PWD. INDEX

.....துறை

குறிப்பிட்டவர் பொறுப்பிலிருக்கும் பதிவுக் கட்டினின்றும் எடுக்கப்பட்ட தாள்.

அச்சு / பல்வகை / வாலாயம் } எண்.....18.98

தேதி.....200

எடுத்த தேதி. (1)	எதன் பொருட்டு			தான் எடுக்கும் எழுத்தர் அல்லது பிற்றெழுத்தர் கருக்கொப்பம். (5)	திருப்பிக் கொடுத்த தேதி (6)	பிற்றெழுத்தரின் கருக்கொப்பம். (7)
	நுமை. (2)	நடப்பு எண். (3)	ஆண்டு. (4)			
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(1) Number of pages.....

(2) Date of repair.....

(3) Initials of the Referencer.....

MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 8209 Press / Mis.

Dated ...-...-0 18[illegible]

Not to be folded or roughly handled

No. 66. Read the following letter from the Superintending Engineer, 6th Division, to the Secretary to Government, Public Works Department, dated Camp at Manaparai, 11th September 1869, No. 667:—

1 Plan and Section.
1 Estimate.

As directed in G. O., No. 2,731, dated 19th August, I have the honour to forward an estimate for a Fish Dam at the Upper Anicut.

2. It was only after the plan and estimate had been prepared that I examined into the question of the probable depths of water over the apron at different states of the floods, and ascertained that the ladder would be of but little, if of any use if placed as proposed, and as I recommend below that a fish ladder should not at present be constructed at the Upper Anicut, I have not deemed it worthwhile to submit a plan and estimate for a fish ladder at the second point selected by me.

3. The site selected for the ladder was immediately north of the fourth set of sluices from the south end of the south branch of the anicut, because the deepest stream in the river bed below the anicut is that from those sluices; here the dam is only four feet four inches high, and for the sake of the ladder I was about to propose that the Tambogyre, or lower step of the anicut under the two arches immediately north of the fourth set of sluices, should not be raised as proposed in my letter, No. 617, dated 30th ultimo, as it was supposed that the water passing through these sluices, and over the Tambogyre under the two adjacent arches, would probably serve to maintain the deep stream in the river bed in its present position.

4. From the plan it will be observed that only two basins, or steps, are required at the site selected, as the dam is only four feet four inches high, and the ladder would be only twenty feet long, leaving twenty feet of cut-stone apron and twelve feet of rough-stone apron between the lowest step of the ladder and the deep stream; on this portion of the apron the depth of water is not likely to be more than an inch or two when water to a depth of one foot is passing over the Tambogyre, up to which the ladder leads: with two feet of water over the Tambogyre, which would give a depth of one foot over the rest of the anicut, the back-water would rise from one-and-a-quarter feet to one-and-a-half feet over the apron. I am not aware whether this depth of water is sufficient to admit of the fish taking their spring into the first or lower basin of the ladder; if so, as this depth corresponds with about six feet on the Cauvery gauge, it would appear that the ladder would be available for about thirty-five days in the year, for the water returns show that the water flows from six to seven feet in depth over the Cauvery dam for about thirty-five days in the year; for thirty-one days in the year the water is above seven feet or above 1·7 feet over the south branch of the anicut, and then it appears to me to be doubtful whether the fish would be able to use the ladder on account of the rush of water over it; they may, however, then be able to surmount the anicut independently of the ladder, the differences of level of water above and below the dam being as per margin; if a depth of from one-and-a-quarter feet

Average of twenty years. Captain Mead's Statement B.

Number of days in a year.	Water above	Difference of level of water above and below dam about
16	7 feet.	4¼ feet.
9*	8 ,,	2¾ ,,
4*	9 ,,	2¼ ,,
2*	10 ,,	1½ ,,

* Ladder would be submerged.

to one-and-a-half feet of water is not enough for the approach to the ladder, a ladder placed as proposed would hardly be of any use.

