

Hollie Berry  
Mayor

*City of Red Bank*  
**Municipal Planning Commission**

John Alexander  
Interim City Manager

**WORK SESSION AGENDA**  
**June 15, 2021**  
**12:00 pm**  
**Red Bank City Hall**

**I. CALL TO ORDER**

**II. ROLL CALL** – Secretary – Billy Cannon

- |                                               |                                                |
|-----------------------------------------------|------------------------------------------------|
| <input type="checkbox"/> Commissioner Browder | <input type="checkbox"/> Commissioner Millard  |
| <input type="checkbox"/> Commissioner Cannon  | <input type="checkbox"/> Commissioner Skonberg |
| <input type="checkbox"/> Commissioner Luther  |                                                |

**III. Agenda items for the June 17, 2021 regular planning commission meeting:**

A. CONSIDERATION OF THE MINUTES

1. May 20, 2021

B. NEW BUSINESS

1. Final Plat for B.C. Subdivision (930 Lullwater Road)
2. Red Bank Bike/Walk Boulevard Project
3. Ordinance authorizing the City of Red Bank to require certain building materials to be restricted
4. Any properly presented new business

C. UNFINISHED BUSINESS

1. Steep slope ordinance discussion
2. Native Tree Ordinance
3. Any properly presented unfinished business

D. OTHER BUSINESS

**IV. ADJOURNMENT**

Hollie Berry  
Mayor

*City of Red Bank*  
**Municipal Planning Commission**

John Alexander  
Interim City Manager

**REGULAR MEETING AGENDA**

**June 17, 2021**

**6:00 pm**

**Red Bank City Hall**

**I. CALL TO ORDER**

**II. ROLL CALL** – Secretary – Billy Cannon

☐ Commissioner Browder

☐ Commissioner Millard

☐ Commissioner Cannon

☐ Commissioner Skonberg

☐ Commissioner Luther

**III. INVOCATION** – Commissioner Smith

**IV. PLEDGE OF ALLEGIANCE** – Commissioner Hafley

**V. CONSIDERATION OF THE MINUTES**

1. May 20, 2021

**VI. NEW BUSINESS**

1. Final Plat for B.C. Subdivision (930 Lullwater Road)
2. Red Bank Bike/Walk Boulevard Project
3. Ordinance authorizing the City of Red Bank to require certain building materials to be restricted
4. Any properly presented new business

**VII. UNFINISHED BUSINESS**

1. Steep slope ordinance discussion
2. Any properly presented unfinished business

**VIII. OTHER BUSINESS**

**IX. ADJOURNMENT**

---

## MEMORANDUM

---

**To:** Members of the Red Bank Planning Commission  
**Cc:** John Alexander, Interim City Manager  
**From:** Ashley Gates, Regional Planner  
**Date:** June 11, 2021  
**Subject:** Final Plat for B.C. Subdivision (930 Lullwater Road)

### SUMMARY

**Parcel Number:** 117K C 010  
**Owners:** Brothers Construction  
**Acreage:** 1.067 acres  
**Zoning:** R-T/Z, limited to up to 6 single-family detached homes  
**Number of Lots:** 6  
**Staff Recommendation:** Approval subject to required signatures

### ANALYSIS

#### Subdivision Description

The plat creates 6 lots that have 40 to 49 feet of frontage on Lullwater Road. The lots range in size from 0.16 to 0.22 acres. While the lots are long and narrow, the slope of the land makes the rear of the lots less desirable for development.

#### Zoning

The lots meet the dimensional requirements of the R-T/Z zone. There was a condition on the rezoning for this property limiting the development to six single-family detached homes. The plat meets this requirement.

#### Land Use Plan

The development of new small lot single-family homes at this location would increase the variety of the housing stock in Red Bank and address Goal C of the Red Bank Land Use Plan:

**C-GOAL:** Attract residential developers back to Red Bank for new development and redevelopment.

**ACTION:** New residential zones that provide more options and diversity of development while still protecting single-family neighborhoods.

**ACTION:** Reduced minimum lot size standards and setback requirements to make Red Bank competitive with surrounding communities.

### RECOMMENDATION

Staff recommends approval subject to required signatures.

THIS DRAWING IS THE PROPERTY OF BEGINNING POINT SURVEYS, INC. AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART OR USED TO FURNISH INFORMATION TO OTHERS, OR FOR ANY OTHER PURPOSE DETRIMENTAL TO THE INTEREST OF BEGINNING POINT SURVEYS, INC. AND IS TO BE RETURNED UPON REQUEST.

REFERENCE MATERIAL & NOTES:

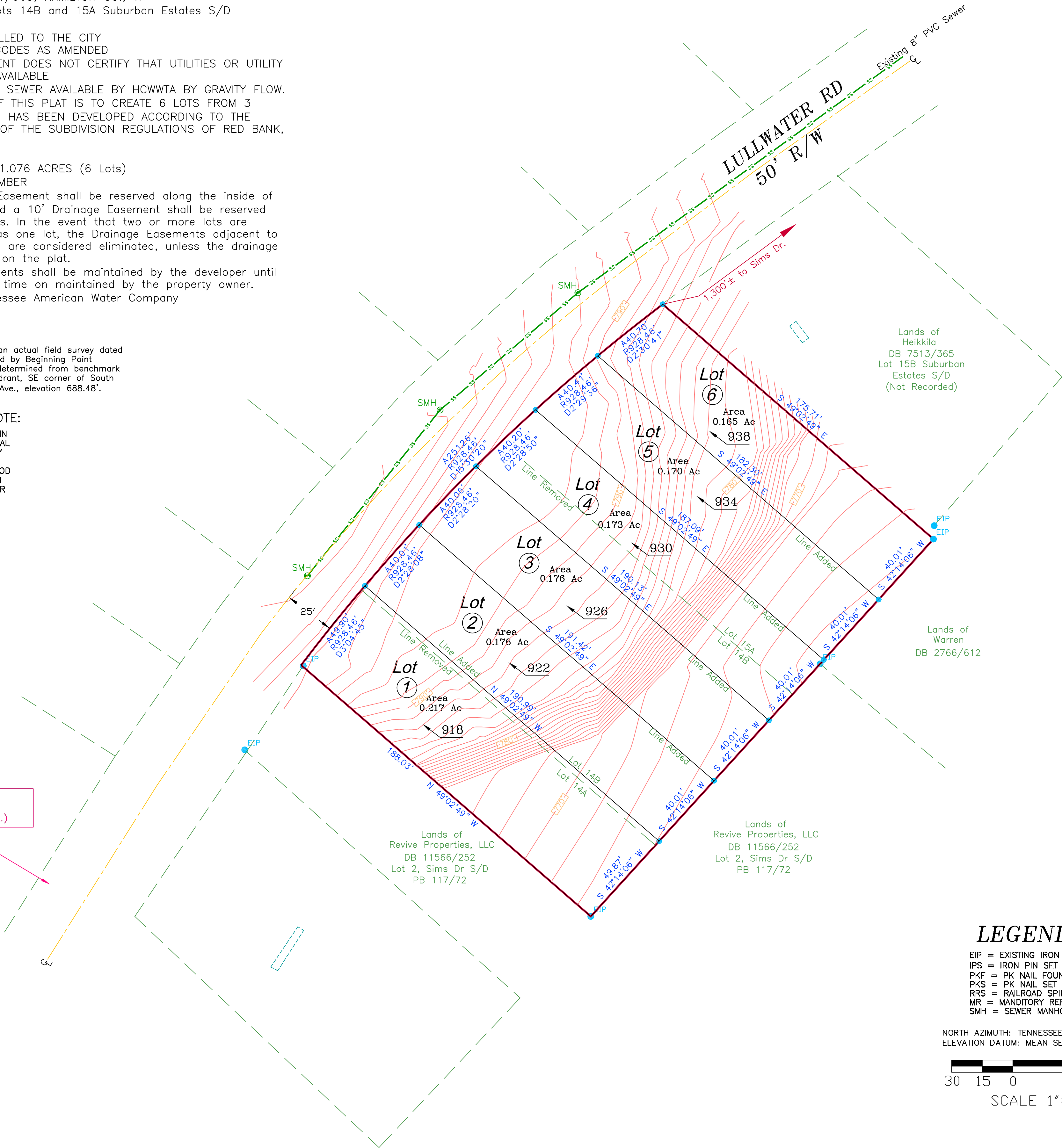
- 1) ELEVATION DATUM: Mean Sea Level, NGVD 88
- 2) TAX ID: 117K-C-010
- 3) DEED BOOK 9621/963, HAMILTON CO., TN
- 4) Part Lot 14A, Lots 14B and 15A Suburban Estates S/D (Not Recorded)
- 5) ATTENTION IS CALLED TO THE CITY OF RED BANK CODES AS AMENDED
- 6) LOCAL GOVERNMENT DOES NOT CERTIFY THAT UTILITIES OR UTILITY CONNECTIONS ARE AVAILABLE
- 7) PUBLIC SANITARY SEWER AVAILABLE BY HCWTA BY GRAVITY FLOW.
- 8) THE PURPOSE OF THIS PLAT IS TO CREATE 6 LOTS FROM 3
- 9) THIS SUBDIVISION HAS BEEN DEVELOPED ACCORDING TO THE DESIGN STANDARDS OF THE SUBDIVISION REGULATIONS OF RED BANK, TENNESSEE
- 10) ZONE R-TZ
- 11) TOTAL AREA = 1.076 ACRES (6 Lots)
- 12) ① = LOT NUMBER
- 13) A 5' Drainage Easement shall be reserved along the inside of all side lot lines and a 10' Drainage Easement shall be reserved along the Rear Lines. In the event that two or more lots are combined or used as one lot, the Drainage Easements adjacent to the interior lot lines are considered eliminated, unless the drainage easement is shown on the plat.
- 14) Drainage Easements shall be maintained by the developer until sold and from that time on maintained by the property owner.
- 15) Water by: Tennessee American Water Company

Topo was obtained from an actual field survey dated September 2020 conducted by Beginning Point Surveys. Elevations were determined from benchmark located at top of Fire Hydrant, SE corner of South Greenwood and Anderson Ave., elevation 688.48'.

