

State of Ohio (DAS)  
Classification  
Specification

**CLASSIFICATION SERIES:**

Highway Technician

**SERIES NO.:**

5377

**MAJOR AGENCIES:**

Department of Transportation only

**EFFECTIVE DATE:**

04/10/2011

**Series purpose:** The purpose of the highway technician occupation is to perform both highway maintenance & construction inspection duties. Advancement through the series hinges upon course work completion, certification, knowledge & experience gained by employees increasing their ability to perform work when needed pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME. Through the first three levels, advancement occurs as Technicians meet the qualification requirements for the level pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME. The fourth & fifth levels in the series are filled pursuant to the November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME and classification distinctions are based on work performed. All classifications in series perform snow & ice control & related maintenance duties by operation of snow plow with spreader, brine dispensing equipment, dump truck with attachments.

**Glossary:** the terms below are to be interpreted as follows wherever they appear in the classification specification:

**Basic Equipment:** air compressor, asphalt reclaimer/recycler; backhoes and loaders; barricades, tow-type; brooms, power or tow-type; brush chipper; concrete saw or vibrator; ditcher, 3 - 8 ton; ditch shaper; truck, class 8 or less, straight or towing a vehicle not in excess of 10,000 lbs. GVWR; electricade, trailer-mounted; forklift; generator; grader, 13,000-23,000 pounds; hammers & jack hammer; tractors, all sizes, with various attachments such as a drag berm, post hole digger/auger and mowers including rear brush hog, rear flail, cutter bar & side mount rotary and drag berm; pick-up truck or van, 1/2 ton, 3/4 ton & 1 ton with or without trailer; plow & spreader; roller patcher, 4-6 tons; roller, 5-8 tons; sand blaster; chain saws; pavement joint sealer, sewer jet; sewer eel; hydraulic &/or stone box spreader; spade; stump cutter; 300 gallon tar kettle; tar distributor; water pumps; weed eaters; mowers, push-type; bucket trucks; computerized weed sprayer, truck-mounted; pickup or flatbed truck mounted winch/crane (3 ton lift capacity or less); guardrail post driver, truck mounted.

**Standard Equipment:** conveyor loader, self-propelled; bump heater; concrete mixer; compactor, 4-6 tons; dozer, 7 tons; excavator, less than 44,000 pounds; grader, over 23,000 pounds; trailers, all including low-boy, tankers, dump trailers, flat deck; mud jack; paver, pull-type; pavement grinder, mounted; roller, 8 ton but less than 12 ton; steamer; hand & long-line stripers; sweeper, truck-mounted; truck, class 8 or less, straight or combination vehicle not requiring a Special Hauling Permit; crane, truck-mounted (greater than 3 but less than 35 tons lift capacity); traffic line remover; sewer cleaner under 17 tons; hydro seeder, truck-mounted; trencher.

**Complex Equipment:** : concrete groove/pavement cutter; cranes, (35 ton and greater lift capacity); truck-mounted, 35 ton, crane; truck, class 8 or less, straight, or combination vehicle requiring a Special Hauling Permit; clam bucket; dozer, 18 tons; excavator, crawler & truck-mounted, 44,000 pounds or more, pile driver, 1 ton or more; road widener; roller, 12 ton or more; sewer cleaner 17 tons & greater; milling machines, self-propelled; pavers, self-propelled, 10,000 pounds or more; earth movers (pans); hydraulic/air hammer/breakers, boom-mounted; platform truck; snooper truck.

**Maintenance related inspection items:** include those work functions performed by ODOT maintenance crews & contractors or other work of similar complexity.

**Earthwork:** earthwork is the foundation of knowledge necessary to perform inspection of earthwork activities in accordance with the contract provisions. Earthwork includes construction specifications 201 thru 206 & the proper methods of inspection, sampling & testing with each specification.

**Drainage:** drainage is the foundation of knowledge necessary to perform inspection of drainage activities in accordance with the contract provisions. Drainage includes construction specifications 603 thru 605 & the proper methods of inspection, sampling & testing with each specification.

**Pavements:** pavements are the foundation of knowledge necessary to perform inspection of pavement activities in accordance with the contract provisions. Pavements include construction specifications 251 thru 254 & 401 thru 499e & proper methods of inspection, sampling & testing with each specification.

