



**KNOXVILLE/KNOX COUNTY METROPOLITAN PLANNING COMMISSION  
USE ON REVIEW REPORT**

▶ **FILE #:** 10-F-06-UR

**AGENDA ITEM #:** 104

**AGENDA DATE:** 10/12/2006

▶ **APPLICANT:** **DISNEY JOINT VENTURE / JERRY DISNEY**

**OWNER(S):** DISNEY JOINT VENTURE

**TAX ID NUMBER:** 78 24.07, 26 & 29

**JURISDICTION:** County Commission District 6

▶ **LOCATION:** **Northwest side of W. Emory Rd., west of Carpenter Rd.**

▶ **APPX. SIZE OF TRACT:** **25.06 acres**

**SECTOR PLAN:** Northwest County

**GROWTH POLICY PLAN:** Planned Growth Area

**ACCESSIBILITY:** Access is via W. Emory Rd., a major arterial street with 23' of pavement width within 50' of right of way.

**UTILITIES:** Water Source: West Knox Utility District

Sewer Source: West Knox Utility District

▶ **ZONING:** **PR (Planned Residential) Pending**

▶ **EXISTING LAND USE:**

▶ **PROPOSED USE:** **Attached residential development**

**DENSITY PROPOSED:** 4.07 du/ac

**HISTORY OF ZONING:** The Planning Commission recommended approval of PR (Planned Residential) zoning at up to 5 du/ac at the September 14, 2006 meeting. Knox County Commission will consider the request on October 23, 2006.

**SURROUNDING LAND USE AND ZONING:** North: Vacant land / A (Agricultural)

South: Residences and floodway / A (Agricultural) & F (Floodway)

East: Residences / PR (Planned Residential) & A (Agricultural)

West: Residences and vacant land / A (Agricultural)

**NEIGHBORHOOD CONTEXT:** This area is developed with rural to low density residential uses under A, RA and PR zoning.

**STAFF RECOMMENDATION:**

▶ **APPROVE the request for up to 102 attached residential condominiums as shown on the development plan subject to 9 conditions**

1. Approval of the rezoning request to PR at a density of up to 5 du/ac by the Knox County Commission (9-H-06-RZ).
2. Connection to sanitary sewer and meeting any other relevant requirements of the Knox County Health Department.
3. Provision of street names which are consistent with the Uniform Street Naming and Addressing System within Knox County (91-1-102)
4. Constructing an east bound left turn lane in W. Emory Rd. at the development entrance subject to approval by the Knox County Department of Engineering and Public Works and the Tennessee Department of Transportation (TDOT). The plans for the turn lane shall be submitted to and approved by County Engineering

and TDOT prior to obtaining a grading permit for this project. The timing of the construction of the turn lane shall also be addressed at that time. All work done in the right-of-way of W. Emory Rd. must be done under the supervision of the TDOT.

5. Detailed design plans of the entrance and gate area shall be submitted to the Knox County Department of Engineering and Public Works for approval prior to obtaining a grading permit.

6. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works

7. All sidewalk and walking trail construction to be compliant with the requirements of the Americans With Disabilities Act

8. Prior to obtaining any certificates of occupancy, establish a homeowners association for the purpose of maintaining the streets, buildings, landscaping, stormwater drainage system and any other commonly held assets.

9. Installation of the landscaping, as shown on the landscape plan, within 6 months of the issuance of occupancy permits for this project, or posting a bond with the Knox County Department of Engineering and Public Works to guarantee such installation.

With the conditions noted, this plan meets the requirements for approval within a PR (Planned Residential) district and the criteria for approval of a use on review.

#### **COMMENTS:**

The applicant is proposing to develop this 25.06 acre site with 102 attached residential condominium units at a density of 4.07 du/ac. The Planning Commission recommended approval of PR (Planned Residential) zoning at up to 5 du/ac at the September 14, 2006 meeting. Knox County Commission will consider the request on October 23, 2006.

The development will have access to W. Emory Rd. The traffic study submitted with the application identified that an east bound left turn lane at the development entrance was marginally warranted and recommended that crash experience be monitored at the entrance to anticipate the need for the turn lane. Following a review of the study, Knox County Engineering and Planning Commission Staff are recommending that the applicant install the turn lane now as a part of the development of the site.

The applicant has submitted proposed floor plans that include two car garages for each unit. All units have a parking area with a depth of at least 20' between the unit and the private access drives serving the development. Trash pick-up and mail delivery will be provided at each unit.

The proposed development also includes recreational amenities including a walking trail and clubhouse.

#### **EFFECT OF THE PROPOSAL ON THE SUBJECT PROPERTY, SURROUNDING PROPERTY AND THE COMMUNITY AS A WHOLE**

1. The proposed residential development will have minimal impact on local services since all utilities are available to serve this site.
2. With the addition of the left turn lane on W. Emory Rd. at the development entrance there should be adequate capacity on the existing roadway to handle the projected traffic.
3. Any school age children living in this development are presently zoned to attend Karns Elementary, Middle and High Schools.

