

The City of Lee's Summit

Final Agenda

Public Works Committee

Monday, September 19, 2016 4:30 PM City Council Chambers City Hall 220 SE Green Street Lee's Summit, MO 64063

- 1. CALL TO ORDER
- 2. ROLL CALL
- 3. APPROVAL OF AGENDA
- 4. APPROVAL OF ACTION LETTER
 - A. <u>2016-0477</u> August 15, 2016 Action Letter for approval.
- 5. PUBLIC COMMENTS:
- 6. BUSINESS
 - A. TMP-0231 AN ORDINANCE AMENDING CHAPTER 1, GENERAL PROVISIONS, AND CHAPTER 29, TRAFFIC AND MOTOR VEHICLES, OF THE CODE OF ORDINANCES FOR THE CITY OF LEE'S SUMMIT, MISSOURI, BY REVISING SECTION 1-2, DEFINITIONS AND RULES OF CONSTRUCTION AND SECTION 29-1, DEFINITIONS, WITHIN EACH RESPECTIVE CHAPTER FOR THE TERM SIDEWALK.
 - B. <u>TMP-0234</u> AN 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.
 - C. <u>TMP-0229</u> AWARD OF RFQ 2017-300 TO PROFESSIONAL SERVICES INDUSTRIES, INC. AS PRIMARY AND TO KANSAS CITY TESTING & ENGINEERING, L.L.C. AS SECONDARY FOR ON-CALL YEARLY GEOTECHNICAL CONSTRUCTION, MATERIAL TESTING AND INSPECTION SERVICES. A ONE-YEAR CONTRACT WITH TWO POSSIBLE ONE-YEAR RENEWAL OPTIONS.

D.	<u>TMP-0230</u>	AN ORDINANCE AUTHORIZING EXECUTION OF A MUNICIPAL AGREEMENT
		BY AND BETWEEN THE CITY OF LEE'S SUMMIT, MISSOURI AND THE
		MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION FOR
		CONSTRUCTION AND MAINTENANCE ACTIVITIES RELATED TO THE PUBLIC
		IMPROVEMENT PROJECT DESIGNATED AS ROUTE COLBERN ROAD, JOB
		J4S3131, WITHIN THE CITY LIMITS OF LEE'S SUMMIT, MISSOURI.

- E. <u>TMP-0227</u> AN ORDINANCE APPROVING CHANGE ORDER #5 TO THE CONTRACT WITH MIDWEST HEAVY CONSTRUCTION FOR THE JEFFERSON STREET IMPROVEMENTS PROJECT, AN INCREASE OF 208 CALENDAR DAYS FOR A TOTAL OF 708 CALENDAR DAYS TO REACH SUBSTANTIAL COMPLETION AND 738 CALENDAR DAY TO REACH FINAL COMPLETION.
- F. TMP-0236 AN ORDINANCE APPROVING CHANGE ORDER #1 TO THE CONTRACT WITH PHOENIX CONCRETE AND UNDERGROUND, L.L.C. FOR THE FY2017 CURB REPAIR PROJECT BID NUMBER 40432472, AN INCREASE OF \$90,871.47 FOR A REVISED CONTRACT PRICE OF \$1,171,836.02 AND AN INCREASE OF 14 CALENDAR DAYS FOR A TOTAL OF 104 CALENDAR DAYS TO REACH SUBSTANTIAL COMPLETION.
- G. <u>2016-0555</u> Continued Discussion of Stormwater Program

7. ROUNDTABLE:

8. ADJOURNMENT

For your convenience, City Council agendas, as well as videos of City Council and Council Committee meetings, may be viewed on the City's Internet site at "www.cityofls.net".



Packet Information

File #: 2016-0477, Version: 1

August 15, 2016 Action Letter for approval.



The City of Lee's Summit

Action Letter

Public Works Committee

Monday, August 15, 2016 4:30 PM City Council Chambers City Hall 220 SE Green Street Lee's Summit, MO 64063

CALL TO ORDER ROLL CALL

RU	ROLL CALL		
		Present:	4 - Chairperson Dave Mosby Vice Chair Rob Binney Councilmember Craig Faith Councilmember Phyllis Edson
1.	. APPROVAL OF ACTION LETTER		CTION LETTER
	Α.	<u>2016-0474</u>	July 18, 2016 Action Letter for approval.
			A motion was made by Councilmember Edson, seconded by Councilmember Faith, to approve the July 18, 2016 Action Letter. The motion carried unanimously.
2.	2. PUBLIC COMMENTS:		
			None
3.		BUSINESS	
	Α.	RES. NO.	A RESOLUTION EXPRESSING THE AFFIRMATIVE ASSENT OF THE CITY OF
		<u>16-17</u>	LEE'S SUMMIT, MISSOURI ON THE QUESTION OF WHETHER THE LITTLE
			BLUE VALLEY SEWER DISTRICT SHOULD ISSUE REVENUE BONDS
			PAYABLE FROM REVENUES TO BE DERIVED FROM THE OPERATION OF
			THE LITTLE BLUE VALLEY SEWER SYSTEM IN AN AMOUNT NOT TO
			EXCEED \$20,000,000 FOR THE PURPOSE OF IMPROVING, EXTENDING OR
			REHABILITATING THE LITTLE BLUE VALLEY SEWER DISTRICT SYSTEM
			INCLUDING, BUT NOT LIMITED TO ADVANCED AIR EMISSIONS
			CONTROLS FOR THE ATHERTON WASTEWATER TREATMENT FACILITIES.
			(PWC 8-15-16)
		Presenter:	Jeff Shook, Assistant Director Little Blue Valley Sewer District
			Greg Beottcher, Director Little Blue Valley Sewer District
			Jeff Thorn, Assistant Director Lee's Summit Water Utilities
			A motion was made by Mayor Pro Tempore Binney, seconded by Councilmember Faith, that this Resolution be recommended for approval to the City Council. The motion carried

unanimously.

В.	<u>BILL NO.</u> <u>16-176</u> <u>Presenter:</u>	AN ORDINANCE AUTHORIZING THE REPAIR OF THE NORTH RAIL SPUR UNDER THE CITY'S ON CALL CONTRACTOR KELLY HILL COMPANY, IN THE AMOUNT OF \$83,564.22 AND AUTHORIZING THE CITY MANAGER TO EXECUTE AN AGREEMENT FOR THE SAME. (PWC 8-15-16) Presenter: Shawn Graff, Assistant Director of Operations
		A motion was made by Mayor Pro Tempore Binney, seconded by Councilmember Edson, that this Ordinance be recommended for approval to the City Council. The motion carried unanimously.
C.	<u>BILL NO.</u> <u>16-177</u>	AN ORDINANCE AUTHORIZING THE AWARD OF AN ON-CALL AGREEMENT FOR ARCHITECTURAL AND ENGINEERING SERVICES TO SFS ARCHITECTURE, INC. (RFQ NO. 2016-070) AND AUTHORIZING THE CITY MANAGER TO EXECUTE AN AGREEMENT FOR THE SAME. (PWC 8-15-16)
	<u>Presenter:</u>	Presenter: Steve Aldridge, City Architect
		A motion was made by Councilmember Edson, seconded by Councilmember Faith, that this Ordinance be recommended for approval to the City Council. The motion carried unanimously.
D.	<u>BILL NO.</u> <u>16-178</u>	AN ORDINANCE AUTHORIZING EXECUTION OF MODIFICATION NO. 1, RFQ NO. 2016-091, TO AN AGREEMENT WITH BURNS AND MCDONNELL FOR PROFESSIONAL ENGINEERING SERVICES FOR SANITARY SEWER FLOW MONITORING FOR WATER UTILITIES, AN INCREASE IN FEE OF \$15,800 FOR A NEW CONTRACT AMOUNT OF \$154,940. (PWC 8-15-16)
	<u>Presenter:</u>	Presenter: Jeff Thorn Assistant Director Lee's Summit Water Utilities
		A motion was made by Councilmember Faith, seconded by Mayor Pro Tempore Binney, that this Ordinance be recommended for approval to the City Council. The motion carried unanimously.
Ε.	<u>2016-0281</u>	Discussion - Transit Study
	<u>Presenter:</u>	Presenter: Bob Hartnett, Deputy Director of Public Works
		Mr. Bob Hartnett, Deputy Director of Public Works, began the Transit Study presentation by giving some background information that included the previous years the study has been completed, the types of information that the study incorporates, and he noted that the new study would be coming through the Kansas City Area Transportation Authority (KCATA) by their consultant Olsson and Associates. Mr. Hartnett then introduced Mr. Mark Swope from KCATA and Mr. Jeff McKerrow and Mr. Tom Worker-Braddock from Olsson and Associates

Mr. Worker-Braddock, Transportation and Transit Planner with Olsson and

from Olsson and Associates.

Public Works Committee Action Letter August 15, 2016

Associates, went over the purpose for the study and where the funding came from. They studied the existing transit, commutes, projected and future ridership and went over the four strategies identified. Strategy one was to consolidate demand-response service (combine the KCATA and OATS services), strategy two was a taxi voucher program (may not be a practical solution because there are not enough taxi's and generally only one company submits a bid for this service), strategy three was a small-area fixed-route and the fourth strategy was a citywide fixed-route service with thirty or sixty minute frequency.

Mayor Pro Tempore Binney asked about the statement that ridership would increase if services increased and if that was based on the assumption that the City would continue to subsidize ridership fees. Mr. Worker-Braddock answered yes and added that no public transportation system is fully funded by rider's fees except in Hong Kong or Tokyo. Mayor Pro Tempore Binney then asked staff about the renewal of the 252 route contract and if it is possible to still cancel that route and add another OATS route. Mr. Hartnett said that could be researched and reported back to the Committee. Mayor Pro Tempore Binney then asked if the new KCATA ideas like the bridge were considered for Lee's Summit ridership. Mr. Worker-Braddock said that this study began before the discussions about the bridge really got started and was not considered as part of any of the strategies provided. A bridge is more of an addition to fixed route systems and Lee's Summit doesn't really have any fixed route systems. Mayor Pro Tempore Binney then stated that it seems Lee's Summit has a student need and a senior need for transportation and asked if age demographics were taken into consideration for the study. Mr. Worker-Braddock said that KCATA's hours of operation aren't condusive for a work day and the problem with demand response transit is they run on a 30-minute window. Mayor Pro-Tempore Binney informed the Committee on funding sources the City receives for this type of transportation.

Councilmember Edson asked if transportation was part of Lee's Summit 360 and if there had been a citizen's committee to look at it. Ms. Christal Weber, Assistant City Manager, answered that yes there was a transportation KPA with Lee's Summit 360.

Chairman Mosby asked what the current direction is for this issue. As the former Public Works Committee Chairman, Mayor Pro-Tempore Binney answered that the Transportation study is done every so often to see if the current system is still meeting the needs of the ridership and the Committee had been asking if the current fixed and flex routes still make sense and investigating the OATS versus the demand response of the 252 route. He asked staff to investigate if there would be a cost savings to cut the 252 and add another OATS van and include Saturday service.

Mr. George Binger, Deputy Director/City Engineer, asked the Committee to clarify what information they would like to see from staff. He suggested that staff could evaluate the strategies presented in the study and go over the pros and cons of each and bring it back to the Committee.

This Other Business - Presentation was received and filed.

Discussion of Stormwater Program Scenarios

F.

<u>2016-0430</u>

<u>Presenter:</u> Presenter: Scott Edgar, Senior Staff Engineer

Mr. Scott Edgar, Senior Staff Engineer, began his presentation with a list of discussion items; Stormwater program goals, examination of existing and proposed levels of service and the Capital Improvement Program. The tenative program goals were listed as the following; improve the reliability of the existing system through increased maintenance including proactive efforts; expand implementation of regulatory water quality plan including infrastructure improvements, public education and staff training; and the construction of capital projects that continue to address problem areas. He presented three scenarios with different numbers of staff, costs and the level of service that could be provided by each, and the Capital Improvement projects would have to handled separately.

Councilmember Faith asked clarifying questions about employee time such as if these numbers were based on a 40-hour work week, exempt or non-exempt employees, and if additional crews and equipment will help cut overtime during snow events. The answer was yes, they were based on a 40-hour work week, with both exempt and non-exempt employees, and it probably will not make much of a difference to overtime hours because you have to factor in the additional lane miles added in the city every year.

Councilmember Edson asked if scenarios 1 and 2 are just bandaids and scenario 3 is where we can begin to be proactive. The answer was yes.

Mayor Pro Tempore Binney asked about the 2004 Commission and what items still need to be addressed from that report. The answer was that the only remaining recommendation is a permantent funding source for ongoing maintenance. Ms. Christal Weber stated that staff will send the recommndations to the Committee.

Chariman Mosby asked for definitions or examples for the level of service items such as water quality programs, capital improvement project and implementation, NPDES, reviews conducted, limited system replacement program, etc., and a list of the things that have to be done both currently and in the future, so the Committee members will know what is a new service that the City is trying to provide with each scenario. He also requested the previous presentation that had 4 scenarios be e-mailed to the Committee members.

Mayor Pro Tempore Binney asked for a list of a few large CIP projects that could be handled through the Capital Improvement Project Sales Tax that is coming up for renewal and what that might do to scenarios 1, 2 and 3.

Councilmember Faith asked staff to bring back some comparisons that have been done with other peer cities.

This Presentation was received and filed.

4. ROUNDTABLE:

Mr. Bob Hartnett announced the Public Works Snow Week as Sept. 13-16 and invited Committe members to guest drive and attend a BBQ. RecycleFest is from 9a.m. - noon on Sept. 17, in the City Hall parking lot. He read the list of items that will be accepted.

Mr. George Binger discussed the updated FEMA Floodplain maps and an updated ordinance that will be due January 20. There will also be changes coming forward regarding the design and construction manual.

Ms. Christal Weber announced that the city will be sending a list of educational oportunites and dates available for Councilmembers to have ride alongs with city staff from different departments.

Mayor Pro Tempore Binney asked for an update on the possibility of getting the North Recycling Center reopening. Mr. Bob Hartnett reported that Kansas City has shown some interest in partnering to reopen that center and he will check for an update on that. Mayor Por-Tempore Binney then asked for updates on the Ward Road phase one project, the curb project, and phase two of Tudor Road. Mr. Mike Anderson provided updates on both projects.

Chairman Mosby asked if the Committee could get a monthly, one or two page write-up, with updates on all of the major projects, sent before the meetings. He also asked for a report on the curb projects to include what projects are currently going on and anticipated as well as a description/discussion on the procedure to determine when they need to be replaced.

5. ADJOURNMENT

The August 15, 2016 Public Works Committee meeting was djourned by Chairman Mosby at 6:38 p.m. at City Hall, 220 SE Green St, City Council Chambers.

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Public Works Committee Action Letter August 15, 2016



Packet Information

File #: TMP-0231, Version: 1

AN ORDINANCE AMENDING CHAPTER 1, GENERAL PROVISIONS, AND CHAPTER 29, TRAFFIC AND MOTOR VEHICLES, OF THE CODE OF ORDINANCES FOR THE CITY OF LEE'S SUMMIT, MISSOURI, BY REVISING SECTION 1-2, DEFINITIONS AND RULES OF CONSTRUCTION AND SECTION 29-1, DEFINITIONS, WITHIN EACH RESPECTIVE CHAPTER FOR THE TERM SIDEWALK.

<u>Issue/Request:</u>

AN ORDINANCE AMENDING CHAPTER 1, GENERAL PROVISIONS, AND CHAPTER 29, TRAFFIC AND MOTOR VEHICLES, OF THE CODE OF ORDINANCES FOR THE CITY OF LEE'S SUMMIT, MISSOURI, BY REVISING SECTION 1-2, DEFINITIONS AND RULES OF CONSTRUCTION AND SECTION 29-1, DEFINITIONS, WITHIN EACH RESPECTIVE CHAPTER FOR THE TERM SIDEWALK.

Key Issues:

The Police Department and City Prosecutors Office desired clarity on the definition of the term Sidewalk for enforcement issues related to blocked pedestrian access routes/sidewalks by parked vehicles on driveways.

The proposed amendment clarifies the inclusion and limits of sidewalk within driveways.

Proposed Committee Motion:

I move to recommend to City Council approval of AN ORDINANCE AMENDING CHAPTER 1, GENERAL PROVISIONS, AND CHAPTER 29, TRAFFIC AND MOTOR VEHICLES, OF THE CODE OF ORDINANCES FOR THE CITY OF LEE'S SUMMIT, MISSOURI, BY REVISING SECTION 1-2, DEFINITIONS AND RULES OF CONSTRUCTION AND SECTION 29-1, DEFINITIONS, WITHIN EACH RESPECTIVE CHAPTER FOR THE TERM SIDEWALK.

Background:

Parking ordinances prohibit parking on sidewalks. ADA considers the extension of sidewalk across a driveway a part of the pedestrian access route that shall remain unobstructed and ADA compliant.

The Police Department and City Prosecutors Office desired clarity on the definition of the term Sidewalk so that without question includes driveways for requests of enforcement related to blocked pedestrian access routes/sidewalks by parked vehicles on driveways.

The issue was advanced to the Livable Streets Advisory Board where a proposed amendment to the definition of Sidewalk in Section 1-2 and Section 29-1 of the Code of Ordinances was drafted and recommended by the board that clarifies the extent, use and intent of Sidewalk, particularly that portion across driveways.

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The proposed amendment was reviewed and supported by staff from the Public Works Department, Police Department and City Prosecutors Office.

The proposed amendment clarifies the inclusion and limits of sidewalk within driveways. The language used to clarify the extent of sidewalk was derived from existing ordinance definitions of sidewalk and crosswalk. Only Section 1-2 and Section 29-1 are applicable to the amendment in the Code of Ordinances.

Existing Definition of Sidewalk (Section 1-2): Sidewalk. The word "sidewalk" shall mean that portion of the street between the curb line and the adjacent property line which is intended for the use of pedestrians.

Existing Definition of Sidewalk (Section 29-1): Sidewalk shall mean that portion of a street between the curb lines or the lateral lines of a roadway and the adjacent property lines, intended for the use of pedestrians.

Existing Definition of Crosswalk (Section 29-1): Crosswalk shall mean: A. That part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the highway measured from the curbs or, in the absence of curbs, from the edges of the traversable roadway; or B. Any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by lines or other markings on the surface.

Proposed Definition of Sidewalk (with slight variation between Section 1-2 and Section 29-1): Sidewalk or Shared Use Path shall mean that portion of a street between the curb lines or the lateral lines of a roadway and the adjacent property lines, intended for the use of pedestrians, with or without mobility aids, bicyclists and other non-motorized transportation modes if such use is not otherwise prohibited by ordinance, including that part of a private road or driveway within the connections of the lateral lines of the sidewalks or shared use path on opposite sides of the private road or driveway measured from the curbs or, in the absence of curbs, from the edges of the traversable private road or driveway.

If and when enforcement of parking violations associated with this ordinance is requested, the Police Department has committed to a process of graduated enforcement that begins with education and warning prior to citation.

Impact/Analysis:

The existing ordinance prohibits parking on driveways in obstruction of sidewalks/pedestrian access routes. The proposed ordinance clarifies the definition of sidewalk for continued effect and better understanding of the existing ordinance in reference. This ordinance has no change regarding the prohibition of parking on driveways in obstruction of the pedestrian route/sidewalk.

<u>Timeline:</u>		
Start:		
Finish:		

Other Information/Unique Characteristics: [Enter text here]

Presenter: Michael Park, City Traffic Engineer

<u>Recommendation</u>: Staff recommends approval of AN ORDINANCE AMENDING CHAPTER 1, GENERAL PROVISIONS, AND CHAPTER 29, TRAFFIC AND MOTOR VEHICLES, OF THE CODE OF ORDINANCES

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FOR THE CITY OF LEE'S SUMMIT, MISSOURI, BY REVISING SECTION 1-2, DEFINITIONS AND RULES OF CONSTRUCTION AND SECTION 29-1, DEFINITIONS, WITHIN EACH RESPECTIVE CHAPTER FOR THE TERM SIDEWALK.

<u>Committee Recommendation:</u> [Enter Committee Recommendation text Here]

BILL NO.

ORDINANCE NO.

AN ORDINANCE AMENDING CHAPTER 1, GENERAL PROVISIONS, AND CHAPTER 29. TRAFFIC AND MOTOR VEHICLES, OF THE CODE OF ORDINANCES FOR THE CITY OF LEE'S SUMMIT, MISSOURI, BY REVISING SECTION 1-2, DEFINITIONS AND RULES OF CONSTRUCTION AND SECTION 29-1, DEFINITIONS, WITHIN EACH RESPECTIVE CHAPTER FOR THE TERM SIDEWALK.

WHEREAS, Sec. 1-2, Definitions and Rules of Construction, of Chapter 1, General Provisions, in the Code of Ordinances for the City of Lee's Summit, provides for various definitions of terms including the term Sidewalk; and,

WHEREAS, Sec. 29-1, Definitions, of Chapter 29, Traffic and Motor Vehicles, in the Code of Ordinances for the City of Lee's Summit, also provides for various definitions of terms including the term Sidewalk; and,

WHEREAS, the term Sidewalk for purposes of clarity should be defined to include the portion of pedestrian route across driveways within the right-of-way and other intended uses permitted in the Code of Ordinances; and,

WHEREAS, the City's Traffic Engineer believes that it is appropriate to amend the definition of Sidewalk in Sec. 1-2 and Sec. 29-1 in the manner shown below; and,.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LEE'S SUMMIT, MISSOURI, as follows:

SECTION 1. That Chapter 1, Section 2-1, of the Code of Ordinances, City of Lee's Summit, Missouri, is hereby amended to revise the definition of Sidewalk as follows:

Sidewalk. The word "Sidewalk" or "Shared Use Path" shall mean that portion of a street between the curblines or the lateral lines of a roadway and the adjacent property lines, intended for the use of pedestrians, with or without mobility aids, bicyclists and other nonmotorized transportation modes if such use is not otherwise prohibited by ordinance, including that part of a private road or driveway within the connections of the lateral lines of the sidewalks or shared use path on opposite sides of the private road or driveway measured from the curbs or, in the absence of curbs, from the edges of the traversable private road or driveway.

SECTION 2. That Chapter 29, Section 29-1, of the Code of Ordinances, City of Lee's Summit, Missouri, is hereby amended to revise the definition of Sidewalk as follows:

Sidewalk or Shared Use Path shall mean that portion of a street between the curblines or the lateral lines of a roadway and the adjacent property lines, intended for the use of pedestrians, with or without mobility aids, bicyclists and other non-motorized transportation modes if such use is not otherwise prohibited by ordinance, including that part of a private road or driveway within the connections of the lateral lines of the sidewalks or shared use path on opposite sides of the private road or driveway measured from the curbs or, in the absence of curbs, from the edges of the traversable private road or driveway.

SECTION 3. That all ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

SECTION 4. That should any section, sentence or clause of this ordinance be declared

invalid or unconstitutional, such declaration shall not affect the validity of the remaining sections, sentences, or clauses.

SECTION 5. That it is the intention of the City Council, and it is hereby ordained, that the provisions of this ordinance shall become and be made a part of the Code of Ordinances for the City of Lee's Summit, Missouri.

SECTION 6. That this ordinance shall be in full force and effect from and after the date of its passage and adoption, and approval by the Mayor.

PASSED by the City Council of the City of Lee's Summit, Missouri, this ____ day of ____, 2016.

Mayor Randall L. Rhoads

ATTEST:

City Clerk Denise R. Chisum

APPROVED by the Mayor of said city this ______day of _____, 2016.

Mayor Randall L. Rhoads

ATTEST:

City Clerk Denise R. Chisum

APPROVED AS TO FORM:

Brian Head, City Attorney



Packet Information

File #: TMP-0234, Version: 1

AN 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.

Issue/Request:

AN 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.

Key Issues:

- The current Design and Construction Manual (DCM) was originally adopted in September 2004 and Sections 1000 in February 2010.
- Sections 5200 and 5300 were last updated in October 2009 and September 2004, respectively.
- In accordance with the adopting ordinance, revisions to the General Provisions and the design criteria sections must be done by ordinance while changes to technical specifications may be handled administratively.
- Certain paragraphs of need to be amended to comply with current advances in industry standards, advances in construction materials, and improved compatibility with the Americans with Disabilities Act (ADA) and the Clean Water Act Amendments.
- Several paragraphs of 1000, General Provisions, have been amended to correct typographical, grammatical errors, or provide clarification.

Proposed Committee Motion:

I move to recommend to City Council approval of AN 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.

Background:

The Design and Construction Manual (DCM) governs design guidelines for public infrastructure and established construction standards for infrastructure that will be maintained and operated by the City after completion of the work. Changes in construction materials, practices, design standards, federal law, state statutes and local ordinances and policies often necessitate changes to design standards. These changes have significant impact on the City's long-term maintenance and operating budget, as well as meeting the quality

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of life goals set forth in the City's master planning documents.

The current Design and Construction Manual (DCM) was adopted by City Council in September 2004. Modifying design standards requires approval by City Council, whereas updates to approved products, construction details, construction specifications and be updated administratively. Periodic updates to the design criteria were made in 2009, 2010, 2013 and 2015. Section 1000, General Provision, was last updated in 2010. Section 5200, Streets, was last updated in 2009. Section 5300, Incidental Construction, was last updated in 2004.

Section 1000: General Conditions

The main reason for edits in Section 1000 are to correct typographical errors, clarify common practices in working with developers, and provide better guidance base on lessons learned during construction. A summary of key items are shown below:

<u>Subsection 1002, Scope</u>: Clarify that requests for design waivers or alternate construction materials must be documented and submitted in writing; clarify certifications for independent testing labs; clarify that sidewalks, paths, trails and other pavements are subject to these design standards.

<u>Subsection 1003, Definitions:</u> Revised definitions for Final Acceptance, Final Affidavit and Final agreement to be consistent with other documents or permits processed at Final Acceptance.

<u>Subsection 1005, Engineering Submittals</u>: Added clarifications for types of plans sheets and details needed on development engineering plan submittals to facilitate proper construction and inspections in the field, and ensure public infrastructure complies with the Americans with Disabilities Act. Added a copy of the project specific Storm Water Pollution Prevention Plan (SWPPP) to list of required submittals.

<u>Subsection 1010, Permits</u>: Clarified requirements for items to be included in the Engineer's Opinion of Probable Construction Cost. Added traffic control, structures (such as culverts), landscaping in public right of way to cost estimates for public infrastructure. Changed a typographical error in the DCM to include drive approaches and sidewalks on private development in the cost estimates.

Section 5200: Streets

Section 5200 updates are requested so that the DCM will be consistent with the City's current Access Management Code, revised language to ensure compliance with ADA requirements, clarify alternative pavement sections, and deleted the table of typical cross-sections because they were both unreadable and in conflict with current design policies.

Section 5300: Incidental Construction

Updates to Section 5300 are request to ensure proper design of accessible routes that meet the newer federal Proposed Guidelines for Pedestrian Facilities in Public Right of Way. Section 5304 was added to provide design criteria for accessible routs in the public right of way based on lessons learned from trying to build and construct ADA compliant infrastructure.

Impact/Analysis:

The design criteria proposed for Sections 5200 and 5304 have been used by the City on Capital Improvement Projects dating back to 2004. Improved design and material requirements have shown reduced annual maintenance costs for pavements, along with improved traffic safety statistics. Modifying development

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standards to match the same standards on CIP project is expected to see a similar reduction in overall maintenance cost, and improve the overall quality to streets and sidewalks. Section 1000 updates are expected to have the same impact of improving the quality of development engineering plans to provide inspectors the necessary tools to ensure proper construction of public infrastructure.

