CITY OF SUNRISE

Memorandum

To: File

From: Sangeeta Dhulashia, P.E., Deputy Director of Utilities SD

Date: September 29, 2025

Re: Basis & Justification for Consultant Selection for Professional Engineering Services for Evaluation of Dewatered WAS Stability and Alternatives for Sludge Stabilization – Technical Memorandum

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The Utilities Department (Department) assigned engineering professional services to Brown and Caldwell (Corporation) to perform an Evaluation of Dewatered WAS Stability and Alternatives for Sludge Stabilization – Technical Memorandum.

Basis

The City of Sunrise (City) participated in the Regional Biosolids Workgroup with Broward County Water and Wastewater Services and other partners for a new regional biosolids facility. Broward County has been advised by consultants and vendors that the proposed facility under evaluation accept and process Class B biosolids due to technology performance concerns. Several partners, including Sunrise, do not currently produce Class B biosolids and may not be able to participate in the regional facility. However, Broward County may be able to accept and process stabilized biosolids if it is determined that the material will not negatively impact the performance and operations of the thermal drying system. A key concern is the stability of the sludge during storage prior to drying, particularly for waste activated sludge (WAS) produced at low solids retention time (SRT) facilities.

The City owns and operates two long-SRT secondary wastewater treatment plants that currently dose VX456, a chemical oxidant, ahead of dewatering to mitigate odor issues during loading and hauling of dewatered cake. This study will evaluate the effectiveness of VX456 in stabilizing WAS, assess the physical and biological stability of the sludge, and compare alternative stabilization methods. The findings will inform whether the City's sludge is suitable for drying and support broader regional planning for sludge management. This study will also compare the life cycle costs of chemical stabilization to biological stabilization processes (i.e., aerobic digestion, anaerobic digestion) through an alternatives analysis.

Justification

Brown and Caldwell (Corporation) has provided the City with a reasonable proposal for the design services related to this project and is capable of performing the services based on its experience and availability. This assignment has been evaluated for compliance with the objective of equitable

distribution of work to the various design consultants under the Continuing Services Agreement, and it is consistent with that objective.