

ENGINEERING EXHIBIT
Application for License

prepared for
Eagle Communications, Inc.

KNPQ(FM) Hershey, Nebraska
Facility ID 164169
Ch. 297C3 25 kW 69 m

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This material supplies a "hard copy" of the engineering portions of this application as entered February 29, 2008 for filing electronically. Since the FCC's electronic filing system may be accessed by anyone with the applicant's name and password, and electronic data may otherwise be altered in an unauthorized fashion, we cannot be responsible for changes made subsequent to our entry of this data and related attachments.

SECTION III - PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name ROBERT J. CLINTON		Relationship to Applicant (e.g., Consulting Engineer) CONSULTANT	
Signature		Date 2/29/2008	
Mailing Address CAVELL, MERTZ & ASSOCIATES, INC. 7839 ASHTON AVENUE			
City MANASSAS		State or Country (if foreign address) VA	Zip Code 20109 - 2883
Telephone Number (include area code) 7033929090		E-Mail Address (if available) BCLINTON@CAVELLMERTZ.COM	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

Section III - Engineering

TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

1.	Channel: 297		
2.	a. Effective Radiated Power:	25 kW(H) 25 kW(V)	
	b. Maximum Effective Radiated Power: (Beam-Tilt Antenna ONLY) <input checked="" type="checkbox"/> Not Applicable	kW(H) kW(V)	
3.	Transmitter Power Output: 6.58 kW		
4.	Antenna Data		
	Manufacturer	Model	Number of Sections
	ERI	SHPX-8AC	8
			Spacing Between Sections (wavelength)
			1

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

CERTIFICATION

All applicants must complete this section.

5.	Main Studio Location. The main studio location complies with 47 C.F.R. Section 73.1125.	<input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 6]
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<p>6. Transmitter Power Output. The operating transmitter power output produces the authorized effective radiated power.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 7]</p>
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APPLICATIONS FILED TO COVER A CONSTRUCTION PERMIT.
 Only applicants filing this application to cover a construction permit must complete the following section.

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

<p>7. Constructed Facility . The facility was constructed as authorized in the underlying construction permit or complies with 47 C.F.R. Section 73.1690.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 8]</p>
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<p>8. Special Operating Conditions. The facility was constructed in compliance with all special operating conditions, terms, and obligations described in the construction permit.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 9]</p>
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<p>An exhibit may be required. Review the underlying construction permit.</p>	<p>[Exhibit 10]</p>
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APPLICATIONS FILED PURSUANT TO 47 C.F.R. SECTIONS 73.1675(c) or 73.1690(c).
 Only applicants filing this application pursuant to 47 C.F.R. Sections 73.1675(c) or 73.1690(c) must complete the following section.

<p>9. Changing transmitter power output. Is this application being filed to authorize a change in transmitter power output caused by the replacement of omnidirectional antenna with another omnidirectional antenna or an alteration of the transmission line system? See 47 C.F.R. Sections 73.1690(c)(1) and (c)(10).</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
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<p>10. Increasing effective radiated power. Is this application being filed to authorize an increase in ERP for a station operating in the nonreserved band (Channels 221-300)? See 47 C.F.R. Sections 73.1690(c)(4), (c)(5) and (c)(7).</p> <p>If "Yes" to the above, the applicant certifies the following:</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
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<p>a. Spacing Requirements. The increase in ERP was authorized pursuant to MM Docket 88-375 (Class A stations) OR the facility complies with the spacing requirements of 47 C.F.R. Section 73.207.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 11]</p>
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<p>b. International Coordination. The transmitter site is greater than 320 km from the Canadian or Mexican borders OR coordination for the station's international class is complete.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 12]</p>
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<p>c. Interference. The requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations have either been satisfied OR are not applicable.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 13]</p>
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<p>Exhibit required. If the proposed facility must be notified to the entities set forth in 47 C.F.R. Section 73.1030, the applicant must provide a copy of the written approval for the ERP increase from the affected entity.</p>	<p>[Exhibit 14]</p>
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<p>d. Multiple Ownership Showing. The increase in ERP will not require the consideration of a multiple ownership showing pursuant to 47 C.F.R. Section 73.3555.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 15]</p>
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	[EXHIBIT 15]
<p>e. Environmental Protection Act. The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Appendix A, an Exhibit is required.</p>	<p style="text-align: right;"><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 16]</p>
<p>By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.</p>	
<p>11. Increasing vertically polarized effective radiated power. Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(4) to authorize an increase in the vertically polarized ERP for a station operating in the reserved band (Channels 200-220)?</p> <p>If "Yes" to the above, the applicant certifies the following:</p>	<p style="text-align: right;"><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>a. TV Channel 6 Protection Requirements. The facility complies with the spacing requirements of 47 C.F.R. Section 73.525(a)(1).</p>	<p style="text-align: right;"><input type="radio"/> Yes <input checked="" type="radio"/> No</p> <p>See Explanation in [Exhibit 17]</p>
<p>b. Environmental Protection Act. The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1 306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Appendix A, an Exhibit is required.</p>	<p style="text-align: right;"><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 18]</p>
<p>By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.</p>	
<p>12. Decreasing effective radiated power (non-reserved channel). Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(8) to authorize a decrease in the ERP for a station operating in the nonreserved band (Channels 221-300)?</p> <p>If "Yes" to the above, the applicant certifies the following:</p>	<p style="text-align: right;"><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>a. Community Coverage . The proposed facility complies with the community coverage requirements of 47 C.F.R. Section 73.315 where the distance to the 3.16 mV/m contour is predicted using the standard prediction method in 47 C.F.R. Section 73.313.</p>	<p style="text-align: right;"><input type="radio"/> Yes <input checked="" type="radio"/> No</p> <p>See Explanation in [Exhibit 19]</p>
<p>b. Auxiliary Facilities. The authorized or pending auxiliary facilities for this station comply with 47 C.F.R. Section 73.1675(a).</p>	<p style="text-align: right;"><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 20]</p>
<p>c. Multiple Ownership Showing. The decrease in ERP is not requested or required to establish compliance with 47 C.F.R. Section 73.3555.</p>	<p style="text-align: right;"><input type="radio"/> Yes <input checked="" type="radio"/> No</p> <p>See Explanation in [Exhibit 21]</p>
<p>13. Decreasing effective radiated power (reserved channel). Is this application being filed</p>	<p style="text-align: right;"><input type="radio"/> Yes <input type="radio"/> No</p>