#### **CONFORMITY OF THE PROPOSAL TO CRITERIA ESTABLISHED BY THE KNOX COUNTY ZONING ORDINANCE**

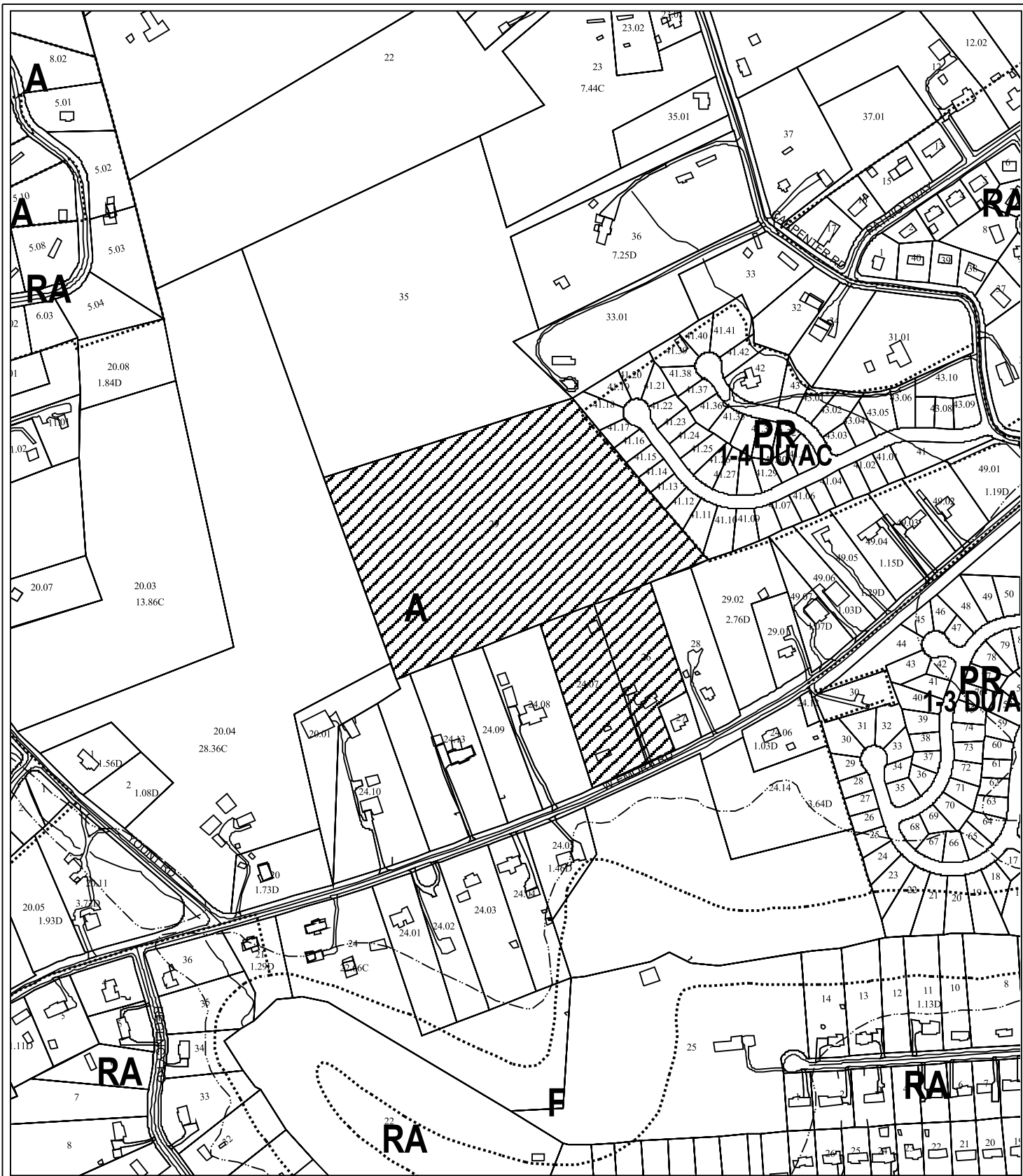
1. With the stated conditions, the proposed attached residential development meets the standards for development within a PR (Planned Residential) Zone and all other requirements of the Zoning Ordinance.
2. The proposed subdivision is consistent with the general standards for uses permitted on review: The proposed development is consistent with the adopted plans and policies of the General Plan and Sector Plan. The use is in harmony with the general purpose and intent of the Zoning Ordinance. The use is compatible with the character of the neighborhood where it is proposed. The use will not significantly injure the value of adjacent property. The use will not draw additional traffic through residential areas since the subdivision has direct access to a major arterial street.

#### **CONFORMITY OF THE PROPOSAL TO ADOPTED PLANS**

1. The Northwest County Sector Plan identifies this property as low density residential. The site is located in

the Planned Growth Area of the Growth Policy Plan. The PR zoning proposed for this site will allow a density up to 5 du/ac. With a density of 4.07 du/ac, the proposed development is consistent with the Sector Plan and Growth Policy Plan.

MPC's approval or denial of this request is final, unless the action is appealed to the Knox County Board of Zoning Appeals. The date of the Knox County Board of Zoning Appeals hearing will depend on when the appeal application is filed. Appellants have 30 days to appeal an MPC decision in the County.