**General knowledge:** general knowledge is the basic knowledge necessary to perform inspection duties such as compliance with the contract provisions, the measurement of quantities for payment & the documentation of compliance & measurements. General knowledge is the basic foundation in order to perform inspection, sampling & testing.

**Structures:** structures are the foundation of knowledge necessary to perform inspection of structures activities in accordance with the contract provisions. Structures include construction specifications 501 thru 526 & applicable

supplemental specifications & proper methods of inspection, sampling & testing with each specification.

**Traffic control devices:** traffic control devices are the foundation of knowledge necessary to perform inspection of signals, highway lighting & maintenance of traffic activities in accordance with the contract provisions. Traffic control devices include construction specifications 614 thru 633 & 641 thru 647 & proper methods of inspection, sampling & testing with each specification.

**Contract administration:** the proper administration of a construction contract including the following: legal requirements; control of work & material; method of measurement & payment; changes & extra work; project scheduling; project closeout; claims & claims management.

**Certification:** demonstrated ability to perform all inspection within a designated area such as earthwork, drainage, general knowledge, contract administration, traffic control devices, pavements & structures.

**Construction specifications:** refers to State of Ohio, Department of Transportation, construction & material specifications manual.

**CMS:** Construction Management System

**TMS:** Transportation Management System

**TAS:** Transportation Administration System

At the first full performance level, incumbents operate basic equipment (i.e., see glossary for identification of basic equipment) & perform general highway maintenance duties, which vary by season including snow & ice, & receive training (i.e., on the job and formal) in operation of basic, standard & complex equipment pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME,

OR

Operate basic equipment (i.e., see glossary for identification of basic equipment) & perform general highway maintenance duties, which vary by season including snow & ice, receive training (i.e., on the job & formal) in various types of construction inspection activities (i.e., maintenance related inspection items) & receive training (i.e., on the job & formal) in operation of basic, standard & complex equipment pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME.

At the second full performance level, incumbents operate basic & standard equipment (i.e., see glossary for identification of basic equipment), perform general highway maintenance duties which vary by season including snow & ice, & act as lead worker in absence of lead worker, inspect maintenance related inspection items & sign inspection reports. Employees receive training (i.e., on the job and formal) in various types of construction inspection & receive training (i.e., on the job & formal) in operation of basic, standard & complex equipment pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME.

At the third full performance level, incumbents operate basic, standard & complex equipment (i.e., see glossary for identification of basic equipment), perform general highway maintenance duties which vary by season including snow & ice, act as lead worker, inspect construction projects related to both maintenance experience & non-maintenance types of projects to ensure contractor compliance with State specifications, plans &/or proposals, verify plans quantities & calculations with blueprints, perform basic laboratory &/or field tests on materials proposed for construction to determine compliance with State specifications & receive training (i.e., on the job & formal) in various types of construction inspection pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME.

At the fourth full performance level, incumbents inspect construction projects to ensure contractor compliance with State specifications, plans &/or proposals &/or perform laboratory &/or field-testing on materials to insure quality control of project materials. Incumbents in this classification also perform the following maintenance duties which include serving as lead worker, emergency response & clean-up, layout & placement of maintenance of traffic devices, snow & ice control & related maintenance duties by operation of snow plow with spreader, brine dispensing equipment, dump truck with attachments pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME.

At the fifth full performance level, incumbents perform/review/monitor field-testing operations, materials acceptance & CMS/TAS records to assure Departmental consistency in materials quality, procedures, acceptance & documentation.

Incumbents oversee construction contract finalization process, which includes documentation audits, change orders & various items to final out projects. Incumbents in this classification also perform the following maintenance duties which include serving as lead worker, emergency response & clean-up, layout & placement of maintenance of traffic devices, snow & ice control & related maintenance duties by operation of snow plow with spreader, brine dispensing equipment, dump truck with attachments pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>PAY RANGE</u>	<u>EFFECTIVE</u>
Highway Technician 1	53771	06	08/17/2004

**CLASS CONCEPT:**

The first full performance level class works under general supervision & requires working knowledge of highway maintenance in order to operate basic equipment (i.e., see glossary for identification of basic equipment) & perform general highway maintenance duties, which vary by season & include snow & ice control & related maintenance duties by operation of snow plow with spreader, brine dispensing equipment, dump truck with attachments & receive training (i.e., on the job & formal) in operation of basic, standard & complex equipment pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME.

