TRAFFIC - LEGENDS & LIST OF DRAWINGS

STANDARD CONVENTIONS

HEDGE LINE	PICKET FENCE	EXISTING CULVERT
BIT. CONC. LIP CURBING	BOARD FENCE	PROPOSED CULVERT
CURB STATED WHETHER STONE or CONC.	WIRE FENCE	
STONE WALL	GRAPE ARBOR	HOUSE / BARN — BUILDINGS
CONC. WALK	RETAINING WALL	
WALK - TAR, GRAVEL or EARTH	OPEN DITCH DRY	RIVERS, LAKES,FLOWING STREAMS, ETC.
NAME of CO.		
EXISTING R.R. TRACKS	TELEGRAPH, TELEPHONE or ELECTRIC LIGHT POLES	SWAMP
PROPOSED R.R. TRACKS	GUIDE RAIL (NOTE TYPE)	
TAKING LINE		C.B.
TAKING LINE NA or NA LINE	LEDGE or ROCK	RANDOM STONE
EASEMENT LINE	HYDRANT	HIGHWAY MON. C.H.D. MONUMENT
	TREE	
PROPERTY LINE	DECIDIOUS EVERGREEN	
TOWN LINE	NORTH ARROW (MAGNETIC)	EXISTING TRAVEL PATH

STANDARD TRAFFIC SIGNAL CONVENTIONS

○	PROPOSED WOOD SPAN POLE
●	EXISTING WOOD SPAN POLE
□	PROPOSED STEEL SPAN POLE
■	EXISTING STEEL SPAN POLE
	PROPOSED COMBINATION SPAN POLE
	EXISTING COMBINATION SPAN POLE
	PROPOSED UTILITY POLE
	EXISTING UTILITY POLE
	PEDESTAL MOUNTING
	PEDESTAL PUSH BUTTON
	TRAFFIC SIGNAL FACE
	PEDESTRIAN SIGNAL FACE
	CONTROLLER
	LOOP DETECTOR
	LOOP LEADS IN SAWCUT
	MAGNETIC DETECTOR
	HANDHOLE
	CONDUIT
	PORCELAIN STRAIN INSULATOR
	CABLE CLOSURE

STANDARD SIGNING CONVENTIONS

	OVERHEAD INSTALLATION	
	CANTILEVER INSTALLATION	
	SIDE MOUNTED INSTALLATION	
	SINGLE POST MOUNTING	REGULATORY, WARNING OR GUIDE SIGN INSTALLATION
	DOUBLE POST MOUNTING	
	AS NOTED - (16H,16E CONSTRUCTION INDENTIFICATION SIGNS)	
00 / 00-0	LOCATION NO. / SIGN NO.	

LIST OF DRAWINGS

DWG. NO.	SHEET NO.	TITLE
TR-01	03.01	SUBSET TITLE SHEET
TCS-01 -TCS-12	03.02-03.13	TRAFFIC CONTROL SIGNAL PLANS
TR-GS_01 -TR-GS_04	03.14-03.17	TRAFFIC GUIDE SHEETS
TR-GS_05 -TR-GS-16	03.18-03.29	HIGHWAY GUIDE SHEETS

THE DESIGN APPEARS TO CONFORM TO APPLICABLE CRITERIA. APPROVAL IS NOT TO BE CONSTRUED TO MEAN THAT ALL ASPECTS OF THE DESIGN HAVE BEEN PERSONALLY CHECKED BY THE UNDERSIGNED.

Matthew C. Blume, P.E., PTOE
For: Erika B. Lindeberg, P.E.
2020.02.10 14:39:02-05'00'

TRANSPORTATION PRINCIPAL ENGINEER

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 2/6/2020

DESIGNER/DRAFTER: P.BRAZAITIS
CHECKED BY: N.FATU
SCALE NONE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\TR_MSH_TSH_0174-0418.dgn

SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY:

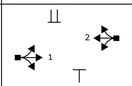
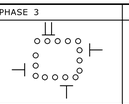
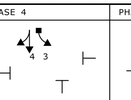
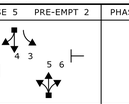
PROJECT TITLE: INSTALLATION & REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4

TOWN: VARIOUS

DRAWING TITLE: TRAFFIC - LEGENDS & LIST OF DRAWINGS

PROJECT NO. 0174-0418
DRAWING NO. TR-01
SHEET NO. 3.01

MOVEMENT DIAGRAM

NTOR	PHASE 1	PHASE 2 PRE-EMPT 1	PHASE 3	PHASE 4	PHASE 5 PRE-EMPT 2	PHASE 6	PHASE 7	PHASE 8	PHASE 9
NONE									

FACE #	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	Y				G	Y	R	R	R	R	R	R	R	R	R	R												
2	Y				G	Y	R	R	R	R	R	R	R	R	R	R												
3	R				R	R	R	R	R	R	← G	Y	G	G	Y	R												
4	R				R	R	R	R	R	R	G	Y	R	G	Y	R												
5	R				R	R	R	R	R	R	R	Y	R	G	Y	R												
6	R				R	R	R	R	R	R	R	Y	R	G	Y	R												
P	OFF				←	DW	→	WØ	←	DW	→																	

INTERVALS	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	PHASE 9
MIN GRN		15		5	7				
WALK			7 ①						
PED CLR			21②						
VEH EXT		2.5		1.5	2				
MAX 1		30		10	30				
MAX 2		40		10	20				
YELLOW		4.2	4	3.3	3.3				
RED		1.2	0	1.6	1.6				
ADD INIT									
MAX INIT									
TBR									
TTR									
MIN GAP									
MODE	OFF	MIN RECALL	NON-LOCK	NON-LOCK	NON-LOCK	OFF	OFF	OFF	OFF
INIT START		THIS PHASE							

ACCESSIBLE PEDESTRIAN SIGNAL

COUNTDOWN PEDESTRIAN SIGNAL

DETECTORS

IDENT	SIZE (WXL)	TYPE	MODE
D2	6' X 6'	VIDEO THERM	PRESENCE
D2A	6' X 6'	VIDEO THERM	PRESENCE
D2B	6' X 6'	VIDEO THERM	PRESENCE
D2C	6' X 6'	VIDEO THERM	PRESENCE
D4	SEE PLAN	VIDEO 360	PRESENCE
D4A	45' X 6'	VIDEO 360	PRESENCE
D4B	45' X 6'	VIDEO 360	PRESENCE

SYSTEM LOC
MASTER

COORDINATION TYPE: NONE

PROGRAM FUNCTION	TIME	DAYS	CYCLE	OFFSET SEC	OFFSET %
FLASH	NONE				
MAX 1	ALL OTHER TIMES				
MAX 2	1400 - 1900	M-F			
	0800 - 1200	SUN			

TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY

MANUAL AND INTERVAL ADVANCE TO BE DISCONNECTED DURING PHASE 3 PEDESTRIAN CHANGE INTERVAL.

① PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL.

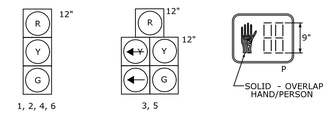
② COUNTDOWN ONLY DURING FLASHING PEDESTRIAN CHANGE INTERVAL.

OFFICE RECORD

REV # TIR # N/A SM # N/A SIGNAL REVISED:

REPLACED TRAFFIC SIGNAL EQUIPMENT AND ADDED EMERGENCY VEHICLE PRE-EMPTION UNDER PROECT 0174-0418.

SIGNAL FACES



ALL INDICATIONS HAVE LED LAMPS.

ALL SIGNAL FACES HAVE BACKPLATES WITH RETROREFLECTIVE YELLOW BORDER

PRE-EMPTION SETTINGS

	PRE-EMPT 1	PRE-EMPT 2
PRIORITY	NO	NO
DET. LOCK	YES	YES
DELAY	0	0
ALT. MIN. GRN	5	5
ALT. YELLOW	PARENT	PARENT
ALT. RED	PARENT	PARENT
ALT. PED. CLR.	21	21
HOLD GREEN	15	15
HOLD YELLOW	4.2	3.3
HOLD RED	1.2	1.6
HOLD PHASE	2	5
EXIT PHASE	4	2
EXIT CALL	NONE	NONE

CONNECTICUT COORDINATE GRID

CONSTRUCTION NOTES:

ALL TRAFFIC SIGNAL EQUIPMENT IS NEW.

STATE FORCES TO STAKE ALL R.O.W. PRIOR TO EXCAVATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING PRIOR TO INSTALLATION.

THE LOCATION OF TRAFFIC SIGNAL FOUNDATIONS WHEN IN OR ADJACENT TO SIDEWALKS SHALL BE VERIFIED PRIOR TO INSTALLATION TO PROVIDE A FREE PATH OF NOT LESS THAN 4 FEET. IF A MINIMUM 4 FOOT FREE PATH IS UNAVAILABLE NOTIFY THE ENGINEER AND CONTACT THE DIVISION OF TRAFFIC ENGINEERING.

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISION.

(J) INSTALL NEW SPAN POLE FOUNDATION ADJACENT TO BACK EDGE OF SIDEWALK.

(K) INSTALL TYPE 7 CONCRETE SIDEWALK RAMP.

(L) INSTALL TYPE 9 CONCRETE SIDEWALK RAMP.

(D) INSTALL TYPE 13 CONCRETE SIDEWALK RAMP.

(E) INSTALL TYPE 16 CONCRETE SIDEWALK RAMP.

(F) TRIM TREE BRANCHES TO INSTALL SPAN POLE. WORK TO BE PAID UNDER ITEM NO. 0952001A - SELECTIVE CLEARING AND THINNING.

INSTALL PEDESTAL FOUNDATIONS ADJACENT TO LANDING AREAS.

INSTALL CONTROLLER FOUNDATION ADJACENT TO WALK AT BACK EDGE.

(H) VIDEO DETECTION BY USE OF VIDEO-360 CAMERA CO-MOUNTED WITH VIDEO-THERM CAMERA AND VIDEO-THERM CAMERA ON SPAN POLE ID #004-208-A.

VIDEO DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE CONTROLLER CABINET.

(W) INSTALL 30" X 30" HANDHOLE. ALL OTHERS TYPE II.

(Y) INSTALL HANDHOLE BETWEEN CONCRETE WALK AND CURBING.

ALL TRAFFIC SIGNAL EQUIPMENT AT THIS LOCATION INCLUDING SPAN POLES, MAST ARMS, PEDESTALS, PUSHBUTTON HOUSINGS, SIGNAL HEADS AND CABINETS ARE TO BE PAINTED TEXTURED BLACK RED ACCORDING TO THE SPECIAL PROVISIONS.

COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES.

SPAN ATTACHMENT ON SNET #874 TO HAVE A MINIMUM CLEARANCE OF 12" BELOW SECONDARY & 40" ABOVE HIGHEST COMMUNICATIONS.

ESTIMATED LOAD ON UTILITY POLES: SNET #874: 5408lbs.

EMERGENCY PRE-EMPTION NOTES

INSTALL AUXILIARY EQUIPMENT CABINET ON LEFT SIDE OF CONTROLLER CABINET. INSTALL PRE-EMPTION EQUIPMENT IN AUXILIARY CABINET.

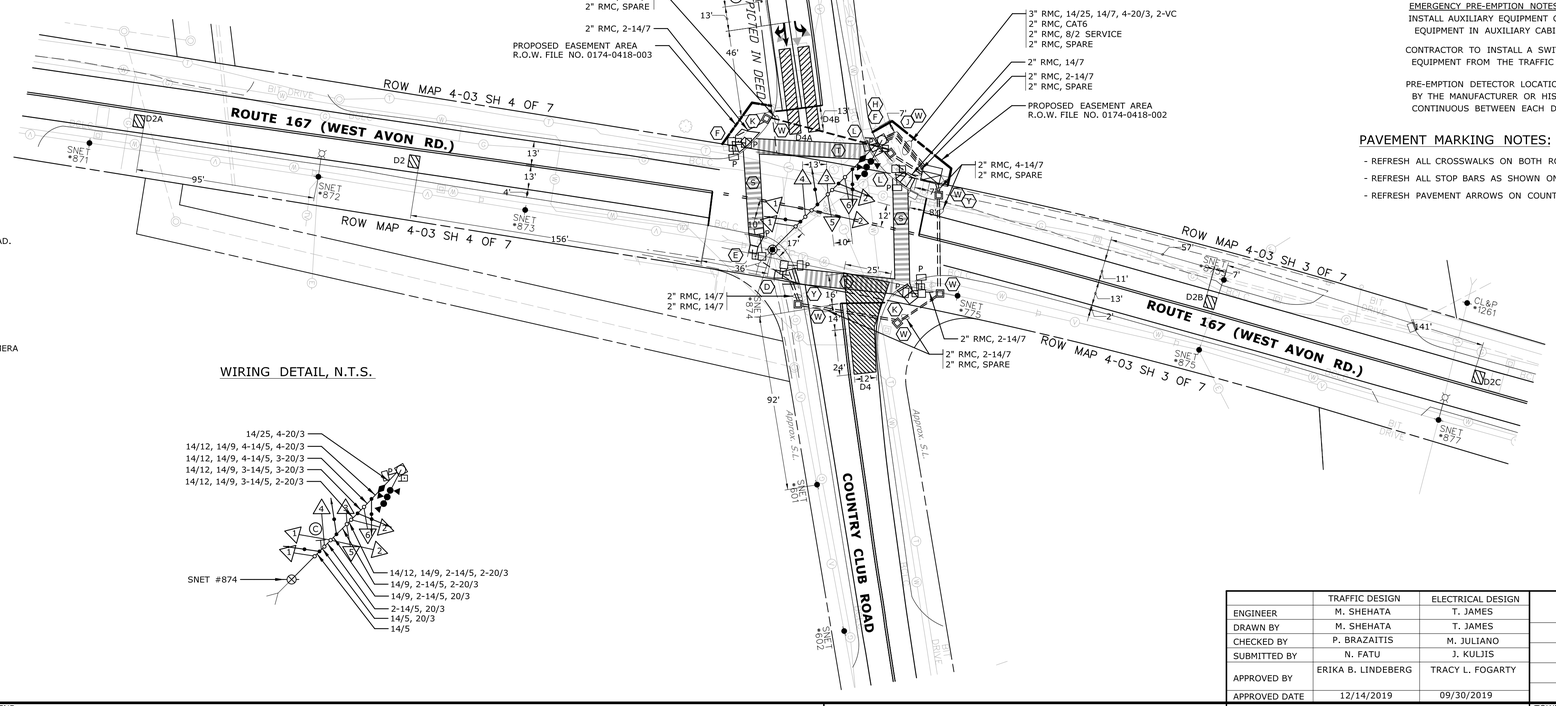
CONTRACTOR TO INSTALL A SWITCH IN THE SIGNAL CABINET TO EFFECTIVELY DISCONNECT THE PRE-EMPTION EQUIPMENT FROM THE TRAFFIC SIGNAL CONTROLLER.

PRE-EMPTION DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE AUXILIARY EQUIPMENT CABINET.

SIGN LEGEND:

(A) REMOVE EXISTING

(B) INSTALL 31-0283Z



NOTES :

TOWN OF AVON TO OWN AND MAINTAN EMERGENCY VEHICLE PRE-EMPTION EQUIPMENT.

TOWN TO MAINTAIN COLOR ON ALL TRAFFIC SIGNAL EQUIPMENT.

STATE TO MAINTAIN ALL PAVEMENT MARKINGS ON ROUTE 167 AND ALL STOP BARS.

TOWN OF AVON TO MAINTAIN PAVEMENT MARKINGS AND SIGNS ON COUNTRY CLUB ROAD.

(S) BAR TYPE - STATE MAINTAINED

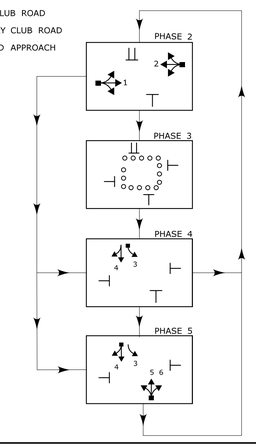
(T) BAR TYPE - TOWN MAINTAINED

(H) VIDEO DETECTION BY USE OF VIDEO-360 CAMERA CO-MOUNTED WITH VIDEO-THERM CAMERA AND VIDEO-THERM CAMERA ON SPAN POLE ID #004-208-A.

(W) 30" X 30" HANDHOLE. ALL OTHERS TYPE II.

PAVEMENT MARKING NOTES:

- REFRESH ALL CROSSWALKS ON BOTH ROUTE 167 AND COUNTRY CLUB ROAD
- REFRESH ALL STOP BARS AS SHOWN ON ROUTE 167 AND COUNTRY CLUB ROAD
- REFRESH PAVEMENT ARROWS ON COUNTRY CLUB ROAD EASTBOUND APPROACH



WIRING DETAIL, N.T.S.

SPAN POLE INFORMATION

ID #	POLE LENGTH	BOLT CIRCLE	CAMERA BRACKET LENGTH	VERTICAL RISER FOR 360° CAMERA	YEAR INSTALLED
004-208-A	28'	24"	20'-HOR	3'	

	TRAFFIC DESIGN	ELECTRICAL DESIGN
ENGINEER	M. SHEHATA	T. JAMES
DRAWN BY	M. SHEHATA	T. JAMES
CHECKED BY	P. BRAZAITIS	M. JULIANO
SUBMITTED BY	N. FATU	J. KULJIS
APPROVED BY	ERIKA B. LINDEBERG	TRACY L. FOGARTY
APPROVED DATE	12/14/2019	09/30/2019

REV # INTERSECTION #004-208

ENERGY BY TOWN | ADDRESS #

MAINT LEVEL 5 | SERVICE POLE SNET#775

UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R, Y, G RED, YEL, GRN
R RED ARROW
Y YELLOW ARROW
G GREEN ARROW
WØ WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

VC VIDEO CAMERA CABLE
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSCEIVER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

DATE PLOTTED : 1/6/2020 \\DOT-SDCENG07V\\CTDOT_Projects\0174-0418-0419\Traffic\Signals\TR_MSH_TCS_004_208_013pending.dgn

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

ROUTE 167 (WEST AVON ROAD) AT COUNTRY CLUB ROAD

SCALE 1" = 40'

TOWN: **AVON**

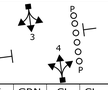
DRAWING TITLE: **TRAFFIC CONTROL SIGNAL PLAN**

PROJECT NO. 0174-0418

DRAWING NO. TCS-01

SHEET NO. 03.02

MOVEMENT DIAGRAM

NTOR	PHASE 1	PHASE 2 PRE-EMPT 1	PHASE 3	PHASE 4 PRE-EMPT 2	PHASE 5	PHASE 6	PHASE 7	PHASE 8
NONE								

FACE #	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	LPI	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	Y				G	Y	R				R	R	R	R															
2	Y				G	Y	R				R	R	R	R															
3	R				R	R	R				R	G	Y	R															
4	R				R	R	R				R	G	Y	R															
P	OFF				← DW →						← WØ →		← DW →																
					← YIELD PT.																								

INTERVALS																													
MIN GRN				15							7																		
WALK											① 4	① 3																	
PED CLR												② 10																	
VEH EXT				2.5								2.0																	
MAX 1				42								28																	
MAX 2				53								31																	
YELLOW					4.1								3.3																
RED						1.5								1.8															
ADD INIT																													
MAX INIT																													
TBR																													
TTR																													
MIN GAP																													
MODE		OFF		MIN RECALL			OFF			NON-LOCK			OFF			OFF			OFF			OFF							
INIT START				THIS PHASE																									

ACCESSIBLE PEDESTRIAN SIGNAL

COUNTDOWN PEDESTRIAN SIGNAL

DETECTORS				SYSTEM LOC
IDENT	SIZE (WXL)	TYPE	MODE	MASTER 004-228
D1	6'X 6'	VIDEO THERM	PRESENCE	004-221
D1A	6'X 6'	VIDEO THERM	PRESENCE	
D2	6'X 6'	VIDEO THERM	PRESENCE	
D2A	6'X 6'	VIDEO THERM	PRESENCE	
D3	SEE PLAN	VIDEO 360	PRESENCE	
D4	SEE PLAN	VIDEO 360	PRESENCE	

COORDINATION TYPE: TIME CLOCK/T.B.C.

PROGRAM FUNCTION	TIME	DAYS	CYCLE	OFFSET SEC	OFFSET %
FLASH	NONE				
MAX. 1	ALL OTHER TIMES				
MAX. 2	1500-1900	M-F			
PATTERN 1	ALL OTHER TIMES		50	1	2
PATTERN 2	0600-1500	M-F	60	1	2
PATTERN 3	1500-1900	M-F	70	1	1

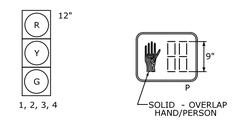
TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY
ARTERY DETECTORS TO BE NON-ACTUATING DURING COORDINATION OPERATION
① PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL
② COUNTDOWN ONLY DURING PEDESTRIAN CHANGE INTERVAL
③ CONCURENT PED PHASE ONLY COMES IN WHEN ACTUATED BY PUSHBUTTON

OFFICE RECORD

REV # TIR # N/A SM # N/A SIGNAL REVISED:
REPLACED TRAFFIC SIGNAL EQUIPMENT, INSTALLED EVPS, REVISED TIMINGS UNDER PROJECT NO. 0174-0418

SIGNAL FACES



ALL INDICATIONS HAVE LED LAMPS.

ALL SIGNAL FACES HAVE BACKPLATES WITH RETROREFLECTIVE YELLOW BORDERS

CONSTRUCTION NOTES:

ALL TRAFFIC SIGNAL EQUIPMENT IS NEW.

STATE FORCES TO STAKE ALL R.O.W. PRIOR TO EXCAVATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING PRIOR TO INSTALLATION.

THE LOCATION OF TRAFFIC SIGNAL FOUNDATIONS WHEN IN OR ADJACENT TO SIDEWALKS SHALL BE VERIFIED PRIOR TO INSTALLATION TO PROVIDE A FREE PATH OF NOT LESS THAN 4 FEET. IF A MINIMUM 4 FOOT FREE PATH IS UNAVALABLE NOTIFY THE ENGINEER AND CONTACT THE DIVSION OF TRAFFFIC ENGINEERING.

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISION

INSTALL PEDESTAL FOUNDATION ADJACENT TO LANDING AREA ON THE NORTHWEST CORNER

(H) INSTALL TYPE 17 CONCRETE RAMP

(W) INSTALL 30" X 30" HANDHOLE. ALL OTHERS TYPE II.

(P) TRIM TREE BRANCES IN VICINITY OF MAST ARM 004-221-B.
WORK TO BE PAID UNDER ITEM NO. 0952001A - SELECTIVE CLEARING AND THINNING.

(G) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERAS MOUNTED ON MAST ARM ID # 004-221-A

(J) VIDEO DETECTION BY USE OF VIDEO-360 CAMERA MOUNTED ON MAST ARM ID # 004-221-B

VIDEO DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY.
EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE.
DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE CONTROLLER CABINET.

(K) INSTALL MAST ARM FOUNDATION ADJACENT TO AND WITHIN R.O.W.

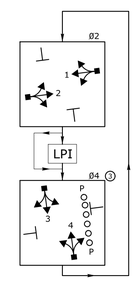
INSTALL RISER ON CL&P #7813 UTILITY POLE

COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES.

ALL TRAFFIC SIGNAL EQUIPMENT AT THIS LOCATION INCLUDING SPAN POLES, MAST ARMS, PEDESTALS, PUSHBUTTON HOUSINGS, SIGNAL HEADS AND CABINETS ARE TO BE PAINTED TEXTURED BLACK RED ACCORDING TO THE SPECIAL PROVISIONS.

PRE-EMPTION SETTINGS

	PRE-EMPT 1	PRE-EMPT 2
PRIORITY	NO	NO
DET. LOCK	YES	YES
DELAY	0	0
ALT. MIN. GRN	5	5
ALT. YELLOW	PARENT	PARENT
ALT. RED	PARENT	PARENT
ALT. PED. CLR.	14	14
HOLD GREEN	15	15
HOLD YELLOW	4.1	3.3
HOLD RED	1.5	1.8
HOLD PHASE	2	4
EXIT PHASE	4	2
EXIT CALL	NONE	NONE



SIGN LEGEND:

Ⓐ INSTALL 31-1626 ( )
Ⓒ INSTALL 31-1626Z ( )
Ⓑ INSTALL 31-1625 ( )
Ⓓ INSTALL 31-1625Z ( )

NOTES :

STATE TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON ROUTE 167 AND ALL STOP BARS.

TOWN OF AVON TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON AVALON DRIVE AND DALE ROAD.

TOWN OF AVON TO OWN AND MAINTAIN EMERGENCY VEHICLE PRE-EMPTION EQUIPMENT.

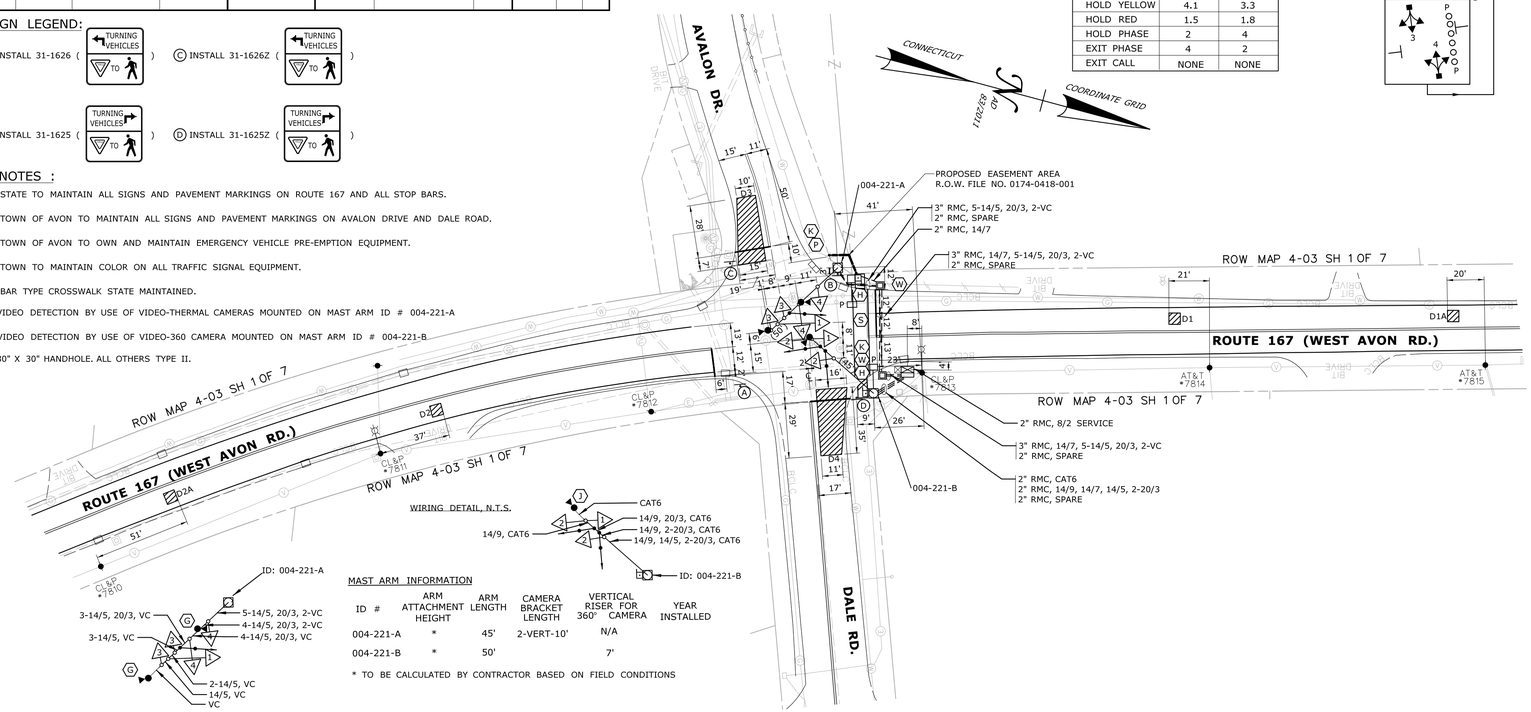
TOWN TO MAINTAIN COLOR ON ALL TRAFFIC SIGNAL EQUIPMENT.

(S) BAR TYPE CROSSWALK STATE MAINTAINED.

(G) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERAS MOUNTED ON MAST ARM ID # 004-221-A

(J) VIDEO DETECTION BY USE OF VIDEO-360 CAMERA MOUNTED ON MAST ARM ID # 004-221-B

(W) 30" X 30" HANDHOLE. ALL OTHERS TYPE II.



MAST ARM INFORMATION

ID #	ARM ATTACHMENT HEIGHT	ARM LENGTH	CAMERA BRACKET LENGTH	VERTICAL RISER FOR 360° CAMERA	YEAR INSTALLED
004-221-A	*	45'	2-VERT-10'	N/A	
004-221-B	*	50'		7'	

* TO BE CALCULATED BY CONTRACTOR BASED ON FIELD CONDITIONS

MAST ARM ASSEMBLY NOTES

ALL MAST ARM MOUNTED TRAFFIC SIGNALS ARE FIXED MOUNTED TO THE ARM BY USE OF ADJUSTABLE BRACKETS.

ALL MAST ARM MOUNTED SIGNS ARE FIXED MOUNTED

CONTRACTOR TO VERIFY ALL MAST ARM INFORMATION INCLUDING CROSS SECTIONS AND DIMENSIONS, BASED ON FIELD SURVEY, PRIOR TO SUBMISSION OF WORKING DRAWINGS.

MAST ARM ASSEMBLES TO HAVE MINIMUM CLEARANCE OF 24" FROM OVERHEAD COMMUNICATION CABLES

EMERGENCY PRE-EMPTION NOTES

INSTALL AUXILIARY EQUIPMENT CABINET ON LEFT SIDE OF CONTROLLER CABINET. INSTALL PRE-EMPTION EQUIPMENT IN AUXILIARY CABINET.

CONTRACTOR TO INSTALL A SWITCH IN THE SIGNAL CABINET TO EFFECTIVELY DISCONNECT THE PRE-EMPTION EQUIPMENT FROM THE TRAFFIC SIGNAL CONTROLLER.

PRE-EMPTION DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE AUXILIARY EQUIPMENT CABINET.

PAVEMENT MARKING NOTES:

-ERADICATE STOP BAR ON ROUTE 167 (WEST AVON ROAD) SOUTHBOUND AND AVALON DRIVE.

-ERADICATE 5' OF DYCL ON ROUTE 167 (WEST AVON RD) SOUTHBOUND.

-ERADICATE 5' OF WHITE EDGE LINE ON ROUTE 167 (WEST AVON RD) SOUTHBOUND.

-INSTALL STOP BARS ON ROUTE 167 (WEST AVON ROAD) SOUTHBOUND AND AVALON DRIVE AS SHOWN.

-REFRESH STOP BARS ON ROUTE 167 (WEST AVON ROAD) NORTHBOUND AND DALE ROAD.

-INSTALL 50 FEET OF D.Y.C.L. ON AVALON DRIVE.

-INSTALL BAR TYPE CROSSWALK AS SHOWN

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R, Y, G RED, YEL, GRN
R RED ARROW
Y YELLOW ARROW
G GREEN ARROW
WØ WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

VC VIDEO CAMERA CABLE
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSCEIVER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

DATE PLOTTED : 1/6/2020 \\DOT-SDCENG07V\CTDOT_Projects\0174-0418-0419\Traffic\Signals\TR_MSH_TCS_004_221_006pendlng_LPI.dgn

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

ROUTE 167 (WEST AVON ROAD) AT AVALON DRIVE AND DALE ROAD

SCALE 1" = 40'

	TRAFFIC DESIGN	ELECTRICAL DESIGN
ENGINEER	A. BRITO	T.JAMES
DRAWN BY	A. BRITO	T.JAMES
CHECKED BY	P. BRAZAITIS	M.JULIANO
SUBMITTED BY	N. FATU	J.KULJIS
APPROVED BY	ERIKA B. LINDEBERG	TRACY L. FOGARTY
APPROVED DATE	12/14/2019	09/30/2019

REV # INTERSECTION #004-221

ENERGY BY - TOWN
MAINT LEVEL - 1
ADDRESS #
SERVICE POLE CL&P #7813
UNMETERED SERVICE

TOWN: AVON

DRAWING TITLE: TRAFFIC CONTROL SIGNAL PLAN

PROJECT NO. 0174-0418
DRAWING NO. TCS-02
SHEET NO. 03.03

MOVEMENT DIAGRAM

NTOR	PHASE 1	PHASE 2 - PRE-EMPT. 1	PHASE 3	PHASE 4 - PRE-EMPT. 2	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
NONE		1, 1		2					

FACE #		FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
	1	Y				G	Y	R				R	R	R															
	2	R				R	R	R				→	Y	R															
							YIELD	POINT																					

INTERVALS	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
MIN GRN		15		9					
WALK									
PED CLR									
VEH EXT		2.5		1.5					
MAX 1		49		20					
MAX 2		52		17					
YELLOW		4.1		3.3					
RED		1.0		1.0					
ADD INIT									
MAX INIT									
TBR									
TTR									
MIN GAP									
MODE	OFF	MIN RECALL	OFF	NON-LOCK	OFF	OFF	OFF	OFF	OFF
INIT START		THIS PHASE							

DETECTORS				SYSTEM LOC
IDENT	SIZE (WXL)	TYPE	MODE	MASTER 034-232
D2,A,B	6'X6'	VIDEO THERMAL	PRESENCE	009-206
D2C	6'X6'	VIDEO THERMAL	PRESENCE	009-222
D4	SEE PLAN	VIDEO 360°	5" DELAY	009-217
				009-211

COORDINATION TYPE: TB/TBC

PROGRAM FUNCTION	PROGRAM TIME	PROGRAM DAYS	CYCLE	OFFSET SEC	OFFSET %
FLASH	NONE				
MAX 1	ALL OTHER TIMES				
MAX 2	1500-1800	M-F			
PATTERN 1	ALL OTHER TIMES		80"	21	26
PATTERN 2	1500-1800	M-F	80"	24	30
FREE	2200-0600	DAILY			

TECHNICAL NOTES

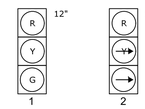
STANDARD OVERLAP SKIP FEATURES APPLY

OFFICE RECORD

REV # TIR # N/A SIGNAL REVISED:

REPLACED TRAFFIC SIGNAL EQUIPMENT UNDER PROJECT 0174-0418

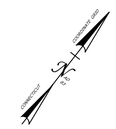
SIGNAL FACES



ALL INDICATIONS HAVE LED LAMPS
ALL SIGNAL FACES HAVE BACKPLATES WITH RETROREFLECTIVE YELLOW BORDERS.
FACES 1 AND 2 HAVE TUNNEL VISORS

PRE-EMPTION SETTINGS

	PRE-EMPT 1	PRE-EMPT 2
PRIORITY	NO	NO
DET. LOCK	YES	YES
DELAY	0	0
ALT. MIN. GRN	5	5
ALT. YELLOW	PARENT	PARENT
ALT. RED	PARENT	PARENT
ALT. PED. CLR.	0	0
HOLD GREEN	15	15
HOLD YELLOW	4.1	3.3
HOLD RED	1	1
HOLD PHASE	2	4
EXIT PHASE	4	2
EXIT CALL	NONE	NONE



CONSTRUCTION NOTES:

ALL TRAFFIC SIGNAL EQUIPMENT IS NEW EXCEPT AS NOTED.

STATE FORCES TO STAKE ALL R.O.W. PRIOR TO EXCAVATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING PRIOR TO INSTALLATION.

THE LOCATION OF TRAFFIC SIGNAL FOUNDATIONS WHEN IN OR ADJACENT TO SIDEWALKS SHALL BE VERIFIED PRIOR TO INSTALLATION TO PROVIDE A FREE PATH OF NOT LESS THAN 4 FEET. IF A MINIMUM 4 FOOT FREE PATH IS UNAVAILABLE NOTIFY THE ENGINEER AND CONTACT THE DIVISION OF TRAFFIC ENGINEERING.

(G) TRIM TREE REMOVE BRUSH FOR INSTALLATION OF A SPAN POLE AND A CONTROL CABINET. THIS WORK IS TO BE PAID UNDER ITEM #0952001A - SELECTIVE CLEARING AND THINNING.