10-F-06-UR  
 USE ON REVIEW

 Attached residential development in PR (Planned Residential) Pending


Original Print Date: 09/27/06 Revised:  
 Metropolitan Planning Commission \* City / County Building \* Knoxville, TN 37902

Petitioner: Disney Joint Venture /  
 Jerry Disney

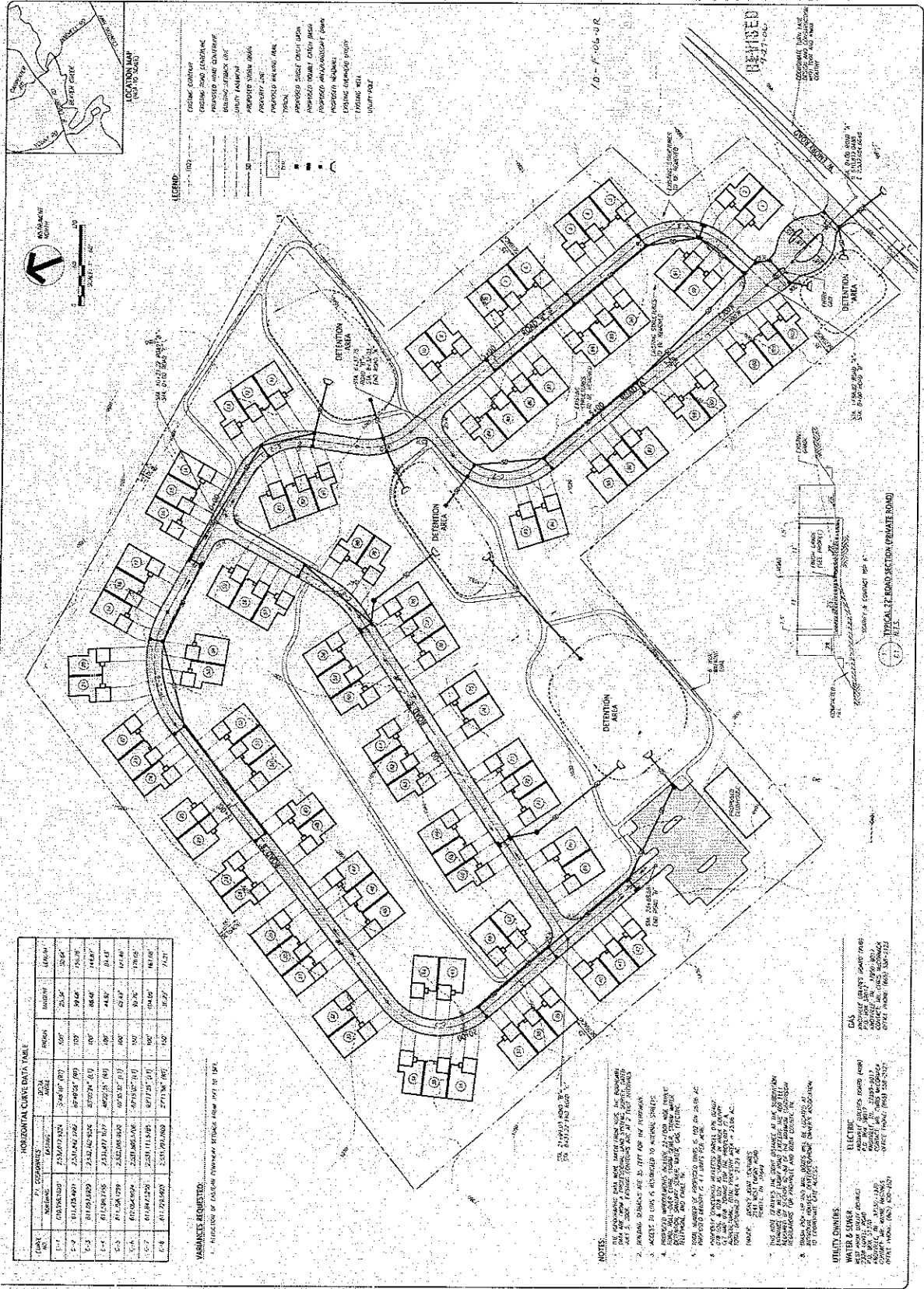
Map No: 78

Jurisdiction: County



 FULGON MACINDOR ARCHITECTURE 1000 BROADWAY SUITE 1000 NEW YORK, NY 10018 TEL: (212) 691-1000 FAX: (212) 691-1001 WWW.FULGONMACINDOR.COM	<b>PRELIMINARY NOT FOR CONSTRUCTION</b>	ALYSHA'S VINEYARD 1800 W. 10TH STREET KNOXVILLE, TENNESSEE 37911	DISNEY JOINT VENTURE 2141 HERRING ROAD POWELL, TN 37849 CONTACT: JERRY DENNEY TELEPHONE NO.: (603) 947-2229	Date: 10/06/06	Sheet: C1
				Project: ALYSHA'S VINEYARD	Date: 10/06/06

