TABLE OF CONTENTS

CHAPTER 1 – GENERAL CONDITIONS	1-1
1.1 GENERAL CONSIDERATIONS	1-1
1.2 APPLICABLE SPECIFICATIONS	1-1
1.3 DESIGN STANDARDS	1-1
1.4 DEFINITIONS AND TERMS	1-1
1.5 CHANGES TO STANDARDS	1-3
1.6 SEVERABILITY	1-3
1.7 DEPARTMENTS AND RESPONSIBILITIES	1-3
1.7.1 Community Development Department	1-3
1.7.2 Public Works Department	1-4
1.7.3 Engineering Department	1-4
1.8 DESIGN AND PLAN SUBMITTAL REQUIREMENTS	1-4
1.8.1 General Requirements	1-4
1.8.2 Plan Submittal and Review Sequence	1-5
1.8.3 Boundary Survey Requirements and Monumentation	1-6
1.8.4 Construction Plan	1-6
1.8.5 Traffic Control Plan	1-7
1.9 PERMITS	1-8
1.9.1 Permits Reviewed or Issued by the ENGINEERING DEPARTMENT	1-8
1.9.2 Application Process for RIGHT-OF-WAY, GRADING AND ACCESS Permits	1-10
1.10 CONSTRUCTION CONTROL	1-11
1.11 TESTING	1-11
1.12 INSPECTION	1-11
1.13 FEES	1-12
1.14 BONDING and FINANCIAL ASSURANCES	1-13
1.14.1 Performance Bond	1-13
1.14.2 financial assurances release	1-13
1.14.3 Warranty bond	1-13
1.15 GUARANTEES, WARRANTY AND ACCEPTANCE OF PUBLIC IMPROVEMENTS	1-14
1.16 UTILITY LOCATIONS	1-14
1.16.1 Easements and Dedications for Utilities, Streets and Alleys, Pedestrian Access a Drainage	nd 1-15
1.16.2 Utility, drainage, street and alley and pedestrian easements:	1-15
1.17 TRAFFIC CONTROL	1-15
1.18 CALL BEFORE YOU DIG	1-16
1.19 GENERAL REQUIREMENTS FOR WORK WITHIN THE CITY RIGHT OF WAY OR CITY PROPERTY	ON 1-16
1.20 UTILITY SERVICE AND EXTENSIONS	1-18
1.21 SYSTEM IMPROVEMENT FEES - WATER AND SEWER	1-18

APPENDICES 1-19

CHAPTER 1 – GENERAL CONDITIONS

1.1 GENERAL CONSIDERATIONS

- A. These Engineering Standards and Guidelines will also be cited in the text as the "Standards."
- B. These Standards shall govern all new construction, reconstruction and rehabilitation of City of Glenwood Springs (City) operated sewer, water, stormwater, electrical, solid waste, and broad band utilities as well as to any publically maintained roads within the City. In addition, these standards and guidelines shall apply to all private developments within the City.

1.2 APPLICABLE SPECIFICATIONS

A. Refer to Chapter sections for applicable specification sections.

1.3 DESIGN STANDARDS

- A. The following codes and manuals shall be applicable when pertinent to the work, when specifically cited in these Standards, or when required. Refer to individual chapters for additional design standards.
 - 1. Rules and Regulations as adopted in the City of Glenwood Springs Municipal Code
 - 2. Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD)

1.4 DEFINITIONS AND TERMS

As-built drawings: A set of reproducible "As Builts" or otherwise marked construction drawings to record all changes which have occurred during construction.

CDOT: Colorado Department of Transportation.

City: The City of Glenwood Springs, Colorado, the City Engineer, the Engineering Department or his/her designee.

City Engineer: The City of Glenwood Springs City Engineer or his/her designee.

Contractor: A person, partnership or corporation duly bonded, licensed and insured to perform work within public rights-of-way in the City.

Developer: Any person, firm, partnership, association, joint venture, or corporation or any other entity responsible for the given project.

Driveway: A rural driveway is that portion of gravel or hard-surfaced roadway from the street, roadway or alley to the private property line to gain access to the private property.

Driveway: An urban driveway means that portion of concrete or asphalt extending from the street gutter lip to the property line for the full width of access from the public right-of-way to the private property.

Engineer: A professional engineer currently licensed by the State of Colorado, retained by the Applicant, and acting on their behalf.

Engineering Plans: Drawings, plans, profiles, cross-sections, elevations, details, and supplementary specifications, and other required details for the construction of public or private improvements within City limits signed by an engineer and approved by the City, which show the location, character, dimension, and details of the work to be performed, conforming with the City's applicable improvement standards.

Improvement Standards: Refers to this document established by the City which sets forth the details, specifications, instructions and procedures to be followed in the planning, design, installation and construction of public or private improvements within the public rights-of-way or public easements.

Inspector: An authorized representative of the Engineering Department assigned to make inspections for contract performances, standards and contract compliance.

Lot or Street Frontage: The distance between the two points where the external most development lines intersect the boundary of the public street right-of-way.

MUTCD: The current edition of the Manual on Uniform Traffic Control Devices (Federal Highway Administration).

OSHA: Occupational Safety and Health Administration.

Project: General term encompassing all phases of the work to be performed and is synonymous to the term "improvement" or "work".

Public Works Director: The City of Glenwood Springs Public Works Director or his or her duly authorized representative.

Right-of-Way: A general term denoting public land, property, or interest therein acquired for or devoted to a public street, public access or public utility use.

Right-of-Way Permit: An official document issued by the City authorizing the performance of a specified activity or work within public rights-of-way and public easements by a person, contractor, company, firm, corporation or public utility licensed to do business in the City. **Road**: Used interchangeably with the term street. A general term denoting a public way for purposes of vehicular, pedestrian and bicycle travel ways, including the entire area within the right-of-way (includes alleyways) and any constructed facility within the right-of-way.

Street: Used interchangeably with the term road. A general term denoting a public way for purposes of vehicular, pedestrian and bicycle travel ways, including the entire area within the right-of-way (includes alleyways) and any constructed facility within the right-of-way.

Surveyor: A professional land surveyor currently licensed by the State of Colorado, retained by the Applicant, and acting on their behalf.

Title Commitment: A document by which a title insurer discloses to all parties connected with a particular real estate transaction all the liens, defects, and burdens and obligations that affect the subject property.

Traffic Control Supervisor (TCS): A well-trained and knowledgeable individual assigned the responsibility for traffic control devices at worksites. The TCS must be ATSSA (American Traffic Safety Services Association) or CCA (Colorado Contractor's Association) certified.

Traffic Engineer: The City Engineer or person responsible for monitoring traffic in the City.

UNCC: The Utility Notification Center of Colorado (commonly referred to as "Colorado 811"). Colorado 811 is committed to protecting Colorado's underground infrastructure, promoting excavator and public safety education, and encouraging compliance with applicable laws at the best overall value to all stakeholders. The UNCC may be reached by dialing 811, calling the toll-free phone number at 1-800-922-1987 or visiting the website at http://colorado811.org.

Utility: A company providing public service including, but not limited to; gas, electric power, street lighting, telephone, broadband, water, sewer, solid waste, or cable television, whether or not such company is privately owned or operated by a governmental entity.

1.5 CHANGES TO STANDARDS

From time to time, changes may be needed to add, delete, or modify the provisions of these Standards. These Standards may be changed and, upon approval of the Engineering Department, shall become effective, when approved, and shall be incorporated into the existing provisions.

1.6 SEVERABILITY

If any part of these standards shall be found invalid, all other parts shall remain in effect.

1.7 DEPARTMENTS AND RESPONSIBILITIES

All new construction, reconstruction and rehabilitation of City operated sewer, water, stormwater, electrical, solid waste, broad band utilities, and publically maintained roads within the City are subject to a review process to determine compliance with these Standards, City's goals, policies and plans. The following provides information to the Developer related to specific department plan review goals.

