Investigation and research on the equipments of sewerage stormwater infiltration facility in the Yokohama City

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( Purpose )
In the Yokohama City, the increase of the stormwater runoff quantity with the progress of the urbanization is remarkable, and rain water countermeasure in sewage works is being mentioned as a large problem.

In such situation, the sewerage storm storage and infiltration business was carried out, and the installation of "infiltration inlet, etc." has been advanced in the Yokohama City, since the year 1994.

However, it is necessary to confirm various effects of "infiltration inlet, etc." by the installation in order to attempt the extension of further business.

This research is coordinated on research method as plan documents for solving various problems of the infiltration in Yokohama City, while actual state of sewerage rainwater infiltration facility is examined.

( Result )
The survey result of infiltration facilities till now was coordinated as the following.

- It is necessary to advance the installation for meeting the rain water not only from the premises but also from road drainage.

- It is necessary to attempt improvement of the infiltration capacity and maintenance of the long-term infiltration capacity by combining porous measure of infiltration inlet and infiltration trenches, mud inlet, etc..

- The osmotic effect must be widely recognized on not only reduction of stormwater flow but also various effects such as groundwater recharge, confluence improvement for further purpose of installation.

- On the calculation technique of the infiltration capacity, there are multiple methods, and it must be established to position it in the stage of sewerage plan in future, accompanying with the evaluation methods of stormwater runoff depression effect etc..

- There are little knowledge on the effects of infiltration rain water for road, soil and groundwater etc., and the investigation must be done through infiltration experiment.

On and, technical knowledge was accumulated in the Yokohama city, it had been scheduled that carries out the investigation of infiltration experiment for the purpose of judging the ideal way of future business, and the research planning technique was examined in this year, and infiltration experiment plan documents was made by Yokohama City.

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Key Words
Rainwater infiltration facility, osmotic power evaluation, road, groundwater, penetration experiment plan