Staff Assignment: Guy McDonald

In the Matter of the Application of	)	
Community Wireless Communications Filing for Kansas	)	Docket No.
Video Service Authorization.	)	09-CWCZ-976-VSA
	)	
	)	

File Date: June 16, 2009

### KANSAS CORPORATION COMMISSIC. TELECOMMUNICATIONS SECTION

Form VSA IA July 2006 Form must be Typed Form must be Signed

# KANSAS VIDEO SERVICE AUTHORIZATION INITIAL APPLICATION

JUN 1 5 2009

2009.06.16 11:21:48 Kansas Corporation
/S/ Susan K. Duffy Kansas Corporation Commission

Date	e: 8 June 2009	• •••
	olicant's Name: Community Wireless Communications	
Add	dress 1: 4105 W 6th St	Phone: <u>(785)</u> 371-4214
Add	dress 2: Suite A-1	
City	: Lawrence State: KS	Zip: <u>66049</u>
Fed	leral Employer Identification Number (FEIN):	
1.	As an attachment, list company principal officers, titles and addresses.	
2.	As an attachment, list designated company contacts with addresses, phone	numbers and email addresses, responsible for this
	application, ongoing regulatory contacts and consumer complaint matters.	
3.	Standing with Kansas Secretary of State's Office Active & In Good Standing	as of <u>01/09/2006</u>
4.	Date of filing FCC Cable Community Registration form 322: 06/08/2009	
	Community Unit Identification Number (CUID) (Assigned by the FCC): KSO	766
5.	By submitting this application, the applicant agrees to comply with all applic	able federal and state statutes and regulations; and that
	applicant agrees to comply with all lawful and applicable municipal regulation	ons regarding the use and occupation of public rights-of-way
	in the delivery of video services, including the police powers of the municipal	alities in which the service is delivered.
	Initial indicating concurrence:	
6.	As an attachment, identify the municipalities and provide a legal description	of the service area footprint(s) to be served using Section,
	Township and Range references. Include the attached description on a con	nputer disc in ESRI compatible format (.E00, or .shp) with
	a defined projection file. Each footprint should clearly state the date by which	ch the provider will pass 100% of the encompassed
	households. Multiple service areas may be included.	
7.	As an attachment, provide a general description and drawing of the type or	types of technologies to be used in serving the footprint(s)
	described above.	
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Ву	submitting this application, the applicant agrees that it may not deny access t	o service to any group of potential residential subscribers
bec	cause of the income of the residents in the local area in which such group res	ides. Initial indicating concurrence:
	W-villa - ti-sa	
	Verification	
I,	, of lawful age, a	and being first duly sworn, now state: As an officer of the
App	plicant, I am authorized to do and hereby make the above commitments. I fur	ther affirm that all statements made above are true and
	rect to the best of my knowledge and belief.	
	MATE One	relent + CEO
	Signature	Title
	1 Vigitation	• • • •

### Attachment #1

## Company Principal Officers

Name	Title	Address
Joshua Montgomery	President & CEO	$4105 \text{ W } 6^{\text{th}} \text{ St}, \overline{\text{Ste A-1}}$
		Lawrence, KS 66049
Todd Mills	Board Member	4105 W 6 <sup>th</sup> St, Ste A-1
		Lawrence, KS 66049
Vince Forte	Board Member	4105 W 6 <sup>th</sup> St, Ste A-1
		Lawrence, KS 66049
Nolan Collins	Board Member	4105 W 6 <sup>th</sup> St, Ste A-1
		Lawrence, KS 66049
Stephen Wyle	Board Member	4105 W 6 <sup>th</sup> St, Ste A-1
		Lawrence, KS 66049

### Attachment #2

## Designated Company Contacts

Name	Title	Address
Joshua Montgomery	President & CEO	4105 W 6 <sup>th</sup> St, Ste A-1 Lawrence, KS 66049 (785) 371-4214
Thomas Mac Ewan	Office Manager	4105 W 6 <sup>th</sup> St, Ste A-1 Lawrence, KS 66049 (785) 371-4214

#### **RESOLUTION NO. 6814**

# A RESOLUTION DECLARING THE BOUNDARIES OF THE CITY OF LAWRENCE, DOUGLAS COUNTY, KANSAS

#### BE IT RESOLVED BY THE GOVERNING BODY OF THE CITY OF LAWRENCE, KANSAS:

1. That the boundaries of the City of Lawrence, Douglas County, Kansas, are hereby declared to be as follows:

Beginning at a point on the west bank of the Kansas River at its intersection with the southerly right-of-way of the Kansas Turnpike; thence southerly along said west bank to the mouth of Brewery Brook; thence meandering in a northwesterly direction along the center of Brewery Brook to its intersection with the easterly right-of-way of the A.T. & S.F. Railway Co.; thence south 18° 40' east and along said right-of-way line, a distance of 1396 feet to the north line of Block 2, West Lawrence Addition; thence west on the south line of the north half of the northeast quarter of Section 25, Township 12 South, Range 19 East, to a point 554.00 feet east of the east right-of-way line of Maine Street in the City of Lawrence; thence north 43° 54' 00" west a distance of 31.6 feet: thence north 90°00'00" east a distance of 284.5 feet; thence north 18° 32'25" west, a distance of 1329.61 feet; thence south 44° 42' 07" west, a distance of 326.05 feet; thence south 30°26'52" west a distance of 83.62 feet, thence south 55° 53'13" west a distance of 154.70 feet, thence south 47°04'02" west 181.55 feet: thence north 127.62 feet; thence west 919 feet to the west line of said northeast quarter, thence north along said line to a point 327 feet north of the southwest corner of the southeast quarter of Section 24, Township 12 South, Range 19 East; thence east 403 feet; thence south 81 feet; thence south 89° 55' 42" east, 427.3 feet; thence north 0° 04' 36" east, 251,14 feet; thence north 23° 38' 38" east, 204,86 feet; thence north 0° 00' 00" west, 117,87 feet; thence north 89° 54' 10" west, 173.13 feet, thence north 130.0 feet; thence east 100 feet; thence north 250 feet; thence west 180 feet; thence north 361.19 feet to the south right-of-way of the Kansas Turnpike; thence southwesterly along said right-of-way to a point 45 feet east of the west line of said southeast quarter; thence south parallel to said west line to a point 1588.60 feet south and 45 feet east of the northwest corner of the southeast quarter of said Section 24; thence west 45 feet to the west line of the southeast guarter of said Section 24; thence north along the west line of the southeast guarter of said Section 24 to the north right-of-way line of the Kansas Turnpike; thence north 79° 52' 20" east along the north right-of-way line of the Kansas Turnpike 677.09 feet; thence north 10° 07' 40" west along the north right-of-way line of the Kansas Turnpike 50 feet; thence north 79° 52' 20" east along the north right-of-way line of the Kansas Turnpike 235.51 feet to the west right-of-way line of the Atchison, Topeka and Santa Fe Railroad; thence north 18° 24' 13" west along the west right-of-way line of the Atchison, Topeka and Santa Fe Railroad; 733.23 feet; thence north 89° 56' 02" west, 158.37 feet; thence south 00° 01' 02" east, 348.48 feet; thence north 89° 56' 02" west 500 feet to the west line of the southeast quarter of said Section 24; thence north along the west line of the southeast quarter of said Section 24 to the Northwest corner of the said Southeast quarter; thence continuing North on the East line of the Northwest quarter of said Section 24, a distance of 1652.18 feet; thence South 88° 12' 41" West a distance of 794.62 feet to the Northeast Corner of Wells Acres a Subdivision in Douglas County Kansas extended North; thence South 01° 59' 42" East along said East line to the Northeast corner of lot 4 Wells Acres a Subdivision in Douglas County Kansas, thence West 168 ft. to the Northwest corner of said lot 4; thence South 440 ft. to the Southwest corner of lot 3 Wells Acres a Subdivision; thence East 168 ft. to the Southeast corner of said lot 3; thence South along said east line to the South line of said quarter section; thence West to a point 412.50 feet East of the Southwest corner of the Northwest Quarter of said Section 24; thence North 01°55'29" West a distance of 528.20 feet; thence South 88°10'25" West a distance of 412.50 feet to the West line of the Northwest Quarter of said Section 24; thence North on the west line of the Northwest guarter of said Section 24, a distance of 426.5 feet; thence East 412.5 feet; thence North 105.2 feet; thence West 412.50 feet to the West line of the Northwest Quarter of said Section 24; thence North on the west line of the Northwest quarter of said Section 24, a distance of 152 feet; thence East a distance of 412.5 feet; thence North a distance of 112 feet; thence East 911.42 feet; thence North 1322.24 feet to the North line of said

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Section 24; thence West 1324.57 feet to the Northwest corner of said Section 24; thence North along the East line of Section 14, Township 12 South, Range 19 East, 1452.06 feet; thence west 1991.57 feet; thence south 1451.55 feet to the south line of said Section 14; thence west to the northwest corner of the northeast quarter of Section 23, Township 12 South, Range 19 East; thence continuing along the north section line to the west line of the east half of the northwest quarter of said Section 23; thence south along said west line to the south right-of-way line of the Kansas Turnpike; thence southeasterly along said right-of-way line of the Kansas Turnpike to the north line of the southwest quarter; thence west along said north line to the Southeast corner of the Northeast Quarter of Section 22, Township 12 South, Range 19 East: thence North00°04'36"East, 582.00 feet to the South right-of-way line of the Kansas Turnpike Authority: thence North70°48'03"West on said South right-of-way line a distance of 977.68 feet: thence continuing along said South right-of-way line on a 7489.44 foot radius curve to the Left with a 2613.96 foot Chord bearing North80°47'29" West, an Arc Length of 2627.41 feet: thence continuing South 89°07'42" West on the South Right-of-way line of the Kansas Turnpike Authority a distance of 1809.94 feet; to the East line of the Northeast Quarter (NE 1/4) of said Section 21 and the West line of the Northwest Quarter (NW 1/4) of Section 22 Township 12 South, Range 19 East of the Sixth Principal Meridian; thence continuing South 89°07'42" West on the South Right-of-way line of the Kansas Turnpike Authority a distance of 1331.81 feet to the West line of the East One-half (E ½) of Northeast Quarter (NE ¼) of said Section 21; thence South 01°42'52" East on the West line of the East One-half (E ½) of Northeast Quarter (NE 1/4) of said Section 21 a distance of 1465.56 feet to the Southwest corner of the East One-half (E 1/2) of the Northeast Quarter (NE 1/4) of said Section 21; thence North 88°11'08" East on the South line of the Northeast Quarter (NE 1/4) of said Section 21, a distance of 1327.66 feet to the Southeast corner of the Northeast Quarter (NE 1/4) of Section 21: thence North01°33'31"West on the East line of the Northeast Quarter (NE 1/4) of said Section 21, a distance of 1324.10 feet; to the Northwest corner of the Southwest Quarter (SW 1/4), of the Northwest Quarter (NW1/4) of said Section 22; thence North 88°19'38" East on the South line of the North One-half (N ½) of the Northwest Quarter (NW ¼) of said Section 22, a distance of 2645.18 feet to the Southeast corner of the North One-half (N ½) of the Northwest Quarter (NW ¼) of said Section 22; thence South01°50'25"East on the West line of the Northeast Quarter (NE 1/4) of said Section 22 a distance of 177.19 feet to the South Right-of-way line of Hill Song Circle; thence South 08°07'42" West, a distance of 210.07 feet: thence South 82°18'18" East, 32.64 feet: thence South 02°00'18" West,333.53 feet: thence South 31°42'23" East, 86.56 feet: thence South 12°30'20" West, 319.68 feet: thence South 00°14'30" West, a distance of 425.23 feet to the Northeast corner of the Southwest Quarter of said Section 22: thence North 89°35'27" West, a distance of 970.00 feet: thence South 00°00'02" East, a distance of 2645.75 feet to the North line of the Northwest Quarter of Section 27, Township 12 South, Range 19 East; thence South 89°28'36" East on the North line of the Northwest Quarter of said Section 27 a distance of 247 feet more or less, to a point 660.00 feet West of the Northeast corner of the Northwest Quarter of said Section 27; thence South 825.0 feet; thence West 1320.0 feet; thence south 495 feet; thence east 659.03 feet to the northwest corner of the southeast guarter of the northwest guarter of said Section 27; thence south 0° 00' 49" west, 331 feet; thence north 89°52'27" west 919.52 feet; thence south 00° 00' 49" east 332.02 feet; thence south 89° 53' 58" east 919.52 feet; thence south 00° 00' 49" west 663.83 to the southwest corner of the southeast quarter of the northwest quarter of said Section 27; thence north 89° 47' 04" west, 55.04 feet; thence south 0° 00' 10" west, 220.04 feet; thence north 89° 55' 02" west, 276.08 feet thence south 0° 02' 15" east, 220.02 feet; thence north 89° 53' 35" west, 990.30 feet to the west line of said Section 27. Thence north on the West line said Section 27 to the Northeast corner of the Southeast quarter of Section 28, Township 12 South, Range 19 East; thence North01°48'13" West on the East line of the Northwest Quarter (NW 1/4) of said Section 28, Township 12 South, Range 19 East, a distance of 2639.26 feet; thence South 88°08'32" West a distance of 660.00 feet; thence North 01°49'01" West a distance of 12.50 feet to the North line of the Northeast Quarter of said Section 28; thence South88°08'32" West on the North line of the Northeast Quarter of said Section 28 a distance of 7.97 feet to the Southeast corner of the West One-half (W 1/2 ) of the Southeast Quarter (SE 1/4 ) of the Southeast Quarter (SE 1/2) of said Section 21; thence North on the East line of West One-half (W 1/2) of the Southeast Quarter (SE 1/4) of the Southeast Quarter (SE 1/4) of said Section 21 to the Northeast corner of the West One-half (W 1/2 ) of the Southeast Quarter (SE 1/4 ) of the Southeast Quarter (SE 1/4) of said Section 21; thence West on the North line of the South One-half (S ½) of the Southeast Quarter (SE ¼) of said Section 21 to the Northeast corner of the South One-half (S 1/2) of the Southwest Quarter (SW 1/4) of said Section 21; thence South88°02'10"West on the North line of the South One-half (S 1/2) of the

