

SUBDIVISION REPORT -CONCEPT/DEVELOPMENT PLAN

AGENDA ITEM #: 23
AGENDA DATE: 2/9/2023
1/12/2023
THOMPSON CREEK (FKA THOMPSON MEADOWS)
ROBERT G. CAMPBELL & ASSOCIATES
HAM Land Partners, LLC
12 209 View map on KGIS
County Commission District 8
7921 THOMPSON SCHOOL RD (7923)
West side of Thompson School Rd, northwest of Karnes Dr
Northeast County
Rural Area
Beaver Creek
108.26 acres
PR (Planned Residential)
Agriculture/Forestry/Vacant Land
Attached and detached residential subdivision
North: Agriculture/forestry/vacant A (Agricultural) South: Single family residential, Rural residential PR (Planned Residential), A (Agricultural) East: Agriculture/forestry/vacant, Rural residential, Single family residential A (Agricultural) West: Agriculture/forestry/vacant, Rural residential, Single family residential PR (Planned Residential), A (Agricultural)
297
Austin Johnson Robert G. Campbell & Associates
Access is via Thompson School Road, a major collector, with a pavement width between 18-ft and 20-ft and a right-of-way width of 40-ft.
VARIANCES 1. Reduce the minimum broken back horizontal curve tangent length from 150' to 98.5' on Road 'E' between curves C13 and C14 2. Reduce the minimum vertical curve on Road 'E' from K=25 to K=20.3 at STA 81+50 3. Reduce the minimum vertical curve on Road 'F' from K=25 to K=16.9

5. Reduce the minimum vertical curve on Road 'G' from K=25 to K=20.6 at STA 122+30

6. Reduce the minimum vertical curve on Road 'G' from K=25 to K=20.2 at STA 124+58

ALTERNATIVE DESIGN STANDARDS REQUIRING KNOXVILLE-KNOX COUNTY PLANNING COMMISSION APPROVAL

1. Reduce the minimum horizontal curve radius from 250' to 100' at curve C1 on Road 'B'

2. Reduce the minimum horizontal curve radius from 250' to 100' at curve C2 on Road 'B'

3. Reduce the minimum horizontal curve radius from 250' to 100' at curve C7 on Road 'D'

4. Reduce the minimum horizontal curve radius from 250' to 100' at curve C8 on Road 'D'

5. Reduce the minimum horizontal curve radius from 250' to 100' at curve C9 on Road 'D'

6. Reduce the minimum horizontal curve radius from 250' to 100' at curve C10 on Road 'D'

7. Reduce the minimum horizontal curve radius from 250' to 200' at curve C11 on Road 'E'

8. Reduce the minimum horizontal curve radius from 250' to 150' at curve C14 on Road 'E'

ALTERNATIVE DESIGN STANDARDS REQUIRING KNOX COUNTY ENGINEERING AND PUBLIC WORKS APPROVAL ** See the Requested Variances and Alternative Design Standards memo attached to the staff report.

STAFF RECOMMENDATION:

Approve the requested variances and alternative design standards based on the justification provided by the applicant and recommendations of the Knox County Department of Engineering and Public Works.

Approve the Concept Plan subject to 13 conditions.

1) Connection to sanitary sewer and meeting other relevant utility provider requirements.

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

3) Provide an internal road connection between Phase 1 and Phase 2 of the development, between Road 'A' and Road 'D', shown as Road 'G'. If environmental constraints prevent this connection, the applicant shall submit a revised concept plan removing the connection and providing justification via a detailed environmental analysis.

4) Road 'G' must be constructed at the same time as Road 'D' in phase 2.

5) Install sidewalks per Chapter 54, Article IV of the Knox County Code, including but not limited to Road' G' and all internal road segments with 1,000 ADT or more. The location of the sidewalks will be determined by Knox County Engineering and Public Works during the design plan phase. Any sidewalks installed that are not required must be maintained by the home owners association.

6) Provide a paved pedestrian connection ("sidewalk") between Road 'B' and Bill Keaton Dr. The sidewalk shall extend to the paved terminus of Bill Keaton Dr and meet ADA standards.

7) Provide a stream determination study to the Knox County Department of Engineering and Public Works for review and approval regarding a potential stream north of Clear Spring Creek. The required stream buffers must be provided if this is determined to be a stream. This may impact the layout of the roads 'D', 'E', and 'F', and lots will have to be consolidated to provide a buildable area outside the stream buffers.

8) If any building construction is proposed within the 50' buffer area around the designated sinkholes/depressions (including the depressions), a geotechnical report must be prepared by a registered engineer to determine soil stability and that report must be submitted to the Knox County Department of Engineering and Public Works for consideration. Any construction in these areas is subject to approval by the County following a review of the report. Engineered footings must be designed for these areas. For those lots that do not have a building site outside of the 50' buffer, approval by Knox County will be required prior to final plat approval. The sinkholes/depressions and 50' buffer shall be designated on the final plat even if they are

|--|

approved to be filled. If it is determined to be a sinkhole, any lot that does not have a buildable area outside of the designated sinkhole must be eliminated or combined with other lots so it does have a buildable area. 9) Provide a minimum 25-ft of road frontage for each lot.

10) Implementing the recommendations of the Thompson Meadows (Thompson Creek) Transportation Impact Analysis (Fulghum MacIndoe, 12/14/2022), as revised and approved by Planning Commission staff and Knox County Engineering and Public Works (see Exhibit A).

11) All double frontage lots must meet the requirements of section 3.02.4. of the Subdivision Regulations.

12) Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.13) Before certification of the final plat for the subdivision, establish a property owners association or other legal entity responsible for maintaining common facilities, such as common areas, amenities, private roads, and/or stormwater drainage systems.

Approve the development plan for an attached and detached residential subdivision with up to 297 dwellings on individual lots, subject to 3 conditions.

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

2) The side street setback (Road 'B' frontage) can be 10' for lots 80, 85, 86, & 90, per Section 3.30.02 of the Knox County Zoning Ordinance.

3) The maximum height of the attached dwellings shall be 35 feet.

With the conditions noted, this plan meets the requirements for approval in the PR district and the criteria for approval of a development plan.

COMMENTS:

This proposal is a residential subdivision with 297 lots on 108 acres at a density of 2.75 du/ac. The property was rezoned from A (Agricultural) to PR (Planned Residential) up to 2.9 du/ac in June 2022 (4-M-22-RZ).

This development is proposed with 2 phases, split by Clear Springs Creek that runs east to west through the middle of the site. Phase 1 is on the south side of the stream and has 66 detached and 34 attached house lots (100 lots total). Phase 2 is on the north and has 100 detached and 87 attached house lots (197 lots total).

The development has two access points to Thompson School Road, one on the south and one on the north sides of Clear Springs Creek. Phase 2 has 197 lots, which exceeds the long-standing unwritten design policy requiring a second entrance or a boulevard entrance road when a subdivision has more than 150 lots. The purpose of this policy is to address access for emergency services, but it also has the secondary benefit of increasing connectivity when multiple entrances are established. The boulevard option should only be used when there are no feasible or logical connections that can provide secondary access to an external road. Staff is recommending an internal connection between phases 1 and 2, shown as Road 'G' on the concept plan.

Sidewalks are required for all road segments that have 1,000 ADT or more, including Road 'G' even if it does not meet the ADT threshold. Additional sidewalks may be installed on the roads; however, their maintenance will be the responsibility of the home owners association. The required sidewalks will be determined during the design plan phase. A pedestrian connection will be provided to Bill Keaton Dr, which terminates with a right-of-way stub-out into the subject property. Knox County is installing a sidewalk on Thompson School Road to create a pedestrian network that leads schools on Tazewell Pike. The pedestrian network uses the Edwards Place sidewalks and connections through a property to the east of Edwards Place that has a subdivision approved but is not yet constructed.

DEVELOPMENT PLAN ANALYSIS PER ARTICLE 6, SECTION 6.50.06 (APPROVAL OR DENIAL)

In the exercise of its administrative judgment, the Planning Commission shall determine if the proposed plan is in harmony with the general purpose and intent of the zoning ordinance and adopted plans.

1) ZONING ORDINANCE

PR (Planned Residential) up to 2.9 du/ac:

a) The PR zone allows detached and attached houses as a permitted use. The administrative procedures for the PR zone require the Planning Commission to approve the development plan before permits can be issued (Article 5, Section 5.13.15).

b) This PR zone district is approved for a maximum of 2.9 du/ac. The proposed density is 2.75 du/ac. c) The maximum height is determined by the Planning Commission for any use other than houses and duplexes. Staff recommends a maximum height of 35 ft for the attached dwellings, which is consistent with the maximum height allowed on surrounding properties.

AGENDA ITEM #: 23	FILE #: 1-SG-23-C	2/2/2023 10:44 AM	MIKE REYNOLDS	PAGE #:	23-3

2) GENERAL PLAN – DEVELOPMENT POLICIES

a) Encourage flexible, planned development zones to protect hillsides, woodlands, wildlife habitats, and stream corridors (Policy 6.1) – The subject site has both Hillside Protection and Stream Protection areas.
Approximately 15 acres on the northern portion of the site will remain undeveloped, and the development remains out of the FEMA 500-year flood plain and 50-ft stream buffer, with only small exceptions.
b) Ensure that the context of new development, including scale and compatibility, does not impact existing neighborhoods and communities (Policy 9.3) – The development will consist of detached houses, which is the same as other nearby residential developments.

c) Encourage a mixture of housing sizes and prices within planned residential developments (Policy 9.8) – This development included a mix of attached and detached houses. This proposal diversifies the housing mix in the area and should provide different price points.

