# HEAVY EQUIPMENT OPERATIONS: PRIMITIVE ROADS

October 20-25, 2013



William Penn Mott Jr. Training Center



# Memorandum

Date: September 20, 2013

**To:** Supervisor

From: Karyn Lombard, Acting Department Training Officer

Department of Parks and Recreation

Training Section

Subject: Employee Attendance at Formal Training

Heavy Equipment Operations: Primitive Roads Group 2

An employee from your office will soon be attending the formal training program described in the attached. Please insure that the employee is fully prepared to attend the session and that the groundwork is laid for the employee's implementation of the training upon returning to work.

You can assist with capturing the full value of the training by taking the following steps:

# **Prior to Training**

- 1. Make sure that **specific** employee needs are identified and, if necessary, called immediately to the attention of the Training Coordinator.
- 2. Review with the employee the reason for the employee's attendance.
- 3. Review objectives and agenda with the employee.
- 4. Discuss objectives and performance expected after the training.

#### Immediately Following Attendance

- 1. Discuss what was learned and intended uses of the training.
- 2. Review the employee's assessment of the training program for its impact at the workplace and review the due date of the Post-Training Evaluation form.
- 3. Support the employee's use of the training at the work place.

# Prior to Three Months Following Training

- Employee after discussion with the supervisor login to the Employee Training Management System (ETMS) to complete the Post-Training Evaluation form.
- Supervisor evaluates the effectiveness of the training on the employee's job performance and login to the ETMS to complete the Training Effectiveness Assessment form.

Thank you for your assistance in seeing that the full benefit of training is realized.

Attachment

cc: Participant

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# Mission Statement Training Section

The mission of the Training Section is to improve organizational and individual performance through consulting, collaboration, training and development.

# **MOTT TRAINING CENTER STAFF**

Karyn Lombard	Acting Department Training Officer
Joanne Danielson	Academy Director
Juventino Ortiz	Academy Coordinator
Pat Bost	Office Manager
	Training Specialist
Sara M. Skinner	Training Specialist
	Training Specialist
Matt Cardinet	Cadet Training Officer
	Cadet Training Officer
Pamela Yaeger	Assistant Program Coordinator
Edith Alhambra	Assistant Program Coordinator
Ginger Henry	Program Assistant
Socorro Wallace	Program Assistant
Joanne Ciccone	Program Assistant
	Program Assistant

# THE MISSION

of the California Department of Parks and Recreation is to provide for the health, inspiration and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high quality outdoor recreation.



#### FORMAL TRAINING GUIDELINES

Welcome to formal training, an essential component in your career development.

Since 1969, our Department has been providing a continuously changing number of diverse training programs at its main training facility, the William Penn Mott Jr. Training Center and other locations including the Marconi Conference Center. The Department strives to enhance your learning and job performance with formal training of the highest quality.

Our Department's dedication to training is only one aspect of its commitment to you and to the public. This commitment is costly and represents an important investment in you and your career. You and the Department realize a return on that investment by your positive participation in formal training itself and post training follow-through.

The program you will be participating in is described in this training syllabus, which outlines what you can expect from this training and what is expected of you. This syllabus details what you should do before you leave for training; what to do when you arrive; what you will be doing while in training; and, importantly, what you should be able to do when you return to your work site. Specifically:

- 1. SYLLABUS: The syllabus is now accessible on the Employee Training Management System (ETMS). You should print a copy of the syllabus to bring with you to class. Your copy of this syllabus is an important part of your training experience and should be brought with you to training. Read it before you arrive and review it following the program along with material you received at training.
- 2. PRE-TRAINING ASSIGNMENTS: Your completion of pre-training assignments is essential to the success of your training. You are responsible for all reading assignments in preparation for classroom sessions. Time will be provided during working hours to accomplish any assignments which involve either individual or group efforts and resources. (Pre-training assignments are listed in the "Training Attendance Requirements" section.)

