

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

May 17, 2019

High Valley Land Company, Inc. c/o Mr. Cody Humphrey Director of Planning La Plata Communities 1755 Telstar Drive, Suite 211 Colorado Springs, CO 80920

> RE: Briargate Commercial North Concept Plan Colorado Springs, Colorado Traffic Technical Memorandum LSC #194360

Dear Mr. Humphrey:

In response to your request, LSC Transportation Consultants, Inc. has prepared this traffic technical memorandum for the currently proposed Briargate Commercial North concept plan. The site is located generally southwest of the Old Ranch Road and Cordera Crest Avenue roundabout in Colorado Springs, Colorado.

#### LAND USE AND ACCESS

The currently proposed Briargate Commercial North concept plan has been attached. The parcels included in the currently proposed concept plan were also included as part of the *Cordera Filing No. 3 Traffic Impact Analysis Report* (TIA) by LSC dated January 17, 2007. A copy of this study has been attached for reference. As shown in Figure 3 of that report, Parcel A of the currently proposed concept plan was included as Traffic Analysis Zone B in the 2007 TIA. The currently proposed land use for this parcel is multi-family residential. This land use is consistent with the 2007 TIA, however the 2007 TIA assumed 291 dwelling units and the currently proposed concept plan was included as Traffic Analysis Zone C in the 2007 TIA. The currently proposed land use for this parcel is 0007 TIA. The currently proposed concept plan was included as Traffic Analysis Zone C in the 2007 TIA. The currently proposed land use for this parcel is office use. This land use is consistent with the 2007 TIA, however the 2007 TIA. The currently proposed land use for this parcel is office use. This land use is consistent with the 2007 TIA, however the 2007 TIA assumed about 213,000 square feet of office floor space and the currently proposed plan calls for only 50,000 square feet of office floor space. Parcel B is shown as an existing detention area and Parcel D is shown as community open space. This is consistent with the 2007 TIS.

Access for Parcel A is proposed to Cordera Crest Avenue via the west leg (Blue Horizon View) of the Old Ranch Road/Cordera Crest intersection and a new full-movement intersection aligning

with Marshall Mesa Court (future access for Cordera Filing 3I). Access for Parcel C is proposed to Cordera Crest Avenue via a new west leg at the intersection of Notch Trail and to a new full-movement access to be located about midway between Notch Trail and Horse Gulch Loop. These access points are consistent with the access assumed in the 2007 TIA.

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#### **TRIP GENERATION**

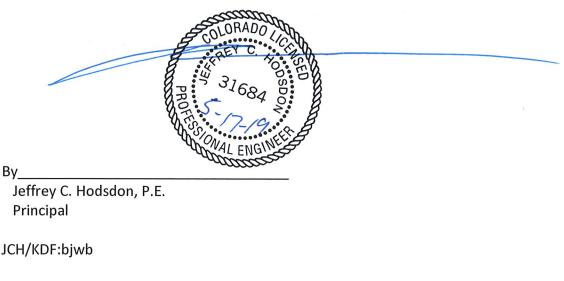
The site-generated vehicle-trips have been estimated using the nationally published trip generation rates from *Trip Generation, 10th Edition, 2017* by the Institute of Transportation Engineers (ITE). Table 1 shows the average weekday and peak-hour trip generation estimates and a comparison to the trip generation estimate for the same area from the *Cordera Filing No. 3 Traffic Impact Analysis Report* by LSC dated January 17, 2007.

The currently proposed Briargate Commercial North concept plan is estimated to generate about 2,591 total vehicle-trips on the average weekday, with about half entering and half exiting the site. This is about 1,752 fewer trips than were estimated for this same area in the 2007 TIA. During the morning peak hour of adjacent street traffic, which generally occurs for one hour between 6:30 and 8:30 a.m., the site is estimated to generate about 93 entering vehicles and 109 exiting vehicles. During the afternoon peak hour of adjacent street traffic, which generally occurs for one hour between 4:15 and 6:15 p.m., the site is estimated to generate about 108 entering vehicles and 108 exiting vehicles.

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

Sincerely,

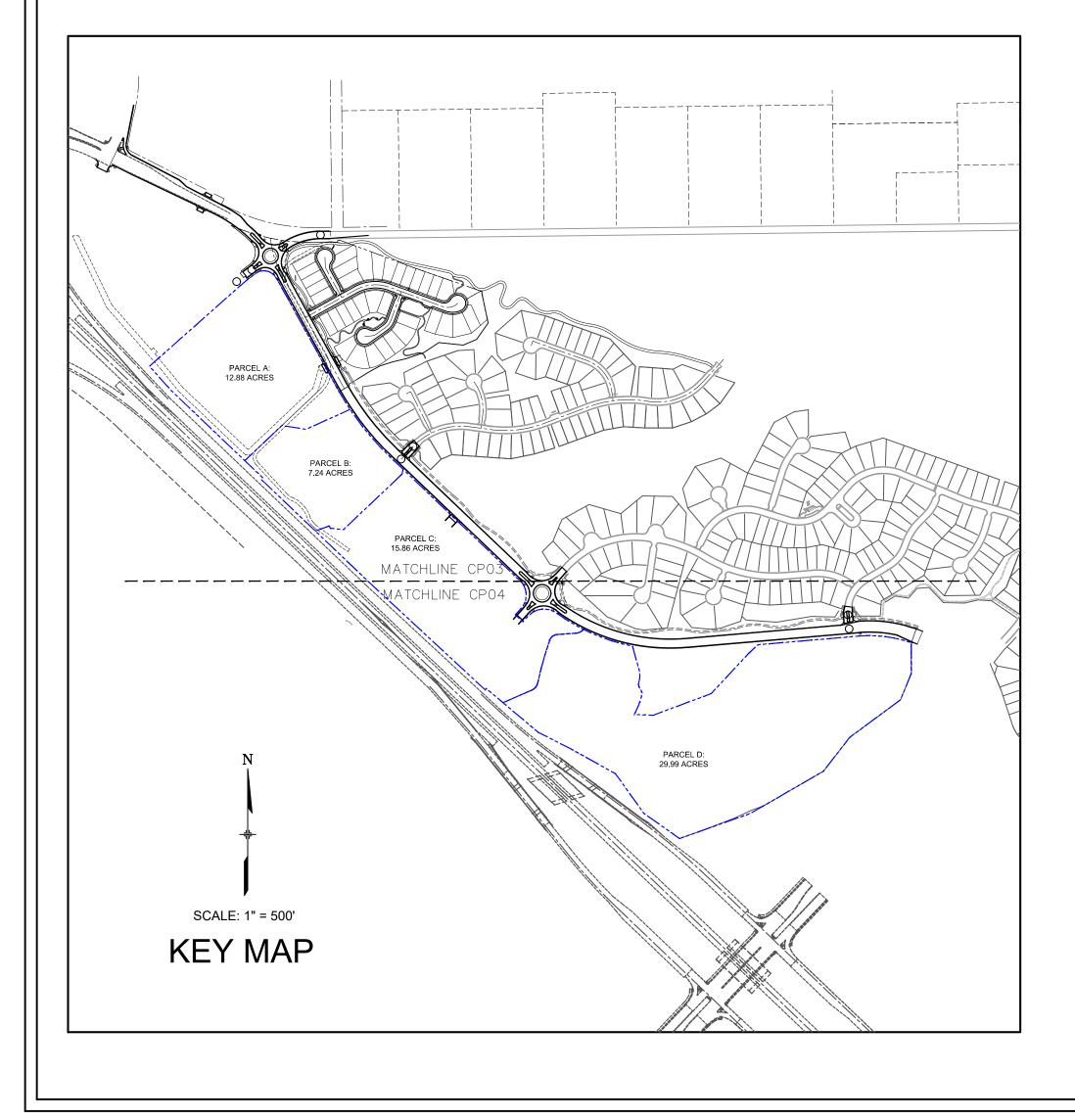
LSC TRANSPORTATION CONSULTANTS, INC.

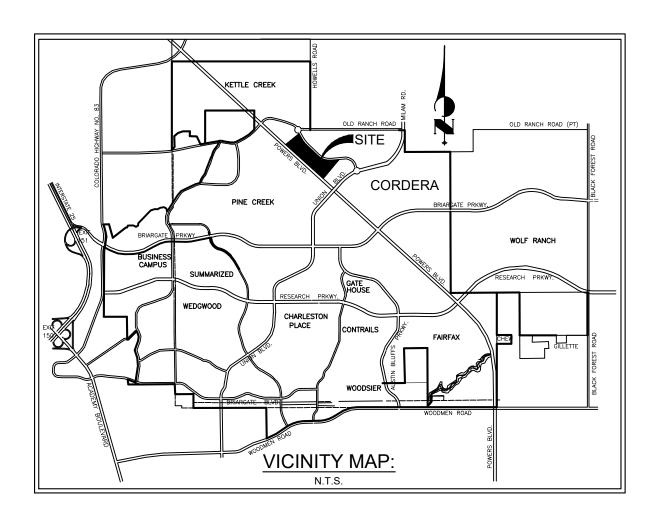


Enclosures: Table 1 Briargate North Concept Plan Cordera Filing No. 3 Traffic Impact Analysis Report dated 1-17-07

						Table	-								
						ip Generatio									
					Bria	rgate Comm		eneration	$\mathbf{Dete} = \begin{pmatrix} 1 \end{pmatrix}$			Total	Tring Com	o vo to d	
	2007	Land	Land	Tr	in	Average		ning	After	noon	Average		Trips Generation		rnoon
Currently Proposed	Traffic Analysis	Use	Use		ration	Weekday	Peak Hour		Peak Hour		Weekday	Morning Peak Hour			Hour
Parcel	Zone	Code	Description	Units		Traffic	In	Out	In	Out	Traffic	In	Out	In	Out
•			I On The Currently Proposed Con		n DU <sup>(2)</sup>	7.32	0.11	0.35	0.35	0.21	2.050	30	99	99	58
A B	В	220	Multifamily Housing (Low-Rise)	280		1.32	0.11	0.35	0.35	0.21	2,050	30	99	99	58
-			Drainage		KSF <sup>(3)</sup>										
C	С	710	General Office Building			10.83	1.26	0.21	0.19	0.99	542	63	10	9	50
D			Open Space												
											2,591	93	109	108	108
Trip Genera	tion Estima	te From	The Cordera Filing No. 3 Traffic I	mpact An	alysis Re	port by LSC	dated Ja	nuary 17, 2	2007						
A	В	220	Multifamily Housing (Low-Rise)	. 291		6.72	0.10	0.41	0.40	0.22	1,956	30	119	117	63
В			Drainage												
С	С	710	General Office Building	213	KSF	11.21	1.42	0.19	0.25	1.24	2,388	302	41	54	263
D			Open Space												
											4,343	333	161	171	326
						Change	(Decreas	e) In Trip	Generation	Estimate	-1,752	-240	-51	-63	-219
								, F							
Notes:															
(1) Source: "	Trip Genera	tion, 10th	Edition, 2017" by the Institute of Tra	ansportatio	on Engine	ers (ITE)									
(2) DU = dwe	lling unit														
(3) KSF = Th	ousand squa	are feet													
Source: LSC	Transportatio	n Consulta	ants, Inc.												

# BRIARGATE COMMERCIAL NORTH CITY OF COLORADO SPRINGS CONCEPT PLAN





SUMM	ARY DATA					
PROPERTY SIZE	65.97 ACRES					
TAX SCHEDULE NO.	6200000667, 6226200002, 6227100007					
MASTER PLAN	BRIARGATE MASTER PLAN (CPC MP 07-00061-A4MN16)					
CONCEPT PLAN	BRIARGATE COMMERCIAL NORTH					
DRAINAGE BASIN	KETTLE CREEK BASIN					
DEVELOPMENT SCHEDULE	2019-2024					
EXISTING LAND USE	VACANT LAND					
PARCI	ELS A & C					
PARCEL A	12.88 ACRES					
PARCEL C	15.86 ACRES					
EXISTING LAND USE	VACANT LAND					
PROPOSED LAND USE	OFFICE/ MULTI-FAMILY RESIDENTIAL					
EXISTING ZONING	A					
PROPOSED ZONING	OC (OFFICE COMPLEX)					
PARCEL SETBACKS	FRONT: 25'					
	SIDE: 20'					
	REAR: 20'					
POWERS LANDSCAPE SETBACK	25'					
MAXIMUM BUILDING HEIGHT	45'					

PA	PARCEL B										
PARCEL B	7.24 ACRES										
EXISTING LAND USE	DETENTION FACILITY, VACANT LAND										
PROPOSED LAND USE	DETENTION FACILITY/ OPEN SPACE										
EXISTING ZONING	A										
PROPOSED ZONING	PF (PUBLIC FACILITY)										

PA	ARCEL D
PARCEL D	29.99 ACRES
EXISTING LAND USE	OPEN SPACE/ VACANT LAND
PROPOSED LAND USE	OPEN SPACE/ PARK
EXISTING ZONING	A
PROPOSED ZONING	PK (PARK)

## **GENERAL NOTES:**

- 1. LAND USES WILL CONFORM TO THOSE ALLOWED WITHIN THE OC (OFFICE COMPLEX), PF (PUBLIC FACILITY), AND PK (PARK) ZONING DISTRICTS
- 2. ALL STREETS ARE PUBLIC UNLESS DESIGNATED AS PRIVATE ON THIS PLAN.
- 3. BUILDING, PARKING AND ACCESS LOCATIONS SHOWN ON THIS PLAN ARE SCHEMATIC IN NATURE AND WILL CHANGE. SPECIFIC DETAILS OF SITE DESIGN WILL BE COMPLETED AT THE TIME OF THE DEVELOPMENT PLAN SUBMITTAL FOR EACH PARCEL.
- 4. DEVELOPMENT WILL OCCUR OVER MULTIPLE PHASES. SIZES/DIMENSIONS OF LOTS ARE UNKNOWN AT THIS TIME.
- 5. ALL STREET LIGHTS WILL BE PER THE CITY OF COLORADO SPRINGS STANDARDS AND THEIR LOCATION WILL BE DETERMINED AT A LATER DATE.
- 6. THIS SITE IS NOT WITHIN A DESIGNATED F.E.M.A. FLOODPLAIN AS DETERMINED BY THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 08041C0507 G, DATED DECEMBER 7, 2018.
- 7. IN ACCORD WITH CITY CODE 7.5.505 AND 7.9.101 (F), THE CITY OF COLORADO SPRINGS RESERVES THE RIGHT TO MODIFY OR REMOVE ANY TRAFFIC CONTROL DEVICE (INCLUDING BUT NOT LIMITED TO TRAFFIC SIGNALS, TRAFFIC SIGNS AND STREET MARKINGS) ON PUBLIC RIGHTS-OF-WAY OR EASEMENTS SHOWN ON THIS OR ANY OTHER APPROVED DEVELOPMENT DOCUMENT. AFTER INSTALLATION OF THE TRAFFIC CONTROL DEVICE(S), THE CITY TRAFFIC ENGINEER (OR DESIGNEE) SHALL HAVE THE DUTY AND POWER TO CONTROL TIMING, MAINTENANCE AND REMOVAL OF THE TRAFFIC CONTROL DEVICE(S), IN ACCORD WITH CITY CODE 10.1.309. NO PRIVATE PERSON OR ENTITY HAS ANY OWNERSHIP RIGHT OR VESTED INTEREST IN OR RIGHT TO THE CONTINUED OPERATION OR PRESENCE OF ANY SPECIFIC TRAFFIC CONTROL DEVICE ON A PUBLIC RIGHT-OF-WAY OR EASEMENT. ALL DESIGN PLANS OF TRAFFIC CONTROL DEVICES SUBMITTED ON ANY DEVELOPMENT DOCUMENT MUST HAVE APPROVAL SIGNATURES FROM THE CITY TRAFFIC ENGINEER (OR DESIGNEE) FOR:
  - CONCEPTUAL APPROVAL OF THE INSTALLATION OF A FUTURE TRAFFIC CONTROL DEVICE
  - DESIGN APPROVAL OF A SPECIFIC TRAFFIC CONTROL DEVICE
  - PERMISSION TO CONSTRUCT OR INSTALL A SPECIFIC TRAFFIC CONTROL DEVICE

ALL FINAL CRITERIA, CONDITIONS AND DESIGN FOR A TRAFFIC CONTROL DEVICE APPROVED BY THE CITY TRAFFIC ENGINEER SHALL SUPERSEDE ANY OTHER INFORMATION FOUND IN APPROVED DEVELOPMENT DOCUMENTS.

- 8. A TWENTY FIVE FOOT (25') LANDSCAPE SETBACK IS REQUIRED ALONG THE PROPERTY BOUNDARY THAT BORDERS POWERS BOULEVARD. ALL REQUIRED LANDSCAPE SETBACKS WILL BE MET AND REVIEWED ON FUTURE DEVELOPMENT PLANS.
- 9. A NOISE STUDY FOR POWERS BLVD. SHALL BE REQUIRED AT THE TIME OF DEVELOPMENT PLAN FOR ANY PROPOSED RESIDENTIAL USES. A NOISE STUDY IS NOT REQUIRED FOR COMMERCIAL/ OFFICE USES.
- 10. CROSS ACCESS AGREEMENTS WILL BE ESTABLISHED FOR THE BRIARGATE COMMERCIAL NORTH DEVELOPMENT.
- 11. A MASTER DEVELOPMENT DRAINAGE PLAN (MDDP) WAS COMPLETED AND APPROVED FOR THESE PARCELS CITY PLANNING FILE NO. 17272-27 DATED OCTOBER 31, 2007. REFER TO THIS MDDP FOR PRELIMINARY DRAINAGE INFORMATION. DETENTION FOR INDIVIDUAL PARCELS WILL UTILIZE EXISTING DETENTION FACILITIES OR WILL REQUIRE ON-SITE DETENTION. A FINAL DRAINAGE REPORT WILL BE REQUIRED AT TIME OF DEVELOPMENT PLAN FOR EACH INDIVIDUAL PARCEL.
- 12. AN GEOLOGICAL HAZARD EXEMPTION REQUEST FORM HAS BEEN SUBMITTED FOR REVIEW AND APPROVAL FOR THE PARCELS INCLUDED WITHIN THIS CONCEPT PLAN.
- 13. REFER TO THE TRAFFIC LETTER SUBMITTED WITH THIS CONCEPT PLAN FOR MORE DETAIL REGARDING TRAFFIC VOLUMES, CIRCULATION, ETC. FUTURE DEVELOPMENT PLANS SHALL FOLLOW THE RECOMMENDATIONS OUTLINED IN THIS TRAFFIC LETTER. ADDITIONAL TRAFFIC ANALYSIS SHALL NOT BE REQUIRED WITH FUTURE SUBMITTALS UNLESS A CHANGE OF USE IS REQUESTED.