1.7.1 COMMUNITY DEVELOPMENT DEPARTMENT

The Community Development Department's mission is to serve the citizens of Glenwood Springs by protecting the area's iconic natural environment and by promoting a high quality built environment. Community Development consists of the Building Department and the Planning Department. The key functions of each are identified below:

A. Building Department:

- Building Plan Review
- Contractor Licensing and Information
- Inspections

B. Planning Department:

- Floodplain Management
- Historic Preservation
- Long Range Planning
- Land Use and Development Review
- Sign Permitting
- Zone Verification

- C. Permits Reviewed and Issued by the Community Development Department:
 - · Building Permit

1.7.2 PUBLIC WORKS DEPARTMENT

The Public Works Department at the City consists of the following sub-departments:

- · Recycle Center
- Streets
- Transportation

The key functions of the streets and transportation departments are identified below:

- A. Streets Department:
 - Maintenance activities associated with the public right of ways
 - Maintains culverts, drains, signs, ditches, paint, snow removal and cleaning of streets
- B. Transportation Department:
 - Transit Resources
 - Transportation Planning

1.7.3 ENGINEERING DEPARTMENT

This Standard addresses the plan review requirements for the Engineering Department.

- A. The primary mission of the Engineering Department is to plan, develop, budget and implement projects to maintain and improve the City's utility, street, pedestrian and bridge infrastructure. The key functions of the Engineering Department are as follows:
 - Public Improvements
 - Transportation Planning
 - Funding and Grant Acquisition
 - CDOT and State Coordination of Large Projects on SH82 and I-70
 - GIS Mapping and Surveying
 - Development Review and Revision to the Engineering Standards
 - Right of Way Management
 - Flood Plain and Geologic Hazards Management
- B. Permits Reviewed and Issued by the Engineering Department include:
 - Right-of-Way Permit
 - · Grading Permit

1.8 DESIGN AND PLAN SUBMITTAL REQUIREMENTS

1.8.1 GENERAL REQUIREMENTS

A. Developers proposing construction and upgrading of public facilities shall submit complete permit applications, plans, specifications and construction estimates with a completed "Plan Review Checklist" form to the Engineering Department for review. Final plans, specifications,

- estimates and permits must be approved by the City prior to the start of construction. A temporary erosion/ sedimentation control plan may be required prior to construction.
- B. On some projects, this full process may not be necessary and may be handled through a Rightof-Way Permit or other method. This will be decided during sufficiency checklist review with the City Engineer.
 - 1. The applicant/Developer should discuss the proposed project with the Engineering Department prior to major engineering work on the project.
- C. All plans submitted to the Engineering Department for permit approvals shall be prepared as follows:
 - 1. Plans shall bear the seal and signature of a professional civil engineer registered as such in the State of Colorado.
 - 2. With adequate information and detail to evaluate submitted designs and ensure accurate and functional construction of public improvements.
 - 3. Drawings shall be submitted in both hard copy and electronic formats.
 - 4. Electronic and hard copy drawing shall conform to the requirements of this standard.
 - 5. Hard copy drawing format shall be produced on legible media, maximum size 24"x36", minimum size 11"x17". The text shall be a clear font with a minimum height of 1/10th of an inch. All text shall be clearly legible on a half size plot. The original shall be accompanied with a CADD disk, the format of which has been approved in advance by the City Engineer.
 - 6. Record copies of the approved plan will become the property of the City.
 - 7. The specific minimum requirements of the drawings are shown on the "Plan Review Checklist" provided in the Appendix.
- D. Review and approval of plans, specifications and estimates will be made in an expeditious manner. However, the time frame required for the review and approval is dependent upon the completeness and accuracy of the plans and specifications submitted. Incomplete submittals will not be reviewed and will be returned to the applicant.

1.8.2 PLAN SUBMITTAL AND REVIEW SEQUENCE

- A. Submittal of the required documents, payment of the required fees, and public improvement procedures shall follow the plan submittal and review process outlined below:
 - 1. <u>First Submittal [Draft Plans]</u>: Applicable fees, together with one (1) hardcopy set of prints or plans, specifications and estimates are submitted for review and comment.
 - a. A cursory check of the plans against the Plan Review Checklist will be made by City staff. If the plans meet the minimum checklist requirements as to content, they will be routed to the appropriate City staff and the plan review process will begin.
 - b. If all the requirements of the Plan Review Checklist are not met, the plans will be returned to the applicant.

- Subsequent Submittals [Final Plans]: Applicable fees, together with six (6) sets of prints (Engineering three (3); Water one (1); Wastewater one (1); and Street/Solid Waste one (1) of corrected plans, specifications (if plan notes are not sufficient), calculations as required, and complete quantity estimate of proposed construction, together with the most recent review set of prints previously marked up by the City reviewer.
- 3. <u>Approval</u>: The Engineering Department approves the plans for construction. Developer is provided with an estimate for construction inspection fees by the City Engineer.
- 4. <u>Insurance and Financial Insurances</u>: The Developer's contractor provides proof of insurance and financial assurances, as required.
- 5. <u>Permits</u>: The Developer obtains all necessary City, County, State and/or Federal permits and pays all applicable fees.
- 6. <u>As Built and Final Submittal</u>: One (1) set of reproducible mylar "As Builts" and digital records (AutoCAD 2013 or newer) shall be submitted, reviewed and accepted with the completion of the "Conveyance of Public Facilities Form" provided in the Appendix prior to final City acceptance of the sewer, water main, street, and/or storm drain facility installation.
- B. The initial turn-around time for the first review of plans submitted is normally two weeks. The engineer is then requested to submit the original drawings for approval or is notified of the need for additional information or revisions. Additional review time will be needed if revisions are necessary.

1.8.3 BOUNDARY SURVEY REQUIREMENTS AND MONUMENTATION

- A. The boundary survey, internal property lines and monumentation as depicted in the final plat for a subdivision shall meet all requirements established under state law.
- B. Survey data shall be checked by the Engineering Department prior to approval of the final plat.
- C. Survey data shall include a Title Commitment.
- D. Monuments shall be set to specifications of the Engineering Department with at least one (1) monument on the boundary established as a permanent benchmark.
- E. All survey traverses shall close to an accuracy of at least within one (1) foot in ten thousand (10,000) feet.

1.8.4 CONSTRUCTION PLAN

- A. The following general conditions and those contained in the specific chapters dealing with water, wastewater, stormwater, transportation, electric and other facilities shall be included on any plans when a permit is required.
- B. All workmanship and materials shall be in accordance with the City of Glenwood Springs Engineering Standards and Guidelines, the current edition of the Colorado State Department of Transportation's Standard Specifications for Road and Bridge Construction, and any project specific special provisions or conditions and requirements.

- C. Temporary erosion/water pollution measures are required and shall comply with Chapter 4 of these Standards.
- D. A preconstruction meeting shall be held with the City a minimum of 72 hours prior to the start of construction. Participants may include, but are not limited to, the following: Representatives of the Contractor, Engineer, Applicant and City.
- E. Horizontal and vertical controls/datum as adopted by the City shall be used, unless approved otherwise.
- F. All approvals and permits required by the City shall be obtained by the contractor prior to the start of construction, unless otherwise approved by the City Engineer.
- G. The contractor shall be fully responsible for the location and protection of all existing utilities. The contractor shall verify all utility locations prior to construction by calling UNCC at 811 a minimum of 48 hours prior to any excavation work.
- H. All non-ferrous pipe and services shall be installed with continuous tracer tape per the requirements of Chapters 2 and 3 of these Standards.
- I. Road closures will only be allowed with a Right-of-Way Permit approved by the City Engineer. Emergency road closures shall be approved by the City of Glenwood Police Chief.
- J. The contractor shall provide a traffic control plan(s) for review and approval by the Engineering Department in accordance with the Manual on Uniform Traffic Control Devices (MUTCD).
- K. The contractor shall have a copy of the approved plans at the construction site at all times.
- L. Special structures shall be installed per plans and manufacturers' recommendations.
- M. All disturbed areas shall receive temporary and permanent erosion control in accordance with Chapter 4 of these Standards.
- N. Construction work hours shall be restricted to 7 A.M. to 7 P.M. Monday through Friday and 9 A.M. through 5 P.M. Saturday and Sunday, unless otherwise approved in writing by the City Manager. No work is allowed on City/State/Federal holidays.
- O. The City Engineer's Office shall be notified a minimum of 72 hours in advance of the need for an inspection.
- P. In the event that said construction does not commence within 6 months of the approval date, the plans must be resubmitted for review and approval.

