



**AGENDA
FARRAGUT MUNICIPAL PLANNING COMMISSION**

**April 18, 2019
7:00 p.m. Farragut Town Hall**

For questions please e-mail Mark Shipley at mshipley@townoffarragut.org or Bart Hose at bhose@townoffarragut.org

- 1. Citizen Forum**
- 2. Approval of agenda**
- 3. Approval of minutes – March 21, 2019**
- 4. Discussion on preliminary road design plans for improvements to Union Road (Town of Farragut, Applicant)**
- 5. Discussion and public hearing on a final plat for Lot 1 of the Swan Farm Subdivision (south side of Union Road across from Brochardt Boulevard), Part of Parcel 58, Tax Map 151, 2.97 Acres, Zoned R-1/FPD (Travis Fuller, Applicant)**
- 6. Discussion and public hearing on a preliminary plat for Campbell Crossing, Parcels 84, 84.01, and 87, Tax Map 130 (southeast intersection of Fretz Road and N. Campbell Station Road), 10.17 Acres, 22 House Lots, Zoned R-1/OSR (Fred Long Construction Concepts, Applicant)**
- 7. Discussion and public hearing on a preliminary plat for the Ivey Village Subdivision, a portion of Parcel 58, Tax Map 151, 7.16 Acres, 34 House Lots, Zoned NCC, OS-P, and FPD (SITE Incorporated/Annette Hommel, Applicant)**
- 8. Discussion and public hearing on a resolution to approve proposed amendments to the future land use map in the Comprehensive Land Use Plan Update 2012 recommended by the Comprehensive Land Use Plan Steering Committee related to the Outlet Drive and Snyder Road corridors (Town of Farragut, Applicant)**
- 9. Discussion and public hearing on proposed amendments to the Farragut Zoning Ordinance to remove references to elderly and group housing and clustered housing units since the terms are no longer used in the ordinance (Town of Farragut, Applicant)**
- 10. Discussion on proposed amendments to the Farragut Zoning Ordinance related to short term rentals (Town of Farragut, Applicant)**

11. Discussion on amending the maximum lot coverage formula as applied in the R-1/OSR Zoning District (Town of Farragut, Applicant)

12. Approval of utilities



**MINUTES
FARRAGUT MUNICIPAL PLANNING COMMISSION**

March 21, 2019

MEMBERS PRESENT

Rita Holladay, Chairman
Ed St. Clair, Vice-Chairman
Ed Whiting, Secretary
Ron Williams, Mayor
Louise Povlin, Alderman
Betty Dick
Rose Ann Kile
Jon Greene

MEMBERS ABSENT

Noah Myers
Nick LiMandri

Staff Representatives: Mark Shipley, Community Development Director
Bart Hose, Assistant Community Development Director
Sue Stuhl, Parks and Recreation Director
Darryl Smith, Town Engineer
Matt Brazille, Assistant Town Engineer

Chairman Holladay called the meeting to order at 7 p.m.

1. Citizen Forum

None.

2. Approval of agenda

Motion was made by Commissioner St. Clair to approve the agenda with Agenda Item #13 being moved to Agenda Item #7 and the subsequent agenda items being renumbered accordingly. Motion was seconded by Commissioner Povlin and motion passed unanimously.

3. Approval of minutes – February 21, 2019

Commissioner Dick noted that Mayor Williams was referred to both as “Commissioner” and “Mayor” in the minutes and questioned if this should not be consistent. Motion was made by Commissioner Whiting to approve the minutes with the reference to “Commissioner Williams” under the “Approval of Agenda” item being changed to “Mayor Williams” for consistency purposes. Motion was seconded by Mayor Williams and motion passed unanimously with Commissioner Kile abstaining due to being absent at the February 21, 2019 meeting.

4. Discussion on approval of a site plan for renovations at Anchor Park, 11730 Turkey Creek Road (Town of Farragut, Applicant)

Sue Stuhl reviewed this item and recommended approval. This site plan includes the following items that are part of the approved 2018 Local Parks and Recreation Fund grant scope: Reconstruction of restroom; construction of ADA compliant access trails to diamond and rectangular athletic field player and spectator areas; realignment of ADA compliant parking and construction of a new entry plaza.

Motion was made by Commissioner St. Clair to approve the site plan as submitted. Motion was seconded by Commissioner Povlin and motion passed unanimously.

5. Discussion and public hearing on approval of plans for a pedestrian facility from Everett Road to Andover Boulevard (Town of Farragut, Applicant)

Darryl Smith reviewed this item and recommended approval.

Commissioner Povlin moved to approve the plans subject to the pedestrian facility being 5 feet in width throughout its entire length; working with the Stavros property owner to ensure that any impacts to the steepness of their driveway is minimized; and verifying that the project would create no adverse impact to the existing stormwater detention basin for the Andover Place Subdivision. Motion was seconded by Commissioner Kile and motion passed unanimously with the exception of Commissioner Dick who abstained due to being a resident of the Andover Place Subdivision.

6. Discussion and public hearing on approval of plans for pedestrian crosswalks at N. Watt Road and Grigsby Chapel Road (Town of Farragut, Applicant)

Darryl Smith reviewed this item and recommended approval.

Motion was made Commissioner Kile to approve the plans. Motion was seconded by Mayor Williams and motion passed unanimously.

7. Discussion and public hearing on approval of a request for a fiber optic extension from Outlet Drive and Snyder Road to the Overlook Apartments off N. Campbell Station Road (Source Broadband Services, Applicant)

Staff recommended approval subject to the following:

- 1) Please bore to the side of any pedestrian facility;
- 2) Please obtain a right of way permit from the Town. Please coordinate erosion control measures with the Town staff;
- 3) Please restore any affected areas to their pre-construction condition and ensure that all affected areas are completely stabilized;
- 4) Please ensure that proper traffic control measures are in place and affected entities are notified; and
- 5) Please provide an as-built of the fiber line placement to the Town once the project is complete.

Motion was made by Commissioner St. Clair to approve the fiber optic extension request subject to the staffs' recommendations. Motion was seconded by Commissioner Povlin and motion passed unanimously.

8. Discussion and public hearing on approval of a site plan for a façade renovation at the former Ingles building at 11801-11833 Kingston Pike, Zoned C-1 (Samia Coker, Land Planning Associates, Applicant)

Staff recommended approval subject to any future HVAC units being screened in accordance with Town requirements.

Motion was made by Commissioner Povlin to approve the façade renovation subject to the staffs' recommendation. Motion was seconded by Commissioner St. Clair and motion passed unanimously.

9. Discussion and public hearing on approval of a site plan revision for an Office/Retail development at 12802 Kingston Pike, 1.341 Acres, Zoned C-1 (GBS Engineering, Applicant)

Staff recommended approval subject to the following items being satisfactorily addressed as verified in writing by the Town staff:

- 1) The parking lot terminal island area in the southwest corner does not appear to maintain the required 5-foot minimum width for the full length of the parking space. Please clarify or adjust plan accordingly. In addition, the northeast corner of parking lot is terminated by a sidewalk with green areas to the east. The staff will recommend that additional landscaping be added immediately to the east of the sidewalk to offset the loss of the traditional terminal landscape island;
- 2) No dumpster is planned for this site. Please clarify how trash will be collected, where it will be picked up from, and where (if applicable) on the site any outdoor containers will be stored;
- 3) Please assure that all plan sheets are sealed and properly signed in accordance with the State board requirements;
- 4) Please correct Note #3 on the cover sheet as one word is missing;
- 5) In order to avoid any confusion please show anticipated HVAC unit(s) on the building elevation sheet so it is clear how it is screened;
- 6) Please remember that a separate application, filing fee, and review is required for the landscape plan;
- 7) Please provide an erosion control letter of credit for \$6,700; and
- 8) Please provide a drainage fee for \$525.

Motion was made by Commissioner St. Clair to approve the site plan subject to the staffs' recommendations. Motion was seconded by Mayor Williams and motion passed unanimously.

10. Discussion and public hearing on approval of a resubdivision plat of Lots 9 and 10 in the Farragut View Subdivision, 133 and 139 Admiral Road, 4.46 Acres, Zoned R-1 (Jay Beeler, Applicant)

Staff noted that the applicant requested a variance from the requirement to construct a pedestrian facility along their Admiral Road frontage since Admiral Road is classified as a local collector. Staff recommended approval of the variance due to the minor nature of the subdivision.

Motion was made by Commissioner Kile to approve the variance due to the minor nature of the subdivision. Motion was seconded by Mayor Williams and motion passed unanimously.

Staff recommended approval of the plat subject to the following items being satisfactorily addressed as verified in writing by the Town staff:

- 1) The plat must include the Town's "Certificate of Water and Sewer Availability" to assure that the lots can be serviced by the existing water and sewer mains along Admiral Road. Please correct the plat accordingly. Please also note that lot 10R (given its size) cannot be created unless it is now, or is going to be, connected to the public sewer system. Note 11 is not adequate, the lot cannot be platted as proposed without a public sewer connection. In addition, why does this plat continue to include a "Certificate of Approval Private Subsurface Sewage Disposal"? Please address these issues and correct the plat accordingly; and
- 2) The plat identifies a Wood Barn on lot 9R with a 16-foot setback from the lot line being created between the two lots. The side and rear setback requirements for an agricultural accessory structure in the R-1 zone is 35 feet. The plat should either include a note stating that the barn is not for agricultural use or the lot line should be adjusted to meet the setback requirements.

Motion was made by Commissioner Kile to approve the plat subject to the staffs' recommendations. Motion was seconded by Mayor Williams and motion passed unanimously.

11. Discussion and public hearing on approval of a revised concept plan for the Ivey Farms Subdivision, Parcels 52, 54, 54.01, and 55, Tax Map 151, 110.92 Acres, 214 Lots, Zoned R-1/OSR (SITE Incorporated/Ryan M. Estabrooks, Applicant)

Staff reviewed this item and noted that the applicant has requested a variance from the maximum length of a cul-de-sac (500 feet) for Streets A, B, C, and E. This was mostly due to topographic reasons and avoiding crossing certain drainages consistent with the OSR overlay district. Staff recommended approval of the variance request due to topographic reasons and avoiding crossing certain drainages consistent with the OSR overlay district.

A long discussion ensued and, based on input provided by some residents in Saddle Ridge, Commissioner St. Clair moved to approve the requested variance with Road B, which provides access to Pecos Road in Saddle Ridge, being changed back to a cul-de-sac to be consistent with the original concept plan that was approved by the Planning Commission in July of 2018. Motion was seconded by Commissioner Povlin and motion passed unanimously.

Staff noted that the applicant has requested a variance for Road E from the minimum local street width and right of way width from 26 to 22 feet and 50 to 40 feet respectively. Staff recommended approval of the variance due to the short length of this street and the presence of a drainage area to the north of Road E.

Motion was made by Commissioner St. Clair to approve the requested variance for the reasons noted by staff. Motion was seconded by Commissioner Povlin and motion passed unanimously.

Staff recommended approval of the concept plan which would amend the concept plan approved in July of 2018 subject to the plan reflecting any changes, including Road B being changed back to a cul-de-sac, that may occur to the preliminary plat based on final staff comments.

Motion was made by Commissioner St. Clair to approve the plat subject to the staffs' recommendations. Motion was seconded by Commissioner Dick and motion passed unanimously.

12. Discussion and public hearing on approval of a preliminary plat for the Ivey Farms Subdivision, Parcels 52, 54, 54.01, and 55, Tax Map 151, 110.92 Acres, 214 Building Lots, Zoned R-1/OSR (SITE Incorporated/Ryan M. Estabrooks, Applicant)

Staff reviewed this item and recommended approval of the plat subject to the following items being satisfactorily addressed as verified in writing by the Town staff:

- 1) Please document what flood event the Town Creek crossing (bridge structure) has been sized to accommodate. Please also note that the Town may continue to evaluate the need to plat finished floor elevations on some lots;
- 2) There is a 40" Oak tree shown on lot 20 on the Tree Preservation Plan. During a site visit, the staff noticed a rock outcropping/shelf in this area. How will this affect the buildability of this lot and any adjoining lots with similar limitations?
- 3) Please provide closure computations for boundary traverses once the surveyor has completed them;
- 4) Please provide copies of state and federal construction permits, as necessary;
- 5) Please provide a copy of the NOC;
- 6) Please provide drainage permit fee of \$8,600;
- 7) Please provide irrevocable letter of credit for erosion control for \$328,000. This is based upon the largest single phase of disturbance. Note that no phase can begin until stabilization is complete on proceeding phases, including a permanent stand of grass;
- 8) All utilities must be approved by the respective owner prior to approval of final plat;
- 9) Please note that pedestrian travel paths and crossings from the sidewalks on the west side of developments entrance road to the sidewalk on the east side of Ivey Farm Road (Way Station Trail Extension) will need to be clarified once the plans for Union Road are finalized;
- 10) Note to Planning Commission: Traffic Impact Study shows that signalization of the Kingston Pike intersection will be warranted by development of the Swan property alone, but not by development of the Ivey property alone. Planning Commission should consider at what point the developer will be required to signalize the intersection. Please note that TDOT's Region 1 Traffic Office must first determine at what point the intersection meets warrants and must approve of signalization plans. This determination is typically not made in advance of development, but after traffic patterns have emerged that warrant signalization; and
- 11) Changing back Road B so that it is a cul-de-sac rather than a through street. Road B would still provide for a connection to Pecos Road in the Saddle Ridge Subdivision.

Motion was made by Commissioner St. Clair to approve the preliminary plat subject to the staffs' recommendations excluding #10 which is more of a note rather than an item. Motion was seconded by Commissioner Whiting and motion passed unanimously.

13. Discussion on a preliminary plat for the Ivey Village Subdivision, a portion of Parcel 58, Tax Map 151, 6.78 Acres, 34 Lots, Zoned NCC, OS-P, and FPD (SITE Incorporated/Annette Hommel, Applicant)

For discussion purposes only.

14. Discussion on proposed amendments to the future land use map recommended by the Comprehensive Land Use Plan Steering Committee related to the Outlet Drive and Snyder Road corridors (Town of Farragut, Applicant)

For discussion purposes only.

15. Discussion on proposed amendments to the Farragut Zoning Ordinance to remove references to elderly and group housing and clustered housing units since the terms are no longer used in the ordinance

For discussion purposes only.

The meeting adjourned at 10:40 p.m.

Edwin K. Whiting, Secretary

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Darryl Smith, Town Engineer

SUBJECT: Discussion of preliminary plans for Union Road, from N. Hobbs Road to Everett Road

INTRODUCTION: This item is discussion on preliminary plans for improvements to Union Road, from N. Hobbs to Everett Road.

The design provides for two 11-foot lanes with curb & gutter on each side, an 8-foot grass strip, and one 10-foot shared-use path on the north side of the roadway.

BACKGROUND: The town has considered improvements to Union Road to be a priority for several years, first appearing in the FY2006 Capital Investment Program. Funding for the project was added to the 5-year plan in 2011, with the intention of budget allocations to begin in FY2014. In 2014, additional funds were projected for the 5-year plan, with the intention of allocating money for engineering and design in FY2018. Funding was secured through the Knoxville Regional Transportation Planning Organization (KRTPO), and the Board of Mayor and Aldermen approved a contract with the Tennessee Department of Transportation (TDOT) in November 2016 for project development. The Town contracted with Kimley Horne and Associates, Inc. for design and engineering services in February 2017. The first public forum on the road improvement project was held in March 2017, presenting a projected timeline that included 18 to 24 months for engineering, 12 to 18 months for right-of-way acquisition, and 14 to 18 months for construction.

Pedestrian connectivity and complete street concepts have been identified as town priorities as early as 1993 when the town conducted its Recreation Plan survey, in which 88% of respondents supported linking the existing pedestrian system throughout the town. This was reflected in the 1997 Pedestrian Circulation Plan, as well as the town's Farragut 2000 and Farragut 2004 plans. In 2001, the town adopted the Land Use and Transportation Policy plan to provide regulatory guidance for a ten-year period. Most recently, the Farragut Municipal Planning Commission (FMPC) adopted the Pedestrian and Bicycle Plan in 2010, formally adopting complete street regulations. These same priorities were included as part of the town's Comprehensive Land Use Plan, adopted in 2012.

DISCUSSION: Because the project is funded in part with federal funds, planning and design have developed in keeping with design standards from TDOT, KRTPO, the Town's Pedestrian and Bicycle Plan (2010), and other adopted regulations. Specifically, the project includes facilities for motor vehicles, bicycles and pedestrians, with consideration given to creating a "sense of place."

As part of their design assessment, Kimley Horn projected a growth in Average Annual Daily Traffic to 3,651 vehicles per day on Union Road (our current count is approximately 700 vpd), mostly due to

development of the Ivey and Swan properties. This is consistent with TDOT's (as well as the Town's) classification of Union Road as a Collector.

Previous road improvement projects have included bike lanes, greenways and/or sidewalks, but have frequently been met with concerns about overall "footprint", as roadways that include all elements separately provide a wide paved road cross-section. In response to those comments, staff asked designers to incorporate a shared-use path on one side of Union Road, thus eliminating the need for separate 4-foot bike lanes and sidewalks on each side of the road.

Other comments from community members included the need to limit speeds on Union Road. The Town requested a design exception from TDOT to allow for a reduced design speed of 30 mph and narrower lanes of 11 feet instead of the standard width of 12 feet. These adjustments to the road design reduce the overall linear footprint of the cross-section, ultimately reducing the road's impact to reach a balance that increases safety for motorists, bicyclists and pedestrians.

The highlighted section shown in Attachment A illustrates the typical project cross-section as currently proposed, in contrast to the highlighted typical section shown in Attachment B (for Old Stage Road, completed in 2014), which included two 12-foot lanes, separate bike lanes and separate sidewalks.

Early design of the project included roundabouts for traffic calming purposes at Brochardt Boulevard, Saddle Ridge Drive and the entrance to the Swan and Ivey developments. When that design was presented in a public forum in November 2018, residents opposed the inclusion of the roundabouts at Brochardt Boulevard and Saddle Ridge Drive. As a result of this feedback, those roundabouts were removed (see Attachment C).

The current design plans include two 11-foot lanes with curb & gutter (2-1/2' wide, to avoid wide paved shoulders), an 8-foot grass strip and 10-foot shared-use path. Please note that the 8-foot grass strip is proposed instead of the typical 6-foot width in order to provide for the planting of trees between the roadway and path, further improving aesthetics and providing lateral offset from vehicular traffic.

In presenting these preliminary plans, staff requests feedback on the overall design of Union Road improvements and any suggested modifications will be brought back to the Planning Commission for approval at a future meeting.

ATTACHMENTS:

- Attachment A: Typical Section, Union Road
- Attachment B: Typical Section, Old Stage Road (2014)
- Attachment C: Typical letter to residents in response to public comments
- Attachment D: Exhibits detailing design parameters considered for roadway, bike and pedestrian improvements
- Attachment E: Present and Proposed Layout Sheets from project plans

Please note that due to the number and length of attachments for this item they will be bound and provided separately.

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion and public hearing on a final plat for Lot 1 of the Swan Farm Subdivision (south side of Union Road across from Brochardt Boulevard), Part of Parcel 58, Tax Map 151, 2.97 Acres, Zoned R-1/FPD (Travis Fuller, Applicant)

INTRODUCTION: The item involves a plat that would create a single-family house lot (Lot 1) from the Swan Farm parent tract that is to be platted with the Ivey Farms Road final plat. A significant portion of what is proposed as Lot 1 is within the Little Turkey Creek floodplain.

BACKGROUND: Staff noted during the rain event a few weeks ago that much of the area proposed as Lot 1 was under water and could potentially be a jurisdiction wetland. Since this is a proposed lot and not a lot of record, it would not be exempt from the Aquatic Buffer Ordinance. One of the staffs' comments is that a wetland specialist must evaluate the property to determine if jurisdictional wetlands are present as this could affect the developability of the property.

In addition to the floodplain and wetland considerations, a dwelling unit on the property would require an access onto Union Road and would need to be coordinated with the Union Road improvement plans and how such access would relate to Brochardt Boulevard on the north side of Union Road. Since the proposed creation of this lot involves property that fronts a collector street (Union Road), a pedestrian facility is required unless a variance is requested and approved.

The applicant is proposing to construct a 5-foot sidewalk along the Union Road frontage. This would need to be coordinated with the Union Road improvements and potentially would need to be covered with a completion letter of credit. This would permit the sidewalk to be constructed in coordination with the Union Road improvements.

RECOMMENDATION: Included in your packet is a copy of the latest final plat for Lot 1 along with the staffs' remaining comments. Again, this area designated for Lot 1 may not be developable depending on the outcome of the wetland determination. Staff will make a recommendation at the meeting.

Mark Shipley

From: Mark Shipley
Sent: Tuesday, April 2, 2019 3:33 PM
To: 'Travis Fuller'; Howard Dawson
Cc: Bart Hose; Connor Vermilyea; 'lori.saal@townoffarragut.org'; Matt Brazille; Darryl Smith
Subject: Fuller plat comments

Hope you all are doing well. Below are the comments on the plat that is proposed to create Lot 1 off Union Road:

1. Please add on the final plat application the request for a variance from the requirement to construct a pedestrian facility along the property's Union Road frontage. The FMPC must specifically take action on this request prior to taking action on the plat;
2. Since this is a proposed new lot and not a lot in existence prior to the adoption of the Aquatic Buffer Ordinance, it is not exempt from the ordinance. Please have a **recognized wetland determination specialist** provide a written determination as to whether the property has any jurisdictional wetlands. Staff noted in a previous review that (based on field review) the property appears to have wetland characteristics but this would only be something that a qualified expert could determine for certainty;
3. Please add the standard explanatory Aquatic Buffer note;
4. Please define B.F.E. and M.F.E on the plat. We need to assure that all future property owners see and understand the notations on the plat;
5. Staff's previous comments questioned the anticipated area of disturbance. Apart from note #13 this does not appear to have been addressed. In addition, the location of a future driveway with respect to Brochardt Boulevard must be evaluated (it will ultimately have to be approved by both the FMPC and the FBMA) for purposes of future compliance prior to any approval of the plat;
6. Proper coordination will be needed with respect to anticipated improvements to Union Road; and
7. Please correctly spell Brochardt Boulevard where the name appears on the plat.

This will be on the April 18 FMPC agenda though the wetland question and potentially the access are both items that could greatly affect the proposed lot.

NOTE:
THE UNDERGROUND UTILITIES SHOWN, IF ANY, HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. EITHER IN SERVICE OR ABANDONED, THE SURVEYOR FURTHER DOES NOT WARRANT THAT UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.
THE SURVEYOR HAS NOT PHYSICALLY LOCATED ALL UNDERGROUND UTILITIES. VERIFY EXACT SIZE AND LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES WITH THE PROPER LOCAL AUTHORITIES BEFORE EXCAVATION OR CONSTRUCTION.



This is to certify that all property taxes and assessments due on this property have been paid.

Signed: _____ Date: _____
Knox County Trustee

CERTIFICATE OF APPROVAL FOR RECORDING

I hereby certify that the subdivision plat shown here has been found to comply with the Subdivision Regulations for Farragut, Tennessee, with the exception of such variances, if any, as are noted in the minutes of the Planning Commission and that it has been approved for recording in the Office of the County of Register of Deeds.

Secretary, Planning Commission Date

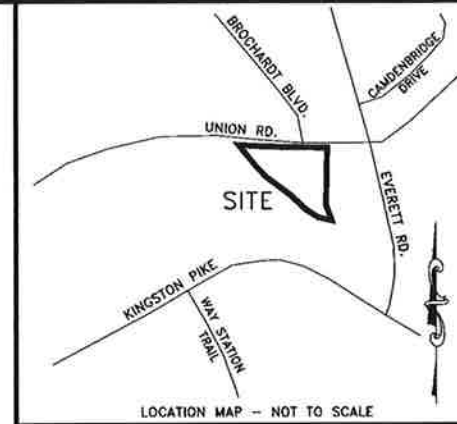
CERTIFICATE OF APPROVAL OF STREET NAMES

This is to certify that the subdivision shown hereon has been reviewed for compliance with the Knox County Uniform Street Naming & Addressing System Ordinance, and the road names are hereby approved for recording.

Knox County Addressing Division Date

LEGEND OF SYMBOLS

- MH ○ SANITARY MANHOLE
— SS — SEWER LINE
IP(F) IRON PIN — OLD (FOUND)
○ — ○ PROPERTY LINE
N90°00'00"E 10.00' SURVEYED BEARING AND DISTANCE
B.F.E. BASE FLOOD ELEVATION (FEMA 100 YEAR)
M.F.E. MINIMUM FLOOR ELEVATION



THIS IS TO CERTIFY THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR THE STATE OF TENNESSEE.

CERTIFICATE OF SURVEY ACCURACY

I hereby certify that the plan shown and described hereon is a true and correct survey to the accuracy required by the Farragut Municipal Planning Commission and that the monuments have been placed as shown hereon, to the specification of the Subdivision Regulations. This is a Category I Land Survey and the ratio of precision of the unadjusted survey is equal to or greater than 1:10,000.

Surveyor / No. 1301 Date

SURVEYOR:
HOWARD T. DAWSON, RLS 1301
SITE INCORPORATED
10215 TECHNOLOGY DR.
KNOXVILLE, TN 37932
PH: (865) 777-4160

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (we) hereby certify that I am (we are) the owner(s) of the property shown and described hereon as evidenced in Book Number _____, page _____, County Registers Office, and that I (we) hereby adopt this plan of subdivision with my (our) free consent, establish the minimum building restriction lines, and dedicate all streets, alleys, walks, parks, and other open space to public or private use as noted.

Signature Date

Signature Date

OWNER:
CLAYTON PROPERTIES GROUP, INC.
5000 CLAYTON ROAD
MARYVILLE, TN 37804

CERTIFICATE OF ELECTRIC, GAS & TELEPHONE AVAILABILITY

This is to certify that every lot within this subdivision has available to it a source for the service identified by signature(s) below which service source is adequate to accommodate the reasonable needs of such lot as to such service within such subdivision.

Date GAS— Name, Title, and Agency of Authorized Approving Agent

Date ELECTRIC— Name, Title, and Agency of Authorized Approving Agent

Date TELEPHONE— Name, Title, and Agency of Authorized Approving Agent

CERTIFICATE OF WATER AND SEWER AVAILABILITY

I hereby certify that every lot within this subdivision will have available to it water and sewer service that is adequate to accommodate the reasonable needs of such lots.

Date Name, Title, and Agency of Authorized Approving Agent



Final plat of
The Fuller House Property
Union Road near Brochardt Boulevard
Civil District No. 6 of Knox County, Tennessee
Town of Farragut

DRAWN BY: MJD DATE: 1-18-2019
CHECKED BY: HTD FILE: 1875

REVISIONS

NO.	DATE	COMMENTS

PLAT

NOTES

- NOTIFY TENNESSEE ONE-CALL SYSTEM AT 1-800-351-1111 AND AN INDIVIDUAL UTILITY AUTHORITY BEFORE ANY EXCAVATION FOR EXACT LOCATION OF ALL UNDERGROUND UTILITIES.
- A FIVE (5) FOOT UTILITY, DRAINAGE AND CONSTRUCTION EASEMENT ON EACH SIDE OF INTERIOR LOT LINES; A TEN (10) FOOT UTILITY, DRAINAGE AND CONSTRUCTION EASEMENT ON INSIDE OF ROAD RIGHTS-OF-WAY AND EXTERIOR LOT LINES.
- THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THIS SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
- 5/8" IRON PINS SET AT ALL CORNERS UNLESS NOTED OTHERWISE.
- PROPERTY IS ZONED "R-1". MINIMUM BUILDING SETBACKS ARE TO CONFORM TO CURRENT REQUIREMENTS OF THE TOWN OF FARRAGUT ZONING ORDINANCE.
- PROPERTY IS KNOWN AND DESIGNATED AS:
— TAX MAP 151, PART OF PARCEL 058.00
— DEED REFERENCE: 201806010071414
- GRID NORTH IS BASED ON THE TDOT GNSS REFERENCE NETWORK.
- THE PURPOSE OF THIS PLAT IS TO CREATE THE 2.97 AC. LOT SHOWN HEREON.
- PER FLOOD INSURANCE RATE MAP (FIRM) 47093C0352F LAST REVISED MAY 2, 2007 THE PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD ZONE. — NOTE: LOCATION OF 100 & 500 YEAR FLOOD LINES SHOWN ARE PER GRAPHIC REPRESENTATION AS SHOWN ON THE CURRENTLY PUBLISHED FEMA FLOOD INSURANCE RATE MAP.
- 15' UTILITY EASEMENT, 7.5' EACH SIDE, OF ALL WATER, SANITARY SEWER AND STORM SEWER LINES AS INSTALLED.
- CURRENT KNOX COUNTY G.I.S. DATA INDICATES A PARCEL OF LAND IN THIS AREA OWNED BY LORENE EVERETTE (PARCEL ID: 152 003), HOWEVER BASED ON DEED PLOTS AND PHYSICAL EXAMINATION, IT DOES NOT APPEAR THAT THIS PARCEL EXISTS.
- ACCESS TO THE SUBJECT PROPERTY WILL HAVE TO BE APPROVED BY THE FARRAGUT PLANNING COMMISSION AND BOARD OF MAYOR AND ALDERMEN, AND FUTURE DEVELOPMENT OF THE SUBJECT PROPERTY WILL COORDINATED WITH THE UNION ROAD IMPROVEMENTS.
- *AQUATIC BUFFER: THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF SOIL AND/OR NATIVE VEGETATION EXCEPT AS PERMITTED BY THE TOWN

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Bart Hose, Assistant Community Development Director

SUBJECT: Discussion and public hearing on a preliminary plat for Campbell Crossing, Parcels 84, 84.01, and 87, Tax Map 130 (southeast intersection of Fretz Road and N. Campbell Station Road), 10.17 Acres, 22 House Lots, Zoned R-1/OSR (Fred Long Construction Concepts, Applicant)

INTRODUCTION AND BACKGROUND: This item involves a preliminary plat for a subdivision located off Fretz Road. The proposed development includes 22 house lots and one open-space lot. The Planning Commission discussed the proposed subdivision as a workshop item at the September 2018 meeting, and the subject property has been rezoned to R-1/OSR to support the proposed development plan.

DISCUSSION: The applicants have requested variances from the maximum cul-de-sac length standard (500 feet) and the connectivity requirement for two points of vehicular access. These variance requests are based on the site's topographic limitations, its shape and location in relation to the intersection of Fretz Road and North Campbell Station Road; and in the case of the connectivity requirement, the fact that it contains less than 30 house lots. The proposed cul-de-sac would access Fretz Road, approximately 288 feet from its intersection with North Campbell Station Road. The staff supports these variance requests given the OSR zoning designation and site constraints. The applicants also appear to be proposing a roadway pavement width of only 24 feet on their plans. This would also require a variance, and the developer's application should be updated accordingly. In addition, there has been no justification presented for reducing the pavement width.

RECOMMENDATION: Included in your packet is a copy of the submitted preliminary plat along with staff comments. Staff will make a recommendation at the meeting based on whether staffs' comments have been addressed.

