

KNOXVILLE/KNOX COUNTY METROPOLITAN PLANNING COMMISSION SUBDIVISION REPORT - CONCEPT/USE ON REVIEW

► FILE #: 10-SF-15-C	AGENDA ITEM #: 10			
10-E-15-UR	AGENDA DATE: 11/12/2015			
POSTPONEMENT(S):	10/8/2015			
SUBDIVISION:	DUTCHTOWN SUBDIVISION			
APPLICANT/DEVELOPER:	GREEN RIVER HOLDINGS, LLC			
OWNER(S):	Green River Holdings, LLC			
TAX IDENTIFICATION:	118 100 & 16301 View map on KGIS			
JURISDICTION:	County Commission District 3			
STREET ADDRESS:	9957 Dutchtown Rd			
► LOCATION:	North side of Dutchtown Rd, south side of Bob Gray Rd.			
SECTOR PLAN:	Northwest County			
GROWTH POLICY PLAN:	Planned Growth Area			
WATERSHED:	Turkey Creek			
APPROXIMATE ACREAGE:	24.62 acres			
ZONING:	PR (Planned Residential)			
EXISTING LAND USE:	Residence and vacant land			
PROPOSED USE:	Detached residential subdivision			
SURROUNDING LAND USE AND ZONING:	North: Residences / BP (Business and Technology), RB (General Residential) and A (Agricultural) South: Church and residence / A-1 (General Agricultural) East: Residences / RA (Low Density Residential) West: Residences / PR (Planned residential)			
NUMBER OF LOTS:	101			
SURVEYOR/ENGINEER:	Fulgum MacIndoe & Assoc.			
ACCESSIBILITY:	Access is via Dutchtown Rd., a minor arterial street with 38' of pavement width within 70' of right-of-way.			
SUBDIVISION VARIANCES REQUIRED:	 Reduction of the intersection spacing along Dutchtown Rd., between Road A and Rennboro Rd., from 400' to 355". Reduction of the horizontal curve radius on Road B at STA 8+48.01, from 250' to 125". Reduction of the intersection radius for the right-of-way for Road C at Road A, from 25' to 9.5'. Reduction of the intersection radius for the edge of pavement for Road C at Road A, from 25' to 19.5'. Reduction of the transition radius for the cul-de-sac for Road C, from 75' to 0'. Reduction of the transition radius for the cul-de-sac for Road B, from 75' to 65'. 			

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STAFF RECOMMENDATION:

APPROVE variances 1-6 because the site's topography and shape restrict compliance with the Subdivision Regulations and the proposed variances will not create a traffic hazard.

APPROVE the Concept Plan subject to 10 conditions

1. Connection to sanitary sewer and meeting any other relevant requirements of the Knox County Health Department.

2. Provision of street names which are consistent with the Uniform Street Naming and Addressing System within Knox County (Ord 91-1-102).

3. Installation of sidewalks as identified on the concept plan. Sidewalks shall meet all applicable requirements of the Americans with Disabilities Act (ADA) and the Knox County Department of Engineering and Public Works, and shall be installed at the time the street improvements are installed for the subdivision.

4. Revising the concept plan to provide a street connection from Road A to the Coluzzi Dr. stub-out to the east.

5. Prior to obtaining a design plan approval for the subdivision, submitting documentation to the Knox County Department of Engineering and Public Works and Planning Commission Staff that shows adequate building sites meeting required setbacks are available on Lots 4, 26, 56-58, 64, 65 and 84. Those lots that cannot comply with this condition will have to be combined with adjoining lots on any final plats submitted to the Planning Commission for approval.

6. Prior to obtaining a design plan approval for the subdivision, submitting a detailed grading plan to the Knox County Department of Engineering and Public Works and Planning Commission Staff that documents all proposed lots will have adequate building sites and yard areas with driveway grades not exceeding a 15% grade. Increased side yard setbacks may be required along streets with grades of 10% or greater. Those lots that cannot comply with this condition will have to be combined with adjoining lots on any final plats submitted to the Planning Commission for approval.

