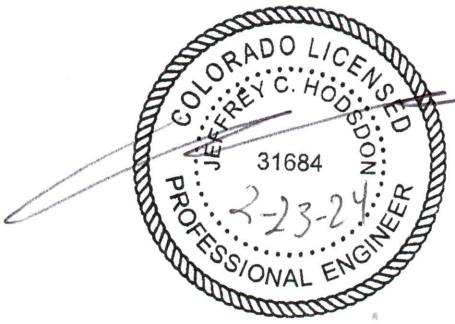
LSC TRANSPORTATION CONSULTANTS, INC.
2504 East Pikes Peak Avenue, Suite 304
Colorado Springs, CO 80909
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: http://www.lsctrans.com

Rolling Hills Ranch North PUD
Transportation Memorandum
PCD File No.: PUDSP235
(LSC #S234290)
February 23, 2024

Traffic Engineer's Statement

This traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.



Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

Raul Guzman, Vice President
GTL Development

February 28, 2024
Date

Rolling Hills Ranch North

PUD

Transportation Memorandum

Prepared for:
Mr. Raul Guzman
Tech Contractors
P.O. Box 80036
San Diego, CA 92138

FEBRUARY23, 2024

LSC Transportation Consultants
Prepared by: Kirstin D. Ferrin, P.E.
Reviewed by: Jeffrey C. Hodsdon, P.E.

EPC PCD File No. PUDSP235
LSC #S234290

CONTENTS

LSC TRANSPORTATION CONSULTANTS, INC.
2504 East Pikes Peak Avenue, Suite 304
Colorado Springs, CO 80909
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: http://www.lsctrans.com

February 23, 2024

Mr. Raul Guzman
Tech Contractors
P.O. Box 80036
San Diego, CA 92138

RE: Rolling Hills Ranch North PUD
El Paso County, CO
Transportation Memorandum
PCD File No.: PUDSP235
LSC #S234290

Dear Mr. Guzman,

LSC Transportation Consultants, Inc. has prepared this Transportation Memorandum for the Rolling Hills Ranch North PUD. The location of the site is shown in Figure 1. This report is intended as a site-specific PUD and final-plat traffic report for Filing Nos. 1 and 2.

PREVIOUS TRAFFIC REPORTS

LSC completed the *Meridian Ranch Sketch Plan 2021 Amendment Traffic Impact Study* (TIS), which included this site. This report was dated June 25, 2021. The land use and access for the currently-proposed plan is consistent with the land use and trip generation estimated and evaluated in that report.

A list of other traffic studies in the area of study completed within the past five years (that LSC is aware of) is attached for reference. This study accounts for the land use, trip generation, and the roadway network included in these studies.

A traffic report, entitled *Eastonville Road Project Conceptual Design Report*, was also recently completed for Eastonville Road by Wilson & Company (for El Paso County).

LAND USE AND ACCESS

Land Use

The approved Meridian Ranch 2021 Sketch Plan Amendment increased the overall maximum number of residential dwelling units within all of Meridian Ranch from 4,500 to 5,000. This increase allows for up to 784 residential dwelling units in the amendment area, which includes the 45-acre site located south of Rex Road approved as the Sanctuary at Meridian Ranch and a 152-acre parcel north of Rex Road currently proposed as Rolling Hills Ranch North. The Sketch Plan TIS analyzed two development scenarios, as the distribution of lots north and south of Rex Road had not been determined at that time. The multiple scenarios have not been carried forward in this report as the distribution of lots north and south of Rex Road has since been determined.

Figure 2 shows the location of the approved, currently-proposed, and future plans for developments within Meridian Rach 2021 Sketch Plan Amendment Area. The approved Sanctuary at Meridian Ranch PUD, located south of Rex Road, includes a total of 343 lots for single-family homes. The currently-proposed Rolling Hills Ranch PUD, located north of Rex Road, is planned to include 441 lots for single-family homes (including 239 lots in Filing No. 1 and 202 lots in Filing No. 2). The total number of lots within the approved Sanctuary at Meridian Ranch PUD and the currently-proposed Rolling Hills Ranch North PUD is 784. This is consistent with the land use assumed in the *Meridian Ranch Sketch Plan 2021 Amendment Traffic Impact Study* (TIS) dated June 25, 2021.

Access

Access for the currently-proposed Rolling Hill Ranch North PUD is planned to Rex Road via the existing intersection at Estate Ridge Drive and a new full-movement intersection on the north side of Rex Road that will align with the Shelter Creek Drive intersection approved as part of Sanctuary at Meridian Ranch Filing No. 1.

Sight Distance

Figures 3 and 4 show sight-distance analysis at the existing intersection of Rex Road/Estate Ridge Drive and at the proposed intersection of Rex Road/Shelter Creek Drive, respectively. Based on a design speed of 40 miles per hour (mph) on Rex Road and the criteria contained in Table 2-21 of the *Engineering Criteria Manual* (*ECM)*, the required intersection sight distance at these intersections to Rex is 445 feet. Based on the criteria contained in Table 2-17 of the *ECM*, the required stopping sight distance approaching these intersections is 305 feet. As shown in Figures 3 and 4, these criteria can be met at both intersections.

Pedestrian Routes to Schools

Figure 5 shows the potential pedestrian routes to schools within two miles of the site.

ROADWAY AND TRAFFIC CONDITIONS

Area Roadways

The major roadways in the site's vicinity are shown in Figure 1 and are described below.

Rex Road extends east from Goodson Road to Estate Ridge Drive within the Meridian Ranch development. Rex Road is classified as an Urban Minor Arterial in the *2016 El Paso County Major Transportation Corridors Plan* (*MTCP*) 2040 Roadway Plan. The posted speed limit on Rex Road is 45 mph between Meridian Road and Mount Gateway Drive and 35 mph east of Mount Gateway Drive. Rex Road is currently being constructed as a 2-lane Urban Minor Arterial from its existing terminus at Estate Ridge Drive to Eastonville Road. The new section is anticipated to be open to traffic by spring 2024. A short section is also proposed to be constructed east of Eastonville Road in the short-term future as part of the approved Grandview Reserve Phase 1 development. The west leg of Rex Road approaching Eastonville Road will be a temporary asphalt connection until a roundabout is constructed as part of the Grandview Reserve Phase 1 development. In the future, Rex Road is planned to be constructed southeast through Grandview Reserve and will intersect US Highway 24 as part of future development within the Grandview Reserve Sketch Plan area, coordination with El Paso County, the Colorado Department of Transportation (CDOT), and other local agencies, and associated applications to CDOT.

Meridian Road extends north from South Blaney Road to County Line Road. The posted speed limit on Meridian Road in the vicinity of Rex Road is 55 mph. Meridian Road is shown as a four-lane Principal Arterial south of Rex Road, a four-lane Minor Arterial north of Rex Road, and a two-lane Minor Arterial north of Murphy Road on the El Paso County *Major Transportation Corridors Plan*. Improvements to the intersection of Meridian Road/Rex Road are under design and planned for construction in the short term as part of an active EPC DPW project. It is our understanding that the intersection improvement plans have been completed, including the plans for the future traffic-control signal, and ROW acquisition is underway to implement plans to improve the vertical profile of Meridian Road north of Rex Road.

Eastonville Road extends northeast from Meridian Road to past Hodgen Road. It is shown as a two-lane Minor Arterial on the El Paso County *Major Transportation Corridors Plan* and the *Preserved Corridor Network Plan*. Eastonville Road has a three-lane cross-section (one through lane in each direction plus a center two-way, left-turn lane) from Woodmen Hills Drive to Snaffle Bit Road (approximately midway between Judge Orr Road and Stapleton Road). Eastonville Road is a two-lane roadway north and south of this section. Eastonville Road is currently unpaved north of Londonderry Drive. Pikes Peak Rural Transportation Authority (PPRTA)-funded improvements are anticipated in the future for Eastonville Road. The *Conceptual Design Report Eastonville Road Project* prepared by Wilson & Company Inc. in April 2021 shows the section of Eastonville adjacent to the site as an urban 48-foot paved section with one through lane in each direction, a two-way, left-turn-lane center median, and 6-foot paved shoulder. The posted speed limit north of Stapleton Drive is 35 mph.

TRIP GENERATION

The site-generated vehicle trips were estimated using the nationally published trip-generation rates from *Trip Generation, 11th Edition*, 2017 by the Institute of Transportation Engineers (ITE). Table 1 shows the trip-generation estimates for the Rolling Hills Ranch North PUD plan area.

Table 1 includes a comparison of the current trip-generation estimate for the two PUD developments within the Sketch Plan 2021 Amendment area (which include the approved Sanctuary at Meridian Ranch PUD, located south of Rex Road, and the currently-proposed Rolling Hills Ranch North PUD, located north of Rex Road) to the trip-generation estimate shown in the Sketch Plan 2021 Amendment TIS. Note: The trip-generation estimate shown in the Sketch Plan 2021 Amendment TIS was based on the trip-generation rates for Single Family Detached Housing from the **10th Edition** of *Trip Generation*, which are slightly higher than the rates shown in the current **11th Edition**.

Rolling Hills Ranch North PUD is expected to generate about 4,254 vehicle trips on the average weekday, with about half entering and half exiting the site during a 24-hour period. During the morning peak hour, which generally occurs for one hour between 6:30 a.m. and 8:30 a.m., about 77 vehicles would enter and 232 vehicles would exit the site. During the afternoon peak hour, which generally occurs for one hour between 4:15 p.m. and 6:15 p.m., about 261 vehicles would enter and 153 vehicles would exit the site.

TRIP DISTRIBUTION AND ASSIGNMENT

The directional distribution of the traffic volumes to be generated by Rolling Hills Ranch North PUD on the area roadways is an important factor in determining the traffic impacts. Figure 6 shows the overall short-term and long-term external-trip directional-distribution estimates for the trips estimated to be generated by the site. The estimates were based on the following factors: the location of Meridian Ranch land uses with respect to nearby residential, employment, commercial, and activity centers and the balance of the Colorado Springs metropolitan area; the land use types; and the internal/external street and roadway system serving the site.

The short-term directional-distribution estimate assumes Rex Road has been extended from its existing terminus to the first Grandview Reserve access east of Eastonville Road but not further east. The long-term directional distribution assumes buildout of the area street network including the extension of Rex Road east to US Hwy 24 and Briargate Parkway west to Black Forest Road.

When the distribution percentages (from Figure 6) are applied to the trip-generation estimates (from Table 1), the resulting site-generated traffic volumes can be determined. Figures 7a and 7b show the short-term Rolling Hills Ranch North Filing 1 and Rolling Hills Ranch North Filing 2 generated traffic volumes at the site-access points to Rex Road, respectively. Figures 8a and 8b show the long-term Rolling Hills Ranch North Filing 1 and Rolling Hills Ranch North Filing 2 generated traffic volumes at the site-access points to Rex Road, respectively.

BACKGROUND TRAFFIC

Background traffic is the traffic estimated to be on the study-area streets without consideration of the land uses within the Amendment area. It includes through traffic and traffic generated by adjacent/nearby developments.

Short Term

Figure 9 shows the projected short-term background traffic volumes at the site-access points to Rex Road. The short-term background traffic volumes were taken from the Sketch Plan 2021 Amendment TIS (PCD File Nos. PUDSP224 and SF2220) and the Sanctuary at Meridian Ranch PUD and Filing No. 1 Transportation Memorandum (PUDSP224 and SF2220).

Long Term

Figure 10 shows the projected 2043 background traffic volumes. The 2043 background traffic volumes were based on the 2043 background volumes from the Sketch Plan 2021 Amendment TIS plus traffic estimated to be generated by the Sanctuary at Meridian Ranch.

TOTAL TRAFFIC

Figure 11 shows the projected short-term total traffic volumes **at the site-access points** to Rex Road. The short-term total traffic volumes are the sum of the short-term background traffic volumes (from Figure 9), the short-term Rolling Hills Ranch North Filing No. 1 generated traffic volumes (from Figure 7a) and the short-term Rolling Hill Ranch North Filing No. 2 generated traffic volumes (from Figure 7b).

Figure 12 shows the projected 2043 total traffic volumes **at the site-access points** to Rex Road. The 2043 total traffic volumes are the sum of the 2043 background traffic volumes (from Figure 10), the long-term Rolling Hills Ranch North Filing No. 1 generated traffic volumes (from Figure 8a), and the long-term Rolling Hills Ranch North Filing No. 2 generated traffic volumes (from Figure 8b).

Please refer to the attached copies of figures from the Sketch Plan Amendment TIS report for off-site intersection volumes. These have been included for reference. The projections of future off-site intersection volumes shown in that report are still valid.

PROJECTED LEVELS OF SERVICE

Level of service (LOS) is a quantitative measure of the level of delay at an intersection. Level of service is indicated on a scale from "A" to "F." LOS A represents control delay of less than 10 seconds for unsignalized and signalized intersections. LOS F represents control delay of more than 50 seconds for unsignalized intersections and more than 80 seconds for signalized intersections. Table 1 shows the level of service delay ranges.

Table 2: Level of Service Delay Ranges

Level of Service	Signalized Intersections Average Control Delay (seconds per vehicle)	Unsignalized Intersections Average Control Delay (seconds per vehicle)[(1)]
A	10.0 sec or less	10.0 sec or less
B	10.1-20.0 sec	10.1-15.0 sec
C	20.1-35.0 sec	15.1-25.0 sec
D	35.1-55.0 sec	25.1-35.0 sec
E	55.1-80.0 sec	35.1-50.0 sec
F	80.1 sec or more	50.1 sec or more

(1) For unsignalized intersections, if V/C ratio is greater than 1.0 the level of service is LOS F, regardless of the projected average control delay per vehicle.

The **site-access points to Rex Road** were analyzed to determine the projected levels of service for the short-term and 2043 total traffic volumes, based on the unsignalized-intersection analysis procedures from the *Highway Capacity Manual*. Figures 11 and 12 show the level of service analysis results. The level of service reports are attached.

The intersections of Rex/Estate Ridge and Rex/Shelter Creek are expected to operate at LOS D or better for all movements during the peak hours as stop-sign-controlled intersections, based on the projected short-term and 2043 traffic volumes.

Please refer to the Sketch Plan 2021 Amendment TIS for the total traffic volumes and level of service analysis at key external intersections in the vicinity of the site. Note: copies of applicable figures from the Sketch Plan Amendment TIS report have been attached to this report for quick reference.

As the total number of dwelling units for the Meridian Ranch 2021 Sketch Plan Amendment area is not anticipated to change from the number shown in the Sketch Plan TIS, no significant changes are projected to the results of that study. El Paso County is currently working on a plan for intersections to Eastonville Road, including Rex Road. Once that study is drafted, this memorandum could be updated accordingly.

REQUIRED IMPROVEMENTS

Table 3 (attached) contains a summary of needed area improvements.

Rex Road/ Rolling Hills Ranch North Access Points

- Based on the 2043 total traffic volumes shown in Figure 12 and the criteria contained in the *ECM*, a westbound right-turn deceleration lane will be required on Rex Road approaching Estate Ridge Drive. This lane should be 155 feet long plus a 160-foot taper.
- Based on the short total-traffic volumes shown in Figure 11 and the criteria contained in the *ECM*, an eastbound left-turn lane will be required on Rex Road approaching Shelter Creek Drive. This lane should be 205 feet long (155 feet of deceleration length plus 50 feet of storage) plus a 160-foot taper.
- Based on the short-term-total traffic volumes shown in Figure 11 and the criteria contained in the *ECM*, a westbound right-turn deceleration lane will be required on Rex Road approaching Shelter Creek Drive. This lane should be 155 feet long plus a 160-foot taper.

These turn-lane improvements were included in the approved Sanctuary Filing 1 at Meridian Ranch Street and Utility Plans and are being installed as part of the construction of Rex Road east of Estate Ridge Drive (currently under construction). It is anticipated that this section of Rex Road would be open to traffic by Spring of 2024. This timing is subject to change.

Meridian Road/Rex Road

The intersection of Meridian Road/Rex Road is currently stop-sign controlled. El Paso County is currently in the preconstruction stage for a project to improve this intersection which includes additional through lanes, road-alignment adjustments, drainage improvements, and a traffic signal. A developer agreement has been completed which identifies Meridian Ranch's share of the cost of these improvements.

ROADWAY CLASSIFICATIONS

Figure 13 shows the recommended street classifications. All of the internal streets within the Rolling Hills Ranch North Filing No. 1 should be classified Urban Local or Urban Local (Low Volume).

DEVIATION REQUESTS

A deviation request to eliminate mid-block pedestrian crossings required by the criteria contained in section 2.5.2.C.4 of the El Paso County *Engineering Criteria Manual* (*ECM*) will be included with this submittal.

ROAD IMPROVEMENT FEE PROGRAM

This site is located within the Woodmen Road Metropolitan District, and as such will be required to pay applicable Woodmen Road District fees in lieu of participation in the El Paso County Road Improvement Fee Program. Regarding a potential request for Countywide Fee Program credit for design and/or installation of new Rex Road segments, it is the applicant's responsibility to:

- Contact the road impact fee advisory committee to confirm/determine if these are eligible intersection improvements for reimbursement under the road impact fee, and
- Submit a request for Fee program credit (if applicable). Any credit, if approved, would be per Fee Program provisions and is based on program unit costs, not actual costs incurred.

* * * * *

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

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

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

JCH/KDF:jas

Enclosures: Tables 1 and 3
Figures 1-13
Level of Service Reports
Appendix Table 1
Excerpt from the 2021 Meridian Ranch Sketch Plan 2021 Amendment TIA
El Paso County Road Impact Fee Advisory Committee Meeting Minutes
ECM Deviation Request Form

Tables 1-3

TRANSPORTATION
CONSULTANTS, INC.

