



United States of America
FEDERAL COMMUNICATIONS COMMISSION
AM BROADCAST STATION CONSTRUCTION PERMIT

Authorizing Official:

Official Mailing Address:

KROL COMMUNICATIONS INC.
103 NORTH WASHINGTON ST.
OWOSSO MI 48867

Son Nguyen
Son Nguyen
Supervisory Engineer
Audio Division
Media Bureau

Facility Id: 60293

Call Sign: WMLM

Permit File Number: BP-20190731ABK

Grant Date: **NOV - 7 2019**

This permit expires 3:00 a.m.
local time, 36 months after the
grant date specified above.

Coordinates Correction

Subject to the provisions of the Communications Act of 1934, as amended, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this permit, the permittee is hereby authorized to construct the radio transmitting apparatus herein described. Installation and adjustment of equipment not specifically set forth herein shall be in accordance with representations contained in the permittee's application for construction permit except for such modifications as are presently permitted, without application, by the Commission's Rules.

Commission rules which became effective on February 16, 1999, have a bearing on this construction permit. See Report & Order, Streamlining of Mass Media Applications, MM Docket No. 98-43, 13 FCC RCD 23056, Para. 77-90 (November 25, 1998); 63 Fed. Reg. 70039 (December 18, 1998). Pursuant to these rules, this construction permit will be subject to automatic forfeiture unless construction is complete and an application for license to cover is filed prior to expiration. See Section 73.3598.

Equipment and program tests shall be conducted only pursuant to Sections 73.1610 and 73.1620 of the Commission's Rules.

Hours of Operation: Unlimited

Average hours of sunrise and sunset:
Local Standard Time (Non-Advanced)

Jan.	8:15 AM	5:30 PM	Jul.	5:15 AM	8:15 PM
Feb.	7:45 AM	6:15 PM	Aug.	5:45 AM	7:45 PM
Mar.	6:45 AM	6:45 PM	Sep.	6:15 AM	6:45 PM
Apr.	6:00 AM	7:15 PM	Oct.	6:45 AM	6:00 PM
May	5:15 AM	8:00 PM	Nov.	7:30 AM	5:15 PM
Jun.	5:00 AM	8:15 PM	Dec.	8:00 AM	5:00 PM

Callsign: WMLM

Permit No.: BP-20190731ABK

Name of Permittee: KROL COMMUNICATIONS INC.

Station Location: ST. LOUIS, MI

Frequency (kHz): 1520

Station Class: B

Antenna Coordinates:

Day

Latitude: N 43 Deg 21 Min 08 Sec

Longitude: W 84 Deg 36 Min 20 Sec

Night

Latitude: N 43 Deg 21 Min 08 Sec

Longitude: W 84 Deg 36 Min 20 Sec

Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Nominal Power (kW): Day: 1.0 Night: 1.0

Antenna Mode: Day: DA Night: DA

(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)

Antenna Registration Number(s):

Day:

Tower No.	ASRN	
1	None	60.88
2	None	60.88
4	None	60.88
5	None	60.88

Night:

Tower No.	ASRN	
1	None	60.88
2	None	60.88
3	None	60.88
4	None	60.88
5	None	60.88
6	None	60.88

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 294.59 Night: 305.8

Standard RMS (mV/m/km): Day: 309.5

Augmented RMS (mV/m/km): Night: 321.51

Q Factor: Day: Night:

Theoretical Parameters:

Day Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	1.0000	0.000	0.0000	0.000	0	110.0
2	0.8000	-91.360	90.0000	340.000	0	110.0
4	0.9000	0.000	188.0000	95.000	0	110.0
5	0.7200	-91.360	90.0000	340.000	1	110.0

* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	1.0000	0.000	0.0000	0.000	0	110.0
2	1.8010	238.780	90.0000	340.000	0	110.0
3	1.0000	-242.440	180.0000	340.000	0	110.0
4	1.0000	0.000	188.0000	95.000	0	110.0
5	1.8010	238.780	169.7100	67.080	0	110.0
6	1.0000	-242.440	194.4100	40.160	0	110.0

* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

Augmentation Parameters:

Aug No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
1	78.0	35.0	24.14
2	95.0	20.0	16.09
3	110.0	30.0	16.09
4	140.0	40.0	19.31
5	165.0	35.0	25.75
6	180.0	40.0	16.09
7	205.0	30.0	48.28
8	230.0	40.0	32.19

Augmentation Parameters:

Aug No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
9	258.0	10.0	16.09
10	292.0	30.0	24.14

Special operating conditions or restrictions:

- 1 Permittee shall install a type accepted transmitter, or submit application (FCC Form 301) along with data prescribed in Section 73.1660(b) should non-type accepted transmitter be proposed.
- 2 A license application (FCC Form 302) to cover this construction permit must be filed with the Commission pursuant to Section 73.3536 of the Rules before the permit expires.
- 3 Licensee shall be responsible for satisfying all reasonable complaints of blanketing interference within the 1 V/m contour as required by Section 73.88 of the Commission's rules.
- 4 Ground system consists of 120-162 equally spaced, buried, copper radials about the base of each tower, Intersecting radials are shortened and bonded to copper straps midway between elements.

*** END OF AUTHORIZATION ***