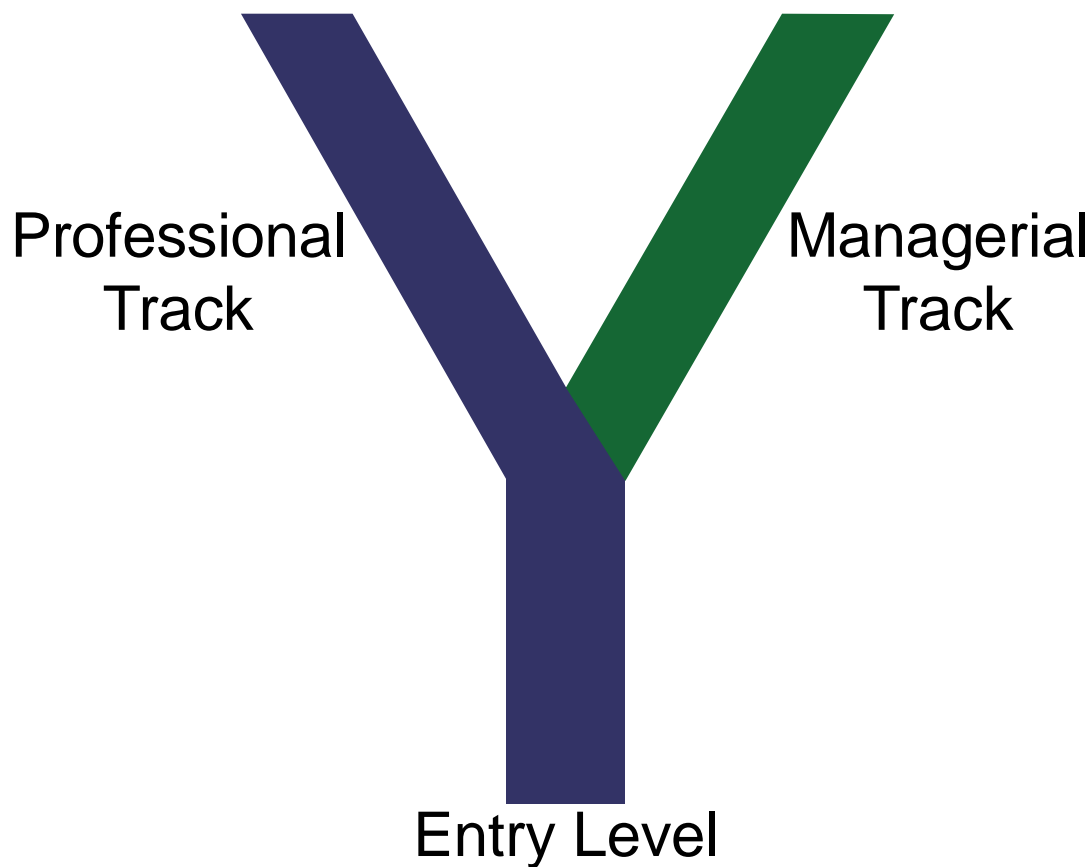




## Engineering Career Family LEVEL DESCRIPTIONS

### PURPOSE

Jobs in this family perform engineering work on a professional level that is focused on the planning, design, construction and maintenance of South Dakota State infrastructure. The jobs in this family ensure financial value of State infrastructure projects and regulatory compliance while balancing the need for public safety, standards of living, and the protection of the environment. This is accomplished through detailed design and review of engineering documents to accommodate current needs and to effectively plan for future needs; infrastructure preservation construction administration and maintenance; effective coordination of projects; and participation in the development of engineering policies.





## Engineering Career Family LEVEL 1 DESCRIPTION-Professional Track Class Code: 804001 Engineer I

# E-1

### Summary

Performs professional level engineering work that requires the application of basic engineering principles/standards, methods, and techniques following established engineering procedures and/or standard practices. Employees in this role perform assignments of specific tasks that are limited in scope, depth, and degree of skill required. To be successful in this role, employees seek guidance and advice from more experienced colleagues and are focused on gaining the knowledge and experience to perform more independently and participate in work of higher complexity.

