

Plans Examiner

SUMMARY/PURPOSE

Under the authority of Minnesota State Statute and the City of Duluth Building Official, protect the community, first responders, and property from hazard, injury, and destruction by overseeing design of construction in the City of Duluth through review of applications and construction documents for all construction work, ensuring compliance with the Minnesota State Building Code. Provide code-related professional and technical expertise to the Construction Services & Inspections team, contractors, architects, engineers, drafters, and others.

SUPERVISION RECEIVED

The supervisor provides continuing or individual assignments by indicating generally what is to be done, limitations, quality and quantity expected, deadlines, and priority of assignments. The supervisor provides additional, specific instructions for new, difficult, or unusual assignments, including suggested work methods or advice on source material available.

SUPERVISION GIVEN

Does not supervise.

ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Review all types of construction documents (such as site, civil, architectural, and structural plans, geotechnical reports, specifications, and calculations) prepared by architects, engineers, contractors, and owners to ensure compliance with building codes, ordinances, statutes, and life safety regulations.
2. Identify aspects of plans that do not comply with the required codes and standards, and communicate code requirements to architects, engineers, contractors, and owners for correction.
3. Compose plan review comment letters documenting non-compliances, requesting corrections, and obtaining all necessary information for a complete, accurate, compliant set of construction documents to be used for construction.
4. Compile complete construction documents to be used by inspectors to ensure construction complies with codes and standards.
5. Interpret and explain code requirements to inspectors and provide them with technical support to resolve field related code issues.
6. Perform field inspections to observe site conditions and provide guidance to inspectors, contractors, architects, engineers, and others in problem-solving during construction.
7. Advise design professionals (architects, engineers, surveyors, etc.) developers, contractors, drafters, inspectors, homeowners, and others regarding how designs comply with applicable codes and standards.
8. Accurately identify deficiencies in critical aspects of the life safety requirements in buildings of all construction types, heights, areas, and occupancies, and any combination thereof, and verify that engineers and architects have used appropriate criteria for building design.
9. Serve as a technical expert, conduct presentations, and provide information to other City divisions, contractors, engineers, architects, and the public regarding codes, ordinances, and proper methods governing building design and construction work.
10. Assist homeowners, designers, and contractors in mitigating risk at the work site by advising them of precautionary, safety, and fire prevention methods that may be employed during the construction phase of the work, and compile informational handouts on commonly asked questions regarding building codes and ordinances and plan submittal requirements.
11. Research regulations, codes, and standards, and construction methods and materials to determine code compliance and for consideration by the Building Official as permitted alternate materials, methods, and modifications.
12. Interpret, explain, and enforce provisions of the building code, fire code, and other laws and regulations related to the construction of buildings.
13. Communicate effectively to explain complex technical requirements to constituents with all levels of experience, translating code language to common language.

14. Organize and lead pre-plan-review meetings with architects, engineers, developers, and others to discuss projects in the design phase and provide preliminary feedback.
15. Through discussion and research, ascertain existing and/or proposed use, purpose, existing conditions, and occupancy classification of buildings and spaces to determine code requirements.
16. Maintain complete and accurate files, paper or digital, of plan reviews, approvals, meeting notes and correspondence in CSI division records, including permitting and plan review software.
17. Perform math computations to determine code requirements for structural and other components of construction, and determine whether designs comply with applicable regulations.
18. Review plans for buildings and structures which incorporate routine to complex architectural and structural concepts in their design.
19. Review new legislation regarding building codes, ordinances, and regulations, and attend and participate in workshops, meetings, seminars, and/or training opportunities regarding certification, to acquire current industry knowledge, and to maintain current knowledge.
20. Coordinate approval process of building or remodeling plan review with appropriate inspection units including construction, electrical, plumbing, heating, and ventilation.
21. As a delegate of the Building Official, regularly exercise thoughtful independent judgment and decision-making in keeping with Building Official policy and interpretation.
22. Perform public outreach in the form of targeted events that serve to educate design professionals, contractors, and/or the general public about various building code topics, as well as permitting and review processes geared towards facilitating successful building projects.
23. Be an effective team member by exhibiting self-motivation, supporting other employees in handling tasks, interacting effectively and respectfully with others, showing a desire to contribute to the team effort, accepting assignments willingly, and completing tasks within agreed upon timelines.
24. Other duties may be assigned.

