

SUBDIVISION REPORT -CONCEPT/SPECIAL USE

AGENDA ITEM #: ► FILE #: 2-SB-23-C 17

> **AGENDA DATE:** 2-C-23-SU 4/13/2023

POSTPONEMENT(S): 2/9/2023, 3/9/2023

SUBDIVISION: **BUFFAT MILL ESTATES**

▶ APPLICANT/DEVELOPER: RD BUFFAT, LLC

RD Buffat, LLC OWNER(S):

60 P A 025,025.01 TAX IDENTIFICATION: View map on KGIS

JURISDICTION: City Council District 4

STREET ADDRESS: 5233 MCINTYRE RD (0 MONTE VISTA RD)

► LOCATION: South side of Buffat Mill Rd. north side of McIntvre Rd. eastern

terminus of Monte Vista Rd

SECTOR PLAN: East City

N/A (Within City Limits) **GROWTH POLICY PLAN:**

WATERSHED: Love Creek APPROXIMATE ACREAGE: 70.68 acres

ZONING: RN-2 (Single-Family Residential Neighborhood), HP (Hillside Protection

Overlay)

EXISTING LAND USE: Agriculture/Forestry/Vacant Land

Residential subdivision for duplexes PROPOSED USE:

North: Single family residential -- RN-1 (Single-Family Residential SURROUNDING LAND **USE AND ZONING:**

Neighborhood), RN- (General Residential Neighborhood), HP (Hillside

Protection Overlav)

South: Single family residential -- RN-1 (Single-Family Residential

Neighborhood), RN-2 (Single-Family Residential Neighborhood), HP (Hillside

Protection Overlay)

East: I-640 Right-of-Way -- ROW (Right-of-Way), HP (Hillside Protection

Overlav)

West: Agriculture/forestry/vacant, single family residential -- RN-1

(SingleFamily Residential Neighborhood), HP (Hillside Protection Overlay)

NUMBER OF LOTS: 290

SURVEYOR/ENGINEER: Christopher Golliher, P.E. Ardurra

ACCESSIBILITY: Access is via McIntyre Road, a local road, with a pavement width of 18-ft

> within a right-of-way width of 42-53-ft; and via Buffat Mill Road, a major collector, with a pavement width of 18-22-ft within a right-of-way width of 50-

65-ft.

SUBDIVISION VARIANCES **VARIANCES**

1. Reduce the minimum intersection separation from 300 ft to 190 ft REQUIRED:

between the centerlines of Road 'A' and Locarno Drive.

ALTERNATIVE DESIGN STANDARDS REQUIRING KNOXVILLE-KNOX

COUNTY PLANNING COMMISSION APPROVAL

1. Increase the maximum road grade from 12 percent to 13 percent on Road 'A' between STA 3+07.27 and 7+90.27

ALTERNATIVE DESIGN STANDARDS REQUIRING CITY OF KNOXVILLE DEPARTMENT OF ENGINEERING APPROVAL

** See the Requested Variances and Alternative Design Standards memo attached to the staff report.

STAFF RECOMMENDATION:

Approve the requested variance and alternative design standard based on the justification provided by the applicant and recommendations of the City of Knoxville Department of Engineering.

Approve the concept plan subject to 14 conditions.

- 1. Connection to sanitary sewer and meeting any other relevant utility provider requirements.
- 2. Provision of a street name consistent with the Uniform Street Naming and Addressing System within the City of Knoxville (City Ord. 0-280-90).
- 3. Implementing the recommendations of the Buffat Mill Estates Transportation Impact Analysis (Ardurra, revised 3/29/2023) as required by the Knoxville Department of Engineering during the design plan phase (see Exhibit A).
- 4. Certifying that the required sight distance in both directions is available at the intersections of Buffat Mill Rd, McIntyre Rd, and, if required during the design plan phase, the interior intersections. Documentation shall be provided to and approved by the Knoxville Department of Engineering during the design plan phase.
- 4. Confirm that the road design complies with AASHTO standards during the design plan phase, with review and approval by the Knoxville Department of Engineering.
- 5. Provide sight distance easements on the final plat as required by the Knoxville Department of Engineering during the design plan phase.
- 6. Confirm that the land disturbance complies with the HP (Hillside Protection Overlay) zone district during the design plan phase.
- 7. Provide a right-of-way connection to the eastern right-of-way terminus of Monte Vista Rd from the southwestern intersection of Road 'A' and Road 'B'.
- 8. Provide a paved sidewalk from the southwestern intersection of Road 'A' and Road 'B' to the paved terminus of Monte Vista Rd. The sidewalk design shall meet the requirements of the Knoxville Department of Engineering during the design plan phase.
- 9. Installing all landscaping at the clubhouse as shown on the landscape plan (sheet L-1.0). Minor modifications that are in keeping with the landscape plan can be approved by Planning Commission staff during the design plan phase.
- 10. Meeting all applicable requirements of the City of Knoxville Zoning Ordinance.
- 11. Meeting all applicable requirements of the Knoxville Department of Engineering.
- 12. 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, and/or stormwater drainage systems.
- 13. Placing a note on the final plat that all lots will have access only to the internal street system.
- 14. Meeting all applicable requirements of the Knoxville Utility Board regarding the placement of stormwater infrastructure or other site improvements, such as fences, in the powerline easement along the eastern lot line.
- ▶ Withdraw the Special Use application as requested by the applicant.

COMMENTS:

This proposal is for a 290-lot residential subdivision on this 70.34-acre property. The property is zoned RN-2 (Single-Family Residential Neighborhood) and HP (Hillside Protection Overlay). The RN-2 zone requires a minimum lot size of 5,000 sqft. The proposed lot sizes range from approximately 5,000 to 17,600 sqft.

Approximately 28 acres of the site are in the HP (Hillside Protection Overlay) zone. A maximum of 19.13 acres within the HP overlay can be disturbed. The applicant proposes to disturb 19.15 acres. Conformance with the disturbance limitations must be confirmed during the design plan phase.

A transportation impact analysis (TIA) was submitted by the applicant. The TIA analyzed the intersections of Buffat Mill Rd, Loves Creek Rd, McIntyre Rd, Spring Hill Rd, Monte Vista Rd, and the two new access points at Road 'A' and Road 'F'. The only improvement warranted is a northbound left turn lane on Loves Creek Rd at

the Buffat Mill Rd intersection. This turn lane is warranted under the existing conditions and is only marginally impacted by the new vehicle trips from the Buffat Mill Estates development. A pedestrian connection to the eastern terminus of Monte Vista Rd is being provided. This will increase pedestrian connectivity and significantly reduce the distance to Spring Hill Elementary.

The proposed Road 'A' intersection at Buffat Mill Rd requires an intersection separation variance from 300 ft to 190 ft to Locarno Dr. There is limited opportunity to shift the access point further away from Locarno Dr. The reduced intersection separation is less of a safety concern because the intersections are on the same side of the street and will not create conflicting turn movements on Buffat Mill Rd.

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

Schools affected by this proposal: Spring Hill Elementary, Holston Middle, and Austin East 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.

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

AGENDA ITEM #: 17 FILE #: 2-SB-23-C CORRECTED 4/10/2023 08:43 AM MIKE REYNOLDS PAGE #: 17-3

Requested Variances & Alternative Design Standards

2-SB-23-C - BUFFAT MILL ESTATES

VARIANCES

1. Reduce the minimum intersection separation from 300 ft to 190 ft between the centerlines of Road 'A' and Locarno Drive.

ALTERNATIVE DESIGN STANDARDS REQUIRING KNOXVILLE-KNOX COUNTY PLANNING COMMISSION APPROVAL

1. Increase the maximum road grade from 12 percent to 13 percent on Road 'A' between STA 3+07.27 and 7+90.27

ALTERNATIVE DESIGN STANDARDS REQUIRING CITY OF KNOXVILLE DEPARTMENT OF ENGINEERING APPROVAL

1. Increase the maximum intersection grade from 1 to 1.84 percent on Road 'C' at the Road 'A' and Road 'B' intersections.

