

TRAINING PLAN TABLE

Job No.	Job Description	Type of Training	Estimated No. of Trainees	Range of Hours		Average Cost per Trainee	Post-Retention Wage
				Class / Lab	CBT		
1	Retrainee Priority Rate SB <100	Commercial Skills, Computer Skills, Continuous Impr., PL-Comp Skills	56	8-200	0	\$1,300	\$15.98
				Weighted Avg: 50			
2	Retrainee Priority Rate SB <100 Job Creation Initiative	Commercial Skills, Computer Skills, Continuous Impr., PL - Comp Skills	13	8-200	0	\$806	\$13.32
				Weighted Avg: 31			

- Reimbursement Rate: Job #'s 1 and 2: \$26 SB Priority
- County(ies): Orange
- Occupations to be Trained: Admin. Staff, CAD Operator, Engineer, Production Staff, Project Manager
- Union Representation: Yes
 No
- Health Benefits: Job #'s 1 and 2: \$2.56 per hour
- Electronic Recordkeeping: N/A

SUBCONTRACTORS

- Development Services: Training Funding Source (TFS) in Seal Beach assisted with development at no charge.
- Administrative Services: TFS will also provide project administrative services for an amount not to exceed 10% of payment earned.
- Training Vendors: To Be Determined

OVERVIEW

VCA Consultants, Inc. (VCA), founded in 1979 as VanDorpe Chou Associates, provides structural engineering consulting services—as well as building code administration and green, sustainability consulting services—to both public and private clients. VCA was newly incorporated, with no change in employees, at the beginning of this year. VCA will take the lead in this proposal with its sister company, The Code Group. The Code Group provides plan check, inspection, and green building compliance services. Both companies are co-owned and co-located, with a combined number of less than 100 employees.

VCA and Code Group report that their businesses are constantly changing due to new building codes and technology. In order to address these changes, the Companies recently implemented several new computer software updates:

- Revit, which is a Building Information Modeling software program
- AutoCAD 2014
- VCAcals 2014 software was recently updated to incorporate new building codes and design methods.
- Ajera 8.0 software was also recently implemented and allows the Company to control all aspects of project management and accounting with real-time project information shared across the entire organization.

The software updates will allow the company to keep up with its competitors by improving design processes, increasing the accuracy of cost controls, and ensuring that employees comply with all building codes.

Retrainee - Job Creation

In support of Job Creation, the Panel is offering incentives to companies that commit to hiring new employees (higher reimbursement rate and a lower post-retention wage). Trainees must be hired within the three-month period prior to Panel approval or during the term of contract.

VCA reports that the companies are expanding as construction has picked up again. Both companies have hired a total of 16 full time employees in the last six months. Growth is expected to continue based on planned design projects. As a result, both companies are projected to hire an additional staff (13 total) over the next two years (Job Number 2).

Training Plan

Computer Skills – Training will be provided to all occupations. Engineers, CAD Operators and Production Staff need to be trained in the latest version of design and building software used in the engineering process. Project managers need to be trained in specific software programs prior to providing training to other employees. Administrative staff need MS Office training to effectively assist in proposal and marketing material preparation and report generation.

Commercial Skills – Training will be provided to Engineers, CAD Operators, Project Managers, and selected Production Staff in order to familiarize them with changes in building codes, LEED processes, California Energy codes, and new products available in the marketplace.

Continuous Improvement – Training will be provided to all occupations based on job functions. Trainees will focus on Process Improvement Techniques, Leadership Skills and Team Building to ensure quality and production efficiencies.

Productive Laboratory-Computer Skills

Productive Laboratory (PL) trainees may produce goods for profit as part of the training in the courses identified under the Curriculum. The instructor must be dedicated to training delivery during all hours of training. A small percentage of the total training hours in this proposal will be delivered via PL – not to exceed 10 hours per person.

