(1) Number of pages 64

(2) Date of repair 22.10.87

(3) Initials of the Referencer lons.

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Public Works DEPARTMENT

G.O. No. / B.P. No. 2012 — W

Press. / Mis.

Dated 31 — 8 — 1885 ~~198~~.

A.A

Not to be folded or roughly handled

Archives I--10,006 I -80.

31st August 1885, No. 2012 W., Public Works.

2012

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following papers :—

From G. T. MACKENZIE, Esq., President, Municipal Commission, to the Chief Secretary to Government, dated Madras, 1st July 1885, No. 199 P.W.

I have the honor to acknowledge G.O., Mis. No. 210, dated 19th June 1885.

2. I beg permission to place on record a concise statement of the question concerning these drains.

3. Drainage flowed into the sea at this portion of the shore before the harbour was commenced. If it is necessary to divert this drainage, the harbour must bear the cost. This was decided by G.O., No. 718 W., dated 11th March 1879, which laid upon the harbour the burden of diverting not only the drainage which flowed into the harbour, but also the drainage entering the sea to the south, between the harbour and the fort. Accordingly the Harbour Superintendent constructed an intercepting sewer which now runs northwards from the fort to Ráyapuram. In constructing this intercepting sewer, the Harbour Superintendent provided storm-water channels opposite to certain drains which had been led into the intercepting sewer. This was in accordance with Mr. Parkes' suggestion, contained in his letter printed in G.O., No. 718 W., dated 11th March 1879. At the present moment three of these storm-water channels from the intercepting sewer flow into the harbour. In addition to these drains which were led into, that is to say, were intercepted by the intercepting sewer, there were four drains which crossed the sewer and flowed into the harbour. Three of these continue to flow into the harbour to this day. The fourth formed the subject of G.O., No. 1290 W., dated 22nd May 1882, which directed the Harbour Superintendent to connect the drain with the intercepting sewer. This was done, but no storm-water channel was provided by the Harbour Superintendent opposite this drain. The proper course for the municipality to have then adopted would have been to have called upon the Harbour Superintendent to supply this omission; but, instead of doing so, the Municipal Vice-President proposed to construct the storm-water outlet at the expense of the municipality, whereupon the correspondence arose.

4. Mr. Parkes contemplated that even the storm-water should be diverted from the harbour, and a catch-water drain for this purpose was sanctioned in G.O., No. 900 W., dated 7th April 1880. No explanation appears to be forthcoming to show why this work has never been carried out by the Harbour Superintendent.

5. Colonel Burton, who was deputed by Government to report on this matter, in paragraph 3 of his letter read in G.O., dated 19th February 1885, Mis. No. 351, F.D., suggests that the drains which now cross the intercepting sewer and flow into the harbour be changed so as to discharge into the intercepting sewer and provided with storm-water channels. This, of course, must be done by the Harbour Superintendent. It in no way concerns the municipality. All we contend for is that the drain which the Harbour Superintendent did connect with the intercepting sewer in accordance with G.O. of 22nd May 1882 be now provided with a storm-water escape. Captain Taylor, in paragraph 3 of his letter, dated 12th May 1885, No. 3817, appears to imagine that Colonel Burton's suggestion is that the municipality should completely intercept drainage and storm-water, and this appears to have misled Government who, in G.O., dated 19th June 1885, No. 210 M., evidently suppose that the changes suggested by Colonel Burton in paragraph 3 of his letter, No. 4127, dated

th February 1885, are to be carried out by the municipality. This is not so. It is the business of the Harbour Superintendent to make these changes and to intercept storm-water, if that is considered to be necessary.

6. It is thus evident that the Master Attendant has completely misunderstood this matter, and that there is no intention on the part of this municipality to "multiply" the drains which flow into the harbour. I may also remark that Mr. Thorowgood, if he is correctly reported by Captain Taylor, has changed his views since he wrote paragraph 4 of his letter, No. 37 W., dated 23rd August 1881, printed with G.O., No. 2721 W., dated 3rd November 1881. In that paragraph he assures Government that the three storm-water channels flowing from the intercepting sewer into the harbour are conspicuously free from unpleasant smell. But this does not concern the municipality. If, as Captain Taylor maintains, the drains are silting up the harbour, the evil must be rectified at the cost of the harbour and not by the municipality.

