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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	764	(2)	Press
B.P. No.			Mis.
Dated	27.3.		1876.

Not to be folded or roughly handled

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*Proceedings of the Madras Government, Public Works Department,
27th March 1876.*

Read the following papers :—

No. 405. From Colonel A. S. MOBERLY, R.E., District Engineer, Cuddapah, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Camp at Gundloor, 2nd February 1876, No. 2,243.

I HAVE the honor to submit the accompanying Return of Tanks affecting the Madras Railway in the Sidhout range for the half-year ending 31st December 1875.

2. The lengths of weirs have been calculated from the Formula $D = C \sqrt[3]{M}$ except for those for which estimates have been made.

Return of Tanks affecting the Line of Railway for the Half-year ending 31st December 1875, prepared with reference to G.O., No. 3,210, dated 13th November 1874.

District.	Line of Railway.	Miles.	Between what Telegraph Posts.	Names of Tanks.	Area of Catchment Basin, Square Miles.	Estimated Maximum Flood Discharge, Cubic Feet per Second.	Intended Maximum Depth of Water on Crest of Surplus Weir.	Length of Surplus Weir required.	Length of Existing Canals, Lanes and Surplus Weirs.		Additional Length of Surplus Weir required.	Height of Top of Bund Above.		Area of Tank.		Special Remarks.	General Remarks.
									Total.	Effective.		Feet.	Feet.	Feet.	Feet.		
North-West Line.		101 a 14 & 15 104 b 2 & 3		Shettigoonta Tank.	17½	c 3,850	2½	280	...	d 154	126	6	...	...	The bund and revetment of this tank generally are in fair order. On the east side of the line of Railway (a small part of the tank only) both bund and the revetment require repairs. On the west side the bund is in fair order, but here and there the revetment would be the better if being relaid. Much of the damage to the end of gravel backing. The weir at the east end will be extended eastwards to give it the necessary length. This work will be taken in hand by the Overseer, and the estimate sent in at an early date. It is hoped that every thing will be in the most complete order before the rains of 1876. The bund of this tank is in very bad order, throughout it has no revetment; the bund was much eroded last year. This is one of the tanks for which a Survey Party has been sanctioned; it has not yet been surveyed, but will within a few days. The estimate will be forwarded in time for sanction and execution before the rains set in 1876.	a Surplus from east weir crosses at this point, joins that from the west weir, and both together cross at b 104, 2 & 3. c C = 450. d 1 weir of 30 feet at east end and 1 of 74 at west end. This tank is the upper one of a group. D = $\sqrt[4]{M^3} \times 450$.	
		108 a 7 & 8 & 8 & 9	Teroomullah Tank of Codoor.	3	b 913	3	93	...	75	17	4½	...	...	a There are two culverts close together; it divides part passing through both. b C = 400. There are two small private tanks lying above this; they will be reported on as soon as certain information called for from the Tablighar is received. Both are reported to be in good order. D = $\sqrt[4]{M^3} \times 400$.			

