

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

▶ **FILE #:** 5-SB-18-C **AGENDA ITEM #:** 12  
 5-E-18-UR **AGENDA DATE:** 6/14/2018

POSTPONEMENT(S): 5/10/2018

▶ **SUBDIVISION:** VERTEX DEVELOPMENT ON BRAKEBILL ROAD

▶ **APPLICANT/DEVELOPER:** VERTEX DEVELOPMENT TN, LLC

OWNER(S): Vertex Development

TAX IDENTIFICATION: 72 267 AND 26701

[View map on KGIS](#)

JURISDICTION: County Commission District 8

STREET ADDRESS: 521 Brakebill Rd

▶ **LOCATION:** West side of Brakebill Rd., south side of Hammer Rd.

SECTOR PLAN: East County

GROWTH POLICY PLAN: Urban Growth Area

WATERSHED: Holston and French Broad, Sinking East Creek and Swan Pond Creek

▶ **APPROXIMATE ACREAGE:** 94.9 acres

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

▶ **EXISTING LAND USE:** Vacant forested land and a residence

▶ **PROPOSED USE:** Detached Residential Subdivision and Future Development

SURROUNDING LAND USE AND ZONING: North: Residences - A (Agricultural), PR (Planned Residential) & RA (Low Density Residential)  
 South: Vacant land and residence - A (Agricultural)  
 East: Residences, place of worship and vacant land - A (Agricultural)  
 West: Residences and vacant land - A (Agricultural) & PR (Planned Residential)

▶ **NUMBER OF LOTS:** 325

SURVEYOR/ENGINEER: Batson, Himes, Norvell & Poe

ACCESSIBILITY: Access is via Brakebill Rd., a major collector street with an 18' pavement width within a 55' right-of-way, and Hammer Rd., a minor collector street with a 16' pavement width within a 50' right-of-way.

▶ **SUBDIVISION VARIANCES REQUIRED:**

1. Vertical curve variance on Road L at Sta 3+35, from k=25 LVC = 250.75' to K=17.5 LVC = 175'.
2. Vertical curve variance on Road L at Sta 5+25, from k=25 LVC = 34' to k=18.4 LVC = 25'.
3. Vertical curve variance on Road I at Sta 0+50, from k=25 LVC = 93.75' to k=18.6 LVC = 70'.
4. Vertical curve variance on Road I at Sta 10+65, from k=25 LVC = 230.25' to k=18.3 LVC = 150'.
5. Vertical curve variance on Road H at Sta 10+60, from k=25 LVC= 175' to k=15 LVC = 105'.

6. Horizontal curve variance on Road B at Sta 17+75, from 250' to 200'.
7. Minimum lot width variance for the attached residential Lots 105 - 140 and Lots 158-199, from 25' to 19.67'.

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**STAFF RECOMMENDATION:**

► **DENY variance 1 due to safety issues.**

**APPROVE variances 2-7 because the site's topography restricts compliance with the Subdivision Regulations and variances will not create a traffic hazard.**

**APPROVE the Concept Plan subject to 14 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. To provide for pedestrian connections between the subdivision, future apartments and commercial development site, and existing commercial development at the I-40 and Strawberry Plains Pike interchange, revise the concept plan to include a sidewalk along the Brakebill Rd. street frontage.
4. Installation of all sidewalks as identified on the revised 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. A bond shall be provided to the Knox County Department of Engineering and Public Works by the developer in an amount sufficient to guarantee the installation of the sidewalks.
5. Implementation of the street and intersection improvements and recommendations outlined in the Traffic Impact Study prepared by Ajax Engineering as revised on May 31, 2018 and as required by the Knox County Department of Engineering and Public Works, Knoxville Department of Engineering and Tennessee Department of Transportation (TDOT). 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, Knoxville Department of Engineering and TDOT during the design plan stage for the subdivision.
6. The widening of Brakebill Rd. from Strawberry Plains Pike through the intersection of Hammer Rd. to a minimum width of 20', including the installation of the left turn lane at the subdivision entrance, shall be completed prior to the approval of a final plat for the subdivision.
7. The widening of Hammer Rd. from Brakebill Rd. to the Hammer Rd. subdivision entrance, to a minimum width of 20' with required tapers on the west side of the entrance. The Hammer Rd. widening will not be required until the northern entrance for the subdivision is opened. The northern entrance shall be required when the platted lots for the subdivision reaches 150 lots. Hammer Rd. shall not be used as a construction entrance until the Hammer Rd. widening is completed.
8. Prior to obtaining a design plan approval for the subdivision, submitting a proposed amenity plan for the subdivision to Planning Commission staff for review and approval. While sidewalks and common areas are identified on the concept, with 325 proposed lots, amenities such as a swimming pool, clubhouse, picnic and park areas (including a dog park) should be provided.
9. Prior to obtaining a design plan approval for the subdivision, submitting a landscape plan for the 25' deep common area strips that border Brakebill Rd. and Hammer Rd. to Planning Commission staff for review and approval. The landscape plan should include existing vegetation when possible or include a combination of new landscaping and berms.
10. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.
11. Placing a note on the final plat that all lots will have access only to the internal street system.
12. Including a line of sight easement on the final plat across Lots 252, 253 and the common area in order to provide the needed sight distance for the curve in Road B.
13. Prior to certification of the final plat for the subdivision, establishing a property owners association that will be responsible for the maintenance of the common areas, recreational amenities and drainage system.
14. Submitting to Planning Commission staff prior to final plat review by the Planning Commission, the certification of design plan approval form as required by the Knoxville-Knox County Subdivision Regulations.

► **APPROVE the Development Plan for up to 247 detached residential units and 78 attached residential units on individual lots, subject to 2 conditions.**

1. The proposed apartment and commercial area developments are subject to separate use on review applications and approval.
2. 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 develop this 94.9 acre tract with a mix of detached residential units, attached residential units, apartments and commercial uses. This application includes a detached residential subdivision with 247 detached residential lots and 78 attached residential lots on 76.76 acres at a density of 4.23 du/ac. The proposed subdivision will have access to both Brakebill Rd. and Hammer Rd.

The plan also shows a future apartment development site of 14.04 acres at the intersection of Brakebill Rd. and Hammer Rd. with proposed access to Brakebill Rd. A future 4.10 acre commercial site is also identified just south of the apartment site on Brakebill Rd. The PR zoning district allows consideration of a commercial development site with the size of the development being based on the number of residential units. The proposed apartment and commercial area developments are subject to separate use on review applications and approval.

The proposed attached residential units will be developed in clusters of four to seven units as two story townhouse units. Each unit will be approximately 1400 square feet with a one car garage. The proposed units are narrow with a width of 19.67'. While this is not an issue with an apartment or condominium development, with each unit being tied to a lot, the lots do not meet the minimum lot frontage requirement of 25'. The applicant is requesting a variance from the minimum lot frontage requirement.

This site was rezoned to PR (Planned Residential) at a density of up to 9 du/ac by Knox County Commission on March 26, 2018 (2-C-18-RZ).

