

CHAPTER 8 INSPECTION & ACCEPTANCE

TABLE OF CONTENTS

8.1	INTRODUCTION	1
8.2	REFERENCES TO OTHER DOCUMENTS	1
8.3	INSPECTION AND ACCEPTANCE PROCESS	1
8.3.1	Infrastructure Permit.....	1
8.3.2	Building Permit (without associated infrastructure permit)	2
8.3.3	Right of Way Permit	2
8.4	ENGINEERING DIVISION INSPECTIONS	3
8.4.1	Building Permit.....	3
8.4.1.1	Pre-Pavement/Pre-Landscaping Inspection.....	3
8.4.1.2	Preliminary Certificate of Occupancy Inspection.....	3
8.4.1.3	Certificate of Occupancy Inspection.....	3
8.4.1.4	Stormwater Management Inspection.....	4
8.4.1.5	Bond Release Inspection.....	4
8.4.2	Right-of-Way Permit.....	4
8.4.2.1	Utility Inspection.....	4
8.4.2.2	Pre-Pavement Inspection	4
8.4.2.3	Completion Inspection	4
8.4.2.4	Stormwater Management Inspection.....	4
8.4.2.5	Two Year Bond Re-Inspection.....	4
8.4.3	Infrastructure Permit	4
8.4.3.1	Utility Inspection.....	5
8.4.3.2	Pre-Pavement Inspection	5
8.4.3.3	Initial Acceptance Inspection	5
8.4.3.4	Other Inspections.....	5
8.4.3.5	Stormwater Management Inspection.....	5
8.4.3.6	Final Acceptance Inspection.....	5
8.5	INITIAL ACCEPTANCE	5
8.6	WARRANTY	6
8.7	RECORD DRAWINGS.....	7
8.8	FINAL ACCEPTANCE	8

LIST OF ATTACHMENTS – APPENDIX F

BUILDING PERMIT INSPECTION FORM

ROW INSPECTION FORM

EXAMPLE ENGINEER'S IMPROVEMENT SUMMARY LETTER

EXAMPLE TESTING FIRM LETTER

8.1 INTRODUCTION

This chapter includes information about the Engineering Division inspection and acceptance procedures and protocols for different types of projects. It also includes information on occupancy requirements and how different types of permits and projects may be closed. This information is intended to apply to activities that occur after initial permits are issued.

8.2 REFERENCES TO OTHER DOCUMENTS

Titles 9 and 10 of the Town Code offer additional information on inspections and acceptance. Chapter 2 of these Standards includes information on the types of permits required by the Town and the submittals required to receive those permits. This chapter only includes the inspection and acceptance procedures of the Engineering Division; permit holders shall reference the Town Code and contact the Community Development Department for additional requirements. Permit holders shall also reference County, State, and Federal regulations for procedures on inspection and acceptance requirements relating to those permits.

8.3 INSPECTION AND ACCEPTANCE PROCESS

The Engineering Division inspection and acceptance process for each type of permit, from permit issuance to final acceptance, is outlined below. Section 8.3.1 to Section 8.3.3 provides an overview of the inspection and acceptance steps for each type of permit; the subsequent sections provide additional detail on the inspections and acceptance steps outlined in Section 8.3. The intent of this section is to provide a summary of steps that must be completed once each permit is issued.

8.3.1 Infrastructure Permit

The infrastructure permit holder shall follow the steps below after receiving an infrastructure permit:

1. **Preconstruction Meeting** – A preconstruction meeting with the Engineering Division is required prior to beginning construction activities.
2. **Begin Construction** – Construction activities may begin only after permit holder has obtained all necessary permits, satisfied all requirements of the Breckenridge Town Code and these Standards, and attended a preconstruction meeting with the Engineering Division.
3. **Subdivision Improvement Agreement** – A Subdivision Improvement Agreement (SIA) will be required if the project requires a subdivision plat and all subdivision improvements are not completed prior to the subdivision plat being recorded. See Title 9 of Town Code for more information on Subdivision Improvement Agreements.
4. **Inspections Prior to Initial Acceptance** – The Engineering Division shall complete inspections throughout the construction process. See Section 8.4 below for the Engineering inspections required for different permit types.
5. **Completion of Work** – Permit holders shall notify the Engineering Division once all improvements required by the construction plans and all agreements have been completed.
6. **Initial Acceptance Inspection** – The Engineering Division shall inspect the improvements for compliance with Standards, plans, specifications, and agreements.
7. **Correction of Deficiencies** – If the Engineering Division finds any improvements not to be in compliance with the Standards, plans, specifications, or any agreements, the Engineering Division will notify the permit holder who then must correct the deficiencies and notify the Engineering Division when the site is ready for another inspection.

