



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

▶ **FILE #:** 1-SE-15-C  
1-I-15-UR

**AGENDA ITEM #:** 11  
**AGENDA DATE:** 1/8/2015

▶ **SUBDIVISION:** MOURFIELD ROAD SUBDIVISION  
▶ **APPLICANT/DEVELOPER:** ERIC MOSELEY  
**OWNER(S):** Volunteer Development

**TAX IDENTIFICATION:** 144 049 [View map on KGIS](#)  
**JURISDICTION:** County Commission District 5  
**STREET ADDRESS:** 1130 Mourfield Rd

▶ **LOCATION:** Northeast side of Mourfield Rd., southeast of Westland Dr.

**SECTOR PLAN:** Southwest County  
**GROWTH POLICY PLAN:** Planned Growth Area  
**WATERSHED:** Sinking Creek

▶ **APPROXIMATE ACREAGE:** 17.91 acres

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

▶ **EXISTING LAND USE:** Detached dwelling and vacant land

▶ **PROPOSED USE:** Detached Residential Subdivision

**SURROUNDING LAND USE AND ZONING:** Current land uses in the area consist of detached and attached residential dwellings. Zoning in the area is A agricultural RA and PR residential.

▶ **NUMBER OF LOTS:** 61

**SURVEYOR/ENGINEER:** Fulghum MacIndoe & Associates, Inc

**ACCESSIBILITY:** Access is via Mourfield Rd., a minor collector Rd., with a pavement width of 18-19' within a 50' wide right-of-way.

▶ **SUBDIVISION VARIANCES REQUIRED:**

1. Reduce K-value from 15 to 10 on Road C, sta 0+49.00 at intersection with Road B.
2. Horizontal curve variance from 250' to 200 at sta 12+00 of Road B
3. Variance of road grade from 12% to 12.5 % between sta 1+00 and 2+50 of Road A
4. Variance of road grade from 12% to 15% between sta 9+00 and 12+75
5. Vertical curve variance from 250' to 150' at sta 0+95 of Road A

**STAFF RECOMMENDATION:**

▶ **APPROVE** variances 1 - 5 because the site's topography restricts compliance with the Subdivision Regulations, and the proposed variances will not create a traffic hazard.

**APPROVE** the Concept Plan subject to 13 conditions:

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

Department

2. Certification on the design plan and final plat by the applicant's surveyor that there is 300 feet of sight distance in both directions on Mourfield Rd. from the proposed subdivision entrance road and from each of the proposed driveways. Approval of all lots is contingent on all these locations being field verified by the Knox County Dept., of Engineering and Public Works for adequate sight distance. Should any of the proposed access locations onto Mourfield Rd. not meet the minimum required sight distance, a new concept plan will be required for the affected lots
3. Prior to obtaining a grading permit provide the Knox County Dept. of Engineering a road profile of Mourfield Rd. that includes the proposed locations of the driveways shown on lots 58-61 and the proposed subdivision entrance road
4. Provision of back-around driveways on all lots with direct access to Mourfield Rd.
5. Place a note on the final plat that all lots with the exception of lots 58-61 will have access from the internal street system only
6. Conducting a stream determination study to determine if the existing creeks/drainage ways are waters of the State and require stream buffers and if they will effect the location of the proposed detention basins
7. Provision of the stream buffers as required by the Knox County Dept. of Engineering and Public Works
8. Meeting all applicable requirements of the Knox County Stormwater Control Ordinance
9. Meeting all other applicable requirements of the Knox County Department of Engineering and Public Works.
10. Establishment of a homeowners association for the purpose of maintaining the stormwater control system and any other commonly held assets
11. Constructing a sidewalk on one side of each street within the development. The sidewalks are to be a minimum of 5' wide with a 2' wide planting strip behind the curb. All sidewalk construction sd to be ADA compliant
12. Approval of the rezoning of this site to PR (Planned Residential) at a density equal to or greater than 3.41 du/ac by the Knox County Commission
13. 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 request for up to 61 detached dwellings on individual lots as shown on the subdivision plan subject to 2 condition**

1. Meeting all applicable requirements of the Knox County Zoning Ordinance
2. Providing a minimum of 10' of separation between all dwellings

**COMMENTS:**

The applicants are proposing to develop a detached residential subdivision containing up to 61 lots. The rezoning of this site to PR (Planned Residential) at 3.5 du/ac was recommended for approval by MPC at their December 11, 2014 meeting . Approval of this subdivision plan will be contingent on the approval of the rezoning at a density equal to or greater than the 3.41 du/ac proposed by this plan by the Knox County Commission. This matter is scheduled to be heard by County Commission on January 26, 2015.

Staff has concerns with this plan with regard to sight distance. The plan calls for the main entrance road and two driveways to access Mourfield Rd. Staff has not been able to verify that either location has the required 300 feet of sight distance. The applicant's engineer believes the sight distance can be provided at the locations in question. Staff has included a number of conditions in this recommendation that specifically address the sight distance question. We have stated that if the sight distance cannot be provided as required, then a new concept plan will be required. The verification of sight distance will be required to be completed before a grading permit is issued for this project.

