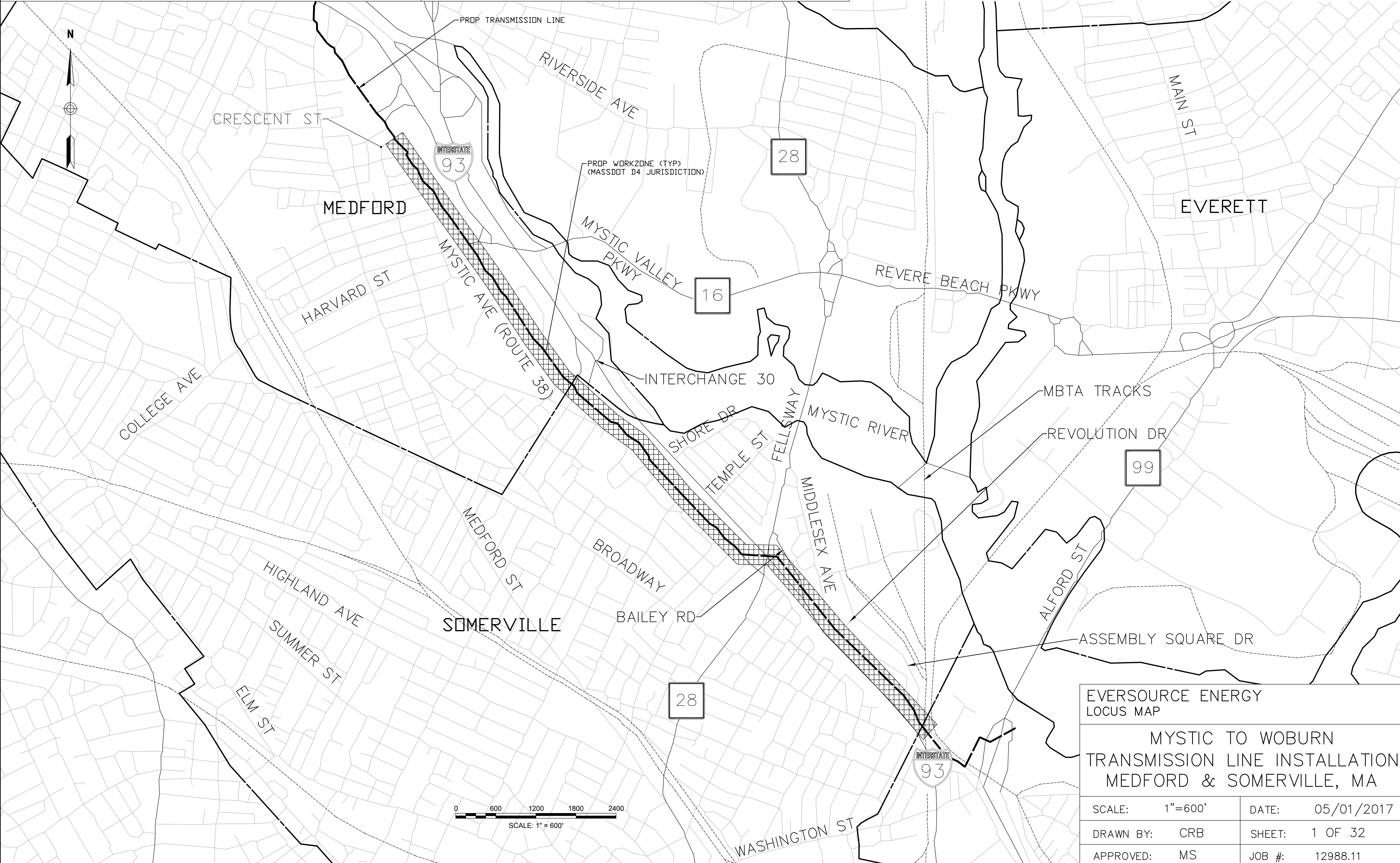


COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE (ROUTE 38)
DATE: MAY 1, 2017 Permit No.:



EVERSOURCE ENERGY LOCUS MAP			
MYSTIC TO WOBURN TRANSMISSION LINE INSTALLATION MEDFORD & SOMERVILLE, MA			
SCALE:	1"=600'	DATE:	05/01/2017
DRAWN BY:	CRB	SHEET:	1 OF 32
APPROVED:	MS	JOB #:	12988.11

TEMPORARY TRAFFIC CONTROL PLAN GENERAL NOTES

1. ALL CONSTRUCTION SIGNING, TEMPORARY TRAFFIC CONTROL DEVICES, AND ROADSIDE ELEMENTS SHALL CONFORM WITH THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS AMENDED, THE MASSDOT STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TEMPORARY TRAFFIC CONTROL PLANS, THE LATEST REVISIONS OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS. (AASHTO) ROADSIDE DESIGN GUIDE, AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, AND NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP) REPORT 350 OR THE AASHTO MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
2. ALL TEMPORARY PEDESTRIAN PATHWAYS SHALL COMPLY FULLY WITH ALL REQUIREMENTS OF THE MUTCD AND ALL APPLICABLE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD (MAAB) AND AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) 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 THRU FRIDAY 7:00AM-9:00AM AND 4:00PM-6:00PM.
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 SIGNS, 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. 11' MINIMUM LANE WIDTHS SHALL BE MAINTAINED UNLESS OTHERWISE NOTED.
9. NON-ESSENTIAL TRAFFIC CONTROL DEVICES AND SIGNS SHALL BE COVERED OR REMOVED DURING NON-WORKING HOURS WHEN NOT IN USE.
10. SIGNS INSTALLED ON PORTABLE STANDS REQUIRE 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 84 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 OF 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.

SUGGESTED TEMPORARY TRAFFIC CONTROL SETUP APPLICATION			
ROADWAY	STATION (NOTE 1)	TEMPORARY TRAFFIC CONTROL SETUPS	SHEET NUMBER
MYSTIC AVENUE (ROUTE 38)	251+00 TO 252+00±	TYPICAL TWO WAY STREET LANE SHIFT	SHEET 3
	252+00 TO 255+20±	TYPICAL TWO WAY STREET LANE SHIFT CENTER WORKZONE	SHEET 3
	255+20 TO 268+50±	TYPICAL LEFT LANE (SB) AND BI-DIRECTIONAL TURN LANE CLOSURE	SHEET 4
	268+50 TO 274+00±	SITE SPECIFIC- MYSTIC AVENUE AT HARVARD STREET	SHEETS 6-8
	274+00 TO 295+30±	TYPICAL LEFT LANE (SB) AND BI-DIRECTIONAL TURN LANE CLOSURE	SHEET 4
		TYPICAL ONE LANE CLOSURE- LEFT [NB & SB]	
	295+30 TO 302+00±	SITE SPECIFIC- MYSTIC AVENUE AT I-93 INTERCHANGE 30	SHEETS 9-10
	302+00 TO 306+00±	TYPICAL ONE LANE CLOSURE- LEFT [NB & SB]	SHEETS 4, 11-14
	306+00 TO 315+50±	SITE SPECIFIC- MYSTIC AVENUE CROSSOVER BETWEEN I-93 RAMPs AND SHORE DR	
	315+50 TO 320+00±	TYPICAL ONE LANE CLOSURE- RIGHT [NB]	SHEET 4
	320+00 TO 322+00±	TYPICAL TWO WAY STREET LANE SHIFT	SHEET 3
	322+00 TO 326+00±	SITE SPECIFIC- MYSTIC AVENUE AT TEMPLE STREET	SHEETS 15-17
		DETOUR PLAN- TEMPLE ROAD AT MYSTIC AVENUE	SHEET 18
		DETOUR PLAN- TEMPLE ROAD AT BAILEY ROAD	SHEET 19
	326+00 TO 329+00±	SITE SPECIFIC- MYSTIC AVENUE CROSSOVER BETWEEN TEMPLE STREET AND ROUTE 38 NORTHBOUND	SHEETS 4, 20-22
		TYPICAL ONE LANE CLOSURE- RIGHT [NB]	
	329+00 TO 333+70±	TYPICAL ONE WAY STREET LANE SHIFT	SHEET 3
	333+70 TO 335+70±	SITE SPECIFIC- ROUTE 38 NORTHBOUND AT FELLSWAY	SHEETS 23-25
	335+70 TO 349+60±	TYPICAL LOCAL ROAD CLOSURE	SHEETS 5,25
		DETOUR PLAN- MYSTIC AVENUE CLOSURE AND DETOUR BETWEEN MIDDLESEX AVENUE AND FELLSWAY	
		TYPICAL LOCAL ROAD CLOSURE WITH LOCAL ACCESS	
	349+60 TO 353+50±	TYPICAL ONE LANE CLOSURE - RIGHT [NB]	SHEETS 4,5
		TYPICAL PEDESTRIAN BYPASS DETAIL TYPE I	
		TYPICAL THRU AND RIGHT TURN LANE CLOSURE [NB]	
	353+50 TO 360+00±	TYPICAL TWO LANE CLOSURE- LEFT [NB]	SHEETS 4,5
		TYPICAL PEDESTRIAN BYPASS DETAIL TYPE I	
		TYPICAL PEDESTRIAN BYPASS DETAIL TYPE I	
	360+00 TO 100' WEST OF ASSEMBLY SQUARE DRIVE	TYPICAL ONE LANE CLOSURE- LEFT [NB]	SHEET 4
	ASSEMBLY SQUARE DRIVE INTERSECTION	SITE SPECIFIC- MYSTIC AVENUE AT ASSEMBLY SQUARE DRIVE	SHEETS 26-29
		TYPICAL PEDESTRIAN BYPASS DETAIL TYPE I	SHEET 5

NOTE:
1. SEE LOCUS PLANS ON SHEETS 1 TO 11 FOR TRANSMISSION LINE LOCATION AND STATIONING.

LEGEND	
	POLICE OFFICER
	REFLECTORIZED DRUM
	REFLECTORIZED DRUM WITH TYPE A FLASHER (SEE NOTE 13)
	TEMPORARY CONSTRUCTION SIGN
	TRAFFIC CONE
	TYPE III BARRICADE
	ARROW BOARD (AB) (RIGHT OR LEFT)
	ARROW BOARD (AB) (CAUTION)
	WORK AREA (PUBLIC ACCESS RESTRICTED)
	TRAFFIC FLOW
	PEDESTRIAN ROUTE
	CONSTRUCTION FENCE
	PEDESTRIAN CHANNELIZATION DEVICE
NTS	NOT TO SCALE

ADVANCE SIGN SPACING				
ROAD	DISTANCE BETWEEN SIGNS (FEET)			
	A	B	C	D
FELLSWAY	500	250	500	500
MYSTIC AVE	350	150	350	350
ALL OTHER ROADWAYS	100	50	100	100

BUFFER SPACING	
SPEED (MPH)	DISTANCE (FEET)
15	80
20	115
25	155
30	200
35	250
40	305
45	360

LANE TAPER LENGTH FORMULAS	
L= TAPER LENGTH IN FEET	
W= WIDTH OF ROADWAY TO BE SHIFTED OR REDIRECTED IN FEET	
S= POSTED SPEED LIMIT IN MPH	
POSTED SPEED	
40 MPH OR LESS	GREATER THAN 40 MPH
$L = \frac{WS^2}{60}$	L= WS

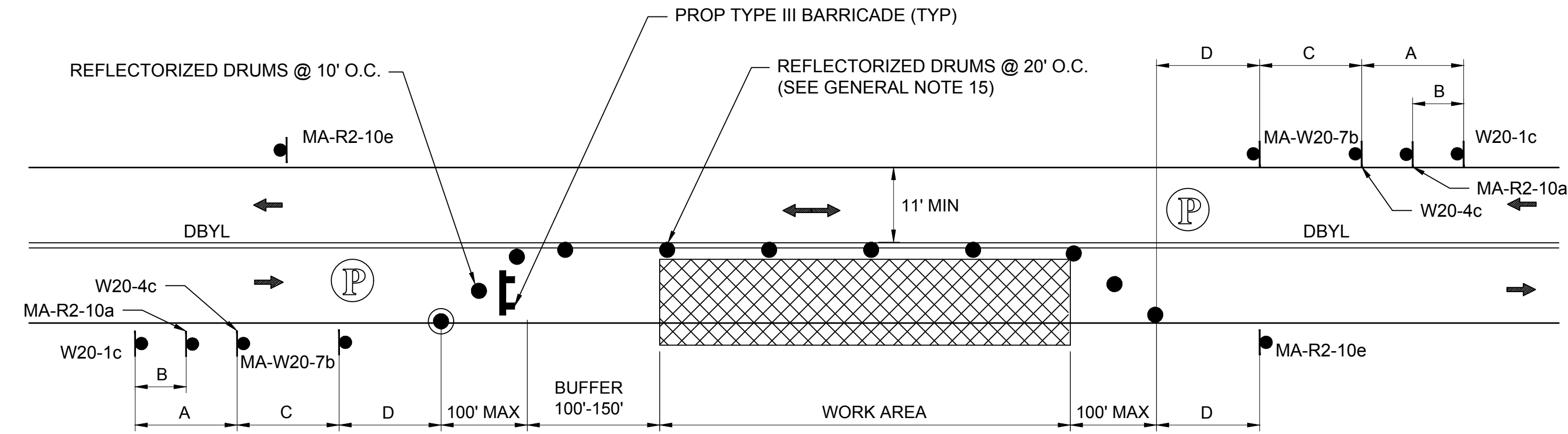
EVERSOURCE ENERGY
TTCP – GENERAL NOTES AND LEGEND

MYSTIC TO WOBURN
TRANSMISSION LINE INSTALLATION
MEDFORD & SOMERVILLE, MA

SCALE: NOT TO SCALE	DATE: 08/07/2017
DRAWN BY: CRB	SHEET: 2 OF 32
APPROVED: MS	JOB #: 12988.11

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476

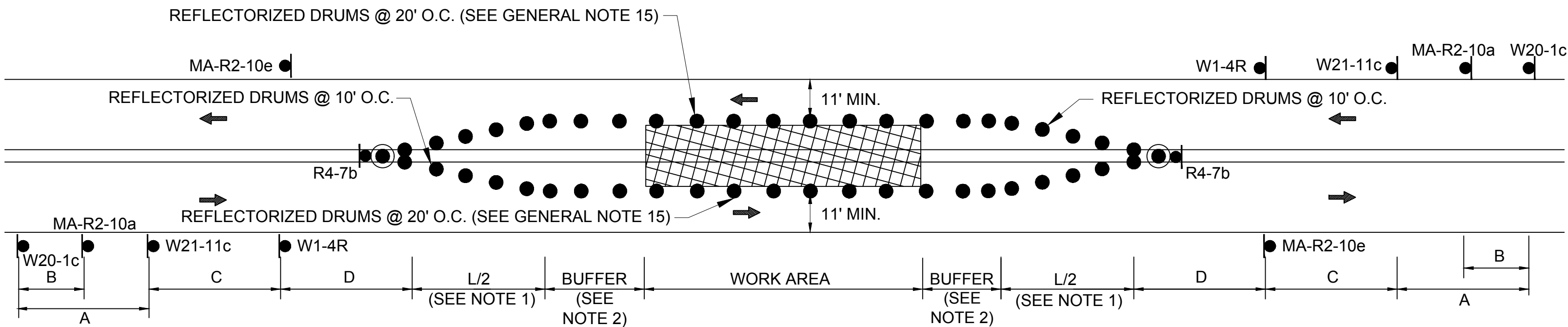
TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE (ROUTE 38)
DATE: MAY 1, 2017
Permit No.:



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

TYPICAL TWO-WAY STREET LANE CLOSURE ALTERNATING TRAFFIC

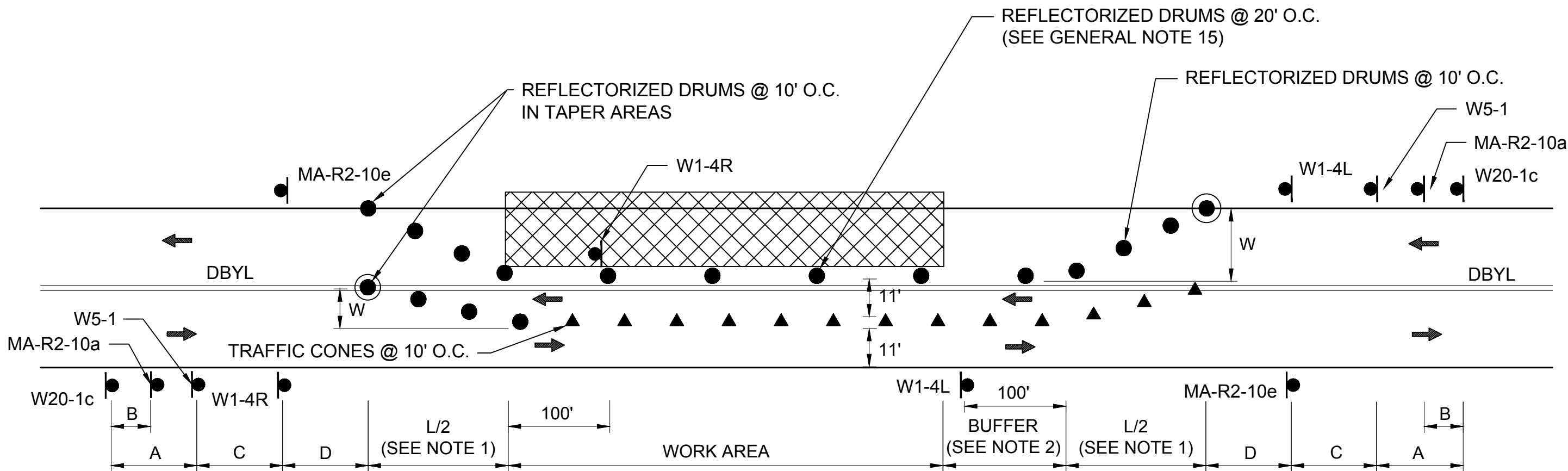
SCALE: NTS



NOTES:
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 TWO WAY STREET LANE SHIFT CENTER WORKZONE

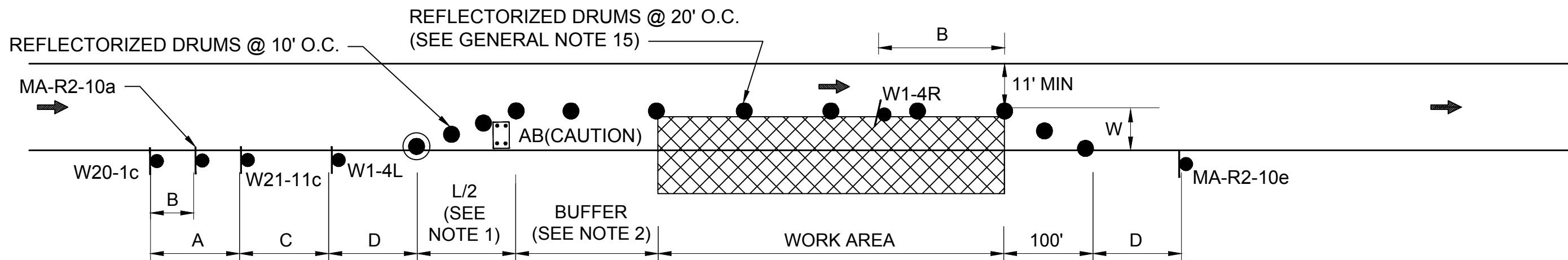
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NOTES:
1. SEE TAPER LENGTH FORMULA ON SHEET 2.
2. SEE BUFFER SPACING CHART ON SHEET 2.
3. REFER TO ADVANCE SIGN SPACING TABLE ON SHEET 2.

TYPICAL TWO-WAY STREET LANE SHIFT

SCALE: NTS



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

TYPICAL ONE WAY STREET LANE SHIFT

SCALE: NTS

EVERSOURCE ENERGY
TTCP – TYPICAL DETAILS

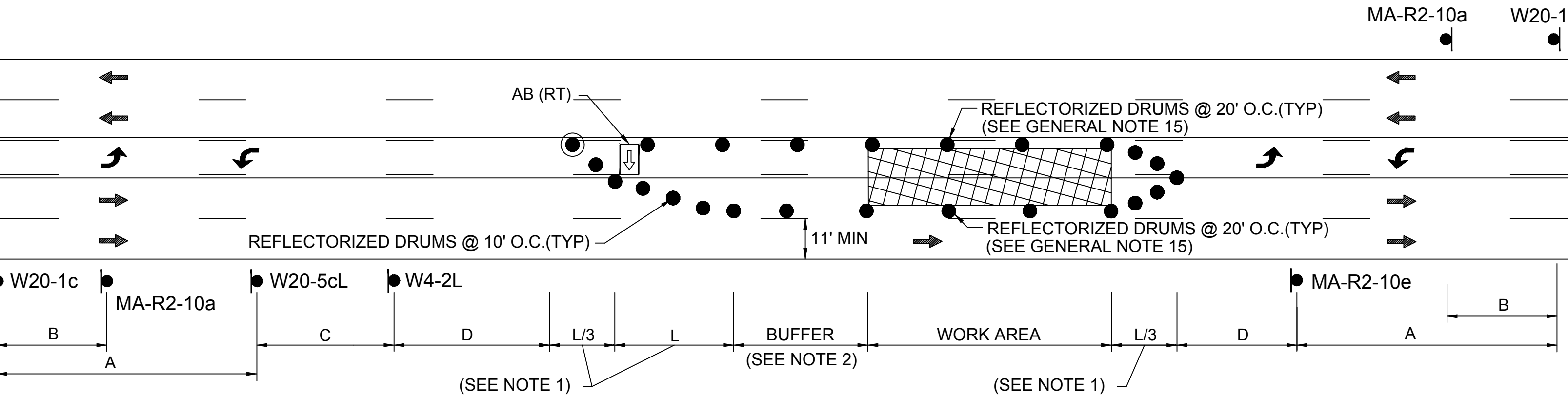
MYSTIC TO WOBURN
TRANSMISSION LINE INSTALLATION
MEDFORD & SOMERVILLE, MA

SCALE: NOT TO SCALE	DATE: 05/01/2017
DRAWN BY: CRB	SHEET: 3 OF 32
APPROVED: MS	JOB #: 12988.11

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE (ROUTE 38)

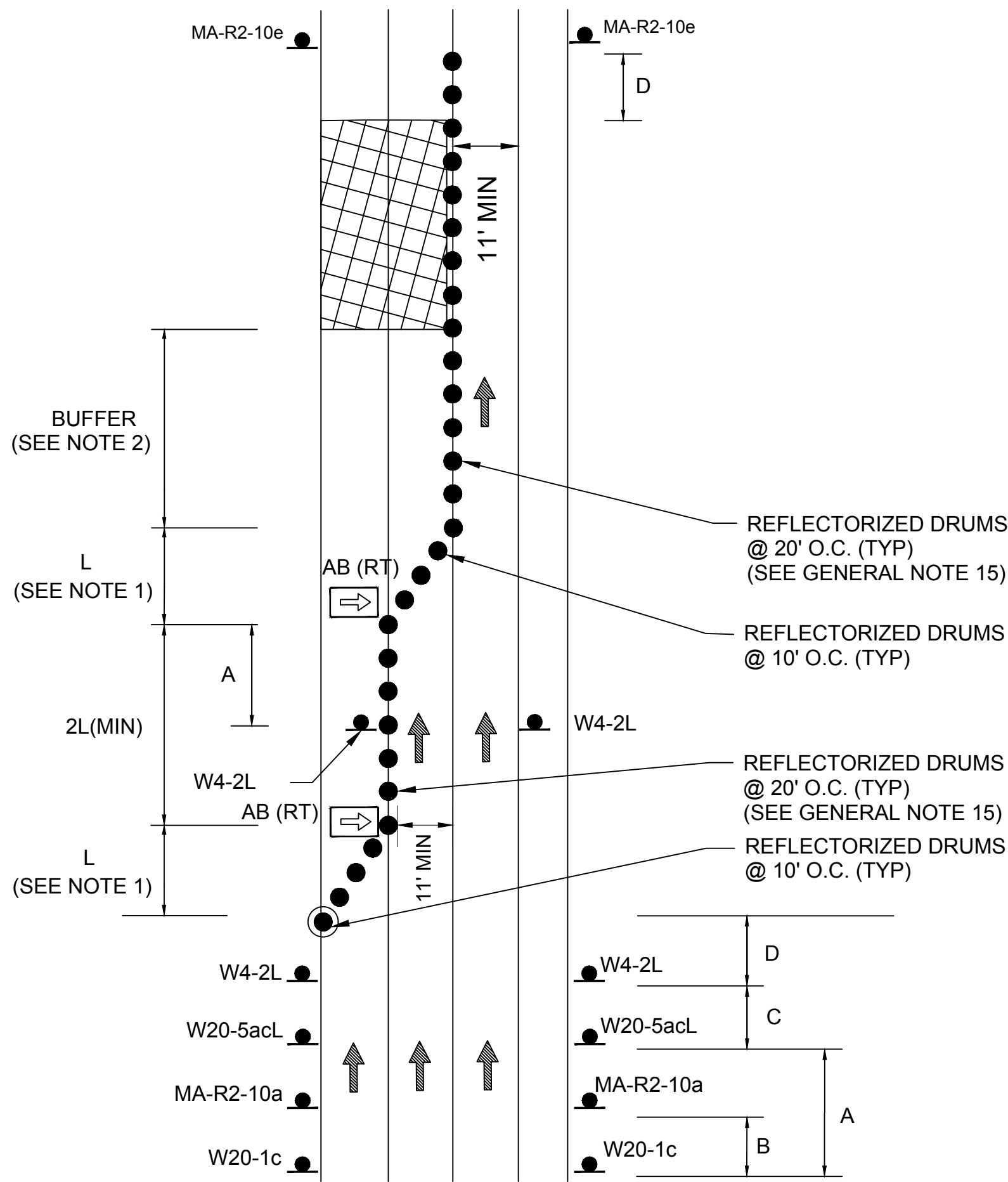
DATE: MAY 1, 2017 Permit No.:



- NOTES:
- SEE TAPER LENGTH FORMULA ON SHEET 2.
 - SEE BUFFER SPACING CHART ON SHEET 2.
 - SEE ADVANCED SIGN SPACING CHART ON SHEET 2.

TYPICAL LEFT LANE (SB) AND BI-DIRECTIONAL TURN LANE CLOSURE

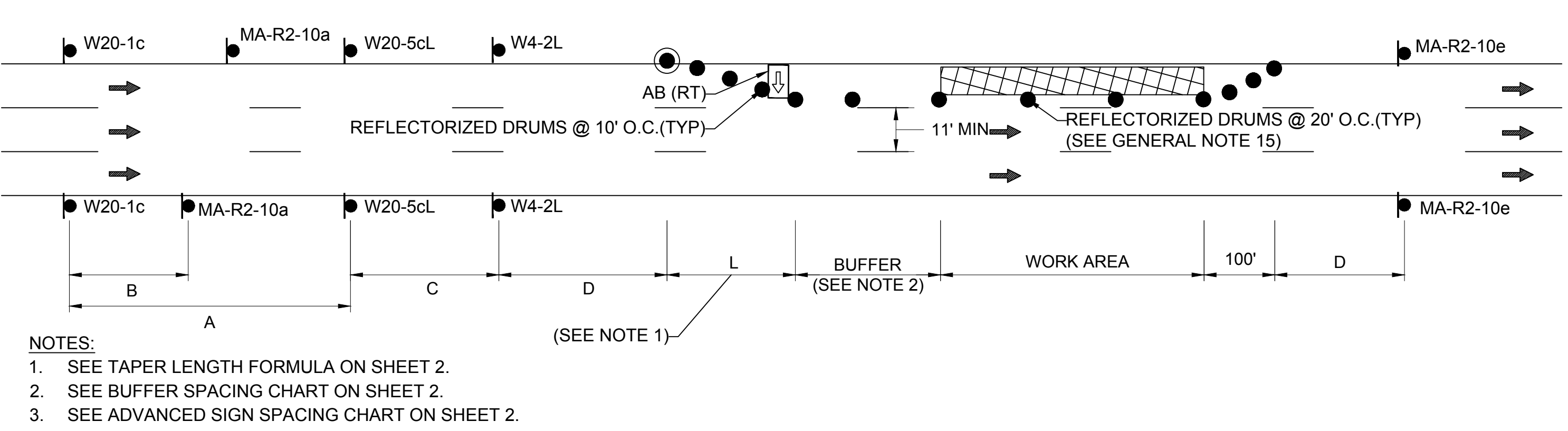
SCALE: NTS



- NOTES:
- SEE TAPER LENGTH FORMULA ON SHEET 2.
 - SEE BUFFER SPACING CHART ON SHEET 2.
 - SEE ADVANCED SIGN SPACING CHART ON SHEET 2.

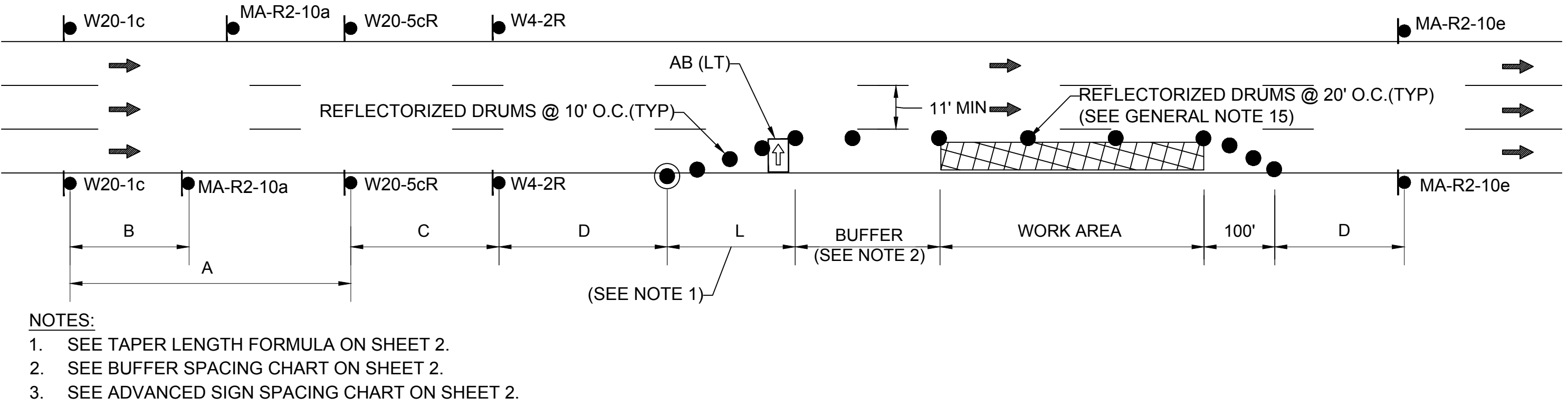
TYPICAL TWO LANE CLOSURE - LEFT

SCALE: NTS



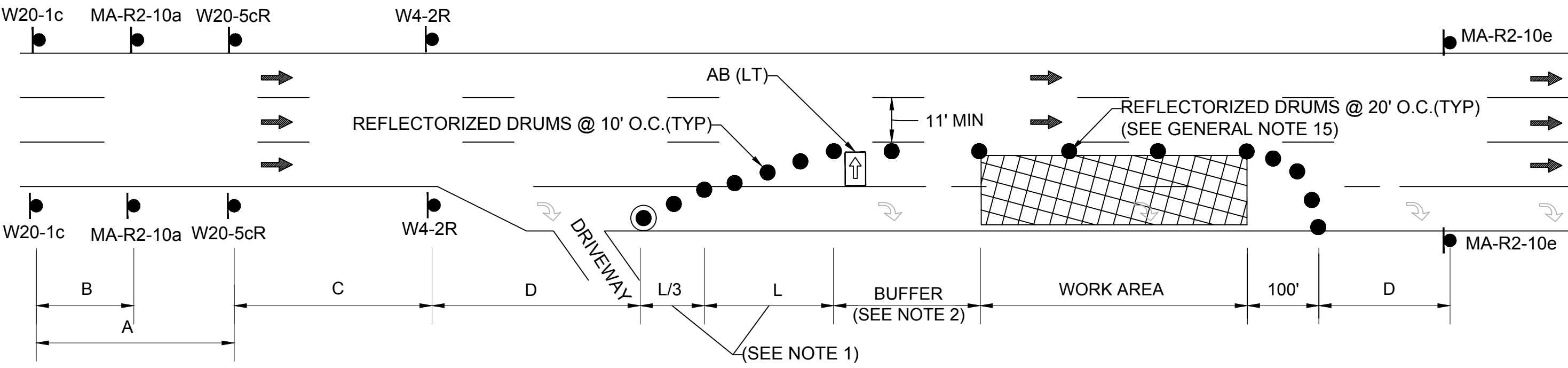
TYPICAL ONE LANE CLOSURE - LEFT

SCALE: NTS



TYPICAL ONE LANE CLOSURE - RIGHT

SCALE: NTS



- NOTES:
- SEE TAPER LENGTH FORMULA ON SHEET 2.
 - SEE BUFFER SPACING CHART ON SHEET 2.
 - SEE ADVANCED SIGN SPACING CHART ON SHEET 2.