8. Record Drawings – The permit holder shall submit record drawings (also referred to as As-Built Drawings) to the Engineering Division in accordance with the requirements in Section 8.7.
9. Initial Acceptance – After the permit holder satisfactorily corrects deficiencies, submits record drawings and the warranty surety, the Engineering Division shall grant Initial Acceptance.
10. Warranty Period – The warranty period shall last for two years after initial acceptance. The permit holder shall maintain the improvements during this period. Private infrastructure shall not require a warranty period.
11. Final Acceptance – The permit holder shall request a final inspection of improvements no later than 45 days prior to the end of the warranty period. The permit holder shall repair any deficiencies prior to the end of warranty period. Once deficiencies are corrected, the Engineering Division shall grant final acceptance and release the warranty surety.

8.3.2 Building Permit (without associated infrastructure permit)

The building permit holder shall follow the steps below after receiving a building permit when there is no associated infrastructure permit:

1. Begin Construction – Construction activities may begin only after permit holder has obtained all necessary permits and satisfied all requirements of the Breckenridge Town Code and these Standards.
2. Inspections Prior to Certificate of Occupancy – The Engineering Division shall complete inspections throughout the construction process. See Section 8.4 below for the Engineering Division inspections required for different permit types.
3. Certificate of Occupancy – The Certificate of Occupancy inspection shall be requested when all improvements are completed.
4. Completion Guarantee – Permit holders are encouraged to complete all site work prior to October 31st. If the permit holder does not complete all improvements by October 31st, and desires to obtain the certificate of occupancy prior to May 1st, a preliminary Certificate of Occupancy inspection shall be scheduled by the permit holder with Engineering. Engineering will require a financial guarantee (surety) in the form of a cash deposit. The Town Engineer shall determine the financial guarantee amount by assessing 125% of the remaining work value. If the remaining work cannot be determined due to snow cover, the Town Engineer may require a financial guarantee for all site work which cannot be inspected. Once all improvements are complete, the permit holder shall request a final inspection. The surety will be released once the Engineering Division determines improvements are complete.

8.3.3 Right of Way Permit

The right-of-way permit holder shall follow the steps below after receiving a right-of-way permit:

1. Begin Construction – Construction activities may begin only after permit holder has obtained all necessary permits and satisfied all requirements of the Breckenridge Town Code and these Standards.
2. Inspections Prior to Initial Acceptance – The Engineering Division shall complete inspections throughout the construction process. See Section 8.4 below for the Engineering Division inspections required for different permit types.
3. Completion Inspection – The completion inspection shall be requested when all improvements are completed.
4. Warranty Period – The warranty period may begin once the completion inspection has been passed.

5. Two Year Bond Re-Inspection - The permit holder shall request a final inspection of improvements no later than 45 days prior to the end of the warranty period. The permit holder shall repair any deficiencies prior to the end of warranty period. Once deficiencies are corrected, the Engineering Division shall grant final acceptance and release the warranty surety.

8.4 ENGINEERING DIVISION INSPECTIONS

Inspections are required at key steps of the construction process to help provide general compliance with plans and specifications. However, inspections completed by the Engineering Division do not provide final assurance of compliance with specifications and do not preclude the Engineering Division from imposing corrective actions in the future. The Engineering Division may require the permit holder to remove, replace, or repair items, or to perform other corrective actions if improvements are ever found to not comply with plans, specifications, or Town Standards.

The permit holder is required to schedule all inspections with the Engineering Division, other than those for stormwater management, at the time indicated for each permit using the contact information on the applicable permit. Failure of the permit holder to schedule inspections at the appropriate time may result in stop work orders, removal and replacement of improvements, fines, or other penalties. The stormwater management inspections shall be scheduled by the Engineering Division. The sections below detail the permits that will require an inspection from the Engineering Division.