<u>Timeline:</u> Start: ____ Finish:

Other Information/Unique Characteristics: [Enter text here]

Presenter: George Binger, Deputy Director/City Engineer

<u>Recommendation:</u> Staff recommends approval of AN 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.

<u>Committee Recommendation:</u> [Enter Committee Recommendation text Here]

AN 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.

WHEREAS, the current Design and Construction Manual (DCM) was originally adopted in September 2004 and Sections 1000 in February 2010; and,

WHEREAS, Sections 5200 and 5300 were last updated in October 2009 and September 2004, respectively; and,

WHEREAS, in accordance with the adopting ordinance, revisions to the General Provisions and the design criteria sections must be done by ordinance while changes to technical specifications may be handled administratively; and,

WHEREAS, certain paragraphs of need to be amended to comply with current advances in industry standards, advances in construction materials, and improved compatibility with the Americans with Disabilities Act (ADA) and the Clean Water Act Amendments; and,

WHEREAS, several paragraphs of 1000, General Provisions, have been amended to correct typographical, grammatical errors, or provide clarification.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LEE'S SUMMIT, MISSOURI, as follows:

SECTION 1. That the City of Lee's Summit, Missouri's Design and Construction Manual, as adopted and made a part of the Code of Ordinances by Chapter 22.5 of the Code of Ordinances of the City of Lee's Summit, Missouri, Public Improvements Design and Construction, Section 22.5-1 (Design and Construction Manual), is hereby amended as follows:

- a. Section 1000, entitled "General Provisions" of the City's Design and Construction Manual shall be amended to read as shown in Exhibit A, which is attached hereto and incorporated by reference as if fully set forth herein.
- b. Section 5200, entitled "Streets" of the City's Design and Construction Manual shall be amended to read as shown in Exhibit B, which is attached hereto and incorporated by reference as if fully set forth herein.
- c. Section 5300, entitled "Incidental Construction" of the City's Design and Construction Manual shall be amended to read as shown in Exhibit C, which is attached hereto and incorporated by reference as if fully set forth herein.

SECTION 2: Severability Clause. That should any section, sentence or clause of this Ordinance be declared invalid or unconstitutional, such declaration shall not affect the validity of the remaining sections, sentences, or clauses.

SECTION 3: Savings Clause. Nothing in this ordinance hereby adopted shall be construed to affect any suit or proceeding now pending in any court or any rights acquired or liability incurred nor any cause or causes of action accrued or existing, under any act or ordinance repealed hereby, nor shall any right or remedy of any character be lost, impaired, or affected by this ordinance.

SECTION 4: That it is the intention of the City Council and it is hereby ordained that the provisions of this ordinance shall become and be made a part of the Code of Ordinances for the City of Lee's Summit, Missouri.

SECTION 5: That this ordinance shall be in full force and effect from and after the date of its passage, and adoption, and approval by the Mayor.

PASSED by the City Council of the City of Lee's Summit, Missouri, this _____ day of _____, 2016.

ATTEST:

Mayor Randall L. Rhoads

City Clerk Denise R. Chisum

APPROVED by the Mayor of said city this _____ day of _____, 2016.

ATTEST:

Mayor Randall L. Rhoads

City Clerk Denise R. Chisum

APPROVED AS TO FORM:

City Attorney Brian Head

EXHIBIT A 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.

CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL

SECTION 1000 - GENERAL PROVISIONS

1001 PURPOSE

The purpose of the City of Lee's Summit Design and Construction Manual ("Manual") is to provide minimum design and construction standards to safeguard life, limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, and location of public and private infrastructure within the City of Lee's Summit.

1002 SCOPE

The Manual is composed of four parts: General Provisions, Design Criteria, Standard Specifications, and Standard Drawings. The provisions of the Manual shall apply to the design and construction of infrastructure including, but not limited to, streets; sidewalks; pavements; water lines; sanitary sewers; storm sewers; and stormwater detention.

Where, in any specific case, different sections of the Manual specify different requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

The regulations are not intended to interfere with, abrogate, or annul any other ordinance, rule or regulation, statute, or other provision of law. Where any provision of these regulations imposes restriction different from any provision of these regulations or any other ordinance, rule, or regulation or other provision of law, whichever provisions are more restrictive or impose higher standards shall control.

- A. Modifications: Wherever there are practical difficulties involved in carrying out the provisions of this Manual, the City Engineer shall have the authority to grant modifications for individual cases, upon application in writing by the property owner or owner's representative, provided the City Engineer shall first find that special individual reasons exist that make the strict letter of this Manual impractical and the modification is in compliance with the intent and purpose of this Manual and that such modification does not lessen health, accessibility, life and safety, or functional requirements. The details of action granting modifications shall be copied to the project file.
- B. Alternative Materials, Design and Methods of Construction and Equipment: The provisions of this Manual are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this Manual, provided that any such alternative has been approved. Requests for use of alternative materials shall be submitted in writing to the City. An alternative material, design or method of construction shall be approved where the City Engineer finds that the proposed design is satisfactory and complies with the intent of the provisions of the Manual, and that the

GENERAL PROVISIONS

material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this manual in quality, strength, effectiveness, durability, and safety.

- C. Tests: Whenever there is insufficient evidence of compliance with the provisions of this Manual, or evidence that a material or method does not conform to the requirements of this Manual, or in order to substantiate claims for alternative materials or methods, the City Engineer shall have the authority to require tests as evidence of compliance to be made at no expense to the City. Test methods shall be as specified in this Manual or by other recognized test standards. In the absence of recognized and accepted test methods, the City Engineer shall be authorized to approve the testing procedures. Tests shall be performed by an independent, accredited testing lab meeting A2LA, AMRL, AASHTO, AWWA, CCRL, or meeting other governing accreditation agencies recognized by the MoDOT, MDNR, or USACE. Reports of such test shall be retained by the City Engineer for the period required for retention of public records.
- D. Appeals: Appeals of orders, decisions or determinations made by the City Engineer relative to the application and interpretation of this Manual shall be made to the Board of Appeals as established by Sec. 7-173 of the City of Lee's Summit Code of Ordinances. The City Engineer's decision shall be final when mailed by U.S. mail postage prepaid to the owner or the owner's representative and may be appealed within ten (10) days from the date of such mailing. The appeal, if any, shall be pursuant to the contested case procedures of Chapter 536, RSMo.

1003 DEFINITIONS

Whenever the following words, phrases or abbreviations appear in this ordinance, they shall have the following meanings:

<u>Bond</u> shall mean performance, payment and/or maintenance bonds and other instruments of security furnished by the Contractor/Developer and his surety in accordance with these specifications.

<u>City</u> shall mean the City of Lee's Summit, a municipal Corporation, acting by and through its duly elected governing body and its duly appointed officials.

<u>City Engineer</u> shall mean the Engineer of the City of Lee's Summit or his/her authorized representative acting on behalf of the City.

<u>Contractor</u> shall mean a person, partnership, or corporation duly licensed to perform construction operations within the City of Lee's Summit.

<u>Contractor/Developer</u> shall mean either a Contractor or Developer who is applying for or has applied for and received approval of engineering plans for infrastructure improvements.

<u>Day</u> shall mean a calendar day of 24 hours measured from midnight to the next midnight unless otherwise defined by specific project contract documents.

<u>Department</u> shall mean the Engineering Division of the Public Works Department or the individual assigned to perform a function for the Engineering Division of the Public Works Department.

<u>Design Engineer</u> shall mean a registered professional engineer, licensed in the state of Missouri, under contract to the Contractor/Developer or the City of Lee's Summit for the purpose of preparing and sealing engineering studies, design drawings, specifications, etc.

<u>Developer</u> shall mean a person whose intent or function is to bring about any change of land use or improvement on any parcel of land within the City of Lee's Summit.

<u>Development</u> shall mean any change of land use or improvement on any parcel of land within the City of Lee's Summit.

<u>Drainage Facility</u> shall mean a manmade structure or natural watercourse for the conveyance of storm runoff. Examples are open channels, pipes, ditches, swales, catch basins, street gutters, slopes, berms, and other features affecting the flow of water.

<u>Engineering Plans</u> shall mean all engineering drawings including plan and profile drawings, a Master Drainage Plan, engineering details, calculations; and / or reports prepared and sealed by a registered professional engineer, and meeting City standards and good engineering practices.

EPRI Fees shall mean the fees paid to the Lee's Summit Public Works Department for Engineering Plan Review and Inspection.

<u>Final Acceptance</u> shall mean the time when all requirements for the required Improvements have been fully met.

<u>Final Affidavit and Agreement</u> shall mean lien waivers indicating all subcontractors and suppliers have been paid; affidavits certifying all contractors and subcontractors have complied with prevailing wage laws for work subject to prevailing wage; necessary bonds or other financial securities have been provided to the City as required by this Manual

<u>Improvements</u> shall mean the entire construction required to be provided in accordance with the approved Engineering Plans. Improvements include and are the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the approved Engineering Plans.

<u>Inspector</u> shall mean an authorized representative of the City of Lee's Summit Public Works Department who has been assigned to monitor conformance to the requirements of this Manual by the Contractor/Developer.

<u>Land Disturbance</u> shall mean an activity including, but not limited to, mechanized clearing, grading, etc., which removes the vegetative ground cover.

<u>Owner</u> shall mean any person having legal title to, or a proprietary interest in real property. Proprietary interest shall include, but not be limited to, estate administration, trusteeship, guardianship, and actions under a valid power of attorney.

<u>Site</u> shall mean the total area of the parcel, tract, lot or ownership of land upon which development or land disturbance is proposed irrespective of the actual limits or size of the proposed development or land disturbance activity.

<u>Substantial Completion</u> shall mean the time at which the Improvements have progressed to the point where, in the opinion of the City Engineer, the Improvements are sufficiently complete, in accordance with the requirements of this Manual, so that the Improvements can be utilized for the purposes for which they are intended.

Abbreviations used throughout the Design Criteria and the Standard Specifications are listed in Appendix A to this Section.

1004 REFERENCED STANDARDS

Whenever references are made to national or industry standards and specifications, methods of testing, materials codes, practices, and requirements, it shall be understood that the latest revision of said references shall govern unless a specific revision is stated. Whenever a reference, standard, or specification is not explicit or not specifically covered by this manual for any engineering and/or construction application, it shall be understood that generally accepted practices, references, standards, and specifications shall govern and shall be approved by the City Engineer.

1005 ENGINEERING SUBMITTALS

- A. Engineering plans for any proposed development (residential, commercial and/or industrial) for improvements that involve the construction of sanitary sewer, storm sewer/detention, waterlines, streets, sidewalks and pavements shall be submitted to the City Engineer to determine if the infrastructure in the proposed development complies with the design criteria in this Manual.
- B. Plan Requirements: Specific plan requirements are contained in the sections of the Design Criteria for various types of infrastructure. Minimum general requirements include the following:
 - 1. Cover sheet shall include the following minimum information:
 - a. Project title
 - b. Vicinity map
 - c. Developer's name, address, phone and fax number, and email address
 - d. Design Engineer's name, address, phone and fax number, and e-mail address
 - e. List of drawings (including revision dates)
 - f. Utility contact information.
 - 2. Plan set shall include:
 - a. Title Sheet
 - b. General Notes
 - c. Survey Control Data
 - d. Summary of bid quantities
 - e. Existing utilities, easements, and right-of-way
 - f. Utility relocations (as required)
 - g. Typical Sections for streets, rights of way, sidewalks, driveways, pavements, slopes, and other features as required.
 - h. Plan views, profiles and details

GENERAL PROVISIONS

- i. street, curb, gutter, sidewalks and pavements
- ii. traffic signals and pavement markings
- iii. sidewalks and associated ADA ramp details
- iv. storm sewers (including detention / retention facilities)
- v. sanitary sewers
- vi. water lines
- c. Temporary traffic control plan (as required)
- d. Permanent signing and marking plan (as required)
- e. Drainage area map, mass grading plan, and a Master Drainage Plan (as required) for the entire development in accordance with the requirements in Section 5600.
- f. Erosion and Sediment Control Plan for the entire development in accordance with the requirements in Sections 5100 and 2100.
- 3. All infrastructure shall have its own stationing and/or coordinates (i.e. pipelines shall not have road stationing).
- 4. All drawings, except detail sheets, shall be drawn to an acceptable standard engineering scale and shall include a bar scale.
- 5. The City's Standard Drawings, necessary to complete the Improvements, shall be incorporated into the plans.
- 6. Plans shall include at least two written benchmark descriptions and elevations, based on USGS (NAD83) or the City's datum.
- 7. Minimum font size on all plans shall be 0.125 inch on full size plans.
- 8. All plans should be oriented so that north is to the top (up) or to the left of the sheet and shall include a north arrow.
- 9. Legend shall be included showing line weights, symbols, abbreviations, etc.
- 10. Aerial backgrounds and imagery shall not be allowed.
- C. Submittals
 - Two sets of sealed engineering drawings on 22" x 34" paper for the initial submittal. One full-size and two half-size (11" x 17") sets for final distribution of the approved plans, and at least one additional set to be stamped and returned to the Contractor upon approval and payment of fees.
 - 2. One copy of each of the following as applicable:
 - a. All storm water calculations, including detention and/or retention system design.
 - b. All sanitary sewer system calculations for a 50-year rainfall event including hydraulic grade line.
 - c. Water system analysis.
 - d. Traffic impact studies.
 - e. Soil or geotechnical reports.
 - f. Pavement designs.

- g. Summary of bid quantities. This may be submitted as a separate document accompanying the engineering plans.
- h. Engineer's Opinion of Probable Construction Costs. This shall be an itemized list by quantity to include all materials, labor, and equipment necessary to complete the entire project and shall be submitted as a separate document. Reference Paragraph 1010, Permits.
- i. All applicable local, state, federal and private agency permits.
- j. Stormwater Pollution Prevention Plan (SWPPP).
- 3. Separate (proposed) off-site easement documents as required for easements not dedicated on a plat.
- 4. Engineering Plan submittals that are inactive may be required to be resubmitted at the discretion of the City Engineer.

1006 OIL AND GAS WELLS AND UNDERMINED AREAS

- A. Engineering drawings for any proposed development shall show the surveyed location of any oil or gas well or undermined area within the development.
- B. Documentation of compliance with the Revised Statutes of Missouri, and the Code of State Regulations shall be provided with the engineering submittal for any oil or gas wells that are plugged and abandoned within the development.
- C. Monumentation of Plugged and Abandoned Oil and Gas Wells
 - 1. The permanent markers shall be placed at all plugged and abandoned oil and gas wells located under pavement in compliance with this section and the Unified Development Ordinance.
 - The permanent marker shall be a "Mark-it" concrete/bench marker Model C/M-SS-3 1/4 B (3 1/4 inch flat/dome top by 3 inch split stem brass marker), with magnet, or an approved equal approved by the Public Works Department.
 - 3. The permanent marker shall be stamped with the identifying number for the well, as issued by the Missouri Department of Natural Resources.

1007 PLAN APPROVAL

Engineering Plan approval can be granted upon review and acceptance by the City Engineer and payment of the EPRI fees. All required submittals must be received in the required number of copies and format in order for approval of Engineering Plans to be granted. Partial approval of Engineering Plans may be granted at the sole discretion of the City Engineer.

Approval of plans does not relieve the Contractor/Developer from complying with the provisions set forth in this Manual. The Design Engineer whose seal appears on the Engineering Plans shall have the ultimate responsibility of ensuring that the engineering complies with the Design Criteria. Resubmission of Engineering Plans will be required for re-review and re-approval if construction has not commenced within one year from the date of plan approval.

1008 POSTING OF SECURITY FOR SUBDIVISION RELATED PUBLIC IMPROVEMENTS

All required subdivision-related public improvements must be completed as a condition precedent to the approval of the final plat, unless security is provided according to Article 16, Division IV – Minimum Public Improvements, Sections 16.330 and 16.340 of the Unified Development Ordinance (UDO). The public improvements covered by the UDO and this Manual include, without limitation, streets, curb and gutter, sidewalks, traffic signals, sanitary sewers, storm drainage facilities, and waterlines.

Whenever security is posted in the manner provided for under the UDO, the Contractor/Developer shall enter into a deposit agreement with the City in a form approved by the City Attorney. The City shall maintain any escrow funds deposited by a Contractor/Developer for the purpose of constructing public improvements in a separate account established for the public improvements. Said account shall earn interest at the rate earned on the City's pooled cash in accordance with the City's investment policy and such interest will be paid to the City to cover administrative and other costs associated with maintaining the cash deposit.

The dollar value of the security shall be based on an estimate of the cost to complete the construction and install the improvements and shall be determined the Design Engineer.

1009 INFRASTRUCTURE UPSIZING

City financial assistance may be made available for upsizing of water lines, sanitary sewers, and/or streets to serve private development. The amount of upsizing assistance shall be based upon City infrastructure planning requirements versus the minimum infrastructure requirements to serve the development. General terms for upsizing of water and sewer projects are covered in Sections 32.5 and 32-8 of the Lee's Summit Code of Ordinances.

- A. During the planning and/or design of a development project, areas of possible upsizing may either be identified by the City Engineer or be proposed by the Contractor/Developer. The Contractor/Developer shall provide the following information to the City Engineer:
 - 1. A cover letter stating the specifics of the upsizing proposal.
 - 2. An Engineer's Opinion of Probable Construction Costs that illustrates the cost of the proposed minimum improvements required to serve the development versus the cost of the proposed improvements generated through the City's CIP construction bids or accepted construction means.
- B. Following the City Engineer's evaluation of the proposal, an upsizing agreement will be drafted by the City Attorney for execution by the City and Contractor/Developer.
- C. After the Contractor/Developer has executed the agreement and returned the originals to the City, the proposal will be presented to the Public Works Committee and City Council for approval of the City's estimated cost share of the project and for approval of the agreement.
- D. Following the City Council action:

- 1. Engineering Plan approval will be given in accordance with the procedures outlined in the Design and Construction Manual.
- 2. The required improvements of the project shall be constructed by the Contractor/Developer.
- E. Reimbursement will be issued following final acceptance of the entire project. Following the acceptance of the improvements of the entire project by the City Engineer, the Contractor/Developer shall submit a written request for reimbursement in the final dollar amount for the City's cost share.
- F. Reimbursement will be made to the Contractor/Developer in the form of a check, provided the request does not exceed the amount included in the upsizing agreement.
- G. In the event the request does exceed the previously approved amount, the request will be reviewed by the City Engineer and will be presented to the Public Works Committee and City Council for final approval prior to payment.

1010 PERMITS

- A. The Contractor/Developer or Owner is responsible for obtaining all applicable local, state, federal and/or private agency permits.
- B. Nothing in this Section shall be deemed to supersede permitting requirements imposed by any law, rule or regulation of other Federal, State or local agencies, or of the City. In the event of conflict between these requirements and any other such law, rule or regulation, the more restrictive laws, rules or regulations shall apply.
- C. Land Disturbance Permit

All land disturbances, including residential and commercial development projects, shall provide adequate erosion control to protect public streets, public storm sewer systems, adjacent property, streams and surface waters from being polluted with sediment and silt.

- 1. A Land Disturbance Permit is required for any public or private entity that intends to cause or causes a condition that allows for erosion, including but not limited to stripping vegetation, clearing and grubbing land, or creating any type of land disturbance. The Contractor/Developer or Owner that intends to cause or causes a condition that allows for erosion shall apply for a Land Disturbance Permit.
- 2. Applications for a Land Disturbance Permit shall be submitted to the City. Applications shall be accompanied by
 - a. An erosion and sediment control plan
 - b. SWPPP
 - c. An application fee
 - d. Other submittals which are listed on the Land Disturbance Permit Application

Where practical, drawings may be combined to contain all of the required plans.

3. The following activities are exceptions and do not require a Land Disturbance Permit:

- a. Any grading or excavation for a basement, footing, retaining wall, or other structure on a single lot authorized by a valid full building permit.
- b. Any land disturbance activity of 2000 square feet or less.
- c. Public landfills.
- d. Agricultural activities in connection with the production, harvesting, storage, drying, or raising of agricultural products and livestock.
- e. Mining, quarrying, excavating, processing, and/or stockpiling of rock, sand, aggregate or clay where established and provided for by law.

D. Infrastructure Permits: An infrastructure permit is required prior to the start of construction.

- 1. Public Works Inspections will issue the infrastructure permit within 48 hours once the construction drawings have been approved by the City Engineer or their designee and the EPRI fee has been paid.
- 2. The EPRI Fees will be calculated using the Engineer's Opinion of Probable Construction Costs or the contract amount from the project contract documents. This must be an itemized list of unit prices and quantities that includes all materials, labor, equipment and incidental work necessary to complete the entire project.
- 3. The fee can be found in the City of Lee's Summit, Schedule of Fees.
- 4. The Engineer's Opinion of Probable Construction Costs shall include, but not be limited to, the following items:
 - a. Public Infrastructure:
 - i. All public infrastructure (sidewalks, streets, pavements, sanitary system, storm water system, and water system).
 - ii. All grading work
 - iii. All offsite public improvements
 - iv. All erosion and sediment control devices, BMPs, and activities
 - v. All detention/retention facilities
 - vi. All public street signage and lighting
 - vii. All traffic signals
 - viii. Traffic Control
 - ix. Other work required to complete the project
 - b. Private Infrastructure:
 - i. Any water service line larger than 2" in diameter, valves, hydrants, and backflow preventer with vault, if outside the building.
 - ii. All storm water piping 6" and larger, structures, and detention/retention facilities
 - iii. All grading for detention/retention ponds
 - iv. All erosion and sediment control devices, BMPs, and activities

- v. All private street construction, including parking lots, drive approaches and sidewalks.
- vi. All site grading
- vii. All retaining wall structures designed to facilitate site grading
- viii. All private sanitary sewer laterals, wyes, cleanouts, and connection of the building stub to the public main
- ix. All traffic control devices

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- E. Building Permit for Foundation Only: No foundation shall be constructed without first obtaining, at a minimum, a Building Permit for Foundation Only from the Codes Administration Department in accordance with the current building code. No Building Permit for Foundation Only will be issued before:
 - 1. The following facilities, if required by approved Engineering Plans, are complete as indicated:
 - a. The sanitary sewer serving the development is substantially complete. Substantial completion of the sanitary sewer shall include substantial completion of any off-site or outfall sewer serving the development. Any new sewer main serving the building site must be completely connected to the existing system and must be operational.
 - b. A paved road is in place serving the development, unless otherwise approved by the City Engineer and the Fire Department.
 - c. Erosion and sediment control must be installed according to the current rules and regulations according to Sections 2150 and 5100 of the Manual.
 - 2. Conditions of all development agreements covering the development are met, if applicable.
 - 3. If required by Section 5600, the as-graded record drawing(s) of the development's Master Drainage Plan have been submitted to and approved by the City Engineer.

Exception: For a single commercial site (single building/single lot) a building permit will be allowed following issuance of an infrastructure permit, provided there is no impact to any other users. Substantial completion shall be issued prior to any certificate of occupancy.

No water or sanitary sewer service lines shall be permitted to connect to the public mains until the mains are substantially complete.

- F. Full Building Permit: All permits for buildings or structures are issued by the Codes Administration Department in accordance with the current building code. No building permit will be issued before:
 - 1. A Certificate of Substantial Completion for all public infrastructure has been executed.

Exception: For a single commercial site (single building / single lot), a building permit will be allowed following issuance of an infrastructure permit, provided there is no impact to any other users.

Substantial completion shall be issued prior to any certificate of occupancy.

- 2. e
- 3. If required by Section 5600, the as-graded, record drawing(s) of the development's Master Drainage Plan have been submitted and approved by the City Engineer.
- 4. Erosion and sediment control has been installed according to current regulations and Sections 2150 and 5100 of this Manual.
- G. Right of Way Permit: All work within the City right-of-way shall be in accordance with the City's Right of Way Management Ordinance.
- H. Temporary Traffic Control Permit: All activity within the City right-of-way that impacts the flow of vehicular or pedestrian traffic shall be in accordance with the City Right-of-Way Management Ordinance.
- I. Blasting Permit: No Contractor/Developer or person using explosives will conduct blasting within the City limits, without first obtaining a permit from the Public Works Department.
 - 1. Use of Explosives
 - a. Blasting shall only be conducted between the hours of 8 a.m. and 8 p.m. Monday through Saturday.
 - b. Any Contractor/Developer or person using explosives within the City limits shall notify the owner or occupant of any residence or business located within a scaled distance of fifty-five from the site of blasting prior to the start of blasting at any new location. The scaled distance shall be determined by dividing the linear distance, in feet from the blast to a specific location, by the square root of the maximum weight of explosives, in pounds, to be detonated in any eight (8) millisecond period. One notification by mail, telephone, printed notification posted prominently on the premises or the property of the owner or occupant of the residence or business, or delivered in person to any such owner or occupant.
 - 2. Application Requirements
 - a. Each blasting permit application submitted under this section shall be accompanied by a fee in the amount indicated in the Schedule of Fees.
 - b. The application shall be submitted no less than five (5) days prior to the first use of explosives, unless such use impacts the normal flow of traffic, in which case the application shall be submitted no less than ten (10) days prior thereof.
 - 3. Blasting Permit Application Must Contain:
 - a. The name, address and telephone number(s) of the person using explosives.
 - b. The name of the individual responsible for the supervision of blasting.
 - c. The date or approximate period over which blasting will be conducted.
 - d. The location where blasting will take place.
 - e. The nature of the project or reason for blasting.

