

GLOSSARY

SECTION 1: ABBREVIATIONS

Wherever the following abbreviations are used in these Design and Construction Standards (Standards), or in association with these Standards, the intent and meaning shall be as follows:

AAN	American Association of Nursery-men	ASME	Architects American Society of Mechanical Engineers
AAR	Association of American Railroads	ASTM	American Society for Testing and Materials
AASHTO	American Association of State Highway and Transportation Officials	ATSSA	American Traffic Safety Services Association
ABC	Aggregate Base Course	AWG	American Wire Gauge
AC	Asphaltic Cement	AWPA	American Wood Preservers Association
ACI	American Concrete Institute	AWS	American Welding Society
ADT	Average Daily Trips	AWWA	American Water Works Association
AGCA	Associated General Contractors of America		
AI	Asphalt Institute		
AIA	American Institute of Architects	BFD	Boulder Fire Department
AISC	American Institute of Steel Construction	BMP	Best Management Practices
AISI	American Iron and Steel Institute	BRC	Boulder Revised Code, 1981
AITC	American Institute of Timber Construction	CCA	Colorado Contractors Association
ANSI	American National Standards Institute, Inc.	CDOT	Colorado Department of Transportation
APWA	American Public Works Association	CFR	Code of Federal Regulations
ARA	American Railway Association	CFS	Cubic Feet per Second
AREA	American Railway Engineering Association	CLOMA	Conditional Letter of Map Amendment
ARTBA	American Road and Transportation Builders Association	CLOMR	Conditional Letter of Map Revision
ASCE	American Society of Civil Engineers	CMP	Corrugated Metal Pipe
ASLA	American Society of Landscape	CP	Colorado Procedure
		CPUC	Colorado Public Utilities Commission
		CRS	Colorado Revised Statutes, 1973, as amended

CRSI	Concrete Reinforcing Steel	LOMA	Letter of Map Amendment
CUHP	Institute Colorado Urban Hydrograph Procedure	LOMR	Letter of Map Revision
DHV	Design Hour Volume	LOS	Level of Service
DIP	Ductile Iron Pipe	MIL	Military Specifications
DRCOG	Denver Regional Council of Governments	MPH	Miles Per Hour
DWG	Drawing	MUP	Master Utility Plan
EDLA	Equivalent Daily Load Applications	MUTCD	Manual on Uniform Traffic Control Devices
EIA	Electronic Industries Association	NCAR	National Center for Atmospheric Research
EPA	Environmental Protection Agency	NEC	National Electrical Code
FEMA	Federal Emergency Management Agency	NEMA	National Electrical Manufacturers Association
FHWA	Federal Highway Administration	NESC	National Electrical Safety Code
FL	Flowline	NFPA	National Fire Protection Association
FPS	Feet Per Second	NIST	National Institute of Standards and Technology
FSS	Federal Specifications and Standards	NOAA	National Oceanic and Atmospheric Administration
GIDM	Gallons Per Inch Diameter Per Mile	NPK	Nitrogen-Phosphorus-Potassium
GPAD	Gallons Per Acre Per Day	NSF	National Sanitation Foundation
GPCD	Gallons Per Capita Per Day	OSHA	Occupational Safety and Health Administration
GPM	Gallons Per Minute	PC	Point of Curve
HCM	Highway Capacity Manual	PCC	Portland Cement Concrete or Point of Compound Curve
HBP	Hot Bituminous Pavement	PLS	Pure Live Seed
ICBO	International Conference of Building Officials	PMR	Physical Map Revision
IEEE	Institute of Electrical and Electronics Engineers	PRC	Point of Reverse Curve
IES	Illuminating Engineering Society	PRV	Pressure Reducing Valve
IMSA	International Municipal Signal Association	PT	Point of Tangent
IPCEA	Insulated Power Cable Engineers Association	RCP	Reinforced Concrete Pipe
ISO	Insurance Service Office	ROW	Right of Way
ITE	Institute of Transportation Engineers	SAE	Society of Automotive Engineers
		SEO	State Engineer's Office
		SHAC	State Highway Access Code
		TC	Top of Curb

TIA	Telecommunications Institute of America	UPC	Uniform Plumbing Code
TMP	Transportation Master Plan, City of Boulder	USDCM	Urban Storm Drainage Criteria Manual
UBC	Uniform Building Code	USGS	United States Geological Survey
UDFCD	Urban Drainage and Flood Control District	VPC	Vertical Point of Curve
UFC	Uniform Fire Code	VPI	Vertical Point of Intersection
UL	Underwriters Laboratories, Inc.	VPT	Vertical Point of Tangent
UMC	Uniform Mechanical Code		

SECTION 2: DEFINITIONS

Words and phrases contained in these Standards shall be read in context and construed according to the rules of grammar and common usage. Words and phrases that have acquired a technical or particular meaning, whether by definition, adoption herein, or otherwise, are intended to be construed accordingly.

