ALBERHILL VILLAGES -
EXISTING DRY UTILITY LOCATIONS AND FUTURE UTILITY REQUIRMENTS

PREPARED BY:
BUTKSO UTILITY DESIGN, INC.
MAY 10TH, 2010

Southern California Edison (SCE):

The area is currently served by the Drieden substation located on Terra Cotta Road south of Nichols Road. Drieden is an existing four (4) circuit 12kV substation. A new substation (Fogarty sub) is currently being planned to be built which will replace the Drieden substation with six (6) new 12 kV circuits. SCE plans to construct this new substation in 2011. Five (5) of these circuits from the new Fogarty substation are currently being planned to feed the Alberhill Villages Specific Plan.

SCE currently has existing overhead 115kV transmission and 12kV distribution circuits located on the south side of Lake Street. These overhead circuits extend on Lake Street easterly to Temescal Canyon Road and then northerly along the easterly side of Temescal Canyon Road. SCE also has an existing 33kV overhead line that extends from Lake Street and Nichols Road through the Alberhill Villages Specific Plan that will be relocated onto Lake Street. The existing 115kV and 12kV overhead lines on Lake Street between Nichols Road and Temescal Canyon Road are currently in the process with SCE to be relocated and reconfigured to meet the needs of the Alberhill Villages Specific Plan.

SCE has an existing 2-6" and 2-5" underground conduit substructure system located along the southerly side of Lake Street from Mountain Avenue to Nichols Road. SCE has plans to install 2-6" and 4-5" conduits on the easterly side of Nichols Road and 6-5" conduits on the westerly side of Nichols Road from the proposed Fogarty substation. This conduit system will be extended across Lake Street at Nichols Road into the Alberhill Villages Specific Plan to provide service.

Southern California Gas Company (Gas):

The Gas Company has an existing 6" high pressure main located on the southerly side of Lake Street that extends easterly from Mountain Ave to Temescal Canyon Road and along the westerly side of Temescal Canyon Road into the Corona area. The Gas Company will require a gas regulator station be built at the corner of Nichols Road and Lake Street. This will allow The Gas Company to step the high pressure service down to a medium pressure service. The Gas Company will extend their system across Lake Street from the regulator station into Alberhill Villages. The Gas Company has sufficient facilities to feed the Alberhill Villages Specific Plan.

Verizon Communications (Phone):

Verizon has an existing underground 2-4" conduit system located on the southerly side of Lake Street extending from Nichols Road east to Temescal Canyon Road. They also have an existing 2-4" conduit system stubbed out at the northwesterly corner of Lake Street and Nichols Road. In addition to these existing facilities, they also have plans to install 4-4" conduits on the westerly side of Nichols Road across Lake Street to feed the Alberhill Villages Specific Plan. Verizon will need to reinforce their existing copper facilities in order to sufficiently serve the Alberhill Villages Specific Plan.

Time Warner Communications (Cable TV):

Time Warner has an existing underground 2-3" conduit system located on the southerly side of Lake Street that extends easterly from Mountain Ave to Nichols Road. They also have an existing overhead fiber system located on the southerly side of Lake Street that extends from Mountain Avenue to Temescal Canyon Road and beyond. Their overhead fiber also extends along the northerly side of Temescal Canyon Road. Time Warner will eventually install a 2-3" conduit system along the westerly side of Nichols Road across Lake Street into the Alberhill Villages Specific Plan.

Level 3 Communications (Fiber):

Level 3 Communications has an existing underground 12- 1 ¼" conduit system that exists on the southerly side of Lake Street and extends easterly to Temescal Canyon Road where it travels along the westerly side of Temescal Canyon Road into the Corona area. This fiber system is a major fiber route that connects the Riverside and San Diego County areas. The existing Level 3 system will not be used to serve the Alberhill Villages Specific Plan.

AT&T (Phone):

AT&T has an existing 3- 1 ¼" fiber conduit system located on the southerly side of Lake Street which extends form Mountain Avenue to Temescal Canyon Road where it travels along the westerly side of Temescal Canyon Road into the Corona area. This fiber system is a Trunk and Toll fiber system which connects AT&T central offices in the Riverside and San Diego County areas. This system will not be used to serve the Alberhill Villages Specific Plan.

