HVAC Replacement and Building Controls Upgrade (Summer 2016)

Moreno Jr. High and A.C. Jones High School

1. Replace (13) Large HVAC Systems that range in age from 15 - 23 years-old

\$315,095 Project Cost (Small District HVAC Loan Application to State submitted February 5, 2016)

- If awarded by State in April 2016, finance rate is .25% over 8 year term (\$3,200 total interest)
- Utility Rebate: \$ 7,800

A.C. Jones High School (300 wing)

2. Replace (4) Outside Air HVAC Units that are not working and re-commission the existing controls

\$62,891 Project Cost

• To meet ASHRAE outside air requirements per code

HMD Elementary School

3. Replace (5) Large HVAC Condensing Units (200 tons) and retrofit existing building controls

\$322,271 Project Cost

- 2015 \$90,268 electricity cost, \$2.05 cost/sq.ft., high energy cost due to HVAC/Controls
- 44,000 sq.ft. elementary school should operate \$1.10 \$1.55 (\$41,868 -\$22,068 savings)
- Annual energy and maintenance savings will pay for project cost over 7 years

Finance rate will be 2.8% for 7 years on projects listed (excluding State Loan Program if awarded)

HMD Demand Charges

	Metered KW	Billed KW	500
JAN	462	462	500
FEB	355	370	400
MAR	342	370	
APR	238	370	300
MAY	243	370	
JUN	228	370	200
JUL	209	370	
AUG	261	370	100
SEP	307	370	
OCT	228	358	0
NOV	381	381	
DEC	320	346	

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Financial Aspects of Projects

Project	Project	Finance	Annual	Term/
	Cost	Rate	Payment	Years
State HVAC Loan	\$315,095	.25%	\$39,786	8 years
300 Wing/HMD	\$385,162	2.79%	\$53,774	8 years
All Projects	\$700,257	2.79%	\$97,765	8 years

- \$15,000 22,000 Estimated Utility Rebates for New HVAC Units
- \$22,068 41,868 Estimated Energy Savings at HMD (Trane to track results)
- 5 year Parts Warranty on New HVAC Units
- \$20,000 Estimated in HVAC Repair Savings
- Purchased through BuyBoard Inter-local agreement

Existing Units





New Trane HVAC Units

New Web Based and Wireless Control System (HMD)