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

1. The proposed 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 other development that has occurred in this area near the interchange of I-40 and Strawberry Plains Pike.
- 3 The proposed residential subdivision at a density of 4.23 du/ac, is consistent in use and density with the approved rezoning for the property.
4. With the recommended street improvements identified in the Traffic Impact Study, traffic flow in the area should continue to function at acceptable levels.

**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 is in 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 two collector street.

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

1. The East County Sector Plan proposes medium density residential uses for this site. The proposed subdivision at a density of 4.23 du/ac is consistent with the sector plan.
2. This site is located within the Urban Growth Area on the Knoxville-Knox County-Farragut Growth Policy Plan map.

**ESTIMATED TRAFFIC IMPACT:** A traffic impact study was prepared by the applicant. The findings of that study were used in formulating the recommendations of this staff report.

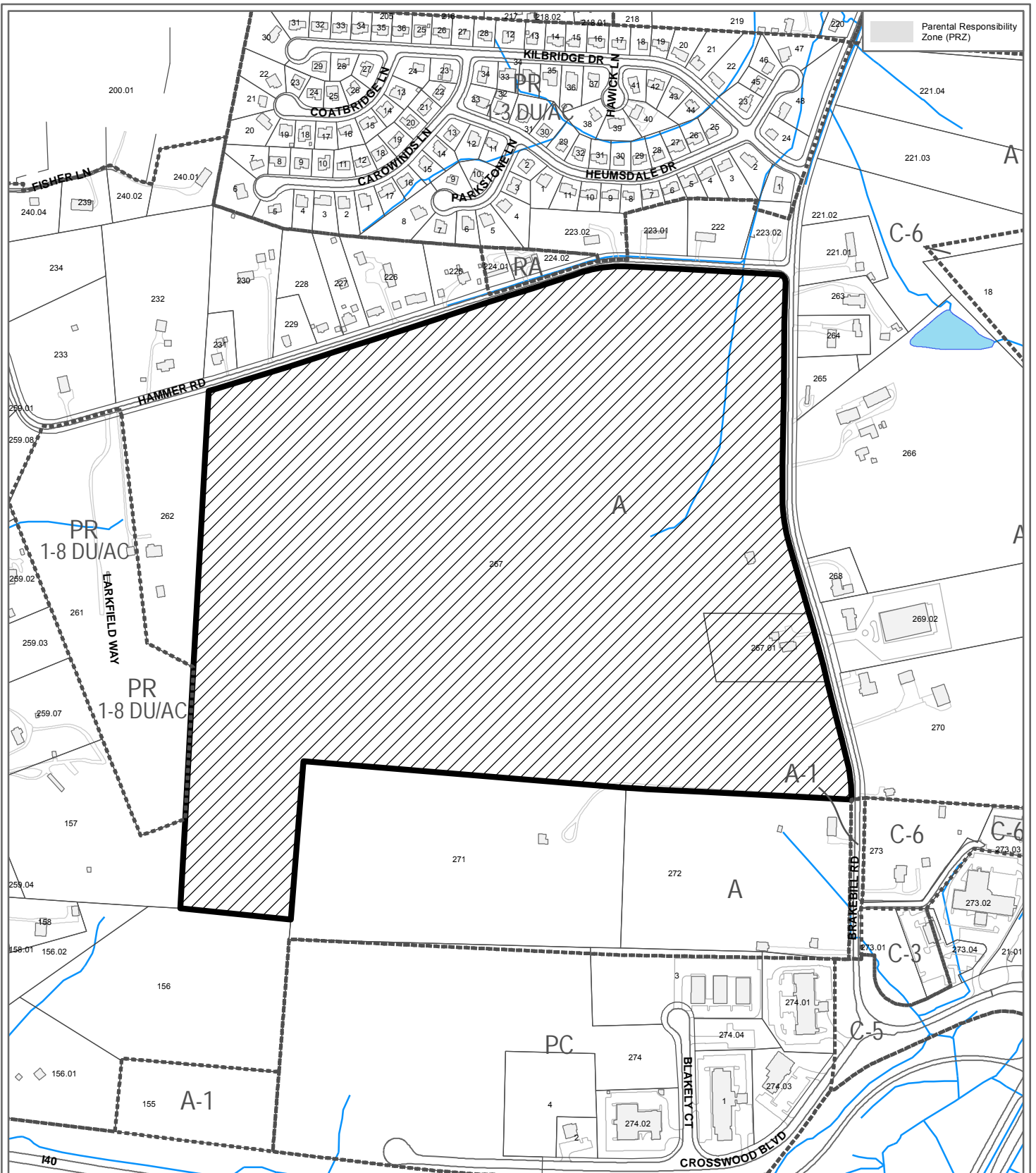
**ESTIMATED STUDENT YIELD:** 84 (public school children, ages 5-18 years)

Schools affected by this proposal: Sunnyview Pr/Chilhowee Int, Carter Middle, and Carter High.

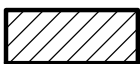
- School-age population (ages 5–18) is estimated by MPC using data from a variety of sources.
- Students are assigned to schools based on current attendance zones as determined by Knox County Schools. Zone boundaries are subject to change.
- Estimates presume full build-out of the proposed development. 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.

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.



**5-SB-18-C / 5-E-18-UR  
CONCEPT PLAN/USE ON REVIEW**



Detached Residential Subdivision and Future Development in PR (Planned Residential)

Original Print Date: 4/16/2018

Revised:

Metropolitan Planning Commission \* City / County Building \* Knoxville, TN 37902

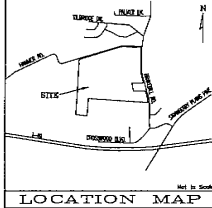
Petitioner: Vertex Development TN, LLC  
Vertex Development on Brakebill Road

Map No: 72

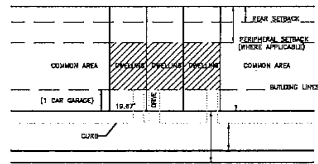
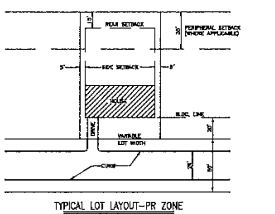
Jurisdiction: County