CONTRACTOR TO INSTALL PAVEMENT MARKINGS AS NOTED BELOW:
-REFRESH ALL STOP BARS.
-INSTALL 50 FEET OF DOUBLE YELLOW CENTERLINE ON PAYNE ROAD.
-INSTALL PAVEMENT MARKING ARROWS AS SHOWN ON PLAN.
-INSTALL 50 FEET OF 4 INCH WHITE LANE ON ROUTE 6 EASTBOUND.
-REFRESH 4 INCH WHITE BROKEN LANE LINE ON ROUTE 6 EASTBOUND PRIOR TO THE INTERSECTION.
-ERADICATE 130 FEET OF 4 INCH WHITE BROKEN LANE LINE ON ROUTE 6 DEPARTING INTERSECTION.
-INSTALL 130 FEET OF 8 INCH WHITE DOTTED LANE LINE ON ROUTE 6 DEPARTING INTERSECTION.
REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISION.

(H) DIG TEST PIT TO LOCATE UNDERGROUND FRONTIER DUCT IN THE VICINITY PRIOR TO THE INSTALLATION OF THE SPAN POLE AND CONTROL CABINET FOUNDATION.

UTILITY NOTES:

COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES.

EMERGENCY PRE-EMPTION NOTES:

RELOCATE AUXILIARY EQUIPMENT CABINET FROM EXISTING CONTROLLER CABINET TO LEFT SIDE OF NEW CONTROLLER CABINET. RELOCATE EXISTING EMERGENCY PRE-EMPTION DETECTORS TO NEW SPAN. TEST PRE-EMPTION SYSTEM PRIOR TO AND AFTER RELOCATION IN ACCORDANCE WITH SPECIFICATIONS

CONTRACTOR TO INSTALL A SWITCH IN THE SIGNAL CABINET TO EFFECTIVELY DISCONNECT THE PRE-EMPTION EQUIPMENT FROM THE TRAFFIC SIGNAL CONTROLLER.

PRE-EMPTION DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE AUXILIARY EQUIPMENT CABINET.

VIDEO DETECTOR NOTES:

VIDEO DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE CONTROLLER CABINET.

(J) VIDEO DETECTION BY USE OF VIDEO-360° CAMERA CO-MOUNTED WITH VIDEO THERMAL CAMERA ON SPAN POLE ID #009-222-A.

SIGN LEGEND

(A) INSTALL 31-0184 — ONLY
(B) REPLACE 31-1603
(C) REPLACE 31-1178 — ONE WAY
(D) REPLACE 31-1120 — DO NOT ENTER
(E) REPLACE 31-1702 — NO PEDESTRIAN CROSSING
(F) SPAN MOUNT 31-0184 — ONLY

NOTES:

STATE TO MAINTAIN SIGNS AND PAVEMENT MARKINGS ON ROUTE 6 AND ALL STOP BARS. AND "NO LEFT TURN SIGN" ON PAYNE ROAD.

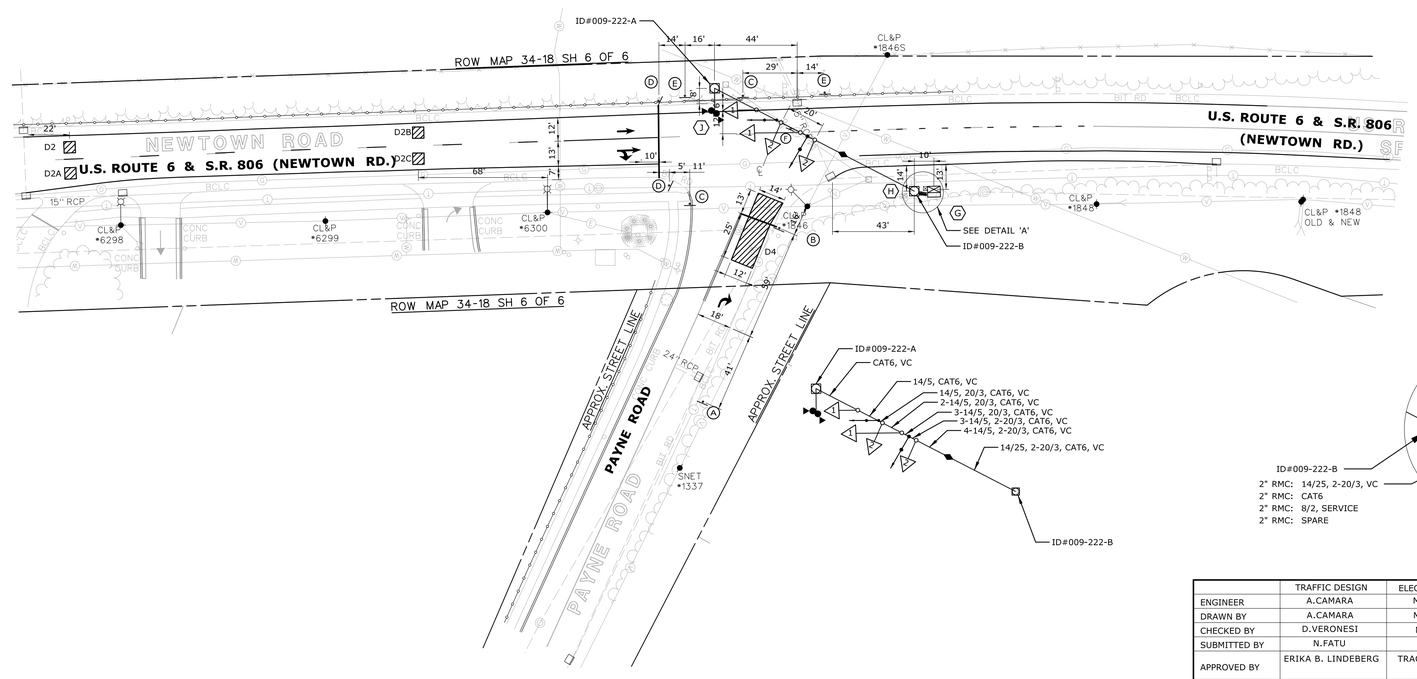
TOWN TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON PAYNE ROAD.

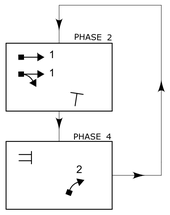
THE TOWN OF BETHEL TO OWN AND MAINTAIN EMERGENCY PRE-EMPION EQUIPMENT.

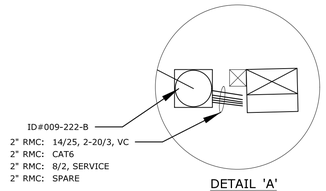
(J) VIDEO DETECTION BY USE OF VIDEO-360° CAMERA CO-MOUNTED WITH VIDEO THERMAL CAMERA ON SPAN POLE ID #009-222-A.

SPAN POLE INFORMATION

ID #	POLE LENGTH	BOLT CIRCLE	CAMERA BRACKET LENGTH	VERTICAL RISER FOR 360° CAMERA	YEAR INSTALLED
009-222-A	30'	24"	20'-HOR	3'	
009-222-B	28'	24"	N/A	N/A	







DETAIL 'A'
NOT TO SCALE

	TRAFFIC DESIGN	ELECTRICAL DESIGN
ENGINEER	A.CAMARA	M.FORTUNA
DRAWN BY	A.CAMARA	M.FORTUNA
CHECKED BY	D.VERONESI	M.JULIANO
SUBMITTED BY	N.FATU	J.KULJIS
APPROVED BY	ERIKA B. LINDEBERG	TRACY L. FOGARTY
APPROVED DATE	12/04/2019	09/30/2019

REV # INTERSECTION # 009-222

ENERGY BY TOWN	ADDRESS #
MAINT LEVEL 5	SERVICE POLE CL&P #1846
	UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R, Y, G RED, YEL, GRN
R RED ARROW
Y YELLOW ARROW
GREEN ARROW
W/Ø WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

VC VIDEO CAMERA CABLE
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSCEIVER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

U.S. ROUTE 6 & S.R. 806
(NEWTOWN ROAD) AT
PAYNE ROAD

TOWN: BETHEL

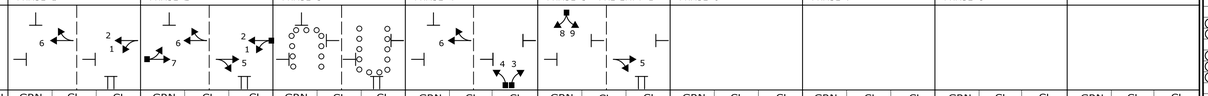
DRAWING TITLE: TRAFFIC CONTROL SIGNAL PLAN

PROJECT NO. 0174-0418
DRAWING NO. TCS-03
SHEET NO. 03.04

DATE PLOTTED : 1/6/2020 \\DOT-SDCENG07V\CTDOT_Projects\0174-0418-0419\Traffic\Signals\TR_MSH_TCS_009_222_XXXpending.dgn

SCALE 1" = 40'

MOVEMENT DIAGRAM

NTOR	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5 - PRE-EMPT 1	PHASE 6	PHASE 7	PHASE 8	
NONE									

FACE #		FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
	1	Y	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R												
	2	Y	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R												
	3	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R												
	4	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R												
	5	Y	R	R	R	G	(3) Y	(3) R	R	R	R	R	R	R	G	Y	R												
	6	Y	G	G	G	G	(4) Y	(4) R	R	R	R	G	(5) Y	(5) R	R	R	R												
	7	Y	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R												
	8	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R												
	9	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R												
	10	Y	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R												
	P	OFF	DW						WØ						DW														

INTERVALS	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
MIN GRN	5	15		7	7				
WALK			7						
PED CLR			19						
VEH EXT		2.5		2.5	1.0				
MAX 1	5	35		19	10				
MAX 2	12	45		19	10				
YELLOW	3.0	3.6	4.0	3.2	3.2				
RED	1.0	1.5	0.0	1.0	1.0				
ADD INIT									
MAX INIT									
TBR									
TTR									
MIN GAP									
MODE	MAX RECALL	MIN RECALL	NON-LOCK	NON-LOCK	NON-LOCK	OFF	OFF	OFF	OFF
INIT START		THIS PHASE							

(1) ACCESSIBLE PEDESTRIAN SIGNAL

(2) COUNTDOWN PEDESTRIAN SIGNAL

TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY

PHASE 2 ON TO OMIT PHASE 1. PHASE 1 ALWAYS TO PRECEDE PHASE 2
(1) PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL.
(2) COUNTDOWN ONLY DURING FLASHING PEDESTRIAN CHANGE INTERVAL.
MANUAL AND INTERVAL ADVANCE TO BE DISCONNECTED DURING PHASE 3 PEDESTRIAN CHANGE INTERVAL.
(B) TO BE "G" IF PHASE 5 IS NEXT
(A) TO BE "G" IF PHASE 4 IS NEXT
(C) TO BE "G" IF PHASE 1 IS NEXT

OFFICE RECORD

REV # TIR # N/A SM # N/A SIGNAL REVISED:
REPLACE TRAFFIC SIGNAL EQUIPMENT UNDER PROJECT 0174-0418.

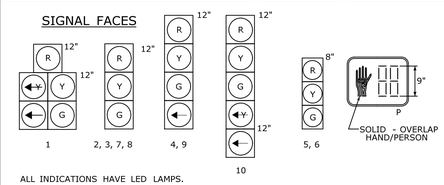
DETECTORS			
IDENT	SIZE (WXL)	TYPE	MODE
D2	6' X 6'	VID-THERM	PRESENCE
D2A	6' X 6'	VID-THERM	PRESENCE
D2B	6' X 6'	VID-THERM	PRESENCE
D2C	6' x 6'	VID-THERM	PRESENCE
D4	6' x 36'	VIDEO-360°	PRESENCE
D4A	6' x 38'	VIDEO-360°	DELAY 8"
D5	SEE PLAN	VIDEO-360°	DELAY 8"

SYSTEM LOC
MASTER

COORDINATION TYPE: NONE

PROGRAM FUNCTION	TIME	DAYS	CYCLE	OFFSET SEC	OFFSET %
FLASH	NONE				
MAX 1	ALL OTHER TIMES				
MAX 2	1600-1800	DAILY			

SIGNAL FACES



ALL INDICATIONS HAVE LED LAMPS.

ALL SIGNAL FACES HAVE BACKPLATES WITH RETROREFLECTIVE YELLOW BORDERS.

PRE-EMPTION SETTINGS

	PRE-EMPT 1
PRIORITY	NO
DET. LOCK	YES
DELAY	0
ALT. MIN. GRN	5
ALT. YELLOW	PARENT
ALT. RED	PARENT
ALT. PED. CLR.	19
HOLD GREEN	15
HOLD YELLOW	3.2
HOLD RED	1.0
HOLD PHASE	5
EXIT PHASE	2
EXIT CALL	NONE

CONSTRUCTION NOTES:

ALL TRAFFIC SIGNAL EQUIPMENT IS NEW EXCEPT AS NOTED.

STATE FORCES TO STAKE ALL R.O.W. PRIOR TO EXCAVATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING PRIOR TO INSTALLATION.

THE LOCATION OF TRAFFIC SIGNAL FOUNDATIONS WHEN IN OR ADJACENT TO SIDEWALKS SHALL BE VERIFIED PRIOR TO INSTALLATION TO PROVIDE A FREE PATH OF NOT LESS THAN 4 FEET. IF A MINIMUM 4 FOOT FREEPATH IS UNAVAILABLE NOTIFY THE ENGINEER AND CONTACT THE DIVISION OF TRAFFIC ENGINEERING.

INSTALL PEDESTAL FOUNDATIONS ADJACENT TO LANDING AREAS.

(C) INSTALL TYPE 13 CONCRETE SIDEWALK RAMP. RAMP ITEM TO INCLUDE CURBING. EXTEND LANDING AREA TO BE WITHIN 10" OF PUSHBUTTON, AS NECESSARY.

(D) INSTALL TYPE 5 CONCRETE SIDEWALK RAMP. EXTEND LANDING AREA TO BE WITHIN 10" OF PUSHBUTTON, AS NECESSARY.

(E) INSTALL TYPE 19 CONCRETE SIDEWALK RAMP. EXTEND LANDING AREA TO BE WITHIN 10" OF PUSHBUTTON, AS NECESSARY.

(F) INSTALL TYPE 13 CONCRETE SIDEWALK RAMP. REMOVE EXISTING CONCRETE IN THE SIDEWALK RAMP AREA AS INDICATED BY HATCHED AREA ON PLAN. FURNISH TOPSOIL, TURF ESTABLISHMENT AND 30 L.F. OF BITUMINOUS CONCRETE CURBING FOR THE DISTURBED AREA. EXTEND LANDING AREA TO BE WITHIN 10" OF PUSHBUTTON, AS NECESSARY. EXTEND SIDEWALK TO MATCH WITH THE ADJACENT SIDEWALK RAMP ON THE OPPOSITE SIDE OF THE PROPOSED MAST ARM.

(G) TRIM TREE BRANCHES AS NEEDED TO PROVIDE A CLEAR LINE OF SIGHT FOR VIDEO DETECTION. WORK TO BE PAID UNDER ITEM NO. 0952001A - SELECTIVE CLEARING AND THINNING.

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISION.

INSTALL NEW CONTROLLER CABINET ON NEW CONTROLLER FOUNDATION ADJACENT TO SIDEWALK.

(W) INSTALL 30" X 30" HANDHOLE. ALL OTHERS TYPE II.

(H) INSTALL HANDHOLE BETWEEN CONCRETE WALK AND CURBING.

(I) VIDEO DETECTION BY USE OF VIDEO-360° CAMERA CO-MOUNTED WITH VIDEO-THERMAL CAMERA ON SPAN POLE #073-201-A.

(J) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON MAST ARM ID #073-201-B.

(K) VIDEO DETECTION BY USE OF VIDEO-360° CAMERA MOUNTED ON MAST ARM ID #073-201-B.

VIDEO DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR THEIR DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE CONTROLLER CABINET.

INSTALL RISER ON SNET #786 UTILITY POLE.

COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES.

ESTIMATED LOAD ON UTILITY POLES: SNET #788: 4250 lbs.

SPAN ATTACHMENT ON SNET #788 TO HAVE A MINIMUM CLEARANCE OF 12" BELOW SECONDARY & 40" ABOVE HIGHEST COMMUNICATIONS.

(L) INSTALL HANDHOLE ADJACENT TO CONCRETE SIDEWALK.

(M) DIG TEST PIT IN THE VICINITY TO LOCATE UNDERGROUND TELEPHONE DUCT.

(N) INSTALL PEDESTAL FOUNDATION ADJACENT TO AND WITHIN R.O.W.

MAST ARM ASSEMBLY NOTES

ALL MAST ARM MOUNTED TRAFFIC SIGNALS ARE FIXED MOUNTED TO THE ARM BY USE OF ADJUSTABLE BRACKETS.

ALL MAST ARM MOUNTED SIGNS ARE FIXED MOUNTED

CONTRACTOR TO VERIFY ALL MAST ARM INFORMATION INCLUDING CROSS SECTIONS AND DIMENSIONS, BASED ON FIELD SURVEY, PRIOR TO SUBMISSION OF WORKING DRAWINGS.

MAST ARM ASSEMBLY TO HAVE MINIMUM CLEARNACE OF 24" FROM OVERHEAD COMMUNICATION CABLES.

EMERGENCY PRE-EMPTION NOTES

RELOCATE AUXILIARY EQUIPMENT CABINET FROM EXISTING CONTROLLER CABINET TO LEFT SIDE OF NEW CONTROLLER CABINET. RELOCATE EXISTING EMERGENCY PRE-EMPTION DETECTORS TO NEW SPAN. TEST PRE-EMPTION SYSTEM PRIOR TO AND AFTER RELOCATION IN ACCORDANCE WITH SPECIFICATIONS

CONTRACTOR TO INSTALL A SWITCH IN THE SIGNAL CABINET TO EFFECTIVELY DISCONNECT THE PRE-EMPTION EQUIPMENT FROM THE TRAFFIC SIGNAL CONTROLLER.

PRE-EMPTION DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE AUXILIARY EQUIPMENT CABINET.

SIGN LEGEND:

(A) INSTALL 41-0835

(B) INSTALL 31-0290 (ONLY ONLY)

(C) REMOVE EXISTING "SIGNAL AHEAD" WARNING SIGN

NOTES:

STATE TO MAINTAIN ALL PAVEMENT MARKINGS AND SIGNING ON ROUTE 202 AND ROUTE 209 AND ALL STOP BARS. TOWN OF LITCHFIELD TO MAINTAIN PAVEMENT MARKINGS ON DOYLE ROAD.

PRE-EMPTION EQUIPMENT TO BE OWNED AND MAINTAINED BY THE TOWN OF LITCHFIELD.

(S) BAR TYPE CROSSWALK - STATE MAINTAINED

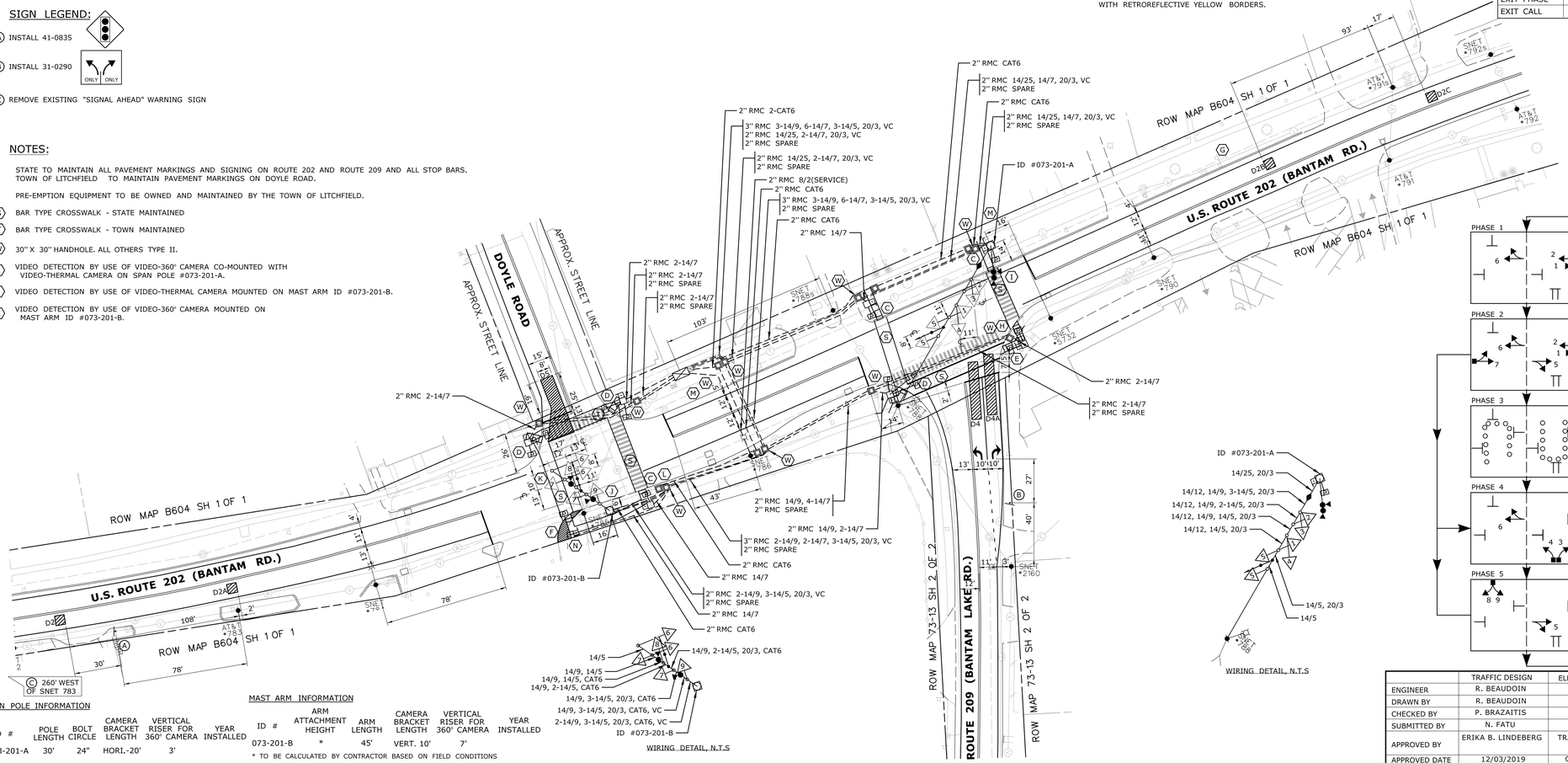
(T) BAR TYPE CROSSWALK - TOWN MAINTAINED

(W) 30" X 30" HANDHOLE. ALL OTHERS TYPE II.

(I) VIDEO DETECTION BY USE OF VIDEO-360° CAMERA CO-MOUNTED WITH VIDEO-THERMAL CAMERA ON SPAN POLE #073-201-A.

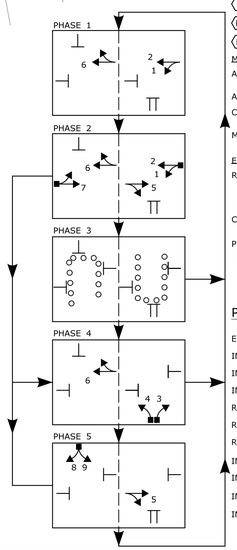
(J) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON MAST ARM ID #073-201-B.

(K) VIDEO DETECTION BY USE OF VIDEO-360° CAMERA MOUNTED ON MAST ARM ID #073-201-B.



WIRING DETAIL, N.T.S

WIRING DETAIL, N.T.S



PAVEMENT MARKING NOTES:

ERADICATE CROSSWALK ON ROUTE 209 APPROACH

INSTALL CROSSWALK ON ROUTE 209 APPROACH

INSTALL CROSSWALK ON US 202 WB APPROACH TO ROUTE 209

INSTALL CROSSWALK ON US 202 WB APPROACH TO DOYLE ROAD

REFRESH CROSSWALK ON US 202 EB APPROACH TO ROUTE 209

REFRESH CROSSWALK ON US 202 EB APPROACH TO DOYLE ROAD

REFRESH CROSSWALK ON DOYLE ROAD APPROACH TO US 202

INSTALL STOP BARS AS SHOWN.

INSTALL 50 FEET OF LANE LANE ON THE ROUTE 209 APPROACH.

INSTALL 70 FEET OF DOTTED EXTENSION LINE ON THE ROUTE 209 APPROACH.

INSTALL LEFT AND RIGHT PAVEMENT ARROWS ON THE ROUTE 209 APPROACH.

SPAN POLE INFORMATION

ID #	POLE LENGTH	BOLT CIRCLE	CAMERA BRACKET LENGTH	VERTICAL RISER FOR 360° CAMERA	YEAR INSTALLED
073-201-A	30'	24"	HORI.-20'	3'	

MAST ARM INFORMATION

ID #	ARM ATTACHMENT HEIGHT	ARM LENGTH	CAMERA BRACKET LENGTH	VERTICAL RISER FOR 360° CAMERA	YEAR INSTALLED
073-201-B	*	45'	VERT. 10'	7'	

* TO BE CALCULATED BY CONTRACTOR BASED ON FIELD CONDITIONS

	TRAFFIC DESIGN	ELECTRICAL DESIGN
ENGINEER	R. BEAUDOIN	Y. XIAN
DRAWN BY	R. BEAUDOIN	Y. XIAN
CHECKED BY	P. BRAZAITIS	M. JULIANO
SUBMITTED BY	N. FATU	J. KULJIS
APPROVED BY	ERIKA B. LINDEBERG	TRACY L. FOGARTY
APPROVED DATE	12/03/2019	09/30/2019

REV # INTERSECTION # 073-201

ENERGY BY TOWN	ADDRESS #
MAINT LEVEL 5	SERVICE POLE - SNET #786
	UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R, Y, G RED, YEL, GRN
R RED ARROW
Y YELLOW ARROW
G GREEN ARROW
WØ WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

VC VIDEO CAMERA CABLE
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSCEIVER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

DATE PLOTTED : 1/6/2020 \\DOT-SDCENG07V\CTDOT_Projects\0174-0418-0419\Traffic\Signals\TR_MSH_TCS_073_201_XXXpending.dgn

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

U.S. ROUTE 202 (BANTAM RD.)
AT ROUTE 209 (BANTAM LAKE RD.)
& DOYLE ROAD

SCALE 1" = 40'

TOWN: LITCHFIELD

DRAWING TITLE: TRAFFIC CONTROL SIGNAL PLAN

PROJECT NO. 0174-0418
DRAWING NO. TCS-04
SHEET NO. 03.05

MOVEMENT DIAGRAM

NTOR	PHASE 1	PHASE 2 PRE-EMPT 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6 PRE-EMPT 1	PHASE 7	PHASE 8	
NONE	1	2 5		3 4 6	5	1 6	7 3 4		

FACE #	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	Y	◄R	◄Y	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R						
2	Y	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R						
3	R	R	R	R	R	R	R	R	R	R	◄G	◄Y	Y	R	R	R	R	R	R	G	Y	R						
4	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	G	Y	R						
5	Y	R	R	R	G	Y	R	R	R	R	R	R	R	◄R	◄Y	R	R	R	R	R	R	R						
6	Y	R	R	R	R	R	R	R	R	R	→R	→Y	►R	R	R	R	G	Y	R	R	R	R						
7	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R						
P	OFF	◄		DW			►	WØ	◄					DW					►									

INTERVALS																												
MIN GRN	5				15						5			5			15			9								
WALK								7																				
PED CLR								18																				
VEH EXT	1.5				3.0						1.5			1.5			3.0			2.0								
MAX 1	7				21						10			7			21			16								
MAX 2	9				21						12			9			21			27								
YELLOW		3.0				4.4			4.0			3.0			3.0			4.4			4.8							
RED				1.0			2.4			0.0			1.0			1.0			1.1			2.4						
ADD INIT																												
MAX INIT																												
TBR																												
TTR																												
MIN GAP																												
MODE	NON LOCK				MIN RECALL			NON LOCK			NON LOCK			NON LOCK			MIN RECALL			NON LOCK			OFF			OFF		
INIT START					THIS PHASE												THIS PHASE											

① ACCESSIBLE PEDESTRIAN SIGNAL

② COUNTDOWN PEDESTRIAN SIGNAL

TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY
PHASE 2 AND 6 ARTERY LOOPS TO BE NON-ACTUATING DURING COORDINATION.
① PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL.
② COUNTDOWN ONLY DURING FLASHING PEDESTRIAN CHANGE INTERVAL.
MANUAL AND INTERVAL ADVANCE TO BE DISCONNECTED DURING PHASE 3 PEDESTRIAN CHANGE INTERVAL.
SIGNAL MAY DOUBLE CYCLE IF PEDESTRIAN TIMING CALLED DURING PATTERN 2.

OFFICE RECORD

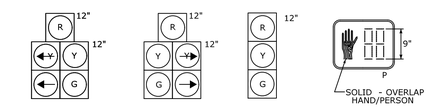
REV # SM # N/A SIGNAL REVISED:
REPLACED TRAFFIC CONTROL SIGNAL EQUIPMENT UNDER PROJECT 0174-0418 AND
ADDED EXCLUSIVE PEDESTRIAN PHASE.

DETECTORS				SYSTEM LOC
IDENT	SIZE (WXL)	TYPE	MODE	MASTER 090-203
D1	6'x25'	VIDEO 360°	PRESENCE	090-210
D2	6'x6'	VIDEO THERMAL	PRESENCE	
D4,D4A	6'x25'	VIDEO 360°	PRESENCE	
D5	6'x25'	VIDEO 360°	PRESENCE	
D6	6'x6'	VIDEO THERMAL	PRESENCE	
D7	SEE PLAN	VIDEO 360°	PRESENCE	

COORDINATION TYPE: T.C./T.B.C.

PROGRAM FUNCTION	TIME	DAYS	CYCLE	OFFSET SEC	OFFSET %
FLASH	NONE				
MAX 1	ALL OTHER TIMES				
MAX 2	1500-1800	M-F			
	1000-1400	SA-SU			
PATTERN 2	1500-1800	M-F	80	1	1
	1000-1400	SA-SU	80	1	1
FREE	ALL OTHER TIMES	DAILY			

SIGNAL FACES



ALL INDICATIONS HAVE LED LAMPS.

ALL SIGNAL FACES HAVE BACKPLATES WITH RETROREFLECTIVE YELLOW BORDER.

CONSTRUCTION NOTES

ALL TRAFFIC SIGNAL EQUIPMENT IS NEW EXCEPT AS NOTED.

STATE FORCES TO STAKE ALL R.O.W. PRIOR TO EXCAVATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING PRIOR TO INSTALLATION.

THE LOCATION OF TRAFFIC SIGNAL FOUNDATIONS WHEN IN OR ADJACENT TO SIDEWALKS SHALL BE VERIFIED PRIOR TO INSTALLATION TO PROVIDE A FREE PATH OF NOT LESS THAN 4 FEET. IF A MINIMUM 4 FOOT FREE PATH IS UNAVAILABLE NOTIFY THE ENGINEER AND CONTACT THE DIVISION OF TRAFFIC ENGINEERING.

COORDINATE WITH THE UTILITY REPRESENTATIVES LISTED IN SPECIAL PROVISION, 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES.

INSTALL PEDESTAL FOUNDATIONS ADJACENT TO LANDING AREAS.

(G) INSTALL TYPE 13 SIDEWALK RAMP.

(H) REMOVE SIDEWALK EXTENSION AS SHOWN IN HATCHED AREA.

REPLACE METAL BEAM RAIL ALONG NORTHEAST CORNER OF INTERSECTION. SEE HIGHWAYS SUBSET FOR DETAILS.

ANY REPLACEMENT OF DECORATIVE CONCRETE WALKWAY SHALL BE REPLACED IN KIND

(I) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON MAST ARM ID #090-203-A.

(J) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON MAST ARM ID #090-203-C.

(K) VIDEO DETECTION BY USE OF VIDEO-360 CAMERA MOUNTED ON MAST ARM ID #090-203-D.

VIDEO DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE CONTROLLER CABINET.

ALL MAST ARMS, PEDESTALS, TRAFFIC SIGNAL HOUSINGS,PEDESTRIAN SIGNAL HOUSINGS, PUSH BUTTON HOUSINGS AND THE CONTROLLER CABINET TO BE PAINTED BLACK PER THE SPECIAL PROVISIONS.

(L) DIG TEST PIT TO LOCATE UNDERGROUND FRONTIER DUCT IN THE VINCINITY PRIOR TO THE INSTALLATION OF THE MAST ARM FOUNDATION.

(M) INSTALL CAT6 REPEATER IN HANDHOLE.

(W) INSTALL 30" X 30" HANDHOLE. ALL OTHERS TYPE II.

INSTALL ONE RISER ON SNET #656 UTILITY POLE.

INSTALL CONTROLLER CABINET AND CONCRETE PAD ADJACENT TO SIDEWALK.

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISION.

MAST ARM ASSEMBLY NOTES

ALL MAST ARM MOUNTED TRAFFIC SIGNALS ARE FIXED MOUNTED TO THE ARM BY USE OF ADJUSTABLE BRACKETS.

ALL MAST ARM MOUNTED SIGNS ARE FIXED MOUNTED.

CONTRACTOR TO VERITY ALL MAST ARM INFORMATION INCLUDING CROSS CROSS SECTIONS AND DIMENSIONS BASED ON FIELD SURVEY, PRIOR TO THE SUBMISSION OF WORKING DRAWINGS.

MAST ARM ASSEMBLES TO HAVE MINIMUM CLEARANCE OF 24" FROM OVERHEAD COMMUNICATION CABLES.

EMERGENCY PRE-EMPTION NOTES

RELOCATE AUXILIARY EQUIPMENT CABINET FROM EXISTING CONTROLLER CABINET TO LEFT SIDE OF NEW CONTROLLER CABINET. RELOCATE EXISTING EMERGENCY PRE-EMPTION DETECTORS TO NEW MAST ARMS. TEST PRE-EMPTION SYSTEM PRIOR TO AND AFTER RELOCATION IN ACCORDANCE WITH SPECIFICATIONS.

CONTRACTOR TO INSTALL A SWITCH IN THE SIGNAL CABINET TO EFFECTIVELY DISCONNECT THE PRE-EMPTION EQUIPMENT FROM THE TRAFFIC SIGNAL CONTROLLER.

PRE-EMPTION DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE AUXILIARY EQUIPMENT CABINET.

