

**STATE OF ARIZONA JOB CODE SPECIFICATION**

<b>FLSA:</b>	<b>NEXP</b>	<b>Job Code:</b>	<b>ACV95382</b>
<b>Job Class Code:</b>	<b>140</b>	<b>Salary Schedule:</b>	<b>ASRRENGPL</b>
<b>EEO Category:</b>	<b>03</b>	<b>Grade:</b>	<b>16</b>
<b>Workers Comp Code:</b>	<b>8601</b>		

<b>Job Code Established:</b>	<b>04/23/84</b>	<b>Effective Date:</b>	
<b>Job Code Revised:</b>	<b>01/01/01</b>	<b>Effective Date:</b>	

**JOB CODE SERIES:** Engineering Series

**JOB CODE TITLE:** ENGINEERING PLANS TECHNICIAN II

**HRIS TITLE:** ENGRG PLANS TECH II

**ORGANIZATION/WORK SETTINGS:** All Agencies

**WORK DESCRIPTION:** Designs and drafts a variety of detailed maps, highway or right-of-way plan sheets; researches engineering files to obtain background information on projects such as survey notes Design Concept Reports, as-built plans and aerial photographs; utilizes computer programs and calculators to compute plans and map geometrics; develops and maintains highway engineering records; operates digitizing or other computer input equipment to compute and store engineering data.

**WORK ACTIVITIES:** constructs detailed engineering drawings from engineering data and recommendations, working with some independence and flexibility of method.

Constructs detailed engineering drawings using computer output data and survey information, working with some independence and flexibility of method.

Resolves geometric and trigonometric problems encountered during processes of making detailed engineering drawings.

Gathers data and supplies data for computer input in order to receive their calculations for detailed engineering drawings.

Draws detailed maps, using survey data.

Makes calculations necessary for drawing of plats or descriptive maps of land sections.

Develops quantity summarizes of basic level for highway construction bid items; submits for approval of team leader or supervisor.

Codes data in preparation for data processing input.

Corrects errors in computer output data, and resubmits to operations supervisor for a rerun.

Gathers available data and fills in form sheets indicating progress of engineering projects for the project control sheet.

Calculates horizontal alignment of roadway for highway construction from preliminary survey data; lays out for drafting.

Calculates vertical alignment (grade line) of roadway for highway construction, from preliminary survey data; plots and connects points of intersection to construct original ground and construction profiles.

Reviews construction plans and verifies that these are in accordance with designated specifications and other requirements.

Writes final design plan for a highway construction project, incorporating summaries of quantity

computations (materials and services), contract documents and design details.

Inspects sites of proposed highway facilities in order to review all factors relating to proposals and to conform or verify data as presented.

Attends work unit staff meetings; gives and receives information; participates in problem-solving and decision-making.

Performs related work as required.

**WORK CONDITIONS:** No unusual work conditions.

**SUPERVISION:** Works under the supervision of a first-line supervisor and performs assigned duties within well-established and defined guidelines.

**WORK RESULTS/PRODUCTS:** Completed preliminary and final design of standard highway projects; completed preliminary and final map or plans sheets; complete, updated engineering data bases; computer plotted maps and sets of computer cards.

**RESPONSIBILITY:** Timely and accurate completion of all assigned work projects; scheduling and prioritizing work assignments within established time frames; completeness, accuracy and neatness of all maps and plans sheets.

**AUTHORITY:** Determines that all calculations are correct; determines that all plan sheets meet applicable standards.

**KNOWLEDGE, SKILLS AND ABILITIES:**

**Knowledge of:** Freehand and mechanical drafting methods, procedures and techniques; agency drafting and design standards, policies and procedures and other regulations applicable to the area of assignment; computer programs available for use in the work unit; methods, procedures and techniques used in analyzing and interpreting a variety of engineering data such as field survey books, aerial photographs and maps.

**Skill in:** using and maintaining a variety of drafting tools; operating a variety of office machinery including calculators, blueprint copiers and computer keypunch machines.

**Ability to:** research and interpret a wide variety of engineering data such as survey notes, maps, aerial photographs and as-built plans; verify the accuracy of computer printouts.