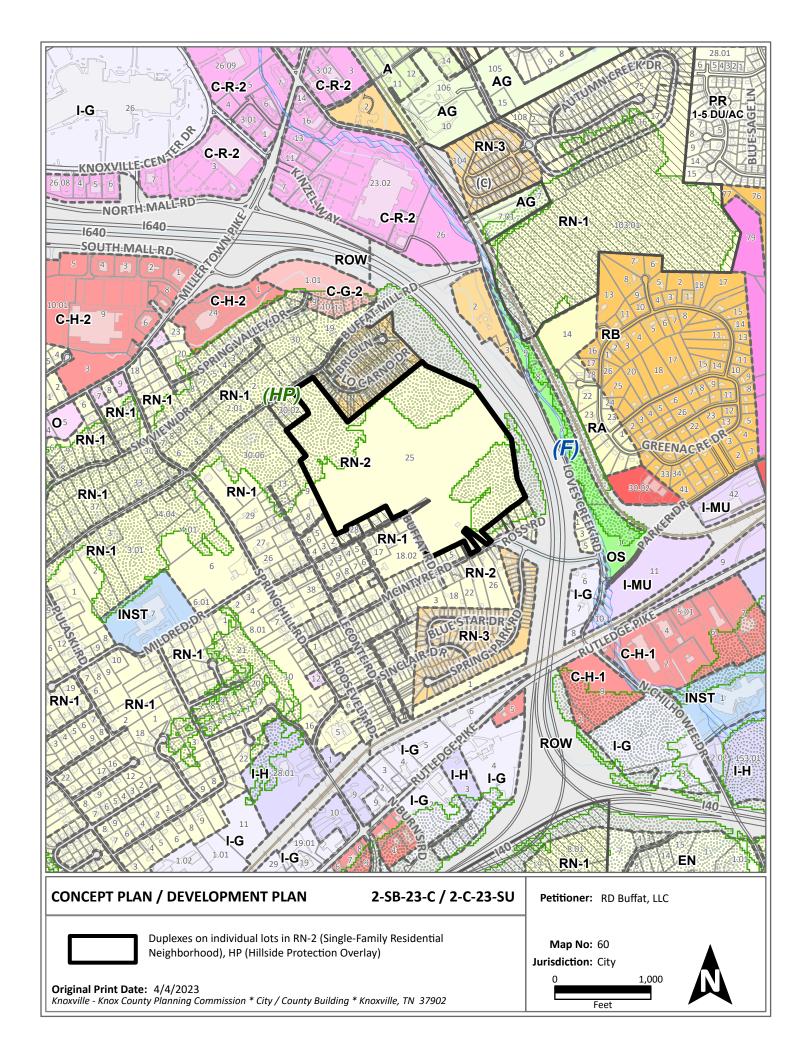
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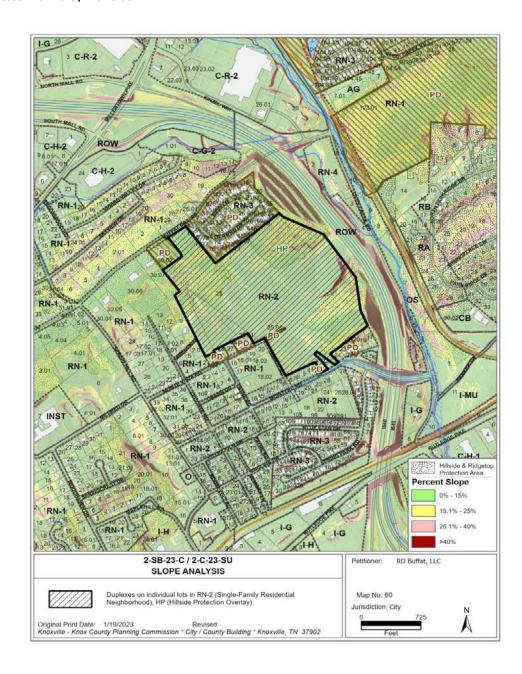
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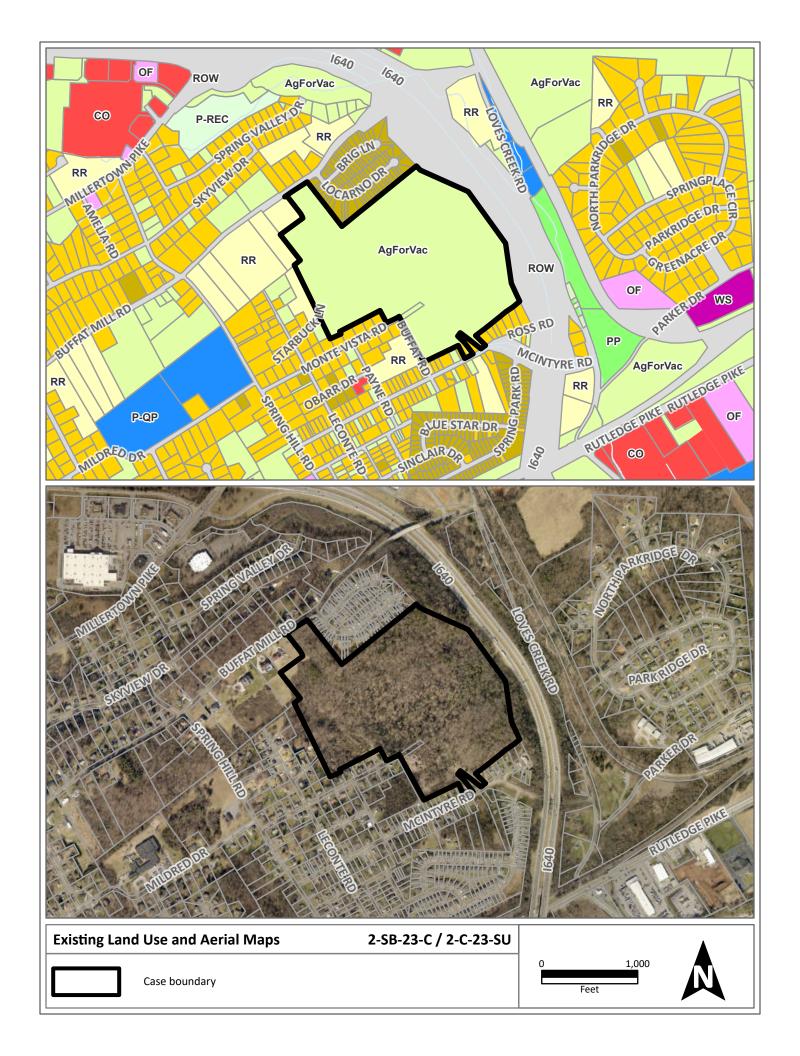
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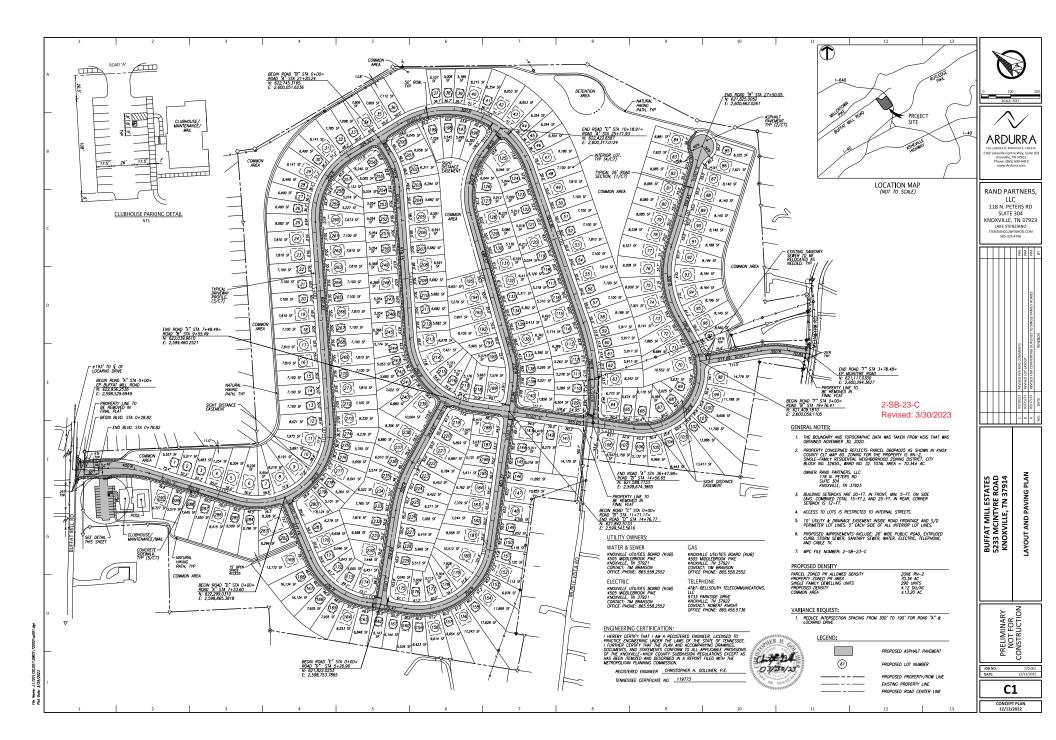
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April 13, 60m	Applicant Name (as it app	ears on the current Planning Com	mission agenda)	Date of Request
2023				File Number(s)
Scheduled Meeting Date		2-C-23-SU		
POSTPONE		<u>. </u>		
POSTPONE: All applications are the week prior to the Planning applications which are eligible for be tabled.	Commission meeting. All	requests must be acted upon	by the Planning Com	mission, except new
SELECT ONE: 30 days 60	days 🔲 90 days			
Postpone the above application(s) (until the		Planning Commission	on Meeting.
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TABLE: Any item requested for to no fee to table or untable an item.		950000000000000000000000000000000000000		ed to the original payee.
AUTHORIZATION By sign	ning below, I certify I am t	he property owner, and/or the	owners authorized r	epresentative.
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Applicant Signature		Please Print		
865-546-9321		bmullins@fmsllp.com		
Phone Number		Email .		
STAFF ONLY				
2/1/00	Micha	el Reynolds	3/22/202	3 -
Staff Signature	Please		Date Paid	3 ✓ No Fee
Eligible for Fee Refund? 🔲 Yes 🖸	2 No Amount: ☐			
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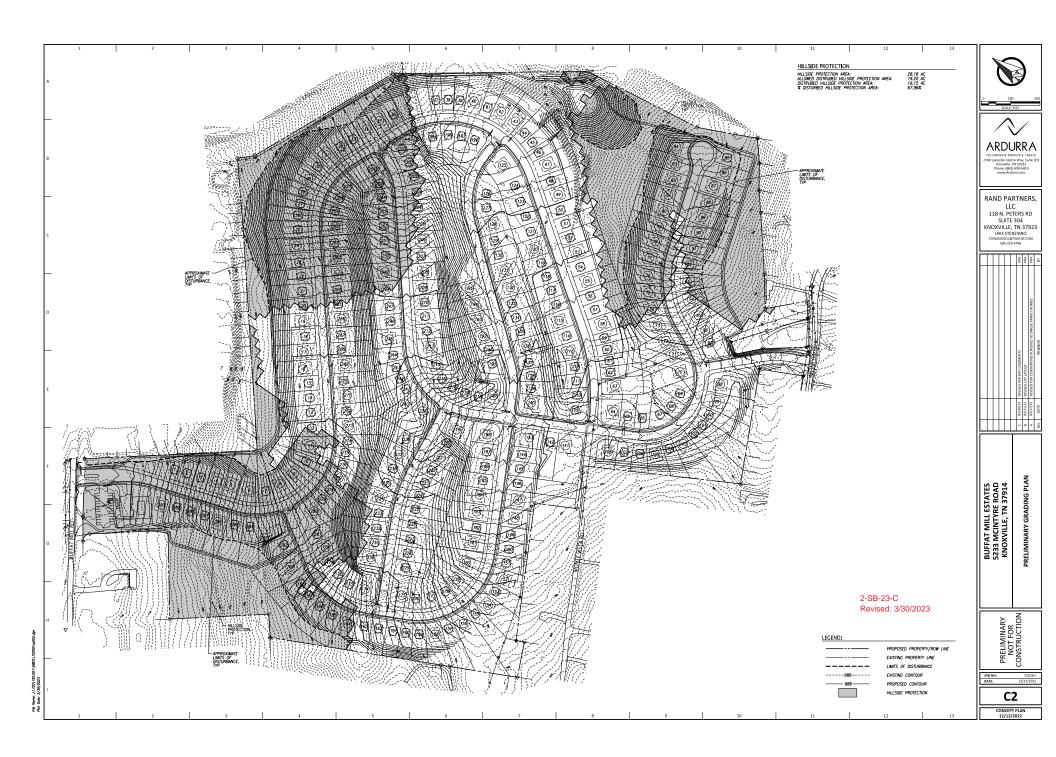


