CHAPTER 10 ACCEPTANCE REQUIREMENTS

10.1. APPLICABILITY

Before the City will assume ownership and maintenance responsibility for public improvements, the public improvements shall be formally accepted by the Public Works Director. The developer is responsible for the proper installation of all improvements. Failure by the City's representatives to detect improper installations or defects during the construction of improvements or during subsequent inspections does not relieve the developer of the responsibility to correct such defects at a later date. There shall be no partial acceptances of public improvements within new developments.

10.1.1 ACCEPTANCE PROCEDURE

10.1.1.1. Written Request

At such time that the developer believes that the construction of all required public and private improvements have been completed, all improvements are accessible and visible for inspection, a written request for acceptance shall be submitted to the Public Works Director.

10.1.1.2. Record Drawings

A complete set of “as-constructed” drawings of the public improvements shall accompany the request for acceptance. Upon approval by the City, the developer will be required to submit a certified set of 3 mil mylar copies of the “as-constructed” drawings and a compact disc with PDFs and AutoCAD Electronic files of the drawings. These drawings shall be prepared on twenty-four-inch by thirty-six-inch (24” x 36”) sheets, and lettering should be no smaller than one-eighth inch (1/8”). At a minimum, record drawings shall indicate the horizontal or vertical layout of all underground water, sanitary sewer, and storm sewer facilities (including distances between valves, fittings, manholes, etc.), profiles of streets, sanitary sewer mains and storm sewer mains, details of special or unusual installations and detention pond volumes. If significant corrections to the improvements are noted during the acceptance inspection, the record drawings may be returned to the developer or contractor for revisions. The final submittal of record drawings shall include the mylar copy mentioned above along with a 24” x 36” copy with each sheet of the signed and sealed by the Professional Engineer registered in the State of Colorado who is responsible for the preparation of the record drawings.

10.1.1.3. Certification of Storm Drainage Detention

Registered Land Surveyor: A land surveyor registered in the State of Colorado shall affirm the as-built detention pond volumes and surface areas at the design depths, outlet structure sizes and elevations, storm sewer sizes and invert elevations at inlets, manholes, discharge location, representative open channel cross-sections and dimensions of all the drainage structures.
Registered Professional Engineer: The responsible design engineer shall state that “I have inspected the drainage facilities and to the best of my knowledge, belief and opinion, the drainage facilities were constructed in accordance with the design intent of the approved drainage report and construction drawings.”

10.1.1.4. **Preparation of Corrections List**

Water and sewer utilities shall be inspected throughout installation. Upon completion of installation and prior to paving operations, a punch list shall be generated stating all discrepancies that relate to water and sewer utilities. Once a written request for acceptance, certification of storm drainage detention and record drawings have been received, the Public Works Director will instruct the appropriate Engineering Construction Inspector to schedule an inspection of the improvements. The developer or his representative will be invited to accompany the City’s representative on all such inspections. The construction of public improvements will be inspected for conformance with the approved plans, the Official Development Plan, the Public Improvements Agreement, these STANDARDS AND SPECIFICATIONS and Municipal Code. If, due to excessive dirt or snow on streets, poor weather conditions, inaccessibility or other reasons the inspection cannot be performed, the developer will be notified of the need to postpone these activities until the cause of the delay can be rectified. Deficiencies noted during the inspection will be compiled in a corrections list to be mailed to the developer.

10.1.1.5. **Correction of Deficiencies**

Correction list items shall be corrected within sixty (60) days of the date of the corrections list. If all of the noted deficiencies are not corrected within this time, the public improvements may be reinspected and any new defects may be added to the corrections list. Public improvements will not be accepted until all noted deficiencies are corrected within the proper time frame. The Engineering Construction Inspector shall be notified before any corrective work commences and immediately upon the completion of the repairs.

10.1.1.6. **Written Acceptance**

Upon the completion of all items on the correction list and payment of all outstanding fees, reimbursements and other items owed to the City, the Public Works Director will issue a written acceptance of the public improvements.