Southwest Quarter (SW 1/4) of said Section 21 a distance of 537.29 feet; thence South02°13'20"East a distance of 1327.86 feet to the South line of the Southwest Quarter (SW 1/4) of said Section 21; thence North88°07'39"East on the South line of the Southwest Quarter (SW 1/4) of said Section 21a distance of 100.00 feet; thence North02°13'20"West a distance of 150.00 feet; thence North42°46'44"East a distance of 72.24 feet; thence North88°07'39"East a distance of 387.89 feet to the East line of the Southwest Quarter (SW 1/4) of said Section 21; thence South02°18'26"East on the East line of the Southwest Quarter (SW 1/4) of said Section 21 a distance of 201.39 feet to the Northeast corner of the Northwest Quarter (NW 1/2) of Section 28, Township 12 South, Range 19 East, thence South01°52'39" East on the East line of the Northwest Quarter (NW 1/4) of said Section 28, a distance of 662.14 feet: thence South 88°09'18" West, 668.89 feet: thence north 01°56'12" west, 661.97 feet: thence south 88°07'45" west, 2008.72 feet to the Northwest Corner of said Section 28: thence South 02°06'55" East, on the west line of the Northwest Quarter of said Section 28 a distance of 1322.17 feet to the Northeast corner, of the Southeast Quarter (SE 1/4) of the Northeast Quarter (NE 1/4) of Section 29, Township 12 South, Range 19 East, thence South88°07'07"West on the North line of said Southeast Quarter (SE 1/4), of the Northeast Quarter (NE 1/4) of said Section 29, a distance of 1337.39 feet to the Northwest corner of the Southeast Quarter (SE 1/4) of the Northeast Quarter (NE 1/4) of said Section 29; thence South88°02'20"West on the North line of the Southwest Quarter (SW 1/4) of the Northeast Quarter (NE 1/4) of said Section 29, a distance of 1336.38 feet to the Northwest corner of said Southwest Quarter (SW 1/4) of the Southeast Quarter (SE 1/4), of the Northeast Quarter (NE 1/4) of said Section 29; thence South02°01'04"East on the West line of the Southwest Quarter (SW 1/4) of the Northeast Quarter (NE 1/4) of said Section 29, a distance of 1324.03 feet to the Southwest corner of the Southwest Quarter (SW 1/4), of the Northeast Quarter (NE 1/4) of said Section 29; thence South 88°04'03" West on the North line of the Southwest Quarter of said Section 29 a distance of 2289.86 feet to the Easterly Right-of-way line of Kansas Highway #10 ( South Lawrence Trafficway); thence in a Southerly direction on the Easterly Right-of-way line of Kansas Highway #10 ( South Lawrence Trafficway) on a 4069.72 foot Radius Curve to the Right with a 554.59 foot chord bearing South 06°36'46" East, an Arc Length of 555.02 feet; thence South 02°42'21" East on said Right-of-way line of Kansas Highway #10 ( South Lawrence Trafficway) a distance of 933.77 feet; thence South 32°50'50" East on said Right-of-way line of Kansas Highway #10 ( South Lawrence Traffic way) a distance of 896.17 feet; thence South 14°23'48" East on said Right-of-way line of Kansas Highway #10 ( South Lawrence Trafficway) a distance of 253.46 feet; thence South 20°43'35" West a distance of 162.22 feet to the South line of the Southwest Quarter of said Section 29; said point being North 88°04'24" East a distance of 899.38 feet from the Southwest corner of the Southwest Quarter of said Section 29; thence South 20°43'35" West, a distance of 223.10 feet to the Southerly Right-of-way line of Kansas Highway #10 (South Lawrence Trafficway); thence South 31°24'36" West on said Right-of-way line of Kansas Highway #10 (South Lawrence Trafficway) a distance of 541.38 feet; thence South 14°55'15" West on said Right-of-way line of Kansas Highway #10 ( South Lawrence Trafficway) a distance of 262.32 feet; thence South 02°42'21" East on said Right-of-way line of Kansas Highway #10 ( South Lawrence Trafficway) a distance of 416.08 feet; thence South 02°42'21" East on said Right-of-way line of Kansas Highway #10 ( South Lawrence Trafficway) a distance of 2102.35 feet; thence South 13° 26' 44" East on said Right-of-way line a distance of 607.63 feet; thence South 88° 58' 51" East on said Right-of-way line a distance of 277.29 feet; thence South 76° 01' 59" East on said right-of-way line a distance of 327.60 feet; thence South 01° 58' 42" East on said right-of-way line a distance of 100 feet; thence South 72° 49' 35" West on said Right-of-way line a distance of 419.67 feet; thence South 08° 23' 34" West on said right-ofway line a distance of 138.47 feet; thence South 31° 53' 27" West on said Right-of-way line a distance of 472.97 feet; thence South 24° 18' 50" West on said Right-of-way line a distance of 269.26 feet; thence South 72° 10' 24" East on said Right-of-way line a distance of 91.02 feet; thence South 01° 55' 18" East on said Right-of-way line a distance of 33 feet to the south line of the Southwest Quarter of said Section 32; Thence north 88° 04' 42" east, 2238.61 feet along the south line of the southwest guarter of said Section 32 to the northwest corner of the northeast quarter of Section 5, Township 13 South, Range 19 East; thence south 00° 19' 08" east, 1292.50 feet along the west line of the northeast guarter of said Section 5; thence south 88° 04' 54" west, 763.27 feet; thence south 02° 16' 47" east, 441.79 feet; thence south 24° 16' 06" east, 919.25 feet; thence south 24° 16' 06" east, 199.39 feet; thence South 66° 41' 51" East, 320.76 feet; thence South 66° 41' 51" East, 912.98 feet; thence North 88° 22' 47" East, 410.63 feet; thence North 18° 50' 33" East, 764.45 feet; thence North 18° 50' 33" East, 232.53 feet; thence North 37° 58' 20" East, 601.14 feet; thence North 21° 08' 45" East, 860.17 feet; thence North 00° 26' 28" West,

956.96 feet; thence north 87° 41' 36" east, 200.11 feet; thence South 00° 26' 22" East, a distance of 1319.2 feet; thence South 24° 45' 55"" West, a distance of 869.30 feet; thence South 00° 26' 27" East, a distance of 550.37 feet; thence North 88°50'14" East a distance of 133.11 feet; Thence South 47°39'14" East a distance of 377.30 feet; thence North 87°59'00" East a distance of 137.29 feet to the West line of the Southwest Quarter of Section 4, Township 13 South, Range 19 East; thence South on the west line of said Section 4 to a point on the West line of the Southwest Quarter of said Section 4, said point being 978,26 feet north of the southwest corner of the southwest quarter of said Section 4; thence south 51°32' 35" west 904.55; feet thence South 38° 43' 05" East a distance of 85.77 feet; thence South 88°09'20" West a distance of 348.67 feet; thence North 01°50'40" West a distance of 25.66 feet; thence North 55°53'48" West a distance of 480.50 feet; thence North 84°02'14" West a distance of 398.93 feet; thence North 35°41'38" West a distance of 603.12 feet; thence North 41°31'01" West a distance of 302.30 feet; thence North 56°36'24" West a distance of 750.00 feet; thence South 78°21'47" West a distance of 300.56 feet; thence South 35°54'53" West a distance of 140.58 feet; thence South 59°23'44" West a distance of 276.61; thence South 87°21'21" West a distance of 219.58; thence North 57°39'01" West a distance of 332,39 feet; thence North 79°55'14" West a distance of 70.08 feet to the Northwesterly Right-of-way line of East 920 Road; thence in a Southwesterly direction on the Northwesterly Right-of-way line of East 920 Road on a curve to the Right with a Radius of 410.00 feet, an Arc Length of 422.80 feet, with the Chord bearing South 42°30'14" West a Chord distance of 404.31 feet; thence South 72°02'47" West on the Northwesterly Right-of-way line of East 920 Road a distance of 110.00 feet; thence continuing on the Northwesterly Right-of-way line of East 920 Road on a curve to the Left with a Radius of 50.00 feet, an Arc Length of 72.27 feet, with the Chord bearing South 30°38'13" West a Chord distance of 66.14 feet to the centerline of East 920 Road; thence in a Southwesterly direction on the centerline of East 920 Road, on a curve to Left with a Radius of 330.01 feet, an Arc Length of 335.86 feet, with the Chord bearing South 34°14'46" West a Chord distance of 321.55 feet to the North line of Lakeview Addition No. 2; thence South 87°52'19" West on the North line of Lakeview Addition No. 2 a distance of 41.56 feet to the Northwest Corner of Lakeview Addition No. 2; thence South 00°27'32" East on the Westerly line of Lakeview Addition No. 2 a distance of 513.06 feet; thence South 87°57'32" West a distance of 510.38 feet to the West line of the Southwest Quarter (SW ¼) of Section 5, Township 13 South, Range 19 East; thence South 00°27'13" East on the West line of the Southwest Quarter (SW 1/4) of said Section 5 a distance of 660.02 feet to the Northwest corner of the Northwest Quarter (NW 1/4) of Section 8, Township 13 South, Range 19 East; thence North 87°58'15" East on the North line of the Northwest Quarter (NW 1/4) of said Section 8, a distance of 2234.44 feet; thence South 00°20'29" East a distance of 100.00 feet; thence North 87°58'46" East parallel with the North line of said Section 8 a distance of 425.57 feet to the East line of the Northwest Quarter (NW 1/4) of said Section 8; thence North 88°09'20" East parallel with the North line of said Section 8 a distance of 2656.21 feet to the East line of the Northeast Quarter (NE 1/4) of said Section 8; thence South 01° 15' 11" East on the East line of said Section 8 a distance of 2543.83 feet to the Southeast corner of the Northeast Quarter of said Section 8; thence South 01° 37' 46" East 350.01 feet; thence South 87° 47' 14" West 724.63 feet; thence North 56° 00' 00" West 592.42 feet to the South line of the Northeast Quarter of said Section 8; thence North 87° 47' 14" East on the South line of the Northeast Quarter of Section 8 Township 13 South Range 19 East a distance of 202.39 feet; thence North 56°00'00" West 2772.56 feet thence in a Westerly direction on a curve to the Left with a Radius of 1337.06 feet an Arc Length 1960.20 feet the Chord of which bears South 82°00'00" West a Chord distance of 1789.32 feet; thence South 40° 00'00" West a distance of 160.82 feet; thence South 25°50'16" East a distance of 448.16 feet; thence in a Southerly direction on a Curve to the Left with a Radius of 2824.87 feet, an arc length of 404.54 feet, the Chord of which bears South 30°05'10" East a Chord distance of 404.19 feet; thence North 55°00'00" East a distance of 30.10 feet; thence in a Southeasterly direction on a curve to the Right with a Radius of 230.99 feet an Arc Length of 362.84 feet, the Chord of which bears South 80°00'00" East a Chord distance of 326.67 feet; thence South 35°00'00" East a distance of 320.82 feet; thence in a Southerly direction on a curve to the right with a radius of 1949.86 feet an Arc Length of 442.46 feet, the Chord which bears South 28°30'00" East a Chord distance of 441.46 feet; thence South 22° 00' 00" East 947.04 feet; thence north 78° 00' 00" east 800.84 feet; thence south 51° 32' 04" east 3253.76 feet; thence south 35° 15' 00" west 200 feet; thence north 57° 57' 56" west 2879.45 feet; thence south 63° 00' 00" west 642.98 feet; thence south 15° 30' 00" east 984.34 feet; thence on a curve to the right with a radius of 22,958.31 feet an arc length of 1402.44 feet; thence south 12° 00' 00" east 3,158.88 feet; thence on a curve to the left with a radius of 716.20 feet an arc length of 1000.16 feet; thence north 87° 59' 16" east