- f. Specific information about the type of explosives to be used and their storage location at the site where used.
- g. An acceptable plan for signage or other means of informing the public of blasting in the proximity to public streets or highways. All street closures or lane reductions must be approved by Public Works Engineering and may require a separate permit.
- h. Proof that the person using explosives is registered with the division of fire safety and that blasting will be conducted by a licensed blaster.
- i. Proof of commercial general liability insurance in the amount of no less than two million dollars (\$2,000,000).
- j. Documentation of at least three attempts to contact the owner of any uncontrolled structures within a scaled distance of thirty-five from the blast site in order to conduct a preblast survey of such structures. The scaled distance shall be determined by dividing the linear distance, in feet from the blast to a specific location, by the square root of the maximum weight of explosives, in pounds, to be detonated in any eight (8) millisecond period. A preblast survey is not required if the owner of any such structure does not give permission for a survey to be conducted.
- 4. Inspection of Blasting Operations: Any authorized representative of the City may:
 - a. Require that any person using explosives to show proof that he or she is registered with the Division of Fire Safety and blasting is being conducted by an individual that is licensed under the provisions of section 319.306 RSMo.
 - b. Request and be allowed access to the site of blasting by the person using explosives and shall be allowed to observe blasting from a safe location as designated by the blaster.
 - c. Examine records to be maintained by sections 319.309 RSMo and 319,315 RSMo.
 - d. Report suspected violations of 319.300RSMo to 319.345 RSMo to the Missouri Division of Fire Safety.
- 5. Suspension or Revocation of Blasting Permit: Public Works shall have the power to suspend for up to fifteen (15) days or revoke any permit issued under the terms and conditions of this article for any of the following causes.
 - a. Any fraud, misrepresentation or false statement contained in the permit application.
 - b. Failure to rectify any dangerous condition after being ordered to do so by any authorized representative of the City of Lee's Summit.
 - c. Reported or suspected violations of city or state regulations related to blasting, storage of explosives, use or handling of explosives.
 - d. Upon revocation or suspension, no refund of any portion of the license fee shall be made to the permittee and permittee shall cease all blasting operations.
- 6. Transfer, Assignment, or Sale of Rights Granted Under Permit: No transfer, assignment, or sale of rights granted under any permit granted under the terms and condition of this article shall be made without prior approval of the City Engineer.
- 7. Penalty: Any person who shall violate any provision of this article shall be subject to the penalties in Section 1-13 of the Code of Ordinances.
- 8. Exemptions: Any blasting as stated in section 319.342.7 RSMo.
- 9. Storage of Explosives

- a. All storage of explosives, in excess of that amount required for one day's use (day box), requires a permit to be issued by the Fire Department. The day box storage of that amount required for one day's use as approved in the Blasting Permit application shall be in accordance with all city, state, and federal regulations. The Lee's Summit Fire Department and the City of Lee's Summit has adopted the NFPA 495, Explosive Materials Code,. 2001 Edition. This information is available upon request.
- b. A Type 3 magazine shall be a "day box" or portable structure used for the temporary storage of explosives. A type 3 magazine shall be fire resistant, theft resistant, and weather resistant.
- c. The magazine shall be equipped with one steel padlock (which shall not be protected with a steel hood) having at least five tumblers and a case-hardened steel shackle at least 9.5 mm (3/8 in.) in diameter. Doors shall overlap the sides by at least 25.4 mm (1 in.) Hinges and hasps shall be attached by welding, riveting or bolting (nuts on inside.)
- d. The magazine shall be constructed of not less than 12-gauge [2.66 mm (0.1046in.)] steel, lined with at least 12.7-mm (1/2-in.) masonite-type hardboard.
- e. Type 3 magazines containing explosive materials shall be within line-of site vision of a blaster.
- f. Detonators shall be stored in a separate magazine for blasting supplies and shall not be stored with other explosives.
- J. Floodplain Development Permit: A floodplain development permit from the City Engineer is required for all work within a regulatory floodplain. Regulatory floodplains are defined on the Flood Insurance Rate Maps (FIRM) issued by the Federal Emergency Management Agency (FEMA). Copies of maps and additional floodplain information are available through the Public Works Engineering Division.
- K. The Missouri Department of Transportation (MoDOT) requires a permit for all work to be performed within state highway right-of-way. No work within the state right-of-way shall commence until a permit is obtained and a copy provided to the City. No work will be accepted by the City that has not been accepted or approved as satisfactory by MoDOT.
- L. Railroad companies require permits for all work to be performed within railroad right-ofway. No work within the railroad right-of-way shall commence until a permit is obtained and a copy provided to the City. No work will be accepted by the City that has not been accepted or approved as satisfactory by the affected railroad company.

1011 FEES

EPRI and miscellaneous permit fees are established in the City's current fee schedule adopted by the City Council.

1012 INSURANCE

The Contractor/Developer shall secure and maintain, throughout the duration of the project, insurance of such types and in at least amounts as are required herein. Contractor shall provide certificate(s) of insurance confirming the required protection on forms acceptable to the City. The

City shall be notified by receipt of written notice from the insurer at least 30 days prior to material modification or cancellation of any policy listed on the certificate(s).

A. Industry Rating

The City will only accept coverage from an insurance carrier who offers proof that it:

- Is licensed to do business in the State of Missouri;
- Carries a Best's policyholder rating of "A" or better;
- Carries at least a Class X financial rating. OR
- Is a company mutually agreed upon by the City and the Contractor/Developer.

B. Insurance Requirements

1.

COMMERCIAL GENERAL LIABILITY POLICY	
Limits -	
Each Occurrence:	\$ 2,000,000
Personal & Advertising Injury:	\$ 2,000,000
Products/Completed Operations	
Aggregate:	\$ 2,000,000
General Aggregate:	\$ 2,000,000
Personal & Advertising Injury: Products/Completed Operations Aggregate:	\$ 2,000,000

Policy <u>SHALL</u> include the following conditions:

- Contractual Liability
- Personal & Advertising Injury
- Products/Completed Operations
 Certificate must confirm inclusion of "Blasting" coverage, if applicable
- Independent Contractors
- Broad Form Property Damage

2. AUTOMOBILE LIABILITY

Policy shall protect the Contractor/Developer against claims for bodily injury and/or property damage arising out of the ownership or use of any owned, hired and/or non-owned vehicle and must include protection for either:

- a. Any Auto, OR
- b. All Owned Autos; Hired Autos; and Non-Owned Autos

Limits -

Each Accident, Combined Single Limits, Bodily Injury and Property Damage:

\$ 2,000,000

3. WORKERS' COMPENSATION

This insurance shall protect the Contractor/Developer against all claims under applicable state Workers' Compensation laws. The Contractor/Developer shall also be protected against claims for injury, disease or death of employees for which, for

any reason, may not fall within the provisions of a Workers' Compensation law. The policy limits shall not be less than the following:

Workers Compensation:	Statutory
Employers Liability -	
Bodily Injury by Accident:	\$ 100,000 Each Accident
Bodily Injury by Disease:	\$ 500,000 Policy Limit
Bodily Injury by Disease:	\$ 100,000 Each Employee

4. UMBRELLA LIABILITY

An Umbrella or Excess Liability policy in the minimum amount of \$1,000,000 each occurrence, \$1,000,000 aggregate. The umbrella or excess policy shall be at least as broad as the underlying policies and include the following protection:

- a. General Liabilitye
- b. Automobile Liability
- c. Employers Liability

The City of Lee's Summit shall be named as an additional insured. Umbrella, or Excess Liability requirements may be <u>modified or waived</u> at the City's discretion upon written application to and approved by the City's risk manager (or risk management consultant). If the requirement is modified or waived, the risk manager (or risk management consultant) shall place on file with the City their reasoning for such waiver or modification.

1013 DAMAGES

The Contractor/Developer hereby expressly binds himself or itself to indemnify and hold harmless the City and its officers and employees against all suits or actions of every kind and nature brought or which may be brought, or sustained by any person, firm, or corporation, or persons, firms or corporations, in connection with or on account of the Contractor/Developer's work or in consequence of any negligence in connection with same, or on account of any poor workmanship, or on account of any act of commission or omission of the Contractor/Developer or his, its, or their agent or employees, or for any cause arising during the course of construction.

1014 SAFETY

The Contractor/Developer is responsible for complying with all applicable OSHA requirements. The City assumes absolutely no oversight responsibility.

1015 CONSTRUCTION COMMENCEMENT

Construction shall commence only after the following requirements are fully met:

A. Approval by City Engineer of final Engineering Plans and other required submittals.

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- B. Deposits, if applicable, have been deposited with the City.
- C. All applicable permits have been obtained.
- D. Certificate of Insurance has been submitted to City.

- E. Verification that a business license has been obtained from the City.
- F. All executed offsite easements required for construction but not dedicated by plat have been submitted to the City.
- G. EPRI fee has been paid.
- H. Notification to Public Works Inspectors at least 48 hours prior to anticipated commencement of construction.
- I. Contractor/Developer may be required to provide written verification from a financial institution of the ability to obtain a maintenance bond or other form of security acceptable to the City.

The general contractor and all subcontractors shall maintain a current set of City-approved, stamped construction plans on the site at all times. Public Works Inspectors may, at their discretion, issue a stop work order until approved plans are available at the site.

1016 HOURS OF WORK, WEEKEND OR HOLIDAY WORK

- A. Normal working hours for the City of Lee's Summit Public Works Inspection employees are between the hours of 7:00 a.m. and 4:00 p.m., Monday through Friday. Legal holidays observed by the City of Lee's Summit are New Year's Day, Martin Luther King Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day including the following Friday, Christmas and a holiday before or after Christmas Day. The actual days off for these holidays may vary and in certain situations additional days may be a part of the amount of time granted as an official holiday by the City of Lee's Summit.
- B. The City of Lee's Summit shall be compensated by the Contractor/Developer for inspection services required for work performed prior to 7:00 a.m., between 12:00 p.m. and 1:00 p.m., and after 4:00 p.m. on normal workdays; and on Saturdays, Sundays, and legal holidays. Compensation for inspection services shall be at an appropriate overtime rate , as shown on the Schedule of Fees, based upon the following time frames:
 - 1. Normal Work Days time actually worked, minimum one hour.
 - 2. Saturday, Sunday, Holidays Time actually worked (door to door), minimum four (4) hours.
- C. Request to work overtime on a normal work day shall be made directly to the Public Works Inspector by 12:00 noon of that day. Request for a Public Works Inspector to work overtime on Saturdays and Sundays shall be made by 3:00 p.m. on the Thursday before. Request for a Public Works Inspector to work overtime on legal holidays shall be made five (5) working days in advance. Requests will be accommodated if possible based on availability of Public Works Inspectors.

1017 TRAFFIC CONTROL

Temporary traffic control plans shall be in accordance with Section 3000 of the Design and Construction Manual.

1018 CHANGES IN THE WORK

All proposed changes must be submitted in writing by the Design Engineer to the City Engineer. Written approval by the City Engineer shall be received by the Public Works Inspector prior to implementing the change. Any change in the work made without the consent of the City Engineer shall be subject to removal by the Contractor/Developer at no cost to the City.

1019 AUTHORITY OF CITY TO STOP WORK

All construction work may be stopped at any time by the City Engineer when, in the opinion of the City Engineer, the workmanship, materials used, or procedures of work do not meet the requirements or comply with the City codes, ordinances, specifications, and procedures for such work.

1020 WORK NOT MEETING MINIMUM SPECIFICATIONS

Any completed item of work not meeting the requirements of these specifications shall normally be removed and replaced. If the City Engineer determines it is not feasible or necessary to remove substandard items of work, then such items shall be accepted as a lesser product and the Contractor/Developer shall place an appropriate amount of funds as determined by the City Engineer, in a deposit account to compensate the City of Lee's Summit for additional maintenance that would be expected for the life of the product.

1021 PROTECTION OF EXISTING FACILITIES

All construction operations in the vicinity of existing facilities shall be performed with care to prevent damage or obstruction to these facilities. If damage or obstruction occurs, repairs or adjustments shall be made in a manner and time frame approved by the City Engineer and any damaged or obstructed facility shall be repaired with new materials and restored to its original condition, at no cost to the City.

1022 SITE CLEAN UP

The Contractor/Developer shall frequently clean up all refuse, rubbish, scrap materials, and debris created as a result of his operations, so that at all times the work site and adjacent disturbed areas shall present a neat, orderly, and workmanlike appearance in accordance with Chapter 16 of the Code of Ordinances. Upon completion of the work, the Contractor/Developer shall remove from the site and any occupied adjoining property, all plants, building, rubbish, unused materials, form lumber, and other materials belonging to him or his subcontractor. Burning of waste material is prohibited. The Contractor/Developer will restore the work site and adjacent disturbed areas to the condition existing before work began as a minimum. Any costs incurred by the City due to failure by the Contractor/Developer to clean up to the City's satisfaction will be charged to the account of the Contractor/Developer or his surety.

1023 RESTORATION OF PROPERTY

The Department will not accept any construction wherein public or private property has not been restored to a condition at least equal to its condition before commencement of construction. All streets, roads and highways shall be restored as required by the Department or the agency concerned with the highway in question. Work performed on private property shall be confined to the easements obtained and the area shall be properly vegetated (according to Section 2150), landscaping restored and all damaged improvements replaced or restored.
1024 RECORD DRAWINGS

- A. Record Drawings, including As-Graded drawings, must include results of a post construction survey. The post construction survey shall include the following:
 - 1. Final street grades.
 - 2. Final elevations of all sanitary and storm sewer lines and structures including pipe inverts and structure top elevations.
 - 3. Final adjusted stationing and/or coordinates of all streets, sanitary and storm sewer structures, service line connections, and water line valves and hydrants.
 - 4. As Graded contours as shown on the grading and drainage plans (Master Drainage Plan).
 - 5. Actual materials used.
 - 6. Record drawings shall not include any future improvements
- B. All easements or right-of-way revised during construction must be noted on the record plans and recorded easement documents must be submitted.
- C. Electronic files of record drawings must be received by the City before final acceptance of any public improvement project.
- D. Initial submittal shall consist of one full set of all project record drawings on 22" x 34" paper.
- E. Final submittal shall consist of two compact discs (CD), each with a complete set of all project record drawings. Each drawing shall be saved as a tagged image format (TIF).Record drawings must include a signed Engineer's Certification stating that the drawings conform to construction records and post construction survey information and shall be dated and stamped "Record Drawing".

1025 BONDS

- A. Contractor/Developer Projects: A suitable maintenance bond, cash deposit, certified check, or other acceptable form of maintenance security shall be furnished to the City of Lee's Summit guaranteeing the maintenance of the construction involved in the public improvement project. The maintenance bond or other form of maintenance security for public streets (including subgrade), storm sewers, sanitary sewers, and/or water lines shall remain in effect for a period of three years after substantial completion and shall be in an amount equal to 50 percent of the total cost of the improvement. If more than one Contractor performs work on any infrastructure item, a separate bond must be provided by each Contractor for their portion of the work. The warranty period for all bonds will begin at the time of issuance of the Certificate of Substantial Completion by the City for all Improvements.
- B. No project shall be accepted by the City prior to the submittal and acceptance of the maintenance bond(s) by the City Engineer.

1026 PARTIAL ACCEPTANCE OF WORK

The City reserves the right to accept and make use of any completed section of the work without obligating the City to accept the remainder of the work or any portion thereof. However, the warranty period for the accepted section shall not start until the project is complete and the City has issued a Certificate of Substantial Completion.

1027 SUBSTANTIAL COMPLETION AND FINAL ACCEPTANCE

- A. A Certificate of Substantial Completion will be issued by a Public Works Inspector upon satisfactory completion of the Improvements (including an approved as-graded Master Drainage Plan) to a point where they can be used for their intended purposes. At that time, a punch list of all items remaining to be completed prior to final acceptance will be provided to the Contractor/Developer.
- B. The Contractor/Developer has 90 days from the issuance of the Certificate of Substantial Completion to complete all punch list work on the project and submit the following items to the City Engineer.
 - 1. Maintenance Bond or other acceptable form of maintenance security for 50% of the total construction cost for a period of three years after substantial completion.
 - 2. Execution of Final Affidavit and Agreement.
 - 3. Approval from the City for the water line bacteriological test.
 - 4. Record Drawings –electronic files.
 - 5. Compensation for Public Works Inspector overtime, when applicable.
 - 6. Permanent offsite easements shall be recorded and a certified copy provided to the City.

In the event all work is not complete and all items submitted within 90 days, no additional building permits will be issued and inspections on any building permits issued for any building within the property described on the Certificate may be suspended at the discretion of the City.

- C. A Certificate of Final Acceptance for the project will be issued when all requirements are fully met. A Certificate of Final Acceptance must be obtained prior to issuance of temporary or permanent occupancy for any building within the property described on the Certificates.
- D. The City will re-inspect the public improvements prior to the expiration of the warranty period. Any defects noted as a result of this inspection shall be corrected by the Contractor/Developer at his expense upon written notification by the City. A written copy of the final inspection report will be forwarded to the Contractor/Developer.

EXHIBIT B 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 5200 - STREETS

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 supersede KC Metro Chapter APWA Section 5200.

SECTION 5201 GENERAL

5201.1 Introduction: The purpose of these criteria is to provide uniform procedures for designing and checking the design of streets 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.

5201.2 Definitions: Refer to Section 1003.

5201.3 Abbreviations:

AASHTO	American Association of State Highway and Transportation Officials
ADT	Average Daily Traffic
AMC	City of Lee's Summit Access Management Code
APWA	American Public Works Association
ASTM	American Society for Testing and Materials
FHWA	U. S. Department of Transportation/Federal Highway Administration
MUTCD	Manual of Uniform Traffic Control Devices
NGVD	National Geodetic Vertical Datum
ITE	Institute of Transportation Engineers
R/W	Right-of-Way

- **5201.4 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. <u>Policy on Geometric Design of Highways and Streets</u>, AASHTO.
 - B. <u>Manual on Uniform Traffic Control Devices for Streets and Highways</u>, FHWA.
 - C. <u>Roadside Design Guide</u>, AASHTO.
 - D. <u>Design of Pavement Structures</u>, AASHTO.

SECTION 5202 FUNCTIONAL CLASSIFICATION OF STREETS:

Refer to the City of Lee's Summit <u>Access Management Code</u> for information regarding the functional classification of streets.

SECTION 5203 GENERAL STREET DESIGN CRITERIA:

- **5203.1 Design Criteria:** This section governs the general design requirements for streets by classification. See Table LS-1 in Section 5205. All street design is subject to approval by the City of Lee's Summit, Missouri.
- **5203.2 Modifications:** Design variances shall be in accordance with Section 1002 of this manual.
- **5203.3 Cross Slopes:** The finished cross slopes within the limits of the right-of-way shall be between one quarter (1/4) inch vertical to one (1) foot horizontal (2%), minimum, to one-half (1/2) inch vertical to one (1) foot horizontal (4%), maximum, except for sidewalks which must meet ADA requirements.

Outside of paved areas along roadways, Fore slopes shall be 4:1 maximum. Back slopes shall be 3:1 maximum, 4:1 or flatter is desired.

- **5203.4 Tangent Length:** No tangent length shall be required between reverse curves for residential access and residential local streets. The minimum tangent length between reverse curves shall be 100 feet for collector streets and commercial/industrial local streets. Major and minor arterial streets shall comply with current AASHTO guidelines.
- **5203.5** Street Intersection Spacing: Refer to the City of Lee's Summit <u>Access Management</u> <u>Code</u> for information regarding the alignment and spacing of intersections.
- **5203.6** Intersection Angle: It is desirable for all intersections to meet at approximately a 90° angle. Skewed intersections should be avoided and in no case should the angle be less than 80°.
- **5203.7** Intersecting Minor/Major Arterial Streets: Where any minor or major arterial streets intersect each other, the crowns of both streets shall be uniformly transitioned into a plane at the intersection. Changes from one cross slope to another should be gradual.
- **5203.8 Curb Radii:** When two streets of different classification intersect, the higher classification street shall govern the curb radii dimension listed in Section 5203.1. Equivalent three-center compound curves may be used in lieu of a single radius curve if the design vehicle can be accommodated. Curb ends facing the flow of traffic shall have a five-foot taper from full height to matching existing condition.
- **5203.9** Sight Distance at Intersecting Streets: Refer to the City of Lee's Summit <u>Access</u> <u>Management Code</u> for minimum intersection sight distances. The Engineer shall submit calculations for intersection sight distances to the City for review and concurrence at each stop, yield, or uncontrolled intersection approach.

5203.10 Considerations for Connection to Existing and Future Streets: Consideration shall be given to the horizontal and vertical alignment of roadways where they connect to existing streets or where roadways may be extended in the future. Where a new street is to connect to an existing street the entire width of the existing pavement shall be saw cut to its full depth, and:

A. Existing Asphalt Street: All deteriorated or cracked asphalt within five feet of the connection point shall be removed to a point where sound material is found.

B. Existing Concrete Street: All deteriorated or cracked concrete shall be removed to the joint closest to the connection point. Existing pavement is to be saw cut for the entire width of the street to a minimum depth of six inches.

5203.11 Pavement Sections: The minimum pavement thicknesses shown in Tables LS-2 and LS-3 apply to Residential streets (Access, Local, and Collector) and Commercial/Industrial streets (Local and Collector). For Arterial streets a pavement design shall be completed by a professional engineer and shall be based upon project specific traffic and geotechnical engineering studies. Geotechnical reports shall be prepared by a civil engineer specializing in the field of geotechnical engineering and registered in the state of Missouri. Traffic studies shall be prepared in accordance with the qualifications in the Access Management Code.

A. Pavement Design Standards: Pavement thicknesses shall be designed in general accordance with AASHTO's *Guide for Design of Pavement Structures*, 1993.

- 1. Minimum AASHTO pavement design parameters for arterial streets are as follows:
 - a. Design Life: 35-years
 - b. ADT: Based upon traffic study
 - c. Truck Traffic: Percentage of truck traffic shall be based upon traffic study
 - d. Subgrade Support: CBR and k values shall be determined by the project specific geotechnical report
 - e. Stabilized Subgrade: Stabilized subgrade shall not be used as the subgrade soil strength. It shall be treated as "sub-base" layer, and the underlying native soils shall be used for subgrade values
 - f. Terminal Serviceability (pt): 2.5
 - g. Reliability: 95% ($Z_R = -1.645$).
- 2. The pavement design report must show all the actual parameters used for the design, as well as the design method used.
- 3. Arterial street pavements shall include stabilized subgrade. Subgrade stabilization shall be (a) flyash treated subgrade, (b) lime treated subgrade or (c) geogrid-reinforced aggregate base.
- 4. Arterial Street Widening No Pavement Design required
 - a. Uncurbed or Interim Street Sections The widened pavement shall be the same type as existing and shall use the crushed aggregate option for

subgrade stabilization. Widening of asphalt sections shall have a minimum of 10 inches of asphalt, and widening of concrete sections shall match the existing.

- b. Curbed or improved Streets The widened pavement shall be the same type as the existing pavement. The thicknesses of each layer shall be equal to the existing, adjacent pavement but not less than that for the uncurbed or interim street section, above.
- 5.
- 6.
- 7. Concrete pavement joint details and joint layout patterns, dowelling and tie bar layout shall be designed and included in the engineering plans. The residential local/access and residential collector pavement do not require dowels at the transverse joints but do require tie bars along longitudinal joints.
- **5203.12 Pavement Transitions:** Reduction in pavement width in the direction of traffic flow shall be accomplished by a taper. The minimum length for merging taper shall be determined by the formula L=WxSxS/60 where posted speeds are 45 mph or less. The formula L=WxS should be used for roadways having a posted speed limit greater than 45 mph. Under either formula, L=taper length in feet, W=width of the transition in feet, and S=design speed in mph.
- **5203.13 Cul-de-sacs:** At locations where streets are to be terminated and a vehicular connection between adjacent streets is not required, the termination shall be a cul-de-sac. Such cul-de-sac shall be constructed with a minimum radius of 39 feet to the back of curb if there are no islands located in the cul-de-sac. At the end of a cul-de-sac, the minimum design speed = 10 mph, with corresponding minimum horizontal radius = 39 feet, minimum stopping sight distance = 75 feet; minimum K Crest = 3 along centerline, and minimum K Sag = 5 (2 w/ lighting) along centerline. The minimum grade in cul-de-sacs shall be 2.0% along centerline and 2.0% for all other slopes.
- **5203.14 Temporary Turn-Arounds:** At locations where streets will be temporarily terminated and which will be extended at a later date, and said street extends beyond the intersection of an adjacent street more than 150 feet, a temporary cul-de-sac shall be constructed with a minimum radius of thirty-five (35) feet. The temporary cul-de-sac shall be constructed of asphaltic concrete with a minimum depth of eight inches. Curb and gutter will not be required. The cul-de-sac shall be constructed within the limits of a temporary easement.

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.

5203.15 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. Driveways shall be spaced and aligned in accordance with the City of Lee's Summit Access Management Code (AMC).
- **5203.16** Access for the Disabled: Refer to Section 5300 of this Manual for design criteria and guidance for Accessible Routes
- **5203.17** Street Lighting: All street lighting shall be designed in accordance with Section 5800 of the Lee's Summit <u>Design and Construction Manual.</u>
- **5203.18** Storm Drainage: All storm drainage shall be designed in accordance with Section 5600 of the APWA design criteria.
- **5203.19** Underdrains: Underdrains shall be required at all low points, cut-fill transitions lines, exposed rock ledges intersecting subgrade, and other locations that have known or expected subsurface moisture problems.
- **5203.20** Erosion Control within R/W Limits: As a minimum, all grass areas in the R/W shall be seeded and mulched to control erosion on to the roadway. All construction projects that have exposed grading require temporary erosion control measures. Temporary erosion control must be approved by the City Engineer.
- **5203.21** Survey Monument Boxes: Monument boxes shall be installed at all quarter section corners involved in the street construction. The monument boxes shall be set by a Registered Land Surveyor licensed in the state of Missouri.
- **5203.22 Traffic Impact Studies:** Refer to the City of Lee's Summit <u>Access Management Code</u> for information regarding traffic impact studies.
- **5203.23 Obstructions:** Rigid structures such as poles, signs and hydrants shall be placed a minimum horizontal distance of 1.5 feet from the back of curb to edge of obstruction. When required, guardrail and barricades shall be installed in accordance with the AASHTO <u>Roadside Design Guide</u> or city policy. Vertical clearance of 14.5 feet shall

be provided. Along sidewalks, a minimum vertical clearance of seven feet shall be provided.

- **5203.24 Traffic Signals:** All Traffic Signals shall be designed in accordance with Section 5900 of the Lee's Summit <u>Design and Construction Manual.</u>
- **5203.25 Roundabouts**: These criteria shall be adhered to for the design of all roundabouts to be constructed within the City of Lee's Summit, Missouri.
 - **A. Design Criteria:** Roundabout design shall be in accordance with the latest edition of AASHTO, FHWA Roundabout Design Guide, and MUTCD.
 - 1 **Codes and Standards:** These criteria are established to provide uniform procedures to aid the design engineer in preparing improvement plans for projects in the City of Lee's Summit. These criteria are not intended to be an ironclad set of rules that restrict the design engineer from utilizing innovative design; however, they may be modified only with prior authorization of the City Engineer.

Toundabouts.							
ROUNDABOUT DESIGN CRITERIA TABLE							
ROU	NDABOUT DESIG	N CRITERIA TA	ABLE				
	Single Lane	Single Lane	Multi-Lane				
	(Compact)	(Suburban)	(Suburban)				
Roadway	Residential	Collector	Arterial				
Classification	Local/Access	Arterial					
Design Speed	15 mph	20 mph	25 mph				
Design Vehicle 1	Р	BUS	BUS				
Design Vehicle 2	BUS	WB-50	WB-67				

2 **Roundabout Design:** This section outlines several basic requirements for roundabouts:

a. Crosswalks shall be ADA compliant, 10 feet wide, cut through the splitter island, and be located at least 25 feet behind the yield line.

120'-150'

- b. Splitter islands shall be at least 50 feet long and have a barrier curb with a mountable nose at the approach.
- c. Mountable curb, i.e. CG-2 or modified CG-1 with 3" 1:1 vertical face, shall be used around the truck apron adjacent to the circulating lane.
- d. Barrier curb shall be used around the truck apron adjacent to the central island.
- e. Approach alignment should be radial. A slight left offset is permitted with approval of the City Engineer. A right offset is prohibited.
- f. Equal spacing between entries is desired, except that roundabouts with three entries should have angles as close to 90 degrees as possible.