Variances

- 1) cul-de-sac length
- 2) 2 access points
- 3) street width

coverages are needed

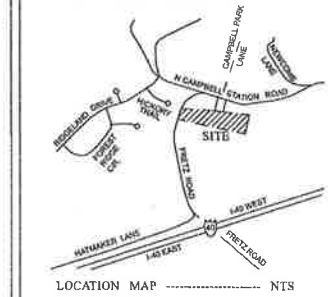
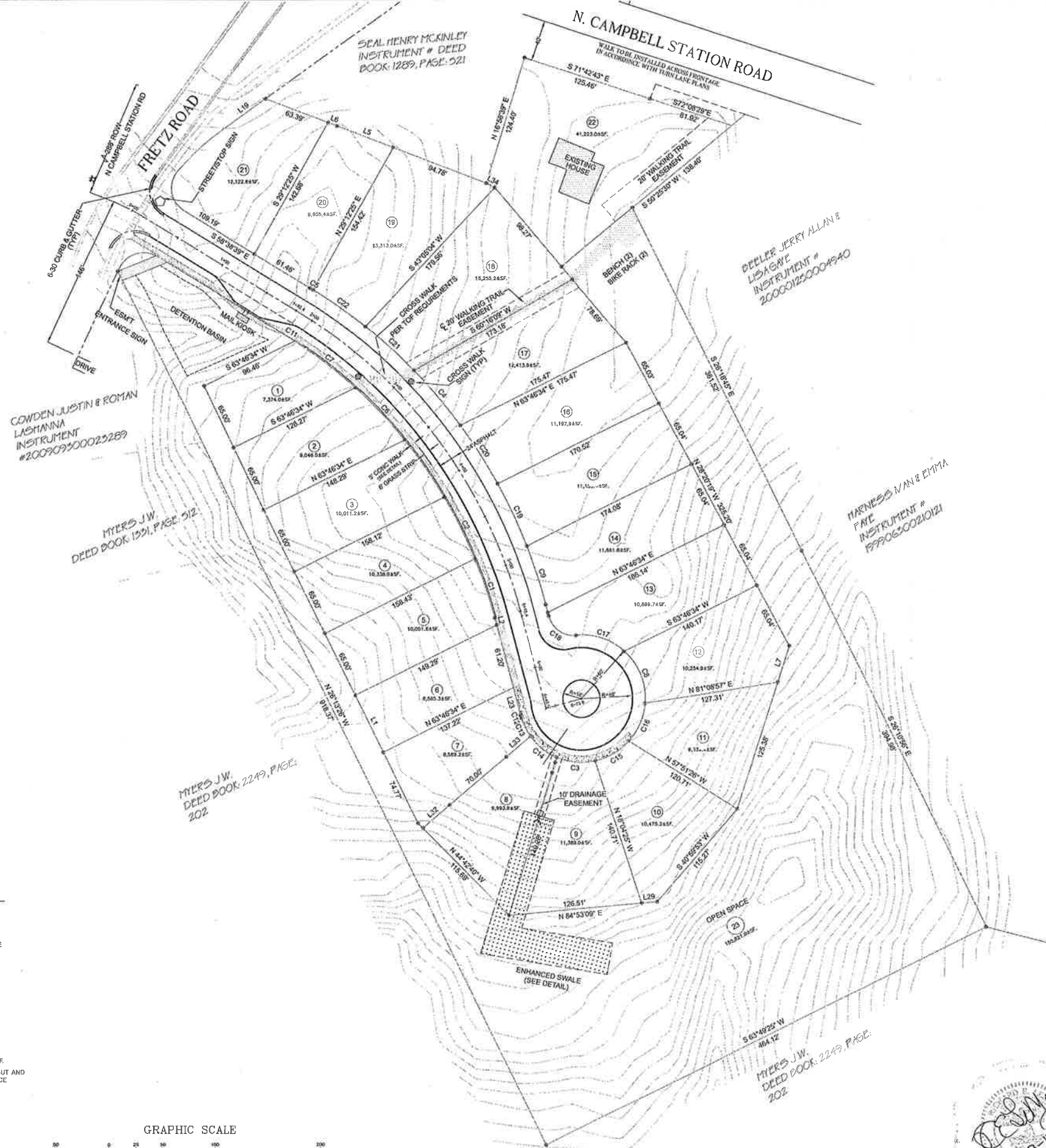
Mark Shipley

From: Mark Shipley
Sent: Tuesday, April 2, 2019 2:59 PM
To: 'Richard LeMay'
Cc: 'lori.saal@townoffarragut.org'; Matt Brazille; Darryl Smith; Bart Hose; Dan Johnson
Subject: Campbell Crossing comments

Richard,

Hope you are doing well. Below are the remaining staff comments on the Campbell Crossing preliminary plat. Can you please address these comments (and include a comment response letter) and provide revisions by the end of the day on Monday, April 8. Please let me know if you have any questions. Thanks.

- 1) Please provide the required ROW width of Fretz Road across the entire frontage;
- 2) Note # 14 does not include crosswalk signs. Please include if they will be required (verify with Eng. Dept.);
- 3) The applicant/designer needs to discuss the alignment of the proposed walking trail easement to N. Campbell with Town staff. Staff would also like to discuss the proposed grading for the bench and bike rack area and its potential effect on a large maple tree;
- 4) The enhanced swale drainage area is shown differently (size & shape) on various sheets. Please explain and/or correct. The area also appears to be located on both the open-space lot and lots 8 & 9 on some sheets. Please discuss any proposal for locating this type of facility on individual lots with the Town staff;
- 5) The enhanced swale detail referenced on the preliminary plan sheet is located on the detail sheet for the separately submitted SWPPP plan sheet set. The detail should be included with the preliminary plat sheets or better yet the SWPPP sheets should be combined with the preliminary plan/plat sheets into a single submission set;
- 6) The seal on the tree protection & replacement plan sheet does not appear to be properly signed (the date is below the seal). Please review and correct;
- 7) The streetscape plan sheet has not been sealed;
- 8) The location of the sign and surrounding area on the streetscape sheet does not appear to be consistent with the same area on the preliminary plan sheets. Please correct;
- 9) Please note that separate landscaping plans will be needed for the detention basin area and the entrance sign area. These plans will need to be reviewed and approved by the VRRB.
- 10) Please provide revised drainage calculations that address the following:
 - a. Calculations for the bioretention swale
 - b. Elevations/dimensions for outlet structure match what is shown on the plans
 - c. Routed runoff flowrates shown on the calculation pages do not match what is shown on the summary page
- 11) Knox County MPC is requiring improvements to Campbell Station Road for a left turn lane at the intersection of Fretz Road. This development should be incorporated into the lot count stipulated by Knox County for the threshold that would trigger these improvements.
- 12) All stormwater pipes should be RCP;
- 13) "K" value for 35 mph design speed for crest and sag vertical curves are 29 and 49, respectively;
- 14) Please provide detail for street name sign. It shall include all current MUTCD standards with regards to size, upper and lower case letters, reflectivity, etc.;
- 15) Please provide grading plan for Sediment Basin #2 and the bioretention swale on the plan sheets of the SWPPP;
- 16) Please submit NOC;
- 17) Please provide an irrevocable letter of credit for erosion control for \$53,000; and
- 18) Please provide a drainage fee of \$880.

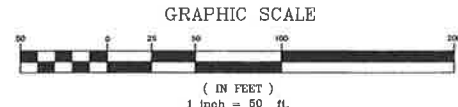


- SMH SANITARY SEWER MANHOLE
- PMH PHONE MANHOLE
- WMH WATER MANHOLE
- SMH STORM DRAIN MANHOLE
- CB CATCH BASIN
- SP SERVICE POLE
- CLPP POWER POLE
- GW GUY WIRE
- PH FIRE HYDRANT
- IV IRRIGATION VALVE
- MW MONITOR WELL
- WM WATER METER
- LS LIGHT STANDARD
- CO CLEANOUT
- EL ELECTRIC BOX
- SP STAND PIPE
- CM GAS METER
- FL FLOOD LIGHT
- IR(0) IRON ROD (OLD)
- IR(N) IRON ROD (NEW)
- CMP CORRUGATED METAL PIPE
- RCP REINFORCED CONCRETE PIPE
- W WATER LINE
- G GAS LINE
- OE OVERHEAD ELECTRIC
- UE UNDERGROUND ELECTRIC
- OP OVERHEAD PHONE LINE
- UP UNDERGROUND PHONE LINE
- OU OVERHEAD UTILITY LINE
- UU UNDERGROUND UTILITY LINE
- NATURAL DRAINAGE
- S SINK HOLE
- C CHECK DAM
- H.C. HANDICAP RAMP
- STOP SIGN
- SILT FENCE
- TPF TREE PROTECTION FENCING
- OPEN SPACE
- FINISH FLOOR ELEVATION
- TOP WALL ELEVATION

LINE	BEARING	DISTANCE
L1	S 25° 13' 20" E	60.00
L2	N 14° 51' 25" W	6.82
L3	S 17° 10' 04" W	5.00
L4	S 17° 10' 04" W	10.00
L5	N 08° 55' 17" W	26.00
L6	N 08° 55' 17" W	9.06
L7	N 17° 53' 22" E	35.81
L8	S 14° 51' 25" E	8.01
L9	S 54° 06' 53" W	5.87
L10	S 52° 55' 25" W	5.57
L11	S 51° 26' 31" W	6.37
L12	S 49° 51' 57" W	5.80
L13	S 48° 35' 33" W	5.39
L14	S 47° 25' 10" W	6.90
L15	S 45° 50' 36" W	6.37
L16	S 44° 22' 22" W	5.57
L17	S 43° 03' 24" W	5.84
L18	S 41° 49' 42" W	35.85
L19	S 40° 06' 41" W	44.30
L20	S 38° 21' 26" W	5.68
L21	N 31° 21' 21" E	65.00
L22	N 28° 38' 30" W	15.12
L23	S 14° 51' 25" E	27.12
L24	N 14° 51' 25" W	3.45
L25	S 08° 38' 39" E	11.70
L26	S 40° 16' 56" E	15.83
L27	N 63° 46' 34" E	0.00
L28	S 28° 20' 19" E	0.02
L29	S 84° 53' 09" W	14.63
L30	N 44° 42' 49" W	6.30
L31	N 25° 05' 07" E	31.59
L32	N 49° 44' 24" E	33.60
L33	N 49° 44' 24" E	30.00
L34	N 62° 01' 52" W	9.08
L35	N 40° 16' 55" W	0.92

CURVE	RADIUS	CHORD BEARING	CHORD LENGTH	ARC LENGTH
C1	450.00	N 16° 16' 17" W	58.83	58.83
C2	450.00	N 26° 29' 40" W	65.00	65.00
C3	60.00	N 84° 48' 18" W	36.67	37.27
C4	500.00	S 40° 19' 03" E	67.78	67.83
C5	600.00	S 58° 26' 20" E	3.58	3.58
C6	450.00	N 43° 20' 52" W	68.02	68.02
C7	450.00	N 62° 11' 37" W	72.30	72.44
C8	60.00	S 22° 02' 15" E	52.84	54.71
C9	500.00	S 18° 06' 57" E	57.75	57.75
C10	450.00	N 34° 49' 30" W	65.74	65.80
C11	450.00	S 57° 46' 29" E	13.66	13.66
C12	25.00	S 18° 00' 25" E	2.75	2.75
C13	60.00	S 29° 36' 05" E	19.04	19.12
C14	60.00	S 41° 22' 48" E	32.35	32.45
C15	60.00	N 69° 27' 50" E	35.95	37.67
C16	60.00	N 22° 48' 22" E	38.51	39.21
C17	60.00	N 71° 27' 25" W	47.46	48.79
C18	25.00	N 64° 48' 18" W	32.10	34.88
C19	500.00	N 25° 12' 08" W	65.01	65.02
C20	500.00	N 32° 40' 49" W	65.41	65.45
C21	500.00	N 47° 46' 07" W	62.18	62.22
C22	500.00	N 64° 47' 01" W	60.16	60.21

- SITE NOTES**
- CORNER MONUMENTS AS SHOWN HEREON
 - VERIFY EXACT SIZE, DEPTH AND LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION
 - A FIVE (5) FOOT UTILITY, DRAINAGE AND CONSTRUCTION EASEMENT ON EACH SIDE OF INTERIOR LOT LINES, A TEN (10) FOOT UTILITY, DRAINAGE AND CONSTRUCTION EASEMENT ON INSIDE OF ROAD RIGHTS-OF-WAY AND EXTERIOR BOUNDARY LINES
 - DEED REFERENCE: INSTR. NO. 200407120003236, 200407120003238, 200503220074656
 - PROPERTY SHOWN ON CLT 130, PARCEL 84.01, 87 & 84
 - PROPERTY SUBJECT TO ALL APPLICABLE EASEMENTS, SETBACKS AND RESTRICTIONS OF RECORD
 - TOTAL AREA: 10.17 ACRES
 - BUILDING LOTS PROPOSED: 22
OPEN SPACE LOTS PROPOSED: 1
 - PROPERTY ZONED: R-1 DSR
BUILDING SETBACKS PER R-1 DSR ZONING
 - THE WALKING TRAILS ARE TO BE FIELD LOCATED WITH TOWN OF FARRAGUT STAFF
 - THE 20' WALKING TRAIL EASEMENT SHALL BE IN FAVOR OF THE TOWN OF FARRAGUT AND RESERVED FOR PUBLIC USE. THE TOWN OF FARRAGUT SHALL ACCEPT MAINTENANCE AND LIABILITY OF USE OF SAID EASEMENTS.
 - OPEN SPACE REQUIRED: 3.57 ACRES (35% 10.17 ACRES)
 - OPEN SPACE PROVIDED: 3.38 ACRES
 - SIGNS TO BE INSTALLED: STOP SIGNS, STREET NAMES, SPEED LIMITS.
 - LOT 23 (OPEN SPACE LOTS) ARE NOT BUILDABLE
 - THERE WILL BE NO INDIVIDUAL DRIVEWAYS TO FRETZ ROAD.
 - THE HOMEOWNERS ASSOCIATION SHALL OWN AND MAINTAIN ALL OPEN SPACE.
 - NO SLOPES TO BE GRADED STEEPER THAN 2:1, SLOPES STEEPER THAN 3:1 SHALL BE PROPERLY STABILIZED. SEE DETAIL.
 - TOPOGRAPHIC SURVEY INFORMATION HAS BEEN FIELD GENERATED AND VERIFIED.



10816 KINGSTON PIKE
KNOXVILLE, TENNESSEE 37934
PH: 865-671-0183 FAX: 865-671-0213

LeMAY AND ASSOCIATES
CONSULTING ENGINEERS



PRELIMINARY PLAN

SHEET 1 OF 9

CAMPBELL CROSSING

DISTRICT 6
KNOX COUNTY • TENNESSEE

MAP 130 084.01, 84 & 87

DRAWN BY: RELJr

APPROVED BY: REL

DATE: 5-9-2018

REVISIONS: 6-26-2018/01-15-2019

SCALE: 1"=50'

DRAWING NUMBER: 5393

OWNER / DEVELOPER
FRED LONG CONSTRUCTION CONCEPTS
1811 SUNSTONE WAY
KNOXVILLE, TN 37922
865-567-0795

GRADING AND EROSION CONTROL NOTES

1. CONTRACTOR TO VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR TO CALL TENNESSEE ONE-CALL AT 1-800-351-1111 AT LEAST 72 HOURS PRIOR TO CONSTRUCTION ACTIVITIES FOR UTILITIES LOCATION.
2. CONTRACTOR RESPONSIBLE FOR EROSION DRAINAGE REQUIREMENTS FOR SLOPE STABILITY, SHORING, AND SLOPE CONTROL DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR VERIFYING GRADES AND ALIGNMENTS PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES OR INCONSISTENCIES TO LEMAY & ASSOCIATES AT (865) 671-0183.
4. TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION AND KNOX COUNTY REQUIREMENTS.
5. THE REQUIREMENTS LISTED BELOW ARE INTENDED TO SERVE AS AN OUTLINE OF GENERAL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY BE SET FORTH IN THESE DRAWINGS.

PERMITS:
CONTRACTOR SHALL PAY GRADING PERMIT FEE AND POST GRADING BOND, AS REQUIRED.

EROSION CONTROL:
INSTALL ALL CONSTRUCTION ENTRANCE, SILT FENCE AND EROSION CONTROL, BERMS AND SEDIMENT RETENTION FACILITIES PRIOR TO THE START OF GRADING.

CLEARING AND GRUBBING:
COMPLY WITH LOCAL AND STATE ORDINANCES REGARDING DISPOSAL OF DEBRIS. DO NOT BURN DEBRIS ON SITE WITHOUT APPROVAL OF LOCAL AUTHORITY. CLEAN AND GRUB FOR NEW CONSTRUCTION AS REQUIRED.

EXCAVATION PRECAUTIONS:
VERIFY LOCATION OF EXISTING ON-SITE UTILITIES. PROTECT AND MAINTAIN EXISTING UTILITIES AS REQUIRED. ESTABLISH AND VERIFY EXISTING LINES, GRADE, AND DIMENSIONS AS SHOWN ON THE DRAWING. REPORT ANY ERRORS OR INCONSISTENCIES TO LEMAY & ASSOCIATES AT (865) 671-0183 BEFORE COMMENCEMENT OF WORK.

SAFETY:
SAFETY BARRIERS HAVING A MAXIMUM OPENING OF 4" SHALL BE PROVIDED FOR ANY PIPE, OPENING OR EXCAVATION TO PREVENT CHILDREN OR LARGE ANIMALS FROM CRAWLING INTO THE STRUCTURE. BARRIERS SHALL BE VISIBLE 24" BARS 8' 4" OC BOTH VAYS.

TEMPORARY DIVERSION EAVES:
TEMPORARY DIVERSION EAVES SHALL BE CONSTRUCTED PRIOR TO STRIPPING OR ANY OTHER GRADING ACTIVITY. IF SHOWN THIS DRAWING ALSO TEMPORARY SEDIMENT TRAPS AND/OR PERMANENT SEDIMENT BASINS SHALL BE CONSTRUCTED PRIOR TO STRIPPING OR OTHER GRADING ACTIVITY.

EXISTING TOP SURFACE:
EXISTING TOP SURFACES SHOWN ARE BASED ON GCS AND ON GROUND SURVEYING DATA. ELEVATIONS TOPOGRAPHIC INFORMATION SHOWN HEREIN SHALL BE VERIFIED BY THE CONTRACTOR AND ANY ERRORS OR VARIATIONS SHOULD BE REPORTED TO LEMAY & ASSOCIATES PRIOR TO COMMENCEMENT OF WORK. ANY ERROR NOT REPORTED CANNOT BE CONSIDERED FOR ADJUSTMENT IN CONTRACT PRICE.

STRIPPING AND SPREADING TOPSOIL:
TOPSOIL SHALL BE STRIPPED AND TEMPORARILY STOCK PILED FOR LATER REUSE IN AREA SHOWN ON PLAN OR OTHER AGREED TO LOCATION ON SITE.

PLACEMENT OF FILL:
ALL AREAS TO RECEIVE NEW STRUCTURAL FILL SHALL BE PROOF ROLLED OR TEXTED BY A SOIL TESTING ENGINEER OR LEMAY & ASSOCIATES. THE CONTRACTOR'S REPRESENTATIVE SHALL NOTIFY LEMAY & ASSOCIATES THAT ALL AREAS HAVE PASSED PROOF ROLL INSPECTION PRIOR TO COMMENCEMENT OF STRUCTURAL OR GENERAL BACKFILL. DO NOT COMMENCE FILL PRIOR TO SUCH NOTIFICATION.

STRUCTURAL OR ROADWAY:
STRUCTURAL FILL SHALL BE COMPACTED TO A MINIMUM OF STANDARD PROCTOR DENSITY WITH MOISTURE CONTENT $\pm 1\%$ OF OPTIMUM. UNSATURATED OR QUESTIONABLE SOILS SHALL BE REMOVED FROM AREAS RECEIVING STRUCTURAL BACKFILL. BACKFILL TO BE PLACED IN 6" TO 8" LIFTS. NO ORGANIC OR ROCK LARGER THAN 6" DIA SHALL BE USED IN FILL AREAS.

GRADING TO FINISH:
GRADING CONTRACTOR SHALL BRING SURFACE TO WITHIN AN AVERAGE OF 1/8" OF ONE FOOT OF REQUIRED ELEVATION TO OBTAIN FINISHED GRADE INDICATED ON DRAWINGS OR AS APPROVED BY LEMAY & ASSOCIATES.

TESTING:
CONTRACTOR SHALL INCLUDE PRICE FOR ONE PROCTOR DENSITY ANALYSIS FROM SAMPLES COLLECTED AT LOCATIONS SPECIFIED BY THE INDEPENDENT QUALIFIED GEOTECHNICAL TESTING AGENCY SUITABLE TO LEMAY & ASSOCIATES. ALL TESTS SHALL SPECIFICALLY STATE THAT THE TEST EITHER PASSES OR FAILS TO MEET SPECIFICATIONS. CONTRACTOR SHALL INCLUDE IN HIS BIDDING SOIL DENSITY DETERMINATION TESTS AFTER COMPLETION OF GRADING IF REQUIRED.

STORMWATER RUNOFF:
THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO PREVENT STORMWATER RUNOFF FROM EXITING THE SITE OR ENTERING ADJACENT WATER QUALITY BUFFERS OR STREAMS. ALL KNOX COUNTY AND TREC REGULATIONS TO BE COMPLIED WITH THROUGHOUT THE CONSTRUCTION PROCESS.

SEQUENCE OF DURING CONSTRUCTION ACTIVITIES

- Continue required inspections of erosion control systems
- Clear and grub remainder of site to be graded.
- Strip topsoil from area to be graded. Stock pile in area indicated on plan or other suitable area. Install silt fencing at toe of topsoil stockpiles.
- Remove any unsuitable material.
- Grade site to grades shown on Final Grading Plan.
- Maintain all erosion and sediment control measures to include silt fence, construction entrance, diversion ditches, sediment basin and any other measures utilized.
- Perform site assessment of all erosion control measures after 30 days, continue to inspect and maintain all erosion control systems and file reports as required by the SWPPP.
- Stabilize the site with seed and straw and maintain all disturbed areas in accordance with the SWPPP.

SEEDING

1. APPLY TEMPORARY SEEDING WHENEVER GRADING OPERATIONS ARE TEMPORARILY HALTED FOR OVER 14 DAYS AND DRAINAGE GRADING OF EXPOSED SURFACES IS TO BE COMPLETED WITHIN ONE YEAR. APPLY TEMPORARY SEEDING TO SOIL STOCKPILES.
2. APPLY PERMANENT SEEDING WHENEVER GRADING OPERATIONS ARE COMPLETED AND ALL CONSTRUCTION OPERATIONS WILL NOT IMPACT THE DISTURBED AREA. APPLY PERMANENT SEEDING TO ALL NON-CONSTRUCTION AREAS WHICH SHOW SIGNS OF EXCESSIVE EROSION.

SITE NOTES

1. CORNER MONUMENTS AS SHOWN HEREON
2. VERIFY EXACT SIZE, DEPTH AND LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
3. A FIVE (5) FOOT UTILITY, DRAINAGE AND CONSTRUCTION EASEMENT ON EACH SIDE OF INTERIOR LOT LINES, A TEN (10) FOOT UTILITY, DRAINAGE AND CONSTRUCTION EASEMENT ON INSIDE OF ROAD RIGHTS-OF-WAY AND EXTERIOR BOUNDARY LINES
4. DEED REFERENCE: INSTR. NO. 2004/07120003236, 2004/07120003236, 2005/03220074650
5. PROPERTY SHOWN ON CLT 130, PARCEL 64 01, 07 & 84
6. PROPERTY SUBJECT TO ALL APPLICABLE EASEMENTS, SETBACKS AND RESTRICTIONS OF RECORD.
7. TOTAL AREA: 10.17 ACRES
8. BUILDING LOTS PROPOSED: 22
9. OPEN SPACE LOTS PROPOSED: 1
10. PROPERTY ZONED: R-1 OSR
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12. THE WALKING TRAILS ARE TO BE FIELD LOCATED WITH TOWN OF FARRAGUT STAFF.
13. THE 20' WALKING TRAIL EASEMENT SHALL BE IN FAVOR OF THE TOWN OF FARRAGUT AND RESERVED FOR PUBLIC USE. THE TOWN OF FARRAGUT SHALL ACCEPT MAINTENANCE AND LIABILITY OF USE OF SAID EASEMENTS.
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16. SIGNS TO BE INSTALLED: STOP SIGNS, STREET NAMES, SPEED LIMITS.
17. LOT 23 (OPEN SPACE LOTS) ARE NOT BUILDABLE.
18. THERE WILL BE NO INDIVIDUAL DRIVEWAYS TO FRETZ ROAD.
19. THE HOMEOWNERS ASSOCIATION SHALL OWN AND MAINTAIN ALL OPEN SPACE.
20. NO SLOPES TO BE GRADED STEEPER THAN 2.5:1. SLOPES STEEPER THAN 3:1 SHALL BE PROPERLY STABILIZED. SEE DETAIL.

1. This is a priority construction activity.

2. Adequate drainage, erosion and sediment control measures, best management practices and/or other stormwater management facilities shall be provided and maintained at all times during construction. Damages to adjacent property and/or the construction site caused by the contractor's or property owner's failure to provide and maintain adequate drainage and erosion/sediment control for the construction area shall be the responsibility of the property owner and/or contractor.

3. Quality assurance of erosion prevention and sediment controls shall be conducted by qualified personnel performing site assessment at each outfall involving drainage totaling 10 or more acres, or five or more acres if draining to impaired or exceptional waters. This assessment will be conducted at each qualifying outfall within a month of construction commencement (see COP sec 3.1.2 for assessment language)

4. Fugitive sediment that has escaped the construction site must be removed so that it is not subsequently washed into storm sewers and/or streams by the next rain and/or so that it does not pose a safety hazard to users of public streets. Arrangements concerning removal of sediment on adjoining property must be settled by the permittee with the adjoining land owner.

5. Sediment should be removed from sediment traps, silt fences, sedimentation ponds, other sediment controls when design capacity has been reduced by 50 %.

6. Litter, construction debris and construction chemicals exposed to stormwater shall be picked up prior to anticipated storm events or before being carried off the site by wind, or otherwise prevented from becoming a pollution source for stormwater discharges.

7. Preconstruction vegetative ground cover shall not be destroyed, removed, or disturbed more than 15 days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.

8. Existing vegetation should be preserved to the maximum extent practicable.

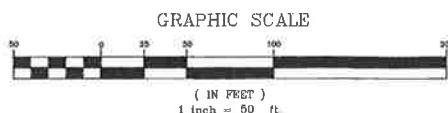
9. Temporary or permanent soil stabilization must be completed no later than 15 days after the construction activity in that portion of the site has permanently or temporarily ceased. Steep slopes (>35 %) must be permanently or temporarily stabilized within 7 days.

10. Site inspections shall be performed at least twice weekly at a minimum of 72 hours apart on all unstabilized sites.

NAME	RIM ELEV.(FT)	BASE ELEV.(FT)	INVERT-IN ELEV.(FT)	INVERT-OUT ELEV.(FT)
CB1	1095.28	1090.78	N/A	1090.78
CB2	1096.43	1090.39	1090.39	1090.39
JB1	1091.41	1088.79	1088.79	1088.79
HW1	1080.38	1076.38	1076.38	N/A
CB3	1104.46	1099.96	N/A	1099.96
CB4	1105.83	1099.53	1099.53	1099.53
DBL-CB1	1101.34	1099.92	1099.92	1099.92
JB2	1074.00	1069.00	1069.00	1069.00
HW2	1072.00	1068.93	1068.93	N/A
CB5	1087.30	1082.80	N/A	1082.80
CB6	1088.67	1082.29	1082.29	1082.29
HW3	1082.10	1078.10	1078.10	N/A

NAME	DN STRUCTURE	UP STRUCTURE	DOWN INVERT (FT)	UP INVERT (FT)	LENGTH (FT)	SLOPE (%)	MATERIAL	SIZE (IN)
P12	CB2	CB1	1090.39	1090.78	19.76	2.000	HDPE	18.0
P11	JB1	CB2	1088.79	1090.39	71.35	2.242	HDPE	18.0
P4	HW1	JB1	1076.38	1088.79	47.06	25.873	HDPE	18.0
P5	CB4	CB3	1099.53	1099.96	20.71	2.049	Concrete	18.0
P6	DBL-CB1	CB4	1099.92	1099.53	122.58	2.135	Concrete	18.0
P7	JB2	DBL-CB1	1069.00	1096.92	189.12	14.762	HDPE	18.0
P8	HW2	JB2	1068.93	1069.00	3.43	2.000	HDPE	18.0
P9	CB6	CB5	1082.29	1082.80	20.70	2.464	Concrete	18.0
P10	HW3	CB6	1078.10	1082.29	36.55	11.450	HDPE	18.0

STORM DRAIN TABLES



LeMAY AND ASSOCIATES
CONSULTING ENGINEERS

PH: 865-671-0183 FAX: 865-671-0213
10816 KINGSTON PIKE
KNOXVILLE, TENNESSEE 37934

GRADING AND DRAINAGE PLAN

SHEET 2 OF 9

CAMPBELL CROSSING

DISTRICT 6
KNOX COUNTY * TENNESSEE

MAP 130 08401

DRAWN BY: RELjr APPROVED BY: REL DATE: 1-15-2019 REVISIONS: 2-12-2019 SCALE: 1"=50' DRAWING NUMBER: 5393

Large Canopy Street Trees

Dogwood and Redbud Trees

Large Canopy Street Trees



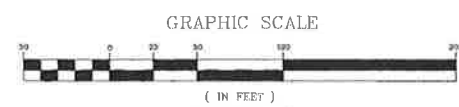
SMH	SANITARY SEWER MANHOLE
PMH	PHONE MANHOLE
WMH	WATER MANHOLE
SBM	STORM DRAIN MANHOLE
CB	CATCH BASIN
SP	SERVICE POLE
PP	POWER POLE
GW	GUY WIRE
FH	FIRE HYDRANT
IV	IRRIGATION VALVE
MW	MONITOR WELL
WM	WATER METER
LS	LIGHT STANDARDB
DO	ELECTRIC BOX
EL	ELECTRIC BOX
SP	STAND PIPE
GM	GAS METER
FL	FLOOD LIGHT
IR(O)	IRON ROD (OLD)
IR(N)	IRON ROD (NEW)
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
W	WATER LINE
G	GAS LINE
OE	OVERHEAD ELECTRIC
UE	UNDERGROUND ELECTRIC
OP	OVERHEAD PHONE LINE
UP	UNDERGROUND PHONE LINE
OU	OVERHEAD UTILITY LINE
UL	UNDERGROUND UTILITY LINE
N	NATURAL DRAINAGE
S	SINK HOLE
C	CHECK DAM
H.C.	HANDICAP RAMP
STOP SIGN	STOP SIGN
S.F.	SILT FENCE
PP	TREE PROTECTION FENCING
OS	OPEN SPACE
FF=1000	FINISH FLOOR ELEVATION
TF=1000	TOP WALL ELEVATION

Streetscape Notes

- Campbell Crossing will provide visual enhancements throughout the neighborhood by planting street trees. Large canopy trees will be planted approximately at each corner property line along the entire street where there is adequate root zone and canopy space. Species may include Willow Oak, Red Oak, London Plane Tree, Red Maple, Zelkova, and Elm.
- Dogwood and Redbud flowering trees will be used along the walking trail to create an 'allee' effect and overhead canopy.
- Final location, species, and size may vary based on the Tree Replacement Plan, driveway location, and utility locations and easements.

SITE NOTES

- CORNER MONUMENTS AS SHOWN HEREON
- VERIFY EXACT SIZE, DEPTH AND LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION
- A FIVE (5) FOOT UTILITY, DRAINAGE AND CONSTRUCTION EASEMENT ON EACH SIDE OF INTERIOR LOT LINES, A TEN (10) FOOT UTILITY, DRAINAGE AND CONSTRUCTION EASEMENT ON INSIDE OF ROAD RIGHTS-OF-WAY AND EXTERIOR BOUNDARY LINES.
- DEED REFERENCE: INSTR. NO. 200407120003236, 200407120003236, 200503220074056
- PROPERTY SHOWN ON CLT 130, PARCEL 84.01, 87 & 84
- PROPERTY SUBJECT TO ALL APPLICABLE EASEMENTS, SETBACKS AND RESTRICTIONS OF RECORD.
- TOTAL AREA: 10.17 ACRES
- BUILDING LOTS PROPOSED: 22
OPEN SPACE LOTS PROPOSED: 1
- PROPERTY ZONED: R-1 OSR
BUILDING SETBACKS PER R-1 OSR ZONING.
- THE WALKING TRAILS ARE TO BE FIELD LOCATED WITH TOWN OF FARRAGUT STAFF.
- THE 20' WALKING TRAIL EASEMENT SHALL BE IN FAVOR OF THE TOWN OF FARRAGUT AND RESERVED FOR PUBLIC USE, THE TOWN OF FARRAGUT SHALL ACCEPT MAINTENANCE AND LIABILITY OF USE OF SAID EASEMENTS.
- OPEN SPACE REQUIRED: 3.67 ACRES (36% 10.17 ACRES)
- OPEN SPACE PROVIDED: 3.68 ACRES
- SIGNS TO BE INSTALLED: STOP SIGNS, STREET NAMES, SPEED LIMITS.
- LOT 23 (OPEN SPACE LOTS) ARE NOT BUILDABLE.
- THERE WILL BE NO INDIVIDUAL DRIVEWAYS TO FRETZ ROAD.
- THE HOMEOWNERS ASSOCIATION SHALL OWN AND MAINTAIN ALL OPEN SPACE.
- NO SLOPES TO BE GRADED STEEPER THAN 2:1. SLOPES STEEPER THAN 3:1 SHALL BE PROPERLY STABILIZED. SEE DETAIL.



10816 KINGSTON PIKE
KNOXVILLE, TENNESSEE 37934
PH: 865-671-0183 FAX: 865-671-0213

LeMAY AND ASSOCIATES
CONSULTING ENGINEERS

OWNER / DEVELOPER
FRED LONG CONSTRUCTION CONCEPTS
1811 SUNSTONE WAY
KNOXVILLE, TN 37922
865-567-0795



STREETSCAPE PLAN		SHEET 8 OF 9	
CAMPBELL CROSSING			
DISTRICT 6 KNOX COUNTY • TENNESSEE			
MAP 130 084.01, 84 & 87			
DRAWN BY: RELjr	APPROVED BY: REL	DATE: 5-9-2018	REVISIONS: 6-26-2018 01-15-2019
SCALE: 1"=50'		DRAWING NUMBER: 5393	

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Bart Hose, Assistant Community Development Director

SUBJECT: Discussion and public hearing on a preliminary plat for the Ivey Village Subdivision, a portion of Parcel 58, Tax Map 151, 7.16 Acres, 34 Building Lots, Zoned NCC, OS-P, and FPD (SITE Incorporated/Annette Hommel, Applicant)

INTRODUCTION AND BACKGROUND: This item involves a preliminary plat for the proposed residential development of the northern portion of the property formerly known as the Swan Property. The developable portions of the site, and the larger “Swan” property, are zoned Neighborhood/Convenience Commercial (NCC). The Ivey Village Subdivision is being developed as a residential transition area under the NCC zoning district’s provisions. The proposed development will include attached single-family residences (townhomes), located between a planned commercial area on the southern portions of the “Swan” property, and Union Road to the north.