along a line parallel to and 40 feet north of the south line of Section 17 Township 13 South Range 19 East, 1744.44 feet; thence north 88° 15' 26" east along the north right-of-way line of county road #458, 2662.92 feet to the east line of the southwest quarter of Section 16 Township 13 South Range 19 East; thence north 01° 44' 04" west along the east line of the southwest quarter of said section 16, a distance of 2557.36 feet; thence north 42° 02' 44" west 495.03 feet; thence north 11° 23' 01" west 213.01 feet; thence north 11° 22' 29" west 199.83 feet; thence north 40° 47' 42" east 888.98 feet; thence north 05° 57' 58" east 434.0 feet; thence south 55° 56' 33" west 413.78 feet; thence north 01° 44' 04" west 1047.9 feet to the south line of Section 9 Township 13 South Range 19 East; thence north 01° 35' 54" west 2655.03 feet to the south line of the northwest quarter of said section 9; thence north 88° 10' 51" east along the south line of the northwest quarter of said Section 9, 80 feet; thence north 01° 24' 29" west along the east line of the northwest quarter to a point 697.09 feet north of the southwest corner of the northeast quarter of Section 9, Township 13 South, Range 19 East; thence north 89° 20' 59" east, 50 feet; thence south 00° 39' 01" east, 8 feet; thence south 47° 13' 59" east, 69.57 feet; thence south 30° 06' 12" east, 101.12 feet; thence south 39° 21' 01" east, 400.03 feet; thence south 45° 45' 33" east, 201.56 feet; thence south 66° 40' 18" east, 149.42 feet; thence south 01° 49' 29" east, 33.00 feet to the south line of the northeast quarter of said Section 9, said point being 2005.69 feet west of the southeast corner of the northeast quarter; thence south 01° 50' 46" east, 33 feet; thence south 48° 57' 25" west, 125.81 feet; thence south 38° 38' 03" east, 611.89 feet; thence south 38° 38' 03" east, 268.11 feet; thence south 59° 19' 37" east, 603.56 feet; thence south 29° 21' 36" east, 586.91 feet; thence south 68° 38' 39" east, 574.81 feet; thence north 61° 34' 02" east, 160.08 feet; thence north 88°40'47" east, 115.56 feet to the east line of the southeast quarter of Section 9, Township 13 South, Range 19 East: thence north 01° 33' 30" west, on the east line of the southeast quarter of said Section 9, 554.31 feet; thence south 88° 26' 30" west 460.00 feet: thence north 01° 33' 30" west 100.00 feet: thence north 88° 26' 30" east, 460 feet to the southeast corner of Wakarusa View Estates Number 2, a subdivision in the City of Lawrence, Douglas County, Kansas; thence north 01° 33' 30" west, on the east line of the southeast quarter of said Section 9, 1123.09 feet to a point 40.00 feet south of the northeast corner of the southeast quarter of Section 9, Township 13 South, Range 19 East; thence east along the south right-of-way line of 27th Street to a point 40.00 feet south of the northwest corner of east half of the southwest quarter of Section 10, Township 13 South, Range 19 East: thence south to a point 950 feet north of the south line of said Section 10; thence southeasterly to a point 450 feet north of the southeast corner of the southwest quarter of said Section 10; thence south to the southwest corner of the southeast quarter of said Section 10; thence north 88°06'41" east, on the south line of the southeast quarter a distance of 1640.41 feet: thence north 29°47'16" east, 5.62 feet: thence north 35°30'58" east, 123.03 feet: thence north 65°06'21" east, 130.68 feet: thence north 36°57'17" east, 94.20 feet: thence north 33°21'02" east, 187.30 feet, thence north74°08'53" east, 83.72 feet: thence south 79°06'38" east, 40.91 feet: thence north 57°55'39" east, 112.52 feet: thence north 07°02'30" east, 132.88 feet: thence north 17°08'02" west, 110.85 feet: thence north 28°30'21" east, 49.04 feet: thence north 70°02'44" east, 60.41 feet: thence north 80°08'33" east, 35.41 feet:: thence north 79°56'46" east; 81.31 feet: thence south 74°24'19" east, 71.46 feet: thence north 80°11'01" east, 143.28 feet to the west right-ofway line of Kasold Drive; thence south parallel to said east line to a point 554 feet north and 50 feet west of the southeast corner of said Section 10; thence west 189 feet; thence south 230 feet; thence east 189 feet to a point 50 feet west of the east line of said Section 10; thence south to the south line of said Section 10: thence east to the southeast corner of said Section 10; thence east along the section line between Sections 11 and 14, to a point 902.2 feet east of the northwest corner of Section 14, Township 13 South, Range 19 East; thence south 417.4 feet; thence east 208.7 feet; thence south 50 feet; thence east 100 feet thence north 467.4 feet; thence east to a point 1324.80 feet west of the northeast corner of the northwest quarter of said Section 14, thence south 1098.76 feet; thence east 1136.33 feet; thence south 1544.06 feet; thence east 190 feet to the east line of the west half of said Section 14; thence south 89° 58' 34" east, along the south line of the northeast quarter of said Section 14, 2129.23 feet; thence north 72° 00' 42" east, 553.03 feet, more or less, to the east line of the northeast quarter of said Section 14:

THE FOLLOWING TRACT IS TO BE EXCLUDED FROM THE NORTHWEST QUARTER OF SAID SECTION 14:

Beginning at a point 453 feet West of the Northeast corner of the Northwest Quarter of Section 14, Township 13 South, Range 19 East; thence South 302 feet; thence West 67 feet; thence South 67 feet; thence West 298.75 feet; thence North 369 feet; thence East 365.75 feet to the point of beginning;

#### **END OF EXCLUSION**

Thence south along the section line between Sections 13 and 14 to the southwest corner of the Northwest Quarter of Section 13, Township 13 South, Range 19 East; thence South along the West line of said Section 13, 1616 feet to the flowline of a stream; thence easterly along the flowline of said stream to a point 1455 feet East of the West line of said Section 13; thence North 2050 feet to the North line of the Southwest Quarter of said Section 13; thence West to a point 1149.19 feet East of the West line of said Section 13; thence North 02° 15' 03" east, 150.00 feet, thence North 87° 44' 45" East a distance of 129.63 feet, thence South 02° 23' 01" East a distance of 125.00 feet to the North Right-of-way line of North 1250 Road (formerly Road No. 382); thence North 87° 44' 45" East, on the North Right-of-way line of North 1250 Road (formerly Road No. 382) a distance of 370.91 feet; thence North 59° 27' 47" East a distance of 663.23 feet; thence North 53°20'43" East a distance of 520.76 feet to the East line of the Northwest Quarter of said Section 13; thence North 01°53'07" West on the East line of the Northwest Quarter of said Section 13 a distance of 2019.67 feet to the Southeast corner of the Southwest Quarter of Section 12, Township 13 South, Range 19 East; thence North along the East line of the Southwest Quarter of Section 12, Township 13 South, Range 19 East, to a point 644.23 feet south of the Southwest corner of Lot 25, Block 10, Indian Hills No. 2, an addition to the City of Lawrence, Kansas; thence northeasterly 376.2 feet to the southwest corner of Lot 34, Block 10 of said addition; thence south 67° 10' east, 649.39 feet; then east 1110.43 feet; thence north 125 feet to the northeast corner of Lot 7, Block 16, Indian Hills No. 2; thence east 55.05 feet; thence northeasterly on a curve having a radius of 380 feet, for an Arc Length of 195.85 feet; thence south 174.38 feet; thence east to the east line of Section 12, Township 13 South, Range 19 East; thence south to the southwest corner of Section 7, Township 13 South, Range 20 East; thence east along the south line of said Section 7 to the northwest corner of Section 17, Township 13 South, Range 20 East; thence south along the west line of said Section 17, 825.45 feet; thence north 89° 54' 18" east, 421.21 feet; thence south 82° 38' 07" east, 240.11 feet; thence north 00° 16' 15" east, 529.33 feet, to a point 661.02 feet east and 338.07 feet south of the southwest corner of Section 8, Township 13 South, Range 20 East; thence east 661.02 feet; thence north 01° 18' 02" west 338.02 feet to the South line of said Section 8; thence east to a point 1850.0 feet east of the southwest corner of said Section 8; thence north parallel with the west line of said Section 8, 100 feet; thence east parallel with the south line of the southwest quarter of said Section 8 to the east line of the southwest quarter of said Section 8; thence South 01°36'11" East on the West line of the Southeast guarter said Section 8 a distance of 100 feet to the Southwest corner of the Southeast Quarter of said Section 8; thence North 87° 36'11" East on the South line of the Southeast Quarter of said Section 8, to the Southeast corner of the Southeast Quarter (SE 1/4) of said Section 8; thence North 01°36'53" West on the East line of the Southeast Quarter (SE 1/4) of said Section 8, a distance of 420 feet; thence South 87° 35'39" West, a distance of 99.58 feet; Thence North 27° 52' 15" East a distance of 135.86 feet; thence North 85° 50' 09" East a distance of 33.03 feet to the East line of the Southeast Quarter of Section 8, Township 13 South, Range 20 East; thence North 01° 36' 53" West, 1056.57 feet on the East line of Section 8, Township 13 South, Range 20 East; thence South 87° 39' 17" West, 865.07 feet; thence North 01° 36' 53" West, 251.85 feet; thence North 87°39' 17" East, 865.07 feet; thence North 01° 36' 53" West, to the Southwest corner of the North half of the North half of the Northwest quarter of the Southwest quarter of Section 9, Township 13 South, Range 20 East; thence East to the Southeast corner of the North half of the North half of the Northwest quarter of the Southwest quarter of said Section 9; thence North to the Northeast corner of the North half of the North half of the Northwest quarter of the Southwest quarter of said section 9; thence North 88°51'12" East a distance of 1337.63 feet to the Southwest corner of the Northeast quarter of said Section 9; thence North 88°56'23" East on the South Line of the Northeast Quarter (NE 1/4) of said Section 9 a distance of 2698.45 feet to the Southeast corner of the Northeast Quarter (NE 1/4) of said Section 9; thence North 01°33'08" West on the West line of the Northeast Quarter (NE 1/4) of said Section 9 a distance of 2640.41 feet to the Northeast corner of the Northeast Quarter (NE 1/4) of said Section 9; thence North 02°23'55" West on the East line of the Southeast Quarter (SE 1/4) of said Section 4 to a point on the northerly right-of-way line of Kansas Highway 10; thence on the northerly right-of-way line of said Kansas Highway 10 the following courses and distances: South 89° 01' 33" east, a distance of 42.27 feet; thence North 68° 13' 27" East, a distance of 129.41 feet;

