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APPENDIX A

CPS FACILITY GENERAL ROUTING/SITING PROCESS

CPS ENERGY GENERAL ROUTING/SITING PROCESS

1. Utility Planners/Engineers determine/establish need for project
   - Transmission line voltage needs
   - Substation needs
2. Study Area delineated based on end points for transmission line and/or electrical load area for substation
   - Study area large enough to allow flexibility in transmission line routing/substation location
3. Data Gathering Phase and Development of Constraints Map
   - Letters sent to federal, state, and local agencies requesting information/concerns about study area
   - Aerial photographs of study area obtained
   - Information regarding sensitive/important natural, cultural, human resources mapped as constraints
   - Property boundary information obtained (not land ownership)
4. Preliminary alternative transmission line routes/substation sites developed, considering
   - Environmental/land use constraints or avoidance/exclusion areas
   - Routing/siting opportunities
   - Engineering/right-of-way concerns
   - Evaluation of structure types
5. Public Involvement Program
   - Landowner and interested party notification and newspaper notices for public meetings
   - Public Open House meetings held to explain need for the project and to solicit input on preliminary alternative routes/sites
6. Alternatives refined
   - Public and agency input evaluated and used to modify alternative routes, if appropriate
7. Additional public meetings
   - Review revised routes with public, if necessary
8. Primary alternative routes/sites evaluated using list of environmental criteria
   - 25-35 environmental/land use criteria used to evaluate/compare alternatives
9. Preferred route/site recommended
   - Based on environmental/land use factors
   - One or more viable alternatives identified
10. Environmental assessment report prepared, including discussion of:
    - Purpose and need for project
    - Description of proposed design and construction
    - Existing environment
    - Alternative analysis
    - Public/Agency input
    - Impacts of each alternative
    - Local/state/federal permitting requirements
    - Mitigation (if necessary)
    - Costs for each alternative
11. Utility selects overall preferred route based on factors such as.
    - Public input
    - Engineering
    - Cost
    - Right-of-way considerations
    - Maintenance
    - Environmental
    - Land Use
12. Public notified of final route/site selected and date for start of construction

APPENDIX B

EXAMPLE LIST OF LOCAL, STATE, AND FEDERAL AGENCY CONTACTS

6/7/17

1. Local
   a. City of San Antonio
   b. Alamo Area Council of Governments
   c. Edwards Aquifer Authority
   d. Alamo Soil and Water Conservation District
   e. San Antonio River Authority
   f. Bexar County Judge
   g. Bexar County Commissioners
   h. Bexar County Floodplain Administrator
   i. Other Counties/Cities/Towns
2. State
   a. Texas Department of Transportation
      (1) Aviation Division
      (2) Environmental Affairs
   b. Texas Water Development Board
   c. Texas Parks and Wildlife Department
   d. Texas Historical Commission
   e. Texas Natural Resource Conservation Commission
3. Federal
   a. Natural Resources Conservation Service
   b. U.S. Army Corps of Engineers, Ft. Worth District
   c. U.S. Environmental Protection Agency
   d. Federal Emergency Management Agency
   e. Federal Aviation Administration
   f. U.S. Fish and Wildlife Service

   (note: if Federally-owned property is involved with any routing/siting alternatives, then the agency owning the property, as well as the National Park Service will be contacted)

APPENDIX C
EXAMPLE LIST OF ENVIRONMENTAL/LAND USE CRITERIA

6/7/17

Land Use
Length of alternative route (new ROW)
Additional length of route in existing transmission line ROW
Length of ROW paralleling property lines
Length of ROW parallel to existing ROW (transmission line, pipeline, roads, etc.)
Length of ROW along proposed highway
Number of habitable structures[1] within 200 ft of ROW centerline
Length of ROW through developed areas
Length of ROW through undeveloped areas
Length of ROW through recreational areas
Number of parks and/or recreational areas within 1,000 ft of TOW centerline
Length of ROW through cropland
Length of ROW trough grazing land
Length of ROW through irrigated pasture or cropland
Length of ROW across prime farmland soils
Length of ROW across gravel pits, mines or quarries
Number of pipeline crossings
Number of transmission line crossings
Number of U.S. and state highway crossings
Number of FM and county road crossings
Number of FAA-listed airfields within 10,000 ft of ROW centerline
Number of commercial AM radio transmitters within 10,000 ft of ROW centerline
Number of FM radio transmitters microwave towers, etc. within 2.000 ft of ROW centerline
Aesthetics
Estimated length of ROW within foreground visual zone[2] of U.S. and State highways
Estimated length of ROW within foreground visual zone[2] of FM roads
Estimated length of ROW within foreground visual zone[2] of recreational or park areas
Estimated length of ROW within foreground visual zone[2] of churches, schools, hospitals and cemeteries
Ecology
Length of ROW through upland woodland
Length of ROW through bottomland/riparian woodland
Length of ROW across wetlands
Length of ROW across known habitat of endangered/threatened species
Length of ROW across open water (lakes, ponds)
Number of stream crossings
Length of ROW over Edwards Aquifer Recharge Zone
Length of ROW parallel (within 100 ft) to streams

---

[1] Residences, businesses, schools, churches, cemeteries, hospitals, nursing homes, etc

[2] One-half mile, unobstructed

6/7/17

Length of ROW across 100-year floodplain
Cultural Resources
Number of recorded historic or prehistoric sites crossed
Number of recorded historic or prehistoric sites within 1,000 ft of ROW centerline
Number of National Register listed or determined-eligible sites crossed
Number of National Register listed or determined-eligible sites within 1,000 ft of ROW centerline
Length of ROW through areas of predicted high archaeological/historic site potential

APPENDIX D

EXAMPLE TABLE OF CONTENTS

ENVIRONMENTAL ASSESSMENT/ALTERNATIVE ROUTING ANALYSIS REPORT

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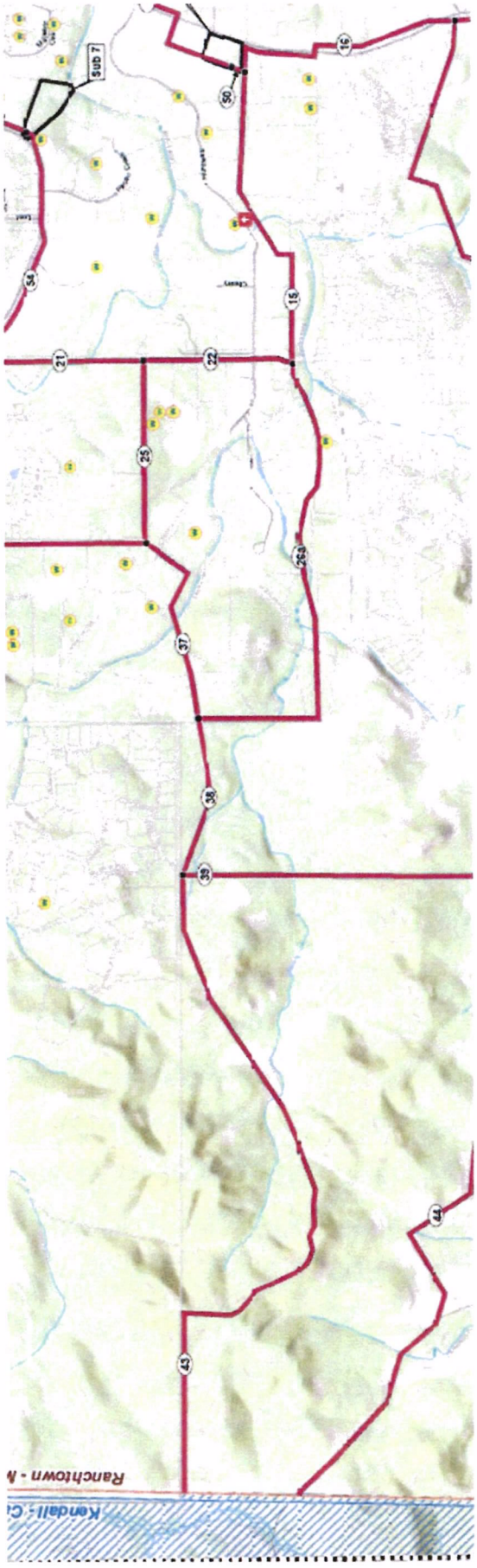
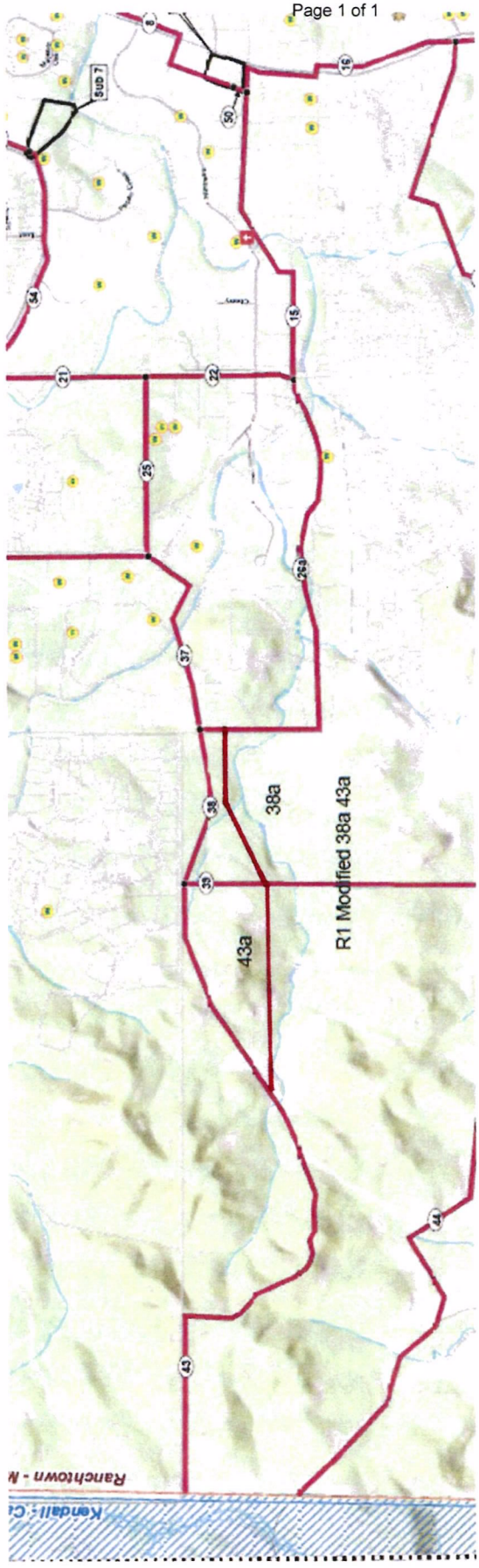
TABLE OF CONTENTS

TABLE OF CONTENTS

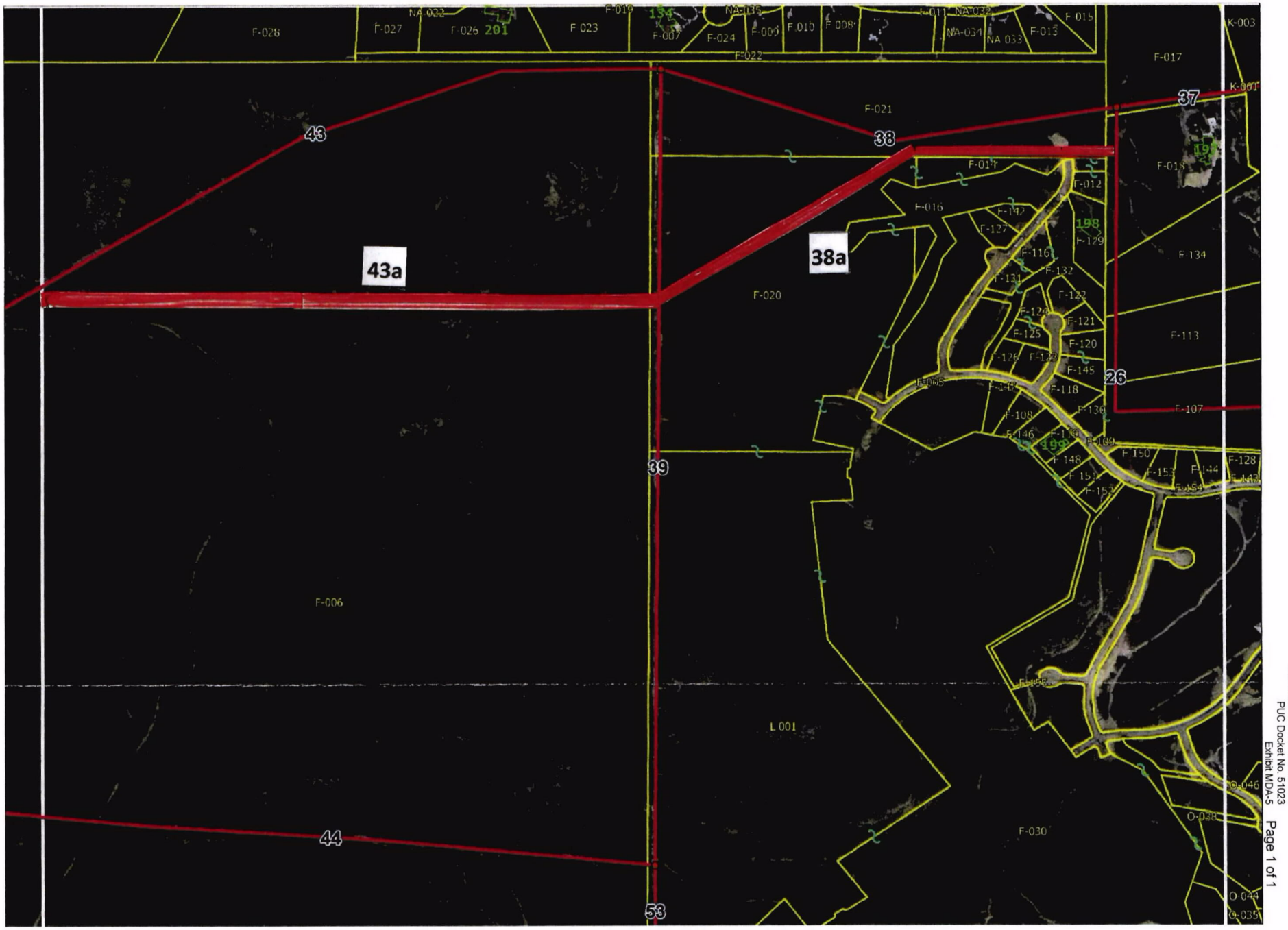
Route R1



Route R1 Modified



Attachment 6 Amended



SOAH Docket No. 473-21-0247
PUC Docket No. 51023
Exhibit MDA-5
Page 1 of 1

Aerial Photograph

PUC Docket No. 51023 SHLAA Response to AS's 1st RFI

AS-1-1 Please provide the date construction started on the structure circled on the Aerial Photograph.

Response: On or about February 25, 2020.

Prepared By: Counsel
Sponsoring Witness: None

PUC Docket No. 51023 SHLAA Response to AS's 1st RFI

AS-1-7. Was construction started on any homes or structures in the Canyons at Scenic Loop within 300 feet of Segment 26 after the open house in October 2019?

Response:

Yes.

Prepared By: Counsel
Sponsoring Witness: None

PUC Docket No. 51023 SHLAA Response to AS's 1st RFI

AS-1-8 If the answer to Anaqua Springs 1-7 is yes, please provide the locations of those homes either by street address, Bexar County parcel number, or CPS Attachment 6 parcel number.

Response:

Please see "Sheet 11 Amended" in Attachment 5 to the amended CPS Energy Application and "Sheet 12" in Attachment 6 to the original CPS Energy Application.

Habitable Structure Map ID 198 located on Parcel No. F-129 is the structure asked about in AS-1-1 through AS-1-6 plus AS-1-10.

Habitable Structure Map ID 199 located on Parcel No. 119, as page 5 of the Amendment to CPS Energy's Application indicates, is another newly constructed habitable structure located south of Segment 26 and within 300 feet thereof.

