

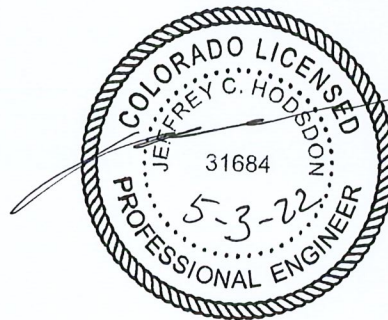


LSC TRANSPORTATION CONSULTANTS, INC.
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The Sanctuary at Meridian Ranch Transportation Memorandum (LSC #S224190) May 3, 2022

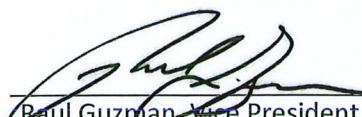
Traffic Engineer's Statement

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, Inc

May 3, 2022
Date

The Sanctuary at Meridian Ranch

PUD & Filing No. 1

Transportation Memorandum

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

MAY 3, 2022

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

LSC #S224190



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Figure 3 School Pedestrian Routes from the Rolling Hills Ranch PUDSP Traffic
Impact Analysis



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May 3, 2022

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

RE: The Sanctuary at Meridian Ranch
El Paso County, CO
Transportation Memorandum
LSC #S224190

Dear Mr. Guzman,

LSC Transportation Consultants, Inc. has prepared this Transportation Memorandum for the Sanctuary at Meridian Ranch PUD and Filing No. 1. The location of the site is shown in Figure 1. This report is intended as a site-specific PUD and final-plat traffic report.

LSC recently 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.

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 currently proposed for the Sanctuary at Meridian Ranch and a 152-acre parcel north of Rex Road. The Sketch Plan TIS analyzed two development scenarios. The first scenario assumed the 152-acre parcel located north of Rex Road built out to a maximum density of 500 residential dwelling units and that the Sanctuary at Meridian Ranch parcel would be developed with 284 units, which is the remaining number of lots to reach the allowable maximum of 5,000 residential units within all of Meridian Ranch. An alternate scenario was presented which assumed a higher dwelling unit distribution (and corresponding trip generation) of 384 residential dwelling units north of Rex Road and 400 residential dwelling units within the Sanctuary at Meridian Ranch parcel.

The site plan for the Sanctuary at Meridian Ranch is shown in Figure 2. It is planned to include a total of 343 lots for single-family homes. The number of proposed units is about midway between the two development scenarios analyzed in the Sketch Plan Amendment TIS. The area north of Rex Road will likely be developed with 441 residential dwelling units as part of a future PUD for a total of 784 residential dwelling units within the Meridian Ranch Sketch Plan 2021 Amendment Area.

Access

This report assumes Rex Road is constructed east from Estate Ridge Drive to Shelter Creek Drive with the proposed Sanctuary Filing 1 at Meridian Ranch. Rex Road will be completed through the Regional Park between Shelter Creek Drive and Eastonville Road prior to trips being generated by residents in the proposed Sanctuary Filing 1 final plat. Two full-movement access points are proposed to this new section. The first access, Retreat Peak Drive, is located 1,848 feet east of Estate Ridge Drive and the second access, Shelter Creek Drive, is located 1,120 feet east of the first access. The proposed access points are consistent with the access plan assumed in the Sketch Plan Amendment TIS.

Sight Distance

Figures 3 and 4 show sight-distance analysis at the proposed intersections of Rex Road/Retreat Peak Drive and 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 future 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 2 shows the proposed sidewalk and trail locations in the vicinity of the site. As shown in Figure 2, the proposed pedestrian facilities will connect with the planned pedestrian facilities for the Rolling Ranch at Meridian Ranch development just west of the site. LSC prepared a school pedestrian plan as part of the Rolling Hills Ranch at Meridian Ranch PUDSP Traffic Impact Analysis dated June 29, 2020. A copy of the figure that shows the potential pedestrian routes to schools within two miles of the site has been attached.

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 Sunrise Ridge Drive within the Meridian Ranch development. The posted speed limit on Rex Road is 45 mph between Meridian Road and Mt. Gateway Drive and 35 mph east of Mt. Gateway Drive. At the time of development of the Sanctuary at Meridian Ranch, Rex Rd will have been constructed to Estate Ridge Drive (with Estates at Rolling Hills Ranch Filing No. 2). Rex Road will be extended east to Eastonville Road by the developer as a separate project. Rex Road will be completed to Eastonville Road prior to trips being generated by residents in the proposed Sanctuary Filing 1 final plat. A short section is also proposed to be constructed east of Eastonville Road in the short-term future as part of the Grandview Reserve Phase 1 development currently under review. In the future, Rex Road is planned to be constructed southeast through Grandview Reserve and will intersect US Highway 24 as part of the Grandview Reserve Sketch Plan, 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*.

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.

Londonderry Drive is a two-lane Collector extending east from the Falcon Hills neighborhood to Eastonville Road. Londonderry Drive has one through lane in each direction and a raised center median.

