

LSC Responses to TIS Redline Comments



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Villages at Sterling Ranch Traffic Impact Study (LSC #S224580) April 12, 2024 PUDSP226 ¹

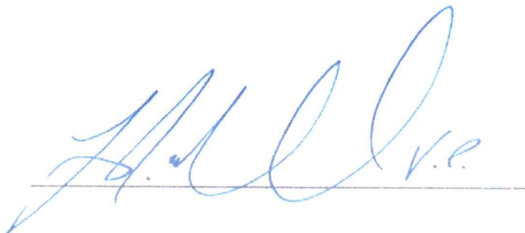
Traffic Engineer's Statement

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.




4/16/2024
Date

LSC Responses to TIS Redline Comments

Page: 1

 Number: 1 Author: CDurham Subject: Text Box Date: 6/26/2024 10:43:19 AM
[PUDSP226](#)

 Author: Kirstin Ferrin Subject: Sticky Note Date: 8/22/2024 12:40:42 PM
LSC Response: Added as requested.



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April 10, 2024

Loren J. Moreland
Vice President/ Project Manager
Classic SRJ
2138 Flying Horse Club Drive
Colorado Springs, CO 80921

RE: Villages at Sterling Ranch
Traffic Impact Study
El Paso County, Colorado
LSC #S224580

Dear Mr. Moreland:


LSC Transportation Consultants, Inc. has prepared this Traffic Impact Study for the proposed Villages at Sterling Ranch. As shown in Figure 1, the site is located east of the future Sterling Ranch Road and south of the future Stapleton Drive in El Paso County, Colorado.

REPORT CONTENTS


[Use Briargate Parkway](#) ¹

The preparation of this report included the following:

- A list of previous Sterling Ranch traffic reports and the context of this project;
- The existing roadway and traffic conditions in the site's vicinity including the roadway widths, surface conditions, lane geometries, traffic controls, and posted speed limits;
- A summary of the proposed land use and access plan;
- Existing traffic volume data;
- Estimates of projected short-term long-term baseline traffic volumes;
- The projected average weekday and peak-hour vehicle trips to be generated by the proposed future development within the preliminary plan area;
- The assignment of the projected preliminary-plan site-generated traffic volumes to the area roadways;
- The projected short-term and long-term total traffic volumes on the area roadways;
- The projected levels of service at the key intersections within the study area;
- Signal-warrant threshold analysis;
- The recommended street classifications;

 Number: 1 Author: CDurham Subject: Callout Date: 6/26/2024 10:45:00 AM

[Use Briargate Parkway](#)

 Author: Kirstin Ferrin Subject: Sticky Note Date: 8/22/2024 12:40:50 PM
LSC Response: Revised as requested.

- Findings and recommendations for study-area roadways and intersections, including number of lanes, auxiliary turn lanes, intersection traffic control, etc.; and
- The project's obligation to the County roadway improvement fee program.

RECENT TRAFFIC REPORTS

LSC prepared a previous master traffic impact study (TIS) for the entire Sterling Ranch development, Sterling Ranch Updated Traffic Impact Analysis ([SKP07007](#)) dated June 5, 2008. **This master study was recently updated. The most current version of the Sterling Ranch Sketch Plan Amendment Master Traffic Impact Study ([SKP224](#)) is dated February 10, 2023.** Since 2008, LSC and SM Rocha, LLC have completed multiple studies for individual filings and phases within Sterling Ranch. Appendix Table 1, which includes a list of other traffic studies within Sterling Ranch and in the vicinity of area of study completed within the past five years (that LSC is aware of), is attached for reference.

El Paso County is currently studying the Briargate Stapleton Corridor as part of a Pikes Peak Rural Transportation Authority (PPRTA) study. A draft version of the Briargate-Stapleton Corridor Study by Wilson & Company was published December 9, 2021.

STUDY AREA

Figure 1 shows the location of the Villages at Sterling Ranch relative to the overall Sterling Ranch Sketch Plan Area. As shown in Figure 1, the site is located generally in the middle of the Sketch Plan Area adjacent to the future extensions of Sterling Ranch Road and Briargate Parkway.

Land Use


Figure 2 shows the proposed Villages at Sterling Ranch Plan. The site is planned to be developed with 237 residential dwelling units, including 49 townhomes, 68 duplexes, 45 detached single-family homes with an accessory dwelling unit, and 75 very small (550 to 950 square feet) single-family detached family homes. This is nine fewer residential dwelling units than was assumed in the Sterling Ranch MTIS.


Pedestrian Plan


Figure 2 also shows the location of all planned trails and sidewalks in the vicinity of the site. There are no proposed regional trails within the boundary of the site. Multiple community trails are included for circulation and recreational use through the Sterling Ranch Phase 1 Preliminary Plan located west and south of the [Sterling Ranch East Filing 5](#) Preliminary Plan.