Construction has also started on a habitable structure located on Parcel No. F-106 and on a habitable structure located on Parcel No. F-131 (the latter of which has the address of 10619 Kendall Canyon).

It appears that there are additional, already-completed habitable structures within the vicinity of 300 feet of Segment 26 at the following addresses, but they may or may not be exactly within 300 feet of Segment 26:

1. 10205 Kendall Canyon
2. 10209 Kendall Canyon
3. 10215 Kendall Canyon
4. 10403 Doherty Springs
5. 10431 Doherty Springs
6. 10503 Kendall Canyon
7. 10519 Kendall Canyon
8. 10539 Kendall Canyon

Prepared By: Counsel
Sponsoring Witness: None

PUC Docket No. 51023 SHLAA Response to AS's 1st RFI

AS-1-9 Was construction started on any homes or structures within 300 feet of the centerline of Segment 26 after CPS provided landowner notice of the Application?

Response:

Yes.

Prepared By: Counsel
Sponsoring Witness: None

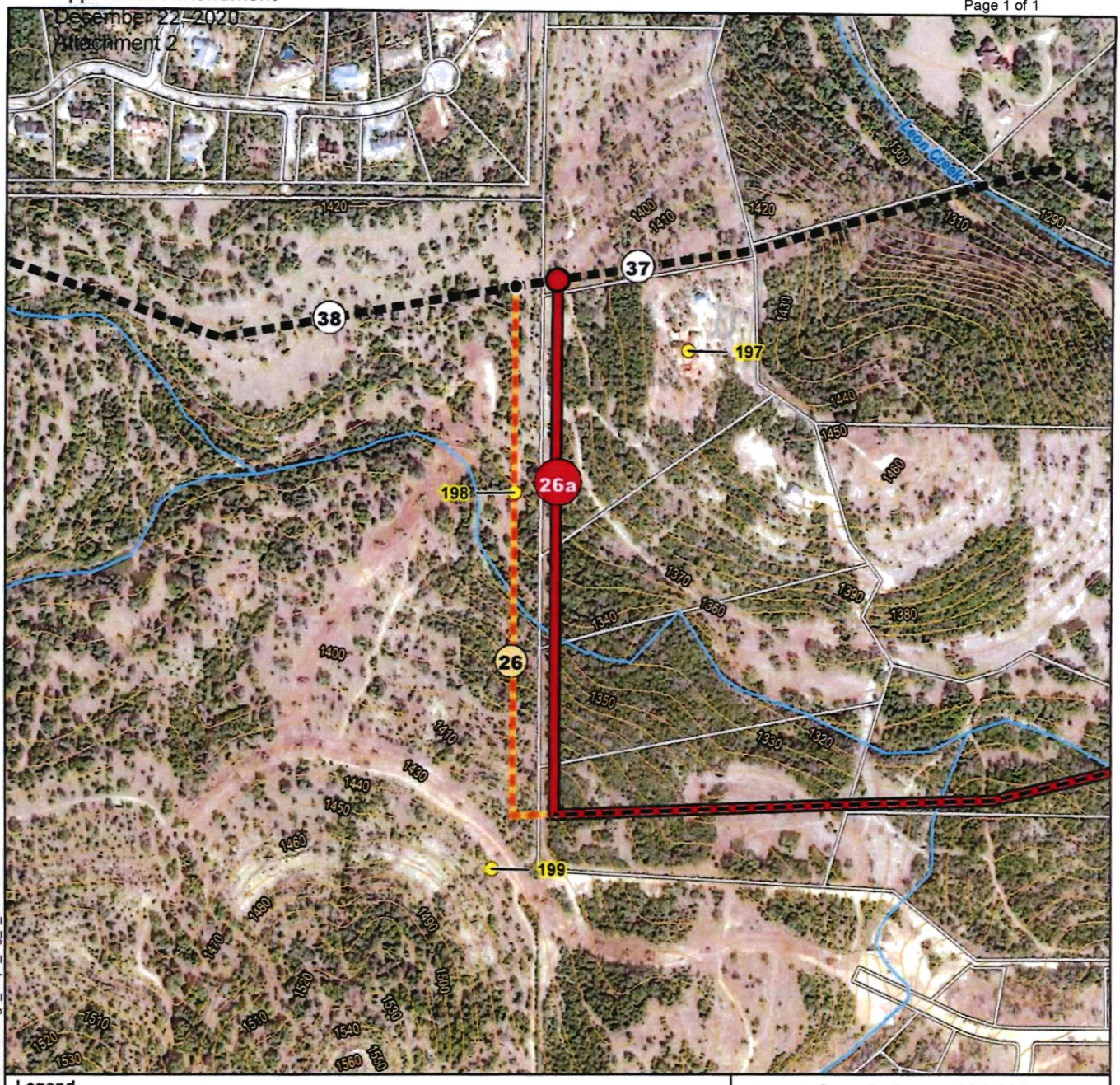
6

PUC Docket No. 51023 SHLAA Response to AS's 1st RFI

AS-1-10 Please provide the date the road allowing access to the structure circled on the Aerial Photograph was paved.

Response: The access road was paved in November 2020.

Prepared By: Counsel
Sponsoring Witness: None



Legend

- Revised or New Alternative Route Segment
- Unchanged Portion of Preliminary Alternative Route Segment
- Primary Alternative Route Segment
- Revised or New Alternative Route Segment Node
- Unchanged Alternative Route Segment Node
- Removed Alternative Route Segment Node
- Revised Alternative Route Segment Label
- Primary Alternative Route Segment Label
- Removed Alternative Route Segment
- Removed Alternative Route Segment Label
- Habitable Structure within 300 Feet of a Primary Segment
- Parcel Boundary
- River or Stream
- 10 foot Contour

12/22/2020

Scenic Loop 138 kV Transmission Line And Substation Project

Figure 6-21

Modification of Segment 26 Following the CCN Filing

Feet
0 500 1,000

12/22/2020 C:\Power\ENG\156816_CPS_Scenic_Loop\DD\GIS\lappst\December2020\Change_Maps_Fig_6_21.mxd

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN ANTONIO TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138-KV TRANSMISSION LINE IN BEXAR COUNTY	§ § § § § §	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

CPS ENERGY'S RESPONSE TO BRAD JAUER'S AND BVJ PROPERTIES, L.L.C.'S SECOND REQUESTS FOR INFORMATION TO CPS ENERGY

Brad Jauer & BVJ Properties RFI 2-17:

Is the habitable structure currently located between Habitable Structures 93 and 94 included in the Application, as amended? What is the distance from that habitable structure to the centerline of the right-of-way on Segment 54?

Response No. 2-17:

The habitable structure located between Habitable Structures 93 and 94 was not tabulated in the data presented in either the Application or Application Amendment. The distance from the habitable structure to the centerline of Segment 54 is approximately 260 feet. POWER's initial aerial photograph interpretation using ESRI identified the structure as a shed. Upon further review, POWER agrees that this is a habitable structure and that it should be included in the Application. The owner of the property was provided direct mail notice of the Project at the time the Application was filed on July 22, 2020 (Tract A-074, row 75 of Attachment 8 to the Application). CPS Energy will update its habitable structure counts for routes within 300 feet of this structure prior to the Hearing on the Merits in this proceeding (e.g., the habitable structure counts for Routes A, B1, C1, D1, E, G1, H, I1, J1, K, L, M1, X1, Y, Z1, AA1, BB, CC, DD, EE will all increase by one). Note that the data CPS Energy provided in response to Chandler RFI 1-1a for Route AA2 does include this habitable structure in the count.

Prepared By: Lisa B. Meaux Title: Project Manager, POWER Engineers, Inc.
Sponsored By. Lisa B. Meaux Title: Project Manager, POWER Engineers, Inc.

Habitable Structure Number	Structure or Feature	Approximate Distance from Route Centerline' (feet)	Nearest Alternative Route Segment2
1	Single Family Residence	267	40
2	Single Family Residence	220	40
3	Single Family Residence	141	40
4	Single Family Residence	194	40
5	Single Family Residence	128	40
6	Single Family Residence	187	40
7	Single Family Residence	290	40
9	Single Family Residence	167	29
10	Single Family Residence	197	29
13	Single Fami y Residence	164	29
14	Single Family Residence	238	30
15	Single Family Residence	174	46
16	Single Fami y Residence	162	46b
17	School	214	35
18	Single Family Residence	162	35
19	Single Family Residence	274	31
20	Single Family Residence	296	31
23	Single Family Residence	191	17
24	Single Family Residence	94	17
25	Single Family Residence	97	17
26	Single Family Residence	84	17
27	Single Family Residence	70	17
28	Single Family Residence	147	17
29	Single Family Residence	170	17
30	Single Family Residence	238	17
31	Single Family Residence	273	17
32	Single Family Residence	233	17
33	Single Family Residence	195	17
34	Single Family Residence	189	17
35	Single Family Residence	189	17
36	Single Family Residence	142	17
37	Single Family Residence	146	17
38	Single Family Residence	152	17
39	Single Family Residence	235	17
40	Single Family Residence	297	17
41	Single Family Residence	158	17
42	Single Family Residence	305	17
51	Single Family Residence	194	2
52	Single Family Residence	307	2
53	Single Family Residence	137	2
55	Commercial	304	4
56	Commercial (Rose Palace)	292	5
57	Single Family Residence	267	7
58	Single Family Residence	229	5
59	Single Family Residence	227	13

60	Single Family Residence	263	13
61	Single Family Residence	285	13
62	Single Family Residence	241	13
63	Single Family Residence	190	13
64	Single Family Residence	144	13
65	Single Family Residence	104	13
66	Single Family Residence	187	13
67	Single Family Residence	148	13
68	Single Family Residence	304	13
69	Single Family Residence	208	14
70	Single Family Residence	206	14
71	Single Family Residence	251	14
72	Single Family Residence	204	14
73	Single Family Residence	244	14
74	Single Family Residence	228	14
75	Single Family Residence	230	14
76	Single Family Residence	260	14
77	Single Family Residence	267	14
78	Single Family Residence	169	14
79	Single Family Residence	215	54
80	Single Family Residence	202	54
81	Single Family Residence	82	54
82	Single Family Residence	251	54
83	Single Family Residence	207	54
84	Single Family Residence	214	54
85	Single Family Residence	158	54
86	Single Family Residence	162	54
87	Single Family Residence	300	54
88	Single Family Residence	122	54
89	Single Family Residence	134	54
90	Single Family Residence	284	54
91	Single Family Residence	223	54
92	Single Family Residence	264	54
93	Single Family Residence	200	54
94	Single Family Residence	224	54
95	Single Family Residence	279	54
96	Single Family Residence	280	20
97	Single Family Residence	195	20
98	Single Family Residence	241	20
99	Single Family Residence	241	20
100	Single Family Residence	244	20
101	Single Family Residence	265	20
102	Single Family Residenc e	266	20
103	Single Family Residence	263	20
104	Single Family Residence	211	20
105	Single Family Residence	255	20
106	Single Family Residence	100	32
107	Single Family Residence	125	32

108	Single Family Residence	140	32
109	Single Family Residence	198	32
110	Single Family Residence	169	32
111	Single Family Residence	176	32
112	Single Family Residence	194	32
113	Single Family Residence	120	32
114	Single Family Residence	110	32
115	Single Family Residence	296	32
116	Single Family Residence	298	32
117	Single Family Residence	225	32
118	Single Family Residence	185	32
119	Single Family Residence	194	32
120	Single Family Residence	186	32
121	Single Family Residence	184	32
122	Single Family Residence	201	32
123	Single Family Residence	208	32
124	Single Family Residence	199	32
125	Single Family Residence	195	32
126	Single Family Residence	212	32
127	Single Family Residence	240	32
134	Single Family Residence	218	43
135	Single Family Residence	260	37
136	Single Family Residence	171	25
137	Single Family Residence	111	25
139	Single Family Residence	283	8
140	Single Family Residence	171	8
141	Single Family Residence	193	8
142	Single Family Residence	304	8
143	Single Family Residence	222	15
146	Single Family Residence	155	15
147	Single Family Residence	208	15
148	Single Family Residence	198	22
149	Single Family Residence	14 1	22
150	Single Family Residence	89	22
151	Single Family Residence	299	16
152	Single Family Residence	172	16
153	Single Family Residence	270	16
154	Single Family Residence	257	16
155	Single Family Residence	162	16
156	Single Family Residence	174	16
157	Single Family Residence	146	55
158	Single Family Residence	141	55
159	Single Family Residence	174	55
160	Single Family Residence	184	55
161	Single Family Residence	115	55
162	Single Family Residence	97	55
163	Single Family Residence	300	55
166	Single Family Residence	55	55

167	Single Family Residence	270	55
168	Single Family Residence	169	55
169	Single Family Residence	58	55
170	Single Family Residence	103	55
171	Single Family Residence	190	55
172	Single Family Residence	158	55
173	Single Family Residence	217	57
174	Single Family Residence	122	57
175	Single Fami y Residence	94	57
176	Single Family Residence	272	57
177	Single Family Residence	78	57
178	Single Family Residence	213	54
179	Single Family Residence	272	55
181	Single Family Residence	191	57
182	Single Family Residence	192	57
183	Single Family Residence	91	55
184	Single Family Residence	153	57
185	Single Family Residence	307	57
186	Single Family Residence	288	40
187	Single Family Residence	151	56
188	Single Family Residence	197	56
189	Single Family Residence	251	56
190	Single Family Residence	227	56
191	Single Family Residence	183	56
192	Single Family Residence	287	56
193	Single Family Residence	208	56
194	Single Family Residence	70	56
195	Single Family Residence	157	56
196	Single Family Residence	278	56
197	Single Family Residence	239	37
198	Single Family Residence	69	26a
199	Single Family Residence	291	26a
200	Commercial-Guard House	227	36
201	Single Family Residence	280	43
301	Boerne Stage Field	7,210	29
501	CellTex Site Services, Ltd	482	36
502	Global Tower, LLC	521	16
701	Heidemann Cemetery	593	36
702	Huntress Lane Cemetery	128	15
901	Heidemann Ranch Historic District	98	36
902	R.L. White Ranch Historic District	0	43
--	Boerne Stage Maverick-Altgelt Ranch and Fenstermaker-Fromme Farm National Register Historic District	50	28
--	Boerne Stage Maverick-Altgelt Ranch and Fenstermaker-Fromme Farm National Register Historic District	50	17

--	Boerne Stage Maverick-Altgelt Ranch and Fenstermaker-Fromme Farm National Register Historic District	142	40

Habitable Structure Number	Structure or Feature	Approximate Distance from Route Centerline' (feet)	Nearest Alternative Route Segment2
1	Single Family Residence	267	40
2	Single Family Residence	220	40
3	Single Family Residence	141	40
4	Single Family Residence	194	40
5	Single Family Residence	128	40
6	Single Family Residence	187	40
7	Single Family Residence	290	40
9	Single Family Residence	167	29
10	Single Family Residence	197	29
13	Single Fami y Residence	164	29
14	Single Family Residence	238	30
15	Single Family Residence	174	46
16	Single Fami y Residence	162	46b
17	School	214	35
18	Single Family Residence	162	35
19	Single Family Residence	274	31
20	Single Family Residence	296	31
23	Single Family Residence	191	17
24	Single Family Residence	94	17
25	Single Family Residence	97	17
26	Single Family Residence	84	17
27	Single Family Residence	70	17
28	Single Family Residence	147	17
29	Single Family Residence	170	17
30	Single Family Residence	238	17
31	Single Family Residence	273	17
32	Single Family Residence	233	17
33	Single Family Residence	195	17
34	Single Family Residence	189	17
35	Single Family Residence	189	17
36	Single Family Residence	142	17
37	Single Family Residence	146	17
38	Single Family Residence	152	17
39	Single Family Residence	235	17
40	Single Family Residence	297	17
41	Single Family Residence	158	17
42	Single Family Residence	305	17
51	Single Family Residence	194	2
52	Single Family Residence	307	2
53	Single Family Residence	137	2
55	Commercial	304	4
56	Commercial (Rose Palace)	292	5
57	Single Family Residence	267	7
58	Single Family Residence	229	5
59	Single Family Residence	227	13