Wherever the phrases "**as directed**", "**as required**", "**as permitted**", or phrases of like meaning are used, it shall be understood that the direction, requirements or permission of the Director of Public Works (Director) is intended. Similarly, use of the words "**approved**", "**acceptable**", and "**satisfactory**" shall refer to approval of the Director.

The definitions in this Glossary apply throughout these Standards. The words or phrases presented have the following meaning unless the context clearly indicates otherwise:

“Alteration” means a request to use a substitute or alternative material, method, or process which will perform the same function as that provided in a particular standard.

“Approach” means the portion of an intersection leg which is used by traffic approaching the intersection.

"Approved plan" means the engineering design and construction drawings for public improvements, prepared by an engineer, which has been granted final approval by the Director of Public Works in accordance with these standards.

"As-built" means an engineering drawing of record, prepared under the direction of a licensed Colorado registered professional engineer, reflecting the actual construction of public improvements in the service area, including, but not limited to, final grading, alignments, dimensioning, elevations, locations and materials sizing and type.

“Average Daily Trips (ADT)” means the volume of traffic passing through a given point during a given time period, divided by the number of days in that time period.

"Backflow" means the reversal of the direction of flow of water or mixtures of water and other liquid, gases, or other substances into the distribution pipes of a potable water supply from any source or sources caused by backpressure and/or back-siphonage.

"Backflow prevention assembly" means any approved assembly, method, or type of construction designed to prevent backflow or back-siphonage into a public water supply by isolating the owner's water system from the public water system. In addition, see Section I. of these rules.

"Caliper" means a diameter measurement of a tree's trunk, and is measured around the trunk of the tree, six inches above tree base grade for one to four inch caliper trees and 12 inches above tree base grade for five to eight inch caliper trees. Trees measuring between four and five inch caliper shall be rounded off to the nearest inch.

"Capacity" means the maximum number of vehicles that have a reasonable expectation of passing over a given roadway or section of roadway in one direction during a given time period.

"Certified Backflow Prevention Device Tester" means any person who has passed a State of Colorado approved or sponsored certification examination, and who is listed as a certified backflow prevention device tester with the Colorado Department of Public Health and Environment.

"City" means the City of Boulder, a Colorado home rule city in Boulder County, Colorado.

"City water system" means the source and distribution facilities of the water system to the point of delivery to the owner water system. The source includes all components of the facilities utilized in the production, treatment, storage, and delivery of water to the distribution system. The distribution system includes the network of conduits used for the delivery of water from the source to the owner water system.

"Contractor" means a person, firm, partnership, subcontractor or corporation, licensed by the City that is responsible for the construction of approved public improvements associated with a specific project, or projects, within the City of Boulder service area. This term also includes the contractor's superintendent and on-site manager.

"Colorado Cross Connection Control Manual" means a manual published by the Colorado Department of Public Health and the Environment addressing cross connection control practices, Fourth Edition - Revised.

"Cross connection" means any physical arrangement whereby the city's water supply system is connected, directly or indirectly, with any other water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture, or other device which contains, or may contain, contaminated water, sewage, or other waste or liquid of unknown or unsafe quality which may be capable of imparting contamination to the public water supply as a result of backflow. Bypass arrangements, jumper connections, removable sections, swivel or changeover assemblies, and other temporary or permanent assemblies through which, or because of which, backflow could occur are considered to be cross connections.

"Delay" means the stopped time per approach vehicle, in seconds per vehicle.

"Design Hour Volume" means the hourly traffic volume used for street design and capacity analysis, usually one (1) or more peak hours during a 24 hour period.

“Design Speed” means five (5) to 10 miles per hour above the proposed or desired speed limit of the facility under design.