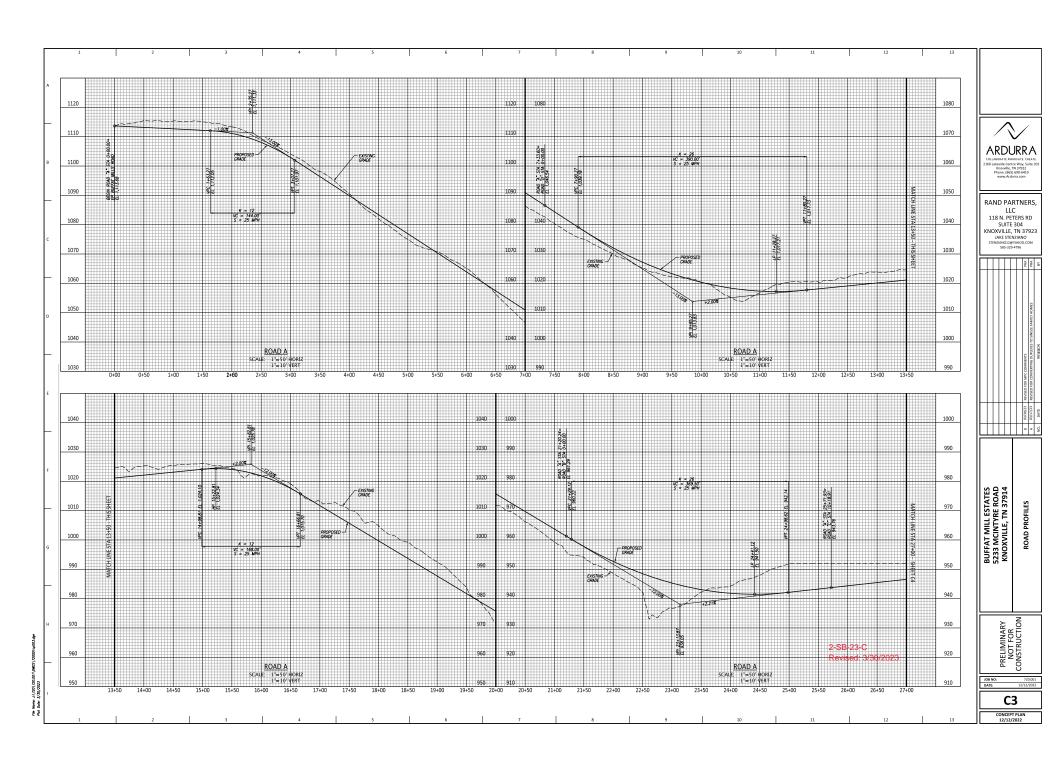
CATEGORY	ACRES	RECOMMENDED DISTURBANCE BUDGET (Percent)	DISTURBANCE AREA (Acres)
Total Area of Site	70.52		
Non-Hillside	42.50	N/A	
0-15% Slope	11.74	100%	11.74
15-25% Slope	13.90	50%	6.95
25-40% Slope	2.03	20%	0.41
Greater than 40% Slope	0.35	10%	0.04
Ridgetops			
Hillside Protection (HP) Area	28.02	Recommended disturbance budget within HP Area (acres)	19.13
		Percent of HP Area	0.7

