



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

▶ **FILE #:** 3-SH-06-C
3-L-06-UR

AGENDA ITEM #: 21
AGENDA DATE: 3/9/2006

▶ **SUBDIVISION:** THOMPSON TRAIL
▶ **APPLICANT/DEVELOPER:** CARDINAL ENTERPRISES
OWNER(S): CARDINAL ENTERPRISES, INC.

TAX IDENTIFICATION: 104 138.02 & 142
JURISDICTION: County Commission District 6

▶ **LOCATION:** Northeast side of Thompson Rd., south of Hardin Valley Rd.

SECTOR PLAN: Northwest County
GROWTH POLICY PLAN: Planned Growth Area

▶ **APPROXIMATE ACREAGE:** 8.8 acres

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

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

▶ **PROPOSED USE:** Detached single-family subdivision

SURROUNDING LAND USE AND ZONING:
North: Residences / PR (Planned Residential)
South: Residences / A (Agricultural)
East: Residences / A (Agricultural)
West: Vacant land / PR (Planned Residential) / TO (Technology Overlay)

▶ **NUMBER OF LOTS:** 35

SURVEYOR/ENGINEER: David Hurst Michael Brady, Inc.

ACCESSIBILITY: Access is via Thompson Rd., a minor collector street with a 14' pavement width within a 50' right of way.

▶ **SUBDIVISION VARIANCES REQUIRED:**

1. Broken back curve tangent variance on Road B at STA 2+56.25 from 150' to 105.46'.
2. Right-of-way intersection radius variance at the intersection of Roads A and B at Lot 9, from 25' to 13'.
3. Cul-de-sac transition radius variance on Road B, from 75' to 38'.

STAFF RECOMMENDATION:

▶ **APPROVE** variances 1-3 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 10 conditions

1. Connection to sanitary sewer and meeting all other applicable requirements of the Knox County Health Department.
2. Provision of street names that are consistent with the Uniform Street Naming and Addressing System within Knox County (Ord. 91-1-102).
3. Widening Thompson Rd. to a width of 20' from the entrance of the subdivision north to the existing 20'

pavement width at Nora's Path, and from the subdivision entrance south for a distance of 300' which corresponds with the area requiring improvements to achieve the required sight distance. Design details shall be submitted to and approved by Knox County Department of Engineering and Public Works during the design plan stage of the development.

4. Submitting a revised concept plan showing the revisions of the cul-de-sac design as approved by Knox County Department of Engineering and Public Works.
5. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.
6. Following design plan approval, and prior to submitting a final plat for review and/or beginning site grading for the entire subdivision, the applicant shall grade the entrance area and embankment along Thompson Rd. in order to achieve the required site distance of 300' in both directions along Thompson Rd. The Knox County Department of Engineering and Public Works Staff will perform a site inspection on the sight distance before the other work can begin or the final plat can be submitted.
7. Certification on the final plat by the applicant's surveyor that there is 300' of sight distance in both directions on Thompson Rd. from the proposed entrance road.
8. Including the sight distance easement across Lot 32 on the final plat.
9. Meeting all requirements of the approved use on review development plan.
10. A final plat based on this concept plan will not be accepted for review by MPC until certification of design plan has been submitted to MPC staff.

► **APPROVE the development plan for up to 35 detached single family dwellings on individual lots subject to 4 conditions**

1. Approval of the rezoning request before Knox County Commission to PR (Planned Residential) at a density up to 4 du/ac (1-C-06-RZ).
2. Revising the concept plan pending the determination by the Tennessee Department of Environment and Conservation on the status of the depression in the area of proposed lots 8 and 9. If it is determined to be a sinkhole, the sinkhole and a 50' setback around the sinkhole will have to be identified on the plan and Lot 9 will have to be combined with the adjoining lots. A geotechnical report prepared by a registered engineer will be required to determine soil stability in the 50' setback area around the sinkhole. The report must be reviewed and approved by the Knox County Department of Engineering and Public Works prior to final plat approval. Engineered footings may be required for these areas. No building is allowed inside the hatched contour of the sinkholes. If the feature is not a sinkhole, the proposed lots can be developed.
3. Meeting all applicable requirements of the approved concept subdivision plan.
4. Meeting all applicable requirements of the Knox County Zoning Ordinance.