1.8.5 TRAFFIC CONTROL PLAN

- A. A traffic control plan shall be submitted and comply with the requirements of these Standards for any work being performed within the City's Right of Way for streets classified as residential and commercial collectors, and minor and principal arterials. Refer to the Street Classification Map provided as an Appendix.
- B. Traffic control plans shall show in detail the proposed work area location and the traffic control devices being proposed.

- C. Plan shall be produced on at least eight and one-half (8½) by eleven (11) inches and shall be included as part of a submittal per the requirements outlined in this Chapter.
- D. Traffic control plans may require more detail than normal at the discretion of the Engineering Department due to unique or unusual conditions.
- E. Traffic control shall also include construction traffic routing requirements. Refer to section 1.17 and Chapter 5 for additional requirements.

1.9 PERMITS

1.9.1 PERMITS REVIEWED OR ISSUED BY THE ENGINEERING DEPARTMENT

- A. Before <u>any work</u> in or use of the public right of way is allowed, a Right-of-Way Permit shall be obtained.
- B. Stop Work Order. The Engineering Department may issue a stop work order to any person violating any provisions of this section. A first-offense will be a warning issued by the Engineering Department requiring any such person to fill any excavation or remove any obstruction within the public right of way. Upon the failure of such person to fill any excavation or remove any obstruction in the right of way, the City will issue a \$50.00 fine and may perform such work. Upon the failure of such person to fill any excavation or remove any obstruction in the right of way, the City will issue a \$500.00 fine and may perform such work, and the person making the excavation or obstructing the right of way shall reimburse the City for all costs of equipment, materials and labor expended by the City. Any subsequent issues with any person violating any provisions of this section could result in removal of Contractors City license for up to one year at the discretion of the City Manager.
- C. Much of the work covered by these Standards involves the potential for multiple permit authority review and approvals. The following describes the construction permits, approvals and agreements, along with issuing permit/code authority identified:
 - 1. **Building Permit** (by the Community Development Department). A building permit is required for building all construction work including alteration, repairs and demolition.
 - 2. Right-of-Way Permit. This permit is required for any project which excavates or opens a hole in or under the surface of any street, alley, sidewalk, public right of way or other public place. This permit is also required for use of the City right-of-way for such issues as street closures, dumpster placements, landscaping or building material storage, sidewalk cafes, fences in the right-of- way, landscaping, and special event use of the right-of-way. All Right-of-Way permits shall have an attached Traffic Control Plan prepared by a Traffic Control Supervisor.
 - a. All excavations made in any street, alley, sidewalk, public right-of-way or other public place shall be made under the supervision of the Engineering Department and shall be performed in accordance with the provisions of the Excavation, Bedding and Backfill Specification. Generally excavation methods and standard maximum trench widths shall be in accordance with these Specifications. However, the Engineering Department shall have the right to prescribe the method to be used in the excavation, the width thereof and any other reasonable conditions for the

- protection of utilities or the public or for minimizing the interference with vehicular or pedestrian traffic.
- b. Any person making or causing to be made any excavation or opening in any street, alley, sidewalk, public right-of-way or other public place or within five (5) feet (152 cm) of the line of any public right-of-way or public place shall provide barricades or other suitable protective devices that will prevent inadvertent entry into the work area by members of the public and will prevent injury to such persons.
- c. No excavations shall be allowed to remain open between sunset and sunrise, unless prior approval of the Engineering Department has been granted. If such approval is granted, such excavations shall be properly barricaded, and properly lighted so as to warn all persons of such danger. All barricades and lights shall be of substantial construction and shall be furnished by the person doing the work. All barricades and lights shall meet the requirements of the MUTCD.
- d. Restoration of Paving after Excavations. All restoration of paving surfaces, after an opening or excavation has been made, shall be made in accordance with these Standards. The entire cost of restoring the paving to its original condition shall be paid by the person making the excavation.
- e. Except as otherwise provided in this Standard, it shall be unlawful for any person to obstruct a street or sidewalk with any debris, lumber, sand, gravel, dirt, abandoned or wrecked automobiles or other material or substance without first obtaining a permit from the Engineering Department. Such permits may be granted only where the obstruction is necessary for the construction, alteration or repair of the adjoining property and such permitted obstructions shall be limited to as short a time as is reasonably possible. Each day that an unlawful obstruction is permitted to exist shall constitute a separate and distinct offense. Refer to Stop Work Order.
- f. This permit is required for any project which construction of new access or major changes to an existing access is required. This permit may be required prior to issuance of a building permit. All accesses shall comply with Chapter 5 of these Standards.
- Grading Permit. This permit is required for any project which involves the movement of more than 50 cubic yards of soil or clearing more than 200 square feet of vegetation. Grading permits are typically necessary for building excavations, berms, trenching, trails, utilities, ponds, etc.
 - a. State law requires the Utility Notification Center of Colorado be contacted prior to any digging.
 - b. Ponds may require an Impoundment Permit by the State Engineer's Office. Development that disturbs more than one acre will require a State Construction Stormwater Permit (SWMP).
 - c. Financial assurances may be required to assure successful revegetation.

d. Development near streams and rivers may require a Floodplain Development Permit.

D. Other Approvals and Permits:

- 1. Permit applicants are responsible for obtaining separate permits or permission as may be required. Examples include work which is proposed within state highway, railroad or irrigation company rights-of-way, located on private property, or located within an environmentally sensitive area such as a creek or flood plain.
- 2. Other Potential City Permits and Approvals include:
 - a. Plat approvals
 - b. Building Permit
 - c. Temporary Certificate of Occupancy and Certificate of Occupancy
 - d. Rezones or reclassification
 - e. Conditional use permits
 - f. Planned Residential Development Approvals
 - g. Wetlands Permit and standards for protection of Environmentally Sensitive Areas Protection Ordinances.

1.9.2 APPLICATION PROCESS FOR RIGHT-OF-WAY, GRADING AND ACCESS PERMITS

- A. Minimum submittal deadlines. A completed application, together with all required submittals and all copies, shall be submitted to the Engineering Department a minimum of five (5) working days (not including Saturdays, Sundays or holidays) prior to the proposed start of work. It is the applicant/contractor's responsibility to submit a complete application. Incomplete submittals will not be reviewed.
- B. Submission of plans. Refer to the Design and Plan Submittal Requirements.
- C. Payment of fees. Permits shall not be issued until all applicable fees have been paid.
- D. Review of submittals. The completed submittals will be reviewed by the City as defined in this Chapter. If additional information is needed, the applicant will be contacted. The City will check to make certain that the applicant has provided the required bond, license and insurance certificates.
- E. Approval of submittals. Once the permit form and all required submittals have been reviewed and found to be complete, the permit may be approved by the City.
- F. Issuance of permit. The approved permit is issued to the applicant. Any modifications to the approved permit, including any schedule or scope changes, must be submitted in writing to the City for its review and approval. The applicant is solely responsible for all work for a period of two (2) years following the project completion.

