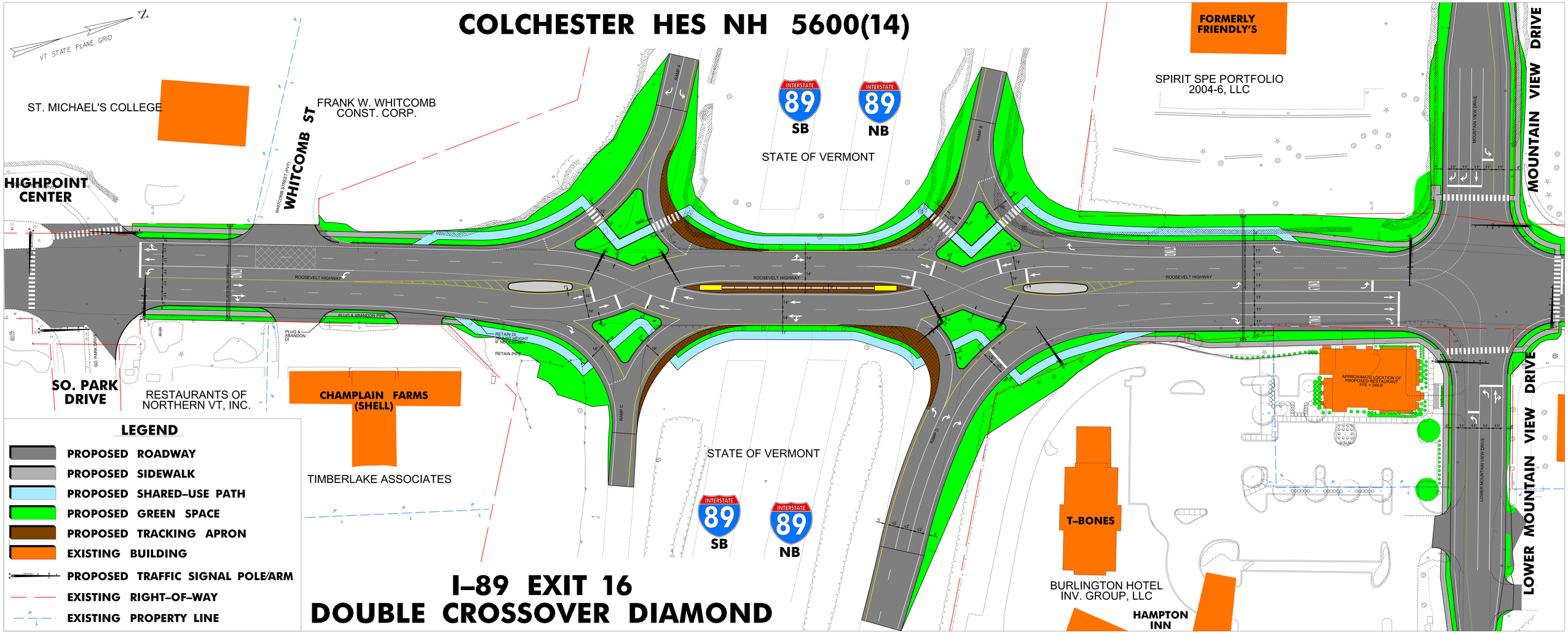
COLCHESTER HES NH 5600(14)

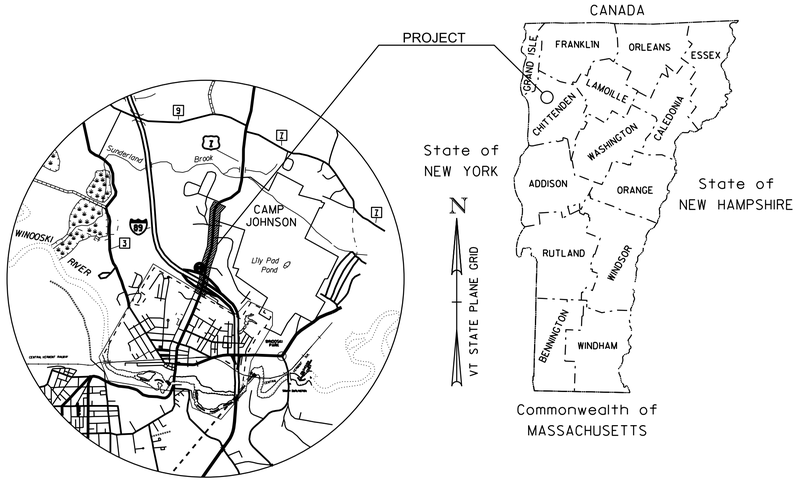


I-89 EXIT 16
DOUBLE CROSSOVER DIAMOND

INDEX OF SHEETS
SEE SHEET 2

INDEX OF STANDARDS
SEE SHEET 2

STATE OF VERMONT
AGENCY OF TRANSPORTATION



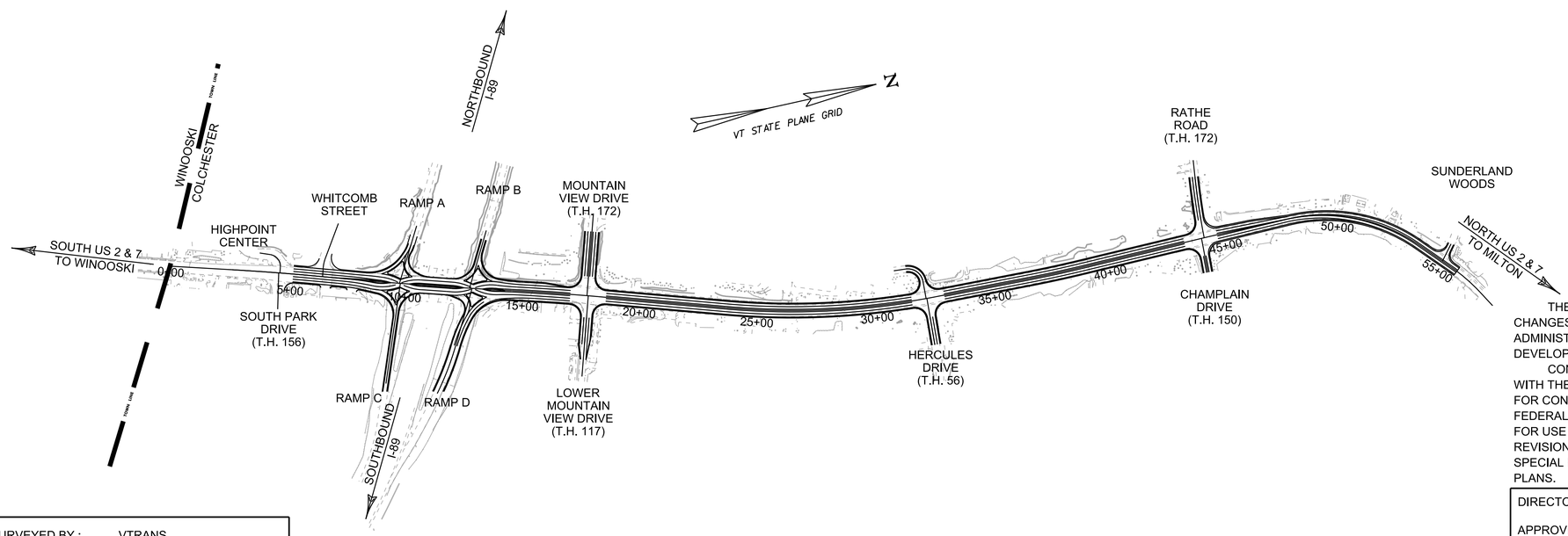
TRAFFIC DATA
SEE SHEET 3

PROPOSED IMPROVEMENT
TOWN OF COLCHESTER
COUNTY OF CHITTENDEN
US ROUTES 2 & 7
PRINCIPAL ARTERIAL

BEGINNING ON US ROUTE 2 & 7 AT THE WINOOSKI-COLCHESTER TOWN LINE EXTENDING NORTHERLY FOR A DISTANCE OF 1.05 MILES TO THE US ROUTE 2 & 7/SUNDERLAND WOODS INTERSECTION IN THE TOWN OF COLCHESTER.

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES THE CONSTRUCTION OF A DOUBLE CROSSOVER DIAMOND INTERCHANGE, WIDENING OF EXISTING ROADWAY FOR NEW TURN LANES, COLD PLANING AND RESURFACING, NEW TRAFFIC SIGNAL EQUIPMENT, NEW LIGHTING, NEW SIGNING AND OTHER ROADWAY RELATED WORK.

LENGTH OF PROJECT = 5563 FT = 1.05 MI



QUALITY ASSURANCE PROGRAM: LEVEL

CONVENTIONAL SYMBOLS

COUNTY LINE
TOWN LINE
LIMITS OF ACCESS
POINT OF ACCESS
FENCE LINE
STONE WALL
TRAVELED WAY
GUARD RAIL
RAILROAD
SURVEY LINE
CULVERT
POWER POLE
TELEPHONE POLE
TREES
CONTROL OF ACCESS
PROPERTY LINE
R.O.W. TAKING LINE
SLOPE RIGHTS (SR)
TOP OF CUT
TOE OF SLOPE

SURVEYED BY : VTRANS
SURVEYED DATE : DEC. 2011

DATUM
VERTICAL NAVD88
HORIZONTAL NAD83 (2007)

0 300 600
SCALE

CONCEPTUAL PLANS
FEBRUARY 29, 2012

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED _____ DATE _____

PROJECT MANAGER : JOSHUA L. SCHULTZ, P.E.

PROJECT NAME : COLCHESTER
PROJECT NUMBER : HES NH 5600(14)

SHEET 1 OF SHEETS

INDEX OF SHEETS & STANDARDS LIST

INDEX OF SHEETS

1	TITLE SHEET
2	INDEX OF SHEETS
3	TRAFFIC DATA SHEET
4-5	TYPICAL SECTION SHEETS
6	TIE SHEET
7-17	GENERAL PLANS
8-27	PROFILE SHEETS
28-39	TRUCK TURNING TEMPLATES
40-45	TRAFFIC SIGNAL PLANS

STANDARDS LIST

TO BE COMPILED

TRAFFIC DATA

TRAFFIC DATA – US ROUTES 2 /7 & SOUTH PARK DRIVE & HIGHPOINT CTR.

INTERSECTION APPROACH	ROUTE / STREET	AADT		DHV		%T		%D		ESAL'S	
		2014	2034	2014	2034	2014	2034	2014	2034	2014-2034	2014-2054
SOUTH LEG	US ROUTE 2/7 NB	16,200	19,700	1,900	2,300	2.9	4.2	59	59	6,027,000	15,290,000
NORTH LEG	US ROUTE 2/7 SB	18,000	21,900	2,100	2,500	2.4	3.4	60	60	7,844,000	19,760,000
WEST LEG	HIGHPOINT CTR. (PVT)	750	910	85	110	2.3	3.1	81	81	90,000	210,000
EAST LEG	SOUTH PARK DR. (TH 156)	4,000	4,900	460	570	2.2	2.9	55	55	523,000	1,203,000

POSTED SPEED = 30 M.P.H

TRAFFIC DATA – US ROUTES 2 /7 & I–89 SOUTHBOUND RAMPS

INTERSECTION APPROACH	ROUTE / STREET	AADT		DHV		%T		%D		ESAL'S	
		2014	2034	2014	2034	2014	2034	2014	2034	2014-2034	2014-2054
SOUTH LEG	US ROUTE 2/7 NB	18,000	21,900	2,100	2,500	2.4	3.4	60	60	7,844,000	19,760,000
NORTH LEG	US ROUTE 2/7 SB	19,600	23,900	2,300	2,800	2.0	2.8	52	52	9,413,000	23,611,000
WEST LEG	SB OFF RAMP	3,800	4,600	440	530	4.6	8.4	100	100	1,266,000	3,287,000
EAST LEG	SB ON RAMP	6,500	7,900	750	920	6.4	11.4	100	100	3,479,000	9,056,000

POSTED SPEED = 30 M.P.H

TRAFFIC DATA – US ROUTES 2 /7 & I–89 NORTHBOUND RAMPS

INTERSECTION APPROACH	ROUTE / STREET	AADT		DHV		%T		%D		ESAL'S	
		2014	2034	2014	2034	2014	2034	2014	2034	2014-2034	2014-2054
SOUTH LEG	US ROUTE 2/7 NB	19,600	23,900	2,300	2,800	2.0	2.8	52	52	9,413,000	23,611,000
NORTH LEG	US ROUTE 2/7 SB	22,800	27,800	2,600	3,200	2.5	3.6	52	52	10,066,000	25,313,000
WEST LEG	NB ON RAMP	3,500	4,200	700	850	0.6	1.0	100	100	1,048,000	2,713,000
EAST LEG	SB OFF RAMP	6,800	8,300	850	1,000	2.8	4.9	100	100	4,020,000	10,422,000

POSTED SPEED = 30 M.P.H

TRAFFIC DATA – US ROUTES 2 /7 & (LOWER) MOUNTAIN VIEW DRIVE

INTERSECTION APPROACH	ROUTE / STREET	AADT		DHV		%T		%D		ESAL'S	
		2014	2034	2014	2034	2014	2034	2014	2034	2014-2034	2014-2054
SOUTH LEG	US ROUTE 2/7 NB	22,800	27,800	2,600	3,200	2.5	3.6	52	52	10,066,000	25,313,000
NORTH LEG	US ROUTE 2/7 SB	15,100	18,400	1,800	2,100	3.8	5.3	57	57	9,654,000	24,188,000
WEST LEG	MOUNTAIN VIEW DR (TH 172)	6,200	7,600	720	880	2.3	3.0	60	60	627,000	1,434,000
EAST LEG	LOWER MOUNTAIN VIEW DR (TH 117)	7,200	8,800	840	1,000	1.8	2.4	57	57	537,000	1,243,000

POSTED SPEED = 30 M.P.H

TRAFFIC DATA – US ROUTES 2 /7 & HERCULES DRIVE

INTERSECTION APPROACH	ROUTE / STREET	AADT		DHV		%T		%D		ESAL'S	
		2014	2034	2014	2034	2014	2034	2014	2034	2014-2034	2014-2054
SOUTH LEG	US ROUTE 2/7 NB	15,100	18,400	1,800	2,100	3.8	5.3	57	57	9,654,000	24,188,000
NORTH LEG	US ROUTE 2/7 SB	16,100	19,600	1,900	2,300	2.6	3.8	67	67	7,347,000	18,538,000
WEST LEG	PARKING LOT	220	270	25	30	2.1	2.5	59	59	43,000	97,000
EAST LEG	HERCULES DRIVE (TH 56)	3,900	4,700	450	550	5.8	6.6	80	80	2,260,000	4,959,000

POSTED SPEED = 40 M.P.H

TRAFFIC DATA – US ROUTES 2 /7 & RATHE ROAD & CHAMPLAIN DRIVE

INTERSECTION APPROACH	ROUTE / STREET	AADT		DHV		%T		%D		ESAL'S	
		2014	2034	2014	2034	2014	2034	2014	2034	2014-2034	2014-2054
SOUTH LEG	US ROUTE 2/7 NB	16,100	19,600	1,900	2,300	2.6	3.8	67	67	7,347,000	18,538,000
NORTH LEG	US ROUTE 2/7 SB	16,100	19,600	1,900	2,300	2.0	2.9	73	73	6,135,000	15,544,000
WEST LEG	RATHE ROAD (TH 172)	3,800	4,600	440	530	2.1	2.7	80	80	1,170,000	2,682,000
EAST LEG	CHAMPLAIN DRIVE (TH 150)	250	310	30	35	5.2	6.5	53	53	118,000	269,000

POSTED SPEED = 50 M.P.H

TRAFFIC DATA – US ROUTES 2 /7 & SUNDERLAND WOODS

INTERSECTION APPROACH	ROUTE / STREET	AADT		DHV		%T		%D		ESAL'S	
		2014	2034	2014	2034	2014	2034	2014	2034	2014-2034	2014-2054
SOUTH LEG	US ROUTE 2/7 NB	16,100	19,600	1,900	2,300	2.0	2.9	73	73	6,135,000	15,544,000
NORTH LEG	US ROUTE 2/7 SB	16,100	19,600	1,900	2,300	2.0	2.9	72	72	6,108,000	15,450,000
WEST LEG	SUNDERLAND WOODS	660	810	75	95	2.3	3.0	57	57	135,000	312,000

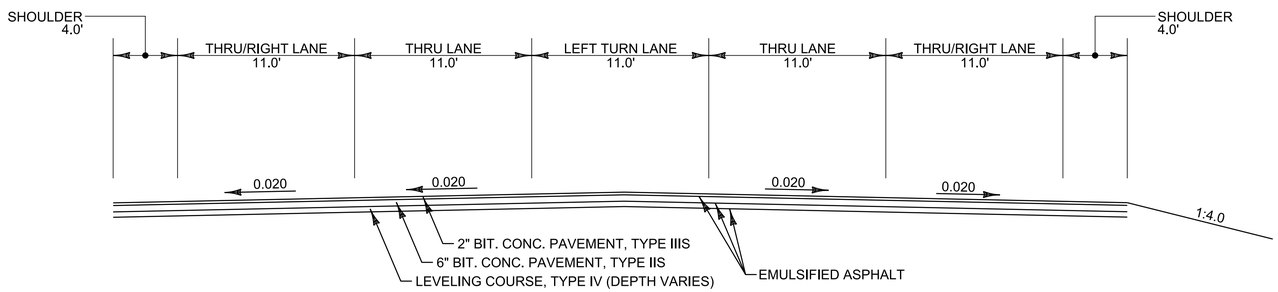
POSTED SPEED = 50 M.P.H

TYPICAL SECTIONS

MATERIAL TOLERANCES

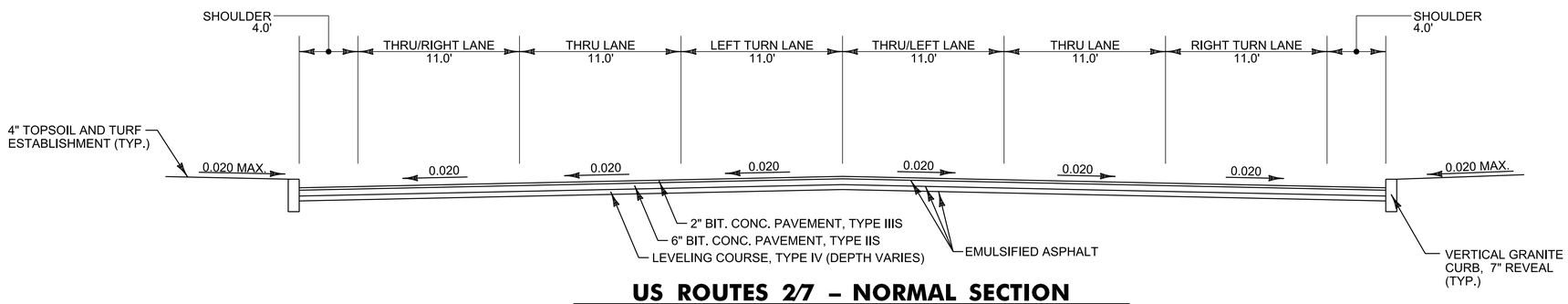
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (TOTAL DEPTH)	±1/4"
SUBBASE	±1"
SAND BORROW	±1"

US ROUTES 2/7
WEARING COURSE: 2" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IIIS)
BASE COURSE: 6" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IIS)
LEVELING COURSE: SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IVS) - DEPTH VARIES



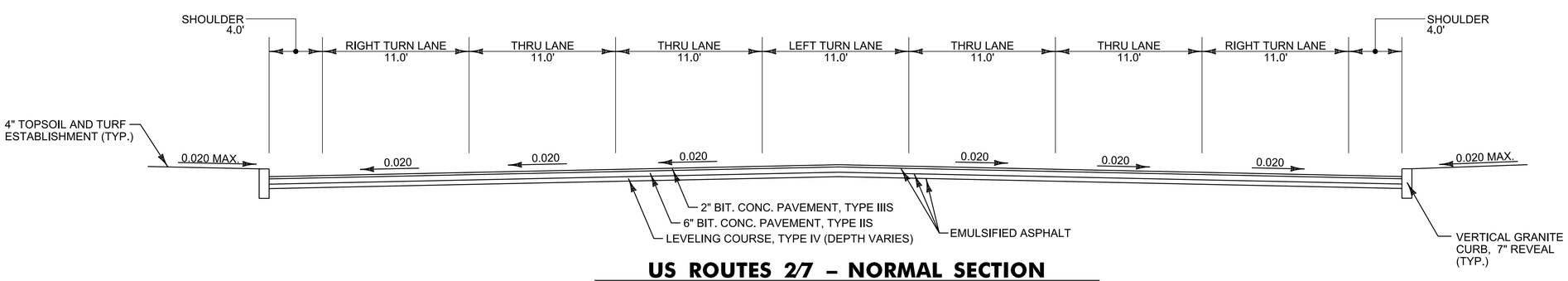
US ROUTES 2/7 – NORMAL SECTION

MOUNTAIN VIEW DRIVE TO SUNDERLAND WOODS
NOT TO SCALE



US ROUTES 2/7 – NORMAL SECTION

SOUTH PARK DRIVE TO SOUTHERN CROSSOVER
NOT TO SCALE



US ROUTES 2/7 – NORMAL SECTION

NORTHERN CROSSOVER TO MOUNTAIN VIEW DRIVE
NOT TO SCALE

SEEDING FORMULA

SEE EPSC DETAILS SHEET 2 FOR THE URBAN SEEDING FORMULA.

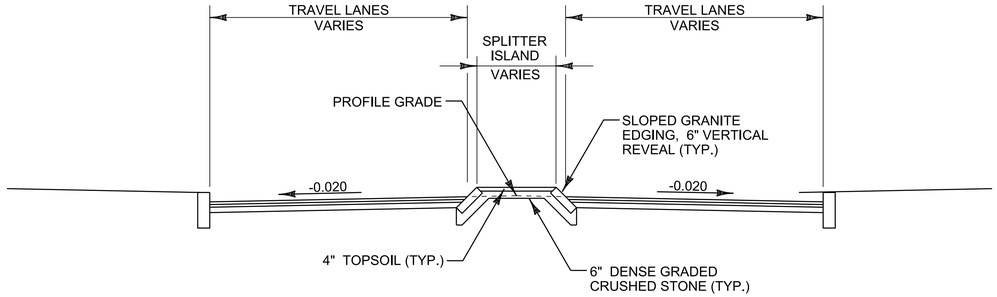
GENERAL NOTES

1. TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.025 GAL/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT OR AS DIRECTED BY THE ENGINEER.
2. SLOPE ROUNDING: ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD B-5.
3. ALL MATERIALS AND CONSTRUCTION PRACTICES SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION'S 2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND IT'S LATEST REVISIONS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE EXISTING UTILITIES WITHIN AND ADJACENT TO THE LIMITS OF WORK. IN THE EVENT OF DAMAGE TO THESE SYSTEMS, THE REPAIRS OR REPLACEMENT SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AS APPROVED BY THE RESIDENT ENGINEER.
5. ANY DISCREPENCIES BETWEEN THESE DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER BEFORE PROCEEDING WITH THE WORK.

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

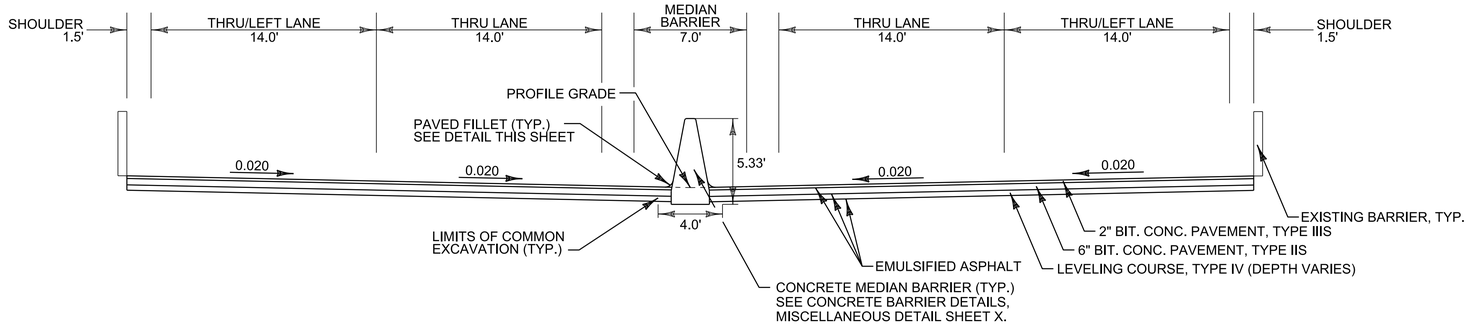
FILE NAME: t11x510frm.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TYPICAL SHEET 1

PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
SHEET 4 OF 45



SPLITTER ISLAND APPROACH SECTION

NOT TO SCALE



US ROUTES 2/7 – INVERTED CROWN

SOUTHERN CROSSOVER TO NORTHERN CROSSOVER
NOT TO SCALE

INTERSTATE OFF-RAMP SLIP RAMPS

NOT TO SCALE

PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: t11x510frm.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
TYPICAL SHEET 2	SHEET 5 OF 45

GPS CONTROL POINTS

HVCTRL #1

I 89 EXIT 16 AZ MK

NORTH = 730816.078
EAST = 1464009.447
ELEV. = 316.310

COLCHESTER, VT.
TO REACH FROM THE I-89 SB BRIDGE OVER US RTE 2 AT EXIT 16 GO SE ALONG I-89 SB FOR ABOUT 0.3 MI TO THE MARK ON THE LT IN THE MEDIAN, JUST S OF A U-TURN. THE MARK IS FLUSH WITH GROUND IN THE TOP OF A 30 CM DIA CONCRETE MONUMENT. IT IS 4.1 M E OF AND ABOUT 0.8 M LOWER THAN THE I-89 SB E EDGE OF PAVEMENT, 8.5 M W OF THE I-89 NB W EDGE OF PAVEMENT, 3.3 M S OF THE CENTER OF A 60 CM SQUARE METAL DRAIN, 1.6 M S OF THE U-TURN S EDGE OF PAVEMENT, AND 0.3 M N OF A FIBERGLASS WITNESS.

HVCTRL #2

I 89 EXIT 16

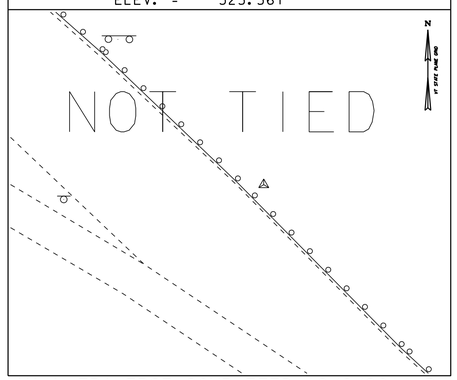
NORTH = 731688.783
EAST = 1462882.455
ELEV. = 342.880

COLCHESTER, VT.
ABOUT 30 M SE OF THE I-89 SB BRIDGE OVER US RTE 2 AT EXIT 16. THE MARK IS LOCATED IN THE MEDIAN AND IS SET FLUSH WITH GROUND IN THE TOP OF A 30 CM DIA CONCRETE MONUMENT. IT IS 8.1 M NH OF AND ABOUT 0.2 M HIGHER THAN THE I-89 SB NE EDGE OF PAVEMENT, 4.9 M SW OF THE I-89 NB SW EDGE OF PAVEMENT, 2.6 M S OF THE MOST SOUTHERLY WOODEN POST FOR A STEEL BEAM GUARD RAIL, AND 0.3 M SE OF A FIBERGLASS WITNESS.