8.4.1 Building Permit

A Building Permit may require up to four separate inspections from the Engineering Division, as detailed in this section. Inspections from the Community Development Department will also be required. The Community Development Department shall be contacted to confirm the required inspections. Inspections for building permits are encouraged to be completed between May 1 and November 1. If a final inspection is required outside these dates, a cash deposit (surety) may be required. Building permit inspections shall be scheduled through the contact information provided on the building permit form. Permit holders may request additional inspections at critical steps during construction if needed.

8.4.1.1 Pre-Pavement/Pre-Landscaping Inspection

The building permit holder shall schedule a pre-pavement/pre-landscaping inspection with the Engineering Division prior to placement of pavement, final topsoil, seeding, and landscaping. Inspection shall generally include the items shown on the inspection form included in Appendix H.

8.4.1.2 Preliminary Certificate of Occupancy Inspection

The preliminary Certificate of Occupancy inspection only applies to projects completed between November 1st and April 31st of each year. If site work cannot be completed by November 1st, the permit holder shall schedule a preliminary inspection prior to November 1st. Any incomplete work shall require a financial guarantee per Section 8.3.2.

8.4.1.3 Certificate of Occupancy Inspection

The building permit holder shall schedule a certificate of occupancy inspection with the Engineering Division after completion of all grading, pavement, landscaping, site stabilization, and all other site work. Inspection shall generally include the items shown on the inspection form included in Appendix H.

8.4.1.4 Stormwater Management Inspection

The Engineering Division will conduct stormwater management inspections of sites to ensure that stormwater controls have been installed per the approved plans and are functioning adequately. Inspections will be scheduled periodically throughout construction and may occur without notice.

8.4.1.5 Bond Release Inspection

If a cash deposit is required for the project (see Section 8.3.2), the building permit holder will schedule a bond release inspection with the Engineering Division for any work completed after the issuance of the certificate of occupancy.

8.4.2 Right-of-Way Permit

A Right-of-Way Permit may require up to four separate inspections from the Engineering Division. No work in the right-of-way or right-of-way inspections shall occur between November 1 and May 1. The types of inspections from the Engineering Division that may be required for a right-of-way permit are detailed in the sections below. Right-of-way permit inspections shall be scheduled through the contact information provided on the permit form.

8.4.2.1 Utility Inspection

The Engineering Division will determine utility inspection requirements prior to start of the project. Utility inspections may be required prior to backfill of utilities to ensure utilities are constructed in accordance with the appropriate construction specifications. Major features shall be inspected prior to utility backfill. The right-of-way permit holder shall call to schedule an inspection at least 48 hours prior to the utility being backfilled.

8.4.2.2 Pre-Pavement Inspection

The right-of-way permit holder shall call to schedule a pre-pavement inspection at least 48 hours prior to the placement of concrete, asphalt, or other types of pavement. Inspection items shall include grading, subgrade, and concrete forms for sidewalks, curbs, curb ramps, and driveway curb cuts.

8.4.2.3 Completion Inspection

The right-of-way permit holder shall call to schedule a completion inspection after completion of all improvements, pavement, site stabilization, and restoration. Inspection shall generally include the items shown on the inspection form. Once the site passes the completion inspection, the 2-year bond and warranty period process can be initiated.

8.4.2.4 Stormwater Management Inspection

The Engineering Division will conduct stormwater management inspections of sites to ensure that stormwater controls have been installed per the approved plans and are functioning adequately. Inspections will be scheduled periodically throughout construction and may occur without notice.

8.4.2.5 Two Year Bond Re-Inspection

The Engineering Division will schedule an inspection of all improvements one month before the end of the two-year warranty bond period. If defects are found in any of the improvements, the right-of-way permit holder shall be notified, and defects shall be repaired by the permit holder.

8.4.3 Infrastructure Permit

The types of inspections that may be required for an infrastructure permit are detailed below.

8.4.3.1 Utility Inspection

The Engineering Division will determine utility inspection requirements prior to start of the project. Utility inspections may be required prior to backfill of utilities to ensure utilities are constructed in accordance with the appropriate construction specifications. If an inspection is required prior to utility backfill, the right-of-way permit holder shall call to schedule an inspection at least 48 hours prior to the utility being backfilled.

8.4.3.2 Pre-Pavement Inspection

The infrastructure permit holder shall call to schedule a pre-pavement inspection at least 48 hours prior to the placement of concrete, asphalt, or other types of pavement. Inspection items shall include grading, subgrade, and concrete forms for sidewalks, curbs, curb ramps, and driveway curb cuts.

