

LSC TRANSPORTATION CONSULTANTS, INC. 2504 East Pikes Peak Avenue, Suite 304 Colorado Springs, CO 80909 (719) 633-2868 FAX (719) 633-5430

E-mail: lsc@lsctrans.com

Website: http://www.lsctrans.com

November 5, 2024

Monument Ridge East, LLC 5050 List Drive Colorado Springs, CO 80919 <via email>

RE: Monument Ridge East Noise Impact Study El Paso County, Colorado LSC #S234400

Dear Mr. Whitehead:

In response to your request, LSC Transportation Consultants, Inc. has completed a detailed analysis of the noise impacts of Interstate 25 (I-25) and County Line Road on the proposed Monument Ridge East residential development. The site is located to the east of I-25 and south of County Line Road in El Paso County, Colorado. LSC has completed an evaluation of the noise exposure for submittal to El Paso County and the Colorado Department of Transportation (CDOT) in accordance with the Federal Highway Administration (FHWA) requirements.

LSC recently completed a traffic impact analysis (TIS) for the Monument Ridge East residential development dated August 7, 2024. Key pages from that report are attached: Figure 1 from the TIS shows the site location relative to the adjacent and nearby roadways; Figure 2 shows the proposed site plan; Figure 3 shows the proposed roadway realignments including the realignment of the north portion of Monument Hill Road; and Figure 10 shows the projected 2044 total traffic volumes.

LSC used the software program Traffic Noise Model Version 2.5 — developed by FHWA — to predict the noise levels at key locations ("receivers") within the proposed development. An elevation of five feet was assumed for the height of the receivers. The receiver locations are shown in Figure 1 of this report.

The input data for the noise predictions included traffic volumes, roadway geometry, traffic control, the existing topographic elevations, the proposed site-grading plan, and the locations of the receivers. A profile view of typical sections has been attached. The analysis was completed using projected 2044 afternoon peak-hour traffic volumes on County Line Road taken from Figure 10 of *The Monument Ridge East Traffic Impact Study* and CDOT existing traffic volume data and the 20-year growth factor on I-25 adjacent to the site. The traffic volumes on I-25 were assumed

to include 2.4% single-unit trucks and 4.8% combination trucks, based on information for the segment of I-25 adjacent to the site obtained from the CDOT website.

The results of the noise prediction were compared to the noise abatement criteria contained in Exhibit 1 of the *Colorado Department of Transportation Noise Analysis and Abatement Guidelines* dated January 15, 2015. The proposed residential development would be considered a Category "B" land use. The threshold for exterior noise levels for Category B is 66 decibels Leq(h).

As shown in Table 1, in the year 2044, some locations have predicted noise levels that would exceed the 66-decibel Leq(h) threshold for Category "B" land uses, even with the proposed grading plan shown in Figure 1. Please refer to the attached *Monument Ridge Preliminary Plan Letter of Intent* for a discussion of the noise mitigation standards and LDC applicability.

* * * * * *

Please contact me if you have any questions or need further assistance.

Respectfully submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

By: Kirstin D. Ferrin, P.E.

Senior Transportation Engineer

KDF:jas

Enclosures:

Table 1

Figure 1

TNM Typical Skew Profiles
Noise Analysis Inputs/Outputs

Key pages from the Monument Ridge East TIS Monument Ridge Preliminary Plan Letter of Intent

Table 1



Table 1 Comparison of Projected/Modeled Noise Level Monument Ridge East

Receiver Location	Noise level with the proposed grading (dBA)	Standard (dBA) ⁽¹⁾	Difference between the standard and the projected noise level (dBA)	Difference from the standard would be considered ⁽²⁾
1	61.3	66	-4.7	
2	60.6	66	-5.4	
3	63.3	66	-2.7	
4	65.4	66	-0.6	
5	62	66	-4	
6	65.9	66	-0.1	
7	64.2	66	-1.8	
8	62.4	66	-3.6	
9	53.9	66	-12.1	
10	60	66	-6	
11	62.1	66	-3.9	
12	68.6	66	2.6	"noticeable"
13	70.1	66	4.1	"noticeable"
14	63.6	66	-2.4	
15	63.4	66	-2.6	
16	60.6	66	-5.4	
17	58	66	-8	
18	55.9	66	-10.1	
19	53.2	66	-12.8	
20	53.4	66	-12.6	
21	61.4	66	-4.6	
22	61.3	66	-4.7	
23	63.1	66	-2.9	
24	65.6	66	-0.4	
25	67.4	66	1.4	"noticeable"

Notes

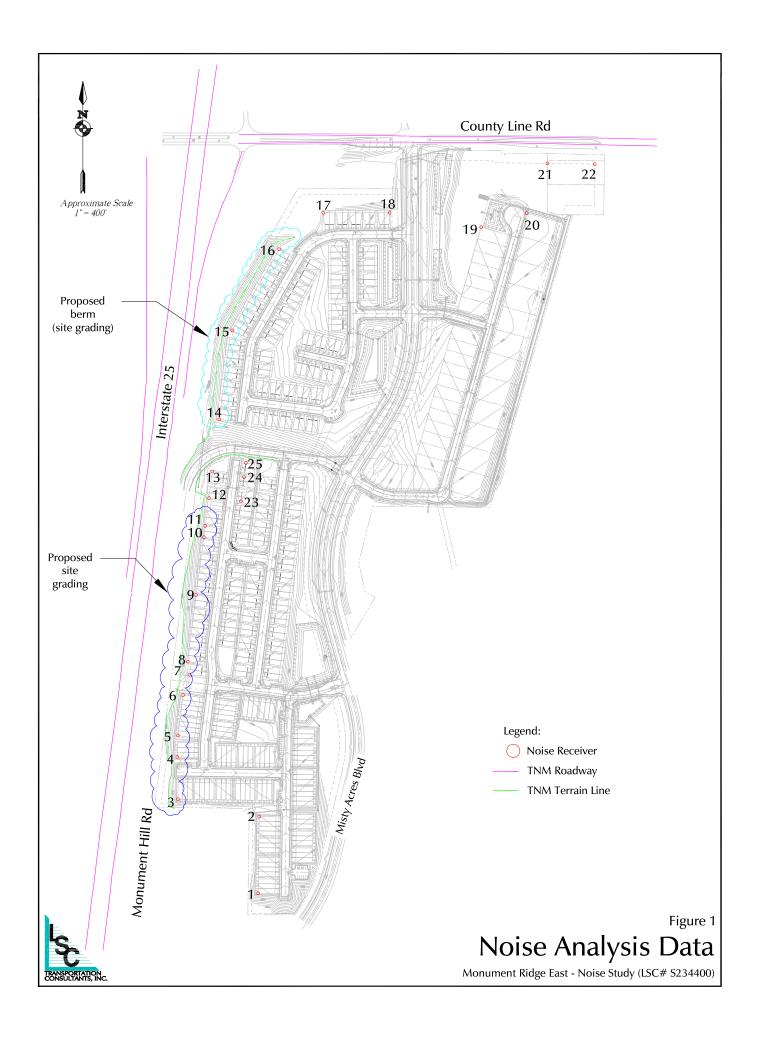
- 1 Source: Table 1 of the Colorado Department of Transportation Noise Analysis and Abatement Guidelines, September 21, 2020
- Source: https://www.codot.gov/programs/environmental/noise/noise-faqs "Studies have shown that changes in noise levels of 3 decibels or less are not normally detectable by the average human ear. An increase of 5 decibels is generally readily noticeable by anyone, and a 10-decibel increase is usually felt to be "twice as loud" as before."
- The results reflect projected noise levels with proposed grading as shown on Figure 1. However, as the projected noise levels for a few of the modeled receiver locations exceed the standard, the applicant is requesting a waiver to the requirement to install a sound wall. Please refer to this waiver request prepared as part of this submittal.

Source: LSC Transportation Consultants, Inc.

Aug-24

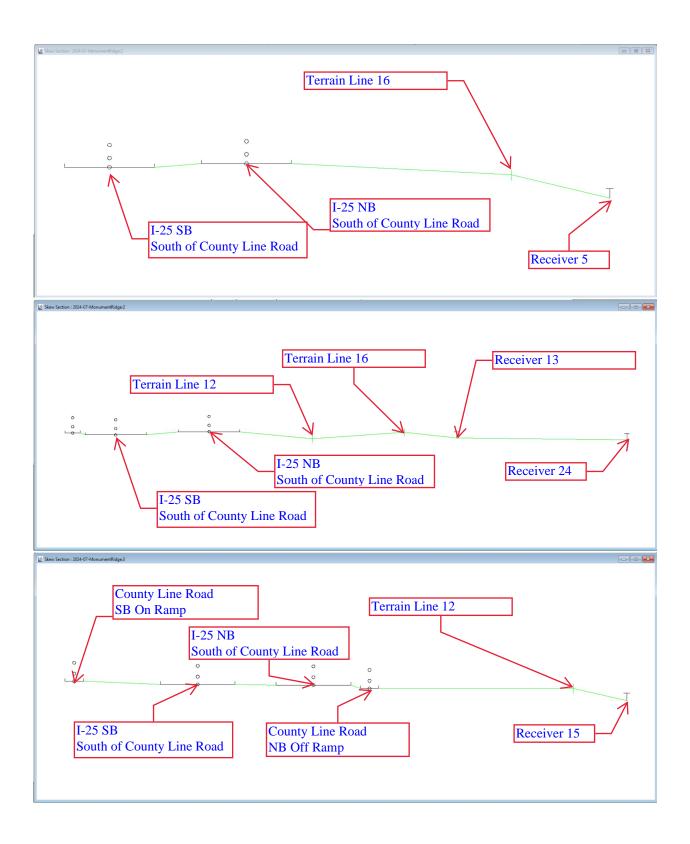
Figure 1





TNM Typical Skew Profiles





Noise Analysis Inputs/Outputs



RESULTS: SOUND LEVELS							Monument	Ridge				
LSC Transportation Consultants, Inc							2 August	2024				
-							2 August	2024				
KDF							TNM 2.5 Calculate	d with TNA	125			
RESULTS: SOUND LEVELS							Jaicalate		1 2.0			
PROJECT/CONTRACT:		Monum	nent Ridge									
RUN:		2044 T	otal PM Pea	ak Hour With	Mitigation							
BARRIER DESIGN:		INPUT	HEIGHTS		_			Average	pavement type	shall be use	d unles:	s
									ghway agenc			
ATMOSPHERICS:		68 deg	F, 50% RH					of a differ	ent type with	approval of F	HWA.	!
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	ction	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver 1	1	1	0.0	61.3	66	61.3	10		61.3	0.0)	8 -8.0
Receiver 2	2	2 1	0.0	60.6	66	60.6	10		60.6	0.0)	8 -8.0
Receiver 3	3	3 1	0.0	63.3	66	63.3	10		63.3	0.0)	8 -8.0
Receiver 4	4	1	0.0	65.4	66	65.4	10		65.4	0.0)	8 -8.0
Receiver 5	5		0.0	62.0	66	62.0	10		62.0	0.0	j	-8.0
Receiver 6	6		0.0	65.9	66	65.9	10		65.9	0.0)	8 -8.0
Receiver 7	7	1 1	0.0	64.2	2 66	64.2	10		64.2	0.0	j	8 -8.0
Receiver 8	8		0.0						62.4		1	8 -8.0
Receiver 9	9		0.0						53.9			8 -8.0
Receiver 10	10		0.0						60.0			8 -8.0
Receiver 11	11		0.0						62.1			8 -8.0
Receiver 12	12		0.0						68.6			8 -8.0
Receiver 13	13		0.0						70.1			8 -8.0
Receiver 14	14		0.0						63.6			8 -8.0
Receiver 15	15		0.0						63.4			8 -8.0
Receiver 16	16		0.0						60.6			8 -8.0
Receiver 17	17		0.0						58.0			8 -8.0
Receiver 18	18		0.0						55.9		_	8 -8.0
Receiver 19	20								53.2			8 -8.0
Receiver 20	22		0.0						53.4			8 -8.0
Receiver 21	23								61.4			8 -8.0
Receiver 22	24								61.3			8 -8.0
Receiver 23	27								63.1			8 -8.0
Receiver 24	38	3 1	0.0	65.6	66	65.6	10		65.6	0.0)	8 -8.0

RESULTS: SOUND LEVELS

Monument Ridge

Receiver 25	40	1	0.0	67.4	66	67.4	10	Snd Lvl	67.4	0.0	8	-8.0
Dwelling Units		# DUs	Noise Red	duction								
			Min	Avg	Max							
			dB	dB	dB							
All Selected		25	0.0	0.0	0.0							
All Impacted		3	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

INPUT: TRAFFIC FOR LAeq1h Volumes		1				M	onumen	t Ridge				
LSC Transportation Consultants, Inc					ust 2024							
KDF				TNM 2	.5 ∣							
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	Monument	Ridge	1		I							
RUN:	2044 Total F	•	Hour With	n Mitiga	ition							
Roadway	Points											
Name	Name	No.	Segmen	t								
			Autos		MTrucks	S	HTrucks	,	Buses	,	Motorcy	cles
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
I-25 NB South of County Line Rd	point1	1	4025	75	83	75	42	75	0	0	C	0
	point3	3	4025	75	83	75	42	75	0	0	C	0
	point4	4	4025	75	83	75	42	75	0	0	C	0
	point5	5	4025	75	83	75	42	75	0	0	C	0
	point6	6	4025	75	83	75	42	75	0	0	C	0
	point7	7	4025			75	42			0	C	0
	point8	8								0	C	0
	point9	9										
	point10	10								0		
	point11	11										
	point12	12									_	
	point13	13							_	_		
	point14	14						75				
	point15	15						75				
	point16	16						75			_	_
	point17	17							_			
	point18	18										
	point19	19										
	point20	20								_	_	
	point21	21								_		
	point22	22										
	point23	23										
	point24	24	4025	75	83	75	42	75	0	0	C	0

