



AGENDA MEMORANDUM

Action Item for the City Council Meeting October 27, 2020

DATE: October 16, 2020

TO: Peter Zaroni, City Manager

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Resolution to submit DEAAG Grant Application to the Office of the Governor

CAPTION:

Resolution authorizing the submittal of a grant application totaling up to \$901,952 to the Office of the Governor for funding from the Texas Military Preparedness Commission's Defense Economic Adjustment Assistance Grant Program with a matching contribution from the city of \$250,000 for project management and grant administration services.

SUMMARY:

Replace a cumulative total of approximately 45,700 linear feet of severely deteriorated high-pressure 78-year-old steel natural gas main lines and services lines with new six- (6"), four- (4"), and two- (2") inch IPS DR11 Driscopex Gas PE2406/2708 pipe, as appropriate, as well as installation of isolation valves, pressure regulators/reducers and valve pits, as needed. The new primary high-pressure natural gas distribution system will be equipped with locator wire(s) buried two feet above the line and cathodic protection conductive wire. Upon installation, the project site areas (parking lot, asphalt roadway and steel reinforced sidewalks and compacted aggregate base and a compacted sub-base) will be restored to at least their original condition.

The project will be accomplished in four phases. The Navy will contract with the City's Gas Department to perform all aspects of the project. The Navy estimates the project could begin in mid-2021 (sometime between March and August 2021). Phases 2 and 3 would not begin until DEAAG funds are awarded, a grant agreement is executed between the State and the City and the Secretary of the Navy approves the "gift" of the grant-funded infrastructure project.

BACKGROUND AND FINDINGS:

The Texas Legislature appropriated \$30 million in this biennium to the Texas Military Preparedness Commission (TMPC) Defense Economic Adjustment Assistance Grant (DEAAG) fund to assist defense communities that have been impacted by a past or future Base Realignment and Closure action. The DEAAG application period is now open with \$16 million available for this round. The deadline for submission of grant applications to the TMPC is Friday, October 30, 2020.

The system is in a state of severe deterioration after decades of constant exposure to severe corrosive and erosive service environments. These system failures and leakages have resulted in significant operational losses of often critical services that subsequently required emergency repairs in order to restore and attempt to ensure both safety and continued reliable operation of the primary high-pressure natural gas distribution system. These failing high-pressure service lines are the backbone of Naval Air Station Corpus Christi's (NASCC) entire natural gas distribution system. The base and its 40 tenants in approximately 75 buildings is one of the top five customers of the City's natural gas utility. Currently, the base accounts for approximately three to four percent of the natural gas consumed (127,827 MMBTU annually). Natural gas provides hot water, heat, humidity control, and is used as a power source for some boiler units. For critical facilities such as the Navy's Calibration Lab and Air Traffic Control Tower, and other critical areas, maintaining 50 percent or less humidity is required. Natural gas is used for major processes in many Corpus Christi Army Depot (CCAD) areas such as the Plating Shop. Natural gas also provides hot water for sanitization in multiple facilities, including the Naval Health Clinic, Family Housing, and the Commissary. All food services use natural gas for cooking.

In January 2019, NASCC Utilities and Energy Management Department requested the City of Corpus Christi's Gas Department to perform a leak detection survey of NASCC's natural gas facilities. The survey, completed in June 2019, identified numerous above- and below-ground leaks in the 78-year-old system running throughout the base to buildings and hangars. The Navy reported 25 major leaks in recent years, including 20 major leaks in 2019 resulting in emergency repairs, threatening adverse impact to military industrial progress toward supplying helicopters to warfighters.

Earlier in Summer 2020, the Navy demolished Hangar 41 and a gas line serving six remaining hangars was damaged stopping service for a period. There is also a grave danger to the public with flammable, natural gas emitting from the ground. Major failures in concert with an ignition event could result in a catastrophic explosive or flammable event that could readily result in catastrophic property damage as well as the incalculable losses due to serious injuries or even loss of life. Imminent catastrophic failure of the system will paralyze missions affecting all processes and tenants, including CCAD, Chief of Naval Air Training (CNATRA), Naval Health Clinic, Defense Logistics Agency (DLA), NASCC Family Housing, and the Department of Homeland Security (DHS).

To address immediate leaks and maintain essential natural gas service to continue, the Navy has contracted with the City's Gas Department to place temporary clamps on the faulty steel lines. A Grade 1 emergency leak was identified and immediately repaired (i.e. clamped) by the City along Lexington Blvd. on September 17. The Navy contacted the City to repair additional leaks in the ageing pipeline in August 2020 as well. *Grade 1 leak* is a leak that represents an existing or probable hazard to persons, property, and requires immediate repair or continuous action until the conditions are no longer hazardous. It is industry standard to perform cathodic protection on natural gas lines to deter corrosion and extend the life of the lines. Unfortunately, this practice has not taken place with the thousands of linear feet of steel lines and hundreds of valves at NASCC.

The gas line replacement project was originally requested by the Navy in 2011, with originally 6,400 linear feet to be replaced, but the continued deterioration has resulted in exponential growth in the

amount of lines to be replaced. If Phases 2-3 are not selected for DEAAG funding, deterioration of the natural gas main and service lines will continue to accelerate.

Ultimately, when all main lines and service lines, valves, and other safety measures associated with this project are completed, the Navy and City will begin exploring an intergovernmental service agreement for the City's Gas Department to take over the operation, maintenance and repair of the base's natural gas delivery system.

PROJECT COST LEVERAGE	DOLLARS	PERCENTAGE
DEAAG	\$ 901,952	46%
NASCC	\$ 800,000	41%
CITY OF CORPUS CHRISTI	\$250,000	13%

ALTERNATIVES:

City Council may choose to not approve the resolution resulting in a need for NASCC to find alternative funding for this project.

FISCAL IMPACT:

The City of Corpus Christi will provide a cash match of \$250,000 which will cover project management and grant administration for the project.

Funding Detail:

Fund: 3542-ST2007A-ITMPCGO
Organization/Activity: 5000303542
Mission Element: 051
Project # (CIP Only):
Account:

RECOMMENDATION:

Staff recommends approval of the resolution

LIST OF SUPPORTING DOCUMENTS:

Aerial View of Preliminary NASCC Gas System Replacement plan