- NOTES:
1. ALL EXISTING ARE SHOWN AND SUBJECT TO CHANGE ON THE FINAL PLAN.
  2. A 4' SETBACK SHALL BE MAINTAINED EXCEPT WHERE SHOWN ALONG ALL ROAD LINES, 5' EACH SIDE OF INTERIOR ROAD LINES.
  3. A 10' SETBACK EXCEPT WHERE SHOWN SHALL BE MAINTAINED EXCEPT WHERE SHOWN AS NOTED.
  4. THE PROPERTY EXTENT APPROXIMATELY 64.00 ACRES. 74.26 ACRES IS SHOWN AND THE SHOWN SHALL BE MAINTAINED AND TO BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT. THE REMAINING 19.74 ACRES IS SHOWN AS RESERVED FOR FUTURE DEVELOPMENT. THE SHOWN AND RESERVED DEVELOPMENT SHALL BE SUBJECT TO THE APPROVAL OF A LATER SET.
  5. THIS PROPERTY IS ZONED R-1.
  6. ALL ROAD PROFILES ARE BASED ON THE EXISTING TOPOGRAPHY.
  7. UTILITIES:
    - BASED ON AVAILABLE UTILITIES RECORDS
    - ELECTRIC: AVAILABLE UTILITIES RECORD
    - SEWER: AVAILABLE UTILITIES RECORD
    - WATER: AVAILABLE UTILITIES RECORD
    - TELEPHONE: AVAILABLE UTILITIES RECORD
  8. BOUNDARY SURVEY BY MAP.
  9. VARIANCES APPROVED BY THE METROPOLITAN PLANNING COMMISSION ON ITS MAY 10, 2017 MEETING ARE AS FOLLOWS:
    - A) HORIZONTAL CURVE LENGTH FROM 300' TO 200', 575' TO 475', 800' TO 700'
    - B) VERTICAL CURVE LENGTH FROM 100' TO 120', 120' TO 140', 140' TO 160', 160' TO 180', 180' TO 200'
    - C) VERTICAL CURVE LENGTH FROM 200' TO 180', 180' TO 160', 160' TO 140', 140' TO 120', 120' TO 100'
    - D) VERTICAL CURVE LENGTH FROM 100' TO 120', 120' TO 140', 140' TO 160', 160' TO 180', 180' TO 200'
    - E) VERTICAL CURVE LENGTH FROM 200' TO 180', 180' TO 160', 160' TO 140', 140' TO 120', 120' TO 100'
  10. GEOTECHNICAL ENGINEER SHALL VERIFY THE SOILS STRENGTH OF ALL FILL SOILS.
  11. SHOWN SHALL BE MAINTAINED FROM 100' TO 120' FROM THE LINE FROM THE POINT OF THE BEGINNING OF THE ROAD OR ADJACENT TO THE LOT LINE.
  12. VARIANCES APPLIED FOR ALL LOTS IS LIMITED TO INTERIOR ROAD SYSTEM ONLY.
  13. VARIANCES APPLIED BY THE METROPOLITAN PLANNING COMMISSION ON ITS MAY 10, 2017 MEETING ARE AS FOLLOWS:
    - A) HORIZONTAL CURVE LENGTH FROM 300' TO 200', 575' TO 475', 800' TO 700'
    - B) VERTICAL CURVE LENGTH FROM 100' TO 120', 120' TO 140', 140' TO 160', 160' TO 180', 180' TO 200'
    - C) VERTICAL CURVE LENGTH FROM 200' TO 180', 180' TO 160', 160' TO 140', 140' TO 120', 120' TO 100'
    - D) VERTICAL CURVE LENGTH FROM 100' TO 120', 120' TO 140', 140' TO 160', 160' TO 180', 180' TO 200'
    - E) VERTICAL CURVE LENGTH FROM 200' TO 180', 180' TO 160', 160' TO 140', 140' TO 120', 120' TO 100'
  14. SHOWN SHALL BE MAINTAINED FROM 100' TO 120' FROM THE LINE FROM THE POINT OF THE BEGINNING OF THE ROAD OR ADJACENT TO THE LOT LINE.
  15. SHOWN SHALL BE MAINTAINED FROM 100' TO 120' FROM THE LINE FROM THE POINT OF THE BEGINNING OF THE ROAD OR ADJACENT TO THE LOT LINE.
  16. SHOWN SHALL BE MAINTAINED FROM 100' TO 120' FROM THE LINE FROM THE POINT OF THE BEGINNING OF THE ROAD OR ADJACENT TO THE LOT LINE.



Revised: 5/30/2018

OWNER/DEVELOPER:  
**VERTEX DEVELOPMENT TN, LLC**  
 670 STEVENS DISTRICT  
 100 CARLETONS LANE  
 KNOXVILLE, TN 37909  
 PHONE: (615) 584-8124



CERTIFICATION OF CONCEPT PLAN  
 I HEREBY CERTIFY THAT I AM AN ENGINEER LICENSED TO PRACTICE ENGINEERING UNDER THE LAWS OF THE STATE OF TENNESSEE. I FURTHER CERTIFY THAT THIS PLAN AND ACCOMPANYING BOUNDARY, EASEMENTS, AND UTILITIES CONFORM TO ALL APPLICABLE REGULATIONS OF THE KNOX COUNTY SUBDIVISION REGULATIONS (CRP) AS HAS BEEN FILED, RECORDED, AND ACCEPTED AS A REPORT FILED WITH THE METROPOLITAN PLANNING COMMISSION.

REGISTERED (ARCHITECT)  
 TENNESSEE CONTRACT NO. \_\_\_\_\_

**DATSON, HIMES, NORFELD, & FOX**  
 REGISTERED ENGINEERS & LAND SURVEYORS  
 1324 PATERSON DRIVE  
 KNOXVILLE, TENNESSEE 37909  
 PHONE: 615-584-3800  
 FAX: 615-584-8473