Table 1
Trip Generation Estimate
Rollings Hills Ranch North PUD

Land Use Code	Land Use Description	Trip Generation Units	Trip Generation Rates [1] Average Weekday Traffic	Morning Peak Hour In	Morning Peak Hour Out	Afternoon Peak Hour In	Afternoon Peak Hour Out	Total Trips Generated Average Weekday Traffic	Morning Peak Hour In	Morning Peak Hour Out	Afternoon Peak Hour In	Afternoon Peak Hour Out
Rolling Hills Ranch North PUD (Currently Proposed)												
Filing 1												
210	Single-Family Detached Housing	239 DU	9.43	0.18	0.53	0.59	0.35	2,254	42	125	142	83
Filing 2												
210	Single-Family Detached Housing	202 DU	9.43	0.18	0.53	0.59	0.35	1,905	35	106	120	70
	Total Rolling Hills Ranch North PUD	441 DU						4,159	77	232	261	153
Sanctuary at Rolling Hills Ranch (Approved)												
210	Single-Family Detached Housing	343 DU[2]	9.43	0.18	0.53	0.59	0.35	3,234	60	180	203	119
	Total 2021 Sketch Plan Amendment Area	**784 DU**						**7,393**	**137**	**412**	**464**	**273**
Trip Generation Estimate for the Same Area From the *The Meridian Ranch Sketch Plan 2021 Amendment Traffic Impact Analysis,* June 25, 2021												
210	Single-Family Detached Housing	784 DU	9.44	0.19	0.56	0.62	0.37	7,401	145	435	489	287
	Change	*0 DU*						*-8*	*-8*	*-24*	*-25*	*-15*

Notes:
(1) Source: "*Trip Generation, 11th Edition, 2021*" by the Institute of Transportation Engineers (ITE)
(2) DU = dwelling unit

Source: LSC Transportation Consultants, Inc. *Oct-23*

Table 3
Roadway Improvements
Rolling Hills Ranch North PUD

Item #	Improvement	Timing	Responsibility
Section I: Roadway Segment Improvements			
Rex Road			
1	Construct Rex Road as an Urban 2-Lane Minor Arterial from Sunrise Ridge Drive to Rolling Ranch Drive.	Completed	Meridian Ranch
2	Construct Rex Road as an Urban 2-Lane Minor Arterial from Rolling Ranch Drive to Estate Ridge Drive.	Completed	Meridian Ranch
3	Construct Rex Road as an Urban 2-Lane Minor Arterial from Estates Ridge Drive to Eastonville Road (with a temporary west leg of the Eastonville/Rex intersection).	Will be completed late 2023 and open to traffic by spring 2024	Meridian Ranch
4	Rex Road from Eastonville Road to US 24	With Grandview Estates **(Timing TBD - beyond Phase 1)**	Grandview Reserve Development
Eastonville Road			
5	Eastonville Road - Rex Road to Latigo initial grading and paving	TBD by EPC; See Item 7 For Phase 2 of the Eastonville PPRTA Project	Area developments or otherwise determined by the County - depending on traffic impacts in the short term prior to Phase 2 of PPRTA.
6	Eastonville Road - Rex Road to Latigo upgrade to Rural Minor Arterial (Per MTCP) **(Note: recent discussions suggest that this segment may be planned for an urban section, instead of rural)**	TBD by EPC (Phase 2 of the Eastonville PPRTA Project)	PPRTA and potentially area developments or otherwise determined by the County - depending on the timing of developments and level of traffic impacts relative to/ prior to Phase 2 of PPRTA.
7	Eastonville Road - Londonderry to Rex Road - Roadway Design and u**pgrade to Urban Minor Arterial (Project-specific cross section has been determined by EPC)**	As per EPC direction PPRTA Phase 1 - Design process is underway	**PPRTA (Phase 1 - north portion):** Grandview Development in cooperation with El Paso County DPW staff/consultants and potentially in conjunction with other area developments per any agreements in-place with El Paso County.
8	Eastonville Road - Snaffle Bit to Londonderry -Roadway Design and u**pgrade to Urban Minor Arterial (Project-specific cross section has been determined by EPC).**	As per EPC direction PPRTA Phase 1 - Design process is underway	**PPRTA (Phase 1 - south portion):** El Paso County
Meridian Road			
5	Meridian Road - Widen to provide two northbound and two southbound through lanes from just north of Indian Paint Trail to Murphy Road.	Shown on 2040 MTCP Roadway Plan	El Paso County
Stapleton Drive			
6	Stapleton Drive - Meridian Road to Eastonville Road complete southern (eastbound) half	Shown on 2040 MTCP Roadway Plan	El Paso County
7	Stapleton Drive - Eastonville Road to US Hwy 24 complete southern (eastbound) half	Shown on 2040 MTCP Roadway Plan	Waterbury Metro District
Section II: Intersection Improvements			
Rex Road/Meridian Road			
8	Rex & Meridian: Design & Construction of the Intersection Improvements. The improvements will include additional through lanes, road alignment adjustments, drainage improvements and a traffic-signal.	Project preconstruction stage; in-progress by El Paso County	The County is the lead for the completion of the design and construction of intersection improvements. A development agreement has been completed which identifies Meridian Ranch's share of the cost of these improvements
Rex/Eastonville			
9	Design and construction of a modern roundabout intersection.	Improvements at this intersection are as part of the Eastonville Road PPRTA Project Phase 1. The design process is currently underway.	**PPRTA (Phase 1 - north portion):** Grandview Development in cooperation with El Paso County DPW staff/consultants and potentially in conjunction with other area developments per any agreements in-place with El Paso County.
Eastonville/Londonderry			
15	Design and construction of a modern roundabout intersection.	Improvements at this intersection are as part of the Eastonville Road PPRTA Project Phase 1. The design process is currently underway.	**PPRTA (Phase 1 - south portion):** El Paso County
Rex/Rolling Ranch & Rex/Estate Ridge			
16	Provide a 155-foot westbound left-turn deceleration lane plus 35 feet of storage on Rex Road approaching Rolling Ranch Drive and a 155-foot eastbound left-turn deceleration lane plus 30 feet of storage on Rex Road approaching Estate Ridge Drive with a shared 90-foot reverse curve taper.	Completed	Meridian Ranch
17	Provide a 155-foot eastbound right-turn deceleration lane on Rex Road approaching Rolling Ranch Drive plus a 160-foot taper.	Completed	Meridian Ranch
18	Provide a 155-foot westbound right-turn deceleration lane on Rex Road approaching Estates Ridge Drive plus a 160-foot taper.	Will be completed late 2023 and open to traffic by spring 2024	Meridian Ranch
Rex Road/Retreat Peak Drive			
19	Provide a 155-foot westbound left-turn deceleration lane plus 50 feet of storage on Rex Road approaching Retreat Peak Drive plus a 160-foot taper	Will be completed late 2023 and open to traffic by spring 2024	Meridian Ranch
20	Provide a 155-foot eastbound right-turn deceleration lane on Rex Road approaching Retreat Peak Drive plus a 160-foot taper.	Will be completed late 2023 and open to traffic by spring 2024	Meridian Ranch
Rex Road/Shelter Creek Drive			
21	Provide a 155-foot westbound left-turn deceleration lane plus 100 feet of storage on Rex Road approaching Shelter Creek Drive plus a 160-foot taper	Will be completed late 2023 and open to traffic by spring 2024	Meridian Ranch
22	Provide a 155-foot westbound right-turn deceleration lane on Rex Road approaching Shelter Creek Drive plus a 160-foot taper.	Will be completed late 2023 and open to traffic by spring 2024	Meridian Ranch
23	Provide a 155-foot eastbound left-turn deceleration lane plus 50 feet of storage on Rex Road approaching Shelter Creek Drive plus a 160-foot taper	Will be completed late 2023 and open to traffic by spring 2024	Meridian Ranch

Source: LSC Transportation Consultants, Inc. *10/31/2023*

Figures 1-13

TRANSPORTATION
CONSULTANTS, INC.

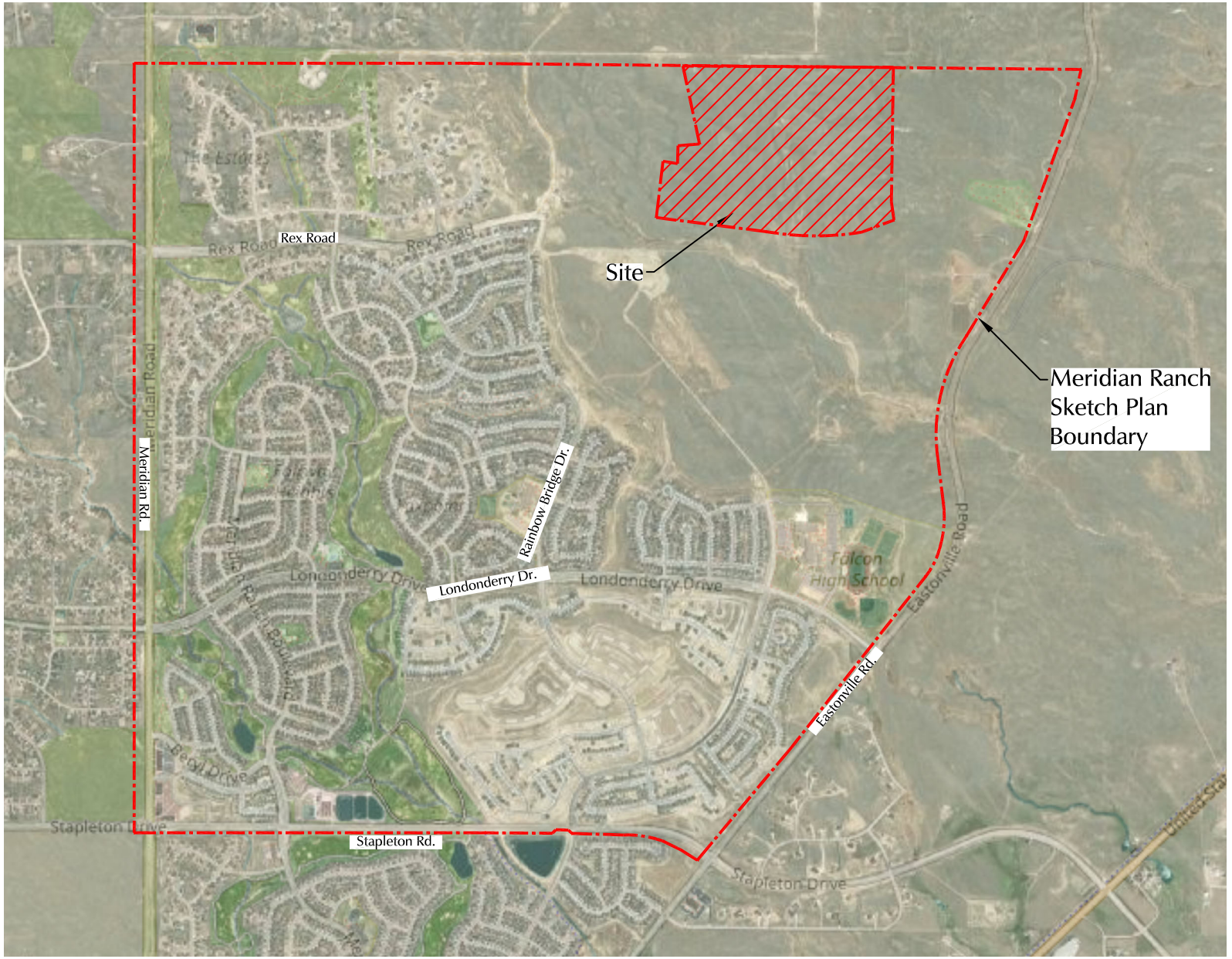
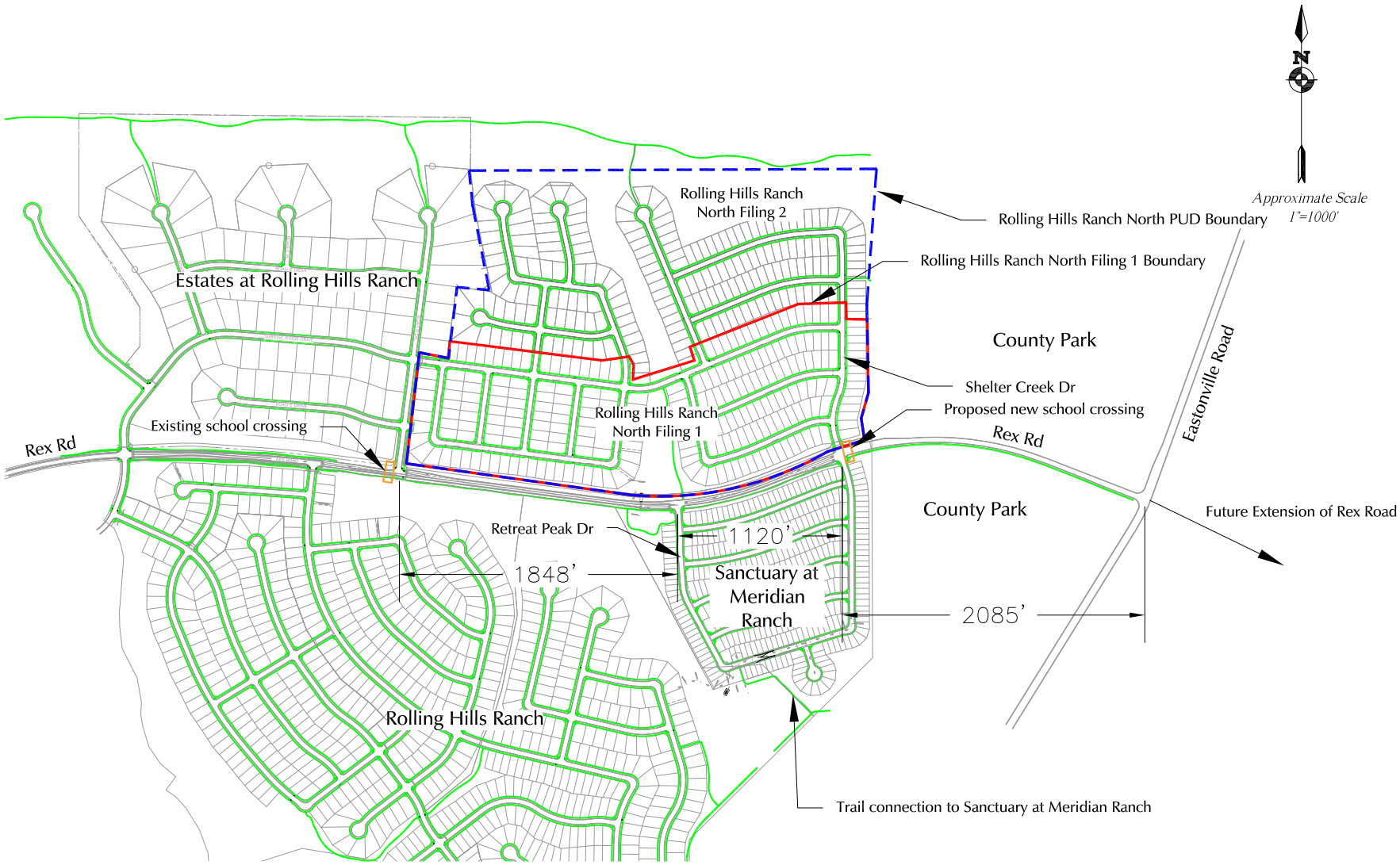


Figure 1

Vicinity Map

Rolling Hills Ranch North PUD (LSC #S234290)

TRANSPORTATION CONSULTANTS, INC.



Sidewalk or trail*

Signed and marked pedestrian crossing

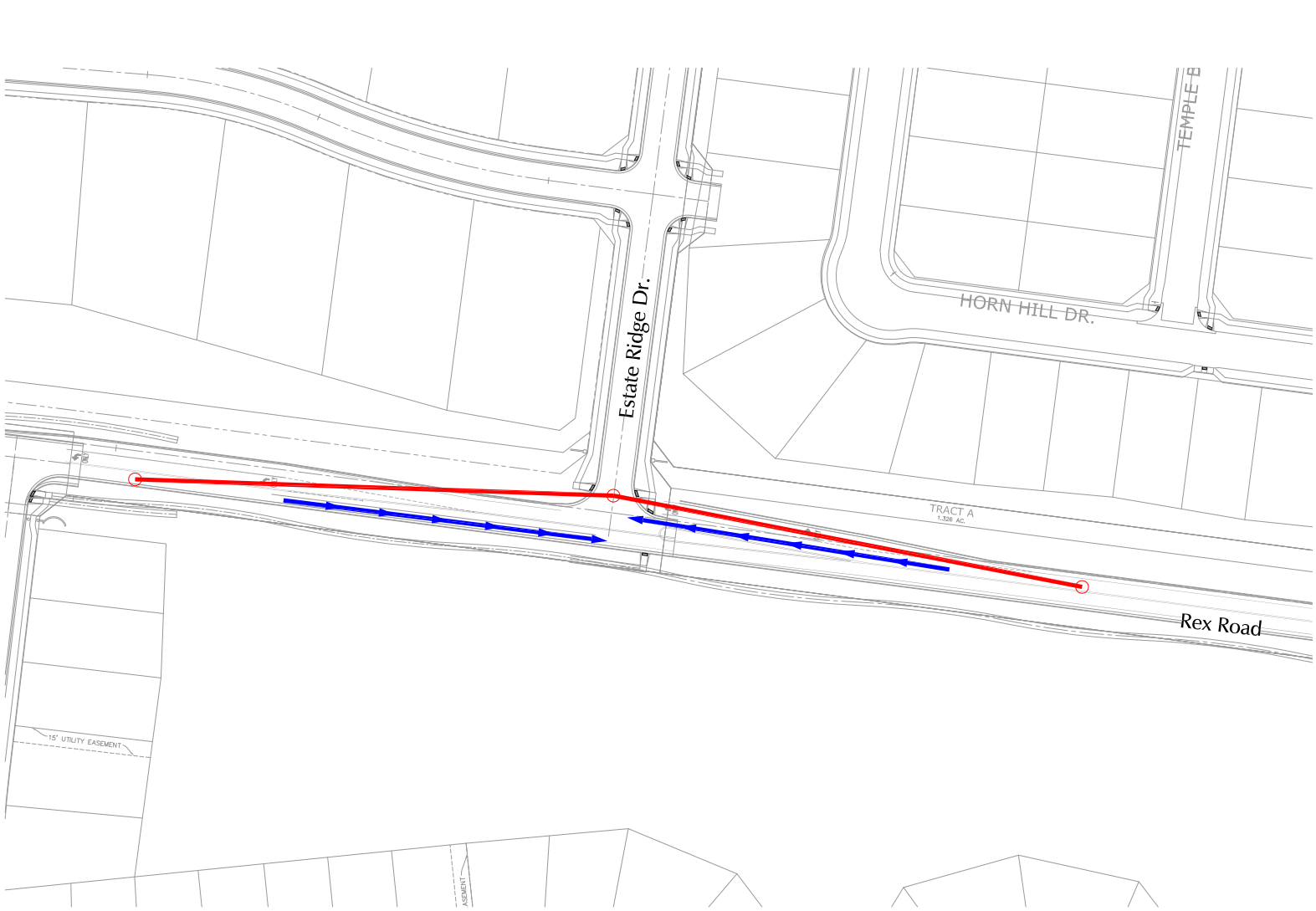
*Note: see attached School Pedestrian Plan Figures from "Rolling Hills at Meridian Ranch Traffic Impact Study" (PCD file no. PUDSP199) June 29, 2020 and from "Estates at Rolling Hill Ranch Filing No. 2 Traffic Impact Study" (PCD file no. PUDSP204 and SF 2018) October 8, 2020

LSC TRANSPORTATION CONSULTANTS, INC.

Figure 2

Site Plan

Rolling Hills Ranch North PUD (LSC #S234290)



LEGEND:

= ECM Required Intersection Sight Distance (445' based on a design speed of 50 mph from Table 2-21)

= ECM Required Stopping Sight Distance (305' based on a design speed of 50 mph from Table 2-17)

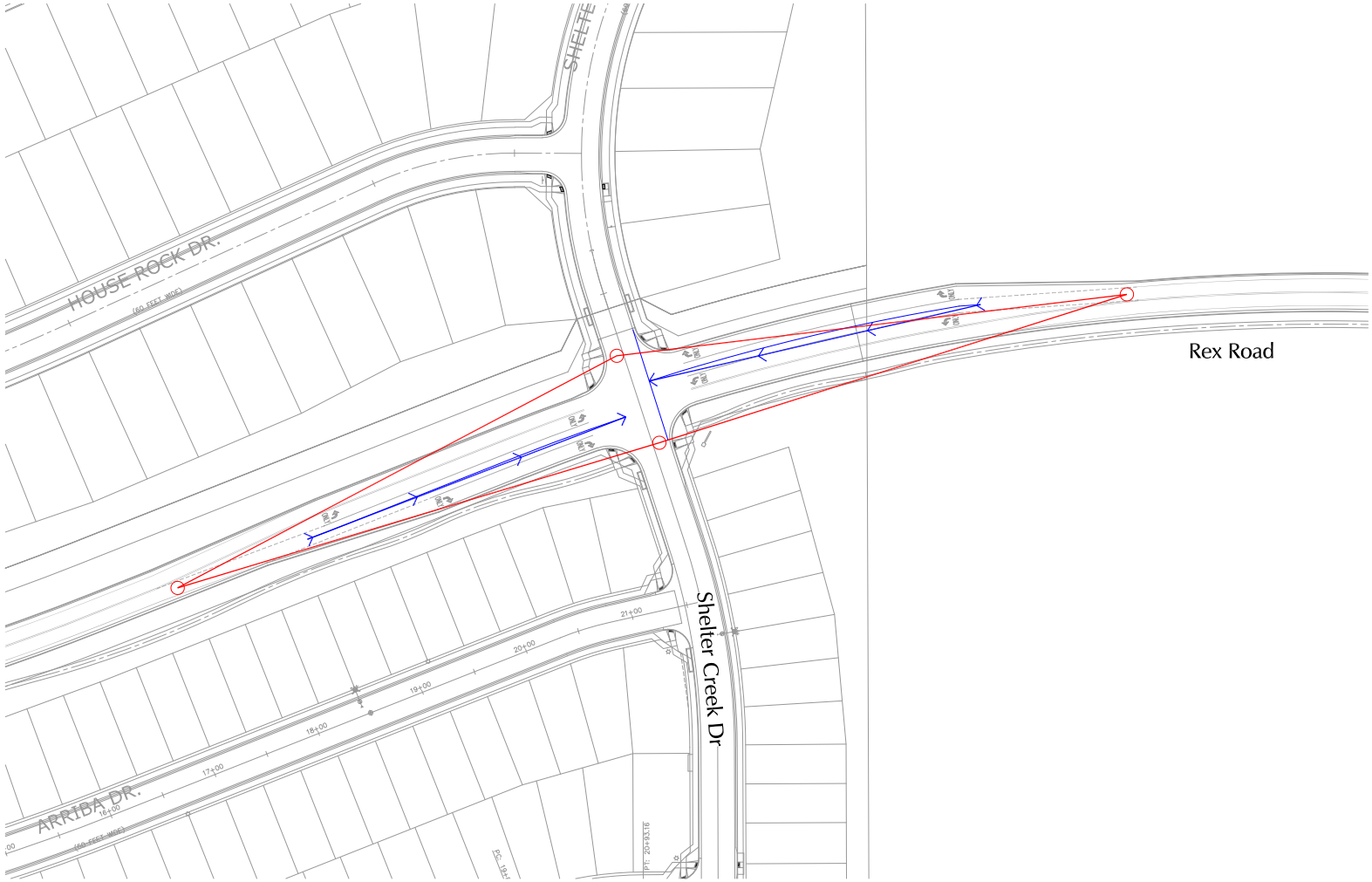
TRANSPORTATION CONSULTANTS, INC.

