



COLORADO
Department of Transportation

CDOT Pre-Approved Classification Program (PAC-UP)

June 2024

Program Guide

Program Summary

Any contractor who is working on a CDOT contract that has FHWA federal money and a contract OJT goal (greater than zero) can use the CDOT PAC-UP program. The contractor shall track their own trainee's hours toward each individual module and craft area. Contractors must accurately record hours in CDOT's LCPtracker system using the correct OJT classification code for all applicable hours worked on the contract being reported. Discrepancies between the payroll and the CDOT Form 838/832 must be addressed and resolved. Future form approvals may not be granted until these discrepancies are resolved.

Registration

New and returning employees must be registered for each project using the CDOT Form 838, OJT Trainee/Apprentice Record. A contractor's trainee can be working on different CDOT projects simultaneously. Employees can be functioning as a PAC-UP trainee within one craft area and up to four different classifications simultaneously.

Wages

The minimum wages applicable for these pre-approved trainee classifications are set forth in CDOT's Standard Special Provision for On-the-Job Training.

Graduation

Upon completion of training hours, OJT graduation certificates must be provided to the trainees for individual modules and craft areas and uploaded into LCPtracker. A template for graduation certificates is located within LCPtracker.

A trainee can graduate in two ways: module or craft area. There are three craft areas: heavy equipment, structures, and concrete.

1. Heavy Equipment - Craft Area

Modules within the Heavy Equipment Craft Area:

Asphalt Distributor Operator, Asphalt Paving Machine/Laydown Machine Operator, Asphalt Plant Operator, Asphalt Screed Operator, Backhoe Operator, Bobcat/Skid Steer Operator, Broom/Sweeper Operator, Bulldozer Operator, Crane Operator (80 tons or less), Drill Operator (Truck Mounted), Excavator/Trackhoe Operator, Front End Loader Operator, Milling (Planing) Machine Operator, Motor Grader Operator, Roller Operator - Dirt and Grade Compaction, Scraper (Earth Mover) Operator, Shuttle Buggy/Transfer Machine Operator, Truck Driver Operator (Multi-Rear Axle)

2. Structures - Craft Area

Modules within the Structures Craft Area:

Form Setter, Form Builder, Ironworkers (Reinforcing)

3. Concrete - Craft Area

Modules within the Concrete Craft Area:

Concrete Finisher, Concrete Paver Operator, Concrete Finishing Machine Operator, Concrete Paving Joint Machine Operator, Concrete Paving Spreader Operator

4. Other Single Modules - this is not a Craft Area

Asphalt Raker, (Hand Held) Concrete Saw Operator, Painter, QC Technician-Roadway, Traffic Control Supervisor, Grade Checker

Module

The completion of required hours (Rqrd) for each pre-approved classification is one module. For each module graduation, the contractor will print out a copy of the hours obtained by the employee and will present the employee this list of completed (Rqrd) hours with a certificate which can be obtained through LCPtracker.

Craft Area

For the graduation of the concrete and heavy equipment craft area, each employee will need to meet 2080 hours. For graduation of the structures area, each employee will need to meet 1700 hours. The contractor will work with CDOT to ensure that the employee met the requirements of the entire craft area by providing hours and certificates of the previous module graduation.

Other Single Modules

For the classifications listed as "other," they will not contribute toward a craft area but are stand-alone modules for on-the-job training.

Please note: if there are any payroll classifications not included on CDOT's wage decision(s) for a selected module, the contractor will be required to submit the requested classification through a DOL Form 1444. **Failure to conform this wage to the wage decision will result in the inability to use this classification in the PAC-UP program.**

Part I – Heavy Equipment Operation

- 1) Asphalt Distributor Operator
- 2) Asphalt Paving / Laydown Machine Operator
- 3) Asphalt Plant Operator
- 4) Asphalt Screed Operator
- 5) Backhoe Operator
- 6) Bobcat / Skid Steer Operator
- 7) Broom / Sweeper Operator
- 8) Bulldozer Operator
- 9) Crane Operator (80 tons or less)
- 10) Drill Operator (Truck Mounted)
- 11) Excavator / Trackhoe Operator
- 12) Front End Loader Operator
- 13) Milling (Planing) Machine Operator
- 14) Motor Grader Operator
- 15) Roller Operator - Dirt and Grade Compaction
- 16) Scraper (Earth Mover) Operator
- 17) Shuttle Buggy/Transfer Machine Operator
- 18) Truck Driver Operator (Multi-Rear Axle)

Part II – Structures

- 1) Form Setter (precursor to form builder)
- 2) Form Builder
- 3) Ironworkers (Reinforcing)