A second area of concern is the proposed stream buffer along the creek that passes across the northern portion of the site. The buffer is required to be a minimum of 50' wide on each side of the creek bank. Due to the required width of the stream buffer, lot one appears to be unbuildable. The applicant believes the lot is buildable. This is a matter that will have to be resolved at the design plan stage when the detailed grading and drainage plans are reviewed. This may become a non-issue because a detention basin may have to be located in this area.

At the concept plan level the storm drainage plan typically consists of a notation on the plan where the proposed detention basins will be located. After the concept plan is approved the County Engineering Dept. will receive a detailed grading and drainage plan for their review. In this case, the detention basin shown in the northeast corner of the site will most likely need to be relocated because it would be difficult to get all of the lots to drain to this location. Relocating the detention basin may have an impact on the final lot count.

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

1. The proposed subdivision will have minimal impact on local services since water and sewer will be provided to this site.
2. The proposed detached residential subdivision at a density of 3.41 du/ac, is consistent in use and density with the recommended rezoning of the property.
3. The proposed low density residential zoning and development is compatible with the scale and intensity of the surrounding development and zoning pattern, which includes attached residential development to the west, zoned PR at a density of up to 4 du/ac.
4. The site is located within the "parental responsibility zone" for school transportation. The applicant is proposing to provide sidewalks within the development.

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

1. The proposed detached residential subdivision with the recommended conditions meets the standards for development within a PR 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 proposed subdivision will not draw significant traffic through residential neighborhoods.

CONFORMITY OF THE PROPOSAL TO ADOPTED PLANS

1. The Southwest County Sector Plan designates this property for low density residential use. The PR zoning recommended for approval for the property allows consideration of up to 3.5 du/ac. The proposed subdivision with its overall density of 3.41 du/ac is consistent with the Sector Plan and the proposed zoning designation.
2. The site is located within the Planned Growth Area on the Knoxville-Knox County-Farragut Growth Policy Plan

ESTIMATED TRAFFIC IMPACT: 658 (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.

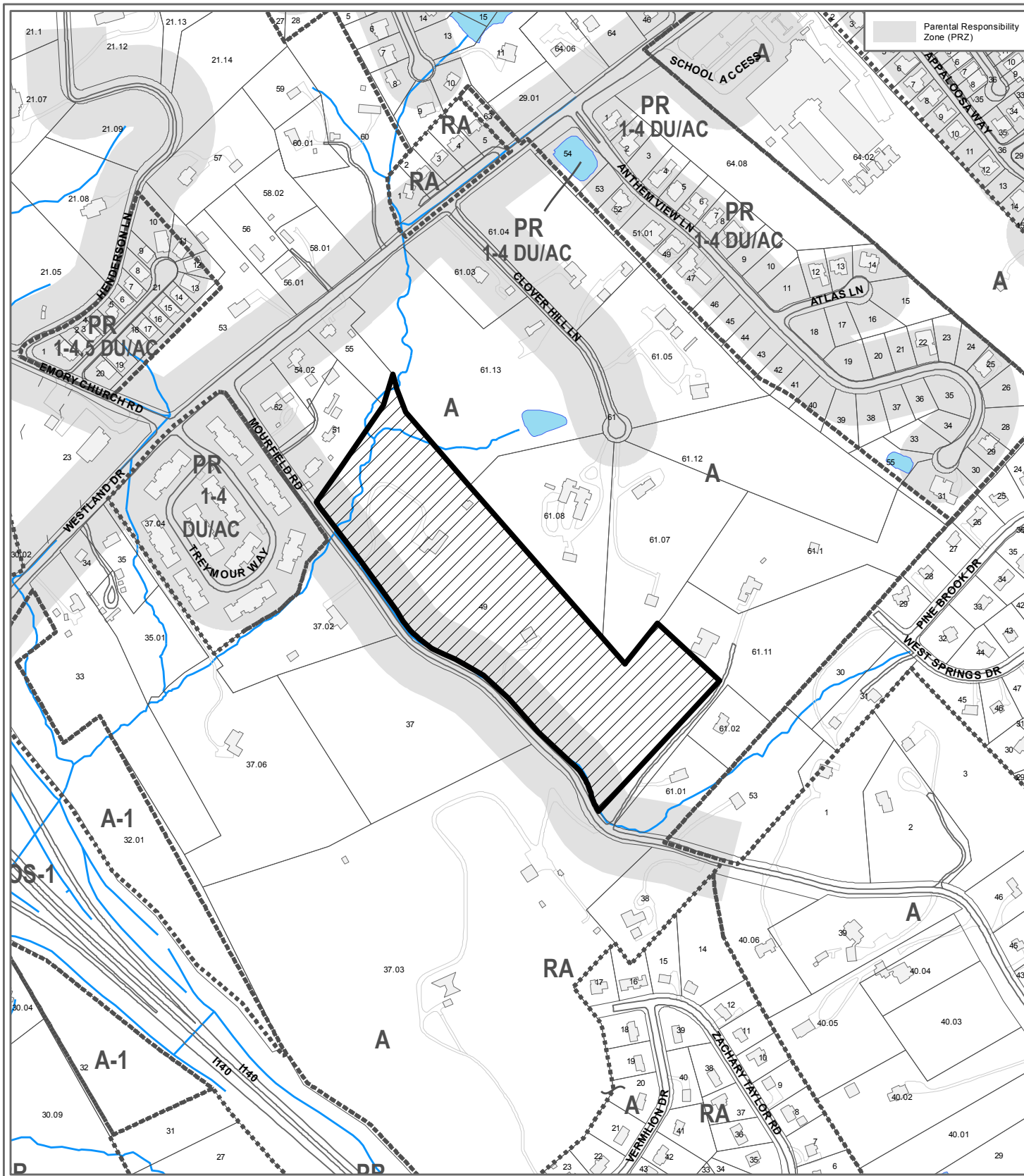
ESTIMATED STUDENT YIELD: 38 (public and private school children, ages 5-18 years)