60	Single Family Residence	263	13
61	Single Family Residence	285	13
62	Single Family Residence	241	13
63	Single Family Residence	190	13
64	Single Family Residence	144	13
65	Single Family Residence	104	13
66	Single Family Residence	187	13
67	Single Family Residence	148	13
68	Single Family Residence	304	13
69	Single Family Residence	208	14
70	Single Family Residence	206	14
71	Single Family Residence	251	14
72	Single Family Residence	204	14
73	Single Family Residence	244	14
74	Single Family Residence	228	14
75	Single Family Residence	230	14
76	Single Family Residence	260	14
77	Single Family Residence	267	14
78	Single Family Residence	169	14
79	Single Family Residence	215	54
80	Single Family Residence	202	54
81	Single Family Residence	82	54
82	Single Family Residence	251	54
83	Single Family Residence	207	54
84	Single Family Residence	214	54
85	Single Famlly Residence	158	54
86	Single Family Residence	162	54
87	Single Family Residence	300	54
88	Single Family Residence	122	54
89	Single Family Residence	134	54
90	Single Family Residence	284	54
91	Single Family Residence	223	54
92	Single Family Residence	264	54
93	Single Family Residence	200	54
94	Single Family Residence	224	54
95	Single Family Residence	279	54
96	Single Family Residence	280	20
97	Single Family Residence	195	20
98	Single Family Residence	241	20
99	Single Family Residence	241	20
100	Single Family Residence	244	20
101	Single Family Residence	265	20
102	Single Family Residenc e	266	20
103	Single Family Residence	263	20
104	Single Family Residence	211	20
105	Single Family Residence	255	20
106	Single Family Residence	100	32
107	Single Family Residence	125	32

108	Single Family Residence	140	32
109	Single Family Residence	198	32
110	Single Family Residence	169	32
111	Single Family Residence	176	32
112	Single Family Residence	194	32
113	Single Family Residence	120	32
114	Single Family Residence	110	32
115	Single Family Residence	296	32
116	Single Family Residence	298	32
117	Single Family Residence	225	32
118	Single Family Residence	185	32
119	Single Family Residence	194	32
120	Single Family Residence	186	32
121	Single Family Residence	184	32
122	Single Family Residence	201	32
123	Single Family Residence	208	32
124	Single Family Residence	199	32
125	Single Family Residence	195	32
126	Single Family Residence	212	32
127	Single Family Residence	240	32
134	Single Family Residence	218	43
135	Single Family Residence	260	37
136	Single Family Residence	171	25
137	Single Family Residence	111	25
139	Single Family Residence	283	8
140	Single Family Residence	171	8
141	Single Family Residence	193	8
142	Single Family Residence	304	8
143	Single Family Residence	222	15
146	Single Family Residence	155	15
147	Single Family Residence	208	15
148	Single Family Residence	198	22
149	Single Family Residence	14 1	22
150	Single Family Residence	89	22
151	Single Family Residence	299	16
152	Single Family Residence	172	16
153	Single Family Residence	270	16
154	Single Family Residence	257	16
155	Single Family Residence	162	16
156	Single Family Residence	174	16
157	Single Family Residence	146	55
158	Single Family Residence	141	55
159	Single Family Residence	174	55
160	Single Family Residence	184	55
161	Single Family Residence	115	55
162	Single Family Residence	97	55
163	Single Family Residence	300	55
166	Single Family Residence	55	55

167	Single Family Residence	270	55
168	Single Family Residence	169	55
169	Single Family Residence	58	55
170	Single Family Residence	103	55
171	Single Family Residence	190	55
172	Single Family Residence	158	55
173	Single Family Residence	217	57
174	Single Family Residence	122	57
175	Single Fami y Residence	94	57
176	Single Family Residence	272	57
177	Single Family Residence	78	57
178	Single Family Residence	213	54
179	Single Family Residence	272	55
181	Single Family Residence	191	57
182	Single Family Residence	192	57
183	Single Family Residence	91	55
184	Single Family Residence	153	57
185	Single Family Residence	307	57
186	Single Family Residence	288	40
187	Single Family Residence	151	56
188	Single Family Residence	197	56
189	Single Family Residence	251	56
190	Single Family Residence	227	56
191	Single Family Residence	183	56
192	Single Family Residence	287	56
193	Single Family Residence	208	56
194	Single Family Residence	70	56
195	Single Family Residence	157	56
196	Single Family Residence	278	56
197	Single Family Residence	239	37
198	Single Family Residence	69	26a
199	Single Family Residence	291	26a
200	Commercial-Guard House	227	36
201	Single Family Residence	280	43
301	Boerne Stage Field	7,210	29
501	CellTex Site Services, Ltd	482	36
502	Global Tower. LLC	521	16
701	Heidemann Cemetery	593	36
702	Huntress Lane Cemetery	128	15
901	Heidemann Ranch Historic District	98	36
902	R.L. White Ranch Historic District	0	43
--	Boerne Stage Maverick-Altgelt Ranch and Fenstermaker-Fromme Farm National Register Historic District	50	28
--	Boerne Stage Maverick-Altgelt Ranch and Fenstermaker-Fromme Farm National Register Historic District	50	17

--	Boerne Stage Maverick-Altgelt Ranch and Fenstermaker-Fromme Farm National Register Historic District	142	40

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN ANTONIO TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138-KV TRANSMISSION LINE IN BEXAR COUNTY	**§ § § § § §**	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

CPS ENERGY'S RESPONSE TO ANAQUA SPRINGS HOMEOWNERS' ASSOCIATION SECOND REQUEST FOR INFORMATION

Anaqua Springs Question No. 2-9:

If the transmission line were to fail during a storm and fall towards the houses within a 75 foot right-of-way on Segments 14, 54, 36, 20, and any other portions along Toutant Beauregard with 75 foot rights-of-way, are any houses within the fall radius of either the structures or conductors, given due regard to conductor sag being extended towards the houses?

Response No. 2-9:

As stated in response to Question 6 of the Application and on page 1-1 of the Environmental Assessment, which is Attachment 1 to the Application, it is currently anticipated that the proposed transmission line facilities will be constructed utilizing a right-of-way width of approximately 100 feet. The transmission line proposed in this proceeding will be designed to meet or exceed all safety and clearance requirements applicable to the facilities, including the current version of the National Electrical Safety Code. The transmission line facilities proposed in this Project are not anticipated to ever fail during a storm and fall. However, as a general design principle, the transmission line, if it does fail, it will likely fail within the right-of-way.

Because the transmission line has not been designed and pole heights and conductor clearances have not yet been determined, CPS Energy cannot determine whether any structures are located within a theoretical fall radius of the proposed facilities.

Prepared By:	Lisa B. Meaux	Title: Project Manager, POWER Engineers, Inc.
	Scott D. Lyssy	Title: Manager Civil Engineering
Sponsored By:	Lisa B. Meaux	Title: Project Manager, POWER Engineers, Inc.
	Scott D. Lyssy	Title: Manager Civil Engineering

CPS Energy CCN Application Amendment
(revised 12/23/2020)
Estimated Costs for Transmission Line and Substation Facilities

Table 1: Transmission and Substation Facilities Total Estimated Costs

Route	Total Length (miles)	Sub Site	**Estimated Total Cost	ROW & Land Acquisition	Engineering & Design (Utility)	Engineering & Design (Contract)	Procurement of Material & Equipment	Construction of Facilities (Utility)	Construction of Facilities (Contract)	Other
A	6 66	1	**$54,695,384**	$7,783,840	$702,240	$2,088,350	$15,331,639	$3,250,060	$13,199,493	$11,217,966
B1	6.19	1	**$50,551,923**	$5,902,834	$681,560	$1,972,025	$15,189,033	$3,198,360	$12,822,362	$9,805,226
C1	5 77	1	**$47,373,301**	$6,793,477	$663,080	$1,868,075	$13,867,819	$3,152,160	$11,925,364	$8,275,750
D1	5 22	2	**$43,904,818**	$6,237,577	$638,880	$1,731,950	$12,876,554	$3,091,660	$10,966,953	$7,601,131
E	6 62	2	**$54,505,460**	$8,616,608	$700,480	$2,078,450	$15,019,244	$3,245,660	$13,010,552	$10,758,605
F1	5.66	2	**$49,658,757**	$6,417,969	$658,240	$1,840,850	$14,386,259	$3,140,060	$12,250,563	$9,968,015
G1	6 2	3	**$51,216,234**	$6,139,834	$682,000	$1,974,500	$15,108,260	$3,199,460	$12,877,623	$10,213,234
H	6 32	3	**$53,621,915**	$8,587,636	$687,280	$2,004,200	$14,722,420	$3,212,660	$12,683,021	$10,658,816
I1	5 03	3	**$42,877,497**	$6,601,539	$630,520	$1,684,925	$12,368,953	$3,070,760	$10,527,670	$7,266,482
J1	5.46	3	**$44,068,606**	$5,618,447	$649,440	$1,791,350	$12,949,237	$3,118,060	$11,113,035	$8,026,397
K	5 29	3	**$46,467,251**	$5,869,179	$641,960	$1,749,275	$13,328,636	$3,099,360	$11,364,549	$9,467,538
L	6 91	3	**$54,086,149**	$7,227,514	$713,240	$2,150,225	$14,738,090	$3,277,560	$12,845,846	$11,939,704
M1	5.85	4	**$46,044,320**	$6,318,803	$666,600	$1,887,875	$13,430,851	$3,160,960	$11,567,273	$8,192,689
N1	5 33	5	**$46,803,781**	$4,908,233	$643,720	$1,759,175	$13,997,195	$3,103,760	$11,849,811	$9,583,534
O	6 83	5	**$56,194,703**	$4,797,587	$709,720	$2,130,425	$17,383,068	$3,268,760	$14,650,892	$12,049,319
P	4 89	6	**$43,408,742**	$3,992,817	$624,360	$1,650,275	$12,975,245	$3,055,360	$10,990,484	$9,200,182
Q1	5 56	6	**$45,890,914**	$4,561,572	$653,840	$1,816,100	$13,307,691	$3,129,060	$11,335,264	$10,079,442
R1	4.76	6	**$43,522,858**	$4,248,347	$618,640	$1,618,100	$13,186,368	$3,041,060	$11,142,125	$8,789,289
S	6 73	6	**$55,327,170**	$4,250,341	$705,320	$2,105,675	$17,071,712	$3,257,760	$14,581,618	$12,140,676
T1	5 93	6	**$47,259,333**	$5,496,182	$670,120	$1,907,675	$13,738,882	$3,169,760	$11,533,563	$9,766,501
U1	6.36	6	**$50,562,536**	$4,907,467	$689,040	$2,014,100	$14,593,806	$3,217,060	$12,618,154	$11,384,462
V	6.6	6	**$54,169,034**	$3,783,721	$699,600	$2,073,500	$17,045,497	$3,243,460	$14,223,883	$11,908,527
W	6.25	6	**$52,869,828**	$4,137,701	$684,200	$1,986,875	$16,482,368	$3,204,960	$13,857,732	$11,378,174
X1	5.34	7	**$45,496,087**	$4,931,777	$644,160	$1,761,650	$13,507,384	$3,104,860	$11,418,045	$9,207,463
Y	5 23	7	**$42,723,887**	$5,900,333	$639,320	$1,734,425	$11,952,819	$3,092,760	$10,416,847	$8,170,347
Z1	4.53	7	**$38,474,771**	$4,174,144	$608,520	$1,561,175	$11,523,763	$3,015,760	$9,891,014	$7,000,360
AA1	4.82	7	**$38,291,572**	$4,261,602	$621,280	$1,632,950	$11,064,175	$3,047,660	$9,595,667	$7,334,761
BB	4.73	7	**$42,741,654**	$3,793,915	$617,320	$1,610,675	$12,831,203	$3,037,760	$10,963,256	$8,988,659
CC	5.23	7	**$43,897,472**	$4,455,112	$639,320	$1,734,425	$12,792,717	$3,092,760	$11,012,099	$9,246,400
DD	4.64	7	**$38,996,943**	$4,392,874	$613,360	$1,588,400	$11,617,680	$3,027,860	$9,814,795	$7,219,976
EE	4 99	7	**$39,757,435**	$4,393,897	$628,760	$1,675,025	$11,566,090	$3,066,360	$9,886,810	$7,764,084

**Estimated Costs include a 10% Contingency for unknown project costs not evident at the time these estimates were created

CPS Energy
Application Amendment
December 22, 2020
Attachment 3

Table 2: Transmission and Substation Facilities Total Estimated Costs (Sorted Least to Most Expensive)

Route	Total Length (miles)	Sub Site	**Estimated Total Cost	ROW & Land Acquisition	Engineering & Design (Utility)	Engineering & Design (Contract)	Procurement of Material & Equipment	Construction of Facilities (Utility)	Construction of Facilities (Contract)	Other
AA1	4.82	7	**$38,291,572**	$4,261,602	$621,280	$1,632,950	$11,064,175	$3,047,660	$9,595,667	$7,334,761
Z1	4.53	7	**$38,474,771**	$4,174,144	$608,520	$1,561,175	$11,523,763	$3,015,760	$9,891,014	$7,000,360
DD	4.64	7	**$38,996,943**	$4,392,874	$613,360	$1,588,400	$11,617,680	$3,027,860	$9,814,795	$7,219,976
EE	4.99	7	**$39,757,435**	$4,393,897	$628,760	$1,675,025	$11,566,090	$3,066,360	$9,886,810	$7,764,084
Y	5.23	7	**$42,723,887**	$5,900,333	$639,320	$1,734,425	$11,952,819	$3,092,760	$10,416,847	$8,170,347
BB	4.73	7	**$42,741,654**	$3,793,915	$617,320	$1,610,675	$12,831,203	$3,037,760	$10,963,256	$8,988,659
I1	5.03	3	**$42,877,497**	$6,601,539	$630,520	$1,684,925	$12,368,953	$3,070,760	$10,527,670	$7,266,482
P	4.89	6	**$43,408,742**	$3,992,817	$624,360	$1,650,275	$12,975,245	$3,055,360	$10,990,484	$9,200,182
R1	4.76	6	**$43,522,858**	$4,248,347	$618,640	$1,618,100	$13,186,368	$3,041,060	$11,142,125	$8,789,289
CC	5.23	7	**$43,897,472**	$4,455,112	$639,320	$1,734,425	$12,792,717	$3,092,760	$11,012,099	$9,246,400
D1	5.22	2	**$43,904,818**	$6,237,577	$638,880	$1,731,950	$12,876,554	$3,091,660	$10,966,953	$7,601,131
J1	5.46	3	**$44,068,606**	$5,618,447	$649,440	$1,791,350	$12,949,237	$3,118,060	$11,113,035	$8,026,397
X1	5.34	7	**$45,496,087**	$4,931,777	$644,160	$1,761,650	$13,507,384	$3,104,860	$11,418,045	$9,207,463
Q1	5.56	6	**$45,890,914**	$4,561,572	$653,840	$1,816,100	$13,307,691	$3,129,060	$11,335,264	$10,079,442
M1	5.85	4	**$46,044,320**	$6,318,803	$666,600	$1,887,875	$13,430,851	$3,160,960	$11,567,273	$8,192,689
K	5.29	3	**$46,467,251**	$5,869,179	$641,960	$1,749,275	$13,328,636	$3,099,360	$11,364,549	$9,467,538
N1	5.33	5	**$46,803,781**	$4,908,233	$643,720	$1,759,175	$13,997,195	$3,103,760	$11,849,811	$9,583,534
T1	5.93	6	**$47,259,333**	$5,496,182	$670,120	$1,907,675	$13,738,882	$3,169,760	$11,533,563	$9,766,501
C1	5.77	1	**$47,373,301**	$6,793,477	$663,080	$1,868,075	$13,867,819	$3,152,160	$11,925,364	$8,275,750
F1	5.66	2	**$49,658,757**	$6,417,969	$658,240	$1,840,850	$14,386,259	$3,140,060	$12,250,563	$9,968,015
B1	6.19	1	**$50,551,923**	$5,902,834	$681,560	$1,972,025	$15,189,033	$3,198,360	$12,822,362	$9,805,226
U1	6.36	6	**$50,562,536**	$4,907,467	$689,040	$2,014,100	$14,593,806	$3,217,060	$12,618,154	$11,384,462
G1	6.2	3	**$51,216,234**	$6,139,834	$682,000	$1,974,500	$15,108,260	$3,199,460	$12,877,623	$10,213,234
W	6.25	6	**$52,869,828**	$4,137,701	$684,200	$1,986,875	$16,482,368	$3,204,960	$13,857,732	$11,378,174
H	6.32	3	**$53,621,915**	$8,587,636	$687,280	$2,004,200	$14,722,420	$3,212,660	$12,683,021	$10,658,816
L	6.91	3	**$54,086,149**	$7,227,514	$713,240	$2,150,225	$14,738,090	$3,277,560	$12,845,846	$11,939,704
V	6.6	6	**$54,169,034**	$3,783,721	$699,600	$2,073,500	$17,045,497	$3,243,460	$14,223,883	$11,908,522
E	6.62	2	**$54,505,460**	$8,616,608	$700,480	$2,078,450	$15,019,244	$3,245,660	$13,010,552	$10,758,605
A	6.66	1	**$54,695,384**	$7,783,840	$702,240	$2,088,350	$15,331,639	$3,250,060	$13,199,493	$11,217,966
S	6.73	6	**$55,327,170**	$4,250,341	$705,320	$2,105,675	$17,071,712	$3,257,760	$14,581,618	$12,140,676
O	6.83	5	**$56,194,703**	$4,797,587	$709,720	$2,130,425	$17,383,068	$3,268,760	$14,650,892	$12,049,319

