

***AMENDMENT TO APPLICATION FOR  
CONSTRUCTION PERMIT***

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**NEW FM TRANSLATOR STATION  
TERRELL WELLS, TEXAS  
BNPFT-20030314BBQ  
103.5 MHz / 0.125 kW ERP**

**PRIMERA IGLESIA EVANGELICA  
DE APOSTOLES Y PROFETAS**

**APRIL, 2013**

## **AMENDMENT TO APPLICATION FOR CONSTRUCTION PERMIT**

The following engineering statement and attached exhibits have been prepared for **Primera Iglesia Evangelica De Apostoles Y Profetas** ("Primera"), applicant for a new FM translator facility to serve Terrell Wells, Texas, and are in support of their application for construction permit for that facility.<sup>1</sup> This exhibit contains the required LPFM grid preclusion study requested by the Commission. In addition, this amendment also proposed a small reduction in the effective radiated power for the facility.

The original short-form application submitted by Primera specified operation on channel 278, at a center of radiation of 15 meters above ground level. Given the specified site elevation of 173 meters AMSL, the resulting center of radiation AMSL was 188 meters. The antenna structure registration data for the facility, however, indicates that the actual site elevation is 176.7 meters AMSL. This amendment will therefore adjust the elevations accordingly to bring the application data into agreement with the ASR data.

In addition to the change in the elevation data, the geographic coordinates associated with the short-form engineering will be modified slightly. This change is necessary to bring the coordinates specified on the 349 into agreement with the ASR coordinates when transformed from NAD83 to NAD27.<sup>2</sup> The changes to the coordinates are one second each for latitude and longitude. The coordinates specified on the form pages would be come 29-20-21 North Latitude and 98-29-14 West Longitude.

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<sup>1</sup> The Facility ID for NEW / BNPFT-20030314BBQ at Terrell Wells, Texas is 147527.

<sup>2</sup> ASR coordinates transformed from NAD83 to NAD27 via *Corpscon* software package.

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Therefore, the proposed facility will specify operation at these coordinates at a center of radiation of 192 meters AMSL. In order to maintain necessary contour protection to both K279AB and KBPA required under Section 74.1204, the proposed effective radiated power for the facility will be reduced from 0.15 kW to 0.128 kW. No other changes to the short-form engineering are proposed at this time.<sup>3</sup>

The proposed translator would operate on FM channel 278 as indicated in the original short-form engineering. Exhibit A illustrates the proposed transmitter site along with the San Antonio market grid and market grid buffer. As this exhibit confirms, the proposed translator facility would lie within the market grid of the San Antonio market.<sup>4</sup>

Under the Grid Preclusion study requirements for this particular case, it is necessary and sufficient to demonstrate that the proposed facility would not impact identified LPFM licensing opportunities on channels 277 through 279 within the San Antonio grid. Other channels do not require study because of the spectrum limited nature of the market. To demonstrate that the proposed translator will not affect LPFM opportunities in the grid, a separate exhibit for each of the mentioned three channels has been prepared.

For channel 277 the spacing limitations from two full-power FM facilities dominate the impact to the LPFM grid. These two facilities are KBPA at San Marcos, Texas, and KSAG at Pearsall, Texas. Exhibit B illustrates the spacing radii from these two facilities. As is indicated on

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<sup>3</sup> Full details concerning the allocation study for the facility will be submitted with the long-form application.

<sup>4</sup> The San Antonio market was designated as Spectrum Limited at the 20 minute grid per Appendices A and B.

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this map, the spacing radii combine to preclude LPFM licensing operations within the San Antonio grid regardless of the presence of the proposed translator. As a result, the proposed translator would not preclude any identified LPFM licensing opportunities on channel 277.

In the case of channel 278, the entire grid is similarly precluded. Exhibit C illustrates the analysis for this channel of operation. Channel 278 is the channel of operation for KBPA at San Marcos, Texas. As a result, the spacing radius for this facility is extended. As such, the radius extends past the entire grid, thus, KBPA by itself precludes any LPFM licensing opportunities within the San Antonio grid. In addition to KBPA, K279AB at San Antonio, Texas also affects the grid. The spacing radii for the K279AB license and K279AB construction permit are also drawn on the analysis map. As demonstrated, the proposed translator would not preclude any identified LPFM licensing opportunities on channel 278.