7. I have, therefore, the honor to ask that Government will now call upon the Harbour Superintendent to construct a storm-water escape opposite to the drain which he connected with the intercepting sewer, in accordance with G.O., No. 1290 W., dated 22nd May 1882. Until this is done there will be danger of the storm-water bursting open the intercepting sewer at that point. Whether the storm-water escape flows into the harbour or into the catch-water drain sanctioned by G.O., No. 900 W., dated 7th April 1880, is a matter which does not concern the municipality.

No. 227, Financial.

Transferred to the Public Works Department, who will be requested to obtain and communicate any remarks Mr. Thorowgood may wish to make upon the President's letter.

(By Order.)
(Signed) M. HAMMICK,
Acting Under Secretary.

Madras,
22nd July 1885.

No. 1705 D.

Referred to the Superintendent, Madras Harbour Works, for remarks.

(By Order.)
(Signed) C. BOWEN, Major, R.E.,
Under Secy. to Govt., P.W.D.

25th July 1885.

To the Public Works Department.

From F. N. THOROWGOOD, Esq., M. Inst. C.E., Superintendent, Madras Harbour Works, to the Secretary to Government, Public Works Department, dated Madras, 29th July 1885, No. 24 W.

I have the honor to submit herewith my remarks upon the letter (returned) from the President of the Municipality, dated 1st July, No. 199 P.W., forwarded with your endorsement, dated 25th July 1885, No. 1705 D.

2. It must be distinctly borne in mind that the intercepting sewer along the shore of the harbour was designed to carry away the discharge of sewage as it was in the year 1880, and for this purpose it was deemed sufficient by all parties. If, since its construction the municipal authorities have made great alterations in the town drainage, so that more sewage and water runs into the intercepting sewer than was at first intended, clearly the municipality will be responsible for any additional work that may be necessary to provide accommodation for a larger body of sewage or flood-water.

3. Before constructing the sewer and during its construction the discharge from every drain was carefully measured and the quantities of storm-water due to a

rainfall of ½ inch per hour were calculated. These preliminaries were carried on with frequent communication with Mr. Jones, Vice-President of the Municipality.

4. The result of these considerations was that it became clearly only necessary to provide storm overflows to three intercepted drains, the other drains being so inconsiderable that they could discharge all their contents into the intercepting sewer or be passed by altogether as described in Mr. Mackenzie's letter.

5. I think in February 1885 Colonel W. H. Burton, R.E., consulted me verbally about the construction of another drain into the harbour; he did not go into details, but no doubt it is the drain now referred to by Mr. Mackenzie. My remarks at the time were to the effect that, if the overflow from the proposed drain was likely to be large, the drain must not be constructed. Later on I had some correspondence with Captain Taylor on the same subject, and expressed myself more strongly against any additional discharge into the harbour, as I had found appreciable silting in my last survey.

6. In May 1882, when by G.O. of 22nd May 1882, No. 1290 W., the harbour works were ordered to extend a certain drain and connect it with the intercepting sewer, the amount of discharge down this drain had always been most insignificant. It was a drain that had been watched with the others previous to constructing the intercepting sewer, and so very slight was the discharge (being, indeed, but an outlet for water from the High Court buildings) that to construct an overflow then for storm-water from it would have been ridiculous. It was connected with the intercepting sewer as directed in the Government order above quoted.

7. But it seems that this drain must now have more work to do than was ever anticipated by myself or than was the case in 1882, for Mr. Mackenzie states that, unless an overflow for storm-water be provided, the main drain runs a chance of being burst open. Most assuredly such a contingency could never have occurred unless since the intercepting sewer was finished more water and sewage have been turned into this drain now under discussion.

8. To provide for storm overflow, and one of such size as to threaten the main sewer with destruction if not carried out, would be most injurious to the harbour, and I must beg that it be not sanctioned. During heavy rains the three existing overflows carry a large amount of sand with their discharge to the damage of the harbour, and against another one of considerable size, one which most certainly was not required four years ago, I must protest.

9. There are two other points in Mr. Mackenzie's letter which it will be well to refer to. First, with reference to the non-construction of the open channel sanctioned in G.O., dated 7th April 1880, No. 900 W. As a matter of fact this design was found to be almost impracticable, as it involved keeping a clear waterway to the south of the south pier, where the sand was continually accumulating during eight months of the year. I therefore allowed the matter to stand till Mr. Parkes should arrive in 1880, and when he arrived the alterations and levelling up of the beach became the main object of attention, the carrying out of which effectually prevented the construction of an open channel as sanctioned. But there is no doubt in my mind that all drainage and storm-water should be intercepted, nor have I ever changed my opinion since in 1878 I submitted a design for a sewer which would be large enough to meet these requirements.

