



AGENDA MEMORANDUM

Action Item for the City Council Meeting of February 8, 2022

DATE: December 7, 2021

TO: Peter Zanoni, City Manager

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Professional Services Contract
Solid Waste Facility Complex

CAPTION:

Motion awarding a professional services contract to SCS Engineers, Houston, TX, to provide conceptual design, process design, and permitting services for a new Solid Waste Facility Complex that includes a transfer station, compost services, fleet services and administration building, located in Council District 3, in an amount not to exceed \$295,571.00, with FY 2022 funding available from the Solid Waste Certificate of Obligation Fund.

SUMMARY:

This motion awards a professional services contract to provide solid waste permitting services and conceptual layout for the proposed transfer station, compost facility, fleet services, and administration building complex.

Additional services include assistance with addressing Texas Commission on Environmental Quality (TCEQ) administrative and technical comments, TCEQ newspaper notices, TCEQ permit public hearings, and meetings with the Coastal Bend Council of Governments, which is tasked with conducting regional planning for its membership of thirty-three cities and eleven counties.

This contract represents Phase 1 of work including conceptual design and permitting services to develop the unified Solid Waste Department campus. Phase 2 will include recommendations for the design, bid, and construction of the facility.

BACKGROUND AND FINDINGS:

The J.C. Elliot Landfill began operations on approximately 158-acres of City property in the 1970s

and closed in 2007 when the Cefe Valenzuela Landfill opened. The J.C. Elliot Transfer Station opened in 2007 to provide services to our residents and to facilitate the hauling of trash the extended distance to the new landfill. The Corpus Christi community continues to utilize the transfer station for waste disposal.

Over 170,000 customers used the transfer station in FY 2021. Due to increasing customer demand for services, including composting, the J.C. Elliot Transfer Station has outgrown its facilities.



To meet the current and growing demand for requested services, the Solid Waste Services Department has proposed the development of a unified Solid Waste Facility Complex to meet both the City's and residents' growing needs. The proposed unified Solid Waste Facility Complex consists of three major projects: a new compost facility, a new transfer station (including consolidated fueling and parking for the transfer and collection fleets), and a new administration building. City staff has achieved several important milestones in the development of this project, including City Council approval in August 2020 to purchase 92 acres of farmland adjacent to the current J.C. Elliott Transfer Station for a sum of \$3.0 million.

The current appraisal of the property shows a land value of \$2,860,000 with a Highest and Best use of "Industrial". A portion of the property lies within an area identified by the Navy as a potential accident zone for aircraft using Cabiness Field. The appraiser determined the property to be located in the AE Flood Zone Designation. Based on information provided in the appraisal, a transfer station and compost facility are ideal uses for this property, which is adjacent to a closed landfill and a working transfer station.

The facility offers a significant convenience to residents to discard household garbage, household hazardous waste, brush, bulky items, and construction materials. As currently utilized by City trucks, residents, and small commercial haulers, the facility is inadequate to meet the current and growing service needs efficiently and safely. The primary concerns are the inadequate driving lanes, conflicting traffic patterns, a congested tipping area and dumpster locations that restrict the number of customers allowed to safely unload materials.

When the existing facility was built, chain link fencing was utilized in place of walls as a means to control costs. With the constant windy conditions, trash is blown from the disposal and unloading areas, littering the adjacent properties. The new transfer station design includes walls that will eliminate the windblown litter, adequate queuing lanes for customers and ample tipping area. The new facility will provide a greater level of service to the existing and growing customer base, while allowing the City to incorporate tire shredding, glass crushing and freon recovery into our waste

processing portfolio.

The site selected for the compost facility (shown in white) is ~40 acres surrounded by ~700 acres of city owned property (shown in blue) including a closed landfill, operating transfer station, brush grinding area, concrete disposal and a borrow pit. Land uses around the city owned property are primarily governmental (Cabiness Field - grey), light and heavy industrial (lt. and dk. purple), some commercial (red) and a limited amount of residential (yellow) and mixed use (peach) to the west and southwest.



The proposed compost facility will initially process wood chips and wastewater sludge in an aerobic, open windrow format.



Aerobic processes decompose organic material in the presence of oxygen and emit heat, carbon dioxide and water vapor. Odors are minimized in this process. All municipal and commercial compost facilities are highly regulated by the Texas Commission on Environmental Quality and must meet stringent design and operational requirements. The proposed location provides a buffer zone of approximately $\frac{1}{2}$ mile to the nearest potential residential customer. The bordering topography of the JC Elliott Landfill, Oso Creek, State Highway 286, and Cabiness Field provides physical impediments that will disperse odors before they can reach neighboring properties. If needed, operational controls such as misting devices and geotextile fabrics are available to provide additional odor control. A New Earth composting facility in Conroe, TX processes wastewater sludge with wood chips (same process we are proposing) in an area surrounded by residential neighborhoods. One house is actually less than 500 feet from the active composting windrows. This is possible because Aerobic composting is effective in preventing noxious odors

from developing.

