

STATE OF OHIO (DAS)CLASSIFICATION
SPECIFICATION**CLASSIFICATION SERIES:**

Surveyor

SERIES NO.:

8556

MAJOR AGENCIES:

Administrative Services, Natural Resources, Transportation

EFFECTIVE DATE:

08/20/2006

SERIES PURPOSE:

The purpose of the surveyor occupation is to gather process, analyze, interpret & certify survey data.

At the developmental level, assist higher-level surveyors in compilation & analysis of survey data for related projects & receive training in operation & maintenance of survey instruments & in absence of higher-level surveyor, act as lead worker (i.e., provide work direction & training) over survey field crews.

At the full performance level, oversees activities of one or more survey crews &/or completes survey plans/projects such as construction layouts, mapping control surveys, topographic surveys & GIS surveys &/or prepares legal descriptions for easements, sale, lease or transfer of state-owned land.

At the supervisory level, incumbents serve as staff specialist & provide advice/guidance to higher-level administrators or do preceding & supervise assigned staff.

At the manager level, incumbents direct overall survey operations in District, Division, Department or Central Office & in addition to preceding, supervise lower-level surveyors or survey technicians.

CLASS TITLE

Surveyor Trainee

CLASS NUMBER

85560

PAY RANGE

30

EFFECTIVE

10/18/1992

CLASS CONCEPT:

The developmental level class works under general supervision & requires some knowledge of professional surveying in order to receive training in operation & maintenance of survey instruments.

CLASS TITLE

Surveyor

CLASS NUMBER

85561

PAY RANGE

32

EFFECTIVE

10/18/1992

CLASS CONCEPT:

The full performance level class works under direction & requires working knowledge of professional surveying in order to act as lead worker over survey field crew (i.e., survey technicians &/or surveyor trainees) or prepare legal descriptions for easements, sale, lease or transfer of state-owned land.

CLASS TITLE

Surveyor Operations Supervisor

CLASS NUMBER

85565

PAY RANGE

13

EFFECTIVE

08/20/2006

CLASS CONCEPT:

The supervisory level class works under general direction & requires considerable knowledge of professional surveying in order to serve as staff specialist & provide advice/guidance to higher-level administrators in areas such as Global Positioning Systems, Geodetic Control, Topographic Mapping, consultant management, public trust lands, submerged lands &/or Boundary Line or do preceding & supervise assigned staff.

CLASS TITLE

Survey Operations Manager

CLASS NUMBER

85566

PAY RANGE

15

EFFECTIVE

08/20/2006

CLASS CONCEPT:

The managerial level class works general direction & requires thorough knowledge of professional surveying in order to direct overall survey operations in District, Division, Department or Central Office & in addition to preceding, supervise lower-level surveyors or surveyor technicians.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Surveyor Trainee	85560	07	10/18/1992	30

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.)

Receives training in operation & maintenance of survey instruments (e.g., theodolite, transit, electronic distance measurer, automatic level) & in absence of higher-level surveyor, acts as lead worker (i.e., provides work direction & training) over survey field crews, ensures survey field crew has supplies & equipment & ensures policies & procedures are followed.

Calculates & records survey data (e.g., office calculations, data processing, transverse adjustment, boundary calculations) & keeps notes & records of all data obtained.

Researches public records & courthouse records (e.g., maps, property deeds, old surveys, city plans, subdivision plats) &/or same in county & city offices, utility companies, private engineering firms & surveying firms; interviews property owners to gather information; prepares plats & legal descriptions for sale, lease or transfer of state owned lands.

MAJOR WORKER CHARACTERISTICS:

Knowledge of professional surveying; employee training & development*. Skill in operation & maintenance of survey instruments (e.g., theodolite, transit, electronic distance measurer, automatic level). Ability to prepare & analyze technical survey data & make mathematical calculations to that data; handle routine & sensitive inquiries from & contacts with government officials, property owners & contractors; lift up to 50 lbs. of equipment.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Current certificate as Surveyor-in-Training pursuant to Section 4733.11 (J) of Ohio Revised Code; 12 mos. trg. or 12 mos. exp. in operation of field survey instruments; valid driver's license.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:

Not applicable.