150'-220'

90'-120'

Inscribed Diameter

- g. Approach flare should be at least 80 feet long.
- h. On-street parking shall be prohibited within 50 feet of the splitter island.
- i. Entry lane widths should range from 14 feet to 16 feet.
- j. Circulatory lane width is generally as wide as the maximum entry width (but no more than 120% of the entry) and shall remain constant throughout the roundabout. Circulatory lane widths generally decrease as the size of the inscribed diameter increases (i.e. single lane roundabouts may have a circulating lane width of 16 feet while multi-lane roundabouts may have a circulating lane width of 14 feet).
- k. The exit lane should be as wide as or wider than the circulating lane.
- 1. Truck aprons, when used, should be 3 feet to 13 feet wide having a cross slope of 3%-4% away from the central island. The apron shall be constructed of colored and/or textured paving materials to differentiate it from the roadway. The truck apron shall be permeable and contain an under drain system so that excessive runoff does not cross the travel lanes.
- m. A landscape strip shall be provided between the curb and sidewalk/multi-use trail. The landscape strip shall have a minimum width of 2 feet and preferred minimum width of 5 feet.
- **B. DESIGN PROCESS:** Roundabout design is an iterative process requiring the designer to consider operational and safety effects of the geometric elements. The recommended process for designing a roundabout is generally as follows:
 - 1. Identify the intersection context. The intersection context includes roadway classification and typical section, environment in which the roundabout will be located (residential, commercial, green field, retrofit, etc.), and the type of adjacent traffic control along the corridor (single-lane roundabouts, multi-lane roundabouts, signals, and stop control).
 - 2. Establish the design vehicle. See Roundabout Design Criteria Table in this section. Design Vehicle 1 should be able to navigate any movement within the roundabout without using the truck apron and shall maintain full lane control. Design Vehicle 2 should be able to navigate any movement within the roundabout while using the truck apron.
 - 3. Perform operational analysis to determine the number of lanes required. The number of lanes (entry, exit, and circulatory) should be kept to a minimum while accommodating an acceptable level of service.
 - 4. Prepare and submit a conceptual design. A scale of 1"=50' is preferred.
 - 5. Check that the design vehicle(s) can be accommodated for all movements at all legs of the roundabout. The vehicle path shall maintain a minimum 2-foot clearance between the tire track and the curb. Drawings shall be submitted illustrating each vehicle path.
 - 6. Check the design speeds of all movements at all legs of the roundabout for Design Vehicle 1. See Roundabout Design Criteria Table in this section for

typical design speeds. Provide a summary of design speeds calculated for each of the five curves to include approach, curve, radius, speed, and speed differential information.

- a. The entry speed should not exceed the design speed.
- b. The exit speed should be higher than the entry and circulating speeds.
- c. Speed differentials should not exceed 6 mph and shall not exceed 12 mph.
- 7. Check sight distance. Submit a drawing showing that adequate stopping sight distance is provided. This drawing shall include vertical and horizontal clearance, for each approach, exit crosswalk, and circulating lane. Submit a drawing showing that adequate intersection sight distance is provided, including vertical and horizontal clearance, for each vehicle entry conflict with entering stream and circulating stream.
- 8. Reiterate the process until a concept plan is approved by the City Engineer.
- **5203.26** Other Design Criteria: Design criteria not covered by this document shall be in accordance with the most current edition of <u>A Policy on Geometric Design of Highways</u> and Streets by the American Association of State Highway and Transportation Officials (AASHTO) or other AASHTO design guides.

SECTION 5204 GENERAL PLAN REQUIREMENTS:

- **5204.1** Scope: This section governs the preparation of plans for street projects.
- **5204.2 General:** The plans shall include all information necessary to build and check the design of streets and related appurtenances. The plans shall be arranged as required by the City Engineer. Applicable standard plans shall be included by reference to standard plan number and title. Plans shall be sealed by a Registered Professional Engineer in the state of Missouri.
- **5204.3** Scales: Plans shall be drawn at the following minimum scales. Larger scales may be needed to clearly present the design. Bar scales shall be shown on each sheet for each scale.

Plan:	1 inch = 20 feet (preferred), 1 inch = 50 feet (minimum)		
Profile:			
Vertical:	1 inch = 5 feet (preferred), 1 inch = 10 feet (minimum)		
Horizontal:	Scale Shall Match Plan Scale		
Drainage Area Map:			
On Site:	1 inch = 200 feet		
Off Site:	1 inch = 1,000 feet		
Structural Plans:	1 inch = 1 foot		

Graphic Drawings: Standard Engineering (scale varies)

5204.4 Sheet Sizes: Full-sized plan sheets shall be 22 inches by 34 inches. Half-sized plan sheets shall be 11 inches by 17 inches. Plan and profile shall be drawn on combined or separate plan and profile sheets to minimum scales shown in Paragraph 5204.3.

5204.5 Types of Sheets in Plans: The plans shall generally consist of:

- 1. Title Sheet
- 2. General Notes and Quantities
- 3. General Layout Sheets
- 4. Plan and Profile Sheets
- 5. Drainage Area Map
- 6. Storm Water Sheets
- 7. Traffic Signal Plans
- 8. Lighting Plans
- 9. Utility Plan and Profile Sheets
- 10. Erosion Control Plans
- 11. Pavement Marking Plans
- 12. Signing Plans
- 13. Traffic Control Plans
- 14. Standard and Special Detail Sheets
- 15. Curb Ramp Detail Sheets
- 16. Cross-Section Sheets

Each sheet shall contain a sheet number, including the individual sheet number and the total number of sheets, proper project identification and date. The engineer's seal shall appear on each sheet per state licensing requirements.

<u>5204.6</u> Minimum Required Information for Title Sheet:

- 1. Name of project.
- 2. Project number (where applicable).
- 3. Index of sheets included in plans.
- 4. A location map adequately showing project location in relation to major streets with north arrow and scale.
- 5. Signature block for city approval.
- 6. The project control bench marks shall be identified as to location and elevation per NGVD datum. A minimum of two (2) bench marks are required for any project (may be shown on an optional Project Control Sheet inserted directly after the Title Sheet).
- 7. Name, address and telephone number of the consulting engineer and owner/developer as well as signature block for the owner/developer.
- 8. List containing name and telephone number of each utility company and the State One-Call System.

- 9. A legend of symbols shall be shown that applies to all sheets (may be shown on an optional General Notes Sheet(s) inserted directly after the Title Sheet).
- 10. Design speed, posted speed and expected ADT numbers plus other traffic information as required by the City Traffic Engineer.
- 11. Engineer's seal, signed and dated.

<u>5204.7</u> Minimum Required Information for General Layout Sheet(s):

- 1. General Notes: Minor construction notes shall appear on the proper plan and profile sheet.
- 2. North arrow and bar scale. Scale of the general layout map shall be one (1) inch equals one hundred (100) feet.
- 3. Layout shall include name of subdivision, block designation (if any), lot designation or proposed block and lots, all street names, street alignment with back of curb lines, and an accurate tie to at least one quarter section corner and at least one additional physical permanent feature. An unplatted tract shall have an accurate tie to at least two (2) quarter section corners.
- 4. Boundary line of project area.
- 5. Schematic layout of existing conditions and proposed improvements shall be shown; including but not limited to: all proposed streets, sidewalks and utility improvements including storm drainage, sanitary sewers, water lines, street lights, traffic signals, etc.
- 7. Typical street sections.

5204.8 Minimum Required Information for Plan and Profile Sheets:

- 1. North arrows and bar scale.
- 2. Elevation and location of all applicable benchmarks per NGVD datum.
- 3. Existing and proposed streets with names and pavement widths.
- 4. Property lines properly identified as to existing or proposed lot, block and subdivision. Survey base line with adequate ties to land lines.
- 5. All existing and proposed utilities such as power, gas, oil, water, telephone, sewer, and other items shall be properly located in conformance with the best information available in the records of the owner of such facilities, or field location, and identified as to size, type, owner, and material.
- 6. All existing and known proposed improvements within 50 feet each side of right-of-way and 200 feet beyond the project limits shall be shown at the proper locations. This shall include, but is not limited to, existing items as paved streets, curb and gutters, driveways, culverts, fire hydrants, utility poles, trees, shrubs, fences, walls, houses, and shall be identified as to type, size, material, etc. as may be applicable.
- 7. All existing and proposed permanent and temporary easements and right-of-way information, including ownership shall be shown on the plans.
- 8. Locations and widths of existing and proposed sidewalks and multi-use trails.

- 9. Horizontal curve data and vertical curve data (K value, stopping sight distance, intersection sight distance, length of curve, curve delta, curve tangent length, middle ordinate, PC, PT, PI, PVI, PRC, etc.).
- 10. Center line stations shall be marked at 100-foot intervals and at other pertinent points.
- 11. Top back of curb elevations shall be shown at maximum increments of 15 feet or quarter points, whichever is less, along the curb returns at street intersections. Points for curb opening to curb ramps will shown location and elevations of opening to be installed during curb placement.
- 12. Plan view of all ADA ramps showing all slopes of the ramps, landings and sidewalks.
- 13. Profile shall show existing grade as a dashed line, proposed finish grades or established street grades by solid lines.
- 14. Storm sewer criteria shall be in accordance with the City of Lee's Summit Design and Construction Manual.
- 15. Elevations shall be shown on the profile at a minimum interval equal to the horizontal scale for tangents and half the horizontal scale for curves. Elevations shall also be shown for all other pertinent points.
- 16. Approximate grading limits.
- 17. Location of test borings if taken.
- 18. For residential development, finished contours shall be shown on street plan sheets. The finished contours shall be screened or gray-scaled.

5204.9 Minimum Required Information for Cross-Section Sheets:

- 1. Street cross section at each station showing existing grade by dashed lines and proposed grade by a solid line. Cross sections to show existing grade lines a minimum of ten (10) feet beyond the right-of-way lines or grading limit, which ever is further. The center line and right-of-way limits shall be shown along with the proposed improvements.
- 2. Center line elevation of top of pavement.
- 3. Center line cross sections shall be shown at all intersecting streets and driveways.
- 4. Location of existing and proposed underground utilities.
- 6. Additional cross sections shall be shown as required to clearly describe the extent of grading operations.
- 7. For residential development, a mass grading plan shall be required in lieu of cross sections.
- **5204.10 Minimum Required Information for Standard and Special Detail Sheets:** Detail sheets shall be included to show all details of appurtenances, materials, and construction. Details shall conform to the requirements of the City and are to be drawn clearly and neatly with proper identifications, dimensions, materials and other information necessary to insure the desired construction.

5204.11 Minimum Required Information for Curb Ramp Detail Sheets: See Section 5304

<u>5204.12</u> Minimum Required Information for Traffic Control Plans:

- 1. Limits of any road closures, sidewalk closures, or multi-use trail closures shall be shown along with the traffic control devices used to effect the closure. Any closure restrictions, speed limit, length of time, etc. shall be indicated on the plans.
- 2. Detour plan shall be designed for traffic affected by closures. Detour signing used in the detour route shall be included in the detour plan.
- 3. Typical lane closure or lane shift plans including taper lengths and spacing of all channelizing devices. Types and spacing of all traffic control signs and markings shall be shown.
- 4. A traffic control plan shall be prepared for each phase of construction.
- 5. All traffic control shall be designed using the traffic control devices and application principals contained in the MUTCD.

SECTION 5205 FIGURES:

TABLE LS-1: GENERAL STREET DESIGN CRITERIA

TABLE LS-2: MINIMUM ASPHALT PAVEMENT THICKNESSES

TABLE LS-3: MINIMUM PCC PAVEMENT THICKNESSES

EXHIBIT B 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.

TABLE LS-1: GENERAL STREET DESIGN CRITERIA

	Major Arterial	Minor Arterial	Commercial/ Industrial Collector	Residential Collector	Commercial/ Industrial Local	Residential Local	Residential Access
Number of Through Traffic Lanes	2-7	2-5	2-3	2-3	2	2	2
Minimum Width of Travel Lanes (1) (Excludes Curb & Gutter)	11 – 12 ft.	11 – 12 ft.	12 ft.	12 ft.	12 ft.	12 ft.	10.5 ft12 ft.
Number of Parking Lanes	0	0	0	0-2	0-2	0-2	0 - 2
Width of Parking Lanes	0	0	0	8 ft.	8 ft.	8 ft.	8 ft.
Right-of-Way Width (2)	100 – 140 ft.	80 – 100 ft.	60 – 80 ft.	60 ft.	50 - 60 ft.	50 ft.	50 ft.
Design Speed (3)	40 – 45 mph	35 – 45 mph	35 mph	30 mph	25 mph	25 mph	25 mph
Stopping Sight Distance (4)	305 - 360 ft.	305 - 360 ft.	250 ft.	200 ft.	155 ft.	155 ft.	155 ft.
Minimum K Crest Vertical Curve (5)	44 - 84	44 - 84	29	19	12	12	12
Minimum K Sag Vertical Curve (6)	64 - 96 (55 with lighting)	64 - 96 (40 with lighting)	49 (27 with lighting)	37 (20 with lighting)	30 (17 with lighting)	26 (14 with lighting)	20 (11 with lighting)
Minimum Radii for Horizontal Curves (7)			510	335	200	200	200
Sidewalks (8)	2	2	2	2	2	1 – 2	1-2
Minimum Distance Between Sidewalk/Path and Right of Way line	3 ft.	3 ft.	1 ft.	1 ft.	1 ft.	1 ft.	1 ft.

LS5200

	Major Arterial	Minor Arterial	Commercial/ Industrial Collector	Residential Collector	Commercial/ Industrial Local	Residential Local	Residential Access
Maximum Grade	6%	7%	6%	8%	6%	10%	12%
Minimum Grade	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Minimum Curb Return Radius (9)	35 ft	35 ft	35 ft	30 ft	35 ft	25 ft	25 ft
Maximum Grade at Intersection with Stop				3% (within 75 ft)	3% (within 75 ft)	5% (within 50 ft)	5% (within 25 ft)
Minimum Grade Across Intersections	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%

NOTES:

- (1) The minimum width of travel lanes may be reduced to 11 feet when approved by the City Engineer. The 10.5 feet lane width for residential access streets shall only be used in a planned development where a minimum of four off-street parking spaces are provided for each dwelling unit. Wider lanes may be required as determined by the City Engineer, based on design vehicle or adopted master planning documents.
- (2) Consideration should be given to providing a minimum 15 foot wide utility easement along each side of the right-of-way for residential access streets and 10 foot wide easements for all other streets
- (3) Lower design speed, with corresponding horizontal curve, vertical curve, and intersection sight distance design criteria may be used under special conditions when approved by the City Engineer.
- (4) Stopping Site Distance in table is for level roadways. Additional distance will be required on downgrades. Refer to minimum desired Intersection Site Distance in AASTHO "Greenbook" for intersections. Greater distance between the two (intersection / stopping) sight distances shall govern.
- (5) Minimum K values for crest and sag vertical curves shall be in accordance with AASHTO <u>A Policy on Geometric Design of</u> <u>Highways and Streets</u>. Minimum K values for sag vertical curves may be reduced to the shown comfort limits if an engineered continuous lighting system is provided along the street. K values shall not exceed 167 for crest or sag conditions...

- (6) The minimum radii shown are based on the AASHTO design for low-speed urban streets with no superelevation. Superelevation can only be used when approved by the City Engineer. Minimum horizontal radii for arterial streets must be approved by the City Engineer.
- (7) Sidewalk may be replaced by Shared Use Path along streets as determined by City Engineer, based upon adopted master planning documents.
- (8) Radius measured to the back of curb. Radius should not exceed 50 feet. Radii in table are minimums. Radius shall be increased as needed to accommodate the design vehicle(s), as determined by the City Engineer.
- (9) Confidence Level for Pavement Design: Residential Local/Access 85%, Residential Collector 90%, Commercial Industrial Local/Collector – 90%

Street Classification	Pavement Option	AC Surface (in.)	AC Base (in.)	MoDOT Type 5 Base (in.)	Geogrid(1)	Chemical Subgrade Stabilization(2) (in.)
Residential Local/Access	А	2	4	6		6
	В	2	4	10	Geogrid	
Residential Collector	А	2	5.5	6		9
	В	2	5.5	12	Geogrid	
Commercial Industrial	А	2	7.5	6		9
Local/Collector	В	2	7.5	12	Geogrid	

TABLE LS-2: MINIMUM ASPHALT PAVEMENT THICKNESSES

TABLE LS-3: MINIMUM PCC PAVEMENT THICKNESSES

Street Classification	PCC (in.)	Aggregate Base (in.)	Subgrade Stabilization ⁽¹⁾ (in.)
Residential	6	4	
Local/Access			
Residential	6	4	б
Collector			
Commercial	8	4	9
Industrial			
Local/Collector			

(1) Subgrade Stabilization and 4" aggregate base may be replaced by approved geogrid and 6" of aggregate base

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

- F. <u>Roadside Design Guide</u>, 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.
- **<u>5304.5</u>** 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.

<u>5304.6</u> 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:

	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: <u>abutted to</u> <u>back of curb</u>	1.5% cross slope Running slope match street profile grade	2.0% cross slope	6 feet

TABLE LS-5: ACCESSIBLE ROUTE DESIGN CRITERIA

TABLE LS-6: MINIMUM ACCESSIBLE ROUTE THICKNESS SECTIONS

Type of Route	$PCC^{(3)}$	Agg Base	Comments
	Thickness	Thickness	
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



Packet Information

File #: TMP-0229, Version: 1

AWARD OF RFQ 2017-300 TO PROFESSIONAL SERVICES INDUSTRIES, INC. AS PRIMARY AND TO KANSAS CITY TESTING & ENGINEERING, L.L.C. AS SECONDARY FOR ON-CALL YEARLY GEOTECHNICAL CONSTRUCTION, MATERIAL TESTING AND INSPECTION SERVICES. A ONE-YEAR CONTRACT WITH TWO POSSIBLE ONE-YEAR RENEWAL OPTIONS.

Issue/Request:

Award of RFQ 2017-300 to Professional Services Industries, Inc. as primary and to Kansas City Testing & Engineering, L.L.C. as secondary for on-call yearly geotechnical construction, material testing and inspection services. A one-year contract with two possible one-year renewal options.

Key Issues:

The City uses on-call geotechnical construction, material testing and inspection services to support several departments.

Work for this contract is funded by specific projects or programs approved by Council in the City's annual operating budget or Capital Improvement Plan.

Geotechnical and Materials Engineering services to include, but not limited to, subsurface exploration, foundation recommendations, soil stabilization, slope stability, retaining wall recommendations, construction recommendations, site visits, interpretation of test data, forensics sampling and analysis, third party reviews, QA/QC analysis, pavement design and analysis, engineering recommendations and preparation of reports.

Construction materials testing services to include, but not limited to, soils, concrete, masonry, aggregates, bituminous mixtures, pavements, roofing systems, structural steel.

Laboratory testing services to include, but not limited to, soils, consolidation, asphalt, aggregates, concrete and masonry, permeability, compaction and density, chemical tests, metals and welding, sheer strengths, pavement, roofing.

Building Construction Special Inspection Services as required by the 2006 International Building Code, section 1704; or later edition as adopted by the Codes Administration Department.

Proposed Committee Motion:

I move to recommend to City Council approval of an ordinance awarding RFQ 2017-300 to Professional Services Industries, Inc. as primary and to Kansas City Testing & Engineering, L.L.C. as secondary for on-call yearly geotechnical construction, material testing and inspection services. A one-year contract with two

File #: TMP-0229, Version: 1

possible one-year renewal options.

Background:

Establishing an On-call Geotechnical Construction, Material Testing and Inspection Services Yearly Contract streamlines the process and provides various City departments the ability to obtain professional services of this nature on projects as they arise. Awarding a primary contract and a secondary contract will allow the City to use the secondary contract firm on projects where the primary contract firm could have a conflict of interest if they also represent the engineering or construction company the City is engaged in a contract with.

The services are being provided primarily on the City's capital projects. Funding for the testing is included in the capital project budgets. A relatively small amount of the construction materials testing is for the confirmation that soil, asphalt, and concrete used in public infrastructure portions of development projects conforms to City specifications. These tests are funded from the Private Development Professional Fees account included in various departments' annual budget. The term of the proposed contract is for one year with the option to renew for up to two-one year renewal periods.

Impact/Analysis: [Enter text here]

<u>Timeline:</u> Start: ____ Finish: ____

Other Information/Unique Characteristics: [Enter text here]

Presenter: Michael Anderson, Construction Manager

<u>Recommendation</u>: Staff recommends approval of an ordinance awarding RFQ 2017-300 to Professional Services Industries, Inc. as primary and to Kansas City Testing & Engineering, L.L.C. as secondary for on-call yearly geotechnical construction, material testing and inspection services. A one-year contract with two possible one-year renewal options.

<u>Committee Recommendation:</u> [Enter Committee Recommendation text Here]

BILL NO. 16-

AN ORDINANCE APPROVING AWARD OF RFQ 2017-300 TO PROFESSIONAL SERVICES INDUSTRIES, INC. AS PRIMARY AND TO KANSAS CITY TESTING & ENGINEERING, L.L.C. AS SECONDARY FOR ON-CALL YEARLY GEOTECHNICAL CONSTRUCTION, MATERIAL TESTING AND INSPECTION SERVICES FOR ONE-YEAR WITH TWO POSSIBLE ONE-YEAR RENEWALS.

WHEREAS, The City uses on-call geotechnical construction, material testing and inspection services to support several departments; and,

WHEREAS, Work for this contract is funded by specific projects or programs approved by Council in the City's annual operating budget or Capital Improvement Plan; and,

WHEREAS, Geotechnical and Materials Engineering services to include, but not limited to, subsurface exploration, foundation recommendations, soil stabilization, slope stability, retaining wall recommendations, construction recommendations, site visits, interpretation of test data, forensics sampling and analysis, third party reviews, QA/QC analysis, pavement design and analysis, engineering recommendations and preparation of reports; and,

WHEREAS, Construction materials testing services to include, but not limited to, soils, concrete, masonry, aggregates, bituminous mixtures, pavements, roofing systems, structural steel; and,

WHEREAS, Laboratory testing services to include, but not limited to, soils, consolidation, asphalt, aggregates, concrete and masonry, permeability, compaction and density, chemical tests, metals and welding, sheer strengths, pavement, roofing; and,

WHEREAS, Building Construction Special Inspection Services as required by the 2012 International Building Code, Chapter 17; or later edition as adopted by the Codes Administration Department.

NOW THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LEE'S SUMMIT. MISSOURI, as follows:

SECTION 1. That the agreement for professional engineering services for geotechnical construction, material testing and inspection services yearly contract (RFQ No. 2017-300) by and between the City of Lee's Summit, Missouri and Professional Services Industries, Inc. generally for the purpose of geotechnical engineering and material testing services, true and accurate copy being attached hereto as Exhibit "A" and incorporated by reference as if fully set forth herein, is hereby approved and the City Manager is hereby authorized to execute the same on behalf of the City of Lee's Summit, Missouri.

SECTION 2. That the agreements for professional engineering services for geotechnical construction, material testing and inspection services yearly contract (RFQ No. 2017-300) by and between the City of Lee's Summit, Missouri and Kansas City Testing & Engineering, L.L.C. generally for the purpose of geotechnical engineering and material testing services, true and accurate copies attached hereto as Exhibit "B" and incorporated by reference as if fully set forth herein, is hereby approved and the City Manager is hereby authorized to execute the same on behalf of the City of Lee's Summit, Missouri.

BILL NO. 16-

SECTION 3. That this Ordinance shall be in full force and effect from and after the date of its passage and adoption, and approval by the Mayor.

PASSED by the City Council of the City of Lee's Summit, Missouri, this _____ day of _____, 2016.

ATTEST:

Mayor Randall L. Rhoads

City Clerk Denise R. Chisum

APPROVED by the Mayor of said city this _____day of _____, 2016

ATTEST:

Mayor Randall L. Rhoads

City Clerk Denise R. Chisum

APPROVED AS TO FORM:

City Attorney Brian W. Head



REQUEST FOR QUALIFICATIONS for GEOTECHNICAL ENGINEERING, MATERIALS TESTING AND INSPECTION SERVICES YEARLY CONTRACT RFQ NO. 2017-300

The City of Lee's Summit is requesting electronically submitted Statements of Qualifications for the abovereferenced project.

Interested firms <u>must</u>upload their Statement of Qualifications into the Public Purchase Eprocurement system prior to the closing date of August 15, 2016, 5:00 PM (Central Daylight Savings Time)

City of Lee's Summit, Public Work Engineering Attention: George Binger, City Engineer/Deputy Director 220 S.E. Green Street Lee's Summit, MO 64063 816-969-1800

It is the responsibility of interested firms to check the City's e-procurement system, Public Purchase at <u>http://www.publicpurchase.com/gems/leessummit,mo/buyer/public/publicInfo</u> for any addendums prior to the closing date and time of this RFQ. All addendums must be signed and included with electronic submittal.

Interested firms, or groups of firms, should prepare a response that addresses the following information:

- Experience and availability of key personnel;
- Experience on similar projects;
- Project Approach/Work Plan; and
- Critical Issues and Approaches to Solutions.

The submittals must be double-sided on standard letter-size paper (8.5" x 11") having a minimum font size of eleven (11) points and is no more than three (3) actual sheets of paper in length. Each of the three sheets of paper shall be numbered front and back as page one (1) through six (6). Up to two (2) additional double-sided sheets of paper, numbered front and back as page one (1) through four (4), may be submitted in an attached appendix and may be up to $11" \times 17"$ in size. In addition, a single-sided one page cover letter should be submitted, which includes the name, title, email address and phone number of the point of contact person for the surveyor. The required signed Work Authorization Affidavit and the E-Verify program's Memorandum of Understanding must be included in your submittal; however they are not part of the maximum page requirement. A selection committee will evaluate the submittals based on the above criteria and notify two selected firms. At this time the City does not anticipate holding interviews; however we reserve the right to if deemed necessary after all submittals are reviewed.



It is the City's intent to enter into contracts with two firms, a primary and a secondary. In all cases, the primary firm will be contacted first. If the primary firm cannot provide services in a timely manner, the secondary firm may be used.

The selected firms will be expected to sign the City of Lee's Summit's standard contract. For a copy of the standard contract, please contact the Project Manager listed below. If the Consultant team is unable to sign the contract, or requests modifications, please indicate so briefly in the cover letter and submit a separate letter detailing any issue(s) with the standard contract.

Schedule

Electronically Submitted Statement of Qualifications Due: Selection Committee Meeting: Firms Notified for Selection: August 16, 2016 5:00 PM CDT August 23, 2016 August 24, 2016

General Scope of Services

The City of Lee's Summit is seeking submittals from qualified firms/providers to provide Geotechnical and Materials Engineering Services to establish a yearly contract on an as needed basis. Respondents must be capable of providing the services of a certified lab and certified technicians in accordance with the Missouri LPA Manual. It is the City's intent to enter into contracts with two firms, a primary and a secondary. In all cases, the primary firm will be contacted first. In cases where the primary firm is providing quality control testing services for a contractor on a City project, the secondary firm shall be used for that project. Additionally, if the primary firm cannot provide services in a timely manner, the secondary firm may be used.

Potential services will include but not be limited to the following activities:

- Geotechnical and Materials Engineering services to include, but not limited to, subsurface exploration, foundation recommendations, soil stabilization, slope stability, retaining wall recommendations, construction recommendations, site visits, interpretation of test data, forensics sampling and analysis, third party reviews, QA/QC analysis, pavement design and analysis, engineering recommendations and preparation of reports.
- Construction materials testing such as soils, concrete, masonry, aggregates, bituminous mixtures, pavements, roofing systems, structural steel.
- Building Construction Special Inspection Services as required by the 2015 International Building Code, section 1704; or later edition as adopted by the Codes Administration Department.
- Laboratory testing such as soils, consolidation, asphalt, aggregates, concrete and masonry, permeability, compaction and density, chemical tests, metals and welding, sheer strengths, pavement, roofing.
- Provide necessary support equipment to carry out required procedures.





Questions

For questions regarding this project, please contact:

Michael Anderson, Construction Manager

Public Works Department City of Lee's Summit 220 S.E. Green Street Lee's Summit, MO 64063 Phone: (816) 969-1800

Email: Michael.Anderson@cityofls.net

This Request for Qualifications (RFQ) is an invitation by the City for interested Design Professionals to submit qualifications, which may be subject to subsequent discussions and negotiations. It is not a request for a competitive bid. Submittal of qualifications does not create any right in or expectation to a contract with the City. The City reserves the right to reject any and all RFQ's.

