



City of Hermosa Beach

Information Item

DATE: Monday, November 23, 2020
TO: Honorable Mayor and Members of the City Council
FROM: Marnell Gibson, Director of Public Works
SUBJECT: Update on Storm Drains and Sump Pits As They Relate to Concerns of an Increase in the Mosquito Population

Executive Summary

On December 17, 2019, Mr. Jim Fasola submitted a supplemental letter to accompany his City Council update, which he presented as the City's delegate for the Los Angeles County West Vector & Vector-Borne Disease Control District.

In the letter, Mr. Fasola identified two concerns: 1) how the City operates the storm drains at the beach and 2) the requirement for sump pits for private development and the potential that both concerns have for allowing an environment that would support an increase in the mosquito population. City staff have previously provided explanations that due to the sandy soils that are typical in Hermosa Beach, infiltration of water occurs regularly under both scenarios thus reducing the potential for standing water for extended periods of time.

The City storm drain outlets are managed for a rainy season and a dry season. During the dry season (May – October), the City fills in the drainage path and the covers the outlets to create a more even surface along the beach. Any flows that may enter into the storm drain are typically small and would then infiltrate into the sand. The sump pits are a water quality design requirement. The pits or boxes are required to have a perforated bottom to allow for infiltration into the sandy soils.

Analysis

Mr. Fasola's December 17, 2019 letter is attached and his two items of concern are listed below followed by responses from staff.

#1 - The storm drains along the beach are not being cleaned out (a temporary and fixable problem).

Staff Response: The City storm drains that Mr. Fasola refers to are the outfalls at the beach, this was confirmed in a meeting with Mr. Fasola and County staff in 2019. The outfalls are covered with sand during the summer months and uncovered during the rainy season to



City of Hermosa Beach

prevent any flooding up stream. The County owns five of the outfalls and the City owns six of them, for a total of eleven outfalls that serve the City. The City covers and uncovers nine of the outfalls annually and the County manages the other two, at Herondo and 16th Street. The County reimburses the City for managing their outfalls.

During the summer months when the outfalls are buried in the sand, any low flow water that reaches the storm drain outlet infiltrates into the sand, preventing standing water, thus not providing a breeding ground for mosquitoes in the pipes.

Additionally, the County “baits” the inlets with mosquito repellent tablets during the mosquito season to prevent mosquitoes from breeding in the pipes.

The covering and uncovering of the outfalls with sand during the dry weather months is a practice that the County performs in the Cities of Manhattan Beach and Redondo Beach as well.

#2 - There is a proliferation of sump pits (drain pits) being built at new houses (a permanent problem).