The final channel under consideration is channel 279. On this channel, KBPA and K279AB provide the limitations to the grid. Exhibit D illustrates the analysis for this channel. As is demonstrated, the spacing radius from KBPA of 111 kilometers precludes the entire grid, with the exception of the very southwest corner. This portion of the grid, however, is precluded by both the licensed and CP facilities for K279AB at San Antonio. As a result, LPFM operations on channel 279 are already precluded by virtue of existing facilities in the region. Since no LPFM licensing opportunities within the San Antonio grid have been identified on channel 279, the proposed translator will have no impact.

It should be noted that adjacent to the San Antonio market are the Austin and Corpus Christi Markets. Both of these markets are listed in Appendix A. The distance between the

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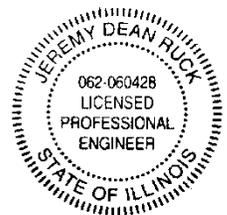
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markets is sufficient however, that the proposed facility lies outside both the grid and the grid buffer associated with either market. Thus, the translator proposed by Primera will not affect LPFM opportunities in either market.

A portion of the output of the Commission's grid finder tool follows the signature in this exhibit. Included with this output is the initial study tabulation. This tabulation confirms that channels 277 through 279 have no identified LPFM licensing opportunities available.

The preceding statement and attached exhibits have been prepared by me, or under my direction, and are true and accurate to the best of my belief and knowledge.



Above signature is digitized copy of actual signature  
License Expires November 30, 2013

Jeremy D. Ruck, PE  
April 18, 2013

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San Antonio, TX  
 Latitude 29-27-06  
 Longitude 098-30-46  
 Grid Size 21 x 21  
 Micro FM 100 Watts at 30m HAAT  
 Co-Channel and 1st Adjacent Protected  
 2nd Adjacent Channel Not Protected  
 3rd Adjacent Channel Not Protected  
 I.F. Not Protected  
 TV Channel 6 Not Protected  
 CP Records Protected  
 APP Records Not Protected  
 FM Translators Protected  
 TV Channel 6 Translators/LP Not Protected  
 Auc83 FX App Records Not Protected

Chan	Avail								
200	0	220	0	240	0	260	440	280	0
201	0	221	12	241	0	261	0	281	0
202	0	222	0	242	0	262	0	282	0
203	0	223	42	243	415	263	0	283	0
204	0	224	0	244	331	264	175	284	0
205	0	225	0	245	310	265	0	285	93
206	0	226	0	246	0	266	0	286	0
207	0	227	17	247	0	267	0	287	0
208	0	228	183	248	0	268	441	288	0
209	0	229	69	249	0	269	0	289	418
210	0	230	0	250	9	270	0	290	13
211	0	231	0	251	332	271	0	291	1
212	0	232	0	252	0	272	0	292	1
213	0	233	158	253	0	273	0	293	0
214	0	234	140	254	0	274	0	294	0
215	0	235	0	255	21	275	0	295	0
216	0	236	0	256	132	276	167	296	295
217	0	237	0	257	0	277	0	297	0
218	0	238	0	258	0	278	0	298	0
219	0	239	0	259	0	279	0	299	0
								300	291