INPUT: TRAFFIC FOR LAeq1h Volume	es					Mor	nument F	Ridge				
	point25	25	4025	75	83	75	42	75	0	0	0	0
	point26	26	4025	75	83	75	42	75	0	0	0	0
	point27	27	4025	75	83	75	42	75	0	0	0	0
	point28	28	4025	75	83	75	42	75	0	0	0	0
	point29	29	4025	75	83	75	42	75	0	0	0	0
	point2	2										
I-25 NB Lane Drop	point30	30	3638	75	75	75	38	75	0	0	0	0
	point32	32	3638	75	75	75	38	75	0	0	0	0
	point33	33	3638	75	75	75	38	75	0	0	0	0
	point34	34	3638	75	75	75	38	75	0	0	0	0
	point35	35	3638	75	75	75	38	75	0	0	0	0
	point36	36	3638	75	75	75	38	75	0	0	0	0
	point37	37	3638	75	75	75	38	75	0	0	0	0
	point31	31										
I-25 NB North of County Line Rd	point38	38	3638	75	75	75	38	75	0	0	0	0
	point40	40	3638	75	75	75	38	75	0	0	0	0
	point41	41	3638	75	75	75	38	75	0	0	0	0
	point42	42	3638	75	75	75	38	75	0	0	0	0
	point43	43	3638	75	75	75	38	75	0	0	0	0
	point39	39										
I-25 SB North of County Line Rd	point44	44	3422	75	71	75	35	75	0	0	0	0
	point46	46	3422	75	71	75	35	75	0	0	0	0
	point47	47	3422	75	71	75	35	75	0	0	0	0
	point48	48	3422	75	71	75	35	75	0	0	0	0
	point49	49	3422	75	71	75	35	75	0	0	0	0
	point50	50	3422	75	71	75	35	75	0	0	0	0
	point51	51	3422	75	71	75	35	75	0	0	0	0
	point52	52	3422	75	71	75	35	75	0	0	0	0
	point53	53	3422	75	71	75	35	75	0	0	0	0
	point54	54	3422	75	71	75	35	75	0	0	0	0
	point55	55	3422	75	71	75	35	75	0	0	0	0
	point56	56	3422	75	71	75	35	75	0	0	0	0
	point57	57	3422	75	71	75	35	75	0	0	0	0
	point58	58	3422	75	71	75	35	75	0	0	0	0
	point59	59	3422	75	71	75	35	75	0	0	0	0
	point60	60	3422	75	71	75	35	75	0	0	0	0

point62 62 3422 75 71 75 35 75 0 0 0 point63 63 3422 75 71 75 35 75 0 0 0 point64 64 3422 75 71 75 35 75 0 0 0 point65 65 3422 75 71 75 35 75 0 0 0 point66 66 3422 75 71 75 35 75 0 0 0 point67 67 3422 75 71 75 35 75 0 0 0 point68 68 3422 75 71 75 35 75 0 0 0 point45 45	INPUT: TRAFFIC FOR LAeq1h Volume	es					M	onument	Ridge				
		point61	61	3422	75	71	75	35	75	0	0	0	0
point64 64 3422 75 71 75 35 75 0 0 0 0 0 0 0 0 0		point62	62	3422	75	71	75	35	75	0	0	0	0
Doint65 65 3422 75 71 75 35 75 0 0 0		point63	63	3422	75	71	75	35	75	0	0	0	0
		point64	64	3422	75	71	75	35	75	0	0	0	0
		point65	65	3422	75	71	75	35	75	0	0	0	0
		point66	66	3422	75	71	75	35	75	0	0	0	0
Point45		point67	67	3422	75	71	75	35	75	0	0	0	0
Point Poin		point68	68	3422	75	71	75	35	75	0	0	0	0
		point45	45										
Doint72 72 3715 75 77 75 38 75 0 0 0 0 0	I-25 SB South of County Line Rd	point69	69	3715	75	77	75	38	75	0	0	0	0
		point71	71	3715	75	77	75	38	75	0	0	0	0
Point74		point72	72	3715	75	77	75	38	75	0	0	0	0
		point73	73	3715	75	77	75	38	75	0	0	0	0
point76 76 3715 75 77 75 38 75 0 0 0 point77 77 3715 75 77 75 38 75 0 0 0 point78 78 3715 75 77 75 38 75 0 0 0 point79 79 3715 75 77 75 38 75 0 0 0 point80 80 3715 75 77 75 38 75 0 0 0 point81 81 3715 75 77 75 38 75 0 0 0 point70 70		point74	74	3715	75	77	75	38	75	0	0	0	0
Point77		point75	75	3715	75	77	75	38	75	0	0	0	0
Point78 78 3715 75 77 75 38 75 0 0 0 0 0 0 0 0 0		point76	76	3715	75	77	75	38	75	0	0	0	0
point79		point77	77	3715	75	77	75	38	75	0	0	0	0
Point80 80 3715 75 77 75 38 75 0 0 0 Point81 81 3715 75 77 75 38 75 0 0 0 Point70 70		point78	78	3715	75	77	75	38	75	0	0	0	0
point81		point79	79	3715	75	77	75	38	75	0	0	0	0
Point70 Foint82 Resident Point82 Resident Point84 Resident Point84 Resident Point84 Resident Point85 Resident Resid		point80	80	3715	75	77	75	38	75	0	0	0	0
County Line Rd NB Off Ramp point82 82 387 35 8 35 4 35 0 0 0 point84 84 387 35 8 35 4 35 0 0 0 point85 85 387 35 8 35 4 35 0 0 0 point86 86 387 35 8 35 4 35 0 0 0 point87 87 387 35 8 35 4 35 0 0 0 point88 88 387 35 8 35 4 35 0 0 0 point89 89 387 35 8 35 4 35 0 0 0 point90 90 387 35 8 35 4 35 0 0 0 point91 91 387 35 8 35 4 35 0 0 0 point92 92 387 35 8 35 4 35 0 0 0 point93 93 387 35 8 35 4 35 0 0 0 point94 94 387 35 8 35 4 35 0 0 0 point95 95 387 35 8 35 4 35 0 0 0 point95 95 387 35 8 35 4 35 0 0 0 point95 95 387 35 8 35 4 35 0 0 0 point95 95 387 35 8 35 4 35 0 0 0 point95 95 387 35 8 35 4 35 0 0 0 point96 95 387 35 8 35 4 35 0 0 0 point96 95 387 35 8 35 4 35 0 0 0 point97 95 387 35 8 35 4 35 0 0 0 point96 95 387 35 8 35 4 35 0 0 0 point97 95 387 35 8 35 4 35 0 0 0 point97 95 387 35 8 35 4 35 0 0 0 point98 95 387 35 8 35 4 35 0 0 0 point99 95 387 35 8 35 4 35 0 0 0 point90 90 90 90 90 90 90 90		point81	81	3715	75	77	75	38	75	0	0	0	0
point84 84 387 35 8 35 4 35 0 0 0 point85 85 387 35 8 35 4 35 0 0 0 point86 86 387 35 8 35 4 35 0 0 0 point87 87 387 35 8 35 4 35 0 0 0 point88 88 387 35 8 35 4 35 0 0 0 point89 89 387 35 8 35 4 35 0 0 0 point90 90 387 35 8 35 4 35 0 0 0 point91 91 387 35 8 35 4 35 0 0 0 point92 92 387 35 8 <t< td=""><td></td><td>point70</td><td>70</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		point70	70										
point85 85 387 35 8 35 4 35 0 0 0 point86 86 387 35 8 35 4 35 0 0 0 point87 87 387 35 8 35 4 35 0 0 0 point88 88 387 35 8 35 4 35 0 0 0 point89 89 387 35 8 35 4 35 0 0 0 point90 90 387 35 8 35 4 35 0 0 0 point91 91 387 35 8 35 4 35 0 0 0 point92 92 387 35 8 35 4 35 0 0 0 point93 93 387 35 8 35 4 35 0 0 0 point94 94 387 35 8 35 4 35 0 0 0 point95 95 387 35 8 35 4 35 0 0 0	County Line Rd NB Off Ramp	point82	82	387	35	8	35	4	35	0	0	0	0
point86 86 387 35 8 35 4 35 0 0 0 point87 87 387 35 8 35 4 35 0 0 0 point88 88 387 35 8 35 4 35 0 0 0 point89 89 387 35 8 35 4 35 0 0 0 point90 90 387 35 8 35 4 35 0 0 0 point91 91 387 35 8 35 4 35 0 0 0 point91 91 387 35 8 35 4 35 0 0 0 point92 92 387 35 8 35 4 35 0 0 0 point93 93 387 35 8 <t< td=""><td></td><td>point84</td><td>84</td><td>387</td><td>35</td><td>8</td><td>35</td><td>4</td><td>35</td><td>0</td><td>0</td><td>0</td><td>0</td></t<>		point84	84	387	35	8	35	4	35	0	0	0	0
point87 87 387 35 8 35 4 35 0 0 0 point88 88 387 35 8 35 4 35 0 0 0 point89 89 387 35 8 35 4 35 0 0 0 point90 90 387 35 8 35 4 35 0 0 0 point91 91 387 35 8 35 4 35 0 0 0 point92 92 387 35 8 35 4 35 0 0 0 point92 92 387 35 8 35 4 35 0 0 0 point93 93 387 35 8 35 4 35 0 0 0 point94 94 387 35 8 <t< td=""><td></td><td>point85</td><td>85</td><td>387</td><td>35</td><td>8</td><td>35</td><td>4</td><td>35</td><td>0</td><td>0</td><td>0</td><td>0</td></t<>		point85	85	387	35	8	35	4	35	0	0	0	0
point88 88 387 35 8 35 4 35 0 0 0 point89 89 387 35 8 35 4 35 0 0 0 point90 90 387 35 8 35 4 35 0 0 0 point91 91 387 35 8 35 4 35 0 0 0 point92 92 387 35 8 35 4 35 0 0 0 point93 93 387 35 8 35 4 35 0 0 0 point94 94 387 35 8 35 4 35 0 0 0 point95 95 387 35 8 35 4 35 0 0 0		point86	86	387	35	8	35	4	35	0	0	0	0
point89 89 387 35 8 35 4 35 0 0 0 point90 90 387 35 8 35 4 35 0 0 0 point91 91 387 35 8 35 4 35 0 0 0 point92 92 387 35 8 35 4 35 0 0 0 point93 93 387 35 8 35 4 35 0 0 0 point94 94 387 35 8 35 4 35 0 0 0 point95 95 387 35 8 35 4 35 0 0 0		point87	87	387	35	8	35	4	35	0	0	0	0
point90 90 387 35 8 35 4 35 0 0 0 point91 91 387 35 8 35 4 35 0 0 0 point92 92 387 35 8 35 4 35 0 0 0 point93 93 387 35 8 35 4 35 0 0 0 point94 94 387 35 8 35 4 35 0 0 0 point95 95 387 35 8 35 4 35 0 0 0		point88	88	387	35	8	35	4	35	0	0	0	0
point91 91 387 35 8 35 4 35 0 0 0 point92 92 387 35 8 35 4 35 0 0 0 point93 93 387 35 8 35 4 35 0 0 0 point94 94 387 35 8 35 4 35 0 0 0 point95 95 387 35 8 35 4 35 0 0 0		point89	89	387	35	8	35	4	35	0	0	0	0
point92 92 387 35 8 35 4 35 0 0 0 point93 93 387 35 8 35 4 35 0 0 0 point94 94 387 35 8 35 4 35 0 0 0 point95 95 387 35 8 35 4 35 0 0 0		point90	90	387	35	8	35	4	35	0	0	0	0
point92 92 387 35 8 35 4 35 0 0 0 point93 93 387 35 8 35 4 35 0 0 0 point94 94 387 35 8 35 4 35 0 0 0 point95 95 387 35 8 35 4 35 0 0 0		point91	91	387	35	8	35	4	35	0	0	0	0
point94 94 387 35 8 35 4 35 0 0 0 0 point95 95 387 35 8 35 4 35 0 0 0			92	387	35	8	35	4	35	0	0	0	0
point95 95 387 35 8 35 4 35 0 0 0		point93	93	387	35	8	35	4	35	0	0	0	0
		point94	94	387	35	8	35	4	35	0	0	0	0
point96 96 387 35 8 35 4 35 0 0 0		point95	95	387	35	8	35	4	35	0	0	0	0
		point96	96	387	35	8	35	4	35	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes						Mon	ument l	Ridge				
	point97	97	387	35	8	35	4	35	0	0	0	0
	point98	98	387	35	8	35	4	35	0	0	0	0
	point83	83										
County Line Rd SB On Ramp	point99	99	293	75	6	75	3	55	0	0	0	0
	point101	101	293	75	6	75	3	55	0	0	0	0
	point102	102	293	75	6	75	3	55	0	0	0	0
	point103	103	293	75	6	75	3	55	0	0	0	0
	point104	104	293	75	6	75	3	55	0	0	0	0
	point105	105	293	75	6	75	3	55	0	0	0	0
	point106	106	293	75	6	75	3	55	0	0	0	0
	point107	107	293	75	6	75	3	55	0	0	0	0
	point108	108	293	75	6	75	3	55	0	0	0	0
	point109	109	293	75	6	75	3	55	0	0	0	0
	point110	110	293	75	6	75	3	55	0	0	0	0
	point111	111	293	75	6	75	3	55	0	0	0	0
	point112	112	293	75	6	75	3	55	0	0	0	0
	point113	113	293	75	6	75	3	55	0	0	0	0
	point114	114	293	75	6	75	3	55	0	0	0	0
	point115	115	293	75	6	75	3	55	0	0	0	0
	point116	116	293	75	6	75	3	55	0	0	0	0
	point117	117	293	75	6	75	3	55	0	0	0	0
	point118	118	293	75	6	75	3	55	0	0	0	0
	point119	119	293	75	6	75	3	55	0	0	0	0
	point120	120	293	75	6	75	3	55	0	0	0	0
	point121	121	293	75	6	75	3	55	0	0	0	0
	point122	122	293	75	6	75	3	55	0	0	0	0
	point123	123	293	75	6	75	3	55	0	0	0	0
	point124	124	293	75	6	75	3	55	0	0	0	0
	point125	125	293	75	6	75	3	55	0	0	0	0
	point100	100										
County Line Rd EB West of Misty Acres	point126	126	656	45	14	45	7	45	0	0	0	0
	point128	128	656	45	14	45	7	45	0	0	0	0
	point129	129	656	45	14	45	7	45	0	0	0	0
	point130	130	656	45	14	45	7	45	0	0	0	0
	point131	131	656	45	14	45	7	45	0	0	0	0
	point132	132	656	45	14	45	7	45	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes						M	onument	Ridge				
	point133	133	656	45	14	45	7	45	0	0	0	0
	point134	134	656	45	14	45	7	45	0	0	0	0
	point135	135	656	45	14	45	7	45	0	0	0	0
	point136	136	656	45	14	45	7	45	0	0	0	0
	point137	137	656	45	14	45	7	45	0	0	0	0
	point138	138	656	45	14	45	7	45	0	0	0	0
	point139	139	656	45	14	45	7	45	0	0	0	0
	point140	140	656	45	14	45	7	45	0	0	0	0
	point141	141	656	45	14	45	7	45	0	0	0	0
	point142	142	656	45	14	45	7	45	0	0	0	0
	point143	143	656	45	14	45	7	45	0	0	0	0
	point144	144	656	45	14	45	7	45	0	0	0	0
	point145	145	656	45	14	45	7	45	0	0	0	0
	point146	146	656	45	14	45	7	45	0	0	0	0
	point147	147	656	45	14	45	7	45	0	0	0	0
	point148	148	656	45	14	45	7	45	0	0	0	0
	point127	127										
County Line Rd EB East of Misty Acres	point149	149	518	45	11	45	5	45	0	0	0	0
	point151	151	518	45	11	45	5	45	0	0	0	0
	point152	152	518	45	11	45	5	45	0	0	0	0
	point153	153	518	45	11	45	5	45	0	0	0	0
	point154	154	518	45	11	45	5	45	0	0	0	0
	point155	155	518	45	11	45	5	45	0	0	0	0
	point156	156	518	45	11	45	5	45	0	0	0	0
	point157	157	518	45	11	45	5	45	0	0	0	0
	point158	158	518	45	11	45	5	45	0	0	0	0
	point159	159	518	45	11	45	5	45	0	0	0	0
	point160	160	518	45	11	45	5	45	0	0	0	0
	point161	161	518	45	11	45	5	45	0	0	0	0
	point162	162	518	45	11	45	5	45	0	0	0	0
	point163	163	518	45	11	45	5	45	0	0	0	0
	point164	164	518	45	11	45	5	45	0	0	0	0
	point165	165	518	45	11	45	5	45	0	0	0	0
	point150	150										
County Line Rd WB East of Misty Acres	point166	166	378	45	8	45	4	45	0	0	0	0
	point168	168	378	45	8	45	4	45	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes							onument	Ridge				
	point169	169	378	45	8	45	4	45	0	0	0	0
	point170	170	378	45	8	45	4	45	0	0	0	0
	point171	171	378	45	8	45	4	45	0	0	0	0
	point172	172	378	45	8	45	4	45	0	0	0	0
	point173	173	378	45	8	45	4	45	0	0	0	0
	point174	174	378	45	8	45	4	45	0	0	0	0
	point175	175	378	45	8	45	4	45	0	0	0	0
	point176	176	378	45	8	45	4	45	0	0	0	0
	point177	177	378	45	8	45	4	45	0	0	0	0
	point178	178	378	45	8	45	4	45	0	0	0	0
	point179	179	378	45	8	45	4	45	0	0	0	0
	point180	180	378	45	8	45	4	45	0	0	0	0
	point181	181	378	45	8	45	4	45	0	0	0	0
	point182	182	378	45	8	45	4	45	0	0	0	0
	point183	183	378	45	8	45	4	45	0	0	0	0
	point184	184	378	45	8	45	4	45	0	0	0	0
	point185	185	378	45	8	45	4	45	0	0	0	0
	point186	186	378	45	8	45	4	0	0	0	0	0
	point187	187	378	45	8	45	4	45	0	0	0	0
	point188	188	378	45	8	45	4	45	0	0	0	0
	point167	167										
County Line Rd WB West of Misty Acres	point189	189	309	45	6	45	3	45	0	0	0	0
	point191	191	309	45	6	45	3	45	0	0	0	0
	point192	192	309	45	6	45	3	45	0	0	0	0
	point193	193	309	45	6	45	3	45	0	0	0	0
	point194	194	309	45	6	45	3	45	0	0	0	0
	point195	195	309	45	6	45	3	45	0	0	0	0
	point196	196	309	45	6	45	3	45	0	0	0	0
	point197	197	309	45	6	45	3	45	0	0	0	0
	point198	198	309	45	6	45	3	45	0	0	0	0
	point199	199	309	45	6	45	3	45	0	0	0	0
	point200	200	309	45	6	45	3	45	0	0	0	0
	point201	201	309	45	6	45	3	45	0	0	0	0
	point202	202	309	45	6	45	3	45	0	0	0	0
	point203	203	309	45	6	45	3	45	0	0	0	0
	point204	204	309	45	6	45	3	45	0	0	0	0