Section 285.530, RSMo, affects all services provided in excess of \$5,000.00. This Section refers to the prohibition of employment of unauthorized aliens and requires participation in a Federal work authorization program. This law went into effect on January 1, 2009.

You are required to fill out and return with your submittal of qualifications the enclosed Work Authorization Affidavit and provide documentation <u>evidencing current enrollment in a federal work authorization Program, e.g., the electronic signature page from the E-Verify program's Memorandum of Understanding, The required documentation must be from the federal work authorization program provider. Letters from contractors reciting compliance is not sufficient. E-verify, <u>http://www.dhs.gov/everify</u>, is a FREE Internet-based <u>federal work authorization program</u> operated by the Department of Homeland Security, U.S. Citizenship and Immigration Services that allows employers to verify the employment eligibility of their employees, regardless of citizenship. Based on information provided by employees on their Form I-9, E-Verify checks the information electronically against records contained in DHS and Social Security Administration databases. There are penalties for employing an unauthorized alien, including suspension of the contractor's business license, termination of the contract, debarment from City and State work for a period of three years or permanently, and withholding 25% of the total amount due the Contractor.</u>





	Project No.
CITY OF LEE'S SUMN WORK AUTHORIZATION AFFIDAVIT PUR (FOR ALL BIDS IN EXCE Effective 1/2	SUANT TO SECTION 285.530, RSMo SS OF \$5,000.00)
County of)	
) ss. State of)	
My name is I am an author	ized agent of
("Bidder"). Bidder is enrolled and participates in a fede	ral work authorization program for all employees
working in connection with services provided to the (City of Lee's Summit, Missouri. Bidder does not
knowingly employ any person who is an unauthoriz provided.	ed alien in connection with the services being
	with an illegal alien to perform work for the City
of Lee's Summit, Missouri or enter into a contract v	
contracts with an illegal alien.	0, 1,
	 Affiant
	Printed Name
	22
Subscribed and sworn to before me this day of _	, 20
	Notary Public
SEAL	



AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES FOR GEOTECHNICAL CONSTRUCTION, MATERIAL TESTING AND INSPECTION SERVICES YEARLY CONTRACT (RFQ NO. 2017-300)

THIS AGREEMENT made and entered into this 6th day of October, 2016, by and between the City of Lee's Summit, Missouri (hereinafter "City"), and Professional Services Industries, Inc (hereinafter "Engineer").

WITNESSETH:

WHEREAS, City intends to have engineering services for Geotechnical Construction, Material Testing and Inspection Services Yearly Contract (hereinafter "Project"); and

WHEREAS, Engineer has submitted a proposal for the Project and an estimate of engineering costs to perform the Project; and

WHEREAS, the City Manager is authorized and empowered by City to execute contracts providing for professional engineering services; and

WHEREAS, City desires to enter into an agreement with Engineer to perform the Project; and

WHEREAS, Engineer represents that the firm is equipped, competent, and able to undertake such an assignment.

NOW THEREFORE, in consideration of the mutual covenants and considerations herein contained, **IT IS HEREBY AGREED** by the parties hereto as follows:

ARTICLE I SCOPE OF BASIC SERVICES TO BE PROVIDED BY ENGINEER

Engineer shall provide the following professional engineering services to City ("Basic Services"):

- Geotechnical and Materials Engineering services to include, but not limited to, subsurface exploration, foundation recommendations, soil stabilization, slope stability, retaining wall recommendations, construction recommendations, site visits, interpretation of test data, forensics sampling and analysis, third party reviews, QA/QC analysis, pavement design and analysis, engineering recommendations and preparation of reports.
- 2. Construction materials testing such as soils, concrete, masonry, aggregates, bituminous mixtures, pavements, roofing systems, structural steel.

- 3. Building Construction Special Inspection Services as required by the 2012 International Building Code, Chapter 17; or later edition as adopted by the Codes Administration Department.
- 4. Laboratory testing of soils, aggregates, concrete, asphalt, masonry, steel, roofing, fireproofing and other construction materials.
- 5. Provide necessary support equipment to carry out required procedures.

Engineer acknowledges that the above scope of services have been awarded to two independent consultants, a primary and a secondary. In all cases, the primary engineering firm will be contacted first. In cases where the primary engineer is providing quality control testing services for a contractor on a City project, the secondary engineering firm shall be used. Additionally, in cases where the primary engineering firm cannot provide services in a timely manner, the secondary engineering firm may be used.

Engineer is Primary Engineering Firm.

ARTICLE II OPTIONAL SERVICES TO BE PROVIDED BY ENGINEER

The following is a list of additional services which will be furnished by Engineer, if needed by City, upon receipt of written authorization by the Director of Public Works ("Optional Services"):

In addition to the on-call services to be provided pursuant to Article I, City may select Engineer to provide professional engineering services on projects which are otherwise capable of being the subject of a stand-alone Agreement for Professional Engineering Services. By entering into this Agreement, City is not obligated to select Engineer to provide professional engineering services beyond those services authorized in Article I above. In the event Engineer is engaged to provide such services, City and Engineer shall enter into a written supplemental agreement describing the scope of services to be provided by Engineer and City, providing for compensation for services to be provided by Engineer, and providing completion times for said services. The compensation to be paid Engineer pursuant to any supplemental agreement shall be at the rates set forth in Exhibit A attached hereto and incorporated herein by reference. In no event is any work in excess of that described in Article I above authorized by this Agreement without City and Engineer first entering into a written supplemental agreement.

ARTICLE III SCOPE OF SERVICES TO BE PROVIDED BY CITY

City shall provide the following services to Engineer:

City will provide access to the project sites for personnel and equipment and provide a project manager to act as primary contact, and to obtain such drawings and other documents or information as needed to complete the tasks assigned.

ARTICLE IV PAYMENTS TO THE ENGINEER

For the services performed by Engineer pursuant to this Agreement, and as full compensation therefore, and for all expenditures made and all expenses incurred by Engineer in connection with this Agreement, except as otherwise expressly provided herein, subject to and in conformance with all provisions of this Agreement, City will pay Engineer according to the following provisions:

- A. The cost of all On-Call Services covered under Article I shall be billed hourly at the rates set forth in Exhibit A attached hereto and incorporated herein by reference. Expenses incurred to provide the On-Call Services shall be billed as set forth in Exhibit A. The total fees (hourly fees and expenses) for the On-Call Services shall not exceed budgeted amounts.
- B. Compensation for services to be provided by Engineer through a supplemental agreement pursuant to Article II above shall be set forth in said supplemental agreement, and shall be at the rates set forth in the attached Exhibit A.
- C. If so requested by Engineer, City will make payment monthly for On-Call Services that have been satisfactorily completed. The City shall make payment to Engineer within a period not to exceed thirty (30) days from the date an invoice is received by City. All invoices shall contain the following information:
 - 1. Project Name/Task Name/RFP Number/Description of Agreement.
 - 2. Invoice Number and Date.
 - 3. Itemized statement for the previous month of Labor (including Personnel Description, Title or classification for each person on the project, Hours Worked, Hourly Rate, and Amount), Itemized Reimbursable Expenses, and Invoice Total.
 - 4. Description of monthly progress detailing the amount of the services completed to date and projected completion time.
 - 5. Project Billing Summary containing the Contract or Agreed Maximum Fee Amount, Cumulative Amount Previously Billed, Billing Amount this Invoice, Contract or Agreed Amount Remaining, and Percent of Maximum Fee Billed to Date.

6. Cost Invoices must be categorized by Phase.

All moneys not paid when due as provided herein shall bear interest at a per annum rate equal to one percent (1%) plus the average *Consumer Price Index for All Urban Consumers (CPI-U)-U.S. City Average* for the time period in which payment is past due; provided, however, that in no event will the amount of interest to be paid by the City exceed 9% per annum.

ARTICLE V TERM

The term of this Agreement shall be a one (1) year period from October 6, 2016 through October 6, 2017. City shall have the option to renew this Agreement at its discretion, for two (2) additional one-year periods. Three (3) months prior to expiration of the initial term or the first renewal term of this Agreement, Engineer shall submit to City a proposal for increases in its billing rates and expenses to be in effect for the following one (1) year term. Engineer shall not be permitted to increase billing rates in any one (1) year renewal period in excess of the Employment Cost Index, Wages and Salaries, Midwest Region - ECU23302I, published by the U.S. Department of Labor, Bureau of Labor Statistics.

ARTICLE VI

- A. CERTIFICATE OF INSURANCE: The Engineer shall secure and maintain, throughout the duration of this contract, insurance of such types and in at least the amounts that are required herein. Engineer shall provide certificate(s) of insurance confirming the required protection on an ACORD 25 (or equivalent form). The City shall be notified by receipt of written notice from the insurer at least thirty (30) days prior to material modification or cancellation of any policy listed on the certificate(s). The City reserves the right to require formal copies of any Additional Insured endorsement, as well as the right to require completed copies of all insuring policies applicable to the project. The cost of such insurance shall be included in the Engineer's contract price.
- B. NOTICE OF CLAIM: The Engineer shall upon receipt of notice of any claim in connection with this contract promptly notify the City, providing full details thereof, including an estimate of the amount of loss or liability. The Engineer shall also promptly notify the City of any reduction in limits of protection afforded under any policy listed in the certificate(s) of insurance in excess of \$10,000.00, whether or not such impairment came about as a result of this contract. If the City shall subsequently determine that the Engineer's aggregate limits of protection shall have been impaired or reduced to such extent that they are inadequate for the balance of the project, the Engineer shall, upon notice from the City, promptly reinstate the

original limits of liability required hereunder and shall furnish evidence thereof to the City.

- C. INDUSTRY RATING: The City will only accept coverage from an insurance carrier who offers proof that it is licensed to do business in the State of Missouri; carries a Best's policyholder rating of "A" or better; carries at least a Class VII financial rating or is a company mutually agreed upon by the City and the Engineer.
- D. SUB-CONSULTANT'S INSURANCE: If any part of the contract is to be sublet, the Engineer shall either:
 - 1. Cover all sub-consultants in the Engineer's liability insurance policy or,
 - 2. Require each sub-consultant not so covered to secure insurance in the minimum amounts required of the Engineer and submit such certificates to the City as outlined herein.
- E. SELF-INSURED RETENTIONS / DEDUCTIBLES: Any Engineer that maintains a Self-Insured Retention or Deductible (in excess of \$50,000) must be declared on the Certificates provided to the City. Such amounts shall be the sole responsibility of the Engineer. The City reserves the right to approve such self-insured retentions/deductibles and may require guarantees from the Engineer for such assumed limits.
- F. PROFESSIONAL LIABILITY: Professional Liability, or Errors and Omissions Insurance protection must be carried by Engineer in the minimum amount of \$1,000,000.
- G. COMMERCIAL GENERAL LIABILITY POLICY Limits:

Each occurrence:	\$1,000,000
Personal & Advertising Injury:	\$1,000,000
Products/Completed Operations Aggregate:	\$1,000,000
General Aggregate:	\$1,000,000

Policy must include the following conditions: Bodily Injury and Property Damage Insured Contract's Contractual Liability Explosion, Collapse & Underground (if risk is present) Additional Insured: City of Lee's Summit, Missouri

- H. AUTOMOBILE LIABILITY: Policy shall protect the Engineer against claims for bodily injury and/or property damage arising out of the ownership or use of any owned, hired and/or non-owned vehicle and must include protection for either:
 - 1. Any Auto
 - 2. or all Owned Autos; Hired Autos; and Non-Owned Autos
Limits:

Each Accident, Combined Single Limits, Bodily Injury and Property Damage: \$500,000 City of Lee's Summit, Missouri does NOT need to be named as additional insured on Automobile Liability

I. WORKERS' COMPENSATION: This insurance shall protect the Engineer against all claims under applicable state Workers' Compensation laws. The Engineer shall also be protected against claims for injury, disease or death of employees which, for any reason, may not fall within the provisions of a Workers' Compensation law and contain a waiver of subrogation against the City. The policy limits shall not be less than the following:

Workers' Compensation: Employer's Liability: Bodily Injury by Accident: Bodily Injury by Disease: Bodily Injury by Disease: Statutory

\$100,000 Each Accident \$500,000 Policy Limit \$100,000 Each Employee

J. GENERAL INSURANCE PROVISIONS

- 1. The insurance limits outlined above represent the minimum coverage limit and do not infer or place a limit of liability on the Engineer nor has the City assessed the risk that may be applicable to the Engineer.
- 2. The Engineer's liability program will be primary and any insurance maintained by the City (including self-insurance) will not contribute with the coverage maintained by the Engineer.
- 3. Coverage limits outlined above may be met by a combination of primary and excess liability insurance programs.
- 4. Any coverage provided on a Claims Made policy form must contain a 3-year tail option (extended reporting period) or the program must be maintained for 3-years subsequent to completion of the Contract.
- 5. Any failure on the part of the Engineer with any policy reporting provision shall not affect the coverage provided to the City.
- 6. When "City" is utilized, this includes its officers, employees and volunteers in respect to their duties for the City.

ARTICLE VII MISCELLANEOUS PROVISIONS

The following miscellaneous provisions are agreed to by both parties to this Agreement:

A. COOPERATIVE PROCUREMENT WITH OTHER JURISDICTIONS: Engineer hereby agrees to the cooperative procurement with other jurisdictions based on the Base Agreement with the City of Lee's Summit. Engineer Agrees to perform the services contained under the terms of the Base Agreement to any Municipal, County Public

Utility, Hospital, Educational Institution, or any other non-profit organization having membership in the Mid-America Council of Public Purchasing (MACPP) or the Mid America Regional Council (MARC) and located within the Greater Kansas City Metropolitan Trade Area (All deliveries shall be F.O.B. Destination and there shall be no obligations on the part of any member of said Council to utilize this Contract). Sales of Engineer's services will be made in accordance with the terms and conditions of the Request for Qualifications and this Base Agreement. There shall, however, be no obligation under the cooperative procurement agreement for any organization represented by MACPP or MARC to utilize the contract unless they were specifically named in the Request for Qualification as a joint bidder. All sales to other jurisdictions will be made on purchase orders issued by that jurisdiction. All receiving, inspection, payments and other contract administration will be the responsibility of the ordering jurisdiction.

- B. COVENANT AGAINST CONTINGENT FEES: Engineer warrants that Engineer has not employed or retained any company or person, other than a bona fide employee working for the Engineer, to solicit or secure this Agreement, and that Engineer has not paid or agreed to pay any company or person, other than bona fide employee, any fee, commission, percentage, brokerage fee, gifts, or any other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the City shall have the right to annul this Agreement without liability or, at its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.
- C. OWNERSHIP OF ENGINEERING DOCUMENTS: Payment by City to Engineer as aforesaid in Article IV shall vest in City title to all drawings, sketches, studies, analyses, reports, models, and other paper, documents, computer files, and material produced by Engineer exclusively for the services performed pursuant to this Agreement up to the time of such payments, and the right to use the same without other or further compensation, provided that any use for another purpose shall be without liability to the Engineer. Any reuse without written verification or adaptation by Engineer for the specific purpose intended will be at City's risk and without liability or exposure to Engineer, and City shall indemnify and hold harmless, to the extent allowed by the Constitution and Laws of the State of Missouri, Engineer from all claims, damages, losses, expenses, including attorneys' fees arising out of or resulting therefrom.
- D. MODIFICATIONS TO AGREEMENT: In the event of any changes in the scope of services contained in this Agreement, prior to commencing the services City and Engineer shall enter into a modification of this Agreement describing the changes in the services to be provided by Engineer and City, providing for compensation for any additional services to be performed by Engineer, and providing completion times for said services.
- E. EMERGENCY CHANGES IN SERVICES: The Director of Public Works, with the consent of the City Manager, is authorized to execute on behalf of the City modification agreements as provided for in subsection C. above where there is an emergency and

the overall compensation authorized in Article IV above, and any supplements or modifications thereto, is not increased. For purposes of this subsection, an "emergency" shall mean those unforeseen circumstances that present an immediate threat to public health, welfare, or safety; or when immediate response is necessary to prevent further damage to public property, machinery, or equipment; or when delay would result in significant financial impacts to the City as determined by the Director of Public Works and the City Manager.

In the event an emergency change in services is authorized by the Director of Public Works and the City Manager pursuant to this provision, the modification agreement shall be submitted to the City Council for ratification at its next available meeting.

- F. TERMINATION: In the event of termination by City, if there are any services hereunder in progress but not completed as of the date of termination, then said Agreement may be extended upon written approval of the City until said services are completed and accepted.
 - 1. <u>Termination for Convenience</u>: The services called for by this Agreement or any supplements thereto may be terminated upon request and for the convenience of City upon thirty (30) days advance written notice. City shall pay Engineer for all services rendered up to the date of termination.
 - 2. <u>Termination for Cause</u>: This Agreement may also be terminated for cause by City or Engineer. Termination for cause shall be preceded by a fourteen-(14) day correction period effective upon delivery of written notice. City shall pay Engineer for all services rendered up to the date of termination. In the event of termination for cause by City, compensation for services rendered by Engineer up to the date of termination shall be offset by City's reasonable cost to mitigate or correct the effects of such termination.
 - 3. <u>Termination Due to Unavailability of Funds in Succeeding Fiscal Years</u>: When funds are not appropriated or otherwise made available to support continuation of the Project in a subsequent fiscal year, this Agreement shall be terminated and Engineer shall be reimbursed for the services rendered up to the date of termination plus the reasonable value of any nonrecurring costs incurred by Engineer but not amortized in the price of the services delivered under this Agreement.
- G. COMPLIANCE WITH LAWS: Engineer shall comply with all Federal, State, and local laws, ordinances, and regulations applicable to the services. Engineer shall secure all licenses, permits, etc. from public and private sources necessary for the fulfillment of its obligations under this Agreement.
- H. SUBLETTING ASSIGNMENT OR TRANSFER: Engineer shall not sublet, assign, or transfer any interest in the services covered by this Agreement, except as provided for herein and except with the prior written consent of City. The use of subcontractors shall in no way relieve Engineer of his/her primary responsibility for the services. No

approval will be necessary for non-professional services such as reproductions, printing, materials, and other services normally performed or provided by others.

- CONFERENCES, VISITS TO SITE, INSPECTION OF SERVICES: Upon reasonable advance notice and during normal business hours at Engineer's place of business, representatives of City shall have the privilege of inspecting and reviewing the services being performed by Engineer and consulting with him/her at such time. Conferences are to be held at the request of City or Engineer.
- J. ENGINEER'S ENDORSEMENT: Engineer shall endorse all plans, specifications, estimates, and engineering data furnished by him/her.
- K. INSPECTION OF DOCUMENTS: Engineer shall maintain all records pertaining to its services hereunder for inspection, upon reasonable advance notice and during normal business hours at Engineer's place of business, by a City representative during the contract period and for three (3) years from the date of final payment for each individual project performed pursuant to this Agreement.
- L. INDEMNIFICATION AND HOLD HARMLESS: Engineer shall indemnify and hold harmless City and its officers, employees, elected officials, and attorneys, each in their official and individual capacities, from and against judgments, damages, losses, expenses, including reasonable attorneys' fees, to the extent caused by the negligent acts, errors, omissions, or willful misconduct of Engineer, or its employees, or subcontractors, in the performance of Engineer's duties under this Agreement, or any supplements or amendments thereto.
- M. LIMITATION OF LIABILITY: In no event will City be liable to Engineer for indirect or consequential damages, and in no event will City's liability under this Agreement exceed the amount to be paid to Engineer pursuant to Article IV of this Agreement.
- N. PROFESSIONAL RESPONSIBILITY: Engineer will exercise reasonable skill, care, and diligence in the performance of its services in accordance with customarily accepted professional engineering practices. If Engineer fails to meet the foregoing standard, Engineer will perform at its own cost, and without reimbursement from City, the professional engineering services necessary to correct errors and omissions that are caused by Engineer's failure to comply with above standard, and that are reported to Engineer within one year from the completion of Engineer's services for each individual project performed pursuant to this Agreement.
- O. ENTIRE AGREEMENT: This Agreement constitutes the entire agreement between the parties with respect to its subject matter, and any prior agreements, understandings, or other matters, whether oral or written, are of no further force or effect. This Agreement may be amended, changed, or supplemented only by written agreement executed by both of the parties hereto.
- P. CONFLICT: In the event of any conflict, ambiguity, or inconsistency between this Agreement and any other document that may be annexed hereto, the terms of this Agreement shall govern.

- Q. GOVERNING LAW: This Agreement shall be governed by and construed in accordance with the laws of the State of Missouri.
- R. OPINION OF PROBABLE CONSTRUCTION COST AND SCHEDULE: Since Engineer has no control over the cost of labor, materials, or equipment, or over contractor's(s') methods of determining prices, or over competitive bidding or market conditions, the estimate of construction cost and schedule provided for herein is to be made on the basis of Engineer's experience and qualifications and represents Engineer's best judgment as a professional engineer familiar with the construction industry, but Engineer cannot and does not guarantee that the bids or the Project construction cost or schedule will not vary from the opinion of probable construction cost and schedule prepared by Engineer.
- S. TAX EXEMPT: City and its agencies are exempt from State and local sales taxes. Sites of all transactions derived from this Agreement shall be deemed to have been accomplished within the State of Missouri.
- T. SAFETY: In the performance of its services, Engineer shall comply with the applicable provisions of the Federal Occupational Safety and Health Act, as well as any pertinent Federal, State and/or local safety or environmental codes.
- U. ANTI-DISCRIMINATION CLAUSE: Engineer and its agents, employees, or subcontractors shall not in any way, directly or indirectly, discriminate against any person because of age, race, color, handicap, sex, national origin, or religious creed.
- V. DELAY IN PERFORMANCE: Neither City nor Engineer shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the nonperforming party. For purposes of this Agreement, such circumstances include, but are not limited to, abnormal weather conditions, floods, earthquakes, fire, epidemics, war, riots, and other civil disturbances, strikes, lockouts, work slowdowns, and other labor disturbances, sabotage, judicial restraint, and delay in or inability to procure permits, licenses, or authorizations from any local, State, or Federal agency for any of the supplies, materials, accesses, or services required to be provided by either City or Engineer under this Agreement. Engineer and City shall be granted a reasonable extension of time for any delay in its performance caused by any such circumstances. Should such circumstances occur, the nonperforming party shall within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of the Agreement.
- W. NO THIRD-PARTY RIGHTS: The services provided for in this Agreement are for the sole use and benefit of City and Engineer. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than City and Engineer.
- X. NOTICE: Whenever any notice is required by this Agreement to be made, given or transmitted to any party, it shall be enclosed in an envelope with sufficient postage

attached to ensure delivery and deposited in the United States Mail, first class, with notices to City addressed to:

City Engineer City of Lee's Summit 220 SE Green Street Lee's Summit, MO 64063 Director of Public Works City of Lee's Summit 220 SE Green Street Lee's Summit, MO 64063

and notices to Engineer shall be addressed to:

Professional Services Industries, Inc. 1211 W Cambridge Circle Kansas City, KS 66103

or such place as either party shall designate by written notice to the other. Said notices may also be personally hand delivered by each party to the other, at the respective addresses listed above. If hand delivered, the date of actual completion of delivery shall be considered the date of receipt. If mailed, the notice shall be considered received the third day after the date of postage.

ARTICLE VIII ALL OTHER TERMS REMAIN IN EFFECT

Reserved.

THIS AGREEMENT shall be binding on the parties thereto only after it has been duly executed and approved by City and Engineer.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed on the ____ day of _____, 20___.

CITY OF LEE'S SUMMIT

Stephen A. Arbo, City Manager

APPROVED AS TO FORM:

Office of the City Attorney

ENGINEER:

BY:	
TITLE:	

ATTEST:



ingineering • Consulting • Testing City of Lee's Summit Schedule of Services and Fees for **Environmental Consulting, Geotechnical Consulting & Construction Materials Testing** Effective: September 1, 2016

TECHNICAL SERVICES

Engineering Services for preliminary reconnaissance, boring layout, delayed water levels, backfilling of borings, evaluation, field supervision, analysis, recommendations, reporting and consultation field inspection, report review, consultation, special inspection submittal preparation, attend pre-construction and progress meetings. Test evaluation, contract administration and supervision of laboratory/field personnel will be billed approximately ½-hour project engineer time per report.

