SANTA YNEZ COMMUNITY SERVICES DISTRICT MEMORANDUM

TO: Board of Directors

FROM: Loch Dreizler, General Manager

DATE: January 18, 2023

SUBJECT: Horizon Drive Sewer Easement Subsidence

Proposed Motion / Recommendation

Discuss additional subsidence on the Horizon Drive sewer easement.

Policy Implications

The District has *Construction Standards for Public Sewage System Improvements.* These standards are incorporated into project construction documents and specifications.

Fiscal Implications

There is approximately \$195,000 remaining from the Horizon Drive project loan fund to use for additional repairs or other Horizon Drive related projects.

Alternatives Considered

None

Discussion

Record rainfall on January 9 ushered in the re-emergence of subsidence on the District's easement between Horizon Drive and Highway 246. Most of the subsidence occurred on the middle property of the three lots, with some minimal subsidence at the property closest to Horizon Drive. Staff promptly responded and secured the area temporarily, and additional short-term improved solutions will be implemented. Staff inspected the site along with Cannon Engineering on Thursday, January 12, to discuss long-term solutions, and the following proposed solution seems to offer the District the most beneficial outcome:

Slurry Backfill. Around the manholes, excavate the soil out of the failed areas (previously disturbed areas) to a depth of 3 feet above the top of the sewer pipe. Along the trench line, excavate the soil out of the failed trench and 6 feet past both ends to a depth of 3 feet above the top of the sewer pipe. Make four passes over the fully exposed subgrade surface using a jumping-jack compactor. Backfill around the manholes and along the trench with a 1.5-sack sand-cement slurry to 12 inches below the desired finished grade (top of the trench). Backfill and compact the top 12 inches with ¾" crushed miscellaneous base or road base.

However, due to groundwater levels and saturated soils, a local contractor and Cannon Engineering recommend waiting 30 days after the last spring rain before proceeding with the trench repair.