

STATE OF CALIFORNIA
CAPITAL OUTLAY
BUDGET CHANGE PROPOSAL (COBCP)
COVER PAGE (REV 06/15)

DEPARTMENT OF FINANCE
915 L Street
Sacramento, CA 95814
IMS Mail Code: A15

BUDGET YEAR 2016-17

BUSINESS UNIT: 5225 COBCP NO. 4 PRIORITY: 3 PROJECT ID: 0000923

DEPARTMENT: California Department of Corrections and Rehabilitation

PROJECT TITLE: Deuel Vocational Institution: New Boiler Facility

TOTAL REQUEST (DOLLARS IN THOUSANDS): \$4,041 MAJOR/MINOR: Major

PHASE(S) TO BE FUNDED: C PROJ CAT: CRI CCCI/EPI: 5959/6055

SUMMARY OF PROPOSAL:

This proposal requests funding to build a new central high-pressure steam boiler facility at Deuel Vocational Institution (DVI). Boiler replacement is required for compliance with San Joaquin Valley Air Pollution Control District (SJVAPCD) regulations for gas-fired boiler emissions standards.

Funding is being requested for the construction phase of this project. Design of this project was funded by the Department's Special Repair Budget. The total estimated project cost is \$4,414,000.

HAS A BUDGET PACKAGE BEEN COMPLETED FOR THIS PROJECT? (E/U/N/?): N

REQUIRES LEGISLATION (Y/N): N IF YES, LIST CODE SECTIONS: _____

REQUIRES PROVISIONAL LANGUAGE (Y/N) N

IMPACT ON SUPPORT BUDGET: ONE-TIME COSTS (Y/N): N FUTURE COSTS (Y/N): N

FUTURE SAVINGS (Y/N): N REVENUE (Y/N): N

DOES THE PROPOSAL AFFECT ANOTHER DEPARTMENT (Y/N): N IF YES, ATTACH

COMMENTS OF AFFECTED DEPARTMENT SIGNED BY ITS DIRECTOR OR DESIGNEE.

SIGNATURE APPROVALS:

Marilee Witt, ACA, Planning Unit
PREPARED BY _____ DATE _____

Dean Lee Borg 12/31/15
Dean Borg, Deputy Director, FPCM

REVIEWED BY _____ DATE _____

Deborah Hysen 12/31/15
Deborah Hysen, Director, FPCM

DEPARTMENT DIRECTOR _____ DATE _____

AGENCY SECRETARY _____ DATE _____

DOF ANALYST USE

DOF ISSUE # _____ PROGRAM CAT: _____ PROJECT CAT: _____ BUDG PACK STATUS: _____
ADDED REVIEW: SUPPORT: _____ OCIO: _____ FSCU/ITCU: _____ OSAE: _____ CALSTARS: _____

PPBA: Original Signed by:
Koreen Hansen

DATE SUBMITTED TO LEGISLATURE: January 7, 2016

A. PURPOSE OF THE PROJECT

Introduction:

This proposal requests funding for the construction of a new boiler facility at DVI. DVI has three boilers that serve the institution's heating, steam, and hot water needs, including inmate showers, medical functions, and food preparation. In 2009, SJVAPCD adopted more restrictive standards for the release of nitrous oxides and carbon monoxide. These new standards were phased, with full compliance of all boilers required by January 1, 2014. The amended emissions restrictions by SJVAPCD apply to industrial, institution, and commercial boilers; steam generators; and process heaters. Originally, the DVI Boiler project was to be fully funded from the Department of Corrections and Rehabilitation's (CDCR) Special Repair Budget. However, consistent with the San Quentin New Boiler Facility funded in the 2015 Budget Act, this project is proposed as a capital outlay project because the project is installing a new boiler system inside a new building.

Background/History:

In 2007, CDCR retrofitted the existing 1950's boilers at DVI to meet air quality regulations at that time. When SJVAPCD enacted new regulations in 2009, CDCR began evaluating the issues and studied several alternatives which included retrofitting the existing boilers or installing new boilers. Engineering design evaluations discovered unforeseen issues in the existing boiler facility. Significant structural deficiencies such as roofing and seismic issues in addition to inadequate boiler control systems and environmental abatement requirements rendered reuse of the existing boiler building expensive and impractical. Section 3417.3.1 of the California Building Code requires a full code compliance upgrade for existing state-owned buildings if the cost of the renovation is greater than 25 percent of the cost of replacing the structure.