TYPICAL THRU AND RIGHT TURN LANE CLOSURE

SCALE: NTS

EVERSOURCE ENERGY
TTCP – TYPICAL DETAILS

MYSTIC TO WOBURN
TRANSMISSION LINE INSTALLATION
MEDFORD & SOMERVILLE, MA

SCALE: NOT TO SCALE DATE: 05/01/2017

DRAWN BY: CRB SHEET: 4 OF 32

APPROVED: MS JOB #: 12988.11

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE (ROUTE 38)

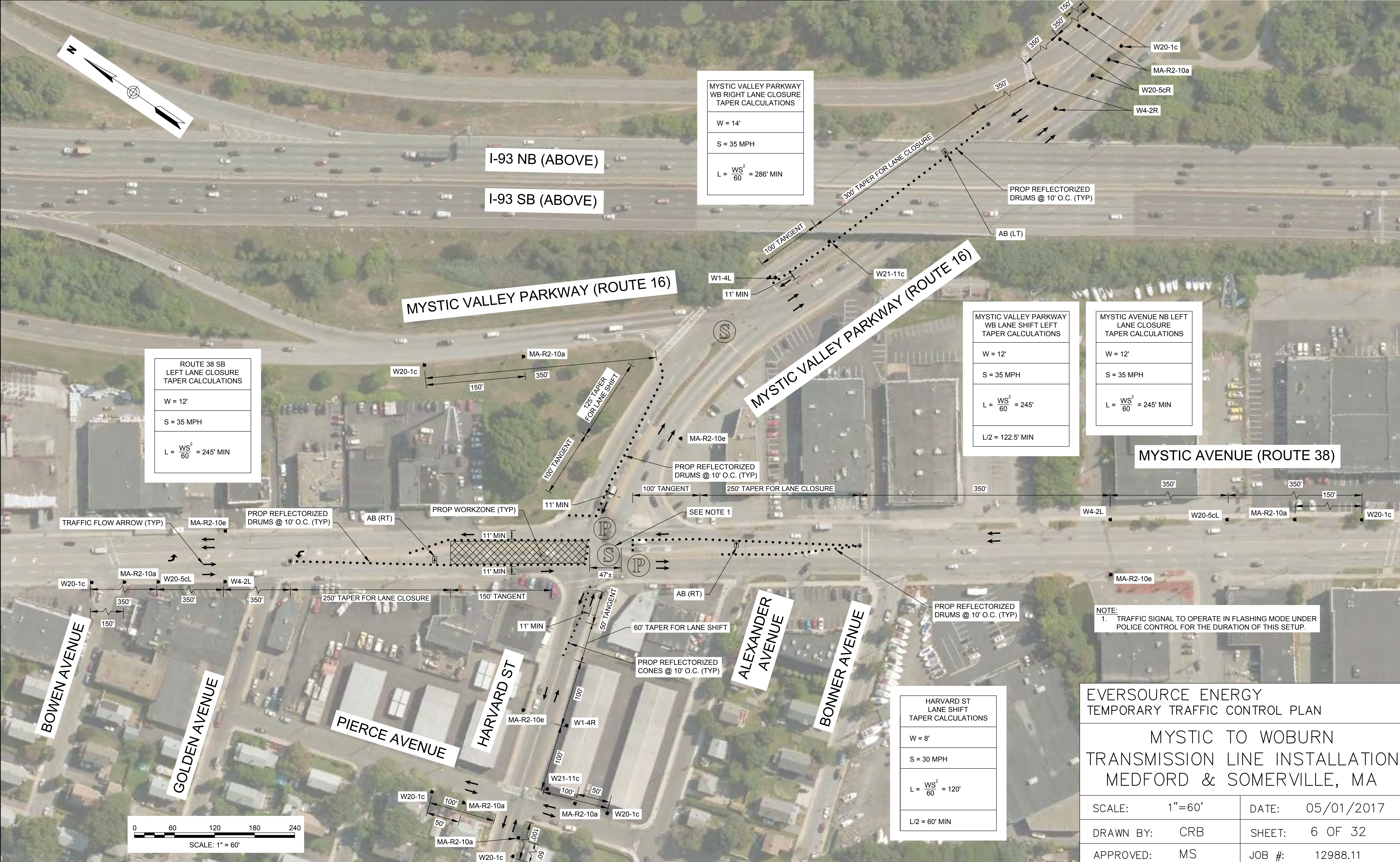
DATE: MAY 1, 2017 Permit No.:



APPROVED: MS	JOB #: 12988.11
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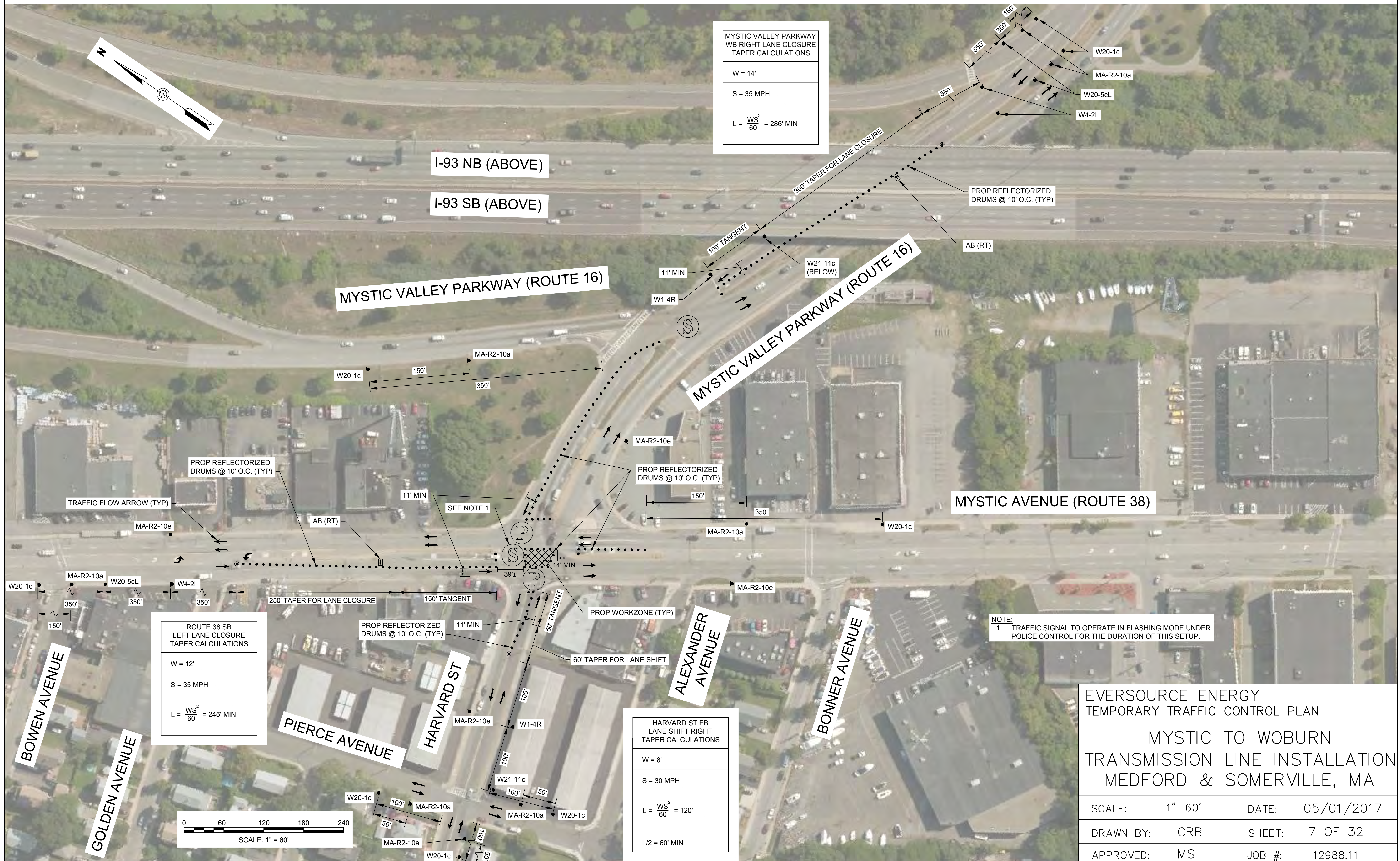
COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE AT HARVARD STREET
DATE: MAY 1, 2017 Permit No.:



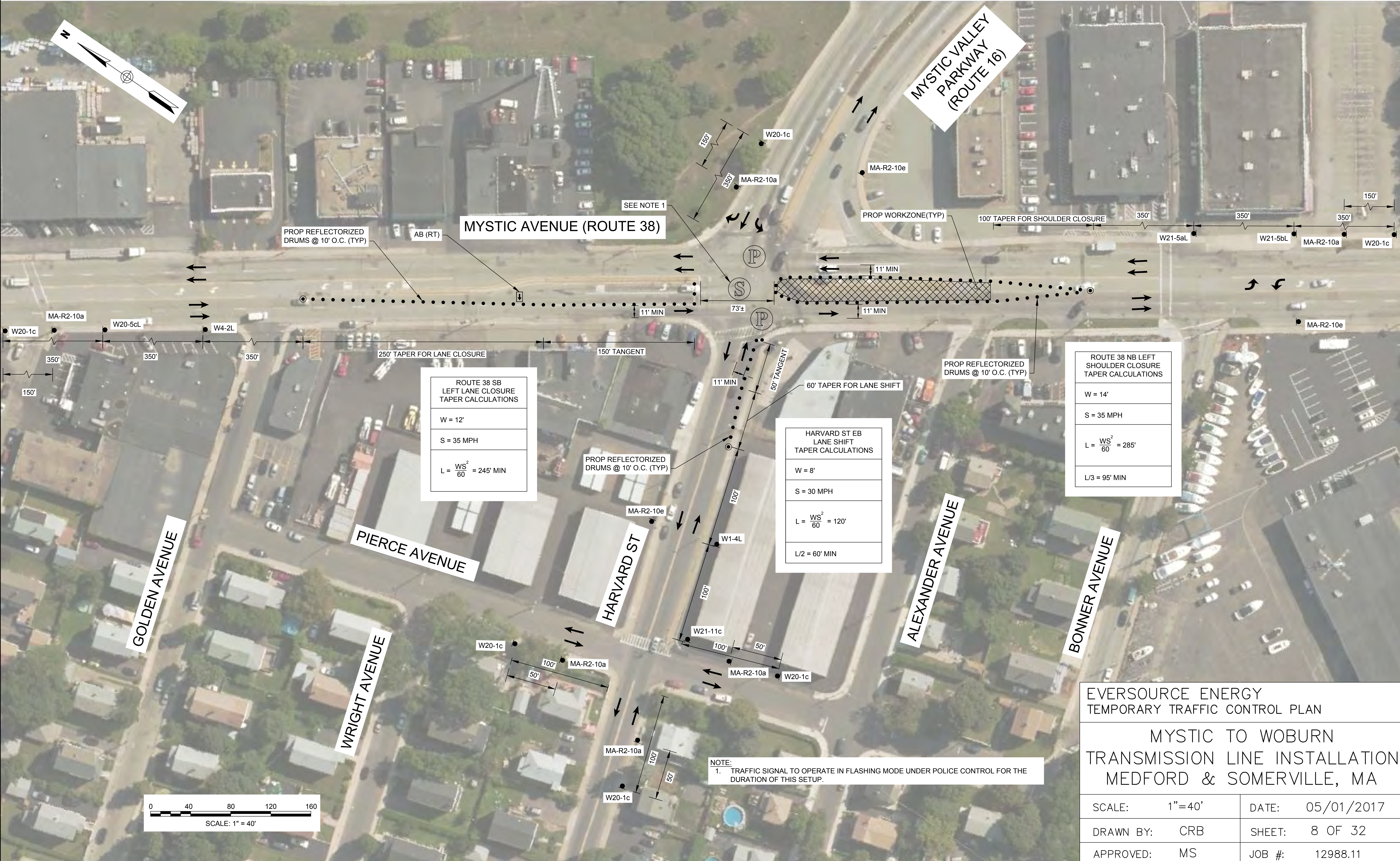
EVERSOURCE ENERGY TEMPORARY TRAFFIC CONTROL PLAN	
MYSTIC TO WOBURN TRANSMISSION LINE INSTALLATION MEDFORD & SOMERVILLE, MA	
SCALE: 1"=60'	DATE: 05/01/2017
DRAWN BY: CRB	SHEET: 6 OF 32
APPROVED: MS	JOB #: 12988.11

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE AT HARVARD STREET
DATE: MAY 1, 2017 Permit No.:



COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE AT HARVARD STREET
DATE: MAY 1, 2017 Permit No.:



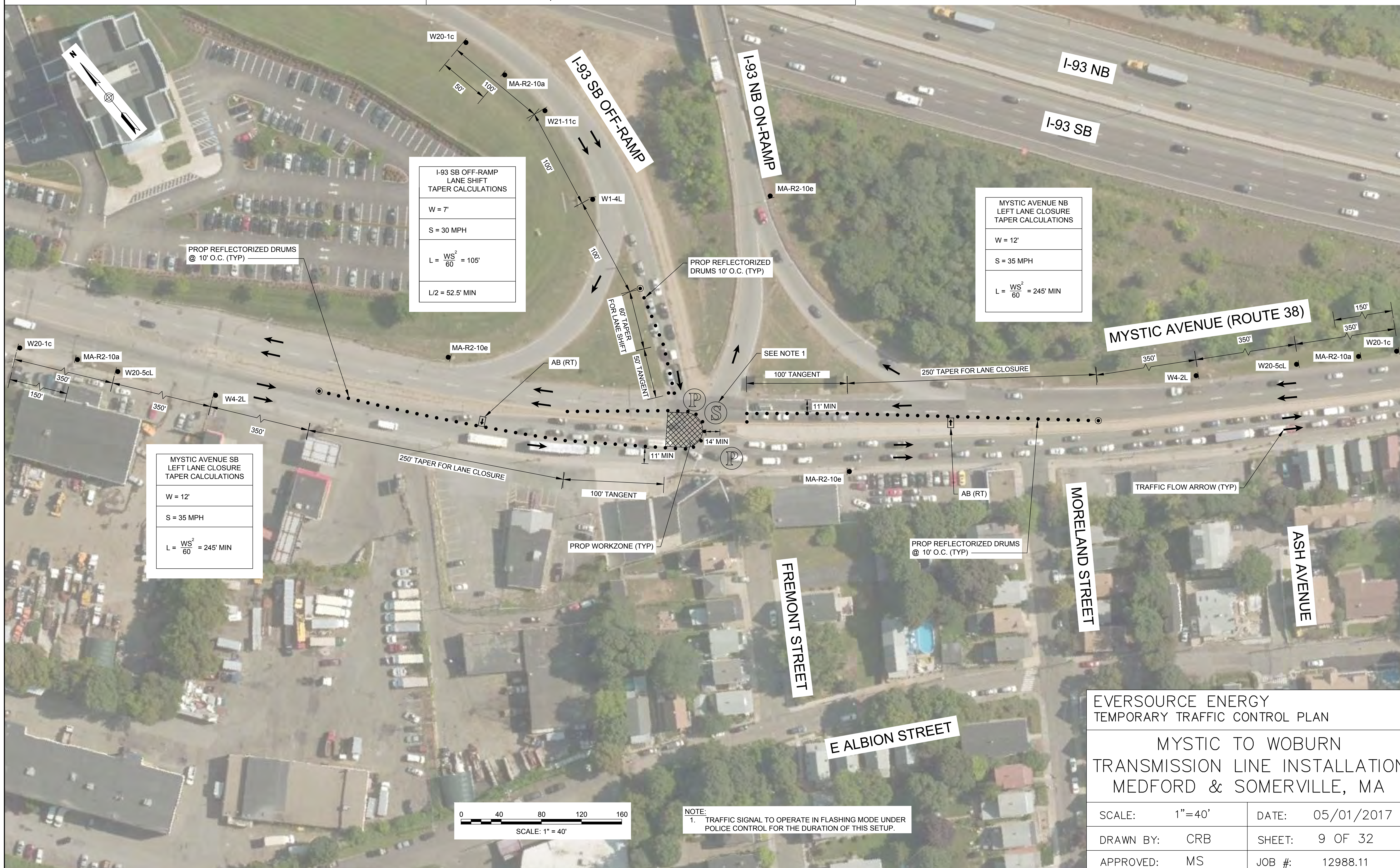
EVERSOURCE ENERGY
TEMPORARY TRAFFIC CONTROL PLAN

