

**JOB DESCRIPTION AND POSITION CLASSIFICATION**

CLASSIFICATION <b>Engineer, Water Resources</b>		DWR POSITION NUMBER <b>3460-3137-113</b>	SAP POSITION NUMBER <b>50032352</b>	MCR <b>1</b>
APPOINTEE <b>Vacant</b>		SAP PERSONNEL NO. <b>TBD</b>	DIVISION/SECTION <b>DOE / Civil Engineering Branch/ Civil II</b>	
COLLECTIVE BARGAINING IDENTIFIER Management Related BU: <input type="checkbox"/> Supervisory Related BU: <input type="checkbox"/> Confidential Related BU: <input checked="" type="checkbox"/> Rank and File BU: <b>R09</b>				
RESPONSIBILITIES EXERCISED <input type="checkbox"/> Supervisory <input type="checkbox"/> Lead Person		IMMEDIATE SUPERVISOR (Print) <b>Duc Tran</b>	SUPERVISOR'S CLASSIFICATION <b>Senior Engineer, WR</b>	
APPROVED BY (Personnel Analyst's Name) <b>Estevez Contreras</b>			DATE <b>03/05/2026</b>	
<i>Percent of Time</i>	<i>Activity</i>			
<b>40%</b>	<p><b>POSITION SUMMARY</b> Under the direction of a Senior Engineer, Water Resources, the incumbent performs engineering studies, writes reports, and prepares the designs, drawings, and specifications for construction of a variety of public civil-works projects related to flood control, environmental protection, water conveyance facilities, species conservation, and recreation. Such work will include the design and analysis of site drainage, canals, check structures, levees, storm and sanitary sewer systems, gates, weirs, siphons, pipelines, penstocks, turnouts, roads, culverts, spillways, retaining walls, fish screens, fish ladders, pump houses, site accessibility, and many other related facilities. The incumbent must provide a broad working knowledge of civil design, reinforced concrete design, structural steel design, masonry design, hydrology and hydraulics, soil and rock mechanics, applicable design and building codes, and engineering analysis computer applications.</p> <p><b>ESSENTIAL FUNCTIONS</b> This position requires that the incumbent work cooperatively on multi-disciplinary teams as well as independently. The incumbent must maintain consistent, predictable attendance, exercise sound engineering judgment, analyze situations accurately, communicate effectively both verbally and in writing, possess good time management skills, and be responsible for completing work assignments on time. The incumbent must have an excellent attention to detail and must be able to present calculations and study results in a clear and logical manner. The incumbent must have the ability to create a set of engineering drawings utilizing CAD applications. The incumbent may be required to work on several projects simultaneously. The specific essential duties are:</p> <p>Prepare designs and calculations for state water facilities using knowledge of civil engineering including structures (reinforced concrete, timber, structural steel, etc.), soil mechanics and foundations, hydraulics and hydrology, and transportation following applicable design and building codes. Apply engineering expertise to perform analyses using specialized modeling software in the areas of hydrology, hydraulics, seismic, geotechnical, and structural engineering using programs such as HEC-RAS, HEC-HMS, FLAC 2D, LS-DYNA, Slope/W, LPILE, Seep/W, and SAP 2000.</p>			
SUPERVISOR'S STATEMENT:		<b>I HAVE DISCUSSED THE DUTIES OF THE POSITION WITH THE EMPLOYEE.</b>		
SUPERVISOR'S NAME (Print) <b>Duc Tran</b>		SUPERVISOR'S SIGNATURE ➤	DATE	
EMPLOYEE'S STATEMENT:		<b>I HAVE DISCUSSED WITH MY SUPERVISOR THE DUTIES OF THE POSITION AND HAVE RECEIVED A COPY OF THE DUTY STATEMENT.</b>		
EMPLOYEE'S NAME (Print) <b>Vacant</b>		EMPLOYEE'S SIGNATURE ➤	DATE	