Problem:

DVI's central boiler system is noncompliant with current SJVAPCD emissions regulations. DVI's boilers run on natural gas and emissions from natural gas generate both nitrogen oxide and carbon monoxide. CDCR is currently facing potential fines, civil penalties, administrative civil penalties, and/or orders from the SJVAPCD to cease operation of the existing boilers that do not comply with new standards. As of June 2015, DVI has paid \$52,537 in emissions fees due to non-compliance. In accordance with the California Health and Safety Code (Section 42403), potential fines for non-compliance can be up to \$1,000,000 per day and can be retroactive. Although no official grace period by SJVAPCD exists, CDCR has kept the regulatory agency informed on the progress of this project and believes that evidence of activity to replace noncompliant boilers may delay a fine assessment.

B. RELATIONSHIP TO THE STRATEGIC PLAN

This project is consistent with Goal 3 of the 2010/2015 Strategic Plan:

Goal 3: Employ Best Practices In Correctional Custody, Care, and Rehabilitation

Outcome: Superior prisons and youth facilities

Key Performance Indicator: National Correctional Standards

Objective 3.6: By June 30, 2014, facilities will reduce the rate of incidents that interfere with orderly facility operations by 20 percent through the implementation of a proactive Incident Prevention Strategy.

Incidents that interfere with orderly facility operations in California's prisons affect the ability to provide basic rehabilitative services, the ability to meet mandates established by the courts relative to access to care, and can result in significant fiscal liability. CDCR will implement a proactive Incident Prevention Strategy to protect the safety of the public, staff, and offenders.

C. ALTERNATIVES

Alternative 1: Build a new boiler inside a new 1,800 square foot (sf) metal building.

Project Advantages:

- Provides a SJVAPCD emission-compliant system.
- Provides a seismically appropriate structure for this region.
- Connects to existing back-up emergency power and back-up fuel supply systems.
- Includes new SJVAPCD permits that will allow limited usage of existing boilers as back-up in case of new boiler failure or maintenance.

Project Disadvantages:

- None.

Estimated Project Cost:

- \$4,414,000

Funding Source:

- General Fund

Alternative 2: Retrofit the existing boilers.

Project Advantages:

- Provides a SJVAPCD emission compliant system.

Project Disadvantages:

- Continues to utilize the existing 1950's boilers as the primary system. These boilers are beyond useful life, requiring significant maintenance and repair.
- Retrofit will not address energy inefficiencies of existing boilers.
- May not be able to comply with future SJVAPCD emission requirements.
- Seismic upgrades would be required.

Estimated Project Cost:

- \$5,896,000

Funding Source:

- General Fund

Alternative 3: Do Nothing.

Project Advantages:

- None.

Project Disadvantages:

- Continued noncompliance with SJVAPCD.

- Potential for retroactive monetary fines for noncompliance.

Estimated Cost:

- Potential fines up to \$1,000,000 per day

Funding Source:

- General Fund (Support)

D. RECOMMENDED SOLUTION

1. Which alternative and why?

Alternative #1 is the recommended solution. The current boiler emissions exceed SJVAPCD limits and the potential for severe fines continues to exist. CDCR must reestablish compliance for DVI's boiler infrastructure by constructing a new boiler facility as soon as possible; this is crucial to avoid significant monetary penalties by SJVAPCD.

2. Detailed scope description.

Construct a new 1,800 sf metal boiler facility adjacent to the existing boiler facility to include: a new 1,000-horsepower, high-pressure steam boiler with Selective Catalytic Reduction, an economizer, fire alarm system, fire suppression system, and associated mechanical components, piping, and controls. Provide lighting, step-down transformer, drainage, and utility connections. Connect to existing back-up fuel supply and emergency power system. The existing boiler facility will be left in place as back-up in case of emergency failure or maintenance of the new boiler. SJVAPCD permits will be included that will allow limited usage of existing boilers and back-up fuel supply.

3. Basis for cost information.

The project cost estimate is based on a Project Cost Summary developed at the completion of design and has been updated to reflect adjustments to the California Construction Cost Index (see Project Cost Summary).

4. Factors/benefits for recommended solution other than the least expensive alternative.

The recommended solution is the least expensive option to reach compliance with SJVAPCD regulations.

5. Complete description of impact on support budget.

None. The operating costs of the new boilers will be roughly equal to the existing boilers.

6. Identify and explain any project risks.

There are no known risks associated with the completion of this project.