MYSTIC TO WOBURN
TRANSMISSION LINE INSTALLATION
MEDFORD & SOMERVILLE, MA

SCALE: 1"=40'	DATE: 05/01/2017
DRAWN BY: CRB	SHEET: 8 OF 32
APPROVED: MS	JOB #: 12988.11

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE AT I-93 INTERCHANGE
DATE: MAY 1, 2017 Permit No.:

Permit No.:



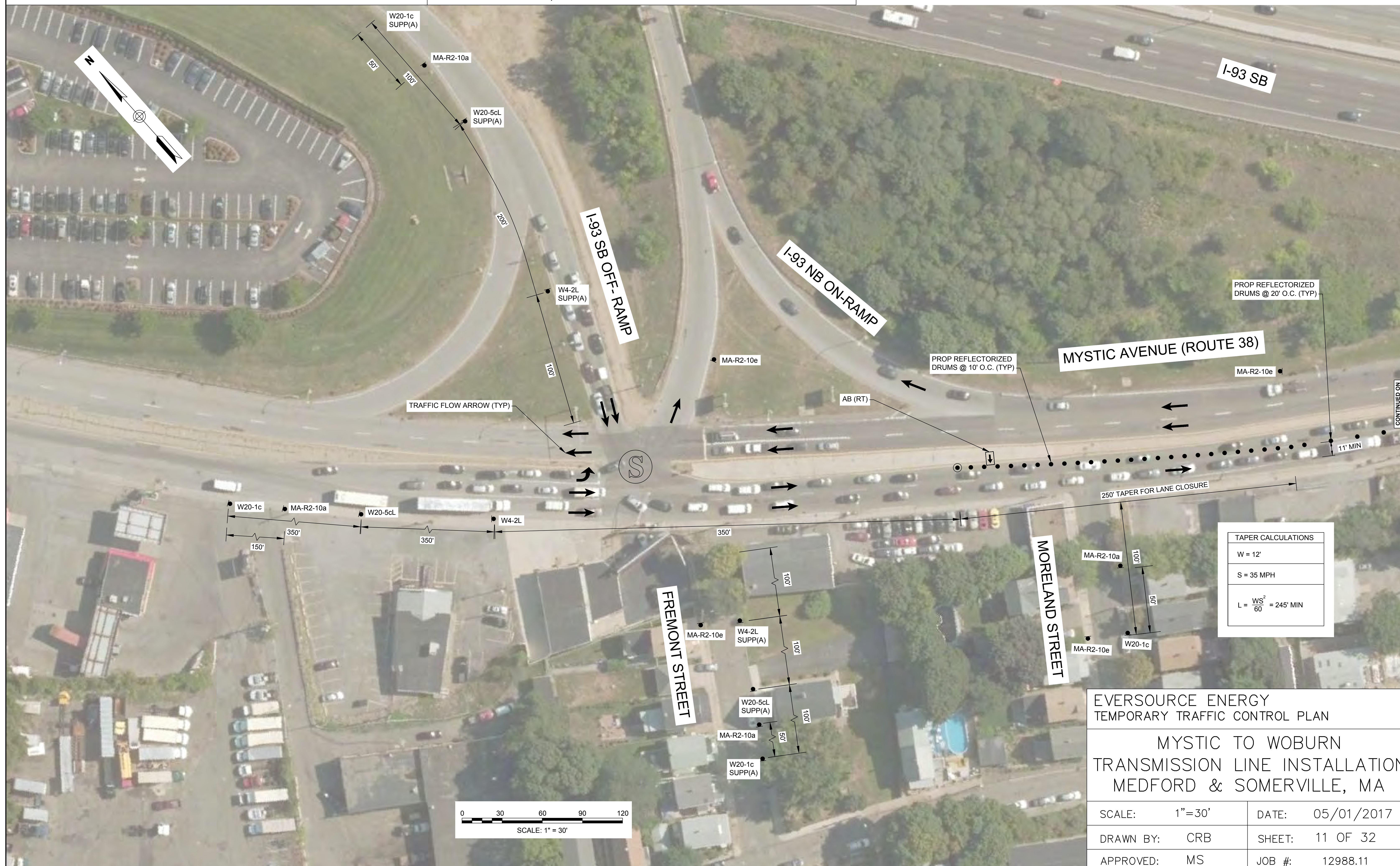
TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE AT I-93 INTERCHANGE
DATE: MAY 1, 2017 Permit No.:

[illegible]

SCALE: 1"=40'	DATE: 05/01/2017
DRAWN BY: CRB	SHEET: 10 OF 32
APPROVED: MS	JOB #: 12988.11

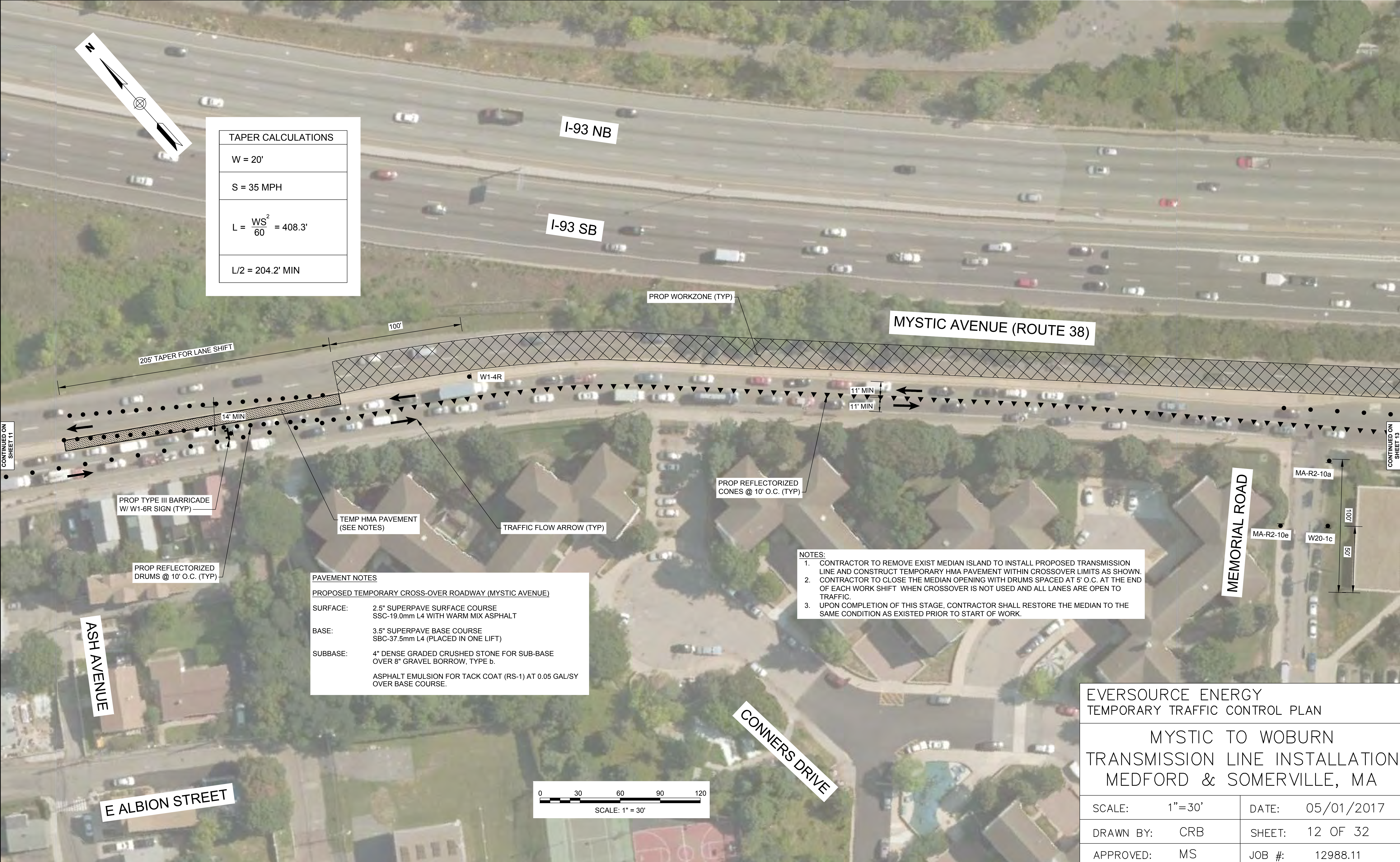
TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE CROSSOVER BETWEEN
I-93 RAMPS AND SHORE DRIVE
DATE: MAY 1, 2017 Permit No.:

Permit No.:



COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE CROSSOVER BETWEEN
I-93 RAMP AND SHORE DRIVE
DATE: MAY 1, 2017 Permit No.:



TAPER CALCULATIONS

W = 20'

S = 35 MPH

$$L = \frac{WS^2}{60} = 408.3'$$

L/2 = 204.2' MIN

CONTINUED ON
SHEET 11

CONTINUED ON
SHEET 13

PROP TYPE III BARRICADE
W/ W1-6R SIGN (TYP)

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

TEMP HMA PAVEMENT
(SEE NOTES)

TRAFFIC FLOW ARROW (TYP)

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

NOTES:

1. CONTRACTOR TO REMOVE EXIST MEDIAN ISLAND TO INSTALL PROPOSED TRANSMISSION LINE AND CONSTRUCT TEMPORARY HMA PAVEMENT WITHIN CROSSOVER LIMITS AS SHOWN.
2. CONTRACTOR TO CLOSE THE 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.

PAVEMENT NOTES

PROPOSED TEMPORARY CROSS-OVER ROADWAY (MYSTIC AVENUE)

SURFACE: 2.5" SUPERPAVE SURFACE COURSE
SSC-19.0mm L4 WITH WARM MIX ASPHALT

BASE: 3.5" SUPERPAVE BASE COURSE
SBC-37.5mm L4 (PLACED IN ONE LIFT)

SUBBASE: 4" DENSE GRADED CRUSHED STONE FOR SUB-BASE
OVER 8" GRAVEL BORROW, TYPE b.

ASPHALT EMULSION FOR TACK COAT (RS-1) AT 0.05 GAL/SY
OVER BASE COURSE.

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

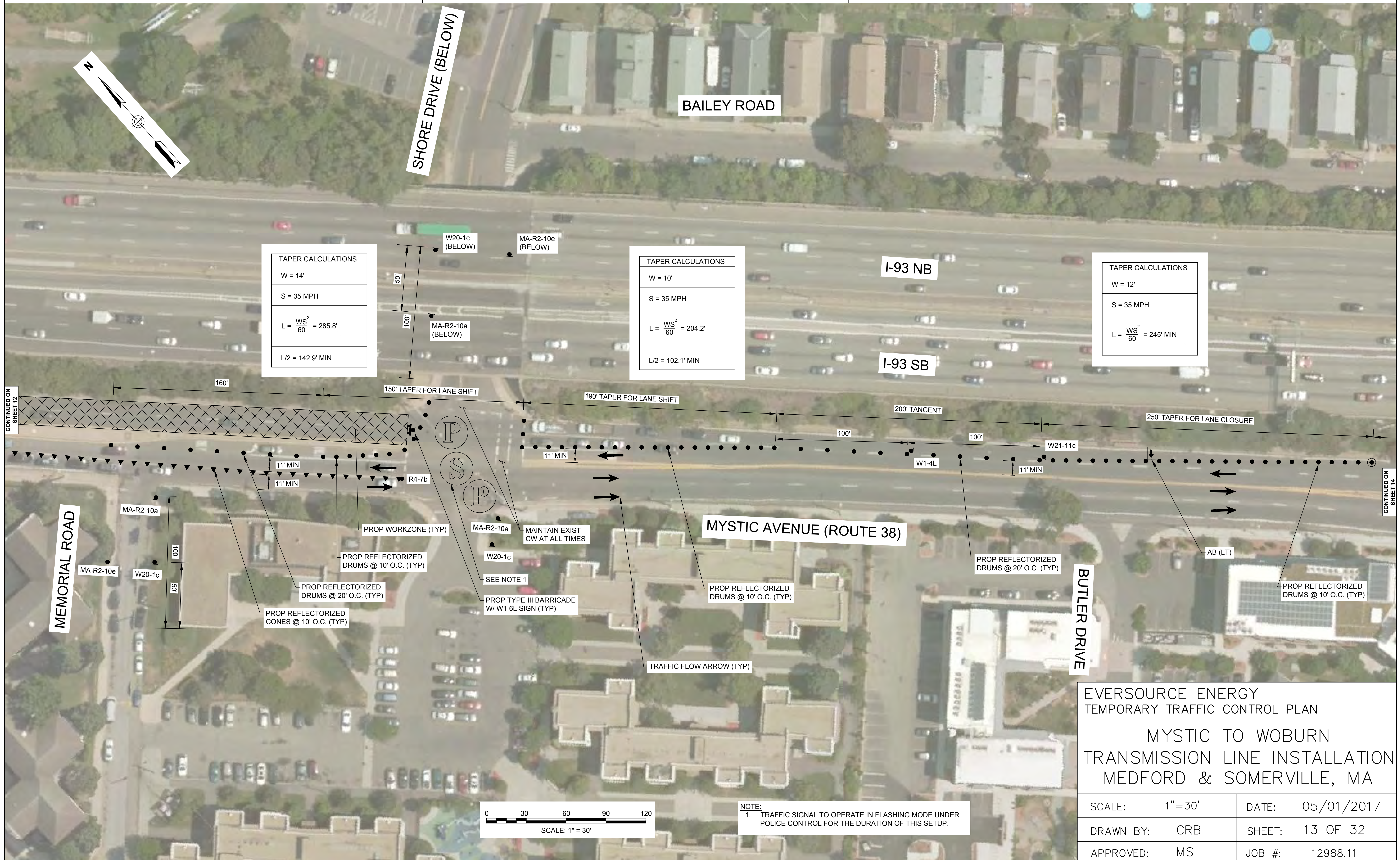
SHEET: 12 OF 32

APPROVED: MS

JOB #: 12988.11

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE CROSSOVER BETWEEN
I-93 RAMPS AND SHORE DRIVE
DATE: MAY 1, 2017 Permit No.:

PERMIT BETWEEN
DRIVE
Permit No.:



COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE CROSSOVER BETWEEN
I-93 RAMPS AND SHORE DRIVE
DATE: MAY 1, 2017 Permit No.:



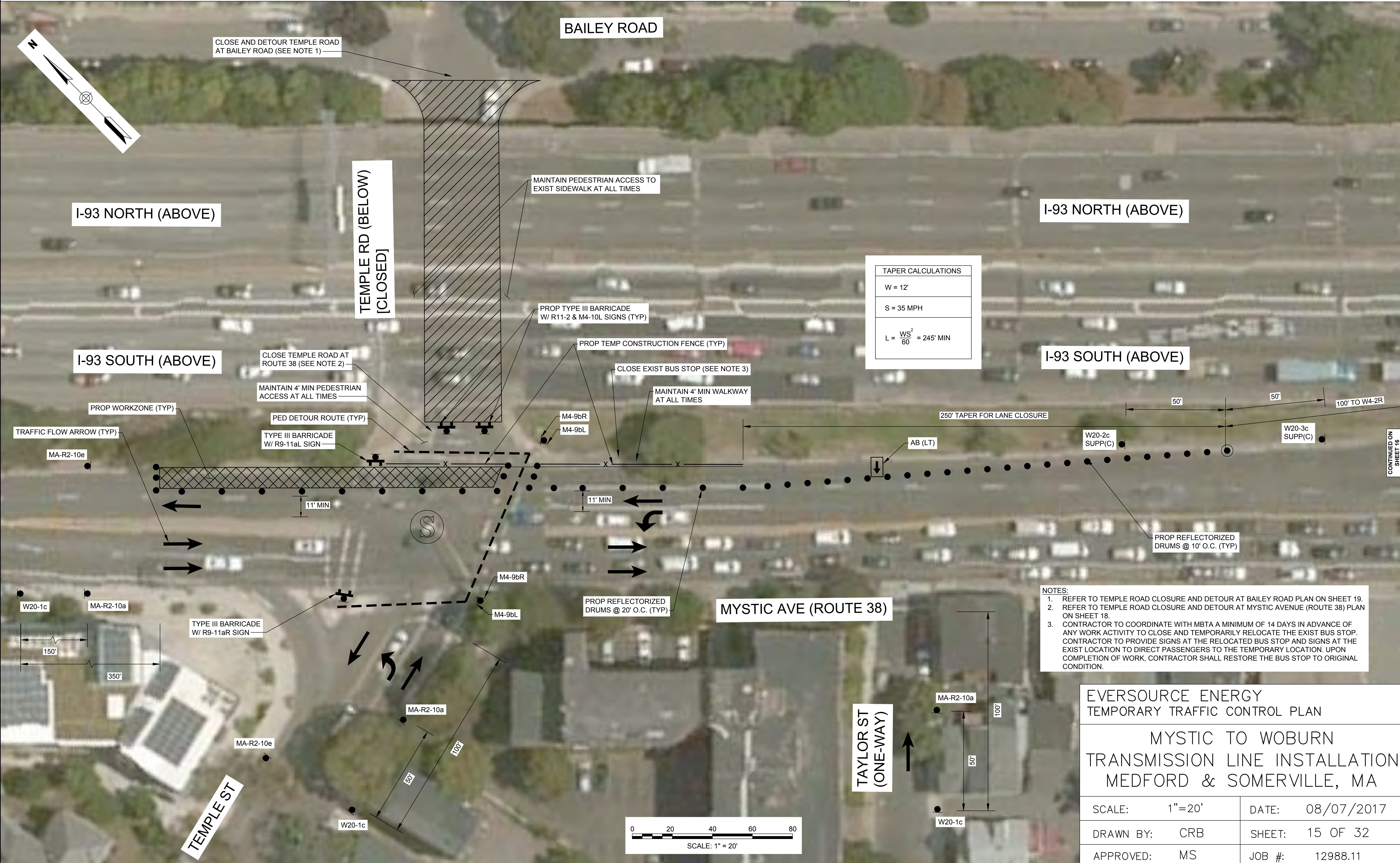
EVERSOURCE ENERGY
TEMPORARY TRAFFIC CONTROL PLAN