1.10 CONSTRUCTION CONTROL

- A. Work performed to construct or improve any City roads or utilities whether by, or for, a private developer, by City forces, or by a City contractor, shall be done to the satisfaction of the Engineering Department and in accordance with approved plans. No work shall be started until such plans are approved. Any revision to the plans shall be approved by the City prior to being implemented. Failure to receive the City Engineer's approval can result in work stoppage, with removal or modification of construction at the contractor's or developer's expense to bring it into conformance with approved plans.
- B. All survey and staking shall be performed by an engineering or survey firm capable of performing such work. The engineer or surveyor directing the work shall be licensed in the State of Colorado.

1.11 TESTING

A. The contractor is required to provide material testing for each phase of the work and at no cost to the City. The independent third party testing firm chosen to perform this work for the contractor must be qualified and identified on the permit application. Refer to Chapter sections for applicable testing requirements.

1.12 INSPECTION

- A. All work performed within the public right-of-way or easements shall be done to the satisfaction of the Engineering Department and in accordance with the CDOT Standard Specifications, any approved plans and these Standards. Any revision to the construction plans must be approved, in writing, by the Engineering Department before being implemented.
- B. It is the responsibility of the developer, contractor, or their agent(s) to notify by phone or email the Engineering Department 72 hours in advance of the commencement of any authorized work. Inspection fees shall be paid on or before the preconstruction meeting. All necessary easements or dedications are required before plan approval.
- C. It is the responsibility of the developer, contractor or their agent(s) to have an approved set of plans and any necessary permits on the job site whenever work is being accomplished.
- D. The City shall have the authority to enforce these Standards as well as other referenced or pertinent specifications. The City will appoint project engineers, assistants and inspectors as necessary to inspect the work and they will exercise authority as the Engineering Department may delegate.
- E. All specific inspections, test measurements or actions required of all work and materials are set forth in the respective chapters herein. Tests shall be performed at the developer's or contractor's expense.
- F. A project is considered final when a letter of acceptance is issued by the City to the party responsible for the project following receipt of as built documents and final approval/verification letter noting the project has been constructed per the approved plans by the Engineer of Record.

- G. It shall be the responsibility of the contractor to provide safe access for the inspector to perform the required inspections.
- H. The Engineering Department may make or require other inspections of any work as deemed necessary to ascertain compliance with the provisions of these Standards. Any work performed without the required inspections shall be subject to stop work orders, removal and replacement at the contractor's expense or modification of the work accomplished, regardless of the quality of the work.
- I. Where large-scale projects exceed the ability of the City to provide inspection, the contractor or utility company will incur the cost of contracting with a private inspection firm. This inspection firm will be mutually agreed upon by the permit applicant and the City prior to issuance of the permit.

1.13 **FEES**

- A. Permit fees shall be as follows:
 - Base fee: Permit applicants will be assessed a fifty-dollar (\$50) fee for review and processing of the permit and associated documents. This will apply to each permit application submitted.
 - Service installations: Service installations which attach to existing utilities will be assessed in addition to the base tap fee. The fee to tap onto the City waterworks and sewer system shall be the actual cost incurred by the City. An invoice detailing the costs incurred installing the tap shall be transmitted to the applicant for the tap.
 - 3. Street cuts including vertical boring of surfaces more than five (5) years old: Street cuts of surfaces more than five (5) years old shall be assessed thirty-five cents (\$1.00) per square foot of surface cut in addition to the base fee.
 - 4. Street cuts including vertical boring of surfaces less than five (5) years old: Street cuts of surfaces less than five (5) years old shall be assessed five dollars (\$6.00) per square foot of surface cut in addition to the base fee.
 - 5. Horizontal boring: Horizontal boring shall be assessed ten cents (\$0.50) per lineal foot of bore in addition to the base fee.
 - 6. Curb, gutter and sidewalk cuts: Curb, gutter and sidewalk cuts shall be assessed thirty-five cents (\$3.00) per square foot in addition to the base fee.
- B. All permit fees are due prior to the release of approved plans.
- C. Inspection fees. Permit applicants will be assessed a fifty-dollar (\$50) fee for an initial inspection. Additional inspections conducted by City staff shall be billed at the hourly rate of fifty dollars (\$50.00), with a two-hour minimum for each inspection. All inspection fees are due at the time of the acceptance or Certificate of Occupancy for the project.

1.14 BONDING AND FINANCIAL ASSURANCES

- A. Bonds or other allowable securities, such as financial insurances may be required by the City to guarantee the installation performance or maintenance of any required public improvements. The type and amount of the security shall be as required by the City Engineer to cover the cost of completion of the required improvements and the maintenance/warranty of any incomplete work which might be involved. Types of securities and financial insurances include but are not limited to a bond with a surety qualified to do a bonding business in the State of Colorado, company/personal check, cashiers or certified check, a cash deposit, an assigned savings account, or a lending institution letter of credit to be designated and approved by the City Attorney. Checks made payable to "City of Glenwood Springs" are deposited into the City's escrow account. All other forms are kept by the City Engineer's office until their release.
- B. All term financial assurances must have a minimum expiration date of 90 days from issue date. Include the name, address and telephone number of the Owner, Subdivider, Developer or Contractor submitting financial assurances. The submitter is responsible to keep current all financial assurances filed with the City and provide renewal documentation to City Engineering a minimum of five working dates prior to the expiration date for improvements not completed.

1.14.1 PERFORMANCE BOND

- A. No building or grading permit shall be issued until all public improvements are completed and final acceptance granted or, with the approval of the City Engineer Department, a performance bond posted with the City in an amount equal to 125 percent of the cost of the public improvements is posted with the City. No certificate of occupancy shall be issued until all public improvements are completed and approved unless otherwise allowed by the City Engineer.
- B. As improvements are completed, the applicant may apply to the City Engineer for release of all or part of the security, which release shall also be approved by the Engineering Department or the City Attorney.

1.14.2 FINANCIAL ASSURANCES RELEASE

- A. Financial assurances are released upon the written Probationary Inspection letter and receipt of assurances for warranty retainage equaling 10 percent of the original estimate of improvements. In lieu of posting the warranty retainage, a partial release of funds can be executed which retains said 10 percent of the original estimate. Upon completion of improvements, provide a written request for Probationary Inspection along with Engineer's Certification of Engineering Inspections.
- B. At the end of the two-year warranty period, the permittee or the contractor for the permittee shall provide a written request for a Final Inspection shall be submitted to the Engineering Department. Upon final acceptance of the improvements, the 10 percent warranty retainage will be released.

1.14.3 WARRANTY BOND

A. Prior to final Engineering Department approval, the permittee or the contractor for the permittee shall, if required, post with the City a warranty bond for the guarantee of the public improvements in an amount equal to 10 percent of the estimated cost of the improvements for a

period of two years after the completed job is accepted by the City. Release of bond will occur two years from the date of City acceptance if all maintenance has been accepted by the City Engineer.

1.15 GUARANTEES, WARRANTY AND ACCEPTANCE OF PUBLIC IMPROVEMENTS

- A. Under no circumstances shall the required public improvements be installed without the prior written approval from the City, which approval shall be contingent upon the developer submitting a sufficient maintenance plan. If the public improvements include landscaping, the maintenance plan shall include provisions for adequate irrigation and fertilization techniques to ensure survival of the landscaping. In the event that any public improvements require replacement, at the sole discretion of the City, prior to the issuance of a certificate of occupancy, the developer, or his/her successor shall be required to make or fund such replacements. The developer or his/her successor shall retain, at his/her sole expense, a licensed professional engineer for appropriate on-site construction inspections. The engineer shall certify, in writing, to the Engineering Department that the improvements were installed in compliance with the approved Development Permit or Subdivision Agreement and that the improvements are in compliance with City Standards. Project as-builts shall be provided in AutoCAD and PDF file formats and certified by the licensed engineer.
- B. All public improvements including, but not limited to, streets, sidewalks, landscaping, alleys, water mains, and wastewater mains, shall be guaranteed for two (2) years from the date of the City's acceptance. Until such improvements have been accepted by the City, the applicant shall be responsible for maintenance thereof. A bond or other security, in an amount determined by the City Manager to cover the cost of maintenance of improvements before acceptance, shall be posted by the applicant before the City accepts any public improvements. Acceptance of public improvements shall be requested by the applicant of the City Manager and shall be granted only after the City approves the as built drawings and certification required in this Subsection.

