



PUBLIC WORKS DEPARTMENT
RIGHT-OF-WAY REGULATIONS

November 2015

Adopted by Ordinance No. 2015-O-30

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1.0 AUTHORITY AND PURPOSE

These Regulations are promulgated as an exercise of the City's police power and under the authority of the Centennial Municipal Code, Chapter 11, Article 6 for the purpose of:

- Establishing standards and procedures to ensure that persons who engage in Construction Activities or Maintenance Activities within the public rights-of-way, which are under the jurisdiction of the City of Centennial, perform such work in a competent, safe, and orderly fashion;
- Issuing Right-of-Way Permits to protect the public's investment and prevent or address the premature degradation of public streets and other infrastructure;
- Ensuring that persons working in the public rights-of-way have the knowledge, competence and resources needed properly to perform the work for which they are permitted.

All permit applications pending as of the effective date of Ordinance No. 2015-O-30 and all permits issued under policies and procedures predating the adoption of these Regulations (including, but not limited to, the Public Works Department Administrative Regulations No. 2009-PW-01, No. 2011-PW-01, No. 2013-PW-01, and No 2014-PW-01) shall be processed and managed in accordance with such policies and procedures until such time that the work authorized by such permit(s) is completed, all warranty periods have expired, and the permit is deemed closed by the Public Works Department. All applications for new permits submitted after the effective date of Ordinance No. 2015-O-30 shall be processed and managed in accordance with Ordinance No. 2015-O-30 and these Regulations. It is the intent of these Regulations that all previously issued policies and procedures dealing with street cuts and traffic control, including but not limited to, Public Works Department Administrative Regulations No. 2009-PW-01, No. 2011-PW-01, No. 2013-PW-01 and No 2014-PW-01, are to be repealed and replaced by these Regulations.

The Public Works Director is authorized to promulgate administrative regulations and directives that are not inconsistent with these Regulations and deemed necessary to implement these Regulations. Such regulations and directives may include, but not be limited to, the most current edition of the Arapahoe County Infrastructure Design and Construction Standards, the Centennial Infrastructure Design and Specifications Manual and the most current edition of the SEMSWA Grading, Erosion, and Sediment Control Manual.

2.0 DEFINITIONS

As used in these Regulations, the following words and phrases are defined as follows:

Approved shall mean by the Designated Representative.

ATSSA shall mean American Traffic Safety Services Association.

CDOT shall mean the Colorado Department of Transportation

City shall mean the City of Centennial, a Colorado home rule municipality.

City Manager shall mean the City Manager of the City.

Construction Activities shall mean construction, excavation, repair, demolition or any other work within the public rights-of-way that requires repair to street pavement, curb,

gutter, sidewalk, roadside vegetation or other improvements. Also see *Maintenance Activities* definition.

Construction Standards shall mean the most current edition of the Arapahoe County Infrastructure Design and Construction Standards, except where changed or modified in the Permit Standards section of these Regulations or the most current edition of the SEMSWA Grading, Erosion, and Sediment Control Manual, as applicable. The City of Centennial Infrastructure Design and Specifications Manual will take precedence over the Arapahoe County standards when they are implemented.

Designated Representative shall mean Public Works Director or designee.

Emergency Repair shall mean necessary, immediate work performed within City rights-of-way in order to repair a damaged Utility, which damaged Utility poses an immediate and substantial hazard to the health, safety, or welfare of City property or the general public.

Entity shall mean any person, corporation, company, agency, government, special district, school district, quasi-governmental agency, contractor, subcontractor, Utility, or other person(s), firm(s) or corporation(s) seeking to perform work within a City right-of-way.

Fee Schedule shall mean any right-of-way fees shown on Appendix A.

GESC Permit shall mean a Grading, Erosion and Sediment Control permit issued by Southeast Metro Stormwater Authority.

Holiday shall mean a legal holiday recognized by the City during which City offices are closed.

Infrared Patching shall mean any pavement repair technology that involves reheating of the existing asphalt pavement and blending of the asphalt patching material that results in the appearance of a seamless patched or repaired area of the pavement.

Legal Parking Lane shall mean that portion of a street along the outer edges where parking is not restricted by signs or Traffic Lane.

Maintenance Activities shall mean maintenance work within the public right-of-way for access to existing facilities or landscaping, including but not limited to manholes, vaults, cabinets, poles or irrigation systems, but which does not cause any surface or ground disturbance and therefore, does not require erosion, sediment control measures, or site restoration (per Section 4.2.14). See the General Requirements of the Permit Conditions section for sediment control requirements. Maintenance Activities shall also mean any work outside of the public rights-of-way that requires traffic control for the closure of a Traffic Lane or sidewalk. Also see *Construction Activities* definition.

Municipal Code shall mean the Municipal Code of the City of Centennial, as the same may be amended from time to time.

MUTCD shall mean the Manual of Uniform Traffic Control Devices, as supplemented by the Colorado Department of Transportation.

OCI shall mean the Overall Condition Index (pavement condition) of the street segment which will be established on January 1 of each year.

Permit or Right-of-Way Permit shall mean the permit issued by the City in a form approved by the City Manager and which is required under these Regulations to use a

City right-of-way for any Construction Activities or Maintenance Activities or any traffic control.

Permit Holder shall mean any Entity holding a valid Right-of-Way Permit.

Regulations shall mean the conditions, standards, rules and requirements for the performance of work in a public right-of-way, as amended by the City Manager and ratified by City Council.

Right of Way Management Team shall mean any individual(s) designated in writing by the City Manager to administer and enforce these Regulations.

SEMSWA shall mean the Southeast Metro Stormwater Authority.

Street Cut shall mean an excavation or removal of pavement within any City street right-of-way.

Subcontractors shall mean any person, firm or corporation performing work associated with a Permit issued to another Entity.

Traffic Lane shall mean that portion of a street designated for vehicular travel by painted lane markings or a minimum ten (10) foot width from the center of the street, median curb or painted lane markings.

Utility (Utilities) shall mean infrastructure, equipment, or improvements of any kind or type associated with the delivery, provision, transmission, distribution, operation, function, or monitoring of publicly available services commonly or customarily provided by public or private Entities to customers of the Entities or to the general public such as but not limited to water, sanitary sewer, storm water sewer, electricity, gas, telephone, communication, telecommunication, broadband, cable and pipe or conduit for such services.

Work Days or Working Days shall mean all days on which City offices are open for business.

3.0 PERMIT PROCESS

3.1 Applicability

These Regulations apply to any Entity seeking to undertake Construction Activities or Maintenance Activities within a public right-of-way under the jurisdiction of the City.

The City's municipal departments and its contracted service providers delivering municipal services are not required to obtain a Right-of-Way Permit for work within a public right-of-way under the jurisdiction of the City; however, work performed by the municipal departments or its service providers must be performed in accordance with all other applicable requirements of these Regulations.

A Permit is required when a contractor is performing work under a contract or agreement with the City, although fees for such Permit may be waived.

