CHAPTER 1 – INTRODUCTION

Chapter Organization

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1.1 TITLE

These regulations, along with all future amendments, shall be known as the City of Spokane Valley Street Standards (hereinafter called "Standards" or “Street Standards”).

1.2 INTENT AND PROVISIONS

These Standards apply to all capital and development projects within the City and, to the extent allowed by law, to those projects outside of City limits that impact City infrastructure or transportation systems.

The City’s review and approval of any plans, reports, or drawings, or the City’s inspection and approval of any improvements designed and constructed by the Applicant in accordance with these Standards, does not constitute a representation, warranty, or guarantee by the City that such improvements are free from defects or will operate adequately for the purpose intended.

These Standards pertain to planning, design, approval, construction, inspection, testing, maintenance and documentation of street improvements. The intent of this manual is to establish the minimum acceptable standards.

1.3 OBJECTIVES OF STREET STANDARDS

1.3.1 MINIMUM STANDARDS

These Standards shall be the minimum standards necessary for design and construction of all street-related and some onsite private improvements in the City. Special situations, as determined by the City, may require different facilities and/or standards. For items not covered by these Standards, the City may require the use of other standards as referenced in Section 1.9.

It is incumbent upon the Applicant’s engineer to use good engineering practice and to be aware of, and implement, new design practices and procedures that reflect current techniques in civil engineering. Good engineering practice is defined in these Standards as professional and ethical conduct that meets the current codes and regulations adopted for engineers. The proposed design shall consider functionality, constructability, operation, and maintenance, including the health, safety and welfare of the public.

1.3.2 OBJECTIVES

It is the objective of these Standards to address the following:

- To provide for an efficient transportation system and improve local circulation and emergency access by providing connectivity between residential streets and arterials;
- To extend the functional life of the existing transportation systems and increase its safe and efficient operation;
- To ensure public facilities and services meet level of service standards as adopted in the Comprehensive Plan;

- To encourage the use of public streets in new development;
- To protect the public health, safety, environment, and welfare to the greatest extent possible resulting from construction, operation and maintenance activities within the public rights-of-way;
- To ensure the primary uses of the public rights-of-way are for bicycle, pedestrian and vehicular travel;
- To ensure the public rights-of-way are properly maintained;
- To protect the City's infrastructure investment by establishing standardized design, materials, construction, and repair criteria for all public improvements;
- To optimize the use of the limited physical capacity of public rights-of-way held by the City;
- To provide an efficient permit system that regulates and coordinates activities in an effective and safe manner;
- To protect private and public property from damages that could occur because of faulty design and construction; and,
- To provide criteria for inspection of public and private improvements, in order to ensure conformance with the approved plans, proper construction techniques, and to ensure that acceptable materials are used for the construction process of such public and/or private improvements.

1.4 DOCUMENT ORGANIZATION

These Standards are generally organized as described below:

- Chapter 2 describes typical project requirements;
- Chapter 3 describes traffic analysis requirements;
- Chapter 4 describes requirements for plan submittal;
- Chapter 5 describes requirements for clearing and grading;
- Chapter 6 describes requirements for utility work;
- Chapter 7 describes requirements for street design;
- Chapter 8 describes requirements for pavement design;
- Chapter 9 describes requirements for inspection and certification;
- Chapter 10 describes maintenance requirements; and,
- Chapter 11 provides the City's Standard Plans.

1.5 AMENDMENTS AND REVISIONS TO STANDARDS

The Street Standards may be periodically amended as necessary to provide additional clarity or to reflect changes in policy or in construction or engineering practice. Such revisions to these Standards may consist of either "policy" revisions or "technical" revisions.

The City will maintain an electronic file of these Standards. All updates and revisions will be available on the City web page or at the City Clerk's office.

1.5.1 POLICY REVISIONS

Policy revisions shall be considered major changes, changes in law and changes that will cause significant increased cost or controversy. Policy revisions also include those changes that relate to the public use and convenience, such as changes in standard street width.

Policy revisions require a public hearing process for their adoption and City Council approval.

1.5.2 TECHNICAL REVISIONS

Technical revisions shall consist of minor additions, clarifications, revisions, and corrections to the Street Standards and City standard plans as may be necessary to better conform to good engineering and/or construction standards and practice.

Technical revisions shall be:

a. Consistent with all existing policies relevant to the revision;

b. Necessary for the public's health, safety and welfare;

c. Needed to clarify these Standards; or,

d. Consistent with existing law.