[Villages at Sterling Ranch](#) ²

A detached sidewalk will be provided along Briargate Parkway, Sterling Ranch Road, and Oak Park Drive. The multi-use paved shoulder on Sterling Ranch Road will accommodate bicycles. Attached

 Number: 1 Author: CDurham Subject: Highlight Date: 6/26/2024 10:46:33 AM
Sterling Ranch East Filing 5

 Author: Kirstin Ferrin Subject: Sticky Note Date: 8/22/2024 12:40:56 PM
LSC Response: Revised as requested.

 Number: 2 Author: CDurham Subject: Text Box Date: 6/26/2024 10:46:55 AM
[Villages at Sterling Ranch](#)

 Author: jchodsdon Subject: Sticky Note Date: 8/22/2024 12:41:21 PM
LSC Response: Corrected in the updated TIS.

REPORT SCENARIOS

Short-Term Scenario

The short-term scenario includes the roadway segments to be added in the short term only, as shown in Figure 3. This scenario includes the Villages at Sterling Ranch area (“the site”) as well as traffic to be generated in the short term by buildout of Homestead at Sterling Ranch, Branding Iron at Sterling Ranch, Sterling Ranch Filings 2-4, Copper Chase at Sterling Ranch, Homestead North at Sterling Ranch Filings 1-3, the Retreat at TimberRidge Filings 1-4, the planned FourSquare at Sterling Ranch East development, the approved filings within Sterling Ranch East Preliminary Plan 1 (Sterling Ranch East Filings 1 and 2), and Sterling Ranch East Filing 5. Note that the short-term scenario assumes no traffic due to future anticipated land uses within Sterling Ranch East Preliminary Plan 1 beyond Sterling Ranch East Filings 1 and 2, including the residential areas east of Sterling Ranch Road and north of Idaho Falls Drive and the future school sites. Trips projected from these other short-term developments outside of the Villages at Sterling Ranch boundary are included as short-term “background traffic” in this report.


Long-Term Scenario

The long-term scenario is essentially the same as the 2044 long-term scenario contained in the LSC February 10, 2023 Master TIS with additional detail added for this application. The study area of this report is more focused than the Sketch Plan. [Provide a bit more information for what this scenario includes/covers.](#) ¹


EXISTING ROAD AND TRAFFIC CONDITIONS

The adjacent streets are shown in Figure 1 and are described below. Copies of the *2016 El Paso County Major Transportation Corridors Plan (MTCP) 2040 Roadway Plan and 2016 MTCP 2060 Corridor Preservation Plan* with the site location identified on them have been attached to this report.

Vollmer Road is currently a five-lane urban street within the City of Colorado Springs limits between Black Forest Road and Cowpoke Road and a two-lane, rural, paved roadway north of Cowpoke Road extending to north of Hodgen Road. In the southbound direction, Vollmer Road has a posted speed limit of 45 mph. South of Cowpoke Road, Vollmer Road has a 40-mph posted speed limit. The *2040 El Paso County Major Transportation Corridors Plan (MTCP)* and the prior Sterling Ranch master traffic study show Vollmer Road as a four-lane Urban Minor Arterial in the vicinity of the site. Note: The new *Connect COS* City of Colorado Springs transportation plan shows Vollmer as a Principal Arterial. The South Vollmer Road improvements ([CDR2116](#)) which will provide two through lanes in each direction on Vollmer Road in the vicinity of Marksheffel Road, are currently under construction and are anticipated to be completed in the near term. The North Vollmer Road improvements ([CDR217](#)), which will provide two through lanes in each direction on Vollmer Road in the vicinity of Briargate Parkway, are currently under construction and are anticipated to be completed by 2024.

 Number: 1 Author: CDurham Subject: Text Box Date: 6/26/2024 10:50:05 AM

[Provide a bit more information for what this scenario includes/covers.](#)

 Author: Kirstin Ferrin Subject: Sticky Note Date: 8/22/2024 12:41:47 PM
LSC Response: Revised as requested.

Marksheffel Road is a Principal Arterial extending north from the City of Fountain to Woodmen Road. Marksheffel Road is planned to ultimately be widened to six lanes and extended north and west from Woodmen Road to connect to Research Parkway at Black Forest Road. Marksheffel Road is shown as a four-lane Principal Arterial through the site on the El Paso County *MTCP*. The City of Colorado Springs intends to take ownership and maintenance of Marksheffel Road when it is constructed from Vollmer to the east and south to where it will connect to the segment constructed north of Woodmen Road in the City.