DISCUSSION: The transitional space within the NCC District is key to blending non-residential development with existing lower density residential areas. In this case, the proposed transitional space will be located along Union Road, a major collector street that the Town plans to improve in the near future. This location will provide a transition between several existing or planned detached single-family residential subdivisions along the northern side of Union Road and a planned commercial development area to the south along Kingston Pike. It will also include internal vehicular and pedestrian connections to the proposed commercial development area for enhanced connectivity.

As proposed, the planned townhomes will face outward, toward Union Road and surrounding properties. This orientation is intended to highlight the residential nature of the development and enhance its transitional effect. The garages and rear entries will face planned internal roadways, which will be public streets and provide vehicular connectivity to the remainder of the “Swan” property.

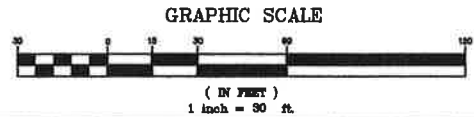
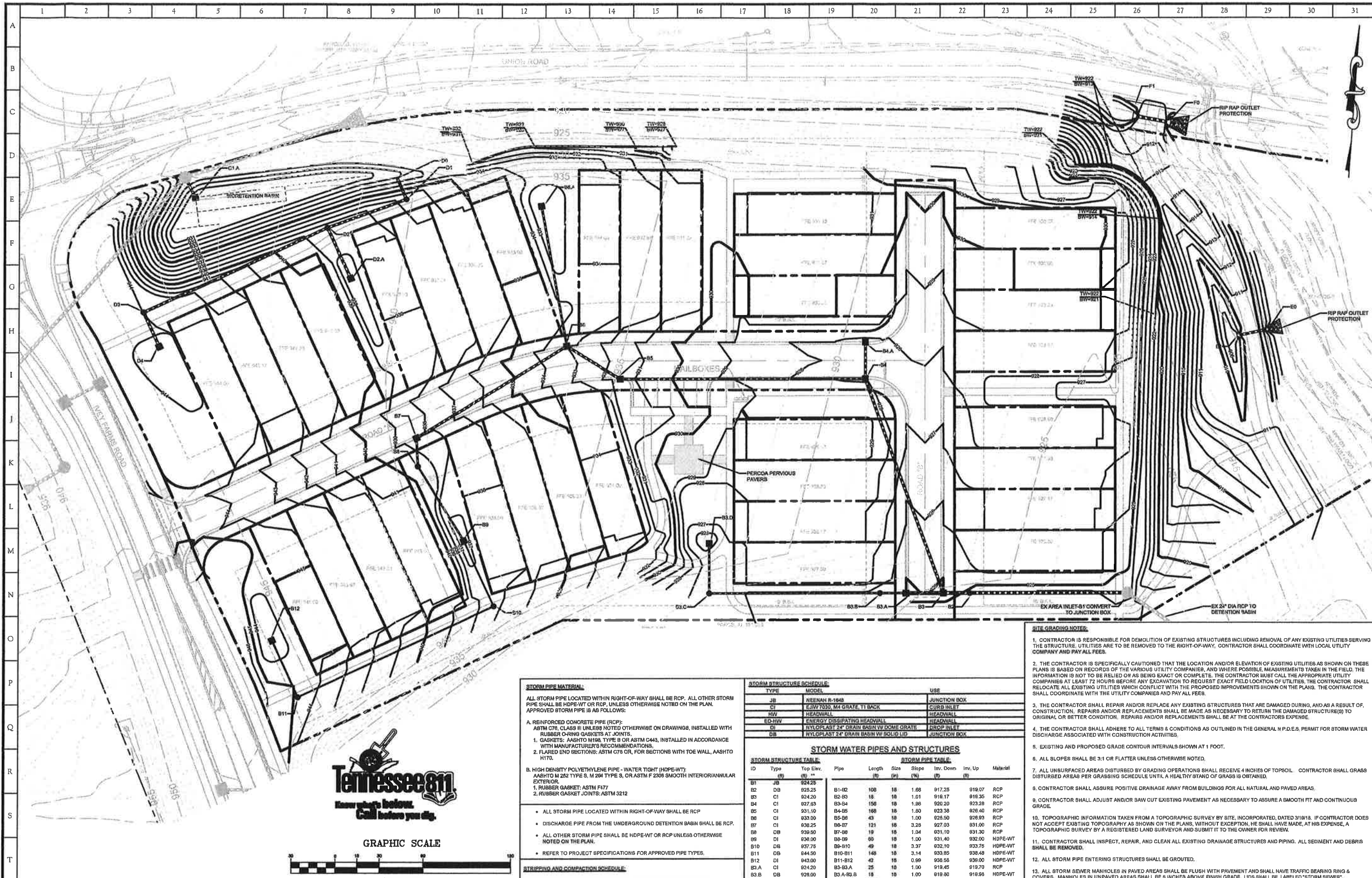
There will be no direct vehicular access between the Ivey Village Subdivision and Union Road. The Village’s proposed roadway system will, instead, connect to the planned Ivey Farms Road (Way Station Trail extension) and commercial development area along Kingston Pike. It is intended for internal residential access and as a connection to the planned commercial area. The applicants are requesting variances to reduce the planned rights-of-way widths from 50 to 40 feet and the pavement widths from 26 to 22 feet. The staff is not opposed to these variance requests.

RECOMMENDATION: Included in your packet is a copy of the submitted preliminary plat along with staff comments. Staff will make a recommendation at the meeting based on whether staffs’ comments have been addressed.

Comments, Ivey Village Pre-Plat Resubmittal, 4-8-19

1. Please review the “purpose of the plat” note and modify as needed.
2. Please clarify on the plan sheets that this is a portion (7.11 ac) of the larger Swan Farm (which has not yet been divided). Please also clearly note on the plan that the plan/plat for Ivey Farms Road has not yet received final approval and that approval of this development is linked/contingent on such final approval.
3. Please provide lot coverage calculation for the development.
4. Please include the approximate acreage of the individual lots being created.
5. Please include the setbacks, front and back, for the proposed buildings on the individual lots. The typical building envelope indicates 20 and 10 feet. The distance between the front building façade and sidewalks needs to be evaluated and ultimately assured.
6. The applicants are requesting a setback variance for lot 12. This variance has not been justified and it impacts a potential landscaping/streetscaping area. The applicants are also requesting road ROW and pavement width variances which have previously been discussed.
7. Please identify proposed landscaping/greenspace areas on the individual lots and discuss how they will be assured in the covenants and deed restrictions.
8. The proposed sidewalk along the northern edge of the building lots is sandwiched between the lots and the front of the buildings (10’ setback), a detention feature, and retaining walls. Can the corridor area around the sidewalk be widened (by elongating the basin or moving the walls back a bit more)? The sidewalk is being proposed in-leu-of a more traditional facility along Union Road and we want the public to see it as a public sidewalk and connection route.
9. A sidewalk connection should be planned from the walking trail/sidewalk near the southeast corner of the lot 23 into the commercial development to connect with the planned commercial development to the south (see concept plan sheet).
10. Please discuss the streetscaping and landscaping plans with Staff. We would like to see the streetscaping enhanced as much as possible given the limited space, and also ensure that the new residential neighborhood is clearly demarcated/separated from the proposed commercial areas to the south.
11. Please update and include all relevant Tree Preservation and Removal Plan sheets from the larger Ivey Farm Road and mass grading Plat/Plan.
12. Please clarify the Road A typical Cross Sections for sidewalk vs non-sidewalk areas. Please do the same for Road B to indicate greenspace strip areas.

13. Please include a street lighting plan and details.
14. Please show FEMA base flood elevations and cross sections on the plans.
15. Please add the Town's required aquatic buffer note regarding disturbance.
16. Please include all updated SWPPP sheets for this project.
17. Please include detail and all other pertinent documentation/information regarding the proposed bio-retention basin.
18. Please coordinate the maximum graded slope notes on the grading plan with the streetscaping plan and note stabilization if any slopes exceed 3:1.
19. Please only show the street and pedestrian facility system on the non-residential portion of the development.
20. Please include raised crosswalks as discussed.
21. Please use the R-4 setbacks as this is essentially an R-4 project.
22. Please provide details for proposed retaining walls exceeding 4 feet.



LEGEND:

	EXISTING CONTOUR LINE
	PROPOSED CONTOUR LINE
	EXISTING STORM SEWER PIPE
	PROPOSED STORM SEWER PIPE
	EXISTING CATCH BASIN/JUNCTION BOX
	PROPOSED CURB INLET
	PROPOSED DROP INLET
	PROPOSED JUNCTION BOX

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EARTHWORK REQUIRED TO PREPARE THE UNCLASSIFIED SITE TO THE LINES AND GRADES AS SHOWN ON PLANS. THIS INCLUDES, BUT IS NOT LIMITED TO, ANY QUANTITY OF IMPORT OR EXPORT OF STRUCTURAL FILL AND/OR DISPOSAL OF UNSUITABLE MATERIAL, AS REQUIRED. ALL COSTS SHALL BE INCLUDED IN OVERALL BASE BID. ALL EXCAVATION SHALL BE CONSIDERED UNCLASSIFIED.

THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION, OR DISTURBANCE OF SOIL AND/OR NATIVE VEGETATION WITHIN THE AQUATIC BUFFER EXCEPT AS PERMITTED BY THE TOWN OF FARRAGUT.

ALL ELEVATIONS (RIM, THROAT, GRATE, TOP) AT STORM STRUCTURES

STORM PIPE MATERIAL:

ALL STORM PIPE LOCATED WITHIN RIGHT-OF-WAY SHALL BE RCP. ALL OTHER STORM PIPE SHALL BE HDPE-WT OR RCP, UNLESS OTHERWISE NOTED ON THE PLAN. APPROVED STORM PIPE IS AS FOLLOWS:

A. REINFORCED CONCRETE PIPE (RCP):
ASTM C76, CLASS III UNLESS NOTED OTHERWISE ON DRAWINGS, INSTALLED WITH RUBBER O-RING GASKETS AT JOINTS.
1. GASKETS: ASHTO M188, TYPE B OR ASTM C443, INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. FLARED END SECTIONS: ASTM C76 OR, FOR SECTIONS WITH TIE WALL, ASHTO M170.

B. HIGH DENSITY POLYETHYLENE PIPE - WATER TIGHT (HDPE-WT):
ASTM M 252 TYPE S, M 204 TYPE S, OR ASTM F 2308 SMOOTH INTERIOR/ANNUAL EXTERIOR.
1. RUBBER GASKET: ASTM F477
2. RUBBER GASKET JOINTS: ASTM 3212

- ALL STORM PIPE LOCATED WITHIN RIGHT-OF-WAY SHALL BE RCP
- DISCHARGE PIPE FROM THE UNDERGROUND DETENTION BASIN SHALL BE RCP.
- ALL OTHER STORM PIPE SHALL BE HDPE-WT OR RCP UNLESS OTHERWISE NOTED ON THE PLAN.
- REFER TO PROJECT SPECIFICATIONS FOR APPROVED PIPE TYPES.

STRIPPING AND COMPACTION SCHEDULE:

TOPSOIL STRIPPING DEPTH 3"-4" AVERAGE. DEEPER IF REQUIRED LOCALLY.

REQUIRED COMPACTION PERCENTAGES (% MAX DRY DENSITY)

STANDARD PROCTOR TEST METHOD ASTM TEST # D-938

TESTING:

- ALLOW 1 COMPACTION TEST PER EA. 2500 S.F. (MAX 50' X 50' AREA) PER LIFT AT BUILDING AREAS.
- ALLOW 1 COMPACTION TEST PER EACH 10,000 S.F. OF CUT OR NATURAL GRADE AT BUILDING AREA.
- ALLOW 1 COMPACTION TEST PER EA. 5500 S.F. (MAX 75' X 75' AREA) PER LIFT AT PARKING AREA.
- ALLOW 1 COMPACTION TEST PER EACH 40,000 S.F. OF CUT OR NATURAL GRADE AT PARKING AREA.

STORM STRUCTURE SCHEDULE:

TYPE	MODEL	USE
JB	NEENAN R-1648	JUNCTION BOX
CI	CAST IRON, M4 GRATE, T1 BACK	CURB INLET
HW	HEADWALL	HEADWALL
ED-HW	ENERGY DISSIPATING HEADWALL	HEADWALL
DI	HYDROPLAST 24" DRAIN BASIN W/ DOME GRATE	DROP INLET
DB	HYDROPLAST 24" DRAIN BASIN W/ SOLID LID	JUNCTION BOX

STORM WATER PIPES AND STRUCTURES

ID	Type	Top Elev. (ft)	Pipe	Length (ft)	Size (in)	Slope (%)	Inv. Down (ft)	Inv. Up (ft)	Material
B1	JB	924.25							RCP
B2	DB	925.25	B1-B2	100	18	1.88	917.25	919.07	RCP
B3	CI	924.20	B2-B3	15	18	1.01	919.17		RCP
B4	CI	927.63	B3-B4	150	18	1.98	920.20	922.28	RCP
B5	CI	931.10	B4-B5	160	18	1.80	923.38	926.40	RCP
B6	CI	930.00	B5-B6	43	18	1.00	925.50	926.93	RCP
B7	CI	930.25	B6-B7	121	18	3.28	927.03	931.00	RCP
B8	DB	939.50	B7-B8	19	18	1.04	931.10		RCP
B9	DI	936.00	B8-B9	60	18	1.00	931.40	932.00	HDPE-WT
B10	DB	937.75	B9-B10	49	18	3.37	932.10	933.75	HDPE-WT
B11	DB	944.50	B10-B11	148	18	3.14	933.85	938.48	HDPE-WT
B12	DI	943.00	B11-B12	42	18	0.99	936.56	936.00	HDPE-WT
B3.A	CI	924.20	B3-B3.A	25	18	1.00	919.45	919.70	RCP
B3.B	DB	928.00	B3.A-B3.B	16	18	1.00	919.80	919.98	HDPE-WT
B3.C	DB	927.25	B3.B-B3.C	117	18	1.00	920.08	921.25	HDPE-WT
B3.D	DI	925.70	B3.C-B3.D	34	18	1.03	921.35	921.70	HDPE-WT
B4.A	CI	927.63	B4-B4.A	26	18	1.00	923.38	923.63	RCP
B6.A	DI	932.00	B6-B6.A	97	18	1.00	927.03	928.00	RCP
C1.A	DI	931.50	C1-C1.A	16	18	1.00	927.27	927.42	RCP
D0	FES								
D1	DB	936.75	D0-D1	16	18	0.99	932.00	932.18	HDPE-WT
D2	DB	938.75	D1-D2	57	18	0.99	932.18	932.73	HDPE-WT
D3	DB	944.00	D2-D3	138	18	1.00	938.58	937.74	HDPE-WT
D4	DI	943.00	D4-D4	26	18	1.01	937.74	938.00	HDPE-WT
D2.A	DI	937.00	D2-D2.A	38	18	0.89	932.73	933.11	HDPE-WT
E0	ED-HW								
E1	ED-HW								
F0	ED-HW								
E0-E1				16	18	3.33	908.50	907.10	RCP

SITE GRADING NOTES:

- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY AND PAY ALL FEES.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. THE CONTRACTOR SHALL RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES AND PAY ALL FEES.
- THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY EXISTING STRUCTURES THAT ARE DAMAGED DURING, AND AS A RESULT OF, CONSTRUCTION. REPAIRS AND/OR REPLACEMENTS SHALL BE MADE AS NECESSARY TO RETURN THE DAMAGED STRUCTURE(S) TO ORIGINAL OR BETTER CONDITION. REPAIRS AND/OR REPLACEMENTS SHALL BE AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- EXISTING AND PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT.
- ALL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
- ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATIONS SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL GRASS DISTURBED AREAS PER GRASSING SCHEDULE UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- CONTRACTOR SHALL ADJUST AND/OR SAW CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- TOPOGRAPHIC INFORMATION TAKEN FROM A TOPOGRAPHIC SURVEY BY SITE, INCORPORATED, DATED 3/18/18. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
- CONTRACTOR SHALL INSPECT, REPAIR, AND CLEAN ALL EXISTING DRAINAGE STRUCTURES AND PIPING. ALL SEDIMENT AND DEBRIS SHALL BE REMOVED.
- ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED.
- ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6 INCHES ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
- ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.
- CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
- MINIMUM COVER FROM TOP OF PIPE TO FINISH GRADE SHALL BE 2 FEET.
- HEADWALLS SHALL BE CONSTRUCTED AND/OR INSTALLED IMMEDIATELY FOLLOWING INSTALLATION OF PIPE TO MINIMIZE POSSIBLE PIPE DAMAGE AND FACILITATE FINAL GRADING.
- RIP-RAP STONE FOR EROSION PROTECTION SHALL BE PROVIDED AT ALL STORMWATER DISCHARGE LOCATIONS.
- WATER, SEWER, AND STORM LINES SHALL BE KEPT TO FEET APART HORIZONTALLY AND 18 INCHES APART VERTICALLY WHEN CROSSING (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE), UNLESS NOTED OTHERWISE.
- WHEN CROSSING, WATER LINES SHALL BE CONSTRUCTED ABOVE SEWER LINES AND STORM LINES, UNLESS A LACK OF DEPTH ABOVE THE SEWER OR STORM LINE NECESSITATES CONSTRUCTION OF WATER LINES BENEATH SEWER LINES OR STORM LINES. IN THE EVENT OF A VERTICAL CONFLICT, THE FOLLOWING MODIFICATIONS MUST OCCUR:
 - SEWER LINES SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF THE CROSSING.
 - STORM LINES SHALL HAVE 10-RING GASKETS WITH HUGGER BAND COUPLING AT LEAST 10 FEET ON BOTH SIDES OF THE CROSSING.
 - JOINTS UNDER SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AND HUGGER BAND COUPLING AT LEAST 10 FEET ON BOTH SIDES OF THE CROSSING.

SITE INCORPORATED
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ANETTE C. HONER
REGISTERED PROFESSIONAL ENGINEER
STATE OF TENNESSEE
001034

Site Grading and Drainage Plan

Ivey Village
12639 Kingston Pike
Farragut, Tennessee 37934
Clayton Properties Group, LLC.

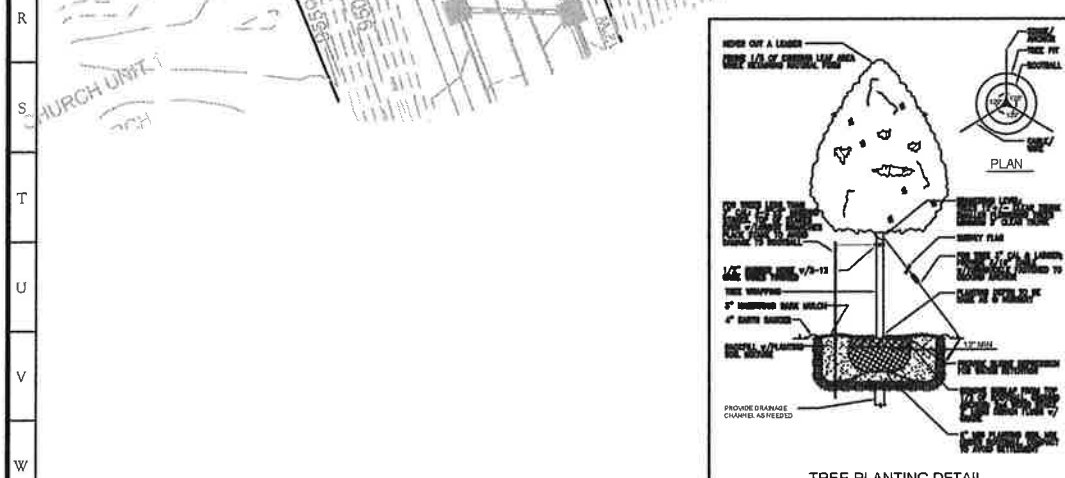
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MAR 27 2019
TOWN OF FARRAGUT

DATE: 12/7/18
CHECKED BY: [Signature]
FILE: [Signature]

REVISIONS

NO.	DATE	COMMENTS
1	02/18/19	Revised per Town Comments
2	02/27/19	Revised per Town Comments

C3.0



PERMANENT GRASSING SCHEDULE

GRASS SEED SHALL BE AS FOLLOWS:

FEB-NOV. TALL FESCUE BLEND
ANNUAL RYE

\$18/1000 BF
1 LB/1000 SF

SOD..... TALL FESCUE BLEND

LIME..... 150 LB/1000 SF
FERTILIZER..... 10/10/10 20 LB/1000 SF
PHOSPHORUS..... 20% SUPERPHOSPHATE 500-500 LB/ACRE

MULCH..... STRAW 75 LB/1000 SF
(GRIMPE) EROSION CONTROL NET OR MULCH
BINDER ON SLOPES.

	MIN SEED PURITY	MIN. GERM.	MAX. WEED
TALL FESCUE.....	95%	85%	0.1%
ANNUAL RYE.....	95%	90%	0.1%

- PLANTING SHALL BE COMPLETE ON ALL AREAS NOT RECEIVING OR BE BUILT UPON WITHIN 14 WORKING DAYS OF COMPLETION OF GRADING. AREAS STEEPER THAN 3:1 V SHALL BE PLANTED NOT LATER THAN 7 DAYS AFTER COMPLETION OF GRADING.

- ALL LIME & FERTILIZER AMOUNTS SHOWN IN THE PHOSPHORUS SECTION ABOVE ARE APPROXIMATE AND SHALL BE VERIFIED AFTER SOIL ANALYSIS IS COMPLETED.

SITE AND LANDSCAPE DATA					
TOTAL SITE AREA		307,292 SF (7.05 ACRES)			
TOTAL OPEN SPACE AREA		170,566 SF (4.12 ACRES)			
PERCENTAGE OPEN SPACE		58.43%			
PLANT MATERIAL SCHEDULE					
SYM.	QTY.	BOTANICAL NAME	COMMON NAME	* MINIMUM SIZE	SPACING
TREES					
AR	22	Acer rubrum	Red Maple	2" cal., 12" height, 6' spread	As Shown
CF	20	Cornus florida "Appalachian Spring"	Appalachian Spring Dogwood	2" cal., 12" height, 6' spread	As Shown
MD	44	Magnolia grandiflora "Little Gem"	Little Gem Magnolia	8' height, 3' spread	As Shown
QP	24	Quercus phellos	Willow Oak	2" cal., 12" height, 6' spread	As Shown
TG	25	Thuja "Green Giant"	Green Giant Arborvitae	8' height, 3' spread	As Shown
UP	11	Ulmus parviflora "Ales"	Ales Elm	2" cal., 12" height, 6' spread	As Shown
* TREE CALIPER SHALL BE MEASURED AT A POINT 6" ABOVE THE GROUND					

LANDSCAPE NOTES:

1. ALL DISTURBED AREAS NOT TO BE PAVED OR BUILT UPON ARE TO RECEIVE A MINIMUM OF 4" TOPSOIL.
2. ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE.
3. ALL PLANT MATERIAL SHALL BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE PLANT LIST.
4. ALL TREES SHALL HAVE A STRAIGHT TRUNK AND FULL HEAD AND MEET ALL REQUIREMENTS SPECIFIED
5. ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE OWNER BEFORE, DURING, AND AFTER INSTALLATION.
6. **ALL TREES MUST BE QUOTED OR ATKAKED AS SHOWN IN THE DETAILS**
7. ALL PLANTING AREAS SHALL BE COMPLETELY MULCHED AS SPECIFIED
8. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS SHALL BE THE MOST REASONABLY AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR (1) TO VERIFY THE LOCATIONS OF UTILITY LINES AND ADJACENT TO THE WORK AREA (2) TO PROTECT OF ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD (3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING PER SPECIFICATIONS TO MAINTAIN HEALTHY PLANT CONDITIONS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) ALL OF THE PLANT MATERIALS AND LAWN UNTIL FINAL ACCEPTANCE OF WORK.
12. ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
13. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF 12 MONTHS AFTER SUBSTANTIAL COMPLETION AND ACCEPTANCE OF WORK. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS DURING THE NORMAL PLANTING SEASON.
14. AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LANT BEDS SHALL BE ACCLIMATED FOR TWO (2) WEEKS UNDER A MIST SYSTEM PRIOR TO INSTALLATION.
15. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
16. WHERE SHOWN ON THE PLANS AND DETAILS, PLANTING BEDS ARE TO BE COMPLETELY COVERED WITH A HARDWOOD BARK MULCH FROM A LOCAL SOURCE HARVESTED IN A SUSTAINABLE MANNER TO A MINIMUM DEPTH OF THREE INCHES.
17. REFER TO PROJECT SPECIFICATIONS FOR INFORMATION NEEDED FOR IMPLEMENTATION OF PLANTING PLANS
18. **WEED MAT IS REQUIRED IN MULCHED LANDSCAPED BEDS AS SPECIFIED.**
19. ALL PLANT MATERIAL QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT SPACING SHOWN.
20. THIS PLAN IS TO BE IMPLEMENTED COOPERATIVELY WITH SWPPP PLAN, AS NEEDED, TO MAXIMIZE THE EFFECTIVENESS OF THE SWPPP PLAN FOR THIS SITE
21. THE CONTRACTOR IS ENCOURAGED TO COMPLETE TEMPORARY OR PERMANENT SEEDING OR SOONING IN STAGES FOR SOIL STABILIZATION AS AREAS ARE COMPLETED AFTER GRADING
22. THIS PLAN DOES NOT PRESENT ANY TEMPORARY STABILIZATION REQUIRED AS PART OF SWPPP PLAN.
23. THE CONTRACTOR SHALL MEET ALL OF THE REQUIREMENTS OF THE TOWN OF FARRAGUT LANDSCAPING ORDINANCE REGARDING THIS PROJECT.
24. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ANY AND ALL REQUIRED SUBMITTALS TO THE TOWN OF FARRAGUT.
25. THIS LANDSCAPE PLAN REFLECTS AND IS CONSISTENT WITH THE REMAINING PLAN SHEETS ASSOCIATED WITH THIS PROJECT.
26. BASED ON AVAILABLE INFORMATION, PROPOSED PLANT MATERIALS WILL NOT INTERFERE WITH ANY EXISTING OR PROPOSED UTILITIES.
27. **THERE ARE NO SLOPES STEEPER THAN 3:1 ON THIS SITE.**



Streetscape Plan
Ivey Village
12639 Kingston Pike
Farragut, Tennessee 37934
Clayton Properties Group, LLC.

RECEIVED
MAR 27 2019
TOWN OF FARRAGUT

[illegible]

C6.0

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion and public hearing on proposed amendments to the future land use map recommended by the Comprehensive Land Use Plan Steering Committee related to the Outlet Drive and Snyder Road corridors (Town of Farragut, Applicant)

INTRODUCTION AND BACKGROUND: This was discussed as a workshop item last month. Staff provided an overview of the recommendation from the CLUP Steering Committee to amend the future land use map for both the Outlet Drive corridor and the Snyder Road corridor west of N. Campbell Station Road.

DISCUSSION: Included in your packet is Resolution PC-19-03 which recommends approval of proposed changes to the future land use map in the CLUP for the Outlet Drive corridor and the Snyder Road corridor west of N. Campbell Station Road. Though, in the past, changes to the future land use map were solely reflected in the minutes of the Planning Commission's meeting, staff felt future changes to the map or text of the CLUP should be reflected in a resolution similar to the original approval of the CLUP Update in December 2012.

RECOMMENDATION: Staff recommends approval of Resolution PC-19-03.

RESOLUTION PC-19-03

FARRAGUT MUNICIPAL PLANNING COMMISSION

A RESOLUTION TO APPROVE AMENDMENTS TO THE FUTURE LAND USE MAP IN THE COMPREHENSIVE LAND USE PLAN UPDATE DECEMBER 2012 FOR PORTIONS OF THE OUTLET DRIVE AND SNYDER ROAD CORRIDORS

WHEREAS, the Tennessee Code Annotated, Section 13-4-201et seq, provides that the Municipal Planning Commission shall make and adopt a general plan for the physical development of the municipality; and

WHEREAS, the Farragut Municipal Planning Commission has adopted the Comprehensive Land Use Plan Update on December 12, 2012; and

WHEREAS, the Farragut Municipal Planning Commission may periodically amend various aspects of the Comprehensive Land Use Plan Update;

NOW, THEREFORE, BE IT RESOLVED that the Farragut Municipal Planning Commission hereby recommends as part of the approval of Resolution PC-19-03 Exhibits A and B which reflect changes to portions of the Outlet Drive and Snyder Road corridors from what is currently shown on the adopted future land use map.

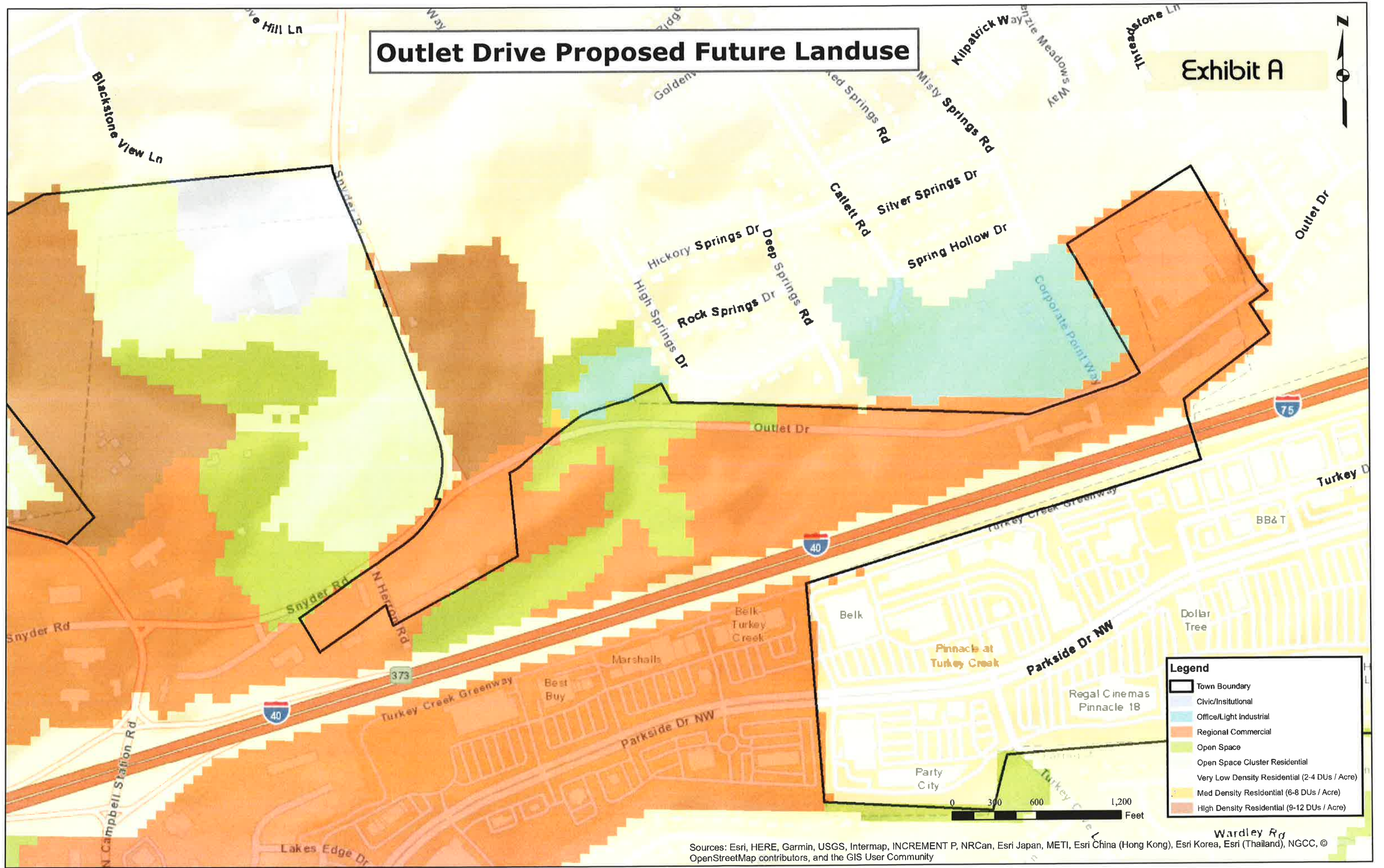
ADOPTED this 18th day of April 2019.