SIGN LEGEND

(A) REPLACE EXISTING WITH 31-0302

(B) REMOVE EXISTING

(C) SPAN MOUNT 31-0183

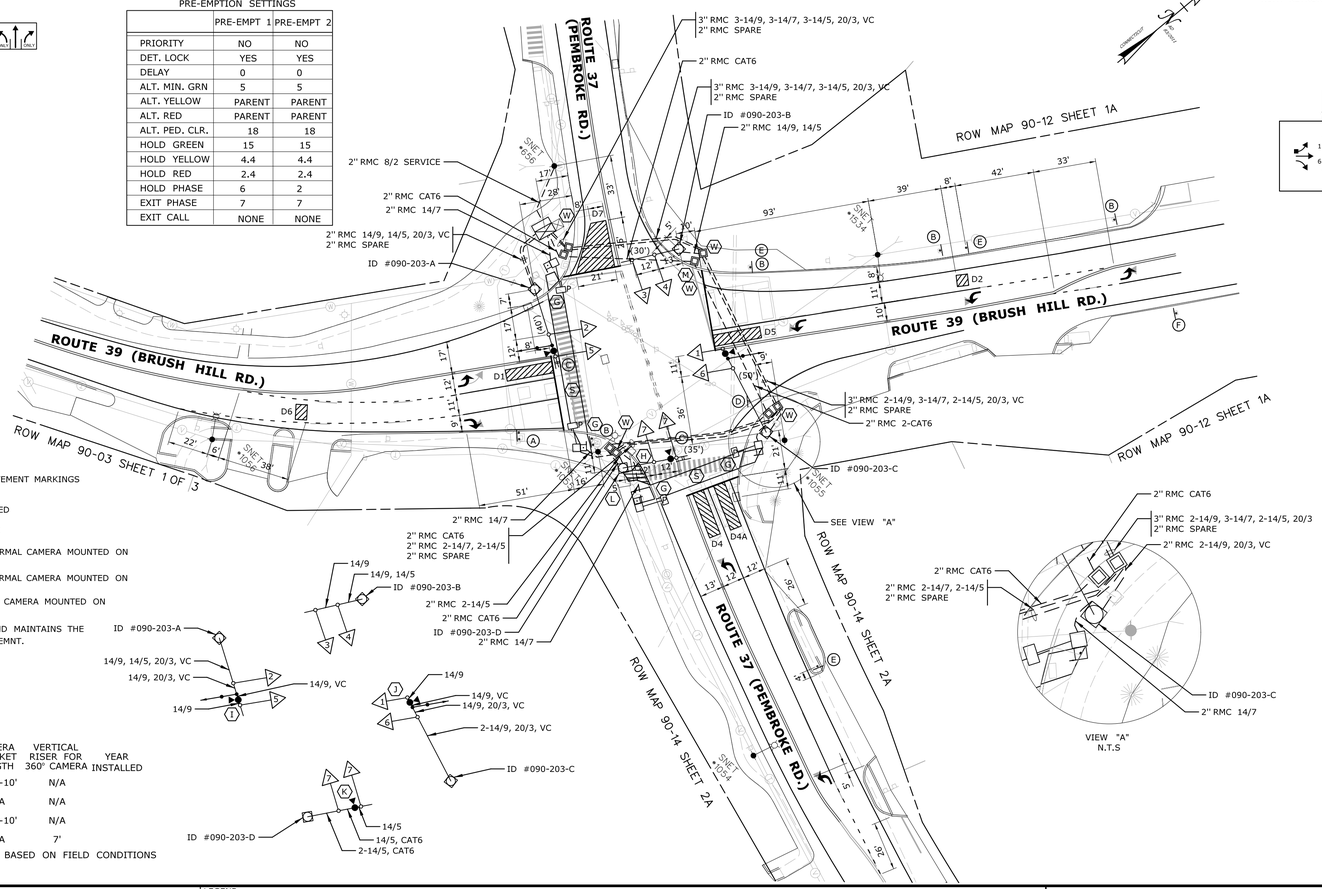
(D) SPAN MOUNT 31-0184

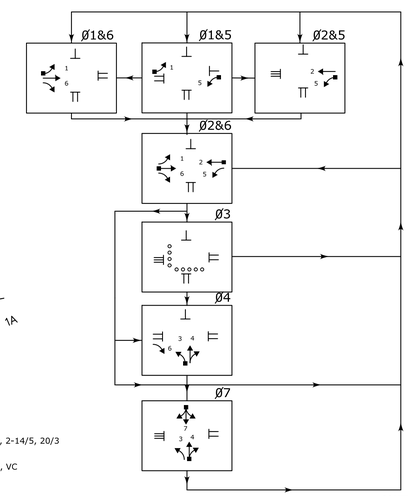
(E) INSTALL 31-0282

(F) EXISTING TO REMAIN

PRE-EMPTION SETTINGS

	PRE-EMPT 1	PRE-EMPT 2
PRIORITY	NO	NO
DET. LOCK	YES	YES
DELAY	0	0
ALT. MIN. GRN	5	5
ALT. YELLOW	PARENT	PARENT
ALT. RED	PARENT	PARENT
ALT. PED. CLR.	18	18
HOLD GREEN	15	15
HOLD YELLOW	4.4	4.4
HOLD RED	2.4	2.4
HOLD PHASE	6	2
EXIT PHASE	7	7
EXIT CALL	NONE	NONE





NOTES:

STATE TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON ROUTE 37 AND ROUTE 39

(S) BAR TYPE CROSSWALK - STATE MAINTAINED

(W) 30" X 30" HANDHOLE. ALL OTHERS TYPE II

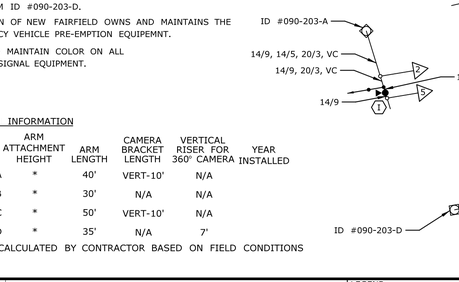
(I) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON MAST ARM ID #090-203-A.

(J) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON MAST ARM ID #090-203-C.

(K) VIDEO DETECTION BY USE OF VIDEO-360 CAMERA MOUNTED ON MAST ARM ID #090-203-D.

THE TOWN OF NEW FAIRFIELD OWNS AND MAINTAINS THE EMERGENCY VEHICLE PRE-EMPTION EQUIPEMNT.

TOWN TO MAINTAIN COLOR ON ALL TRAFFIC SIGNAL EQUIPMENT.



MAST ARM INFORMATION

ID #	ARM ATTACHMENT HEIGHT	ARM LENGTH	CAMERA BRACKET LENGTH	VERTICAL RISER FOR 360° CAMERA	YEAR INSTALLED
090-203-A	*	40'	VERT-10'	N/A	
090-203-B	*	30'	N/A	N/A	
090-203-C	*	50'	VERT-10'	N/A	
090-203-D	*	35'	N/A	7'	

* TO BE CALCULATED BY CONTRACTOR BASED ON FIELD CONDITIONS

CONTRACTOR TO INSTALL PAVEMENT MARKINGS AS NOTED BELOW:

-ERADICATE STOP BAR AND 5' OF DYCL ON ROUTE 37 SOUTHBOUND.
-ERADICATE STOP BAR AND 5' OF DYCL ON ROUTE 39 NORTHBOUND.
-ERADICATE CROSSWALK ON ROUTE 37 NORTHBOUND.
-INSTALL STOP BARS ON ROUTE 37 SOUTHBOUND AND ROUTE 39 SOUTHBOUND.
-INSTALL 4" WHITE LANE LINE AND 4" WHITE DOTTED EXTENSION LINE ON ROUTE 37 NORTHBOUND LEFT TURN LANE.
-INSTALL 4" WHITE LANE LINE AND 4" WHITE DOTTED EXTENSION LINE ON ROUTE 39 SOUTHBOUND LEFT TURN LANE.
-REFRESH STOP BARS ON ROUTE ROUTE 37 NORTHBOUND AND ROUTE 39 NORTHBOUND.
-INSTALL CROSSWALKS AS SHOWN.
-INSTALL 4" DOUBLE YELLOW EXTENSION LINE (2' LINE - 4' SPACE) ON ROUTE 37 THROUGH THE INTERSECTION.

	TRAFFIC DESIGN	ELECTRICAL DESIGN
ENGINEER	D.VERONESI	Y.XIAN
DRAWN BY	D.VERONESI	Y.XIAN
CHECKED BY	P.BRAZAITIS	M.JULIANO
SUBMITTED BY	N.FATU	J.KULJIS
APPROVED BY	ERIKA B. LINDEBERG	TRACY L. FOGARTY
APPROVED DATE	12/06/2019	09/30/2019

REV # INTERSECTION # 090-203

ENERGY BY STATE	ADDRESS #
MAINT LEVEL 5	SERVICE POLE - SNET #656
	UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R, Y, G RED, YEL, GRN
◄R RED ARROW
◄Y YELLOW ARROW
← GREEN ARROW
WØ WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

VC VIDEO CAMERA CABLE
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSCEIVER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

DATE PLOTTED : 1/6/2020 \\DOT-SDCENG07V\CTDOT_Projects$\0174-0418-0419\Traffic\Signals\TR_MSH_TCS_090_203_XXXpending.dgn

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

ROUTE 39 (BRUSH HILL RD.) AT ROUTE 37 (PEMBROKE RD.)

SCALE 1" = 40'

TOWN: NEW FAIRFIELD

DRAWING TITLE: TRAFFIC CONTROL SIGNAL PLAN

PROJECT NO. 0174-0418
DRAWING NO. TCS-05
SHEET NO. 03.06

MOVEMENT DIAGRAM

NTOR	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
Y		1, 2		3, 4	5, 6				

FACE #	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	Y				G	Y	R				R	R	R	R	R	R												
2	Y				G	Y	R				R	R	R	R	R	R												
3	R				R	R	R				← G	Y	R	R	R	R												
4	R				R	R	R				G	Y	R	R	R	R												
5	R				R	R	R				R	R	R	← G	Y	R												
6	R				R	R	R				R	R	R	G	Y	R												

INTERVALS	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
MIN GRN		15		7	7				
WALK									
PED CLR									
VEH EXT		2.5		2.0	2.0				
MAX 1		45		23	23				
MAX 2		56		29	29				
YELLOW		4.4		3.2	3.2				
RED		1.0		3.0	3.5				
ADD INIT									
MAX INIT									
TBR									
TTR									
MIN GAP									
MODE	OFF	MIN RECALL	OFF	NON-LOCK	NON-LOCK	OFF	OFF	OFF	OFF
INIT START		THIS PHASE							

DETECTORS

IDENT	SIZE (WXL)	TYPE	MODE
D2	6'X6'	VIDEO THERMAL	PRESENCE
D2A	6'X6'	VIDEO THERMAL	PRESENCE
D2B	6'X6'	VIDEO THERMAL	PRESENCE
D2C	6'X6'	VIDEO THERMAL	PRESENCE
D4	SEE PLAN	VIDEO 360	PRESENCE
D5	SEE PLAN	VIDEO 360	PRESENCE

SYSTEM LOC
MASTER

COORDINATION TYPE: NONE

PROGRAM FUNCTION	TIME	DAYS
FLASH	NONE	
MAX 1	ALL OTHER TIMES	
MAX 2	0600-0900	M-F
	1500-1900	M-F

CYCLE	OFFSET SEC	OFFSET %

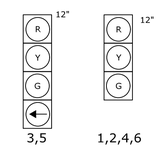
TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY

OFFICE RECORD

REV # SM # N/A SIGNAL REVISED:
REMOVED OVERHEAD FLASHING BEACON AND INSTALLED TRAFFIC SIGNAL EQUIPMENT UNDER PROJECT NO. 0174-0418.

SIGNAL FACES



ALL INDICATIONS HAVE LED LAMPS.

ALL SIGNAL FACES HAVE BACKPLATES WITH RETROREFLECTIVE YELLOW BORDERS.

CONSTRUCTION NOTES

ALL TRAFFIC SIGNAL EQUIPMENT IS NEW.

STATE FORCES TO STAKE ALL R.O.W. PRIOR TO EXCAVATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING PRIOR TO INSTALLATION.

(G) TRIM BRUSH NEAR THE PROPOSED TRAFFIC SIGNAL MAST ARM. TO BE PAID FOR UNDER ITEM NO. 0952001A - SELECTIVE CLEARING AND THINNING

EXCEPT FOR TEST PURPOSES, KEEP SIGNAL BAGGED PRIOR TO FUNCTIONAL INSPECTION (FORM 817. SECT. 10.10.10). SIGNAL SHALL BE PLACED IN FLASHING OPERATION NO MORE THAN 7 DAYS PRIOR TO PLACING IN OPERATION.

INSTALL SUBMOUNTED SIGN 41-0815 "NEW" AND 41-0636 (SIGNAL AHEAD SYMBOL) ON ALL APPROACHES APPROXIMATELY 500 FEET IN ADVANCE OF THE INTERSECTION. REMOVE SIGN ASSEMBLY AFTER 14 CALENDAR DAYS FROM THE DATE THE SIGNAL IS PLACED IN OPERATION.

(W) REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISION. INSTALL 30" X 30" HANDHOLE. ALL OTHERS TYPE II.

(M) DIG TEST PIT TO LOCATE AN UNKNOWN UNDERGROUND DUCT IN THE VICINITY PRIOR TO THE INSTALLATION OF THE MAST ARM FOUNDATION.

VIDEO DETECTOR NOTES:

VIDEO DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE CONTROLLER CABINET.

(J) VIDEO DETECTION BY USE OF VIDEO-360° CAMERA MOUNTED ON MAST ARM ID #96-210-B.

(K) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON MAST ARM ID #96-210-A.

(L) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON MAST ARM ID #96-210-B.

UTILITY NOTES

INSTALL RISER ON SBC #2334 UTILITY POLE.

COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES.

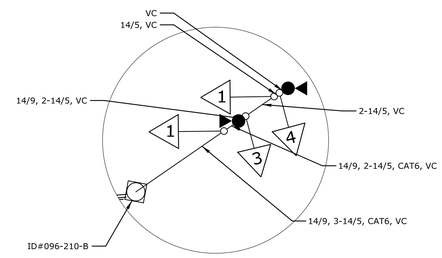
MAST ARM ASSEMBLY NOTES

ALL MAST ARM MOUNTED TRAFFIC SIGNALS ARE FIXED MOUNTED TO THE ARM BY USE OF ADJUSTABLE BRACKETS.

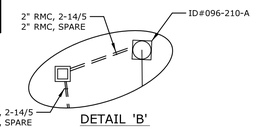
ALL MAST ARM MOUNTED SIGNS ARE FIXED MOUNTED

CONTRACTOR TO VERIFY ALL MAST ARM INFORMATION INCLUDING CROSS SECTIONS AND DIMENSIONS, BASED ON FIELD SURVEY, PRIOR TO SUBMISSION OF WORKING DRAWINGS.

MAST ARM ASSEMBLY TO HAVE MINIMUM CLEARANCE OF 24" FROM OVERHEAD COMMUNICATION CABLES.

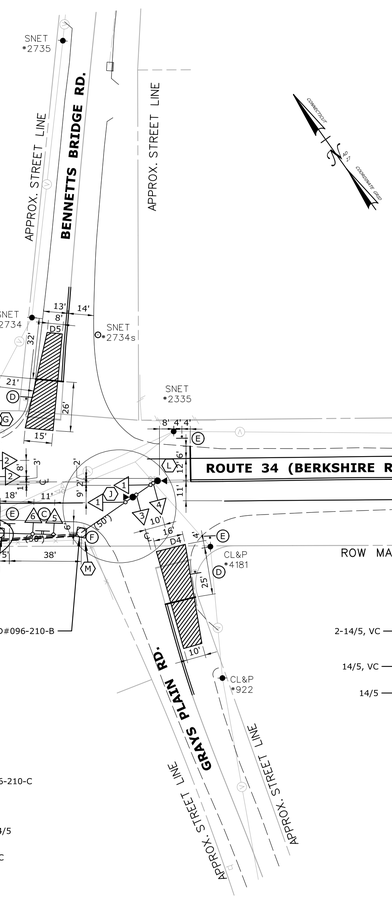


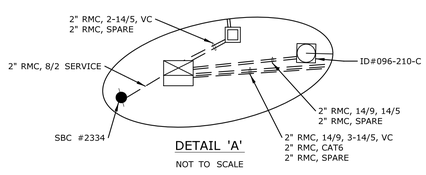
WIRING DETAIL N.T.S.



DETAIL 'B'

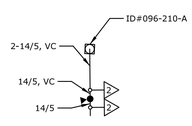
NOT TO SCALE

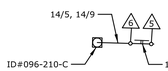




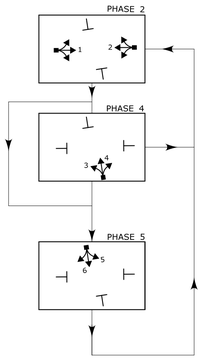
DETAIL 'A'

NOT TO SCALE





WIRING DETAIL N.T.S.



SIGN LEGEND :

(A) INSTALL 41-0835
(B) REMOVE EXISTING 41-4226
(C) INSTALL 31-0816 (NO TURN ON RED)
(D) REMOVE EXISTING 31-0552 (STOP)
(E) INSTALL 31-1702 (NO PEDESTRIAN CROSSING)
(F) RELOCATE EXISTING STREET SIGN ADJACENT TO MAST ARM.

NOTES :

STATE TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON ROUTE 34 AND ALL STOP BARS.

TOWN TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON BENNETTS BRIDGE ROAD AND GRAYS PLAIN ROAD.

(J) VIDEO DETECTION BY USE OF VIDEO-360° CAMERA MOUNTED ON MAST ARM ID #96-210-B.
(K) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON MAST ARM ID #96-210-A.
(L) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON MAST ARM ID #96-210-B.
(W) 30" X 30" HANDHOLE. ALL OTHERS TYPE II.

MAST ARM INFORMATION

ID #	ARM ATTACHMENT HEIGHT	ARM LENGTH	CAMERA BRACKET LENGTH	VERTICAL RISER FOR 360° CAMERA	YEAR INSTALLED
096-210-A	*	35'	10'-VERT	N/A	
096-210-B	*	50'	10'-VERT	7'	
096-210-C	*	30'	N/A	N/A	

*TO BE CALCULATED BY CONTRACTOR BASED ON FIELD CONDITIONS.

PAVEMENT MARKING NOTES:

ERADICATE STOP BAR AND 20' OF SINGLE YELLOW CENTERLINE ON BENNETS BRIDGE ROAD. INSTALL STOP BAR AS SHOWN.

ERADICATE STOP BAR AND 20' OF SINGLE YELLOW CENTERLINE ON GRAYS PLAIN ROAD. INSTALL STOP BAR AS SHOWN.

ERADICATE 31' OF DOUBLE YELLOW CENTERLINE ON ROUTE 34 EASTBOUND APPROACH. INSTALL STOP BAR AS SHOWN.

ERADICATE 12' OF DOUBLE YELLOW CENTERLINE ON ROUTE 34 WESTBOUND APPROACH. INSTALL STOP BAR AS SHOWN.

ERADICATE ANY CONFLICTING PAVEMENT MARKINGS NOT CONSISTENT WITH THIS PLAN.

INSTALL 50' OF DOUBLE YELLOW CENTERLINE ON GRAYS PLAIN ROAD AND BENNETTS BRIDGE ROAD.

	TRAFFIC DESIGN	ELECTRICAL DESIGN
ENGINEER	P. BRAZAITIS	M. FORTUNA
DRAWN BY	P. BRAZAITIS	M. FORTUNA
CHECKED BY	D. VERONESI	M. JULIANO
SUBMITTED BY	N. FATU	J. KULJIS
APPROVED BY	ERIKA B. LINDEBERG	TRACY L. FOGARTY
APPROVED DATE	12/03/2019	09/30/2019

REV # INTERSECTION # 096-210

ENERGY BY TOWN	ADDRESS #
MAINT LEVEL 1	SBC #2334
	UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R, Y, G RED, YEL, GRN
R RED ARROW
Y YELLOW ARROW
GREEN ARROW
W WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

VC VIDEO CAMERA CABLE
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSCEIVER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

ROUTE 34 (BERKSHIRE RD.) AT GRAYS PLAIN ROAD AND BENNETTS BRIDGE ROAD

TOWN: **NEWTOWN**

DRAWING TITLE: **TRAFFIC CONTROL SIGNAL PLAN**

PROJECT NO. 0174-0418
DRAWING NO. TCS-06
SHEET NO. 03.07

DATE PLOTTED : 1/6/2020 \\DOT-SDCENG07V\CTDOT_Projects$\0174-0418-0419\Traffic\Signals\TR_MSH_TCS_096_210_XXXpending.dgn

SCALE 1" = 40'

MOVEMENT DIAGRAM

NTOR	PHASE 1	PHASE 2 - PRE-EMPT 1	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
NONE	1, 2	1, 2, 3, 4		4, 5					

FACE #	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	Y	◄ G	◄Y	G	G	Y	R				R	R	R															
2	Y	G	G	G	G	Y	R				R	R	R															
3	Y	R	R	R	G	Y	R				R	R	R															
4	Y	R	R	R	G	Y	R				R →	R Y►	R															
5	R	R	R	R	R	R	R				G	Y	R															
P	OFF	◄ DW		►	WØ	◄				DW			►															
					◄ YIELD	PT																						

INTERVALS	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
MIN GRN	5	15		9					
WALK		7 (1)							
PED CLR		13 (2)							
VEH EXT	2.0	2.5		2.0					
MAX 1	10	36		20					
MAX 2	12	45		25					
YELLOW	3.9	3.9		3.9					
RED	1.0	1.7		1.0					
ADD INIT									
MAX INIT									
TBR									
TTR									
MIN GAP									
MODE	NON-LOCK	MIN-RECALL	OFF	NON-LOCK	OFF	OFF	OFF	OFF	OFF
INIT START		THIS PHASE							

ACCESSIBLE PEDESTRIAN SIGNAL

COUNTDOWN PEDESTRIAN SIGNAL

DETECTORS

IDENT	SIZE (WXL)	TYPE	MODE
D1	6'X30'	VIDEO 360	PRESENCE
D2	6'X6'	VIDEO THERMAL	PRESENCE
D2A	6'X6'	VIDEO THERMAL	PRESENCE
D2B	6'X6'	VIDEO THERMAL	PRESENCE
D2C	6'X6'	VIDEO THERMAL	PRESENCE
D4	SEE PLAN	VIDEO 360	DELAY 7"
D4A	6'X30'	VIDEO 360	PRESENCE
DWW	SEE PLAN	VIDEO 360	PRESENCE

SYSTEM LOC

MASTER	
096-217	
096-215	
096-216	

COORDINATION TYPE: TIME CLOCK/T.B.C.

PROGRAM FUNCTION	PROGRAM TIME	PROGRAM DAYS	CYCLE	OFFSET SEC	OFFSET %
FLASH	NONE				
MAX 1	ALL OTHER TIMES				
MAX 2	1500-1900				
PATTERN 1	ALL OTHER TIMES		80	60	75
PATTERN 2	1500-1900	M-F	80	57	71
FREE	2200-0500	DAILY			

TECHNICAL NOTES

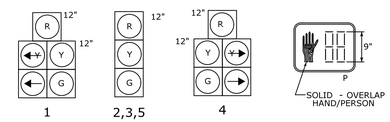
STANDARD OVERLAP SKIP FEATURES APPLY
PHASE 2 ARTERY DETECTORS TO BE NON-ACTUATING DURING COORDINATED OPERATION
(1) PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL

(2) COUNTDOWN ONLY DURING FLASHING PEDESTRIAN CHANGE INTERVAL.
(3) CONCURRENT PED PHASE ONLY COMES IN WHEN ACTUATED BY PUSHBUTTON

OFFICE RECORD

REV # TIR # N/A SM # N/A SIGNAL REVISED:
REPLACED TRAFFIC SIGNAL EQUIPMENT AND ADDED EMERGENCY PRE-EMPTION
UNDER PROJECT NO. 0174-0418.

SIGNAL FACES



ALL INDICATIONS HAVE LED LAMPS.

ALL SIGNAL FACES HAVE BACKPLATES WITH RETROREFLECTIVE YELLOW BORDERS.

PRE-EMPTION SETTINGS

	PRE-EMPT 1
PRIORITY	NO
DET. LOCK	YES
DELAY	0
ALT. MIN. GRN	5
ALT. YELLOW	PARENT
ALT. RED	PARENT
ALT. PED. CLR.	13
HOLD GREEN	15
HOLD YELLOW	3.9
HOLD RED	1.7
HOLD PHASE	2
EXIT PHASE	4
EXIT CALL	NONE

CONSTRUCTION NOTES

ALL TRAFFIC SIGNAL EQUIPMENT IS NEW.
STATE FORCES TO STAKE ALL R.O.W. PRIOR TO EXCAVATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING PRIOR TO INSTALLATION.

(L) TRIM BRUSH NEAR THE PROPOSED TRAFFIC SIGNAL SPAN POLE, LIGHT STANDARD AND CONTROLLER CABINET. TO BE PAID FOR UNDER ITEM NO. 0952001A - SELECTIVE CLEARING AND THINNING.

(M) INSTALL 4'X4' LANDING AREA IN FRONT AND ADJACENT TO GUIDERAIL WITH 8' ALUMINUM PEDESTAL AND PEDESTRIAN PUSHBUTTON BEHIND AND ADJACENT TO GUIDERAIL. PUSHBUTTON IS TO HAVE 18" EXTENSION BRACKET ATTACHED AND BE WITHIN 10" OF LANDING AREA.

(N) SEE HIGHWAY DESIGN SUBSET 6 FOR PEDESTRIAN RAMP ON NORTHEAST CORNER OF S.R. 816 AND I-84 RAMPS.

(O) SEE HIGHWAY DESIGN SUBSET 6 FOR SLIVER WIDENING ON WESTBOUND APPROACH OF S.R. 816.

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISION.
INSTALL PEDESTAL FOUNDATIONS ADJACENT TO LANDING AREAS.

(W) EXISTING LIGHT STANDARD (#96-123F) AND CONCRETE FOUNDATION TO BE REMOVED UNDER ITEMS NO. 1003906A AND NO. 1003912A

(X) ENTER EXISTING LIGHT STANDARD BASE (#96-123E) AND DISCONNECT FEED TO LIGHT STANDARD #96-123F.

(Y) INSTALL LED LUMINAIRE TO SPAN POLE ID#096-216-A. INSTALL 15A DISCONNECT CIRCUIT BREAKER IN THE CONTROL CABINET. TO BE PAID FOR UNDER ITEM NO. 1005600A.

(Z) SEE HIGHWAY DESIGN SUBSET 6 FOR SIDEWALK, RAMP AND GUIDERAIL INSTALLATION.

VIDEO DETECTOR NOTES:

(P) VIDEO DETECTION BY USE OF VIDEO-360 CAMERA CO-MOUNTED WITH VIDEO-THERMAL CAMERA ON SPAN POLE ID #096-216-A.

(Q) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA ON A LIGHT STANDARD (15' BRACKET 30' MOUNTING HEIGHT).
VIDEO DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE CONTROLLER CABINET.

UTILITY NOTES:

INSTALL 2 RISERS ON CL&P #3711 AND 1 RISER ON SNET #390 UTILITY POLE.

COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES.
SPAN ATTACHMENT ON AT&T #7194 AND CL&P #3711 TO HAVE A MINIMUM CLEARANCE OF 12" BELOW SECONDARY & 40" ABOVE HIGHEST COMMUNICATIONS.

ESTIMATED LOAD ON UTILITY POLES: CL&P3711: 2653lbs., AT&T#7194: 3315lbs.

EMERGENCY PRE-EMPTION NOTES

INSTALL AUXILIARY EQUIPMENT CABINET ON LEFT SIDE OF CONTROLLER CABINET. INSTALL PRE-EMPTION EQUIPMENT IN AUXILIARY CABINET.

CONTRACTOR TO INSTALL A SWITCH IN THE SIGNAL CABINET TO EFFECTIVELY DISCONNECT THE PRE-EMPTION EQUIPMENT FROM THE TRAFFIC SIGNAL CONTROLLER.

PRE-EMPTION DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE AUXILIARY EQUIPMENT CABINET.

PAVEMENT MARKING NOTES:

-INSTALL 130' OF 4" WHITE LANE LINE OVER EXISTING 4" WHITE DASHED LANE LINE ON S.R. 816 EASTBOUND APPROACH.

-INSTALL 160' OF 4" WIDE WHITE DOTTED EXTENSION LINE (2' LINES AT 4' SPACE) ON S.R. 816 EASTBOUND.

-INSTALL 340' OF 4" WIDE WHITE EDGE LINE ON S.R. 816 EASTBOUND.

-ERADICATE STOP BAR ON S.R. 816 EASTBOUND APPROACH

-INSTALL STOP BAR ON S.R. 816 EASTBOUND APPROACH AS SHOWN.

-REFRESH STOP BARS ON S.R. 816 WESTBOUND AND THE I-84 OFF RAMPS AS SHOWN.

-ERADICATE 19' OF DOUBLE YELLOW CENTERLINE, 4" WIDE WHITE LANE LINE AND EDGE LINE FROM THE PROPOSED STOP BAR EASTWARD ON S.R. 816 EASTBOUND.

-INSTALL 19' OF DASHED DOUBLE YELLOW CENTERLINE (2' LINES AT 4' SPACE) FROM THE PROPOSED STOP BAR EASTWARD ON S.R. 816 EASTBOUND.

-ERADICATE LANE USE ARROWS ON S.R. 816 EASTBOUND AND I-84 OFF RAMPS.

-INSTALL LANE USE ARROWS ON S.R. 816 EASTBOUND, S.R. 816 WESTBOUND AND I-84 OFF RAMPS.

-ERADICATE ANY CONFLICTING PAVEMENT MARKINGS NOT CONSISTENT WITH THIS PLAN.

-INSTALL 50' OF 4" WIDE WHITE LANE LINE ON S.R. 816 WESTBOUND.

-INSTALL 165' OF 4" WIDE WHITE EDGE LINE ON S.R. 816 WESTBOUND.

-INSTALL 100' OF 4" WIDE WHITE DOTTED EXTENSION LINE (2' LINES AT 4' SPACE) ON S.R. 816 WESTBOUND.

-ERADICATE 4' OF DASHED DOUBLE YELLOW CENTERLINE FROM THE I-84 OFF RAMPS SOUTHWARD TOWARD THE INTERSECTION.

SIGN LEGEND :

(A) SPAN MOUNT 31-0183 (ONLY)
(B) SPAN MOUNT 31-0184 (ONLY)
(C) INSTALL 31-0290 (ONLY ONLY)
(D) INSTALL 31-1702 (NO PEDESTRIAN CROSSING)
(E) EXISTING 31-1121 (DO NOT ENTER)
(F) EXISTING 31-1526 ( )
(G) EXISTING 31-1122 (WRONG WAY)
(H) EXISTING BACK TO BACK ONE-WAY SIGNS
(J) INSTALL 31-1626 (TURNING VEHICLES TO)
(K) INSTALL 31-1625 (TURNING VEHICLES TO)
(R) INSTALL 31-0222 (ONLY)

NOTES :

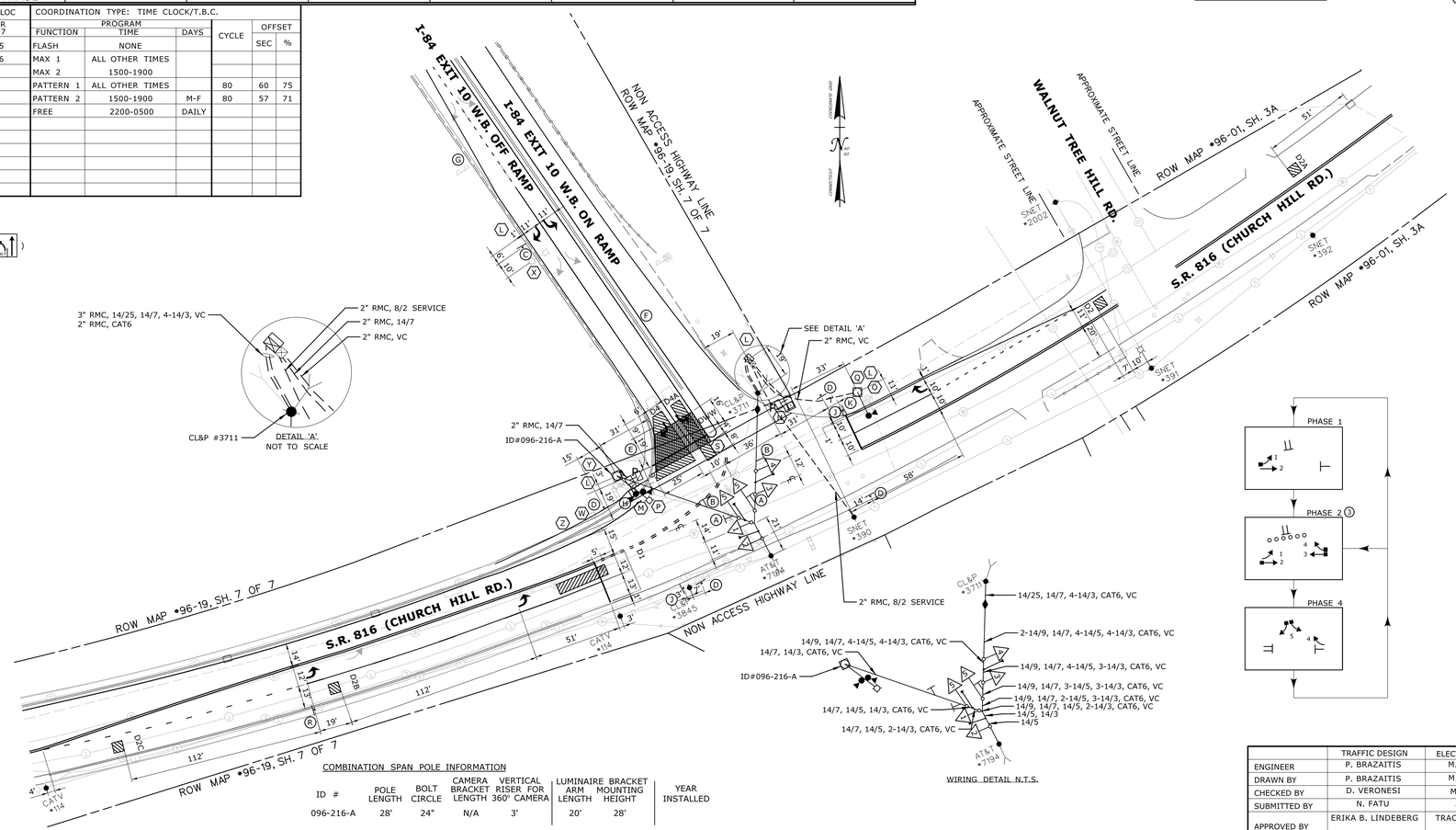
STATE TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON I-84, S.R. 816, AND ALL STOP BARS.

TOWN OF NEWTOWN TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON WALNUT TREE HILL ROAD.

TOWN OF NEWTOWN TO OWN AND MAINTAIN EMERGENCY VEHICLE PRE-EMPTION EQUIPMENT.

(S) BAR TYPE CROSSWALK - STATE MAINTAINED

(P) VIDEO DETECTION BY USE OF VIDEO-360 CAMERA CO-MOUNTED WITH VIDEO-THERMAL CAMERA ON SPAN POLE ID #096-216-A.
(Q) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA ON A LIGHT STANDARD.



COMBINATION SPAN POLE INFORMATION

ID #	POLE LENGTH	BOLT CIRCLE	CAMERA BRACKET LENGTH	VERTICAL RISER FOR 360° CAMERA	LUMINAIRE ARM LENGTH	BRACKET MOUNTING HEIGHT	YEAR INSTALLED
096-216-A	28'	24"	N/A	3'	20'	28'	

	TRAFFIC DESIGN	ELECTRICAL DESIGN
ENGINEER	P. BRAZAITIS	M. FORTUNA
DRAWN BY	P. BRAZAITIS	M. FORTUNA
CHECKED BY	D. VERONESI	M. JULIANO
SUBMITTED BY	N. FATU	J. KULJIS
APPROVED BY	ERIKA B. LINDEBERG	TRACY L. FOGARTY
APPROVED DATE	12/03/2019	09/30/2019

REV # INTERSECTION #096-216

ENERGY BY TOWN	ADDRESS #
MAINT LEVEL 5	SERVICE POLE SNET #390
	UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R, Y, G RED, YEL, GRN
◄R RED ARROW
◄Y YELLOW ARROW
◄ GREEN ARROW
WØ WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

○ PROPOSED WOOD SPAN POLE
● EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

VC VIDEO CAMERA CABLE
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSCEIVER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

DATE PLOTTED : 1/6/2020 \\DOT-SDCENG07V\CTDOT_Projects\0174-0418-0419\Traffic\Signals\TR_MSH_TCS_096_216_007pending.dgn

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

S.R. 816 (CHURCH HILL ROAD) AT EXIT 10 I-84 W.B. ON AND OFF RAMPS

SCALE 1" = 40'

TOWN: NEWTOWN

DRAWING TITLE: TRAFFIC CONTROL SIGNAL PLAN

PROJECT NO. 0174-0418
DRAWING NO. TCS-07
SHEET NO. 03.08

MOVEMENT DIAGRAM

NTOR	PHASE 1	PHASE 2 - PRE-EMPT 1	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
		2 1		4 3					

FACE #	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	Y				G	Y	R	R	R	R	R	R	R															
2	Y				G	Y	R	R	R	R	R	R	R															
3	R				R	R	R	R	R	R	G	Y	R															
4	R				R	R	R	R	R	R	G	Y	R															
P	OFF				◄ DW ►			WØ	◄ DW ►																			

INTERVALS	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
MIN GRN		15		7					
WALK			7 (1)						
PED CLR			11 (2)						
VEH EXT		2.5		1.5					
MAX 1		60		24					
MAX 2		60		24					
YELLOW		4.1	4.0	3.3					
RED		1.9	0.0	1.7					
ADD INIT									
MAX INIT									
TBR									
TTR									
MIN GAP									
MODE	OFF	MIN RECALL	NON-LOCK	NON-LOCK	OFF	OFF	OFF	OFF	OFF
INIT START		THIS PHASE							

(1) ACCESSIBLE PEDESTRIAN SIGNAL

(2) COUNTDOWN PEDESTRIAN SIGNAL

TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY

(1) PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL

(2) COUNTDOWN ONLY DURING FLASHING PEDESTRIAN CHANGE INTERVAL

MANUAL AND INTERVAL ADVANCE TO BE DISCONNECTED DURING PHASE 3 PEDESTRIAN CHANGE INTERVAL

PHASE 2 ARTERY DETECTORS TO BE NON-ACTUATING DURING COORDINATION.