OR

Operate basic equipment (i.e., see glossary for identification of basic equipment) & perform general highway maintenance duties, which vary by season & include snow & ice control & related maintenance duties by operation of snow plow with spreader, brine dispensing equipment, dump truck with attachments, receive training (i.e., on the job & formal) in various types of construction inspection activities (maintenance related inspection items) & receive training (i.e., on the job & formal) in operation of basic, standard & complex equipment pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>PAY RANGE</u>	<u>EFFECTIVE</u>
Highway Technician 2	53772	07	04/10/2011

**CLASS CONCEPT:**

The second full performance level class works under general direction & requires considerable knowledge of highway maintenance & maintenance related inspection items in order to operate basic & standard equipment (i.e., see glossary for identification of basic equipment), inspect maintenance related inspection items and sign inspection reports, perform general highway maintenance duties which vary by season & includes snow & ice control & related maintenance duties by operation of snow plow with spreader, brine dispensing equipment, dump truck with attachments & act as lead worker (i.e., provide work direction & training) in absence of lead worker & receive training (i.e., on the job & formal) in various types of construction inspection activities & receives training (i.e., on the job & formal) in operation of basic, standard & complex equipment pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>PAY RANGE</u>	<u>EFFECTIVE</u>
Highway Technician 3	53773	08	04/10/2011

**CLASS CONCEPT:**

The third full performance level class works under general direction & requires considerable knowledge of highway maintenance & construction project inspection in order to operate basic, standard & complex equipment (i.e., see glossary for identification of basic equipment), perform general highway maintenance duties which vary by season & include snow & ice control & related maintenance duties by operation of snow plow with spreader, brine dispensing equipment, dump truck with attachments, act as lead worker (i.e., provide work direction & training), inspect construction projects related to both maintenance & non-maintenance types of projects to ensure contractor compliance with State specifications, plans &/or proposals, verifies plans quantities & calculations with blueprints, performs laboratory &/or field tests on materials proposed for construction to determine compliance with State specifications, signs inspection reports as qualified inspector pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>PAY RANGE</u>	<u>EFFECTIVE</u>
Highway Technician 4	53774	09	04/10/2011

**CLASS CONCEPT:**

The fourth full performance level classification works under general direction & requires considerable knowledge of project inspection & related technical skills in order to inspect construction projects to ensure contractor compliance with State specifications, plans &/or proposals &/or perform laboratory &/or field tests on materials to ensure quality control of project materials, perform maintenance duties which include serving as lead worker, emergency response & clean-up, layout & placement of maintenance of traffic devices, snow & ice control & related maintenance duties by operation of snow plow with spreader, brine dispensing equipment, dump truck with attachments pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>PAY RANGE</u>	<u>EFFECTIVE</u>
Highway Technician 5	53775	10	04/10/2011

**CLASS CONCEPT:**

The fifth full performance level classification requires thorough knowledge of construction &/or testing inspection techniques & construction &/or testing contract administration in order to coordinate related programs, administer testing &/or construction programs (e.g., perform/review/monitor field-testing operations, materials acceptance & CMS/TAS records to assure departmental consistency in materials quality, procedures, acceptance & documentation & oversee district wide construction contract finalization process to include documentation audit, change orders & various items to final out a project), perform maintenance duties which include serving as lead worker, emergency response & clean-up, layout & placement of maintenance of traffic devices, snow & ice control & related maintenance duties by operation of snow plow with spreader, brine dispensing equipment, dump truck with attachments pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME.

**NOTE:** In order to be properly classified at this level must possess contract administration certification.

<b>CLASS TITLE</b>	<b>CLASS NUMBER</b>	<b>B. U.</b>	<b>EFFECTIVE</b>	<b>PAY RANGE</b>
Highway Technician 1	53771	07	08/17/2004	06

**Job duties in order of importance: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Operates basic equipment (i.e., see glossary for identification of basic equipment) & performs general highway maintenance duties which vary by season (e.g., constructs, improves, maintains, repairs & cleans highways &/or roadways & right-of-ways to include excavating & grading ditches, digging channels & cleaning waterways, cuts brush, grass & other vegetation, applies chemicals to vegetation, patches & seals berm & pavement, mixes mortar & concrete, shovels backfill, installs & repairs catch basin & stream channel & completes other drainage work, screens bleeding surface, reshapes/digs ditches/trenches, pours hot tar, removes trash, cleans & repairs highways &/or roadways & right-of-ways, mows grass, moves & loads supplies & materials & completes other related highway maintenance assignments, operates any combination of basic equipment to haul trash), performs snow & ice control & related maintenance duties by operation of snow plow with spreader, brine dispensing equipment, dump truck with attachments, maintains, repairs & installs traffic signs & pavement markings on inter-state, federal & state highways &/or roadways (e.g., repairs/replaces/straightens street &/or traffic signs & other route markers; installs & repairs guardrails).