DESIGNED DBM  
 DRAWN SEW  
 CHECKED DBM

5-SB-18-C  
 5-M-10-UR

NO.	DATE	REVISION	APPR.
1	5/31/18	ADDED ATTACHED LOTS, RETURN TO 1"-100"	
2	5/30/18	REVISED FOR MPC COMMENTS	

SCALE  
 1" = 50'  
 DATE  
 03/20/18  
 DEED REFERENCES:  
 INSTR. #200005120031972  
 DEED BOOK 2311, PAGE 995

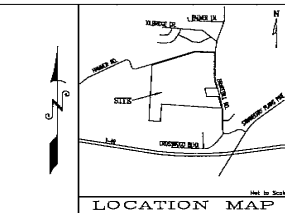
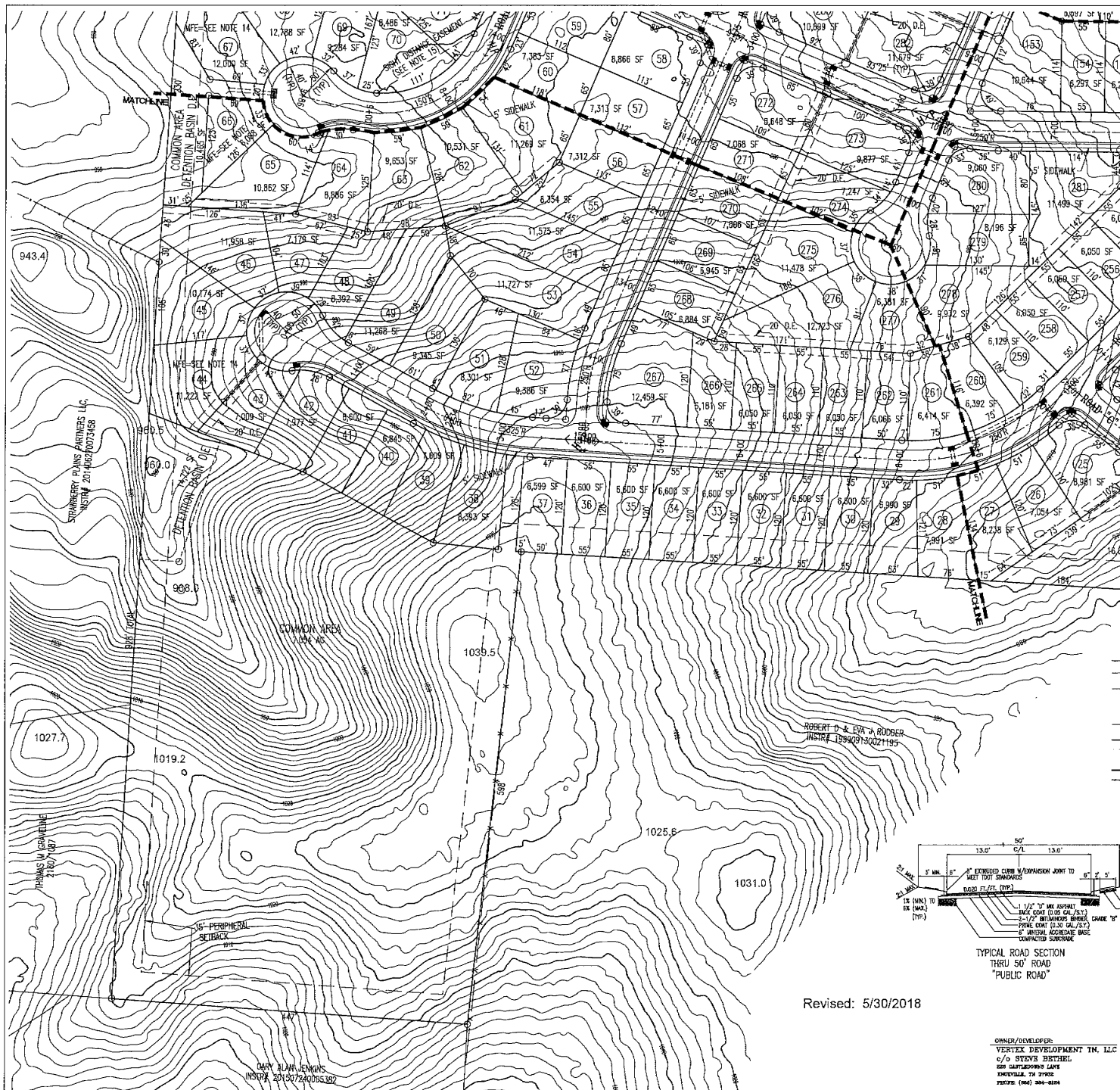
CONCEPT PLAN FOR  
**VERTEX DEVELOPMENT, LLC - BRAKEHILL RD.**  
 CLT MAP 72, PARCELS 267 & 267.01  
 DISTRICT 8, KNOX COUNTY, TENNESSEE

25040-SP2  
 SHEET 2 OF 7 SHEETS  
 03/20/2018-C-10114

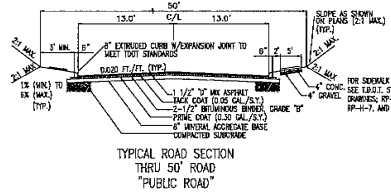
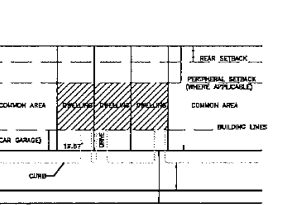
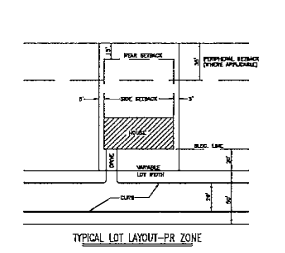
MPC June 14, 2018

Agenda Item # 12





- NOTES:
1. ALL DIMENSIONS ARE SHOWN AND SUBJECT TO CHANGE ON THE FINAL PLAN.
  2. A 10' PERMANENT VEGETATION PROTECTION BUFFER EXISTS ALONG ALL ROAD LINES, 5' EACH SIDE OF SIDEWALK ROAD LINES.
  3. A 10' VEGETATION BUFFER EXISTS 7.5' EACH SIDE OF CENTERLINE OF MAINWAY NUMBER AS SHOWN.
  4. THE PROPERTY CORNER APPROXIMATELY 84.00 ACRES, 19.28 ACRES IS SHOWN WITH THE SHADE ONLY BOUNDARY WITH AN 8' SIDEWALK ATTACHED WITH THE AREA OF PROTECTIVE TREE IS PROVIDED FOR AN UNDEVELOPED DEVELOPMENT. ALL DIMENSIONS ARE SHOWN FOR THE PROTECTIVE TREE, A MINIMUM OF 10' PERMANENT BUFFER SHALL BE MAINTAINED FOR THE PROTECTIVE TREE AT A LEAST ONE.
  5. THIS PROPERTY IS ZONED R-1.
  6. ALL ROAD PROFILES ARE BASED ON 10% GRADE.
  7. UTILITIES:
    - EXISTING: UNDEVELOPED UTILITIES SHOWN
    - EXISTING: UNDEVELOPED UTILITIES SHOWN
    - EXISTING: UNDEVELOPED UTILITIES SHOWN
    - EXISTING: UNDEVELOPED UTILITIES SHOWN
  8. DRAINAGE SYSTEM BY MAP:
  9. SURVEY APPROVED BY THE METROPOLITAN PLANNING COMMISSION ON 05 MAY 11.
  10. HORIZONTAL CURVE LENGTH FROM 200' TO 200', STA 11+75.00 TO 11+75.00
  11. VERTICAL CURVE LENGTH FROM 200' TO 100', STA 11+75.00 TO 11+75.00
  12. VERTICAL CURVE LENGTH FROM 100' TO 100', STA 11+75.00 TO 11+75.00
  13. VERTICAL CURVE LENGTH FROM 100' TO 100', STA 11+75.00 TO 11+75.00
  14. VERTICAL CURVE LENGTH FROM 100' TO 100', STA 11+75.00 TO 11+75.00
  15. HORIZONTAL CURVE LENGTH FROM 200' TO 200', STA 11+75.00 TO 11+75.00
  16. GEOMETRIC DESIGN SHALL COMPLY WITH THE SLOPE CRITERIA ON ALL PAVEMENTS.
  17. MINIMUM CLEARANCE FROM OVERHEAD POWER LINES SHALL BE MAINTAINED FROM THE WORK OF THE RESIDENTIAL BARRIERS OR OTHERWISE TO THE LINES.
  18. VERTICAL CLEARANCE FOR ALL LOTS IS LIMITED TO 10' FROM ROAD SYSTEM ONLY.
  19. MINIMUM CLEARANCE OF 10' SHALL BE MAINTAINED FROM THE WORK OF THE RESIDENTIAL BARRIERS OR OTHERWISE TO THE LINES.
  20. MINIMUM CLEARANCE FOR ALL LOTS IS LIMITED TO 10' FROM ROAD SYSTEM ONLY.
  21. MINIMUM CLEARANCE OF 10' SHALL BE MAINTAINED FROM THE WORK OF THE RESIDENTIAL BARRIERS OR OTHERWISE TO THE LINES.
  22. MINIMUM CLEARANCE FOR ALL LOTS IS LIMITED TO 10' FROM ROAD SYSTEM ONLY.
  23. MINIMUM CLEARANCE OF 10' SHALL BE MAINTAINED FROM THE WORK OF THE RESIDENTIAL BARRIERS OR OTHERWISE TO THE LINES.
  24. MINIMUM CLEARANCE FOR ALL LOTS IS LIMITED TO 10' FROM ROAD SYSTEM ONLY.
  25. MINIMUM CLEARANCE OF 10' SHALL BE MAINTAINED FROM THE WORK OF THE RESIDENTIAL BARRIERS OR OTHERWISE TO THE LINES.