Part III – Concrete

- 1) Concrete Finisher
- 2) Concrete Paver Operator
- 3) Concrete Finishing Machine Operator
- 4) Concrete Paving Joint Machine Operator
- 5) Concrete Paving Spreader Operator

Other -- Single Area Modules

- 1) Asphalt Raker
- 2) (Hand Held) Concrete Saw Operator
- 3) Grade Checker
- 4) Painter
- 5) QC Technician- Roadway
- 6) Traffic Control Supervisor

CDOT PAC-UP Classification Crosswalk					
PAC-UP Modules	Work Classification on the Wage Decision	1444 Required?	Identified Craft in Wage Decision	Total # of Hours Required	Notes
Please note: if there are any payroll classifications not included on CDOT's wage decision(s) for a selected module, the contractor will be required to submit the requested classification through a DOL Form 1444. Failure to conform this wage to the wage decision will result in the inability to use this classification in the PAC-UP program.					
Heavy Equipment Craft Area					
Asphalt Distributor Operator	Truck driver: Distributor		Truck Driver	1,040	If the asphalt distributor truck is a multi-rear axle, the correct module for this classification is asphalt distributor operator and not truck driver (multi-rear axle).
Asphalt Paving Machine/Laydown Machine Operator	PEO: Asphalt Laydown		Power Equipment Operator	1,040	Contractors must choose either the asphalt paver operator or the asphalt laydown operator and indicate that choice on the CDOT form 838.
Asphalt Plant Operator	PEO: Asphalt Plant		Power Equipment Operator	1,050	
Asphalt Screed Operator	PEO: Screed		Power Equipment Operator	1,020	
Backhoe Operator	PEO: Backhoe/Trackhoe		Power Equipment Operator	720	
Bobcat/Skid Steer Operator	PEO: Bobcat/Skid Loader		Power Equipment Operator	320	
Broom/Sweeper Operator	PEO: Broom/Sweeper		Power Equipment Operator	520	
Bulldozer Operator	PEO: Bulldozer		Power Equipment Operator	720	
Crane Operator (80 tons or less)	PEO: Crane		Power Equipment Operator	1,040	
Drill Operator (Truck Mounted)	PEO: Drill		Power Equipment Operator	1,040	
Excavator / Trackhoe Operator	PEO: Backhoe/Trackhoe		Power Equipment Operator	720	
Front End Loader Operator	PEO: Loader (Front End)		Power Equipment Operator	720	
Milling (Planing) Machine Operator	PEO: Rotomill		Power Equipment Operator	1,040	
Motor Grader Operator	PEO: Grader/Blade		Power Equipment Operator	1,040	
Roller Operator - Dirt and Grade Compaction	PEO: Roller/Compactor (Dirt and Grade)		Power Equipment Operator	1,040	
Scraper (Earth Mover) Operator	PEO: Scraper		Power Equipment Operator	520	Some wage determinations will include "Scraper," and others may provide the distinction between "Single Bowl Under 40 Cubic Yards" and "40 Cubic Yards and Over." Any of the mentioned classifications may be used for this module and properly noted on the CDOT form 838.

CDOT PAC-UP Classification Crosswalk					
PAC-UP Modules	Work Classification on the Wage Decision	1444 Required?	Identified Craft in Wage Decision	Total # of Hours Required	Notes
Shuttle Buggy / Transfer Machine Operator	Need Wage Conformance	Yes	Power Equipment Operator	720	
Truck Driver (Multi-Rear Axle)	more than one axle on the back. depends- this could be a dump truck, low boy, semi/trailer truck, maybe water truck.		Truck Driver	1,040	
Structures Craft Area					
Form Setter	Carpenter: Form Work Only		Carpenter	720	If an employee is working in the form setter and form builder modules to work toward the craft graduation of structures, the form setter must precede form builder in OJT work.
Form Builder	Carpenter: Form Work Only		Carpenter	720	
Ironworkers (Reinforcing)	Ironworker: Reinforcing		Ironworker	720	
Concrete Craft Area					
Concrete Finisher	Cement Mason/Concrete Finisher		Cement Mason/Concrete Finisher	1,040	The mason tender classification under laborer should not be used for the purposes of OJT.
Concrete Paver Operator	Need Wage Conformance	yes		1,040	
Concrete Finishing Machine Operator	Need Wage Conformance	yes		1,040	
Concrete Paving Joint Machine Operator	Need Wage Conformance	yes		720	
Concrete Paving Spreader Operator	Need Wage Conformance	yes		1,040	
Other Single Modules					
Asphalt Raker	Laborer: Asphalt Raker		Laborer	520	
(Hand Held) Concrete Saw Operator	Laborer: Concrete Saw (Hand Held)		Laborer	1,040	
Grader Checker	PEO: Grade Checker	yes- for some counties	Power Equipment Operator	520	The grade checker classification is included on some wage determinations and omitted in others. Therefore, a 1444 may be required as part of the process.
Painter	Painter: Spray Only	possibly- see notes	Painter	520	If a brush or roller is used, a wage conformance will be required.
QC Technician - Roadway	Need Wage Conformance	yes		1,040	
Traffic Control Supervisor	Truck Driver: Pickup and Pilot Car			850	For the use of an OJT classification for TCS, contractors must use the truck driver: pickup and pilot car classification to get credit toward the goal.