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 of the shows the trip-generation estimates for the Sanctuary at Meridian Ranch. Table 1 also shows a comparison estimates of the traffic expected to be generated for the Sketch Plan 2021 Amendment TIS which includes the proposed Sanctuary at Meridian Ranch site and a 152-acre parcel north of Rex Road. The north parcel is assumed to be developed with 441 residential dwelling units as allowed by the approved Sketch Plan 2021 Amendment. Note that 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.

The Sanctuary at Meridian Ranch is expected to generate about 3,234 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 62 vehicles would enter and 178 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 130 vehicles would enter and 77 vehicles would exit the site.

TOTAL TRAFFIC AND PROJECTED LEVELS OF SERVICE

Please refer to the Sketch Plan 2021 Amendment TIS for the total traffic volumes and level of service analysis. 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 2 (attached) contains a summary of needed area improvements.

ROADWAY CLASSIFICATIONS

Figure 5 shows the recommended street classifications. All of the internal streets within the Sanctuary at Meridian Ranch should be classified Urban Local or Urban Local (Low Volume).

ROAD IMPROVEMENT FEE PROGRAM

Sanctuary at Meridian Ranch will not be required to participate in the Countywide Transportation Improvement Fee Program, as Meridian Ranch is located within the Woodmen Road Metropolitan District.

- Regarding a potential request for 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

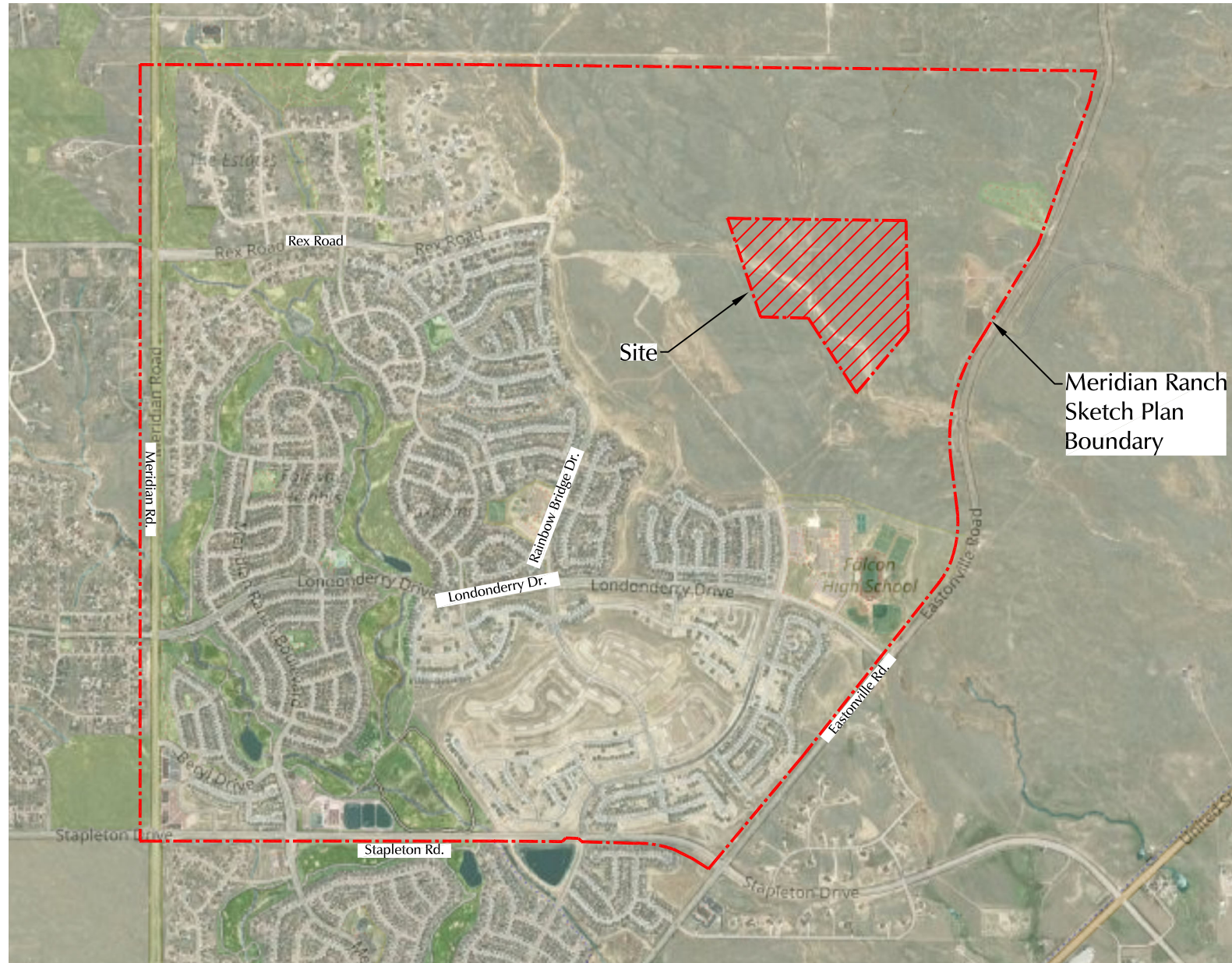
Enclosures: Tables 1-2
Figures 1-5
Figure 3 School Pedestrian Routes from the Rolling Hills Ranch PUDSP
Traffic Impact Analysis