“Design Vehicle” means that all public and private streets must be designed to accommodate an SU-30 vehicle. The definition of this vehicle type is found in AASHTO’s Geometric Highway Design Standards.

"Developer" means the person, owner, firm, or corporation responsible for the development and completion of all public improvements associated with a proposed project in accordance with these standards.

“Diameter” means the diameter size measurement of a tree's trunk, and is measured around the trunk at 4.5 feet above the tree base grade for trees greater than eight (8) inch caliper.

"Director of Public Works" means the authorized City employee, or his/her designee, responsible for the enforcement of these standards and approval of the design and construction of public improvements within the City of Boulder service area, and the overall management and direction of the Public Works Department.

“Dripline” means the outermost edge of a tree's canopy, projected on the ground.

"Engineer" means the Colorado registered professional engineer responsible for the design of all public improvements submitted to the City for a proposed project in accordance with these standards, including all plans, calculations, specifications, and coordination of field surveys.

"Construction plan" means the engineering design and construction drawings for public improvements, prepared by an Engineer which has been submitted for final approval by the Director of Public Works in accordance with these standards.

“Hourly Volume” means the number of vehicles that pass over a given section of a lane or roadway during one hour.

"Inspector" means the Director of Public Works, or his/her designee, responsible for the inspection of public improvements construction.

“Level of Service (LOS)” refers to the definitions of LOS provided in the Highway Capacity Manual, “Definitions and Concepts.”

"May" means is authorized to, or a permissive condition which indicates a choice between two (2) or more alternatives.

“Modification” means a request to change or modify a standard or the parameters of a standard because the particular application may not require the degree of rigor which the standard requires.

“Peak Hour” means the concept referring to the hour of a day when the highest volume of traffic occurs on a transportation facility.

“Planting Strip” means the landscape area within a street median, the landscape planting strip between the curb and detached sidewalk, or the landscape area between the back edge of a public sidewalk (attached or detached) and the right-of-way/property line.

"Public improvements" means any public facility, system or infrastructure in the City of Boulder service area including, but not limited to: earthwork or landscaping, streets, sidewalks, bike paths, trails, parking and traffic control devices; water supply, treatment, storage and distribution systems; wastewater collection and treatment systems; and stormwater and flood control collection and conveyance systems in public easements or right-of-way.

“Public Sign” means any sign that is posted by a governmental entity within the right-of-way for the purpose of directing traffic or parking.

"Record Set" means the engineering design and construction drawings for public improvements, sealed and signed by an engineer, approved by the Director of Public Works in accordance with these standards, and maintained on file in public records as the final approved construction document.

“Root Protection Zone” means the ground area surrounding the entire tree that extends from trunk to dripline, or a minimum of fifteen feet for column-shaped trees, whichever is greater.

"Shall" means a mandatory duty to conform to the specified standard. Where certain requirements in these standards are described with the "shall" stipulation, it is mandatory that these requirements be met or exceeded.

"Should" means an advisory condition. Where "should" is used, it is considered to be recommended or advisory, but not mandatory.

“Sidewalk, Attached” means a sidewalk and curb that are attached as one (1) continuous element.

“Sidewalk, Detached” means a sidewalk that is separated from the curb by a landscape planting strip.

“Sight Distance” means the length of roadway ahead visible to the driver. The minimum sight distance available must be long enough to enable a vehicle traveling at or near the design speed to stop before reaching a stationary object in its path.

“Speed Change Lane” means a separate lane for the purpose of enabling a vehicle entering or leaving a roadway to increase (acceleration lane) or decrease (deceleration lane) its speed to a rate at which it can more safely merge or diverge with through traffic. Includes tapered areas.

"Standards" means the "Design and Construction Standards" manual for the City of Boulder.

“Storage Lane” means additional length added to a deceleration lane, to store the maximum number of vehicles likely to accumulate during a critical period without interfering with the through lanes.

“Street Tree” means any tree in the public right-of-way.

“Streetscape” means landscaping design for any streetside area, generally including but not limited to

planting strips and medians.

“Transportation Demand Management” means any action or set of actions aimed at reducing the impact of traffic by influencing people’s travel behavior.

“Trips” means a vehicle moving from an origin point to a destination point. Trips are one-way.

“Waiver” means a request to delete or omit the application of a particular standard.

"Work" means any activity involved in the performance of constructing, installing, repairing or maintaining public improvements.