Modules within the Heavy Equipment Craft Area

Asphalt Distributor Operator

Duties

- Drives asphalt distributor
- Sets spray bar on manual, automatic, or semi-automatic distributors for applying liquid asphalt
- May oil, grease, service, and make normal operating adjustments to equipment
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Observation of machine in operation	35	<input type="checkbox"/>
C. Starting and manipulating valves and levers to distribute material	30	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
D. Safety procedures	5	<input type="checkbox"/>
E. Routine fueling, lubricating, and servicing	35	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	5	<input type="checkbox"/>
B. Regulates valves and levers to distribute oil for highway surfacing	120	<input type="checkbox"/>
C. Operation of machine	800	<input type="checkbox"/>
Total	1,040 hours	

Asphalt Paving Machine / Laydown Machine Operator

Duties

- Drives laydown machine
- Manipulates levers, electronic ski, stringline to control movements of paving machine that spreads and levels asphaltic concrete on subgrade of highway
- Regulates the height and width of screed and speed of machine in accordance with specifications
- May oil, grease, or otherwise service and make necessary adjustments to equipment as needed
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Observation of machine in operation	35	<input type="checkbox"/>
C. Starting and manipulating levers to distribute material	30	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	35	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	5	<input type="checkbox"/>
B. Screed regulation indoctrination and operation	120	<input type="checkbox"/>
C. Operation of machine	800	<input type="checkbox"/>

Total	1,040 hours	
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Asphalt Plant Operator

Duties

- Operates asphalt plant controls to weigh and deliver specified quantities of aggregates and asphalt cement to dryer for heating and to mixer for mixing and dumping into trucks
- Maintains proper heat in dryer by adjusting thermostatic controls and maintains proper flow of materials
- Assists in maintenance and repair of plant equipment
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Observation of machine in operation	40	<input type="checkbox"/>
C. Adjustment of scales, operation of controls, levers, and attachments	40	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	120	<input type="checkbox"/>
C. Assists in maintenance and repair of plant equipment	120	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	10	<input type="checkbox"/>
B. Operates controls and scales for measurement and discharge of asphaltic materials into trucks or carriers	700	<input type="checkbox"/>

Total	1,050 hours	
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Asphalt Screed Operator

Duties

- Operates screed on an asphalt paver
- Makes normal operating adjustments for obtaining proper depth, grade, and finished cross section
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	15	<input type="checkbox"/>
B. Observation of machine in operation	40	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	15	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	120	<input type="checkbox"/>
C. Assists in maintenance and repair of plant equipment	120	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	10	<input type="checkbox"/>
B. Operates controls and scales for measurement and discharge of asphaltic materials into trucks or carriers	700	<input type="checkbox"/>

Total	1,020 hours
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Backhoe Operator

Duties

- Operates backhoe with or without accessories (attachments) such as is on rear of utility tractor and on other equipment, for the purpose of digging and excavating
- May oil, grease, and make normal operating adjustments to the machine
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Observation of machine in operation	20	<input type="checkbox"/>
C. Starting and manipulating levers for moving equipment and attachments	20	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	70	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	5	<input type="checkbox"/>
B. Trenching operations (for pipe laying, etc.)	275	<input type="checkbox"/>
C. Excavation (for structures, footings, etc.)	280	<input type="checkbox"/>
D. Special applications and functions	40	<input type="checkbox"/>

Total	720 hours
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Bobcat / Skid Steer Operator

Duties

- Operates skid steer for digging, hauling, and/or transportation materials
- Used in demolition for exterior projects
- Clearing snow, brush, and other debris
- May oil, grease, and make normal operating adjustments to the machine
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Observation of machine in operation	10	<input type="checkbox"/>
C. Starting and manipulating levers for moving equipment and attachments	10	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	35	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	10	<input type="checkbox"/>
B. Loading Material	135	<input type="checkbox"/>
C. Operation of Machine	100	<input type="checkbox"/>

Total	320 hours	
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Broom / Sweeper Operator