8.4.3.3 Initial Acceptance Inspection

The infrastructure permit holder shall call to schedule an initial acceptance inspection after all improvements, pavement, site stabilization, and restoration are complete. Inspection shall include all infrastructure, public improvements to be conveyed to the Town, private improvements, utilities, detention and permanent stormwater quality features, and all other site work. Once the site passes the initial acceptance inspection, the 2-year bond and warranty period process can be initiated. The initial acceptance process is discussed in more detail in Section 8.5.

8.4.3.4 Other Inspections

The Engineering Division will determine if additional inspections are necessary during the pre-construction meeting and will establish those with the developer. The Engineering Division also may require additional inspections throughout the project duration. These may include structural concrete, structural steel, reinforcing steel, and backfill compaction inspections.

8.4.3.5 Stormwater Management Inspection

The Engineering Division will conduct stormwater management inspections of sites to monitor that stormwater controls have been installed per the approved plans and functioning adequately. Inspections will be scheduled by the Engineering Division periodically throughout construction and may also occur without notice.

8.4.3.6 Final Acceptance Inspection

The Engineering Division will schedule an inspection of all improvements at the end of the two-year warranty bond period. If defects are found in any of the improvements, the infrastructure permit holder shall be notified, and defects shall be repaired by the permit holder.

8.5 INITIAL ACCEPTANCE

For all projects that are issued an infrastructure permit, initial acceptance generally indicates that the project has been completed to the satisfaction of the Engineering Division and that the 2-year bond (surety) process (warranty period) can be initiated. Initial acceptance requires the following at a minimum:

1. Construction Plans – Plans shall be submitted for approval clearly identifying public improvements to be conveyed to Town.
2. Preconstruction Meeting – A pre-construction meeting between an Engineering Division representative, the Project Engineer, developer, and contractor shall be held prior to the start

of construction. The meeting shall confirm the scope of work, inspection requirements, and testing requirements for the project.

3. Initial Acceptance Submittals:
 - a. Material testing reports & testing firm letter – Material testing shall be completed in accordance with the Town specifications. An example testing firm letter is included as an attachment to Appendix H and shall be signed and stamped by a Colorado Professional Engineer to certify that all test procedures were in conformance with the approved plans and specifications.
 - b. Inspection & construction observation reports – Inspection and construction observation required to be performed by the Project Engineer shall be established during the pre-construction meeting. Reports shall be certified by the Project Engineer and shall certify that construction was in conformance with approved plans and specifications.
 - c. Engineering Record Drawings – Prior to issuance of initial acceptance, record drawings shall be submitted to the Engineering Division that meet the requirements of Section 8.7.
 - d. As-built survey of detention and water quality facilities and certification by a professional engineer licensed in the state of Colorado certifying the facility meets the detention and water quality requirements.
 - e. As-built survey of main features of underground utilities. Examples include utility surface locates, manholes, valves, inlets, hydrants, junction boxes, and other exposed features. Survey of underground facilities prior to backfill may be required at critical locations. The surveyed features shall be drawn electronically and submitted in DWG and PDF formats.
 - f. Other documentation – Additional documentation, as required by Town Engineer, shall be submitted to the Engineering Division prior to initial acceptance.
4. Initial Acceptance Request – An initial acceptance request shall be submitted in writing to request an initial acceptance inspection after all initial acceptance submittals have been submitted. An improvements summary letter shall be submitted with the initial acceptance request. An example improvements summary letter is included as an attachment to Appendix H. The initial acceptance request shall only be submitted if the work has been fully completed in accordance with the approved plans and specifications. All work and known punch list items must be complete prior to submitting the request.
 - a. Work Acceptable. If the work has been completed satisfactorily for initial acceptance, the Town Engineer will issue a written notice of initial acceptance to the permit holder.
 - b. Work not Acceptable. If the work has not been completed satisfactorily, the Town Engineer will provide the permit holder with a punch list of items to be completed. Once the punch list items are completed, the permit holder may request a subsequent inspection.
5. Warranty Surety – If the permit holder fails to complete punch list items satisfactorily within 30 days, the Town may utilize the warranty surety to complete improvements. The Town may also withhold additional permits or certificates of occupancy.