FLOOD HAZARD NOTE:

THIS PROPERTY LIES WITHIN ZONE "X" (OUTSIDE NORMAL FLOODING) AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD MAP OF CHATTANOOGA, TN COMMUNITY PANEL NUMBER 47065C-0327-G DATED FEBRUARY 3, 2016

SITE BENCHMARK  
TOP OF HYDRANT  
EL 795.66' (M.S.L.)



LEGEND

EIP = EXISTING IRON PIN  
IPS = IRON PIN SET  
PKF = PK NAIL FOUND  
PKS = PK NAIL SET  
RRS = RAILROAD SPIKE  
MR = MANDATORY REFERRAL  
SMH = SEWER MANHOLE

NORTH AZIMUTH: TENNESSEE GRID (NAD 83).  
ELEVATION DATUM: MEAN SEA LEVEL (NGVD 88)

30 15 0 30 60  
SCALE 1"=30'

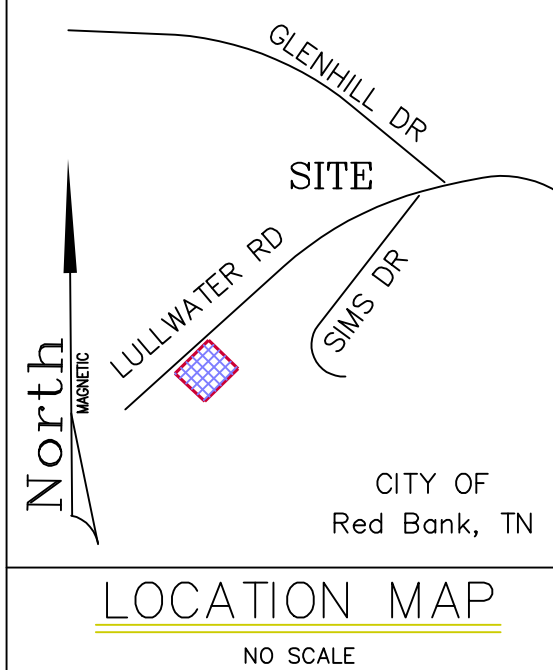
THE UTILITIES AND STRUCTURES AS SHOWN ON THIS PLAN WERE FOUND PER ABOVE GROUND EXAMINATION OF THE SITE, BASED ON VISIBLE INDICATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXACT LOCATIONS AND ELEVATIONS OF ALL UNDERGROUND UTILITIES AND OTHER STRUCTURES BEFORE THE START OF CONSTRUCTION ON THIS PROJECT. THIS NOTICE APPLIES TO INFORMATION SHOWN ON THIS PLAN OR ANY ASSOCIATES PLAN FOR THIS PROJECT - INCLUDING PLANS OF THE SAME PREPARED BY OTHERS. CALL 811 BEFORE YOU DIG!

APPROVED FOR RECORDING  
HAMILTON COUNTY GIS DEPT  
DATE \_\_\_\_\_  
BY \_\_\_\_\_

HAMILTON COUNTY WMTA  
DATE \_\_\_\_\_  
BY \_\_\_\_\_

JURISDICTIONAL AUTHORITY  
DATE \_\_\_\_\_  
BY \_\_\_\_\_

RED BANK MUNICIPAL  
PLANNING COMMISSION  
DATE \_\_\_\_\_  
BY \_\_\_\_\_



BEGINNING POINT SURVEYS, INC.

Consulting Land Surveyors

101 Tuxedo Circle, Chattanooga TN 37411

(423) 624-0020

FINAL PLAT

B.C. S/D

RED BANK, HAMILTON CO., TN

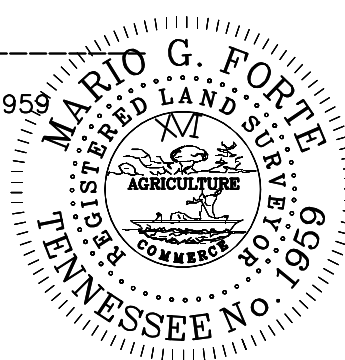
PREPARED FOR  
BROTHERS CONSTRUCTION

OWNER'S CERTIFICATION:  
I HEREBY CERTIFY THAT I AM THE OWNER  
IN FEE SIMPLE OF THE TRACT (S) OF LAND  
SHOWN HEREON. I HEREBY ADOPT THIS  
PLAT AS MY NEW PLAN OF PROPERTY.

OWNER: BROTHERS CONSTRUCTION  
Elliott Brewer  
P.O. Box 15446  
Chattanooga, TN 37415  
Phone: 423.488.6041

SURVEYOR'S CERTIFICATION:  
I HEREBY CERTIFY THAT THIS IS A  
CATEGORY 1 SURVEY AND THAT THE RATIO  
OF PRECISION OF THE UNADJUSTED  
SURVEY IS GREATER THAN 1:20,000 AS  
SHOWN HEREON. I FURTHER CERTIFY THAT I  
HAVE SURVEYED THE PROPERTY SHOWN  
HEREON AND THAT THIS SURVEY IS  
CORRECT TO THE BEST OF MY KNOWLEDGE  
AND BELIEF.

SURVEYOR  
TENN. REG # 1956



| DRAWN BY:   | MGF      | REVISION | DATE |
|-------------|----------|----------|------|
| CHECKED BY: | MGF      |          |      |
| DATE:       | 5/6/2021 |          |      |
| SCALE:      | 1" = 30' |          |      |
|             |          |          |      |
|             |          |          |      |
|             |          |          |      |
|             |          |          |      |

SHEET NO.  
1 OF 1

JOB NO.

TN-1845HC

---

## MEMORANDUM

---

**To:** Members of the Red Bank Planning Commission

**Cc:** John Alexander, Interim City Manager

**From:** Ashley Gates, Regional Planner

**Date:** June 11, 2021

**Subject:** Red Bank Bike / Walk Boulevard Project

### SUMMARY

As part of a study conducted in 2018 and 2019, a bike/walk boulevard along Lyndon Avenue and Redding Road was studied and proposed. These paths would connect to a larger greenway that connects to North Shore, through White Oak Park and Stringers Ridge. The Board of Commissioners is considering applying to a grant to fund this portion of the greenway.

### Bike / Walk Boulevards

Bike/Walk Boulevards are low-traffic shared roadways that provide traffic calming and safety measures to encourage and prioritize cycling. They are shared roadways, not separate paths.

### Project Design

The project is at the conceptual stage and has not been designed. Proposed elements include wayfinding signage, road striping, safety signage, crossing enhancements and traffic calming measures. High visibility crossings with painted symbols for cyclists are proposed at two locations. A traffic circle at Piedmont Circle is also recommended.

### Location

The proposed project has four main components:

1. Lyndon Avenue Segment: Along Lyndon Avenue from Midvale to Culver Street
2. Redding Road Segment: Along Williamsburg Plaza, Greenwich Avenue, Newberry Street and Redding Road connecting Baxter to Lawton/Bank Street.
3. Memorial Drive Connection: A connection to the proposed greenway along Memorial Drive. This would be a separate pathway rather than a bike/walk boulevard
4. Piedmont Circle Connection: This would connect Redding Road to the proposed rail-with-trail greenway

### **Surrounding Land Use**

The proposed path is through a primarily residential area. There are some commercial businesses along Dayton Boulevard, but the railroad sits between the proposed path and the businesses. There is also a storage facility and rail yard between Harding and Newberry Street along the Greenwich Avenue Segment. There is also a park at the northern portion of the Redding Road segment.

### **Land Use Plan**

The proposed path will help to meet Goal D of the transportation portion of the plan. If designed correctly, it may also help achieve Goal B.

B-GOAL: Provide road improvements to enhance safety and ease of traffic flow for residential side streets.

ACTION: Widen narrow side streets where necessary and so desired by a majority of the residents on those streets.

D-GOAL: Facilitate bicycle transit.

ACTION: Develop a plan to provide for safer bikeways and better connectivity south into Chattanooga. Determine feasibility of Dayton Blvd. bike lane.

### **Connectivity**

The proposed path will provide a much-needed bike pathway that parallels Dayton Boulevard. The proposed path will provide a safer bike that extends almost from Ashland Terrace to Midvale Avenue. The long-term plan will provide greenway infrastructure, which in many communities has been transformative.