### Nature of Work

- Performs, with direction, basic engineering activities that develop professional skills/knowledge, provide familiarization with the engineering staff, methods, practices, and projects of the State, and that add value to the State's infrastructure.
- Learns and applies relevant statutes, codes, rules, and engineering standards, specifications, and processes.
- Learns and applies applicable tools, materials (e.g., equipment), and testing procedures.
- Performs basic tests and measurements to ensure compliance with requirements.
- Writes basic permits/documents to ensure compliance with applicable statutes, rules, and regulations.
- Develops basic designs to provide plans for internal review.
- Reviews basic engineering designs/applications to report findings and makes recommendations for internal approval.
- Observes experienced project managers to learn engineering project management skills and applies learned knowledge and skills to the administration of basic portions of engineering projects.
- Undertakes specific engineering tasks of varying complexity to support and assist more experienced colleagues in:
  - higher level tests and inspections;
  - gathering data and performing initial analyses for input into designs; and
  - contract administration by preparing project documents.
- Tracks and evaluates data/observations and drafts technical report of findings.

### Competencies

- **Attention to Detail:** Shows concern for all aspects of tasks and ensures work is accurate and complete.
- **Communication:** Listens attentively and clearly conveys information and ideas to others.
- **Expertise:** Develops self to expand own knowledge, applies it, and shares with others.
- **Information Seeking:** Actively seeks, collects, and evaluates potentially useful information.
- **Initiative:** Sets goals and puts forth the effort required to achieve them.
- **Integrity:** Conducts work in a responsible and ethical manner and is committed to the organization.
- **Teamwork:** Works cooperatively with coworkers and treats them with respect.

### Job Knowledge (typical education/experience needed for entry into the level)

Bachelors Degree in engineering.

### Career Development

This role provides the opportunity to gain experience in the application of engineering principles, build competence, and begin a long-term career with the State. The State offers engineering opportunities at this level that involve exposure to a variety of tasks and partnership with more experienced engineers to expand knowledge and skills within an area of interest.

To develop proficiently in this role, it will be important to demonstrate patience, progressively learn and apply appropriate approaches on how work is performed within a state government environment, seek out answers to questions, learn how to set priorities and organize work, have confidence in own abilities, and effectively communicate (both written and verbal) with others.

For movement to the next level, an employee will need to demonstrate quality and effectiveness of work responsibilities and the full range of supporting behaviors, an understanding of the "why" behind procedures and policies, sound judgment, initiative and ability to take on more challenging responsibilities with greater independence, and desire to progress.



## Engineering Career Family LEVEL 2 DESCRIPTION - Professional Track Class Code: 804002 Engineer II

# E-2

### Summary

Performs professional level engineering work of moderate scope and/or moderate complexity. This role is for a well-grounded professional who has solid working knowledge of engineering principles and practices. Work is performed independently within the parameters of assigned tasks and in accordance with defined policies, procedures, practices and standards. Tasks require independent analysis and judgment, interpretation of data and regulations, and solving moderately complex problems. Employees in this role seek guidance and support from more experienced colleagues and outside sources when needed.

### Nature of Work

- Interprets and applies regulations and design standards; applies professional and engineering principles to develop an understanding of differing and variable situations that will guide thinking on ways to address/approach those situations.
- Undertakes required and/or federal training to obtain certifications or more advanced knowledge.
- Performs independent inspections of moderate scope (e.g., number of variables, type of regulations, locations) to ensure compliance with requirements; makes engineering recommendations for corrective actions; assists on broader scope inspections.
- Writes moderately complex permits/documents which may include performing modeling under guidance, to ensure compliance with applicable statutes, rules, and regulations.
- Develops standard designs and portions of more complex designs, with direction; validates design with appropriate stakeholders with assistance as required.
- Gathers and performs in-depth analysis of data for input into plans.
- Reviews complete and/or portions of moderately complex engineering designs/applications/permits to report findings and make recommendations for internal approval.
- Performs initial technical review of designs and works with original designer to resolve issues.
- Coordinates work with other engineers and various stakeholders to facilitate participation in the development of a project design.
- Administers (i.e., full project management including budget) projects of moderate scope and complexity; observes and administers, under direction, portions of broader projects to ensure compliance with requirements.
- Evaluates data/observations and prepares technical report of findings.