10. Another point in Mr. Mackenzie's letter which I wish to remark upon is in paragraph 6, wherein he refers to me as having changed my opinion on a certain point. I do not know what I am represented as having said, but I in no way have altered my opinion about the discharge from the storm overflows during rain being nearly free from smell. The discharge is practically nothing but muddy water, and the evil to the harbour is the amount of sand which is washed away and into the harbour by these overflows.

11. In conclusion, I have to state that the subject of what to do with the storm-water is one that I have already recently drawn the attention of Mr. Parkes to, with a view towards preventing its flowing into the harbour area.

20K / 13

Note by the Chief Engineer, Public Works Department.

Adverting to the controversy raised in these papers relative to the construction of an additional storm-water escape to the intercepting sewer along the base of the Madras harbour, the undersigned has the honor to state his opinion, after careful consideration of all papers bearing on the question, that the time has arrived when the existing intercepting sewer should be replaced by one of dimensions sufficient to carry off both sewage and storm-water.

2. It is clear that an additional storm-water outlet is necessary for the safety of the intercepting sewer; but the Superintendent of the Harbour Works protests against the construction of such an overflow as being decidedly injurious to the harbour; and the Master Attendant apparently concurs in Mr. Thorowgood's views. It is shown that the discharge of flood-water by the existing outlets appreciably silts up the harbour, while the sewage which escapes with the storm-water necessarily contaminates the confined space.

3. In February 1879 Mr. Parkes* admitted that it would be "ultimately necessary to intercept from the harbour all possible vents for storm-water," although he did not at that time see his way to recommend any special plan for carrying out such interception. It was then seen that the difficulty which has now arisen would have to be faced sooner or later, and it is considered that the adoption of half measures now will probably lead to greater expenditure hereafter.

4. The construction of an intercepting sewer, such as that now recommended, will probably cost about Rs. 60,000; and if it be constructed, the outlay on the existing sewer will become thrown away; but if a further expenditure now of Rs. 60,000 will prevent an appreciable silting up of the bed of the harbour and the fouling of its water, the money will clearly be well spent.

5. As to incidence of cost, it is thought that the charge will be a fair one against the harbour. The proposals submitted by Mr. Parkes in 1879, which dealt solely with sewage, were admittedly incomplete; and now that, as Mr. Parkes then foresaw, it has become necessary to deal with the question of intercepting storm-water also, it seems to the undersigned that the subsidiary or alternative scheme of drainage should in like manner form a charge against the harbour.

Ootacamund,
17th August 1885.

(Signed) J. SHAW-STEWART, Colonel, R.E.,
~~Secretary to Government,~~ Chief Engineer P.W.D.

Order—dated 31st August 1885, No. 2012 W., Public Works.

The Government concur in the views expressed by the Chief Engineer in his note above recorded, and accordingly direct the Superintendent, Madras Harbour Works, to submit, as soon as possible, in communication with the President of the Madras Municipality, plans and estimates for replacing the intercepting sewer along the base of the Madras harbour by one of dimensions sufficient to carry off both sewage and storm-water.

(True Extract.)

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

To the Superintendent, Madras Harbour Works.
„ Examiner, Public Works Accounts.
„ Financial Department.
„ Marine Department.

Exd. J. Henricus.
Spare Copies

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* *Vide* paragraph 2 of his letter, dated 15th February 1879, printed in Proceedings of Government, under date 11th March 1879, No. 718 W.

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of (1885) Madras.
PUBLIC WORKS.

Dated August, 31st.

Recd. Encl.

G.O., 31st Aug. 1885, No. 2012 W.

AUGUST.

Intercepting Sewer

Plans and estimates for replacing the — along the base of the Madras harbour by one of dimensions sufficient to carry off both sewage and storm-water, ordered to be submitted.

D.W. 2012 W / 4

In transferring Mr Thorowgood's letter to Financial Dept do you wish any remarks to be made?

F.B.

Please [illegible] with the [illegible] 31-7

To D.G.W.