Duties

- Remove debris and trash from road surfaces
- Uses mechanical or vacuum cleaning equipment to remove particulates from pavement or street surfaces before stormwater runoff washes potentially hazardous materials into rivers, streams, habitats, and residential properties
- May oil, grease, and make normal operating adjustments to machine
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Observation of machine in operation	5	<input type="checkbox"/>
C. Starting and manipulating controls for moving equipment and attachments	10	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	35	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	10	<input type="checkbox"/>
B. Proper start-up, engagement, and position of broom	10	<input type="checkbox"/>
C. Proper sweeping technique	10	<input type="checkbox"/>
D. Removal and replacement of broom wafers	10	<input type="checkbox"/>
E. Operation of sweeper in cleaning pavement	410	<input type="checkbox"/>

Total	520 hours
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Bulldozer Operator

Duties

- Performs work such as, but not limited to, moving materials in stockpile, rough work on grade, pusher for loading scrapers and earthmovers, etc.
- Operates the equipment with other attachments such as, but not limited to, clearing rake, ripper, stumper, push block, etc.
- Capable of carrying grade and line
- May oil, grease, service, and make normal operating adjustments to machine
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Observation of machine in operation	35	<input type="checkbox"/>
C. Starting and manipulating controls for moving equipment and attachments	30	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	35	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	5	<input type="checkbox"/>
B. Movement and stockpiling of material	150	<input type="checkbox"/>
C. Pushing and rough grading	125	<input type="checkbox"/>
D. Clearing and grubbing	125	<input type="checkbox"/>
E. Finish grading	175	<input type="checkbox"/>
F. Special application	30	<input type="checkbox"/>

Total	720 hours
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Crane Operator (80 tons or less)

Duties

- Operates boom type equipment to hoist and move materials, raise, and lower heavy weights, and performs other related operations
- Equipment is used for such work as excavation, pouring concrete, and setting steel that requires close conformance to specifications and is subjected to a strict inspection
- May oil, grease, or otherwise service
- Makes adjustments to equipment as necessary
- Performs other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Observation of machine in operation	35	<input type="checkbox"/>
C. Starting and manipulating levers for moving equipment and attachments	30	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	100	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	5	<input type="checkbox"/>
B. Automatic screed regulation indoctrination and servicing	120	<input type="checkbox"/>
C. Operation of machine	730	<input type="checkbox"/>

Total	1,040 hours
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Drill Operator (Truck Mounted)

Duties

- Operates drilling machine, such as wagon drill, air trac, well driller, etc., for the purpose of drilling rock, shale, or other materials
- Starts, stops, and services portable air compressor
- May oil, grease, service, and make normal operating adjustments to equipment
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Observation of machine in operation	35	<input type="checkbox"/>
C. Starting and manipulating levers for moving equipment and attachments	30	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	35	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	10	<input type="checkbox"/>
B. Small hole drilling	300	<input type="checkbox"/>
C. Large hole drilling	300	<input type="checkbox"/>
D. Casing operation	110	<input type="checkbox"/>
E. General operating	200	<input type="checkbox"/>

Total	1,040 hours	
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Excavator / Trackhoe Operator

Duties

- Operates the excavator to dig, unload, move, and load earth, rock, and rubble
- May oil, grease, service, and make normal operating adjustments to equipment
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Observation of machine in operation	25	<input type="checkbox"/>
C. Starting and manipulating levers for moving equipment and attachments	25	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	35	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	10	<input type="checkbox"/>
B. Excavation for footings and removal of unsuitable materials	250	<input type="checkbox"/>
C. Loading materials	100	<input type="checkbox"/>
D. Trenching for pipe, etc.	165	<input type="checkbox"/>
E. Placement of pipe, precast concrete structures, etc.	90	<input type="checkbox"/>

Total	720 hours	
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Front End Loader Operator

Duties

- Operates rubber tired or crawler type tractor with attached scoop type bucket on front end
- Excavates and loads excavating material, loads material from stockpiles, and loads trucks
- May oil, grease, service, and make normal operating adjustments to equipment
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Observation of machine in operation	20	<input type="checkbox"/>
C. Starting and manipulating levers for moving equipment and attachments	15	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	35	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	10	<input type="checkbox"/>
B. Loading materials	250	<input type="checkbox"/>
C. Excavation	170	<input type="checkbox"/>
D. Special applications	200	<input type="checkbox"/>

Total	720 hours	
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Milling (Planing) Machine Operator