5. The ladder might, however, be placed under the second arch immediately north of the sixth set of sluices of the south branch of the anicut, below which a tolerably deep stream is formed in the river bed; here the dam is five feet four inches high, and the apron thirty-one feet broad, or just sufficient for three basins or steps for the ladder, and the rough-stone below the apron might be lowered half a yard or more, to admit of the water being at least one-and-a-half feet deep at the approach to the ladder when water was only trickling over the anicut; this would render the ladder available for eighty-five instead of the thirty-five days in the year, adverted to in paragraph 4. A ladder of three steps built north of the sixth set of sluices would cost about Rupees 1,050.

6. I have not Dr. Day's report with me, but I remember that he states that it may be necessary to alter the length of basin so as to adapt it, to what I suppose may be termed the run and spring of the sable; and I would suggest that the ladder at the Upper Anicut should not be built till that at the Lower Anicut has been completed, and till experience has proved that the length and width of the basins, and the form of the ladder generally, is that best suited to the peculiarities of the floods in the Cauvery and Coleroon, and to the habits of the fish for the accommodation of which the ladders are to be provided.

No. 67. ORDER THEREON, 5th October 1869, No. 3,204.

IRRIGATION, No. 5.

His Excellency the Governor in Council is of opinion that the inclination of the fish ladder proposed to be erected at the Upper Anicut is too great, but, as suggested by the Superintending Engineer, it seems desirable to postpone the work till experience has shown the suitability or otherwise of the form of ladder sanctioned for the Lower Anicut.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Superintending Engineer, 6th Div

Exd. S. T. Augustin.

No. 667 Supg Engr Office 6 Dr

Camp Manaparai 11th September 1869

From, Captain A. F. Cadres R.E.
Supg Engineer 6th Division

To, Colonel C. A. Orr R.E.
Secretary to Government
Public Works Department

Sir,

As directed in G.O. No. 2731 dated 19th August I have the honor to forward an Estimate for a Fish Dam at the Upper Anicut.

2. It was only after the Plan & Estimate had been prepared that I examined into the question of the probable depths of water over the apron at different states of the floods and ascertained that the ladder would be of but little, if of any use if placed as proposed and as I recommend below that a Fish ladder should not at present be constructed at the Upper Anicut. I have not deemed it worthwhile to submit a plan and estimate for a Fish ladder at the 2nd point selected by me.

3. The site selected for the ladder was immediately north of the 6th set of Sluices from the South end of the South branch

branch of the Ancut because the deepest stream in the River bed below the Ancut is that from those Sluices. here the Dam is only 4'4" high and for the sake of the Ladder I was about to propose that the Pambogyre or lowest step of the Ancut under the 2 arches immediately North of the 4th Set of Sluices should not be raised as proposed in my letter No 617 dated 20th Ultimo, as it was supposed that the water passing through these Sluices and over the Pambogyre under the 2 adjacent arches would probably serve to maintain the deep stream in the River bed in its present position.

4. From the Plan it will be observed that only 2 basins or steps are required at the site selected, as the Dam is only 4'4" high and the Ladder would be only 20' long, leaving 20 feet of cut stone apron and 12' of rough stone apron between the lowest step of the Ladder and the deep stream, on this portion of the apron the depth of water is not likely to be more than one Inch or two when water to a depth of 1 foot is passing over the Pambogyre upto which the Ladder leads: with two feet of water over the Pambogyre which would give a depth of 1 foot over the rest of the Ancut the backwater would rise from 1¼' to 1½'

over

over the Apron. I am not aware whether this depth of water is sufficient to admit of the fish taking their spring into the first or lower basin of the Ladder, if so, as this depth corresponds with about 6' on the Cavery Guage, it would appear that the Ladder would be available for about 35 days in the year for the Water returns show that the water flows from 6 to 7' in depth over the Cavery Dam for

about 35 days in the year

for 31 days in the year the

water is above 7' or above by 1' over the South

branch of the Ancut and then it appears

to me to be doubtful whether the Fish would

be able to use the Ladder on account of

the neck of water

over it; they may

however then be

able to surmount

the Ancut inde-

pendently of the

Ladder, the difference of level of water

above and below the Dam being as per

margin; if a depth of from 1¼' to 1½' of

water is not enough for the approach

to the Ladder a Ladder placed as proposed

would hardly be of any use.