Figure 3

Sight Distance Analysis

Rex Rd/Estate Ridge Dr

Rolling Hills Ranch North PUD (LSC #S234290)



N

Approximate Scale
1"=150'

ECM Required Stopping Sight Distance (305' from Table 2-17 based on a design speed of 40 mph.

ECM Required Intersection Sight Distance (455' from Table 2-21 based on a design speed of 40 mph.

TRANSPORTATION CONSULTANTS, INC.

Figure 4

Sight Distance Analysis
Rex/Shelter Creek

Rolling Hills Ranch North PUD (LSC #S234290)

Approximate Scale
1"=1000'

Rex Rd

Existing

Retreat Peak Dr

Proposed paved trail connection

Rex Rd

Eastonville Road

Future Extension of Rex Road

Alternate Potential School Pedestrian Crossing Locations*

Potential "Cut-Through" Route

Trail connection to Sanctuary at Meridian Ranch

Future School Site

Existing

Potential Future School Access

Existing

Existing School

Existing School

Existing

Existing

*Note:
Alternate, and potential new (with this plan) School Pedestrian Crossing locations:

Depending on coordination between El Paso County Public Works and the School District, one of these crossing locations may be marked and signed as designated school pedestrian crossing locations with MUTCD standard school crosswalk markings, school pedestrian crossing signs, and advance school pedestrian crossing signs. This exhibit shows most possible routes to/from the area schools, however, the school district in cooperation/coordination with El Paso County public works and other departments may designate more specific routes to be used for non-motorized travel to/from the area schools - likely in accordance with latest federal Safe Routes to School and CDOT guidelines. Any specific routes established may affect crossing locations and/or "treatments"/design of crossings.

While these locations are over a mile from Falcon High School, the following enhanced treatments may be considered once the new school is developed, if not as part of a route to Falcon High School. Some or all may be staffed with crossing guards prior to the start time of schools and following the school end times. If trained crossing guards are not an option, or if the ability to staff with crossing guards is limited, one or more pedestrian signal or other actuated devices and or pedestrian refuge islands (or other crossing treatments) may be agreed upon by EPC Public Works and the school district. Additionally, a 20mph school zone(s) may be needed at selected intersections. Flashing beacon systems with 20 mph school speed limit signs would be optimal, but supplemental panels indicating specific times of day could be an option in lieu of beacon systems.

LEGEND:

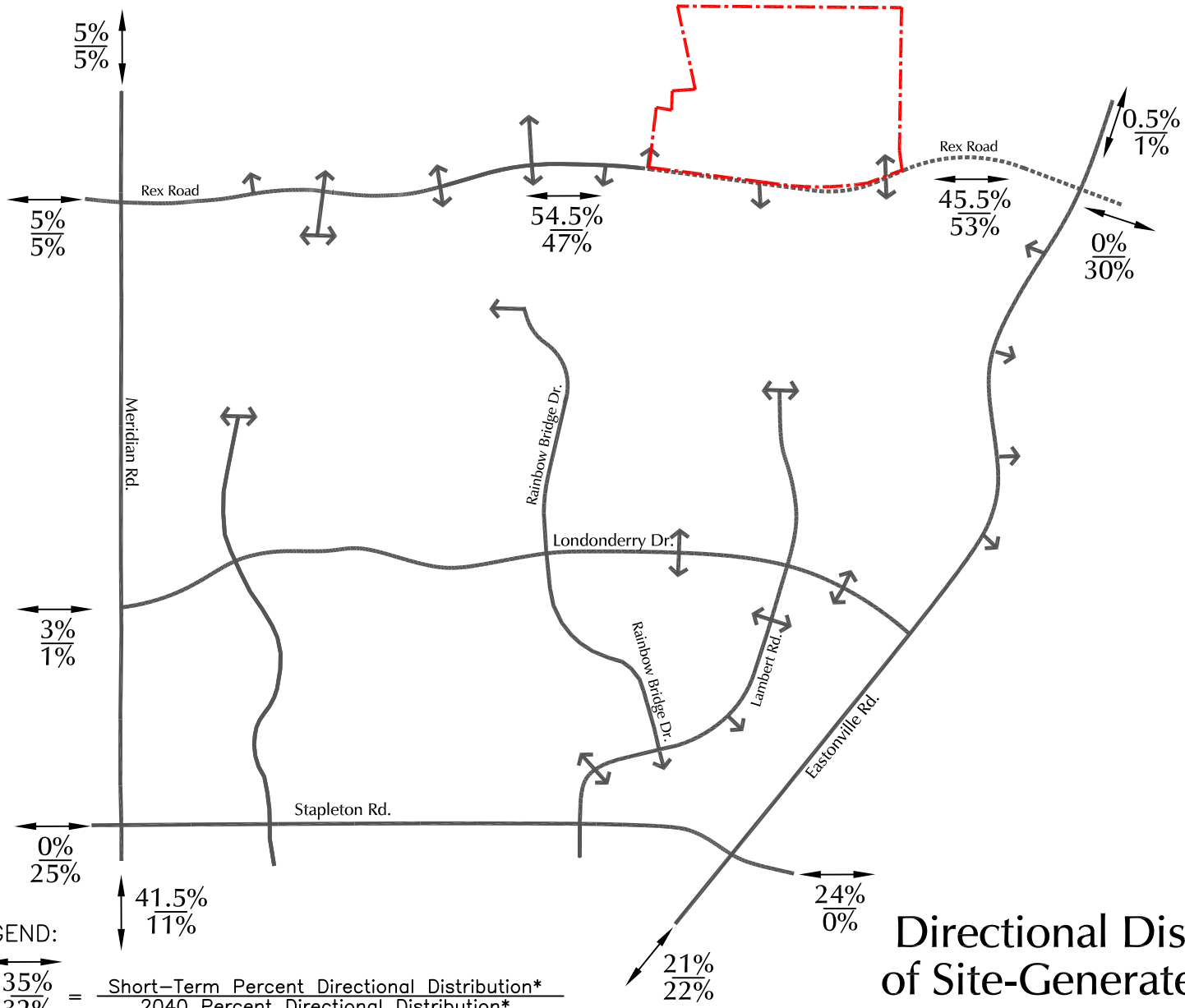
= Potential School Pedestrian Routes
= Sidewalk
= Crosswalk
= FUTURE Potential School Pedestrian Routes
= FUTURE Sidewalk (not part of this project)
= Stop Sign

TRANSPORTATION CONSULTANTS, INC.

Figure 5

School Pedestrian Routes

Rolling Hills Ranch North PUD (LSC #S234290)



Approximate Scale
Scale: 1"= 2,000'

LEGEND:

35%
32%
= Short–Term Percent Directional Distribution* / 2040 Percent Directional Distribution*

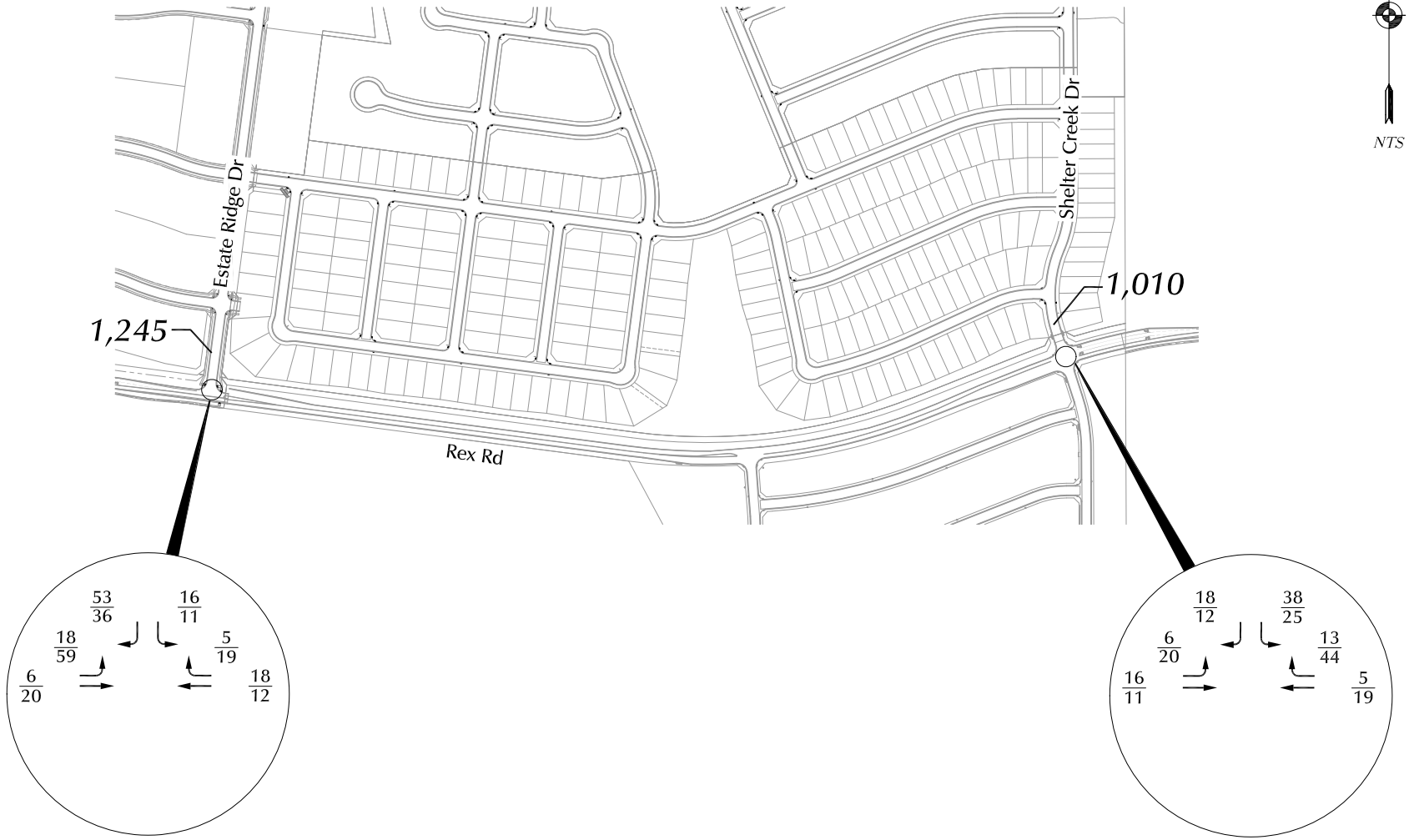
*External to Meridian Ranch

LSC TRANSPORTATION CONSULTANTS, INC.

Figure 6

Directional Distribution of Site-Generated Traffic

Rolling Hills Ranch North PUD (LSC #S234290)



LEGEND:

$\frac{26}{31}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

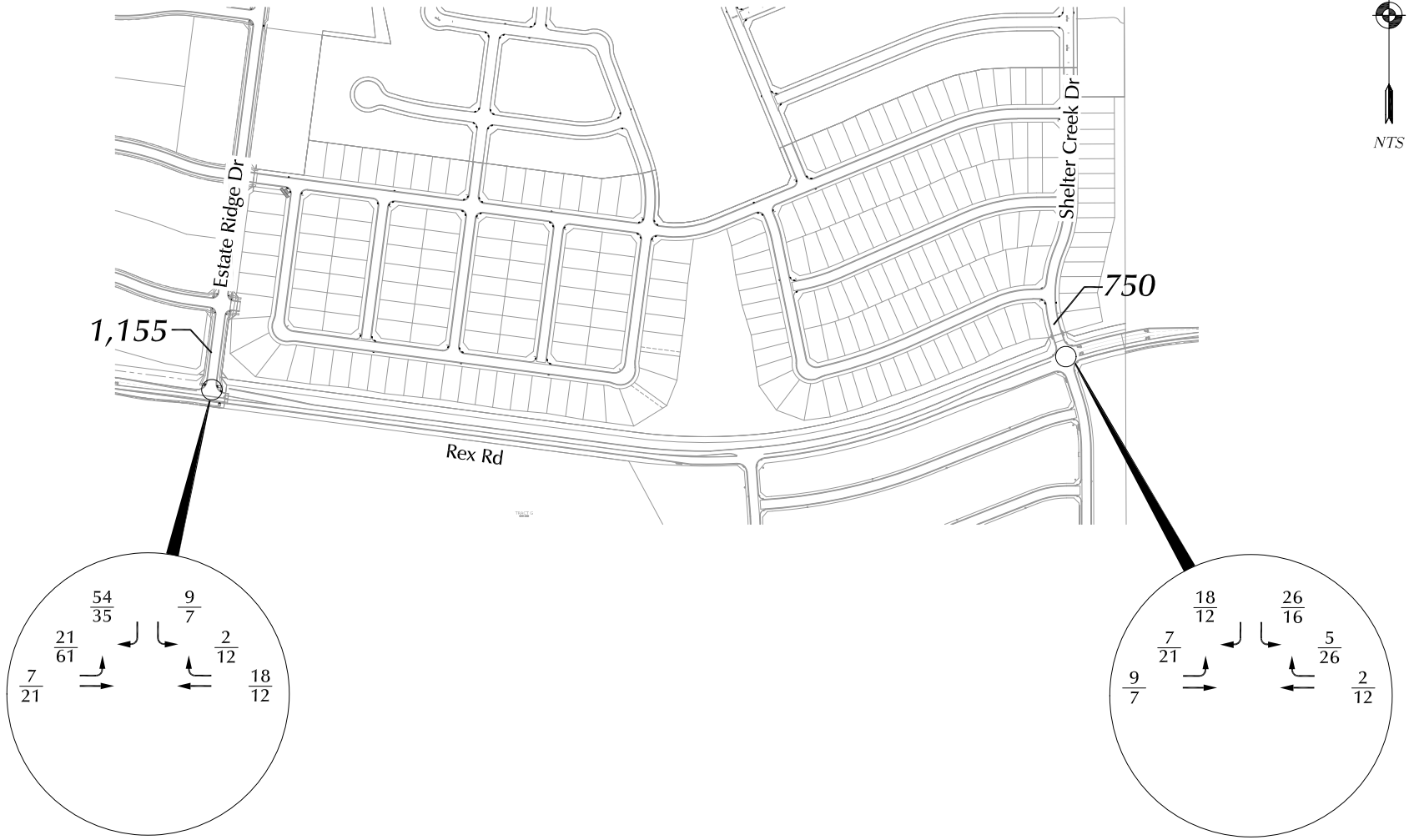
1,000 = Average Weekday Traffic (vehicles per day)

TRANSPORTATION CONSULTANTS, INC.

Figure 7a

Short-Term Rolling Hills Ranch North Filing 1 Site-Generated Traffic

Rolling Hills Ranch North PUD (LSC #S234290)



LEGEND:

$\frac{26}{31}$ = $\frac{\text{AM Weekday Peak–Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak–Hour Traffic (vehicles per hour)}}$

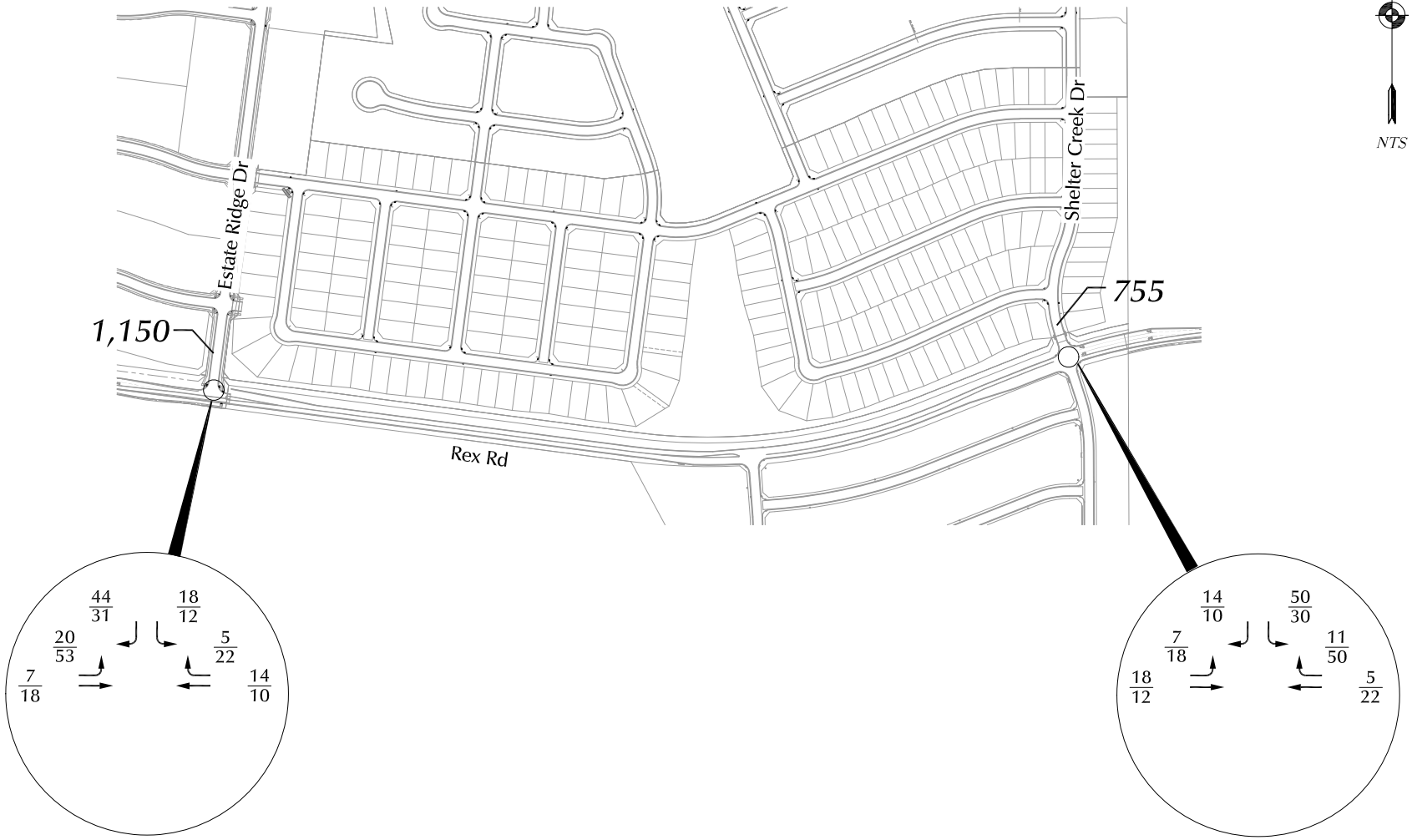
1,000 = Average Weekday Traffic (vehicles per day)

TRANSPORTATION CONSULTANTS, INC.

