



CALIFORNIA DEPARTMENT OF EDUCATION

**CAREER TECHNICAL EDUCATION FACILITIES APPLICATION  
FORM A – COVER PAGE (Rev. 2/07)**

**Local Educational Agency Contact**

Local Educational Agency (LEA)

Chico Unified School District

CDS Code

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**Project Information**

Type of Project: ☐ New Construction ☒ Modernization/Reconfiguration ☐ Equipment Only

School Name

Pleasant Valley High School

Name of Project

Pleasant Valley High School Welding Lab

Career Technical Education Industry Sector

Manufacturing and Product Development: Welding Technology Pathway

Number of Teaching Stations

1.4 FTE

Expected Number of Students

180

Square Footage of Project

11,146

Construction Cost Estimate

**Approval**

Date CTE Plan Approved by Governing Board

**Certification**

*The local educational agency (LEA) certifies that the Advisory Committee pursuant to Education Code Section 8070 has met and approved the CTE Plan, and the other requirements contained in Education Code Section 17078.72, including sections (i) (1 thru 7) have been accomplished, and minutes and other supporting documentation are on file at the LEA's Office. Further, the project is on a comprehensive high school site that meets the requirements of Education Code sections 51224, 51225.3, and 51228.*

Janet L. Brinson

Print Name of Authorized LEA Representative

*Janet L. Brinson*

Signature of Authorized LEA

7/26/07

Date

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☐ Floppy Disk ☐ CD Backup

Application Log Number

Reviewer Number

Date of Review

Received by

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## **Pleasant Valley Industrial Technology Modernization ABSTRACT**

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Pleasant Valley High School's Industrial Technology Department has three separate career pathway programs in two industry sectors: manufacturing and product development, and engineering and design. A pathway in the building and construction sector will begin in fall, 2007. Yet at a time when career-technical education programs are facing increasing pressures statewide, forcing many of them to fold, Pleasant Valley High has seen an unprecedented growth in student enrollment and in student, parent and community involvement in our CTE programs.

In welding in particular, section numbers are up and student interest is on the rise. The existing welding facility has gone from two sections of welding/manufacturing to five (3 district funded and one two hour ROP). The section sizes have increased as well, from 20-25 to 25-35 students per section.

Industry demand in the Manufacturing and Product Development sector is high, and projections are that it will continue to rise. Locally, the demand is even higher than in the state as a whole. There are over 25 modern manufacturing facilities within twenty miles of Pleasant Valley High School, constantly advertising for welders and machinists. We have over thirty students and graduates currently working in these facilities. Yet the demand for these highly-trained students continues to outpace supply due to further expansion in local manufacturing facilities.

A great deal of work has been done to put industrial grade equipment and modern technology into the existing manufacturing/welding facility, but there is still much more to do. Most of the SMAW welding machines are original pieces of equipment installed in the mid seventies. Much of the GMAW and GTAW equipment is not only outdated, but the maintenance cost to keep the machines going is becoming a strain on limited departmental funds. Industry partners have made generous donations of both welding and machining equipment, but we lack the space for the equipment to be placed within the lab.

Our goal with this funding is to convert an existing abandoned auto shop into a welding/manufacturing facility. The auto shop, which shares a building with our current welding lab, has one more bay (10'x8' rolling door), 600 more square feet, an existing hoist, and a large outdoor work area that would make it an ideal location for the manufacturing/welding program. We propose moving the existing welding laboratory into this abandoned auto shop, and converting the existing welding shop into a facility that can be used for a residential building construction laboratory (for which we have submitted a separate application and plan). This modernization includes supplying both laboratories with adequate ventilation and power as well as with equipment upgrades.

Long-standing industry and community partnerships, solid administrative support, and a strong labor market are helping to drive this application. Our proposed modernization project will enhance CTE opportunities and improve academic achievement for students, and will allow us to better prepare our graduates in the manufacturing/welding pathway.

## **Project Elements**

### **Element 1: CAREER TECHNICAL EDUCATION PLAN**

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#### **Part A: Rationale, Industry Sector, Labor Market**

**Rationale and Industry Sector:** Pleasant Valley High School's Welding Technology program is experiencing an unprecedented growth. Section numbers are up and student interest is on the rise: the existing welding facility has gone from two sections of welding/manufacturing to five sections of welding/manufacturing a day (3 district funded sections and one two hour ROP section). Class sizes have increased as well from 20-25 to 25-35 students per section. Industry partners have made generous donations of both welding and machining equipment, including four milling machines, two lathes, one 90 ton mechanical press brake, one 12' mechanical shear, one 4' box and pan brake, and two drill presses, but we lack the space for the equipment to be placed within the lab. The existing facility is too small for all of the work stations that we need to effectively deliver our standards-based curriculum.