There are significant challenges to developing bike infrastructure in Red Bank. There is limited right-of-way, narrow roads, a tunnel that significantly limits access to the North Shore, and a railroad directly parallel to the main traffic corridor. These challenges are reflected in the limitations to this proposed pathway:

- These roads will not improve access for bicycles on Dayton Boulevard, where most businesses are located.
- There is a break in the path at Culver Street.
- While this is called a Bike/Walk Boulevard, without actual sidewalks the project will provide limited pedestrian connectivity.

- The railroad may require that fencing be installed along Lyndon Avenue, which could be considered a negative by those that live along Lyndon Avenue. It could be a positive, though, if it is designed appropriately.
- Full connectivity to the North Shore and Chattanooga will be dependent on the TPO and City of Chattanooga investing in a portion of the greenway

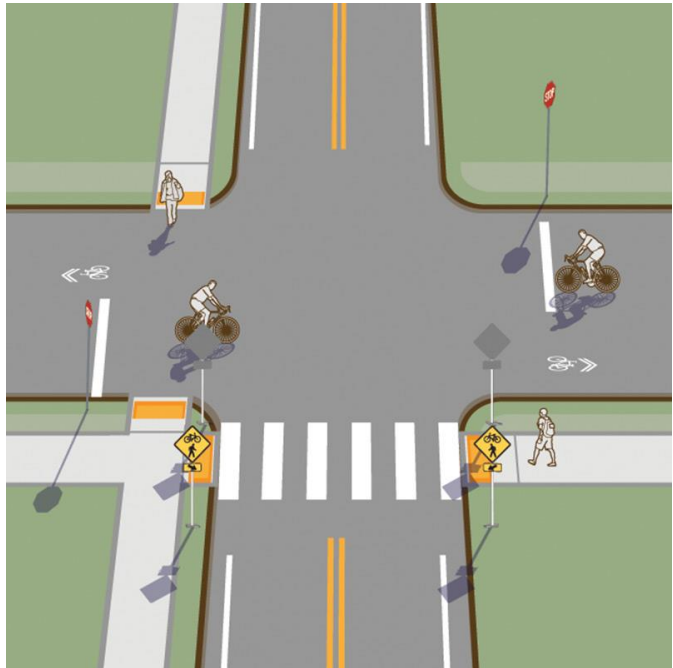
#### **Staff Recommendation**

While this project does have limitations, it will significantly improve bicycle access and safety in Red Bank. I recommend approval of the project, but with some additional necessary actions:

1. Include the prioritization of the pathway segments in the Planning Commission recommendation. Staff recommends prioritizing Lyndon Avenue, as this would connect with future segments of the greenway.
2. Request outreach to property owners along the proposed project prior to the public hearing.
3. Consider developing guidelines for bike boulevard design.

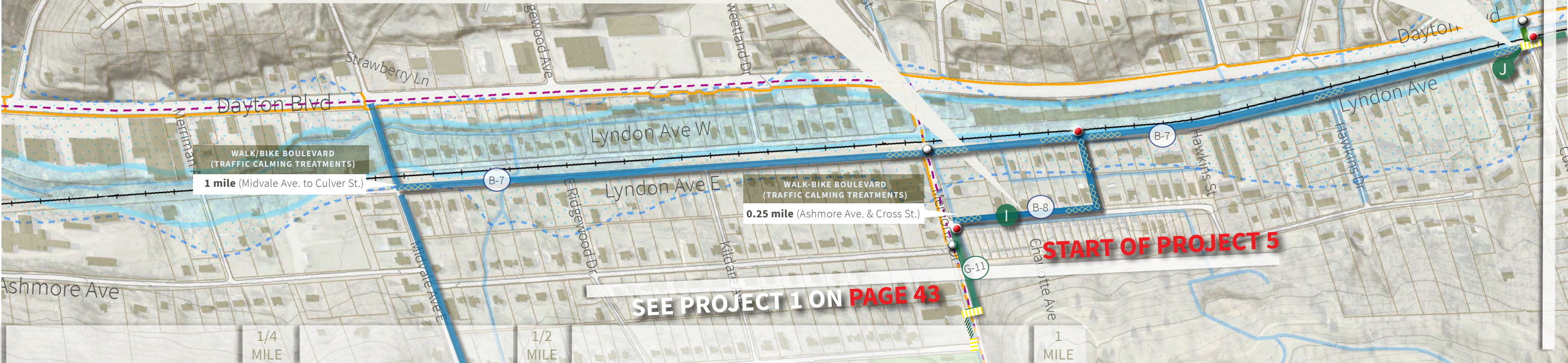
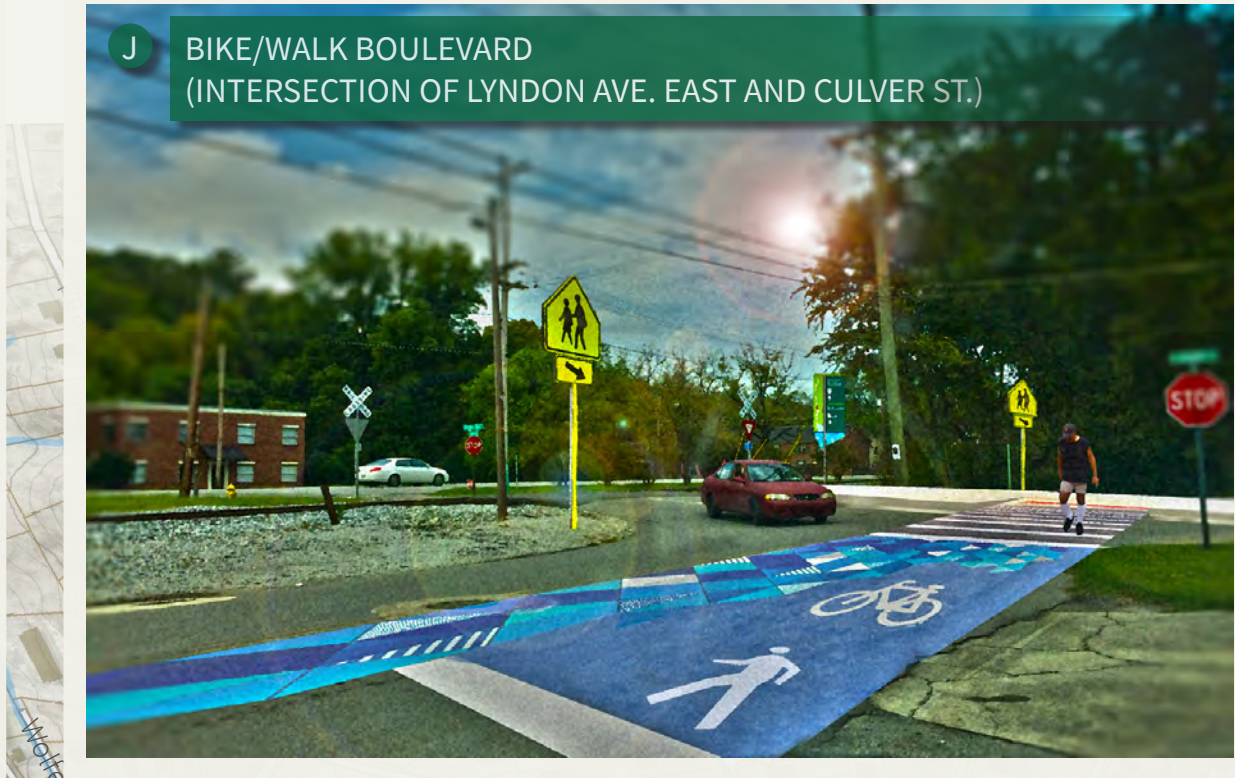
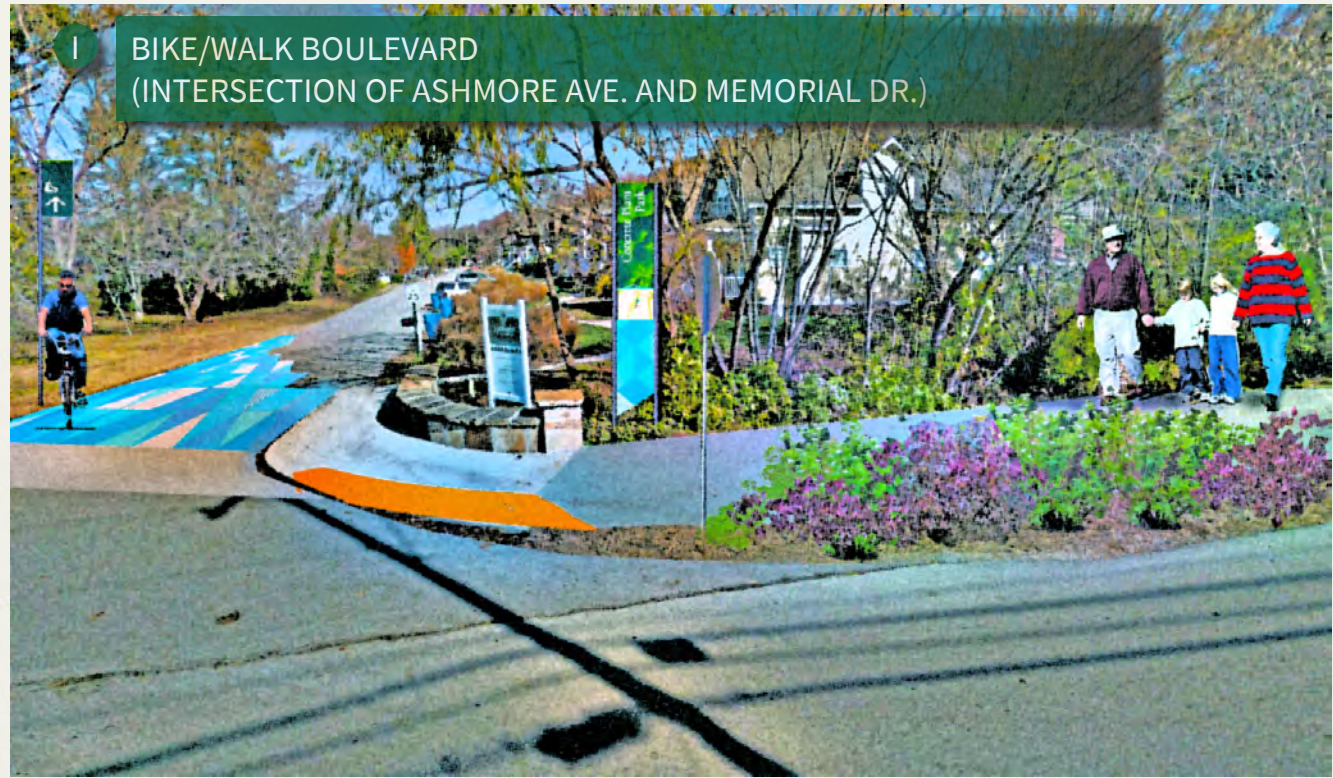
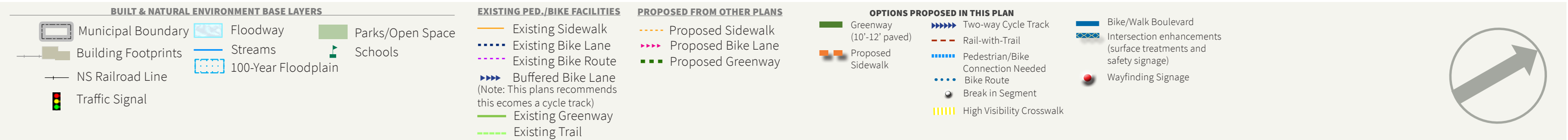
## Bike Boulevard Illustrations