Technical revisions shall become effective when approved in writing. If technical revisions are deemed necessary, the revisions may occur through either:

e. Planned periodic revisions; or

f. An accelerated process. If a technical revision is determined to be immediately necessary, then the change shall be made and notification given on the web page. Document holders on record with the City will be notified of the changes.

1.6 INTERPRETATION OF STANDARDS

In the interpretation and application of the provisions of the Street Standards, the following principles shall apply:

1.6.1 GOVERNING STANDARDS

Whenever a provision of the Street Standards or any provision in any law, ordinance, resolution, rule, or regulation of any kind contains restrictions covering

any of the same subject matter, the standards that are more restrictive or impose higher standards or requirements shall govern.

1.6.2 PRIOR ACCEPTANCE OF CONSTRUCTION PLANS

The Street Standards shall not modify or alter any street construction plans that have been filed with and accepted by the City prior to the effective date of the ordinance adopting the Street Standards. This exception shall be subject to the conditions and limitations under which said plans were accepted by the City.

1.7 REFERENCE MATERIAL

The Street Standards are supplemented by the current version of the "Washington State Department of Transportation/American Public Works Association (WSDOT/APWA) Standard Specifications for Road, Bridge and Municipal Construction.," The Street Standard Details are comprised of the City's construction and design detail drawings for grading, storm drainage, and street work within the City that are supplemented by the current version of the WSDOT "Standard Plans for Road, Bridge and Municipal Construction."

The current version of the following publications shall be used as additional reference material for design applications, when situations are not addressed by these Street Standards or WSDOT Standards. Every subsequent reference to one of these publications in the Street Standards shall be to the currently adopted version unless specifically stated to the contrary, whether stated or not. Other standard technical references may be used if approved by the City Engineer:

a. American Association of State Highway and Transportation Officials' (AASHTO) "A Policy on Geometric Design of Highways and Streets" (Green Book)
b. AASHTO Guide for the Development of Bicycle Facilities
c. AASHTO Standard Specifications for Highway Bridges
d. Americans with Disabilities Act (ADA)Accessibility Guidelines
e. American Society for Testing and Materials (ASTM)
f. Associated Rockery Contractors, Standard Rock Wall Construction Guidelines
g. City of Spokane Valley Municipal Code
h. Federal Highway Administration (FHWA) Engineering Circulars
i. Highway Capacity Manual
j. Institute of Transportation Engineers (ITE) Trip Generation Manual
k. International Fire Code adopted by the City of Spokane Valley
l. Washington Model Traffic Ordinance (Chapter 308-330 WAC)
m. Spokane County Standards for Road and Sewer Construction
n. Spokane Regional Stormwater Manual
o. U. S. Department of Transportation Manual on Uniform Traffic Control Devices, (MUTCD)
p. Washington Department of Ecology Stormwater Management Manual for Eastern Washington
q. Washington State Department of Transportation (WSDOT) Design Standards
r. WSDOT Guidelines for Urban Arterial Program
s. WSDOT Local Agency Guidelines

t. WSDOT Standard Specifications for Road, Bridge and Municipal Construction
u. WSDOT "Design Standards"
v. Design criteria of federal agencies including the Federal Housing Administration, Department of Housing and Urban Development; and the Federal Highway Administration, Department of Transportation

1.8 DESIGN DEVIATIONS

In special cases, strict application of Street Standards may not best address a particular engineering situation. In these cases, a design deviation may be requested. Design deviation requests shall be on the City's form and include applicable engineering justification for the deviation.

a. The Applicant shall request a design deviation when either of the following situations applies:
   i. The project proposes non-standard methods, analysis, design elements or materials; or,
   ii. The project proposes design elements above maximum criteria or below the minimum criteria found in these Standards.

b. A design deviation will only be considered for review if:
   i. The design elements proposed do not conflict with or modify a condition of approval; and,
   ii. The design elements proposed are based on sound engineering principles, and are not inconsistent with the public interest, and the City's goals and policies.

c. To request a design deviation, the Applicant shall submit a design deviation request and supporting documentation. The supporting documentation shall include sufficient information for the City to make a decision as to the adequacy of the proposal. The design deviation package shall demonstrate that:
   i. There are special physical circumstances or conditions affecting the property that may prohibit the application of some of the requirements of these standards;
   ii. Every effort has been made to find alternative ways to meet the objectives of the Street Standards;
   iii. Approving the design deviation will not cause adverse impact on down gradient or adjacent properties, public health or welfare; and,
   iv. Approving the design deviation will not adversely affect the goals and policies of: *the City's Comprehensive Plan*, *Spokane Valley Municipal Code*, *Street Master Plan*, and *Transportation Improvement Plan.*

