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| **STATE OF SOUTH DAKOTA**  **Career Banding Questionnaire**  Engineering | |
| **SUPERVISOR SECTION** | |
| *Employee Name:* | *Supervisor Name* |
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| 1. **Comments** | |
| *Comment on the accuracy of the information provided by the employee throughout the CBQ.* | |
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| 1. **Scope & Complexity of Position** | |
| *What are the most important aspects of this position?* | |
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| *What are the most complex aspects of this position?* | |
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| *If this employee is specialized or considered the technical expert in a specific area(s) of engineering, describe those area(s) and the complexity of the area(s).* | |
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| 1. **Career Path** | |
| *What previous experiences are needed for employees filling this position?* | |
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| *What is the next position that people in this job typically move to?* | |
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| *What positions are perceived to be similar in scope and complexity to this position?* | |
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| 1. **Qualifications** |
| *What knowledge, skills, education (including professional licenses or certificates), and experience are required at entry for this position?* |
| *Knowledge:* |
| *Skills:* |
| *Education (including licenses or certificates):* |
| *Experience:* |
| *What knowledge, skills, education (including professional licenses or certificates), and experience are required of a fully trained and competent employee in this position?* |
| *Knowledge:* |
| *Skills:* |
| *Education (including licenses or certificates):* |
| *Experience:* |

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| 1. **Does this employee (check all that apply):** | |
|  | Perform basic tests and measurements or assist more experienced colleagues in higher level tests and inspections? |
|  | Gather data and perform initial analysis for input into designs? |
|  | Review basic engineering designs or applications? |
|  | Prepare project documents to support and assist more experienced colleagues in contract administration? |
|  | Perform independent inspections of a limited and defined scope, or assist on broader inspections? |
|  | Make engineering recommendations for corrective actions? |
|  | Develop basic designs with minimal direction? |
|  | Develop portions of complex designs, with direction? |
|  | Review portions of moderately complex engineering designs/applications/permits? |
|  | Perform initial technical review of basic designs? |
|  | Independently administer all aspects of basic projects, including the budget? |
|  | Observe and administer portions of broad projects? |
|  | Gather and perform in-depth analysis of data for input into plans? |
|  | Perform assignments involving significant portions of large projects? |
|  | Perform assignments of moderate scope and complexity? |
|  | Serve as a technical resource? |
|  | Serve as a senior project member? |
|  | Independently interpret and apply engineering knowledge, regulations, and standards? |
|  | Have solid engineering knowledge and familiarity with an additional specialty? |
|  | Conduct complex, broad inspections? |
|  | Monitor the work of professional staff that perform inspections? |
|  | Develop moderately complex, comprehensive designs with several components, under minimal supervision? |
|  | Develop and analyze multiple design options to provide recommendations for the optimum design? |
|  | Develop specifications that involve unique applications to define plan requirements? |
|  | Review moderately complex engineering designs/applications/permits? |
|  | Independently administer all aspects of moderately complex, comprehensive projects, including budgeting and securing staff resources? |
|  | Prepare, negotiate, and execute financial agreements to ensure projects are funded? |
|  | Participate in defining engineering approaches and recommend changes in policy or procedures to respond to new technology and regulations? |
|  | Serve as a specialty representative to outside organizations to keep them informed of department activities? |
|  | Provide technical guidance to junior colleagues? |
|  | Train junior colleagues? |
|  | Review the work of junior colleagues (outside of design reviews)? |
|  | Perform advanced or specialty engineering work in large projects, or projects with a broad scope and specialized complexity? |
|  | Regarded as an expert in their area and serve as a technical expert to management and/or stakeholders? |
|  | Interpret on a broad basis, principles, theories, and concepts of an engineering specialty? |
|  | Independently modify procedures to meet situational requirements? |
|  | Serve as the go-to person for interpretation and application of regulations, specifications, and permits? |
|  | Write complex permits or documents that require modeling? |
|  | Develop complex, specialized designs? |
|  | Validate designs with appropriate stakeholders? |
|  | Bring together all portions of designs prepared by others? |
|  | Perform quality assurance checks of both internal and external designs? |
|  | Approve external designs? |
|  | Provide technical guidance to external contractors? |
|  | Independently administer complex, specialized projects? |

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|  | Serve as a resource and participate in the development and modification of internal engineering methods, tools, processes, and standards? | |
|  | Determine implications of legislative and regulatory changes and take action to address them? | |
|  | Monitor the effectiveness and consistency of internal practices, procedures, and policies and recommend improvements? | |
|  | Serve as a specialist representative to outside organizations and/or a state representative to national organization to participate in the development of national standards? | |
|  | Provide work directives to junior colleagues? | |
|  | Serve as a resource and participate in the development and modification of internal engineering methods, tools, processes and standards? | |
|  | Perform consultative engineering work that is both wide in scope (cross multiple fields) and extremely complex? | |
|  | Regarded as a state-wide expert in an engineering field of major importance to the State? | |
|  | Administer projects that are challenging from a cross-functional perspective or which contain elements of new or uncertain technology? | |
|  | Participate as a key member in policy approval by providing an authority signature? | |
|  | Approve exceptions to policies? | |
|  | Propose ways for the state to address impact and compliance issues arising out of pending legislative/regulatory changes? | |
|  | Serve as an advisor to other technical personnel by providing in-depth technical expertise to address major engineering issues? | |
|  | Coordinate and integrate efforts of all relevant divisions of the State, facilitate collective efforts, and help resolve collaboration issues? | |
|  | Collaborate with management to define technical needs? | |
|  | Lead efforts to research and explore new and emerging technology, standards, and practices? | |
|  | Identify and promote interactions with others inside and outside the State who can help capitalize on opportunities and recommend major technical areas of opportunity? | |
|  | Participate in short and long-term planning to implement major technical changes/applications across the State and to expedite the accomplishment of assigned special projects? | |
|  | Supervise one or more engineers? | |
|  | Supervise non-engineering professional-level staff? | |
|  | Supervise vocational-level staff? | |
|  | Provide day-to-day supervision over a team that carries out basic to moderately sized activities and projects? | |
|  | Contribute to other engineering fields to support broad collaboration and success? | |
|  | Supervise employees who supervise engineers? | |
|  | Supervise employees who supervise vocational-level staff and/or non-engineering professional-level staff? | |
|  | Provide day-to-day supervision of engineers to accomplish specific engineering projects or within a specific area of the engineering function? | |
|  | Coordinate work responsibilities and manage multiple teams comprised primarily of engineers or other professional staff? | |
|  | Have full technical responsibility for the results of the unit's efforts and for the effectiveness of its overall integration with other units? | |
|  | Participate in budget management and make operational decisions within delegated authority? | |
|  | Direct and administer a comprehensive program comprised of technical/professional teams and technical experts, within multiple fields? | |
|  | Have both functional and administrative responsibility for the execution and success of multiple program activities and projects where coordination across all teams is required? | |
|  | Have thorough broad knowledge of the areas managed and knowledge of the legislative scope, program related technical issues and requirements, ability to address broad operational issues, and the authority to make annual operational decisions within the context of longer-term planning? | |
| **Supervisor Signature:** | | **Date:** |