**TEMPORARY TRAFFIC CONTROL PLAN GENERAL NOTES**


2. All temporary pedestrian pathways shall comply fully with all requirements of the MUTCD and all applicable Massachusetts architectural access board (MAB) and Americans with Disabilities Act accessibility guidelines (ADA) requirements.

3. Work hours shall be as stated in the approved Highway Access Permit unless otherwise approved by the Engineer. Work shall not affect traffic patterns during peak traffic periods. Peak traffic periods are defined as Monday through Friday 7:00 AM to 9:00 PM.

4. All drums outside Tapers shall be set at 20' on center max. unless otherwise noted or adjusted by the Engineer.

5. All drums shall be approximately placed and moved as necessary to maintain adequate abutter access at all times. Work may require additional sign, drums and other traffic control devices, grading and temporary pavement for passage of pedestrian, vehicular and emergency traffic through the work areas, both during and after working hours, to maintain such access.

6. The contractor shall notify each abutter at least 24 hours in advance of the start of any work that will require the temporary closure or restriction of access.

7. Contractor shall plate or backfill open excavation during non-working hours in accordance with massdot requirements.

8. If minimum lane widths are maintained, unless otherwise noted.

9. Nonessential traffic control devices and signs shall be covered or removed during non-working hours/weekend in use.

10. Signs installed on portable stands require a 12 inch minimum mounting height from the roadway surface to the bottom of the sign.

11. Signs installed on portable stands placed among channelization devices require a 36 inch minimum mounting height from the roadway surface to the bottom of the sign.

12. Signs mounted on P5 posts require a minimum 36 inch mounting height from the roadway or sidewalk surface to the bottom of the sign.

13. The first 5 drums on Tapers shall be reflectorized drums with type A lights.

14. Reflectorized cones shall be a minimum of 36 inches in height.

15. Cones may be used in lieu of drums outside taper areas.

16. No work shall occur within the public way on State recognized holidays unless otherwise approved by the Engineer.

17. Arrow board flashing caution shall flash in four-point caution mode only.

18. Contractor shall secure work areas to prevent unauthorized access at all times.

19. There is no designated bicycle lane on the roadway within the project limits. Bicycles are expected to share the road with general vehicular traffic.

20. Pedestrian channelization device.

21. Not to scale.

22. RSVP 200 MPH OR LESS 50 MPH OR LESS greater than 60 MPH

23. ADVANCE SIGN SPACING

<table>
<thead>
<tr>
<th>ROAD</th>
<th>DISTANCE BETWEEN SIGNS (FEET)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>FELLEWAY</td>
<td>500</td>
<td>250</td>
<td>500</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>MYSTIC AVE</td>
<td>500</td>
<td>150</td>
<td>350</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>MYSTIC AVES</td>
<td>500</td>
<td>50</td>
<td>300</td>
<td>500</td>
<td></td>
</tr>
</tbody>
</table>

24. LANE TAPER LENGTH FORMULAS

<table>
<thead>
<tr>
<th>L = TAPER LENGTH IN FEET</th>
<th>W = SHIFTS OR RESTORED INFEET</th>
<th>P = POSTED SPEED LIMIT IN MPH</th>
</tr>
</thead>
<tbody>
<tr>
<td>45 MPH OR LESS</td>
<td>60 MPH</td>
<td>60 MPH</td>
</tr>
</tbody>
</table>

25. EVERSOURCE ENERGY TCP - GENERAL NOTES AND LEGEND

**MYSTIC TO WOWBURN TRANSMISSION LINE INSTALLATION MEDFORD & SOMERVILLE, MA**

**SCALE** NOT TO SCALE DATE: 08/07/2017

**DRAWN BY:** CRB SHEET: 2 OF 32

**APPROVED:** MS JDB #: 12888.11
TYPICAL TWO-WAY STREET LANE CLOSURE ALTERNATING TRAFFIC

SCALE: NTS

NOTE:
1. REFER TO ADVANCE SIGN SPACING TABLE ON SHEET 2.

TYPICAL TWO-WAY STREET LANE SHIFT CENTER WORKZONE

SCALE: NTS

NOTE:
1. SEE TAPER LENGTH FORMULA ON SHEET 2.
2. SEE BUFFER SPACING CHART ON SHEET 2.
3. REFER TO ADVANCE SIGN SPACING TABLE ON SHEET 2.