3) NORTHEAST COUNTY SECTOR PLAN

a) The property is classified RR (Rural Residential), SP (Stream Protection), and HP (Hillside Protection).
b) The RR land use allows consideration of up to 2-3 du/ac, consistent with the recommendations of the Growth Policy Plan. The proposed density is 2.75 du/ac.

c) There are approximately 44.65 acres in the HP (Hillside Protection) area in the northern portion of the site (phase 2). The slope analysis recommends disturbing no more than 27.7 acres in the HP area. Approximately 15.75 acres of HP area will remain undisturbed on the site's northern portion. Assuming all other portions of the HP area are disturbed, that is approximately 28.8 acres of disturbance. However, it is unlikely that all 28.8 acres will be disturbed. This proposal is consistent with the HP recommendations.

d) The SP (Stream Protection) area aligns with the FEMA 500-year floodplain. Only a portion of the stream on the property is studied (has a FEMA flood designation). The lots will almost entirely stay out of the 500-year flood area, except for a small portion of lots 28 and 138-140.

4) KNOXVILLE – FARRAGUT – KNOX COUNTY GROWTH POLICY PLAN

a) The property is within the Rural Area. Rural areas are to include land to be preserved for farming, recreation, and other non-urban uses. The rural designation shall not impede the right of a property owner to use or develop the property for a purpose permitted by that property's zoning.

b) The Rural Area recommends a maximum density of 2-3 du/ac. Three (3) du/ac can be considered as an extension of low density residential development if the property is PR, sanitary sewer and public water is provided, connecting collector and arterial roads from the development to the Planned Growth area meet the standards of Knox County Engineering and Public Works, and a transportation impact analysis demonstrates to the satisfaction of the Planning Commission that the effect of the proposed and similar developments in the traffic analysis zone will not reasonably impair traffic flow.

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: 81 (public school children, grades K-12)

Schools affected by this proposal: Gibbs Elementary, Gibbs Middle, and Gibbs High.

• Potential new school population is estimated using locally-derived data on public school student yield generated by new housing.

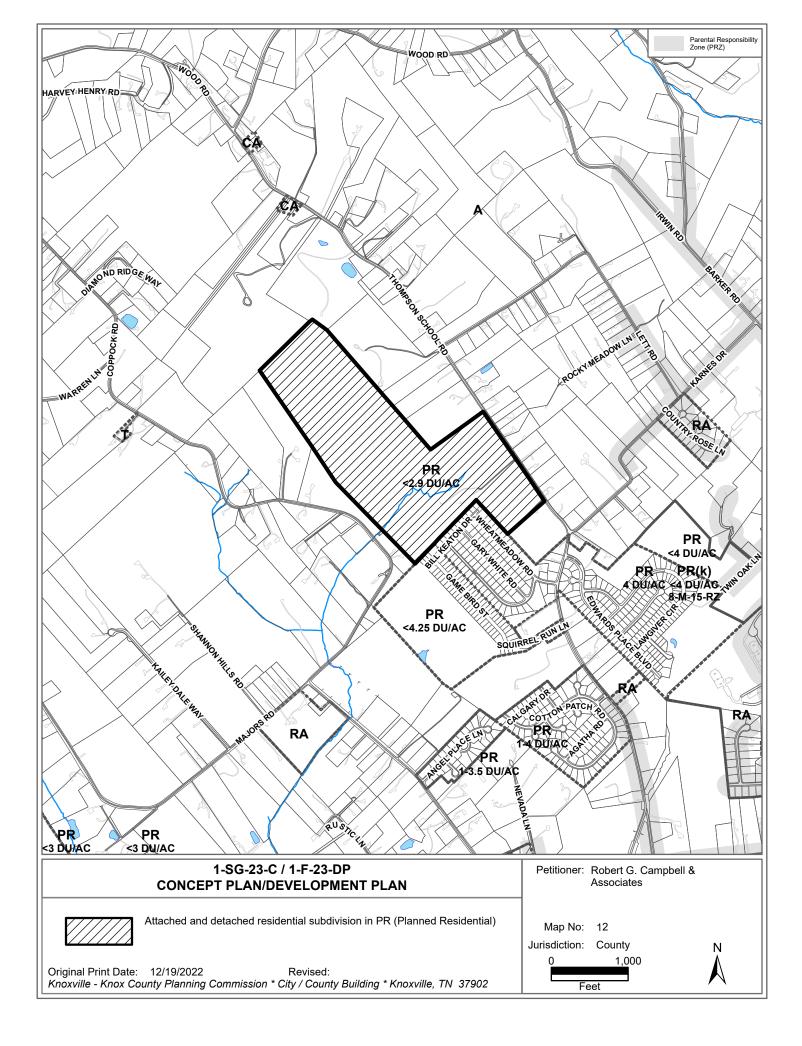
• Students are assigned to schools based on current attendance zones as determined by Knox County Schools. Students may request transfers to different zones, and zone boundaries are subject to change.

• 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.

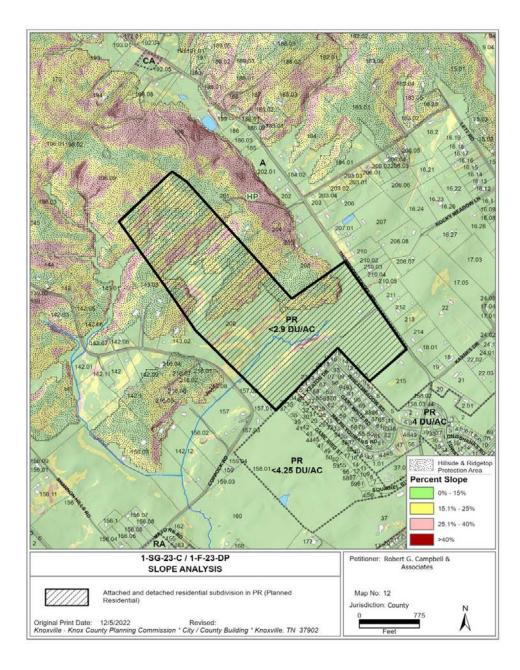
Knoxville-Knox County Planning Commission's approval or denial of this concept plan request is final, unless the action is appealed to Knox County Chancery Court. The date of the Knox County Chancery Court hearing will depend on when the appeal application is filed.

The Planning Commission's approval or denial of this development plan request is final, unless the action is appealed either to the Board of Zoning Appeals or to a court of competent jurisdiction within thirty (30) days of the decision being appealed (Knox County, Tennessee Code of Ordinances, Appendix A, Zoning, 6.50.08).



Staff - Slope Analysis Case: 1-SG-23-C/1-F-23-DP

CATEGORY	ACRES	RECOMMENDED DISTURBANCE BUDGET (Percent)	DISTURBANCE AREA (Acres)
Total Area of Site	108.09		
Non-Hillside	63.44	N/A	
0-15% Slope	15.17	100%	15.17
15-25% Slope	22.04	50%	11.02
25-40% Slope	7.26	20%	1.45
Greater than 40% Slope	0.19	10%	0.02
Ridgetops			
Hillside Protection (HP) Area	44.65	Recommended disturbance budget within HP Area (acres)	27.7
		Percent of HP Area	0.6



Requested Variances & Alternative Design Standards

1-SG-23-C / 1-F-23-DP- THOMPSON MEADOWS, PHASES 1 & 2

VARIANCES

- Reduce the minimum broken back horizontal curve tangent length from 150' to 98.5' on Road 'E' between curves C13 and C14
- 2. Reduce the minimum vertical curve on Road 'E' from K=25 to K=20.3 at STA 81+50
- 3. Reduce the minimum vertical curve on Road 'F' from K=25 to K=16.9 at STA 111+25
- Reduce the minimum broken back curve tangent on Road 'E' from 150' to 98.5' between curves C13 and C14
- 5. Reduce the minimum vertical curve on Road 'G' from K=25 to K=20.6 at STA 122+30
- 6. Reduce the minimum vertical curve on Road 'G' from K=25 to K=20.2 at STA 124+58

ALTERNATIVE DESIGN STANDARDS REQUIRING KNOXVILLE-KNOX COUNTY PLANNING COMMISSION APPROVAL

- 1. Reduce the minimum horizontal curve radius from 250' to 100' at curve C1 on Road 'B'
- 2. Reduce the minimum horizontal curve radius from 250' to 100' at curve C2 on Road 'B'
- 3. Reduce the minimum horizontal curve radius from 250' to 100' at curve C7 on Road 'D'
- 4. Reduce the minimum horizontal curve radius from 250' to 100' at curve C8 on Road 'D'
- 5. Reduce the minimum horizontal curve radius from 250' to 100' at curve C9 on Road 'D'
- 6. Reduce the minimum horizontal curve radius from 250' to 100' at curve C10 on Road 'D'
- 7. Reduce the minimum horizontal curve radius from 250' to 200' at curve C11 on Road 'E'
- 8. Reduce the minimum horizontal curve radius from 250' to 150' at curve C14 on Road 'E'

