



Department of
Transportation



Work Zone Traffic Control, Updating the 619 Standard Sheets



THE 35TH ANNUAL AGC NYS INDUSTRY CONFERENCE

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Saratoga Springs, N.Y.

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10 Airline Drive, Suite 203, Albany, New York 12205
(P) 518-456-1134 (F) 518-456-1198

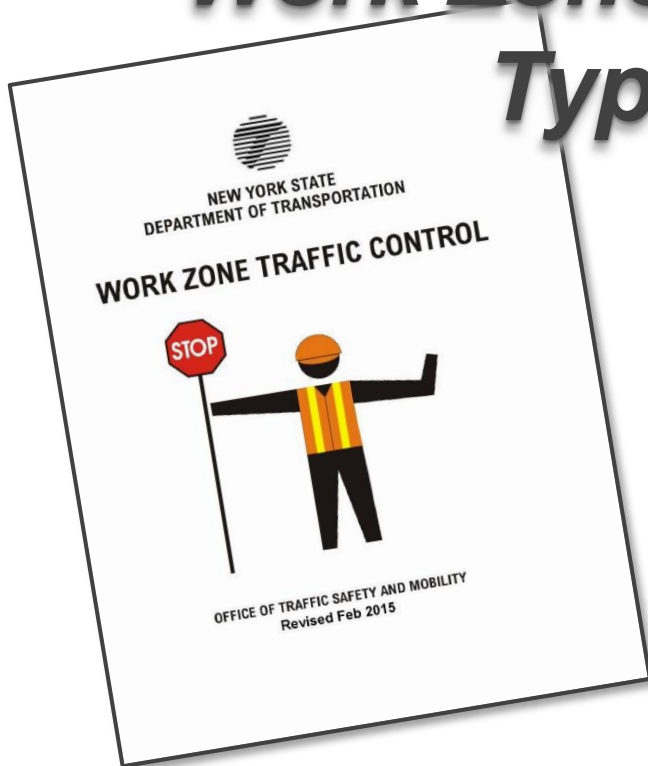
Presentation Overview

- 1) Why is the Department updating the 619 Standard Sheets?**
- 2) When are the changes expected to be effective?**
- 3) What are some of the more significant changes?**
- 4) Q & A**

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Work Zone Traffic Control Manual Typical Applications



Originally intended for Operations. This manual is also used by Design for capital construction projects and by NYSDOT consultant Contractors and Permittees as well.

See: <https://www.dot.ny.gov/divisions/operating/oom/transportation-systems/safety-program-technical-operations/work-zone-control/traffic-control-manual> There are a total of 54 drawings on 54 sheets, TAG-C1 to TAST-P1. Organized by roadway type, operation, and duration. Emphasis is on short duration and short-term operations.

Work Zone Traffic Control Manual Typical Applications

FREEWAY OR EXPRESSWAY

Notes:

- Short-term stationary is daytime work that occupies a location for more than 1 hour within a single daylight period.
- The Barrier Vehicle (and Advance Warning Vehicle(s) where appropriate) shall maintain the appropriate Roll-Ahead Distance, be an unoccupied truck, positioned parallel to traffic, parking brake set, placed in 2nd gear (Park / Neutral), have the wheels aligned with the lane striping and lane to maintain lane discipline and to stay in lane if struck.
- There shall be no workers, equipment, or other vehicles in the buffer space or the roll ahead distance.

Speed Limit (MPH)	Merging Taper Lengths Based on Lane Shift			Shoulder Taper from 4'-6" Shift	Speed Limit	Buffer Space
	10'	11'	12'			
45	450'	495'	540'	60'-90'	45	360' (9 Skip Lines)
50	500'	550'	600'	70'-100'	50	420' (~11 Skip Lines)
55	550'	605'	660'	75'-110'	55	495' (~13 Skip Lines)
65	650'	715'	780'	90'-130'	65	645' (~16 Skip Lines)

LANE CLOSED NYW8-33
48x24 in.

END ROAD WORK G20-2
48x24 in.

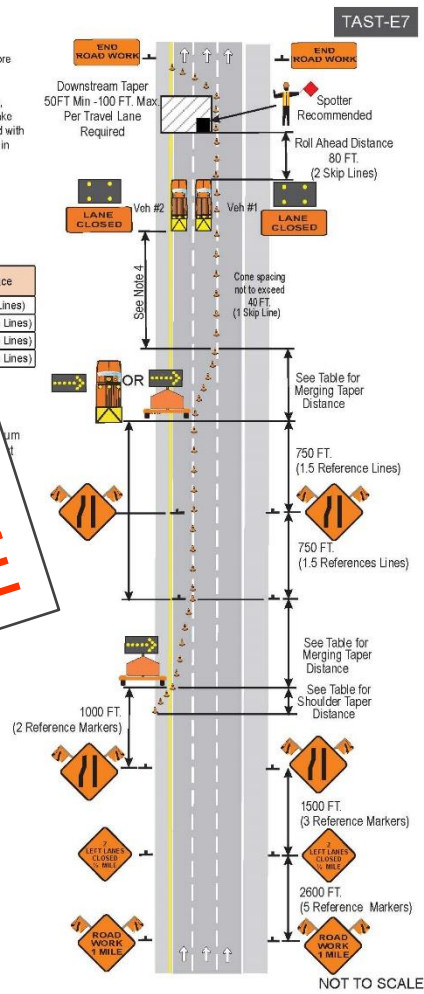
EXISTING EXAMPLE

**NYSDOT
WORK ZONE TRAFFIC CONTROL**

**SHORT TERM STATIONARY
OPERATION INVOLVING
LEFT TWO LANE CLOSURE
(PAVED SHOULDER LESS THAN 8 FT.)
ON
FREEWAY OR EXPRESSWAY**