TYPICAL ONE WAY STREET LANE SHIFT

SCALE: NTS

NOTE:
1. SEE TAPER LENGTH FORMULA ON SHEET 2.
2. SEE BUFFER SPACING CHART ON SHEET 2.
3. REFER TO ADVANCE SIGN SPACING TABLE ON SHEET 2.
NOTES:

1. ADDITIONAL ADVANCE WARNING SIGNS MAY BE NECESSARY AS DETERMINED BY THE ENGINEER.

2. CONTROLS FOR PEDESTRIAN TRAFFIC ONLY, ARE SHOWN. VEHICULAR TRAFFIC SHALL BE MAINTAINED AS SHOWN ELSEWHERE.

3. STREET LIGHTING SHOULD BE CONSIDERED WHEN LOCATING CONTROL DEVICES.

4. ▪️ INDICATES DIRECTION OF PEDESTRIAN TRAVEL.

5. ALL TEMPORARY PEDESTRIAN PATHWAYS SHALL COMPLY FULLY WITH ALL REQUIREMENTS OF THE MUTCD AND ALL APPLICABLE MAAB AND ADAAG REQUIREMENTS.

6. CONTRACTOR SHALL MAINTAIN AS WIDE OF A PEDESTRIAN ACCESS AS POSSIBLE AT ALL TIMES. EXCEPT WHERE NECESSARY, THE CONTRACTOR MAY TEMPORARILY REDUCE PEDESTRIAN PATHWAYS TO 4 FEET IN WIDTH (EXCLUDING CURB) FOR NO MORE THAN 200 LINEAR FEET AT A TIME IN ACCORDANCE WITH ALL STANDARDS.

SCALE: NTS

TYPICAL PEDESTRIAN CURB RAMP PERPENDICULAR TO CURB

TEMPORARY CURB RAMP - PARALLEL TO CURB

SCALE: NTS

TYPICAL PEDESTRIAN CURB RAMP DETAIL

NOTE:

1. REFER TO ADVANCE SIGN SPACING TABLE ON SHEET 2.
NOTE:
1. TRAFFIC SIGNAL TO OPERATE IN FLASHING MODE UNDER POLICE CONTROL FOR THE DURATION OF THIS SETUP.
TAPER CALCULATIONS

W = 20'
S = 35 MPH
L = \frac{W^2}{20} = 408.3'

\frac{L}{2} = 204.2' MIN

Mystic Avenue (Route 38)

I-93 SB

I-93 NB

Prop Reflectorized Cones @ 10' O.C. (Typ)

Prop Reflectorized Drums @ 10' O.C. (Typ)

Prop Type III Barricade w/ W1-6R Sign (Typ)

Traffic Flow Arrow (Typ)

Temp HMA Pavement

Pavement Notes

Proposed Temporary Crossover roadway (Mystic Avenue)

Surface: 2.5" Superpave Surface Course

Base: 3.5" Superpave Base Course

Subbase: 4" Graded Crushed Stone for Subbase

Tack Coat: 0.05 Gal/Sq Yd

NOTES:

1. Contractor to remove existing median island to install proposed transmission line and construct temporary HMA pavement within crossover limits as shown.

2. Contractor to close median opening with drums spaced at 5' O.C. at the end of each work shift when crossover is not used and all lanes are open to traffic.

3. Upon completion of this stage, contractor shall restore the median to the same condition as existed prior to start of work.

Eversource Energy
Temporary Traffic Control Plan

Mystic to Woburn
Transmission Line Installation
Medford & Somerville, MA

Scale: 1" = 30'

Date: 05/01/2017

Drawn By: CRB

Sheet: 12 of 32

Approved: MS

Job #: 12988.11
TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE (ROUTE 38) AT TEMPLE STREET
DATE: AUGUST 7, 2017

TAPER CALCULATIONS

W = 12'

S = 35 MPH

WS = 245' MINL = 60

MA-R2-10a
W20-1c
100'
50'
MA-R2-10e

PROP REFLECTORIZED DRUMS @ 10' O.C. (TYP)

PROP REFLECTORIZED DRUMS @ 20' O.C. (TYP)

PROP WORKZONE (TYP)

MAINTAIN PEDESTRIAN ACCESS TO EXIST SIDEWALK AT ALL TIMES

CLOSE EXIST BUS STOP (SEE NOTE 3)

MAINTAIN 4' MIN PEDESTRIAN ACCESS AT ALL TIMES

MAINTAIN 4' MIN WALKWAY AT ALL TIMES

PROP TEMP CONSTRUCTION FENCE (TYP)

MAINTAIN 4' MIN PEDESTRIAN ACCESS AT ALL TIMES

CLOSE TEMPLE ROAD AT ROUTE 38 (SEE NOTE 2)

