EXHIBIT C to

ORDINANCE AMENDING SECTIONS 1000, 5200 AND 5300 OF THE CITY'S DESIGN AND CONSTRUCTION MANUAL AS ADOPTED AND MADE A PART OF THE CODE OF ORDINANCES BY SECTION 22.5-1 OF THE CODE OF ORDINANCES OF THE CITY OF LEE'S SUMMIT, MISSOURI.

SECTION 5300 – INCIDENTAL CONSTRUCTION

CITY OF LEE'S SUMMIT, MISSOURI
DESIGN CRITERIA

These criteria shall be adhered to for the design of all streets within the City of Lee's Summit, Missouri and shall be in addition to KC Metro Chapter APWA Section 5300.

ADD the following:

SECTION 5304 GENERAL ACCESSIBLE ROUTE CRITERIA

Introduction: The purpose of these criteria is to provide uniform procedures for designing and checking the design of accessible routes in Lee's Summit, Missouri. Specific criteria have been developed and are applicable to the types of conditions ordinarily encountered in local urban areas. Other special situations may be encountered that require added criteria or more complex design than included herein.

Definitions: Refer to Section 1003 of this Manual.

Abbreviations:

AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
ADAAG	ADA Accessibility Guidelines
APWA	American Public Works Association
ASTM	American Society for Testing and Materials
DOJ	Department of Justice
FHWA	U. S. Department of Transportation/Federal Highway Administration
MUTCD	Manual of Uniform Traffic Control Devices
NACTO	Nation Association of City Transportation Officials
PROWAG	Proposed Guidelines for Pedestrian Facilities in the Public Right of Way
R/W	Right-of-Way

Governing Criteria: Design shall be in accordance with the latest edition of the following publications and the current interim supplements thereto except as modified herein or modified for the specific project:

A. Americans with Disabilities Act
B. Proposed Guidelines for Pedestrian Facilities in the Public Right of Way
C. Urban Bikeway Design Guide, NACTO
D. Policy on Geometric Design of Highways and Streets, AASHTO.
E. Manual on Uniform Traffic Control Devices for Streets and Highways, FHWA.

F. Roadside Design Guide, AASHTO.

5304.1 **Design Criteria:** This section governs the general design requirements for accessible routes. See Table LS-5 in Section 5305. All design is subject to approval by the City of Lee's Summit, Missouri.

5304.2 **Modifications:** Design variances shall be in accordance with Section 1002 of this manual. Design variances to ADA / PROWAG criteria are not permissible.

5304.3 **Cross Slopes:** Cross slopes for sidewalks, trails, paths, and other pavements primarily used for pedestrian traffic must meet ADA requirements.

5304.4 **Pavement Sections for Accessible Routes:** The minimum pavement thicknesses shown in Tables LS-2 and LS-3 apply to all accessible routes.

5304.5 **Temporary Turn-Arounds:** At locations where accessible routes will be temporarily terminated and which will be extended at a later date, a temporary turning landing and turning space shall be constructed meeting PROWAG guidelines.

Temporary Turn-Arounds shall be located so that they do not interfere with permanent development. They should normally be located on property adjacent to the property to be served. For new subdivision plats, they should be located on property beyond the limits of the plat.

5304.6 **Driveways:**

A. All driveway approaches within public right of way shall be concrete in accordance with Section 2300.

B. Driveways shall attain a minimum elevation of six inches above the gutter elevation within the right-of-way with a maximum grade of 8%. The algebraic difference in grades at the right-of-way on crest drives shall be 8% maximum and on sag drives shall be 12% maximum. The maximum recommended driveway grade outside the right-of-way is 15%.

C. Accessible pedestrian routes shall be extended across driveways in compliance with ADA and should have the typical width of the connecting sidewalk path.

5304.7 **Access for the Disabled:** Accessible routes shall be designed in accordance with the Public Rights-of-Way Access Guidelines (PROWAG) current draft version proposed by the Access Board, and subsequent approvals.

1. Ramps shall be required at all planned sidewalk-curb intersections in accordance with standard practice and current PROWAG criteria.

2. A turning space shall be required at locations where turning movements are required.

a. Typically level landings are located at the top of perpendicular ramps and the bottom of parallel ramps.

b. Turning spaces shall be installed at the top or bottom of blended transitions.

3. Non-standard driveways and alleys will also be designed with ADA accommodations.

*Note: PROWAG and ADA does not allow for construction tolerances. Values given are absolute maximums allowed for compliance. Therefore all slopes shall be designed to a lesser value to allow for tolerances during construction, such that the as-built conditions do not exceed regulatory guidelines.

5304.8 Minimum Required Information for Trail, Sidewalk and Curb Ramp Detail Sheets: Details for each ramp to be constructed on the project will be shown. Details may be shown in either plan view or orthogonal view. Details will include the following information:

1. Location and elevation of curb openings.
2. Detectable Surface area and location.
3. Maximum distance between the detectable surface and back of curb.
4. Running slope and cross slope for ramps.
5. Running slope and cross slope for level landings (turning spaces).
6. Running slope, cross slope and length of ramp extension to transition from curb ramp to sidewalk.
7. Transitions between from ramp to curb and from ramp to sidewalk.
8. Transition curbs along back of sidewalk or grading, as needed, to blend ramps into surrounding slopes.
9. Location of isolation and construction joints and required joint details for construction.
10. Type and location of steel tie bars.
11. Cross sections of the ramp. Section A-A will be along the long axis of the ramp. Section B-B will be across the width of the ramp. Section C-C will along the curb opening of the ramp.
12. Typical sections for sidewalks, trails, shared use paths
13. Typical cross sections for driveways intersecting accessible routes.
11. All cross slopes for trails, sidewalks, paths and accessible routes.

(Continued on next page)

5305 FIGURES:

TABLE LS-5: ACCESSIBLE ROUTE DESIGN CRITERIA

	Design Slopes	**PROWAG Max Allowed Slope***	**Minimum Width**
Turning Space	1.5% all directions	2.0% all	5 ft. x 5 ft.
Ramp Running Grade	Less than 7.5%	8.33%	5 ft
Sidewalks: ≥ 3 ft. green space between sidewalk and curb	1.5% cross slope Running slope no greater than street profile grade	2.0% cross slope	5 feet
Sidewalks: abutted to back of curb	1.5% cross slope Running slope match street profile grade	2.0% cross slope	6 feet

TABLE LS-6: MINIMUM ACCESSIBLE ROUTE THICKNESS SECTIONS

Type of Route	**PCC(3) Thickness**	**Agg Base Thickness**	**Comments**
Sidewalk(1)	4”	4”	Transverse joints shall be spaced to match width of sidewalk; Joints may be tooled or sawn.
Shared Use Path(2)	6”	4”	Transverse joints shall be spaced to match width of trail, but not greater than 12 ft.; joints shall be sawn.
ADA Ramp	6”	4”	

(1) Minimum width of sidewalks shall be 5 feet, with a typical 5-foot green space between sidewalk and back of curb. A 3 to 5-foot green space may be used based on site conditions and upon approval of the City Engineer. If less than 3-foot green space, sidewalk shall be at least 6-feet wide.

(2)Minimum width of paths shall be 10 feet

(3)Accessible routes shall be paved using KCMMB 4k concrete