TRAVERSE TIES

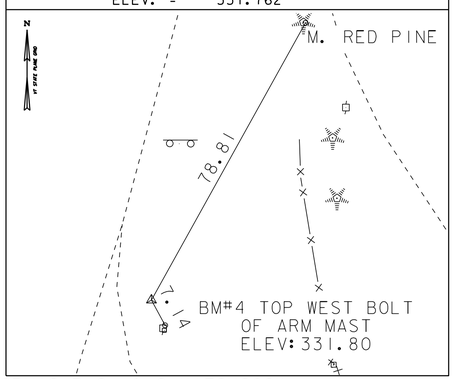
HVCTRL #3

NORTH = 731499.639
EAST = 1463396.578
ELEV. = 325.561



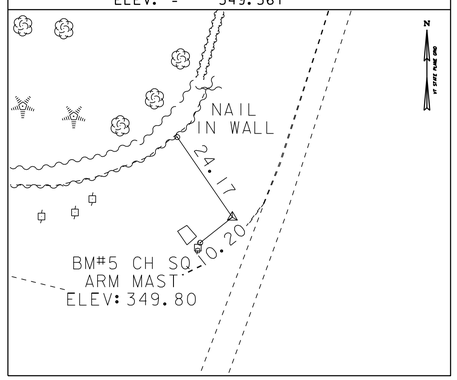
HVCTRL #4

NORTH = 731937.351
EAST = 1462819.534
ELEV. = 331.762



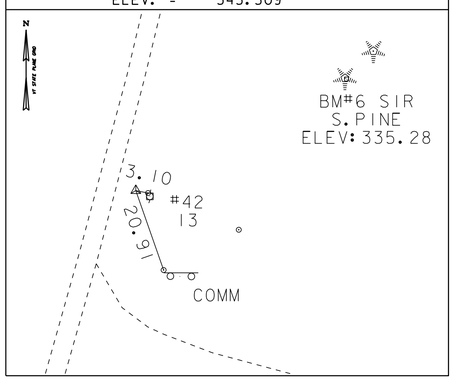
HVCTRL #5

NORTH = 732448.728
EAST = 1462870.927
ELEV. = 349.561



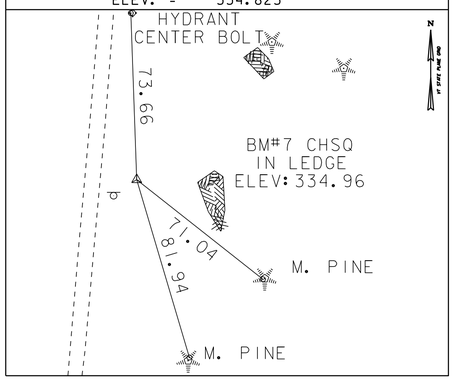
HVCTRL #6

NORTH = 733079.999
EAST = 1463150.092
ELEV. = 345.509



HVCTRL #7

NORTH = 733660.626
EAST = 1463256.995
ELEV. = 334.825

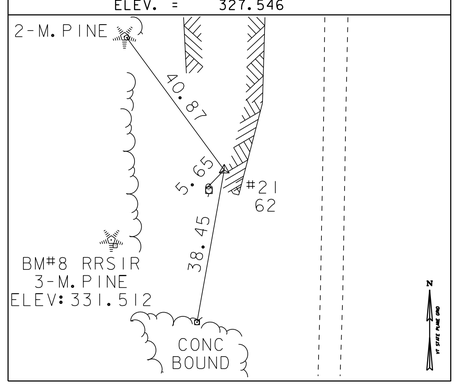


*MAIN TRAVERSE COMPLETED 12/6/2011 BY L.ORVIS P.C. & G.HITCHCOCK

TRAVERSE TIES

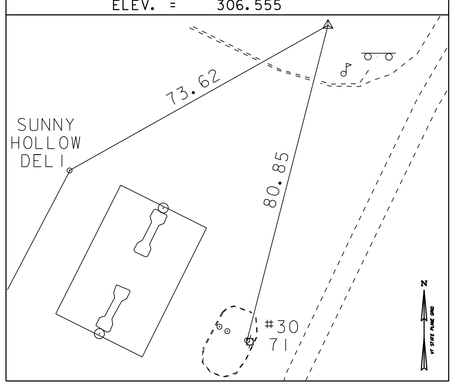
HVCTRL #8

NORTH = 734339.675
EAST = 1463179.911
ELEV. = 327.546



HVCTRL #10

NORTH = 735730.521
EAST = 1463276.959
ELEV. = 306.555



GPS CONTROL POINT

HVCTRL #9

C95035

NORTH = 734925.130
EAST = 1463156.820
ELEV. = 321.070

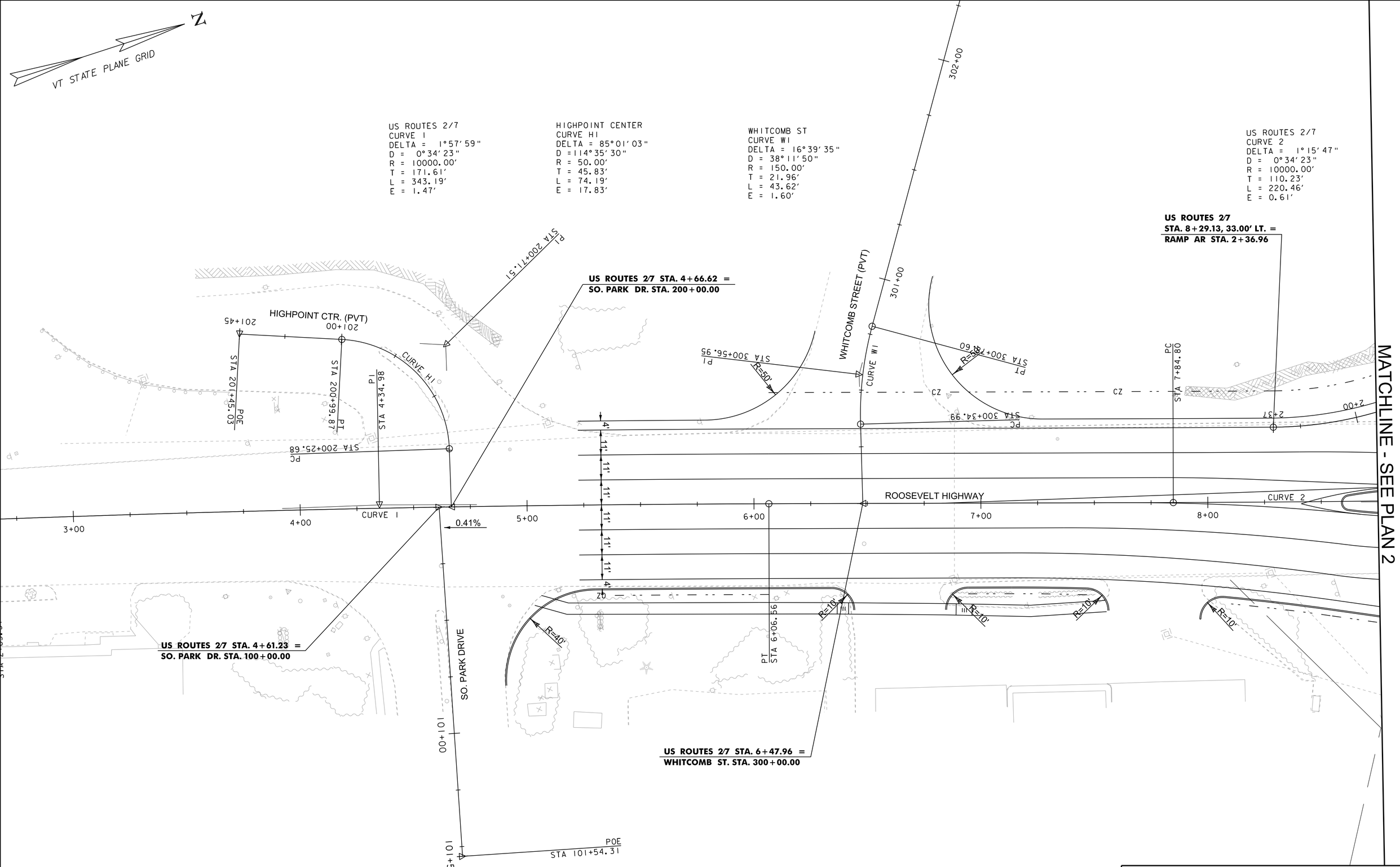
GENERAL LOCATION, COLCHESTER, VT. TO REACH FROM THE I-89 BRIDGES OVER U.S. ROUTES 2+7 AT EXIT 16 JUST NORTH OF WINOOSKI GO NORTH ALONG U.S. ROUTES 2+7 FOR 0.6 MI (1.0 KM) TO THE INTERSECTION OF RATHE ROAD LEFT AND THE MARK ON THE LEFT IN THE SOUTHWEST QUADRANT OF THE INTERSECTION IN THE LAWN OF THE STATE FARM INSURANCE COMPANY. THE MARK IS SET FLUSH WITH GROUND SURFACE IN THE TOP OF A 0.6 M (2.0 FT) X 0.9 M (3.0 FT) ROCK OUTCROP. IT IS 21.3 M (69.9 FT) WEST OF AND ABOUT 0.3 M (1.0 FT) HIGHER THAN THE CENTERLINE OF U.S. ROUTES 2+7, 18.3 M (60.0 FT) SOUTH OF THE CENTERLINE OF RATHE ROAD, 14.9 M (48.9 FT) NORTH OF THE WEST END OF A BRICK STATE FARM INSURANCE SIGN, AND 7.8 M (25.6 FT)

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (07)
ADJUSTMENT	COMPASS

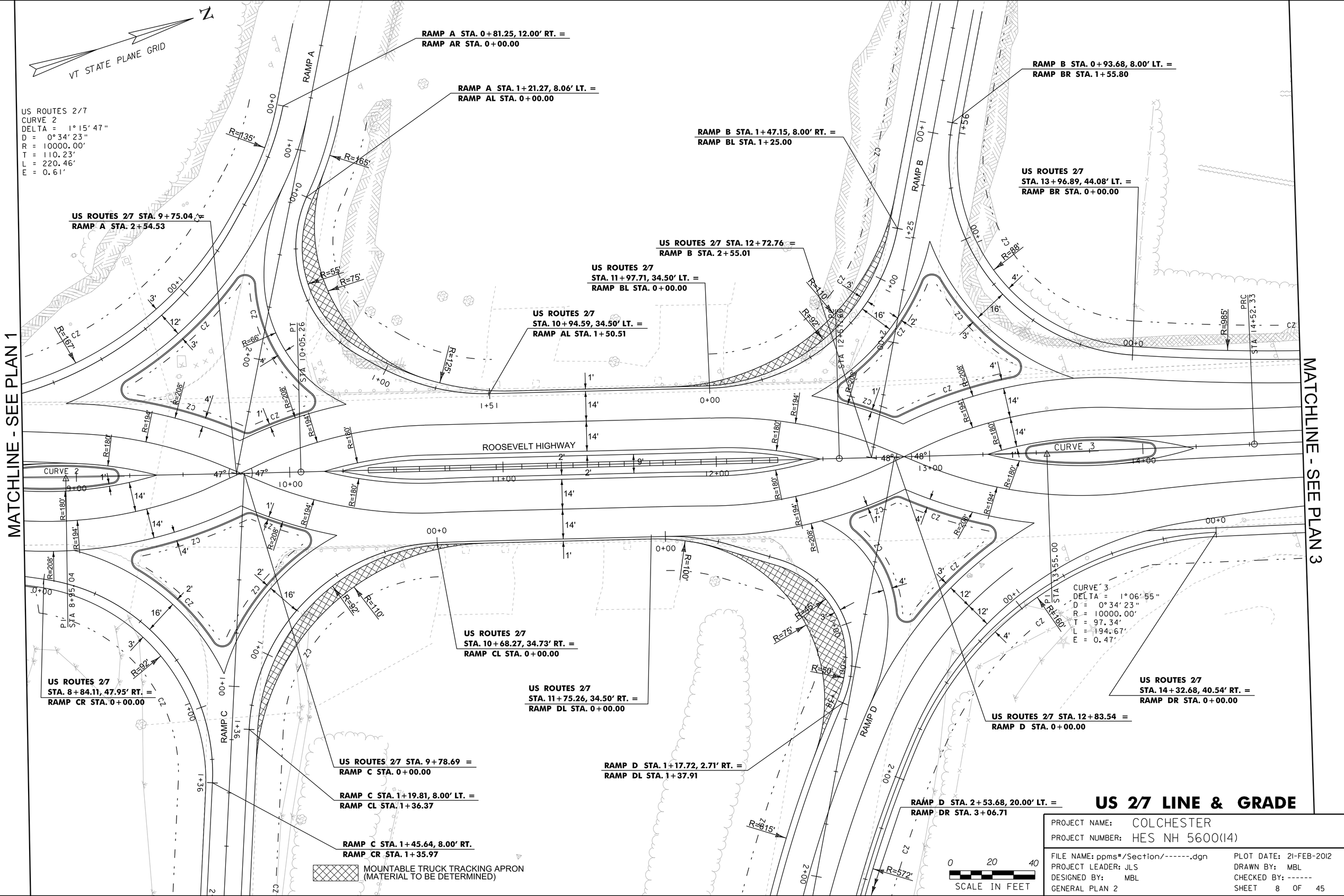
PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

FILE NAME: t11x510frmdgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TIE SHEET

PLOT DATE: 21-FEB-2012
DRAWN BY: R. BULLOCK
CHECKED BY: ------
SHEET 6 OF 45

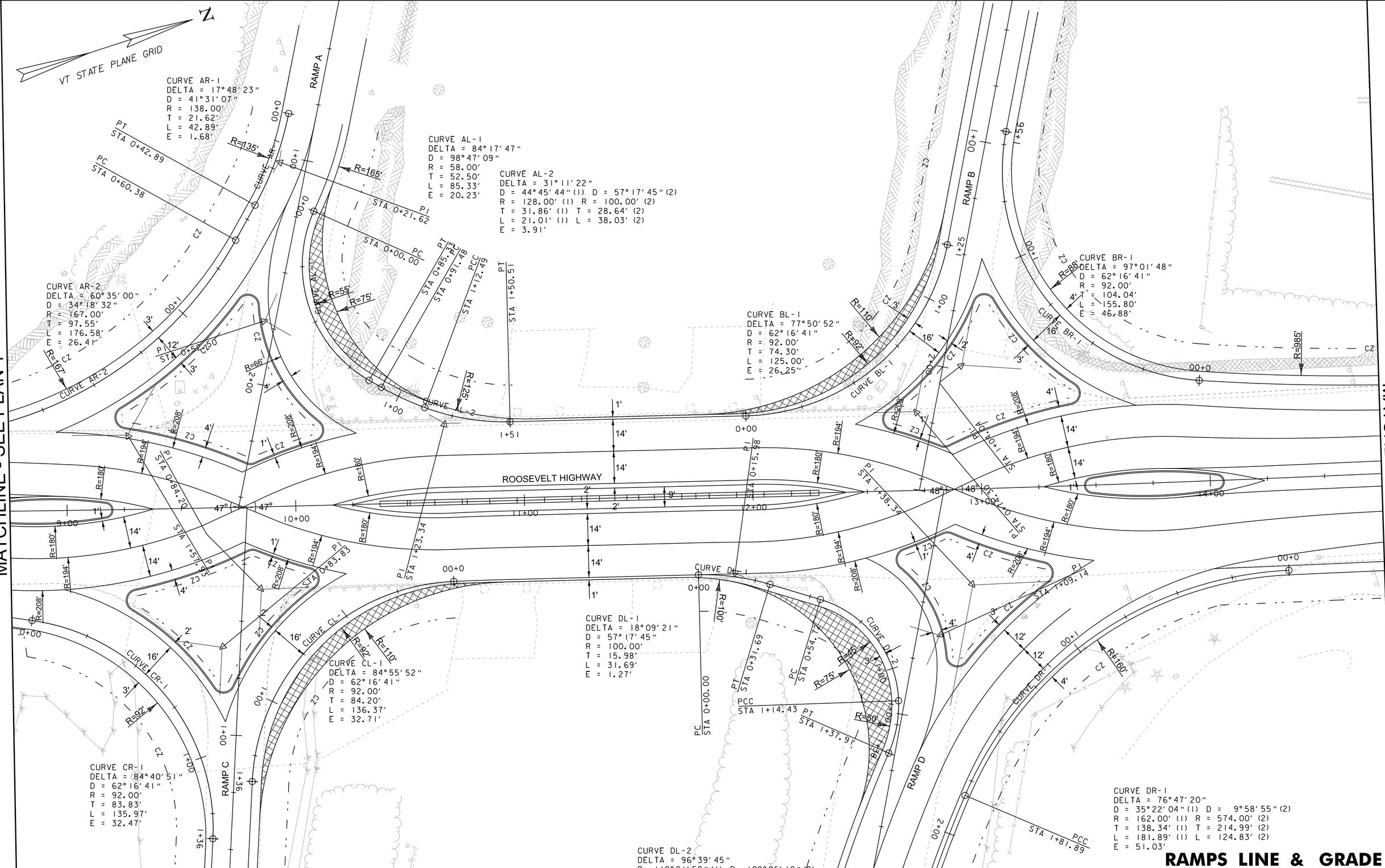


PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: ppms#/Section/------.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
GENERAL PLAN 1	SHEET 7 OF 45



US 2/7 LINE & GRADE

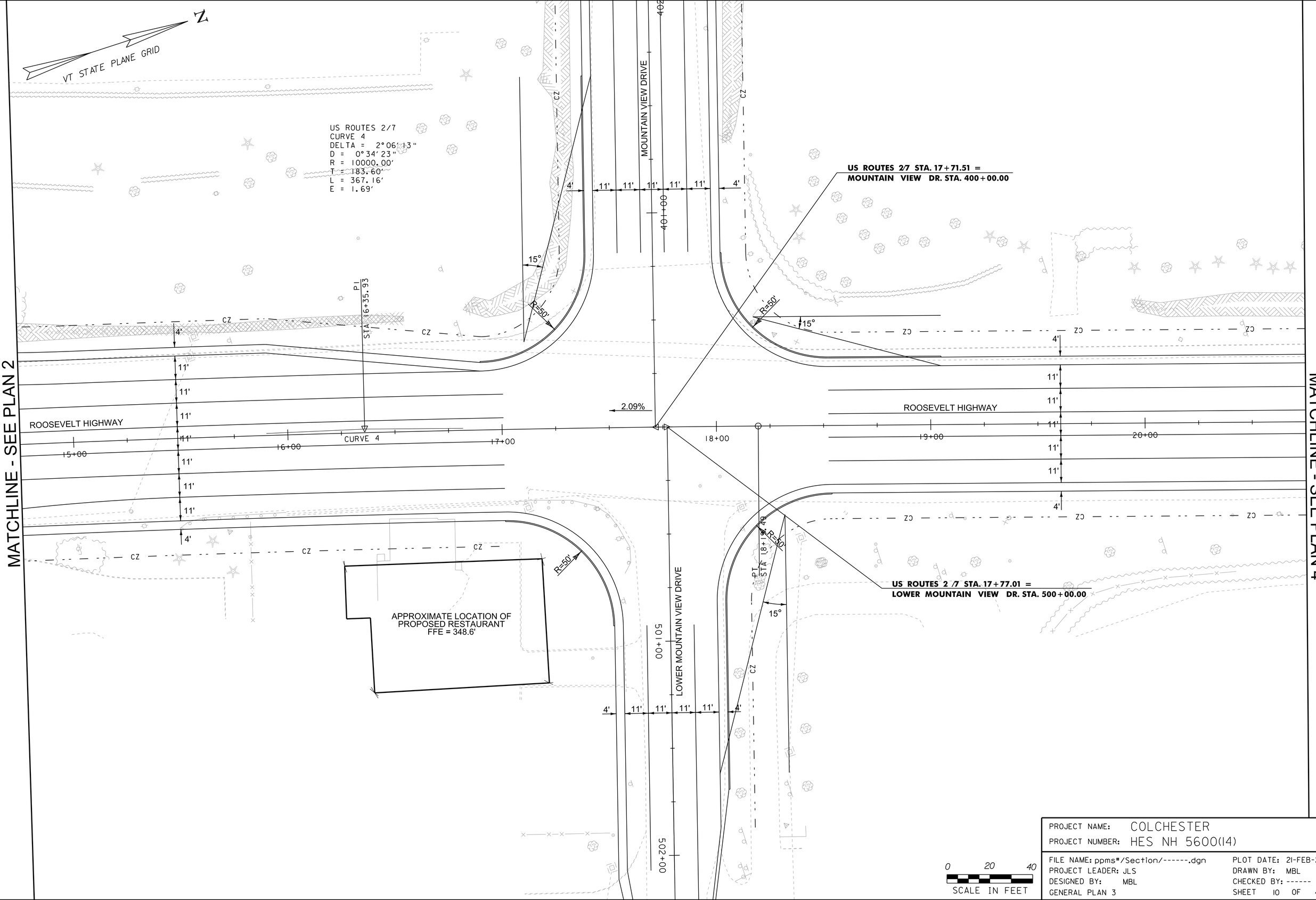
PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: ppms*/Section/------.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
GENERAL PLAN 2	SHEET 8 OF 45



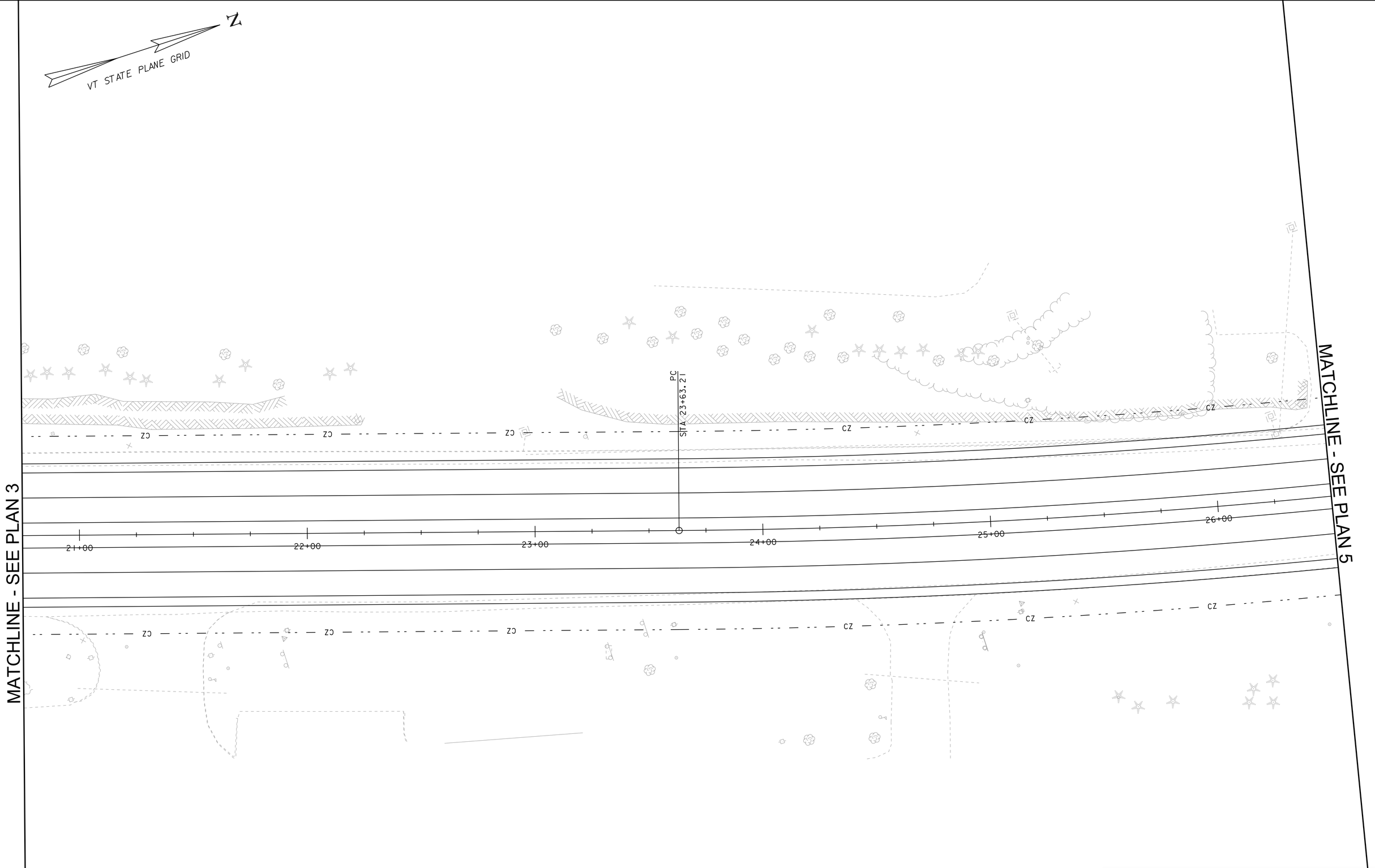
RAMPS LINE & GRADE

PROJECT NAME:	COLCHESTER
PROJECT NUMBER:	HES NH 5600(14)

FILE NAME: ppms#/Section/------.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
GENERAL PLAN 2	SHEET 9 OF 45

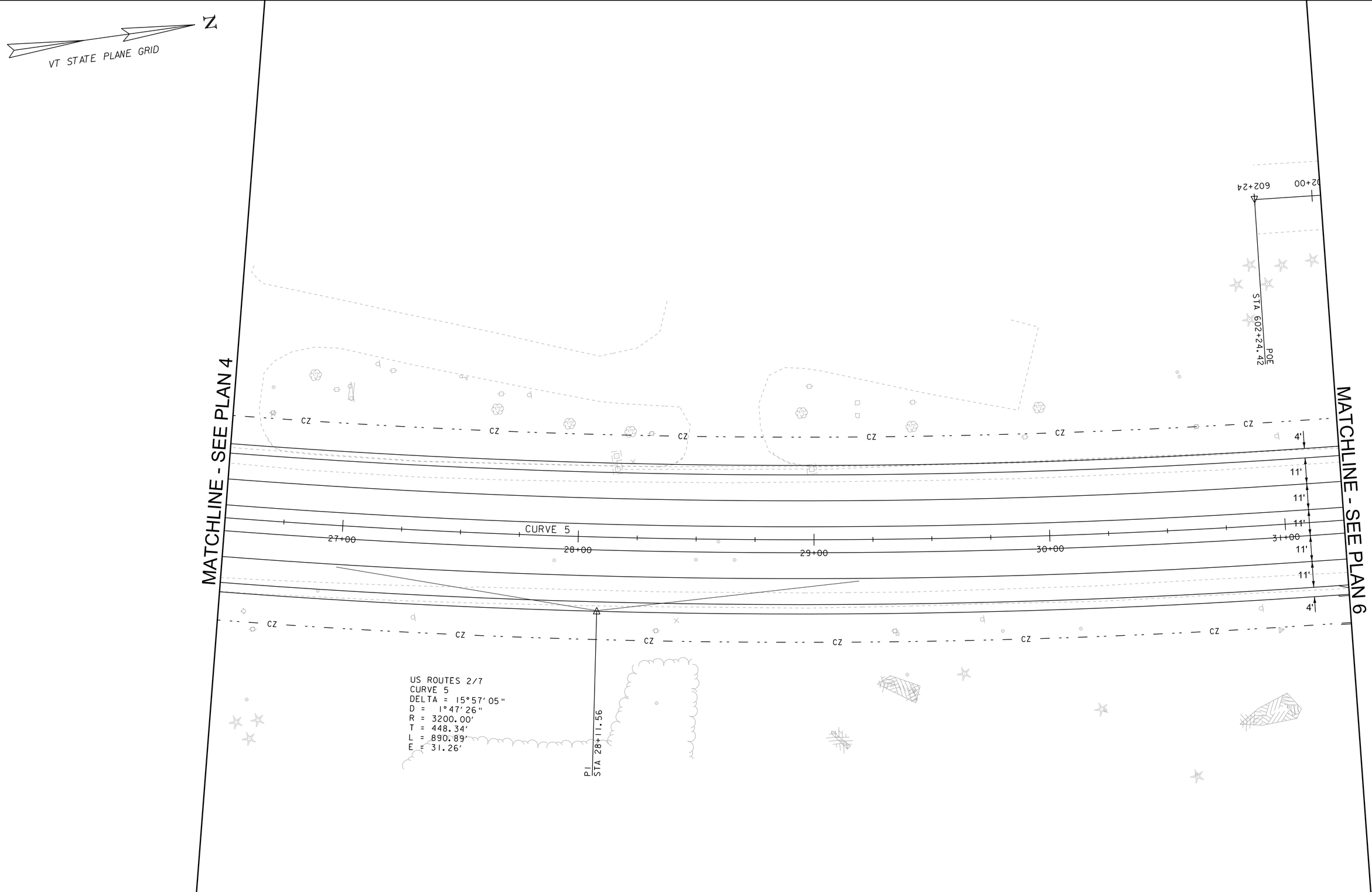


PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: ppms#/Section/------.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
GENERAL PLAN 3	SHEET 10 OF 45