Schools affected by this proposal: A. L. Lotts Elementary, West Valley Middle, and Bearden High.

- 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.

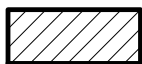
MPC's approval or denial of this concept plan request is final, unless the action is appealed to Knox County Chancery Court. The date of the Knox County Chancery Court hearing will depend on when the appeal application is filed.

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.



**1-SE-15-C / 1-I-15-UR  
CONCEPT PLAN/USE ON REVIEW**

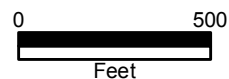
Petitioner: Moseley, Eric  
Mourfield Road Subdivision

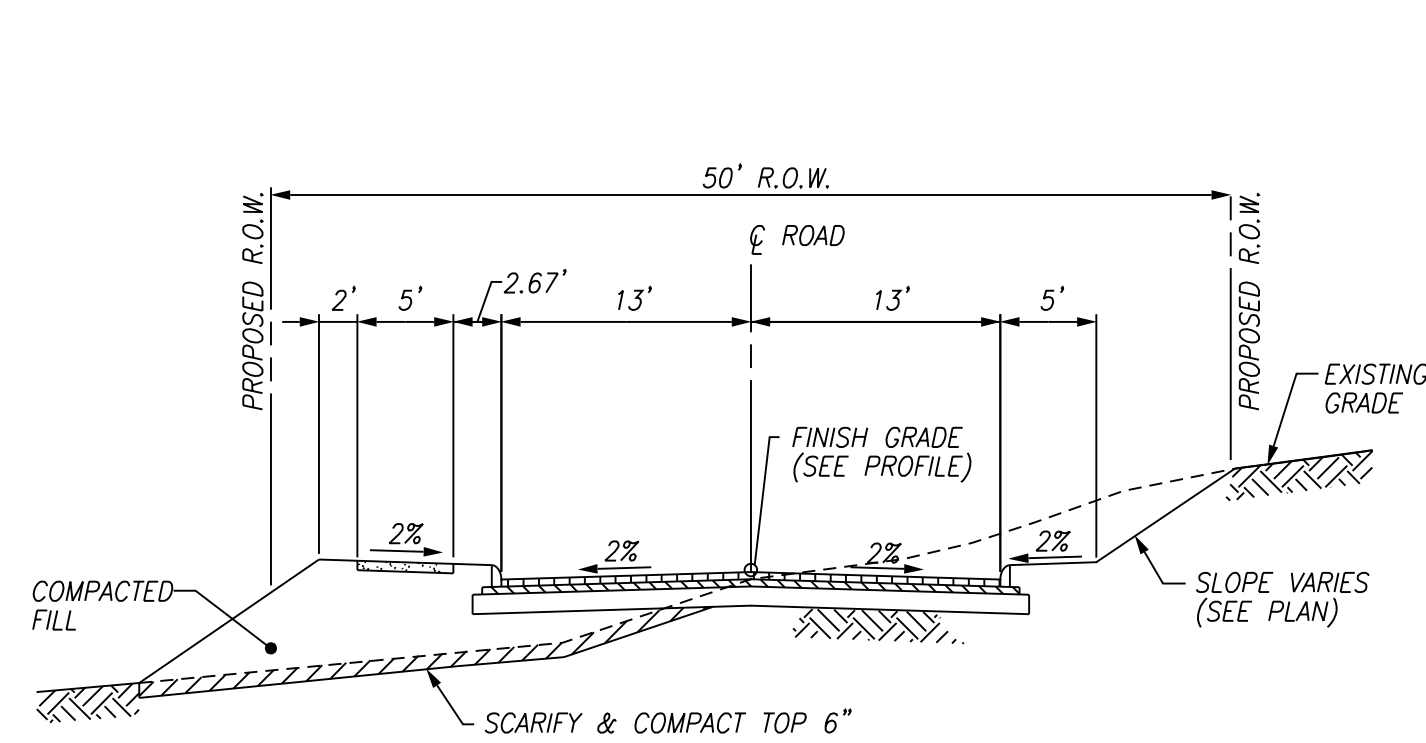


Detached Residential Subdivision in PR (Planned Residential) Pending

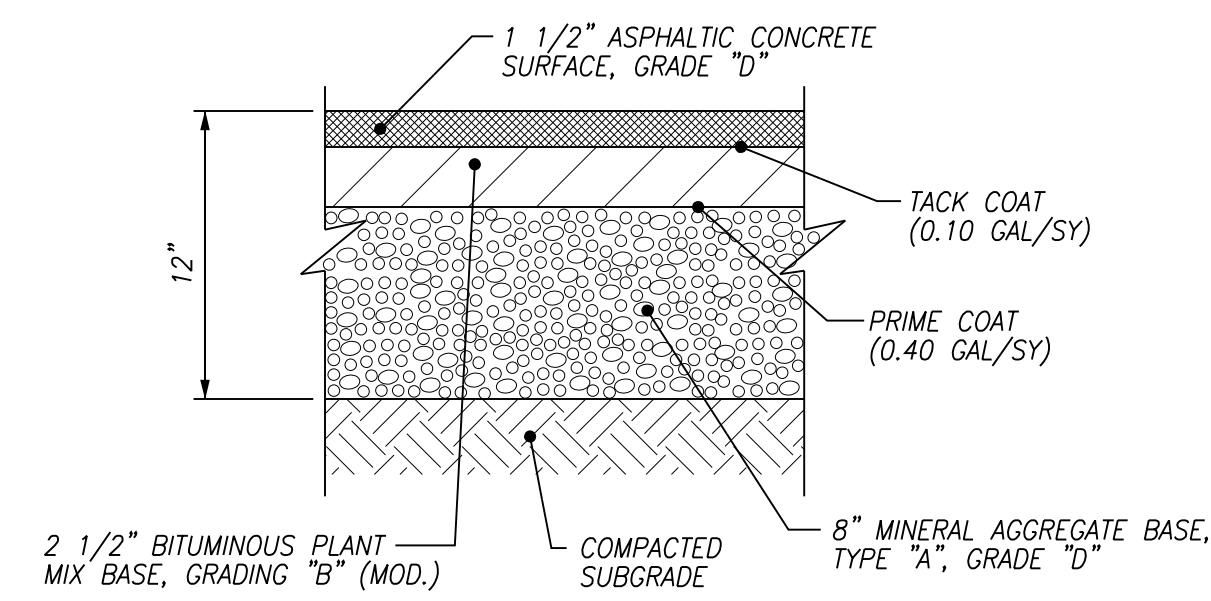
Map No: 144  
Jurisdiction: County

Original Print Date: 12/22/2014  
Revised:  
Metropolitan Planning Commission \* City / County Building \* Knoxville, TN 37902

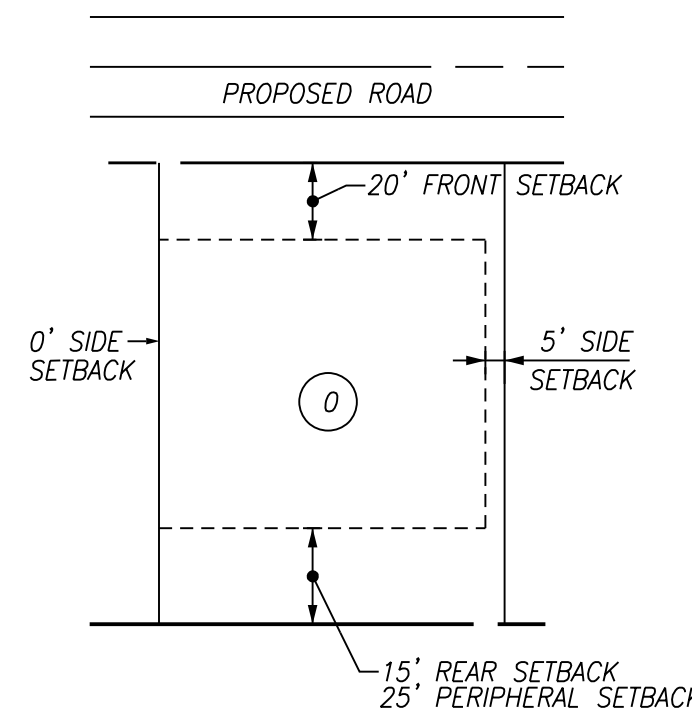




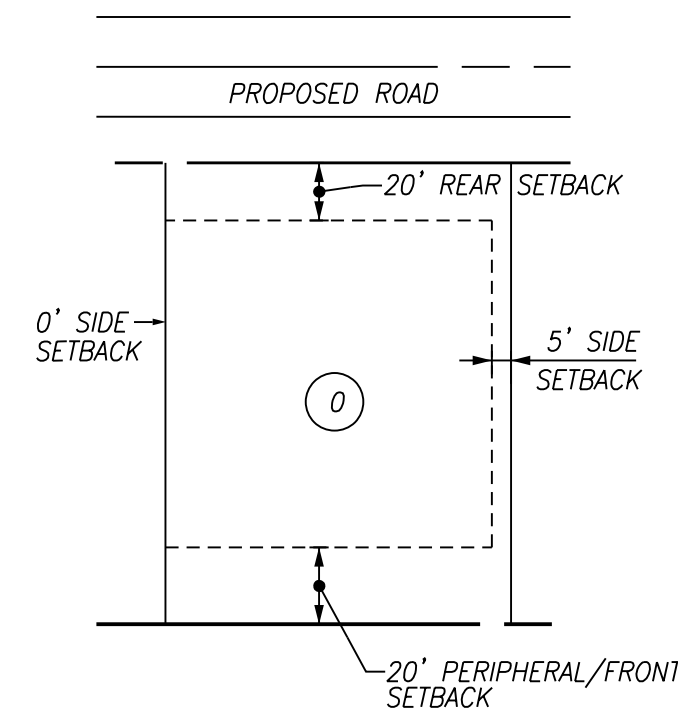
1 TYPICAL 26' ROAD SECTION  
N.T.S.