With the conditions noted, this plan meets the requirements for approval of the 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 8.80 acre tract into 35 lots at a density of 3.98 du/ac. The Planning Commission recommended approval of the rezoning of a portion of this property to PR (Planned Residential) at a density of up to 4 du/ac on January 12, 2006 (1-C-06-RZ). The Knox County Commission postponed action on this rezoning request until their March 27, 2006 meeting. The other portion of the property was rezoned to PR (Planned Residential) at up to 4 du/ac by Knox County Commission on December 19, 2005 (11-K-05-RZ).

One of Staff's major concerns on visiting the site was the extremely limited sight distance from the location of the proposed entrance road for the subdivision to the south along Thompson Rd. The combination of existing vegetation and the embankment along the road and existing design features of the road (horizontal and vertical curvature) will make it difficult to achieve the required sight distance of 300' in both directions along Thompson Rd from the proposed entrance. While the applicant's engineer has supplied some documentation on how the sight distance can be achieved, Staff is recommending a condition that following design plan approval, and prior to submitting a final plat for review and/or beginning site grading for the entire subdivision, the applicant will be required to grade the entrance area and embankment in order to achieve the required site distance. Knox County Department of Engineering and Public Works Staff will perform a site inspection on the sight distance before the other work can begin.

As identified in the rezoning report for this property, any development of the property will require the widening of Thompson Rd. due to the substandard width of the road in this area (approximately 14' -15' in this area). The developer of the subdivision just to the north of the site was required to widen Thompson Rd. to a width of 20' from their development north to Hardin Valley Rd. Staff is recommending that the applicant widen Thompson Rd. to a width of 20' from the entrance of the subdivision north to the existing 20' pavement width at Nora's Path and from the entrance south for a distance of 300' which corresponds to the required sight

distance. Design details shall be submitted to and approved by Knox County Department of Engineering and Public Works during the design plan stage of the development.

The KGIS data base identifies a depression/hatched contour area located along the northern property line in the area of Lots 8 and 9. The applicant is working with the Tennessee Department of Environment and Conservation on a determination as to whether the feature is a sinkhole or not. If it is determined to be a sinkhole the sinkhole and a 50' setback around the sinkhole will have to be identified. This will require the elimination of Lot 9 and a combining that area with the adjoining two lots. If it is not a sinkhole the proposed lots can be developed.

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 utilities are available to serve this site.
2. The proposed detached single-family subdivision is consistent in use and density with the recent rezoning recommendation.

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

1. With the proposed conditions, the detached single-family subdivision 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 use will not draw additional traffic through residential areas.