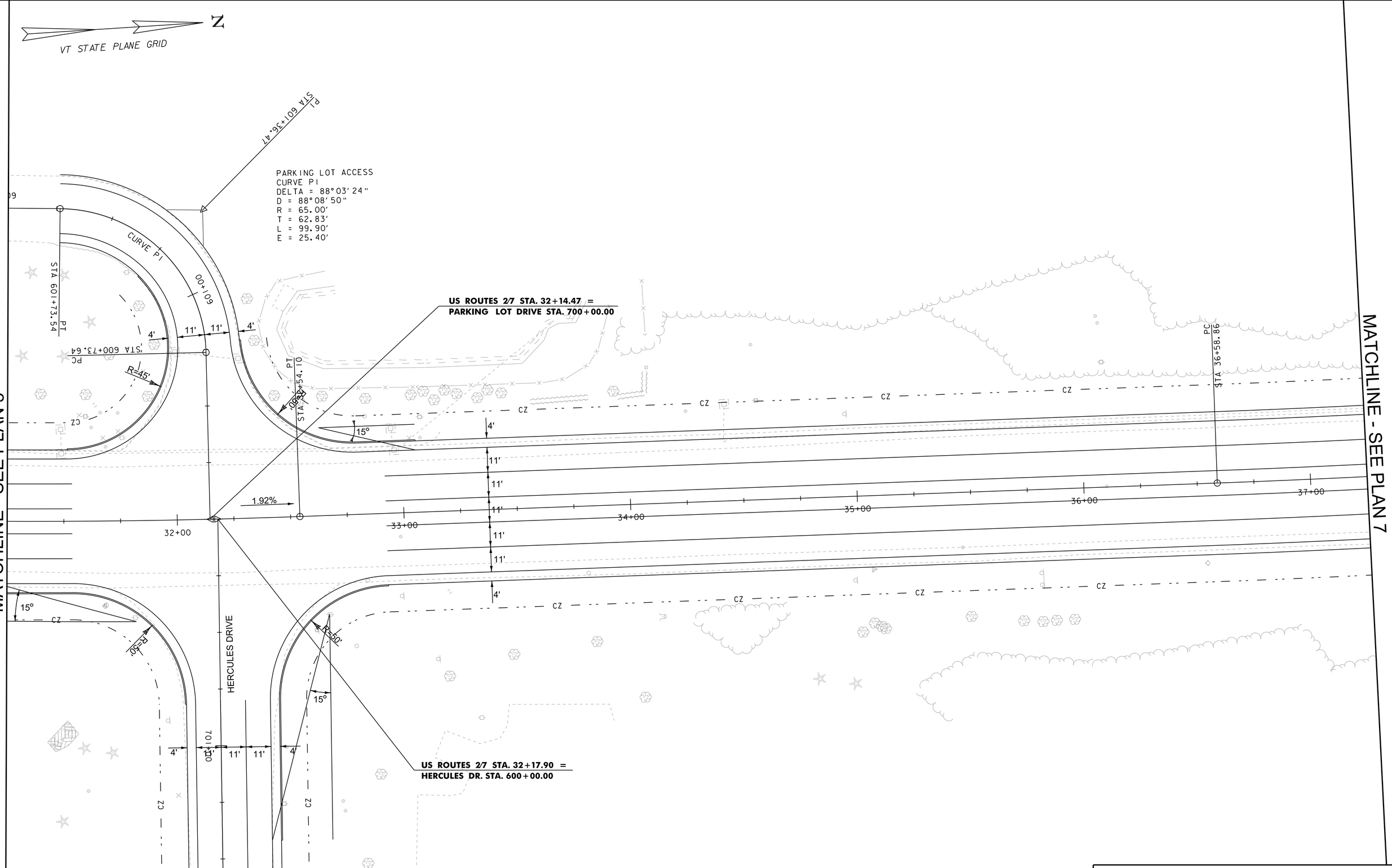


0 20 40
SCALE IN FEET

PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: ppms*/Section/------.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: MBL	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
GENERAL PLAN 4	SHEET 11 OF 45

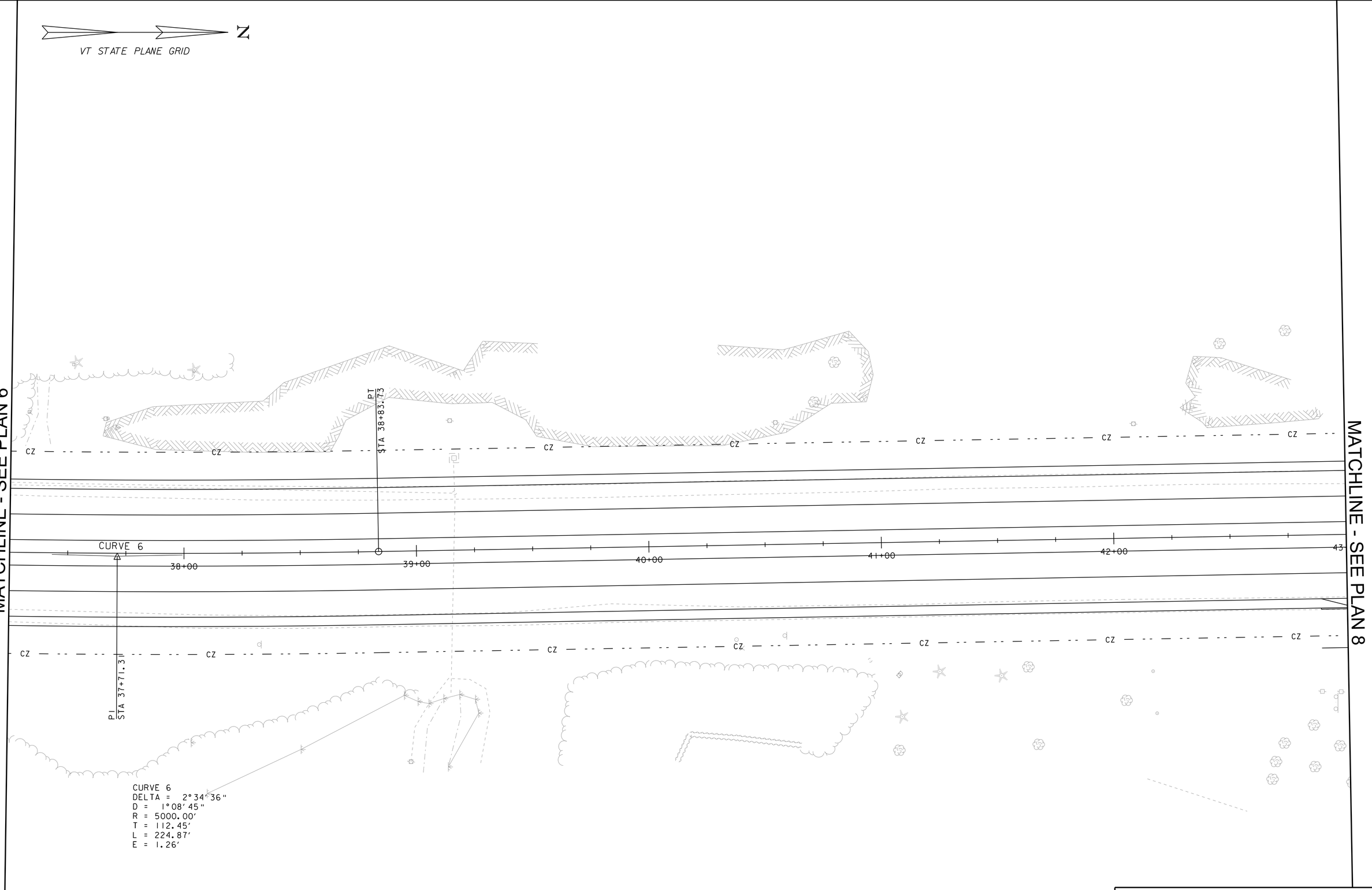


PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: ppms*/Section/------.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
GENERAL PLAN 5	SHEET 12 OF 45



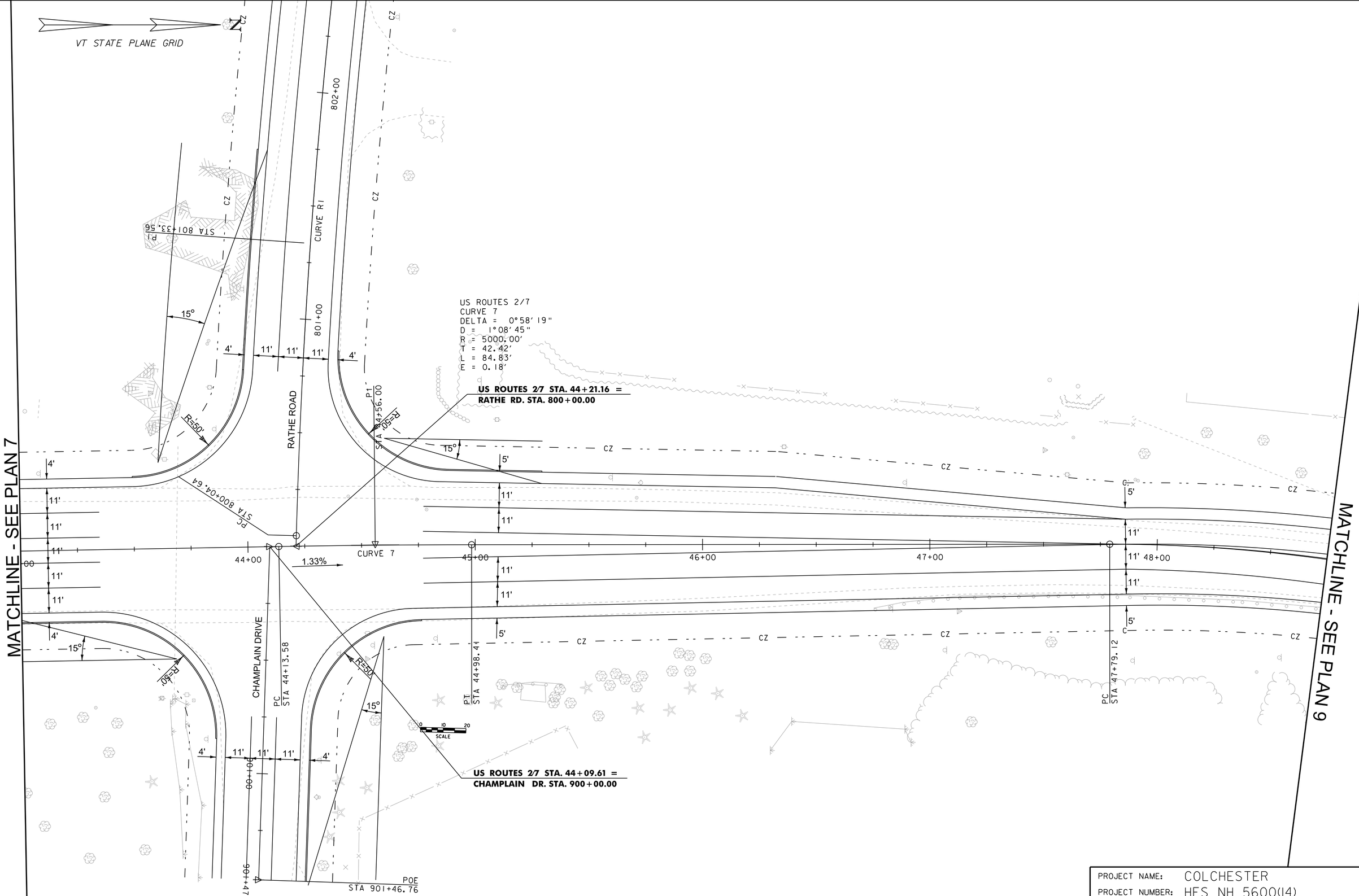
0 20 40
SCALE IN FEET

PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: ppms#/Section/------.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
GENERAL PLAN 6	SHEET 13 OF 45



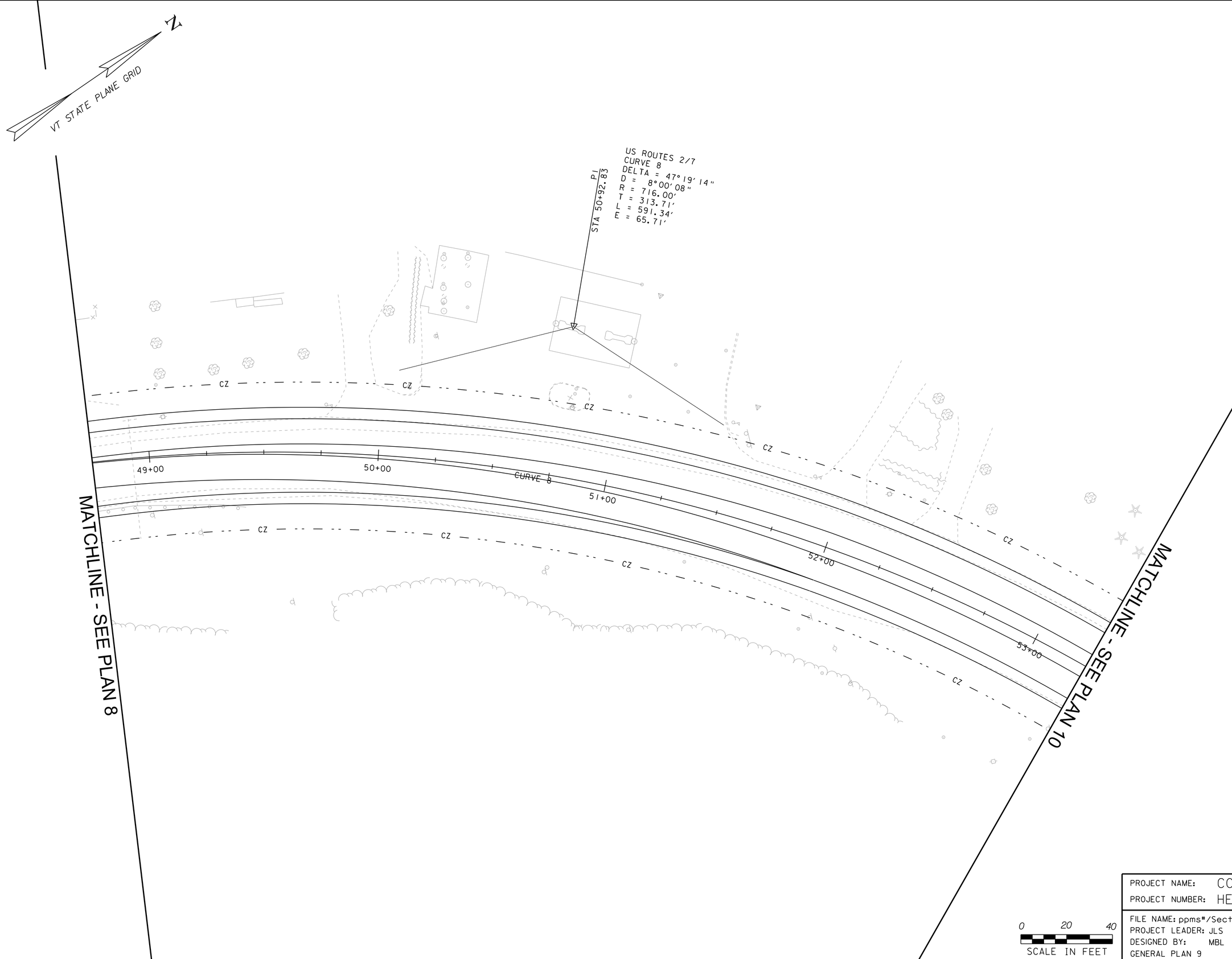
0 20 40
SCALE IN FEET

PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: ppms#/Section/------.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
GENERAL PLAN 7	SHEET 14 OF 45

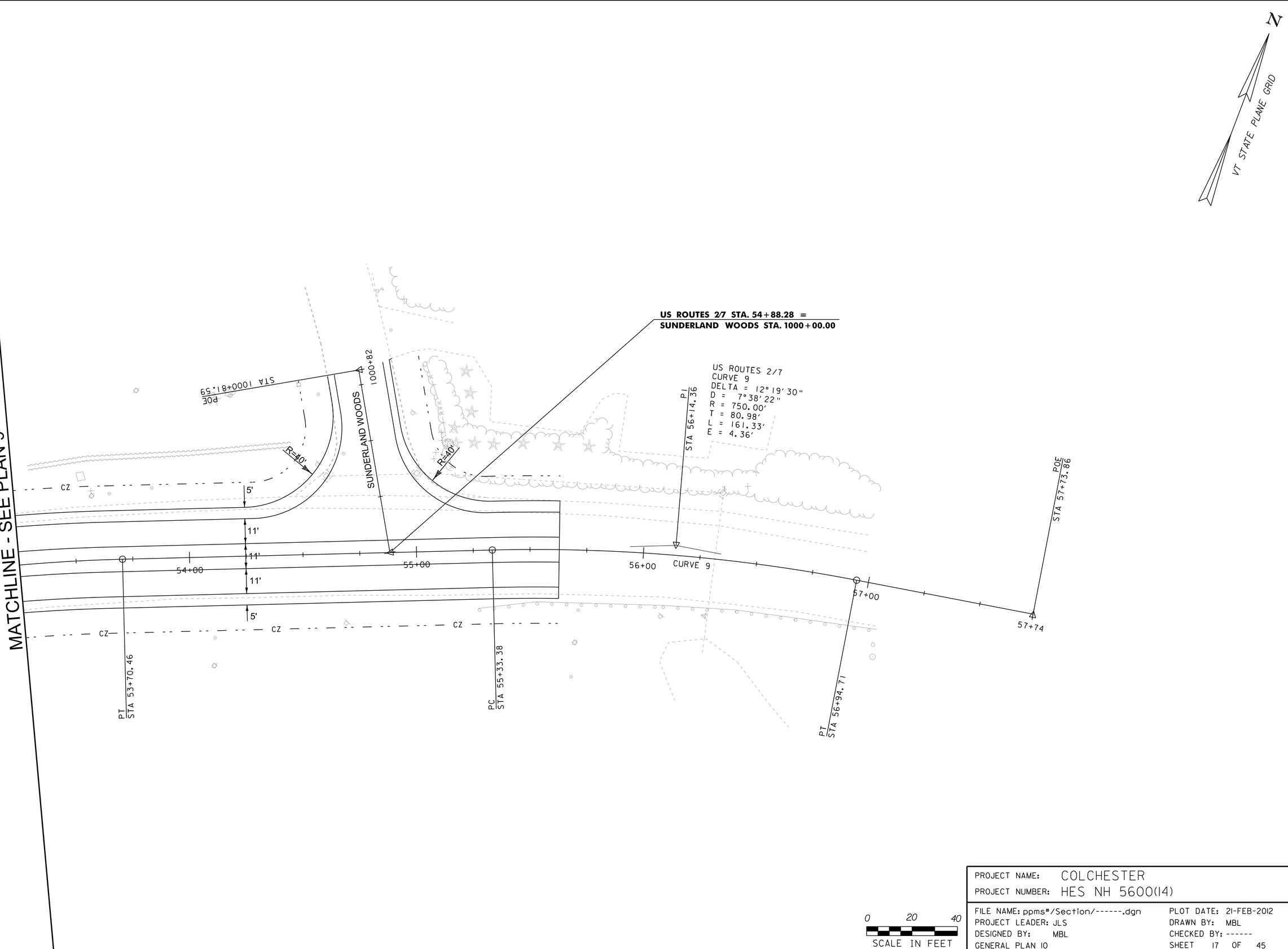


PROJECT NAME:	COLCHESTER
PROJECT NUMBER:	HES NH 5600(14)

FILE NAME: ppms#/Section/------.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
GENERAL PLAN 8	SHEET 15 OF 45

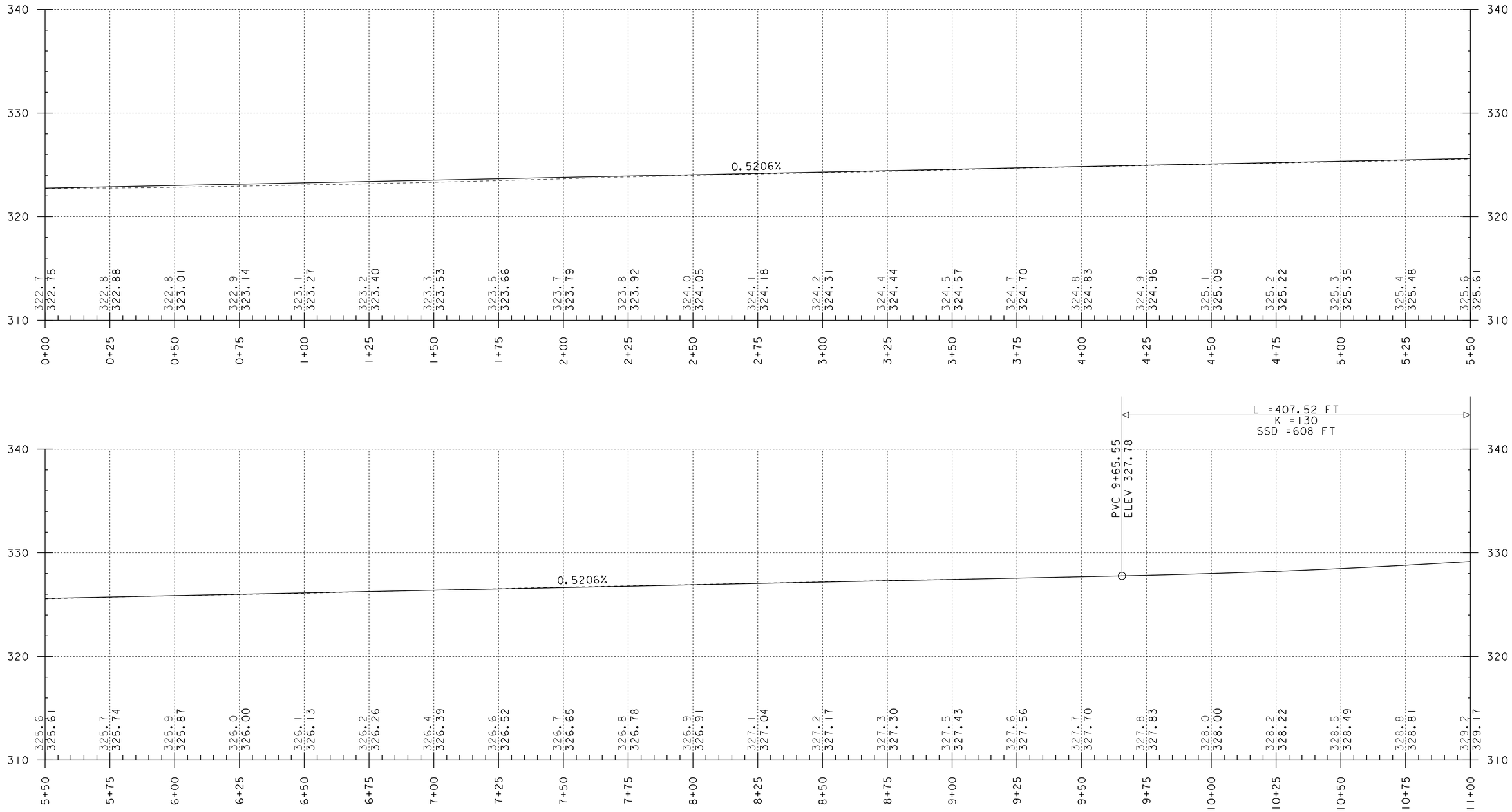


PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: ppms*/Section/------.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
GENERAL PLAN 9	SHEET 16 OF 45



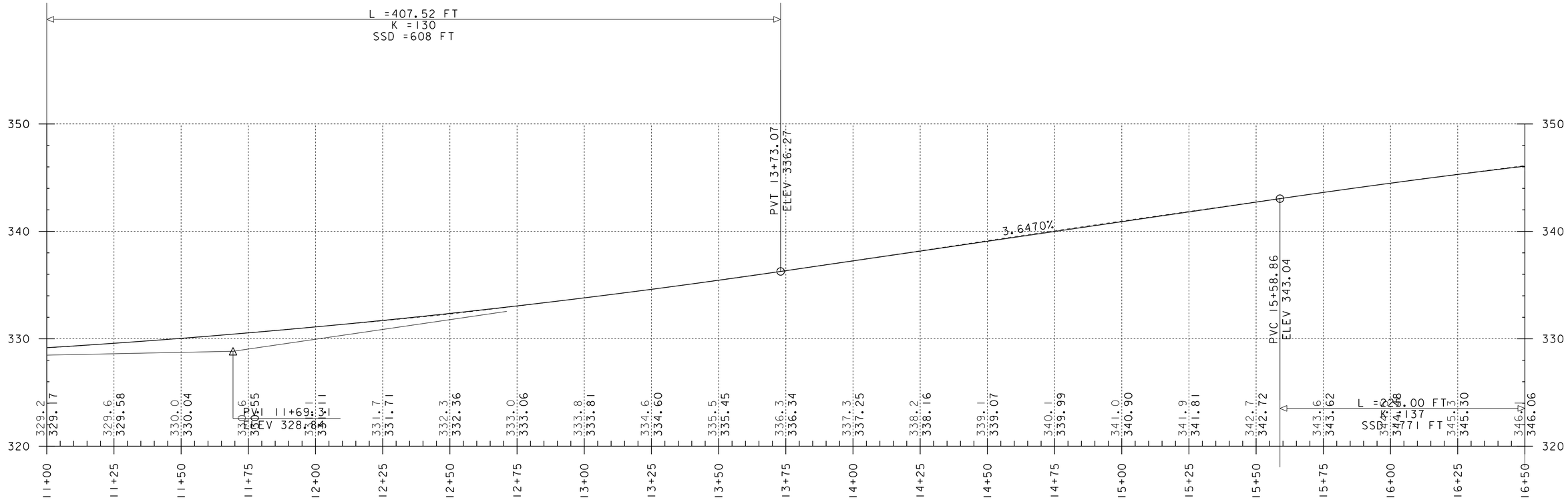
PROJECT NAME:	COLCHESTER
PROJECT NUMBER:	HES NH 5600(14)

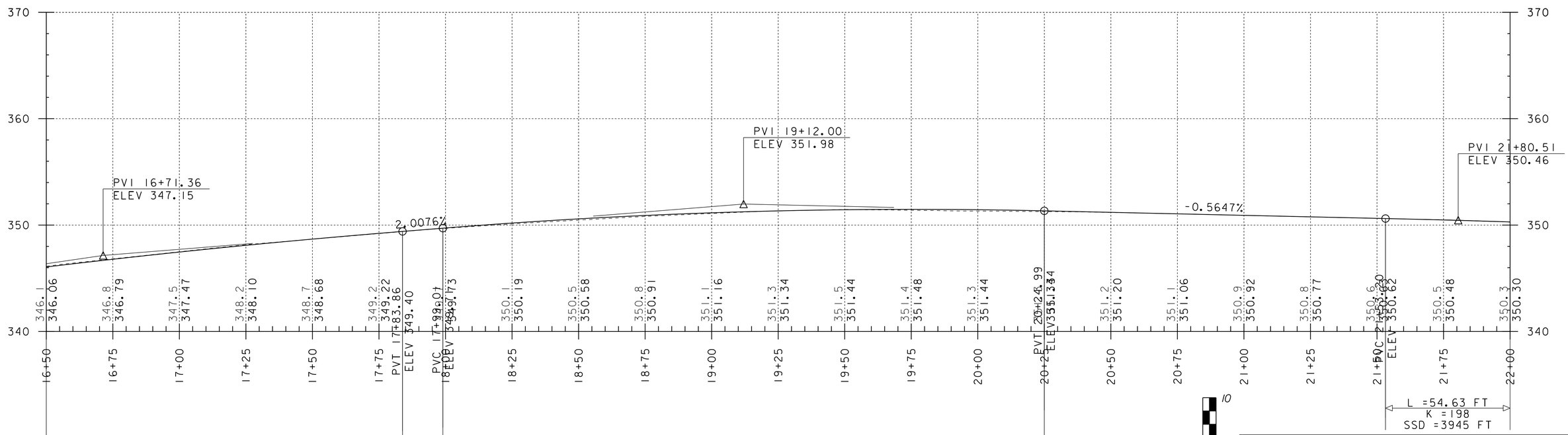
FILE NAME: ppms#/Section/------.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
GENERAL PLAN 10	SHEET 17 OF 45



SCALES (FULL):
HORIZ: 1" = 20'
VERT: 1" = 5'