\$ 21.00

\$192.00 3.00

\$

Certified Industrial Hygienist	Per Hour	\$ 145.00
Senior Engineer/Geologist/Scientist	Per Hour	\$ 118.00
Project Engineer/Manager/Geologist/Scientist	Per Hour	\$ 92.00
Staff Engineer/Geologist/Scientist	Per Hour	\$ 80.00
Staff Air Quality Specialist	Per Hour	\$ 80.00
Environmental Technician	Per Hour	\$ 57.00
Certified Asbestos/Lead Designer	Per Hour	\$ 95.00
Certified Asbestos Management Planner	Per Hour	\$ 95.00
Certified Lead Risk Assessor	Per Hour	\$ 93.50
Certified Asbestos/Lead Inspector	Per Hour	\$ 60.00
CADD	Per Hour	\$ 58.00
Clerical	Per Hour	\$ 50.00
Principal Consultant	Per Hour	\$ 163.00
Chief Engineer	Per Hour	\$ 194.00
Travel	Per Mile	\$ 0.78
Engineering Technician	Per Hour	\$ 57.00
Drilling		
Mobilization and moving of drilling equipment on and off site each way		
a. Rig (per mile)	Per Mile	\$ 4.90
5 (1)	Minimum	\$ 365.00
		\$ 303.00 \$ 60.00
c. Service truck daily charge	Per Day	
d. Service truck	Per Mile	\$ 0.78
GEOPHYSICAL EQUIPMENT		
ReMi – Seismic Analysis/Rock-Profile Equipment Service Truck	Per Day	\$2,700.00

Soil sampling as required with split-barrel sampler or thin wall tube (Shelby tube not included):

DEPTH RANGE	UNIT CHARGES	
0-25	\$19.00 per sample	
25-50	\$25.00 per sample	
50-100	\$32.00 per sample	
Shelby Tubes		Each
		Per Boring
	appropriate)	PLF

For wash boring add	Per Foot	\$	4.00
Cost of special equipment or permits for moving			
drilling equipment on or about the site	At cost plus 20)%	
Standby setup time per hole in excess of ½-hour	Per Hour	\$10	04.00



City of Lee's Summit Schedule of Services and Fees for Environmental Consulting, Geotechnical Consulting & Construction Materials Testing Effective: September 1, 2016

CONSTRUCTION PERSONNEL/FIELD SERVICES Engineering Technician: Asphaltic Concrete Field Testing Concrete Sampling/Testing Soil - In-Place Density Testing Sample Pick-Up/Preparation	Per Hour	\$ 52.00
Senior Engineering Technician: Concrete/Asphalt Batch Plant Inspection		
Concrete Tilt-up Panel Inspection		
Drilled Pier/Pile Inspection		
Drill & Epoxy/Anchor Bolt Inspection		
Fireproofing Inspection		
Masonry Inspection		
Post-Tension Inspection		
Reinforcing Steel Inspection		
Shallow Footing and Subgrade Inspection		
Soil Fill Control/Site Observation Inspection State Certified (KDOT) Sampling/Field Testing	Per Hour	\$ 58.00
Structural Steel Inspector/Certified Welding Inspector:	Fel Houl	φ 30.00
Visual Weld Inspection	Per Hour	\$ 90.00
Bolt Torque Verification	Per Hour	\$ 90.00
Shear Stud Verification	Per Hour	\$ 90.00
Ferroscan Operator	Per Hour	\$ 70.00
LABORATORY TESTING SERVICES Soils:		^
Soils: Atterberg Limits Determination (PI)	Each	\$ 98.00
Soils: Atterberg Limits Determination (PI) Hydrometer (without sieve)	Each	\$ 77.00
Soils: Atterberg Limits Determination (PI) Hydrometer (without sieve) Moisture Content		•
Soils: Atterberg Limits Determination (PI) Hydrometer (without sieve) Moisture Content Moisture/Density Relationship (Proctor):	Each Each	\$ 77.00 \$ 9.50
Soils: Atterberg Limits Determination (PI) Hydrometer (without sieve) Moisture Content Moisture/Density Relationship (Proctor): ASTM D698 (Standard)	Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00
Soils: Atterberg Limits Determination (PI) Hydrometer (without sieve) Moisture Content Moisture/Density Relationship (Proctor):	Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00
Soils: Atterberg Limits Determination (PI) Hydrometer (without sieve) Moisture Content Moisture/Density Relationship (Proctor): ASTM D698 (Standard) ASTM D1557 (Modified)	Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00
Soils: Atterberg Limits Determination (PI) Hydrometer (without sieve) Moisture Content Moisture/Density Relationship (Proctor): ASTM D698 (Standard) ASTM D1557 (Modified) One Point Proctor Verification	Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00
Soils: Atterberg Limits Determination (PI) Hydrometer (without sieve) Moisture Content Moisture/Density Relationship (Proctor): ASTM D698 (Standard) ASTM D1557 (Modified) One Point Proctor Verification Oversized Correction Organic Content Relative Density Test	Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00
Soils: Atterberg Limits Determination (PI) Hydrometer (without sieve) Moisture Content Moisture/Density Relationship (Proctor): ASTM D698 (Standard) ASTM D1557 (Modified) One Point Proctor Verification Oversized Correction Organic Content Relative Density Test Density determination	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 252.00 \$ 10.50
Soils: Atterberg Limits Determination (PI) Hydrometer (without sieve) Moisture Content Moisture/Density Relationship (Proctor): ASTM D698 (Standard) ASTM D1557 (Modified) One Point Proctor Verification Oversized Correction Organic Content Relative Density Test Density determination Hand penetrometer test	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 252.00 \$ 10.50 \$ 6.50
Soils: Atterberg Limits Determination (PI) Hydrometer (without sieve) Moisture Content Moisture/Density Relationship (Proctor): ASTM D698 (Standard) ASTM D1557 (Modified) One Point Proctor Verification Oversized Correction Organic Content Relative Density Test Density determination Hand penetrometer test. Unconfined compression test	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 252.00 \$ 10.50 \$ 6.50 \$ 52.00
Soils: Atterberg Limits Determination (PI) Hydrometer (without sieve) Moisture Content Moisture/Density Relationship (Proctor): ASTM D698 (Standard) ASTM D1557 (Modified) One Point Proctor Verification Oversized Correction Organic Content Relative Density Test Density determination Hand penetrometer test. Unconfined compression test Percent swell (Free Swell)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 252.00 \$ 10.50 \$ 6.50 \$ 52.00 \$ 10.50 \$ 6.50 \$ 52.00 \$ 156.00
Soils: Atterberg Limits Determination (PI) Hydrometer (without sieve) Moisture Content Moisture/Density Relationship (Proctor): ASTM D698 (Standard) ASTM D1557 (Modified) One Point Proctor Verification Oversized Correction Organic Content Relative Density Test Density determination Hand penetrometer test. Unconfined compression test Percent swell (Free Swell). Swell Test ASTM D4546 (Method A)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 252.00 \$ 10.50 \$ 6.50 \$ 52.00 \$ 1.56.00 \$ 1,248.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 252.00 \$ 10.50 \$ 6.50 \$ 52.00 \$ 156.00 \$ 1,248.00 \$ 338.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 252.00 \$ 10.50 \$ 6.50 \$ 52.00 \$ 156.00 \$ 1,248.00 \$ 338.00 \$ 416.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 252.00 \$ 10.50 \$ 6.50 \$ 52.00 \$ 156.00 \$ 1,248.00 \$ 338.00 \$ 416.00 \$ 83.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 252.00 \$ 10.50 \$ 6.50 \$ 52.00 \$ 156.00 \$ 1,248.00 \$ 338.00 \$ 416.00 \$ 83.00 \$ 67.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 252.00 \$ 10.50 \$ 6.50 \$ 52.00 \$ 156.00 \$ 1,248.00 \$ 338.00 \$ 416.00 \$ 83.00 \$ 67.00 \$ 33.00
Soils: Atterberg Limits Determination (PI)	Each Each Each Each Each Each Each Each	\$ 77.00 \$ 9.50 \$ 156.00 \$ 172.00 \$ 68.00 \$ 52.00 \$ 52.00 \$ 252.00 \$ 10.50 \$ 6.50 \$ 52.00 \$ 156.00 \$ 1,248.00 \$ 338.00 \$ 416.00 \$ 83.00 \$ 67.00



Schedule of Services and Fees for Environmental Consulting, Geotechnical Consulting & Construction Materials Testing

Effective: September 1, 2016

Permeability			
a.	Falling head	Each	\$ 380.00
b.	Constant head	Each	\$ 442.00
Triaxial shear			•
a.	Unconsolidated-undrained	Per Point	\$ 203.00
b.	Consolidated-undrained	Per Point	\$ 494.00
С.	Consolidated-drained (Granular Soils Only)	Per Point	\$ 442.00
Remold Sampl	e Preparation	Per Hour	\$ 50.00
·			
Concrete:			
	ride Vapor Emission Test Kit	Test	\$ 31.00
	npression	Test	\$ 15.00
	npression (Contractor made)	Test	\$ 29.00 \$ 35.00 \$ 45.00 \$ 0.06
	npression of Drilled Core	Test	\$ 35.00
	igth of Concrete (Beams)	Test	\$ 45.00
	s Survey (\$400/day minimum)	Ft. ²	\$ 0.06
	ge of Harden Concrete (C157)	Test	\$ 296.00
	r Curve (Cylinders made at batch plant)	Each	\$ 875.00
	r Curve (Cylinders made in Laboratory)	Each	\$ 1,375.00
	ete Mix Design Trial Batch Verification (6 cyls & assoc.tests)	Each	\$ 700.00
	nitial and Final)	Each	\$ 625.00
Trim Specime	en (if necessary)	Each	\$ 45.00
Aggregate Ma			• -• •
Acid Chloride	lon	Test	\$ 76.00
	ity of Cement-Agg. Mortar Bar Method (C1260) (plus shipping)	Test	\$ 925.00
	Strength of Intact Rock Core Specimens (D2938)	Test	\$ 70.00
	hale/soft-friable) (C142)	Test	\$ 45.00
	Inic Impurities in Fine Agg. On Strength (C87)	Test	\$ 490.00
	te Angularity (AASHTO T304)	Test	\$ 45.00 \$ 490.00 \$ 70.00 \$ 175.00
		Test	\$ 175.00
	(36)	Test	\$ 70.00
	36) Coarse Aggregate Large Size (> 1")	Test	\$ 125.00 \$ 125.00
	C131)	Test	\$ 135.00 \$ 155.00
	Large Aggregate (C535)	Test	\$ 155.00 \$ 45.00
	Particles (C123)	Test	\$ 45.00 \$ 45.00
	er than #200 in Aggregates (C117)	Test	
	AASHTO T327)	Test Test	•
		Test	•
	tent (C566) rities in Sand (C40)	Test	\$
	e – Flat & Elongated (CRD C120) (3 week turn-around)	Test	\$ 40.00 \$ 44.00
	Analysis of Aggregates (C295) (plus shipping)	Test	\$
	e lon (plus shipping)	Test	\$
	ency Value of Soils and Fine Agg (D2419)	Test	\$ 65.00
	ness Soft Particles (C235)	Test	\$
	ity & Absorption (C127 / C128)	Test	\$ 43.00 \$ 70.00
	Iness – Magnesium or Sodium (C88)	Test	\$
	f Aggregate (C29)	Test	\$ 35.00
	e Chloride (plus shipping)	Test	\$
		1000	ψ 02.00



Engineering • Consulting • Testing City of Lee's Summit Schedule of Services and Fees for Environmental Consulting, Geotechnical Consulting & Construction Materials Testing Effective: September 1, 2016

Asphaltic Concrete Testing:		
Asphalt Core Density	Test	\$ 12.50
Asphalt Extraction and Gradation	Test	\$ 182.00
Asphalt Marshall Density (includes molding of 3 specimens)	Set of 3	\$ 140.00
Asphalt Marshall Stability and Flow	Set of 3	\$ 160.00
Gyratory Pill Compaction with Density (150 mm)	Test	\$ 110.00
Gyratory Pill Compaction with Density (100 mm)	Test	\$ 82.00
Marshall Pill Compaction	Test	\$ 12.50
Marshall Theoretical Specific Gravity (Rice Test)	Test	\$ 114.00
Tensile Strength Ratio (TSR)	Test	\$ 380.00
Masonry Product Testing:		¢ 100.00
Dry Shrinkage (3 per set) (ASTM C426)	Per Set	\$ 430.00
Grain Size Analysis (ASTM C136)	Test	\$ 70.00
Minus No. 200 Sieve (ASTM C117)	Test	\$ 45.00
Shotcrete Compressive Strength Testing	Test	\$ 35.00
Specific Gravity (ASTM C127, C128)	Test	\$ 70.00
	- ,	• • • = •
Compressive Strength: 3"x3"x6" Prisms/2"x2" cubes (ASTM C1019)	Test	\$ 18.50
Dry Package Mix (mixing, flow test and 6 compr.strength samples)	Each	\$ 234.00
Mix Design (computations, mixing, slump and molding)	Each	\$ 325.00
Mortar:	- ,	• 40 50
Compressive Strength: 2" x 2" Cubes	Test	\$ 12.50
Dry Package Mix (mixing, flow test & 6 compr.strength samples)	Each	\$ 234.00
Water Retention	Test	\$ 35.00
Air Test (specific gravity not included)	Test	\$ 47.00
Mix Design (computations, mixing, flow test and molding)	Test	\$ 365.00
Concrete Masonry Units:		
Compressive Strength Testing:		•
8" & 12" Block, ASTM C140	Test	\$ 40.00
8" & 12" Hollow Prism	Test	\$ 75.00
8" & 12" Grouted Prism	Test	\$ 85.00
Measuring, Moisture Content and Absorption (3 per set)(ASTM C140)	Per Set	\$ 179.00
Fireproofing:		
Adhesion/Cohesion	Test	\$ 42.00
Density	Test	\$ 42.00
EQUIPMENT:		
Concrete/Asphalt Coring Equipment		
Diamond bit core barrel	Per Inch	\$ 9.50
Coring Machine	Per Day	\$ 200.00
Hole Patch (non-shrink grout)	Cost Plus 2	
Ferroscan	Per Day	\$ 175.00
Nuclear Density Gauge (price included in technician hourly rate)	Per Day	\$ 10.50
Skidmore-Wilhelm Equipment	Per Day	\$ 170.00
REIMBURSABLE EXPENSES		
Drilling/Geoprobe	Quoted Pe	er Proiect
Analytical Testing (Wastestream, Soil, Water)	Quoted Pe	
Ashastas & Laad Sampla Analysis		

Quoted Per Project

Asbestos & Lead Sample Analysis



Engineering • Consulting • Testing City of Lee's Summit Schedule of Services and Fees for Environmental Consulting, Geotechnical Consulting & Construction Materials Testing Effective: September 1, 2016

REMARKS

- 1. Unit prices attached are in effect for twelve (12) months from the date of this proposal. Services and fees not listed above will be quoted upon request. It is assumed that the site is legally and physically accessible to the drilling equipment without additional cost to Professional Service Industries, Inc.
- 2. The fees apply only to geotechnical/foundation borings in areas which are not contaminated by hazardous constituents. Fees for hazardous drilling conditions will be in accordance with the Environmental Drilling Schedule of Fees and Services. Testing on contaminated samples will be performed at stated fee plus the cost of protective clothing and a 25% minimum additional charge for special handling. Contaminated soil samples will be returned to the client upon completion of testing at shipping cost + 15%, including any necessary permit costs. Surcharges for laboratory services during overtime hours for expedited results may apply.
- 3. Field services will be charged on a whole hourly basis from the time the engineer or technician leaves the office until he/she returns from the project. Four (4) hour minimum per trip and a vehicle charge of \$0.85 a mile will be added. A per diem charge of \$125.00 per man, per day will be added, if applicable. Rates involving mileage (including transportation, mobilization, vehicle, and trip charges) are subject to change based upon increases in the national average gasoline price. As necessary, a fuel surcharge, equal to 2% of the total trip charge (\$5.00 minimum) will be added to each invoice to offset rising fuel prices. Fuel costs will be evaluated each month prior to billing with invoices adjusted as necessary on a project by project basis. Scheduling or cancellation of field testing and observation services is required no less than the working day prior to the date services are to be performed. Services cancelled without advance and/or inadequate notice will be assessed a minimum 3 hour charge.
- 4. The prices listed above include up to three copies of the report distributed in accordance with your instruction. Additional copies will be billed at the rate of \$0.35 per sheet. Wet stamped copies will be charged \$50.00 per additional report.
- 5. Overtime rates are applicable for services performed in excess of 8 hours per day Monday through Friday, before 7:00 AM or after 5:00 PM, and for all hours worked on Saturdays, Sundays and holidays. The overtime rate is 1.5 times the applicable hourly unit rate. Surcharges for laboratory services during overtime hours or for expedited results may apply.
- 6. Transportation and per diem are charged at the applicable rates. Rates involving mileage (including transportation, mobilization, vehicle, and trip charges) are subject to change based upon increases in the national average gasoline price. A fuel surcharge shall be applied to invoices to offset the increase in fuel prices. Increases shall be made no more often than monthly.
- Unless noted otherwise: Concrete cylinders are made in accordance with ASTM C-31(4x8 cylinders) except for Section 10.1.2. Asphalt field compaction tests are performed in accordance with ASTM D-2950 except Section 3.5 unless noted otherwise. Asphalt extraction data from ASTM D-6307 Method B except Section 12.
- 8. For all PSI services, a project management/engineering review charge will be billed for all reports issued for the scheduling/supervision of personnel and the evaluation/review of data and reports.
- 9. A project set-up charge of \$125.00 applies to each project.
- 10. A final inspection charge of a minimum of two hours at a Project Manager rate applies to all special inspection projects.

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES FOR GEOTECHNICAL CONSTRUCTION, MATERIAL TESTING AND INSPECTION SERVICES YEARLY CONTRACT (RFQ NO. 2017-300)

THIS AGREEMENT made and entered into this 6th day of October, 2016, by and between the City of Lee's Summit, Missouri (hereinafter "City"), and Kansas City Testing & Engineering, L.L.C. (hereinafter "Engineer").

WITNESSETH:

WHEREAS, City intends to have engineering services for Geotechnical Construction, Material Testing and Inspection Services Yearly Contract (hereinafter "Project"); and

WHEREAS, Engineer has submitted a proposal for the Project and an estimate of engineering costs to perform the Project; and

WHEREAS, the City Manager is authorized and empowered by City to execute contracts providing for professional engineering services; and

WHEREAS, City desires to enter into an agreement with Engineer to perform the Project; and

WHEREAS, Engineer represents that the firm is equipped, competent, and able to undertake such an assignment.

NOW THEREFORE, in consideration of the mutual covenants and considerations herein contained, **IT IS HEREBY AGREED** by the parties hereto as follows:

ARTICLE I SCOPE OF BASIC SERVICES TO BE PROVIDED BY ENGINEER

Engineer shall provide the following professional engineering services to City ("Basic Services"):

- Geotechnical and Materials Engineering services to include, but not limited to, subsurface exploration, foundation recommendations, soil stabilization, slope stability, retaining wall recommendations, construction recommendations, site visits, interpretation of test data, forensics sampling and analysis, third party reviews, QA/QC analysis, pavement design and analysis, engineering recommendations and preparation of reports.
- 2. Construction materials testing such as soils, concrete, masonry, aggregates, bituminous mixtures, pavements, roofing systems, structural steel.

- 3. Building Construction Special Inspection Services as required by the 2012 International Building Code, Chapter 17; or later edition as adopted by the Codes Administration Department.
- 4. Laboratory testing of soils, aggregates, concrete, asphalt, masonry, steel, roofing, fireproofing and other construction materials.
- 5. Provide necessary support equipment to carry out required procedures.

Engineer acknowledges that the above scope of services have been awarded to two independent consultants, a primary and a secondary. In all cases, the primary engineering firm will be contacted first. In cases where the primary engineer is providing quality control testing services for a contractor on a City project, the secondary engineering firm shall be used. Additionally, in cases where the primary engineering firm cannot provide services in a timely manner, the secondary engineering firm may be used.

Engineer is Secondary Engineering Firm.

ARTICLE II OPTIONAL SERVICES TO BE PROVIDED BY ENGINEER

The following is a list of additional services which will be furnished by Engineer, if needed by City, upon receipt of written authorization by the Director of Public Works ("Optional Services"):

In addition to the on-call services to be provided pursuant to Article I, City may select Engineer to provide professional engineering services on projects which are otherwise capable of being the subject of a stand-alone Agreement for Professional Engineering Services. By entering into this Agreement, City is not obligated to select Engineer to provide professional engineering services beyond those services authorized in Article I above. In the event Engineer is engaged to provide such services, City and Engineer shall enter into a written supplemental agreement describing the scope of services to be provided by Engineer and City, providing for compensation for services to be provided by Engineer, and providing completion times for said services. The compensation to be paid Engineer pursuant to any supplemental agreement shall be at the rates set forth in Exhibit A attached hereto and incorporated herein by reference. In no event is any work in excess of that described in Article I above authorized by this Agreement without City and Engineer first entering into a written supplemental agreement.

ARTICLE III SCOPE OF SERVICES TO BE PROVIDED BY CITY

City shall provide the following services to Engineer:

City will provide access to the project sites for personnel and equipment and provide a project manager to act as primary contact, and to obtain such drawings and other documents or information as needed to complete the tasks assigned.

ARTICLE IV PAYMENTS TO THE ENGINEER

For the services performed by Engineer pursuant to this Agreement, and as full compensation therefore, and for all expenditures made and all expenses incurred by Engineer in connection with this Agreement, except as otherwise expressly provided herein, subject to and in conformance with all provisions of this Agreement, City will pay Engineer according to the following provisions:

- A. The cost of all On-Call Services covered under Article I shall be billed hourly at the rates set forth in Exhibit A attached hereto and incorporated herein by reference. Expenses incurred to provide the On-Call Services shall be billed as set forth in Exhibit A. The total fees (hourly fees and expenses) for the On-Call Services shall not exceed budgeted amounts.
- B. Compensation for services to be provided by Engineer through a supplemental agreement pursuant to Article II above shall be set forth in said supplemental agreement, and shall be at the rates set forth in the attached Exhibit A.
- C. If so requested by Engineer, City will make payment monthly for On-Call Services that have been satisfactorily completed. The City shall make payment to Engineer within a period not to exceed thirty (30) days from the date an invoice is received by City. All invoices shall contain the following information:
 - 1. Project Name/Task Name/RFP Number/Description of Agreement.
 - 2. Invoice Number and Date.
 - 3. Itemized statement for the previous month of Labor (including Personnel Description, Title or classification for each person on the project, Hours Worked, Hourly Rate, and Amount), Itemized Reimbursable Expenses, and Invoice Total.
 - 4. Description of monthly progress detailing the amount of the services completed to date and projected completion time.
 - 5. Project Billing Summary containing the Contract or Agreed Maximum Fee Amount, Cumulative Amount Previously Billed, Billing Amount this Invoice, Contract or Agreed Amount Remaining, and Percent of Maximum Fee Billed to Date.

6. Cost Invoices must be categorized by Phase.

All moneys not paid when due as provided herein shall bear interest at a per annum rate equal to one percent (1%) plus the average *Consumer Price Index for All Urban Consumers (CPI-U)-U.S. City Average* for the time period in which payment is past due; provided, however, that in no event will the amount of interest to be paid by the City exceed 9% per annum.

ARTICLE V TERM

The term of this Agreement shall be a one (1) year period from October 6, 2016 through October 6, 2017. City shall have the option to renew this Agreement at its discretion, for two (2) additional one-year periods. Three (3) months prior to expiration of the initial term or the first renewal term of this Agreement, Engineer shall submit to City a proposal for increases in its billing rates and expenses to be in effect for the following one (1) year term. Engineer shall not be permitted to increase billing rates in any one (1) year renewal period in excess of the Employment Cost Index, Wages and Salaries, Midwest Region - ECU23302I, published by the U.S. Department of Labor, Bureau of Labor Statistics.

ARTICLE VI

- A. CERTIFICATE OF INSURANCE: The Engineer shall secure and maintain, throughout the duration of this contract, insurance of such types and in at least the amounts that are required herein. Engineer shall provide certificate(s) of insurance confirming the required protection on an ACORD 25 (or equivalent form). The City shall be notified by receipt of written notice from the insurer at least thirty (30) days prior to material modification or cancellation of any policy listed on the certificate(s). The City reserves the right to require formal copies of any Additional Insured endorsement, as well as the right to require completed copies of all insuring policies applicable to the project. The cost of such insurance shall be included in the Engineer's contract price.
- B. NOTICE OF CLAIM: The Engineer shall upon receipt of notice of any claim in connection with this contract promptly notify the City, providing full details thereof, including an estimate of the amount of loss or liability. The Engineer shall also promptly notify the City of any reduction in limits of protection afforded under any policy listed in the certificate(s) of insurance in excess of \$10,000.00, whether or not such impairment came about as a result of this contract. If the City shall subsequently determine that the Engineer's aggregate limits of protection shall have been impaired or reduced to such extent that they are inadequate for the balance of the project, the Engineer shall, upon notice from the City, promptly reinstate the

original limits of liability required hereunder and shall furnish evidence thereof to the City.

- C. INDUSTRY RATING: The City will only accept coverage from an insurance carrier who offers proof that it is licensed to do business in the State of Missouri; carries a Best's policyholder rating of "A" or better; carries at least a Class VII financial rating or is a company mutually agreed upon by the City and the Engineer.
- D. SUB-CONSULTANT'S INSURANCE: If any part of the contract is to be sublet, the Engineer shall either:
 - 1. Cover all sub-consultants in the Engineer's liability insurance policy or,
 - 2. Require each sub-consultant not so covered to secure insurance in the minimum amounts required of the Engineer and submit such certificates to the City as outlined herein.
- E. SELF-INSURED RETENTIONS / DEDUCTIBLES: Any Engineer that maintains a Self-Insured Retention or Deductible (in excess of \$50,000) must be declared on the Certificates provided to the City. Such amounts shall be the sole responsibility of the Engineer. The City reserves the right to approve such self-insured retentions/deductibles and may require guarantees from the Engineer for such assumed limits.
- F. PROFESSIONAL LIABILITY: Professional Liability, or Errors and Omissions Insurance protection must be carried by Engineer in the minimum amount of \$1,000,000.
- G. COMMERCIAL GENERAL LIABILITY POLICY Limits:

Each occurrence:	\$1,000,000
Personal & Advertising Injury:	\$1,000,000
Products/Completed Operations Aggregate:	\$1,000,000
General Aggregate:	\$1,000,000

Policy must include the following conditions: Bodily Injury and Property Damage Insured Contract's Contractual Liability Explosion, Collapse & Underground (if risk is present) Additional Insured: City of Lee's Summit, Missouri

- H. AUTOMOBILE LIABILITY: Policy shall protect the Engineer against claims for bodily injury and/or property damage arising out of the ownership or use of any owned, hired and/or non-owned vehicle and must include protection for either:
 - 1. Any Auto
 - 2. or all Owned Autos; Hired Autos; and Non-Owned Autos

Limits:

Each Accident, Combined Single Limits, Bodily Injury and Property Damage: \$500,000 City of Lee's Summit, Missouri does NOT need to be named as additional insured on Automobile Liability

I. WORKERS' COMPENSATION: This insurance shall protect the Engineer against all claims under applicable state Workers' Compensation laws. The Engineer shall also be protected against claims for injury, disease or death of employees which, for any reason, may not fall within the provisions of a Workers' Compensation law and contain a waiver of subrogation against the City. The policy limits shall not be less than the following:

Workers' Compensation: Employer's Liability: Bodily Injury by Accident: Bodily Injury by Disease: Bodily Injury by Disease: Statutory

\$100,000 Each Accident \$500,000 Policy Limit \$100,000 Each Employee

J. GENERAL INSURANCE PROVISIONS

- 1. The insurance limits outlined above represent the minimum coverage limit and do not infer or place a limit of liability on the Engineer nor has the City assessed the risk that may be applicable to the Engineer.
- 2. The Engineer's liability program will be primary and any insurance maintained by the City (including self-insurance) will not contribute with the coverage maintained by the Engineer.
- 3. Coverage limits outlined above may be met by a combination of primary and excess liability insurance programs.
- 4. Any coverage provided on a Claims Made policy form must contain a 3-year tail option (extended reporting period) or the program must be maintained for 3-years subsequent to completion of the Contract.
- 5. Any failure on the part of the Engineer with any policy reporting provision shall not affect the coverage provided to the City.
- 6. When "City" is utilized, this includes its officers, employees and volunteers in respect to their duties for the City.

ARTICLE VII MISCELLANEOUS PROVISIONS

The following miscellaneous provisions are agreed to by both parties to this Agreement:

A. COOPERATIVE PROCUREMENT WITH OTHER JURISDICTIONS: Engineer hereby agrees to the cooperative procurement with other jurisdictions based on the Base Agreement with the City of Lee's Summit. Engineer Agrees to perform the services contained under the terms of the Base Agreement to any Municipal, County Public

Utility, Hospital, Educational Institution, or any other non-profit organization having membership in the Mid-America Council of Public Purchasing (MACPP) or the Mid America Regional Council (MARC) and located within the Greater Kansas City Metropolitan Trade Area (All deliveries shall be F.O.B. Destination and there shall be no obligations on the part of any member of said Council to utilize this Contract). Sales of Engineer's services will be made in accordance with the terms and conditions of the Request for Qualifications and this Base Agreement. There shall, however, be no obligation under the cooperative procurement agreement for any organization represented by MACPP or MARC to utilize the contract unless they were specifically named in the Request for Qualification as a joint bidder. All sales to other jurisdictions will be made on purchase orders issued by that jurisdiction. All receiving, inspection, payments and other contract administration will be the responsibility of the ordering jurisdiction.

- B. COVENANT AGAINST CONTINGENT FEES: Engineer warrants that Engineer has not employed or retained any company or person, other than a bona fide employee working for the Engineer, to solicit or secure this Agreement, and that Engineer has not paid or agreed to pay any company or person, other than bona fide employee, any fee, commission, percentage, brokerage fee, gifts, or any other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the City shall have the right to annul this Agreement without liability or, at its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.
- C. OWNERSHIP OF ENGINEERING DOCUMENTS: Payment by City to Engineer as aforesaid in Article IV shall vest in City title to all drawings, sketches, studies, analyses, reports, models, and other paper, documents, computer files, and material produced by Engineer exclusively for the services performed pursuant to this Agreement up to the time of such payments, and the right to use the same without other or further compensation, provided that any use for another purpose shall be without liability to the Engineer. Any reuse without written verification or adaptation by Engineer for the specific purpose intended will be at City's risk and without liability or exposure to Engineer, and City shall indemnify and hold harmless, to the extent allowed by the Constitution and Laws of the State of Missouri, Engineer from all claims, damages, losses, expenses, including attorneys' fees arising out of or resulting therefrom.
- D. MODIFICATIONS TO AGREEMENT: In the event of any changes in the scope of services contained in this Agreement, prior to commencing the services City and Engineer shall enter into a modification of this Agreement describing the changes in the services to be provided by Engineer and City, providing for compensation for any additional services to be performed by Engineer, and providing completion times for said services.
- E. EMERGENCY CHANGES IN SERVICES: The Director of Public Works, with the consent of the City Manager, is authorized to execute on behalf of the City modification agreements as provided for in subsection C. above where there is an emergency and

the overall compensation authorized in Article IV above, and any supplements or modifications thereto, is not increased. For purposes of this subsection, an "emergency" shall mean those unforeseen circumstances that present an immediate threat to public health, welfare, or safety; or when immediate response is necessary to prevent further damage to public property, machinery, or equipment; or when delay would result in significant financial impacts to the City as determined by the Director of Public Works and the City Manager.