Performs emergency response & clean up & performs traffic control (e.g., flags traffic through work zone or around accident site; sets lane closures; places high water signs; erects barricades); receives training (on the job & formal) in various types of construction inspection activities (maintenance related inspection items).

Performs minor repairs & maintenance on equipment (e.g., sharpens; sands; paints; refuels; lubricates; checks tires for wear & pressure; replaces light bulbs; washes & cleans trucks & equipment to prevent rusting); changes tailgates & snowplow blades; conducts pre-trip inspections of equipment.

Performs miscellaneous labor & bookkeeping tasks; operates two-way radio/base station; telephones crews for emergencies; cleans offices & garage; keeps daily records & logs (e.g., fuel sheets, material check sheets); responds to general inquiries from public (e.g., gives directions; explains traffic delays; explains work underway); assists stranded motorists (e.g., telephones for needed assistance); performs general labor & maintenance functions at garage; loads & unloads freight; arranges stock in warehouse; moves equipment.

**Major worker characteristics:**

Knowledge of addition & subtraction; decimals, percentages & fractions; safety practices associated with highway maintenance & use of traffic control equipment\*; agency policies\*. Skill in use of basic equipment & related highway maintenance tools; traffic control equipment. Ability to recognize unusual or threatening conditions & take appropriate action; read & verbalize simple sentences; maintain accurate records; cooperate with co-workers on group projects; demonstrate strength to lift 50-100 pounds.

(\*) Developed after employment.

**Minimum Class Qualifications for Employment:**

Formal education in arithmetic that includes addition & subtraction & decimals, percentages & fractions; ability to read, write & speak common English vocabulary; 3 mos. trg. or 3 mos. exp. in operation of basic equipment.

Note: Applicant must have valid Commercial Driver's License at the appropriate level pursuant to approved position description on file to operate motorized equipment of size & type regulated by sections 4506.1, 4506.03 & 4506.12 of Ohio Revised Code.

-Or equivalent of minimum class qualifications for employment noted above.

**Training and Development required to remain in the classification after employment:**

Renewal of Commercial Driver's License pursuant to approved position description on file.

**Unusual Working Conditions:**

Works outside exposed to weather (e.g., including rain, lightening, humidity & hot temperatures in summer time & cold temperatures in winter) & on-going traffic; may work rotating shift; may be on-call 24 hrs, 7 days per week; lift & transport 50-100 pounds; exposed to unpleasant surroundings to include dead animals, containers filled with human waste, diapers, ditches with water & sewage, loud noise from equipment & traffic, confined work area while driving truck during regular &/or double shift during snow & ice removal or in confined space while digging ditches to install pipes or digging holes; exposed to insects such as bees, mosquitoes, flies & spiders; exposed to rodents to include mice & rats; exposed to stray dogs, dirt, dust, fumes, poison ivy/sumac & pollen.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Highway Technician 2	53772	07	04/10/2011	07