TIMINGS SHOWN REFLECT FREE OPERATION.

ACTUAL COORDINATION INFORMATION TO BE DETERMINED BY THE CLOSED LOOP LOCAL COORDINATION UNIT.

OFFICE RECORD

REV # TIR # N/A SM # N/A SIGNAL REVISED:

UPGRADE OF PEDESTRIAL FACILITIES AND ADDITION OF VIDEO DETECTION UNDER PROJECT NO. 0174-0418

DETECTORS				SYSTEM LOC	COORDINATION TYPE: CLOSED LOOP					
					PROGRAM				OFFSET	
IDENT	SIZE (WXL)	TYPE	MODE	MASTER 128-210	FUNCTION	TIME	DAYS	CYCLE	SEC	%
D2, D2A	6'x6'	VIDEO-THERMAL	PRESENCE	128-227	FLASH	NONE				
D2B	6'x6'	VIDEO-THERMAL	PRESENCE	128-215		SEE TECH NOTE				
D2C	6'x6'	VIDEO-THERMAL	PRESENCE	128-202						
D4	10'x34'	VIDEO-360°	PRESENCE	128-203						
D4A	10'x33'	VIDEO-360°	PRESENCE	128-236						
				128-218						
				128-221						

CONSTRUCTION NOTES

ALL TRAFFIC SIGNAL EQUIPMENT IS EXISTING EXCEPT AS NOTED.

INSTALL NEW PEDESTAL FOUNDATIONS, PEDESTALS, COUNTDOWN PEDESTRIAN INDICATIONS, APS PEDESTRIAN PUSH BUTTONS AND SIGNS.

THE LOCATION OF TRAFFIC SIGNAL FOUNDATIONS WHEN IN OR ADJACENT TO SIDEWALKS SHALL BE VERIFIED PRIOR TO INSTALLATION TO PROVIDE A FREE PATH OF NOT LESS THAN 4 FEET. IF A MINIMUM 4 FOOT FREE PATH IS UNAVAILABLE NOTIFY THE ENGINEER AND CONTACT THE DIVISION OF TRAFFIC ENGINEERING.

STATE FORCES TO STAKE ALL R.O.W. PRIOR TO EXCAVATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING PRIOR TO INSTALLATION.

INSTALL PEDESTAL FOUNDATIONS ADJACENT TO LANDING AREAS.

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISION.

(H) INSTALL TYPE 6 CONCRETE SIDEWALK RAMP.

(I) INSTALL TYPE 15 CONCRETE SIDEWALK RAMP.

(J) INSTALL TYPE 19 CONCRETE SIDEWALK RAMP.

(V) INSTALL TYPE 16 CONCRETE SIDEWALK RAMP.

(K) INSTALL TYPE 2 CONCRETE SIDEWALK RAMP.

(L) INSTALL SIDEWALK AND MATCH TO EXISTING PAVER.

MODIFY EXISTING CONTROLLER TO ACCOMMODATE CHANGES. SUPPLY 5 COPIES OF REVISED CABINET WIRING DIAGRAMS.

(W) INSTALL 30" X 30" HANDHOLE. ALL OTHERS TYPE II.

(M) TRIM TREE BRANCHES TO PROVIDE A CLEAR LINE OF SIGHT FOR VIDEO DETECTION. THIS WORK TO BE PAID FOR UNDER ITEM #0952001A - SELECTIVE CLEARING AND THINNING.

INSTALL A TOGGLE BOLT WITH A WASHER TO EFFECTIVELY SEAL EACH HOLE LEFT IN THE SPAN POLE WHERE ANY TRAFFIC SIGNAL EQUIPMENT HAS BEEN REMOVED.

(O) INSTALL LIGHT STANDARD FOUNDATION ADJACENT TO SIDEWALK.

(P) VIDEO DETECTION BY USE OF VIDEO-360° CAMERA CO-MOUNTED WITH VIDEO-THERMAL CAMERA ON SPAN POLE ID #128-210-A.

(Q) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON LIGHT STANDARD (15' BRACKET 30' MOUNTING HEIGHT).

VIDEO DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE CONTROLLER CABINET.

COORDINATE THIS REVISION WITH CONNECTICUT D.O.T. SIGNAL LAB CONTACT MR. DONALD ASSARD (860) 258-0346 OR MR. MARK ZAMPINI (860) 258-0349 AT LEAST 45 DAYS PRIOR TO REVISION.

(R) REPLACE EXISTING HANDHOLE WITH TYPE I CONCRETE HANDHOLE. EXTEND EXISTING CONDUITS INTO NEW HANDHOLE.

COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES.

CLEAN EXISTING CONDUIT WHERE REQUIRED TO BE PAID UNDER ITEM NO. 1008908A.

CLEAN EXISTING HANDHOLE WHERE REQUIRED TO BE PAID UNDER ITEM NO. 1010060A.

ALL PEDESTALS AND PEDESTRIAN SIGNAL EQUIPMENT TO BE PAINTED DARK GREEN ACCORDING TO THE SPECIAL PROVISIONS.

CONTRACTOR TO :

ERADICATE 21' OF WHITE EDGE LINE ON NORTH LEG OF ROUTE 10 / 202 (HOPMEADOW ST)

ERADICATE CROSSWALK ON WILCOX ST, LIBRARY LN, AND SOUTH LEG OF ROUTE 10 / 202 (HOPMEADOW ST).

ERADICATE EXISTING STOP BAR ON NORTH LEG OF ROUTE 10 / 202 (HOPMEADOW ST)

ERADICATE 11' OF DOUBLE YELLOW CENTERLINE ON NORTH LEG OF ROUTE 10 / 202 (HOPMEADOW ST)

INSTALL STOP BAR ON NORTH LEG OF ROUTE 10 / 202 (HOPMEADOW ST).

REFRESH STOP BAR ON WILCOX ST, LIBRARY LN, AND SOUTH LEG OF ROUTE 10 / 202 (HOPMEADOW ST).

INSTALL BAR TYPE CROSSWALKS AS SHOWN.

SIGN LEGEND:

(A) RELOCATE EXISTING NO PARKING SIGN TO PROPOSED STOP BAR LOCATION

(B) EXISTING SPAN MOUNTED 31-0823 (NO TURN ON RED)

(C) EXISTING 31-0830 (NO TURN ON RED)

NOTES :

STATE TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON U.S. ROUTE 10/202 AND ALL STOP BARS

TOWN TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON LIBRARY LANE AND WILCOX STREET.

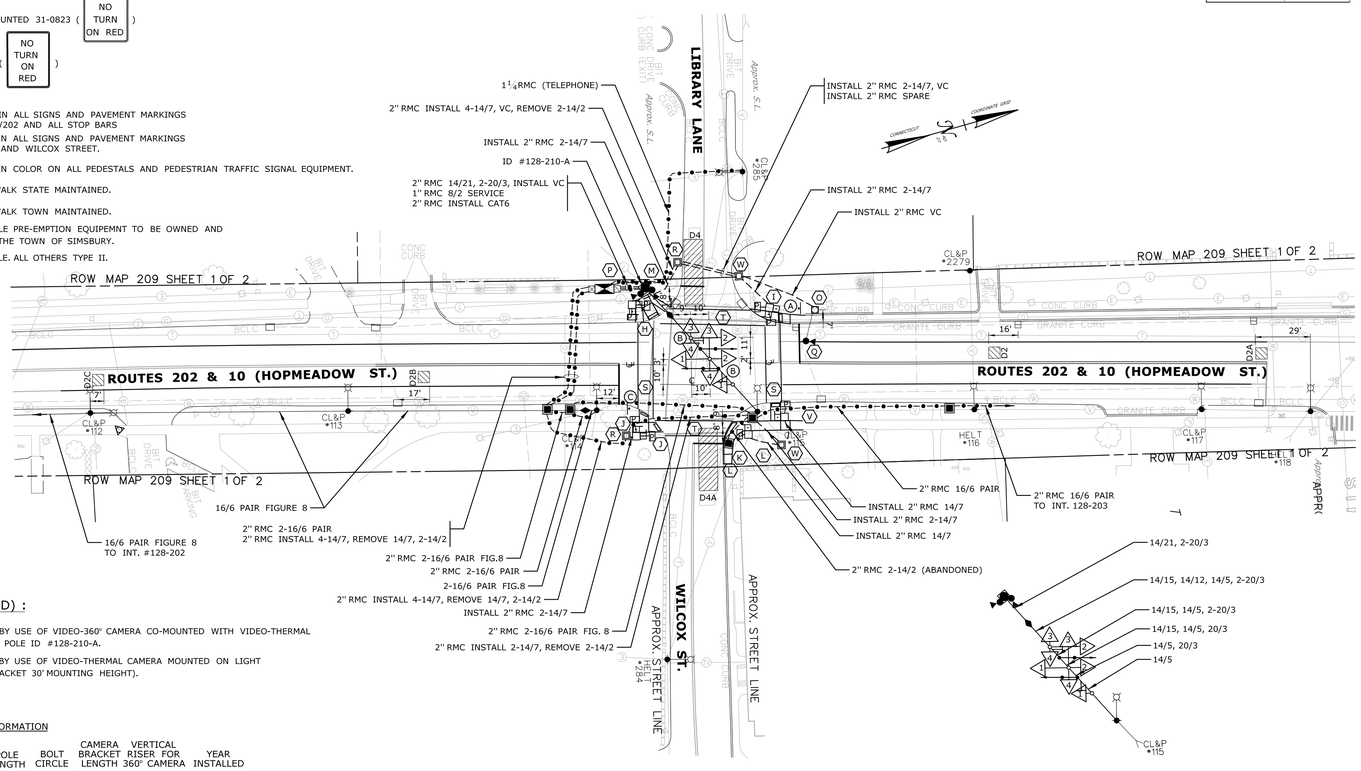
TOWN TO MAINTAIN COLOR ON ALL PEDESTALS AND PEDESTRIAN TRAFFIC SIGNAL EQUIPMENT.

(S) BAR TYPE CROSSWALK STATE MAINTAINED.

(T) BAR TYPE CROSSWALK TOWN MAINTAINED.

EMERGENCY VEHICLE PRE-EMPTION EQUIPEMNT TO BE OWNED AND MAINTAINED BY THE TOWN OF SIMSBURY.

(W) 30" X 30" HANDHOLE. ALL OTHERS TYPE II.



NOTES (CONT'D) :

(P) VIDEO DETECTION BY USE OF VIDEO-360° CAMERA CO-MOUNTED WITH VIDEO-THERMAL CAMERA ON SPAN POLE ID #128-210-A.

(Q) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON LIGHT STANDARD (15' BRACKET 30' MOUNTING HEIGHT).

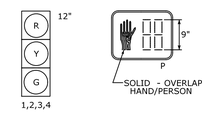
SPAN POLE INFORMATION

ID #	POLE LENGTH	BOLT CIRCLE	CAMERA BRACKET LENGTH	VERTICAL RISER FOR 360° CAMERA	YEAR INSTALLED
128-210-A	30'	24"	N/A	3'	2004

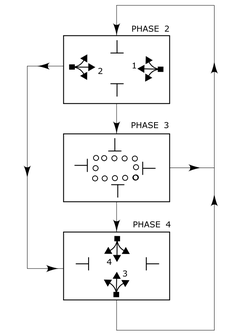
PRE-EMPTION SETTINGS

	PRE-EMPT 1
PRIORITY	NO
DET. LOCK	YES
DELAY	0
ALT. MIN. GRN	5
ALT. YELLOW	PARENT
ALT. RED	PARENT
ALT. PED. CLR.	11
HOLD GREEN	15
HOLD YELLOW	4.1
HOLD RED	1.9
HOLD PHASE	2
EXIT PHASE	4
EXIT CALL	NONE

SIGNAL FACES



ALL SIGNAL FACES HAVE LED LAMPS.



NO.	DATE	REVISION DESCRIPTION

LEGEND:
R, Y, G RED, YEL, GRN
◄R RED ARROW
◄Y YELLOW ARROW
◄— GREEN ARROW
WØ WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

VC VIDEO CAMERA CABLE
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSCEIVER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

DATE PLOTTED : 1/6/2020 \\DOT-SDCENG07V\CTDOT_Projects$\0174-0418-0419\Traffic\Signals\TR_MSH_TCS_128_210_XXXpending.dgn

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

ROUTES 202 & 10 (HOPMEADOW ST.)
AT LIBRARY LANE AND
WILCOX ST.

SCALE 1" = 40'

	TRAFFIC DESIGN	ELECTRICAL DESIGN
ENGINEER	O. AYE-ADDO	Y. XIAN
DRAWN BY	O. AYE-ADDO	Y. XIAN
CHECKED BY	P. BRAZAITIS	M. JULIANO
SUBMITTED BY	N. FATU	J. KULJIS
APPROVED BY	ERIKA B. LINDEBERG	TRACY L. FOGARTY
APPROVED DATE	12/14/2019	09/30/2019

REV # INTERSECTION # 128-210

ENERGY BY - TOWN | ADDRESS # 575M, 576ML, 580L

MAINT LEVEL: 5 | SERVICE POLE - CL&P 114

UNMETERED SERVICE

TOWN: **SIMSBURY**

DRAWING TITLE: **TRAFFIC CONTROL SIGNAL PLAN**

PROJECT NO. 0174-0418

DRAWING NO. TCS-08

SHEET NO. 03.09

MOVEMENT DIAGRAM

NTOR	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8
		1, 2		3, 4				

FACE #	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	Y				G	Y	R	R	R	R	R	R	R															
2	Y				G	Y	R	R	R	R	R	R	R															
3	R				R	R	R	R	R	R	G	Y	R															
4	R				R	R	R	R	R	R	G	Y	R															
P	OFF				◄ DW ►			WØ	◄ DW ►																			

INTERVALS	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8
MIN GRN		15		9				
WALK			7 (1) ACCESSIBLE PEDESTRIAN SIGNAL					
PED CLR			14 (2)					
VEH EXT		2.5		2.0				
MAX 1		26		15				
MAX 2		45		31				
YELLOW		4.0	4.0	3.3				
RED		1.8	0.0	2.2				
ADD INIT								
MAX INIT			COUNTDOWN PEDESTRIAN SIGNAL					
TBR								
TTR								
MIN GAP								
MODE	OFF	MIN RECALL	NON-LOCK	NON-LOCK	OFF	OFF	OFF	OFF
INIT START		THIS PHASE						

TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY
(1) PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL
(2) COUNTDOWN ONLY DURING FLASHING PEDESTRIAN CHANGE INTERVAL

MANUAL AND INTERVAL ADVANCE TO BE DISCONNECTED DURING PHASE 3 PEDESTRIAN CHANGE INTERVAL.

OFFICE RECORD

REV # TIR # N/A SM # N/A SIGNAL REVISED:
REPLACED TRAFFIC SIGNAL EQUIPMENT UNDER PROJECT NO. 0174-0418

DETECTORS

IDENT	SIZE (WXL)	TYPE	MODE
D2	6' X 6'	VIDEO THERMAL	PRESENCE
D2A	6' X 6'	VIDEO THERMAL	PRESENCE
D2B	6' X 6'	VIDEO THERMAL	PRESENCE
D2C	6' X 6'	VIDEO THERMAL	PRESENCE
D4	SEE PLAN	VIDEO 360	8" DELAY
D4A	SEE PLAN	VIDEO 360	8" DELAY

SYSTEM LOC
MASTER

COORDINATION TYPE: NONE

PROGRAM FUNCTION	TIME	DAYS	CYCLE	OFFSET SEC	OFFSET %
FLASH	NONE				
MAX 1	ALL OTHER TIMES				
MAX 2	1500-1800	M-F			

CONSTRUCTION NOTES

ALL TRAFFIC SIGNAL EQUIPMENT IS NEW.

STATE FORCES TO STAKE ALL R.O.W. PRIOR TO EXCAVATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING PRIOR TO INSTALLATION.

THE LOCATION OF TRAFFIC SIGNAL FOUNDATIONS WHEN IN OR ADJACENT TO SIDEWALKS SHALL BE VERIFIED PRIOR TO INSTALLATION TO PROVIDE A FREE PATH OF NOT LESS THAN 4 FEET. IF A MINIMUM 4 FOOT FREE PATH IS UNAVAILABLE NOTIFY THE ENGINEER AND CONTACT THE DIVISION OF TRAFFIC ENGINEERING.

INSTALL PEDESTAL FOUNDATIONS ADJACENT TO LANDING AREAS.

(P) INSTALL A LIGHT STANDARD FOUNDATION ADJACENT TO WALK AT BACK EDGE.

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISION.

(H) INSTALL TYPE 16 CONCRETE SIDEWALK RAMP.

(I) INSTALL TYPE 12 CONCRETE SIDEWALK RAMP.

(J) INSTALL TYPE 17 CONCRETE SIDEWALK RAMP.

(K) INSTALL 4 FOOT WIDE SIDEWALK AND MATCH TO EXISTING SIDEWALK ON SOUTHEAST CORNER.

(L) INSTALL 4 FOOT WIDE SIDEWALK ON NORTHEAST CORNER.

(M) MATCH SIDEWALK RAMP AND LANDING TO EXISTING PAVED WALKWAY ON NORTHWEST CORNER.

(N) REMOVE CONCRETE SIDEWALK EXTENSION AND ADD BITUMINOUS CONCRETE LIP CURBING. TOP SOIL AND TURF ESTABLISHMENT PAID FOR UNDER ITEM NO. 0944000 & ITEM NO. 0950005

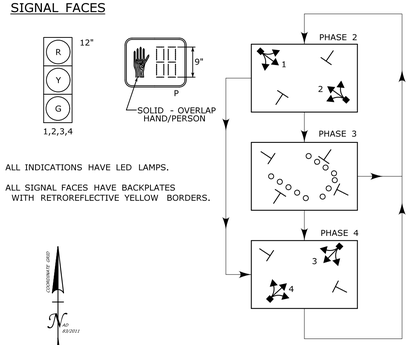
(O) REMOVE BITUMINOUS SIDEWALK ON BOTH SIDES OF RAMP AND LANDING. TOP SOIL AND TURF ESTABLISHMENT PAID FOR UNDER ITEM NO. 0944000 & ITEM NO. 0950005

(P) REMOVE CONCRETE SIDEWALK RAMP.

SIGN LEGEND:

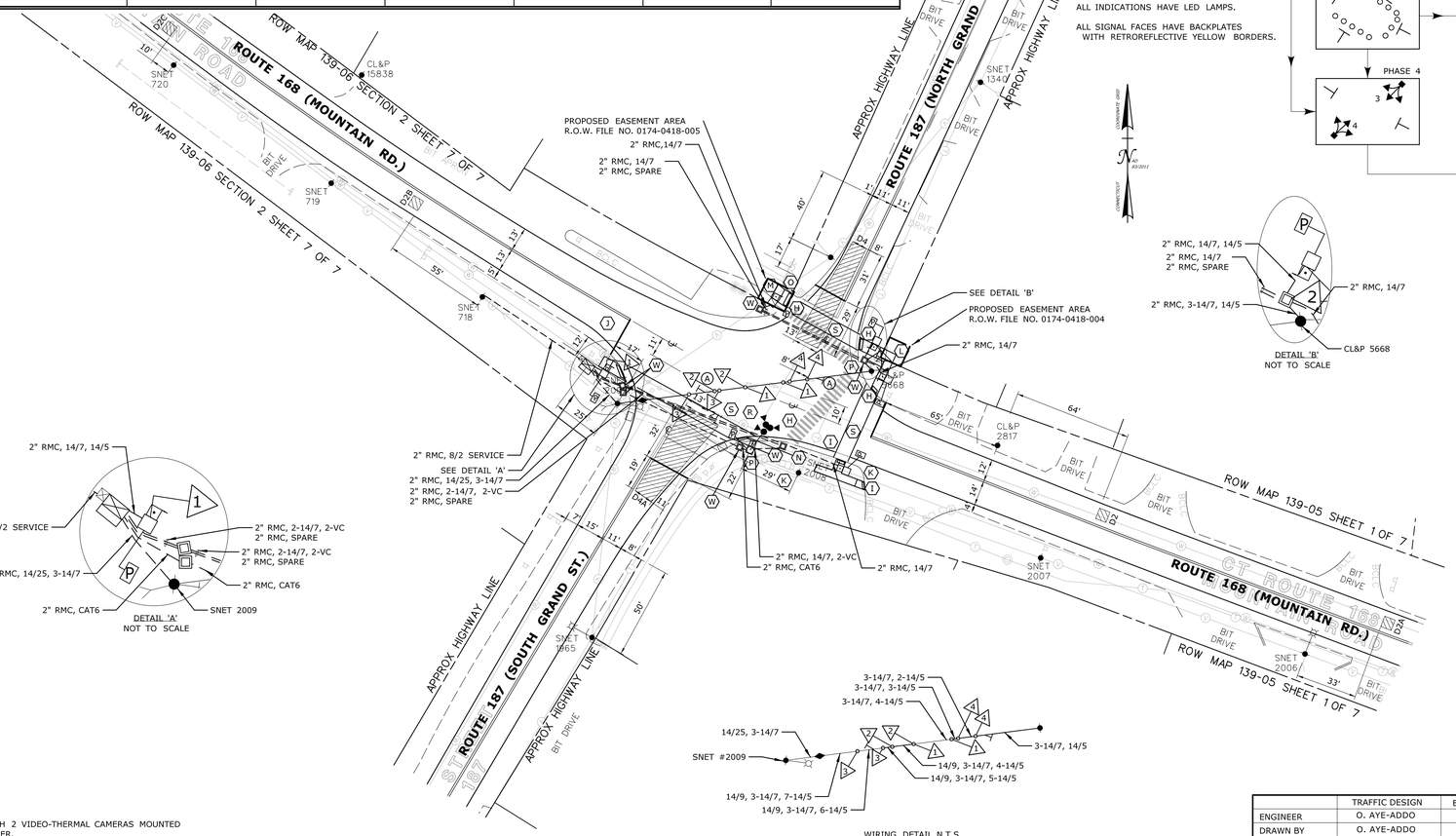
(A) SPAN MOUNT 31-0823 (NO TURN ON RED)

SIGNAL FACES

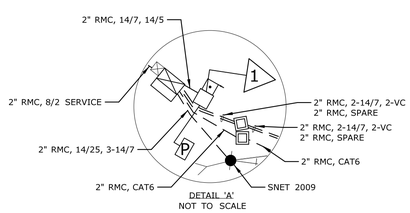


ALL INDICATIONS HAVE LED LAMPS.

ALL SIGNAL FACES HAVE BACKPLATES WITH RETROREFLECTIVE YELLOW BORDERS.



DETAIL 'B'
NOT TO SCALE



DETAIL 'A'
NOT TO SCALE

WIRING DETAIL N.T.S.

PAVEMENT MARKING NOTES:

ERADICATE CROSSWALKS ON ROUTE 168 (MOUNTAIN ROAD) AND ROUTE 187 (NORTH GRAND STREET).

ERADICATE 10 FEET OF 4" DYCL ON ROUTE 187 (NORTH GRAND STREET).

ERADICATE 14 FEET OF 4" DYCL ON ROUTE 187 (SOUTH GRAND STREET).

ERADICATE STOP BARS ON BOTH ROUTE 187 (NORTH/SOUTH GRAND STREET).

INSTALL STOP BARS ON BOTH ROUTE 187 (NORTH/SOUTH GRAND STREET).

INSTALL BAR TYPE CROSSWALKS AS SHOWN.

REFRESH STOP BARS ON BOTH WEST AND EAST LEG OF ROUTE 168 (MOUNTAIN ROAD).

HANDHOLE NOTES:

(W) INSTALL 30" X 30" HANDHOLE. ALL OTHERS TYPE II.

UTILITY NOTES:

INSTALL RISER ON SNET #718, SNET #2009 AND CL&P #5668 UTILITY POLES.

COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES.

SPAN ATTACHMENT ON SNET 2009 AND CL&P 5668 TO HAVE A MINIMUM CLEARANCE OF 12" BELOW SECONDARY & 40" ABOVE HIGHEST COMMUNICATIONS.
ESTIMATED LOAD ON UTILITY POLES: SNET#2009: 4783lbs., CL&P#5668: 4783lbs.

VIDEO DETECTOR NOTES:

(R) VIDEO DETECTION BY USE OF VIDEO-360° AND 2 VIDEO-THERMAL CAMERAS MOUNTED ON A LIGHT STANDARD. VIDEO-360° MOUNTED ON A 3' VERTICAL RISER.
(15' BRACKET, 30' MOUNTING HEIGHT)

VIDEO DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR THEIR DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE CONTROLLER CABINET.

NOTES :

STATE TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON ROUTE 168 AND ROUTE 189.

(S) BAR TYPE CROSSWALK STATE MAINTAINED.

(R) VIDEO DETECTION BY USE OF VIDEO-360° CAMERA CO-MOUNTED WITH 2 VIDEO-THERMAL CAMERAS MOUNTED ON A LIGHT STANDARD. VIDEO-360° MOUNTED ON A 3' VERTICAL RISER.
(15' BRACKET, 30' MOUNTING HEIGHT)

(W) 30" X 30" HANDHOLE. ALL OTHERS TYPE II.

	TRAFFIC DESIGN	ELECTRICAL DESIGN
ENGINEER	O. AYE-ADDO	M. FORTUNA
DRAWN BY	O. AYE-ADDO	M. FORTUNA
CHECKED BY	P. BRAZAITIS	M. JULIANO
SUBMITTED BY	N. FATU	J. KULJIS
APPROVED BY	ERIKA B. LINDEBERG	TRACY L. FOGARTY
APPROVED DATE	12/14/2019	09/30/2019

REV # INTERSECTION #139-208

ENERGY BY - STATE	ADDRESS #
MAINT LEVEL 2	SERVICE POLE - SNET 718
	UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R, Y, G RED, YEL, GRN
R RED ARROW
Y YELLOW ARROW
G GREEN ARROW
WØ WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

VC VIDEO CAMERA CABLE
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSCEIVER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

ROUTE 187 (NORTH GRAND ST.) & ROUTE 187 (SOUTH GRAND ST.) AT ROUTE 168 (MOUNTAIN RD.)

DATE PLOTTED : 1/6/2020 \\DOT-SDCENG07V\CTDOT_Projects$\0174-0418-0419\Traffic\Signals\TR_MSH_TCS_139_208_012pending.dgn

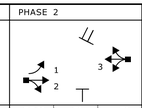
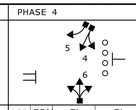
SCALE 1" = 40'

TOWN: **SUFFIELD**

DRAWING TITLE: **TRAFFIC CONTROL SIGNAL PLAN**

PROJECT NO. 0174-0418
DRAWING NO. TCS-09
SHEET NO. 03.10

MOVEMENT DIAGRAM

NTOR	PHASE 1 - PRE-EMPT 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
NONE									

FACE #	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	LPI	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	Y	◄G	◄Y G	G	G	Y	R				R	R	R	R															
2	Y	G	G	G	G	Y	R				R	R	R	R															
3	Y	R	R	R	G	Y	R				R	R	R	R															
4	R	R	R	R	R	R	R				R	G	Y	R															
5	R	R →	R Y►	R	R	R	R				R	G	Y	R															
6	R	R	R	R	R	R	R				R	G	Y	R															
P	OFF	◄			DW		►				WØ	→ ►◄		DW ►															
					◄ YIELD	PT																							

INTERVALS																													
MIN GRN	5				15							8																	
WALK											① 3	4	① ACCESSIBLE PEDESTRIAN SIGNAL																
PED CLR												8	②																
VEH EXT	1				2.5							1.5																	
MAX 1	7				40							16																	
MAX 2	7				40							16																	
YELLOW		3.0				4.0							3.3																
RED			1.0				2.5							1.4															
ADD INIT													COUNTDOWN PEDESTRIAN SIGNAL																
MAX INIT																													
TBR																													
TTR																													
MIN GAP																													
MODE	NON-LOCK				MIN RECALL			OFF			NON-LOCK				OFF			OFF			OFF			OFF			OFF		
INIT START					THIS PHASE																								

DETECTORS

IDENT	SIZE (WXL)	TYPE	MODE
D1	6' X 34'	VIDEO-360	PRESENCE
D2	6' X 6'	VIDEO-THERMAL	PRESENCE
D2A	9'x6'	VIDEO-THERMAL	PRESENCE
D2B	6' X 6'	VIDEO-THERMAL	PRESENCE
D2C	6' X 6'	VIDEO-THERMAL	PRESENCE
D4	6' X 20'	VIDEO-360	DELAY 8"
D4A	6' X 34'	VIDEO-360	PRESENCE
D4B	SEE PLAN	VIDEO-360	DELAY 8"

SYSTEM LOC

MASTER 140-208
140-207
140-206
140-212

COORDINATION TYPE: TBC

PROGRAM			CYCLE	OFFSET	
FUNCTION	TIME	DAYS		SEC	%
FLASH	NONE				
MAX 1	ALL OTHER TIMES				
MAX 2	FUTURE				
PATTERN 1	0530-2100	DAILY	70"	4	6
FREE	2100-0530				

NOTE:

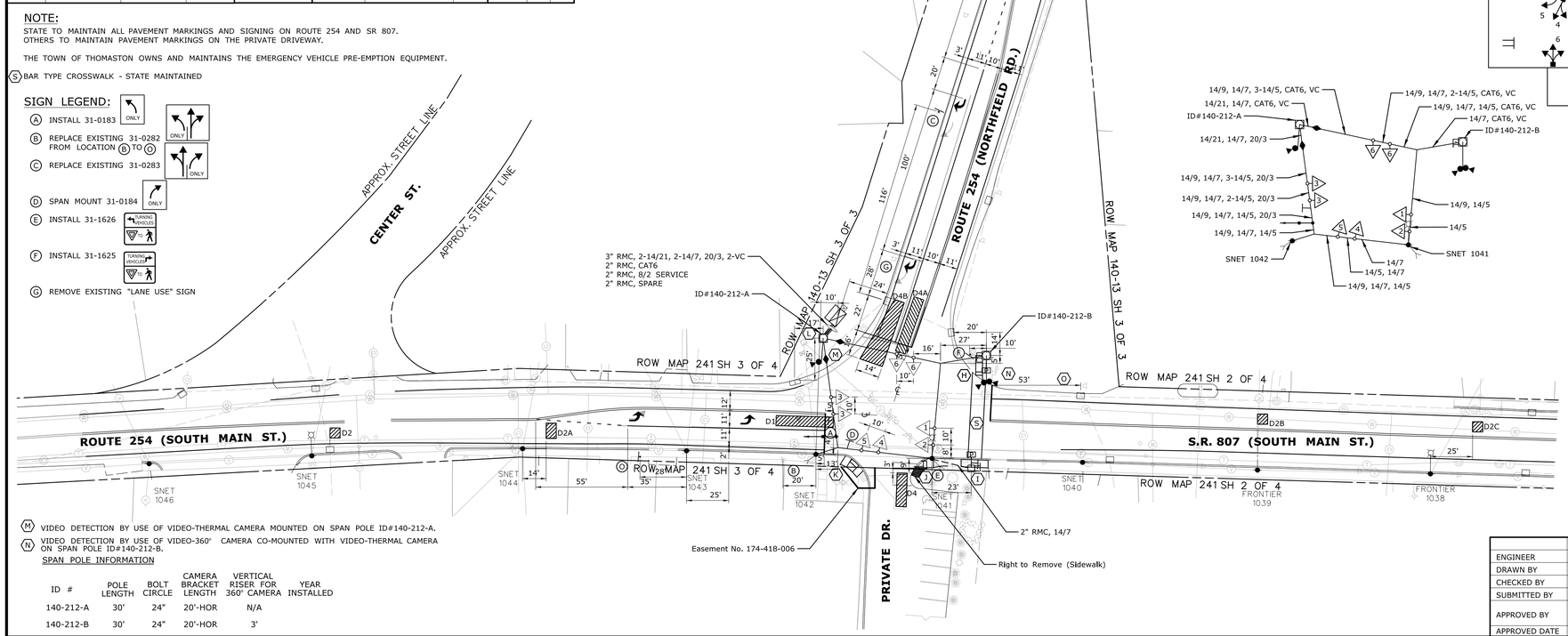
STATE TO MAINTAIN ALL PAVEMENT MARKINGS AND SIGNING ON ROUTE 254 AND SR 807.
OTHERS TO MAINTAIN PAVEMENT MARKINGS ON THE PRIVATE DRIVEWAY.

THE TOWN OF THOMASTON OWNS AND MAINTAINS THE EMERGENCY VEHICLE PRE-EMPTION EQUIPMENT.

(S) BAR TYPE CROSSWALK - STATE MAINTAINED

SIGN LEGEND:

(A) INSTALL 31-0183 ONLY
(B) REPLACE EXISTING 31-0282 FROM LOCATION (B) TO (O) ONLY
(C) REPLACE EXISTING 31-0283 ONLY
(D) SPAN MOUNT 31-0184 ONLY
(E) INSTALL 31-1626 TURNING VEHICLES YIELD TO
(F) INSTALL 31-1625 TURNING VEHICLES YIELD TO
(G) REMOVE EXISTING "LANE USE" SIGN



(M) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON SPAN POLE ID#140-212-A.
(N) VIDEO DETECTION BY USE OF VIDEO-360° CAMERA CO-MOUNTED WITH VIDEO-THERMAL CAMERA ON SPAN POLE ID#140-212-B.

SPAN POLE INFORMATION

ID #	POLE LENGTH	BOLT CIRCLE	CAMERA BRACKET LENGTH	VERTICAL RISER FOR 360° CAMERA	YEAR INSTALLED
140-212-A	30'	24"	20'-HOR	N/A	
140-212-B	30'	24"	20'-HOR	3'	

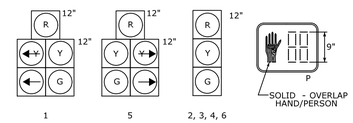
TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY
(1) PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL
(2) COUTDOWN ONLY DURING PEDESTRIAN CHANGE INTERVAL.
(3) CONCURRENT PED PHASE ONLY COMES IN WHEN ACTUATED BY PUSH BUTTON.

OFFICE RECORD

REV # TIR # N/A SM # N/A SIGNAL REVISED:
REPLACE TRAFFIC SIGNAL EQUIPMENT UNDER PROJECT 0174-0418

SIGNAL FACES

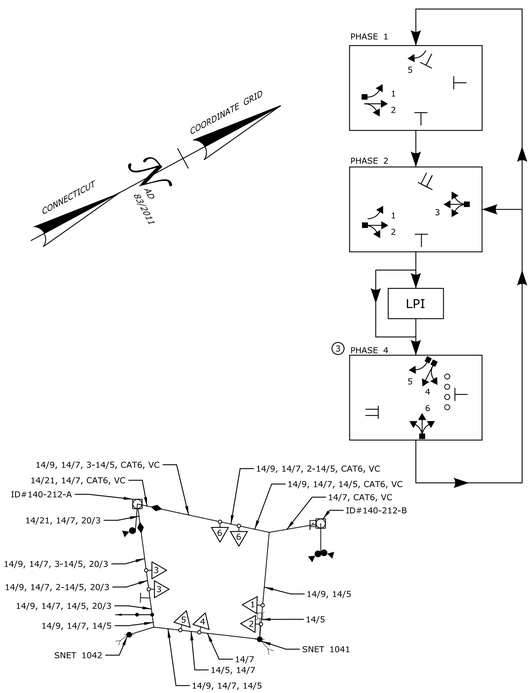


ALL INDICATIONS HAVE LED LAMPS.

