Engineering Statement

RADIO MULTIPLE OWNERSHIP STUDY

prepared for

Eagle Communications, Inc.

New(FM) Maryville, MO

Facility ID 762475

Channel 285C3 10.5 kW 152 meters

Introduction

The instant application is being filed in response to Auction 109 as *Eagle Communications, Inc. ("Eagle")* has been identified as the winning bidder of the Marysville, MO allotment (Facility ID 762475). An ownership study has been performed and is summarized herein in support of the Long Form application for a new facility. The instant exhibit is provided to demonstrate *Eagle's* compliance with Section 73.3555 of the Commission's rules with regard to ownership of multiple radio stations.

Presently owned by *Eagle* in the immediate region*:*

Call Sign	City, State	Facility ID
KESJ(AM)	St. Joseph, MO	8767
KFEQ(AM)	St. Joseph, MO	34419
KINA(AM)	Salina, KS	60660
KJCK(AM)	Junction City, KS	52798
KYSJ(AM)	St. Joseph, MO	50511
KJCK-FM	Junction City, KS	52799
KKJO-FM	St. Joseph, MO	8770
KQLA(FM)	Ogden, KS	33565
KSJQ(FM)	Savannah, MO	59246
KSKG(FM)	Salina, KS	58645

Of the principal communities listed above, none lie within the nearest FCC geographic radio market, Kansas City, KS and Kansas City, MO. All station principal communities lie beyond the bounds of the Kansas City radio market.

The Commission issued a Report and Order and Notice of Proposed Rulemaking ("R&O")[1] for various multiple ownership issues. The R&O establishes a means of evaluating radio station multiple ownership issues utilizing existing Nielsen Audio®[2] and BIA® MEDIA Access Pro™[3]

[1] Report and Order in MB Docket No. 02-277 and MM Docket Nos. 01-235, 01-317, and 00-244, and Notice of Proposed Rulemaking for MB Docket 03-130 FCC-03-127, (adopted June 2, 2003)(released July 2, 2003).

[2] Nielsen Audio is a registered mark of Nielsen Holdings, N.V.

[3] MEDIA Access Pro is a trademark of BIA® Financial Network Inc.

market data for analysis of markets with established geographic boundaries.[4] There is a separate "interim" means for evaluating radio station multiple ownership issues beyond established Nielsen Audio radio markets. In cases where a station is not geographically within a Nielsen Audio boundary, the ownership concentration must be studied using the interim method.

Pursuant to §73.3555 of the Commission's Rules, the number of stations that a licensee may own is based on the total number of stations in that particular market, regardless of the study methodology employed. There is also a limit on how many stations each licensee may own in any one service (AM or FM).

- Markets with 45 or more stations are limited to 8 total stations and 5 in any one service.
- Markets with 30-44 stations are limited to 7 total stations and 4 in any one service.
- Markets with 15-29 stations are limited to 6 total stations and 4 in any one service.
- Markets with 14 or fewer stations are limited to 5 total stations and 3 in any one service, but not more than 50% of the market stations.

Interim Method – Introduction

The **Figure 1** map depicts the licensed 70 dBμ FM and 5 mV/m daytime AM principal community contours of all of the *Eagle* radio stations in the general area along with the proposed New(FM) 5 mV/m contour in blue. Under the current Rules, any station with a principal community beyond the geographic boundary of a defined geographic radio market shall be studied under the Commission's "interim," contour overlap methodology. A "market" is defined as the area encompassed by the principal community contours of radio stations for which common ownership is proposed[5] and which have a mutual area of principal community contour overlap.

[4] As an initial matter, the geographical boundaries of a market are established by reference to the boundaries of the markets established by Nielsen Audio. Within that market, the FCC requires that the BIA count of stations operating in the market be employed.

[5] Order in Implementation of Sections 202(a) and 202(b)(1) of the Telecommunications Act of 1996 (Broadcast Radio Ownership) FCC 96-90, released March 8, 1996 and Memorandum Opinion and Order in Revision of Radio Rules and Policies 7 FCC Rcd 6387, 6395 para. 39 (1992).

Interim Method – the Market

As shown in greater detail with **Figure 2**, the principal community contours of six of the stations listed herein have two instances of unique principal community contour overlap. Stations KINA(AM), KSKG(FM), KJCK(AM), KJCK-FM and KQLA(FM), do not have common overlap with KGNM(AM) or any of the other stations, thus are not affected by the instant study and will not be considered beyond this point. The common overlap area of AM and FM stations KESJ(AM), KFEQ(AM), KGNM(AM), KKJO(FM), and KSJQ(FM) constitutes the "core" of **Market 1** while KFEQ(AM), KSJQ(FM) and the New(FM) proposed facility constitute the core of **Market 2**. The core common overlap areas of Market 1 and Market 2 are shaded red and green, respectively, in **Figure 2.** The composite overlap land area of the three (3) AM and three (3) FM stations defines the limits of Market Core 1, shown by red shading, and Market Core 2, shown by Green shading in **Figure 2.** **Figure 3** and **Figure 4** depict the individual Market 1 and Market 2 makeup, respectively.

Figures 5 and 6 illustrate that an "interim-contour overlap" study of **Market 1** with five (5) commonly owned stations (3 AM and 2 FM) identifies seventy-four (74) operating commercial and noncommercial stations with principal community contours that overlap some portion of the Market, as defined by the licensed stations. Of the seventy-four (74) stations, five (5) sharing common overlap would have ownership interest attributable to *Eagle.* The total station count for the licensed market is thus seventy-four (74) when including the five (5) commonly owned stations. All stations shown have transmitter locations that are situated less than 92 km from the nearest edge of the common principal community contour overlap. The proposed ownership of these *Eagle* stations as identified herein – **Market 1**, (KESJ(AM), KFEQ(AM), KYSJ(AM), KKJO(FM), and KSJQ(FM)), complies with Section 73.3555 of the FCC Rules: *Markets with 45 or more stations are limited to 8 total stations and not more than 5 in the same service.*

Figures 7 and 8 illustrate that an "interim-contour overlap" study of **Market 2** with three (3) commonly owned stations (1 AM and 2 FM) identifies twenty-nine (29) operating commercial and noncommercial stations with principal community contours that overlap some portion of Market 2, as defined by the licensed stations. Of the twenty-nine (29) stations, five (3) sharing common overlap would have ownership interest attributable to *Eagle.* The total station

count for the licensed market is thus thirty (30) when including the three (3) commonly owned stations, including the proposed new FM. All stations shown have transmitter locations that are situated less than 92 km from the nearest edge of the common principal community contour overlap. The proposed ownership of these *Eagle* stations as identified herein – **Market 2**, (KFEQ(AM), KSJQ(FM) and the New(FM) facility), complies with Section 73.3555 of the FCC Rules: *Markets with 30 or more stations are limited to 7 total stations and not more than 4 in the same service.*