Revised: 5/30/2018

WATSON, JIMMIS, NORVILL, & FOX  
REGISTERED ENGINEERS & LAND SURVEYORS  
150 W. MAIN ST., SUITE 200  
MEMPHIS, TENNESSEE 38103  
PHONE: 901-528-8472  
FAX: 901-528-8473

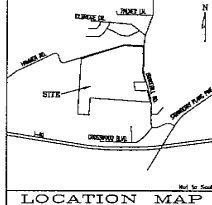
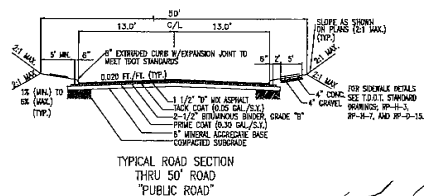
DESIGNED DBI	SCALE	50 25 0 25 50 100
DRAWN SEW	1" = 50'	SCALE: 1" = 50'
CHECKED DBI	DATE	03/20/18
5-SB-10-C	REVISION	APPR.
5-E-10-UR	NO. DATE	

DEED REFERENCES:  
DEED BOOK 2311, PAGE 595

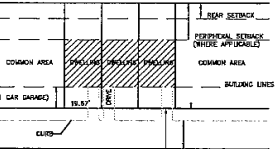
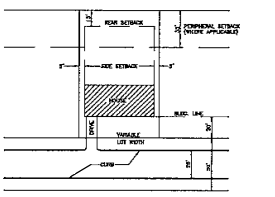
CONCEPT PLAN FOR  
VERTEX DEVELOPMENT, LLC-BRAKEBILL RD.  
CLT MAP 72, PARCELS 267 & 287.01  
DISTRICT 8, KNOX COUNTY, TENNESSEE

25040-SP3  
SHEET 3 OF 7 SHEETS  
1/2018/2018-C-0111





- NOTES:
1. ALL DIMENSIONS ARE SCALED AND SUBJECT TO CHANGE ON THE FINAL PLAN.
  2. A 10' BUFFER, WIDTH AND CENTERLINE (MARKER STAKES) SHALL BE MAINTAINED ON EACH SIDE OF INTERIOR ROAD LINES.
  3. A 10' LOT LINE ENCROACHMENT EXCEPT 7.5' EACH SIDE OF CENTERLINE OF MAINWAY SHALL BE MAINTAINED.
  4. THE PROPERTY CONTAINS APPROXIMATELY 14.00 ACRES. 7.5' BUFFER IS MAINTAINED WITH 24\"/>
  - 5. THIS PROJECT IS ZONED R-1.
  - 6. ALL ROAD PROFILES ARE BASED ON THE TOPOGRAPHY.
  - 7. UTILITIES:
    - WATER: UNDESIGNED UTILITIES BOARD
    - SEWER: UNDESIGNED UTILITIES BOARD
    - SEE KNOXVILLE UTILITY BOARD
    - TELEPHONE: UNDESIGNED
  - 8. REZONING SUBJECT BY OWNER.
  - 9. UNUSUAL APPROVED BY THE METROPOLITAN PLANNING COMMISSION ON 04/14/10.
    - A) MINIMUMS ARE AS FOLLOWS:
      - 1) HORIZONTAL CURVE LENGTH FROM 250' TO 500', SEE 1747-1748, ROAD "D"
      - 2) HORIZONTAL CURVE LENGTH FROM 500' TO 750', SEE 1749, ROAD "D"
      - 3) HORIZONTAL CURVE LENGTH FROM 750' TO 1000', SEE 1750, ROAD "D"
      - 4) HORIZONTAL CURVE LENGTH FROM 1000' TO 1500', SEE 1751, ROAD "D"
      - 5) HORIZONTAL CURVE LENGTH FROM 1500' TO 2000', SEE 1752, ROAD "D"
      - 6) HORIZONTAL CURVE LENGTH FROM 2000' TO 2500', SEE 1753, ROAD "D"
      - 7) MINIMUM LOT WIDTH FROM 24 FEET TO 114 FEET FOR LOTS 188-14 & 188-15.
  - 10. COTTERILL ENGINEER SHALL VERIFY THE SHAPE BENCHMARK ON ALL FILL SLOPES.
  - 11. UNUSUAL FLOOR ELEVATION FOR LOTS 145 & 146 IS ONE FOOT ABOVE THE BENCH OF THE SECTION BENCH OR AN ADJACENT TO THE LOT.
  - 12. VEHICULAR ACCESS FOR ALL LOTS IS LIMITED TO INTERIOR ROAD SYSTEM ONLY.
  - 13. UNUSUAL GRADES OR INTERFERENCES OF LOT TO BE MADE BEHIND PROPERTY AND APPROVED BY STATE DEPARTMENT OF TRANSPORTATION.
  - 14. UNUSUAL FLOOR ELEVATION FOR LOTS 145 & 146 IS ONE FOOT ABOVE THE BENCH OF THE SECTION BENCH OR AN ADJACENT TO THE LOT.
  - 15. ALL SLOPE REQUIREMENTS SHALL BE MAINTAINED AS SHOWN ON THIS PLAN.
  - 16. ALL SLOPE REQUIREMENTS SHALL BE MAINTAINED AS SHOWN ON THIS PLAN.