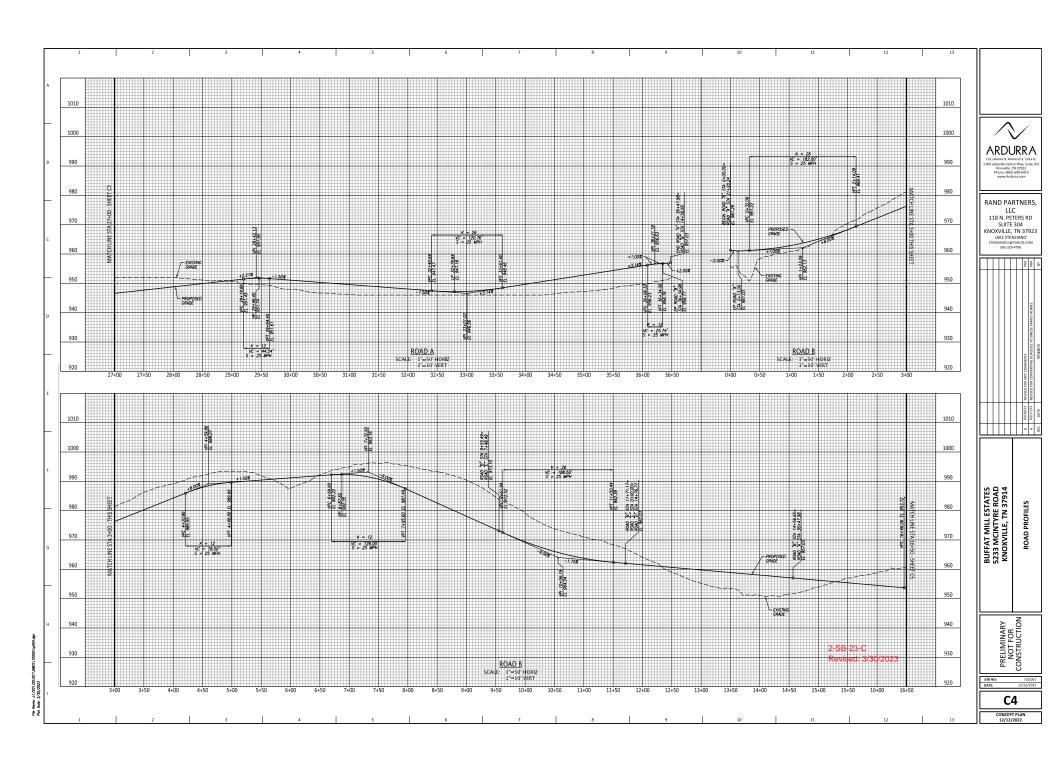


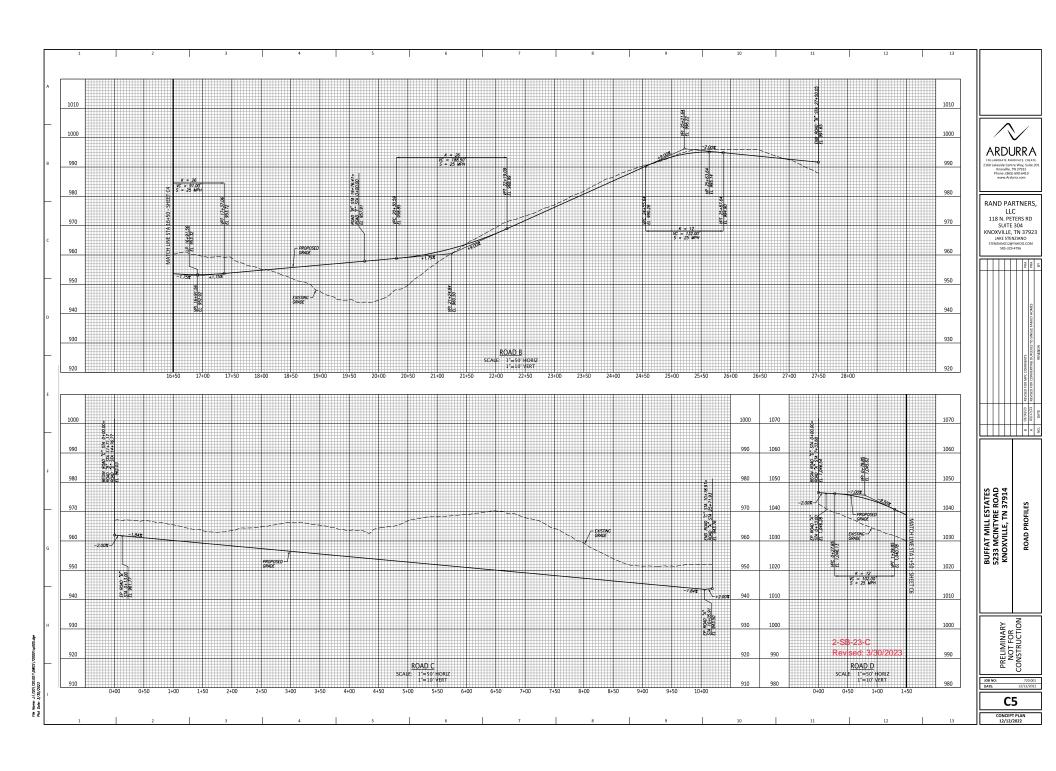


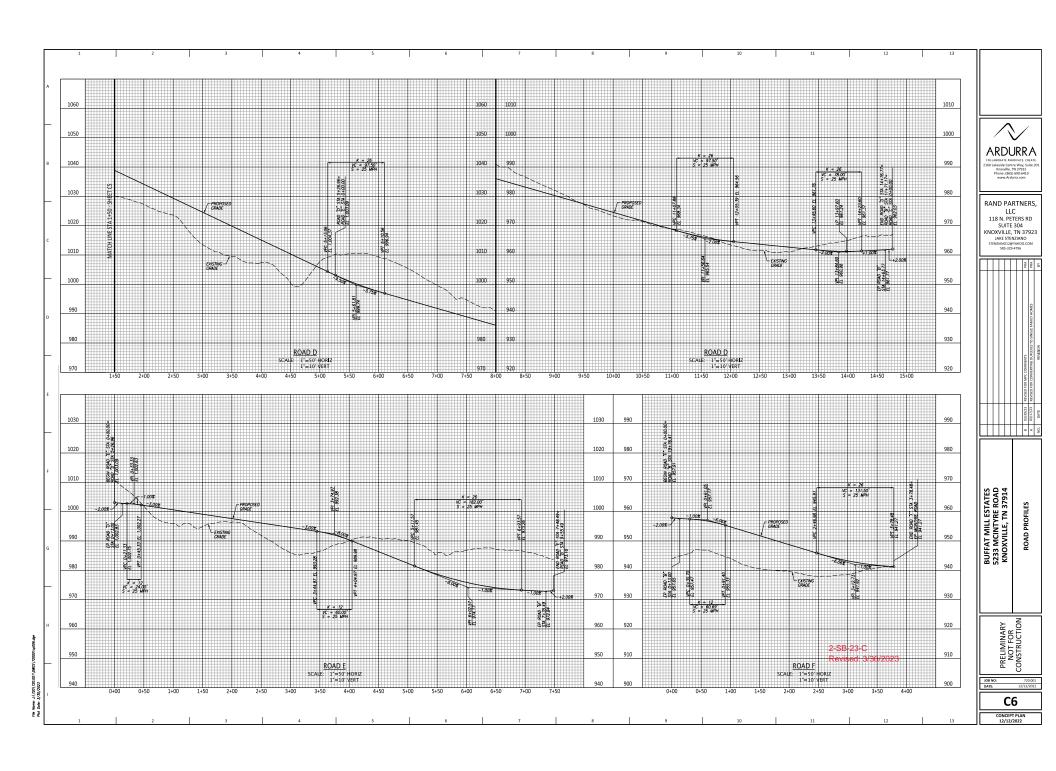


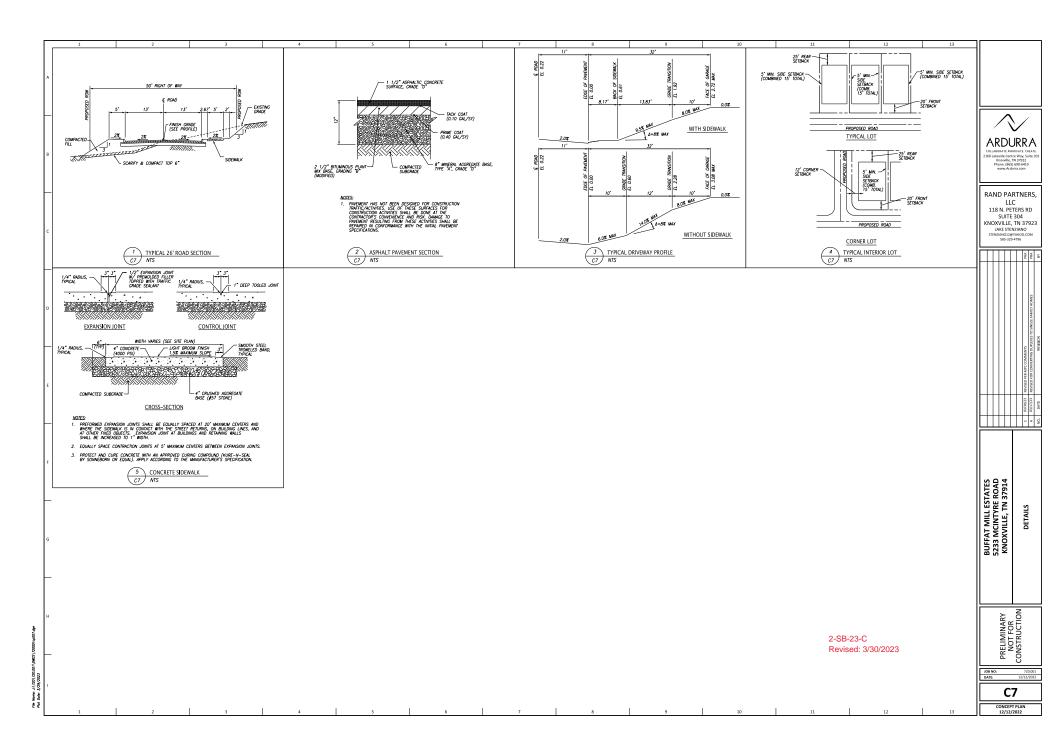


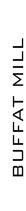


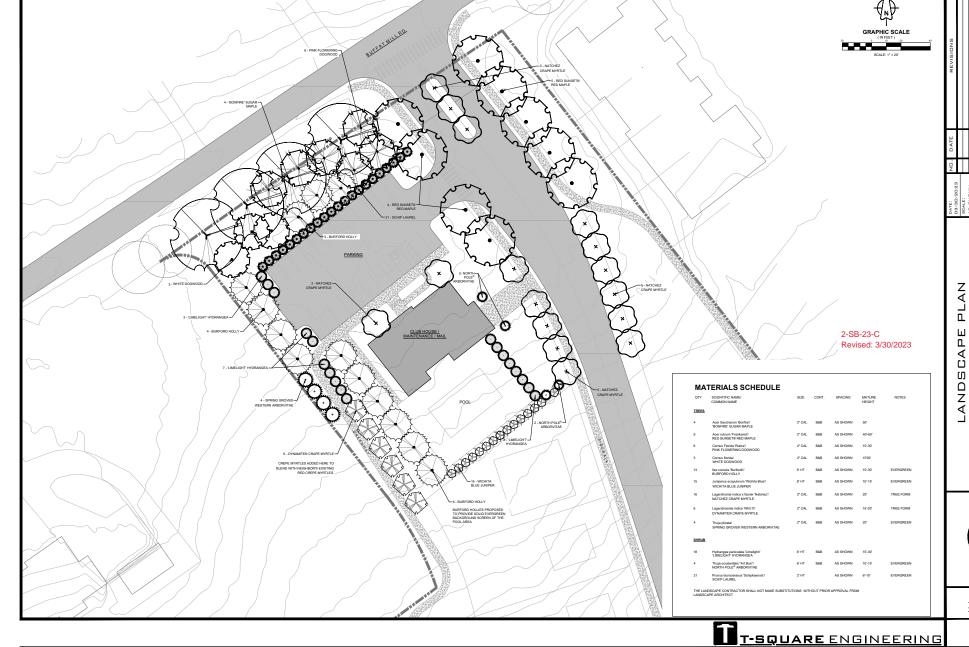














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PROJECT 22-1224

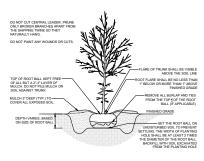
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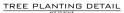
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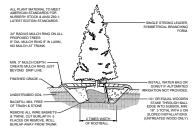
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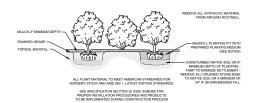
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EVERGREEN TREE PLANTING DETAIL



SHRUB PLANTING IN GROUP DETAIL

- GENERAL NOTES:

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- FINAL ACCEPTANCE.