In our region, there is a very high demand for graduates with the entry-level skills taught within the manufacturing/welding program. Course enrollments indicate that student interest has increased and our current manufacturing facility is too small for the number of students in the program. The department sees the need to incorporate more machining technology, and CNC equipment into the curriculum. The addition of CNC technology and machining skills will improve the quality and depth of our program while also making our graduates much more desirable to the local manufacturers. The increase in students and desire to incorporate more manufacturing skills into our curriculum necessitates the need to move our current facility into an existing abandoned facility which has much more room indoors and outdoors.

Our proposed modernization project will enhance CTE opportunities and improve academic achievement for students by converting an existing welding/manufacturing facility and an abandoned auto shop, currently separated by a classroom, into two new laboratories: one to be used for residential building and construction, and the other for the manufacturing/welding lab. (We have submitted a separate plan and application for the residential building and construction lab). This remodeling will allow us to increase the number of workstations and the quality of the equipment we are able to use to better prepare our students for high wage, high skill professions. The auto shop is larger than our current welding facility, with one more bay (10'x8' rolling door), 600 more square feet, an existing hoist, and a large outdoor work area that will make it an ideal location for the manufacturing/welding program. The modernization includes supplying both laboratories with adequate ventilation and power as well as equipment up-grades.

**Labor Market:** Industry demand in the Manufacturing and Product Development industry sector is helping drive this application. There are over 25 modern manufacturing facilities within twenty miles of Pleasant Valley High School, constantly advertising for welders and machinists. Pleasant Valley High Industrial Technology instructors have built working relationships with the company owners and shop foremen, many of whom let us know how difficult it is to find employees with the high entry-level skills that our program currently produces. We have over thirty students and graduates currently working in these facilities. Yet the demand for these highly-trained students continues to outpace supply due to further expansion in local manufacturing facilities.

Thomas Welding is one example of a business partner who is currently expanding their shop size to keep up with consumer demand. Other businesses such as Tink Inc. have gone to swing shifts, and multiple work crews to keep up with their consumer demands.

The table below, based on California Employment Development Department data, shows labor market projections in selected manufacturing and production-related occupations from 2004-2014. The data indicate that the job prospects in this field will continue to be good statewide, and even better locally in terms of the percentage of growth.

Occupational Title	Employment 2004		Employment 2014		Percentage Change		Annual Job Openings	
	Butte	Calif	Butte	Calif	Butte	Calif	Butte	Calif
<b>Production Occupations</b>	<b>3,840</b>	<b>1,047,700</b>	<b>4310</b>	<b>1,098,400</b>	<b>12.2%</b>	<b>4.8%</b>	<b>141</b>	<b>29,520</b>
Machinists	130	34,200	150	37,300	15.4%	9.1%	5	1110
Welders, Cutters, Solders, Brazers	200	29,800	230	33,100	15%	11.1%	9	1170

### Part B: Advisory Committee

As required by California *Education Code* Section 8070, Pleasant Valley's Industrial Technology program has an active career technical education committee, which offers program recommendations and acts as a liaison between the district and potential employers. This industry-based committee includes representatives from the manufacturing industry as well as parents, teachers, site administration, ROP, Butte Community College, and students.

In addition, the Chico Unified School District has a CTE advisory committee which provides oversight to all the different CTE in programs in the district. Membership of this committee is comprised of district administration, CTE teachers, a site administrator, students, and business owners. The purpose of this committee is to address the needs of existing CTE programs while focusing on improvement, and expansion of programs to meet the needs of students and industry sectors. Rosters for both advisory committees, including each member's affiliation and contact information, are shown below.