<p>pursuant to 47 C.F.R. Section 73.1690(c)(8) to authorize a decrease in the ERP for a station operating in the reserved band (Channels 200-220)?</p> <p>If "Yes" to the above, the applicant certifies the following:</p>	
<p>a. Community Coverage . The proposed facility complies with the community coverage requirements of 47 C.F.R. Section 73.1690(c)(8)(i) where the distance to the 1 mV/m contour is predicted using the standard prediction method in 47 C.F.R. Section 73.313.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 22]</p>
<p>b. Auxiliary Facilities. The authorized or pending auxiliary facilities for this station comply with 47 C.F.R. Section 73.1675(a).</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p> <p>See Explanation in [Exhibit 23]</p>
<p>14. Replacing a directional antenna. Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(2) to replace a directional antenna with another directional antenna?</p> <p>If "Yes" to the above, the applicant certifies the following:</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
<p>a. Measurement of Directional Antenna. The composite measured pattern and measurement procedures comply with 47 C.F.R. Section 73.1690(c)(2). Exhibit required.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 24]</p> <p>[Exhibit 25]</p>
<p>b. Installation of Directional Antenna. The installation of the directional antenna complies with 47 C.F.R. Section 73.1690(c)(2). Exhibit required.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 26]</p> <p>[Exhibit 27]</p>
<p>15. Deleting contour protection status. Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(6) to delete contour protection status (47 C.F.R. Section 73.215) for a station operating in the nonreserved band (Channels 221-300)?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>If "Yes" to the above, the applicant certifies that the facility complies with the spacing requirements of 47 C.F.R. Section 73.207.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 28]</p>
<p>16. Use a formerly licensed main facility as an auxiliary facility. Is this application being filed pursuant to 47 C.F.R. Section 73.1675(c)(1) to request authorization to use a formerly licensed main facility as an auxiliary facility and/or change the ERP of the proposed auxiliary facility?</p> <p>If "Yes" to the above, the applicant certifies the following:</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
<p>a. Auxiliary antenna service area. The proposed auxiliary facility complies with 47 C.F.R. Section 73.1675(a).</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 29]</p>
<p>b. Environmental Protection Act. The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1 306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Appendix A, an Exhibit is required.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 30]</p>

<p>By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.</p>	
<p>17. Change the license status. Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(9) to change the license status from commercial to noncommercial or from noncommercial to commercial?</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
<p>If "Yes" to the above, submit an exhibit providing full particulars. For applications changing license status from commercial to noncommercial, include Section II of FCC Form 340 as an exhibit to this application.</p>	<p>[Exhibit 31]</p>

PREPARERS CERIFICATION ON PAGE 3 MUST BE COMPLETED AND SIGNED.

