

**AGENDA**

**ENGINEERING COMMITTEE MEETING  
LEUCADIA WASTEWATER DISTRICT**  
Tuesday, November 7, 2017 – 8:30 a.m.  
1960 La Costa Avenue, Carlsbad, CA 92009

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1. **Call to Order**
2. **Roll Call**
3. **Public Comment**
4. **New Business**
  - A. Authorize the General Manager to execute a purchase order with Miramar Truck Center for the purchase of a 2018 Ford F-750 Heavy Duty Truck (15.5-ton) in an amount of \$83,367.73. (Pages 2 - 3)
  - B. Authorize the General Manager to notify San Diego Association of Governments (SANDAG) of the District's intent to proceed with construction of the Poinsettia Station Gravity Pipeline with the stipulation that the bid price for the construction does not exceed \$600,000. (Pages 4 - 5)
  - C. Authorize the General Manager to execute a sole source purchase agreement with Jensen Precast for the pre-purchase of three precast manholes required for the Poinsettia Station Gravity Pipeline Project in an amount not to exceed \$92,616. (Pages 6 - 7)
5. **Information Items**
  - A. Notice of Violation - San Diego County Air Pollution Control District. (verbal)
6. **Directors' Comments**
7. **General Manager's Comments**
8. **Adjournment**

## MEMORANDUM

**Date:** November 1, 2017  
**To:** Engineering Committee  
**From:** Paul J. Bushee, General Manager   
**Re:** **Vehicle Purchase to Replace Year 2000 Dump Truck**

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**RECOMMENDATION:**

Staff requests that the Engineering Committee (EC) recommend that the Board of Directors:

1. Authorize the General Manager to execute a purchase order with Miramar Truck Center for the purchase of a 2018 Ford F-750 Heavy Duty Truck (15.5-ton) in an amount of \$83,367.73
2. Discuss and take other action, as appropriate

**BACKGROUND:****Tactical Goal: Services / Purchase Large Vehicle to Tow the ACME Pump**

The District utilizes a year 2000 Dump Truck to tow its large emergency ACME pump known as "Big Blue". Big Blue weighs 17,500 pounds and the Dump Truck is the only vehicle with sufficient towing capacity to safely tow Big Blue. The District owns and maintains the Dump Truck solely to transport Big Blue.

The key reasons for the replacing the Dump Truck are as follows:

- It does not meet emissions standards and is require to be replaced by 2018
- Has large blind spots
- Has a manual transmission making it difficult to drive
- Its only use is to tow Big Blue
- District's Vehicle Replacement Policy, beyond useful life threshold
- Diminished reliability due to vehicle age

As you may recall, the Fiscal Year 2017 (FY17) Tactics and Action Plan included a goal to evaluate the potential need for a large vehicle to tow Big Blue. Field Service Technician II Easton presented the results of the evaluation to the Engineering Committee and Board in March 2017. During the evaluation the Ford F-750 Heavy Duty Truck was found to be best suited to replace the Dump Truck. Subsequently, staff included funds to purchase the new truck in the FY18 Budget.

Key advantages of the Ford F-750 Heavy Duty Truck include:

- Emissions compliant
- Multi use vehicle, flat bed for equipment hauling
- Automatic transmission
- Better fuel efficiency

- Improved maneuverability and visibility
- Safety

In accordance with the District's vehicle replacement guidelines, the 17 year old Dump Truck has reached its useful life and meets replacement criteria. It is important to note that the District will auction off the Dump Truck rather than turning it into the dealer to maximize its trade-in value.

**DISCUSSION:**

Staff solicited sealed bids for a 15.5-ton diesel driven F-750 Heavy Duty Truck from ten (10) San Diego County Ford dealerships.

The bids were due on September 7, 2017. One bid was received and reviewed:

- |                         |             |
|-------------------------|-------------|
| 1. Miramar Truck Center | \$83,367.73 |
|-------------------------|-------------|

Staff believes the reason the District only received one bid was because Miramar Truck Center specializes in larger heavy-duty industrial vehicles, while other Ford dealerships focus on selling smaller consumer trucks through their fleet services.