### PV High School Industrial Technology Advisory Committee/Industry Partners

Member	Company Affiliation	Title/Role	Phone	Address	City
Tim Adkins	MJB Welding	Owner	(530) 342-3589	357 East Park ave	Chico
Tom Dauterman	Thomas Welding	Owner	(530) 893-8940	1308 West 8 <sup>th</sup> Ave	Chico
Jon Arnold	MJB Welding	Manager	(530) 342-3589	357 East Park ave	Chico
Jim Stanfield	Weiss McNair	Foreman	(530) 891-6214	531 Country Dr	Chico
Floyd Harris	Metal Works	Owner	(530) 534-6266	550 Georgia Pacific Wy	Oroville

Bob Kohen	Advanced Building	Owner	530) 895-1836	2810 Hwy 32	Chico
Jerry Brooks	Steel Works Fabrication	Owner	(530) 892-2390	6 Freight In	Chico
North State Electric and Pump	Ron Stillwell	Owner	(530) 891-5545	3282 Highway 32	Chico
PBM Supply & MFG. Inc	Tim Maginnis	Manager	(530) 345-1334	324 Meyers	Chico
Chico Power Equipment	Doug Riswig	Owner	(530) 893-3030	181 E-9 <sup>th</sup> Ave	Chico
Tink Inc.	Dan Debose	Owner	(530) 895-0897	2361 Durham Dayton Hwy	Durham
Steel Mill Recyclers	Ron Davis	Owner	(530) 342-4930	786 Oro-Chico Hwy	Durham
Don Davis	All Metals	Owner	(530) 533-3445	600 Ophir Rd.	Oroville
Garth Lathrup	Jesse Machine Works	Owner	(530) 342-4379	1733 Nord Ave	Chico
John Dahlgren	Lares Reasearch	Engineer	(530)345-1767	295 Lockheed Ave	Chico
Amanda Ellis	PVHS	Counselor	(530) 879-5100	1475 East Ave	Chico
Karl Jordan	PVHS	Student	(530) 879-5100	1475 East Ave	Chico
Miles Peacock	PVHS	Instructor	(530) 879-5100	1475 East Ave	Chico
Jerry Joiner	PVHS	Instructor ROP	(530) 879-5100	1475 East Ave	Chico
Doug Bentz	Butte College	Dean	(530) 895-2531	3536 Butte Campus Dr	Oroville

#### **District Career Technical Education Advisory Committee:**

<b>Name</b>	<b>Affiliation</b>	<b>Contact Information</b>
Kelly Staley	Interim Superintendent	<a href="mailto:kstaley@mail.chicousd.org">kstaley@mail.chicousd.org</a>
Sara Simmons	Director II, Innovative Programs	<a href="mailto:ssimmons@mail.chicousd.org">ssimmons@mail.chicousd.org</a>
Mary Leary	Director, M&O/Transportation	<a href="mailto:mleary@mail.chicousd.org">mleary@mail.chicousd.org</a>
Michael Weissenborn	Facilities Planner	<a href="mailto:mweisse@mail.chicousd.org">mweisse@mail.chicousd.org</a>
Janet Brinson	Director, Categorical Programs	<a href="mailto:jbrinson@mail.chicousd.org">jbrinson@mail.chicousd.org</a>
Jocelyn Allen	CHS Student	
Miles Peacock	PVHS Industrial Arts Teacher	<a href="mailto:mpeacock@pvchico.org">mpeacock@pvchico.org</a>
Vance Jarrard	PVHS Student	<a href="mailto:vjarrard@yahoo.com">vjarrard@yahoo.com</a>
Sheri Zeno	FVHS Teacher	<a href="mailto:szeno@mail.chicousd.org">szeno@mail.chicousd.org</a>
Joanne Parsley	BJHS Principal	<a href="mailto:jparsley@mail.chicousd.org">jparsley@mail.chicousd.org</a>
Linda Zorn	ROP	<a href="mailto:zornli@butte.edu">zornli@butte.edu</a>
Fred Davis	CEPCO	<a href="mailto:FD6724@aol.com">FD6724@aol.com</a>
John Pereira	CEPCO	<a href="mailto:johnp@rush-personnel.com">johnp@rush-personnel.com</a>
TBD	Employment Development Dept.	
Norm Nielsen	Chico Chamber of Commerce	<a href="mailto:NNielsen@chicoelectric.com">NNielsen@chicoelectric.com</a>
Darci Bruggman	PVHS Parent	<a href="mailto:dbruggma@mail.chicousd.org">dbruggma@mail.chicousd.org</a>

### **Part C: Administrative Support of Career Pathway Programs**

The Pleasant Valley High School staff is committed to ensuring that all students are given the opportunity to participate in CTE programs, activities, and experiences. School wide, challenging CTE courses prepare students with the academic and technical skills they need for postsecondary education and the workplace. Teacher teams work across curriculum boundaries to tie standards together, helping students understand that classes do not operate in isolation, and skills taught in one course can be applied in others. Of the fifteen PVHS courses articulated with Butte College, thirteen are CTE courses. Approximately 50% of PVHS students enroll in at least one CTE course during their 4-year high school career

Guidance and counseling staff are key to ensuring that students have the opportunity to set high goals and help them select courses from among the many career pathways we offer to keep their options open. Counselors meet with each student and parent to design a four-year plan with an articulated, sequenced series of courses leading students to their postsecondary goals. Students' programs are revisited annually during PV's two-day advising and registration sessions.

