

## Exhibit 12—Contour Spacing

The proposed facility will operate with an ERP of 0.250kw @ 41m AGL. A Contour spacing study was conducted (see Exhibit 12A) and found no expected interference to any co-, first, second or third adjacent , channel 6 or IF stations. Clearance is illustrated in attached Exhibit 12B, Contour Spacing map. Exhibit 12C shows 12 radial 60dBu Contour Data.

All the statements, maps and data contained in the following pages are true and correct to the best of my knowledge and belief and were prepared by me or under my supervision. Unless otherwise noted, all data and maps are from *rFinvestigator V.3.524 by rFsoftware, Inc.* All maps utilize USGS rasterized data and terrain data is based on the USGS 3-second DEM(DMA) terrain database, ver. 2012. Scale is as described on each map and all co-ordinates are NAD 27 datum unless otherwise noted.



Floyd E. Turner CBRE, CBNT  
FET Engineering  
Haubstadt, IN 47639  
01-27-2015

Floyd E. Turner, CBRE, CBNT  
1837 E SR68 Haubstadt IN 47639  
812.457.9860 eng@thyword.org

## Exhibit 12A-Contour Spacing Study

Page 1 of 1  
Date: 1/26/2015 9:45:00 AM  
rfInvestigator Version 3.5.25  
by rfSoftware, Inc.

FET Engineering  
Job: W232CJ Upwatt.fmj  
Master Database: 2015\_Jan\_13.fmd  
Lat: N39:18:14 Lon: W087:58:15 NAD-27  
Channel: 235 Class: DX  
Status: Licensed, Construction Permit, Application  
Channels: Co-Channel, 1st Adj, 2nd Adj, 3rd Adj  
Range: 75 km  
Comments: No Comments  
Description: Proposed ch235 Interference Study

Callsign	City	State	Channel	Adjacency	Class	Latitude (NAD27)	Longitude (NAD27)	Statu	ERP	HAAT	Dist	Bear173	Min73	207	Clear	Owner
W232CJ	CASEY	IL	232 : 94.3 MHz	3rd Adj	DX	N39:18:14	W087:58:15	CP	0.05	50	0.01	000	0	0.01		WORD POWER, INC.
W232FM	SULLIVAN	IN	237 : 95.3 MHz	2nd Adj	A	N39:09:36	W087:32:32	LIC	6.00	100	40.31	113	0	40.31		J T M BROADCASTING CORPORATI
W236AE	TERRE HAUTE	IN	236 : 95.1 MHz	1st Adj	DX	N39:28:20	W087:24:40	CP	0.04	36	51.72	069	0	51.72		THE TRUSTEES OF INDIANA UNIVE
W236AE	TERRE HAUTE	IN	236 : 95.1 MHz	1st Adj	DX	N39:28:21	W087:24:20	LIC	0.04	54	52.18	069	0	52.18		THE TRUSTEES OF INDIANA UNIVE
W234CE	EFFINGHAM	IL	234 : 94.7 MHz	1st Adj	DX	N39:06:26	W088:33:44	CP	0.10	121	55.56	247	0	55.56		THE CROMWELL GROUP, INC. OF IL