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2-SB-23-C Revised: 3/30/2023



PROJECT 22-1224

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BUFFAT MILL ESTATES

Transportation Impact Analysis
5233 McIntyre Road
Knoxville, TN

A Transportation Impact Analysis for the Buffat Mill Estates Subdivision

Submitted to

City of Knoxville Department of Engineering

Revised March 29, 2023 January 9, 2023 FMA Project No. 720.001

Submitted By:





The turn lane warrant worksheets and analysis are included in Attachment 9.

7 Conclusions and Recommendations

7.1 Spring Hill Road at Buffat Mill Road

The existing, background and full buildout conditions at the unsignalized intersection of Spring Hill Road at Buffat Mill Road were analyzed using the Highway Capacity Software (HCS7). Spring Hill Road at Buffat Mill Road is a four-legged intersection with existing stop signs on Buffat Mill Road and on the northbound approach of Spring Hill Road. The southbound approach of Spring Hill Road does not stop. The Highway Capacity Software (HCS7) does not calculate delay for an intersection in which only one approach does not stop; therefore, the intersection was analyzed as an all-way stop controlled intersection as a conservative estimate of delay.

The existing and background traffic conditions for the intersection of Spring Hill Road at Buffat Mill Road operate at a LOS B or better for all approaches during both the AM and PM peak hour.

After the completion of the full buildout of the Buffat Mill Estates the traffic conditions for the intersection of Spring Hill Road at Buffat Mill Road will continue to operate at a LOS B or better for all four approaches 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.

The all-way stop controlled intersection capacity analysis shows the full buildout 95% queue length for the northbound approach (Spring Hill Road) and eastbound and westbound approaches (Buffat Mill Road) of less than two vehicles during both the AM peak hour and PM peak hours.

The existing storage lengths for the northbound approach (Spring Hill Road) and eastbound and westbound approaches (Buffat Mill Road) are adequate and no additional improvements are necessary in order to accommodate the Buffat Mill Estates residential development.

7.2 Loves Creek Road at Buffat Mill Road

The existing, background and full buildout conditions at the unsignalized intersection of Loves Creek at Buffat Mill Road were analyzed using the Highway Capacity Software (HCS7). Loves Creek Road at Buffat Mill Road is a three-legged intersection with an existing stop sign on eastbound Buffat Mill Road.

The existing traffic conditions for the eastbound approach (Buffat Mill Road) operate at a LOS B during the AM peak hour and a LOS C during the PM peak hour and the northbound approach (Loves Creek Road) operates at a LOS A during both the AM and PM peak hours.

The background traffic conditions for the eastbound approach (Buffat Mill Road) operate at a LOS B during the AM peak hour and a LOS D during the PM peak hour and the northbound approach (Loves Creek Road) operates at a LOS A during both the AM and PM peak hours.

After the completion of the full buildout of the Buffat Mill Estates the traffic conditions for the intersection of Buffat Mill Road at Loves Creek Road will operate as follows. The eastbound approach (Buffat Mill Road) will operate at a LOS B during the AM peak hour and a LOS D during the PM peak hour. The northbound approach (Loves Creek 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.

Buffat Mill Road at the intersection with Loves Creek Road is located approximately 300 feet east of the intersection of Kinzel Way with an available storage of 15 vehicles before the queue from the stop-controlled intersection would block the connection to Kinzel Way.

The unsignalized intersection capacity analysis shows the full buildout 95% queue length for the eastbound approach (Buffat Mill Road) of less than one vehicle (approximately 25 feet) during the AM peak hour and 4.6 vehicles (approximately 125 feet) during the PM peak hour; therefore, the existing storage at the intersection is adequate and no improvements are necessary in order to accommodate the Buffat Mill Estates residential development.

At the intersection of Buffat Mill Road at Loves Creek a southbound right turn lane is not warranted during either the AM or PM peak hour and a northbound left turn lane is warranted during the PM peak hour per the Knox County Department of Engineering and Public Works handbook, "Access Control and Driveway Design Policy." A northbound left turn lane at the intersection of Buffat Mill Road at Loves Creek Road is met during existing, background and full buildout conditions. The warrant for a northbound left turn lane is an existing condition that is only marginally impacted by the new vehicle trips from the Buffat Mill Estates residential development.

Any future improvements to the intersection or the various traffic management infrastructure, would need to be reviewed, coordinated, and approved by the City of Knoxville Department of Engineering.

7.3 Spring Hill Road at McIntyre Road

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

The existing and background traffic conditions for the westbound approach (McIntyre Road) operate at a LOS A during the AM and PM peak hours and the southbound approach (Spring Hill Road) operate at a LOS A during both the AM and PM peak hours.

After the completion of the full buildout of the Buffat Mill Estates the traffic conditions for the intersection of Spring Hill Road at McIntyre Road will operate as follows. The westbound approach (McIntyre Road) will operate at a LOS B during both the AM and PM peak hours. The southbound approach (Loves Creek Road) will continue to operate at a LOS A during both the AM and PM peak hours.

The unsignalized intersection capacity analysis shows a 95% queue length at the full buildout for westbound McIntyre Road of less than one car length during both the AM and PM peak hours; therefore, the existing storage is adequate, and no improvements are necessary in order to accommodate the Buffat Mill Estates residential development.

7.4 Loves Creek Road at McIntyre Road

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

The existing and background traffic conditions for the eastbound approach (McIntyre Road) operate at a LOS B during both the AM and PM peak hours and the

northbound approach (Loves Creek Road) operate at a LOS A during both the AM and PM peak hours.

After the completion of the full buildout of the Buffat Mill Estates the traffic conditions for the intersection of Loves Creek Road at McIntyre Road will operate as follows. The eastbound approach (McIntyre Road) will operate at a LOS B during both the AM and PM peak hours. The northbound approach (Loves Creek Road) will continue to operate at a LOS A during both the AM and PM peak hours.

The unsignalized intersection capacity analysis shows a 95% queue length at the full buildout for eastbound McIntyre Road of less than one car length during both the AM and PM peak hours; therefore, the existing storage is adequate, and no improvements are necessary in order to accommodate the Buffat Mill Estates.

7.5 Spring Hill Road at Monte Vista Road

The existing, background and full buildout conditions at the unsignalized intersection of Spring Hill Road at Monte Vista Road were analyzed using the Highway Capacity Software (HCS7). Spring Hill Road at Monte Vista Road is a three-legged intersection with an existing stop sign on westbound Monte Vista Road.

The existing and background traffic conditions for the westbound approach (Monte Vista Road) operate at a LOS A during both the AM and PM peak hours and the southbound approach (Spring Hill Road) operates at a LOS A during both the AM and PM peak hours.

After the completion of the full buildout of the Buffat Mill Estates the traffic conditions for the intersection of Spring Hill Road at Monte Vista Road will operate as follows. The westbound approach (Monte Vista Road) will continue to operate at a LOS A during both the AM and PM peak hours. The southbound approach (Spring Hill Road) will continue to operate at a LOS A during both the AM and PM peak hours.

The unsignalized intersection capacity analysis shows a 95% queue length at the full buildout for westbound Monte Vista Road of less than one car length during both the AM and PM peak hours; therefore, the existing storage is adequate, and no improvements are necessary in order to accommodate the Buffat Mill Estates.

7.6 Buffat Mill Road at Roadway Connection (Road "A")

The proposed full buildout conditions at the unsignalized intersection of Buffat Mill Road at the roadway connection (Road "A") were analyzed using the Highway Capacity Software (HCS7). Buffat Mill Road at the proposed roadway connection

Buffat Mill Estates Transportation Impact Analysis March 29, 2023

(Road "A") is a three-legged intersection with a proposed stop sign on the northbound roadway connection (Road "A").

After the completion of the full buildout of the Buffat Mill Estates the traffic conditions for the intersection of Buffat Mill Road at the roadway connection (Road "A") will operate as follows. The westbound approach (Buffat Mill Road) will operate at a LOS A during both the AM and PM peak hours. The northbound approach (Road "A") will operate at a LOS B during both the AM and PM peak hours.

The width of Buffat Mill Road at the proposed roadway connection (Road "A") is approximately 19-20 feet. The minimum recommended pavement width standard is 20 feet wide. The City of Knoxville has reviewed the pavement width in the vicinity of the Buffat Mill Estates and is not requiring any road widening improvements.

