



LSC TRANSPORTATION CONSULTANTS, INC.
545 East Pikes Peak Avenue, Suite 210
Colorado Springs, CO 80903
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: <http://www.lsctrans.com>

December 19, 2018

Tim Seibert
Nor'wood Development Group
111 South Tejon Street, Suite 222
Colorado Springs, CO 80903

RE: Wolf Ranch Master Plan Amendment
Colorado Springs, CO
Trip Generation Technical Memorandum
LSC #184590

Dear Tim:

LSC Transportation Consultants, Inc. has prepared this trip generation technical memorandum for the proposed amendment to the Wolf Ranch Master Plan. Wolf Ranch is located in northeastern Colorado Springs, Colorado. The original Wolf Ranch Master Plan traffic study by LSC was dated April 13, 2001. Updates to that study were completed by LSC August 15, 2005 and July 3, 2013. This report presents the currently proposed land use changes to the approved Wolf Ranch Plan and resulting changes in estimated trip generation.

LAND USE AND ACCESS

The approved Wolf Ranch Master Plan and the currently proposed amendment are attached. As shown on the plan Wolf Ranch is planned to continue to be a primarily residential community consisting of a mix of residential densities, schools, parks, and open space. Retail uses are no longer planned to be included in Wolf Ranch.

Table 1 shows a comparison of the land uses assumed in the original Master Plan traffic impact study (TIS) and the latest transportation memorandum completed in 2013. In the original TIS, Wolf Ranch was divided into detailed traffic analysis zones (TAZs) based on the land uses and natural divisions such as streets and streams. A copy of the traffic analysis zone map from that report has been attached. Due to changes in the Master Plan many of these TAZ boundaries do not correlate well with the most current amendment. The master plan has been broken down into more general traffic analysis zones as shown in the attached map. Table 1 shows which of the TAZs from the original TIS are included within these larger analysis zones.

As shown in Table 1 there has been an overall reduction in the number of residential uses from 7,861 units assumed in 2001 to 7,404 in the currently proposed amendment. The number of units in the west area of the site, most have which have already been developed, represent a general decrease from what was assumed in the 2001 study while the number of units shown on the current plan amendment in the east and north portions of the site generally represent increases compared to the 2001 study. A retail center previously shown northeast of Research Parkway and Powers Boulevard and all the "Mixed Use" zones have been replaced with residential uses.

TRIP GENERATION

The trip generation estimate for the Wolf Ranch Master Plan Amendment is based on nationally published trip generation rates from *Trip Generation, 10th Edition, 2017* by the Institute of Transportation Engineers (ITE). Table 2 shows the results of the trip generation. Table 2 also shows the trip generation estimate from the original Wolf Ranch Master Plan traffic study dated April 13, 2001 and the transportation memorandum dated July 3, 2013 for comparison.

As shown on Table 2, overall the projected number of vehicle-trips on the average weekday to be generated by the land uses within the Wolf Ranch Master Plan has been reduced by about 11,855 trips per day from what was assumed in the original Wolf Ranch Master Plan traffic study. Although there is an overall reduction in the number of vehicle-trips projected, the distribution of trip origin within the master plan areas/TAZs has changed with a general reduction in the number of trips generated by the land uses in the west area of the site and an increase in the number of trips projected to be generated by the land uses in the east and north areas of the site.

The traffic analysis zone with the most significant increase in the projected number of vehicle-trips generated by land uses compared to what was assumed in the original study is TAZ 1, which is located north of Briargate Parkway. The number of vehicle-trips per day for this area increased by about 4,667 vehicle-trips per day. The projected number of vehicle-trips generated by land uses within TAZs 4 and 5 located south of Research Parkway increased by a small amount above what was assumed in the original study.

Please contact me if you have any questions regarding this report.

Respectfully submitted,

LSC TRANSPORTATION CONSULTANTS, INC.



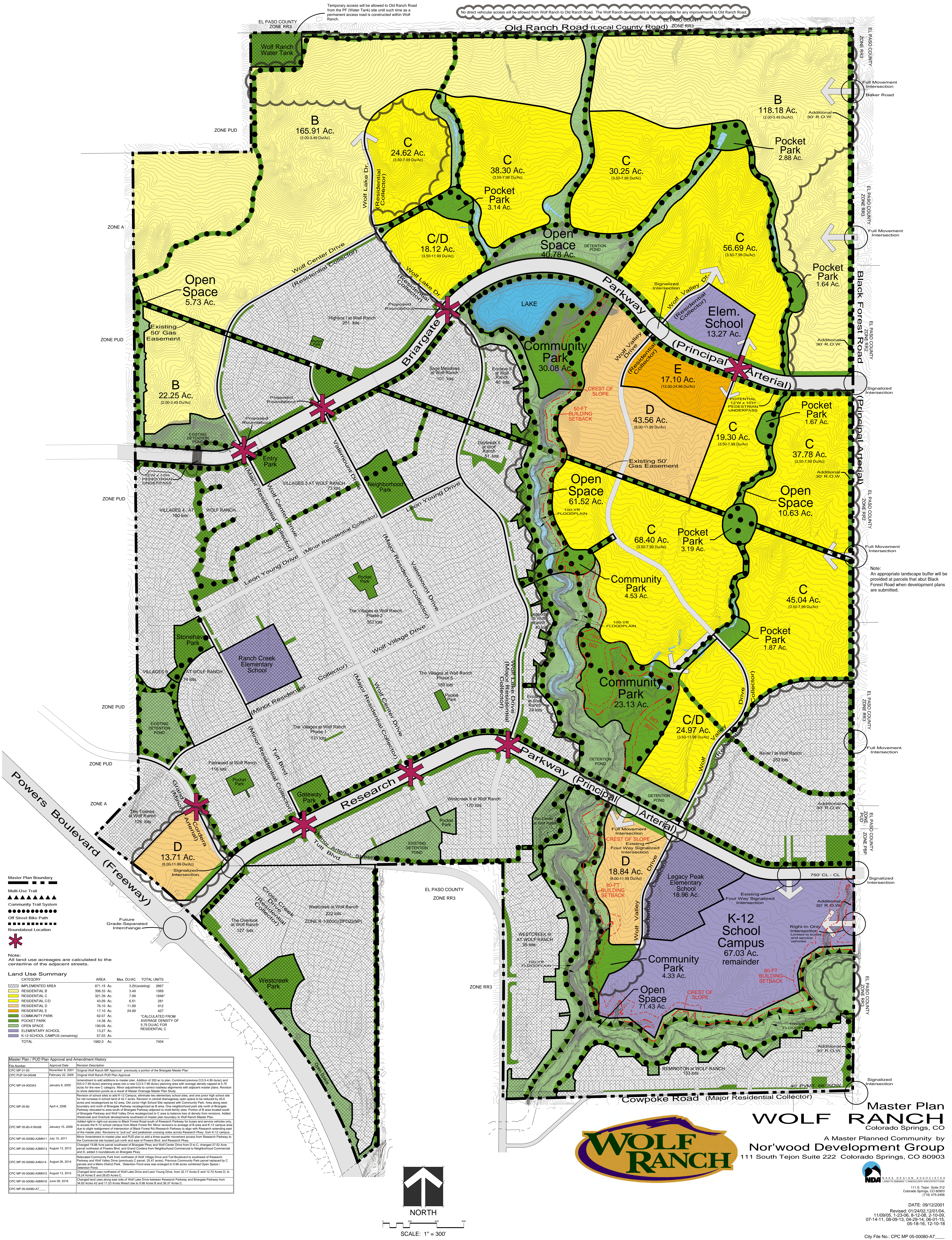
By: Jeffrey C. Hodsdon, P.E., PTOE
Principal