Table1

Table 1 Trip Generation Estimate The Sanctuary at Meridian Ranch												
Land Use Code	Land Use Description	Trip Generation Units	Trip Generation Rates ⁽¹⁾						Total Trips Generated			
			Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour		Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour	
				In	Out	In	Out		In	Out	In	Out
Sanctuary at Rolling Hills Ranch (Currently Proposed PUD)												
210	Single-Family Detached Housing	343 DU ⁽²⁾	9.43	0.18	0.52	0.59	0.35	3,234	62	178	203	119
Future Development North of Rex Road (Not a part of the currently proposed PUD)												
210	Single-Family Detached Housing	441 DU	9.43	0.18	0.52	0.59	0.35	4,159	80	228	261	153
Total 2021 Sketch Plan Amendment Area		784 DU						7393	143	406	464	273
Trip Generation Estimate for the Same Area From the <i>The Meridian Ranch Sketch Plan 2021 Amendment Traffic Impact Analysis, June 25, 2021</i>												
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	-2	-29	-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.												
Apr-22												

Table 2 The Sanctuary at Meridian Ranch Roadway Improvements			
Item #	Improvement	Timing	Responsibility
Roadway Segment Improvements			
1	Eastonville Road - Rex Road to Latigo initial grading and paving	TBD by EPC; See Item 2 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.
2	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.
3	Eastonville Road - Roadway Design - Londonderry to Rex Road Upgrade to Urban Minor Arterial (Cross section TBD shortly- the determination is underway by EPC)	As per EPC direction PPRTA Phase 1 - Design process is underway	PPRTA (Phase 1): Grandview Development and/or other area developments in conjunction El Paso County DPW staff/consultants in conjunction with owners/consultants of the Grandview Development and potentially other area developments.
4	Eastonville Road - Roadway Design - Stapleton to Londonderry Upgrade to Urban Minor Arterial (Cross section TBD shortly- the determination is underway by EPC)	As per EPC direction PPRTA Phase 1 - Design process is underway	PPRTA (Phase 1): Grandview Development and/or other area developments in conjunction El Paso County DPW staff/consultants in conjunction with owners/consultants of the Grandview Development and potentially other area developments.
5	Construct Rex Road as an Urban 2-Lane Minor Arterial from Sunrise Ridge Drive to Rolling Ranch Drive.	The Estates at Rolling Hills Ranch Filing No. 2	Meridian Ranch
6	Construct Rex Road as an Urban 2-Lane Minor Arterial from Rolling Ranch Drive to Estate Ridge Drive.	The Estates at Rolling Hills Ranch Filing No. 2	Meridian Ranch
7	Construct Rex Road as an Urban 2-Lane Minor Arterial from the Rolling Ranch Drive to Shelter Creek Drive	With the Sanctuary at Meridian Ranch	Meridian Ranch
8	Construct Rex Road as an Urban 2-Lane Minor Arterial from Shelter Creek Drive	Prior to approval of subdivisions north of Sanctuary at Meridian Ranch (north side of Rex Road) <u>but also</u> prior to trips being generated by residents of the Sanctuary at Meridian Ranch.	Meridian Ranch
9	Rex Road from Eastonville Road to US 24	With Grandview Estates (Timing TBD - beyond Phase 1)	Grandview Estates
10	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
11	Stapleton Drive - Meridian Road to Eastonville Road complete southern (eastbound) half	Shown on 2040 MTCP Roadway Plan	El Paso County
12	Stapleton Drive - Eastonville Road to US Hwy 24 complete southern (eastbound) half	Shown on 2040 MTCP Roadway Plan	Waterbury Metro District
Rex/Meridian			
(Please refer to the "Rex/Meridian Intersection" section of the report for additional details)			
13	Rex & Meridian: Design & Construction of the Intersection Improvements, addition of - The improvements will include additional through lanes, road alignment adjustments, drainage improvements and a traffic-signal.	The design is under contract and is in preliminary design. The design phase is expected to be completed 2022 with the construction to begin Spring 2023. (Information current as of 04/12/2022)	The County is the lead for the completion of the design and construction of intersection improvements. The developer of Meridian Ranch will be responsible for the fair share cost of the design and construction of the traffic-signal improvements. At its November 18, 2020 meeting, the El Paso County Road Impact Fee Advisory Committee Rex and Meridian Signal Request-- unanimously approved the request to include the Rex Road and Meridian Road intersection as an Eligible Intersection Improvement.
Rex/Eastonville			
14	The traffic control and determination of intersection type (conventional intersection or roundabout) number of through lanes, auxiliary turn lane needs, road alignment adjustments, drainage improvements, etc. TBD shortly- the determination is underway by EPC.	Improvements at this intersection as well as the future intersection control are included as part of the Eastonville Road PPRTA Project Phase 1 design process which is currently under way.	PPRTA (Phase 1): Grandview Development and/or other area developments in conjunction El Paso County and owners of the Grandview Development and potentially other area developments.
