

FOR  
FCC  
USE  
ONLY

# FCC 301

## APPLICATION FOR CONSTRUCTION PERMIT FOR COMMERCIAL BROADCAST STATION

FOR COMMISSION USE ONLY

FILE NO.

### Section I - General Information

1	Legal Name of the Applicant <b>MAIN STREET MEDIA OF COLORADO, LLC</b>		
	Mailing Address <b>6395 West Berry Ave.</b>		
	City <b>Littleton</b>	State or Country (if foreign address) <b>Colorado</b>	ZIP Code <b>80123</b>
	Telephone Number (include area code) <b>303 382 1000</b>		E-Mail Address (if available) <b>lontine@icloud.com</b>
	FCC Registration Number <b>0022057137</b>	Call Sign <b>KKCL</b>	Facility ID Number <b>161314</b>
2.	Contact Representative (if other than applicant) <b>Francisco R. Montero</b>		
	Firm or Company Name <b>Fletcher, Heald &amp; Hildreth, PLC</b>		
	Mailing Address <b>1300 N 17th St.</b>		
	City <b>Arlington</b>	State or Country (if foreign address) <b>VA</b>	ZIP Code <b>22209</b>
	Telephone Number (include area code) <b>703 812 0480</b>		E-Mail Address (if available) <b>montero@fhhlaw.com</b>

3. If this application has been submitted without a fee, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114):

☐ Governmental Entity ☐ Other \_\_\_\_\_

#### 4. Application Purpose.

- |  |  |
|--|--|
| <input type="checkbox"/> New Station   | <input type="checkbox"/> Major Modification of construction permit |
| <input type="checkbox"/> New Station with Petition for Rulemaking or Counterproposal to Amend FM Table of Allotments                       | <input type="checkbox"/> Minor Modification of construction permit |
| <input type="checkbox"/> New Station with Petition for Rulemaking or Counterproposal to Amend FM Table of Allotments using Tribal Priority | <input type="checkbox"/> Major Amendment to pending application    |
|  | <input type="checkbox"/> Minor Amendment to pending application    |
- ☐ Major Change in licensed facility
- ☒ Minor Change in licensed facility

a. File number of original construction permit: \_\_\_\_\_

☒ N/A

b. Service Type: ☒ AM ☐ FM ☐ TV ☐ DTV ☐ DTS

c. DTV Type: ☐ Pre-Transition ☐ Post-Transition ☐ Both

d. Community of License: 

City <b>GOLDEN</b>	State <b>COLORADO</b>
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e. Facility Type: ☒ Main ☐ Auxiliary

If an amendment, submit as an Exhibit a listing by Section and Question Number of the portions of the pending application that are being revised.

Exhibit No.

**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.**

**Section II - Legal**

1. **Certification.** Applicant certifies that it has answered each question in this application based on its review of the application instructions and worksheets. Applicant further certifies that where it has made an affirmative certification below, this certification constitutes its representation that the application satisfies each of the pertinent standards and criteria set forth in the application instructions and worksheets. ☒ Yes ☐ No

2. **Parties to the Application.**

a. List the applicant, and, if other than a natural person, its officers, directors, stockholders and other entities with attributable interests, non-insulated partners and/or members. If a corporation or partnership holds an attributable interest in the applicant, list separately its officers, directors, stockholders and other entities with attributable interests, non-insulated partners and/or members. Create a separate row for each individual or entity. Attach additional pages if necessary.

(1) Name and address of the applicant and each party to the application holding an attributable interest (if other than individual also show name, address and citizenship of natural person authorized to vote the stock or holding the attributable interest). List the applicant first, officers next, then directors and, thereafter, remaining stockholders and other entities with attributable interests, and partners.

(2) Citizenship.

(3) Positional Interest: Officer, director, general partner, limited partner, LLC member, investor/creditor attributable under the Commission's **equity/debt plus** standard, etc.

(4) Percentage of votes.

(5) Percentage of total assets (equity plus debt).

(1)	(2)	(3)	(4)	(5)
See Exhibit 1.				

b. Applicant certifies that equity and financial interests not set forth above are non-attributable.

☒ Yes ☐ No

See Explanation in Exhibit No.

☐ N/A

3. **Other Authorizations.** List call signs, locations, and facility identifiers of all other broadcast stations in which applicant or any party to the application has an attributable interest.

☒ Exhibit No.

☐ N/A

4. **Multiple Ownership.**

a. Is the applicant or any party to the application the holder of an attributable radio joint sales agreement or an attributable radio or television time brokerage agreement in the same market as the station subject to this application?

☐ Y ☐ No

If "YES," radio applicants must submit as an Exhibit a copy of each such agreement for radio stations.

Exhibit No.  
3

## Section II - Legal

- b. Applicant certifies that the proposed facility complies with the Commission's multiple ownership rules.

☒ Yes ☐ No

Radio applicants only: If "Yes," submit an Exhibit providing information regarding the market, broadcast station(s), and other information necessary to demonstrate compliance with 47 C.F.R. Section 73.3555(a).

See Explanation  
in Exhibit No.

All Applicants: If "No," submit as an Exhibit a detailed explanation in support of an exemption from, or waiver of, 47 C.F.R. Section 73.3555.

- c. Applicant certifies that the proposed facility:

☒ Yes ☐ No

- (1) does not present an issue under the Commission's policies relating to media interests of immediate family members;
- (2) complies with the Commission's policies relating to future ownership interests; and
- (3) complies with the Commission's restrictions relating to the insulation and non-participation of non-party investors and creditors.

See Explanation  
in Exhibit No.

- d. Does the Applicant claim status as an "eligible entity," that is, an entity that qualifies as a small business under the Small Business Administration's size standards for its industry grouping (as set forth in 13 C.F.R. Section 121.201), and holds:

☐ Yes ☒ No

- (1) 30 percent or more of the stock or partnership interests and more than 50 percent of the voting power of the corporation or partnership that will own the media outlet; or
- (2) 15 percent or more of the stock or partnership interests and more than 50 percent of the voting power of the corporation or partnership that will own the media outlet, provided that no other person or entity owns or controls more than 25 percent of the outstanding stock or partnership interests; or
- (3) more than 50 percent of the voting power of the corporation that will own the media outlet (if such corporation is a publicly traded company)?

See Explanation  
in Exhibit No.

All applicants: If "Yes," submit as an Exhibit a detailed showing demonstrating proof of status as an eligible entity.

5. **Character Issues.** Applicant certifies that neither applicant nor any party to the application

☒ Yes ☐ No

- a. any broadcast application in any proceeding where character issues were left unresolved or were resolved adversely against the applicant or party to the application; or
- b. any pending broadcast application in which character issues have been raised.

See Explanation  
in Exhibit No.

6. **Adverse Findings.** Applicant certifies that, with respect to the applicant and any party to the application, no adverse finding has been made, nor has an adverse final action been taken by any court or administrative body in a civil or criminal proceeding brought under the provisions of any law related to the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination.

☒ Yes ☐ No

See Explanation  
in Exhibit No.

7. **Alien Ownership and Control.** Applicant certifies that it complies with the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments.

☒ Yes ☐ No

See Explanation  
in Exhibit No.

8. **Program Service Certification.** Applicant certifies that it is cognizant of and will comply with its obligations as a Commission licensee to present a program service responsive to the issues of public concern facing the station's community of license and service area.

☒ Yes ☐ No

9. **Local Public Notice.** Applicant certifies that it has or will comply with the public notice requirements of 47 C.F.R. Section 73.3580.

☒ Yes ☐ No

10. **Auction Authorization.** If the application is being submitted to obtain a construction permit for which the applicant was the winning bidder in an auction, then the applicant certifies, pursuant to 47 C.F.R. Section 73.5005(a), that it has attached an exhibit containing the information required by 47 C.F.R. Sections 1.2107(d), 1.2110(i), 1.2112(a) and 1.2112(b), if applicable.

☐ Yes ☐ No ☒ N/A

Exhibit No.

An exhibit is required unless this question is inapplicable.

11. **Anti-Drug Abuse Act Certification.** Applicant certifies that neither applicant nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.