JCH:KDF:bjwb

Enclosures: Tables 1 and 2
Approved Wolf Ranch Master Plan
Currently Proposed Amendment
Previous TAZ Map (Figure 3)
TAZ Map

Table 1 Land Use Comparison by TAZ Wolf Ranch Update 2013																
TAZ	August 2005 TIS ⁽¹⁾			July 2013 TIS ⁽²⁾			Land Use									
	Area	Density	Units	Area	Density	Units	Currently Proposed									
							Area	Density	Units	Area	Density	Units				
TAZ 1: North of Briargate																
1	29.73	A1	29 DU ⁽³⁾	29.73	A1	29 DU	165.91	B	579 DU							
2	10.38	Elem. School	500 Students	10.38	Elem. School	500 Students										
3	9.78	A1	10 DU	9.78	A1	10 DU										
14	62.38	B	218 DU	147.78	B	516 DU	22.25	B	78 DU							
15	47.8	B	167 DU													
18	5.3	B	18 DU													
19	32.3	B	113 DU	47.8	A1	47 DU	118.18	B	412 DU							
4	47.8	A1	47 DU													
5	20.6	A2	41 DU													
6	5.31	Park	5.31 Acres	20.64	A2	41 DU	4.52	Park	4.52 Acres							
7	42.2	B	147 DU	5.31	Park	5.31 Acres										
8	35.5	B	124 DU	77.76	B	271 DU										
9	20.06	B	70 DU	25.08	B/C	102 DU	56.69	C	327 DU							
10	9.1	A2	18 DU													
11	20.86	A2	42 DU													
12	38.45	C	222 DU	20.86	A2	42 DU	13.27	Elem. School	500 Students							
13	38.42	C	222 DU	36.28	C/D	236 DU										
				21.63	C	125 DU										
				12.75	C/D	83 DU										
16	37.6	C	217 DU	72.56	C/D	419 DU	IMPLEMNTED SINGLE FAMILY		251 DU							
17	35.2	C	203 DU													
SUBTOTAL			A1	86 DU	SUBTOTAL							A1	0 DU			
			A2	83 DU								A2	0 DU			
			B	787 DU								B	1069 DU			
			B/C	102 DU								B/C	0 DU			
			C	544 DU								C	864 DU			
			C/D	319 DU								C/D	118 DU			
			D	0 DU								D	0 DU			
			ALL RESIDENTIAL 1,907 DU						Imp. Single Family 251 DU							
									ALL RESIDENTIAL 2,302 DU							
			Elementary School	500 Students				Elementary School	500 Students							
			Park	5.31 Acres				Park	7.69 Acres							
TAZ 2: Between Research Parkway and Briargate Parkway West of the Open Space																
20	30.24	C	174 DU	---	C	350 DU	IMPLEMNTED SINGLE FAMILY						180 DU			
21	22.4	C	129 DU				IMP. SINGLE FAMILY						19 DU			
40	2	C	12 DU				IMP. SINGLE FAMILY						74 DU			
43	20.7	C	119 DU	26.31	Park	26.31 Acres	3.76	Park	3.76 Acres							
44	26.31	Park	26.31 Acres	3.45	Park	3.45 Acres	3.45	Park	3.45 Acres							
22	3.45	Park	3.45 Acres	28.1	B	73 DU	IMP. SINGLE FAMILY						73 DU			
23	28.2	C	163 DU	32.17	E	804 DU	IMP. MULTI-FAMILY						101 DU			
24	32.17	E	804 DU	12.7	D	152 DU	IMP. SINGLE FAMILY						98 DU			
34	12.7	D	152 DU	5.74	Park	5.74 Acres	5.74	Park	5.74 Acres							
35	5.74	Park	5.74 Acres	11.53	Mixed Use	4 Acres	IMPLEMNTED SINGLE FAMILY						91 DU			
25	11.53	Mixed Use	4 Acres				57.74						57.74 Acres			
26	135	Park	135 Acres				IMPLEMNTED SINGLE FAMILY						127 DU			
36	18.1	C	104 DU	116.39	Park	116.39 Acres	IMP. SINGLE FAMILY						112 DU			
38	15.1	C	87 DU	273.16	C	352 DU	IMP. SINGLE FAMILY						113 DU			
39	30.7	C	177 DU				IMP. SINGLE FAMILY						40 DU			
42	16.32	C	94 DU				10.44						500 Students			
37	19.48	A2	39 DU	17.4	A2	35 DU	IMP. MULTI-FAMILY						128 DU			
41	10.44	Elem. School	500 Students	10.44	Elem. School	500 Students	13.71	D	164 DU							
45	5.82	Neighborhood	46 KSF ⁽⁴⁾	13.81	D	166 DU	IMP. MULTI-FAMILY						116 DU			
46	21.7	Commercial	170 KSF	13.71	Neigh. Comm.	107.5 KSF	3.66	Park	3.66 Acres							
47	29.8	C	172 DU	29.8	C	116 DU	IMP. SINGLE FAMILY						131 DU			
48	3.66	Park	3.66 Acres	3.66	Park	3.66 Acres	IMPLEMENTED SINGLE FAMILY						189 DU			
49	35.5	C	205 DU	35.5	C	131 DU	IMP. SINGLE FAMILY						24 DU			
50	40.3	C	232 DU	52.2	C	189 DU	SUBTOTAL						A2	0 DU		
51	11.9	C	69 DU	17.37	A2	35 DU	B						0 DU			
52	17.76	A2	35 DU				C						0 DU			
SUBTOTAL			A2	74 DU	SUBTOTAL			A2	70 DU	SUBTOTAL			A2	0 DU		
			B	0 DU				B	73 DU				B	0 DU		
			C	1,738 DU				C	1,138 DU				C	0 DU		
			D	152 DU				D	318 DU				D	164 DU		
			E	804 DU				E	804 DU				E	0 DU		
