



Kessler and Gehman Associates
Consultants • Broadcast • Wireless

**DIGITAL TELEVISION
TRANSLATOR POST
TRANSITION CHANNEL
DISPLACEMENT
RELIEF APPLICATION
FOR KVHP-LD
FACILITY ID 168235**

Jasper, TX

Prepared For:

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1.0 MINOR MODIFICATION CHANNEL DISPLACEMENT RELIEF ELIGIBILITY

LSB Broadcasting, Inc. (“LSB”) is the licensee of a digital Low Power Television Station (“LPTV”) having call sign KVHP-LD, Facility ID 168235 which is licensed¹ to operate on channel 44 with an ERP of 7.8KW through an omni-directional antenna using a stringent emission mask.

LPTV/translator stations which currently broadcast on channels (38-51) are automatically displaced because they are in the new 600 MHz band for mobile broadband service and thus KVHP-LD is clearly eligible to file for channel displacement relief in the April 10, 2018 through June 1, 2018 post-incentive auction special displacement window and is the purpose of the instant application.

Pursuant to 47 CFR Section 74.787(b) the instant application is considered a “minor” change because:

- The change in frequency is related to displacement relief as outlined above.
- There is no change in transmitting antenna location such that the protected contour resulting from the change does not overlap some portion of the protected contour of the authorized facilities of the existing station as illustrated in Appendix C.
- There is no change in transmitting antenna location greater than 30 miles (48km) from the reference coordinates of the existing station’s antenna location.

2.0 STATION TRANSMITTER LOCATION AND ELEVATION

It is proposed to keep KVHP-LD at its licensed location on an existing tower having FCC Antenna Structure Registration (“ASR”) number 1053390. The

¹ FCC File No.: BLDTL-20091022ABR

instant application does not propose to increase or modify the existing ASR or support structure.

3.0 ALLOCATION ANALYSIS

Appendix B are the summarized results from TVStudy V2.2.5. As indicated the proposed facility is not predicted to receive or cause prohibited interference.

4.0 AM STATION PROXIMITY

No AM stations are located within 3.2 km of the proposed facility. Pursuant to 47 C.F.R. Section 1.30002(e), the construction or extension of an antenna-supporting structure shall be considered subject to the moment method analysis and prior notification requirement; however, the instant application does not propose to extend the existing structure or build a new structure. Thus, the proposed facility is exempt from further AM analysis consideration.

5.0 INTERNATIONAL COORDINATION

The KVHP-LD transmitter site is 625.3 km and 1552.5 km from the Mexican and Canadian border respectively. The proposed facility will not require international coordination.

6.0 RADIO FREQUENCY RADIATION COMPLIANCE

A theoretical analysis has been conducted of the human exposure to radio frequency radiation ("RFR") using the calculation methodology described in OET Bulletin 65, Edition 97-01. The RFR analysis is conducted pursuant to the following methodology:

Terrain² extraction is compiled from the proposed tower site to radial lengths of 0.25 miles in 0.001 mile increments for 360 radials. The power

² Terrain extraction is based upon a 3 arc second point spacing terrain database.

density is calculated for each terrain point at 6 feet above ground level using the elevation and azimuth pattern of the proposed broadcast antenna. The power density calculations are conducted using the lower edge of the proposed channel frequency. To account for ground reflections, a coefficient of 1.6 was included in the calculation.

The resulting cylindrical polar analysis is then summarized into a coordinate plane graph using the following methodology:

Starting from the origin the maximum calculated RFR value is determined among the 360 degree radials for each 0.001 mile increment, the value is then converted into a percentage of the maximum allowable general population or uncontrolled exposure and plotted as a function of perpendicular distance from the tower.

The resulting RFR study in Appendix D demonstrates that the peak exposure is 0.7% of the most restrictive permissible exposure threshold. Pursuant to OET Bulletin 65 concerning multiple-user transmitter sites only those licensees whose transmitters produce power density levels greater than 5.0% of the exposure limit are considered significant contributors to RFR. Since the proposed operation is within 5% of the most permissible exposure at any location 2 meters above the ground, it is not considered a significant contributor to RFR exposure. Thus, contributions to exposure from other RF sources in the vicinity of the proposed facility were not taken into account. The instant application is compliant with the FCC limits for human exposure to RF radiation and is excluded from further environmental processing since no changes are proposed to the tower structure in order to accommodate the proposed antenna.