3.2 Contact Information

The following contact phone numbers are provided for the convenience of the applicant or Permit Holder:

- Utility Notification Center of Colorado (UNCC) utility locates: Call 811 before you dig.
- Sheriff's Department Non-Emergency Number: (303) 795-4711
- Public Works Department
 - 24-hour City Citizen Response Center: (303) 325-8000
 - City Facilities
 - § Centennial Civic Center, 13133 E. Arapahoe Rd, Centennial, CO 80112, (303) 325-8000 (Right-of-Way Permit and License Counter)
 - § Centennial Eagle Street Facility, 7272 S. Eagle St, Centennial, CO 80112, (303) 325-8000
 - City Website: www.centennialco.gov: Click on Centennial Government, Public Works, and then Right-of-Way Permits.
- SEMSWA: (303) 858-8844

3.3 When a Permit is Required

3.3.1 Construction Activities

- a. A Permit is required for each project where Construction Activities occur within any City right-of-way;
- b. A Permit is required when the work requires grading, erosion and sediment controls;
- c. Phased projects or work areas that are geographically separated from each other may require separate permits for the phases or areas, when directed by the Designated Representative.

3.3.2 Maintenance Activities

A Permit is required when Maintenance Activities occur in the right-of-way or require a lane or sidewalk closure in a right-of-way. Entities that perform repetitive work or services at the same or multiple locations within the public right-of-way may be eligible, at the discretion of the Designated Representative, for an annual permit for Maintenance Activities. Loading or offloading vehicles or equipment into a Traffic Lane or obstruction of a Traffic Lane is prohibited without a Permit.

3.3.3 Subcontractors

Subcontractors are authorized to perform work under the Permit, provided that they are listed on the Permit or are added to the Permit prior to starting work. Subcontractors must hold a valid contractor's license with the City of Centennial (see Section 3.7.1).

3.4 Prohibition on Construction Activities – Recently Resurfaced Streets

- 3.4.1 Construction Activities necessitating street cuts shall not be allowed on any street section that has been paved, overlaid or slurred within two (2)

calendar years following the year in which the resurfacing work was completed by the City or a City contractor except for Emergency Repairs of existing facilities or when approved in advance and in writing by the Designated Representative following a review of the criteria set forth in this Section 3.4.1. When reviewing a request for a street cut on a recently resurfaced street, the Designated Representative shall review the following criteria:

- a. Whether the applicant considered the City's anticipated resurfacing schedule prior to planning the proposed street cut;
- b. Alternatives that eliminate the need for the street cut;
- c. Whether the proposed street cut is needed to provide new service to a customer; and
- d. Additional restoration requirements, beyond the permanent patch requirements of these Regulations that may be required to restore ride quality and anticipated pavement life. Additional requirements may include resurfacing an area larger than the street cut, replacing or using geogrid or other materials, requiring a longer warranty period, imposing a payment to the City equal to the anticipated restoration remedy, or a reasonable combination thereof.

3.4.2 In documenting any exception to the prohibition on Construction Activities within recently resurfaced streets, the Designated Representative shall clearly identify the required additional restoration requirements authorized by Section 3.4.1(d) and identify the same on the Permit.

3.5 Fees

3.5.1 Permit Fees

Permit fees shall be paid in accordance with the Fee Schedule. The Fee Schedule can also be obtained at the Right-of-Way Permit and license counter at Centennial Civic Center, 13133 E. Arapahoe Rd, Centennial, CO 80112, (303) 325-8000; Centennial Eagle Street Facility, 7272 S. Eagle St, Centennial, CO 80112, (303) 325-8000; or from the Public Works Right-of-Way Permits page on the of the City website, www.centennialco.gov.

3.5.2 Refunds

With the exception of cancelled permits, no refunds shall be issued on any Permit fees paid without approval of the Designated Representative.

An administrative fee shall be charged to refunds issued for cancelled permits.

3.6 Application Information

3.6.1 Permit applications can be obtained at the Right-of-Way Permit and license counter at Centennial Civic Center, 13133 E. Arapahoe Rd, Centennial, CO 80112, (303) 325-8000; Centennial Eagle Street Facility, 7272 S. Eagle St, Centennial, CO 80112, (303) 325-8000; or from the

Public Works Right-of-Way Permits page on the of the City website:
www.centennialco.gov.

3.6.2 Submittal Requirements

- a. Completed Permit application with estimated quantities for fee calculations.
- b. Construction plans or sketch plan showing work location street(s), work address or nearest intersecting street(s), street names, medians, ditch line, curb, gutter and sidewalk, approximate easement and property lines, existing and proposed utilities, dimensions and north arrow.
- c. Grading, erosion and sediment control information. A GESC Permit from SEMSWA may be required. See Section 5.1 for additional information.
- d. New culvert locations must be approved by SEMSWA prior to the approval of a City Permit to construct a new culvert in a new location.
- e. Traffic control plan or MUTCD plan number. Street closure plans must be submitted for approval. See Section 5.3 for additional information.
- f. New driveway locations, which require approval by the City Traffic Engineer prior to the approval of a City Permit to construct a new driveway in a new location.

3.6.3 Processing Time

The Designated Representative will not unreasonably withhold the issuance of a Permit and shall act on all completed Permit applications within a reasonable time. A Permit application shall not be accepted until all submittal requirements in Section 3.6.2 are satisfied. An Entity shall allow up to fourteen (14) calendar days from the acceptance date of the application for the City to process a permit application.

For any Construction Activity that requires colocation of City conduit, the City shall not unreasonably delay the processing of the application and shall in all instances prioritize the delivery of City conduit and other City-required improvements to the Permit Holder's site of installation. Where the City is unable to reasonably meet the Permit Holder's construction schedule, the City's Public Works Director is authorized to waive the City requirement for colocation.

3.6.4 24-hour Contact Personnel

The Permit Holder shall provide the name and phone number of a contact person who is available on a twenty-four (24)hour basis in the event the City becomes aware of an unsafe condition that warrants immediate attention. The Permit Holder shall immediately provide updated contact information to the Designated Representative whenever a change occurs.

3.6.5 Multiple Applications for Construction Activities

Applications for Construction Activities associated with the same improvement shall not be divided into multiple applications for the purpose of evading obligations for colocation of City conduit (e.g., submission of two applications, one for 900 linear feet and one for 300 linear feet, to install 1200 linear feet of a water main). Multiple applications for the same improvement may be justified where discrete segments of the improvement will be installed in different phases or at different times separated by thirty (30) or more calendar days.

3.7 Emergency Repairs

Permits for emergency repairs must be obtained within seven (7) Working Days following the date the emergency repairs were initiated, in accordance with the timing requirements of this Section 3.7. In addition, the notice requirements of Section 4.2.4 shall apply to any emergency repairs. Any Entity undertaking an emergency repair shall: (1) submit a Right-of-Way Permit application within two (2) Working Days following the date the emergency repair was initiated; and (2) pick up the Permit and pay any and all applicable fees within five (5) Working Days thereafter. If any Entity fails to submit a Right-of-Way Permit application or fails to pick up the Permit within the timeframes required by this Section 3.7, a Notice of Violation may be issued to the Entity.

3.8 Contractor License and Bond Requirements

3.8.1 Any Entity proposing to perform work as an owner, contractor or subcontractor under a Right-of-Way Permit must be licensed to perform work within the City, in accordance with applicable City licensure requirements. Contractor licenses can be obtained at the Right-of-Way Permit and Contractor License counter at the City Civic Center, 13133 E. Arapahoe Rd, Centennial, CO 80112, (303) 325-8000.