**CORDERA**<sup>®</sup> CONSULTANT PLANNER/ CIVIL ENGINEER: 2435 Research Parkway, Suite 300 Colorado Springs, CO 80920 Phone 719-575-0100 Fax 719-575-0208 Contact: Greg Shaner/ Jason Alwine PROJECT: BRIARGATE COMMERCIAL NORTH CONCEPT PLAN CITY OF COLORADO SPRINGS APRIL 2019 OWNER: HIGH VALLEY LAND CO, INC. 1755 TELSTAR DRIVE, SUITE 211 COLORADO SPRINGS, COLORADO 80920 (719) 260-7477 SHEET INDEX: DESCRIPTION SHEET COVER SHEET NOTE SHEET CONCEPT PLAN CONCEPT PLAN

ISSUE:

DRAWING INFORMATION: PROJECT NO: 19.104.202 DRAWN BY: JASON ALWINE CHECKED BY: GREG SHANER APPROVED BY GREG SHANER SHEET TITLE:

## **COVER SHEET**

CITY PLANNING FILE NO: CPC-CP

**CS01** 

SHEET 1 OF 4

CITY FILE NO.:

# BRIARGATE COMMERCIAL NORTH CITY OF COLORADO SPRINGS CONCEPT PLAN

### LEGAL DESCRIPTION PARCEL A

A PARCEL OF LAND LOCATED IN THE NORTHEAST ONE-QUARTER OF SECTION 27 AND THE NORTHWEST ONE-QUARTER OF SECTION 26 TOWNSHIP 12 SOUTH RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN IN THE CITY OF COLORADO SPRINGS, COUNTY OF EL PASO, STATE OF COLORADO; MORE PARTICULARLY DESCRIBED AS FOLLOWS WITH BEARINGS REFERENCED TO THE NORTH LINE OF SAID NORTHEAST ONE-QUARTER OF SECTION 27; MONUMENTED ON THE EAST END BY A FOUND ILLEGIBLE 3-1/4" ALUMINUM CAP IN RANGE BOX AND ON THE WEST END BY A FOUND 3-1/4" ALUMINUM CAP STAMPED "COLORADO DEPT OF TRANSPORTATION PLS NO. 25381" AND IS ASSUMED TO BEAR SOUTH 89°45'46" WEST 2623.10 FEET;

COMMENCE AT THE NORTHEAST CORNER OF SAID SECTION 27; THENCE SOUTH 00°36'05" EAST, ALONG THE WEST LINE OF SAID NORTHWEST ONE-QUARTER OF SECTION 26, A DISTANCE OF 834.87 FEET TO THE WESTERNMOST CORNER OF THE PLAT OF CORDERA FILING NO. 3H RECORDED ON JUNE 16, 2016 IN THE OFFICE OF THE EL PASO COUNTY CLERK AND RECORDER UNDER RECEPTION NUMBER 216713791 AND THE POINT OF BEGINNING; SAID POINT ALSO BEING THE BEGINNING OF A CURVE TO THE LEFT, OF WHICH THE RADIUS POINT BEARS NORTH 60°12'43" EAST, A RADIAL DISTANCE OF 1,532.50 FEET;

THENCE SOUTHEASTERLY ALONG SAID CURVE AND THE WEST LINE OF SAID CORDERA FILING NO. 3H, THROUGH A CENTRAL ANGLE OF 04°07'57", AN ARC DISTANCE OF 110.54 FEET; THENCE SOUTH 65°42'51" WEST, A DISTANCE OF 257.79 FEET:

THENCE NORTH 80°39'22" WEST, A DISTANCE OF 129.21 FEET TO A POINT ON THE EAST LINE OF THAT CERTAIN UTILITY EASEMENT RECORDED ON FEBRUARY 17, 2016 IN SAID RECORDS UNDER RECEPTION NUMBER 216015764;

THENCE SOUTH 46°32'37" WEST, ALONG SAID EAST LINE AND ITS EXTENSION, A DISTANCE OF 272.47 FEET TO THE EAST LINE OF THE PRESENT POWERS BOULEVARD RIGHT-OF-WAY AS DESCRIBED IN WARRANTY DEED RECORDED ON MARCH 25, 2004 IN SAID RECORDS UNDER RECEPTION NUMBER 204047093; THENCE NORTH 46°22'25" WEST, ALONG SAID EAST LINE AND ITS EXTENSION, A DISTANCE OF 546.15 FEET TO AN ANGLE POINT IN SAID EAST LINE OF POWERS BOULEVARD RIGHT-OF-WAY AS DESCRIBED IN DEED RECORDED ON NOVEMBER 06, 2002 IN SAID RECORDS UNDER RECEPTION NUMBER 202195126; THENCE NORTH 41°33'42" WEST, ALONG SAID EAST LINE, A DISTANCE OF 167.96 FEET;

THENCE NORTH 48°26'16" EAST, A DISTANCE OF 108.04 FEET TO THE EAST LINE OF OLD RANCH STATION FILING NO. 1 RECORDED ON JANUARY 25, 2018 IN SAID RECORDS UNDER RECEPTION NUMBER 218714082;

THENCE ALONG SAID EAST LINE THE FOLLOWING 2 COURSES:

1. THENCE NORTH 48°26'16" EAST, A DISTANCE OF 537.79 FEET TO A 971.50 FOOT RADIUS TANGENT CURVE WHOSE CENTER BEARS SOUTHEASTERLY; 2. THENCE NORTHEASTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 02°57'59", AN ARC DISTANCE OF 50.30 FEET TO THE SOUTH LINE OF

CORDERA FILING NO. 3/ RECORDED ON MAY 25, 2017 IN SAID RECORDS UNDER RECEPTION NUMBER 217713971; THENCE ALONG SAID SOUTH LINE THE FOLLOWING 8 COURSES:

- 1. THENCE CONTINUE NORTHEASTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 02°51'15", AN ARC DISTANCE OF 48.40 FEET;
- 2. THENCE NORTH 54°15'30" EAST, A DISTANCE OF 6.36 FEET TO A TANGENT 74.00 FOOT RADIUS CURVE WHOSE CENTER BEARS SOUTHEASTERLY;
- 3. THENCE EASTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 85°40'26", AN ARC DISTANCE OF 110.65 FEET;
- 4. THENCE SOUTH 25°41'16" EAST, A DISTANCE OF 11.89 FEET; 5. THENCE NORTH 64°18'44" EAST, A DISTANCE OF 2.05 FEET TO A 986.50 FOOT RADIUS NON-TANGENT CURVE WHOSE CENTER BEARS SOUTH 58°19'15"
- 6. THENCE SOUTHEASTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 02°49'42", AN ARC DISTANCE OF 48.70 FEET:

7. THENCE SOUTH 28°51'04" EAST, A DISTANCE OF 620.86 FEET TO A TANGENT 1,532.50 FOOT RADIUS CURVE WHOSE CENTER BEARS NORTHEASTERLY; 8. THENCE SOUTHEASTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 00°56'13", AN ARC DISTANCE OF 25.06 FEET TO THE POINT OF

THE ABOVE PARCEL DESCRIPTION CONTAINS A CALCULATED AREA OF 560,934 SQUARE FEET OR (12.87728 ACRES), MORE OR LESS.

## LEGAL DESCRIPTION PARCEL B

BEGINNING.

A PARCEL OF LAND LOCATED IN THE NORTHWEST ONE-QUARTER OF SECTION 26 AND THE NORTHEAST ONE-

QUARTER OF SECTION 27. TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN IN THE

CITY OF COLORADO SPRINGS, COUNTY OF EL PASO, STATE OF COLORADO; MORE PARTICULARLY DESCRIBED AS FOLLOWS WITH BEARINGS REFERENCED TO THE NORTH LINE OF SAID NORTHWEST ONE-QUARTER OF SECTION 26; MONUMENTED AT EACH END BY A FOUND ILLEGIBLE 3-1/4" ALUMINUM CAP IN RANGE BOX AND ASSUMED TO BEAR NORTH 89 18'07" EAST 2644.70 FEET

COMMENCE AT THE WEST END OF SAID NORTH LINE; THENCE SOUTH 00°36'05" EAST, ALONG THE WEST LINE OF SAID NORTHWEST ONE-QUARTER, A DISTANCE OF 954.50 FEET TO THE POINT OF BEGINNING;

THENCE NORTH 65°42'51" EAST, A DISTANCE OF 62.61 FEET TO A 1,532.50 FOOT RADIUS NON-TANGENT CURVE WHOSE CENTER BEARS NORTH 56°04'46" EAST; SAID POINT IS ON THE WEST LINE OF CORDERA CREST AVENUE RIGHT-OF-WAY AS SHOWN ON THE PLAT OF CORDERA FILING NO. 3H AS RECORDED JUNE 16, 2016 IN THE OFFICE OF THE CLERK AND RECORDER OF EL PASO COUNTY UNDER RECEPTION NUMBER 216713791;

THENCE ALONG SAID WEST LINE THE FOLLOWING 2 COURSES;

1. THENCE SOUTHEASTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 12°26'47", AN ARC DISTANCE OF 332.91 FEET; 2. THENCE SOUTH 46°22'02" EAST, A DISTANCE OF 93.82 FEET TO A POINT ON THE WEST LINE OF THAT CERTAIN UTILITY EASEMENT RECORDED ON

SEPTEMBER 26, 2016 IN SAID RECORDS UNDER RECEPTION NUMBER 216110222;

THENCE ALONG SAID WEST LINE THE FOLLOWING 3 COURSES: 1. THENCE SOUTH 13°44'16" WEST, A DISTANCE OF 27.01 FEET:

2. THENCE SOUTH 46°35'51" WEST, A DISTANCE OF 427.94 FEET;

3. THENCE NORTH 84°03'13" WEST, A DISTANCE OF 15.51 FEET TO A POINT ON THE NORTH LINE OF THAT CERTAIN UTILITY EASEMENT RECORDED ON SEPTEMBER 26, 2016 IN SAID RECORDS UNDER RECEPTION NUMBER 216110223:

THENCE CONTINUE NORTH 84°03'13" WEST, ALONG SAID NORTH LINE, A DISTANCE OF 55.59 FEET TO A POINT ON THE NORTH LINE OF THAT CERTAIN UTILITY EASEMENT RECORDED ON AUGUST 04, 2003 IN SAID RECORDS UNDER RECEPTION NUMBER 203179242; THENCE ALONG SAID NORTH LINE THE FOLLOWING 2 COURSES:

1. THENCE NORTH 19°06'01" WEST, A DISTANCE OF 12.21 FEET;

2. THENCE SOUTH 70°53'59" WEST, A DISTANCE OF 79.94 FEET TO A POINT ON THE NORTHEAST LINE OF POWERS BOULEVARD RIGHT-OF-WAY AS DESCRIBED IN DEED RECORDED ON NOVEMBER 6, 2002 IN SAID RECORDS UNDER RECEPTION NUMBER 202195130;

THENCE NORTH 46°22'25" WEST, ALONG SAID NORTHEAST LINE, A DISTANCE OF 400.91 FEET TO THE NORTHEAST LINE OF POWERS BOULEVARD RIGHT-OF-WAY AS DESCRIBED IN DEED RECORDED ON MARCH 25, 2004 IN SAID RECORDS UNDER RECEPTION NUMBER 204047093;

THENCE CONTINUE ALONG SAID NORTHEAST LINE THE FOLLOWING 2 COURSES: 1. THENCE NORTH 43°38'40" EAST, A DISTANCE OF 12.00 FEET;

2. THENCE NORTH 46°22'25" WEST, A DISTANCE OF 128.29 FEET TO THE INTERSECTION OF SAID NORTHEAST LINE AND THE EXTENSION OF THE EAST LINE OF THAT CERTAIN UTILITY EASEMENT RECORDED ON FEBRUARY 17, 2016 IN SAID RECORDS UNDER RECEPTION NUMBER 216015764;

THENCE NORTH 46°32'37" EAST, ALONG SAID EAST LINE, A DISTANCE OF 272.47 FEET;

THENCE SOUTH 80°39'22" EAST, A DISTANCE OF 129.21 FEET;

THENCE NORTH 65°42'51" EAST, A DISTANCE OF 195.18 FEET TO THE POINT OF BEGINNING.

THE ABOVE PARCEL DESCRIPTION CONTAINS A CALCULATED AREA OF 315,507 SQUARE FEET OR (7.24305 ACRES), MORE OR LESS

### LEGAL DESCRIPTION PARCEL C

A PARCEL OF LAND LOCATED IN THE NORTHWEST ONE-QUARTER OF SECTION 26 AND THE NORTHEAST ONE-QUARTER OF SECTION 27. TOWNSHIP 12 SOUTH RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN CITY OF COLORADO SPRINGS, COUNTY OF FL PASO, STATE OF COLORADO MORE PARTICULARI Y DESCRIBED AS FOLLOWS WITH BEARINGS REFERENCED TO THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF CORDERA CREST AVENUE ACCORDING TO THE OFFICIAL PLAT OF CORDERA FILING NO. 3H RECORDED JUNE 16, 2016 IN THE OFFICE OF THE CLERK AND RECORDER OF EL PASO COUNTY UNDER RECEPTION NUMBER 216713791. SAID PORTION OF CORDERA CREST AVENUE BEING MONUMENTED ON EACH END BY A FOUND NO. 5 REBAR AND 1-1/2 INCH ALUMINUM CAP STAMPED "MATRIX PLS 34977" - BEARING SOUTH 46°22'02" EAST A DISTANCE OF 910.57 FEET

BEGIN AT THE MOST SOUTHERLY CORNER OF SAID CORDERA FILING NO. 3H;

THENCE SOUTHEASTERLY, ALONG THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF SAID CORDERA CREST AVENUE AND THE EXTERIOR OF CORDERA FILING NO. 3G RECORDED AUGUST 7, 2015 IN THE OFFICE OF THE CLERK AND RECORDER OF EL PASO COUNTY UNDER RECEPTION NUMBER 215713655 THE OLLOWING (8) EIGHT COURSES:

COMPOUND CURVE:

- 4. THENCE SOUTH 42°53'14" WEST A DISTANCE OF 5.01 FEET;

6. THENCE NORTH 42°53'14" EAST A DISTANCE OF 42.37 FEET TO A TANGENT 114.00 FOOT RADIUS CURVE WHOSE CENTER BEARS SOUTHEASTERLY

**REVERSE CURVE** 

RADIUS NON-TANGENT CURVE WHOSE CENTER BEARS NORTH 49°54'47" WEST

THENCE SOUTHWESTERLY, ALONG SAID NON-TANGENT CURVE, THROUGH A CENTRAL ANGLE OF 45°29'12" AN ARC DISTANCE OF 44.95 FEET TO A 6,601.92 FOOT RADIUS NON-TANGENT CURVE WHOSE CENTER BEARS NORTH 04°32'40" WEST

THENCE WESTERLY, ALONG SAID NON-TANGENT CURVE, THROUGH A CENTRAL ANGLE OF 00°52'32" AN ARC DISTANCE OF 100.88 FEET TO A 45.70 FOOT RADIUS REVERSE CURVE

THENCE SOUTHWESTERLY, ALONG SAID REVERSE CURVE THROUGH A CENTRAL ANGLE OF 67°24'04" AN ARC DISTANCE OF 53.76 FEET TO A 2.100.70 FOOT RADIUS COMPOUND CURVE

THENCE SOUTHERLY, ALONG SAID COMPOUND CURVE THROUGH A CENTRAL ANGLE OF 06°27'31" AN ARC DISTANCE OF 236.80 FEET TO A 52.75 FOOT RADIUS REVERSE CURVE

THENCE SOUTHWESTERLY, ALONG SAID REVERSE CURVE THROUGH A CENTRAL ANGLE OF 54°01'45" AN ARC DISTANCE OF 49.74 FEET;

THENCE SOUTH 66°30'02" WEST A DISTANCE OF 167.71 FEET TO THE NORTHEASTERLY RIGHT-OF-WAY LINE OF POWERS BOULEVARD

THENCE NORTHWESTERLY, ALONG THE SAID NORTHEASTERLY RIGHT-OF-WAY LINE OF SAID POWERS BOULEVARD, THE FOLLOWING (5) FIVE COURSES;

1. THENCE NORTH 49°54'12" WEST A DISTANCE OF 115.88 FEET;

2. THENCE SOUTH 41°32'14" WEST A DISTANCE OF 9.00 FEET;

5. THENCE NORTH 46°22'25" WEST A DISTANCE OF 188.27 FEET; THENCE NORTH 70°53'59" EAST A DISTANCE OF 79.94 FEET; THENCE SOUTH 19°06'01" EAST A DISTANCE OF 12.21 FEET; THENCE SOUTH 84°03'13" EAST A DISTANCE OF 71.10 FEET;

THENCE NORTH 46°35'51" EAST A DISTANCE OF 427.94 FEET; THENCE NORTH 13°44'16" EAST A DISTANCE OF 27.01 FEET TO THE PREVIOUSLY CITED SOUTH WESTERLY LINE OF CORDERA CREST AVENUE; THENCE SOUTH 46°22'02" EAST, ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 816.75 FEET TO THE POINT OF BEGINNING.

1. THENCE SOUTH 46°22'02" EAST A DISTANCE OF 43.31 FEET TO A TANGENT 104.00 FOOT RADIUS CURVE WHOSE CENTER BEARS SOUTHWESTERLY. 2. THENCE SOUTHERLY, ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 86°41'30" AN ARC DISTANCE OF 157.36 FEET TO A 990.50 FOOT RADIUS

3. THENCE SOUTHWESTERLY, ALONG SAID COMPOUND CURVE, THROUGH A CENTRAL ANGLE OF 02°35'49" AN ARC DISTANCE OF 44.90 FEET

5. THENCE SOUTH 47°06'46" EAST A DISTANCE OF 55.00 FEET

7. THENCE EASTERLY, ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 82°54'38" AN ARC DISTANCE OF 164.97 FEET TO A 1,032.50 FOOT RADIUS

8. THENCE SOUTHEASTERLY, ALONG SAID REVERSE CURVE THROUGH A CENTRAL ANGLE OF 09°17'51" AN ARC DISTANCE OF 167.55 FEET TO A 56.62 FOOT

3. THENCE NORTH 47°10'36" WEST A DISTANCE OF 840.91 FEET;

4. THENCE NORTH 46°21'28" WEST A DISTANCE OF 208.81 FEET;

THE ABOVE DESCRIPTION PRODUCES A CALCULATED AREA OF 690,920 SQUARE FEET (15.86134 ACRES), MORE OR LESS.