Duties

- Operates milling / planing machine to restore ride and texture to roadway surface and/or preparation for overlays
- Manipulates and makes adjustments by use of a control panel to regulate depth and alignment of pavement planning operation
- May oil, grease, service, and make normal operating adjustments to equipment
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Observation of machine in operation	35	<input type="checkbox"/>
C. Begin operation and moving equipment	30	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Routine maintenance and clearing	150	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	5	<input type="checkbox"/>
B. Milling head operation and maintenance	100	<input type="checkbox"/>
C. General operation of machine	650	<input type="checkbox"/>
D. Milling to grade / profiling	60	<input type="checkbox"/>

Total	1,040 hours	
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Motor Grader Operator

Duties

- Operates self-propelled motor grader on rough work, such as finishing rough grade on highway, including highway shoulders, slopes, and ditches
- May oil, grease, service, and make normal operating adjustments to equipment
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Observation (as a passenger) of machine in operation	100	<input type="checkbox"/>
C. Starting and manipulating levers for moving equipment and attachments	95	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	35	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	5	<input type="checkbox"/>
B. Scraping and leveling dirt on roadway	180	<input type="checkbox"/>
C. Spreading and mixing materials on roadway	170	<input type="checkbox"/>
D. Shaping and blading subgrades	150	<input type="checkbox"/>
E. Balancing and rough shaping base course materials	150	<input type="checkbox"/>
F. Grading and dressing of shoulders and slopes	145	<input type="checkbox"/>

Total	1,040 hours
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Roller Operator – Dirt and Grade Compaction

Duties

- Operates self-propelled steel wheeled, rubber tired, sheep foot, vibratory, segmented, or other type roller to compact earth, subgrade, subbase, shoulder materials, or stone cover surface treatment
- May oil, grease, service, and make normal operating adjustments to equipment
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Observation of machine in operation	35	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	35	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	5	<input type="checkbox"/>
B. Rolls base course to desired compaction and smoothness	955	<input type="checkbox"/>

Total	1,040 hours	
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Scraper (Earth Mover) Operator

Duties

- Operates self-propelled rubber tired or tractor drawn unit known as scraper, pan, etc., to excavate, transport, and deposit materials moved in normal grading operations
- May oil, grease, service, and make normal operating adjustments to equipment
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Observation of machine in operation	20	<input type="checkbox"/>
C. Starting and manipulating levers for moving equipment and attachments	15	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	35	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	5	<input type="checkbox"/>
B. Loading	150	<input type="checkbox"/>
C. Spreading materials	150	<input type="checkbox"/>
D. Rough roadway grading	70	<input type="checkbox"/>
E. Compaction of embankment	65	<input type="checkbox"/>
Total	520 hours	

Shuttle Buggy / Transfer Machine Operator

Duties

- Learn safety procedures and receives training from experienced transfer operator
- Operates transfer machine to improve the ride and prevent segregation of asphalt during the lay-down process
- Operates transfer machine control panel for the intake amount of asphalt from the dump trucks to the mixing storage hopper of the machine
- Manipulates and makes adjustments by use of a control panel to regulate the amount of asphalt to the paving machine in correlation to paving speed
- May oil, grease, service, and make normal operating adjustments to equipment
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Observation of machine in operation	35	<input type="checkbox"/>
C. Starting and manipulating levers for moving equipment and attachments	30	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	150	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	5	<input type="checkbox"/>
B. Screed regulation indoctrination & operation	200	<input type="checkbox"/>
C. Operation of machine	290	<input type="checkbox"/>
Total	720 hours	

*****The use of this classification must follow the process to conform it to CDOT's wage decision and will likely require a DOL Form 1444 to be completed and submitted to CDOT.*****

Truck Driver (Multi-Rear Axle)

Duties

- Drives multi-rear axle truck
- May have various kinds of beds attached
- May make normal operating adjustments to equipment
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	15	<input type="checkbox"/>
B. Observation (as a passenger) of machine in operation	35	<input type="checkbox"/>
C. Starting and manipulating vehicle	40	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	15	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	340	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	15	<input type="checkbox"/>
B. Loading and unloading materials and operation of vehicle	580	<input type="checkbox"/>
Total	1,040 hours	

Modules within the Structures Craft Area

Form Setter

Duties

- Fits together, aligns, and set to grade metal and wooden forms for holding concrete in place until it hardens
- May use hammer, saw, square, level, and such fastening devices as may be required
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Observation of placing of forms	20	<input type="checkbox"/>
C. Observing of form stripping and setting of precast concrete	20	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Help strip forms and clean work area	20	<input type="checkbox"/>

Actual Work Activities	Training Hours Rqrd	Checklist
A. Safe operating procedures	5	<input type="checkbox"/>
B. Hold and help align forms, drive stakes for braces, and help erect scaffolding	200	<input type="checkbox"/>
C. Observe and assist in setting precast concrete	145	<input type="checkbox"/>
D. Measure space between forms, fits together, lines, plumbs vertically, sets to elevation	200	<input type="checkbox"/>
E. Check forms while concrete is being poured.	100	<input type="checkbox"/>