**Job duties in order of importance: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Operates basic & standard motorized equipment (i.e., see glossary for identification of basic equipment), inspects maintenance related inspection items, signs inspection reports & performs general highway maintenance duties which vary by season (e.g., constructs, improves, maintains, repairs & cleans highways &/or roadways & right-of-ways to include excavating & grading ditches, digging channels & cleaning waterways, cuts brush, grass & other vegetation, applies chemicals to vegetation, patches & seals berm & pavement, mixes mortar & concrete, shovels backfill, installs & repairs catch basin & stream channel & completes other drainage work, screens bleeding surface, reshapes/digs ditches/trenches, pours hot tar; removes trash, cleans & repairs highways &/or roadways & right-of-ways, mows grass, constructs, improves, maintain roadways, moves & loads supplies & materials, hauls trash & completes other related highway maintenance assignments), perform snow & ice control & related maintenance duties by operation of snow plow with spreader, brine dispensing equipment, dump truck with attachments, inspects basic construction projects related to maintenance experience to ensure contractor compliance with state specifications, plans &/or proposals, verifies plans quantities & calculations with blueprints & performs basic laboratory &/or field tests on materials proposed for construction &/or on producers' or suppliers' stock obtained from field to determine compliance with state specifications & applies basic construction inspection knowledge to jobs performed in maintenance (e.g., cuts & removes deteriorated concrete, mixes, pours, finishes & water proofs new concrete, builds, repairs & replaces headwalls, wooden bridge decks) & acts as lead worker (i.e., provides work direction & training) in absence of lead worker, maintains repairs & installs traffic signs & pavement markings on inter-state, federal & state highways (e.g., repairs replaces/straightens street &/or traffic signs & other route markers; installs & repairs guardrails), performs bridge maintenance duties (e.g. cuts & removes deteriorated concrete, mixes, pours, finishes & water proofs new concrete, builds, repairs & replaces headwalls, wooden bridge decks) & receives training (i.e., on the job & formal) in various types of construction inspection activities & receives training (i.e., on the job & formal) in operation of basic, standard & complex equipment.

Prepares & maintains project records & reports (e.g., daily diary, inspection reports, pay item quantities, progress estimates, contractor's construction methods, material inspection); utilizes CMS & TAS to record information & generate reports.

Performs emergency response & clean up; performs traffic control (e.g., flags traffic through work zone or around accident site; sets lane closures; places high water signs; erects barricades); performs general labor & maintenance functions at garage; loads & unloads freight; arranges stock in warehouse; moves equipment.

Performs minor repairs & maintenance on equipment (e.g., sharpens, sands; paints; refuels; lubricates; checks tires for wear & pressure; replaces light bulbs; washes & cleans trucks & equipment to prevent rusting); changes tailgates & snowplow blades; conducts pre-trip inspections of equipment; performs miscellaneous labor & bookkeeping tasks; operates two-way radio/base station; telephones crews for emergencies; cleans offices & garage; keeps daily records & logs (e.g., fuel sheets, material check sheets); responds to general inquiries from public (e.g., gives directions; explains traffic delays; explains work underway); assists stranded motorists (e.g., telephones for needed assistance); performs general labor & maintenance functions at garage; loads & unloads freight; arranges stock in warehouse; moves equipment.

**Major Worker Characteristics:**

Knowledge of construction operations; safety practices (i.e., OSHA, ODOT safety practices & procedures related to maintenance & construction); human relations; agency policies (i.e., general maintenance, materials & construction); input information in CMS & TMS; basic & standard equipment operations, testing & construction, computer- other in progress; interpret variety of instructions in written, oral, picture or schedule form; technical mathematics to include basic geometry; understand manuals & verbal instruction, technical in nature; cooperate with co-workers on group projects; demonstrate strength to lift 50-100 pounds.

(\*) Developed after employment.

**Minimum Class Qualifications for Employment:**

Successful completion of all Highway Technician level 1 courses; Certification in Aggregate Level 1.

Note: Applicant must have valid Commercial Driver's License at the appropriate level pursuant to approved position description on file to operate motorized equipment of size & type regulated by sections 4506.1, 4506.03 & 4506.12 of Ohio Revised Code.

-Or equivalent of minimum class qualifications for employment noted above.

**Training and Development required to remain in the classification after employment:**

Maintenance of certification in aggregate level 1; renewal of Commercial Driver's License pursuant to approved position description on file.

**Unusual working conditions:**

Works outside exposed to weather (i.e., including rain, lightening, humidity & hot temperatures in summer time & cold temperatures in winter) & on-going traffic; work rotating shift; may be on-call 24 hrs, 7 days per week; lift &/or transport 50-100 pounds; exposed to unpleasant surroundings to include dead animals, containers filled with human waste, diapers, ditches with water & sewage, loud noise from equipment & traffic, confined work area while driving truck during regular &/or double shift during snow & ice removal or in confined space while digging ditches to install pipes or digging holes; exposed to insects such as bees, mosquitoes, flies & spiders; exposed to rodents to include mice & rats; exposed to stray dogs, dirt, dust, fumes, poison ivy/sumac & pollen.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Highway Technician 3	53773	07	04/10/2011	08