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Table 3: Transmission Facilities Total Estimated Costs

Route	Total Length (miles)	Sub Site	Estimated Total Cost	ROW & Land Acquisition	Engineering & Design (Utility)	Engineering & Design (Contract)	Procurement of Material & Equipment	Construction of Facilities (Utility)	Construction of Facilities (Contract)	Other
A	6 66	1	$39,479,733	$6,205,475	$266,400	$1,498,500	$10,375,854	$666,000	$9,249,539	$11,217,966
B1	6.19	1	$35,821,831	$4,604,350	$247,600	$1,392,750	$10,246,212	$619,000	$8,906,692	$9,805,226
C1	5.77	1	$32,899,624	$5,381,475	$230,800	$1,298,250	$9,045,109	$577,000	$8,091,240	$8,275,750
D1	5.22	2	$29,130,346	$4,260,000	$208,800	$1,174,500	$8,143,958	$522,000	$7,219,957	$7,601,131
E	6.62	2	$38,654,663	$6,310,125	$264,800	$1,489,500	$10,091,858	$662,000	$9,077,775	$10,758,605
F1	5.66	2	$34,248,570	$4,311,363	$226,400	$1,273,500	$9,516,417	$566,000	$8,386,875	$9,968,015
G1	6.2	3	$36,200,846	$4,594,900	$248,000	$1,395,000	$10,172,782	$620,000	$8,956,930	$10,213,234
H	6.32	3	$37,742,578	$6,174,925	$252,800	$1,422,000	$9,822,018	$632,000	$8,780,019	$10,658,816
I1	5.03	3	$28,079,256	$4,473,713	$201,200	$1,131,750	$7,682,502	$503,000	$6,820,609	$7,266,482
J1	5.46	3	$29,661,502	$4,079,413	$218,400	$1,228,500	$8,210,034	$546,000	$7,352,759	$8,026,397
K	5.29	3	$31,238,339	$3,703,600	$211,600	$1,190,250	$8,554,942	$529,000	$7,581,408	$9,467,538
L	6.91	3	$38,164,609	$4,938,450	$276,400	$1,554,750	$9,836,263	$691,000	$8,928,042	$11,939,704
M1	5.85	4	$31,931,306	$5,189,800	$234,000	$1,316,250	$8,647,864	$585,000	$7,765,702	$8,192,689
N1	5.33	5	$32,774,012	$4,059,750	$213,200	$1,199,250	$9,162,723	$533,000	$8,022,555	$9,583,534
O	6.83	5	$41,311,213	$3,959,163	$273,200	$1,536,750	$12,240,789	$683,000	$10,568,993	$12,049,319
P	4.89	6	$29,655,409	$3,195,350	$195,600	$1,100,250	$8,233,678	$489,000	$7,241,349	$9,200,182
Q1	5 56	6	$31,911,929	$3,712,400	$222,400	$1,251,000	$8,535,901	$556,000	$7,554,785	$10,079,442
R1	4.76	6	$29,759,151	$3,427,650	$190,400	$1,071,000	$8,425,608	$476,000	$7,379,204	$8,789,289
S	6.73	6	$40,490,343	$3,429,463	$269,200	$1,514,250	$11,957,738	$673,000	$10,506,016	$12,140,676
T1	5.93	6	$33,268,576	$4,674,675	$237,200	$1,334,250	$8,927,893	$593,000	$7,735,057	$9,766,501
U1	6.36	6	$36,158,857	$4,026,850	$254,400	$1,431,000	$9,705,097	$636,000	$8,721,049	$11,384,462
V	6.6	6	$39,437,492	$3,005,263	$264,000	$1,485,000	$11,933,906	$660,000	$10,180,802	$11,908,522
W	6.25	6	$38,256,396	$3,327,063	$250,000	$1,406,250	$11,421,971	$625,000	$9,847,938	$11,378,174
X1	5.34	7	$31,423,745	$3,919,700	$213,600	$1,201,500	$8,717,440	$534,000	$7,630,041	$9,207,463
Y	5.23	7	$28,852,833	$4,749,475	$209,200	$1,176,750	$7,304,200	$523,000	$6,719,861	$8,170,347
Z1	4.53	7	$24,986,251	$3,176,463	$181,200	$1,019,250	$6,914,148	$453,000	$6,241,831	$7,000,360
AA1	4.82	7	$25,176,699	$3,612,963	$192,800	$1,084,500	$6,496,341	$482,000	$5,973,334	$7,334,761
BB	4.73	7	$28,856,185	$2,821,750	$189,200	$1,064,250	$8,102,730	$473,000	$7,216,596	$8,988,659
CC	5.23	7	$29,906,929	$3,422,838	$209,200	$1,176,750	$8,067,743	$523,000	$7,260,999	$9,246,400
DD	4.64	7	$25,528,232	$3,442,588	$185,600	$1,044,000	$6,999,527	$464,000	$6,172,541	$7,219,976
EE	4 99	7	$26,239,758	$3,463,688	$199,600	$1,122,750	$6,952,628	$499,000	$6,238,009	$7,764,084

Table 4: Substation Facilities Total Estimated Costs

Sub Site	Estimated Total Cost	ROW & Land Acquisition	Engineering & Design (Utility)	Engineering & Design (Contract)	Procurement of Material & Equipment	Construction of Facilities (Utility)	Construction of Facilities (Contract)
1	$10,243,343.00	$ 870,743	$372,000 00	$400,000.00	$3,562,000.00	$2,288,600 00	$2,750,000 00
2	$10,895,754.79	$ 1,523,155	$372,000 00	$400,000 00	$3,562,000 00	$2,288,600 00	$2,750,000.00
3	$11,004,617.00	$ 1,632,017	$372,000 00	$400,000.00	$3,562,000.00	$2,288,600 00	$2,750,000 00
4	$10,039,796.54	$ 667,197	$372,000.00	$400,000.00	$3,562,000.00	$2,288,600 00	$2,750,000 00
5	$9,774,880.00	$ 402,280	$372,000 00	$400,000 00	$3,562,000.00	$2,288,600.00	$2,750,000.00
6	$9,807,084.00	$ 434,484	$372,000 00	$400,000.00	$3,562,000.00	$2,288,600.00	$2,750,000 00
7	$9,999,864.00	$ 627,264	$372,000 00	$400,000 00	$3,562,000 00	$2,288,600.00	$2,750,000.00

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Table 4-1 Amended
Environmental and Land Use Data For Route Evaluation
Scenic Loop

Evaluation Criteria		A	B1	C1	D1	E	F1	G1	H	I1	J1	K	L	M1	N1	O	P	Q1
Land Use																		
1	Length of alternative route (miles)	6.66	6.19	5.77	5.22	6.62	5.66	6.20	6.32	5.03	5.46	5.29	6.91	5.85	5.33	6.83	4.89	5.56
2	Number of habitable structures[1] within 300 feet of the route centerline	69	61	48	43	60	12	52	61	43	41	36	35	43	11	29	12	6
3	Length of ROW using existing transmission line ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Length of ROW parallel and adjacent to existing transmission line ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Length of ROW parallel to other existing ROW (roadways, railways, canals, etc.)	1.79	1.00	2.43	2.13	2.45	1.48	1.35	1.89	2.01	2.26	1.86	2.21	2.76	1.15	2.91	0.85	1.39
6	Length of ROW parallel and adjacent to apparent property lines[2]	3.71	3.19	1.39	1.49	2.54	2.49	1.96	3.20	1.58	0.78	1.85	2.18	1.49	2.49	1.30	2.62	2.44
7	Sum of evaluation criteria 4, 5, and 6	5.50	4.19	3.82	3.62	4.99	3.97	3.31	5.09	3.59	3.04	3.71	4.38	4.25	3.64	4.21	3.47	3.83
8	Percent of evaluation criteria 4, 5, and 6	83%	68%	66%	69%	75%	70%	53%	80%	71%	56%	70%	63%	73%	68%	62%	71%	69%
9	Length of ROW across parks/recreational areas[3]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Number of additional parks/recreational areas[3] within 1,000 feet of ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Length of ROW across cropland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Length of ROW across pasture/rangeland	0.61	0.76	1.69	0.77	0.69	0.89	0.65	0.50	0.67	0.67	0.51	0.38	1.09	0.71	0.42	0.36	0.24
13	Length of ROW across land irrigated by traveling systems (rolling or pivot type)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Length of route across conservation easements and/or mitigation banks (Special Management Area)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Length of route across gravel pits, mines, or quarries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Length of ROW parallel and adjacent to pipelines[4]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Number of pipeline crossings[4]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Number of transmission line crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Number of IH, US and state highway crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Number of FM or RM road crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Number of cemeteries within 1,000 feet of the ROW centerline and substation site	0	1	1	1	0	1	1	0	1	1	0	0	1	1	0	1	1
22	Number of FAA registered airports[5] with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerline and substation site	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23	Number of FAA registered airports[5] having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Number of private airstrips within 10,000 feet of the ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Number of heliports within 5,000 feet of the ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline and substation site	0	0	1	1	0	0	0	0	1	1	0	0	1	0	1	0	0
28	Number of identifiable existing water wells within 200 feet of the ROW centerline and substation site	6	4	2	3	3	1	4	5	3	3	3	3	4	1	2	1	1
29	Number of oil and gas wells within 200 feet of the ROW centerline (including dry or plugged wells) and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aesthetics																		
30	Estimated length of ROW within foreground visual zone[6] of IH, US and state highways	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Estimated length of ROW within foreground visual zone[6] of FM/RM roads	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Estimated length of ROW within foreground visual zone[6][7] of parks/recreational areas[3]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ecology																		
33	Length of ROW across upland woodlands/brushlands	5.27	5.06	3.48	3.94	5.24	4.70	5.10	5.03	3.86	4.20	4.40	6.14	4.24	4.56	6.24	4.42	5.27
34	Length of ROW across bottomland/riparian woodlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	Length of ROW across NWI mapped wetlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	Length of ROW across critical habitat of federally listed endangered or threatened species	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	Area of ROW across golden-cheeked warbler modeled habitat designated as 3-Moderate High and 4-High Quality (acres)[8]	13.88	13.68	10.74	11.12	12.29	19.03	12.78	12.29	8.92	11.81	25.08	14.38	11.12	19.03	2.95	25.11	5.52
38	Area of ROW across golden-cheeked warbler modeled habitat designated as 1-Low and 2-Moderate Low Quality (acres)[8]	18.21	17.55	12.08	12.17	15.74	15.04	18.59	16.46	12.93	14.95	11.65	21.28	12.17	13.33	16.59	12.04	17.59
39	Length of ROW across open water (lakes, ponds)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Number of stream and river crossings	3	6	6	8	3	10	7	3	8	9	4	8	10	9	10	4	11
41	Length of ROW parallel (within 100 feet) to streams or rivers	0.07	0.10	0.00	0.10	0.07	0.15	0.17	0.07	0.10	0.17	0.26	0.20	0.10	0.15	0.24	0.15	0.21
42	Length of ROW across Edwards Aquifer Contributing Zone	6.66	6.19	5.77	5.22	6.62	5.66	6.20	6.32	5.03	5.46	5.29	6.91	5.85	5.33	6.83	4.89	5.56
43	Length of ROW across FEMA mapped 100-year floodplain	0.13	0.78	0.55	1.03	0.13	0.25	0.75	0.13	1.03	1.00	0.17	0.42	1.49	0.23	0.07	0.09	0.16
Cultural Resources																		
44	Number of recorded cultural resource sites crossed by ROW	0	0	0	0	0	2	0	0	0	0	0	0	0	2	1	1	2
45	Number of additional recorded cultural resource sites within 1,000 feet of ROW centerline	0	2	2	2	2	12	2	0	2	2	0	0	2	12	1	10	12
46	Number of NRHP listed properties crossed by ROW	0	0	0	0	0	1	0	0	0	0	1	1	0	1	1	1	1
47	Number of additional NRHP listed properties within 1,000 feet of ROW centerline	1	2	1	1	1	0	2	1	1	1	0	0	1	0	0	0	0
48	Length of ROW across areas of high archeological site potential	1.73	2.94	2.89	3.14	1.49	3.10	2.84	1.44	3.24	3.27	2.40	4.55	3.76	2.84	2.94	2.49	3.13

[1] Single-family and multi-family dwellings, and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerline of a transmission project of 230-kV or less

[2] Apparent property boundaries created by existing roads, highways, or railroad ROWs are not "double-counted" in the length of ROW parallel to apparent property boundaries criteria

[3] Defined as parks and recreational areas owned by a governmental body or an organized group, club, or church within 1,000 feet of the centerline of the project

[4] Only steel pipelines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations

[5] As listed in the Chart Supplement South Central US (FAA 2019b formerly known as the Airport/Facility Directory South Central US) and FAA 2019a

[6] One-half mile, unobstructed Lengths of ROW within the visual foreground zone of interstates, US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria

[7] One-half mile, unobstructed Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates, US and state highway criteria and/or with the total length of ROW within the visual foreground zone of FM roads criteria

[8] From Model C by Diamond et al. 2010

All length measurements are shown in miles unless noted otherwise

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Table 4-1 Amended
Environmental and Land Use Data For Route Evaluation
Scenic Loop