In the event an emergency change in services is authorized by the Director of Public Works and the City Manager pursuant to this provision, the modification agreement shall be submitted to the City Council for ratification at its next available meeting.

- F. TERMINATION: In the event of termination by City, if there are any services hereunder in progress but not completed as of the date of termination, then said Agreement may be extended upon written approval of the City until said services are completed and accepted.
 - <u>Termination for Convenience</u>: The services called for by this Agreement or any supplements thereto may be terminated upon request and for the convenience of City upon thirty (30) days advance written notice. City shall pay Engineer for all services rendered up to the date of termination.
 - 2. <u>Termination for Cause</u>: This Agreement may also be terminated for cause by City or Engineer. Termination for cause shall be preceded by a fourteen-(14) day correction period effective upon delivery of written notice. City shall pay Engineer for all services rendered up to the date of termination. In the event of termination for cause by City, compensation for services rendered by Engineer up to the date of termination shall be offset by City's reasonable cost to mitigate or correct the effects of such termination.
 - 3. <u>Termination Due to Unavailability of Funds in Succeeding Fiscal Years</u>: When funds are not appropriated or otherwise made available to support continuation of the Project in a subsequent fiscal year, this Agreement shall be terminated and Engineer shall be reimbursed for the services rendered up to the date of termination plus the reasonable value of any nonrecurring costs incurred by Engineer but not amortized in the price of the services delivered under this Agreement.
- G. COMPLIANCE WITH LAWS: Engineer shall comply with all Federal, State, and local laws, ordinances, and regulations applicable to the services. Engineer shall secure all licenses, permits, etc. from public and private sources necessary for the fulfillment of its obligations under this Agreement.
- H. SUBLETTING ASSIGNMENT OR TRANSFER: Engineer shall not sublet, assign, or transfer any interest in the services covered by this Agreement, except as provided for herein and except with the prior written consent of City. The use of subcontractors shall in no way relieve Engineer of his/her primary responsibility for the services. No

approval will be necessary for non-professional services such as reproductions, printing, materials, and other services normally performed or provided by others.

- CONFERENCES, VISITS TO SITE, INSPECTION OF SERVICES: Upon reasonable advance notice and during normal business hours at Engineer's place of business, representatives of City shall have the privilege of inspecting and reviewing the services being performed by Engineer and consulting with him/her at such time. Conferences are to be held at the request of City or Engineer.
- J. ENGINEER'S ENDORSEMENT: Engineer shall endorse all plans, specifications, estimates, and engineering data furnished by him/her.
- K. INSPECTION OF DOCUMENTS: Engineer shall maintain all records pertaining to its services hereunder for inspection, upon reasonable advance notice and during normal business hours at Engineer's place of business, by a City representative during the contract period and for three (3) years from the date of final payment for each individual project performed pursuant to this Agreement.
- L. INDEMNIFICATION AND HOLD HARMLESS: Engineer shall indemnify and hold harmless City and its officers, employees, elected officials, and attorneys, each in their official and individual capacities, from and against judgments, damages, losses, expenses, including reasonable attorneys' fees, to the extent caused by the negligent acts, errors, omissions, or willful misconduct of Engineer, or its employees, or subcontractors, in the performance of Engineer's duties under this Agreement, or any supplements or amendments thereto.
- M. LIMITATION OF LIABILITY: In no event will City be liable to Engineer for indirect or consequential damages, and in no event will City's liability under this Agreement exceed the amount to be paid to Engineer pursuant to Article IV of this Agreement.
- N. PROFESSIONAL RESPONSIBILITY: Engineer will exercise reasonable skill, care, and diligence in the performance of its services in accordance with customarily accepted professional engineering practices. If Engineer fails to meet the foregoing standard, Engineer will perform at its own cost, and without reimbursement from City, the professional engineering services necessary to correct errors and omissions that are caused by Engineer's failure to comply with above standard, and that are reported to Engineer within one year from the completion of Engineer's services for each individual project performed pursuant to this Agreement.
- O. ENTIRE AGREEMENT: This Agreement constitutes the entire agreement between the parties with respect to its subject matter, and any prior agreements, understandings, or other matters, whether oral or written, are of no further force or effect. This Agreement may be amended, changed, or supplemented only by written agreement executed by both of the parties hereto.
- P. CONFLICT: In the event of any conflict, ambiguity, or inconsistency between this Agreement and any other document that may be annexed hereto, the terms of this Agreement shall govern.

- Q. GOVERNING LAW: This Agreement shall be governed by and construed in accordance with the laws of the State of Missouri.
- R. OPINION OF PROBABLE CONSTRUCTION COST AND SCHEDULE: Since Engineer has no control over the cost of labor, materials, or equipment, or over contractor's(s') methods of determining prices, or over competitive bidding or market conditions, the estimate of construction cost and schedule provided for herein is to be made on the basis of Engineer's experience and qualifications and represents Engineer's best judgment as a professional engineer familiar with the construction industry, but Engineer cannot and does not guarantee that the bids or the Project construction cost or schedule will not vary from the opinion of probable construction cost and schedule prepared by Engineer.
- S. TAX EXEMPT: City and its agencies are exempt from State and local sales taxes. Sites of all transactions derived from this Agreement shall be deemed to have been accomplished within the State of Missouri.
- T. SAFETY: In the performance of its services, Engineer shall comply with the applicable provisions of the Federal Occupational Safety and Health Act, as well as any pertinent Federal, State and/or local safety or environmental codes.
- U. ANTI-DISCRIMINATION CLAUSE: Engineer and its agents, employees, or subcontractors shall not in any way, directly or indirectly, discriminate against any person because of age, race, color, handicap, sex, national origin, or religious creed.
- V. DELAY IN PERFORMANCE: Neither City nor Engineer shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the nonperforming party. For purposes of this Agreement, such circumstances include, but are not limited to, abnormal weather conditions, floods, earthquakes, fire, epidemics, war, riots, and other civil disturbances, strikes, lockouts, work slowdowns, and other labor disturbances, sabotage, judicial restraint, and delay in or inability to procure permits, licenses, or authorizations from any local, State, or Federal agency for any of the supplies, materials, accesses, or services required to be provided by either City or Engineer under this Agreement. Engineer and City shall be granted a reasonable extension of time for any delay in its performance caused by any such circumstances. Should such circumstances occur, the nonperforming party shall within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of the Agreement.
- W. NO THIRD-PARTY RIGHTS: The services provided for in this Agreement are for the sole use and benefit of City and Engineer. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than City and Engineer.
- X. NOTICE: Whenever any notice is required by this Agreement to be made, given or transmitted to any party, it shall be enclosed in an envelope with sufficient postage

attached to ensure delivery and deposited in the United States Mail, first class, with notices to City addressed to:

City Engineer City of Lee's Summit 220 SE Green Street Lee's Summit, MO 64063 Director of Public Works City of Lee's Summit 220 SE Green Street Lee's Summit, MO 64063

and notices to Engineer shall be addressed to:

Kansas City Testing & Engineering 1308 Adams Street Kansas City, KS 66103

or such place as either party shall designate by written notice to the other. Said notices may also be personally hand delivered by each party to the other, at the respective addresses listed above. If hand delivered, the date of actual completion of delivery shall be considered the date of receipt. If mailed, the notice shall be considered received the third day after the date of postage.

ARTICLE VIII ALL OTHER TERMS REMAIN IN EFFECT

Reserved.

THIS AGREEMENT shall be binding on the parties thereto only after it has been duly executed and approved by City and Engineer.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed on the ____ day of _____, 20___.

CITY OF LEE'S SUMMIT

Stephen A. Arbo, City Manager

APPROVED AS TO FORM:

Office of the City Attorney

ENGINEER:

BY:	
TITLE:	

ATTEST:



Unit Rate Schedule

City of Lee's Summit, Missouri

GEOTECHNICAL ENGINEERING, MATERIALS TESTING AND INSPECTION SERVICES YEARLY CONTRACT

FY 2017

1308 Adams Street I Kansas City, Kansas 66103 I 913.321.8100 I kctesting.com

KANSAS CITY TESTING & ENGINEERING, LLC

1308 Adams Street | Kansas City, KS 66103 | (913) 321-8100 | kctesting.com

UNIT RATES - LEE'S SUMMIT, MISSOURI ANNUAL CONTRACT

Effective For FY 2017 Contract

Construction Materials Testing Field Services

		7
Senior Technician (Special Inspection or MoDOT)		\$52.00/hr
Technician Concrete, Soil and Asphalt Testing		\$48.00/hr
Structural Steel Technician		\$85.00/hr
CWI		\$90.00/hr
Nuclear Density Gauge	-	\$25.00/day *
2-man Coring Crew		\$100.00/hr
Field Engineer/Geologist		\$85.00/hr
Project Manager (by request only)		\$95.00/hr
Senior Engineer P.E. (by request only)		\$125.00/hr
Vehicle Charge (within Lee's Summit)		\$30.00
Vehicle Charge (outside Lee's Summit)		.65/mile
Floor Slab RH Testing - ICRI Certified	5 probes or fewer	\$150/ea
Floor Slab RH Testing - ICRI Certified	More than 5 probes	*
CaCL Vapor Emission Testing Kits/with pH		\$55.00/ea
CaCL Vapor Emission Testing - ICRI Certified Tech		\$52.00/hr
Gmax Athletic Field Turf Testing	per field/per testing episode	\$575.00/ea
Project Management, Supervision, Reporting	Percentage of other fees	12%**
	8	
* Available on request. Cost per probe less at higher v		
** Applies to field and laboratory work not related to ge	otechnical reports	



1308 Adams Street | Kansas City, KS 66103 | (913) 321-8100 | kctesting.com

UNIT RATES - LEE'S SUMMIT, MISSOURI ANNUAL CONTRACT

Effective September 1, 2016 to August 31, 2017

Geotechnical Services

Senior Engineer	hour	\$135.00
Project Engineer	hour	\$95.00
Staff/Field Engineer	hour	\$85.00
Senior Geologist	hour	\$100.00
Project Geologist	hour	\$75.00
Staff/Field Geologist	hour	\$60.00

Mobilization of Drilling Equipment (w/in 100 miles RT)	lump sum	\$400.00
Drill Crew and Rig Standby	hour	\$150.00
Boring Layout	hour	\$100.00
Drill Crew Per Diem	each	\$200.00
Soil Drilling and SPT Sampling - 0' to 20'	foot	\$11.00
Soil Drilling and SPT Sampling - 21' to 40"	foot	\$12.00
Soil Drilling and SPT Sampling - 41' to 60'	foot	\$14.00
Soil Drilling and SPT Sampling - 61' to 80'	foot	\$17.00
Soil Drilling and SPT Sampling - 81' to 100'	foot	\$21.00
Shelby tube sample	each	\$12.00
Auger Probe - no sampling - 0' to 30'	foot	\$9.00
Auger Probe - no sampling - 31' to 60'	foot	\$10.00
Auger Probe - no sampling - 61' to 90'	foot	\$12.00
Pavement Core and Patch	each	\$75.00
Mud Rotary Drilling Set Up	each	\$85.00
Mud Rotary Drilling - 0' to 20'	foot	\$13.00
Mud Rotary Drilling - 21' to 40'	foot	\$15.00
Mud Rotary Drilling - 41' to 60'	foot	\$17.00
Mud Rotary Drilling - 61' to 80'	foot	\$20.00
Mud Rotary Drilling - 81' to 100'	foot	\$23.00
Rock Coring Set Up	each	\$85.00
Rock Coring - NQ size - 0' to 20'	foot	\$34.00
Rock Coring - NQ size - 21' to 40'	foot	\$36.00
Rock Coring - NQ size - 41' to 60'	foot	\$38.00
Rock Coring - NQ size - 61' to 80'	foot	\$42.00
Rock Coring - NQ size - 81' to 100'	foot	\$46.00
Grout boreholes	foot	\$6.00
Temporary Piezometer	each / foot	\$150 / \$13
Settlement Monitoring Device Installation	each / foot	\$250 / \$10
Field Resistivity (Werner 4-Pin Method)	location	\$200.00
Field Vane Shear Testing	each	\$50.00



1308 Adams Street | Kansas City, KS 66103 | (913) 321-8100 | kctesting.com

UNIT RATES - LEE'S SUMMIT, MISSOURI ANNUAL CONTRACT

Effective for FY 2017 Contract

Construction Materials Testing Laboratory Services

Concrete and Masonry		
Compressive Strength of 4" x 8" Cylinder	ASTM C39	\$15.00/ea
Compressive Strength of Concrete Cores	ASTM C42	\$26.00/ea
Compressive Strength of Grout 3" x 6" prism	ASTM C1019	\$26.00/ea
Compressive Strength of 2" Cube	ASTM C270	\$16.00/ea
Compressive Strength and Dimensions of CMU	ASTM C140	\$52.00/ea
Net Area, Unit Weight and Absorption of CMU	ASTM C140	\$52.00/ea
Compressive Strength of CMU Prisms (ungrouted)	ASTM C1314	\$75.00/ea
Freeze Thaw of Limestone Prisms	Cutting not included	\$200.00/test
Freeze/Thaw	ASTM C666	\$2500.00/set
Soil and Aggregate		\$125.00/hr
Standard Proctor Test	ASTM D 698	\$180.00/ea
Atterberg Limits	ASTM D4318	\$85.00/ea
Standard Proctor - Fly Ash or Lime Treated (Delay)	ASTM D 698	\$200.00/ea
Relative Density	ASTM D4253/4254	\$200.00/ea
Grain Size Analysis (Through #200)	ASTM C136	\$85.00/ea
Grain Size Analysis - Hydrometer and Sieve	ASTM D422	\$200.00/ea
LA Abrasion	ASTM C131	\$150.00/ea
Soundness	ASTM C88	\$200.00/ea
Light Weight Particles	ASTM C123	\$85.00/ea
Flat and Elongated	ASTM D4791	\$85.00/ea
ASR Testing	ASTM C1260/1567	\$750.00/ea
#200 Wash	ASTM D1140 or C117	\$15.00/ea
Asphaltic Concrete	а. 19 ж. н.	
Core Density	ASTM D2726	\$26.00/ea
Binder Content and Gradation	ASTM D6307	\$160.00/ea
Marshall Density, Stability, Flow	ASTM D1559	\$140.00
Theoretical Max Density	Rice	



1308 Adams Street | Kansas City, KS 66103 | (913) 321-8100 | kctesting.com

UNIT RATES - LEE'S SUMMIT, MISSOURI ANNUAL CONTRACT

Effective for FY 2017 Contract

Laboratory Testing - Soil Mechanics

Moisture Content	ASTM D 2216	\$5.00
Moisture Content & Bulk Density	ASTM D 2216 & D 2937	\$10.00
Atterberg Limits (3 points)	ASTM D 4318	\$85.00
Shrinkage Limit	ASTM D 4318	\$65.00
Specific Gravity - soil	ASTM D 4943	\$50.00
Grain Size Analysis, 3-inch to <no. 200="" sieve<="" td=""><td>ASTM D 6913</td><td>\$85.00</td></no.>	ASTM D 6913	\$85.00
Grain Size Analysis, 3/4-inch to <no. 200="" sieve<="" td=""><td>ASTM D 6913</td><td>\$65.00</td></no.>	ASTM D 6913	\$65.00
Grain Size Analysis, % fines, <no. 200="" only<="" sieve="" td=""><td>ASTM 1140</td><td>\$50.00</td></no.>	ASTM 1140	\$50.00
Hydrometer Analysis	ASTM D 422	\$200.00
Organic Matter Content	ASTM D 2974	\$50.00
Hydraulic Conductivity (soil) - Falling Head	ASTM D 5084	\$350.00
Hydraulic Conductivity (soil) - Constant Head	ASTM D 2434	\$400.00
Consolidation Test	ASTM D 2435	\$325.00
Swell/Settlement Consolidation Test, Method A	ASTM D 4546	\$400.00
Swell/Settlement Consolidation Test, Method B	ASTM D 4546	\$100.00
Swell/Settlement Consolidation Test, Method C	ASTM D 4546	\$425.00
Denver Swell (modified Chen Method)	Pre-2008 D 4546 Method B	\$125.00
Unconfined Compressive Strength Test-soil	ASTM D 2166	\$65.00
Unconfined Compressive Strength Test-rock (peak)	ASTM D 7012, Method C	\$85.00
Triaxial Shear - Unconsolidated Undrained (per point)	ASTM D 2850	\$175.00
Triaxial Shear - Consolidated Undrained (per point)	ASTM D 4767	\$400.00
Triaxial Shear - Consolidated Drained (per point)	USACOE Method	\$600.00



Packet Information

File #: TMP-0230, Version: 1

AN ORDINANCE AUTHORIZING EXECUTION OF A MUNICIPAL AGREEMENT BY AND BETWEEN THE CITY OF LEE'S SUMMIT, MISSOURI AND THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES RELATED TO THE PUBLIC IMPROVEMENT PROJECT DESIGNATED AS ROUTE COLBERN ROAD, JOB J4S3131, WITHIN THE CITY LIMITS OF LEE'S SUMMIT, MISSOURI.

Issue/Request:

AN ORDINANCE AUTHORIZING EXECUTION OF A MUNICIPAL AGREEMENT BY AND BETWEEN THE CITY OF LEE'S SUMMIT, MISSOURI AND THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES RELATED TO THE PUBLIC IMPROVEMENT PROJECT DESIGNATED AS ROUTE COLBERN ROAD, JOB J4S3131, WITHIN THE CITY LIMITS OF LEE'S SUMMIT, MISSOURI.

Key Issues:

MoDOT will be performing bridge rehabilitation and sidewalk improvements along Colbern Road over I-470/M-291.

This project is scheduled to begin construction in 2017.

The project work will be done in both City and MoDOT rights-of-ways.

An agreement between the City and MoDOT is necessary for MoDOT to perform all the work associated with this project.

Proposed Committee Motion:

I move to recommend to the City Council approval of AN ORDINANCE AUTHORIZING EXECUTION OF A MUNICIPAL AGREEMENT BY AND BETWEEN THE CITY OF LEE'S SUMMIT, MISSOURI AND THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES RELATED TO THE PUBLIC IMPROVEMENT PROJECT DESIGNATED AS ROUTE COLBERN ROAD, JOB J4S3131, WITHIN THE CITY LIMITS OF LEE'S SUMMIT, MISSOURI.

Background:

The Colbern Road bridges over I470/M291 are scheduled for rehabilitation work by MoDOT. Sidewalk improvements (10' wide shared-use path consistent with the City's Greenway Master Plan and Bicycle Transportation Plan) are included with the bridge rehabilitation work.

Impact/Analysis:

This is a typical municipal agreement between the City and MoDOT with regard to MoDOT improvements.

File #: TMP-0230, Version: 1

This agreement will allow MoDOT to work on City right-of-way and take temporary ownership of City right-ofway for the construction of improvements. The City is required to retain its existing interest in City right-ofway upon completion of the project.

Other Information/Unique Characteristics:

Presenter: Michael Park, City Traffic Engineer

Staff recommends approval of AN ORDINANCE AUTHORIZING EXECUTION OF A MUNICIPAL AGREEMENT BY AND BETWEEN THE CITY OF LEE'S SUMMIT, MISSOURI AND THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES RELATED TO THE PUBLIC IMPROVEMENT PROJECT DESIGNATED AS ROUTE COLBERN ROAD, JOB J4S3131, WITHIN THE CITY LIMITS OF LEE'S SUMMIT, MISSOURI. CCO Form: DE11 Approved: 04/93 (CEH) Revised: 09/15 (AR) Modified: Municipal Agreement Route: Colbern Rd County: Jackson Job No.: J4S3131

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION MUNICIPAL AGREEMENT

THIS AGREEMENT is entered into by the Missouri Highways and Transportation Commission (hereinafter, "Commission") and the City of Lee's Summit, Missouri, a municipal corporation (hereinafter, "City").

WITNESSETH:

NOW, THEREFORE, in consideration of the mutual covenants, promises and representations contained herein, the parties agree as follows:

(1) <u>IMPROVEMENT DESIGNATION</u>: The public improvement designated as Route Colbern Rd, Jackson County, Job No. J4S3131 shall consist of bridge rehabilitation and sidewalk improvements over I-470 and MO 291.

(2) <u>IMPROVEMENT WITHIN CITY</u>: The improvement within the City is located as follows:

Beginning on Colbern Rd at approximately Station 27+69.98 and ending at approximately 52+14.48. The length of the improvements within the city is 0.463 miles.

(3) <u>EXTENT OF AGREEMENT</u>: This Agreement shall apply only to the portion of the improvement lying within the city limits as they exist on the date this Agreement is executed by the City.

(4) <u>LOCATION</u>: The general location of the public improvement is shown on an attached sketch marked "Exhibit A" and made a part of this Agreement. The detailed location of the improvement is shown on the plans prepared by the Commission for the above-designated route and project.

(5) <u>PURPOSE</u>: It is the intent of this Agreement to outline the parties' responsibilities with respect to the construction and maintenance of those improvements to the State Highway System located within the City limits described in paragraphs (1) and (2) above and designated as Commission Job No. J4S3131.

(6) <u>RIGHT-OF-WAY USE</u>: The City grants the right to use the right-of-way of public roads, streets, and alleys as necessary for construction and maintenance of said public improvement.

(7) <u>CLOSE AND VACATE</u>: The City shall temporarily close and vacate all streets or roads, or parts thereof, which may be necessary to permit the construction of the project in accordance with the detailed plans.

(8) <u>RIGHT-OF-WAY ACQUISITION</u>: No acquisition of additional right-of-way is anticipated in connection with Job No. J4S3131 or contemplated by this Agreement.

(9) <u>UTILITY RELOCATION</u>:

(A) It is understood and agreed by the parties to this Agreement that no city-owned utility facilities will require relocation or adjustment in connection with this improvement, but that should utility facilities be discovered at any time during development or construction of this improvement, relocation or adjustment of the same will be done and performed under a supplemental agreement covering the subject, and in accordance with Commission policy then in effect on division of costs for adjustment of utility facilities.

(B) The City agrees that any installation, removal, relocation, maintenance, or repair of public or private utilities involving work within highway right-ofway included in this project shall be done only in accordance with the general rules and regulations of the Commission and after a permit for the particular work has been obtained from the Commission's district engineer or his authorized representative. Similarly, the City will allow no work on the highway right-of-way involving excavation or alteration in any manner of the highway as constructed, including but not limited to driveway connections, except in accordance with the rules and regulations of the Commission's district engineer or his authorized representative. The City shall take whatever actions that are necessary to assure compliance with this Subsection.

(10) <u>LIGHTING:</u> The Commission will, at its cost and expense, install, operate, and maintain basic highway intersection or interchange lighting at warranted locations on the improvement. The construction, installation, and maintenance of any other or further lighting system on the public improvement covered by this Agreement shall be only in accordance with the Commission's policy on highway lighting in effect, and to the extent deemed warranted by the Commission, at the time of any such installation. No lighting system shall be installed or maintained by the City on the improvement without approval of the Commission.

(11) <u>TRAFFIC CONTROL DEVICES</u>: The installation, operation and maintenance of all traffic signals, pavement markings, signs, and devices on the improvement, including those between the highway and intersecting streets shall be under the exclusive jurisdiction and at the cost of the Commission. The City shall not install, operate, or maintain any traffic signals, signs or other traffic control devices on the highway or on streets and highways at any point where they intersect this highway without approval of the Commission.

(12) <u>DRAINAGE</u>: The Commission will construct drainage facilities along the improvement and may use any existing storm and surface water drainage facilities now in existence in the area. The City shall be responsible for receiving and disposing of storm and surface water discharged from those drainage facilities which the Commission constructs within the limits of highway right-of-way to the extent of the City's authority and control of the storm sewer facilities or natural drainage involved.

(13) <u>PERMITS</u>: The Commission shall secure any necessary approvals or permits from the Surface Transportation Board, the Public Service Commission of Missouri, or any other state or federal regulating authority required to permit the construction and maintenance of the highway.

(14) <u>COMMENCEMENT OF WORK</u>: The Commission shall construct the highway in accordance with final detailed plans approved by the Federal Highway Administration (or as they may be changed from time to time by the Commission with the approval of the FHWA) at such time as federal and state funds are allocated to the public improvement in an amount sufficient to pay for the federal and state government's proportionate share of construction costs. The obligation of the Commission toward the actual construction of the public improvement shall be dependent upon the completion of plans in time to obligate federal funds for such construction, upon approval of the plans by the FHWA, upon the award by the Commission of the contract for the construction, and upon the approval of the award by the FHWA.

(15) <u>MAINTENANCE</u>:

(A) Except as provided in this Agreement, upon completion of the public improvement, the Commission will maintain all portions of the improvement within the Commission owned right-of-way. Maintenance by the Commission shall not in any case include maintenance or repair of sidewalks whether new or used in place, water supply lines, sanitary or storm sewers (except those storm sewers constructed by the Commission to drain the highway), city-owned utilities within the right-of-way or the removal of snow other than the machine or chemical removal from the traveled portion of the highway.

(B) When it is necessary to revise or adjust city streets, the right-of-way acquired for these adjustments and connections will be deeded to the City.

(C) The City shall inspect and maintain the sidewalks constructed by this project, excluding sidewalks located on the bridge structures, in a condition reasonably safe to the public and, to the extent allowed by law, shall indemnify and hold the Commission harmless from any claims arising from the construction and maintenance of said sidewalks.

- (16) <u>ACCEPTED WITHIN HIGHWAY SYSTEM</u>: Effective upon execution of
 - 3

this Agreement, the Commission temporarily accepts the portion of the City street system described in this Agreement as part of the State Highway System for the purposes of this project. However, during the construction period contemplated in this Agreement:

(A) The Commission will assume no police or traffic control functions not obligatory upon Commission immediately prior to the execution of this Agreement, and

(B) The City shall perform or cause to be performed normal maintenance on the project site.

(17) <u>CITY TO MAINTAIN</u>: Upon completion of construction of this improvement, the City shall accept control and maintenance of the improved City street that was temporarily accepted as part of the State Highway System for the purposes of this project pursuant to paragraph (16) above and shall thereafter keep, control, and maintain the same as, and for all purposes, a part of the City street system at its own cost and expense and at no cost and expense whatsoever to the Commission. All obligations of the Commission with respect to the City street system under this Agreement shall cease upon completion of the improvement.

(18) <u>POLICE POWERS</u>: It is the intent of the parties to this Agreement that the City shall retain its police powers with respect to the regulation of traffic upon the improvement contemplated. However, the City will enact, keep in force, and enforce only such ordinances relating to traffic movement and parking restrictions as may be approved by the Commission and as are not in conflict with any regulations for federal aid. The Commission shall not arbitrarily withhold approval of reasonable traffic regulations, signs, and markings which will permit the movement of traffic in accordance with accepted traffic regulation practices.