INPUT: TRAFFIC FOR LARGIN VOIUMES						IVI	onument	: Kiage				
	point205	205	309	45	6	45	3	45	0	0	0	0
	point206	206	309	45	6	45	3	45	0	0	0	0
	point207	207	309	45	6	45	3	45	0	0	0	0
	point208	208	309	45	6	45	3	45	0	0	0	0
	point209	209	309	45	6	45	3	45	0	0	0	0
	point210	210	309	45	6	45	3	45	0	0	0	0
	point211	211	309	45	6	45	3	45	0	0	0	0
	point190	190										

	П					Monu	ment Ridge			
				24 July 2024 TNM 2.5						
Monume	nt Ridge					a State h	ighway agend	y substant	iates the u	se
2044 Tota	al PM Peak	Hour W	ith Mitigation			of a diffe	rent type with	the approv	val of FHW	A
	Points									
Width	Name	No.	Coordinates	(pavement)		Flow Cor	ntrol		Segment	
			X	Υ	Z	Control	Speed	Percent	Pvmt	On
						Device	Constraint	Vehicles	Type	Struct?
								Affected		
ft			ft	ft	ft		mph	%		
48.0	point1	1	3,179,954.5	1,468,648.8	7,316.00				Average	
	point3	3	3,180,072.2	1,469,570.8	7,352.00				Average	
	point4	4	3,180,080.8	1,469,636.6	7,350.00				Average	
	point5	5	3,180,089.0	1,469,707.1	7,348.00				Average	
	point6	6	3,180,095.5	1,469,771.4	7,350.00				Average	
	point7	7	3,180,108.2	1,469,857.8	7,352.00				Average	
	point8	8	3,180,127.2	1,469,992.0	7,354.00				Average	
	point9	9	3,180,144.2						Average	
	point10	10							Average	
	point11	11							Average	
	point12	12							Average	
	point13	13							Average	
	point14	14								
	point15	15								
	point16	16			*					
	· ·				*					
	· ·									
	<u> </u>									
	· ·				1					
	<u> </u>									
	· ·									
	<u> </u>									
	<u> </u>									
	point25	25							Average	
	2044 Tota Width	ft 48.0 point1 point3 point4 point5 point6 point7 point8 point10 point11 point11 point12 point13 point14 point15 point14 point15 point15 point16 point15 point16 point16 point17 point18 point19 point20 point21 point21 point23 point23 point24 point25	Points Width Name No.	Points Width Name No. Coordinates X	Monument Ridge 2044 Total PM Peak Hour With Mitigation Points	Monument Ridge 2044 Total PM Peak Hour With Mitigation	Monument Ridge	Nonument Ridge Points Po	Monument Ridge 2044 Total PM Peak Hour With Mitigation Points Points Name No. Coordinates (pavement) Flow Control Speed Percent Constraint Vehicles Affected Af	Monument Ridge 2044 Total PM Peak Hour With Mitigation Points No. Coordinates (pavement) X Y Z Control Speed Percent Type Mith the approval of FHW.

NPUT: ROADWAYS			a= a			ment Ridge		
		point27	27 3,180,3				Average	
		point28	28 3,180,3				Average	
		ooint29	29 3,180,3				Average	
		point2	2 3,180,3		1			
I-25 NB Lane Drop	48.0 p	ooint30	30 3,180,3	56.8 1,471,760.0			Average	
	F	ooint32	32 3,180,3	61.8 1,471,808.0	7,314.00		Average	
	l p	ooint33	33 3,180,3	69.8 1,471,859.8	7,312.00		Average	
	l F	ooint34	34 3,180,3	77.5 1,471,921.9	7,310.00		Average	
	F	ooint35	35 3,180,3	36.2 1,471,988.0	7,308.00		Average	
	F	ooint36	36 3,180,3	97.5 1,472,065.4	7,306.00		Average	
	F	ooint37	37 3,180,4	14.0 1,472,190.6	7,304.00		Average	
	ļ ķ	ooint31	31 3,180,4	16.0 1,472,204.0	7,304.00			
I-25 NB North of County Line Rd	36.0 p	ooint38	38 3,180,4	16.0 1,472,210.0	7,304.00		Average	
	F	ooint40	40 3,180,4	52.0 1,472,540.9	7,302.00		Average	
	ļ r	ooint41	41 3,180,4	36.8 1,472,828.6	7,300.00		Average	
	ŗ	ooint42	42 3,180,4	90.0 1,472,846.5	7,300.00		Average	
	ŗ	ooint43	43 3,180,4	97.0 1,472,895.5	7,300.00		Average	
	ŗ	ooint39	39 3,180,5	31.5 1,473,140.2	7,298.00			
I-25 SB North of County Line Rd	48.0 p	ooint44	44 3,180,4	58.0 1,473,121.8	7,298.00		Average	
	F	ooint46	46 3,180,4	06.8 1,472,731.8	7,300.00		Average	
	F	ooint47	47 3,180,3	61.5 1,472,368.8	7,302.00		Average	
	ļ ļ	ooint48	48 3,180,3	35.8 1,472,167.6	7,304.00		Average	
	ļ ļ	ooint49	49 3,180,3	24.5 1,472,081.1	7,306.00		Average	
	ļ ļ	ooint50	50 3,180,3	16.0 1,472,019.9	7,308.00		Average	
	ļ ļ	ooint51	51 3,180,3	09.2 1,471,952.6	7,310.00		Average	
	F	ooint52	52 3,180,3	02.2 1,471,902.8	7,312.00		Average	
	ļ r	ooint53	53 3,180,2	97.0 1,471,850.1	7,314.00		Average	
	ļ ļ	ooint54	54 3,180,2	37.5 1,471,797.4	7,316.00		Average	
	ŗ	ooint55	55 3,180,2	77.2 1,471,732.2	7,318.00		Average	
	ļ ļ	ooint56	56 3,180,2	70.2 1,471,678.4	7,320.00		Average	
	F	ooint57	57 3,180,2	66.5 1,471,632.4	7,322.00		Average	
	ŗ	ooint58	58 3,180,2	56.2 1,471,566.8	7,324.00		Average	
	ļ ļ	ooint59	59 3,180,2	50.8 1,471,513.2	7,326.00		Average	
		ooint60		1,471,453.0			Average	
	ŗ	ooint61	61 3,180,2	35.0 1,471,405.1	7,330.00		Average	
	ļ ļ	ooint62	62 3,180,2	28.2 1,471,350.8	7,332.00		Average	
	ļ ļ	ooint63	63 3,180,2	21.0 1,471,294.1	7,334.00		Average	
	F	ooint64	64 3,180,2	15.2 1,471,245.6	7,336.00		Average	
	l l	ooint65	65 3,180,2	08.0 1,471,190.0	7,338.00		Average	

 $\textbf{C:} \\ \textbf{Users} \\ \textbf{kdfer} \\ \textbf{OneDrive} \\ \textbf{Documents} \\ \textbf{TNM} \\ \textbf{MonumentRidgeFINAL} \\ \textbf{2024-07-MonumentRidgeFINAL} \\$

NPUT: ROADWAYS							Monu	ment Ridge			
		point66	66	3,180,200.0	1,471,125.5	7,340.00				Average	
		point67	67	3,180,193.0	1,471,070.8	7,342.00				Average	
		point68	68	3,180,183.5	1,471,010.1	7,344.00				Average	
		point45	45	3,180,175.8	1,470,945.2	7,346.00					
I-25 SB South of County Line Rd	48.0	point69	69	3,180,175.8	1,470,939.2	7,346.00				Average	
		point71	71	3,180,167.0	1,470,877.8	7,348.00				Average	
		point72	72	3,180,154.0	1,470,784.9	7,350.00				Average	
		point73	73	3,180,141.5	1,470,693.4	7,352.00				Average	
		point74	74	3,180,124.0	1,470,536.5	7,354.00				Average	
		point75	75	3,180,063.0	1,470,073.9	7,354.00				Average	
		point76	76	3,180,045.0	1,469,945.8	7,352.00				Average	
		point77	77	3,180,044.2	1,469,934.8	7,352.00				Average	-
		point78	78	3,180,031.8	1,469,837.8	7,350.00				Average	
		point79	79	3,180,018.5	1,469,723.9	7,350.00				Average	
		point80	80	3,180,014.0	1,469,690.9	7,352.00				Average	
		point81	81	3,180,010.2	1,469,664.0	7,354.00				Average	
		point70	70	3,179,883.2	1,468,648.0	7,316.00					
County Line Rd NB Off Ramp	12.0	point82	82	3,180,392.5	1,471,754.0	7,314.00				Average	
		point84	84	3,180,402.0	1,471,813.1	7,312.00				Average	
		point85	85	3,180,407.0	1,471,865.2	7,310.00				Average	
		point86	86	3,180,415.2	1,471,932.6	7,308.00				Average	
		point87	87	3,180,424.2	1,471,997.0	7,306.00				Average	
		point88	88	3,180,437.0	1,472,092.9	7,304.00				Average	
		point89	89	3,180,453.0	1,472,214.5	7,302.00				Average	
		point90	90	3,180,489.0	1,472,363.8	7,302.00				Average	
		point91	91	3,180,512.0	1,472,439.9	7,304.00				Average	
		point92	92	3,180,529.0	1,472,490.5	7,306.00				Average	
		point93	93	3,180,536.5	1,472,507.4	7,308.00				Average	
		point94	94	3,180,541.2	1,472,520.6	7,308.00				Average	
		point95	95	3,180,553.8	1,472,557.1	7,310.00				Average	
		point96	96	3,180,573.2	1,472,598.8	7,312.00				Average	
		point97	97	3,180,593.8	1,472,646.6	7,314.00				Average	
		point98	98	3,180,609.2	1,472,696.1	7,316.00				Average	
		point83	83		1,472,779.1					-	
County Line Rd SB On Ramp	12.0	point99	99	3,180,238.2	1,472,755.1	7,326.00	Onramp	0.00	100	Average	
·		point101	101		1,472,671.9		-			Average	
		point102	102	3,180,240.0	1,472,623.1	7,322.00				Average	
		point103	103		1,472,569.1	7,320.00				Average	
		point104	104		1,472,528.2	7,318.00				Average	

