

Late Backup



#60

Date: May 13, 2010 (Revised 06-07-2010)
To: Jerry Rusthoven, Case Manager
CC: Alex Reyna, P.E., Bury & Partners, Inc.
Reference: Whisper Valley PUD TIA, C814-2009-0094

The Transportation Review Section has reviewed the Traffic Impact Analysis (TIA) for the Whisper Valley PUD, dated July, 2009, prepared by Bury & Partners, Inc, and offers the following comments:

The Whisper Valley PUD covers a total of 2,066 acres. The site is located in east of Austin and is east of SH 130, north of Decker Lake Rd, west of Taylor Lane, and south of Blake Manor Road.

The property is currently vacant and unzoned and is within the City's 2-mile and 5-mile Extra-Territorial Jurisdictions (ETJ). The applicant has requested annexation and zoning to Planned Unit Development (PUD) and proposes to develop the site with 1,171-acres of residential uses, 69.7-acres of commercial space, and 189.4-acres of mixed use development. The assumed build-out is in four phases between 2014 and 2030.

TRIP GENERATION

Based on the standard trip generation rates established by the Institute of Transportation Engineers (ITE), the development will generate approximately 95,285 new unadjusted average daily trips (ADT).

The table below shows the adjusted trip generation by land use for the proposed development:

Table 1. Trip Generation				
LAND USE	Size	ADT	AM Peak	PM Peak
Single-Family	2,848 DU	19,245	1,718	1,841
Multi-Family	2,668 DU	13,766	1,112	1,344
Townhome	1,990 DU	6,935	491	609
Shopping Center	1,276,500 SF	24,363	607	1,713
Office	1,276,500 SF	8,062	1,227	1,281
Civic (Students)	2,000 ST	963	146	27
Total		73,334	5,301	6,815

ASSUMPTIONS

1. Based on traffic volumes collected from TxDOT, the following growth rates were applied within the study area:

Table 2. Growth Rates per Year	
Roadway Segment	%
US 290	4
FM 973	2
FM 969	3
FM 3177	1
FM 734	2

2. In addition to these growth rates, background traffic included estimated traffic volumes for the following projects:

- Wildhorse Ranch PUD C814-200-2063.02
- Indian Hills C14-2009-0089
- Eastwood Proposed Project
- Las Entradas Proposed Project

3. Reductions were taken for pass-by for the following uses:

Table 3. Summary of Pass-By and Internal Capture Reductions		
Pass-By Reductions %		
Land Use	AM	PM
Shopping Center	0%	34%
Internal Capture Reductions %		
Land Use	AM	PM
All Land Uses (excluding School)	10%	10%
Civic (Schools)	80%	80%

4. A five percent transit reduction was assumed for all land uses during both the AM and PM peak periods.

EXISTING AND PLANNED ROADWAYS

US 290 East – The CAMPO 2030 Mobility classifies US 290 as a four-lane major divided arterial. According to TxDOT traffic counts, the 2005 traffic volume on US 290, east of Greg Manor, was approximately 42,000 vehicles per day (vpd). The roadway from US 183 to FM 734 is being studied by CTRMA and TxDOT to become a limited access toll facility to be known as the Manor Expressway. The Expressway should be constructed in its entirety by 2014.

FM 969 – The CAMPO 2025 Plan classifies FM 969 as a two-lane undivided major arterial between FM 973 to Taylor Lane. TxDOT has planned improvements for FM 969 to be upgraded to a 4-lane

major divided arterial from SH 130 to Taylor Lane, including an interchange with FM 973. Currently TxDOT is adding shoulders along the roadway. According to TxDOT traffic counts, the 2005 traffic volume on FM 969, east of Decker Lane, was approximately 13,600 vpd.

FM 973 – The CAMPO 2025 Plan classifies FM 973 as a two-lane minor arterial and is planned to be upgraded to a 4-lane major divided arterial from US 290 to FM 969, including realignment from US 290 to just north of SH 130. This realignment will divert traffic away from the City of Manor. According to TxDOT traffic counts, the 2008 traffic volume on FM 973, south of Blake Manor Rd, was approximately 7,852 vpd.