Cuddalore	Madras Railway.	116	5 & 6	Jillamadugu (Shrotrium Tank).	10	a 2,611	3	139	Breached.	139	6	...	...	...	This is a Shrotrium tank, it breached in 1872, since which time it has had no weir. The breach is closed in a temporary manner by a ring bund, which is very weak and not calculated to stand should the tank fill. The proprietor is collecting material for the construction of a new weir. The bund is being raised and the revetment relaid. This tank bund and revetment are in fair order. There are a few places where the revetment has fallen in at the toe of slope, but nothing serious. The division bund between this tank and the Jillamadugu Shrotrium tank is low and will be raised and revetted on both sides. The east weir, which is present is 60 feet in length, can be lengthened 47 feet. Sections have been taken and the estimate will shortly be submitted. The tank will be put in good order before the rains of 1876. The supply channel has also been surveyed and levelled, and will be put in good order as the same time as the tank bund. The bund of this tank is strong and high along the centre, but towards the ends is low and must be strengthened and raised. The revetment is in bad order throughout, and must be relaid with a portion of new stone. The weir is a very short one being only 40 feet. It will be lengthened out to 110 feet with new masonry works. This tank will be surveyed in a few days, and the estimate sent in for sanction as early as possible. The work it is expected will be finished before the rains of 1876.	a C = 450. It is believed that the proprietor intends that 8 feet of water shall pass, in which case the crest will be placed 6 feet below lowest part of bund. D = $\sqrt[4]{M^3} \times 450$. c C = 450. b 188 feet is required for the discharge of surface drainage. c East weir 60 feet. West " 81 " The supply channel from the Guondalar does not require a head sluice, being protected by a rock at its head. D = $\sqrt[4]{M^3} \times 450$.
116	5 & 6	Korhacoonta Tank.	15	a 3,429	3	b 188	...	...	c 141	47	6	...	...	...	a C = 500. b 135 feet for surface drainage and 17 feet for supply channel. The surplus of this tank flows into the supply channel of the Korhacoonta tank at about one mile below its head. The repairs of the channel and a head sluice, if it is necessary, will be carried out at the same time as the repairs of the tank bund. Supply received from the Guondalar river. D = $\sqrt[4]{M^3} \times 500$.	
116	5 & 6	Terragoontlacota Tank.	6	a 1,915	2½	b 188 + 17	...	...	46	115	6½	...	...	...	a Surplus from east escape flows into Reddypully tank. Surplus from west escape flows into the Polingair which crosses at 123, 14 & 15. b C = 663.5 (D = $\sqrt[4]{M^3} \times 663.5$). c 123 feet for surface drainage and 15 feet for supply	
120 123	a 11 & 12 14 & 15	Rungumpally Tank.	3	b 1,170	2	c 128 + 15	...	...	61	77	4½	...	...	...	a Surplus from east escape flows into Reddypully tank. Surplus from west escape flows into the Polingair which crosses at 123, 14 & 15. b C = 663.5 (D = $\sqrt[4]{M^3} \times 663.5$). c 123 feet for surface drainage and 15 feet for supply	

Return of Tanks affecting the Line of Railway for the Half-year ending 31st December 1875, &c.—(Continued.)

District.	Line of Railway.	Miles.	Between what Tele- graph Posts.	Names of Tanks.	Area of Catchment Basin, Square Miles.	Estimated Maximum Flood Dis- charge, Cubic Feet per Second.	Intended Maximum Depth of Water on Crest of Surplus Weir.	Length of Surplus Weir required.	Length of Existing Calingulams and Surplus Weirs.		Additional length of Surplus Weir required.	HEIGHT OF TOP OF BUND ABOVE.		APPROX- IMATE OR ACTUAL.		Special Remarks.	General Remarks.
									Total.	Effective.		Weir Crest.	Top of Stones.	Area of Tank.	Capacity of Tank when full.		
North-West Line.	123 a 1 & 2	123 a 1 & 2	123 a 1 & 2	Nookanapally Tank.	2	b 840	2 c 85+15	...	72	28	4½	...	...	...	...	The third part requires strengthening in earth-work; the revetment is in good order. A new weir of 77 feet will be constructed at the south end of east bund; that at the west end requires repairs. Sections have been taken and the estimate has been forwarded for sanction. Work will be complete by the time the rains begin in 1876. The bund and revetment are in very bad order throughout; bund requires to be raised and strengthened, and revetment relaid with a portion of new stone throughout. The weirs at the west end will require to be rebuilt and extended. Sections are now being taken and the estimate will be taken in hand at an early date. The work is expected to be complete before next year's rain set in.	a Surplus flows into the Polingair from whence its supply is received. b C = 500. c 85 feet for surface drainage and 15 feet for supply channel. Repairs to channel will be carried out at the same time as the tank bund, and also the construction of a head sluice which is required D = 4 √M³ X 500. a C = 400. b 82 feet for surface of drainage, and 4 feet for supply channel which is led off from the Polingair. Channel does not require a head sluice. A weir will be placed between head and tank
	124 16 & 17	124 16 & 17	124 16 & 17	Pullumpett Tank.	3	a 912	2 b 92	...	96	None	3½	...	...	...	...	This tank bund and revetment are in good order and requires nothing to be done to either. Weir is also in good order. Only a small part of this tank lies above the Railway although the weir does.	

Cuddapah
Madras Railway.