A chain link fence encloses the support structure and the applicant will cooperate with any other users of the tower by reducing the power to the antenna or if necessary completely cutting it off to protect maintenance workers on the tower.

7.0 CERTIFICATION

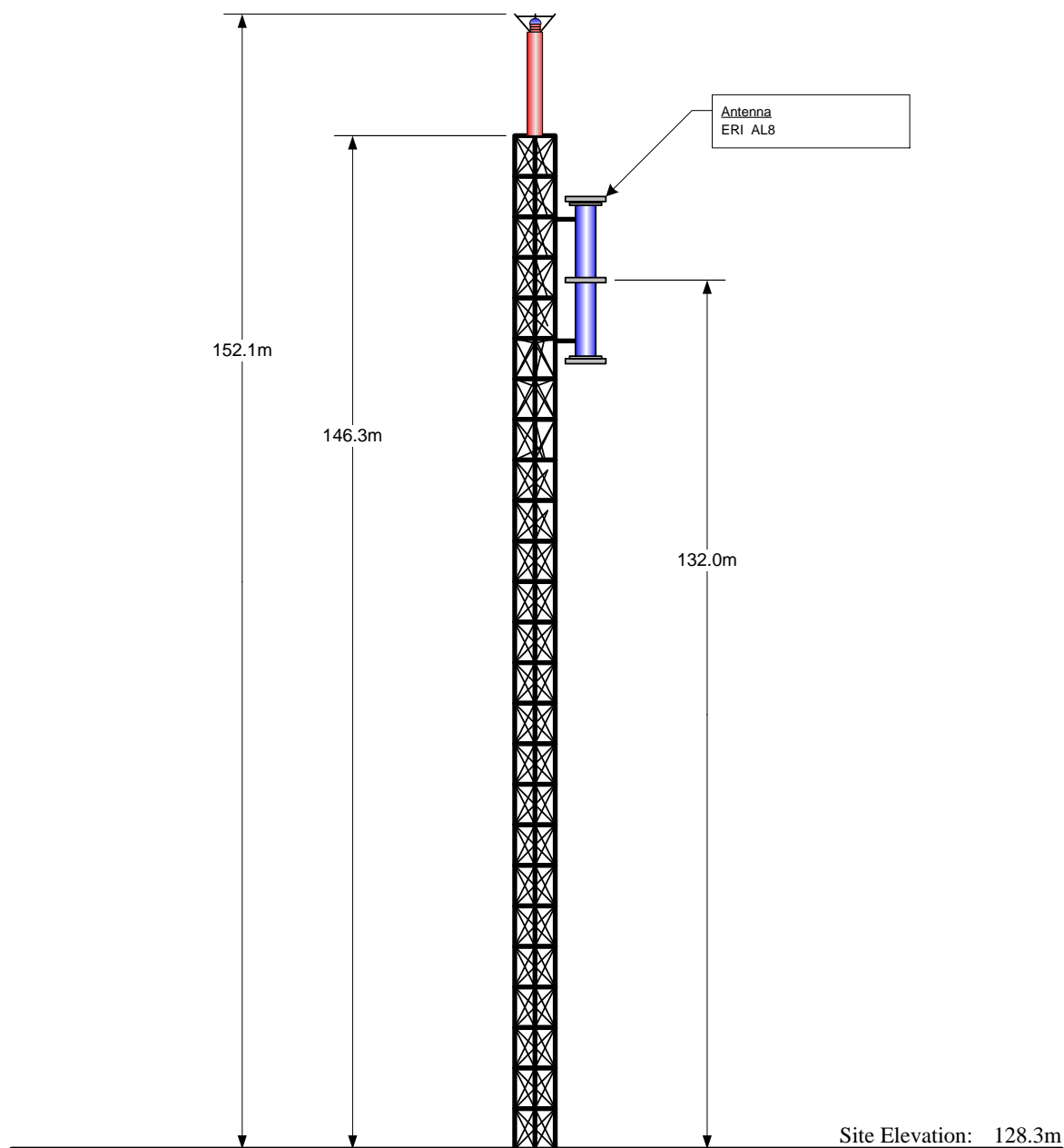
The foregoing statement and the report regarding the engineering work are true and correct to the best of my knowledge. Executed May 20, 2018.

Kessler and Gehman Associates, Inc.