Original No 900 W of 7 April 1880 with letters plan &c now put up. Original No 3180 W of 22-12-81 has also been added to the file as it is thought it might be of some use —

D.O.
1-8-85

rtg 4-8-85

2012

---

or foul drainage & transport-

2012/5

W.

The controversy now raised as regards the construction of an additional Storm-water outlet to the intercepting drain, between the Harbour and the streets of Blacktown immediately adjoining is somewhatdifficult to follow, and when the points in discussion have been mastered it is not easy to say what had best now be done. -

The intercepting drain was built to cut off the sewage the natural outfall of which was that portion of the sea now taken up by the Harbour & the part between the South Pier & Fort St. George.

Three of the drains discharging into the harbour were so intercepted, four smaller ones being allowed to follow their old course into the sea. Subsequently, in 82, one of these four- that from the High Court buildings- was also connected with the intercepting sewer. This sewer only provided for cutting off the sewage or foul drainage & transport-

4-8-85.

ing it to an outfall north of the North Pier. Escapes were provided in it, opposite the inlets to the three drains for the discharge of flood waters which thus found their way into the Harbour as formerly, but being comparatively pure were, it was thought at the time, unobjectionable.

When the fourth drain from the High-court buildings was also led into the intercepting sewer, no additional escape for storm-water was made, and the contention of the Municipality now is that the absence of this additional flood outlet endangers the main drain & that it is the business of the Harbour Works Supdt. to construct it, whilst the Supdt. protests against the construction of such an overflow as being decidedly injurious to the Harbour.

It seems to me that the protest of Mr. Thorowgood against the addition of another overflow to the intercepting sewer can hardly be acceded to, inasmuch as if the storm water endangers the main drain provision must be made for it somehow or other, and the argument that this High-court drain must have now more duty to perform than it had in 1880 when the intercepting sewer was built & provided with only three escapes, simply goes to show that at that time sufficient thought was not given to future requirements. The fact of an intercepting sewer of a certain capacity being built could hardly be considered as a bar to the Municipality improving their drainage, and it seems to me that if they now flush their street drains better, sending down more water into the intercepting sewer, the Harbour works must provide or help to provide for the increased discharge.

The fact is the initial mistake was committed of making the intercepting sewer too small. Clearly it should have been given sufficient section to carry off both sewage & rainfall, and Mr. Thorowgood was himself strongly of this opinion when he framed the estimate. This mistake was apparently afterwards recognised, when an additional open catchwater drain for Storm water was subsequently sanctioned in 1880- but never carried out as it was found impracticable.

In the circumstance a compromise between the Municipality & the Harbour Works would suggest itself, were it not that the Supdt. protests against any further discharge whatever being allowed into the harbour, and the Master Attendant concurs apparently in Mr. Thorowgood's views. It is now seen that the discharge of flood-water appreciably silts up the Harbour, whilst sewage discharge necessarily contaminates the confined space- an evil which must go on increasing- & in this view the Supdt's. protest is reasonable enough.

What then is to be done ? There is but one radical remedy & that is to take up the intercepting sewer & replace it by one of dimensions sufficient to carry off both sewage & flood water. The cost will be great & the money already spent on the intercepting sewer will be thrown away, but that can't be helped. The difficulty will have to be faced sooner or later, and the adoption of half-measures now will only lead to greater eventual waste of money. The new sewer will cost say Rs. 60000, but the Madras Harbour is to cost Rs. 11400000, & if Rs. 60000 spent now will prevent an appreciable silting up of its bed and the fouling of its water, an evil which time will intensify, I cannot but think this Rs. 60000 will be well spent.

The incidence of such a charge may lead to dispute, but here we surely can effect a compromise. Let the Municipality & Harbour share the cost. The Municipality may say it is none of their business, but surely the Harbour will be of immense indirect benefit to the Municipality, and the better it is made in all respects the better for them. And to the Harbour authorities the benefit will be indisputable.

But are thse benefits worth
the money ? Unquestionably so.
To stop short & make shift
with an in-efficient intercepting sewer, allowing silting up
and contamination, for the
sake of Rs. 60000, will be very
like "spoiling the ship for
a ha'porth of tar"

D.W.
4.[illegible].85

201222

.A.W

After going carefully through these
luminous papers, I arrive at the
me conclusion with D.W. of $\frac{2}{8}$ that
intercepting sewer should be
placed by one of dimensions sufficient
carry off both sewage and storm
ter.