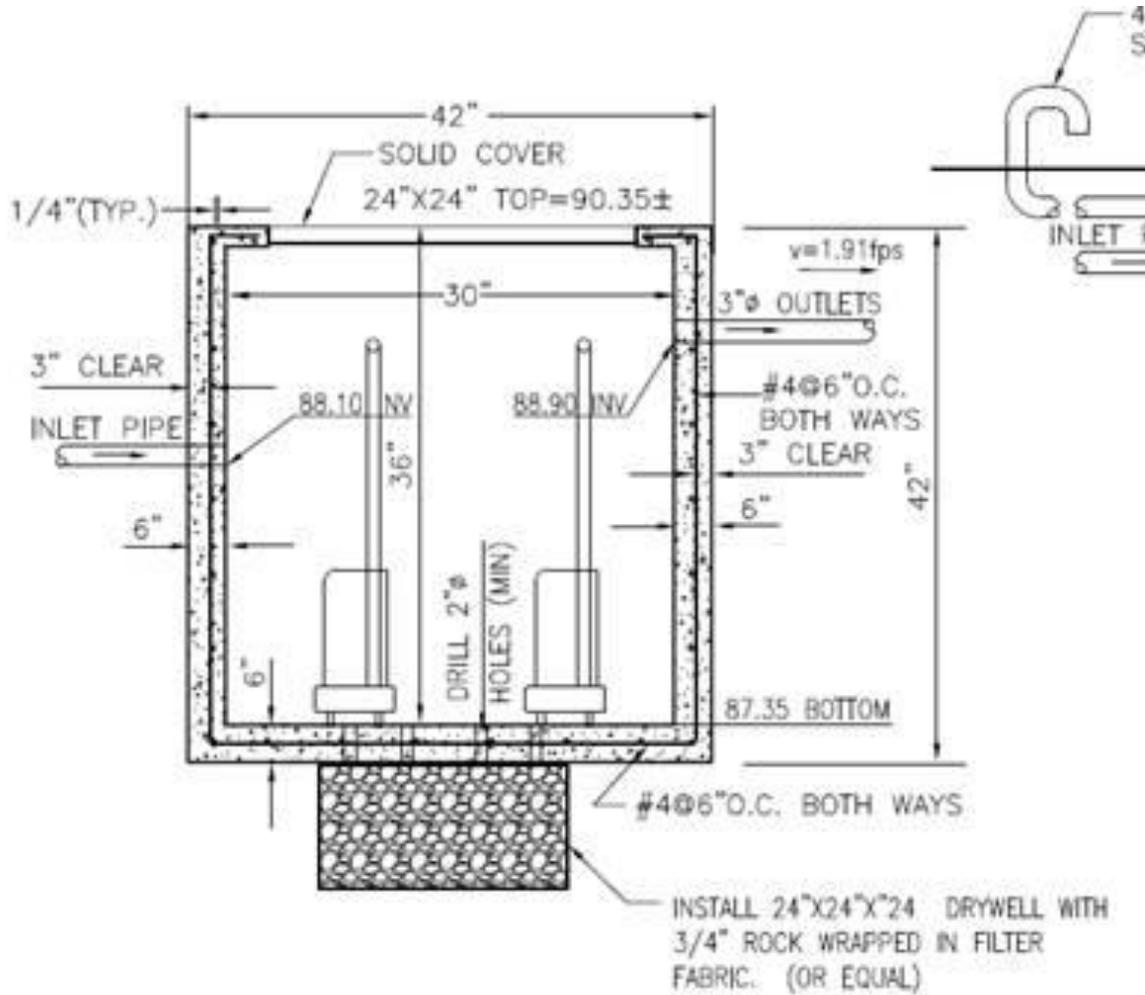
Staff Response: Sump pits are a result of the County of Los Angeles Low Impact Development Standards Manual (LID Standards Manual) that was prepared to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit for stormwater and non-stormwater discharges from the MS4 within the coastal watersheds of Los Angeles County.

The City of Hermosa Beach modeled its own LID guidelines to follow the County’s standards for the implementation of the MS4 permit and for compliance with the City’s Municipal Code.

The main requirement of Low Impact Development is to infiltrate runoff from a rain event into the soils to minimize any pollutants that the runoff may carry to the ocean. As a result of the LID standards, sump pits that house the pumps for the LID systems are constructed for new developments. The sump pits however, have drainage holes at the bottom to prevent standing water in the pits during dry weather, thus not allowing the breeding of mosquitoes. A sample detail for the design of a sump pit with drainage holes is provided below.



SAMPLE SUMP PIT WITH DRAINAGE HOLES



SUMP BASIN DETAIL

ATTACHMENT

Report from the Hermosa Beach Trustee of the L.A. County West Vector Control District

Hermosa Beach City Council Meeting

December 17, 2019

Last September I told Council of two problems that directly increase our mosquito population:

- #1 – The storm drains along the beach are not being cleaned out.
(A temporary and fixable problem).

- #2 – There is a proliferation of sump pits (drain pits) being built at new houses.
(A permanent problem).

The City storm drains are currently clogged, but the mosquito season for 2019 has ended.

A permit from the Coastal Commission is required to move the sand required to open those drains. But if rainwater unclogs the drains, the City can keep these cleaned out without permits or review as the Coastal Commission will look at this as an “existing” or “natural” condition.

The City should have a plan in place now, to start cleaning and maintaining the drains as soon as the rainy season is over. Our city manager has been contacted by the Director of Vector, and she should be working with him and Public Works on our plan of action.

The sump pits are a much more difficult issue, and are tied to more intensive development in the City in general. For instance, the construction of new basements is a fairly new phenomenon that requires the installation of many sump pits. The general plan (Plan Hermosa) doesn't specifically address this. Council and the Planning Department might consider the impacts of increasingly intensive development on the mosquito problem in the City.

Jim Fasola