☒ Yes ☐ No

12. **Equal Employment Opportunity (EEO).** If the applicant proposes to employ five or more full-time employees, applicant certifies that it is filing simultaneously with this application a Model EEO Program Report on FCC Form 396-A.

☐ Yes ☐ No ☒ N/A

13. **Petition for Rulemaking/Counterproposal to Add New FM Channel to FM Table of Allotments.** If the application is being submitted concurrently with a Petition for Rulemaking or Counterproposal to Amend the FM Table of Allotments (47 C.F.R. Section 73.202) to add a new FM channel allotment, petitioner/counter-proponent certifies that, if the FM channel allotment requested is allotted, petitioner/counter-proponent will apply to participate in the auction of the channel allotment requested and specified in this application.

☐ Yes ☐ No ☒ N/A

14. **Tribal Priority - Threshold Qualifications.** Is the Applicant applying for an FM allotment set forth in a Public Notice announcing a Tribal Threshold Qualifications window? An Applicant answering "Yes" must provide an Exhibit demonstrating that it would have been qualified to add the allotment for which it is applying using the Tribal Priority.

☐ Yes ☒ No

Exhibit No.

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing Charles C. Lontine	Typed or Printed Title of Person Signing Member
Signature s/Charles C. Lontine	Date August 5, 2022

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 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 Timothy C. Cutforth	Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature Timothy C Cutforth	Date 7/28/22	
Mailing Address Broadcast Engineering Consultants 965 S. Irving Street		
City Denver	State or Country (if foreign address) Colorado	ZIP Code 80219
Telephone Number (include area code) 303-912-5474	E-Mail Address (if available) tcut4th@msn.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 - A AM 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. Frequency: 1550 kHz
2. Class: ☐ A ☒ B ☐ C ☐ D
3. Hours of Operation: ☒ Unlimited ☐ Limited ☐ Daytime ☐ Share Time ☐ Specified Hours: \_\_\_\_\_
4. Daytime Operation: ☒ Yes ☐ No
- a. Power: 1 kW
- b. Antenna Location Coordinates: (NAD 27)
- 39° 46' 01" ☒ N ☐ S Latitude  
105° 07' 22" ☐ E ☒ W Longitude
- c. Nondirectional: ☒ Yes ☐ No

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Exhibit No.

Theoretical 255.1 mV/m per kW at 1 km

Tower	1
Overall height above ground (include obstruction lighting) (meters)	19.8
Antenna structure registration	<div>Number</div> <div><input type="checkbox"/> Notification filed with FAA</div> <div><input checked="" type="checkbox"/> Not applicable</div>
Height of radiator above base insulator, or above base, if grounded (meters)	19.8
Electrical height of radiator (degrees)	35.9
Top-Loaded/Sectionalized apparent height (degrees)	
A	
B	
C	
D	

# TECH BOX - DAYTIME OPERATION

## d. Directional:

☐ Yes ☒ No

Exhibit No.

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Theoretical \_\_\_\_\_ mV/m at 1 km

Standard RMS: \_\_\_\_\_ mV/m at 1 km

Towers	1	2	3	4
Overall height above ground (include obstruction lighting) (meters)				
Antenna structure registration	<div>Number</div> <input type="checkbox"/> Notification filed with FAA  <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA  <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA  <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA  <input type="checkbox"/> Not applicable
Height of radiator above base insulator, or above base, if grounded (meters)				
Electrical height of radiator (degrees)				
Field ratio				
Phase (degrees)				
Spacing (degrees)				
Tower orientation (degrees)				
Tower reference switch				
Top-Loaded/Sectionalized apparent height (degrees)				
A				
B				
C				
D				

Augmented:

☐ Yes ☐ No

If "Yes," complete the following:

Augmented RMS: \_\_\_\_\_ mV/m at 1 km

Azimuth

Span

Augmentation radiation  
(mV/m at 1 km)


# TECH BOX - NIGHTTIME OPERATION

## 5. Nighttime Operation:

☒ Yes ☐ No

a. Power: 0.21 kW

b. Antenna Location Coordinates: (NAD 27)

39 ° 46 ' 01 " ☒ N ☐ S Latitude  
105 ° 07 ' 22 " ☐ E ☒ W Longitude

c. Nondirectional:

☒ Yes ☐ No

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Exhibit No.

Theoretical 255.7 mV/m per kW at 1 km

Tower	1
Overall height above ground (include obstruction lighting) (meters)	19.8
Antenna structure registration	<div style="text-align: center;"> <u>                    </u>  Number  <input type="checkbox"/> Notification filed with  FAA  <input checked="" type="checkbox"/> Not applicable </div>
Height of radiator above base insulator, or above base, if grounded (meters)	19.8
Electrical height of radiator (degrees)	35.9
Top-Loaded/Sectionalized apparent height (degrees)	
A	
B	
C	
D	



# TECH BOX - NIGHTTIME OPERATION

## d. Directional:

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

☐ Yes ☒ No

Exhibit No.

Theoretical \_\_\_\_\_ mV/m at 1 km

Standard RMS: \_\_\_\_\_ mV/m at 1 km

Towers	1	2	3	4
Overall height above ground (include obstruction lighting) (meters)				
Antenna structure registration	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable
Height of radiator above base insulator, or above base, if grounded (meters)				
Electrical height of radiator (degrees)				
Field ratio				
Phase (degrees)				
Spacing (degrees)				
Tower orientation (degrees)				
Tower reference switch				
Top-Loaded/Sectionalized apparent height (degrees)				
A				
B				
C				
D				

## Augmented:

☐ Yes ☒ No

If "Yes," complete the following:

Augmented RMS: \_\_\_\_\_ mV/m at 1 km

Azimuth

Span

Augmentation radiation


## TECH BOX - CRITICAL HOURS OPERATION

6. Critical Hours Operation:

☐ Yes ☒ No

a. Power: \_\_\_\_\_ kW

b. Antenna Location Coordinates: (NAD 27)

\_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ " ☐ N ☐ S Latitude  
 \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ " ☐ E ☐ W Longitude

c. Nondirectional:

☐ Yes ☐ No

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Exhibit No.

Theoretical \_\_\_\_\_ mV/m per kW at 1 km

Tower	
Overall height above ground (include obstruction lighting) (meters)	
Antenna structure registration	<p>_____ Number</p> <p><input type="checkbox"/> Notification filed with FAA</p> <p><input type="checkbox"/> Not applicable</p>
Height of radiator above base insulator, or above base, if grounded (meters)	
Electrical height of radiator (degrees)	
Top-Loaded/Sectionalized apparent height (meters)	
A	
B	
C	
D	

# TECH BOX - CRITICAL HOURS OPERATION

## d. Directional:

if "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

☐ Yes ☒ No

Exhibit No.

Theoretical \_\_\_\_\_ mV/m at 1 km

Standard RMS: \_\_\_\_\_ mV/m at 1 km

Towers	1	2	3	4
Overall height above ground (include obstruction lighting) (meters)				
Antenna structure registration	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable
Height of radiator above base insulator, or above base, if grounded (meters)				
Electrical height of radiator (degrees)				
Field ratio				
Phase (degrees)				
Spacing (degrees)				
Tower orientation (degrees)				
Tower reference switch				
Top-Loaded/Sectionalized apparent height (degrees)				
A				
B				
C				
D				

## Augmented:

☐ Yes ☐ No

If "Yes," complete the following:

Augmented RMS: \_\_\_\_\_ mV/m at 1 km

Azimuth

Span

Augmentation radiation


**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

7. **Broadcast Facility.** The proposed facility complies with the engineering standards and assignment requirements of 47 C.F.R. Sections 73.24(e), 73.24(g), 73.33, 73.45, 73.150, 73.152, 73.160, 73.182(a)-(i), 73.186, 73.189, 73.1650. **Exhibit Required.**
- ☒ Yes ☐ No See Explanation in Exhibit No.
- Exhibit No.  
eng stmt
8. **Community Coverage.** The proposed facility complies with community coverage requirements of 47 C.F.R. Section 73.24(i).
- ☒ Yes ☐ No See Explanation in Exhibit No.
9. **Main Studio Location.** The proposed main studio location complies with requirements of 47 C.F.R. Section 73.1125.
- ☒ Yes ☐ No See Explanation in Exhibit No.
10. **Interference.** The proposed facility complies with all of the following applicable rule sections. Check all those that apply. An exhibit is required for each applicable section.
- Groundwave.**
- a. ☒ 47 C.F.R. Section 73.37
- Exhibit No.  
eng stmt
- Skywave.**
- b. ☒ 47 C.F.R. Section 73.182.
- Exhibit No.  
eng stmt
- Critical Hours.**
- c. ☐ 47 C.F.R. Section 73.187.
- Exhibit No.
11. **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 radio frequency 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.**
- ☒ Yes ☐ No See Explanation in Exhibit No.
- 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 radio frequency electromagnetic exposure in excess of FCC guidelines.
12. **Community of License Change - Section 307(b).** If the application is being submitted to change the facility's community of license, then the applicant certifies that it has attached an exhibit containing information demonstrating that the proposed community of license change constitutes a preferential arrangement of assignments under Section 307(b) of the Communications Act of 1934, as amended (47 U.S.C. Section 307(b)).
- ☐ Yes ☒ No ☐ N/A
- Exhibit No.
- An exhibit is required unless this question is not applicable.**
13. **Dispositive Section 307(b) Preference**
- a. Was the AM facility that is the subject of this application awarded on the basis of a dispositive Section 307(b) preference?
- ☐ Yes ☒ No
- b. If yes to 13(a), applicant certifies that: (i) the community of license proposed in the subject application is the same as that on which the Section 307(b) preference was based, or (ii) as shown in the attached Exhibit, the service area proposed in the subject application is substantially equivalent to the service area on which the Section 307(b) preference was based.
- ☐ Yes ☐ No ☐ N/A
- Exhibit No.
- c. If yes to 13(a) and no to 13(b), applicant certifies that, although in the subject application it proposes to: (i) change the community of license, or (ii) modify service to the area on which the Section 307(b) preference was based, it has for a period of four years of on-air operations: (1) served the community of license, or (2) provided full service to the area on which the Section 307(b) preference was based.
- ☐ Yes ☐ No
- Exhibit No.

Concerning a minor change application for Construction Permit to move to a new transmitter site and change the night power.

Mainstreet Media of Colorado, INC. is the licensee of KKCL Golden, CO, FID 161314 authorized for 1550 kHz with 1 kW daytime and 0.35 kW nighttime using directional antenna nighttime (DA-N) file number BMM-20160511ABY. Loss of the tower site has made it necessary to change to a new tower site and design a replacement facility from scratch. This amended application requests the power of 1 kW daytime and 0.21 kW nighttime using nondirectional antenna (ND-2) to serve the community of Golden, Colorado.

#### PROPOSED DAYTIME OPERATION

The proposed KKCL nondirectional operation will use one tower 35.9 electrical degrees tall (20 meters AGL). The ground system will consist of 90 buried radials averaging 30 m long (54 electrical degrees) except where shortened at a property boundary.

#### DAYTIME ALLOCATIONS STUDY

The existing broadcast stations on 1550 kHz and adjacent channels were studied as required for a complete allocations study. The proposed and present coverage and interference contours are shown in the attached allocations map. There are no stations of interest near the proposed interference contours.

#### PROPOSED NIGHTTIME OPERATION

The proposed KKCL 0.21 kW nondirectional nighttime operation does not enter the 25% RSS of any US station, permit, or known proposal. The proposed operation does not enter the 50% RSS of any foreign notification.

#### CITY GRADE COVERAGE

The city of Golden, CO is fully encompassed in the proposed daytime 5 mV/m contour and the nighttime proposed 5.74 mV/m Night Limit contour provides full city grade coverage over Golden.

## ENVIRONMENTAL CONSIDERATIONS

The proposed facility will be constructed using on grade concrete foundations so there will be no significant disturbance of the ground on the site. An existing building will be used for the transmitter and therefore no significant on site construction will be required to accommodate the KKCL facilities. RF exposures outside of the tower base protective fence will be below the recommended maximum public exposure levels of OET65. No employee will be allowed to climb the tower when energized.

## SUMMARY

The engineering presented for the proposed KKCL 1 kW daytime operation and the 0.21 kW nighttime operation serving Golden has been prepared in compliance with FCC Rules and Regulations in effect as of this date. At the time of the preparation there are no known proposed, authorized, or existing stations that would require additional interference study.

Respectfully submitted,

A handwritten signature in black ink that reads "Timothy C. Cutforth". The signature is written in a cursive, flowing style.

Timothy C. Cutforth P.E.  
28 July 2022

Station: KKCLMOV		Frequency 1550 kHz		39-46-01	105-07-22		
Azim	Inverse	25 mV	5 mV	2.0 mV	0.5 mV	.250 mV	.025 mV
(deg)	(mV/m)	(km)	(km)	(km)	(km)	(km)	(km)
<hr/>							
0	255.7	7.2	20.2	28.5	47.8	62.4	151.4
5	255.7	7.2	20.4	28.8	48.0	62.6	151.7
10	255.7	7.2	20.8	29.1	48.4	63.0	152.0
15	255.7	7.2	20.9	29.5	48.8	63.4	152.4
20	255.7	7.2	20.9	30.1	49.3	63.9	153.0
25	255.7	7.2	20.9	30.7	49.9	64.5	153.6
30	255.7	7.2	20.9	31.3	50.5	65.2	154.2
35	255.7	7.2	20.9	32.1	51.3	65.9	155.0
40	255.7	7.2	20.9	33.1	52.3	66.9	156.0
45	255.7	7.2	20.9	33.5	53.7	68.3	157.3
50	255.7	7.2	20.9	33.5	55.4	70.0	159.1
55	255.7	7.2	20.9	33.5	57.9	72.5	161.6
60	255.7	7.2	20.9	33.5	60.6	75.2	164.3
65	255.7	7.2	20.9	33.5	61.1	78.3	167.4
70	255.7	7.2	20.9	33.5	61.1	80.7	175.6
75	255.7	7.2	20.9	33.5	61.1	80.7	190.3
80	255.7	7.2	20.9	33.5	61.1	80.7	190.3
85	255.7	7.2	20.9	33.5	61.1	80.7	190.3
90	255.7	7.2	20.9	33.5	61.1	80.7	190.3
95	255.7	7.2	20.9	33.5	61.1	80.7	190.3
100	255.7	7.2	20.9	33.5	61.1	80.7	190.3
105	255.7	7.2	20.9	33.5	61.1	80.7	190.3
110	255.7	7.2	20.9	33.5	61.1	80.7	190.3
115	255.7	7.2	20.9	33.5	61.1	80.7	190.3
120	255.7	7.2	20.9	33.5	61.1	80.7	190.3
125	255.7	7.2	20.9	33.5	61.1	80.7	190.3
130	255.7	7.2	20.9	33.5	61.1	80.7	190.3
135	255.7	7.2	20.9	33.5	61.1	80.7	190.3
140	255.7	7.2	20.9	33.5	61.1	80.7	190.3
145	255.7	7.2	20.9	33.5	61.1	80.7	190.3
150	255.7	7.2	20.9	33.5	61.1	80.7	190.3
155	255.7	7.2	20.9	33.5	61.1	80.7	190.3
160	255.7	7.2	20.9	33.5	61.1	80.7	190.3
165	255.7	7.2	20.9	33.5	61.1	80.7	190.3
170	255.7	7.2	20.9	33.5	61.1	80.7	190.3
175	255.7	7.2	20.9	33.5	61.1	80.7	190.3