thence South 38° 49' 33" East, 78.04 feet; thence South 89° 01' 33" East, a distance of 599.58 feet; thence North 88° 01' 27" East, a distance of 327.27 feet; thence North 68° 23' 27" East, a distance of 181.87 feet; thence North 89° 18' 27" East, a distance of 199.86 feet; thence South 79° 22' 33" East, a distance of 407.61 feet; thence North 89° 18' 27" East, a distance of 650.42 feet; thence South 02° 02' 23" East, a distance of 85.00 feet to the North line of the Northwest quarter of Section 10, Township 13 South, Range 20 East; said point being South 88° 00' 27" West on the North line of the Northwest Quarter (NW) of said Section 10 a distance of 63.7 feet thence South 02°02'21" East a distance of 185.00 feet; thence South 18°21'54" East a distance of 119.89 feet; thence North 87°57'39" East a distance of 30.00 feet to the West line of the Northeast Quarter (NE 1/4) of Section 10, Township 13 South, Range 20 East said point being 300 feet from the Northwest corner of the Northeast Quarter (NE 1/4) of said Section 10; thence North 87°57'39" East a distance of 85.00 feet; thence North 04°01'55" East a distance of 126.90 feet; thence North 87°15'51" East a distance of 444.20 feet; thence North 83°01'47" East a distance of 1151.16 feet; thence North 86°06'41" East a distance of 936.50 feet; to the West line of the Northwest Quarter (NW 1/4) of Section 11, Township 13 South, Range 20 East said point being 37.1 feet from the Northwest corner of the Northwest Quarter (NW 1/4) of said Section 11; thence North 02°17'53" West on the West line of the Northwest Quarter (NW 1/4) of Section 11, Township 13 South, Range 20 East a distance of 4.6 feet said point being 32.5 feet from the Northwest corner of the Northwest Quarter (NW 1/4) of said Section 11; thence North 89°17'32" East a distance of 289.59 feet; thence North 02°17'53" West a distance of 32.50 feet to the South line of the Southwest Quarter (SW 1/4) of Section 2 Township 13 South, Range 20 East; and the West line of the Shawnee Indian Reservation: thence North 02°17'58" West on the West line of the Shawnee Indian Reservation 1394.60 feet: thence South 88°35'39" West a measured distance of 2909.66 feet (2919.18 feet by deed) to the west line of the Southeast Quarter of said Section 3: thence on an assumed bearing of North 00° 00' 00" West on the East line of the Southwest Quarter of said Section 3 a distance of 1204.71 feet to a point on the Southerly right-of-way line of the Atchison, Topeka, and Santa Fe Railroad; thence along said right-of-way line North 89° 10' 00" West, 1271.83 feet to a point; thence along said right-of-way line on a 1960.08 foot radius curve to the right, 231.06 feet (the long chord of which bears North 89° 47' 22" West, a distance of 230.92 feet) to a point on the North quarter section line of said Southwest quarter of Section 3; thence leaving said right-of-way line North 89° 54' 24" West, a distance of 1134.20 feet along said North quarter section line to the Northwest corner of said quarter section; thence North 89° 18' 06" West, a distance of 2675.76 feet along the North quarter section line to the Northwest corner of the Southeast quarter of Section 4, Township 13 South, Range 20 East; thence South 00° 07' 18" West, a distance of 2658.92 feet on the West line of the Southeast Quarter (SE 1/4) of said Section 4 to the Northwest corner of the Northeast Quarter (NE 1/4) of Section 9, Township 13 South, Range 20 East; thence South 01°30'03" East on the West line of the Northeast Quarter (NE 1/4) of said Section 9 a distance of 1239.98 feet; thence South 88°52'57" West a distance of 669.31 to the East line of the West Onehalf (W 1/2 ) of the Northeast Quarter ( NE 1/4 ) of the Northwest Quarter (NW 1/2) of said Section 9; thence North 01°31'40" West on the East line of the West One-half (W 1/2) of the Northeast Quarter ( NE 1/4) of the Northwest Quarter (NW 1/4) of said Section 9 a distance of 1240.09 feet to the North line of the Northwest Quarter (NW 1/4 ) of said Section 9; thence South 88°53'29" West on the North line of the Northwest Quarter (NW 1/4) of said Section 9 a distance of 1010.25 feet;

# THE FOLLOWING TRACT IS TO BE EXCLUDED FROM THE NORTHWEST QUARTER OF SAID SECTION 9:

The Southwest Quarter (SW ¼) of the Southwest Quarter (SW ¼) of the Northwest Quarter (NW ¼) of Section 9, Township 13 South, Range 20 East of the Sixth Principal Meridian.

# THE FOLLOWING TRACTS ARE TO BE EXCLUDED FROM THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 13 SOUTH, RANGE 20 EAST:

Commencing at the Southwest corner of the Southeast Quarter (SE ¼) of Section 4, Township 13 South, Range 20 East thence North 88°54'05" East on the South line of the Southeast Quarter (SE ¼) of said Section 4 a distance of 659.20 feet; thence North 01°05'26" West a distance of

67.60 feet to the North Right-of-way line of Kansas Highway No. 10 for a Point of Beginning; thence North 88°56′22″ East on the North Right-of-way line of Kansas Highway No. 10 a distance of 660.00 feet; thence North 01°05′26″ West a distance of 592.75 feet; thence South 88°54′34″ West a distance of 660.00 feet; thence South 01°05′26″ East a distance of 592.40 feet to the Point of Beginning.

Also

Commencing at the Southeast corner of the Southeast Quarter (SE ½) of Section 4, Township 13 South, Range 20 East thence North 02°23′55" East on the East line of the Southeast Quarter (SE ¼) of said Section 4 a distance of 106.20 feet to the North Right-of-way line of Kansas Highway No. 10 for a Point of Beginning; thence South 88°56′22" West on the North Right-of-way line of Kansas Highway No. 10 a distance of 37.70 feet; thence South 50°36′05" West on the North Right-of-way line of Kansas Highway No. 10 a distance of 64.50 feet; thence South 88°56′22" West on the North Right-of-way line of Kansas Highway No. 10 a distance of 240.05 feet; thence North 02°20′24" West a distance of 593.71 feet; thence North 88°54′05" East a distance of 330.00 feet to the East line of the Southeast Quarter (SE ¼) of said Section 4; thence South 02°15′34" East on the East line of the Southeast Quarter (SE ¼) of said Section 4 a distance of 553.80 feet to the Point of Beginning.

#### **END OF EXCLUSIONS**

thence North 01°36'31" West a distance of 89.70 feet to the North Right-of-way Line of Kansas Highway #10; thence South 88°56'29" West on the North Right-of-way Line of Kansas Highway #10 a distance of 959.69 feet; thence North 50°06'31" West on the North Right-of-way Line of Kansas Highway #10 a distance of 53.60 feet to the West line of the Southwest Quarter (SW 1/4) of Section 4, Township 13 South, Range 20 East; thence South 01°10'31" East on the West line of the Southwest Quarter (SW 1/4) of Section 4, Township 13 South, Range 20 East, a distance of 125.70 feet to the Southeast Quarter of Section 5, Township 13 South, Range 20 East; thence West on the South line of the Southeast quarter of said Section 5 to the Southwest corner of the East One-half of the Southeast Quarter of said Section 5; thence North on the West line of the East One-half of the Southeast Quarter of Section 5 to the Southwest corner of the North 20 acres of the east half of the southeast quarter of Section 5, Township 13 South, Range 20 East; thence east to the east line of said Section 5; thence north on the East line of said Section 5 to the Northeast corner of said Section 5; thence west along the north line of said Section 5 to the southeast corner of the southwest quarter of the southeast quarter of Section 32, Township 12 South, Range 20 East; thence north to the northeast corner of the southwest quarter of the southeast quarter of said Section 32; thence west, 330 feet: thence north, 594 feet (36 rods) to the South boundary of the Right-of-way heretofore granted to the St. Louis, Lawrence and Denver Railroad (now the Atchison, Topeka and Santa Fe Railway Company): thence in a Northwesterly direction along the South boundary of said Right-of-way of said Railway Company a distance of 386.1feet: thence north to the north line of the Southeast Quarter of said Section 32: thence west on the north line of the Southeast Quarter of said Section 32 a distance of 12 feet: thence South to the South boundary of the Right-of-way heretofore granted to the St. Louis, Lawrence and Denver Railroad (now the Atchison, Topeka and Santa Fe Railway Company): thence in a Northwesterly direction along the South boundary of said Right-of-way of said Railway Company to the West line of the Southeast Quarter of said Section 32; thence north to a point 349.82 feet north of the northwest corner of the southeast quarter; thence north 89° 55' 00" east parallel to the south line of the northeast quarter of Section 32 Township 12 South Range 20 East 373.56 feet; thence south to the South line of the Northeast Quarter of said Section 32: thence east 264 feet (4 chains): thence North to a point on the high bank of the Kansas River said point being 1,687.19 feet. North and 635.01 feet East of the Southwest corner of the Northeast Quarter of said Section 32; thence in a Northwesterly direction on the High Bank of the Kansas River to the west line of the northeast quarter of said Section 32; thence north to the northeast corner of the northwest quarter of Section 32, Township 12 South, Range 20 East; thence continuing north to a point 911.66 feet north of the southwest corner of the northeast quarter of Section 29, Township 12 South, Range 20 East, said point being on the North right-of-way line of the Union Pacific Railroad; thence northeasterly along said right-of-way 949.93 feet; thence north 103.63 feet; thence west 897 feet to the west line of the northeast quarter of said Section 29; thence north along the said west line 700 feet; thence east 897 feet; thence north 243 feet; thence west 897 feet to the west line of the northeast quarter of said section; thence north along said west line to the northeast corner of the northwest quarter of said Section 29; thence South 87°35'40" West on the North line of the Northwest Quarter of said Section 29 a distance of 1439.90 feet; thence North 02°59'53" West a distance of 331.02 feet to the Northeast corner of Lot 1Block 1, Bismark Gardens No. 5; thence South87°35'17"West a distance of