The truck bid submitted by Miramar Truck Center meets all the bid specifications required by the District. Staff has determined that Miramar Truck Center is the lowest responsive and responsible bidder.

Staff recommends that the Board authorize the General Manager to purchase a 2018 Ford F-750 Heavy Duty Truck (15.5- ton) from Miramar Truck Center in an amount of \$83,367.73.

**FISCAL IMPACT:**

The FY18 Capital Acquisition Budget includes sufficient funding for the purchase of this replacement truck.

js:PJB

## MEMORANDUM

**DATE:** November 1, 2017  
**TO:** Engineering Committee  
**FROM:** Paul J. Bushee, General Manager   
**SUBJECT:** **General Manager Authority to Notify SANDAG of District Intent to Proceed with Construction of the Poinsettia Station Gravity Pipeline**

**RECOMMENDATION:**

Staff requests that the Engineering Committee (EC) recommend that the Board of Directors:

1. Authorize the General Manager to notify San Diego Association of Governments (SANDAG) of the District's intent to proceed with construction of the Poinsettia Station Gravity Pipeline with the stipulation that the bid price for the construction does not exceed \$600,000.
2. Discuss and take other action as appropriate.

**BACKGROUND:****Tactical Goal: Infrastructure and Technology / Poinsettia Station Gravity Pipeline Project**

As you may recall in May 2016 the Board Authorize staff to coordinate with San Diego Association of Governments (SANDAG) and pay for the construction of extensions to the casings for the Lanikai Gravity Line and Secondary Effluent Force Main (B1) at the Carlsbad Poinsettia Train Station. Additionally, the Board authorized staff to simultaneously proceed with plans to design and construct an encased parallel gravity line in the project area.

The SANDAG Poinsettia Station Improvement Project (POSI) will construct an underground pedestrian tunnel to connect the east and west pedestrian platforms. The construction of the tunnel requires shifting the two railroad tracks to the west to accommodate the entrance into the tunnel at the east platform. The shifting of the tracks requires the extension of the protective casings around two District lines that run under the railroad tracks adjacent to the station. The two lines are the jointly owned Lanikai Gravity Trunk Sewer (Lanikai Line) and the Secondary Effluent Force Main (B1). As stipulated in the NCTD license agreements for the Lanikai Line and B1, the District is obligated to pay for any modifications to or removal of those lines. The Lanikai Line and B1 are critical District assets that must be protected in place.

The construction of POSI presents a unique opportunity for construction of a parallel gravity line under the railroad tracks. The environmental requirements and permits for work in the railroad right of way have been completed by SANDAG. The District executed an engineering design agreement with T.Y. Lin International (TYLI), SANDAG's design engineer, to design both the casing extensions and parallel line as a cost effective and efficient measure for project design. SANDAG has added the construction of the new parallel line as an additive bid item in the POSI bid. This will enable the removal of the parallel line construction project if the District decides not to go forward.

**DISCUSSION:**

SANDAG set Monday, November 13, 2017 as the POSI bid opening date. In accordance with the Memorandum of Understanding (MOU) executed between the District and SANDAG, the District has 15 days after bid opening to notify SANDAG that it intends to proceed with the construction of the parallel gravity line. In essence, the District will agree to accept the additive bid item price provided by the POSI lowest responsive and responsible bidder. The 15 day notification period will expire on November 28<sup>th</sup>, prior to the scheduled December 2017 Board meeting. As a result, staff is requesting authority for the General Manager to notify SANDAG of the District's intent.