15	Include a northbound left-turn lane on Eastonville Road at Rex Road into the design of the Eastonville Road PPRTA project.	Subject to change and as necessary depending on intersection type (conventional or roundabout) Improvements at this intersection as well as the future intersection control are included as part of the Eastonville Road PPRTA Project Phase 1 design process which is currently under way.	PPRTA (Phase 1): Grandview Development and/or other area developments in conjunction El Paso County and owners of the Grandview Development and potentially other area developments.
16	Include a southbound right turn lane on Eastonville Road at Rex Road into the design of the Eastonville Road PPRTA project.		
17	Construct 205' eastbound left-turn plus 160' taper on Rex Road approaching Eastonville Road		
18	Construct 155' eastbound right-turn deceleration lane plus 160 foot taper on Rex Road approaching Eastonville Road		
19	Convert from two-way, stop-sign control to traffic signal (if not constructed as a roundabout)	Future (& potentially as part of Phase 2 of the Eastonville PPRTA project). (As applicable and once warrants are met - potentially with the connection of Rex Road to Highway 24, future area development and/or increases in through traffic)	Likely El Paso County under the county fee program guidelines or potentially as part of Phase 2 of the Eastonville PPRTA project.
Eastonville/Londonderry			
20	Include a northbound left-turn lane on Eastonville Road at Londonderry Drive into the design of the Eastonville Road PPRTA project.	Subject to change and as necessary depending on intersection type (conventional or roundabout) Improvements at this intersection as well as the future intersection control are included as part of the Eastonville Road PPRTA Project Phase 1 design process which is currently under way.	Phase 1 of the Eastonville PPRTA project. EPC and potentially area developments.
21	Include a southbound right turn lane on Eastonville Road at Londonderry Drive into the design of the Eastonville Road PPRTA project.	Subject to change and as necessary depending on intersection type (conventional or roundabout) Improvements at this intersection as well as the future intersection control are included as part of the Eastonville Road PPRTA Project Phase 1 design process which is currently under way.	Phase 1 of the Eastonville PPRTA project. EPC and potentially area developments.
22	Convert from two-way, stop-sign control to traffic signal (if not constructed as a roundabout)	As applicable and once warrants are met -Subject to change and as necessary depending on intersection type (conventional or roundabout). Improvements at this intersection as well as the intersection control are included as part of the Eastonville Road PPRTA Project Phase 1 design process which is currently under way.	Phase 1 of the Eastonville PPRTA project. EPC and potentially area developments.
Rex/Rolling Ranch & Rex/Estate Ridge			
23	Construct a 190-foot westbound left-turn lane on Rex Road approaching Rolling Ranch Drive and a 185-foot eastbound left-turn lane on Rex Road approaching Estate Ridge Drive with a shared 90-foot reverse curve taper.	With The Estates at Rolling Hills Ranch Filing No. 2 or Rolling Hills Ranch at Meridian Ranch Filing No. 3	Meridian Ranch
24	Construct a 155-foot eastbound right-turn deceleration lane on Rex Road approaching Rolling Ranch Drive plus a 160-foot taper.	Rolling Hills Ranch at Meridian Ranch Filing No. 3	Meridian Ranch
25	Construct a 155-foot westbound right-turn deceleration lane on Rex Road approaching Estates Ridge Drive plus a 160-foot taper.	With development of filings within the amendment area north of Rex Road	Meridian Ranch
Rex Road/Retreat Peak Drive			
26	Construct a 205-foot westbound left-turn lane on Rex Road approaching Retreat Peak Drive plus a 160-foot taper	With the Sanctuary at Meridian Ranch	Meridian Ranch
27	Construct a 155-foot eastbound right-turn deceleration lane on Rex Road approaching Retreat Peak Drive plus a 160-foot taper.	With the Sanctuary at Meridian Ranch	Meridian Ranch
Rex Road/Shelter Creek Drive			
28	Construct a 255-foot westbound left-turn lane on Rex Road approaching Shelter Creek Drive plus a 160-foot taper	With the Sanctuary at Meridian Ranch	Meridian Ranch
29	Construct a 155-foot eastbound right-turn deceleration lane on Rex Road approaching Shelter Creek Drive plus a 160-foot taper.	With the Sanctuary at Meridian Ranch	Meridian Ranch
30	Construct a 205-foot eastbound left-turn lane on Rex Road approaching Shelter Creek Drive plus a 160-foot taper	With the development of filings within the amendment area north of Rex Road	Meridian Ranch
Source: LSC Transportation Consultants, Inc. (May 3, 2022)			