Station: KKCLMOV		Frequency 1550 kHz		39-46-01	105-07-22		
Azim	Inverse	25 mV	5 mV	2.0 mV	0.5 mV	.250 mV	.025 mV
(deg)	(mV/m)	(km)	(km)	(km)	(km)	(km)	(km)
<hr/>							
180	255.7	7.2	20.9	33.5	61.1	80.7	188.2
185	255.7	7.2	20.9	33.5	61.1	80.7	182.9
190	255.7	7.2	20.9	33.5	61.1	80.7	175.2
195	255.7	7.2	20.9	33.5	61.1	80.7	170.4
200	255.7	7.2	20.9	33.5	61.1	78.1	167.1
205	255.7	7.2	20.9	33.5	61.1	76.6	165.7
210	255.7	7.2	20.9	33.5	61.0	75.6	162.0
215	255.7	7.2	20.9	33.5	60.1	74.7	158.2
220	255.7	7.2	20.9	33.5	59.7	74.3	154.8
225	255.7	7.2	20.9	33.5	59.4	74.0	150.6
230	255.7	7.2	20.9	33.5	59.3	73.9	146.4
235	255.7	7.2	20.9	33.5	59.3	73.9	143.3
240	255.7	7.2	20.9	33.5	59.4	74.0	140.9
245	255.7	7.2	20.9	33.5	59.7	74.3	139.3
250	255.7	7.2	20.9	33.5	59.4	74.0	138.0
255	255.7	7.2	20.9	33.5	59.1	73.7	136.8
260	255.7	7.2	20.9	33.5	58.0	72.6	135.6
265	255.7	7.2	20.9	33.5	56.8	71.4	134.6
270	255.7	7.2	20.9	33.5	54.7	69.4	133.5
275	255.7	7.2	20.9	33.5	53.2	67.8	132.8
280	255.7	7.2	20.9	32.7	52.0	66.6	132.5
285	255.7	7.2	20.9	31.8	51.1	65.7	132.9
290	255.7	7.2	20.9	31.1	50.4	65.0	133.6
295	255.7	7.2	20.9	30.4	49.6	64.3	134.4
300	255.7	7.2	20.9	29.8	49.0	63.6	135.7
305	255.7	7.2	20.9	29.3	48.6	63.2	137.3
310	255.7	7.2	20.6	28.9	48.2	62.8	138.4
315	255.7	7.2	20.3	28.6	47.9	62.5	139.9
320	255.7	7.2	20.1	28.4	47.7	62.3	141.9
325	255.7	7.2	20.0	28.3	47.6	62.2	144.2
330	255.7	7.2	19.8	28.2	47.4	62.0	147.2
335	255.7	7.2	19.8	28.1	47.4	62.0	151.6
340	255.7	7.2	19.8	28.1	47.4	62.0	152.7
345	255.7	7.2	19.8	28.1	47.4	62.0	152.6
350	255.7	7.2	19.9	28.2	47.5	62.1	151.1
355	255.7	7.2	20.0	28.4	47.6	62.2	151.3



Station: KKCLMOV      Frequency 1550 kHz      39-46-01      105-07-22  
 Azim      Inverse      1000 mV      25 mV      5.7 mV      5.0 mV      2.00 mV  
 (deg)      (mV/m)      (km)      (km)      (km)      (km)      (km)

0	117.2	0.12	3.8	11.9	13.0	21.3
5	117.2	0.12	3.8	11.9	13.0	21.5
10	117.2	0.12	3.8	11.9	13.0	21.8
15	117.2	0.12	3.8	11.9	13.0	22.3
20	117.2	0.12	3.8	11.9	13.0	22.5
25	117.2	0.12	3.8	11.9	13.0	22.5
30	117.2	0.12	3.8	11.9	13.0	22.5
35	117.2	0.12	3.8	11.9	13.0	22.5
40	117.2	0.12	3.8	11.9	13.0	22.5
45	117.2	0.12	3.8	11.9	13.0	22.5
50	117.2	0.12	3.8	11.9	13.0	22.5
55	117.2	0.12	3.8	11.9	13.0	22.5
60	117.2	0.12	3.8	11.9	13.0	22.5
65	117.2	0.12	3.8	11.9	13.0	22.5
70	117.2	0.12	3.8	11.9	13.0	22.5
75	117.2	0.12	3.8	11.9	13.0	22.5
80	117.2	0.12	3.8	11.9	13.0	22.5
85	117.2	0.12	3.8	11.9	13.0	22.5
90	117.2	0.12	3.8	11.9	13.0	22.5
95	117.2	0.12	3.8	11.9	13.0	22.5
100	117.2	0.12	3.8	11.9	13.0	22.5
105	117.2	0.12	3.8	11.9	13.0	22.5
110	117.2	0.12	3.8	11.9	13.0	22.5
115	117.2	0.12	3.8	11.9	13.0	22.5
120	117.2	0.12	3.8	11.9	13.0	22.5
125	117.2	0.12	3.8	11.9	13.0	22.5
130	117.2	0.12	3.8	11.9	13.0	22.5
135	117.2	0.12	3.8	11.9	13.0	22.5
140	117.2	0.12	3.8	11.9	13.0	22.5
145	117.2	0.12	3.8	11.9	13.0	22.5
150	117.2	0.12	3.8	11.9	13.0	22.5
155	117.2	0.12	3.8	11.9	13.0	22.5
160	117.2	0.12	3.8	11.9	13.0	22.5
165	117.2	0.12	3.8	11.9	13.0	22.5
170	117.2	0.12	3.8	11.9	13.0	22.5
175	117.2	0.12	3.8	11.9	13.0	22.5

Station: KKCLMOV      Frequency 1550 kHz      39-46-01      105-07-22

Azim	Inverse	1000 mV	25 mV	5.7 mV	5.0 mV	2.00 mV
(deg)	(mV/m)	(km)	(km)	(km)	(km)	(km)

180	117.2	0.12	3.8	11.9	13.0	22.5
185	117.2	0.12	3.8	11.9	13.0	22.5
190	117.2	0.12	3.8	11.9	13.0	22.5
195	117.2	0.12	3.8	11.9	13.0	22.5
200	117.2	0.12	3.8	11.9	13.0	22.5
205	117.2	0.12	3.8	11.9	13.0	22.5
210	117.2	0.12	3.8	11.9	13.0	22.5
215	117.2	0.12	3.8	11.9	13.0	22.5
220	117.2	0.12	3.8	11.9	13.0	22.5
225	117.2	0.12	3.8	11.9	13.0	22.5
230	117.2	0.12	3.8	11.9	13.0	22.5
235	117.2	0.12	3.8	11.9	13.0	22.5
240	117.2	0.12	3.8	11.9	13.0	22.5
245	117.2	0.12	3.8	11.9	13.0	22.5
250	117.2	0.12	3.8	11.9	13.0	22.5
255	117.2	0.12	3.8	11.9	13.0	22.5
260	117.2	0.12	3.8	11.9	13.0	22.5
265	117.2	0.12	3.8	11.9	13.0	22.5
270	117.2	0.12	3.8	11.9	13.0	22.5
275	117.2	0.12	3.8	11.9	13.0	22.5
280	117.2	0.12	3.8	11.9	13.0	22.5
285	117.2	0.12	3.8	11.9	13.0	22.5
290	117.2	0.12	3.8	11.9	13.0	22.5
295	117.2	0.12	3.8	11.9	13.0	22.5
300	117.2	0.12	3.8	11.9	13.0	22.5
305	117.2	0.12	3.8	11.9	13.0	22.0
310	117.2	0.12	3.8	11.9	13.0	21.7
315	117.2	0.12	3.8	11.9	13.0	21.4
320	117.2	0.12	3.8	11.9	13.0	21.2
325	117.2	0.12	3.8	11.9	13.0	21.0
330	117.2	0.12	3.8	11.9	13.0	20.9
335	117.2	0.12	3.8	11.9	13.0	20.9
340	117.2	0.12	3.8	11.9	13.0	20.8
345	117.2	0.12	3.8	11.9	13.0	20.9
350	117.2	0.12	3.8	11.9	13.0	21.0
355	117.2	0.12	3.8	11.9	13.0	21.1