ALTERNATIVE DESIGN STANDARDS REQUIRING KNOX COUNTY ENGINEERING AND PUBLIC WORKS APPROVAL

- 1. Increase the maximum intersection grade from 1% to 2% on Road 'A' at Thompson School Rd
- 2. Increase the maximum intersection grade from 1% to 2% on Road 'B' at Road 'A' at STA 30+00
- 3. Increase the maximum intersection grade from 1% to 2% on Road 'B' at Road 'A' at STA 48+61
- 4. Increase the maximum intersection grade from 1% to 1.7% on Road 'C' at Road 'B' at STA 50+00
- 5. Increase the maximum intersection grade from 1% to 2% on Road 'C' at Road 'B' at STA 53+74
- 6. Increase the maximum intersection grade from 1% to 2% on Road 'D' at Thompson School Rd
- 7. Increase the maximum intersection grade from 1% to 2.1% on Road 'E' at Road 'D'
- 8. Increase the maximum intersection grade from 1% to 2% on Road 'F' at Road 'E'
- 9. Increase the maximum intersection grade from 1% to 2% on Road 'G' at Road 'A'
- 10. Increase the maximum intersection grade from 1% to 2% on Road 'G' at Road 'D'

KNOX COUNTY ENGINEERING AND PUBLIC WORKS RECOMMENDATION:

Approve 2/3/23

CONCEPT PLAN OF: THOMPSON CREEK **PHASE 1 & 2** KNOX COUNTY, TENNESSEE

INDEX OF SHEETS

COVER SHEET SHEET 1: EXISTING CONDITIONS SHEET 2: EXISTING CONDITIONS (CONT.) SHEET 3: OVERALL SITE LAYOUT SHEET 4: SITE PLAN (PHASE 1) SHEET 5: SITE PLAN (PHASE 1) SHEET 6: SITE PLAN (PHASE 2) SHEET 7: SITE PLAN (PHASE 2) SHEET 8: SITE PLAN (PHASE 2) SHEET 9: ROAD PROFILES SHEET 10: ROAD PROFILES SHEET 11: ROAD PROFILES SHEET 12: ROAD PROFILES SHEET 13: ROAD PROFILES



ROBERT G. CAMPBELL & ASSOCIATES , L.P.

CONSULTING ENGINEERS

KNOXVILLE, TENNESSEE

DEVELOPER: HAM LAND PARTNERS, LLC 672 FOX DEN LANE LAFOLLETTE, TN 3776 (865) 567-1725

ROBERT G. CAMPBELL & ASSOCIATES, L.P. 7523 TAGGART LN. ENGINEER KNOXVILLE. TN 37938 (865) 947-5996

621 WALL STREET SEVIERVILLE, TN 37862 (865) 429-4683

Certification of Concept Plan. I hereby certify that I am a registered engineer, licensed to practice engineering under the laws of the State of Tennessee. I further certify that the plan and accompanying drawings, documents and statements onform to all applicable provisions of the Knoxville-Knox County Subdivision Regulations except as has been itemized and described in a enort filed with the Meterbolitan Planting Commission olitan Plathing Commission

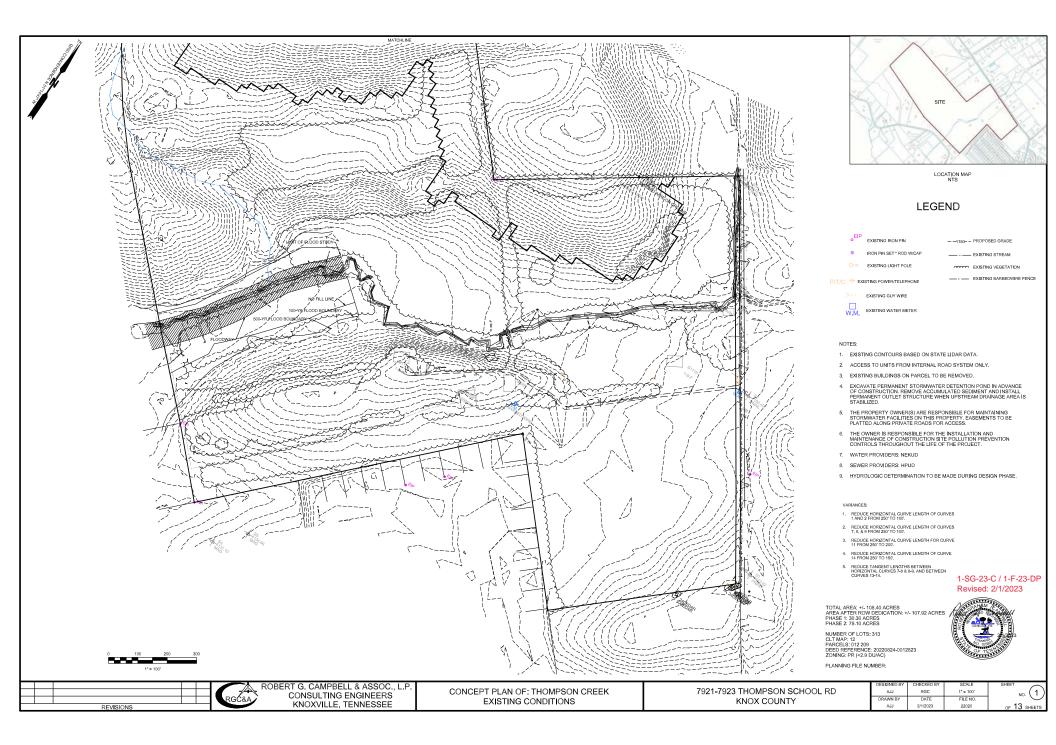
> 1-SG-23-C / 1-F-23-DP Revised: 2/1/2023

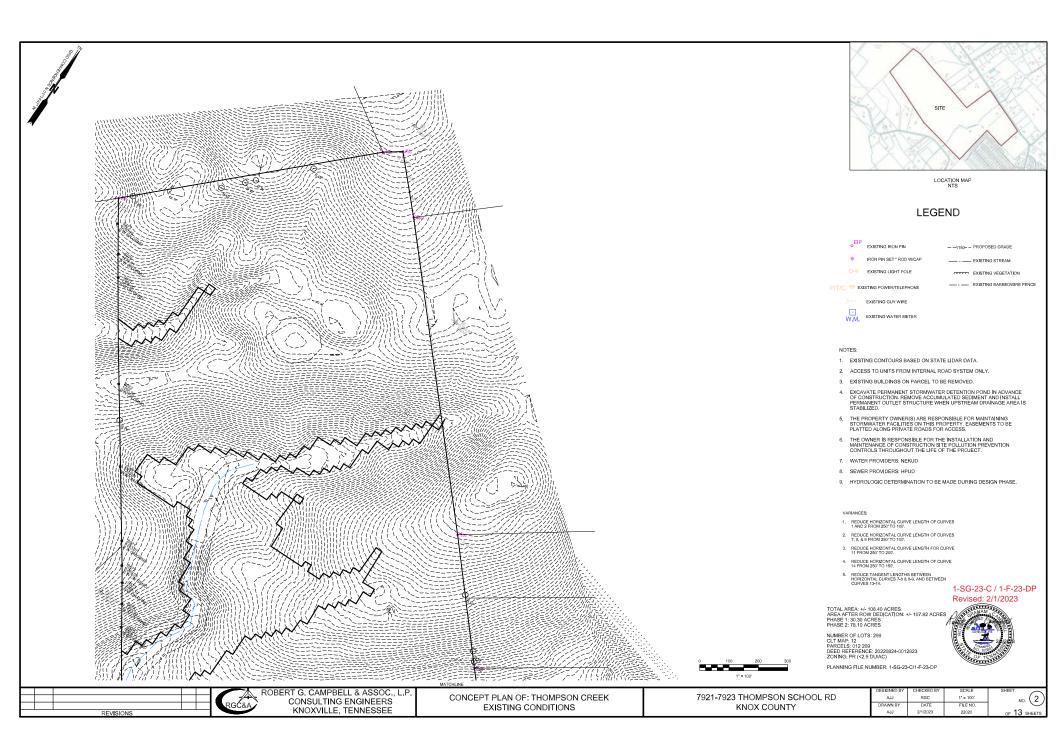


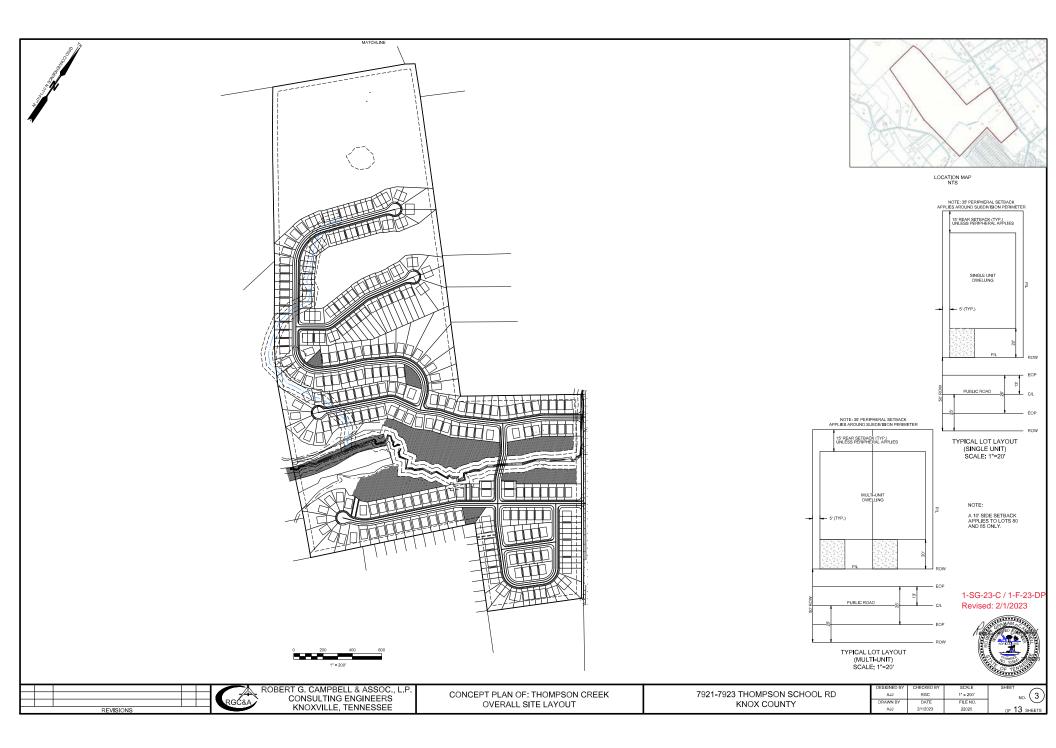
TOTAL AREA: +/- 108.40 ACRES AREA AFTER ROW DEDICATION: +/- 107.92 ACRES PHASE 1: 30.30 ACRES PHASE 2: 78.10 ACRES