TYPICAL LOT LAYOUT FOR SINGLE FAMILY ATTACHED  
1/4\"/>

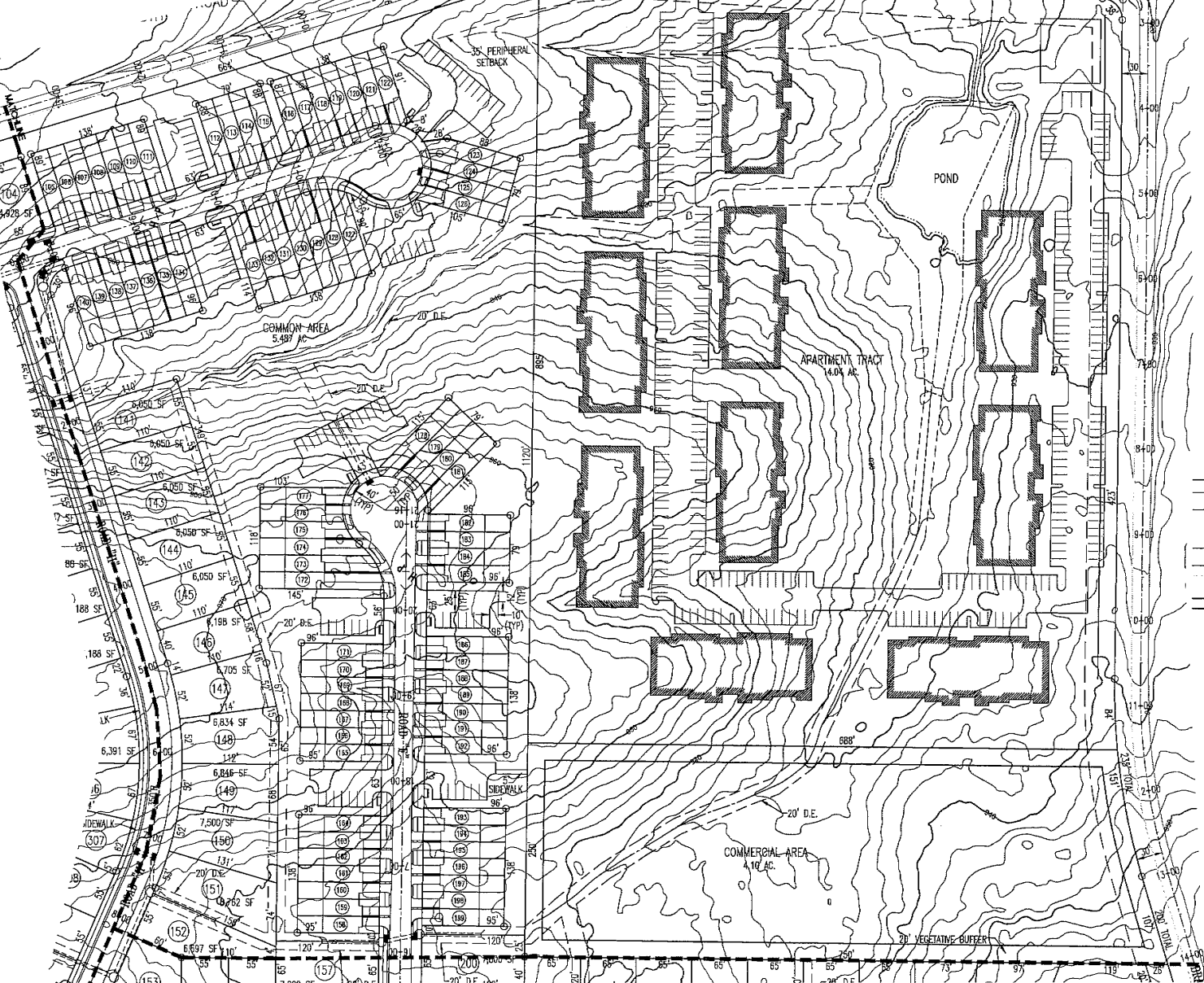
Revised: 5/30/2018

OWNER/DEVELOPER:  
**VERTEX DEVELOPMENT TN, LLC**  
 c/o STEVE BRIDGEMAN  
 808 CARTERSVILLE LANE  
 KNOXVILLE, TN 37916  
 PHONE: (606) 366-8114



CERTIFICATION OF CONCEPT PLAN  
 I HEREBY CERTIFY THAT I AM AN ENGINEER LICENSED TO PRACTICE ENGINEERING UNDER THE LAWS OF THE STATE OF TENNESSEE. I FURTHER CERTIFY THAT THIS PLAN AND ACCOMPANYING DIMENSIONS, SPECIFICATIONS, AND STATEMENTS OF WORK ARE THE RESULT OF MY OWN PERSONAL AND INDEPENDENT PROFESSIONAL SUPERVISION AND CONTROL AND THAT I AM A MEMBER OF THE PROFESSIONAL SOCIETY OF REGISTERED PROFESSIONAL ENGINEERS OF THE STATE OF TENNESSEE. I HAVE NOT BEEN RECALLED, DECEASED, OR ADJUDICATED IN A MANNER THAT WOULD PREVENT ME FROM PRACTICING ENGINEERING AS A MEMBER OF THE PROFESSIONAL SOCIETY OF REGISTERED PROFESSIONAL ENGINEERS OF THE STATE OF TENNESSEE.

REGISTERED ENGINEER  
 TENNESSEE CERTIFICATE NO. 26018



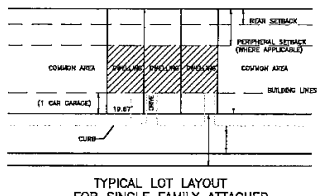
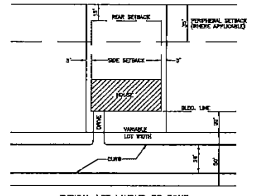
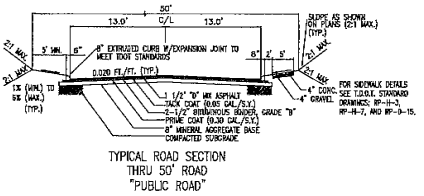
DESIGNED BY: **DATSON, LEHRER, NORVILL & POS**  
 REGISTERED ENGINEERS & LAND SURVEYORS  
 4144 HARRISONVILLE DRIVE  
 KNOXVILLE, TENNESSEE 37909  
 PHONE: 606-238-3300  
 FAX: 606-238-9473

5-SB-16-C	5-B-18-UR
2/5/18	REVISED FOR MPC COMMENTS
1/5/18	ADDED ATTACHED LOTS, REDRAWN TO 1"=50'
NO. DATE	REVISION
	APPR.