			Mixed Use Residential	188 DU				Mixed Use Residential	188 DU				Mixed Use Residential	0 DU		
			ALL RESIDENTIAL 2,956 DU				ALL RESIDENTIAL 2,591 DU							Mixed Use Residential	1,271 DU	
														Imp. Multi-Family	345 DU	
														ALL RESIDENTIAL	1,780 DU	
			Elementary School	500 Students					Elementary School	500 Students					Elementary School	500 Students
			Park	174.16 Acres					Park	155.55 Acres					Park	74.35 Acres
			Mixed Use Commercial	4 Acres					Mixed Use Commercial	4 Acres					Mixed Use Commercial	0 Acres
			Neighborhood Commercial	216 KSF					Neighborhood Commercial	107 KSF					Neighborhood Commercial	0 KSF
TAZ 3: Between Research Parkway and Briargate Parkway East of the Open Space																
27	26.89	Mixed Use	4 Acres	26.89	Mixed Use	4 Acres	17.1	E	427 DU							
28	59.1	C	341 DU	104.7	C	604 DU	43.56	D	522 DU							
30	35.5	C	205 DU				19.3	C	111 DU							
32	5.4	Park	5.4 Acres				68.4	C	395 DU							
33	30.73	A2	61 DU	5.4	Park	5.4 Acres	3.19	Park	3.19 Acres							
29	51	B	178 DU	26.72	B	93 DU	37.78	C	218 DU							
				193.82	B	676 DU	1.67	Park	1.67 Acres							
							45.04	C	260 DU							
31	10.1	C	58 DU													
53	141.63	B	494 DU													
SUBTOTAL			A2	61 DU	SUBTOTAL			A2	0 DU							
			B	672 DU				B	0 DU							
			C	604 DU				C	984 DU							
			C/D	0 DU				C/D	163 DU							
			D	0 DU				D	522 DU							
			E	0 DU				E	427 DU							
			Mixed Use Residential	572 DU				Mixed Use Residential	0 DU							
			ALL RESIDENTIAL 1,909 DU				ALL RESIDENTIAL 1,945 DU									
			Park	5.40 Acres					Park	5.40 Acres						
			Mixed Use Commercial	4 Acres					Mixed Use Commercial	4 Acres						
TAZ 4: South of Research Parkway and West of the Open Space																
56	100.96	B	265 DU	100.96	B	265 DU	IMP. SINGLE FAMILY						265 DU			
58	57.94	IMP. SF	222 DU	57.94	IMP. SF	222 DU	IMP. SINGLE FAMILY						222 DU			
59	17.55	IMP. MF	127 DU	17.55	IMP. MF	127 DU	IMP. MULTI-FAMILY						127 DU			
			B	265 DU				B	265 DU							
			Imp. Single Family	222 DU				Imp. Single Family	222 DU							
			Imp. Multi-Family	127 DU				Imp. Multi-Family	127 DU							
			ALL RESIDENTIAL	701 DU				ALL RESIDENTIAL	614 DU							
TAZ 5: South of Research Parkway and East of the Open Space																
54	82.9	K-12 Sch	2950 Students	83.48	K-12 Sch	2950 Students	83.83	K-12 Sch	2950 Students							
55	27.23	C	157 DU	25.47	C	147 DU	18.84	D	226 DU							
TAZ 6: North of Cowpoke Road																
57	41.79	C	241 DU	41.79	C	241 DU	IMP. SINGLE FAMILY						133 DU			
TOTAL			A1	86 DU	TOTAL			A1	86 DU	TOTAL			A1	0 DU		
			A2	236 DU				A2	153 DU				A2	0 DU		
			B	1,882 DU				B	1,894 DU				B	1,069 DU		
			B/C	0 DU				B/C	102 DU				B/C	0 DU		
			C	3,603 DU				C	2,674 DU				C	1,848 DU		
			C/D	0 DU				C/D	319 DU				C/D	281 DU		
			D	152 DU				D	318 DU				D	912 DU		
			E	804 DU				E	804 DU				E	427 DU		
			Mixed Use Residential	760 DU				Mixed Use Residential	760 DU				Mixed Use Residential	0 DU		
			Imp. Single Family	222 DU				Imp. Single Family	222 DU				Imp. Single Family	2,395 DU		
			Imp. Multi-Family	127 DU				Imp. Multi-Family	127 DU				Imp. Multi-Family	472 DU		
			ALL RESIDENTIAL	7,872 DU				ALL RESIDENTIAL	7,459 DU				ALL RESIDENTIAL	7,404 DU		
			School	3,950 Students				School	3,950 Students				School	3,950 Students		
			Mixed Use Commercial	127 Acres				Mixed Use Commercial	127 Acres				Mixed Use Commercial	0 Acres		
			Neighborhood Commercial	3,107 KSF				Neighborhood Commercial	147 KSF				Neighborhood Commercial	0 KSF		
Notes:																
(1) Source: Wolf Ranch Master Plan Update by LSC August 15, 2005																
(2) Source: Wolf Ranch Master Plan Amendment Updated Traffic Impact Analysis by LSC July 3, 2013																
(3) DU = Dwelling Unit																
(4) KSF = thousand square feet of floor area																
Source: LSC Transportation Consultants, Inc.																