Alberhill Villages - Electric Demand Summary

Estimated Total Coincident Peak Load	
Planning Area	kW
Planning Area 1	
Non-Residential	14,124
Residential	4,109
Planning Area 2	
Non-Residential	1,011
Residential	5,883
Planning Area 3	
Non-Residential	29
Residential	101
Planning Area 4	
Non-Residential	4,091
Residential	6,319
Planning Area 5	
Non-Residential	1,051
Residential	1,492
Planning Area 6	
Non-Residential	5,054
Residential	630
Estimated Non-Residential Coincident Peak Load:	25,360
Estimated Residential Coincident Peak Load:	18,534
Estimated Total Coincident Peak Load:	**43,894**

Alberhill Villages - Non-Residential Electric Demand - Planning Area 1

Planning Area	Land Use	Approx. Square Footage	Square Foot Demand (Watts)	% Load Factor	TOTAL kW Demand (Watts/1000)
1A	**Institutional (University)**	**1,500,000**			
	Colleges and Universities	1,500,000	6.2	35	9,300
1B	**Mixed Use (University Town Center)**	**960,000**			
	Large Office Bldg. (>30K sf)	155,000	4.7	44	729
	Small Office Bldg. (<30K sf)	155,000	8.5	34	1,318
	Movie Theatre	97,500	12.7	37	1,238
	Restaurants (<3K sf)	130,000	20.5	44	2,665
	Restaurants (>3K sf)	130,000	14.5	49	1,885
	Large Retail (>30K sf)	162,500	4.2	49	683
	Small Retail (<30K sf)	130,000	8.6	37	1,118
1B	**Community Park (University Town Center)**	**43,560**			
	Park(1 Acre)	43,560			2
1C	**Mixed Use (University Town Center)**	**380,000**			
	Restaurants (<3K sf)	10,000	20.5	44	205
	Small Retail (<30K sf)	40,000	8.6	37	344
	Medical/ Professional	330,000	6.8	55	2,244
	Total Non-Coincident Peak Demand	**2,883,560**			**21,730**
	Coincident Factor (65%)				**65%**
	Total Coincident Peak Load				**14,124**

Note: The data used in computing the electric demand was derived from the Castle & Cooke land use table, park program for energy needs spread sheet and the MXU revised statisical table provided by Jim Stebbins on April 14, 2010 (see appendix A).

The SCE demand data for type of occupancy and diversified residential kW demand (per unit w/ air conditioning) found in SCE Distribution Design Standards were used to calculate the square foot demand, % load factor and total kW demand information for each planning area.

Alberhill Villages - Non-Residential Electric Demand - Planning Area 2 & 3

Planning Area	Land Use	Approx. Square Footage	Square Foot Demand (Watts)	% Load Factor	TOTAL kW Demand (Watts/1000)
2A	**Worship (Parkview)**	**55,500**			
	Church	55,500	10.1	25	561
2C	**Elementary School (Parkview)**	**71,500**			
	Elementary and Secondary Schools	71,500	10.1	25	722
2C	**Community Park (Parkview)**	**696,960**			
	Active Park (16 Acres)	696,960	17.0	35	272
3B	**Open Space/ Park (Highlands)**	**1,981,980**			
	Open Space & Active Park (45.5 Acres)	1,981,980	2.0	35	45
	Total Non-Coincident Peak Demand	**2,805,940**			**1,600**
	Coincident Factor (65%)				**65%**
	Total Coincident Peak Load				**1,040**

Note: The data used in computing the electric demand was derived from the Castle & Cooke land use table, park program for energy needs spread sheet and the MXU revised statisical table provided by Jim Stebbins on April 14, 2010 (see appendix A).

The SCE demand data for type of occupancy and diversified residential kW demand (per unit w/ air conditioning) found in SCE Distribution Design Standards were used to calculate the square foot demand, % load factor and total kW demand information for each planning area.