Buffat Mill 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 main roadway connection (Road "A") is located approximately 190 feet west of Locarno Drive and approximately 1,590 feet east of Spring Hill Road; therefore, the minimum required separation on a collector street is not met.

The Buffat Mill Estates residential development will need to request a variance to allow the intersection spacing to be less than the required 300 feet. The property frontage along Buffat Mill Road is limited and shifting the entrance further away from Locarno Drive is not an option.

The unsignalized intersection capacity analysis shows a 95% queue length at the full buildout for westbound Buffat Mill Road of less than one car length during both the AM and PM peak hours; therefore, westbound vehicles turning left onto Road "A" are not expected to back up or interfere with the traffic operations at the intersection of Buffat Mill Road at Locarno Drive.

An eastbound right turn lane and a westbound left turn lane on Buffat Mill 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 stopping sight distance and intersection sight distance for the intersection of Buffat Mill Road at the proposed roadway connection (Road "A") was determined using the AASHTO "Geometric Design of Highways and Streets". The required stopping sight distance is 200 feet for a road with a 30 mph design speed; 184 feet for a 6% upgrade and 215 feet for a 6% downgrade. The required

intersection sight distance for a road with a 30 mph design speed is 290 feet for a right turn from stop and 335 feet for a left turn from stop.

The existing vegetation and slope in the right-of-way did not allow a clear field measurement at 15 feet from the edge of pavement to determine the intersection sight distance for Buffat Mill Road at the proposed roadway connection (Road "A").

A site line profile using the 335 foot minimum required intersection sight distance shows that the intersection sight distance can be achieved at the proposed intersection. The proposed grading work is located in the right-of-way to allow for construction of the boulevard entrance. There is no proposed or necessary grading work on Buffat Mill Road.

Ardurra recommends that the intersection sight distance be certified by a land surveyor prior to construction in order to verify that Buffat Mill Road has adequate intersection sight distance at the proposed roadway connection (Road "A") to comply with City of Knoxville and AASHTO requirements. No sight distance easement will be needed.

Attachment 10 includes the intersection sight triangles, pictures of the existing intersection sight distance and sight line profiles at the intersection of Buffat Mill Road at the proposed roadway connection (Road "A").

The intersection sight triangles at the intersection of Buffat Mill Road at the Roadway Connection (Road "A") do not show that any easements will be required from the adjoining properties. Any required sight distance easements for the internal subdivision intersections should be coordinated with the City of Knoxville Department of Engineering and included on the final design drawings prior to construction of the residential development.

Ardurra 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 Buffat Mill Estates residential development will be located in the Parent Responsibility Zone (PRZ) for Spring Hill Elementary School. Given the lack of existing sidewalk connectivity in the area and low numbers of existing pedestrians on the roadway network included on the traffic counts it is expected that the majority of students will have to reach the elementary school by vehicle.

7.7 McIntyre Road at Roadway Connection (Road "F")

The proposed full buildout conditions at the unsignalized intersection of McIntyre Road at the roadway connection (Road "F") were analyzed using the Highway

Buffat Mill Estates Transportation Impact Analysis March 29, 2023

Capacity Software (HCS7). McIntyre Road at the proposed roadway connection (Road "F") is a three-legged intersection with a proposed stop sign on the southbound roadway connection (Road "F").

After the completion of the full buildout of the Buffat Mill Estates the traffic conditions for the intersection of McIntyre Road at the roadway connection (Road "F") will operate as follows. The eastbound approach (McIntyre Road) will operate at a LOS A during both the AM and PM peak hours. The southbound approach (Road "F") will operate at a LOS A during both the AM and PM peak hours

The width of McIntyre Road at the proposed roadway connection (Road "F") is approximately 19-24 feet. The minimum recommended pavement width standard is 20 feet wide. The City of Knoxville has reviewed the pavement width in the vicinity of the Buffat Mill Estates and is not requiring any road widening improvements.

McIntyre Road is not classified by the Major Road Plan; therefore, it is considered a local street. The minimum intersection spacing required on a local street is 125 feet per the "Knoxville-Knox County Subdivision Regulations" amended through October 6, 2022. The second roadway connection (Road "F") is located approximately 405 feet west of Ross Road and approximately 1,000 feet east of Payne Road.; therefore, the minimum separation on a local street is met and no change is necessary.

An eastbound left turn lane and a westbound right turn lane on McIntyre 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 stopping sight distance and intersection sight distance for the intersection of McIntyre Road at the proposed roadway connection (Road "F") was determined using the AASHTO "Geometric Design of Highways and Streets". The required stopping sight distance is 155 feet for a road with a 25 mph design speed. The required intersection sight distance for a road with a 25 mph design speed is 240 feet for a right turn from stop and 280 feet for a left turn from stop.

At 15 feet from the edge of pavement the intersection sight distance is greater than 350 feet looking eastbound and westbound. A site line profile using the 280 foot minimum required intersection sight distance shows that the intersection sight distance can be achieved at the proposed intersection.

Ardurra recommends that the intersection sight distance be certified by a land surveyor prior to construction in order to verify that McIntyre Road has adequate

Buffat Mill Estates Transportation Impact Analysis March 29, 2023

intersection sight distance at the proposed roadway connection to comply with City of Knoxville and AASHTO requirements.

Attachment 10 includes intersection sight triangles, pictures of the existing intersection sight distance and sight line profiles at the intersection of McIntyre Road at the proposed roadway connection (Road "F").

The intersection sight triangles at the intersection of McIntyre Road at the Roadway Connection (Road "F") do not show that any easements will be required from the adjoining properties.

Attachment 10 Sight Distance



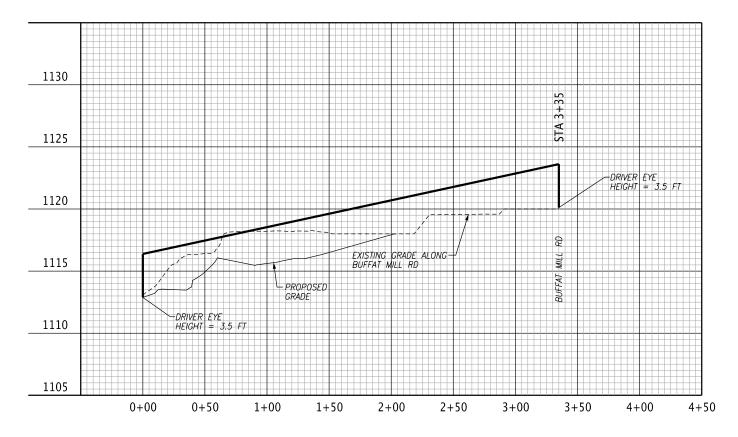
Buffat Mill Road at Roadway Connection (Road "A")
Intersection Sight Triangles



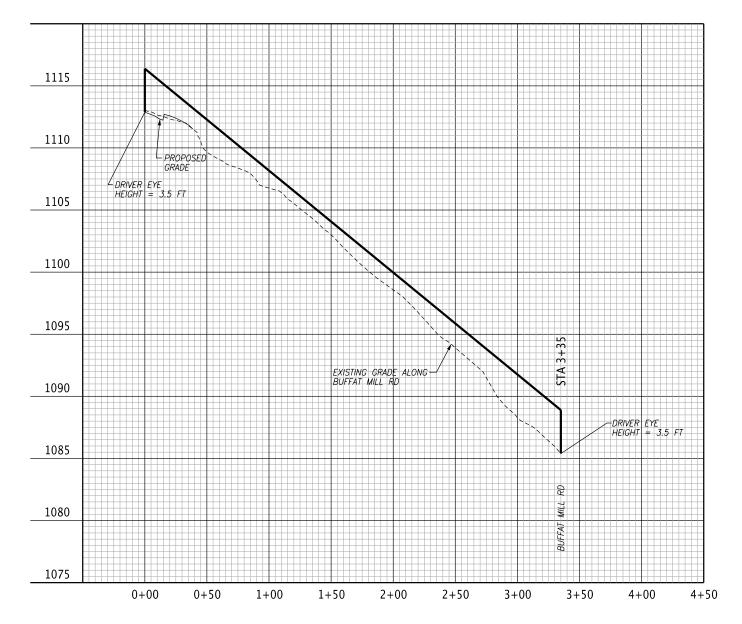
Buffat Mill Road at Roadway Connection (Road "A") – Looking Left



Buffat Mill Road at Roadway Connection (Road "A") – Looking Right



SIGHT DISTANCE PROFILE - BUFFAT MILL RD - LEFT APPROACH

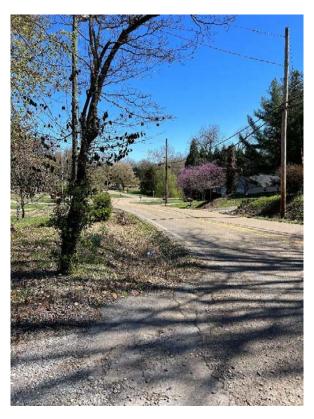


SIGHT DISTANCE PROFILE - BUFFAT MILL RD - RIGHT APPROACH



McIntyre Road at Roadway Connection (Road "F")

