

ABSTRACT

Water Resources Department – Villupuram District – Renovation of Sornavur Anicut across Thenpennaiyar River in Sornavur Village in Villupuram Taluk and District at a cost of Rs.39.00 crore – Administrative Sanction accorded - Orders issued.

Water Resources (S1) Department

G.O. (4D) No.3

Dated 02.03.2023 சுபகிருது, மாசி 18 திருவள்ளுவர் ஆண்டு 2054 Read:

From the Chief Engineer, Plan Formulation, Water Resources Department, Letter No.B4/2308/Anno 2021-22 / 207 Reh / AE1 / AEE3/ 2022, dated: 03.11.2022.

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ORDER:

During the Demand for Grants for Water Resources Department for the year 2021-2022 held on 23.8.2021, the Hon'ble Minister for Water Resources on the floor of the Assembly has announced that "Based on the types of rehabilitation works for irrigation structures and for new major schemes mentioned in the 'Vision document for a New Dawn for State and District level programme, 207 Tanks, supply channels, ponds and their structures spread over 17 basins of 31 Districts will be rehabilitated in a phased manner under NABARD assistance".

2. The Chief Engineer, Plan Formulation, Water Resources Department in his letter read above has sent a proposal for Renovation of Sornavur Anicut across Thenpennaiyar River in Sornavur Village in Villuppuram Taluk and District at a cost of Rs.39.00 crore and the scheme envisages as follows:

(a) Physical Structure

Sornavur Anicut constructed across Pennaiyar River in the year 1970. Prior to the construction of the Sornavur Anicut, water was diverted from Pennaiyar River into Bangaru Channel by means of Korambu by the local ryots. Therefore the necessity for the construction of an Anicut across Penniayar River near Sornavur Village was keenly felt by the Puducherry Government. It was therefore decided in 1962 to put up an anicut about 306 metres with D/S of the head Sluice to Bangaru Channel in the line of the Korambu to give assured supply into the Bangaru Channel.

(b) Ayacut detail

The Bangaru Channel is 14 Km length taking off at the left flank of the anicut feeds a total number of 21 tanks, 8 tanks in Tamil Nadu and 13 tanks in Puducherry State. The total ayacut fed by Bangaru Channel is 6053.11 Acres. Comprising of 1275.11 Acres in Tamil Nadu and 4478 Acres in Puducherry State. In addition through the open traphizodal vent in the anicut an ayact of 1822.66 Acres in Tamil Nadu limits is benefited through open off take channels below the Anicut.

(c) Present condition of the Anicut

Due to the unprecedented heavy rainfall occurred in the North East monsoon 2021, the Energy dissipating arrangements of the Anicut such as Cement Concrete ED Blocks, Launching apron were completely eroded. The down stream side river bed scoured to beyond the depth of downstream side cutoff wall. Bank protection works such as revetments, Toe walls on both sides of the Anicut were completely eroded. The right side abutment structure was temporarily restored in the 2021 monsoon flood. The maximum flood discharge observed at Sornavur Anicut on 19.11.2021 was 1,59,270 cusecs. The upstream side Toe wall, Stone pitching and down stream side Toe wall were completely eroded. Both side flood banks of the Anicut were also eroded. At present the Sornavur Anicut is in highly dilapidated condition.

(d) <u>Proposal</u>

- i Diaphragm wall of 0.80 m thick and 9m depth in Reinforced Cement Concrete M30 grade and Cement Concrete ED Blocks of size 1.50x1.50x0.90m in 9 rows will be constructed in PCC M15 grade.
- ii The width of the Stilling basin will be extended about 5.30m in PCC M15 grade.
- iii Upstream side Toe wall and down stream side Toe wall will be constructed in PCC M15 grade.
- iv Launching apron using boulders will be provided in the down stream of the anicut for a length of 18m.
- v Stone pitching using boulders will be provided in the upstream side of the Anicut. Wearing coat of 0.25 m thick in RCC M20 grade over the existing body wall will be provided.
- vi The necessary bank protection works such as revetments and Toe walls are also proposed.
- vii Strengthening of Flood banks about 1500m on upstream side and 500m on downstream side for both side of the Anicut
- viii The top width of the bund proposed is 5 m.
- ix The front and rear slope of the bund will be adopted as 1.5:1 and 2:1 respectively.