ALL SIGNAL FACES HAVE BACKPLATES WITH RETROREFLECTIVE YELLOW BORDERS.

PRE-EMPTION SETTINGS

	PRE-EMPT 1
PRIORITY	NO
DET. LOCK	YES
DELAY	0
ALT. MIN. GRN	5
ALT. YELLOW	PARENT
ALT. RED	PARENT
ALT. PED. CLR.	NO
HOLD GREEN	15
HOLD YELLOW	3.0
HOLD RED	1.0
HOLD PHASE	1
EXIT PHASE	2
EXIT CALL	NONE



CONSTRUCTION NOTES:

ALL TRAFFIC SIGNAL EQUIPMENT IS NEW EXCEPT AS NOTED.

STATE FORCES TO STAKE ALL R.O.W. PRIOR TO EXCAVATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING PRIOR TO INSTALLATION.

THE LOCATION OF TRAFFIC SIGNAL FOUNDATIONS WHEN IN OR ADJACENT TO SIDEWALKS SHALL BE VERIFIED PRIOR TO INSTALLATION TO PROVIDE A FREE PATH OF NOT LESS THAN 4 FEET. IF A MINIMUM 4 FOOT FREE PATH IS UNAVAILABLE NOTIFY THE ENGINEER AND CONTACT THE DIVISION OF TRAFFIC ENGINEERING.

INSTALL PEDESTAL FOUNDATIONS ADJACENT TO LANDING AREAS.

(H) INSTALL TYPE 17 CONCRETE SIDEWALK RAMP. EXTEND LANDING AREA TO BE WITHIN 10" OF PUSHBUTTON, AS NECESSARY.

(I) INSTALL TYPE 9 CONCRETE SIDEWALK RAMP.

(J) INSTALL TYPE 15 CONCRETE SIDEWALK RAMP. REMOVE EXISTING SIDEWALK RAMP AS INDICATED BY HATCHED AREA ON PLAN. FURNISH TOPSOIL, EROSION CONTROL MATTING, TURF ESTABLISHMENT AND 6 L.F. OF BITUMINOUS CONCRETE CURBING FOR THE DISTURBED AREA.

(K) INSTALL TYPE 2 CONCRETE SIDEWALK RAMP.

(L) TRIM TREE AND REMOVE BRUSH FOR INSTALLATION OF SPAN POLE AND VIDEO DETECTION. WORK TO BE PAID UNDER ITEM NO. 0952001A - SELECTIVE CLEARING AND THINNING.

(O) TRIM TREE BRANCHES AS NEEDED TO PROVIDE A CLEAR LINE OF SIGHT FOR VIDEO DETECTION. WORK TO BE PAID UNDER ITEM NO. 0952001A - SELECTIVE CLEARING AND THINNING.

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISION.

PAVEMENT MARKING NOTES:

ERADICATE PRIVATE DRIVE STOP BAR.

INSTALL STOP BARS AS SHOWN.

INSTALL 117 FOOT LANE LINE ON ROUTE 254 NORTHBOUND APPROACH.

INSTALL 55 FEET DOTTED EXTENSION LINES (2' LINE - 4' SPACE) ON ROUTE 254 NORTHBOUND APPROACH.

ERADICATE LEFT TURN PAVEMENT MARKING ARROWS ON ROUTE 254 NORTHBOUND APPROACH.

INSTALL LEFT TURN PAVEMENT MARKING ARROWS ON ROUTE 254 NORTHBOUND APPROACH.

INSTALL CROSSWALK ON S.R 807 (SOUTH MAIN STREET) EAST LEG.

VIDEO DETECTOR NOTES:

(M) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON SPAN POLE ID#140-212-A.

(N) VIDEO DETECTION BY USE OF VIDEO-360° CAMERA CO-MOUNTED WITH VIDEO-THERMAL CAMERA ON SPAN POLE ID#140-212-B.

VIDEO DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE CONTROLLER CABINET.

UTILITY NOTES:

INSTALL RISER ON SNET #1041 UTILITY POLE.

COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 - LEGAL RELAIONS AND RESPONSIBILITIES.

ESTIMATED LOAD ON UTILITY POLES: SNET#1041: 5453lbs., SNET#1042: 2372lbs.,

SPAN ATTACHMENT ON SNET 1041 AND SNET 1042 TO HAVE A MINIMUM CLEARANCE OF 12" BELOW SECONDARY & 40" ABOVE HIGHEST COMMUNICATIONS.

SPAN POLES WITH 2 SPAN ATTACHMENTS TO HAVE 2 SPAN CLAMPS.

EMERGENCY PRE-EMPTION NOTES

RELOCATE AUXILIARY EQUIPMENT CABINET FROM EXISTING CONTROLLER CABINET TO LEFT SIDE OF NEW CONTROLLER CABINET. RELCATE EXISTING EMERGENCY PRE-EMPION DETECTORS TO NEW SPAN. TEST PRE-EMPION SYSTEM PRIOR TO AND AFTER RELOCATION IN ACCORDANCE WITH SPECIFICATIONS.

CONTRACTOR TO INSTALL A SWITCH IN THE SIGNAL CABINET TO EFFECTIVELY DISCONNECT THE PRE-EMPTION EQUIPMENT FROM THE TRAFFIC SIGNAL CONTROLLER.

PRE-EMPTION DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE AUXILIARY EQUIPMENT CABINET.

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R, Y, G RED, YEL, GRN
RED ARROW
YELLOW ARROW
GREEN ARROW
WØ WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

VC VIDEO CAMERA CABLE
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSCEIVER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

DATE PLOTTED : 1/6/2020 \\DOT-SDCENG07V\CTDOT_Projects\0174-0418-0419\Traffic\Signals\TR_MSH_TCS_140_212_XXXpending.dgn

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

S.R. 807 (SOUTH MAIN ST.) AT ROUTE 254 (SOUTH MAIN ST. & NORTHFIELD RD.) & PRIVATE DR.

SCALE 1" = 40'

	TRAFFIC DESIGN	ELECTRICAL DESIGN
ENGINEER	R. BEAUDOIN	M. FORTUNA
DRAWN BY	R. BEAUDOIN	M. FORTUNA
CHECKED BY	P. BRAZAITIS	M. JULIANO
SUBMITTED BY	N. FATU	J. KULJIS
APPROVED BY	ERIKA B. LINDEBERG	TRACY L. FOGARTY
APPROVED DATE	12/6/2019	09/30/2019

REV # INTERSECTION # 140-212

ENERGY BY - STATE | ADDRESS #
MAINT LEVEL 5 | SERVICE POLE - SNET 1042
UNMETERED SERVICE

TOWN: **THOMASTON**

DRAWING TITLE: **TRAFFIC CONTROL SIGNAL PLAN**

PROJECT NO. 0174-0418
DRAWING NO. TCS-10
SHEET NO. 03.11

MOVEMENT DIAGRAM

NTOR	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
		1 2		4 3					

FACE #	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	Y				G	Y	R				R	R	R	R											
2	Y				G	Y	R				R	R	R	R											
3	R				R	R	R				R	G	Y	R											
4	R				R	R	R				R	G	Y	R											
P	OFF				◄ DW ►						WØ	►	◄ DW ►												

INTERVALS	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
MIN GRN		15		9					
WALK			①	4 3 ①					
PED CLR				8 ② ACCESSIBLE PEDESTRIAN SIGNAL					
VEH EXT		2.5		3.5					
MAX 1		36		38					
MAX 2		36		38					
YELLOW		4.8		3.7					
RED		2.5		1.0					
ADD INIT				COUNTDOWN PEDESTRIAN SIGNAL					
MAX INIT									
TBR									
TTR									
MIN GAP									
MODE	OFF	MIN RECALL	OFF	NON-LOCK	OFF	OFF	OFF	OFF	OFF
INIT START		THIS PHASE							

TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY
① PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL
② COUNTDOWN ONLY DURING FLASHING PEDESTRIAN CHANGE INTERVAL
③ CONCURRENT PED PHASE ONLY COMES IN WHEN ACTUATED BY PUSHBUTTON

OFFICE RECORD
REV # TIR # N/A SM # N/A SIGNAL REVISED:
REPLACED TRAFFIC SIGNAL EQUIPMENT UNDER PROJECT NO. 0174-0418

DETECTORS				SYSTEM LOC
IDENT	SIZE (WXL)	TYPE	MODE	MASTER
D2	6' X 6'	VIDEO-THERMAL	PRESENCE	
D2A	6' X 6'	VIDEO-THERMAL	PRESENCE	
D2B	6' X 6'	VIDEO-THERMAL	PRESENCE	
D2C	6' X 6'	VIDEO-THERMAL	PRESENCE	
D4A,D4B	SEE PLAN	VIDEO 360	PRESENCE	

COORDINATION TYPE: NONE

PROGRAM FUNCTION	TIME	DAYS	CYCLE	OFFSET SEC	OFFSET %
FLASH	NONE				
MAX 1	ALL OTHER TIME				
MAX 2	FUTURE				

CONSTRUCTION NOTES

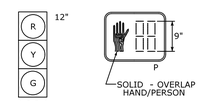
ALL TRAFFIC SIGNAL EQUIPMENT IS NEW.

STATE FORCES TO STAKE ALL R.O.W. PRIOR TO EXCAVATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING PRIOR TO INSTALLATION.

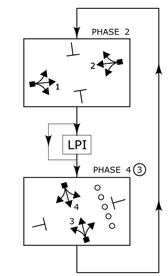
INSTALL PEDESTAL FOUNDATIONS ADJACENT TO LANDING AREAS.

SIGNAL FACES



ALL INDICATIONS HAVE LED LAMPS.

ALL SIGNAL FACES HAVE BACKPLATES WITH RETROREFLECTIVE YELLOW BORDERS.



Ⓙ INSTALL TYPE 17 CONCRETE RAMP

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISION.

Ⓕ VIDEO DETECTION BY USE VIDEO-THERMAL CAMERA MOUNTED ON SPAN POLE ID #149-201-A.

Ⓖ VIDEO DETECTION BY USE OF VIDEO-360 CAMERA CO-MOUNTED WITH VIDEO-THERMAL CAMERA ON SPAN POLE ID #149-201-B.

VIDEO DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE CONTROLLER CABINET.

Ⓘ TRIM TREE BRANCHES TO PROVIDE A CLEAR LINE OF SIGHT FOR THERMAL CAMERA. THIS WORK TO BE PAID FOR UNDER ITEM 0952001 - SELECTIVE CLEARING AND THINNING.

Ⓦ INSTALL 30" X 30" HANDHOLE.

COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES.

CONTRACTOR TO :

ERADICATE CROSSWALK ON ROUTE 341 & 45 (LAKE ROAD).

ERADICATE 8' OF DYCL ON ROUTE 45 (CORNWALL ROAD).

ERADICATE 8' OF WHITE EDGE LINE ON ROUTE 45 (CORNWALL ROAD).

ERADICATE STOP BAR ON ROUTE 45 (CORNWALL ROAD).

INSTALL BAR TYPE CROSSWALK AS SHOWN.

INSTALL 50' OF DYCL ON SACKETT HILL ROAD.

INSTALL STOP BAR ON ROUTE 45 (CORNWALL ROAD) AS SHOWN.

REFRESH STOP BARS ON SACKETT HILL ROAD, ROUTE 341, AND ROUTE 45 / 341 (KENT ROAD).

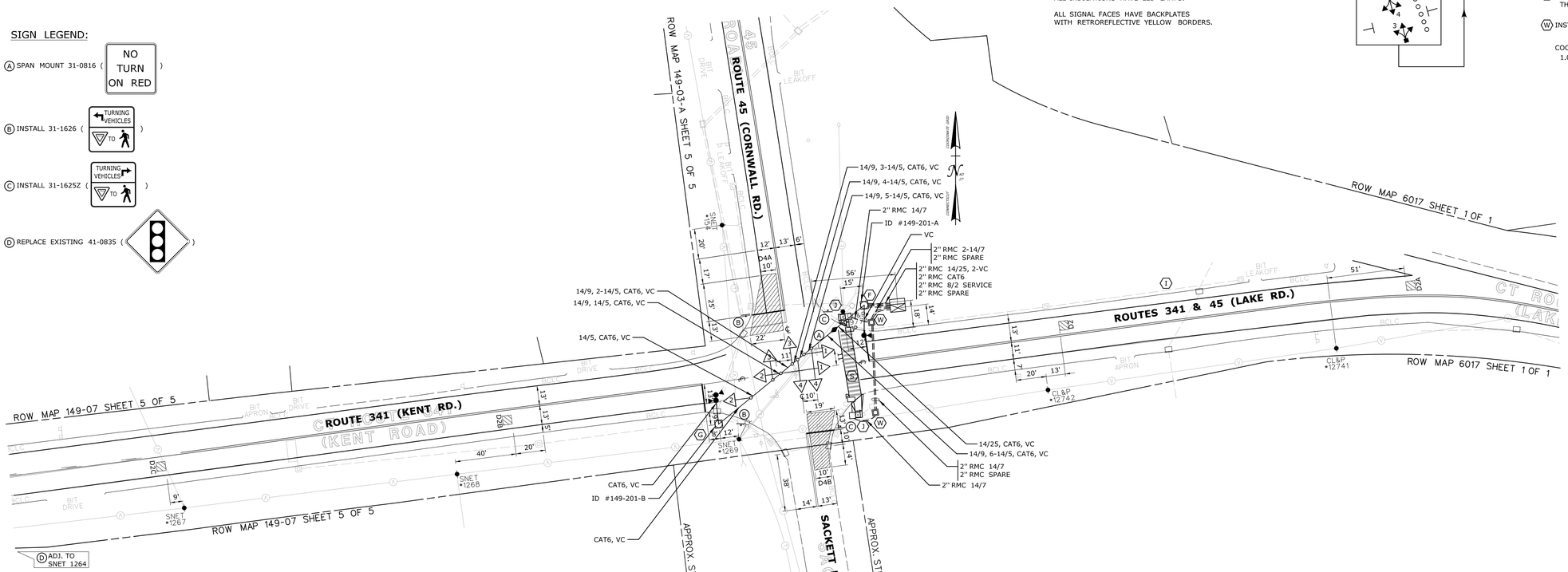
SIGN LEGEND:

Ⓐ SPAN MOUNT 31-0816 (NO TURN ON RED)

Ⓑ INSTALL 31-1626 (TURNING VEHICLES TO ☞)

Ⓒ INSTALL 31-1625Z (TURNING VEHICLES TO ☞)

Ⓓ REPLACE EXISTING 41-0835 ( )



NOTES :

STATE TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON ROUTE 45 AND ROUTE 341 AND ALL STOP BARS.

TOWN TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON SACKETT HILL ROAD.

Ⓢ BAR TYPE CROSSWALK STATE MAINTAINED.

Ⓕ VIDEO DETECTION BY USE VIDEO-THERMAL CAMERA MOUNTED ON SPAN POLE ID #149-201-A.

Ⓖ VIDEO DETECTION BY USE OF VIDEO-360 CAMERA CO-MOUNTED WITH VIDEO-THERMAL CAMERA ON SPAN POLE ID #149-201-B.

Ⓦ 30" X 30" HANDHOLE.

SPAN POLE INFORMATION

ID #	POLE LENGTH	BOLT CIRCLE	CAMERA BRACKET LENGTH	VERTICAL RISER FOR 360° CAMERA	YEAR INSTALLED
ID #149-201-A	34'	24"	HOR.-20'	N/A	
ID #149-201-B	28'	24"	HOR.-20'	3'	

	TRAFFIC DESIGN	ELECTRICAL DESIGN
ENGINEER	O. AYE-ADDO	Y. XIAN
DRAWN BY	O. AYE-ADDO	Y. XIAN
CHECKED BY	P. BRAZAITIS	M. JULIANO
SUBMITTED BY	N. FATU	J. KULJIS
APPROVED BY	ERIKA B. LINDEBERG	TRACY L. FOGARTY
APPROVED DATE	12/14/2019	09/30/2019

REV # INTERSECTION # 149-201

ENERGY BY - STATE	ADDRESS #
MAINT LEVEL 5	SERVICE POLE - SNET 1269
	UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R, Y, G RED, YEL, GRN
◄R RED ARROW
◄Y YELLOW ARROW
◄— GREEN ARROW
WØ WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

○ PROPOSED WOOD SPAN POLE
● EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

VC VIDEO CAMERA CABLE
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSCEIVER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

DATE PLOTTED : 1/6/2020 \\DOT-SDCENG07V\CTDOT_Projects$\0174-0418-0419\Traffic\Signals\TR_MSH_TCS_149_201_XXXpending.dgn

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

ROUTE 341 (KENT RD.) AT
ROUTES 341 & 45 (LAKE RD.)
AND ROUTE 45 (CORNWALL RD.)

SCALE 1" = 40'

TOWN: **WARREN**

DRAWING TITLE: **TRAFFIC CONTROL SIGNAL PLAN**

PROJECT NO. 0174-0418
DRAWING NO. TCS-11
SHEET NO. 03.12

MOVEMENT DIAGRAM

NTOR	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
		1 2		3 4	5 6				

FACE #	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	LPI	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	Y				G	Y	R				R	R	R	R	R	R	R												
2	Y				G	Y	R				R	R	R	R	R	R	R												
3	R				R	R	R				← G	Y	R	R	R	R	R												
4	R				R	R	R				G	Y	R	R	R	R	R												
5	R				R	R	R				R	R	R	R	← G	Y	R												
6	R				R	R	R				R	R	R	R	G	Y	R												
P	OFF				← DW →						← DW →			WØ	← DW →														

INTERVALS	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
MIN GRN		15		9	9				
WALK					① 3 4 ①				
PED CLR					7 ②				
VEH EXT		2.5		1	1				
MAX 1		35		14	10				
MAX 2		35		14	10				
YELLOW		4.7		3.0	3.0				
RED		2.3		1.0	1.0				
ADD INIT									
MAX INIT									
TBR									
TTR									
MIN GAP									
MODE	OFF	MIN RECALL	OFF	NON-LOCK	NON-LOCK	OFF	OFF	OFF	OFF
INIT START		THIS PHASE							

ACCESSIBLE PEDESTRIAN SIGNAL

COUNTDOWN PEDESTRIAN SIGNAL

DETECTORS			
IDENT	SIZE (WXL)	TYPE	MODE
D2	6' X 6'	VID-THRM	PRESENCE
D2A	6' X 6'	VID-THRM	PRESENCE
D2B	6' X 6'	VID-THRM	PRESENCE
D2C	6' X 6'	VID-THRM	PRESENCE
D4	SEE PLAN	VIDEO-360°	PRESENCE
D5	SEE PLAN	VIDEO-360°	PRESENCE

SYSTEM LOC MASTER

COORDINATION TYPE: NONE

PROGRAM FUNCTION	TIME	DAYS
FLASH	NONE	
MAX 1	ALL OTHER TIMES	
MAX 2	FUTURE	

CYCLE	OFFSET SEC	OFFSET %

TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY

① PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL

② COUNTDOWN ONLY DURING PEDESTRIAN CHANGE INTERVAL.

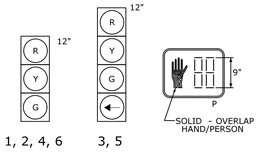
③ CONCURRENT PED PHASE ONLY COMES IN WHEN ACTUATED BY PUSHBUTTON.

OFFICE RECORD

REV # TIR # N/A SM # N/A SIGNAL REVISED:

REPLACE TRAFFIC SIGNAL EQUIPMENT UNDER PROJECT 0174-0418

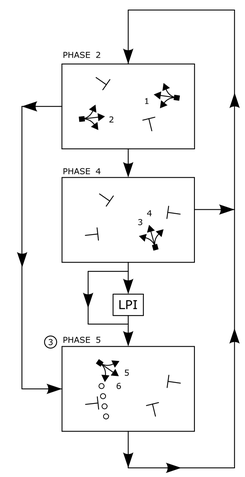
SIGNAL FACES



ALL INDICATIONS HAVE LED LAMPS.

ALL SIGNAL FACES HAVE BACKPLATES WITH RETROREFLECTIVE YELLOW BORDERS.

SIGNAL HEAD 6 ON PEDESTAL HAS LOUVERS CUTOFF R.



CONSTRUCTION NOTES:

ALL TRAFFIC SIGNAL EQUIPMENT IS NEW EXCEPT AS NOTED.

STATE FORCES TO STAKE ALL R.O.W. PRIOR TO EXCAVATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING PRIOR TO INSTALLATION.

INSTALL PEDESTAL FOUNDATIONS ADJACENT TO LANDING AREAS.

(E) INSTALL TYPE 17 CONCRETE SIDEWALK RAMP. EXTEND LANDING AREA TO BE WITHIN 10" OF PUSHBUTTON, AS NECESSARY.

(F) TRIM TREE BRANCHES TO PROVIDE A CLEAR LINE OF SIGHT FOR VIDEO DETECTION. WORK TO BE PAID UNDER ITEM NO. 0952001A - SELECTIVE CLEARING AND THINNING.

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISION.

(W) INSTALL 30" X 30" HANDHOLE. ALL OTHERS TYPE II.

(G) VIDEO DETECTION BY USE OF VIDEO-360° CAMERA MOUNTED ON SPAN POLE ID #150-203-A

(H) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON LIGHT STANDARD (15' BRACKET 30' MOUNTING HEIGHT).

(I) INSTALL PEDESTAL FOUNDATION ADJACENT TO AND WITHIN R.O.W.

VIDEO DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE CONTROLLER CABINET.

COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES.

ESTIMATED LOAD ON UTILITY POLES: NEW POLE: 4448 lbs.

SPAN ATTACHMENT ON NEW 45' MIDSPAN POLE TO HAVE A MINIMUM CLEARANCE OF 12" BELOW SECONDARY & 40" ABOVE HIGHEST COMMUNICATIONS.

PAVEMENT MARKING NOTES:

ERADICATE STOP BAR ON U.S. 202 EASTBOUND AND WESTBOUND

ERADICATE DYCL ON U.S. 202 EASTBOUND, FROM OLD STOP BAR TO NEW STOP BAR.

ERADICATE DOTTED DYCL THRU THE INTERSECTION, BETWEEN THE TWO EXISTING STOP BARS, ON U.S. 202.

INSTALL STOP BARS AS SHOWN.

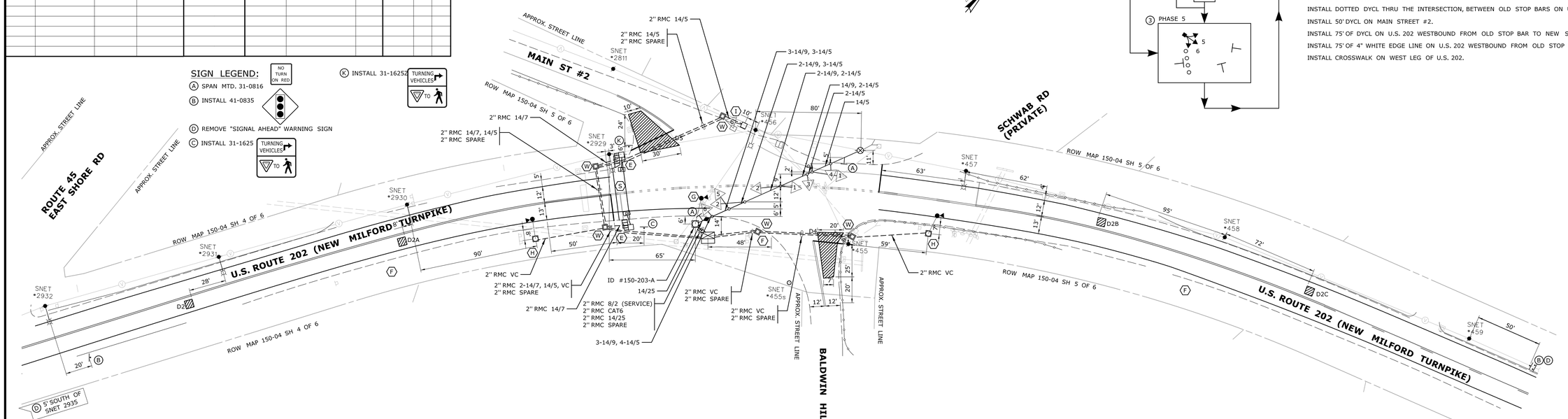
INSTALL DOTTED DYCL THRU THE INTERSECTION, BETWEEN OLD STOP BARS ON U.S. 202.

INSTALL 50' DYCL ON MAIN STREET #2.

INSTALL 75' OF DYCL ON U.S. 202 WESTBOUND FROM OLD STOP BAR TO NEW STOP BAR.

INSTALL 75' OF 4" WHITE EDGE LINE ON U.S. 202 WESTBOUND FROM OLD STOP BAR TO NEW STOP BAR.

INSTALL CROSSWALK ON WEST LEG OF U.S. 202.



NOTES:

STATE TO MAINTAIN ALL PAVEMENT MARKINGS AND SIGNING ON U.S. 202 AND MAINTAIN ALL STOP BARS.

TOWN TO MAINTAIN ALL OTHER SIGNS AND PAVEMENT MARKINGS ON BALDWIN HILL ROAD AND MAIN STREET #2

(S) BAR TYPE CROSSWALK - STATE MAINTAINED

(W) 30" X 30" HANDHOLE. ALL OTHERS TYPE II.

(G) VIDEO DETECTION BY USE OF VIDEO-360° CAMERA MOUNTED ON SPAN POLE ID #150-203-A

(H) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON LIGHT STANDARD (15' BRACKET 30' MOUNTING HEIGHT).

SPAN POLE INFORMATION

ID #	POLE LENGTH	BOLT CIRCLE	CAMERA BRACKET LENGTH	VERTICAL RISER FOR 360° CAMERA	YEAR INSTALLED
150-203-A	34'	24"	HORI. 20'	3'	

	TRAFFIC DESIGN	ELECTRICAL DESIGN
ENGINEER	R. BEAUDOIN	Y. XIAN
DRAWN BY	R. BEAUDOIN	Y. XIAN
CHECKED BY	P. BRAZAITIS	M. JULIANO
SUBMITTED BY	N. FATU	J. KULJIS
APPROVED BY	ERIKA B. LINDEBERG	TRACY L. FOGARTY
APPROVED DATE	12/06/2019	09/30/2019

REV # INTERSECTION # 150-203

ENERGY BY TOWN	ADDRESS #
MAINT LEVEL 5	SERVICE POLE - SNET 2929
	UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R, Y, G RED, YEL, GRN
R RED ARROW
Y YELLOW ARROW
G GREEN ARROW
WØ WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

VC VIDEO CAMERA CABLE
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSCEIVER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

U.S. ROUTE 202 (NEW MILFORD TURNPIKE) AT BALDWIN HILL ROAD AND MAIN STREET #2

TOWN: WASHINGTON

DRAWING TITLE: TRAFFIC CONTROL SIGNAL PLAN

PROJECT NO. 0174-0418

DRAWING NO. TCS-12

SHEET NO. 03.13

DATE PLOTTED : 1/6/2020 \\DOT-SDCENG07V\CTDOT_Projects\0174-0418-0419\Traffic\Signals\TR_MSH_TCS_150_203_XXX.dgn

SCALE 1" = 40'

R1 - SERIES

R1-1

LEGEND - WHITE
BACKGROUND - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
1.85	18	31-0532	1	.080
5.19	30	31-0552	1	.080
7.98	36	31-0553	1	.080
13.3	48	31-0557	2	.100

R1-2

LEGEND - RED
BACKGROUND -WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
0.97	18	31-0520	1	.080
3.90	36	31-0523	1	.080
6.77	48	31-0522	2	.100
10.83	60	31-0528	2	.100

R1-3P

LEGEND - WHITE
BACKGROUND - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
0.75	18X6	31-0508		.080

R2 - SERIES

R2-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	31-5505	1	.080
7.50	30X36	31-5504	1	.080
12.00	36X48	31-5506	2	.100
20.00	48X60	31-5507	2	.100

R2-4a

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
32	48X96	31-5510	2	.125

R3 - SERIES

R3-1

LEGEND - BLACK
BACKGROUND - WHITE
CIRCLE & DIAGONAL - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	31-1604	1	.080
9.00	36X36	31-1627	2	.080

R3-2

LEGEND - BLACK
BACKGROUND - WHITE
CIRCLE & DIAGONAL - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	31-1603	1	.080
9.00	36X36	31-1629	2	.080

R3-3

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	31-1648	1	.080
9.00	36X36	31-1647	2	.080

R3-4

LEGEND - BLACK
BACKGROUND - WHITE
CIRCLE & DIAGONAL - RED

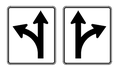
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	31-1622	1	.080
9.00	36X36	31-1632	2	.080

R3-5

31-0183 31-0184

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	30X36		1	.080

R3-6



31-0157 31-0158

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	30X36		1	.080

R3-7

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30X30	31-0117	1	.080
9.00	36X36	31-0120	2	.080

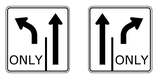
R3-7

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30X30	31-0118	1	.080
9.00	36X36	31-0123	2	.080

R3-8

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	30X36	31-0175	1	.080

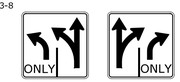
R3-8



31-0222 31-0223

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30X30		1	.080

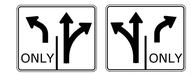
R3-8



31-0262 31-0261

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30X30		1	.080

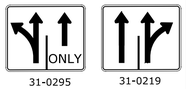
R3-8



31-0282 31-0283

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	36X30		2	.080

R3-8



31-0295 31-0219

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	36X30		2	.080

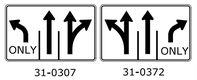
R3-8

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
8.75	42X30	31-0279	2	.100

R3-8b

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
10.00	48X30	31-0302	2	.100

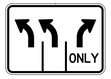
R3-8b



31-0307 31-0372

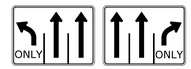
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
10.00	48X30		2	.100

R3-8b



AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
8.75	42X30	31-0334	2	.100

R3-8b



31-0370 31-0371

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
8.75	42X30		2	.100

R4 - SERIES

R4-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	31-1502	1	.080

R4-16

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
20.00	48X60	31-1574	2	.100

R4-3

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	31-1562	1	.080
20.00	48X60	31-1564	2	.100

R4-7

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	31-1526	1	.080
12.00	36X48	31-1536	2	.100
20.00	48X60	31-1546	2	.100

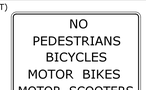
R5 - SERIES

R5-1

LEGEND - WHITE
BACKGROUND - WHITE
CIRCLE - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30X30	31-1119	1	.080
9.00	36X36	31-1120	2	.080
16.00	48X48	31-1121	2	.100

R5-10a(CT)



AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36X36	31-1775	2	.100

R5-1a

LEGEND - WHITE
BACKGROUND - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.00	36X24	31-1122	2	.080
8.75	42X30	31-1123	2	.100

R5-11

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	30X24	31-1790	1	.080
20.00	48X36	31-1792	2	.100

R5-10a(CT)

LEGEND - BLACK
TOP SECTION BACKGROUND - YELLOW
BOTTON SECTION BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
32.50	60X78	31-1719	2	.125

R5-10c

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.00	24X12	31-1774	1	.080

R6 - SERIES

R6-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
3.00	36X12	31-1188	1	.080
6.75	54X18	31-1189	2	.100

R6-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
3.00	36X12	31-1177	1	.080
6.75	54X18	31-1178	2	.100

R7 - SERIES

R7-1

(R) (L)
(D)

LEGEND - RED
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
1.50	12X18	31-0630	1	.080

R7-2a

VARIABLE TIMES
(R) (L)
(D)

LEGEND - RED
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
1.50	12X18	31-0603	1	.080

R8 - SERIES

R8-7

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
12.00	48X36	31-0670	2	.100

R9 - SERIES

R9-3

LEGEND - BLACK
BACKGROUND - WHITE
CIRCLE & DIAGONAL - RED

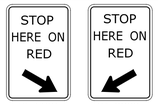
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.25	18X18	31-1705	1	.080
4.00	24x24	31-1769	1	.080
6.25	30x30	31-1770	1	.080

R9-3a

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
1.50	12X18	31-1702	1	.080

R10 - SERIES

R10-6



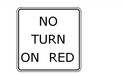
31-0801 31-0802

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.00	24X36		1	.080

R10-7

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	31-0806	1	.080

R10-11b



AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36X36	31-0816	2	.080

R10-11c(CT)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	30X36	31-0847	1	.080

R10-10L

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	30X36	31-0852	1	.080

R10-11a

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	30X36	31-0830	1	.080
12.00	36X48	31-0819	2	.100

R11 - SERIES

R11-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	31-1915	1	.080
20.00	48X60	31-1918	2	.100

RETROREFLECTIVE STRIP

LEGEND - N/A
BACKGROUND - RED

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
1.00	4X48	31-5003	1	.080
2.00	4X72	31-5004	1	.080

R10-15L

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.3	30X30	31-1626	1	.080

R10-15R

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.3	30X30	31-1625	1	.080

NOTES:

1. THE LEGEND "O.S.T.A." SHALL APPEAR ON ALL R- SERIES SIGNS EXCEPT WHEN SUFFIXED WITH THE LETTER "Z".
2. FOR SPECIFIC SIGN DESIGN CONTACT CONN. D.O.T., DIVISION OF TRAFFIC ENGINEERING. FOR BOLT HOLE PATTERN REFER TO FHWA PUBLICATION "STANDARD HIGHWAY SIGNS". SIGNS OF DIFFERENT DIMENSIONS TO BE ERECTED ON THE SAME POSTS, OR SPAN/MAST ARM MOUNTED, MAY REQUIRE SPECIAL BOLT HOLE PATTERNS.
3. POSTS - SEE STANDARD SHEET TR-1208_02 - "METAL SIGN POSTS AND SIGN MOUNTING DETAILS."
4. POSTS SHALL BE 4 LBS./FT.
5. SIGNS SHALL BE FABRICATED OF ONE CONTINUOUS PIECE OF SHEET ALUMINUM. SPLICING OF SHEET ALUMINUM WILL NOT BE ACCEPTED.
6. FOR OVERHEAD MOUNTED SIGNS, SEE STANDARD SHEET TR-1114_01 - "BONDING AND UTILITY POLE ATTACHMENT DETAILS, SIGN HANGER, "Y" CLAMP DETAIL."

COLORS:

BACKGROUND - WHITE - EXCEPT AS NOTED.
LEGEND - BLACK - EXCEPT AS NOTED.
ALL SIGNS TO USE TYPE IX RETROREFLECTIVE SHEETING.