7. List requested interdepartmental coordination and/or special project approval.

This project will require review and approval by the State Fire Marshal.

8. Project Schedule.

Construction: Start 10/16 Complete 9/17

E. CONSISTENCY WITH GOVERNMENT CODE SECTION 65041.1:

1. Does the recommended solution (project) promote infill development by rehabilitating existing infrastructure and how? Explain.

Yes, this project will be completed at an existing CDCR facility.

2. Does the project improve the protection of environmental and agricultural resources by protecting and preserving the state's most valuable natural resources? Explain.

Yes, this project will be completed at an existing CDCR facility.

3. Does the project encourage efficient development patterns by ensuring that infrastructure associated with development, other than infill, support efficient use of land and is appropriately planned for growth? Explain

Yes, this project will be completed at an existing CDCR facility.

**DEPARTMENT OF GENERAL SERVICES
REAL ESTATE SERVICES DIVISION - PROJECT MANAGEMENT BRANCH
PROJECT COST SUMMARY**

PROJECT:	DVI Boiler Replacement	W. D. ESTIMATE:	W4CDCR95CP
LOCATION:	Deuel Vocational Institute	EST. / CURR'T. CCCI:	5959 / 6055
CUSTOMER:	Department of Corrections and Rehabilitation	DATE ESTIMATED:	7/2/2015
DESIGN BY:	GDH	ABMS NO:	132593E
PROJECT MGR:	Bob Boben	PREPARED BY:	LL
TEMPLATE:	Design / Bid / Build	DOF PROJ. I.D. NO.:	0

DESCRIPTION

This project consists of the addition of a supplemental boiler adjacent to the existing boilerhouse at the Deuel Vocational Institute (DVI) in Tracy, CA. New equipment to be provided include a pre-fabricated metal building, a 1-1,000 HP steam boiler, an SCR Urea to Amonia emissions package, piping and paving. Minor asbestos and lead abatement is also included.

ESTIMATE SUMMARY

Earth Work	\$76,500
Underground Utilities Gas, Power, Storm & Water	\$349,300
Concrete Work	\$52,300
Misc. & Structural Steel	\$80,800
Thermal & Moisture Protection	\$23,200
Doors & Windows	\$20,200
Interior Finishes	\$127,300
Fire Sprinkler System	\$16,100
Plumbing	\$37,500
Boiler, Piping and Controls	\$2,029,100
Electrical	\$161,300

ESTIMATED TOTAL CURRENT COSTS:	JULY 2014	\$2,973,600
Adjust CCCI From 5959 to 6055		\$47,900
ESTIMATED TOTAL CURRENT COSTS ON JUNE 2015		\$3,021,500
Escalation to Start of Construction 16 Months @ 0.42% / Mo.:		\$203,000
Escalation to Mid Point 6 Months @ 0.42% / Mo.:		\$76,100
ESTIMATED TOTAL CONTRACTS:		\$3,300,600
Contingency At: 7%		\$231,000
ESTIMATED TOTAL CONSTRUCTION COST:		\$3,531,600

**SUMMARY OF COSTS
BY PHASE**

PROJECT: DVI Boiler Replacement
 LOCATION: Deuel Vocational Institute
 ABMS #: 132593E

W. D. ESTIMATE: W4CDCR95CP
 DATE ESTIMATED: 7/2/2015

CONSTRUCTION DURATION: 12 MONTHS
 ESTIMATED CONTRACT: \$3,300,600 \$3,300,600
 CONSTRUCTION CONTINGENCY: \$231,000 \$231,000
 TOTAL: \$3,531,600 \$3,531,600

CATEGORY	ACQUISITION STUDY 00	PRELIMINARY PLANS 01	WORKING DRAWINGS 02	CONSTRUCTION 03	TOTAL
ARCHITECTURAL AND ENGINEERING SERVICES					
A&E Design		\$0	\$250,090	\$119,910	\$370,000
Construction Inspection				\$108,000	\$108,000
Construction Inspection Travel				\$15,000	\$15,000
Project Scheduling & Cost Analysis		\$0	\$6,370	\$0	\$6,370
Advertising, Printing and Mailing		\$0	\$4,000		\$4,000
Construction Guarantee Inspection				\$5,000	\$5,000
SUBTOTAL A&E SERVICES	\$0	\$0	\$260,460	\$247,910	\$508,370