(e) Benefits

By the renovation of this anicut the irrigation facility for the existing ayacut will be ensured. Effective recharging of ground water can be achieved and their by depletion of water table may be avoided. Agricultural productivity and quality of drinking water will be improved.

- (f) The estimate works out to Rs.39.00 crore as per the Schedule of Rates for the year 2022 2023 of Villupuram District.
- 3. After careful examination, the Government have decided to accept the proposal of the Chief Engineer, Plan Formulation, Water Resources Department and accordingly, administrative sanction is accorded for Renovation of Sornavur Anicut across Thenpennaiyar River in Sornavur Village in Villupuram Taluk and District at an estimated cost of Rs.39.00 crore (Rupees Thirty nine crore only) as follows: Further the amount sanctioned in the order will be provided in the Financial Year 2023 2024.

SI. No.	Description	Estimate (amount in Rupees)
1.	Renovation of Anicut	31,85,81,022
2.	Provision for GST charges at 18%	5,73,44,584
	Civil Cost Total	37,59,25,606
3.	Provision for Labour Welfare Fund at 1%	31,85,810
4.	Provision for advertisement charges	6,00,000
5.	provision for Price adjustments	39,00,000
6	Provision for Petty supervision charges, contingencies and Unforeseen items at 2.5%	63,88,584
	Total	39,00,00,000

4. The expenditure sanctioned in para 3 above shall be debited under the following Head of Account.

4700 – Capital Outlay on Major Irrigation – 02 Pennaiyar Basin – 800 – Other Expenditure State's Expenditure - AA – Reservoir – 416 – Major Works – 01 Major Works.

(IFHRMS DPC 4700 - 02 - 800 - AA - 416 01)

5. The expenditure sanctioned in para 3 above shall constitute an item of "New Instrument of Services" and the approval of the Legislature will be obtained in due course. Pending approval of the Legislature, the expenditure will be met by drawal of an advance from the Contingency Fund. The Engineer-In-Chief and Chief Engineer (General), Water Resources Department, Chennai-5, is directed to send necessary proposals to Government in Finance (BG-I) Department directly in Form "A" appended to the Tamil Nadu Contingency Fund Rules, 1963 along with copy of this order for

sanction of an advance from the Contingency Fund, orders regarding which will be issued by Finance (BG-I) Department separately. He is also directed to send necessary explanatory notes for inclusion of the above expenditure in Supplementary Estimate 2022 - 2023 to Finance (PW-II / BG-I) Department at an appropriate time.

- 6. The Engineer concerned is directed that the details of works executed must be uploaded in the Tamil Nadu Water Resources Information and Management Systems Portal under the Control of Chief Engineer, Institute of Water Studies, Hydrology and Quality Control to ensure effective data base in the Water Resources Department.
- 7. This order issues with the concurrence of Finance Department vide its U.O. No.6550/PW-II/2023, dated. 25.02.2023 and Additional Sanction Ledger No.2547 (Two thousand five hundred and forty seven). (IFHRMS ASL No.2023022547).

(BY ORDER OF THE GOVERNOR)

SANDEEP SAXENA, ADDITIONAL CHIEF SECRETARY TO GOVERNMENT.

To

The Engineer-in-Chief and Chief Engineer (General), Water Resources Department, Chennai-5.

The Chief Engineer, Plan Formulation, Water Resources Department, Chennai-5.

The Chief Engineer, Water Resources Department, Chennai Region, Chennai-5.

The Chief Engineer, Institute of Water Studies, Hydrology and Quality Control, Taramani, Chennai-113.

The District Collector, Villupuram.

The District Treasury Officer, Villupuram.

The Pay and Accounts Officer (East), Chennai-8.

The Principal Accountant General (A&E), Chennai-18.

The Principal Accountant General, (Economic and Revenue Sector Audit), Chennai-18.

Copy to

The Secretary-II to the Hon'ble Chief Minister, Secretariat, Chennai-9.

The Special Personal Assistant to Hon'ble Minister (Water Resources), Secretariat, Chennai-9.

The Finance (P.W.II / B.G.I / B.G.II / W&M-I) Department, Secretariat, Chennai-9.

The Water Resources (OP-II / ISpl.I) Department, Secretariat, Chennai-9.

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// Forwarded by Order //

Section Officer