As to incidence of cost, it seems
me that it would be a fair charge
gainst the Harbour.

In his letter of 15.2.79, W. Parkes
dmitted that it would be "ultimately
ecessary to intercept from the Harbour
ll possible vents for storm water",
lthough he did not at that time
ee his way to recommend any
ecial plan for carrying out such
terception.

In their order dated 11-3-79,
Govt. accepted his proposals,
which dealt solely with the sewage,
— and now that it has become
necessary to deal with the other
matter, it seems to me that the
ubsidiary, or alternative, scheme
f drainage ~~becomes~~ should in
like manner form a charge
against the harbour.

In this point, of incidence
cost, I shall be glad to have
ur opinion.

9.8.85

To W. If the question were one
which involved merely the
construction of an extra

MUNICIPALITY OF MADRAS.

Public Works Department,
Municipal Office,
1885.

Storm water escape, to carry off additional drainage which the Municipality have directed towards the Harbour since the construction of the intercepting sewer, the cost should assuredly fall on the Municipality.

If a private individual bought up a piece of ground & built a house thereon, & went to the expense of diverting all existing drainage therefrom, he would certainly object to further expense being thrown upon him, by being required to divert additional drainage which might afterwards be directed towards his property by the Municipality —

The question has however now become one of constructing a new intercepting sewer altogether, of dimensions large enough to carry away from the Harbour both sewage & storm water, & the cost of this would appear to be a fair charge against the Harbour — The cost of a fourth storm water escape, if set against this would be an inappreciable item. —

202/9

It would apparently be advisable to order the construction of the new intercepting sewer before the Harbour gets into the hands of the proposed Trustees, as the question might hereafter lead to dispute between the Trustees & the Municipality. —

Ch

14.8.85

MUNICIPALITY OF MADRAS.
Public Works Department,
Municipal Office,
[illegible] 1885

Read the following papers -

p. 1

P. W. No. 199

MUNICIPALITY OF MADRAS.

Public Works Department,
Municipal Office,
1st July 1885.

2012/[illegible]

From G. T. Mackenzie Esqre
President, Municipal Commission.

To
The Chief Secretary
to Government.

Sir,

I have the honor to acknowledge G.O. No 210 Mis: dated 19th June 1885.

2. I beg permission to place on record a concise statement of the question concerning these drains.

3. Drainage flowed into the sea at this portion of the shore before the Harbour was commenced. If it is necessary to divert this drainage the Harbour must bear the cost. This was decided by G.O. 7/18 W dated 11th March 1879 which laid upon the Harbour the burden of diverting not only the drainage which flowed into the Harbour but also the drainage entering the sea to the south, between the Harbour and the Fort. Accordingly the Harbour Superintendent constructed an intercepting sewer which now runs northwards from the Fort to Royapoorum. In constructing this intercepting sewer the Harbour Superintendent provided storm-water channels opposite to certain drains which had been led into the intercepting sewer. This was in accordance with Mr. Parke's suggestion contained in

his

his letter printed in G. O. No 718 W dated 11th March 1879. At the present moment three of these storm-water channels from the intercepting sewer flow into the Harbour. In addition to these drains which were led into, that is to say, were intercepted by the intercepting sewer, there were four drains which crossed the sewer and flowed into the Harbour. Three of these continue to flow into the Harbour to this day. The fourth formed the subject of G. O. No 1290 W dated 22nd May 1882 which directed the Harbour Superintendent to connect the drain with the intercepting sewer. This was done but no storm water channel was provided by the Harbour Superintendent opposite this drain. The proper course for the Municipality to have then adopted would have been to have called upon the Harbour Superintendent to supply this omission but instead of doing so the Municipal Vice President proposed to construct the storm water outlet at the expense of the Municipality, whereupon the correspondence arose.

3. Mr Parkes contemplated that even the storm water should be diverted from the Harbour and a catch water drain for this purpose was sanctioned in G. O. No 900 W dated 7th April 1880. No explanation appears to be forthcoming

to

to show why this work has never been carried out by the Harbour Superintendent.