3.8.2 Each permittee, except governmental agencies, public utility and communications companies, water and sanitation districts and mutual companies, is required to post and maintain, during the term of any Permit, a minimum twenty thousand dollar (\$20,000) bond. Excepted Entities are required to provide the bond or a performance guarantee in a form approved by the City that identifies the City as the beneficiary or secured party of the performance guarantee. An approved performance guarantee form (Letter of Responsibility and Agreement to Perform) can be obtained at the Right-of-Way Permit and Contractor License counter at the City Civic Center, 13133 E. Arapahoe Road, Centennial, CO 80112, (303) 325-8000.

3.9 Permit Amendments / Cancellations

A Permit may be cancelled at the discretion of the Designated Representative and a new Permit required when a quantity specified as part of the Permit increases by more than ten percent (10%) or additional Construction Activities that were not contemplated at the time the Permit was originally issued by the City are scheduled to occur. The final quantity of work will be reviewed during the Final Completion inspection.

3.10 Permit Extensions

The duration of any Permit may be extended when approved by the Designated Representative. Requests for extension must be made in writing to the

Designated Representative a minimum of ten (10) Working Days prior to the Permit's expiration. The minimum fee to be charged for extending a Permit is the base fee. Additional fees may be assessed at the discretion of the Designated Representative.

3.11 Notice of Violation

A Notice of Violation may be issued by the Designated Representative when a Permit is not obtained prior to starting work or work performed under the Permit is not in compliance with these Regulations. The Permit Holder shall be responsible for the payment of a fee, in the amount shown on the Fee Schedule, when issued a Notice of Violation. The Fee Schedule specifically includes and references increased fees for second and subsequent Notices of Violation. The Designated Representative will identify the violations or deficiencies that must be corrected. A Notice of Violation issued for working without a permit must be corrected within one (1) Work Day and other corrective actions must be initiated within three (3) Work Days and corrected within five (5) Work Days, unless extensions are approved by the Designated Representative and included in the completion date. If the corrections are not completed by the date required on the Notice of Violation, an additional Notice of Violation with the associated fee, to be assessed in the amount set forth in the Fee Schedule, may be issued by the Designated Representative.

The Designated Representative retains the authority to revoke any Permit for failure to comply with these Regulations or other applicable laws or regulations of the City. The Designated Representative may also revoke a contractor license, in accordance with applicable provisions of the City Municipal Code, for failure to comply with these Regulations.

Upon issuance of a Notice of Violation, the Permit Holder shall secure the site(s), provide the necessary traffic control and discontinue all non-corrective work within the public right-of-way. No further work will be allowed until the corrections are completed and approval is provided by the Designated Representative. Permit applications for any Entity with a Notice of Violation in effect will not be processed until all applicable outstanding fees, as set forth in the Fee Schedule, have been paid to the City by the Permit Holder and the City has verified that all outstanding amounts have been collected.

The Designated Representative shall be authorized, in consultation with the City Attorney, to issue a summons and complaint for any violation of these Regulations.

3.12 Completion Inspection

The Permit Holder or contractor shall schedule a completion inspection with the Designated Representative a minimum of twenty-four (24) hours in advance of leaving the site after completion of the work. Failure to schedule a completion inspection prior to leaving the site after completing the work is justification for a Notice of Violation.

For projects involving colocation of City conduit (see Section 4.2.1 of these Regulations), this completion inspection shall include physical verification of the installed City conduit. The Permit Holder may be required to submit signed as-built documentation of the City's conduit to the City if physical verification of the City conduit is not possible.

The Designated Representative shall provide an inspection report with a written punchlist of all deficiencies, if any, that must be corrected prior to acceptance of the work for completion of the Permit. The Permit Holder shall complete the punchlist and schedule a final inspection within seven (7) calendar days, unless a written extension is approved by the Designated Representative. If there are no punchlist items, the completion inspection will be the final inspection.

3.13 Final Inspection

If the completion inspection is not the final inspection, the Permit Holder or contractor shall complete the punchlist and schedule a final inspection within seven (7) calendar days, unless a written extension is approved by the Designated Representative. Failure to complete the punchlist items within the period approved by the Designated Representative and schedule the final inspection is justification for a Notice of Violation. If the Designated Representative does not accept the corrected work at the final inspection, or the work is not completed, the Designated Representative may assess a Notice of Violation.

3.14 Acceptance

Upon acceptance of the work after the final inspection, the Designated Representative will sign and date the Permit to indicate the start date of the warranty period.

3.15 Warranty

All work performed under the Permit shall be warranted for two (2) years from the date of acceptance. During the warranty period, the Permit Holder may be notified in writing of any defective work and shall correct the defective work within fourteen (14) calendar days or within the time allowed in writing by the Designated Representative. The corrective work shall be warranted for two (2) years after completion. Failure to correct the deficiencies within the required time period, or obtain a written extension, is justification for a Notice of Violation. As set forth in Section 3.4.1(d), a warranty period exceeding two (2) years may be required for Construction Activities permitted to occur within streets that have recently been resurfaced.

3.16 Warranty Inspection

The Designated Representative will send a notice of warranty inspection to the Permit Holder prior to the warranty expiration date. The notice will indicate that the work is accepted and the Permit is closed or it will include a written punchlist of deficiencies that must be corrected within fourteen (14) calendar days or the within time allowed in writing by the Designated Representative. The Permit Holder shall notify the Designated Representative after the punchlist is completed. Failure to complete the punchlist within the required time period, or obtain a written extension, is justification for a Notice of Violation.

4.0 PERMIT CONDITIONS

4.1 Duration of Permit

4.1.1 Permits for Maintenance Activities are issued on an annual basis or by location (up to three (3) locations). Annual permits for Maintenance Activities must be renewed each calendar year. Permits issued by

location (up to three (3) locations) shall be in effect for 120 days from date of issuance.

- 4.1.2 Permits for Construction Activities shall be in effect for 120 calendar days from date of issuance.

4.2 Terms and Conditions

4.2.1 Colocation of City Infrastructure with Permit Holder's Infrastructure

- a. The City recognizes that it is within its police power as a home rule municipality to preserve the physical integrity of its streets and highways, control the orderly flow of vehicles and pedestrians, and efficiently manage the gas, electric, water, cable, broadband, telephone, and other facilities that crisscross its streets and public rights-of-way. It is the City's policy to efficiently use public rights-of-way for a variety of infrastructure and utilities in order to provide public services; advance the City's goal of increasing opportunities for access to traffic control, communication, and broadband services; limit the frequency of street closures and cutting of public streets; and reduce road degradation caused by repeated boring and trenching of public rights-of-way. To this end, the City requires all Permit Holders proposing Construction Activities that involve directional boring or open trenching within a public right-of-way that extend for more than 1000 feet in length to colocate and install City conduit simultaneously with the permit Holder's Construction Activity. The City will review all permit applications in a competitively neutral manner and make all permit decisions based on substantial evidence. The City may, upon initial review of the permit application, determine that the Permit Holder's proposed Construction Activity does not demonstrate a need for colocation of City infrastructure.
- b. For any Construction Activity that requires colocation of City conduit, the City shall, as a condition of the issuance of the Permit or continued validity of a Permit, require the Entity/Permit Holder to install City conduit with tracer wire and associated infrastructure, as identified by the City, concurrent with the installation of the Permit Holder's infrastructure., The requirement for the Entity/Permit Holder to install City conduit with tracer wire and the associated infrastructure shall be completed after the City has reviewed and approved all estimated costs associated with the co-location of the City conduit.

The Permit Holder shall install the City conduit with tracer wire adjacent to the Permit Holder's infrastructure and within the same bore or trench alignment.