### Competencies

- **Adaptability:** Readily adjusts to changing situations and works effectively with a variety of people.
- **Attention to Detail:** Shows concern for all aspects of tasks and ensures work is accurate and complete.
- **Customer Service:** Treats customers courteously and ensures their needs are met.
- **Expertise:** Develops self to expand own knowledge, applies it, and shares with others.
- **Information Seeking:** Actively seeks, collects, and evaluates potentially useful information.
- **Initiative:** Sets goals and puts forth the effort required to achieve them.
- **Integrity:** Conducts work in a responsible and ethical manner and is committed to the organization.
- **Organization:** Plans ahead, sets priorities, and works in an orderly manner.
- **Organizational Awareness:** Understands underlying organizational issues and relationships and acts accordingly.
- **Teamwork:** Works cooperatively with coworkers and treats them with respect.

## **Job Knowledge** (typical education/experience needed for entry into the level)

Bachelors Degree in engineering plus 1-3 years of progressive experience equivalent to a Level 2 in the Engineering Career Family.

## **Career Development**

This role provides the opportunity to gain more in-depth and involved engineering experience in the application of engineering principles, including development of basic designs, more independent writing of technical documentation, and initial exposure to various stakeholders. Opportunities at this level involve working independently, networking within the State and within the industry, exercising judgement and making well informed decisions that require the interpretation of procedures, statues, codes, rules, and engineering standards, specifications and processes.

To develop proficiently in this role, it will be important to apply a thorough understanding of established rules, policies and specifications; gain a solid knowledge of the department wide organizational structure and resources; work towards performing duties more independently and make decisions without consultation while maintaining an awareness of when one does not know the answer; balance the need for high quality and accurate work with the need for achievement of timelines; and develop effective verbal and written communication skills.

For movement to the next level, an employee will need to perform responsibilities and assignments independently, confidently, accurately, effectively, and timely; demonstrate the full range of supporting behaviors; progress towards Professional Engineering license or demonstrate an interest in expanding responsibilities by tackling larger and more complex assignments; and the desire to progress.



**Engineering Career Family**  
**LEVEL 3 DESCRIPTION - Professional Track**  
**Class Code: 804003 Engineer III**

**E-3**

**Summary**

Performs professional level engineering work of broad scope and high complexity, or as part of a significant portion of large, complex project. Employees in this role serve as a technical resource or senior project member which requires independence in the interpretation and broad application of engineering knowledge, relevant regulations, and engineering standards; exercise of sound technical judgment in making decisions; and coordination of activities. Employees in this role have extensive engineering knowledge and may be acquainted with an additional specialty. They handle most issues independently and modify procedures to meet situational requirements. Advice and guidance is sought from more senior level colleagues on highly complex issues.

**Nature of Work**

- Interprets and applies more complicated regulations, specifications, and permits.
- Undertakes additional specialized or specialty training to expand level of knowledge; identifies and engages in continuing educational opportunities to maintain knowledge of current technology and standards.
- Conducts more complex, broader inspections to ensure compliance with requirements; establishes priorities; resolves disputes; determines corrective action; enforces or recommends enforcement; and monitors the work of both professional and non-professional levels.
- Writes complex permits/documents that may require modeling.
- Develops complex, comprehensive (i.e., several components) designs under minimal supervision; validates design with appropriate stakeholders.
- Develops and analyzes multiple design options (value engineering) to provide recommendations for the optimum design.
- Develops specifications that involve unique applications in order to define plan requirements.
- Reviews more complex engineering designs/applications/permits to report findings and make recommendations for internal approval.
- Performs technical review of designs developed by junior colleagues for completeness, accuracy and conformance to established procedures; works with original designer to resolve issues.
- Administers (i.e., full project management including budget and securing people resources and coordinating their contribution) complex projects, or projects that are comprehensive and broad in scope; observes and administers, under direction, portions of broader projects to ensure compliance with requirements.
- Prepares, negotiates, and executes financial agreements to ensure project is funded; directs preparation of appropriate documentation for assigned projects.
- Participates in defining engineering approaches and recommends changes in policies or procedures to respond to new technology and regulations.
- Serves as a specialty representative to outside organizations to keep informed of Departments' activities.
- Provides technical guidance, trains, and may review the work of junior colleagues to ensure work accuracy and quality, assess problems, generate alternative solutions, and to contribute to departmental performance goals.