Total	720 hours
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*****If an employee is working toward the craft graduation of structures and choosing to utilize the form setter and form builder classifications, the form setter must precede form builder in OJT work. *****

Form Builder

Duties

- Constructs built-in place or prefabricated forms according to specifications, for molding concrete structures
- Studies blueprints and diagrams to determine type and dimension of forms to be constructed
- Erects forms on the construction site according to specifications
- Inserts spreaders and tie rods between opposite faces of forms to maintain specified dimensions
- May work with power tools
- May perform other related duties

Orientation and Observation

Training Hours Rqrd

Checklist

A. Safety procedures	5	<input type="checkbox"/>
B. Power and hand tools	15	<input type="checkbox"/>
C. Material selection	20	<input type="checkbox"/>

Applied Techniques of Highway Construction Carpentry

Training Hours Rqrd

Checklist

A. Safe operating procedures	5	<input type="checkbox"/>
B. Pier, pile, and cap framework	100	<input type="checkbox"/>
C. Decking framework	150	<input type="checkbox"/>
D. Parapet and hand railing framework	150	<input type="checkbox"/>
E. Endwall framework	150	<input type="checkbox"/>
F. Box culverts, inlets, and headwall framework	150	<input type="checkbox"/>
G. Blueprint plans reading & application	95	<input type="checkbox"/>
H. Basic form design familiarity	100	<input type="checkbox"/>
I. Stripping and salvage of forms, re-use	100	<input type="checkbox"/>

Total

1,040 hours

Ironworkers (Reinforcing)

Duties

- Reads plans
- Places and ties reinforcing steel in forms
- Sets rods in place, spaces and wires reinforcing rods
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
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- | | | |
|-----------------------------|----|--------------------------|
| A. Safety procedures | 5 | <input type="checkbox"/> |
| B. Observation of operation | 15 | <input type="checkbox"/> |

Specific Job Skills	Training Hours Rqrd	Checklist
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- | | | |
|----------------------------|----|--------------------------|
| A. Layout and plan reading | 35 | <input type="checkbox"/> |
|----------------------------|----|--------------------------|

Actual Operation of Reinforcing	Training Hours Rqrd	Checklist
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- | | | |
|--------------------------------------|-----|--------------------------|
| A. Places reinforcing steel in form | 100 | <input type="checkbox"/> |
| B. Ties reinforcing steel in form | 250 | <input type="checkbox"/> |
| C. Sets rods in place | 90 | <input type="checkbox"/> |
| D. Spaces and wires reinforcing rods | 225 | <input type="checkbox"/> |

Total	720 hours	
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Modules within the Concrete Craft Area

Concrete Finisher

Duties

- Finishes wet surfaces to grade with hand tools, float, trowel, screed, template, and straight edge on all types of concrete work requiring a fine finish
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Observation of use of straight edges, floats, and steel trowels	25	<input type="checkbox"/>
C. Observation of forming a finishing of edges and joints	25	<input type="checkbox"/>
D. Observation of use of concrete finishing machine	15	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Routine cleaning work area and materials, holding materials, tools and handling canvas belting or burlap straps	195	<input type="checkbox"/>
C. Routine fueling, lubricating, and servicing	50	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	10	<input type="checkbox"/>
B. Basic operation of tools	200	<input type="checkbox"/>
C. Forming and finishing edges, joints, curbs, gutters, paving, and structures	310	<input type="checkbox"/>
D. Operation of trowels, straight edges, floats, or finishing machine	200	<input type="checkbox"/>

Total	1,040 hours
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Concrete Paver Operator

Duties

- Operates paving machine
- Charges, mixes, and discharges concrete
- Apportions water and times mixing cycle
- May oil, grease, service, and make normal operating adjustments to equipment
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Observation of machine in operation	35	<input type="checkbox"/>
C. Starting and manipulating levers for moving equipment and attachments	30	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	35	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	10	<input type="checkbox"/>
B. Regulate equipment to mix and discharge concrete, apportion water and time mixer cycle	120	<input type="checkbox"/>
C. Operation of machine	790	<input type="checkbox"/>

Total	1,040 hours
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*****The use of this classification must follow the process to conform it to CDOT's wage decision and will likely require a DOL Form 1444 to be completed and submitted to CDOT.*****