THIS SIGN ADDED FOR THIS PROJECT ONLY.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
3	12-2018	REVISED RETROREFLECTIVE STRIPS	TR-GS_01
2	10-2018	REVISED R5-11 SIGNS PER MUTCD	TR-GS_01
1	6-2018	NEW SHEET ISSUED	TR-GS_01

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 1/3/2020

DESIGNER/DRAFTER: P.BRAZAITIS
CHECKED BY: N.FATU

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\Signals\CTDOT_TRAFFIC_GS.dgn

SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY: DATE:

PROJECT TITLE: INSTALLATION AND REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4

TOWN: VARIOUS

DRAWING TITLE: SIGN FACE SHEET ALUMINUM (X) R-SERIES TYPICAL SIGN DETAILS

PROJECT NO. 174-418
DRAWING NO. TR-GS_01
SHEET NO. 03.14

S - SERIES

S1-1

LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.75	36	41-2112	1	.080
12.00	48	41-2113	2	.100

W1 - SERIES

W1-1L

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4006	1	.080
9.00	36	41-4031	1	.080

W1-1R

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4005	1	.080
9.00	36	41-4160	1	.080

W1-6

LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW
(LEFT OR RIGHT)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
8.00	48X24	41-4223	2	.100
12.50	60X30	41-4262	2	.100

W1-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4029	1	.080
9.00	36	41-4169	1	.080

W1-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4168	1	.080
9.00	36	41-4032	1	.080

W1-7

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
8.00	48X24	41-4207	2	.100
12.50	60X30	41-4208	2	.100

W1-8

LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW
(LEFT OR RIGHT)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
3.00	18X24	41-3951	1	.080
7.50	30X36	41-4211	1	.080
12.00	36X48	41-4260	2	.080

W2 - SERIES

W2-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4226	1	.080
9.00	36	41-4236	1	.080

W2-2

(LEFT OR RIGHT)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4225	1	.080
9.00	36	41-4235	1	.080

W3 - SERIES

W3-1

OCTAGON - RED

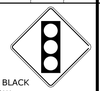
AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-0501	1	.080
16.00	48	41-0503	2	.100

W3-2

TRIANGLE - RED & WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-0504	1	.080
16.00	48	41-0506	2	.100

W3-3



SYMBOL & LEGEND - BLACK
BACKGROUND - YELLOW
TOP CIRCLE - RED
BOTTOM CIRCLE - GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-0835	1	.080
16.00	48	41-0848	2	.100

W/ FLASHERS

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
25.00	60	41-0534	2	.125

W4 - SERIES

W4-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4448	1	.080
16.00	48	41-4452	2	.100

W4-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4449	1	.080
16.00	48	41-4459	2	.100

W4-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4442	1	.080
16.00	48	41-4446	2	.100

W4-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4441	1	.080
16.00	48	41-4447	2	.100

W4-3

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4468	1	.080
16.00	48	41-4435	2	.100

W4-3

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4470	1	.080
16.00	48	41-4434	2	.100

W5 - SERIES

W5-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4402	1	.080
16.00	48	41-4404	2	.100

W6 - SERIES

W6-1

W6-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4335	1	.080
16.00	48	41-4330	2	.100

W6-3

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4329	1	.080
16.00	48	41-4331	2	.100

W7 - SERIES

W7-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4506	1	.080
9.00	36	41-4530	1	.080
16.00	48	41-4508	2	.100

W8 - SERIES

W8-5

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4519	1	.080
9.00	36	41-4520	1	.080
16.00	48	41-4521	2	.100

W9 - SERIES

W9-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4443	1	.080
16.00	48	41-4444	2	.100

W9-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4440	1	.080
16.00	48	41-4445	2	.100

W9-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4454	1	.080
16.00	48	41-4456	2	.100

W9-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4453	1	.080
16.00	48	41-4455	2	.100

W11 - SERIES

W11-2

LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4829	1	.080
9.00	36	41-4830	1	.080

W11-8

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4680	1	.080
9.00	36	41-4681	1	.080

W12 - SERIES

W12-1

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.25	30	41-4213	1	.080
9.00	36	41-4215	1	.080

W12-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
9.00	36	41-4706	1	.080
16.00	48	41-4708	2	.100

LEFT
LANE

(SUBPLATE)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	30X24	41-4721		.080

RIGHT
LANE

(SUBPLATE)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	30X24	41-4722		.080

W13 - SERIES

W13-1P

(SUBPLATE)

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.25	18X18	41-5566		.080
4.00	24X24	41-5567		.080
6.25	30X30	41-5574		.080

W13-2

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
12.00	36X48	41-5596	2	.100

W13-3

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
12.00	36X48	41-5581	2	.100

W16 - SERIES

W16-2aP

(SUBPLATE)
USE AT ADVANCE SIGN LOCATION
LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.00	24X12	41-6140		.080

W16-7PL

(SUBPLATE)
USE AT CROSSWALK
LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.00	24X12	41-2617		.080

W16-7PR

(SUBPLATE)
USE AT CROSSWALK
LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.00	24X12	41-2619		.080

W16-9P

(SUBPLATE)
USE AT ADVANCE SIGN LOCATION
LEGEND - BLACK
BACKGROUND - FLUORESCENT YELLOW GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.00	24X12	41-6126		.080
3.75	30X18	41-6137		.080

W16-2aP

41-6130 000 FT
41-6134 0000 FT

(SUBPLATE)
USE AT ADVANCE SIGN LOCATION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.00	24X12	41-6130		.080
3.75	30X18	41-6134		.080

RETROREFLECTIVE STRIP

LEGEND - N/A
BACKGROUND - FLUORESCENT YELLOW GREEN

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.00	4X72	41-5010	1	.080

LEGEND - N/A
BACKGROUND - FLUORESCENT YELLOW

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
1.50	4X48	41-5001	1	.080
2.00	4X72	41-5006	1	.080

NOTES:

1. FOR SPECIFIC SIGN DESIGN CONTACT CONN. D.O.T., DIVISION OF TRAFFIC ENGINEERING. FOR BOLT HOLE PATTERN REFER TO FHWA PUBLICATION "STANDARD HIGHWAY SIGNS". SIGNS OF DIFFERENT DIMENSIONS TO BE ERECTED ON THE SAME POSTS, OR SPAN/MAST ARM MOUNTED, MAY REQUIRE SPECIAL BOLT HOLE PATTERNS.
2. POSTS - SEE STANDARD SHEET TR-1208_02 "METAL SIGN POSTS AND SIGN MOUNTING DETAILS."
3. POSTS SHALL BE 4 LBS./FT.
4. SIGNS SHALL BE FABRICATED OF ONE CONTINUOUS PIECE OF SHEET ALUMINUM. SPLICING OF SHEET ALUMINUM WILL NOT BE ACCEPTED.
5. FLUORESCENT YELLOW RETROREFLECTIVE STRIPS SHALL BE INSTALLED ON ALL SIGN POSTS FOR W1-6 AND W1-8 SIGNS. FLUORESCENT YELLOW GREEN RETROREFLECTIVE STRIPS SHALL BE INSTALLED ON ALL SIGN POSTS FOR S1-1 AND W11-2 SIGNS LOCATED AT CROSSINGS. RETROREFLECTIVE STRIPS SHOULD NOT BE INSTALLED ON ADVANCE CROSSING WARNING SIGNS. SEE STANDARD SHEET TR-1208_01 "SIGN PLACEMENT AND RETROREFLECTIVE STRIP DETAILS" FOR RETROREFLECTIVE STRIP DETAILS AND INSTALLATION.

COLORS:

BACKGROUND - YELLOW - EXCEPT AS NOTED.
LEGEND - BLACK - EXCEPT AS NOTED.
ALL SIGNS TO USE TYPE IX RETROREFLECTIVE SHEETING.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
1	6-2018	NEW SHEET ISSUED	TR-GS_02

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 1/3/2020

DESIGNER/DRAFTER: **P.BRAZAITIS**
CHECKED BY: **N.FATU**

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\Signals\CTDOT_TRAFFIC_GS.dgn

SIGNATURE/ BLOCK: **OFFICE OF ENGINEERING**
APPROVED BY: DATE:

PROJECT TITLE: **INSTALLATION AND REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4**

TOWN: **VARIOUS**

DRAWING TITLE: **SIGN FACE SHEET ALUMINUM** (Y)
S&W SERIES TYPICAL SIGN DETAILS

PROJECT NO. **174-418**
DRAWING NO. **TR-GS_02**
SHEET NO. **03.15**

D1 - SERIES

D1-1

51-5202 Variable →

D1-2

51-5203 Variable Variable →

VARIABLE LEGEND & ARROW DIRECTION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	60X12	51-5202	2	.100
10.00	60X24	51-5203	2	.100

D3 - SERIES

D3-1

Variable Road Name

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.00	48X18	51-2004	2	.100
7.50	60X18	51-2001	2	.100
9.00	72X18	51-2002	2	.125
10.50	84X18	51-2003	2	.125

D4 - SERIES

D4-2

PARK - RIDE →

VARIABLE ARROW DIRECTION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	51-6006	1	.080
7.50	30X36	51-6007	1	.080

D4-2

EXIT 000

1 2

PARK - RIDE

VARIABLE EXIT NUMBER

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
38.50	84X66	51-2082	3	.125

D4-2

PARK - RIDE →

VARIABLE ARROW DIRECTION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	51-6033	1	.080
7.50	30X36	51-6034	1	.080

D4-2

EXIT 000

1 2

PARK - RIDE

VARIABLE EXIT NUMBER

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
38.50	84X66	51-2095	3	.125

D4-2

PARK - RIDE →

VARIABLE ARROW DIRECTION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
5.00	24X30	51-6044	1	.080
7.50	30X36	51-6045	1	.080

D4-2

EXIT 000

2

PARK - RIDE

VARIABLE EXIT NUMBER

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
38.50	84X66	51-2097	3	.125

D4-2

EXIT 000

2

PARK - RIDE

VARIABLE EXIT NUMBER

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
38.50	84X66	51-2099	3	.125

D5 - SERIES

D5-2b

REST AREA ↗

LEGEND - WHITE
BACKGROUND - BLUE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
42.25	78X78	51-6901	2	.125

SERVICE PLAZA ↗

LEGEND - WHITE
BACKGROUND - BLUE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
39.00	72X78	51-6158	2	.125

D7 - SERIES

D-7

51-6802 Variable →

51-6803 Variable Variable →

W or W/O ARROW
VARIABLE ARROW DIRECTION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.17	60X12	51-6802	2	.100
8.33	60X24	51-6803	2	.100

D9 - SERIES

D9-2

H

** FOR ARROW SUBPLATES
USE M5 & M6 SERIES

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	51-6788	1	.080

51-6705 DIESEL →
51-6706 FOOD →
51-6708 GAS →
51-6709 LODGING →

VARIABLE ARROW DIRECTION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.25	36X9		2	.080

51-5405 STATE POLICE →
51-6714 CAMPING →
51-6960 INFO →

VARIABLE ARROW DIRECTION

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.25	36X9		2	.080

D10 - SERIES

D10-4

NORTH
ROUTE 95
MILE 000

CARDINAL DIRECTION,
SHIELD AND NUMERALS ARE VARIABLE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
6.75	18X54	51-5307	1	.080

RECREATIONAL RS- SERIES

RS-054

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	51-6873	1	.080

RS-117

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	51-7872	1	.080

51-2705 ↑

51-2706 L or R →

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
2.19	21X15	51-2705		.080
2.19	21X15	51-2706		.080

E5 - SERIES

E5-1a

EXIT ↗

FOR USE AT "NO NUMBERED" EXITS

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
30.00	72X60	51-6150	2	.125

E5-1a

EXIT ↖ 00 — 51-6124

EXIT 00 ↗ — 51-6125

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
32.50	78X60		2	.125

E5-1a

EXIT ↖ 00 B — 51-6126

EXIT 00 B ↗ — 51-6127

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
45.00	108X60		2	.125

E5-1a

EXIT ↖ 00 A-B — 51-6128

EXIT 00 A-B ↗ — 51-6129

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
57.50	138X60		2	.125

I - SERIES

I-3

(Variable) River

VARIABLE: RIVER, BROOK, CREEK

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
1.50	18X12	51-2009	1	.080
4.50	36X18	51-2007	2	.080
12.00	48X36	51-2051	2	.100

(Town Name)
(INCORPORATED OR SETTLED) (DATE)
TOWN LINE

VARIABLE: TOWN / CITY

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	40X27	51-2020	2	.080

I-7

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	51-1448	1	.080
6.25	30X30	51-1445	1	.080

PARKING AREA PATROLLED

LEGEND - BLACK
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
7.50	36X30	51-5937	2	.080

INCIDENT MANAGEMENT

N 0.0 — N 0 0 .0 — N 0 0 0 .0

CARDINAL DIRECTION VARIABLE - N, S, E, W

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
3.00	12X36	51-5103	1	.080
4.00	12X48	51-5104	1	.080
5.00	12X60	51-5105	1	.080

SYMBOL - WHITE
BACKGROUND - BLUE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
3.00	18X24	51-5943	1	.080

51-6504 Variable

51-6505 Variable Variable

TO BE SUBMOUNTED W/ 51-5943
LEGEND - WHITE
BACKGROUND - BLUE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
0.75	18X6	51-6504		.080
1.50	18X12	51-6505		.080

M1 - SERIES

M1-1

INTERSTATE CONNECTICUT 00 — 51-6662, 51-6666, VARIABLE: 1 or 2 DIGITS

INTERSTATE CONNECTICUT 000 — 51-6663, 51-6667, VARIABLE: 3 DIGITS

LEGEND - WHITE
BACKGROUND - RED & BLUE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
3.20	24X24	51-6662	1	.080
3.99	30X24	51-6663	1	.080
7.20	36X36	51-6666	2	.080
8.99	45X36	51-6667	2	.100

M1-4

00 — 51-6615, 51-6635, VARIABLE: 1 or 2 DIGITS

000 — 51-6644, 51-6645, VARIABLE: 3 DIGITS

LEGEND - BLACK
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	51-6615	1	.080
5.00	30X24	51-6644	1	.080
9.00	36X36	51-6635	2	.080
11.25	45X36	51-6645	2	.100

M1-5

00 — 51-6616, 51-6636, VARIABLE: 1 or 2 DIGITS

000 — 51-6647, 51-6646, VARIABLE: 3 DIGITS

LEGEND - BLACK
BACKGROUND - WHITE

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	POSTS	ALUM. THK.
4.00	24X24	51-6616	1	.080
5.00	30X24	51-6647	1	.080
9.00	36X36	51-6636	2	.080
11.25	45X36	51-6646	2	.100

M2 - SERIES

M2-1

JCT

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.19	21X15	51-6640	(1)	.080
2.19	21X15	51-6610	(2)	.080

M3 - SERIES

M3-1

NORTH

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.00	24X12	51-6651	(1)	.080
2.00	24X12	51-6611	(2)	.080
4.50	36X18	51-6655	(1)	.080
4.50	36X18	51-6625	(2)	.080

M3-4

WEST

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.00	24X12	51-6654	(1)	.080
2.00	24X12	51-6614	(2)	.080
4.50	36X18	51-6658	(1)	.080
4.50	36X18	51-6628	(2)	.080

M3-2

EAST

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.00	24X12	51-6652	(1)	.080
2.00	24X12	51-6612	(2)	.080
4.50	36X18	51-6656	(1)	.080
4.50	36X18	51-6626	(2)	.080

M3-3

SOUTH

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.00	24X12	51-6653	(1)	.080
2.00	24X12	51-6613	(2)	.080
4.50	36X18	51-6657	(1)	.080
4.50	36X18	51-6627	(2)	.080

M4 - SERIES

M4-5

TO

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.00	24X12	51-6650	(1)	.080
2.00	24X12	51-6620	(2)	.080

M5 - SERIES

M5-1

51-2690, 51-2630 ↰ — 51-2691, 51-2631 ↱

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.19	21X15	51-2690	(1)	.080
2.19	21X15	51-2691	(1)	.080
2.19	21X15	51-2630	(2)	.080
2.19	21X15	51-2631	(2)	.080

M5-2

51-2692, 51-2632 ↖ — 51-2693, 51-2633 ↗

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.19	21X15	51-2692	(1)	.080
2.19	21X15	51-2693	(1)	.080
2.19	21X15	51-2632	(2)	.080
2.19	21X15	51-2633	(2)	.080

M6 - SERIES

M6-1

→ L or R

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.19	21X15	51-2686	(1)	.080
2.19	21X15	51-2626	(2)	.080

M6-4

↔

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.19	21X15	51-2697	(1)	.080
2.19	21X15	51-2627	(2)	.080

M6-2

51-2688, 51-2629 ↖ — 51-2689, 51-2628, 51-2609 ↗

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.19	21X15	51-2688	(1)	.080
2.19	21X15	51-2689	(1)	.080
2.19	21X15	51-2628	(2)	.080
2.19	21X15	51-2629	(2)	.080
4.38	30X21	51-2609	(2)	.080

M6-3

↑

AREA (SQ. FT)	SIZE (INCHES)	CONN. D.O.T. #	COLOR	ALUM. THK.
2.19	21X15	51-2685	(1)	.080
2.19	21X15	51-2625	(2)	.080

NOTES:

1. FOR SPECIFIC SIGN DESIGN CONTACT CONN. D.O.T., DIVISION OF TRAFFIC ENGINEERING. FOR BOLT HOLE PATTERN REFER TO FHWA PUBLICATION "STANDARD HIGHWAY SIGNS". SIGNS OF DIFFERENT DIMENSIONS TO BE ERECTED ON THE SAME POSTS, OR SPAN/MAST ARM MOUNTED, MAY REQUIRE SPECIAL BOLT HOLE PATTERNS.
2. POSTS - SEE STANDARD SHEET TR-1208_02 - "METAL SIGN POSTS AND SIGN MOUNTING DETAILS."
3. POSTS SHALL BE 4 LBS./FT.
4. SIGNS SHALL BE FABRICATED OF ONE CONTINUOUS PIECE OF SHEET ALUMINUM. SPLICING OF SHEET ALUMINUM WILL NOT BE ACCEPTED.

COLORS:

D - SERIES
D1, 2, 3, 4, 10 BACKGROUND-GREEN, LEGEND-WHITE
D7, RS BACKGROUND-BROWN, LEGEND-WHITE
D9 BACKGROUND-BLUE, LEGEND-WHITE
ALL OTHER D-SERIES AS NOTED

E - SERIES
BACKGROUND-GREEN, LEGEND-WHITE

I - SERIES
BACKGROUND-GREEN, LEGEND-WHITE
(EXCEPT AS NOTED)

M2 - M6 SERIES
(1) BACKGROUND-BLUE, LEGEND-WHITE
(2) BACKGROUND-WHITE, LEGEND-BLACK

ALL COLORS SHALL BE TYPE IX RETROREFLECTIVE WITH THE EXCEPTION OF BROWN WHICH SHALL BE TYPE IV RETROREFLECTIVE AND BLACK WHICH SHALL BE OPAQUE.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
3	12-2018	REVISED D2, D3, D9, AND I SIGN SERIES.	TR-GS_03
2	7-2018	REVISED BROWN COLOR TO TYPE IV.	TR-GS_03
1	6-2018	NEW SHEET ISSUED	TR-GS_03

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 1/3/2020

DESIGNER/DRAFTER: P.BRAZAITIS
CHECKED BY: N.FATU

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\Signals\CTDOT_TRAFFIC_GS.dgn

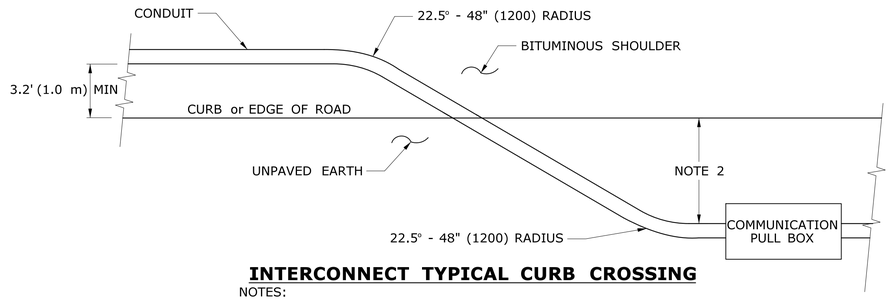
SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY: DATE:

PROJECT TITLE: INSTALLATION AND REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4

TOWN: VARIOUS

DRAWING TITLE: SIGN FACE SHEET ALUMINUM (2)
D,RS,E,I,&M SERIES TYPICAL SIGN DETAILS

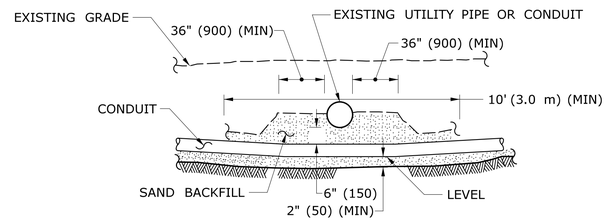
PROJECT NO. 174-418
DRAWING NO. TR-GS_03
SHEET NO. 03.16



INTERCONNECT TYPICAL CURB CROSSING

NOTES:

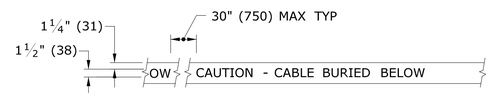
1. RESTORE AREAS DISTURBED BY TRENCH TO ORIGINAL CONDITION.
2. INSTALL PULL BOX A MINIMUM OF 10' (3.0 m) FROM CURB UNLESS OTHERWISE SHOWN ON PLANS OR DIRECTED BY ENGINEER.



CROSSING UNDER EXISTING UTILITY

NOTES:

1. WHEN ENCOUNTERED AT APPROXIMATELY THE SAME DEPTH, CROSS BENEATH.
2. PROTECT & SUPPORT EXPOSED EXISTING UTILITY.

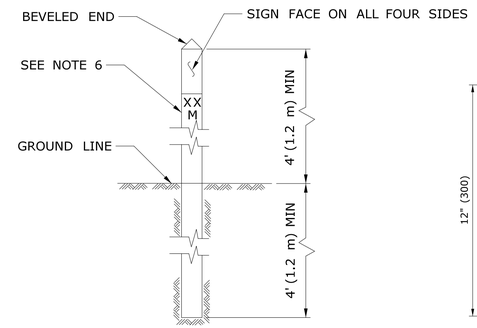


DETECTABLE WARNING TAPE

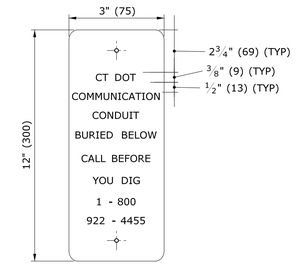
NOTE:

STANDARD SPECIFICATIONS, ARTICLE: 1.05.15

1. TAPE COLORS:
   COMMUNICATION - ORANGE BACKGROUND / BLACK LEGEND
   POWER - RED BACKGROUND / BLACK LEGEND



INTERCONNECT CONDUIT IDENTIFICATION POST

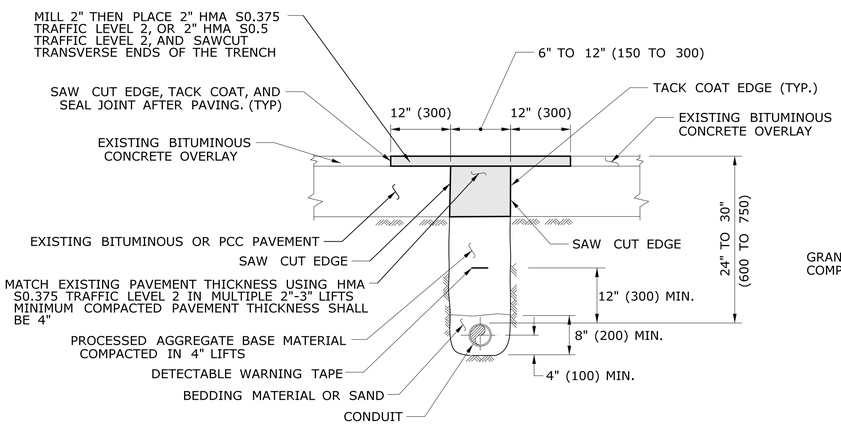


SIGN FACE DETAIL

SIGN # 41-4669

NOTES:

1. 4" x 4" (100 x 100) NOMINAL, PRESSURE TREATED WOOD POST.
2. ATTACH SIGN TO POST WITH ¼" x 1¼" (6 x 31) STAINLESS STEEL LAG SCREW WITH NYLON WASHER ON FACE OF SIGN.
3. SIGN COLORS: BACKGROUND - ORANGE (RETROREFLECTIVE) LEGEND - BLACK (OPAQUE).
4. INSTALL POST APPROX 24" (600) FROM RMC IN VICINITY OF EACH PULL BOX.
5. INSTALL POSTS BETWEEN PULL BOXES, APPROX 10' (3.0 m) OFF CURB. SPACE POSTS 1500'± (460 m±) APART.
6. PERMANENTLY ATTACH STAINLESS STEEL NUMBERS INDICATING DISTANCE TO TRENCH IN FEET (METERS) CONTAINING COMMUNICATION CABLE. ATTACH NUMBERS TO SIDE OF POST FACING CONDUIT. INCLUDE "M" SUFFIX IF METERS.

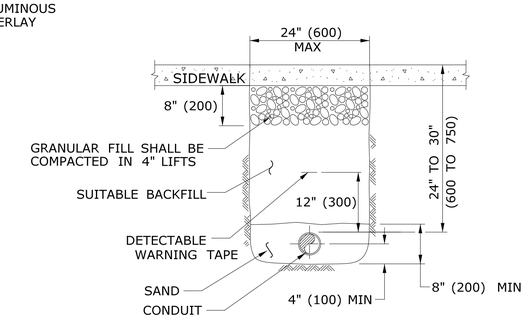


PAVEMENT - BITUMINOUS CONCRETE OR OVERLAYED PORTLAND CEMENT CONCRETE

NOTES:

STANDARD SPECIFICATION, ARTICLE 3.04 AND SPECIAL PROVISION, SECTION 4.06.03

1. TOTAL HOT MIX ASPHALT (HMA) THICKNESS TO MATCH EXISTING BITUMINOUS CONCRETE AND PORTLAND CEMENT CONCRETE (PCC) THICKNESS.
2. WHEN ALLOWED BY ENGINEER, USE CONTROLLED LOW STRENGTH MATERIAL (CLSM) AS BEDDING MATERIAL. TOP OF CLSM AT LEAST 20" (500) BELOW SURFACE.

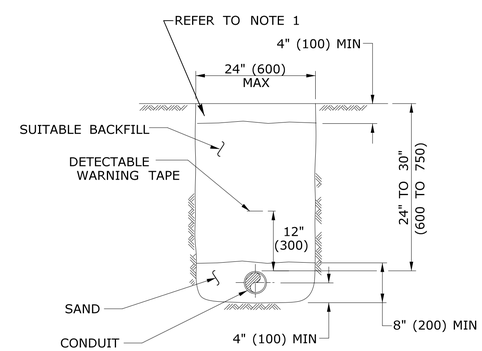


SIDEWALK

NOTES:

STANDARD SPECIFICATIONS, ARTICLE: 9.21 & 9.22

1. WHERE CONCRETE SIDEWALK DAMAGED OR CUT, REPLACE THE ENTIRE SECTION BETWEEN JOINTS. REPLACEMENT SIDEWALK IS PAID FOR AT THE CONTRACT UNIT PRICE FOR "CONCRETE SIDEWALK".



EARTH

NOTES:

STANDARD SPECIFICATIONS, ARTICLE: 9.50

1. IN MOWED AREAS: PLACE TOPSOIL, FERTILIZER, SEED, & MULCH.

GENERAL NOTES:

1. TOP OF CONDUIT NO LESS THAN 24" (600) DEEP.
2. COMPACT BACKFILL IN ≤6" (150) LIFTS. HAND COMPACTION NOT PERMITTED.

LEGEND AS SHOWN ON TRAFFIC CONTROL SIGNAL PLAN:

—·— RMC (RIGID METAL CONDUIT)

REV.	DATE	REVISION DESCRIPTION
2	4-2019	REVISED FILL & OVERLAY REQUIREMENTS, & MINOR REVISIONS
1	4-2012	REVISED BITUMINOUS CONCRETE TO HMA, & MINOR REVISIONS.

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Plotted Date: 1/3/2020

DIMENSIONS ARE IN ENGLISH (.") & METRIC UNITS (mm). METRIC DIMENSIONS ARE ROUNDED:
- OVER 1" TO NEAREST 5 mm
- UNDER 1" TO NEAREST 1 mm.

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: GS_TRENCHING & BACKFILLING.DGN Model: GS_TRENCHING AND BACKFILLING

SUBMITTED BY: NAME/DATE/TIME:

APPROVED BY: NAME/DATE/TIME:

CTDOT
GUIDE SHEET

OFFICE OF ENGINEERING

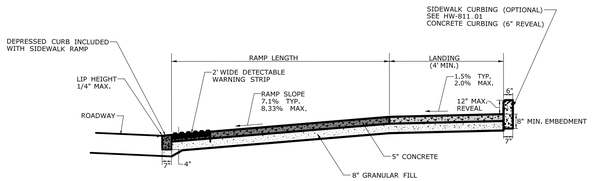
DRAWING TITLE:

TRENCHING & BACKFILLING, ELECTRICAL CONDUIT

PROJECT NO. 0174-0418

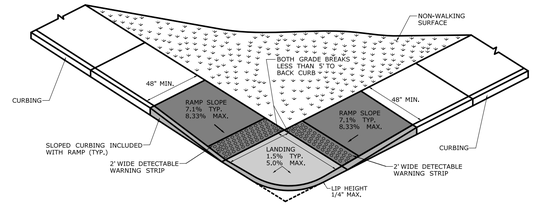
DRAWING NO. TR-GS_04

SHEET NO. 03.17



BASIC RAMP ATTRIBUTES

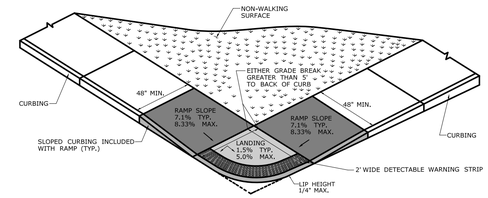
- Plan view of Ramp Components
- Section View of Typical Ramp
- Wheelchair Cross-slope Criteria
- Ramp Warping Detail



PERPENDICULAR RAMP(S)
LANDING'S GRADE BREAK OF 5' OR LESS

TYPE 1 SIDEWALK ABUTS ROADWAY

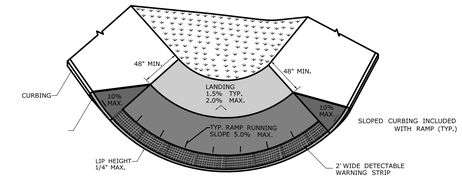
TYPE 3 SIDEWALK SEPARATED FROM ROADWAY WITH NONWALK AREA



BLENDED RAMP(S)
LANDING'S GRADE BREAK GREATER THAN 5'

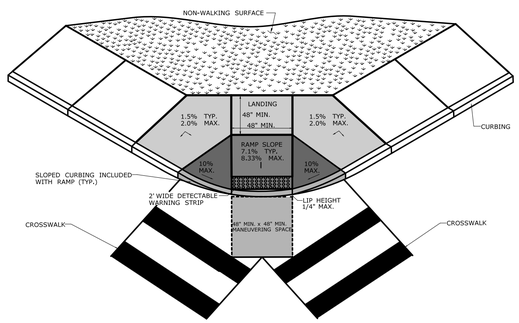
TYPE 2 SIDEWALK ABUTS ROADWAY

TYPE 4 SIDEWALK SEPARATED FROM ROADWAY WITH NONWALK AREA



BLENDED RAMP(S)
LANDING'S IS LOCATED ON TOP

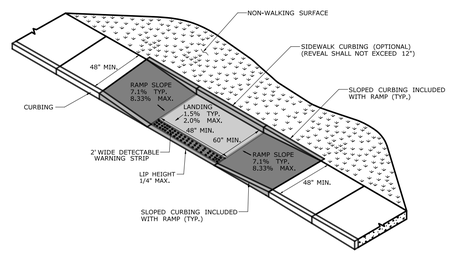
TYPE 5 SIDEWALK ABUTS ROADWAY



PERPENDICULAR RAMP(S) WITH
STREET MANEUVERING SPACE

TYPE 6 LANDING OBSTRUCTION PRESENT

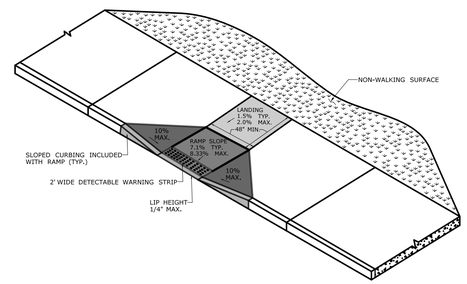
TYPE 7 NO LANDING OBSTRUCTION



PARALLEL RAMP(S)

TYPE 9 TWO RAMP(S) APPROACH TO LANDING

TYPE 10 SINGLE RAMP TO LANDING



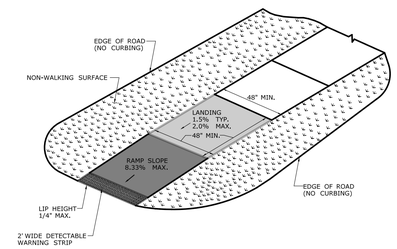
PERPENDICULAR RAMP(S)

TYPE 8 LANDING BYPASS WITH WALKABLE SURFACE

TYPE 13 LANDING WITH NON-WALKABLE SURFACE

TYPE 12 60" X 48" LANDING WITH NON-WALKABLE SURFACE

TYPE 11 60" X 60" LANDING WITH NON-WALKABLE SURFACE



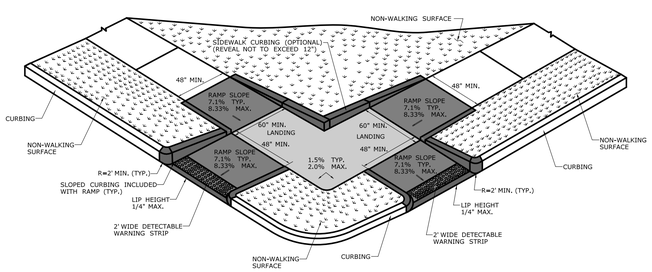
SINGLE DIRECTION RAMP(S)

TYPE 15 LANDING'S GRADE BREAK LESS THAN 5 FT

TYPE 14 LANDING'S GRADE BREAK GREATER 5 FT

TYPE 16 RAMP WITH RETURN CURBING

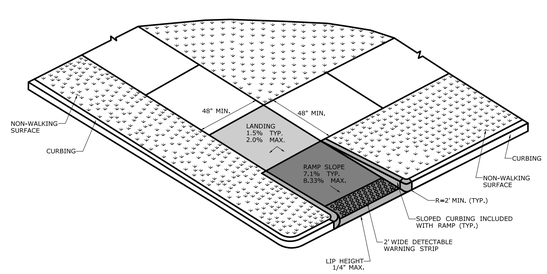
TYPE 17 RAMP WITH NO RETURN CURBING



PERPENDICULAR RAMP(S)

TYPE 18 EXAMPLE OF RAMP FLARE/CURB APPLICATIONS

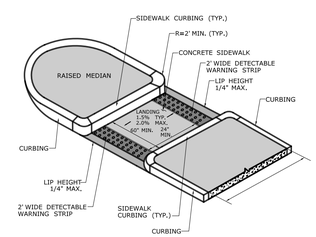
TYPE 19 COMBINATION SIDEWALK RAMPS



RESTRICTED PEDESTRIAN CROSSING
SIDEWALK RAMP(S)

TYPE 20 SINGLE RAMP FROM LANDING

TYPE 21 TWO RAMP(S) TO LANDING



PEDESTRIAN REFUGE ISLAND(S)

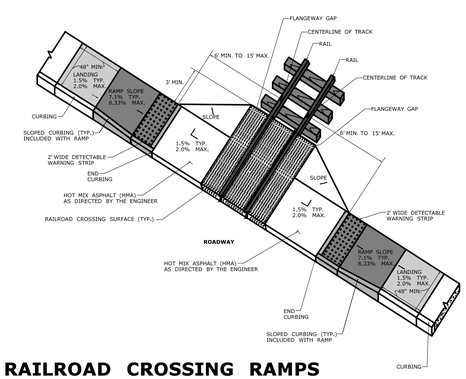
TYPE 22 ISLAND WIDTH 6 FT OR MORE

TYPE 23 ISLAND LESS THAN 6 FT WIDE

TYPE 24 REFUDGE ISLAND WITH ELEVATED LANDING

TYPE 25 RIGHT TURN SLIP-LANE REFUDGE ISLAND

TYPE 26 REFUDGE ISLAND WITH OFFSET ACCESS



RAILROAD CROSSING RAMPS

TYPE 27 RAILROAD CROSSING WITHOUT GATE

TYPE 28 RAILROAD CROSSING WITH GATE

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 6/11/2019

DESIGNER/DRAFTER: -

CHECKED BY: -

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\CTDOT_HIGHWAY_GD SIDEWALK INDEX [6-3-19].dgn

SIGNATURE/
BLOCK:
OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE:
INSTALLATION AND REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4

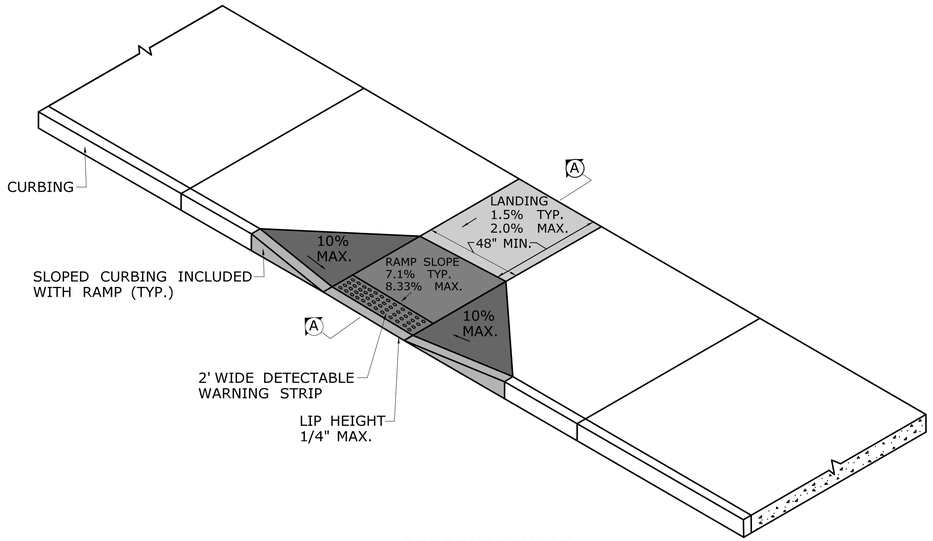
TOWN:
VARIOUS

DRAWING TITLE:
CONCRETE SIDEWALK RAMP(S) INDEX

PROJECT NO.
0174-0418

DRAWING NO.
TR-GS_05

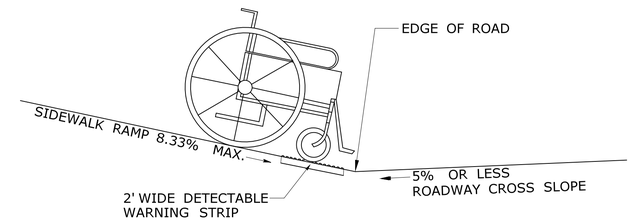
SHEET NO.
03.18



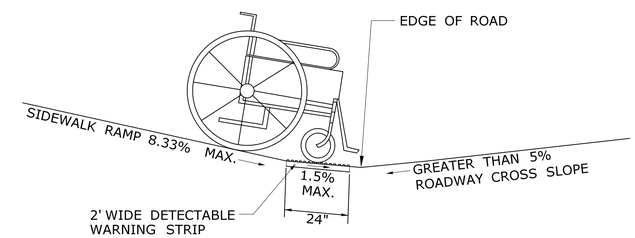
PERPENDICULAR SIDEWALK RAMP

GENERAL NOTES:

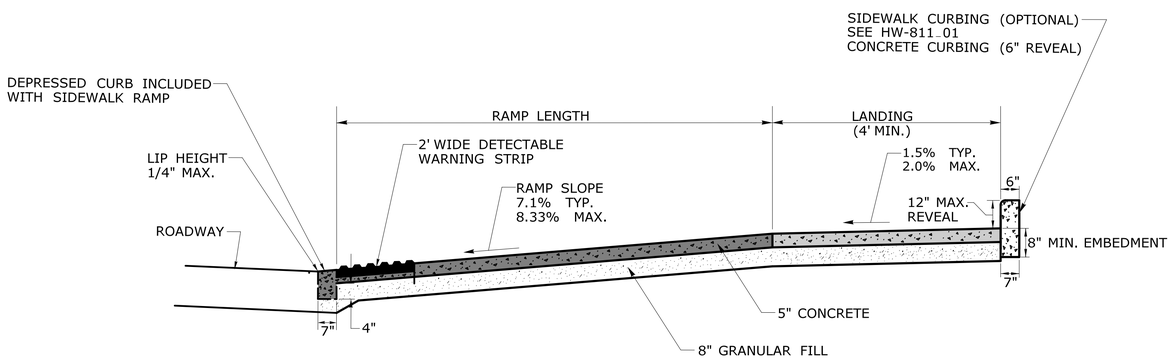
1. SIDEWALK RAMPS SHALL HAVE A COARSE BROOM FINISH TRAVERSE TO THE SLOPE OF THE RAMP.
2. VERTICAL SURFACE DISCONTINUITIES AT JOINTS SHALL NOT EXCEED ¼ INCH.
3. REMOVAL OF EXISTING SIDEWALK FOR NEW RAMP INSTALLATIONS SHALL BE TO THE NEAREST EXPANSION OR CONTRACTION JOINT.
4. THE RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 PERCENT MAXIMUM BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET.



