

Further Modification of Permit W275AZ; BMPFT-20190410AAD Facility ID No. 148955

This exhibit is for an amendment to the pending minor modification of translator permit for W275AZ Facility ID No. 148955, BMPFT-20190410AAD. It specifies a change in antenna pattern and elevation from 71 to 77 m RCAMS and an increase in power from 160 to 200 watts only.

Antenna Location

The proposed antenna is to be mounted on an existing tower in the antenna array of standard band stations WTMP and WMGG, identified by registration number 1040049 at 64 meters above ground, having a horizontal plane azimuth gain pattern as given in **Figure 0** below.

Below as **Figure 1** is an overlap and spacing study from which it can be determined that this proposal is within the protected contour of **second** adjacent channel station WHPT; and **third** adjacent channel station WFUS.

73.1204 Compliance

We will demonstrate that a lack of population and/or other factors allow this proposal to be compliant with 74.1204. The process commonly called “Living Way”, allows for the use of D/U Analysis, also known as “signal strength ratio methodology” to be utilized to demonstrate compliance. In this instant case the facility to be protected is on a second or third adjacent channel and is to be afforded protection from signals 40 dB stronger than the protected facility presents near the proposed translator antenna location.

Concerning WHPT; In **Figure 2** a map showing the predicted 66.2 dBu signal contour of the protected facility at the proposed translator antenna location is given. This proposal can only cause predicted interference to the protected facility by having a signal exceeding 106.2 dBu (66.2 + 40) in a habitable/populated area. Utilizing the line of sight equation shown in **Figure 3** which considers the vertical elevation pattern of the proposed antenna, it has been determined that a 106.2 dBu signal developed by 200 watts, as proposed, emitted by the proposed antenna mounted 64 meters above ground, will not reach habitable areas or ground level. With examination of the image in **Figure 4** it can be determined that no habitable space extends above this height within the confines of this contour. Thus the provisions of the rules section concerning prohibited overlap will not apply as it has been demonstrated that no actual interference will occur due to a lack of population and other factors as applied in this instant proposal.

Concerning WFUS; In **Figure 2** a map showing the predicted 82.3 dBu signal contour of the protected facility at the proposed translator antenna location is given. As this signal is due the same 40

dB protection, and is of higher value than that of WHPT, the demonstrated protection of the weaker WHPT provides for the protection of WFUS.

Thus the provisions of the rules section concerning prohibited overlap will not apply as it has been demonstrated that no actual interference will occur due to a lack of population and other factors as applied in this instant proposal.

Fill-in and Minor Change Status

This proposal is to serve as a fill-in translator for station WFUS(FM), Facility ID 63984, Gulfport, FL. The map of **Figure 5** demonstrates that the proposed 60 dBu contour is contained within that of the WFUS(FM) facility. It can also be seen that the proposed and licensed facilities have service contour overlap.

RF Fields Statement

The proposed facilities were evaluated in terms of potential radio frequency fields exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation."

The proposed antenna system is an **ERI LP-5E-DA-HW**, a five (5) element, half-wave spaced antenna, mounted 64 meters above ground. As this element type is modeled in the FM Model RF Fields program has been set to calculate values for an array of antenna element(s) "type 3", operated with an effective radiated power of 0.20 Kilowatts in the Horizontal and Vertical plane. At 2 meters above the surface, at 306 meters from the base of the tower, this proposal will contribute worst case, 0.06 microwatts per square centimeter, or 0.01 percent of the allowable ANSI limit for controlled exposure, and 0.05 percent of the allowable limit for uncontrolled exposure. This figure is less than 5.0% of the applicable FCC exposure limit at all locations extending out from the base of the tower. Section 1.1307(b)(3) excludes applications when the calculated level is predicted to be less than 5.0% of the applicable exposure limit. It is therefore believed that this proposal is in compliance with OET Bulletin Number 65 as required by the Federal Communications Commission.

Further, the applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The site itself is restricted from public access. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.