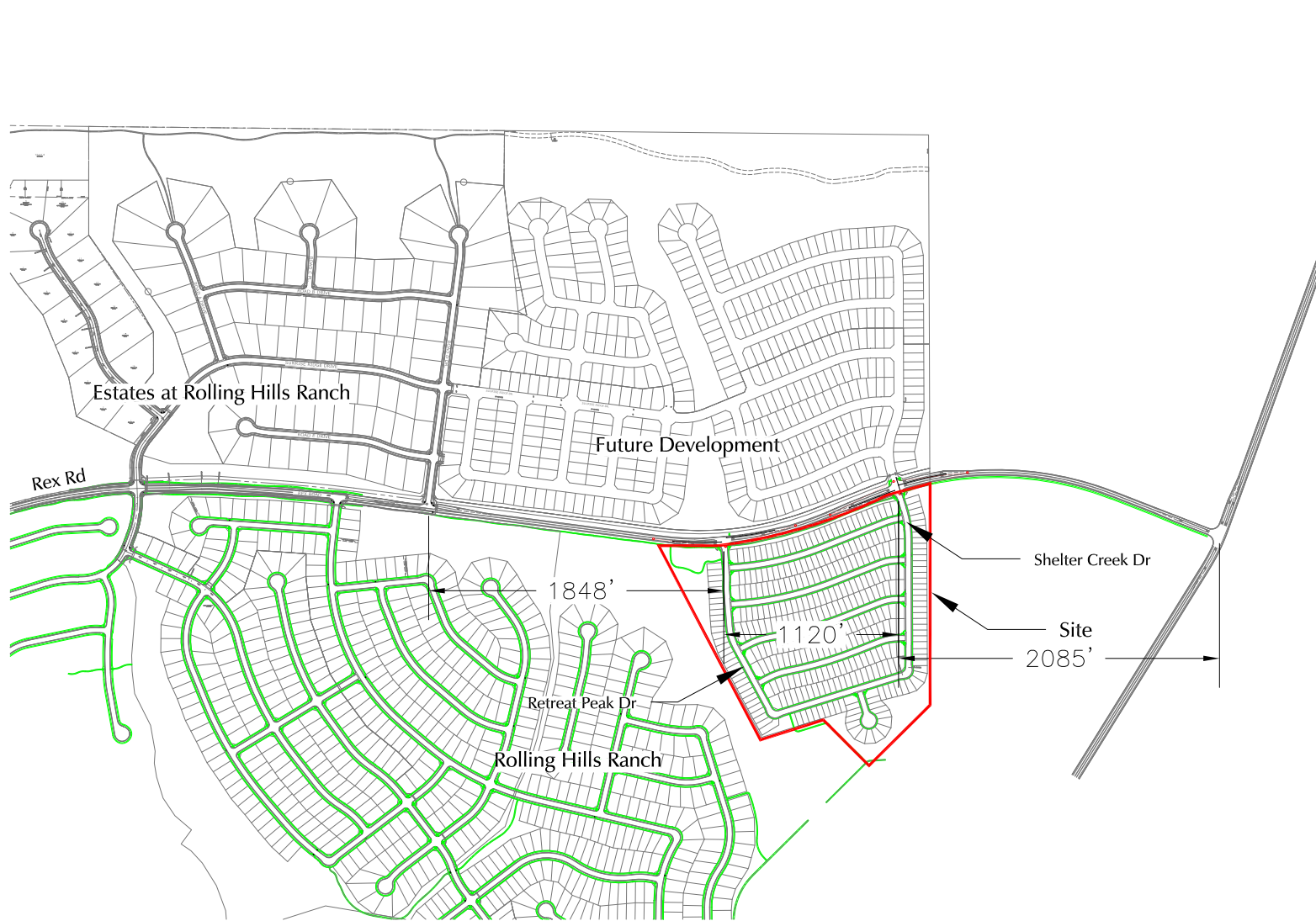
Figures 1-5



Approximate Scale
Scale: 1" = 2,000'

Figure 1
**Vicinity
Map**

The Sanctuary at Meridian Ranch (LSC #S214250)



Approximate Scale
1"=1000'