PROJECTS 5  
*Bike/Walk Boulevard Connection  
Through Red Bank*





---

---

## MEMORANDUM

---

---

**To:** Members of the Red Bank Planning Commission

**Cc:** John Alexander, Interim City Manager

**From:** Ashley Gates, Regional Planner

**Date:** June 11, 2021

**Subject:** Ordinance authorizing the City of Red Bank to require certain building materials to be restricted

### Background

As explained in the attached article, Tennessee state law now requires that all municipalities re-authorize all existing restrictions that they have placed on building materials. This must be completed by September 1, 2021.

### Existing Regulations

Red Bank restricts building materials in the follow policies:

- Communication Towers
- Screening Requirements
- Design Review Standards
- Street and Road Construction
- Building and Fire Codes

### Staff Recommendation

Staff recommends re-approving all existing building material restrictions.

## **How House Bill 749 Affects Your Cities' Strong Building Material Standards**

### **By:**

Two bills were proposed in the 2021 Tennessee General Assembly this past session, HB 749 and SB 631. These bills originally amended Tennessee Code which requires the state fire marshal to adopt a minimum statewide fire code and allowed local jurisdictions to adopt and enforce their own local fire codes, so long as they adopt sufficiently up-to-date versions of specific approved industry codes. As it was written, it specified that the state fire code "shall not discriminate against or in favor of particular construction materials or techniques."

On April 13, 2021, an amendment was introduced that made this into a caption bill aimed at building material regulations. The fire marshal and fire code part fell by the wayside, as the main argument became local governments and their right to decide the quality of construction in their community. After much debate, the materials amendment ended up allowing local governments to regulate building materials only if specific procedures were followed. This includes already existing zoning ordinances that reference building materials standards such as exist in Germantown, Franklin, and Gallatin and across the state.

House Bill 749 passed on April 21, 2021 and will go into effect on September 1, 2021. This means all cities that currently have zoning ordinances, overlay districts, PUDs or historic districts that include building material requirements have until then to follow the procedures laid out in the bill or have these requirements erased. All cities that would like to create design standards that regulate building materials going forward will also have to follow these new procedures.

These procedures simply require a separate stand-alone ordinance to pass building material requirements. The procedures include holding two readings on two separate days of the ordinance, having it be a separate agenda item to be voted on, and requiring specific notice language highlighting that the item pertains to the regulation of building materials. One of the goals of the bill proponents was to require communities that already have material standards to revisit them in a more "transparent way" or have them invalidated. In order to avoid any enforcement gaps of your current materials standards, it will be important that communities adopt their material standards through the new process by September 1<sup>st</sup>, 2021.

As planners, we depend on tools such as building material standards to promote sustainability, high property values, economic growth, and public safety. These new procedures are an attempt to catch many cities off guard and render their material standards void. It is important that we spread the word about this bill and make sure the resilient communities that use material standards to create a sense of place are aware of the steps they need to protect their communities.

---

**MEMORANDUM**

---

**To:** Members of the Red Bank Planning Commission  
**Cc:** John Alexander, Interim City Manager  
**From:** Ashley Gates, Regional Planner  
**Date:** June 11, 2021  
**Subject:** Native Tree Ordinance

**Background**

Additional amendments to the landscape screening requirements have been submitted for Planning Commission review.

**DRAFT 05/20/21**  
(DFM)

**Proposed Red Bank, TN Native Plant Policy**  
(revisions to existing ordinance on plant installation specifications **in bold**)

SECTION 14-903. Plant Installation Specifications

903.01 Intent

**The City of Red Bank prefers the use of native vegetation whenever feasible, for its climatic adaptation, absence of invasiveness, and greater ecological benefits to wildlife, pollinators, soil health and water quality. See Table (xx) for a list of approved native trees and shrubs for various purposes; cultivars of these native species may be used. Other appropriate native tree and shrub species not listed here may be used, contingent upon prior approval by the Red Bank Planning Commission. Non-native, edible fruit-bearing trees and shrubs are recognized as beneficial to the human community, and are allowed, with prior approval.**

**If demonstrated that no native species are suitable or commercially available, hybrids or *non-invasive* exotic species may be used *contingent upon prior approval* by the Red Bank Planning Commission.**

All landscaping material shall be installed in a professional manner, and according to accepted planting procedures specified in the Arboricultural Specifications Manual.

- (A) Class I Shade Trees: These trees are used to meet the tree planting requirements specified in the Street Yard and Parking Lot sections. All Class I

shade trees shall be installed at a minimum of caliper of two (2) inches as measured from two and one-half (2 ½) feet above grade level. Class I shade trees shall also have a minimum expected maturity height of at least ~~thirty-five (35)~~ **twenty (20)** feet and a minimum canopy spread of ~~twenty (20)~~ **fifteen (15)** feet. Evergreen trees can be treated as Class I shade trees provided they meet the minimum maturity height and canopy spread criteria.

(B) Class II Shade Trees: These trees are intended to be used for the planting under overhead power lines only where they encroach into the property. All Class II shade trees shall be installed at a minimum caliper of one and one-half (1 ½) inches as measured at two and one-half (2 ½) feet above grade level from the base of the tree. Class II shade trees shall have a maximum expected maturity height of twenty (20) feet and a minimum canopy spread of ten (10) feet.

(C) Screening Trees: Screening trees are used to meet the tree planting requirements of Section 14-902 Procedure. All screening trees shall be installed at a minimum height of five (5) to six (6) feet and have a minimum expected canopy spread of eight (8) feet.

(D) Screening Shrubs: All screening shrubs shall be installed at a minimum size of three (3) gallons and have an expected maturity height of at least eight (8) feet and a mature spread of at least five (5) feet.

(E) Prohibited Plants: Certain plants are prohibited due to problems with hardiness, maintenance, **invasiveness** and nuisance. See **table (xx)** for **the full list of specific prohibited plants. The City of Red Bank shall not approve, fund, support or participate in planting of the prohibited species under any circumstances. Where already present, the City encourages voluntary eradication of the prohibited species by public and private landowners.**

[Insert Table 14-903.01 here]

## SECTION 14-903. Plant Installation Specifications

### 903.01 Intent

All landscaping material shall be installed in a professional manner, and according to accepted planting procedures specified in the Arboricultural Specifications Manual.