Concrete Finishing Machine Operator

Duties

- Operates machine running on forms, spreads strikes off, and screeds to correct elevation
- May oil, grease, and make normal operation adjustments to machine
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Observation (as a passenger) of machine in operation	30	<input type="checkbox"/>
C. Starting and manipulating controls for moving equipment and attachments	30	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	150	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	5	<input type="checkbox"/>
B. Screed regulation indoctrination and operation and operation	120	<input type="checkbox"/>
C. Operation of machine	690	<input type="checkbox"/>
Total	1,040 hours	

*****The use of this classification must follow the process to conform it to CDOT's wage decision and will likely require a DOL Form 1444 to be completed and submitted to CDOT.*****

Concrete Paving Joint Machine Operator

Duties

- Operates a machine which cuts grooves for expansion and contraction joints in freshly poured concrete pavement
- When cutting expansion joints, places strips of material such as cork, asphalt, or steel in joints, or places roll of expansion-joint material on machine that automatically inserts material into joints
- May oil, grease, and make normal operation adjustments to machine
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Observation of machine in operation	20	<input type="checkbox"/>
C. Starting, stopping, and manipulating levers for moving equipment and attachments	15	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	30	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	5	<input type="checkbox"/>
B. Cutting grooves for expansion and contraction joints	600	<input type="checkbox"/>
C. Depressing aggregate at joint	35	<input type="checkbox"/>
Total	720 hours	

*****The use of this classification must follow the process to conform it to CDOT's wage decision and will likely require a DOL Form 1444 to be completed and submitted to CDOT.*****

Concrete Paving Spreader Operator

Duties

- Operates a self-propelled machine that rides on the paving forms behind concrete pavers
- Operates controls to spread fresh concrete evenly over subgrade or in concrete forms
- Points out low spots in freshly poured concrete so that more concrete can be dumped in that spot
- May oil, grease, and make normal operation adjustments to machine
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Observation of machine in operation	30	<input type="checkbox"/>
C. Starting and manipulating levers for moving equipment and attachments	30	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	150	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	5	<input type="checkbox"/>
B. Regulation, indoctrination and operation	120	<input type="checkbox"/>
C. Operation of machine	690	<input type="checkbox"/>
Total	1,040 hours	

*****The use of this classification must follow the process to conform it to CDOT's wage decision and will likely require a DOL Form 1444 to be completed and submitted to CDOT.*****

Other Single Modules

Asphalt Raker

Duties

- Distributes asphaltic materials by raking
- Matches and finishes freshly made asphalt paving joints evenly
- Smoothes and adjusts surface irregularities
- Restores surface finish after hand raking
- Spreads asphalt to proper grade and finish before compaction
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
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- | | | |
|-----------------------------|----|--------------------------|
| A. Safety procedures | 5 | <input type="checkbox"/> |
| B. Observation of operation | 25 | <input type="checkbox"/> |

Care and Maintenance	Training Hours Rqrd	Checklist
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- | | | |
|----------------------|----|--------------------------|
| A. Safety procedures | 10 | <input type="checkbox"/> |
| B. Hand Tools | 20 | <input type="checkbox"/> |

Actual Operation of Equipment	Training Hours Rqrd	Checklist
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- | | | |
|---|-----|--------------------------|
| A. Matches and finishes freshly made asphalt paving joint evenly | 80 | <input type="checkbox"/> |
| B. Smoothes and adjusts surface irregularities | 140 | <input type="checkbox"/> |
| C. Restores surface finish after hand raking | 100 | <input type="checkbox"/> |
| D. Spreads asphalt to proper grade and finishes before compaction | 140 | <input type="checkbox"/> |

Total	520 hours	
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****A company can have multiple rakers, but only one will count toward the OJT goal per project.**

(Hand Held) Concrete Saw Operator

Duties

- Operates a water-cooled power saw with either a diamond blade or an abrasive blade to saw expansion and contraction joints in concrete paving
- May also be used to saw asphaltic pavements
- May oil, grease, or otherwise service and make necessary adjustments to equipment as needed
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Observation of work of concrete paving saw operator	50	<input type="checkbox"/>
C. Assist concrete paving saw operator	10	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Routine fueling, lubricating, and servicing	35	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	15	<input type="checkbox"/>
B. Saw expansion and contraction joints in concrete paving	710	<input type="checkbox"/>
C. Saw asphaltic pavements	205	<input type="checkbox"/>

Total	1,040 hours
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Grade Checker

Duties

- Positions batter boards or pins to indicate direction of cut
- Hammers batter board pins into ground at designated intervals
- Tests contour of road subgrade to determine uniformity of contour
- Shovels dirt from high areas and tamps it into low areas to obtain uniform contour
- May signal operator of grading machine to correct discrepancies

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Observation of placing grade pins and line	20	<input type="checkbox"/>
C. Observation of setting and checking grade	20	<input type="checkbox"/>

