# Barbers Hill Independent School District Energy Efficiency Building Upgrade/Retrofit Project SEP No. 2012-10 - as Amended on 2/10/2022

## **Project Description:**

Barbers Hill Independent School District ("BHISD") has a number of school district buildings, including school buildings, administrative offices, and maintenance facilities, among others. Some of these buildings are old and energy-inefficient. This Project will involve installation and monitoring of sub-meters for the hardware and software infrastructure of certain district buildings which will allow real-time observation of energy consumption and demand in order to make timely decisions to reduce consumption. Based on energy audit reports, upgrades and retrofits will be completed to reduce energy consumption within the school district. BHISD shall use SEP Funds to pay for 80% of the direct expenses associated with the Project and shall provide 20% matching funds to cover the expenses.

BHISD shall use SEP Funds to pay a contractor to install and monitor sub-meters. The contractor's work will include installing revenue grade electric sub-meters in the line feed of certain facilities; installing revenue grade current transformers; incorporating all engineering, software, and graphics to accomplish effective monitoring of the status of this equipment; and a one year warranty including parts and labor for the new sub-meters.

BHISD's contractor shall install new sub-meters in the following buildings:

- Administration building
- Field House located at Eagle Stadium
- Press Box located at Eagle Stadium
- Primary School addition
- Transportation building
- Technology building
- Eagle Positive Intervention Center (Disciplinary Alternative Education Program) Woodshop

BHISD's contractor shall monitor, calibrate, and repair as needed existing meters in the following locations:

- Elementary School
- Intermediate School
- High School
- Middle School (main meter and meter no. 2)
- Kindergarten Center (main meter and meter no. 2)
- Primary School

Calibration and repair of existing meters will allow accurate measurement of peak electricity demand and reduction of electrical usage during these hours.

In addition to sub-metering, BHISD shall use SEP Funds to pay its contractor to complete energy efficiency upgrades and/or retrofits based on needs identified in energy audits. Any additional upgrades or retrofits must be identified in an energy audit, submitted in a proposal to TCEQ, and approved in writing by TCEQ before BHISD may use SEP Funds to undertake the projects.

## **Environmental Benefits:**

This Project will result in reduced energy consumption by school district buildings and will contribute to the overall reduction of greenhouse gases. The sub-metering is expected to reduce energy consumption up to eight percent. This Project will reduce fuel and electricity usage for heating and cooling and day-to-day operations. These reductions will reduce emission of particulate matter, volatile organic carbon compounds, nitrogen oxides, and other pollutants associated with the combustion of fuel and generation of electricity. It will also contribute to a reduction in peak loads on the State electric power grid.

#### **County**:

This project may receive contributions from the following:

Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty, Matagorda, Montgomery, San Jacinto, Walker, Waller, and Wharton Counties

#### **Minimum Contribution:**

\$500

# **Total Project Budget:**

\$1,151,928