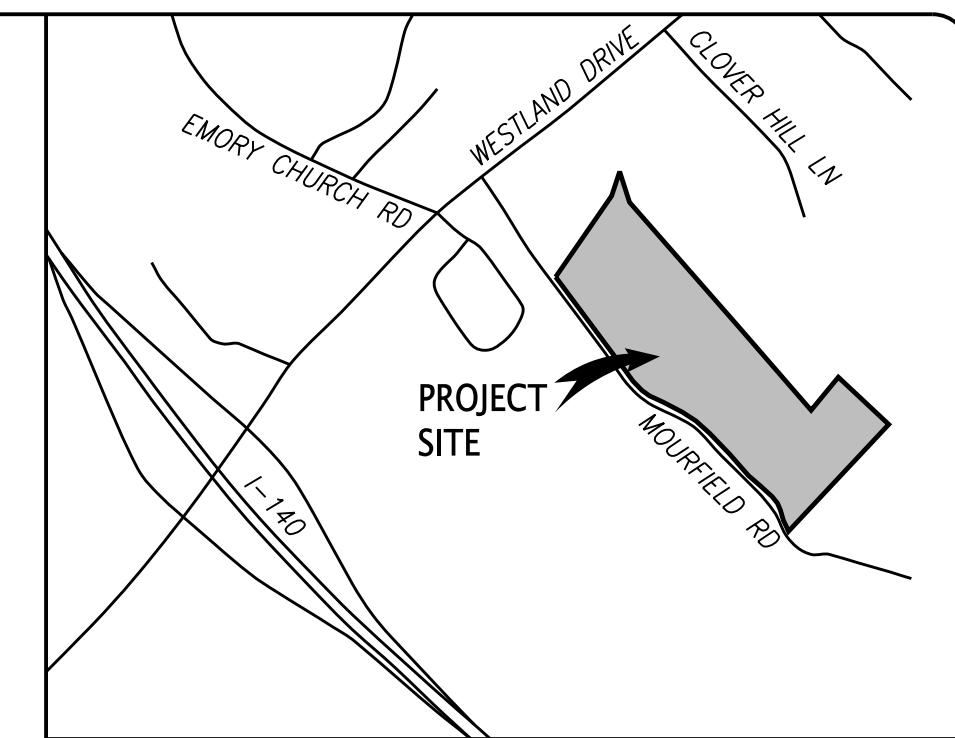
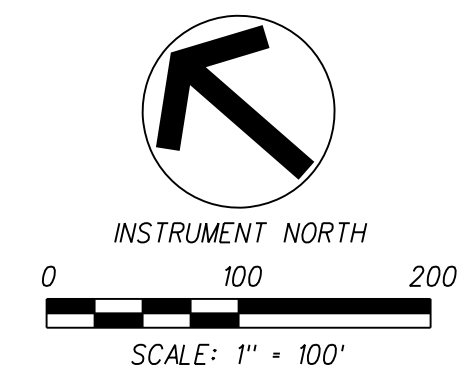
2 ASPHALT PAVEMENT SECTION  
N.T.S.



3 TYPICAL INTERIOR LOT  
N.T.S.



3 TYPICAL EXTERIOR LOT (57-60)  
N.T.S.



LOCATION MAP  
(NOT TO SCALE)