Exhibits

Exhibit 2

Description: EXHIBIT 2

IT IS THE APPLICANT'S UNDERSTANDING THAT NRG LICENSE SUB, LLC IS SUBMITTING AN APPLICATION ON 302-AM FOR STATION KODY(AM), NORTH PLATTE, NE (FAC. ID NO. 9931) TO RETURN TO THE DIRECT METHOD OF POWER DETERMINATION, WHICH CONTAINS THE INFORMATION REQUIRED BY SPECIAL OPERATING CONDITION NUMBER 2 OF KNPQ(AM)'S CONSTRUCTION PERMIT.

THE INFORMATION CONCERNING KOOQ(AM), NORTH PLATTE, NE (FAC. ID NO. 69701) REQUIRED BY SPECIAL OPERATING CONDITION NUMBER 3 OF KNPQ(AM)'S CONSTRUCTION PERMIT IS ATTACHED HERETO AT EXHIBIT 10.

Attachment 2

Exhibit 7

Description: EXHIBIT 7 - TABLE I

EXHIBIT 7 - TABLE I - TRANSMITTER POWER OUTPUT

Attachment 7

Description
<p>EXHIBIT 7 - TABLE I</p>

Exhibit 10

Description: EXHIBIT 10 - STATEMENT A

EXHIBIT 10 - STATEMENT A - SPECIAL OPERATING CONDITIONS

Attachment 10

Description
<p>Exhibit 10 - Statement A</p>

[Attachment I](#)

[Attachment II](#)

Exhibit 10 - Statement A
SPECIAL OPERATING CONDITIONS

prepared for

Eagle Communications, Inc.

KNPQ(FM) Hershey, Nebraska

Facility ID 164169

Ch. 297C3 25 kW 69 m

Eagle Communications, Inc. (“*Eagle*”) has completed construction of the KNPQ(FM) facility authorized in its construction permit (“CP,” file number BMPH-20071115AEB). Upon review of the instant application by Commission Staff, *Eagle* requests issuance of a license to cover the construction. This statement and associated exhibits are provided to comply with the various special operating conditions on the CP.

In compliance with the CP, the ERI model SHPX-8AC, 8-bay full-wavelength spaced antenna was mounted on the KODY(AM) tower with a center of radiation of 98.3 meters above ground. The CP specifies a center of radiation of 99 meters above ground. This complies with Section 73.1690(c)(1) of the Rules, which permits installation within two meters above or four meters below the authorized value.

In compliance with **Condition 2** of the CP, AM Station KODY(AM), North Platte, Nebraska, determined operating power by the indirect method during construction of the KNPQ(FM) facility. Upon completion of the KNPQ(FM) construction, an antenna impedance measurement was performed on the KODY tower (see **Attachment I**). FCC Form 302-AM for KNPQ has been prepared and will be filed simultaneously with the instant application for the station to return to the direct method of power determination. As required in **Condition 1**, *Eagle* will coordinate access with other site users and will either reduce power or cease operation to protect persons having access to areas at the site or on the tower from radio frequency electromagnetic fields in excess of the FCC’s guidelines. Further, as it relates to AM RF exposure levels, a fence surrounds the tower with a minimum of 3.0 meters distance from the tower base to the fence. Access to the tower is controlled by the use of a locked gate, and RF exposure warning signs are posted around the perimeter of the fence, thus complying with **Condition 4**.

In compliance with **Condition 3** of the CP, nearby co-owned directional radio station KOOQ(AM) was notified of the construction. Monitoring points were maintained during and after

Exhibit 10 - Statement A
SPECIAL OPERATING CONDITIONS
(page 2 of 2)

construction and a partial proof of performance was conducted to establish that the AM array had not been adversely affected by the construction. Since no significant change to the KOOQ(AM) pattern has been identified, FCC Form 302-AM for KOOQ will not be filed. An Engineering Statement regarding the KOOQ facility is attached along with the partial proof (see **Attachment II**).

A map is supplied as **Exhibit 10 - Figure 1**, which depicts the KNPQ 60 dB μ (protected) and 70 dB μ (principal community) contour and the boundaries of Hershey, the station's principal community. As demonstrated thereon, the facility as constructed complies with §73.315(a), as the entire principal community is encompassed by the principal community contour.

The antenna's input power, based on the antenna gain specified by the manufacturer is 5.571 kW to achieve the authorized ERP of 25 kW. The transmission line consists of 103.6 meters of Andrew type HJ7-50A line (coaxial, 1-5/8" nominal diameter). This line has an efficiency of 84.7 percent at the KNPQ operating frequency. Considering the transmission line loss, a transmitter power output of 6.58kW is required to achieve 25.0 kW ERP.