Ryan Wilhour
Consulting Engineer

APPENDIX A – Tower Elevation Diagram



Antenna CRAGL:	134.0 m
Antenna CRAMSL:	260.3 m
Antenna HAAT:	172.2 m

NAD 83 Coordinates:	
N. Latitude:	30° 58' 32.0"
W. Longitude:	93° 59' 25.0"

FCC Tower Registration Number: 1053390

NOTE: NOT TO SCALE

FAA Study Number 91-ASW-1197-OE

KVHP-LD – Post Transition Channel Displacement Relief

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APPENDIX B – TVStudy V2.2.5 Allocation Analysis

Study created: 2018.05.20 13:48:08

Study build station data: LMS TV 2018-05-18

Proposal: KVHP-LD D34 LD LIC JASPER, TX
File number: KVHP-LD Channel 34
Facility ID: 168235
Station data: User record
Record ID: 3110
Country: U.S.

Build options:
Protect pre-transition records not on baseline channel

Search options:
Non-U.S. records included
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	KWCE-LP	N27-	TX	LIC	ALEXANDRIA, LA	BLTTL20060714ACI	155.4 km
No	K33MP-D	D33	LD	LIC	ALEXANDRIA, LA	BLANK0000014176	151.5
No	KLPA-TV	D33	DT	CP	ALEXANDRIA, LA	BLANK0000028079	152.0
Yes	KITU-TV	D33	DT	LIC	BEAUMONT, TX	BLEDT20110415ABG	89.0
No	KTBU	D33	DT	CP	CONROE, TX	BLANK0000034102	214.4
No	KASN	D34	DT	CP	PINE BLUFF, AR	BLANK0000034796	419.4
No	WVLA-TV	D34	DT	LIC	BATON ROUGE, LA	BLCDT20051221AOO	269.3
Yes	KMSS-TV	D34	DT	LIC	SHREVEPORT, LA	BLCDT20050705AAB	188.0
No	WRBJ-TV	D34	DT	LIC	MAGEE, MS	BLCDT20110511AGB	439.6
No	K34FM-D	D34	LD	LIC	AUSTIN, TX	BLANK0000005051	371.5
No	KEYE-TV	D34	DT	CP	AUSTIN, TX	BLANK0000034391	371.8
No	K34FM-D	N34-	TX	LIC	AUSTIN, TX	BLTT20061002BGB	371.5
Yes	K34LK-D	D34	LD	CP	BEAUMONT, TX	BNPDTL20090826ACT	92.8
Yes	NEW	D34	LD	APP	BEAUMONT, TX	BNPDTL20090825AYC	89.0
No	KZCZ-LD	D34	LD	LIC	COLLEGE STATION, TX	BLANK0000011233	313.0
Yes	KTWC-LD	D34	LD	LIC	CROCKETT, TX	BLDTL20120628ABT	146.2
No	KJJM-LD	D34	LD	LIC	DALLAS & MESQUITE, TX	BLDTL20090319ABX	333.8
Yes	KIAH	D34	DT	CP	HOUSTON, TX	BLANK0000034047	213.2
Yes	KIAH	D34	DT	APP	HOUSTON, TX	BLANK0000035711	213.2
No	KSTR-DT	D34	DT	CP	IRVING, TX	BLANK0000034260	330.3
No	KUVM-CD	D34	DC	LIC	MISSOURI CITY, TX	BLDTA20121017ABA	214.4
No	KALB-TV	D35	DT	LIC	ALEXANDRIA, LA	BLCDT20090924AAC	142.5
No	NEW	D35	LD	APP	BEAUMONT, TX	BNPDTL20090825AQW	96.3
No	KPRC-TV	D35	DT	LIC	HOUSTON, TX	BLCDT19991022ABJ	213.2
No	NEW	D35	LD	APP	TYLER, TX	BNPDTT20091123AIY	196.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D34
Mask: Full Service
Latitude: 30 58 32.00 N (NAD83)
Longitude: 93 59 25.00 W
Height AMSL: 260.3 m
HAAT: 172.2 m
Peak ERP: 15.0 kW
Antenna: Omnidirectional
Elev Pattn: Generic
Elec Tilt: 1.75

50.7 dBu contour:
Azimuth ERP HAAT Distance
0.0 deg 15.0 kW 160.5 m 47.8 km

KVHP-LD – Post Transition Channel Displacement Relief

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45.0	15.0	123.9	45.3
90.0	15.0	158.9	47.7
135.0	15.0	175.1	48.7
180.0	15.0	187.5	49.4
225.0	15.0	196.8	50.0
270.0	15.0	185.0	49.3
315.0	15.0	190.0	49.6

