PUBLIC WORKS

RULES & REGULATIONS

OF THE MANAGER OF THE DEPARTMENT OF PUBLIC WORKS, CITY & COUNTY OF DENVER

Adopted Pursuant to Article VII, Chapter 20 of the Revised Municipal Code, City & County of Denver

Rules & Regulations For Sidewalk and Curb Ramp Construction

Version Dated October 1, 2007

Date Advertised	September 6, 2007
IN (Publication)	*The Daily Journal*
Public Hearing Date	September 27, 2007

Approved as to form:

Arlene V. Dykstra
Attorney for the City & County of Denver

Endorsed by:

Kim Bailey
Manager of Parks and Recreation

Approved & Adopted:

Guillermo v. Vidal
Manager of Public Works

OCTOBER 15, 2007
Effective Date

DEPARTMENT OF PUBLIC WORKS
SIDEWALK and CURB RAMP CONSTRUCTION RULES AND REGULATIONS

Purpose: The purpose of these Rules and Regulations is to create a more connected and walkable City for all members of the community by establishing consistent criteria:

A. for the construction or reconstruction of sidewalks in public Right-of-Way throughout the City; and,

B. for the installation of pedestrian curb ramps in public Right-of-Way throughout the City.

Authority and Scope:

A. Primary reference of governing authority is Denver Revised Municipal Code ("DRMC") Chapter 49 Article VI Division 2.

B. These Rules and Regulations do not apply to commercial or residential interior renovations but shall apply to development when new public Right-of-Way street construction is part of the development; or when any of the following conditions are met as part of development or redevelopment involving construction or reconstruction of an existing public Right-of-Way, in whole or in part:

1) issuance of a permit for residential building or an addition to a residential building (for improvements estimated at $100,000 or more); or,

2) issuance of a permit for commercial building or an addition to a commercial building (for improvements estimated at $100,000 or more); or,

3) issuance of an equivalent building permit requiring a Public Works construction engineering signature for issuance of a certificate of occupancy.

C. In accordance with these Rules and Regulations, the City and County of Denver Manager of Public Works or his or her designee (hereafter referred to as the "Manager") may modify construction requirements if the Manager determines that modifications are necessary due to:

1) availability of right-of-way;

2) advice of the City Forester as provided under Section 57-24(2) DRMC and defined in section I herein; or

3) safety considerations requiring a different curb and gutter or sidewalk width or location.

D. "Attached" and "detached" sidewalk shall refer to the specifications provided in Standard Drawing 5.2.

E. These Rules and Regulations shall supersede any other public right of way sidewalk guidelines or recommendations.

I. Preservation of Trees

A. To protect valuable trees, any sidewalk that is constructed, reconstructed or repaired pursuant to these Rules and Regulations may be required to meander, adjust grade or narrow to avoid damaging significant tree roots by constructing the sidewalk consistent with the following directions.

1) A valuable tree is any tree that is established in its current location, is healthy and structurally sound, is a desirable species that is not over-mature as determined by the City Forester.

2) The treelawn is the area of lawn or planting between the curb and the detached sidewalk. The area is typically landscaped and lined with street trees but in some cases may be hardscaped and occupied by street trees in grates as well as other urban amenities like street and pedestrian lights, news boxes, benches, trash cans, etc.

3) The structural root-plate includes all roots within a certain radius of the tree. The radius is measured from the mid-point of the tree and is determined by multiplying the tree's diameter by three.

4) The installation of all sidewalks and curb ramps must not sever or damage:

   i. Any roots of a valuable tree within the structural root-plate; or,

   ii. Any root over two (2) inches in diameter within a valuable tree's drip line.

5) Sidewalks installed over tree roots must have a minimum of four inches of appropriate sub-base material over roots.

6) Except when trees are to be placed in tree grates, the edge of the sidewalk should be at least two (2) feet from the trunk of all valuable trees.
7) The treelawn may be reduced for a limited distance to allow the sidewalk to meander around a valuable tree if the City Forester determines that there is reasonable likelihood that the tree's remaining life expectancy is greater than that of the sidewalk.
8) If the preservation accommodations outlined in this section cannot be applied to a required sidewalk project, the manager may consult with the City Forester to determine appropriate construction method and materials for preserving and protecting parkway trees.

II. Existing Condition: DRMC Sec. 49-16. Designated Parkways and Boulevards

A. In the event, the property under development is on a designated Parkway as defined by DRMC Sec 49-16, sidewalk shall be installed pursuant to the following requirements and consistent with Section I above and Standard Drawing 5.2 or the most current revisions to the City's curb, gutter and sidewalk typical sections, as follows:

1) In areas with existing sidewalk, the sidewalk condition that existed prior to any development or redevelopment must be either maintained or rebuilt consistent with all applicable Department of Public Works Rules, Regulations, Standards and other requirements;
2) In areas without sidewalk, the property owner must construct a detached sidewalk on public Right-of-Way adjacent to private property. If this requirement creates a sidewalk inconsistent with adjacent sidewalks the Manager and the Manager of Parks and Recreation (or that manager's designee) will determine if or how this requirement could be modified and will then provide direction to the property owner.