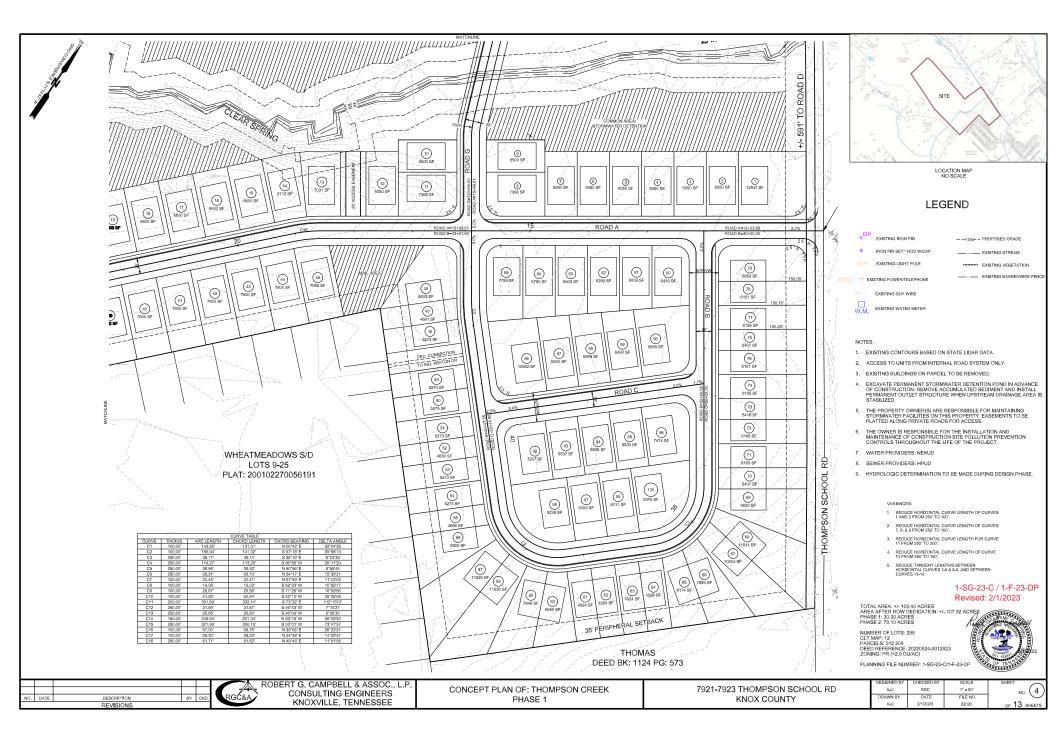
NUMBER OF LOTS: 297 CLT MAP: 12 PARCELS: 012 209 DEED REFERENCE: 20220824-0012823 ZONING: PR (<2.9 DU/AC)

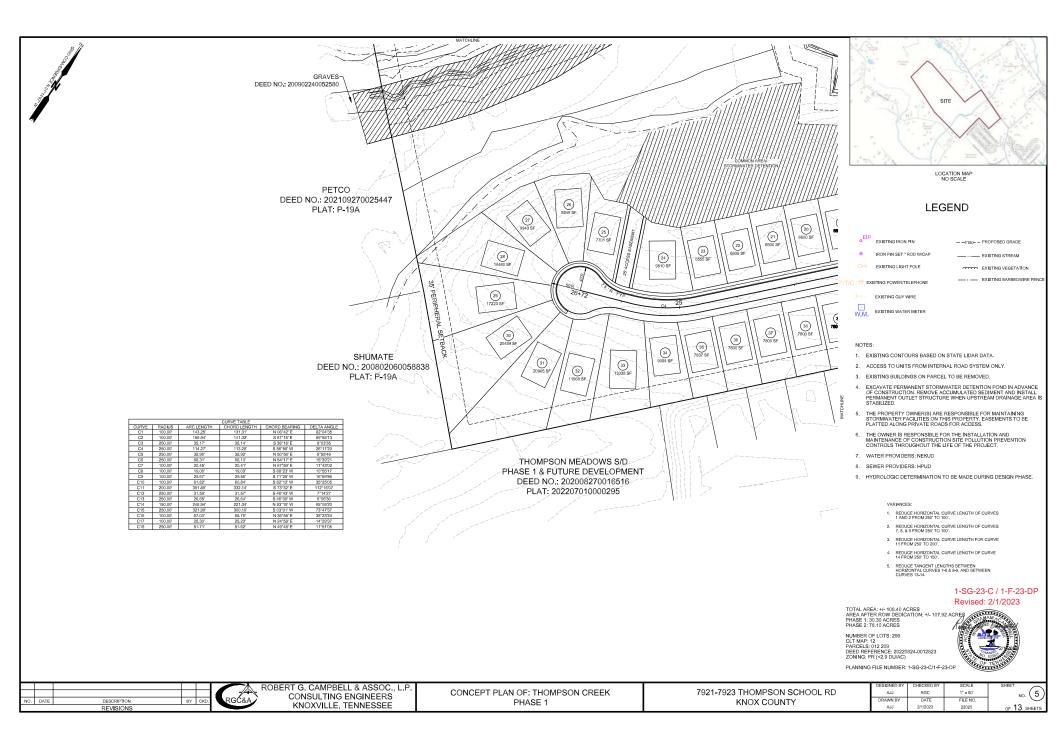
PLANNING FILE NUMBER: 1-SG-23-C/1-F-23-DP