10.1.2 **WARRANTY PERIOD**

10.1.2.1. **Duration**

All public improvements shall be subject to a warranty period of at least two (2) years after the date of the letter of acceptance from the Public Works Director.

10.1.2.2. **Maintenance Responsibility**
The developer shall be responsible for the maintenance of all public improvements during the warranty period. The Public Works Director will notify the developer of any maintenance that may be necessary during this time. Routine maintenance normally performed by the developer includes, but shall not be limited to, the cleaning of streets, patching of potholes and removal of blockages from water, storm and sanitary sewer facilities. The cost of any routine maintenance not performed by the developer that must be performed by the City will be billed to the developer at cost plus fifteen percent (15%).

10.1.2.3. **Emergency Repairs**

In the event of a water main break, sanitary sewer main blockage, street or bridge failure, or other emergency that may occur during the warranty period, it may become necessary for the City to undertake immediate repairs to the facilities and/or make the area safe to residents, pedestrians or motorists. The City will attempt to contact the developer in the event of such emergency. However, if the developer or his representative cannot be contacted quickly or if the developer is unable to take immediate action to relieve the urgent situation, the City may proceed with such action as deemed necessary by the Public Works Director, and the developer will be billed for all costs of these actions at cost plus fifteen percent (15%).

10.1.3 **END OF WARRANTY PROCEDURE**

10.1.3.1. **Preparation of Corrections List**

At approximately 1 year and nine (9) months into the warranty period, the Engineering Construction Inspector will schedule and perform an inspection of the public improvements within the development. The developer or his representative will be invited to accompany the City's representative on all such inspections. The condition of the public improvements will be inspected for conformance with the approved plans, the Official Development Plan, the Public Improvements Agreement, these STANDARDS AND SPECIFICATIONS and Municipal Code. If due to excessive dirt or snow on streets, poor weather conditions, inaccessibility or other reasons the inspection cannot be performed, the developer will be notified of the need to postpone these activities until the cause of the delay can be rectified. Deficiencies noted during the warranty inspection will be compiled in a corrections list to be emailed to the developer.

10.1.3.2. **Correction of Deficiencies**

Warranty correction list items should be corrected within 2 months of the date of the warranty correction list, unless authorized by the Public Works Director and all corrections must be completed no later than ten (10) working days prior to the scheduled end of the warranty period. If all of the noted deficiencies are not corrected within this time, the public improvements may be reinspected, a revised correction list may be issued and the end of the warranty period may be adjusted at the discretion of the Public Works Director to allow ample time for the completion of the corrections. The end of the warranty period will not be acknowledged until all noted deficiencies are corrected.
within the proper time frame. The appropriate Engineering Construction Inspector shall be notified before any corrective work commences and immediately upon the completion of the repairs.

10.1.3.3. **Written Acknowledgment of End of Warranty**

Upon completion of the correction of all deficiencies noted in the warranty correction list, the Public Works Director or designee will issue a written acknowledgment of the end of the warranty period for the public improvements. Surety for public improvements may be released in its entirety at this time.

10.1.4 **ACCEPTANCE/WARRANTY INSPECTION CRITERIA**

10.1.4.1. **General**

All public and private improvements shall be installed in conformance with the approved plans, the Official Development Plan, the Public Improvements Agreement, and these STANDARDS AND SPECIFICATIONS. The Public Works Director shall be the final authority in the determination of defects and required corrections to public and private improvements.

10.1.4.2. **Grading and Seeding**

Finished grades shall be in conformance with the approved plans and the Official Development Plan. Detention pond grading shall provide, at a minimum, the required volume as defined in the approved final drainage study. Unless otherwise approved, no slopes shall exceed a grade of four (horizontal) to one (vertical) (4:1). Approved seed mix shall be applied (unless other landscape improvement materials are approved) and grass shall be established in conformance with Chapter 2 of these STANDARDS AND SPECIFICATIONS.