 $\textbf{C:} \\ \textbf{Users} \\ \textbf{kdfer} \\ \textbf{OneDrive} \\ \textbf{Documents} \\ \textbf{TNM} \\ \textbf{MonumentRidgeFINAL} \\ \textbf{2024-07-MonumentRidgeFINAL} \\$

NPUT: ROADWAYS						Mon	ument Ridge	
		point105	105	3,180,239.5	1,472,479.8	7,316.00		Average
		point106	106	3,180,239.5	1,472,418.8	7,314.00		Average
		point107	107	3,180,239.5	1,472,342.9	7,312.00		Average
		point108	108	3,180,239.5	1,472,221.9	7,310.00		Average
		point109	109	3,180,239.0	1,472,024.8	7,310.00		Average
		point110	110	3,180,237.0	1,471,898.9	7,312.00		Average
		point111	111	3,180,237.0	1,471,820.8	7,314.00		Average
		point112	112	3,180,233.8	1,471,779.1	7,316.00		Average
		point113	113	3,180,228.5	1,471,718.1	7,318.00		Average
		point114	114	3,180,224.5	1,471,665.1	7,320.00		Average
		point115	115	3,180,223.2	1,471,615.1	7,322.00		Average
		point116	116	3,180,219.0	1,471,560.8	7,324.00		Average
		point117	117	3,180,215.5	1,471,502.2	7,326.00		Average
		point118	118	3,180,209.0	1,471,450.6	7,328.00		Average
		point119	119	3,180,203.5	1,471,396.2	7,330.00		Average
		point120	120	3,180,196.0	1,471,338.9	7,332.00		Average
		point121	121	3,180,189.8	1,471,283.9	7,334.00		Average
		point122	122	3,180,184.2	1,471,230.1	7,336.00		Average
		point123	123	3,180,176.2	1,471,174.6	7,338.00		Average
		point124	124	3,180,168.8	1,471,114.5	7,340.00		Average
		point125	125	3,180,162.2	1,471,059.0	7,342.00		Average
		point100	100	3,180,154.0	1,471,003.4	7,344.00		
County Line Rd EB West of Misty Acres	12.0	point126	126	3,180,620.0	1,472,813.9	7,318.00		Average
		point128	128	3,180,678.0	1,472,813.9	7,316.00		Average
		point129	129	3,180,716.5	1,472,813.9	7,314.00		Average
		point130	130	3,180,778.0	1,472,814.8	7,312.00		Average
		point131	131	3,180,808.0	1,472,815.2	7,310.00		Average
		point132	132	3,180,841.8	1,472,815.2	7,308.00		Average
		point133	133	3,180,872.5	1,472,815.2	7,306.00		Average
		point134	134	3,180,909.2	1,472,815.2	7,304.00		Average
		point135	135	3,180,927.2	1,472,816.8	7,302.00		Average
		point136	136	3,180,960.2	1,472,817.2	7,300.00		Average
		point137	137	3,180,984.2				Average
		point138	138		1,472,818.0			Average
		point139	139					Average
		point140	140					Average
		point141	141		1,472,818.8			Average
		point142	142		1,472,818.8			Average
		point143	143		1,472,818.6			Average

NPUT: ROADWAYS						Mo	nument Ridge	
		point144	144	3,181,186.0	1,472,818.6	7,284.00		Average
		point145	145	3,181,216.8	1,472,818.6	7,282.00		Average
		point146	146	3,181,247.8	1,472,818.6	7,280.00		Average
		point147	147	3,181,279.5	1,472,818.6	7,278.00		Average
		point148	148	3,181,304.2	1,472,818.5	7,276.00		Average
		point127	127	3,181,335.5	1,472,818.6	7,274.00		
County Line Rd EB East of Misty Acres	12.0	point149	149	3,181,341.5	1,472,818.6	7,274.00		Average
		point151	151	3,181,362.2	1,472,817.1	7,272.00		Average
		point152	152	3,181,390.5	1,472,818.1	7,270.00		Average
		point153	153	3,181,430.5	1,472,817.1	7,268.00		Average
		point154	154	3,181,494.0	1,472,817.1	7,266.00		Average
		point155	155	3,181,579.0	1,472,817.1	7,264.00		Average
		point156	156	3,181,738.5	1,472,815.9	7,264.00		Average
		point157	157	3,181,869.5	1,472,812.9	7,266.00		Average
		point158	158	3,182,016.0	1,472,809.8	7,268.00		Average
		point159	159	3,182,162.5	1,472,806.6	7,270.00		Average
		point160	160	3,182,257.0	1,472,804.6	7,272.00		Average
		point161	161	3,182,348.0	1,472,802.8	7,274.00		Average
		point162	162	3,182,405.8	1,472,801.4	7,276.00		Average
		point163	163	3,182,450.0	1,472,800.9	7,278.00		Average
		point164	164	3,182,495.5	1,472,800.9	7,280.00		Average
		point165	165	3,182,527.0	1,472,798.8	7,282.00		Average
		point150	150	3,182,535.2	1,472,798.6	7,282.00		
County Line Rd WB East of Misty Acres	12.0	point166	166	3,182,542.8	1,472,829.1	7,282.00		Average
		point168	168	3,182,507.2	1,472,829.6	7,280.00		Average
		point169	169	3,182,467.5	1,472,830.2	7,278.00		Average
		point170	170	3,182,425.0	1,472,830.8	7,276.00		Average
		point171	171	3,182,373.5	1,472,831.5	7,274.00		Average
		point172	172	3,182,300.2	1,472,831.5	7,272.00		Average
		point173	173	3,182,193.8	1,472,834.8	7,270.00		Average
		point174	174	3,182,064.0	1,472,836.0	7,268.00		Average
		point175	175	3,181,940.5	1,472,837.8	7,266.00		Average
		point176	176					Average
		point177	177		1,472,840.6			Average
		point178	178	3,181,664.2	1,472,841.8	7,260.00		Average
		point179	179	3,181,634.5	1,472,842.1	7,258.00		Average
		point180	180			7,256.00		Average
		point181	181		1,472,842.2	7,258.00		Average
		point182	182		1,472,842.1	7,260.00		Average

INPUT: ROADWAYS			Monument Ridge	
		point183	183 3,181,505.5 1,472,842.0 7,262.00	Average
		point184	184 3,181,469.2 1,472,842.0 7,264.00	Average
		point185	185 3,181,442.5 1,472,841.9 7,266.00	Average
		point186	186 3,181,411.8 1,472,841.9 7,268.00	Average
		point187	187 3,181,382.2 1,472,843.2 7,270.00	Average
		point188	188 3,181,354.5 1,472,843.2 7,272.00	Average
		point167	167 3,181,337.5 1,472,843.2 7,274.00	
County Line Rd WB West of Misty Acres	12.0	point189	189 3,181,323.5 1,472,843.9 7,274.00	Average
		point191	191 3,181,299.0 1,472,843.9 7,276.00	Average
		point192	192 3,181,223.0 1,472,845.8 7,278.00	Average
		point193	193 3,181,192.0 1,472,846.1 7,280.00	Average
		point194	194 3,181,172.0 1,472,846.2 7,282.00	Average
		point195	195 3,181,143.0 1,472,846.5 7,284.00	Average
		point196	196 3,181,099.8 1,472,846.9 7,286.00	Average
		point197	197 3,181,075.2 1,472,847.1 7,288.00	Average
		point198	198 3,181,046.0 1,472,847.2 7,290.00	Average
		point199	199 3,181,017.5 1,472,847.4 7,292.00	Average
		point200	200 3,180,989.8 1,472,847.8 7,294.00	Average
		point201	201 3,180,962.5 1,472,848.0 7,296.00	Average
		point202	202 3,180,933.0 1,472,848.2 7,298.00	Average
		point203	203 3,180,905.8 1,472,848.8 7,300.00	Average
		point204	204 3,180,879.8 1,472,848.9 7,302.00	Average
		point205	205 3,180,846.2 1,472,848.8 7,304.00	Average
		point206	206 3,180,818.5 1,472,849.2 7,306.00	Average
		point207	207 3,180,790.2 1,472,849.9 7,308.00	Average
		point208	208 3,180,757.5 1,472,849.9 7,310.00	Average
		point209	209 3,180,717.8 1,472,850.2 7,312.00	Average
		point210	210 3,180,699.5 1,472,850.6 7,314.00	Average
		point211	211 3,180,673.5 1,472,850.5 7,316.00	Average
		point190	190 3,180,624.2 1,472,850.6 7,318.00	

INPUT: RECEIVERS									Monumen	t Ridge		
 	4- 1						04 1 00					
LSC Transportation Consultan	ts, Inc						24 July 20	24				
KDF							TNM 2.5					
INPUT: RECEIVERS												
PROJECT/CONTRACT:	Monum	ent R	idge		1							
RUN:			•	With Mitigatio	n							
Receiver												
Name	No.	#DUs	Coordinates	(ground)			Height	Input Sou	nd Levels a	and Criter	ia	Active
			X	Υ	Z		above	Existing	Impact Cr	iteria	NR	in
							Ground	LAeq1h	LAeq1h	Sub'l	Goal	Calc.
											<u> </u>	
			ft	ft	ft		ft	dBA	dBA	dB	dB	
Receiver 1	1	1	3,180,703.5	1,469,689.0		7,345.00	4.92	0.00	66	10.	0 8.	0
Receiver 2	2	1	3,180,707.8	1,470,009.0		7,336.00	4.92	0.00	66	10.	0 8.	0
Receiver 3	3	1	3,180,369.0	1,470,081.2		7,337.50	4.92	0.00	66	10.	0 8.	0
Receiver 4	4	1	3,180,366.5	1,470,256.6		7,337.00	4.92	0.00	66	10.	0 8.	0
Receiver 5	5	1	3,180,369.0	1,470,346.4		7,337.50	4.92	0.00	66	10.	0 8.	0
Receiver 6	6	1	3,180,408.0	1,470,531.0		7,334.50	4.92	0.00	66	10.	0 8.	0
Receiver 7	7	1	3,180,417.0	1,470,598.6		7,335.00	4.92	0.00	66	10.	0 8.	0
Receiver 8	8	1	3,180,410.8	1,470,654.0		7,335.50	4.92	0.00	66	10.	0 8.	0
Receiver 9	9	1	3,180,445.5	1,470,931.8		7,321.50	4.92	0.00	66	10.	0 8.	0
Receiver 10	10	1	3,180,477.0	1,471,172.8		7,326.00	4.92	0.00	66	10.	0 8.	0
Receiver 11	11	1	3,180,483.0	1,471,219.4		7,325.50	4.92	0.00	66	10.	0 8.	0
Receiver 12	12	1	3,180,498.2	1,471,335.6		7,324.00	4.92	0.00	66	10.	0 8.	0
Receiver 13	13	1	3,180,512.8	1,471,446.1		7,323.50	4.92	0.00	66	10.	0 8.	0
Receiver 14	14	1	3,180,541.0	1,471,663.2		7,305.50	4.92	0.00	66	10.	0 8.	0
Receiver 15	15	1	3,180,596.0	1,472,034.2		7,297.50	4.92	0.00	66	10.	0 8.	0
Receiver 16	16	1	3,180,790.8	1,472,372.2		7,289.00	4.92	0.00	66	10.	0 8.	0
Receiver 17	17	1	3,180,974.8	1,472,524.1		7,285.00	4.92	0.00	66	10.	0 8.	0
Receiver 18	18	1	3,181,250.8	1,472,525.2		7,277.50	4.92	0.00	66	10.	0 8.	0
Receiver 19	20	1	3,181,632.2	1,472,464.1		7,278.00	4.92	0.00	66	10.	0 8.	0
Receiver 20	22	1	3,181,822.5	1,472,522.6		7,276.00	4.92	0.00	66	10.	0 8.	0
Receiver 21	23	1	3,181,908.2	1,472,730.0		7,272.00	4.92	0.00	66	10.	0 8.	0
Receiver 22	24	1	3,182,105.5	1,472,726.4		7,274.00	4.92	0.00	66	10.	0 8.	0

INPUT: RECEIVERS Monument Ridge

Receiver 23	27	1	3,180,631.8	1,471,322.0	7,322.00	4.92	0.00	66	10.0	8.0	Υ
Receiver 24	38	1	3,180,645.0	1,471,423.5	7,322.00	4.92	0.00	66	10.0	8.0	Y
Receiver 25	40	1	3,180,652.5	1,471,481.6	7,322.00	4.92	0.00	66	10.0	8.0	Υ

___ Monument Ridge

LSC Transportation Consultants, Inc			24 July 2024	
KDF			TNM 2.5	
INPUT: TERRAIN LINES				
PROJECT/CONTRACT:	Monun	nent Ridge		
RUN:		otal PM Peak	Hour With Mi	tigation
Terrain Line	Points	<u> </u>		
Name	No.	Coordinates	(ground)	
		X	Y	Z
		ft	ft	ft
Terrain Line12	362	3,180,382.2	1,471,395.2	7,328.00
	365	3,180,380.8	1,471,410.2	7,326.00
	366	3,180,387.0	1,471,441.1	7,324.00
	367	3,180,441.0	1,471,525.8	7,322.00
	368	3,180,445.0	1,471,536.8	7,320.00
	369	3,180,450.5	1,471,548.0	7,318.00
	370	3,180,455.0	1,471,558.2	7,316.00
	371	3,180,485.8	1,471,578.2	7,314.00
	372	3,180,504.0	1,471,623.2	7,316.00
	373	3,180,503.0	1,471,664.4	7,314.00
	374	3,180,516.5	1,471,760.5	7,312.00
	375	3,180,529.0	1,471,860.0	7,310.00
	376	3,180,538.2	1,471,938.8	7,308.00
	377	3,180,564.0	1,472,047.5	7,306.00
	378	3,180,609.0	1,472,133.8	7,304.00
	379	3,180,649.5	1,472,203.6	7,302.00
	380	3,180,689.8	1,472,270.4	7,300.00
	381	3,180,728.5	1,472,339.6	7,298.00
	382	3,180,760.2	1,472,393.8	7,296.00
	383	3,180,783.8	1,472,403.0	7,294.00
	384	3,180,808.0	1,472,409.4	7,292.00
	385	3,180,832.0	1,472,415.9	7,290.00
	363	3,180,856.0	1,472,422.4	7,288.00
Terrain Line16	490	3,180,355.8	1,470,042.9	7,346.00

