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The Ridge at Lorson Ranch Transportation Memorandum (LSC #S214082) March 15, 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.

Date

PUDSP-22-004 ¹

Summary of Comments on Microsoft Word - The Ridge at Lorson Ranch Final Plat Filing 1 Memo

Page: 1

Number: 1 Author: CDurham Subject: Text Box Date: 5/3/2022 12:14:43

[PUDSP-22-004](#)

Author: jchodsdon Subject: Sticky Note Date: 6/12/2022 14:28:41

LSC Response: "PCD File No. SF 22-004" has been added. Also the title has been changed to "The Ridge at Lorson Ranch Filing Nos. 1, 2 and 3 -Transportation Memorandum"

left-turn volume only on Lorson Boulevard) at the subject intersection were analyzed to determine if the combination currently exceeds or would exceed the threshold criteria for a Four-Hour Vehicular-Volume Traffic-Signal Warrant in the 2009 *MUTCD*. Table 2 shows the warrant evaluation.

All eight of the hours analyzed currently meet the thresholds for a Four-Hour Vehicular-Volume Warrant. **This warrant is currently met.**

Warrant 3, Peak Hour

Per the *MUTCD*, *“This signal warrant shall be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time.”* Based on this standard, a peak-hour traffic-signal warrant should not be applied to the intersection of Marksheffel/Lorson.

Warrant 4, Pedestrian Volume

Per the *MUTCD*, *“The Pedestrian Volume signal warrant is intended for application where the traffic volume on a major street is so heavy that pedestrians experience excessive delay in crossing the major street.”*

The lower-threshold pedestrian volume for a major street with a posted speed limit of greater than 35 mph is 75 pedestrians per hour for a Four-Hour Volume Warrant and 93 pedestrians per hour for a Peak-Hour Pedestrian-Volume Warrant. The pedestrian volumes at the intersection of Lorson/Marksheffel are anticipated to be well below these thresholds.

Warrant 5, School Crossing

Per the *MUTCD*, *“The School Crossing signal warrant is intended for application where the fact that schoolchildren cross the major street is the principal reason to consider installing a traffic control signal.”*

No school children are anticipated to cross Marksheffel at Lorson.

Warrant 6, Coordinated Signal System

Per the *MUTCD*, *“Progressive movement in a coordinated signal system sometimes necessitates installing traffic control signals at intersections where they would not otherwise be needed in order to maintain proper platooning of vehicles.”*


It is our understanding that the existing signal at the adjacent intersection of Fontaine/Marksheffel is not part of a coordinated system. Even if this signal is placed in

Is this Fountain or Fontaine? Please update spelling

1

Number: 1 Author: CDurham Subject: Callout Date: 5/3/2022 12:06:09

[Is this Fountain or Fontaine? Please update spelling](#)

 Author: jchodsdon Subject: Sticky Note Date: 6/12/2022 14:33:08

LSC Response: Corrected to "Fontaine."

Fontaine/Carriage Meadows

The Ridge at Lorson Ranch is not projected to add to the total traffic volumes on the minor approaches at the intersection of Fontaine/Carriage Meadows. No contribution to the escrow amounts towards a future signal at that intersection should be required for this development.

TRAFFIC IMPACTS AND RECOMMENDED IMPROVEMENTS

Please refer to the *Ridge at Lorson Ranch Full Traffic* (PUDSP216) for the short-term and 2040-total traffic recommended auxiliary turn lanes and roadway class

1
Need to reanalyze the westbound to northbound movement from Fontaine to Marksheffel. If analysis deems an acceleration lane is needed, one of the filings will need to provide CD's and FAE collateral for the acceleration lane on Marksheffel.

The October 2021 full TIA included a table which presented improvements in the vicinity of the site. A copy of this table with additional notes by LSC identifying which improvements will be required by each filing has been attached.

Item 9 of the improvements table from the October 2021 full TIA identified the trigger for the addition of a second southbound left-turn as when the southbound left-turn volume exceeds 505 vehicles per hour (vph). As shown in Table 3, the projected afternoon peak-hour volume for this movement is projected to be 480 vehicles following buildout of the Ridge at Lorson Ranch Filing No. 1 and 523 vehicles following buildout of Filing No. 2. If all of the Ridge at Lorson Ranch is built prior to this improvement, the southbound left-turn movement is projected to operate at LOS E and have a v/c ratio of 1.05. LSC recommends escrow funds be collected for the addition of the second southbound left-turn lane payable with final Ridge at Lorson Boulevard Filing to allow time to develop design plans and cost estimates. Table 4 shows the projected short-term afternoon peak-hour southbound left-turn total traffic volume at the intersection of Marksheffel/Fontaine. As shown in Table 4, the Ridge at Lorson Ranch Filing Nos. 1-3 are projected to contribute about 30.8 percent, 16.2 percent, and 10.5 percent of the traffic at buildout of Lorson Ranch, respectively.

2
Ridge at Lorson Boulevard Filing

3
Verify this is correct project reference & provide filing #.

ROADWAY IMPROVEMENT FEE PROGRAM

This project will be required to participate in the El Paso County Road Improvement Fee Program. The Ridge at Lorson Ranch will join the ten-mil PID. The ten-mil PID building-permit fee portion associated with this option is \$1,221 per single-family dwelling unit. The building-permit fees would be \$653,235 for Filing No. 1, \$338,217 for Filing No. 2, and \$222,222 for Filing No. 3.

☰ Number: 1 Author: CDurham Subject: Text Box Date: 6/12/2022 13:32:17

[Need to reanalyze the westbound to northbound movement from Fontaine to Marksheffel. If analysis deems an acceleration lane is needed, one of the filings will need to provide CD's and FAE collateral for the acceleration lane on Marksheffel.](#)

👉 Author: jchodsdon Subject: Sticky Note Date: 6/12/2022 15:30:14

LSC Response: A paragraph has been added to the report to address this comment. Regarding the responsibility for this improvement, the added report section references the applicable development agreement. This has been provided by the applicant for reference and inclusion as an attachment to this report.

📄 Number: 2 Author: CDurham Subject: Highlight Date: 5/3/2022 12:11:22
I Ridge at Lorson Boulevard Filing

☰ Number: 3 Author: CDurham Subject: Callout Date: 5/3/2022 12:12:00

[Verify this is correct project reference & provide filing #.](#)

👉 Author: jchodsdon Subject: Sticky Note Date: 6/12/2022 15:32:13

LSC Response: This paragraph has been modified in the updated June 2022 version of the report.