III. Existing Condition: No Sidewalk, Attached Sidewalk or Detached Sidewalk

A sidewalk shall be installed on public Right-of-Way adjacent to private property, pursuant to the following requirements and consistent with Standard Drawing 5.2 or

the most current revisions to the City's curb, gutter and sidewalk typical sections. If the sidewalk is missing, in poor condition, or does not meet current City standards for grade, width or other reasons, the property owner shall be required to reconstruct it as follows:

A. When the property owner (re)constructs the sidewalk, the owner must (re)construct attached sidewalk if the general character of the rest of the neighborhood is attached sidewalk, as determined by the Manager.

B. When the property owner (re)constructs the sidewalk, the owner must (re)construct detached sidewalk if:

   1) The general character of the rest of the neighborhood is detached sidewalk, as determined by the Manager;

   2) The property is located where the development is in an area being converted to residential use (e.g. Stapleton, Green Valley Ranch);

   3) The affected street frontage of the property is on an RTD bus route, arterial roadway, or is a Pedestrian Master Plan defined pedestrian route (including Game Plan defined green streets).

C. If a proposed development on the private property is increasing the density or otherwise significantly changing the land use, the Manager may require a wider sidewalk to better serve pedestrian needs

IV. Exempted Areas

A. These Rules and Regulations shall not apply and no sidewalk shall be required or allowed to be constructed in the public Right-of-Way adjacent to any property if the existing conditions in the area is deemed by the Manager to be consistent with all six of the following exemption criteria:

   1) **Historic sidewalk-less design**: The area has never had a built-out sidewalk system parallel to the street within the public Right-of-Way and maintains a distinctive and consistent streetscape design which does not include sidewalks.

   2) **No internal transit:** There are no bus routes internal to the area or transit stations in close proximity.

3) **No internal civic features:** The area does not provide connections to internal civic destinations including schools, libraries, parks, recreation centers, or neighborhood shopping areas.

4) **Accessibility and Drainage:** The area does not require curb ramps to provide access to adjacent properties and provides adequate drainage via existing roadway infrastructure such that the City does not expect to need upgrades to a standard curb and gutter.

5) **Inconsistent grid:** The area does not provide reasonably direct connections along street alignments generally consistent with the larger street grid system.

6) **Pedestrians can share the street:** For a specific street or within a specific residential area, the City Traffic Engineer agrees that the current and anticipated future daily vehicular volume is low enough that the existing street surface can support safe travel for all transportation modes.

B. By adoption of these Rules and Regulations, the Manager hereby determines that the following areas meet all six of the above exemption criteria:

1) Belcaro: *Between and not including Exposition Ave, Kentucky Ave, Steele St and Colorado Blvd*

2) Crestmoor: *Between and not including 6th Ave, Monaco, Bayaud Ave and Holly St*

3) The Park Lane Historic District of Country Club: *Between and not including 6th Ave, York St, 3rd Ave, and High St*

4) S Jackson St: *Between and not including Iliff Ave and Harvard Gulch*

5) Lakeridge Road: *Between and not including Wolff St and Tennyson St*

6) Inspiration Point streets: *Includes North Ames Way, West 51st Avenue from N Benton Way to N Benton St, and N Benton Way from W. 51st Ave to Inspiration Pt. Dr.*

C. Notwithstanding any determination by the manager exempting an area from the requirements of these rules, the manager may, in the manager's sole discretion, require any other improvement, anywhere in the city right of way to create a more connected and walkable City for all members of the community.

V. Curb Ramps

A. Requirements for construction of new sidewalks at corners shall include the requirement to construct curb ramps that comply with the most current City standards as part of the new sidewalk if:

1) there are no existing curb ramps at the location;
2) the existing curb ramps do not meet current city standards; or,
3) are in poor condition.

B. Pedestrian curb ramps or other pedestrian accessible facilities will be required at the following locations if the intersecting pedestrian path has an improved surface:

1) Sidewalk (not including service walk) intersections with public streets.
2) Bike path intersections with public streets.
3) Pedestrian parkways/trails intersecting with public streets.
4) All intersections between sidewalks, pedestrian parkways/trails and bike paths.
5) Sidewalk intersections with alleys and driveways.
6) Other locations as determined by the Manager.

C. Stub-out curb ramps will be required at locations where streets are improved, sidewalk/pedestrian paths are unimproved or there are no existing sidewalk/pedestrian paths, and there is a reasonable expectation, as determined by the Manager, that a sidewalk/pedestrian path will be constructed in the future.

