

### **STATE OF NEVADA**

# Department of Administration Division of Human Resource Management

# **CLASS SPECIFICATION**

TITLE	<u>GRADE</u>	<u>EEO-4</u>	<u>CODE</u>
A/E DRAFTER III	33	$\mathbf{C}$	6.355
A/E DRAFTER II	31	$\mathbf{C}$	6.358
A/E DRAFTER I	28	C	6.360

#### SERIES CONCEPT

Architectural/Engineering Drafters prepare schematics, design development, working drawings and specifications for new construction and the renovation and remodeling of existing structures involving architectural, mechanical, electrical, civil, structural and plumbing design; conduct research to determine materials, specifications and compliance with applicable codes and standards; estimate cost of projects; and prepare documents for contract bidding.

Meet with clients and project architects/engineers to determine design objectives for new construction, renovations and remodeling; review record drawings and inspect site location to take measurements, survey, verify conditions and collect information relevant to project design; evaluate client needs.

Use computer aided design and drafting (CADD) software and/or drafting instruments, media and accepted drafting techniques to prepare schematics, design development, working drawings and specifications; perform detailed drafting work for purposes of developing plans for construction projects which may be utilized by contractors and craftpersons to complete construction requirements.

Conduct research to ascertain applicable codes and standards, materials and specifications as a basis for preparing drawings and contract documents; compile contract documents to include notice of contract bidding, forms, specifications, cost, and working drawings.

Prepare cost estimates at various phases of construction design and development by measuring and tabulating material quantities to ensure costs are within the project budget.

Check plans prepared by architects and engineers to ensure compliance with specifications and applicable codes.

Update record drawings during or after construction to reflect changes, additions and variations from the original design so that drawings can be used for future building construction or modifications.

Draft furniture layouts for newly remodeled and existing space for the purpose of displaying furniture location and ensuring proper clearances for handicapped access and fire and life safety provisions; review furniture catalogs to select furniture for newly remodeled space and log model numbers and costs for production of furniture bid documents.

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#### **CLASS CONCEPTS**

<u>A/E Drafter III</u>: Under general direction, incumbents function at an advanced journey level, perform the full range of duties outlined in the series concept and manage smaller, less complex construction projects to include pre-bid meetings with contractors, walk-throughs, bid openings, inspections, change orders, authorization of payments for work completed and the reconciliation of problems and disagreements to ensure that work is completed according to construction plans, specifications and applicable codes. Individuals coordinating projects more than 50% of the time may be allocated to the Construction Project Coordinator series.

<u>A/E Drafter II</u>: Under limited supervision, incumbents perform the full range of duties outlined in the series concept to include the development of final drawings and specifications for construction projects. This is the journey level in the series.

<u>A/E Drafter I</u>: Under general supervision, incumbents receive training and gain experience in the performance of the duties outlined in the series concept, and progression to the next level may occur upon meeting the minimum qualifications and with the recommendation of the appointing authority.

# MINIMUM QUALIFICATIONS

#### SPECIAL REQUIREMENT:

\* Pursuant to NRS 284.4066, some positions in this series have been identified as affecting public safety. Persons offered employment in these positions must submit to pre-employment screening for controlled substances.

## A/E DRAFTER III

EDUCATION AND EXPERIENCE: Graduation from high school or equivalent education and five years of progressively responsible architectural, mechanical and/or civil drafting experience. Education above the high school level in architectural, mechanical and/or civil drafting may be substituted for up to two years of experience on a year-for-year basis; **OR** an equivalent combination of education and experience; **OR** one year of experience as an A/E Drafter II in Nevada State service. (See Special Requirement)

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (required at time of application):

**Detailed knowledge of:** architectural/engineering drafting methods, nomenclature, fractions, decimals, measures, conventional symbols and sources of information; electrical, mechanical, civil and structural systems in buildings; personal computers, plotters, printers and copy equipment. **Working knowledge of:** contracts related to architecture, construction and engineering; *and all knowledge, skills and abilities required at the lower levels.* 

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job): **Detailed knowledge of:** agency policies, procedures and practices related to construction and remodeling projects; State Purchasing policies and requirements. **Working knowledge of:** bid-letting of construction projects. **Ability to:** oversee construction projects to include scheduling of construction, evaluating completed work to ensure it conforms to specifications and reconciling differences with contractors; speak in front of groups to convey information and conduct formal meetings such as job walks and bid openings.

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### MINIMUM QUALIFICATIONS (cont'd)

### A/E DRAFTER II

EDUCATION AND EXPERIENCE: Graduation from high school or equivalent education and four years of progressively responsible architectural, mechanical and/or civil drafting experience. Education above the high school level in architectural, mechanical and/or civil drafting may be substituted for up to two years of experience on a year-for-year basis; **OR** an equivalent combination of education and experience; **OR** two years of experience as an A/E Drafter I in Nevada State service. (See Special Requirement)

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (required at time of application):

**Detailed knowledge of:** CADD software. **Working knowledge of:** required codes and standards for building design and interpretation of plans for code compliance; electrical, mechanical, civil and structural systems in buildings; requirements of the Americans with Disabilities Act related to buildings and other facilities; mathematical operations involving algebra, trigonometry and geometry and their application to architecture, construction and engineering. **General knowledge of:** contracts related to architecture, construction and engineering. **Ability to:** estimate costs of project components to include consideration of relative costs and benefits of potential actions to make the most appropriate choice or recommendation; prepare project specifications; and all knowledge, skills and abilities required at the lower level.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job): (These are identical to the Entry Level Knowledge, Skills and Abilities for A/E Drafter III.)

# A/E DRAFTER I

EDUCATION AND EXPERIENCE: Graduation from high school or equivalent education and two years of progressively responsible architectural, mechanical and/or civil drafting experience. Education above the high school level in architectural, mechanical and/or civil drafting may be substituted for one year of experience on a year-for-year basis; <u>OR</u> an equivalent combination of education and experience. (See Special Requirement)

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (required at time of application):

Working knowledge of: architectural/engineering drafting methods, nomenclature, fractions, decimals, measures, conventional symbols and sources of information; CADD software; personal computers, plotters, printers and copy equipment. General knowledge of: electrical, mechanical, civil and structural systems in buildings; requirements of the Americans with Disabilities Act related to buildings and other facilities; mathematical operations involving algebra, trigonometry and geometry and their application to architecture, construction and engineering. Skill in: using drafting techniques to achieve appropriate line qualities for the production of drawings with speed and accuracy. Ability to: read, interpret and translate field notes and design notes into neat, legible and accurate drawings; set up and use surveying equipment; write concise, logical and grammatically correct correspondence; organize and lay out drawings systematically to optimize efficiency for construction; communicate with design and construction personnel to exchange information for formulation of drawings and sketches.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job): (These are identical to the Entry Level Knowledge, Skills and Abilities for A/E Drafter II.)

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This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards for positions assigned to this class.

	<u>6.355</u>	<u>6.358</u>	<u>6.360</u>
ESTABLISHED:	7/1/93P	7/1/93P	7/1/93P
REVISED:	8/31/92PC	8/31/92PC	8/31/92PC
REVISED:	12/19/03PC	12/19/03PC	12/19/03PC
REVISED:	12/10/10PC	12/10/10PC	12/10/10PC