INPUT: TERRAIN LINES

 $C: \label{local-continuity} C: \label{local-continuity} C: \label{local-continuity} Wonument Ridge FINAL \label{local-continuity} A continuity of the cont$

INPUT: TERRAIN LINES Monument Ridge

INFOI. TERRAIN LINES				
	492	3,180,337.5	1,470,050.8	7,346.00
	493	3,180,332.5	1,470,059.2	7,346.00
	494	3,180,328.8	1,470,125.2	7,346.00
	495	3,180,333.2	1,470,158.2	7,344.00
	496	3,180,339.0	1,470,172.4	7,342.00
	497	3,180,342.0	1,470,179.6	7,342.00
	498	3,180,343.2	1,470,194.2	7,342.00
	499	3,180,342.5	1,470,211.2	7,342.00
	500	3,180,344.2	1,470,228.9	7,342.00
	501	3,180,335.8	1,470,240.9	7,342.00
	502	3,180,328.8	1,470,244.6	7,344.00
	503	3,180,323.8	1,470,266.6	7,346.00
	504	3,180,319.8	1,470,305.5	7,348.00
	505	3,180,315.2	1,470,340.1	7,350.00
	506	3,180,323.0	1,470,424.2	7,350.00
	507	3,180,330.0	1,470,437.1	7,348.00
	508	3,180,338.0	1,470,458.8	7,346.00
	509	3,180,345.5	1,470,476.9	7,344.00
	510	3,180,367.2	1,470,486.8	7,342.00
	511	3,180,359.2	1,470,497.8	7,340.00
	512	3,180,397.2	1,470,571.0	7,340.00
	513	3,180,389.5	1,470,585.0	7,342.00
	514	3,180,381.2	1,470,601.8	7,344.00
	515	3,180,376.0	1,470,617.1	7,344.00
	516	3,180,386.5	1,470,684.2	7,344.00
	517	3,180,391.8	1,470,718.8	7,344.00
	518	3,180,387.2	1,470,733.9	7,346.00
	519	3,180,390.8	1,470,786.6	7,346.00
	520	3,180,394.8	1,470,857.8	7,346.00
	521	3,180,390.0	1,470,878.9	7,348.00
	522	3,180,385.0	1,470,898.2	7,350.00
	523	3,180,387.5	1,470,944.5	7,350.00
	524	3,180,396.2	1,470,995.4	7,348.00
	525	3,180,403.8	1,471,023.2	7,346.00
	526	3,180,412.0	1,471,063.1	7,344.00
	527	3,180,422.0	1,471,118.4	7,342.00

 $C: \label{local-continuity} C: \label{local-continuity} C: \label{local-continuity} Wonument Ridge FINAL \label{local-continuity} A continuity of the cont$

INPUT: TERRAIN LINES

INI OI. ILINAIN LINEO				
	528	3,180,430.8	1,471,149.8	7,340.00
	529	3,180,439.8	1,471,184.2	7,338.00
	530	3,180,448.0	1,471,209.2	7,336.00
	531	3,180,456.2	1,471,237.8	7,334.00
	532	3,180,465.0	1,471,267.9	7,332.00
	533	3,180,476.5	1,471,334.2	7,330.00
	534	3,180,483.5	1,471,345.6	7,328.00
	535	3,180,443.2	1,471,362.4	7,328.00
	536	3,180,442.5	1,471,367.9	7,328.00
	537	3,180,446.5	1,471,403.9	7,328.00
	538	3,180,465.8	1,471,444.9	7,328.00
	539	3,180,521.5	1,471,495.6	7,328.00
	540	3,180,553.0	1,471,508.4	7,326.00
	541	3,180,580.0	1,471,514.2	7,324.00
	542	3,180,607.8	1,471,515.8	7,322.00

543 3,180,636.8 1,471,512.9

544 3,180,670.2 1,471,508.5

545 3,180,711.0 1,471,503.2

491 3,180,779.5 1,471,493.2

7,320.00

7,318.00

7,316.00

7,314.00

Monument Ridge

Key pages from the Monument Ridge East TIS



Monument Ridge East Traffic Impact Study

Prepared for:
Monument Ridge East, LLC
5050 List Drive
Colorado Springs, CO 80919
<via email>

MARCH 11, 2024

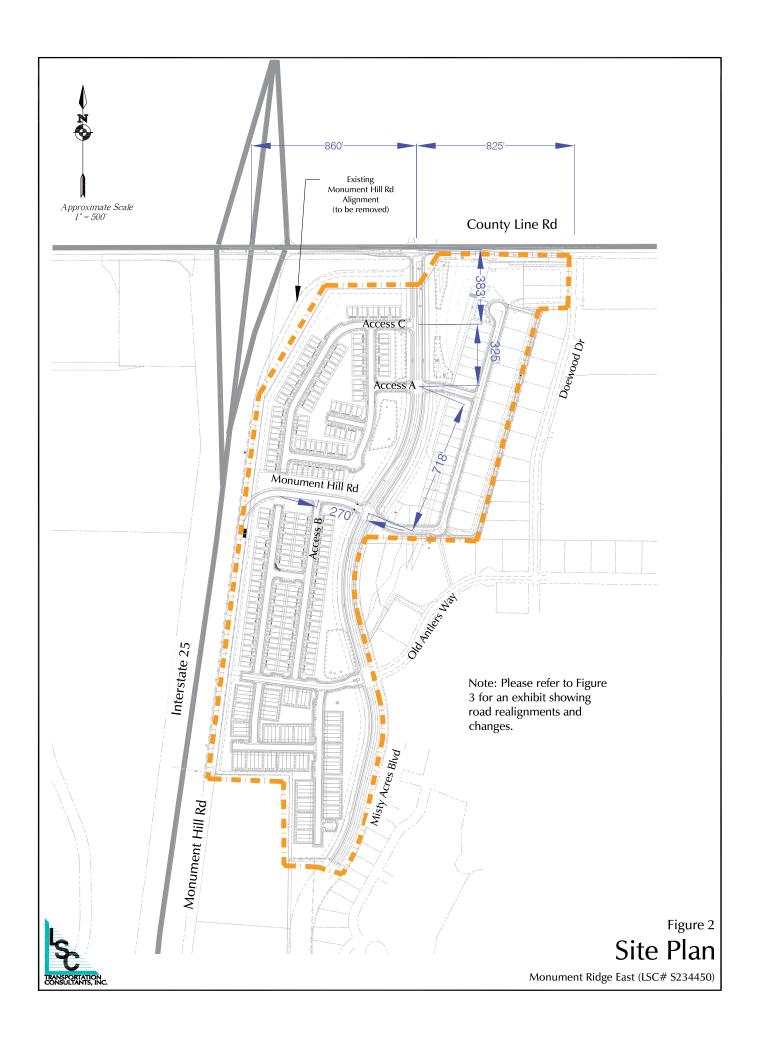
LSC Transportation Consultants, Inc. Prepared by: Jeffrey C. Hodsdon, P.E.

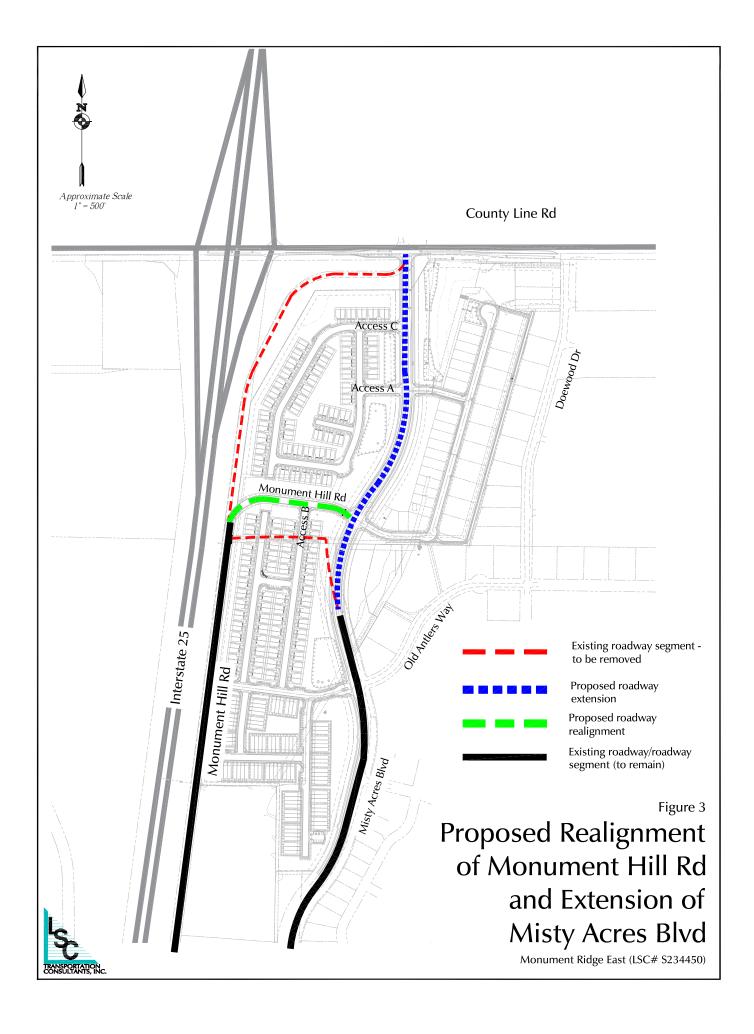
LSC #S234450

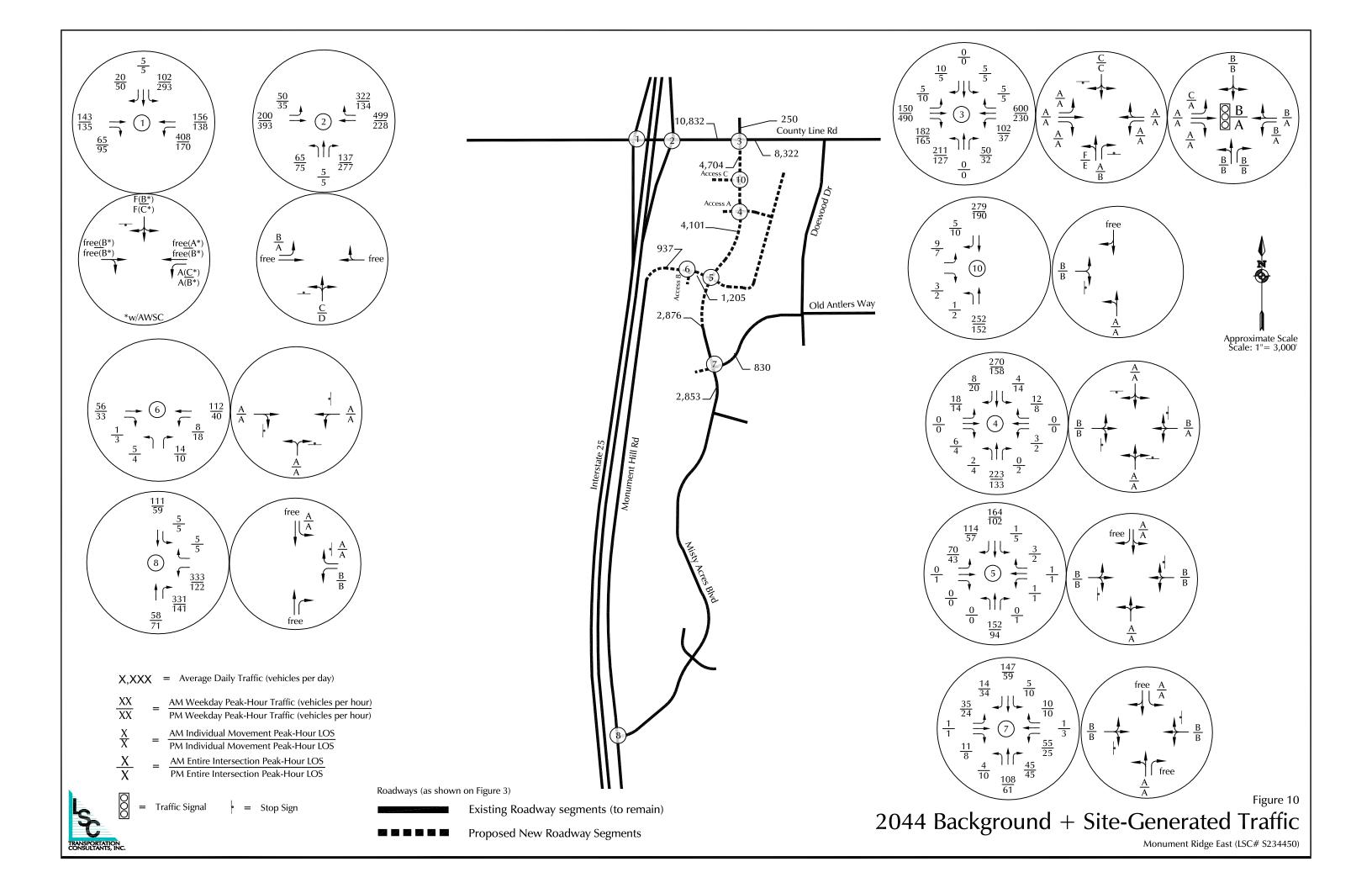




Figure 1 Vicinity

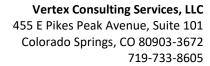






Monument Ridge Preliminary Plan Letter of Intent







Monument Ridge East Preliminary Plan

Letter of Intent

May 17, 2024 REVISED: August 18, 2024

PCD File No: SP241

Monument Ridge East, LLC 5055 List Drive Colorado Springs, CO 80919

OWNER: Monument Ridge East, LLC

5055 List Drive

Colorado Springs, CO 80919

PLANNER: Vertex Consulting Services, LLC

455 E Pikes Peak Avenue, Suite 101

Colorado Springs, CO 80903

719-733-8605

craig.dossey@vertexcos.com

PROPERTY LOCATION:

Southeast of the Interstate 25 and County Line Road interchange

TAX SCHEDULE NOS:

7102200013, 7102200008, 7102200006, 7102201001, 7102201014, and 7102200010

ACREAGE:

59.48 acres

CURRENT ZONING:

PUD, CC, CS, C-1, RS-20000 (Concurrent application for rezoning to RM-12 and RS-6000)

REQUEST AND SITE SIZE:

Vertex Consulting Services, LLC, on behalf of Monument Ridge East, LLC, is respectfully submitting an application for approval of a preliminary plan for the six parcels listed above which comprise a total of 59.48 acres. The preliminary plan depicts 59 lots ranging in size from 0.14 acres to 1.62 acres and ten (10) tracts ranging in size from 0.09 acres to 7.31 acres. The property is located on the east side of Interstate 25, south of County Line Road and is bisected by the planned extension of Misty Acres Boulevard.