Table 2 Trip Generation Estimate and Comparison Wolf Ranch Master Plan Amendment 2018														
Zone	Land Use Code	Land Use Description	Trip Generation Rates ⁽¹⁾						Total Trips Generated					
			Trip Generation Units	Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour		Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour		
					In	Out	In	Out		In	Out	In	Out	
Currently Proposed Master Plan Amendment														
TAZ 1: North of Briargate	210	Single Family Detached Housing	2184 DU ⁽²⁾	9.44	0.19	0.56	0.62	0.37	20,617	404	1,212	1,362	800	
	220	Multifamily Housing (Low-Rise)	118 DU	7.32	0.11	0.35	0.35	0.21	864	12	42	42	24	
	520	Elementary School	500 Students	1.89	0.36	0.31	0.08	0.09	945	181	154	41	44	
	Subtotal							22,426	597	1,408	1,445	868		
	Change from 2005 TIS							3,520	121	239	229	148		
Change from 2013 TIS							4,667	147	289	287	180			
TAZ 2: Between Research Parkway and Briargate Parkway West of the Open Space	210	Single-Family Detached Housing	1271 DU	9.44	0.19	0.56	0.62	0.37	11,998	235	705	793	466	
	220	Multifamily Housing (Low-Rise)	509 DU	7.32	0.11	0.35	0.35	0.21	3,726	54	180	180	105	
	520	Elementary School	500 Students	1.89	0.36	0.31	0.08	0.09	945	181	154	41	44	
	411	Public Park	74 Acres	0.78	0.01	0.01	0.06	0.05	58	1	1	4	4	
	Subtotal							16,727	471	1,040	1,018	619		
Change from 2005 TIS							-23,950	-434	-769	-1,309	-1,095			
Change from 2013 TIS							-15,502	-293	-493	-847	-740			
TAZ 3: Between Research Parkway and Briargate Parkway East of the Open Space	210	Single-Family Detached Housing	1237 DU	9.44	0.19	0.56	0.62	0.37	11,677	229	687	772	453	
	220	Multifamily Housing (Low-Rise)	1112 DU	7.32	0.11	0.35	0.35	0.21	8,140	118	394	392	230	
	520	Elementary School	111 Students	1.89	0.36	0.31	0.08	0.09	210	40	34	9	10	
	Subtotal							20,027	387	1,115	1,173	693		
	Change from 2005 TIS							-156	-41	24	-86	-109		
Change from 2013 TIS							-390	-47	4	-100	-117			
TAZ 4: South of Research Parkway and West of the Open Space	210	Single-Family Detached Housing	487 DU	9.44	0.19	0.56	0.62	0.37	4,597	90	270	304	178	
	220	Multifamily Housing (Low-Rise)	127 DU	7.32	0.11	0.35	0.35	0.21	930	13	45	45	26	
	Subtotal							5,527	103	315	349	204		
	Change from 2005 TIS							-823	-18	-60	-67	-39		
	Change from 2013 TIS							153	3	-5	-2	2		
TAZ 5: South of Research Parkway and East of the Open Space	220	Multifamily Housing (Low-Rise)	226 DU	7.32	0.11	0.35	0.35	0.21	1,654	24	80	80	47	
	---	K-12 School ⁽³⁾	2950 Students	1.50	0.27	0.15	0.07	0.09	4,418	800	455	199	259	
	Subtotal							6,072	824	535	279	306		
	Change from 2005 TIS							151	-5	-8	-20	-12		
	Change from 2013 TIS							255	-4	-3	-13	-7		
TAZ 6: North of Cowpoke	210	Single-Family Detached Housing	133 DU	9.44	0.19	0.56	0.62	0.37	1,256	25	74	83	49	
	Change from 2005 TIS							-1,051	-20	-62	-70	-41		
	Change from 2013 TIS							-1,038	-20	-62	-69	-40		
	TOTAL							72,035	2,407	4,487	4,347	2,739		
	Change from 2005 TIS							-22,309	-397	-636	-1,323	-1,148		
Change from 2013 TIS							-11,855	-214	-270	-744	-722			
Wolf Ranch Master Plan Update by LSC August 15, 2005														
TAZ 1: North of Briargate	210	Single-Family Detached Housing	1907 DU	9.57	0.19	0.56	0.64	0.37	18,253	358	1,073	1,214	713	
	520	Elementary School	500 DU	1.29	0.23	0.19	0.00	0.01	645	116	95	1	5	
	411	City Park	5 Acres	1.59	0.37	0.15	0.21	0.38	8	2	1	1	2	
	Subtotal							18,906	476	1,169	1,216	720		
TAZ 2: Between Research Parkway and Briargate Parkway West of the Open Space	210	Single-Family Detached Housing	1812 DU	9.57	0.19	0.56	0.64	0.37	17,339	340	1,019	1,153	677	
	220	Apartment	1144 DU	6.72	0.10	0.41	0.40	0.22	7,689	117	467	461	248	
	520	Elementary School	500 Students	1.29	0.23	0.19	0.00	0.01	645	116	95	1	5	
	411	City Park	174 Acres	1.59	0.37	0.15	0.21	0.38	277	64	26	36	67	
	---	Retail/Restaurants/Hotel ⁽⁴⁾	4 Acres	882.94	29.17	26.36	44.08	44.09	3,532	117	105	176	176	
	820	Shopping Center	216 KSF ⁽⁵⁾	51.88	0.70	0.45	2.31	2.51	11,195	151	97	499	541	
Subtotal							40,677	905	1,809	2,327	1,714			