JOB REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements
 - A. A minimum of six (6) years of related education and/or professional experience working with codes in construction, plan review, or building design, OR; three (3) years of experience working in the City of Duluth as a Construction Inspector or Permit Coordinator. An Associate's or Bachelor's degree in a related field may be substituted for two (2) years of experience.
2. License Requirements
 - A. Must obtain certification as a Plans Examiner from a nationally recognized code agency within two (2) years of appointment.
3. Knowledge Requirements
 - A. Expert knowledge of the entirety of the Minnesota Building Code and other related ordinances, laws, regulations, and manuals governing building design and construction.
 - B. Moderate knowledge of mechanical, plumbing, electrical, and fire codes.
 - C. Extensive knowledge of architectural design principles and building construction methods.
 - D. Knowledge of City of Duluth zoning ordinances and regulations.
 - E. Extensive knowledge of construction materials.
 - F. Knowledge of office methods and procedures.
 - G. Knowledge of nomenclature used in plan review.
 - H. Extensive knowledge of legal aspects of building code enforcement.
 - I. Extensive knowledge of current architectural practices, procedures, and techniques, including specialty engineering.
 - J. Basic knowledge of algebra, geometry, and trigonometry in order to evaluate designs for compliance with the building code.

- K. Knowledge of basic engineering principles.
 - L. Knowledge of problem-solving and conflict-resolution techniques.
 - M. Knowledge of applicable safety requirements.
 - N. Knowledge of, or the ability to learn, City policies and procedures.
4. Skill Requirements
- A. Skill in reading and interpreting legal descriptions, building plans, specifications, codes, and ordinances.
 - B. Skill in properly applying building codes and ordinances.
 - C. Skill in maintaining records and files, both paper and electronic.
 - D. Skill in communicating orally and in writing.
 - E. Skill in the operation of office equipment including, but not limited to, general computer systems, job required software applications, the internet, and modern office equipment.
 - F. Skill in managing one's own time.
 - G. Skill in completing assignments accurately and with attention to detail.
5. Ability Requirements
- A. Ability to read, understand, and discuss building codes, construction documents, and other material used in the design, regulation, and construction of buildings and sites.
 - B. Ability to apply complex technical regulations to details of construction to determine compliance.
 - C. Ability to write effectively to explain code issues and requirements to professionals and non-professionals.
 - D. Ability to use a computer for communication, research, data entry, recordkeeping, and plan review.
 - E. Ability to provide a high standard of public service in the form of clear, consistent, and timely communication with the public, contractors, architects, engineers, and others in the community.
 - F. Ability to effectively multi-task and reorganize tasks to address priority items.
 - G. Ability to work professionally and maintain composure with individuals experiencing a wide range of emotions related to their construction projects.
 - H. Ability to interpret structural plans and calculations to determine correct design criteria is used, load paths are complete, and structural components are properly protected for fire-resistance.
 - I. Ability to undertake electronic plan review utilizing industry standard software packages to annotate and otherwise manipulate electronic drawing files.
 - J. Ability to use GIS software to verify setback requirements, confirm property line location and dimensions, and assess slope and drainage conditions.
 - K. Ability to persuade people to work towards alternative solutions to problems.
 - L. Ability to interpret instructions furnished in written, oral, or diagrammatic form.
 - M. Ability to read and interpret complex legal regulations.
 - N. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.
 - O. Ability to communicate and interact effectively with members of the public.
 - P. Ability to communicate effectively both orally and in writing.
 - Q. Ability to understand and follow instructions.
 - R. Ability to problem-solve a variety of situations.
 - S. Ability to set priorities and complete assignments on time.
 - T. Ability to attend work as scheduled and/or required.

Physical Demands

The work requires some physical exertion such as long periods of standing; walking over rough, uneven, or rocky surfaces; recurring bending, crouching, stooping, stretching, reaching, or similar

activities; recurring lifting of moderately heavy items such as record boxes. The work may require specific, but common, physical characteristics and abilities such as above.

Work Environment

The work environment occasionally involves moderate risks or discomforts requiring special safety precautions (e.g., working around moving parts, carts, or machines, or with contagious diseases or irritant chemicals). Employees may be required to use protective clothing or gear such as masks, gowns, coats, boots, goggles, gloves, or shields.