## Competencies

- **Assertiveness:** Acts with confidence and completes work independently.
- **Attention to Detail:** Shows concern for all aspects of tasks and ensures work is accurate and complete.
- **Creativity:** Generates innovative ideas and uses them to solve problems or make improvements.
- **Customer Service:** Treats customers courteously and ensures their needs are met.
- **Decisiveness:** Exercises sound judgment and makes timely, well-informed decisions.
- **Expertise:** Develops self to expand own knowledge, applies it, and shares with others.
- **Initiative:** Sets goals and puts forth the effort required to achieve them.
- **Integrity:** Conducts work in a responsible and ethical manner and is committed to the organization.
- **Organization:** Plans ahead, sets priorities, and works in an orderly manner.
- **Relationship Building:** Builds, maintains, and strengthens relationships with others who can provide support.

## Job Knowledge (typical education/experience needed for entry into the level)

Bachelors Degree in engineering plus 3-7 years of progressive experience equivalent to a Level 3 in the Engineering Career Family;

OR Professional Engineering license plus 1-2 years of progressive experience equivalent to a Level 3 or 2-5 years of progressive experience equivalent to a Level 2.

## Career Development

This role provides the opportunity to gain exposure and experience in the application of complex engineering principles including the opportunity for specialized or specialty training. Opportunities at this level include project management, greater independence in decision making, the ability to declare focus in one or two areas of technical expertise, and serve as a technical resource to others both as a mentor to junior colleagues and peers and providing recommendations that shape future engineering approaches and procedures.

To develop proficiently in this role, it will be important to gain an interpersonal understanding of stakeholders and other involved in projects or in accomplishment of other duties and apply this understanding to communications, interactions, and in the discovery of issues/problems. It will also be important to gain an understanding and/or analyze the impact and implications of decisions while balancing the need for timely decisions and while maintaining an awareness of when one does not know the answers; work under pressure and/or deadlines which require organization and prioritization of time and resources; and utilize own past experiences and knowledge and those of others.

For movement to the next level, an employee will need to have an awareness of own strengths and will have made it known to others one's interest in leadership or further technical progression. For leadership, an employee will need to have demonstrated some leadership capability, have organizational skills, and a solid understanding of the engineering area of assignment. For technical progression, an employee will need to be sought-out as a go-to person for technical guidance and obtained a Professional Engineering license, has excelled at duties beyond the average Level 3 responsibilities and/or has gained some knowledge and skill as an engineering specialist.



## Engineering Career Family LEVEL 4 DESCRIPTION - Professional Track Class Code: 804004 Engineer IV

# E-4

### Summary

Performs advanced or specialized, professional level engineering work within complex assignments usually representing a large project or of broad scope and specialized complexity. Employees in this role are usually regarded as an expert (but may not be the only expert) in their area or perform work that requires broad engineering knowledge and understanding of the cross impacts of the work on other areas, assessment of the feasibility and soundness of proposed plans, and development of new approaches, application of existing criteria in new ways, and conclusions based on comparative situations. Work at this level requires an ability to interpret on a broad basis, principles, theories, and concepts of an engineering specialty.

### Nature of Work

- Provides specialty consultative advice, insights, interpretations, implications, and recommendations for higher-level decisions; studies and recommends unique solutions to specific problem areas.
- Serves as the go-to person for interpretation and application of regulations, specifications, and permits.
- Undertakes additional specialty trainings to expand level of knowledge; identifies and engages in continuing educational opportunities such as participating in professional organizations to maintain current knowledge of technical innovations.
- Conducts complex, specialized inspections; helps resolve complicated issues and enforcement; and monitors the work of and performs a technical review of reports prepared by junior colleagues to ensure compliance with requirements.
- Writes complex permits/documents that require modeling.
- Develops complex, specialized designs; develops and analyzes multiple design options (value engineering) to provide recommendations for the optimum design; validates design with appropriate stakeholders.
- Researches and develops new design methods to improve efficiency.
- Brings together all portions of designs prepared by others, performs a technical review, identifies and resolves discrepancies, and ensures continuity.
- Performs quality assurance checks of both internal and external designs; approves external designs; may provide technical guidance to external contractors.
- Administers (i.e., full project management including budget and securing staffing resources and coordinating their contribution) complex, specialized projects; resolves conflicting design requirements, unsuitability of standard material, and difficult coordination requirements; coordinates project activities with other operating or engineering areas to facilitate participation of appropriate staff in project completion; reviews project-related documentation to ensure accuracy; may provide expert testimony.
- Serves as a resource and participates in the development and modification of internal engineering methods, tools, processes, and standards; determines implications of legislative and regulatory changes and takes action to address them; monitors the effectiveness and consistency of internal practices, procedures, and policies and recommends improvements.
- May serve as a specialty representative to outside organizations and/or state representative to national organizations to participate in the development of national standards.
- Provides technical guidance, training, direction, and reviews the work of junior colleagues and project members to ensure accuracy, quality, and achievement of timelines. May provide input into performance reviews.