The City will bear all costs associated with the colocation, including the City conduit, pullboxes, and all other materials and infrastructure to be installed, including the incremental labor and equipment cost incurred by the Permit Holder (or its contractor or subcontractor) that are reasonably and directly attributable to the required colocation of City conduit, materials and infrastructure.

Pursuant to Section 3.12 of these Regulations, a completion inspection with the Designated Representative is required. When a colocation of City conduit is required, this completion inspection shall include physical verification of the installed City conduit. The Permit Holder may be required to submit signed as-built documentation of the City's conduit to the City if physical verification of the City conduit is not possible.

The Designated Representative may waive Permit fees set forth in the Fee Schedule for any Construction Activities associated with a City colocation project. All applicable pavement restoration fees, as set forth in the Fee Schedule, shall apply unless and until a written waiver is obtained from the Designated Representative. A Permit Holder may appeal a colocation condition imposed by the City in accordance with the appeals procedure set forth in Section 7.0 of these Regulations.

4.2.2 Planned Construction Activity

The Permit Holder is responsible for ensuring that the Designated Representative is notified a minimum of two (2) Working Days prior to initiating planned (non-emergency) Construction Activities and a minimum of twenty-four (24) hours in advance of each required inspection. Contact the City's 24-hour Citizen Response Center at (303) 325-8000 for notifications. A Notice of Violation may be charged to the Permit Holder if the contractor cancels a scheduled inspection or changes the work schedule without providing a minimum of four (4) hours advance notice to the Designated Representative.

4.2.3 Planned Maintenance Activity

The Permit Holder is responsible for ensuring that the Designated Representative is notified no later than 4:00 pm on the Work Day preceding the scheduled commencement of planned (non-emergency) Maintenance Activities. Contact the City's 24-hour Citizen Response Center at (303) 325-8000 for notifications. For Maintenance Activities involving a multiple day period or multiple locations, a work and/or project schedule may be provided to the Designated Representative in lieu of prior Work Day notifications. The work and/or project schedule shall contain the location(s) of the Maintenance Activities, start date(s) and the estimated duration of the work to be performed at each site. A Notice of Violation may be issued if the Permit Holder does not contact the City prior to initiating work.

4.2.4 Emergency Repairs

The Permit Holder is responsible for ensuring that the City's 24-hour Citizen Response Center at (303) 325-8000 is notified upon beginning any work or operations related to emergency repairs in the right-of-way. The Citizen Response Center will notify the Designated Representative. A Notice of Violation may be issued if the Permit Holder does not call the Citizen Response Center prior to initiating the emergency repairs.

4.2.5 Work Limits

- a. For non-trenching operations, the working limit of a permit is limited to one (1) linear mile. Final restorations must be completed before any work occurs past this distance. Any exceptions to the one-mile rule set forth in this Section 4.2.5(a) must be documented and approved by the Designated Representative in writing.
- b. For continuous trenching operations, the working limit of a permit is limited to 1000 linear feet. Final restorations must be completed before any work occurs past this distance. Any exceptions to the 1000 linear feet rule set forth in this Section 4.2.5(b) must be documented and approved by the Designated Representative in writing.

4.2.6 Preconstruction Meeting

Permits may require a preconstruction meeting to be scheduled with the Designated Representative. The Designated Representative may require attendance by any or all of the following parties: Owner, Contractor, Subcontractors, project design engineer and project design traffic engineer. The preconstruction meeting may be required to be rescheduled if any required representative fails to appear at the meeting. Starting work prior to a required preconstruction meeting is justification for a Notice of Violation.

4.2.7 Work Schedule

The key schedule dates below shall be provided to the Designated Representative when the two (2) days' notice is given prior to starting work, as required by Section 4.2.2 of these Regulations. Failure to inform the Designated Representative of changes to the schedule or inspection dates is justification for a Notice of Violation. The key schedule dates are:

- a. Project start date;
- b. Estimated date of completion of subgrade preparation for paving or patching;
- c. Estimated start date of paving or patching restoration; and
- d. Estimated project completion date.

4.2.8 Permit Posting

- a. Construction Activities: When the work involves Construction Activities, a copy of the Permit with reviewed and accepted traffic control plans shall be available at the site at all times when work is being performed.
- b. Maintenance Activities: When work involves Maintenance Activities, the contractor shall have a copy of the Permit or the permit number available for the Designated Representative to verify.

4.2.9 Conflicts In Standards

All work must conform to the construction plans, sketches, and traffic control plans submitted to the City as part of the Permit application. Unless a conflict between the approved Permit and the Regulations and the Construction Standards is noted on the Permit, the Regulations and Construction Standards will govern.

4.2.10 Water Pumped onto the Street

Sediment and/or debris from water that is pumped out of structures during Maintenance Activities or maintenance work on residential streets shall be contained within the work area and removed from the street. Sediment shall not flow to the gutter or ditch without providing inlet protection and/or sediment control devices for containment. The contractor shall clean the street and gutters whenever sediment is pumped out of a work area. Failure to provide sediment control when sediment is discharged outside of the work area is justification for a Notice of Violation.

4.2.11 General Permit Holder Responsibilities

The Permit Holder shall be responsible for providing a 24-hour contact person in the event the City becomes aware of an unsafe condition related to the project that warrants immediate attention. If the contact person cannot be reached or refuses to agree to undertake corrective action in a timely manner, the City will proceed to perform the necessary work to remedy the unsafe condition in order to protect the public's safety. The Permit Holder shall be responsible for reimbursing the City for all of the City's reasonable expenses incurred for repairs, active traffic control, and/or other work that is necessary to remedy the unsafe condition. Failure to fully reimburse the City within ten (10) Work Days following the date the City provides the Permit Holder with an itemized invoice setting forth such costs is justification for a Notice of Violation.

The Permit Holder is responsible for coordinating with all Entities and other contractors working in the same or adjacent areas.

The Permit Holder shall be responsible for ensuring that all Contractors and Subcontractors comply with the terms and conditions of the Permit and these Regulations.

4.2.12 Daily Cleanup, Damage and Safety

- a. Daily cleanup: Upon completion of each day's work, the permit holder is responsible for ensuring that all litter, construction debris and other waste materials resulting from the work is removed from the site and the site is left in a neat and orderly appearance. The street pavement and sidewalk shall be swept daily, if determined necessary by the Designated Representative, for dust control and to remove mud or loose material resulting from the work.
- b. Property damage: Any damage to public or private facilities as a result of the permitted work shall be the responsibility of the Permit Holder.

- c. Safety: The Permit Holder assumes full and complete responsibility for job site conditions and the safety of all persons and property within the job site during the course of the permitted activity.

4.2.13 Permanent Patching

Weather permitting, placement of the permanent patch or surface course shall be completed following the installation of cold patching material within seven (7) calendar days for residential streets and two (2) calendar days for collector and arterial streets, unless an extended date is submitted and approved by the Designated Representative.

4.2.14 Site Restoration

All repairs shall cause the street and other property to be returned to a condition equal to or better than the condition prior to the work within seven (7) calendar days of the work being substantially complete, unless the Permit Holder receives written approval for an extended date from the Designated Representative. Site restoration may include final street and sidewalk sweeping, vegetation and landscape restoration, pavement striping, utility locating paint and flag removal and removal of erosion and siltation controls. The work is substantially complete when the major items of work on a Permit, such as the repair or installation of a structure or utility, are complete, as evidenced by opening the street to traffic and removing materials, equipment and/or traffic controls.