Figure 0. Antenna Pattern

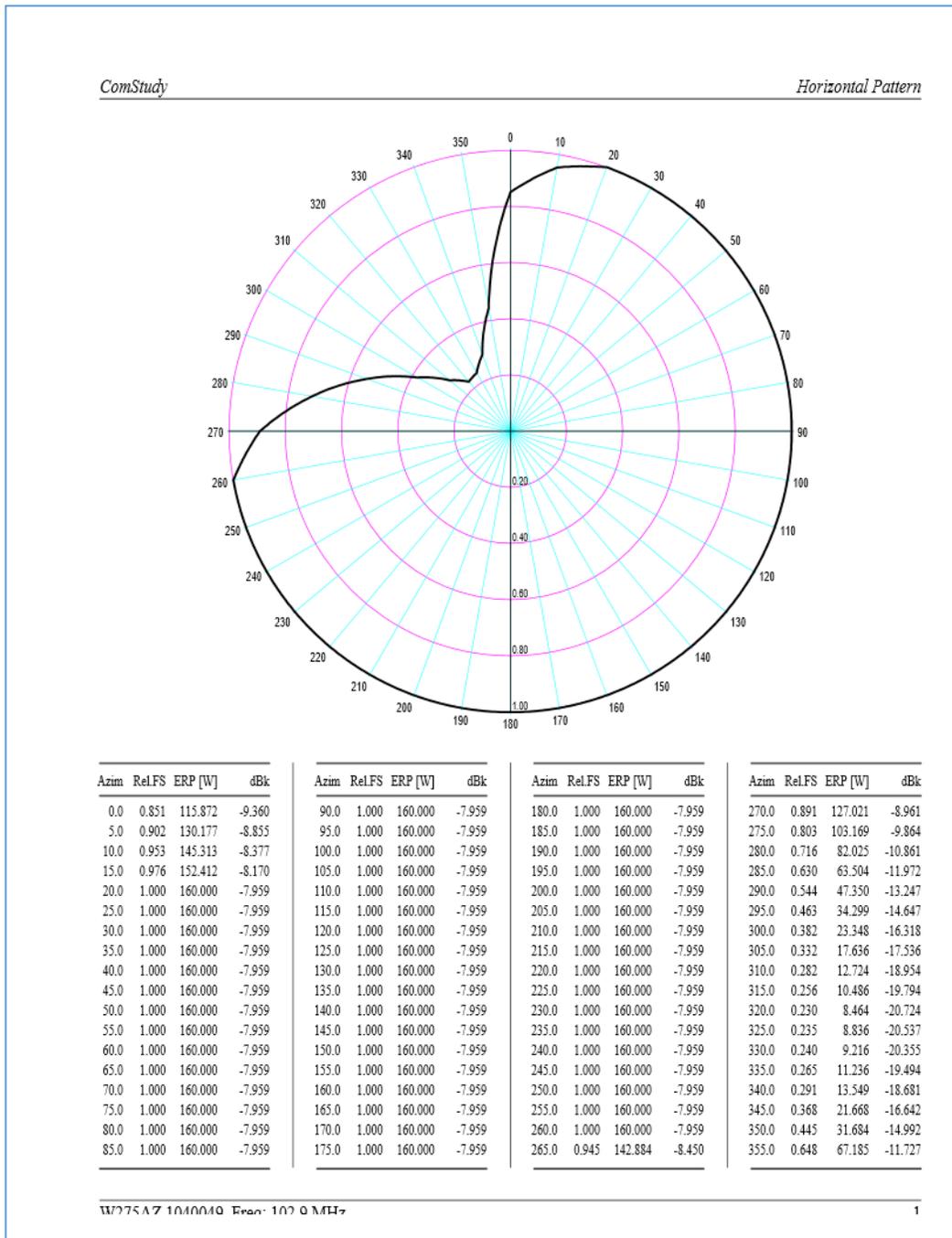


Figure 1. Overlap and Spacing Study

W275AZ at ASR 1040049											
Citicasters Licenses, Inc.											
CH# 275D - 102.9 MHz, Pwr= 0.16 kW DA, HAAT= 65.9 M, COR= 71 M											
Average Protected F(50-50)= 9.49 km											
Standard Directional											
DISPLAY DATES											
DATA 11-07-19											
SEARCH 11-07-19											
CH	CALL	TYPE	ANT	AZI	DIST	LAT	PWR	INT	PRO	*IN*	*OUT*
CITY	STATE			<--	FILE #	LNG	(kW)	(km)	(km)	(Overlap	in km)
							HAAT(M)	COR(M)	LICENSEE		
278CO	WFUS	LIC	FL	132.4	31.58	27 49 10.80	68,000	11.2	82.0	10.8	-51.3*
	Gulfport			312.5	BLH20111004ADI	82 15 38.00	472	491	Citicasters Licenses, Inc.		
275D	W275AZ	CP	FL	95.9	1.77	28 00 35.10	0.250		---	Reference---	
	Tampa			275.9	BMPFT20190410AAD	82 28 47.40		89	Citicasters Licenses, Inc.		
275D	W275AZ	LIC	FL	185.7	13.28	27 53 33.00	0.200		---	Reference---	
	Wesley Chapel			5.7	BLFT20141202AAY	82 30 40.00		55	Citicasters Licenses, Inc.		
273C	WHPT	LIC	FL	159.9	71.31	27 24 31.20	100,000	12.6	86.9	48.9	-16.4*
	Sarasota			340.0	BMLH20100212AAW	82 14 59.30	503	520	Cox Radio, Inc.		
276D	W276CX	LIC	FL	305.7	32.61	28 10 57.00	0.250	40.3	24.2	-11.8*	0.8
	New Port Richey			125.6	BLFT20170113AAI	82 46 04.40		414	Beasley Media Group Licens		
275D	W275AX	CP	FL	97.3	58.00	27 56 37.10	0.240	43.1	12.8	5.6	14.1
	Bartow			277.6	BPFT20180705AAG	81 54 43.30		182	Glades Media Company, LLC		
275D	W275AX	LIC	FL	97.3	58.00	27 56 37.10	0.240	37.6	11.1	11.4	16.4
	Bartow			277.6	BLFT20130906AAJ	81 54 43.30	143	182	Glades Media Company, LLC		
275C1	WJGO	LIC	FL	161.5	178.43	26 29 17.30	96,000	152.7	57.3	15.9	88.6
	Tice			341.8	BMLH20150427AAW	81 55 45.30	142	144	Renda Broadcasting Corp. O		
276C2	WOTW	LIC	FL	55.2	107.41	28 33 33.00	22,000	76.8	52.1	21.2	42.3
	Windermere			235.7	BLH20090317ACS	81 35 38.30	227	259	Jvc Media Of Florida, LLC		
273D	W273CP	LIC	FL	305.7	32.61	28 10 57.00	0.250	0.0	1.6	25.5	26.9
	New Port Richey			125.6	BLFT20161209AAL	82 46 04.40		154	Cox Radio, Inc.		
275L1	WZEU-LP	LIC	FL	357.3	63.53	28 34 56.00	0.012			36.6	31.4