#### LEGAL DESCRIPTION PARCEL D

A PARCEL OF LAND LOCATED IN SECTION 26, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF COLORADO SPRINGS, COUNTY OF EL PASO, STATE OF COLORADO MORE PARTICULARLY DESCRIBED AS FOLLOWS WITH BEARINGS REFERENCED TO THE RIGHT-OF-WAY LINE OF CORDERA CREST AVENUE ACCORDING TO THE OFFICIAL PLAT OF CORDERA FILING NO. 3G RECORDED AUGUST 7, 2015 IN THE OFFICE OF THE CLERK AND RECORDER OF FIL PASO COUNTY UNDER RECEPTION NUMBER 215713655, SAID PORTION OF CORDERA CREST AVENUE BEING MONUMENTED ON EACH END BY A FOUND NO. 5 REBAR AND 1- 1/2 INCH ALUMINUM CAP STAMPED "MATRIX PLS 34977" - BEARING NORTH 42°53'14" EAST A DISTANCE OF 42.37 FEET COMMENCE AT THE MOST SOUTHERLY CORNER OF SAID CORDERA FILING NO. 3G; THENCE NORTHEASTERLY, ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF SAID CORDERA CREST AVENUE AND THE EXTERIOR OF CORDERA FILING NO. 3G THE FOLLOWING (3) THREE COURSES:

1. THENCE NORTH 42°53'14" EAST A DISTANCE OF 42.37 FEET TO A TANGENT 114.00 FOOT RADIUS CURVE WHOSE CENTER BEARS SOUTHEASTERLY 2. THENCE EASTERLY, ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 82°54'38" AN ARC DISTANCE OF 164.97 FEET TO A 1032.50 FOOT RADIUS REVERSE CURVE; 3. THENCE SOUTHEASTERLY, ALONG SAID REVERSE CURVE, THROUGH A CENTRAL ANGLE OF 9°17'51" AN ARC DISTANCE OF 167.55 FEET TO THE POINT OF BEGINNING;

THENCE EASTERLY, CONTINUING ALONG SAID RIGHT-OF-WAY AND ARC, THROUGH A CENTRAL ANGLE OF 15°18'28", AN ARC DISTANCE OF 275.86 FEET TO A 5.482.09 FOOT RADIUS NON-TANGENT CURVE WHOSE CENTER BEARS NORTH 74°48'51" EAST:

THENCE SOUTHERLY, ALONG SAID NON-TANGENT CURVE, THROUGH A CENTRAL ANGLE OF 01°20'34" AN ARC DISTANCE OF 128.49 FEET TO A 114.11 FOOT REVERSE CURVE;

THENCE SOUTHERLY, ALONG SAID REVERSE CURVE THROUGH A CENTRAL ANGLE OF 35°00'03" AN ARC DISTANCE OF 69.71 FEET TO A 32.97 FOOT REVERSE CURVE;

THENCE SOUTHERLY, ALONG SAID REVERSE CURVE THROUGH A CENTRAL ANGLE OF 57°56'43" AN ARC DISTANCE OF 33.34 FEET TO A 47.35 FOOT REVERSE CURVE;

THENCE SOUTHERLY, ALONG SAID REVERSE CURVE THROUGH A CENTRAL ANGLE OF 53°52'06" AN ARC DISTANCE OF 44.51 FEET TO A 397.25 FEET COMPOUND CURVE.

THENCE SOUTHERLY, ALONG SAID COMPOUND CURVE THROUGH A CENTRAL ANGLE OF 13°31'19" AN ARC DISTANCE OF 93.75 FEET;

THENCE SOUTH 27°55'02" WEST A DISTANCE OF 12.29 FEET TO A POINT ON THE EXTERIOR OF PARCEL 5 AS DESCRIBED IN A DOCUMENT RECORDED MARCH 7, 2003 IN THE OFFICE OF THE CLERK AND RECORDER OF EL PASO COUNTY UNDER RECEPTION NUMBER 203049162

THENCE ALONG SAID PARCEL 5 THE FOLLOWING (3) THREE COURSES;

- 1. THENCE SOUTH 87°25'14" EAST A DISTANCE OF 99.79 FEET; 2. THENCE NORTH 69°39'15" EAST A DISTANCE OF 329.51 FEET:
- 3. THENCE NORTH 43°01'10" EAST A DISTANCE OF 297.54 FEET;

THENCE NORTH 47°20'27" EAST A DISTANCE OF 63.68 FEET TO THE SOUTHERLY RIGHT-OF-WAY LINE OF CORDERA CREST AVENUE ACCORDING TO THE OFFICIAL PLAT OF CORDERA FILING NO. 3B RECORDED FEBRUARY 11, 2014 IN THE OFFICE OF THE CLERK AND RECORDER OF EL PASO COUNTY UNDER RECEPTION NUMBER 214713431;

THENCE EASTERLY ALONG SAID SOUTHERLY RIGHT-OF-WAY THE FOLLOWING (2) TWO COURSES;

1. THENCE NORTH 85°05'27" EAST A DISTANCE OF 539.62 FEET TO A TANGENT 658.00 FOOT RADIUS CURVE WHOSE CENTER BEARS SOUTHEASTERLY 2. THENCE EASTERLY, ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 24°35'19" AN ARC DISTANCE OF 282.38 FEET TO THE WESTERLY EXTERIOR OF BRIARGATE CROSSING EAST SUBDIVISION FILING NO.2 RECORDED FEBRUARY 2, 2007 IN THE OFFICE OF THE CLERK AND RECORDER OF EL PASO COUNTY UNDER RECEPTION NUMBER 207712525

THENCE SOUTH 00°00'17" WEST, ALONG THE SAID WESTERLY EXTERIOR, A DISTANCE OF 47.06 FEET TO THE NORTHEAST CORNER OF PREVIOUSLY CITED PARCEL 5;

- 1. THENCE SOUTH 00°00'17" WEST A DISTANCE OF 117.05 FEET; 2. THENCE SOUTH 22°38'26" WEST A DISTANCE OF 150.66 FEET:
- 3. THENCE SOUTH 53°27'12" WEST A DISTANCE OF 335.64 FEET;
- 4. THENCE SOUTH 37°46'24" WEST A DISTANCE OF 227.20 FEET: 5. THENCE SOUTH 59°58'48" WEST A DISTANCE OF 372.13 FEET;

THENCE SOUTHERLY ALONG SAID PARCEL 5 THE FOLLOWING (2) TWO COURSES;

- 1. THENCE SOUTH 59°58'48" WEST A DISTANCE OF 78.08 FEET;
- 2002 IN THE OFFICE OF THE COUNTY CLERK AND RECORDER OF EL PASO COUNTY UNDER RECEPTION NO. 202195133;

THENCE NORTHWESTERLY, ALONG SAID POWERS BOULEVARD RIGHT-OF-WAY, THE FOLLOWING (6) SIX COURSES

- 1. THENCE NORTH 53°27'24" WEST A DISTANCE OF 42.79 FEET:
- 2. THENCE NORTH 55°01'13" WEST A DISTANCE OF 187.28 FEET;
- 3. THENCE NORTH 35°41'32" WEST A DISTANCE OF 261.37 FEET; 4. THENCE NORTH 60°53'19" WEST A DISTANCE OF 264.18 FEET;
- 5. THENCE NORTH 62°57'09" WEST A DISTANCE OF 202.67 FEET;
- 6. THENCE NORTH 49°54'12" WEST A DISTANCE OF 244.05 FEET;

THENCE NORTH 66°30'02" EAST A DISTANCE OF 167.71 FEET TO A TANGENT 52.75 FOOT RADIUS CURVE WHOSE CENTER BEARS NORTHWESTERLY;

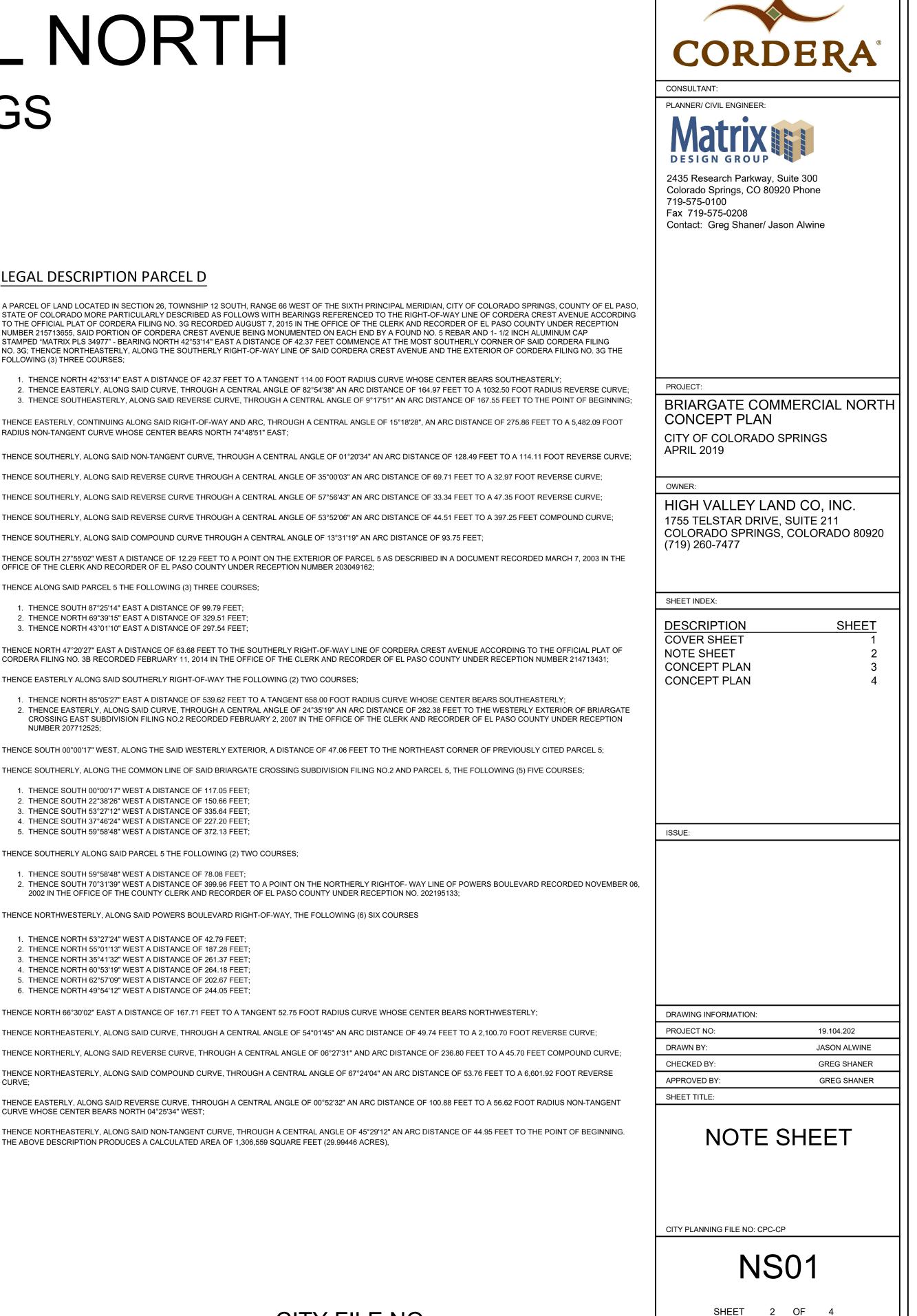
THENCE NORTHEASTERLY, ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 54°01'45" AN ARC DISTANCE OF 49.74 FEET TO A 2,100.70 FOOT REVERSE CURVE;

THENCE NORTHERLY, ALONG SAID REVERSE CURVE, THROUGH A CENTRAL ANGLE OF 06°27'31" AND ARC DISTANCE OF 236.80 FEET TO A 45.70 FEET COMPOUND CURVE;

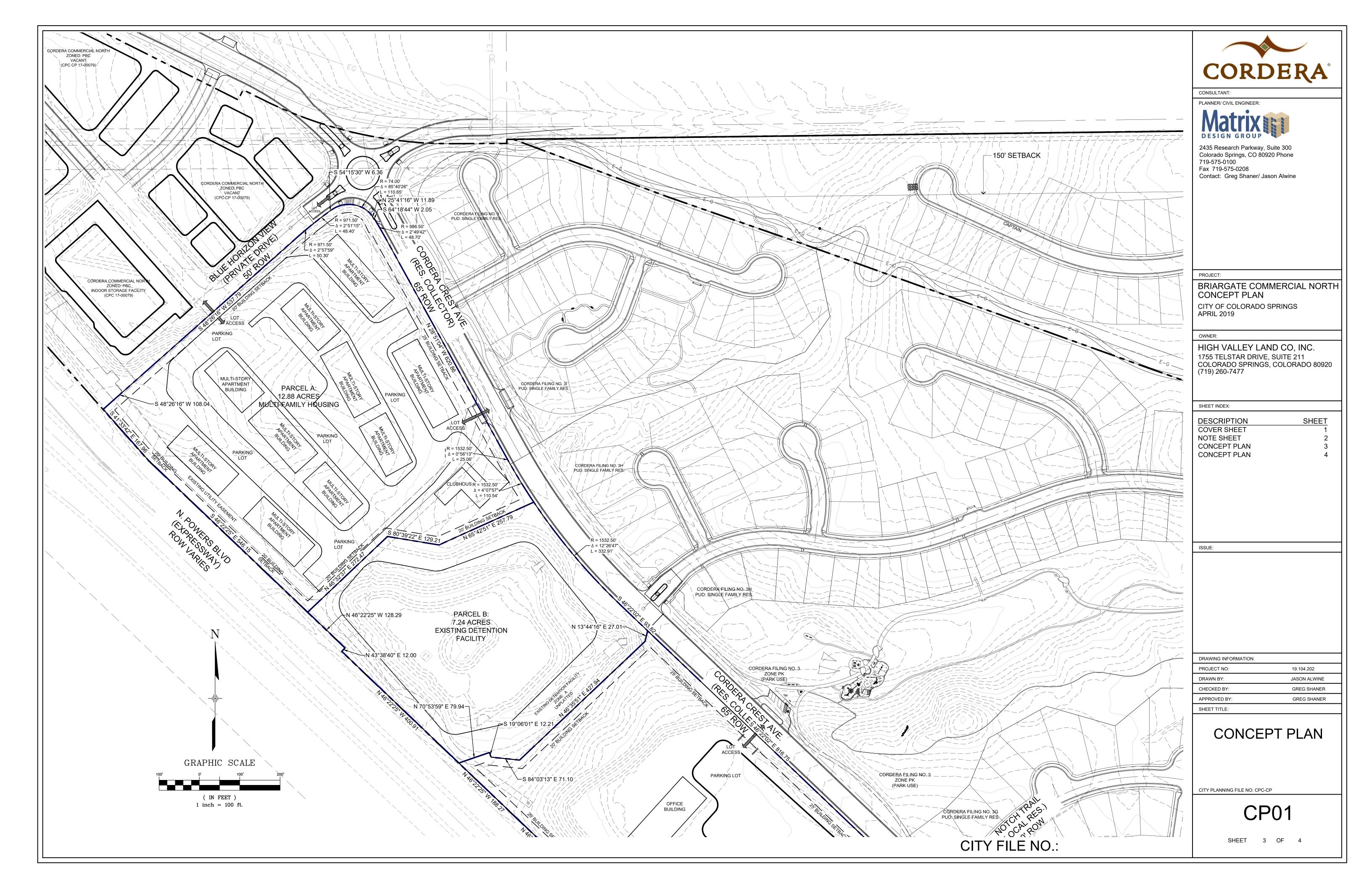
THENCE NORTHEASTERLY, ALONG SAID COMPOUND CURVE, THROUGH A CENTRAL ANGLE OF 67°24'04" AN ARC DISTANCE OF 53.76 FEET TO A 6,601.92 FOOT REVERSE CURVE

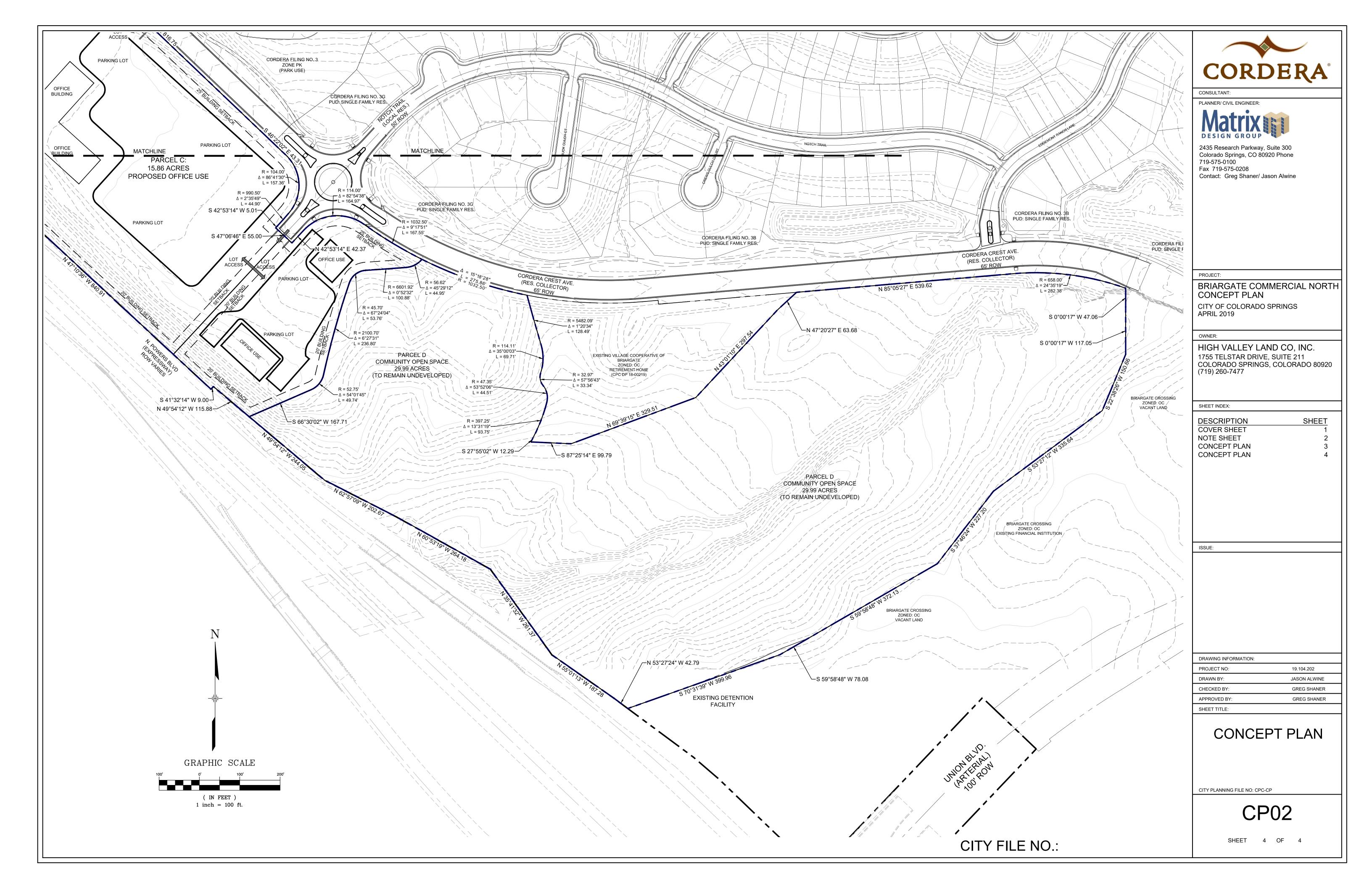
THENCE EASTERLY, ALONG SAID REVERSE CURVE, THROUGH A CENTRAL ANGLE OF 00°52'32" AN ARC DISTANCE OF 100.88 FEET TO A 56.62 FOOT RADIUS NON-TANGENT CURVE WHOSE CENTER BEARS NORTH 04°25'34" WEST;

THENCE NORTHEASTERLY, ALONG SAID NON-TANGENT CURVE, THROUGH A CENTRAL ANGLE OF 45°29'12" AN ARC DISTANCE OF 44.95 FEET TO THE POINT OF BEGINNING. THE ABOVE DESCRIPTION PRODUCES A CALCULATED AREA OF 1,306,559 SQUARE FEET (29.99446 ACRES),



CITY FILE NO.:





#### LSC TRANSP\ ...ATION CONSULTANTS, INC.



516 North Tejon Street Colorado Springs, CO 80903 (719) 633-2868 FAX (719) 633-5430 E-mail: lsc@lsccs.com Web Site: http://www.lsccs.com

January 17, 2007

Ms. Angela White, AICP La Plata Investments, LLC 2315 Briargate Parkway, Suite 100 Colorado Springs, Colorado 80920

RE: Cordera Filing No.3 Traffic Impact Analysis Report Colorado Springs, Colorado LSC #065940

Dear Ms. White:

In response to your request, LSC Transportation Consultants, Inc. has prepared this traffic impact analysis report for the proposed Cordera Filing No.3 development. As shown on Figure 1, the site is located south of Old Ranch Road, north of Union Boulevard, east of Powers Boulevard and west of Milam Road in Colorado Springs, Colorado. The areas northeast of Cordera Crest Avenue are generally proposed as residential. The areas southwest of Cordera Crest Avenue are generally proposed as office/commercial, with some multi-family residential near the Cordera Crest Avenue/ Old Ranch Road intersection.