- (A) Class I Shade Trees: These trees are used to meet the tree planting requirements specified in the Street Yard and Parking Lot sections. All Class I shade trees shall be installed at a minimum of caliper of two (2) inches as measured from two and one-half (2 1/2) feet above grade level. Class I shade trees shall also have a minimum expected maturity height of a least thirty-five (35) feet and a minimum canopy spread of twenty (20) feet. Evergreen trees can be treated as Class I shade trees provided they meet the minimum maturity height and canopy spread criteria. When approved by the City Manager, native species may be installed at a height below the minimum provided they are of a size sufficient to withstand external stresses likely to be encountered and are planted in a manner consistent with standard horticultural practices.
- (B) Class II Shade Trees: These trees are intended to be used for the planting under overhead power lines only where they encroach into the property. All Class II shade trees shall be installed at a minimum caliper of one and one-half (1 1/2) inches as measured at two and one-half (2 1/2) feet above grade level from the base of the tree. Class II shade trees shall have a maximum expected maturity height of twenty (20) feet and a minimum canopy spread of ten (10) feet. When approved by the City Manager, native species may be installed at a caliper below the minimum provided they are of a size sufficient to withstand external stresses likely to be encountered and are planted in a manner consistent with standard horticultural practices. For TVA easements, plants shall be selected from the TVA list of "Compatible Trees and Shrubs," which may be obtained by contacting the TVA Transmission Right of Way Team at 884-812-2626.
- (C) Screening Trees: Screening trees are used to meet the tree planting requirements of Section 14-902 Procedure. All screening trees shall be installed at a minimum height of five (5) to six (6) feet and have a minimum expected canopy spread of eight (8) feet. When approved by the

City Manager, native species may be installed at a height below the minimum provided they are of a size sufficient to withstand external stresses likely to be encountered and are planted in a manner consistent with standard horticultural practices.

- (B) Screening Shrubs: All screening shrubs shall be installed at a minimum size of three (3) gallons and have an expected maturity height of at least eight (8) feet and a mature spread of at least five (5) feet. When required by the Design Review Standards to screen parking lots, shrubs shall have a height of between three (3) and six (6) feet. When approved by the City Manager, native species may be installed at a size under three (3) gallons provided they are of a size sufficient to withstand external stresses likely to be encountered and are planted in a manner consistent with standard horticultural practices.

- ~~(D)~~ Prohibited Plants: The City of Red Bank shall not participate in planting of the species under any circumstances. Where already present, the City encourages eradication of these species by public and private landowners. See Table 14-903.03 for the Prohibited Species list. Certain plants are prohibited due to problems with hardiness, maintenance and nuisance. See chart for specific plants.

~~(E)(D)~~

| Table 14-903.01 Plant Installation Specification (Common Name) |                        |                              |                                                 |                         |                        |                           |
|----------------------------------------------------------------|------------------------|------------------------------|-------------------------------------------------|-------------------------|------------------------|---------------------------|
| Class I Shade Trees                                            |                        | Class II Shade Trees         | Screening Trees                                 | Screening Shrubs        | Prohibited Plants      |                           |
| Allee Elm                                                      | Princeton American Elm | Amur Maple                   | Southern Magnolia                               | Burford Holly           | Air-potato             | Mimosa                    |
| American Hornbeam                                              | Red Maple              | Autumn Flowering Cherry      | American Holly                                  | Cherry Laurel           | Amur Bush Honeysuckle  | Morrow's Bush Honeysuckle |
| American Hophornbeam                                           | Red oak                | Crape myrtle                 | Atlas Cedar                                     | Eastern Arborvitae      | Asian Bittersweet      | Mulberry                  |
| Aristocrat Pear                                                | River Birch            | Flowering Dogwood            | Canadian Hemlock                                | English Holly           | Autumn Olive           | Multiflora Rose           |
| Athena Elm                                                     | Sawtooth Oak           | Golden Raintree              | Carolina Hemlock                                | English Laurel          | Bradford Pear          | Princess Tree             |
| Black Gum                                                      | Scarlet Oak            | Hedge Maple                  | Deodar Cedar                                    | Fragrant Olive          | Bush Honeysuckle       | Purple Loosestrife        |
| Chinese Pistache                                               | Seedless Honey Locust  | Kousa Dogwood                | Eastern Holly                                   | Leatherleaf Viburnum    | Chinese Privet         | Sericea Lespedeza         |
| Cleveland Select Pear                                          | Shumard Oak            | Okame Cherry                 | Green Giant Arborvitae                          | Nellie R. Stevens Holly | Common Privet          | Shrub Honeysuckle         |
| Dawn Redwood                                                   | Silver Linden          | Redbud                       | Leyland Cypress                                 | Wax Mirtle              | Common Reed            | Siberian Elm              |
| Drake elm                                                      | Southern Sugar Maple   | Serviceberry                 | Loblolly Pine*                                  |                         | English Ivy            | Silver Maple              |
| English Oak                                                    | Sugar Maple            | Sweetbay Magnolia            | Virginia Pine*                                  |                         | Eurasian Water Milfoil | Silver Poplar             |
| European Hornbeam                                              | Swamp White Oak        | Thornless Cockspur Hawthorne | White Pine*                                     |                         | Garlic Mustard         | Sweetgum                  |
| Ginkgo (use male only)                                         | Water Oak              | Trident Maple                | *should not be used near high vehicular traffic |                         | January Jasmine        | Tartarian Honeysuckle     |
| Golden Raintree                                                | White Oak              | Winter King Hawthorne        |                                                 |                         | Japanese Bamboo        | Thorny Olive              |
| Japanese Pogodatree                                            | Willow Oak             | Yoshino Cherry               |                                                 |                         | Japanese Grass         | Tree of Heaven            |
| Japanese Zelkova                                               | Yellowwood             |                              |                                                 |                         | Japanese Honeysuckle   | Tropical Soda Apple       |
| Katsura Tree                                                   |                        |                              |                                                 |                         | Japanese Knotwood      | Winter Creeper            |
| Littleleaf Linden                                              |                        |                              |                                                 |                         | Japanese Spiraea       |                           |
| Northern Red Oak                                               |                        |                              |                                                 |                         | Johnson Grass          |                           |
| Overcup Oak                                                    |                        |                              |                                                 |                         | Kudzu                  |                           |
| Pin Oak                                                        |                        |                              |                                                 |                         | Lespedeza              |                           |

| Table 14-903.01 Permitted Tree Species |                                          |                                       |                                  |
|----------------------------------------|------------------------------------------|---------------------------------------|----------------------------------|
| Native Class I Shade Trees             |                                          | Native Class II Shade Trees           |                                  |
| Red maple                              | <i>Acer rubrum</i>                       | Yellow buckeye                        | <i>Aesculus flava</i>            |
| Sugar maple                            | <i>Acer saccharum</i>                    | Red buckeye                           | <i>Aesculus pavia</i>            |
| River birch                            | <i>Betula nigra</i>                      | Alder (Smooth A. / Hazel A.)          | <i>Alnus serrulata</i>           |
| American hornbeam                      | <i>Carpinus caroliniana</i>              | Serviceberry (and related species)    | <i>Amelanchier arborea, etc.</i> |
| Bitternut hickory                      | <i>Carya cordiformis</i>                 | Indigo bush                           | <i>Amorpha fruticosa</i>         |
| Pignut hickory                         | <i>Carya glabra</i>                      | Pawpaw                                | <i>Asimina triloba</i>           |
| Pecan                                  | <i>Carya illinoensis</i>                 | Redbud                                | <i>Cercis canadensis</i>         |
| Shagbark hickory                       | <i>Carya ovata</i>                       | Alternate-leaf dogwood                | <i>Cornus alternifolia</i>       |
| Mockernut                              | <i>Carya tomentosa</i>                   | Flowering dogwood                     | <i>Cornus florida</i>            |
| Fringe tree / Old man's beard          | <i>Chionanthus virginicus</i>            | Cockspur hawthorn                     | <i>Crataegus crus-galli</i>      |
| Yellowwood                             | <i>Cladrastic kentukea</i>               | Parsley hawthorn                      | <i>Crataegus marshallii</i>      |
| Persimmon                              | <i>Diospyros virginiana</i>              | Washington hawthorn                   | <i>Crataegus phaenopyrum</i>     |
| American beech                         | <i>Fagus grandifolia</i>                 | Winter king hawthorn / Green hawthorn | <i>Crataegus viridis</i>         |
| Carolina silverbell                    | <i>Halesia tetraptera</i>                | Witch-hazel                           | <i>Hamamelis virginiana</i>      |
| Black walnut                           | <i>Juglans nigra</i>                     | Sourwood                              | <i>Oxydendrum arboreum</i>       |
| Tulip poplar                           | <i>Liriodendron tulipifera</i>           | Bladdernut                            | <i>Staphylea trifolia</i>        |
| Cucumber magnolia                      | <i>Magnolia acuminata</i>                | Native Screening Trees                |                                  |
| Red mulberry                           | <i>Morus rubra</i>                       | American holly                        | <i>Ilex opaca</i>                |
| Black gum                              | <i>Nyssa sylvatica</i>                   | Eastern redcedar                      | <i>Juniperus virginiana</i>      |
| American hophornbeam                   | <i>Ostrya virginiana</i>                 | Shortleaf pine                        | <i>Pinus echinata</i>            |
| Sycamore                               | <i>Platanus occidentalis</i>             | White pine                            | <i>Pinus strobus</i>             |
| Black cherry                           | <i>Prunus serotina</i>                   | Loblolly pine                         | <i>Pinus taeda</i>               |
| White oak                              | <i>Quercus alba</i>                      | Virginia pine                         | <i>Pinus virginiana</i>          |
| Scarlet oak                            | <i>Quercus coccinea</i>                  | White cedar / Arbor Vitae             | <i>Thuja occidentalis</i>        |
| Southern red oak                       | <i>Quercus falcata</i>                   | Canadian hemlock                      | <i>Tsuga canadensis</i>          |
| Chestnut oak                           | <i>Quercus montana (or Q. prinus L.)</i> | Native Wetland Trees                  |                                  |
| Water oak                              | <i>Quercus nigra</i>                     | Red maple                             | <i>Acer rubrum</i>               |
| Willow oak                             | <i>Quercus phellos</i>                   | River birch                           | <i>Betula nigra</i>              |
| Northern red oak                       | <i>Quercus rubra</i>                     | Overcup oak                           | <i>Quercus lyrata</i>            |
| Northern red oak                       | <i>Quercus stellata</i>                  | Swamp chestnut oak                    | <i>Quercus michauxii</i>         |