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 Total 4506

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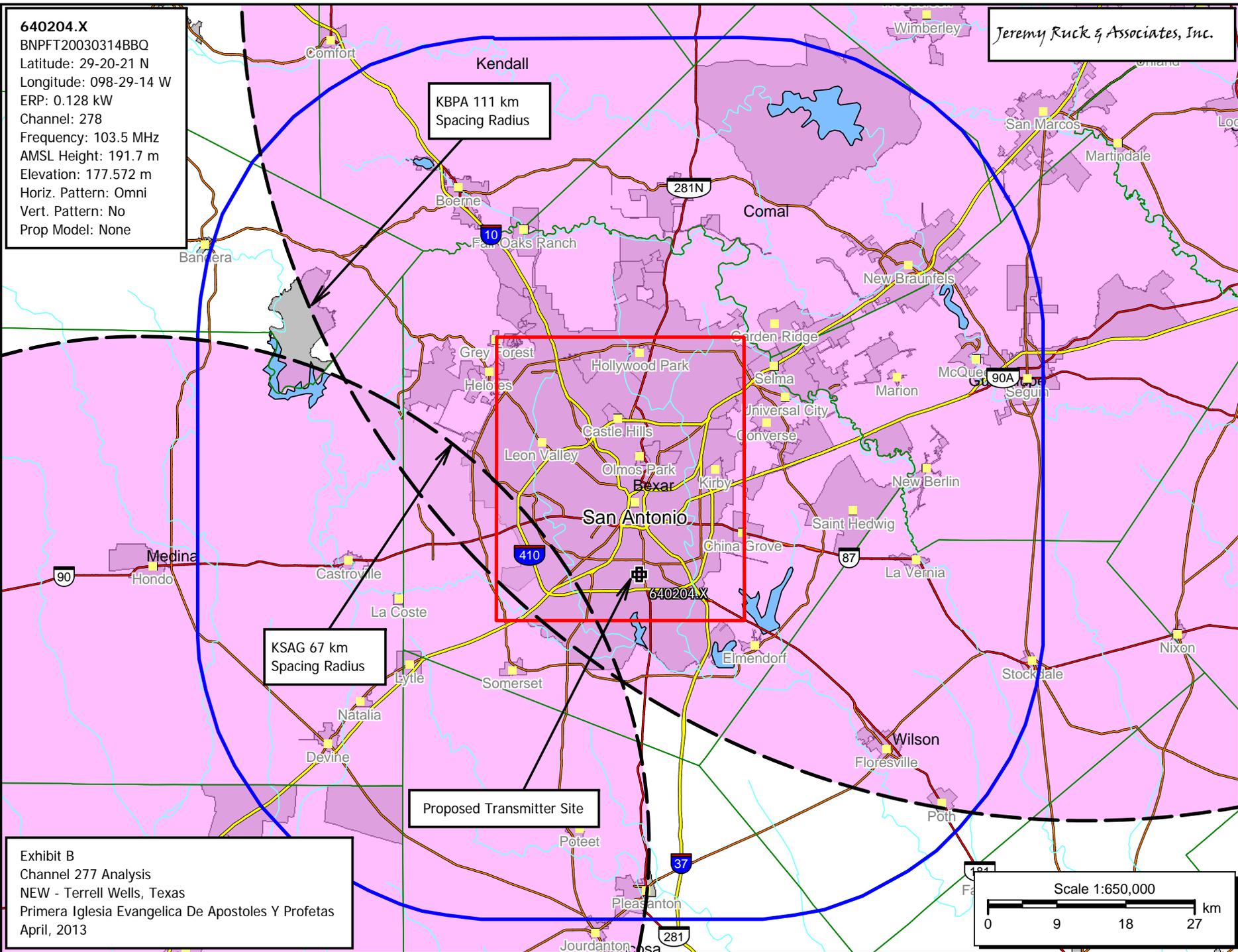
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**640204.X**  
BNPFT20030314BBO  
Latitude: 29-20-21 N  
Longitude: 098-29-14 W  
ERP: 0.128 kW  
Channel: 278  
Frequency: 103.5 MHz  
AMSL Height: 191.7 m  
Elevation: 177.572 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

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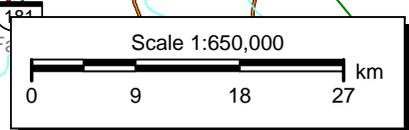