## Competencies

- **Attention to Detail:** Shows concern for all aspects of tasks and ensures work is accurate and complete.
- **Composure:** Remains focused under pressure and controls emotions.
- **Creativity:** Generates innovative ideas and uses them to solve problems or make improvements.
- **Decisiveness:** Exercises sound judgment and makes timely, well-informed decisions.
- **Developing Others:** Plans and supports the development of others.
- **Expertise:** Develops self to expand own knowledge, applies it, and shares with others.
- **Influence:** Gains acceptance or support for ideas, projects, and solutions.
- **Information Seeking:** Actively seeks, collects, and evaluates potentially useful information.
- **Initiative:** Sets goals and puts forth the effort required to achieve them.
- **Integrity:** Conducts work in a responsible and ethical manner and is committed to the organization.

## Job Knowledge (typical education/experience needed for entry into the level)

Bachelors in engineering and Professional Engineering license plus typically 2-4 years of progressive experience equivalent to a Level 4 in the Engineering Career Family; or 3-6 years of progressive experience equivalent to a Level 3.

## Career Development

This role provides the opportunity to work as an expert either within a specialization or broadly across engineering areas. Opportunities at this level involved specialty trainings; project management of highly complex and technical projects; collaboration with internal and external professionals and clients in complex decision-making and improvement of processes and better business practices; and development of new policy and/or revisions to existing policy within area of expertise.

To develop proficiently in this role, it will be important to focus growth on technical knowledge to maintain recognition as an expert; accept and be mindful of the risk and responsibility associated with being an expert; continue competence in project management and communications with others; make decisions with solid analysis and consideration of the “bigger” picture; monitor and analyze the implications of legislative and regulatory changes; and enhance the knowledge and skills of others through functional leadership.

For movement to the next level, an employee will need to have demonstrated functional leadership within area of expertise and across other engineering areas; ability to problem solve beyond own specialized expertise; and evidence of facilitating cross-specialty collaboration.





## Engineering Career Family

### LEVEL 5 DESCRIPTION - Professional Track

Class Code: 804005 Engineer V

# E-5

#### Summary

Performs consultative, highly specialized professional level engineering work that is extremely complex. Employees in this role act as an authority and are regarded as the statewide expert in an engineering field of major importance to the State and are proficient in all relevant fields. Work at this level requires that ability to conceive, develop, and evaluate engineering documents and criteria for solving a variety of unique and complex engineering problems; and to integrate traditional, modified, and new approaches that cross all relevant fields and have statewide impact. This role is typically occupied by a limited number of employees across the State Government.

#### Nature of Work

- Works to ensure uniformity and alignment of specialized techniques across an entire department.
- Participates as a key member in policy approval by providing an authority signature; approves exceptions to policies.
- Creates clear, professional and engineering principles to address differing and variable situations.
- Leads efforts to develop, modify, and implement internal engineering standards in specialized areas for use across the State.
- Coordinates and integrates efforts of all relevant departments, facilitates collective efforts, and helps to resolve collaboration issues.
- Serves as an advisor to other technical personnel. Provides in-depth technical expertise and consulting to address major engineering issues and may lead implementation of solutions.
- Collaborates with management to define technical needs.
- Participates in short- and long-term planning to implement major technical changes/applications across the State and to expedite the accomplishment of assigned special projects.
- Administers projects that are challenging from a cross-functional specialized technical perspective or which contain elements of new or uncertain technology, processes, and methods; draws on specialized expertise and networks to resolve major project issues and roadblocks (e.g., resource management, environment, safety); develops non standard processes and methodologies to meet unusual circumstances.
- Proposes ways for the State to address impacts and compliance issues arising out of pending legislative/regulatory changes.
- Serves as a specialty representative to outside organizations and/or state representative to national organizations to participate in the development of national standards.
- May influence changes to industry-wide codes, regulations, and standards in specialized area.
- Leads efforts to research and explore emergency and new technology, standards, practices of significance to the State and recommends major technical areas of opportunity; serves as a change catalyst; identifies and promotes interactions with others inside and outside the State who can help capitalize on opportunities.
- Provides technical guidance and training and ensures structures are in place to develop technical expertise within the State.
- Mentors and reviews the work of others engaged in complex technical design and applications.