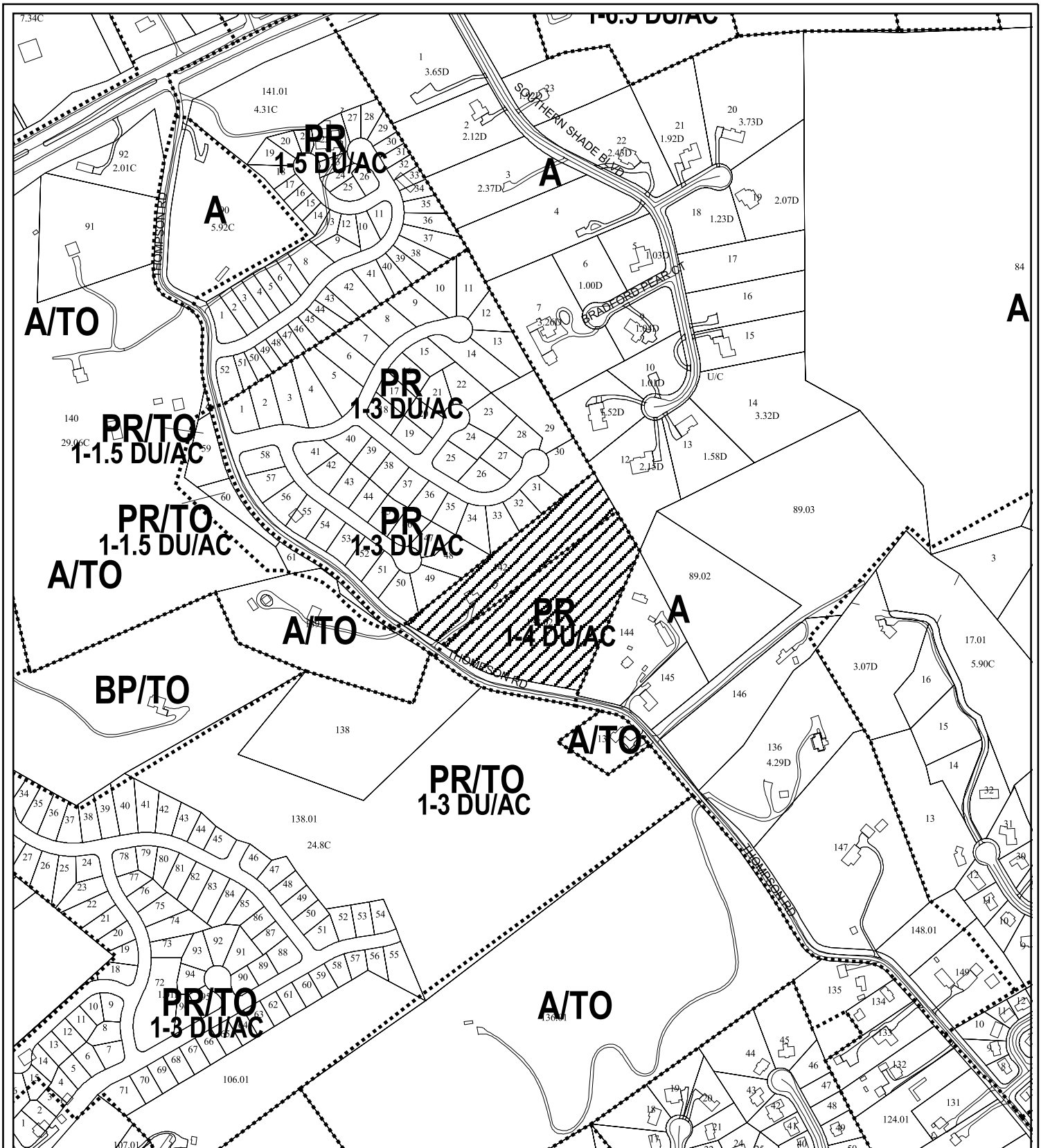
CONFORMITY OF THE PROPOSAL TO ADOPTED PLANS

1. The proposed development is consistent with the Northwest County Sector Plan proposal of low density residential uses. The PR zoning recommended for this site will allow a density up to 4 du/ac. At a proposed density of 3.98 du/ac, the proposed subdivision is consistent with the Sector Plan and recommended zoning density.
2. The site is located within the Planned Growth Area on the Knoxville-Knox County-Farragut Growth Policy Plan map.


Upon final approval of this request, the developer must prepare a design plan prior to the development of the property. During the design plan phase, grading, drainage, street design and construction, and connection to public utilities must satisfy technical engineering requirements before any development can proceed.

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.



3-SH-06-C/3-L-06-UR
 CONCEPT PLAN/USE ON REVIEW

 Detached single-family subdivision in PR (Planned Residential)

Original Print Date: 02/24/06 Revised:
 Metropolitan Planning Commission * City / County Building * Knoxville, TN 37902

Petitioner: Thompson Trail
 Cardinal Enterprises

Map No: 104

Jurisdiction: County



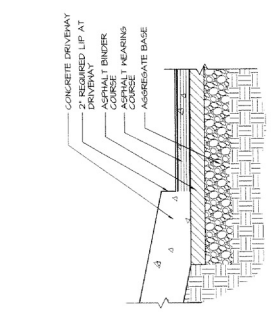
1. PAVK SHALL CORRELATE WITH THE ROAD COUNTY MINIMUM SPECIFICATIONS AND SHALL BE CONFORMANT TO A MINIMUM OF 48 PERCENT STANDARD PROCTOR MAXIMUM DRY DENSITY OPTIMUM MOISTURE CONTENT, SIX (6) FINENESS TESTS, SIX (6) PERCENT OF AREA FINE AND SLOTTED APPROX. 1.15 TO 1.50 INCHES. THE SUBGRADE SHALL BE PREPARED TO A MINIMUM OF 102 INCH FILL OR HING OF THE CENTRAL LINE.

