

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

▶ **FILE #:** 12-SB-12-C **AGENDA ITEM #:** 12
 12-D-12-UR **AGENDA DATE:** 12/13/2012

▶ **SUBDIVISION:** COPPER TRACE
 ▶ **APPLICANT/DEVELOPER:** COPPER TRACE, LLC C/O RUSSELL RACKLEY
 OWNER(S): KnoxFi Two, LLC

TAX IDENTIFICATION: 77 128, 128.01 & 128.02

JURISDICTION: County Commission District 6

▶ **LOCATION:** Right side of Copper Ridge Rd., north of W. Emory Rd.

SECTOR PLAN: Northwest County

GROWTH POLICY PLAN: Planned Growth Area

WATERSHED: Beaver Creek

▶ **APPROXIMATE ACREAGE:** 53 acres

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

▶ **EXISTING LAND USE:** Residence and vacant land

▶ **PROPOSED USE:** Detached Residential Subdivision

SURROUNDING LAND USE AND ZONING: North: Vacant land / A (Agricultural)
 South: Residences / A (Agricultural)
 East: Residences and vacant land / PR (Planned Residential)
 West: Residences / A (Agricultural), A (Agricultural) / HZ (Historic Overlay) & PR (Planned Residential)

▶ **NUMBER OF LOTS:** 102

SURVEYOR/ENGINEER: Rackley Engineering

ACCESSIBILITY: Access is via Copper Ridge Rd., a local street with a 19' to 20' pavement width within a 50' right-of-way.

▶ **SUBDIVISION VARIANCES REQUIRED:**

1. Broken back curve tangent variances on Road A, STA 7+60, from 150' to 131.38'.
2. Broken back curve tangent variances on Road A, STA 25+02, from 150' to 42.31'.
3. Vertical curve variance Road A at STA 2+74, from 339.75' to 271.83'.
4. Vertical curve variance Road A at STA 19+61, from 257' to 164.47'.
5. Vertical curve variance Road D at STA 4+36, from 148.5' to 95.13'.
6. Vertical curve variance Road D at STA 5+90, from 262.5' to 70.78'.
7. Right-of-way radius variance on the north side of Road A at the intersection with Copper Ridge Rd., from 25' to 0'.
8. Right-of-way radius variance on Road D at the cul-de-sac transition near the intersection of Road C from 75' to 5'.

STAFF RECOMMENDATION:

- ▶ **APPROVE variances 1-8 because the site's topography and existing site conditions restrict compliance with the Subdivision Regulations, and the 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 (County Ord. 91-1-102).
3. Prior to obtaining design plan approval for the subdivision, providing field certification that 300 feet of sight distance is available in both directions along Copper Ridge Rd. at the proposed subdivision entrance.
4. No more than 35 building permits shall be issued for this subdivision until a design plan has been submitted to the Knox County Department of Engineering and Public Works and the Tennessee Department of Transportation for review and approval for the warranted intersection improvements at the intersection of Emory Road and Copper Ridge Rd. as identified in the Traffic Impact Study prepared by Cannon & Cannon, Inc. on November 8, 2012.
5. Placing a note on the final plat that all structures will have to be located at least 50' from the top of the sinkholes (closed contour areas) identified on the plat. Building construction within the 50' setback may be permitted if a geotechnical study prepared by a registered engineer states that building within the 50' sinkhole buffer is acceptable and the study is approved by the Knox County Department of Engineering and Public Works. A 5' drainage easement extending outside of the uppermost closed contour is required. Building construction is not permitted within the hatched contour area of the sinkhole or the drainage easement. Engineered footings may be required for any structures within the 50' sinkhole buffer.
6. Meeting all applicable requirements and obtaining all required permits from the Tennessee Department of Environment and Conservation for any alteration to the sinkholes.
7. Obtaining off-site drainage easements as determined by the Knox County Department of Engineering and Public Works.
8. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.
9. On the final plat, including a line of sight easement across Lot 17 in order to provide the needed sight distance for the curve in Road B.
10. Placing a note on the final plat that all lots will have access only to the internal street system.

- ▶ **APPROVE the development plan for up to 102 detached residential dwellings on individual lots and the request to reduce the peripheral boundary setback from 35' to 15' as shown on the concept plan 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 of a concept plan in the PR zone and the other criteria for approval of a use on review.