7. Implementation of the intersection improvements and recommendations outlined in the Traffic Impact Study prepared by Fulghum MacIndoe & Associates, Inc. as revised on September 21, 2015. The design details and timing of the installation of the improvements shall be worked out with the Knox County Department of Engineering and Public Works during the design plan stage for the subdivision.

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

9. Placing a note on the final plat that all lots will have access only to the internal street system except for the lot (proposed Lot 66) with the existing house fronting on Bob Gray Rd.

10. A final plat application based on this concept plan will not be accepted for review by the MPC until certification of design plan approval has been submitted to the MPC staff.

APPROVE the Development Plan for up to 101 detached dwelling units on individual lots, and the requested reduction of the peripheral setback from 35' to 25', subject to 1 condition.

1. Meeting all applicable requirements of the Knox County Zoning Ordinance.

With the conditions noted, this plan meets the requirements for approval in the PR zone and the other criteria for approval of a Use on Review.

COMMENTS:

The applicant is proposing to subdivide a 24.62 acre tract into 101 detached residential lots at a density of 4.1 du/ac. The property is located on the north side of Dutchtown Rd. and the southeast side of Bob Gray Rd. The proposed subdivision will be served by public streets with access out to Dutchtown Rd. The proposed subdivision will include sidewalks on one side of all streets and will connect to the existing sidewalks located along Dutchtown Rd.

The Planning Commission recommended approval of a rezoning to PR (Planned Residential) at a density of up to 5 du/ac. on September 10, 2015 with a condition that access must be provided to both Dutchtown Rd. and Bob Gray Rd.. The Knox County Commission approved the rezoning to PR (Planned Residential) at a density of up to 5 du/ac. without the condition on October 26, 2015.

Staff has recommended a condition that a street connection be provided from Road A to the Coluzzi Dr. stubout that adjoins this property to east. This short street connection will allow for two access connections out to Dutchtown Rd.

The preliminary site grading plan identified a potential problem with having adequate building sites on approximately 17 lots within the subdivision. Staff has recommended a condition that the applicant provide a

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detailed grading plan prior to design plan approval that documents that adequate building sites are available on all proposed lots.

A Traffic Impact Study was prepared by Fulghum MacIndoe & Associates, Inc. for this development with the last revision date being September 21, 2015. The study recommends turn lane improvements on Dutchtown Rd. at the proposed subdivision entrance.

The applicant has requested a reduction of the peripheral setback from 35' to 25' along all exterior boundaries of this subdivision. The Planning Commission can approve a peripheral setback reduction down to 15' when the subdivision adjoins specific residential zoning districts. The standard rear yard setback for the low density and general residential zoning districts is 25'. The peripheral setback cannot be reduced adjoining the mobile home park at the north end of the subdivision since it is zoned BP (Business and Technology).

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

1. The proposed detached residential subdivision will have minimal impact on local services since utilities are available to serve this site.

2. The proposed low density residential development is compatible with the scale and intensity of development that has occurred in this area.

3. The proposed detached residential subdivision at a density of 4.1 du/ac, is consistent in use and density with the approved rezoning for the property.

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

1. With the recommended conditions, the proposed subdivision is consistent with all relevant requirements of the PR zoning, as well as other criteria for approval of a use on review.

2. The development is consistent with the following general standards for uses permitted on review: The proposal is consistent with the adopted plans and policies of the General Plan and Sector Plan. The use in is harmony with the general purpose and intent of the Zoning Ordinance. The use will not significantly injure the value of adjacent property. The use will not draw additional traffic through residential areas since the development has access to a minor arterial street.

CONFORMITY OF THE PROPOSAL TO ADOPTED MPC PLANS

1. The Northwest County Sector Plan proposes low density residential uses for this site. The proposed development at a density of 4.1 du/ac is consistent with the sector plan.

2. This site is located within the Planned Growth Area on the Knoxville-Knox County-Farragut Growth Policy Plan map.

ESTIMATED TRAFFIC IMPACT: 1046 (average daily vehicle trips)

Average Daily Vehicle Trips are computed using national average trip rates reported in the latest edition of "Trip Generation," published by the Institute of Transportation Engineers. Average Daily Vehicle Trips represent the total number of trips that a particular land use can be expected to generate during a 24-hour day (Monday through Friday), with a "trip" counted each time a vehicle enters or exits a proposed development.