NOISE MITIGATION STANDARDS AND LDC APPLICABILITY:

Land Development Code Discourages the Use of Noise Barriers

In discussions with County review staff, there was a request for the applicant to construct a noise barrier along the area of the property that is projected to potentially experience increased noise levels originating from the Interstate 25 offramp to County Line Road. Subsection (c)(1) of Section 8.4.2(B) of the Code should be considered when determining the appropriateness of requiring a noise barrier. While this section clearly states that "Noise barriers are generally more appropriate within an urban area or adjacent to urban development" it also goes on to caution the use of noise barriers by stating the following:

"A noise barrier should not be the default design alternative unless other mitigation strategies cannot practically and effectively achieve the noise reduction." (emphasis added)

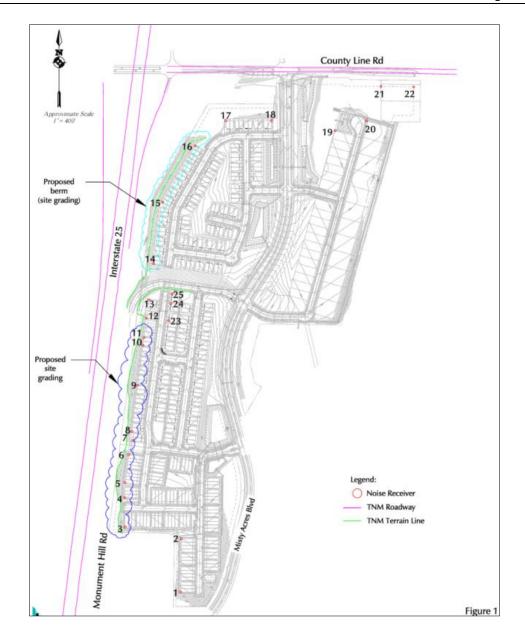
Based upon this citation from the County's Land Development Code and the minimal degree of potential noise overage for a very limited area of the project, as discussed below, it is appropriate to complete a full evaluation of the Code standards and to do so with the perspective that constructing noise barriers is not the desired noise mitigation approach of the County.

Analysis of Noise Impact Standards, Assessment of Applicability, and Proposed Mitigation

Section 8.4.2 of the <u>El Paso County Land Development Code</u> provides standards for addressing noise impacts associated with divisions of land. More specifically, subsection (a), Impacts of Noise Pollution to be Minimized, states the following:

"Divisions of land shall be designed to minimize the impacts of noise pollution to residents. Divisions of land shall be designed with reference to potential and actual noise pollution hazards based on both existing conditions and project conditions as identified in the TIS or noise study."

The associated Noise Impact Study, prepared by LSC Transportation Consultants, Inc. dated August 2, 2024, identifies the potential for 3 of the 25 noise receptor locations to exceed the County's noise level threshold of 67dBA associated with projected roadway noise coming from Interstate 25 and County Line Road. More specifically, the receptor locations that were found to potentially exceed the threshold are location nos. 12, 13, and 25 (see map below) with potential exceedances of 2.6, 4.1, and 1.4 dBA, respectively. Each of the receptors is located near Monument Hill Road as it is proposed to turn east into the development and near the northbound Interstate 25 offramp at County Line Road.



Subsection (2)(b) of Section 8.4.2.B of the Land Development Code specifically addresses "Roadway and Railroad Mitigation." Each of the provisions of that subsection are included below along with an analysis of their applicability to the Monument Ridge East Preliminary Plan and the mitigation measures being proposed by the applicant where required.

Subsection 8.4.2.B(2)(b)(i):

- (i) Types of Noise Mitigation. Where noise levels exceed or are predicted to exceed 67 dBA Equivalent Sound Level (Leq), any or all of the following mitigation measures shall be included in the design:
 - Increased building setbacks;
 - Modified site orientation for buildings and outdoor areas;

- Landscape buffers or tracts;
- Noise easement;
- Soil berming;
- Noise barrier.

In the event that building setbacks or orientation standards are utilized as the mitigation strategy, those building setbacks and orientation standards shall be noted on the plat.

Subsection 8.4.2.B(2)(b)(i) Analysis: No Waiver Needed – Mitigation Proposed

The associated Noise Impact Study projects that a small, isolated area of the project nearest to the extension of Monument Hill Road may experience noise levels slightly in excess of the standard of 67dBA. Those exceedances have been projected to amount to 2.6, 4.1, and 1.4 dBA for receptors 12, 13, and 25, respectively. For this reason, the applicant is proposing to install a landscape buffer and berm along the western boundary of the property. More specifically, the proposed landscaping in the area of the potential noise exceedance is proposed to include only evergreen plantings in the form of 6-foot-tall Austrian Black Pines and 6-foot-tall Pinion Pines (both highlighted in green) as depicted below in a selection from the associated preliminary landscape plan:



In addition, the existing topography of the property suggests that vertical construction of residences on the site will occur at an elevation approximately 20 feet below the edge of the adjacent right-of-way to the west. In addition, due the slope of the hillside extending east from the edge of the right-of-way to the west towards the buildable portion of the property will cause the building footprints to be located further east into the site in a location that will far exceed the required RM-12 setback of 20 feet (the structures in this area are double-fronted as a result of backing up to Monument Hill Road and fronting the local roadway providing access to the units). The estimated distance from the eastern right-of-way line on Monument Hill Road to the planned building sites is approximately 60 feet, which would represent an increase in building setback of around 40 feet beyond the required 20 feet. When taken together, the existing/finished grade of the property, the necessity of having increased building setbacks, and installation of the planned landscaping and berming in the area will have the cumulative effect of mitigating any potential impacts to residences in the area of the projected minor exceedances.

Subsection 8.4.2.B(2)(b)(ii):

(ii) Mitigation in Residential Subdivisions. Noise mitigation may be required for any residential subdivision, and shall be required for single-family and duplex residential subdivisions, which contain lots that will be individually owned, <u>and</u> are located adjacent to expressways, principal arterials or railroads. Where required, mitigation shall reduce the existing or projected exterior noise levels at the building site location and outdoor areas for patios and decks closest to the noise generator to 67 dBA Leq. A noise study to determine the area of potential impact is required where a subdivision includes or borders an expressway, principal arterial or railroad. A noise study is not required for minor subdivisions and minor replats.

Subsection 8.4.2.B(2)(b)(ii) Analysis: No Waiver Needed and No Mitigation Required

The first sentence of this standard does not apply to this project because the proposed preliminary plan does not "contain lots that will be individually owned". The area of the preliminary plan that is projected to potentially exceed the noise standard is being designed and will be developed for attached single-family rental units or condo units, not individually owned lots. While there is an argument that this area "borders an expressway, principal arterial or railroad" via the proximity to the Interstate 25 offramp, that portion of the standard only applies as a result of the "and" separating the two requirements, which has been emphasized above for reference. For this reason, and due to the fact that this area will not have individually owned lots, the applicant suggests the proximity of the property to the Interstate 25 offramp does not have any bearing on the project in the context of noise mitigation for the purposes of applying this subsection (ii).

Subsection 8.4.2.B(2)(b)(iii):

(iii) Noise Activity Covenant and Disclosure Required. In the event noise mitigation within the area subject to noise levels of 67 dBA Leq would not achieve a noise level reduction of a minimum of 5 dBA Leq without a noise barrier, a Noise Activity Covenant and Disclosure is required to be applied to each lot which will remain in the 67 dBA Leq, either by notation on the plat or by recording a separate document.

<u>Subsection 8.4.2.B(2)(b)(iii) Analysis: No Waiver Needed – Mitigation and Noise Activity</u> Covenant & Disclosure Proposed

It is anticipated that the landscape buffer along the western portion of the property will reduce the level of noise from the Interstate 25 offramp as experienced by the occupants of the single-family attached housing. However, in order to ensure that all owners of property within the identified area are fully aware of the potential for noise impacts, even if such impacts are, in fact, mitigated by the proposed landscaping buffer, the applicant is proposing to apply the standard Noise Activity Covenant and Disclosure to each ownership within the potentially affected area via notation on the subsequent final plat and agrees to a condition on the Preliminary Plan approval to that same effect. Since the maximum project noise level overage in the area is 4.1 dBA, the use of the Covenant and Disclosure would be in compliance with this subsection (iii) in lieu of building a relatively short, standalone noise barrier. In addition, the developer intends to require builders of residences in the area to use noise mitigation construction techniques such as higher rated wall and roof insulation and thicker, higher quality windows.

Subsection 8.4.2.B(2)(b)(iv):

(iv) Noise Mitigation Located Outside Right-of-Way. Noise mitigation measures shall be located in easements or on tracts to be maintained by a special district or homeowners association and outside of the right-of-way or roadway easements, unless otherwise approved by the ECM Administrator. A noise easement or maintenance agreement is required to assure access to and maintenance of the noise mitigation.

<u>Subsection 8.4.2.B(2)(b)(iv) Analysis: No Waiver Needed – Landscape Buffer to be</u> Located within Tracts

The proposed landscape buffer along the west side of the property is proposed to be located within tracts and will be owned and maintained by the proposed Monument Ridge Metropolitan District. A noise access and maintenance agreement can be put in place for the benefit of the County upon request, otherwise, maintenance of the area will be solely the responsibility of the District.

OVERLAY ZONING:

There is no overlay zoning applicable to the subject property.

COMPLIANCE WITH CRITERIA OF APPROVAL AND SUBDIVISION DESIGN STANDARDS

The proposed subdivision meets the criteria for approval included within Section 7.2.1.D.2 of the <u>El Paso County Land Development Code</u> as described below:

The subdivision is in general conformance with the goals, objectives, and policies of the Master Plan;

Your El Paso County Master Plan

Chapter 1 of <u>Your El Paso Master Plan</u> (2021) states that the <u>Plan</u> is "general in nature-it cannot tackle every issue in sufficient detail to determine every type of necessary action." In addition, Chapter 1 goes on to state that the <u>Plan</u> "is intended to provide clearer and more coordinated policy, resulting in a document that effectively communicates County goals and identifies specific actions to achieve both County-wide and local area objectives." When taken together, these two statements suggest to the reader that the <u>Plan</u> may only address certain issues at a cursory level and that specific steps or actions for addressing such issues may not be offered within the <u>Plan</u>. However, that is not the case with this preliminary plan and the concurrent map amendment (rezoning) request, as identified below.

Chapter 3 Land Use

Key Area Analysis: "Tri-Lakes Key Area" and "Potential Areas for Annexation"

"Tri-Lakes" Key Area

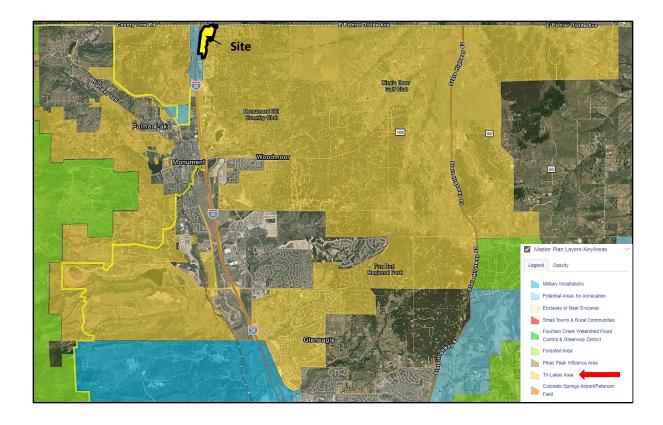
A portion of the property is located within the Tri-Lakes Key Area. The <u>Plan</u> describes the key area as follows:

"Tri-Lakes is the northern gateway into the County along Interstate 25 and Highway 83. It is situated between Pike National Forest, the United States Air Force Academy, and Black Forest. With significant suburban development and some mixed-use development, this Key Area supports the commercial needs of many of the residents in northern El Paso County. *Tri-Lakes also serves as a place of residence for many who commute to work in the Denver Metropolitan Area*. It is also an activity and entertainment center with the three lakes (Monument Lake, Woodmoor Lake, and Palmer Lake) that comprise its namesake and direct access to the national forest. Tri-Lakes is the most well-established community in the northern part of the County with *a mixture of housing options*, easy access to necessary commercial goods and services, and a variety of entertainment opportunities. *Future development in this area should align with the existing character and strengthen the residential, commercial, employment, and entertainment*

opportunities in the adjacent communities of Monument, Palmer Lake, and Woodmoor." (emphasis added)

The proposed preliminary plan and map amendment (rezoning) will help support the existing character of the Tri-Lakes Key Area by providing additional places of residence for those who commute to work in the Denver Metropolitan Area. In addition, the preliminary plan proposes to implement the concurrently proposed rezoning which includes two different zoning districts, RM-12 and RS-6000. The two different zoning districts will allow for a greater variety (mixture) of housing options in the area. Developing additional housing in the area will help strengthen the current residential market as well as generate increased sales for any existing and future commercial uses in the area.