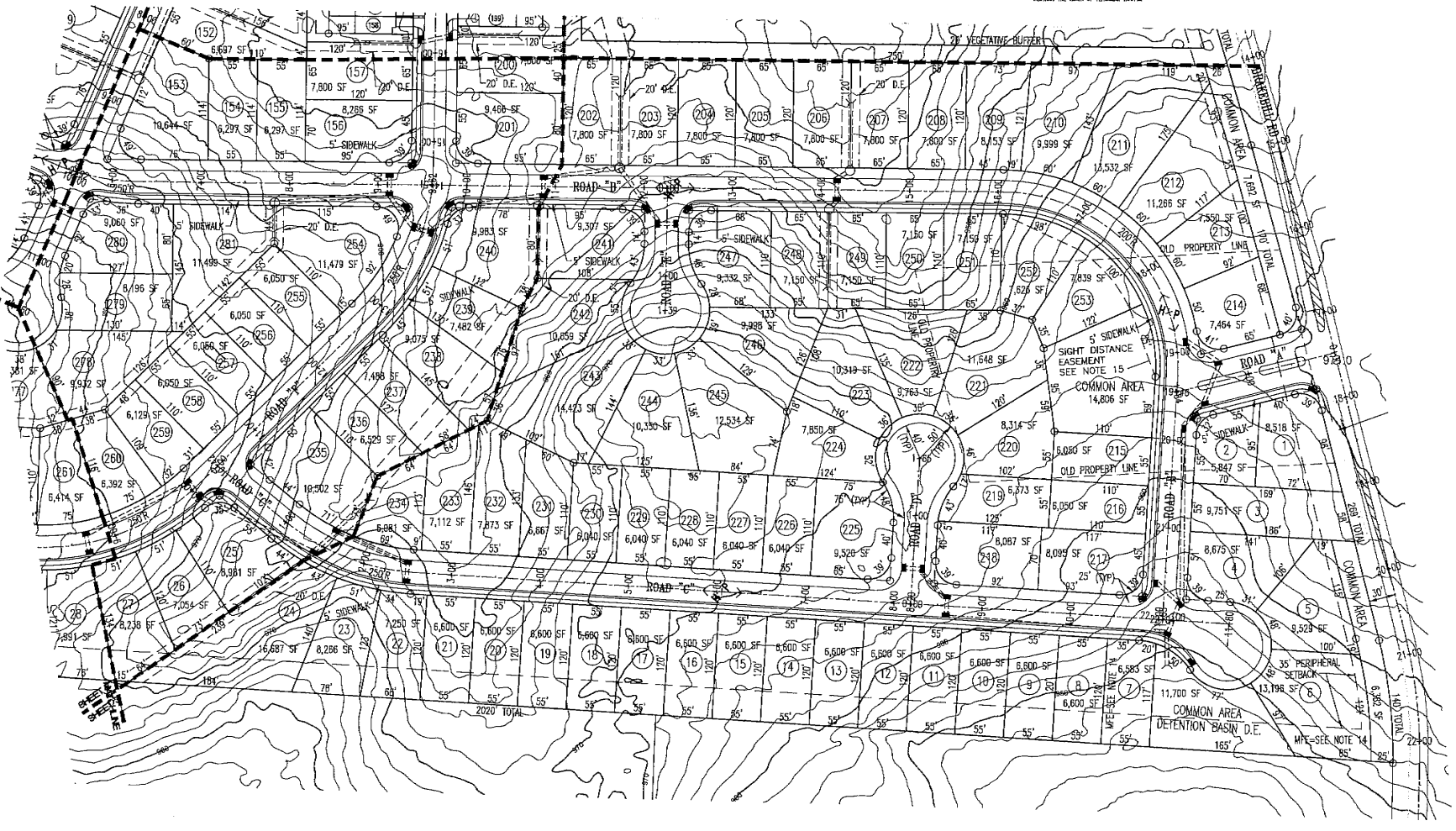
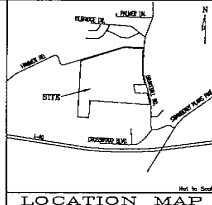
SCALE: 1" = 50'  
 DATE: 03/20/18  
 DEED REFERENCES: INSTR. #200005120031872 DEED BOOK 2311, PAGE 995

CONCEPT PLAN FOR  
**VERTEX DEVELOPMENT, LLC - BRAKEBELL RD.**  
 CLT MAP # 72, PARCELS 267 & 267.01  
 DISTRICT 8, KNOX COUNTY, TENNESSEE

25040-SP4  
 SHEET 4 OF 7 SHEETS



- NOTES:
1. ALL DIMENSIONS ARE SCALED AND SUBJECT TO CHANGE ON THE FINAL PLAN.
  2. A 5' VERTICAL CURB WITH CONCRETE EXISTENT CURBS ALONG ALL ROAD LINES, 5' EACH SIDE OF INTERIOR ROAD LINES.
  3. A 5' UTILITY EASEMENT EXISTS 7.5' EACH SIDE OF CENTERLINE OF SANITARY SEWER AS DETAILLED.
  4. THE PROPERTY CONTAINS APPROXIMATELY 8.0 ACRES. 7.578 ACRES IS BURNINGWATER TRACT AND 0.422 ACRES IS UNBURNINGWATER TRACT. THIS TRACT IS BURNINGWATER TRACT. THE TOTAL AREA IS APPROXIMATELY 8.0 ACRES. THE BURNINGWATER TRACT IS BURNINGWATER TRACT. THE UNBURNINGWATER TRACT IS UNBURNINGWATER TRACT. ALL RIGHTS RESERVED TO THE DEVELOPER, AND APPLICABLE TO THE DEVELOPER'S DEVELOPMENT OF THE BURNINGWATER TRACT AND UNBURNINGWATER TRACT. A LATER DATE.
  5. THIS PROJECT IS SIGNED IN.
  6. ALL ROAD PROFILES ARE BASED ON REED TOPOGRAPHIC.
  7. UTILITIES:
    - a. WATER: EXISTING WATER MAINS UNDER THE 10' SIDEWALKS.
    - b. SANITARY: EXISTING SANITARY MAINS UNDER THE 10' SIDEWALKS.
    - c. GAS: EXISTING GAS MAINS UNDER THE 10' SIDEWALKS.
    - d. TELEPHONE: EXISTING TELEPHONE MAINS UNDER THE 10' SIDEWALKS.
  8. BOUNDARY SURVEY BY DATE.
  9. UNPAVED AREAS APPROVED BY THE METROPOLITAN PLANNING COMMISSION ON ITS 1/17/18.
    - a. INTERIOR DRIVE LENGTH FROM 200' TO 200'. SEE 11/17/18 ROAD "A".
    - b. INTERIOR DRIVE LENGTH FROM 120' TO 120'. SEE 11/17/18 ROAD "B".
    - c. INTERIOR DRIVE LENGTH FROM 120' TO 120'. SEE 11/17/18 ROAD "C".
    - d. INTERIOR DRIVE LENGTH FROM 120' TO 120'. SEE 11/17/18 ROAD "D".
    - e. INTERIOR DRIVE LENGTH FROM 120' TO 120'. SEE 11/17/18 ROAD "E".
    - f. INTERIOR DRIVE LENGTH FROM 120' TO 120'. SEE 11/17/18 ROAD "F".
  10. METROPOLITAN PLANNING COMMISSION SHALL VERIFY THE SLOPE STABILITY OF ALL TIE SURVEYS.
  11. MINIMUM FLOOR ELEVATION FOR LOTS 200' TO 200' IS ONE FOOT ABOVE THE BENCH OF THE DETENTION BASIN OR AS SHOWN ON THIS SET.
  12. VEHICULAR ACCESS FOR ALL LOTS IS LIMITED TO INTERIOR ROAD DRIVE ONLY.
  13. BOUNDARY SURVEY AT INTERSECTION OF 10' SIDEWALKS AND 10' SIDEWALKS TO BE PROVIDED BY EACH PROPERTY OWNER/DEVELOPER.
  14. MINIMUM FLOOR ELEVATION FOR LOTS 200' TO 200' IS ONE FOOT ABOVE THE BENCH OF THE DETENTION BASIN OR AS SHOWN ON THIS SET.
  15. NIGHT DISTANCE EASEMENT PROVIDES PLACING ANY STRUCTURE OR VEHICLE THEREIN MAY RESTRICT THE VIEW OF VEHICLES TRAVELING.