5. The Ladder might however be placed

under the 2nd arch immediately north

of the 6th Set of Sluices of the South branch of

of the Ancut, below which a tolerably deep stream is formed in the River but, here the Dam is 5'4" high and the Apron 31' broad or just sufficient for 3 basins or steps for the Ladder and the rough stone below the Apron might be lowered ½ a yard, or more, to admit of the water being at least 1½' deep at the approach to the Ladder when water was only trickling over the Ancut, this would render the Ladder available for 85 instead of the 35 days in the year adverted to in par.o 4: a Ladder of 3 steps built north of the 6th Set of Sluices would cost about Rs. 1050

6. " I have no Days report with me but I remember that he states that it may be necessary to alter the length of basin so as to adapt it, to what I suppose may be termed the run and spring of the Table and I would suggest that the Ladder at the Upper Ancut should not be built till that at the Lower Ancut has been completed and till experience has proved that the length and width of the basins and the form of the Ladder generally, is that best suited to the peculiarities of the floods in the Cavery and Coleroon and to the habits of the Fish for the accommodation

Tanjore District

Abstract Estimate &c. £6470

for R— Estimate for a Fish Ladder at the Upper Ancut at the Arch immediately North of the 5 1/4" Set of Sluices from the South End —

Unrevised		
81		
" "		
36		
12 "		
4 "		
45		
per 650		

Ladder as near to the former as I have the time &c. &c. &c.

Fair Sketch accompanies Report

Captain &c.
Engineer 6th Division

Captain &c.
6th Div.

of the Ameat, below which a tolerably deep stream is formed in the River but, here the Dam is 5'4" high and the Apron 31' broad or just sufficient for 3 basins or steps for the Ladder and the rough stone below th
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peculiarities of the floods in the
Cavery and Coleroon and to the habits
of the Fish for the accommodation

Dept
Prs Pro: of Sept 1869.
The Supt Engineer
6 Divn
Do The Secretary to Govt
P W Department
Dated 11th
Recd 15th Sept 1869

No 667
Enclosures 2
Forwards a Plan and an Estimate for a Fish Dam at the Upper Anicut
No 3204 - 5th Octr 1869
No 668
dated 22nd & letter to Govt dated 24th

Coimbatore District
Abstract Estimate No 69/70
Work — Estimate for a Fish Ladder at the Upper Anicut at the Arch immediately North of the 4th Set of Sluices from the South End —

Quantity	Description of Work	Rate	Amount	
88 11/12	Cub feet of Dressing Chunam	at	2	12 8
81	Cub feet of Cut Stone in Chunam	at	1	81
526 3/4	Cub feet of Do — Do —	at	10	329 36
463	Cub feet of Repairing as per Plan examining & filling if necessary	at	4	115 12
90	Clamps including charge of drilling holes & fixing with lead	at	10	56 4
	Sundries & Contingencies			55 45
	Total Estimate Rupees			650

Supg Engineers Office 6th Divn
Camp Manaparai
11th September 1869

Lt Blake Captain & C
Supg Engineer 6th Divn

of the form of ladder

sanctioned for the

lower ...

To S. Engr 6th Dn

Circ 3916

Govt. of {1869} Madras.

PUBLIC WORKS.

To The Superintending Engr.
6th Division

Dated

Recd. Encl. 2

G. O. 5th Oct. 1869, No. 3204-

Nos. 66-67

Fish Dam Papers ordered on the letter from the Supt Engr of the 6th Div submitting further remarks on estimate for a Fish Dam at the Upper Coleroon Anicut, Tanjore Dt