Rita Holladay, Chairman

Edwin K. Whiting, Secretary

Outlet Drive Proposed Future Landuse

Exhibit A



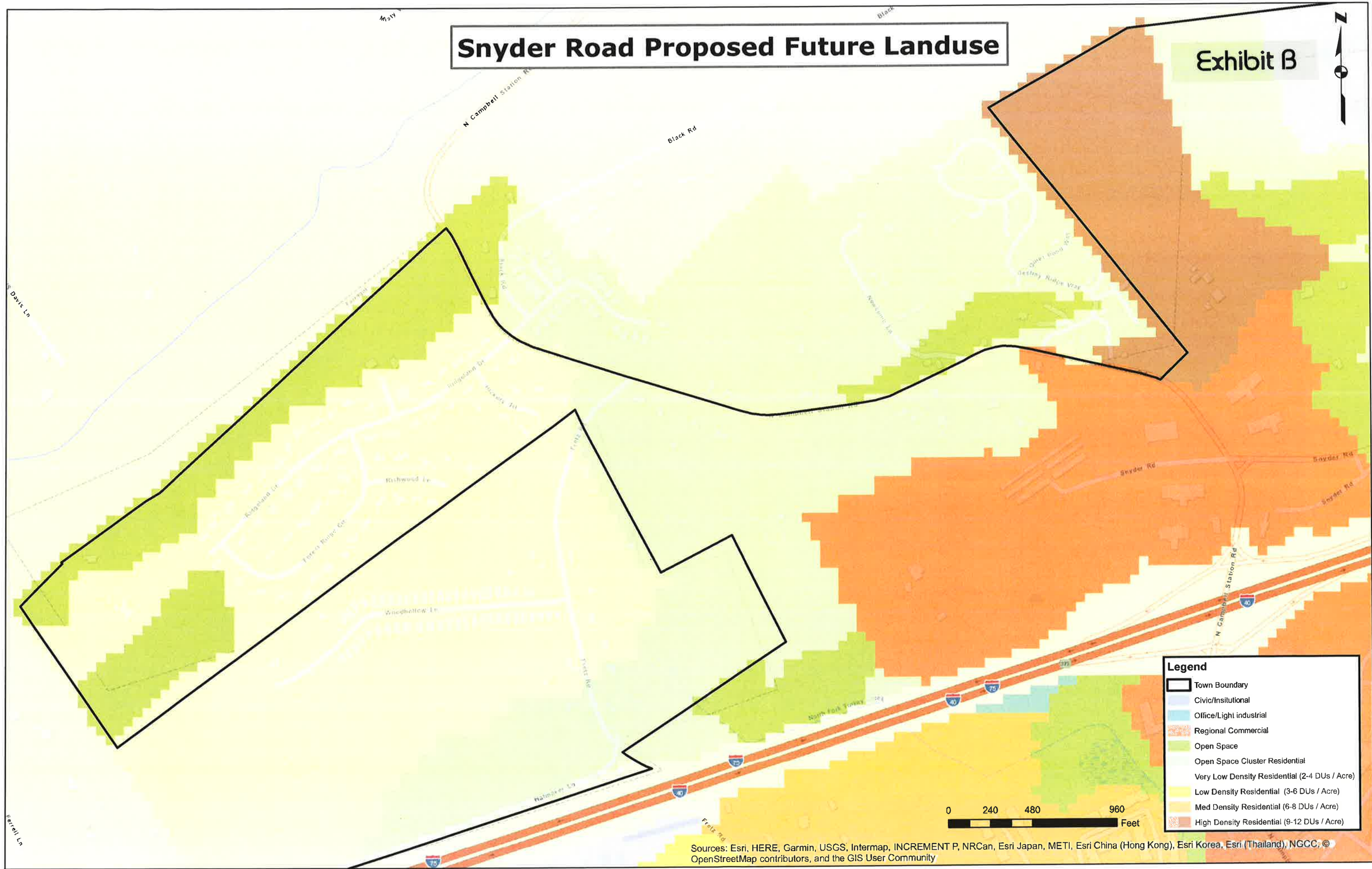
Legend

- Town Boundary
- Civic/Institutional
- Office/Light Industrial
- Regional Commercial
- Open Space
- Open Space Cluster Residential
- Very Low Density Residential (2-4 DUs / Acre)
- Med Density Residential (6-8 DUs / Acre)
- High Density Residential (9-12 DUs / Acre)

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

Snyder Road Proposed Future Landuse

Exhibit B



REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director

SUBJECT: Discussion and public hearing on proposed amendments to the Farragut Zoning Ordinance to remove references to elderly and group housing and clustered housing units since the terms are no longer used in the ordinance

INTRODUCTION AND BACKGROUND: This was discussed as a workshop item last month and involves the deletion of obsolete terms or uses in the Farragut Zoning Ordinance. The affected sections include the following:

1. Chapter 2. Definitions – the term “House trailer” includes a reference to “Clustered Housing Units;”
2. Chapter 3. Specific District Regulations – Section XI. Multi-family residential district (R-6) refers to “group housing facilities” under the General Description subsection;
3. Chapter 3. Specific District Regulations – Section XII. General commercial district (C-1) includes, under the permitted uses, “17. Elderly housing as regulated in Chapter 4;”
4. Chapter 3. Specific District Regulations – Section XV. Regional commercial district (C-2) includes, under the permitted uses, “18. Group housing as regulated in Chapter 4;”
5. Chapter 3. Specific District Regulations – Section XXVIII. Open space multi-family residential overlay (OSMFR) includes, under the permitted uses, “3. Elderly and group housing as regulated in Chapter 4.”

RECOMMENDATION: Included in your packet is a copy of Resolution PC-19-04 which recommends approval of Ordinance 19-19. Staff recommends approval of Resolution PC-19-04.

RESOLUTION PC-19-04

FARRAGUT MUNICIPAL PLANNING COMMISSION

A RESOLUTION TO AMEND THE TEXT OF THE FARRAGUT ZONING ORDINANCE, ORDINANCE 86-16, AS AMENDED, PURSUANT TO AUTHORITY GRANTED BY SECTION 13-4-201, TENNESSEE CODE ANNOTATED, BY AMENDING CHAPTER 2. DEFINITIONS, TO REMOVE REFERENCE TO CLUSTERED HOUSING UNITS IN THE DEFINITION OF HOUSE TRAILER AND AMENDING CHAPTER 3. SPECIFIC DISTRICT REGULATIONS, SECTIONS XI., XII., XV., AND XXVIII., TO REMOVE REFERENCES, AS APPLICABLE, TO GROUP HOUSING FACILITIES, ELDERLY HOUSING, GROUP HOUSING, AND ELDERLY AND GROUP HOUSING

WHEREAS, the Tennessee Code Annotated, Section 13-4-201 et seq, provides that the Municipal Planning Commission shall make and adopt a general plan for the physical development of the municipality; and

WHEREAS, the Farragut Municipal Planning Commission has adopted various elements of a zoning plan as an element of the general plan for physical development; and

WHEREAS, a public hearing was held on this request on April 18, 2019;

NOW, THEREFORE, BE IT RESOLVED that the Farragut Municipal Planning Commission hereby recommends approval to the Farragut Board of Mayor and Aldermen of an ordinance, amending Ordinance 86-16, of the Farragut Zoning Ordinance, by adding Ordinance 19-19.

ADOPTED this 18th day of April 2019.

Rita Holladay, Chairman

Edwin K. Whiting, Secretary

ORDINANCE: 19-19
PREPARED BY: Shipley
REQUESTED BY: Staff
CERTIFIED BY FMPC: April 18, 2019
PUBLIC HEARING: _____
PUBLISHED IN: _____
DATE: _____
1ST READING: _____
2ND READING: _____
PUBLISHED IN: _____
DATE: _____

AN ORDINANCE TO AMEND THE TEXT OF THE FARRAGUT ZONING ORDINANCE, ORDINANCE 86-16, AS AMENDED, PURSUANT TO AUTHORITY GRANTED BY SECTION 13-4-201, TENNESSEE CODE ANNOTATED, BY AMENDING CHAPTER 2. DEFINITIONS, TO REMOVE REFERENCE TO CLUSTERED HOUSING UNITS IN THE DEFINITION OF HOUSE TRAILER AND AMENDING CHAPTER 3. SPECIFIC DISTRICT REGULATIONS, SECTIONS XI., XII., XV., AND XXVIII., TO REMOVE REFERENCES, AS APPLICABLE, TO GROUP HOUSING FACILITIES, ELDERLY HOUSING, GROUP HOUSING, AND ELDERLY AND GROUP HOUSING

WHEREAS, the Board of Mayor and Aldermen of the Town of Farragut, Tennessee, wishes to amend Chapter 4, General Provisions and Exceptions, of the Farragut Zoning Ordinance, Ordinance 86-16,

NOW, THEREFORE, BE IT ORDAINED by the Board of Mayor and Aldermen of the Town of Farragut, Tennessee, that the Farragut Zoning Ordinance is hereby amended as follows:

SECTION 1.

The Farragut Zoning Ordinance, Chapter 2, Definitions, is amended by deleting reference to “clustered housing units” as part of the definition of “House trailer.”

SECTION 2.

The Farragut Zoning Ordinance, Chapter 3, Specific District Regulations, Section XI. Multi-family residential district (R-6) is amended by deleting reference to “group housing facilities” under the General Description subsection.

SECTION 3.

The Farragut Zoning Ordinance, Chapter 3, Specific District Regulations, Section XII. General commercial district (C-1) is amended by deleting, under the permitted uses, “17. Elderly housing as regulated in Chapter 4.”

SECTION 4.

The Farragut Zoning Ordinance, Chapter 3, Specific District Regulations, Section XV. Regional commercial district (C-2) is amended by deleting, under the permitted uses, "18. Group housing as regulated in Chapter 4."

SECTION 5.

The Farragut Zoning Ordinance, Chapter 3, Specific District Regulations, Section XXVIII. Open space multi-family residential overlay (OSMFR) is amended by deleting, under the permitted uses, "3. Elderly and group housing as regulated in Chapter 4."

SECTION 6.

This ordinance shall take effect from and after its final passage and publication, the public welfare requiring it.

Ron Williams, Mayor

Allison Myers, Town Recorder

Certified to the Farragut Board of Mayor and Aldermen this _____ day of _____, 2019, with approval recommended.

Rita Holladay, Chairman

Edwin K. Whiting, Secretary

FARRAGUT MUNICIPAL PLANNING COMMISSION

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Connor Vermilyea, Planner

SUBJECT: Discussion on proposed amendments to the Farragut Zoning Ordinance related to short term rentals (Town of Farragut, Applicant)

INTRODUCTION AND BACKGROUND: Tennessee's Short Term Rental Unit Act became effective May 17, 2018 and provides guidelines and regulations surrounding the general use of short term rentals. The Act also establishes protections for pre-existing grandfathered units.

During the Board of Mayor and Alderman's strategic planning session in January 2019, the topic of addressing short term rentals was discussed. The Board requested that staff provide policy recommendations that would prohibit the use of short term rentals.

On March 21, 2019, staff presented an overview of short term rentals to the Planning Commission. Some information covered included how short term rentals are defined, grandfathering, usage and permitting considerations, and possible avenues of regulation and/or prohibition. During the discussion, Planning Commissioners expressed the desire to prohibit the use of short term rentals and, similar to the Board of Mayor and Alderman, asked staff to pursue language that would accomplish this objective.

DISCUSSION: This workshop discussion is intended to present options for addressing short term rentals and to clarify the general application of permitted and prohibited uses.

For example, in Chapter 2 of the Zoning Ordinance, the terms "short-term rental", "permitted use", "prohibited use", and potentially "bed and breakfast" should be defined as they are intended to be applied in Farragut.

A possible avenue for addressing intended zoning use would be an alteration to Chapter 4, Section 4, to include "permitted and prohibited uses" in the title. A new provision, Subsection E, could be added to clearly establish that any principal or accessory use not specifically permitted is prohibited. This would nullify the need to alter each zoning district in Chapter 3 to address the lack of a prohibited use section.

Additionally, Chapter 4, Section X, is reserved as a placeholder. Staff could create in this section a short term rentals section to prohibit short term rentals and establish parameters for addressing grandfathered units. These are some considerations that staff will present in more detail at the meeting.

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Mark Shipley, Community Development Director
Bart Hose, Assistant Community Development Director

SUBJECT: Discussion on amending the maximum lot coverage formula as applied in the R-1/OSR Zoning District (Town of Farragut, Applicant)

INTRODUCTION AND BACKGROUND: Recently, in a matter that came before the Board of Zoning Appeals, the language governing the “maximum lot coverage” provisions in the Open Space Residential Overlay (OSR) district was brought into question. Specifically, the formulas that determine maximum building coverage (i.e. the area of a lot covered with roofed structures) and total lot coverage (i.e. that portion of a lot that is covered by any nonvegetative surface) are currently worded as follows:

- a. Total building area for each dwelling unit equals 75 percent of the gross land area multiplied by the maximum building coverage established in the base zone divided by the total number of dwelling units in the development.
- b. Total lot coverage for each dwelling unit equals 75 percent of the gross land area multiplied by the maximum lot coverage established in the base zone divided by the total number of dwelling units in the development.

DISCUSSION: The specific language in question was that both formulas use the “total number of dwelling units in the development” (noted above in blue) to help determine allowable coverages. Though this language has not created any issues or confusion in the past, a literal reading does not convey the actual intent of the formula. Rather than “total number of dwelling units in the development” the actual application of the formula’s intent would be better stated as the “total number of house/building lots planned in the development.”

The current language could be construed as using only the dwelling units (in existence) in the development as a basis for coverage determination for individual homes where a building permit has been filed. The proposed language noted below in red would remove this interpretation and ensure that the formula is consistent with the intent of the district as applied to coverage allocations. Additional changes to the current language have also been added in an attempt to further clarify the calculations.

- a. Total building coverage area per planned building lot shall be calculated as follows:
75 percent of the development’s gross land area multiplied by the maximum lot (total building) coverage percentage established in the base zone (see Rural Residential R-1 district) divided by the total number of planned house/building lots in the development.
- b. Total lot coverage area per planned building lot shall be calculated as follows:
75 percent of the development’s gross land area multiplied by the maximum lot (total lot) coverage percentage established in the base zone (see Rural Residential R-1 district) divided by the total number of planned house/building lots in the development.

Another matter that has been discussed is modifying the ordinance to deal with the issue of reallocating building and lot coverage values when existing lots are resubdivided or replatted after an initial plat has been recorded. For instance, if two lots are combined should the coverage values increase for the new larger lot. This situation is not clearly addressed in the current ordinance and additional language would need to be added to specifically deal with the issue. The staff would suggest setting a limit to any such reallocation to prevent grossly out-of-scale building and site development within neighborhoods. For example, the code could allow for two lots to be replatted and combined, along with their respective coverage allowances, provided that the combined building and lot coverage allocation would not increase by more than 50%.

The following is an example of how the building and total lot coverage calculations would work for a 200-lot subdivision on a 100-acre development site in the R-1/OSR district. The maximum building and total lot coverage values in the base R-1 zone are 25% and 35%, respectively.

Total Building Coverage Area Per Lot

75 acres (75% of gross site area) x .25 (max building coverage in R-1 base zone) = 18.75 acres of total building coverage for the development.

18.75 acres of total building coverage divided by 200 planned house/building lots = .094 acres (4,094 square feet) of allocated total building coverage on each lot.

Total Lot Coverage Area Per Lot

75 acres (75% of gross site area) x .35 (max lot coverage in R-1 base zone) = 26.25 acres of total building coverage for the development.

26.25 acres of total lot coverage divided by 200 planned house/building lots = .131 acres (5,706 square feet) of allocated total lot coverage on each lot.

If two of the lots in the above example were later replatted and combined under the hypothetical 50% increase rule noted above, the new larger lot would see its total building coverage increase to .141 acres or 6,141 square feet, and its total lot coverage increase to .197 acres or 8,559 square feet.

REPORT TO THE FARRAGUT MUNICIPAL PLANNING COMMISSION

PREPARED BY: Darryl Smith, Town Engineer

SUBJECT: Discussion of preliminary plans for Union Road, from N. Hobbs Road to Everett Road

INTRODUCTION: This item is discussion on preliminary plans for improvements to Union Road, from N. Hobbs to Everett Road.

The design provides for two 11-foot lanes with curb & gutter on each side, an 8-foot grass strip, and one 10-foot shared-use path on the north side of the roadway.

BACKGROUND: The town has considered improvements to Union Road to be a priority for several years, first appearing in the FY2006 Capital Investment Program. Funding for the project was added to the 5-year plan in 2011, with the intention of budget allocations to begin in FY2014. In 2014, additional funds were projected for the 5-year plan, with the intention of allocating money for engineering and design in FY2018. Funding was secured through the Knoxville Regional Transportation Planning Organization (KRTPO), and the Board of Mayor and Aldermen approved a contract with the Tennessee Department of Transportation (TDOT) in November 2016 for project development. The Town contracted with Kimley Horne and Associates, Inc. for design and engineering services in February 2017. The first public forum on the road improvement project was held in March 2017, presenting a projected timeline that included 18 to 24 months for engineering, 12 to 18 months for right-of-way acquisition, and 14 to 18 months for construction.

Pedestrian connectivity and complete street concepts have been identified as town priorities as early as 1993 when the town conducted its Recreation Plan survey, in which 88% of respondents supported linking the existing pedestrian system throughout the town. This was reflected in the 1997 Pedestrian Circulation Plan, as well as the town's Farragut 2000 and Farragut 2004 plans. In 2001, the town adopted the Land Use and Transportation Policy plan to provide regulatory guidance for a ten-year period. Most recently, the Farragut Municipal Planning Commission (FMPC) adopted the Pedestrian and Bicycle Plan in 2010, formally adopting complete street regulations. These same priorities were included as part of the town's Comprehensive Land Use Plan, adopted in 2012.

DISCUSSION: Because the project is funded in part with federal funds, planning and design have developed in keeping with design standards from TDOT, KRTPO, the Town's Pedestrian and Bicycle Plan (2010), and other adopted regulations. Specifically, the project includes facilities for motor vehicles, bicycles and pedestrians, with consideration given to creating a "sense of place."

As part of their design assessment, Kimley Horn projected a growth in Average Annual Daily Traffic to 3,651 vehicles per day on Union Road (our current count is approximately 700 vpd), mostly due to

development of the Ivey and Swan properties. This is consistent with TDOT's (as well as the Town's) classification of Union Road as a Collector.

Previous road improvement projects have included bike lanes, greenways and/or sidewalks, but have frequently been met with concerns about overall "footprint", as roadways that include all elements separately provide a wide paved road cross-section. In response to those comments, staff asked designers to incorporate a shared-use path on one side of Union Road, thus eliminating the need for separate 4-foot bike lanes and sidewalks on each side of the road.

Other comments from community members included the need to limit speeds on Union Road. The Town requested a design exception from TDOT to allow for a reduced design speed of 30 mph and narrower lanes of 11 feet instead of the standard width of 12 feet. These adjustments to the road design reduce the overall linear footprint of the cross-section, ultimately reducing the road's impact to reach a balance that increases safety for motorists, bicyclists and pedestrians.

The highlighted section shown in Attachment A illustrates the typical project cross-section as currently proposed, in contrast to the highlighted typical section shown in Attachment B (for Old Stage Road, completed in 2014), which included two 12-foot lanes, separate bike lanes and separate sidewalks.

Early design of the project included roundabouts for traffic calming purposes at Brochart Boulevard, Saddle Ridge Drive and the entrance to the Swan and Ivey developments. When that design was presented in a public forum in November 2018, residents opposed the inclusion of the roundabouts at Brochart Boulevard and Saddle Ridge Drive. As a result of this feedback, those roundabouts were removed (see Attachment C).

The current design plans include two 11-foot lanes with curb & gutter (2-1/2' wide, to avoid wide paved shoulders), an 8-foot grass strip and 10-foot shared-use path. Please note that the 8-foot grass strip is proposed instead of the typical 6-foot width in order to provide for the planting of trees between the roadway and path, further improving aesthetics and providing lateral offset from vehicular traffic.

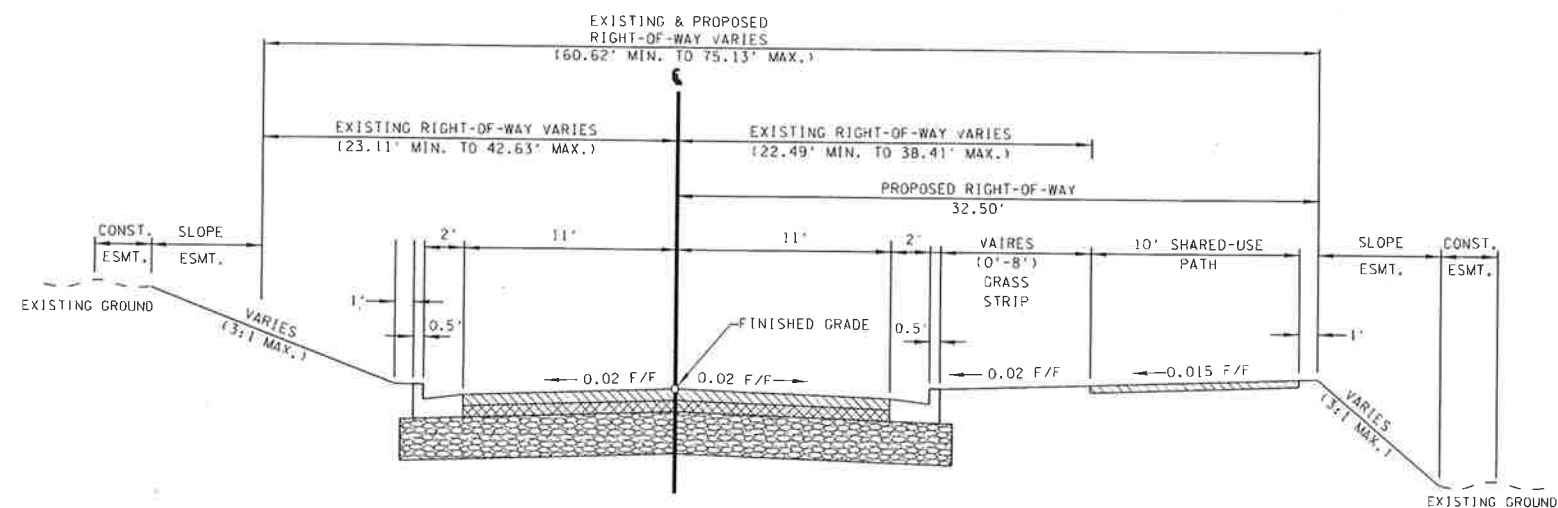
In presenting these preliminary plans, staff requests feedback on the overall design of Union Road improvements and any suggested modifications will be brought back to the Planning Commission for approval at a future meeting.

ATTACHMENTS:

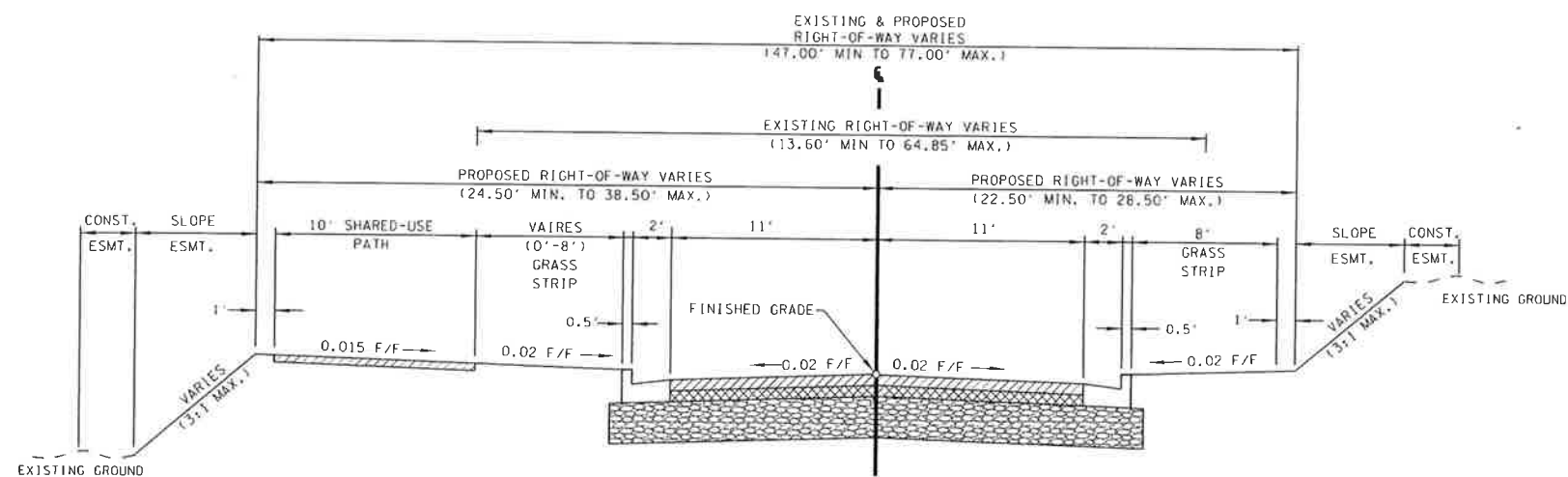
- Attachment A: Typical Section, Union Road
- Attachment B: Typical Section, Old Stage Road (2014)
- Attachment C: Typical letter to residents in response to public comments
- Attachment D: Exhibits detailing design parameters considered for roadway, bike and pedestrian improvements
- Attachment E: Present and Proposed Layout Sheets from project plans

Please note that due to the number and length of attachments for this item they will be bound and provided separately.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2019	471PLM-F0-133	2



UNION ROAD
TANGENT SECTION
N.T.S.
FROM STA. 9+99.90 TO STA. 15+47.12



UNION ROAD
TANGENT SECTION
N.T.S.
FROM STA. 15+47.12 TO STA. 51+83.73

PRELIMINARY
PLANS

SEALED BY

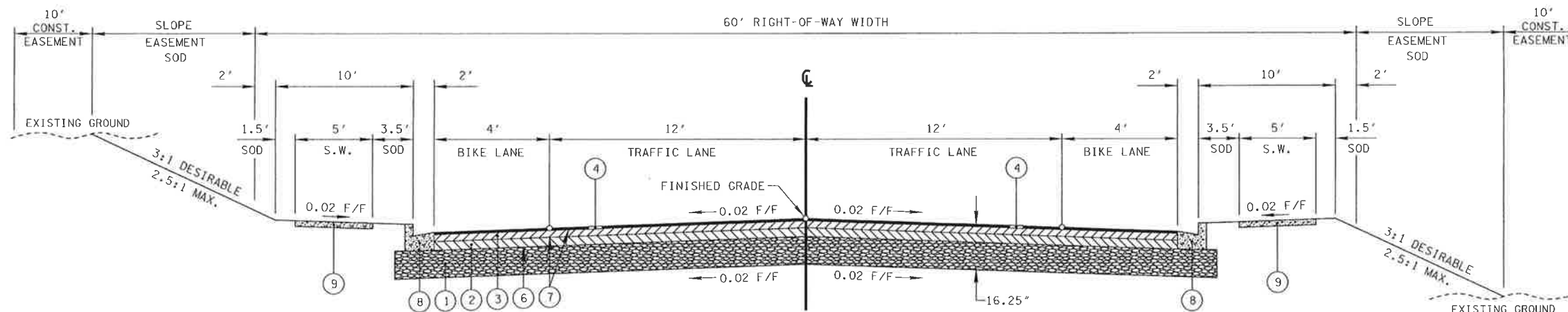
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

TYPICAL
SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	STP-M-9109(113)	2A
CONST.	2012	STP-M-9109(113)	2B

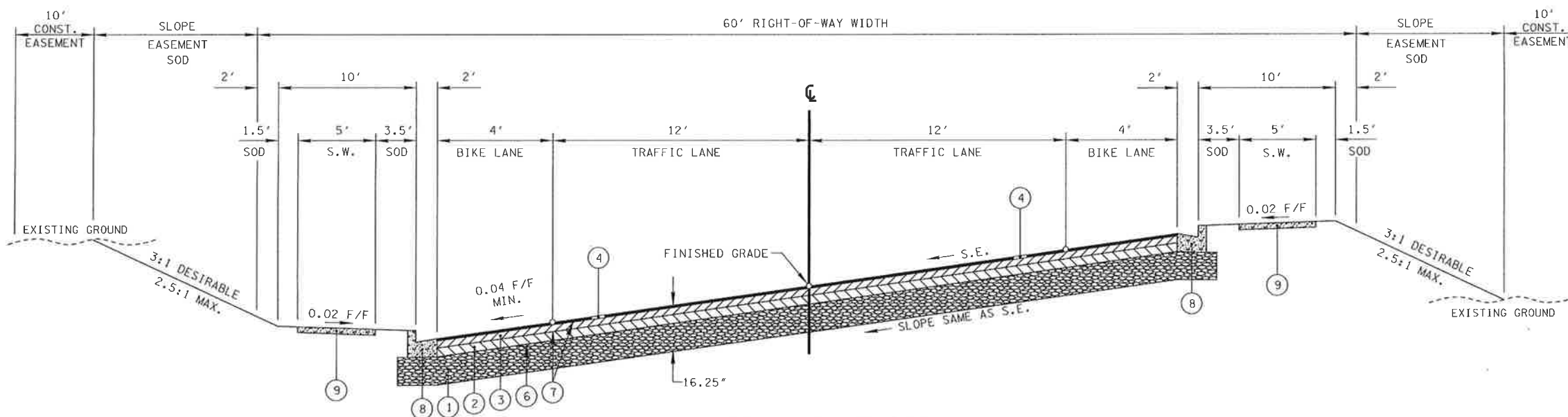
KNOX COUNTY
47946-3525-54 (CONST.)

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.



**TANGENT SECTION
OLD STAGE ROAD**
(BASED ON STD. DWG. RD01-TS-2)

FROM STA. 202+22.83 TO STA. 210+36.00
FROM STA. 213+60.00 TO STA. 215+41.00
FROM STA. 218+67.00 TO STA. 219+53.00
FROM STA. 223+69.00 TO STA. 224+86.00



**SUPERELEVATED SECTION
OLD STAGE ROAD**
(BASED ON STD. DWG. RD01-TS-2)

FROM STA. 210+36.00 TO STA. 213+60.00
FROM STA. 215+41.00 TO STA. 218+67.00
FROM STA. 219+53.00 TO STA. 223+69.00
FROM STA. 224+86.00 TO STA. 227+54.65



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**TYPICAL
SECTIONS**



February 15, 2019

Fox Run Homeowner Association (HOA)
12804 Norden Drive
Farragut, Tennessee 37934

**Re: Union Road Improvements
Town of Farragut Responses to Public Comment**

Dear Mr. Bolon:

The Town of Farragut (Town) is pleased to provide the response contained herein regarding public comments for the Union Road capital project that is currently in the National Environmental Policy Act (NEPA) phase. The Town received a total of 127 comments via mail-in cards and electronic mail. In order to quickly and efficiently respond to public comments provided by residents of the Fox Run subdivision, the Town requests that the Fox Run Homeowner's Association (HOA) distribute this letter to the homeowners in the neighborhood via the HOA's typical distribution method. The Town appreciates your patience as staff worked on providing these responses to you and the residents of Fox Run.

After a thorough review of comments and questions provided both during the Union Road Public Meeting (held November 13, 2018) and after the meeting (via comment card), the Town has elected to make the following changes to the proposed plans as presented at the November 13, 2018 public meeting:

- Removal of the roundabout at the entrance to the Saddle Ridge subdivision; and
- Removal of the roundabout at the entrance to the Fox Run subdivision.

In addition to the above changes, the Town is considering the addition of a traffic calming island just west of Brochardt Boulevard.

Additional public comments reviewed and considered by Town engineering staff and the Town's engineering consultant (Kimley-Horn and Associates, Inc.) were determined to not meet design goals or engineering standards for the project. Those comments were as follows:

- **Move roundabouts from Saddle Ridge Drive and Brochardt Boulevard to N. Hobbs Road and Everett Road, respectively.** This would require substantial right of way and easements from adjacent residential lots, causing significant damage to existing properties. Additionally, driving approach grades of Union Road at the Everett Road intersection cannot be modified to meet acceptable approach grades for a roundabout.
- **Eliminate the multi-use path.** The Farragut Municipal Planning Commission (FMPC) adopted the Town's current Pedestrian and Bicycle plan in April 2010 that requires improved collector roads in Farragut to provide for pedestrian facilities and bike lanes (See Exhibit 1). It is also important to note that, while the Town of Farragut (and TDOT) have a minimum lane



width of 12-feet (See Exhibit 2 & 2B), a design exception was obtained for this project to reduce the lane width to 11-feet to decrease impacts to property owners along Union Road. The Town has had a long-term goal for over two decades to promote bike and pedestrian connectivity throughout the Town, starting with the Town's Pedestrian Circulation Plan drafted in October 1997 (See Exhibit 3). The street section currently proposed for Union Road (two 11-foot lanes, curb and gutter, an 8-foot grass strip, and 10-foot multi-use path) meets those goals and provides a safe, bike and pedestrian-friendly connection for residents along the route. Additionally, the inclusion of a multi-use path on one side of the proposed Union Road allows both bicyclists and pedestrians to use the path. Five-foot sidewalks are not wide enough for two-directional bicycle and pedestrian use (See Exhibit 1 & 4), so the multi-use path eliminates the need for bike lanes in the street section, which would include an additional eight feet of pavement to provide for two, four-foot bike lanes (See Exhibit 5, 6 & 7). Per the adopted complete streets plan, the multi-use path and corresponding green space will remain at widths of 10-feet and 8-feet, respectively.