ESTIMATED STUDENT YIELD: 54 (public and private school children, ages 5-18 years)

Schools affected by this proposal: Cedar Bluff Elementary, Cedar Bluff Middle, and Hardin Valley Academy.

• School-age population (ages 5–18) is estimated by MPC using data from a variety of sources.

• While most children will attend public schools, the estimate includes population that may be home-schooled, attend private schools at various stages of enrollment, or drop out of the public system.

• Students are assigned to schools based on current attendance zones as determined by Knox County Schools. Zone boundaries are subject to change.

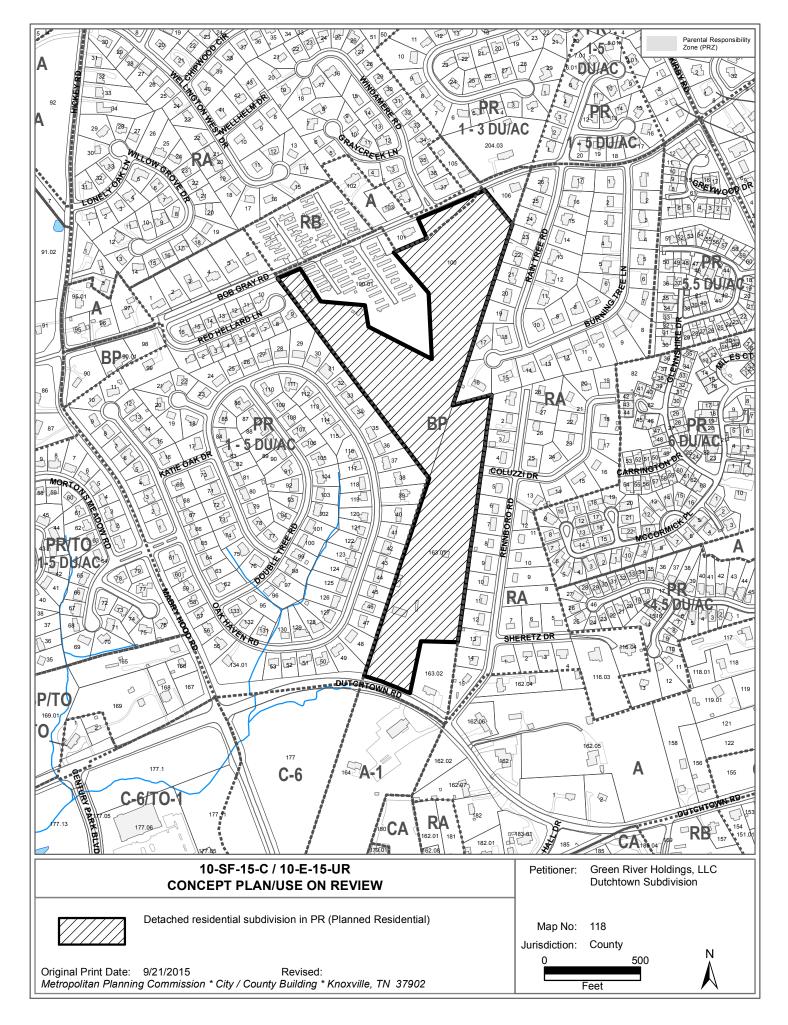
• Estimates presume full build-out of the proposed development. Build-out is subject to market forces, and timing varies widely from proposal to proposal.

