ABSTRACT

Surabaya Sport Center (SSC) as stadium international level is not quit of the condition of football field as rainwater pond at surface, and also exploiting of less efficient water.

In the plan this use System cell is a system of drainage functioning also as irrigation system. coefficient value of drainage reckoned pursuant to daily rainfall maximum during 10 year ( 1994-2003), that is equal to 254 mm /hour. At geology use coat of porous as thick as 0,45 m which consist of sand coat as thick as 0.30 m with value assess Coefficient of hydraulic ( K1) = 2 m / day, and gravel coat residing in under him as thick as 0,15 m, with Coefficient value of hydraulic ( K2) = 150 m / day. Requirement irrigating of grass of zoysia matrella 135,66 m³ / 7hari. Irrigation system the used is by using divided pump become 4 service area, which is the each area with pump capacities (Rated power) = 3kW.

From result of planning With this system almost entire all rainwater can be permeated swiftly, so that the no time happened pond in field, so that can create the condition of football field remain to be good by exploiting existing facility and with processing of water which as efficient as possible.

Keyword: Surabaya Sport Center, pond, cell system, coefficient of drainage, sand, gravel, irrigation, pump.