

ABSTRAK

Embun Semar yang terletak di Desa Mlatirejo, Kabupaten Rembang dibangun di Sungai Serojeh dengan luas daerah aliran sungai $10,62 \text{ km}^2$. Embung Semar berfungsi untuk memenuhi kebutuhan air baku dan kebutuhan air irigasi. Embung Semar didesain dengan kapasitas genangan air sebesar 240.449 m^3 pada elevasi +67. Volume tampungan efektif Embung Semar sebesar 137.384 m^3 mampu melayani kebutuhan air baku dan air irigasi masing – masing sebesar $0,002 \text{ m}^3/\text{detik}$ dan $0,08 \text{ m}^3/\text{detik}$. Bangunan pelimpah yang didesain mampu mereduksi debit banjir rencana periode ulang 50 tahunan sebesar $121,091 \text{ m}^3/\text{detik}$ menjadi $43,47 \text{ m}^3/\text{detik}$. Desain tubuh embung direncanakan menggunakan urugan tanah homogen dengan tinggi 15 meter dan panjang 158 meter. Rencana waktu pelaksanaan proyek adalah 28 minggu dengan rencana anggaran biaya sebesar Rp 8.469.864.600,00.

Kata kunci : Sungai Serojeh, Embung Semar, Irigasi.

ABSTRACT

Semar small dam which is located in Mlatirejo village of Rembang Regency is built on Serojeh River with 10.62 km^2 of watershed.. The function of Semar small dam is to fill the needs of raw water and irrigation water requirement. Semar small dam was is designed with 240.449 m^3 of water capacity in +67 elevations. The effective volume of Semar small dam is 137.385 m^3 which provides the needs of raw water and irrigation of them are $0.002 \text{ m}^3/\text{sec}$ and $0.08 \text{ m}^3/\text{sec}$. This spillway is designed to reduce the flood of reissue 50 years period of $121.091 \text{ m}^3/\text{sec}$ into $43.47\text{m}^3/\text{sec}$. The small dam was a homogeneous soil with its 15 meter in height and 158 meter in length. This project implementation is scheduled for 28 weeks with a budget plan of Rp 8.469.864.600,00.

Kata kunci : *Serojeh River, Semar Small Dam, irrigation.*