1207.95 feet to the West line of the Southwest Quarter of Section 20, Township 12 South, Range 20 East; thence South on the West line of the Southwest Quarter of said Section 20 to the Southeast Corner of Section 19, Township 12 South, Range 19 East; thence west 660 feet; thence north 660 feet; thence west 181.5 feet; thence south 330 feet; thence west 148.5 feet; thence south 200 feet; thence west 120 feet; thence south 130 feet to the south line of Section 19, Township 12 South, Range 20 East; thence west to a point 66 feet east of the southwest corner of the southeast quarter of the southeast quarter of Section 19, Township 12 South, Range 20 East; thence north 100 feet; thence west 66 feet; thence south 100 feet to the southwest corner of the southeast quarter of the southeast quarter of said Section 19; thence west to a point 302.4 feet east of the southwest corner of the southeast quarter of said Section 19 said point being the Centerline of the Maple Grove Drainage Ditch; thence Northeast on the centerline of the Maple Grove Drainage Ditch, a distance of 399.8 feet; thence West, a distance of 287.7 feet; thence North to the South line of Schomer Addition; thence East on the South line of said Schomer Addition to the Southeast corner of Lot 1 of said Schomer Addition; thence North, a distance of 90.00 feet to the Northeast of Lot 1 of said Schomer Addition; thence West on the North line of said Lot 1 a distance of 288.0 feet; thence North parallel to the West line of said Southeast guarter to the South line of North Lawrence Industrial Subdivision in the City of Lawrence, Kansas; thence south 89° 27' east, 761.50 feet; thence north 0° 05' east, 331.50 feet; thence south 89° 27' east, 265.30 feet; thence north 0° 01' west, 232.10 feet; thence north 89° 26' west, 165 feet; thence north 0° 09' east, 268.26 feet, more or less, to the Kansas Turnpike right-of-way, thence north 165 feet, thence east 165 feet to the east line of the northwest quarter of the southeast quarter of said Section 19; thence north along said east line 142.54 feet; thence easterly 193.43 feet; thence northeasterly 565.69 feet to the north line of the southeast quarter of Section 19; thence northerly 300 feet to the north line of the Kansas Turnpike right-of-way; thence westerly along the north line of the Kansas Turnpike to a point 235.43 feet north of and 60.89 feet east of the southwest corner of the southeast quarter of the northeast quarter of said Section 19; thence northwesterly to a point 593.74 feet north of the southwest corner of the southeast quarter of the northeast quarter of said Section 19; thence north along the east line of the west half of the northeast quarter of said Section 19 to a point 500 feet north of the northeast corner of the southwest guarter of the northeast guarter of said Section 19; thence west 38 feet; thence north 160 feet; thence west 750 feet, more or less, to the center of the Maple Grove Drainage Ditch; thence northwesterly along the centerline of said ditch, to a point 330.38 feet south of the north line of the northeast quarter of said Section 19; thence west 15.5 feet; thence south 132.32 feet; thence west 330 feet to the west line of the northeast quarter of said Section 19; thence south to a point 1320 feet north of the center of said Section 19; thence west to the east right-of-way line of the Union Pacific Railroad; thence south along said east right-of-way to the intersection of the south right-of-way of the Kansas Turnpike; thence westerly along the south right-of-way of the Kansas Turnpike to the point of beginning.

#### DETACHED AREAS ANNEXED TO CITY

In the East One-half of the Southeast Quarter of Section 5, Township 13 South, Range 20 East of the Sixth Principal Meridian.

Beginning 125.82 feet North and 85.09 feet West of the Southeast corner of Section 5, Township 13 South, Range 20 East; thence North, a distance of 300.00 feet; thence West, a distance of 100 feet; thence North, a distance of 123.72 feet; thence West, a distance of 400 feet; thence North, a distance of 47.33 feet; thence West, a distance of 265.13 feet to the North line of the South 10 Acres of the East One-half of the Southeast quarter of said Section 5; thence West, a distance of 495.03 feet to the Northwest corner of Lot 1, Block 1 Cornerstone Plaza Addition; thence South 01°47'40" East on the West line of said Lot 1 a distance of 222.06 feet to the Southwest corner of said Lot 1 Cornerstone plaza Addition and the North Right-of-way line of Kansas State Highway No. 10; thence East on said right-of-way line to the point of beginning.

In the Northwest Quarter of Section 24, Township 12 South, Range 19 East of the Sixth Principal Meridian

Commencing at the Southwest corner of the North 30 acres of the Northeast Quarter (NE ¼) of the Northwest Quarter (NW ¼) of Section 24, Township 12 South, Range 19 East of the Sixth Principal Meridian, said point also being the Northwest corner of Wells Acres Subdivision; thence East on the South line of said quarter – quarter Section on an assumed bearing of South 89°55'35" East a distance of 242.00 feet to the true point of beginning of the tract of land being described; thence North 00°01'43" East parallel with the West line of said quarter – quarter Section, a distance of 250.00 feet; thence South 89°55'35" East parallel with the South line of said quarter – quarter Section, a distance of 180.00 feet; thence South 00°01'43" West parallel with the West line of said quarter – quarter Section, a distance of 250.00 feet to a point on said South line; thence North 89°55'35" West on the South line of said quarter – quarter Section, a distance of 180.00 feet to the place of beginning.

**Martin Park** in Martin Subdivision, a subdivision in Douglas County, Kansas, all being in the Southwest quarter of Section 22, Township 12 South, Range 19 East.

#### Maple Grove Cemetery--KDOT

The south half of the southwest quarter of the southeast quarter of Section 18, Township 12 South, Range 20 East.

#### Airport:

Beginning at the Northwest Corner of Section 21, Township 12 South, Range 20 East, thence South 89°08'26" East on the North line of said Section 21 a distance of 84.50 feet; thence South 26°18'36" East, a distance of 1,023.84 feet; thence South 63°41'24" West a distance of 590.85 feet to the West line of said Section 21; thence South on the West line of said Section 21 to the Southeast Corner of the Northeast Quarter of the Northeast Quarter of Section 20, Township 12 South, Range 20 East; thence West on the South line of the Northeast Quarter of the Northeast Quarter of said Section 20, to the Southeast Corner of the Northeast Quarter of the Northeast Quarter of said Section 20; thence North on the East line of the Northwest Quarter of the Northeast Quarter of said Section 20 to a point that is 1181.28 feet South of the Northeast Corner of the Northwest Quarter of the Northeast Quarter of said Section 20; thence North 17°46'45" West a distance of 1,122.85 feet; thence North 00°04'12" West a distance of 111.62 feet, to the South Line of Section 17, Township 12 South, Range 20 East; thence South 89° 55' 48" West, on the South Line of Section 17, a distance of 2322.88 feet to the Southwest corner of the Southeast Quarter of the Southwest quarter of said Section 17; thence north 0° 04' 46" west, 1323.37 feet; thence south 89° 56' 48" west, 1327.17 feet; thence north 0° 00' west, 372 feet, thence north 33° 43' 21" east, 411.39 feet; thence north 54° 53' 28" east, 274.37 feet; thence north 63° 43' 38" east, 561.81 feet; thence north 31° 09' 30" east, 905.90 feet; thence north 18° 56' 28" east, 496.36 feet; thence north 7° 53' 00" east, 285.94 feet; thence north 26° 11' 56" west, 1475.14 feet to the South line of Section 8 Township 12 South, Range 20 East; thence North 89° 59' 36" West, on the South line of said Section 8, a distance of 249.47 feet; thence North 00°00'00" East, a distance of 291 feet; thence North 89°59'36" East, a distance of 163.87 feet; thence North 26° 11' 56" West, a distance of 1146.57 feet; thence North 89° 59' 36" West, a distance of 99.01 feet; thence North 0° 22' 14" East, a distance of 163 feet; thence North 89° 59' 36" West, a distance of 276 feet; to the West line of the Southwest Quarter of said Section 8; thence North 0° 22' 14" East, a distance of on the West line of the Southwest Quarter of said Section 8 a distance of 1156.74 feet to the Northwest corner of the Southwest Quarter of said Section 8; thence South 89° 59' 36" East, a distance of 542.17 feet; thence South 68° 14' 16" East, a distance of 931.28 feet; thence on a curve to the right having a radius of 694.09 feet, a distance of 226.53 feet; thence on a curve to the left having a radius of 1154.02 feet, a distance of 34.86 feet; thence South 26° 11' 56" East, a distance of 1952.03 feet; thence South 70° 28' 50" East, a distance of 485.43 feet; thence South 19° 31' 10" West, a distance of 256.76 feet to the North line of the Northeast Quarter of Section 17, Township 12 South, Range 20 East; thence South 19° 31' 10" West, a distance of 288.83 feet; thence South 26° 11' 56" East, a distance of 5089.37 feet; thence South 34° 43' 47" East, a distance of 502.50 feet to the East line of said

Section 17; thence South 0° 12' 44" East along the east line of said Section 17, a distance of 37.69 feet to the point of beginning.

#### Levee:

Beginning at a point which is the intersection of the centerline of the Kansas River and the north line of the south half of the northeast quarter of Section 10, Township 12 South, Range 19 East; thence east to a point 660 feet east of the northwest corner of the south half of the northwest quarter of Section 11, Township 12 South, Range 19 East; thence north to the north line of said Section 11; thence east 66 feet; thence north to a point four (4) rods north of the north line of the southwest quarter of the southwest quarter of Section 2, Township 12 South, Range 19 East; thence east 800 feet; thence South 1° 30' east, 578 feet; thence east to the centerline of the levee; thence southeasterly along the centerline of the levee on an Azimuth of 334° 15' 19", a distance of 390 feet, more or less, to levee station 76 + 00.34; thence southeasterly on an Azimuth of 338° 59' 56", a distance of 2231.44 feet to the P.C. (Station 98 + 31.78) of a curve to the right having a radius of 2291.83 feet; thence along the centerline of said curve, a distance of 415.98 feet to the P.T. (Station 102 + 47.76) of said curve; thence southeasterly on an Azimuth of 349° 23' 54", a distance of 1835.33 feet to the P.C. (Station 120 + 83.09) of a curve to the left having a radius of 2291.83 feet; thence along the centerline of said curve, a distance of 2148.97 feet to the P.T. (Station 142 + 32.06) of said curve; thence southeasterly on an Azimuth of 295° 40' 27", a distance of 6992.06 feet to the P.C. (Station 212 + 24.12) of a curve to the right having a radius of 3819.72 feet; thence along the centerline of said curve, a distance of 1515.54 feet to the P.T. (Station 227 + 39.66) of said curve; thence southeasterly on an Azimuth of 318° 24' 26", a distance of 511.58 feet to the P.C. (Station 232 + 51.24) of a curve to the right having a radius of 572.96 feet; thence along the centerline of said curve, a distance of 237.67 feet to the P.T. (Station 234 + 88.91) of said curve; thence southeasterly on an Azimuth of 342° 10' 26", a distance of 484.39 feet to the P.C. (Station 239 + 73.30) of a curve to the right having a radius of 572.96 feet; thence along the centerline of said curve, a distance of 191.63 feet to the P.T. (Station 241 + 64.93 back, Station 241 + 24.57 ahead) of said curve; thence southwesterly on an Azimuth of 1° 20' 12", a distance of 2353.96 feet to the P.C. (Station 264 + 78.53) of a curve to the left having a radius of 238.73 feet; thence along the centerline of said curve, a distance of 136.23 feet to the P.T. (Station 266 + 14.76) of said curve; thence southeasterly on an Azimuth of 328° 38' 26", a distance of 6.39 feet to the P.C. (Station 266 + 21.5) of a curve to the right having a radius of 159.16 feet; thence along the centerline of said curve, a distance of 90.55 feet to the P.T. (Station 267 + 11.70) of said curve; thence southwesterly on an Azimuth of 1° 14' 19", a distance of 100.79 feet to the P.C. (Station 268 + 12.49) of a curve to the right having a radius of 409.26 feet; thence along the centerline of said curve, a distance of 75.21 feet to the P.T. (Station 268 + 87.70) of said curve; thence southwesterly on an Azimuth of 11° 46' 06", a distance of 119.82 feet to the P.C. (Station 269 + 07.52) of a curve to the left having a radius of 716.20 feet; thence along the centerline of said curve, a distance of 60 feet, more or less, to the south right-of-way line of the Kansas Turnpike; thence westerly along said southerly right-of-way line to the centerline of the Kansas River; thence northwesterly along the centerline of the Kansas River to the point of beginning, containing approximately 808 acres, more or less.