Station: KKCLMOV      Frequency 1550 kHz      39-46-01      105-07-22

Azim (deg)	Inverse (mV/m)	1000 mV (km)	15 mV (km)	1.0 mV (km)	0.1 mV (km)	.050 mV (km)	.005 mV (km)
0	255.7	0.3	10.5	36.9	89.6	117.3	253.2
5	255.7	0.3	10.5	37.1	89.8	117.6	253.5
10	255.7	0.3	10.5	37.4	90.2	117.9	253.8
15	255.7	0.3	10.5	37.9	90.6	118.3	254.2
20	255.7	0.3	10.5	38.4	91.1	118.8	254.7
25	255.7	0.3	10.5	39.0	91.7	119.4	255.3
30	255.7	0.3	10.5	39.6	92.4	120.1	256.0
35	255.7	0.3	10.5	40.4	93.1	120.8	256.7
40	255.7	0.3	10.5	41.4	94.1	121.8	257.8
45	255.7	0.3	10.5	42.8	95.5	123.2	259.1
50	255.7	0.3	10.5	44.5	97.2	125.0	260.9
55	255.7	0.3	10.5	45.7	99.7	127.4	263.3
60	255.7	0.3	10.5	45.7	102.4	130.1	266.0
65	255.7	0.3	10.5	45.7	105.5	133.2	279.4
70	255.7	0.3	10.5	45.7	110.1	137.8	289.6
75	255.7	0.3	10.5	45.7	115.4	149.7	304.3
80	255.7	0.3	10.5	45.7	115.4	149.7	304.3
85	255.7	0.3	10.5	45.7	115.4	149.7	304.3
90	255.7	0.3	10.5	45.7	115.4	149.7	304.3
95	255.7	0.3	10.5	45.7	115.4	149.7	304.3
100	255.7	0.3	10.5	45.7	115.4	149.7	304.3
105	255.7	0.3	10.5	45.7	115.4	149.7	304.3
110	255.7	0.3	10.5	45.7	115.4	149.7	304.3
115	255.7	0.3	10.5	45.7	115.4	149.7	304.3
120	255.7	0.3	10.5	45.7	115.4	149.7	304.3
125	255.7	0.3	10.5	45.7	115.4	149.7	304.3
130	255.7	0.3	10.5	45.7	115.4	149.7	304.3
135	255.7	0.3	10.5	45.7	115.4	149.7	304.3
140	255.7	0.3	10.5	45.7	115.4	149.7	304.3
145	255.7	0.3	10.5	45.7	115.4	149.7	304.3
150	255.7	0.3	10.5	45.7	115.4	149.7	304.3
155	255.7	0.3	10.5	45.7	115.4	149.7	304.3
160	255.7	0.3	10.5	45.7	115.4	149.7	304.3
165	255.7	0.3	10.5	45.7	115.4	149.7	304.3
170	255.7	0.3	10.5	45.7	115.4	149.7	304.3
175	255.7	0.3	10.5	45.7	115.4	149.7	282.3

Station: KKCLMOV      Frequency 1550 kHz      39-46-01      105-07-22

Azim	Inverse	1000 mV	15 mV	1.0 mV	0.1 mV	.050 mV	.005 mV
(deg)	(mV/m)	(km)	(km)	(km)	(km)	(km)	(km)

180	255.7	0.3	10.5	45.7	115.4	149.7	277.2
185	255.7	0.3	10.5	45.7	115.4	148.8	271.5
190	255.7	0.3	10.5	45.7	113.3	141.1	267.5
195	255.7	0.3	10.5	45.7	108.5	136.3	261.2
200	255.7	0.3	10.5	45.7	105.3	133.0	256.6
205	255.7	0.3	10.5	45.7	103.8	131.5	247.7
210	255.7	0.3	10.5	45.7	102.8	130.5	238.2
215	255.7	0.3	10.5	45.7	101.9	129.6	234.4
220	255.7	0.3	10.5	45.7	101.5	129.2	231.0
225	255.7	0.3	10.5	45.7	101.2	127.9	226.8
230	255.7	0.3	10.5	45.7	101.1	123.8	222.6
235	255.7	0.3	10.5	45.7	101.1	120.6	219.5
240	255.7	0.3	10.5	45.7	100.9	118.2	217.1
245	255.7	0.3	10.5	45.7	99.4	116.7	215.9
250	255.7	0.3	10.5	45.7	98.0	115.3	214.6
255	255.7	0.3	10.5	45.7	96.9	114.2	213.0
260	255.7	0.3	10.5	45.7	95.7	113.0	211.8
265	255.7	0.3	10.5	45.7	94.7	111.9	210.8
270	255.7	0.3	10.5	43.8	93.6	110.8	209.7
275	255.7	0.3	10.5	42.2	92.8	110.1	209.0
280	255.7	0.3	10.5	41.1	92.6	109.9	208.8
285	255.7	0.3	10.5	40.2	92.9	110.3	210.7
290	255.7	0.3	10.5	39.5	92.2	110.9	212.5
295	255.7	0.3	10.5	38.7	91.5	111.7	213.4
300	255.7	0.3	10.5	38.1	90.8	113.1	212.4
305	255.7	0.3	10.5	37.6	90.4	114.6	213.5
310	255.7	0.3	10.5	37.3	90.0	115.7	214.6
315	255.7	0.3	10.5	37.0	89.7	117.2	216.1
320	255.7	0.3	10.5	36.8	89.5	117.2	218.0
325	255.7	0.3	10.5	36.6	89.4	117.1	220.4
330	255.7	0.3	10.5	36.5	89.2	116.9	223.4
335	255.7	0.3	10.5	36.5	89.2	116.9	228.6
340	255.7	0.3	10.5	36.4	89.2	116.9	266.7
345	255.7	0.3	10.5	36.5	89.2	116.9	266.6
350	255.7	0.3	10.5	36.6	89.3	117.0	262.7
355	255.7	0.3	10.5	36.7	89.4	117.1	253.0

Vir James Engineers

Station: KKCLMOV 1550 kHz 39-46-01 105-07-22

Distances are from Site to Conductivity Breaks

AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
<hr/>								
0	15	18.8	8	301.2	15	466.3	8	552.8
	15	588.9	8	921.2	15	939.7	30	950.0
5	15	19.5	8	310.9	15	441.9	8	572.6
	15	639.2	8	924.9	30	950.0		
10	15	20.5	8	547.5	15	611.8	8	899.3
	30	950.0						
15	15	21.7	8	353.4	15	397.3	8	514.3
	15	602.2	8	859.4	30	950.0		
20	15	23.3	8	355.9	15	605.6	8	822.9
	30	950.0						
25	15	25.1	8	363.5	15	412.3	8	519.8
	15	622.2	8	792.4	30	950.0		
30	15	26.9	8	401.1	15	405.1	8	543.8
	15	744.8	30	950.0				
35	15	29.2	8	338.1	4	454.2	8	545.3
	15	648.2	30	950.0				
40	15	32.2	8	291.0	4	489.5	8	547.0
	15	659.7	30	855.3	15	950.0		
45	15	36.3	8	279.9	4	509.1	8	566.9
	15	652.4	30	785.9	15	950.0		
50	15	41.8	8	291.5	4	522.5	8	586.0
	15	639.0	30	783.5	15	950.0		
55	15	49.8	8	308.5	4	547.1	8	619.2
	15	659.0	30	803.3	15	939.6	30	954.8
60	15	59.1	8	314.6	15	333.1	4	593.1
	8	654.4	15	744.2	30	812.5	15	882.7
	30	950.0						
65	15	71.0	8	177.6	15	372.7	4	424.4
	30	568.6	4	644.8	15	914.2	30	950.0
70	15	89.9	8	152.6	15	384.3	30	593.6
	15	950.0						
75	15	377.1	30	582.3	15	624.2	30	745.3
	15	950.0						
80	15	372.9	30	573.7	15	673.0	30	718.7
	15	803.9	30	875.6	15	950.0		
85	15	371.6	30	567.0	15	789.3	30	848.9
	15	950.0						
90	15	373.1	30	567.3	15	709.0	30	831.8
	15	950.0						
95	15	377.5	30	831.0	15	950.0		
100	15	385.0	30	851.0	15	950.0		
105	15	398.0	30	885.0	15	950.0		
110	15	426.2	30	892.3	15	947.8	8	950.0
115	15	463.5	30	815.5	8	895.8	15	950.0
120	15	458.1	30	818.7	15	838.6	8	882.2
	15	950.0						