#### Competencies

- **Attention to Detail:** Shows concern for all aspects of tasks and ensures work is accurate and complete.
- **Composure:** Remains focused under pressure and controls emotions.
- **Creativity:** Generates innovative ideas and uses them to solve problems or make improvements.
- **Expertise:** Develops self to expand own knowledge, applies it, and shares with others.
- **Influence:** Gains acceptance or support for ideas, projects, and solutions.
- **Initiative:** Sets goals and puts forth the effort required to achieve them.
- **Integrity:** Conducts work in a responsible and ethical manner and is committed to the organization.
- **Relationship Building:** Builds, maintains, and strengthens relationships with others who can provide support.
- **Team Leadership:** Provides clear direction and guidance to others and drives organizational change.

**Job Knowledge** (typical education/experience needed for entry into the level)

Bachelors in engineering and Professional Engineering license plus 12-18 years of progressive engineering experience.

**Career Development**

This role provides the opportunity to serve as a statewide expert in a highly technical and specialized area and serve as a technical advisor, including exploration of new technologies, standards, and practices; provide solutions to complex problems that could affect the entire State of South Dakota; partner with every division within the Department and serve as a facilitator and leader on a wide array of topics and projects; and expand network throughout the agency and industry in multiple areas.

To develop proficiency in this role, it will be important to build and strengthen relationships within the agency and externally across the State and the industry; have continued focus and identify ways to grow and broaden own technical and organizational knowledge; identify and plan for engineering improvements/solutions; and communicate effectively in order to inform, educate, and influence.



## Engineering Career Family

### LEVEL 1 DESCRIPTION - Managerial Track

Class Code: 804101 Engineering Manager I  
Class Code: 804111 Exempt Engineering Manager I

# M-1

#### Summary

Coordinates work responsibilities and leads a team(s) comprised of professional-level engineering and vocational staff; and/or supervises vocational and/or professional staff in an engineering-related area. Employees in this role provide day-to-day supervision over a team that carries out basic to moderately sized activities and projects; employees at this level also contribute to other engineering fields to support broad collaboration and success. Work at this level requires thorough knowledge of the team's requirements, the ability to address operational and strong functional issues, and the authority to make short-term operational decisions.

#### Nature of Work

- Aligns work with management goals and objectives and accordingly establishes goals and expectations for team members.
- Recommends resources and budgetary requirements for annual planning purposes; may write justifications for resources.
- Creates a positive work environment that maximizes the strengths of members and focuses on individual and team developmental areas in order to increase the capability of staff and to ensure work accuracy and quality.
- Reviews work and monitors progress and performance of activities and projects, provides guidance and coaching, and motivates on an individual and team level to ensure consistency of work and achievement of goals.
- Assists in interviewing and hiring; provides input on personnel actions such as performance reviews and discipline to ensure adequate and competent staff.
- Provides technical guidance to team; identifies training needs and works to ensure training is made available to staff.
- Acts as a technical reference for the team, other technical colleagues, public, and consultants; maintains up-to-date knowledge of own engineering field of expertise and engages in continuing educational opportunities such as participating in professional organizations to maintain current knowledge of technical innovations.
- Identifies gaps or improvement areas, initiates and develops team processes and procedures for responsibilities such as inspections, permitting, design, and reviews; recommends and implements departmental policies; resolves technical disputes between team members.
- Manages activities and projects at the team level; develops a direction and plans for meeting identified goals and objectives, including setting priorities, assigning or re-arranging work and projects; manages related budgets and/or other funds.
- Coordinates activities and plans, directs, and utilizes available resources to provide effective team/project management and to ensure work is completed in accordance with statutes, codes, rules, and engineering standards, specifications, and processes.
- Performs the same activities of team; evaluates and reviews designs and specifications prepared by professional staff; reviews and approves staff prepared technical reports, recommended enforcement actions, and permits.
- Collaborates and communicates with other teams and engineering specialists to obtain information and needed resources.
- Determines implications of legislative and regulatory changes and takes action to address them; monitors the effectiveness and consistency of internal practices, procedures, and policies and recommends improvements.
- Educates staff on new developments and communicates critical information to ensure compliance and advancements in methods and techniques.