Figure 7b

Short-Term Rolling Hills Ranch North Filing 2 Site-Generated Traffic

Rolling Hills Ranch North PUD (LSC #S234290)



LEGEND:

$\frac{26}{31}$ = $\frac{\text{AM Weekday Peak–Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak–Hour Traffic (vehicles per hour)}}$

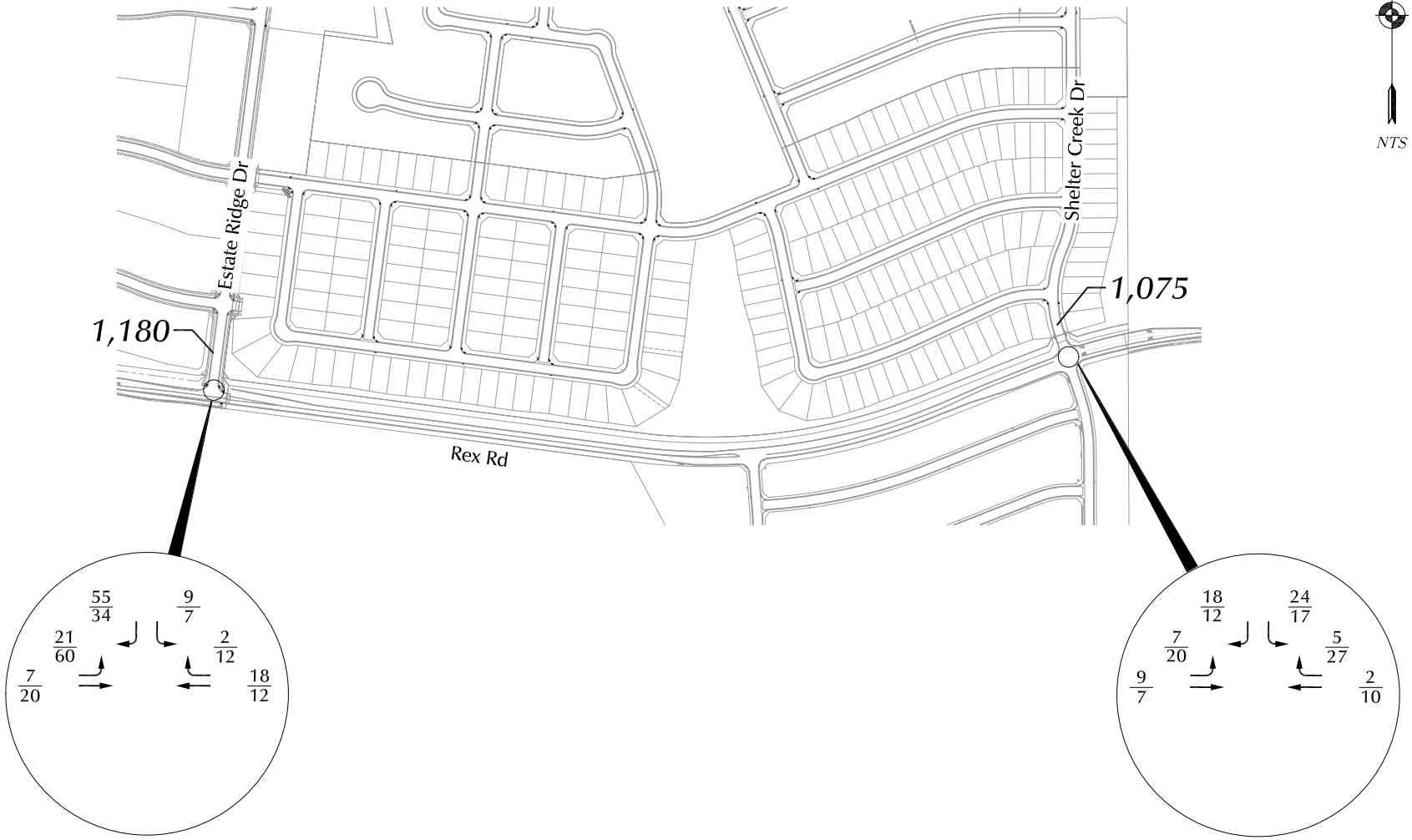
1,000 = Average Weekday Traffic (vehicles per day)

TRANSPORTATION CONSULTANTS, INC.

Figure 8a

Long-Term Rolling Hills Ranch North Filing 1 Site-Generated Traffic

Rolling Hills Ranch North PUD (LSC #S234290)



LEGEND:

$\frac{26}{31}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

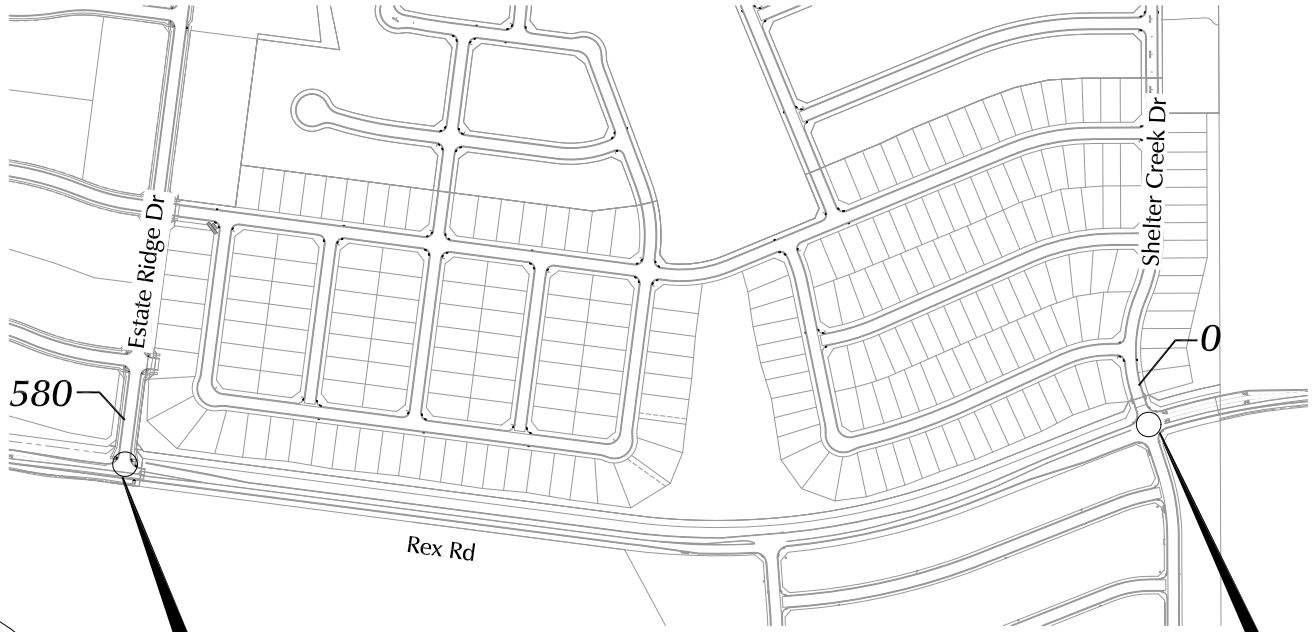
1,000 = Average Weekday Traffic (vehicles per day)

TRANSPORTATION CONSULTANTS, INC.

Figure 8b

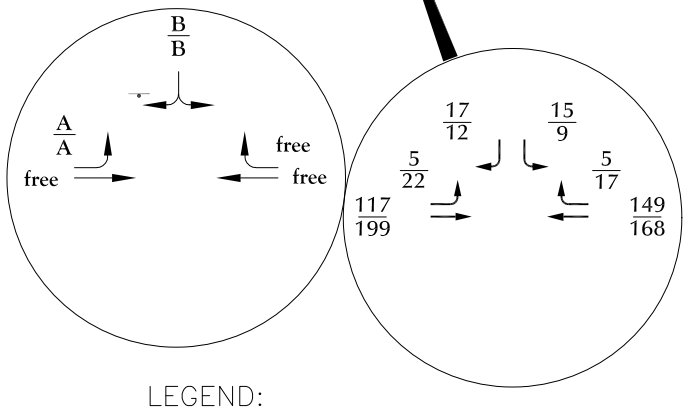
Long-Term Rolling Hills Ranch North Filing 2 Site-Generated Traffic

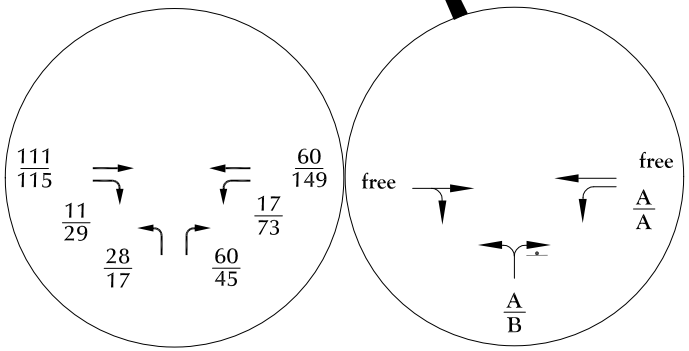
Rolling Hills Ranch North PUD (LSC #S234290)



N

NTS





LEGEND:

$\frac{26}{31}$ = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour)

1,000 = Average Weekday Traffic (vehicles per day)

$\frac{A}{B}$ = AM Individual Movement Peak–Hour Level of Service / PM Individual Movement Peak–Hour Level of Service

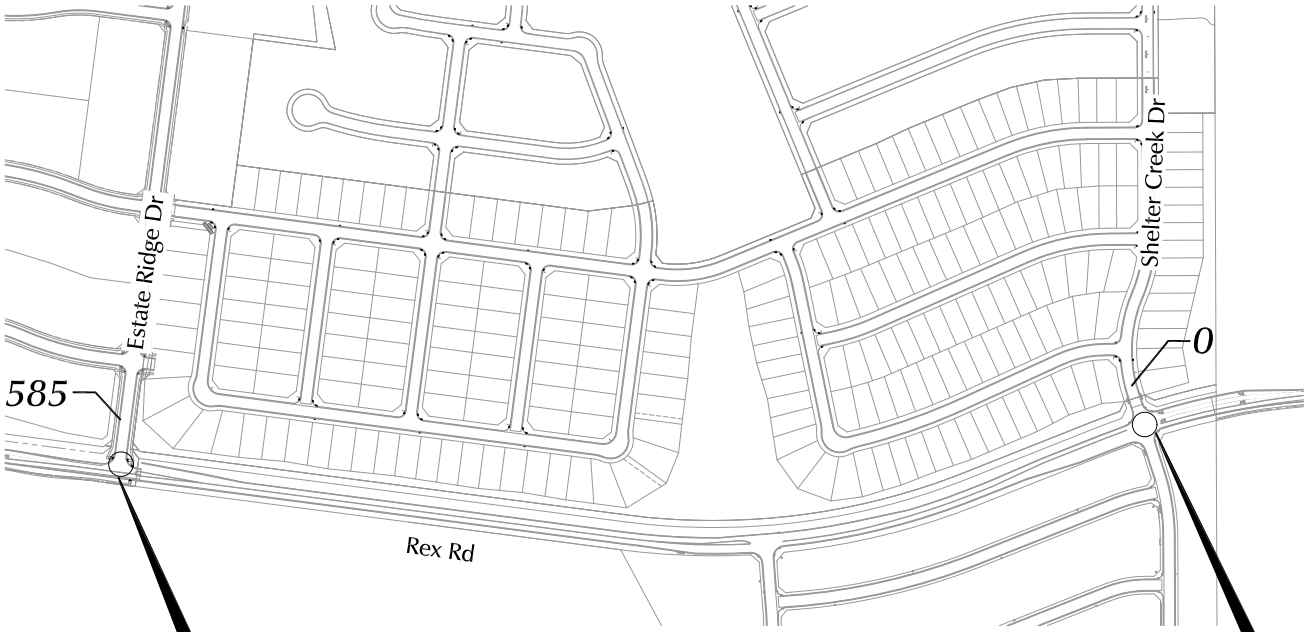
= Stop Sign

TRANSPORTATION CONSULTANTS, INC.

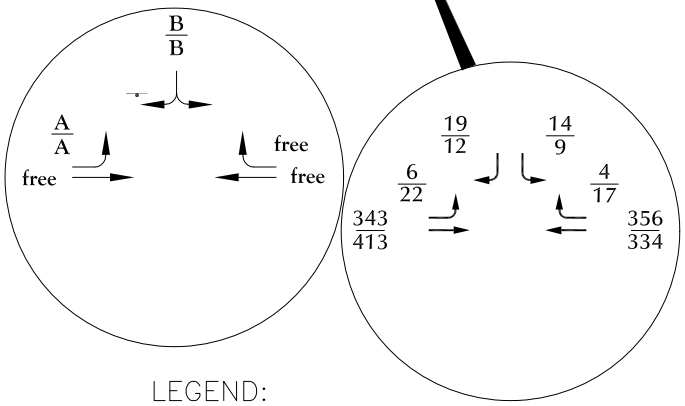
Figure 9

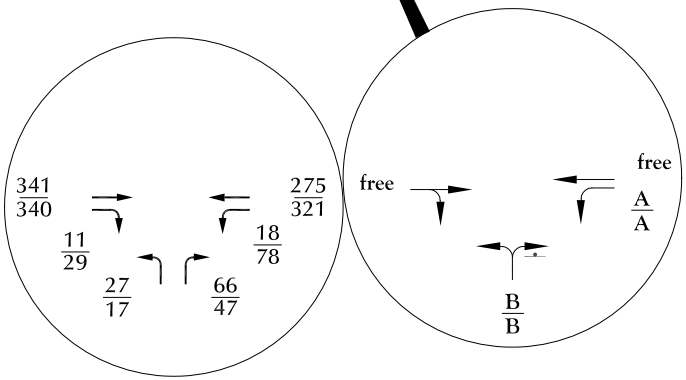
Short-Term Background Traffic Conditions

Rolling Hills Ranch North PUD (LSC #S234290)



NTS





LEGEND:

$\frac{26}{31}$ = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour)

1,000 = Average Weekday Traffic (vehicles per day)

$\frac{A}{B}$ = AM Individual Movement Peak–Hour Level of Service / PM Individual Movement Peak–Hour Level of Service

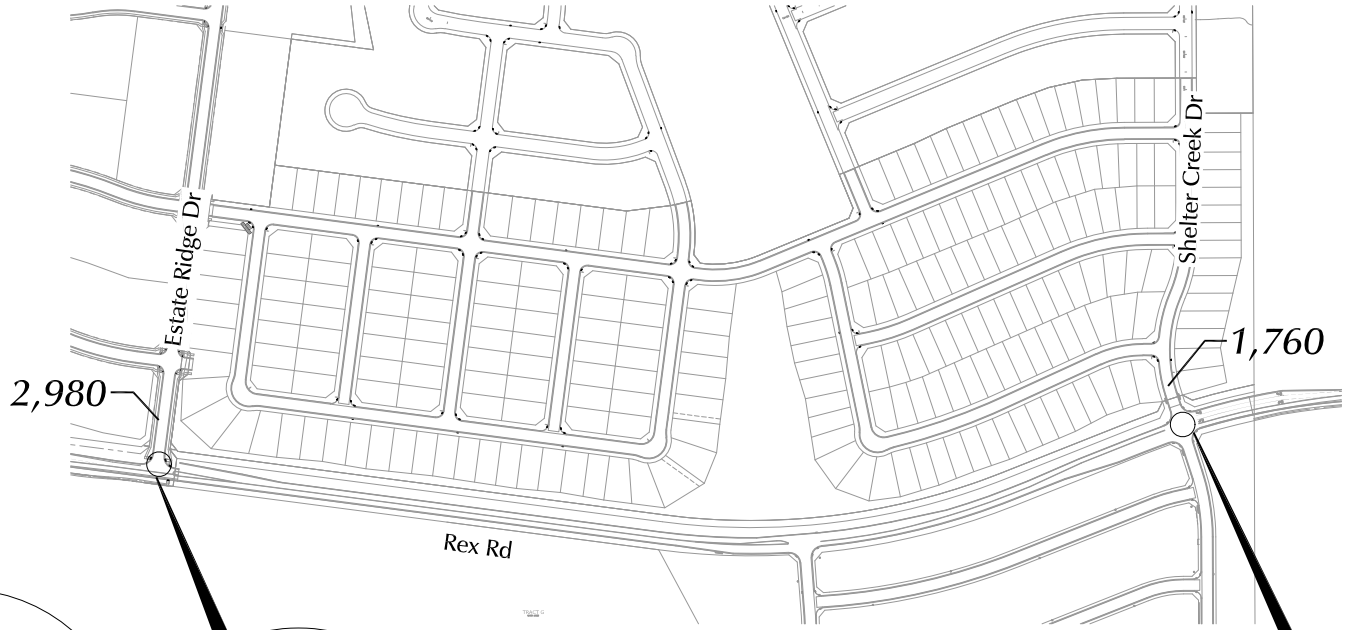
= Stop Sign

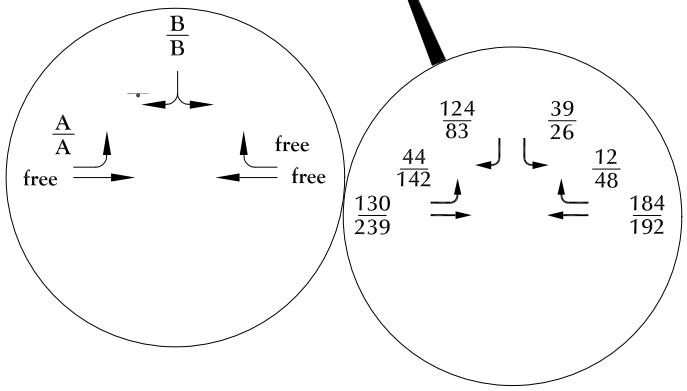
TRANSPORTATION CONSULTANTS, INC.