No
See Superintending Engineer's letter read in G. O. 19th Feby/85 No 351 Mis

4. Colonel Burton, who was deputed by Government to report on this matter, in paragraph 3 of his letter read in G. O. 19th February 1885 No 351 Mis: F.D.+ suggests that the drains which now cross the intercepting sewer and flow into the Harbour, be changed so as to discharge into the intercepting sewer and provided with storm water channels. This, of course, must be done by the Harbour Superintendent. It in noway concerns the Municipality. All we contend for is that the drain which the Harbour Superintendent did connect with the intercepting sewer in accordance with G. O.* of 22nd May 1882 be now provided with a storm water escape. Captain Taylor, in paragraph 3 of his letter dated 12th May 1885 No 3817, appears to imagine that Colonel Burton's suggestion is that the Municipality should completely intercept drainage and storm water and this appears to have misled Government who in G. O. dated 19th June 1885 No 210 M* evidently suppose that the changes suggested by Colonel Burton in paragraph 3 of his letter No 4127 dated 5th February 1885 are to be carried out by the Municipality. This is not so. It is the

+ G. O. No 415 W of 10-2-85—

* No 1290 W. of 22-5-82—

* No 1584 W of 7-7-85—

2012/11

the business of the Harbour Superintendent to make these changes and to intercept storm water if that is considered to be necessary.

5. It is thus evident that the Master Attendant has completely misunderstood this matter and that there is no intention on the part of this Municipality to "multiply" the drains which flow into the Harbour. I may also remark that Mr Thorowgood, if he is correctly reported by Captain Taylor, has changed his views since he wrote paragraph 4 of his letter No 37W dated 23rd August 1881 printed with G. C. No 2721W dated 31st November 1881. In that paragraph he assures Government that the three storm water channels flowing from the intercepting sewer into the Harbour are conspicuously free from unpleasant smell. But this does not concern the Municipality. If, as Captain Taylor maintains, the drains are silting up the Harbour the evil must be rectified at the cost of the Harbour and not by the Municipality.

6. I have, therefore, the honor to ask that Government will now call upon the Harbour Superintendent to construct a storm water escape opposite to the drain which he connects with the intercepting sewer, in accordance with G. C. No 1290 W dated 22nd May 1882. Until this is done there will be danger of the storm water bursting open the intercepting sewer at that point. Whether the storm water escape flows into the Harbour or into the catch water drain sanctioned by G. C. No 900 W dated 7th April 1880, is a matter which does not concern the Municipality.

20/12

I have the honor to be
Sir
Your most obdt. Servant

J. T. Mackenzie
President
Municipal Commission

2012
13

p 4

No 227.

Transferred to the Public works Dept who will be requested to obtain and communicate any remarks Mr Thoroughgood may wish to make upon the President's letter.

(By order)

Madras
July 1885

Ag Under Secretary

No 1705 D of 25th July 85

p 5

Referred to the Supt. Madras Harbour Works for remarks.

(By order)

C. [illegible] Major RE
Under Secy: to Govt. P.W.D.

To
The Public works Departmt
[illegible] 6.4.8.85 D. 31.8.85

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[9]

Arch 6450
+ 671

Current No. 433

D. Memo 3-8-85

From
The President
Municipal Commrs. Madras

P.W No. 199

Dated	2nd	July 1885
Despd	3rd	
Received	4th	
[illegible]	23	
Enclosures	nil	

SUBJECT.

Forwards a concise statement of the question regarding the carrying of the outfalls of drains into the Harbour for discharge of storm water & requests Govt. to call upon the Harbour Supdt. to construct the Storm water Escape in accordance with G.O. No 1290 W dated 22nd May 1882.

Complete file put up. D.O. 24-7-85

For
Transferred

---

p 6

No. 24 W.

2012
14

From

The SUPERINTENDENT,
MADRAS HARBOUR WORKS,

To
The Honble Col. J. H. M. Shaw-Stewart R.E.
Secretary to Government
Public Works Department
Fort Saint George

MADRAS, 29th July 1885.

Sir,

I have the honour to submit herewith my remarks upon the letter + from the President of the Municipality dated July 1st No 199 P.W, forwarded with your endorsement No 1706 D 25th July 1885.