#### Competencies

- Displays Integrity & Commitment
- Acts Decisively
- Builds Strong Alliances
- Demonstrates Astuteness
- Builds Competence
- Exercises Due Diligence
- Focuses on Customer Needs
- Achieves Successful Results
- Communicates Powerfully
- Develops Successful Teams

**Job Knowledge** (typical education/experience needed for entry into the level)

Bachelors Degree in engineering or a Professional Engineering license plus typically 3-6 years of progressive experience equivalent to a Level 3 on the professional track in the Engineering Career Family; or 1-3 years team lead experience equivalent to Management Level 1.

**Career Development**

This role provides the opportunity to begin a leadership career with the State through delegated authority to lead a team, to motivate, to mentor, and to impact team performance. Opportunities at this level involve exposure to a greater part of the business; more in-depth and regular interactions with higher level management, including participation in management decision making.

To develop proficiently in this role, it will be important to shift focus from performing individual contributor work the majority of the time to a more balanced focus on leading a team and engaging in the work performed by team members. It will also be important to seek answers, guidance, and training to address one's gap in knowledge and abilities, personnel rules and regulations, resource management, and decision making authority.



## Engineering Career Family

### LEVEL 2 DESCRIPTION - Managerial Track

Class Code: 804102 Engineering Manager II  
Class Code: 804112 Exempt Engineering Manager II

# M-2

#### Summary

Coordinates work responsibilities and manages multiple teams comprised of primarily professional staff (which must include engineers), and may oversee the first level of management/supervision in the Engineering Job Family. Employees in this role provide day-to-day supervision of engineers and technicians to accomplish specific engineering projects or within a specific area of the engineering function. Employees at this level have full technical responsibility for the results of the unit's efforts and for the effectiveness of its overall integration with other units as well as participate in budget management and make operational decisions within delegated authority.

#### Nature of Work

- Aligns work with department level management goals and objectives and accordingly establishes own vision, goals and expectations for area of responsibility; recommends future project needs.
- Delegates supervision and/or coordinates activities across multiple teams/project processes.
- Justifies needs for resources and manages assigned budgets to ensure proper expenditure of funds; approves acquisition of resources within established delegated authority; provides input into development of program budget.
- Plans, directs, and utilizes available resources across area of responsibility in order to complete designs/work documents that are in accordance with established regulations and engineering standards, specifications, and processes.
- Creates a positive work environment that maximizes the strengths of members and focuses on individual and team developmental areas in order to increase the capability of staff and to ensure work accuracy and quality.
- Reviews work and monitors progress and performance of multiple teams and/or first level of management, provides guidance and coaching, and motivates on an individual and team level to ensure consistency of work and achievement of goals.
- Manages and engages in effective people management activities such as recruitment, interviewing, hiring, training and retention, including personnel actions such as performance reviews and discipline to ensure adequate and competent staff.
- Provides technical guidance to team; identifies training needs and works to ensure training is made available to staff.
- Evaluates, reviews and approves designs and specifications; reviews technical feasibility of proposed solutions to engineering problems; reviews and approves staff prepared technical reports, recommended enforcement actions, and permits.
- Manages and monitors multiple team projects, taking a holistic approach within area of responsibility; develops a direction and plan for meeting identified goals and objectives, including setting priorities, assigning or re-arranging work and projects.
- Collaborates and communicates with other fields, engineering specialists and experts to obtain information and resources.
- Helps solve difficult technical problems; maintains up-to-date knowledge of own engineering field of expertise and engages in continuing educational opportunities such as participating in professional organizations to maintain current knowledge of technical innovations.
- Serves as a spokesperson in public forums and builds relationships with key stakeholders; provides dispute resolution in a variety of situations such as between internal and external stakeholders and every combination there of; between team members; and contractual claims.

#### Competencies

- Displays Integrity & Commitment
- Acts Decisively
- Builds Strong Alliances
- Demonstrates Astuteness
- Builds Competence
- Exercises Due Diligence
- Focuses on Customer Needs
- Achieves Successful Results
- Communicates Powerfully
- Develops Successful Teams

**Job Knowledge** (typical education/experience needed for entry into the level)

Bachelors Degree in engineering, plus 8-10 years progressive technical experience, and experience either managing others in a supervisory capacity or demonstrated ability to effectively lead others.