The Industrial Technology Department makes its entry level courses open to all grade levels, and a clear sequence of courses has been developed that takes a student from an introduction course to a capstone course training students for high skill high wage professions. The courses within the Industrial Technology department are open to all students, and accommodations are made for students with special needs.

Pleasant Valley High School Administration has been supportive of CTE courses in the recent years. The school administration has approved of an on campus ROP welding /manufacturing course. A new Computer Aided drafting lab has been completed.

### **Part D: Certification, Standards, Course Sequences, and Career Pathways**

**Certification:** All of the current career pathways have at least one course in the sequence that has an active articulation agreement with the local Community College. Students are able to go straight from our program into the programs available at Butte College. In both the ROP CAD and ROP Welding courses students receive certificates of proficiency. Students can also practice and obtain American Welding Certification through our ROP Welding Program.

### **State Board Adopted CTE Standards, Course Sequences and Career Pathways:**

The Industrial Technology Department has spent numerous hours collaborating with other Industrial Technology instructors in our district and surrounding districts to share common practices and instructional methods. We have re-written our course outlines to better address both the academic foundation standards and the Career pathway standards.

The course sequence for the welding technology pathway in the Manufacturing and Product Development industry pathway is shown below:

	<b>Welding Technology</b>
9 <sup>th</sup>	Introduction to Technology OR Welding I
10 <sup>th</sup>	Welding II
11 <sup>th</sup>	Welding II Or ROP Welding and Manufacturing
12 <sup>th</sup>	ROP Welding and Manufacturing

All CTE courses are aligned to the California Career Technical Education Model Curriculum Standards.

## **Element 2: PROJECTIONS OF STUDENT ENROLLMENT**

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### **Part A: Projected Enrollment**

The Industrial Technology welding career pathway enrolled 150 students in 2006-07; that number is expected to increase to 180 students in 2007-08 (including ROP sections), with the addition of one section to the Welding Program. With the addition of a construction technology career pathway the enrollment for the whole Industrial Technology Department is anticipated to be between 330-350 students in the next two to three years. This growth estimation is based on the growth in the program over the past four years, and the expected student interest in the area of building construction. Two different student surveys have been given indicating a strong of interest in all of the pathways in the Industrial Technology Department.

### **Part B: Meeting our Enrollment Goals**

Guidance and counseling staff, teachers, and students are critical in ongoing recruitment and enrollment procedures that will ensure that our projected student enrollment will be met. This process begins with an eighth grade parent night at PV designed to give parents a comprehensive overview and a chance to ask specific questions of department chairs and program coordinators. Counselors visit eighth grade classrooms twice before course selection to provide information and an introduction to PV. Representatives of programs make presentations to acquaint middle school students with the range of options open to them in high school.

However, the best assurance of continued and growing enrollment is probably the teachers and students themselves: the Industrial Technology department has a strong belief in letting people see the work our students are doing. Student's projects are displayed at our local fair. Students are constantly creating projects that enhance or beautify our campus, such as rail fencing around planter areas. Currently the department is designing an arch entrance to the football stadium. These projects not only showcase student work, but they spark the interest of other students on campus that might be interested in a course within our pathway. The fact students are getting hired while still in high school to work in related professions is a recruitment tool in itself.



There are many students hungry for work who come to us wanting to learn the skills the Industrial Technology Department teaches.

Each of our high school counselors is assigned to be a liaison to certain departments. The Industrial Technology department routinely meets with our counseling liaison to keep her informed of current classes and curriculum as well as upcoming changes within the department. When an Industrial Technology course is being added, or significantly changed then the department will meet with the whole counseling staff to keep them informed as to what the new class will be, what the goal of the course is, potential careers the course can lead to, and any prerequisites the course may require.