**Job duties in order of importance: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Operates basic, standard & complex equipment (i.e., see glossary for identification of basic equipment), acts as lead worker (i.e., provides work direction & training, schedules & assigns maintenance & repair of state highways, bridges & highway facilities, instructs crew members in proper highway maintenance procedures & safety practices, procures necessary equipment & materials & assigns equipment on daily basis & carries out established policies & procedures, monitors work for quality & completeness), performs snow & ice control & related maintenance duties by operation of snow plow with spreader, brine dispensing equipment, dump truck with attachments, inspects construction projects related to both maintenance experience & non-maintenance types of projects to ensure contractor compliance with state specifications, plans &/or proposals, verifies plans quantities & calculations with blueprints, performs laboratory &/or field tests on materials proposed for construction to determine compliance with State specifications, monitors quality control sampling & testing, performs job control & quality control sampling of various plants, signs inspection reports as a qualified inspector pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME.

Performs variety of general highway maintenance duties, which vary by season, (e.g., cuts brush, grass & other vegetation; applies chemicals to vegetation; patches & seals berm & pavement; mixes mortar & concrete; shovels backfill; installs & repairs catch basin & stream channel & completes other drainage work; screens bleeding surface; reshapes/digs ditches/trenches; pours hot tar; removes trash; repairs/replaces/straightens street &/or traffic signs & other route markers; installs & repairs guardrails) & operates any combination of basic, standard or complex equipment to haul trash, mow grass, construct, improve, maintain, clean & repair highways &/or roadways & right-of-ways, excavates & grades ditches, digs channels & cleans waterways, move & load supplies & materials & complete other related highway maintenance assignments; erects snow fence; performs emergency response & clean up; performs traffic control (e.g., flags traffic through work zone or around accident site; sets lane closures; places high water signs; erects barricades); performs bridge maintenance duties (e.g., cuts & removes deteriorated concrete, mixes, pours, finishes and water proofs new concrete, builds, repairs & replaces headwalls, wooden bridge decks).

Prepares & maintains project records & reports (e.g., daily diary, inspection reports, pay item quantities, progress estimates, contractor's construction methods, material inspection); utilizes CMS & TAS to record information & generate reports.

Performs minor repairs & maintenance on equipment (e.g., sharpens, sands, welds; paints; refuels; lubricates; checks tires for wear & pressure; replaces light bulbs; washes & cleans trucks & equipment to prevent rusting); changes tailgates & snowplow blades; conducts pre-trip inspections of equipment; performs miscellaneous labor & bookkeeping tasks; operates two-way radio/base station; telephones crews for emergencies; performs maintenance work on drawbridge equipment; cleans offices & garage; keeps daily records & logs (e.g., fuel sheets, material check sheets); responds to general inquiries from public (e.g., gives directions; explains traffic delays; explains work underway); assists stranded motorists (e.g., telephones for needed assistance); performs general labor & maintenance functions at garage; loads & unloads freight; arranges stock in warehouse; moves equipment.

**Major Worker Characteristics:**

Knowledge of construction operations; employee training & development; lead work; safety practices (i.e., OSHA, ODOT safety practices & procedures related to maintenance & construction; human relations; agency policies (i.e., general maintenance, materials & construction); input information using CMS, TMS; basic understanding of spreadsheets; Skill in equipment operations (i.e., basic, standard & complex), testing & construction equipment, computer. Ability to deal with some abstract but mostly concrete variables; use technical mathematics to include statistical analysis as it applies to construction; prepare & deliver speeches before specialized audiences & general public; resolve complaints from angry citizens & government officials; demonstrate strength to lift 50-100 pounds.

(\*) Developed after employment.

**Minimum Class Qualifications for Employment:**

ODOT Certification in General Knowledge, Earthwork, Drainage, & Pavements; successful completion of all Highway Technician Level 1 & 2 courses; 12 months actual construction inspection experience (may include experience obtained in the test lab); Certification in Asphalt Level 1; Certification in ACI Field Testing Technician Grade I; Certification in Aggregate Level 1; Certification in Aggregate Level 2 (test lab only).

Note: Applicant must have valid Commercial Driver's License at the appropriate level pursuant to approved position description on file to operate motorized equipment of size & type regulated by sections 4506.1, 4506.03 & 4506.12 of Ohio Revised Code.

Or equivalent of minimum class qualifications for employment noted above.