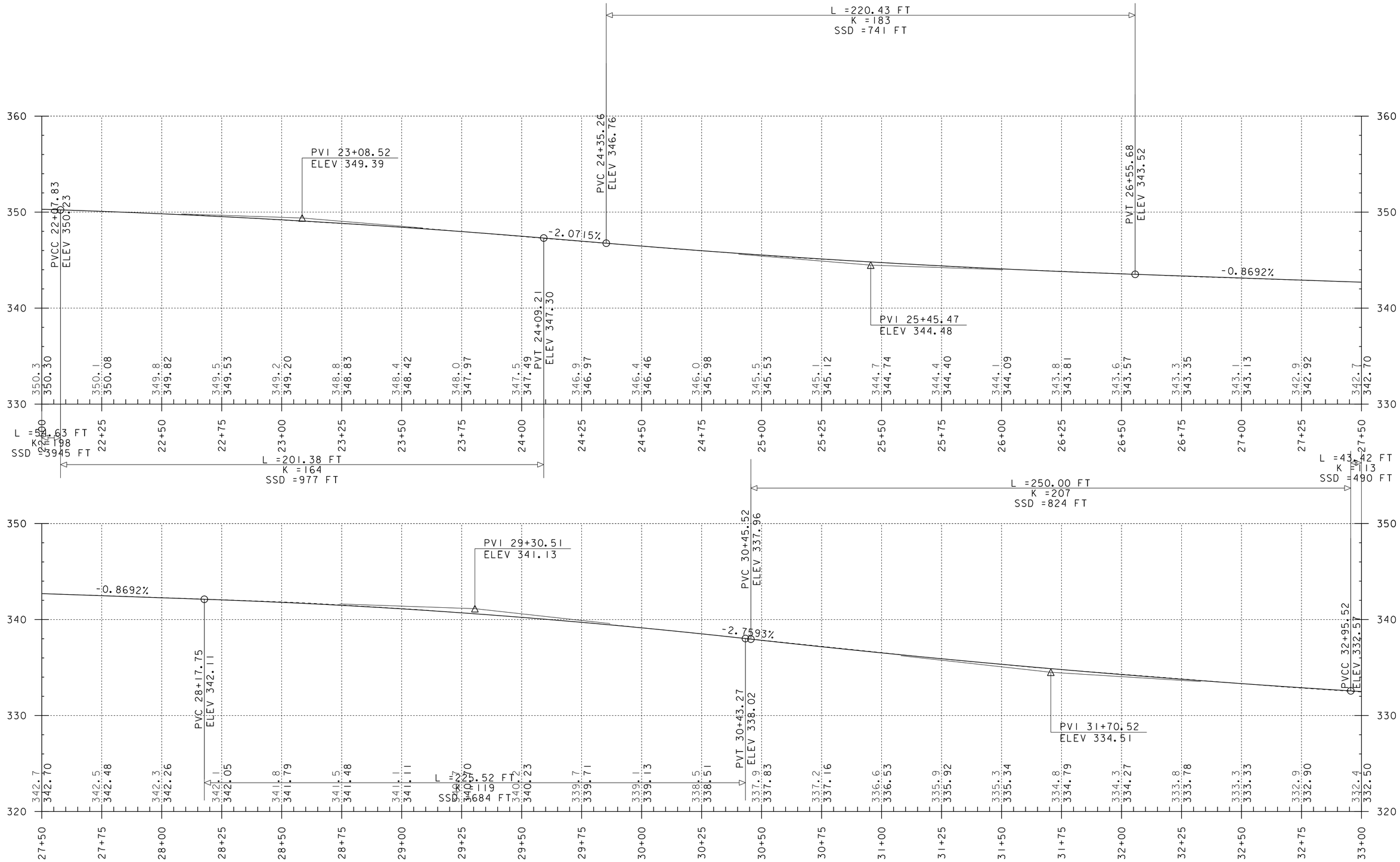
PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: t11x510pro.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
PROFILE SHEET 1	SHEET 18 OF 45



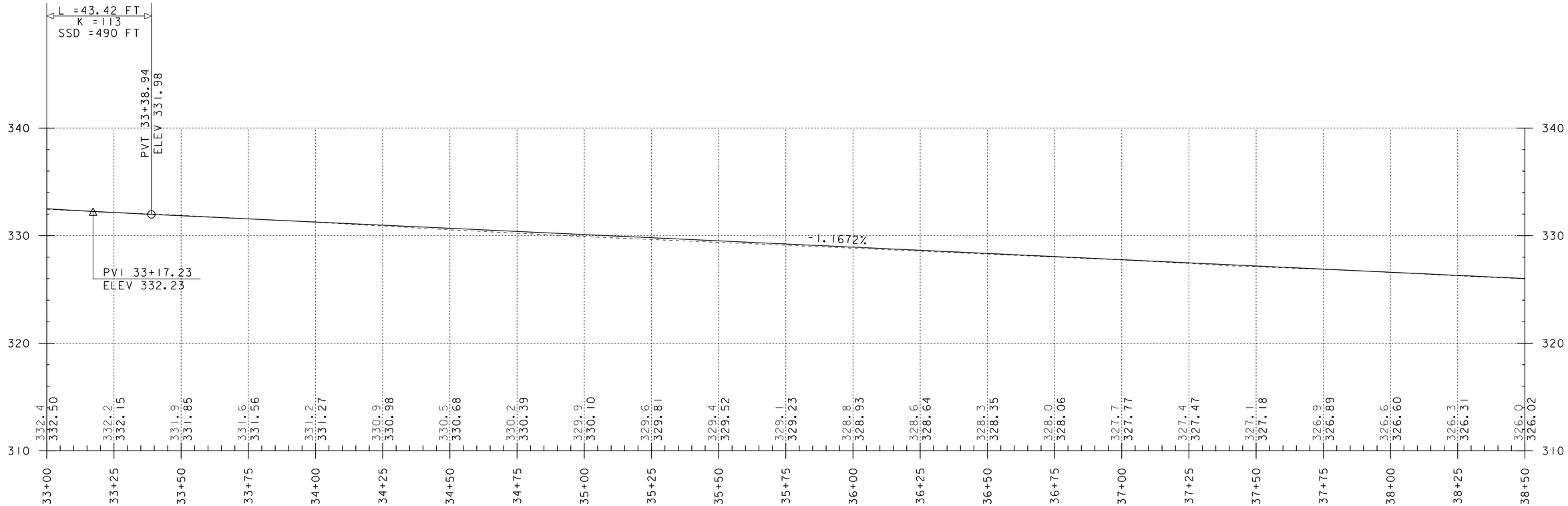


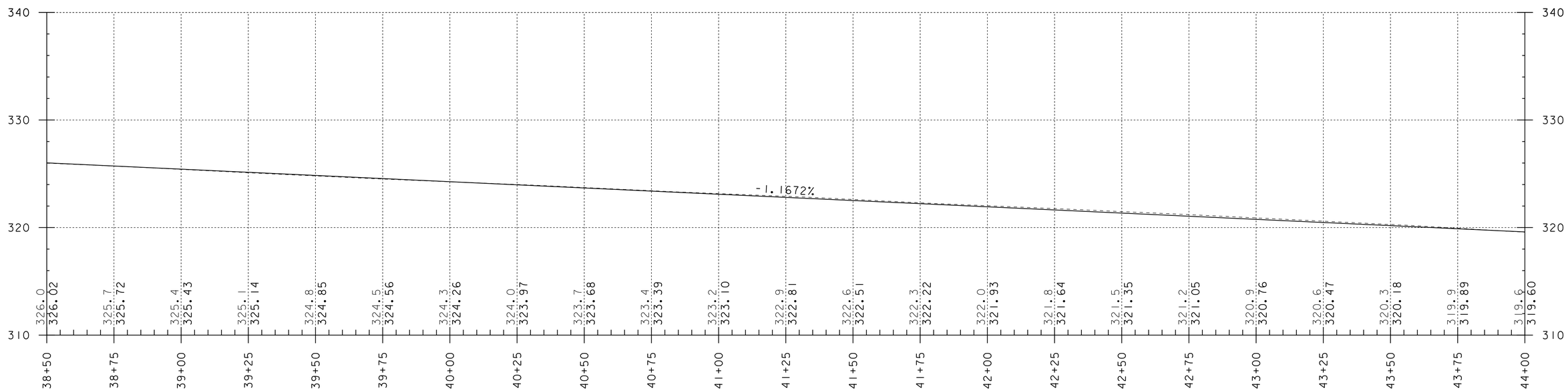
SCALES (FULL):
HORIZ: 1" = 20'
VERT: 1" = 5'

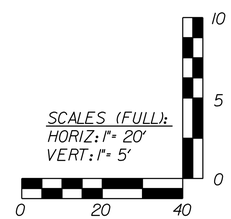
PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: t11x510pro.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
PROFILE SHEET 2	SHEET 19 OF 45



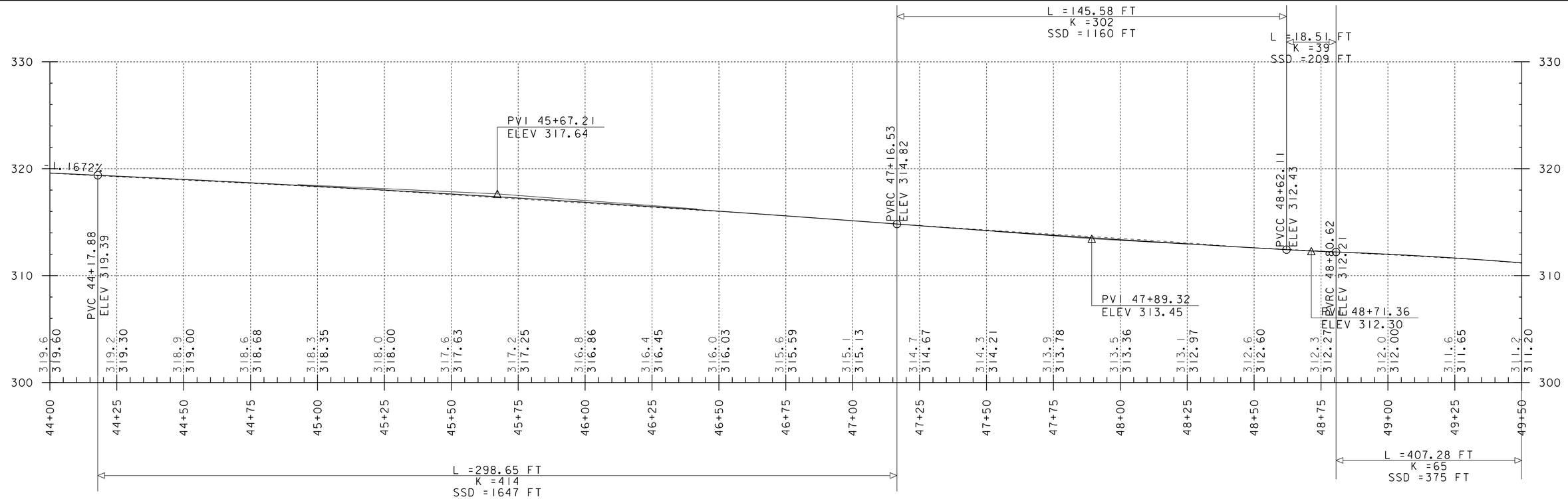
PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: t11x510pro.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
PROFILE SHEET 3	SHEET 20 OF 45

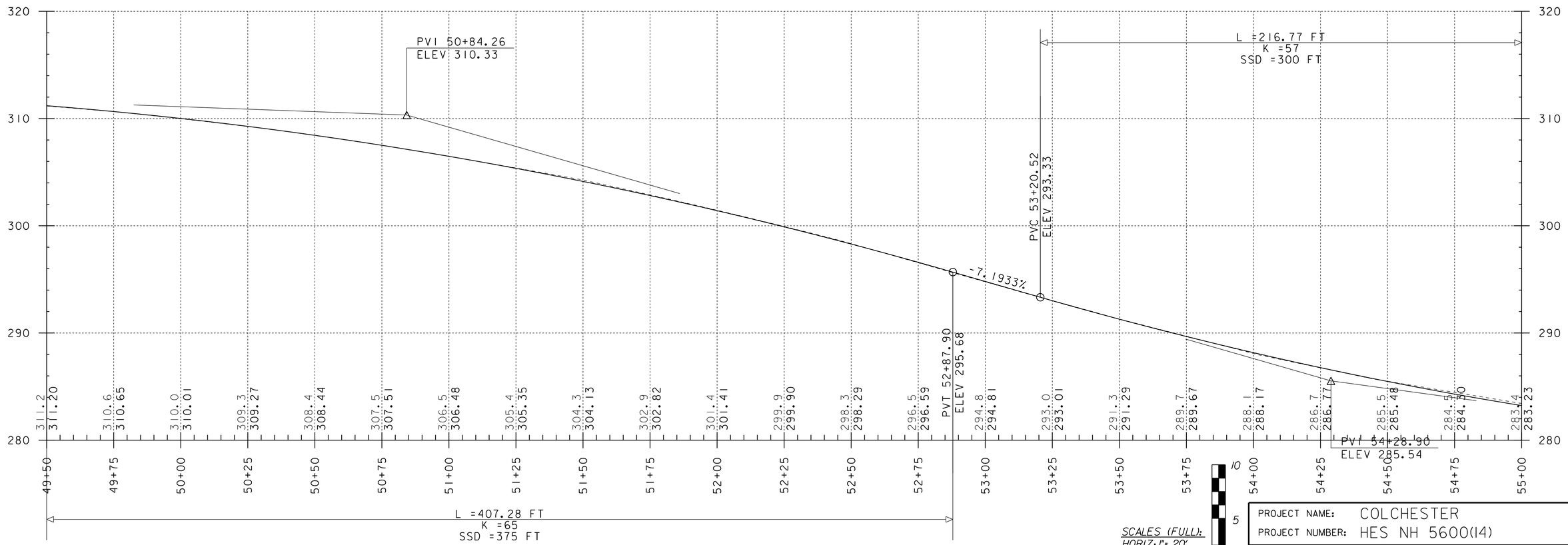






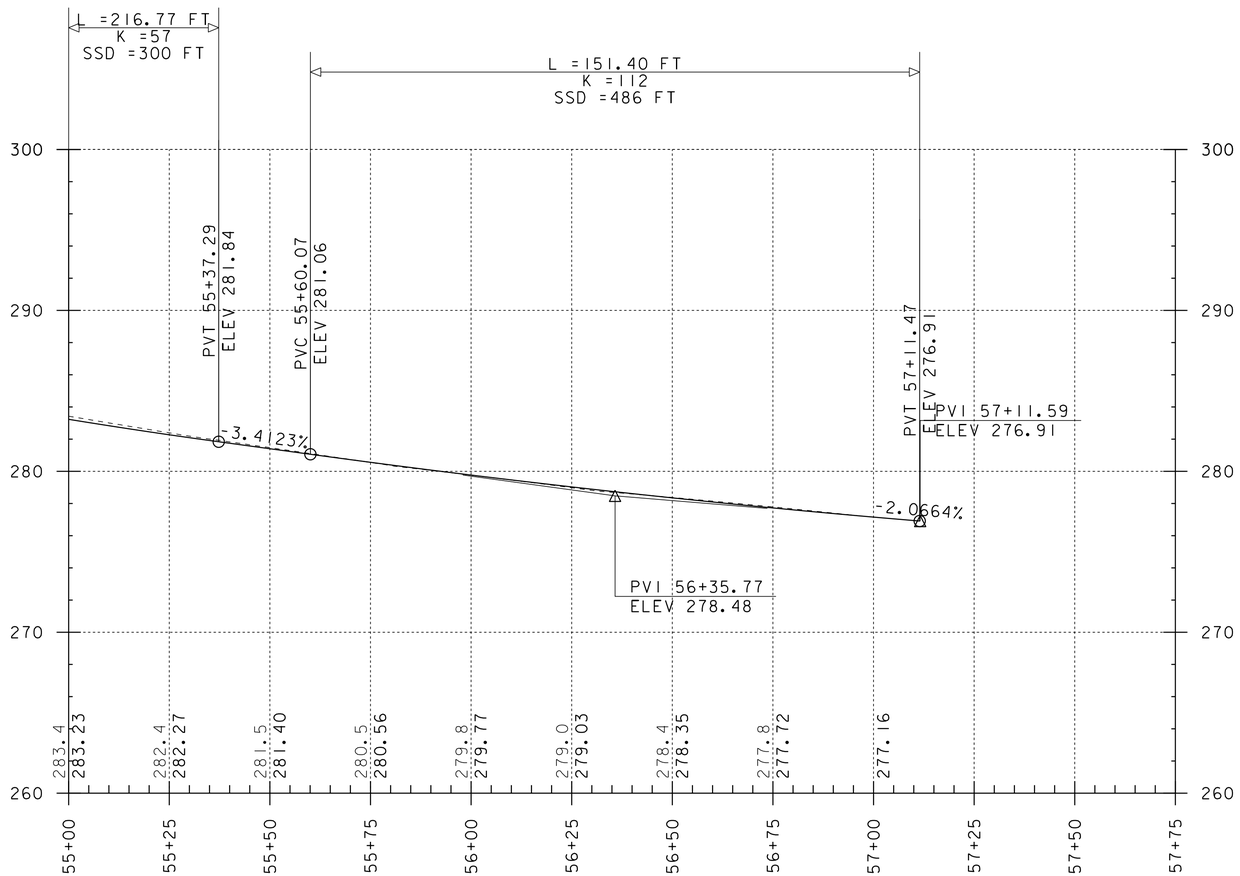
PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: t11x510pro.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
PROFILE SHEET 4	SHEET 21 OF 45

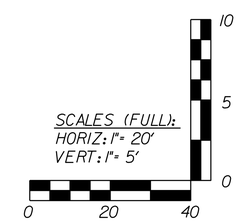




SCALES (FULL):
HORIZ: 1"= 20'
VERT: 1"= 5'

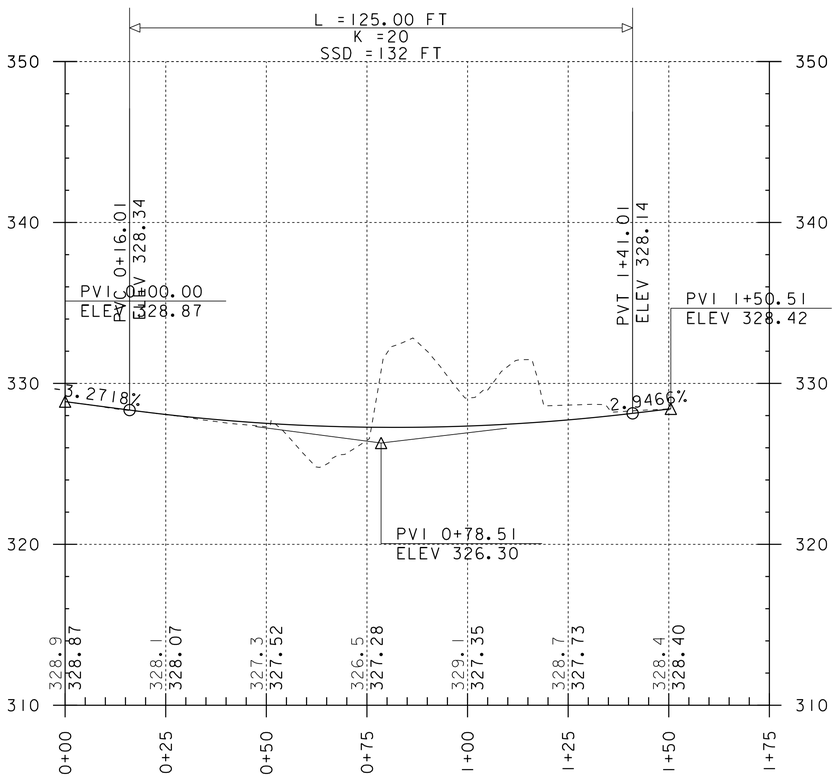
PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: t11x510pro.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
PROFILE SHEET 5	SHEET 22 OF 45



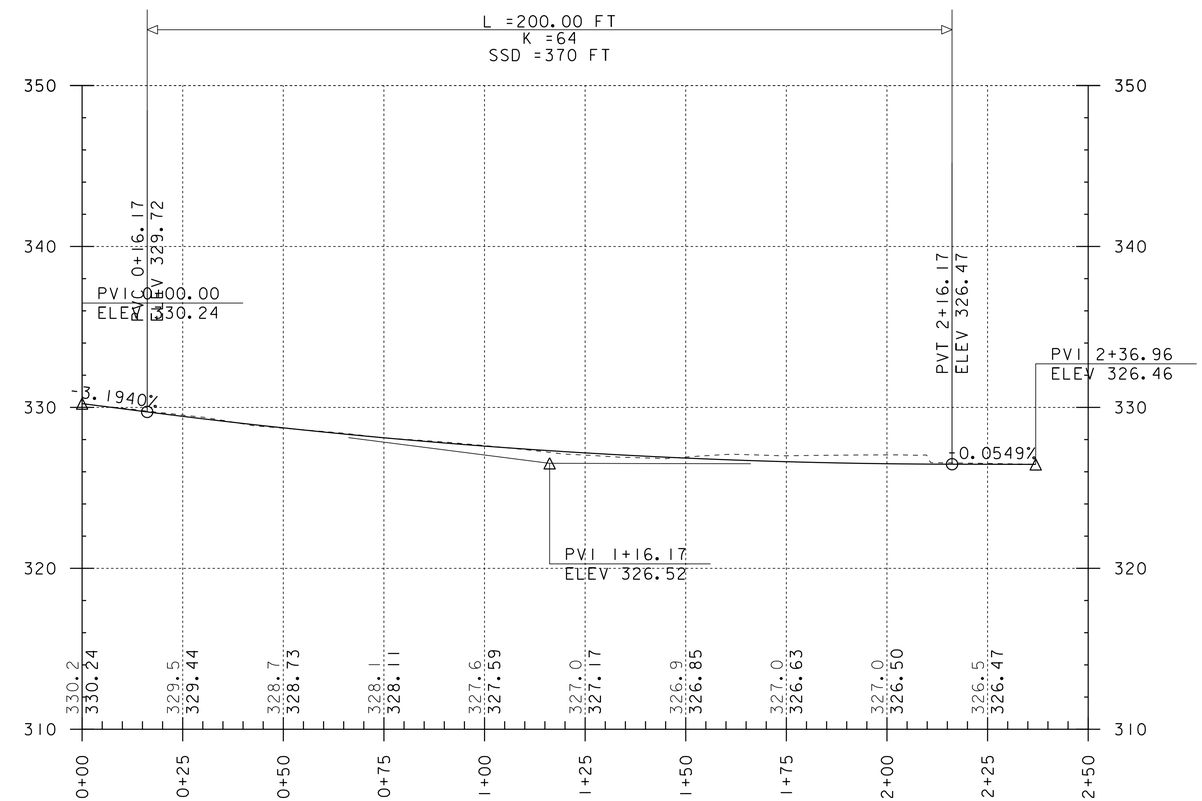


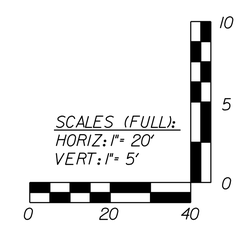
PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: t11x510pro.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
PROFILE SHEET 6	SHEET 23 OF 45

Ramp AL



Ramp AR

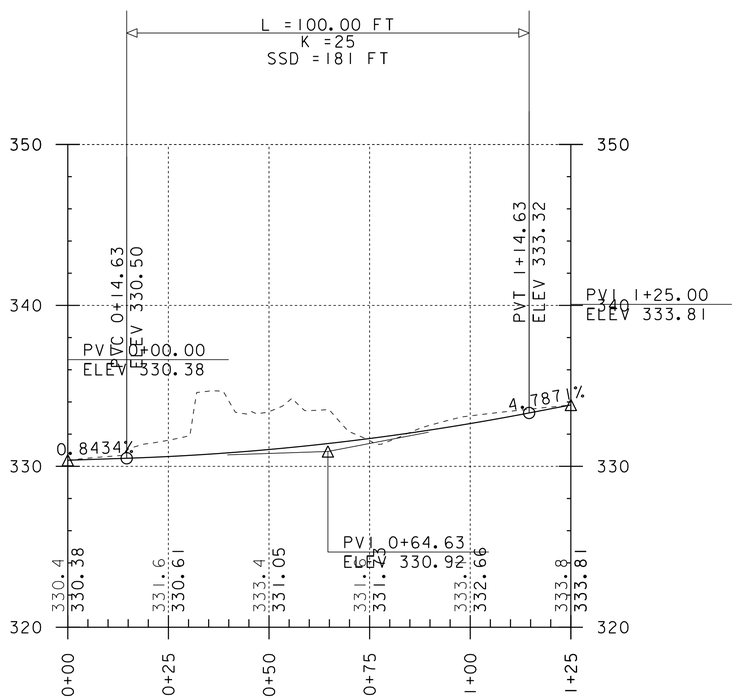


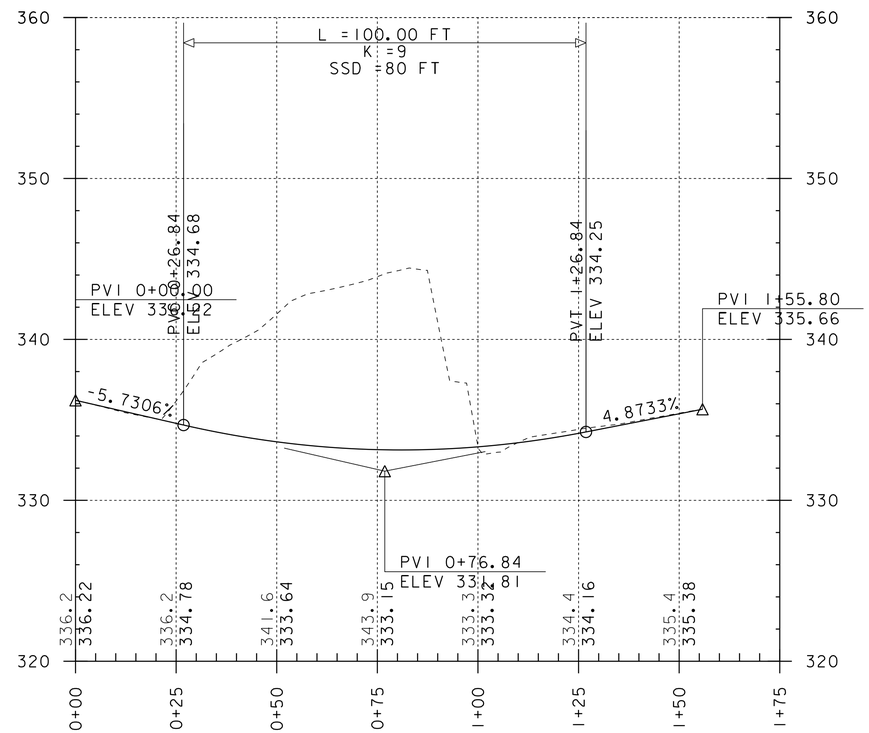


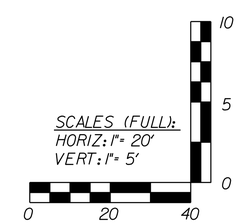
PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: t11x510pro.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
PROFILE SHEET 7	SHEET 24 OF 45