Although the majority of Computer Skills will be delivered via class/lab, the PL training supports the class/lab by providing hands-on experience with a specific “live” project using building design software skills. These employees must learn how to apply new building software

designs and codes. According to the Company, working on a live project is the only way to ensure competency in the architecture and engineering design processes. The trainer will be able to explain, guide, and illustrate the process while the trainee will receive hands-on experience.

PL training will be provided to approximately 50 CAD Operators, Engineers and selected Production Staff in Job Numbers 1 and 2. Training will be provided in building software applications skills, depending on specific job functions. Most of the training will be conducted with a 1:1 trainer-to-trainee ratio, and will not exceed 1:3. Trainees will work with a trainer (Principal or Project Manager) who is working on a project, such as drawings or calculations for a specific building. The trainer will explain the processes behind each step to get to the finished project. Trainees will perform the following tasks under the trainer's direction:

- Implement the conversion of engineering software output solutions into construction documents for a specific building design;
- Use material specifications and structural design systems in a specific project;
- Use input values for 2-dimensional and 3-dimensional modeling techniques for a specific building;
- Utilize software to prepare construction documents for building and non-building structures;
- Derive and adjust input values and the effect on output solutions for a specific building project; and
- Interpret the software output solutions for a specific project;

Training competencies will be checked during the Company's Quality Assurance and Quality Control review. The trainee will be notified and re-trained if necessary.

Waiver Request to 60-Hour Cap

VCA requests a waiver to the small business 60-hour cap on training. The Company conducted an in-depth management survey and training assessment for all staff and found that 15 CAD Operators and 27 Engineers (39 percent of training plan) will need a minimum of 72 hours with up to a maximum of 200 hours of training depending on the trainees prior knowledge and skill level in 1) Computer Skills such as Building Design Modeling Skills, Structural Design and Analysis software applications, and Engineering Software Applications; and 2) Commercial Skills training in 2013 Building Standards, California Building Green Standards and Energy Pro courses. This training is critical to Operators and Engineers to assure competency in all aspects of new codes and structural building software applications. The Company is requesting that the cap be increased to 200 hours to accommodate the smaller number of less experienced CAD operators and Engineers in Job Number 2 who may need more hours to become competent.

RECOMMENDATION

Staff recommends approval of this proposal.

Exhibit B: Menu Curriculum**Class/Lab Hours**

8–200

Trainees may receive any of the following:

COMPUTER SKILLS

- AutoCAD 2014 (Computer-Aided Drafting Software)
- Revit 2014 Building Information Modeling (BIM) Software
- Bentley Structural Suite Application Skills
- Building Design Modeling Skills
- VCA Calc 2014 Internal Design Software Skills
- Daniel Li Spreadsheet Application Skills
- Enercalc Application Skills
- Etabs Application Skills
- Ajera 8 Project & Financial Management Software Skills
- VMWare View 5.2
- Electronic Plan Check
- Engineering Software Applications
- Microsoft Office Suite 2013

COMMERCIAL SKILLS

- 2013 International California Building Standards
- American Society of Testing and Material (ASTM) Standards
- California Building Green Standards 2013
- Leadership Energy Environmental Design (LEED)
- California Energy Code
- Energy-Pro 6.1 Energy Efficiency Skills (Quality Insulation Installation; Electric Vehicle Charging Stations; Solar Electrical Generation; Mechanical, Electrical & Plumbing Energy Efficiencies)
- Construction Standards
- New Product Knowledge

CONTINUOUS IMPROVEMENT

- Client Relations
- Project Management
- Leadership Skills
- Planning and Strategy Skills
- Team Building
- Process Improvement Techniques

Productive Lab

0-10

COMPUTER SKILLS (1:3 ratio)

- AutoCAD 2014
- Revit 2014
- Bentley Structural Suite Applications
- Building Design Modeling Skills
- VCACalc 2014 Internal Software Skills
- Daniel Li Spreadsheet Application Skills
- Enercalc Application Skills
- Etabs Application Skills
- Engineering Software Application Skills

Note: Reimbursement for retraining is capped at 200 hours total per-trainee, regardless of method of delivery.