	Weeki Wachee			177.3	BLL20181119AAI	82 31 43.40	85	100	Weeki Wachee Community Rad		
276D	W276CR	CP	FL	188.7	61.57	27 27 50.10	0.250	19.1	12.8	32.8	35.2
	Bradenton			8.7	BPFT20190829AAB	82 35 32.40		99	Citicasters Licenses, Inc.		
276D	W276CR	LIC	FL	188.7	61.57	27 27 50.10	0.250	15.2	10.2	37.1	36.1
	Bradenton			8.7	BLFT20160115ABW	82 35 32.40		99	Citicasters Licenses, Inc.		
272D	W272EH	LIC	FL	40.0	46.91	28 20 04.00	0.250	1.1	8.5	36.4	37.4
	Dade City			220.1	BLFT20190709AAA	82 11 23.30		78	Radio World Inc.		
274L1	WXIO-LP	LIC	FL	29.4	63.55	28 30 31.90	0.100			46.4	45.2
	Ridge Manor			209.6	BLL20150225ACN	82 10 41.30	17	43	Anchor Of Our Soul Ministr		
274D	W274BB	LIC	FL	85.6	87.27	28 04 10.00	0.038	9.3	6.5	68.5	67.6
	Haines City			266.0	BLFT20150805AAS	81 36 39.00	66	102	Central Florida Educationa		
272C2	WXUS	LIC	FL	4.4	131.17	29 11 15.90	50,000	6.0	52.6	116.4	77.8
	Dunnellon			184.4	BMLH20011214AJZ	82 23 39.40	149	171	Jvc Media Of Florida, LLC		
221C3	WCTQ	LIC	FL	178.0	95.37	27 09 04.20	11,500	0.0	0.0	11.5R	83.9M
	Venice			358.0	BLH20040406ACI	82 27 50.30	145	147	Citicasters Licenses, Inc.		
275C	WEZI	LIC	FL	19.6	267.62	30 16 34.90	100,000	173.0	73.1	85.5	164.9
	Jacksonville			200.0	BMLH20130124AAQ	81 33 52.30	309	315	Cox Radio, Inc.		
274D	W274BR	LIC	FL	27.8	112.37	28 54 16.90	0.250	17.5	11.9	85.8	87.7
	The Villages			208.0	BLFT20190213AAB	81 57 35.30		105	Central Florida Educationa		
277C2	WXCZ	LIC	FL	339.9	140.40	29 11 45.90	31,000	5.1	46.5	127.6	93.6
	Cedar Key			159.6	BLH20180105AAI	82 59 45.40	140	140	Wgul-Fm, Inc.		
278D	W278CI	LIC	FL	21.3	106.40	28 54 07.90	0.250	1.1	11.1	96.2	94.4
	Oxford			201.5	BLFT20170227ABT	82 05 59.30		85	Marc Radio Gainesville, LL		
275L1	WIEB-LP	LIC	FL	15.0	135.47	29 11 16.90	0.100			107.9	100.5
	Ocala			195.2	BMLL20170301AAH	82 08 13.30	32	54	Institucion Educativa Beth		
278D	NEW	APP	FL	37.3	114.45	28 49 43.00	0.080	0.6	7.0	104.5	106.5
	Leesburg-Eustis			217.6	BNPFT20180503AAK	81 47 09.30		76	Wlbe 790, Inc.		
273D	W273CA	LIC	FL	57.7	124.66	28 36 21.20	0.250	1.1	14.7	114.2	109.1
	Orlando			238.2	BLFT20121018ACJ	81 25 04.30	143	169	Central Florida Educationa		