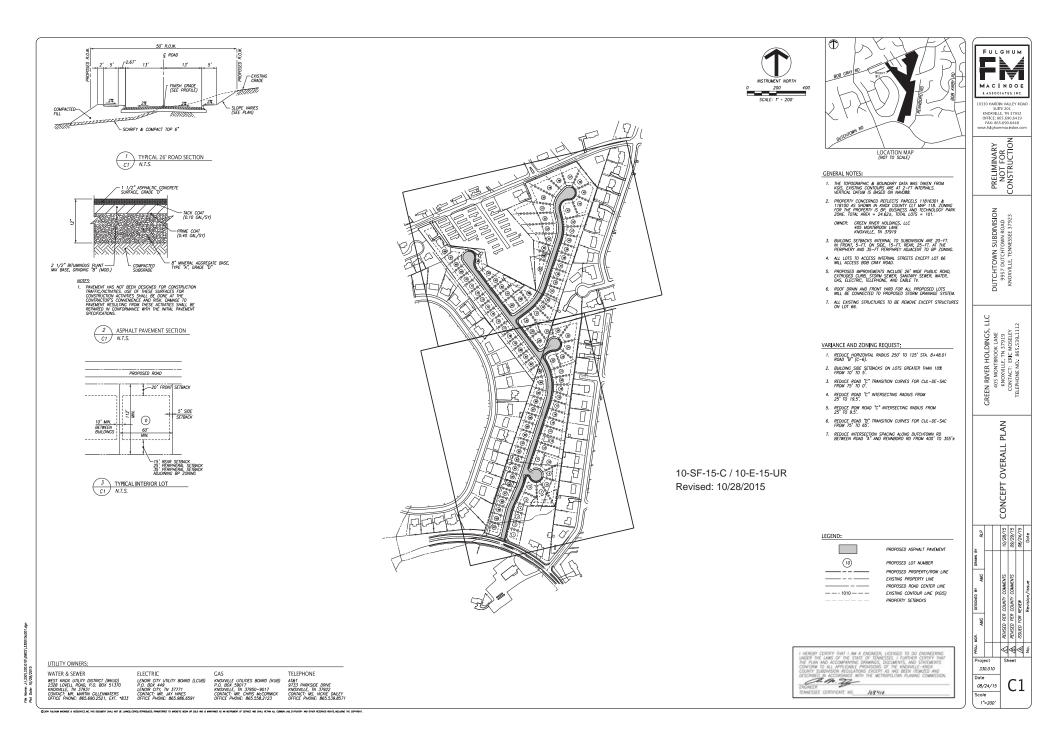
• Student yields from new development do not reflect a net addition of children in schools. Additions occur incrementally over the build-out period. New students may replace current population that ages through the system or moves from the attendance zone.

• School capacities are subject to change by Knox County Schools through building additions, curriculum or scheduling changes, or amendments to attendance zone boundaries.

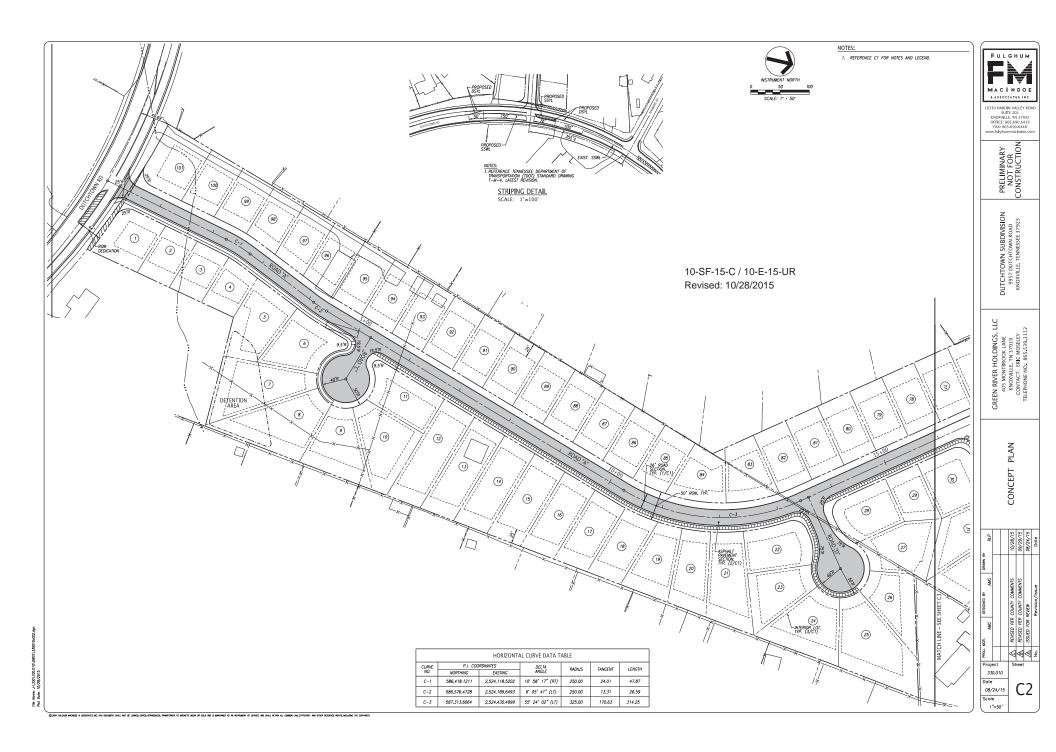
MPC's approval or denial of this concept plan request is final, unless the action is appealed to Knox County Chancery Court. The date of the Knox County Chancery Court hearing will depend on when the appeal application is filed.