Ramp BR

Ramp BL

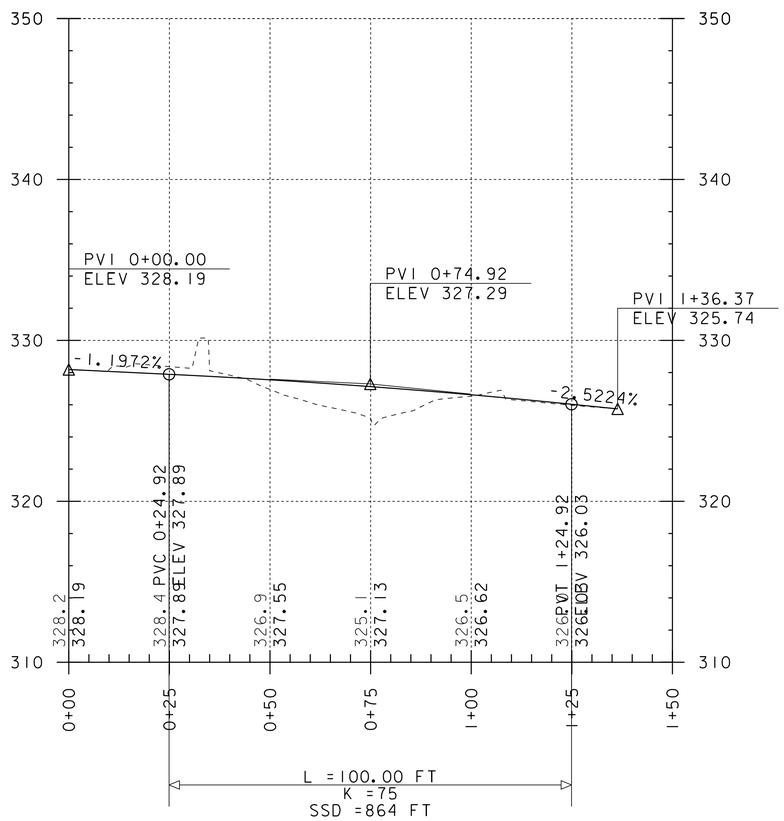




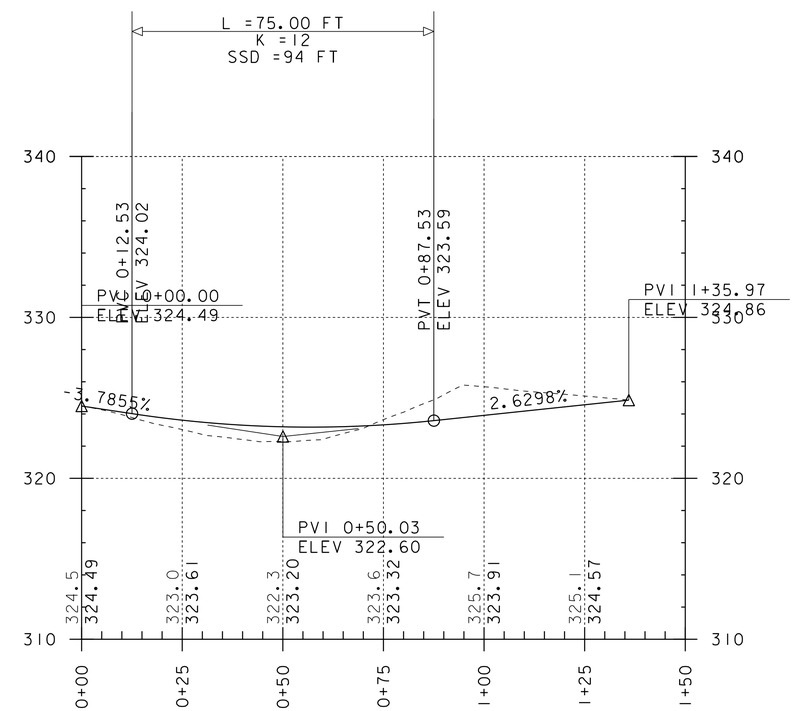


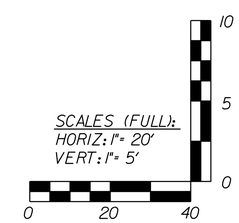
PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: t11x510pro.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
PROFILE SHEET 2	SHEET 25 OF 45

Ramp CL



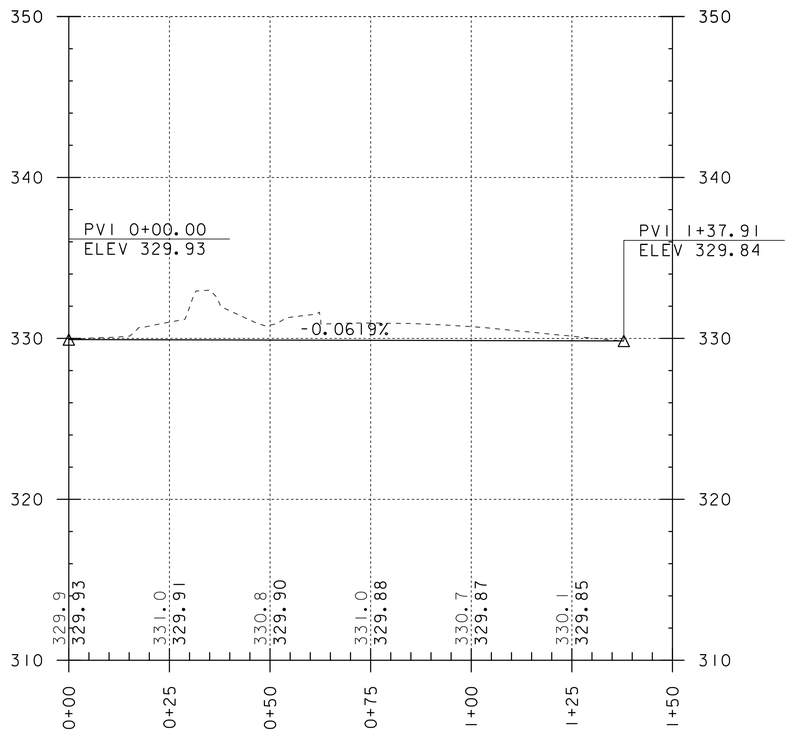
Ramp CR



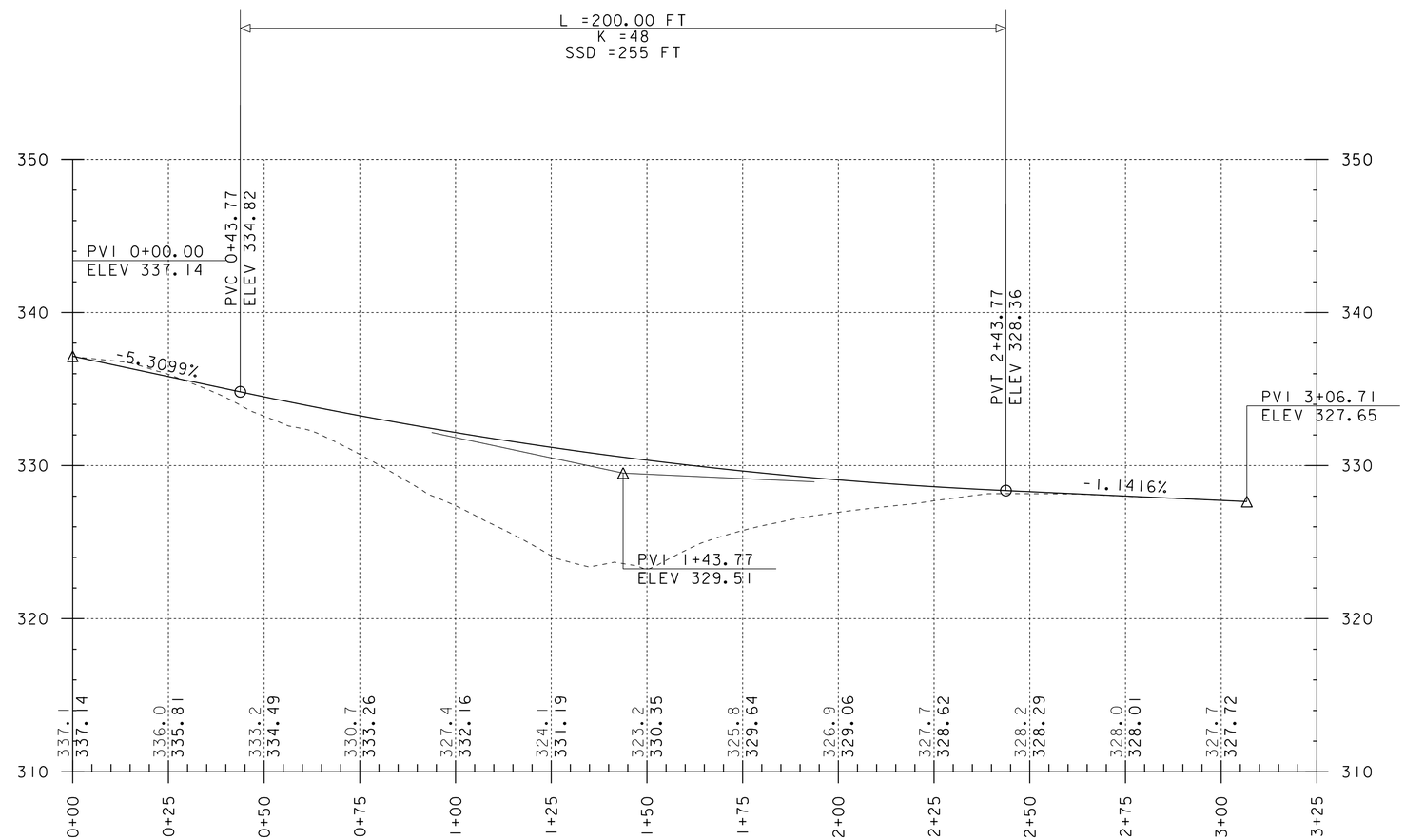


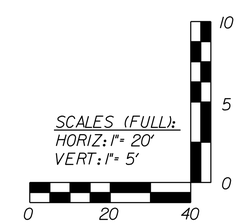
PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: t11x510pro.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
PROFILE SHEET 2	SHEET 26 OF 45

Ramp DL



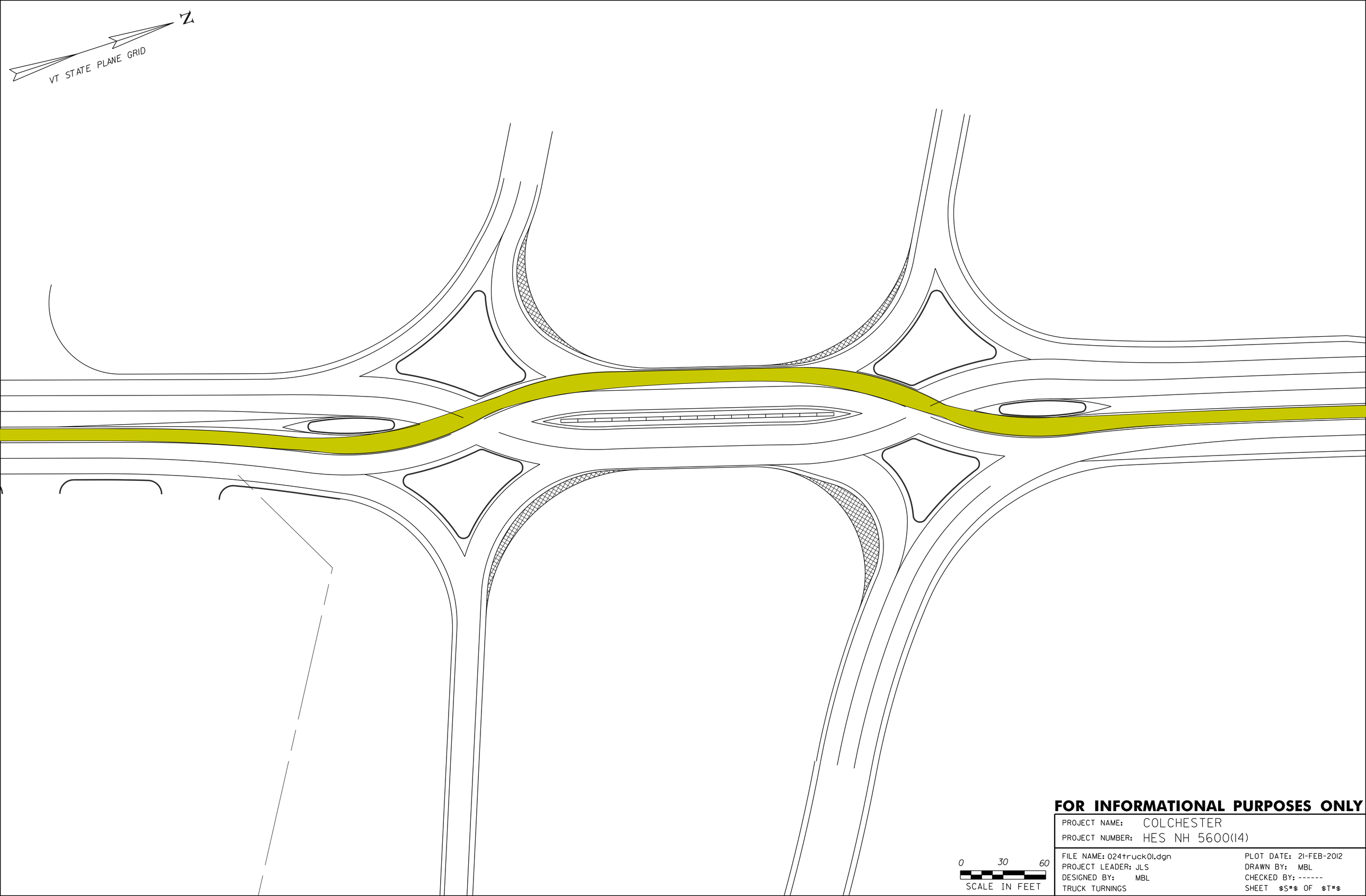
Ramp DR





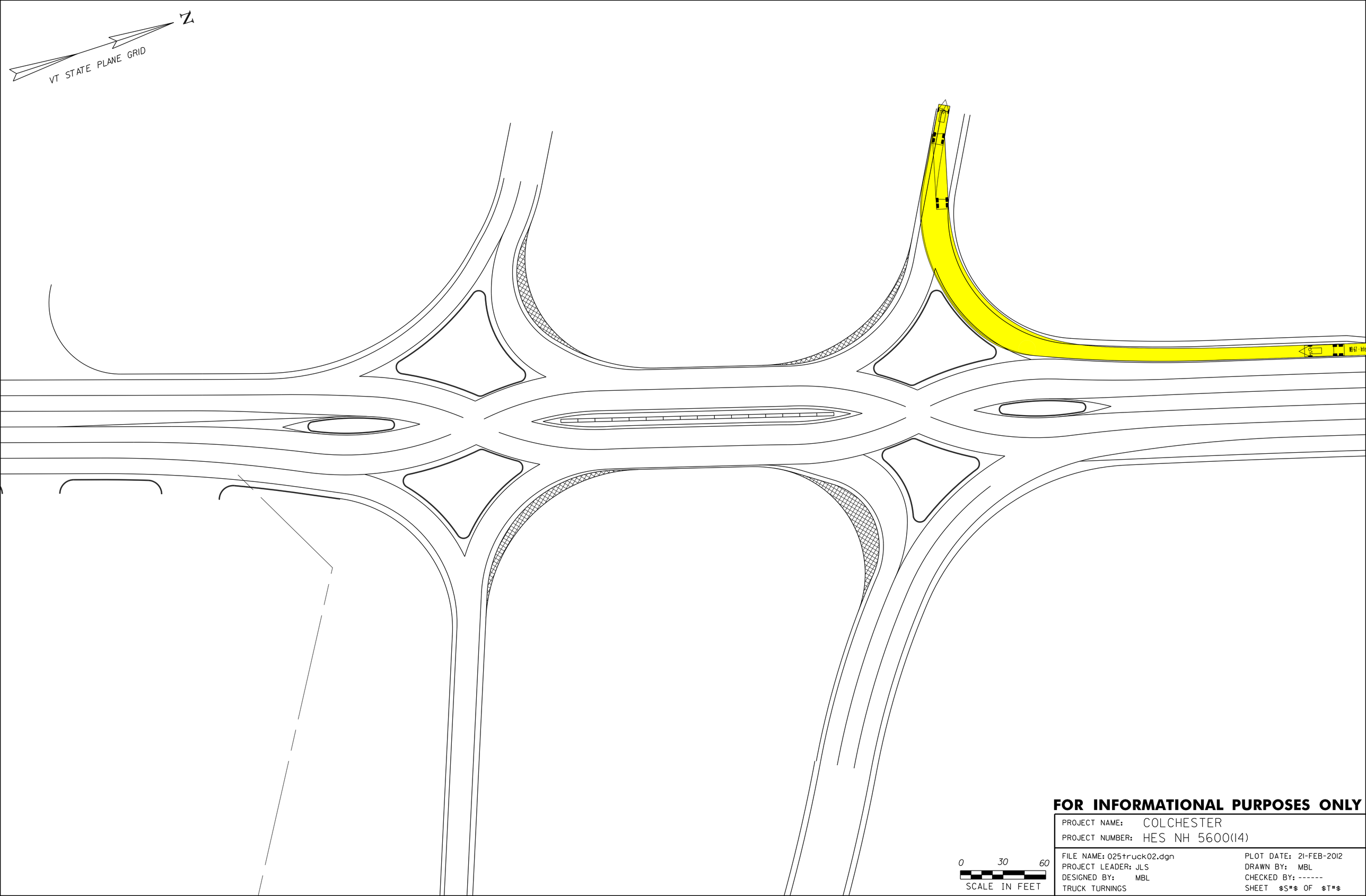
SCALES (FULL):
HORIZ: 1"= 20'
VERT: 1"= 5'

PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: t11x510pro.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
PROFILE SHEET 4	SHEET 27 OF 45



FOR INFORMATIONAL PURPOSES ONLY

PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: 024truck01.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
TRUCK TURNINGS	SHEET $S*$ OF $T*$

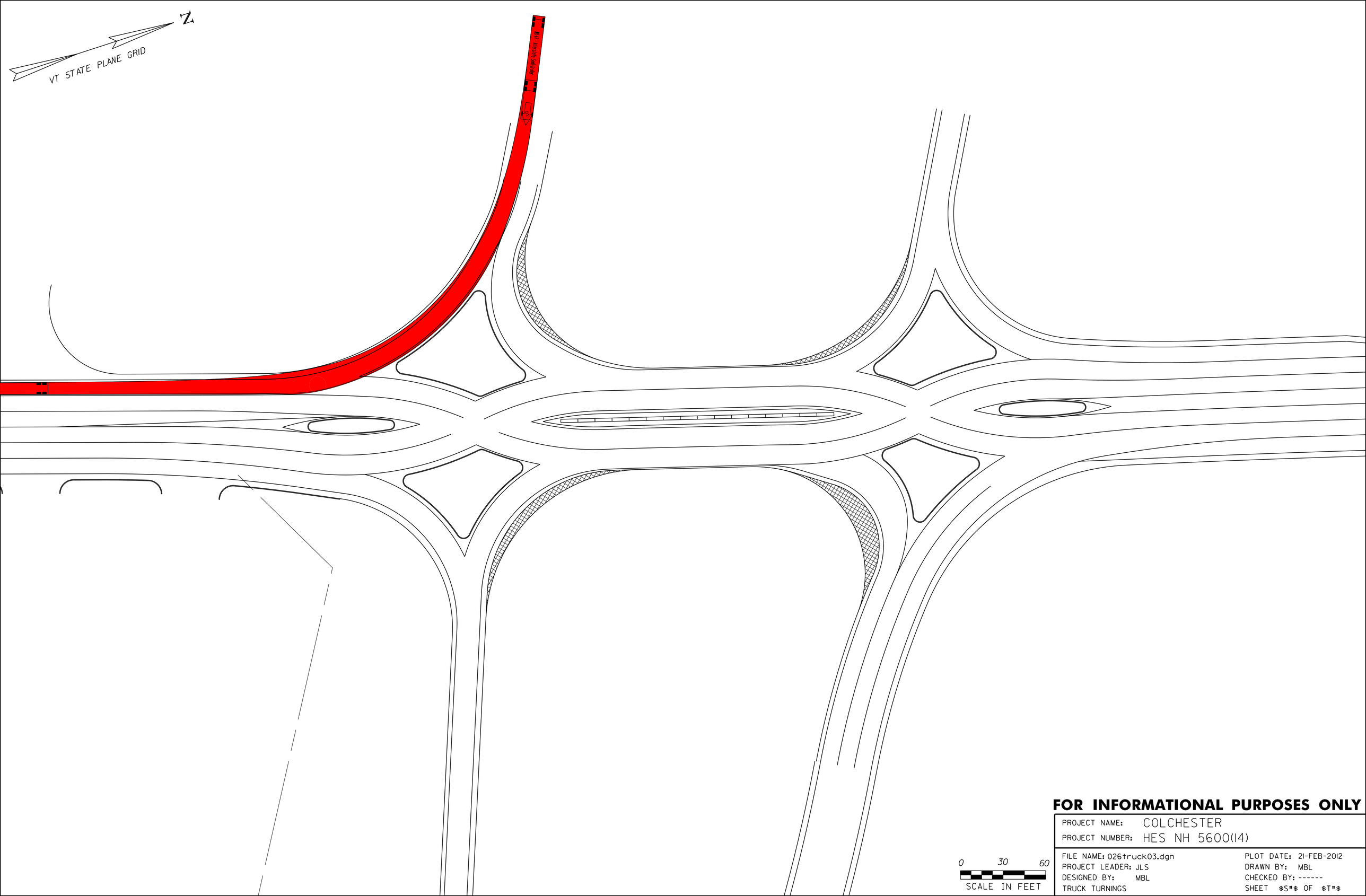


FOR INFORMATIONAL PURPOSES ONLY

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

FILE NAME: 025truck02.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TRUCK TURNINGS

PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
SHEET $S#$ OF $T#$

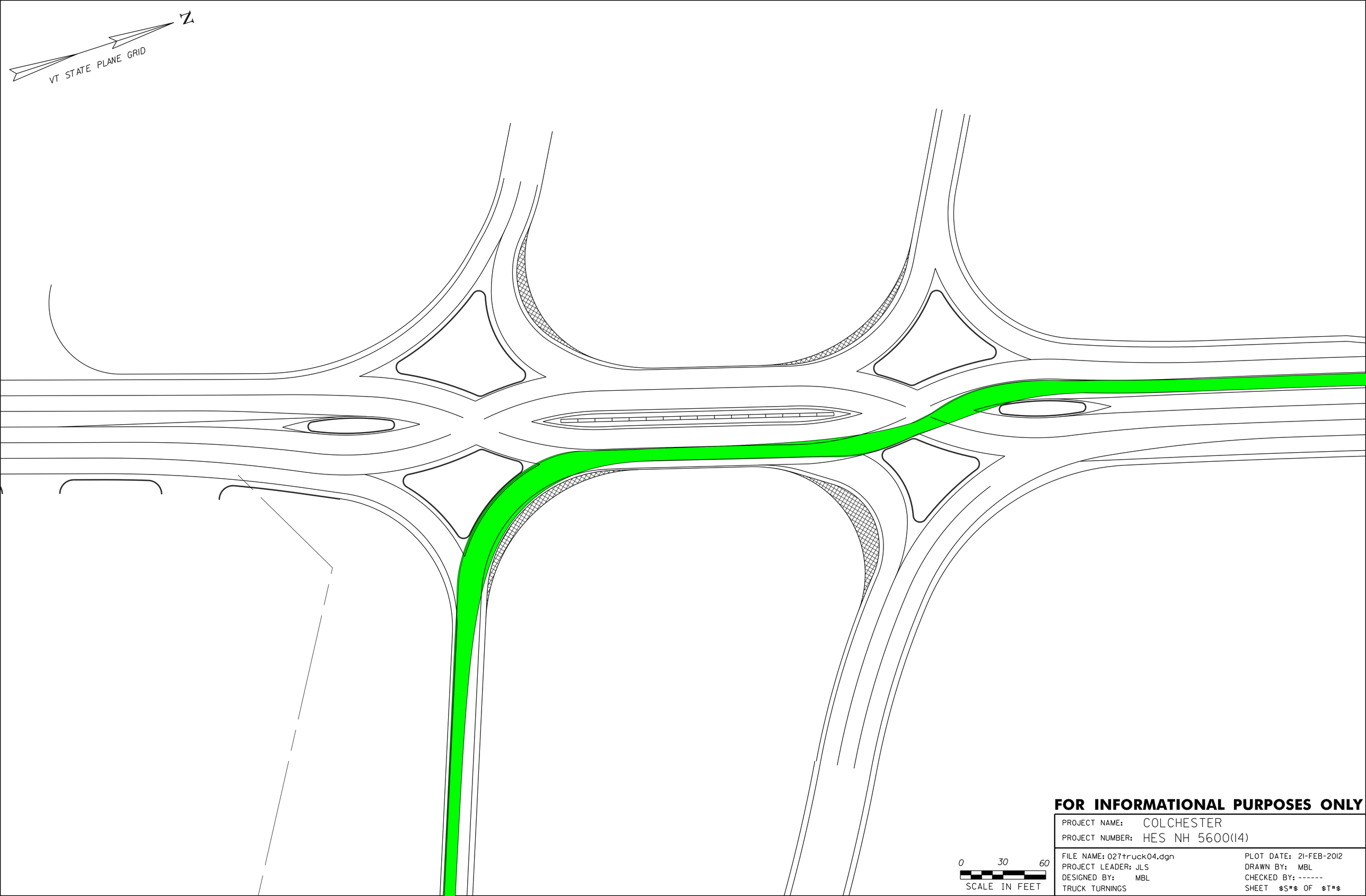


FOR INFORMATIONAL PURPOSES ONLY

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

FILE NAME: 026truck03.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TRUCK TURNINGS

PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
SHEET $S#$ OF $T#$

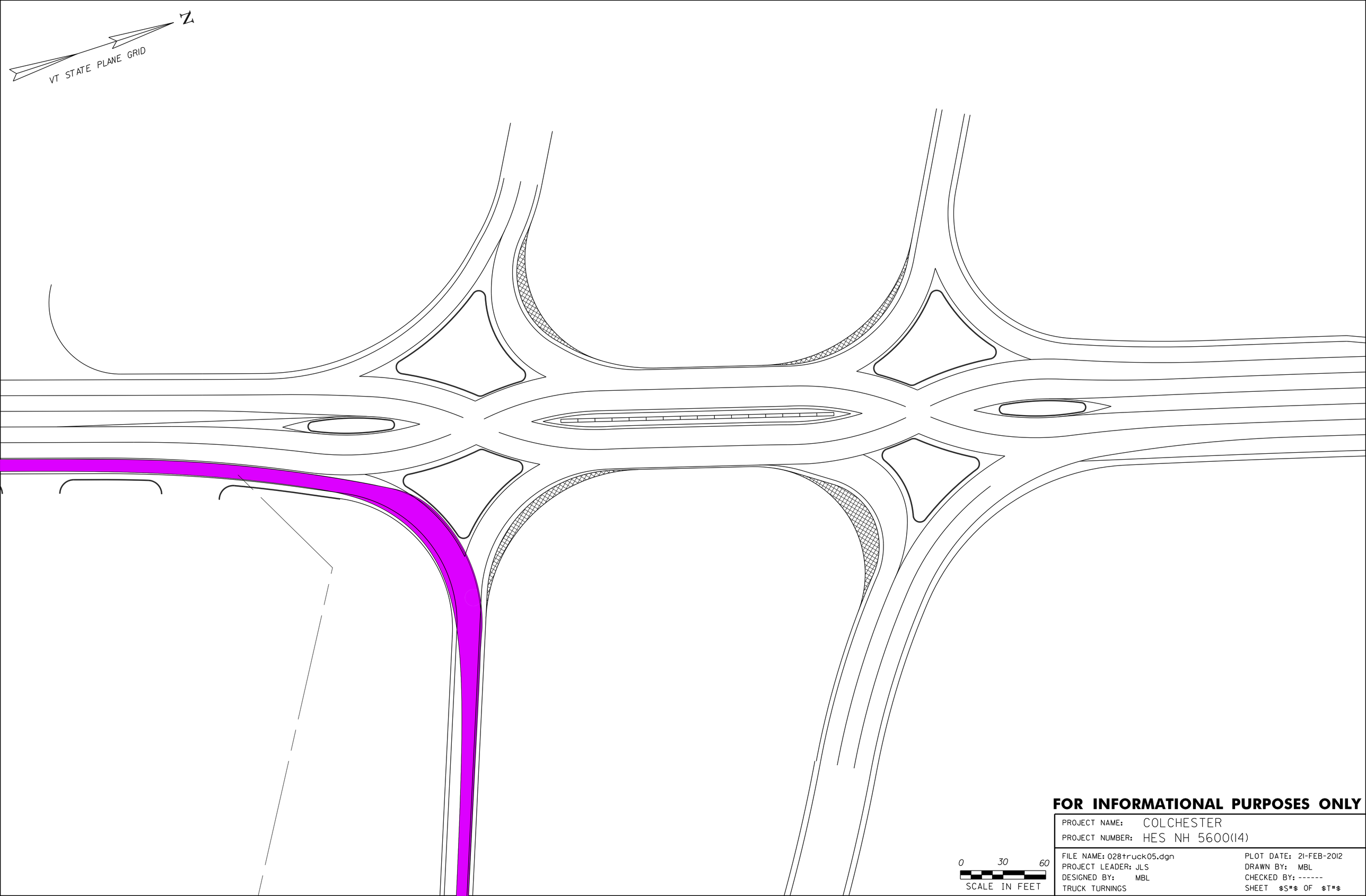


FOR INFORMATIONAL PURPOSES ONLY

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

FILE NAME: 027truck04.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TRUCK TURNINGS

PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
SHEET $S*$ OF $T*$

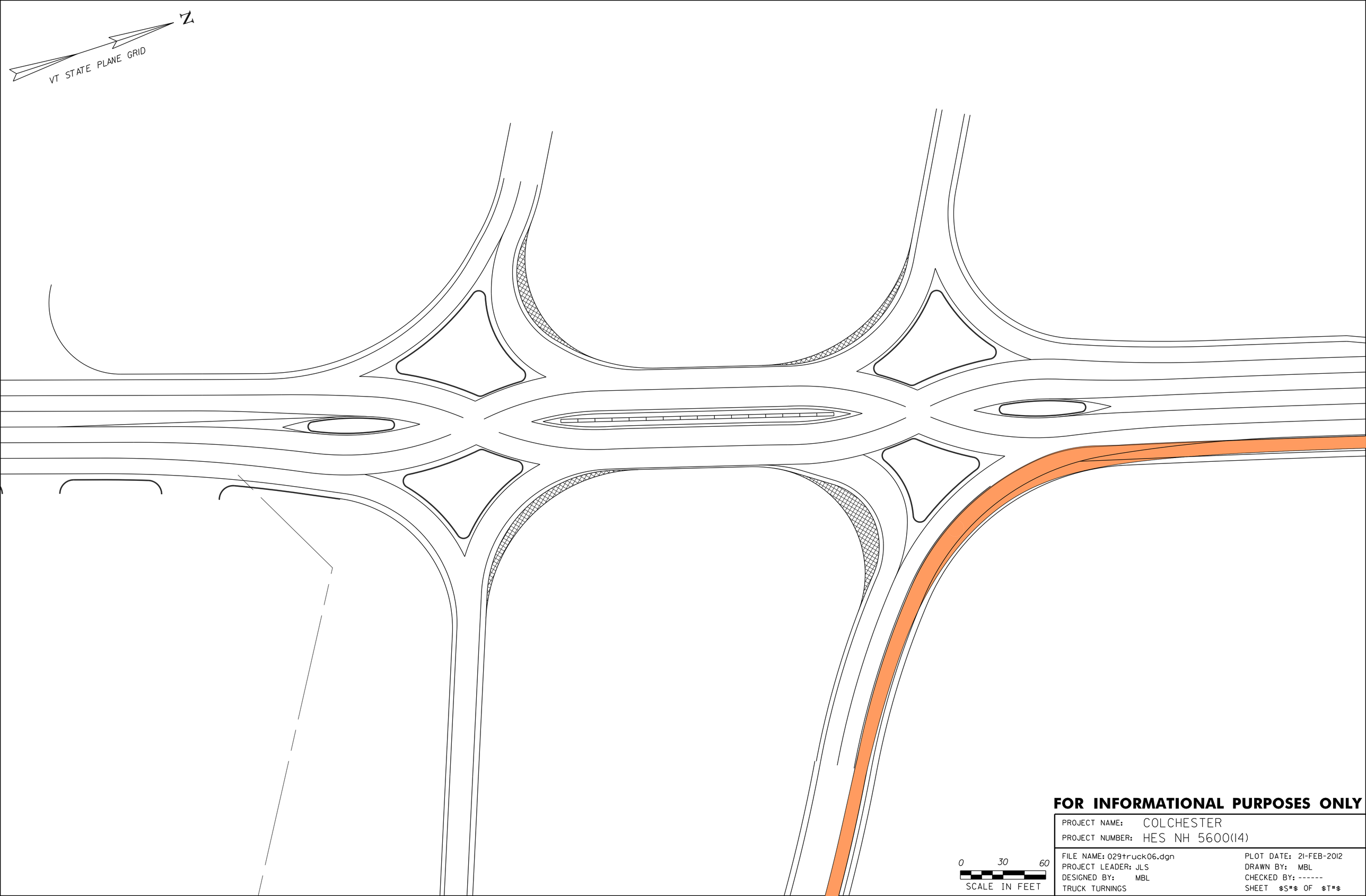


FOR INFORMATIONAL PURPOSES ONLY

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

FILE NAME: 028truck05.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TRUCK TURNINGS

PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
SHEET $S#$ OF $T#$

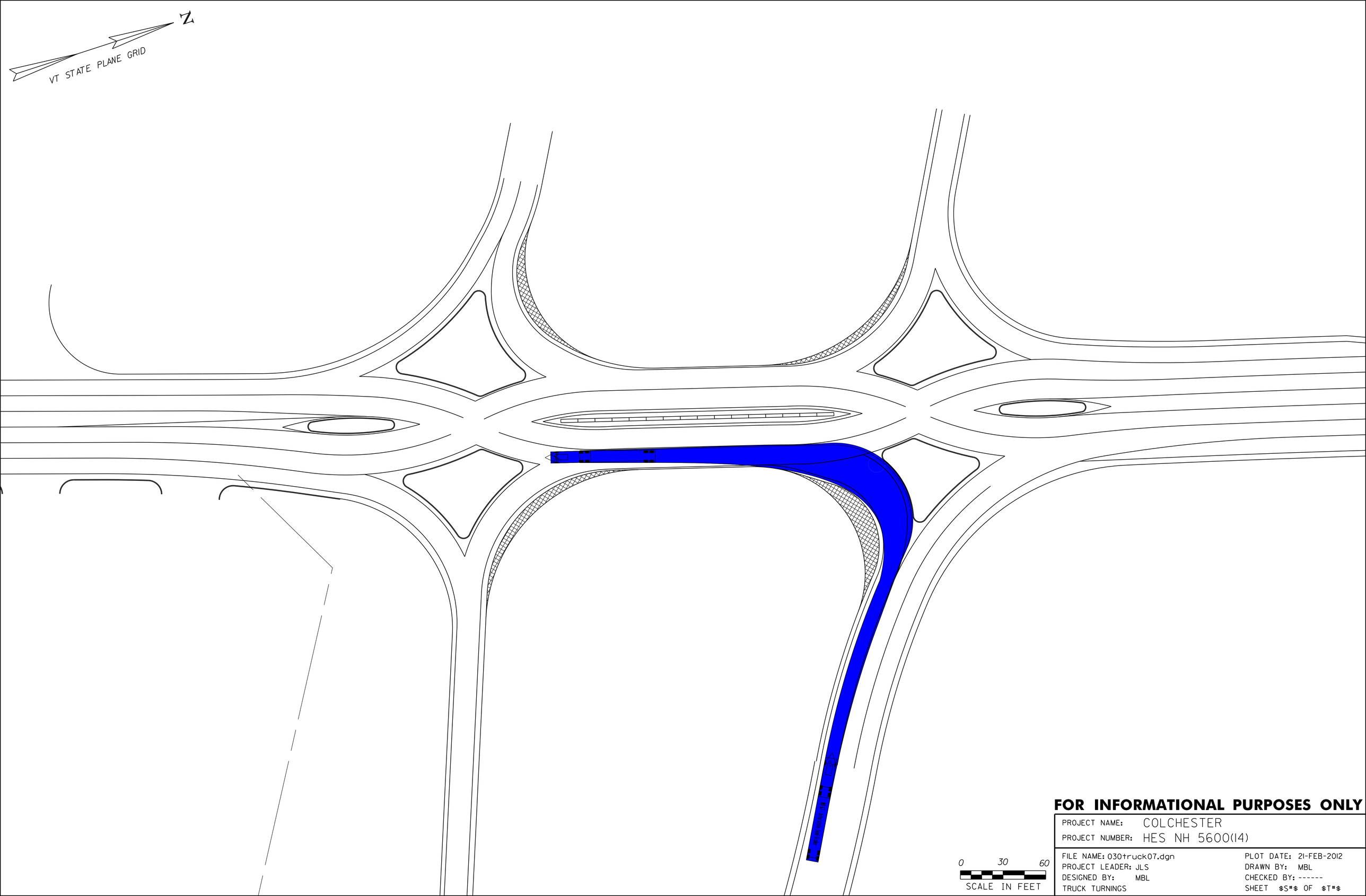


FOR INFORMATIONAL PURPOSES ONLY

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

FILE NAME: 029truck06.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TRUCK TURNINGS

PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
SHEET $S#$ OF $T#$

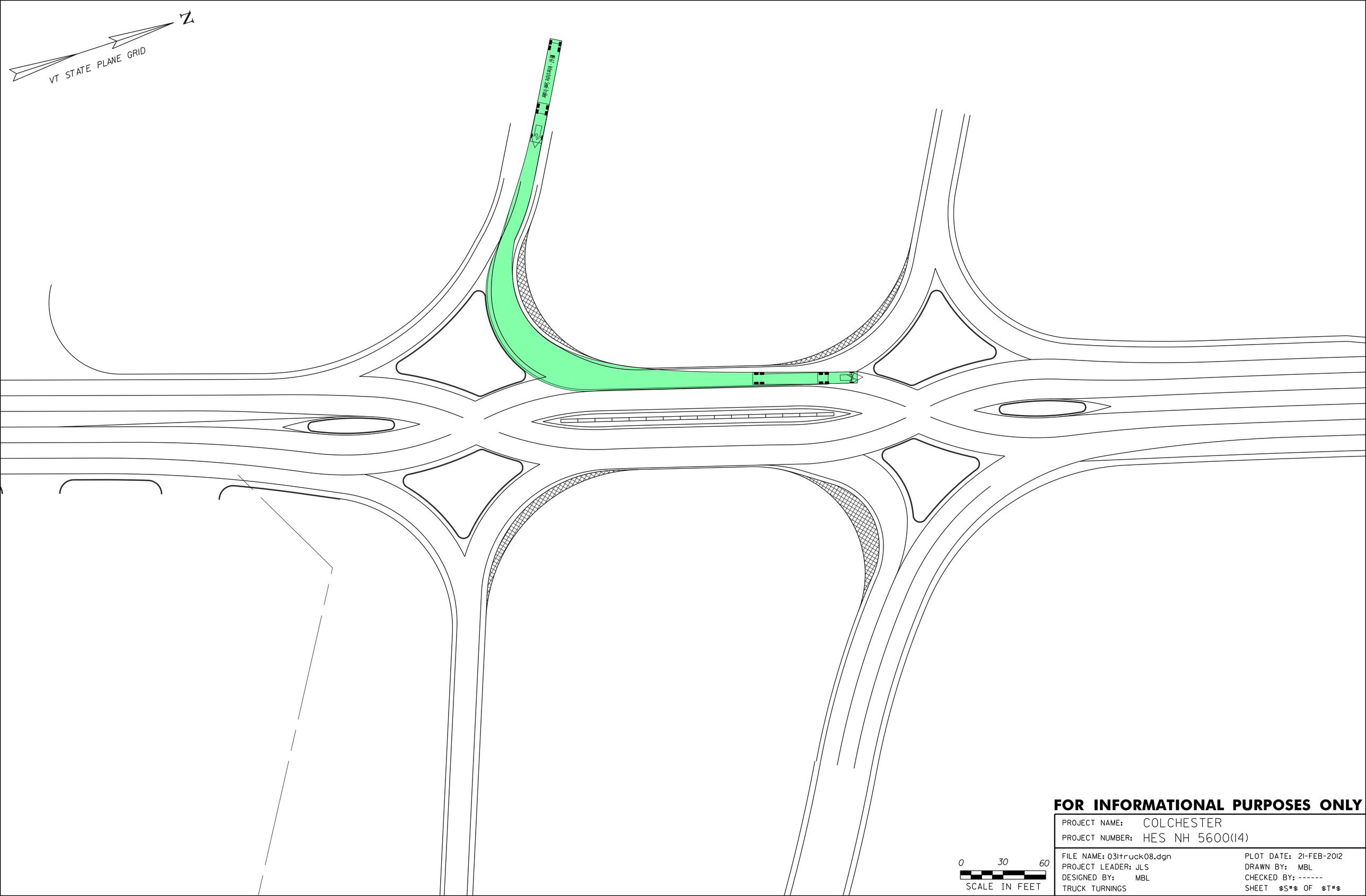


FOR INFORMATIONAL PURPOSES ONLY

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

FILE NAME: 030truck07.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TRUCK TURNINGS

PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
SHEET $S#$ OF $T#$

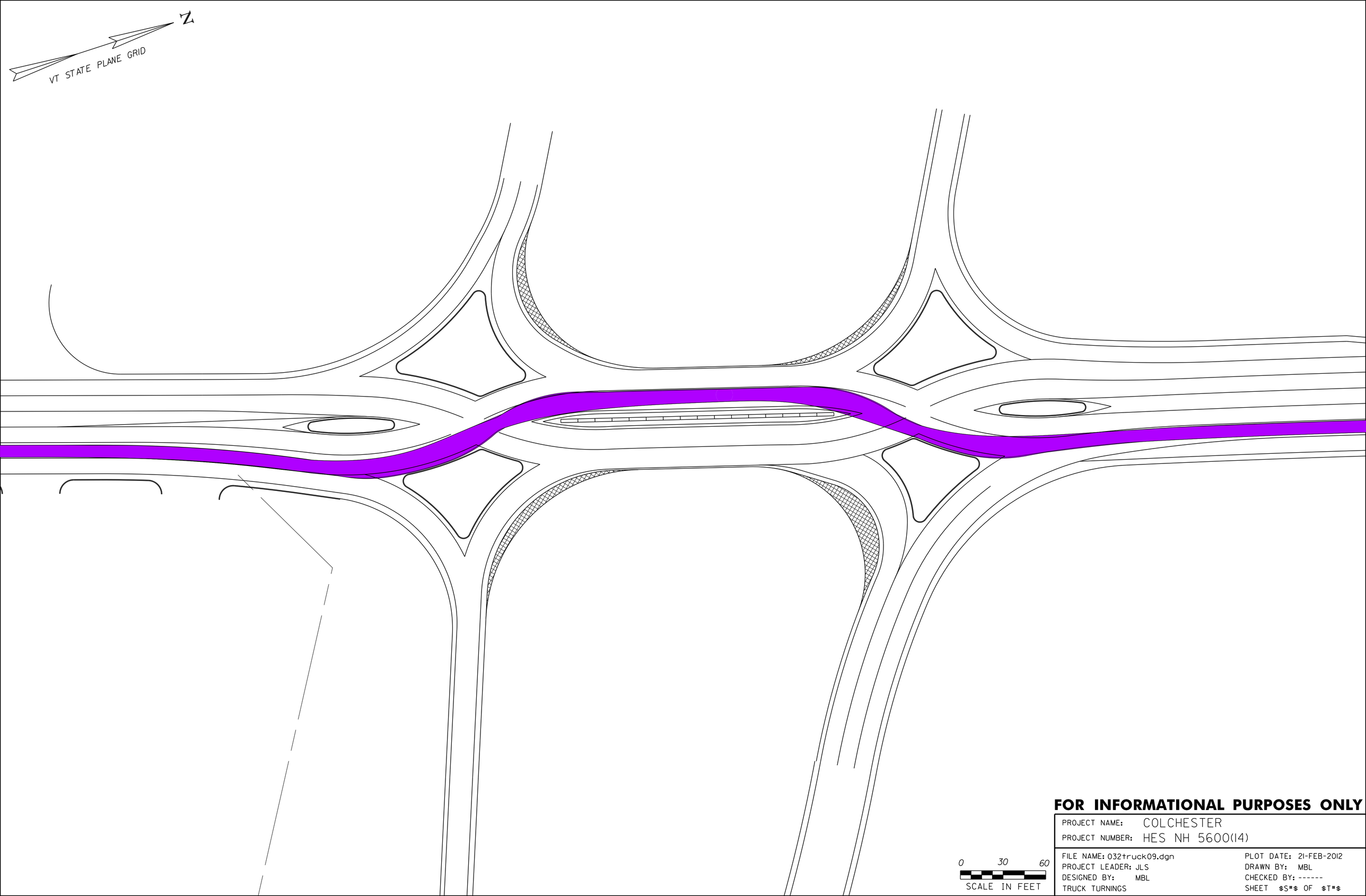


FOR INFORMATIONAL PURPOSES ONLY

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

FILE NAME: 031truck08.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TRUCK TURNINGS

PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
SHEET $S#$ OF $T#$

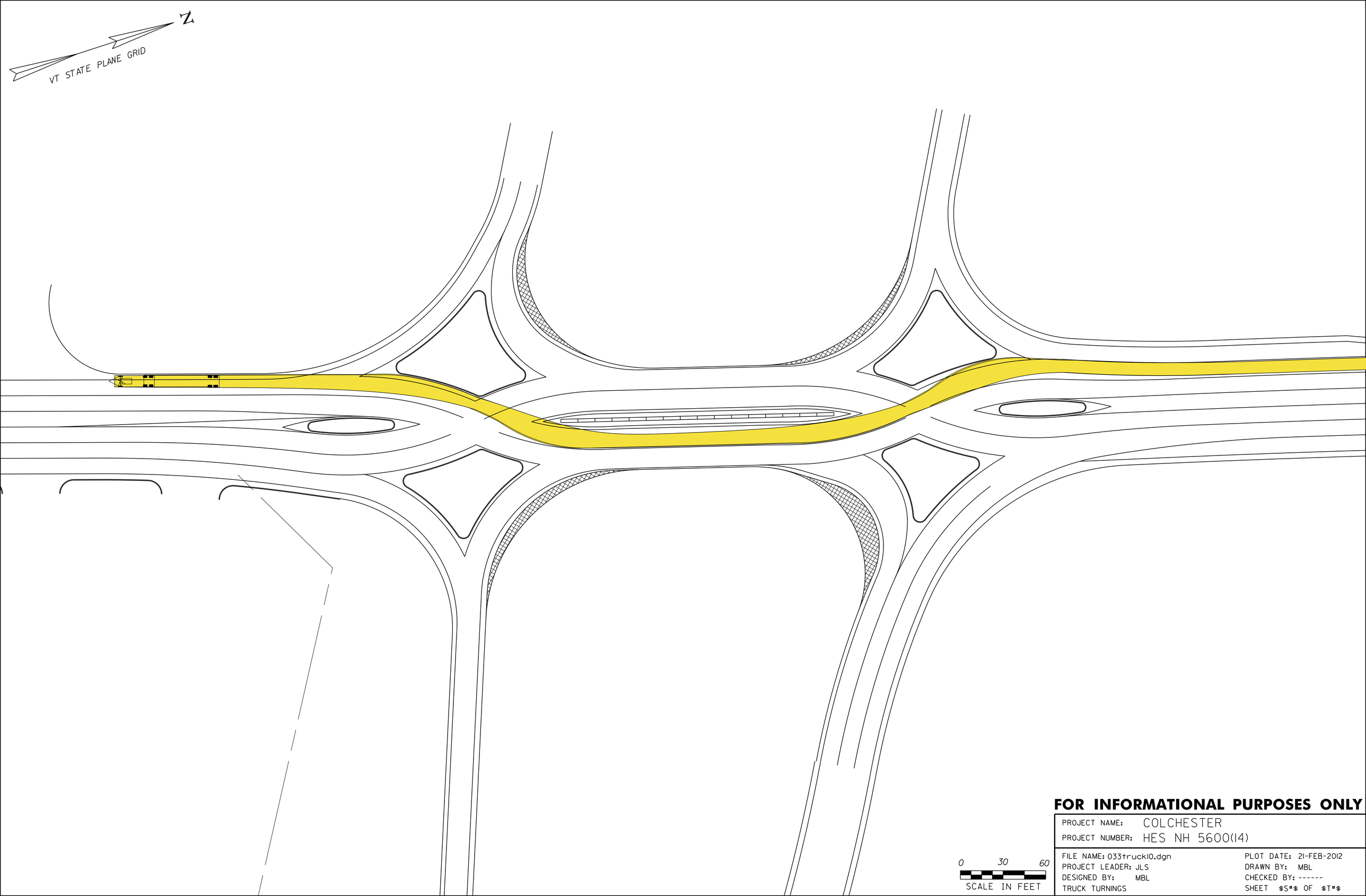


FOR INFORMATIONAL PURPOSES ONLY

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

FILE NAME: 032truck09.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TRUCK TURNINGS

PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
SHEET $S*$ OF $T*$

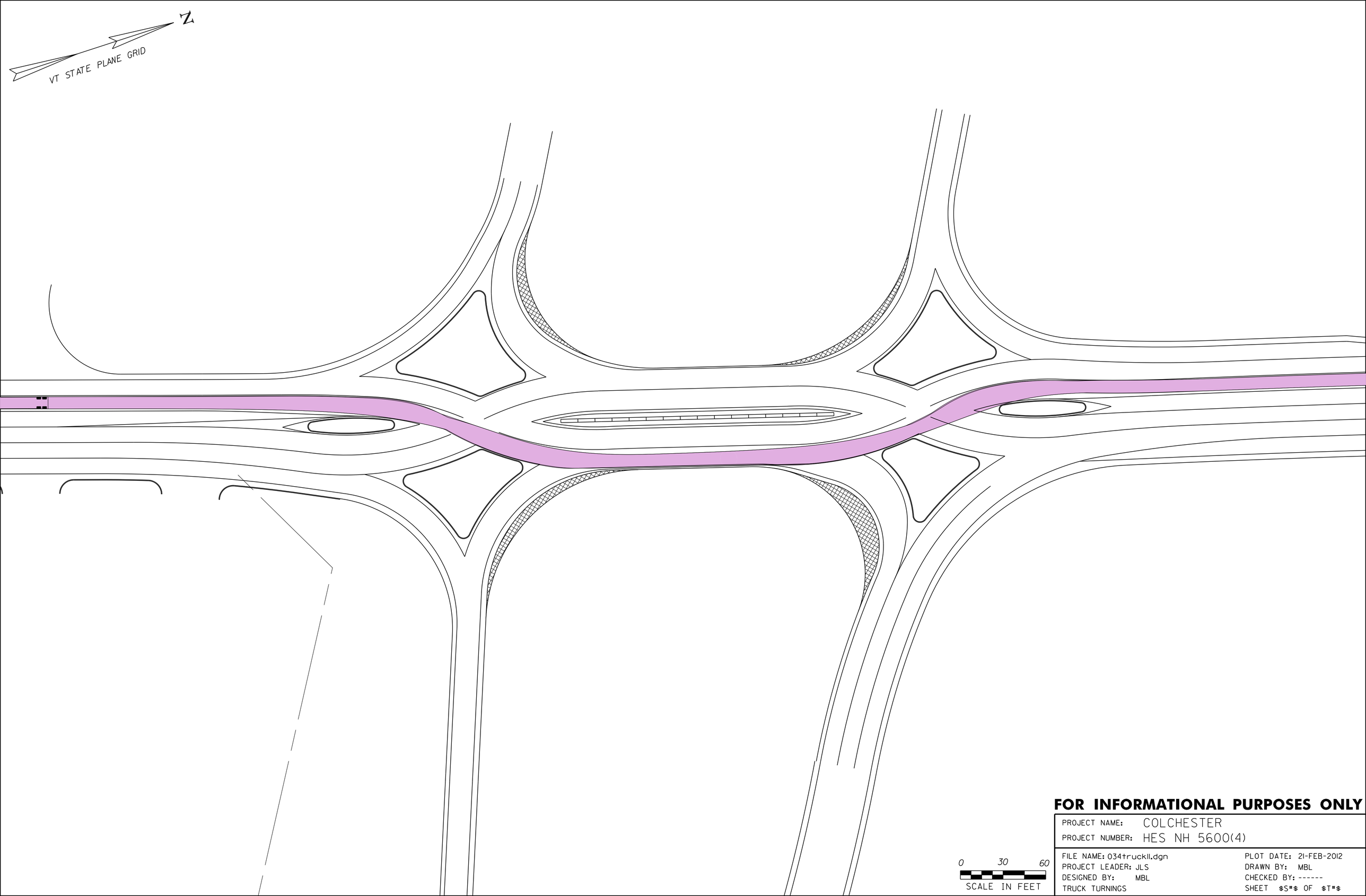


FOR INFORMATIONAL PURPOSES ONLY

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

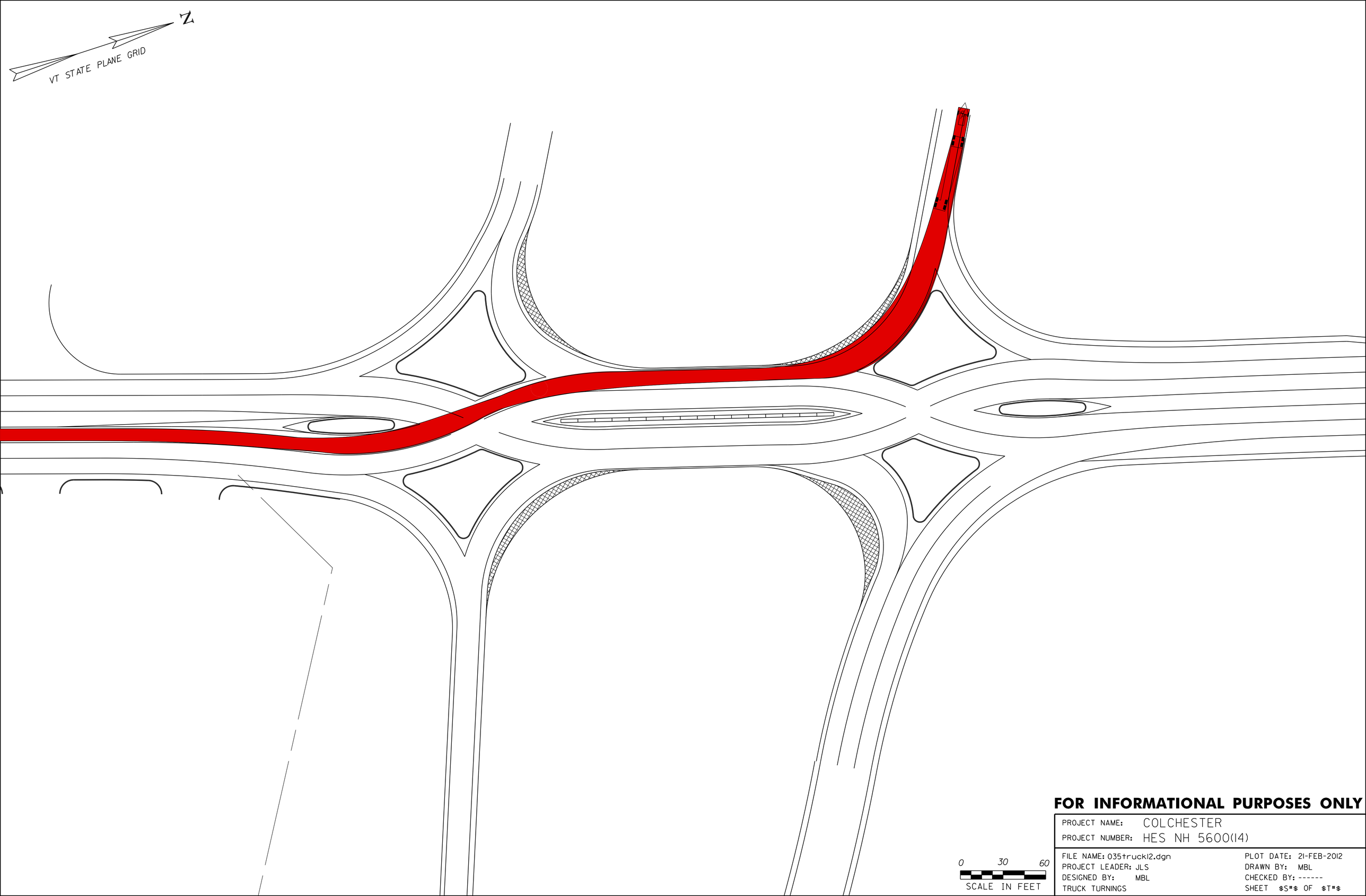
FILE NAME: 033truck10.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TRUCK TURNINGS

PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
SHEET $S#$ OF $T#$



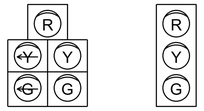
FOR INFORMATIONAL PURPOSES ONLY

PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(4)	
FILE NAME: 034truck11.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
TRUCK TURNINGS	SHEET $S*$ OF $T*$



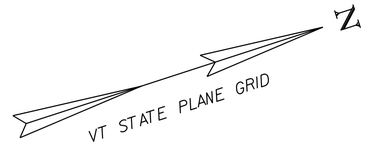
FOR INFORMATIONAL PURPOSES ONLY

PROJECT NAME: COLCHESTER	
PROJECT NUMBER: HES NH 5600(14)	
FILE NAME: 035truck12.dgn	PLOT DATE: 21-FEB-2012
PROJECT LEADER: JLS	DRAWN BY: MBL
DESIGNED BY: MBL	CHECKED BY: ------
TRUCK TURNINGS	SHEET $S*$ OF $T*$

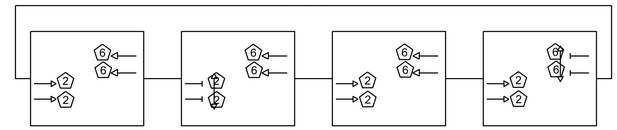


PROPOSED SIGNAL FACE ARRANGEMENTS
12" LED LENSES

SIGN DETAILS
NOT TO SCALE



PHASING DIAGRAM



678.23 - WIRED CONDUIT	CONDUIT SIZE		DESCRIPTION
	1½"	2"	
SUBTOTALS			
ROUNDING			
TOTALS			

678.15 - TRAFFIC CONTROL SIGNAL SYSTEM, INTERSECTION

MAST ARM POLE
STA. XX+XX, LT.
STA. XX+XX, LT.
STA. XX+XX, LT.
STA. XX+XX, RT.