#### Bartz I

Beginning at the southwest corner of the northwest quarter of the southwest quarter of Section 14, Township 12 South, Range 19 East of the Sixth Principal Meridian; thence east along the south line of said northwest quarter, a distance of 300 feet; thence north on a line parallel with the west line of said Section 14, a distance of 200 feet; thence west on a line parallel with the south line of said northwest quarter, a distance of 300 feet to the west line of the said Section 14; thence south along the west line of said Section 14 to the point of beginning, all in Douglas County, Kansas. This tract contains approximately 1.39 acres.

#### Bartz II

Beginning at a point 730 feet east of the northwest corner of Section 23, Township 12 South, Range 19 East; thence east along the north line of Section 23, 140 feet; thence south 344.14 feet parallel to the west line of said Section 23; thence west 140 feet parallel to the north line of said Section 23; thence north 344.14 feet to the point of beginning. Contains 1.11 acres all in Douglas County, Kansas.

#### Kimmel

The north 90 feet of the southwest quarter of the southeast quarter of Section 18, Township 12 South, Range 20 East of the Sixth Principal Meridian, contains 2.27 acres, all in Douglas County, Kansas.

#### **Wastewater Reclamation Facility**

A tract of land in the Sections 15, 16, 17, 20, 21 and 22 Township 13 South, Range 20 East of the 6<sup>th</sup> P.M. all in Douglas County, Kansas and being more particularly described as follows:

Beginning at the Southwest corner of the Northwest Quarter of said Section 21; Thence on Azimuth (ASSUMED) 358 degrees 38 minutes 13 seconds coincident with the West line of the South one half of the Northwest Quarter of said Section 21 a distance of 1329.24 feet to the Northwest corner of the Southwest Quarter of the Northwest Quarter; thence on Azimuth 268 degrees 17 minutes 25 seconds coincident with the South line of the North on half of the Northeast Quarter of said Section 20, 1995.50 feet to the intersection of the said South line and the Easterly Right-of-Way line of the Atchison, Topeka and Santa Fe Railroad; thence on Azimuth 316 Degrees 18 Minutes 34 Seconds coincident with the Easterly Right-of-Way line of said Atchison, Topeka and Santa Fe Railroad, 740.93 feet to a point in the center of Wakarusa Creek said point being 1874.56' North and 147.45 feet East of the Northwest corner of the Southwest Quarter of said Section 20; thence along the centerline of said Wakarusa Creek the following courses on Azimuth 38 Degrees 46 Minutes 26 Seconds, 119.71 feet; Azimuth 14 Degrees 39 Minutes 57 Seconds, 181.49 feet, Azimuth 352 Degrees 54 Minutes 27 Seconds, 140.41 feet, Azimuth 357 Degrees 02 Minutes 28 Seconds, 58.34 feet; Azimuth 338 Degrees 22 Minutes 20 Seconds, 155.59 feet; Azimuth 299 Degrees 12 Minutes 58 Seconds, 239.18 feet; Azimuth 288 Degrees 09 Minutes 29 Seconds, 508.82 feet; Azimuth 308 Degrees 03 Minutes 01 Seconds, 183.22 feet; Azimuth 344 Degrees 34 Minutes 12 Seconds, 208,25 feet; Azimuth 04 Degrees 43 Minutes 31 Seconds, 259,13 feet; Azimuth 25 Degrees 40 Minutes 26 Seconds, 571.74 feet; Azimuth 50 Degrees 36 Minutes 10 Seconds, 145.11 feet: Azimuth 65 Degrees 49 Minutes 29 Seconds, 160,36 feet; Azimuth 115 Degrees 40 Minutes 26 Seconds, 131.87 feet to a point on the west line of the Southeast Quarter of said Section 17 that is 1350.68 feet South of the Northwest Corner of the Southeast Quarter of said Section 17; Azimuth 115 degrees 40 minutes 26 seconds, 45.95 feet; Azimuth 154 Degrees 24 Minutes 56 Seconds, 218.19 feet; Azimuth 117 Degrees 48 Minutes 49 Seconds, 144.20 feet; Azimuth 101 Degrees 10 Minutes 56 Seconds, 626.78 feet; Azimuth 95 Degrees 14 Minutes 18 Seconds, 250.94 feet; Azimuth 62 Degrees 16 Minutes 33 Seconds, 244.62 feet; Azimuth 357 Degrees 17 Minutes 40 Seconds, 270.80 feet; Azimuth 27 Degrees 28 Minutes 10 Seconds, 55.36 feet; Azimuth 8 Degrees 51 Minutes 44 Seconds, 128.16 feet; Azimuth 28 Degrees 57 Minutes 54 Seconds, 212.15 feet; Azimuth 79 Degrees 57 Minutes 31 Seconds, 171.56 feet; Azimuth 132 Degrees 50 Minutes 55 Seconds, 966.63 feet; Azimuth 123 Degrees 44 Minutes 05 Seconds, 271.22 feet; Azimuth 112 Degrees 10 Minutes 41 Seconds, 84.64 feet to a point on the West line of the Southwest Quarter of said Section 16 that is 729.51 feet North of the Southwest corner of the Southwest Quarter of said Section 16; Azimuth 112 degrees 10 minutes 41 seconds, 283.72 feet; Azimuth 93 Degrees 10 Minutes 08 Seconds, 256.15 feet; Azimuth 45 Degrees 43 Minutes 31 Seconds, 137.33 feet; Azimuth 03 Degrees 03 Minutes 00 Seconds, 397.35 feet; Azimuth 24 Degrees 24 Minutes 21 Seconds, 101.45 feet; Azimuth 57 Degrees 47 Minutes 48 Seconds, 103.83 feet; Azimuth 93 degrees 08 minutes 40 seconds, 187.24 feet; Azimuth 104 Degrees 00 Minutes 21 Seconds, 125.23 feet; Azimuth 120 Degrees 08 Minutes 23 Seconds, 183.68 feet; Azimuth 100 Degrees 30 Minutes 17 Seconds, 271.34 feet; Azimuth 89 Degrees 07 Minutes 24 Seconds, 146.68 feet; Azimuth 72 Degrees 36 Minutes 50 Seconds, 588.38 feet; Azimuth 35 Degrees 12 Minutes 58 Seconds, 222.90 feet; Azimuth 20 Degrees 57 Minutes 08 Seconds, 295.71 feet; Azimuth 110 Degrees 06 Minutes 36 Seconds, 207.20 feet; Azimuth 145 Degrees 20 Minutes 43 Seconds, 161.75 feet; Azimuth 168 Degrees 43 Minutes 17 Seconds, 348.65 feet; Azimuth 212 Degrees 39 Minutes 54 Seconds, 197.87 feet; Azimuth 239 Degrees 54 Minutes 47 Seconds, 457.95 feet; Azimuth 143 Degrees 42 Minutes 27 Seconds, 324.61 feet; Azimuth 107 Degrees 16 Minutes 31 Seconds, 210.51 feet to a point on the East line of the Southwest Quarter of

said Section 16 that is 410.55 feet North of the Southeast corner of the Southwest Quarter of said Section 16; Azimuth 107 degrees 16 minutes 31 seconds, 33.40 feet; Azimuth 30 Degrees 13 Minutes 47 Seconds, 452.49 feet; Azimuth 61 Degrees 19 Minutes 58 Seconds, 267.27 feet; Azimuth 130 Degrees 43 Minutes 23 Seconds, 586.28 feet; Azimuth 108 Degrees 57 Minutes 25 Seconds, 528.35 feet; Azimuth 74 Degrees 44 Minutes 22 Seconds, 328.99 feet; Azimuth 109 Degrees 37 Minutes 56 Seconds, 692.60 feet; Azimuth 102 Degrees 11 Minutes 26 Seconds, 292.24 feet to a point that is 2689.35 feet South of the Northeast Corner of the Southeast Quarter of said Section 16; Azimuth 102 Degrees 11 Minutes 26 Seconds, 198.78 feet; Azimuth 118 Degrees 06 Minutes 16 Seconds, 391.19 feet to the intersection of the center of said Wakarusa Creek and the centerline of Coal Creek said point being 311.41 feet East and 130.43 feet South of the Northwest corner of the Northwest Quarter of said Section 22; thence coincident with the Centerline of said Coal Creek the following courses Azimuth 235 Degrees 38 Minutes 23 Seconds, 270.07 feet; Azimuth 184 Degrees 10 Minutes 55 Seconds, 119.66 feet; Azimuth 147 Degrees 14 Minutes 14 Seconds, 129.08 feet; Azimuth 128 Degrees 31 Minutes 17 Seconds, 157.83 feet; Azimuth 198 Degrees 46 Minutes 57 Seconds, 59.48 feet; Azimuth 243 Degrees 32 Minutes 06 Seconds, 78.10 feet; Azimuth 305 Degrees 27 Minutes 34 Seconds, 172.37 feet; Azimuth 271 Degrees 39 Minutes 27 Seconds, 50.59 feet; Azimuth 237 Degrees 32 Minutes 25 Seconds, 122.76 feet; Azimuth 205 Degrees 08 Minutes 56 Seconds, 119.11 feet; Azimuth 207 Degrees 27 Minutes 41 Seconds, 119.91 feet; Azimuth 259 Degrees 12 Minutes 10 Seconds, 76.69 feet; Azimuth 329 Degrees 30 Minutes 24 Seconds, 122.25 feet; Azimuth 350 Degrees 30 Minutes 54 Seconds, 348.61 feet; Azimuth 324 Degrees 51 Minutes 13 Seconds, 191.59 feet; Azimuth 304 Degrees 37 Minutes 24 Seconds, 100.00 feet; Azimuth 269 Degrees 06 Minutes 33 Seconds, 83.10 feet; Azimuth 195 Degrees 47 Minutes 33 Seconds, 265.35 feet; Azimuth 149 Degrees 53 Minutes 25 Seconds, 157.73 feet; Azimuth 107 Degrees 40 Minutes 03 Seconds, 122.69 feet; Azimuth 150 Degrees 17 Minutes 58 Seconds, 152.83 feet; Azimuth 207 Degrees 26 Minutes 14 Seconds, 205.22 feet; Azimuth 270 Degrees 21 Minutes 43 Seconds, 131.94 feet; Azimuth 273 Degrees 48 Minutes 01 Seconds, 156.87 feet; Azimuth 253 Degrees 54 Minutes 54 Seconds, 67.00 feet; Azimuth 195 Degrees 58 Minutes 39 Seconds, 181.18 feet; Azimuth 209 Degrees 10 Minutes 42 Seconds, 166.77 feet; Azimuth 158 Degrees 22 Minutes 51 Seconds, 189.61 feet; Azimuth 189 Degrees 09 Minutes 16 Seconds, 141.28 feet; Azimuth 201 Degrees 46 Minutes 46 Seconds, 139.14 feet; Azimuth 170 Degrees 14 Minutes 55 Seconds, 129.38 feet; Azimuth 223 Degrees 40 Minutes 54 Seconds, 253.19 feet; Azimuth 210 Degrees 35 Minutes 10 Seconds, 108.52 feet; Azimuth 242 Degrees 17 Minutes 50 Seconds, 184.61 feet; Azimuth 276 Degrees 08 Minutes 14 Seconds, 62.27 feet to a point on the West line of the Southeast Quarter of the Northeast Quarter of said Section 21 that is 1346.08 feet West and 444.86 feet North of the Southwest corner of the Northeast Quarter of said Section 21; Thence on Azimuth 358 Degrees 19 Minutes 57 Seconds, coincident with the West line of the Southeast Quarter of the Northeast Quarter of said Section 21, 213.72 feet to the Southeast corner of the Northeast Quarter of the Southwest Quarter of the Northeast Quarter of said Section 21; Thence on Azimuth 269 Degrees 04 Minutes 21 Seconds coincident with the South line of Northeast Quarter of the Southwest Quarter of the Northeast Quarter of said Section 21, 672.64 feet to the Southwest Corner of Northeast Quarter of the Southwest Quarter of the Northeast Quarter of said Section 21; thence on Azimuth 178 Degrees 22 Minutes 05 Seconds coincident with the East line of the Southwest Quarter of the Southwest Quarter of the Northeast Quarter of said Section 21, 658.84 feet to the Southeast corner of the Southwest Quarter of the Southwest Quarter of the Northeast Quarter of said Section 21; thence on Azimuth 269 Degrees 01 Minutes 43 Seconds coincident with the South line of Southwest Quarter of the Southwest Quarter of the Northeast Quarter of said Section 21 673.04 feet to the Southwest corner of the Southwest Quarter of the Northeast Quarter of said section 21; thence on Azimuth 269 Degrees 00 Minutes 44 Seconds coincident with the South line of the South one half of the Northwest Quarter of said section 21, 2021.44 feet to the Northeast corner of the Northwest Quarter of the Northwest Quarter of the Southwest Quarter of said Section 21: thence on Azimuth 178 Degrees 40 Minutes 07 Seconds coincident with the East line of Northwest Quarter of the Northwest Quarter of the Southwest Quarter of said Section 21 663.76 feet to the Southeast corner of the Northwest Quarter of the Northwest Quarter of the Southwest Quarter of said Section 21; thence on Azimuth 268 Degrees 56 Minutes 48 Seconds coincident with the South line of the Northwest Quarter of the Northwest Quarter of the Southwest Quarter of said Section 21, 673.15 feet to the Southwest corner of the Northwest Quarter of the Northwest Quarter of the Southwest Quarter of said Section 21; thence on Azimuth 358 Degrees 39 Minutes 47 Seconds coincident with the West line of the Northwest Quarter of the Northwest Quarter of the Southwest Quarter of said Section 21, 664.56 feet to