PROP WORKZONE (TYP)

CLOSE AND DETOUR TEMPLE ROAD AT BAILEY ROAD (SEE NOTE 1)

NOTES:
1. REFER TO TEMPLE ROAD CLOSURE AND DETOUR AT BAILEY ROAD PLAN ON SHEET 19.
2. REFER TO TEMPLE ROAD CLOSURE AND DETOUR AT MYSTIC AVENUE (ROUTE 38) PLAN ON SHEET 18.
3. CONTRACTOR TO COORDINATE WITH MBTA A MINIMUM OF 14 DAYS IN ADVANCE OF ANY WORK ACTIVITY TO CLOSE AND TEMPORARILY RELOCATE THE EXIST BUS STOP. THE CONTRACTOR MUST PROVIDE SIGNS DIRECTING PASSENGERS TO THE TEMPORARY LOCATION. UPON COMPLETION OF WORK, CONTRACTOR SHALL RESTORE THE BUS STOP TO ORIGINAL CONDITION.

CLOSE TEMPLE ROAD AT ROUTE 38 (SEE NOTE 2)

PROP TEMP CONSTRUCTION FENCE (TYP)

MAINTAIN 4' MIN PEDESTRIAN ACCESS AT ALL TIMES

MAINTAIN 4' MIN WALKWAY AT ALL TIMES

PED DETOUR ROUTE (TYP)

CLOSE EXIST BUS STOP (SEE NOTE 3)

MAINTAIN PEDESTRIAN ACCESS TO EXIST SIDEWALK AT ALL TIMES

11' MIN

TEMPLE RD (CLOSED)

I-93 NORTH (ABOVE)

I-93 SOUTH (ABOVE)

I-93 NORTH (ABOVE)

I-93 SOUTH (ABOVE)

Mystic Ave (Route 38)

Taylor St (One-Way)

Taylor St (One-Way)

Mystic Ave (Route 38)

I-93 South (Above)

I-93 North (Above)

Temple St

Bailey Road

Commonwealth of Massachusetts
Massachusetts Department of Transportation, District 4
519 Appleton Street, Arlington, MA 02476

Eversource Energy
Temporary Traffic Control Plan
Mystic to Woburn
Transmission Line Installation
Medford & Somerville, MA

Scale: 1" = 20'
Date: 08/07/2017
Drawn By: CR9
Sheet: 15 of 32

Approved: MS
Job #: 123888.11
ROUTE 38 NORTHBOUND
(BELOW)

WHEATLAND ST
(ONE-WAY)

GRAFT ST

TRAFFIC FLOW ARROW (TYP)

ROUTE 38 NORTHBOUND
(BELOW)

MYSTIC AVE (ROUTE 38)

Eversource Energy
Temporary Traffic Control Plan
Mystic to Woburn
Transmission Line Installation
Medford & Somerville, MA

Scale: 1"=20'
Date: 08/07/2017
Drawn By: CRB
Sheet: 16 of 32
Approved: MS
Job #: 129888.11

COMMongwealth of Massachusetts
Massachusetts Department of Transportation, District 4
519 Appleton Street, Arlington, MA 02476

Town: Medford & Somerville
Location: Mystic Avenue (Route 38) at Temple Street
Date: August 7, 2017
Permit No.:
TEMPLE ROAD CLOSURE AND DETOUR
AT BAILEY ROAD

NOTES:
1. SEE TYPICAL LOCAL ROAD CLOSURE DETAIL ON SHEET 5 FOR ADDITIONAL INDICATORS.
2. SEE TEMPLE RD AT BAILEY RD CLOSURE DETAL AT ROUTE 38 PLAN ON SHEET 18.
3. FOR WORK ON MYSTIC AVE (ROUTE 38) AT TEMPLE STREET INTERSECTION, SEE TEMPORARY TRAFFIC CONTROL PLANS ON SHEETS 15 - 17.
TAPER CALCULATIONS

\[ W = 14' \]
\[ S = 35 \text{ MPH} \]
\[ WS = 290' \]
\[ L = \] 
\[ L/2 = 145' \text{ MIN} \]
TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE CROSSOVER BETWEEN TEMPLE STREET AND ROUTE 38 NORTHBOUND
DATE: MAY 1, 2017

TAPER CALCULATIONS:
S = 35 MPH
W = 12'
WS = 245' MINL = 60

PROPEL REFLECTORIZED DRUMS @ 10' O.C. (TYP)

ROUTE 38 NORTHBOUND (BELOW)
ROUTE 38 SOUTHBOUND (BELOW)

50' 100'