CABINET/CONTROLLER
STA. XX+XX, LT.

678.20 - INTERCONNECTING CABLE
STA. XX+XX, XT. - STA. XX+XX, XT. (XXX')

678.25 - PULLBOX, STANDARD
STA. XX+XX, XT.

678.26 - JUNCTION BOX
STA. XX+XX, XT.

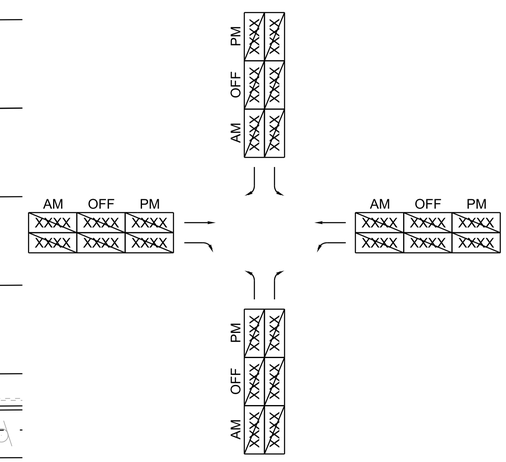
678.27 - PULLBOX, DOUBLE
STA. XX+XX, XT.

678.30 - ELECTRICAL CONDUIT SLEEVE (8" DIA.)
STA. XX+XX, XT.

679.55 - POWER DROP STANCHION, STREET LIGHTING
STA. XX+XX, XT.

MAJOR EQUIPMENT LIST

EQUIPMENT ITEM NO. 678.15 (US ROUTES 2 / 7 & S. PARK DR.)	QUANTITIES
MAST ARM POLES	4
MAST ARMS	4
PEDESTAL POLES	0
NEW 12" LED SIGNAL HEADS (ONE-WAY, 3-SECTION, VISORS, DISCONNECT HANGERS, BACKPLATES, AND MOUNTING HARDWARE)	12
NEW 12" LED SIGNAL HEADS (ONE-WAY, 5-SECTION, VISORS, DISCONNECT HANGERS, BACKPLATES, AND MOUNTING HARDWARE)	1
HANDICAP ACCESSIBLE PEDESTRIAN PUSH BUTTONS - POLE MOUNTED	0
HANDICAP ACCESSIBLE PEDESTRIAN SIGNAL HEADS	0
CONTROLLER/CABINET	1
CAMERA EXTENSION BRACKET (EA)	4
CAMERA ASSEMBLY (EA)	4
VIDEO DETECTION PROCESSOR (EA)	4
OPTICAL PREEMPTION DETECTORS	2
AC STROBE - RED	4
OPTICAL SIGNAL PROCESSOR CARD & CAGE	1



2014 HOURLY VOLUMES

PREEMPTION TIMINGS

	PREEMPTOR 1	PREEMPTOR 2
DIRECTION	US 2 / 7 NB	US 2 / 7 SB
PHASE	2	6
DET. LOCK	NO	NO
DURATION TIME	10	10
MIN. GREEN	4.0	4.0
HOLD GREEN	12.0	12.0
HOLD YELLOW	4.0	4.0
HOLD RED	2.0	2.0
RELEASE PHASE	2 & 6	2 & 6

LEGEND

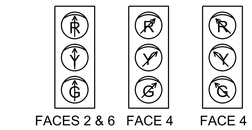
- MAST ARM & POLE
- CONTROLLER CABINET
- PULLBOX
- DOUBLE PULLBOX OR JUNCTION BOX
- PEDESTAL POST
- SIGNAL HEAD WITH PHASE NO.
- CONDUIT
- MAST ARM MOUNTED SIGN
- VIDEO DETECTOR
- VIDEO DETECTION AREA
- PREEMPTION STROBE LIGHT
- OPTICAL PREEMPTION DETECTOR

0 10 20
SCALE

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

FILE NAME: ppms#/Section/------.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TRAFFIC SIGNAL PLAN- US 2/7 & SO. PARK

PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
SHEET 40 OF 45

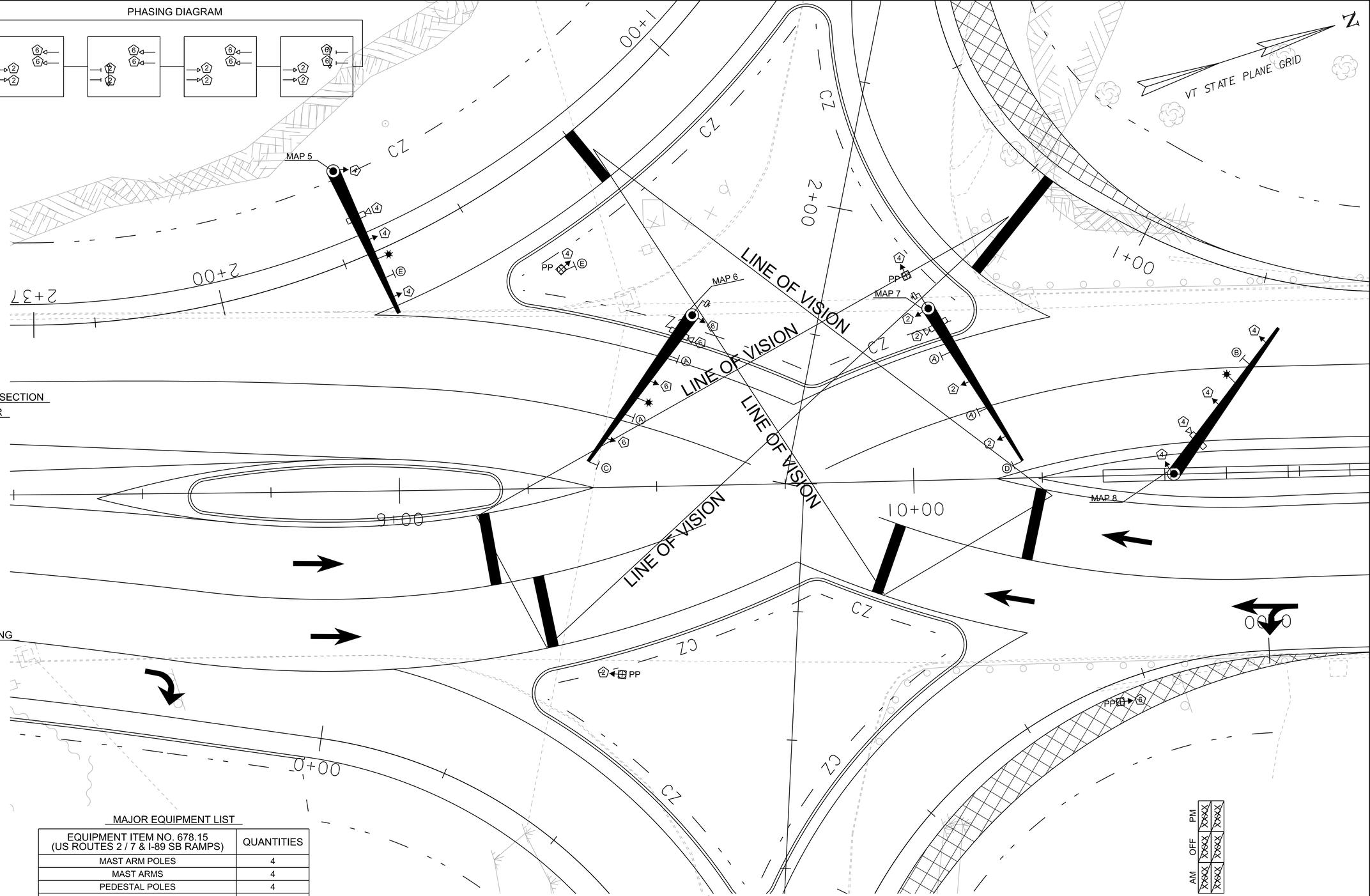


PROPOSED SIGNAL FACE ARRANGEMENTS
12" LED LENSES

Ⓐ R3-5a Ⓑ R3-5L Ⓒ R3-2 Ⓓ R3-1

Ⓔ R10-11b
30" X 30"

SIGN DETAILS
NOT TO SCALE



678.15 - TRAFFIC CONTROL SIGNAL SYSTEM, INTERSECTION

MAST ARM POLE
STA. XX+XX, LT.
STA. XX+XX, LT.
STA. XX+XX, LT.
STA. XX+XX, RT.

CABINET/CONTROLLER
STA. XX+XX, LT.

678.20 - INTERCONNECTING CABLE
STA. XX+XX, XT. - STA. XX+XX, XT. (XXX')

678.25 - PULLBOX, STANDARD
STA. XX+XX, XT.

678.26 - JUNCTION BOX
STA. XX+XX, XT.

678.27 - PULLBOX, DOUBLE
STA. XX+XX, XT.

678.30 - ELECTRICAL CONDUIT SLEEVE (8" DIA.)
STA. XX+XX, XT.

679.55 - POWER DROP STANCHION, STREET LIGHTING
STA. XX+XX, XT.

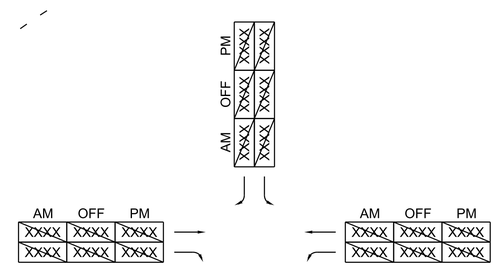
PREEMPTION TIMINGS

	PREEMPTOR 1	PREEMPTOR 2
DIRECTION	US 2 / 7 NB	US 2 / 7 SB
PHASE	2	6
DET. LOCK	NO	NO
DURATION TIME	10	10
MIN. GREEN	4.0	4.0
HOLD GREEN	12.0	12.0
HOLD YELLOW	4.0	4.0
HOLD RED	2.0	2.0
RELEASE PHASE	2 & 6	2 & 6

MAJOR EQUIPMENT LIST

EQUIPMENT ITEM NO. 678.15 (US ROUTES 2 / 7 & I-89 SB RAMPS)	QUANTITIES
MAST ARM POLES	4
MAST ARMS	4
PEDESTAL POLES	4
NEW 12" LED SIGNAL HEADS (ONE-WAY, 3-SECTION, VISORS, DISCONNECT HANGERS, BACKPLATES, AND MOUNTING HARDWARE)	16
HANDICAP ACCESSIBLE PEDESTRIAN PUSH BUTTONS - POLE MOUNTED	0
HANDICAP ACCESSIBLE PEDESTRIAN SIGNAL HEADS	0
CONTROLLER/CABINET	1
CAMERA EXTENSION BRACKET (EA)	4
CAMERA ASSEMBLY (EA)	4
VIDEO DETECTION PROCESSOR (EA)	4
OPTICAL PREEMPTION DETECTORS	2
AC STROBE - RED	4
OPTICAL SIGNAL PROCESSOR CARD & CAGE	1

678.23 - WIRED CONDUIT	CONDUIT SIZE 1½"	CONDUIT SIZE 2"	DESCRIPTION
SUBTOTALS			
ROUNDING			
TOTALS			



2014 HOURLY VOLUMES

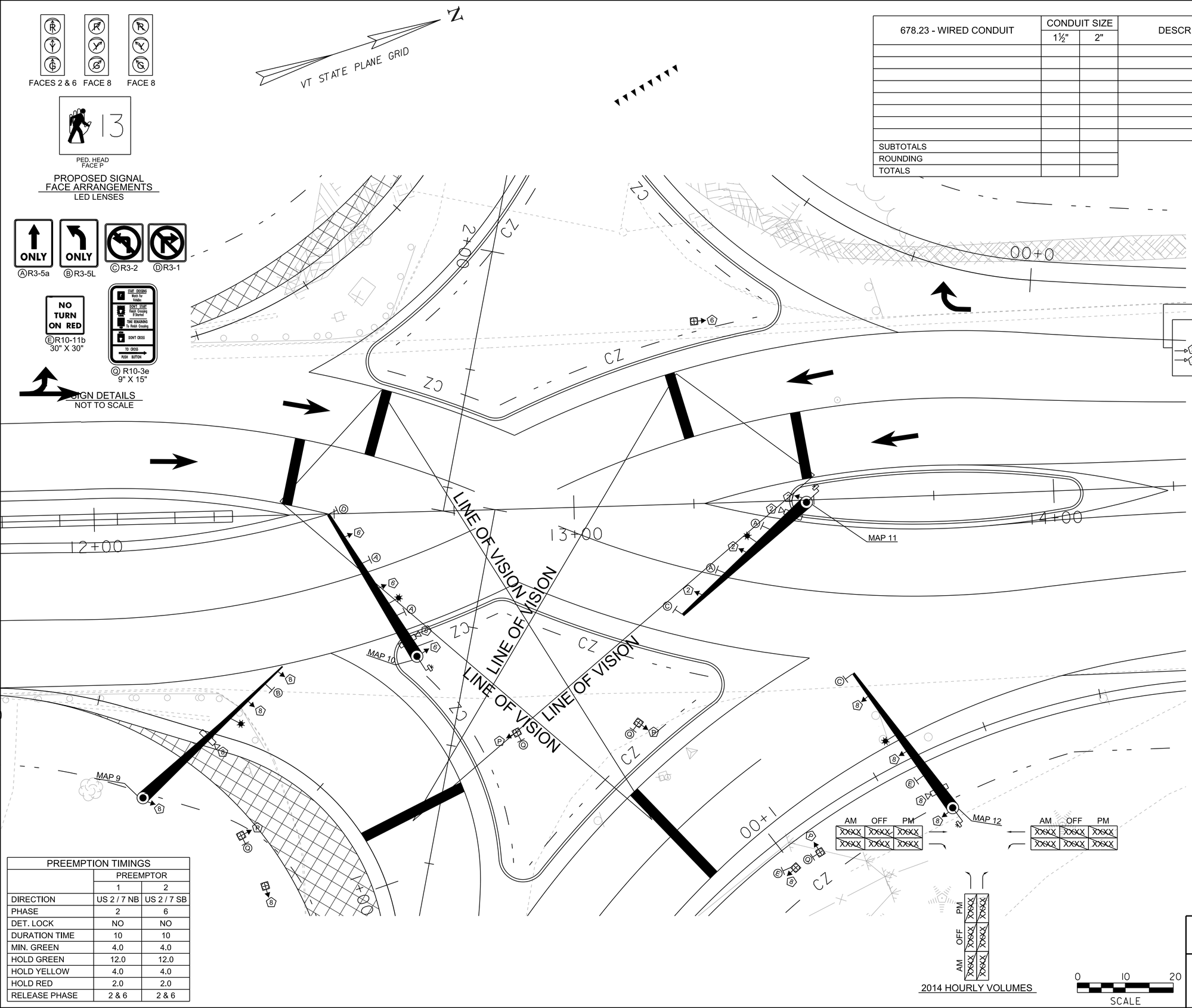
LEGEND

- MAST ARM & POLE
- CONTROLLER CABINET
- PULLBOX
- DOUBLE PULLBOX OR JUNCTION BOX
- PEDESTAL POST
- SIGNAL HEAD WITH PHASE NO.
- CONDUIT
- MAST ARM MOUNTED SIGN
- VIDEO DETECTOR
- VIDEO DETECTION AREA
- PREEMPTION STROBE LIGHT
- OPTICAL PREEMPTION DETECTOR

0 10 20
SCALE

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

FILE NAME: ppms#/Section/------.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
TRAFFIC SIGNAL PLAN- US 2/7 & SB RAMPS
SHEET 41 OF 45



678.23 - WIRED CONDUIT	CONDUIT SIZE		DESCRIPTION
	1½"	2"	
SUBTOTALS			
ROUNDING			
TOTALS			

MAJOR EQUIPMENT LIST

EQUIPMENT ITEM NO. 678.15 (US ROUTES 2 / 7 & I-89 NB RAMPS)	QUANTITIES
MAST ARM POLES	4
MAST ARMS	4
PEDESTAL POLES	8
NEW 12" LED SIGNAL HEADS (ONE-WAY, 3-SECTION, VISORS, DISCONNECT HANGERS, BACKPLATES, AND MOUNTING HARDWARE)	16
HANDICAP ACCESSIBLE PEDESTRIAN PUSH BUTTONS - POLE MOUNTED	4
HANDICAP ACCESSIBLE PEDESTRIAN SIGNAL HEADS	4
CONTROLLER/CABINET	1
CAMERA EXTENSION BRACKET (EA)	4
CAMERA ASSEMBLY (EA)	4
VIDEO DETECTION PROCESSOR (EA)	4
OPTICAL PREEMPTION DETECTORS	2
AC STROBE - RED	4
OPTICAL SIGNAL PROCESSOR CARD & CAGE	1

PHASING DIAGRAM

678.15 - TRAFFIC CONTROL SIGNAL SYSTEM, INTERSECTION

MAST ARM POLE
STA. XX+XX, LT.
STA. XX+XX, LT.
STA. XX+XX, LT.
STA. XX+XX, RT.

CABINET/CONTROLLER
STA. XX+XX, LT.

678.20 - INTERCONNECTING CABLE
STA. XX+XX, XT. - STA. XX+XX, XT. (XXX')

678.25 - PULLBOX, STANDARD
STA. XX+XX, XT.

678.26 - JUNCTION BOX
STA. XX+XX, XT.

678.27 - PULLBOX, DOUBLE
STA. XX+XX, XT.

678.30 - ELECTRICAL CONDUIT SLEEVE (8" DIA.)
STA. XX+XX, XT.

679.55 - POWER DROP STANCHION, STREET LIGHTING
STA. XX+XX, XT.

LEGEND

- MAST ARM & POLE
- CONTROLLER CABINET
- PULLBOX
- DOUBLE PULLBOX OR JUNCTION BOX
- PEDESTAL POST
- SIGNAL HEAD WITH PHASE NO.
- CONDUIT
- MAST ARM MOUNTED SIGN
- VIDEO DETECTOR
- VIDEO DETECTION AREA
- PREEMPTION STROBE LIGHT
- OPTICAL PREEMPTION DETECTOR

PREEMPTION TIMINGS		
	PREEMPTOR	
	1	2
DIRECTION	US 2 / 7 NB	US 2 / 7 SB
PHASE	2	6
DET. LOCK	NO	NO
DURATION TIME	10	10
MIN. GREEN	4.0	4.0
HOLD GREEN	12.0	12.0
HOLD YELLOW	4.0	4.0
HOLD RED	2.0	2.0
RELEASE PHASE	2 & 6	2 & 6

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

FILE NAME: ppms#/Section/------.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TRAFFIC SIGNAL PLAN- US 2/7 & NB RAMPS

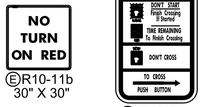
PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
SHEET 42 OF 45

FACES 1,3,5,7

FACES 2,4,6,8

PED. HEAD
FACE P

PROPOSED SIGNAL FACE ARRANGEMENTS
LED LENSES



Ⓔ R10-11b
30" X 30"

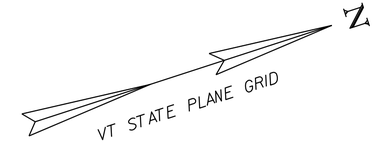
Ⓠ R10-3e
9" X 15"

Ⓖ Lower Mountain View Dr

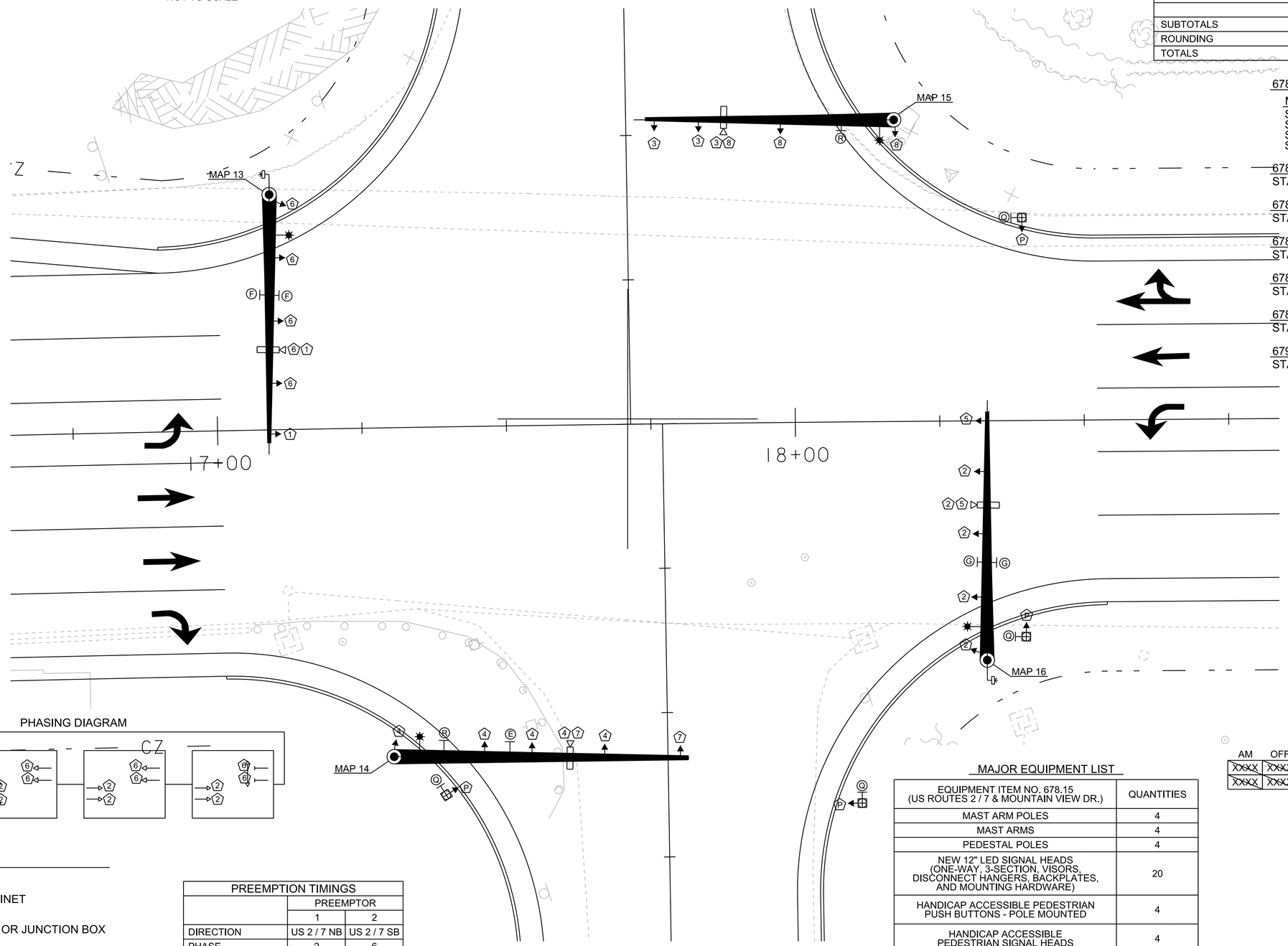
Ⓕ Mountain View Dr

Ⓡ Roosevelt Hwy

SIGN DETAILS
NOT TO SCALE



678.23 - WIRED CONDUIT	CONDUIT SIZE		DESCRIPTION
	1½"	2"	
SUBTOTALS			
ROUNDING			
TOTALS			



PHASING DIAGRAM

678.15 - TRAFFIC CONTROL SIGNAL SYSTEM, INTERSECTION

MAST ARM POLE	CABINET/CONTROLLER
STA. XX+XX, LT.	STA. XX+XX, LT.
STA. XX+XX, LT.	
STA. XX+XX, LT.	
STA. XX+XX, RT.	

678.20 - INTERCONNECTING CABLE
STA. XX+XX, XT. - STA. XX+XX, XT. (XXX')

678.25 - PULLBOX, STANDARD
STA. XX+XX, XT.

678.26 - JUNCTION BOX
STA. XX+XX, XT.

678.27 - PULLBOX, DOUBLE
STA. XX+XX, XT.

678.30 - ELECTRICAL CONDUIT SLEEVE (8" DIA.)
STA. XX+XX, XT.

679.55 - POWER DROP STANCHION, STREET LIGHTING
STA. XX+XX, XT.

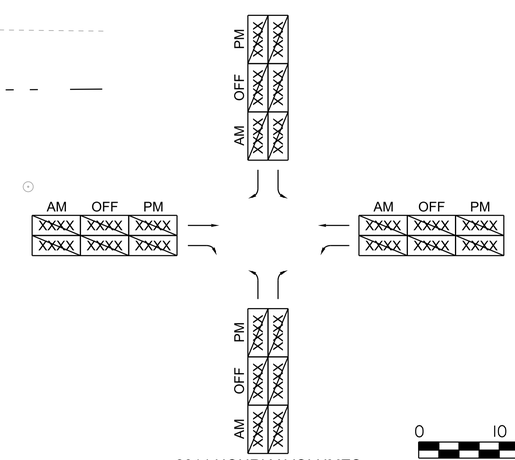
LEGEND

- MAST ARM & POLE
- CONTROLLER CABINET
- PULLBOX
- DOUBLE PULLBOX OR JUNCTION BOX
- PEDESTAL POST
- SIGNAL HEAD WITH PHASE NO.
- CONDUIT
- MAST ARM MOUNTED SIGN
- VIDEO DETECTOR
- VIDEO DETECTION AREA
- PREEMPTION STROBE LIGHT
- OPTICAL PREEMPTION DETECTOR

PREEMPTION TIMINGS		
	PREEMPTOR	
	1	2
DIRECTION	US 2 / 7 NB	US 2 / 7 SB
PHASE	2	6
DET. LOCK	NO	NO
DURATION TIME	10	10
MIN. GREEN	4.0	4.0
HOLD GREEN	12.0	12.0
HOLD YELLOW	4.0	4.0
HOLD RED	2.0	2.0
RELEASE PHASE	2 & 6	2 & 6

MAJOR EQUIPMENT LIST

EQUIPMENT ITEM NO. 678.15 (US ROUTES 2 / 7 & MOUNTAIN VIEW DR.)	QUANTITIES
MAST ARM POLES	4
MAST ARMS	4
PEDESTAL POLES	4
NEW 12" LED SIGNAL HEADS (ONE-WAY, 3-SECTION, VISORS, DISCONNECT HANGERS, BACKPLATES, AND MOUNTING HARDWARE)	20
HANDICAP ACCESSIBLE PEDESTRIAN PUSH BUTTONS - POLE MOUNTED	4
HANDICAP ACCESSIBLE PEDESTRIAN SIGNAL HEADS	4
CONTROLLER/CABINET	1
CAMERA EXTENSION BRACKET (EA)	4
CAMERA ASSEMBLY (EA)	4
VIDEO DETECTION PROCESSOR (EA)	4
OPTICAL PREEMPTION DETECTORS	2
AC STROBE - RED	4
OPTICAL SIGNAL PROCESSOR CARD & CAGE	1



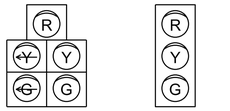
2014 HOURLY VOLUMES

0 10 20
SCALE

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

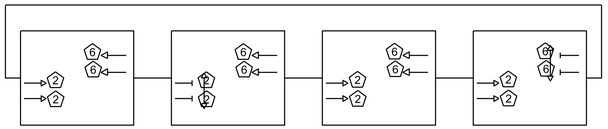
FILE NAME: ppms#/Section/------.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TRAFFIC SIGNAL PLAN- US 2/7 & MT VIEW

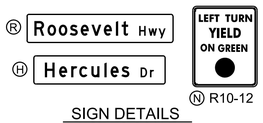
PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
SHEET 43 OF 45



PROPOSED SIGNAL FACE ARRANGEMENTS
12" LED LENSES

PHASING DIAGRAM





SIGN DETAILS
NOT TO SCALE

VT STATE PLANE GRID

678.15 - TRAFFIC CONTROL SIGNAL SYSTEM, INTERSECTION

MAST ARM POLE
STA. XX+XX, LT.
STA. XX+XX, LT.
STA. XX+XX, LT.
STA. XX+XX, RT.