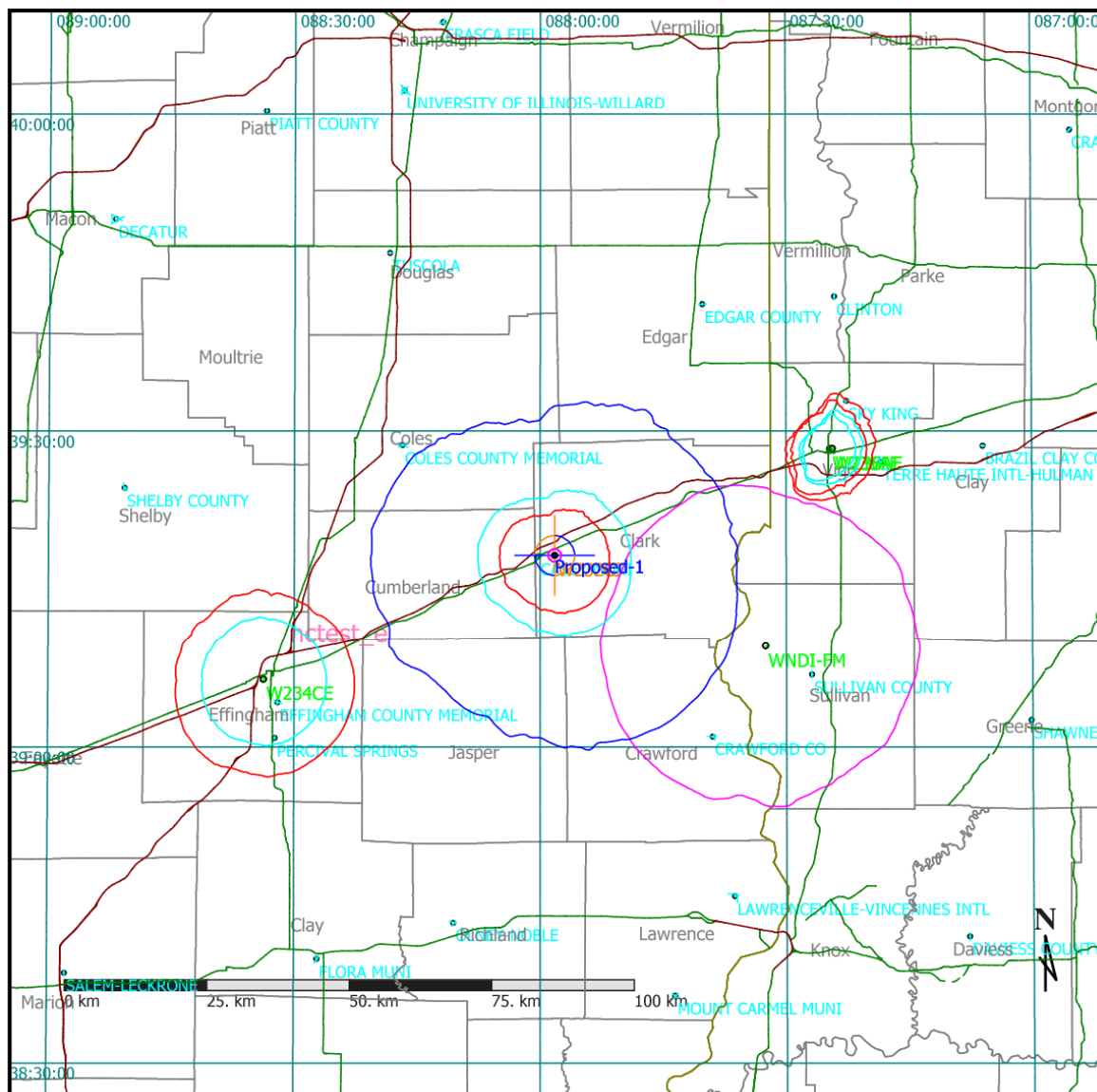
## Exhibit 12B-Contour Spacing Study

### Contour Analysis

FET Engineering  
 Job: W232CJ Upwatt.fmj  
 Master Database: 2015\_Jan\_13.fmd  
 Lat: N39:18:14 Lon: W087:58:15 NAD-27  
 Scale: 1:1000000  
 Channel: 235 Class: DX  
 Status: Licensed, Construction Permit, Application  
 Channels: Co-Channel, 1st Adj, 2nd Adj, 3rd Adj  
 Range: 75 km, Clearance: FCC  
 Comments: No Comments  
 Description: Proposed ch235 Interference Study Map

rfInvestigator Version 3.5.25  
 by rfSoftware, Inc.  
 Date: 1/26/2015 9:46:24 AM  
 Key:

City Grade  
 Protected  
 Co-Channel  
 1st Adj  
 2nd/3rd Adj



## Exhibit 12C-HAAT Radial Study

### 12 Radial Average Terrain Report

#### FET Engineering

Job: W232CJ Upwatt.fmj:\*Proposed-12 radial  
N39:18:14 W087:58:15 NAD-27  
Channel: 235 Class: DX  
Description: Proposed ch235 60dBu 12 Radial

rfInvestigator Version 3.5.25  
by rfSoftware, Inc.  
Date: 1/26/2015 10:23:22 AM  
USGS 3-Sec DEM(DMA)

Site Elevation: 186.1 meters AMSL Rad Center: 237.5 meters AMSL

#### Radial Details

Bearing Degrees True	Average Height 3.0 to 16.0 km meters (feet)		Antenna Height HAAT meters (feet)		Min Height AMSL meters (feet)		Max Height AMSL meters (feet)	
000	200.6	(658)	36.9	(121)	194.0	(636)	208.0	(682)
030	191.2	(627)	46.3	(152)	183.0	(600)	200.0	(656)
060	189.1	(620)	48.4	(159)	181.9	(597)	204.1	(669)
090	184.9	(607)	52.6	(172)	168.0	(551)	196.0	(643)
120	175.2	(575)	62.3	(204)	164.1	(539)	183.0	(600)
150	173.4	(569)	64.1	(210)	160.6	(527)	187.0	(614)
180	180.2	(591)	57.3	(188)	162.8	(534)	192.0	(630)
210	185.9	(610)	51.6	(169)	171.3	(562)	196.0	(643)
240	181.0	(594)	56.4	(185)	168.0	(551)	198.0	(650)
270	183.4	(602)	54.0	(177)	163.0	(535)	198.0	(650)
300	188.4	(618)	49.1	(161)	183.0	(600)	203.9	(669)
330	199.9	(656)	37.5	(123)	192.0	(630)	228.0	(748)

#### Average of -N- Radials

8 Radials	187.0	(613)	50.5	(166)
12 Radials	186.1	(611)	51.4	(169)
72 Radials	189.4	(621)	48.1	(158)
360 Radials	187.3	(615)	50.1	(164)