The map on the next page shows the relative location of the site with respect to the rest of the Tri-Lakes Key Area. The context provided by this exhibit indicates the importance of supporting the preliminary plan (and subsequent final plat) as well as the concurrent RM-12 and RS-6000 rezoning requests due to the immediate adjacency of the site to Interstate 25, which is even more pertinent when compared to the rest of the Key Area. Other locations in the Tri-Lakes Key Area would not be appropriate for increased residential densities due to concerns over use-to-use or even zoning-to-zoning compatibility such as in areas located to the east that are currently zoned RR-5 or RR-2.5. As the Tri-Lakes Key Area continues to build out the most logical location for meaningful residential growth is along the Interstate 25 corridor, whether within the incorporated boundaries of Towns of Monument or Palmer Lake, or on centralized services in unincorporated El Paso County, as would be the case with this site.



"Potential Areas for Annexation" Key Area

The remaining portion of the property that is located outside the boundaries of the "Tri-Lakes" Key Area is within the "Areas for Potential Annexation" Key Area. The <u>Plan</u> describes the Potential Areas for Annexation as follows:

"A significant portion of the County's expected population growth will located in one of the eight incorporated municipalities. As the largest municipality in El Paso County, Colorado Springs is expected to grow in population over the next several decades. As a result of this growth, Colorado Springs, and other municipalities including Fountain and Monument, will need to annex parts of unincorporated County to plan for and *accommodate new development*. This will either occur through new development within existing municipal limits or the annexation of subdivisions in unincorporated parts of the County."

"This Key Area outlines the portions of the County that are *anticipated to be annexed as development occurs*. It is imperative that the County continue to coordinate with the individual cities and towns as they plan for growth. Collaboration with the individual communities will prevent the unnecessary duplication of efforts, overextension of resources, and spending of funds. The County should coordinate with each of the municipalities experiencing substantial growth the development of an intergovernmental agreement similar to that developed with Colorado Springs."

The challenge for owners of land located within the "Potential Areas for Annexation" Key Area is that the final decision as to whether to annex the land into the respective incorporated city or town lies exclusively with the city or town itself. The owner of the property experienced this challenge firsthand while twice attempting to annex the property into the Town of Monument. The first attempt at annexing the land into the Town of Monument in 2022 ultimately resulted in the property owner withdrawing the annexation petition after an unfavorable and formally continued Town Planning Commission hearing. Delaying the hearing via a continuance strategically allowed for the then-recently elected but not yet seated Town Trustees to hear the request instead of the then-seated Trustees.

On the property owner's second attempt to annex the land into the Town of Monument, which occurred in 2023, the Town Board of Trustees denied a separate annexation petition for property located at the southwest corner of Interstate 25 and County Line Road, which is also owned by the owner of the subject property. Denial of that annexation petition effectively rendered annexation of the subject property into the Town impractical due to contiguity issues. On both occasions, Town staff invited and encouraged the property owner to annex into the Town only to then have the proposed development meet political opposition.

One of the main reasons for annexing land into a municipality is to obtain centralized water and wastewater service, which can help justify an overall increase in development intensity, whether that be as more intense commercial or industrial development or higher density residential development, as was the intent of the landowner in requesting annexation into the Town of Monument. Centralized water and wastewater services can, however, still be provided to developments in the County via a special district. In this case, Woodmoor Water and Sanitation District was already going to provide water and wastewater service to the development even if annexed into the Town of Monument due to Monument's inability to serve new development on the east side of Interstate 25 in this area. Woodmoor Water and Sanitation District has confirmed its commitment to providing municipal-level water and wastewater services to the proposed development even if it develops in unincorporate El Paso County.

Even though annexation of the land has been repeatedly rejected by the Town of Monument, the intent of the Key Area designation of the land as a "Potential Area for Annexation" can still be maintained with inclusion of the land into the Woodmoor Water and Sanitation District. All of this suggests that development of the subject property in unincorporated El Paso County is equivalent if not more sustainable in this area of the County than it might have otherwise been in the Town of Monument.

Area of Change Analysis: "Minimal Change: Developed" and "New Development"

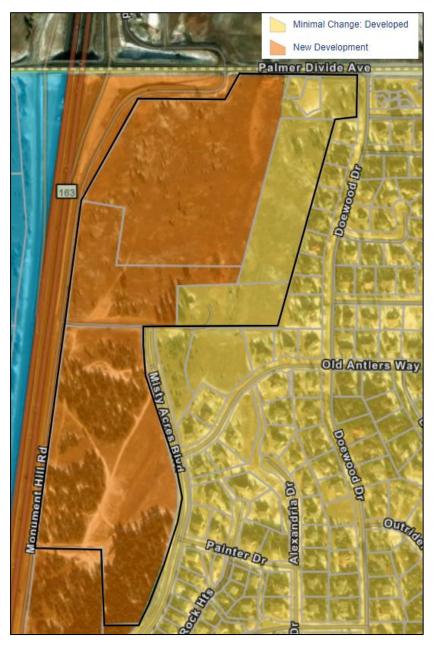
The subject property is identified in the Areas of Change map within the <u>Plan</u> as being primarily with the "New Development" area of change with a smaller portion within the "Minimal Change:

Developed" area of change (see the map on the next page for the delineation of the two areas).

"New Development" Area of Change

Page 21 of the Plan characterizes areas of "New Development" by stating:

"These areas will be significantly transformed as new development takes place on lands currently largely designated as undeveloped or agricultural areas. *Undeveloped portions of the County that are adjacent to a built out area will be developed to match the character of that adjacent development or to a different supporting or otherwise complementary one* such as an employment hub or business park adjacent to an urban neighborhood." (Emphasis added)



<u>Your El Paso Master Plan</u> identifies only 9% of land within unincorporated El Paso County as being within an Area of Change for "New Development." For comparison purposes, 90% of unincorporated El Paso County is expected to see minimal change, if any. These areas are comprised of 70% as "Minimal Change: Undeveloped", 6% as "Minimal Change: Developed", and the remaining 14% as "Protected/Conservation Area". Page 20 of the <u>Plan</u> states the following:

"As El Paso County plans for growth and development over the coming decades, it is anticipated that some areas of the County will change more significantly than other areas."

Further down on page 20 the <u>Plan</u> goes on to focus the discussion of change specifically on the need to address housing affordability, without regard for existing demographics or localized preferences, when it says:

"A key factor in identifying areas of new development, particularly for residential uses, is affordability. Housing affordability is addressed in Chapter 4 Housing & Communities page 58)."

These statements indicate that the proposed preliminary plan and concurrent RS-6000 and RM-12 rezoning requests, which will allow for new development to occur on the property, is consistent with the "New Development" Area of Change designation and are even more uniquely supported by the <u>Plan</u> as an opportunity to help address the County-wide issue of housing affordability. This is particularly critical in the Tri-Lakes Area of the County which is generally void of any form of affordable housing or even mid-level housing. The proposed subdivision and zoning change to the property is residential in nature and would provide an appropriate transition between existing residential to the east and Interstate 25 to the west. The residential "character" of the area is, therefore, maintained, which would not necessarily be the case if the property were to be developed pursuant to the current mix of residential and commercial zoning.

"Minimal Change: Developed" Area of Change

Page 21 of the <u>Plan</u> characterizes areas of "Minimal Change: Developed" by stating:

"These areas have undergone development and have an established character. Developed areas of minimal change are largely built out but may include isolated pockets of vacant or underutilized land. These key sites are likely to see more intense infill development with a mix of uses and scale of redevelopment that will significantly impact the character of an area. For example, a large amount of vacant land in a suburban division adjacent to a more urban neighborhood may be developed and change to match the urban character and intensity so as to accommodate a greater population. The inverse is also possible where an undeveloped portion of an denser neighborhood could redevelop to a less intense suburban scale. Regardless of the development that may occur, if these areas evolve to a

new development pattern of differing intensity, their overall character can be maintained."

The mapping of the boundary of the "Minimal Change: Developed" Area of Change on the property is not consistent with the actual developed status of the property. The exhibit provided above shows an aerial image of the property underlying the Area of Change designations. The aerial image clearly shows that no development has occurred on the property, which suggests that all of the property probably should have been designated as "New Development."

<u>Placetype Analysis</u>: "Suburban Residential"

The subject property is shown on the Placetypes map of <u>Your El Paso Master Plan</u> as being within the Suburban Residential Placetype.

Page 28 of the <u>Plan</u> identifies the following land uses as being Primary Land Uses within the Suburban Residential Placetype:

 Single-Family Detached Residential with lot sizes smaller than 2.5 acres per lot, up to 5 units per acre.

In addition, the Placetype includes the following Supporting Land Uses:

- Single-Family Attached
- Multifamily Residential
- Parks/Open Space
- Commercial Retail
- Commercial Services
- Institutional

The Suburban Residential Placetype is described further on page 28 as follows:

"Suburban Residential is characterized by predominantly residential areas with mostly single-family detached housing. This placetype can also include limited single-family attached and multifamily housing, provided such development is not the dominant development type and is supportive of and compatible with the overall single-family character of the area. The Suburban Residential placetype generally supports accessory dwelling units. This placetype often deviates from the traditional grid pattern of streets and contains a more curvilinear pattern.

Although primarily a residential area, this placetype includes limited retail and service uses, typically located at major intersections or along perimeter streets. Utilities, such as water and wastewater services are consolidated and shared by clusters of developments, dependent on the subdivision or area of the County.

Some County suburban areas may be difficult to distinguish from suburban development within city limits. Examples of the Suburban Residential placetype in

El Paso County are Security, Widefield, Woodmen Hills, and similar areas in Falcon."

A review of this area of the County in the context of the mapped Placetypes in the County Master Plan reveals a significant amount of single-family residential development ranging from neighborhoods located immediately east of the subject property all the way east to Furrow Road and beyond as well as north to the Douglas County/El Paso County line. Similarly, single family residential is found west of the property from properties along Beacon Lite Road to the Town of Palmer Lake. These areas are typical of the Suburban Residential Placetype Designation. It is important to note, however, that the Suburban Residential Placetype also includes single-family attached and multi-family residential as supporting land uses, which would be consistent with the proposed preliminary plan and concurrently proposed RS-6,000 and RM-12 rezonings as evidenced by the list of allowed land uses included above. Roughly six (6) square miles (or approximately 3,956 acres) of Suburban Residential Placetype-designated land located in this area of the County is already predominately developed with single family residential dwellings, suggesting that there is almost an overabundance of existing single family residential in the area when compared to the supporting single-family attached and multi-family residential land uses, of which there is basically none in the same area.

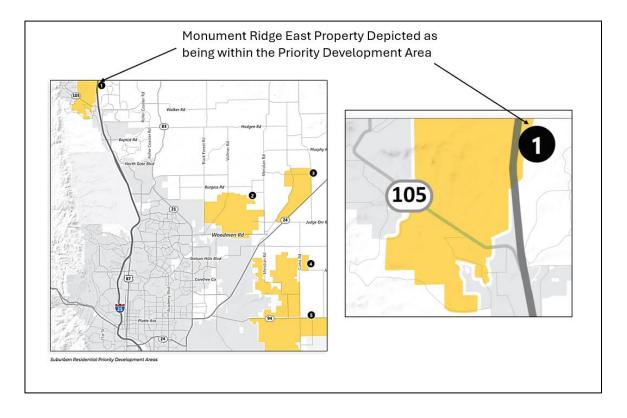
The 59.48 acres that make up the proposed rezoning area are estimated to represent less than 2% of the land included in the local Suburban Residential Placetype area. This means that the proposed development is not only a "Supporting Land Use" to the sprawling single-family residential development that existing in this area today, but it can also be characterized as "Supportive" in terms of its size and scale in the context of the overall surrounding Suburban Residential Placetype area.

Inclusion of compatible, but not necessarily the same, residential land uses such as multi-family and single-family attached within the Suburban Residential Placetype demonstrates the overall vision of the <u>Master Plan</u>. No better location exists in this area, or perhaps even throughout the County as a whole, to locate a subdivision that is aimed at providing new, market-driven residential dwellings than the subject property, which just so happens to be conveniently located immediately adjacent to Interstate 25.

Chapter 4 Housing & Communities

In addition to supporting and being in compliance with the applicable Areas of Change, Key Area, and Placetype designations and policies in Chapter 3 of the Master Plan, the proposed subdivision and concurrent rezoning requests are also in total alignment with the Residential Priority Development Area designation found in Chapter 4 of the <u>Plan</u>. The Monument Ridge East property is identified as being within the Highway 105 & Interstate 25 Priority Development Area. Page 52 of the <u>Plan</u> describes this area as follows:

"The area is located between Monument, Woodmoor, and Palmer Lake. Due to its proximity to these communities, this area has largely developed to match that community's style of suburban residential and should continue to do so without impediment. It would also be supported by commercial and public services, both of which are important factors when considering denser development. *Furthermore, increased density at the north end of the County would help support residents who commute north for work every day."* (emphasis added)



The Suburban Residential Priority Development Areas section then goes on to support well-planned higher-density residential development in this area by stating:

"Single-family attached and detached housing units should be developed in a cohesive manner that establishes a seamless transition between different housing types, as opposed to large, isolated clusters or blocks of a single type of housing. Maintaining this mixed development pattern should be prioritized by the County to preserve the existing residential character of this area."

By including RS-6,000 zoning within the proposed subdivision in a location between the proposed RM-12 zoning and the existing single family residential lots to the east, and by proposing a condition of the RS-6,000 zoning that requires a minimum of 15,000 square foot lots adjacent to the existing residences, the applicant is helping to establish a seamless transition along the property's only shared border with existing residential development.

Furthermore, the proposed development can be served by centralized services which justifies "increased density" so as to support residents who commute north to the Denver metropolitan area for work every day.