3. TRAVEL: Arrange your travel to and from the training through your District or Office. (No reimbursement for travel expense - including per diem costs - will be approved for travel not specifically authorized in advance by the District Superintendent.) Individuals may claim reimbursement for incidental expenses incurred as outlined in DAM 0410.6. The Mott Training Center does not have the capability to provide transportation to/from any airport.

The cost of your travel (air fare, mileage, rental car, etc.) is paid by your District or Office **to** and **from** the location of the training.

- 4. HOUSING: Housing will be assigned to you on a shared-room basis and will be available from 3:00 p.m. on the date of arrival to 12:00 noon on the date of departure. The Department provides your room and board expenses at the Redwood Glen Camp and Conference Center only. No per diem allowance will be authorized for living off-grounds. This does not preclude living off-grounds at your own expense. Please advise the Department Training Officer no later than one week before your scheduled arrival if you plan to live off-grounds. No animals are permitted in housing. In the event of an emergency, staff must know your room assignment, therefore, you may not switch rooms without staff approval. Additional overnight guests are not allowed in the buildings. Quiet hour for lodge living areas is 10:00 p.m.
- 5. ENROLLMENT OR HOUSING CANCELLATION POLICY: To cancel participation in a course, the participant must have their District Superintendent or Section/Office Manager send an email to the Training Specialist assigned to the course requesting to remove the participant. If you do not need lodging or must change or cancel your reservation for lodging, you must contact the Mott Training Center or Training Specialist assigned to the course at least 72 hours prior to your date of arrival. Lodging, registration, and associated fees will be charged to the employee's District or Section/Office if a training cancellation is received with less than 72 hours' notice.

The Mott Training Center is committed to ensuring that the reservation that has been made for you is accurate and needed.

- 6. OFF-GROUNDS ACCOMMODATIONS: When authorized to stay off-grounds by the Department Training Officer, the Mott Training Center may pick up the cost of your room and meals at the current DPR rate.
- 7. MEALS: Meals will be provided, from dinner on the date of arrival through lunch on the date of departure. Meals will be served at 7:00 a.m. for breakfast, 12:00 noon for lunch, and 6:00 p.m. for dinner. Hot or box lunches may be provided on some days. If you require a special diet, notify the Training Specialist Chuck Combs at (831) 649-7124 no later than two weeks before your scheduled arrival.

- 8. CLOTHING: Field uniforms as found in "Description of Required Field Uniforms", DOM Chapter 2300, Uniform Handbooks, not including optional items, will be worn daily by all uniformed employees during formal training sessions. Non-uniformed employees shall wear apparel normally worn on the job. Appropriate attire includes apparel suitable for professional office dress. It does not include such items as shorts, t-shirts, tank tops, or sandals.
  - Because we are on the conference grounds with many other groups, and the image we project as State Park employees is important not only during working hours but off duty hours as well, your informal sportswear should be appropriate.
- ALCOHOLIC BEVERAGES: Participants shall not possess or consume alcoholic beverages anywhere on the grounds or in the buildings of Camp Redwood Glen. Please make offsite arrangements for a designated driver and a location to consume ALCOHOLIC BEVERAGES if necessary.
- 10. **SMOKING**: Smoking is not permitted in the any building at the Redwood Glen Camp and Conference Grounds. Smoking is permitted only adjacent to the basketball court.
- 11. REGISTRATION: When you arrive at Camp Redwood Glen, go directly to the Gate House for you room key. If you are going to arrive later than 18:00 hours contact Chuck Combs at 831-901-5864 to make arrangements.
- 12. COURSE LEADERS: The formal training you will attend is developed and, for the most part, conducted by experienced State Park employees in field and staff positions. Some courses will be conducted by qualified instructors from other agencies and educational institutions. Your course leaders have proven their ability and knowledge in their profession, and provide a level of expertise difficult to match.
- 13. TRAINING SECTION STAFF: Chuck Combs is your Training Specialist and has been assigned the responsibility for your training group. That staff member usually serves as a Course Leader as well as a Coordinator. During the program, you may be asked to assist Training Section Staff in the logistics of your training program (organizing field trip transportation, supervising classroom breaks, etc.). Training Section Staff will do all within their power to make your training experience pleasant and meaningful.
- 14. TRAINING MATERIALS: May be made available to you at both your unit and the Mott Training Center. Handout materials issued at your unit should be brought to training for possible use. A conference binder or notebook will be issued to you at the training session for note taking and convenience in handling materials. Copies of DAM and DOM will be available to you for self-study. Bring your own pens and pencils.