Summary

In preparing the attached maps and tables, pertinent station data were extracted from the Commission's engineering databases. For AM stations, these included the operating power, radiation efficiency, directional antenna data (where appropriate), and geographic coordinates. The distances to the 5 mV/m contours were then determined using the digitized version of the *Atlas of Ground Conductivity* published in 1981 by the International Telecommunication Union along with a computer program which simulates the FCC's AM groundwave propagation curves. For the FM stations, pertinent data for determining the distances to the contour included the antenna elevation above mean sea level, geographic coordinates, effective radiated power, and, where appropriate, directional antenna patterns. The requisite 3.16 mV/m (70 dBμ) contours were determined using digitized 3 arc-second U.S.G.S. terrain data along radials spaced every degree from the transmitter site and an implementation of the Commission's TVFMFS computer program which simulates the FM propagation curves. The detailed distances to the principal community contours were then used with a GIS mapping program to generate the attached maps.

Conclusion

As shown herein, the proposed ownership by *Eagle* of the six stations studied herein for Market 1 and the three stations studied for Market 2 will comply with §73.3555 of the Commission's Rules regarding the multiple ownership of radio stations. This conclusion is confirmed by using the interim, contour-overlap method.

Certification

Under the penalty of perjury, the undersigned hereby certifies that the foregoing statement was prepared by him or under his direction on behalf of *Eagle* and that it is true and correct to the best of his knowledge and belief. Robert Clinton is a senior consultant in the firm of *Cavell, Mertz & Associates, Inc.* and has submitted numerous engineering exhibits to the Federal Communications Commission. His qualifications are a matter of record with the Commission.