10-F-06-UR



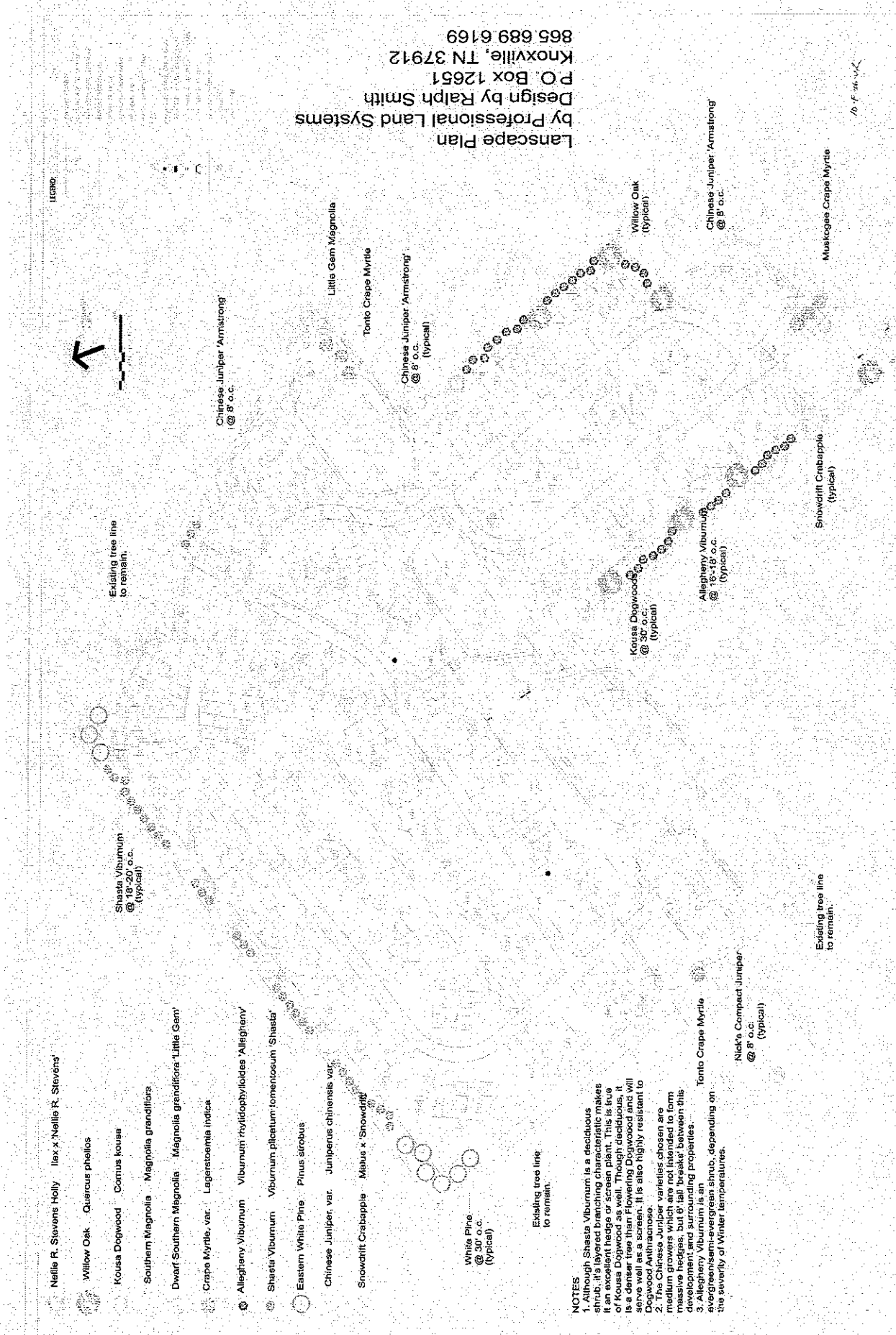
**HORIZONTAL CURVE DATA TABLE**

STATION	PC	PT	CV	PI	PT	PC	LENGTH
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1+30	1+00	1+30	1+15	1+15	1+30	0+00	30.00'
1+60	1+30	1+60	1+45	1+45	1+60	0+00	30.00'
1+90	1+60	1+90	1+75	1+75	1+90	0+00	30.00'
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2+50	2+20	2+50	2+35	2+35	2+50	0+00	30.00'
2+80	2+50	2+80	2+65	2+65	2+80	0+00	30.00'
3+10	2+80	3+10	2+95	2+95	3+10	0+00	30.00'
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**VARIOUS REQUIREMENTS:**  
 1. FULGON ARCHITECTURE  
 2. DISNEY JOINT VENTURE

- NOTES:**
1. ALL DIMENSIONS AND ANGLES ARE AS SHOWN UNLESS OTHERWISE NOTED.
  2. FINISH GRADES ARE TO BE DETERMINED BY THE CONTRACTOR.
  3. ACCESS TO CURB IS REQUIRED TO AVOID INTERFERENCES.
  4. PROPERTY LINES AND ADJACENT PROPERTIES ARE SHOWN FOR REFERENCE ONLY. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF THESE LINES AND ADJACENT PROPERTIES.
  5. ALL UTILITIES ARE TO BE DELETED OR RELOCATED AS SHOWN.
  6. PROPERTY LINES AND ADJACENT PROPERTIES ARE SHOWN FOR REFERENCE ONLY. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF THESE LINES AND ADJACENT PROPERTIES.
  7. ALL UTILITIES ARE TO BE DELETED OR RELOCATED AS SHOWN.
  8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
  9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
  10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

**UTILITY COMPANIES:**  
 WATER & SEWER: [Company Name]  
 GAS: [Company Name]  
 ELECTRIC: [Company Name]



Landscape Plan  
 by Professional Land Systems  
 Design by Ralph Smith  
 P.O. Box 12651  
 Knoxville, TN 37912  
 865 689 6169

10-F-06-UR

**NOTES**  
 1. Although Shasta Viburnum is a deciduous shrub, it's layered branching characteristic makes it an excellent hedge or screen plant. This is true of Kousa Dogwood as well. Though deciduous, it is a denser tree than Flowering Dogwood and will Dogwood in winter. It is also highly resistant to snow damage.  
 2. The Chinese Juniper varieties chosen are medium growers which are not intended to form massive hedges, but 'fall' breaks' between this development and surrounding properties.  
 3. Allegheny Viburnum is an evergreen/semi-evergreen shrub, depending on the severity of winter temperatures.