The Engineer's Cost estimate is \$365,000. Considering the current construction bid environment, staff is requesting Board approval in an amount not to exceed \$600,000, which is conservative but consistent with the project budget amount. That being said, it is critical to remember that the construction of the Poinsettia Project presents a unique opportunity for construction of a parallel gravity line under the railroad tracks. Currently the District has only one gravity line installed under the railroad tracks, the Lanikai Line Gravity Line. This is a critical weakness in the District's collection system especially in the area of the train tracks. The Lanikai Line is designed for a peak flow of 17 million gallons per day (MGD). All of LWD's flow (approximately 4 MGD) plus Encinitas' flow (approximately 1 MGD) passes through the Lanikai Line on its way to the Encina Water Pollution Control Facility. In the event of a failure, there is no easy way to by-pass flow across the tracks and repairs to the pipeline would likely take several days to fix at a considerable cost. Additionally, a failure would likely lead to a high volume of wastewater spilled into a sensitive environmental area and could possibly undermine the railroad tracks. Staff believes it is prudent to construct a parallel gravity line under the tracks. Doing so will eliminate the risk of a single point of failure and allow proper maintenance of this critical section of pipeline.

Therefore, it is recommended that the Board authorize the General Manager to notify SANDAG of the District's intent to proceed with construction of the Poinsettia Station Gravity Pipeline with the stipulation that the bid price for SANDAG's POSI additive bid item does not exceed \$600,000.

**FISCAL IMPACT:**

The amount appropriated for the Poinsettia Station Gravity Pipeline Project in the Fiscal Year 2018 budget is sufficient to cover the estimated cost of construction.

rym:PJB



MEMORANDUM

**DATE:** November 1, 2017  
**TO:** Engineering Committee  
**FROM:** Paul J. Bushee, General Manager   
**SUBJECT:** Award of Sole Source Purchase Agreement to Jensen Precast for Three New Manholes for the Poinsettia Station Gravity Pipeline Project

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**RECOMMENDATION:**

Staff requests that the Engineering Committee (EC) recommend that the Board of Directors:

1. Authorize the General Manager to execute a sole source purchase agreement with Jensen Precast for the pre-purchase of three precast manholes required for the Poinsettia Station Gravity Pipeline Project in an amount not to exceed \$92,616.
2. Discuss and take other action as appropriate.

**BACKGROUND:**

**Tactical Goal: Infrastructure and Technology / Poinsettia Station Gravity Pipeline Project**

Predl manufactures polypropylene (PP) manhole liner systems and fiberglass reinforce polymer (FRP) manhole pipe connections, gates and grating. Pictured below is an example of the liner.



Jensen Precast (Jensen) uses the Predl system to manufacture precast manholes to project design specifications. The PP liner is used to line the manhole base, channel and riser rings.



Manhole being formed around Predl liner.



Finished precast manhole with FRP grating and gates.

The PP liner and associated FRP parts do not degrade in the corrosive wastewater environment and protects the concrete manhole from hydrogen sulfide exposure and corrosion.

#### **DISCUSSION:**

The use of the Jensen Precast Manhole with Predl Liner (Jensen Manhole) was selected for installation and use in the Poinsettia Station Gravity Pipeline Project. The use of the Jensen Manhole will increase the reliability, integrity and life of the new parallel gravity line to be installed under the Poinsettia Station railroad tracks. The project requires three manholes. Jensen estimates they will need six to eight weeks to obtain the Predl liners and manufacture the manholes. In order to use these precast manholes, the District will need to pre-purchase them prior to the start of project construction to prevent project delay. SANDAG's Poinsettia Station Improvement Project schedule lists the installation of the new parallel gravity line as one of the first construction items of the project.

Under Section 10.1, Sole Source Procurement, of the District's Procurement Policy, sole source procurement is allowed in cases where goods are obtainable from a single vendor due to unique and proprietary conditions. Jensen is the only precast manhole manufacturer that uses the Predl liner system in its precast manholes. As a result, staff requested a price quote from Jensen for the three manholes to be used on the Poinsettia Station Gravity Pipeline project. Jensen's quote was \$92,615.44, including tax, shipping and delivery.

Staff recommends the Board authorize the General Manager to execute a sole source purchase agreement with Jensen for the pre-purchase of three precast manholes for installation during the Poinsettia Station Gravity Pipeline Project in an amount not to exceed \$92,616.

#### **FISCAL IMPACT:**

The amount appropriated for the Poinsettia Station Gravity Pipeline Project in the Fiscal Year 2018 budget is sufficient to cover the procurement of the manholes.

rym:PJB