1.9 ABBREVIATIONS

When the following abbreviations appear in these Standards, they shall mean the following:

AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
ADT	Average Daily Trips
APWA	American Public Works Association
ASA	American Standards Association
ASTM	American Society for Testing Materials
BMPs	Best Management Practices
CBR	California Bearing Ration
CC&Rs	Covenants, Codes and Restrictions
CESCL	Certified Erosion and Sediment Control Lead
CSBC	Crush surfacing base course
CSTC	Crush surfacing top course
Dbh	Diameter Breast Height
ESALs	Equivalent Single-Axle Loads
ESC	Erosion and Sediment Control
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FOP	Field Operating Procedure
GMA	Growth Management Area
HCM	Highway Capacity Manual
HMA	Hot Mix Asphalt
HOA	Homeowner's Association
IBC	International Building Code
IFC	International Fire Code
IRC	International Residential Code
ITE	Institute of Transportation Engineers
LOS	Level of Service
M_r	Resilient Modulus
MUTCD	Manual on Uniform Traffic Control Devices

O&M	Operations and Maintenance
PI	Point of Intersection
PC	Point of Curvature
PCR	Point of Curve Return
PE	Professional Engineer
PGIS	Pollution Generating Impervious Surfaces
PLS	Professional Land Surveyor
POA	Property Owner's Association
PT	Point of Tangency
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SI	Street intersection
SR	State Route
SRSM	Spokane Regional Stormwater Manual
SRTC	Spokane Regional Transportation Council
SVMC	Spokane Valley Municipal Code
TESC	Temporary Erosion and Sedimentation Control
TIA	Traffic Impact Analysis
TIP	Transportation Improvement Program
USGS	United States Geological Survey
WAC	Washington Administrative Code
WAQTC	Western Alliance for Quality Transportation Construction
WSDOT	Washington State Department of Transportation

1.10 DEFINITIONS

For the purpose of these Street Standards, certain words and terms are herein defined. The word "shall" is always mandatory. The word "may" is permissive, subject to the judgment of the person administering the code.

These definitions take precedence over those found elsewhere in the SVMC. In the event a technical term is not listed below, definitions shall be taken from the WSDOT Design Manual.

Access Management: The concept of a public agency controlling the location of access points in order to achieve the dual purposes of providing access to individual land uses and limiting access on higher order streets in order to facilitate the smooth flow of traffic with a limited amount of impedance.

Applicant: The party or parties desiring to construct a public or private improvement or project within City rights-of-way, easements or private property, securing all required approvals and permits from the City, and assuming full and complete responsibility for the project. The Applicant may be the Developer or the individual designated by the Developer to act on his behalf.

Binding Site Plan: A division of land approved administratively by the Department of Community Development, which legally obligates a person making a proposal to conditions, standards or requirements specified by these Standards and the SVMC.

Border Easement: A dedicated easement on private property adjacent to public street right-of-way established for the purpose of utility, drainage facilities, pedestrian access or other public purpose.

Building Division: The Division at the City of Spokane Valley responsible for reviewing, issuing and certifying construction permits.

Builder: The party or parties desiring to construct a public or private project, which may include improvements, within the boundaries of the Applicant's project. Builder's project may include but not be limited to landscaping, paving, stormwater facilities, structures and installation of facilities or utilities to support the Builder's project.

Certificate of Occupancy: An official certificate issued by the City building official that indicates conformance with all applicable provisions of the SVMC and authorizes legal use of the premises for which it is issued.

Certification Package: A packet prepared by the Onsite Inspector including, but not limited to, Mylar record drawings, weekly reports, certification checklist and related construction documents, for review by the City to determine project acceptability.

City: City of Spokane Valley, Washington.

City Engineer -- The City Engineer or his duly authorized representative.

Clear Zone: A relatively flat area void of fixed objects or obstructions beyond the edge of the traveled way that allows drivers to stop safely or regain control of a vehicle that leaves the traveled way.

Clearing and grubbing: Includes, but is not limited to, removing trees, stumps, roots, brush, structures, abandoned utilities, trash, debris and all other materials found on or near the surface of the ground in the construction area.

Concurrency: A requirement that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use, without decreasing the current level of service below minimum standards adopted by the City**.**

Contractor: The individual, partnership, firm or organization to whom a construction contract has been awarded by the Applicant, or who has been issued a right-of-way work permit by the City, for work covered by the contract. Agents, employees, workers, subcontractors, or designers employed by the Contractor shall also be bound by the terms of the contract or permit.

Corner Clearance: At an intersecting street, the distance measured along the curb line from the projection of the intersecting street flowline to the nearest edge of the curb opening.