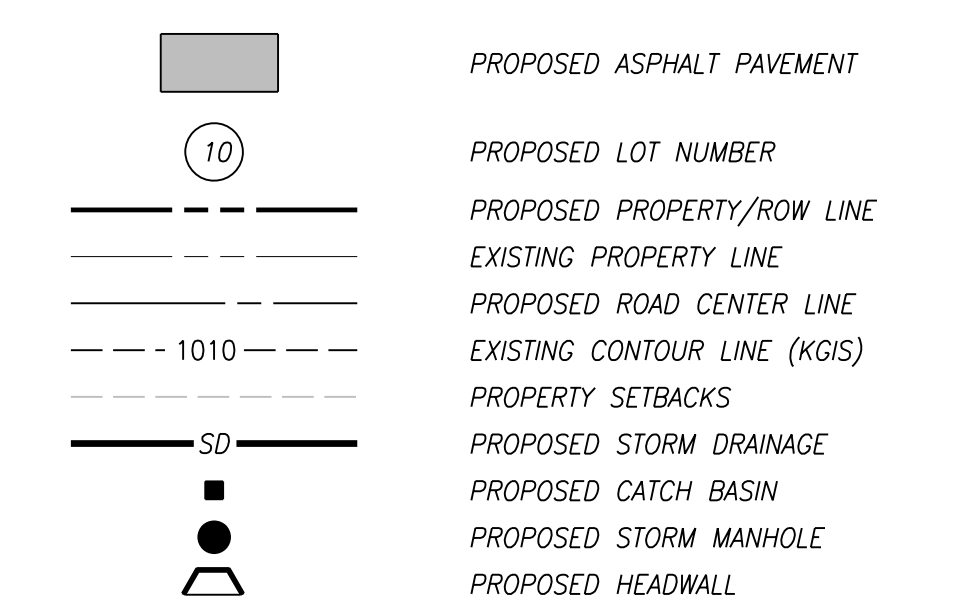
**GENERAL NOTES:**

- THE TOPOGRAPHIC & BOUNDARY DATA WAS TAKEN FROM KGIS. EXISTING CONTOURS ARE AT 2-FT INTERVALS. VERTICAL DATUM IS BASED ON NAVD83.
- PROPERTY CONCERNED REFLECTS PARCEL 144049 AS SHOWN IN KNOX COUNTY CLT MAP 144. ZONING CHANGE REQUEST FOR THE PROPERTY IS PR, PLANNED RESIDENTIAL ZONE. TOTAL AREA = 17.91± AC.  
  
OWNER: S&E PROPERTIES, LLC  
405 MONTBROOK LANE  
KNOXVILLE, TN 37919  
CONTACT: MR. ERIC MOSELEY  
PHONE NUMBER: 865.539.1112
- BUILDING SETBACKS INTERNAL TO SUBDIVISION ARE 20-FT. IN FRONT, 5-FT. ON ONE SIDE, 0-FT. ON OPPOSITE SIDE, 15-FT. REAR, AND 25-FT. AT THE PERIPHERY. BUILDING SETBACKS FOR LOTS ALONG MOURFIELD ROAD ARE 20-FT. IN FRONT, 5-FT. ON ONE SIDE, 0-FT. ON OPPOSITE SIDE, 15-FT. REAR, AND 20-FT. AT THE PERIPHERY.
- TOTAL NUMBER OF PROPOSED LOTS ARE 61 ON 17.91± AC.
- ACCESS TO LOTS IS RESTRICTED TO INTERNAL STREETS EXCEPT FOR LOTS 58, 59, 60 & 61 WHICH WILL ACCESS FROM MOURFIELD ROAD.
- PROPOSED IMPROVEMENTS INCLUDE 26' WIDE PUBLIC ROAD, EXTRUDED CURB, STORM SEWER, SANITARY SEWER, WATER, GAS, ELECTRIC, TELEPHONE, AND CABLE TV.
- A 30' GREENWAY EASEMENT WILL BE ADDED ADJACENT TO STREAM & COORDINATED WITH MPC.

**VARIANCE AND ZONING REQUEST:**

- REDUCE K-VALUE FROM 15 TO 10 ON ROAD "C", STA. 0+49.00 AT INTERSECTION OF ROAD "B".
- REZONE PROPERTY FROM AGRICULTURAL ZONE TO PLANNED RESIDENTIAL ZONE.
- BUILDING SIDE SETBACKS ON LOTS GREATER THAN 10% FROM 10' TO 5'.
- CURVE C-4 RADIUS FROM 250' TO 200' ON ROAD LENGTH OF GREATER THAN 1000'.
- ROAD SLOPE FROM 12% TO 12.5% FROM STA. 0+95.00 ROAD A TO STA. 2+54.12 ROAD A.
- ROAD SLOPE FROM 12% TO 15% FROM STA. 8+72.38 ROAD B TO STA. 12+53.60 ROAD B.

**LEGEND:**



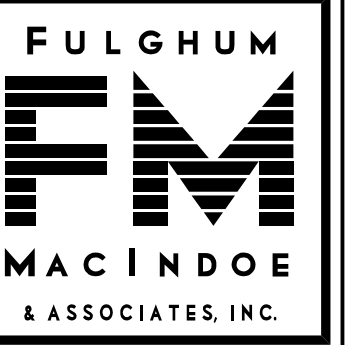
**UTILITY OWNERS:**

<b>WATER &amp; SEWER</b> FIRST UTILITY DISTRICT (FUD) 122 DURWOOD ROAD KNOXVILLE, TN 37922 CONTACT: MR. TROY WEDEKIND OFFICE PHONE: 865.966.9741	<b>ELECTRIC</b> LENOIR CITY UTILITY BOARD (LCUB) P.O. BOX 449 LENOIR CITY, TN 37771 CONTACT: MR. JAY HINES OFFICE PHONE: 865.986.6591	<b>GAS</b> KNOXVILLE UTILITIES BOARD (KUB) P.O. BOX 59017 KNOXVILLE, TN 37950-9017 CONTACT: MR. CHRIS McCORMICK OFFICE PHONE: 865.558.2123	<b>TELEPHONE</b> AT&T 9733 PARKSIDE DRIVE KNOXVILLE, TN 37922 CONTACT: MS. VICKIE DAILEY OFFICE PHONE: 865.539.8571
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1-SE-15-C  
1-I-15-UR  
Revised: 12/23/2014

I HEREBY CERTIFY THAT I AM AN ENGINEER, LICENSED TO DO ENGINEERING UNDER THE LAWS OF THE STATE OF TENNESSEE. I FURTHER CERTIFY THAT THE PLAN AND ACCOMPANYING DRAWINGS, DOCUMENTS, AND STATEMENTS CONFORM TO ALL APPLICABLE PROVISIONS OF THE KNOXVILLE-KNOX COUNTY SUBDIVISION REGULATIONS EXCEPT AS HAS BEEN ITEMIZED AND DESCRIBED IN ACCORDANCE WITH THE METROPOLITAN PLANNING COMMISSION.