- **Reduce the overall width of the multi-use path and green strip.** The minimum width for multi-use paths is 10 feet, per Tennessee Department of Transportation (TDOT) requirements (See Exhibit 5). As this project is funded with 80% federal/20% local dollars, design parameters are required to follow TDOT requirements. The width of the grass strip between the back of curb and the edge of the greenway can vary somewhat by TDOT standards, but the Town requires a minimum width of 6 feet on roadways classified as collectors (See Exhibit 8). For Union Road, however, the Town plans on planting street trees within this grass strip, requiring a minimum of 8 feet of width for proper development of those trees.
- **Modify the total width of the proposed roadway cross-section to save existing mature trees along Union Road.** Most road expansion and improvement projects involve the removal of some existing trees and vegetation. The Town works with our engineering consultants to conserve trees, particularly mature trees, whenever possible on Town projects (Exhibit 9). A typical road project includes widening the roadway surface, curb and gutter on both sides of the roadway, pedestrian facilities, and graded slopes to tie the new roadway into existing grades. In the case of Union Road, a large volume of the mature trees along the route are directly adjacent or very close to the existing roadway. Due to the location of the existing trees along the roadway it is impossible to improve the roadway without the removal of mature trees.
- **Include three-way stops at Saddle Ridge Drive and Brochardt Boulevard, as opposed to roundabouts.** All jurisdictions are required to follow guidelines described in the Manual on Uniform Traffic Control Devices (MUTCD), which is published by the Federal Highway Administration to provide national standards for designing, applying and planning traffic control devices. The MUTCD describes warrants for multi-way stops, which are essentially volume thresholds that must be met to justify the use of that configuration (See Exhibit 10). Both Saddle Ridge Drive and Brochardt Boulevard do not meet these warrants. Further guidance cautions that unwarranted multi-way stops can create a more dangerous situation than free flow on the major route, as motorists on the minor approach can be lulled into a false sense of security when motorists on the major approaches fail to obey the stop condition.



- **Close Union Road at the bridge just west of the Fox Run subdivision entrance.** All communities require a roadway network that provides optional routes for motorists, bicyclists and pedestrians (See Exhibit 11). Multiple roads and streets that lead to and from similar locations or areas spread out traffic volumes and reduce congestion on major roadways. Union Road currently serves several hundred residences and more development is planned. Due to the current and projected volume of vehicles on Union Road and the desire for vehicular connectivity throughout the Town, Farragut cannot support the closure of Union Road.

The Town anticipates receiving revised Union Road drawings based on public feedback from our design engineer Kimley Horn around the first of March. Staff will provide those drawings for additional public review once they are received. The Town currently anticipates a discussion for Union Road to occur at the April Municipal Planning Commission meeting with follow up discussion and a vote occurring at the May or June FMPC meeting depending on the number of changes needed to the drawings as determined at the April meeting.

The Town appreciates the comments and feedback provided by residents in the Fox Run subdivision regarding the proposed Union Road improvements. If you have any questions do not hesitate to contact the undersigned at 865-966-7057 or mbrazille@townoffarragut.org.

Sincerely,

Matt W. Brazille, P.E.
Assistant Town Engineer

Darryl Smith, P.E.
Town Engineer

Pedestrian Connectivity Goal: Exhibit 1

Town of Farragut Pedestrian & Bicycle Plan- 2010

Pages 7, 12.

12-Foot Lanes (TOF): Exhibit 2

Town of Farragut Subdivision Regulations, Appendix B, Article III, § A-4-C.

12-Foot Lanes (TDOT): Exhibit 2B

TDOT Publication RD01-TS-2

Long-term Pedestrian Connectivity Initiative- Exhibit 3

Town of Farragut Pedestrian Circulation Plan- 1997

Pages 1, 2, 11-16.

Shared-Use Path Width: Exhibit 4

TDOT Publication RD11-TS-8

Shared-Use Path Width: Exhibit 5

AASHTO Guide for Development of Bicycles, 2012, 4th Ed., 5.2.1

5-Foot Single Direction Bicycle Lanes- Exhibit 6

AASHTO Guide for Development of Bicycles, 2012, 4th Ed., 4.6.4

4-Foot Single-Direction Bicycle Lanes- Exhibit 7

Town of Farragut Pedestrian & Bicycle Plan- 2010, Exhibits C,D,F.

6-Foot Grass Strip on Collector Streets- Exhibit 8

Town of Farragut Subdivision Regulations: Appendix B, Article III, §B-2.

Tree Protection: Exhibit 9

Town of Farragut Comprehensive Land Use Plan- 2012, pp. 18.

Warrant for Three-way Stop: Exhibit 10

Manual on Uniform Traffic Control Devices (MUTCD) 2009 Version, Section 2B.07 – Multi-way stop applications, Bullets A through D.

Road Connectivity Goal: Exhibit 11

Town of Farragut Comprehensive Land Use Plan, Strategy 4, pp. 12

Exhibit 1

Town of Farragut Pedestrian & Bicycle
Plan- 2010

CHAPTER 2 - POLICY STATEMENTS

Goal 1:

Promote pedestrian connectivity between residential areas and nearby activity centers so that short, simple errands or trips can be made by means other than motor vehicles.

Objectives:

- Continue to evaluate where major gaps exist in the Town's pedestrian circulation system and work on addressing these gaps.
- Promote a pedestrian circulation system that encourages a wide variety of users and maximizes functionality and use potential.
- Develop a community wide understanding that transportation is more than just moving automobiles.
- Address the factors that discourage short trips made either on foot or on bicycle.

Strategies:

- Continue to require pedestrian facilities as part of all new developments or redevelopments on both sides of streets with the classification of a collector or arterial street on the Town's *Major Road Plan*. As part of this requirement encourage a minimum eight (8) foot wide asphalt walking path that would benefit a greater range of users.
- Continue to require pedestrian facilities to be constructed along residential spine streets and along the frontages of all roads which the subdivision fronts.
- If a walking path runs behind houses, the path should be connected to the ends of cul-de-sacs.
- As part of a development or re-development, walking trails should be constructed to stub into adjacent vacant properties and tie into the overall pedestrian circulation system.
- In lieu of concrete sidewalks, particularly along collector and arterial streets, consideration should be given to using asphalt walking paths with a minimum width of eight (8) feet. This wider surface would invite more use by providing a greater passing area and a surface that would create less physical impact to the body than concrete.
- Incorporate the needs of the pedestrian and bicyclist into roadway plan designs and construction. In addition to walking paths, bike lanes should be incorporated where possible into construction, re-construction, and/or modifications to collector and arterial streets.
- Encourage contextually appropriate Complete Streets (see **Exhibits C-F** for Complete Street cross sections contextually appropriate for Farragut based on road classifications) roadway design and implementation.
- Plan for a pedestrian overpass or underpass where an opportunity may exist at prioritized arterial roadway crossings. Look into grants and other sources of funding for these structures and ensure that safe crossings of roadways are given high priority in roadway construction plans.
- Coordinate with adjacent governmental entities on projects that tie into but extend beyond the Town limits.

Exhibit 1**Town of Farragut Pedestrian & Bicycle Plan- 2010**

- Construction materials used for improved pedestrian surfaces should vary depending on the nature of the facility and its targeted users.
- Pedestrian facilities should be carefully planned to minimize conflicts with roadway construction and reconstruction, utilities, and structures that may be situated nearby.
- Pedestrian facilities should be incorporated into the design and construction of all roadway improvement projects in accordance with Complete Streets policies.
- Available grants and other state and federal funding sources should be investigated for pedestrian facility projects.

Strategies:

- The location of pedestrian facilities within a subdivision should be determined at the time of concept plan or, if applicable, preliminary plat review. The more heavily traveled spine streets and all exterior streets that the subdivision fronts should be required to have pedestrian facilities. Low traffic streets and cul-de-sacs in most cases should not be required to have pedestrian facilities.
- In lieu of five (5) foot wide concrete sidewalks, the Town should encourage the more user friendly wider asphalt walking paths because of their softer surface and their capacity to accommodate more and varied users.
- Pedestrian facilities in environmentally sensitive areas should minimize disruption to the environment which, in turn, will lessen construction costs. A lightly graded mulched walking path should be considered in these areas in lieu of the standard sidewalk or walking path construction.
- Street trees near pedestrian facilities should be approved through the Town to ensure that there is enough space for such trees and the species is appropriate for the location. This will lessen the potential for trees to cause failures in the pedestrian system that the Town will have to correct. The minimum grass strip width for any street tree application should be no less than six (6) feet.
- The Town staff should help locate the placement of pedestrian facilities to ensure that proper coordination of all entities is achieved and nearby trees are protected to the greatest extent possible so that funds will not need to be spent in the future to address problems that could have been avoided during construction.
- The Town should designate a staff person to track possible funding sources (e.g. grants, loans, cost shares, etc.) for pedestrian facilities so that no funding opportunities are lost.

Goal 7:

Promote the Town as being bicycle friendly for all types of bicyclists.

Objectives:

- Develop measures that will make the Town's collector and arterial streets more bicycle friendly.
- Provide the facilities needed for bicyclists.
- Promote and encourage bicycling for both recreation and commuting.
- Create a mindset that roadways are not only for moving automobiles and that bicycles could be expected on most roadways.

Exhibit 2

Town of Farragut Subdivision Regulations, Appendix B, Article III, § A-4-C.

A. - Streets.

1. *Conformity to the Major Road Plan and the Pedestrian and Bicycle Plan - 2010, as amended.* The town's adopted Major Road Plan, as amended, shall serve as the official document regarding street classifications involving the town's existing and future transportation system. For those streets that are classified on the Major Road Plan as collector or arterial, an abutting subdivision that fronts along such street(s) shall be improved along such frontage as part of the subdivision process to provide for a context appropriate (i.e. appropriate in relation to the proposed development, the street in question, and its physical surroundings) complete streets cross section consistent with the Complete Streets Cross Section exhibits in the Pedestrian and Bicycle Plan - 2010, as amended. Where a subdivision fronts on only one side of a collector or arterial street, only the side of such street abutting the subdivision shall be required to be improved to the complete streets cross section.
2. *Relation to adjoining street system.* The proposed street system shall extend existing streets within proposed projects at the same or greater width, but in no case less than the required minimum width.
3. *Access streets to subdivision boundaries.* Sufficient access streets to adjoining properties shall be provided in subdivisions to permit harmonious development of the area.
4. *Right-of-way and pavement widths.* The minimum width of any right-of-way is measured from lot line to lot line. The width of pavement is measured from pavement edge to pavement edge, thus excluding the gutter and curb section. Standards for both right-of-way and lane width for applications falling within the jurisdiction of these regulations shall not be less than as follows:

a. Major arterial streets.

Right-of-way	100 feet
Curb and gutter (TDOT 6-30)	30 inches
Lane width	12 feet*

Reduction in lane width may be permitted due to existing conditions based on the recommendation of the town engineer.

Such streets are used primarily for fast or heavy traffic and are located on the major road plan. Turn lanes may be required by the Planning Commission if warranted by the traffic impact study.

b. Minor arterial streets.

Right-of-way	80 feet
Curb and gutter (TDOT 6-30)	30 inches
Lane width	12 feet*

Reduction in lane width may be permitted due to existing conditions based on the recommendation of the town engineer.

Such streets are used primarily to handle moderate to high traffic speeds and volumes. These streets should be reflected on the major road plan. Turn lanes may be required by the Planning Commission if warranted by the traffic impact study.

The Planning Commission may, at the recommendation of the town engineer, elect to allow three twelve-foot lanes distributed as follows:

Right-of-way	70 feet
Curb and gutter (TDOT 6-30)	30 inches
Lane width	12 feet*

c. Major collector streets.

Right-of-way	60 feet
Curb and gutter (TDOT 6-30)	30 inches
Lane width	12 feet

Such streets are used primarily to carry slow to moderate traffic speeds and volumes. These streets act primarily as the transition between local traffic and through traffic. These streets should be reflected on the major road plan. Turn lanes may be required by the Planning Commission if warranted by the traffic impact study.

d. Local collector streets.

Right-of-way	50 feet
Curb, extruded	8 inches
Lane width	13 feet

Such streets are used primarily to carry slow traffic speeds and volumes. The streets primarily serve the internal movements of residential areas to major collector status streets. These streets should be reflected on the major road plan. Turn lanes may be required by the Planning Commission if warranted by the traffic impact.

e. Local streets.

Right-of-way	50 feet
Curb, extruded	8 inches
Curb, rolled	24 inches(multi-family residential)
Lane width	13 feet

Such streets are used primarily to serve individual residential lots. Typically, both speeds and volumes are very slow. In such cases where local streets intersect with arterial or major collector streets, the Planning Commission may require a twelve-foot center lane if warranted by the traffic impact study.

f. *Frontage roads.*

Right-of-way	40 feet
Pavement width	30 feet
Curb, extruded	8 inches

Typically, access or frontage roads are used in commercial and/or multi-family developments to facilitate internal traffic movements or reduce the overall number of curb cuts to higher status streets. Such frontage roads shall conform to the radius requirements, at points of ingress and egress, on arterial streets.

NOTE: In extreme cases where topography or other physical conditions make a street of the required minimum width impractical, the Planning Commission may modify the above referenced requirements. However, through proposed neighborhood or local business areas, the street right-of-way width may be increased 11 feet on each side to provide for movement of vehicles into and out of necessary off-street parking areas without interference to traffic.

5. *Additional right-of-way widths on existing streets.* Subdivisions that adjoin existing streets shall dedicate additional right-of-way to meet the above minimum street width requirements.
 - a. The entire right-of-way shall be provided where any part of the subdivision is on both sides of the existing street.
 - b. When the subdivision is located on only one side of the existing street, one-half of the required width of the right-of-way, measured from the center line of the existing roadway, shall be provided.
6. *Restriction of access.* Where a subdivision abuts or contains an existing or proposed major street the Planning Commission may require frontage roads, or such other treatment as may be required to afford separation to through and local traffic. Subdivisions abutting or containing an existing or proposed major street shall comply with the provisions of the driveways and other access ways ordinance.
 - a. Paved acceleration and deceleration lanes may be required along any arterial or collector street or highway at the determination of the commission.
 - b. Frontage roads (roads which parallel the public streets giving access and which extend along the entire frontage of particular properties) shall be constructed in order to provide safe and efficient vehicular movement between specified access points. All frontage roads shall be dedicated as public streets and shall be maintained by the public.
 - c. Frontage roads shall be constructed in conformance with standards of the subdivision regulations. Dedicated right-of-way for frontage roads shall be ten feet greater than the width of the proposed frontage road.
 - d. Items a through c of this subparagraph shall apply in their entirety to commercial property having road frontage greater than the distance between access points specified in the access ordinance. For commercial property of lesser road frontage, the commission may waive or reduce requirements (i.e., require dedicated right-of-way for frontage roads rather than constructed frontage roads).
7. *Street grades.* Grades on streets shall not exceed the following:

- a. Arterial streets and highways: Seven percent.
 - b. Collector streets: Ten percent.
 - c. Residential streets: 12 percent.
 - d. Dead end and loop streets: 14 percent.
8. *Horizontal curves.* When a deflection angle of more than six degrees in the alignment of a street occurs, the following radii shall be used:
- a. Arterial streets and highways: 600 feet.
 - b. Collector streets: 400 feet.
 - c. Residential streets: 150 feet.
 - d. Dead end and loop streets: 100 feet.
9. *Vertical curves.* Vertical curves shall conform to AASHTO stopping sight distance for the following design speeds:
- a. Arterial streets and highways: 50 mph.
 - b. Collector streets: 40 mph.
 - c. Residential streets: 35 mph.
 - d. Dead end and loop streets: 30 mph.
10. *Intersections.* Street intersections shall be as nearly at right angles as possible, and no intersection shall be at an angle of less than 60 degrees.

To permit the construction of a curb having a desirable radius, property line radii at all street intersections shall not be less than 20 feet. Where the angle of the street intersection is less than 90 degrees, the Planning Commission may require a greater radius.

All intersections of two or more streets shall have a grade that does not exceed four percent of the following distance from the intersection:

- a. Arterial streets and highways: 150 feet.
 - b. Collector streets: 100 feet.
 - c. Residential streets: 60 feet.
 - d. Dead end and loop street: 50 feet.
11. *Tangents.* Reverse curves in road right-of-way shall be corrected by tangents of not less than the following:
- a. Arterial streets and highways: 150 feet.
 - b. Collector streets: 100 feet.
 - c. Residential streets: 75 feet.
 - d. Dead end and loop streets: 50 feet.
12. *Street jogs.* Street jogs of less than 200 feet shall not be allowed, except where both intersecting streets are cul-de-sacs in which case the street jogs with centerline offsets of less than 125 feet shall not be allowed.
13. *Dead end streets and cul-de-sacs.*
- a. The use of dead end streets and cul-de-sacs shall be discouraged in favor of loop and other connected street designs. The planning commission may permit the limited use of dead end streets and cul-de-sacs to enhance the protection of desirable natural features inherent to the property or as a temporary stub out to abutting properties for future connections. When permitted,

dead end streets and cul-de-sacs shall be no more than 500 feet in length unless necessitated by topography and approved as a variance by the planning commission.

Dead end streets and cul-de-sacs shall be provided at the closed end with a turn-around having an outside roadway diameter of at least 74 feet and a street right-of-way diameter of at least 94 feet.

- b. Where dead end streets are stubbed out to abutting properties, such streets shall be provided with a temporary turn-around as recommended by the Town Engineer and Fire Marshal.
14. *Private streets and reserve strips.* Private streets are prohibited. All streets shall be constructed per these regulations and shall be dedicated to the town. There shall be no reserve strips controlling access to streets, except where the control of such strips is definitely placed with the town under conditions approved by the Planning Commission.
15. *Drainage.* All streets and roads must be so designed as to provide for the discharge of surface water from the right-of-way of all streets and roads by grading and drainage as shall be approved by the planning commission. Where possible, water should be discharged by surface drainage into open ditches or swales. Such open ditches and swales shall be platted on the final plat as water quality drainage easements. In order to reduce run off, such open ditches and swales shall be kept in a vegetated state. No piping or the use of any type of hard surface (rip rap, river rock, etc.) shall be permitted in a water quality drainage easement. Where water cannot be adequately discharged by surface drainage, the planning commission shall require the installation of a storm sewer.

A street shall not carry water for a distance greater than 400 feet from the beginning point of the runoff. Discharge from the street shall be handled by means of a catch basin—The number, size, type, and location to be determined by the town engineer. Pipes under the right-of-way, for purposes of discharging water into the pipe, must be no less than 18 inches in diameter. Drainage shall not discharge into a sinkhole as a means of an outlet for runoff, unless the depression has a storage capacity for a 100-year flood without flooding any adjacent properties, or creating overflow runoff that will adversely affect existing drainage courses.
16. *Street Names.* Proposed streets which are obviously in alignment with others already existing and names shall bear the names of existing streets. In no case shall the name for proposed streets duplicate existing street names, irrespective of the use of the suffix street, avenue, boulevard, drive, place or court. The Planning Commission shall have the power to approve or disapprove street names and if necessary determine and assign names to public rights-of-way on submitted plats.
17. *Street Elevations.* The Planning Commission may require, where necessary, profiles and elevations of streets for determination of proximity to floodplains. No street shall be approved for construction within a floodplain if it is proposed to be constructed more than one foot below the elevation of the 500-year flood as defined in Article III, Section E. Fill may be used for streets provided such fill does not increase upstream flood heights. Drainage openings shall be so designed as to not restrict the flow of floodwaters or increase upstream flood heights.
18. *Connectivity.* The subdivision shall provide for both vehicular and pedestrian/shared-use path connectivity to abutting properties. The subdivision shall have more than one public street vehicular access into and out of the development. The planning commission may waive this requirement in cases where 1) All of the surrounding properties are existing house lots of less than one acre; or 2) Where very significant topographic issues, not created by the design of the subdivision, would effectively prohibit connections; or 3) The subdivision will have 30 or less dwelling units.

(Ord. of 10-1987; Ord. of 2-2006; Res. No. PC-09-08, § 2, 5-21-2009; Res. PC-17-01, § 1, 2-16-2017; Ord. No. 18-04, § 1, 1-18-2018; Res. No. PC 18-04, § 2, 1-18-2018)

DESIGN LOADING: ALL NEW AND REHABILITATED BRIDGES SHALL BE DESIGNED FOR HL-93 LOADING

FOR NEW ROUTE CONSTRUCTION OR ROUTE RECONSTRUCTION PROJECTS:
THE MINIMUM CLEAR WIDTH FOR NEW BRIDGES SHALL BE EQUAL TO THE FULL WIDTH OF THE APPROACH ROADWAY (CURB-TO-CURB OR FULL SHOULDER WIDTH AS APPLICABLE)

TABLE I.
MINIMUM CLEAR ROADWAY WIDTHS AND
DESIGN LOADINGS FOR NEW AND
RECONSTRUCTED BRIDGES (SEE PAGE 430)

DESIGN ADT (VEH/DAY)	DESIGN LOADING	MINIMUM CLEAR ROADWAY WIDTH OF BRIDGE (1)
UNDER 400	HL-93	TRAVELED WAY + 4 FT. (2 FT. EACH SIDE)
400 TO 1,500	HL-93	TRAVELED WAY + 6 FT. (3 FT. EACH SIDE)
1,500 TO 2,000	HL-93	TRAVELED WAY + 6 FT. (4 FT. EACH SIDE)
OVER 2,000	HL-93	APPROACH ROADWAY WIDTH

TABLE II. MINIMUM STRUCTURAL CAPACITIES AND MINIMUM
ROADWAY WIDTHS FOR BRIDGES TO REMAIN IN PLACE
(SEE PAGE 431) (2)

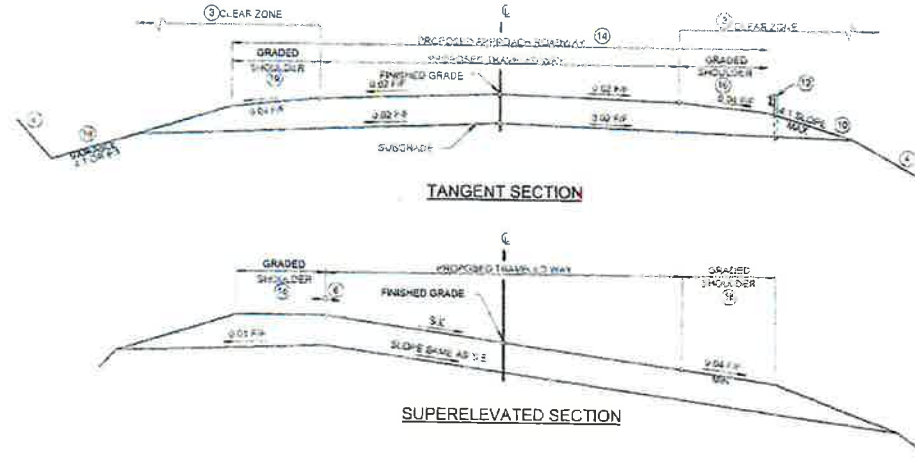
DESIGN ADT (VEH/DAY)	DESIGN LOADING (STRUCTURAL CAPACITY)	MINIMUM CLEAR ROADWAY WIDTH (FT.) (5)
UNDER 400	H-15	22
400 - 1,500	H-15	22
1,500 - 2,000	H-15	24
OVER 2,000	H-15	25

TABLE III. MINIMUM DESIGN SPEEDS
FOR RURAL COLLECTOR ROADS
(SEE PAGE 426)

TYPE OF TERRAIN	MINIMUM DESIGN SPEED (MPH) FOR SPECIFIED DESIGN ADT (VEH/DAY)		
	0-400	400-2,000	OVER 2,000
LEVEL	40	50	60
ROLLING	30	40	50
MOUNTAINOUS	20 (7)	30	40

TABLE IV. COLLECTOR ROADS AND STREETS - DESIGN STANDARDS (1)

DESIGN STANDARDS (FOR GIVEN DESIGN SPEED)		DESIGN SPEEDS (MPH)										DESIGN SPEED (MPH) FOR WHICH STANDARD IS APPLICABLE
		10	20	30	40	50	60	70	80	90	100	
MINIMUM WIDTH OF TRAVELED WAY IN RURAL AREAS (FT.) (SEE PAGE 426)	DESIGN ADT UNDER 400	10	20	30	40	50	60	70	80	90	100	10
	DESIGN ADT 400 - 1,500	12	22	32	42	52	62	72	82	92	102	12
	DESIGN ADT 1,500 - 2,000	14	24	34	44	54	64	74	84	94	104	14
MINIMUM RADIUS (FT.) (0.04 MAX. S.E.)	DESIGN ADT UNDER 400	105	205	305	405	505	605	705	805	905	1005	105
	DESIGN ADT 400 - 1,500	115	215	315	415	515	615	715	815	915	1015	115
	DESIGN ADT 1,500 - 2,000	125	225	325	425	525	625	725	825	925	1025	125
MINIMUM RADIUS (FT.) (0.04 MAX. S.E.)	DESIGN ADT OVER 2,000	135	235	335	435	535	635	735	835	935	1035	135
	DESIGN ADT OVER 2,000	145	245	345	445	545	645	745	845	945	1045	145
	DESIGN ADT OVER 2,000	155	255	355	455	555	655	755	855	955	1055	155
MAXIMUM RURAL GRADES (%) (1)	LEVEL TERRAIN	7	7	7	7	7	7	7	7	7	7	7
	ROLLING TERRAIN	8	8	8	8	8	8	8	8	8	8	8
	MOUNTAINOUS TERRAIN	12	12	12	12	12	12	12	12	12	12	12
MAXIMUM URBAN GRADES (%) (1)	LEVEL TERRAIN	8	8	8	8	8	8	8	8	8	8	8
	ROLLING TERRAIN	12	12	12	12	12	12	12	12	12	12	12
	MOUNTAINOUS TERRAIN	15	15	15	15	15	15	15	15	15	15	15
MINIMUM STOPPING SIGHT DISTANCE (FT.)	DESIGN ADT UNDER 400	105	150	200	250	300	350	400	450	500	550	105
	DESIGN ADT 400 - 1,500	115	160	210	260	310	360	410	460	510	560	115
	DESIGN ADT 1,500 - 2,000	125	170	220	270	320	370	420	470	520	570	125
MINIMUM "K" VALUE FOR CREST VERTICAL CURVE	DESIGN ADT UNDER 400	7	12	18	24	30	36	42	48	54	60	7
	DESIGN ADT 400 - 1,500	12	20	30	40	50	60	70	80	90	100	12
	DESIGN ADT 1,500 - 2,000	17	30	45	60	75	90	105	120	135	150	17
MINIMUM "K" VALUE FOR CREST VERTICAL CURVE	DESIGN ADT OVER 2,000	180	260	420	580	740	900	1060	1220	1380	1540	180
	DESIGN ADT OVER 2,000	190	270	430	590	750	910	1070	1230	1390	1550	190
	DESIGN ADT OVER 2,000	200	280	440	600	760	920	1080	1240	1400	1560	200
SUPERELEVATION												



GENERAL NOTES

- (1) FOR SPECIFIC CONDITIONS NOT COVERED ON THIS SHEET, REFERENCE SHOULD BE MADE TO "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS," AASHTO, 2001.
- (2) PAGE NUMBERS REFERRED TO ON THIS DRAWING ARE FROM "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS," AASHTO, 2001, UNLESS OTHERWISE NOTED.
- (3) REFERENCE SHOULD ALSO BE MADE TO THE "ROADSIDE DESIGN GUIDE," AASHTO, 2011.
- (4) FOR URBAN DESIGN GUIDANCE AND CRITERIA, SEE PAGES 433-444.
- (5) DESIRABLE RIGHT-OF-WAY IS SLOPE LINES PLUS FIFTEEN FEET.
- (6) FOR RURAL INTERSECTION DESIGN, SEE PAGE 432.
- (7) IF NO ABOVE GROUND UTILITIES ARE INVOLVED, MINIMUM RIGHT-OF-WAY SHALL BE TRAVELED WAY PLUS CLEAR ZONE.
- (8) IF ABOVE GROUND UTILITIES ARE INVOLVED, MINIMUM RIGHT-OF-WAY SHALL BE TO ACCOMMODATE THE UTILITIES OUTSIDE THE CLEAR ZONE.
- (9) FOR URBAN INTERSECTION DESIGN, SEE PAGE 442.

FOOTNOTES

- (1) WHERE THE APPROACH ROADWAY WIDTH (TRAVELED WAY PLUS SHOULDER) IS SURFACED, THAT SURFACE WIDTH SHOULD BE CARRIED ACROSS THE STRUCTURE.
- (2) THESE STRUCTURES SHOULD BE ANALYZED INDIVIDUALLY, TAKING INTO CONSIDERATION THE CLEAR WIDTH PROVIDED, TRAFFIC VOLUMES, REMAINING LIFE OF THE STRUCTURE, FUTURE TRAFFIC VOLUMES, SHOWN STORAGE, DESIGN SPEED, ACCIDENT RECORD, AND OTHER PERTINENT FACTORS.
- (3) THE CLEAR ZONE WIDTH SHALL BE DETERMINED FROM STANDARD DRAWING S-C2-1 SEE THE "ROADSIDE DESIGN GUIDE," AASHTO, 2011 FOR FURTHER INFORMATION ON CLEAR ZONES.
- (4) SEE STANDARD DRAWINGS RD01-S-11 AND RD01-S-11B FOR DESIRABLE SLOPES AND NOTE REGARDING GEOLOGICAL RECOMMENDATIONS.
- (5) CLEAR WIDTH BETWEEN CURBS OR RAILS, WHICHEVER IS THE LESSER, SHOULD BE EQUAL TO OR GREATER THAN THE APPROACH TRAVELED WAY.
- (6) THE SLOPE OF THE SHOULDER AND THE ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 0.01 FOOT PER FOOT.
- (7) EFFORTS SHOULD BE MADE TO SELECT A DESIGN SPEED GREATER THAN 20 MILES PER HOUR. REFER TO PAGE 432 OF THE "POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS," AASHTO, 2001 FOR FURTHER INFORMATION.
- (8) ON ROADWAYS TO BE RECONSTRUCTED, THE 22 FEET TRAVELED WAY MAY BE RETAINED WHERE THE ALIGNMENT AND SAFETY RECORDS ARE SATISFACTORY.
- (9) AN 18 FEET MINIMUM WIDTH MAY BE USED FOR ROADWAYS WITH DESIGN ADT UNDER 250 VEHICLES PER DAY.
- (10) DESIGN ADTS OVER 400 AND DESIGN SPEEDS OF 50 MILES PER HOUR AND GREATER SHALL REQUIRE 6:1 FOSLOPES, AND 3'-6" DEPTH DITCHES INSTEAD OF 2'-0" DITCHES.
- (11) SHORT LENGTHS OF GRADE IN RURAL AND URBAN AREAS, SUCH AS GRADES LESS THAN 500 FEET IN LENGTH, ONE-WAY ONE-WAY, AND GRADES ON LOW-VOLUME RURAL OR URBAN COLLECTORS MAY BE UP TO 2 PERCENT STEEPER THAN THE GRADES SHOWN IN TABLE IV.
- (12) SEE DETAIL S-PL-6 FOR TYPICAL GUARDRAIL PLACEMENT DETAILS.
- (13) ALTHOUGH THE SELECTED DESIGN SPEED ESTABLISHES THE LIMITING VALUES OF CURVE RADIUS AND MINIMUM SIGHT DISTANCE THAT SHOULD BE USED IN DESIGN, THERE SHOULD BE NO RESTRICTION ON THE USE OF FLATTER HORIZONTAL CURVES OR GREATER SIGHT DISTANCES WHERE SUCH IMPROVEMENTS CAN BE PROVIDED AS A PART OF AN ECONOMIC DESIGN (SEE PAGE 44).
- (14) PROPOSED ROADWAY WIDTH NOT BE LESS THAN EXISTING WIDTH.
- (15) WHEN GUARDRAIL IS PLACED BEHIND CURB AND GUTTER, THE SLOPING CURB HEIGHT MUST BE 4 INCHES OR LESS.
- (16) SHOULDER SURFACE TREATMENT TO BE SPECIFIED BY THE DESIGN ENGINEER. PAVEMENT DESIGN SECTION. DESIGNERS SHOULD REFER TO THE DESIGN GUIDELINES FOR PAVEMENT. REQUEST FOR PROPOSALS, WHICH SHOULD BE PAVED THE GRADED SHOULDER WITHIN TWO FEET OF THE SHOULDER. THE SHOULDER SHOULD BE PAVED THE GRADED SHOULDER WITHIN TWO FEET OF THE SHOULDER. THE SHOULDER SHOULD BE PAVED THE GRADED SHOULDER WITHIN TWO FEET OF THE SHOULDER.

Exhibit
2B

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

DESIGN STANDARDS
FOR COLLECTOR
ROADS AND
STREETS

10-15-02 RD01-TS-2

CHAPTER 1

Introduction

Planning for the pedestrian is an essential function of a community.

Communities which have a well-planned and functional pedestrian network are typically more livable and more marketable than those which do not. By reducing dependence on vehicular transportation, a community with a functional pedestrian network can help contribute to the conservation of resources and minimize the frequency of roadway maintenance. **A well-planned pedestrian circulation system can also provide a community with safe areas for individuals to walk and bike and can contribute to a more intense level of recreational activity in the Town.** Such a system can, furthermore, promote a healthy interaction between different types of land uses, build a more complete sense of neighborhood, and provide for a greater appreciation of the natural beauty of the area.