10.1.4.3. **Water Systems**

The required inspection and testing of water mains and appurtenances that shall be performed before systems can be released for service is outlined in Chapter 3 of these STANDARDS AND SPECIFICATIONS. At the time of acceptance and warranty inspections of all public and private improvements, additional aspects of water system construction that shall be inspected include, but shall not be limited to, the following:

a. All valves, blow-off installations and fire hydrants shall be operable.

b. Valve box risers shall be vertical and shall be adjusted to within one-eighth inch (1/8") below grade in paved areas or one inch (1") above grade in landscaped areas.

c. Valve operating nuts shall be accessible with a six-foot (5') valve key with between eighteen inches (18'') and four feet
(4') of clearance between the handle of the key and finished grade.

d. Fire hydrants shall be vertical and shall be adjusted to a minimum of eighteen inches (18”) from the center of the nozzle to finished grade.

e. A minimum of five feet (5’) of clearance for operation shall be provided around all fire hydrants and water valve risers.

f. Manhole rims and covers for water valve vaults shall be adjusted to within one-eighth inch (1/8”) below grade in paved areas or one inch (1”) above grade in landscaped areas.

g. The construction and operation of any required pumping systems shall be in conformance with the specifications issued and approved for that specific installation.

h. All mains and manholes shall be free of construction debris, dirt, trash and other foreign material.

i. Manhole steps shall be properly spaced and aligned.

10.1.4.4. **Sanitary Sewer System**

The required inspection and testing of sanitary sewer mains and appurtenances that shall be performed before systems can be released is outlined in Chapter 4 of these STANDARDS AND SPECIFICATIONS. At the time of acceptance and warranty inspections of all public improvements, additional aspects of sanitary sewer system construction that shall be inspected include, but shall not be limited to, the following:

a. All mains and manholes shall be free of construction debris, dirt, trash and other foreign material.

b. The Contactor’s TV inspection of all sanitary sewer mains shall be completed prior to the acceptance of public and private improvements.

c. Manhole rims and covers shall be adjusted to within one-eighth inch (1/8”) below grade in paved areas or one inch (1”) above grade in landscaped areas.

d. Manhole steps shall be properly spaced and aligned.

e. The construction and operation of any required sewage lift systems shall be in conformance with the specifications issued and approved for that specific installation.

10.1.4.5. **Storm Sewer System**

The required inspection and testing of storm sewer mains and appurtenances that shall be performed are outlined in Chapter 5 of these STANDARDS AND SPECIFICATIONS. At the times of acceptance and warranty inspections of all public improvements,
additional aspects of storm sewer system construction that shall be inspected include, but shall not be limited to, the following:

a. All pipes and manholes shall be free of construction debris, dirt, trash, and other foreign material.

b. The Contractor's TV inspection of all sanitary sewer mains shall be completed prior to the acceptance of public and private improvements.

c. Manhole rims and covers shall be adjusted to within one-fourth inch (1/4") below grade in paved areas or one inch (1") above grade in landscaped areas.

d. Manhole steps shall be properly spaced and aligned.

e. Inlets shall be properly aligned to within one-eighth inch (1/8") below grade next to sidewalk or curb and gutter.

10.1.4.6. **Concrete**

The required inspection and testing of concrete that shall be performed are outlined in Chapter 7 of these STANDARDS AND SPECIFICATIONS. At the time of acceptance and warranty inspection of all public improvements the aspects of concrete construction that shall be inspected include, but shall not be limited to the following:

a. Breakage or cracking greater than 1/32” at other than construction joints.

b. Ponding of any size.

c. Settlement affecting drainage, pedestrian or traffic safety.

d. Surface spalling or deterioration.

e. Longitudinal cracking.

10.1.4.7. **Roadway**

The required inspection and testing of roadways that shall be performed are outlined in Chapter 6 of these STANDARDS AND SPECIFICATIONS. At the time of acceptance and warranty inspection of all public improvements, the aspects of roadway construction that shall be inspected include, but shall not be limited to, the following:

a. Breakage or cracking greater than 1/8”.

b. Ponding of any size.

c. Settlement affecting drainage, pedestrian or traffic safety.

d. Surface segregation of fines or aggregate

e. Hazardous conditions

f. Alligatoring
g. Improper grade or inverted crown.