+ returned

2. It must be distinctly borne in mind that the intercepting sewer along the shore of the Harbour was designed to carry away the discharge of sewage as it was in the year 1880 and for this purpose it was deemed sufficient by all parties. If, since its construction the Municipal authorities have made great alterations in the town drainage so that more sewage and water runs into the intercepting sewer than was at first intended clearly the Municipality will be responsible for any additional work that may be necessary to provide

accomodation

accomodation for a larger body of sewage or flood water.-

3. Before constructing the sewer and during its construction the discharge from every drain was carefully measured and the quantities of storm water due to a rainfall of ½ inch per hour were calculated. These preliminaries were carried on with frequent communication with Mr Jones, Vice President of the Municipality.-

4. The result of these considerations was that it became clearly only necessary to provide storm overflows to three intercepted drains, the other drains being so inconsiderable that they could discharge all their contents into the intercepting sewer, or be passed by altogether as described in Mr Mackenzie's letter.-

5. I think in February 1885 Col. W. H. T. Burton, R.E. consulted me verbally about the construction of another drain into the Harbour, he did not go into details but no doubt it is the drain now referred to by Mr Mackenzie. My remarks at the time were to the effect that if the overflow from the proposed drain was likely to be large, the drain must not be constructed.

Later

6.4.8.85 [illegible] 31.85

20/12/85

Later on I had some correspondence with Captain Taylor on the same subject, and expressed myself more strongly against any additional discharge into the Harbour, as I had found appreciable silting in my last survey.

6 In May 1882 which by G. O. No 1290 W of May 22. 1882 the Harbour Works were ordered to extend a certain drain and connect it with the intercepting sewer, the amount of discharge down this drain had always been most insignificant. It was a drain that had been watched with the others previous to constructing the intercepting sewer, and so very slight was the discharge (being indeed but an outlet for water from the High Court building) that to construct an overflow there for storm water from it would have been ridiculous. It was connected with the intercepting sewer as directed in the G. O. above quoted.

7 But it seems that this drain must now have more work to do than was ever anticipated by myself or than was the case in 1882, for Mr Mackenzie states that unless an overflow for storm water be provided the main drain runs a

of being burst open. Most assuredly such a contingency could never have occurred unless since the intercepting sewer was finished more water and sewage have been turned into the drain now under discussion.

8 To provide for storm overflow, and one of such size as to threaten the main sewer with destruction if not carried out, would be most injurious to the Harbour and I must beg that it be not sanctioned. During heavy rains the three existing overflows carry a large amount of sand with their discharge to the damage of the Harbour, and against another one of considerable size, one which most certainly was not required 4 years ago, I must protest.

9. There are two other points in Mr. Mackenzie's letter which it will be well to refer to. First with reference to the non-construction of the open channel sanctioned in G.O. No 900 W april 7th 1880. As a matter of fact this design was found to be almost impracticable, as it involved keeping a clear water way to the South of the South Pier where the sand was

Continually

2012/16

continually accumulating during 8 months of the year. I therefore allowed the matter to stand till Mr Parkes should arrive in 1880, and when he arrived the alteration and levelling up of the beach became the main object of attention, the carrying out of which effectually prevented the construction of an open channel as sanctioned. But there is no doubt in my mind that all drainage and storm water should be intercepted, nor have I ever changed my opinion since in 1878 I submitted a design for a sewer which would be large enough to meet these requirements.

10 Another point in Mr. Mackenzie's letter which I wish to remark upon is in para 5, wherein he refers to me as having changed my opinion on a certain point. I do not know what I am represented as having said, but I in no way have altered my opinion about the discharge from the storm overflows during rain being nearly free from smell. The discharge is practically nothing but

muddy

muddy water, and the evil to the Harbour is the amount of sand which is washed away and into the Harbour by these overflows.

11 In conclusion I have to state that the subject of what to do with the Storm water is one that I have already recently drawn the attention of the [illegible], with a view towards preventing its flowing into the Harbour area.

I have the honour to be,
Sir,
Your most Obdt. Servant
F. W. [illegible]
Superintendent

LW/

2012/17

No 276C - 10-2-85
G.O. No 415W 21-2-85
〃 1580W 7-7-85
〃 3157W 26-12-84
No 2118 D. 28-11-84
G.O. No 900W 7-4-80
〃 1290W 22-6-82
〃 2721W 3-11-81
3180W 22-12-81
718W 11-5-79
CE No 752 - 24-2-79
CE No 5119 J 12-11-78
CE No 4753. 7-10-78
G.O. No 2953 J 22-7-78
〃 2472 J 12-6-78
〃 2088 J 8-5-78
1760 10-4-78
984W 28-2-78
558W 4-2-78