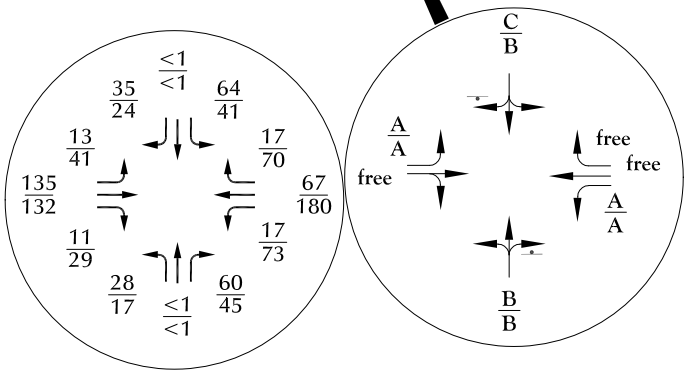
Figure 10

Long-Term Background Traffic Conditions

Rolling Hills Ranch North PUD (LSC #S234290)







LEGEND:

$\frac{26}{31}$ = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour)

1,000 = Average Weekday Traffic (vehicles per day)

$\frac{A}{B}$ = AM Individual Movement Peak–Hour Level of Service / PM Individual Movement Peak–Hour Level of Service

= Stop Sign

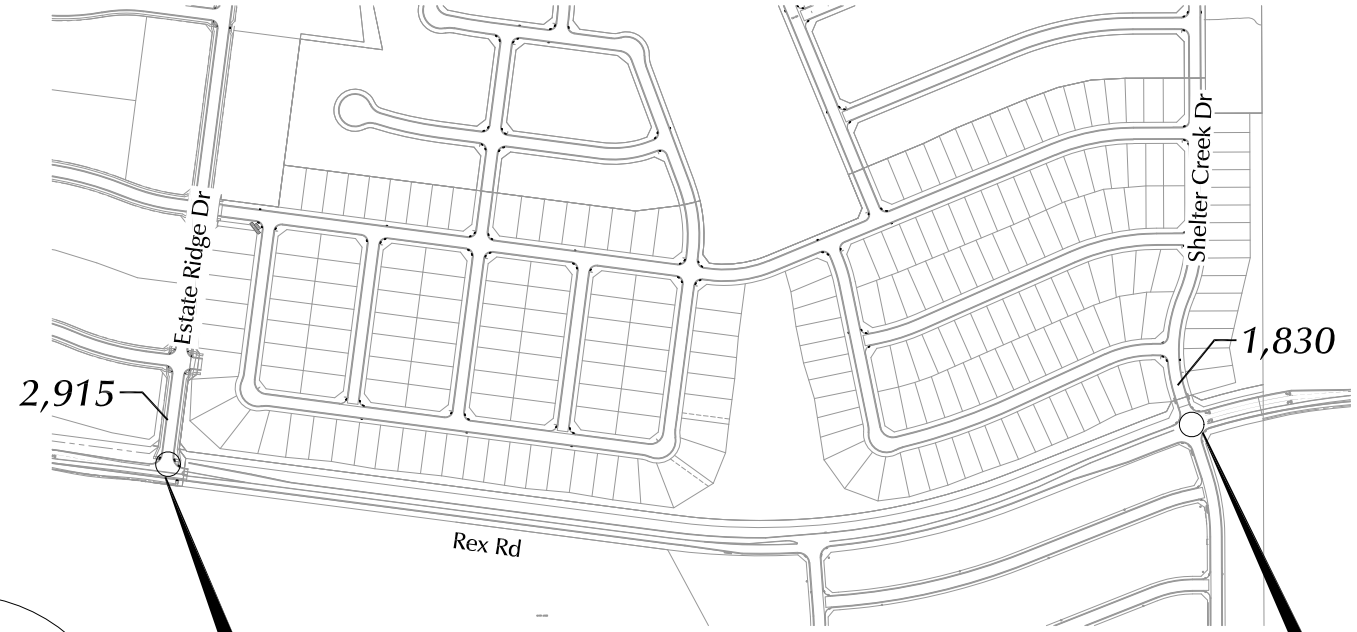
NTS

Figure 11

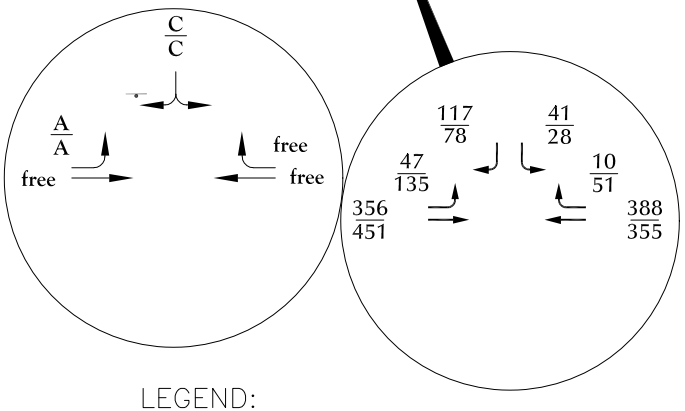
Short-Term Total Traffic Conditions

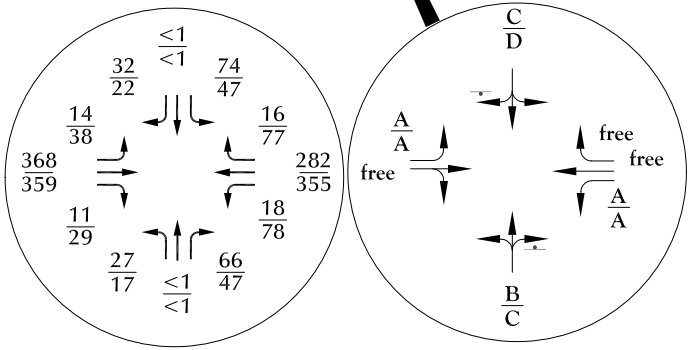
Rolling Hills Ranch North PUD (LSC #S234290)

LSC TRANSPORTATION CONSULTANTS, INC.



NTS





LEGEND:

26/31 = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour)

1,000 = Average Weekday Traffic (vehicles per day)

A/B = AM Individual Movement Peak–Hour Level of Service / PM Individual Movement Peak–Hour Level of Service

= Stop Sign

TRANSPORTATION CONSULTANTS, INC.

Figure 12

2043 Total Traffic Conditions

Rolling Hills Ranch North PUD (LSC #S234290)

Figure 13

Roadway Classifications

Rolling Hills Ranch North PUD (LSC #S234290)

Level of Service Reports

TRANSPORTATION
CONSULTANTS, INC.

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	117	149	5	15	17
Future Vol, veh/h	5	117	149	5	15	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	138	175	6	18	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	181	0	-	0	328	178
Stage 1	-	-	-	-	178	-
Stage 2	-	-	-	-	150	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1394	-	-	-	666	865
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	878	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1394	-	-	-	663	865
Mov Cap-2 Maneuver	-	-	-	-	663	-
Stage 1	-	-	-	-	850	-
Stage 2	-	-	-	-	878	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1394	-	-	-	757
HCM Lane V/C Ratio	0.004	-	-	-	0.05
HCM Control Delay (s)	7.6	-	-	-	10
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	3.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	111	11	17	60	28	60
Future Vol, veh/h	111	11	17	60	28	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	131	13	20	71	33	71

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	144	0	249	138
Stage 1	-	-	-	-	138	-
Stage 2	-	-	-	-	111	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1438	-	739	910
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1438	-	729	910
Mov Cap-2 Maneuver	-	-	-	-	741	-
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	901	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	848	-	-	1438	-
HCM Lane V/C Ratio	0.122	-	-	0.014	-
HCM Control Delay (s)	9.8	-	-	7.5	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	199	168	17	9	12
Future Vol, veh/h	22	199	168	17	9	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	234	198	20	11	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	218	0	-	0	494	208
Stage 1	-	-	-	-	208	-
Stage 2	-	-	-	-	286	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1352	-	-	-	535	832
Stage 1	-	-	-	-	827	-
Stage 2	-	-	-	-	763	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1352	-	-	-	525	832
Mov Cap-2 Maneuver	-	-	-	-	525	-
Stage 1	-	-	-	-	811	-
Stage 2	-	-	-	-	763	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1352	-	-	-	665
HCM Lane V/C Ratio	0.019	-	-	-	0.037
HCM Control Delay (s)	7.7	-	-	-	10.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	115	29	73	149	17	45
Future Vol, veh/h	115	29	73	149	17	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	135	34	86	175	20	53

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	169	0	499	152
Stage 1	-	-	-	-	152	-
Stage 2	-	-	-	-	347	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1409	-	531	894
Stage 1	-	-	-	-	876	-
Stage 2	-	-	-	-	716	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1409	-	499	894
Mov Cap-2 Maneuver	-	-	-	-	564	-
Stage 1	-	-	-	-	876	-
Stage 2	-	-	-	-	672	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.5	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	770	-	-	1409	-
HCM Lane V/C Ratio	0.095	-	-	0.061	-
HCM Control Delay (s)	10.2	-	-	7.7	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	343	356	4	14	19
Future Vol, veh/h	6	343	356	4	14	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	373	387	4	15	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	391	0	-	0	776	389
Stage 1	-	-	-	-	389	-
Stage 2	-	-	-	-	387	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1168	-	-	-	366	659
Stage 1	-	-	-	-	685	-
Stage 2	-	-	-	-	686	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1168	-	-	-	364	659
Mov Cap-2 Maneuver	-	-	-	-	364	-
Stage 1	-	-	-	-	681	-
Stage 2	-	-	-	-	686	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	12.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1168	-	-	-	490
HCM Lane V/C Ratio	0.006	-	-	-	0.073
HCM Control Delay (s)	8.1	-	-	-	12.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	341	11	18	275	27	66
Future Vol, veh/h	341	11	18	275	27	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	371	12	20	299	29	72

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	383	0	716	377
Stage 1	-	-	-	-	377	-
Stage 2	-	-	-	-	339	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1175	-	397	670
Stage 1	-	-	-	-	694	-
Stage 2	-	-	-	-	722	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1175	-	390	670
Mov Cap-2 Maneuver	-	-	-	-	498	-
Stage 1	-	-	-	-	694	-
Stage 2	-	-	-	-	710	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	12.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	609	-	-	1175	-
HCM Lane V/C Ratio	0.166	-	-	0.017	-
HCM Control Delay (s)	12.1	-	-	8.1	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	413	334	17	9	12
Future Vol, veh/h	22	413	334	17	9	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	435	352	18	9	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	370	0	-	0	842	361
Stage 1	-	-	-	-	361	-
Stage 2	-	-	-	-	481	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1189	-	-	-	334	684
Stage 1	-	-	-	-	705	-
Stage 2	-	-	-	-	622	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1189	-	-	-	328	684
Mov Cap-2 Maneuver	-	-	-	-	328	-
Stage 1	-	-	-	-	692	-
Stage 2	-	-	-	-	622	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1189	-	-	-	467
HCM Lane V/C Ratio	0.019	-	-	-	0.047
HCM Control Delay (s)	8.1	-	-	-	13.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	340	29	78	321	17	47
Future Vol, veh/h	340	29	78	321	17	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	358	31	82	338	18	49

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	389	0	876	374
Stage 1	-	-	-	-	374	-
Stage 2	-	-	-	-	502	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1170	-	319	672
Stage 1	-	-	-	-	696	-
Stage 2	-	-	-	-	608	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1170	-	297	672
Mov Cap-2 Maneuver	-	-	-	-	417	-
Stage 1	-	-	-	-	696	-
Stage 2	-	-	-	-	565	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	12
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	578	-	-	1170	-
HCM Lane V/C Ratio	0.117	-	-	0.07	-
HCM Control Delay (s)	12	-	-	8.3	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0.2	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	44	130	184	12	39	124
Future Vol, veh/h	44	130	184	12	39	124
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	153	216	14	46	146

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	230	0	-	0	480	223
Stage 1	-	-	-	-	223	-
Stage 2	-	-	-	-	257	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1338	-	-	-	545	817
Stage 1	-	-	-	-	814	-
Stage 2	-	-	-	-	786	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1338	-	-	-	524	817
Mov Cap-2 Maneuver	-	-	-	-	524	-
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	786	-

Approach	EB	WB	SB
HCM Control Delay, s	2	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1338	-	-	-	721
HCM Lane V/C Ratio	0.039	-	-	-	0.266
HCM Control Delay (s)	7.8	-	-	-	11.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.1

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	135	11	17	67	17	28	0	60	64	0	35
Future Vol, veh/h	13	135	11	17	67	17	28	0	60	64	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	0	-	205	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	159	13	20	79	20	33	0	71	75	0	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	99	0	0	172	0	0	346	335	166	350	321	79
Stage 1	-	-	-	-	-	-	196	196	-	119	119	-
Stage 2	-	-	-	-	-	-	150	139	-	231	202	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1494	-	-	1405	-	-	608	585	878	605	596	981
Stage 1	-	-	-	-	-	-	806	739	-	885	797	-
Stage 2	-	-	-	-	-	-	853	782	-	772	734	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1494	-	-	1405	-	-	572	571	878	546	582	981
Mov Cap-2 Maneuver	-	-	-	-	-	-	572	571	-	546	582	-
Stage 1	-	-	-	-	-	-	798	732	-	876	786	-
Stage 2	-	-	-	-	-	-	806	771	-	703	727	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1.3	10.6	11.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	750	1494	-	-	1405	-	-	648
HCM Lane V/C Ratio	0.138	0.01	-	-	0.014	-	-	0.18
HCM Control Delay (s)	10.6	7.4	-	-	7.6	-	-	11.8
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.7

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	142	239	192	48	26	83
Future Vol, veh/h	142	239	192	48	26	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	167	281	226	56	31	98

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	282	0	-	0	869	254
Stage 1	-	-	-	-	254	-
Stage 2	-	-	-	-	615	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1280	-	-	-	322	785
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	539	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1280	-	-	-	280	785
Mov Cap-2 Maneuver	-	-	-	-	280	-
Stage 1	-	-	-	-	686	-
Stage 2	-	-	-	-	539	-

Approach	EB	WB	SB
HCM Control Delay, s	3.1	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1280	-	-	-	549
HCM Lane V/C Ratio	0.131	-	-	-	0.234
HCM Control Delay (s)	8.2	-	-	-	13.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.9

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	132	29	73	180	70	17	0	45	41	0	24
Future Vol, veh/h	41	132	29	73	180	70	17	0	45	41	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	0	-	205	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	155	34	86	212	82	20	0	53	48	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	294	0	0	189	0	0	707	734	172	679	669	212
Stage 1	-	-	-	-	-	-	268	268	-	384	384	-
Stage 2	-	-	-	-	-	-	439	466	-	295	285	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1268	-	-	1385	-	-	350	347	872	366	379	828
Stage 1	-	-	-	-	-	-	738	687	-	639	611	-
Stage 2	-	-	-	-	-	-	597	562	-	713	676	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1268	-	-	1385	-	-	313	313	872	318	342	828
Mov Cap-2 Maneuver	-	-	-	-	-	-	313	313	-	318	342	-
Stage 1	-	-	-	-	-	-	710	661	-	615	573	-
Stage 2	-	-	-	-	-	-	541	527	-	644	650	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	1.8	12	15.7
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	585	1268	-	-	1385	-	-	412
HCM Lane V/C Ratio	0.125	0.038	-	-	0.062	-	-	0.186
HCM Control Delay (s)	12	8	-	-	7.8	-	-	15.7
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.2	-	-	0.7

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	47	356	388	10	41	117
Future Vol, veh/h	47	356	388	10	41	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	387	422	11	45	127

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	433	0	-	0	917	428
Stage 1	-	-	-	-	428	-
Stage 2	-	-	-	-	489	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1127	-	-	-	302	627
Stage 1	-	-	-	-	657	-
Stage 2	-	-	-	-	616	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1127	-	-	-	288	627
Mov Cap-2 Maneuver	-	-	-	-	288	-
Stage 1	-	-	-	-	627	-
Stage 2	-	-	-	-	616	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	16.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1127	-	-	-	480
HCM Lane V/C Ratio	0.045	-	-	-	0.358
HCM Control Delay (s)	8.3	-	-	-	16.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.6

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	368	11	18	282	16	27	0	66	74	0	32
Future Vol, veh/h	14	368	11	18	282	16	27	0	66	74	0	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	0	-	205	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	400	12	20	307	17	29	0	72	80	0	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	324	0	0	412	0	0	809	800	406	819	789	307
Stage 1	-	-	-	-	-	-	436	436	-	347	347	-
Stage 2	-	-	-	-	-	-	373	364	-	472	442	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1236	-	-	1147	-	-	299	318	645	294	323	733
Stage 1	-	-	-	-	-	-	599	580	-	669	635	-
Stage 2	-	-	-	-	-	-	648	624	-	573	576	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1236	-	-	1147	-	-	278	309	645	255	314	733
Mov Cap-2 Maneuver	-	-	-	-	-	-	278	309	-	255	314	-
Stage 1	-	-	-	-	-	-	592	573	-	661	624	-
Stage 2	-	-	-	-	-	-	606	613	-	503	569	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.5	14.9	22.6
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	466	1236	-	-	1147	-	-	318
HCM Lane V/C Ratio	0.217	0.012	-	-	0.017	-	-	0.362
HCM Control Delay (s)	14.9	7.9	-	-	8.2	-	-	22.6
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.8	0	-	-	0.1	-	-	1.6

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	135	451	355	51	28	78
Future Vol, veh/h	135	451	355	51	28	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	142	475	374	54	29	82

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	428	0	-	0	1160	401
Stage 1	-	-	-	-	401	-
Stage 2	-	-	-	-	759	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1131	-	-	-	216	649
Stage 1	-	-	-	-	676	-
Stage 2	-	-	-	-	462	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1131	-	-	-	189	649
Mov Cap-2 Maneuver	-	-	-	-	189	-
Stage 1	-	-	-	-	591	-
Stage 2	-	-	-	-	462	-

Approach	EB	WB	SB
HCM Control Delay, s	2	0	17.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1131	-	-	-	395
HCM Lane V/C Ratio	0.126	-	-	-	0.282
HCM Control Delay (s)	8.6	-	-	-	17.7
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	1.1

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	359	29	78	355	77	17	0	47	47	0	22
Future Vol, veh/h	38	359	29	78	355	77	17	0	47	47	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	0	-	205	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	378	31	82	374	81	18	0	49	49	0	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	455	0	0	409	0	0	1064	1093	394	1036	1027	374
Stage 1	-	-	-	-	-	-	474	474	-	538	538	-
Stage 2	-	-	-	-	-	-	590	619	-	498	489	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1106	-	-	1150	-	-	201	214	655	210	234	672
Stage 1	-	-	-	-	-	-	571	558	-	527	522	-
Stage 2	-	-	-	-	-	-	494	480	-	554	549	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1106	-	-	1150	-	-	178	192	655	179	210	672
Mov Cap-2 Maneuver	-	-	-	-	-	-	178	192	-	179	210	-
Stage 1	-	-	-	-	-	-	550	538	-	508	485	-
Stage 2	-	-	-	-	-	-	443	446	-	494	529	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	1.3	16.4	27.2
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	383	1106	-	-	1150	-	-	234
HCM Lane V/C Ratio	0.176	0.036	-	-	0.071	-	-	0.31
HCM Control Delay (s)	16.4	8.4	-	-	8.4	-	-	27.2
HCM Lane LOS	C	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0.2	-	-	1.3

Appendix Table 1

TRANSPORTATION
CONSULTANTS, INC.

