



Training Proposal for:
Southern California Surveyors Joint
Apprenticeship Committee
Agreement Number: ET17-0915

Panel Meeting of: October 28, 2016

ETP Regional Office: North Hollywood

Analyst: M. Paccarelli

PROJECT PROFILE

Contract Attributes:	Retrainee Priority Rate Apprenticeship	Industry Sector(s):	Construction Priority Industry: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Counties Served:	Imperial, Inyo, Kern, Los Angeles, Mono, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Ventura	Repeat Contractor:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Union(s):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No International Union of Operating Engineers Local 12		
Turnover Rate:	≤20%		
Managers/Supervisors: (% of total trainees)	N/A		

FUNDING DETAIL:

Program Costs	+	Support Costs	=	Total ETP Funding
\$144,375		\$9,955 8%		\$154,330

In-Kind Contribution:	50% of Total ETP Funding Required	Inherent
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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 Apprentice	Commercial Skills	55	8-200	0	\$1,042	\$23.37
				Weighted Avg: 75			
2	Retrainee Priority Rate Journeyman	Commercial Skills	55	8-200	0	\$1,764	\$44.81
				Weighted Avg: 75			

Minimum Wage by County: \$21.28 per hour Statewide (Priority Industry)

Health Benefits: Yes No This is employer share of cost for healthcare premiums – medical, dental, vision.

Used to meet the Post-Retention Wage?: Yes No Maybe

Although trainees receive health benefits under their collective bargaining agreement, it is not being used to meet the Post-Retention Wage.

Wage Range by Occupation

Occupation Titles	Wage Range	Estimated # of Trainees
Apprentice Chainman		55
Journeyman Chief of Party		55

INTRODUCTION

The Southern California Surveyors Joint Apprenticeship Committee (SCSJAC) (www.scsurveyjac.org) was established in 1960 to provide Apprentice and Journeyman Surveyors training throughout 12 counties in Southern California. It is administered jointly by the Southern California Association of Civil Engineers and Land Surveyors, and the International Union of Operating Engineers, Local 12 (Union). Signatory employers include engineering, surveying, and construction firms.

This will be SCSJAC's second ETP Agreement within the last five years. In this proposal, training will continue for Apprentices and Journeymen. Training includes inspection, service, maintenance, start-up, testing, balancing, adjusting, repair modification, and replacement of mechanical and refrigeration equipment.

Employer Demand

The proposed training is designed to meet the signatory employer's need to acquire an adequate number of skilled surveyors to work on specialized projects, and replace retiring Journeymen.

Funding for this training will increase the employability of Apprentice and Journeyman workers. Projects currently under contract with signatory employers include the Wilshire Grand (Downtown Los Angeles), 91 freeway widening (Corona). Great Park Development (Irvine),

Kaiser Hospital (San Diego and Murrieta), Long Boat Solar Project (Barstow), and High Speed Rail Phase 4.

Apprenticeship Program

The Panel is authorized to fund Apprentice training that does not displace any other source of government funds, or replace an existing apprenticeship program approved by the Division of Apprenticeship Standards (DAS). ETP funding is designed to supplement cost of delivery for the Related and Supplemental Instruction (RSI) portion of DAS-approved apprenticeship training. Depending on the type of trade, apprenticeship programs vary in length. In this case, the program takes three years to complete for Chainman.

Apprentice programs are typically sponsored by a Joint Apprenticeship Training Committee (JATC). A JATC is created through collective bargaining, with an equal number of members appointed by union and management with employer contributions to a training trust fund. The employers are not “participants” but are signatories to the Collective Bargaining Agreement.

RSI is traditionally delivered as class/lab, and ETP does not reimburse CBT delivery for apprenticeship training. The curriculum is developed with input from DAS and a designated Local Educational Agency (in this case Rancho Santiago Community College). The Apprenticeship Program allows reimbursement for up to 200 hours per apprentice. (Journeymen are capped at 200 hours.)

For the building trades, it is not customary for workers to be employed for a standard retention period of 90 consecutive days with one employer. In that instance, the Panel may substitute non-consecutive hours worked for retention. This modified retention period must be no less than 500 hours within 272 days with more than one employer. Both the standard and modified retention periods will apply to this proposal.

To ensure ETP does not displace Montoya Funds, Apprenticeship reimbursement is reduced by \$5, reducing the priority industry rate from \$18 to \$13 per hour. In addition, the Panel adopted a “blended rate” for Journeymen, reflecting the fact that they may be employed by a variety of contractors over the two-year term of contract ranging from large employers, to small (≤ 100 employees). This is \$22 per hour, midway between the Priority Industry standard rate (\$18) and Small Business rate (\$26).

The ETP wage for Apprentices is no less than \$21.28 per hour, tracking the Special Employment Training wage as modified for priority industries. However, the actual wages paid are shown in the Training Plan Table and contract when they exceed \$21.28, for both Apprentices and Journeymen.

PROJECT DETAILS

Training Plan

The curriculum was developed by surveyor industry professionals. Labor and management are consulted through joint committees at all levels once a year to update the curriculum. SCSJAC conducts assessments at the conclusion of each training session to evaluate program effectiveness. Trainees and employers are encouraged to provide feedback through their representatives on the Committee and directly to training personnel at the SCSJAC.

Trainers have a minimum of six years’ experience. They have completed both programs (Chainman and Chief of Party) and are either certified as Chief of Party; or have at least 18

college units outside of apprenticeship; or are licensed by the State of California as a Land Surveyor in Training or Professional Land Surveyor. This criteria was agreed upon with Rancho Santiago College and the college screens instructors.