the Point of Beginning containing 536.88 acres more or less and being subject to any easements, restrictions, right-of-ways, covenants or conditions, if any, now of record.

A Tract of land in the Southwest Quarter of Section 10, Township 13 South, Range 20 East of the 6<sup>TH</sup> Principal Meridian in Douglas County, Kansas described as follows:

Commencing at the Southwest Corner of said Southwest Quarter (SW  $\frac{1}{2}$ ) of Section 10, Township 13 South, Range 20 East; thence N 01°30′50″ W, on the West line of said Southwest Quarter (SW  $\frac{1}{2}$ ), a distance of 566.86 feet for the Point of Beginning; thence N 88°29′10″ E a distance of 81.27 feet; thence on a Curve to the Right, 62.08 feet, said Curve has a Radius of 75.00 feet and a Chord bearing South 67°48′05″ East, a Chord Length of 60.32 feet to a Point of Reverse Curvature; Thence on a Curve to the Left 62.08 feet, said Curve has a Radius of 75.00 feet and a Chord bearing S 67°48′05″ East, a Chord Length of 60.32 feet; thence N 88°29′10″ E, a distance of 126.12 feet; thence N 01°30′50″ West, a distance of 151.27 feet; thence S 88°29′10″ W, a distance of 317.85 feet to the West line of said Southwest Quarter (SW  $\frac{1}{2}$ ), thence S 01°30′50″ E, on the West line of said Southwest Quarter (SW  $\frac{1}{2}$ ), a distance of 102.75 feet to the Point of Beginning, containing 41,458 square feet or 0.952 Acres, more or less all in the City of Lawrence Douglas County, Kansas .

A Tract of land in the Southwest Quarter of Section 18, Township 12 South, Range19, East of the 6<sup>TH</sup> Principal Meridian in Douglas County, Kansas described as follows:

The Southeast One Quarter (SE1/4) of Section Eighteen (18), Township Twelve (12), Range Nineteen (19), less public road right-of-way, containing 154.9 acres, more or less and subject to restrictions, easements, and reservations of record; in Douglas County, Kansas

- 2. The City Clerk forthwith shall file a certified copy of this resolution with the County Clerk, with the Register of Deeds of Douglas County, Kansas, and with the state transportation engineer, as provided by K.S.A.12-518, as amended.
- 3. This resolution shall take effect and be in force from and after its adoption.

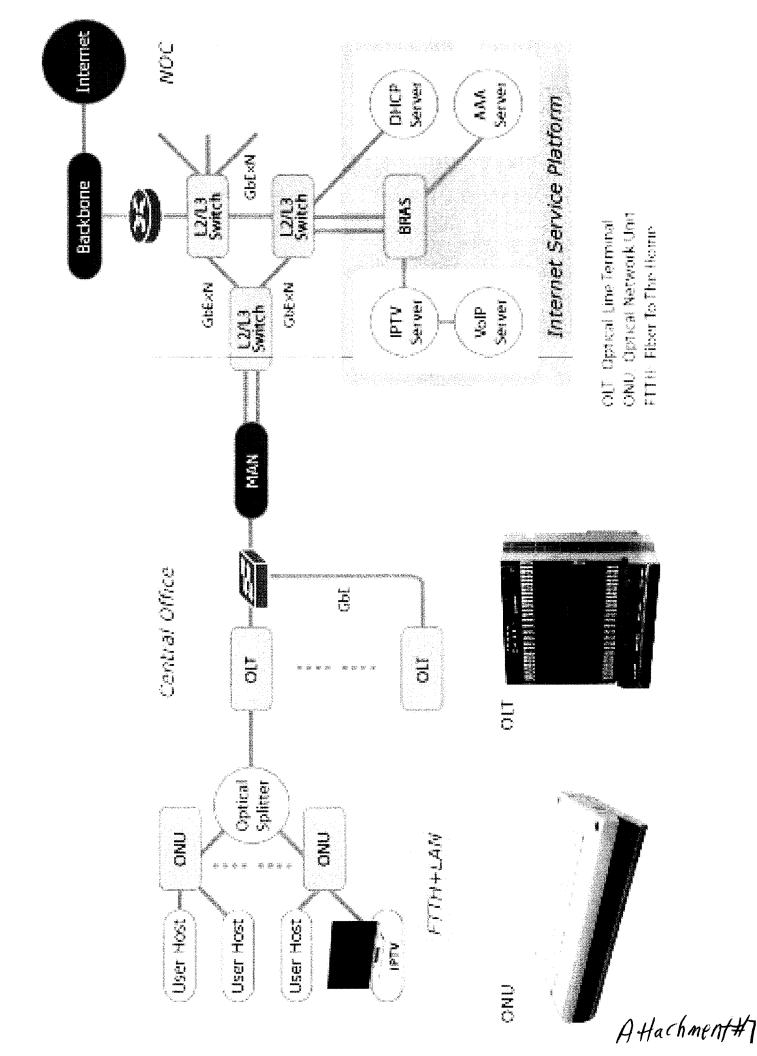
PASSED by the Governing Body of the City of Lawrence, Kansas, this 9th day of December, 2008

APPROVED:

Michael Dever, Mayor

Frank's Roch City Clark

P
Date December 6, 2008
Date December <u>tt.</u> , 2008



# Alloptic edge2000







Providing seamless, reliable connectivity between the core network and optical access network, the **edge2000** is Alloptic's central office chassis. The edge2000 delivers voice, video, and data services to your customers with the flexibility to support TDM or IP voice, RF or IP video, and ultra-high speed data. Built around a 16-gigabit switching fabric, the edge2000 supports up to 16 Gigabit Ethernet PONs from a compact, high-density, NEBS compliant design. With a full compliment of testing and management capabilities, the edge2000 provides unparalleled bandwidth, functionality, and reliability.

#### Features and Benefits

#### Carrier grade chassis and electronics

- Redundant, hot-swappable controllers, interface cards and powering
- 19" rack mounting with front accessed connectivity (suitable for ANSI or ETSI rack mounting)
- NEBS compliant with redundant -48VDC power
- External alarm (outputs and inputs) for integration to head-end monitoring systems
- Voice, video and data services integrated into one platform
- Business, home and high-density applications in one network

#### Secure, high capacity data services

- Internal 16Gbps aggregation switch allows all PONs to be supported on one network interface
- Optional network interfaces for up to 8Gbps network-facing data capacity
- Port aggregation and spanning-tree support for redundant data network access
- VLAN managed services with priority QoS processing
- Designated services support for guaranteed error free delivery of VoIP and streaming video content
- Universal PON bridging capabilities allows private LAN communications

#### Industry-standard TDM telephony

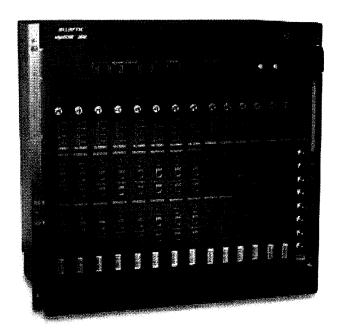
- Standard DS3 telephony interfaces for TDM/POTS connections
- Integrated 3-1-0 digital cross connect device
- Synchronous T1/E1 delivery
- Private T1/E1 point to point services

#### Universal video distribution

- RF Video support via optical overlay (HDTV supported)
- Remote RF video service controls
- IP video using IGMP multicast and proxy functionality (HDTV, MPEG2 and MPEG4 supported)
- VoD capability with 2-way signaling (HDTV supported)

#### Centralized configuration, testing, and management

- Built in web-based configuration manager
- SNMP network management interface
- Software download and distribution control
- Circuit testing and loop backs for telephony services
- Extensive data port statistics
- Remote RF alarms and controls







### **Specifications**

#### SHLF002

#### **Physical**

- 10U 19" rack mount
- Dimensions: 17.5" H x 17" W x 12" D
   (44.45cm H x 43.18cm W x 30.48cm D)
- Weight: 30 pounds (13.6kg)
- Card slots
  - 8 OLT slots (optional working/standby mode)
- 2 SCM slots (working/standby)
- 2 6Gb NIM slots (working/standby)
- 2 DS3M slots (working/standby)
- 1 DS3 interface slot