Robert J. Clinton
September 13, 2021

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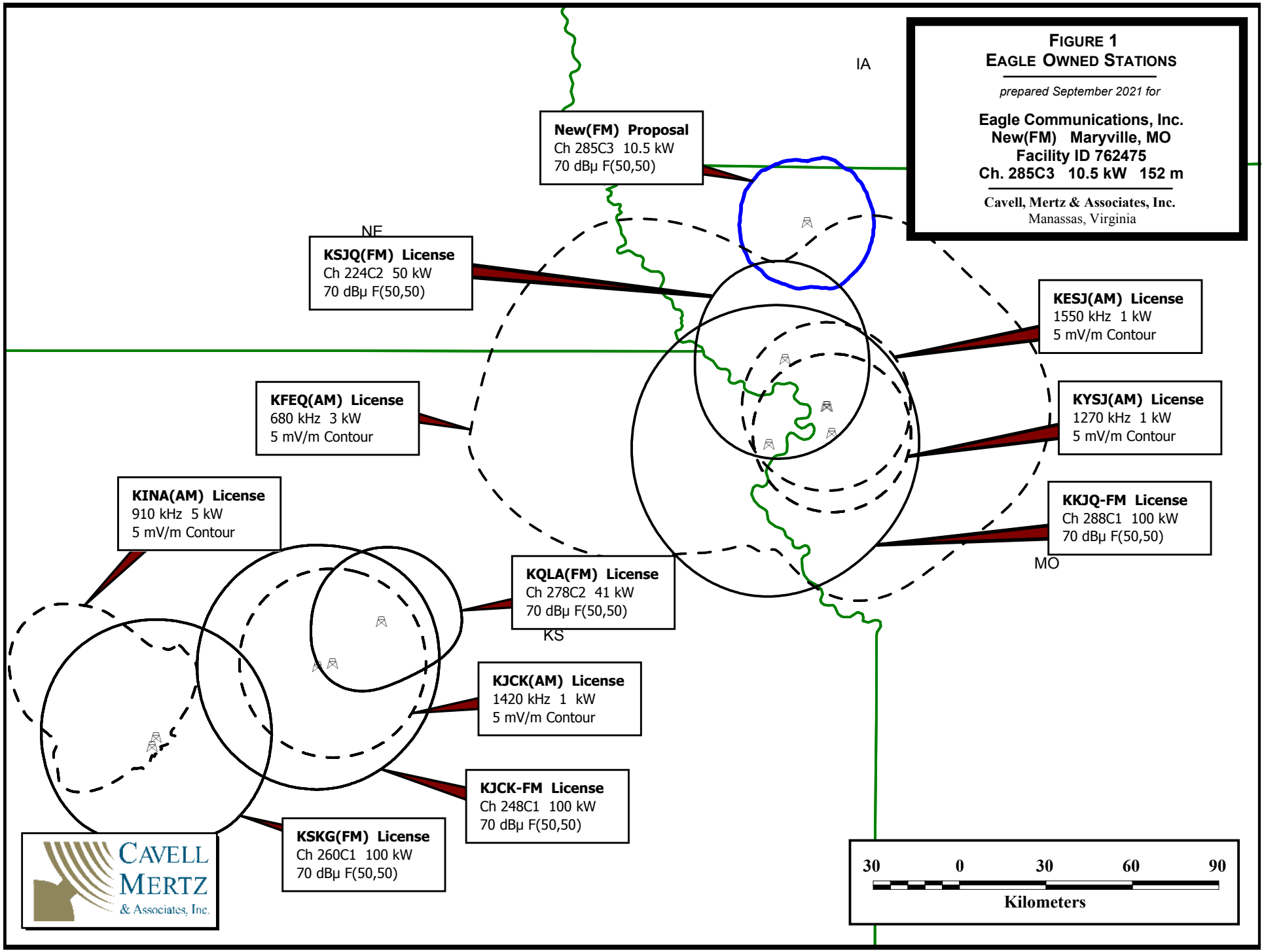
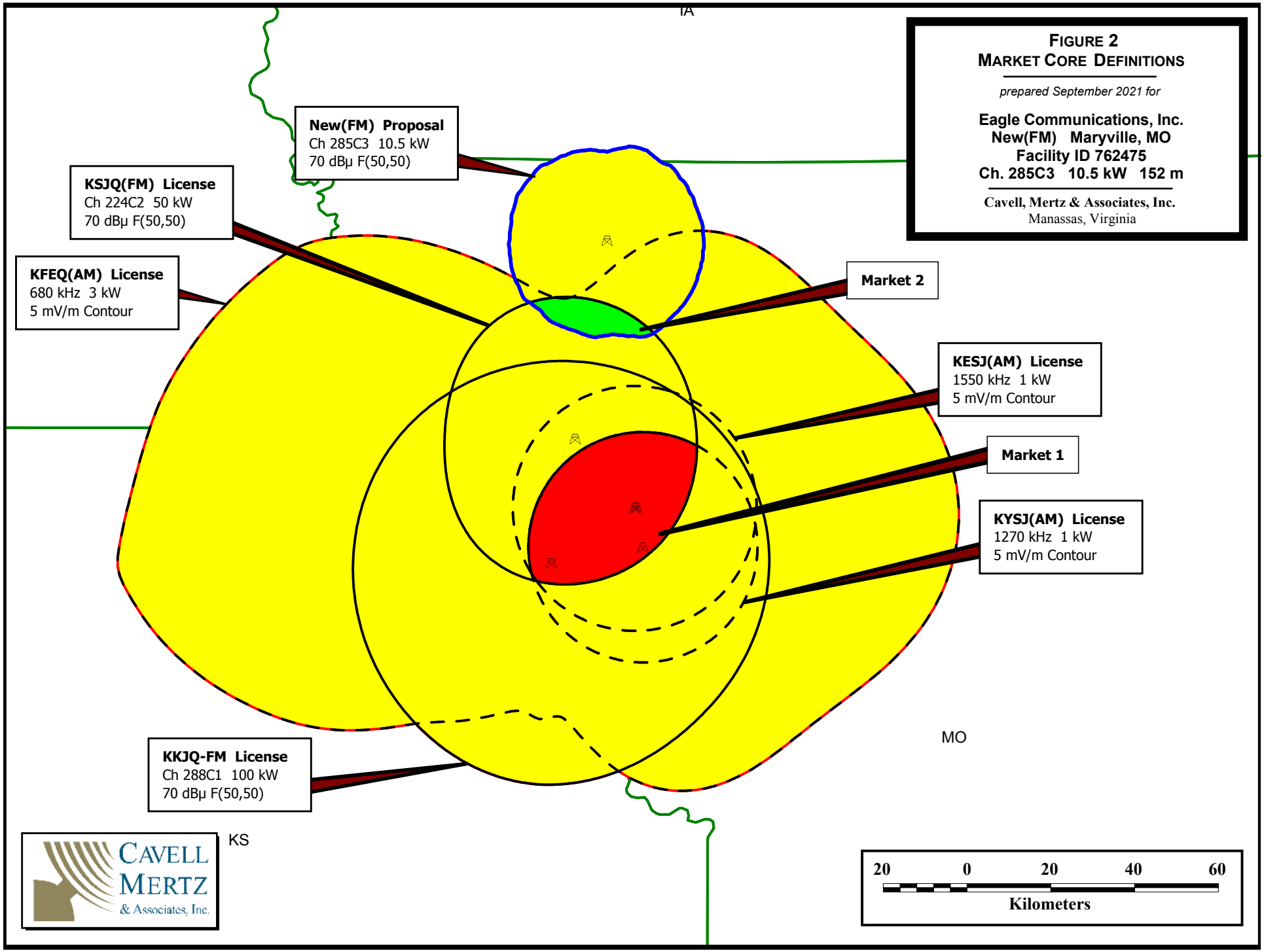
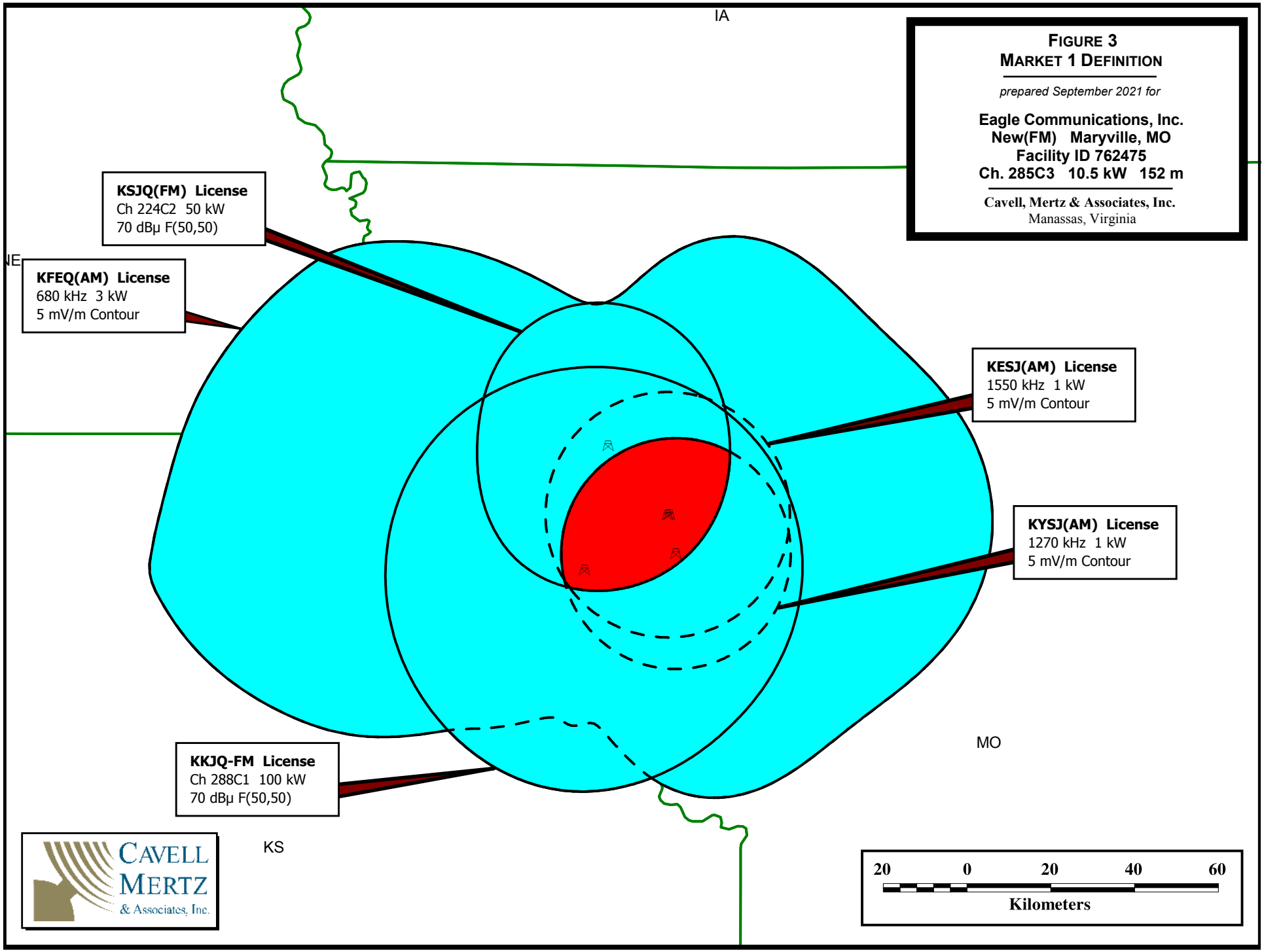