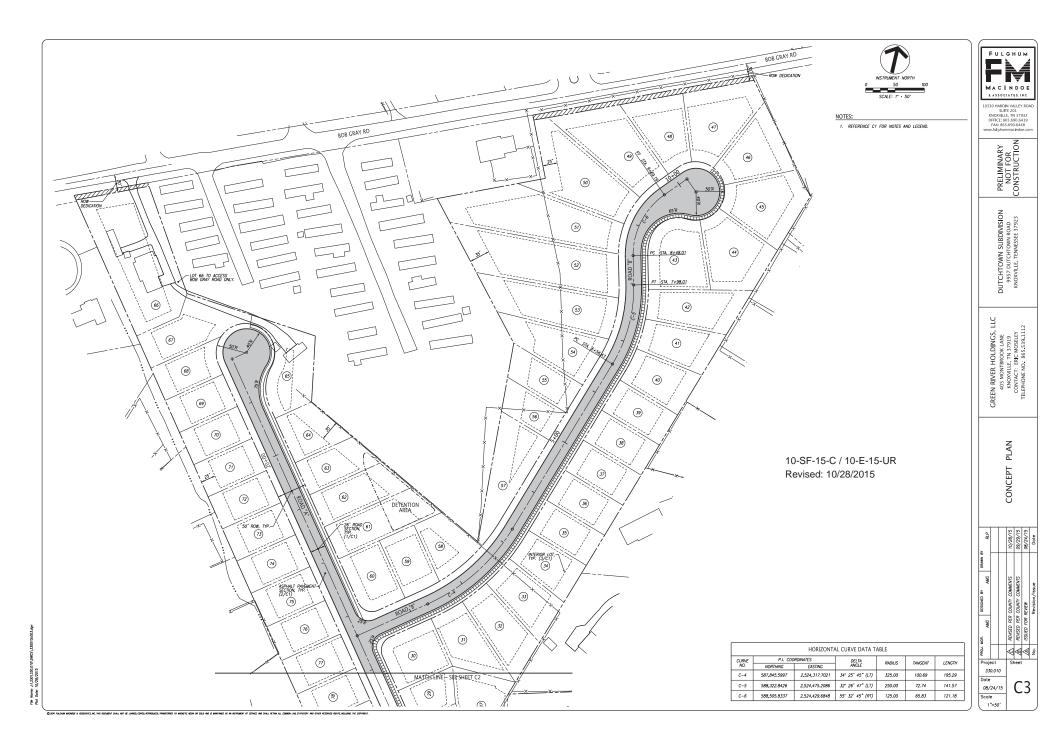
MPC's approval or denial of this use on review request is final, unless the action is appealed to the Knox County Board of Zoning Appeals. The date of the Knox County Board of Zoning Appeals hearing will depend on when the appeal application is filed.