Appendix Table 1
Area Traffic Impact Studies by LSC
Rolling Hills Ranch North PUD

Study	Date
Meridian Ranch	
Meridian Ranch Sketch Plan TIA	April 11, 2011
Meridian Ranch Filing 11 Updated TIA	November 26, 2013
Stonebridge at Meridian Ranch Filing No. 1 Updated TIA	April 23, 2014
Stonebridge at Meridian Ranch Transportation Memorandum	July 28, 2015
Meridian Ranch Filing 8 Updated TIA	December 23, 2014
Meridian Ranch Filing 9 Updated TIA	May 21, 2015
Meridian Ranch Sketch Plan 2015 Amendment TIA	July 30, 2015
The Vistas at Meridian Ranch TIA	March 24, 2016
Meridian Ranch Estates Filing No. 2 Transportation Memorandum	August 27, 2015
The Vistas at Meridian Ranch Updated Transportation Memorandum	June 20, 2017
Londonderry Drive Pedestrian Operations and Safety Study	February 8, 2017
Stonebridge Filing 3 at Meridian Ranch Updated TIA	March 20, 2017
Meridian Ranch Sketch Plan 2017 Amendment TIA	October 3, 2017
WindingWalk at Meridian Ranch and The Enclave at Stonebridge at Meridian Ranch Updated Traffic Impact Analysis	May 10, 2018
Rolling Hills Ranch at Meridian Ranch PUDSP Traffic Impact Analysis	June 29, 2020
The Estates at Rolling Hills Ranch Filing No. 1 Traffic Impact Analysis	May 13, 2020
Rolling Hills Ranch at Meridian Ranch Filing No. 1 Traffic Impact Analysis	July 14, 2020
The Estates at Rolling Hills Ranch Filing No. 2 Traffic Impact Study	October 8, 2020
Rolling Hills Ranch at Meridian Ranch Filing No. 2 Transportation Memorandum	December 29, 2020
Rolling Hills Ranch at Meridian Ranch Filing No. 3 Transportation Memorandum	June 29, 2021
Meridian Ranch 2021 Sketch Plan Amendment Traffic Impact Study	June 25, 2021
The Sanctuary at Meridian Ranch Transportation Memorandum	June 30, 2022
Grandview Reserve	
Grandview Reserve Updated Master TIA	December 5, 2020
Grandview Reserve Phase 1 Updated TIA	May 9, 2022
Waterbury/4-Way Ranch	
Waterbury PUD Development Plan Updated TIA	January 10, 2013
Waterbury Filing Nos. 1 and 2 TIA	March 11, 2022
Meadowlake Ranch	
Meadowlake Ranch Traffic Impact Analysis	May 29, 2019
Latigo	
Latigo Preserve Filing No. 10 TIA	March 31, 2022

Source: LSC Transportation Consultants, Inc. Oct-23

Excerpt from the 2021 Meridian Ranch Sketch Plan 2021 Amendment TIA

Figures taken from this report for reference:
(October 2023 notation added)

LSC TRANSPORTATION CONSULTANTS, INC.
2504 East Pikes Peak Avenue, Suite 304
Colorado Springs, CO 80909
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: http://www.lsctrans.com

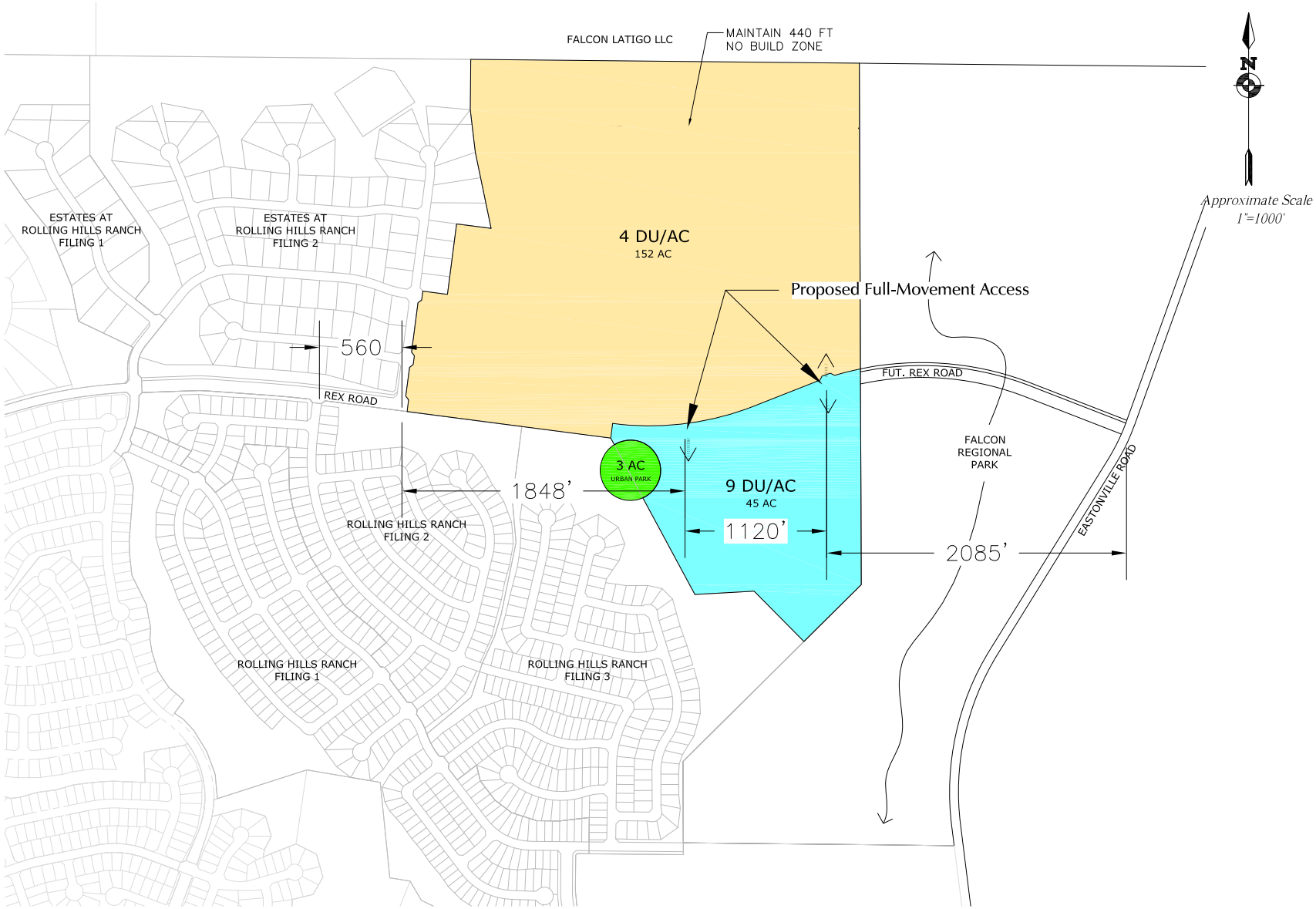
Meridian Ranch Sketch Plan 2021 Amendment
Traffic Impact Analysis
PCD File No. SKP213
(LSC #S214250)
June 25, 2021

Figure 1

Vicinity Map

Meridian Ranch Sketch Plan Amendment 2021 (LSC #S214250)

LSC TRANSPORTATION CONSULTANTS, INC.

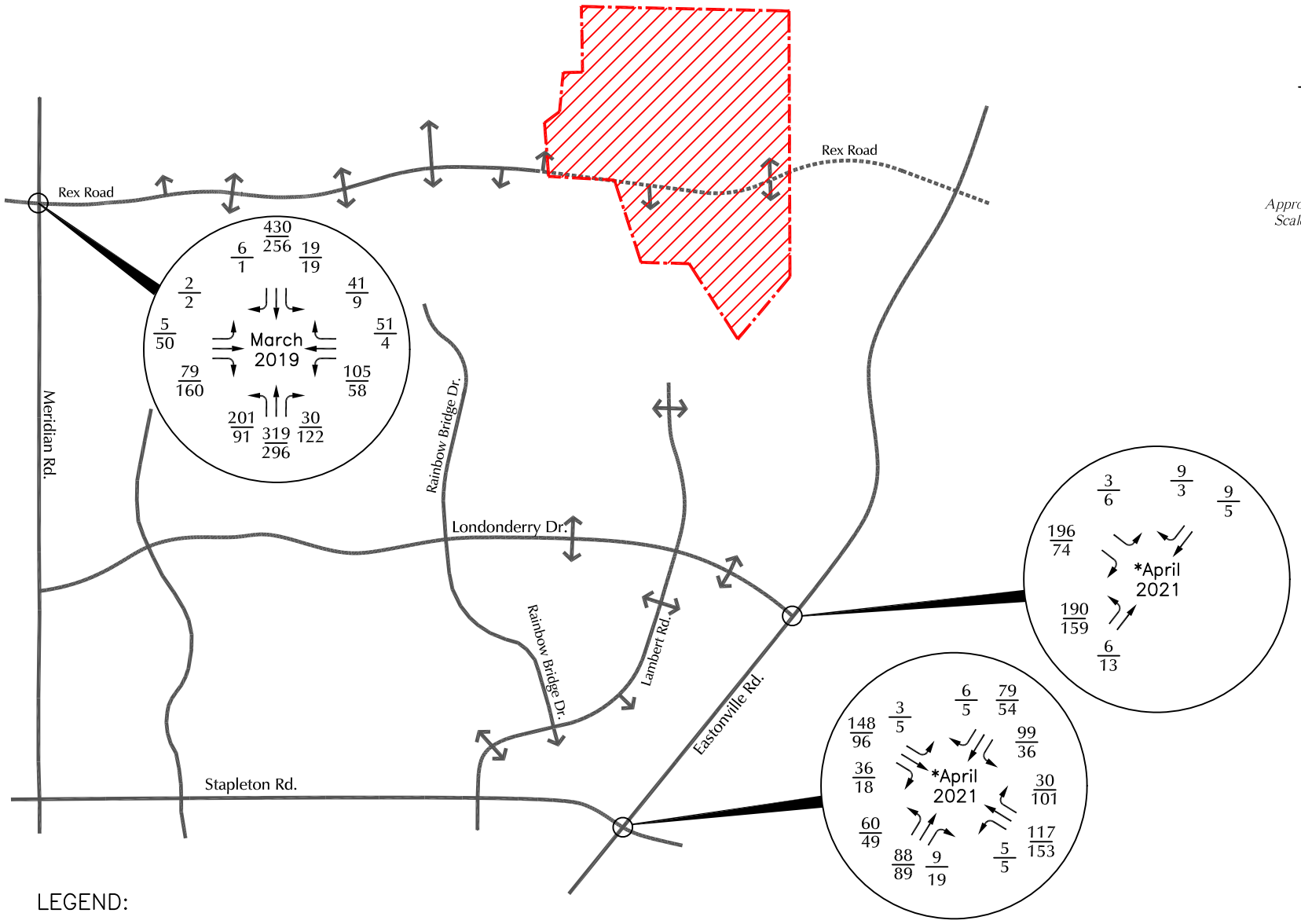


TRANSPORTATION CONSULTANTS, INC.

Figure 2

Sketch Plan Amendment Area

Meridian Ranch Sketch Plan Amendment 2021 (LSC #S214250)



LEGEND:

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

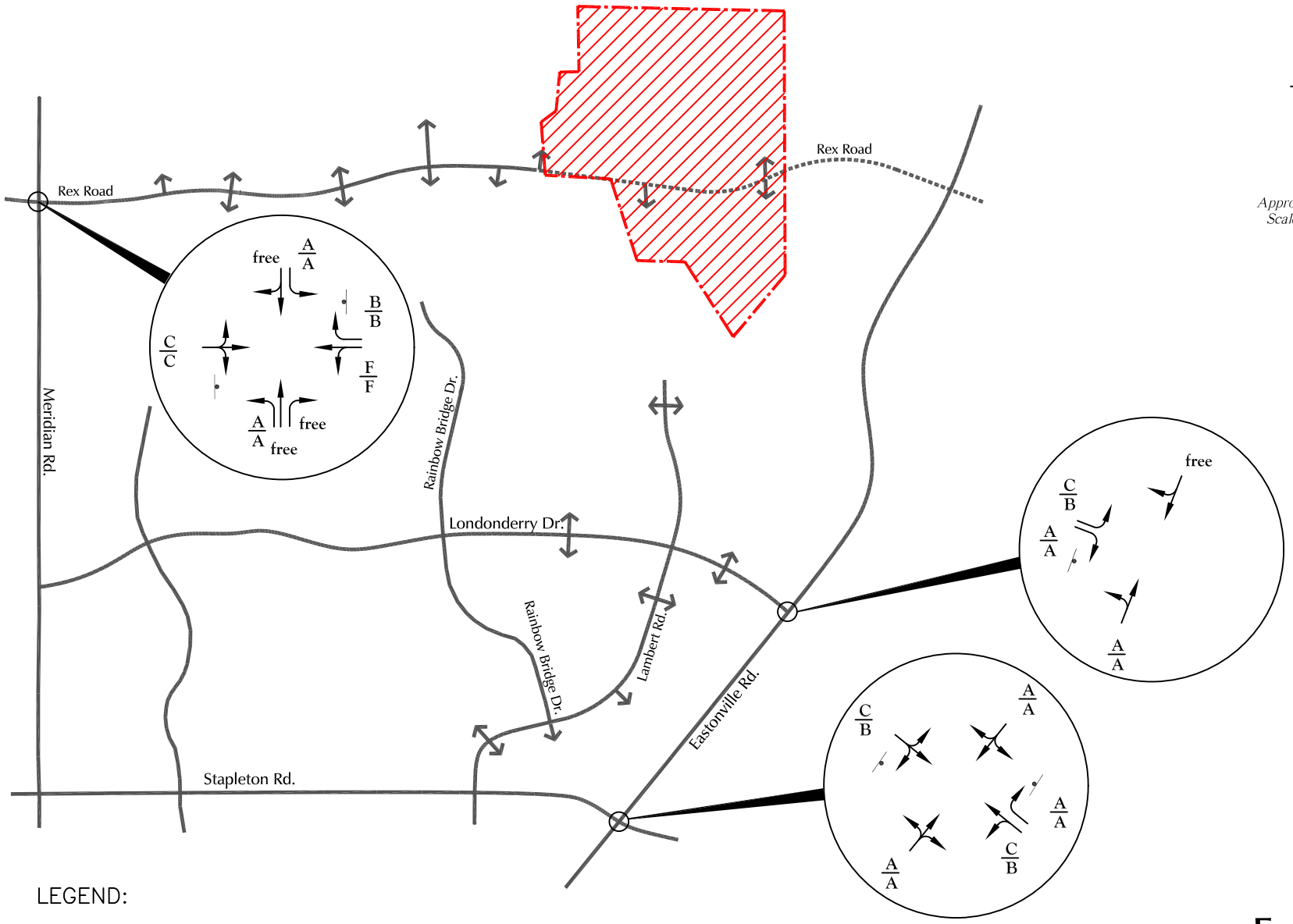
*Counts by LSC

TRANSPORTATION CONSULTANTS, INC.

Figure 3a

Existing Traffic

Meridian Ranch Sketch Plan Amendment 2021 (LSC #S214250)



Approximate Scale
Scale: 1"= 2,000'

LEGEND:

= Stop Sign

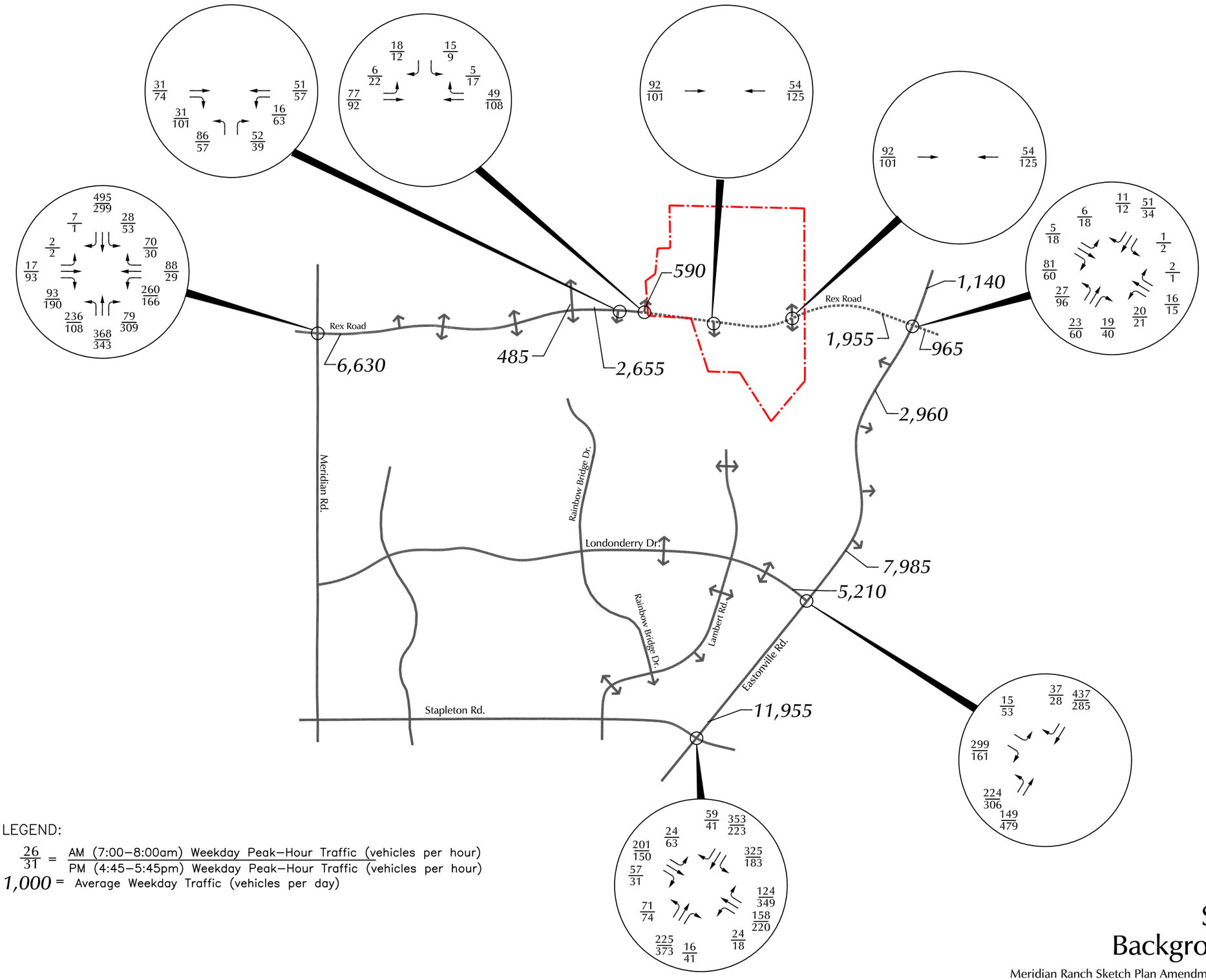
$\frac{A}{B}$ = $\frac{\text{AM Individual Movement Peak–Hour Level of Service}}{\text{PM Individual Movement Peak–Hour Level of Service}}$

TRANSPORTATION CONSULTANTS, INC.

Figure 3b

Existing Lane Geometry and Level of Service

Meridian Ranch Sketch Plan Amendment 2021 (LSC #S214250)



LEGEND:

$\frac{26}{31}$ = AM (7:00–8:00am) Weekday Peak–Hour Traffic (vehicles per hour) / PM (4:45–5:45pm) Weekday Peak–Hour Traffic (vehicles per hour)

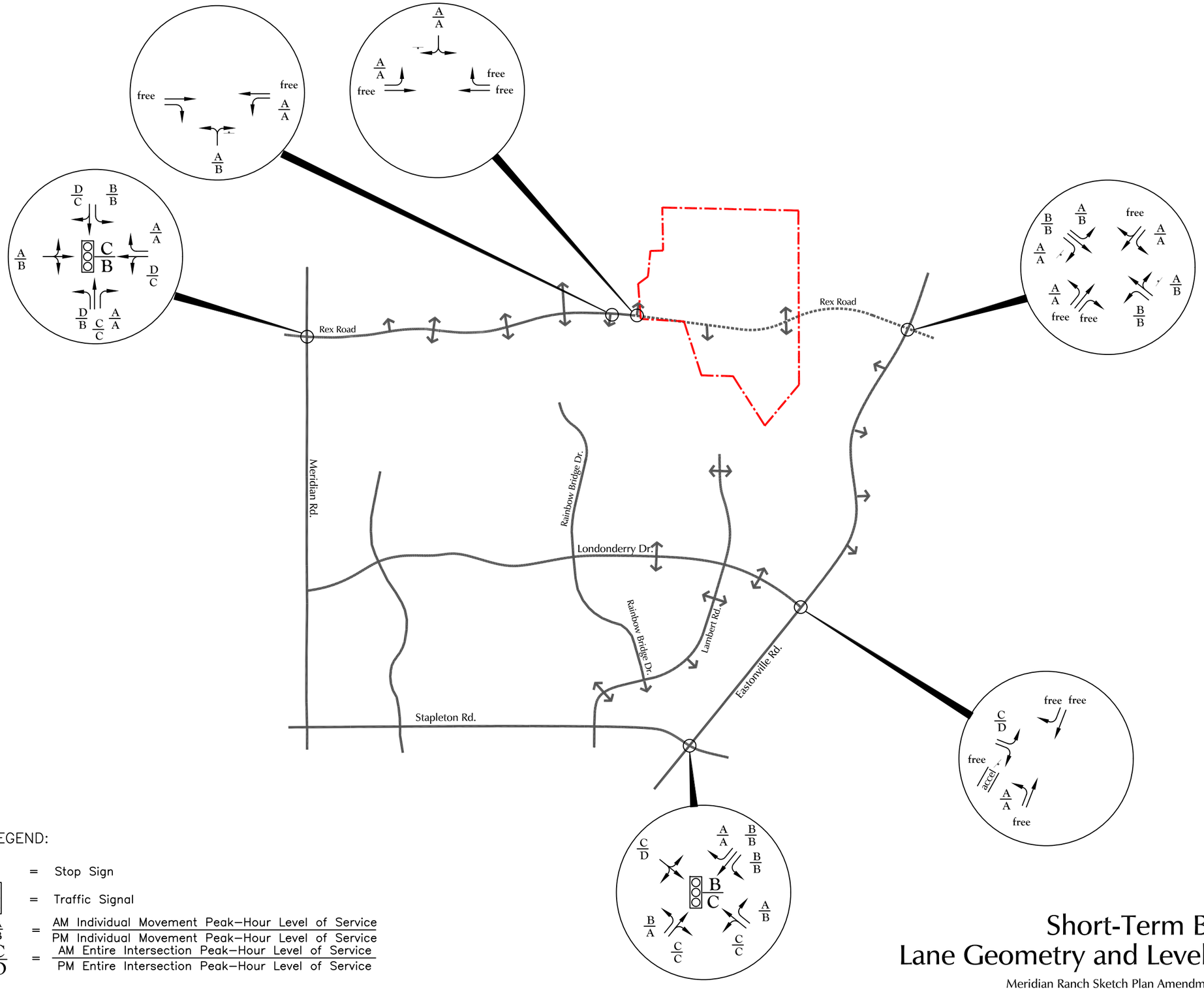
1,000 = Average Weekday Traffic (vehicles per day)

LSC TRANSPORTATION CONSULTANTS, INC.

