

TRAFFIC IMPACT ANALYSIS REVIEW

ELOY BUSINESS CENTER WITH NATIONAL GYPSUM WALLBOARD FACILITY

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General comments:

1. The report should include the future Average Daily Traffic (ADT) on the roadways within the study area. The ADT should then be used to determine the cross-sectional needs of the roadways.

Specific comments:

1. Page 1 - The trip generation in Table 1 is substantially different from the numbers presented in Table 14 in page 33.
2. Page 2 – Table 1 is not consistent with Figure 1, as the table indicates signal control for the I-10 ramps by 2010, while the figure shows stop control.
3. Page 2 – The construction of the Eloy Business Center (EBC) may require earlier installation of some of the signals indicated in Table 1 (i.e. Sunshine/Alsdorf). Table 2 should include the year in which every signal will be required with the EBC, not only those that are not warranted without it.
4. Pages 5-6 – Why are there only 2 northbound through lanes at intersection #4, if Figures 1-2 show 3 through lanes?
5. Pages 5-6 – Shared through/right lanes next to a dedicated right turn lane (NB Int # 5, NB Int # 3) are not desirable as they produce uneven lane demands for right turns and could result in safety problems. The exception is at intersections where split phasing would be implemented (such as at EB-WB Int. #3).
6. Page 7 – The number of acres indicated in the introduction (398) is different from the total calculated from Table 3 (383 acres).
7. Page 8 - Why is the secondary access expected not to service any of the daily traffic demand? If La Palma will not be paved this needs to be described, if it is to be paved then some of the traffic is likely to use that route.
8. Pages 11 -12 – The ADT volumes do not match the peak hour turning movement counts (TMC). As an example, the ADT on the I-10 WB ramp (4,515) is more than 24 times the peak hour volume from Figure 13 ($142 \times 24 = 3,408$). The same situation takes place for

the EB ramp and for Sunshine Boulevard around Date Street. Please verify the information in both Figures.

9. Page 16 – Why are the peak hours at the intersection of Sunshine Blvd and Date Street unknown if a TMC was performed?
10. Page 16 – The Ambient Traffic paragraph mentions that linear growth rates of 7% and 12% were used but does not specify which rate was used where. All the volumes in Figures 14-15 seem to be based on a 7% growth rate.
11. Page 17 – The volumes on Sunshine Blvd north and south of Date Street should be the same as only one ADT count was conducted between I-10 and SR 84.
12. Page 18 - Please clarify the procedure used to calculate the future ambient hourly traffic volume, as the current description is confusing. Also, why can't the growth rate just be applied to the existing TMC? Some of the volumes triple between 2006 and 2010 (Sunshine Blvd NB AM at Date Street goes from 100 to 346 veh.)
13. Page 21 – Verify the warrant analysis in Table 6. At the I-10 WB ramp the through volumes are not enough to meet the warrant. Also describe your assumptions in regards to the warrant analysis, especially how you are accounting for right turns and whether you are using the 70% or the 100% conditions.
14. Page 23 – See previous comment in regards to the warrant analysis.
15. Page 28 – Figure 22 shows stop control at both I-10 ramps, which is inconsistent with the warrant analysis (Tables 6 and 8).
16. Page 32 – The Floor Area Ratio assumed for Parcel F (0.12) is low. Please assume 0.15-0.20. In fact, the numbers in Table 13 seem to be based on a FAR of 0.20. Are any internal or pass-by trips expected?
17. Page 33 – There are numerous inconsistencies in Table 12. Some include:
 - a. The total number of acres does not match the total area of the parcels
 - b. Parcels A and B – The inbound and outbound percentages are different from those in ITE's Trip Generation. The PM total appears high.
 - c. Parcel C – The volume for these 103 acres is too low (based on Land Use 110 or Land Use 140). In comparison, land uses A and B, which comprise 88 acres combined, generate 6 times more trips.
 - d. Parcel D – Page 32 states that L.U. 120 was used, but the trip generation appears to be calculated from L.U. 130. We would prefer to avoid the use of LU 120, as the sample size is very small.
18. Page 33 – The referenced Figures 26 and 27 show site traffic but not trip distribution. Please explain your distribution assumptions. It appears that there are more trips to the north than to I-10 (813 v. 665 respectively in the PM), which is counter intuitive.

19. The site volumes shown in Figures 26 and 27 do not match the numbers in Tables 12 and 13. From the tables, the inbound AM volume is 2,202 (2,087+115). Figure 26 shows only 1,358 inbound trips (1,004+354). The same takes place in the evening peak hour
20. Page 38 – The storage lengths should be based on the Synchro analysis. The AASHTO criterion is a very preliminary method that does not consider signal spacing, timing or other factors. Also, describe the criteria used to identify the need for dual turn lanes.
21. Page 38 - Please justify the assumption of 10% heavy vehicles. It would seem that traffic for an industrial site would generate more than 10% heavy vehicles. Also, the storage length for a WB-40 should be 50-55 feet (45.5 feet of length plus spacing from the next vehicle).
22. Page 39-40 – What is the difference between Tables 16 and 19? Why is the intersection of Date Street and Sunshine Blvd shown in both?
23. Why is the lane configuration different in Figure 4 than that in Figure 34 and 35 (i.e. the I-10 ramps)?
24. Page 45 – Based on the increased traffic volumes, will any roadway widening be necessary through the study area?