Town of Farragut officials and residents of the Town understand the importance of planning for the pedestrian. Both the *Farragut 2000* and *2004 Plans* discuss the necessity of providing for an adequate system of sidewalks, bikepaths and greenways. In fact, in a survey conducted for the *Farragut 2004 Plan*, bike and walking paths were viewed as the most important recreational facilities to be considered in recreation planning. Farragut residents have also expressed a desire for linkages within the pedestrian circulation system. In a survey conducted for the *1993 Farragut Recreation Plan*, 88% of the respondents stated that they would strongly support linking the existing pedestrian system throughout the Town.

Purpose

The purpose of the *Farragut Pedestrian Circulation Plan* is to determine the most efficient locations for a limited but safe and functional pedestrian circulation system. To accomplish this, the plan provides an evaluation of the Town's existing facilities. From this evaluation, the plan then establishes a series of goals, objectives, and strategies designed to promote the Town's vision of its future pedestrian system. The *Farragut Pedestrian Circulation Plan* is intended to be a plan of action or essentially a "comprehensive plan" for pedestrian circulation. The plan provides the base from which amendments to the zoning ordinance and subdivision regulations may be referenced. The plan also provides the Town with a resource for grant applications and selected elements of the capital improvement plan.

Definition of Terms

The following words, terms, and phrases are hereby defined as follows and shall be interpreted as such throughout this plan. Terms not herein defined shall have the meaning customarily assigned to them.

Activity Centers: General locations where relatively large groups of people frequently assemble. Typical activity centers would include schools, traditional parks, recreation areas, shopping centers, government buildings, and churches.

Bike Paths: Paths designated for bicycling, jogging, and walking and which target the recreational bicyclist.

Bikeways: Areas used primarily for bicycling only and which are located on shoulders of roads and are marked appropriately for bicycle use (targets the more serious bicyclist).

Concept Plan: A plan which shows the conceptual layout of a proposed subdivision. The concept plan includes all phases of the proposed subdivision and specifically outlines the overall roadway, sidewalk, and greenway network as well as the general location and number of lots to be created.

Greenway: Linear parks or corridors of protected open space that connect neighborhoods, traditional parks, commercial centers, government buildings and churches to each other with walking, bicycling, and/or nature trails. Greenways are often located along natural features, such as streams and ridgelines, or along man-made features, such as roads and utility rights-of-way.

Improved Pedestrian Surface: An area used for pedestrian travel and which has a man-made surface.

Parental Responsibility Zone: An area defined as being within one (1) mile of an elementary school or one and one-half (1½) miles from a middle or high school and where children are not eligible to ride school buses provided by the Knox County School System.

Pedestrian Circulation System: Refers to all improved or unimproved facilities and/or areas designated solely for pedestrian travel and recreational bicyclists.

CHAPTER 3

Goals, Objectives, and Strategies

Background

During the past five years, the Town of Farragut has taken some positive steps toward developing the foundation for a comprehensive pedestrian circulation system. Planning for the pedestrian is now a requirement specified in the Town's zoning ordinance and subdivision regulations.

To ensure that this commitment is continued and enhanced, the sections which follow will provide a series of goals related to the Town's vision of its future pedestrian circulation system. For each goal, a list of objectives and strategies will be provided. The purpose of the objectives is to provide for statements of measurable activities designed to accomplish the stated goal. The purpose of the strategies is to provide for specific proposals that directly relate to accomplishing the objectives. The strategies are intended to provide for the how, where, and amount to be done.

Formulation and Listing of Goals, Objectives, and Strategies

In order to determine the Town's vision for its future pedestrian network, a number of questions were first considered. Chief among these were the following:

- ◆ What does the Town of Farragut want in a pedestrian circulation network?
- ◆ Who will be using the pedestrian system?
- ◆ Where should pedestrian-oriented facilities be required?
- ◆ What should be the construction standards?
- ◆ What should be the relationship between the different elements of a pedestrian circulation network?
- ◆ How will the plan ensure efficiency so that unnecessary costs to developers and home owners are minimized and future maintenance costs to the Town are controlled?
- ◆ How can the Town become more "walkable"?
- ◆ What factors currently hinder pedestrian travel in the Town?

The goals, objectives, and strategies provided below are intended to be general statements designed to provide guidance to policy makers. In some cases, objectives and strategies will overlap among the different goals.

Goal 1:

Promote pedestrian connectivity between residential areas and nearby activity centers so that short, simple errands or trips can be made by means other than motor vehicles.

Objectives:

- ◆ Evaluate where the major "gaps" in the pedestrian network exist.
- ◆ Address the factors which discourage short trips made either on foot or on bicycle.

Strategies:

- ◆ Require sidewalks to be constructed as part of all new developments or redevelopments on both sides of streets with the classification of collector street or arterial street on the *Major Road Plan*.
- ◆ Require sidewalks to be constructed along residential spine roads and along the frontages of all roads which the subdivision fronts.
- ◆ Revise traffic signal timing based on expected walking speeds. When determining such speeds, give special consideration to small children and elderly individuals.

Goal 2:

Promote pedestrian/bicycle-based recreational activities in the community

Objectives:

- ◆ Encourage walking, running, and bicycling as a form of recreation in and of itself.
- ◆ Ensure that parks are directly connected with other activity centers and with neighborhoods so that they are conveniently accessible by non-vehicular means.

Strategies:

- ◆ Conduct periodic events involving either walking, running, or bicycling along the Town's pedestrian circulation system.
- ◆ Advertise recreational use of the pedestrian circulation system. Include greenway markers, map trails, and names for greenways. Alleviate any concerns the public may have with regards to accessing public walking/bike paths. Provide the public with information related to the destination of greenways, the significant natural features found along greenways, and the locations of any rest stations or other improvements.
- ◆ Post maps of the Town's comprehensive pedestrian network at the Farragut Branch Library, on the Town of Farragut Home Page, in Talk of the Town, and

- in the Annual Report.
- ◆ Ensure that walking/bike paths are directly connected, free of barriers, and, where appropriate, have bicycle parking available.
- ◆ Provide for connections between all Town parks, both existing and proposed. This would include Anchor Park, Mayor Bob Leonard Park, the park proposed on the Graham property, and the park proposed along McFee Road.

Goal 3:

Promote pedestrian connectivity between commercial, office, and service uses so as to minimize inefficient and highly fuel consumptive short trips related to the completion of service-oriented errands.

Objectives:

- ◆ Promote clustering of service-oriented facilities.
- ◆ Fill in the "gaps" along arterial and collector streets.

Strategies:

- ◆ Require sidewalks to be constructed as part of all new residential and non-residential developments or redevelopments on both sides of all collector and arterial streets.
- ◆ Require sidewalks to be constructed along all public streets, joint permanent easements and access ways associated with a commercial development.
- ◆ Specify that, where sidewalks are required, they should be constructed at the time of subdivision approval or site plan approval.
- ◆ Within activity centers, provide for the highest densities that can be accommodated by the transportation network. A more densely developed core area would significantly benefit the pedestrian and would, in general, provide for a more efficient use of the land and natural resources. Some of the savings in development costs afforded by a dense, compact development could then be invested in amenities to enhance the pedestrian system.
- ◆ Provide parking along the periphery of an activity center rather than in the center so that the pedestrian can minimize walking distances between different establishments.
- ◆ Through provisions in the zoning ordinance, encourage a mix of uses which complement one another in terms of pedestrian trip attraction.
- ◆ The Town should construct small sections of missing links within the sidewalk network on streets classified as collector or arterial on the *Major Road Plan*. If the contiguous property develops within five (5) years of construction, the property owner should reimburse the Town for the construction cost.

Goal 4:

Provide for a safe pedestrian network.

Objectives:

- ◆ Minimize the number of conflict points between pedestrian and motor vehicle traffic.
- ◆ Make crossing busy intersections more pedestrian friendly.
- ◆ Provide adequate walking and biking space in order to minimize the number of conflict points between the different users of the pedestrian network.

Strategies:

- ◆ Consider ways of organizing a site to reduce the number of places pedestrians must cross vehicular flow, particularly heavy flows.
- ◆ Where possible and appropriate, provide raised medians at crossroads of major arterial streets.
- ◆ Ensure, where feasible, that planting strips with a minimum width of two (2) feet are provided between all pedestrian facilities and the curb of the nearest street.
- ◆ Provide for at least one (1) foot of additional width for sidewalks of minimum required width which are to be constructed flush with an adjacent street curb.
- ◆ Where an improved pedestrian surface of an appropriate width is expected to receive heavy use by both walkers and bicyclists, utilize striping and signage to divide the path into two lanes. One lane would be designated for walkers and runners. The other lane would be designated for bicyclists.
- ◆ Require that sidewalks be constructed along both sides of property fronting along arterial and collector streets.
- ◆ Require the construction of sidewalks along at least one (1) side of all "spine" streets in residential subdivisions and along any other local streets where a pedestrian/vehicular conflict would be likely to exist.
- ◆ Ensure that, where concrete is used as construction material, a broomed finish is provided to improve traction.
- ◆ Require that bollards be erected at the outlets of pedestrian facilities where such facilities might be capable of accommodating motor vehicles.

Goal 5:

Provide for a comprehensive pedestrian system that ensures a variety of venues and maximizes an appreciation for the natural beauty of the community.

Objectives:

- ◆ Promote connectivity between sidewalks, bikepaths, and greenways.

- ◆ Promote connectivity with the greenway systems of Knoxville and Knox County.
- ◆ Link the Town's pedestrian circulation network with scenic areas unsuitable for development, such as floodways and ridgelines.

Strategies:

- ◆ Continue to require reservations as part of the subdivision process, particularly where a proposed development would have a linkage or fill a "gap" in the local and/or regional pedestrian network.
- ◆ Establish a pedestrian-oriented greenway along the Turkey Creek floodplain and ensure that it is linked with the Town's comprehensive pedestrian system.
- ◆ Provide for direct connections between the Turkey Creek Greenway at both ends of Knoxville's Parkside Greenway.
- ◆ Require that, as part of the subdivision, site development, or redevelopment process, portions of areas which come in contact with public access easements or Town-owned open space will be either dedicated to the Town or provided as twenty (20) foot access easements so that linkages for public travel will be provided.
- ◆ The Town should actively pursue the acquisition of property with natural and scenic value but which is unsuitable for development.
- ◆ Encourage clubs, organizations, businesses, and other interested groups to adopt segments of pedestrian facilities so as to assist the Town in helping to ensure that such facilities will be maintained in an attractive condition.

Goal 6:

Make all public facilities, such as schools, libraries, and parks, pedestrian accessible.

Objective:

- ◆ Promote connectivity between parks, schools, neighborhoods, and places of business.

Strategies:

- ◆ Construct sidewalks along all existing or proposed residential spine streets and along any other local streets which may provide an essential link between parks, schools, neighborhoods, and places of business.
- ◆ Require the development of sidewalks along collector and arterial roads located within the Parental Responsibility Zone (Map 3.1). Focus immediate attention on those areas where the greatest usage potential would exist.
- ◆ Where possible, the nearest portion of the sidewalk to the roadway should be at least two (2) feet from the edge of the curb.
- ◆ The Town should construct pedestrian facilities along areas within the Parental

Responsibility Zone where such pedestrian facilities are needed but which would not be provided in the near future.

Goal 7:

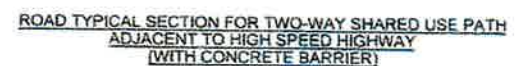
Provide for a pedestrian system which maximizes functionality and minimizes costs to the developer and the Town.

Objectives:

- ◆ Construction materials used for improved pedestrian surfaces should vary depending on the nature of the facility and its targeted users.
- ◆ Require the provision of pedestrian facilities only where such facilities would be warranted. In determining those areas, consideration should be given to the importance of the potential linkage and the anticipated use of the facilities.
- ◆ Investigate the possibility of state and federal financial assistance related to various elements of the pedestrian circulation system.
- ◆ Locate sidewalks so as to minimize conflicts related to the future maintenance of underground utilities and the placement of fences, mailboxes, traffic control signs, and other structures.
- ◆ Coordinate the development of a pedestrian circulation system with proposed roadway improvements so as to minimize sidewalk reconstruction.

Strategies:

- ◆ The location of pedestrian facilities within a residential subdivision should be determined at the time of concept plan review. The more heavily traveled "spine" road(s) and all exterior roads that the subdivision fronts along should be required to have sidewalks. However, as a savings to the developer, homebuyer, and the Town, the Planning Commission may consider omitting sidewalks which would front along local non-spine streets internal to a subdivision. In making their determination, the Commission would consider primarily the potential use of the facilities, the possibility of pedestrian/vehicular conflicts, and whether such facilities would make a significant contribution to the Town's comprehensive pedestrian network.
- ◆ Where possible, locate sidewalks in the right-of-way one (1) foot from the property line so as to minimize conflicts related to future maintenance of underground utilities, provide for separation between the sidewalk and the adjacent roadway, and ensure that adequate space is available for the placement of mailboxes, street signs, utility poles, and fire hydrants.
- ◆ Allow sidewalk placement to vary in order to preserve specimen trees and/or other unique natural or topographic features.
- ◆ Applications should be made for Intermodal Surface Transportation Efficiency



- ① 18 MPH BICYCLE DESIGN SPEED
- ② PEDESTRIAN DENSITY 200 PED/HR
- ③ HORIZONTAL CURVE 60' MIN. RADIUS
- ④ VERTICAL GRADE 5% MAX.
- ⑤ MINIMUM PAVED PATH WIDTH 10' WITH MAX. 6:1 SLOPE, 2' WIDE CLEAR OF OBSTRUCTIONS
- ⑥ MAXIMUM CROSS SLOPE 2%

- (A) UNDER CERTAIN CONDITIONS IT MAY BE NECESSARY OR DESIRABLE TO USE ALTERNATIVE PATH WIDTHS. TOOT STANDARDS ARE BASED ON 20' OR 22' CLEAR WIDTH PER FOOT. A LEVEL OF SERVICE (LOS) OF "C". REFER TO THE HIGHWAY CAPACITY MANUAL, 4TH EDITION FOR MORE INFORMATION.
- (B) THE MINIMUM WIDTH OF A ONE-DIRECTIONAL SHARED USE PATH IS 6 FEET.
- (C) 2 FEET ON A 6" SLOPE IS DESIRABLE TO PROVIDE LATERAL OFFSET FROM TREES, POLES, WALLS, FENCES, GUARDRAILS, OR OTHER LATERAL OBSTRUCTIONS, WHERE THE PATH IS ADJACENT TO CANALS, DITCHES OR SLOPES STEEPER THAN 3:1. A WIDER SEPARATION SHOULD BE CONSIDERED.
- (D) THE VERTICAL CLEARANCE TO OBSTRUCTIONS SHOULD BE A MINIMUM OF 8 FEET. HOWEVER, VERTICAL CLEARANCE MAY NEED TO BE GREATER TO PERMIT PASSAGE OF MAINTENANCE AND EMERGENCY VEHICLES. IN UNDER CROSSINGS AND TUNNELS, 10 FEET IS DESIRABLE FOR ADEQUATE VERTICAL CLEARANCE.
- (E) A DRAINAGE OR STORMWATER CONVEYANCE SYSTEM DITCH SHOULD BE LOCATED PROPERLY BETWEEN THE SHARED USE PATH AND ROADWAY TO ENSURE WATER DOES NOT FLOW ONTO THE ROADWAY OR SHOULDER. ALSO, DITCH SHOULD BE SUFFICIENT ENOUGH TO REMOVE THE ADDITIONAL RUNOFF.
- (F) WHEN THE DISTANCE BETWEEN THE EDGE OF TRAVEL LANE AND THE SHARED USE PATH IS LESS THAN 15.5 FEET ON A FACILITY WITH DESIGN SPEED OF 45 MILES PER HOUR, A BARRIER RAIL IS REQUIRED. (THIS REDUCED WIDTH SHALL MEET THE REQUIREMENTS FOR OCCASIONAL MAINTENANCE ACTIVITIES.)
- (G) CLEAR ZONE SHOULD BE MAINTAINED BETWEEN THE ROADWAY AND THE SHARED USE PATH. IF CLEAR ZONE CAN NOT BE ACHIEVED, AN APPROPRIATE BARRIER SHOULD BE CONSIDERED FOR SPEED MORE THAN 45 MPH.
- (H) ON ALL BRIDGE DECKS, SPECIAL CARE SHALL BE TAKEN TO ENSURE THAT BICYCLE-SAFE EXPANSION JOINTS ARE USED AND DECKING MATERIALS THAT MAY become SLIPPERY WHEN WET ARE AVOIDED.
- (I) SEE STANDARD DRAWINGS T-4-10, T-4-11, T-4-12, AND T-4-13 FOR SIGNING AND PAVEMENT MARKINGS.
- (J) THE PURPOSE OF THIS STANDARD IS TO PROVIDE MINIMUM GEOMETRIC AND SAFETY DESIGN STANDARDS DURING THE DEVELOPMENT OF NON-MOTORIZED TRANSPORTATION FACILITIES. ALL FACILITIES SHALL BE DESIGNED FOR ADA ACCESSIBILITY.
- (K) FOR FURTHER INFORMATION, REFER TO AASHTO "GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES" FOR GEOMETRIC DESIGN REQUIREMENTS AND TOOT ROADWAY DESIGN GUIDELINES MULTIMODAL DESIGN GUIDE SECTION.
- (L) SHARED USE PATHS DO NOT REQUIRE PAVEMENT MARKINGS. HOWEVER, PROPER SIGNAGE SHOULD BE INSTALLED PER STANDARDS AND THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

studies. However, it is generally assumed that the speed of youth bicyclists is lower than adult bicyclists. Since much of the design criteria in this guide is based on design speed, children will be accommodated to a large extent. When considering criteria unrelated to design speed, engineering judgment should be used when modifying these values for children. Throughout this chapter, several design measures are recommended which are based primarily on pedestrian research. It is presumed that these measures will also benefit bicyclists and other path users, although the research has not been conducted to support this assumption.

5.2.1 Width and Clearance

The usable width and the horizontal clearance for a shared use path are primary design considerations. Figure 5-1 depicts the typical cross section of a shared use path. The appropriate paved width for a shared use path is dependent on the context, volume, and mix of users. **The minimum paved width for a two-directional shared use path is 10 ft (3.0 m).** Typically, widths range from 10 to 14 ft (3.0 to 4.3 m), with the wider values applicable to areas with high use and/or a wider variety of user groups.

In very rare circumstances, a reduced width of 8 ft (2.4 m) may be used where the following conditions prevail:

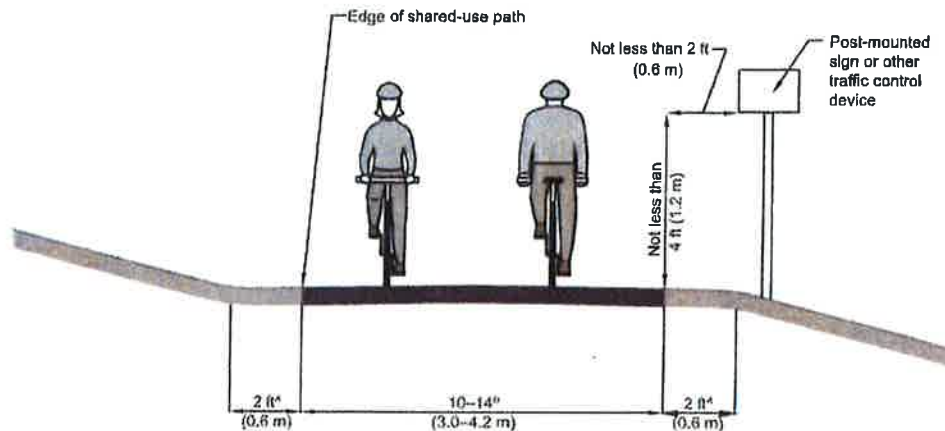
- Bicycle traffic is expected to be low, even on peak days or during peak hours.
- Pedestrian use of the facility is not expected to be more than occasional.
- Horizontal and vertical alignments provide frequent, well-designed passing and resting opportunities.
- The path will not be regularly subjected to maintenance vehicle loading conditions that would cause pavement edge damage.

In addition, a path width of 8 ft (2.4 m) may be used for a short distance due to a physical constraint such as an environmental feature, bridge abutment, utility structure, fence, and such. Warning signs that indicate the pathway narrows (W5-4a), per the MUTCD (7) should be considered at these locations.

A wider path is needed to provide an acceptable level of service on pathways that are frequently used by both pedestrians and wheeled users. The *Shared Use Path Level of Service Calculator* is helpful in determining the appropriate width of a pathway given existing or anticipated user volumes and mixes (9). Wider pathways, 11 to 14 ft (3.4 to 4.2 m) are recommended in locations that are anticipated to serve a high percentage of pedestrians (30 percent or more of the total pathway volume) and high user volumes (more than 300 total users in the peak hour). Eleven foot (3.4 m) wide pathways are needed to enable a bicyclist to pass another path user going the same direction, at the same time a path user is approaching from the opposite direction (see Figure 5-2) (8). Wider paths are also advisable in the following situations:

- Where there is significant use by inline skaters, adult tricycles, children, or other users that need more operating width (see Chapter 3);
- Where the path is used by larger maintenance vehicles;

- On steep grades to provide additional passing area; or
- Through curves to provide more operating space.



Notes:

^a (1V:6H) Maximum slope (typ.)

^b More if necessary to meet anticipated volumes and mix of users, per the Shared Use Path Level of Service Calculator (9)

Figure 5-1. Typical Cross Section of Two-Way, Shared Use Path on Independent Right-of-Way

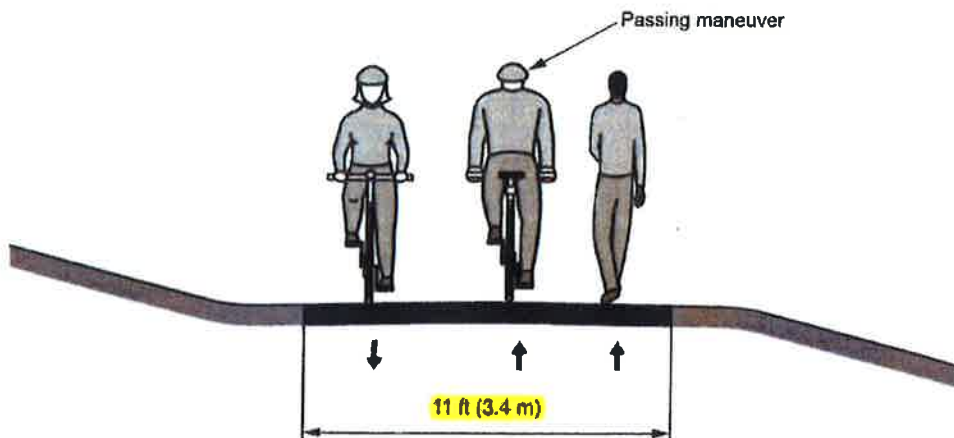


Figure 5-2. Minimum Width Needed to Facilitate Passing on a Shared Use Path

Under most conditions, there is no need to segregate pedestrians and bicyclists on a shared use path, even in areas with high user volumes—they can typically coexist. Path users customarily keep right except to pass. Signs may be used to remind bicyclists to pass on the left and to give an

- Pavement markings are the simplest form of separation and should consist of two solid yellow lines, the standard centerline marking where passing (across the centerline) is prohibited in both directions.
- Medians or traffic separators provide more separation between motorists and bicyclists traveling in opposing directions. This treatment should be considered in situations with higher speeds or volumes. If medians or traffic separators are used, the contra-flow bike lane width should be at least 7 ft (2.1 m).
- At intersecting streets, alleys, and major driveways, “DO NOT ENTER” signs and turn restriction signs should include supplemental plaque that says “EXCEPT BICYCLES,” to establish that the street is two-way for bicyclists and to remind motorists to expect two-way bicycle traffic.
- At traffic signals, signal heads should be provided for contra-flow bicyclists, as well as suitable bicycle detection measures. A supplemental plaque that says “BICYCLE SIGNAL” may be needed beneath the signal to clarify its purpose.

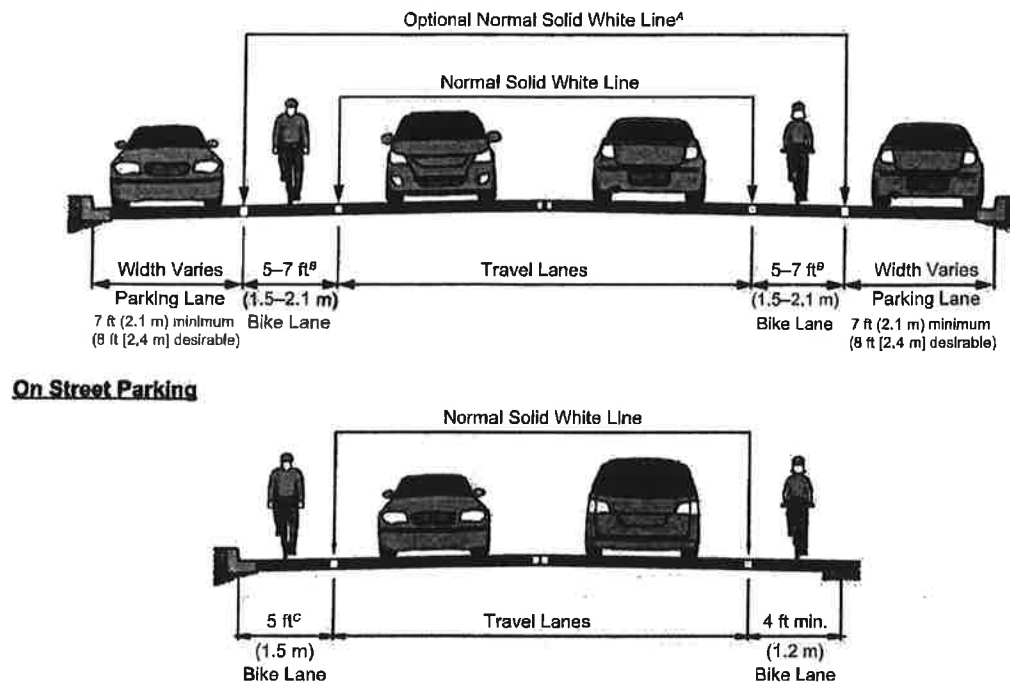
4.6.4 Bicycle Lane Widths

Bicycle lane widths should be determined by context and anticipated use. The speed, volume, and type of vehicles in adjacent lanes significantly affect bicyclists' comfort and desire for lateral separation from other vehicles. Bike lane widths should be measured from the center of the bike lane line. The appropriate width should take into account design features at the right edge of the bicycle lane, such as the curb, gutter, on-street parking lane, or guardrail. Figure 4-13 shows two typical locations for bicycle lanes in relation to the rest of the roadway, and the widths associated with these facilities.

As discussed in the previous chapter, a bicyclist's preferred operating width is 5 ft (1.5 m). Therefore, under most circumstances the recommended width for bike lanes is 5 ft (1.5 m). Wider bicycle lanes may be desirable under the following conditions:

- Adjacent to a narrow parking lane (7 ft [2.1 m]) with high turnover (such as those servicing restaurants, shops, or entertainment venues), a wider bicycle lane (6–7 ft or 1.8–2.1 m) provides more operating space for bicyclists to ride out of the area of opening vehicle doors.
- In areas with high bicycle use and without on-street parking, a bicycle lane width of 6 to 8 ft (1.8–2.4 m) makes it possible for bicyclists to ride side-by-side or pass each other without leaving the lane.
- On high-speed (greater than 45 mph [70 km/h]) and high-volume roadways, or where there is a substantial volume of heavy vehicles, a wide bicycle lane provides additional lateral separation between motor vehicles and bicycles to minimize wind blast and other effects.

Chapter 4: Design of On-Road Facilities



On Street Parking

Parking Prohibited

Notes:

- * An optional normal (4–6-in./100–150-mm) solid white line may be helpful even when no parking stalls are marked (because parking is tight), to make the presence of a bicycle lane more evident. Parking stall markings may also be used.
- # Bike lanes up to 7 ft (2.1 m) in width may be considered adjacent to narrow parking lanes with high turnover.
- c On extremely constrained, low-speed roadways (45 mph [70 km/h] or less) with curbs but no gutter, where the preferred bike lane width cannot be achieved despite narrowing all other travel lanes to their minimum widths, a 4-ft (1.2-m) wide bike lane can be used.

Figure 4-13. Typical Bike Lane Cross Sections

Where bicycle lanes are provided, appropriate marking or signing should be used so the lanes are not mistaken for motor-vehicle travel lanes or parking areas. For roadways with no curb and gutter and no on-street parking, the minimum width of a bicycle lane is 4 ft (1.2 m). For roadways where the bike lane is immediately adjacent to a curb, guardrails, or other vertical surface, the minimum bike lane width is 5 ft (1.5 m), measured from the face of a curb or vertical surface to the center of the bike lane line. There are two exceptions to this:

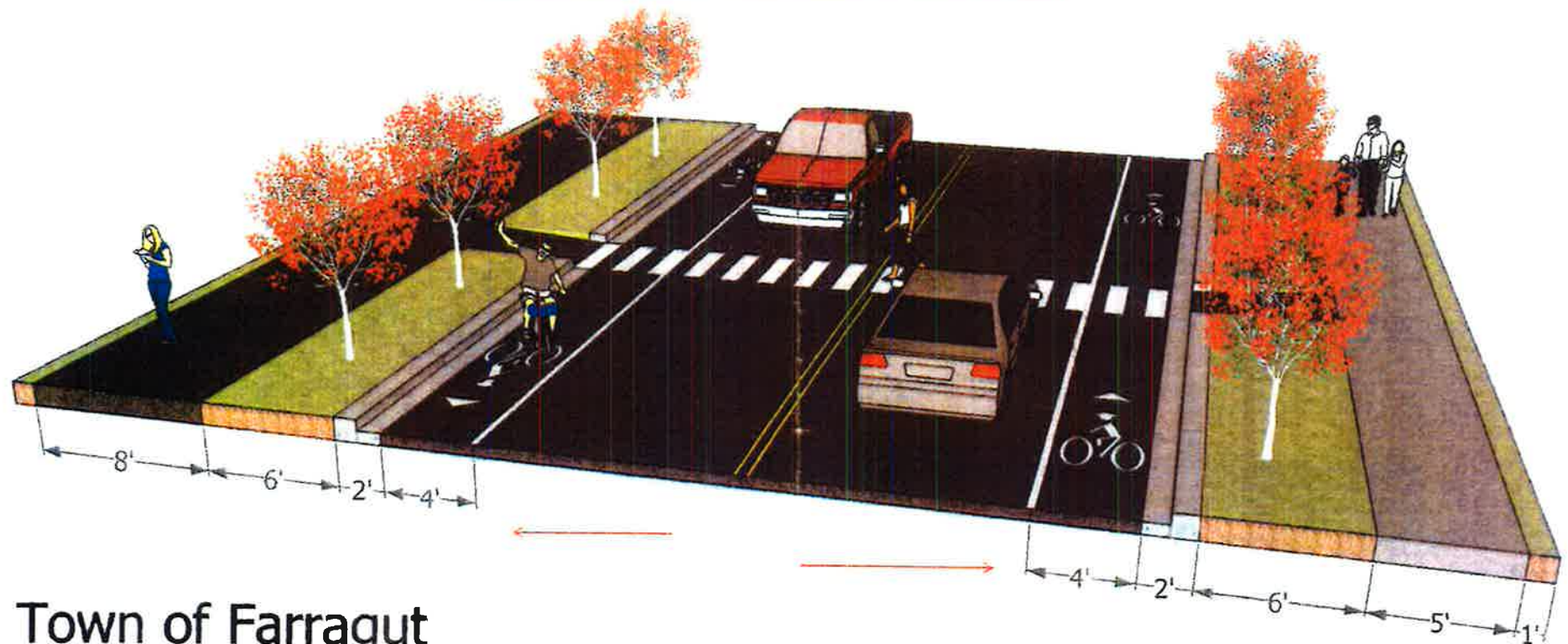
- In locations with higher motor-vehicle speeds where a 2-ft (0.6 m) wide gutter is used, the preferred bike lane width is 6 ft (1.8 m), inclusive of the gutter.
- On extremely constrained, low-speed roadways with curbs but no gutter, where the preferred bike lane width cannot be achieved despite narrowing all other travel lanes to their minimum widths, a 4-ft (1.2 m) wide bike lane can be used.

Along sections of roadway with curb and gutter, a usable width of 4 ft (1.2 m) measured from the longitudinal joint to the center of the bike lane line is recommended. Drainage inlets and

Exhibit F

Exhibit 7
Town of Farragut Pedestrian & Bicycle Plan- 2010, Exhibits F

John Hughes 2010



Town of Farragut
Complete Streets Cross Section
Major Collector- 2 Lane Scenario

Exhibit 8

Town of Farragut Code of Ordinances: Subdivision Regulations Appendix B, Article III, Section B, Item 2

B. - Sidewalks and other pedestrian facilities.

1. *Provisions for Sidewalks and Other Pedestrian Facilities.* Sidewalks shall be constructed on all collector and arterial streets which a subdivision fronts. Sidewalks shall be constructed on at least one side of all new spine streets. Spine streets are those main streets located within a subdivision which connect less traveled streets located deeper within the subdivision to the subdivision entrance(s).