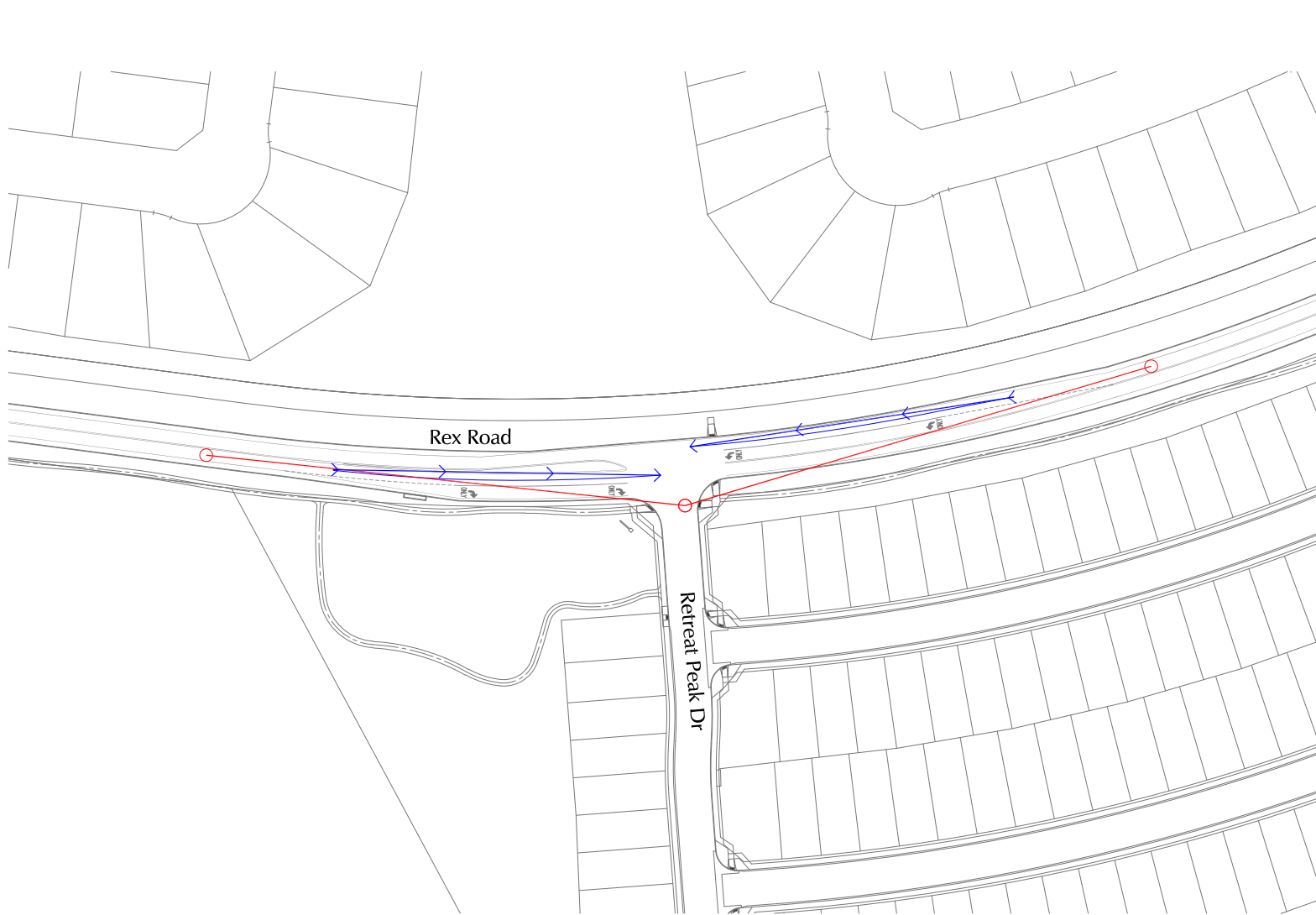
— Sidewalk or trail*

*Note: see attached School Pedestrian Plan Figure from "Rolling Hills at Meridian Ranch Traffic Impact Study" June 29, 2020

Figure 2
Site Plan

The Sanctuary at Meridian Ranch (LSC #S214250)





Approximate Scale
1"=150'



ECM Required Stopping Sight Distance (325' from
Table 2-17 based on a design speed of 40
mph)



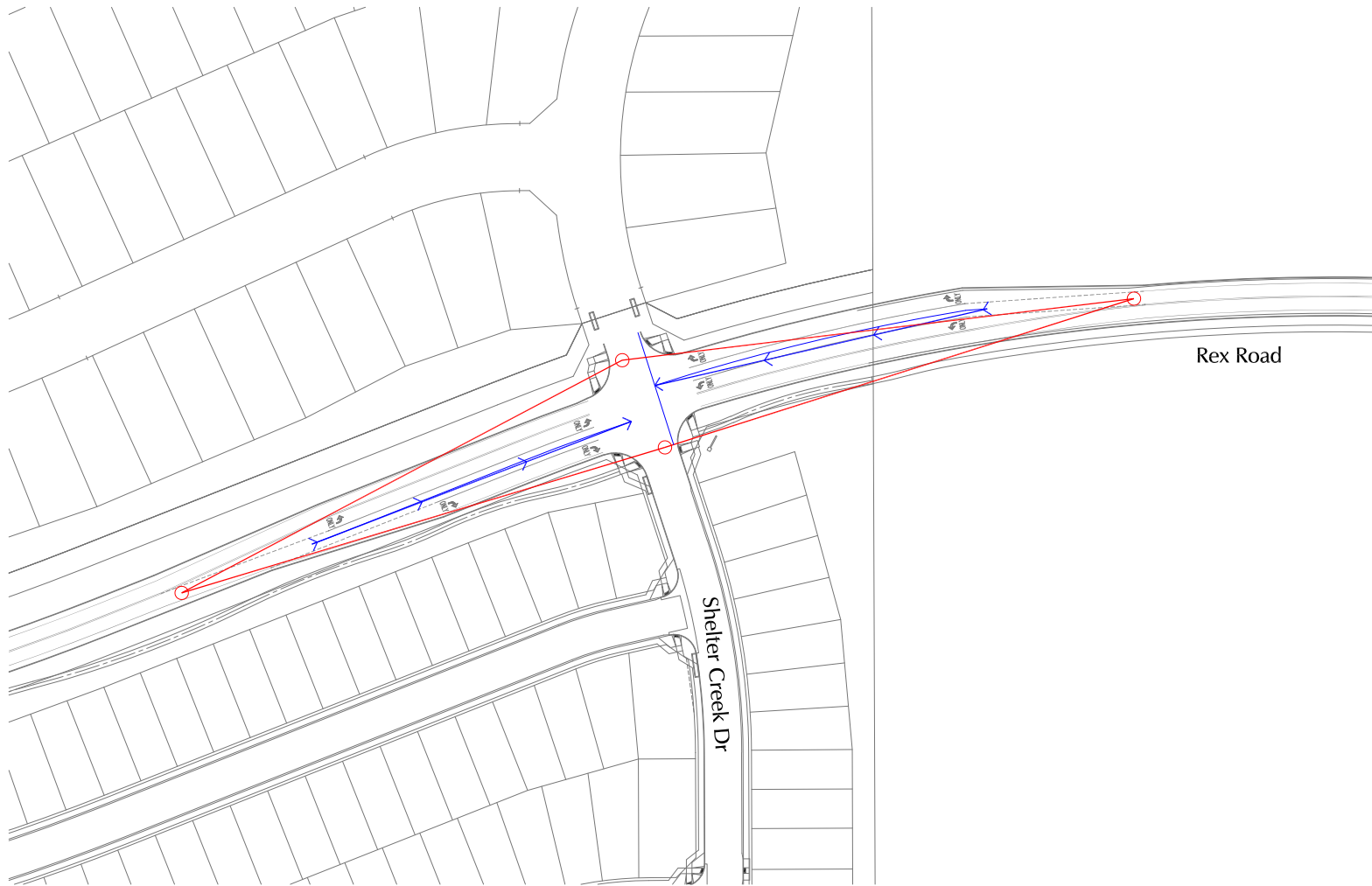
ECM Required Intersection Sight Distance (445'
from Table 2-21 based on a design speed of 40
mph)

