SERIES PURPOSE:
The purpose of the GIMS technician occupation is to operate GIS &/or CADD software (e.g., ArcView, ArcInfo, AutoCad, GeoMedia, Grass, MicroStation, MapInfo, GeneriCad, Intergraph, MGE) &/or design & implement research methods to collect, code, prepare & perform quality control analysis on geo-spatial data.

At the full performance level, incumbents operate GIMS &/or CADD software.

At the advanced level, incumbents design & implement research methods to collect, code, prepare, enter & perform quality control analysis on geo-spatial data.

GLOSSARY:
AM       -     Automated and desktop mapping.
DBMS  -     Data base management systems.
GIS      -     Geographic information systems.
CADD  -     Computer aided drafting and design.
GIMS   -     A term used to describe a collection of related technologies used to manage geo-spatial data, these Technologies include: GIS, CADD, AM, DBMS and RSI.
MGE    -     Modular geographic environment.
RSI      -     Remote sensing and image analysis.
Spatial Analysis - Ability to evaluate features in the context of their surroundings.

CLASS TITLE:  CLASS NUMBER:
GIMS Technician 1  85671

EFFECTIVE DATE:  11/23/1997

CLASS CONCEPT:
The full performance level class works under general supervision & requires considerable knowledge of geographic information systems &/or computer aided drafting & design software in order to operate GIMS &/or CADD software to produce &/or revise maps, engineering design drawings &/or cartographic enhancements.

CLASS TITLE:  CLASS NUMBER:
GIMS Technician 2  85672

EFFECTIVE DATE:  11/23/1997

CLASS CONCEPT:
The advanced level class works under general supervision & requires thorough knowledge of geographic information systems &/or computer aided drafting & design software in order to design & implement research methods to collect, code, prepare, enter & perform quality control analysis on geo-spatial data.
CLASS TITLE: GIMS Technician 1

CLASS NUMBER: 85671

BARGAINING UNIT: 014

EFFECTIVE DATE: 11/23/1997

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 GIS &/or CADD software (e.g., Intergraph, MGE, Grass, ArcView, ArcInfo, AutoCad, MicroStation, MapInfo, GeneriCad, GeoMedia) to produce &/or revise maps, engineering design drawings, cartographic enhancements (e.g., land use/land cover, bedrock geology, wetlands, land parcels, highway design characteristics, pavement, highway performance monitoring system, highway accident statistics, bridge locations) for planning & design report preparation, documentation & project management.

Collects, prepares, digitizes &/or geo-codes spatial data into GIS &/or CADD usable format; scans documents (e.g., photographs, engineering drawings, projects plans, united states geological survey quadrangle maps, environmental wetland delineations) using scanner/interface; utilizes scanning software package to convert raster data into vector elements; creates command files, font libraries & user commands; enters attribute data into geo-spatial data base.

Provides geo-spatial data to governmental agencies, consulting firms & conservation organizations; drafts correspondence.

MAJOR WORKER CHARACTERISTICS:
Knowledge of geographical information systems &/or computer aided drafting & design software. Skill in operation of GIS &/or CADD software packages (e.g., MicroStation, MapInfo, GeneriCad, Intergraph, MGE, Grass, ArcView, ArcInfo, AutoCad, GeoMedia). Ability to prepare concise reports; gather, collate & classify information about geo-spatial data, use research methods in gathering geo-spatial data; maintain accurate records.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:
Completion of undergraduate core program in assigned program area (e.g., geography, cartography, engineering, zoology, biology, ecology, botany, computer science).
- Or 2 yrs. trg. or 2 yrs. exp. in operation of GIS &/or CADD software packages (e.g., ArcView, ArcInfo, AutoCad, MicroStation, MapInfo, GeneriCad, Intergraph, MGE, Grass, GeoMedia) to produce maps &/or topographical maps.
- Or equivalent of Minimum Class Qualifications For Employment noted above.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:
Not applicable.

UNUSUAL WORKING CONDITIONS:
Not applicable.
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.)

Designs & implements research methods to collect, code, prepare, enter & perform quality control analysis on geo-spatial data, assists lower-level GIMS technicians in data coding & preparation, provides input evaluation of geo-spatial data base enhancements, provides input for new or modified database elements, participates in design of geo-spatial database standards for content, format, design & maintenance procedures, participates in installation of GIS &/or CADD software & acts as lead worker over lower-level GIMS technicians.

Operates GIS &/or CADD software (e.g., Intergraph, MGE, ArcView, ArcInfo, AutoCad, revise maps, engineering design drawings, cartographic enhancements (e.g., land use, land cover, bed rock geology, wetlands, land parcels, highway design characteristics, pavement management, highway performance monitoring system, highway accident statistics, bridge locations) for planning & design report preparation, documentation & project management.

Collects, prepares, digitizes &/or geo-codes spatial data into GIS &/or CADD usable format; scans documents (e.g., photographs, engineering drawings, project plans, united states geological survey quadrangle maps, environmental wetland delineations) using scanner/interface; utilizes scanning software package to convert raster data into vector elements, creates command files, font libraries & user commands; enters geo-spatial data into geo-spatial database.

Provides geo-spatial data to government agencies, consulting firms & conservation organizations; drafts correspondence.

MAJOR WORKER CHARACTERISTICS:
Knowledge of geographical information systems &/or computer aided drafting & design software; employee training & development*. Skill in operation of GIS &/or CADD software packages (e.g., ArcView, ArcInfo, AutoCad, MicroStation, MapInfo, GeneriCad, Intergraph, MGE, Grass, GeoMedia). Ability to prepare concise reports; gather, collate & classify information about geo-spatial data; use research methods in gathering data; maintain accurate records.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:
Completion of undergraduate core program in assigned program area (e.g. geography, engineering, computer science, zoology, biology, ecology, botany); 6 mos. trg. or 6 mos. exp. in operation of GIS &/or CADD software packages (e.g., MicroStation, MapInfo, GeneriCad, Intergraph, MGE, Grass, ArcView, ArcInfo, AutoCad, GeoMedia) in order to produce maps &/or topographical maps.

-Or 30 mos. trg. or 30 mos. exp. in operation of GIS &/or CADD software packages (e.g., ArcView, ArcInfo, AutoCad, GeoMedia) in order to produce maps &/or topographical maps

-Or 12 mos. exp. as GISMS Technician 1, 85671.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:
Not applicable.

UNUSUAL WORKING CONDITIONS:
Not applicable.