**Training and Development required to remain in the classification after employment:**

Maintenance of certification requirements (i.e., ODOT Certified General Knowledge, Earthwork, Drainage, & Pavements; Certification in Asphalt Level 1; Certification in ACI Field Testing Technician Grade I; Certification in Aggregate Level 1; Certification in Aggregate Level 2) (test lab only); renewal of Commercial Driver's License pursuant to approved position description on file.

**Unusual Working Conditions:**

Works outside exposed to weather (i.e., including rain, lightening, humidity & hot temperatures in summer time & cold temperatures in winter) & on-going traffic; work rotating shift; may be on-call 24 hrs. 7 days per week; lift &/or transport 50-100 pounds; exposed to unpleasant surroundings to include dead animals, containers filled with human waste, diapers, ditches with water & sewage, loud noise from equipment & traffic, confined work area while driving truck during regular &/or double shift during snow & ice removal or in confined space while digging ditches to install pipes or digging holes; exposed to insects such as bees, mosquitoes, flies & spiders; exposed to rodents to include mice & rats; exposed to stray dogs, dirt, dust, fumes, poison ivy/sumac & pollen.

<b>CLASS TITLE</b>	<b>CLASS NUMBER</b>	<b>B. U.</b>	<b>EFFECTIVE</b>	<b>PAY RANGE</b>
Highway Technician 4	53774	07	04/10/2011	09

**Job duties in order of importance: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Inspects construction projects to ensure contractor compliance with State specifications, plans &/or proposals &/or performs laboratory &/or field tests on materials to ensure quality control of project materials (e.g., roadway, drainage, demolition & clearing, foundations for embankment, sub grades, piles, guardrails &/or median barriers, landscaping slope protection, detours, temporary roads, bridge painting, inspects complex structures, verifies plans quantities & calculations with blueprints, tests concrete for air, slump & yield, operates nuclear gauges or embankment kit to test compaction & density & collects material samples to be forwarded to district or central office, performs specific laboratory or field tests on materials proposed for construction &/or on producers' or suppliers' stock obtained from field to determine compliance with state specifications & to monitor quality control testing, or monitor sampling & quality control testing or perform job control & quality control sampling of various plants in assigned work area, receives cross training in testing & construction, approves construction in line with environmental documents, designs & approves mix designs, researches & designs new materials to recommend changes, aggregate quality testing including the interpretation of results, rejects or accepts specific aspect of project pending review by engineer), signs inspection reports as a certified inspector (i.e. fully certified inspector), performs maintenance duties which include serving as a lead worker, emergency response & clean-up, layout & placement of maintenance of traffic devices, snow & ice control & related maintenance duties by operation of snow plow with spreader, brine dispensing equipment, dump truck with attachments pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME.

Prepares & maintains project records & reports (e.g., daily diary, inspection reports, pay item quantities, progress estimates, contractor's construction methods, material inspection); utilizes CMS & TAS to record information & generate reports; maintains records of samples tested; calibrates & maintains laboratory & field test equipment & instruments; operates personal computer to input data & create records.

**Major Worker Characteristics:**

Knowledge of construction operations; employee training & development; lead work; safety practices (i.e., OSHA, ODOT safety practices & procedures related to maintenance & construction; human relations; agency policies (i.e., general maintenance, materials & construction); input information in CMS, TAS, TMS; basic understanding of spreadsheets. Skill in equipment operations (i.e., basic, standard and complex), testing & construction equipment, computer. Ability to interpret extensive variety of technical material in books, journals, & manuals; use technical mathematics to include statistical analysis as it applies to construction; use proper research methods in gathering data; handle sensitive inquiries from & contacts with officials & general public; demonstrate strength to lift 50-100 pounds.

(\*) Developed after employment.

**Minimum Class Qualifications for Employment:**

ODOT Certification in general knowledge, earthwork, drainage, & pavements; successful completion of all Highway Technician level 1, 2 & 3 courses; 24 mos. construction &/or testing exp.; Certification in ACI Field Testing Technician; Grade I; Certification in Aggregate Level 1; Certification in Asphalt Level 1; Certification in Nuclear Gauge.

In addition to the above, for positions in Construction, applicants must possess the following:

Successful completion of bridge painting inspection course; ODOT Certification in Structures & Traffic.