KBPA 111 km  
Spacing Radius

KSAG 67 km  
Spacing Radius

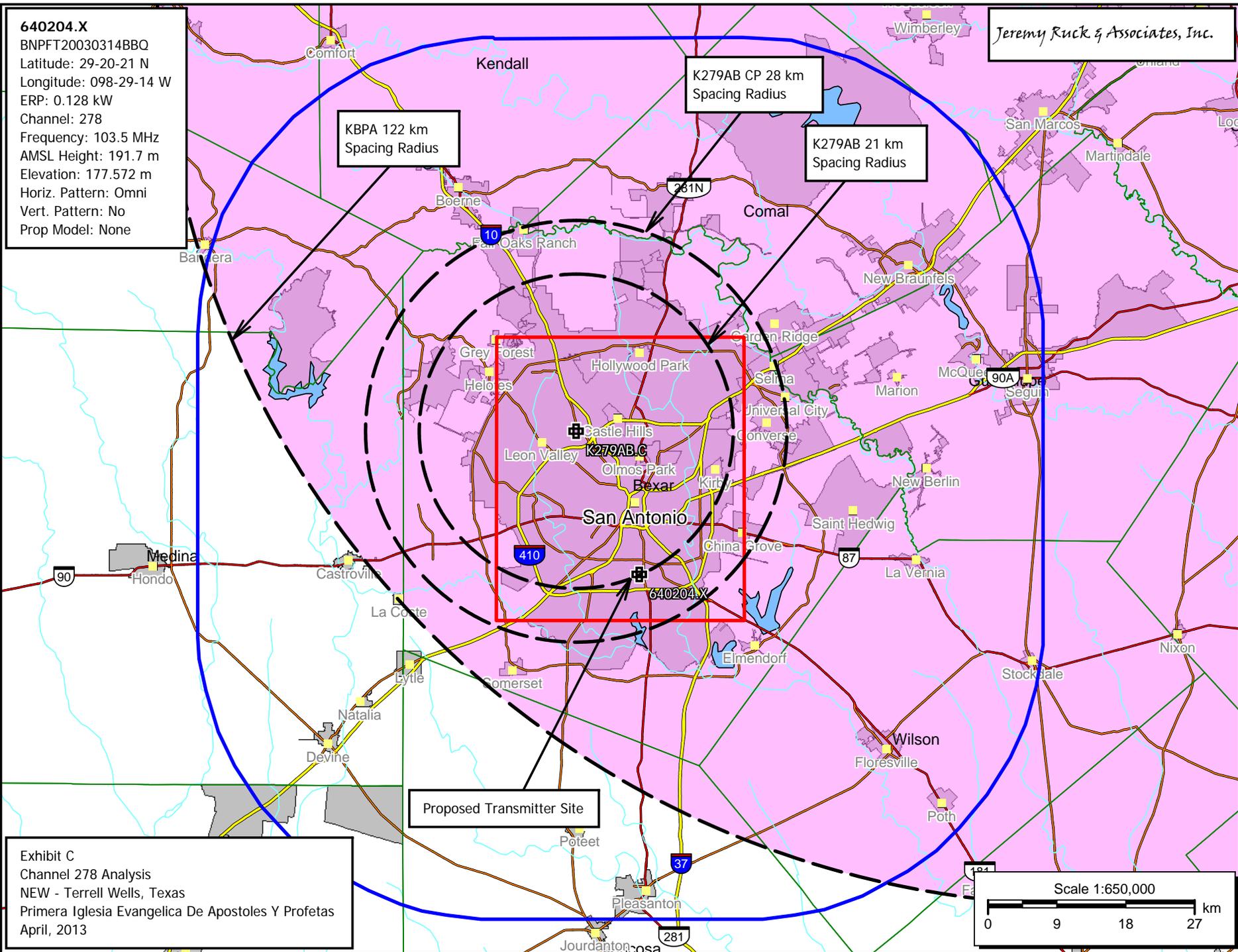
Proposed Transmitter Site

Exhibit B  
Channel 277 Analysis  
NEW - Terrell Wells, Texas  
Primera Iglesia Evangelica De Apostoles Y Profetas  
April, 2013



**640204.X**  
BNPFT20030314BBO  
Latitude: 29-20-21 N  
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AMSL Height: 191.7 m  
Elevation: 177.572 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

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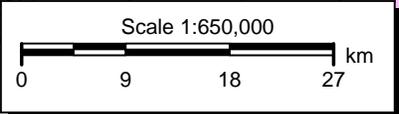
Proposed Transmitter Site