Figure 3 Sight Distance Analysis Rex/Retreat Peak

The Sanctuary at Meridian Ranch (LSC #S214250)



Approximate Scale
1"=150'



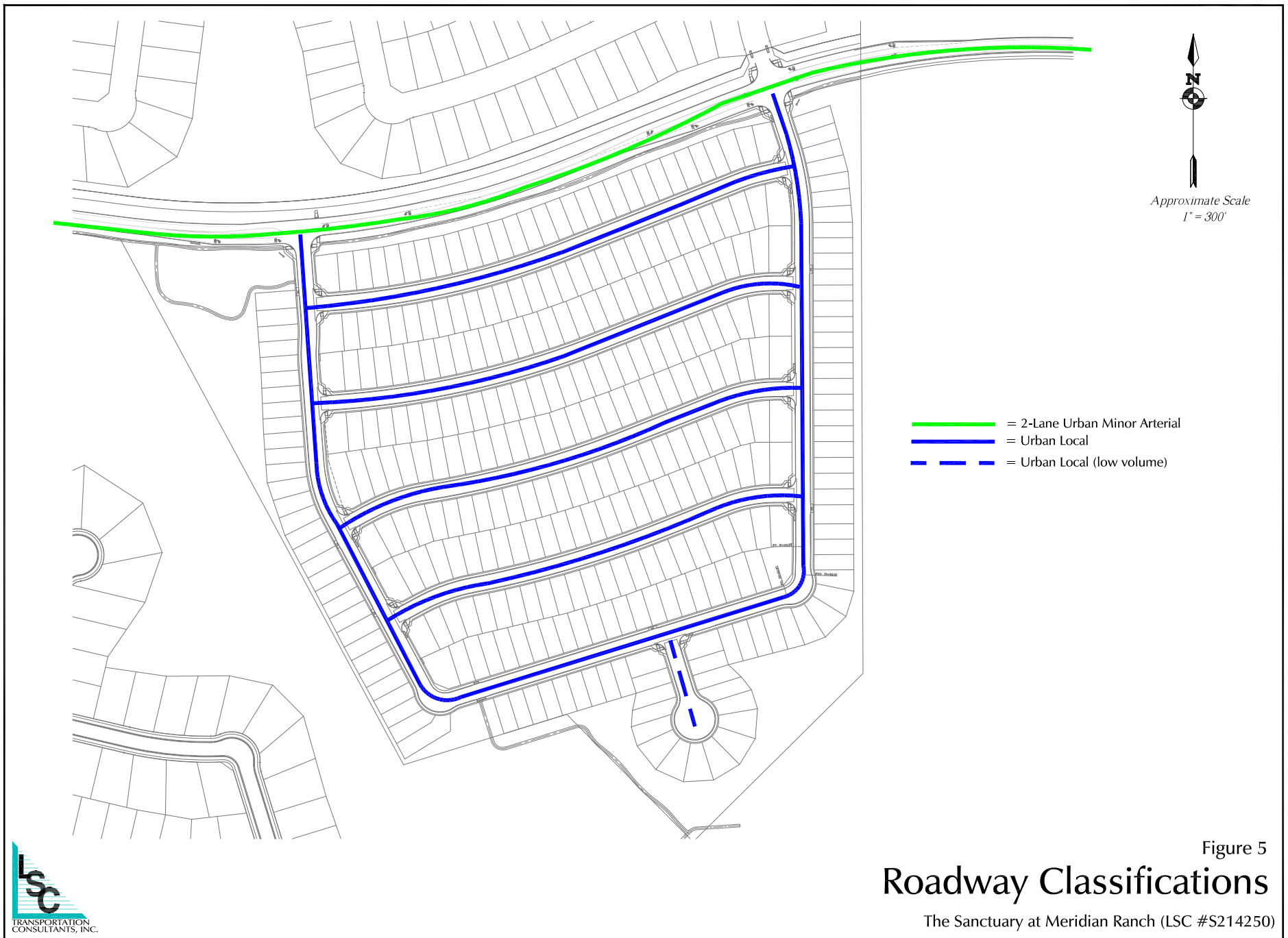
ECM Required Stopping Sight Distance (305' from
Table 2-17 based on a design speed of 40 mph.