HR: CK	Union: Basic	EEOC: Technicians	CSB: 05/16/2023	Class No: 3428
WC: 8810	Pay:	EEOF: Housing	CC:	Resolution:

PLANS EXAMINER

Plans Examiner

SUMMARY/PURPOSE: ~~_____ Assist~~

Under the authority of Minnesota State Statute and the City of Duluth Building Official, protect the community, first responders, and property from hazard, injury, and destruction by overseeing design of construction in the City of Duluth through review of applications and construction documents for all construction work, ensuring compliance with the Minnesota State Building Code. Provide code-related professional and technical expertise to the Construction Services & Inspections team, contractors, architects, engineers, drafters, and others.

SUPERVISION RECEIVED

The supervisor provides continuing or individual assignments by indicating generally what is to be done, limitations, quality and quantity expected, deadlines, and priority of assignments. The supervisor provides additional, specific instructions for new, difficult, or unusual assignments, including suggested work methods or advice on source material available.

SUPERVISION GIVEN

Does not supervise.

ESSENTIAL DUTIES AND RESPONSIBILITIES

1. Review all types of construction documents (such as site, civil, architectural, and structural plans, geotechnical reports, specifications, and calculations) prepared by architects, engineers, contractors, and owners, to ensure compliance with building codes, ordinances, statutes, and life safety regulations.
2. Identify aspects of plans that do not comply with the required codes and standards, and communicate code requirements to architects, engineers, contractors, and owners for correction.
3. Compose plan review comment letters documenting non-compliances, requesting corrections, and obtaining all necessary information for a complete, accurate, compliant set of construction documents to be used for construction.
4. Compile complete construction documents to be used by inspectors to ensure construction complies with codes and standards.
5. Interpret and explain code requirements to inspectors and provide them with technical support to resolve field related code issues.
6. Perform field inspections to observe site conditions and provide guidance to inspectors, contractors, architects, engineers, and others in problem-solving during construction.
7. Advise design professionals (architects, engineers, surveyors, etc.) developers, contractors, drafters, inspectors, homeowners, and others in obtaining building permits by reviewing plans submitted with building permit applications for compliance regarding how designs comply with applicable codes and approving when standards.
8. Accurately identify deficiencies in critical aspects of the life safety requirements in buildings of all construction types, heights, areas, and occupancies, and any combination thereof, and verify that engineers and architects have used appropriate criteria for building design.

FUNCTIONAL AREAS:

1. _____ Review and approve building construction plans and permits.
- * _____ A. _____ Obtain and review commercial and residential building plans and specification for compliance with building codes, ordinances, statutes, and life safety. Serve as a technical expert, conduct presentations, and provide information to other City divisions, contractors, engineers, architects, and the public regarding codes, ordinances, and proper methods governing building design and construction work.

10. Assist homeowners, designers, and contractors in mitigating risk at the work site by advising them of precautionary, safety, and fire prevention methods that may be employed during the construction phase of the work, and compile informational handouts on commonly asked questions regarding building codes and ordinances and plan submittal requirements.

Research regulations.

* ~~B. Perform mathematical computations, codes and standards, and construction methods and materials to determine required design loads and verify the strength of various structural components.~~

11. * ~~C. Interpret complex regulations and recommend approval of equivalents for code compliance and for consideration by the Building Official=s approval as permitted alternate materials, methods, and modifications.~~

12. * ~~D. Interpret, explain, and enforce provisions of the building code, zoning requirements, fire code, and other laws and regulations related to the construction of buildings.~~

* ~~E. Review site plans.~~

* ~~F. Schedule and attend preconstruction conferences with builders, architects, engineers, and others to review preliminary plans.~~

13. * ~~G. Confer~~Communicate effectively to explain complex technical requirements to constituents with all levels of experience, translating code language to common language.

14. Organize and lead pre-plan-review meetings with architects, engineers, contractors and owners regarding methods, developers, and others to discuss projects in the design phase and provide preliminary feedback.

15. Through discussion and research, ascertain existing and/or proposed use, purpose, existing conditions, and occupancy classification of buildings and spaces to determine code requirements.

16. Maintain complete and accurate files, paper or digital, of plan reviews, approvals, meeting notes and correspondence in CSI division records, including permitting and plan review software.

17. Perform math computations to determine code requirements for structural and other components of construction and features of design, determine whether designs comply with applicable regulations.

18. * ~~H. Review plans for buildings and structures which incorporate routine to complex architectural and structural concepts in their design.~~

* ~~I. Determine applicable building code requirements.~~

* ~~J. Review and as applicable, approve plans submitted with permit applications.~~

* ~~K. Identify aspects of plans that don=t comply with the Building Code and communicate code requirements to the applicant for correction.~~

* ~~L. Calculate valuations for the purpose of determining permit fees.~~

* ~~M. Perform related tasks as required.~~

2. Provide information and assistance to property owners, contractors, developers, architects, engineers, Building Safety staff and the general public.