4.3 Work Hours

- 4.3.1 Work hours are limited to 8:00 a.m. to 5:00 p.m. Monday through Friday on residential streets.
- 4.3.2 Work hours are limited to 8:30 a.m. to 3:30 p.m. Monday through Friday on arterial and collector streets.
- 4.3.3 Permitted night work on arterial and collector streets shall begin no earlier than 7:00 p.m. and end by 5:00 a.m. on the following day.
- 4.3.4 No work is permitted on Saturday, Sunday or City designated Holiday without approval of the Designated Representative.
- 4.3.5 Traffic control setup and removal shall be performed within the specified working hours, unless approved otherwise on the Permit's traffic control plan. Preparations that do not interfere with vehicular or pedestrian movement are allowed.
- 4.3.6 For work requiring a lane closure outside of the specified hours, written approval must be provided by the Designated Representative.
- 4.3.7 If work occurs outside of the above referenced working hours without written approval, a Notice of Violation may be issued.

5.0 PERMIT STANDARDS

5.1 Grading, Erosion and Sediment Control (GESC)

5.1.1 GESC Permit

SEMSWA administers the grading, erosion and sediment control program (GESC) for the City. A GESC Permit is required for projects involving land disturbance of any type. Right-of-Way Permits will not be issued to any Entity until the Entity has obtained a GESC Permit, when required. For more information contact the SEMSWA office at 7437 S. Fairplay Street, Centennial, CO 80112, (303) 858-8844.

5.1.2 City Permit Requirements

Erosion and sediment control shall be provided for work where sediment could be discharged outside of the work limits or into a storm drain. Erosion and sediment controls shall be required for, but not limited to, the following work:

- a. Trenching or excavation;
- b. Grading;
- c. Boring or tunneling;
- d. Utility plowing;
- e. Sediment pumped from manholes and vaults that will enter a storm drain; and
- f. Stockpiling excavated or backfill materials.

5.2 Construction

The most current edition of the Arapahoe County Infrastructure Design and Construction Standards shall apply to construction within City rights-of-way, except as modified in this section. The City of Centennial Infrastructure Design and Specifications Manual will take precedence over the Arapahoe County standards when they are implemented.

5.2.1 Pavement Cutting

- a. All pavement cuts shall be in straight lines parallel or perpendicular to the street centerline. Irregular shaped cuts with more than four sides will not be allowed. Cuts within existing patched areas must be extended to the edge of the existing patched area if the proposed cut is within four (4) feet of the edge of the existing patch.
- b. All asphalt pavements shall be cut by wheel-cutting, saw-cutting, rotomilling or other methods that assures a straight, uniform, vertical edge for the required depth of the cut, as approved in advance by the Designated Representative. Saw cuts extending beyond the patch limits by more than the depth of the cut may require crack sealing.

- c. All cuts in concrete pavement require saw cutting. Saw cuts through curb and gutter sections must be continuous through the base of the curb head.
- d. The minimum size of an asphalt pavement cut shall be three (3) feet by three (3) feet.
- e. The minimum width of asphalt pavement removal for concrete replacement shall be eighteen (18) inches.
- f. The contractor may initially remove less pavement than the required replacement area. The final limits of pavement removal for any pavement patch shall comply with the Regulations.
- g. Any pavement cut edge that is damaged by Construction Activities shall be cut back beyond the damage for the entire length of the cut to provide a continuously straight and vertical edge prior to patching. Damage to exposed concrete faces may require the removal and replacement of additional concrete pavement sections.
- h. Any sloughing of the excavation wall that causes undermining of the pavement cut shall require cutting the pavement back beyond the limits of undermining for the entire length of the cut prior to backfill and patching.
- i. Use of steel plate(s) to cover excavations is not permitted unless specifically authorized by the Designated Representative. All trenches and other excavations must be backfilled with a temporary cold mix asphalt paving surface provided at the end of each workday. The use of asphalt millings or other aggregates is not permitted. The use of hot mix asphalt paving for temporary patching is acceptable.

5.2.2 Backfill and Compaction

- a. Backfill: Backfill for excavations shall be composed of suitable excavated material, CDOT Class 6 base course material or flowable fill, such as flowfill or flashfill. Excavated material shall be approved by the Designated Representative in writing prior to backfill.
- b. Flowable fill: Flowable fill shall be “flow fill” or “flash fill” type material with a design compressive strength between 50 and 150 psi at twenty-eight (28) days when tested in accordance with ASTM D4832.
- c. Compaction testing requirements: Compaction of backfill, except flowable fill, shall be provided by the permittee or their designated subcontractor when the patching area exceeds 250 square feet. Compaction testing on other projects may not be required when twenty-four (24) hours advance notice is provided to the Designated Representative prior to backfilling. When testing is required, compaction test results shall be certified by a Colorado-licensed Professional Engineer and provided to the Designated

Representative. Backfill material shall be compacted according to the requirements of the following table:

AASHTO	Compaction	Moisture Content
Classification	Percent of Maximum	Deviation from Optimum
Clay Soils A-6, A-7	95% Min of AASHTO T-99 Standard Proctor Method	0% to +2%
Sands, Gravels, Silts A-1, A-2, A-3, A-4, A-5	95% Min of AASHTO T-180 Standard Proctor Method	-2% to +2%

- d. Compaction testing frequency: When compaction testing is required, trench backfill shall be tested at maximum depth intervals of two (2) feet and maximum length intervals of 125 feet. A minimum of one (1) test location is required within one (1) foot of a manhole, valve box, or other structure. Excavated areas, other than trenches, shall be tested at a minimum of three (3) test locations per 250 square feet. Testing frequency may be increased or decreased when directed in writing by the Designated Representative. Compaction test results shall be certified by a Colorado-licensed Professional Engineer and provided to the Designated Representative prior to acceptance of the work and completion of the Permit. If no test results are received or test results are unsatisfactory, the Contractor shall be required to remove and recompact the entire excavation upon written notice by the Designated Representative. All removal and recompaction activities shall be completed within fourteen (14) calendar days following the date of the Designated Representative's written notice issued pursuant to this Section 5.2.2(d).
- e. Test holes: Test holes, potholes for utilities or core borings less than one (1) square foot in area shall be backfilled with flowable fill or squeegee to the bottom of the pavement or six (6) inches from the pavement surface, whichever provides greater pavement patching thickness.

5.2.3 Permanent Patching

- a. Patch depth: The hot mix asphalt patching depth shall be equal to the existing asphalt thickness or a minimum of six (6) inches, whichever is greater.
- b. Tack: Tack coat shall be applied to the vertical face of all pavement cuts edges and milled surfaces prior to patching or placement of any asphaltic surface or base course materials.
- c. Types and limits of patching: Street Cuts with an area of 250 square feet or less and patch-back areas (see 5.2.3.d) may be patched within the limits of the pavement cut. The limits shall be approved by the Designated Representative prior to patching. Street Cuts, regardless of size, in streets that have been paved,

overlaid or slurried within two (2) calendar years following the year in which the resurfacing work was completed by the City shall be Infrared Patched or milled and overlaid to a depth of two (2) inches below the existing pavement surface and in parallel lines at a minimum distance of one (1) foot beyond the pavement cuts. For Street Cuts greater than 250 square feet, the City shall, at its discretion require, Infrared Patching or mill and overlay. When any asphalt overlay or patch edge is within two (2) feet of the lip of a cross-pan, gutter or other concrete edge, the limits of required patching or trench overlay shall be extended to the concrete edge.