Revised: 5/30/2018

OWNER/DEVELOPER:  
 VERTEX DEVELOPMENT TN, LLC  
 c/o STEVE BETHEL  
 608 GARDNER LANE  
 BRIDGEVILLE, TN 37026  
 PHONE: (606) 466-2124



CERTIFICATION OF CONCEPT PLAN  
 I HEREBY CERTIFY THAT I AM AN ENGINEER LICENSED TO PRACTICE ENGINEERING UNDER THE LAWS OF THE STATE OF TENNESSEE. I FURTHER CERTIFY THAT THIS PLAN AND ACCOMPANYING SURVEYS, EXISTENCE, AND SCHEMATIC CONCORD TO ALL APPLICABLE PROVISIONS OF THE KNOWLEDGE/GOOD FAITH REQUIREMENTS AS SET FORTH IN THE TENNESSEE PROFESSIONAL ENGINEERING ACT AND AS AMENDED BY ANY SUBSEQUENT LEGISLATION. I HAVE BEEN TRAINED, REGISTERED, AND CERTIFIED BY THE METROPOLITAN PLANNING COMMISSION.

REGISTERED ENGINEER  
 TENNESSEE CERTIFICATE NO. 15254

DESIGNED DBM: **5-SB-18-C**  
**5-E-18-UR**

DRAWN SEW

CHECKED DBM

**DATSON, HIMES, NORVILL & FOX**  
 ENGINEERS, ARCHITECTS & LAND SURVEYORS  
 6324 PARKWAY DRIVE  
 KNOXVILLE, TENNESSEE 37920  
 PHONE: 865-506-5412  
 FAX: 865-506-9413

NO.	DATE	REVISION	APPR.
2	5/30/18	REVISED FOR MPC CONDOTS	
1	5/17/18	ADDED ATTACHED LOTS, REFERRED TO "1"-D07	

SCALE: 1" = 50'

DATE: 03/20/18

DEED REFERENCES: INSTR. #202005120031972 DEED BOOK 2311, PAGE 995

CONCEPT PLAN FOR  
**VERTEX DEVELOPMENT, LLC-BRAKEBILL RD.**  
 CLT MAP 72, PARCELS 267 & 267.01  
 DISTRICT 8, KNOX COUNTY, TENNESSEE

25040-SP5

SHEET 9 OF 7 SHEETS

# SUBDIVISION - CONCEPT



Name of Applicant: Vertex Development, TN, LLC  
 Date Filed: 3/26/18 Meeting Date: 5/10/18  
 Application Accepted by: [Signature]  
 Fee Amount: \$9,530<sup>00</sup> File Number: Subdivision - Concept 5-SB-18-C  
 Fee Amount: \_\_\_\_\_ Related File Number: Development Plan 5-E-18-UR

**PROPERTY INFORMATION**

Subdivision Name: Vertex Development - Brakebill Road  
 Unit/Phase Number: \_\_\_\_\_  
 General Location: West side of Brakebill Rd, North of Strawberry Plains Pike  
 Tract Size: 94.9 acres No. of Lots: 301  
 Zoning District: PR (pending)  
 Existing Land Use: Vacant  
 Planning Sector: East County  
 Growth Policy Plan Designation: Urban Growth

Census Tract: 53.01  
 Traffic Zone: 130  
 Parcel ID Number(s): Map 12 Parcels 267 & 267.01  
 Jurisdiction:  City Council \_\_\_\_\_ District  
 County Commission 8th District

**AVAILABILITY OF UTILITIES**

List utility districts proposed to serve this subdivision:  
 Sewer Knoxville Utilities Board  
 Water Knoxville Utilities Board  
 Electricity Knoxville Utilities Board  
 Gas Knoxville Utilities Board  
 Telephone AT&T Southeast

**TRAFFIC IMPACT STUDY REQUIRED**

No  Yes

**USE ON REVIEW**  No  Yes

Approval Requested:  
 Development Plans in Planned District or Zone  
 Other (be specific): \_\_\_\_\_

**VARIANCE(S) REQUESTED**

No  Yes (If Yes, see reverse side of this form)

**PROPERTY OWNER/OPTION HOLDER**

PLEASE PRINT  
 Name: Steve Bethel  
 Company: Vertex Development TN, LLC  
 Address: 226 Castle Downs Ln  
 City: Knoxville State: TN Zip: 37932  
 Telephone: 384-8124  
 Fax: \_\_\_\_\_  
 E-mail: sbethel.bethel@gmail.com

**PROJECT SURVEYOR/ENGINEER**

PLEASE PRINT  
 Name: David Harbin  
 Company: Barton Homes Nowell & POC  
 Address: 4334 Papermill Dr  
 City: Knoxville State: TN Zip: 37909  
 Telephone: 588-6472  
 Fax: 588-6473  
 E-mail: harbin@bhn-p.com

**APPLICATION CORRESPONDENCE**

All correspondence relating to this application (including plat corrections) should be directed to:

PLEASE PRINT  
 Name: David Harbin  
 Company: Barton Homes Nowell & POC  
 Address: 4334 Papermill Dr  
 City: Knoxville State: TN Zip: 37909  
 Telephone: 588-6472  
 Fax: 588-6473  
 E-mail: harbin@bhn-p.com

**VARIANCES REQUESTED**

1. Horizontal curve length from 250' to 200', STA 17+75, Road "B"  
Justify variance by indicating hardship: topography

2. Vertical curve length from 175' to 105', sta 10+60, Rd. "H"  
Justify variance by indicating hardship: topography

3. Vertical curve length from 230.25' to 150', sta 1450, Rd. "I"  
Justify variance by indicating hardship: topography

4. Vertical curve length from 250.75' to 175', sta 3+35, Rd "L"  
Justify variance by indicating hardship: topography

5. Vertical curve length from 93.75' to 75', sta 0+50, Rd "I"  
Justify variance by indicating hardship: topography

6. \_\_\_\_\_  
Justify variance by indicating hardship: \_\_\_\_\_

7. \_\_\_\_\_  
Justify variance by indicating hardship: \_\_\_\_\_

**APPLICATION AUTHORIZATION**

I hereby certify that I am the authorized applicant, representing ALL property owners involved in this request or holders of option on same, as listed on this form. I further certify that any and all variances needed to meet regulations are requested above, or are attached. I understand and agree that no additional variances can be acted upon by the legislative body upon appeal and none will be requested. I hereby waive the requirement for approval or disapproval of the plat within sixty (60) days after its submission, in accordance with the provisions of Tennessee Code Annotated 13-3-404.

PLEASE PRINT

Name: David Harbin

Address: 4334 Papermill Drive

City: Knoxville State: TN zip: 37909

Telephone: 588-6472

Fax: 588-6473

Signature: David Harbin

Date: 3/26/18

E-mail: harbin@bhm-p.com