County: Spokane County.

Design Deviation: An administrative approval of design elements that do not conform to or are not explicitly addressed by these Standards.

Developer: Owner of the Project and/or Development. Owner may be an individual, corporation, government or governmental agency, business trust, estate, trust, partnership, association, or some combination of the foregoing.

Development: Any man-made change to improved or unimproved real estate including the division of land with potential for construction.

Development Agreement: The contract between the City and the Applicant that defines public improvement requirements, costs, and other related public improvement issues.

Development Inspector: A City employee, responsible for coordinating with the Onsite Inspector(s), reviewing and accepting certification packages and warranty sureties, and recommending public streets for establishment.

Driveway: Any area, improvement or facility between a public or private street and private property, which provides ingress/egress for vehicles from a public or private street to a lot or parcel or to a structure constructed on the lot or parcel, whichever is longer.

Driveway Approach: The transition at the end of a private street or driveway where it connects to a public or private street. For details, see standard plans.

Easement: A right to use the land of others. The right may be from the common law or may be acquired, usually by purchase or condemnation and occasionally by prescription or inverse condemnation. The right is not exclusive, but subject to rights of others in the same land, the lesser right being subservient to a prior right which is dominant. Easements for drainage may give rights to impound, divert, discharge or concentrate surface flow, extend pipelines, deposit silt, erode, scour, or any other necessary consequence of a development.

Engineered Driveways: Driveways, which due to their length, surface area or other situational factors, are required to be designed by a professional engineer.

Engineering – City Engineering Department

Fill: A deposit of earthen material placed by artificial means.

Fire Department: Fire district having jurisdiction.

Fire Lane: An access designated to accommodate emergency access to a parcel of land or its improvements.

Final Acceptance: The written notification from Engineering, after the City Engineer finds the Warranty Period to be satisfactorily completed, that all public improvements

are free of defects, and the City releases the Applicant from future maintenance obligations.

Frontage Improvements: Required improvements on public streets fronting the property which typically include pavement widening, curb, gutter, grassy swale, and sidewalk.

Grading: The physical manipulation of the earth's surface and/or surface drainage pattern which includes surcharging, preloading, contouring, cutting, and filling to establish final site grades.

Half-Street Improvements: The construction of frontage improvement on the street fronting the property or development, including paving from the street centerline, curb, gutter, swale or grassy strip, and sidewalk, plus a minimum of a 12-foot lane on the opposite side of centerline with a one-foot gravel shoulder and grassy ditch for stormwater treatment. The final pavement width shall be at least 28 feet.

Improvements: All public or private improvements within City rights-of-way, easements or private property. Development of a public or private street, typically including some or all of the following: pavements, curb, gutter, landscaped swale, sidewalk, drainage improvements.

Intersection Sight Distance: The distance necessary for the driver of a motor vehicle stopped at an intersection or driveway to see approaching vehicles, pedestrians, and bicyclists along the intersecting major street and have sufficient space to make any allowed move to cross the intersection or merge with traffic without causing vehicles, pedestrians, or bicyclists traveling at or near the design speed on the major street to slow down. The controlling distance for design is the longest distance, generally the distance necessary to merge with traffic.

Land Disturbing Activity: The result in a change in existing soil cover (vegetative or non-vegetative) or site topography. Land disturbing activities include, but are not limited to, demolition, construction, clearing and grubbing, grading and logging.

Level of Service (LOS): A measure of a public facility or service's operational characteristics used to gauge its performance.

Offsite Improvements: Construction of facilities located away from and up to a project site, necessary to serve the proposed development or to mitigate effects of the development.

Onsite Inspector: A qualified person or firm, hired by the Applicant or Owner, responsible for project inspection and certification.

Pollution Generating Impervious Surface (PGIS): Impervious surfaces that are significant sources of pollutants in stormwater runoff. Such surfaces include those that are subject to vehicular use, industrial activities, or storage of erodible or leachable materials that receive direct rainfall, or run-on or blow-in of rainfall. Metal roofs are considered to be PGIS unless coated with an inert, non-leachable material. Roofs that are subject to venting of manufacturing, commercial, or other indoor pollutants are also considered PGIS. A surface, whether paved or not, shall be considered PGIS if it is regularly used by motor vehicles. The following are considered regularly-used

surfaces: streets, non-vegetated street shoulders, bike lanes within the traveled lane of a street, driveways, parking lots, unfenced fire lanes, vehicular equipment storage yards, and airport runways.

Pre-Construction Meeting: A meeting between the Designer and assigned agents, the Onsite Inspector, and the Development Inspector to review proposed work necessary to construct the project, prior to proceeding with the work. A meeting may be required for each project, at the Development Inspector's discretion.