Evaluation Criteria		R1	S	T1	U1	V	W	X1	Y	Z1	AA1	BB	CC	DD	EE
Land Use															
1	Length of alternative route (miles)	4 78	6 73	5 93	6 36	6 60	6 25	5 34	5 23	4 53	4 82	4 73	5 23	4 64	4 99
2	Number of hab table structures[1] within 300 feet of the route centerline	7	25	34	6	31	25	40	39	30	30	24	54	32	31
3	Length of ROW using existing transmission line ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Length of ROW parallel and adjacent to existing transmission line ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Length of ROW parallel to other existing ROW (roadways, railways, canals, etc)	0.85	2 57	0 51	1 20	2 60	2 60	0 79	3 01	1 60	1 85	1 45	1 94	1 88	2 13
6	Length of ROW parallel and adjacent to apparent property lines[2]	2 21	0 74	3 96	2 54	2 21	1 03	2 67	1 26	1 49	0 87	1 85	1 90	1 39	0 68
7	Sum of evaluation criteria 4 5 and 6	3 06	3 31	4 46	3 74	4 82	3 63	3 46	4 27	3 09	2 72	3 30	3 84	3 27	2 81
8	Percent of evaluation criteria 4 5, and 6	64%	49%	75%	59%	73%	58%	65%	82%	68%	56%	70%	73%	70%	56%
9	Length of ROW across parks/recreational areas[3]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Number of additional parks/recreational areas[3] within 1,000 feet of ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Length of ROW across cropland	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Length of ROW across pasture/rangeland	0 36	0 08	0 28	0 24	0 00	0 08	0 59	0 93	0 54	0 54	0 37	0 62	1 05	1 05
13	Length of ROW across land irrigated by traveling systems (rolling or pivot type)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Length of route across conservation easements and/or mitigation banks (Special Management Area)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Length of route across gravel pits, mines, or quarries	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Length of ROW parallel and adjacent to pipelines[4]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Number of pipeline crossings[4]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Number of transmission line crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Number of IH, US and state highway crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Number of FM or RM road crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Number of cemeteries within 1,000 feet of the ROW centerline and substation site	1	0	2	1	0	0	0	1	1	1	0	0	1	1
22	Number of FAA registered airports[5] with at least one runway more than 3,200 feet in length located within 20 000 feet of ROW centerline and substation site	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23	Number of FAA registered airports[5] having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Number of private airstrips within 10 000 feet of the ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Number of heliports within 5,000 feet of the ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Number of commercial AM radio transmitters within 10 000 feet of the ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline and substation s te	0	1	1	0	1	1	0	1	1	1	0	1	1	1
28	Number of identifiable existing water wells within 200 feet of the ROW centerline and substation site	1	2	3	1	0	2	2	1	2	2	2	2	1	1
29	Number of oil and gas wells within 200 feet of the ROW centerline (including dry or plugged wells) and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aesthetics															
30	Est mated length of ROW within foreground visual zone[6] of IH, US and state highways	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Estimated length of ROW w thin foreground visual zone[6] of FM/RM roads	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Estimated length of ROW w thin foreground visual zone[6][7] of parks/recreational areas[3]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ecology															
33	Length of ROW across upland woodlands/brushlands	4 35	6 51	5 48	6 07	6 52	6 03	4 25	3 76	3 60	3 81	4 08	4 27	3 12	3 40
34	Length of ROW across bottom land/riparian woodlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	Length of ROW across NWI mapped wetlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	Length of ROW across critical habitat of federally listed endangered or threatened species	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	Area of ROW across golden cheeked warbler modeled habitat designated as 3 Moderate High and 4-High Quality (acres)[8]	18 03	4 77	20 39	8 31	4 28	2 95	11 92	11 12	11 12	9 6	25 08	23 82	10 74	11 43
38	Area of ROW across golden cheeked warbler modeled habitat designated as 1 Low and 2-Moderate Low Quality (acres)[8]	13 33	18 57	15 67	22 81	18 34	16 59	13 18	12 34	11 02	14 56	10 50	11 35	10 93	13 72
39	Length of ROW across open water (lakes, ponds)	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
40	Number of stream and river crossings	8	10	8	12	9	9	3	6	8	9	4	4	6	7
41	Length of ROW parallel (within 100 feet) to streams or rivers	0 15	0 11	0 10	0 08	0 24	0 24	0 00	0 07	0 10	0 17	0 26	0 15	0 00	0 08
42	Length of ROW across Edwards Aquifer Contributing Zone	4 76	6 73	5 93	6 36	6 60	6 25	5 34	5 23	4 53	4 82	4 73	5 23	4 64	4 99
43	Length of ROW across FEMA mapped 100-year floodplain	0 16	0 24	0 97	0 40	0 00	0 00	0 03	0 38	1 03	1 00	0 17	0 15	0 28	0 25
Cultural Resources															
44	Number of recorded cultural resource sites crossed by ROW	2	1	1	2	1	1	0	0	0	0	0	0	0	0
45	Number of additional recorded cultural resource sites within 1,000 feet of ROW centerline	12	1	12	12	0	1	2	2	2	2	0	0	2	2
46	Number of NRHP listed properties crossed by ROW	1	1	0	1	1	1	0	0	0	0	1	1	0	0
47	Number of additional NRHP listed properties within 1,000 feet of ROW centerline	0	0	1	0	0	0	1	2	1	1	0	0	1	1
48	Length of ROW across areas of high archeological site potential	2 65	4 07	3 72	4 77	2 85	2 75	1 44	2,28	3 01	3 35	2 33	2 80	2 34	2 57

[1] Single family and multi-family dwellings and related structures mobile homes apartment buildings commercial structures industrial structures business structures churches hospitals nursing homes schools or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerline of a transmission project of 230-kV or less

[2] Apparent property boundaries created by existing roads highways or railroad ROWs are not "double-counted" in the length of ROW parallel to apparent property boundaries criteria

[3] Defined as parks and recreational areas owned by a governmental body or an organized group club, or church within 1 000 feet of the centerline of the project

[4] Only steel pipelines six inches and greater in diameter carry ng hydrocarbons were quantified in the pipeline crossing and paralleling calculations

[5] As listed in the Chart Supplement South Central US (FAA 2019b formerly known as the Airport/Facility Directory South Central US) and FAA 2019a

[6] One-half mile unobstructed Lengths of ROW within the visual foreground zone of interstates US and state highway criteria are not "double counted" in the length of ROW within the visual foreground zone of FM roads criteria

One-half mile unobstructed Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates US and state highway criteria and/or with the total length of ROW w thin the visual foreground zone of FM roads criteria

[7] From Model C by Diamond et al 2010

All length measurements are shown in miles unless noted otherwise

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Table 4-1 Amended
Environmental and Land Use Data For Route Evaluation
Scenic Loop

Evaluation Criteria		A	B1	C1	D1	E	F1	G1	H	I1	J1	K	L	M1	N1	O	P	Q1
Land Use																		
1	Length of alternative route (miles)	6.66	6.19	5.77	5.22	6.62	5.66	6.20	6.32	5.03	5.46	5.29	6.91	5.85	5.33	6.83	4.89	5.56
2	Number of habitable structures[1] within 300 feet of the route centerline	69	61	48	43	60	12	52	61	43	41	36	35	43	11	29	12	6
3	Length of ROW using existing transmission line ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Length of ROW parallel and adjacent to existing transmission line ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Length of ROW parallel to other existing ROW (roadways, railways, canals, etc)	1.79	1.00	2.43	2 13	2.45	1.48	1.35	1.89	2.01	2 26	1.86	2 21	2.76	1 15	2.91	0 85	1.39
6	Length of ROW parallel and adjacent to apparent property lines[2]	3.71	3.19	1.39	1 49	2 54	2 49	1.96	3.20	1.58	0 78	1.85	2.18	1.49	2.49	1.30	2.62	2 44
7	Sum of evaluation criteria 4, 5, and 6	5.50	4.19	3.82	3.62	4 99	3 97	3.31	5.09	3.59	3.04	3.71	4.38	4.25	3.64	4.21	3.47	3.83
8	Percent of evaluation criteria 4, 5, and 6	83%	68%	66%	69%	75%	70%	53%	80%	71%	56%	70%	63%	73%	68%	62%	71%	69%
9	Length of ROW across parks/recreational areas[3]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Number of additional parks/recreational areas[3] within 1,000 feet of ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Length of ROW across cropland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Length of ROW across pasture/rangeland	0.61	0.76	1.69	0.77	0.69	0.89	0 65	0 50	0.67	0.67	0.51	0 38	1 09	0.71	0.42	0 36	0 24
13	Length of ROW across land irrigated by traveling systems (rolling or pivot type)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Length of route across conservation easements and/or mitigation banks (Special Management Area)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Length of route across gravel pits, mines, or quarries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Length of ROW parallel and adjacent to pipelines[4]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Number of pipeline crossings[4]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Number of transmission line crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Number of IH, US and state highway crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Number of FM or RM road crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Number of cemeteries within 1,000 feet of the ROW centerline and substation site	0	1	1	1	0	1	1	0	1	1	0	0	1	1	0	1	1
22	Number of FAA registered airports[5] with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerline and substation site	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23	Number of FAA registered airports[5] having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Number of private airstrips within 10,000 feet of the ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Number of heliports within 5,000 feet of the ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline and substation site	0	0	1	1	0	0	0	0	1	1	0	0	1	0	1	0	0
28	Number of identifiable existing water wells within 200 feet of the ROW centerline and substation site	6	4	2	3	3	1	4	5	3	3	3	3	4	1	2	1	1
29	Number of oil and gas wells within 200 feet of the ROW centerline (including dry or plugged wells) and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aesthetics																		
30	Estimated length of ROW within foreground visual zone[6] of IH, US and state highways	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Estimated length of ROW within foreground visual zone[6] of FM/RM roads	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Estimated length of ROW within foreground visual zone[6][7] of parks/recreational areas[3]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ecology																		
33	Length of ROW across upland woodlands/brushlands	5.27	5.06	3.48	3.94	5.24	4.70	5.10	5.03	3.86	4.20	4.40	6.14	4.24	4.56	6.24	4.42	5.27
34	Length of ROW across bottomland/riparian woodlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	Length of ROW across NWI mapped wetlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	Length of ROW across critical habitat of federally listed endangered or threatened species	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	Area of ROW across golden-cheeked warbler modeled habitat designated as 3-Moderate High and 4-High Quality (acres)[8]	13 88	13.68	10.74	11.12	12.29	19.03	12 78	12.29	8.92	11.81	25.08	14.38	11 12	19 03	2.95	25.11	5.52
38	Area of ROW across golden-cheeked warbler modeled habitat designated as 1-Low and 2-Moderate Low Quality (acres)[8]	18 21	17.55	12.08	12.17	15.74	15.04	18.59	16.46	12.93	14 95	11.65	21 28	12.17	13.33	16.59	12.04	17 59
39	Length of ROW across open water (lakes, ponds)	0.00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0 00	0.00	0.00	0.00	0.00	0.00
40	Number of stream and river crossings	3	6	6	8	3	10	7	3	8	9	4	8	10	9	10	4	11
41	Length of ROW parallel (within 100 feet) to streams or rivers	0.07	0 10	0.00	0.10	0.07	0 15	0.17	0.07	0.10	0.17	0.26	0.20	0 10	0.15	0.24	0.15	0.21
42	Length of ROW across Edwards Aquifer Contributing Zone	6.66	6.19	5.77	5 22	6.62	5.66	6.20	6.32	5.03	5.46	5.29	6 91	5.85	5 33	6.83	4.89	5.56
43	Length of ROW across FEMA mapped 100-year floodplain	0 13	0.78	0.55	1.03	0.13	0 25	0.75	0.13	1.03	1 00	0 17	0 42	1.49	0 23	0.07	0.09	0.16
Cultural Resources																		
44	Number of recorded cultural resource sites crossed by ROW	0	0	0	0	0	2	0	0	0	0	0	0	0	2	1	1	2
45	Number of additional recorded cultural resource sites within 1,000 feet of ROW centerline	0	2	2	2	2	12	2	0	2	2	0	0	2	12	1	10	12
46	Number of NRHP listed properties crossed by ROW	0	0	0	0	0	1	0	0	0	0	1	1	0	1	1	1	1
47	Number of additional NRHP listed properties within 1,000 feet of ROW centerline	1	2	1	1	1	0	2	1	1	1	0	0	1	0	0	0	0
48	Length of ROW across areas of high archeological site potential	1.73	2.94	2.89	3.14	1.49	3 10	2.84	1.44	3.24	3 27	2.40	4.55	3.76	2.84	2.94	2.49	3.13

[1] Single-family and multi-family dwellings, and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerline of a transmission project of 230-kV or less

[2] Apparent property boundaries created by existing roads, highways, or railroad ROWs are not "double-counted" in the length of ROW parallel to apparent property boundaries criteria

[3] Defined as parks and recreational areas owned by a governmental body or an organized group, club, or church within 1,000 feet of the centerline of the project

[4] Only steel pipelines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations

[5] As listed in the Chart Supplement South Central US (FAA 2019b formerly known as the Airport/Facility Directory South Central US) and FAA 2019a

[6] One-half mile, unobstructed Lengths of ROW within the visual foreground zone of interstates, US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria

[7] One-half mile, unobstructed Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates, US and state highway criteria and/or with the total length of ROW within the visual foreground zone of FM roads criteria

[8] From Model C by Diamond et al 2010

All length measurements are shown in miles unless noted otherwise

CPS Energy
Application Amendment
December 22, 2020
Attachment 2

Table 4-1 Amended
Environmental and Land Use Data For Route Evaluation
Scenic Loop

Evaluation Criteria		R1	S	T1	U1	V	W	X1	Y	Z1	AA1	BB	CC	DD	EE
Land Use															
1	Length of alternative route (miles)	4.76	6.73	5.93	6.36	6.60	6.25	5.34	5.23	4.53	4.82	4.73	5.23	4.64	4.99
2	Number of habitable structures[1] within 300 feet of the route centerline	7	25	34	6	31	25	40	39	30	30	24	54	32	31
3	Length of ROW using existing transmission line ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Length of ROW parallel and adjacent to existing transmission line ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Length of ROW parallel to other existing ROW (roadways, railways, canals, etc.)	0.85	2.57	0.51	1.20	2.60	2.60	0.79	3.01	1.60	1.85	1.45	1.94	1.88	2.13
6	Length of ROW parallel and adjacent to apparent property lines[2]	2.21	0.74	3.96	2.54	2.21	1.03	2.67	1.26	1.49	0.87	1.85	1.90	1.39	0.68
7	Sum of evaluation criteria 4, 5, and 6	3.06	3.31	4.46	3.74	4.82	3.63	3.46	4.27	3.09	2.72	3.30	3.84	3.27	2.81
8	Percent of evaluation criteria 4, 5, and 6	64%	49%	75%	59%	73%	58%	65%	82%	68%	56%	70%	73%	70%	56%
9	Length of ROW across parks/recreational areas[3]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Number of additional parks/recreational areas[3] within 1,000 feet of ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Length of ROW across cropland	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Length of ROW across pasture/rangeland	0.36	0.08	0.28	0.24	0.00	0.08	0.59	0.93	0.54	0.54	0.37	0.62	1.05	1.05
13	Length of ROW across land irrigated by traveling systems (rolling or pivot type)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Length of route across conservation easements and/or mitigation banks (Special Management Area)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Length of route across gravel pits, mines, or quarries	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Length of ROW parallel and adjacent to pipelines[4]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Number of pipeline crossings[4]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Number of transmission line crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Number of IH, US and state highway crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Number of FM or RM road crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Number of cemeteries within 1,000 feet of the ROW centerline and substation site	1	0	2	1	0	0	0	1	1	1	0	0	1	1
22	Number of FAA registered airports[5] with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerline and substation site	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23	Number of FAA registered airports[5] having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Number of private airstrips within 10,000 feet of the ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Number of heliports within 5,000 feet of the ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline and substation site	0	1	1	0	1	1	0	1	1	1	0	1	1	1
28	Number of identifiable existing water wells within 200 feet of the ROW centerline and substation site	1	2	3	1	0	2	2	1	2	2	2	2	1	1
29	Number of oil and gas wells within 200 feet of the ROW centerline (including dry or plugged wells) and substation site	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aesthetics															
30	Estimated length of ROW within foreground visual zone[6] of IH, US and state highways	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Estimated length of ROW within foreground visual zone[6] of FM/RM roads	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Estimated length of ROW within foreground visual zone[6][7] of parks/recreational areas[3]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ecology															
33	Length of ROW across upland woodlands/brushlands	4.35	6.51	5.46	6.07	6.52	6.03	4.25	3.76	3.60	3.81	4.08	4.27	3.12	3.40
34	Length of ROW across bottomland/riparian woodlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	Length of ROW across NWI mapped wetlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	Length of ROW across critical habitat of federally listed endangered or threatened species	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	Area of ROW across golden-cheeked warbler modeled habitat designated as 3-Moderate High and 4-High Quality (acres)[8]	19.03	4.77	20.39	8.31	4.28	2.95	11.92	11.12	11.12	9.6	25.08	23.82	10.74	11.43
38	Area of ROW across golden-cheeked warbler modeled habitat designated as 1-Low and 2-Moderate Low Quality (acres)[8]	13.33	18.57	15.87	22.81	18.34	16.59	13.18	12.34	11.02	14.56	10.50	11.35	10.93	13.72
39	Length of ROW across open water (lakes, ponds)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	Number of stream and river crossings	8	10	8	12	9	9	3	6	8	9	4	4	6	7
41	Length of ROW parallel (within 100 feet) to streams or rivers	0.15	0.11	0.10	0.08	0.24	0.24	0.00	0.07	0.10	0.17	0.26	0.15	0.00	0.08
42	Length of ROW across Edwards Aquifer Contributing Zone	4.76	6.73	5.93	6.36	6.60	6.25	5.34	5.23	4.53	4.82	4.73	5.23	4.64	4.99
43	Length of ROW across FEMA mapped 100-year floodplain	0.16	0.24	0.97	0.40	0.00	0.00	0.03	0.38	1.03	1.00	0.17	0.15	0.28	0.25
Cultural Resources															
44	Number of recorded cultural resource sites crossed by ROW	2	1	1	2	1	1	0	0	0	0	0	0	0	0
45	Number of additional recorded cultural resource sites within 1,000 feet of ROW centerline	12	1	12	12	0	1	2	2	2	2	0	0	2	2
46	Number of NRHP listed properties crossed by ROW	1	1	0	1	1	1	0	0	0	0	1	1	0	0
47	Number of additional NRHP listed properties within 1,000 feet of ROW centerline	0	0	1	0	0	0	1	2	1	1	0	0	1	1
48	Length of ROW across areas of high archeological site potential	2.65	4.07	3.72	4.77	2.85	2.75	1.44	2.26	3.01	3.35	2.33	2.80	2.34	2.52