COMMENTS:

The applicant is proposing to subdivide this 53 acre tract into 102 detached residential lots at a density of 1.92 du/ac. The concept plan that had previously been approved for this site in 2007 for 139 lots at a density of 2.62 du/ac has expired. The Knox County Commission approved the rezoning for this property to PR (Planned Residential) at up to 3 du/ac on September 25, 2006.

The proposed layout of the subdivision includes 18.33 acres of common area which is approximately 34.6% of the subdivision. Access points are provided from the street system to the common area allowing for a future trail system. An amenity area is also proposed. The site is not located within the Knox County Schools Parental Responsibility Zone, and therefore, sidewalks are not required.

The applicant is requesting that the Planning Commission approve the reduction in the required peripheral boundary setback from 35' to 15' for this subdivision. The Knox County Zoning Ordinance allows the Planning Commission to reduce the peripheral setback down to 15' when the property adjoins residential zoning districts such as the PR (Planned Residential) and A (Agricultural) districts.

Due to the number of proposed lots, a traffic impact study was prepared and submitted for Staff review. The traffic study that was prepared by Cannon & Cannon, Inc., concluded that the traffic generated by the proposed development will have an impact on traffic operational conditions at the intersection of W. Emory Rd. and Copper Ridge Rd., and an eastbound left turn lane on W. Emory Rd. at this intersection would be needed. A condition is proposed that no more than 35 building permits shall be issued for this subdivision until a design plan has been submitted to the Knox County Department of Engineering and Public Works and the Tennessee

Department of Transportation for review and approval for the warranted intersection improvements. While the applicant would be required to prepare the design plans for the intersection improvements, the applicant would not be responsible for any other costs associated with the intersection improvements. Any improvements at this intersection are under the jurisdiction of the Tennessee Department of Transportation.

There are four sinkholes/closed contour areas located on this property. The sinkholes and a 50' building setback from the top of the sinkholes/ closed contour areas shall be designated on the final plat. All lots in the area of the these features must have a suitable building area outside of the setback area. An option would be to have a geotechnical study conducted by a registered engineer that would identify that building within the 50' building setback area is acceptable, and the study is approved by the Knox County Department of Engineering and Public Works. A 5' drainage easement extending outside of the uppermost closed contour is required. Building construction is not permitted within the hatched contour area of the sinkhole or the drainage easement. Engineered footings may be required for any structures within the 50' sinkhole buffer.

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 utilities are available to serve this site.
2. The proposed detached residential subdivision at a density of 1.92 du/ac, is consistent in use and density (up to 3 du/ac) with the zoning designation. Other subdivision development in the area is occurring under the PR zoning district at similar densities.
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 detached residential subdivision 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.

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 approved for this site will allow a density up to 3 du/ac. With a proposed density of 1.92 du/ac, the proposed subdivision is consistent with the Sector Plan and Growth Policy Plan.

ESTIMATED TRAFFIC IMPACT 1056 (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.