### **Element 3: IDENTIFICATION OF FEEDER SCHOOLS AND PARTNERS**

The development, articulation, review and approval of our CTE plan was a joint effort among many stakeholders. Our advisory committee, listed in 1B above, discussed and approved the expansion proposal at its March meeting. Although this Request for Proposals was not available at that time, we knew that it was pending, and the committee agreed in concept with our ideas for expansion of the facility. Representatives from that committee have signed a statement indicating their approval for the plan (attached.) In addition, the individuals listed below have provided significant input into the development of the plan for facilities expansion and the creation of our new pathway:

Tim Adkins, owner MJB Welding	Jon Arnold, Manager MJB Welding
Doug Bentz, CTE Dean Butte College	Darci Bruggman, 3 time ROP Parent Representative
Mike Bruggeman, ROP Teacher CAD CHS	Steve Connolly, Principal 2007/08 PVHS
John Dahlgren, Lares Research, Inc.	David Flemming, Thomas Welding & Machinery
Lowell Forward, ROP Teacher CAD PHS	Jim Hanlon, Principal CHS
Shelle Hord, ROP Secretary	Jerry Joiner, ROP Teacher Welding Fabrication Manufacturing PVHS
Karl Jordan, PVHS Student	Miles Peacock, CAD & Intro into Welding Teacher
Tom Phelan, Wood Mfg. Teacher, CHS	Doug Reiswig, Chico Power Equipment
Dan Sours, CHS Foundation, Math Teacher CHS	Chuck Tatreau, President M&T Construction
Paul Watters, Director ROP	Mark Wegener, Wegener Engineering Group
David Wilburn, Norfield Industries	

The two primary schools that feed into Pleasant Valley High School are Marsh Jr. High and Bidwell Jr. High. There are also a small number of students who come to PVHS from Chico Junior High and Notre Dame (a private school). Though none of the

feeder schools have an active Industrial Technology program the department sends representatives to the primary feeder schools to let students know about the program.

The Butte County Office of Education funds an ROP Welding and manufacturing course that is offered on our high school campus. The ROP program has been the largest single supporter of the program and the expansion. The majority of the new and donated equipment has been brought into the PVHS welding facility because of the ROP program.

The department has discussed the expansion with key members of the Butte college staff. They seem to be very interested as Butte College pulls many of our students into related programs on their campus.

#### **Geographic proximity of other similar programs:**

This project will complement other CTE offerings in our immediate area. At Chico High School there is an Ag Mechanics program that teaches welding. Students at CHS are able to come to the PVHS facility for the ROP welding. Another ROP welding program exists at Las Plumas High, twenty miles away. Both programs serve their students well and there is a great deal of collaboration between the instructors. There are some CHS students who come over to PVHS because they are interested in getting the work experience in the manufacturing area. The expansion will benefit not only PVHS Industrial Technology Students, but students from Chico High, Durham, and Paradise who may choose to enroll in the program.

In terms of CTE courses in other related industry sectors, Paradise High (also twenty miles away) teaches an ROP construction course, but the distance (twenty miles) makes it impractical for our students to attend. At Chico High there is a manufacturing pathway (using wood as the median). There are some program completers in the CHS manufacturing pathway that enroll in the ROP welding program to learn more about the metal manufacturing industry. The CHS manufacturing and CAD students may also be interested in a future ROP Construction in the future.

### **ELEMENT 4. THE ACCOUNTABILITY PLAN**

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#### **Part A: The Accountability Plan**

During the regular school year, the department estimates that 24 students receive certificates through our ROP program. This summer 17 additional students are to receive certificates through our ROP summer work program. Commonly 20-25% of the Industrial Technology students go on to either work in a related industry, join an apprenticeship program or join the military. The Industrial Technology Department estimates that 30-35% of program completers go on to postsecondary institutions for more advanced study in the applicable industry or other areas of study.

The Pleasant Valley Industrial Technology Department and the ROP program routinely conduct postgraduate surveys to gather information about program completers. These surveys are completed by telephone and e-mail to try and find where students are, what they are doing, and how well the department prepared these graduates for post secondary education, advanced training and professional careers. The counseling department at PVHS does post graduate surveys as well. Surveys are done by mail, E-mail and Telephone to try and account for all students.

Information gathered from these surveys is analyzed and assessed. Instructors share this information with advisory members, industry partners and school administrators. The data collected is combined with input from industry partners to try and improve future curriculum within the program.

#### **Part B: Meeting our obligations pursuant to Education Code Section 51228(b)**

The Industrial Technology Department has developed course sequences that allow students completely fulfill the A-G admission requirements of the University of California system. These requirements can still be met while exposing students to quality career and technical education courses.