Alberhill Villages - Non-Residential Electric Demand - Planning Area 4

Planning Area	Land Use	Approx. Square Footage	Square Foot Demand (Watts)	% Load Factor	TOTAL kW Demand (Watts/1000)
4C	**Mixed Use (Lakeside)**	**382,000**			
	Restaurants (<3K sf)	134,000	20.5	44	2,747
	Restaurants (>3K sf)	57,000	14.5	49	827
	Small Retail (<30K sf)	191,000	8.6	37	1,643
4A	**Community Park (Lakeside)**	**1,742,400**			
	Active Park(40 Acres)	1,742,400	14.0	35	560
4B	**Community Park (Lakeside)**	**1,611,720**			
	Active Park(37 Acres)	1,611,720	14.0	35	518
	Total Non-Coincident Peak Demand	**3,736,120**			**6,294**
	Coincident Factor (65%)				**65%**
	Total Coincident Peak Load				**4,091**

Note: The data used in computing the electric demand was derived from the Castle & Cooke land use table, park program for energy needs spread sheet and the MXU revised statisical table provided by Jim Stebbins on April 14, 2010 (see appendix A).

The SCE demand data for type of occupancy and diversified residential kW demand (per unit w/ air conditioning) found in SCE Distribution Design Standards were used to calculate the square foot demand, % load factor and total kW demand information for each planning area.

Alberhill Villages - Non-Residential Electric Demand - Planning Area 5

Planning Area	Land Use	Approx. Square Footage	Square Foot Demand (Watts)	% Load Factor	TOTAL kW Demand (Watts/1000)
5A	**Middle School (Ridgeview Village)**	**95,000**			
	Elementary and Secondary Schools	95,000	10.1	25	960
5B	**Worship (Ridgeview Village)**	**71,500**			
	Church	65,000	10.1	25	657
Total Non-Coincident Peak Demand		**166,500**			**1,617**
Coincident Factor (65%)					**65%**
Total Coincident Peak Load					**1,051**

Note: The data used in computing the electric demand was derived from the Castle & Cooke land use table, park program for energy needs spread sheet and the MXU revised statisical table provided by Jim Stebbins on April 14, 2010 (see appendix A).

The SCE demand data for type of occupancy and diversified residential kW demand (per unit w/ air conditioning) found in SCE Distribution Design Standards were used to calculate the square foot demand, % load factor and total kW demand information for each planning area.

Alberhill Villages - Non-Residential Electric Demand - Planning Area 6

Planning Area	Land Use	Approx. Square Footage	Square Foot Demand (Watts)	% Load Factor	TOTAL kW Demand (Watts/1000)
6A	**Mixed Use (Alberhill Town Center)**	**392,500**			
	Large Office Bldg. (>30K sf)	30,000	4.7	44	141
	Small Office Bldg. (<30K sf)	68,000	8.5	34	578
	Restaurants (>3K sf)	42,000	14.5	49	609
	Restaurants (<3K sf)	54,000	20.5	44	1,107
	Large Retail (>30K sf)	71,000	4.2	49	298
	Small Retail (<30K sf)	103,500	8.6	37	890
	Small Food Store (<30K sf)	22,000	13.9	58	306
6B	**Mixed Use (Alberhill Town Center)**	**392,500**			
	Large Office Bldg. (>30K sf)	60,000	4.7	44	282
	Small Office Bldg. (<30K sf)	38,000	8.5	34	323
	Restaurants (>3K sf)	30,000	14.5	49	435
	Restaurants (<3K sf)	41,000	20.5	44	841
	Large Retail (>30K sf)	40,500	4.2	49	170
	Small Retail (<30K sf)	102,000	8.6	37	877
	Large Food Store (>30K sf)	53,000	10.0	79	530
	Small Food Store (<30K sf)	28,000	13.9	58	389
Total Non-Coincident Peak Demand		**785,000**			**7,776**
Coincident Factor (65%)					**65%**
Total Coincident Peak Load					**5,054**

Note: The data used in computing the electric demand was derived from the Castle & Cooke land use table, park program for energy needs spread sheet and the MXU revised statisical table provided by Jim Stebbins on April 14, 2010 (see appendix A).

The SCE demand data for type of occupancy and diversified residential kW demand (per unit w/ air conditioning) found in SCE Distribution Design Standards were used to calculate the square foot demand, % load factor and total kW demand information for each planning area.