OTHER PROJECT COSTS					
Special Consultants (Soils/Survey)		\$0	\$16,000	\$0	\$16,000
Materials Testing				\$30,000	\$30,000
Project/Construction Management		\$0	\$84,990	\$110,600	\$195,590
Contract Construction Management					\$0
Builders Risk Insurance				\$33,000	\$33,000
Agency Retained Items					\$0
SBE/DVBE Assessment				\$10,600	\$10,600
School Checking			\$0		\$0
Hospital Checking			\$0		\$0
Essential Services			\$0		\$0
Accessibility Checking			\$5,300	\$2,600	\$7,900
Environmental Document (CatEx)			\$0		\$0
Due Diligence			\$0		\$0
Other Costs - (SFM)		\$0	\$1,840	\$25,000	\$26,840
Other Costs - (Permit/Reg. Fees)					\$0
Other Costs - (ARF Assessment)	\$0	\$0	\$4,500	\$49,200	\$53,700
SUBTOTAL OTHER PROJECT COSTS	\$0	\$0	\$112,630	\$261,000	\$373,630

TOTAL ESTIMATED PROJECT COST	\$0	\$0	\$373,090	\$4,040,510	\$4,413,600
LESS FUNDS TRANSFERRED	\$0	\$0	\$373,000	\$0	\$373,000
LESS FUNDS AVAILABLE NOT TRANSFERRED	\$0	\$0	\$0	\$0	\$0
CARRY OVER	\$0	\$0	\$0	\$90	
BALANCE OF FUNDS REQUIRED	\$0	\$0	\$90	\$4,040,600	\$4,040,600

FUNDING DATA & ESTIMATE NOTES

PROJECT: DVI Boiler Replacement
 LOCATION: Deuel Vocational Institute
 ABMS#: 132593E

W. D. ESTIMATE: W4CDCR95CP
 DATE ESTIMATED: 7/2/2015

FUNDING DATA

<u>Chapter / Item</u>	<u>Phase</u>	<u>Amount</u>	<u>Totals</u>
Fund Transfers			
0712/2010 - 5225 - 001 - 0001 (7.4)	W	\$64,000	
0033/2011 - 5225 - 001 - 0001 (7.4)	W	\$309,000	
0	0	\$0	
0	0	\$0	
0	0	\$0	
0	0	\$0	
0	0	\$0	
0	0	\$0	
Total Funds Transferred			\$373,000
Funds Available Not Transferred			
N/A	0	\$0	
0	0	\$0	
0	0	\$0	
0	0	\$0	
Total Funds Available not Transferred			\$0
Total Funds Transferred and Available			\$373,000

ESTIMATE NOTES

1. The construction costs in this estimate are indexed from the CCCI Index as of the date of estimate preparation to the CCCI index that is current as of JUNE 1, 2015. The project estimate is then escalated for a 6 month period to an assumed construction midpoint. Additionally, the project has been escalated to the assumed start of construction.
2. The Agency may have retained items that are not included in this estimate such as guarding costs, furniture, etc.
3. Special Consultant costs include Asbestos / Lead Survey & Monitoring.
4. Is it assumed the new boiler house is not an "essential service facility" and therefore a DSA review (essential service review) is NOT
5. An ARF Assessment of 1.233 percent has been applied to the working drawings and construction phases, in accordance with Control Section 4.70 of the 2008 Budget Act.

STATE OF CALIFORNIA

Budget Year 2016-17

CAPITAL OUTLAY BUDGET CHANGE PROPOSAL (COBCP)

Proj ID: 0000923

SCOPE/ASSUMPTIONS WORKSHEET

Department Title: California Department of Corrections & Rehabilitation
 Project Title: DVI - New Boiler Facility
 Program Category: Other - Critical Infrastructure
 Program Subcategory:

BU/Entity:	5225
Program ID	4615
COBCP #:	4
Priority:	3
MA/MT:	MA

Project Specific Proposals: For new projects provide proposed Scope language. For continuing projects provide the latest approved Scope language. Enter Scope language in cell A110.

Conceptual Proposals: Provide a brief discussion of proposal defining assumptions supporting the level of funding proposed by fiscal year in relation to outstanding need identified for that fiscal year. (Also include scope descriptions for BY+1 through BY+4 in cell A110).

This proposal requests funding to build a new central high-pressure steam boiler facility at Deuel Vocational Institution to include a pre-fabricated metal building, a 1,000 horsepower steam boiler, an emissions package, piping, and paving. Boiler replacement is required for compliance with San Joaquin Valley Air Pollution Control District regulations for gas-fired boiler emissions standards.