#### **REPORT CONTENTS**

This report is being prepared for submittal to the City of Colorado Springs. The analysis includes the following items: dividing the site and the adjacent properties into traffic analysis zones (TAZs); develop projections of the vehicle-trips to be generated by each TAZ; develop projections of the site-generated and background traffic volumes on the proposed street system; and develop recommendations for the access intersection lane geometries and traffic controls along Cordera Crest Avenue necessary to accommodate the site-generated and adjacent off-site traffic volumes.

#### PROPOSED LAND USE AND ACCESS PLAN

Figure 2 shows the preliminary site plan and the adjacent proposed off-site land uses. The area southwest of Cordera Crest Avenue is generally proposed as office/commercial, with some multi-family residential near the Cordera Crest Avenue/Old Ranch Road intersection.

Figure 2 also shows the proposed access points to Cordera Crest Avenue between Union Boulevard and Old Ranch Road.

#### STREET AND TRAFFIC CONDITIONS

Figure 1 shows the existing and proposed streets in the vicinity of the site. The major streets are identified below, followed by a brief description.

- Union Boulevard is a north/south Principal Arterial. Plans call for an extension of Union Boulevard northeast across Powers Boulevard to connect to Milam Road, which extends north into the Black Forest area.
- **Cordera Crest Avenue** is a planned Minor Arterial that will parallel Powers Boulevard to the east between Old Ranch Road and Union Boulevard. The Union Boulevard/Cordera Crest Avenue and Cordera Crest Avenue/Old Ranch Road intersections are proposed as two-lane roundabouts. Cordera Crest Avenue will extend the bicycle lane from Old Ranch Road to the roundabout just north of Union Boulevard.
- Old Ranch Road is an existing east/west street extending east from Powers Boulevard, providing access to Pine Creek High School at Thunder Mountain Avenue. Old Ranch Road is currently classified as a Minor Arterial, but the City of Colorado Springs plans to downgrade it to a Collector in the vicinity of the site. Just beyond Thunder Mountain Avenue, Old Ranch Road becomes a two-lane rural cross section. Approximately one and a half miles east of Thunder Mountain Avenue, Old Ranch Road turns 90 degrees to the north and changes its name to Milam Road extending north into the Black Forest area.
- Milam Road is a north/south street extending north from Old Ranch Road to north of Shoup Road in the Black Forest area. Plans call for Union Boulevard to be extended east across Powers Boulevard and connect to Milam Road near the current location where Old Ranch Road and Milam Road meet.

#### TRIP GENERATION

The site has been divided into TAZs, as shown on Figure 3. Estimates of the traffic volumes expected to be generated by each TAZ were based on the nationally published trip generation rates found in *Trip Generation*, 7<sup>th</sup> *Edition*, 2003 by the Institute of Transportation Engineers (ITE). The results of the trip generation estimates by TAZ are shown on Table 1.

The Cordera Filing No.3 site is projected to generate about 21,100 new vehicle-trips on the average weekday, with about half of the vehicles entering and half of the vehicles exiting the site in a 24-hour period. During the morning peak hour, about 995 vehicles would enter and 665 vehicles would exit the site. During the afternoon peak hour, about 1,250 vehicles would enter and 1,525 vehicles would exit the site.

The sum of all the land uses along Cordera Crest Avenue between Union Boulevard and Old Ranch Road are projected to generate about 22,500 new vehicle-trips on the average weekday, with about half of the vehicles entering and half of the vehicles exiting these land uses in a 24-hour period. During the morning peak hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about 1,025 vehicles would enter and 745 vehicles would exit these land uses. During the afternoon Ms. Angela White, AICP Cordera Filing No.3

peak hour, which generally occurs for one hour between 4:15 and 6:15 p.n., about 1,340 vehicles would enter and 1,580 vehicles would exit these land uses.

#### TRIP DISTRIBUTION AND ASSIGNMENT

The directional distribution of the site-generated traffic volumes on the proposed street system is one of the most important factors in determining the site's traffic impacts. Specific trip distribution estimates were assumed for each TAZ. The directional distribution estimates for each TAZ were based on the following factors: the location of the site with respect to the greater Colorado Springs area; the land uses proposed for each TAZ; the planned access to each TAZ; the existing and proposed street system serving the overall site; and LSC's previous work in the area.

#### 2030 TOTAL TRAFFIC

Figure 4 shows the total traffic volumes for the year 2030. The 2030 total traffic volumes include the buildout site-generated and background traffic volumes. The background through traffic volumes on Cordera Crest Avenue were based on other studies performed in the area including the *May 20, 2003 Briargate Master Plan 2003 Update Transportation Study* by LSC and the *Briargate Crossing East Traffic Impact Study* by Kimley-Horn and Associates, Inc.

#### PROJECTED LEVELS OF SERVICE

The Old Ranch Road/Thunder Mountain Avenue intersection and all of the intersections along Cordera Crest Avenue from Old Ranch Road to Union Boulevard have been analyzed to determine the projected levels of service for the 2030 total traffic volumes. Four roundabouts are proposed along Cordera Crest Avenue located at Old Ranch Road, Union Boulevard, the approximate midpoint between Old Ranch Road and Union Boulevard, and the access just northwest of Union Boulevard. The roundabouts were analyzed with Sidra analysis software. All of the other intersections were analyzed based on the signalized and unsignalized method of analysis procedures outlined in the *Highway Capacity Manual, 2000 Edition* by the Transportation Research Board. All of the movements at the analyzed intersections are projected to operate at acceptable levels of service during the peak hours through the year 2030. The level of service analysis results are shown on Figure 5. The level of service reports are attached.

#### **RECOMMENDED IMPROVEMENTS**

Figure 5 shows the recommended lane geometries and traffic controls for the analyzed intersections. With the recommended improvements, there are not expected to be any significant capacity or queuing issues along Cordera Crest Avenue between Union Boulevard and Old Ranch Road.

#### CONCLUSIONS AND RECOMMENDATIONS

#### **Trip Generation**

1. The Cordera Filing No.3 site is projected to generate about 21,100 new vehicle-trips on the average weekday, with about half of the vehicles entering and half of the vehicles exiting the

Ms. Angela White, AICP Cordera Filing No.3 January 17, 2007 Traffic Impact Analysis Report

site in a 24-hour period. During the morning peak hour, about 995 vehicles would enter and 665 vehicles would exit the site. During the afternoon peak hour, about 1,250 vehicles would enter and 1,525 vehicles would exit the site.

2. The sum of all the land uses along Cordera Crest Avenue between Union Boulevard and Old Ranch Road are projected to generate about 22,500 vehicle-trips on the average weekday, with about half of the vehicles entering and half of the vehicles exiting these land uses in a 24-hour period. During the morning peak hour, about 1,025 vehicles would enter and 745 vehicles would exit these land uses. During the afternoon peak hour, about 1,340 vehicles would enter and 1,580 vehicles would exit these land uses.

#### **Projected Levels of Service**

3. All of the movements at the analyzed intersections are projected to operate at acceptable levels of service during the peak hours through the year 2030.

#### **Proposed Improvements**

4. Figure 5 shows the recommended lane geometries and traffic controls for the analyzed intersections. With the recommended improvements, there are not expected to be any significant capacity or queuing issues along Cordera Crest Avenue between Union Boulevard and Old Ranch Road.

\* \* \* \* \*

We trust this traffic impact analysis report will assist you in gaining approval of the proposed Cordera Filing No.3 development. Please contact me if you have any questions or need further assistance.

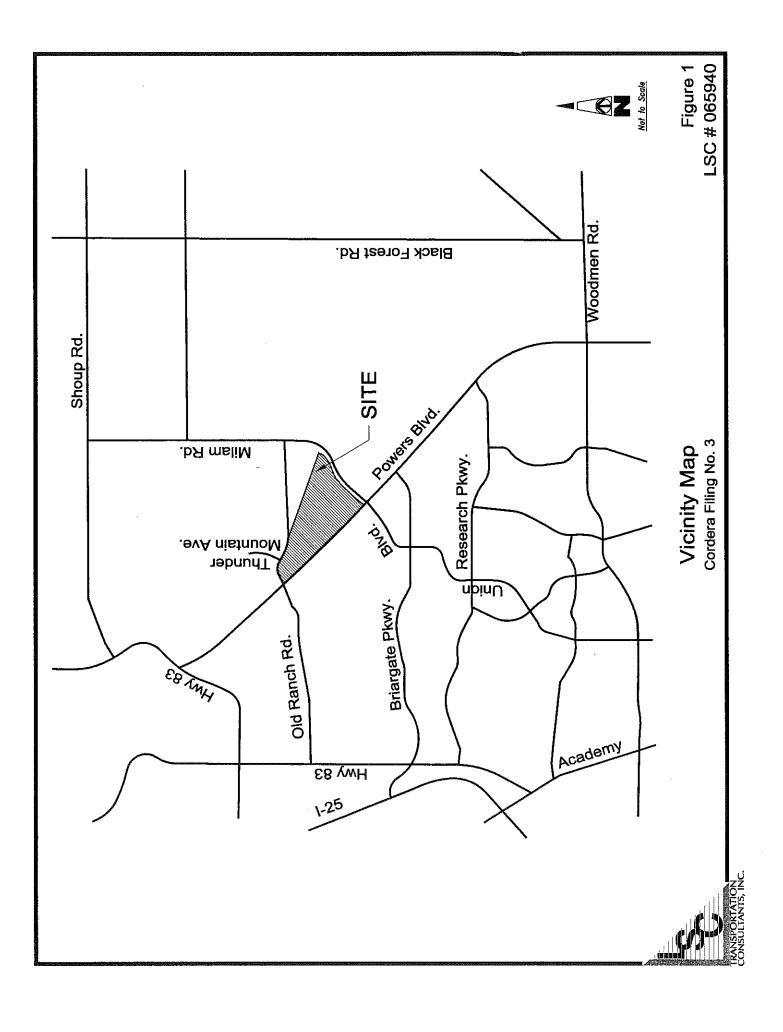
Sincerely,

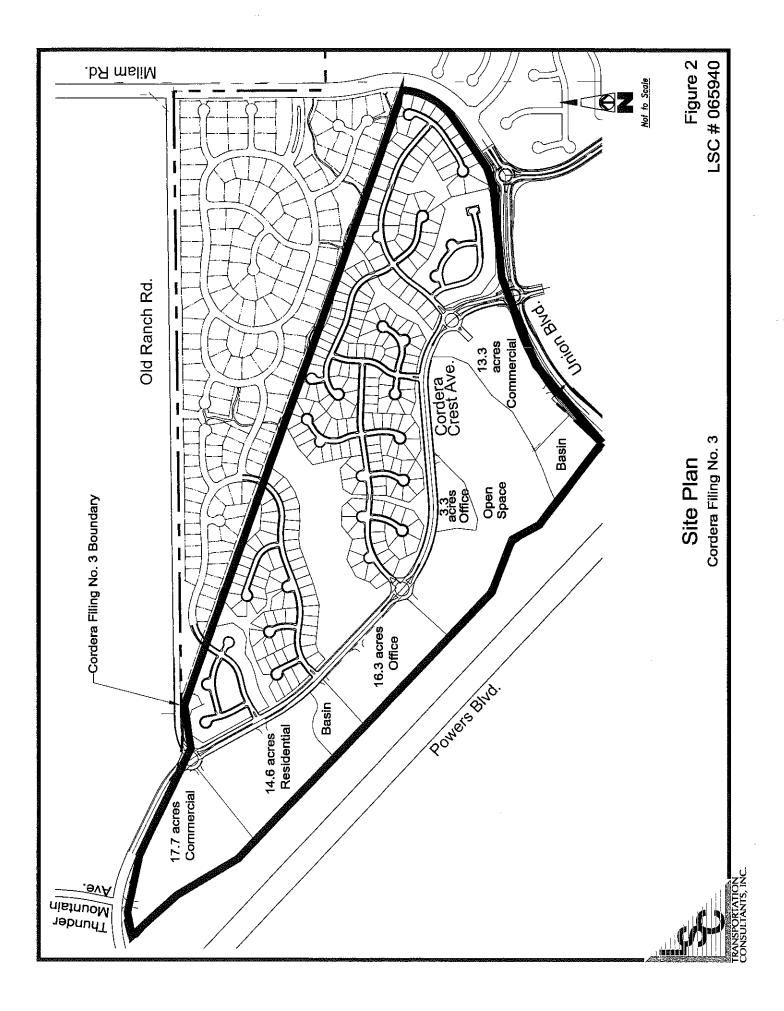
LSC TRANSPORTATION CONSULTANTS. I By 3901 Christopher 8. McGranahan, P.E., PTOE Associate/ CSM:DCJ:rf Enclosures: Table 1 Figures 1-5 Level of Service Reports

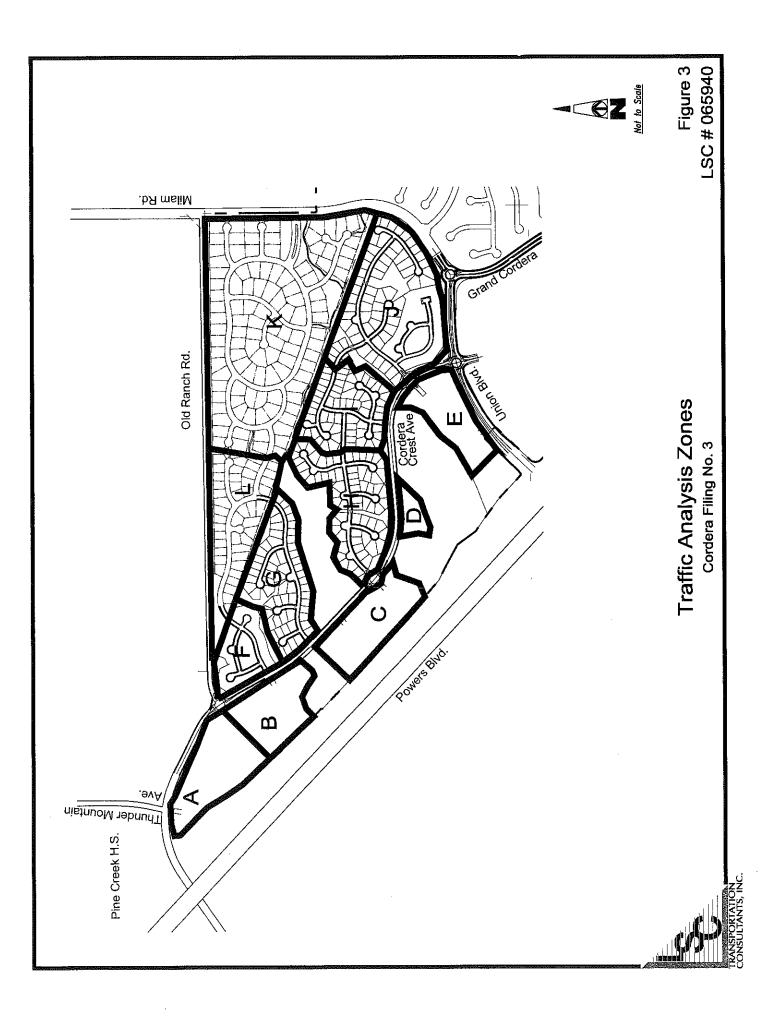
Table 1
Cordera Filing No.3 and Surrounding Land Uses
Trip Generation Estimates