FIGURE 1
EAGLE OWNED STATIONS
prepared September 2021 for
Eagle Communications, Inc.
New(FM) Maryville, MO
Facility ID 762475
Ch. 285C3 10.5 kW 152 m
Cavell, Mertz & Associates, Inc.
Manassas, Virginia
IA
NE
MO
KS
New(FM) Proposal
Ch 285C3 10.5 kW
70 dBµ F(50,50)
KSJQ(FM) License
Ch 224C2 50 kW
70 dBµ F(50,50)
KESJ(AM) License
1550 kHz 1 kW
5 mV/m Contour
KFEQ(AM) License
680 kHz 3 kW
5 mV/m Contour
KYSJ(AM) License
1270 kHz 1 kW
5 mV/m Contour
KINA(AM) License
910 kHz 5 kW
5 mV/m Contour
KKJQ-FM License
Ch 288C1 100 kW
70 dBµ F(50,50)
KQLA(FM) License
Ch 278C2 41 kW
70 dBµ F(50,50)
KJCK(AM) License
1420 kHz 1 kW
5 mV/m Contour
KJCK-FM License
Ch 248C1 100 kW
70 dBµ F(50,50)
KSKG(FM) License
Ch 260C1 100 kW
70 dBµ F(50,50)
CAVELL MERTZ & Associates, Inc.
30 0 30 60 90
Kilometers


IA
FIGURE 2
MARKET CORE DEFINITIONS
prepared September 2021 for
Eagle Communications, Inc.
New(FM) Maryville, MO
Facility ID 762475
Ch. 285C3 10.5 kW 152 m
Cavell, Mertz & Associates, Inc.
Manassas, Virginia
New(FM) Proposal
Ch 285C3 10.5 kW
70 dBµ F(50,50)
KSJQ(FM) License
Ch 224C2 50 kW
70 dBµ F(50,50)
KFEQ(AM) License
680 kHz 3 kW
5 mV/m Contour
Market 2
KESJ(AM) License
1550 kHz 1 kW
5 mV/m Contour
Market 1
KYSJ(AM) License
1270 kHz 1 kW
5 mV/m Contour
MO
KKJQ-FM License
Ch 288C1 100 kW
70 dBµ F(50,50)
KS
CAVELL MERTZ & Associates, Inc.
20 0 20 40 60
Kilometers


IA
FIGURE 3
MARKET 1 DEFINITION
prepared September 2021 for
Eagle Communications, Inc.
New(FM) Maryville, MO
Facility ID 762475
Ch. 285C3 10.5 kW 152 m
Cavell, Mertz & Associates, Inc.
Manassas, Virginia
KSJQ(FM) License
Ch 224C2 50 kW
70 dBµ F(50,50)
NE
KFEQ(AM) License
680 kHz 3 kW
5 mV/m Contour
KESJ(AM) License
1550 kHz 1 kW
5 mV/m Contour
KYSJ(AM) License
1270 kHz 1 kW
5 mV/m Contour
MO
KKJQ-FM License
Ch 288C1 100 kW
70 dBµ F(50,50)
KS
CAVELL MERTZ & Associates, Inc.
20 0 20 40 60
Kilometers