* ~~A. Interpret building codes, ordinances, and statutes.~~

* ~~B. Provide explanations of code requirements that pertain to submitted plans.~~

* ~~C. Research and respond to inquiries.~~

* ~~D. Maintain accurate files, both paper and computer, on plan reviews, meeting notes and correspondence.~~

* ~~E. Review new legislation regarding building codes, ordinances, and regulations.~~

* ~~F. Compile informational handouts on commonly asked questions regarding building codes and ordinances and plan submittal requirements.~~

* ~~G. Attend required code change seminars and conferences held by the State Building Code Division and other agencies.~~

19. * ~~H. Attend, and attend and participate in workshops, meetings, seminars, and/or training opportunities regarding certification, to acquire current industry knowledge, and to maintain current knowledge.~~

- * ~~I. Advise City inspectors, builders, owners, contractors and architects on building and structural problems, and required modifications to plans/specifications/blueprints to bring about compliance.~~
- * ~~J. Discuss technical requirements of plans with engineers, contractors, builders or owners for correction to plans as necessary and return plans for corrections and re-submission.~~
- * ~~K. Interpret and explain building regulation options and methods for modifying plans submitted to comply with the building code.~~
- * ~~L. Provide technical advice to building inspectors.~~
- 20. * M. Coordinate approval process of building or remodeling plan review with appropriate inspection units including construction, electrical, ~~structural~~, plumbing, heating and ventilation.
- 21. As a delegate of the building official, regularly exercise thoughtful independent judgement and decision-making in keeping with building official policy and interpretation.
- 22. Perform public outreach in the form of targeted events that serve to educate design professionals, contractors, and/or the general public about various building code topics, as well as permitting and review processes geared towards facilitating successful building projects.
- 23. Be an effective team member by exhibiting self-motivation, supporting other employees in handling tasks, interacting effectively and respectfully with others, showing a desire to contribute to the team effort, accepting assignments willingly, and completing tasks within agreed upon timelines.
- 24. Other duties may be assigned.

JOB REQUIREMENTS

EDUCATION AND EXPERIENCE REQUIREMENTS:

- H ~~A. Three (3) years of verifiable experience reviewing residential and commercial building plans for compliance with applicable codes.~~

LICENSE REQUIREMENT:

~~A. Certification~~ To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed are representative of the knowledge, skills, and abilities required.

1. Education & Experience Requirements

- A. A minimum of six (6) years of related education and/or professional experience working with codes in construction, plan review, or building design, OR; three (3) years of experience working in the City of Duluth as a Construction Inspector or Permit Coordinator. An Associate's or Bachelor's degree in a related field may be substituted for two (2) years of experience.

2. License Requirements

- A. Must obtain certification as a Plans Examiner from a nationally recognized code agency within two (2) years of appointment.

KNOWLEDGE REQUIREMENTS:

3. H.A. Knowledge Requirements

- A. Expert knowledge of the entirety of the Minnesota Building Code and other related ordinances, laws, regulations, and manuals governing building design and construction.
- B. Moderate knowledge of mechanical, plumbing, electrical, and fire codes.

~~Extensive knowledge of applicable building codes, ordinances, and statutes.~~

- C. ~~H~~ B. ~~Extensive Knowledge of architectural design principles and building construction methods.~~
- D. ~~±~~ C. Knowledge of City of Duluth zoning ordinances and regulations.
- E. Extensive knowledge of construction materials.
- F. ~~H~~ D. ~~Knowledge of office methods and procedures.~~
- G. ~~±~~ E. ~~Knowledge of nomenclature used in plan review.~~
- H. ~~±~~ F. ~~Extensive knowledge of legal aspects of building code enforcement.~~
- I. ~~±~~ G. ~~Extensive knowledge of current architectural practices, procedures, and techniques, including specialty engineering.~~
- J. ~~H~~ H. Basic ~~Knowledge~~ knowledge of algebra, geometry, and trigonometry in order to evaluate designs for compliance with the Building Code.
- K. ~~±~~ I. ~~Knowledge of basic engineering principles.~~

SKILL REQUIREMENTS:

- ~~H~~ A. ~~Skill in communicating effectively orally and in writing.~~
- ~~H~~ B. ~~Skill in operating computers, calculators, and other office machines.~~
- L. ~~H~~ C. Knowledge of problem-solving and conflict-resolution techniques.
- M. Knowledge of applicable safety requirements.
- N. Knowledge of, or the ability to learn, City policies and procedures.