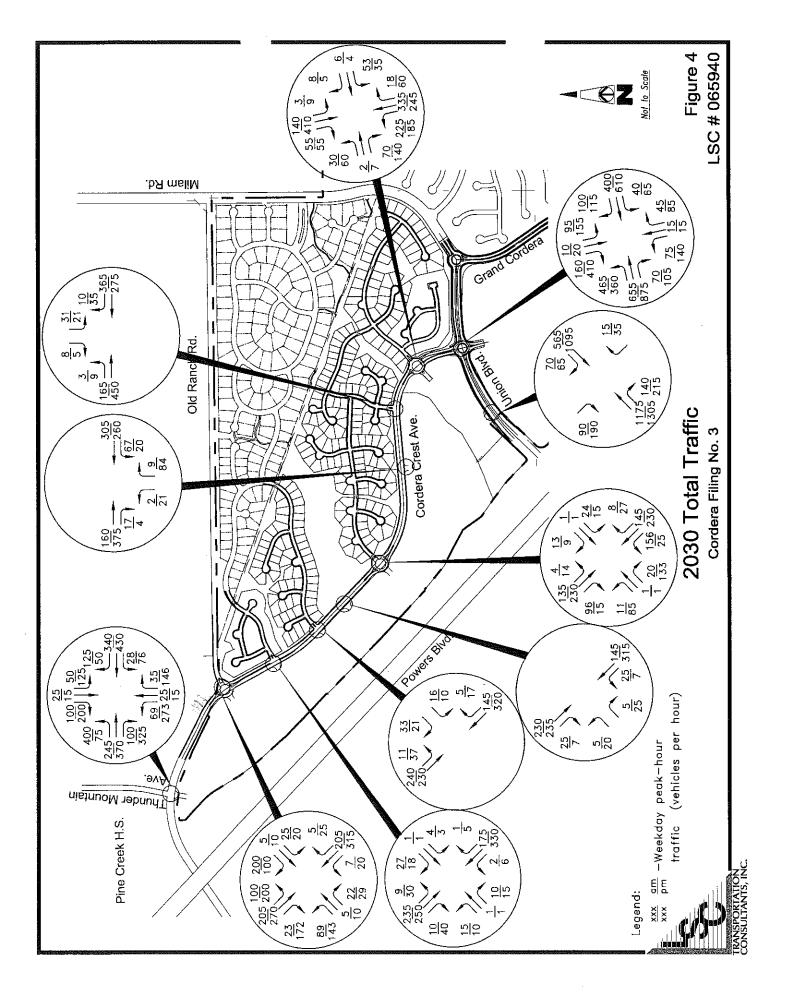
					Trip Gen	eration R	ates (1)			Total Tr	ips Gene	erated		Total New	Trips Generated	
	Land Use	Land Use	Trip Generation	Average Weekday	eekday Peak Hour		-		Average Weekday	Morning Peak Hour			noon Hour	Pass-By	Average New Weekday	
ΔZ <sup>(2)</sup>	Code	Description	Units	Traffic			In Out		Traffic	in Out		In	Out	Trips <sup>(3)</sup>	Traffic	
<b>ዲ</b> <sup>(4)</sup>	820	Shopping Center	231 KSF <sup>(5)</sup>	50.66	0.68	0.44	2.26	2.45	11,703	158	101	522	566	34%	7,724	
В <sup>(4)</sup>		Apartment	291 DU <sup>(6)</sup>	6.72	0.10	0.41	0.40	0.22	1,956	30	119	<u> </u>	63	0%	1,956	
C <sup>(4)</sup>		General Office Building	213 KSF	11.21	1.42	0.19	0.25	1.24	2,388	302	41	54	263	0%	2,388	
D <sup>(4)</sup>			43 KSF	16.20	1.95	0.27	0.50	2.45	697	84	11	22	105	0%	697	
		Day Care Center	7.2 KSF	79.26	6.78	6.01	6.19	6.99	571	49	43	45	50	0%	571	
E <sup>(4)</sup>	710	General Office Building	93 KSF	13.57	1.68	0.23	0.33	1.63	1,259	155	21	31	152	0%	1,259	
<b>E</b> '''	912	Drive-In Bank	5 DIL <sup>(7)</sup>	411.17	11.24	8.14	25.54	25.54	2,056	56	41	128	128	24%	1,562	
	932	High Turnover (Sit-Down) Restaurant	16 KSF	127.15	5.99	5.53	6.66	4.26	2,034	96	88	107	68	22%	1,587	
F <sup>(4)</sup>	210	Single-Family Detached Housing	39 DU	9.57	0.19	0.56	0.64	0.37	373	7	22	25	15	0%	373	
G <sup>(4)</sup>	210	Single-Family Detached Housing	60 DU	9.57	0.19	0.56	0.64	0.37	574	11	34	38	22	0%	574	
H <sup>(4)</sup>	210	Single-Family Detached Housing	65 DU	9.57	0.19	0.56	0.64	0.37	622	12	37	41	24	0%	622	
(4)	210	Single-Family Detached Housing	77 DU	9.57	0.19	0.56	0.64	0.37	737	14	43	49	29	0%	737	
J <sup>(4)</sup>	210	Single-Family Detached Housing	110 DU	9.57	0.19	0.56	0.64	0.37	1,053	21	62	70	41	0%	1,053	
к	210	Single-Family Detached Housing	107 DU	9.57	0.19	0.56	0.64	0.37	1,024	20	60	68	40	0%	1,024	
L	210	Single-Family Detached Housing	40 DU	9.57	0.19	0.56	0.64	0.37	383	8	23	25	15	0%	383	
		Total (TAZs A-L)							27,429	1,023	746	1,342	1,582		22,509	
		Cordera Filing No.3 Total (TAZs A-J)							26,022	996	663	1, <b>248</b>	1,527		21,102	
tes:																
1) Sou	irce: "Tr	ip Generation, 7th Edition, 2003" by the Ir	nstitute of Transpo	ortation Engine	eers (ITE)	)										
2) TAZ	<u> z</u> = traffi	c analysis zone														
-		ip Generation Handbook - An ITE Propos		d Practice, Oc	tober 199	98" by ITE										
		ing No.3 land uses. The other land uses a	are off-site.													
•		sand square feet														
•	= dwelli	•		·												
	- drive	-in lane														

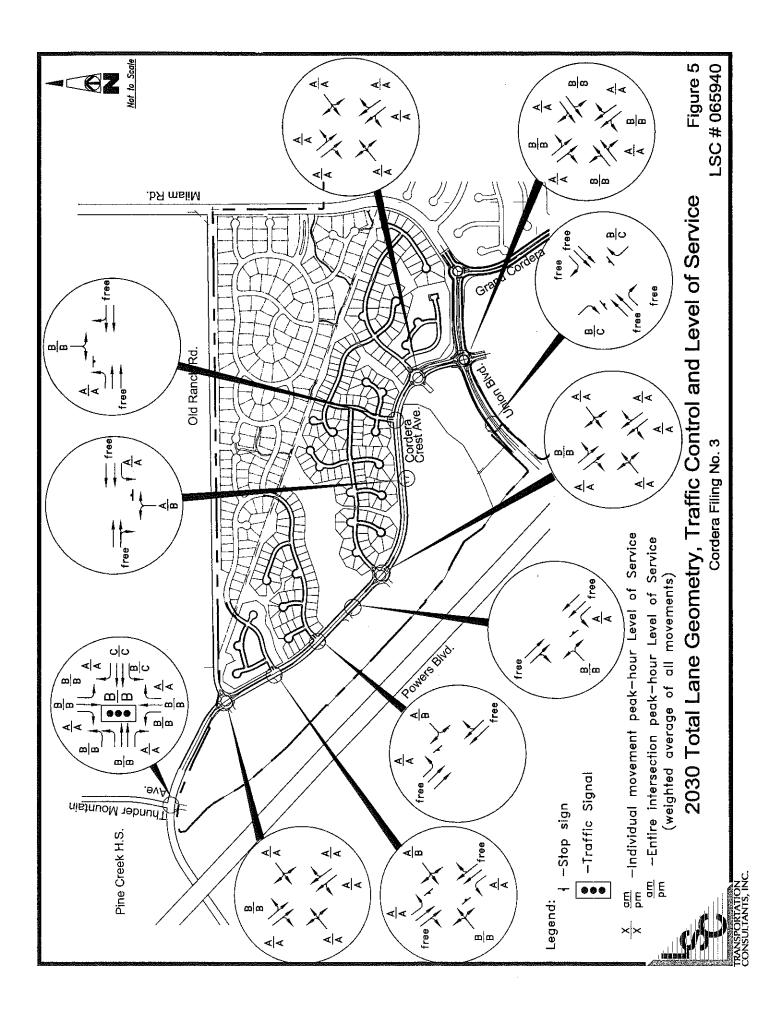
Source: LSC Transportation Consultants, Inc.











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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	忭	ሻ	ሻ	<u>††</u>	f	۲	Ť	7	**************************************	ŕ	7
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.Ö	4.0
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	1863	1583	1770	1863	1583
Fit Permitted	0.502	일 같이라.		0.592			0,737			0,737		
Satd. Flow (perm)	1814	3539	1583	1103	3539	1583	1373	1863	1583	1373	1863	1583
Satd. Flow (RTOR)			105			132	法有限时	ΔE	41			105
Volume (vph) Peak Hour Factor	400 0,95	245 0.95	100 0.95	28 0,80	340 0.95	125 0.95	69 0.85	25 0.80	35 0.85	50 0.85	25 0.80	100 0.95
Adj. Flow (vph)	421	258	105	0,00 35	358	132	0.00 81	0,80 31	0.03 41	0.85 59	0.80 31	105
Lane Group Flow (vph		258	105	35	358	132	81		41	59	S12	105
Turn Type	pm+pt	ies <b>e sys</b> te	Perm	Perm	lenei <b>Mar X</b> il	Perm	Perm	Saaba <b>Y</b> (113	Perm	Perm		Perm
Protected Phases	P P.	4			8	an stadu		2	SECON.	346862	6	00100
Permitted Phases	4	endersterlick State	4	8	Pris Tel Varia de 19	8	2	0000000	2	6	" ti Bəl dürmlir	6
Detector Phases	7	4	4	8	8	8	2	2	2	6	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	12.0	91.0	91.0	79.0	79.0	79. <b>0</b>	29.0	29.0	29.0	29.0	29.0	29.0
Total Split (%)	10.0%	i e il fan die e súderfoarte b		1. I. PARTING AND ADDRESS					en de persona ana anti-ara di			
Maximum Green (s)	8.0	87.0	87.0	75.0	75.0	75.0	25.0	25.0	25.0	25.0	25.0	25.0
Yellow Time (s)	3.5	3.5	3,5	3.5	3.5	3.5	3,5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5 Normalad	0.5	0.5	0.5	0.5 09000655	0.5 Sasthister	0.5
Lead/Lag Lead-Lag Optimize?	Lead Yes	946444	na provinski provi Pa provinski	Lag Yes	Lag Yes	Lag Yes	n ata serie para a Gala Villago da			SBER GER F	939367	14654
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max	Max	Max
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)	ICCC OFFICE OF PERSON	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr	) i teknikeli	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	23.3	23.3	23.3	11.3	11.3	11.3	25.0	25.0	25.0	25.0	25.0	25.0
Actuated g/C Ratio	0.41	0.41	0,41	0.20	0.20	0.20	0.44	0,44	0.44	0.44	0.44	0.44
v/c Ratio	0.43	0.18	0.15	0,16	0.50	0.31	0.13	0.04	0.06	0.10	0.04	0.14
Control Delay	12.4	10.6	3.1	19.9	22,4	6,4	11.1	10.2	4.3	10.8	10.2	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0 נוגייאגיגיי ווו	0.0	0.0	0.0	0.0	0.0
Total Delay				19.9		6.4		10.2		10.8		3.4
LOS Approach Delay	B Belief and the second	В 10.5	A A	B Maranan	C 18.2	A Second	B	B 9.1	A Representation	B	B B	A BREAR
Approach LOS		B B	0.8530044	비가 관련하는	B B	di Historieli	SI nditisin	A A	an na seo an		ان ۹۰ <i>۱</i> A	
								~~~~~				
Intersection Summary	and a second		a na sa			Ne des les des			the second s			
Cycle Length: 120		ana tanàna dia kaominina d	rate da la ka 40 M		Konseran	un en		eren anderen er	- 	264322200	ur de la comp	9965534
Actuated Cycle Length	1. 55.4		205946)	649646	h printe		1899 A A A		90398654	uttaties	kanda	8344639
Natural Cycle: 50 Control Type: Actuate	dillococce	lingtod					argenser					
Maximum v/c Ratio: 0		mateu	name de dich	use kolonely	r shirida	ent.Fjähd:	2000331036	1998 J. U.	ti zastata	.99900281	anti de di	93461116
Intersection Signal De			446444	le le	itersec	tion LOS	S B		<u> ABRUTE</u>	9990 <u>245</u> 34	40.5 A.U.	547 <u>1</u> 687
Intersection Capacity			asanna da 1920. As	и, фінальська ][	CU Lev	el of Ser	vice A	e na se	9.5 (J. 2016) (J. 2016) (19.17)	t sinter of states.	sterne i stander	and the state
Analysis Period (min)			6	<u>Richel</u>			1665136		adji se Qen			
alenander i stelen der her der som der som der som	(all 4.16)(a.e., e.g. (a)(a)(a)	요구하다 유민이가	an the second		an ta milita a fagir.		saandigi i iyo na	en este las ciens	ne (alet, e te triu	- 479 - 1460 (1777) 1777 - 1776 (1777) 1777 - 1776 (1777)		gorna tutt.

Lanes, Volumes, Timings 4: Old Ranch Rd. & Thunder Mountain Ave.

Splits and Phases: 4	: Old Ranch Rd. & Thunder Mountain Ave.
<b>↑</b> <sub>@2</sub>	e4
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	28 79:

	۶	-	$\mathbf{F}$	4	<b>.</b>	×		1	*	<b>&gt;</b>	¥	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL,	SBT	SBR
Lane Configurations	ሻሻ	<b>*</b> *	ሾ	۲	<b>^</b>	7	۲	<b>†</b>	7	ኘ	Ť	۴
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4,0	4.0
Satd. Flow (prot)	3433 0.448	3539	1583	1770 0.522	3539	1583	1770 0,744	1863	1583	1770 0.744	1863	1583
Fit Permitted Satd. Flow (perm)	1619	3539	1583	<u>0.522</u> 972	3539	1583	0,744 1386	1863	1583	1386	1863	1583
Satd Flow (RTOR)			342			59			154			211
Volume (vph)	75	370	325	76	430	50	273	15	146	125	15	200
Peak Hour Factor	0.85	0.95	0.95	0.85	0.95	0.85	0.95	0.75	0.95	0.95	0.75	0,95
Adj. Flow (vph)	88	389	342	89	453	59	287	20	154	132	20	211
Lane Group Flow (vph	Sector and the first of the part of the	389	_342	89	453	59	287	20	154	132	20	_211
Turn Type	pm+pt	Tanan aras	Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases Permitted Phases	4	4	20366-90 4	8 8	8	8 8	155411933 <b>2</b>	, the Z	1919-2- 2	21.53234 6	6.	
Detector Phases	4 7 4	<u> </u>	4	8	8	8	2 2		ے 21	6	6	6 6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	12.0	91.0	91.0	79.0	79.0	79.0	29.0	29.0	29.0	29.0	29.0	29.0
Total Split (%)	10.0%		and a standard state of the sec	mente dis constante de la const	an talah sahat talah bar	and serve the access	an na tha program a su		n age ar chuid is arrus file igea	<ul> <li>Price de la construction de la </li> </ul>		and successful the second
Maximum Green (s)	8.0	87.0	87.0	75.0	75.0	75.0	25.0	25.0	25.0	25.0	25.0	25.0
Yellow Time (s)	3.5	3.5	3,5	3,5	3.5	3,5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5 Lead	0.5 Jakaso oli	0.5 DEMENDE	0.5 Lag	0.5 Lag	0.5 Lag	0.5 ©©©©©©	0.5	0.5	0.5	0.5 1995/1995	0.5 (1997)
Lead-Lag Optimize?	Yes	900366	n de constant.	Yes	Yes	Yes	PERSON	Autonius	addada (add	h ta titat tin	ura zektenia	Baccol HSI
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	Max	Max	Max	Max	Max	Max
Walk Time (s)	N Marina (* 1961) Na kasaran (* 1964)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	second the second	0	0	ျာဂျ	0		0	<u> </u>	0	0		<u> </u>
Act Effct Green (s) Actuated g/C Ratio	18.6 0.33	18.2 0.35	18.2 0.35	12.2 0.23	12.2 0.23	12.2 0.23	25.9 0.50	25.9 0.50	25.9 0.50	25.9 0.50	25.9 0.50	25.9 0.50
v/c Ratio	0.33	0.32	0.35	0.39	0.55	0.23 0.14	0.50	0.02	0.50	0.50	0.02	0.50
Control Delay	10.6	12.0	3.4	23,6	20.8	6.5	14.0	10.9	3.3	11.7	10.9	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.6	12.0	3.4	23.6	20.8	6.5	14.0	10.9	3.3	11.7	10.9	3.0
LOS	B	В	А	С	С	А	В	В	А	В	В	А
Approach Delay		8.3	경망성성	463444	19.8		g g gere v	10.3			6.6	
Approach LOS		A			В			В			A	
Intersection Summary		P. 1	ene es el	ka 19 - 12								
Cycle Length: 120				1								
Actuated Cycle Length	1: 52.3	비행 상품 성문	방송문문					164 위식 P				
Natural Cycle: 50 Control Type: Actuated		in an	94094004	(49) (4) (4) (0) (0)		tg inge optidete	440.04467	gegeligezgel ve	net Store of	enes comos	ung or ar	9134-0517
Maximum v/c Ratio: 0.		nialeu	303.9664	ess sedacs	ek karjun	gurneidt.	1090444	이란 문문을	nag habby	1458-1469 	n keral	
Intersection Signal De		(TRUE)	S (72418) (7	i i i i i i	itersect	ion LOS	B	NG MARINE	r. Nga nga nga nga nga nga nga nga nga nga n		25,640	
Intersection Capacity I			/1-8471769C1			el of Ser		s saga santa	en mange tar i diji	contra de la serie de la s La serie de la s	ويوفظ الباد الأشريت	n fei fi din ji din gan din
Analysis Period (min)			h bili				l stati			i an	9495.7	

Splits and Phases:	4: Old Ranch Rd. & Thunder Mountain Ave.
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29 :	
<b>∲</b> © ø6	→ <sub>∞7</sub> <sup>≪</sup> ∞8
29 3	12 <b>*</b> 28 <b>*</b>



#### Cordera Crest/Old Ranch

Roundabout

#### **Vehicle Movements**

Mov No	Turn	Dem Flow (veh/h)	Cap (veh/h)	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (ft)	Eff. Stop Rate	Aver Speed (mi/h)	Oper Cost (\$/h)
NW Bound	d Corder	a Crest	vanskada jelovala pranova v projeka jedna v me		1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -					
72	L	8	85	0.094	7.1	LOS A	13	1.11	22.9	1
71	Т	223	2362	0.094	2.3	LOS A	13	0.50	29.5	18
73	R	5	64	0.094	4.8	LOS A	13	0.88	27.1	1
Approach	Ł	236	2511	0.094	2.6	LOS A	13	0.53	2 <b>9.2</b>	19
SW Bound	d Old Ra	nch	e el an antinente el antinente a ser antinente en antinente en antinente en antinente en antinente en antinente					****		k ne slav Koltoner esterdori
62	L	27	1064	0.236	5.8	LOS A	33	1.02	27.5	28
62	т	5	1064	0.236	5.8	LOS A	33	1.02	27.5	28
62	R	217	1064	0.236	5.8	LOS A	33	1.02	27.5	28
Approach	I	251	1064	0.236	5.8	LOS A	33	1.02	27.5	28
SE Bound	Cordera	Crest						ta ka ng ka ng ka ng ka kana ng kaga ka nang ka ng paga kan		
82	L	109	1055	0.103	10.9	LOS B	13	1.28	25.2	15
81	Т	223	2150	0.103	1.7	LOS A	13	0.37	32.0	21
83	R	25	252	0.103	4.1	LOS A	13	0.79	28.8	2
Approach	ŧ	357	3457	0.103	4.7	LOS A	13	0.68	29.2	38
NE Bound	TAZ B	anaanii a faalaista a	***************************************			iela co re historie d'un óncon construción i súlo	alviile akti liikko ovinoove	, <u>1999</u> , 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1	*	
52	L	97	1008	0.127	6.8	LOS A	16	1.11	18.7	15
52	Т	5	1008	0.127	6.8	LOS A	16	1.11	18.7	15
52	R	24	1008	0.127	6.8	LOS A	16	1.11	18.7	15
Approach	l	128	1008	0.127	6.8	LOS A	16	1.11	18.7	15
All Vehicles		972	8040	0.236	4.7	LOS A	33	0.79	27.2	100

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#### **Cordera Crest/Old Ranch**