TAZ 3: Between Research Parkway and Briargate Parkway East of the Open Space	210	Single-Family Detached Housing	1337 DU	9.57	0.19	0.56	0.64	0.37	12,798	251	752	851	500	
	220	Apartment	572 DU	6.72	0.10	0.41	0.40	0.22	3,844	58	233	231	124	
	411	City Park	5 Acres	1.59	0.37	0.15	0.21	0.38	9	2	1	1	2	
	---	Retail/Restaurants/Hotel	4 acres	882.94	29.17	26.36	44.08	44.09	3,532	117	105	176	176	
	Subtotal							20,183	428	1,091	1,259	802		
TAZ 4: South of Research Parkway and West of the Open Space	210	Single-Family Detached Housing	574 DU	9.57	0.19	0.56	0.64	0.37	5,497	108	323	365	215	
	220	Apartment	127 DU	6.72	0.10	0.41	0.40	0.22	853	13	52	51	28	
Subtotal							6,350	121	375	416	243			
TAZ 5: South of Research Parkway and East of the Open Space	210	Single-Family Detached Housing	157 DU	9.57	0.19	0.56	0.64	0.37	1,503	29	88	100	59	
	---	K-12 School ⁽³⁾	2950 Students	1.50	0.27	0.15	0.07	0.09	4,418	800	455	199	259	
Subtotal							5,921	829	543	299	318			
TAZ 6: North of Cowpoke	210	Single-Family Detached Housing	241 DU	9.57	0.19	0.56	0.64	0.37	2,307	45	136	153	90	
TOTAL							94,344	2,804	5,123	5,670	3,887			
Wolf Ranch Master Plan Amendment Updated Traffic Impact Analysisby LSC July 3, 2013														
TAZ 1: North of Briargate	210	Single-Family Detached Housing	1602 DU	9.52	0.19	0.56	0.63	0.37	15,251	300	901	1,009	593	
	230	Residential Condominium/Townhouse	319 DU	5.81	0.07	0.37	0.35	0.17	1,853	24	116	111	55	
	520	Elementary School	500 DU	1.29	0.25	0.20	0.07	0.08	645	124	101	37	38	
	411	City Park	5 Acres	1.89	0.37	0.15	0.21	0.38	10	2	1	1	2	
Subtotal							17,759	450	1,119	1,158	688			
TAZ 2: Between Research Parkway and Briargate Parkway West of the Open Space	210	Single-Family Detached Housing	1281 DU	9.52	0.19	0.56	0.63	0.37	12,195	240	721	807	474	
	220	Apartment	992 DU	6.65	0.10	0.41	0.40	0.22	6,597	101	405	400	215	
	230	Residential Condominium/Townhouse	318 DU	5.81	0.07	0.37	0.35	0.17	1,848	24	116	111	55	
	520	Elementary School	500 Students	1.29	0.25	0.20	0.07	0.08	645	124	101	37	38	
	411	City Park	156 Acres	1.89	0.37	0.15	0.21	0.38	294	57	23	32	60	
	---	Retail/Restaurants/Hotel	4 Acres	882.94	29.17	26.36	44.08	44.09	3,532	117	105	176	176	
820	Shopping Center	107 KSF	66.21	0.94	0.58	2.81	3.17	7,118	101	62	302	341		
Subtotal							32,229	764	1,533	1,865	1,359			
TAZ 3: Between Research Parkway and Briargate Parkway East of the Open Space	210	Single-Family Detached Housing	1373 DU	9.52	0.19	0.56	0.63	0.37	13,071	257	772	865	508	
	220	Apartment	572 DU	6.65	0.10	0.41	0.40	0.22	3,804	58	233	231	124	
	411	City Park	5 Acres	1.89	0.37	0.15	0.21	0.38	10	2	1	1	2	
	---	Retail/Restaurants/Hotel	4 Acres	882.94	29.17	26.36	44.08	44.09	3,532	117	105	176	176	
Subtotal							20,417	434	1,111	1,273	810			
TAZ 4: South of Research Parkway and West of the Open Space	210	Single-Family Detached Housing	487 DU	9.52	0.19	0.56	0.63	0.37	4,636	91	274	307	180	
	230	Residential Condominium/Townhouse	127 DU	5.81	0.07	0.37	0.35	0.17	738	9	46	44	22	
Subtotal							5,374	100	320	351	202			
TAZ 5: South of Research Parkway and East of the Open Space	210	Single-Family Detached Housing	147 DU	9.52	0.19	0.56	0.63	0.37	1,399	28	83	93	54	
	---	K-12 School	2950 Students	1.50	0.27	0.15	0.07	0.09	4,418	800	455	199	259	
Subtotal							5,817	828	538	292	313			
TAZ 6: North of Cowpoke	210	Single-Family Detached Housing	241 DU	9.52	0.19	0.56	0.63	0.37	2,294	45	136	152	89	
TOTAL							83,890	2,621	4,757	5,091	3,461			
Notes: (1) 2005 TIS Source: "Trip Generation," Institute of Transportation Engineers, 7th ed., 2003. 2013 TIS Source: "Trip Generation," Institute of Transportation Engineers, 9th ed., 2012. Current Source: "Trip Generation," Institute of Transportation Engineers, 10th ed., 2017. (2) DU = dwelling units (3) Trip generation rates based on the transportation study for the Science Canyon Campus prepared by Radix Engineering, Inc. (4) Trip generation rates estimates by LSC (5) KSF = thousand square feet														
Source: LSC Transportation Consultants, Inc.														