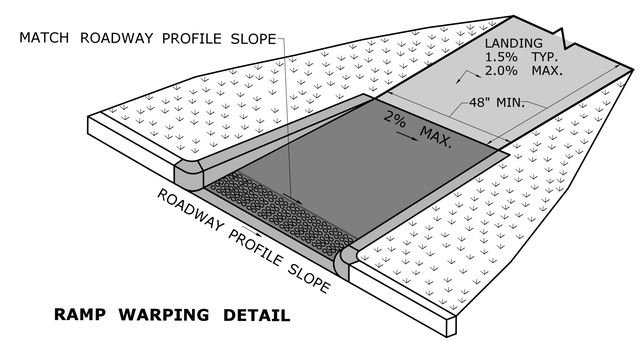
SIDEWALK RAMP GRADE AT ROADWAY CROSS SLOPE OF 5% OR LESS



SIDEWALK RAMP GRADE AT ROADWAY CROSS SLOPE OF GREATER THAN 5%



SECTION AA



RAMP WARPING DETAIL

1. TRANSITION SIDEWALK RAMP TO MATCH ROADWAY PROFILE AS GRADUALLY AS POSSIBLE. DO NOT EXCEED 3 % PER FOOT CROSS SLOPE RATE OF CHANGE WHEN TRANSITIONING TO ROADWAY PROFILE.
2. COMPLETE TRANSITION TO ROADWAY PROFILE BEHIND DETECTABLE WARNING SURFACE.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
1.	6/19	REVISED MAX LANDING SLOPE TO 2% AND DRAWING TITLE	

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 6/11/2019

DESIGNER/DRAFTER: -

CHECKED BY: -

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\CTDOT_HIGHWAY_GD [5-30-19].dgn

SIGNATURE/BLOCK:
OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE:
INSTALLATION AND REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4

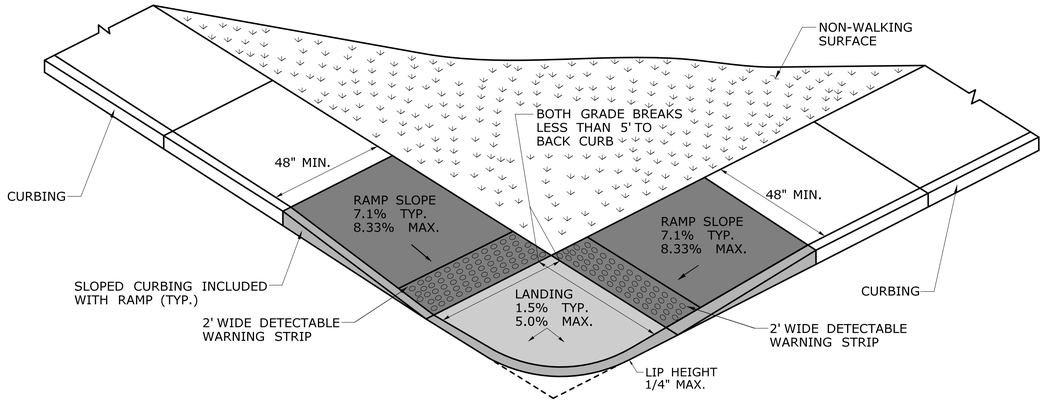
TOWN: **VARIOUS**

DRAWING TITLE: **CONCRETE SIDEWALK RAMPS SHEET 1**

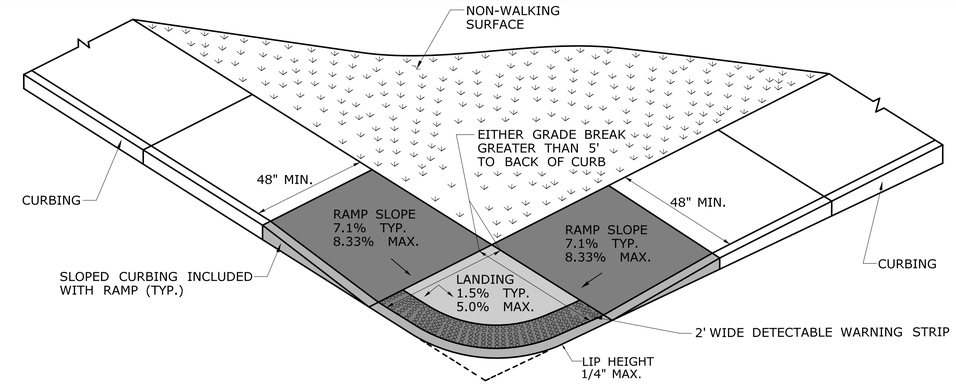
PROJECT NO. **0174-0418**

DRAWING NO. **TR-GS_06**

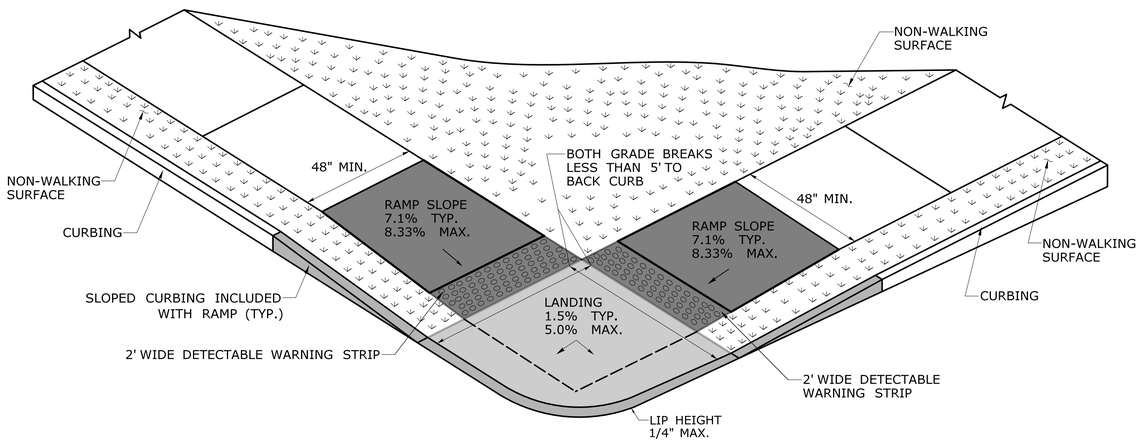
SHEET NO. **03.19**



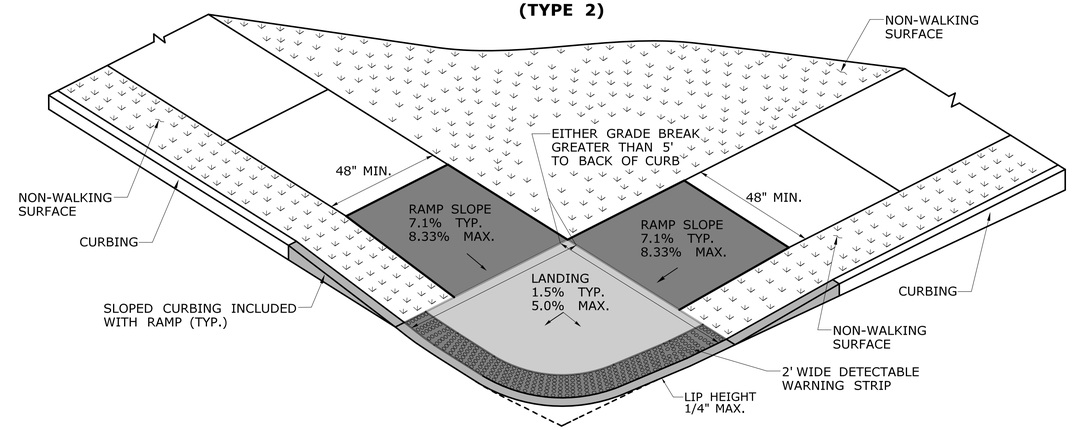
PERPENDICULAR RAMP
WITH A GRADE BREAK OF 5' OR LESS
(TYPE 1)



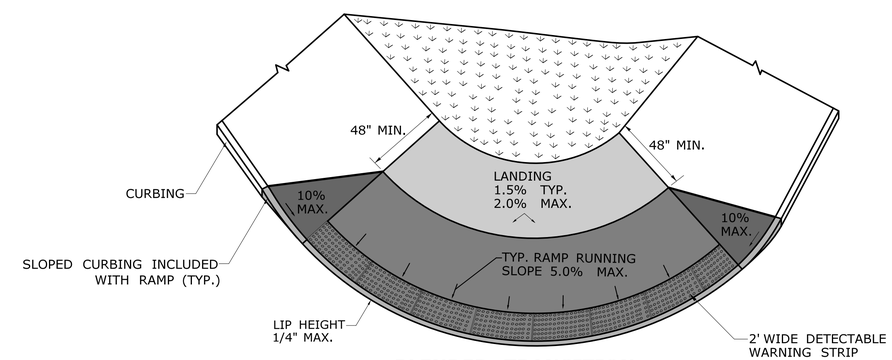
BLENDED TRANSITION
WITH GRADE BREAK GREATER THAN 5'
(TYPE 2)



PERPENDICULAR RAMP
WITH A GRADE BREAK
TO BACK OF CURB OF 5' OR LESS
(TYPE 3)



BLENDED TRANSITION
WITH A GRADE BREAK
TO BACK OF CURB GREATER THAN 5'
(TYPE 4)



BLENDED TRANSITION
WITH LANDING AT TOP
(TYPE 5)

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 1/30/2019

DESIGNER/DRAFTER: -

CHECKED BY: -

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\CTDOT_HIGHWAY_GD_[1-28-19].dgn

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE:

INSTALLATION AND REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4

TOWN: **VARIOUS**

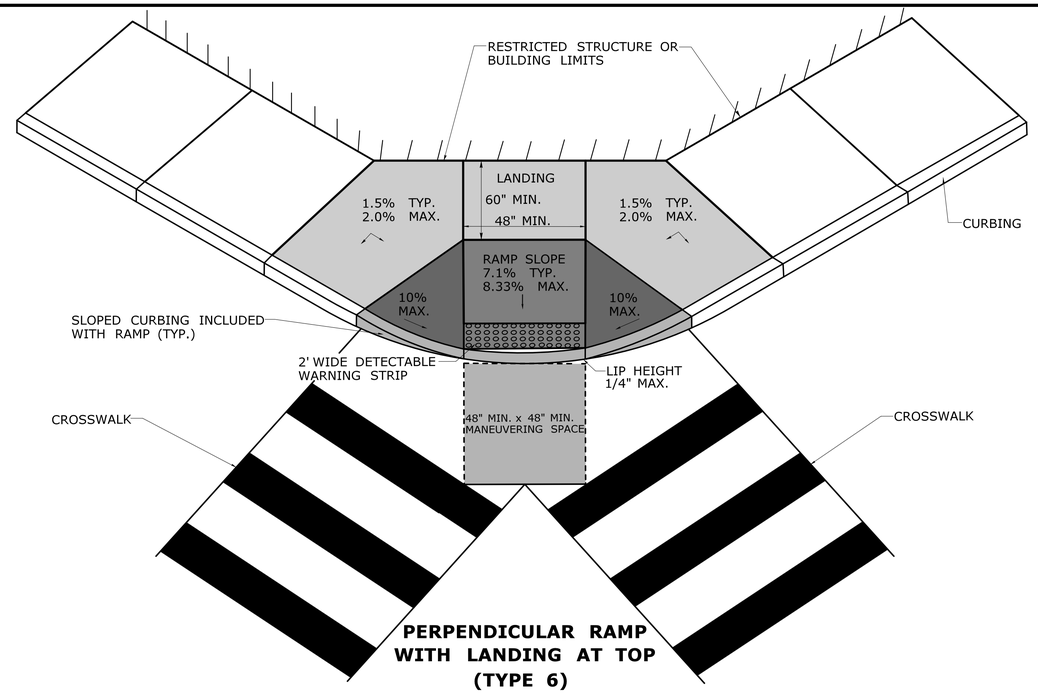
DRAWING TITLE:

CONCRETE SIDEWALK RAMPS - SHEET 2

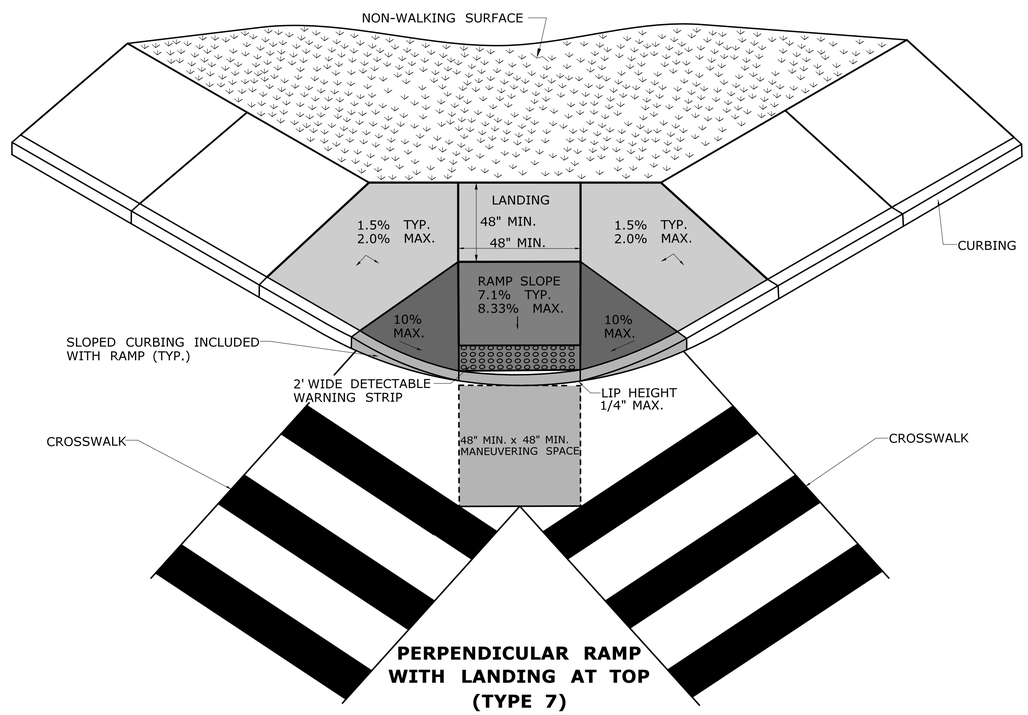
PROJECT NO. **0174-0418**

DRAWING NO. **TR-GS_07**

SHEET NO. **03.20**



PERPENDICULAR RAMP WITH LANDING AT TOP (TYPE 6)



PERPENDICULAR RAMP WITH LANDING AT TOP (TYPE 7)

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE:

INSTALLATION AND REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4

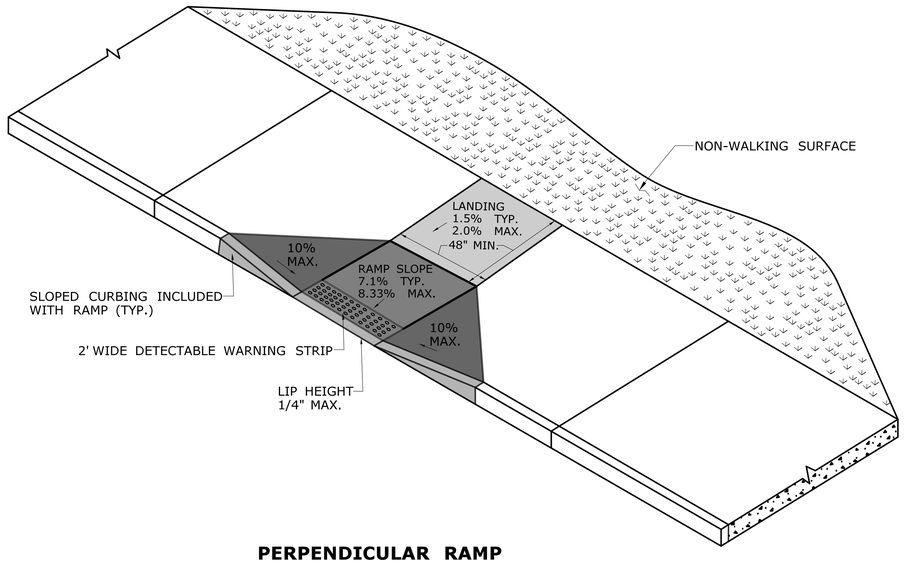
TOWN: **VARIOUS**

DRAWING TITLE: **CONCRETE SIDEWALK RAMPS SHEET 3**

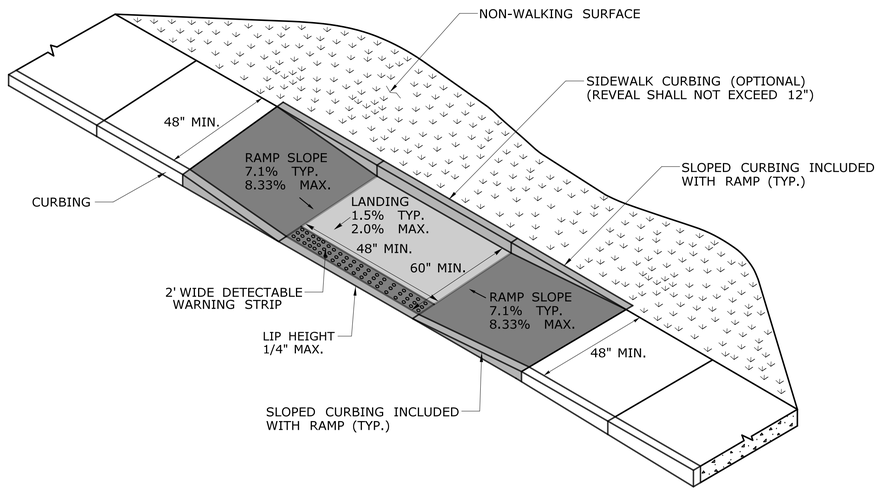
PROJECT NO. **0174-0418**

DRAWING NO. **TR-GS_08**

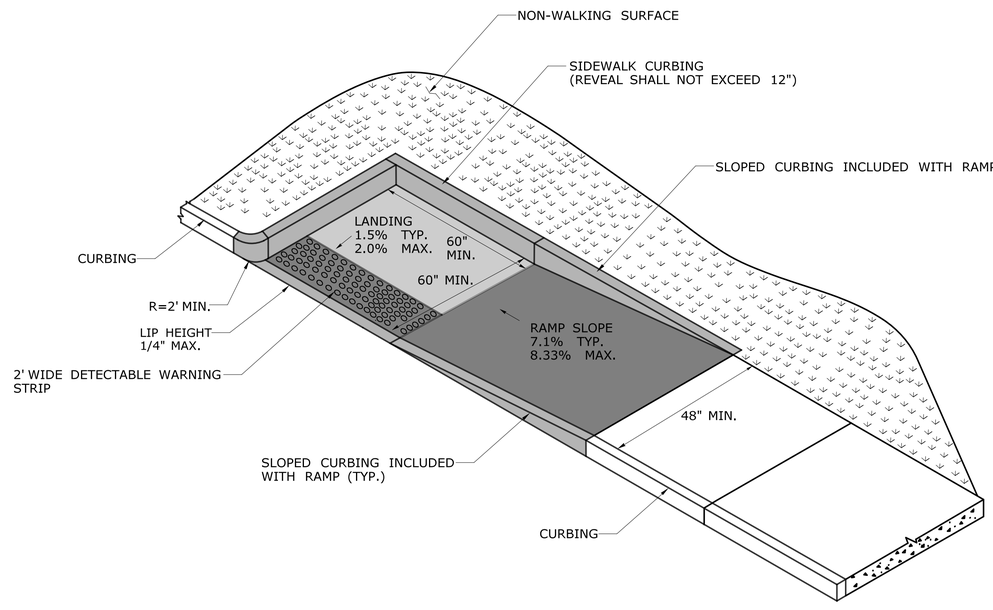
SHEET NO. **03.21**



PERPENDICULAR RAMP
WITH 48" BY-PASS
(TYPE 8)



PARALLEL RAMP WITHOUT
NON-WALKING SURFACE
(TYPE 9)



PARALLEL RAMP
WITH LANDING AT BOTTOM ON CORNER
(TYPE 10)

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE:
INSTALLATION AND REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4

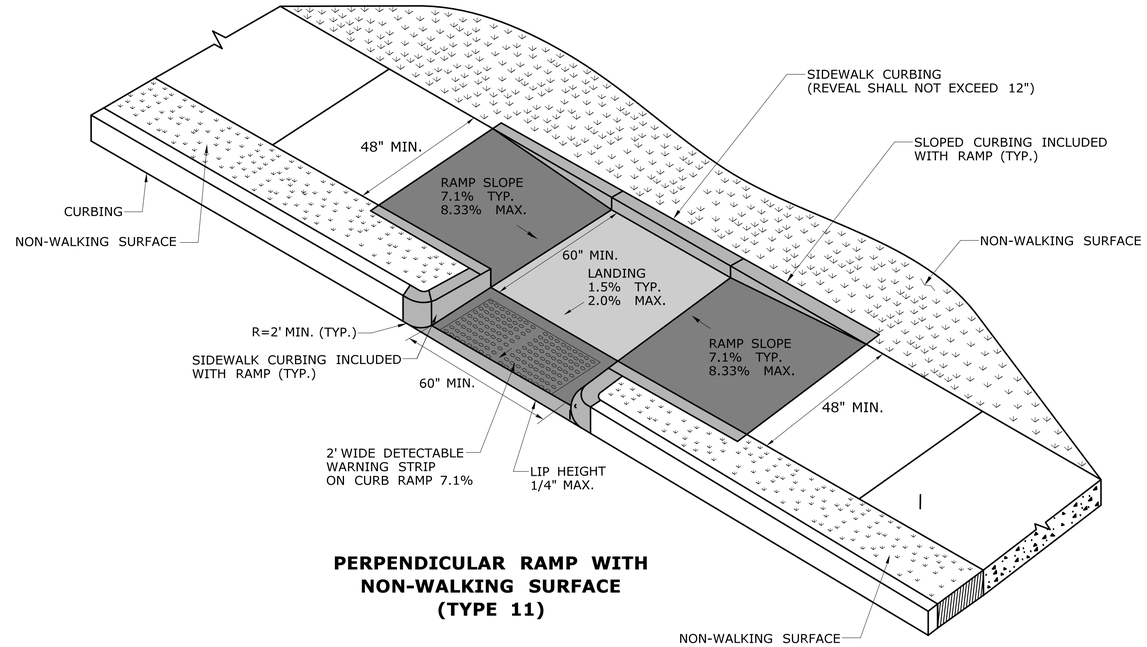
TOWN: **VARIOUS**

DRAWING TITLE:
CONCRETE SIDEWALK RAMPS SHEET 4

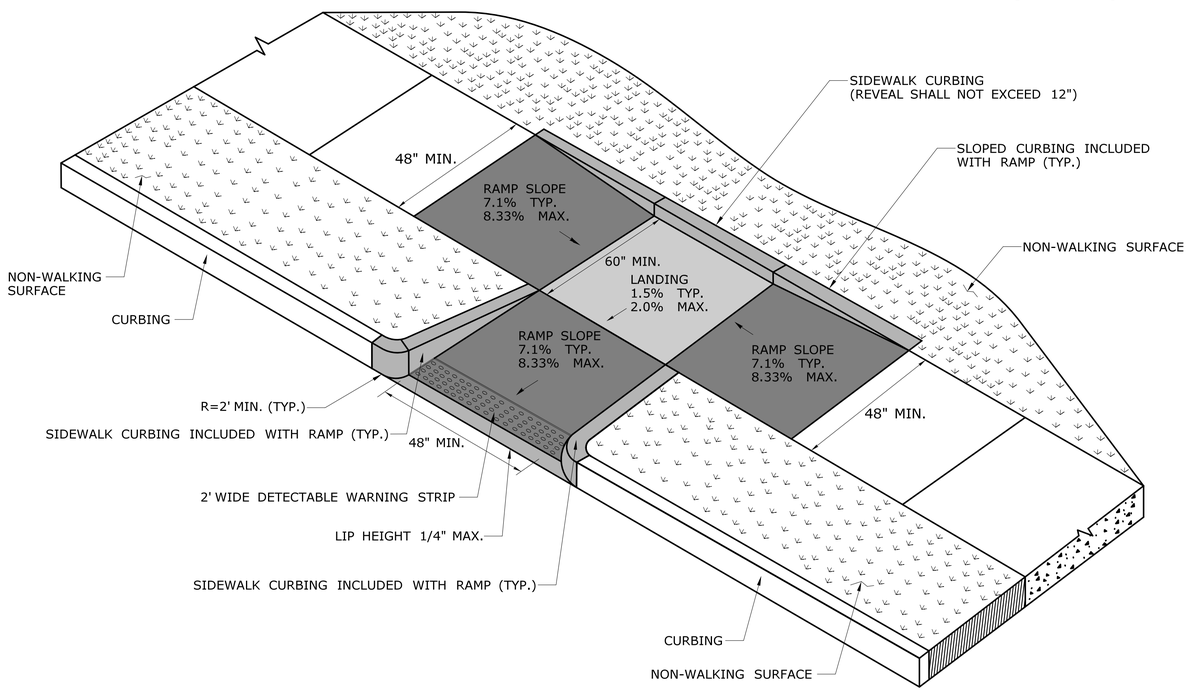
PROJECT NO. **0174-0418**

DRAWING NO. **TR-GS_09**

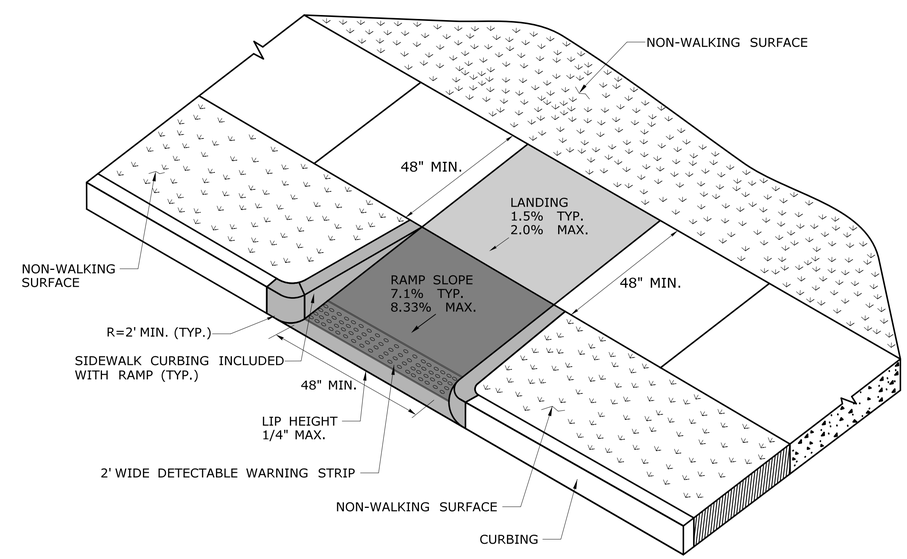
SHEET NO. **03.22**



PERPENDICULAR RAMP WITH NON-WALKING SURFACE (TYPE 11)



PERPENDICULAR RAMP WITH SIDEWALK CURB AND NON-WALKING SURFACE (TYPE 12)



PERPENDICULAR RAMP WITH NON-WALKING SURFACE (TYPE 13)

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE:
INSTALLATION AND REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4

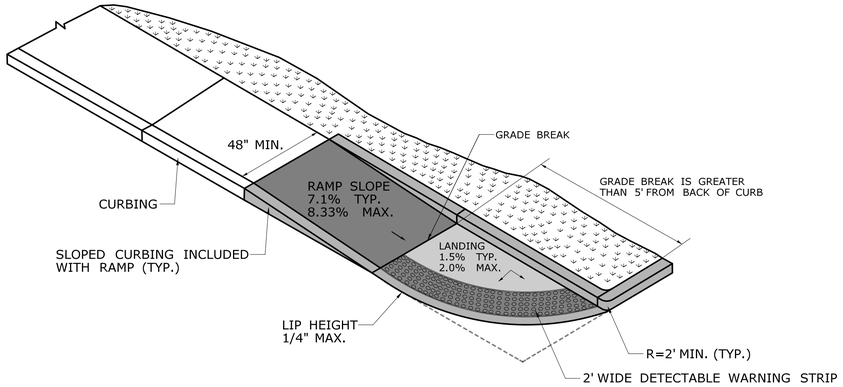
TOWN: VARIOUS

DRAWING TITLE:
CONCRETE SIDEWALK RAMPS SHEET 5

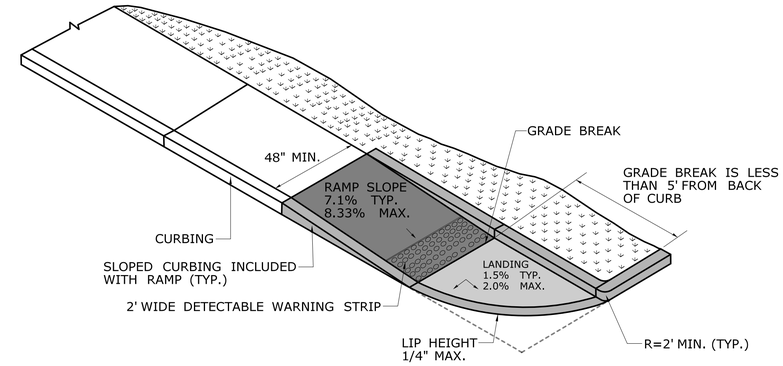
PROJECT NO. 0174-0418

DRAWING NO. TR-GS_10

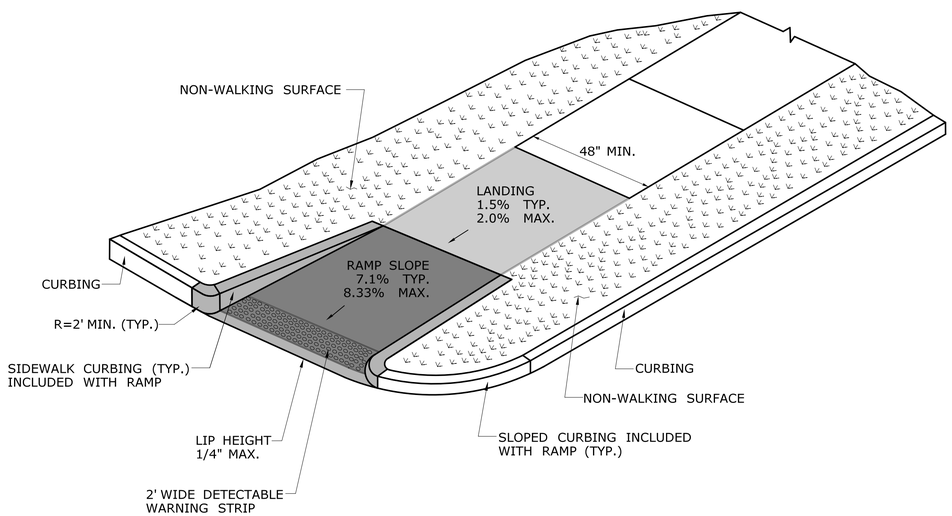
SHEET NO. 03.23



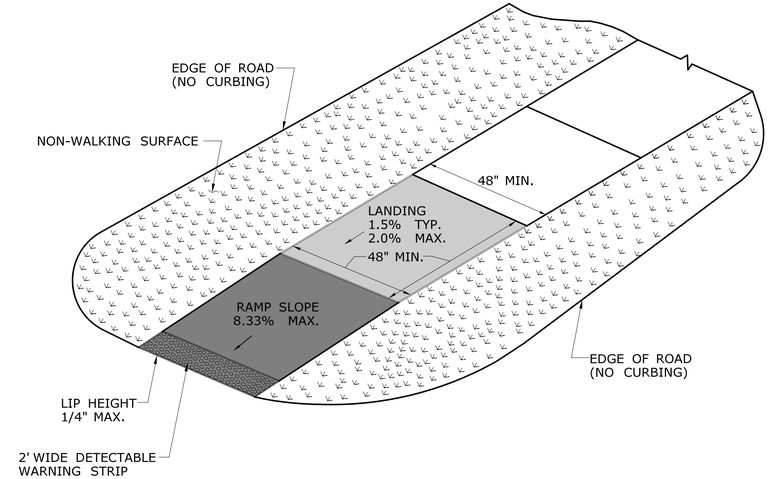
SINGLE DIRECTION RAMP
WITHOUT NON-WALKING SURFACE
GRADE BREAK GREATER THAN 5'
(TYPE 14)