K279AB CP 28 km  
Spacing Radius

K279AB 21 km  
Spacing Radius

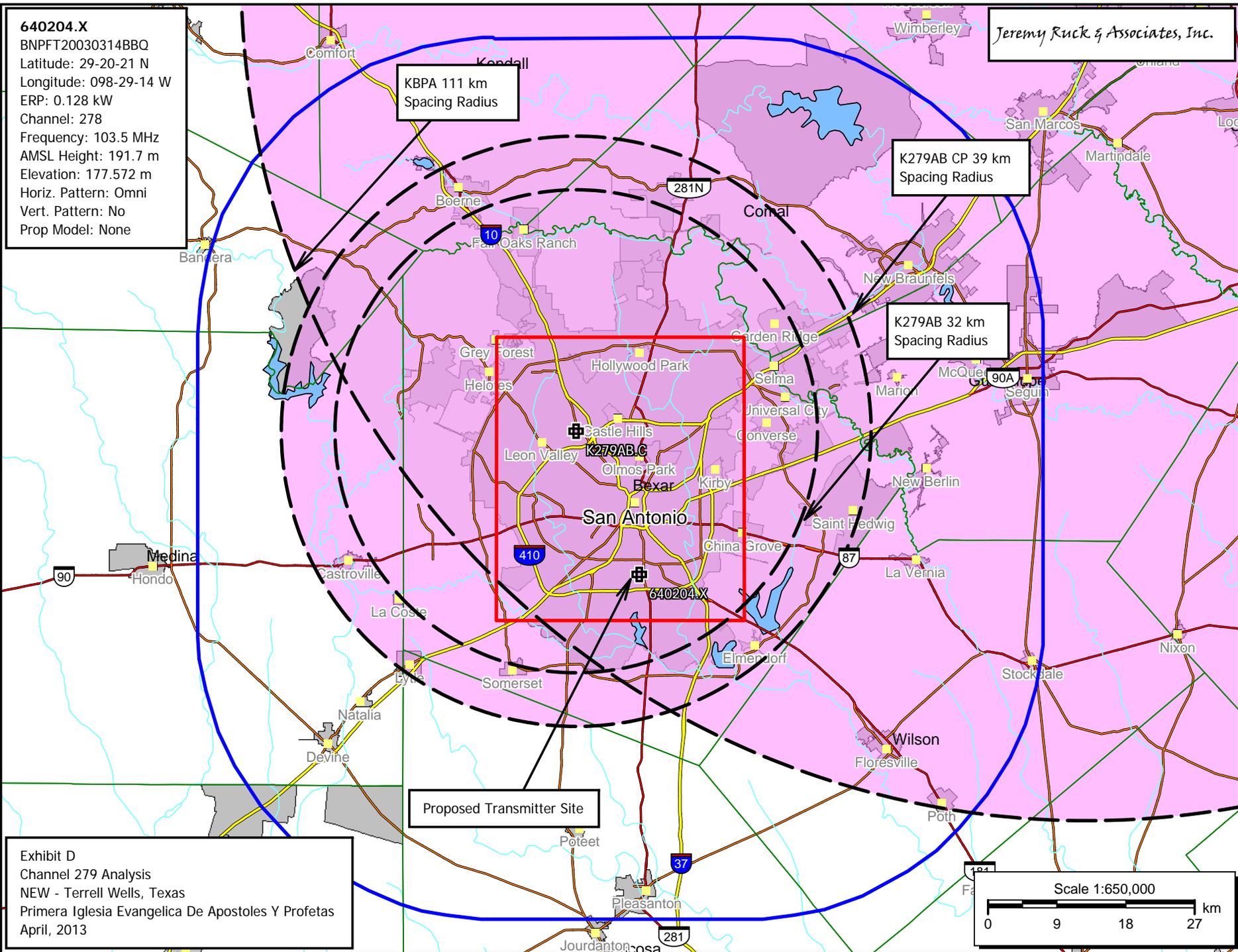
KBPA 122 km  
Spacing Radius

Exhibit C  
Channel 278 Analysis  
NEW - Terrell Wells, Texas  
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April, 2013



**640204.X**  
BNPFT20030314BBO  
Latitude: 29-20-21 N  
Longitude: 098-29-14 W  
ERP: 0.128 kW  
Channel: 278  
Frequency: 103.5 MHz  
AMSL Height: 191.7 m  
Elevation: 177.572 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

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KBPA 111 km  
Spacing Radius

K279AB CP 39 km  
Spacing Radius

K279AB 32 km  
Spacing Radius

Proposed Transmitter Site

Exhibit D  
Channel 279 Analysis  
NEW - Terrell Wells, Texas  
Primera Iglesia Evangelica De Apostoles Y Profetas  
April, 2013