8.6 WARRANTY

For permits requiring a warranty, the permit holder shall warrant that all public improvements shall remain free from defects for a period of two years from the date the Town issues initial acceptance of the improvements. This period may be referred to as the two-year warranty period, warranty period, the two-year bond period, or initial acceptance period. During the two-year warranty period, any defect determined to exist with respect to such improvements shall be repaired or the improvement replaced at the sole cost of the permit holder.

The permit holder shall be required to file a warranty surety in the form of a warranty bond, cash bond, or irrevocable letter of credit with the Town in a form acceptable to the Town Attorney, prior to initial acceptance of any public improvements, in an amount equal to 25% of the original cost of the public improvements, in order to assure the satisfactory maintenance of the improvements for a period of two years after the date of initial acceptance by the Town. Such bond shall guarantee all public improvements constructed by the permit holder remain free from defect for the required two-year period.

If initial acceptance is reached prior to obtaining final site stabilization (70% revegetation), the permit holder shall be responsible for maintenance of all temporary and permanent stormwater quality features until final stabilization of the site is achieved. This shall include sweeping of street and sidewalks, and maintenance of detention ponds, water quality features, and storm sewer infrastructure. The permit holder shall be responsible for the maintenance of trees, shrubs, and other landscaping features during the two year warranty period.

8.7 RECORD DRAWINGS

Record drawings, also called as-built drawings, are to be submitted to and accepted by the Town Engineer prior to final acceptance of any public improvements. As-built drawings shall be produced under the direction of and stamped by a Colorado registered professional engineer to assure compliance with original design drawings. Certification shall be presented along with the as-built drawings stating such compliance.

One set of as-built drawings shall be submitted to the Engineering Division within 30 days of completion of construction (initial acceptance). Drawings shall be submitted electronically in DWG and PDF format so that they will print to scale on 11" x 17" paper. Each drawing sheet shall include a title block, scale, north arrow, original and revision dates, and professional engineer's stamp when applicable. Title blocks shall be along the bottom or right margin of each drawing. Survey control and project benchmarks including datum shall be included.

Manufacturer's literature and product data, including catalog sheets, descriptive literature, product warranties, and any O&M manuals, for all materials and equipment used, shall be provided with as-built drawings.

The construction plans shall be updated with all design changes that occurred after issuance of infrastructure permit. Record drawings shall also identify actual constructed locations and dimensions of street improvements, signage, striping, street lights, swales, WQ/detention ponds, inlets, stormwater improvements, and other infrastructure. For detention and water quality facilities, record drawings shall identify the as-built locations of all inlets and outlets, the as-built grading of the site for all ponds, and as-built details of the outlet structure including the sizes and elevations of all orifices and weirs that may convey water out of the facility. Record drawings shall also document locations and elevations of underground utilities. Record drawings shall identify any other conditions that vary from the approved plans and specifications, or any other information requested by the Town Engineer.

Detention and water quality facilities shall be surveyed, added to the record drawings, and stamped by the engineer certifying the facilities are in compliance with the design.

Underground utilities shall be surveyed and added to the record drawings submitted by surveying surface utility locates, manholes, valves, inlets, hydrants, junction boxes, and other exposed features. Survey of underground facilities prior to backfill may be required at critical locations.

8.8 FINAL ACCEPTANCE

Final acceptance requires the following at a minimum:

1. Final Acceptance Inspection Request – The permit holder shall request a final acceptance inspection in writing within 45 days of the expiration of the warranty period.
2. Final Acceptance Inspection and Punch List – The Engineering Division shall inspect all public improvements for the project and shall compile a written final punch list of items requiring repair or replacement and any defective or unsatisfactory conditions resulting from materials or workmanship that are defective, inferior, or not in accordance with project plans and specifications.
3. Re-Inspection – If repair or replacement of public infrastructure is required, the permit holder shall complete such repair or replacement within 30 calendar days. Once completed, the permit holder shall contact the Engineering Division for re-inspection.
4. Notice of Final Acceptance – Once all punch list items are completed to the satisfaction of the Engineering Division, and after the record drawings have been submitted and accepted by the Town Engineer, the Town Engineer shall issue a written notice of final acceptance of improvements and shall release warranty surety.
5. Warranty Surety – If the permit holder fails to complete the punch list items satisfactorily within 30 calendar days, the Engineering Division may utilize the warranty surety to complete the punch list items. The Engineering Division may also withhold additional permit approval or certificates of occupancy.