MYSTIC TO WOBURN
TRANSMISSION LINE INSTALLATION
MEDFORD & SOMERVILLE, MA

SCALE: 1"=30'	DATE: 05/01/2017
DRAWN BY: CRB	SHEET: 14 OF 32
APPROVED: MS	JOB #: 12988.11

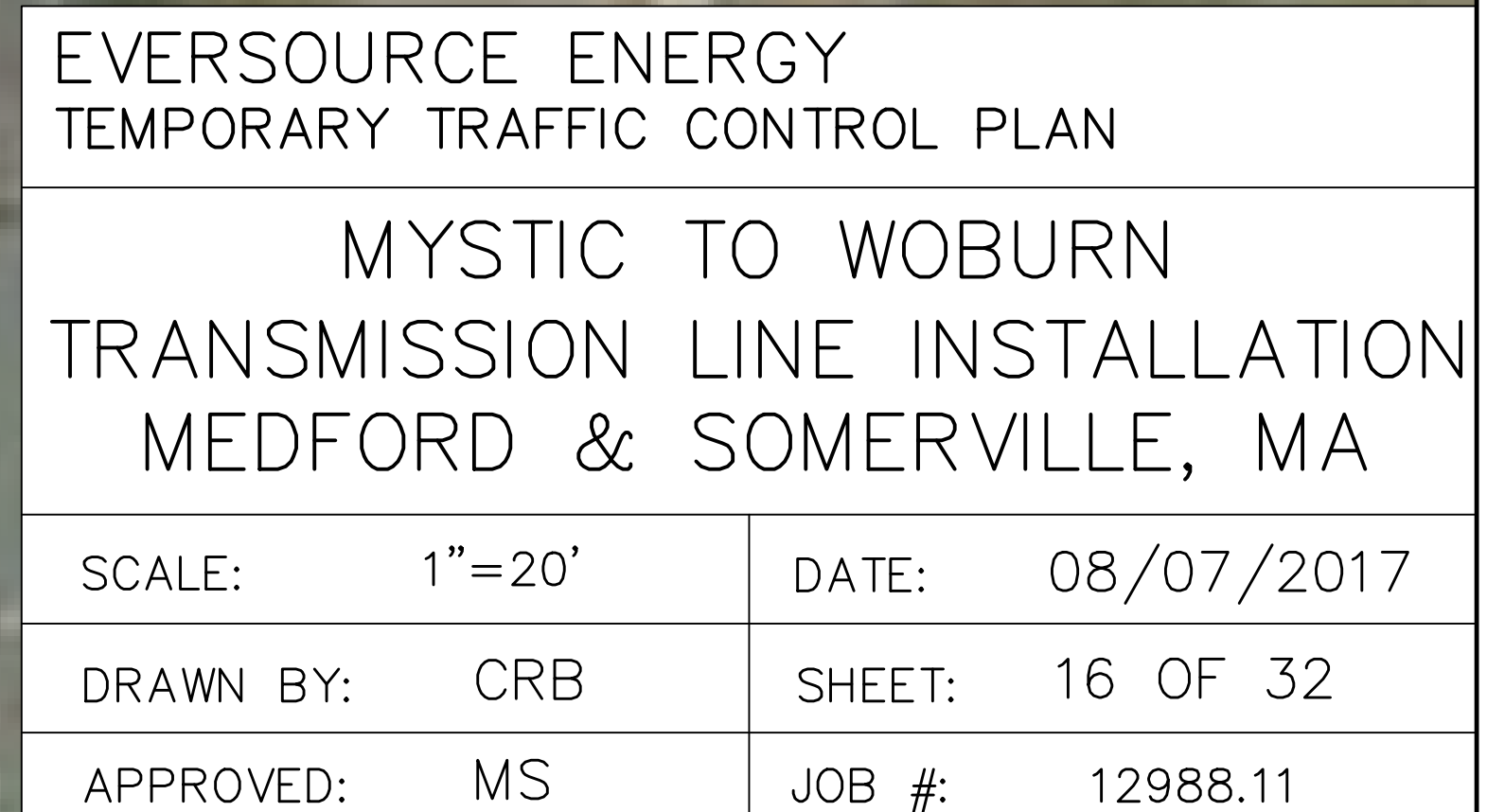
COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE (ROUTE 38) AT TEMPLE STREET
DATE: AUGUST 7, 2017 Permit No.:



TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE (ROUTE 38) AT TEMPLE STREET
DATE: AUGUST 7, 2017 Permit No.:

Permit No.:



TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE (ROUTE 38) AT TEMPLE STREET
DATE: AUGUST 7, 2017 Permit No.:

TAPER CALCULATIONS
W = 12'
S = 35 MPH
$L = \frac{WS^2}{60} = 245' \text{ MIN}$

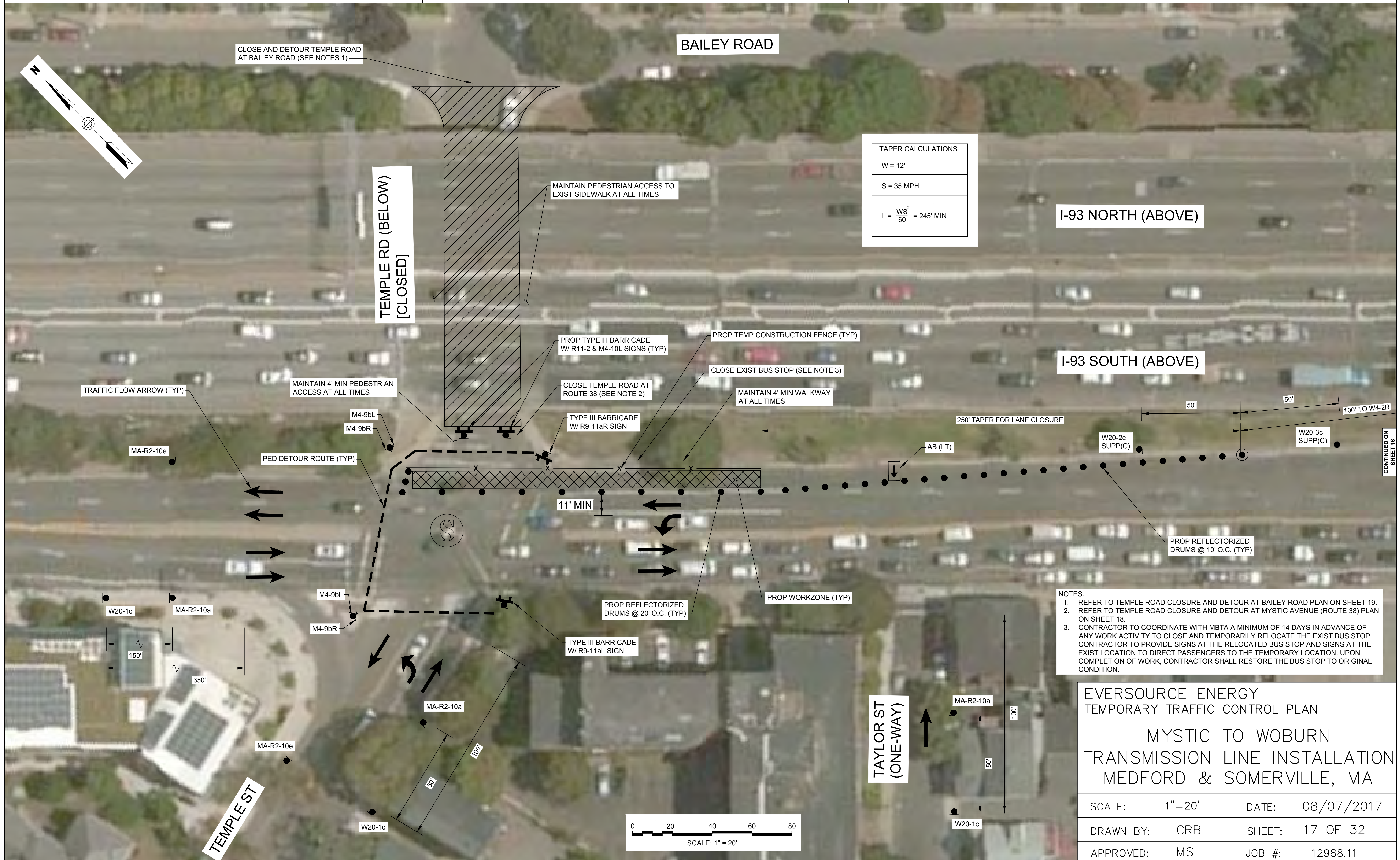
I-93 SOUTH (ABOVE)

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. CONTRACTOR TO PROVIDE SIGNS AT THE RELOCATED BUS STOP AND SIGNS AT THE EXIST LOCATION TO DIRECT PASSENGERS TO THE TEMPORARY LOCATION. UPON COMPLETION OF WORK, CONTRACTOR SHALL RESTORE THE BUS STOP TO ORIGINAL CONDITION.

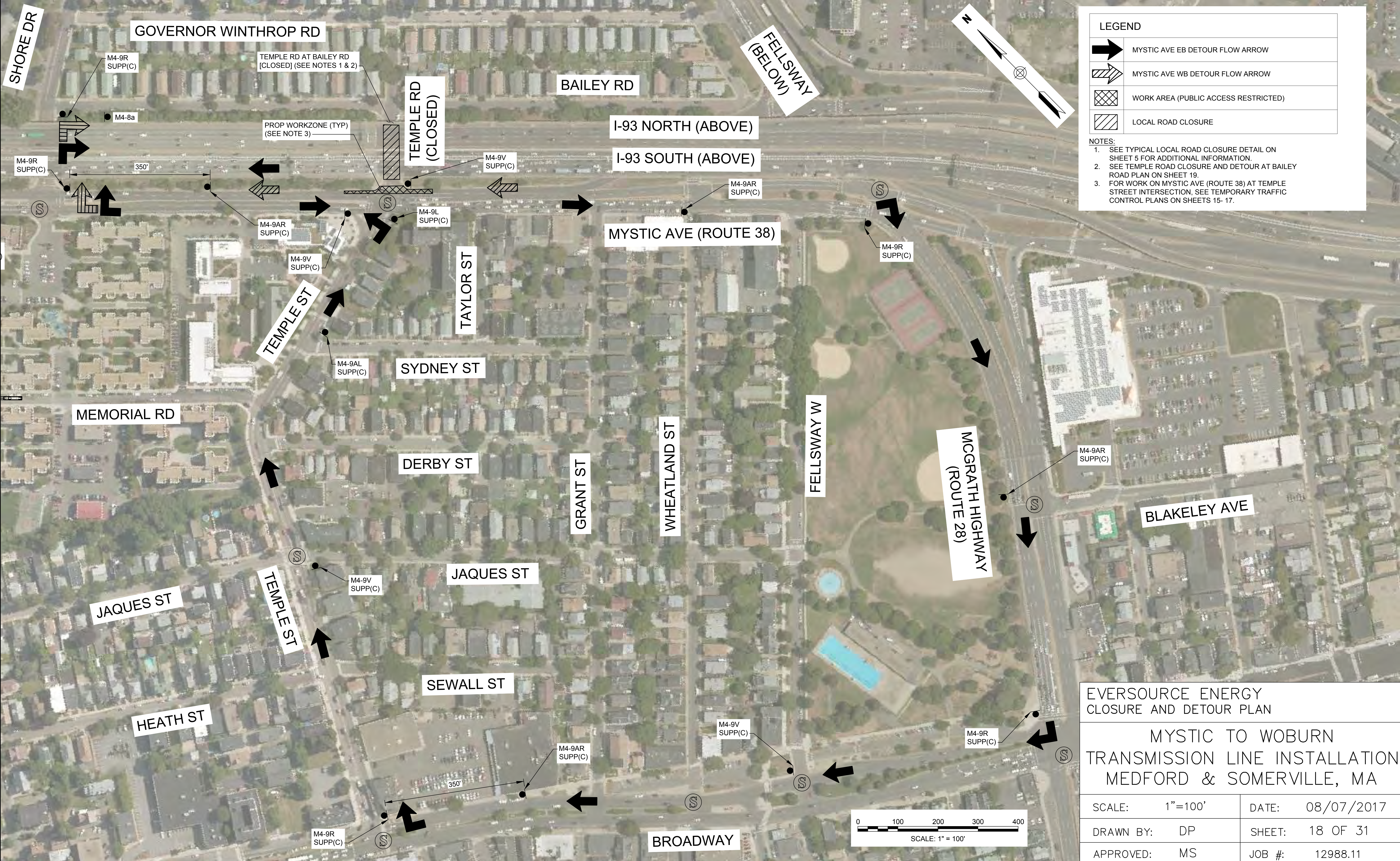
MYSTIC TO WOBURN
TRANSMISSION LINE INSTALLATION
MEDFORD & SOMERVILLE, MA

JOB #: 12988.11



COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476

TOWN: MEDFORD & SOMERVILLE
LOCATION: TEMPLE ROAD CLOSURE AND DETOUR
AT MYSTIC AVENUE (ROUTE 38)
DATE: AUGUST 7, 2017 Permit No.:



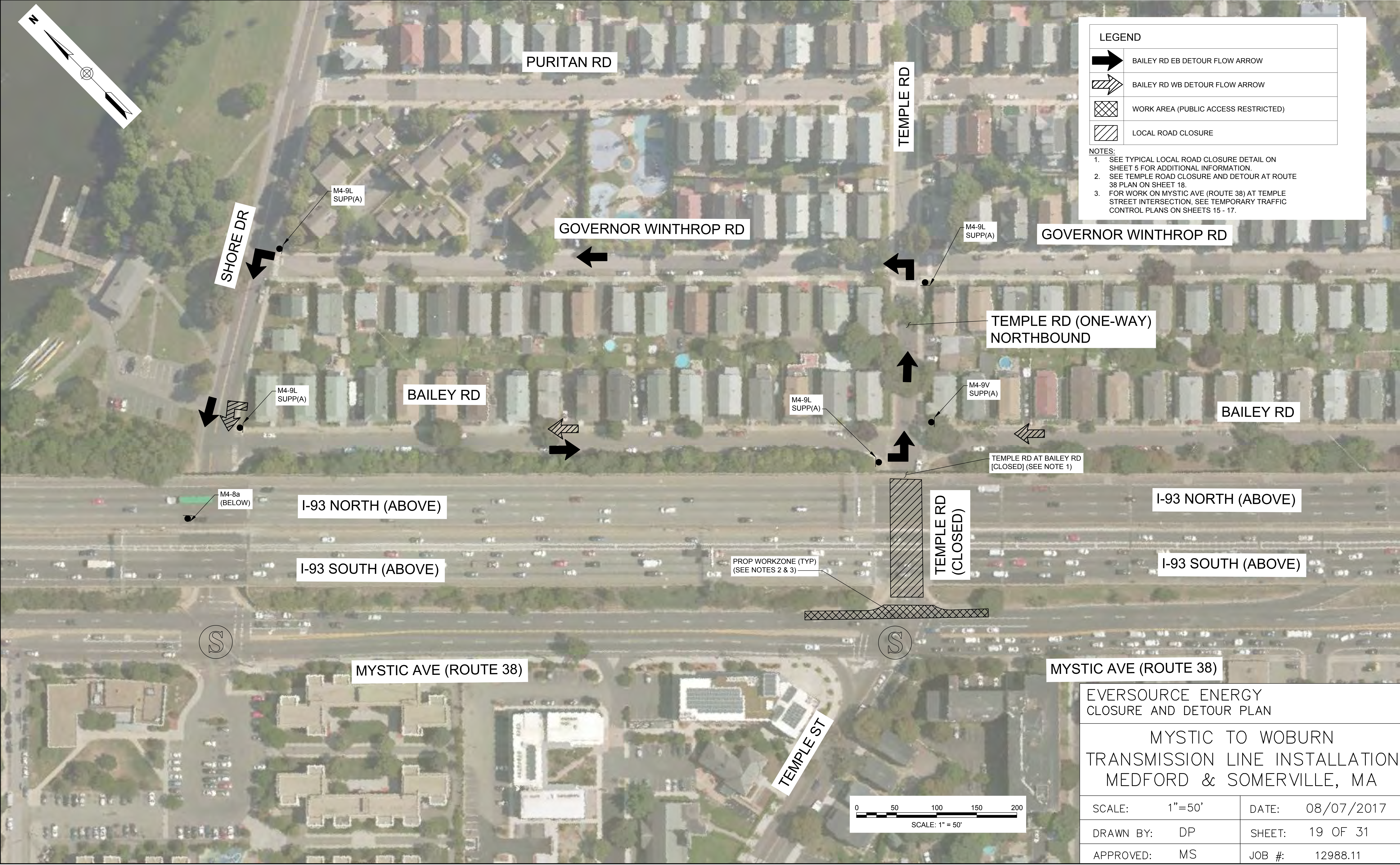
LEGEND	
	MYSTIC AVE EB DETOUR FLOW ARROW
	MYSTIC AVE WB DETOUR FLOW ARROW
	WORK AREA (PUBLIC ACCESS RESTRICTED)
	LOCAL ROAD CLOSURE

- NOTES:
- SEE TYPICAL LOCAL ROAD CLOSURE DETAIL ON SHEET 5 FOR ADDITIONAL INFORMATION.
 - SEE TEMPLE ROAD CLOSURE AND DETOUR AT BAILEY ROAD PLAN ON SHEET 19.
 - FOR WORK ON MYSTIC AVE (ROUTE 38) AT TEMPLE STREET INTERSECTION, SEE TEMPORARY TRAFFIC CONTROL PLANS ON SHEETS 15- 17.