D. Exceptions to the requirement to install a curb ramp at a required location may be granted, at the sole discretion of the Manager (or his or her designee), upon a showing of extraordinary circumstances or need.

E. Responsibility

1) <u>Public/Governmental Entities</u>- Publicly funded work, whether performed by government crews or by government contractors will trigger the requirement to install pedestrian curb ramps if any one of the following criteria is met:

   i. Construction activity that impacts or disturbs curbs, sidewalks, crosspans or pedestrian facilities within 10 feet of a potential curb ramp location, as measured along the flowline or

projected flowline of an existing or potential sidewalk/pedestrian crossing.

ii. Pavement rehabilitation except micro-surfacing and pavement maintenance as defined within these Rules and Regulations that occurs adjacent to an existing or potential sidewalk/pedestrian crossing.

iii. Utility trench restoration, regardless of size, where the method used to restore the pavement surface is by an asphalt milling and overlay operation or concrete panel replacement that has a minimum width of ten (10) feet, and where such restoration occurs on the same side of the street centerline and adjacent to an existing or potential sidewalk/pedestrian crossing.

iv. Government owned or operated facilities on properties located adjacent to existing or potential sidewalk/pedestrian crossings.

v. In addition to the requirements listed above, the City will maintain a list of requests from individual citizens for curb ramp installation. These ramps will be installed through an annual program.

2) Quasi-Governmental Agencies or Utilities- Work within the public Right-of-Way by quasi-governmental agencies or utility companies will trigger the requirement to install pedestrian curb ramps if any of the following criteria is met:

i. Construction activity that impacts or disturbs curbs, sidewalks, crosspans or pedestrian facilities within 10 feet of a potential curb ramp location, as measured along the flowline or projected flowline of an existing or potential sidewalk/pedestrian crossing.

ii. Utility trench restoration, regardless of size, where the method used to restore the pavement surface is by an asphalt milling and overlay operation or concrete panel replacement that has a minimum width of ten (10) feet, and where such restoration occurs on the same side of the street centerline and adjacent to

an existing or potential sidewalk/pedestrian crossing.

3) Private Construction- Privately funded work will trigger the requirement to install pedestrian curb ramps if any of the following criteria is met:

i. Developments that require the alteration of existing, or construction of new streets within 10 feet of a potential curb ramp location, as measured along the flowline or projected flowline of an existing or potential sidewalk/pedestrian crossing.

ii. Development or redevelopment at a location adjacent to an existing or potential sidewalk/pedestrian crossing.

iii. Construction activity that impacts or disturbs curbs, sidewalks, crosspans or pedestrian facilities within 10 feet of a potential curb ramp location, as measured along the flowline or projected flowline of an existing or potential sidewalk/pedestrian crossing.

iv. Utility trench restoration, regardless of size, where the method used to restore the pavement surface is by an asphalt milling and overlay operation or concrete panel replacement that has a minimum width of ten (10) feet, and where such restoration occurs on the same side of the street centerline and adjacent to an existing or potential sidewalk/pedestrian crossing.

VI. **Definitions**

ADAAG: Americans with Disabilities Act Access Guidelines, latest version.

Alteration: Pavement rehabilitation or reconstruction, roto-mill and overlay operations or other pavement construction not included as a maintenance activity.

City: City and County of Denver

Crosspan: Drainage structure built to convey surface water transversely across a street while still allowing for vehicular and pedestrian traffic.

Curb Ramp: Facility designed and constructed to direct and enable disabled citizens to a street crossing from a sidewalk or other pedestrian walkway.

Drip line: Outer edge of a tree, the point where water would drip to the ground from the outer leaves.

Flowline: The edge of a pavement section or gutter that lies immediately adjacent to a curb face delineating the edge of the street.

Improved Surface: Hard surface constructed with any of the following
- Portland Cement Concrete Pavement (PCCP),
- Asphalt Concrete Pavement (ACP),
- Concrete or brick paver stones,
- Flagstone,
- Cobblestone,
- Other another material approved by the Manager of Public Works.

Manager: City and County of Denver Manager of Public Works or his or her designee.

Micro-surfacing: Maintenance of asphalt streets consisting of chip seal, Nova Chip, seal coat, hot in-place recycle, asphalt overlay or other resurfacing technique no greater than one inch (1") thick.

Pavement Maintenance: Pothole patching, crack sealing, and pavement rehabilitation of less than three hundred (300) square yards (sy) per location.

Service Walk: Sidewalk within the Public right-of-way but generally perpendicular to the adjacent roadway and serving a single property.

Sidewalk: Pathway intended for pedestrian use generally running parallel and adjacent to a roadway within the public right-of-way.

Structural root-plate: All roots within a certain radius of the tree. The radius is measured from the mid-point of the tree and is determined by multiplying the tree's diameter by three.