Sech 6712 S

Buildings & Roads

(23)

No 24 W
Dated 29th July 1885
Rec 30

No of Enclosures one

Drain

Submits protest against another — being construct-ed to carry away Storm water

C.E.L. 1/8 —
Col.E -4-8-85 R 31-8-85

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p 10

2012/18

Note by the Chief Engineer P. W. Department

Adverting to the controversy raised in these papers relative to the construction of an additional storm-water escape to the intercepting sewer along the base of the Madras Harbour, the undersigned has the honor to state his opinion, after careful consideration of all papers bearing on the question, that the time has arrived when the existing intercepting sewer should be replaced by one of dimensions sufficient to carry off both sewage and storm-water.

2. It is clear that an additional storm-water outlet is necessary for the safety of the intercepting sewer; but the Supt: of the Harbour works pro=tests against the con=struction of such an overflow, as being decidedly injurious to the Harbour; and the Master Attendant apparently concurs in Mr Thorowgood's views. It is shown that the

discharge of flood-water by the existing outlets appreciably silts up the Harbour, while the sewage which [illegible] with the storm-water necessarily contaminates the confined space

2013/79

3. In February 1879, Mr Parkes[+] admitted that it would be "ultimately necessary to intercept from the Harbour all possible vents for storm water", although he did not at that time see his way to recommend any special plan for carrying out such interception. It was then

[+] Vide para 2 of his letter dated 15.2.79, printed in Pro: of Govt. under date 11.3.79 No. 718. W.

seen that the difficulty which has now arisen would have to be faced sooner or later, and it is considered that the adoption of half measures now will probably lead to greater expenditure ~~waste of money~~ hereafter

4. The construction of an intercepting Sewer, such as that now recommended, will probably cost about Rs 60,000+, and if it be constructed, the outlay on the existing Sewer will be thrown away; but if a further expenditure now of Rs 60,000 will prevent an appreciable

+ Mr Morewood's estimate framed in 1878, amounted to about Rs 58,000.

I was a little doubtful at first whether the whole cost should be charged against the harbour but after a careful perusal of the papers I have come to the same conclusion as the Chief Engineer

AW

silting up of the bed of the Harbour, and the fouling of its water, the money will clearly be well spent.

5. As to incidence of cost, it is thought that the charge ~~would~~ will be a fair one against the Harbour. The proposals submitted by Mr Parkes in 1879, which dealt solely with sewage, were admittedly incomplete, and as Mr Parkes then foresaw, now that it has become necessary to deal with the question of intercepting storm water also, it

seems ~~[illegible]~~ to the undersigned, that the subsidiary or alternative scheme of drainage should in like manner form a ~~charge against~~ not the Harbour.

17.8.85

E.W.

Ootacamund }
17th Augt. 1885 }

CM

B^t W

PUBLIC WORKS DEPARTMENT.

No. 2012 W

2012/22/9

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 31st August 1885

READ the following

Letter from the President, Municipal Commission, Madras. A.E. No. 199 d/ 1st July/85

Endt. thereon by the Finl: Dept ... 227 d/ 22nd do

Letter from the Supt. Madras Harbour Works ... 24 W d/ 29th July 1885

Note by the Chief Engr: P.W. Department d/ 17th August/85

14

The Government concur in the views expressed by the Chief Engineer in his note above recorded, and accordingly direct the Supt: Madras Harbour Works to submit, as soon as possible, in communication with the President of the Madras Municipality

plans and estimates for
replacing the intercepting
sewer along the base of
the Madras Harbour by
one of dimensions sufficient
to carry off both Sewage
and Storm-water.

~~[illegible]~~

23 AUG 85

W
17.8.85

FW 20/8

D
8/9

Supt: M. H. Works
Ex: P.W. accts:
Finl: Dept
Marine Dept:

Cr.
A.G.S. 17/8. Cio 20/8.

[illegible]12/88

6712

Govt. of {1885} Madras.

PUBLIC WORKS.

Dated 11/7/85

Recd.

Encl. Recd - 5 [illegible]

G.O., 31 Aug 1885, No. 2012

~~Madras Harbour~~ Intercepting Sewer

Plans & Estimates for replacing the — along the base of the Madras Harbour by one of dimensions sufficient to carry off both sewage & storm-water, ordered to be submitted

20/6

Rd 4.30 PM
3/9