OR

In addition to the above, for positions in Testing, applicants must possess the following:

Certification in Concrete Technician; Certification in Aggregate Level 2; Certification in Aggregate Level 3; Certification in Asphalt Level 2 & 3; Successful completion of HT 310 QC/QA.

Note: Applicant must have valid Commercial Driver's License at the appropriate level pursuant to approved position description on file to operate motorized equipment of size & type regulated by sections 4506.1, 4506.03 & 4506.12 of Ohio Revised Code.

-Or equivalent of minimum class qualifications for employment noted above.

**Training and Development required to remain in the classification after employment:**

Maintenance of certification requirements as noted in minimum qualifications; renewal of Commercial Driver's License pursuant to approved position description on file.

**Unusual Working Conditions:** Exposed to construction equipment, traffic, dust, noise, adverse weather conditions, high areas (e.g., beams, bridges), rough terrain, sewer odor; may work varying hours; requires travel.

<b>CLASS TITLE</b>	<b>CLASS NUMBER</b>	<b>B. U.</b>	<b>EFFECTIVE</b>	<b>PAY RANGE</b>
Highway Technician 5	53775	07	04/10/2011	10

**Job duties in order of importance: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Coordinates construction &/or testing contract administration (e.g., performs/reviews/monitors field-testing operations, materials acceptance & CMS/TAS records to insure departmental consistency in materials quality, procedures, acceptance & documentation & oversees district-wide construction contract finalization process to include documentation audit, change orders & various items to final out a project), performs maintenance duties which include serving as a lead worker, emergency response & clean-up, layout & placement of maintenance of traffic devices, snow & ice control & related maintenance duties by operation of snow plow with spreader, brine dispensing equipment, dump truck with attachments pursuant to November 26, 2003 Highway Technician MOU between ODOT & OCSEA/AFSCME.

Provides support services to projects for acceptance of project materials, interpretation of test results, definition & interpretation of procedures (e.g. policies, testing methods, acceptance, exceptions, small quantities); performs monitoring of supplier, contractor, & producer quality control, testing & acceptance processes to assure performance test results have validity based on materials production processes (e.g. test procedures, equipment calibration, test performance, technician performance, quality control monitoring of mix designs, mix processes, raw materials acceptance, supplier/contractor/producer test results, documentation, problem investigations); performs or directs performance of special tests for material failures investigations, research, & specification development.

Operates personal computer to input, maintain, update CMS/TAS data (e.g. samples, materials, material codes, data screen, bills of materials).

Performs routine materials tests for acceptance, verification, quality assurance as required or guides lower level personnel; maintains laboratory testing equipment, calibration, records, & tolerances; performs inspections of manufacturer's test equipment (e.g. scales, delivery equipment, test devices, temperature equipment).

Performs or assists in training of department, supplier & contractor personnel for materials certification tests required by policy or specification; gathers, analyzes & interprets data, prepares reports, makes presentations; attends materials training, district & departmental meetings, acts as representative for materials management unit in specific materials field.

**Major Worker Characteristics:**

Knowledge of construction operations; employee training development; lead work; safety practices (i.e., OSHA, ODOT safety practices & procedures related to maintenance and construction); human relations; agency policies (e.g., general maintenance, materials & construction); input information in various systems (e.g., CMS, TMS), basic understanding of spreadsheets, Data Base\*, CPM Schedule\*, Power Point\*. Skill in equipment operations (e.g., snow & ice equip, testing & construction equipment, computer). Ability to deal with some abstract but mostly concrete variables; use technical mathematics to include statistical analysis as it applies to construction; use proper research methods in gathering data; prepare & deliver speeches before specialized audiences & general public; resolve complaints from angry citizens & government officials; demonstrate strength to lift 50-100 pounds.

(\*) Developed after employment.

**Minimum Class Qualifications for Employment:**

ODOT Certification in General Knowledge, Earthwork, Drainage, Pavements, & Contract Administration; successful completion of all Highway Technician level 1, 2, 3 & 4 courses; 24 mos. construction &/or testing exp.; Certification in ACI Field Testing Technician Grade I; Certification in Aggregate Level 1;; Certification in Asphalt Level 1; Certification in Nuclear Gauge.

In addition to the above, for positions in Construction, applicants must possess the following:

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In addition to the above, for positions in Testing, applicants must possess the following:

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Successful completion of HT 310 QC/QA.

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