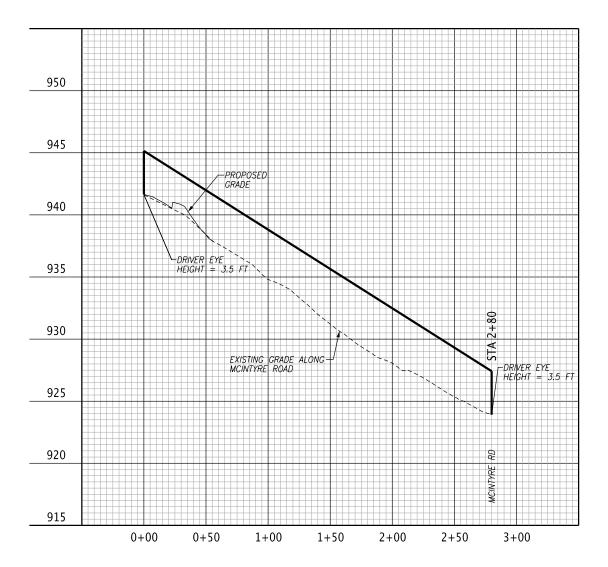
Intersection Sight Triangles



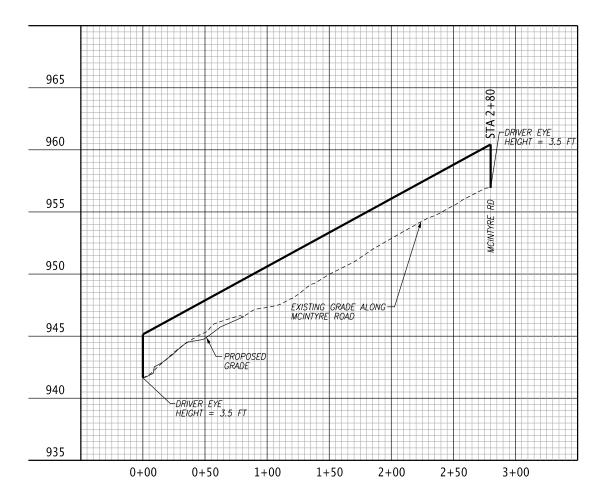
McIntyre Road at Roadway Connection (Road "F) – Looking Left



 $McIntyre\ Road\ at\ Roadway\ Connection\ (Road\ "F")-Looking\ Right$



SIGHT DISTANCE PROFILE - MCINTYRE RD - LEFT APPROACH



SIGHT DISTANCE PROFILE - MCINTYRE RD - RIGHT APPROACH



Request to Postpone · Table · Withdraw

	RD Buffat, LLC		2-16-23
KNOXAITTE I KNOX COUNTA	Applicant Name (as it appears on th	e current Planning Commission agenda)	Date of Request
March 9, 2023			File Number(s)
Scheduled Meeting Date	The state of the s	2-SB-23-C _2-C-23-SU	
POSTPONE			
the week prior to the Plannin	e eligible for postponement if the re g Commission meeting. All requests for one 30-day automatic postponer	must be acted upon by the Planning	Commission, except new
SELECT ONE: ■ 30 days □	50 days 🔲 90 days		
Postpone the above application(s	until the April 13, 2023	Planning Com	mission Meeting.
WITHDRAW			
week prior to the Planning Co Applicants are eligible for a ref	be withdrawn automatically if the re mmission meeting. Requests made a fund only if a written request for with deadline and the request is approve	fter this deadline must be acted on b ndrawal is received no later than clos	by the Planning Commission. Se of business 2 business days
TABLE		*The refund check will be	mailed to the original payee.
■ TABLE: Any item requested for no fee to table or untable an it	tabling must be acted upon by the Frem.	Planning Commission before it can be	e officially tabled. There is
presidentalistics By s	igning below, I certify I am the prope	rty owner, and/or the owners author	ized representative,
Proceed Mil	Benjar	nin C. Mullins for RD Buffat, LI	LC
Applicant Signature	Please P	rint	ennen neura una respera de commune en commune de l'abrilde de la manura de l'Arra y esta antica de mante antica
865-546-9321	bmulli	ns@fmsllp.com	
Phone Number	Email		
STAFF ONLY	•		
Mous	M. Jones	2/1	6/23 □ No Fee
Staff Signature	Please Print	Date i	LINOTEE
Eligible for Fee Refund? Yes	☐ No Amount:	- 300mg	
	Servinegan ayan ayan antan sa		
Approved by:		Date:	
Payee Name	Payee Phone	Payee Address	



Payee Name

Request to

	Ро	stpone · Table ·	Withdraw
Planning	RD Buffat, LLC		2.0 1/ 1 9/2023
KNOXVILLE I KNOX COUNTY	Applicant Name (as it appears on the	current Planning Commission agenda)	Date of Request
February 9, 2023			File Number(s)
Scheduled Meeting Date		2-SB-23-C & 2-C-23-SU	
POSTPONE	Paid 1/20/2023		
the week prior to the Planning	Commission meeting. All requests n	uest is received in writing and paid for I nust be acted upon by the Planning Cor ent. If payment is not received by the o	nmission, except new
SELECT ONE: ☐ 30 days ☐ 60			
Postpone the above application(s)	until the 3/9/2023	Planning Commiss	ion Meeting.
WITHDRAW			
week prior to the Planning Com Applicants are eligible for a refu	mission meeting. Requests made aft nd only if a written request for witho	quest is received in writing no later that er this deadline must be acted on by th Irawal is received no later than close of by the Executive Director or Planning S	e Planning Commission. business 2 business days
TABLE		*The refund check will be mai	iled to the original payee.
☐ TABLE: Any item requested for t no fee to table or untable an ite		anning Commission before it can be off	icially tabled. There is
AUTHORIZATION By sig	ning below, I certify I am the propert	y owner, and/or the owners authorized	representative.
Law Mul	Benjam	in C. Mullins	
Applicant Signature	Please Pri	nt	
865-546-9321	bmullin	s@fmsllp.com	
Phone Number	Email		
STAFF ONLY			
	M. Jones	1/20/2	2023 □ No Fee
Staff Signature	Please Print	Date Paid	INOTEE
Eligible for Fee Refund? ☐ Yes ☐	No Amount:		
Approved by:		Date:	

Payee Phone

Payee Address



Development Request

		DEVELOPMENT	SUBDIVISION	ZONING
Pl	annin	☐ Development Plan ☐ Planned Development ☑ Use on Review / Special Use ☐ Hillside Protection COA	✓ Concept Plan ☐ Final Plat	☐ Plan Amendment☐ Sector Plan☐ One Year Plan☐ Rezoning
RD Buffa	t, LLC			
Applicant	Name		Affilia	ition
12/26/20	022	2/9/2023	2-SB-23-C / 2-C	-23-SU
Date Filed	d	Meeting Date (if applicable)	File Number(s)	
CORRE	SPONDENCE	All correspondence related to this application sh	nould be directed to the c	approved contact listed below.
Benjamir	n C. Mullins Frantz,	McConnell and Seymour, LLP		
Name / C				
550 W. N	Aain St. St. Suite 50	00 Knoxville TN 37922		
Address				
865-546-	9321 / bmullins@f	msllp.com		
Phone / E	Email			
CURRE	ENT PROPERTY I	NFO		
RD Buffa	t, LLC	118 N Peters Rd Suite 304 Knoxv	ille TN 37923	865-546-9321
Owner Na	ame (if different)	Owner Address Owner		Owner Phone / Email
5233 MC	INTYRE RD / 0 MO	NTE VISTA RD		
Property				
60 P A 02	25.025.01			70.68 acres
Parcel ID		Part of P		Tract Size
Knoxville	Utilities Board	Knoxville Utilities E	Board	
Sewer Pro		Water Provider	- Cara	Septic (Y/N)
STAFF	USE ONLY			
South sid	le of Buffat Mill Rd	, north side of McIntyre Rd, eastern terminus of	Monte Vista Rd	
General L		• •		
✓ City	Council District 4	RN-2 (Single-Family Residential Neighborhood (Hillside Protection Overlay)	l), HP Agricult	ture/Forestry/Vacant Land
Count	District	Zoning District	Existin	g Land Use
East City		LDR (Low Density Residential), HP (Hillside Pro	tection) N/A (W	ithin City Limits)
	Planning Sector Sector Plan Land Use Classification			Policy Plan Designation

2-SB-23-C Printed 12/29/2022 1:46:57 PM

DEVELOPMENT REQUEST						
☐ Development Plan ☐ Planned	Development ✓ Use o	on Revie	w / Special Use		Related City	Permit Number(s)
☐ Hillside Protection COA	☐ Resid	dential	☐ Non-resid	dential		
Home Occupation (specify)						
Other (specify) Duplexes on individ	ual lots					
SUBDIVSION REQUEST						
Buffat Mill Estates Proposed Subdivision Name					Related Rezo	oning File Number
Unit / Phase Number ✓ Split Additional Information	: Parcels	Tota	180 Il Number of Lot	s Created		
☐ Attachments / Additional Requirer	ments					
ZONING REQUEST						
☐ Zoning Change Proposed Zoning					Pending P	lat File Number
Plan Amendment Proposed Plan I	Designation(s)					
Proposed Density (units/acre) Prev	vious Zoning Requests					
Additional Information						
STAFF USE ONLY						
PLAT TYPE				Fee 1		Total
☐ Staff Review ☐ Planning Co	ommission			\$1,600.00		
ATTACHMENTS Property Owners / Option Holders	s 🔲 Variance Request			Fee 2		
ADDITIONAL REQUIREMENTS	s U variance nequest			ree z		
 □ COA Checklist (Hillside Protection) □ Design Plan Certification (Final Pla ☑ Site Plan (Development Request) □ Traffic Impact Study □ Use on Review / Special Use (Concepts) 	t)			Fee 3		
AUTHORIZATION	,					
	RD Buffat, LLC					12/26/2022
Applicant Signature	Please Print					Date
Phone / Email						
Decrease Company Company	RD Buffat, LLC					12/26/2022
Property Owner Signature	Please Print					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.