Vir James Engineers								
Station: KKCLMOV			1550 kHz		39-46-01		105-07-22	
AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
<hr/>								
125	15	443.8	30	561.9	15	720.3	30	807.7
	15	833.9	30	928.5	15	950.0		
130	15	435.9	30	608.7	15	817.2	30	950.0
135	15	438.5	30	627.1	15	852.8	30	948.0
	15	950.0						
140	15	453.3	30	603.8	15	728.4	30	924.0
	15	950.0						
145	15	485.8	30	897.3	8	928.9	15	950.0
150	15	524.1	30	714.6	15	798.5	30	878.6
	15	882.3	8	950.0				
155	15	565.8	30	680.9	15	927.8	8	950.0
160	15	626.6	30	649.7	15	936.4	8	950.0
165	15	843.8	8	950.0				
170	15	777.5	8	950.0				
175	15	231.6	2	344.0	15	554.6	8	622.4
	15	735.5	8	950.0				
180	15	177.2	8	234.2	2	407.3	15	516.9
	8	696.6	4	770.9	8	950.0		
185	15	144.8	8	225.3	2	284.2	4	306.2
	2	490.7	15	675.2	4	848.6	8	932.5
	4	950.0						
190	15	104.5	8	200.7	4	318.0	2	386.5
	4	461.1	15	689.4	4	950.0		
195	15	83.4	8	186.1	4	302.1	2	351.7
	4	441.2	15	707.0	4	950.0		
200	15	69.8	8	175.2	4	282.8	2	339.7
	4	431.9	15	670.6	8	746.9	4	808.4
	8	816.2	4	939.6	8	950.0		
205	15	64.3	8	166.0	2	199.4	4	254.3
	2	325.6	4	428.9	15	541.4	8	697.3
	4	844.5	8	950.0				
210	15	60.3	8	156.0	2	317.8	4	421.7
	15	519.7	8	688.3	4	809.6	8	958.7
215	15	57.2	8	146.4	2	321.3	4	416.2
	15	520.5	8	657.4	15	713.7	4	777.1
	8	908.7	15	950.0				
220	15	55.9	8	137.5	2	327.7	4	421.0
	15	508.7	8	621.2	15	744.8	8	896.1
	15	950.0						
225	15	55.0	8	126.2	2	318.3	4	425.9
	15	501.7	8	665.6	15	746.7	8	916.1
	15	950.0						
230	15	54.6	8	115.3	2	294.6	4	427.3
	15	504.5	8	643.6	15	730.4	8	931.3
	15	950.0						
235	15	54.6	8	106.8	2	272.7	15	291.3
	4	434.0	15	517.0	8	627.0	15	714.1
	8	927.7	15	950.0				

Vir James Engineers								
Station: KKCLMOV			1550 kHz		39-46-01		105-07-22	
AZIMUTH	mS/m	KM	mS/m	KM	mS/m	KM	mS/m	KM
<hr/>								
240	15	55.0	8	100.3	2	224.8	8	269.0
	15	317.7	4	453.4	15	549.9	8	613.4
	15	708.5	8	894.3	15	950.0		
245	15	55.9	8	96.3	2	214.1	8	265.7
	15	335.4	4	453.5	15	655.4	8	847.3
	15	950.0						
250	15	54.9	8	93.3	2	212.6	8	267.0
	15	354.8	4	400.1	15	510.3	8	630.5
	30	752.6	8	771.8	15	950.0		
255	15	53.8	8	91.1	2	214.4	8	276.7
	15	546.0	8	654.6	30	723.5	15	908.5
	4	950.0						
260	15	50.0	8	89.7	2	217.8	8	295.5
	15	383.7	4	428.1	15	550.5	8	660.4
	15	815.2	4	950.0				
265	15	46.2	8	89.0	2	220.9	8	380.3
	4	450.2	15	518.5	8	619.3	15	798.0
	4	950.0						
270	15	39.6	8	89.0	2	220.2	8	387.5
	4	470.4	15	503.9	8	565.8	15	782.7
	4	950.0						
275	15	34.8	8	89.6	2	215.2	8	365.5
	15	425.0	4	545.0	15	717.9	4	950.0
280	15	31.3	8	91.0	2	208.3	8	352.7
	15	481.2	2	502.1	4	565.2	15	684.3
	8	771.9	4	950.0				
285	15	28.6	8	93.1	2	202.9	8	349.3
	15	353.4	2	531.8	4	587.1	15	688.3
	8	821.5	4	950.0				
290	15	26.5	8	95.9	2	200.9	8	261.9
	15	313.6	2	422.0	8	443.0	15	503.4
	8	549.7	4	582.6	8	614.0	15	703.0
	8	882.0	4	950.0				
295	15	24.3	8	99.3	2	201.3	8	254.3
	15	354.1	8	440.6	15	510.4	8	872.4
	4	950.0						
300	15	22.5	8	103.8	2	209.9	8	249.9
	15	372.7	8	438.0	15	511.1	8	950.0
305	15	21.1	8	108.6	2	243.1	8	247.5
	15	525.6	8	821.9	4	950.0		
310	15	20.0	8	112.2	2	246.6	15	573.4
	8	577.4	2	626.5	8	783.6	4	950.0
315	15	19.1	8	116.9	2	247.6	15	417.2
	2	683.1	4	688.2	8	767.4	4	950.0
320	15	18.5	8	122.9	2	249.7	15	494.9
	2	659.4	4	950.0				

Vir James Engineers

Station: KKCLMOV		1550 kHz		39-46-01		105-07-22	
AZIMUTH	mS/m KM	mS/m KM	mS/m KM	mS/m KM	mS/m KM	mS/m KM	mS/m KM
325	15 18.0	8 130.2	2 252.8	15 501.0			
	8 573.0	2 715.5	4 950.0				
330	15 17.7	8 139.3	2 252.9	15 471.0			
	8 662.3	2 778.6	8 857.0	4 960.9			
335	15 17.6	8 146.7	15 153.6	2 243.1			
	15 437.8	8 850.8	15 941.7	8 950.0			
340	15 17.5	8 142.6	15 432.3	8 813.1			
	15 950.0						
345	15 17.6	8 143.0	15 479.1	8 867.4			
	15 950.0						
350	15 17.9	8 167.5	15 533.6	8 892.1			
	15 950.0						
355	15 18.2	8 300.6	15 498.4	8 902.9			
	15 950.0						



This program uses the 2000 US Census Database: PL 94-171

Block level centroid retrieval methodology

Distance to the Contours are interpolated between Azimuths

CONTOUR OF STUDY is 5.0 mV/m.

-----  
City of Study: GOLDEN CITY -----

GOLDEN CITY, Jefferson County, CO

Total City Persons: 17,159

Total Contour Persons: 17,159

Persons in Contour: 100.0%

Area within Contour by Sectoring: 1,351.5 sq. km

Land Area in City from Census: 13.1 sq. km

Land Area in Contour from Census: 13.1 sq. km 100.0%

This program uses the 2000 US Census Database: PL 94-171

Block level centroid retrieval methodology

Distance to the Contours are interpolated between Azimuths

CONTOUR OF STUDY is 5.7 mV/m.

-----  
City of Study: GOLDEN CITY -----

GOLDEN CITY, Jefferson County, CO

Total City Persons:	17,159	
Total Contour Persons:	17,159	
Persons in Contour:	100.0%	
Area within Contour by Sectoring:	441.9 sq. km	
Land Area in City from Census:	13.1 sq. km	
Land Area in Contour from Census:	13.1 sq. km	100.0%

This program uses the 2000 US Census Database: PL 94-171

Block level centroid retrieval methodology

Distance to the Contours are interpolated between Azimuths

CONTOUR OF STUDY is 1000.0 mV/m.