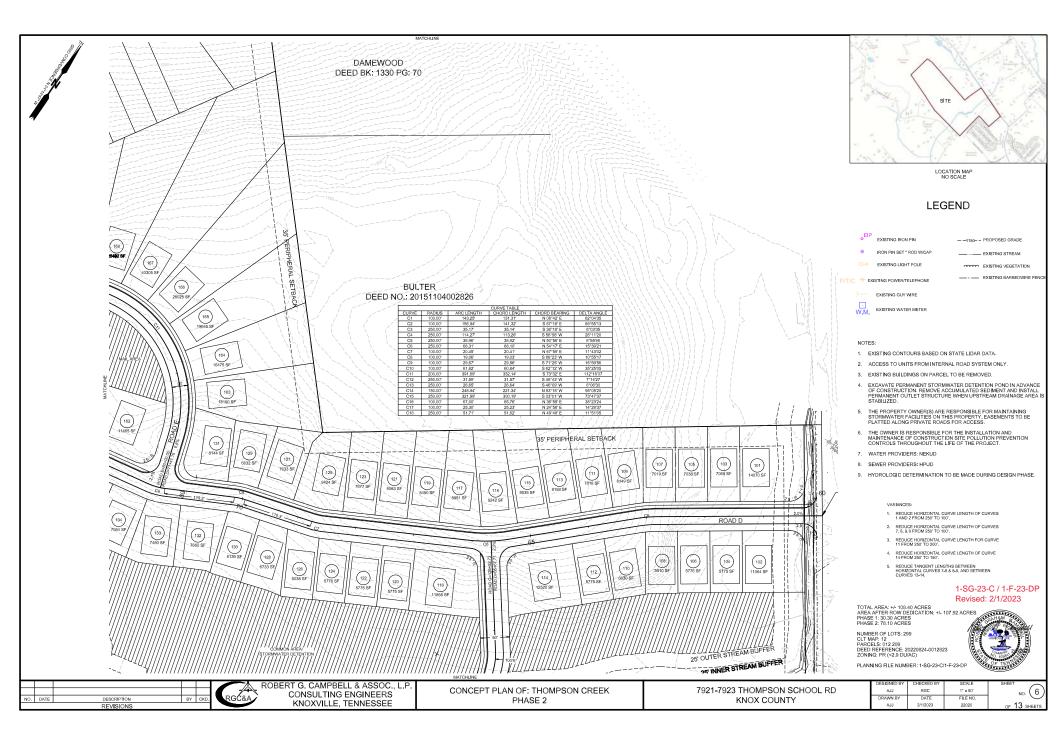


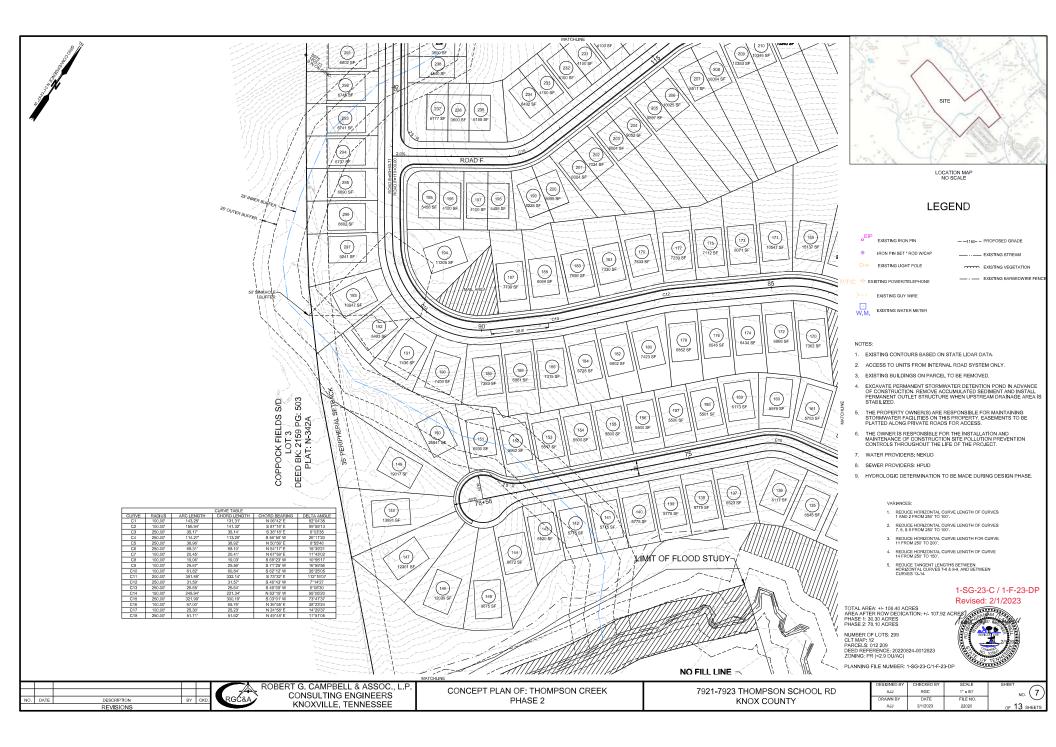


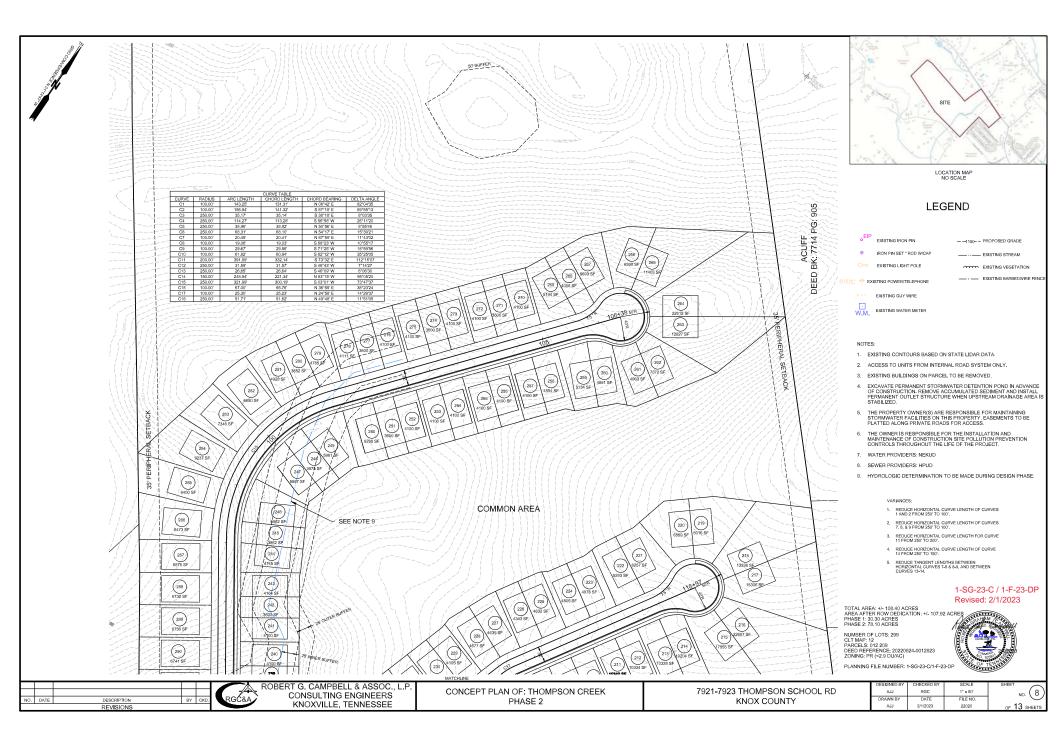


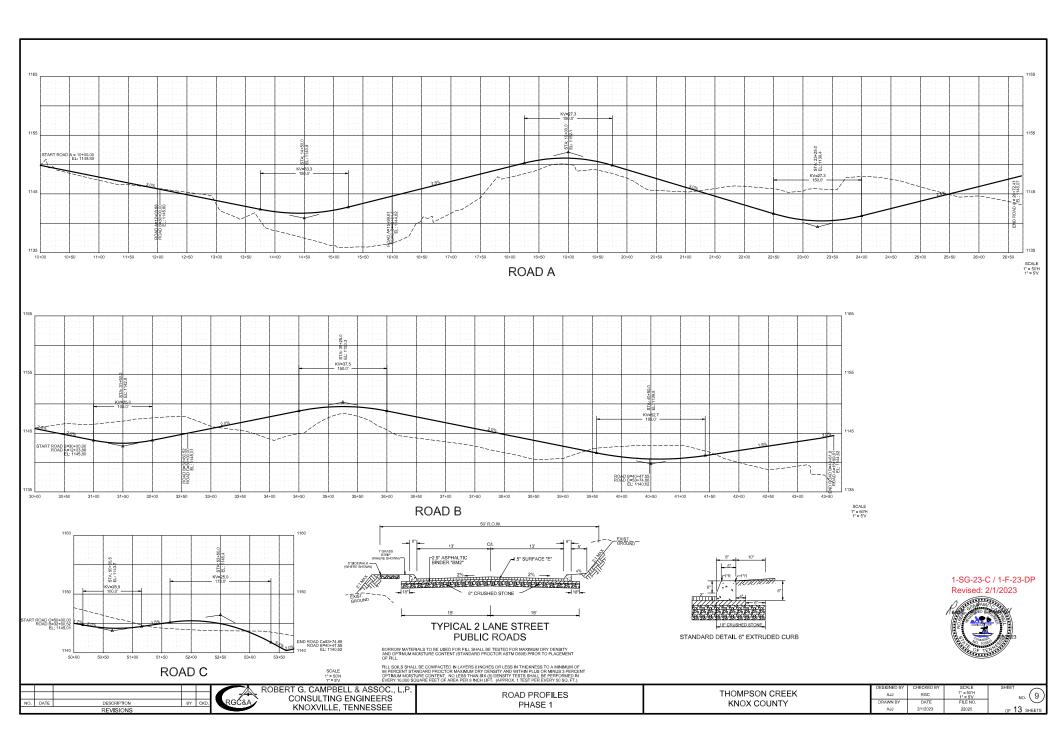


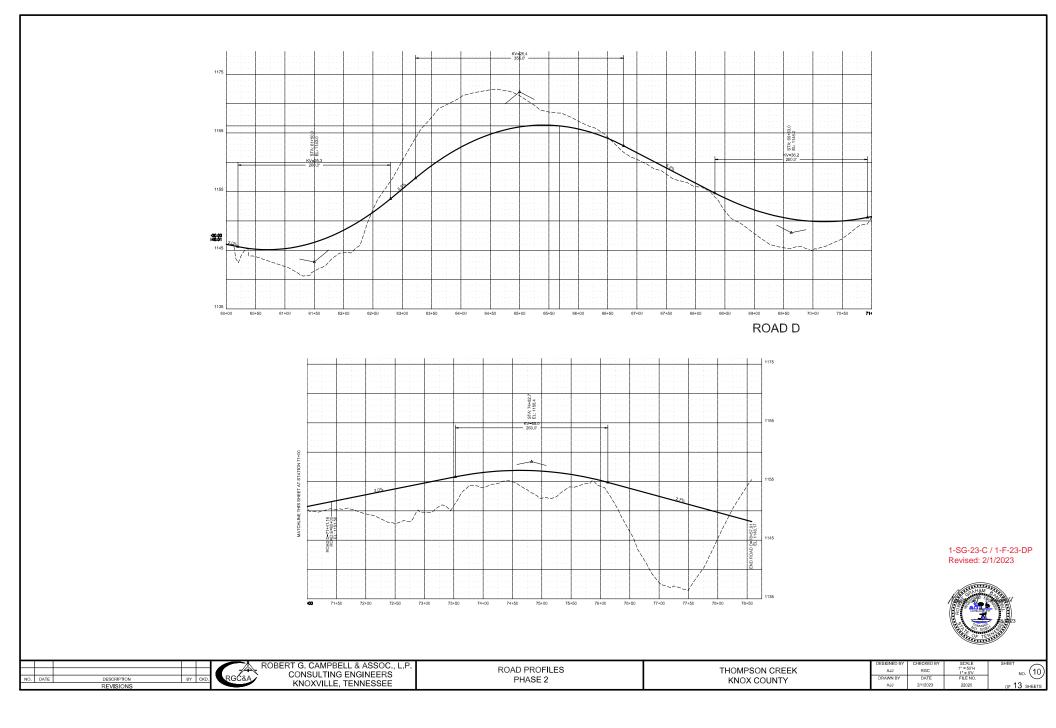


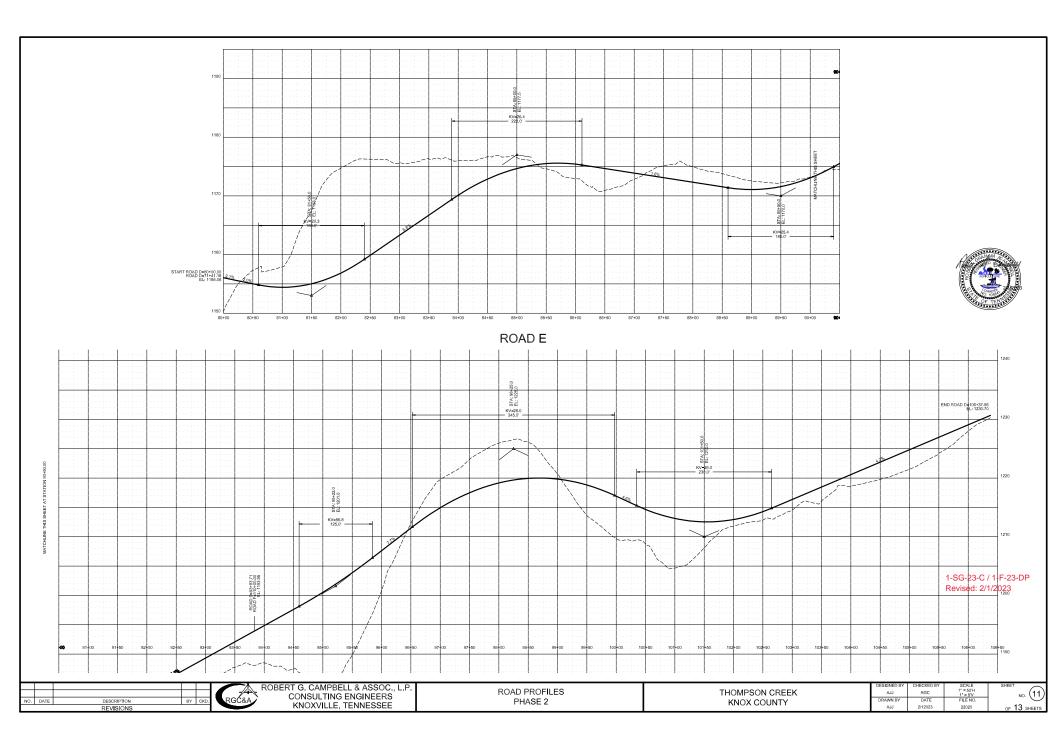


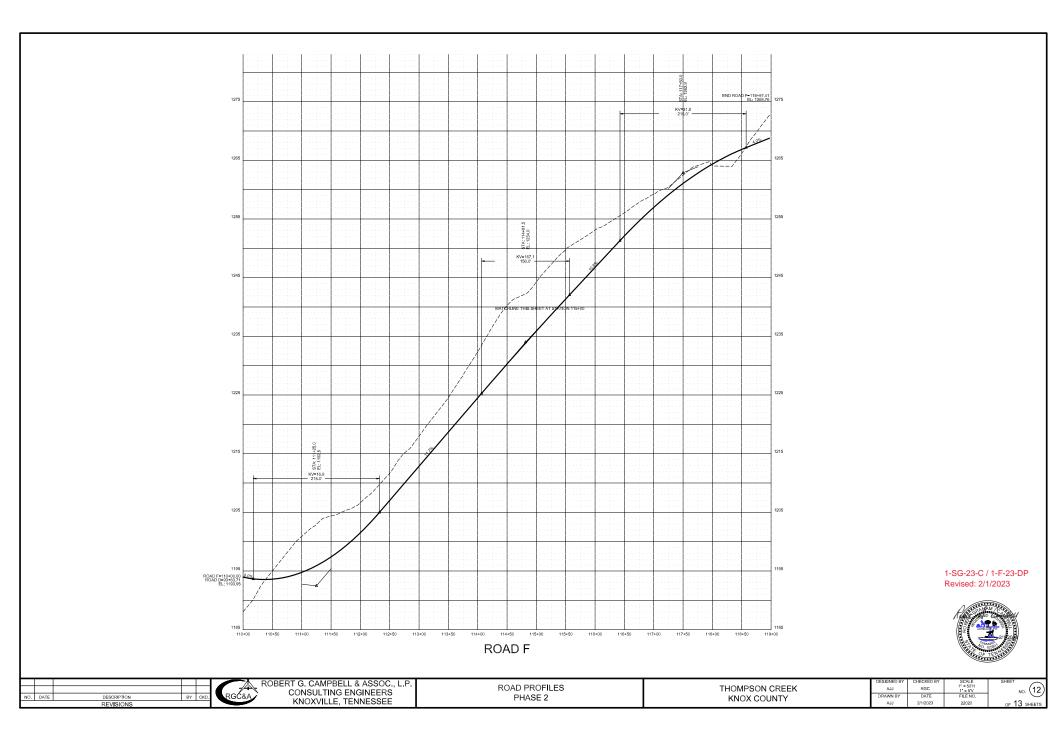


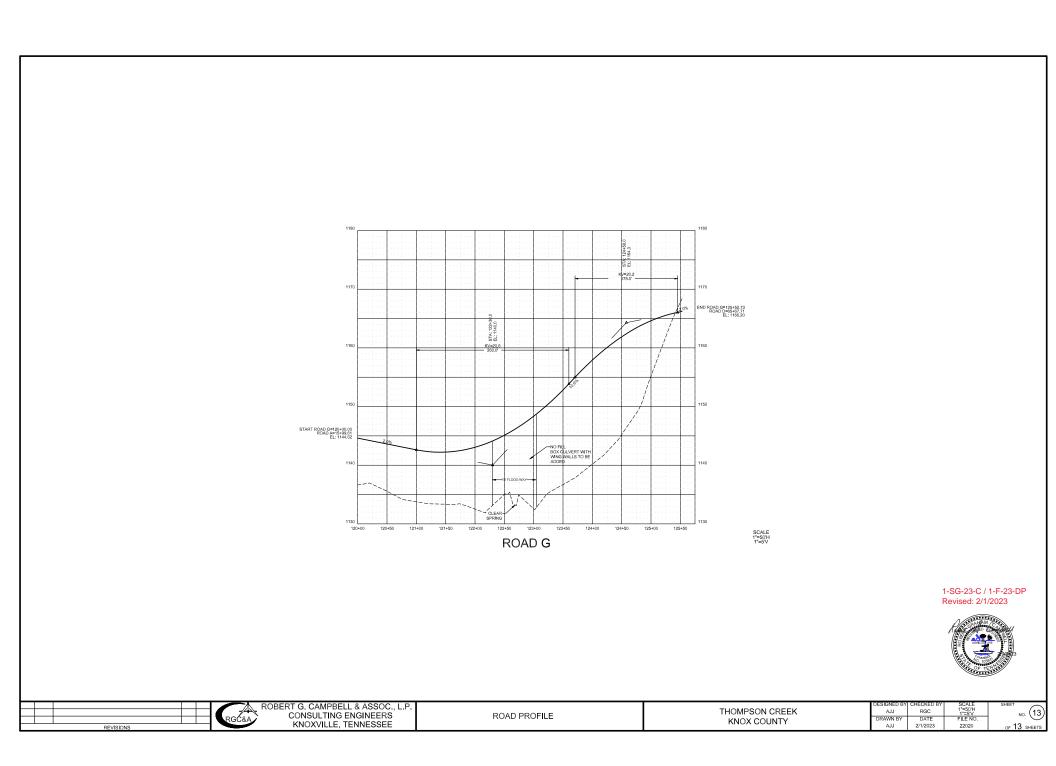












THOMPSON MEADOWS SUBDIVISION

Transportation Impact Analysis 7921 & 7923 Thompson School Road Knox County, TN

A Transportation Impact Analysis for the Thompson Meadows Subdivision

Submitted to

Knox County Engineering and Public Works

Updated December 14, 2022 November 28, 2022 FMA Project No. 588.014



Submitted By:



1-SG-23-C / 1-F-23-DP TIS Version 2 12/14/2022

Thompson Meadows Subdivision Transportation Impact Analysis December 14, 2022

6 Turn Lane Warrant Analysis

The intersections of Thompson School Road at Karnes Drive and Thompson School Road at both driveway connections were evaluated to determine if a right turn lane or a left turn lane are warranted. The Knox County Department of Engineering and Public Works handbook, "Access Control and Driveway Design Policy," was used to analyze the information.

There are no turn lanes warranted at the intersections of Thompson School Road at Karnes Drive, Thompson School Road at the proposed driveway Access #1 and Thompson School Road at the proposed driveway Access #2 during either the AM or PM peak hours after the full buildout of the Thompson Meadows Subdivision residential development.

The turn lane warrant worksheets and analysis are included in Attachment 8.

7 Conclusions and Recommendations

7.1 Thompson School Road at Karnes Drive

The existing, background and full buildout conditions at the unsignalized intersection of Thompson School Road at Karnes Drive were analyzed using the Highway Capacity Software (HCS7). Thompson School Road at Karnes Drive is a three-legged intersection with an existing stop sign on Karnes Drive.

The existing and background traffic conditions for the westbound approach (Karnes Drive) operate at a LOS A during both the AM and PM peak hours and the southbound approach (Thompson School Road) operates at a LOS A during both the AM and PM peak hours.