SINGLE DIRECTION RAMP
WITHOUT NON-WALKING SURFACE
GRADE BREAK LESS THAN 5'
(TYPE 15)



SINGLE DIRECTION - RETURN CURB
WITH NON-WALKING SURFACE
(TYPE 16)



SINGLE DIRECTION - NO CURB
WITH NON-WALKING SURFACE
(TYPE 17)

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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OFFICE OF ENGINEERING

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PROJECT TITLE:

INSTALLATION AND REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4

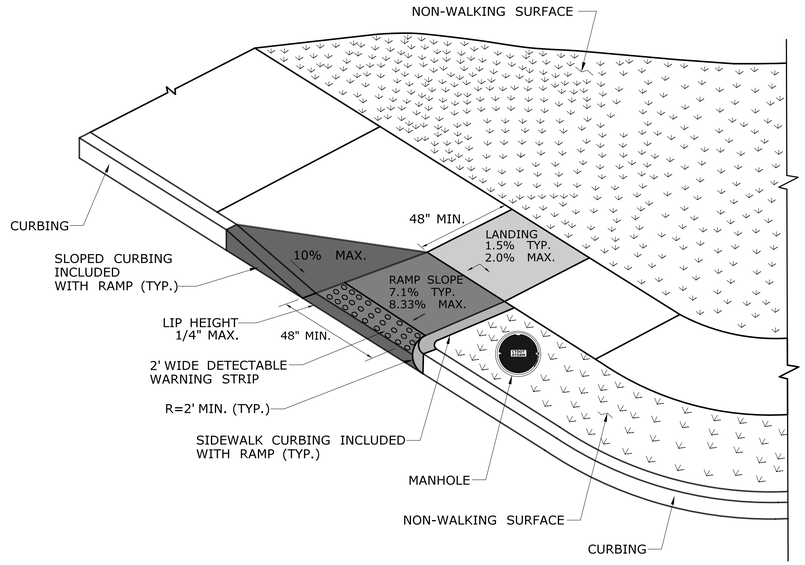
TOWN: **VARIOUS**

DRAWING TITLE: **CONCRETE SIDEWALK RAMPS SHEET 6**

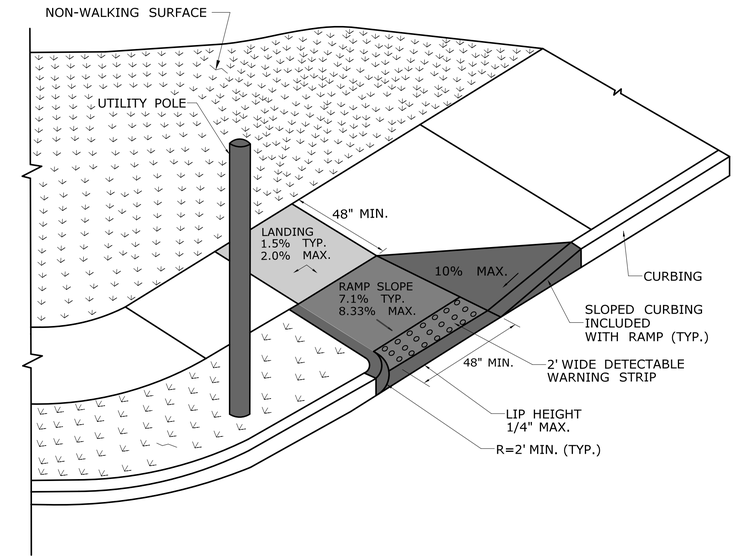
PROJECT NO. **0174-0418**

DRAWING NO. **TR-GS_11**

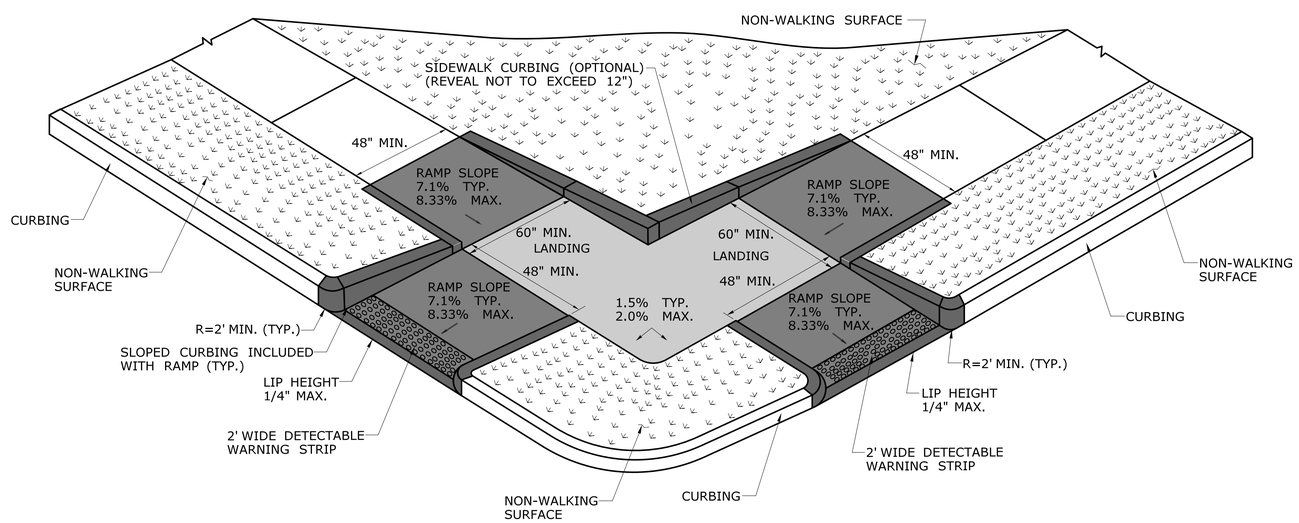
SHEET NO. **03.24**



PERPENDICULAR RAMP
WITH NON-WALKING SURFACE
(TYPE 18 LEFT)



PERPENDICULAR RAMP
WITH NON-WALKING SURFACE
(TYPE 18 RIGHT)



PERPENDICULAR RAMP
WITH NON-WALKING SURFACE
(TYPE 19)

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE:
INSTALLATION AND REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4

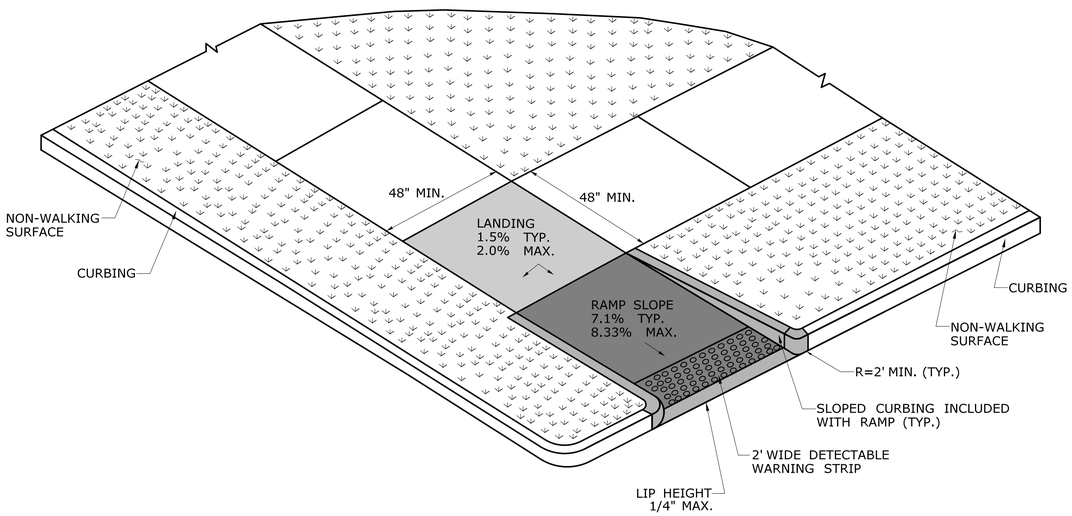
TOWN: **VARIOUS**

DRAWING TITLE:
CONCRETE SIDEWALK RAMPS SHEET 7

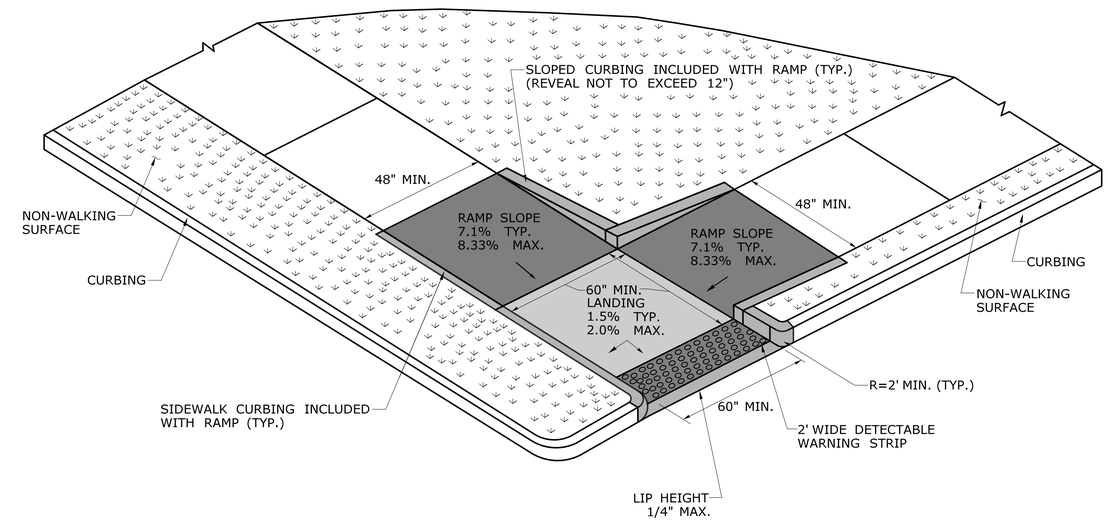
PROJECT NO. **0174-0418**

DRAWING NO. **TR-GS_12**

SHEET NO. **03.25**



RESTRICTED PEDESTRIAN CROSSING SIDEWALK RAMP WITH NON-WALKING SURFACE (TYPE 20)



RESTRICTED PEDESTRIAN CROSSING WITH LANDING AT BOTTOM AND NON-WALKING SURFACE (TYPE 21)

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE:
INSTALLATION AND REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4

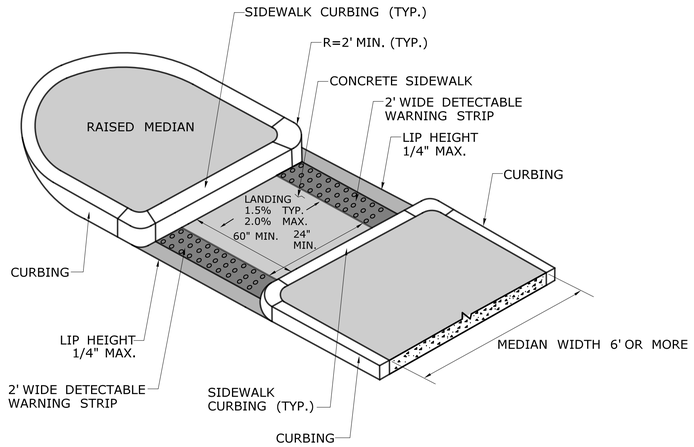
TOWN: VARIOUS

DRAWING TITLE:
CONCRETE SIDWALK RAMPS SHEET 8

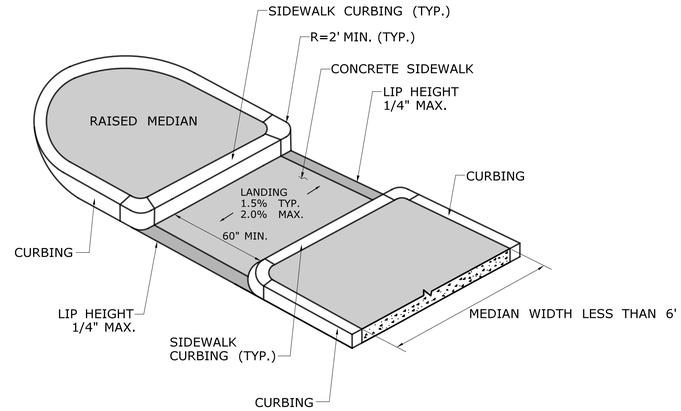
PROJECT NO. 0174-0418

DRAWING NO. TR-GS_13

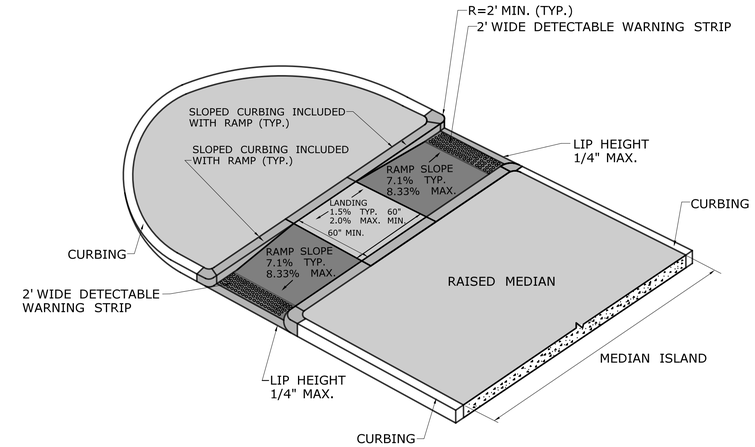
SHEET NO. 03.26



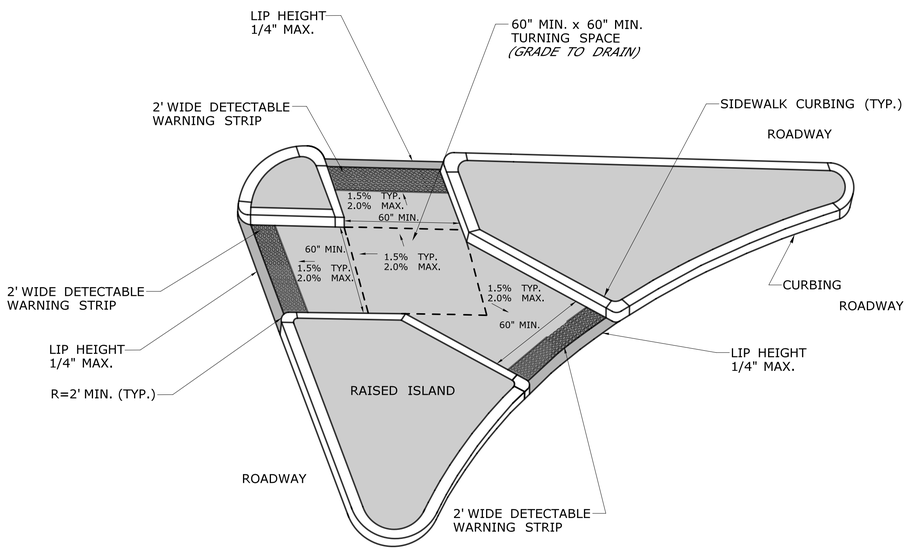
CUT-THROUGH PEDESTRIAN REFUGE ISLAND
MEDIAN WIDTH 6' OR MORE
(TYPE 22)



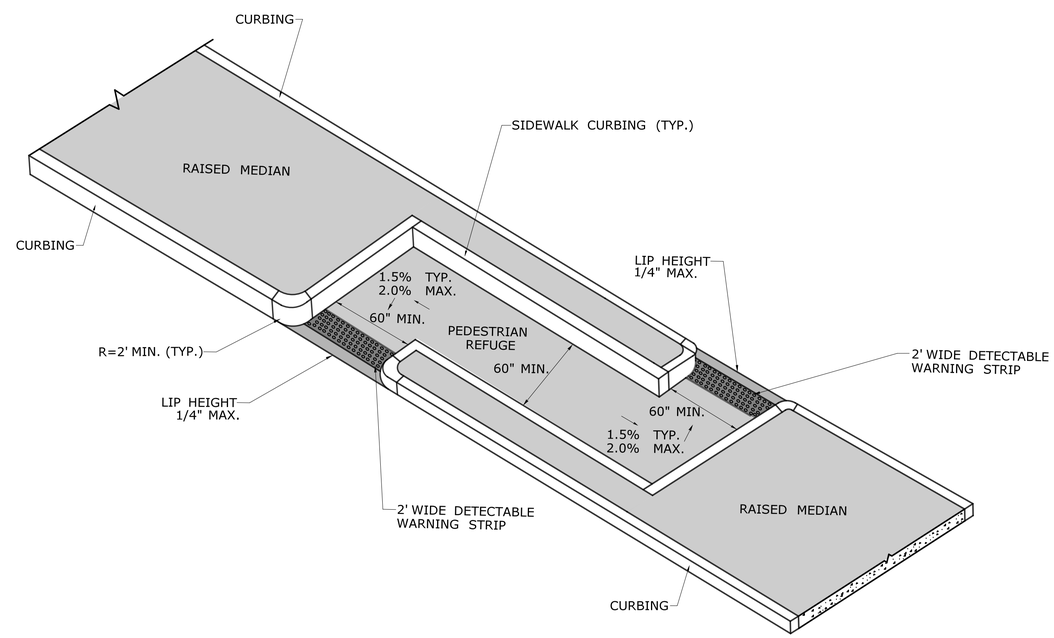
CUT-THROUGH PEDESTRIAN REFUGE ISLAND
MEDIAN WIDTH LESS THAN 6'
(TYPE 23)



PEDESTRIAN REFUGE ISLAND WITH LANDING AND RAMPS
(TYPE 24)



CUT-THROUGH PEDESTRIAN REFUGE ISLAND
(TYPE 25)



CUT-THROUGH PEDESTRIAN REFUGE ISLAND
OFFSET CONFIGURATION
(TYPE 26)

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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PROJECT TITLE:
INSTALLATION AND REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4

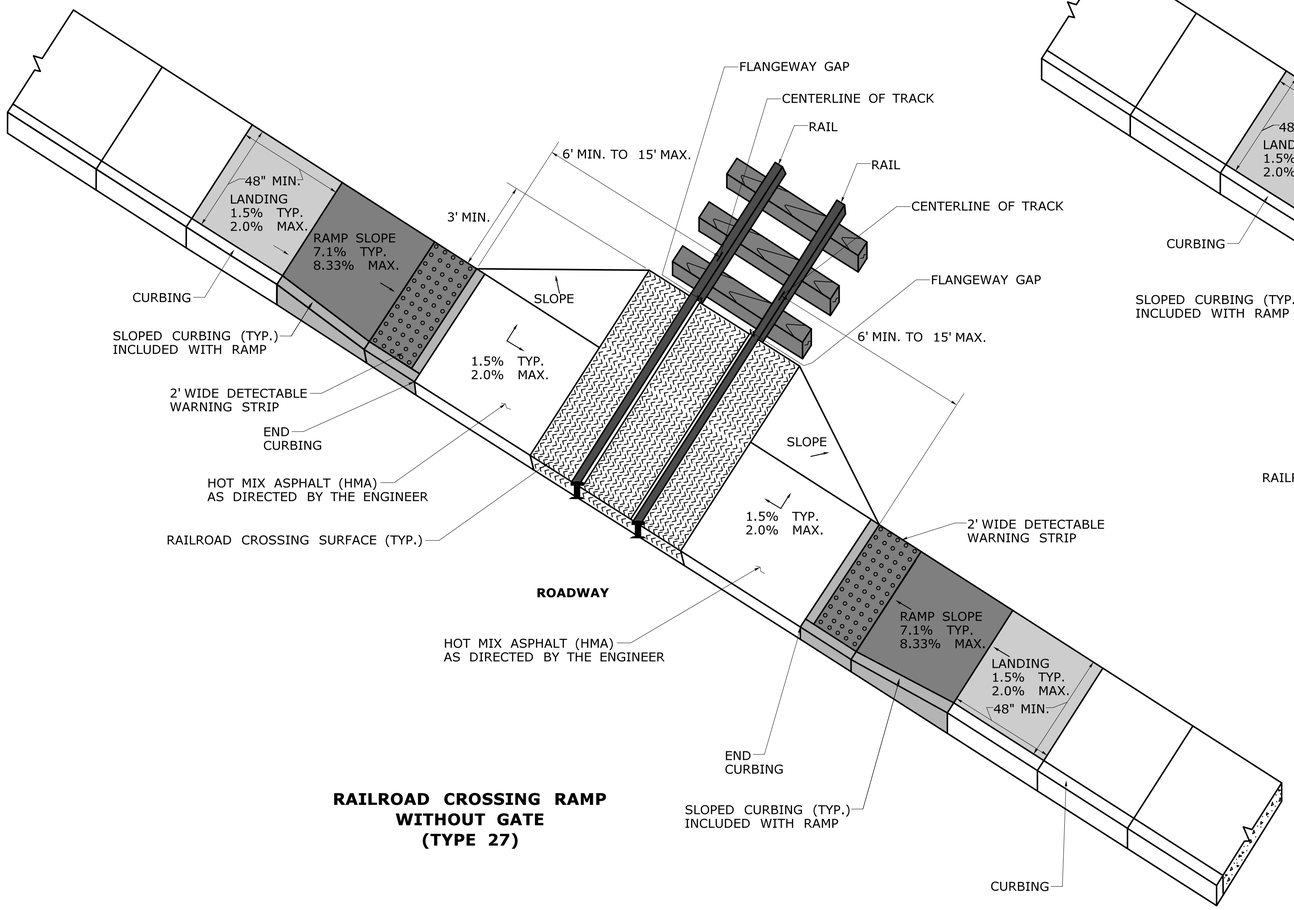
TOWN: **VARIOUS**

DRAWING TITLE:
CONCRETE SIDEWALK RAMPS SHEET 9

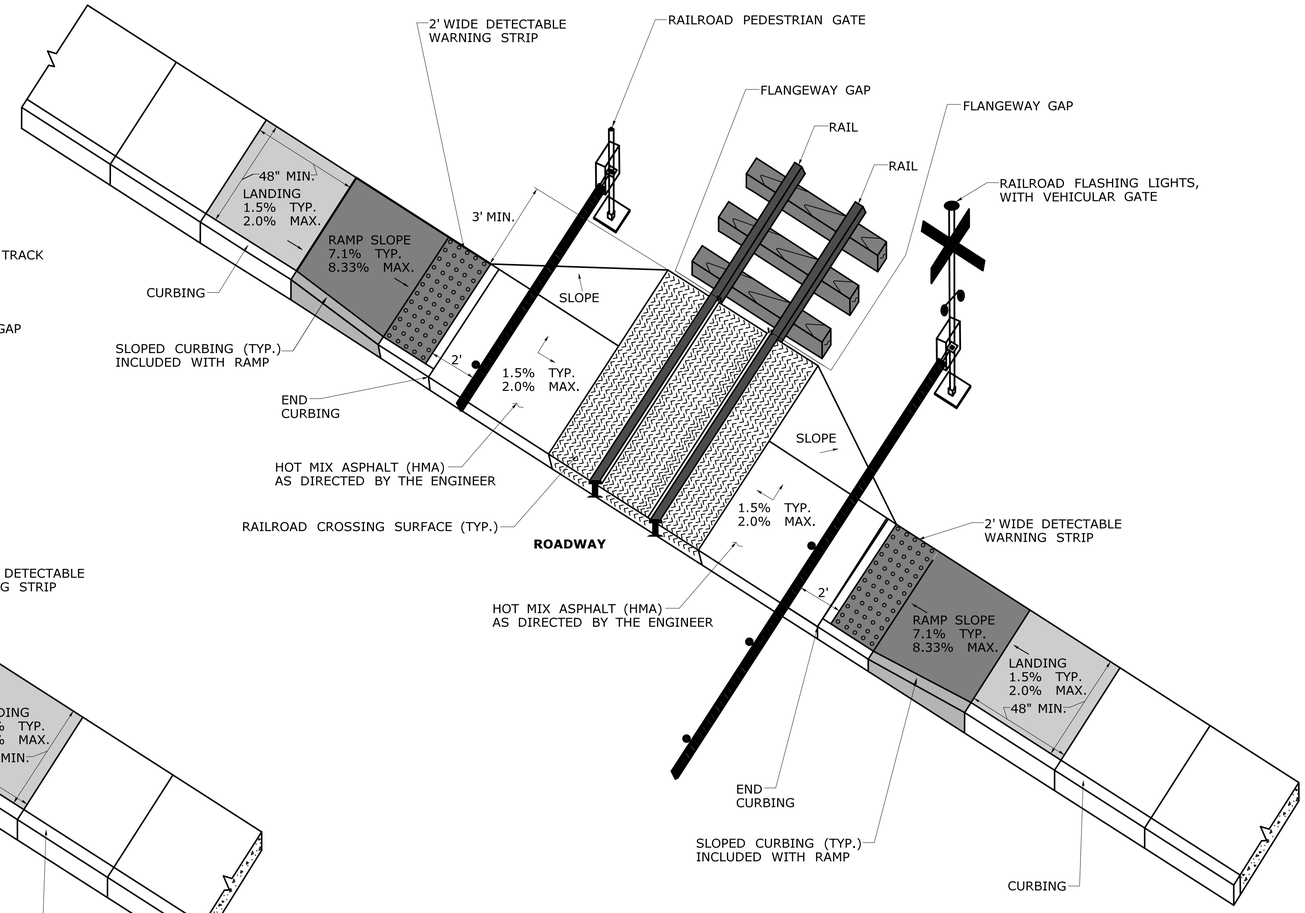
PROJECT NO. **0174-0418**

DRAWING NO. **TR-GS_14**

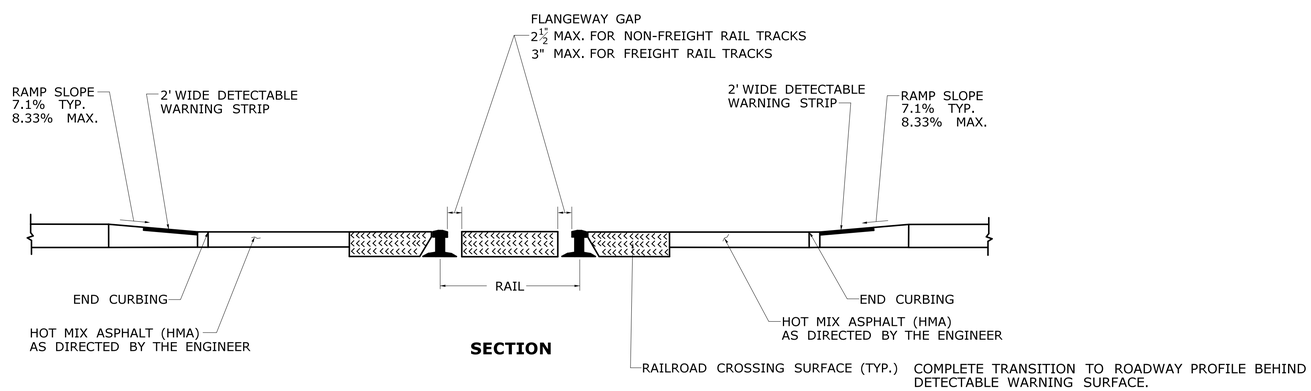
SHEET NO. **03.27**



RAILROAD CROSSING RAMP
WITHOUT GATE
(TYPE 27)



RAILROAD CROSSING RAMP
WITH GATE
(TYPE 28)



SECTION

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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APPROVED BY:

PROJECT TITLE:
INSTALLATION AND REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4

TOWN: **VARIOUS**

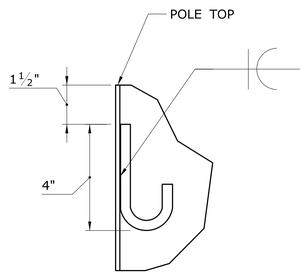
DRAWING TITLE:
CONCRETE SIDEWALK RAMPS SHEET 10

PROJECT NO. **0174-0418**

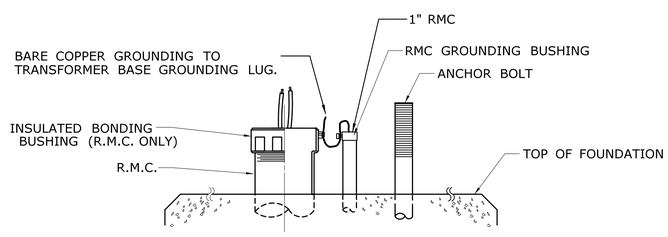
DRAWING NO. **TR-GS_15**

SHEET NO. **03.28**

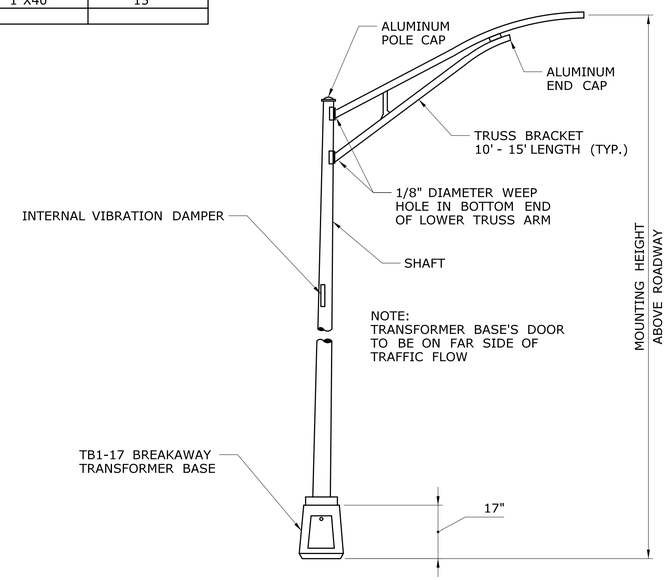
ALUMINUM LIGHT STANDARD - DIMENSION TABLE								
ITEM NO.	MOUNTING HEIGHT	BRACKET LENGTH	SHAFT DIAMETER		SHAFT WALL THICKNESS	BASE TYPE	ANCHOR BOLT SIZE	BOLT CIRCLE DIAMETER
			BOTTOM	TOP				
1003206	30'	15'	8"	6"	0.188"	TRANSFORMER	1"X40"	15"



J-HOOK MOUNTING DETAIL



CONDUIT TERMINATION AT VEHICLE DETECTOR LIGHT STANDARD BASE



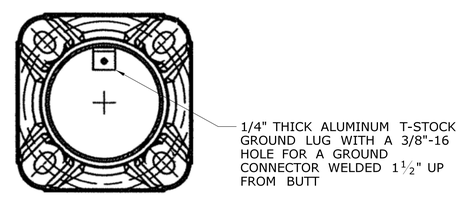
ALUMINUM LIGHT STANDARD FOR VEHICLE DETECTOR

NOTE:

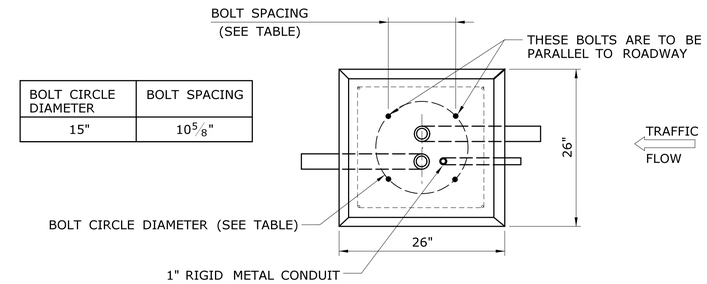
TRANSFORMER BASE DOOR TO BE ON FAR SIDE OF TRAFFIC FLOW.

TOP 2'-6" OF SHAFT IS NOT TAPERED.

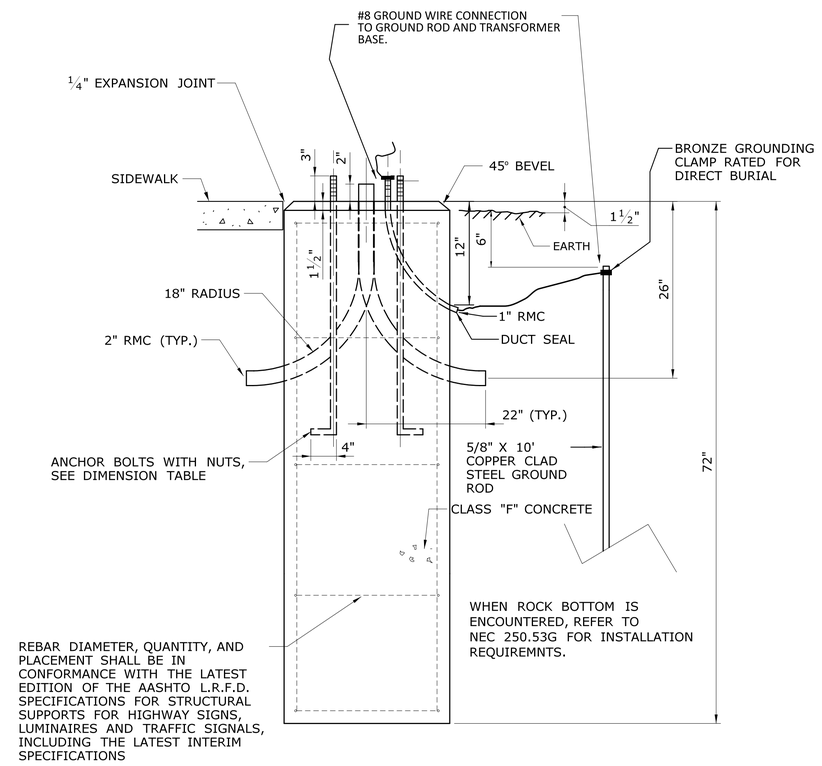
REFER TO SIGNAL PLANS FOR BRACKET LENGTHS.



ALUMINUM LIGHT STANDARD BASE



BOLT CIRCLE DIAMETER	BOLT SPACING
15"	10 5/8"



LIGHT STANDARD FOUNDATION - TYPE I

LIGHT STANDARD NOTES:

1) ALUMINUM ALLOY SHALL BE 6063, T6 TEMPER.
2) BOLT CIRCLE SHOWN IS FOR TRANSFORMER BASE BOTTOM.
3) TO BE DESIGNED TO AASHTO "STANDARD SPECIFICATION FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" FOR 90 M.P.H. WINDS.
4) WELDING DESIGN AND FABRICATION SHALL CONFORM TO THE LATEST EDITION OF THE ANSI/AWS D1.2, STRUCTURAL WELDING CODE - ALUMINUM.
5) FOR BASE CONNECTION WELDS, FABRICATION INSPECTION AND TESTING SHALL BE PERFORMED AS NECESSARY PRIOR TO ASSEMBLY, DURING ASSEMBLY, DURING WELDING, AND AFTER WELDING, TO ENSURE THAT MATERIALS AND WORKMANSHIP MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. FABRICATION INSPECTION AND TESTING IS THE RESPONSIBILITY OF THE CONTRACTOR. VERIFICATION INSPECTION AND TESTING IS THE PREROGATIVE OF THE ENGINEER (CONNDOT).
6) NON-DESTRUCTIVE TESTING FOR ALUMINUM SHALL BE AS FOLLOWS: A RANDOM 25% OF ALL BASE CONNECTION WELDS SHALL BE INSPECTED IN ACCORDANCE WITH ASTM E-165 STANDARD PRACTICE FOR LIQUID PENETRANT INSPECTION METHOD.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 1/3/2020

DESIGNER/DRAFTER:

CHECKED BY:

NO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\CTDOT_TRAFFIC_GS-LS_AND_FOUND(11-14-2019).dgn

SIGNATURE/BLOCK:

OFFICE OF ENGINEERING

APPROVED BY: DATE:

PROJECT TITLE:

INSTALLATION AND REVISIONS OF TRAFFIC CONTROL SIGNALS IN DISTRICT 4

TOWN: **VARIOUS**

DRAWING TITLE:

LIGHT STANDARD & FOUNDATION FOR VEHICLE DETECTION

PROJECT NO. **0174-0418**

DRAWING NO. **TR-GS_16**

SHEET NO. **03.29**