The section of Marksheffel Road adjacent to Sterling Ranch has been or is planned to be constructed on 107 feet of right-of-way to the City's required cross section(s) and criteria. The section of Marksheffel Road between Sterling Ranch Road and Vollmer Road has recently been completed and the section of Marksheffel Road southeast of Sterling Ranch Road (to connect to the segment recently constructed) will be completed in the short term and will open the connection to Woodmen Road. Marksheffel will be constructed as a four-lane roadway to the previously agreed upon cross section.

Briargate Parkway is a Principal Arterial that extends east from I-25 to Grand Lawn Circle (about one-half mile east of Powers Boulevard). Briargate Parkway is planned ultimately to extend to Towner Drive. The segment of Briargate Parkway between Vollmer Road and Sterling Ranch Road is planned to be constructed to its full 4-lane cross section in the very short term.

Sterling Ranch Road is a planned Non-Residential Collector shown extending through the Sterling Ranch development between Marksheffel Road and the north end of the Sketch Plan area (Arroya Road). Sterling Ranch Road has been constructed between Marksheffel Road and Dines Boulevard and will be constructed north to Briargate Parkway in the short term with the **Sterling Ranch East Phase 1** Preliminary Plan.

Existing Traffic Volumes

Figures 5a and 5b show the existing average weekday and peak-hour traffic volumes at the key study-area intersections. The peak-hour traffic volumes shown are based on manual turning-movement counts by LSC Transportation Consultants in March and April 2024. The average weekday traffic volume on Vollmer Road north of Marksheffel Road shown in Figure 5a are based on machine counts by LSC in April 2024. The traffic count sheets are attached.

Existing Levels of Service

Level of service (LOS) is a quantitative measure of the level of congestion or 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 intersections. LOS F represents control delay of more than 50 seconds for unsignalized intersections. Table 1 shows the level of service delay ranges.

BASELINE CONDITIONS

Baseline traffic is the traffic estimated to be on the adjacent roadways and at adjacent intersections without the proposed development's trip generation of site-generated traffic volumes. Baseline traffic (for a specified horizon year) includes the through traffic and the traffic generated by nearby developments (existing and planned, including traffic generated by existing and planned developments within the greater Sterling Ranch overall development) but assumes zero traffic generated by land uses within the site (the Villages at Sterling Ranch boundary area).

Short-Term Scenario Baseline Conditions

Please refer to the description of the short-term scenario above. Figures 6a and 6b show the projected volumes for the short-term baseline scenario. Note that the short-term baseline scenario assumes only the approved filings within Sterling Ranch East Preliminary Plan 1 (Filing Nos 1 and 2) and Sterling Ranch East Filing 5 have been constructed in the short-term. No traffic due to future anticipated land uses within Sterling Ranch East Preliminary Plan 1 beyond Filings 1 and 2, including the residential areas east of Sterling Ranch Road and north of Idaho Falls Drive and the future school sites, are included in the volumes shown in Figures 6a and 6b.


Figure 6c shows the lane geometry, traffic control, and level of service at the key area intersections, based on the short-term scenario baseline volumes.

Long-Term Scenario Baseline Conditions


Figure 7a shows the projected 2044 baseline daily traffic volumes on key street segments at the key area intersections and Figure 7b shows the projected 2044 peak-hour baseline traffic volumes at the key area intersections. These volumes assume buildout of the area street network, including the completion of Marksheffel Road between Vollmer Road and Black Forest Road, Briargate Parkway between Meridian Road and Black Forest Road, and Sterling Ranch Road between Marksheffel Road and Briargate Parkway.

The 2044 baseline traffic volumes are estimates by LSC, based on the traffic projections in the LSC February 10, 2023 Master TIS report. The 2044 baseline daily traffic volumes assume buildout of the land uses within the Sterling Ranch Master Plan that are not included in the Sterling Ranch East Phase 1 Preliminary Plan area. [Indicate is this does or does not include build out of the schools.](#) ¹

Figure 7c shows the lane geometry, traffic control, and level of service at the key area intersections, based on the 2044 baseline volumes.

 Number: 1 Author: CDurham Subject: Text Box Date: 6/26/2024 11:14:02 AM

Indicate is this does or does not include build out of the schools.

 Author: Kirstin Ferrin Subject: Sticky Note Date: 8/22/2024 12:42:14 PM

LSC Response: Revised to clarify that the long-term analysis assumes buildout of the school site.

Warrant. This analysis indicates that traffic-signal warrant(s) may not be met in the short-term. Detailed analysis should be provided with each future filing within Sterling Ranch. Escrow towards this improvement may also need to be provided with this filing.

Note either here or in the conclusion that an escrow analysis for each intersection will be provided with the final plat, if needed.