After the completion of the full buildout of the Thompson Meadows Subdivision the traffic conditions for the intersection of Thompson School Road at Karnes Drive will operate as follows. The westbound approach (Karnes Drive) will operate at a LOS B during both the AM and PM peak hours. The southbound approach (Thompson School Road) will operate at a LOS A during both the AM and PM peak hours.

The 95% queue length is defined as the queue length that has only a 5-percent probability of being exceeded during the analysis time period. The 95% queue length is typically used to determine the length of turning lanes in order to minimize the risk of blockage.

Thompson Meadows Subdivision Transportation Impact Analysis December 14, 2022

The unsignalized intersection capacity analysis shows the full buildout 95% queue length for the westbound approach (Karnes Drive) of less than one vehicle during the AM peak hour and 1.1 vehicles (approximately 50 feet) during the PM peak hour. The existing storage lengths at the intersection of Thompson School Road at Karnes Drive are adequate and no additional improvements are necessary in order to accommodate the Thompson Meadows Subdivision residential development.

A northbound right turn lane and a southbound left turn lane on Thompson School Road are not warranted during either the AM or PM peak hours per the Knox County Department of Engineering and Public Works handbook, "Access Control and Driveway Design Policy."

The width of Karnes Drive varies between 15.5 feet and 16 feet. The minimum recommended pavement width for a local road with a 30 mph design speed and a low volume ADT is 18 feet per AASHTO's A Policy on Geometric Design of Highways and Street. FMA did not identify any locations where spot improvements might be necessary, but the existing roadway width does not meet the minimum recommended pavement width.

The existing signage on Karnes Drive includes a speed limit sign in each direction and a "W1-6" horizontal rectangular sign with a large horizontal arrow pointing to the left for eastbound traffic approaching the horizontal curve. FMA recommends any improvements to Karnes Drive between Thompson School Road and Barker Road including road/shoulder widening, resurfacing, increased signage, etc. be coordinated with Knox County Engineering and Public Works.

7.2 Thompson School Road at Driveway Access #1

Thompson School Road is classified as a Major Collector by the Major Road Plan. The minimum intersection spacing required on a collector street is 300 feet per the "Knoxville-Knox County Subdivision Regulations" amended through October 6, 2022. The driveway connection (Access #1) is located approximately 1,160 feet north of Karnes Drive and 590 feet south of the driveway connection (Access #2). The driveway Access #1 exceeds the typical minimum separation on a collector street; therefore, no change is necessary.

The full buildout conditions at the unsignalized intersection of Thompson School Road at driveway Access #1 were analyzed using the Highway Capacity Software (HCS7). The proposed driveway connection is a three-legged intersection with a stop sign at driveway Access #1.

After the completion of the full buildout of the Thompson Meadows Subdivision the traffic conditions for the intersection of Thompson School Road at driveway Access #1 will operate as follows. The eastbound approach (Access #1) will operate at a

Thompson Meadows Subdivision Transportation Impact Analysis December 14, 2022

LOS A during both the AM and PM peak hours. The northbound approach (Thompson School Road) will operate at a LOS A during both the AM and PM peak hours.

A northbound left turn lane and a southbound right turn lane on Thompson School Road are not warranted during either the AM or PM peak hours per the Knox County Department of Engineering and Public Works handbook, "Access Control and Driveway Design Policy."

The minimum required sight distance for a road with a posted speed limit of 30 mph is 300 feet in each direction in accordance with the "Knoxville-Knox County Subdivision Regulations" amended through October 6, 2022. FMA measured the sight distance at the proposed intersection of Thompson School Road at the driveway Access #1 in November 2022. At 15 feet from the edge of pavement the sight distance at the proposed intersection is greater than 500 feet looking to the north and greater than 500 feet looking to the south.

Any required sight distance easements for the internal subdivision intersections should be coordinated with Knox County Engineering and Public Works and included on the final design drawings prior to construction of the subdivision.

FMA recommends that the signs and pavement markings be installed in accordance with the standards provided in the *Manual on Uniform Traffic Control Devices* (MUTCD).

7.3 Thompson School Road at Driveway Access #2

Thompson School Road is classified as a Major Collector by the Major Road Plan. The minimum intersection spacing required on a collector street is 300 feet per the "Knoxville-Knox County Subdivision Regulations" amended through October 6, 2022. The driveway connection (Access #2) is located approximately 1,160 feet south of Lett Road and approximately 590 feet north of the driveway connection (Access #1). The driveway Access #2 exceeds the typical minimum separation on a collector street; therefore, no change is necessary.

The full buildout conditions at the unsignalized intersection of Thompson School Road at driveway Access #2 were analyzed using the Highway Capacity Software (HCS7). The proposed driveway connection is a three-legged intersection with a stop sign at driveway Access #2.

After the completion of the full buildout of the Thompson Meadows Subdivision the traffic conditions for the intersection of Thompson School Road at driveway Access #2 will operate as follows. The eastbound approach (Access #2) will operate at a LOS A during both the AM and PM peak hours. The northbound approach

Thompson Meadows Subdivision Transportation Impact Analysis December 14, 2022

(Thompson School Road) will operate at a LOS A during both the AM and PM peak hours.

A northbound left turn lane and a southbound right turn lane on Thompson School Road are not warranted during either the AM or PM peak hours per the Knox County Department of Engineering and Public Works handbook, "Access Control and Driveway Design Policy."

The minimum required sight distance for a road with a posted speed limit of 30 mph is 300 feet in each direction in accordance with the "Knoxville-Knox County Subdivision Regulations" amended through October 6, 2022. FMA measured the sight distance at the proposed intersection of Thompson School Road at the driveway Access #2 in November 2022. At 15 feet from the edge of pavement the sight distance at the proposed intersection is greater than 500 feet looking to the north and greater than 500 feet looking to the south.

Any required sight distance easements for the internal subdivision intersections should be coordinated with Knox County Engineering and Public Works and included on the final design drawings prior to construction of the subdivision.

FMA recommends that the signs and pavement markings be installed in accordance with the standards provided in the *Manual on Uniform Traffic Control Devices* (MUTCD).

The standard practice for a residential subdivision with 150 or more lots is to require at least two access points to provide alternative access opportunities in the event that one access is blocked by a fallen tree, crash, or other. The subdivision north of Clear Spring proposes 95 townhome lots and 118 single-family lots for a total of 213 residential lots. The concept plan shows a single entry/exit lane onto Thompson School Road at the driveway Access #2; therefore, consideration should be made to adding a boulevard entrance in order to provide an alternate means of access if one side is blocked. A boulevard section is typically required to extend to the first major internal intersection in order to provide alternate travel paths.

7.4 Traffic Impact Letter

A Traffic Impact Letter evaluation was completed by Fulghum, MacIndoe & Associates in March 2022 for the Thompson Meadows Subdivision residential development during the rezoning process. The total expected area of development was 95 acres and was rezoned from A (Agricultural and Estate) to PR (Planned Residential) with an estimated density of 3.2 units/acre or approximately 300 single family lots.

Thompson Meadows Subdivision Transportation Impact Analysis December 14, 2022

The TIL calculated the trip generation based on 300 single family lots with an estimated 2,772 new daily trips, 202 trips during the AM peak hour and 279 trips during the PM peak hour.

The TIL estimated that 20% of the subdivision traffic would enter/exit using Karnes Drive as a "cut-thru" to access Tazewell Pike (SR 131) and the Gibbs Schools and that the subdivision would add approximately 41 trips during the AM peak hour and 56 trips during the PM peak hour to Karnes Drive.

The submitted concept plan has a total of 313 lots with a proposed combination of townhome and single family lots. The total combined new trips generated by the Thompson Meadows Subdivision residential development were estimated to be 3,032 daily trips. The estimated trips are 224 trips during the AM peak hour and 301 trips during the PM peak hour.

Using the same 20% estimate for traffic entering/exiting using Karnes Drive as a "cut-thru" to access Tazewell Pike (SR 131) and the Gibbs Schools the Thompson Meadows Subdivision will add approximately 44 trips during the AM peak hour and 59 trips during the PM peak hour to Karnes Drive.

The difference between the estimated development during the rezoning process and the submitted concept plan was an increase of 13 lots resulting in an expected increase of 260 daily trips, 22 trips during the AM peak hour and 22 trips during the PM peak hour. And a resulting increase to the traffic entering/exiting Karnes Drive of an additional 3 trips during the AM peak hour and 3 trips during the PM peak hour.