Private Street: A local access street that is privately owned and maintained by capable and legally responsible owner(s).

Professional Engineer (P.E.) (or Engineer): A civil engineer licensed in Washington under Chapter 18.43 RCW who is qualified by examination and/or experience to practice in the fields of civil, geotechnical and/or soils engineering.

Professional Land Surveyor (P.L.S.) (or Surveyor): A Washington licensed land surveyor.

Project: The public or private improvement(s) designated in the approved plans, which are to be constructed in conformance with these Standards. The term "Project" includes any and all public or private improvement projects for or within the City, whether development projects, private utility projects, or capital improvement projects.

Public Improvements: Public facilities to be located within the rights-of-way or border easement which include pavement, curb and gutter, sidewalk, pedestrian/bike/equestrian paths, storm drain facilities, bridges, water distribution or transmission facilities with related appurtenances, pavement markings, signage and striping, traffic signals and related appurtenances, erosion control and right-of-way grading, or earth excavation processes integral to construction of other public improvements listed herein.

Punch list, Initial or Final: A written list of work items, compiled by the Onsite Inspector, which do not conform to these Standards, the plans or SVMC that govern the project and require correction prior to project approval.

Record Drawings: Original approved design drawings, updated by an engineer which depicts all modifications from the design that occurred during construction.

Redevelopment: Removal or modification of existing improvements and construction of new improvements or substantial remodeling.

Regional Pavement Cut Policy: A regional policy adopted by the City of Spokane Valley, City of Spokane, and Spokane County.

Rights-of-way (Also "public right-of-way"): The land area owned by the City which was obtained by acquisition or dedication for public use of streets, utilities, walks, and other uses, including providing access to adjoining properties.

Right-of-way Permit: A permit, with or without conditions specified by the City, which allows an Applicant to construct public or private improvements within the public rights-of-way or border easement.

Subdivision:

Long Subdivision: A division of land resulting in the creation of 10 or more lots.

Short Subdivision: A division of land resulting in the creation of nine or fewer lots.

Slope, Recoverable: A slope on which a motorist may retain or regain control of a vehicle by slowing or stopping. Slopes flatter than 4:1 are generally considered recoverable.

Slope, Non-recoverable: A slope considered being traversable but on which an errant vehicle continues to bottom. Embankment slopes between 3:1 and 4:1 may be considered traversable but non-recoverable if they are smooth and free of fixed objects.

Specifications: Construction and standards adopted by the City.

Speed – 85th Percentile: The speed at or below which 85% of the motorists drive on a given street unaffected by slower traffic or poor weather. This speed indicates the speed that most motorists on the street consider safe and reasonable under ideal conditions.

Street: A public or private way for vehicular travel, exclusive of the sidewalk or shoulder even though such sidewalk or shoulder is used by persons riding bicycles.

Street Classifications: The identification of a street according to different levels of emphasis on traffic movement versus direct access to property.

Surety: A financial instrument securing the Applicant's responsibility to complete construction of public or private improvements within an approved project. Surety shall also mean a financial instrument securing the Applicant's obligations throughout the Warranty Period. Sureties approved by the City include cash, letters of credit and savings assignment.

Surety, Performance: A surety securing the Applicant's responsibility to complete construction of public or private improvements within an approved project.

Surety, Warranty: A surety securing the Applicant's obligations throughout the warranty period; required of projects in the public rights-of-way and border easements, guaranteeing against defects in street construction, utility work and/or drainage facilities.

Swale: A grassland percolation area designed to accept and treat storm runoff from impervious areas such as streets, driveways, sidewalks, parking lots, roofs, etc.

Traffic Calming Devices: Physical measures included in the design of streets that improve neighborhood livability by reducing the speed and impact of vehicular traffic on residential streets.

Travel Lane: The portion of the street intended for the movement of vehicles, exclusive of shoulders and lanes for parking.

Trip Generation and Distribution Letter (TGDL): A document, prepared by a professional civil engineer with experience in traffic, design and analysis that identifies

the amount of traffic anticipated to and from a development. The letter is reviewed to determine if a traffic impact analysis is required.

Traffic Impact Analysis (TIA): A study of the potential traffic impacts of a development on the transportation system.

Warranty Period: The period of time that the Applicant remains responsible for material and workmanship defects in the public improvements, which remains in effect until written notification is issued by the City. Warranty period is a minimum of two years.

Wheel Path: The three-foot wide portion of a travel lane, located on both sides of the travel lane and the two-foot wide portion from the center of the travel lane.

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