128 a 1 & 2	Davannoodrum Tank.	20	b 3,784	2	881	...	c 113	d 68	4½	...	...	...	...	...	...	Bund generally of fair section, but rather low. Revetment will be relaid throughout, partly of new stone. A new weir will be built at the north end 208 feet in length. Sections have been taken and the estimate has been forwarded for sanction. Work will be complete before the next rains set in.	to discharge surplus. D = 4 √M³ X 400. a Discharges into Ootkur tank. b C = 400. c 113 feet of good weir and 200 feet of rough stone can hardly be called a weir. A new weir of 268 feet will be constructed of proper material. d Should be 268 feet new weir.
128 a 1 & 2	Wothaloor Tank.	18½	b 4,718	2½	308	...	c 261	47	6	...	...	...	...	...	...	D = 4 √M³ X 400. a Discharges into Ootkur tank. b C = 675. c East weir, 87 feet in length. West weir, 174 feet in length, in good order. D = 4 √M³ X 775. a Discharges into Wothaloor tank. b C = 500 (D = 4 √M³ X 500) c West weir is 64 feet, and east weir is 86 feet in length—can be obtained by extending the west weir to the west over rocky ground; the other 60 by extending east weir eastwards where masonry work will be required. a Discharges into the Boochirajoo tank. b C = 500. c 125 feet for surface drainage and 15 feet for supply channel. d A rough stone weir over which water seldom passes. Water escapes round both end of the bund, but the soil is not good, and it is dangerous. Channel will be repaired at the same time as the tank bund. D = 4 √M³ X 500.	
128 a 1 & 2	Ananthasamoodrum Boochirajoo Tank.	10½	b 2,915	2½	210	...	c 100	110	5	...	...	...	...	...	...	Bund and revetment in fair order; bund requires raising, and gravel repairs to revetment. One sluice requires repairs. Sections have been taken and the estimate will be sent in shortly. Work will be complete by the end of August 1876.	
128 a 1 & 2	Ananthasamoodrum large tank	7½	b 2,265	3	c 125+15	...	d 57	83	6	...	...	...	...	...	...	Bund, except at the ends, is high and strong; towards the ends the bund will be raised and strengthened. The revetment will be rebuilt throughout. A new weir of 197 feet will be built at the east end. Sections are now being taken, and the estimate will be submitted shortly. Work will be complete before the end of September 1876.	

Proceedings of the Madras Government, Public Works Department,
27th March 1876.

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Return of Tanks affecting the Line of Railway for the Half-year ending 31st December 1875, &c.—(Concluded.)

Proceedings of the Madras Government, Public Works Department,
27th March 1876.

District.	Line of Railway.	Miles.	Between what Tele- graph Posts.	Names of Tanks.	Area of Catchment Basin, Square Miles.	Estimated Maximum Flood Dis- charge, Cubic Feet per Second.	Intended Maximum Depth of Water on Crest of Surplus Weir.	Length of Surplus Weir required.	Length of Existing Canals, Lanes and Surplus Weir.		Additional Length of Surplus Weir required.	Height of Top of Bund Above.		Approx- imate or Actual.	Special Remarks.	General Remarks.
									Total.	Effective.		Feet.	Feet.			
North-West Line.		130 131	a 6 & 7 b 3 & 4	Munoor-kiloham- mah Tank.	9	b 2,500	2	263	...	c 109	153	4 1/2	...	...	This tank bund and revetment are in fair order. The tank breached last year. Breach was closed, but not revetted. New weir of 150 feet will be built at the west end. Bund at west will be raised and strengthened. Estimate has been forwarded for sanction. Work will be complete before April 1876.	a Discharge from south weir crosses at 130—6 and 7, and from the west weir it crosses at 131—3 and 4. b C = 500. c West weir is 63 feet in length and south weir 47 feet. D = $\sqrt[4]{M^3} \times 500$.
		132 133	a 14 & 15 b 6 & 7	Hustavaram Tank.	8 1/2	b 1,150	2	129	...	c 125	4	4	...	...	This tank bund and revetment are in fair order, and require nothing to be done to them. The south weir will be lengthened 4 feet, which can easily be done at very little cost.	a Discharge from south weir crosses at 132—14 & 15, and from the north weir at 133—5 & 7. b C = 500. c South weir 80 feet, north weir 45 feet. D = $\sqrt[4]{M^3} \times 500$.
		136	a 11 & 12	Pantoor Tank...	1 1/2	b 540	2 1/2	33	...	38	None	4 1/2	...	...	This tank bund and revetment are in good order, having been repaired in 1875-76. Weir is also in good order.	a Surplus flows into the Nundaloor tank supply channel. b C = 400. D = $\sqrt[4]{M^3} \times 400$.
		137	a 7 & 8	Nagareddipally Tank (lately Dasabundum.)	1 1/2	b 607	2	c 61	...	Breached	61	24 1/2	...	...	This tank is breached. The bund and revetment are in very bad order. Over-see will, as early as possible, prepare an estimate for raising and strengthening the bund, and for reconstructing the revet-	a Surplus flows into Nun- dalore tank. b C = 450. c This will be new; there is no weir at present.