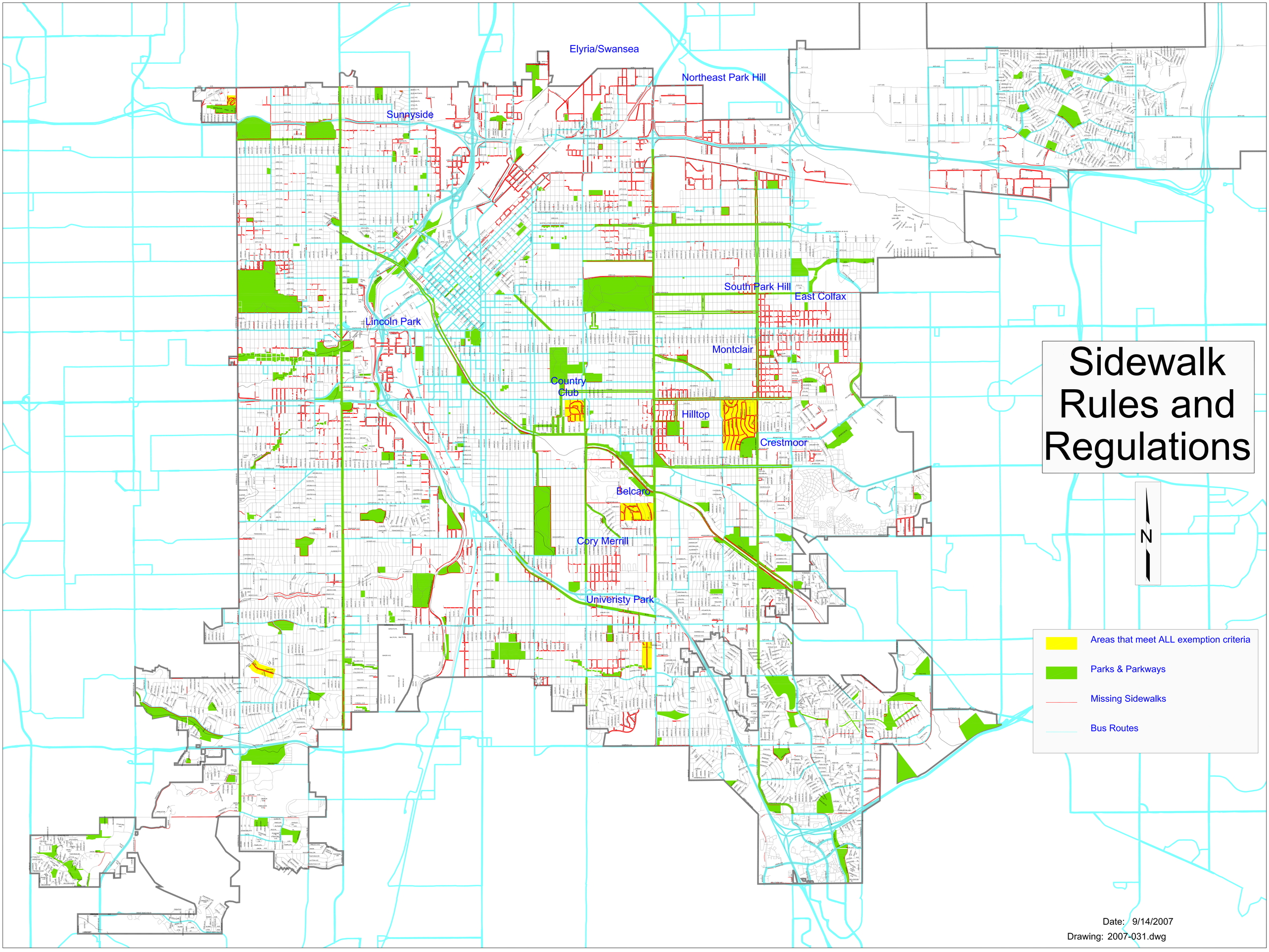
Stub-out Curb Ramp: Pedestrian curb ramp where the only portion built is the gutter area and ramp throat no longer than two (2) feet and not connecting to an improved sidewalk/pedestrian

path.

Treelawn: The area of lawn or planting between the curb and the detached sidewalk.

Unimproved Surface- Pavement surface constructed with material other than those listed in Improved Surface.

Valuable tree: Any tree that is established in its current location, is healthy and structurally sound, is a desirable species that is not over-mature as determined by the City Forester.


Sidewalk Rules and Regulations
Elyria/Swansea
Northeast Park Hill
Sunnyside
South Park Hill
East Colfax
Lincoln Park
Montclair
Country Club
Hilltop
Crestmoor
Belcaro
Cory Merrill
Univeristy Park
N
Areas that meet ALL exemption criteria
Parks & Parkways
Missing Sidewalks
Bus Routes
Date: 9/14/2007
Drawing: 2007-031.dwg