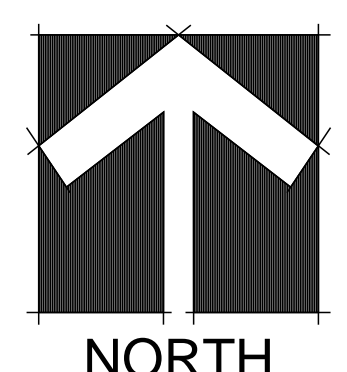


Master Plan Boundary
Multi-Use Trail
Community Trail System
Off Street Bike Path
Roundabout Location

Note:
All land use acreages are calculated to the centerline of the adjacent streets.

Category	Area	Max. DU/AC	Total Units
IMPLEMENTED AREA	871.15 Ac.	3.29 (existing)	2867
RESIDENTIAL B	306.33 Ac.	3.49	1069
RESIDENTIAL C	321.39 Ac.	7.99	1848*
RESIDENTIAL C/D	43.09 Ac.	6.51	281
RESIDENTIAL D	76.10 Ac.	11.99	912
RESIDENTIAL E	17.10 Ac.	24.99	427
COMMUNITY PARK	62.07 Ac.		*CALCULATED FROM AVERAGE DENSITY OF 5.75 DU/AC FOR RESIDENTIAL C
POCKET PARK	14.36 Ac.		
OPEN SPACE	190.09 Ac.		
ELEMENTARY SCHOOL	13.27 Ac.		
K-12 SCHOOL CAMPUS (remaining)	67.03 Ac.		
TOTAL	1982.0 Ac.		7404

Master Plan / PUD Plan Approval and Amendment History	Approval Date	Revision Description
CPC MP 01-03	November 8, 2001	Original Wolf Ranch MP Approval - previously a portion of the Briargate Master Plan
CPC PUP 04-00045	February 22, 2005	Original Wolf Ranch PUD Plan Approval
CPC MP 04-000343	January 6, 2006	Amendment to add additional to master plan. Addition of 200 ac to plan. Combined previous C/D, E, and F areas and re-designated as A2 area. Old Junior High School site replaced with Community Park. Area along west boundary and north of Briargate Parkway re-designated as C area. One neighborhood park site north of Briargate Parkway relocated to area south of Briargate Parkway adjacent to multi-family site. Portion of B area located south of Briargate Parkway and Wolf Valley Drive re-designated as C area to balance loss of density from revisions. Added Westcreek and Overlook developments southwest of master plan boundary to Wolf Ranch Master Plan.
CPC MP 05-00	April 4, 2006	Revisions to school sites to add K-12 Campus, eliminate two elementary school sites, and one junior high school site for net increase in school level of 42.7 acres. Revision to central elementary open space to be reduced by 45.6 acres and re-designated as A2 area. Old Junior High School site replaced with Community Park. Area along west boundary and north of Briargate Parkway re-designated as C area. One neighborhood park site north of Briargate Parkway relocated to area south of Briargate Parkway adjacent to multi-family site. Portion of B area located south of Briargate Parkway and Wolf Valley Drive re-designated as C area to balance loss of density from revisions. Added Westcreek and Overlook developments southwest of master plan boundary to Wolf Ranch Master Plan.
CPC MP 05-00-000-A2MN10	January 15, 2009	Added right-of-way access to Black Forest Road south of Research Parkway for buses and service vehicles only, access the K-12 school campus from Black Forest Rd. Minor revisions to acreage of B area and K-12 campus area due to slight realignment of intersection of Black Forest Rd. Research Parkway to align with Research extending east of the master plan. Revisions to "bull out" and pedestrian crossing notes across Research Parkway from K-12 campus. Minor Amendment to master plan and PUD plan to add a three-quarter movement across from Research Parkway to the Commercial site located just north and east of Powers Blvd. and Research Parkway.
CPC MP 05-00-000-A2MN13	July 15, 2011	Changed 15.85 acre parcel southwest of Briargate Parkway and Wolf Center Drive from D to C. Changed 37.52 acre parcel northwest of Powers Blvd. and Grand Corral from Neighborhood Commercial to Neighborhood Commercial and D. Added 3 roundabouts on Briargate Parkway.
CPC MP 05-00-000-A4MN14	August 26, 2014	Relocated Community Park from northwest of Wolf Valley Drive and Wolf Boulevard to southwest of Research Parkway and Wolf Valley Drive (previously C parcel, 25.47 acres). Previous Community Park parcel replaced by C parcels and a Main District Park. Detention Pond area was re-designated to 9.96 acres combined Open Space / Detention Pond.
CPC MP 05-00-000-A5MN15	August 13, 2015	Changed land uses northwest of Wolf Lake Drive and Leon Young Drive, from 32.17 Acres E and 12.70 Acres D, to 16.24 Acres E and 26.63 Acres C.
CPC MP 05-00-000-A6MN16	June 09, 2016	Changed land uses along east side of Wolf Lake Drive between Research Parkway and Briargate Parkway from 34.83 Acres A2 and 11.55 Acres Mixed Use to 9.98 Acres B and 36.37 Acres C.
CPC MP 05-00-000-A7		