2. THE BASE COURSE SHALL CONSIST OF EIGHT (8) INCHES OF COMPACTED GRADED STONE. THE BASE COURSE SHALL BE CONFORMANT TO TYPICAL ROAD SECTION. THE BASE MATERIAL SHALL BE PREPARED THROUGH A TWO (2) INCH SIEVE AND SHALL BE CONFORMANT TO TYPICAL ROAD SECTION.

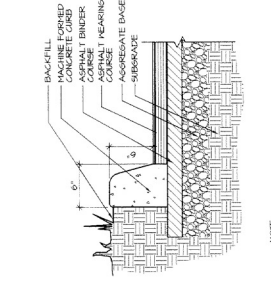
3. THE ASPHALT BINDER SHALL BE ONE (1) PCT. OF THE TOTAL MIXTURE AND SHALL BE CONFORMANT TO TYPICAL ROAD SECTION UNDER SELECTION METHOD. AN AVERAGE OF 428 OF THE ASPHALT CONCRETE COURSE GRADE "E" SHALL CONSIST OF ONE AND ONE HALF (1 1/2) INCHES OF CURSE MATERIAL CONFORMANT TO TYPICAL ROAD SECTION. THE ASPHALT CONCRETE COURSE SHALL BE CONFORMANT TO TYPICAL ROAD SECTION. THE FINENESS SHALL BE 410/200. THE FINENESS SHALL BE 410/200. THE FINENESS SHALL BE 410/200.

4. THE FINENESS SHALL BE 410/200. THE FINENESS SHALL BE 410/200. THE FINENESS SHALL BE 410/200.

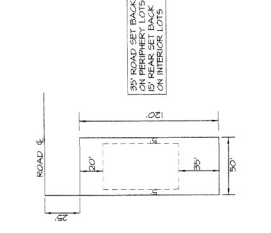
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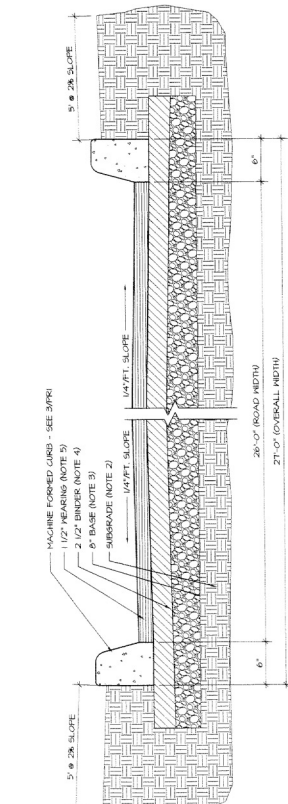
DRIVEWAY SECTION
SCALE: 1/2" = 1'-0"



CURB DETAIL
SCALE: 1/2" = 1'-0"



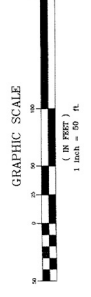
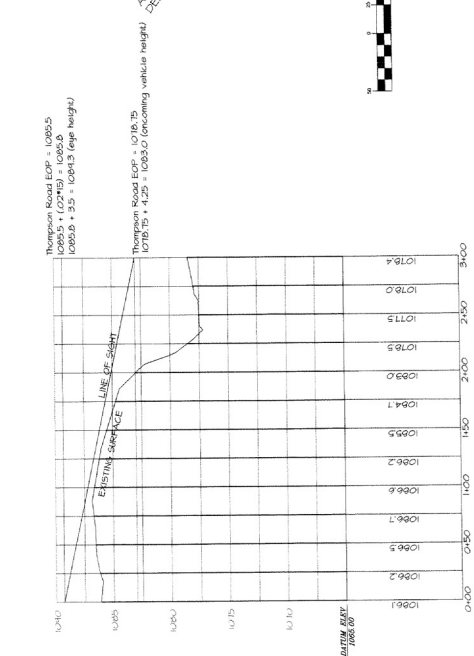
SITE DIMENSION PLAN
SCALE: 1/2" = 1'-0"



TYPICAL ROAD SECTION
SCALE: N.T.S.