[1] Single-family and multi-family dwellings, and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerline of a transmission project of 230-kV or less

[2] Apparent property boundaries created by existing roads, highways, or railroad ROWs are not "double-counted" in the length of ROW parallel to apparent property boundaries criteria

[3] Defined as parks and recreational areas owned by a governmental body or an organized group, club, or church within 1,000 feet of the centerline of the project

[4] Only steel pipelines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations

[5] As listed in the Chart Supplement South Central US (FAA 2019b formerly known as the Airport/Facility Directory South Central US) and FAA 2019a

[6] One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of interstates, US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria

[7] One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates, US and state highway criteria and/or with the total length of ROW within the visual foreground zone of FM roads criteria

[8] From Model C by Diamond et al. 2010

All length measurements are shown in miles unless noted otherwise

TABLE 2-1 AMENDED ALTERNATIVE SUBSTATION AND ROUTE COMPOSITION AND LENGTH

PRIMARY ALTERNATIVE ROUTES	ALTERNATIVE SUBSTATION AND ROUTE SEGMENT COMPOSITION	TOTAL LENGTH IN MILES
A	Sub 1 – 13-14-54-17-28-29-40	6.66
B1	Sub 1 – 13-14-54-17-31-42a-46a-46b	6.19
C1	Sub 1 – 2-3-4-5-14-54-20-36-35-34-41-46a-46b	5.77
D1	Sub 2 – 4-5-14-54-20-36-42a-46a-46b	5.22
E	Sub 2 – 4-5-14-54-17-28-30-34-33-40	6.62
F1	Sub 2 – 7-8-50-15-26a-38-43	5.66
G1	Sub 3 – 5-14-54-17-31-42a-46a-49a	6.20
H	Sub 3 – 5-14-54-17-28-29-40	6.32
I1	Sub 3 – 5-14-54-20-36-42a-46-46b	5.03
J1	Sub 3 – 5-14-54-20-36-42a-46a-49a	5.46
K	Sub 3 – 5-14-54-21-25-37-38-43	5.29
L	Sub 3 – 5-14-54-21-25-37-38-39-53-52-45	6.91
M1	Sub 4 – 1-3-4-5-14-54-20-36-42a-46a-46b	5.85
N1	Sub 5 – 8-50-15-26a-38-43	5.33
O	Sub 5 – 8-50-16-56-57-27-47-53-44	6.83
P	Sub 6 – 50-15-22-25-37-38-43	4.89
Q1	Sub 6 – 50-15-26a-38-39-44	5.56
R1	Sub 6 – 50-15-26a-38-43	4.76
S	Sub 6 – 50-16-56-57-27-51-45	6.73
T1	Sub 6 – 50-15-22-25-32-36-42a-46a-46b	5.93
U1	Sub 6 – 50-15-26a-38-39-53-52-45	6.36
V	Sub 6 – 50-16-55-57-27-47-53-44	6.60
W	Sub 6 – 50-16-56-57-27-47-53-44	6.25
X1	Sub 7 – 54-17-28-30-34-41-46a-46b	5.34
Y	Sub 7 – 54-20-36-35-34-33-40	5.23
Z1	Sub 7 – 54-20-36-42a-46a-46b	4.53
AA1	Sub 7 – 54-20-36-42a-46-49a	4.82
BB	Sub 7 – 54-21-25-37-38-43	4.73
CC	Sub 7 - 54-20-32-37-38-43	5.23
DD	Sub 7 – 54-20-36-35-34-41-46a-46b	4.64
EE	Sub 7 – 54-20-36-35-34-41-46a-49a	4.99

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN ANTONIO TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138-KV TRANSMISSION LINE IN BEXAR COUNTY	§	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

CPS ENERGY'S RESPONSE TO ANAQUA SPRINGS HOMEOWNERS' ASSOCIATION SECOND REQUEST FOR INFORMATION

Anaqua Springs Question No. 2-7:

How many transmission structures does CPS anticipate will be located on Segment 14? How many structures on Segment 54, 36, and 20? And what will the approximate distance be between each structure, given the 75-foot right-of-way?

Response No. 2-7:

As stated in response to Question 6 of the Application and on page 1-1 of the Environmental Assessment, which is Attachment 1 to the Application, it is currently anticipated that the proposed transmission line facilities will be constructed utilizing a right-of-way width of approximately 100 feet. The survey, geotechnical, and engineering work necessary to design the proposed transmission line facilities along Segments 14, 20, 36, and 54 have not yet been completed. Thus, CPS Energy cannot yet identify where pole structures will be located or the exact number of poles, nor whether narrower than anticipated right-of-way may be required along some portions of those segments. For preliminary estimating, the following structure count and span lengths were used.

Segment	Number of Structures	Estimated Average Span Length
14	4	550 feet
54	9	465 feet
36	6	500 feet
20	6	630 feet

Prepared By: Scott D. Lyssy Title: Manager Civil Engineering
Sponsored By: Scott D. Lyssy Title: Manager Civil Engineering

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN ANTONIO TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138-KV TRANSMISSION LINE IN BEXAR COUNTY	§ § § § § §	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

CPS ENERGY'S RESPONSE TO ANAQUA SPRINGS HOMEOWNERS' ASSOCIATION SECOND REQUEST FOR INFORMATION

Anaqua Springs Question No. 2-5:

Regarding Segment 54, please provide the anticipated distance from the edge of the right-of-way to Habitable Structure Nos. 79, 178, 81, 85, 86, 87, 88 and 89 on the north side of Toutant Beauregard Road (EA Figure 4-1) and Habitable Structure Nos. 70, 72, 78, and 80 on the south side of Toutant Beauregard. Please provide a sketch or drawing showing anticipated ROW easement width, structure spacing and locations for Segment 54 given the need to follow the sharp curve in the road and proximity to housing. Is it accurate that in this stretch of 54, CPS plans to use a 75-foot right-of-way with structures spaced more closely together? If not, how will this segment be constructed?

Response No. 2-5:

The approximate distance from the edge of the right-of-way to the habitable structures identified above are as follows:

Habitable Structure No.	Approximate Distance (feet)
70	156
72	154
78	119
79	165
80	152
81	32
85	108
86	112
87	250
88	72
89	84
178	163

As stated in response to Question 6 of the Application and on page 1-1 of the Environmental Assessment, which is Attachment 1 to the Application, it is currently anticipated that the proposed

transmission line facilities will be constructed utilizing a right-of-way width of approximately 100 feet. The survey, geotechnical, and engineering work necessary to design the proposed transmission line facilities along Segment 54 have not yet been completed. Thus, CPS Energy cannot yet identify where pole structures will be located and whether narrower than anticipated right-of-way may be required in that area.

Prepared By:	Lisa B. Meaux	Title:	Project Manager, POWER Engineers, Inc.
	Scott D. Lyssy	Title:	Manager Civil Engineering
Sponsored By:	Lisa B. Meaux	Title:	Project Manager, POWER Engineers, Inc.
	Scott D. Lyssy	Title:	Manager Civil Engineering

EXHIBIT MDA-17 (CONF)

Exhibit MDA-17 to the Direct Testimony of Mark D. Anderson is Confidential and is being provided pursuant to the terms of the Protective Order.

920744

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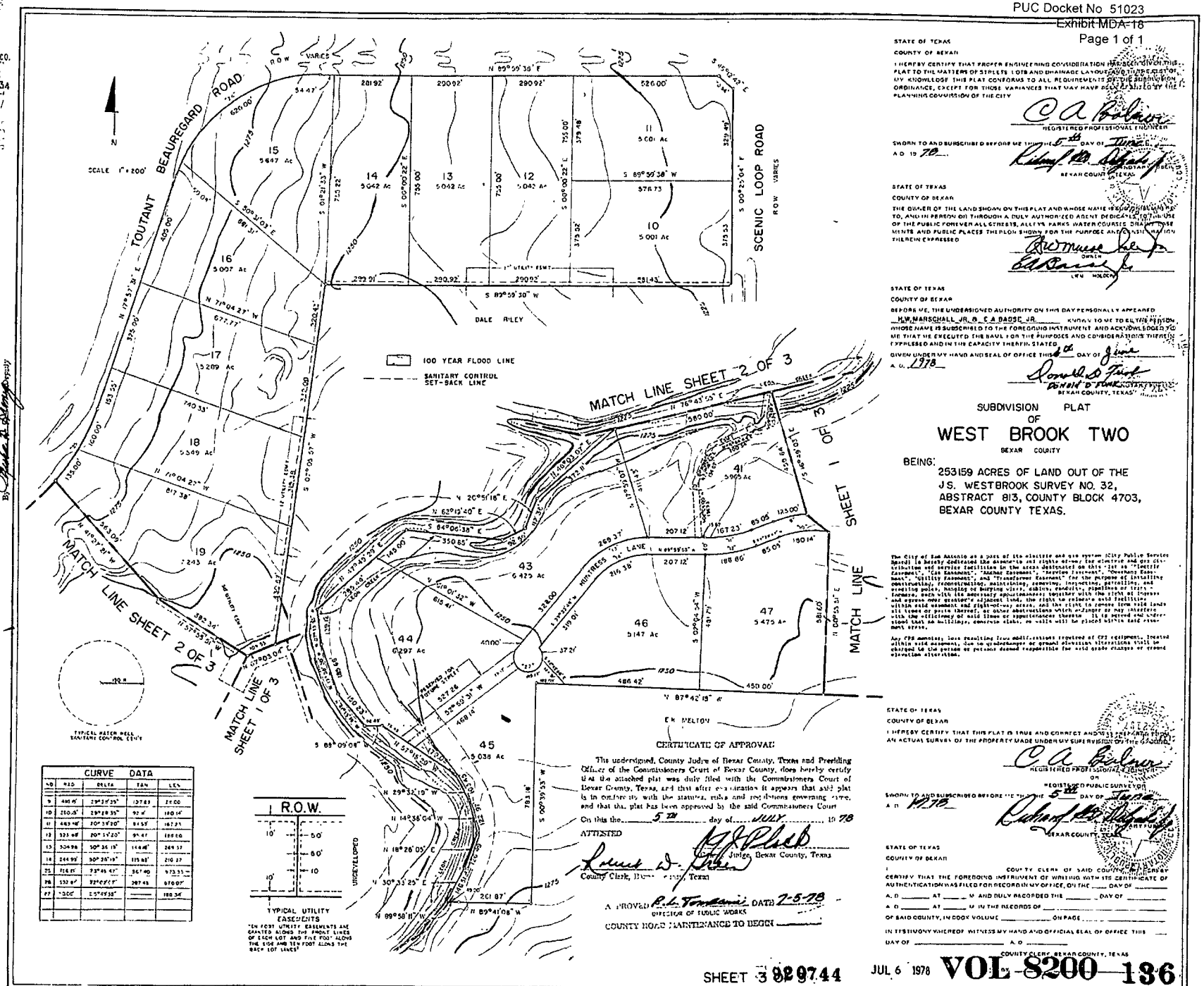


CURVE DATA				
NO	RAD	DELTA	TAN	LEN
9	440.15'	29°31'25"	127.83	226.00
10	350.15'	29°28'35"	92.4'	180.14'
11	483.98'	20°13'20"	91.53'	167.23'
12	323.98'	20°13'20"	91.41'	166.66
13	324.98	50°36'15"	144.48'	269.37
14	244.98'	50°36'15"	115.88'	210.37
25	716.11'	23°46'42"	367.90	973.33
26	532.97'	92°04'21"	387.45	870.07'
27	20.00'	89°59'38"	———	180.34'

STATE OF TEXAS
COUNTY OF BEXAR

I HEREBY CERTIFY THAT PROPER ENGINEERING CONSIDERATION HAS BEEN GIVEN THIS PLAT TO THE MATTERS OF STREETS, LOTS AND DRAINAGE LAYOUT AND TO THE BEST OF MY KNOWLEDGE THIS PLAT CONFORMS TO ALL REQUIREMENTS OF THE SUBDIVISION ORDINANCE, EXCEPT FOR THOSE VARIANCES THAT MAY HAVE BEEN GRANTED BY THE PLANNING COMMISSION OF THE CITY

C A Bolner
REGISTERED PROFESSIONAL ENGINEER

SWORN TO AND SUBSCRIBED BEFORE ME THIS THE 5th DAY OF June A.D. 19 78.

Richard W. Aubrey
NOTARY PUBLIC
BEXAR COUNTY, TEXAS

STATE OF TEXAS
COUNTY OF BEXAR

THE OWNER OF THE LAND SHOWN ON THIS PLAT AND WHOSE NAME IS SUBSCRIBED HERETO, AND IN PERSON OR THROUGH A DULY AUTHORIZED AGENT DEDICATES TO THE USE OF THE PUBLIC FOREVER ALL STREETS, ALLEYS, PARKS, WATER COURSES, DRAINAGE EASEMENTS AND PUBLIC PLACES THEREON SHOWN FOR THE PURPOSE AND CONSIDERATION THEREIN EXPRESSED

H.W. Marschall Jr.
OWNER

E.A. Baose Jr.
LIEN HOLDER

STATE OF TEXAS
COUNTY OF BEXAR

BEFORE ME, THE UNDERSIGNED AUTHORITY ON THIS DAY PERSONALLY APPEARED H.W. MARSCHALL JR. & E.A. BAOSE JR. KNOWN TO ME TO BE THE PERSON, WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN EXPRESSED AND IN THE CAPACITY THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 5th DAY OF June A.D. 1978

Donald D. Funk
NOTARY PUBLIC
BEXAR COUNTY, TEXAS

SUBDIVISION PLAT
OF
WEST BROOK TWO
BEXAR COUNTY

BEING:
253.159 ACRES OF LAND OUT OF THE J.S. WESTBROOK SURVEY NO. 32, ABSTRACT 813, COUNTY BLOCK 4703, BEXAR COUNTY TEXAS.

