

October 1, 2019

To: Michele Nekota, Department of Parks and Recreation, City and County of Honolulu

Regarding maintenance of athletic fields at Waimanalo District Park, a.k.a. Azevedo Field, the Department of Parks and Recreation and the Waimanalo councilperson Ikaika Anderson have consistently claimed that the problem prohibiting appropriate maintenance of the functioning of these fields for keiki athletic purposes is the underlying “clay soil.” It is pointed out that during dry periods cracks open in the soil, presenting a hazard in the event that a participant in an athletic program might trip, resulting in injury for which the City and County would be liable.

The soils at the park are similar to soils widespread in Waimanalo and elsewhere on this island, as described in the soil survey of Oahu (U.S. Govt. Printing Office, 1972). The park lies on two soil series, roughly separated by the roadway bisecting the park from mauka to makai. On the Kailua side is the Waialua soil series; on the Makapuu side is the Haleiwa soil series. Both these soils are composed partially of clays known to have “moderate” shrink-swell potential, due to their mineral make-up, with the Waialua series having this characteristic slightly more pronounced. These brown-to-grey soils differ from the red soils characteristic of the central Oahu plains, which do not shrink and swell due to moisture content.

Soils similar to the Azevedo site are common throughout Waimanalo, except in the near-shore areas. Soils underling the Olomana golf course are similar except that they have an even more pronounced tendency to crack if dried. We have not heard of any problems with golfers losing their balls to cracks in the fairways, or stumbling and falling. This may be because the course is adequately irrigated to prevent drying and cracking.

It is unfortunate that you cannot be advised by the experts of yesteryear, who were responsible for soil surveys and advice on soil management. The surveys were done by the [then] USDA Soil Conservation Service (now the Natural Resources Conservation Service), and much of the scientific data was developed by soil scientists and soil mineralogists, long retired, with the University of Hawaii’s [then] Department of Agronomy and Soil Science. Both of these entities, having done their work in characterizing Hawaii’s soils and their management, have moved on to focus mainly on other objectives.

The science of managing these soils, however, remains the same despite changes in the bureaucracies. It’s just physics. If the Azevedo soils are prevented from drying out by appropriate irrigation, they will not crack. If their cracks when dry are filled with sand or organic matter or a mixture of these, they will be ameliorated to be less prone to cracking, as long as an irrigation regime is subsequently maintained.

Mayor Caldwell, in a communication dated 9/25/19, stated, “because of the clay material that comprises the field, the top layer would need to be replaced every few years....” This, in my opinion, is nonsense, and I challenge you to provide any testimony from a reputable soil scientist that substantiates this claim.

Councilperson Anderson claimed in a public meeting that the irrigation system had been fixed twice to no avail and that it wasn’t worth the effort to fix it yet again, or words to that effect. The former park manager has stated that one problem had been that the city provided brass irrigation fixtures that were stolen, and that his request for plastic fixtures was ignored, more brass fixtures were installed, and these were again stolen.

It is up to your department to do what's necessary to make these athletic fields usable for Waimanalo's children. If you choose to do so, you can ensure that the irrigation system in the park is up to standard and maintained and run consistently. If additions of sand and/or compost are desired as topdressings, these can be applied for much less than the many millions of dollars that your office has claimed would be required to make these fields usable. The City's municipal composting system is nearby and available. Water for irrigation is available from the State's agricultural irrigation line running along Hihimanu Street, so no expensive municipal potable water need be used.

Considering the realities that I describe here, I cannot understand why your agency is stuck with the "clay soil," no-can-do lament and not anxious to make this facility function as it was intended, to serve the sports needs of Waimanalo's youth.

The suspicion is widespread in the community that the City has a hidden agenda for the park property, and that allowing the facility to deteriorate and go unmaintained is part of a strategy to justify development of the unwanted and unneeded Waimanalo Bay Beach Park regional athletic complex, thus freeing the Azevedo acreage for other, unknown purposes.

With hopes that you will do the right thing for Waimanalo by fixing what we already have,

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Cc (by digital copy):
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Jim Howe, mayor's liaison to Waimanalo Neighborhood Board
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