NOTE:
1. PROVIDE 1/2" EXPANSION JOINTS @ 60' OF O.C.
2. PROVIDE SANDY JOINTS @ 60' OF O.C. AND NOT REQUIRED IN ENTRANCE DRIVE FROM STATION 0+00 TO 3+00

SUBDIVISION ENTRANCE LINE OF SIGHT PROFILE
SCALE: N.T.S.



SITE ROAD PLAN
SCALE: 1" = 50'-0"

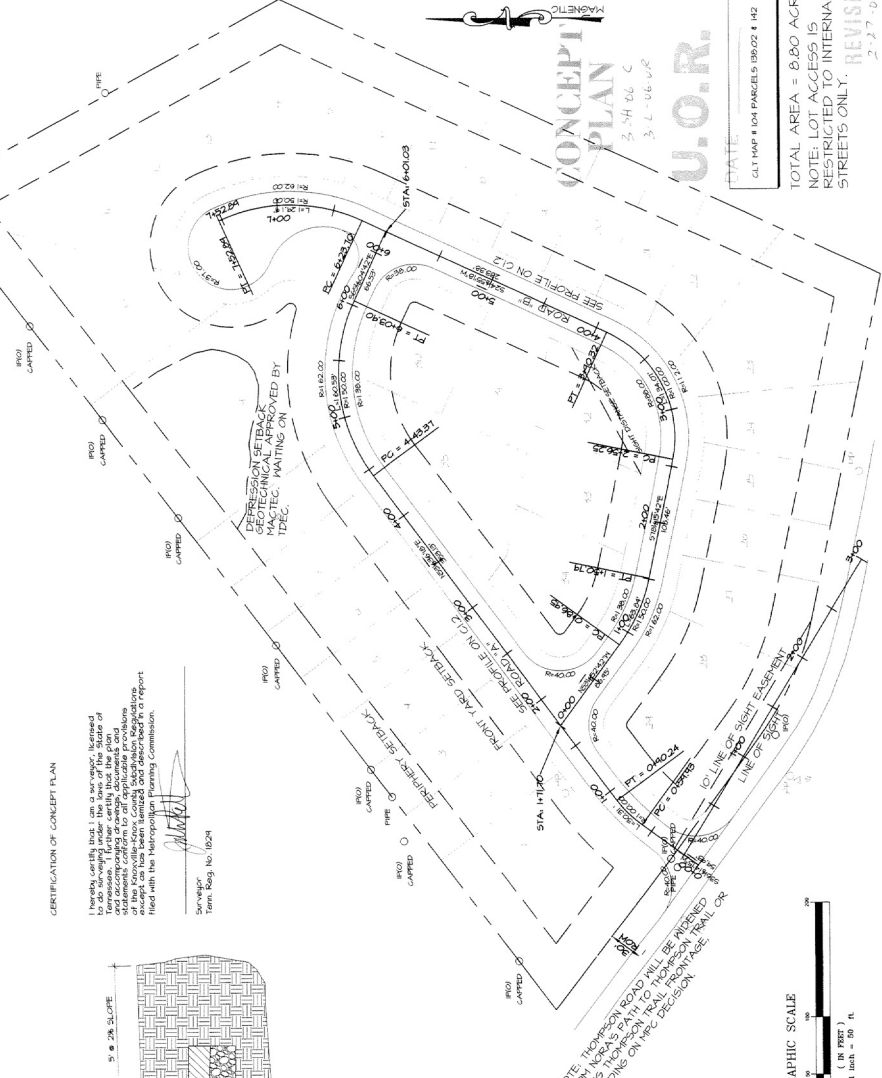
CERTIFICATION OF CONCEPT PLAN

I hereby certify that I am an architect, licensed to do so, working under the supervision of the State of Tennessee, and that I am duly qualified to prepare and accompany all drawings, documents and specifications for the construction of the project shown on the foregoing drawings, documents and specifications, and that I am duly qualified to support the same with the Metropolitan Planning Commission.