ENGINEER  
TENNESSEE CERTIFICATE NO. 108410



10330 HARDIN VALLEY ROAD  
SUITE 201  
KNOXVILLE, TN 37932  
OFFICE: 865.690.6419  
FAX: 865.690.6448  
www.fulghummacindoe.com

PRELIMINARY  
NOT FOR  
CONSTRUCTION

BEALS CREEK  
SUBDIVISION  
1130 MOURFIELD ROAD  
KNOXVILLE, TENNESSEE 37922

VOLUNTEER DEVELOPMENT  
405 MONTBROOK LANE  
KNOXVILLE, TN 37919  
CONTACT: MR. ERIC MOSELEY  
TELEPHONE NO.: 865.539.1112  
EMAIL: ERICMOSELEY@BELLSOUTH.NET

CONCEPT OVERALL PLAN

PROJ. MGR.	DESIGNED BY	DRAWN BY	DATE
AMG	AMG	R/LP	12/23/14
			11/24/14
			No.

Project	330.008
Date	11/24/14
Scale	1"=100'

C1

File Name: 1-1-15-UR-1130-008-0005-130005-001.dgn  
Plot Date: 12/23/2014

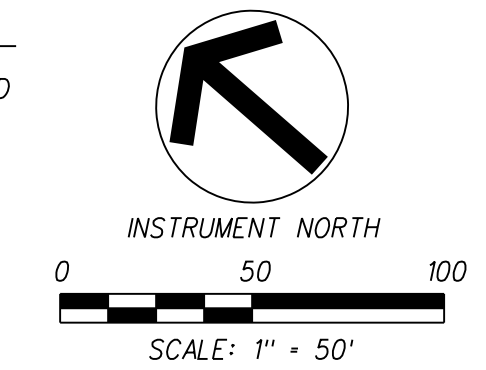


File Name: \\13201\13201\088\DWG\132008-002.dwg  
 Plot Date: 12/23/2014



NOTES:

1. REFERENCE C1 FOR NOTES AND LEGEND



1-SE-15-C  
 1-I-15-UR  
 Revised: 12/23/2014

CURVE NO.	P.I. COORDINATES		DELTA ANGLE	RADIUS	TANGENT	LENGTH
	NORTHING	EASTING				
C-1	567,901.2467	2,534,716.6036	21° 11' 06" (RT)	150.00	28.05	55.46
C-2	567,933.1589	2,534,835.7782	26° 05' 49" (LT)	150.00	34.76	68.32



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PRELIMINARY  
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 CONTACT: MR. ERIC MOSELEY  
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 EMAIL: ERICMOSELEY@BELLSOUTH.NET

CONCEPT PLAN

PROJ. MFR.	DESIGNED BY	DRAWN BY	DATE
	AMG	AMG	12/23/14
			11/24/14

Project	Sheet
330.008	C2
Date	11/24/14
Scale	1"=50'









December 29, 2014

**Mr. Dan Kelly**

Development Services Manager,  
Development Plan Review  
Knox County Metropolitan Planning Commission

RE: 12-I-14-RZ Mourfield Road, Beals Creek

Mr. Kelly or To Whom It May Concern,

My name is Sam Mayes. My residence is located at 1405 Mourfield Rd, Knoxville, TN. I am writing in regard to the conceptual plan that was submitted for the subdivision that is currently proposed along Mourfield Rd. My concerns include the density of the proposed layout, safety concerns with access from the homeowners onto Mourfield Rd, adherence to local, state, and federal stormwater regulations, erosion concerns due to the steep topography for the existing and proposed layouts, and the aging infrastructure along Mourfield Rd.

As a longtime resident of Knoxville that is vested in my community, a professional engineer (Civil) registered in the State of Tennessee and as a member of the Knox County Industrial Development Board, I would like to see the aforementioned issues addressed by the MPC before the subdivision is approved by the MPC. The current layout proposes 10-foot easement between houses, which may be okay for flat topography but is not practical for property that is so steep. Knox County needs to ensure that forethought is input into the process and the land is not ravaged and the downstream homeowner's or adjacent community left holding the bag.

Following is a list of my concerns that should be addressed prior to approval of the property by the MPC. Assurances should be addressed by a conceptual plan being resubmitted that addresses each of the items listed below.

**Proposed Lot Density**

Currently a lot density of 3.5 residences per acre is proposed. Due to the steep slopes and the road layout I believe that 2.0 residences per acre is more practical. I base this off of the fact that the detention basins will be required to be larger than normal due to the larger volume of stormwater runoff due to steeper slopes, runoff increasing due to more roof area, driveways, and roads.

A second reason for the lower density is that the roadway, as laid out, is shown running across the slopes instead of perpendicular to the topographic contours. This is going to cause severe elevation changes on both side of the road to access the residences. This causes concerns with erosion and also is not ideal as residences will be located either 20 to 30 feet above or below the road elevation. This could be alleviated with lower lot densities.

