

# **ON-THE-JOB TRAINING PROGRAM**

## **EQUIPMENT OPERATOR**



## OVERVIEW

The purpose of the OJT Program is to address the underrepresentation of minority, female, veteran and disadvantaged individuals in the highway construction trades.

By providing on-the-job training, the contractor will attract and retain more highly qualified employees and improve productivity and services.

### The goals of the

### OJT Program are:

- To offer equal opportunity for the training and upgrading of minorities, female, veteran and disadvantaged persons toward journey-level status in the highway construction trades.
- To improve the skills of the available workforce.

## PARTICIPANT RECRUITMENT

Contractors will review employment applications of prospective participants for work experience who will make desirable trainees. Contractors could obtain prospects who are interested in the OJT program through:

- Job fairs
- Existing employees
- Online Employment Resources
- ADOT BECO OJT Supportive Services Program

## ENTRANCE REQUIREMENTS

Applicants will meet the following minimum qualifications:

- The applicant must be a minimum of eighteen (18) years of age.
- The applicant must be physically capable of performing the essential functions of the OJT program, with or without a reasonable accommodation, and without posing a direct threat to the health and safety of the individual or others.
- Applicants are subject to random, post-accident and reasonable suspension drug testing per company policy.
- No applicant will be accepted as a trainee in any classification for which he/she has successfully completed, or in which he or she has been gainfully employed.

## EMPLOYEE ORIENTATION

Each trainee will receive an orientation by a Project Manager and/or Supervisor. These meetings will include the following:

- The trainee will receive a copy of this manual, which includes the specific training program he/she is completing.
- The starting wage rate and the graduated pay scale of the trainee enrolled in the training program.
- The seasonality of construction work and the adverse weather conditions under which work may occur.
- The necessity that construction workers are punctual and willing to work extra hours in order to remain steadily employed.
- From time to time, the trainee may have an obligation to perform tasks not included in the training program outline.
- Qualities or traits the company considers desirable in its workers, including work ethics.
- Ways in which employees can earn a promotion within the company.
- EEO policy, Affirmative Action Plan, Complaint and Unlawful Harassment policies.
- Appropriate PPE (i.e. hard hat, safety vest, work boots etc.) for the project shall be worn at all times in compliance with "Company Policy." Clothing should be applicable for the job environment.
- Basic hours of operation, overtime, weekend expectations.
- Whom the trainee will report to (primary supervisor); whom the trainee should call in case he/she will be tardy, absent from work or need to leave the worksite, specifically identifying the Company policies.
- Disciplinary procedures, termination, and layoff policies.
- Tool Box Talk participation.

## SUPERVISION

The trainee will be assigned to a journey worker, supervisor, or other knowledgeable employee who will, on a daily and personal basis, direct, review, and observe the trainee.

The allowable ratio of apprentices to journeyman is 1:1 ratio for the first trainee and one trainee for the next three journeymen at the same occupation.

## **RECORD KEEPING**

Contractor must complete a Trainee Enrollment form for each trainee. Contractor shall make all training records available for ADOT review upon request.

Training hours achieved on ADOT Federally funded projects shall be recorded in ADOT's online OJT reporting module within the ADOT DOORS System. Training hours achieved on non-federally funded ADOT Projects shall be recorded by contractor and made available for review upon request.

## **BENEFITS**

For employees subject to prevailing wages, the fringe benefits will be contributed into bona fide funds, plans or programs when applicable. Unless specified in union standards, fringes will be at the journeyman rate.

## **WORK HOURS**

The normal workweek is to consist of eight (8) hours per day, five (5) days per week, or that which the journeyman in the craft is working. Additionally, a trainee is eligible to work overtime if the opportunity is presented.

## **TERMINATION FOR JUST CAUSE**

The trainee may be terminated at any time during training. Some examples of reasons for termination are: absenteeism, lack of punctuality, accident-proneness, lack of interest, poor attitude, failure to demonstrate his/her ability to perform diligently and faithfully the work of the trade and other pertinent duties as assigned, or failure to conduct him/herself in a creditable, ethical, and moral manner.

As an employee, participation in the OJT program is not intended and does not constitute a contract of continued employment between the contractor and yourself. In addition, employment with the contractor is "at will" and that either the trainee or the employer may terminate employment at any time, and for any or no reason.

## **CERTIFICATE OF TRAINING PROGRAM COMPLETION**

At the completion of the training program, the trainee will receive a Certificate as a record of his/her accomplishment.

## **TEMPLATE ON THE JOB TRAINING CLASSIFICATIONS**

The OJT Program has been designed to provide training in the skilled construction trade classifications, and to ensure the Trainee consistently receives the level and quality of training necessary to perform in their respective skilled trade classification. The training classifications below and as outlined in the document have been approved by FHWA. Changes made to the content below will need to be submitted to ADOT for FHWA approval.