**Career Development**

This role provides the opportunity to strengthen leadership behaviors and abilities; lead and build multiple effective teams of professional staff and/or first level management; and learn budget development and fiscal management.

To develop proficiently in this role, it will be important to translate goals into clear expectations and direction; delegate responsibility based on an awareness of the abilities and skills of team members; focus on team-wide needs and respond to areas for improvement; strengthen key relationships; advance both team and own knowledge and abilities; strengthen communication skills to effectively coordinate assignments across teams and complete commitments within timelines, and gain knowledge of budget management.



**Engineering Career Family**  
**LEVEL 3 DESCRIPTION - Managerial Track**  
Class Code: 804103 Engineering Manager III  
Class Code: 804113 Exempt Engineering Manager III

**M-3**

**Summary**

Directs and administers a comprehensive program comprised of technical/professional teams and technical experts within the multiple fields. Employees in this role have both functional and administrative responsibility for the execution and success of multiple program activities and projects where coordination across all teams is required. Work at this level requires thorough and broad knowledge of the areas managed and 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.

**Nature of Work**

- Develops and negotiates annual plan for a comprehensive engineering program; understands and clearly articulates department goals and engineering requirements as context for tactical program planning, developing, prioritizing, implementing and monitoring of operations; establishes goals for individual teams/multiple projects.
- Develops and has overall responsibility for program goals and objectives, policies and procedures, and technical standards; provides input in the strategic planning process for the department and the long-term logistical and product/service planning of the program.
- Identifies linkages between projects and work performed in other parts of the department or State and collaborates to achieve overall department goals.
- Evaluates engineering value and ensures project activities are performed in a manner that results in sound and safe State infrastructure; meets current and future needs; and protects public health and the environment.
- Delegates supervision and/or coordinates activities across the program with the aim of accomplishing engineering goals while balancing value, costs, practices, and staffing.
- Works with managerial employees to identify training needs; provides policy direction on required trainings.
- Instills a sense of vision and direction in teams and creates a positive work environment that leverages the strengths of members and focuses on individual, team, and program-wide developmental areas in order to increase the capabilities and ensure success of program goals.
- Identifies, allocates, reorganizes, and provides necessary resources and requirements to achieve program objectives and goals, considering future engineering needs and issues, and to meet the needs of staff; recommends outsourcing needs.
- Develops and maintains effective working relationships with internal and external stakeholders to ensure coordination, understanding, and support of program goals, objectives and requirements; serves as department spokesperson in public forums.
- Anticipates program issues/problems and develops plans for problem resolution; reviews and approves high profile designs, permits, or other work documents; resolves claims.
- Recommends rules and regulations for board approval; analyzes the impact of state and federal laws and regulations on the program and advises senior management on approaches to issues.
- Utilizes technical knowledge and experience to generate and develop insights, approaches, and improvements that may have impact beyond immediate program. Maintains proficiency and develops technical/managerial knowledge and networks.
- Manages and engages in effective people management activities such as recruitment, interviewing, hiring, training and retention, including personnel actions such as performance reviews and discipline to ensure adequate and competent staff; approves hiring recommendations.
- Develops budget projections, justifies needs, and manages budget(s) for program to ensure proper expenditure of funds.

## Competencies

- Displays Integrity & Commitment
- Acts Decisively
- Builds Strong Alliances
- Demonstrates Astuteness
- Builds Competence
- Exercises Due Diligence
- Focuses on Customer Needs
- Achieves Successful Results
- Communicates Powerfully
- Develops Successful Teams

## Job Knowledge (typical education/experience needed for entry into the level)

Bachelors Degree in engineering, plus progressive technical experience over 10 or more years, and experience managing others in a supervisory capacity, developing and managing budgets, and working knowledge of state government.



## Career Development

This role provides the opportunity to have independence and accountability for the administration and direction of a program, gain pride from facilitating others' success, and to influence statewide policy. Opportunities at this level involve: work variety and the need to think through all of the variables; participation in agency direction; and interaction with key stakeholders both internally and externally.

To develop proficiently in this role, it will be important to identify what motivates key stakeholders, peers, and employees in order to advance program goals and performance; delegate responsibility and focus primarily on leading and providing direction; develop the talents and skills of management level 1 and 2; gain guidance and coaching on how to deal with tough personnel issues; identify short and long term needs and opportunities and analyze implications to develop a strong vision and direction for the program.