Alberhill Villages - Residential Electric Demand - Planning Areas 1 - 6

Planning Area	Type	Avg. Unit Size (SF)	No. of Units	kW Per Unit	TOTAL kW Demand
1A	Multi Family	1,300	445	4.0	**1,780**
1B	Multi Family	1,100	1,000	3.5	**3,500**
1C	Multi Family	1,100	1,100	3.5	**3,850**
2A	Multi Family	1,400	640	4.0	**2,560**
2A	Single Family	3,200	425	8.0	**3,400**
2A	Single Family	3,000	180	7.5	**1,350**
2B	Multi Family	1,400	945	4.0	**3,780**
2C	Single Family	2,400	115	6.5	**748**
2C	Single Family	2,200	190	6.5	**1,235**
3A	Single Family	4,000	25	9.0	**225**
4A	Multi Family	1,400	805	4.0	**3,220**
4A	Single Family	2,000	220	6.0	**1,320**
4A	Single Family	3,200	200	8.0	**1,600**
4A	Single Family	3,000	245	7.5	**1,838**
4A	Single Family	2,800	90	7.0	**630**
4B	Multi Family	2,400	425	5.0	**2,125**
4B	Single Family	2,700	355	7.0	**2,485**
4B	Single Family	2,800	75	7.0	**525**
4C	Multi Family	1,400	75	4.0	**300**
5A	Single Family	3,200	110	8.0	**880**
5B	Multi Family	2,400	175	5.0	**875**
5B	Single Family	2,800	80	7.0	**560**
5B	Single Family	3,200	125	8.0	**1,000**
6A	Multi Family	1,200	200	3.5	**700**
6B	Multi Family	1,200	200	3.5	**700**
Total Non-Coincident Peak Demand			**8,445**		**41,186**
Coincident Factor (45%)					**45%**
Total Coincident Peak Load					**18,534**

Note:

The data used in computing the electric demand was derived from the Castle & Cooke land use table, park program for energy needs spread sheet and the MXU revised statisical table provided by Jim Stebbins on April 14, 2010 (see appendix A).

The SCE demand data for type of occupancy and diversified residential kW demand (per unit w/ air conditioning) found in SCE Distribution Design Standards were used to calculate the square foot demand, % load factor and total kW demand information for each planning area.

FIRST DRAFT IN-HOUSE USE ONLY

Alberhill Villages, Alberhill Ridge, & Alberhill Ranch

Castle & Cook

Date 4/14/10

PROJECT DESIGN CONSULTANTS

Tags	Planning Area	Land Use	Approximate Acreage	Density	DU's			Civic/Plaza	Retail (Sq.Ft.)	Office (Sq.Ft.)	Comments
					SFD	MF	Total				
26	1a	mf-35	12.0	37.1		445	445				
25	1a	university	62.0				0				See attachment
18-22,24	1b	mxu reg.com.	64.5	52.0		1000	1000		650,000	310,000	See attachment
23	1b	park	1.0				0				
7	1c	mxu/office/med	43.5	52.0		1100	1100		50,000	330,000	See attachment
	PA1 Subtotal		**183.0**		**0**	**2545**	**2545**		**700,000**	**700,000**	
8	2a	mf-35	18.5	34.6		640	640				
1-6,15	2a	sf-4.5	94.0	4.5	425		425				
16	2a	sf-5	36.0	5.0	180		180				
17	2a	worship	7.5	0.0			0				
9,10	2b	mf-35	27.0	35.0		945	945				
12	2c	park	16.0				0				
14-Jan	2c	elementary school	13.0				0				
13	2c	sf-6	19.0	6.1	115		115				
11	2c	sf-7	27.0	7.0	190		190				
	PA2 Subtotal		**258.0**		**910**	**1585**	**2495**				
91	3c	open space corridor	30.0								
93	3a	custom homes	194.0		25.0		25				
92	3b	park	15.5				0				
	PA3 Subtotal		**304**		**25**	**0**	**25**				
27,28	4a	mf-35	23.0	35.0		805	805				
33-35	4a	sf-10	22.0	10.0	220		220				
43,49-50	4a	sf-5	40.5	4.9	200		200				
40,41,44	4a	sf-5.5	44.5	5.5	245		245				collector road will impact ac
48	4a	sf-7	13.0	6.9	90		90				
36,37,42	4a	park	40.0								
29,31,32	4b	park	37.0								collector road will impact ac
45,52	4b	mf-16	26.5	16.0		425	425				
38,39,46	4b	sf-10	35.5	10.0	355		355				
47	4b	sf-7	11.0	6.8	75		75				
30	4c	mxu/entertainment	11.0	30.0		75	75		382,000		See attachment
	PA 4 Subtotal		**304.0**	**125.2**	**1185.0**	**1305**	**2490**		**382,000**		
63	5a	middle school	26.0	0.0			0				
64	5a	sf-5	23.0	4.8	110		110				
57	5b	mf-16	11.0	15.9		175	175				
57	5b	sf-7	11.5	7.0	80		80				
66	5b	sf-5	25.0	5.0	125		125				
62	5b	worship	7.5								
	PA5 Subtotal		**104.0**		**315**	**175**	**490**				
58	6b	com./mxu	22.5			200	200		294,500	98,000	See attachment
53	6a	com./mxu	24.0			200	200		294,500	98,000	See attachment
	PA6 Subtotal		**46.5**		**0**	**400**	**400**		**589,000**	**589,000**	
	Grand Total		**895.5**		**2435**	**6010**	**8445**		**1,671,000**	**1,289,000**	