Master Plan
WOLF RANCH
Colorado Springs, CO

A Master Planned Community by
Nor'wood Development Group
111 South Tejon Suite 222 Colorado Springs, CO 80903

NDA NASS DESIGN ASSOCIATES
111 S. Tejon Suite 312
Colorado Springs, CO 80903
(719) 475-2408

DATE: 09/12/2001
Revised: 01/24/02, 12/01/04,
11/09/05, 1/23/06, 8/15/08, 2/18/09,
07/14/11, 08/09/13, 04/29/14, 06/01/15,
05/18/16, 12/10/18

City File No.: CPC MP 05-00080-A7

Exhibit: Previous TAZ map* from the LSC Traffic Report for the 2013 Wolf Ranch Master Plan Update.



Approximate Scale
Scale: 1"= 2,000'

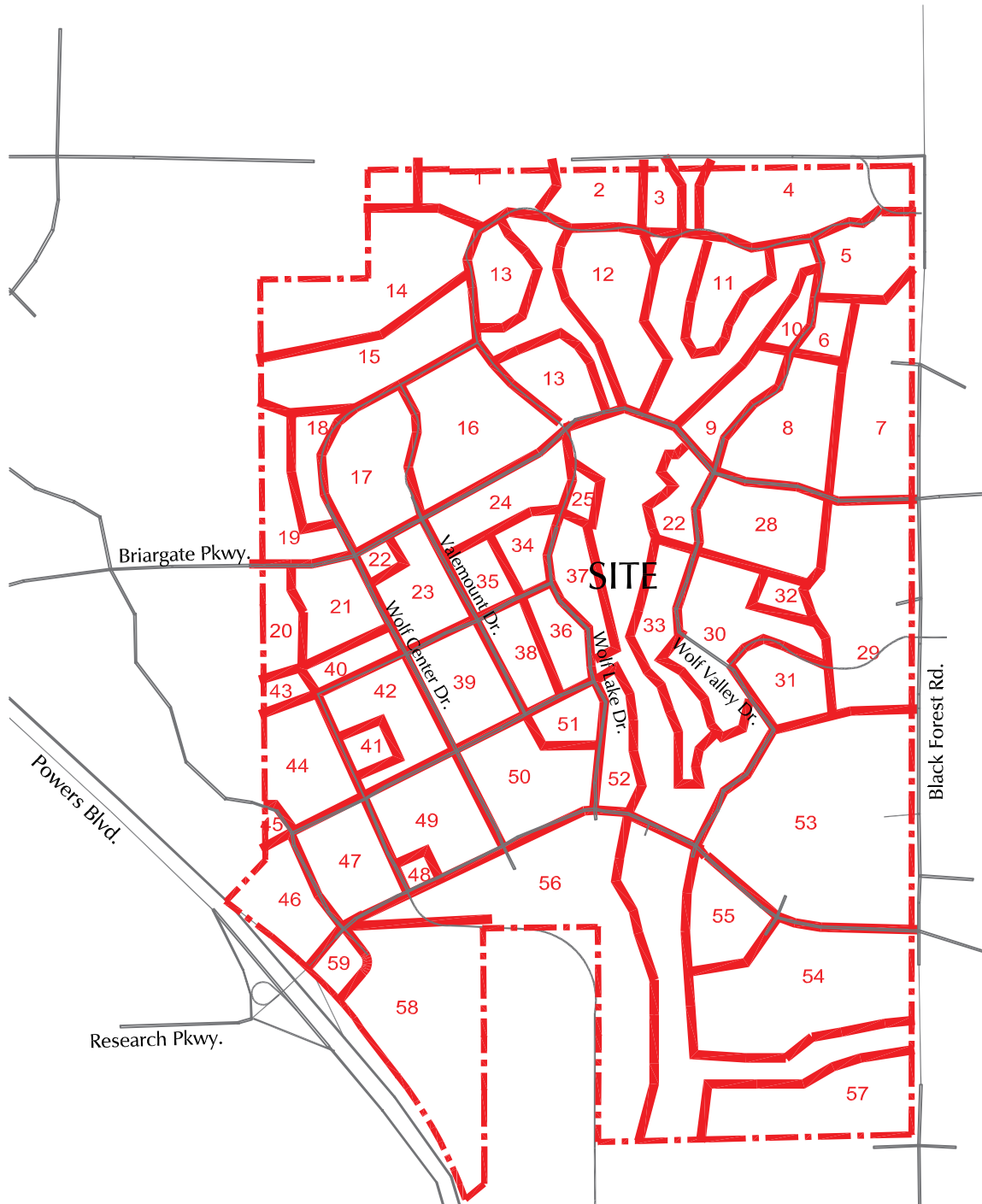


Figure 3

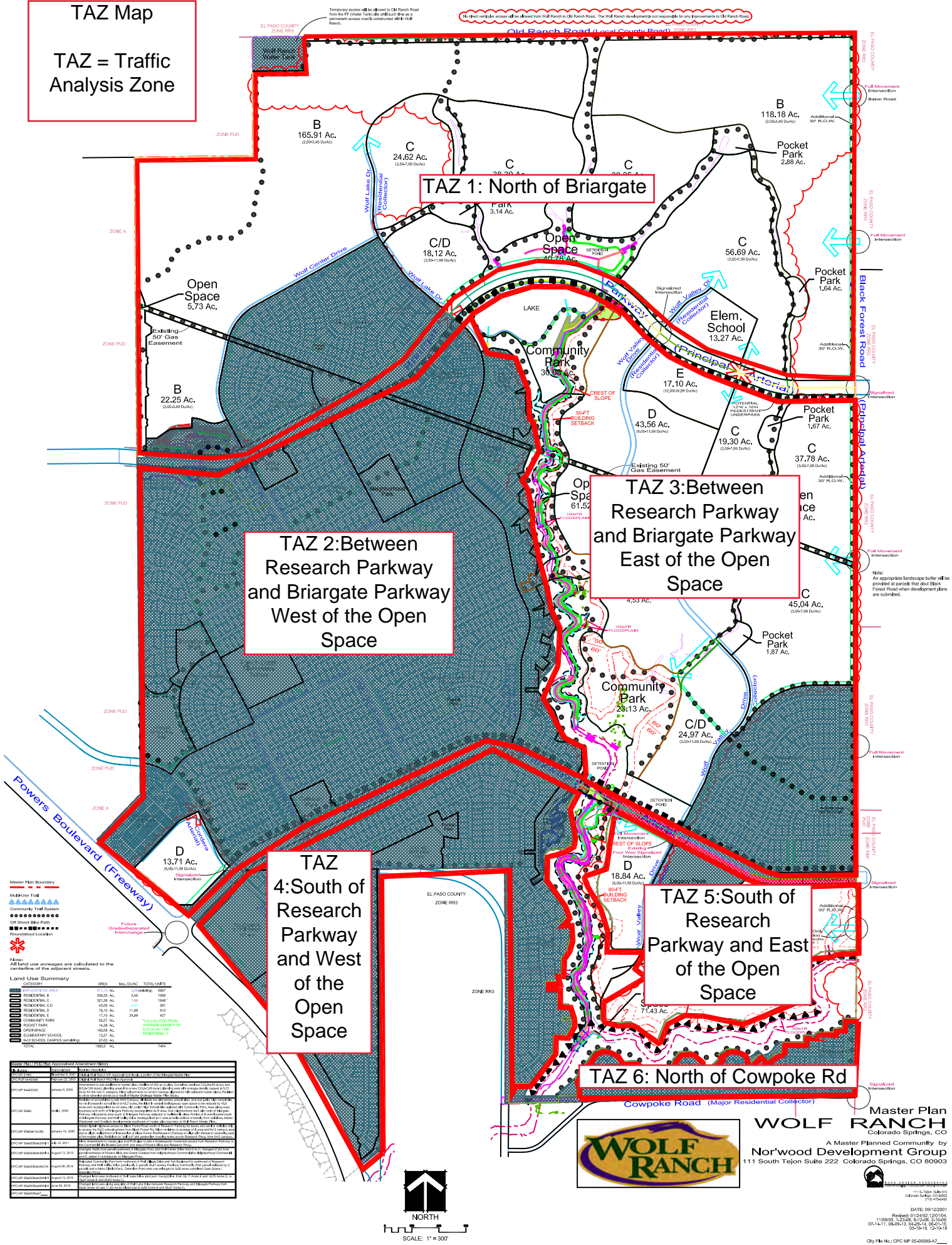
Previous* Traffic
Analysis Zones

Wolf Ranch Master Plan- Update 2013 (LSC #134390)

* Provided for reference only. Please refer to current TAZ map.

TAZ Map

TAZ = Traffic Analysis Zone



TAZ 1: North of Briargate

TAZ 2: Between Research Parkway and Briargate Parkway West of the Open Space

TAZ 3: Between Research Parkway and Briargate Parkway East of the Open Space

TAZ 4: South of Research Parkway and West of the Open Space

TAZ 5: South of Research Parkway and East of the Open Space

TAZ 6: North of Cowpoke Rd

Master Plan Boundary

Subdivisions

Community Trail System

Off Street Bike Path

Roundabout Location

Notes:
All land use acreages are calculated to the centerline of the adjacent streets.

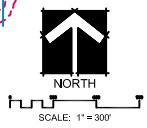