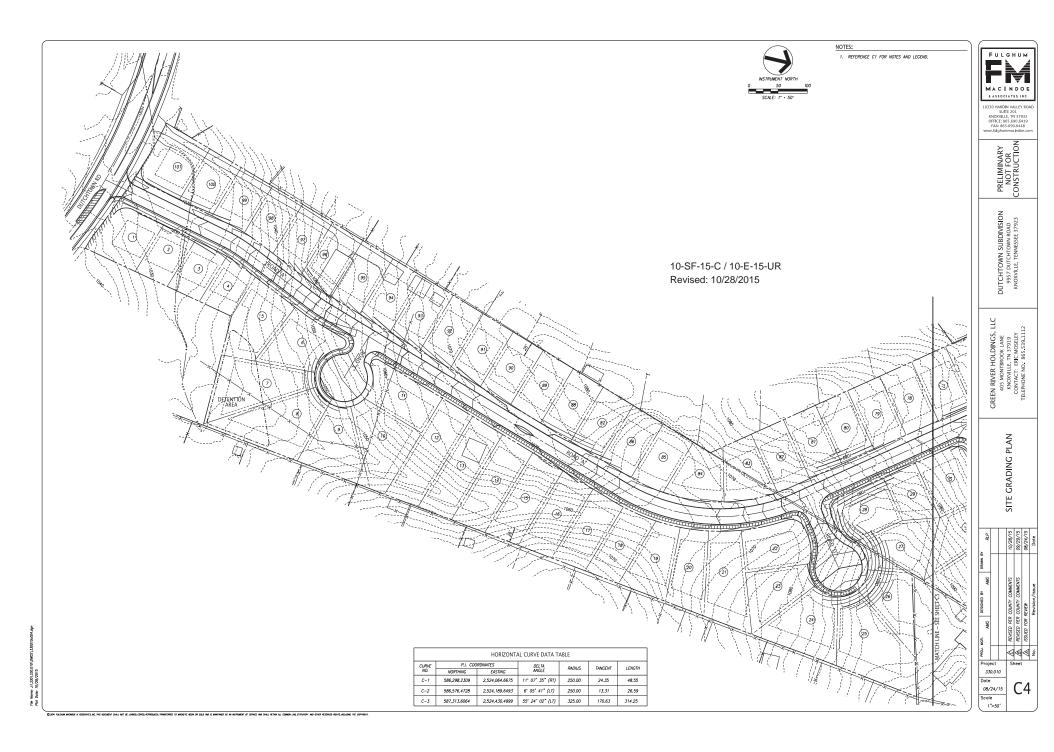


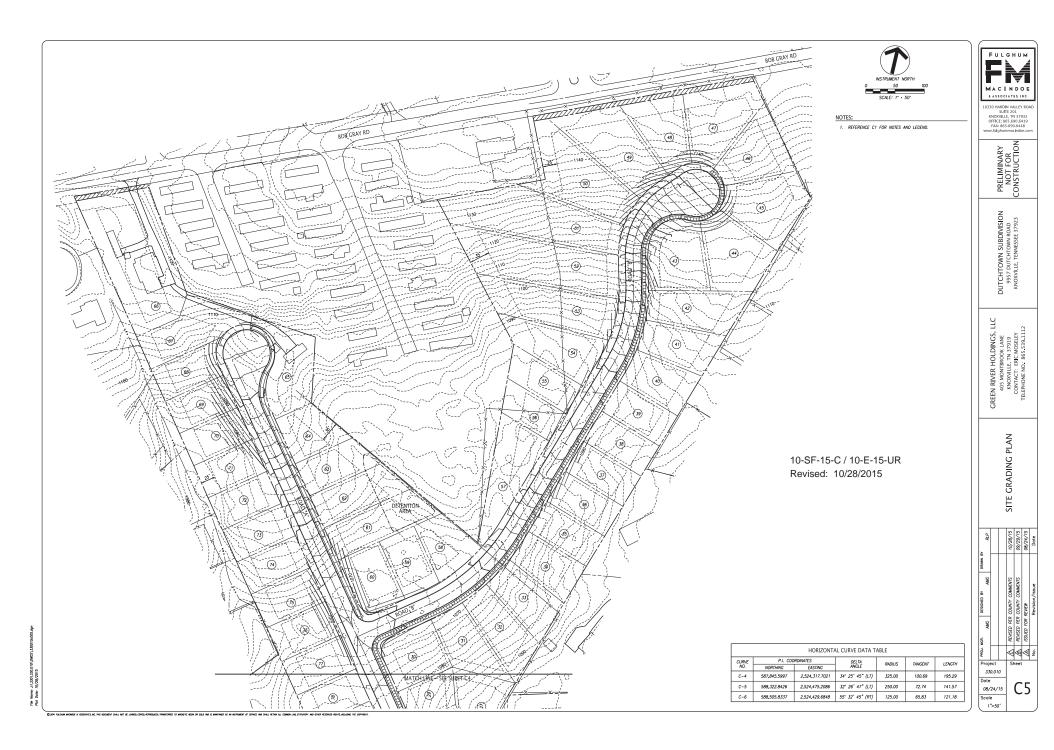


MPC November 12, 2015









DUTCHTOWN ROAD SUBDIVISION

Traffic Impact Study Dutchtown Road Knoxville, TN

A Traffic Impact Study for the Proposed Dutchtown Road Subdivision

Submitted to

Knoxville – Knox County Metropolitan Planning Commission

Revised September 21, 2015 September 1, 2015 FMA Project No. 330.010

Submitted By:





Agenda Item # 10

10-E-15-0R

9-23-15

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MPC November 12, 2015

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• Warrant 3, Peak Hour

Signal Warrants 1 eight-hr vehicular volume, 2 four-hr vehicular volume and 3 peak hour were not met after the full build out of the Dutchtown Road Subdivision. The signal warrant worksheet is included in Attachment 8.

8 Conclusions and Recommendations

8.1 Dutchtown Road @ Mabry Hood Road

At the intersection of Dutchtown Road and Mabry Hood Road, all eastbound and westbound approaches currently operate at an acceptable LOS A or B during both the AM and PM peak hour. The eastbound and westbound approach will continue to operate at a LOS B or higher after the completion of the Dutchtown Road Subdivision.

At the intersection of Dutchtown Road and Mabry Hood Road, all northbound and southbound approaches currently operate at a LOS F during both the AM and PM peak hour. The northbound and southbound approach will continue to operate at a LOS F after the completion of the Dutchtown Road Subdivision.

FMA recommends that the crash data at this intersection be monitored.

8.2 Dutchtown Road @ Project Entrance

Dutchtown Road is classified as a minor arterial. The minimum intersection spacing required for an arterial is 400 feet per the "Minimum Subdivision Regulations" for Knoxville and Knox County. The nearest road intersection to the project entrance is currently 385 feet east at the intersection of Dutchtown Road and Rennboro Road. This intersection does not meet the recommended minimum separation of 400 feet between roads on an arterial.