4. Skill Requirements

- A. Skill in reading and interpreting legal descriptions, building plans, specifications, codes, and ordinances.
- B. ~~±~~ D. ~~Skill in properly applying building codes and ordinances.~~
- C. ~~H~~ E. ~~Skill in maintaining records and files, both paper and electronic.~~
- D. ~~H~~ F. ~~Skill in interpersonal communicating orally and customer relations and conflict management in writing.~~
- ~~±~~ G. Skill in analyzing difficult situations and handling controversy.

ABILITY REQUIREMENTS:

- ~~H~~ A. ~~Ability to establish and maintain effective working relationships with supervisors, peers, and the operation of office equipment including, but not limited to, general public.~~
- ~~H~~ B. ~~Ability to exercise independent judgment.~~
- E. ~~H~~ C. Ability to transport oneself to, from, and around construction sites within computer systems, job required software applications, the City of Duluth internet, and modern office equipment.
- F. ~~±~~ D. Skill in managing one's own time.
- G. Skill in completing assignments accurately and with attention to detail.

5. Ability Requirements

- A. Ability to read and, understand, and discuss building codes, construction documents, and other material used in the design, regulation, and construction of buildings and sites.
- B. Ability to apply complex technical regulations to details of construction to determine compliance.
- C. Ability to write effectively to explain code issues and requirements to professionals and non-professionals.
- D. Ability to use a computer for communication, research, data entry, recordkeeping, and plan review.
- E. Ability to provide a high standard of public service in the form of clear, consistent, and timely communication with the public, contractors, architects, engineers, and others in the community.

- ~~F. Ability to effectively multi-task and reorganize tasks to address priority items.~~
- ~~G. Ability to work professionally and maintain composure with individuals experiencing a wide range of emotions related to their construction projects.~~
- ~~H. Ability to interpret blueprints, site plans, architectural designs, and construction specifications.~~
- ~~I. Ability to interpret structural plans and calculations to determine correct design criteria is used, load paths are complete, and structural components are properly protected for fire-resistance.~~
- ~~J. Ability to calculate structural loads, stress and other calculations necessary to approve proposed plans.~~
- ~~K. Ability to develop alternative solutions to problems.~~
- ~~L. Ability to undertake electronic plan review utilizing industry standard software packages to annotate and otherwise manipulate electronic drawing files.~~
- ~~M. Ability to use GIS software to verify setback requirements, confirm property line location and dimensions, and assess slope and drainage conditions.~~
- ~~N. Ability to persuade people to work towards alternative solutions to problems.~~
- ~~O. Ability to interpret instructions furnished in written, oral, or diagrammatic form.~~
- ~~P. Ability to read and interpret complex legal regulations.~~
- ~~Q. Ability to create and maintain a positive working environment that welcomes diversity, ensures cooperation, and promotes respect by sharing expertise with team members, fostering safe work practices, and developing trusting work relationships.~~
- ~~R. Ability to communicate and interact effectively with members of the public.~~
- ~~S. Ability to communicate effectively both orally and in writing.~~
- ~~T. Ability to understand and follow instructions.~~
- ~~U. Ability to problem-solve a variety of situations.~~
- ~~V. Ability to set priorities and complete assignments on time.~~
- ~~W. Ability to attend work on a regularly as scheduled basis and/or required.~~
- ~~X. Ability to occasionally lift and carry articles such as dockets, ledgers, plans and specifications weighing up to 40 pounds.~~

* Essential functions of the classification.

H Minimum requirements of the classification necessary on the first day of employment.

Physical Demands

The work requires some physical exertion such as long periods of standing; walking over rough, uneven, or rocky surfaces; recurring bending, crouching, stooping, stretching, reaching, or similar activities; recurring lifting of moderately heavy items such as record boxes. The work may require specific, but common, physical characteristics and abilities such as above.

Work Environment

The work environment occasionally involves moderate risks or discomforts requiring special safety precautions (e.g., working around moving parts, carts, or machines, or with contagious diseases or irritant chemicals). Employees may be required to use protective clothing or gear such as masks, gowns, coats, boots, goggles, gloves, or shields.

HR: KGCK	Union: Basic	EEOC: Technicians	CSB: 20050208	Class No: 3428
WC: 8810	Pay: 29	EEOF: Housing	CC: 20051024	Resolution: 05-0703R