1.16 UTILITY LOCATIONS

- A. Utilities within the right-of-way or easement on new roads or in roadways where existing utilities are not in conflict shall be located as detailed in the Standard Details. Where existing utilities are in place, new utilities shall conform to these standards as nearly as practical and yet be compatible with the existing installations. Deviations of locations shall be approved by the Engineering Department. Existing utilities shall be shown using the best information available. Field verification exploration/excavation will be required, if utilities are in conflict with the proposed design.
- B. All wires, cables or other equipment for the distribution of electric energy and telecommunication signals, with the exception of transformers, meters, junction boxes and like equipment, shall be placed underground. Where new subdivisions or developments are approved near existing overhead power and communications facilities, energy and telecommunications may be obtained from these existing facilities. However, the connections to these facilities shall be placed underground unless otherwise approved by the Director of Electrical Services. Utility easements and rights-of-way shall be provided in the subdivision or development meeting the

requirements of the City electric system for the installation and maintenance of energy distribution and telecommunication facilities.

1.16.1 EASEMENTS AND DEDICATIONS FOR UTILITIES, STREETS AND ALLEYS, PEDESTRIAN ACCESS AND DRAINAGE

A. Dedication of land and easements shall be made by means of a subdivision plat or deed. Dedications shall be made to fulfill the requirements for utility easements, drainage easements, pedestrian easements, streets and alleys in accordance with the provisions of Subsections below.

1.16.2 UTILITY, DRAINAGE, STREET AND ALLEY AND PEDESTRIAN EASEMENTS:

- A. Where drainage systems and public utilities and/or their conveyance systems or pedestrian routes cross private lands, an easement shall be granted to the City. The Planning Department will generally process, record and file all easements. If the property is platted, the easement may be conveyed when the final plat is filed. All easements not shown on the plat must be prepared by a licensed land surveyor or engineering firm licensed in the State of Colorado capable of performing such work. All easements shall be filed prior to final plan approval for construction.
- B. Easement widths shall be 20 feet for a single utility and wider for dual utilities. Construction easements shall be 30 feet minimum in total width, including the permanent easement. When trench depths dictate or where pipe diameter or vault widths exceed four feet, a wider construction easement may be required by the City Engineer.
- C. Easements are required to be submitted in draft, unsigned for review and approval prior to plan approval.
- D. Signed copies are required prior to plan approval. Any change in design which places an amenity outside of the easement may necessitate stopping of construction until plans and easements can be resubmitted and approved. Typical easement samples are included in these standards in the appendix.
- E. No permanent structures or fences are allowed in utility or drainage easement.
- F. The horizontal and vertical location of sewer, water, and storm drain facilities within all easements shall be verified and certified in writing by a licensed land surveyor or engineer.
- G. Because of the potential impact improvements could have to surrounding properties if improperly maintained, the City requires assurances in the form of a "Maintenance Agreement" signed by City and the Owner, as provided in the Appendix.

1.17 TRAFFIC CONTROL

A. The developer/contractor shall be responsible for interim traffic control during construction within the City's Right-of-Way. Traffic control signing and devices shall comply with the provisions as established in the most current edition of the FHWA *Manual on Uniform Traffic Control Devices* (MUTCD). Street designation signs shall display street names, and be constructed in accordance with the most current MUTCD standard.

- B. A traffic control plan signed by a Colorado State Traffic Control Supervisor (TCS) is required of all work within City easements or rights-of-way, and shall be submitted to the City for approval at least 5 days before the start of the work. Work within SH 82 or SH 6&24 right-of-way shall also require CDOT approval.
- C. Signs shall be constructed and placed per the requirements of the MUTCD and shall be removed at the end of each work day, if not applicable after construction hours.
- D. When road or lane closures and detours cannot be avoided the contractor/developer/resident shall notify, and obtain approval from, the City prior to the beginning of the work. The City will require a detour plan be prepared by a Traffic Specialist, submitted and approved prior to closing any portion of a City roadway.

1.18 CALL BEFORE YOU DIG

A. All developers/contractors must contact the Utility Notification Center of Colorado (UNCC) at phone number 1-800-922-1987 or by visiting the website at http://www. Unco2.org/web at least two full working days (48 hours in advance of the work) of all utilities in advance of any construction in right-of-way or utility easements.. The first locate is made at no charge. Additional locates of the same utility and location may result in a charge to the contractor. Utilities are only required to locate utilities under their direct responsibility. In some cases, private utilities exist. It is the responsibility of the developer/contractor to hire a private utility location company. Contact UNCC for further information.

1.19 GENERAL REQUIREMENTS FOR WORK WITHIN THE CITY RIGHT OF WAY OR ON CITY PROPERTY

- A. Construction General Conditions. The following general conditions apply to all work done within the public rights-of-way, such as utility line installation or repairs performed by any contractor or utility department, public or private.
 - 1. Protection of existing improvements:
 - a. The contractor shall, at all times, take proper precautions and be responsible for the protection of existing street and alley surfaces, driveway culverts, street intersection culverts or aprons, irrigation systems, mailboxes, driveway approaches, landscaping, fencing, utility services, curb, gutter and sidewalks and all other identifiable installations that may be encountered during construction.
 - b. The contractor shall, at all times, take proper precautions for the protection of existing utilities, the presence of which are known or can be determined by field locations of the utility companies. The contractor shall contact the UNCC at 1-800-922-1987 for utility locates a minimum of 48 hours prior to his/her proposed start of work.
 - c. The contractor shall at all times take proper precautions for the protection of property pins/corners and survey control monuments encountered during construction. Any damaged or disturbed survey markers shall be replaced by a registered land surveyor at the contractor's expense.

- d. The repair of any damaged improvements as described above shall be the responsibility of the permit holder.
- e. The contractor shall make adequate provisions to ensure that traffic and adjacent property owners experience a minimum of inconvenience.
- 2. Temporary surfaces required. When the final surface is not immediately installed, it shall be necessary to place a temporary asphalt surface on any street cut opening. The temporary surface installation and maintenance shall be the responsibility of the permittee until the permanent surface is completed and accepted. It shall be either a hot mix or cold mix paving material. Temporary surfaces shall be compacted, rolled smooth and sealed to prevent degradation of the repair and existing structures during the temporary period. Permanent patching shall occur within two (2) weeks except as outlined by the City in the permit or as approved by the City Engineer.
- 3. Pavement patches. All permanent pavement patches and repairs shall be made with "in-kind" materials. For example, concrete patches in concrete surfaces, full depth asphalt patches with full depth asphalt, concrete pavement with asphalt overlay patches will be expected in permanent "overlaid" concrete streets, etc. In no case is there to be an asphalt patch in concrete streets or concrete patch in asphalt streets. Any repair not meeting these requirements will be removed and replaced by the contractor at his/her expense.
- 4. Work to be done in expedient manner. All work shall be done in an expedient manner. Repairs shall be made as rapidly as is consistent with high-quality workmanship and materials. Use of fast-setting concrete and similar techniques are encouraged whenever possible without sacrificing the quality of repair. Completion of the work, including replacement of pavement and cleanup, shall be accomplished within two (2) weeks after the repair work or activity involving the cut is done. Extension of time for completion shall be with the written approval of the City Engineer. If the repairs are not completed in the allotted time, the City has the right to repair the street at the contractor's expense.
- 5. Removal and replacement of unsatisfactory work. Removal and replacement of unsatisfactory work shall be completed within fifteen (15) days of written notification of the deficiency unless deemed an emergency requiring immediate action. In the event the replacement work has not been completed, the City will take action upon the contractor's bond to cover all related costs.
- 6. No tracked vehicles shall be allowed on asphalt or concrete unless approved by the City Engineer. When tracked vehicles are allowed, existing facilities will be restored to original condition at the contractor's expense.
- 7. Construction equipment and material delivery routing will be made a condition of the permit.