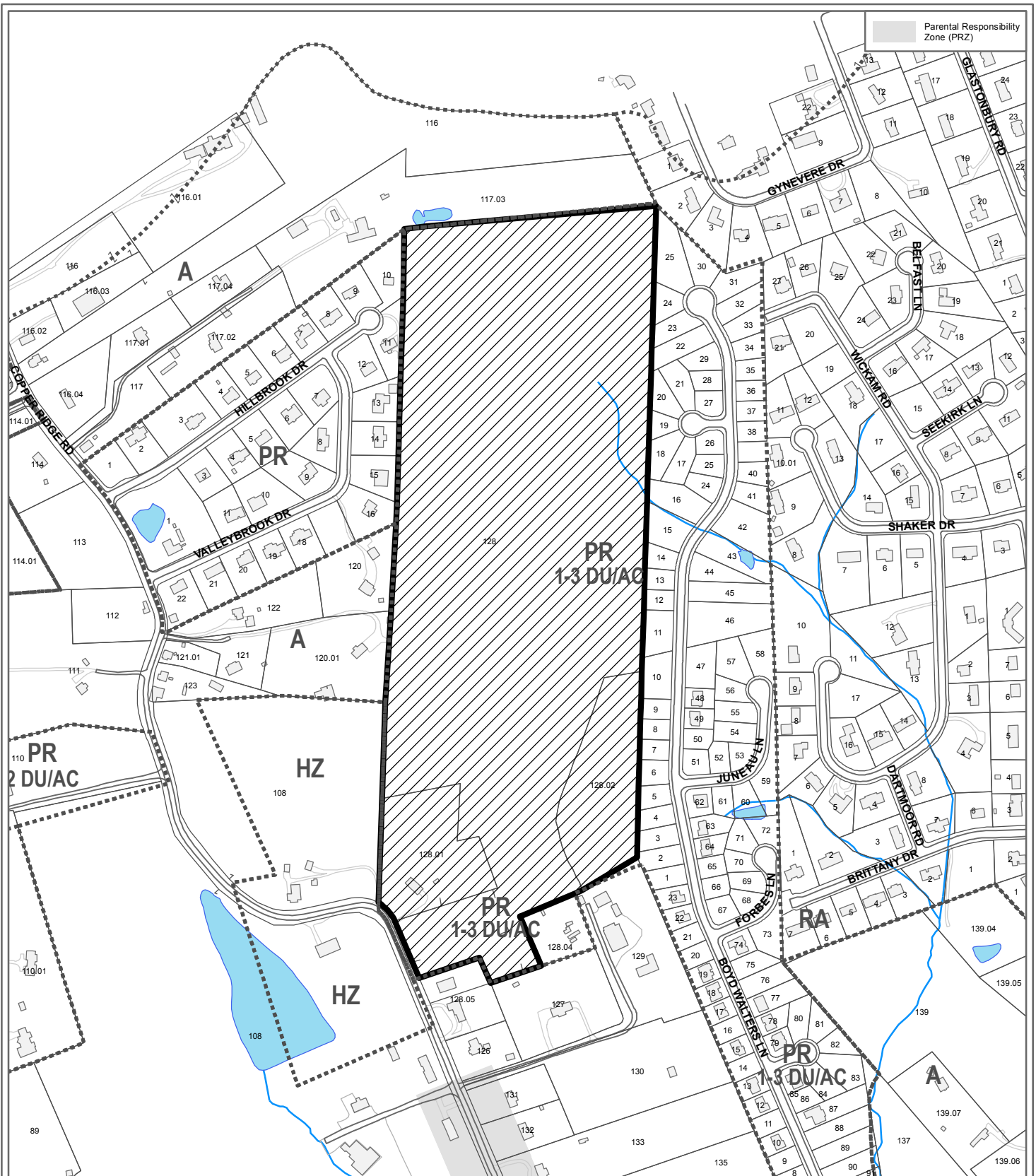
ESTIMATED STUDENT YIELD: 54 (public and private school children, ages 5-18 years)

Schools affected by this proposal: Karns Elementary, Karns Middle, and Karns 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.



**12-SB-12-C / 12-D-12-UR
CONCEPT PLAN/USE ON REVIEW**

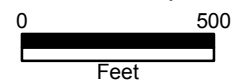
Petitioner: Copper Trace, LLC, c/o Russell Rackley
Copper Trace



Detached Residential Subdivision in PR (Planned Residential)