LEVEL OF SERVICE ANALYSIS

The key area future signalized intersections have been analyzed to determine the projected intersection levels of service for short-term and 2044 baseline and total traffic scenarios for the morning and afternoon peak-hour periods using Synchro. The key area future stop-sign-controlled and modern-roundabout-controlled intersections have been analyzed based on the unsignalized-intersection analysis procedures from the *Highway Capacity Manual 6th Edition*. Figures 6c, 7c, 11c, and 12c show the level of service analysis results. The level of service reports are attached.


Intersection #1: Vollmer Road/Burgess Road

The stop-sign-controlled intersection of Vollmer/Burgess is currently operating at LOS E for the eastbound approach during the afternoon peak hour. The intersection currently has one-lane approaches in all directions. If this intersection were converted to all-way, stop-sign control, all approaches are projected to operate at LOS C or better, based on the short-term total traffic volumes and the existing lane geometry. Based on existing traffic volumes shown in Figure 5 and the criteria contained in the *El Paso County Engineering Criteria Manual (ECM)*, multiple auxiliary turn lanes would be required to meet the *ECM* standard. LSC recommends this intersection instead be reconstructed as a modern one-lane roundabout. As a modern roundabout, it is projected to operate at LOS C or better for all approaches during the peak hours, based on the projected short-term and 2044 total traffic volumes.


Intersection #4: Vollmer Road/Briargate Parkway

The section of Briargate Parkway between Vollmer Road and Sterling Ranch Road is planned to be constructed to its final cross section in the short term. The intersection of Vollmer/Briargate could operate at a satisfactory level of service (LOS B or better) in the short term as a stop-sign-controlled intersection.

By 2044, it was assumed Briargate Parkway would be extended west to Black Forest Road and East to Towner Avenue and that the intersection of Vollmer/Briargate will be converted to traffic-signal control. The intersection of Vollmer/Briargate is projected to operate at an overall LOS C during the peak hours as a signalized intersection, based on the projected 2044 total traffic volumes shown in Figure 12b and the lane geometry shown in Figure 12c.

 Number: 1 Author: CDurham Subject: Text Box Date: 6/26/2024 12:52:10 PM

Note either here or in the conclusion that an escrow analysis for each intersection will be provided with the final plat, if needed.

 Author: Kirstin Ferrin Subject: Sticky Note Date: 8/22/2024 12:42:37 PM

LSC Response: The additional information has been added to the conclusion section.

Intersection #5: Briargate Parkway/Sterling Ranch Road

The section of Briargate Parkway between Vollmer Road and Sterling Ranch Road is planned to be constructed to its final cross section in the short term. The intersection of Briargate/Sterling Ranch is projected to operate at LOS A for all movements in the short term as a stop-sign-controlled intersection.

By 2044, it was assumed Briargate Parkway would be extended west to Black Forest Road and East to Towner Avenue and that the intersection of Briargate/Sterling Ranch will be converted to traffic-signal control. The intersection of Briargate/Sterling Ranch is projected to operate at an overall LOS C during the peak hours as a signalized intersection, based on the projected 2044 total traffic volumes shown in Figure 12b and the lane geometry shown in Figure 12c.


Intersection #8: Oak Park Drive/Sterling Ranch Road


11d Oak Park Drive is planned to be constructed east from Sterling Ranch Road to the east site boundary as part of the Villages at Sterling Ranch development. Based on the short-term total traffic volumes shown in Figure 11b and the lane geometry shown in Figure 11c, the intersection of Oak Park/Sterling Ranch is projected to operate at LOS B or better for all movements during the peak hours as a stop-sign controlled intersection.

By 2044, it was assumed that Oak Park Drive would be constructed east of the site to Banning Lewis Parkway. It was also assumed that the future K-8 School planned for the parcel southwest of Briargate/Sterling Ranch would be constructed and that an **exit-only** access would be constructed aligning with the Oak Park/Sterling Ranch intersection. Based on the 2044 total traffic volumes shown in Figure 12b and the lane geometry shown in Figure 12c, the eastbound and westbound left-turn movements are projected to operate at LOS E during the morning peak hour and LOS C during the afternoon peak hour. Alternate traffic control may be needed to achieve a satisfactory level of service at this intersection. Further analysis of this intersection should be conducted when the number of students, site layout, and proposed access plan for the school site are determined.

Intersection #12: Marksheffel Road/Vollmer Road

Marksheffel Road has been recently constructed between Vollmer Road and Sterling Ranch Road. Based on the projected short-term total traffic volumes, the westbound left-turn movement is projected to operate at LOS E during the afternoon peak hour. This intersection is planned as a future signalized intersection. However, traffic-signal warrant(s) may not be met in the short term. It is not uncommon for the minor movements at a stop-sign-controlled intersection to operate at LOS E or F as the traffic volumes approach the levels needed to meet vehicular-volume traffic-signal warrants.

