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# Mayberry Filing No. 3 <br> Traffic Technical Memorandum 

PCD File No. SF2219
T
(LSC \#S224210)
September 1, 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.


## LSC Responses to EPC TIS Redline Comments.pdf

Page: 1
Number: $1 \quad$ Author: jchodsdon Subject: Sticky Note Date: 10/22/2022 15:37:45
LSC Responses to EPC TIS redline comments.

## LAND USE AND ACCESS

Filing No. 3 includes 142 lots for single family homes. Access to Highway 94 for this filing will be at New Log Road (full movement) and Springs Road (right-in/right-out) via the interim street connections internal to the Mayberry development.

The Filing No. 3 plat is consistent with the Phase 1 PUD/Preliminary Plan Amendment studied in the February 2022 TIS. A copy of that TIS is attached for reference. Note: this current Filing No. 3 was previously referred to as "Filing No. 4" in recent TIS reports for the PUD/Preliminary Plan Amendment and the June 2020 Rezone TIS Report. A copy of the subdivision plat is attached for reference.

## TRIP GENERATION



Filing No. 3 includes 142 lots for single-family homes. Neither the ITE Land Use code nor the number of dwelling units has changed from the above-referenced prior TIS reports.

Estimates of the vehicle trips projected to be generated by Filing 3 have been made using the nationally published trip-generation rates from Trip Generation, 11th Edition, 2021 by the Institute of Transportation Engineers (ITE). Table 1 (attached) presents the Filing 3 trip generation estimate.

Based on ITE rates, Filing No. 3 is expected to generate about 1,336 vehicle trips on the average weekday (one half entering and one half exiting in a 24 -hour period) following expansion. During the morning peak hour, 25 vehicles are projected to enter the site and 72 are projected to exit. Approximately 84 vehicles would enter and 50 vehicles would exit the site during the evening peak.

Table 1 also presents the estimated "cumulative" trip-generation through the current Filing 3 development. This cumulative trip-generation estimate includes trips estimated for the previously approved Filings 1 and 2 plus the currently-proposed Filing No. 3.

## TRAFFIC IMPACT ANALYSIS AND ROADWAY IMPROVEMENTS

## Overall

Please refer to the Mayberry Phase 1 PUD Amendment Transportation Memorandum dated February 17, 2022, which references (and identifies some specific updates to) the June 2020 TIS report entitled Ellicott Town Center Filing 2 Traffic Impact Study March 31, 2020* (*Note: Minor Revision June 2, 2020). The El Paso County reference numbers are PCD File Nos. CS192 and SF 1910. These documents addressed the impacts and improvements associated with this filing, as well as all of "Mayberry Phase 1." Table 12a, which address El Paso County road improvements, has been updated with the new plat filing numbers and is attached to this report.

Page: 3
El $\frac{\text { Number: } 1 \quad \text { Author: Daniel Torres } \quad \text { Subject: Callout } \quad \text { Date: } 10 / 16 / 2022 \text { 22:04:00 }}{\text { FYI: this is no longer attached to this document }}$
S $\frac{\text { Author: jchodsdon Subject: Sticky Note } \quad \text { Date: 10/22/2022 15:36:47 }}{\text { LSC Response: The plat (sheet 3) has been attached to the updated TIS report. }}$

PCD File No. SF2219
Mayberry Filing No. 3
(LSC\#224210)
The drawing shows an 1 entry width of 16 for
Mayberry Drive \& Springs Road Roueach of the legs. County: El Paso Please clarify.

## ROUNDABOUT CRITICAL DESIGN PARAMETERS

| DESIGN PARAMETERS | LEG 1 | $\text { KEG } 2$ | LEG 3 | LEG 4 | LEG 5 | LEG 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Approach Width, FT | 20.0 | 21.0 | 20.0 | 21.0 |  |  |
| Entry Width, FT | 22.1 | 22.1 | 22.1 | 22.1 |  |  |
| Entry Angle, PHI ©, DEG | 24.0 | 24.5 | 24.0 | 24.5 |  |  |
| Inscribed Circle Diameter, FT | 120.0 | 120.0 | 120.0 | 120.0 |  |  |
| Exit Width, FT | 18.0 | 18.0 | 18.0 | 18.0 |  |  |
| Circulating Roadway Width Upstream of Entry, FT | 20.0 | 20.0 | 20.0 | 20.0 |  |  |

## FASTEST SPEED PATH

| $R_{1}$, Radius/Speed, FT/MPH | 140 | 23 | 150 | 23 | 140 | 23 | 155 | 23 |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $R_{2}$, Radius/Speed, FT/MPH | 100 | 20 | 100 | 20 | 100 | 20 | 100 | 20 |  |  |  |
| $R_{3}$, Radius/Speed, FT/MPH | 380 | 32 | 600 | 39 | 350 | 31 | 540 | 37 |  |  |  |
| $R_{4}$, Radius/Speed, FT/MPH | 50 | 16 | 50 | 16 | 50 | 16 | 50 | 16 |  |  |  |
| $R_{5}$, Radius/Speed, FT/MPH | 92 | 20 | 97 | 20 | 95 | 20 | 96 | 20 |  |  |  |
| Bypass $R_{5}$, Radius/Speed, FT/MPH |  |  |  |  |  |  |  |  |  |  |  |