The trainee will learn and operate many types of construction equipment used on highway and bridge construction projects.

A typical training program under this classification will consist of the following (as a minimum):

**A. FAMILIARIZATION**

- Safety
- Company Policies
- Materials
- Employer/Employee Responsibility
- General Housekeeping on the Project
- Communication
- Heat Stress
- Personal Protective Equipment
- Noise and Hearing Protection
- Jobsite Safety Orientation
- Accident Prevention Heavy Construction
- Working Around Mobile Equipment
- Power and Hand Tools
- Hazard Communication Awareness

**B. TRAINING**

- First-Aid/CPR
- OSHA – An Introduction
- OSHA 10
- OSHA 10 Road Course
- OSHA 30
- Fall Protection Awareness
- Fire Protection Awareness
- Portable Fire Extinguishers
- Scaffold Safety Awareness
- Ladder Safety
- MSDS/Hazmat
- Traffic Safety/Control
- Soil Analysis and Classifications
- Trenching and Excavation Awareness
- Demolition Hazards
- Defensive Driving
- Crane Safety Basics
- Perform a Walk Around Inspection
- Mounting and Dismounting
- Safety Videos and Safe Operation of Equipment
- Task List:
  - ✓ Start Up and Shut Down Procedures
  - ✓ Safety and Maintenance Inspections
- Construction Basics:
  - ✓ Operation and Maintenance Manual
  - ✓ Load Charts
  - ✓ Materials/Earth Work
  - ✓ Site Preparation
  - ✓ Dust Control
  - ✓ Fueling/Lubrication/Hydraulic Systems
  - ✓ Equipment Capabilities and Limitations
  - ✓ Rolling (Compaction/Vibration)
  - ✓ Trenching/Pipe Laying



- ✓ Cut and Fill Ground Elevation Variations
- ✓ Backfill/Curbing
- ✓ Rigging/Hoisting
- ✓ Common Grade Stake Terms and Placement
- ✓ Making Adjustments for Proper Depth, Grade and Finish
- ✓ Reading Survey Stakes and their Markings
- Operations of Equipment:
  - ✓ V-Ditching
  - ✓ Side Slop Finishing
  - ✓ Grading
  - ✓ Stockpiling
  - ✓ Site Prep
  - ✓ Site Clean-up
  - ✓ Cutting/Leveling
  - ✓ Accu Grade Equipment
  - ✓ Level/Straight Dozing
  - ✓ Slot Dozing
  - ✓ Backfilling
  - ✓ Ripping
  - ✓ Tree Stump Removal
  - ✓ Slope Building
  - ✓ Boulder Removal
  - ✓ Ramp Building
  - ✓ Drainage
  - ✓ Excavation
  - ✓ Lifting
  - ✓ Demolition
  - ✓ Loading Trucks
  - ✓ Finding Utilities
  - ✓ Finish Straight Walls
  - ✓ Integrated Tools
    - Buckets - Standard and Multipurpose, Hammers, Augers, Rippers, Tampers, Rollers, Material Handling, Brooms, Rakes, Asphalt Cutters, Bale Spear, Thumb Attachment, E-Stick
  - ✓ Towing
  - ✓ Forestry
  - ✓ Mining
  - ✓ Wheel Roller, Tamping
  - ✓ Screening Material
  - ✓ Payload Control Material
  - ✓ Fill Compaction
  - ✓ Landfill Construction
  - ✓ Levee Construction
  - ✓ Aggregate Mining
  - ✓ Airport Construction
  - ✓ Canal Excavation
  - ✓ Earthfill Dam Building
  - ✓ Irrigation System Work
  - ✓ Pond Building
  - ✓ Railroad Embankment Construction
  - ✓ Reclamation
  - ✓ Refuse Covering
  - ✓ Spoil Removal
  - ✓ Stripping
  - ✓ Terracing
  - ✓ Haul Road Maintenance
- Maintenance:
  - ✓ Maintenance of Equipment (Minor Repairs/Parts Replacement)
  - ✓ Machine Cleanliness
  - ✓ Performing Maintenance Safely
  - ✓ Cleaning Vehicle, i.e. Windows, Lights, Cargo Area, Placing Proper Placard on Truck
  - ✓ Checking and Adding Vehicle Fluid as Necessary
  - ✓ Basic Fueling



### C. GENERAL CONSTRUCTION CLASSIFICATIONS

- A-Frame Boom Truck
- Aggregate Plant
- Air Compressor
- Asphalt Laydown Machine
- Asphalt Plant Mixer
- Auto Grade Machine