 Number: 1 Author: CDurham Subject: Highlight Date: 6/26/2024 11:29:58 AM
Old

 Author: Kirstin Ferrin Subject: Sticky Note Date: 8/22/2024 12:42:53 PM
LSC Response: Revised to Oak Park Drive.

By 2044, it was assumed that Marksheffel Road would be constructed west to Briargate Parkway and that the intersection of Marksheffel/Vollmer will be converted to traffic-signal control. The intersection of Marksheffel/Vollmer is projected to operate at an overall LOS C or better during the peak hours as a signalized intersection, based on the projected 2044 total traffic volumes shown in Figure 12b and the lane geometry shown in Figure 12c.

Intersection #13: Marksheffel Road/Sterling Ranch Road

Marksheffel Road was recently constructed between Sterling Ranch Road and Vollmer Road and the section southeast of Sterling Ranch Road (to connect to the segment recently constructed) will be completed in the short term and will open the connection to Woodmen Road. Based on the projected short-term total traffic volumes, the southbound left-turn movement is projected to operate at LOS F during the afternoon peak hour if it remains stop-sign controlled. This intersection is projected to meet multiple traffic-signal warrants with buildout of the currently proposed Villages at Sterling Ranch currently approved filings discussed in the Short-Term Scenario Baseline Conditions section above. If this intersection is converted to signal control, it is projected to operate at an overall LOS C or better during the peak hours through 2044.

Intersection #501 and #502: Oak Park Drive Access Points

Both of the proposed full-movement site access points to Oak Park Drive are projected to operate at LOS B or better for all movements as stop-sign controlled intersections, based on the projected short-term and 2044 total traffic volumes.

ROADWAY FUNCTIONAL CLASSIFICATIONS AND LANEAGE

Figure 13 shows the recommended functional classifications and number of through lanes for the streets in the study area.

WAIVER AND DEVIATION REQUESTS


Deviations have been requested for private roads with mat width of 22' and permanent roadway terminations. Please revise this section accordingly ¹

No waivers to the *Land Development Code* (LDC) or deviations to the criteria contained in the *El Paso County Engineering Criteria Manual* (ECM) are needed for the proposed preliminary plan.


AREA MTCP 2040 ROADWAY IMPROVEMENT PROJECTS

The *El Paso County 2016 Major Transportation Corridors Plan Update* identified the following 2040 roadway improvement projects within the study area:

- C13: Vollmer Road from Marksheffel Road to Stapleton Drive as a Rural 4-Lane Minor Arterial;
- N5: Stapleton Drive [Briargate Parkway] from Towner Road to Black Forest Road as a 4-Lane Urban Principal Arterial;

 Number: 1 Author: CDurham Subject: Text Box Date: 6/26/2024 11:34:08 AM

Deviations have been requested for private roads with mat width of 22' and permanent roadway terminations. Please revise this section accordingly

 Author: Kirstin Ferrin Subject: Sticky Note Date: 8/22/2024 12:43:13 PM

LSC Response: An updated list of deviation requests has been included with the updated TIS.

- N12: Marksheffel Road from Woodman Road to Research Parkway as a 4-Lane Urban Principal Arterial; and
- M11: Vollmer Road Bicycle & Primary Regional Trail from Marksheffel Road to Shoup Road.

CONCLUSIONS AND RECOMMENDATIONS


Trip Generation


1,967 per earlier
in the report ¹


- Villages at Sterling Ranch is projected to generate about 2,097 new external 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 and 8:30 a.m., about 34 vehicles would enter and 104 vehicles would exit the site. During the afternoon peak hour, which generally occurs for one hour between 4:15 and 6:15 p.m., about 109 vehicles would enter and 69 vehicles would exit the site.