Blake Manor Road – The CAMPO 2025 Plan classifies Blake Manor Rd as a two-lane minor arterial and is planned to be upgraded to a 4-lane major divided arterial from Littig Road to Taylor Ln. Based on a 2008 TxDOT traffic count, the traffic volume on Blake Manor east of FM 973 was 6,971 vpd.

Old Texas 20 – Old Texas 20 is a 2-lane undivided roadway. There are currently no plans to upgrade Old Texas 20. Based on a 2008 TxDOT traffic count, the traffic volume on Old Texas 20 east of FM 734 was 3,265 vpd.

Taylor Lane/Old Kimbro Lane – Taylor Lane is currently classified in the CAMPO 2030 Plan as a 2-lane minor arterial from US 290 to FM 969 and is planned to be improved to a 4-lane divided major arterial. Taylor Lane and Old Kimbro will be linked from Little Rd to Blake Manor to create a direct connection to US 290. According to TxDOT traffic counts, the 2008 traffic volume on Taylor Ln, south of Blake Manor Rd, was approximately 898 vpd.

FM 734 (Parmer Lane) - The CAMPO 2030 Plan classified Parmer Ln as a 4-lane major divided arterial from Harris Branch Pkwy to US 290. It is planned to be improved to a 6-lane major divided arterial and to be extended past US 290 to FM 973 as a 4-lane major divided arterial.

Braker Lane Extension – The extension of Braker Lane between SH 130 and Taylor Ln/ Old Kimbro Road is planned as a six-lane major divided arterial to be funded and constructed jointly by Travis County and the developer. The roadway is planned to be complete by 2014.

INTERSECTION LEVEL OF SERVICE (LOS)

The TIA examined 21 external intersections impacted by site traffic. Existing and projected levels of service for each phase are identified in Table 4, assuming that all improvements recommended in the TIA are built.

Some of the analyzed intersections will fail in the final phase of development even after the recommended improvements identified below are implemented. This is in part due to the 2030 forecasted traffic conditions that will exist without the site and the limited realistic capacity improvements possible at the analyzed intersections. The improvements recommended by the traffic consultant for this site provide reasonable relief from the impacts of the proposed development for most of the intersections. The only way to further mitigate the impact would be to reduce the amount of proposed development.

RECOMMENDATIONS

- 1) As part of the development agreement between the City and the developer, the developer should provide a pro-rata share of the improvements listed in the attached Table 5 at the time each phase of the development is initiated. An engineer's estimate of the cost associated with each improvement must be provided prior to the beginning of each phase. This agreement should be recorded in a traffic phasing agreement prior to 3rd reading by Council.

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- 2) The traffic phasing agreement between the City and the developer will allow for the transfer of fiscal to intersections identified in the TIA within the same phase to achieve full funding for construction of an improvement. The agreement will also allow the pooling of these funds with funds collected from other approved TIAs over an agreed upon study area.
 - 3) As this analysis did not assess the impact to roadways and intersections within the development, a traffic impact analysis will be required, as identified in the Development Agreement, for projects within the PUD that generate more than 2,000 vehicles trips per day. The scope of subsequent TIAs will be limited to streets, intersections, drives, traffic signals, turn lanes and other traffic improvements that are within the boundaries of the PUD. Submittal will be required at the time of site plan for non-single family residential sites, mixed-use, and commercial sites and at the time of preliminary plan for any other development. The developer shall post pro-rata for identified improvements from any subsequent TIAs.
 - 4) Development of this property should be limited to uses and intensities which will not exceed or vary from the projected traffic conditions assumed in the TIA, including peak hour trip generations, traffic distribution, roadway conditions, and other traffic related characteristics.
 - 5) Prior to third reading of the zoning, a final version of the TIA incorporating all revisions and responses to staff comments must be provided.

If you have any questions or require additional information, please contact me at 974-3428.



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