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Planning Sector

Plann KNOXVILLE I KNOX	ing	DEVELOPMEN ☐ Developmen ☐ Planned De ☐ Use on Rev ☐ Hillside Pro	NT ent Plan evelopment iew / Specia	ıl Use	SUBDIVISION CONCEPTO	ÖN t Plan	ZONIN □ Plan	n Amendm □ SP □	
RD Buffat, LLC						Owne	er via atto	orney	
Applicant Name	BCM	2-0	1-23	BCM		Affiliati	ion		
12 - 20 - 2 November 25, 2	2022		12, 2023					File Numb	ber(s)
Date Filed		Meeting I	Date (if applica	ble)			-23-C 23-SU		
CORRESPONDE	NCE All co	rrespondence re	ated to this ag	plication sh	ould be directe	d to the ap	proved cor	ntact listed b	elow.
Applicant	Property Owner	☐ Option Hold	er 🗌 Proje	ct Surveyor	☐ Engineer	☐ Archi	itect/Lands	cape Archite	ect
Benjamin C. Mu	llins			Frantz,	McConnell	& Seymo	ur, LLP		
Name				Compan	У				
550 West Main	Street, Suite 50	00		Knoxvi	lle	TN		37922	4
Address				City		State		ZIP	
865-546-9321		bmullin	bmullins@fmsllp.com						
Phone		Email							
CURRENT PROF	PERTY INFO								
RD Buffat, LLC	Trust, 620 Market S	t 27002	118 N. Pete	rs Rd. St 3	04 Knoxville,	, TN 3792	2 865-54	6-9321	
Property Owner Na	me (if different)		roperty Owne	r Address			Property	Owner Pho	ne
5 52 3 McIntyre F	Rd. & 0 Monte \	/ista Rd			060PA025 8	& 060PA)2501		
Property Address					Parcel ID				
KUB			KUB						
Sewer Provider			Water	Provider				Septio	c (Y/N)
STAFF USE ONL	v								
		overetion of I	D. I	1 = £ N.1=1=	tuma Dal	~70.2	0		
S. of Buffat Mill	Ku, W. Irom int	ersection of L	ocarno Dr. i	v. or ivicin	tyre Ka.	000001000	9 acres		
General Location	4	B.V = /				Tract Si	ze		
■ City □ County	4	RN-2 (C)		ŧ	Agricultu	re/forestr	y/vacant		
	District	Zoning Dis			Existing Land				
East City		LDR & HP		NA (in City)					

Sector Plan Land Use Classification

Growth Policy Plan Designation

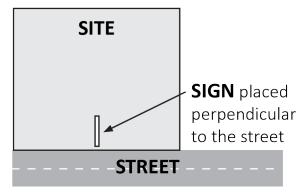
☐ Development Plan ■ Use on Review / Special Use ☐ Hillside Protection COA ☑ Residential ☐ Non-Residential Home Occupation (specify)					ty Permit Number(s
Other (specify) Two-family dwellings					
SUBDIVISION REQUEST					
Rand at Buffat Mill				Related Re	ezoning File Numbe
Proposed Subdivision Name		100			
☐ Combine Parcels	■ Divide Parcel ——	180	<u>, l</u>		
Jnit / Phase Number		Number of Lots	Created		
Other (specify) Residential subdiv	vision for two-family dwe	ellings			
☐ Attachments / Additional Requirements					
ZONING REQUEST				D !!	DI-LEU III II
☐ Zoning Change				Pending	Plat File Number
Proposed Zoning					
☐ Plan Amendment Change	CE STREET STREET STREET STREET STREET STREET				
Proposed Plan	Designation(s)				
Proposed Density (units/acre)	Previous Rezoning Requests				
STAFF USE ONLY					
PLAT TYPE		Fee 1			Total
			Concer	ot Plan	Total
Staff Review Planning Commission ATTACHMENTS		102	Concep	ot Plan	Total
ATTACHMENTS ☐ Property Owners / Option Holders ☐ Val	ríance Request		Conce	ot Plan	
☐ Staff Review ☐ Planning Commission ATTACHMENTS ☐ Property Owners / Option Holders ☐ Val ADDITIONAL REQUIREMENTS	ríance Request	102	Concep	ot Plan	Total \$1,600
☐ Staff Review ☐ Planning Commission ATTACHMENTS ☐ Property Owners / Option Holders ☐ Val ADDITIONAL REQUIREMENTS ☐ Design Plan Certification (Final Plat)		102 Fee 2	Concep	ot Plan	
☐ Staff Review ☐ Planning Commission ATTACHMENTS ☐ Property Owners / Option Holders ☐ Val ADDITIONAL REQUIREMENTS ☐ Design Plan Certification (Final Plat) ☐ Use on Review / Special Use (Concept Plan)		102	Concep	ot Plan	
☐ Staff Review ☐ Planning Commission ATTACHMENTS ☐ Property Owners / Option Holders ☐ Val ADDITIONAL REQUIREMENTS ☐ Design Plan Certification (Final Plat) ☐ Use on Review / Special Use (Concept Plan) ☐ Traffic Impact Study		102 Fee 2	Concep	ot Plan	
☐ Staff Review ☐ Planning Commission ATTACHMENTS ☐ Property Owners / Option Holders ☐ Val ADDITIONAL REQUIREMENTS ☐ Design Plan Certification (Final Plat) ☐ Use on Review / Special Use (Concept Plan) ☐ Traffic Impact Study		102 Fee 2	Concer	ot Plan	
☐ Staff Review ☐ Planning Commission ATTACHMENTS ☐ Property Owners / Option Holders ☐ Val ADDITIONAL REQUIREMENTS ☐ Design Plan Certification (Final Plat) ☐ Use on Review / Special Use (Concept Plan)		102 Fee 2	Concep		\$1,600
Staff Review Planning Commission ATTACHMENTS Property Owners / Option Holders Val ADDITIONAL REQUIREMENTS Design Plan Certification (Final Plat) Use on Review / Special Use (Concept Plan) Traffic Impact Study COA Checklist (Hillside Protection) AUTHORIZATION Populy Applicative Application of Special Commission (Plan) Open Plan Commission (Plan) Open Plan Commission (Plan) Planning Commission (Plan) Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Val Va		102 Fee 2	Concep		\$1,600
Staff Review Planning Commission ATTACHMENTS Property Owners / Option Holders Val ADDITIONAL REQUIREMENTS Design Plan Certification (Final Plat) Use on Review / Special Use (Concept Plan) Traffic Impact Study COA Checklist (Hillside Protection) AUTHORIZATION 48914c33-f15c4Pert-9c5d Polyth / 4891c321 155 0925d Polyth / 4891c321 155	afoszirántát (102 Fee 2	Concer		
Staff Review ☐ Planning Commission ATTACHMENTS ☐ Property Owners / Option Holders ☐ Val ADDITIONAL REQUIREMENTS ☐ Design Plan Certification (Final Plat) ☑ Use on Review / Special Use (Concept Plan) ☑ Traffic Impact Study ☐ COA Checklist (Hillside Protection) AUTHORIZATION	RD Buffat, LLC	102 Fee 2 Fee 3	Concer	11-2	\$1,600
Staff Review Planning Commission ATTACHMENTS Property Owners / Option Holders Val ADDITIONAL REQUIREMENTS Design Plan Certification (Final Plat) Use on Review / Special Use (Concept Plan) Traffic Impact Study COA Checklist (Hillside Protection) AUTHORIZATION 48914c33-f15c42ec52c5d Applicant Signature	RD Buffat, LLC Please Print	102 Fee 2 Fee 3	Concep	11-2	\$1,600
Staff Review Planning Commission ATTACHMENTS Property Owners / Option Holders Val ADDITIONAL REQUIREMENTS Design Plan Certification (Final Plat) Use on Review / Special Use (Concept Plan) Traffic Impact Study COA Checklist (Hillside Protection) AUTHORIZATION 48914c33-f15c4get-9c5d afa097d63803 Applicant Signature 865-546-9321	RD Buffat, LLC Please Print bmullins@fmsllp	102 Fee 2 Fee 3	Concep	11-2 Date	\$1,600



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-ofway 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:

	and
(applicant or staff to post sign)	(applicant to remove sign)
Applicant Name:	
Date:	Sign posted by Staff
File Number:	Sign posted by Applicant