#### System Service Capacities

- 16 Gbps switching fabric
- 16 1Gbps Ethernet PONS (32 ONUs each)
- 512 ONUs total
- 4,032 VLANs
- 5 designated high-priority service facilities
- 8 1000BaseFX network interfaces (2 standard, 6 optional)
- 4 DS3 TDM interfaces ports (up to 2,688-static DS0 cross connects)

#### System Timing

- Primary, secondary & tertiary system clock source selections
- Internal (free-run)
- 2 external BITS clock inputs, at 1.544 Mbps or 2.048 Mbps
- DS3 clock (T1 or E1 derived clock timing)

#### Alarm and Indicators

- Critical, Major, Minor alarm LED indicators on shelf and plug-in cards
- Audible alarm indicator relay contacts
- Visual alarm indicator relay contacts
- ACO & Lamp test push-button

#### Network Management

- Redundant 10/100BaseT Ethernet management ports with configurable IP addresses
- In-band or out-of-band management access
- Web-enabled GUI based local configuration
- SNMP remote management capabilities

#### Testing and Maintenance Capabilities

- OTDR automatically ranges the ONUs
- Variable TCAs for optical power on ONUs
- Packet analysis tools
- TDM performance monitoring
- Digital pattern validation for POTS and T1 channels
- Loopback controls on TDM ports

#### Power and Environmental

- Dual -48VDC power feeds (-42 to -65VDC)
- 480W maximum power consumption
- 0°C to +50°C ambient air temperature
- 5% to 95% operating humidity (non condensing)

#### Standards, Certifications, and Patents

- # UL and CE mark
- NEBS
- UL 1950 3rd Edition, FCC Part 15, Class A, UL/CSA 22.2 EOC
- ANSI T1.102, T1.107, T1.107A, T1.404, T1.231
- Telcordia TR-TSY-000009, TR-NWT-000499,
- ITU G.703, G.704, G.706, G.747, G.775
- IEEE 802.3
- FCC part 15a
- EN300 386
- Patents
- United States (US Pat 7 031 343)
- **■** Taiwan (#90128223)
- China (ZL01821736.2)

# Description of Plug-in Cards for edge2000

#### SCMA003

The SCMA003 is a system controller and network interface card. It contains 16 Gigabit layer 2 switching fabric and CPU control complex that manages all aspects of the Alloptic edge2000 system and attached ONUs. It provides network management and diagnostic ports, as well as 2 Gigabit SFP sockets for Ethernet payload to be connected to the Alloptic access network.

#### Management interfaces

- RJ45 connector
- 10/100 Ethernet with automatic negotiation
- SNMP v1 network management
- HTML based GUI for local provisioning
- Name/password security with access list and closed user groups

#### Payload interfaces

- 2 1000BaseFX Ethernet SFP interface ports
- Port aggregation
- Spanning tree
- VLAN tagging
- Double-tagged packet support
- TOS and Ethernet priority support
- IP Video Multicast and Unicast support

#### **OLTB002**

The OLTB002 is a dual PON termination card that may be installed in slots 1–8 in the edge2000 chassis. The OLT incorporates an Ethernet switching fabric, 2 PON optical interfaces and OAM management functionality.

#### Features

- 2 1 Gigabit PONS on each card
- OAM&P control
- Automatic ONU ranging
- PON to PON bridging
- Same PON bridging
- Alarm management and forwarding
- Alarm status indicators

#### **PON Interfaces**

- 2 faceplate mounted SC/APC optical PHY (single-mode fiber)
- 1.25 Gigabit Ethernet PON
- Broadcast downstream @ 1Gbps
- Burst-mode TDM upstream @ 960Mbps

## Downstream PON optics (transmitter)

- Class 1 laser
- Optical output power level: >+3dBm
- Laser wavelength: 1490nm +/-2nm

#### Upstream PON optics (receiver)

- Optical receive wavelength: 1310nm +/-50nm
- Optical receiver dynamic range: -8 to -29dBm

#### OLTC002

The OLTC002 is a dual PON termination card that may be installed in slots 1-8 in the edge2000 chassis. It supports all of the functions of the OLTB002 and also includes an internal optical coupler that allows RF video to be injected onto the PON fiber. Two RF video inputs are provided (one for each PON) that allow the RF video power levels to be fine-tuned on a PON by PON basis for optimal performance.

#### Features

- 2 1-Gigabit PONS on each card
- OAM&P control
- Automatic ONU ranging
- PON to PON bridging
- Same PON bridging
- Alarm management and forwarding
- Alarm status indicators

#### **PON** Interfaces

- 2 faceplate mounted SC/APC optical PHY (single-mode fiber)
- 1.25 Gigabit Ethernet PON
- Broadcast downstream @ 1Gbps
- Burst-mode TDM upstream @ 960Mbps

# Downstream PON optics (transmitter)

- Class 1 laser
- Optical output power level: >+2dBm
- Laser wavelength: 1490nm +/-2nm
- RF overlay wavelength: 1550nm +/-20nm

#### Upstream PON optics (receiver)

- Optical receive wavelength: 1310nm +/-50nm
- Optical receiver dynamic range: -7 to -28dBm

Ordering information		
Part #	Description	
SHLF002	edge2000 chassis with fans, alarm and power conditioning unit.	
Plug-in cards	for edge2000	
Part #	Description	
SCMA003	Universal system controller with 2 SFP sockets	
OLTB002	Switching Optical Line Terminal 2 PONs 1490nm down, 1310nm up	
OLTC002	Switching Optical Line Terminal 2 PONs 1490nm down, 1310nm up + 1550nm RF video	
6PGEFX	Gigabit Ethernet NIM card with 6 SFP sockets	
DS3M001	4 port DS3 MUX	
BNC4001	4 port BNC card with BITS clock inputs	
SCMA003: S	FP Plug-ins	
Part #	Description	
OPT2100	1000BaseFX SFP module, multi-mode fiber, 850nm optics, 200meter range	
OPT2200	1000BaseFX SFP module, single-mode fiber, 1310nm optics, 20kilometer range	
0PT2300	1000BaseFX SFP module, single mode fiber, 1550nm optics, 70kilometer range	
COP2000	1000BaseT SFP module, RJ45 connector, CAT 5 cable, 300 foot range	

#### 6PGEFX (NIM)

The 6PGEFX (NIM) card provides up to 6 Gigabit interfaces from the Alloptic chassis to the core network to allow simple service connectivity and to support network capacities greater than the 2 Gigabit interfaces provided by the standard SCM ports. It provides 6 individually configurable ports using SFP interface modules (purchased separately) to allow a maximum flexibility for installation of each port. All ports support Link Aggregation and Spanning tree capabilities. A second 6PGEFX may be added for redundant, high reliability applications.

#### Features

- 6 1000BaseFX Ethernet, SFP interface ports
- Port aggregation
- Spanning tree support
- VLAN tagging
- Double-tagged packet support
- TOS and Ethernet priority support
- IP video Multicast and Unicast support

#### DS3M001

The DS3M001 is a 3-1-0 cross connect switch that accepts standard DS3 TDM interfaces and allows an operator to connect T1/E1 or POTS traffic from the ONUs to the DS3 facility. This card also supports the TDM synchronization, diagnostics, and performance monitoring functionality for the system.

#### **Features**

- 4 ITU/ANSI standard DS3 interfaces
- ■T1 or E1 payloads
- Full 3-1-0 cross connect functionality
- Full grooming for up to 2688 DS0 cross connects
- T1 derived system timing
- Red/Yellow alarm processing
- Performance monitoring
- Alarm indicators

#### BNC4001

The BNC4001 card provides the physical interfaces for the DS3M cards and supports redundant BITS clock inputs. This unit is needed when the system is providing TDM services. It supports 4 DS3 interfaces with standard BNC coax connectors.

#### Features

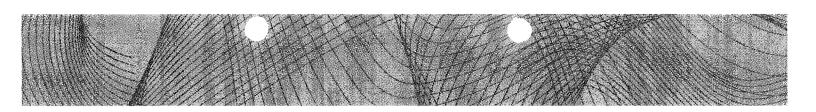
- 4 DS3 interfaces (separate transmit and receive BNC connectors)
- 8 Service NIM Slot indicators
- 2 RJ48 BITS clock inputs (working and protect)



www.alloptic.com

Alloptic, Inc. 2301 Armstrong St. Suite 101 Livermore, CA 94551 925.245.7600

Atta Chment#





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Attachment#7

# Alloptic Home Gateway 300™





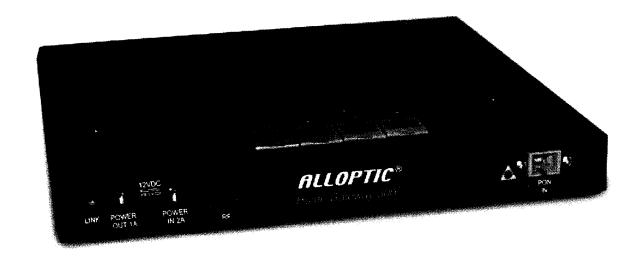


#### Features and Benefits

- 4 10/100 Ethernet ports
- 12VDC extension port to power additional CPE devices
- LED status indicator
- Auxiliary port to control external RF devices such as Alloptic's MicroNode
- IP Video support for IGMP multicast or VoD (including HDTV IP Video @ 20Mbps) on any or all data ports

#### Comprehensive Remote Management

- Service activation, diagnostics and monitoring
- Hardware, software, and service inventory
- Bandwidth provisioning (64Kbps increments up to 100Mbps/port)
- Pre-provisioning supported
- Single or Multiple family applications supported on the
- Special services (VoIP, IP Video, etc.) supported simultaneously with ultra high-speed data on the same port





## Alloptic Home Gateway 300

### **Specifications**

Small size: 1.0" H x 7.9" W x 7.1" D(2.5cm H x 20cm W x 18cm D)

Weight: 1.75 pounds (.79kg)Wall or flat surface mounting

■ PON/Unit status multi-color LED

#### Physical PON interface

- SC optical PHY (single-mode fiber)
- 1.25 Gigabit Ethernet PON
- Symmetrical 400 Mbps ONT capacity

#### Downstream PON optics (receiver)

- Operating range: 0 to 10km (dispersion limited)
- Dynamic range: 0 to -24 dBm
- Receive wavelength: 1490nm +/-10nm

#### Upstream PON optics (transmitter)

- Class 1 laser
- Optical output power level: 0dBm +/-1dB
- Optical output wavelength: 1310nm +/-50nm

#### Compatible power systems

Part # Description

PSB1006HG Brick, Domestic and International plug mount, 12 Volt

- 4 10/100baseT Ethernet ports
- RJ45 connectors with link state and activity indicators
- 10/100 Ethernet (automatic speed detect)
- Full or half duplex (Automatic or manual setting)
- Bandwidth selectivity 64Kbp to 100Mbps in 64Kbp increments
- Each port supports 100Mbps full duplex
- Reach at 100Mbps: 100 meters on CAT5 cable

#### Data switching features

- Port Bridging
- IGMP V2 support
- 1VLAN + 3 "special services"/port

#### Port statistics

- Transmit Packets/Octets
- Receive Packets/Octets
- Receive errors
- Collisions

- Remote control capable
- Alarms with configurable severity
- Software download
- Remote configuration
- Transmission path config testing
- Real time data port statistics
- 0°C to +40°C
- 5% to 95% humidity (non-condensing)
- 10 to 16VDC input power (12VDC optimal)
- 12 watts maximum
- TUV mark, CE mark and FDA certified for safety
- Meets or exceeds FCC part 15b for emissions
- IEC 60825-1:1993+A1: 1997+A2:2001
- IGMP V2 for IP video support
- Patents
- United States (US Pat 7 031 343)
- Taiwan (#90128223)
- China (ZL01821736.2)



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