- d. Patch-back: Asphalt patching (patch-back) along curb, gutter, sidewalk, crosspans, aprons or other concrete that is removed for replacement, shall have a minimum width of eighteen (18) inches from the edge of the concrete for the entire length of the new concrete. CDOT grading SX aggregate with the proper asphalt grade (see 5.2.5) may be used for the full depth of the patch with a maximum compacted lift thickness of three (3) inches.
- e. New pavement: See Section 3.4.1.
- f. Patches less than 250 SF: Areas less than 250 square feet and patch back areas for concrete replacement may use hot mix asphalt with CDOT grading SX aggregate and the proper asphalt grade (see 5.2.5) for the full depth of the patch with a maximum compacted lift thickness of three (3) inches.
- g. Patches greater than 250 SF: Areas greater than 250 square feet shall be patched as follows:
 - 1. Minimum compacted thickness of the surface course shall be two (2) inches of hot mix asphalt with grading SX aggregate and the proper asphalt grade (see 5.2.5). Maximum compacted thickness shall be three (3) inches.
 - 2. Minimum compacted thickness of the asphalt base course shall be three (3) inches of hot mix asphalt with grading S aggregate and the proper asphalt grade (see 5.2.5). Maximum compacted thickness shall be four (4) inches.
- h. Total patch area greater than 1000 SF: If the total patching area within a one (1) linear mile section exceeds 1000 SF, than a two (2) inch mill and overlay will be required for the entire lane width of the patch.
- i. Test holes: Potholes for utilities, test holes and core borings shall be square patched six (6) inches beyond the hole. Holes within twenty-four (24) inches of each other shall be combined into one (1) patch requiring milling, saw-cutting or Infrared Patching six (6) inches beyond the holes.
- j. Open seams: Patch seams that open in excess of 1/8" during the warranty period shall be crack sealed.
- k. Smoothness: All pavements shall be replaced to uniform lines and grades to match the longitudinal slope of the existing pavement.

When checked with a ten (10) foot straight edge, variations in the pavement surface shall not exceed plus or minus 1/4" .

5.2.4 Temporary Patching

- a. Time limits: All pavement cuts open to traffic shall be temporarily patched until permanent patching is completed. The temporary patch shall be maintained to provide a level road surface until permanent hot mix asphalt is placed. Refer to section 4.2.13 for permanent patching requirements.
- b. City patching: If a permanent patch is not placed within fourteen (14) calendar days after placement of the temporary patch, the City has the authority to hire and/or perform the permanent patching operations and assess the total cost to perform this work plus an administrative surcharge of five percent (5%) to the Permittee for reimbursement. Any costs not paid by the Permittee within thirty (30) days following the date on which the City has assessed the costs to the Permittee and delivered a written statement invoicing said costs, shall bear interest at the rate of eighteen percent (18%) per annum, until paid in full. Eligible costs associated with the City's permanent patching work may include, but are not limited to, traffic control, mobilization, materials, equipment and labor. If the Permit Holder does not fully reimburse the City for these costs within thirty (30) days of the City submitting an invoice to the Permit Holder, default interest shall accrue as set forth above and the City may withhold the approval of future permits or suspend existing permits for the Permit Holder, or any other entity retained to perform work on behalf of the Permit Holder, until full reimbursement of the City costs has been received by the City.
- c. Materials: Temporary patching materials shall be cold mix asphalt, hot mix asphalt or flowable fill material, with a minimum two (2) inch depth. See Section 5.2.5 for asphalt material specifications.

5.2.5 Asphalt Materials and Compaction

- a. Large or small patch areas: See Section 5.2.3 for asphalt materials when patching area is less than or greater than 250 square feet.
- b. Arterial or collector street: Surface courses shall be CDOT grading SX aggregate, PG 58-28 or 64-22 asphalt and 75 gyration compaction. Asphalt base course shall be CDOT grading S aggregate, PG 58-28 or 64-22 asphalt and 75 gyration compaction.
- c. Local or residential street: Surface and base courses shall be the same aggregates as arterial and collector streets with PG 58-28 or PG 64-22 asphalt and 75 gyration compaction.
- d. Mix design: Hot mix asphalt mix designs shall be in accordance with CDOT Manual of Test Procedures. Mix designs shall be approved by the City prior to placement.

- e. Cold mix material: Cold mix material shall be of a quality that does not rut or shove during the temporary period that it is in place. If the temporary patch shows signs of failure, the Contractor must correct within twenty-four (24) hours of notification. If the Permit Holder fails to correct the temporary patch to the City's satisfaction within the specified time frame, the City reserves the right to install emergency traffic control measures and/or perform permanent patching and assess costs against the Permit Holder in accordance with the procedure set forth in Section 5.2.4(b).
- f. Tack coat material: Tack coat material shall comply with CDOT Standards and specifications for CSS-1h emulsified asphalt.
- g. Compaction testing requirements: Unless directed otherwise by the Designated Representative in writing, asphalt compaction testing may not be required when twenty-four (24) hours advance notice of patching and/or paving is provided to the Designated Representative. When required, compaction test results shall be certified by a Colorado-licensed Professional Engineer and provided to the Inspector. Hot mix asphalt shall be compacted to 92% - 96% of maximum density.
- h. Compaction testing frequency: When asphalt compaction testing is required by the Designated Representative in writing, asphalt compaction for trenches shall be tested at maximum intervals of 250 feet per lane width. A minimum of one (1) test location is required within one (1) foot of a manhole or valve box. Patched or paved areas, other than trenches, shall be tested in maximum 500 square foot areas with a minimum of three (3) test locations per excavated area. Each asphalt lift shall be tested.
- i. Test holes: Asphalt patching for test holes and core borings shall be compacted with a pneumatic compactor (pogo stick) or other approved method.

5.2.6 Concrete Pavement Replacement and Repair

- a. Pavement removal area and replacement depth: Entire jointed panels shall be replaced when a Street Cut is made within the panels, with the concrete pavement saw-cut to the full depth of the existing pavement. The joints shall be constructed in the same pattern as the existing pavement.
- b. Manholes and structures: When replacing concrete around a manhole, valve box or other structure that is not within an existing jointed section for the structure, the existing concrete pavement shall be cut to provide a minimum two (2) foot by two (2) foot square joint pattern that is approved by the Designated Representative. Replacement of the entire jointed section of the existing pavement, as stated in Section 5.2.6.a, is not required.
- c. Potholes: Potholes, test holes and core borings less than (1) one square foot in area shall be repaired for the full depth of the concrete by placing Quikrete, Rapid Set or an approved equal concrete repair product with a minimum one (1) day compressive strength of 4,000 psi. More than one (1) hole in a jointed section

may require replacement of the jointed section when directed by the Designated Representative in writing.

