N

BROADWAY

ELM ST

LIMITS OF TREE TRIMMING/REMOVAL REQUIRED TO ACHIEVE MINIMUM SIGHT DISTANCE

LIMITS OF TREE TRIMMING/REMOVAL REQUIRED TO ACHIEVE MINIMUM SIGHT DISTANCE

10
11
12
13
14
20
21
22
22+50

PC +87.72
PC +55.76
PT +20.18
PT +06.36
PC +69.83

R=320'
R=40'
R=50'
R=100'

R=335.00'
L=232.46'
T=121.13'

R=100.00'
L=36.54'
T=18.48'

1'
14'
11'
12.5'

NOTES:
1. ALL RADII EVALUATED FOR WB-40 TRUCK TURNS AND ASSUMING THAT TRUCKS SHOULD NOT CROSS OVER ROADWAY CENTERLINE.
2. THIS CONCEPTUAL DESIGN REQUIRES THE REMOVAL OF THE EXISTING RAISED ISLANDS AND ISLAND VEGETATION ON ELM STREET AND BROADWAY.

0 20 50 100
SCALE: 1" = 20'

vhb

Broadway at Elm St
Concept #1 - Skewed Intersection
Hanover, MA

August 2019

N

BROADWAY

ELM ST

LIMITS OF TREE TRIMMING/REMOVAL REQUIRED TO ACHIEVE MINIMUM SIGHT DISTANCE

LIMITS OF TREE TRIMMING/REMOVAL REQUIRED TO ACHIEVE MINIMUM SIGHT DISTANCE

10

11

12

13

14

20

21

22

PC +87.72

PC +99.09

PC +55.76

PT +20.18

PT +03.86

22+50

R=320'

R=40'

R=200'

R=60'

R=335.00'
L=232.46'
T=121.13'

Δ=24°00'41"
R=250.00'
L=104.77'
T=53.16'

1'
11'
14'
11.5'
12.5'

0 20 50 100
SCALE: 1" = 20'

NOTES:
1. ALL RADII EVALUATED FOR WB-40 TRUCK TURNS AND ASSUMING THAT TRUCKS SHOULD NOT CROSS OVER ROADWAY CENTERLINE.
2. THIS CONCEPTUAL DESIGN REQUIRES THE REMOVAL OF THE EXISTING RAISED ISLANDS AND ISLAND VEGETATION ON ELM STREET AND BROADWAY.

vhb

Broadway at Elm St
Concept #2 - T intersection with no islands
Hanover, MA August 2019

N

BROADWAY

ELM ST

LIMITS OF TREE TRIMMING/REMOVAL REQUIRED TO ACHIEVE MINIMUM SIGHT DISTANCE

LIMITS OF TREE TRIMMING/REMOVAL REQUIRED TO ACHIEVE MINIMUM SIGHT DISTANCE

10
11
12
PC +60.91
22+50
13
14
15
15+50
PT +75.99
20
21
PC +99.09
22
PT +03.86

R=400'
R=40'
R=60'
R=200'

ONLY

L=215.081, R=310.000
Δ=039.7524

Δ=24°00'41"
R=250.00'
L=104.77'
T=53.16'

1'
14'
11'
10'
11.5'
12.5'

0 20 50 100
SCALE: 1" = 20'

NOTES:
1. ALL RADII EVALUATED FOR WB-40 TRUCK TURNS AND ASSUMING THAT TRUCKS SHOULD NOT CROSS OVER ROADWAY CENTERLINE.
2. THIS CONCEPTUAL DESIGN REQUIRES THE REMOVAL OF THE EXISTING RAISED ISLANDS AND ISLAND VEGETATION ON ELM STREET AND BROADWAY.
3. THE HORIZONTAL GEOMETRY FOR BROADWAY IN THIS CONCEPTUAL DESIGN MEETS THE DESIGN REQUIREMENTS FOR A 30 MPH DESIGN SPEED UNDER THE ASSUMPTION/REQUIREMENT THAT THE ROADWAY IS SUPERELEVATED AT LEAST 2.0%.

vhb

Broadway at Elm St
Concept #3 - T intersection with left turn lane
Hanover, MA August 2019