Figure 4a

Short-Term Background Traffic

Meridian Ranch Sketch Plan Amendment 2021 (LSC #S214250)



LEGEND:

= Stop Sign

= Traffic Signal

$\frac{A}{B}$ = $\frac{\text{AM Individual Movement Peak–Hour Level of Service}}{\text{PM Individual Movement Peak–Hour Level of Service}}$

$\frac{C}{D}$ = $\frac{\text{AM Entire Intersection Peak–Hour Level of Service}}{\text{PM Entire Intersection Peak–Hour Level of Service}}$

LSC TRANSPORTATION CONSULTANTS, INC.

Figure 4b

Short-Term Background Lane Geometry and Level-of-Service

Meridian Ranch Sketch Plan Amendment 2021 (LSC #S214250)

For these three intersections, please use the updated information contained in the report figures within this Rolling Hills Ranch North PUD and Filing 1 Transportation Memorandum and the Sanctuary at Meridian Ranch Transportation Memorandum (PCD File Nos. PUDSP224 and SF2220).

N

Approximate Scale
Scale: 1"= 2,000'

Rex Road
8,125
490
585
6,330
Rex Road
5,785
5,615
16,795
17,825
Meridian Rd.
Rainbow Bridge Dr.
Londonderry Dr.
Rainbow Bridge Dr.
Lambert Rd.
23,810
7,535
Eastonville Rd.
25,940
Stapleton Rd.

LEGEND:

$\frac{26}{31}$ = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour)

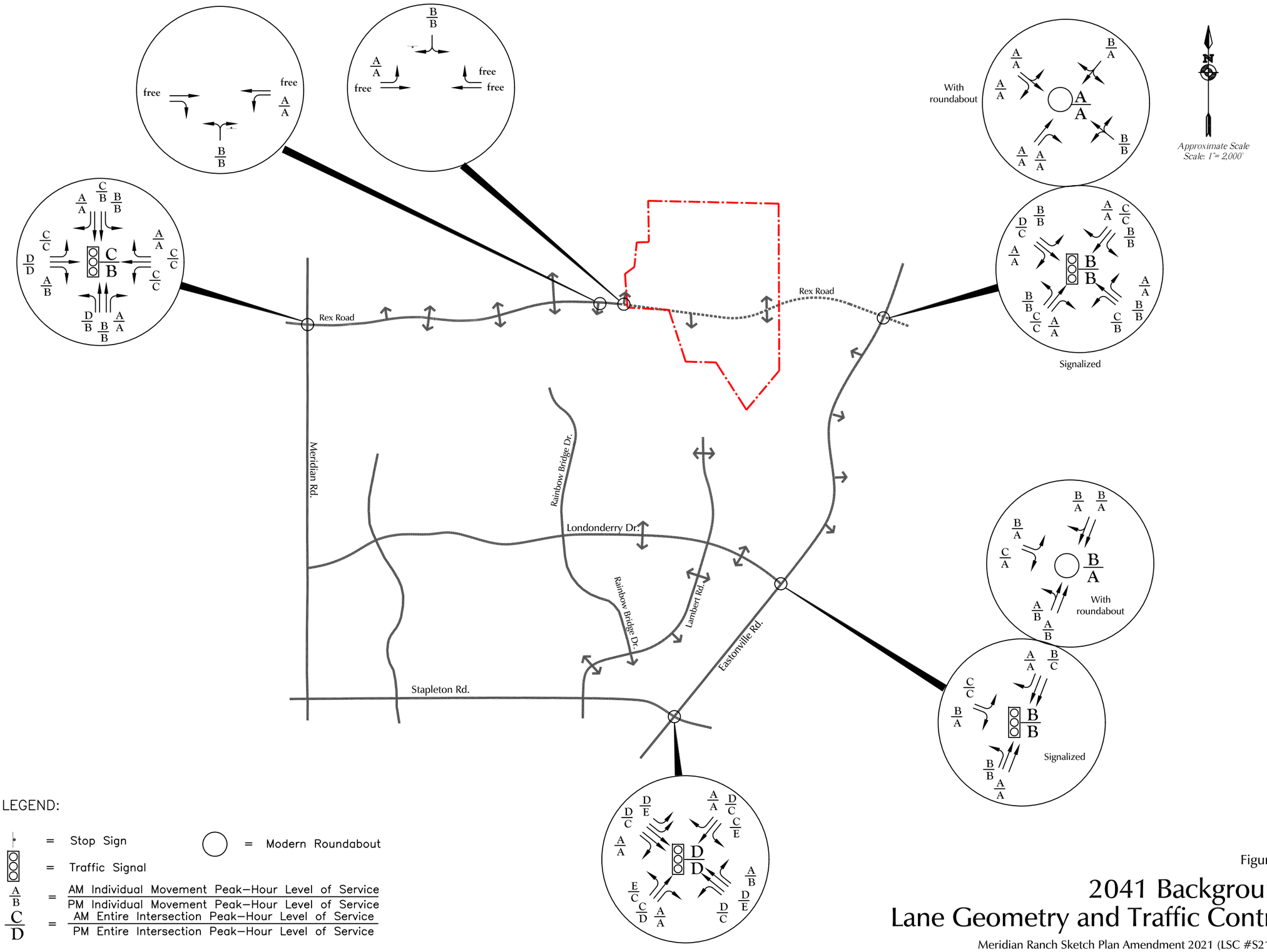
1,000 = Average Weekday Traffic (vehicles per day)

TRANSPORTATION CONSULTANTS, INC.

Figure 5a

2041 Background Traffic

Meridian Ranch Sketch Plan Amendment 2021 (LSC #S214250)



LEGEND:

= Stop Sign

= Traffic Signal

= Modern Roundabout

$\frac{A}{B}$ = $\frac{\text{AM Individual Movement Peak–Hour Level of Service}}{\text{PM Individual Movement Peak–Hour Level of Service}}$

$\frac{C}{D}$ = $\frac{\text{AM Entire Intersection Peak–Hour Level of Service}}{\text{PM Entire Intersection Peak–Hour Level of Service}}$

LSC TRANSPORTATION CONSULTANTS, INC.

Figure 5b

2041 Background Lane Geometry and Traffic Control

Meridian Ranch Sketch Plan Amendment 2021 (LSC #S214250)

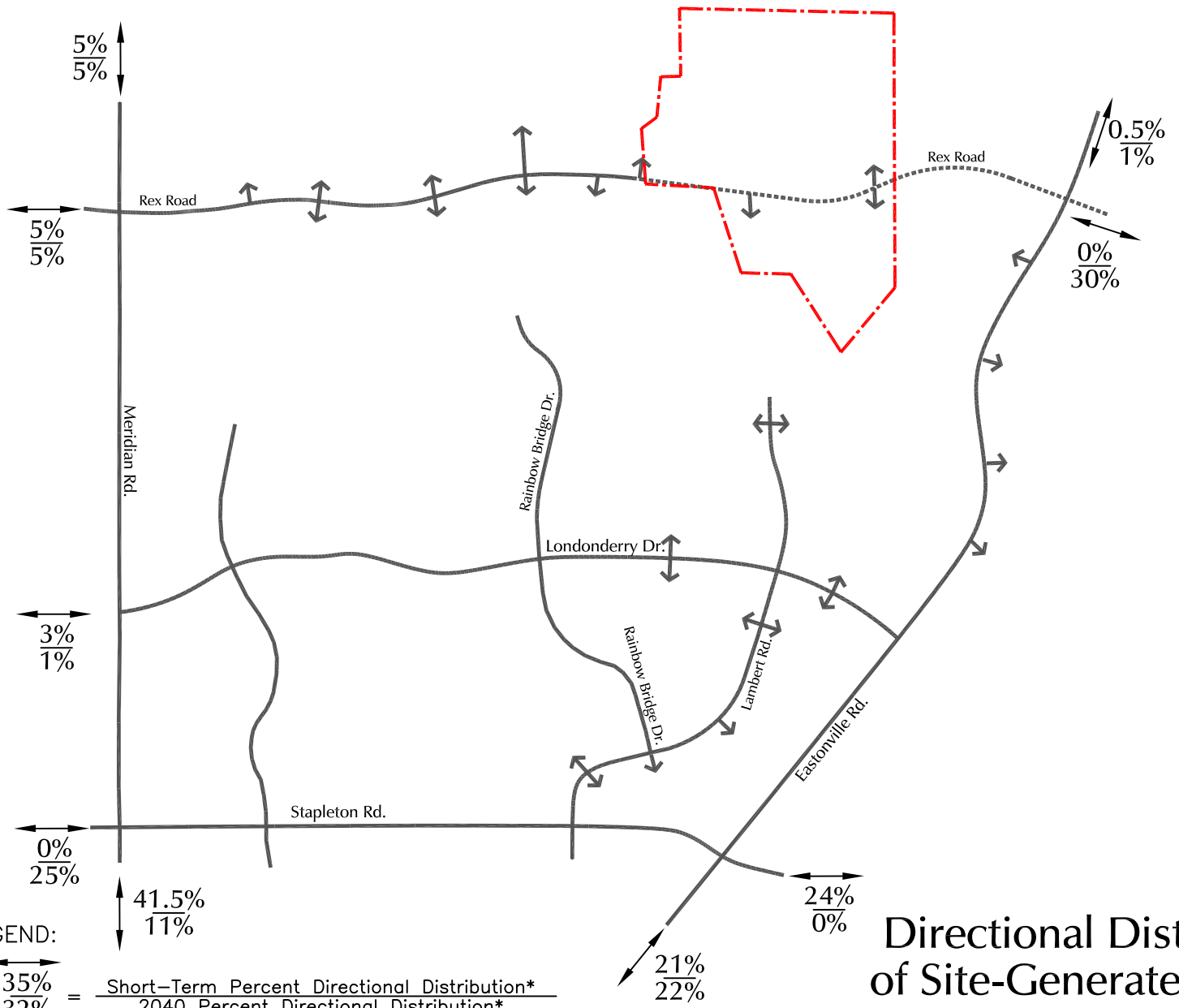


Figure 6

Directional Distribution of Site-Generated Traffic

Meridian Ranch Sketch Plan Amendment 2021 (LSC #S214250)

LSC TRANSPORTATION CONSULTANTS, INC.

For these three intersections, please use the updated information contained in the report figures within this Rolling Hills Ranch North PUD and Filing 1 Transportation Memorandum and the Sanctuary at Meridian Ranch Transportation Memorandum (PCD File Nos. PUDSP224 and SF2220).

N

Approximate Scale
Scale: 1"= 2,000'

Rex Road
Meridian Rd.
Rainbow Bridge Dr.
Londonderry Dr.
Rainbow Bridge Dr.
Lambert Rd.
Eastonville Rd.
Stapleton Rd.

4,180
15
4,245
1,315
2,545
2,160
1,370
Rex Road
3,075
0
40
3,035
3,035
170
2,860

LEGEND:

$\frac{26}{31}$ = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour)

1,000 = Average Weekday Traffic (vehicles per day)

TRANSPORTATION CONSULTANTS, INC.

Figure 7

Short-Term Amendment Area Generated Traffic

Meridian Ranch Sketch Plan Amendment 2021 (LSC #S214250)

For these three intersections, please use the updated information contained in the report figures within this Rolling Hills Ranch North PUD and Filing 1 Transportation Memorandum and the Sanctuary at Meridian Ranch Transportation Memorandum (PCD File Nos. PUDSP224 and SF2220).

Approximate Scale
Scale: 1"= 2,000'

Rex Road
Meridian Rd.
Rainbow Bridge Dr.
Londonderry Dr.
Rainbow Bridge Dr.
Lambert Rd.
Eastonville Rd.
Stapleton Rd.

3,750
15
3,840
1,270
2,525
2,185
1,410
3,285
80
1,765
1,440
1,440
150
1,290

LEGEND:

$\frac{26}{31}$ = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour)

1,000 = Average Weekday Traffic (vehicles per day)

Figure 8a

Long-Term Amendment Area Generated Traffic

Meridian Ranch Sketch Plan Amendment 2021 (LSC #S214250)

LSC TRANSPORTATION CONSULTANTS, INC.

For these three intersections, please use the updated information contained in the report figures within this Rolling Hills Ranch North PUD and Filing 1 Transportation Memorandum and the Sanctuary at Meridian Ranch Transportation Memorandum (PCD File Nos. PUDSP224 and SF2220).

Approximate Scale
Scale: 1"= 2,000'

Rex Road
Meridian Rd.
Rainbow Bridge Dr.
Londonderry Dr.
Rainbow Bridge Dr.
Lambert Rd.
Eastonville Rd.
Stapleton Rd.

10,810
500
6,900
1,315
3,135
2,160
1,370
5,030
965
1,180
5,995
11,020
5,380
14,820

LEGEND:

$\frac{26}{31}$ = AM (7:00–8:00am) Weekday Peak–Hour Traffic (vehicles per hour) / PM (4:45–5:45pm) Weekday Peak–Hour Traffic (vehicles per hour)

1,000 = Average Weekday Traffic (vehicles per day)

Figure 9a

Short-Term Total Traffic

Meridian Ranch Sketch Plan Amendment 2021 (LSC #S214250)

LSC TRANSPORTATION CONSULTANTS, INC.

For these three intersections, please use the updated information contained in the report figures within this Rolling Hills Ranch North PUD and Filing 1 Transportation Memorandum and the Sanctuary at Meridian Ranch Transportation Memorandum (PCD File Nos. PUDSP224 and SF2220).

Approximate Scale
Scale: 1"= 2,000'

Rex Road

Rex Road

Meridian Rd.

Rainbow Bridge Dr.

Londonderry Dr.

Rainbow Bridge Dr.

Lambert Rd.

Eastonville Rd.

Stapleton Rd.

With potential improvements.

LEGEND:

= Stop Sign

= Traffic Signal

$\frac{A}{B}$ = $\frac{\text{AM Individual Movement Peak–Hour Level of Service}}{\text{PM Individual Movement Peak–Hour Level of Service}}$

$\frac{C}{D}$ = $\frac{\text{AM Entire Intersection Peak–Hour Level of Service}}{\text{PM Entire Intersection Peak–Hour Level of Service}}$

TRANSPORTATION CONSULTANTS, INC.

Figure 9b

Short-Term Total Lane Geometry and Level-of-Service

Meridian Ranch Sketch Plan Amendment 2021 (LSC #S214250)

For these three intersections, please use the updated information contained in the report figures within this Rolling Hills Ranch North PUD and Filing 1 Transportation Memorandum and the Sanctuary at Meridian Ranch Transportation Memorandum (PCD File Nos. PUDSP224 and SF2220).

Approximate Scale
Scale: 1"= 2,000'

Rex Road
Meridian Rd.
Rainbow Bridge Dr.
Londonderry Dr.
Rainbow Bridge Dr.
Lambert Rd.
Eastonville Rd.
Stapleton Rd.

11,875
505
10,165
1,270
3,110
2,185
1,410
9,070
5,965
18,560
19,265
25,250
7,685
27,225

LEGEND:

$\frac{26}{31}$ = AM Weekday Peak–Hour Traffic (vehicles per hour) / PM Weekday Peak–Hour Traffic (vehicles per hour)

1,000 = Average Weekday Traffic (vehicles per day)

TRANSPORTATION CONSULTANTS, INC.

Figure 10a

2041 Total Traffic

Meridian Ranch Sketch Plan Amendment 2021 (LSC #S214250)

For these three intersections, please use the updated information contained in the report figures within this Rolling Hills Ranch North PUD and Filing 1 Transportation Memorandum and the Sanctuary at Meridian Ranch Transportation Memorandum (PCD File Nos. PUDSP224 and SF2220).

N

Approximate Scale
Scale: 1" = 2,000'

Rex Road

Meridian Rd.

Rainbow Bridge Dr.

Londonderry Dr.

Lambert Rd.

Eastonville Rd.

Stapleton Rd.

Signalized

With roundabout

With roundabout

Signalized

With hypothetical capacity improvements.

LEGEND:

= Stop Sign

= Traffic Signal

$\frac{A}{B}$ = $\frac{\text{AM Individual Movement Peak–Hour Level of Service}}{\text{PM Individual Movement Peak–Hour Level of Service}}$

$\frac{C}{D}$ = $\frac{\text{AM Entire Intersection Peak–Hour Level of Service}}{\text{PM Entire Intersection Peak–Hour Level of Service}}$

= Modern Roundabout

TRANSPORTATION CONSULTANTS, INC.

Figure 10c

2041 Total Lane Geometry and Traffic Control

Meridian Ranch Sketch Plan Amendment 2021 (LSC #S214250)

El Paso County Road Impact Fee Advisory Committee Meeting Minutes

TRANSPORTATION CONSULTANTS, INC.

EL PASO COUNTY

ROAD IMPACT FEE ADVISORY COMMITTEE

MEETING MINUTES

Date: **November 18, 2020 (10:00 PM – 12:00 PM)**

Where: Remote meeting

Members Present: Jeff Mark, Jennifer Irvine, Craig Dossey, Randy Case, Steve Hicks, Jerry Novak, Nikki Simmons

Others Present: Victoria Chavez, Lori Seago, Jeff Hodsdon, Tom Kerby, Elizabeth Nijkamp,

1. Call to order

Mr. Case called the meeting to order at 10:02 AM.

2. Introductions

3. Fee Advisory Committee Approved the Agenda

Ms. Irvine moved, and Mr. Dossey seconded the motion to approve and the Fee Committee unanimously approved the agenda.

4. Approval of minutes, April 23 Meeting – Vote

Ms. Simmons moved, and Mr. Hicks seconded the motion to approve the April meeting minutes as amended. The vote was unanimous.

5. Rex and Meridian Signal Request– Discussion/Vote – Tom Kerby – Discussion/Vote

Mr. Kerby presented the request to make the signal at Rex Road and Meridian Road eligible for credit in the road impact fee program. He provided background data, signal warrant information, traffic counts, traffic projections and signal inclusion criteria. The committee asked questions about functional classification, nearby developments, future road connections and to review the development per the criteria in the Implementation Document. Mr. Dossey moved and Mr. Novak seconded the motion to include the Rex Road and Meridian Road intersection as an Eligible Intersection Improvement. The motion was unanimous.