Level of Service

- The stop-sign-controlled intersection of Vollmer/Burgess is currently operating at LOS E for the eastbound approach during the afternoon peak hour. This intersection currently meets the criteria for all-way, stop-sign control. Based on the short-term total traffic volumes and the existing lane geometry, all approaches at this intersection are projected to operate at LOS C or better during the peak hours. This intersection also currently meets the criteria for a 4-Hour Vehicular-Volume Traffic-Signal Warrant. However, as it is not anticipated to meet an 8-Hour Vehicular-Volume Traffic-Signal Warrant in the short term and it is projected to operate at a satisfactory level of service as an all-way, stop-sign-controlled intersection, LSC does not recommend this intersection be converted to signal control in the short-term future. Additionally, this intersection currently has one-lane approaches in all directions. Based on existing traffic volumes shown in Figure 5 and the criteria contained in the El Paso County *Engineering Criteria Manual (ECM)*, multiple auxiliary turn lanes would be required to meet the *ECM* standard. LSC recommends this intersection be reconstructed as a modern one-lane roundabout. As a modern roundabout, it is projected to operate at LOS C or better for all approaches during the peak hours, based on the projected short-term and 2044 total traffic volumes. This project may be required to contribute to future improvements at this intersection. Based on the projected site-generated traffic volumes (shown in Figure 9b) and the short-term total traffic volumes (shown in Figure 11b), the site is projected to contribute about 1.3% of the morning and 1.5% of the afternoon peak-hour volumes at this intersection.
- The intersections of Vollmer/Briargate and Briargate/Sterling Ranch are projected to operate at a satisfactory level of service as stop-sign-controlled intersections in the short-term future. By 2044, these intersections will likely need to be converted to traffic-signal control. As signalized intersections, all movements are projected to operate

 Number: 1 Author: CDurham Subject: Text Box Date: 6/26/2024 12:47:31 PM
[1,967 per earlier in the report](#)

 Author: Kirstin Ferrin Subject: Sticky Note Date: 8/22/2024 12:43:40 PM
LSC Response: The trip generation section has been updated based on the updated land uses.

 Number: 2 Author: CDurham Subject: Highlight Date: 6/26/2024 12:47:13 PM
1,097

A road fee credit agreement and development agreement and Subdivision Improvements Agreement will be required to address developer's road fee credits for construction of Vollmer Road. Additional credit agreements will be needed with each phase of construction to account for reimbursement of costs for the additional lanes and major intersection improvements.

* * * * *

Include discussion section¹
on auxiliary lanes

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


Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.


By Jeffrey C. Hodsdon, P.E.
Principal

JCH/KDF:jas

Enclosures: Tables 2-8
Figures 1-14
Traffic Count Reports
Level of Service Reports
Appendix Table 1
MTCP Maps
Crash History

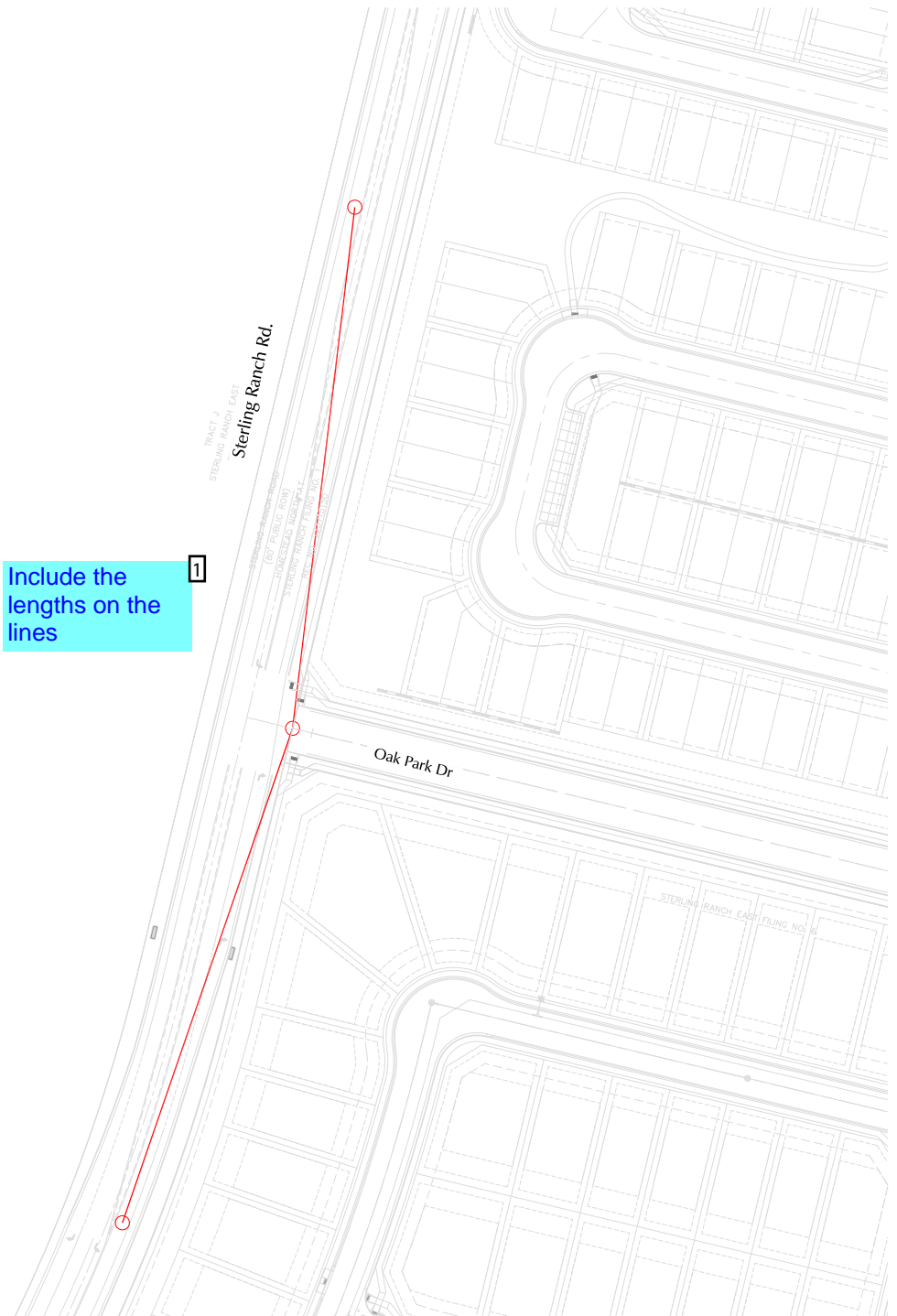
 Number: 1 Author: CDurham Subject: Text Box Date: 6/26/2024 12:49:25 PM