Figure 2. Contour Map

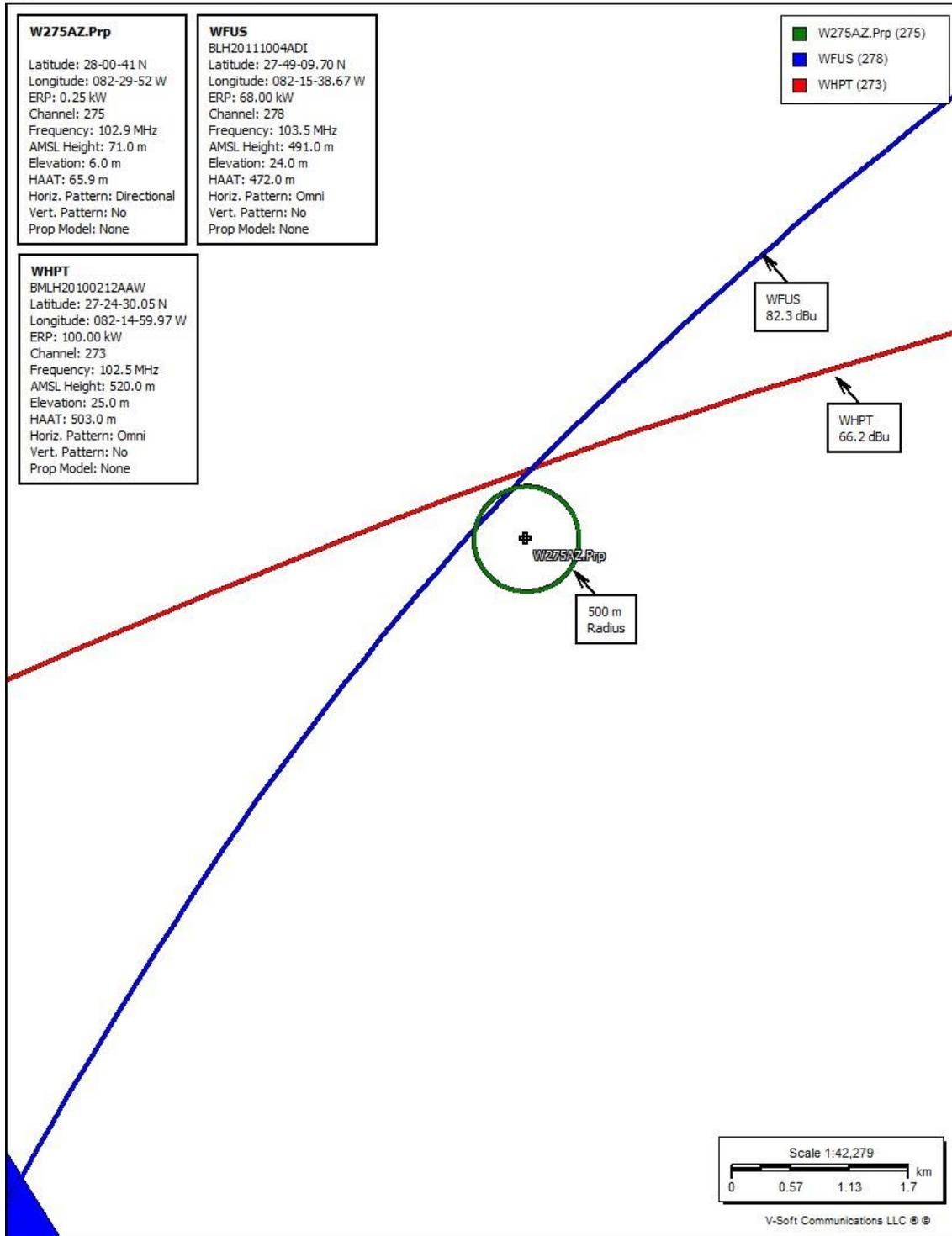


Figure 3. Signal Level at or Near Ground Level

Proposed Antenna:		LP-5E-DA-HW							
Proposed Power:		0.2 kW						Fill in "yellow" cells	
Antenna Height AGL:		64 meters							
Interference Contour:		106 dBu							
Artificial Rcv Antenna Height:		2 meters							
Distance (Free Space) Equation:				= $10^{((106.92 - [\text{desired dBu}] + [\text{ERP in dBk}]) / 20)}$ *1000					
Field Strength (dBu) Equation				"= $106.92 - (20 * (\text{LOG}10[\text{DistMeters}/1000])) + [\text{ERP in dBk}]$					
Depression				Distance					
Angle	Antenna			from Ant.	Distance	Field Strength	Distance	Field Strength	
Below	Relative	ERP	ERP	to Interf	from Ant. to	in dBu @	from Ant.	in dBu @	
Horizon	Field	in kW	in dBk	Contour	Artificial Plane	Artificial Plane	to Ground Level	Ground Level	
0°	1.000	0.200	-6.99	497.18 m	infinite	---	infinite	---	
-5°	0.924	0.171	-7.68	459.40 m	711.37 m	102.20 dBu	734.32 m	101.93 dBu	
-10°	0.717	0.103	-9.88	356.48 m	357.04 m	105.99 dBu	368.56 m	105.71 dBu	
-15°	0.439	0.039	-14.14	218.26 m	239.55 m	105.19 dBu	247.28 m	104.92 dBu	