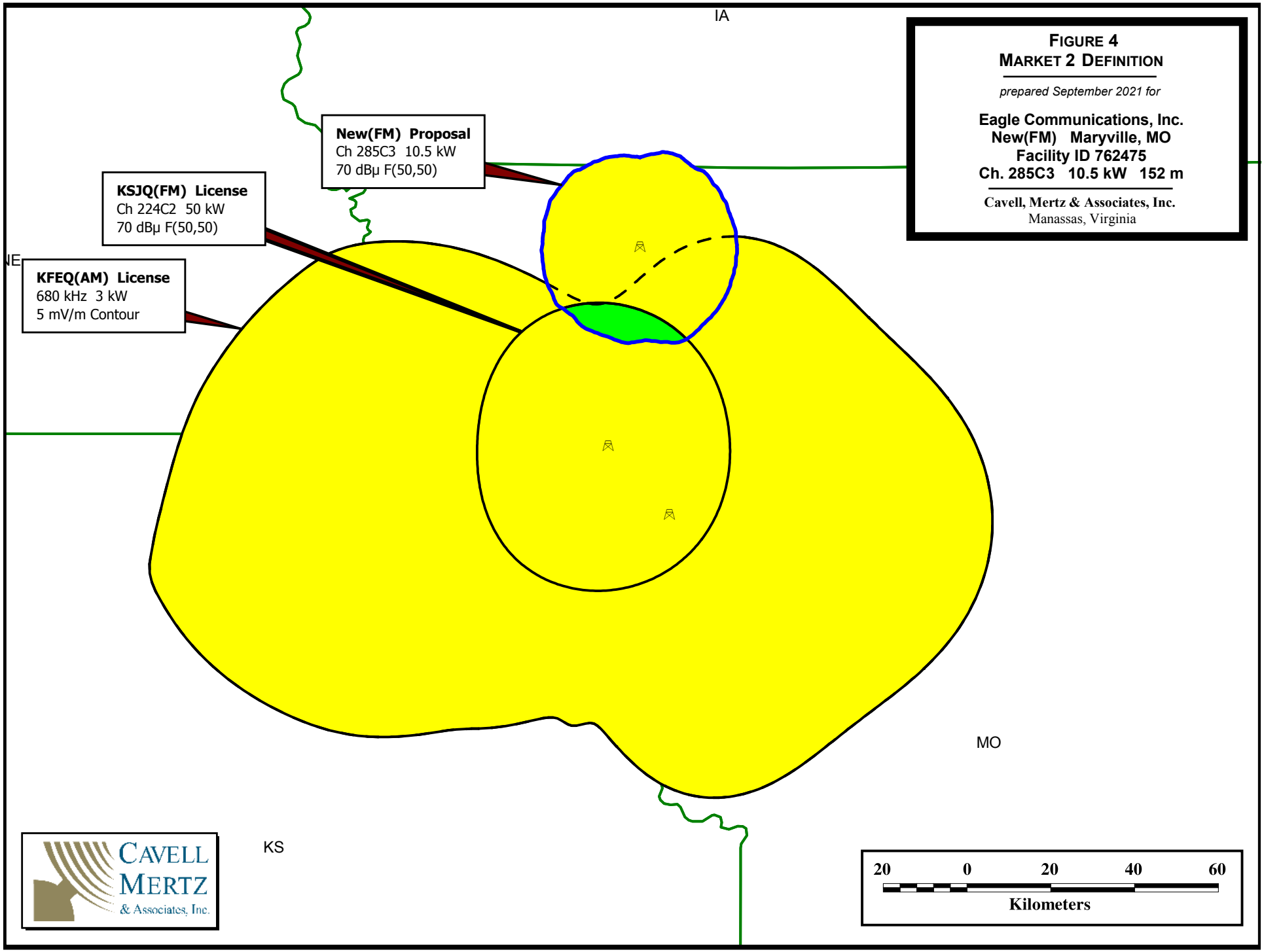


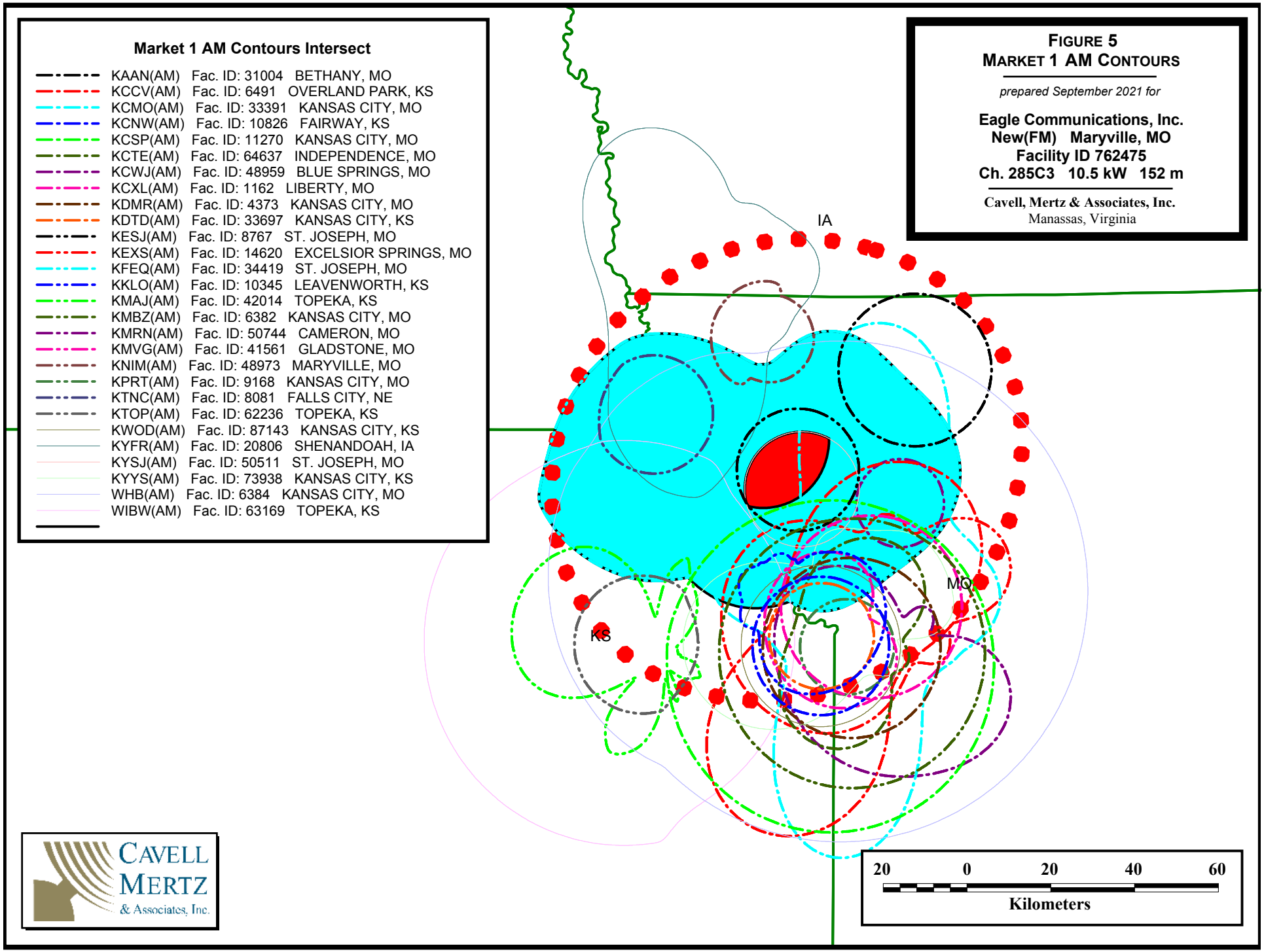
FIGURE 4
MARKET 2 DEFINITION

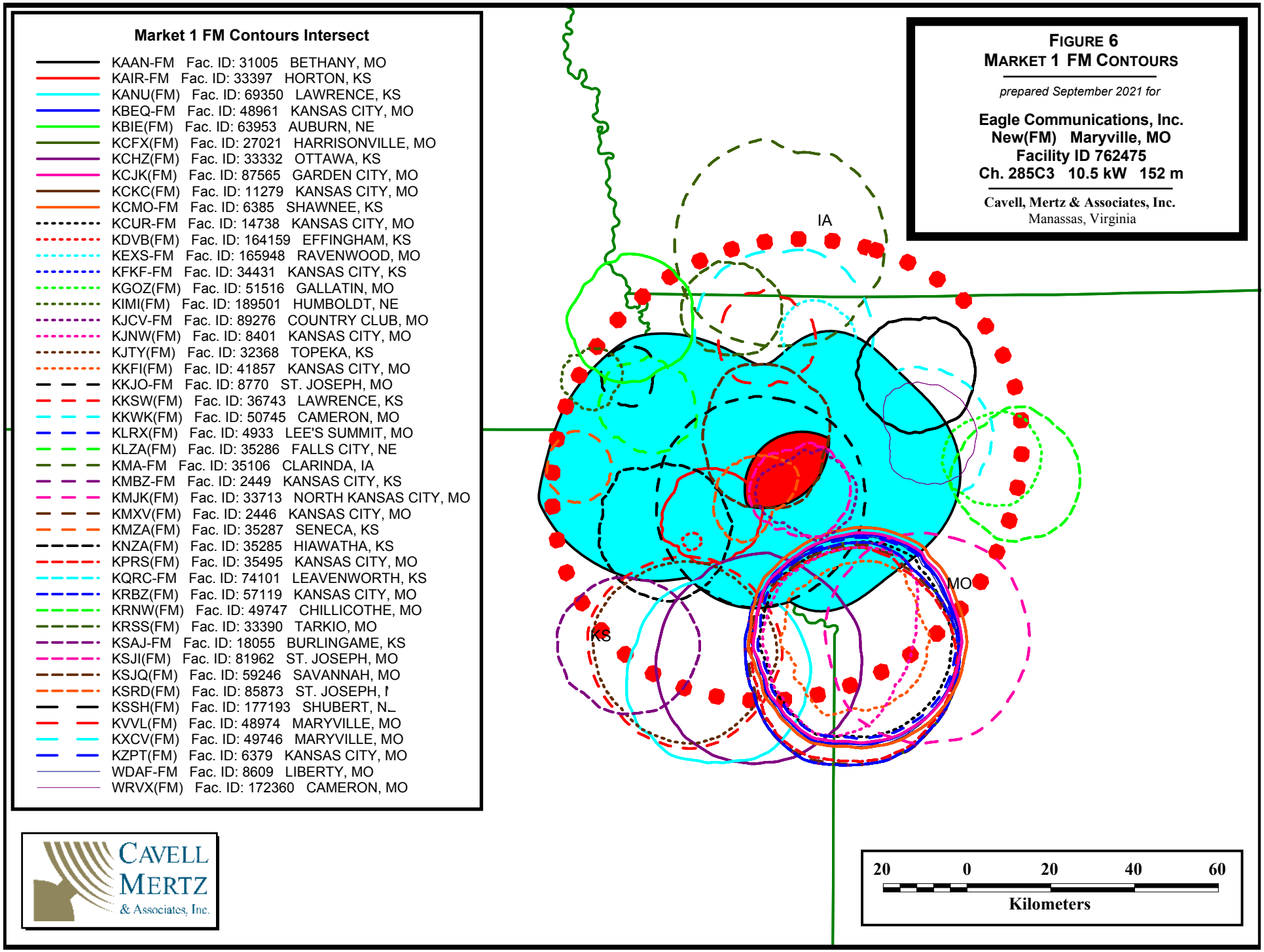