|                    |                            |                 |                           |
|--------------------|----------------------------|-----------------|---------------------------|
| Post oak           | <i>Quercus velutina</i>    | Water oak       | <i>Quercus nigra</i>      |
| Black oak          | <i>Quercus alba</i>        | Cherrybark oak  | <i>Quercus pagoda</i>     |
| Carolina buckthorn | <i>Rhamnus caroliniana</i> | Pin oak         | <i>Quercus palustris</i>  |
| Black willow       | <i>Salix nigra</i>         | Willow oak      | <i>Quercus phellos</i>    |
| Sassafras          | <i>Sassafras albidum</i>   | Shumard red oak | <i>Quercus shumardii</i>  |
| Basswood           | <i>Tilia americana</i>     | Black willow    | <i>Salix nigra</i>        |
|                    |                            | Bald cypress    | <i>Taxodium distichum</i> |

| Table 14-903.02 Permitted Shrub Species |                                               |                                        |                                                  |
|-----------------------------------------|-----------------------------------------------|----------------------------------------|--------------------------------------------------|
| Native Shrubs                           |                                               | Native Shrubs (Cont'd)                 |                                                  |
| Black chokeberry                        | <i>Aronia melanocarpa</i>                     | Coralberry / buckbrush                 | <i>Symphoricarpos orbiculatus</i>                |
| American beautyberry                    | <i>Callicarpa americana</i>                   | Farkleberry                            | <i>Vaccinium arboreum</i>                        |
| Sweetshrub                              | <i>Calycanthus floridus</i>                   | Highbush blueberry                     | <i>Vaccinium corymbosum</i> , V. <i>fuscatum</i> |
| New Jersey tea                          | <i>Ceanothus americanus</i>                   | Deerberry                              | <i>Vaccinium stamineum</i>                       |
| American hazelnut                       | <i>Corylus americana</i>                      | Lowbush blueberry                      | <i>Vaccinium pallidum</i>                        |
| Leatherwood                             | <i>Dirca palustris</i>                        | Mapleleaf viburnum                     | <i>Viburnum acerifolium</i>                      |
| Hearts-a-busting                        | <i>Euonymus americanus</i>                    | Northern blackhaw / Plum-leaf viburnum | <i>Viburnum prunifolium</i>                      |
| Rose/swamp mallows                      | <i>Hibiscus laevis</i> , H. <i>moscheutos</i> | Rusty blackhaw                         | <i>Viburnum rufidulum</i>                        |
| Wild hydrangea                          | <i>Hydrandea arborescens</i>                  | Native Screening Shrubs                |                                                  |
| Oak-leaved hydrangea                    | <i>Hydrangea quercifolia</i>                  | American holly                         | <i>Ilex opaca</i>                                |
| St. John's wort                         | <i>Hypericum spp.</i>                         | Mountain laurel                        | <i>Kalmia latifolia</i>                          |
| Golden St. John's wort                  | <i>Hypericum frondosum</i>                    | Catawba rhododendron                   | <i>Rhododendron catawbiense</i>                  |
| Shrubby St. John's wort                 | <i>Hypericum prolificum</i>                   | Rosebay / Great rhododendron           | <i>Rhododendron maximum</i>                      |
| Possumhaw                               | <i>Ilex decidua</i>                           | Native Wetland Shrubs                  |                                                  |
| Common winterberry                      | <i>Ilex verticillata</i>                      | Hazel alder                            | <i>Alnus serrulata</i>                           |
| Virginia willow / Sweet spire           | <i>Itea virginica</i>                         | Red chokeberry                         | <i>Aronia arbutifolia</i>                        |
| Spicebush                               | <i>Lindera benzoin</i>                        | Ironwood / hornbeam                    | <i>Carpinus caroliniana</i>                      |
| Ninebark                                | <i>Physocarpus opulifolius</i>                | Buttonbush                             | <i>Cephalanthus occidentalis</i>                 |
| American plum                           | <i>Prunus americana</i>                       | Silky dogwood                          | <i>Cornus amomum</i>                             |
| Chickasaw plum                          | <i>Prunus angustifolia</i>                    | Witch hazel                            | <i>Hamamelis virginiana</i>                      |
| Flame azalea                            | <i>Rhododendron calendulaceum</i>             | Virginia willow / Sweet spire          | <i>Itea virginica</i>                            |
| Mountain azalea                         | <i>Rhododendron</i>                           | Dog hobble                             | <i>Leucothoe</i>                                 |

|                  |                                     |                                         |                                    |
|------------------|-------------------------------------|-----------------------------------------|------------------------------------|
|                  | <i>canescens</i>                    |                                         | <i>fontanesiana</i>                |
| Wild azalea      | <i>Rhododendron periclymenoides</i> | Native Vines                            |                                    |
| Fragrant sumac   | <i>Rhus aromatica</i>               | Crossvine                               | <i>Bignonia capreolata</i>         |
| Winged sumac     | <i>Rhus copallina</i>               | Trumpet creeper                         | <i>Campsis radicans</i>            |
| Carolina rose    | <i>Rosa carolina</i>                | Yellow jessamine                        | <i>Gelsemium sempervirens</i>      |
| Swamp rose       | <i>Rosa palustris</i>               | Coral honeysuckle / trumpet honeysuckle | <i>Lonicera sempervirens</i>       |
| Elderberry       | <i>Sambucus canadensis</i>          | Virginia creeper                        | <i>Parthenocissus quinquefolia</i> |
| Mountain camelia | <i>Stewartia ovata</i>              | Muscadine                               | <i>Vitis rotundifolia</i>          |

| Table 14-903.03 Prohibited Species                                                                                                                                                                                 |                                                                                              |                                        |                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------------------|
| The City of Red Bank shall not participate in planting of the following species under any circumstances. Where already present, the City encourages eradication of these species by public and private landowners. |                                                                                              |                                        |                                                                 |
| Tree of heaven                                                                                                                                                                                                     | <i>Ailanthus altissima</i>                                                                   | Purple loosestrife                     | <i>Lythrum salicaria</i>                                        |
| Mimosa; Silktree                                                                                                                                                                                                   | <i>Albizia julibrissin</i>                                                                   | Leatherleaf mahonia                    | <i>Mahonia bealei</i>                                           |
| Garlic mustard                                                                                                                                                                                                     | <i>Alliaria petiolata</i>                                                                    | Chinaberry                             | <i>Melia azedarach</i>                                          |
| Paper mulberry                                                                                                                                                                                                     | <i>Broussonetia papyrifera</i>                                                               | White mulberry                         | <i>Morus alba</i>                                               |
| Asian bittersweet /<br>Oriental bittersweet                                                                                                                                                                        | <i>Celastrus orbiculatus</i>                                                                 | Eurasian water milfoil                 | <i>Myriophyllum spicatum</i>                                    |
| Air potato                                                                                                                                                                                                         | <i>Dioscorea bulbifera</i>                                                                   | Nandina                                | <i>Nandina domestica</i>                                        |
| Autumn olive /<br>Thorny olive                                                                                                                                                                                     | <i>Eleagnus pungens</i>                                                                      | Princess tree; Royal paulownia         | <i>Paulownia tomentosa</i>                                      |
| Russian olive /<br>Autumn olive                                                                                                                                                                                    | <i>Eleagnus umbellata</i>                                                                    | Japanese bamboo /<br>Japanese knotweed | <i>Polygonum cuspidatum</i> ; aka<br><i>Reynoutria japonica</i> |
| Burning bush                                                                                                                                                                                                       | <i>Euonymus alatus</i>                                                                       | Silver poplar / White poplar           | <i>Populus alba</i>                                             |
| Winter creeper                                                                                                                                                                                                     | <i>Euonymus hederaceus</i>                                                                   | Kudzu                                  | <i>Pueraria montana</i> var.<br><i>lobata</i>                   |
| Chinese parasol tree                                                                                                                                                                                               | <i>Firmiana simplex</i>                                                                      | Bradford pear                          | <i>Pyrus calleryana</i>                                         |
| English ivy                                                                                                                                                                                                        | <i>Hedera helix</i>                                                                          | Multiflora rose                        | <i>Rosa multiflora</i>                                          |
| Sericea lespedeza                                                                                                                                                                                                  | <i>Lespedeza cuneata</i>                                                                     | Tropical soda apple                    | <i>Solanum viarum</i>                                           |
| Bicolor lespedeza;<br>shrub lespedeza                                                                                                                                                                              | <i>Lespedeza bicolor</i>                                                                     | Johnson grass                          | <i>Sorghum halapense</i>                                        |
| Chinese privet                                                                                                                                                                                                     | <i>Ligustrum sinense</i>                                                                     | Japanese spiraea                       | <i>Spiraea japonica</i>                                         |
| Common /<br>European privet                                                                                                                                                                                        | <i>Ligustrum vulgare</i>                                                                     | Chinese tallow tree                    | <i>Triadica sebifera</i>                                        |
| January jasmine /<br>Chinese honeysuckle                                                                                                                                                                           | <i>Lonicera fragrantissima</i>                                                               | Siberian elm                           | <i>Ulmus pumilla</i>                                            |
| Japanese honeysuckle                                                                                                                                                                                               | <i>Lonicera japonica</i>                                                                     | Chinese wisteria                       | <i>Wisteria sinensis</i>                                        |
| Bush honeysuckles,<br>multiple species                                                                                                                                                                             | <i>Lonicera maackii</i> , L.<br><i>morrowii</i> , L. <i>tartarica</i> , L.<br><i>X bella</i> | Japanese wisteria                      | <i>Wisteria floribunda</i>                                      |
|                                                                                                                                                                                                                    |                                                                                              | Periwinkle                             | <i>Vinca major</i> , <i>V. minor</i>                            |