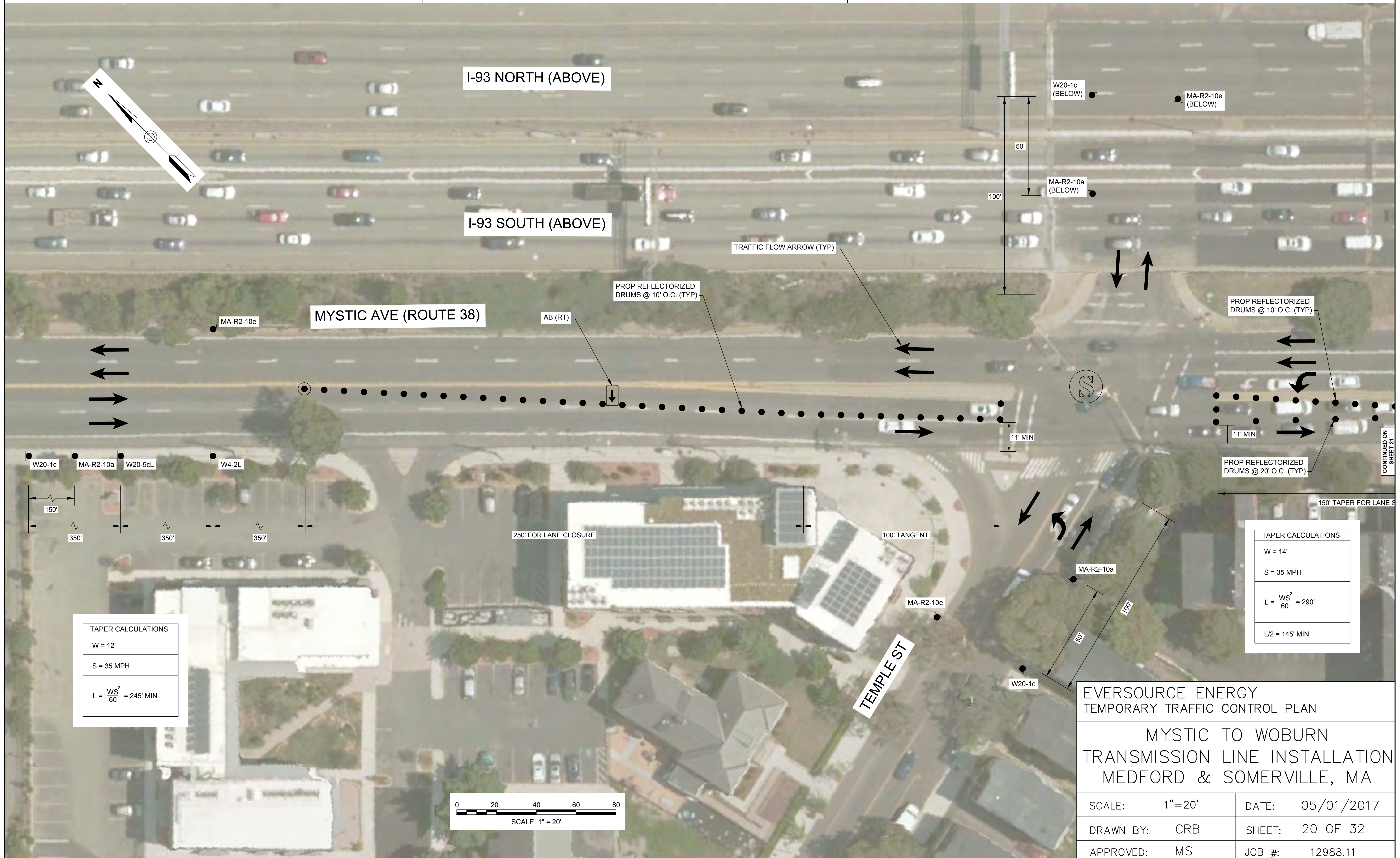
EVERSOURCE ENERGY CLOSURE AND DETOUR PLAN	
MYSTIC TO WOBURN TRANSMISSION LINE INSTALLATION MEDFORD & SOMERVILLE, MA	
SCALE: 1"=100'	DATE: 08/07/2017
DRAWN BY: DP	SHEET: 18 OF 31
APPROVED: MS	JOB #: 12988.11

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476

TOWN: MEDFORD & SOMERVILLE
LOCATION: TEMPLE ROAD CLOSURE AND DETOUR
AT BAILEY ROAD
DATE: AUGUST 7, 2017
Permit No.:

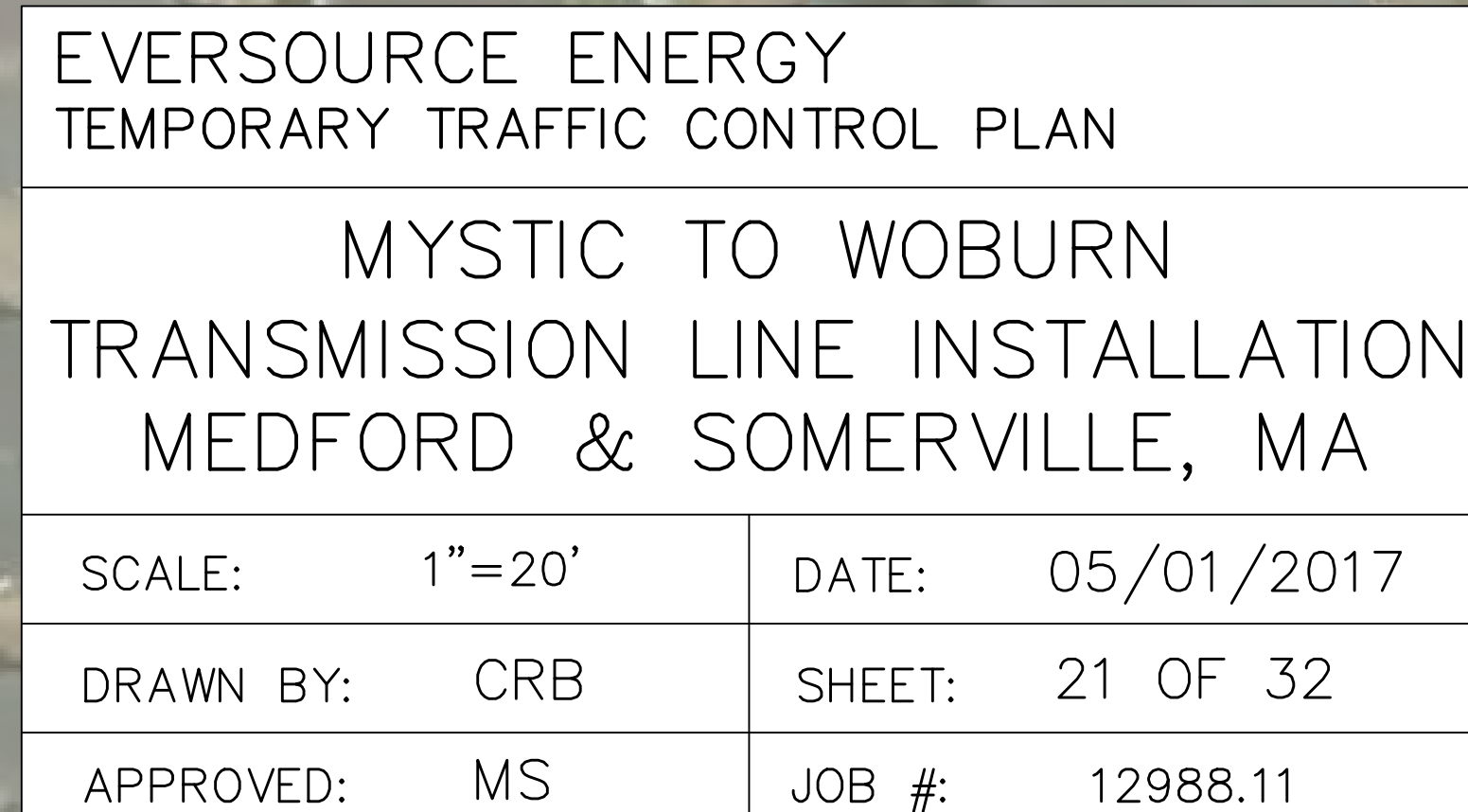


TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE CROSSOVER BETWEEN
TEMPLE STREET AND ROUTE 38 NORTHBOUND
DATE: MAY 1, 2017 Permit No.:



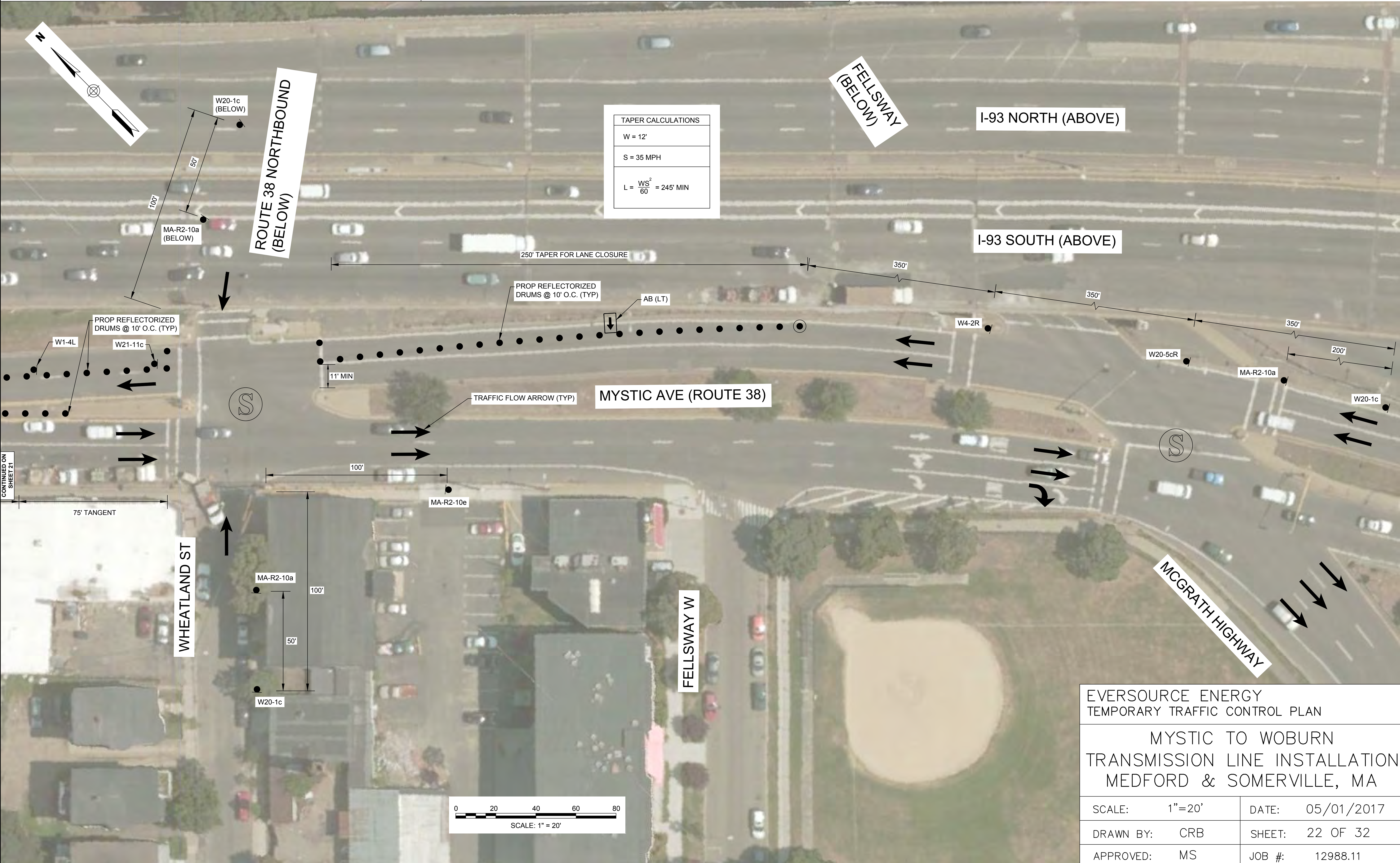
TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE CROSSOVER BETWEEN
TEMPLE STREET AND ROUTE 38 NORTHBOUND
DATE: MAY 1, 2017 Permit No.:

Permit No.:



COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE CROSSOVER BETWEEN
TEMPLE STREET AND ROUTE 38 NORTHBOUND
DATE: MAY 1, 2017 Permit No.:



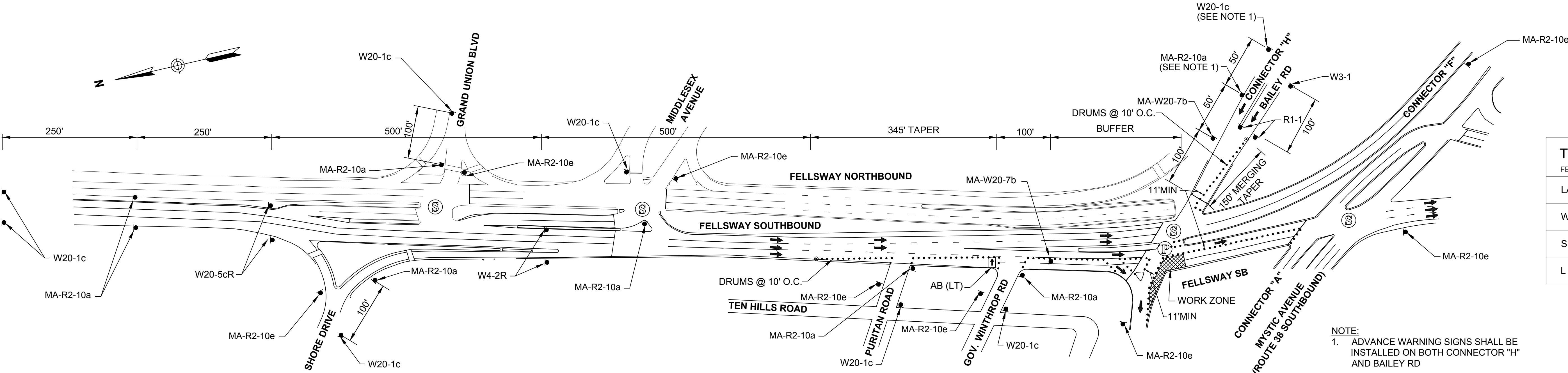
EVERSOURCE ENERGY
TEMPORARY TRAFFIC CONTROL PLAN