-20°	0.163	0.005	-22.75	81.04 m	181.28 m	99.01 dBu	187.12 m	98.73 dBu	
-25°	0.053	0.001	-32.50	26.35 m	146.70 m	91.09 dBu	151.44 m	90.81 dBu	
-30°	0.177	0.006	-22.03	88.00 m	124.00 m	103.02 dBu	128.00 m	102.75 dBu	
-35°	0.210	0.009	-20.55	104.41 m	108.09 m	105.70 dBu	111.58 m	105.42 dBu	
-40°	0.177	0.006	-22.03	88.00 m	96.45 m	105.20 dBu	99.57 m	104.93 dBu	
-45°	0.111	0.002	-26.08	55.19 m	87.68 m	101.98 dBu	90.51 m	101.70 dBu	
-50°	0.039	0.000	-35.17	19.39 m	80.94 m	93.59 dBu	83.55 m	93.31 dBu	
-55°	0.020	0.000	-40.97	9.94 m	75.69 m	88.37 dBu	78.13 m	88.09 dBu	
-60°	0.057	0.001	-31.87	28.34 m	71.59 m	97.95 dBu	73.90 m	97.67 dBu	
-65°	0.074	0.001	-29.61	36.79 m	68.41 m	100.61 dBu	70.62 m	100.34 dBu	
-70°	0.076	0.001	-29.37	37.79 m	65.98 m	101.16 dBu	68.11 m	100.88 dBu	
-75°	0.068	0.001	-30.34	33.81 m	64.19 m	100.43 dBu	66.26 m	100.16 dBu	
-80°	0.055	0.001	-32.18	27.34 m	62.96 m	98.76 dBu	64.99 m	98.48 dBu	
-85°	0.040	0.000	-34.95	19.89 m	62.24 m	96.09 dBu	64.24 m	95.81 dBu	
-90°	0.025	0.000	-39.03	12.43 m	62.00 m	92.04 dBu	64.00 m	91.77 dBu	