Roundabout

#### **Vehicle Movements**

Mov No	Turn	Dem Flow (veh/h)	Cap (veh/h)	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (ft)	Eff. Stop Rate	Aver Speed (mi/h)	Oper Cost (\$/h)
NW Bound	l Corder	a Crest	L				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
72	L	22	125	0.176	8.1	LOS A	27	1.26	22.3	2
71	Т	342	1948	0.176	3.2	LOS A	27	0.69	28.3	28
73	R	27	159	0.176	5.6	LOS A	27	1.04	26.3	3
Approach		393	2232	0.176	3.6	LOS A	27	0.75	27.8	33
SW Bound	Old Ra	nch	<del>, , , , , , , , , , , , , , , , , , , </del>	gyggagg an oggag an anger an	gagang ana mining ang ang ang ang ang ang ang ang ang a					
62	L	22	894	0.160	6.9	LOS A	21	1.18	26.9	16
62	т	11	894	0.160	6.9	LOS A	21	1.18	26.9	16
62	R	109	894	0.160	6.9	LOS A	21	1.18	26.9	16
Approach		143	894	0.160	6.9	LOS A	21	1.18	26.9	16
SE Bound	Cordera	ı Crest	NEOEDIN (VALUE - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 199	an shunda da an	an fannen san fernande yn gestânder an fe	LL VEN LE POLET ANY THOUGH A POPULATION AND AND AND AND AND AND AND AND AND AN				
82	L	217	1064	0.204	11.0	LOS B	28	1.27	25,1	30
81	т	293	1441	0.204	1.7	LOS A	28	0.38	31.8	28
83	R	187	916	0.204	4.2	LOS A	28	0.80	28.6	15
Approach		698	3421	0.204	5.3	LOS A	28	0.77	28.4	73
NE Bound	TAZ B	20 20 - 20 - 20 - 20 - 20 - 20 - 20 - 2		2		with the second of spanse in the second s	na na kana na kana sa kana kana kana kan			
52	L	155	912	0.219	7.9	LOS A	31	1.29	18.4	23
52	т	11	912	0.219	7.9	LOS A	31	1,29	18.4	23
52	R	32	912	0.219	7.9	LOS A	31	1.29	18.4	23
Approach		200	912	0.219	7.9	LOS A	31	1.29	18.4	23
All Vehicles		1434	7459	0.219	5.4	LOS A	31	0.88	26.5	145

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			\$		ሻ	<u></u> ተኩ		ኻ	<b>ተ</b> ጉ	
Sign Control		Stop			Stop			Free		1.9.25	Free	
		0% 1		es en las en el c <b>a</b> ltas	0%		u u u u u a a	0% 175	e e e e e e e e e e e e e e e e e e e		0% 2 <b>35</b>	10
Volume (veh/h) Peak Hour Factor	0.75	0.60	10 0.70	0.60	0.60	0.80	0.60	0.95	0.60	9 0.65	0.95	0.70
Hourly flow rate (vph)	20	2	0.70		0.00	34	3	184		14		14
Pedestrians	i le l'is <b>t y</b> li i	-		2000-000-0050 	s-nu m <del>s</del> a	n i Ya		desigint <b>M</b> atria	66666 <b>75</b> 50	31922413.420	890.000	44533313
Lane Width (ft)								Net des Mérica des John John				
Walking Speed (ft/s)	2. NA 1911 - TANA NA 42.22, SASTANG TA											
Percent Blockage		net sense Sense			an a	u uuustaalas hatadootsaas	2946, 947888 1997 - J. Amerika 1997 - J. Amerika	an isa isy i Kang Mahai				
Right turn flare (veh)	Apple and the	<b>ST</b> 1997 - Station	libiland fol	o de peteredes	A NUMBER		271-324334	asero de co	ate Successions	onu namen		uneno toren.
Median type Median storage veh)	gelstaan di	None	a da Section		None		an Dafie			a le par ser le	uudta stab	
Upstream signal (ft)		4407246961	ing dan ka	an e se s	waansa	ustor	A generative data data Maji wana data data data	and the set	4414-613	9566669		NGGFAR
pX, platoon unblocked	.90145053-KG	na hi seu anas	Geodelii Idae	seal in sit 1993.	-i O kitin milayda	etoritakes, 2005	a no C. C. Salat in	0251-668357263	2012/07/2017	90.5,150194499	1011456251462	993933388
vC, conflicting volume	416	475	131	358	481	93	262	(140 psi 452 a		186	s an	n te si
vC1, stage 1 conf vol	s a na mara an ang	1 de la 120 2 a 2001 y a	. (64. SEA.)p.a		10. 5 41120000.0411				ee feffil tee t jugicio	proceeding the former of the		
vC2, stage 2 conf vol												
vCu, unblocked vol	416	475	131	358	481	93	262	i si de distante programa	a definition d'un te te	186	an teachtraich.	94477020.236
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		ali besco di
tC, 2 stage (s) tF (s)	3.5	4.0	3.3	3,5	4.0	3.3	2,2		469366649	2.2	n a sa s	kakesi 20
p0 queue free %	4889-948 96	4.0 100	98 98	99	100	96	100	480 <b>(14.9</b> 04)	407. BARA	99	1000080080	usseltii ko×n
cM capacity (veh/h)	496	481	894	556	477	946	1300		us and	1386		1995-199
Direction; Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB2	SB 3		Alexandra (	All and a second	
Volume Total	36	42	3	123	63	14	165	97	e Kopeli i Secolo E Kopeli i Secolo	u de la companya	60.000 19.00	
Volume Left	20	nna∺4:: 7	3	1 <u>2</u> 5, 0	0	14 North	0 0	816-249 0	864000000	846,644,644	endelerster	0,999,072
Volume Right	14	34	HEELO	<u> </u>	2	o III o	<u>.</u>	14			0.603.6	
cSH	602	823	1300	1700	1700	1386	1700	1700	area ad belor as d	n tra an daga da bah	9 H ( 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
Volume to Capacity	0.06	0.05	0.00	0.07	0.04	0.01	0.10	0.06				
Queue Length 95th (ft)	5 	4	0	0	0	1	0	0	TOT TOUGHT AND	li Origi Matania Maliada	949 B (K) (T) (T) (B) (S)	
Control Delay (s)	11,4	9.6	7.8	0.0	0.0	7.6	0.0	0.0	54444	un 1913 et statis I 1945 i de la seconda de la seconda I 1947 e seconda de la second	60996746 777	이비카
Approach Delay (s)	В 11.4	A 9.6	A 0.1	<u></u>	- 6810-656	A 0.4	en e	959267833	4247347G	li penne ser e		472417
Approach LOS	B B	A	ga Vide	g prendensi.	racerses	in de la company	parteus de la companya de la company La companya de la comp	n. dag helda	aseus soluti.	uurazata:	PF-13-152	94 HC (97 C)
• /												
Intersection Summary Average Delay	NEPADA PRESS	Fig. Dat option	1.7	201-00-00 <b>4</b> -00	AND DECKS				an a			
Intersection Capacity Ut	ilization		۱.7 19.0%	10	CU Leve	el of Se	rvice		Α		900630	the c

Intersection Capacity Utilization 19.0% ICU Level of Service A Analysis Period (min) 15 

	۶.		` <del>`</del>	4	<b>4</b>	×	1	t	1	4	ţ	1
	EBL E	BT E	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<b>4</b> 3	ensendidiste	ensewner af the	<b>4</b>	s. Kunna (Marija)	<b>*</b> 63369998139	<b>4</b> 1		<b>۴</b> الماليد المالي	∱∱ Free	Lotate Criter
Sign Control		Stop 0%			Stop 0%			Free 0%	9896984		0%	KKREE K
Volume (veh/h)		070 ⊞1∎⊡	15	3	1	18	6	330	5	30	250	40
	CCC	-4,194 DAMART POR	). <b>75</b>	0.60	0.60	0.75	0.65	0.95	0.65	0.80	0.95	0.85
Hourly flow rate (vph)	14	2	20	5	2	24	9	347	8	38	263	47
Pedestrians	Phone and the second second second	HEREITZER STAT	ota konzelatel		01900001202000	- C. ASTRONOMICI I M	ud an the state of t	PROJECTS STOLEN	a na kata na ka	a an		
Lane Width (ft)			an a						gangen u	ANGERER A		
Walking Speed (ft/s) Percent Blockage		ende se							ING MAR			
Right turn flare (veh)	601644688	n in the reaction of the	andrigene	a nanzoriska talak	n Roll-Archite	1 <u>1</u> .00-(1-166)		164 CE 8 BEAA52W	2.000 Cuigan (	r Built-Cloud FL 10370F		delettione (Fill)
Median type	N N	one		ter de la company de la com	None				ha taran 45 Na Kasal Waa	18, 59, 49, 49 47 - 19 - 19 - 19		
Median storage veh)			an aranger tari	and the late the b	× 9494040400	almatica.dilla	National Contraction		0.00000.00040	n an thairteachairte		alaterii a
Upstream signal (ff)				Humanita H		la Creaz de la	isi nanganga Shi Panganga		Cherner			anka a
pX, platoon unblocked vC, conflicting volume	579	735	155	597	755	178	310	10.2101		355		
vC1, stage 1 conf vol	<b>Y1 X</b>				FRAZ GUR	station of the	88.5850	i a pocialista d	Geologia den Statikan	adhar ta tan se	an Kidali a ata 19	9911-992-193-1-00-a
vC2. stage 2 conf vol												
vCu, unblocked vol		735	155	597	755	178	310	n de la composition d	enter at anticorda	355 1111 - 111	NUS STATEM STATEM	en frædes er
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s) tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		40 da 10
p0 queue free %	96	99	98	99	99	97	99		00024044.64	97	19119-1919 (* 1919)	ataq (n.1.51-1.51
cM capacity (veh/h)			863	365	323	835	1247			1200		
	-81 W	/B.1N	IB 1	NB 2	NB 3	SB 1	SB 2	SB 3				
Volume Total	36	31	9	232	123	38	175	135				
Volume Left	14	5 5	9 9	0	0	38	0	0	ine iteriore a real a			
Volume Right	20	24	0	0	8	0	0	47				
cSH			247 2070	1700	1700	1200	1700	1700 0.08		4008.346CM	4077793.12	556.05VS
Volume to Capacity Queue Length 95th (ft)	0.07 0.07 5	0.05 ( 4	0.01	0.14 0	0.07 0	0.03 2	0.10	0.00 0	an a		1960-1951-1951-195 1960-1951-1951-195	40.949333
Control Delay (s)	12.1	•	7.9	0.0	0.0	8.1	-	0.0				1493 B
Lane LOS	B	Β.	А	ten den leiste en de	1990 - 1991 - <del>1</del> 999 - 1999	A	Millindebrened g	1 (977) (977) (978) 1 (977) (978)	en part constant	angan menerati par se sa	n in drammer of the	on and straight
Approach Delay (s)	12.1	10.9	0.2			0.9			(). (). (). (). (). (). (). (). (). ().			
Approach LOS	В	В										
Intersection Summary					SU 12	i ng sin ng						
Average Delay Intersection Capacity Utiliz	alara gabaratara		1.5	i de la		an a	garappetetaa		segeneral <b>k</b> er	949) 1949 (1949) 1949 (1949)	iegereen ootstaat	elsellet-der

Analysis Period (min) 15

		ال≪	اف	X	×.	*				
Movement	SBL	SBR	SEL	SET	NWT	NWR				
Lane Configurations	¥1	98.8406.6444.	<b>*</b>	* <b>*</b> *	<b>^</b> †}	ah in the interaction of	• MARINA MARINE ANTAL	us al ser l'house se se	ander sinder het setter beinen. H	oren er en
Sign Control	Stop 0%			Free 0%	Free 0%	l thigh with the		6.446.614.49		and provide the second s
Volume (veh/h)	16	33	11	240	145	5				
Peak Hour Factor	0.75	0.85	0.70	0.95	0.95	0.65				
Hourly flow rate (vph) Pedestrians	21	39	16	253	153	8				
Lane Width (ft)				as de la				n ha ga ha sa ha		
Walking Speed (ft/s)	CONTRACTORIES PRO		et del trichite induction	endiano (dale) y filik	thi trì di dài dhe dhai	i del alta del la calcada delado	eserve lej dester des infants or proja	telenegen in provinsi i de siven	u velator definei e al coletti (CALT)	( 1991 WARFOLD BEEK ABER 1
Percent Blockage										
Right turn flare (veh) Median type	None			UNARS	49.466					
Median storage veh)		199 <u>2 (1997) 535</u> (19	100999 ( ja: 55)	dilla lineaith	dahi tibi bekadi			angener er ener	a, Congranda da Co	1016-1545-1-1-1-6-1-
Upstream signal (ft)				(REEG)	u zrz PSP U Przyska p					ind of the
pX, platoon unblocked vC, conflicting volume		80	160	yan an y	u, notroj d	na ar an	Sannaan sa	u de la compañía de l La compañía de la comp	en de la company	CCCNUUS DS
vC1, stage 1 conf vol	- U U T - I					8046468533	54895462585	Galen Baler (n. 197	5.66.7 TU () ( E	seeds a s
vC2, stage 2 conf vol			Śdrądzie	r de la compañía de la Compañía de la compañía					karde b	
vCu, unblocked vol	314 6.8	80 6.9	160 4. <b>1</b>	madal Olda	94. COM 1985 (19	era a a di ila da di	r (referensisten og sin state og	379,244,07444,014	ine oscence persona	dentaria (198
tC; single (s) tC, 2 stage (s)	0,0	0.9	4.1	the shift	- Hallabu	hel Segeral Hand	ketiki (†			
tF (s)	3.5	3.3	2.2	48 herrier Statistics				George George Japanese I. Terreter State State State		
p0 queue free %	97	96	99	ar mariant, in			nya ji ya pinyanja na mjalas katologa	egunda o o de 1956 y 1 cor	en jel en se in en freierie inte	alia din tradi.
cM capacity (veh/h)	647	964	1416							
Direction: Lane #	_SB1	SE 1	aller all all and a second	100 C 28 C 28 C 28 C	NW 1	and a second	er en		的成了内的	
Volume Total	60 21	16 16	126 0	126 0	102 0	59 0			er her som en	UNE 3191
Volume Right	39		nau õ	at o		8	() 이번 전 전 전	Louis and the second		
cSH	821	1416	1700	1700	1700	1700	······	ter and the second s		approximation of the
Volume to Capacity	0,07	nast i tidatas	0.07	ar bibriana	0.06	0.03 0				
Queue Length 95th (ft) Control Delay (s)	6 9,7	1 7.6	0.0	0 0.0	0				ri Decista (1914), LUMA, A. LAND ( 1915), Marcal II, Marcal (1917), A. LAND (1917),	
Lane LOS	Α	A Strategy	ui li aireach acan	(opposition) (opposition)	oni ne ni nitre - Ani ala		. Al fel traisceitel Strafel vels	PACES, PERENDUAL (1999)	141 - <b>197 1</b> 9 1911   11.11.11.11.11.11.11.11.11.11.11.11.11.	i Béd an an go i a
Approach Delay (s)	971	0.4			0.0					
Approach LOS	A	AV1001201313130018144444411	1044517507587588518611611610000	CONTRACTORY DUSING A STREET		2175 (4190) 24 W. B. C. S. L. S. L	*******	10 MMA 10 M data 14 M Alexandra		
Intersection Summary										
Average Delay Intersection Capacity Uti	lization	BELOX: 4H	1.4 10 1%	i i i c				<b>.</b>	ENGLIGHTSS	
microcoupin Capacity Off	nccition 1	onali Sahi	1 <b>2</b> , 170	unter A			ez ( le	esta Alfi		146 151 446 66

Analysis Period (min) 15

	ų.	• ايو	N	* *	•		
Movement	SBL	SBR SEL	SET 1	IWT NWF	Research		
Lane Configurations	<b>ک</b> یڈ		<b>*</b> *	<u>†</u> }	e para se en el compositione de la c		
Sign Control	Stop 0%		Free 0%	Free 0%		n an ann an Anna an Anna an Anna an Anna Anna Anna	
Volume (veh/h)	10	21 37	230	320 17			
Peak Hour Factor	0.70	0.80 0.85		0.95 0.75		······································	terestation des sous para a tracts de la composicionadad
Hourly flow rate (vph)	9414	26 44	242	337 23	8-0-2-1-2-2-2		
Pedestrians Lane Width (ft)	to a constant						
Walking Speed (ft/s)	ander de la statem	Nasamilisedes: Presidente Angeleen	and an	n iden sinder og som en det	en dere Verteich Versien und sinder	an landana ar ar me antana da ar	en del a en desenten la social a proposition de la seconda de
Percent Blockage							1916年1月1日1日1日1日1日1日1日1日1日1日1日1日1日1日1日1日1日1日1
Right turn flare (veh) Median type	None	5 5 5 5 4 4 4 5 5 5 5					
Median storage veh)		ay) <u>and 122 an</u> 303 (196)	an stan daar	i sinjeli jeren ojsten star mastadra	i la tala ang si ni Katalon.	a y initini pintettiti pupiti	CLIPER Land Alexandric Andreas Alexandrian China and Alexandrian Alexandrian Alexandrian Alexandrian Alexandria
Upstream signal (ft)							
pX, platoon unblocked vC, conflicting volume	556	180 360					
vC1, stage 1 conf vol			46,314,516,640,663,650	onnen statuten der S	S MANAGAN PASADON S	n of the set	<u>98. M. ARANA - I</u> AMAMMANI ANG
vC2, stage 2 conf vol							
vCu, unblocked vol	556 6.8	180 360 6.9 4.1		HER DE VERSIE	an a		
tC, single (s) tC, 2 stage (s)	0.0	0.9 4.1	여러 위에운 아이는	15 in the second se	GURHQUAS EUROPE		ngnagner nganga obygangi Ngangangangangangangangangangangangangang
tF (s)	3.5	3.3 2.2					
p0 queue free %	97	97 96 832 1196	nation Statistics			a accordence a constante de la	
cM capacity (veh/h)	個 <b>444</b> 章	1999 I. Berg Dalaman, et di Nebel Teter bi Hendelare bil Mana mana amang manang attanta seratar bartat bartat birakat				hishidi istaan (1966) (1966) A	herarsisten televisista († 1935) 1937 - Angelander Statista († 1936)
Direction, Lane #	SB 1	SE 1 SE 2 44 121	SE 3 N 121	IW 1 NW 2 225 135	C CARGE CALCUMPTER TO BASE 119 CONTRACT		
Volume Total	<b>41</b> 14	44 1 <u>2 1</u> 44 0	0 0	0 (	and finds on dedication of the behavior of the	n in de la serie de la ser La serie de la s	enereleniszték költelt liszin költék
Volume Right	- 26	0	0	0 23			
cSH	636	1196 1700		1700 <b>17</b> 00		ere raad weat-beere televisie	
Volume to Capacity Queue Length 95th (ft)	0,06 5	0.04 0.07 3 0	0.07 0	0.13 0.08	a na daharan butan butan karan bara baran b		
Control Delay (s)		8.1 0,0		0.0 0.0			
Lane LOS	В	A			:		
Approach Delay (s)	11.0 B	1.2		. U.U. H. H.			
Intersection Summary Average Delay		1.2					
Intersection Capacity Uti	lization		ICI	J Level of S	ervice	A	
Analysis Period (min)		15	um, no cos como aso colo de		na ana mangana ang ang ang ang ang ang ang ang a	an photos in the Paged - Second Street Mill	arrantational managera (algebra, esta tricologic of aller (aller (aller (aller (aller (aller (aller (aller (all