(E) Other native trees and shrubs species not listed in Tables 14-903.01, 14-901.02, and 14-903.03 that are considered native to East Tennessee MAY be used, CONTINGENT UPON APPROVAL BEFORE installation. If no native species are suitable or available, non-invasive exotic species may be used by the City, contingent upon prior approval. Non-native, edible fruit-bearing trees and shrubs are recognized as beneficial to

the community, and are encouraged with prior approval.

~~These include: Alternate Leaved Dogwood, American Beech, American Plum, Basswood, Bitternut Hickory, Black Birch, Black Oak, Black Walnut, Black Will, Blackgum, Blue Ash, Carolina Buckthorn, Carolina Silverbell, Chestnut Oak, Cucumber Tree, Fringe Tree, Green Ash, Hawthorn, Hercules, Ironwood, Mockernut, Mountain Ash, Northern Blackhaw, (F) Parsley Hawthorn, Paw Paw, Persimmon, Pignut Hickory, Post Oak, Red Cedar, Red Mulberry, Redbud, Sassafras, Shagbark, Short Leaf Pine, Southern Rusty, Sourwood, Southern Magnolia, Southern Red Oak, Staghorn Sumac, Sycamore, Tulip Poplar, Washington Hawthorn, White Ash, White Cedar, Witch-hazel, Yellow Buckeye, Alder, American Beautyberry, Black Chokeberry, Bladdernut, Buttonbush, Carolina Rose, Common Winterberry, Coralberry, Cranberry, Cumberland Rosemary, Deerberry, Elderberry, Farkleberry, Flame Azalea, Fragrant Sumac, Golden St. John's Wort, Hazelnut, Hearts-a-bustin, Highbush Blueberry, Indigo Bush, Leatherwood, Mapleleaf, Mountain Laurel, New Jersey Tea, Ninebark, Red Chokeberry, Rose Bay, Shrubby St. John's Wort, Spicebush, Swamp Mallow, Swamp Rose, Sweetshrub, Virginia Willow, Wild Azalea, Wild Hydrangea, Winged Sumac.~~

#### SECTION 14-904. Utility Easement Policy

##### 904.01 Intent

Any tree or shrub used to meet the requirements of this Chapter shall not be located within proposed or existing utility easements unless it meets one of the special exceptions as defined below:

- (A) Written permission has been obtained from the holder of the utility easement.
- (B) Where overhead power lines cross an area required by the ordinance to be planted with shade trees, smaller shade trees (listed in the Plant Installation Specifications section as Class II Shade Trees) may be substituted. For TVA easements, plants shall be selected from the TVA list of "Compatible Trees and Shrubs," which may be obtained by contacting the TVA Transmission Right of Way Team at 884-812-2626.

~~(B)~~(C) If none of the special exceptions apply, the following options shall be considered in order of priority:

- 1) Priority 1: Plant the tree as close to the easement as possible.
- 2) Priority 2: For highly visible areas (street yards, parking lots in front) plant the tree in the same general area where it can be seen from the street or parking lot.

~~(C)~~(D) Utility easements can be used to meet the landscape yard requirements. The applicant is responsible for identifying existing and proposed utility easements within the property on the landscape site plan.

#### SECTION 14-905. Maintenance

905.01 The property owner shall be responsible for the maintenance of all landscaping provided. All landscaped areas must present a healthy, neat and orderly appearance and shall be kept free from refuse and weeds. Any dead or diseased plant material shall be replaced by the property owner with new plantings that meet the requirements of this chapter.

---

## MEMORANDUM

---

**To:** Members of the Red Bank Planning Commission

**Cc:** Tim Thornbury, Public Works Director

**From:** Ashley Gates, Regional Planner

**Date:** February 12, 2021; Updated April 8, 2021

**Subject:** Short-term rental unit regulations

### Summary

---

Staff has summarized three ordinances including Chattanooga, Oak Hill, and Williamson County. Williamson County provides a comprehensive approach with two tiers – moderate and very steep slopes. Staff recommends that the Planning Commission use the table listed under “Examples and Recommendations” to identify the ideas and regulations that Red Bank would like to adopt. Staff will then draft an ordinance based on this discussion.

### Goal of Steep Slope Ordinance

---

The goal of a steep slope ordinance is to establish standards that will mitigate flooding, erosion, and, in extreme cases, landslides.

### Examples and Recommendations

---

| Consideration       | Examples and Recommendations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Two-tiered approach | <p>The following is a summary of the Steep Slope rules from Williamson County, which may provide a good starting point for Red Bank.</p> <p>Moderate Slope: 15 to 25%</p> <ul style="list-style-type: none"> <li>Require engineered site plan</li> <li>Roads and driveways to follow contours as much as practicable</li> </ul> <p>Very Steep Slope: Greater than 25%</p> <ul style="list-style-type: none"> <li>Preserved as open space OR outside building envelop</li> <li>Uses limited to: Passive recreation; minor utilities and driveways (less than 50% slope only, and only when no other location is feasible)</li> </ul> <p>Slippage Soils – Determined Soil Scientist Report</p> <ul style="list-style-type: none"> <li>On slopes over 15%: Preserved as open space or outside building envelop</li> </ul> |

| Consideration                   | Examples and Recommendations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                 | <ul style="list-style-type: none"> <li>On slopes less than 15%: Require geotechnical report and design of drainage system by geotechnical engineer; Development must be supervised by geotechnical engineer</li> <li>Red Bank may consider utilizing K-Factor of greater than 0.4 (or the appropriate value) to establish location of slippage soils</li> </ul>                                                                                                                                                                                                                                                     |
| Amount of Disturbance Permitted | <p>Many cities strictly limit land disturbance to areas with a slope of under a certain level, in Williamson County that is 25%. Others limit by percentage at each site.</p> <p>In Hamilton County the original proposal was:</p> <ul style="list-style-type: none"> <li>For slopes of 15% to 25%, no more than 50% of the sloped area may be cleared, graded or disturbed</li> <li>For slopes of 25% or greater, no more than 25% of the sloped area may be cleared, graded or disturbed</li> </ul> <p>Further assessment of the vacant properties in Red Bank needs to be completed.</p>                         |
| Engineering Requirements        | <p>Based on Williamson County's approach, the following engineering is required:</p> <ul style="list-style-type: none"> <li>For moderate slopes, plans must be stamped by a qualified engineer as determined by the Tennessee Board of Architectural and Engineering Examiners. Red Bank could consider review by a licensed geologist.</li> <li>For slippage soils on slopes under 15%, require a geotechnical engineer stamp.</li> <li>Limit uses on very steep and high-risk slippage soils. Any utilities or driveways in steep slope shall require a stamp from a qualified engineer.</li> </ul>               |
| Allowed Uses                    | <p>Very Steep Slopes: Typically, cities select a slope where development is limited to open space, passive recreation, certain agricultural uses, short driveways and minor utilities. Removal of topsoil, clearing, grading and fill are often prohibited as well.</p> <p>Moderate Slopes: Typically determined by the underlying zoning, with steep slope regulations applying to the design of the structure. Critical infrastructure could be prohibited (hospitals, schools, for example). Activities such as logging or mineral extraction are often prohibited (though not likely to occur in Red Bank).</p> |
| Densities                       | <p>Some cities and counties have large minimum lot sizes for steep slope areas. This is often an alternative to limiting the uses in these areas because it results in lots that are designed with more options for buildable areas. Builders and property owners will typically build in the flattest area of the lot due to the cost of building on steep slopes.</p>                                                                                                                                                                                                                                             |
| Retaining Walls                 | <p>Retaining walls over 24 inches in height that support anything other than soil already must be engineered per the building code. Any further regulation of these would be within the building code. Red Bank may</p>                                                                                                                                                                                                                                                                                                                                                                                             |

| Consideration                | Examples and Recommendations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | require these plans to be submitted with the required site plan to the Planning Commission.                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Road Grades                  | The current maximum grade is 15%, with a 4% grade requirement for the 30 feet approaching an intersection. Language requiring roads to follow contours as much as possible can be added to the Subdivision Regulations.                                                                                                                                                                                                                                                                                              |
| Vegetation Requirements      | Existing vegetation is one of the best means of preventing erosion. Newly planted vegetation takes several years to provide the level of protection of existing, rooted vegetation. Red Bank may consider provisions such as: <ul style="list-style-type: none"> <li>• Prohibiting the clearing of very steep slopes</li> <li>• Requiring that development on moderate slopes preserves the existing vegetation to the maximum extent possible</li> <li>• Require that any cleared vegetation be replaced</li> </ul> |
| Incentives / Density Bonuses | With Red Bank having few large developable lots left, density bonuses will have little use. They are typically used for large developments. Additionally, they must be carefully designed and take more staff review time.                                                                                                                                                                                                                                                                                           |
| Other Considerations         | Red Bank may consider the following provisions for moderate or very slope development: <ul style="list-style-type: none"> <li>• Require that natural water courses be maintained</li> <li>• Limit the impervious surface area as a percentage of the lot. This may not be needed if land disturbance limitations are established.</li> </ul>                                                                                                                                                                         |

## City of Chattanooga Ordinance

---

The City of Chattanooga passed the first reading of a steep slope vegetation ordinance that is limited regulations for slopes over 30%.