Nellie R. Stevens Holly *Ilex x 'Nellie R. Stevens'*

Willow Oak *Quercus phellos*

Kousa Dogwood *Cornus kousa*

Southern Magnolia *Magnolia grandiflora*

Dwarf Southern Magnolia *Magnolia grandiflora 'Little Gem'*

Crape Myrtle, var. *Lagerstroemia indica*

Allegheny Viburnum *Viburnum rhytidophylloides 'Allegheny'*

Shasta Viburnum *Viburnum plicatum tomentosum 'Shasta'*

Eastern White Pine *Pinus strobus*

Chinese Juniper, var. *Juniperus chinensis var.*

Snowdrift Crabapple *Malus x 'Snowdrift'*

White Pine *Pinus strobus*

Kousa Dogwood *Cornus kousa*

Willow Oak *Quercus phellos*

Chinese Juniper *Juniperus chinensis*

Little Gem Magnolia *Magnolia grandiflora 'Little Gem'*

Tonto Crape Myrtle *Lagerstroemia indica 'Tonto'*

Chinese Juniper *Juniperus chinensis*

Willow Oak *Quercus phellos*

Chinese Juniper *Juniperus chinensis*

Nick's Compact Juniper *Juniperus chinensis 'Nick's Compact'*

Snowdrift Crabapple *Malus x 'Snowdrift'*

Minkogee Crape Myrtle *Lagerstroemia indica 'Minkogee'*

Existing tree line to remain

Existing tree line to remain

Existing tree line to remain



LEGEND

Scale: 1" = 10'-0"

North Arrow

Legend

Notes

Plantings

Existing

Proposed

Site

Boundary

Utility

Other

Notes

Scale

North Arrow

Legend

Notes

Plantings

Existing

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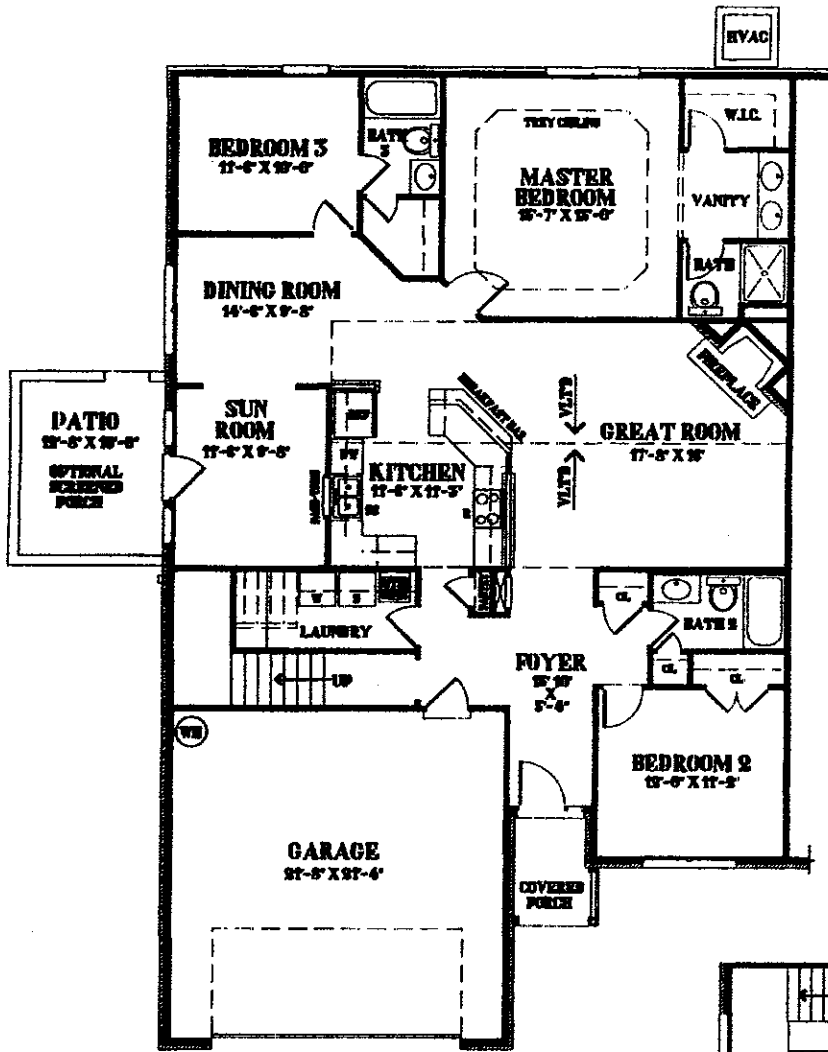
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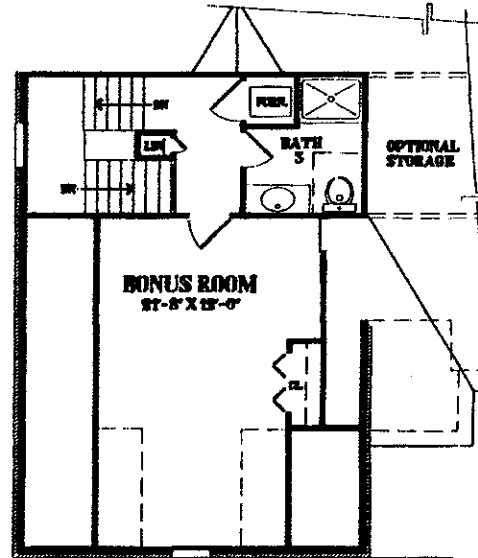
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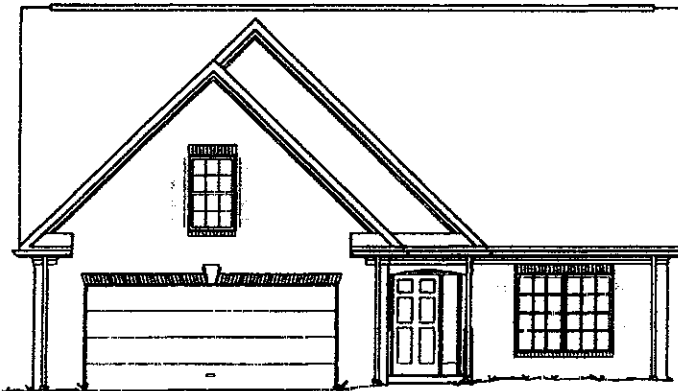