6. Finance Report – Information – Nikki Simmons

Ms. Simmons reviewed the September Finance Reports. She noted that staff will review the finances in January and request reimbursement for Central Marksheffel Metro District (CMMD) and Glen Development. Per the vote of the committee at the January meeting and subsequent IGA amendment, there is no vote of the committee needed to reimburse 50% of the revenues to CMMD and 50% to Glen Development until their credits are reimbursed.

Preliminary Budget for the Fee Program for 2021 is being requested to include $2.5 million in revenues.

7. Draft Credit Request Presentation Template – Comments from Members

Ms. Chavez reviewed the draft template. The committee requested to have it formatted like other PCD checklists, adding a purpose paragraph with unit costs, adding date, applicant, contact information, file numbers, etc.

8. Memos from the Fee Administrator – Information

Ms. Chavez reviewed the memos that allow for the Fee Program Manager to determine trip rates or the fee categories for non-standard land uses. Committee members commented that this will reduce the administrative burden of implementing the program and making the process faster for applicants.

9. Public comments on items not on the agenda

Mr. Dossey provided an update on the EPC Master Plan, expected to be passed early next year. The committee asked for a presentation in January/February of 2021.

Mr. Case asked about the upcoming change in the Woodmen Road Metro District (WRMD) IGA. Ms. Seago summarized the change coming on January 1, 2021. Mr. Case asked about what may happen if the district bonds are retired and impact on vacant land. This has not been determined yet. WRMD may retire bonds in 2024. Ms. Seago agreed to provide the committee with a summary of the WRMD IGA.

Mr. Case also asked about an update to the bylaws to allow for virtual meetings and if any members terms are expiring. Ms. Chavez will look into this.

10. Items for Future Agendas

The committee would like to discuss the EPC Master Plan update, finalizing the format for presentation of improvement requests to the committee, potential bylaw updates, and bringing credit agreements to the committee as an information item.

11. Adjourn

Mr. Case closed the meeting at 11:03 AM.

ECM Deviation Request Form

TRANSPORTATION
CONSULTANTS, INC.

Planning and Community Development Department
2880 International Circle
Colorado Springs, Colorado 80910
Phone: 719.520.6300
Fax: 719.520.6695
Website www.elpasoco.com

DEVIATION REQUEST AND DECISION FORM IN ASSOCIATION WITH AREQUEST FOR A PUD MODIFICATION FROM THE ECM

Updated: 6/26/2019

Pursuant to the El Paso County Land Development Code, the Board of County Commissioners may approve as part of the Planned Unit Development (PUD) approval a Modification to the Engineering Criteria Manual standards provided the Board can make the findings listed Section 4.2.6.F.2.h of the Land Development Code:
The proposal provides for the general health, safety, and welfare of the citizens and at least one of the following benefits:

- **Preservation of natural features;**
- **Provision of a more livable environment, such as the installment of street furniture, decorative street lighting or decorative paving materials;**
- **Provision of a more efficient pedestrian system;**
- **Provision of additional open space;**
- **Provision of other public amenities not otherwise required by the Code; or**
- **The proposed modification is granted in exchange for the open space and/or amenity designs provided in the PUD development plan and/or development guide.**

The review and approval of this Deviation does not authorize construction of the requested improvements until and unless the Board of County Commissioners approves the Modifications in association with the Planned Unit Development request, the applicant has received approval of all associated engineering documents, the applicant has provided the necessary financial assurances, and a construction permit has been issued by the Planning and Community Development Department.

PCD File No. _____

PROJECT INFORMATION

Project Name :	Rolling Hills Ranch North PUD
Schedule No.(s) :	4200000477
Legal Description :	See attached Exhibit A

APPLICANT INFORMATION

Company :	Tech Contractors
Name :	Tom Kerby
	☐ Owner ☒ Consultant ☐ Contractor
Mailing Address :	11910 Tourmaline Dr., Suite 130
	Falcon, CO 80831
Phone Number :	719.495.7444
FAX Number :	n/a
Email Address :	tom@meridianranch.com

ENGINEER INFORMATION

Company :	Tech Contractors		
Name :	Tom Kerby	Colorado P.E. Number :	31429
Mailing Address :	11910 Tourmaline Dr., Suite 130		
	Falcon, CO 80831		
Phone Number :	719.495.7444		
FAX Number :	n/a		
Email Address :	tom@meridianranch.com		

OWNER, APPLICANT, AND ENGINEER DECLARATION

To the best of my knowledge, the information on this application and all additional or supplemental documentation is true, factual and complete. I am fully aware that any misrepresentation of any information on this application may be grounds for denial. I have familiarized myself with the rules, regulations and procedures with respect to preparing and filing this application. I also understand that an incorrect submittal will be cause to have the project removed from the agenda of the Planning Commission, Board of County Commissioners and/or Board of Adjustment or delay review until corrections are made, and that any approval of this application is based on the representations made in the application and may be revoked on any breach of representation or condition(s) of approval.

_____ _____

Signature of owner (or authorized representative) Date

Engineer's Seal, Signature
And Date of Signature

PCD File No. _____

DEVIATION REQUEST (Attach diagrams, figures, and other documentation to clarify request)

A deviation from the standards of or in Section **2.5.2.C.4** of the Engineering Criteria Manual (ECM) is requested.

Identify the specific ECM standard which a deviation is requested:

2.5.2.C.4 Access ramps on local roadways shall be spaced no greater than 600 feet apart. Where spacing is greater than 600 feet, mid-block access ramps shall be provided at spacings that minimize travel distances between access ramps. Private accesses may be used for these access points where the access is designed to meet access ramp requirements. The pavement markings and signing required by the ECM and MUTCD shall be provided for mid-block access ramps.

State the reason for the requested deviation:

The PUD modification to remove the need for a midblock crossing is consistent with the following considerations identified in Section 4.2.6.F.2.h of the Land Development Code:

- **Provision to promote pedestrian safety** – pedestrians entering the roadway from behind parked vehicles where lines of sight are limited or blocked can create a false sense of security the roadway without looking for traffic. The use of mid-block pedestrian crossings can create safety hazards by blocking or hindering sight lines and placing pedestrians in danger.
- **Provision of a more efficient pedestrian system** – pedestrian circulation within Meridian Ranch is focused on the provided trail system, which connects the residential areas to the parks and open space. The project is designed to encourage the use of the trail system, rather than the sidewalks, where possible. On the streets where mid-block crossings are not provided, there are no pedestrian destinations or trails that would necessitate a midblock crossing to connect to amenities.
- **Provision of additional open space** – by encouraging the residents to use the trail system, the project provides better access to the open space in the development.

Explain the proposed alternative and compare to the ECM standards (May provide applicable regional or national standards used as basis):

The deviation would eliminate mid-block pedestrian crossings between intersections on the following streets: Chalk Cliffs Drive, Lava Falls Drive, Sunrise Ridge Drive, Crystal Falls Drive and House Rock Drive.

PCD File No. _____

LIMITS OF CONSIDERATION
(At least one of the conditions listed below must be met for this deviation request to be considered.)

☐ The ECM standard is inapplicable to the particular situation.
☐ Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.
☒ A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

Provide justification:

The desired change is to provide increased safety, where pedestrians enter the roadway from behind parked vehicles where lines of sight are limited or blocked. The use of mid-block pedestrian crossings can create safety hazards by blocking or hindering sight lines and placing pedestrians in danger.

The change will also provide a specific design characteristic within the project. The development has a focus on the trail system that meanders in an out of open space and local park space, the desire is to encourage the use of the trails. The design concept also creates an aesthetically pleasing, consistent sidewalk offset from the curb to sidewalk.

Pedestrians along residential streets will generally cross the street at any location regardless of the presence of a pedestrian ramp due to the typically low traffic volume found on local streets.

A suggested revision would be to revise the criteria such that mid-block pedestrian ramps are required as deemed necessary to provide access to schools, shopping, transportation facilities or other community facilities and services similar to the City of Colorado Springs standards.

CRITERIA FOR APPROVAL

Per ECM section 5.8.7 the request for a deviation may be considered if the request is **not based exclusively on financial considerations**. The deviation must not be detrimental to public safety or surrounding property. The applicant must include supporting information demonstrating compliance with **all of the following criteria**:

The deviation will achieve the intended result with a comparable or superior design and quality of improvement.

The request will provide a superior design by eliminating potential crossing safety hazards.

Provision of a more efficient pedestrian system – pedestrian circulation within Meridian Ranch is focused on the provided trail system, which connects the residential areas to the parks and open space. The project is designed to encourage the use of the trail system, rather than the sidewalks, where possible. On all the streets where mid-block crossings are not provided, there are no pedestrian destinations or trails that would necessitate a midblock crossing to connect to amenities.

The deviation will not adversely affect safety or operations.

The design enhances safety by eliminating potential dangerous mid-block crossings, where pedestrians enter the roadway from behind parked vehicles where lines of sight are limited or blocked. The deviation will also eliminate mid-block ramps where changes in direction of the sidewalk and/or grade could produce a tripping or stumbling hazard.

PCD File No. _____

The deviation will not adversely affect maintenance and its associated cost.

The deviation will not adversely affect the maintenance cost or the ability for maintenance vehicles to work on the street or within the right-of-way. Eliminating mid-block pedestrian ramps will reduce the cost of maintenance of pedestrian ramps, signage, and pavement markings.

The deviation will not adversely affect aesthetic appearance.

The deviation will improve the aesthetic appearance by creating unswerving smooth offset line of the sidewalk from curb.

The deviation meets the design intent and purpose of the ECM standards.

The deviation meets the design intent and purposes of the ECM standards by meeting all other aspects of the standards with respect road design, road safety and pedestrian safety. There is no Federal ADA maximum distances allowed between pedestrian crossing along street that would necessitate mid-block pedestrian ramps.

The deviation meets the control measure requirements of Part I.E.3 and Part I.E.4 of the County's MS4 permit, as applicable.

The proposed design does not inhibit the program requirements with respect to water quality and storm water runoff during construction and future permanent facilities.

PCD File No. _____

REVIEW AND RECOMMENDATION:

Approved by the ECM Administrator
This request has been determined to have met the criteria for approval. A deviation from Section _____ of the ECM is hereby granted based on the justification provided.

Denied by the ECM Administrator
This request has been determined not to have met criteria for approval. A deviation from Section _____ of the ECM is hereby denied.

ECM ADMINISTRATOR COMMENTS/CONDITIONS:

PCD File No. _____

1.1. PURPOSE

The purpose of this resource is to provide a form for documenting the findings and decision by the ECM Administrator concerning a deviation request. The form is used to document the review and decision concerning a requested deviation. The request and decision concerning each deviation from a specific section of the ECM shall be recorded on a separate form.

1.2. BACKGROUND

A deviation is a critical aspect of the review process and needs to be documented to ensure that the deviations granted are applied to a specific development application in conformance with the criteria for approval and that the action is documented as such requests can point to potential needed revisions to the ECM.

1.3. APPLICABLE STATUTES AND REGULATIONS

Section 5.8 of the ECM establishes a mechanism whereby an engineering design standard can be modified when if strictly adhered to, would cause unnecessary hardship or unsafe design because of topographical or other conditions particular to the site, and that a departure may be made without destroying the intent of such provision.

1.4. APPLICABILITY

All provisions of the ECM are subject to deviation by the ECM Administrator provided that one of the following conditions is met:

- The ECM standard is inapplicable to a particular situation.
- Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship on the applicant, and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.
- A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

1.5. TECHNICAL GUIDANCE

The review shall ensure all criteria for approval are adequately considered and that justification for the deviation is properly documented.

1.6. LIMITS OF APPROVAL

Whether a request for deviation is approved as proposed or with conditions, the approval is for project-specific use and shall not constitute a precedent or general deviation from these Standards.

1.7. REVIEW FEES

A Deviation Review Fee shall be paid in full at the time of submission of a request for deviation. The fee for Deviation Review shall be as determined by resolution of the BoCC.

Exhibit A

KNOW ALL MEN BY THESE PRESENTS:
THAT GTL, INC. DBA GTL DEVELOPMENT, INC., THEODORE TCHANG, PRESIDENT BEING THE OWNER OF THE FOLLOWING DESCRIBED TRACT OF LAND:

A PARCEL OF LAND LOCATED IN A PORTION OF SECTION 20, IN TOWNSHIP 12 SOUTH, RANGE 64 WEST OF THE 6TH PRINCIPAL MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE EASTERLY RIGHT-OF-WAY OF ESTATE RIDGE DRIVE AS-DEDICATED IN THE ESTATES AT ROLLING HILLS RANCH FILING NO. 2, RECORDED WITH RECEPTION NO. 222714944 IN THE RECORDS OF EL PASO COUNTY, POINT BEING ON THE EASTERN BOUNDARY LINE OF SAID FILING;

THE FOLLOWING FIVE (5) COURSES ARE ON SAID BOUNDARY LINE:

1. THENCE N07°26'02"E A DISTANCE OF 616.00 FEET;
2. THENCE N52°26'02"E A DISTANCE OF 31.11 FEET;
3. THENCE N07°26'02"E A DISTANCE OF 60.00 FEET;
4. THENCE S82°33'58"E A DISTANCE OF 168.00 FEET;
5. THENCE N07°26'02"E A DISTANCE OF 120.00 FEET;
6. THENCE S82°33'58"E A DISTANCE OF 1005.00 FEET;
7. THENCE N83°0250"E A DISTANCE OF 125.64 FEET;
8. THENCE N76°59'35"E A DISTANCE OF 60.00 FEET TO A NON-TANGENT CURVE TO THE RIGHT;
9. THENCE ON THE ARC OF SAID CURVE, HAVING A RADIUS OF 430.00 FEET, A DELTA ANGLE OF 20°26'26", AN ARC LENGTH OF 153.41 FEET, WHOSE LONG CHORD BEARS S02°47'11"E A DISTANCE OF 152.59 FEET;
10. THENCE S37°33'58"E A DISTANCE OF 31.11 FEET TO A NON-TANGENT CURVE TO THE LEFT;
11. THENCE ON THE ARC OF SAID CURVE, HAVING A RADIUS OF 320.00 FEET, A DELTA ANGLE OF 29°52'23", AN ARC LENGTH OF 166.84 FEET, WHOSE LONG CHORD BEARS N82°29'50"E A DISTANCE OF 164.96 FEET;
12. THENCE N67°33'39"E A DISTANCE OF 278.06 FEET;
13. THENCE N22°33'39"E A DISTANCE OF 31.11 FEET;
14. THENCE N22°26'21"W A DISTANCE OF 103.00 FEET;
15. THENCE N67°33'39"E A DISTANCE OF 230.00 FEET;
16. THENCE N64°41'54"E A DISTANCE OF 100.12 FEET;
17. THENCE N67°33'39"E A DISTANCE OF 215.00 FEET;
18. THENCE N69°55'18"E A DISTANCE OF 97.94 FEET;
19. THENCE N77°08'32"E A DISTANCE OF 97.44 FEET;
20. THENCE N87°17'03"E A DISTANCE OF 98.28 FEET;
21. THENCE N89°46'57"E A DISTANCE OF 225.24 FEET;
22. THENCE S00°13'03"E A DISTANCE OF 99.94 FEET;
23. THENCE N89°46'57"E A DISTANCE OF 160.00 FEET TO A POINT ON THE WESTERN BOUNDARY OF FALCON REGIONAL PARK RECORDED WITH RECEPTION NO. 214093227;

THE FOLLOWING COURSE IS ON SAID BOUNDARY LINE:

24. THENCE S00°13'03"E A DISTANCE OF 769.32 FEET TO A NON-TANGENT CURVE TO THE LEFT, POINT BEING ON THE NORTHERN BOUNDARY OF THE SANCTUARY FILING NO. 1 AT MERIDIAN RANCH RECORDED WITH RECEPTION NO. 223715140 IN THE RECORDS OF EL PASO COUNTY;

THE FOLLOWING NINE (9) COURSES ARE ON THE BOUNDARY LINE OF SAID THE SANCTUARY FILING NO. 1 AT MERIDIAN RANCH:

25. THENCE ON THE ARC OF SAID CURVE, HAVING A RADIUS OF 2050.00 FEET, A DELTA ANGLE OF 05°02'20", AN ARC LENGTH OF 180.29 FEET, WHOSE LONG CHORD BEARS S75°52'06"W A DISTANCE OF 180.23 FEET;
26. THENCE N62°31'53"W A DISTANCE OF 31.42 FEET;
27. THENCE S71°53'44"W A DISTANCE OF 60.00 FEET;
28. THENCE S26°19'21"W A DISTANCE OF 31.42 FEET TO A NON-TANGENT CURVE TO THE LEFT;
29. THENCE ON THE ARC OF SAID CURVE, HAVING A RADIUS OF 2050.00 FEET, A DELTA ANGLE OF 02°03'13", AN ARC LENGTH OF 73.48 FEET, WHOSE LONG CHORD BEARS S69°24'55"W A DISTANCE OF 73.48 FEET;
30. THENCE S68°23'18"W A DISTANCE OF 399.50 FEET TO A POINT OF CURVE TO THE RIGHT;
31. THENCE ON THE ARC OF SAID CURVE, HAVING A RADIUS OF 1930.00 FEET, A DELTA ANGLE OF 29°02'43", AN ARC LENGTH OF 978.39 FEET, WHOSE LONG CHORD BEARS S82°54'40"W A DISTANCE OF 967.95 FEET;
32. THENCE N82°33'58"W A DISTANCE OF 1387.37 FEET;
33. THENCE N37°33'58"W A DISTANCE OF 31.11 FEET TO THE POINT OF BEGINNING;

THE ABOVE PARCEL OF LAND CONTAINS 60.700 ACRES, MORE OR LESS.

BEARINGS ARE BASED ON THE SOUTH LINE OF THE SW ¼ OF SECTION29, TOWNSHIP 12 SOUTH, RANGE 64 WEST OF THE 6TH P.M., ASSUMED TO BEAR S89°25'42"E FROM THE SOUTHWEST CORNER OF SAID SECTION 29 (A STONE W/SCRIBED "X") TO THE SOUTH QUARTER CORNER OF SAID SECTION 29 (3.25" ALUM. CAP LS #30087).

EXHIBIT B

ESTATES AT
ROLLING HILLS
RANCH FILING 2

ESTATE RIDGE DRIVE

ROLLING HILLS RANCH
NORTH FILING 2

GALEROS DRIVE

TORQUEAP WAY

BRIGHT ANGEL DRIVE

ESPLANADE DRIVE

CARDENAS DRIVE

1,410'

CHALK CLIFFS DRIVE

1,000'

LAVA FALLS DRIVE

SHELTER CREEK DR.

880'

SUNRISE RIDGE DRIVE

950'

CRYSTAL FALLS DRIVE

HOUSE ROCK DRIVE

1,170'

REDWALL DRIVE

TEMPLE BUTTE DRIVE

TAPEATS DRIVE

HORN HILL DRIVE

ROLLING HILLS RANCH
NORTH FILING 1

REX ROAD

ROLLING HILLS
RANCH FILING 3

THE SANCTUARY
FILING 1

FALCON
REGIONAL
PARK

N

GRAPHIC SCALE

150 0 75 150 300 600

(IN FEET)

1 inch = 150 ft.

No.	Revisions	Date	Init.	Appr.	Date
1	-				
2	-				
3	-				

TECH CONTRACTORS
11886 STAPLETON DRIVE
FALCON, CO 80831
TELEPHONE: 719.495.7444
FAX: 719.495.3349

MERIDIAN RANCH

MID BLOCK FED CROSSING DEVIATION
ROLLING HILLS RANCH NORTH FILING
MERIDIAN RANCH

Drawn by	Checked by TK	Date SEPT 2023
Scale AS SHOWN	1 of 1	