Distance to Canadian border: 1552.5 km

Distance to Mexican border: 625.3 km

Conditions at FCC monitoring station: Kingsville TX

Bearing: 224.8 degrees Distance: 544.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 318.2 degrees Distance: 1434.7 km

Study cell size: 1.00 km

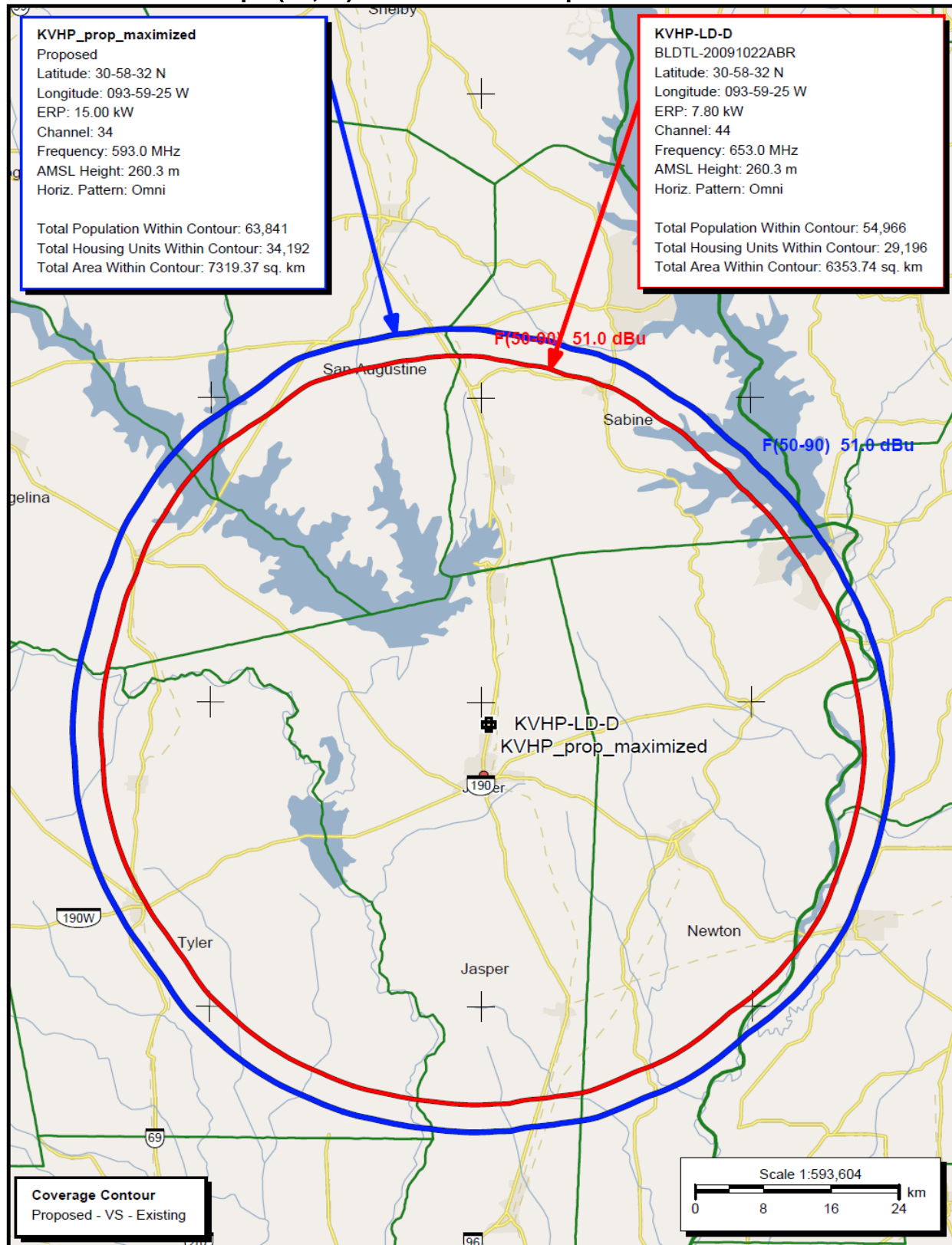
Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%

Maximum new IX to LPTV: 2.00%

No IX check failures found.

APPENDIX C – 51dBμ F(50,90) Licensed and Proposed Contour



APPENDIX D – Far Field Exposure to RF Emissions