**OVERALL DIMENSIONS**  
 40-0 X 64-0  
 WIDTH X DEPTH

**MAIN FLOOR PLAN**



**UPPER FLOOR PLAN**



**ELEVATION**

**THE ALYSHA**  
 SINGLE FAMILY ATTACHED HOUSE

<b>SQUARE FOOTAGE</b>	<b>MAIN</b>	<b>1844 SQ FT</b>
	<b>PATIO</b>	<b>131 SQ FT</b>
	<b>BONUS ROOM</b>	<b>518 SQ FT</b>
	<b>GARAGE</b>	<b>482 SQ FT</b>

10-F-06-UR

**WYBYND DESIGNS INC.**  
 PBC MEMBER ARCHITECT-AAA

WYBYND DESIGNS INC. 421 FOREST PARK BLVD. GOODVILLE, TENNESSEE 37072  
 ARCHITECTS - INTERIOR PLANNING - DESIGNERS (931) 454-0712

10-F-06-UR



1100 Marion Street, Suite 200  
Knoxville, TN 37921  
Tel (865) 963-4300  
Fax (865) 963-4301  
www.wilbursmith.com

August 30, 2006

Mr. Dwight Disney  
Disney Construction  
2141 Emory Road  
Powell, Tennessee 37849

**RE: ALYSHA'S VINEYARD SUBDIVISION TRAFFIC IMPACT STUDY**

Dear Mr. Disney:

Wilbur Smith Associates (WSA) is pleased to submit this letter report pertaining to the anticipated traffic impacts of a proposed residential subdivision to be located on the north side of W. Emory Road (State Route 131) in northwest Knox County, Tennessee. Figure 1 presents the general site location. Figure 2 presents the proposed conceptual site plan. The scope of this study was defined by the Knox County Department of Engineering and Public Works and the Regional Metropolitan Transportation Planning Organization (TPO) to address geometric conditions and intersection capacity at the site access point and at the intersection of W. Emory Road with Harrell Road.

**Data Collection and General Site Description**

The proposed development will consist of 102 condominium units. The proposed access is a single driveway on the north side of W. Emory Road approximately 1,600 feet east of Yount Road and approximately 2,000 feet west of Harrell Road. Build out and full occupancy is expected to occur within three years, or by 2009.

WSA conducted a field investigation in the environs of the proposed development to note any existing or potential geometric deficiencies. W. Emory Road is a two-lane arterial road with 11-foot travel lanes and paved shoulders one foot wide. The posted speed limit is 40 MPH. The available intersection sight distance at the proposed site driveway location is greater than 600 feet to the right and to the left.

Albany NY, Anaheim CA, Atlanta GA, Baltimore MD, Bangkok Thailand, Burlington VI, Charleston SC, Charleston WV, Chicago IL, Cincinnati OH, Cleveland OH, Columbia SC, Columbus OH, Dallas TX, Dubai UAE, Falls Church VA, Greenville SC, Hong Kong, Houston TX, Iselin NJ, Kansas City MO, Knoxville TN, Lansing MI, Lexington KY, London UK, Milwaukee WI, Mumbai India, Myrtle Beach SC, New Haven CT, Orlando FL, Philadelphia PA, Pittsburgh PA, Portland ME, Poughkeepsie NY, Raleigh NC, Richmond VA, Salt Lake City UT, San Francisco CA, Tallahassee FL, Tampa FL, Tempe AZ, Trenton NJ, Washington DC

**MPC October 12, 2006**

Employee-Owned Company

**Agenda Item #104**



WSA conducted a turning movement count at the intersection of W. Emory Road with Harrell Road on Tuesday, August 22, 2006. The count was conducted to determine existing traffic volumes and directional distribution in the proposed site vicinity. Figure 3 shows the existing AM and PM peak hour traffic volumes at the count location.