Category	Area	Max. Density	Total Units
RESIDENTIAL A	30,000 Ac.	3.00	90,000
RESIDENTIAL B	30,000 Ac.	3.00	90,000
RESIDENTIAL C	30,000 Ac.	3.00	90,000
RESIDENTIAL D	30,000 Ac.	3.00	90,000
RESIDENTIAL E	30,000 Ac.	3.00	90,000
COMMUNITY PARK	10,000 Ac.	1.00	10,000
OPEN SPACE	10,000 Ac.	0.00	0
ELIMINATED SCHOOL	10,000 Ac.	0.00	0
WOLF RANCH CAMPUS (existing)	10,000 Ac.	0.00	0
TOTAL	160,000 Ac.		370,000

Legend:

- RESIDENTIAL A
- RESIDENTIAL B
- RESIDENTIAL C
- RESIDENTIAL D
- RESIDENTIAL E
- COMMUNITY PARK
- OPEN SPACE
- ELIMINATED SCHOOL
- WOLF RANCH CAMPUS (existing)

Notes:

- 1. All land use acreages are calculated to the centerline of the adjacent streets.
- 2. The total area of the Wolf Ranch Master Plan is 160,000 acres.
- 3. The total number of units is 370,000.
- 4. The total number of acres is 160,000.
- 5. The total number of units is 370,000.
- 6. The total number of acres is 160,000.
- 7. The total number of units is 370,000.
- 8. The total number of acres is 160,000.
- 9. The total number of units is 370,000.
- 10. The total number of acres is 160,000.



WOLF RANCH
Colorado Springs, CO

A Master Planned Community by
Norwood Development Group
111 South Tejon Suite 222 Colorado Springs, CO 80903

DATE: 05/12/2011
Revised: 01/24/2012
11/08/10, 12/14/10, 01/24/11, 02/24/11, 03/24/11, 04/24/11, 05/24/11, 06/24/11, 07/24/11, 08/24/11, 09/24/11, 10/24/11, 11/24/11, 12/24/11

City File No: CPC MP 05-00005-AT