B. End-of-day street conditions:

1. Asphalt street. When work is stopped for the day, all lanes of the street shall be opened to traffic unless approved by the City Engineer. A traffic lane shall be considered

- satisfactorily open only if it is paved with hot or cold mix asphalt paving, except when the Engineering Department allows an alternate temporary street patch at his or her discretion.
- 2. Concrete street. When work is stopped for the day, all lanes of the street shall be opened for traffic. A traffic lane shall be considered satisfactorily open only if it is surfaced with a temporary asphalt surface. In the event the street surface has been replaced in the same day as the excavation was made, the repaired areas shall be barricaded in accordance with the MUTCD to protect the concrete during the curing period.
- 3. Temporary street patching may be allowed with the approval of the City Engineer. Temporary street patching shall be 1 inch minimum depth of compacted asphalt concrete cold mix, rolled smooth and sealed to prevent degradation of the repair area and utility structures during the temporary period. The contractor shall be responsible for the maintenance of the patch until the permanent repair is made. Permanent patching shall occur within two weeks, except as allowed by written condition in the permit issued by the City or as approved by the City Engineer.

1.20 UTILITY SERVICE AND EXTENSIONS

A. Utility mains shall be extended to and through the extremes of the property being developed to provide for loop closures and/or future development as determined by the City Engineer.

1.21 SYSTEM IMPROVEMENT FEES - WATER AND SEWER

A. All connections to existing water and sewer systems are subject to the payment of system improvement fees to recover a proportionate share of the actual capital costs of water and sewer facilities from the properties within the utility service area per the fees outlined in the City Code or latest ordinance.

APPENDICES

1.	Plan Review Checklist
2.	Easement Form
3.	Conveyance of Public Facilities
4.	Public Facilities Maintenance Bond
5.	Performance and Payment Bond
6.	Right of Way Permit Application
7.	Grading Permit Application

		Plan Review Checklist				
Cono	ral Engi	Applicable to utility plans, site plans, and roadway plans				
	icant	neering Items	City	Staff		
Yes	N/A	Geologic Hazard Report				
103	14/7	Drainage Study	Yes	N/A		
		Traffic Impact Analysis				
		Site Improvement Survey				
		Site improvement survey				
Gene	ı ral Plan	Items (to be included on all sheets)				
		Drawings shall be submitted in both hard copy and electronic formats				
		Name of subdivision or address, followed by the section, township and range along with				
		City, County, and State.				
		City File Number				
		Page Number (i.e. 1 of x, 2 of x, etc.)				
		Sheet size shall be a minimum of 11" x 17" with a ½" border in 'landscape' orientation				
		Title Block				
		Indication of a standardized scale, both fractional and bar (i.e. 1" = 20')				
		North Arrow				
		Symbols and line types shall comply with industry drafting standards, and shall graphically				
		distinguish between existing and proposed items				
		Property Boundary Lines of the subject property shall be depicted with a bold 'phantom'				
		linetype				
		Text should be no less than 0.1 inches in height				
		Street Labels, indicate public or private				
Cover	Sheet					
COVE	Jileet	Date of Preparation				
		Legal description				
		Site Address, if available				
		Vicinity Map				
		Owner, Developer, and Applicant name				
		Basis of Bearings				
		Benchmarks				
		Proposed Land uses				
		Required and proposed parking quantities				
		FEMA Floodplain statement including community map number and date. Indicate whether				
		the site is located within a designated floodplain.				
		Geologic Hazards Disclosure: "This property is subject to the findings summary and				
		conclusions of a Geologic Hazards Report prepared by dated, which				
		identified the following specific geologic hazard/s on the property:				
		A copy of said report has been placed within file # or within the subdivision file				
		of the City of Glenwood Springs Community Development/Engineering?.				
		Contact the Community Development/Engineering? Office at 101 W. 8 th St. Glenwood				
		Springs , Colorado, if you would like to view said report."				
		If within an airport overlay, the following note must be added: "The avigation easement				
		dedicated herein for public avigation purposes, shall be considered a public easement				
		subject to those terms and conditions specified on the instrument recorded at				
		subject to those terms and conditions specified on the instrument recorded at of the Records of Garfield County, Colorado. All other easements or interests of record				
		•				

Appli	cant		City	Staff
Yes	N/A		Yes	N/A
		Public Facilities – A note shall be placed on the site plan that makes reference to the public		
		facility requirements for the installation and construction and/or contributions.		
		PUD Projects – Indicate the City ordinance number and approved land use types, maximum		
		building heights and the intensity or density of the development.		
		Residential Projects – Indicate the potential housing types and the number of lots and/or		
		units, maximum density range, minimum lot area and width, minimum front, side and rear		
		setbacks, maximum building height, and maximum lot coverage.		
		Non-Residential Projects – Indicate the potential land use types and approximate site area		
		and building use, floor area, minimum lot area and width, minimum front, side and rear		
		setbacks, building height and percent of lot coverage. Indicate the total percent of site		
		covered with both structures and impervious surfaces.		
victio	og Con	 ditions/Demolition Plan		
XISUII	ig Cond	Existing building locations, s.f., FFE, and existing use		
		Existing streams or other natural features		
		Existing historic sites and resources		
		Existing thistoric sites and resources Existing topography		
		Existing topography Existing sidewalk/trail locations and materials		
		Existing access locations		
		Indicate any removals or replacements, if applicable		
		indicate any removals of replacements, if applicable		
urve	/ Plat	<u> </u>		
, ar ve	y i iac	Colorado Professional Surveyor (P.L.S.) seals shall be provided on each set of drawings. All		
		seals and stamps shall be in black, non-smearable ink and shall be legible. All letterings shall		
		be solid black and a minimum of 11 pt. type. The contents of the survey plat shall include:		
		Title on the top center of the front page with lettering not less than 1 inch; a purpose		
		under the title that clearly describes the purpose of the plat; under the purpose, a legal		
		description of the property		
		The name, address, and telephone number of the owner/applicant, designer of the		
		proposed subdivision		
		Surveyor's name and address		
		Scale: The plan view must be drawn to a scale that displays the plan in a way that is		
		clearly legible. Recommended scales include 1 inch equals 5, 10, or 20 feet		
		Survey performed or verified within the last 12 months		
		Vicinity map showing the property surveyed in reference to nearby highway(s) or major		
		street intersections (shown at a legible scale)		
		Monuments placed (or a reference monument or witness to the corner) at all corners of		
		the boundary of the property, unless already marked or referenced by an existing		
		monument or witness to the corner		
		Boundary, field, and recorded bearing and distances around the property. All curves		
		shall be circular arcs and shall be defined by the radius, central angle, tangent, arc, and		
		chord distances		
		Legend of symbols scale and north arrow		
		Survey tied to City of Glenwood Springs monuments		
		Overlaps and gores along the exterior of the boundaries		
		Existing building(s) locations and dimensions with ties		
		Basis of bearing and point of beginning graphically		
		Label easements and encroachments; add reference numbers as applicable		
		Indication of access to public right—of-way on land, such as curb cuts and driveways,		
		and to and from waters adjoining the surveyed tract		