- Slopes of 30% or more must adhere to vegetative planting requirements
- Required vegetative cover is based on lot size
- Incentives for the preservation of existing trees

Key Objectives of the Steep Slope Vegetation Policy:

5. Encourages a “stay away from steep slopes” mentality by placing additional vegetation replacement program.
6. Encourages preservation of existing established trees.
7. Offers property owner a menu of items allowing an array of vegetation types while encouraging the use of native species.
8. Defines anything above a thirty (30%) percent grade officially as a Steep Slope with a distance of at least 100 linear feet.

9. Allows for the possibility of a credit program for maintaining placement of mature trees and the protection of native trees.
10. Vegetation program allows for covering more ground per sq. ft. vs. number of trees methodology.
11. Policy creates a formula to provide flexibility and choice while maintaining a sq. ft. focus and tree conservation.
12. Allows the Land Development Office to review Landscape Plan submittals prior to the issuance of a Land Disturbing permit to review Steep Slope development plans before vegetation is removed to retain placement of mature trees, the protection of native trees, and the planting of new trees, which are considered for any credit on a Steep Slope as part of the Land Disturbance permit application process.

### **City of Oak Hill Ordinance**

---

The regulations from Oak Hill, Tennessee provides a simple option that requires additional engineering and design standards for steep slope development. Their ordinance applies to slopes over 15%, but other cities limit steep slope restrictions to slopes over 25%. The ordinance requires:

- A site plan that includes additional information on the vegetation, slope, and long-term stabilization plans
- The site plan to be stamped by a certified engineer
- To meet design principals that mitigate runoff and erosion, including the preservation of natural vegetation and drainage ways

## **14-238 Regulations for steep slope areas**

It is a substantiated fact that areas of steep slopes, when developed into buildings and streets, present a significant threat of landslides or soil movement. This generally occurs on slopes exceeding fifteen to twenty (15-20%) percent grades. (See: *Landslides in the Nashville, Tennessee Area-Winter 1975*, Robert A. Miller and John D. Wiethe, Tennessee Division of Geology, 1975) Oak Hill contains many such areas. Therefore, it is the policy of the City of Oak Hill to protect life and property by requiring special review procedures for construction on any area of fifteen percent (15%) or greater slopes. The applicant shall pay, as adopted by Board of Commissioners resolution, for review by the Planning Commission for steep slopes or in connection with the Radnor Lake Impact Ordinance. The following regulations shall apply:

### *14-238.1 Site plan required*

No building permit shall be issued for construction on any area of 15% or greater slopes until a site plan meeting the following requirements has been approved by the Planning Commission. Said site plan shall show:

- (a) The exact size, shape, and location of the lot, and the existing drainage pattern,

- (b) The proposed location of all buildings, driveways, drainage ways, and utilities,
- (c) Contours at vertical intervals of no more than five feet (5') taken from aerial photography or field survey,
- (d) The extent of natural tree cover and vegetation,
- (e) The location of any on-site soil absorption sewage disposal systems,
- (f) The type and location of erosion control methodology,
- (g) The exact area where any natural vegetation is proposed to be removed,
- (h) The size, type, and height of all buildings proposed to be constructed.
- (i) The location and extent of colluvial soil areas as determined by soil test borings,
- (j) The engineer's stamp that prepared the plan,
- (k) Certification as to the stability of the structures and slope and compliance with sound construction methods for areas with steep slopes and landslide problems by a registered geotechnical engineer. Said engineer shall also certify such features after completion of construction prior to issuance of the certificate of occupancy,
- (l) When the Planning Commission determines that additional information is required, an additional soils or geotechnical engineer may be employed to be funded by the developer. The Planning Commission may then require additional standards for development of the lot or tract if substantiated by the facts.

#### 14-238.2 *Development standards*

The following standards shall be used as a guide in determining the suitability of the construction proposed for the particular site in question. The engineer's certification required in § 14-238.1 above shall address these standards:

- (a) Natural vegetation shall be preserved to the maximum extent possible. Existing vegetation on slopes fifteen percent (15%) or greater shall not be removed except as approved by the Planning Commission. The Planning Commission may require replacement of removed trees up to the caliper inches removed. Any grass areas shall be sodded,

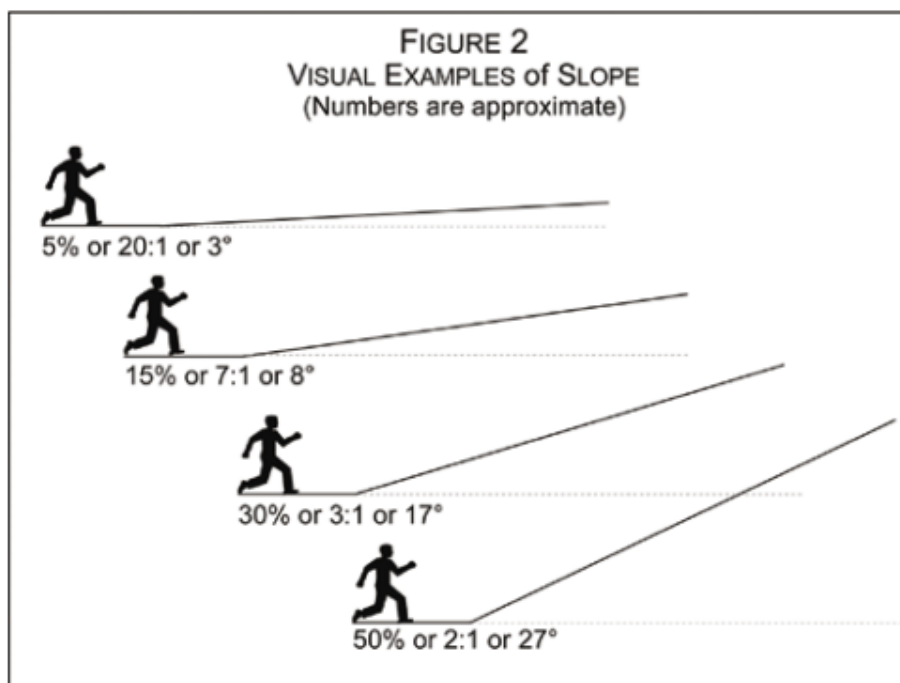
- (b) Natural drainage ways and systems shall be maintained, except that surface water may be diverted around a house or slope area to a natural drain using acceptable construction techniques,
- (c) Development shall require a minimum of two (2) acres of land per parcel. The Planning Commission may require additional acreage when justified by the soil tests and/or slope of the site and limit development to a maximum of ten percent (10%) of the lot,
- (d) Off-road vehicles shall be prohibited from all such areas and may not be operated off streets and driveways,
- (e) Operations that increase loads, reduce slope support, and cause instability of the slope shall be prohibited to the maximum extent possible which will permit reasonable development of the site. These include filling, irrigation systems, accessory buildings, and on-site soil absorption sewage disposal systems,
- (f) Where sanitary sewers are not available, any on-site sewage disposal system shall be shown on the site plan and located to avoid slide prone areas. Said system shall be approved by the County Health Department prior to the Planning Commission's review taking into account these requirements,
- (g) Erosion control measures shall be employed to prevent all soil material from leaving the site. Additionally, soil from excavation on the site shall not be deposited as fill on a potential slide area. Additionally, all aspects of the Metropolitan Nashville Storm Water Management Ordinance shall apply,
- (h) No construction, including for roads which would cut the toe of the slope shall be permitted, except as approved as a part of a soil stabilization plan submitted by a licensed geotechnical engineer on behalf of developer.

## Attachment 1. Slope Information.

**TABLE 1**  
**Degree of Slope**

| Degree of slope | Development Potential                                                                                                                                                 |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0% to 3%        | Generally suitable for all development and uses.                                                                                                                      |
| 3% to 8%        | Suitable for medium density residential development, agriculture, industrial and institutional uses.                                                                  |
| 8% to 15%       | Suitable for moderate to low-density residential development, but great care should be exercised in the location of any commercial, industrial or institutional uses. |
| 15% to 25%      | Only suitable for low-density residential, limited agricultural and recreational uses.                                                                                |
| Over 25%        | Only used for open space and certain recreational uses.                                                                                                               |

**Source:** Soil Surveys of Lehigh/Northampton Counties, Pennsylvania, Soil Conservation Service. 1963, 1974.



## Attachment 2. Red Bank Slope Map.