**Background Growth of Traffic Volumes**

The Tennessee Department of Transportation (TDOT) maintains two count stations on W. Emory Road in the study area. Station #47 is located approximately two miles east and Station #284 approximately one mile west, respectively, of the proposed project location. Annual traffic growth has ranged from 2.8% per year at Station #47 to 3.4% per year at Station #284. For study purposes, it was assumed that traffic growth is at a rate of 4% per year. This annual growth rate was applied to the observed traffic volumes. Figure 4 presents the projected 2009 peak hour traffic at the intersection of W. Emory Road with Harrell Road assuming this background traffic growth.

**Trip Generation and Trip Distribution of Site Traffic**

Table 1 shows the daily, AM peak hour, and PM peak hour traffic expected to be generated by the proposed residential development. The procedures of *Trip Generation, 7<sup>th</sup> Edition*, published by the Institute of Transportation Engineers, were used to estimate these volumes based on locally gathered trip generation data. The TPO published a memorandum (“Local Trip Generation Rates for Multi-Family Residential Uses”, August 14, 2000, contained in Appendix) instructing traffic impact study preparers to use the locally obtained data for all multi-family residential developments including apartments, condominiums and the like.

Table 1: Alysha’s Vineyard Subdivision Trip Generation Summary

Time Period	Total Trips	Percent		Number	
		Enter	Exit	Enter	Exit
Weekday (24 hours)	972	50%	50%	486	486
AM Peak Hour	54	22%	78%	12	42
PM Peak Hour	78	55%	45%	43	35

The directional distribution of traffic generated by the proposed Alysha’s Vineyard subdivision was assumed based on the existing traffic patterns evident in the turning movement count at the intersection of W. Emory Road with Harrell Road. The typical pattern is for traffic to be heavier in one direction in the morning and in the opposite direction in the evening as commuters travel to and return from work. Based on the cited traffic count, traffic near the proposed site is more

heavily oriented (approximately 60%) to and from the west. Less than 10% of the traffic currently passing the site uses Harrell Road. For study purposes it was assumed that 60% of the proposed subdivision traffic would depart to the west in the morning and return from the west in the evening. 30% was assigned to and from the east via W. Emory Road, and 10% was assigned to Harrell Road. Figure 5 shows the directional splits applied to the generated traffic for Alysha's Vineyard.

### Traffic Conditions

Unsignalized intersection capacity analyses were performed for the AM and PM peak hours to evaluate the traffic conditions at the intersection of W. Emory Road with Harrell Road and at the site driveway. The capacity analysis reports are contained in the Appendix. The methodology of the *2000 Highway Capacity Manual* as contained in the *Highway Capacity Software (version 5.1)* was used. One of the measures employed in such analyses is "level of service" (LOS), a qualitative statement of the acceptability of traffic conditions based on delay. The LOS index ranges from LOS A, indicating excellent traffic conditions with minimal delay, to LOS F indicating very congested conditions with excessive delay. LOS D generally is considered the minimum acceptable condition in urban areas.

Based on capacity analyses using the volumes of Figure 3, Harrell Road drivers currently experience LOS C (AM peak hour) to LOS D (PM peak hour) conditions. With future background traffic growth not including the proposed Alysha's Vineyard subdivision (Figure 4), those conditions are projected to decline to LOS D and E, respectively, and LOS D and F with the added Alysha's Vineyard traffic (Figure 6). Westbound traffic on W. Emory Road will be impeded by vehicles turning left onto Harrell Road, but their delay will be minimal under all scenarios with LOS A conditions. Upon site buildout (Figure 6), traffic conditions at the site entrance are projected to be LOS C for drivers exiting Alysha's Vineyard subdivision and LOS A for eastbound W. Emory Road traffic during both peak hours.

### Evaluation of Signal Warrants

The need for signalization of the intersection of W. Emory Road with Harrell Road was evaluated. Warrants for traffic signals are set forth in the *2003 Manual on Uniform Traffic Control Devices (MUTCD)* published by the FHWA. Three volume-based warrants are defined in the MUTCD as follows:

- Warrant 1: Eight-Hour Vehicular Volume,
- Warrant 2: Four-Hour Vehicular Volume, and
- Warrant 3: Peak Hour.

Warrant 1 is subdivided into three conditions. Condition A (Minimum Vehicular Volume) is applicable where a large volume of intersecting traffic is the principal reason for signalization. Condition B (Interruption of Continuous Traffic) is applicable where major street traffic volumes are so heavy that minor street drivers suffer excessive delay or conflict entering or crossing the major street. The third condition provides for a combination of Conditions A and B.

Based on the signal warrant analyses, traffic volumes at the intersection currently meet the four-hour and peak hour warrant thresholds and will continue to do so at the buildout year independent of the proposed subdivision traffic. Satisfaction of these warrants is driven by the relatively high afternoon traffic volumes on Harrell Road. Morning and midday volumes are less remarkable. The signal warrant worksheets are contained in the Appendix.

#### **Evaluation of Turn Lane Warrants**

The need for auxiliary turn lanes at the intersection of W. Emory Road with Harrell Road and at the proposed site access point was evaluated. The criteria for such turn-lane warrants are contained in Knox County's *Access Control and Driveway Design Policy*. The evaluation worksheets are contained in the Appendix.