Appli	icant		City Sta	
Yes	N/A		Yes	N/A
		Utility agreements and/or reference to associated agreements with utility providers or		
		ditch companies, including reception numbers		
		Common elements, along with limited and general common elements (i.e., sidewalks,		
		parking, open space, etc.)		
		The location and boundaries of the proposed subdivision/planned development		
		Any other significant manmade or natural features within or adjacent to the proposed		
		subdivision including raw water ditches		
		Proposed lot lines and areas or structures reserved or dedicated for public or common		
		use in the proposed project		
		Unless already submitted as part of the approved plan set, a Final Landscaping Plan must		
		be submitted that includes the location, size, and type of existing vegetation and other		
		natural landscape features and the proposed limits of any excavation or regrading in the		
		proposed project, including the location of trees with a trunk diameter of six (6) inches		
		or more measured four and one-half (4/>) feet above the ground and an indication of		
		which trees are proposed to be removed. Where large groves are to remain undisturbed,		
	single trees need not be located			<u></u>
	Site data tabulation listing acreage of land in the proposed subdivision, number, type,			
		and typical size of lots, structures, and/or dwelling units; ground coverage of proposed		
		structures and improvements, including parking areas, streets, sidewalks and open		
		space; and the amount of open space that is being provided		
		In the case of a division of land into condominium interests, apartments, or other multi-		
		family or time share dwelling units, the location of all proposed structures, parking		
		areas, structures, and/or areas for common use		
		A certificate by the registered land surveyor as to the accuracy of the survey and plat		
		and a statement that the survey was performed in accordance with Title 38, Article 51,		
		C.R.S. 1973, as amended from time to time		
		A certificate showing review of the final plat by the City Engineer		
		A certificate by a Corporate Title insurer that the person or persons dedicating to the		
		public the public right-of-way, areas, or facilities as shown thereon are the owners		
		thereof in fee simple, free and clear of all liens and encumbrances		
		A certificate showing approval of the final plat by Community Development Director		
		If the subdivision was approved by ordinance, a certificate showing approval of the plat		
		and acceptance of dedications and easements by the City Council (when required), with		
		signature by the Mayor and attestation by the City Clerk		
Utilitie	es	In order to assess the feasibility of providing utility service to any project or development		
		and to identify the impact of any development application on the existing and planned		
		public utility systems, a utility plan shall be submitted when improvements involving		
		connections to or abandonments of utilities are proposed. The plan shall contain a note		
		stating: "Utilities shall comply with the City of Glenwood Springs Standards and respective		
		utility provider standards."		
		Storm sewers shall be designed in accordance with the URMP. Other utilities must be		
		designed in accordance with the respective utility provider standards.		
		Letters must be submitted from the public or private utility companies that will service the		
		proposed subdivision with gas, electricity, telephones, sanitary sewer, water, and fire		
		protection facilities that state the aforementioned can service the proposed subdivision.		
		Additionally, any agreements with utility or ditch companies must be submitted.		
		Plans shall show:		

Appl	icant		City	Staff
Yes	N/A		Yes	N/A
	,	Easements, utility pipes, and mains shall be marked on the plans as being publicly or		
		privately maintained so that such responsibilities are clearly defined		
		Existing and proposed utilities		
		All utilities shall be identified as "Right-Of-Way" or "Easement"		
		<u> </u>		
Const	ruction	Management Plan		
		Although a complete construction mitigation plan is not required for land use, the project		
		must identify impacts during construction. This includes duration and length of		
		encroachments, including parking and pedestrian walkways and the duration schedule of		
		significant noise impacts.		
Site P	lan		1	
<u> </u>		The site plan view must be drawn to a scale that displays the plan in a way that is clearly		
		legible (recommended scale is 1 inch equals 5, 10, or 20 feet)		
		Existing and proposed improvements and structures; including, without limitation, all		
		grading, transportation, landscaping, City-operated and non-City-operated public utilities		
		(including storm sewer, telephone, gas, electric, cable television, fiber optics, raw water,		
		water and sewer); floodways, floodplains, driveway locations, street lights, roadways,		
		sidewalks, curbs, and gutters; traffic signal poles and controllers; and pavement edges,		
		trees, and other significant features		
		Match lines that connect information from drawings		
		Utility information is required according to the following (for proposed unless otherwise		
		noted):		
		Pipe type, size, class and joint restraint		
		Angles at alignment changes		
		Horizontal locations of soil borings		
		Horizontal locations of structures		
		Existing and proposed contours of at least 1-foot intervals (steep slopes may have		
		alternate intervals as approved by the City Engineer)		
		Existing and proposed storm drainage facilities and details, including storm sewers,		
		inlets, manholes, culverts, swales, detention ponds, and drainage ways		
		Horizontal and vertical locations and sizing of manholes and inlets for storm drainage		
		Horizontal and vertical location of existing and proposed drainage outfall points		
		Profiles for gravity systems or pipes with minimum depths required		
		Proposed and existing transportation, along with surface improvements information;		
		including, without limitation:		
		Survey lines and stations based on centerline or flowline stationing, cul-de-sacs,		
		horizontal curves, and other departures from normal street cross sections		
		Stations and elevations of flowlines at all existing and proposed curb returns, such as		
		horizontal points of curvature (PCs), points of tangency (PTs), and points of compound		
		curvature (PCCs) at the high or low point on all vertical curves; at inlets (including		
		invert); and at intervals of no more than 10 feet along the streets. For larger projects,		
		the City may consider intervals up to 25 feet		
		Curb return radii		
		ADA ramps		
		Complete horizontal curve data: radius (R), delta (D), arc length (L), and tangent length	1	
		(T)		
		All crown lines, where they depart from the normal cross sections (transitions to existing		
		roadways), with appropriate transition starting elevation		
		Centerline stations at all intersecting streets		

Appl	icant		City	Staff
Yes	N/A		Yes	N/A
		Drainage facility stations, including inlets, manholes, and stormwater outfalls, as well as		
		directional drainage flow arrows		
		Full width of right-of-way, intersecting roadways, street cross sections, sidewalks and		
		trails, existing curb cuts, and other relevant features along all roadways abutting the		
		project		
		Permanent traffic control devices, including striping, markings, signage, and signals		
		Label basis of bearings		
		Label benchmarks		
		Label the property and area in acres and s.f.		
		Label Easements		
		Indicate minimum setbacks		
		Indicate access locations		
		Show sight triangles for all access		
		Indicate parking and quantity		
		Indicate accessible parking locations		
		Indicate pavement material		
	Indicate bicycle Parking location and quantity, if applicable			
	Indicate loading and stacking areas, if applicable			
		Existing/Proposed buildings indicating uses and s.f.		
		Label distance from closes property line to buildings		
		Existing/proposed sidewalk/trail locations and material		
		Accessible ramps		
		Provide an accessible route from the public right of way (Note: 60% of all public entrances		
		must meet the ADA Standards 206.4.1)		
		Location, type, materials, size, and height for all feces, retaining walls, and sound barrier		
		walls		
		Locations, type, material size and height for all stash enclosures		
Profile	e			
		The profile view is to be located directly below the plan view drawing along a matching		
		survey line and stationing and is to be drawn at a horizontal scale that matches the plan		
		view and a vertical scale of 1 inch equals 5 feet and shall contain the following information:		
		Original and proposed ground elevations		
		Stationing sequence, preferably left to right		
		Elevations labeled on both left and right sides of the drawing sheet		
		Match lines		
		Elevations based on centerline (if needed), flowline, or invert of pipe (Top of pipe is		
		acceptable only for existing utilities)		
		Stations and elevations of existing and proposed grade breaks		
		Crossings of existing and proposed utilities		
		Elevations of inlets, tops of curbs, flowlines, inverts, and connection locations		
		Interference drawings that show all crossings for proposed and existing grades		
		Slopes or grades of stormwater sewers		
		Existing and proposed finished grades over utilities		
		Street profiles, including:		
		Stations and elevations of existing and proposed horizontal PC, PT, PCC, and PRC		
		Vertical curves with VIP, VPC, VPT, high point, or low point (not middle ordinate) stations		
		and elevations		
		Centerline stations of all intersecting streets		