WHEATLAND ST
FELLSWAY W

MCGRATH HIGHWAY

I-93 NORTH (ABOVE)
I-93 SOUTH (ABOVE)

EVERSOURCE ENERGY
TEMPORARY TRAFFIC CONTROL PLAN
MYSTIC TO WOBURN
TRANSMISSION LINE INSTALLATION
MEDFORD & SOMERVILLE, MA

SCALE: 1” = 20’
DATE: 05/01/2017
DRAWN BY: CRB
SHEET: 22 OF 32
APPROVED: MS
JOB #: 12988.11

CONTINUED ON SHEET 21
WORK IN THE MIDDLE OF THE INTERSECTION - STAGE 3

WORK ON THE EAST SIDE OF THE INTERSECTION - STAGE 4

Eversource Energy
Transmission Line Installation
Medford & Somerville, MA

Typical Details

Mystic to Woburn Line Installation
M4-8
SUPP(A)
M6-1L
M4-8
SUPP(A)
M6-3
M4-8
SUPP(A)
M6-1L
M4-8
SUPP(A)
M6-2L
M4-8
SUPP(A)
M6-1L

SEE TYPICAL LOCAL ROAD CLOSURE DETAIL ON SHEET 5

PROP REFLECTORIZED DRUMS @ 5’ O.C.

SEE TYPICAL LOCAL ROAD CLOSURE WITH LOCAL ACCESS DETAIL ON SHEET 5

MYS TIC AVE (ROUTE 38)

LEGEND:
MYS TIC AVE NB DETOUR FLOW ARROW
MYS TIC AVE SB DETOUR FLOW ARROW
ROAD CLOSED, LOCAL ACCESS ONLY

EVERSOURCE ENERGY
CLOSURE AND DETOUR PLAN
MYSTIC TO WOBURN
TRANSMISSION LINE INSTALLATION
MEDFORD & SOMERVILLE, MA

SCALE: 1” = 150’
DATE: 05/01/2017
DRAWN BY: CRB
SHEET: 25 OF 32
APPROVED: MS
JOB #: 12988.11
NOTE:

TRAFFIC SIGNAL TO OPERATE IN FLASHING MODE UNDER POLICE CONTROL FOR THE DURATION OF THIS SETUP.
## TEMPORARY TRAFFIC CONTROL SIGN SUMMARY (CONTINUED)

<table>
<thead>
<tr>
<th>SIGN NUMBER</th>
<th>SIDE OF SIGN</th>
<th>TEXT</th>
<th>WIDTH</th>
<th>LENGTH</th>
<th>ARROW</th>
<th>LETTER</th>
<th>BLDG</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>M4-9AL</td>
<td>30&quot;</td>
<td>24&quot;</td>
<td>⬅️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BLACK BLACK</td>
</tr>
<tr>
<td>M4-9AR</td>
<td>30&quot;</td>
<td>24&quot;</td>
<td>⬅️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BLACK BLACK</td>
</tr>
<tr>
<td>M4-9AL</td>
<td>30&quot;</td>
<td>24&quot;</td>
<td>⬅️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BLACK BLACK</td>
</tr>
<tr>
<td>M4-9AL</td>
<td>30&quot;</td>
<td>24&quot;</td>
<td>⬅️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BLACK BLACK</td>
</tr>
<tr>
<td>M4-9AL</td>
<td>30&quot;</td>
<td>24&quot;</td>
<td>⬅️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BLACK BLACK</td>
</tr>
<tr>
<td>M4-9AL</td>
<td>30&quot;</td>
<td>24&quot;</td>
<td>⬅️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BLACK BLACK</td>
</tr>
<tr>
<td>M4-9AL</td>
<td>30&quot;</td>
<td>24&quot;</td>
<td>⬅️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BLACK BLACK</td>
</tr>
<tr>
<td>M4-9AL</td>
<td>30&quot;</td>
<td>24&quot;</td>
<td>⬅️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BLACK BLACK</td>
</tr>
<tr>
<td>M4-9AL</td>
<td>30&quot;</td>
<td>24&quot;</td>
<td>⬅️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BLACK BLACK</td>
</tr>
<tr>
<td>M4-9AL</td>
<td>30&quot;</td>
<td>24&quot;</td>
<td>⬅️</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BLACK BLACK</td>
</tr>
</tbody>
</table>

**NOTES:**
2. ALL SIGNS SHOWN GRAPHICALLY FOR INFORMATION ONLY. SIGN VENDOR SHALL FABRICATE ALL SIGNS IN ACCORDANCE WITH THE APPLICABLE STANDARDS.