Trusses for 10-inch pipe complete and in place 16.50 each. """ 8-inch """" """ 18.00 "" 10-inch expansion joints complete and in

place at ..... 55.00 " 8-inch expansion joints, complete and in

equipped with castings ..... 22.00 " Additional height of piers, per vertical foot... 3.00

The accompanying photograph shows a section of exposed sewer and a drop manhole entirely above ground, a complication arising from the conditions before mentioned.

## PROPOSED SEWAGE TANK AT GUILDFORD, ENG.

The tank now in course of construction is what is known as the "Fieldhouse Patent Tank," the advantages of which in comparison with square or rectangular tanks are as follows:—

(1) That the whole of the sewage in the tank is obliged to travel from the centre to the circumference.

(5) That the surface of tank being divided into seventeen parts prevents the scum being broken up by the wind, and at the same time allows the removal of small portions without disturbing the remainder of contents.

(6) That the tank has always the same capacity, owing to the facilities included for the periodical removal of sludge and scum.

(7) That the large weiring surface aerates the effluent, and, owing to the slowing down of the velocity, allows largely increased volumes of sewage to be dealt with without disturbance of the scum or solids. (The ratio of the inlet to the outlet is as 1 to 66).

(8) That no aërial nuisance is created owing to the tank never requiring to be emptied.

The following is a short description of the manner in which it is proposed to deal with the sewage in this tank. The flow enters the central tank through a 15-in. diameter pipe and discharges over an inverted cone, the sludge falling through a small annular space at foot of cone, and the effluent passing through some small openings in the wall of central tank to six outside compartments. Small particles of sediment escaping from the central tank slowly settle in the



Cuildford : Proposed Additional S wage Sedimentation Tank.

(2) That perfect sedimentation takes place.

(3) That the solids are not disturbed by the inflow, but deposited in sludge pits, where they can be regularly and easily removed.

(4) That the flow of sewage over the inverted cone in the centre of tank directs the solids to the bottom, any particles escaping being impelled to sludge outlets down the sharply inclined walls.

outer compartments, while the sewage quietly approaches a weir, 260 ft. in circumference, over which it passes to the effluent channel and thence to the effluent pipe. The solids may be removed periodically by opening the penstocks in sludge pits, the weight of the sewage forcing the sludge through a cast-iron pipe into the sludge tank. The scum may also be removed, at convenient times, from small portions of the surface (which is divided up by boards fixed in