The City of San Antonio as a part of its electric and gas system (City Public Service Board) is hereby dedicated the perpetual and rights of-way, easements and gas distribution and service facilities in the areas designated on this plat as "Electric Easement", "Gas Easement", "Service Easement", "Overhang Easement", "Utility Easement", and "Transformer Easement" for the purpose of installing constructing, reconstructing, maintaining, removing, inspecting, patrolling, and operating poles, hanging or burying wires, cables, conduits, pipelines or other fixtures, each with its necessary appurtenances together with the right of ingress and egress over grantor's adjacent land, the right to relocate said facilities within said easement and right-of-way areas, and the right to remove from said lands all trees or parts thereof, or other obstructions which endanger or may interfere with the efficiency of said lines or appurtenances thereto. It is agreed and understood that no buildings, concrete slabs, or walls will be placed within said easement areas.

Any CPS monetary loss resulting from modifications required of CPS equipment, located within said easement, due to grade change or ground elevation alteration shall be charged to the person or persons deemed responsible for said grade change or ground elevation alteration.

CERTIFICATE OF APPROVAL

The undersigned, County Judge of Bexar County, Texas and Presiding Officer of the Commissioners Court of Bexar County, does hereby certify that the attached plat was duly filed with the Commissioners Court of Bexar County, Texas, and that after examination it appears that said plat is in conformity with the statutes, rules and regulations governing same, and that the plat has been approved by the said Commissioners Court

On this the 5th day of JULY, 19 78

ATTESTED

Robert D. Cheen
County Clerk, Bexar County, Texas

C.J. Black
Judge, Bexar County, Texas

APPROVED R.L. Tomanec DATE 7-5-78
DIRECTOR OF PUBLIC WORKS

COUNTY ROAD MAINTENANCE TO BEGIN _____

STATE OF TEXAS
COUNTY OF BEXAR

I HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECT AND WAS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY MADE UNDER MY SUPERVISION ON THE GROUND

C A Bolner
REGISTERED PROFESSIONAL ENGINEER
ON
REGISTERED PUBLIC SURVEYOR

SWORN TO AND SUBSCRIBED BEFORE ME THIS THE 5th DAY OF June A.D. 1978

Richard W. Aubrey
NOTARY PUBLIC
BEXAR COUNTY, TEXAS

STATE OF TEXAS
COUNTY OF BEXAR

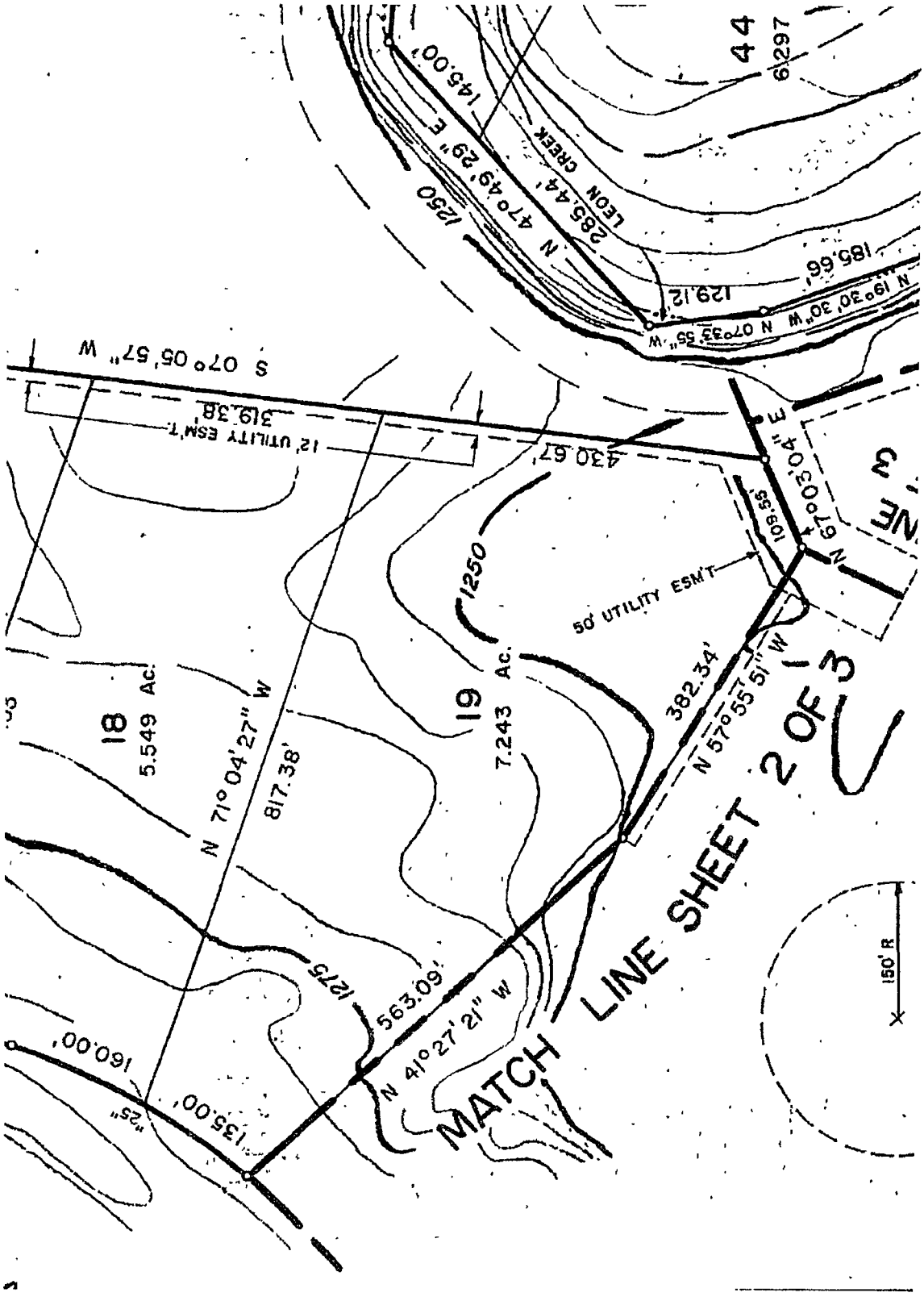
I, _____ COUNTY CLERK OF SAID COUNTY, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING WITH ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE, ON THE ____ DAY OF _____ A.D. _____ AT _____ M. AND DULY RECORDED THE _____ DAY OF _____ A.D. _____ AT _____ M. IN THE RECORDS OF _____ OF SAID COUNTY, IN BOOK VOLUME _____ ON PAGE _____

IN TESTIMONY WHEREOF WITNESS MY HAND AND OFFICIAL SEAL OF OFFICE THIS ____ DAY OF _____ A.D. _____

COUNTY CLERK, BEXAR COUNTY, TEXAS

SHEET 3 OF 3 920744

JUL 6 1978 VOL 8200 136


MATCH LINE SHEET 2 OF 3
18
5.549 Ac.
19
7.243 Ac.
44
6.297
50' UTILITY ESM'T
12' UTILITY ESM'T
N 71° 04' 27" W
817.38'
N 57° 55' 51" W
382.34'
N 41° 27' 21" W
563.09'
S 07° 05' 57" W
319.38'
430.67'
N 67° 03' 04" E
109.55'
N 19° 30' 30" W
185.66'
N 07° 33' 55" W
129.12'
N 47° 49' 29" E
285.44'
LEON CREEK
1250
1275
160.00'
135.00'
150' R

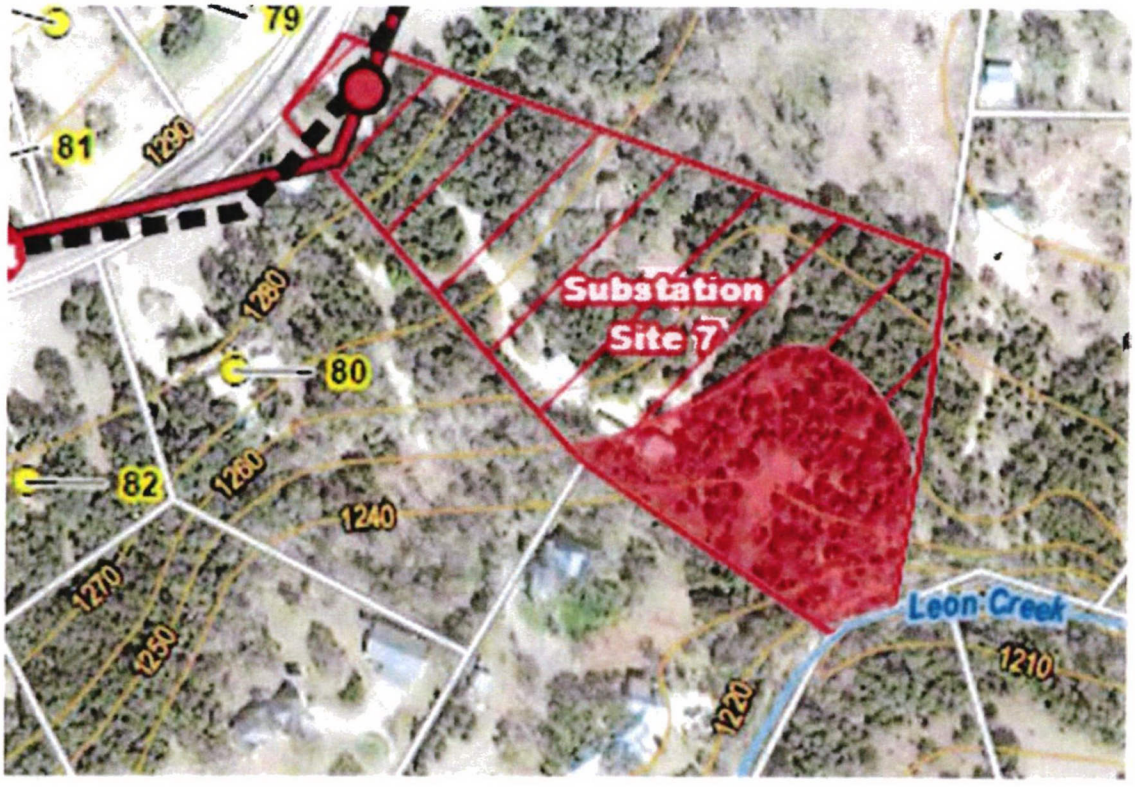


Figure 6-3, entitled "Addition of Substation 7; Relable of Southern Portion of 14 as 54 Following the Open House Meeting" from CPS's Application, Environmental Assessment, Page 6-13 (Bates Stamp No. 000200), *with highlighting added to show floodplain starting at the 1250 contour line.*

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN ANTONIO TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138-KV TRANSMISSION LINE IN BEXAR COUNTY	§ § § § § §	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

CPS ENERGY'S RESPONSE TO ANAQUA SPRINGS HOMEOWNERS' ASSOCIATION SECOND REQUEST FOR INFORMATION

Anaqua Springs Question No. 2-16:

Regarding Substation Site 7, please provide a detailed sketch showing the dead-end transmission structure, the substation site, including fence and lights. Please describe the security lighting heights and wattage and the hours of illumination proposed for the Substation Site 7 or, if not yet proposed, typically used by CPS.

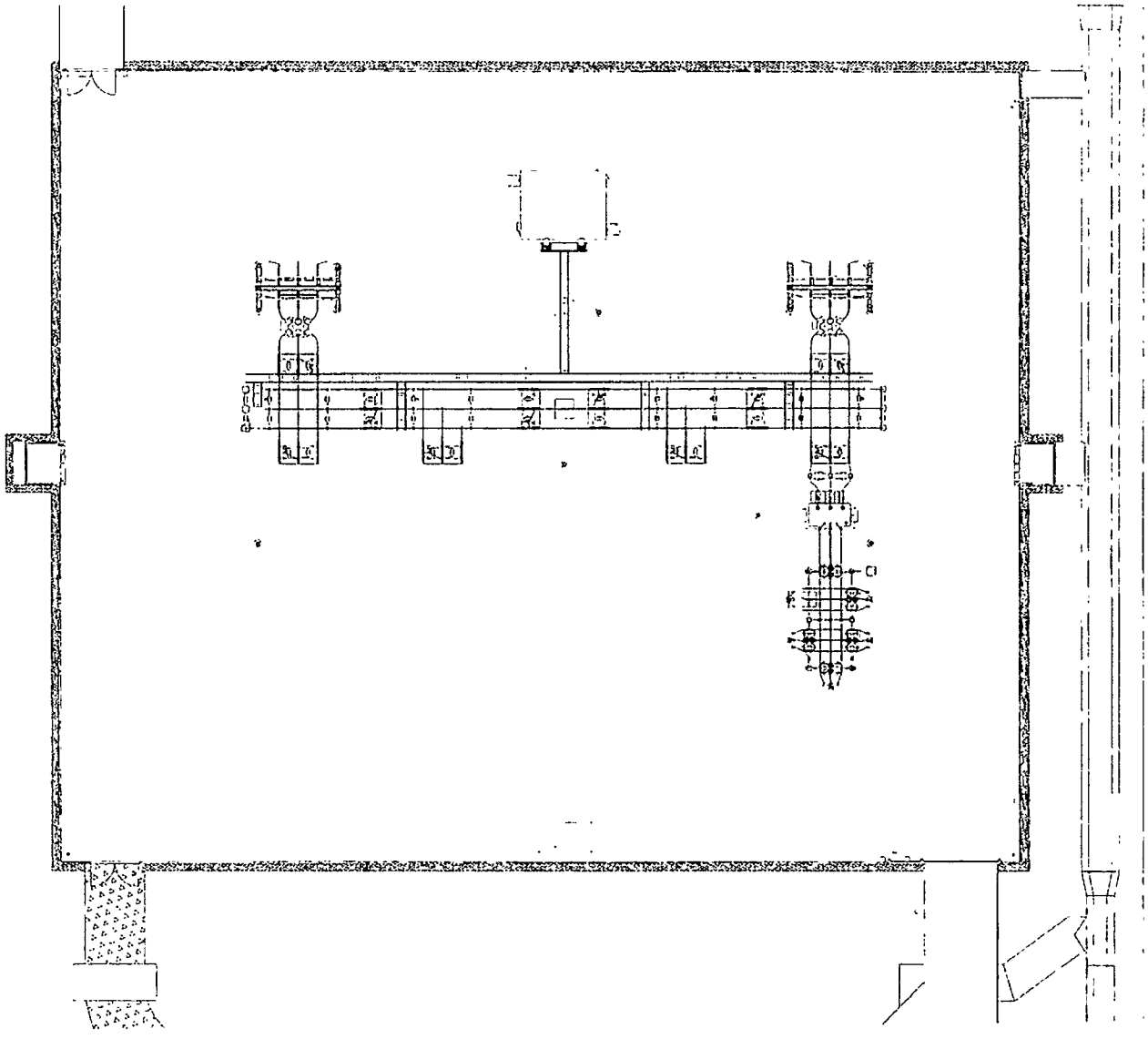
Response No. 2-16:

The line terminal structures that will be utilized if the proposed Project is connected to a substation at Substation Site 7 have not yet been designed. Typical CPS Energy line terminal structures can be seen in Appendix B to Attachment 1 to the Application (see Bates Pages 310, 311, 312, 313, 316, and 320).

The site layout for a substation at Substation Site 7 has not yet be designed. Figure 1-6 in Attachment 1 to the Application is the general proposed substation layout. Appendix B to Attachment 1 to the Application includes pictures of CPS Energy substations that will be generally similar to the substation facilities that are proposed to be constructed for this Project, (see Bates Pages 310, 311, 312, 313, 316, and 320).

The lighting design for the substation constructed as part of the Project will follow the City of San Antonio's guidance of exterior lighting for the International Dark Sky and the San Antonio Urban Lighting Master Plan. The height of security lighting for a substation constructed at Substation Site 7 has not yet been determined. Typically, CPS Energy installs security lighting approximately 10-20 feet in height. Typical substation security lighting for CPS Energy is 120 watts for the yard lights and 113 watts for the wall mounted lights and the hours of illumination are dawn to dusk. Images of typical substation lighting within CPS Energy substations can be seen in Appendix B to Attachment 1 to the Application (see e.g., Bates Page 320).