UNUSUAL WORKING CONDITIONS:

Requires travel & overnight stays; may be exposed to varying weather conditions & traffic; may work flexible hours; may work in shallow water/boat.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Surveyor	85561	13	10/18/1992	32

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.)

Oversees activities of one or more survey crews (e.g., trains personnel on use & care of survey instruments; determines proper methods & procedures for all types of survey work; certifies completed work as registered surveyor), makes all necessary calculations & keeps notes & records of all data obtained, or writes & provides legal descriptions for easements, sale, lease or transfer of state-owned lands & reviews work of private/contracted surveyors when necessary.

Operates & maintains survey instruments (e.g., theodolite, transit, electronic distance measurer, automatic level), makes necessary calculations (e.g., office calculations, transverse adjustment, boundary calculations) & determines boundary line locations.

Researches courthouse records (e.g., maps, property deeds, old surveys, city plans, subdivision plats) &/or researches same in county & city offices, utility companies &/or private engineering & surveying firms; talks to property owners to gather information needed for survey; drafts & plats survey drawings; prepares legal descriptions; testifies in court if necessary.

MAJOR WORKER CHARACTERISTICS:

Knowledge of supervisory principles/techniques*; employee training & development*; professional surveying; public relations*. Skill in use & basic maintenance of survey equipment; computer operation to utilize & display survey data*. Ability to define problems, collect data, establish facts & draw valid conclusions; prepare & analyze technical survey data & make necessary mathematical calculations; handle routine & sensitive inquiries from & contacts with government officials, property owners & contractors; lift up to 50 lbs. of equipment.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Certificate of registration as professional surveyor pursuant to Section 4733.02 of Ohio Revised Code; valid driver's license.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:

Annual renewal of certificate of registration as professional surveyor pursuant to Section 4733.15 of Revised Code.

UNUSUAL WORKING CONDITIONS:

Requires overnight travel; works outside exposed to varying weather conditions & traffic. May work flexible hours.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Surveyor Operations Supervisor	85565	EX	08/20/2006	13

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.)

Serves as staff specialist & provides advice/guidance to higher-level administrators in areas such as Global Positioning Systems, Geodetic Control, Topographic Mapping, consultant management, public trust lands, submerged lands &/or Boundary Line Replacement (e.g., coordinates, implements & enforces complex plan/project priorities/policies/methodologies; prepares scope of services; determines methods & procedures necessary to obtain requested survey data; utilizes software such as CAD, COGO, Global Positioning Systems, GIS, Microsoft Office; coordinates plan/project activities with other offices; reviews, signs & seals survey work products as Professional Surveyor; oversees preparation of survey drawings & calculations) or does preceding & supervises assigned staff.

Prepares exhibits for court use & public displays (e.g., prepares factual data in boundary disputes); testifies in court as to methods used, final product & related issues; resolves discrepancies in deeds & surveys; meets with public, property owners & public officials regarding surveys, existing & proposed right of way plans &/or acquisition of property.

Operates & maintains survey instruments (e.g. Total Station Electronic measuring devices, digital levels, 3-D laser scanners, global positioning systems (GPS) receivers, global positioning systems (GPS) rover receiver w/data collector); calculates & records survey data (e.g., office calculations, data processing, transverse adjustment, boundary calculations) & keeps notes & records of all data obtained; analyzes survey data via statistical, algebraic & geometrical operations (e.g. Standard deviations, area, volume, curves, spiral curves, vertical curves, coordinate geometry, least squares adjustments, elevations, traverse closure); calculates sources of error to identify &/or correct random, systematic & procedural errors in survey measurements &/or to identify boundary &/or survey control points; assists in performing data management (e.g., transfers, maintains, manipulates, updates & archives survey data files, prints surveying files, rinex files, feature tables, ASCII files; ensures contractor adherence to plans, notes & guidelines, verifies calculations & checks quantities).

Researches public records & courthouse records (e.g., maps, property deeds, old surveys, city plans, subdivision plats) &/or same in county & city offices, utility companies, private engineering firms & surveying firms; interviews property owners to gather information needed for survey; drafts & plats survey drawings; prepares legal descriptions; testifies in court.