-----  
CO, Jefferson County

Population :

141  
-----

SUMMARY:

Population :

141

Area within Contour by Sectoring:

0 sq. km

Land Area in Contour from Census:

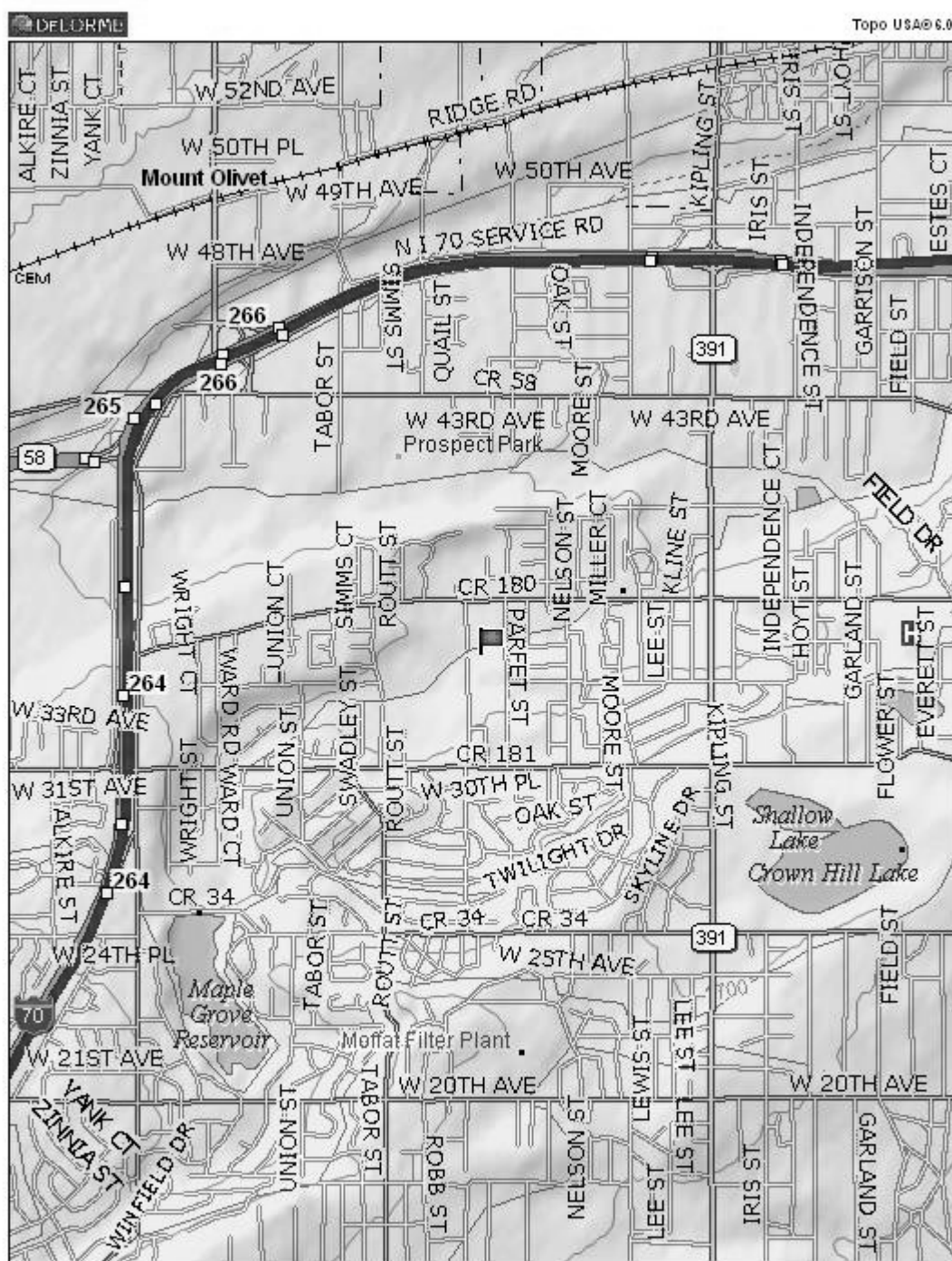
0.0 sq. km

# Proposed Night Limits

KKCL NIGHT 1550 kHz to Co-Channel Stations: 1550 kHz

\*\*\* Facilities/Points with Proposed Limits less than .5 mV/m are NOT printed

Facility or Contour	Location	Dist km	Azim deg	Theta deg	Max IDF mV/m/km	Skywave uV/m	Limit mV/m	Required Protect
XENU-O	27-29-41N 99-32-52W	1457.9	157.6	4.2	4.2	116.8	28.6	0.668 7.672
KMRI-L	40-43-16N 112-02-29W	596.5	282.4	12.2	20.5	114.3	91.2	2.085 2.215
XEBG-	32-30-45N 117-01-06W	1336.4	236.7	5.1	5.1	116.7	36.0	0.840 1.432
KESJ-L	39-49-39N 94-48-39W	880.4	86.3	7.3	13.2	116.2	49.4	1.149 1.162
KGMZ-L	37-31-59N 122-16-27W	1507.4	266.0	2.1	5.6	117.1	21.4	0.502 1.847
XEBG-O	32-30-48N 117-00-47W	1335.9	236.7	5.1	5.1	116.7	36.0	0.840 1.433
KWRN-L	34-32-12N 117-09-22W	1213.1	245.2	4.0	8.4	116.9	32.3	0.755 3.833
KXEX-L	36-46-14N 119-55-20W	1332.4	260.3	3.2	7.2	117.0	26.9	0.629 2.947



Data use subject to license.

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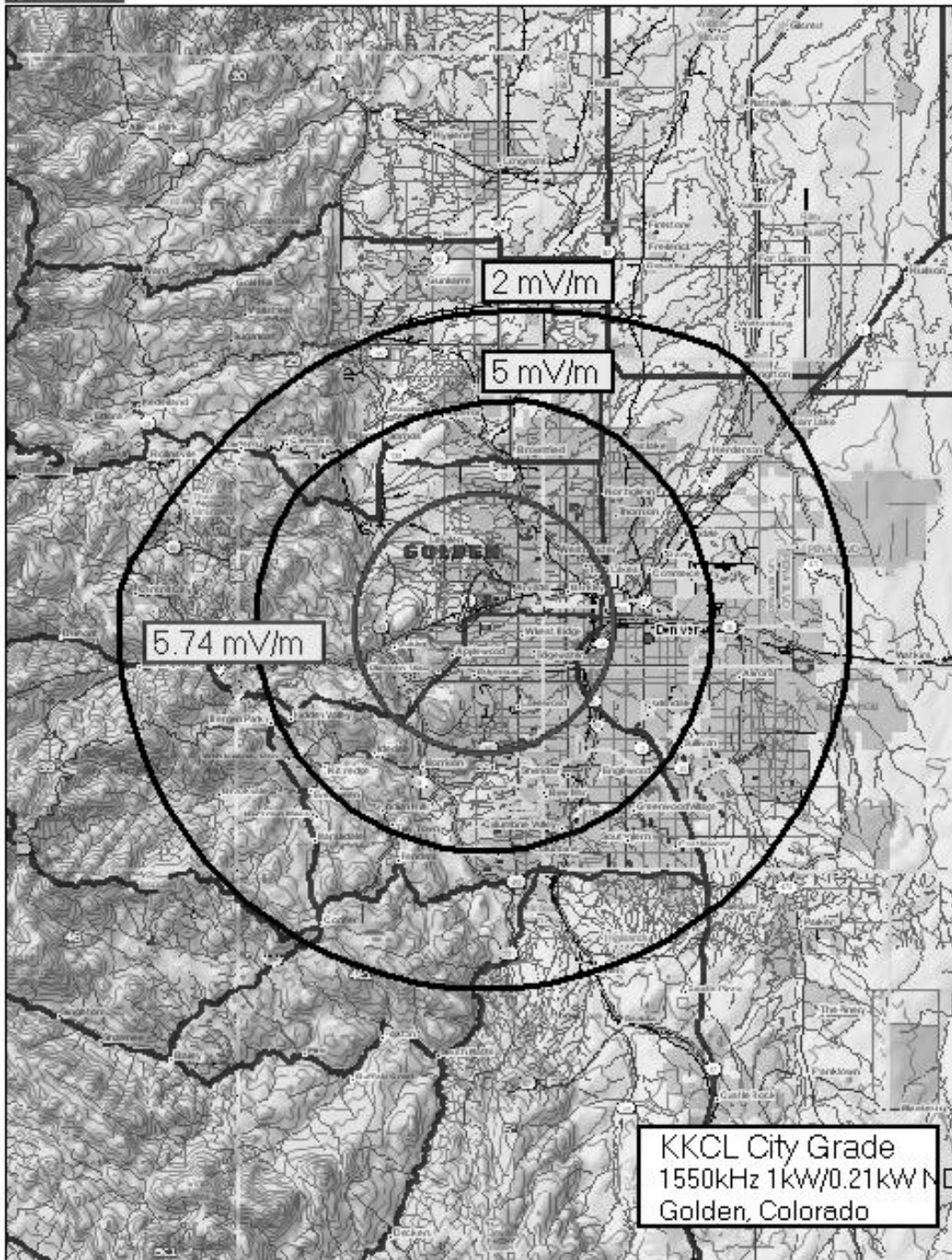
www.delorme.com