### Roadway Safety Concerns

Mourfield Rd is a very treacherous road, especially in the winter and especially at the southern end of the subdivision.

- There are safety issues with multiple driveways having direct access onto Mourfield Rd. For 30 mph speed, a minimum sight distance of 300-feet has to be available before access is approved. Private driveways should not be allowed to access Mourfield from the new development. Especially backing of a car onto the roadway from a private residence.
- It is doubtful that a sight distance of 300-feet is available for the main entrance. This should be proven in the field prior to MPC approval.
- The Knox County regulations (62-60, pg 35) state that the local street maximum grade is 12%. Road "B" on the drawings shows an existing grade of 15%. Road A shows a grade of 12.5%. They should not be approved for greater than 12% unless there is a valid reason for doing so. If the allowable grade has to be raised to 15% to make the subdivision developable, development should not be allowed. Raising from 12% to 15% should be the exception and not the norm. I know that the regulations say that for exceptions it can be raised to 15%. If 15% was the intent, they would not have listed 12% as the maximum grade in the regulations.

### Erosion Control

- Guidelines were passed in 2012 for the "Hillside & Ridgetop Protection Area Development Standards. These are guidelines for developments in which the slopes are greater than 16%. The guidelines should be honored by the developer as slopes on the northern and southern sides of Road B are very steep. Measures should be enforced to minimize sloughing off of embankments and stormwater erosion velocities upstream and downstream of Road B. There are enough examples of slope failure in the report to understand that Knox County doesn't want to keep approving of developments without doing their due diligence first.
- Lots 35 – 39 are bisected by fairly long and steep slopes that would require very controlled erosion control structures to be put into place prior to construction as they are adjacent to the drainage channel for Mourfield Road. With high stormwater velocities being realized in the drainage channel on Mourfield Rd, any sediment that enters the drainage channel will be transported into the creek immediately. As a side note, these are not very good building sites for the houses that would eventually inhabit the lots.

### Stormwater Concerns

There is a major concern with the layout of the subdivision as shown and the ability to accommodate the density of lots that was requested due to the fact that the drawings do not show stormwater control devices that are located in compliance with current county, state and federal regulations. I understand that the detailed stormwater design and calculations will be performed later during the design phase, **but the lot density has to be based off of a conceptual plan that is somewhat close to realistic.** The layout and location of the stormwater devices as shown is not good on the conceptual drawings. Additionally, current Knox County residents that are located downstream of the proposed subdivision have been flooded due to previous developments being constructed along Westland Drive in which stormwater requirements were not enforced.



- The concept drawing and the preliminary construction drawing are not realistic in that they depict a detention pond being located at the northern corner of the site within two streams that are converging. One has been classified as a wet weather stream. The Detention Pond cannot be located at that particular location as the stormwater regulations DO NOT allow the Detention Pond to be located within an existing stream, much less two streams. Waters flowing from the site have to be collected before they are discharged to waters off-site. Off-site streams cannot be directed through new stormwater detention structures, therefore the current locations of the detention basins are not realistic or optimal.
- Stormwater regulation require ALL stormwater from the development to be collected separately from off-site water before being discharged off-site. This is not the case in these plans as water is NOT shown as being collected at the southern part of the site before being discharged off-site. For some reason, detention ponds are located upstream of the lowest point on the site. The subdivision entrance is located close to where a detention pond would probably be required, therefore the subdivision entrance location is not realistic which also affects the sight distance that can be achieved.
- Water from the proposed subdivision would also have to be kept separate before it can be discharged off-site with the existing channel stormwater along Mourfield Rd. The existing channel overflows now when major storms occur. Lots 35, 36, and 58 through 61 are not realistic as residential sites.
- Lot #'s 1, 2, 6, 7, and 8 show the 50-foot buffer. They are not practical for building on if the buffer is honored. The plan is not realistic in this area.
- The size of the detention basins as shown are not realistic for the current stormwater regulations which require it to be sized for a 2-yr to a 100-year storm event. Property along Mourfield road is a very steep and has very fast times of concentration, therefore receive high volumes of water very fast. The size of detention basins that are shown are conceptual, but still not realistic.

Bottom line, we want to make sure that all stormwater regulations are adhered to and enforced for any future development. MPC should not include a plan that is a picture and not realistic in working effectively.

#### **Existing Utilities along Mourfield Rd**

The existing waterline along Mourfield Rd has had several breaks over the past 3 to 4 years because of aging infrastructure. Agreement should be made with First Utility District for a new line or upgrade prior to more services being added to an inadequate existing water main.

In closing, I would like to thank you for your time and ask that you forward my concerns with your letter to the MPC before the next meeting. The purpose of the MPC should be to make sure that conceptual plans are realistic and not just pictures that are not reasonable. I am sure that calculations and good design efforts have to occur before many of the items that I mentioned can be determined, but the plan that was submitted is so far off from meeting regulations that it cannot be



approved until it is redone in accordance with current NPDES stormwater regulations and other issues which I noted. Please contact me concerning any of my comments or for any questions.

Sincerely,

Sam Mayes, P.E.

(865) 388-7211