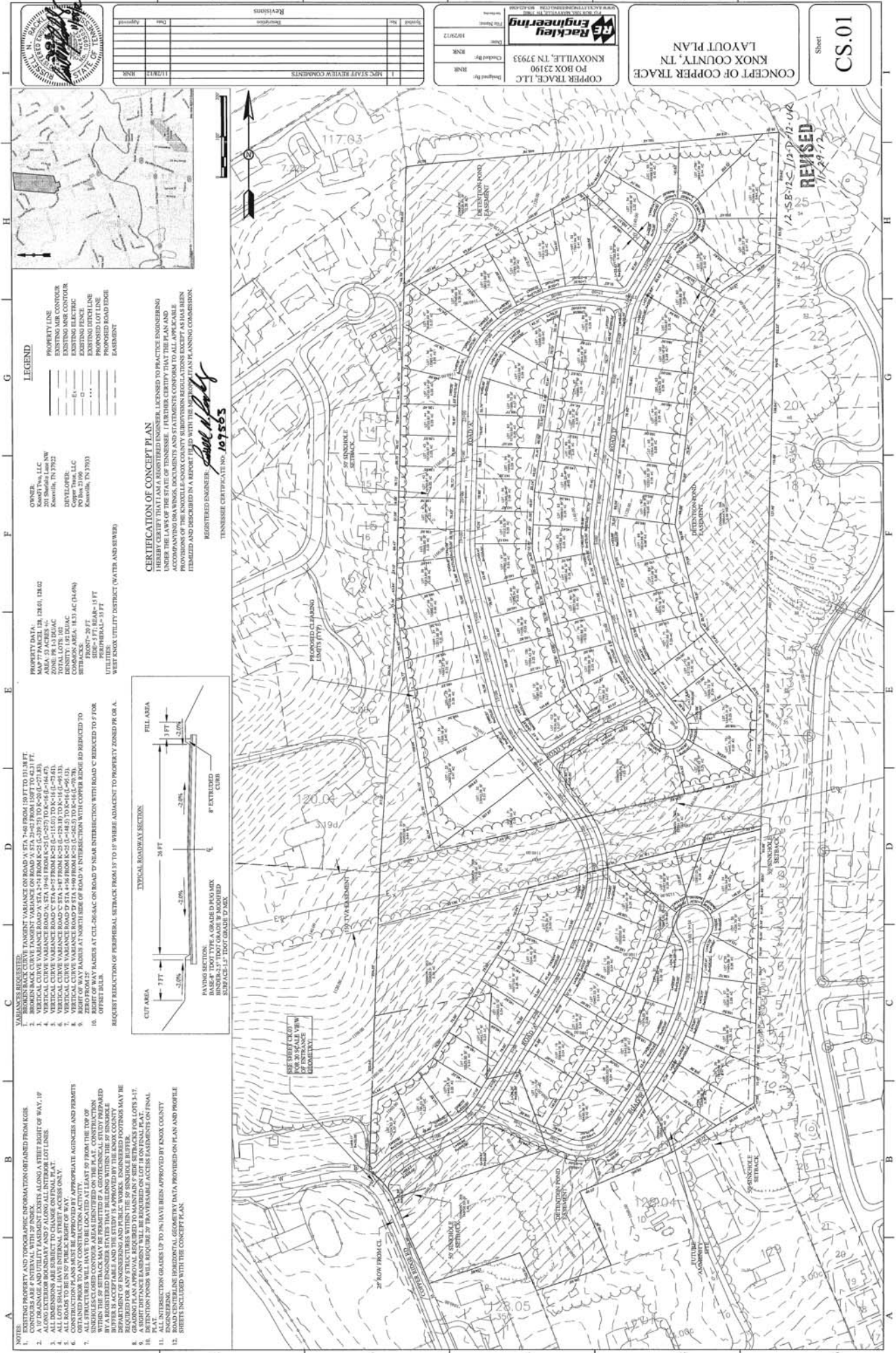
Map No: 77

Jurisdiction: County



Original Print Date: 11/20/2012
Metropolitan Planning Commission * City / County Building * Knoxville, TN 37902

Revised:



Sheet
CS.01

COPPER TRACE, LLC
KNOXVILLE, TN 37933
PO BOX 23190
KNOX COUNTY, TN
LAYOUT PLAN

RE Rackley Engineering
KNOXVILLE, TN 37933
Checked By: RSK
Designed By: RSK
Date: 10/29/12

NO.	REVISIONS	DATE
1	MPC STATE REVIEW COMMENTS	11/27/12



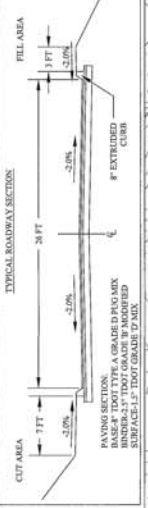
LEGEND
 --- PROPERTY LINE
 --- EXISTING AIR CONTOUR
 --- EXISTING ELEC. CONTOUR
 --- EXISTING UTILITY
 --- EXISTING LOT LINE
 --- PROPOSED LOT LINE
 --- PROPOSED ROAD EDGE
 --- EASEMENT

OWNER: Copper Trace, LLC
DEVELOPER: Copper Trace, LLC
COMMON AREA: 18.3 AC (14.6%)
PROPOSED: 20.77 AC
UTILITIES: WEST KNOX UTILITY DISTRICT (WATER AND SEWER)

CERTIFICATION OF CONCEPT PLAN
 I, THE UNDERSIGNED, LICENSED PROFESSIONAL ENGINEERING UNDER THE LAWS OF THE STATE OF TENNESSEE, HEREBY CERTIFY THAT THE PLAN AND ACCOMPANYING DRAWINGS, DOCUMENTS AND STATEMENTS CONFORM TO ALL APPLICABLE PROVISIONS OF THE KNOX COUNTY SUBDIVISION REGULATIONS EXCEPT AS HAS BEEN ITEMIZED AND DESCRIBED IN A REPORT FILED WITH THE KNOX COUNTY PLANNING COMMISSION.