Additional sidewalks along non-spine streets internal to a subdivision may also be required by the Planning Commission. In making their determination, the Planning Commission shall consider the anticipated use of such facilities, the frequency of pedestrian/vehicular conflicts, and whether such additional facilities would significantly contribute to the town's existing or projected pedestrian network.

In lieu of sidewalks being constructed along spine and/or non-spine streets, the Planning Commission may approve an alternate comprehensive pedestrian system for the subdivision. Such system shall include sidewalks, bicycle/pedestrian paths, greenways, or any combination thereof.

2. *Placement of sidewalks and other pedestrian and shared-use facilities.* A grassed or landscaped strip of at least six feet in width shall be provided between the back of the street curb and the edge of the approved pedestrian or shared-use facility on all streets classified as a local or collector on the Major Road Plan. A grassed or landscaped strip of at least eight feet in width shall be provided between the back of the street curb and the edge of the approved pedestrian or shared-use facility on all streets classified as an arterial street on the Major Road Plan. When there is a deceleration or taper lane and the right-of-way is not of adequate width to accommodate a six-foot or eight-foot grassed or landscaped strip between the back of the street curb and the edge of the pedestrian or shared-use facility, the grass or landscaped strip may be reduced in width to a minimum of three feet for that abutting section, if approved by the planning commission.

If the Town of Farragut is constructing a new pedestrian or shared-use facility on an existing street next to an existing residential subdivision, a grassed or landscaped strip shall be provided or, if possible, additional width in excess of the minimum required shall be added to the pedestrian or shared-use facility to provide the greatest pedestrian and vehicular separation possible in the given context.

3. *Widths of Sidewalks and Other Pedestrian Facilities.* Sidewalks fronting on access easements or public streets shall be a minimum of five feet in width. Bicycle/pedestrian paths and greenways shall be a minimum of eight feet in width.
4. *Completion and Bond Requirements for Sidewalks and Other Pedestrian Facilities.* Prior to the recording of a final plat, all pedestrian facilities shall be completed or a bond provided to ensure completion. A two-year maintenance bond for all pedestrian facilities shall also be provided before the final plat is recorded or the completion bond is released.

(Ord. of 10-1987; Ord. of 2-2006; Res. No. PC-07-02, § 4, 3-15-2007; Res. No. PC-09-05, §§ 1, 2, 4-16-2009; Res. No. PC-11-09, § 1, 6-16-2011; Res. No. PC 18-04, § 2, 1-18-2018)

Gateways

Gateways influence the first impression visitors and prospective businesses form when arriving in the town or downtown. Their appearance conveys an image of the community, including the Town's sense of pride. Since Farragut wants to encourage new businesses, particular attention should be paid to gateways to assure that they communicate the appropriate message. But businesses are only one side of the land use equation; Farragut also wants to remain a premier/high quality residential community. Improving gateways can improve civic pride.

One way to preserve gateways is through guidelines. Town gateway guidelines might focus on:

1. The impression created at gateways is more powerful and lasting than any "welcome to..." sign. Therefore, it is recommended to reinforce gateways primarily by installing quality landscaping, such as creating planted medians and installing landscaping and stone walls at intersection corners.
2. Install large trees to screen out unattractive buildings, or uses.
3. Protect vistas and historic buildings so visitors can experience Farragut's setting and heritage.
4. Enhance natural vegetation, mature trees add distinctive qualities to any setting.

Gateways treatments, smaller in nature, can also be used to signal the downtown, with elements such as:

- wayfinding signage to direct one to different services.

Exhibit 9

Town of Farragut Comprehensive Land Use Plan- 2012, pp. 18.

- medians and streetscaping with wide, brick walks; street trees to give shade, comfortable benches, attractive, consistent signage, and other pedestrian amenities.

Primary implementation tools

1. Design guidelines

Prepare, and encourage developers to use, an illustrated guide for a limited range of architectural elements that would project a distinct image in highly viable areas. The preliminary list below suggests elements that could be addressed, but a more detailed study and public involvement is recommended.

Architecture

- 2-3 story buildings.
- pitched roofs with large overhangs.
- flat roofs with cornices and parapets.
- red and orange brick varieties, or local stone.
- taller ground floor with more windows.
- wide frame windows and doors.
- awnings and insets for variety.
- lintels above windows.
- transparency on ground floor.
- mullins in windows.
- modern, contemporary, and industrial design such as reflective glass or corrugated metal siding should be avoided.

Streetscape

- generous landscaping.
- preserve existing mature trees.
- paving with brick-type (avoid flat concrete).

Utilities

- undergrounding of utilities (where geology permits).

■ Actions

To protect and enhance the town's image Farragut's should:

1. Improve its gateways by commissioning subarea designs for gateways.
2. Preserve key open spaces and scenic views by acquiring properties and/or easements.
3. Create design guidelines to encourage more consistent design character for future development in commercial, medium density residential, and mixed use areas.
4. Maintain views from/of historic resources (see Strategy 5).
5. Assure that design of public facilities meets quality standards.

To protect Farragut's open feel:

1. Development will avoid hazardous areas (sinkholes, steep slopes, floodplains). When possible, open areas should maintain view and allow trails.

Section 2B.06 STOP Sign Applications*Guidance:*

- 01 *At intersections where a full stop is not necessary at all times, consideration should first be given to using less restrictive measures such as YIELD signs (see Sections 2B.08 and 2B.09).*
- 02 *The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions:*
- A. *The vehicular traffic volumes on the through street or highway exceed 6,000 vehicles per day;*
 - B. *A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway; and/or*
 - C. *Crash records indicate that three or more crashes that are susceptible to correction by the installation of a STOP sign have been reported within a 12-month period, or that five or more such crashes have been reported within a 2-year period. Such crashes include right-angle collisions involving road users on the minor-street approach failing to yield the right-of-way to traffic on the through street or highway.*

Support:

- 03 *The use of STOP signs at grade crossings is described in Sections 8B.04 and 8B.05.*

Section 2B.07 Multi-Way Stop Applications*Support:*

- 01 *Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.*
- 02 *The restrictions on the use of STOP signs described in Section 2B.04 also apply to multi-way stop applications.*

Guidance:

- 03 *The decision to install multi-way stop control should be based on an engineering study.*
- 04 *The following criteria should be considered in the engineering study for a multi-way STOP sign installation:*
- A. *Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.*
 - B. *Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.*
 - C. *Minimum volumes:*
 - 1. *The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and*
 - 2. *The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but*
 - 3. *If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.*
 - D. *Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.*

Option:

- 05 *Other criteria that may be considered in an engineering study include:*
- A. *The need to control left-turn conflicts;*
 - B. *The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;*
 - C. *Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and*
 - D. *An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.*

Exhibit 11

Town of Farragut Comprehensive Land Use Plan, Strategy 4, pp. 12

To protect existing neighborhoods from incompatible new development, and to encourage gradual transitions even within a new development (such as between blocks with different densities), the following guidelines should be applied:

- If a density different from an adjacent property is proposed, the transition should occur within the proposed development (gradually increase or decrease away from the common boundary).

For example, if a new development with a medium density designation were placed next to an existing low density neighborhood, single-family homes should be placed along the common boundary, with duplexes and townhomes placed further away from the existing neighborhood. This will create a gradual transition of density away from the common property line and make adjacent developments compatible. However, if the medium density was placed alongside a non-residential use (commercial, office), density could increase to match the intensity of that use. For example a medium density residential development would 'fit' next to office or commercial.

- Gradual density increases are encouraged near mixed use, office and commercial developments, along arterials, and at major intersections, as long as they maintain quality standards to ensure compatibility with adjacent development



Figure 10: Higher density transitioning gradually to lower density existing development

- Policy: Densities of new development should be compatible with existing adjacent densities

1. Mixed use development

Add housing variety and create mixed use zoning when implementing strategy 1 and 2.

2. Flexible density & transitions

The Town can take advantage of the relatively few remaining large vacant parcels in Farragut, by using the concept of "flexible density" to encourage, within new developments, a greater range of housing types. (See [Chapter 3: Future Land Use Plan](#) for more information).

Actions

1. Update zoning to:

- Create mixed use zoning districts that allow residential uses in commercial, office and some civic uses—with appropriate amenities (see [Chapter 3: Future Land Use Plan](#) for more information).
- Allow greater range of housing types within a development, including the concept of flexible, or averaging, density

STRATEGY 4. INCREASE CONNECTIVITY

Many of Farragut's subdivisions have only a single entrance. Single-entry subdivisions have impacts on the rest of the community in the form of congestion and longer distances to travel. Increased roadway connectivity provides more options for travel and thereby reduces congestion. It also improves the efficiency of school buses and emergency services and provides access when one entry may be blocked. Increasing pathway

connectivity encourages walking and biking, which is attractive to both elderly and starter families

Primary implementation tools

1. Connect new development

Require new development to connect to surrounding development when possible. The plan identifies a number of potential "desire lines" for connecting roads and trails. These should be implemented through the subdivision review process, and condition approval on their construction.

2. Fix missing links

Construct "missing links" (pedestrian ways and roadways) in existing developments, where routes are feasible.

3. Continue to implement the Road Master Plan and the Pedestrian and Bicycle Plan (PBP)



Figure 11: Potential roadways identify missing links and in some cases desired roadway connections (See [Chapter 3: Future Land Use Plan](#) for more information)

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2019	47LPLM-F0-133	4

CURVE UNION-1	CURVE UNION-2	CURVE SADDLERIDGE-1
PI 11+43.16	PI 14+86.75	PI 75+19.88
N 563,232.7668	N 563,530.5337	N 563,536.5071
E 2,497,468.1045	E 2,497,642.3748	E 2,497,633.9122
A 17° 44' 11" (LT)	A 19° 41' 51" (RT)	A 9° 05' 37" (RT)
D 10° 00' 00"	D 9° 00' 00"	D 22° 55' 06"
R 572.96	R 636.62	R 250.00
L 177.37	L 218.06	L 39.68
T 89.40	T 110.52	T 19.88

CURVE HOBBS-3	CURVE HOBBS-4
PI 67+41.76	PI 67+86.46
N 563,111.2368	N 563,146.8539
E 2,497,381.1124	E 2,497,354.0609
A 7° 43' 30" (RT)	A 7° 22' 48" (LT)
D 57° 17' 45"	D 57° 17' 45"
R 100.00	R 100.00
L 13.48	L 12.88
T 6.75	T 6.45

THE JACKIE NORRIS TROUTT
REVOCABLE TRUST &
THE CHARLENE ADELIA WEIGEL
TROUTT
REVOCABLE TRUST

JAMES D. AND
MIRIAM B. LARSON

JIMMIE JANE HARBISON MCCONNELL
& STEVEN K. HARBISON

SADDLE RIDGE
HOMEOWNERS ASSOCIATION

UNION ROAD STA. 14+83.57 =
SADDLE RIDGE DRIVE STA. 75+00.00
N 563522.7930
E 2497648.3056

POT 69+28.53
LIMIT OF CONSTRUCTION
N HOBBS ROAD STA. 68+15.33
N 563167.4246
E 2497333.7776

PC 67+80.01
PT 67+92.89
N 48° 04' 30" E

CHRIST COVENANT
PRESBYTERIAN CHURCH

BEGIN PROJECT STP-M-9109(174) (PRELIM.)
UNION ROAD STA. 9+99.90 =
N HOBBS ROAD STA. 67+74.14
N 563137.0434
E 2497361.5120

MATCH LINE STA. 66+00.00 SEE SHT. NO. 8

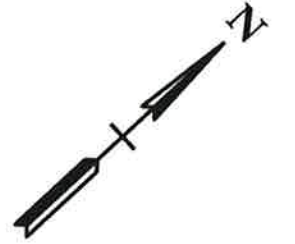
DORIS M. HENNING

PATRICK E. AND
PENELOPE M. PILGRIM

CORNERSTONE CHURCH OF
GOD

FARRAGUT HEALTH CARE
CENTER, LP

POINT	NORTH	EAST	ELEVATION	STATION	OFFSET	FEATURE	DESCRIPTION
2	563096.4330	2497371.9040	968.3100	9+80.49	37.16	REF	TRIP SPIKE
3	563606.6280	2497711.3490	959.9380	15+86.50	-14.08	REF	TRIP SPIKE
12	563377.7859	2497538.1464	964.0379	13+02.27	-12.80	REF	TRIP SPIKE



PRELIMINARY
PLANS

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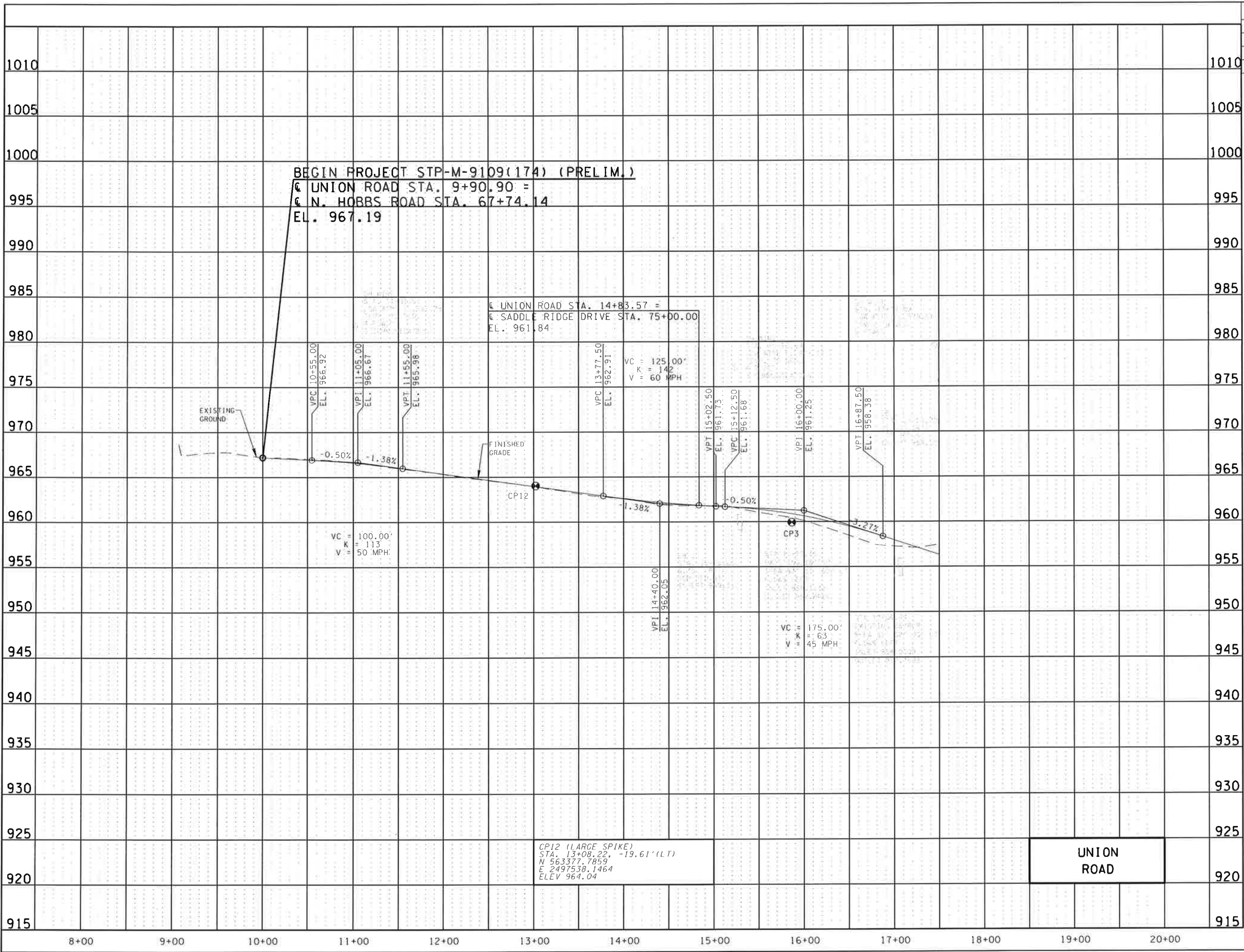
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

PRESENT
LAYOUT

B.O.P. TO STA. 17+50
SCALE: 1"=50'

\$\$\$\$SYTIME\$\$\$\$
\$\$\$\$GNSPEC\$\$\$\$

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TYPE	YEAR	PROJECT NO.	SHEET NO.
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PRELIMINARY
PLANS

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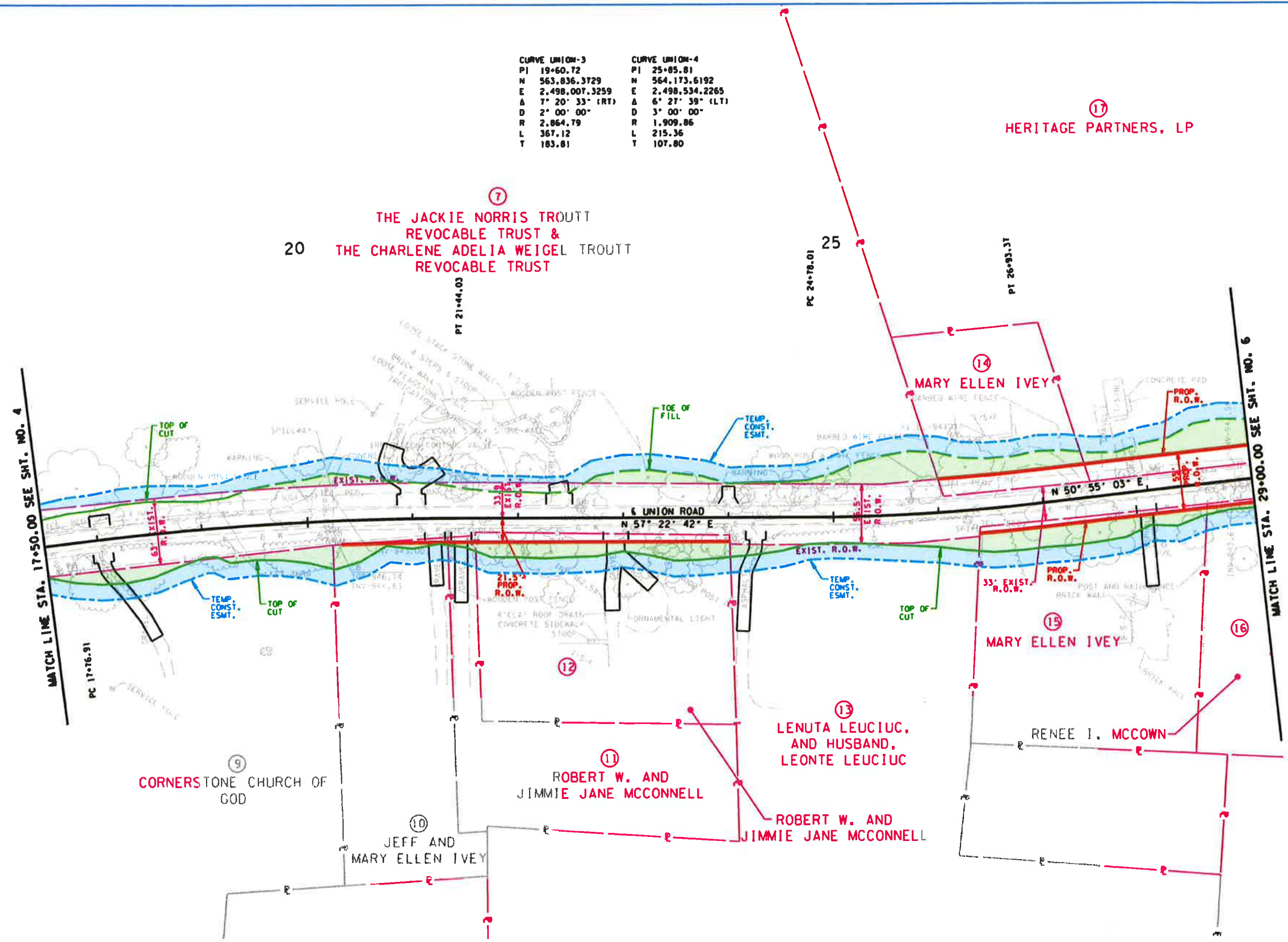
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DEPARTMENT OF
TRANSPORTATION

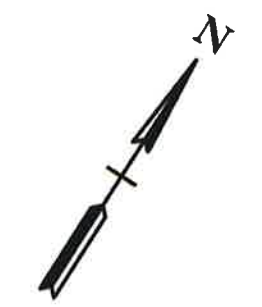
PROFILE

B.O.P. TO STA. 17+50
SCALE: 1"=50' HORIZ.
1"=5' VERT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2018	47LPLM-F0-133	5



CONTROL POINT DATA						
POINT	NORTH	EAST	ELEVATION	STATION	OFFSET	FEATURE / DESCRIPTION
4	564005.4940	2498255.3200	915.1710	22+60.26	-8.75	XCP RTW MAW
14	564193.5686	2498571.2981	947.0914	26+27.23	5.04	XCP SIZ SPK



PRELIMINARY PLANS

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STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

PRESENT LAYOUT

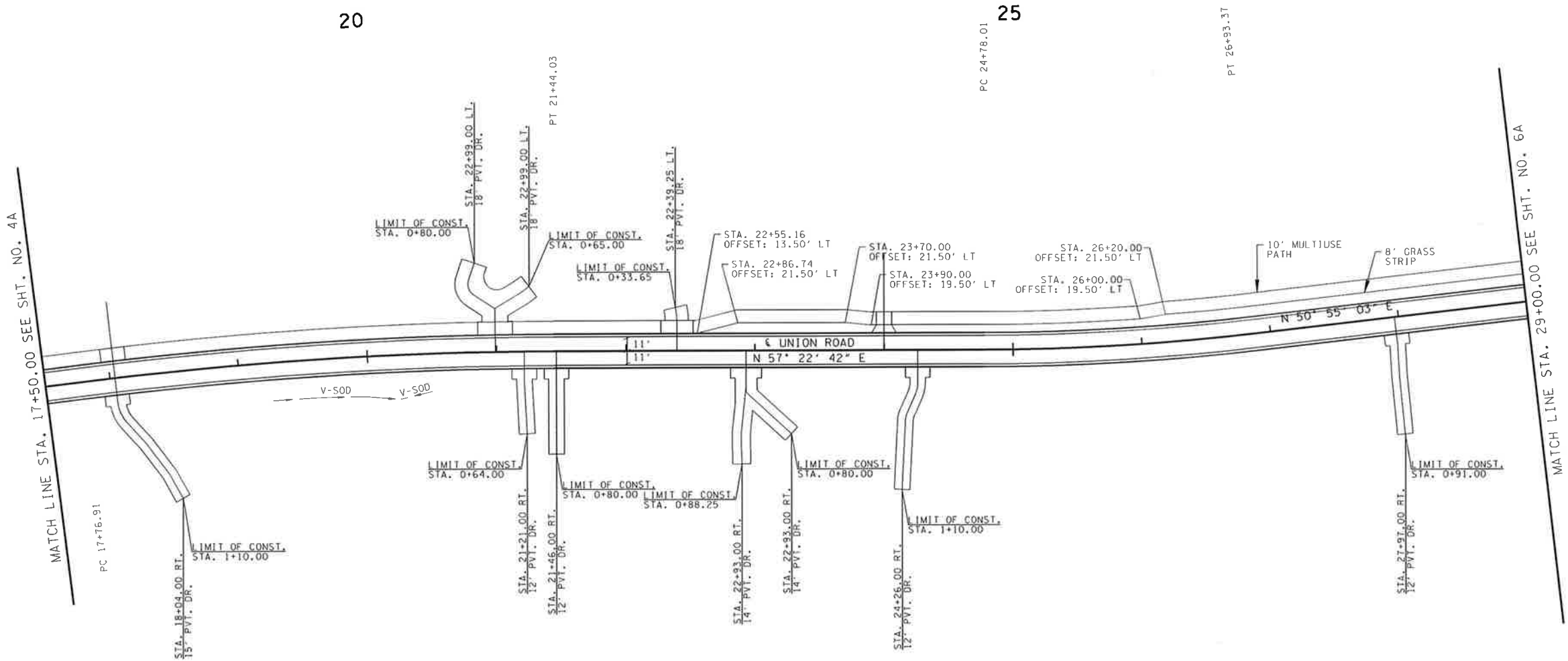
STA. 17+50 TO STA. 29+00

SCALE: 1"=50'

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 \$\$\$\$\$\$DGN\$SPEC\$\$\$\$\$\$
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2019	47LPLM-F0-133	5A

CURVE UNION-3	CURVE UNION-4
PI 19+60.72	PI 25+85.81
N 563,836.3729	N 564,173.6192
E 2,498,007.3259	E 2,498,534.2265
Δ 7° 20' 33" (RT)	Δ 6° 27' 39" (LT)
D 2° 00' 00"	D 3° 00' 00"
R 2,864.79	R 1,909.86
L 367.12	L 215.36
T 183.81	T 107.80



PRELIMINARY PLANS

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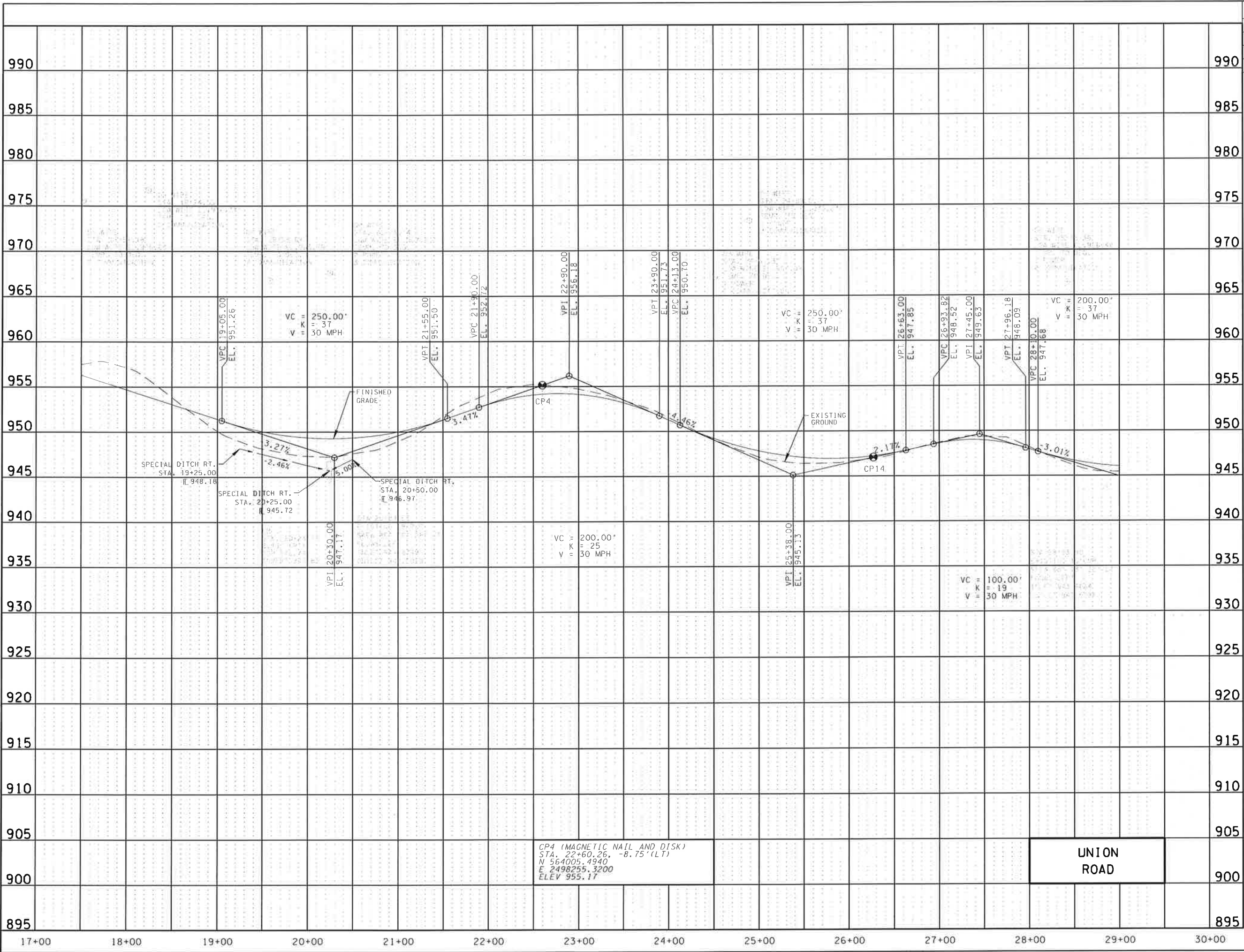
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REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

PROPOSED
LAYOUT

STA.17+50 TO STA. 29+00

SCALE: 1"=50'



TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2019	471PLM-F0-133	5B

PRELIMINARY PLANS

SEALED BY

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**STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION**

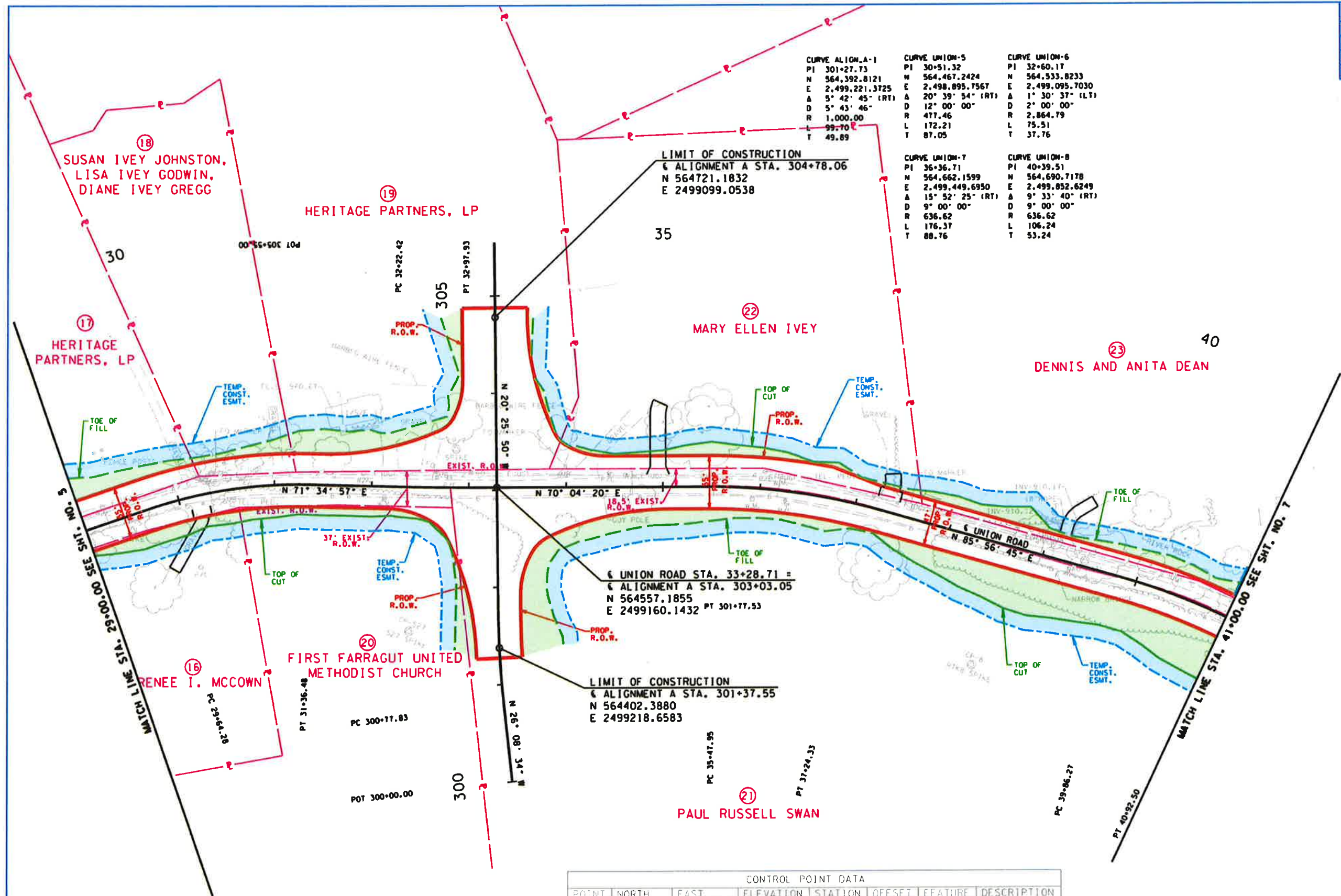
**PROFILE
UNION ROAD**

STA. 17+50 TO STA. 29+00

SCALE: 1"=50' HORIZ.
1"=5' VERT.