An eastbound left turn lane is warranted at the intersection of Dutchtown Road and the proposed project entrance. The Unsignalized intersection capacity analyses shows a 95% queue length for the eastbound left turning movement of less than one car length during both the AM and PM peak hour; therefore, the existing two-way left turn lane has adequate storage. FMA recommends the two way left turn lane be restriped to include a break at the intersection of Dutchtown Road and the project entrance.

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A westbound right turn lane is not warranted at the intersection of Dutchtown Road and the proposed project entrance.

The minimum required sight distance for a road with a posted speed limit of 40 mph is 400 feet in each direction in accordance with the "Minimum Subdivision Regulations" for Knoxville and Knox County. The proposed intersection of Dutchtown Road and the project entrance has a measured sight distance that exceeds 400-ft east and west of the intersection, which meets the requirement. FMA recommends any necessary landscaping that may be involved to maintain this sight distance and continue to comply with Knox County Engineering & Public Works.

The southbound approach of the proposed intersection of Dutchtown Road and the project entrance is expected to operate at a LOS C during the AM peak hour and a LOS B during PM peak hour after the completion of the Dutchtown Road Subdivision. The Unsignalized intersection capacity analyses shows a 95% queue length for the southbound approach of less than one car length during both the AM and PM peak hours; therefore, the proposed geometry of one 13-ft lane exiting the subdivision will be adequate.

A signal is not warranted after the full build out of the Dutchtown Road Subdivision.

8.3 Dutchtown Road @ Rennboro Road

The intersection of Dutchtown Road and Rennboro Road is expected to operate at a LOS C or better during both the AM and PM peak hours after the full build out of the Dutchtown Road Subdivision. The Unsignalized intersection capacity analyses shows a 95% queue length for the eastbound left turn lane of less than one car length during both the AM and PM peak hours; therefore, the existing left turn lane with a 150-ft storage length entering Rennboro Road will be adequate and will not interfere with the Dutchtown Road Subdivision.

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