- d. Mix design: Concrete mix design for pavement sections shall meet or exceed CDOT Class P concrete specifications and have a minimum twenty-eight (28) day compressive strength of 4,200 psi. Mix designs shall be approved by the City prior to placement.
- e. Panel joints at saw-cuts: Rebar doweling is required at the saw-cut joints for all concrete pavement repairs. Grade 40, epoxy coated rebar (#5 rebar) with 5/8" diameter, must be provided at twelve (12) inches on centers for each side of the Street Cut. Rebar dowels shall be placed at half of the pavement depth. Rebar dowels shall be a minimum of twenty-four (24) inches in length to allow for twelve (12) inches drilled into the existing pavement and twelve (12) inches of embedment into the new concrete pavement. Rebar dowels shall be set into the drilled holes with epoxy adhesive.
- f. Panel joints for new concrete: Provide contraction joint assemblies for panel joints in new concrete. 1-1/4 inch diameter, grade 60, epoxy coated steel dowels shall be used. Dowels shall be minimum eighteen (18) inches in length and placed at twelve (12) inches on centers and at one half of the pavement thickness.
- g. Joint dimensions: After placement of concrete pavement, joints shall be saw-cut or tooled to a depth of 1/4 of the concrete slab's thickness. Maximum joint width at the surface shall be 5/16".
- h. Joint Sealant: Joints shall be sealed with gray silicone concrete pavement sealant, such as Dow 888, Dow 888-SL or an approved equivalent.

5.2.7 Concrete Curb, Gutter and Sidewalk

- a. Standards: This section applies to concrete curb, gutter, sidewalk, crosspans, aprons, curb ramps and other types of flatwork. Construction shall be in accordance with Arapahoe County Infrastructure Design and Construction Standards unless specified otherwise in this section. Concrete pavements, cross pans, aprons and the like shall be replaced to the limits of the existing joint pattern.
- b. Saw-cutting: All concrete removal shall be saw-cut to the full depth of the concrete and continuous through the curb head.
- c. Mix design: Concrete mix design for curb, gutter and sidewalk shall meet or exceed CDOT Class D specifications and have a minimum twenty-eight (28) day compressive strength of 4,000 psi.
- d. Base course: A minimum four (4) inch thick aggregate base course complying with CDOT Class 6 material is required. Compaction of subgrade and base course shall be inspected by the Designated Representative prior to placing concrete.
- e. Minimum concrete thickness:

1. Crosspans and aprons – ten (10) inches per Construction Standards
 2. Driveways and detached sidewalks – six (6) inches
 3. Combination or monolithic curb, gutter and sidewalk – six (6) inches
 4. Curb ramps – per Construction Standards
- f. Contraction joints: Sidewalk shall be replaced with transverse contraction joints not exceeding the width of the sidewalk. Curb or combination curb, gutter and sidewalk sections shall be replaced in full sections that are nominally ten (10) feet long. Joints shall be saw-cut or tooled to a depth of 1/4 of the concrete slab thickness. Maximum joint width at the surface shall be 5/16”.
- g. Expansion joints: Expansion joint material shall be placed along cuts for structures, such as poles and posts.

5.2.8 Directional Boring

- a. Permit Holder shall provide documentation for the bore depth, which must be in accordance with manufacturer recommendations for the bore size and soil type to be encountered.
- b. Permit Holder shall evaluate the pavement surface every fifty (50) feet along a directional bore for displacement and stop operations when the vertical displacement of the surface exceeds 0.5 inch.

5.3 Traffic Control

5.3.1 General

Construction Activities or Maintenance Activities that involve vehicles, materials or equipment that interfere with the movement of vehicular or pedestrian traffic on any public street must have appropriate traffic control during the activity. Traffic control devices and standards shall be in accordance with the most recent version of the MUTCD. Traffic control plans shall be provided when applying for a Right-of-Way Permit for Construction Activities. Traffic control for Maintenance Activities shall be provided in accordance with the requirements of this section. When required by the Designated Representative, the contractor shall modify the traffic control plan in the field in order to improve traffic flow or safety. Improper installation of traffic control may be cause for a Notice of Violation. All excavations shall be protected and surrounded with safety orange fence and type one barriers with reflective lights.

5.3.2 Traffic Control for Maintenance Activities

- a. Traffic control for maintenance activities is generally considered to be “short-term stationary”, “short-duration” or “mobile”, as defined by the MUTCD Chapter 6G. Permit requirements are as follows:
 1. For short-term stationary (daytime work at one (1) location for more than one (1) hour and completed within one (1) day) and short-duration work (work in one location for up to

one hour), vehicle(s) shall have a rotating beacon/strobe light. An arrow board or arrow stick can be substituted for a rotating beacon/strobe light. A vehicle shall be augmented with arrow panels when working on arterial streets. A minimum of five (5) cones beginning at the back of the vehicle will be spaced at distances equal to the speed limit in feet for each adjacent Traffic Lane.

2. For mobile work (continuously moving operation with short-duration stops), TA-35 for streets with more than two (2) lanes and TA-17 for two(2) lane streets must be followed. Shadow vehicles must be equipped with arrow panels and proper signs. Cones and attenuators are not required.
- b. Vehicles and equipment shall not block sidewalks if pedestrians cannot safely pass around them and shall be moved from sidewalks to accommodate disabled people if necessary.

5.3.3 Minor Traffic Control for Construction Activities

- a. Typical application (TA) plans provided in the MUTCD, Section 6H.01, may be copied and submitted as traffic control plans when work does not involve conditions listed under Section 5.3.4 for major traffic control, such as work within an intersection or a traffic control zone that passes through an intersection.
- b. The following TA plans are typically used for Right-of-Way Permits: 1, 3, 4, 6, 15, 16, 17, 18, and 21 through 29. Where the TA plans do not apply, a separate traffic control plan will be required. Applicants are required to comply with the TA plan that is submitted.
- c. Traffic control plans for sidewalk closures are required.

5.3.4 Major Traffic Control for Construction Activities

A traffic control plan, including any sidewalk closures, shall be prepared by an ATSSA Certified Traffic Control Supervisor and submitted with the Permit application when one (1) or more of the following conditions occur:

- a. The length of the traffic control zone passes through an intersection;
- b. Work occurs within an intersection;
- c. Full street closures are proposed;
- d. Detours are proposed; or
- e. When required by the City Traffic Engineer.

5.3.5 Variable Message Boards and Neighborhood Information

- a. Variable Message Boards should be considered and may be required by the City Traffic Engineer for Construction Activities on arterial streets. When proposed or required, message boards will

be provided a minimum of forty-eight (48) hours in advance of the start of construction.

- b. Neighborhood notification by door hangers or flyers may be required by the Designated Representative when Construction Activities will significantly impact neighborhood traffic. When required, door hangers or flyers will be distributed within an area designated by the Designated Representative a minimum of forty-eight (48) hours in advance of the start of construction.
- c. The Designated Representative may require Permit Holders or contractors to provide news release information in significantly affected neighborhoods and meet with homeowner associations in advance of the work to obtain their input and minimize the noise, congestion and inconvenience that will occur.

5.3.6 Taper Lengths

The minimum taper lengths (L) required for Traffic Lane shall not be less than the following. Where conditions warrant, the Designated Representative reserves the right to require greater taper lengths in accordance with the project site and posted speed limits:

Street Type	Length	Speed
Residential	180 feet	30 mph
Collector	320 feet	40 mph
Arterial	500 feet	50 mph

5.3.7 After-Hours Traffic Controls

Barricades, cones, signs and all other vehicular or pedestrian traffic controls shall be taken out of service after designated working hours unless their use and application are required to ensure the safety of the traveling public. Controls shall be noted on the traffic control plan.