TYPE	YEAR	PROJECT NO	SHEET NO
PRELIM	2019	47LPLM-F0-133	6

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PRELIMINARY
 PLANS

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STATE OF TENNESSEE
 DEPARTMENT OF
 TRANSPORTATION

PRESENT
 LAYOUT
 STA.29+00 TO STA. 41+00
 SCALE: 1"=50'

CONTROL POINT DATA							
POINT	NORTH	EAST	ELEVATION	STATION	OFFSET	FEATURE	DESCRIPTION
5	564388.1550	2498822.9540	948.5760	29+44.90	15.44	XCP	S5 SPIKE
7	564580.4320	2499107.6050	945.8600	32+87.09	-39.74	XCP	RTK8 SPIKE
8	564550.2330	2499681.9950	930.2380	38+59.37	128.07	XCP	RTK8 SPIKE
23	564690.3631	2499756.3862	912.0768	39+43.45	-6.45	XCP	23 MAG

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2019	47LPLM-F0-133	6A

CURVE ALIGN-A-1	CURVE UNION-5	CURVE UNION-6
PI 301+27.73	PI 30+51.32	PI 32+60.17
N 564,392.8121	N 564,467.2424	N 564,533.8233
E 2,499,221.3725	E 2,498,895.7567	E 2,499,095.7030
Δ 5° 42' 45" (RT)	Δ 20° 39' 54" (RT)	Δ 1° 30' 37" (LT)
D 5° 43' 46"	D 12° 00' 00"	D 2° 00' 00"
R 1,000.00	R 477.46	R 2,864.79
L 99.70	L 172.21	L 75.51
T 49.89	T 87.05	T 37.76

CURVE UNION-7	CURVE UNION-8
PI 36+36.71	PI 40+39.51
N 564,662.1599	N 564,690.7178
E 2,499,449.6950	E 2,499,852.6249
Δ 15° 52' 25" (RT)	Δ 9° 33' 40" (RT)
D 9° 00' 00"	D 9° 00' 00"
R 636.62	R 636.62
L 176.37	L 106.24
T 88.76	T 53.24

LIMIT OF CONSTRUCTION
€ ALIGNMENT A STA. 304+78.06
N 564721.1832
E 2499099.0538

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PRELIMINARY PLANS

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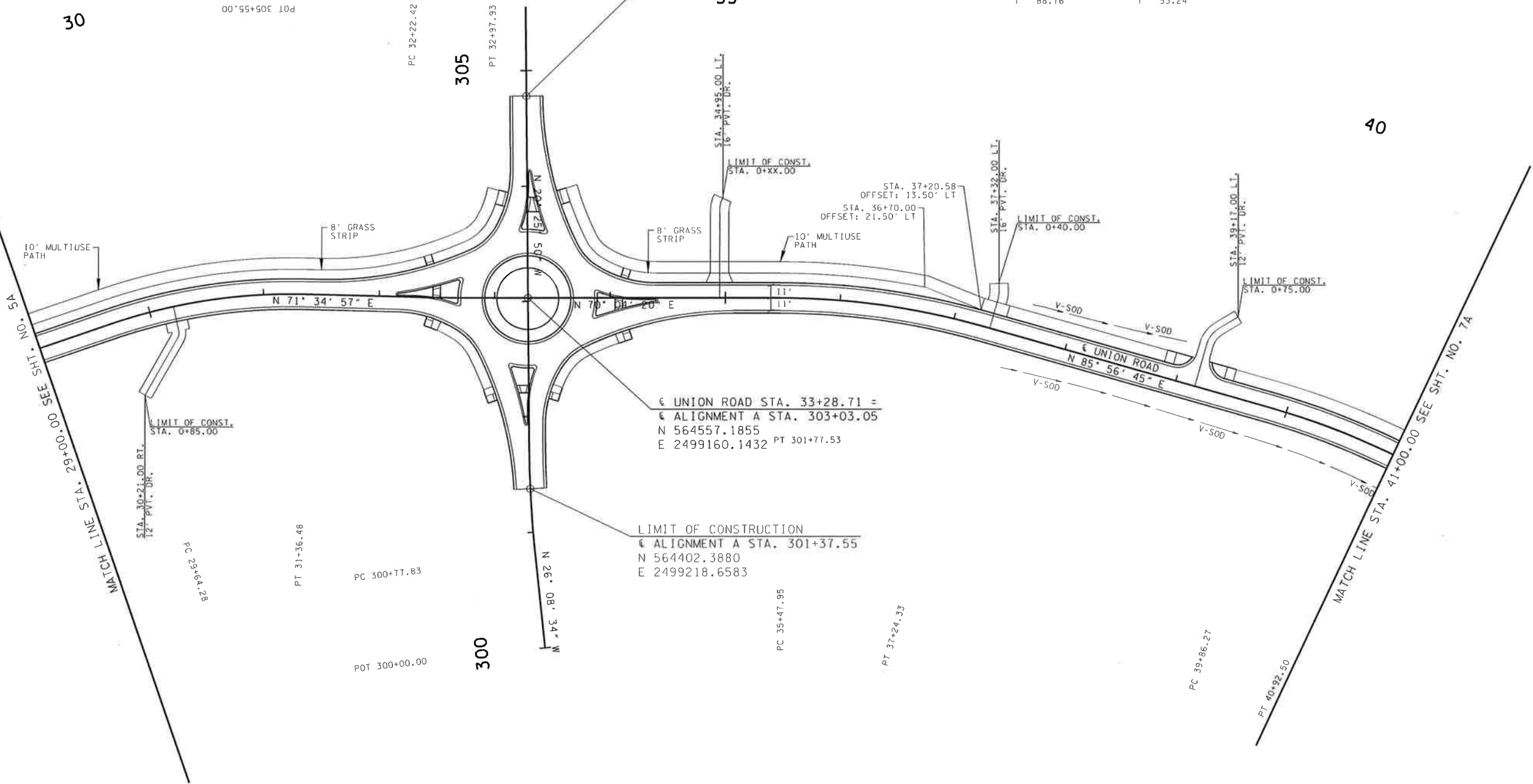
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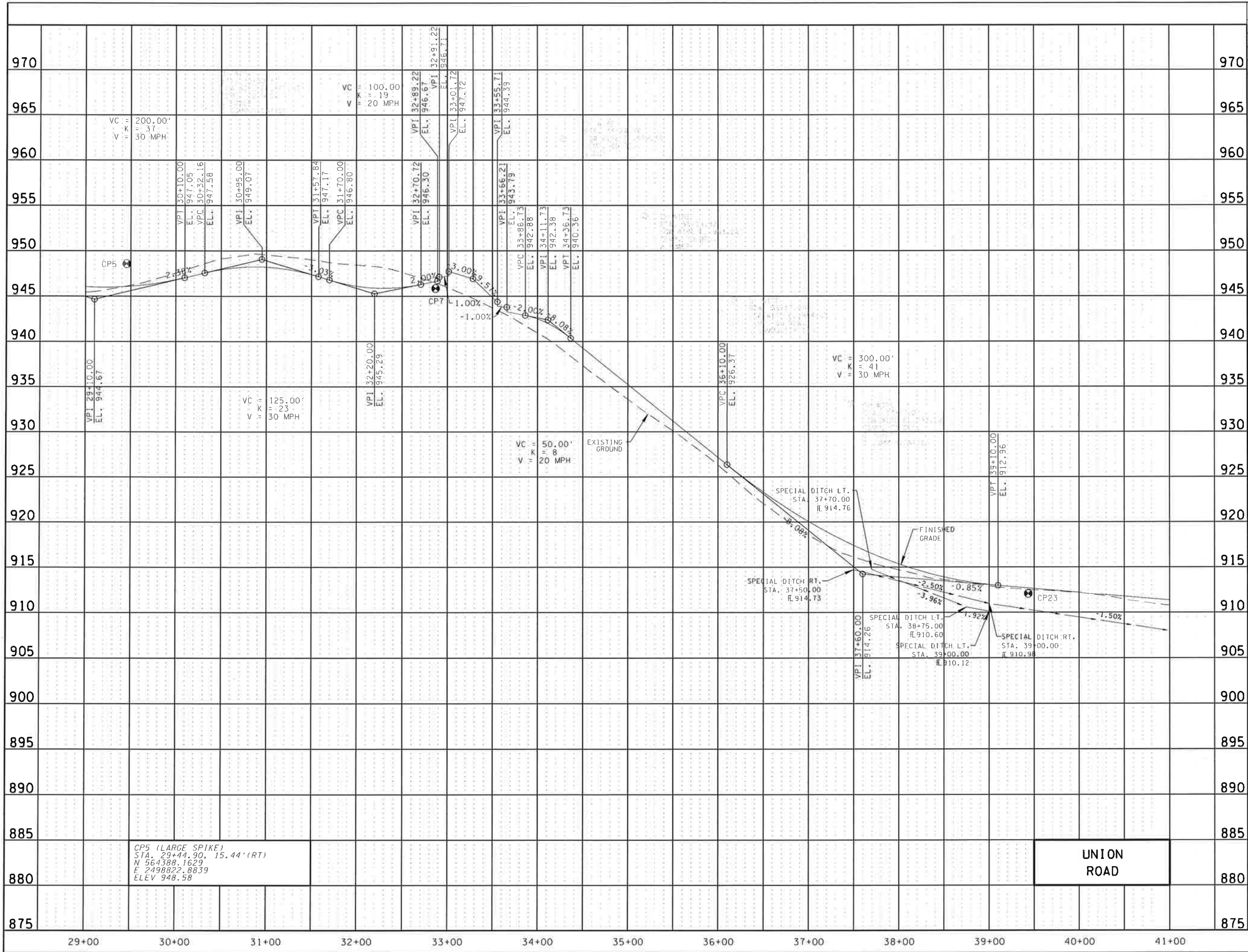
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

PROPOSED
LAYOUT

STA.29+00 TO STA. 41+00

SCALE: 1"=50'



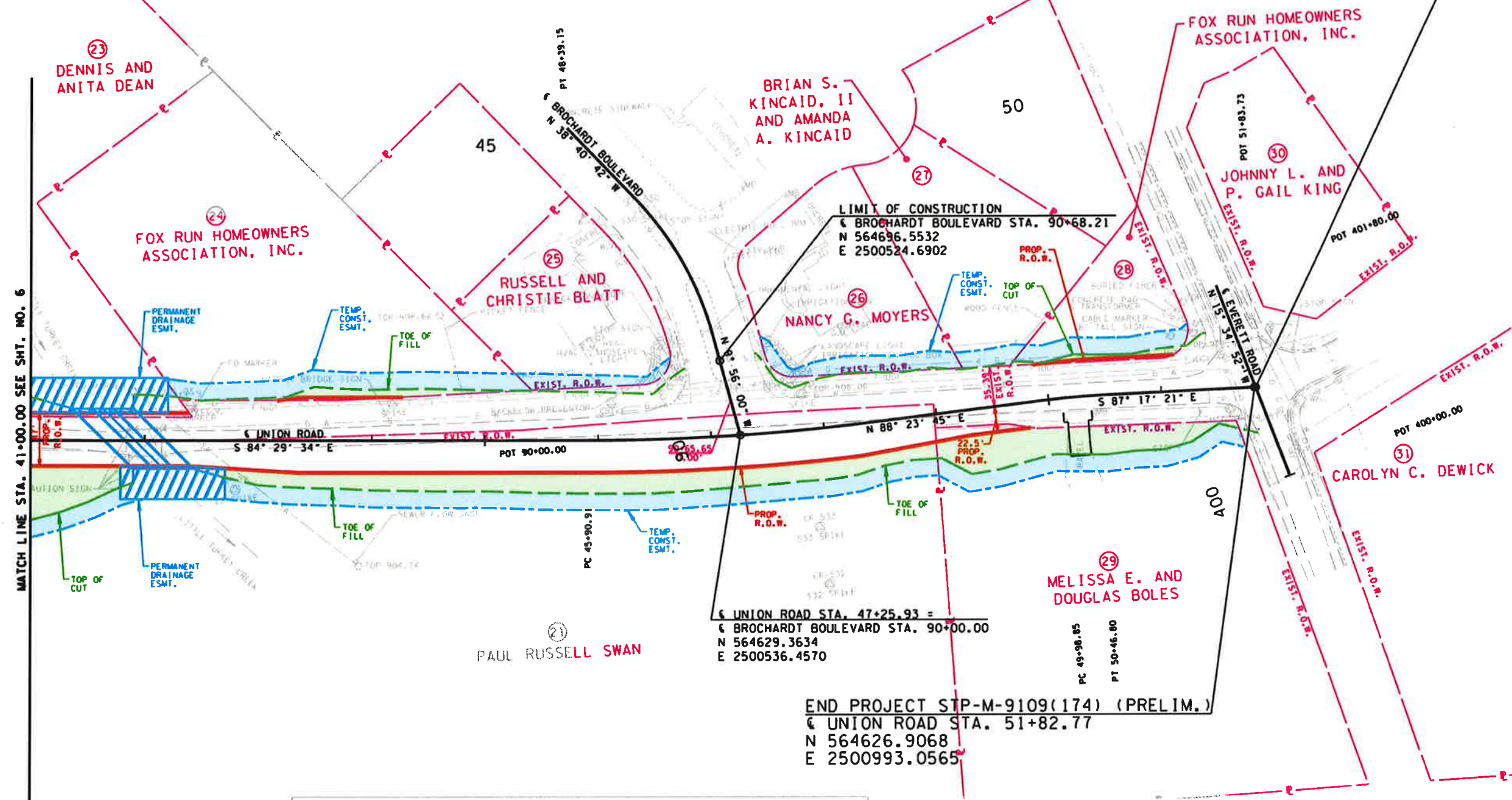


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2019	47LPLM-F0-133	6B
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SEALED BY			
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STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION			
PROFILE			
STA. 29+00 TO STA. 41+00 SCALE: 1"=50' HORIZ. 1"=5' VERT.			

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2019	47LPLM-F0-133	7

CURVE UNION-9	CURVE UNION-10	CURVE BROCHARDT-1
PI 47+15.19	PI 50+22.84	PI 91+63.64
N 564,625.8497	N 564,634.4718	N 564,790.5544
E 2,500,525.4293	E 2,500,833.2779	E 2,500,508.2280
Δ 7° 06' 41" (LT)	Δ 4° 18' 54" (RT)	Δ 28° 44' 42" (LT)
D 2° 51' 53"	D 9° 00' 00"	D 20° 30' 05"
R 2,000.00	R 636.62	R 275.00
L 248.24	L 47.94	L 137.97
T 124.28	T 23.98	T 70.47

§ UNION ROAD STA. 51+83.73 =
 § EVERETT ROAD STA. 400+83.52
 N 564626.8617
 E 2500994.0101



MATCH LINE STA. 41+00.00 SEE SHT. NO. 6

POINT	NORTH	EAST	ELEVATION	STATION	OFFSET	FEATURE	DESCRIPTION
9	564703.6610	2500066.7040	306.5140	42+43.10	-32.45	XCP	R-10 SPIKE
10	564605.9380	2500070.1570	320.4050	51+60.70	18.03	XCP	R-10 MAGN
20	564660.2395	2500595.4991	308.5809	42+82.95	-31.69	XCP	20 SPIKE
21	564669.0718	2500425.8849	305.1121	46+12.27	-33.30	XCP	21 SPIKE
22	564626.9289	2500086.3075	305.1114	42+80.23	-43.46	XCP	22 SPIKE
24	564681.0957	2500133.5361	307.4631	44+16.82	-32.96	XCP	24 SPIKE

PRELIMINARY
PLANS

SEALED BY

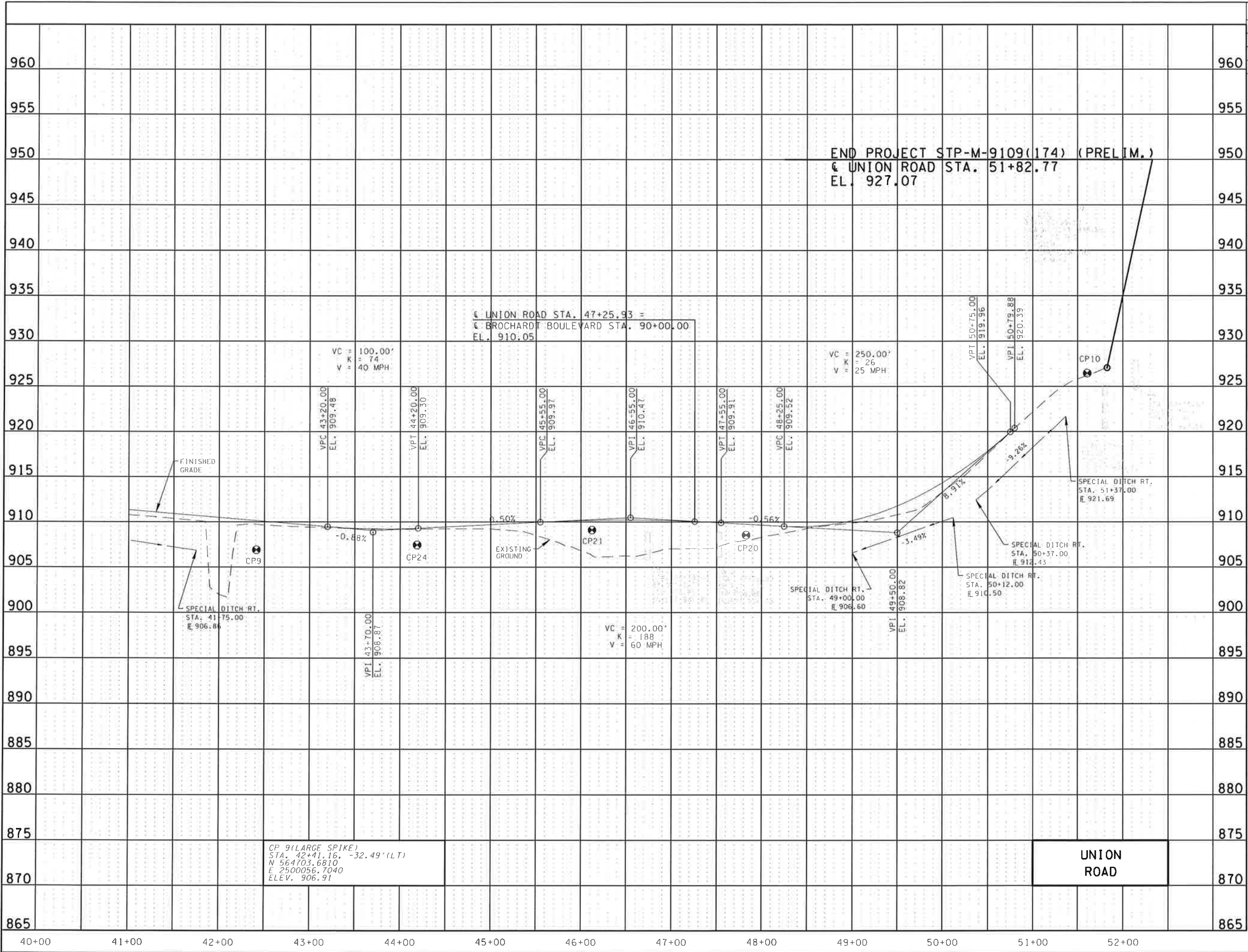
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 THE TGRN. ALL ELEVATIONS ARE
 REFERENCED TO THE NAVD 1988

STATE OF TENNESSEE
 DEPARTMENT OF
 TRANSPORTATION

PRESENT
LAYOUT

STA. 41+00 TO E.O.P.
 SCALE: 1"=50'

\$\$\$\$\$\$SYTIME\$\$\$\$\$\$
 \$\$\$\$\$\$GNSPEC\$\$\$\$\$\$



PRELIMINARY PLANS

SEALED BY

COORDINATES ARE NAD/83(1995),
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STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

PROFILE

STA. 41+00 TO E.O.P.
SCALE: 1"=50' HORIZ.
1"=5' VERT.

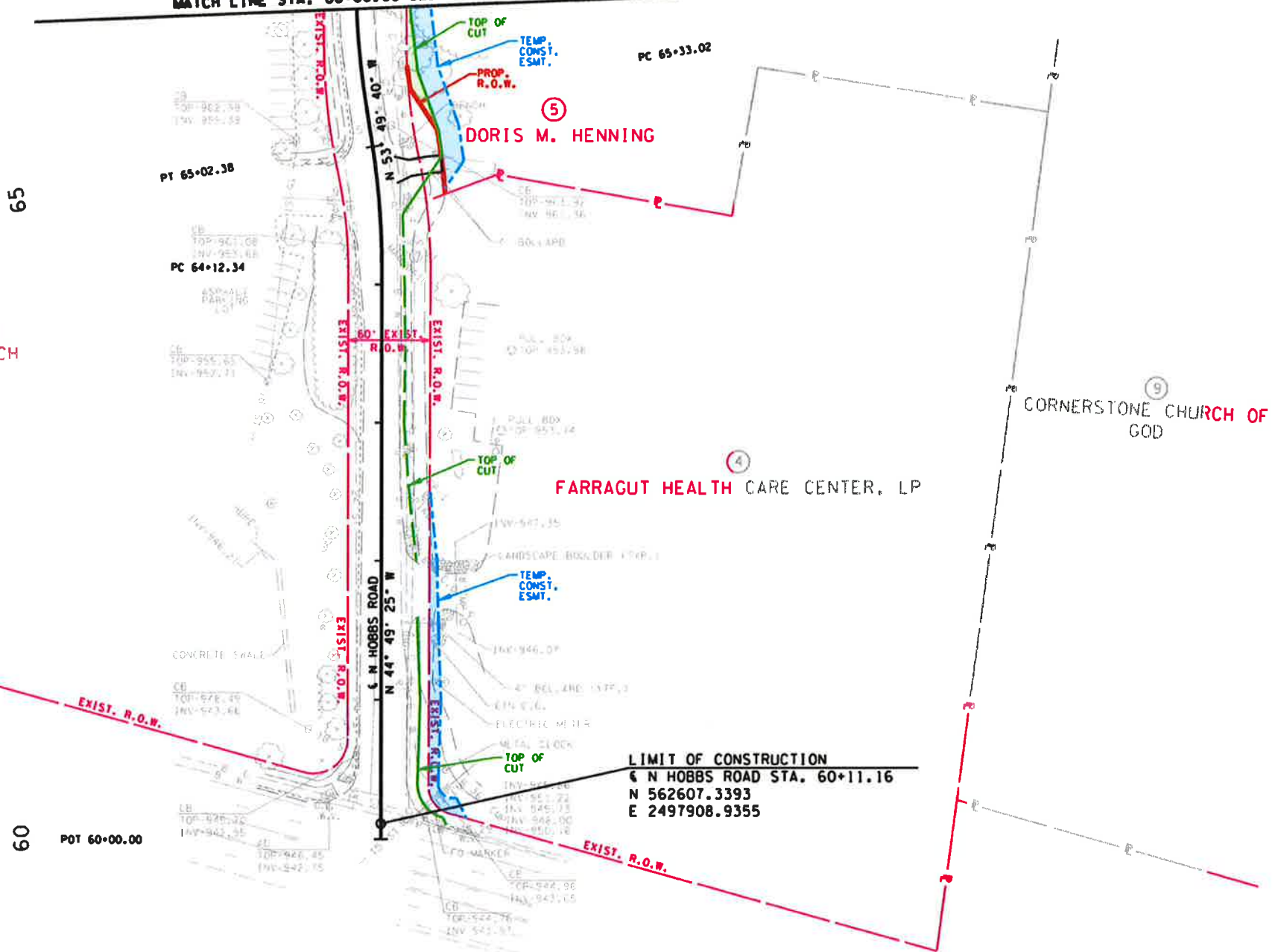
TYPE	YEAR	PROJECT NO	SHEET NO
PRELIM	2019	47LPLM-F0-133	8

CURVE HOBBS-1
PI 64+57.45
N 562,923.8883
E 2,497,594.3282
A 9° 00' 15" (LT)
D 10° 00' 00"
R 572.96
L 90.04
T 45.11

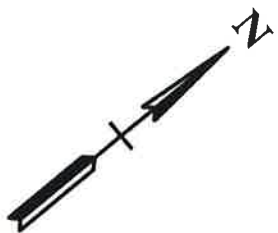
CURVE HOBBS-2
PI 65+77.54
N 562,994.8743
E 2,497,497.2392
A 8° 53' 09" (RT)
D 10° 00' 00"
R 572.96
L 88.86
T 44.52

③
CHRIST COVENANT
PRESBYTERIAN CHURCH

MATCH LINE STA. 66+00.00 SEE SHT. NO. 4



CONTROL POINT DATA						
POINT	NORTH	EAST	ELEVATION	STATION	OFFSET	FEATURE DESCRIPTION
1	562797.7800	2497767.7650	952.8710	62+45.75	34.12	XCP RKT SPIRE
11	562915.2219	2497637.8346	962.5453	64+20.29	24.81	XCP SPR 11 MAG



PRELIMINARY
PLANS

SEALED BY

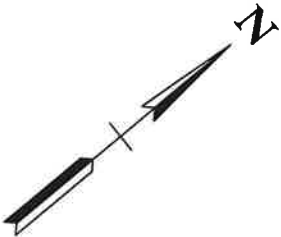
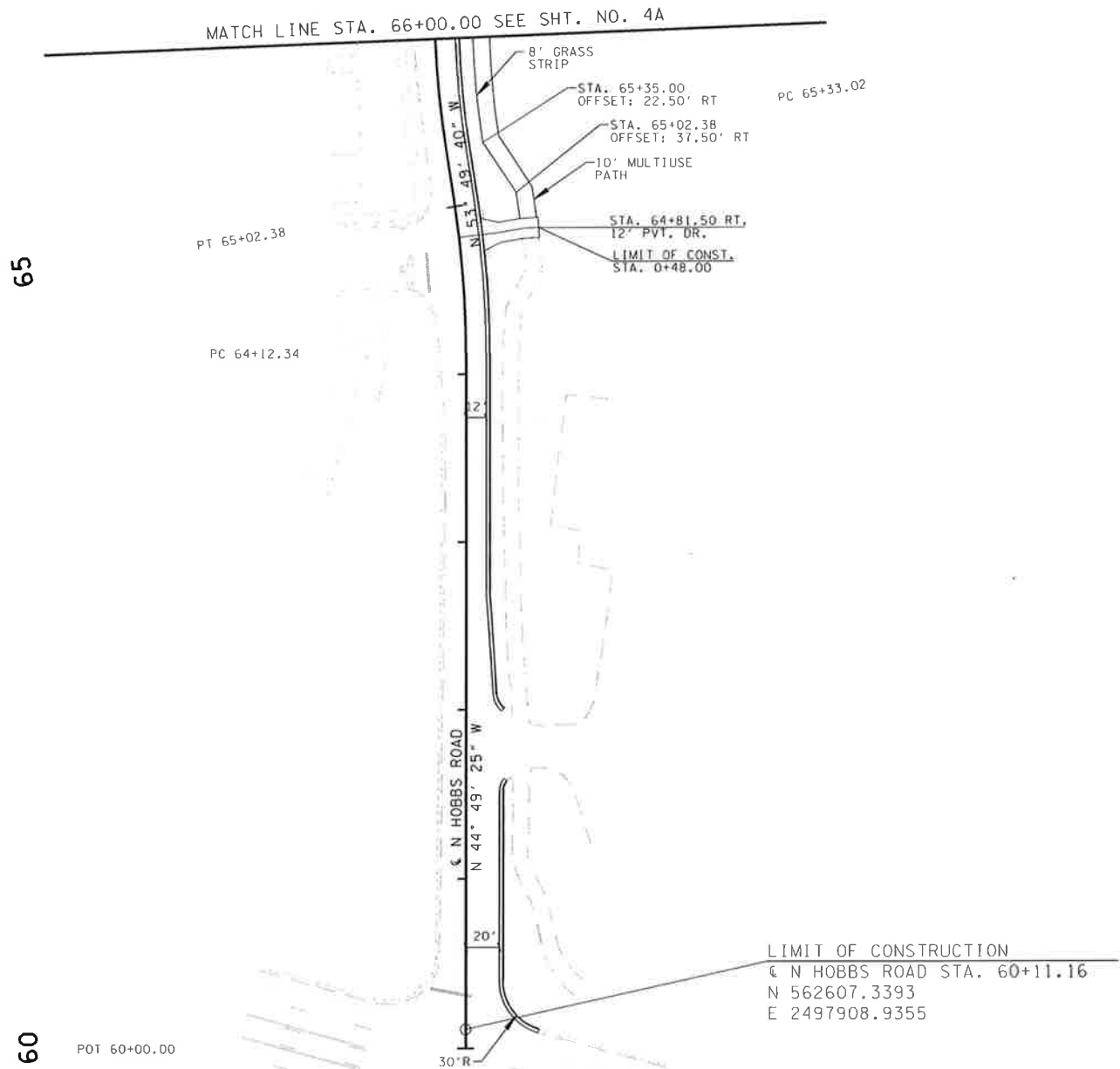
COORDINATES ARE NAD/83(1995).
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.00009 AND TIED TO
THE TGRN. ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

PRESENT
LAYOUT
STA. 60+11 TO STA. 66+00
SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2019	47LPLM-F0-133	8A

CURVE HOBBS-1	CURVE HOBBS-2
PI 64+57.45	PI 65+77.54
N 562,923.8883	N 562,994.8743
E 2,497,594.3282	E 2,497,497.2392
Δ 9° 00' 15" (LT)	Δ 8° 53' 09" (RT)
D 10° 00' 00"	D 10° 00' 00"
R 572.96	R 572.96
L 90.04	L 88.86
T 45.11	T 44.52



PRELIMINARY
PLANS

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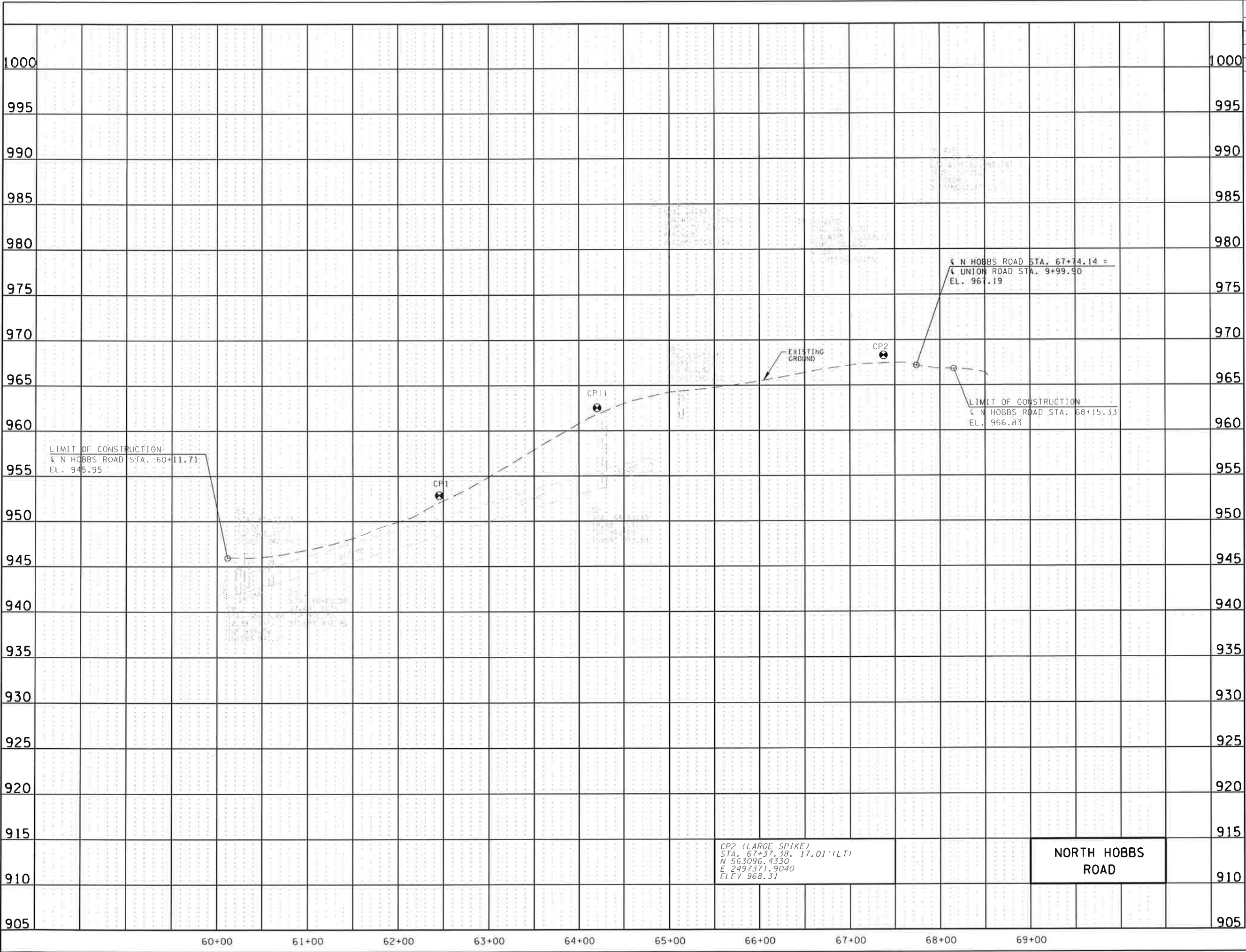
COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.00009 AND TIED TO
THE TGRN. ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

PROPOSED
LAYOUT

60+11.16 TO STA.66+00

SCALE: 1"=50'



TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2019	47LPLM-F0-133	8B

PRELIMINARY PLANS

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00009, AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

PROFILE

STA. 60+11 TO STA. 68+15
SCALE: 1"=50' HORIZ.
1"=5' VERT.