Figure 4. Image of Proposed Support Tower

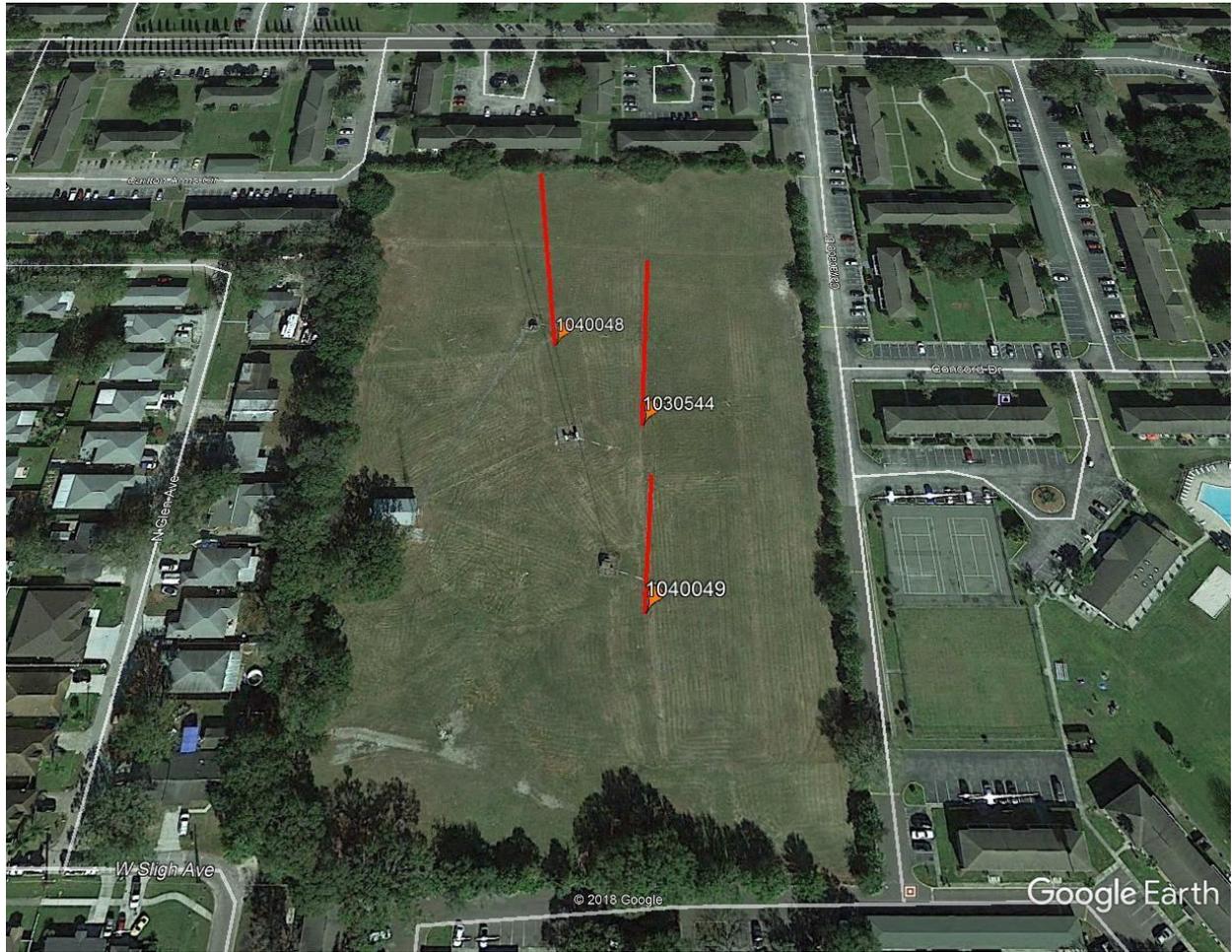


Figure 5. Fill-in and Minor Change Contour Map