Care and Maintenance	Training Hours Rqrd	Checklist
A. Safety procedures	5	<input type="checkbox"/>
B. Helping set grade pins and lines	25	<input type="checkbox"/>

Actual Operation of Equipment	Training Hours Rqrd	Checklist
A. Safe operating procedures	5	<input type="checkbox"/>
B. Observe and assist in setting grade	200	<input type="checkbox"/>
C. Setting and driving pins and braces in place	100	<input type="checkbox"/>
D. Check grade and lines before and after grading operations	140	<input type="checkbox"/>

Total	520 hours
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Painter

Duties

- Paints guard rail, fence, sign post, sign, or structural steel framework of bridges and other portions of structures requiring painting using brush, roller, or spray
- May oil, grease, and make normal operating adjustments to machine
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
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- | | | |
|-----------------------------|----|---|
| A. Safety procedures | 10 | ☐ |
| B. Observation of operation | 15 | ☐ |

Care and Maintenance	Training Hours Rqrd	Checklist
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- | | | |
|----------------------------------|----|---|
| A. Safety procedures | 5 | ☐ |
| B. Care and maintenance of tools | 10 | ☐ |

Actual Painting Operation	Training Hours Rqrd	Checklist
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- | | | |
|---|-----|---|
| A. Paints guard rails, fence, sign posts, etc., with brush, roller, or sprays or paints cables and structural steel framework of bridges and other portions of structures requiring painting using brush, roller, or spray. | 480 | ☐ |
|---|-----|---|

Total	520 hours
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*****Painter spray only – corresponds to the classification on the wage determination for painter (spray only). If a brush or roller is used, a wage conformance will be required.*****

QC Technician - Roadway

Duties

- Operates density gauge to monitor compaction and laydown of asphalt
- Operates coring rig in cutting core samples of asphalt for comparison against lab densities
- Completes necessary paperwork for Contractor and CDOT requirements
- May perform other related duties

Orientation and Observation	Training Hours	Rqrd Checklist
A. Safety procedures	20	<input type="checkbox"/>
B. Observation of density gauge and coring rig in operation	70	<input type="checkbox"/>

Care and Maintenance	Training Hours	Rqrd Checklist
A. Care of density gauge	50	<input type="checkbox"/>
B. Care of coring rig	50	<input type="checkbox"/>
C. Care of other related equipment	50	<input type="checkbox"/>

Actual Record Keeping	Training Hours	Rqrd Checklist
A. Safety procedures in operating density gauge	15	<input type="checkbox"/>
B. Paperwork required when operating density gauge	15	<input type="checkbox"/>
C. Paperwork (DOT required)	250	<input type="checkbox"/>
D. Proper filing and record keeping	50	<input type="checkbox"/>

Basic Job Duties	Training Hours	Rqrd Checklist
A. Attends class and receives certification in operating density gauge as required by CDOT	20	<input type="checkbox"/>
B. Safety procedures in operating and maintaining density gauge	50	<input type="checkbox"/>
C. Operating and monitoring density gauge	150	<input type="checkbox"/>
D. Operating coring rig; cutting cores for lab testing	100	<input type="checkbox"/>
E. Maintains proper care for handling cut cores during transportation to lab for testing of compaction, density, etc.	150	<input type="checkbox"/>
Total	1,040 hours	

Traffic Control Supervisor

Duties

- Controls flow of traffic around construction site
- Maintains necessary supplies
- Oversees the proper erection, placement, removal, and storage of traffic control materials
- Ensures that flaggers are properly trained and placed
- May perform other related duties

Orientation and Observation	Training Hours Rqrd	Checklist
A. Safety procedures	10	<input type="checkbox"/>
B. Learn and fully understand the basic functions and requirements of the position	20	<input type="checkbox"/>
C. Becomes familiar with applicable regulations and/or policies	20	<input type="checkbox"/>

Applied Techniques	Training Hours Rqrd	Checklist
A. Develops and maintains suitable liaison with project superintendent and project engineer. Develops and maintains ways and means of controlling traffic on a daily basis.	150	<input type="checkbox"/>
B. Confirms that adequate signs, barrels, cones, staff, etc. are on hand to meet needs for the construction activities	20	<input type="checkbox"/>
C. Ensures proper erection and placement as well removal of required traffic control materials on a daily basis. Verifies that flag personnel are properly trained and placed on the job where they will be most effective and performing properly.	300	<input type="checkbox"/>
D. Maintains and manages any changes which come about during the day and takes necessary steps to affect suitable control procedures.	200	<input type="checkbox"/>
E. Drafts methods of handling traffic (MHT) for the specific work requirement working alongside the TCS for their approval.	130	<input type="checkbox"/>

Total **850 hours**