## JOB DESCRIPTION AND POSITION CLASSIFICATION

CLASSIFICATION <b>Engineer, Water Resources</b>	DWR POSITION NUMBER <b>3460-3137-113</b>	SAP POSITION NUMBER <b>50032352</b>	MCR <b>1</b>
APPOINTEE <b>Vacant</b>	SAP PERSONNEL NO. <b>TBD</b>	DIVISION/SECTION <b>DOE / Civil Engineering Branch/ Civil II</b>	
<i>Percent of Time</i>	<i>Activity</i>		
<b>20%</b>	<p>Prepares sketches, plans, and details for contract drawings working alone or with a drafter as directed. Writes, reviews, and edits engineering specifications. Calculates quantity estimates and makes cost comparisons of design alternatives. Perform evaluations and analyze demand and capacity of existing and proposed facilities and their components.</p>		
<b>10%</b>	<p>Be knowledgeable and proficient in the use of MS Word, Excel, and PowerPoint and auxiliary civil engineering design software such as spatial mapping with ArcGIS (ArcMap, ArcGIS Pro, QGIS), Computer Aided Drafting (Microstation/OpenRoads, AutoCAD), and calculation spreadsheets (MathCAD, Mathematica).</p>		
<b>10%</b>	<p>Prepare engineering reports, drawings, figures, memorandum, and visual presentations explaining the results of the studies to staff, management, consultants, and contractors utilizing word processing software, spreadsheets, CAD, ArcGIS, and reference materials appropriate for the tasks. Research engineering records and perform special studies related to engineering. Assist in the preparation of engineering studies and reports of existing and proposed facilities using word referenced items appropriate to the task.</p>		
<b>10%</b>	<p>Prepare written responses to a wide variety of inquiries and requests regarding project designs and studies. Coordinate and communicate design activities with other project participants, clients, and stakeholders. Answer and respond to inquiries, contractor requests for information, and questions from construction inspectors. Review reports and provide technical comments on plans and specifications. Direct the work of others such as drafters, students, and consultants. Review shop drawings and other contractor submittals related to in-progress construction. Provide quality-assurance reviews of design work. Coordinate with Construction personnel in resolving changes.</p>		
<b>10%</b>	<p>Perform field inspection of existing or proposed facilities. Perform inspections of slopes, embankments, tunnels, pipelines, building structures, hydraulic structures and other enclosed areas, often in uneven rugged terrain. Involves driving a pick-up truck off road usually on rugged terrain to and from the job sites.</p>		
	<p><b>OTHER RESPONSIBILITIES</b>            This position provides necessary support to the Divisions of Flood Management, Safety of Dams, Operations and Maintenance, Engineering, and/or the Public Affairs Office during governor declared emergencies, flood, dam SWP, and other incidents and emergencies. Additionally, this position may participate in emergency operations in the capacity of area teams, field inspection, coordination, and assist agencies such as CalOES and FEMA in disaster work, including performing fieldwork to complete damage survey reports for droughts, flooding, earthquakes, and other emergencies. This position may also serve in one of the sections established in the Incident Command System to assist the Department in performing its emergency preparedness, response, recovery, and mitigation functions. These functions are established in the California State Emergency Plan and the Department's Administrative Orders.</p>		

## JOB DESCRIPTION AND POSITION CLASSIFICATION

CLASSIFICATION <b>Engineer, Water Resources</b>	DWR POSITION NUMBER <b>3460-3137-113</b>	SAP POSITION NUMBER <b>50032352</b>	MCR <b>1</b>
APPOINTEE <b>Vacant</b>	SAP PERSONNEL NO. <b>TBD</b>	DIVISION/SECTION <b>DOE / Civil Engineering Branch/ Civil II</b>	
<i>Percent of Time</i>	<i>Activity</i>		
	<p><b>DIVERSITY, EQUITY AND INCLUSION</b> All employees are responsible for contributing to an inclusive, safe, and secure work environment that values diverse cultures, perspectives, and experiences, and is free from discrimination.</p> <p><b>SPECIAL REQUIREMENTS</b> The scope of responsibility of the Engineer, Water Resources in the Civil Engineering Branch requires a broad knowledge and working capabilities in hydrology; hydraulics; structures; soil and rock mechanics; engineering economics; applicable design and building codes; and computer applications for design.</p> <p>Work requires traveling throughout the State by air or vehicle on public roadways, in the field travel and to remote areas, possibly in uneven terrain. Must possess a valid California Class C Driver's License with a good driving record as travel throughout the State will be required. Travel on short notice and overnight lodging will be required on some trips. May be required to work alone in remote areas and on weekends and Holidays. Employees are required to successfully complete all relevant safety training related and follow established safety procedures inherent to the job.</p> <p>Perform inspections of slopes, embankments, tunnels, pipes, enclosed and/or confined spaces, and projects under construction; often in rugged areas. Must be able to inspect pipelines and excavations including inclined slippery surfaces and faces, climbing abutments, and other similar physical activity. Possess adequate strength and ability to push, pull, move items up to 25 pounds; ability and stamina to bend, stoop, kneel, and crawl; the ability to ascend/descent stairs, slopes and ladders and work in confined spaces, and the ability to enter/exit vehicles, vaults, structures, and pipelines; mobility to walk unassisted throughout the facilities of the State Water Project. Must be able and willing to work in adverse weather conditions such as extreme heat or cold; must work well with others; must have the ability to walk unassisted throughout the facilities of the SWP.</p> <p>Range D of this classification requires possession of a valid certificate of registration as a civil engineer issued by the California State Board of Registration for Professional Engineers.</p> <p>The employee is supervised through frequent contact and guidance of a Senior Engineer, with less frequent contact and assistance as employee becomes familiar with assignments.</p> <p>The Department of Water Resources is committed to its mission and employees, and we are grounded in our commitment to public safety. Regular, consistent, and predictable attendance is essential to the successful performance in this position.</p>		