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

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476

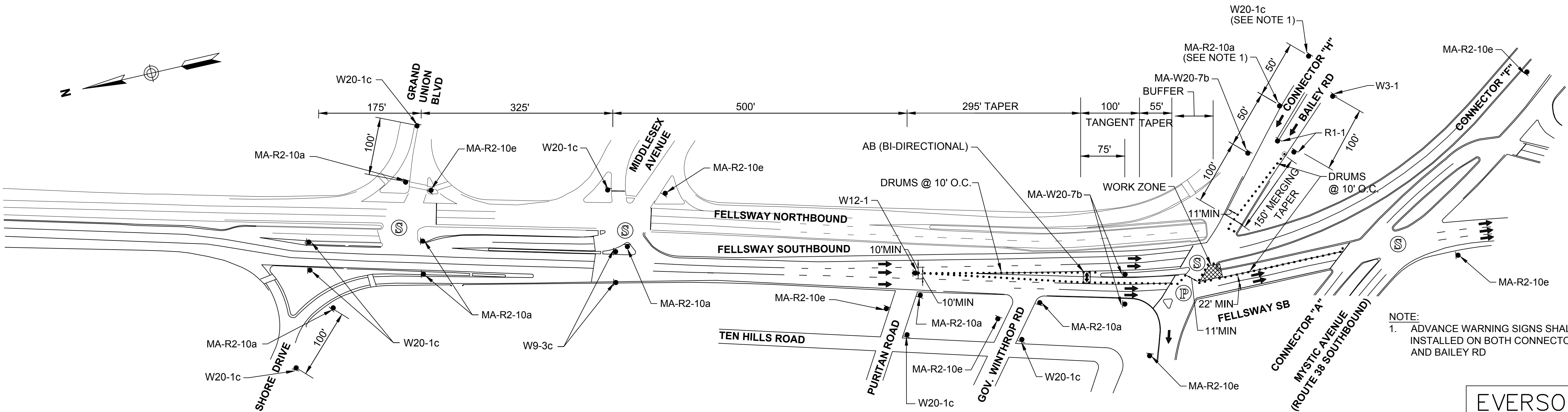
TOWN: MEDFORD & SOMERVILLE
LOCATION: ROUTE 38 NORTHBOUND AT FELLSWAY
DATE: MAY 1, 2017
Permit No.:



TAPER CALCULATION	
FELLSWAY SOUTHBOUND	
LANE CLOSURE	
W = 13'	
S = 40 MPH	
$L = \frac{WS^2}{60} = 345'$	

WORK ON THE WEST SIDE OF THE INTERSECTION - STAGE 1

SCALE: NTS



TAPER CALCULATION	
FELLSWAY SOUTHBOUND	
LANE CLOSURE	LANE SHIFT
W = 11'	W = 4'
S = 40 MPH	S = 40 MPH
$L = \frac{WS^2}{60} = 295'$	$L = \frac{WS^2}{60} = 105'$
	L/2 = 55' MIN

WORK IN THE MIDDLE OF THE INTERSECTION - STAGE 2

SCALE: NTS

EVERSOURCE ENERGY
TYPICAL DETAILS

MYSTIC TO WOBURN
TRANSMISSION LINE INSTALLATION
MEDFORD & SOMERVILLE, MA

SCALE: NOT TO SCALE	DATE: 05/01/2017
DRAWN BY: CRB	SHEET: 23 OF 32
APPROVED: MS	JOB #: 12988.11

TOWN: MEDFORD & SOMERVILLE
LOCATION: ROUTE 38 NB AT FELLSWAY

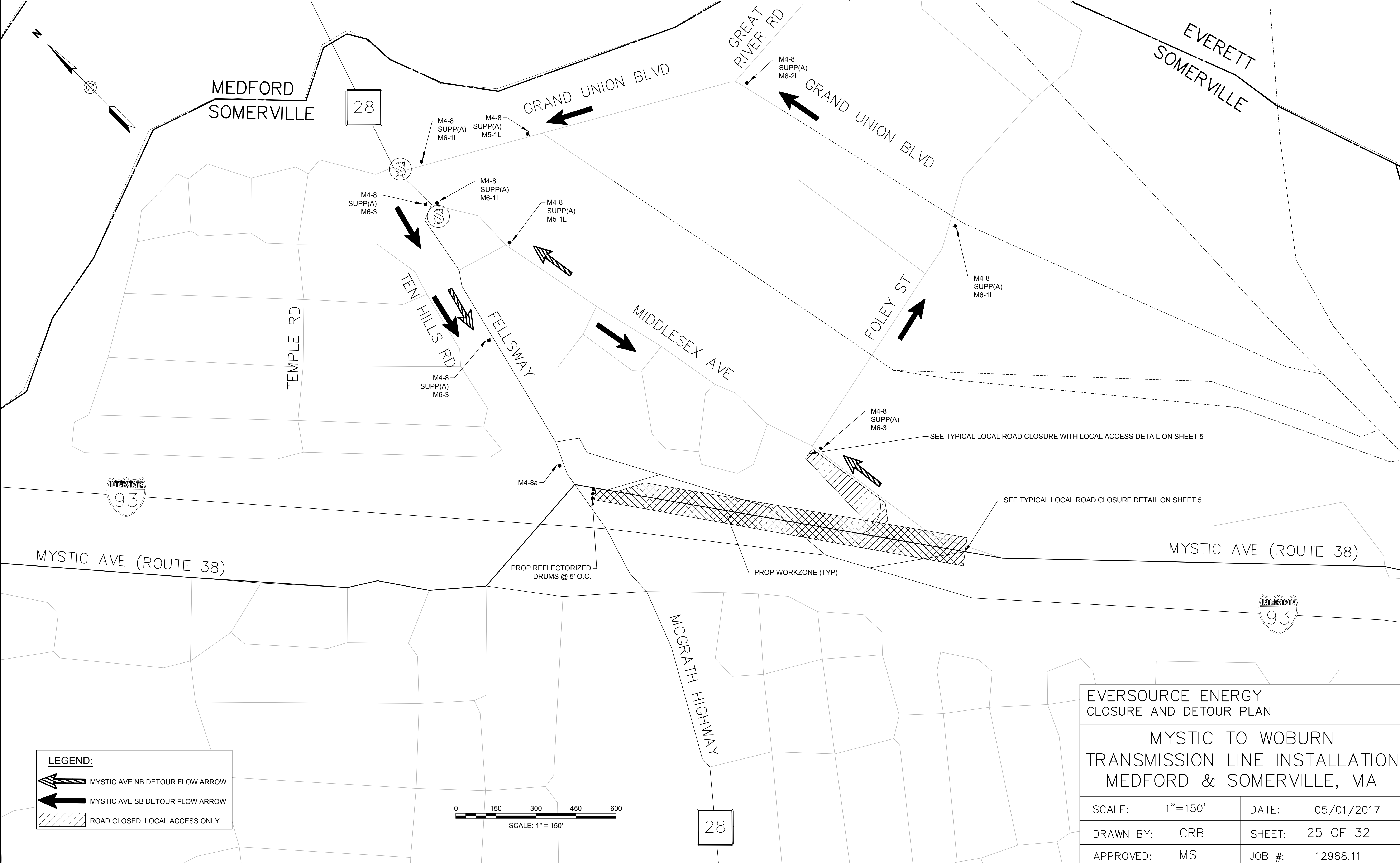
DATE: MAY 1, 2017 Permit No.:



EVERSOURCE ENERGY TYPICAL DETAILS	
MYSTIC TO WOBURN TRANSMISSION LINE INSTALLATION MEDFORD & SOMERVILLE, MA	
SCALE: NOT TO SCALE	DATE: 05/01/2017
DRAWN BY: CRB	SHEET: 24 OF 32
APPROVED: MS	JOB #: 12988.11

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE CLOSURE AND DETOUR BETWEEN
MIDDLESEX AVENUE AND FELLSWAY
DATE: MAY 1, 2017 Permit No.:

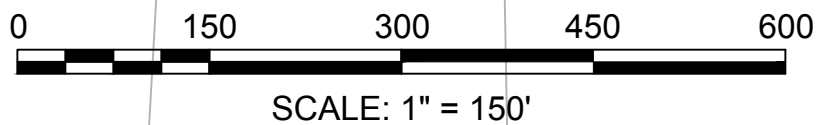


LEGEND:

MYSTIC AVE NB DETOUR FLOW ARROW

MYSTIC AVE SB DETOUR FLOW ARROW

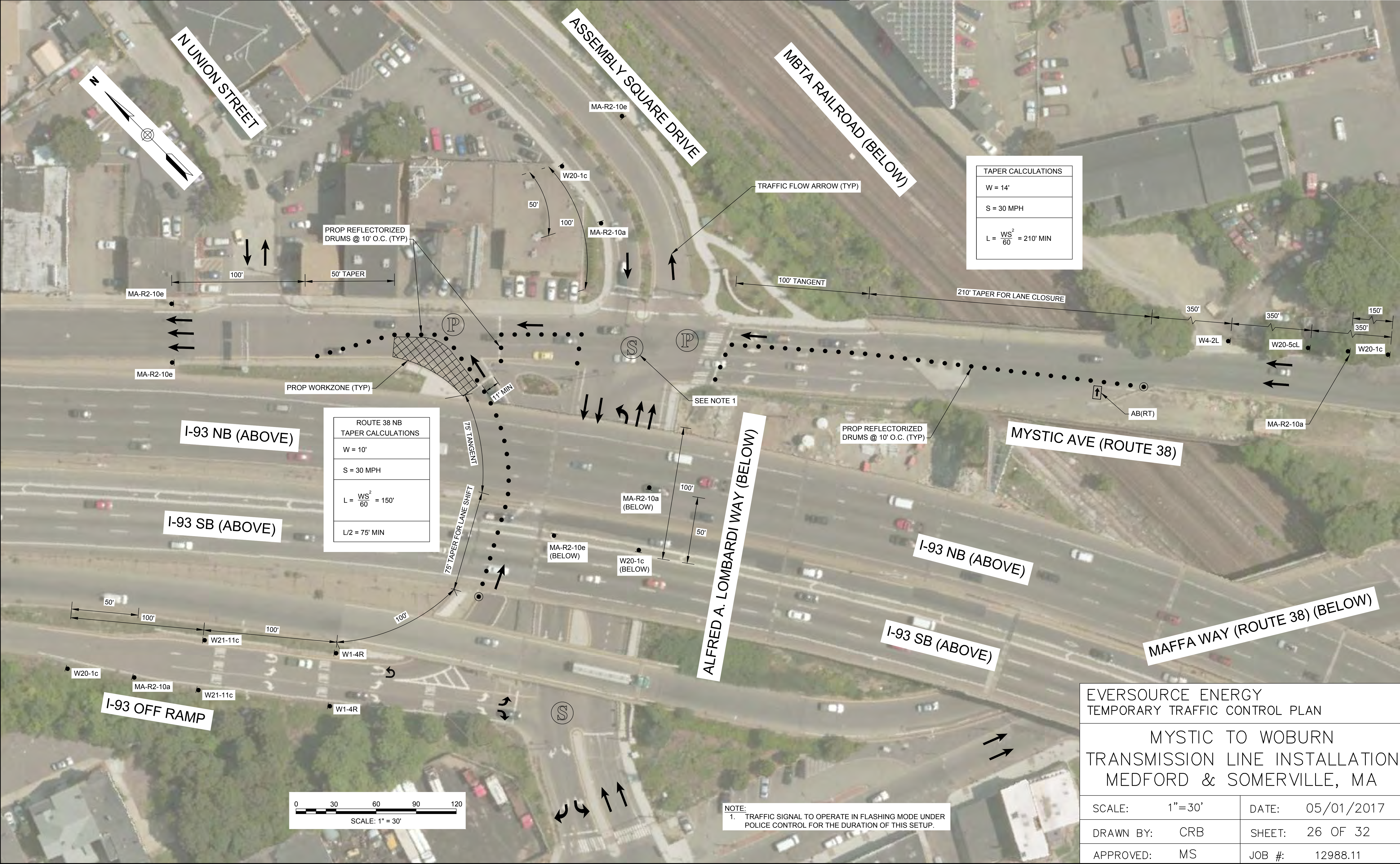
ROAD CLOSED, LOCAL ACCESS ONLY



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

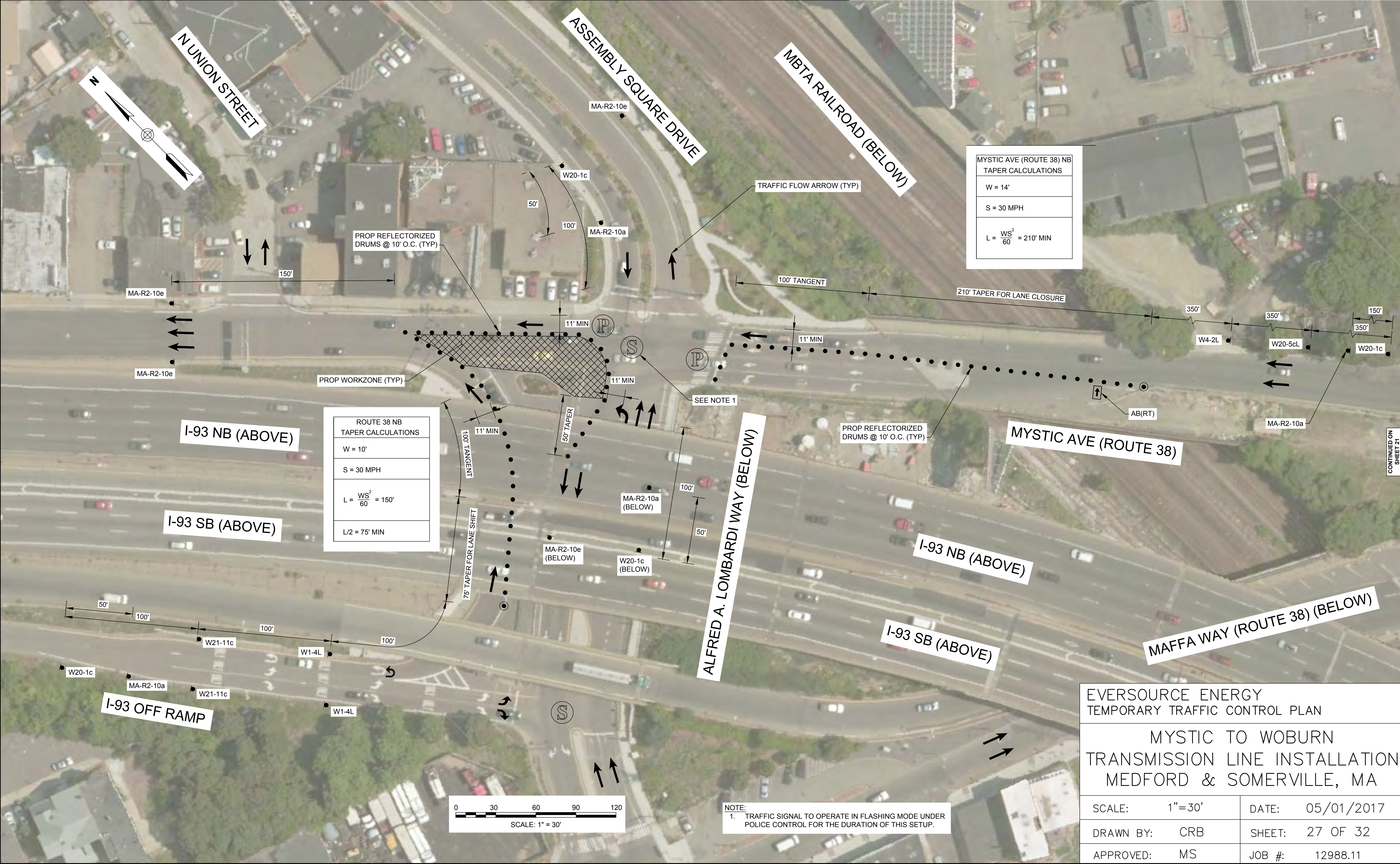
COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE AT ASSEMBLY SQUARE DRIVE
DATE: MAY 1, 2017 Permit No.:



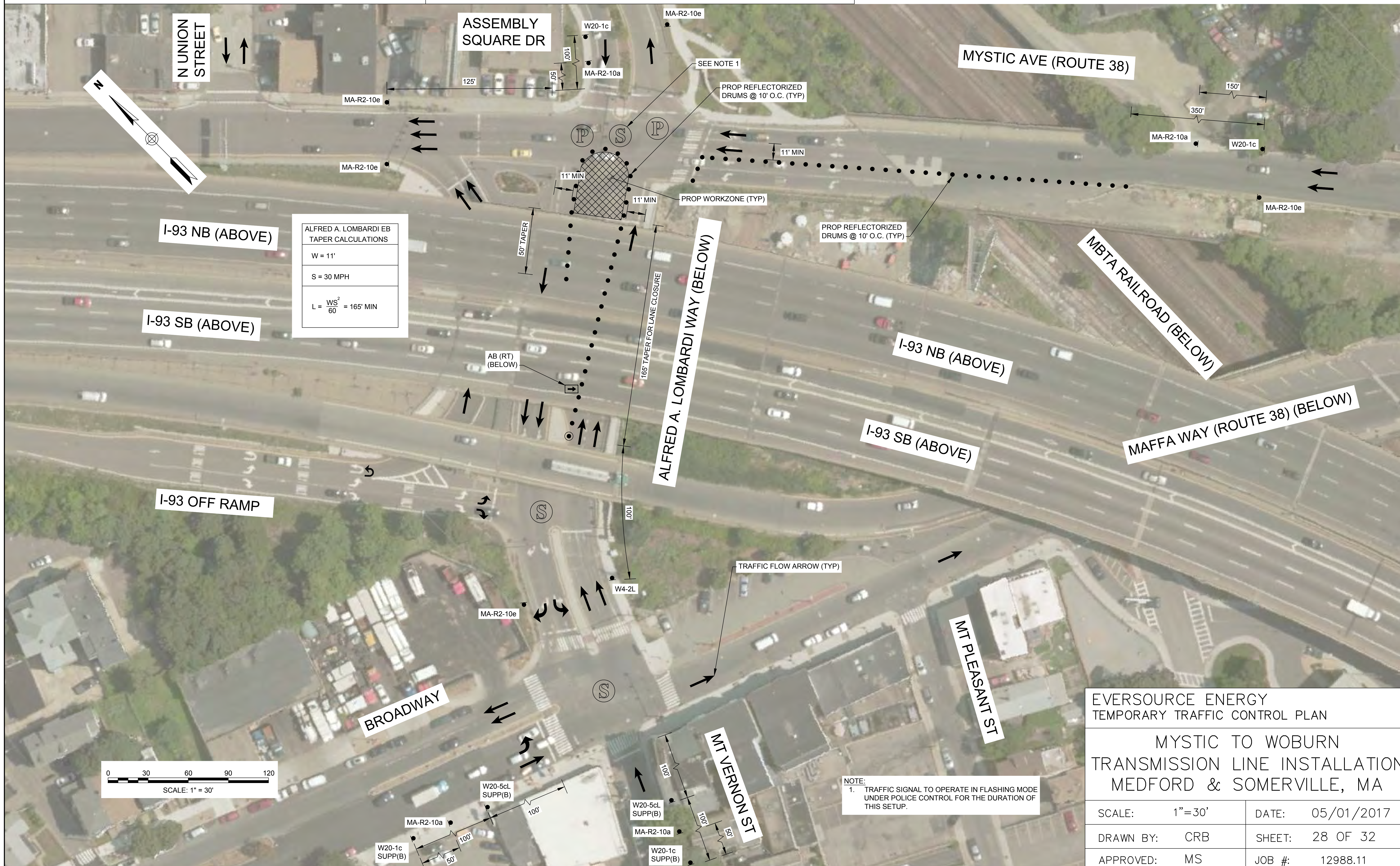
COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE AT ASSEMBLY SQUARE DRIVE
DATE: MAY 1, 2017 Permit No.:



TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE AT ASSEMBLY SQUARE DRIVE
DATE: MAY 1, 2017 Permit No.:

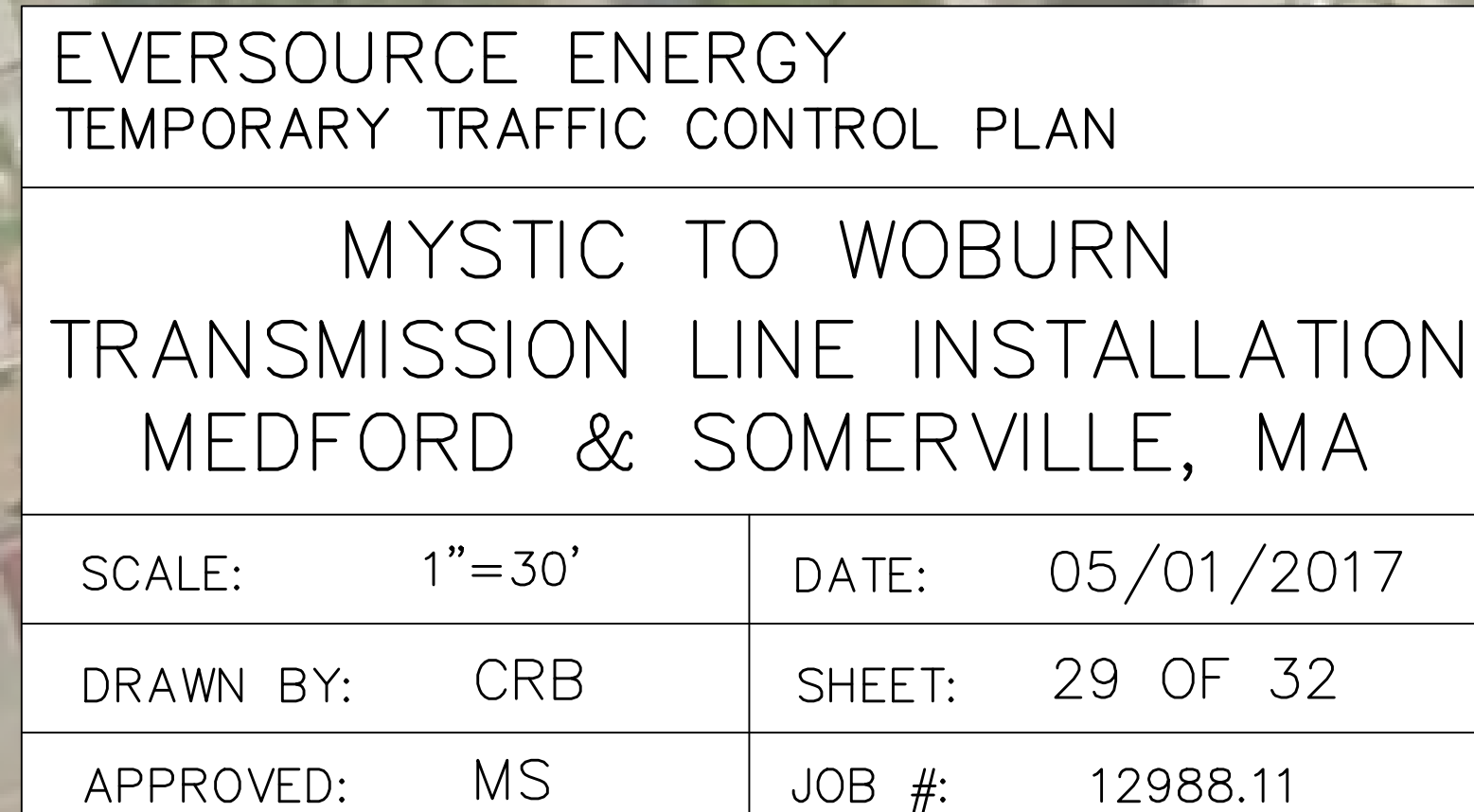
Permit No.:



MYSTIC TO WOBURN
TRANSMISSION LINE INSTALLATION
MEDFORD & SOMERVILLE, MA

SCALE: 1"=30'	DATE: 05/01/2017
DRAWN BY: CRB	SHEET: 28 OF 32
APPROVED: MS	JOB #: 12988.11

TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE AT ASSEMBLY SQUARE DRIVE
DATE: MAY 1, 2017 Permit No.:


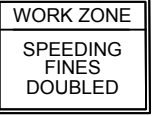
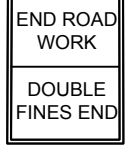







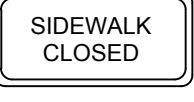
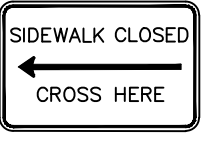
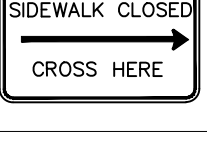










COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4
519 APPLETON STREET, ARLINGTON, MA 02476


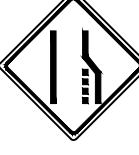


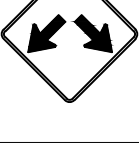





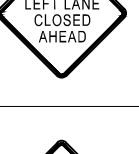
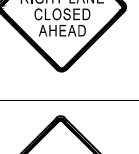

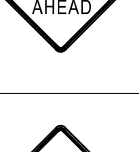
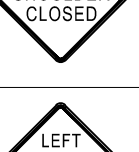
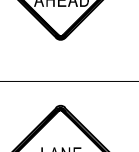

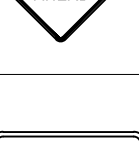
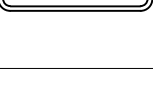


TOWN: MEDFORD & SOMERVILLE
LOCATION: MYSTIC AVENUE

DATE: AUGUST 7, 2017 Permit No.:

TEMPORARY TRAFFIC CONTROL SIGN SUMMARY

IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			COLOR		
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.	BACK- GROUND	LEGEND	BORDER
R1-1	36"	36"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			RED	WHITE	WHITE
MA-R2-10a	48"	36"		AS PER MASSDOT STANDARD			FLUOR- ESCENT ORANGE --- WHITE	BLACK	BLACK
MA-R2-10e	36"	48"					FLUOR- ESCENT ORANGE --- WHITE	BLACK	BLACK
R3-1	30"	30"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			WHITE	RED/ BLACK	BLACK
R3-2	30"	30"					WHITE	RED/ BLACK	BLACK
R4-7b	24"	30"					WHITE	BLACK	BLACK
R7-1D	12"	18"					WHITE	RED	RED
R7-1L	12"	18"					WHITE	RED	RED
R7-1R	12"	18"					WHITE	RED	RED
R9-9	30"	18"					WHITE	BLACK	BLACK
R9-11aL	24"	12"					WHITE	BLACK	BLACK
R9-11aR	24"	12"					WHITE	BLACK	BLACK
R11-2	48"	30"					WHITE	BLACK	BLACK
R11-3a	60"	30"					WHITE	BLACK	BLACK
W1-4L	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK
W1-4R	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK
W1-6L	48"	24"					FLUOR- ESCENT ORANGE	BLACK	BLACK
W1-6R	48"	24"					FLUOR- ESCENT ORANGE	BLACK	BLACK
W3-1	36"	36"					FLUOR- ESCENT ORANGE	BLACK RED/ WHITE	BLACK

TEMPORARY TRAFFIC CONTROL SIGN SUMMARY (CONTINUED)

IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			COLOR		
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.	BACK- GROUND	LEGEND	BORDER
W4-2L	36"	36"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			FLUOR- ESCENT ORANGE	BLACK	BLACK
W4-2R	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK
W5-1	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK
W9-3c	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK
W12-1	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK
W20-1c	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK
W20-2c	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK
W20-3c	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK
W20-4c	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK
W20-5aL	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK
W20-5cL	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK
W20-5cR	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK
MA-W20-7b	36"	36"		AS PER MASSDOT STANDARD			FLUOR- ESCENT ORANGE	BLACK	BLACK
W21-5aL	36"	36"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			FLUOR- ESCENT ORANGE	BLACK	BLACK
W21-5bL	36"	36"					FLUOR- ESCENT ORANGE	BLACK	BLACK
W21-11c	36"	36"		AS PER MASSDOT STANDARD			FLUOR- ESCENT ORANGE	BLACK	BLACK
M4-8	24"	12"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			FLUOR- ESCENT ORANGE	BLACK	BLACK
M4-8a	24"	18"					FLUOR- ESCENT ORANGE	BLACK	BLACK

NOTES:
1. HIGH INTENSITY REFLECTIVE SHEETING SHALL BE USED FOR ALL SIGNS. SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION" FOR TEXT DIMENSIONS, AS AMENDED; THE 1977 MASSHIGHWAY DEPARTMENT CONSTRUCTION AND TRAFFIC STANDARD DETAILS, AS AMENDED, FOR SIGNS AND SUPPORTS; THE MASSHIGHWAY DEPARTMENT SIGN LISTINGS 1993 EDITION, AS AMENDED; AND THE 2017 MASSDOT STANDARD SIGNS BOOK, AS AMENDED.
2. ALL SIGNS SHOWN GRAPHICALLY FOR INFORMATION ONLY. SIGN VENDOR SHALL FABRICATE ALL SIGNS IN ACCORDANCE WITH THE APPLICABLE STANDARDS.

















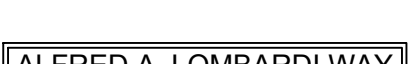


EVERSOURCE ENERGY
TTCP – SIGN SUMMARY

MYSTIC TO WOBURN
TRANSMISSION LINE INSTALLATION
MEDFORD & SOMERVILLE, MA

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

DRAWN BY: CRB SHEET: 30 OF 32

APPROVED: MS JOB #: 12988.11

COMMONWEALTH OF MASSACHUSETTS MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, DISTRICT 4 519 APPLETON STREET, ARLINGTON, MA 02476			TOWN: MEDFORD & SOMERVILLE LOCATION: MYSTIC AVENUE DATE: AUGUST 7, 2017 Permit No.:						
TEMPORARY TRAFFIC CONTROL SIGN SUMMARY (CONTINUED)									
IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			COLOR		
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.	BACK- GROUND	LEGEND	BORDER
M4-9bL	30"	24"		SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED			FLUOR- ESCENT ORANGE	BLACK	BLACK
M4-9bR	30"	24"				FLUOR- ESCENT ORANGE	BLACK	BLACK	
M4-9bSL	30"	24"				FLUOR- ESCENT ORANGE	BLACK	BLACK	
M4-9bSR	30"	24"				FLUOR- ESCENT ORANGE	BLACK	BLACK	
M4-9AL	30"	24"				FLUOR- ESCENT ORANGE	BLACK	BLACK	
M4-9AR	30"	24"				FLUOR- ESCENT ORANGE	BLACK	BLACK	
M4-9L	30"	24"				FLUOR- ESCENT ORANGE	BLACK	BLACK	
M4-9R	30"	24"				FLUOR- ESCENT ORANGE	BLACK	BLACK	
M4-9V	30"	24"				FLUOR- ESCENT ORANGE	BLACK	BLACK	
M4-10L	48"	18"				FLUOR- ESCENT ORANGE	BLACK	BLACK	
M4-10R	48"	18"				FLUOR- ESCENT ORANGE	BLACK	BLACK	
M5-1L	30"	21"				WHITE	BLACK	BLACK	
M6-1L	30"	21"				WHITE	BLACK	BLACK	
M6-2L	30"	21"				WHITE	BLACK	BLACK	
M6-3	30"	21"				WHITE	BLACK	BLACK	
SUPP(A)	VARIABLE	12"				FLUOR- ESCENT ORANGE	BLACK	BLACK	
SUPP(B)	VARIABLE	12"				FLUOR- ESCENT ORANGE	BLACK	BLACK	
SUPP(C)	VARIABLE	12"				FLUOR- ESCENT ORANGE	BLACK	BLACK	
<div>NOTES:</div> <div><div>1. HIGH INTENSITY REFLECTIVE SHEETING SHALL BE USED FOR ALL SIGNS. SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION" FOR TEXT DIMENSIONS, AS AMENDED; THE 1977 MASSHIGHWAY DEPARTMENT CONSTRUCTION AND TRAFFIC STANDARD DETAILS, AS AMENDED, FOR SIGNS AND SUPPORTS; THE MASSHIGHWAY DEPARTMENT SIGN LISTINGS 1993 EDITION, AS AMENDED; AND THE 2017 MASSDOT STANDARD SIGNS BOOK, AS AMENDED.</div><div>2. ALL SIGNS SHOWN GRAPHICALLY FOR INFORMATION ONLY. SIGN VENDOR SHALL FABRICATE ALL SIGNS IN ACCORDANCE WITH THE APPLICABLE STANDARDS.</div></div>									
							EVERSOURCE ENERGY TTCP – SIGN SUMMARY		
							MYSTIC TO WOBURN TRANSMISSION LINE INSTALLATION MEDFORD & SOMERVILLE, MA		
SCALE: NOT TO SCALE				DATE: 08/07/2017					
DRAWN BY: CRB				SHEET: 31 OF 32					
APPROVED: MS				JOB #: 12988.11					