Data Zoom 12-0

tower site 1:25k map

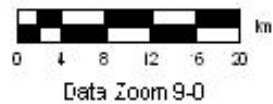
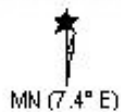
KKCL



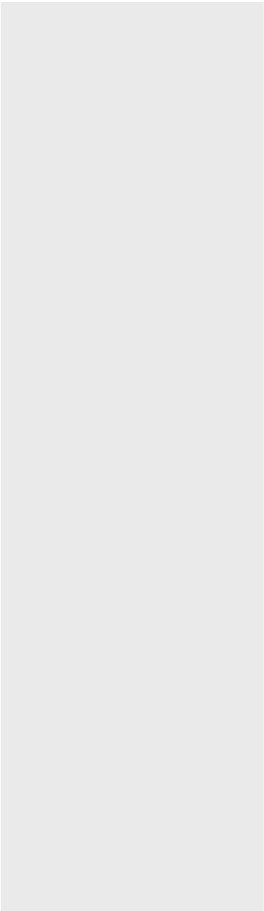
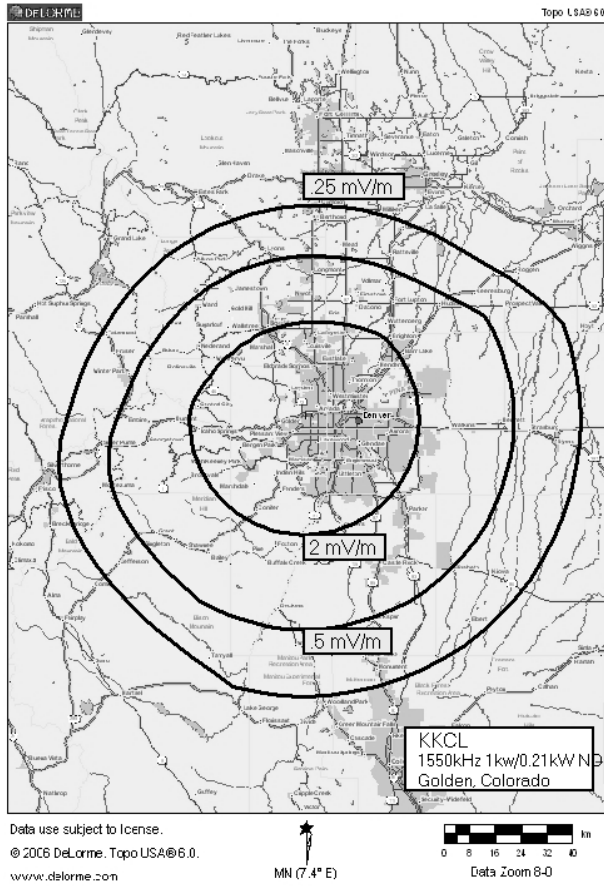
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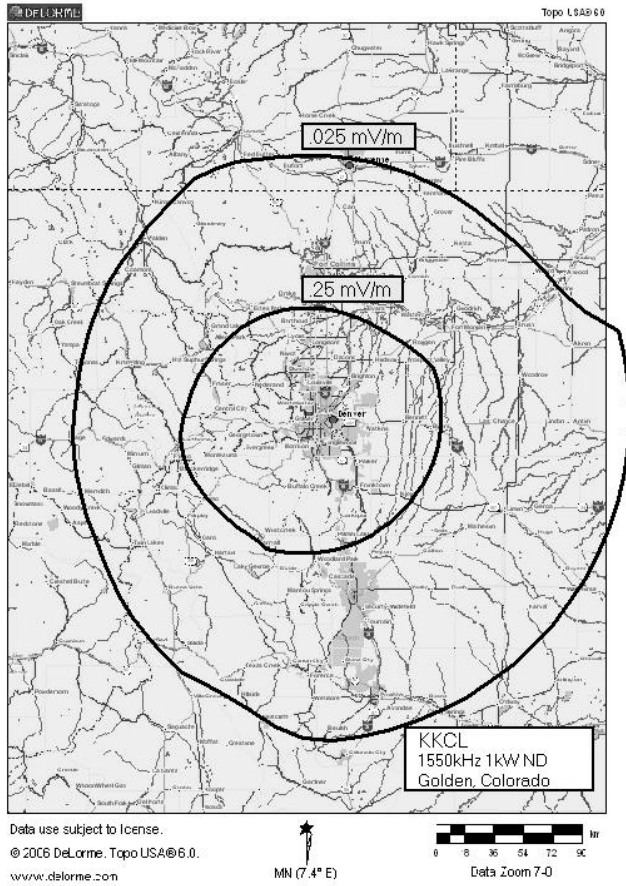
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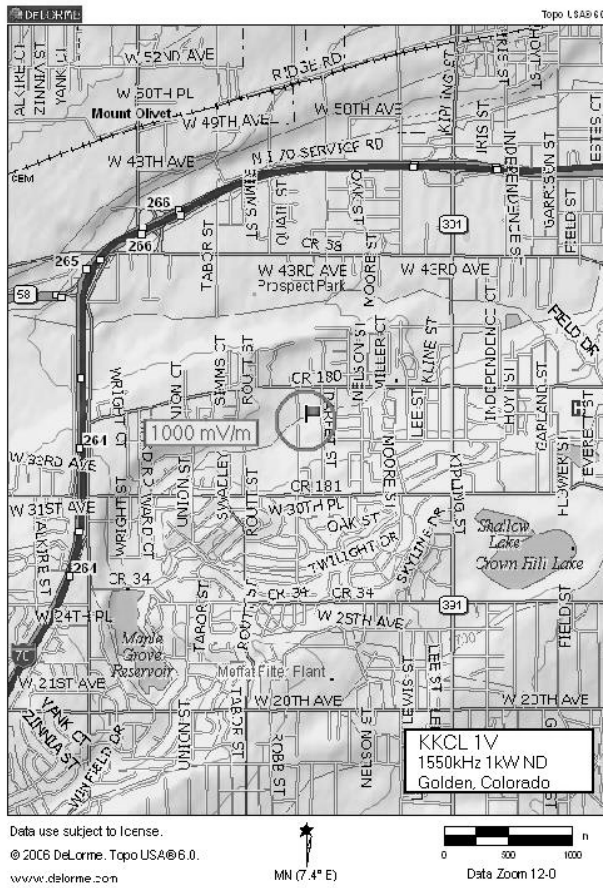
KKCL city grade coverage contours





KKCL primary and allocations contour





1V/M CONTOUR

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing	Typed or Printed Title of Person Signing
Signature	Date

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 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 Timothy C. Cutforth	Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature Timothy C. Cutforth	Date 7/28/22	
Mailing Address Broadcast Engineering Consultants 965 S. Irving Street		
City Denver	State or Country (if foreign address) Colorado	ZIP Code 80219
Telephone Number (include area code) 303-912-5474	E-Mail Address (if available) tcut4th@msn.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).

Exhibit 1 – Parties to the Application

**Mainstreet Media of Colorado, LLC**

6395 West Berry Ave,

Littleton, CO, 80123

United States

Licensee

0% Assets, 0% voting Share

**Charles C. Lontine, Jr.**

6395 West Berry Ave,

Littleton, CO, 80123

United States

LLC Member

100% Assets, 100% Voting Share

## Exhibit 2 - Other Authorizations

In addition to KKCL, Mainstreet Media of Colorado, LLC also holds the following authorizations:

K245CM, Golden, Colorado, FCC Facility ID No. 25621

K245AD, Boulder, Colorado, FCC Facility ID No. 140240

### Exhibit 3- Multiple Ownership

The Licensee does not propose to acquire any new Stations in this application. The Licensee only holds authorizations to one full power station and two translators, which complies with the Commission's multiple ownership rules.