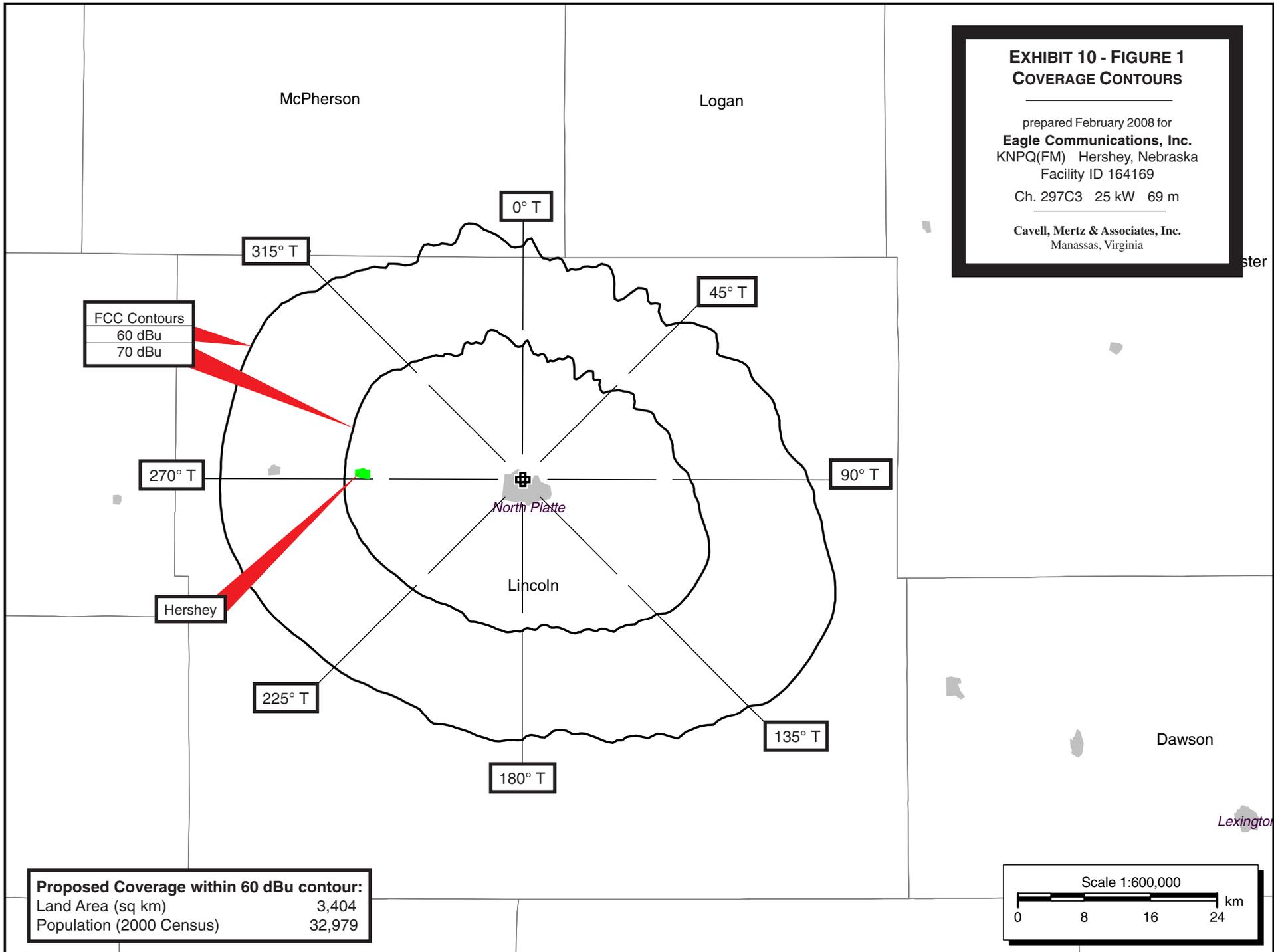
**EXHIBIT 10 - FIGURE 1
COVERAGE CONTOURS**

prepared February 2008 for
Eagle Communications, Inc.
 KNPQ(FM) Hershey, Nebraska
 Facility ID 164169

Ch. 297C3 25 kW 69 m

Cavell, Mertz & Associates, Inc.
 Manassas, Virginia

ster



FCC Contours
 60 dBu
 70 dBu

270° T

Hershey

315° T

225° T

0° T

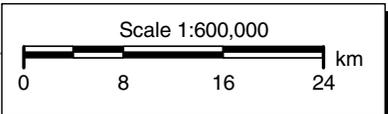
180° T

45° T

90° T

135° T

Proposed Coverage within 60 dBu contour:
 Land Area (sq km) 3,404
 Population (2000 Census) 32,979



McPherson

Logan

North Platte

Lincoln

Dawson

Lexington