Movement SET SER NWL NWT NEL NER
Lane Configurations
Sign Control
Grade 0% 0% 0% Volume (veh/h) 230 25 25 145 5 5 5
Peak Hour Factor 0.92 0.92 0.92 0.92 0.92 0.92
Hourly flow rate (vph) 250 27 27 27 158 5 5 14 5
Lane Width (ft) ////////////////////////////////////
Percent Blockage
Right turn flare (veh)
Median type
Median storage veh) Upstream signal (ft)
pX, platoon unblocked
VC conflicting volume
vC1, stage 1 conf vol
vC2, stage 2 conf vol
tC, single (s)
tC, 2 stage (s)
tF (s)
p0 queue free % 98 99 99 cM capacity (veh/h)
Direction, Lane # SE 1 SE 2 NW 1 NW 2 NW 3 NE 1
Volume Total         167         111         27         79         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11
cSH 1700 1700 1283 1700 1700 692
Volume to Capacity 0.10 0.07 0.02 0.05 0.05 0.02
Queue Length 95th (ft) 0 0 2 0 0 1 Control Delay (s) 0.0 7.9 0.0 0.0 10.3
Approach Delay (s)
Approach LOS B
Intersection Summary
Intersection Capacity Utilization 23.8% ICU Level of Service A

~\*

## $\mathbf{x} \neq \mathbf{x} \times \mathbf{y}$

Intersection Capacity Utilization 23.8% ICU Level of Service A Analysis Period (min) 15

	× 2	m K	7	~		
Movement	SET SER	NWL NWT	A CONTRACTOR OF A CONTRACT OF A CARD OF A	VER		
Lane Configurations	<b>^}-</b>			u destructures constructions reads	ander der States auch der State	en andere and
Sign Control	Free 0%	Free 0%				
Grade Volume (veh/h)	235	7 315		25		
Peak Hour Factor	0.95 0.65	in the second	e werder in ald lete is to former balance	0.80	PERMITENSIS (SECONDARI)	in in an
lourly flow rate (vph)	247 11	11 332	<b>. 11 25</b>	31		
Pedestrians		an a shi na shi na shi wa Manazini aminishi ku	u se la sussi da este de la forma de la	-sectory characteric (1993) (1994)	tan sukus da ba-ndadd dd	HERBERCHER MERSTER
ane Width (ft)						
Valking Speed (ft/s) Percent Blockage						
Right turn flare (veh)	rationshelledtrickfilded. F	unan munan sa dala sa dalam kasa.	nenen erenan birtek	e de antie de la de l La de la d	1.071.2003203420443043044044444	ala debili debili della de
Vedian type			None			
Median storage veh)		ana ben'ny tanàna mandritry mandritry ilay 1000-000.	a na ann an tha an tha	na voleto tega (hiji teo mini 1996)	an manager and the set	. T. PARISAN A. INS. PARAMAN STRAND AND AND A
Jpstream signal (ft)						
X, platoon unblocked		258	440	129		
/C1, stage 1 conf vol	9004030243874080874080		en de la compañía de Compañía de la compañía de la compañí	a (1999) yang perteksi perteksi berteksi A	<u>1999 - 1999 (</u> n. 1979), 1999 (n. 1979) 1999 - 1997 (n. 1979), 1997 (n. 1979)	, Still Fill (11, 12) File (PC2) (21, 12, 12, 12, 12, 12, 12, 12, 12, 12,
/C2; stage 2 conf vol						
Cu, unblocked vol	n chan ar ach an	258	440 6.8	129 6.9		serve istrational Philipping (1977).
C, single (s) C, 2 stage (s)		4.1	0.8	0,9		r ser av stad for an
C, 2 stage (s) F (s)		2.2	3.5	3.3		
0 queue free %	talaa kababaat istaala kababaata shirta aa	99	95	97		
:M capacity (veh/h)		1304	541	897		
Direction, Lane #	SE1 SE2	NW 1 NW 2	NW 3 1	VE 1		
Volume Total	165 93	11 166	166	56		
√olume Left	0 0	· · · · · · · · · · · · · · · · · · ·		25	ICHERICE II COMMENDIALI (COM	
Volume Right	0 11 1700 1700	telephological de la Terra del 14 - 14 19 11 7	ն լելիսե կեղծներ Ծվներինը։	31 694		
cSH Volume to Capacity	0.10 0.05			0.08		
Queue Length 95th (ft)	0 0	· 영양성 전 1978년 - 전환 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전	and dealed of the second definition of	7 7	- 	a de arci, státene their Arch-Hernan, activalisten ar cara
Control Delay (s)	0.0 0.0	7.8 0.0	0.0	10.6		
_ane LOS	ieta Kaikia eta suna	A	737644386436666666	B	<u>enere (1946)-1950</u> -196	H DUGLZENG, OFFICIER IN CAMERATE OF
Approach Delay (s)		0.2		10.6 b	nestas ja Parte	
Approach LOS				ч		
Intersection Summary		1.0				
Average Delay Intersection Capacity Ut	lization	1.0 18.7%	ICU Level	of Service	A	
Analysis Period (min)		15	1. T.T		economic constituint d'hai	nen vinten anter ere gesten gesten separat
			care procession of distances with		entremeters and a set and a set of the	on a sub-contract the state of the state of the sub-contract based



#### Cordera Crest/TAZs C & H

Roundabout

#### **Vehicle Movements**

Mov No	Turn	Dem Flow (veh/h)	Cap (veh/h)	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (ft)	Eff. Stop Rate	Aver Speed (mi/h)	Oper Cost (\$/h)
NW Bound	d Corder	a Crest	********		******		****			10.0000.0000.0000.0000.0000.0000
72	L	170	1780	0.095	6.4	LOS A	12	1.06	25.3	18
71	т	158	1654	0.095	1.7	LOS A	12	0.35	32.4	15
73	R	9	105	0.095	4.1	LOS A	12	0.74	29.8	1
Approach		336	3540	0.095	4.1	LOS A	12	0.72	28.3	34
SW Bound	I TAZ H						******	,	***********	
62	L	26	999	0.043	9.4	LOS A	5	1.18	22.3	4
62	т	1	999	0.043	9.4	LOS A	5	1.18	22.3	4
62	R	14	999	0.043	9.4	LOS A	5	1.18	22.3	4
Approach		43	999	0.043	9.4	LOS A	5	1.18	22.3	4
SE Bound	Cordera	Crest	********	2012/00/2017 (CANTERNATION AND TAMOUTAN AND TAMOUTAN AND TAM						
82	L	4	50	0.100	11.5	LOS B	14	1.29	21.4	1
81	т	147	1482	0.099	2.3	LOS A	14	0.50	28.3	10
83	R	104	1049	0.099	4.5	LOS A	14	0.89	23.6	5
Approach		256	2581	0.099	3.4	LOS A	14	0.67	26.3	15
NE Bound	TAZ C		econo constructo de ocerción de la construction de la construcción de la construcción de la construcción de la	na smana na balan na mana na ma	n, an	niha ndriha oksidi i disioni ofasion ordi	an fan Erskinskinskin om resonansk	- <del>19</del>	**** <u>*</u> *******************************	
52	Ł	12	1095	0.034	3.5	LOS A	4	0,64	19.8	4
52	т	1	1095	0.034	3.5	LOS A	4	0.64	19.8	4
52	R	22	1095	0.034	3.5	LOS A	4	0.64	19.8	4
Approach		37	1095	0.034	3.5	LOS A	4	0.64	19.8	4
All Vehicles		672	8216	0.100	4.2	LOS A	14	0.73	26.8	57

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#### Cordera Crest/TAZs C & H

Roundabout

#### **Vehicle Movements**

Mov No	Turn	Dem Flow (veh/h)	Cap (veh/h)	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (ft)	Eff. Stop Rate	Aver Speed (mi/h)	Oper Cost (\$/h)
NW Bound	l Corder	a Crest			1997 C. A. C.	۵۵۵۹۵۰۹۹۵۲۰۵۶۶۵۶۵۶۵۶۵۶۵۵۵۵۵۵۵۵۵۵۵۵۵۵۵۵۵۵			, og gegen fog de Verannen geregen men skalade skan skalet av forskel	
72	L	27	261	0.107	6.7	LOS A	14	1.07	24.8	3
71	Т	250	2328	0.107	1.9	LOS A	14	0.42	31,2	24
73	R	29	279	0.108	4.4	LOS A	14	0.79	29.0	3
Approach		308	2869	0.107	2.6	LOS A	14	0.51	30.3	30
SW Bound	TAZ H	0	ana dh'na ch'an a bran ann a hairean an chaol	napa dénamipakan sakad kelanakén balan biné sita			ero orean du constante dou era como reducto dan	dar ( deliver to All to 12 despite et 1004 to antis	H	
62	L	16	954	0.030	9.3	LOS A	4	1.17	22.3	3
62	Т	1	954	0.030	9.3	LOS A	4	1.17	22.3	3
62	R	10	954	0.030	9.3	LOS A	4	1.17	22.3	3
Approach		29	954	0.030	9.3	LOS A	4	1.17	22.3	3
SE Bound	Cordera	Crest	a la guarda da guarda da <b>ta ta ta ta ta ta</b> da	41.91.9269.040.979.0299.0299.0299.029		2000,000,000,000,000,000,000,000,000,00		any diploid any differential and a second	en an	, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1
82	L	15	195	0.082	11.0	LOS B	10	1.27	22.1	2
81	Т	250	3048	0.082	1.7	LOS A	10	0.37	30.4	16
83	R	16	207	0.082	4.1	LOS A	10	0.79	25.1	1
Approach		283	3451	0.082	2.4	LOS A	10	0,44	29.4	18
NE Bound	TAZ C	formalition of all in this can distance an increase and			addenne og for ander at sen at se	ייזאר איזעריייזע בנוגער איז בענגע איז איזעראראיז איזיין איזיין איזיין איזיין איזיין איזיין איזיין איזיין איזיי	******	an na mang na mang kanang k	A A REAL AND	
52	L	92	1122	0.211	4.2	LOS A	28	0.80	19.4	25
52	т	1	1122	0.211	4.2	LOS A	28	0.80	19.4	25
52	R	145	1122	0.211	4.2	LOS A	28	0.80	19.4	25
Approach		237	1122	0.211	4.2	LOS A	28	0.80	19,4	25
All Vehicles	ALL BOATET 27 AT CONTRACTOR	857	8396	0.211	3.2	LOS A	28	0.59	26.3	76

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Movement EBT EBR WBL WBT NBL NBR	
Lane Configurations     ↑↑     ↑     ↑       Sign Control     Free     Free     Stop       Grade     0%     0%     0%	
Volume (veh/h)         160         17         67         305         9           Peak Hour Factor         0.95         0.75         0.85         0.95         0.65           Hourly flow rate (vph)         168         23         79         321         3         14	
Pedestrians Lane Width (ft)	
Walking Speed (ft/s) Percent Blockage	
Right turn flare (veh) Median type	
Median storage veh) Upstream signal (ft) pX, platoon unblocked	
vC, conflicting volume vC1, stage 1 conf vol	
vC2, stage 2 conf vol vCu, unblocked vol 191 498 96	
tC, Single (s) tC, 2 stage (s) tF (s) 3.5 3.3	8
p0 queue free % 94 99 99 cM capacity (veh/h) 1380 473 942	
Direction, Lane # EB1 EB2 WB1 WB2 WB3 NB1	
Volume Total         112         79         161         161         17           Volume Left         0         0         79         0         0         3	ļ.
Volume Right         0         23         0         0         14           cSH         1700         1700         1380         1700         790           Volume to Capacity         0.07         0.05         0.06         0.09         0.02	
Volume to capacity:         0.03         0.03         0.03         0.02           Queue Length 95th (ft)         0         0         5         0         0         2           Control Delay (s)         0.01         7.8         0.0         9.7         1         1	
Lane LOS A A Approach Delay (\$) 0.0 Approach LOS A	
Intersection Summary	
Average Delay       1.3         Intersection Capacity Utilization       22.0%         Analysis Period (min)       15	

$\rightarrow$ $\rightarrow$ $\leftarrow$ $\leftarrow$ $\leftarrow$
Movement EBT EBR WBL WBT NBL NBR
Lane Configurations
Grade 0% 0% 0%
Volume (veh/h)         375         20         260         21         84           Peak Hour Factor         0.95         0.60         0.75         0.95         0.80         0.90
Hourly flow rate (vph) 395 7 27 27 274 26 93
Pedestrians Lane Width (ft)
Walking Speed (ft/s)
Percent Blockage Percen
Median type
Median storage veh) Upstream signal (ft)
pX, platoon unblocked
vC, conflicting volume 401. 401. 588 201. 201. VC1, stage 1 conf vol
vC2, stage 2 conf vol vCu, unblocked vol 401 588 201
tC, single (s) 4:1 6.8 6.9
tC, 2 stage (s) tF (s) 3.5 3.3 state for the state of the
p0 queue free % 98 94 88
cM capacity (veh/h) 1154 430 807
Direction: Lane # EB 1 EB 2 WB 1 WB 2 WB 3 NB 1 Volume Total 263 138 27 137 137 120
Volume Left 0 0 27 0 0 26
Volume Right 0 7 7 0 0 0 93 0 93 cSH 1700 1700 1700 1154 1700 1700 676
Volume to Capacity 0.15 0.08 0.02 0.08 0.08 0.18 0.18
Queue Length 95th (ft)         0         0         2         0         0         16           Control Delay (s)         0.0         0.0         8.2         0.0         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5         11.5
Lane LOS A B
Approach Delay (s) 0.0 0.7 11.5 Approach LOS B
Intersection Summary
Average Delay 1.9 Intersection Capacity Utilization 29.6% ICU Level of Service A
Analysis Period (min) 15

	CHARACTER - 1.2007 - 1
Movement EBL EBT WBT WBR SBL SBR	
Lane Configurations 方 齐齐 齐序 Y	
Sign Control	
Grade         0%         0%           Volume (veh/h)         3         165         365         10         31         8         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10	n BCB ( URDAN) ( 1973 - 1914) ( 1914) ( 1917) ( 1917) ( 1914) ( 1914) ( 1914)
Volume (veh/h)         3         165         365         10         31         8         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10 <th10< th="">         10         10</th10<>	
Hourly flow rate (Vph)	
Pedestrians	ar, yashada ay da dayar sa ay sa Ay sa ay s
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage (Internet States and States	
Median type	
Median storage veh)	aliyi kuchumoyal kategor kaliyaan ta'r rubyaan a solynaath
Upstream signal (ft)	
pX, platoon unblocked	b b a set the physical and the P to P to a physical and the P to a physical and the P to a physical and the
vCl. conflicting volume 398	
vC1, stage 1 conf vol vC2, stage 2 conf vol	
vCu, unblocked vol 398 488 199	ennentenna a hondistanan internetieren inditus intervitie k.
tC single (s) 4.1	
tC, 2 stage (s)	
tF (s) 315 - 3.3 Hit Hall	
p0 queue free % 100 92 98 cM capacity (veh/h) 1157	
Direction, Lane # EB 1 EB 2 EB 3 WB 1 WB 2 SB 1	
Volume Total         5         87         87         256         142         51         142           Volume Left         5         0         0         0         39	
Volume Left         5         0         0         0         39           Volume Right         0         0         0         0         14         12	
cSH 1157 1700 1700 1700 1700 557	alle de la secondar de la seconda de la s Al seconda de la seconda de
Volume to Capacity 0.00 0.05 0.05 0.15 0.08 0.09	
Queue Length 95th (ft) 0 0 0 0 0 8	and advanta cate (4.5) way dista (4) (4.5) jan jiwa natusi Shakawa an K. Maki Kanan (40.8)
Control Delay (s)         8.1         0.0         0.0         0.0         12.1           Lane LOS         A         B	
Lane LOS A B Approach Delay (s) 0.2 0.0 12.1	
Approach LOS B	renena este en aggeration (COUSE)
Intersection Summary	
Average Delay 1.0	
Intersection Capacity Utilization 20.4% ICU Level of Service	AUNT
	en data ar ar sel kizer Meia tzia II in Biet izaie 19 Mardeini (1996) Biet Biet Biet Biet Biet Biet Biet Biet

Analysis Period (min) 15

*	← ▲ \ _ /	
-	EBT WBT WBR SBL SBR	
Movement EBL		
Lane Configurations	<mark>↑↑ ↑⊅ ∀</mark> Free Free Stop	
Grade		de, stato
Volume (veh/h) 9	450 275 35 21 5	
Peak Hour Factor 0.65		:: ::/*:: :: :: ::
Hourly flow rate (vph) 14	474 289 41 26 8	i i i
Pedestrians		
Lane Width (ft)		<u>cilia</u> le
Walking Speed (ft/s) Percent Blockage		
Right turn flare (veh)	y THE VERY LAGY DECEMBER LEVEL CONTRECTOR OF A THE DECKER IN COLLARD HER PERSON FROM FROM THE OWNER AND A CONTRECT AND A DECKER	
Median type	None	
Median storage veh)		45067.50
Upstream signal (ft)		
pX, platoon unblocked vC, conflicting volume 111=331	575 165	1810 J.
vC1, stage 1 conf vol		48439
vC2, stage 2 conf vol		
vCu, unblocked vol 331	575 165	
tC, single (s) 4.1	6.8 6.9	
tC, 2 stage (s)		u <del>nd</del> e
tF (s) 2.2 p0 queue free % 99		
p0 queue free % 99 cM capacity (veh/h) 1226		
		John Karalana Karalana
Direction, Lane # EB 1	EB2 EB3 WB1 WB2 SB1	dellaria.
Volume Total 14 Volume Left 14	Ballade Print and Andrew Print Print and Andrew Andrew Print Andrew Print Prin	
Volume Right		
cSH 1226	New York Construction of the Article State of the State of State	.sobach.
Volume to Capacity 0.01	0.14 0.14 0.11 0.08 0.07	
Queue Length 95th (ft) 1		daliazzette
Control Delay (s)	and defined with the second	
Lane LOS A		<b>100</b> 1
Approach LOS	8 12.8 B	uditik
•••	-	
Intersection Summary		
Average Delay Intersection Capacity Utilization	0.6 n 22.4% ICU Level of Service All Service	
Analysis Period (min)	15	a-tai21