prepared September 2021 for

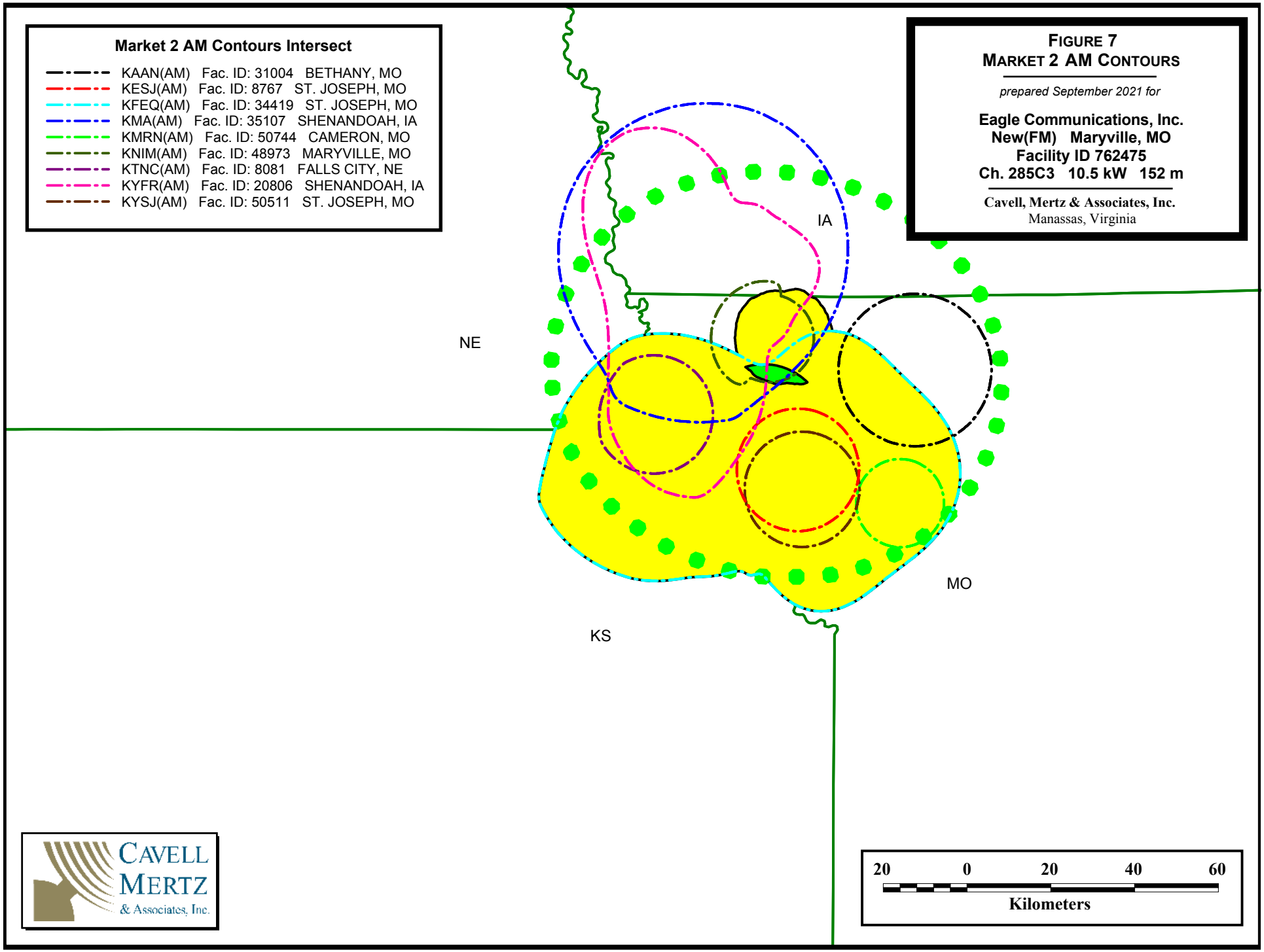
Eagle Communications, Inc.
New(FM) Maryville, MO
Facility ID 762475
Ch. 285C3 10.5 kW 152 m