CABINET/CONTROLLER
STA. XX+XX, LT.

678.20 - INTERCONNECTING CABLE
STA. XX+XX, XT. - STA. XX+XX, XT. (XXX')

678.25 - PULLBOX, STANDARD
STA. XX+XX, XT.

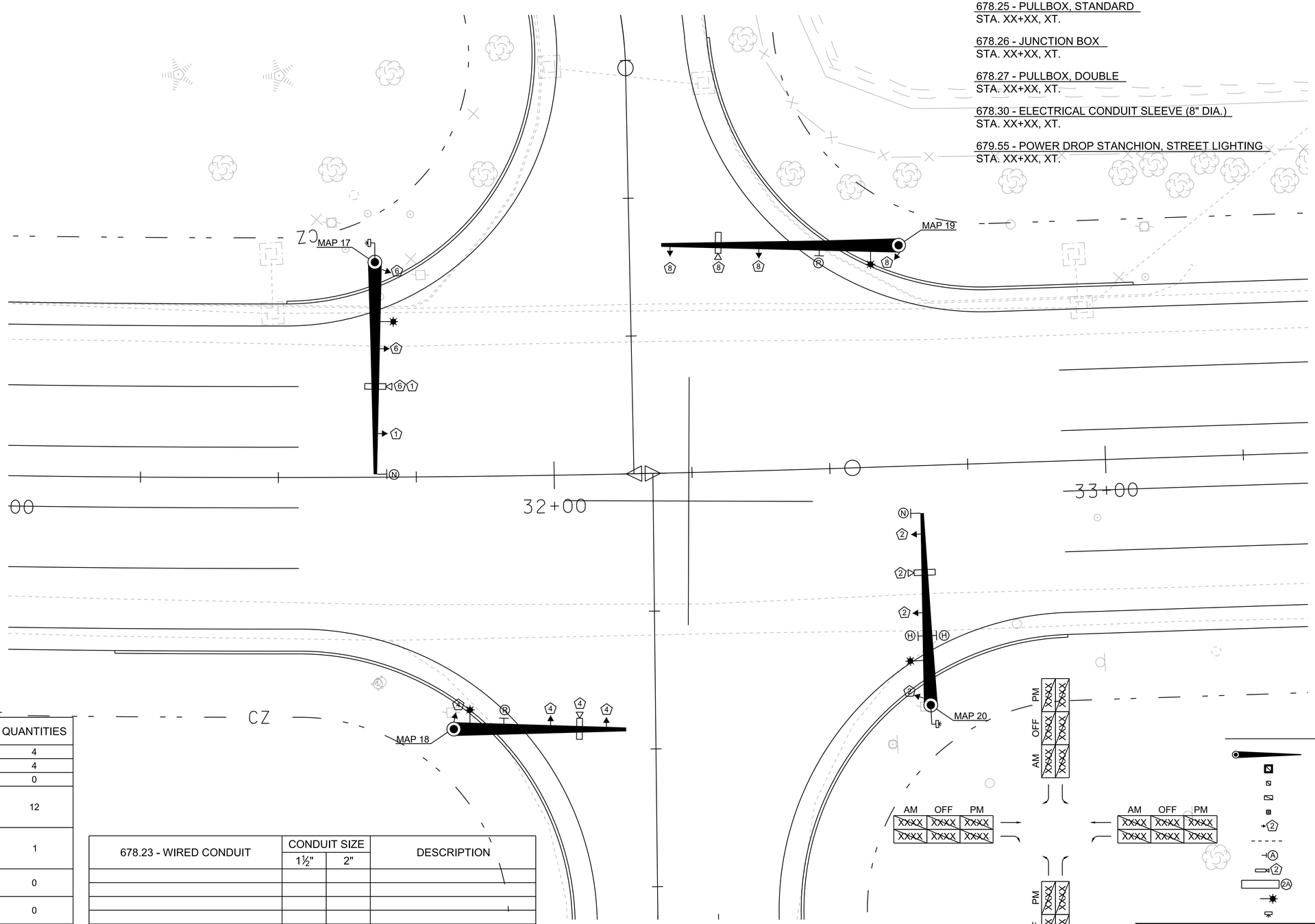
678.26 - JUNCTION BOX
STA. XX+XX, XT.

678.27 - PULLBOX, DOUBLE
STA. XX+XX, XT.

678.30 - ELECTRICAL CONDUIT SLEEVE (8" DIA.)
STA. XX+XX, XT.

679.55 - POWER DROP STANCHION, STREET LIGHTING
STA. XX+XX, XT.

PREEMPTION TIMINGS		
	PREEMPTOR	
	1	2
DIRECTION	US 2 / 7 NB	US 2 / 7 SB
PHASE	2	6
DET. LOCK	NO	NO
DURATION TIME	10	10
MIN. GREEN	4.0	4.0
HOLD GREEN	12.0	12.0
HOLD YELLOW	4.0	4.0
HOLD RED	2.0	2.0
RELEASE PHASE	2 & 6	2 & 6



MAJOR EQUIPMENT LIST

EQUIPMENT ITEM NO. 678.15 (US ROUTES 2 / 7 & HERCULES DR.)	QUANTITIES
MAST ARM POLES	4
MAST ARMS	4
PEDESTAL POLES	0
NEW 12" LED SIGNAL HEADS (ONE-WAY, 3-SECTION, VISORS, DISCONNECT HANGERS, BACKPLATES, AND MOUNTING HARDWARE)	12
NEW 12" LED SIGNAL HEADS (ONE-WAY, 5-SECTION, VISORS, DISCONNECT HANGERS, BACKPLATES, AND MOUNTING HARDWARE)	1
HANDICAP ACCESSIBLE PEDESTRIAN PUSH BUTTONS - POLE MOUNTED	0
HANDICAP ACCESSIBLE PEDESTRIAN SIGNAL HEADS	0
CONTROLLER/CABINET	1
CAMERA EXTENSION BRACKET (EA)	4
CAMERA ASSEMBLY (EA)	4
VIDEO DETECTION PROCESSOR (EA)	4
OPTICAL PREEMPTION DETECTORS	2
AC STROBE - RED	4
OPTICAL SIGNAL PROCESSOR CARD & CAGE	1

678.23 - WIRED CONDUIT	CONDUIT SIZE		DESCRIPTION
	1½"	2"	
SUBTOTALS			
ROUNDING			
TOTALS			

0 10 20
SCALE

2014 HOURLY VOLUMES

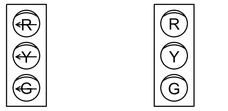
LEGEND

- MAST ARM & POLE
- CONTROLLER CABINET
- PULLBOX
- DOUBLE PULLBOX OR JUNCTION BOX
- PEDESTAL POST
- SIGNAL HEAD WITH PHASE NO.
- CONDUIT
- MAST ARM MOUNTED SIGN
- VIDEO DETECTOR
- VIDEO DETECTION AREA
- PREEMPTION STROBE LIGHT
- OPTICAL PREEMPTION DETECTOR

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

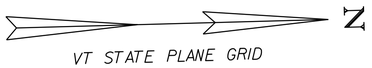
FILE NAME: ppms#/Section/------.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TRAFFIC SIGNAL PLAN- US 2/7 & HERCULES

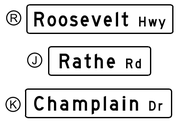
PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
SHEET 44 OF 45



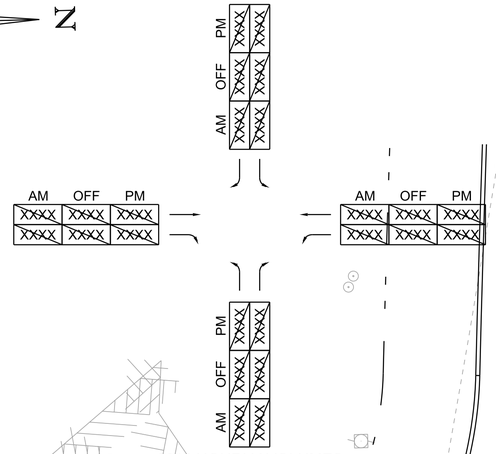
FACE 5 FACES 2,4,6,8

PROPOSED SIGNAL FACE ARRANGEMENTS
12" LED LENSES





SIGN DETAILS
NOT TO SCALE



2014 HOURLY VOLUMES

678.15 - TRAFFIC CONTROL SIGNAL SYSTEM, INTERSECTION

MAST ARM POLE
STA. XX+XX, LT.
STA. XX+XX, LT.
STA. XX+XX, LT.
STA. XX+XX, RT.

CABINET/CONTROLLER
STA. XX+XX, LT.

678.20 - INTERCONNECTING CABLE
STA. XX+XX, XT. - STA. XX+XX, XT. (XXX')

678.25 - PULLBOX, STANDARD
STA. XX+XX, XT.

678.26 - JUNCTION BOX
STA. XX+XX, XT.

678.27 - PULLBOX, DOUBLE
STA. XX+XX, XT.

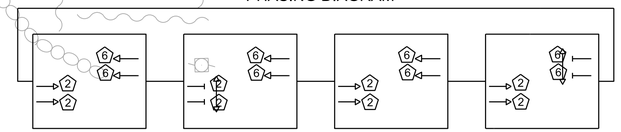
678.30 - ELECTRICAL CONDUIT SLEEVE (8" DIA.)
STA. XX+XX, XT.

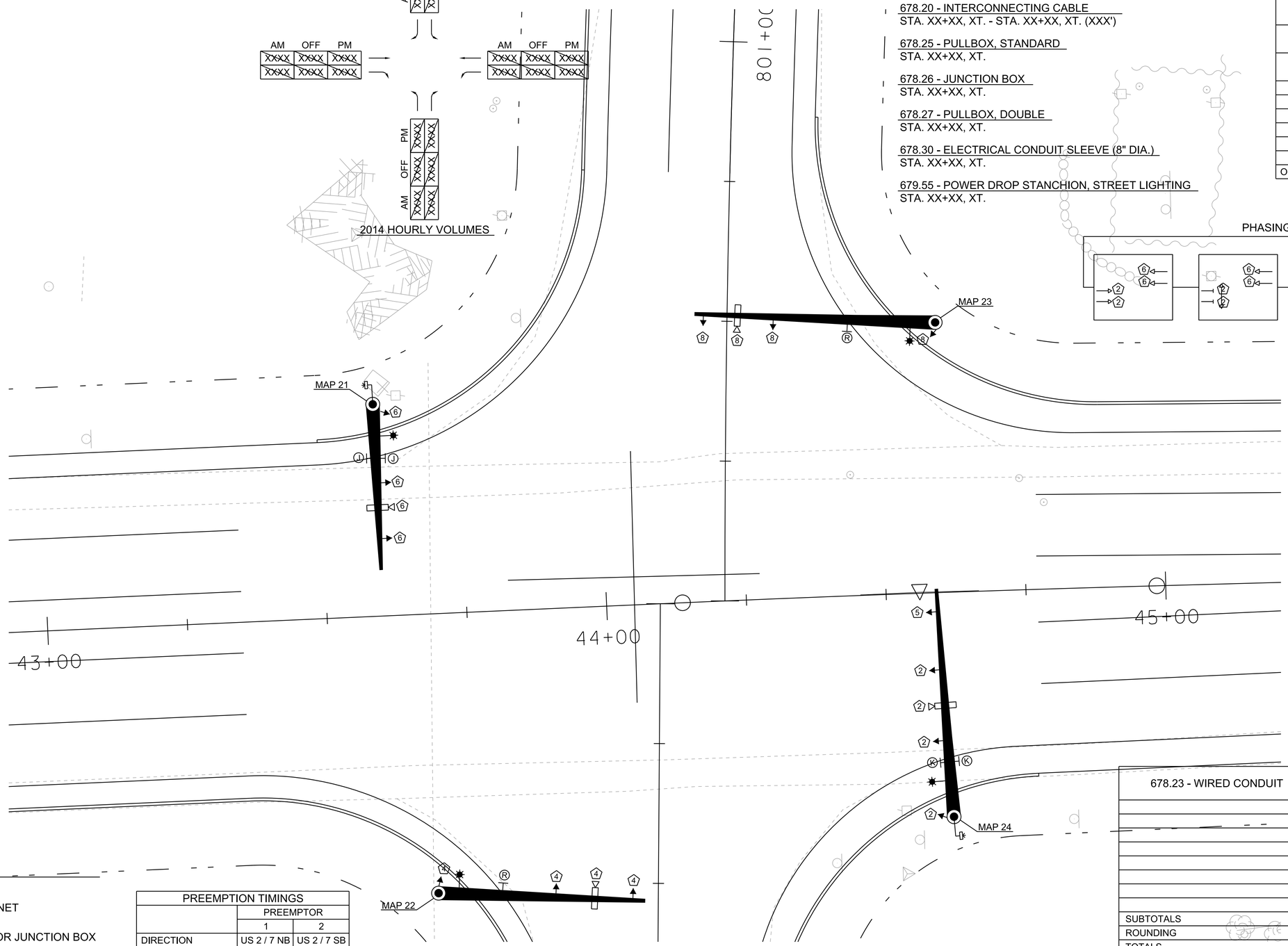
679.55 - POWER DROP STANCHION, STREET LIGHTING
STA. XX+XX, XT.

MAJOR EQUIPMENT LIST

EQUIPMENT ITEM NO. 678.15 (US ROUTES 2 / 7 & RATHE RD.)	QUANTITIES
MAST ARM POLES	4
MAST ARMS	4
PEDESTAL POLES	0
NEW 12" LED SIGNAL HEADS (ONE-WAY, 3-SECTION, VISORS, DISCONNECT HANGERS, BACKPLATES, AND MOUNTING HARDWARE)	14
HANDICAP ACCESSIBLE PEDESTRIAN PUSH BUTTONS - POLE MOUNTED	0
HANDICAP ACCESSIBLE PEDESTRIAN SIGNAL HEADS	0
CONTROLLER/CABINET	1
CAMERA EXTENSION BRACKET (EA)	4
CAMERA ASSEMBLY (EA)	4
VIDEO DETECTION PROCESSOR (EA)	4
OPTICAL PREEMPTION DETECTORS	2
AC STROBE - RED	4
OPTICAL SIGNAL PROCESSOR CARD & CAGE	1

PHASING DIAGRAM





678.23 - WIRED CONDUIT	CONDUIT SIZE 1½"	CONDUIT SIZE 2"	DESCRIPTION
SUBTOTALS			
ROUNDING			
TOTALS			

LEGEND

- MAST ARM & POLE
- CONTROLLER CABINET
- PULLBOX
- DOUBLE PULLBOX OR JUNCTION BOX
- PEDESTAL POST
- SIGNAL HEAD WITH PHASE NO.
- CONDUIT
- MAST ARM MOUNTED SIGN
- VIDEO DETECTOR
- VIDEO DETECTION AREA
- PREEMPTION STROBE LIGHT
- OPTICAL PREEMPTION DETECTOR

PREEMPTION TIMINGS

	PREEMPTOR 1	PREEMPTOR 2
DIRECTION	US 2 / 7 NB	US 2 / 7 SB
PHASE	2	6
DET. LOCK	NO	NO
DURATION TIME	10	10
MIN. GREEN	4.0	4.0
HOLD GREEN	12.0	12.0
HOLD YELLOW	4.0	4.0
HOLD RED	2.0	2.0
RELEASE PHASE	2 & 6	2 & 6

PROJECT NAME: COLCHESTER
PROJECT NUMBER: HES NH 5600(14)

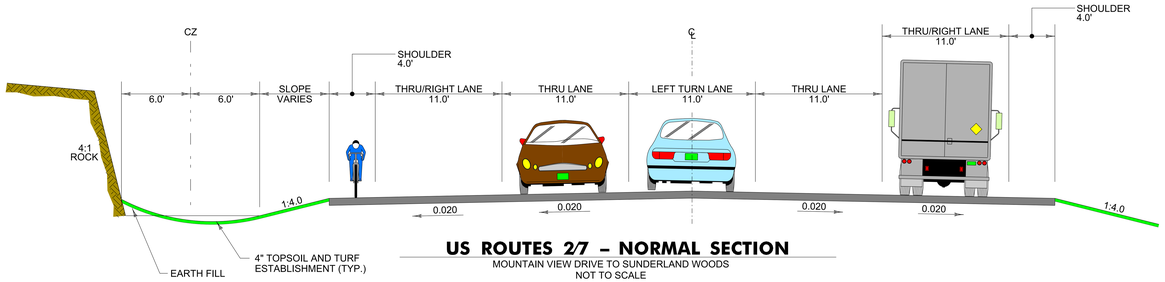
FILE NAME: ppms#/Section/------.dgn
PROJECT LEADER: JLS
DESIGNED BY: MBL
TRAFFIC SIGNAL PLAN- US 2/7 & RATHE

PLOT DATE: 21-FEB-2012
DRAWN BY: MBL
CHECKED BY: ------
SHEET 45 OF 45

TYPICAL SECTIONS

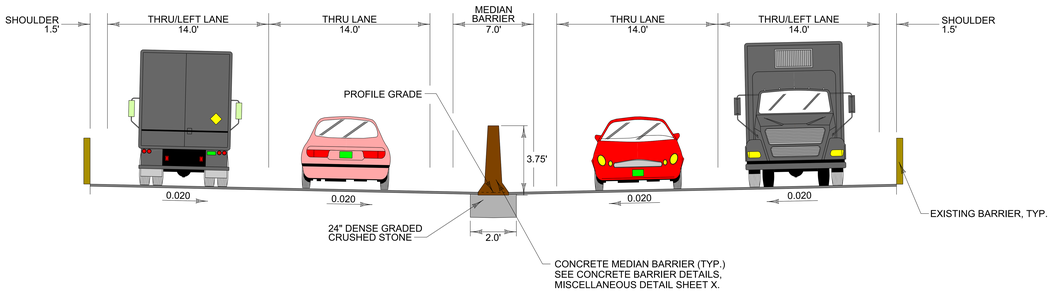
US ROUTES 2 / 7 WIDENING
WEARING COURSE: 1¾" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IIIS)
BASE COURSE: 2 LIFTS OF 3½" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IIS)
LEVELING COURSE: ½" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IVS)

US ROUTES 2 / 7 OVERLAY
COLD PLANING: 2¼"
LEVELING COURSE: ½" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IVS)
BASE COURSE: 1¾" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IIIS)



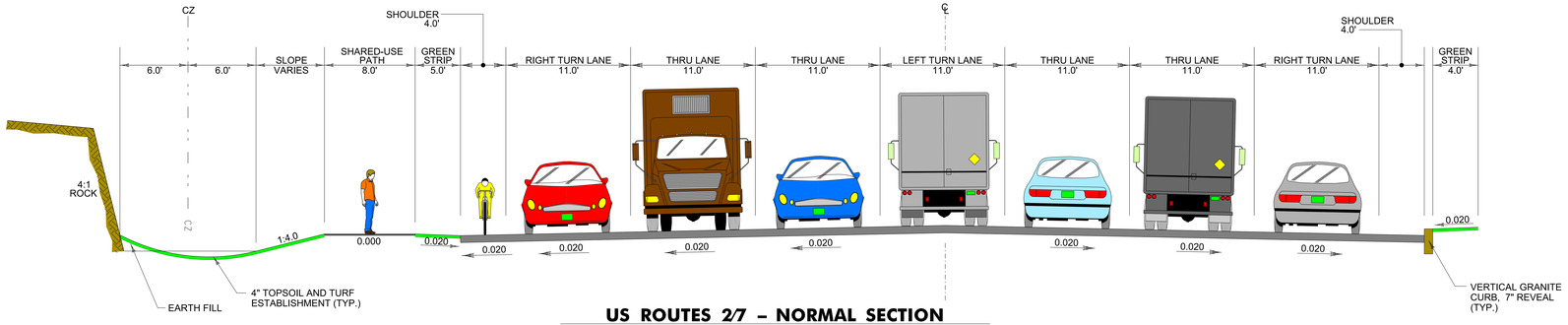
US ROUTES 2/7 – NORMAL SECTION

MOUNTAIN VIEW DRIVE TO SUNDERLAND WOODS
NOT TO SCALE



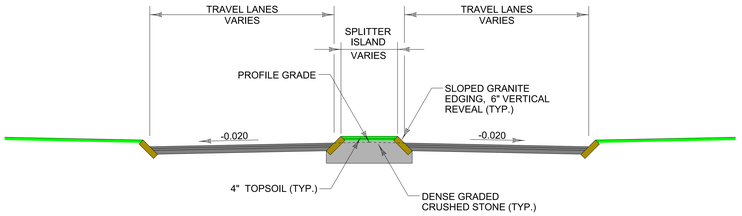
US ROUTES 2/7 – INVERTED CROWN

SOUTHERN CROSSOVER TO NORTHERN CROSSOVER
NOT TO SCALE



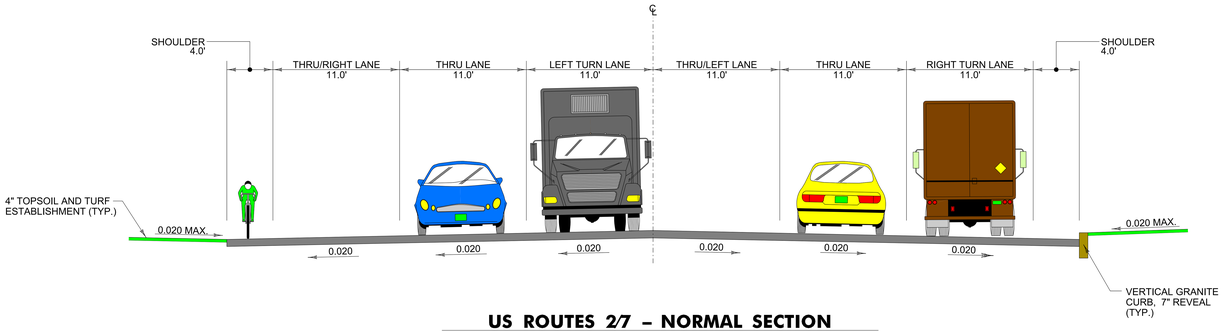
US ROUTES 2/7 – NORMAL SECTION

NORTHERN CROSSOVER TO MOUNTAIN VIEW DRIVE
NOT TO SCALE



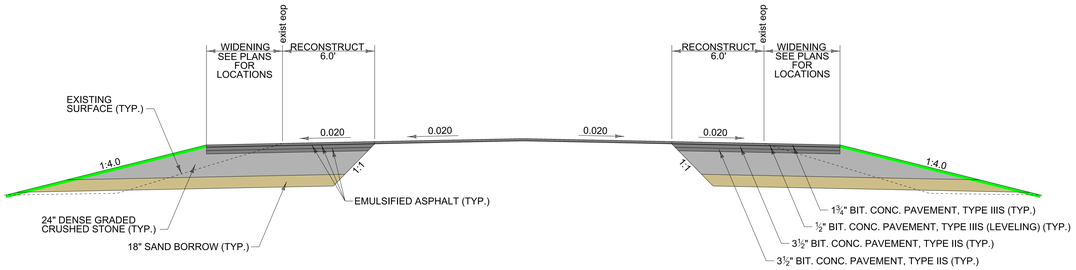
SPLITTER ISLAND APPROACH SECTION

NOT TO SCALE



US ROUTES 2/7 – NORMAL SECTION

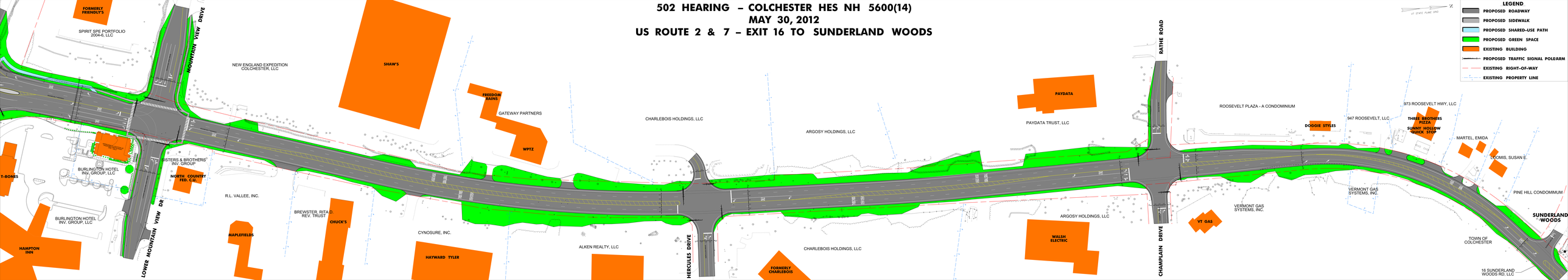
SOUTH PARK DRIVE TO SOUTHERN CROSSOVER
NOT TO SCALE



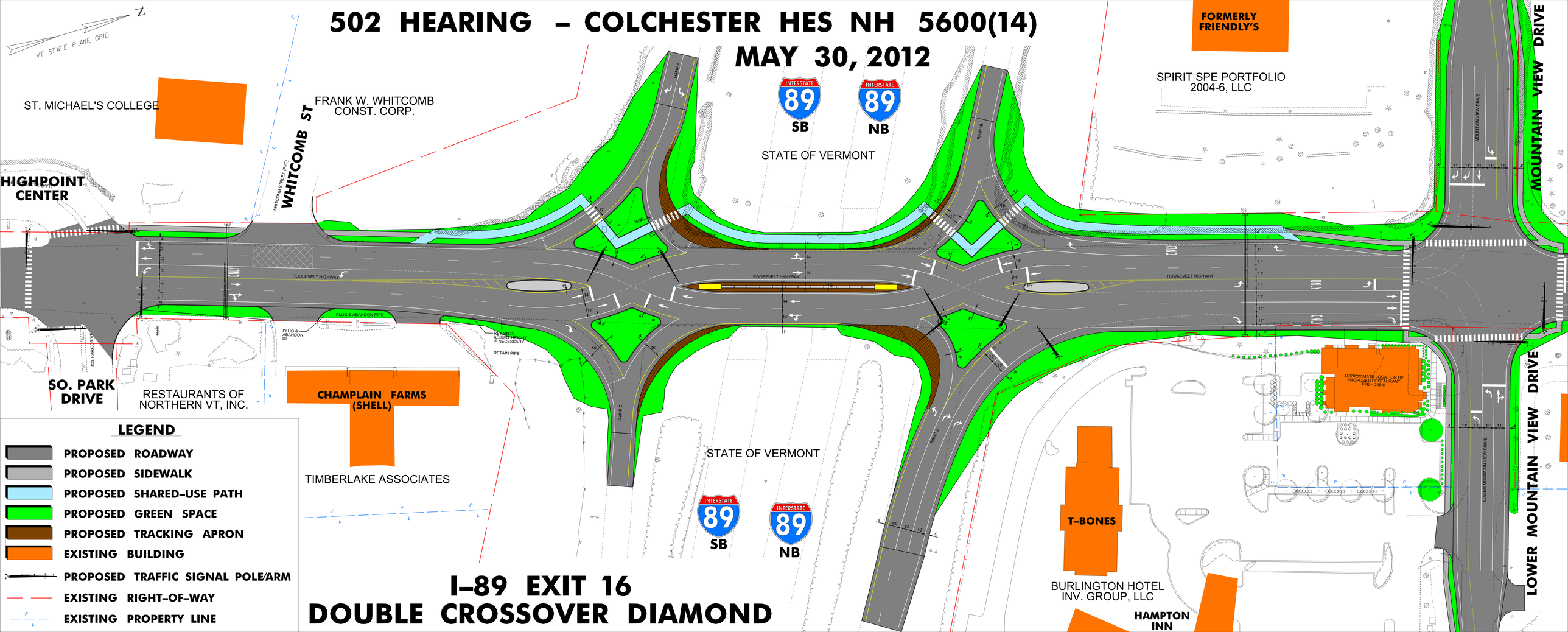
WIDENING AREAS

NOT TO SCALE

502 HEARING – COLCHESTER HES NH 5600(14)
MAY 30, 2012
US ROUTE 2 & 7 – EXIT 16 TO SUNDERLAND WOODS



502 HEARING – COLCHESTER HES NH 5600(14)
MAY 30, 2012



I-89 EXIT 16
DOUBLE CROSSOVER DIAMOND