Analysis Period (min) 15



#### Cordera Crest/TAZs E & J

Roundabout

#### Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	Cap (veh/h)	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% 8ack of Queue (ft)	Eff. Stop Rate	Aver Speed (mi/h)	Oper Cost (\$/h)
NW Bound	l Corder	a Crest			******				anna an anna an anna an anna an anna an an	96977979999999999999999999999999999999
72	L	245	1352	0,181	6.5	LOS A	24	1.05	19,1	16
71	Т	364	2009	0.181	1.7	LOS A	25	0.37	29.2	18
73	R	20	110	0.182	4.1	LOS A	25	0.79	21.9	1
Approach	proach 629 3		3471	0.181	3.6	LOS A	25	0.65	24.0	34
5W Bound	TAZ J	646. <del>- 766 177. 66 19</del> . 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	1-9-09-09-09-09-09-09-09-09-09-09-09-09-0					BUTTERNOVAN (1993) (1994) (1994) (1994) (1994) (1994) (1994) (1994) (1994) (1994) (1994) (1994) (1994) (1994) (		
62	L	58	850	0.088	7.9	LOS A	11	1.27	17.8	7
62	Т	7	850	0.088	7.9	LOS A	11	1.27	17.8	7
62	R	9	850	0.088	7.9	LOS A	11	1.27	17.8	7
Approach		75	850	0.088	7.9	LOS A	11	1.27	17.8	7
SE Bound	Cordera	ı Crest	₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩	UT & BOLINE COMPLETE AND AN	*****	ana malan kana ana kana kana kana kana kana k		1999-1997 - Toning and a standard and a standard a standard a standard a standard a standard a standard a stand	a, in control de la control	
82	L	3	43	0.093	7.6	LOS A	13	1.17	22.6	0
81	т	152	1647	0.092	2.8	LOS A	13	0.60	28.9	12
83	R	60	650	0.092	5.1	LOS A	13	0.97	25.6	4
Approach		216	2341	0.092	3.5	LOS A	13	0.71	27.9	17
NE Bound	TAZ E			a da sensar a sensar da se		ann an an an ann an an an an an an an an	<u>konfrånsko en delansk och av sastat</u>	אל יישראל יישראלא איז איז איז איז איז איז איז איז איז אי	d i navrodni stri od di te i tra olite postiti ti ti	1999 A. 1992 A. 1997 A
52	L	33	1110	0.102	3.4	LOS A	13	0.65	19.7	9
52	т	2	1110	0.102	3.4	LOS A	13	0.65	19.7	9
52	R	76	1110	0.102	3.4	LOS A	13	0.65	19.7	9
Approach		113	1110	0.102	3.4	LOS A	13	0.65	19.7	9
All Vehicles		1033	7772	0.182	3.9	LOS A	25	0.71	23.9	66

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Cordera Crest/TAZs E & J

Roundabout

#### Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	Cap (veh/h)	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (ft)	Eff. Stop Rate	Aver Speed (mi/h)	Oper Cost (\$/h)
NW Воипс	l Corder	a Crest			aavaavaalaanaanaalaadan 2.400 m.7470 m6787	nger yy ny hy na a fa'n ddainad Ab yddael de Allennad A Sama	TAN INTERNATION OF THE OWNER OF T	an a		and and a subsection of the subsection of the
72	L	201	1248	0.161	6.6	LOS A	22	1.05	18.8	13
71	Т	266	1651	0.161	1.8	LOS A	22	0.39	28.3	13
73	R	65	403	0.161	4.3	LOS A	22	0.82	21.3	2
Approach	oach 532 3302		0.161	3.9	LOS A	22	0.70	23.1	29	
SW Bound	TAZ J	in an air an Anna an An		ganacesanana utadu sereki ta takan di t	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	dawalan da sabada yang kang kang kang kang kang kang kang k				
62	L	38	871	0.057	7.5	LOS A	7	1.19	17.9	4
62	т	4	871	0.057	7.5	LOS A	7	1,19	17.9	4
62	R	5	871	0.057	7.5	LOS A	7	1.19	17.9	4
Approach		50	871	0.057	7.5	LOS A	7	1.19	17.9	4
SE Bound	Cordera	• Crest	99499999999999999999999999999999999999	and an			9) al an	an fan fan fan fan fan fan fan fan fan f		
82	L	10	54	0.204	7.4	LOS A	30	1.17	22.7	1
81	т	446	2207	0.202	2.5	LOS A	31	0.55	29.1	36
83	R	60	297	0.202	4.9	LOS A	31	0.96	25.8	4
Approach		517	255 <del>9</del>	0.202	2.9	LOS A	31	0.61	28.6	41
NE Bound	TAZ E	a Al Hanal Andre Antonia Hill and Antonia 2011 and 40	1949-949 Barrier of Hill State State State 200			inenden enen debeste den soon van die van d	an an an an an an an Ar Anna an	De 1	2 (2) 19	**************************************
52	L	65	924	0.244	4.6	LOS A	32	0.96	18.8	17
52	т	8	924	0.244	4.6	LOS A	32	0.96	18.8	17
52	R	152	924	0.244	4.6	LOS A	32	0.96	18.8	17
Approach		225	924	0.244	4.6	LOS A	32	0.96	18.8	17
All Vehicles		1324	7656	0.244	3.8	LOS A	32	0.73	24.6	92

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#### **Cordera Crest/Union**

Roundabout

#### **Vehicle Movements**

Mov No	lo Turn Dem Flow Cap (veh/h) (veh/h)		Deg of Satn (v/c)	Aver Delay (sec)	lay Level of B		95% Back of Eff. Stop Queue Rate (ft)		Oper Cost (\$/h)	
NB Corde	ra Crest	, 1997 - B. 1997 - B	***************************************		an na han a sa s					
32	L	82	751	0.109	13.0	LOS B	15	1.61	18.4	10
31	т	16	156	0.109	5,8	LOS A	15	1.29	21.4	1
33	R	49	449	0.109	7.1	LOS A	14	1.39	20.1	4
Approach	oroach 148 135		1355	0.109	10.2	LOS B	15	1.50	19.2	16
WB Union		99999999 899 999 999 999 999 999 999 99	ini kan dan bar kan yanna kan nan na yan yan yan yan yan yan yan ya			at vertilen mener veranden en van de			*******	10000 WALLARY 20100 W WAL
22	L	43	144	0.306	11.2	LOS B	52	1.51	21.6	5
21	Т	435	1421	0.306	4.8	LOS A	54	1.03	27.1	37
23	R	109	356	0.306	7.0	LOS A	54	1.28	25.4	10
Approach	pproach 588 1		1920	0.306	5.7	LOS A	54	1.11	26.3	52
SB Corder	a Crest	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				777 7770 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			, 1999 - Tanan San San San San San San San San San	***************************************
42	L	103	785	0.131	12.9	LOS B	16	1.49	19.9	11
41	Т	11	91	0.132	4.3	LOS A	16	0.96	22.5	1
43	R	174	1055	0.164	5.8	LOS A	21	1.09	23.3	12
Approach		288	1931	0.164	8.3	LOS A	21	1.23	21.7	23
EB Union	an an an aite ann an tarairte an tarairte	9998) 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -								
12	L	505	1215	0.416	11.4	LOS B	72	1.28	20.6	52
11	т	712	1713	0.416	2.3	LOS A	72	0.49	27.4	42
13	R	76	185	0.416	3.4	LOS A	72	0.74	23.4	4
Approach		1294	3113	0.416	5.9	LOS A	72	0.81	23.7	97
All Vehicles		2318	8320	0.416	6.4	LOS A	72	0,98	23.8	188

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#### **Cordera Crest/Union**

Roundabout

#### Vehicle Movements

Mov No	No Turn Dem Flow Cap Vo Turn (veh/h) (veh/h		Cap (veh/h)	- Satn		Level of Service	95% Back of Queue (ft)	Eff. Stop Rate	Aver Speed (mi/h)	Oper Cost (\$/h)
NB Corder	a Crest	****	886 <b>8.1</b> 08882100000000000000000000000000000000	ay additiya waxay katika di kat			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		~,~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
32	L	152	606	0.251	15.2	LOS B	36	1.81	17.4	19
31	Т	16	71	0.239	8.6	LOS A	31	1.52	19.3	2
33	R	92	388	0,240	9.8	LOS A	31	1.59	18.3	9
Approach	ach 262 1065		0.251	12.9	LOS B	36	1.71	17.8	29	
WB Union	nan na sana ang kana sa	MCREATING CONTRACTOR CONTRACTOR	r fanden Hannarer Vielss Vielska (* 1944) 1940 -	244049999 - Contractor Contractor Contractor Contractor Contractor Contractor Contractor Contractor Contractor	a Odikant witiki ka	an taran ana fanan an				
22	L	71	163	0.429	11.2	LOS B	76 1.54		21.6	7
21	Т	663	1541	0.430	4.7	LOS A	79	1.02	27.0	57
23	R	125	290	0.431	6.9	LOS A	79	1.31	25.4	12
Approach	Approach 858		1994	0.430	5.6	LOS A	79	1.10	26.2	76
SB Corder	a Crest	**************************************		999 999 999 999 999 999 999 999 999 99	an a	99.999.999.999.999.999.999.999.999.999	an a			
42	L	168	566	0.297	15.0	LOS B	37	1.74	18.9	18
41	Т	22	74	0.297	6.4	LOS A	37	1.40	21.3	1
43	R	446	875	0.510	8.5	LOS A	87	1.64	21.8	32
Approach		636	1515	0.510	10.1	LOS B	87	1.66	20.8	51
EB Union		1999 - Marine Marin, manager and an and an		**** 1925551 **********************************	in performant of the state of the	9999-12-12-12-19-1-19-19-19-19-19-19-19-19-19-19-19-1				
12	L	391	746	0,524	12.0	LOS B	103	1.34	20.1	40
11	т	951	1814	0.524	2.9	LOS A	103	0.63	25.9	58
13	R	114	217	0.525	4,2	LOS A	100	0,91	22.1	5
Approach		1456	2777	0.524	5.4	LOS A	103	0.84	23.5	104
All Vehicles		3212	7350	0,525	7.0	LOS A	103	1.14	23.1	260

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Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations			7			7		<b>††</b>	7		<b>†</b> †	٦
Sign Control		Stop			Stop			Free		nennae.34	Free	nan de de la composition National de la composition de
Grade Volume (veh/h)		0%	- Se	0	0%	70		0% 1175	140	0	0% 565	70
Peak Hour Factor	0.60	0.60	0,75	0.60	0.60	0.85	0.60	0.95	0.95	0.60	0.95	0.85
Hourly flow rate (vph)			20	USIOI	0.00	82	0.00		147	0.00	595	82
Pedestrians		- (20. 12) (2) ( ( ()-)-	11.11.11.12%ev. 021.11.1	Coldetadaaandd		arindi dinama ara arin	ni, ing luis gi sha n, dina		el d-falle "d dre d del	ana yana sadh	n in an	Plate al antico
Lane Width (ft)	rtes opene Konstantes			eleve grange		era opråden po Se opråden vikter				oran propi Received		
Walking Speed (ft/s)			PRESS OF THE OT	COURSE SEAL SO	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	u de cara de la costa de las	a d'a concepto la com	m analos versa	Lation Andreas Roberts	e dan di Kali Kadi Jul	uero dunte de Brito de	se dochestelete
Percent Blockage Right turn flare (veh)											5546500	i la bateri en an Referencia
Median type		None	46 - 96 - 94		None		80.340.45			112.14.14	999 - LU	ele ante
Median storage veh)	SUUS CAMPANE		1467226000	euisente 1926		r.16 (2013) 27-1964 	la se en anos	DIAN MART	N TELEVISION CONTRACTOR	an ting ting ting ting ting ting ting tin	oa geogra iopa	han ta
Upstream signal (ft)						2146 - MARINE MARINE 2017		nna de la				ne égé
pX, platoon unblocked				i ki a la lanan	unana Laurand	natural web	a strate contribute	ter fatter mainanites i	ala ana tao taona	an a chunnain	i and the latence to add the set	nan na mar
vC, conflicting volume	1617	1914	618	1233	1979	297	677			1384		
vC1, stage 1 conf vol vC2, stage 2 conf vol	tetete under Ge	utunanaa	lasofiadad	u da aku ja	STATES -	0001070220		90433343		13640146	.489.65	1943.44
vCu, unblocked vol	1617	1914	618	1233	1979	297	677		1)10000.}^}}	1384	3 (14)(14 <u>(1</u> 4)(14)	15102040
tC, single (s)	7.5	6.5	6.9	7,5	6.5	6.9	4.1			41		
tC, 2 stage (s)									and an area of the	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.		
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100 61	100 67	95 432	100	100 61	88	100 911	attauneu	a an	100 491	a san sa	uesta antesen
cM capacity (veh/h)	1,399,09.47%,1499	(1.1351-11.1.1.1.), 62(91)(.)		127		699	2			49.1	9340433535350	
Direction, Lane #	NB 1	SB 1	NE 1	NE 2	NE 3	SW 1	SW2	Sector States	K <sub>2</sub> (1) <sup>™</sup> ,	ti s		
Volume Total	20	82	618	618	147	297	297	82				
Volume Left Volume Right	0 201	0 82	0	0 0	0 147	0 0	0 	0 82		Järkiu		COM A
cSH	432	699	1700	1700	1700	1700	1700	1700	elerenti erteko	20 <u>2</u> 956699	922229922299	869,966,91
Volume to Capacity	0.05	0.12	0.36	0.36	0.09	0.17	0.17	0.05		aronxemen Void Osea		
Queue Length 95th (ft)	4	10	0	0	0	0	0	0				
Control Delay (s)	The total design and to the field	10.8	0,0	0.0	0.0	0.0	0.0	0.0			ie statuataja 19 septembrio (†	
Lane LOS Approach Delay (s)	B Iana 7⊡	B	പ്പ	The second s		0.0				49,020,022		的复数服务
Approach LOS	-∋-1 <b>-3.</b> / ∷ B	B B	U.U.		1994	υ.υ		en her de	sendi 100 y	2.2044.84		Decha
	) (1)		and the second									n netra 1
Intersection Summary. Average Delay			0.5		and the local	2 N	STATISTICS OF A STATISTICS				1	e e ste ko
Intersection Capacity Ut	ilization	2	12.5%	I IC	CU Lev	el of Ser	vice	<b>MU 19</b> 27	A		the E	
Analysis Period (min)	na na marina di Ba	ner verskeldt.	15	rvariar ittira Gal	และการสารสารสีร	en les sections à	taine son 1991 Mail	one ostandař	enerinter) en T.a. Señeh	opeoni Adalar	un falikinin tali	na Pasa i di Bulki
SHARANG SHARAGAR AND A SAFAR	and and the	1955.0402	una anta dal He	kong (1982-1988)	and designed	NU-SARAHARA	a hu cens sa lo La	da wanasha	égeneri elestroji	90093460055	dsuidente ee	HELENCE:

Analysis Period (min) 15

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Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations			1			ក		<b>*</b> *	۲		木木	7
Sign Control		Stop			Stop			Free			Free	
Grade	ar antar an an tar 🖵 tartaran	0%	The second s	an a	0%			0%	urate:	e-enebrands	0%	~~~
Volume (veh/h)	0	0	35	0		190		1305 0.92	215 0.92	0.92	1095 0.92	65 0.92
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92 1418	0.92	0.92	0.92	
Hourly flow rate (vph) Pedestrians		U	S SO	v	U	201	<b>U</b>	11410	11497.1	Vering Veri	1150	oguspenkers
Lane Width (ft)								1995				
Walking Speed (ft/s)	iseonado Malakini	1443) KA 16761 (PR	h Alfondisson Ar	udada da da ma	erte fru de la considere	AND DECEMBER 1	LILIA dell'Anticăcia.	latriaticicii i ieti.*	ubor tetto bist A.E. W. I. B	en deservatere por d	8.4409.000.001.002	URU (*12 GURU) (**
Percent Blockage						u de la complete				55. M (* 1		
Right turn flare (veh)									es erede to dans se thefet add		roeveneed.th (a 'v)	
Median type		None			None				M Each and a set			
Median storage veh)	aaladi indo ka Erimeria	nenstationalist.	h.Ph., Matting Sillary	ecessonda	1000 Andrewski Arte	()))))))))))))))))))))))))))))))))))))		hava kiriya ku	445-226-226-22		a an	2014716874-60
Upstream signal (ft) pX, platoon unblocked		ul percent				all of the states of the state	ya kubentah	199799143	465461849	For and shaded a	din 22 (d. 1968)	sin bing
vC, conflicting volume	2220	2679	709	1938	2842	595	1261	in de les	ulugalua	1652	16 (J. 16 (17 (17 (17 (17 (17 (17 (17 (17 (17 (17	
vC1, stage 1 conf vol	si kala dalam in diladi		SCA MARIN				na ka Rusa	arikatikatika Mata	vinder der der der der der der der der der		el diference cert	ALLES STREETS
vC2, stage 2 conf vol											2021	
vCu, unblocked vol	2220	2679	709	1938	2842	595	1261			1652		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4,1			4,1		
tC, 2 stage (s)	na ka meni se tahik			-			IN CAR	n e van de se	ander ter Baas fer		una entra una p	
tF (s)	3.5 100	4.0	3.3 90	3.5 100	4.0 100	3.3 54	2.2 100		192000488	2.2 100		
p0 queue free % cM capacity (veh/h)	100	100	90 376				547			387		
ipanin spiritis i signi sipiliti di si serie della si			- 1.1 - 1.1 - 1.1 - 1.1 - 1.2 - 1.2 - 1.2 - 1.2 - 1.2 - 1.2 - 1.2 - 1.2 - 1.2 - 1.2 - 1.2 - 1.2 - 1.2 - 1.2 - 1 Agendication of the state of the sta	sirtitizian dariek					LOGIS DE CICIOLE		isinini pilaksing Merekasing	
Direction, Lane #	NB 1	SB 1	NE 1	NE 2	NE 3	SW1	<u>SW2</u>	VERIFICATION STATES				
Volume Total	38	207	709	709	htariy se ya qiti)	595	595	71			erinan ay ara An Frankisia	
Volume Left Volume Right	0 38	0 207	0	0 2131-03	0 234	0 	0 	0 71				
cSH	376	447	1700	1700	1700	1700	1700	1700	kat Nelski senata	0.4.49309490	NG N	eritelet plaat
Volume to Capacity	0.10	0.46	0.42	0.42	0.14	0.35		0.04		ne dels problemento Statuto del contra		
Queue Length 95th (ft)	8	60	0		0	0	0	0	-			
Control Delay (s)	15.6	19.8	0.0	0.0	0.0	0.0	0.0	0.0				
Lane LOS	С	С		ente investorio da	unsee estato	anna gran.	28.09.00022214253	eripan jaket atsijet in de i	nan an anasar	actory of the second	elenderse at	
Approach Delay (s)	15.6	19.8	0.0	art she	- Maria	0.0				ausiaelejejejejej	antes fé	
Approach LOS	С	С									101011-1010-1010-0-101-0-0-0-0-0-0-0-0-	and the state of the
Intersection Summary		•,∺,≓• •,									- 12 12 1	
Average Delay			1.5	. Kusennen fas	sala winin in	19 PR 6 2010	rugenya katanagaj istigaj	rtstog of BLBCL	turet Handweiter 🗶 1997		lookaalaana Hi	transfel de la
Intersection Capacity Ut	ilization		8.7%	ese a K	CU Leve	el of Sei	vice	enciene	A A			
Analysis Period (min)			15									

Analysis Period (min) 15