Based on these evaluations, a westbound left-turn lane on W. Emory Road at Harrell Road currently is warranted during both peak hours with left-turn volumes far exceeding the warrant thresholds. The need for this turn lane will continue with future traffic growth. An eastbound right-turn lane on W. Emory Road at Harrell Road will be warranted at the buildout year, independent of the proposed subdivision traffic, but it is not currently warranted.

An eastbound left-turn lane into Alysha's Vineyard subdivision is expected to be warranted but only marginally and only during the PM peak hour. The warrant threshold is 20 vehicles per hour, and the projected left-turn volume is 26 vehicles per hour.

#### **Conclusions and Recommendations**

Based on the analyses and evaluations reported herein, WSA reached the following conclusions and makes the recommendations set forth below.

- *Sight distance*
  - Discussion: The minimum required sight distance based on the posted speed limit of 40 MPH on W. Emory Road is 400 feet. Thus, the available sight distance at the proposed driveway location (greater than 600 feet in both directions) is

expected to be more than adequate, even if actual operating speeds exceed the posted limit slightly.

- Recommendation: Site grading and landscaping should be accomplished to maintain the available sight distance.
- *Intersection spacing*
  - Discussion: The nearest public road intersection is approximately 1,600 feet from the proposed access. This exceeds the Knox County minimum separation of 400 feet along arterial roadways.
  - Recommendation: None.
- *Auxiliary lanes (W. Emory Road at Harrell Road)*
  - Discussion: A westbound left-turn lane is currently warranted on W. Emory Road at Harrell Road. The need for this auxiliary lane was identified in an earlier traffic study for a development on Harrell Road ("Traffic Impact Study Painter Farms Residential Development", Wilbur Smith Associates, December 20, 2004). This 91-lot development is currently under construction as is Carpenter Ridge subdivision, a 54-lot subdivision on Carpenter Road on the north side of W. Emory Road near Harrell Road. Traffic generated by these developments will increase demand at the intersection. However, the level of service for westbound W. Emory Road traffic is projected to remain at LOS A indicating minimal delay. Similarly, an eastbound right-turn lane is expected to become warranted with future traffic growth though less convincingly than the left-turn lane.

This intersection was reviewed in depth as a part of Knox County's efforts to identify and prioritize traffic improvement needs ("Knox County Intersection Evaluation, Part 1", Wilbur Smith Associates, November 2002). In that study it was noted that the intersection crash rate (0.09 crashes per million entering vehicles, or MEV) was below the statewide average rate of 0.24 crashes/MEV and well below the critical rate of 0.54 crashes/MEV.

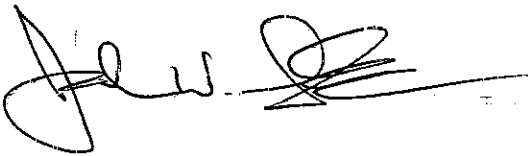
- Recommendation: Given the very good projected level of service for W. Emory Road drivers and the lack of a demonstrated safety deficiency, it is recommended that construction of a westbound left-turn lane and eastbound right-turn lane at this intersection be considered but with due regard to Knox County's overall intersection improvement priorities. Crash experience should be monitored to anticipate a demonstrated need for the turn lanes.

- *Signalization of W. Emory Road at Harrell Road*
  - Discussion: The four-hour and peak hour signal warrants are currently met for this intersection. However, many agencies including TDOT often are reluctant to install signals without satisfaction of an eight-hour warrant.
  - Recommendation: As in the discussion of turn lane warrants for this intersection, it is recommended that signalization be considered but with due regard to Knox County's overall intersection improvement priorities. Crash experience should be monitored to anticipate a demonstrated need for signalization.
- *Auxiliary lanes (W. Emory Road at site driveway)*
  - Discussion: An eastbound left-turn lane into Alysha's Vineyard subdivision is marginally warranted in the PM peak hour. The projected level of service for eastbound drivers is LOSA.
  - Recommendation: Given the minimal satisfaction of the turn lane warrant and the projected traffic conditions, it is recommended that crash experience be monitored at the driveway to anticipate the need for the eastbound left-turn lane.

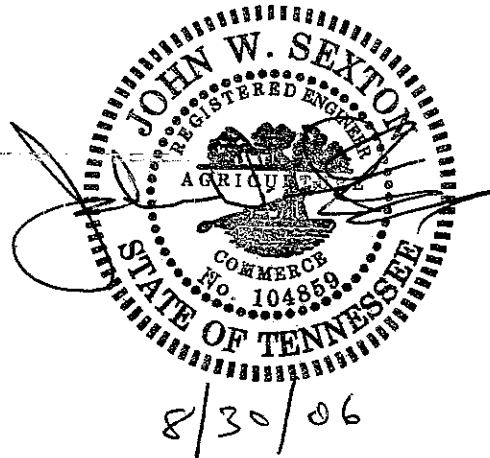
Please find enclosed the supporting figures and appendix items cited herein. Do not hesitate to call if you have any questions or wish to discuss this report.

Sincerely,

WILBUR SMITH ASSOCIATES



John W. Sexton, PE  
Senior Transportation Engineer



Enclosures:

FIGURES

- Figure 1: Location Map
- Figure 2: Site Plan
- Figure 3: Year 2006 Peak Hour Traffic
- Figure 4: Year 2009 Peak Hour Traffic Without Development
- Figure 5: Year 2009 Peak Hour Site Generated Traffic
- Figure 6: Year 2009 Peak Hour Traffic With Development

APPENDIX