- 15. ATTENDANCE: Regular attendance is a critical course requirement and your participation is important to the success of this training. An absence of more than 10% of the course hours constitutes grounds for dropping a participant from the course. The Department Training Officer may modify this requirement based upon participant knowledge level and/or the portion of the course missed. All absences, except those of an emergency nature, must be approved in advance by the Training Specialist.
- 16. VEHICLES: All vehicles should be parked in the lots (see map) of Camp Redwood Glen. Any questions regarding use of a State vehicle while at the training Center should be discussed with your supervisor prior to your departure for training, or with your Program Coordinator.
- 17. CELL PHONES: As a courtesy to your fellow participants and course leaders ensure that your cell phone is turned off during classes. Participants should not be receiving or making cell phone calls during class time. Please limit those calls to your breaks. Due to the rural nature of our sites your Cell Phone reception maybe limited depending on your carrier.
- 18. FAX: The Mott Training Center's FAX number is (831) 649-2824.
- 19. TELEPHONE: Limit phone calls during classroom hours to urgent business or emergencies
- 20. POST-TRAINING ASSIGNMENTS: In connection with formal training are to be completed under the direction of your supervisor. See "Program Attendance Requirements" in this syllabus.
- 21. COFFEE BREAK REFRESHMENTS: Will be available throughout each classroom session. You will be asked to contribute to the "Hospitality Fund" to defray expenses. Please <u>bring your own coffee cup</u>.

# PROGRAM ATTENDANCE CHECKLIST

To assist you in your preparation for formal training the following list is provided: Prior to coming to the class: Make arrangements for Travel as described in the Formal Training Guidelines. Read and understand the Heavy Equipment Operations: Primitive Roads Syllabus prior to your arrival at training. Review the Post-Training Assignment in your syllabus with your supervisor. Discuss the projects you will be assigned in the next twelve months that will utilize the skills developed during the training program. Remember to bring the following with you to training. Program syllabus. Personal safety equipment (safety glasses, ear protection, gloves, hardhat, poison oak screen or cleansers, and sunscreen). Rain gear with good work boots. Appropriate field uniform, see Formal Training Guidelines #8. Daypack to carry your lunch, any personal items, and water bottle/canteen. Alarm clock, pens, pencils.

If you have questions or need assistance, call Program Coordinator Chuck Combs at (831) 649-7124 or email Chuck.Combs@parks.ca.gov.

# POST-TRAINING ASSIGNMENT

Prior to ninety days after the completion of this program, the employee and his/her supervisor should sit down and discuss the impact and assess the effectiveness this program has had on the employee. Then both the supervisor and employee should login to the Employee Training Management System (ETMS) and complete the Post-Training Evaluation form (an email will be sent to both employee and supervisor notifying them that the evaluation needs to be completed).

The post-training evaluation process is intended to provide a bridge between classroom instruction and the on-the-job application of training. The information obtained through this process will assist the training participant, supervisor, and Mott Training Center in providing a return on the investment the Department has on training.

# HEAVY EQUIPMENT OPERATIONS: PRIMITIVE ROADS GROUP 2 - AGENDA OCTOBER 20-25, 2013

There will be a vanpool to take you from the front parking area of the Redwood Glen Camp and Conference Center to the training sites on the field days. It will depart promptly at 0800 hours. There is not sufficient parking at the field sites for you to park your vehicle there.