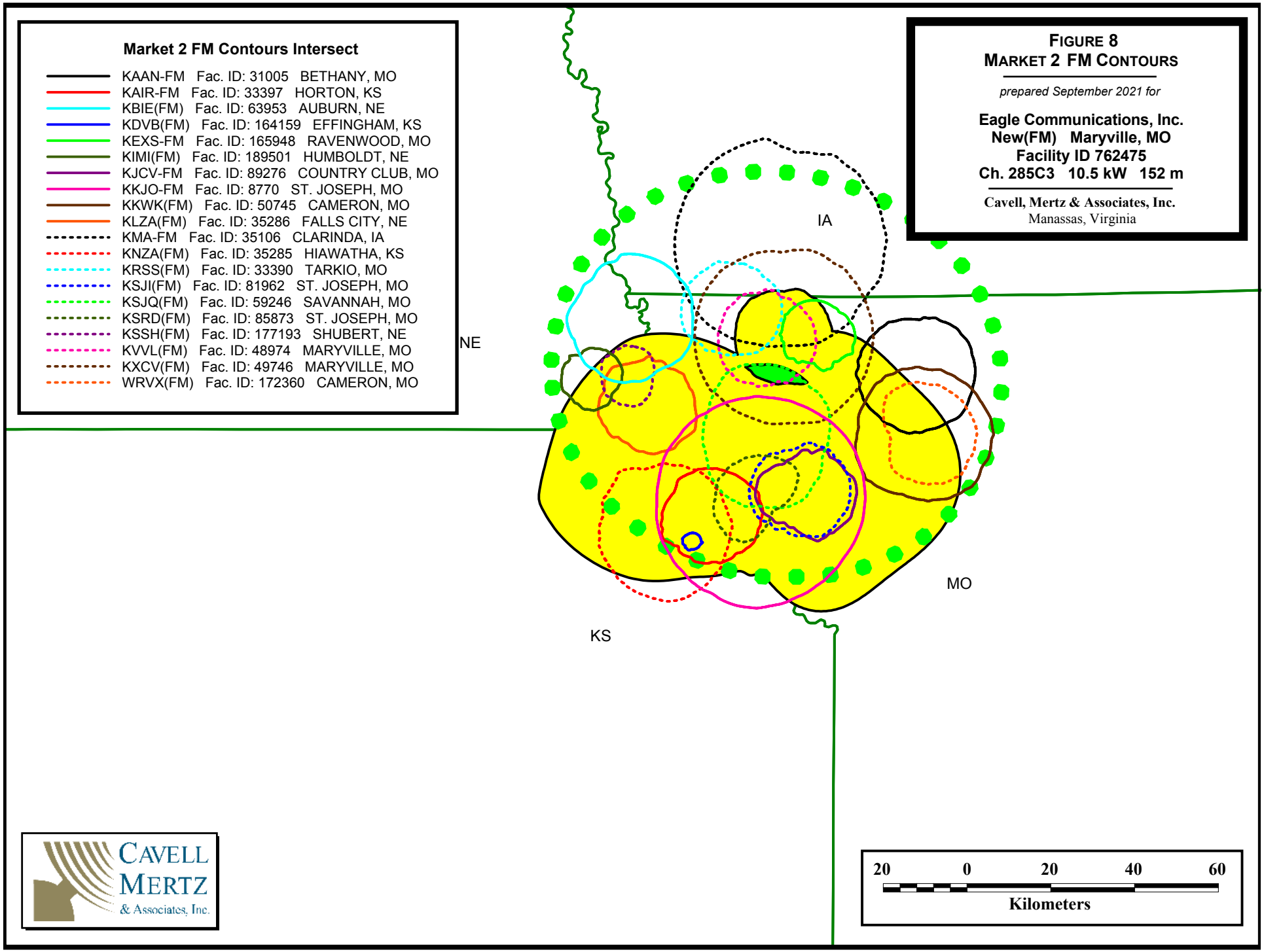
Cavell, Mertz & Associates, Inc.
Manassas, Virginia

CAVELL MERTZ & Associates, Inc.


Market 1 AM Contours Intersect
KAAN(AM) Fac. ID: 31004 BETHANY, MO
KCCV(AM) Fac. ID: 6491 OVERLAND PARK, KS
KCMO(AM) Fac. ID: 33391 KANSAS CITY, MO
KCNW(AM) Fac. ID: 10826 FAIRWAY, KS
KCSP(AM) Fac. ID: 11270 KANSAS CITY, MO
KCTE(AM) Fac. ID: 64637 INDEPENDENCE, MO
KCWJ(AM) Fac. ID: 48959 BLUE SPRINGS, MO
KCXL(AM) Fac. ID: 1162 LIBERTY, MO
KDMR(AM) Fac. ID: 4373 KANSAS CITY, MO
KDTD(AM) Fac. ID: 33697 KANSAS CITY, KS
KESJ(AM) Fac. ID: 8767 ST. JOSEPH, MO
KEXS(AM) Fac. ID: 14620 EXCELSIOR SPRINGS, MO
KFEQ(AM) Fac. ID: 34419 ST. JOSEPH, MO
KKLO(AM) Fac. ID: 10345 LEAVENWORTH, KS
KMAJ(AM) Fac. ID: 42014 TOPEKA, KS
KMBZ(AM) Fac. ID: 6382 KANSAS CITY, MO
KMRN(AM) Fac. ID: 50744 CAMERON, MO
KMVG(AM) Fac. ID: 41561 GLADSTONE, MO
KNIM(AM) Fac. ID: 48973 MARYVILLE, MO
KPRT(AM) Fac. ID: 9168 KANSAS CITY, MO
KTNC(AM) Fac. ID: 8081 FALLS CITY, NE
KTOP(AM) Fac. ID: 62236 TOPEKA, KS
KWOD(AM) Fac. ID: 87143 KANSAS CITY, KS
KYFR(AM) Fac. ID: 20806 SHENANDOAH, IA
KYSJ(AM) Fac. ID: 50511 ST. JOSEPH, MO
KYYS(AM) Fac. ID: 73938 KANSAS CITY, KS
WHB(AM) Fac. ID: 6384 KANSAS CITY, MO
WIBW(AM) Fac. ID: 63169 TOPEKA, KS
FIGURE 5
MARKET 1 AM CONTOURS
prepared September 2021 for
Eagle Communications, Inc.
New(FM) Maryville, MO
Facility ID 762475
Ch. 285C3 10.5 kW 152 m
Cavell, Mertz & Associates, Inc.
Manassas, Virginia
IA
MO
KS
CAVELL MERTZ & Associates, Inc.
20 0 20 40 60
Kilometers