Signature: _____
Title: _____



LOCATION MAP NOT TO SCALE



U.O.R.
DATE: 2/27/06
CLT MAP # 04 PARCELS 19002 & 102
TOTAL AREA = 8.80 ACRES
NOTE: LOT ACCESS IS RESTRICTED TO INTERNAL STREETS ONLY. REVISED 2-27-06

SHEET 1

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THE CITY OF KNOXVILLE
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COMMUNITY DEVELOPMENT DEPARTMENT
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ADDRESS: 1100 CHAMBERLAIN DRIVE, SUITE 100
KNOXVILLE, TN 37922

THOMPSON TRAIL SUBDIVISION
2128 THOMPSON ROAD
KNOXVILLE, TN 37922
A NEW DEVELOPMENT FOR

DRAWING TITLE: SITE ROAD PLAN
DESIGNED BY: C.M.J.
DRAWN BY: J.C.P.
CHECKED BY: R.E.H.
COMM. NO. 06043
REVISIONS:
DATE: 2/27/06

Sheet 1 of 1
Call

GRADING AND EROSION CONTROL NOTES

1. EROSION CONTROL MEASURES SHOWN ON THIS PLAN ARE A MINIMUM REQUIREMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL REGULATORY AGENCIES RELATED TO SITE GRADING AND STORMWATER RUNOFF.
2. ALL GRADING SHALL BE MAINTAINED UNTIL PAVING IS COMPLETED AND LANDS HAVE BEEN ESTABLISHED.
3. CONTRACTOR TO FIELD VERIFY ROAD GRADES PRIOR TO CONSTRUCTION. ENGINEERS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL REGULATORY AGENCIES RELATED TO SITE GRADING AND STORMWATER RUNOFF.
4. CONTRACTOR SHALL NOTIFY ENGINEER IF SLOPES ARE LESS THAN 1%.
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7. CONTRACTOR SHALL NOTIFY ENGINEER IF SLOPES ARE LESS THAN 1%.
8. THE INTENT OF THESE PLANS IS TO ESTABLISH RESIDENTIAL LOTS THAT ARE FEASIBLE AND ECONOMICALLY VIABLE. ENGINEERS SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL REGULATORY AGENCIES RELATED TO SITE GRADING AND STORMWATER RUNOFF.
9. CONTRACTOR SHALL NOTIFY ENGINEER IF SLOPES ARE LESS THAN 1%.
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21. CONTRACTOR SHALL NOTIFY ENGINEER IF SLOPES ARE LESS THAN 1%.
22. CONTRACTOR SHALL NOTIFY ENGINEER IF SLOPES ARE LESS THAN 1%.



LOCATION MAP NOT TO SCALE

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THOMPSON TRAIL SUBDIVISION
 A NEW DEVELOPMENT FOR
 2128 THOMPSON ROAD
 KNOXVILLE, TN 37932

ALL DRAWINGS HAS BEEN CHECKED FOR:
 ■ FOR INTERFERENCES
 ■ FOR CONFLICTS
 ■ FOR OMISSIONS
 ■ FOR ERRORS
 ■ FOR CONSTRUCTION LOGIC
 ■ FOR CONSTRUCTION SEQUENCE
 ■ FOR CONSTRUCTION COSTS

