

You all may notice at the end of this week that there will be activity on the Burnham Strip. In 2020 the board of the Sewer Authority Mid-Coastside (SAM) approved a contract for the construction of additional wet weather storage in the strip. Granada Community Services District (GCSD), as a board member of SAM, approved of the project and granted an easement to allow it to happen. It is a SAM project.

There is already one 200,000 gallon storage facility on the strip (built in 2012) and a second very similar one will soon be built. These facilities give SAM the ability to hold water during big storm events and for planned maintenance shutdowns at SAM. The new storage will go in next to the existing one, and when the project is completed by mid-Spring the area will be recovered with soil and seeded. The new tanks will be below ground as the current ones are, with only a few maintenance-hole covers to be seen. The plans for the future park take these features into consideration in the design. Below is a more detailed description of the project by the SAM General Manager. I am also attaching a map showing the location.

Our team is working hard on the park plans and expects to have plans ready for submittal by spring.

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## **DESCRIPTION OF THE PROJECT BY KISHEN PRATHEVADI, SAM GENERAL MANAGER**

### **Wet Weather Storage Facility Expansion Project Overview**

Prior to 2014, during unusually heavy rain events the capacity of the Sewer Authority Mid-Coastside's (SAM's) largest pump station, the Portola PS, was periodically exceeded. This would cause the wet well to become overwhelmed with the higher-than-normal flows. During these extreme weather events, sewage would back up into the interceptor upstream of Portola PS and the surrounding gravity sewer system eventually leading to sanitary sewer overflows (SSOs). An SSO is a violation of SAM's National Pollutant Discharge Elimination System (NPDES) Permit and can be met with steep fines and litigation.

In order to manage stormwater during heavy rain events, and aid in planned shutdowns for maintenance, SAM constructed Phase I of the Wet Weather Storage Facility Project in 2012. This is a completely passive storage facility with a capacity of 200,000 gallons buried out of sight under Burnham Strip. It is connected to the gravity sewer that is just upstream of the Portola PS wet well. If the inflow rate to the pump station exceeds its pumping capacity, and the wet well starts to backup, the excessive sewage will flow into the wet weather storage facility. The facility consists of five (5) interconnected precast concrete chambers. Each chamber is 6 feet high, 10 feet wide and 90 feet long. The five chambers are sloped at 0.5 percent towards the pump station. After the rain event and excessive flows decrease, wastewater that was diverted into the storage facility flows back to the pump station by gravity. This system requires no pumps, valves, gates, moving parts, or onsite supervision by SAM staff.

Phase I of this project was successful for the following reasons:

- Provides 200,000 gallons of wet weather storage volume to SAM's collection system
- Prevents SSO's from occurring due to a 5-year, 6-hour storm or similar sized event
- Reduces potential SSO volumes of a higher intensity storm
- Provides greater operational flexibility to collection system operators
- Allows extended shut down of the Portola PS for routine maintenance and emergencies

- Allows for future storage expansion
- Provides flow equalization for the treatment plant if necessary

Phase I was awarded to a local construction contractor for \$600,000 in 2012. The work was completed in under 5 months and was immediately utilized during the next rainy season. The facility has been used many times since it came online holding sewage temporarily while repairs and upgrades were made to the force main as well as during storm events when the pump station was unable to maintain wet well level control. The facility has also been used to equalize flow at the treatment plant to normalize flows that otherwise could disrupt the biological process.

To further protect public health and the local marine environment, SAM is implementing the phase II expansion of the storage facility which will add an additional 200,000 gallons of storage bring the total capacity to 400,000 gallons. Although there have been no SSOs at the Portola PS since Phase I was built, climate change is expected to increase storm intensities and contribute to sea level rise. Expansion of the storage facility now will allow SAM to meet these challenges with greater confidence. This expansion project was recently awarded to a trusted contractor that SAM has worked with before for \$1.3M. Work will begin on Burnham Strip in January 2021 and is expected to be substantially complete by March 2021.

The Contractor is expected to mobilize during the first week of January 2021, after which necessary surveying, potholing followed by temporary fencing will be carried out. Excavation and grading will then commence and after installing the manholes and necessary connections, the project will be completed with top soil replacement and hydroseeding with paving restoration.

When complete, the wet weather storage facility expansion will provide greater environmental protection, further reduce the risk of SSOs, and will provide SAM with additional operational and maintenance flexibility as the coastal environment and weather patterns are expected to change.