[Include discussion section on auxiliary lanes](#)

 Author: Kirstin Ferrin Subject: Sticky Note Date: 8/22/2024 12:44:02 PM
LSC Response: The additional information has been added as requested.



Approximate
Scale
1" = 150'



LEGEND:


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

Figure 4a


Sight Distance Analysis- Sterling Ranch Road/Oak Park Dr Intersection

Villages at Sterling Ranch (LSC# S224580)



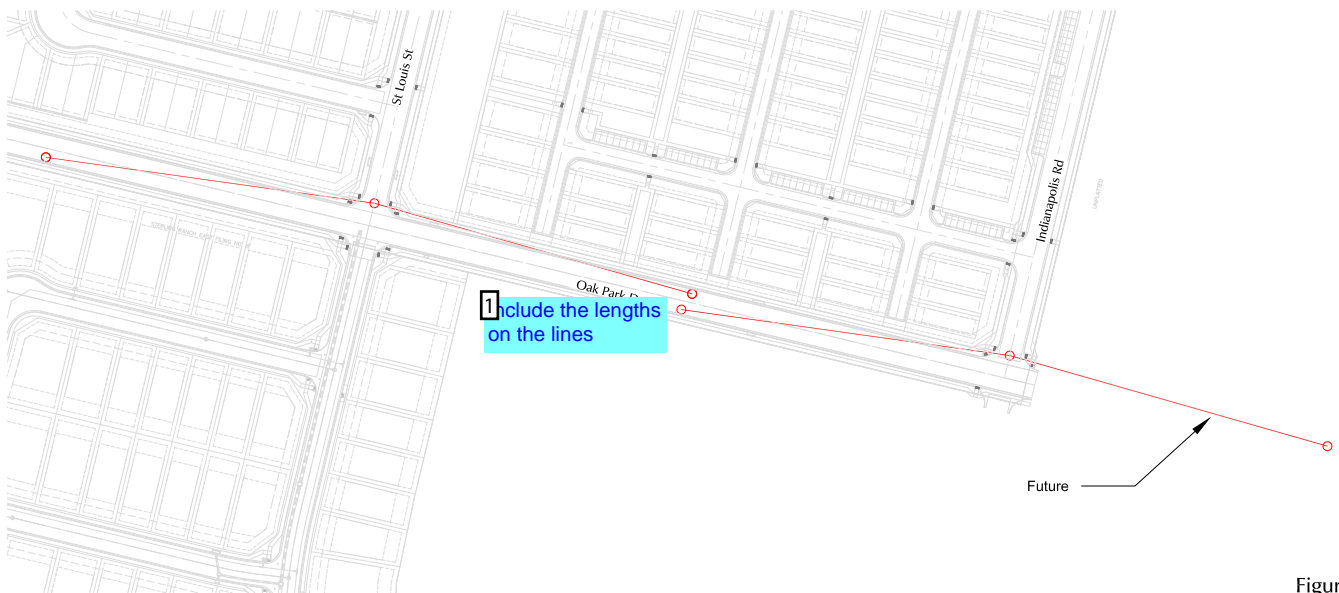
 Number: 1 Author: CDurham Subject: Text Box Date: 6/26/2024 12:56:11 PM

[Include the lengths on the lines](#)

 Author: Kirstin Ferrin Subject: Sticky Note Date: 8/22/2024 12:44:20 PM
LSC Response: Revised as requested.