The course curriculum in all of the Industrial Technology courses is designed to train students for entry-level employment in all of the industry sectors. This curriculum is designed to address the new industry sector career pathways and the academic foundation standards. Advisory committee members analyze curriculum and give feedback to ensure that the program is adequately preparing students with the necessary skills to obtain entry-level employment within the career pathway.

The academic foundation standards are all embedded within the program curriculum. This ensures that the program maintains adequate academic rigor, but truly allows students to see where and how the core academics can be applied. This incorporation of applied academics makes the subject much more real, relevant and comprehensible.

#### **ELEMENT 5. EDUCATIONAL SPECIFICATION AND EQUIPMENT/SPACE REQUIREMENTS SHEET**

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Our overall goal is to improve the existing program pathways and facilities while increasing the number of career pathways offered within the department. In order to do this the department must have a larger welding facility, with sufficient workstations and industry-standard equipment to prepare our students for high wage high-skill professions.

The construction necessary to complete the project consists of installing electrical outlets and wiring into the existing abandoned auto shop. An adequate ventilation system must also be installed in order to remove the particulate matter created within a welding laboratory. Adequate storage facilities must be constructed. Roll gates, swing gates and other fencing must be modified to provide proper access while still restricting unauthorized personnel. The number of usable air chucks must be increased in the proposed new welding shop.

There is a great deal of equipment that must be purchased to provide our students with industry grade equipment necessary to train them for the employers in our area, including a plasma cutter, pulse spray welder, 4 grinders, 5 SMAW welders, suitcase x-treme fluxcore feeder, 2 GTAW welders, 2hp drill press, cut-off saw, and hydraulic tubing/pipe bender. Many of the pieces of equipment the department currently has are outdated and irrelevant to what industry is doing now. Having access to these pieces of equipment will help prepare graduates for the high-wage, high-skill professions within the manufacturing industry.

#### **ELEMENT 6. BUDGET JUSTIFICATION/DETAIL SHEET**

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**Part A - See Attached: Form C**

The capital cost per pupil is \$2,446. This figure includes all of the costs related to money requested. It does not include the cost of much of the donated equipment, labor, or the cost of equipment that is either already being purchased or will be purchased from outside sources such as ROP. The capital cost per pupil is estimated by dividing the cost of the requested funds by the estimated total enrollment (\$440,446/180).

**Part B: Financial participation of our Industry Partners in building and equipping the facilities**

Industry partners have been extremely generous in helping us to work toward the Industrial Technology Departmental vision. The following equipment and services, with an estimated value of \$82,700, have been donated by industry partners:

- 6000 lb forklift (Guy Rents \$6,000)
- 8 ft 12 Gauge mechanical shear (Weiss McNaire (\$12,000)
- 90 ton Mechanical press break (Weiss Mcnaire \$10,000)
- Trucking and crane service to set donated shear and press brake (North State Drilling \$800)
- Painting of classroom (Westerdahl \$500)
- Pouring 4 yards of concrete for the footings/slab to place mechanical press brake (Ginno and Maloney Construction \$ 700)
- 4 milling machines (Gridley high, Butte College, Chico State University \$10,000)
- 2 lathes (Gridley High \$ 2,000)
- 1 drill press (Weiss McNaire \$500)
- Commitment from Regional Occupation Program (ROP) to purchase majority of new welding equipment written into this application (4 GMAW Welders, Plasma cutter, GTAW welder, 5 SMAW welders, Tubing/Pipe Bender, welding helmets, grinders, arc screens, roto-hammer \$40,000)
- Commitment from MJB Welding to give 20% discount on new welding purchases.
- Commitment from County office of education to fund a summer workability program (using special needs students) to help with the conversion process. This program will build new welding booths, layout tables, feed tables, storage racks, and roll gates. Student's wages are paid through Butte County Regional Occupation Program (\$39,360 wages, \$14,000 supplies and materials).

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**ELEMENT 7: UNIQUE CONDITIONS**

**Part A:**

As mentioned previously, this modernization project will result in a facility that houses two separate labs: one for residential construction, and one for welding/manufacturing. As suggested in the RFA for this program, we are submitting two separate applications, as the two projects are part of different industry sectors.

Each has been approved by an industry-specific advisory committee, and is based on the needs and employment outlook for the specific industry sector.