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Madras Railway

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Cuddapah Madras Railway		140	a 12 & 13	Muntapumpully Chellamareddy Tank.	7	b 2,150	c 3 1/2	87	...	105	None	6	...	...	The tank bund and revetment are in good order, also the weir which was repaired in 1876-78. The bund is high and of strong section.	a The bund will be brought up to this level. This tank was silted last year. The Dasabundum- dar having refused to carry out the repairs. D = $\sqrt[4]{M^3} \times 450$.
		141	a 8 & 4	Muntapumpully Kootalumamah Tank.	3	b 1,140	7	63	...	c 41	21	4 1/2	...	...	Tank bund and revetment are in very fair order. Nothing requires to be done to either. The weir will be extended to 63 feet at an early date.	a Surplus flows into the Wontimitta tank. b C = 500. c Could discharge up to 5 feet with safety. D = $\sqrt[4]{M^3} \times 500$.
																a Surplus flows into the Wontimitta tank. b C = 500. c In addition to this 41 feet there is what may be called a by wash in con- tinuation of the weir. It measures about 45 feet. The masonry of the weir will be extended over this as early as may be convenient. D = $\sqrt[4]{M^3} \times 500$.

21st January 1876.

(Signed) A. S. MOBERLY, Col., R.E.,
District Engineer.

(Signed) J. SCHIOURY,
Range Officer.

*Proceedings of the Madras Government, Public Works Department,
27th March 1876.*

No. 7 W.

No. 405-A. *Note by the Chief Engineer for Irrigation.*

COMMUNICATED to Government for their information.

(Signed) A. DE C. SCOTT, Major, R.E.,
*Depy. Chief Engineer for Irrigation,
for Chief Engineer for Irrigation.*

FORT ST. GEORGE,
15th March 1876.

No. 406. ORDER THEREON, 27th March 1876, No. 764.

IRRIGATION, No. 35.

ORDERED to be recorded.

(True Extract.)

(Signed) G. W. WALKER, Major-General, R.E.,
Secretary to Government.

To the District Engineer, Cuddapah.
" Chief Engineer for Irrigation.
" Consulting Engineer for Railways.
" Collector of Cuddapah.
" Revenue Department.

Exd. T. O'Connor.

Spare Copies

E. I. Form No. 19

OFFICE OF THE CHIEF ENGINEER
FOR IRRIGATION,
Fort Saint George,
15 March 1876.

No. 7 W.

Note by the Chief Engineer for Irrigation.

Irrigation.

Enclosures.

*Communicated to Government for
their information.*

Asst. Secy.

Major R.E.

*Deputy Chief Engineer for Irrigation
for Chief Engineer for Irrigation*

*The Secretary to Government
Public Works Dept.*

Compd. J.C.

5011-001/75 No 2905

PTW 1876 Departt
No 2066.

From

The Chief Engineer
for Irrigation

Dated 15th }
Recd 20th } March 1876

No 720

Encls 2.

Note on the
Return of Tanks affecting
the Madras Railway
in the Sidhach Range
for the half year
ending 31st Decr/75

By 27 March 76 PW 405A

Cir 22-3-76.

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No 764 S.A.B.

Proceedings of the head and tail

Under date the 27th March/76.

Read the following:-

The Chief Engineer } (H.E. Esq. of 15th March/76)
for Irrigation }
Printed

Ordered to be recorded.

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- To The District Engineer, Cuddalore.
- " Chief Engineer for Irrigation. With 2 Encls.
- " Consulting Engineer for Railways.
- " Collector of Cuddalore.
- " Revenue Department.

Desp 15-4-76

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2566
Govt. of 1876 Madras.
PUBLIC WORKS.

To
The H. E. Budden

Dated
Encl.
Recd.

G. O. 27 Mar 1876, No. 704

Nos. 405-406

Return of Tanks affecting
the Railway line in the
Fidhombur Range, Cuddalore
Dist. - Note by the Chief
Engr for Sanitation on the
for the half year ending 31st
Decr/75, recorded
18/11

405/6000000000