Prepared By: Scott D. Lyssy Title: Manager Civil Engineering
Sponsored By: Scott D. Lyssy Title: Manager Civil Engineering



SCENIC LOOP 138 KV TRANSMISSION LINE AND SUBSTATION PROJECT

Figure 1-6

Typical 3-Unit Substation Layout

SOAH DOCKET NO. 473-21-0247
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APPLICATION OF THE CITY OF SAN ANTONIO TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138-KV TRANSMISSION LINE IN BEXAR COUNTY	§ § § § § §	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

CPS ENERGY'S RESPONSE TO BRAD JAUER'S AND BVJ PROPERTIES, L.L.C.'S SECOND REQUESTS FOR INFORMATION TO CPS ENERGY

Brad Jauer & BVJ Properties RFI 2-10:

Regarding AS 2-16 and 2-17, substation site 7, parcel A-078 is just slightly larger than 7 acres and is irregularly pie shaped with a maximum width of just over 400 feet. CPS figure 1-6 shows a squarish boundary with equal clearance to the fence for all components. How would altering CPS standard design to fit within this narrow parcel change the response to these RFI's? Would the entire parcel need to be clear cut of all vegetation? Would the substation security fence generally be located at the lot lines, and is there any setback required for perimeter fencing?

Response No. 2-10:

If Substation Site 7 is an endpoint of a route approved by the Public Utility Commission of Texas for the Project, the substation facilities will be designed and constructed on the property in a way that minimizes the footprint on the property and leaves as much of the existing vegetation as possible for a visual buffer. No "clear cutting" is anticipated. Based on CPS Energy's current understanding of the property without the benefit of on the ground surveys, it is anticipated the substation facilities will be constructed in the center area of the property.

CPS Energy is not aware of any setback requirements that will be applicable to the construction and operation of substation facilities on Substation Site 7.

It is presently anticipated that approximately eight foot high chain-link security fencing will be installed around the perimeter of the substation equipment (i.e., not at the lot line). If Substation Site 7 is utilized for the project, CPS Energy will evaluate if a lower barbed wire property line fence is also appropriate.

Prepared By: Scott D. Lyssy Title: Manager Civil Engineering
Sponsored By: Scott D. Lyssy Title: Manager Civil Engineering

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF	§	**BEFORE THE STATE OFFICE**
SAN ANTONIO TO AMEND ITS	§	
CERTIFICATE OF CONVENIENCE	§	**OF**
AND NECESSITY FOR THE	§	
SCENIC LOOP 138-KV TRANSMISSION	§	**ADMINISTRATIVE HEARINGS**
LINE IN BEXAR COUNTY	§	

CPS ENERGY'S RESPONSE TO BRAD JAUER'S AND BVJ PROPERTIES, L.L.C.'S SECOND REQUESTS FOR INFORMATION TO CPS ENERGY

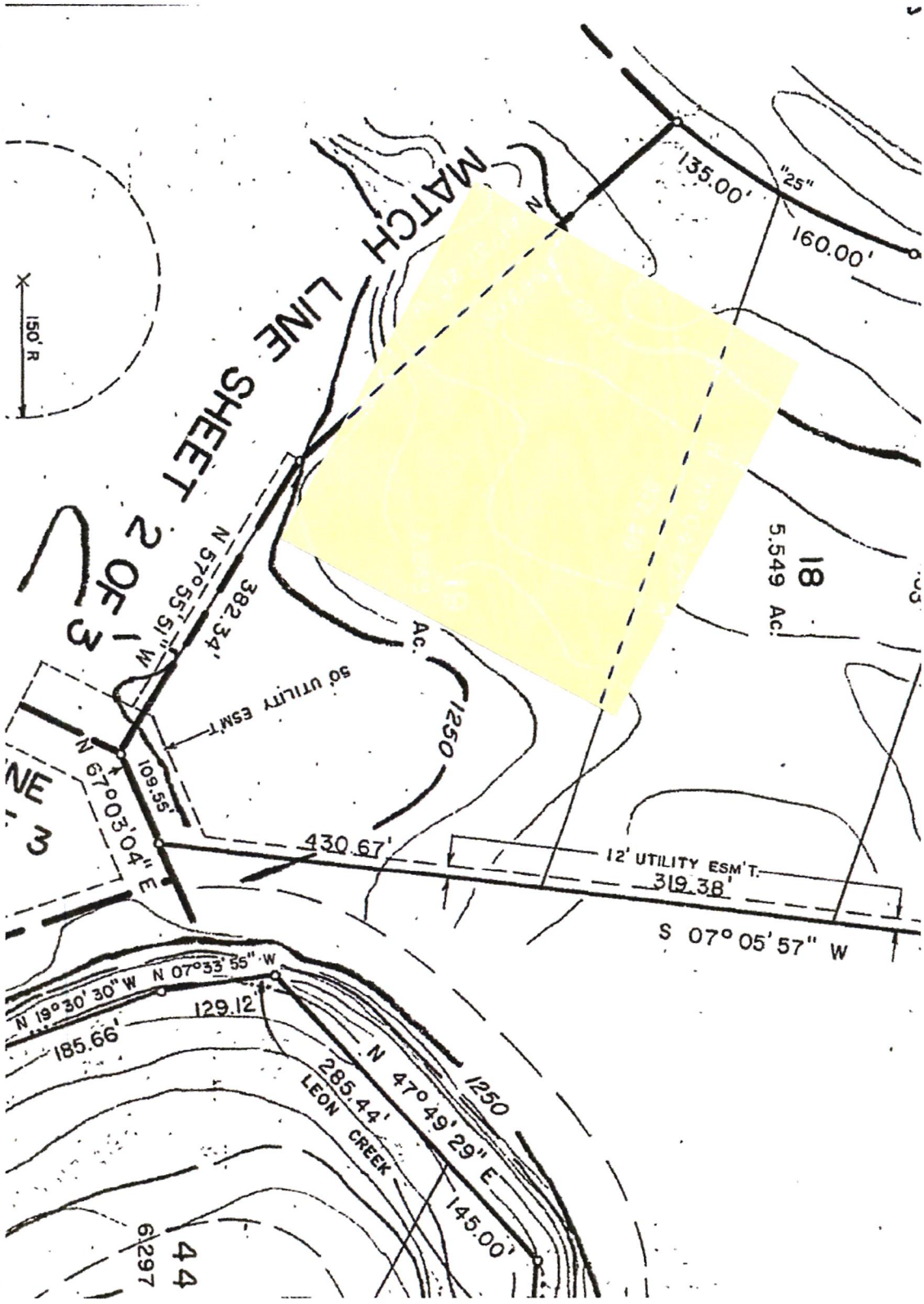
Brad Jauer & BVJ Properties RFI 2-13:

Referring to *CPS Energy Electric Transmission Line Routing/Substation Siting General Process Manual, 4.A.2.h re: Neighborhood Impact, where it is stated. "The substation site will be located to minimize impact on churches, schools, parks, residences, etc."* Please describe how Substation Site 7 minimizes impacts on nearby residences given its location within a populated/mature residential neighborhood.

Response No. 2-13:

Because of the residential and developing nature of the Study Area for the Project, most of the substation locations included in CPS Energy's Application are within some proximity to habitable structures. CPS Energy's evaluation of Substation Site 7 specifically took into consideration impacts to the surrounding area and determined the location was acceptable. The oversized and heavily vegetated property provides CPS Energy with an opportunity to construct and operate the substation facilities away from the property lines with existing vegetation around the facility reducing the visual impacts. Refer also to CPS Energy's response to Brad Jauer & BVJ Properties RFI 2-10.

Prepared By: Adam R. Marin Title: Regulatory Case Manager
Sponsored By: Adam R. Marin Title: Regulatory Case Manager


MATCH LINE SHEET 2 OF 3
135.00'
"25"
160.00'
150' R
N 57°55'51" W
382.34'
5.549 Ac.
18
1250
50' UTILITY ESM'T.
N 67°03'04" E
109.55'
430.67'
12' UTILITY ESM'T.
319.38'
S 07°05'57" W
N 19°30'30" W
N 07°33'55" W
129.12'
185.66'
285.44'
LEON CREEK
N 47°49'29" E
145.00'
1250
44
6297

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN ANTONIO TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138-KV TRANSMISSION LINE IN BEXAR COUNTY	§ § § § § §	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

CPS ENERGY'S RESPONSE TO PATRICK CLEVELAND'S FIRST REQUEST FOR INFORMATION TO CPS ENERGY

Patrick Cleveland Question No. 1-10:

Please admit or deny that the distance between Segment 42 and the outdoor areas accessible to children at Dr. Sara B. McAndrew Middle School is less than 323 feet.

Response No. 1-10:

The school referenced in this question is the Dr. Sara B. McAndrew Elementary School Based on fencing and other indications of potential property use, the distance between proposed Segment 42 and the closest corner of an outdoor area on the elementary school property that POWER Engineers, Inc. believes may be accessible to children on a regular basis is approximately 335 feet to the area with playground structures and approximately 280 feet to the grass area with a baseball/kickball backstop in the southwest corner of the elementary school property.

Prepared By: Lisa B. Meaux Title: Project Manager, POWER Engineers, Inc.
Sponsored By: Lisa B. Meaux Title: Project Manager, POWER Engineers, Inc.

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF	§	**BEFORE THE STATE OFFICE**
SAN ANTONIO TO AMEND ITS	§	
CERTIFICATE OF CONVENIENCE	§	**OF**
AND NECESSITY FOR THE	§	
SCENIC LOOP 138-KV TRANSMISSION	§	**ADMINISTRATIVE HEARINGS**
LINE IN BEXAR COUNTY	§	

CPS ENERGY'S RESPONSE TO BRAD JAUER'S AND BVJ PROPERTIES, L.L.C.'S SECOND REQUESTS FOR INFORMATION TO CPS ENERGY

Brad Jauer & BVJ Properties RFI 2-8:

CPS response to AS 2-12 states in part: "As a prudent utility operator CPS Energy will ensure appropriate grounding, if necessary, for any of the facilities proposed for the construction of the Project." Please state how CPS determines if appropriate grounding is necessary? Do CPS easements convey the right to enter properties and test and install grounding systems? Does CPS disclose up front when initial easement negotiations take place with impacted homeowners that grounding may be necessary, what potential dangers will be mitigated, and how this grounding will be maintained? Please describe CPS's typical cathodic protection for steel natural gas or water pipelines.

Response No. 2-8:

CPS Energy obtains easements that provide sufficient access to safely construct and operate its facilities. Any specific landowner requirements, negotiations, or access needs are addressed on a case by case basis. It is not anticipated that access to any property outside of the easement will be necessary to ensure safe grounding of the proposed transmission line facilities. Once CPS Energy identifies the exact locations and the foundations are installed, a resistivity test is conducted on all foundations. If the test returns a result of 25 ohms or greater, additional grounding conductor is buried around the foundations until a reading of less than 25 ohms is achieved.

CPS Energy is not aware of any steel natural gas or water pipelines within the study area. Further, any issues necessitating potential consideration of cathodic protection will only be related to steel pipelines carrying hydrocarbons (not water) running parallel to the proposed transmission line facilities. CPS Energy is not aware of any standards that require it to take any specific actions with regard to a pipeline's cathodic protection requirements to safely operate pipeline facilities.

Prepared By: Scott D. Lyssy Title: Manager Civil Engineering
Sponsored By: Scott D. Lyssy Title: Manager Civil Engineering

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN ANTONIO TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138-KV TRANSMISSION LINE IN BEXAR COUNTY	§	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

CPS ENERGY'S RESPONSE TO BRAD JAUER'S AND BVJ PROPERTIES, L.L.C.'S SECOND REQUESTS FOR INFORMATION TO CPS ENERGY

Brad Jauer & BVJ Properties RFI 2-16:

Regarding the pipeline or other utility service line currently marked with yellow paint and flags on the north side of Toutant Beauregard along Segment 20, please provide its (e.g., the pipeline's) owner, size (e.g., diameter), composition or material (e.g., metal, polyvinyl, etc., including type thereof), and type (e.g. water, natural gas, etc., as well as whether it is a distribution or transmission line), and please indicate whether CPS is the entity currently having that pipeline or other utility service marked.

Response No. 2-16:

CPS Energy does not have any information regarding any pipelines in proximity to Segment 20, including owner, size, composition or material, and type. The pipeline information that POWER obtained from PLATTs and the Railroad Commission of Texas (RRC) in performing the routing assessment for this Project does not show any distribution, transmission, gathering, intrastate, or interstate hydrocarbon pipelines within the study area. CPS Energy is not currently surveying or marking pipelines in the Study Area in association with this Project. Following approval of a specific route for the Project by the Public Utility Commission of Texas, survey and geotechnical studies necessary to design and construct the proposed transmission line facilities will be completed.

Typical pipeline system types in the RRC data include the following:

A = Offshore (Liquids)
B = Apartment Complexes
C = Compressor Station
D = Distribution
E = Interstate Transmission Gas
F = Non-Jurisdictional Gathering
G = Gas Gathering
H = Government (Housing Authority)
I = LP Gas Distribution
J = Direct Sales Customer
K = Carbon Dioxide Pipelines

O = Crude Transmission
M = Municipal Distribution
N = City Not Served
L = Crude Gathering
P = Product Lines (NOT Highly Volatile)
Q = Other Liquid Lines (Highly Volatile)
S = Municipal Supply Line
T = Transmission
U = Underground Liquid Storage
V = Underground Gas Storage
W = Mobile Home Parks
X = Liquefied Natural Gas
Y = Brine
Z = Offshore (Gas) Gathering

Prepared By:	Lisa B. Meaux	Title:	Project Manager, POWER Engineers, Inc.
	Adam R. Marin	Title:	Regulatory Case Manager
Sponsored By:	Lisa B. Meaux	Title:	Project Manager, POWER Engineers, Inc.
	Adam R. Marin	Title:	Regulatory Case Manager

SOAH DOCKET NO. 473-21-0247
PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN ANTONIO TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138-KV TRANSMISSION LINE IN BEXAR COUNTY	§ § § § § §	**BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS**

CPS ENERGY'S RESPONSE TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION

Staff Question No. 1-2:

Please provide the location of all existing schools in the project area and the distance each school is from the center line. If CPS Energy is aware of any school that has been planned but not yet constructed in the project area (Planned Schools), please provide the location of any Planned Schools and the distance from the centerline of any of the proposed segments.

Response No. 1-2:

During the performance of its routing study for this project, POWER identified one public school within the Study Area, Dr. Sara McAndrew Elementary School, located at 26615 Toutant Beauregard Road (*see* Page 3-36 of the Environmental Assessment), which is a public school operated by the Northside Independent School District (Northside ISD). McAndrew Elementary School is approximately 214 feet from the centerline of Segment 35 (which is located across the road from the school) (*see, e.g.*, Table 4-8 in Appendix C of the Environmental Assessment). The centerline of Segment 42 is approximately 323 feet from the school. The centerline of Segment 41 is approximately 627 feet from the school. All other segments proposed for the Project are further than those three segments from the school.

A private school, Concept Therapy Institute, located at 25550 Boerne Stage Road was also identified within the study area. The Concept Therapy Institute is approximately 832 feet from the centerline of Segment 1 (which is located across the road from the school) (see Figure 2-4 of the EA).

During its routing evaluation, POWER identified property owned by the Northside ISD to the northwest of McAndrew Elementary School. On June 19, 2019, POWER requested information from the Northside ISD concerning land use constraints or other issues of interest to the proposed project. Northside ISD did not respond to POWER's request at that time. CPS Energy has recently been informed by a representative of the Northside ISD that a middle school "out in that general vicinity sometime in the future is a possibility."

Prepared By: Lisa Meaux — Title: Project Manager, POWER Engineers
Sponsored By: Lisa Meaux — Title: Project Manager, POWER Engineers