The fact that we are converting a single building into two labs represents a unique cost/expense issue, as it is less expensive than building or converting two separate labs. Though there are no major structural changes to any of the buildings the cost of the electrical work and ventilation is the largest obstacle. We are requesting these costs from the manufacturing/welding proposal, but they will benefit both labs. In addition, the Butte County Office of Education and the Private Industry Council hired seventeen students during the summer of 2007 to help make non-structural changes to the prospective construction lab. This created a unique partnership through which students gained valuable experience and the satisfaction of contributing to a real project, and the school was able to have some of the construction accomplished in a cost-efficient way.



CALIFORNIA DEPARTMENT OF EDUCATION

# CAREER TECHNICAL EDUCATION FACILITIES APPLICATION FORM B – EDUCATIONAL SPECIFICATIONS AND EQUIPMENT/SPACE REQUIREMENTS SHEET (Rev. 2/07)

Use additional sheets as necessary.

Type of Project: <input type="checkbox"/> New Construction <input checked="" type="checkbox"/> Modernization/Reconfiguration <input type="checkbox"/> Equipment Only		
County Butte	Project Tracking Number	Expected Number of Students Served 150
Local Education Agency Chico Unified School District	Name of Project Pleasant Valley High School Welding Lab Modernization	
Name of School Pleasant Valley High School	Proposed Schematic Drawing Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

## Project Summary

Generally describe the scope of the career technical project and its educational goals.

Modify the abandoned Auto Shop into a welding/machining/manufacturing facility. This will allow us to increase the number of workstations and the quality of the equipment we are able to use to better prepare our students for high wage, high skill professions.

## Program and Space Functionality

Describe the program activities for this career technical project/equipment and how the teaching station will support those functions.

The program will expand the course content in the welding and manufacturing pathways. More welding stations will be added that contain state of the art manufacturing equipment. Machining technology will be included in the curriculum for a larger number of our students. CNC machinery will be introduced and used for all students.

## Space and Equipment Requirements

List required equipment needed to support the career technical project and the square footage requirements for all its other spaces (teaching station storage, office, lab, lecture area, etc.). Please attach a schematic drawing of the proposed project.

Plasma cutter, pulse welder, 110 wire feed welder, Iron worker, 5 arc welders, 2 GTAW welders, 1 suit case Welder, Drill press, cut off saw, 2 -220 wire feed welders,

## Functional Relationship to Site

Describe how the new construction or modernized building will impact other areas of the site.

The modernization will convert an abandoned auto shop into a modern manufacturing laboratory, with no impact on surrounding areas of campus (after the electrical sub panel is installed). Bringing adequate power to the facility will require the cutting, removal and re-pouring of concrete sidewalks on campus.

**Site Development Considerations**

Provide, if any, additional site development needs associated with the career technical project.

Adequate power and ventilation must be installed into abandoned auto shop in order to support the necessary welders and machining equipment to support a modern manufacturing laboratory with 25-35 students per section.

This will include

Installing an additional sub-panel and bringing in power from the main distribution panel on campus. Dust removal equipment must also be installed into facility to support a building construction program. A roll gate for easier access to facility be added (planned for summer of 2007).



CALIFORNIA DEPARTMENT OF EDUCATION

**CAREER TECHNICAL EDUCATION FACILITIES APPLICATION  
FORM C – BUDGET JUSTIFICATION/DETAIL SHEET** (Rev. 2/07)

One Form per School Site, per Project

Local Education Agency CHICO UNIFIED SCHOOL DISTRICT PVHS	Project Name Pleasant Valley High School
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Provide sufficient detail to justify the budget. The budget justification page(s) must provide all required information even if the items have already been identified and discussed in another section. For each project or equipment, list the costs associated. Please use additional sheets as necessary.

Project/Equipment Description	Subtotal Each Item
<p><b>Supply electricity into the ITECH building.</b> This is necessary in order to operate the industry-level equipment required to adequately train and prepare students. <u>Note:</u> Because there was not sufficient power in the existing panel to meet these needs, additional trenching under the sidewalk will be required and is included in the quote.</p> <p>Quote includes:</p> <ul style="list-style-type: none"><li>• Installing power and branch circuits for welding shop (\$97,050.)</li><li>• Installing power to two (2) metal brake machines (\$900)</li><li>• Installing 30 amp 3 phase power to new dust collector (<i>included in budget for residential construction project</i>)</li></ul> <p><u>Inclusions:</u> <u>Power package:</u></p> <ul style="list-style-type: none"><li>• Install 2 480-volt, 400 amp, 42 circuit 3 phase, NEMA 3R surface-mounted panels on southwest exterior corner of shop area</li><li>• Provide 28 30-amp, 3 pole circuit breakers</li><li>• Provide and install one (1) 400-amp main circuit breaker in main panel</li></ul> <p><u>Lighting:</u> Furnish and install strip lighting as indicated over south end welding booths</p> <p><u>Branch Circuits:</u></p> <ul style="list-style-type: none"><li>• Install conduit, Wiremold (or equal), THHN wire</li></ul>	\$97,950.00