Market 1 FM Contours Intersect
KAAN-FM Fac. ID: 31005 BETHANY, MO
KAIR-FM Fac. ID: 33397 HORTON, KS
KANU(FM) Fac. ID: 69350 LAWRENCE, KS
KBEQ-FM Fac. ID: 48961 KANSAS CITY, MO
KBIE(FM) Fac. ID: 63953 AUBURN, NE
KCFX(FM) Fac. ID: 27021 HARRISONVILLE, MO
KCHZ(FM) Fac. ID: 33332 OTTAWA, KS
KCJK(FM) Fac. ID: 87565 GARDEN CITY, MO
KCKC(FM) Fac. ID: 11279 KANSAS CITY, MO
KCMO-FM Fac. ID: 6385 SHAWNEE, KS
KCUR-FM Fac. ID: 14738 KANSAS CITY, MO
KDVB(FM) Fac. ID: 164159 EFFINGHAM, KS
KEXS-FM Fac. ID: 165948 RAVENWOOD, MO
KFKF-FM Fac. ID: 34431 KANSAS CITY, KS
KGOZ(FM) Fac. ID: 51516 GALLATIN, MO
KIMI(FM) Fac. ID: 189501 HUMBOLDT, NE
KJCV-FM Fac. ID: 89276 COUNTRY CLUB, MO
KJNW(FM) Fac. ID: 8401 KANSAS CITY, MO
KJTY(FM) Fac. ID: 32368 TOPEKA, KS
KKFI(FM) Fac. ID: 41857 KANSAS CITY, MO
KKJO-FM Fac. ID: 8770 ST. JOSEPH, MO
KKSW(FM) Fac. ID: 36743 LAWRENCE, KS
KKWK(FM) Fac. ID: 50745 CAMERON, MO
KLRX(FM) Fac. ID: 4933 LEE'S SUMMIT, MO
KLZA(FM) Fac. ID: 35286 FALLS CITY, NE
KMA-FM Fac. ID: 35106 CLARINDA, IA
KMBZ-FM Fac. ID: 2449 KANSAS CITY, KS
KMJK(FM) Fac. ID: 33713 NORTH KANSAS CITY, MO
KMXV(FM) Fac. ID: 2446 KANSAS CITY, MO
KMZA(FM) Fac. ID: 35287 SENECA, KS
KNZA(FM) Fac. ID: 35285 HIAWATHA, KS
KPRS(FM) Fac. ID: 35495 KANSAS CITY, MO
KQRC-FM Fac. ID: 74101 LEAVENWORTH, KS
KRBZ(FM) Fac. ID: 57119 KANSAS CITY, MO
KRNW(FM) Fac. ID: 49747 CHILLICOTHE, MO
KRSS(FM) Fac. ID: 33390 TARKIO, MO
KSAJ-FM Fac. ID: 18055 BURLINGAME, KS
KSJI(FM) Fac. ID: 81962 ST. JOSEPH, MO
KSJQ(FM) Fac. ID: 59246 SAVANNAH, MO
KSRD(FM) Fac. ID: 85873 ST. JOSEPH, M
KSSH(FM) Fac. ID: 177193 SHUBERT, N
KVVL(FM) Fac. ID: 48974 MARYVILLE, MO
KXCV(FM) Fac. ID: 49746 MARYVILLE, MO
KZPT(FM) Fac. ID: 6379 KANSAS CITY, MO
WDAF-FM Fac. ID: 8609 LIBERTY, MO
WRVX(FM) Fac. ID: 172360 CAMERON, MO
FIGURE 6
MARKET 1 FM CONTOURS
prepared September 2021 for
Eagle Communications, Inc.
New(FM) Maryville, MO
Facility ID 762475
Ch. 285C3 10.5 kW 152 m
Cavell, Mertz & Associates, Inc.
Manassas, Virginia
IA
MO
KS
CAVELL MERTZ & Associates, Inc.
20 0 20 40 60
Kilometers


Market 2 AM Contours Intersect
KAAN(AM) Fac. ID: 31004 BETHANY, MO
KESJ(AM) Fac. ID: 8767 ST. JOSEPH, MO
KFEQ(AM) Fac. ID: 34419 ST. JOSEPH, MO
KMA(AM) Fac. ID: 35107 SHENANDOAH, IA
KMRN(AM) Fac. ID: 50744 CAMERON, MO
KNIM(AM) Fac. ID: 48973 MARYVILLE, MO
KTNC(AM) Fac. ID: 8081 FALLS CITY, NE
KYFR(AM) Fac. ID: 20806 SHENANDOAH, IA
KYSJ(AM) Fac. ID: 50511 ST. JOSEPH, MO
FIGURE 7
MARKET 2 AM CONTOURS
prepared September 2021 for
Eagle Communications, Inc.
New(FM) Maryville, MO
Facility ID 762475
Ch. 285C3 10.5 kW 152 m
Cavell, Mertz & Associates, Inc.
Manassas, Virginia
IA
NE
MO
KS
CAVELL MERTZ & Associates, Inc.
20 0 20 40 60
Kilometers


Market 2 FM Contours Intersect
KAAN-FM Fac. ID: 31005 BETHANY, MO
KAIR-FM Fac. ID: 33397 HORTON, KS
KBIE(FM) Fac. ID: 63953 AUBURN, NE
KDVB(FM) Fac. ID: 164159 EFFINGHAM, KS
KEXS-FM Fac. ID: 165948 RAVENWOOD, MO
KIMI(FM) Fac. ID: 189501 HUMBOLDT, NE
KJCV-FM Fac. ID: 89276 COUNTRY CLUB, MO
KKJO-FM Fac. ID: 8770 ST. JOSEPH, MO
KKWK(FM) Fac. ID: 50745 CAMERON, MO
KLZA(FM) Fac. ID: 35286 FALLS CITY, NE
KMA-FM Fac. ID: 35106 CLARINDA, IA
KNZA(FM) Fac. ID: 35285 HIAWATHA, KS
KRSS(FM) Fac. ID: 33390 TARKIO, MO
KSJI(FM) Fac. ID: 81962 ST. JOSEPH, MO
KSJQ(FM) Fac. ID: 59246 SAVANNAH, MO
KSRD(FM) Fac. ID: 85873 ST. JOSEPH, MO
KSSH(FM) Fac. ID: 177193 SHUBERT, NE
KVVL(FM) Fac. ID: 48974 MARYVILLE, MO
KXCV(FM) Fac. ID: 49746 MARYVILLE, MO
WRVX(FM) Fac. ID: 172360 CAMERON, MO
NE
IA
MO
KS
FIGURE 8
MARKET 2 FM CONTOURS
prepared September 2021 for
Eagle Communications, Inc.
New(FM) Maryville, MO
Facility ID 762475
Ch. 285C3 10.5 kW 152 m
Cavell, Mertz & Associates, Inc.
Manassas, Virginia
CAVELL MERTZ & Associates, Inc.
20 0 20 40 60
Kilometers