REGISTERED ENGINEER: *David H. Rackley*
 TENNESSEE CERTIFICATE NO. 1075563

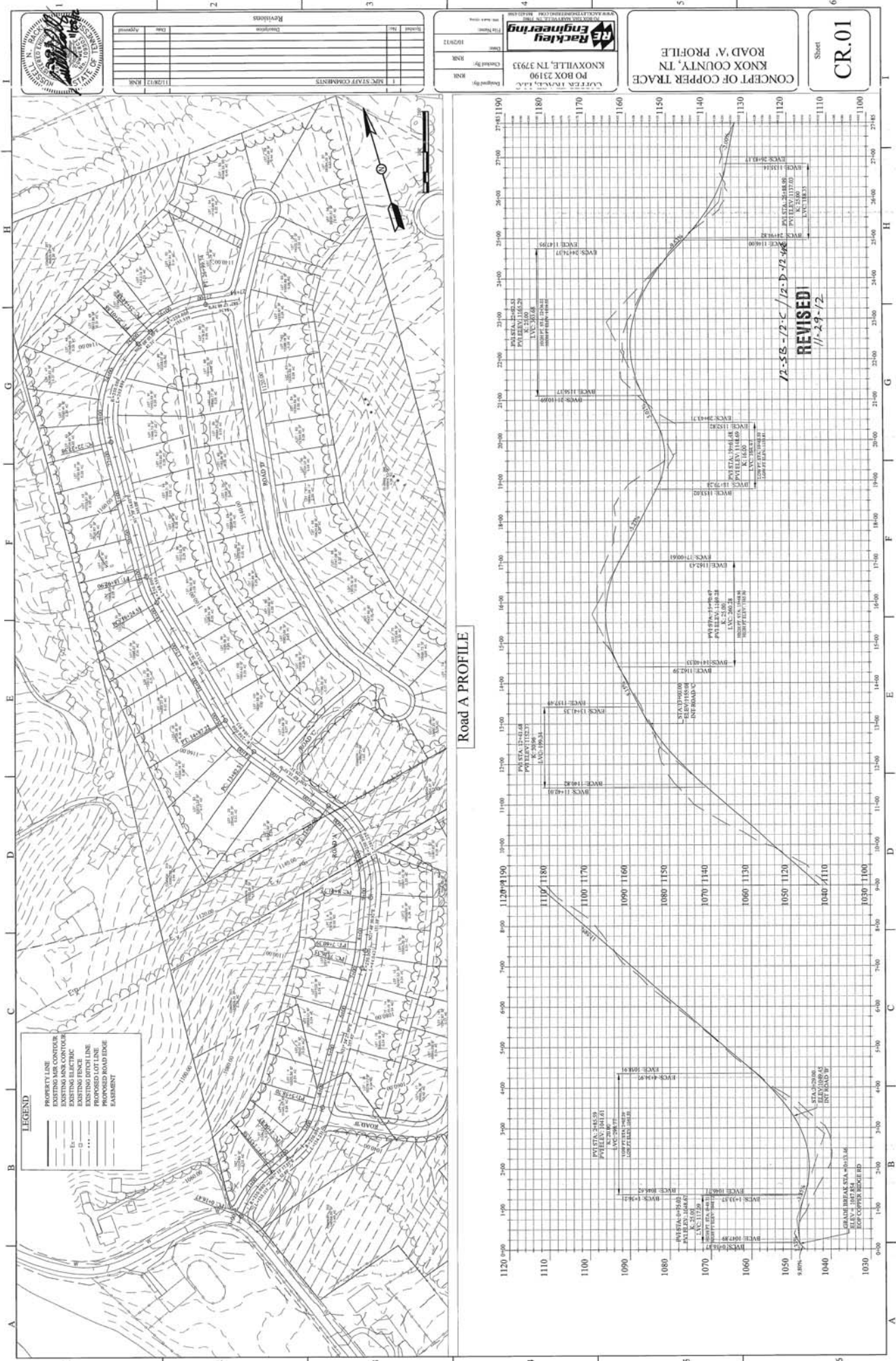
PROPERTY DATA:
 MAP 77 PARCELS 124, 12461, 12462
 ZONE: PK 14 (R) SAC
 DENSITY: 1.05 (R) SAC
 COMMON AREA: 18.3 AC (14.6%)
 PROPOSED: 20.77 AC
 UTILITIES: WEST KNOX UTILITY DISTRICT (WATER AND SEWER)