Sunday October 20 1500-	REGISTRATION: Check in at Redwood Glen Camp and Conference Center, 3100 Bean Creek Road, Scotts Valley, CA 95066	All
Monday		
October 21 0800-0845	Program Orientation	Combs
0845-0930	Participant Expectations	Combs
0930-1030	Heavy Equipment Operations: Primitive Roads Overview	Knapp
1030-1100	Primitive Road Types - Terms and Definitions	Allsop
1100-1200	Drainage Strategies	Knapp
1200-1300	Lunch (on site)	
1300-1400	Reconstruction/Re-engineering	Knapp
1400-1530	Road Rehabilitation/Obliteration	Merrill
1530-1630	Load Safety and CHP Requirements	Belltawn
1630-1700	Introduction to Pre-Ops and Simulators	Officer TBA Profs. Webb and Greene
Tuesday		
October 22	Van Daal fram Ladging	
0800-0830 0830-1630	Van Pool from Lodging Van Pool to Rotating Lab Sites	All
0030-1030	Rotating Lab sites	ΔII
	Equipment Service, Safety, BIT, and Equipment Operation	
	Culvert and Drainage Applications	
	Road Reconstruction	
	Road Removal	
1200-1300	Lunch (on site, box lunch in the field, pick up at breakfast)	

9/20/13 7

1630-1700 Van Pool to Lodging

# HEAVY EQUIPMENT OPERATIONS: PRIMITIVE ROADS GROUP 2 - AGENDA OCTOBER 20-25, 2013

There will be a vanpool to take you from the front parking area of the Redwood Glen Camp and Conference Center to the training sites on the field days. It will depart promptly at 0800 hours. There is not sufficient parking at the field sites for you to park your vehicle there.

Wednesday October 23 0800-0830 0830-1630	Van Pool from Lodging Van Pool to Rotating Lab Sites Rotating Labs with Teams Equipment Service, Safety, BIT, and Equipment Operation Culvert and Drainage Applications Road Reconstruction Road Removal	All
1200-1300	Lunch (on site, box lunch in the field, pick up at breakfast)	
1630-1700	Van Pool to Lodging	
Thursday October 24 0800-0830 0830-1630 1200-1300 1630-1700	Van Pool from Lodging Van Pool to Rotating Lab Sites Rotating Labs with Teams Equipment Service, Safety, BIT, and Equipment Operation Culvert and Drainage Applications Road Reconstruction Road Removal Lunch (on site, box lunch in the field, pick up at breakfast) Van Pool to Lodging	All
Friday October 25 0800-0930 0930-1030 1030-1200 1200-	Check out of Camp Redwood Glen Maximo and Equipment Records, Statewide Equipment Management, and SPEO's Class Review, Test, Program Evaluation, and Expectations Lunch and Departure (box lunch for the road, pick up at breakfast)	Allsop Belltawn Combs

# PROGRAM OUTLINE

ogram Orientation/Registration and Training Overview	.0
eavy Equipment Operations: Primitive Roads Overview	.0
imitive Roads Types and Definitions	.0
ainage Strategies4	.0
oject Planning/PEF1	.0
oad Reconstruction/Rehabilitation/Reroute/Obliteration	.0
oad Inventories/Assessment Process	.0
oad Design and Project Concepts	.0
ask Hazard Analysis/Safety 4	0
quipment Service, Operation and BIT4	.0
ourse Evaluation <u>1</u>	.0
TOTAL 36	0.6

# **HEAVY EQUIPMENT OPERATIONS: PRIMITIVE ROADS**

# PROGRAM ORIENTATION AND TRAINING OVERVIEW

<u>Purpose</u>: Participants and Trainers will become reacquainted with each other and the Program Coordinator. The group will be given information on the logistics of the week's training program at the Wilder Ranch State Park. Participants will share how they have applied the knowledge gained in the previous programs at their district and what expectations they have for this program. In addition, the program content will be reviewed.

**Performance Objectives:** By the close of the session the participant will

- 1. Become acquainted with each other and the Program Coordinator.
- 2. Share and record expectations with group members.
- 3. Review program content, procedures, and evaluation processes.