Operates state vehicles (e.g., trucks, vans), to transport equipment, instruments & personnel to project sites; carries field equipment & instruments through rough terrain (e.g., across creeks, up/down hills, over fences, through marshes); identifies tree species & other vegetation for environmental preservation, economic reimbursements & safety factors; clears brush as required to facilitate surveying operations with appropriate equipment (e.g., machete, chain saw); operates hand tools & small equipment (e.g., jackhammer, power auger, pionjar, posthole digger, sledgehammer, spud bar); communicates with consultants, utilities, federal, state & local agencies, general public &/or property owners to obtain project specific information (e.g., parole evidence, property lines, corner monuments); communicates project purposes with general public.

MAJOR WORKER CHARACTERISTICS:

Knowledge of employee training & development*; professional surveying; public relations*. Skill in use & basic maintenance of survey equipment (e.g., Total Station Electronic measuring devices, digital levels, 3-D Laser Scanners, Global Positioning Systems (GPS) Receivers, Global Positioning Systems (GPS) Rover Receiver w/Data Collector); operation of motor vehicle to transport survey equipment to & from work sites *; personal computer operation to utilize & display survey data*. Ability to define problems, collect data, establish facts & draw valid conclusions; prepare & analyze technical survey data & make necessary mathematical calculations; handle routine & sensitive inquiries from & contacts with government officials, property owners & contractors; lift up to 75 lbs. of equipment.

(*) Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Current registration as professional surveyor pursuant to section 4733.02 of Ohio Revised Code; 24 mos. trg. or 24 mos. exp. as professional surveyor; 12 mos. trg. or 12 mos. exp. in employee training & development; valid driver's license.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:

Annual renewal of registration as professional surveyor pursuant to section 4733.15 of revised code.

UNUSUAL WORKING CONDITIONS:

Requires travel & overnight stays; works outside exposed to varying weather conditions & traffic; may work flexible hours.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Surveyor Operations Manager	85566	EX	08/20/2006	15

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.)

Directs overall survey operations in District, Division, Department or Central Office, establishes goals, objectives, & priorities for District, Division, Department or Central Office survey program, develops budget for equipment & supplies, establishes policies & procedures for survey operations, testifies in court as expert witness as to methods used, final product & related issues, oversees inventory & determines maintenance/repair schedule for instruments & equipment, coordinates plan/project activities with activities of other offices, reviews, signs & seals survey work products as Professional Surveyor, oversees preparation of survey drawings & calculations & supervises lower-level surveyors or survey technicians.

Manages consultant projects (e.g., meets with land holding divisions or agencies to review surveying needs & develops plan to address needs within budgetary limits; prepares project advertisement, scope of services, controlling board information & other contract documents; recommends consultants; negotiates fees & other contract provisions; authorizes payments to consultants; reviews consultant survey work products; reviews & maintains policies & procedures for consultant evaluation systems; communicates project purposes with consultants, utilities, local, state & federal agencies & general public).

Meets with district & area managers to review survey-related problems & recommend solutions; researches records in courthouse & other locations; performs boundary entrancement surveys; analyzes survey results; prepares survey plats drawings & certifies results of property surveys, prepares exhibits for court use & public displays (e.g., prepares factual data in boundary disputes); meets with public, property owners & public officials regarding surveys, existing & proposed right of way plans &/or acquisition of property; serves on professional & steering committees.

MAJOR WORKER CHARACTERISTICS:

Knowledge of supervisory principles/techniques; employee training & development*; professional surveying; public relations*. Skill in use & basic maintenance of survey equipment (e.g. Total Station Electronic measuring devices, digital levels, 3-D Laser Scanners, Global Positioning Systems (GPS) Receivers, Global Positioning Systems (GPS) Rover Receiver w/Data Collector); personal computer to utilize & display survey data*; general office equipment. Ability to define problems, collect data, establish facts & draw valid conclusions; prepare & analyze technical survey data & make necessary mathematical calculations; handle routine & sensitive inquiries from & contacts with government officials, property owners & contractors.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Current registration as professional surveyor pursuant to section 4733.02 of Ohio Revised Code; 30 mos. trg. or 30 mos. exp. as Professional Surveyor; 6 mos. trg. or 6 mos. exp. in supervisory principles & techniques; valid driver's license.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:

Annual renewal of registration as professional surveyor pursuant to section 4733.15 of revised code.

UNUSUAL WORKING CONDITIONS:

Requires travel & overnight stays; works outside exposed to varying weather conditions & traffic; may work flexible hours.