VARIANCES REQUESTED:
 1. TANGENT VARIANCE ON ROAD 'A' STA. 146 FROM 150 FT TO 131 FT.
 2. BROKEN BACK CURVE TANGENT VARIANCE ON ROAD 'A' STA. 210 TO 187 FT.
 3. VERTICAL CURVE VARIANCE ON ROAD 'A' STA. 194 FROM 150 FT TO 164 FT.
 4. VERTICAL CURVE VARIANCE ON ROAD 'A' STA. 194 FROM 150 FT TO 164 FT.
 5. VERTICAL CURVE VARIANCE ON ROAD 'C' STA. 6+25 FROM 8+25 TO 8+40.
 6. VERTICAL CURVE VARIANCE ON ROAD 'D' STA. 4+45 FROM 8+25 TO 8+40.
 7. VERTICAL CURVE VARIANCE ON ROAD 'D' STA. 4+45 FROM 8+25 TO 8+40.
 8. VERTICAL CURVE VARIANCE ON ROAD 'D' STA. 4+45 FROM 8+25 TO 8+40.
 9. ZERO FEET OF WAY ADJACENT TO NORTH SIDE OF ROAD 'A' INTERSECTION WITH COPPER TRACE RD REDUCED TO ZERO FEET FROM 15'.

REQUEST REDUCTION OF PERIPHERAL SETBACK FROM 15' TO 10' WHERE ADJACENT TO PROPERTY ZONED PG 0.8A.
PAVING SECTION: GRADES 2.0% MAX UNDER 2.5' TYPICAL GRADE TO ADJACENT SURFACE 1.5' TYPICAL GRADE TO ADJ.
CUT AREA: 7 FT
FILL AREA: 1 FT

NOTES:
 1. CONTIGUOUS PROPERTY AND TOPOGRAPHIC INFORMATION OBTAINED FROM KEES CONTOURS ARE 4' INTERVAL WITH 2' FINISH.
 2. ALL DIMENSIONS ARE SUBJECT TO CHANGE ON FINAL PLAN.
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 4. ALL ROADS TO BE PA 20' PUBLIC RIGHT OF WAY.
 5. CONSTRUCTION PLANS MUST BE APPROVED BY APPROPRIATE AGENCIES AND PERMITS MUST BE OBTAINED PRIOR TO CONSTRUCTION.
 6. ALL STRUCTURES WILL HAVE TO BE LOCATED AT LEAST 50' FROM THE TOP OF ANY STRUCTURES WITHIN THE 50' SETBACK BUFFER.
 7. ALL STRUCTURES WILL HAVE TO BE LOCATED AT LEAST 50' FROM THE TOP OF ANY STRUCTURES WITHIN THE 50' SETBACK BUFFER.
 8. ALL STRUCTURES WILL HAVE TO BE LOCATED AT LEAST 50' FROM THE TOP OF ANY STRUCTURES WITHIN THE 50' SETBACK BUFFER.
 9. ALL STRUCTURES WILL HAVE TO BE LOCATED AT LEAST 50' FROM THE TOP OF ANY STRUCTURES WITHIN THE 50' SETBACK BUFFER.
 10. ALL STRUCTURES WILL HAVE TO BE LOCATED AT LEAST 50' FROM THE TOP OF ANY STRUCTURES WITHIN THE 50' SETBACK BUFFER.
 11. ALL INTERSECTION GRADES UP TO 1% HAVE BEEN PROVIDED BY KNOX COUNTY.
 12. ROAD CENTERLINE HORIZONTAL GEOMETRY DATA PROVIDED ON PLAN AND PROFILE SHEETS INCLUDED WITH THE CONCEPT PLAN.



MPC STAFF COMMENTS	

Revisions	