Approximate
Scale
1" = 200'



1 Include the lengths on the lines


Future

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


Figure 4b
**Sight Distance Analysis -
Oak Park Drive Intersections**

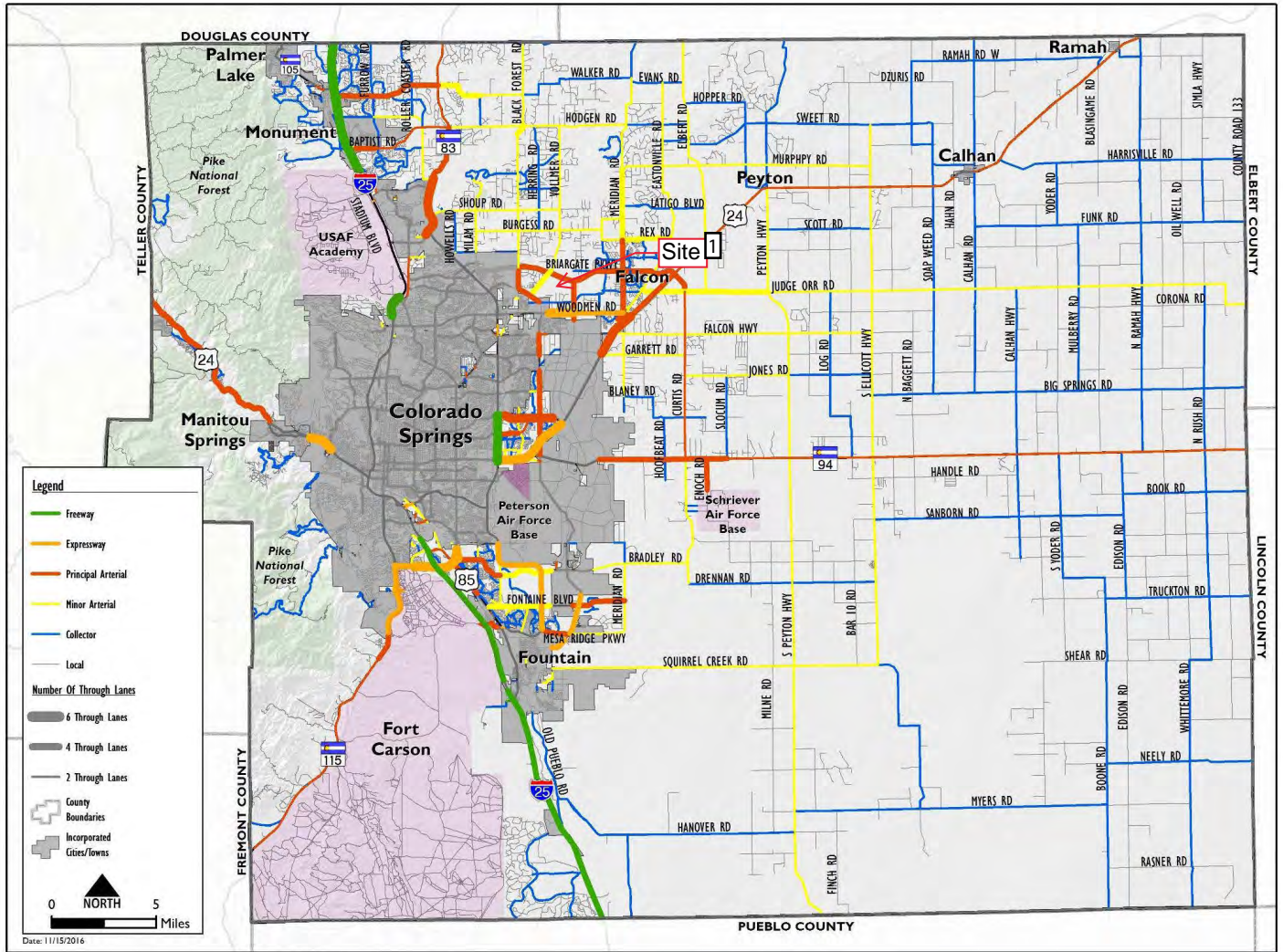
Villages at Sterling Ranch (LSC# S224580)



 Number: 1 Author: CDurham Subject: Text Box Date: 6/26/2024 12:56:31 PM

[Include the lengths on the lines](#)

 Author: Kirstin Ferrin Subject: Sticky Note Date: 8/22/2024 12:44:41 PM
LSC Response: Revised as requested.



Map 14: 2040 Roadway Plan (Classification and Lanes)

Map 17: 2060 Corridor Preservation