The multi-family and attached single family supporting land use allowance in the Suburban Residential Placetype found in Chapter 3 of the <u>Plan</u> combined with the encouraging and prioritizing language in Chapter 4 supporting increased residential density on the subject property as a "Priority Development Area" result in a County master plan that overwhelming supports the proposed subdivision and concurrent RS-6,000 and RM-12 rezoning requests. Housing availability and affordability is one of the main issues facing the Pikes Peak Regional today. Projects like the Monument Ridge East subdivision cannot by itself resolve that issue, but it can be part of the solution. The housing solutions for the otherwise homogenously developed Tri-Lakes Area are evident throughout the <u>Master Plan</u> as discussed above. It is through this rezoning request that the applicant is championing those solutions for the Tri-Lakes Area and proposing to aid the County as a whole as it continues to address this ever-increasing Countywide housing challenge.

El Paso County Water Master Plan

The subject property is located within Planning Region 2 of the <u>Water Master Plan</u>, pursuant to Figure 3-1 on page 25, which includes Woodmoor Water and Sanitation District along with several other central water providers. Table 5-3 of the <u>Plan</u> identifies that Region 2 has a current demand of 7,532 acre-feet per year and a current supply of 13,607 acre-feet per year, which results in current excess water supplies in the amount of 6,075 acre-feet per year. Tables 5-4 and 5-5 project Region 2 as continuing to have excess water supplies at year 2040 and at full buildout (2060) in the amount of 1,894 acre-feet and 353 acre-feet, respectively. A Water Resources Report, prepared by Whitehead Engineering, LLC, dated April 2024, has been provided in support of the preliminary plan application. The Report projects 37 detached single family residential lots on 18.96 acres and 305 multi-family attached units on 40.52 acres and an annual water demand of 105.23 acre-feet (93,948 gallons). Woodmoor Water and Sanitation District has provided a commitment letter to provide water service to the proposed subdivision. Woodmoor has calculated water demand projections that have been accepted by the State Water Engineer's Office for both single family and multi-family residential homes based upon actual usage within the District, which are as follows:

Single Family Equivalent (SFE) = 0.3584 ac-ft/year Multiple Family Equivalent (MFE) = 0.2688 ac-ft/year

The District has adequate water supplies to provide reliable service to the proposed subdivision without injuring other water rights pursuant to the District's decreed water rights.

El Paso County Parks Master Plan

The <u>El Paso County Parks Master Plan</u> (2022) depicts the property as having "local access" within five (5) miles of two parks, Palmer Lake Recreation Area and Fox Run Regional Park. The <u>Plan</u> does not depict any planned trails or open space within or adjacent to the subject property. Land dedication, or fees in lieu of land dedication will be required at the final plat stage of development.

2024 Major Transportation Corridors Plan (MTCP)

Map 14. The 2040 Roadway Plan (Classification and Lanes) exhibit of the 2024 El Paso County Major Transportation Corridors Plan (MTCP) doesn't identifies Interstate 25 to the west of the project as a "Freeway" and it depicts several other "Collector" level roads in the area. No new roadways or roadway classification upgrades are depicted for any of the roads within or immediately serving the proposed development.

A northern extension of Misty Acres Boulevard connecting to County Line Road has been planned for well over two decades but is not depicted on the 2024 MTCP. Nevertheless, the applicant is proposing to construct the planned extension of Misty Acres Boulevard and will seek County Road Impact Fee credits therefrom. The anticipated intersection of Misty Acres Boulevard and County Line Road will likely need to be phased from a three-way stop-controlled intersection to a signalized intersection. The fourth leg of the intersection coming from north of County Line Road in Douglas County is not anticipated at this point since the property in that area is subject to a conservation easement.

At the request of the County, the applicant also plans to construct an easterly extension of Monument Hill Road through the proposed development as a connection to Misty Acres Boulevard. This connection has also been planned for some time and will eliminate the dead-end terminus of Monument Hill Road that exists today.

Other Topical Elements of the County Master Plan

The proposed subdivision and concurrent rezone are in compliance with the other topical elements of the County Master Plan, including the Master Plan for Mineral Extraction, and the El Paso County Wildlife Habitat Maps and Descriptors.

The Master Plan for Mineral Extraction, and specifically Map 1 Aggregate Resource Evaluation, identifies the property as having "Upland Deposits" which is defined as including "sand, gravel with silt and clay, remnants of older stream deposited on topographic highs or beach like features." Map 2 of the Plan, which is the Exclusive Version of the Aggregate Resource Evaluation, more or

less dismisses the property from potential mineral resources excavation by identifying the major of the property as "Platted and/or Developed." Lastly, Map 3, which is the Residual Version of the Aggregate Resource Evaluation, only preserves the drainage area and wetlands as having potential "Upland Deposits." Preservation of the wetlands is required and the drainage areas are being protected via located them within tracts thereby eliminating the potential for commercially viable mineral extraction on the property now or into the future.

The Mineral Rights Affidavit submitted in support of the preliminary plan application identifies that there is not a separate mineral rights owner(s) on the subject property that would be impacted by the approval and development of the proposed subdivision and concurrent rezoning requests.

The subdivision is consistent with the purposes of the Land Development Code;

The subdivision is consistent with the purposes of the Land Development Code as outlined in Chapter 1 of the <u>Code</u> including full implementation of the goals and policies of the Master Plan specific to the property as well as those aimed at addressing many of the housing and land use-related issues within the County. The subdivision will allow for orderly development of the property pursuant to the concurrently-requested rezoning and will be financially supported by an Colorado Revised Statutes Title 32 special district for the purposes of construction facilities and infrastructure necessary to serve the development.

The subdivision is consistent with the subdivision design standards and any approved sketch plan;

The subdivision meets all of the design standards included within Chapter 8 of the Code as well as the dimensional standards of the concurrently proposed zoning districts (RS-6000 and RM-12). The reports and maps submitted in support of the application are in full compliance with the County, State, and Federal rules and regulations as well as the County adopted checklists.

A sufficient water supply has been acquired in terms of quantity, quality, and dependability for the type of subdivision proposed, as determined in accordance with the standards set forth in the water supply standards [C.R.S. § 30-28-133(6)(a)] and the requirements of Chapter 8 of this Code (this finding may not be deferred to final plat if the applicant intends to seek administrative final plat approval);

The associated water resources report identifies a sufficient water supply has been acquired in terms of quantity, quality, and dependability. The source of water supply is Woodmoor Water and Sanitation District No.1, which has provided a service commitment letter dated April 22, 2024. The letter identifies a project total water demand of 95.3075 acre-feet per year. The service commitment is only conditioned upon entering into an agreement for water service and upon the development complying with Woodmoor's rules, regulations, specifications and policies, both of which are standard conditions for providing service.

A public sewage disposal system has been established and, if other methods of sewage disposal are proposed, the system complies with state and local laws and regulations, [C.R.S. § 30-28-133(6) (b)] and the requirements of Chapter 8 of this Code;

The service commitment letter provided by Woodmoor Water and Sanitation District No. 1 discussed above also includes a commitment to provide wastewater service to the development. Woodmoor's wastewater treatment system is regulated by the State of Colorado, specifically the Colorado Department of Public Health and Environment.

All areas of the proposed subdivision, which may involve soil or topographical conditions presenting hazards or requiring special precautions, have been identified and the proposed subdivision is compatible with such conditions. [C.R.S. § 30-28-133(6)(c)];

A Soils and Geology Study, dated March 7, 2023, was prepared by Entech Engineering, Inc. and was submitted as a supporting document to this preliminary plan application. The conclusion of the Study was that "This site was found to be suitable for the proposed development." Entech did identify that there were areas on the property that will impose constraints on development and land use, and highlighted that those areas include artificial fill, potentially expansive soils, shallow groundwater, seasonally wet, potentially seasonally wet, and potential areas of shallow bedrock. In conclusion, however, Entech stated the following:

"In general, it is our opinion that the development can be achieved if the observed geologic conditions on site can be property mitigated with site grading and engineering design."

Adequate drainage improvements complying with State law [C.R.S. § 30-28-133(3)(c)(VIII)] and the requirements of this Code and the ECM are provided by the design;

A drainage report has been submitted addressing the requirements of the <u>Land Development Code</u> and the <u>Engineering Criteria Manual</u> at the preliminary plan stage of development and all applicable design criteria requirements have been implemented in the associated preliminary drainage plan. A final drainage report, final drainage design and construction drawings for all necessary drainage infrastructure will comply with the requirements of the Code and ECM at the final plat stage of development.

The location and design of the public improvements proposed in connection with the subdivision are adequate to serve the needs and mitigate the effects of the development;

The roadways planned to serve the subdivision include two significant connections of existing roadways in the area, with those being Misty Acres Boulevard and Monument Hill Road. These connections have been planned for over two decades. Both connections will provide much improved traffic circulation in the area as well as an alternative evacuation route in the event of an emergency in the area. The Traffic Impact Study prepared by LSC, Inc., has been submitted in support of the preliminary plan application. The Study identifies that the proposed connections of

Misty Acres Boulevard and Monument Hills Road, combined with existing roadway and intersection capacity in the area are able to adequately serve the proposed subdivision.

The internal roads to the subdivision are proposed to be publicly accessible, with most of the roads being constructed and maintained by the anticipated special district. The internal roadways are depicted as "private" on the preliminary plan per the direction of the County review staff, however, the roads will be public pursuant to the definition of "Road, Public" included in Chapter 1 of the Land Development Code:

"A road located in a public right-of-way or easement and open to the public for travel and accepted for maintenance by El Paso County or another governmental jurisdiction."

The Metropolitan District (governmental district) will maintain the roads and they will be accessible to the public.

The extension of water and wastewater service to the property will require construction of Woodmoor Water and Sanitation District's infrastructure. The design and construction of these lines will be subject to approval and acceptance by the District.

The proposed stormwater detention facilities have been appropriately sited to ensure full compliance with the County's Engineering Criteria Manual and Drainage Criteria Manuals.

Legal and physical access is or will be provided to all parcels by public rights-of-way or recorded easement, acceptable to the County in compliance with this Code and the ECM;

Access will generally be provided by public rights-of-way including County Line Road, Misty Acres Boulevard, Monument Hill Road, and internal publicly dedicated roadways as well as internal publicly accessible roadways proposed to be owned and maintained by the anticipated special district. All lots and tracts depicted on the associated preliminary plan map will have direct access to a public road or a publicly accessible road.

The proposed subdivision has established an adequate level of compatibility by (1) incorporating natural physical features into the design and providing sufficient open spaces considering the type and intensity of the subdivision; (2) incorporating site planning techniques to foster the implementation of the County's plans, and encourage a land use pattern to support a balanced transportation system, including auto, bike and pedestrian traffic, public or mass transit if appropriate, and the cost effective delivery of other services consistent with adopted plans, policies and regulations of the County; (3) incorporating physical design features in the subdivision to provide a transition between the subdivision and adjacent land uses; (4) incorporating identified environmentally sensitive areas, including but not limited to, wetlands and wildlife corridors, into the design; and (5) incorporating public facilities or infrastructure, or provisions therefore, reasonably related to the proposed subdivision so the proposed subdivision will not negatively impact the levels of service of County services and facilities;

A riparian analysis was prepared by Bristlecone Ecology (February 13, 2024) identifying that wetlands comprise 2% of the property included within the preliminary plan and riparian areas

covered another 0.3% of the property. Delineation of the wetlands and riparian areas by Bristlecone Ecology resulted in the following conclusions:

"It is [Bristlecone Ecology's] professional opinion that no high value habitat will be adversely impacted by the proposed development. There is little riparian habitat present within the Project Area, and all riparian habitat and wetlands will be preserved in an open space tract as part of the Project."

Open space areas are being provided within a number of different tracts within the preliminary plan, including tracts needed to preserve and protect sensitive wetlands and riparian areas as well areas for construction and ongoing operation of planned stormwater treatment and detention facilities.

The design of the preliminary plan implements a transition of land uses from Interstate 25 to the west to existing single family detached dwellings to the east, more specifically the preliminary plan includes large acreage tracts along the western side of the property (west of Misty Acres Boulevard) to allow for attached residential development as well as increasingly-sized single family detached lots along the east side of the property (east of Misty Acres Boulevard) to ensure use-to-use compatibility with the existing neighborhood. In addition, many of the open space tracts are conveniently located along the east side of development, providing an enhanced buffer and transition between the proposed development and the existing residences on the east side of Misty Acres Boulevard.

Necessary services, including police and fire protection, recreation, utilities, open space and transportation system, are or will be available to serve the proposed subdivision;

The property is served by the Tri-Lakes Monument Fire Protection District, which has an obligation to provide fire protection service to the development, and is within the patrol area of the El Paso County Sheriff's Office. Mountain View Electric Association will provide electric service and Black Hill Energy will provide natural gas service to the development. The proposed roadways will be adequate and allow for emergency response access to the site and will provide increased access to neighboring residential areas via connection of Monument Hill Road and Misty Acres Boulevard. The internal roadways that will be constructed within the RM-12 zoning area are not proposed to be dedicated to the County and will instead by owned and maintained by the anticipated special district. The internal roadways within the RS-6000 zoning area as well as the extensions of Monument Hill Road and Misty Acres Boulevard are all proposed to be constructed to the County's standards and dedicated to the County for ongoing ownership and maintenance.

The subdivision provides evidence to show that the proposed methods for fire protection comply with Chapter 6 of this Code; and

Fire hydrants will be installed within the subdivision. All roadways are designed to meet the fire apparatus turning radius requirements and minimum width requirements for two-way travel.

The proposed subdivision meets other applicable sections of Chapters 6 and 8 of the Code;

The proposed subdivision meets all applicable regulations included within Chapters 6 and 8. Please review the associated soils and geology report, onsite wastewater treatment system report, traffic study, drainage report, and grading and erosion control plan which document compliance with both chapters, as applicable.

COUNTY ROAD IMPACT FEE

The proposed subdivision will be subject to the County's Road Impact Fee. Payment of fees will be required. The applicant intends to apply for Road Impact Fee credits for the design and construction of the Misty Acres Boulevard and Monument Hill Road extensions and any other qualifying improvement as determined at the final plat stage of development.

COMMUNITY OUTREACH EFFORTS

The applicant previously held three neighborhood meetings at the time the project was proposed to be annexed and developed in the Town of Monument. An additional neighborhood meeting is being planned for June 4, 2024 in connection with the rezoning and preliminary plan applications to El Paso County. For more information, please see the associated document uploaded to the EDARP file regarding a summary of neighborhood meetings.