<ul style="list-style-type: none"> <li>• Disconnecting means for all equipment will be plugs and cord caps, no disconnect switches are included.</li> </ul> <p><u>Utilities:</u> Cut sidewalk, trench and install one (1) new 4" PVC conduit from existing pull box at main panel to west wall of shop area (approx. 225'). Install one 4" EMT conduit across west wall to southwest corner location of new panels (approx. 50'). Install 750 MCM wire</p>	
<p><b>Install a Weld School Ventilation system for fourteen weld stations and one plasma weld table.</b> This includes:</p> <ul style="list-style-type: none"> <li>• One FARR-GS10 lowboy, with 20HP-8400CFM blower/silencer</li> <li>• One FARR-GS10 lowboy, with 15HP-5000CFM blower/silencer</li> <li>• 14 Airflow systems, positioner arms at each weld station</li> <li>• Clamp-style (reusable) inside ductwork by Nordfab, includes pipe, fittings, elbows, flex and support materials</li> <li>• Galvanized (SMACNA gage) spiral pipe, fittings and elbows for outside ductwork, includes high quality flex hose for final connections</li> <li>• Tax (7.25%), freight, lifts, and installation labor</li> </ul>	<p>\$105,008.00</p>
<p><b>Build new welding booths, layout tables, feed tables, storage racks, and roll gates.</b></p>	<p>\$53,360</p>
<p><b>Possible lead/asbestos abatement (all floors and walls):</b> due to the age of the building, it is probable that asbestos and lead will be a factor requiring abatement. If so, estimated costs are</p> <ul style="list-style-type: none"> <li>• Abatement project (\$26,800)</li> <li>• Abatement project management (\$1,000)</li> <li>• Air samples (\$268)</li> </ul>	<p>\$27,168.00</p>
<p><b>Equipment:</b></p> <ul style="list-style-type: none"> <li>• 6000 lb forklift (\$6,000)</li> <li>• 8 ft 12 Gauge mechanical shear (\$12,000)</li> <li>• 90 ton Mechanical press brake (\$10,000)</li> <li>• Trucking and crane service to set donated shear and press brake (\$800)</li> <li>• Painting of classroom (\$500)</li> <li>• Pouring 4 yards of concrete for the footings/slab to place mechanical press brake (\$700)</li> <li>• 4 milling machines (\$10,000)</li> <li>• 2 lathes (\$ 2,000)</li> <li>• 1 drill press (\$500)</li> </ul>	<p>\$82,500</p>

<ul style="list-style-type: none"> <li>• Commitment from Regional Occupation Program (ROP) to purchase majority of new welding equipment written into this application (4 GMAW Welders, Plasma cutter, GTAW welder, 5 SMAW welders, Tubing/Pipe Bender, welding helmets, grinders, arc screens, roto-hammer \$40,000)</li> <li>• Commitment from MJB Welding to give 20% discount on new welding purchases.</li> </ul>	
<b>Architects' fees</b> (calculated at 25% of total construction cost)	\$50,952.00
<b>Inspectors' Fees</b> (calculated at \$45/hour)	\$1500.00
<b>Department of State Architect (DSA) Fees</b> for structural and ADA compliance requirement; calculated at .007% of total construction cost)	\$1,427.00
<b>Advertising:</b> Because project total cost exceeds \$100,000, it must be advertised for a formal bid.	\$200.00
<b>Contingencies:</b> Calculated at 10%	\$20,381.00
<b>Total Amount of Funds Requested</b>	<b>\$440,446.00</b>

Total Match Amount \$135,860	Source of Match Business and industry partners, department budget, ROP, Perkins funding
Time Payment Required <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Financial Support from Industry Partners Equipment and labor as described in 6B
Other Sources of Funding Perkins; ROP; Dept budget, Business and industry partners	