- Backhoe 1 < cu yd
- Backhoe < 10 cu yd
- Backhoe 10 cu yd and over
- Barge
- Bee Gee
- Beltcrete
- Boring Bridge and Texture
- Boring Machine
- Boring Machine (including Mole, Badger & similar type directional/horizontal)
- Brakeman
- Clamshell < 10 cu yd
- Clamshell 10 cu yd and over
- Concrete Batch Plant
- Concrete mechanical Tamping-Spreading Finishing Machine
- Concrete Mixer (paving & mobile)
- Concrete Mixer (skip type)
- Concrete Pump
- Concrete Pump (truck mounted with boom only)
- Conductor
- Conveyor
- Crane (crawler & pneumatic 15 > 100 tons)
- Crane (crawler & pneumatic 100 tons and over)
- Crane (under 15 tons)
- Crawler Type Tractor with Boom Attachment & Slope Bar
- Cross Timing and Pipe Float
- Curing Machine
- Derrick
- Dinky (under 20 tons)
- Dragline < 10 cu yd
- Dragline 10 cu yd and over
- Drilling Machine (including water wells)
- Elevating Grader (except as otherwise classified)
- Elevator hoist (Husky and similar)
- Fireman
- Forklift
- Generator (all)
- Gradall
- Grade Checker
- Handler
- Helicopter Hoist or Pilot
- Highline Cableway
- Highline Cableway Signalman
- Hydrographic Mulcher
- Hydrographic Seeder
- Joint Insertor
- Jumbo Finishing Machine
- Kolman Belt Loader
- Locomotive Engineer
- (including Dinky 20 tons & over)
- Machine Conveyor
- Mass Excavator
- Mechanical Hoist
- Milling Machine/Rotomill
- Moto-Paver
- Motor Grader (finish-any type power blade)
- Motor Grader (rough)
- Mucking Machine
- Multiple Power Concrete Saw
- Oiler-Driver
- Operating Engineer Rigger
- Overhead Crane
- Pavement Breaker
- Pile Driver Engineer (portable, stationary or skid)
- Pipe-Wrapping & cleaning Machine (stationary or traveling)
- Power Driven Ditch Lining or Ditch Trimming Machine
- Power Grizzly
- Power Jumbo Form Setter
- Power Sweeper
- Pressure Grout Machine
- Pump
- Remote Control Earth Moving Machine
- Road Oil Mixing Machine
- Roller (all types asphalt)
- Roller (excluding asphalt)
- Scraper (pneumatic tired)
- Screed
- Self-Propelled Chip Spreading Machine
- Self-Propelled Compactor (with blade-grade operation)
- Shovel < 10 cu yd
- Shovel 10 cu yd and over
- Skip Loader (all types < 3 cu yd)
- Skip Loader (all types 3 < 6 cu yd)
- Skip Loader (all types 6 < 10 cu yd)
- Slip Form (power driven lifting device for concrete forms)
- Slip Form Paving Machine (including Gunnert, Zimmerman & similar types)
- Slurry Seal Machine (Moto paver driver)
- Small Self-Propelled Compactor (with blade-backfill, ditch operation)
- Soil Cement Road Mixing Machine
- Straw Blower
- Surface Heater & Planer
- Tower Crane or similar type
- Tractor (dozer, pusher-all)
- Water Truck





### EQUIPMENT OPERATOR TRAINEE - FEDERAL FUNDED PROJECT

LEVEL 1 – 1,000 HOURS @60%	_____	+	_____	FRINGE	=	_____	WAGES
LEVEL 2 – 2,000 HOURS @65%	_____	+	_____	FRINGE	=	_____	WAGES
LEVEL 3 – 3,000 HOURS @70%	_____	+	_____	FRINGE	=	_____	WAGES
LEVEL 4 – 4,000 HOURS @75%	_____	+	_____	FRINGE	=	_____	WAGES
LEVEL 5 – 5,000 HOURS @80%	_____	+	_____	FRINGE	=	_____	WAGES
LEVEL 6 – 6,000 HOURS @90%	_____	+	_____	FRINGE	=	_____	WAGES

#### 6,000 OJT HOURS ACHIEVED CERTIFICATE OF COMPLETION AWARDED

All contractors and work sites have their respective work site safety rules. They have their own traffic rules for on-site service or haul roads. As a new operator, you need to review these with your supervisor. Make sure you understand the signs and markings used on the jobsite, especially those relating to underground utilities. Scan the site for overhead danger areas. And ensure that you are aware of any clearance or weight limitations in areas you will be working.

The O&M Manual contains many warning sections for each machine on how the machine should or should not be used. An O&M Manual is provided with each machine. It is attached to the cab by a lanyard. The operator should become thoroughly familiar with its contents before initially operating the tractor. Often, this manual is stored in a pouch attached to the back of the seat.