10/9/18 AGENDA, ITEM 6a - THE GREENBELT INFILTRATION PROJECT SUPPLEMENTAL EMAIL FROM DEBBIE ROSS SUBMITTED TO THE CITY MANAGER'S OFFICE ON 10/8/18 AT 1:53 A.M.

From: Debbie Ross <daesr9@gmail.com>
Sent: Monday, October 8, 2018 1:53 PM
To: Ann Yang <anny@hermosabch.org>; City Council <citycouncil@hermosabch.org>; City Clerk <cityclerk@hermosabch.org>
Subject: Objections to the Greenbelt Infiltration Project

October 8, 2018

Re: Objections to the Greenbelt Infiltration Project

Dear Hermosa Beach City Council,

You, the members of the Hermosa Beach City Council, are caught between the proverbial rock and a hard place. The Rock: you believe that this massive stormwater infiltration project must be built in Hermosa Beach by 2021, or risk fines being levied for falling out of compliance. The Hard Place: the science and law prohibit the infiltration project from being built on the greenbelt.

The Science

The greenbelt water table is too high to build a massive 2.4 million gallon infiltration gallery steps from hundreds of homes. This fatal flaw is detailed by engineer and resident Alex Reitzman in his letters to this Council. Without sufficient earth between the bottom of the infiltration structure invert and the top of a fluctuating (and rising with the sealevel) water table, the e coli and other toxins cannot break down as warranted. There simply is not enough soil to work, so this liquid brew will saturate the soils supporting our homes and contaminate the dirt of our greenbelt. There is a reason large infiltration projects such as this are not built near the beach in high water table zones.

Additionally, Tetra Tech is a relative new comer to this type of project and admitted at the May greenbelt meet up that they had never built a project of this size so close to homes or the ocean with such a high of a water table. The only similar project they've built is in Bolivar Park. Although of similar size, it is less impactful to the far more distant homes, has a higher water table and a significant portion of that stormwater is recycled, rather than infiltrated. Tetra Tech's rookie status to this genre of projects has shown up in a number of ways, most recently by apparently miscalculating the critical water table height by a precious 7 feet (see the Oct. 5, 2018 Alex Reizman letter). The models and calculations used to design this project require precision and accuracy. Otherwise, garbage in, garbage out and none of our homes and quality of life will be safe from damage.

Liquefaction risks currently exist along the greenbelt (Geosyntec studies and Alex Reizman's letters dated October 8, 2018 and June 14, 2018). Soils subject to liquefaction do not just damage homes during earthquakes. Such soils are also susceptible to settling

and shifting and thus damaging the structures above when they become repeatedly and unnaturally saturated (ie. when repeatedly forced to absorb 2.4 million gallons of water injections). Please review the Reitzman letters for the substantive discussion on this topic.

The Law

The zoning and land use laws applicable to the greenbelt prohibit this project.
The greenbelt is zoned OS-1, Restricted Open Space, as such an industrial sized water treatment/infiltration plant cannot be built on or under the greenbelt. As the HB City Attorney discussed in his legal analysis on greenbelt building restrictions when reviewing a proposed installation of a granite path:

"the physical improvements permitted on the Greenbelt are limited by Sec 17.32.030 to the improvements stated therein."

The only underground improvements "stated therein" as permissible for the Greenbelt are: irrigation improvements, erosion control and anti-seawater intrusion wells. All three items are expressly listed in the HB zoning Code as permissible underground improvements, underground stormwater infiltration plants are not included on the approved list. Simply put, if it's not on the list, it can't be built and stormwater infiltration plants are most definitely not on the list.

More recently City staff, perhaps to challenge the greenbelt building restrictions, told the City Attorney that the underground infiltration structure could be construed as an anti-seawater intrusion well:

"The project consists of structures ("improvements") that staff tells me in part serve an anti-seawater intrusion purpose." City Attorney letter to Kristy Morris, Sept.20, 2018.

Construing the infiltration structure this way is not only misleading, it's simply untrue. The planned infiltration project injects polluted water at a shallow 10-15 feet below the ground surface. First of all, the last thing saltwater intrusion wells would use is contaminated stormwater filled with e coli or unfiltered toxins to mix with the freshwater aquifers. The seawater anti-intrusion wells are monitored to ensure that the quality of the recycled water used for intrusion is clean. Secondly, the saltwater intrusion wells go hundreds of feet deep into the water aquifers to create the protection barriers, not 10-15 feet below ground surface. This contaminated stormwater does not and cannot act as a seawater anti-intrusion barrier, it is polluted and does not go deep enough.

Additionally, the language in HB Code Section 17.32.030 states:

"Only nonbuilding public improvements relating to landscaping, beautification, erosion control and irrigation improvements by the city which are consistent with or necessary to maintain and assure permanent open space in and for public parks and recreation purposes or relating to anti-seawater intrusion wells as an existing use;"

The Code to states that anti-seawater intrusion wells are "existing" at the time of the writing of the Code section. This makes sense since the wells were placed there around 1953. Even if someone tries to claim that the stormwater infiltration gallery "serves an anti-

seawater intrusion purpose", this brand new 2019 built infiltration structure is not an existing use. One last point, the Greenbelt infiltration project has absolutely nothing to do with the LA County DPW or Water Replenishment District of Southern California's management of the of the seawater intrusion efforts for the LA Basin because seawater intrusion is managed via the "West Coast Barrier Project".

The argument that this infiltration structure could be construed as an anti-seawater intrusion well is at best disingenuous and more likely a tactic to circumvent the Greenbelt building restrictions voted on by the citizens of Hermosa Beach. Attempting to build the infiltration project anywhere on the greenbelt (above or below) is a violation of not just the letter of the law, but most definitely violates the spirit of the residents' intent when they voted to protect the greenbelt from land grabs and negative impacts.

To knowingly build this dangerous and defective infiltration project anywhere on the greenbelt, (or on any of the alternative sites with the same characteristics) is a breach of your duties owed to the residents living around the greenbelt. Citizen groups have identified and repeatedly illustrated how unreasonable it is to build this oversized project in or adjacent to a liquefaction zone with such a high water table (in violation of the most minimal statutory requirements, such as the 10' distance statutorily required between invert and groundwater). While the City's recent agreement to do an EIR is a welcome concession, this does not make reasonable the unmitigable potential damage to hundreds of residents, ranging from structural damage to our homes and property, the annoyance from perpetual odors and noise, increased hazard risks in case of earthquake or subsidence of the earth under buildings (due to infiltrating saturated soils, on a high water table next to our homes).

Unfortunately, while earlier Councils were caught up in the Oil litigation, from day one, management of this large project fell to the wayside with no one overseeing the most basic of duties on site selection, monitoring the consultants and staff, finding legitimate options and alternatives, complying with the Brown Act, authorizing appropriate site testing, and frankly doing the most basic of due diligence.

The Solution

Engage in negotiations with the purveyors of most of this contaminated water, Redondo Beach, to take on its' share of the problem. It is simply inequitable to burden Hermosa Beach with 100% of the clean up while producing less than 14% of the problem. Hermosa has addressed its stormwater problem in other zones of the City with a combination of small and right sized infiltration trenches along Pier Ave. and on the beach along the Strand, with patches of green streets here and there. By upsizing the currently planned Strand trench at 2nd St., Hermosa could take care of its contribution to the Herondo storm drain. Time to go back to the drawing board and talk to the other sources of the problem, our fellow Beach Cities in the Watershed Management Group.

Sincerely yours,

Debbie Sanowski

3rd St., Hermosa Beach