Commercial Skills (100%) - Training will be offered to Apprentice and Journeyman trainees. The Chainman Apprenticeship training will cover surveying equipment, techniques, procedures, practices, computations, and projects. The Chief of Party training is an advanced training after becoming a Chainman. Training will cover the following, but not limited to, aerial photogrammetry, subdivision surveying, plan surveying and advanced coordinate geometry.

Impact/Outcome

Upon completion of the programs, the Apprentice graduates will get trade certificates from both the State and Federal Government. Certificate of Completion of Apprenticeship will be issued from the California Apprenticeship Council and from the federal Department of Labor Office of Apprenticeship.

Marketing and Support Costs

Participating employers are notified by email and regular mail of program and upgrade courses. The SCSJAC also markets and advertises its program through their union local and via mailers sent to EDD offices and announcement on its website.

The SCSJAC is requesting 8% in support costs to assist in apprentice recruitment, employer outreach, and to conduct assessments of employer-specific job requirements. Although many of the signatory employers have already been made aware of this training opportunity, additional outreach will take place to complete the project and assessment of employer-specific job requirements will occur during the term of the Agreement. Staff recommends the 8% support costs.

Commitment to Training

Employers will continue to contribute to the training trust for every hour worked by Apprentices and Journey level workers. In addition, Chainman will also receive up to 6,000 hours of on-the-job training and 4,000 hours for Chief of Party at the employers' expense.

Safety training is, and will continue to be, provided by the participating employers in accordance with all pertinent requirements under state and federal law.

RECOMMENDATION

Staff recommends approval of this proposal.

PRIOR PROJECTS

The following table summarizes performance by the SCSJAC under an ETP Agreement that was completed within the last five years:

Agreement No.	Location (City)	Term	Approved Amount	Payment Earned \$ %
ET15-0902	Statewide	7/7/14 - 7/6/16	\$153,700	\$153,700 (100%)

DEVELOPMENT SERVICES

N/A

ADMINISTRATIVE SERVICES

N/A

TRAINING VENDORS

N/A

Exhibit B: Menu Curriculum

Class/Lab Hours

8 - 200

Trainees may receive any of the following:

APPRENTICE TRAINING - CHAINMAN

COMMERCIAL SKILLS

- Surveying Equipment & Techniques:
 - Overview of the Survey Industry
 - Basic Field Operations and Setting Survey Points
 - Basic Measurement Techniques in Surveying
 - Introduction to Angle Measuring and Field Instruments
 - Introduction to Leveling
 - Introduction to Topographic Surveys
 - First Aid
 - Computer Literacy
- Survey Procedures:
 - Apprentice Responsibilities and Public Relations
 - Field Notes
 - Identification of Monuments
 - Linear Measurements
 - Introduction to Station and Location Systems
 - Review of Angles, Bearings and Instruments
 - Leveling Methods
 - Global Positioning Systems
 - Plan Reading and Grade Sheets
 - Introduction to Construction Surveys
- Surveying Practices:
 - Review of Measuring Systems
 - Review of Angles, Bearings and Location Systems
 - Trigonometry
 - Slope Staking
 - Electronic Distance Measuring and Recording
- Surveying Computations:
 - Coordinate Geometry
 - Horizontal and Vertical Curves
 - Traverse Surveys
- Surveying Projects:
 - Safety Procedures
 - U.S. Public Land Surveys
 - Property Surveys
 - Subdivision Surveys
 - Topographic and Photogrammetric Surveys
 - Staking Procedures for Various Projects
 - Heavy Construction Surveys
 - ALTA Surveys
 - Total Stations

- Public Relations
- Scope of Profession

JOURNEYMAN TRAINING – CHIEF OF PARTY

- Plane Surveying and Coordinate Geometry:
 - Surveying Mathematics and Coordinate Geometry
 - Modern Field Methods and Measuring Systems
 - Locating/Eliminating Plan, Calculation and Staking Errors
- Advance Coordinate Geometry:
 - Advanced Coordinate Geometry and Curve Calculations
 - Complex Field Problems and Accuracy Requirements
 - Field and Office Calculating Techniques
- Laptop Surveying/Aerial Photogrammetry:
 - Laptop Surveying Using Trimble Business Center Software
 - Topographic Surveying Methods and Techniques
 - Topographic Surveying Analysis and Review
 - Performing Topographic Surveys
 - Plotting Field Data and Surveys for Quantities
 - Photogrammetry, Ground Control and Topo Analysis
- Plan Reading and Subdivision Surveying:
 - Types of Plans, Plan Reading and Locating Errors
 - Grading Plans and Control for Construction Projects
 - Staking Procedures and Improvement Plans
- Major Project Plans and Survey Layout:
 - Construction Plan Reading, Survey Control and Layout
 - Case Study of Multi-Story Building – Structural
- Control and Geodetic Surveying;
 - Triangulation and State Plane Coordinate Systems
 - Astronomy and Global Positioning Systems
 - Dredging and Hydrographic Surveys
- U.S. Public Land and Property Descriptions:
 - Public Land System and Subdivision of Sections
 - Retracement Surveys and Restoration of Corners
 - Reading and Interpreting Property Descriptions
- Property Surveys and Legal Descriptions:
 - Property surveys and Legal Descriptions
 - Laws Affecting Surveyors
 - Supervision and Public Relations

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