5.3.8 Loop Detectors

Any damage to traffic signal poles, lines and loop detectors shall be immediately reported to the City's 24-hour Citizen Response Center at (303) 325-8000.

6.0 PAVEMENT RESTORATION

6.1 Fee

Pavement restoration fees, as set forth in **Appendix A**, are charged in order to offset a portion of cost directly incurred by the City due to the Permit Holder electing not to construct a two (2) inch mill and overlay for the length of the cut and full width of the lane, as required by these Regulations. Excavations result in the need to reconstruct the surface and/or subsurface structure of the street earlier than would be required if the excavation or disturbance did not occur. A portion of the Permit fee relates to restoration costs. The cost to substantially restore the pavement to its original condition shall be calculated as the cost to construct a two (2) inch mill and overlay for the length of the cut and the full width of the lane and the OCI of the pavement as set forth below and in **Appendix A**.

6.2 Fee Determination

The cost of restoration shall be based on the cost to construct a two (2) inch mill and overlay for the length of the cut and the full width of the lane. The unit prices for the Permit fee relating to restoration costs shall be reviewed annually and revised to reflect significant increases or decreases, which will be based on the bid tabulation from the City's annual Capital Improvement Program ("CIP") overlay project. The unit prices shall be determined by averaging the milling and overlay bid prices and also include a proportionate share of the traffic control and mobilization bid prices and a ten (10) percent administrative fee. Revised fees shall be approved by the City Council.

6.3 Fee Schedule

Pavement restoration fees, as set forth in **Appendix A**, will be assessed based on the OCI of the existing pavement surface. OCI information for a specific street segment can be requested through the Designated Representative.

6.3.1 In order to promote coordination and reduce unnecessary expense, a pavement restoration fee will not be assessed for streets included on the current Capital Improvement Program (CIP) schedule for overlay and reconstruction. A copy of the City's current CIP schedule may be requested through the Designated Representative. The City's CIP schedule is subject to change without notice and ultimately depends on budgeting constraints of the City.

6.3.2 A pavement restoration fee will not be assessed when the Permit Holder or contractor elects to mill and overlay for the length of the cut and the full width of the lane. See Section 6.4.

6.4 Mill and Overlay Instead of Pavement Restoration Fee

The Permit Holder or contractor may elect to mill and overlay for the length of the cut and the full width of the lane to a depth of two (2) inches instead of paying the restoration fee. The following guidelines shall be used to determine the milling area for the overlay:

6.4.1 Streets with No Lane Striping or Centerline Striping Only

- a. A strip of pavement over the street cut shall be milled to a two (2) inch depth and a width of twelve (12) feet, plus any additional width for the requirement to mill one (1) foot beyond the edges of the pavement cut.
- b. If the location of the milled strip will result in an edge less than four (4) feet from the street centerline or gutter lip line, the width shall be extended to the street centerline or gutter lip line.
- c. If the location of the milled strip will result in an edge less than one (1) foot from an existing pavement joint, the width shall be extended to the joint.
- d. If the location of the milled strip is over the street centerline, the minimum milled width along a centerline shall be four (4) feet.

6.4.2 Streets with Lane Striping

- a. A strip of pavement over the street cut shall be milled to a two (2) inch depth and a width of one (1) lane, plus any additional width for the requirement to mill one (1) foot beyond the edges of the pavement cut.
- b. The edges of the milled strip shall be at the lane stripes or centered in a lane.
- c. If the location of the milled strip will result in an edge less than two (2) feet from an existing pavement joint, the width shall be extended to the joint.
- d. Increased milling greater than one (1) lane width shall be made in 1/2 lane width increments.

6.5 Intergovernmental Cooperation

The Designated Representative shall have the authority to waive any of the right-of-way use fees set forth in the Fee Schedule for any Construction Activities or Maintenance Activities associated with a Permit issued to another governmental entity, which may include municipalities, towns, water and sanitation districts, metropolitan districts, and intergovernmental authorities. The Designated Representative shall not have any authority to waive the pavement restoration fees as set forth in the Fee Schedule. No waiver of pavement restoration fees shall occur unless a written waiver is obtained from the Designated Representative.

7.0 APPEALS

Any applicant for a Permit and any Permit Holder may appeal to the City Manager or his Designee in writing any decision by the City made pursuant to these Regulations. The City Manager or his Designee shall render a decision on such appeal based upon substantial evidence and in a competitive neutral manner. The City Manager or his Designee's decision shall be made in writing within thirty (30) calendar days following the City's receipt of the applicant's or Permit Holder's written appeal. Such decision shall be final. Unless otherwise approved by the City Manager or his Designee in writing, no work under the Permit shall be allowed during the pendency of the appeal.

APPENDIX A CENTENNIAL RIGHT-OF-WAY PERMIT FEES

Permit #:		# of Work Days:		App. Date:	
Contractor:					
Project Location or Address:					
Work Description:					

	Unit	Unit Cost	Min. Cost	Quantity	Fee
Administrative Fees (Non-Refundable)					
BASE FEE (required for each permit)	EA	\$ 65.00	 		\$
Street closure/detour plan review	EA	\$ 175.00	 		\$
Project and/or plan review - \$550 Max	LF	\$ 0.40	 		\$
Total Administrative Fees					\$

ROW Activity Fees					
Maintenance Activity - 1 to 3 locations	EA	\$ 20.00	 		\$
Maintenance Activity - annual fee	EA	\$ 335.00	 		\$
Excavation - backfill/compaction	SF	\$ 0.05	\$ 75.00		\$
Pavement - cut/subgrade/pave/patch	SF	\$ 0.05	\$ 150.00		\$
Pothole - cut/backfill/patch	EA	\$ 25.00	\$ 75.00		\$
Concrete - curb/gutter/sidewalk/crossspan	LF	\$ 1.00	\$ 75.00		\$
Traffic Control - lane closure/detour	WK	\$ 100.00	 		\$
Traffic Control - sidewalk or trail closure	WK	\$ 100.00	 		\$
Total ROW Activity Fees					\$

Pavement Restoration Fee		
2-inch mill and overlay for the full lane width instead of restoration fee payment	Check <input type="checkbox"/>	No Fee
Streets that are on the CIP Schedule for rehabilitation - No restoration fee required	Check <input type="checkbox"/>	No Fee

Restoration Fee - Schedule of fees (LF-longest cut dimension in feet)					
	OCI	Unit	Unit Cost	Quantity	Fee
	100-90	LF	\$ 16.00		\$
	90-80	LF	\$ 13.60		\$
	80-70	LF	\$ 11.20		\$
	70-60	LF	\$ 8.80		\$
	60-50	LF	\$ 6.40		\$
	50-40	LF	\$ 4.80		\$
	40-30	LF	\$ 3.20		\$
	30-0	LF	\$ 1.60		\$
Total Pavement Restoration Fee					\$

Other Fees					
Technician Controlled Signal	HR	\$ 75.00	\$ 150.00		\$
After-hours inspection or signal control	HR	\$ 90.00	\$ 180.00		\$
Notice of Violation	<input type="checkbox"/> 1-\$200 <input type="checkbox"/> 2-\$400 <input type="checkbox"/> 3-\$800 <input type="checkbox"/> 4-\$1,600 <input type="checkbox"/> 5-\$3,200 <input type="checkbox"/> 6 & subsequent-\$6,400				\$
Total Other Fees					\$

Centennial Use Tax					\$
Arapahoe County Use Tax					\$
Total Permit Fee					\$