# **HEAVY EQUIPMENT OPERATIONS: PRIMITIVE ROADS OVERVIEW**

<u>Purpose</u>: Develop the participant's knowledge of the Department's use of heavy equipment in the maintenance and construction of primitive roads, trails, drainage structures, and in resource projects. These will include policies, regulations, rules, regarding equipment operations and safety.

**Performance Objectives:** By the close of the session the participant will

- 1. Review basic policies concerning equipment operation as used in the field by the Department.
- 2. Safely and effectively maintain their equipment on a daily basis while operating in the field.
- 3. Identify drainage structures and their components, and relate their function to road systems.
- 4. Describe how equipment operation supports the Department's mission in resource work.

# **PROJECT SAFETY**

<u>Purpose</u>: Review of basic safety protocols (i.e. task-hazard analysis). Present additional safety concerns while working with heavy equipment. Present project safety and evacuation plan.

**Performance Objectives:** By the close of the session the participant will

- 1. Conduct a task-hazard analysis.
- 2. Identify safety concerns while working with mechanized equipment.
- 3. Prepare project safety and evacuation plan.

#### PROJECT DEVELOPMENT

<u>Purpose</u>: To demonstrate standard methods of assessment, site specific surveying, development of technical specifications, and construction planning.

Performance Objectives: By the close of the session the participant will

- 1. Understand components of comprehensive project planning and development.
- 2. Evaluate field assessments, prioritization, and prescriptions provided by in-house specialists or contractors.
- 3. Use prescriptions to guide site surveys, and develop technical construction specifications.
- 4. Implement in-house or contract construction projects.

### PROJECT EVALUATION DOCUMENTATION

**Purpose:** To review requirements for documentation on heavy equipment projects.

**Performance Objectives:** By the close of the session the participant will

- 1. Identify required documents for project evaluation.
- 2. Prepare project evaluation documentation, i.e. PEF, etc.

# **PROJECT IMPLEMENTATION**

<u>Purpose</u>: To develop the participant's knowledge of project implementation including equipment access logistics, equipment coordination, brush management, guiding excavations, surface finishing, mulching and erosion control, and hand crew coordination.

**Performance Objectives:** By the close of the session the participant will

- 1. Plan and coordinate in-house or contract project logistics, access, etc.
- 2. Provide on-site coordination and inspection of heavy equipment.
- 3. Demonstrate ability to excavate and finish to grade.
- 4. Guide hand crews in road to trail completion.

# FIELD DEMONSTRATION OF ROAD RECONTOUR

<u>Purpose</u>: To demonstrate techniques using mechanized equipment to convert existing suitable roads to trails and to recontour unsuitable roads where trail reroutes are prescribed.

<u>Performance Objectives</u>: By the close of the session the participant will

- 1. Perform techniques using mechanized equipment to convert suitable routes with complex and failing drainage to simple and effectively drained roads.
- 2. Demonstrate techniques using mechanized equipment to recontour unsuitable segments of road.

#### SITE ASSESSMENT EXERCISE

<u>Purpose</u>: Increase participant's knowledge of site considerations in detailed field assessments including local hydrology, slope stability, existing roads, trails and other structures (i.e. culverts), springs (groundwater), and vegetation.

**<u>Performance Objectives</u>**: By the close of the session the participant will

- 1. Identify components of individual site assessments.
- 2. Describe basic mapping and documenting techniques used in site assessment.

# WORK RECORDS AND POST PROJECT DOCUMENTATION

<u>**Purpose**</u>: Increase participant's knowledge of effective project/construction documentation, data analysis, and reporting.

**Performance Objectives:** By the close of the session the participant will

- 1. Effectively document construction/project progress, rates of excavation, brushing, photo documentation, etc.
- 2. Organize and analyze field data to produce production rates and cost breakdowns.
- 3. Prepare reports to permanently document project completion.

# **Regional Map and Vicinity Maps**