Appli	icant		City Staf	
Yes	N/A		Yes	N/A
	·	Grades for all profiles		
		Curb flowlines		
		Curb return profiles to ensure positive drainage at ramp locations		
		Driveway profile		
Gradir	ng Plan			
		Existing and Proposed Contours		
		Limits of disturbance		
		Flow directions with arrows		
		Cut and Fill slopes not to exceed 2:1, unless otherwise specified by the geotechnical report		
		Retaining Wall Details		
		Finished Floor Elevations		
		Provide and label all drainage easements for public storm drainage facilities located on		
		private property		
		Label all existing and proposed storm sewer pipes and structures and include their size, type		
		and material and designate whether the system is private or public.		
		Geologic Hazards Disclosure: "This property is subject to the findings summary and		
		conclusions of a Geologic Hazards Report prepared by dated, which		
		identified the following specific geologic hazard/s on the property:		
		A copy of said report has been placed within file # or within the subdivision file		
		of the City of Glenwood Springs Community Development/Engineering?.		
		Contact the Community Development/Engineering? Office at 101 W. 8 th St. Glenwood		
		Springs , Colorado, if you would like to view said report."		
		Type, location and extent of drainage facilities and permanent stormwater best		
		management practices. Label these as private or public (on a separate sheet if necessary)		
Cross-	Section	nal Drawings		
		Cross-sectional drawings are required with all construction plans that include varying or		
		transitional features, such as street sections, fill slopes, and drainage channels. Cross-		
		sectional drawings reflect dimensions, elevations, stationing, and any other detailed		
		information necessary to ensure accurate construction, including:		
		Cross sections through curb and gutter at 10-foot intervals		
		Cross sections through alleys at 10-foot intervals and at the centerline of each drive		
		entrance and/or pedestrian access		
Hazar	ds			
		All projects shall be evaluated for all hazards that may pose a threat to public safety or the		
		natural environment. This includes the designation of all areas that constitute natural		
		hazard areas, including but not limited to snowslides, avalanches, mudslides, and/or		
		rockslides		
Trans	portati			
		The following information is required in order to adequately describe the transportation		
		infrastructure associated with the project:		
		Proposed sidewalks or pedestrian access and circulation		
		All existing and proposed streets and alleys, including widths, centerline of roadway		
		pavement (if project impacts centerline of street), and road right-of-way (including curve		
		data)		

Applicant				Staff		
Yes	N/A		Yes	N/A		
	All existing and proposed streets shall be marked on the plans as being publicly or					
	privately maintained so that such responsibilities are clearly defined					
		Access for the project shall be clearly marked				
		All proposed dedications of streets, easements, and alleys shall be identified as "ROW"				
	or "Easement"					
	Signing and striping plan					

EASEMENT FORM

SPRINGS ENGINEERING way for underground utiliconstruct, maintain and reconstructs.	e Dollar (\$1.00) cash in I other benefits, the Grand I conveys to the CITY Coporation, (referred to head ties (sewer, storm, elected	for and in hand paid, receipt whereof is antor(s) has this day sold and F GLENWOOD SPRINGS, a rein as the "City") a permandric, broad band and water), in lities over and along the full subject to conditions contain	s hereby acknowledged, d by these presents grants a municipal ent easement and right of cluding the right to width and length of the
disturbed by the City, to a	as good condition as it v	restore the premises of the vas in prior to any such cons	truction of facilities.
Grantor	Date	Grantor	Date
STATE OF COLORADC)		
appeared	ng Easement and ackn	Public in and for the State of, to me kno owledged to me that they sig	wn to be the individual(s)
DATED this	day of	, 20	
		NOTARY PUBLIC f residing at My commission exp	·



CONVEYANCE OF PUBLIC FACILITIES to the CITY OF GLENWOOD SPRINGS

hereby describ	FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,								
Colora	as recorded in Vol, Page of Plats, records of Garfield County, Colorado. The sewer, storm drain, and/or water systems are more specifically described as follows:								
PIPE SIZE	LENGTH	MATERIAL	ON OR IN	FROM	то	VALUE			
OIZL									
						\$			
						\$			
						\$			
						\$			
						\$			
STREETS									
						\$			
						\$			
						\$			

Including manholes, tees, wyes, valves, hydrants, blowoffs, detention\retention facilities, pipelines, waterlines, streets, alleys, and other appurtenances, all within public right-of-way and/or easements. As builts of system must be provided.

In making the conveyance, the undersigned warrants to the CITY OF GLENWOOD SPRINGS that all claims for labor materials, or taxes, and other indebtedness that might be a lien against said public facilities, have been paid, and further guarantees to the CITY OF GLENWOOD SPRINGS for the period of twenty four (24) months from the date of this instrument, that the said public facilities be free of defects in labor and materials.

The undersigned further public facilities free and confidence of same.				
	DATED this GRANTOR(S)			
STATE OF COLORADO)			
SS: COUNTY OF GARFI	ELD)			
I certify that I know or have	ve satisfactory evidence	that	sianec	 d this instrument,
on oath stated that he/sh be the free and voluntary and purposes mentioned	act of		he instrument, and ack	nowledged it to
SUBSCRIBED AND SWO	ORN to before me this _	day of		, 20
		_	RY PUBLIC in and for the Colorado, residing at	ie

My appointment expires_____

PUBLIC FACILITIES MAINTENANCE BOND



KNOW ALL MEN BY THESE PRESENTS: That _	, as
Principal, and	, a rirtue of the laws of the State of Colorado and e of Colorado under the laws thereof, as Surety, IWOOD SPRINGS in the full and just sum of Dollars,
lawful money of the United States of America, for t made, we hereby bind ourselves, our and each of and assigns, jointly and severally, firmly by these p	our heirs, executors, administrators, successors,
and in the judgment of the Director of Public Works named, conditioned that the Principal(s) will warral and materials used in the construction of streets, a manholes, and side sewers, and water mains, valver repairs, correcting deficiencies, and performing em period of not less than twelve (12) months from the further agree(s) to promptly reimburse the City of maintenance necessary, to preserve and maintain	, located in SectionNorth, Range
	of said Principal(s) is/are hereto affixed and attested nt at,
thisday of	, 20
	Principal By:
	Surety
	Dv.



PERFORMANCE AND PAYMENT BOND

Bond to the City of Glenwood Springs

SPRIINOS	Bond #	
ENGINEERING		
KNOW ALL MEN BY THESE PRESENTS:		
That we, the undersigned,	, as Princip	
the laws of the State of Colorado to become su surety, are jointly and severally held and firmly		l under tions as
of \$, in the pen for the pay	ment of
	our successors, heirs, administrators or personal	
This obligation is entered into pursuant to the st City of Glenwood Springs.	tatutes of the State of Colorado and the ordinances of	the
DATED at, Color	rado, this day of,,	
The conditions of the above obligation are such	that:	
, ROW Permit #	ements to be constructed in the City of Glenwood Sprir contract is referred to herein and is made part hereof a	, a , ngs
	oout to accept, the said contract, and undertake to nner and within the time set forth; NOW, THEREFORE,	,
in the manner and within the time set forth, or w contract, and shall pay all laborers, mechanics, supply said Principal or subcontractors with the shall indemnify and hold the City of Glenwood S reason of failure of performance as specified in material or workmanship provided or performed	, shall faithfully perform all of the provisions of said continuous extensions of time as may be granted under subcontractors and material men, and all persons who provisions and supplies for the carrying on of said wor springs and harmless from any damage or expensaid contract or from defects appearing or developing dunder said contract within a period of two years after its and, then and in that event, this obligation full force and effect.	r said o shall rk, and ose by in the
Signed this day of		
SURETY	PRINCIPAL	
Ву		
Title	Title	