		5	
P	la KNOXVI		g

Request to Postpone · Table · Withdraw

Robert G. Campbell & Associates 1/5/2023 Applicant Name (as it appears on the current Planning Commission agenda) Date of Request January 12, 🚂 File Number(s) 1-SG-23-C/1-F-23-DP Scheduled Meeting Date POSTPONE POSTPONE: All applications are eligible for postponement if the request is received in writing and paid for by noon on Thursday the week prior to the Planning Commission meeting. All requests must be acted upon by the Planning Commission, except new applications which are eligible for one 30-day automatic postponement. If payment is not received by the deadline, the item will be tabled. SELECT ONE: 🔳 30 days 🗌 60 days 90 days February 9, 2023 Postpone the above application(s) until the _____ Planning Commission Meeting. WITHDRAW 🗇 WITHDRAW: Applications may be withdrawn automatically if the request is received in writing no later than 3:30pm on Thursday the week prior to the Planning Commission meeting. Requests made after this deadline must be acted on by the Planning Commission. Applicants are eligible for a refund only if a written request for withdrawal is received no later than close of business 2 business days after the application submittal deadline and the request is approved by the Executive Director or Planning Services Manager. *The refund check will be mailed to the original payee. TABLE **TABLE:** Any item requested for tabling must be acted upon by the Planning Commission before it can be officially tabled. There is no fee to table or untable an item. AUDIHORNZAMION By signing below, I certify I am the property owner, and/or the owners authorized representative. Austin Johnson Applicant Signature **Please Print** (865) 947-5996 austin.johnson@rgc-a.com Phone Number Email STAFF ONLY Michael Reynolds 🗌 No Fee Staff Signature Please Print Date Paid Eligible for Fee Refund? 🗌 Yes 🔲 No Amount: Approved by: Date: Payee Name



Development Request

DEVELOPMENT

Development Plan

Planned Development
 Use on Review / Special Use
 Hillside Protection COA

SUBDIVISION

Concept Plan
Final Plat

ZONING

Plan Amendment
🗌 Sector Plan
🗌 One Year Plan
Rezoning

Robert G. Campbell & Associates Applicant Name Affiliation 11/29/2022 1/12/2023 1-SG-23-C / 1-F-23-DP Date Filed Meeting Date (if applicable) File Number(s) CORRESPONDENCE All correspondence related to this application should be directed to the approved contact listed below. Austin Johnson Robert G. Campbell & Associates Name / Company 7523 Taggart Ln Knoxville TN 37938 Address 865-947-5996 / austin.johnson@rgc-a.com Phone / Email **CURRENT PROPERTY INFO** 672 Fox Den Ln Lafollette TN 37766 **HAM Land Partners, LLC** 865-567-1725 Owner Name (if different) **Owner Address** Owner Phone / Email 7921 THOMPSON SCHOOL RD / 7923 **Property Address** 12 209 108.26 acres Parcel ID Part of Parcel (Y/N)? Tract Size Hallsdale-Powell Utility District, Northeast Hallsdale-Powell Utility District Sewer Provider Water Provider Septic (Y/N) **STAFF USE ONLY** West side of Thompson School Rd, northwest of Karnes Dr **General Location** City **Commission District 8 PR (Planned Residential)** Agriculture/Forestry/Vacant Land ✓ County District **Zoning District** Existing Land Use

Northeast County	RR (Rural Residential), HP (Hillside Protection), SP (Strea	Rural Area
Planning Sector	Sector Plan Land Use Classification	Growth Policy Plan Designation

🖌 Development Plan 🗌 Planned Develo	pment 🗌 Use on Review / Special L	Jse	Related City Permit Number
Hillside Protection COA		residential	·
Home Occupation (specify)			
Other (specify) Attached and detached res	sidential subdivision		
SUBDIVSION REQUEST			
Thompson Meadows			Related Rezoning File Numb
Proposed Subdivision Name			
1 & 2 Split Parcel	313	3	
Unit / Phase Number	Total Number of	f Lots Created	
Additional Information			
Attachments / Additional Requirements			
ZONING REQUEST			
Zoning Change			Pending Plat File Number
Proposed Zoning			
🗌 Plan			
Amendment Proposed Plan Designa	ntion(s)		
	oning Requests		
Additional Information			
STAFF USE ONLY			
PLAT TYPE		Fee 1	Total
Staff Review Planning Commiss	ion	\$1,600.00	
ATTACHMENTS	-		
Property Owners / Option Holders] Variance Request	Fee 2	
ADDITIONAL REQUIREMENTS COA Checklist (Hillside Protection)			
 Design Plan Certification (Final Plat) 		Fee 3	
✓ Site Plan (Development Request)			
Traffic Impact Study			
Use on Review / Special Use (Concept Pla	n)		
AUTHORIZATION			
Ro	bert G. Campbell & Associates		11/29/2022
Applicant Signature Ple	ase Print		Date
Phone / Email			
	M Land Partners, LLC		11/29/2022

Planning	Development DEVELOPMENT Development Plan	SUBDIVISION Concept Plan	ZONING
	 Use on Review / Special Use Hillside Protection COA 		□ Rezoning
Robert G. Campbell & Associ	ates	Eng	ineer/Surveyor
Applicant Name	JUNUARY 12, 2023	Affili	ation
11/28/2022	Carden and a second		File Number(s)
Date Filed	Meeting Date (if applicable)		
	correspondence related to this application	should be directed to the	approved contact listed below.
🔳 Applicant 🛛 Property Owner	🗌 Option Holder 🗌 Project Survey	or 🗌 Engineer 🗌 Ar	chitect/Landscape Architect
Austin Johnson	Robe	ert G. Campbell & Ass	ociates
Name	Comp	any	
7523 Taggart Lane	Knox	ville TN	37938
Address	City	State	e ZIP
(865) 947-5996	Austin.Johnson@rgc-a.com	1	
Phone	Email		
CURRENT PROPERTY INFO			
HAM Land Partners, LLC	672 Fox Den Lane, L	afollette, TN 3776	(865) 567-1725
Property Owner Name (if different)	Property Owner Address	3	Property Owner Phone
7921-7923 Thompson School	Road Corryton, TN 37721	012 209	
Property Address		Parcel ID	
NEKUD	NEKUD		N
Sewer Provider	Water Provider		Septic (Y/N)
STAFF USE ONLY			·····
West side of Thompson Scho	ool Rd, northwest of Karnes Dr	108	acres
General Location		Tract	Size
☐ City X County Bth District	PR (Planned Residential) Zoning District	Agriculture Existing Land Use	e/forestry/vacant
Northeast County	RR, HP, & SP	R	ural Area
Planning Sector	Sector Plan Land Use Classificatio	n Grov	vth Policy Plan Designation

DEVELOPMENT REQUEST

 Development Plan Use on Review / Special Use Hillside Protection COA Residential Non-Residential Home Occupation (specify) 				ity Permit Number(s)
			```	
Other (specify) Attached and detach	ed residential subdivis	ion		
SUBDIVISION REQUEST				
Thompson Meadows	NWYFYFYYN YNALLER HOLOD HLECHRU CHYC DRECHDYDD FYMLWY AL HECHAL CHUR ACH LALA		Related R	ezoning File Number
			4-	M-22-RZ
Phase 1/2 Combine Parcels	Divide Parcel	3/3	•	
Unit / Phase Number	Total	Number of Lots C	reated	
Other (specify) Attached and detach	ned residential subdivis	sion		
Attachments / Additional Requirements				
ZONING REQUEST				
		ERANY JERTINA CONTRACTORIO (CONTRACTORIO)	Pendin	g Plat File Number
Zoning Change Proposed Zoning				
Plan Amendment Change				
Proposed Plan D				
Proposed Density (units/acre) P	Previous Rezoning Requests			
🗌 Other (specify)				
STAFF USE ONLY				
PLAT TYPE		Fee 1		Total
Staff Review Planning Commission				
ATTACHMENTS		0102	Concept Plan	
Property Owners / Option Holders 🛛 Vari	ance Request	Fee 2		¢4 coo
ADDITIONAL REQUIREMENTS				\$1,600
Design Plan Certification ( <i>Final Plat</i> )		Fee 3		
<ul> <li>Use on Review / Special Use (Concept Plan)</li> <li>Traffic Impact Study</li> </ul>				
COA Checklist (Hillside Protection)				
			, <b> </b> 	
11LM			.11	-28-2022
thingh	Robert G. Campl	oell & Associat	es 🖉	Albertat
Applicant Signature	Please Print		Date	
(865) 947-5996	Austin.Johnson@	prgc-a.com		
Phone Number	Email			
The let	Christian 6.	thicks	10-2,	-22
Property Owner Signature	Please Print	. 4	Date	

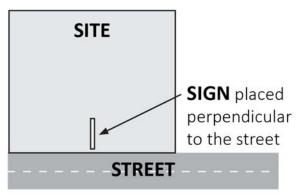
I declare under penalty of perjury the foregoing [i.e., he/she/they is/are the owner of the property and that the application and all associated materials are being submitted with his/her/their consent] is true and correct.



# Sign Posting & Removal Requirement

Revised April 2021

The Administrative Rules and Procedures of the Knoxville-Knox County Planning Commission require a sign to be posted on the property for each application subject to consideration by the Planning Commission, including the following applications: rezoning, plan amendment, concept plan, use on review/special use, planned development, right-of-way closure, and name change.



The required public notice sign(s) will be provided by Planning to the applicant when an application is submitted. If an application is submitted electronically, Planning staff will post the required sign. If a replacement sign(s) is needed, the applicant is responsible for picking up the new sign(s) from Planning and will be charged \$10 for each replacement.

## LOCATION AND VISIBILITY

The sign must be posted on the nearest adjacent/frontage street and in a location clearly visible to vehicles traveling in either direction. If the property has more than one street frontage, the sign should be placed along the street that carries more traffic. Planning staff may recommend a preferred location for the sign to be posted at the time of application.

## TIMING

The sign(s) must be posted **not less than 12 days prior to the scheduled Planning Commission public hearing** and must remain in place until the day after the meeting. In the case of a postponement, the sign can either remain in place or be removed and reposted not less than 12 days prior to the next Planning Commission meeting. The applicant is responsible for removing the sign after the application has been acted upon by the Planning Commission.

The individual below is responsible for posting and removing the sign(s) provided consistent with the above guidelines and between the dates of:

12/31/2022	and	1/13/2023
(applicant or staff to post sign)		(applicant to remove sign)
Applicant Name: <u>Robert G. Campbell &amp; A</u>	Associates	X Sign posted by Staff
Date: <u>11/29/22</u> File Number: <u>1-SG-23-C_1-F-23-DP</u>		Sign posted by Applicant