APPENDIX A

Alberhill Villages Specific Plan

Preliminary Park Programs

For in house use only- Developed primarily for Energy needs

4/14/10

Lakeside Park - PA 4a & 4b approx. 65 to 70 acres

2 lakes, the western lake (6 acres) is about 5 to 8 feet above eastern lake (13 to 17 acres) pumping required for water circulation

Pumping may also be needed for "streams" in park

Amphitheatre with possible stage and sound equipment (college may use facility)

Lighting for paths, etc play fields will probably not be lighted (wildlife corridor passes through park

Power for recharging rental boats, possible concession offering bait, drinks etc

Tot lot area, maybe water play area (splash pad) with restrooms

Parkview Park – PA 2c approx. 16 acres Sports Park

Lighted multi-purpose fields for soccer, football, softball, etc.

Path lighting

Tot lot area, maybe water play area (splash pad) with restrooms

Concession stand for events

Highlands Adventure Park – PA 3b approx. 15 acres, rolling terrain

Tot lot area, maybe water play area (splash pad) with restrooms

Path lighting

Adventure play apparatus, zip line, hillside slide

Pumping may also be needed for "streams" in park

APPENDIX A

MIXED USE STATISTICAL SUMMARY
Specific Plan
In-House Use Only
April 14, 2010

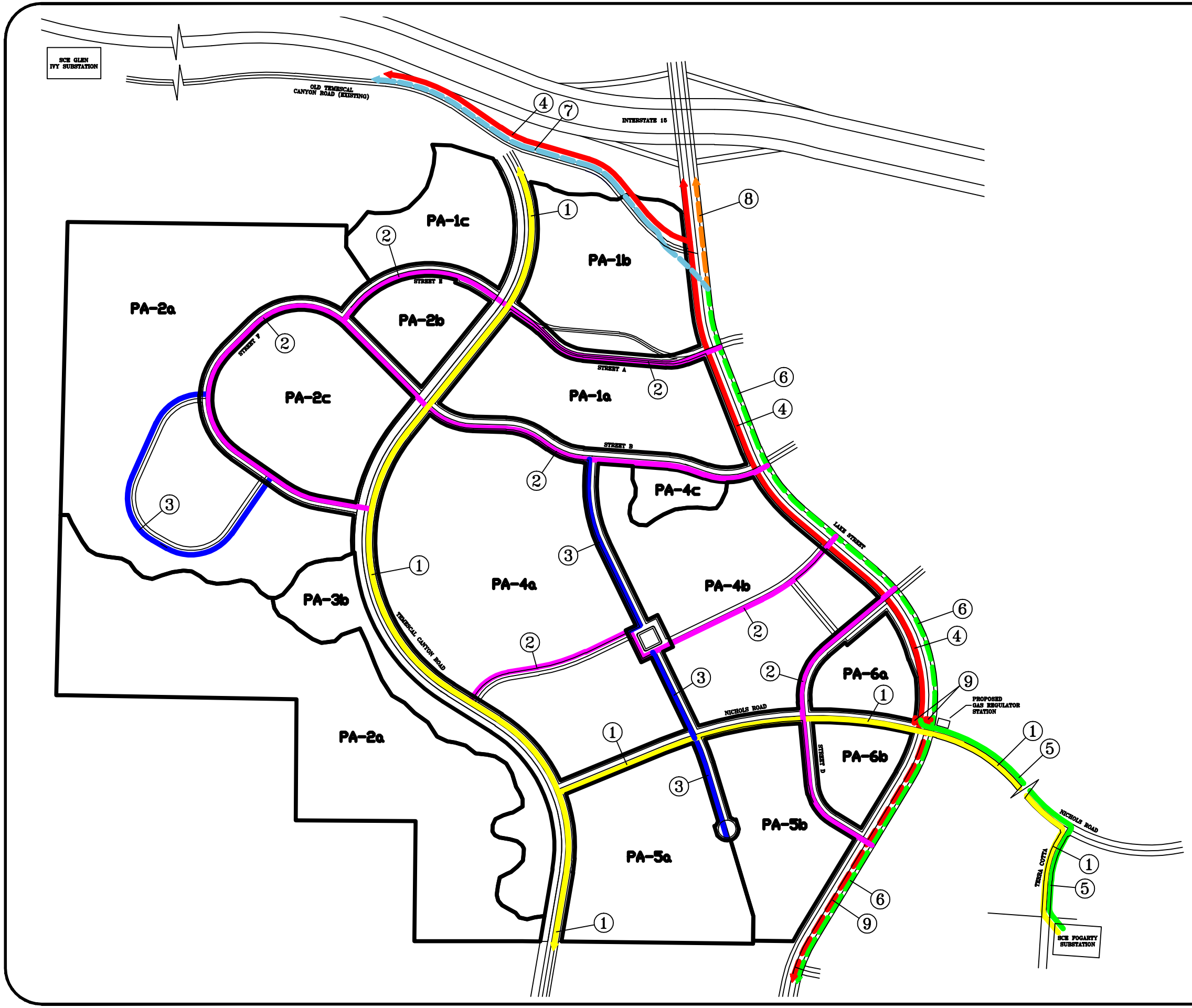
MXU TYPE	P.A.	TOTAL App AC.	UNITS				COMMERCIAL Includes Retail and Office			RETAIL			OFFICE		