Should we encounter odor issues at the J.C. Elliott location, it is possible to relocate the compost facility program to the Cefe Valenzuela Landfill without incurring significant capital costs, but it will require significant additional operational expenses of approximately \$830,000 annually. This is due to the increased hauling distance to move approximately 70,000 cubic yards of brush and 50,000 tons of wastewater sludge the additional 11.5 miles to Cefe. The increased haul distance for the Brush and Bulky collection crews that collect ~235,000 cubic yards of brush annually will add significant time to the collection operations and will require an additional brush crew. This crew consisting of 4 employees, 3 brush trucks and a rear steer grapple truck, will require approximately \$565,000 annually for equipment, fuel, and labor.

Solid Waste Services staff has over 25 years' experience operating compost facilities utilizing the feedstocks recommended for our location. Composting is performed throughout Texas and there are many programs operating in communities that demonstrate composting is a good use for this property. Unfortunately, in the past some operators have not been good neighbors and created negative publicity. These situations are rare, and regulations have been enacted that prevent them from occurring in the future. Well run compost programs can be good neighbors and provide a great way to reuse the massive quantities of vegetative mater created by our 12-month growing season. In addition, this facility will provide responsible, inexpensive disposal for any natural disasters that we encounter in the future.

To achieve the requirements for the transfer station, this project will be completed in two phases:

Phase 1 will include transfer station permit or registration application, appropriate for TCEQ authorization. This phase of the project will also include development of conceptual layout of the Facility considering entrance location, traffic, truck queuing at the gate, scale details, the conceptual building layout for the transfer station/administration building, fueling area, maintenance area for hauling vehicles, and potential site obstacles such as floodplains, wetlands, easements, pipelines, Cabaniss Airfield proximity concerns, and powerlines.

Phase 2 of the project will be presented to Council at a future date to include development of detailed plans and specifications for construction, construction cost estimate, construction bid administration and construction phase services.

PROJECT TIMELINE

The projected preliminary schedule reflects City Council award in December 2021, with conceptual design, and permitting completion anticipated in June 2023. The project schedule is dependent on a timely issuance of Notice to Proceed and is based on estimated time periods for TCEQ review and response. Phase 2 will commence after the completion of Phase 1.

COMPETITIVE SOLICITATION PROCESS:

SCS Engineers was selected for the Professional Engineering Service in March 2021 under RFQ 3409, Capital Improvement Projects 2020-2021, Public Health and Safety. SCS Engineers is one of nine firms that submitted qualifications for this project announcement.

The RFQ selection committee consisted of representatives from Solid Waste Department, Asset Management Department, Engineering Services, and the City Manager's Office. On March 15, 2021, the RFQ selection committee conducted interviews for the top two firms that were recommended by the evaluation committee. Firms were ranked based on five factors: 1) firm's experience and qualifications; 2) team's experience and qualifications; 3) understanding of project

scope based on understanding of scope of services, ability to maintain schedules, cost, and quality controls.

SCS Engineers has 50 years of experience as an environmental engineering firm. SCS has been assisting several communities throughout Texas, like Cities of Brownsville, Beaumont, Dallas, Denton, El Paso, Lubbock, Killeen, Odessa, Nacogdoches, New Braunfels, Port Arthur, Temple, and Waco on various recycling and solid waste projects. SCS Engineers have previously completed the Cefe Valenzuela Landfill Gas Collection & Control System Lifecycle Improvements - Cells 1B/1C project for the City.

ALTERNATIVES:

The alternative is to not approve the proposed professional services agreement; however, the Solid Waste Facility Complex is an approved project in the Solid Waste Department CIP for FY 2022, and it will cause a delay in the development of the unified Solid Waste Facility Complex and new Compost Facility if this professional services agreement is not approved.

FISCAL IMPACT:

The fiscal impact in FY 2022 is an amount of \$295,571.00, with funding available from the Solid Waste Certificate of Obligation Fund.

FUNDING DETAIL:

The Capital Improvement Program (CIP) shows the project is planned for FY 2022 and there is sufficient funding available for design.

Fund: **SolidWst2021TCO (Fund 3373)**
Mission Elem: Maintaining Solid Waste Facilities (031)
Project No.: Solid Waste Complex Building (21007)
Account: Design (550950)
Activity: 21007-3373-EXP
Amount: \$295,571.00

RECOMMENDATION:

City staff recommends award of the professional services contract in the amount of \$295,571 to SCS Engineers

LIST OF SUPPORTING DOCUMENTS:

Location and Vicinity Maps
Evaluation Matrix
Contract
CIP Page
Powerpoint Presentation