MINIMUM SIGHT PARAMETERS

| Approach Design Speed, MPH | 30.0 |  | 35.0 |  | 35.0 |  | 35.0 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Design Vehicle:

Truck Apron Width:

OSOW Accommodations: N/A
Circulating Roadway Cross-Slope:

Access Control:

Parking Control: No Parking
Bicycle \& Pedestrian Accommodations: Ped ramps and sidewalks

Designer: Matt Romero
Reviewer: Chris McGranahan, P.E., PTOE

SIGNATURE: $\qquad$ DATE:
9/1/2022

NAME: Christopher S. McGranahan, P.E., PTOE
 I roundabout principals. The critical design elements have been addressed. The project design engineer in responsible charge of final planl ! $\qquad$ development will stamp the plans when applicable.

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$\equiv \frac{\text { Number: } 1 \quad \text { Author: Daniel Torres }}{\text { The drawing shows an entry width of } 16 \text { for each of the legs. Please clarify. }}$

The drawing shows an entry width of 16 for each of the legs. Please clarify.
5 Author: jchodsdon Subject: Sticky Note Date: 10/22/2022 15:44:13
LSC Response: The $16^{\prime}$ dimension is to the stripe only. The entry width dimension is $22.1^{\prime}$, which is also shown.


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| $\ddagger$ Number: $1 \quad$ Author: Daniel Torres $\quad$ Subject: Cloud $+\quad$ Date: 10/16/2022 22:17:55 |
| :--- |
| fix as the vehicle is shown to go over the curb |
|  |
|  |
| Author: jchodsdon Subject: Sticky Note $\quad$ Date: 10/22/2022 15:44:57 |
| LSC Response: This has been corrected. |



Page: 23
$\square$ Number: $1 \quad$ Author: Daniel Torres $\quad$ Subject: Cloud $+\quad$ Date: 10/16/2022 22:26:46
fix as the snow plow is going onto the curb

Author: jchodsdon Subject: Sticky Note $\quad$ Date: 10/22/2022 15:45:03
LSC Response: This has been corrected. SC Response: This has been corrected.


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Number: $1 \quad$ Author: Daniel Torres $\quad$ Subject: Callout $\quad$ Date: 10/22/2022 15:13:37

Author: jchodsdon Subject: Sticky Note Date: 10/22/2022 15:55:07
LSC Response: There does not appear to be a comment here.


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Number: $1 \quad$ Author: Daniel Torres $\quad$ Subject: Callout $\quad$ Date: 10/16/2022 22:39:37

Author: jchodsdon Subject: Sticky Note Date: 10/22/2022 15:55:14
LSC Response: There does not appear to be a comment here.

| Please indicate the limits of Filing 3 construction(Atchison |  |  |  |
| :---: | :---: | :---: | :---: |
| Way to Springs Table 12a <br> Road). El Paso County Roadway Improvements  <br>   <br>  1 |  |  |  |
| Item \# | Improvement | Timing | Responsibility |
| El Paso County Roadway Segment Improvements |  |  |  |
| 1 | New Log Road (Highway 94/outh into the project) construct as an Urban Minor Arterial per the PUD | With Filing No. 1: <br> Note: Phased half-section (northbound couplet) for Filing 1 and full couplet segments beyond Filing 1 per the PUD plans. <br> shouldn't this be beyond Filing 3 with | Applicant |
| 2a | Mayberry Drive (Garden Park Avenue to Springs Road) construct as a gravel, second ry $^{\text {ry }}$ access road | With Filing No. 1: <br> Note: An interim gravel street connection >3000 ADT threshold exceeds 200 vpd) will be provided with Filing No. 1 | Applicant 2 |
| 2b | Mayberr Drive - construct half-section | With Filing No. 3 | Applicant |
| 2c | Mayberry Drive - Complete Full section (IE construct the remaining half-section) | Future - To be determined w/Future PUD's beyond Phase 1 | Applicant |
| 3 | Springs Road (Highway 94 south into the project) construct street with 65' ROW; design attributes to meet Urban Collector standards. i believe this road is now called positive place. Please verify with developer. | With Filing No. 1: <br> The classification of Springs Road is: Urban Minor Collector with 65' of ROW adjacent to Filings 2 and an Urban Local with 65' of ROW south of that point adjacent to Filing No. 3. Design attributes will meet Collector standards. | Applicant |
| 4 | Cattlemen Ruh west of Springs Road into Filing Nos. 2 an 3 A as a Local Street | With Filing Nos. 2 and 2a [For reference only - not part of the phase 1 PUD Amendment or the Filing 3 Plat application] | Applicant |
| 5 | Cattlemen Run east of Springs Road (into future Filing No. 4 commercial development east of Springs Road) as a Local Street | With future Filing No. 4 commercial development east of Springs Road [For reference only - not part of the phase 1 PUD Amendment or the Filing 3 Plat application] | Applicant |
| 6 | Mayberry Drive \& Springs Road Intersection | With Filing No. 3. - Construct as a one-lane roundabout intersection | Applicant |
| 7 | Besseyi \& Springs Road Intersection | With Filing No. 3. Construct as four leg, conventional, two-way, stop-sign controlled (TWSC) intersection. | Applicant |

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