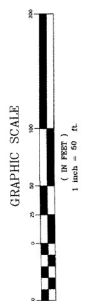
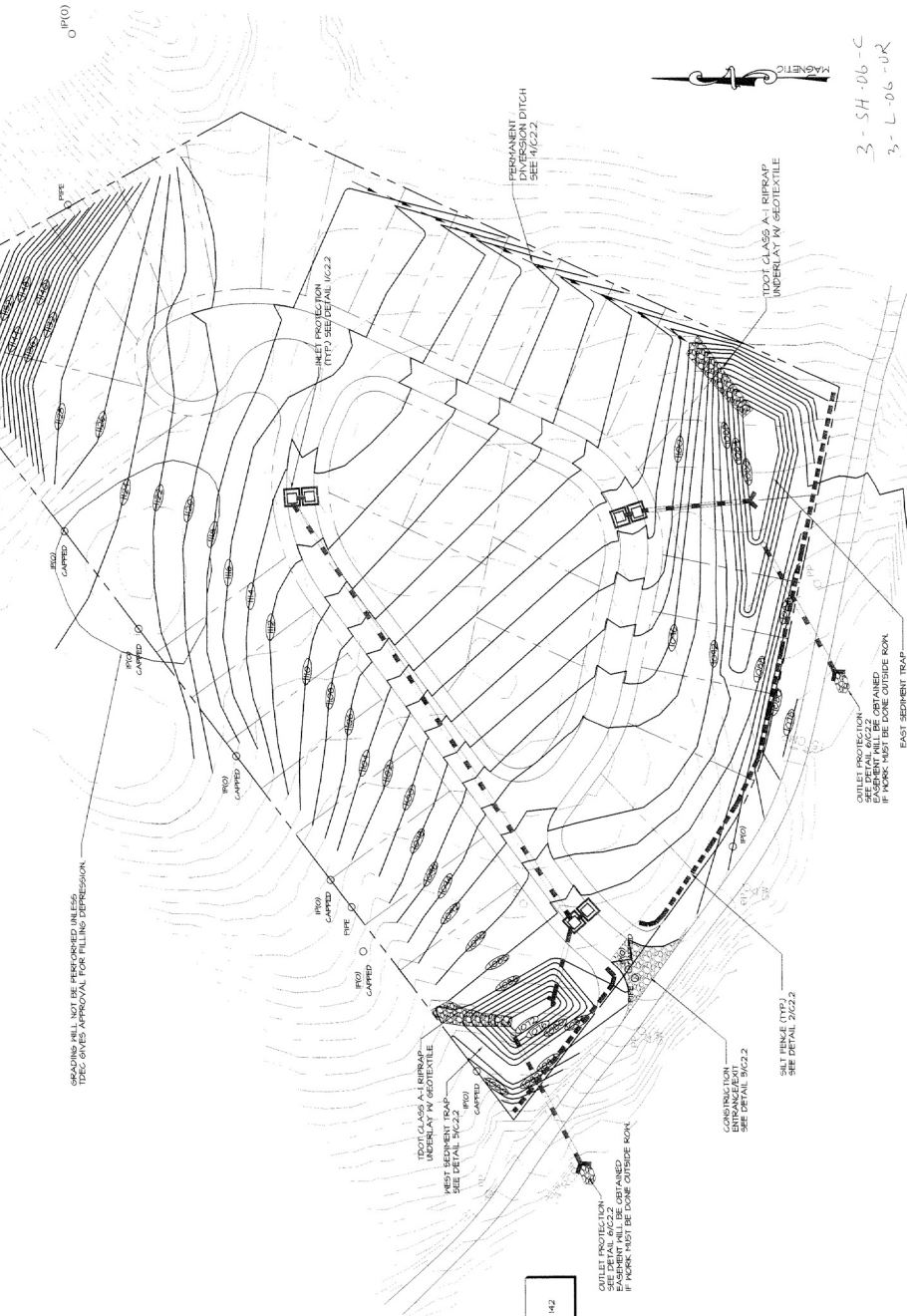
DRAWING TITLE:
 SITE GRADING AND EROSION CONTROL PLAN

Date: 2/27/06
Designed By: S.M.L.
Drawn By: J.C.P.
Reviewed By: R.E.H.
Comm. No.: 060403
REVISIONS:

Sheet No. 5 of 12
 Sheet No. C21

2-27-06

3-SH-06-C
 3-L-06-UK



SITE GRADING AND EROSION CONTROL PLAN
 SCALE: 1" = 30'-0"

SITE GRADING LEGEND

- EXISTING PROPERTY LINE
- INTERIOR LOT LINE
- EXISTING CONTOUR
- FINISH CONTOUR
- FINISH SPOT ELEVATION
- SILT FENCE (10'-12')
- STORM INLET (16"x24")
- INLET PROTECTION (16"x24")
- ENTRANCED MAT (16"x24")
- BENCHMARK

GLT MAP # 04 PARCELS 190.02 # 142
 NOTE: NOT SUBMITTED TO STATE



REQD SED. TRAP VOLUMES

REQD SED. TRAP VOLUMES	NET STORAGE (CF)	DRY STORAGE (CF)
WEST POND	12,000	12,000
EAST POND	16,000	16,000