

WestWing Business Park

Traffic Impact Study

Prepared for

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Prepared by



Submitted to

Arizona Department of Transportation



Maricopa County Department of Transportation



Maricopa County
Department of Transportation

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Executive Summary

This report summarizes the findings of a traffic impact analysis for the proposed WestWing Business Park located north of the State Route 303 Loop (SR 303L) freeway and east of El Mirage Road in unincorporated Maricopa County, Arizona. El Mirage Road will be extended north of SR 303L to a new east-west collector that will be extended to the east of El Mirage Road to and through the proposed site.

The Project will generate approximately 268 AM peak hour trips, 230 PM peak hour trips and 3,011 daily trips on a typical weekday based on the proposed land uses of 6 parcels.

The project will be developed in 2 phases. Phase 1 includes the development of Parcel 6, anticipated opening in Year 2020. Phase 2 includes the development of Parcels 1 – 5, anticipated to be built out by Year 2029.

Existing Conditions

Conclusions

- The intersections of El Mirage Road and the SR 303L ramps operate at LOS B or better in the AM peak hour
- The two study intersections operate at LOS C or better in the PM peak hour
- The roadway segment of El Mirage Road south of the SR 303L Eastbound ramps operates at LOS A or better
- 3 crashes occurred in 2017 on the SR 303L ramps
- The El Mirage Road and SR 303L Westbound Ramp intersection meets Warrant 1, 8-Hour Volume and Warrant 2, 4-Hour Volume based on study assumptions

Recommendations

- None

Non-Site Conditions

Year 2020

Conclusions

- The two study intersections operate at LOS C or better in all peak hours
- The study area roadway segment operates at LOS A or better
- No other planned future development is anticipated in the immediate Project vicinity by 2020
- The El Mirage Road and SR 303L Westbound Ramp intersection meets Warrant 1, 8-Hour Volume and Warrant 2, 4-Hour Volume based on study assumptions

Recommendations

- None

Year 2029

Conclusions

- The two study intersections operate at LOS C or better in all peak hours
- The study area roadway segment operates at LOS A or better
- No other planned future development is anticipated in the immediate Project vicinity by 2029
- The El Mirage Road and SR 303L Westbound Ramp intersection meets Warrant 1, 8-Hour Volume and Warrant 2, 4-Hour Volume based on study assumptions

Recommendations

- None

Year 2034

Conclusions

- The two study intersections operate at LOS C or better in all peak hours
- The study area roadway segment operates at LOS A or better
- No other planned future development is anticipated in the immediate Project vicinity by 2034
- The El Mirage Road and SR 303L Westbound Ramp intersection meets Warrant 1, 8-Hour Volume and Warrant 2, 4-Hour Volume based on study assumptions
- The El Mirage Road and SR 303L Eastbound Ramp intersection meets Warrant 2, 4-Hour Volume based on study assumptions
- The volumes on the northbound right turn at the SR 303L eastbound ramp and on the westbound left turn at the SR 303L westbound ramp warrant 750 feet of storage.

Recommendations

- Signalize the El Mirage Road and SR 303L intersection by 2034
- Extend the northbound right turn at the SR 303L eastbound ramp and the westbound left turn at the SR 303L westbound ramp to provide 750 feet of storage.

Total Conditions

Year 2020

Conclusions

- The intersections of El Mirage Road and the SR 303L ramps operate at LOS C or better in all peak hours
- The Parcel 6 Driveways operate at LOS A or better
- The right-turn lane warrants for parcel 6 driveways were not met
- The El Mirage Road and SR 303L Westbound Ramp intersection meets Warrant 1, 8-Hour Volume and Warrant 2, 4-Hour Volume based on study assumptions

Recommendations

- Provide a minimum of 1 lane in each direction on the New East-West Collector Road alignment
- Provide a minimum of 1 lane in each direction on the El Mirage Road alignment
- Provide stop-control on driveway approaches to the New East-West Collector Road

Year 2029

Conclusions

- The two study intersections operate at LOS D or better in the peak hours
- All of the Parcel Driveways operate at LOS A or better
- Right-turn lane warrants were not met for any Parcel Driveways
- Left-turn lane warrants were met for Parcel 1 and Parcel 3 driveways in the AM peak hour
- The El Mirage Road and SR 303L Westbound Ramp intersection meets Warrant 1, 8-Hour Volume and Warrant 2, 4-Hour Volume based on study assumptions
- The El Mirage Road and SR 303L Eastbound Ramp intersection meets Warrant 2, 4-Hour Volume based on study assumptions

Recommendations

- Install dedicated left-turn lanes with 75 feet of storage at the Parcel 1 and Parcel 3 driveways when these parcels are developed
- Provide stop-control on driveway approaches to the New East-West Collector Road

Year 2034

Conclusions

- The two study intersections operate at LOS D or better in the peak hours.
- All parcel driveways operate at LOS A or better
- Right-turn lane warrants were not met for any Parcel Driveways
- Left-turn lane warrants were met for Parcel 1 and Parcel 3 driveways in the AM peak hour
- The El Mirage Road and SR 303L Westbound Ramp intersection meets Warrant 1, 8-Hour Volume and Warrant 2, 4-Hour Volume based on study assumptions
- The El Mirage Road and SR 303L Eastbound Ramp intersection meets Warrant 2, 4-Hour Volume based on study assumptions
- The volumes on the northbound right turn at the SR 303L eastbound ramp and on the westbound left turn at the SR 303L westbound ramp warrant 750 feet of storage.
- The eastbound left-turn volumes at the Parcel 1 and Parcel 3 driveways warrant a dedicated turn lane with 75 feet of storage.

Recommendations

- None

Recommended Project Improvements

- Provide a minimum of 1 lane in each direction on the New East-West Collector Road alignment
- Provide a minimum of 1 lane in each direction on the El Mirage Road alignment
- Provide stop-control on driveway approaches to the New East-West Collector Road
- When developed, provide dedicated left-turn lanes at:
 - New East-West Collector / Parcel 1 Driveway: 75' of storage for the westbound left
 - New East-West Collector / Parcel 3 Driveway: 75' of storage for the westbound left
- Construct project improvements in accordance with ADOT and MCDOT design criteria, as applicable

The recommendations are summarized on Figure 22.