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

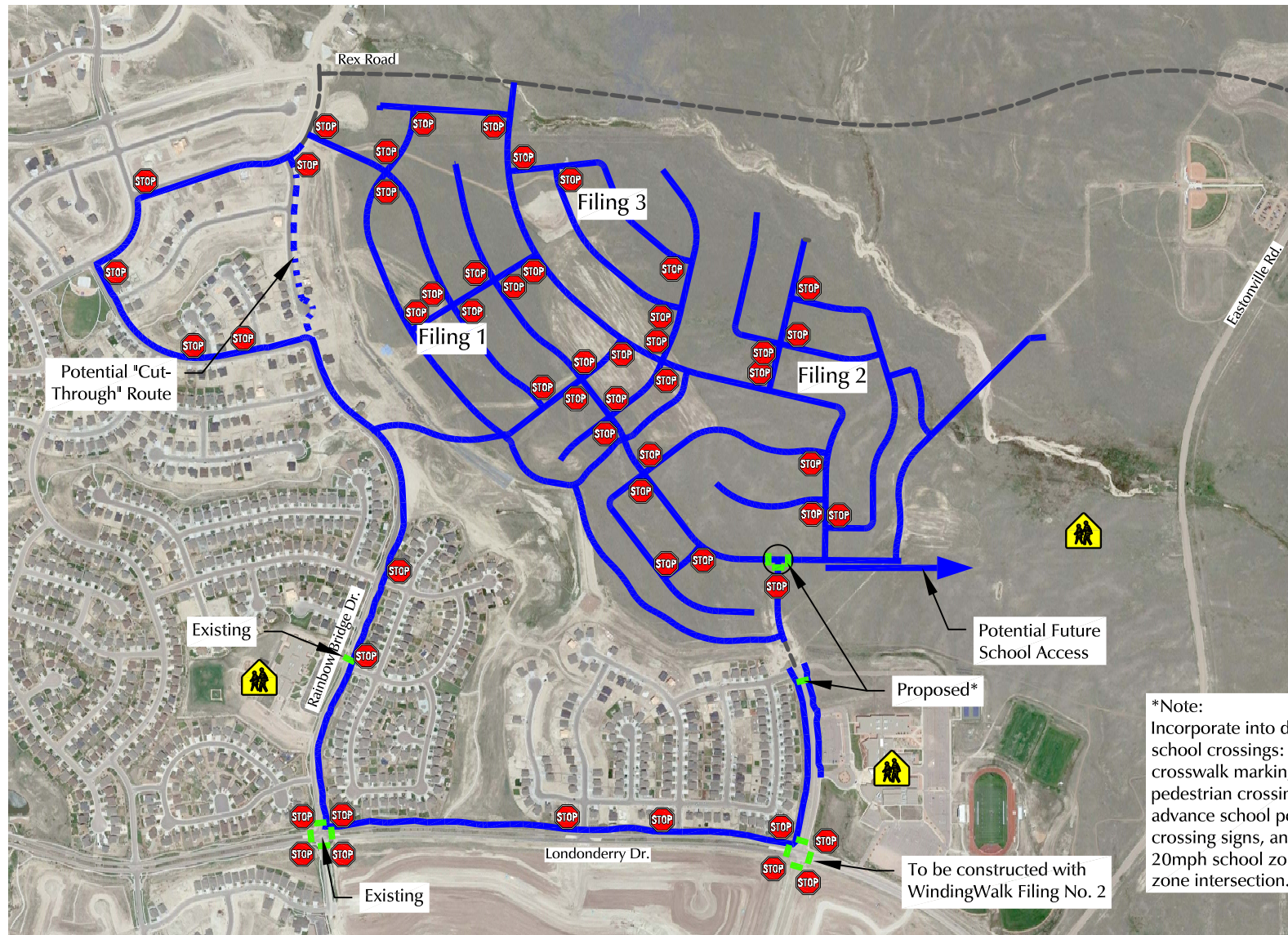
Figure 4
Sight Distance Analysis
Rex/Shelter Creek

The Sanctuary at Meridian Ranch (LSC #S214250)



Additional Attachments

Figure 3 School Pedestrian Routes from the *Rolling Hills Ranch PUDSP Traffic Impact Analysis*



Approximate Scale
Scale: 1"= 1,000'

LEGEND:



- = Pedestrian Route
- = Crosswalk
-  = Stop Sign
-  = School

Figure 3

School Pedestrian Routes

Rolling Hills at Meridian Ranch Filings 1-3 (LSC #194180)