(19) <u>RESTRICTION OF PARKING</u>: Since the improvement is being designed and constructed to accommodate a maximum amount of traffic with a minimum amount of right-of-way, the City shall take whatever actions that are necessary to prevent parking upon the highway or any part of the area of the highway right-of-way within the limits of the improvement.

(20) <u>OUTDOOR ADVERTISING</u>: No billboards or other advertising signs or devices or vending or sale of merchandise will be permitted within the right-of-way limits of the project and the City shall take whatever actions that are necessary to enforce this Section.

(21) <u>WITHHOLDING OF FUNDS</u>: In the event that the City fails, neglects, or refuses to enact, keep in force or enforce ordinances specified or enacts ordinances contrary to the provisions in this Agreement, or in any other manner fails, neglects or refuses to perform any of the obligations assumed by it under this Agreement, the Commission may, after serving written request upon the City for compliance and the

City's failure to comply, withhold the expenditure of further funds for maintenance, improvement, construction, or reconstruction of the state highway system in the City.

(22) <u>FEDERAL HIGHWAY ADMINISTRATION</u>: This Agreement is entered into subject to approval by the Federal Highway Administration, and is further subject to the availability of federal and state funds for this construction.

(23) <u>INDEMNIFICATION</u>:

(A) To the extent allowed or imposed by law, the City shall defend, indemnify and hold harmless the Commission, including its members and department employees, from any claim or liability whether based on a claim for damages to real or personal property or to a person for any matter relating to or arising out of the City's wrongful or negligent performance of its obligations under this Agreement.

(B) The City will require any contractor procured by the City to work under this Agreement:

(1) To obtain a no cost permit from the Commission's district engineer prior to working on the Commission's right-of-way, which shall be signed by an authorized contractor representative (a permit from the Commission's district engineer will not be required for work outside of the Commission's right-of-way); and

(2) To carry commercial general liability insurance and commercial automobile liability insurance from a company authorized to issue insurance in Missouri, and to name the Commission, and the Missouri Department of Transportation and its employees, as additional named insureds in amounts sufficient to cover the sovereign immunity limits for Missouri public entities (\$500,000 per claimant and \$3,000,000 per occurrence) as calculated by the Missouri Department of Insurance, Financial Institutions and Professional Registration, and published annually in the Missouri Register pursuant to Section 537.610, RSMo.

(C) In no event shall the language of this Agreement constitute or be construed as a waiver or limitation for either party's rights or defenses with regard to each party's applicable sovereign, governmental, or official immunities and protections as provided by federal and state constitution or law.

(24) <u>AMENDMENTS</u>: Any change in this Agreement, whether by modification or supplementation, must be accomplished by a formal contract amendment approved and signed by representatives of the City and Commission, respectively, each of whom being duly authorized to execute the contract amendment on behalf of the City and Commission, respectively.

(25) <u>COMMISSION REPRESENTATIVE</u>: The Commission's District Engineer, Kansas City District is designated as the Commission's representative for the purpose of administering the provisions of this Agreement. The Commission's representative
may designate by written notice other persons having the authority to act on behalf of the Commission in furtherance of the performance of this Agreement.

(26) <u>CITY REPRESENTATIVE:</u> The City's Director of Public Works is designated as the City's representative for the purpose of administering the provisions of this Agreement. The City's representative may designate by written notice other persons having the authority to act on behalf of the City in furtherance of the performance of this Agreement.

(27) <u>NOTICES</u>: Any notice or other communication required or permitted to be given hereunder shall be in writing and shall be deemed given three (3) days after delivery by United States mail, regular mail postage prepaid, or upon receipt by personal or facsimile delivery, addressed as follows:

(A) To the City:

Dena Mezger Director of Public Works City of Lee's Summit 220 SE Green St Lee's Summit, MO 64063 (816) 969-1800

(B) To the Commission:

Dan Niec District Engineer, Kansas City District Missouri Department of Transportation 600 NE Colbern Rd Lee's Summit, MO 64086 (816) 607-2281

or to such other place as the parties may designate in accordance with this Agreement. To be valid, facsimile delivery shall be followed by delivery of the original document, or a clear and legible copy thereof, within three (3) business days of the date of facsimile transmission of that document.

(28) <u>ASSIGNMENT</u>: The City shall not assign, transfer or delegate any interest in this Agreement without the prior written consent of the Commission.

(29) <u>LAW OF MISSOURI TO GOVERN</u>: This Agreement shall be construed according to the laws of the State of Missouri. The City shall comply with all local, state and federal laws and regulations relating to the performance of the contract.

(30) <u>VENUE</u>: It is agreed by the parties that any action at law, suit in equity, or other judicial proceeding to enforce or construe this Agreement, or regarding its alleged

breach, shall be instituted only in the Circuit Court of Cole County, Missouri.

(31) <u>SOLE BENEFICIARY</u>: This Agreement is made for the sole benefit of the parties hereto and nothing in this Agreement shall be construed to give any rights or benefits to anyone other than the Commission and the City.

(32) <u>AUTHORITY TO EXECUTE</u>: The signers of this Agreement warrant that they are acting officially and properly on behalf of their respective institutions and have been duly authorized, directed and empowered to execute this Agreement.

(33) <u>SECTION HEADINGS</u>: All section headings contained in this Agreement are for the convenience of reference only and are not intended to define or limit the scope of any provision of this Agreement.

[remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties have entered into this Agreement on the date last written below.

Executed by the City this day of	, 2016.
Executed by the Commission this	_ day of, 2016.
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION	CITY OF LEE'S SUMMIT
Ву:	Ву:
Title:	Title:
ATTEST:	ATTEST:
Secretary to the Commission	By: Title:
APPROVED AS TO FORM:	APPROVED AS TO FORM: By:
Commission Counsel	Title:
	Ordinance Number

AN ORDINANCE AUTHORIZING EXECUTION OF A MUNICIPAL AGREEMENT BY AND BETWEEN THE CITY OF LEE'S SUMMIT, MISSOURI AND THE MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES RELATED TO THE PUBLIC IMPROVEMENT PROJECT DESIGNATED AS ROUTE COLBERN ROAD, JOB J4S3131, WITHIN THE CITY LIMITS OF LEE'S SUMMIT, MISSOURI..

WHEREAS, the Missouri Department of Transportation (MoDOT) will be rehabilitating the bridge(s) along Colbern Road over Route 291 and Interstate 470 and improving sidewalks as part of the bridge(s) rehabilitation project; and,

WHEREAS, this project will begin construction in 2017; and,

WHEREAS, an agreement between the City of Lee's Summit ("City") and the Missouri Highways and Transportation Commission is necessary for the construction and maintenance of these improvements; and,

WHEREAS, The City roads where impacted by the MoDOT project will temporarily become a part of the state system for the duration of construction then will be returned to the City upon completion.

NOW THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LEE'S SUMMIT. MISSOURI, as follows:

SECTION 1. That the City Council of the City of Lee's Summit hereby approves and authorizes the execution, by the Mayor, of a municipal agreement by and between the City of Lee's Summit, Missouri and the Missouri Highways and Transportation Commission for construction and maintenance activities related to the Colbern Road bridge(s) rehabilitation and sidewalk improvements at Route 291 and Interstate 470 within the city limits of Lee's Summit, Missouri, which is attached hereto and incorporated by reference as if fully set forth herein.

SECTION 2. That this Ordinance shall be in full force and effect from and after the date of its passage and adoption, and approval by the Mayor.

PASSED by the City Council of the City of Lee's Summit, Missouri, this _____ day of _____, 2016.

Mayor Randall L. Rhoads

ATTEST:

City Clerk Denise R. Chisum

APPROVED by the Mayor of said city this _____day of _____, 2016.

Mayor Randall L. Rhoads

ATTEST:

City Clerk Denise R. Chisum

APPROVED AS TO FORM:

Brian Head, City Attorney



Packet Information

File #: TMP-0227, Version: 2

AN ORDINANCE APPROVING CHANGE ORDER #5 TO THE CONTRACT WITH MIDWEST HEAVY CONSTRUCTION FOR THE JEFFERSON STREET IMPROVEMENTS PROJECT, AN INCREASE OF 208 CALENDAR DAYS FOR A TOTAL OF 708 CALENDAR DAYS TO REACH SUBSTANTIAL COMPLETION AND 738 CALENDAR DAY TO REACH FINAL COMPLETION.

Issue/Request:

AN ORDINANCE APPROVING CHANGE ORDER #5 TO THE CONTRACT WITH MIDWEST HEAVY CONSTRUCTION FOR THE JEFFERSON STREET IMPROVEMENTS PROJECT, AN INCREASE OF 208 CALENDAR DAYS FOR A TOTAL OF 708 CALENDAR DAYS TO REACH SUBSTANTIAL COMPLETION AND 738 CALENDAR DAY TO REACH FINAL COMPLETION.

Key Issues:

Utility Delays:

- As a result of the unidentified MGE gas main, the contractor was unable to construct the Scherer Road connection between Jefferson Street and Market. This impacted the critical path for constructing Jefferson Street, as the Scherer Road connection to Market was required to handle traffic during construction.
- The MGE gas main was discovered on August 1, 2015 and the contractor was able to return to work on November 2, 2015. A loss of 93 calendar days.
- To account for the seasonal impact of the delay, MoDOT's weighted time table was used to determine the equitable adjustment of calendar days. Following this process, 170 calendar days are being added to the contract.

Stuart Road Box Culvert Replacement:

• The removal and replacement of the Stuart Road box culvert was approved in Change Order number 4. In addition to the cost associated with this change, 38 calendar days are being provided for this additional work.

Proposed Committee Motion:

I move to recommend to city council approval of an Ordinance approving change order #5 to the contract with Midwest Heavy Construction, L.L.C. for the Jefferson Street improvements project, an increase of 208 calendar days for a total of 708 calendar days to reach substantial completion and 738 calendar days to reach final completion.

Background:

170 calendar days are being added for delays associated with the MGE gas utility not being relocated in time for the contractor to complete all Phase 1 work. The gas main was found to be in direct conflict with the intersection work at Jefferson and Scherer as well as the construction of the Scherer Road connection to M291. Not being able to construct the Scherer Road connection, as the flow of traffic could

File #: TMP-0227, Version: 2

not be adequately maintained without it. The conflict was discovered and the contractor essentially shut down on August 1st, 2015. The conflict was resolved on October 30, 2015 and the contractor was able to resume work on November 2, 2015. As a result, the contractor lost 93 calendar days of work. With the construction restarting later in the fall season, the contractor essentially switched more productive late summer calendar days for less productive winter days. To fairly assess the seasonal impact of this delay, the Missouri Department of Transportation's, MoDOT, Weighted Time Table for Contracts with No Time Exclusion was used to arrive at an equitable adjustment to the contract calendar days. Following the procedure outlined in MoDOT's Engineering Policy Guide, it was determined that 170 calendar days should be added to the contract. Additionally, 38 calendar days are being added to the contract to construct the Stuart Road Box Culvert, which was approved with Change Order #4. As a result of these two changes, 208 calendar days are being added to this contract. This results in a revised substantial completion date of June 14th, 2017.

Impact/Analysis: [Enter text here]

<u>Timeline:</u> Start: ____ Finish: ____

Other Information/Unique Characteristics: [Enter text here]

Presenter: Michael Anderson, Construction Manager

<u>Recommendation</u>: Staff recommends approval of an Ordinance approving Change Order #5 to the contract with Midwest Heavy Construction for the Jefferson Street improvements project, an increase of 208 calendar days for a total of 708 calendar days to reach substantial completion and 738 calendar days to reach final completion.

<u>Committee Recommendation:</u> [Enter Committee Recommendation text Here]

BILL NO. 16-

AN ORDINANCE APPROVING CHANGE ORDER #5 TO THE CONTRACT WITH MIDWEST HEAVY CONSTRUCTION, L.L.C. FOR THE JEFFERSON STREET IMPROVEMENTS PROJECT, AN INCREASE OF 208 CALENDAR DAYS FOR A TOTAL OF 708 CALENDAR DAYS TO REACH SUBSTANTIAL COMPLETION AND 738 CALENDAR DAYS TO REACH FINAL COMPLETION.

WHEREAS, the City of Lee's Summit, Missouri ("City") has previously entered into a contract with Midwest Heavy Construction L.L.C., for the Jefferson Street Improvements Project, being undertaken by the City's Public Works Department; and,

WHEREAS, a fifth change order to the contract with Midwest Heavy Construction L.L.C. is necessary; and,

WHEREAS, the major item included in change order no. 5 is the addition of 208 calendar days.

NOW THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LEE'S SUMMIT. MISSOURI, as follows:

SECTION 1. That the City Council of the City of Lee's Summit hereby approves change order 5 to the contract with Midwest Heavy Construction L.L.C. for the Jefferson Street Improvements Project, bid no. 11003-C, which is attached hereto and incorporated by reference as if fully set forth herein, for an increase of 208 calendar days for a total of 708 calendar days to reach substantial completion and 738 calendar days to reach final completion.

SECTION 2. That this Ordinance shall be in full force and effect from and after the date of its passage and adoption, and approval by the Mayor.

PASSED by the City Council of the City of Lee's Summit, Missouri, this _____ day of _____, 2016.

ATTEST:

Mayor Randall L. Rhoads

City Clerk Denise R. Chisum

APPROVED by the Mayor of said city this _____day of _____, 2016.

ATTEST:

Mayor Randall L. Rhoads

City Clerk Denise R. Chisum

APPROVED AS TO FORM:

City Attorney Brian W. Head

Change Order

No. 5

Date of Issuance: August 16, 2016		Effective Date:	August 16, 2016			
Project: Jefferson Street Improvem	ents Owner: City of Le	e's Summit, MO	Owner's Contract No.: 11003-C			
Contract: Jefferson Street Improven	nents		Date of Contract: July 6, 2015			
Contractor: MidWest Heavy Constru	ction		Engineer's Project No.:			
17001 291 Hwy, Pleasan	t Hill, MO 64080					
The Contract Documents are modified	l as follows upon exec	ution of this Change Orde	r:			
Description: Refer to Reasons for C (Attached).	hange and Change	Spreadsheet				
Attachments: (List documents supportin	g change):					
Reasons for Change						
Change Spreadsheet						
CHANGE IN CONTRACT PR	ICE:	CHANGE IN (CONTRACT TIMES:			
CHANGE IN CONTRACT PRICE: Original Contract Price:		Original Contract Times: Working days x Calendar days Substantial completion (days or date): 500 Days (November 17, 2016)				
\$ 6,008,491.59	Rea	Ready for final payment (days or date): <u>Dec. 17th, 2016</u>				
Increase from previously approved Change Orders No. 1 to No. 4 :	No.	ase] [Decrease] from previo NA to No. NA stantial completion (days): _				
\$ 271,681.64	Rea	dy for final payment (days):				
Contract Price prior to this Change Orde		act Times prior to this Chang stantial completion (days or	-			
\$ 6,280163.23	Rea	ady for final payment (days o	r date):			
Increase of this Change Order:		se of this Change Order: stantial completion (days or a	208 days _{date}): <u>June 13th, 2017</u>			
\$ 0.00	Rea	dy for final payment (days o	r date): July 14th, 2017			
Contract Price incorporating this Change		Contract Times with all approved Change Orders: 706 days Substantial completion (days or date): <u>June 13th, 2017</u>				
\$ 6,280,163.23	Rea	dy for final payment (days o	r date): July 14th, 2017			
RECOMMENDED:	ACCEPTED:	A	CCEPTED:			
Ву:	Ву:	Ву	r			
Engineer (Authorized Signature)	Owner (Author	rized Signature)	Contractor (Authorized Signature)			
Date:	Date:	Da	ate:			
Approved by Funding Agency (if applicable):		Da	ate:			
EJCDC No. C-941 (2002 Edition)						

Prepared by the Engineers' Joint Contract Documents Committee and endorsed by the Associated General Contractors of America and the Construction Specifications Institute.

Jefferson St. Improvements Decker Street extension BID No. 11003-C

Change Order No. 5 Reason for Change:

This change order is adding 170 calendar days for delays associated with the MGE gas utility not being relocated in time for the contractor to complete all Phase 1 work. The gas main was found to be in direct conflict with the intersection work at Jefferson and Scherer as well as the construction of the Scherer Road connection to M291. Not being able to construct the Scherer Road connection affected the critical path of the Jefferson Street construction, as the flow of traffic could not be adequately maintained without it.

The conflict was discovered and the contractor essentially shut down on August 1st, 2015. The conflict was resolved on October 30, 2015 and the contractor was able to resume work on November 2, 2015. As a result, the contractor lost 93 calendar days of work.

With the construction restarting later in the fall season, the contractor essentially switched more productive late summer calendar days for less productive winter days. To fairly assess the seasonal impact of this delay, the Missouri Department of Transportation's, MoDOT, Weighted Time Table for Contracts with No Time Exclusion was used to arrive at an equitable adjustment to the contract calendar days. Following the procedure outlined in MoDOT's Engineering Policy Guide, it was determined that 170 calendar days should be added to the contract.

In addition, 38 calendar days is being added to the contract to construct the Stuart Road Box Culvert, which was approved with Change Order #4.

As a result of these two changes, 208 calendar days is being added to this contract. This results in a revised substantial completion date of June 13th, 2017.

This adjustment in calendar days represents complete and final settlement for the MGE utility found to be in conflict.



Packet Information

File #: TMP-0236, Version: 1

AN ORDINANCE APPROVING CHANGE ORDER #1 TO THE CONTRACT WITH PHOENIX CONCRETE AND UNDERGROUND, L.L.C. FOR THE FY2017 CURB REPAIR PROJECT BID NUMBER 40432472, AN INCREASE OF \$90,871.47 FOR A REVISED CONTRACT PRICE OF \$1,171,836.02 AND AN INCREASE OF 14 CALENDAR DAYS FOR A TOTAL OF 104 CALENDAR DAYS TO REACH SUBSTANTIAL COMPLETION.

Key Issues:

The need for continued curb repair has been established throughout the City. The low bid for the FY2017 Curb Repair program is 16% below estimates. The area for change order 1 was the last area removed when putting the FY2017 Curb Repair program together.

Proposed Committee Motion:

I move to recommend to City Council approval of AN ORDINANCE APPROVING CHANGE ORDER #1 TO THE CONTRACT WITH PHOENIX CONCRETE AND UNDERGROUND, L.L.C. FOR THE FY2017 CURB REPAIR PROJECT BID NUMBER 40432472, AN INCREASE OF \$90,871.47 FOR A REVISED CONTRACT PRICE OF \$1,171,836.02 AND AN INCREASE OF 14 CALENDAR DAYS FOR A TOTAL OF 104 CALENDAR DAYS TO REACH SUBSTANTIAL COMPLETION.

Background:

The Project The FY2017 Curb Repair project bids came in 16% under estimates, so the project is about \$500,000 under budget. The area proposed to be added was originally planned to be included in this year's program, but was initially removed due to budget constraints based on the Engineer's estimate. The area is some of the worst rated residential curb in Lee's Summit as illustrated in the attached pictures, and the area is also due for pavement maintenance work. The curb will most likely deteriorate significantly over the winter. In the past, curb in this condition was taken out by street sweeping operations. Therefore it is strongly recommended to proceed with replacing this curb now using funds already allocated for this work in this year's CIP. By accelerating the replacement this year, the work will improve those neighborhoods now instead of later, and allow the streets in this areas to be overlaid next summer instead of waiting until 2018 for resurfacing.

The major items included in change order no. 1 is the price increase of \$90,871.47 and the addition of thirty (14) calendar days to reach substantial completion related to the addition of the additional curb repair areas. This change order will add an additional 3,400 linear feet of curbing, along with replacing 8 sidewalk ramps to comply with Americans with Disabilities Act (ADA). The additional work will increase the contract amount by 16%.

File #: TMP-0236, Version: 1

The Annual Curb Program money comes from the permanent transportation sales tax fund. This year's favorable bid prices significant enough to allow for the curb replacement in the last neighborhood to be removed from this years program and placed in next years program.

<u>Timeline:</u> Start: September 2016 Finish: December 2016

Presenter: Vince Schmoeger, Project Manager

<u>Recommendation</u>: Staff recommends approval of AN ORDINANCE APPROVING CHANGE ORDER #1 TO THE CONTRACT WITH PHOENIX CONCRETE AND UNDERGROUND, L.L.C. FOR THE FY2017 CURB REPAIR PROJECT BID NUMBER 40432472, AN INCREASE OF \$90,871.47 FOR A REVISED CONTRACT PRICE OF \$1,171,836.02 AND AN INCREASE OF 14 CALENDAR DAYS FOR A TOTAL OF 104 CALENDAR DAYS TO REACH SUBSTANTIAL COMPLETION.

<u>Committee Recommendation:</u> [Enter Committee Recommendation text Here]

AN ORDINANCE APPROVING CHANGE ORDER #1 TO THE CONTRACT WITH PHOENIX CONCRETE AND UNDERGROUND, L.L.C. FOR THE FY2017 CURB REPAIR PROJECT BID NUMBER 40432472, AN INCREASE OF \$90,871.47 FOR A REVISED CONTRACT PRICE OF \$1,171,836.02 AND AN INCREASE OF 14 CALENDAR DAYS FOR A TOTAL OF 104 CALENDAR DAYS TO REACH SUBSTANTIAL COMPLETION.

WHEREAS, the City of Lee's Summit, Missouri ("City") has previously entered into a contract with Phoenix Concrete and Underground, L.L.C. for the FY2017 Curb Repair Project (the "Project") being undertaken by the City's Public Works Department; and,

WHEREAS, a change order to the contract with Phoenix Concrete and Underground is necessary; and,

WHEREAS, the need for continued curb repair has been established throughout the City; and,

NOW THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF LEE'S SUMMIT. MISSOURI, as follows:

SECTION 1. That the Change Order #1 to the contract between the City of Lee's Summit, Missouri and Phoenix Concrete and Underground, L.L.C for the FY2017 Curb Repair Program, Bid No. 40432472, with an increase in contract price of \$90,871.47, for a revised contract price of \$1,171,836.02 and an increase of fourteen (14) calendar days for a total of 104 calendar days to reach substantial completion, a true and accurate copy attached hereto as Exhibit A and incorporated by reference as if fully set forth herein, be and the same is hereby approved. The City Manager is hereby authorized to execute the same by and on behalf of the City of Lee's Summit, Missouri.

SECTION 2. That this Ordinance shall be in full force and effect from and after the date of its passage and adoption, and approval by the Mayor.

PASSED by the City Council of the City of Lee's Summit, Missouri, this ____ day of ____, 2016.

Mayor Randall L. Rhoads

ATTEST:

City Clerk Denise R. Chisum

APPROVED by the Mayor of said city this _____day of _____, 2015.

Mayor Randall L. Rhoads

ATTEST:

City Clerk Denise R. Chisum

APPROVED AS TO FORM:

City Attorney Brian W. Head

Change Order

No. <u>1</u>

Date of Issuance:	Effective D	late:				
Contract: FY2017 CURB REPAIR	Owner: City of Lee's Summit	Owner's Project No.: 40432472				
Project: FY2017 CURB REPAIR		Date of Contract:				
Contractor: Phoenix Concrete and Undergroun	d L.L.C.	Engineer's Project No .:				
The Contract Documents are modified as fo	llows upon execution of thi	s Change Order:				
Description: Addition of 1 area to the FY2017 Curb Repair	Program					
Attachments (list documents supporting cha Spread sheet of estimated quantities and map o		repalacement.				
Increase of 8.4%.						
CHANGE IN CONTRACT PRICE:	CHANGE I	N CONTRACT TIMES:				
Original Contract Price:		🗌 Working days 🔀 Calendar days				
\$ <u>1,080,964.55</u>		Substantial completion (days or date): <u>90</u> Ready for final payment (days or date): <u>120</u>				
[Increase] [Decrease] from previously approved Change Orders No to No:	d [Increase] [Decrease] from No:	m previously approved Change Orders				
	Substantial completion ((days):				
\$	Ready for final payment	(days):				
Contract Price prior to this Change Order:	Contract Times prior to th Substantial completion (
\$ <u>1,080,964.55</u>	Ready for final payment					
Increase of this Change Order:	Increase of this Change Or Substantial completion (
\$ <u>90,871.47</u>	Ready for final payment					
Contract Price incorporating this Change Order:	Substantial completion (days or date): <u>104</u>				
\$ <u>1,171,836.02</u>	Ready for final payment	(days or date): <u>134</u>				
RECOMMENDED: ACCH By: By:	EPTED:	ACCEPTED:				
Engineer (Authorized Signature) O Date: 7,7,16 Date:	wner (Authorized Signature)	Contractor (Authorized Signature) Date: 9-7-16				
Approved by Funding Agency (if applicable):		Date:				
E. Prepared by the Engineers Joint Contract Docum	ICDC C-941 Change Order tents Committee and endorsed by the Con Page 1 of 1	nstruction Specifications Institute.				

FY2017 Curb Repair CO-1 Pryor Meadows

				_									
		Curb	Curb LF Ramps EA Sidewalk Driveway										
		Year Built		Α	В	М	SF	Residential SF	Mice	Curb Ś	Bamp/ Sidowalk S		
			\$20.55	\$1,480.06	\$2,327.81	\$1,482.65	\$8.79	\$10.13	Misc.	Curb \$	Ramp/ Sidewalk \$	Driveway \$	Area Total \$
Area 1	Pryor Meadows	2003	3,400	3	0	5	884	136		\$69,870.00	\$19,623.79	\$1,377.68	\$90,871.47
										\$0.00	\$0.00	\$0.00	\$0.00
										\$0.00	\$0.00	\$0.00	\$0.00
										\$0.00	\$0.00	\$0.00	\$0.00
										\$0.00	\$0.00	\$0.00	\$0.00
										\$0.00	\$0.00	\$0.00	\$0.00
			3,400	3	0	5	884	136	0	\$69,870.00	\$19,623.79	\$1,377.68	\$90,871.47

Construction Estimate

Lee's Summit FY2017 Curb Repair





Packet Information

File #: 2016-0555, Version: 1

Continued Discussion of Stormwater Program

Issue/Request:

Continuing discussion of stormwater program goals.

Key Issues:

Proposed goals and objectives of a stormwater program will be discussed as a follow-up to discussions at the September 12 Public Works Committee meeting.

Background:

City Council and PWC have been in discussions concerning the stormwater system and programs to maintain and improve the system since September 2015. There are many challenges from structural integrity to environmental compliance which will have to be addressed.

Presenter: Dena Mezger, Director of Public Works

Stormwater Program Goals as discussed during Sept. 12, 2016 PWC Meeting

	TERM	
	Short (S) or	PRIORITY
GOAL	Long (L)	RANKING
Improve reliability of existing system through increased maintenance including proactive efforts		
1. Dedicated resources		
2. Inspection of system		
3. CMP replacement program		
Expand implementation of regulatory NPDES water quality program including infrastructure		
improvements, public education, and staff training		
Construct capital projects that continue to address problem areas based on priorities		
1. System deficiencies identified by the City's Master Plan that cause		
flooding of homes, businesses, or other structures.		
2. System deficiencies that cause street flooding to the extent that		
access for emergency response vehicles is impeded and/or that		
public safety is protected.		
3. System deficiencies identified by the City's Master Plan that cause		
erosion in open channels that may threaten the stability of existing		
structures.		
4. System deficiencies identified in the City's Master Plan that result		
in damage to private improvements such as landscaping and fencing.		