			App. Acres	Den	Du	FAR	App. Acres	Sf *	FAR	App. Acres	Sf *	FAR	App. Acres	Sf *	FAR
REGIONAL															
Commercial	1b	64.5	19	52	1000	1.2	45.5	960	0.50	34	650	0.45	11.5	310	0.65
Office/Medical	1c	43.5	21	52	1100	1.2	22.5	380	0.40	4.5	50	0.25	18	330	0.45
Institutional	1a	62.0	62											1500	0.5
	1a2	12.0	12	37	445	1.1									
Entertainment	4c	11.0	2.5	30	75	1.1	8.5	382	1.0	8.5	382	1.0			
COMMUNITY															
Nichols North	6a	24.0	6	33.3	200	1.1	18	393	0.4	13.5	294.5	0.5	4.5	98	0.5
Nichols South	6b	22.5	4.5	44.5	200	1.1	18	392	0.4	13.5	294.5	0.5	4.5	98	0.5

APPENDIX A

* In thousands

ALBERHILL VILLAGES

MASTER DRY UTILITY CONCEPTUAL EXHIBIT



LEGEND

PROPOSED

1. SCE: 6-5"
   GAS: 6" MAIN
   VERIZON: 4-4" DUCTS
   CABLE TV: 2-3" DUCTS
2. SCE: 4-5", 2-4"
   GAS: 6" MAIN
   VERIZON: 4-4" DUCTS
   CABLE TV: 2-3" DUCTS
3. SCE: 2-5", 1-4"
   GAS: 4" MAIN
   VERIZON: 2-4" DUCTS
   CABLE TV: 2-3" DUCTS
4. SCE: 2-6", 4-5"
5. SCE: 4-5", 2-6"

EXISTING

6. EXISTING FACILITIES ON LAKE ST.
   SCE OH: 115KV & 12KV CIRCUIT
   GAS: 6" H.P. MAIN
   VERIZON: 4-4" DUCTS
   CABLE TV: 2-3" DUCTS & OH FIBER
   PACIFIC BELL: 3 1-1/4" DUCTS (FIBER DUCTS)
   LEVEL 3 COMM.: 12 1-1/4" DUCTS
7. SCE OH: 115KV & 12KV CIRCUIT
   GAS: 6" H.P. MAIN
   OH CABLE TV FIBER
8. SCE OH: 12KV CIRCUIT
   OH CABLE TV FIBER
9. SCE: 2-6" & 4-5"

BUTSKO

0 500'

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Project	Sheet
ALBERHILL VILLAGES	1
Date: MAY 3, 2010	
Scale: 1" = 500'	