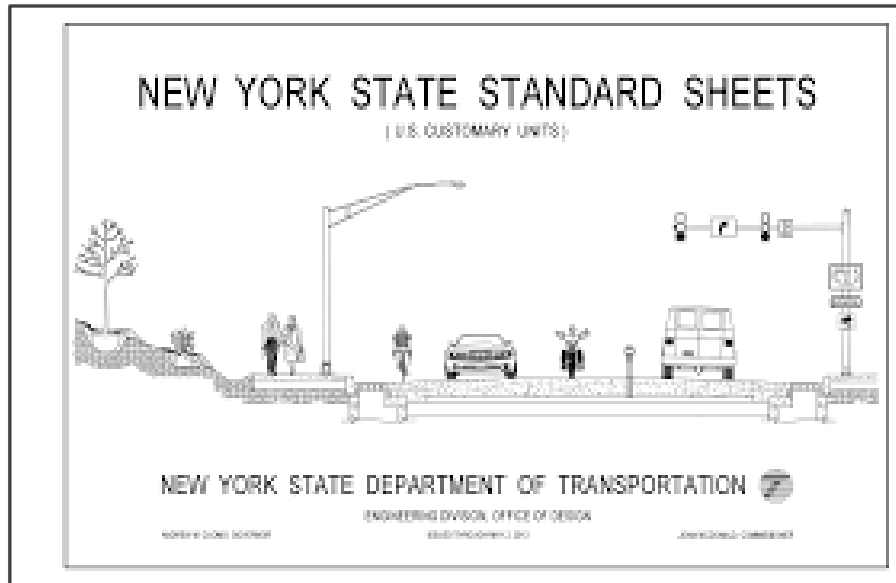
NOVEMBER 2019

TAST-E7



8 1/2"x11". Color.
Standalone. Tables included.
All information needed to set up the work zone is included on each drawing. Content managed by Traffic.
Updates made on an ad hoc basis.

Work Zone Traffic Control Standard Sheets



Originally intended for capital construction contracts. Municipalities and NYSDOT design consultants use these as well.

See: <https://www.dot.ny.gov/main/business-center/engineering/cadd-info/drawings/standard-sheets-us/619>

There are a total of 27 WZTC related sheets, 619-01 to 619-66, on 33 pages. Not organized by duration or roadway type. Emphasis is on intermediate and long-term operations.

- ➔ **The existing 619 Standard Sheets are being updated in order to:**
 - Unify the way NYSDOT implements work zone traffic control on NYS highways regardless of who within, or outside the Department is responsible**
 - Reduce risks to both workers and the traveling public**
 - Eliminate redundancy and conflicts between separate guidance documents**
 - Vet proposed schemes thoroughly before issuing changes**
 - Provide version control**
 - Make the drawings easier to use**

PROPOSED Work Zone Traffic Control Standard Sheets

EXAMPLE

TABLE 204-01: PROTECTIVE VEHICLE REQUIREMENTS			
CLOSURE TYPE	ROAD TYPE & SPEED		
	1-45 MPH	35-40 MPH	1-30 MPH
WORKERS ON FOOT OR VEHICLE EXPOSED TO TRAFFIC	P, TWA	P, TWA	P, TWA
OTHER HAZARDS: NO WORKERS EXPOSED	P, TWA	P, TWA	P, TWA

TABLE 204-02: ROLL AHEAD DISTANCE			
ROLL AHEAD DISTANCE* IF TRAP LINES FOR VEHICLES			
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	STATIONARY OPERATION		
	MIN	MAX	
≥ 55	120/3	200/5	
45-50	80/2	160/4	
≤ 40	40/1	120/3	

TABLE 204-03: ADVANCE WARNING SIGN SPACE				
ROAD TYPE	DISTANCE BETWEEN SIGNS		SIGN SPACING	
	A (FT)	B (FT)	XX	YY
URBAN (A ≤ 30 MPH)	100	100	AHEAD	AHEAD
URBAN (35-45 MPH)	200	200	AHEAD	AHEAD
URBAN (45-60 MPH)	300	300	1000 FT	AHEAD
RURAL	500	500	1000 FT	1000 FT

TABLE 204-04: REQUIRED SIGN SIZES*		
SIGN	NON-FREEMAY	FREEMAY
W19-33	48x24	48x24
W1-1	26x36	48x48
W20-1	26x36	48x48
WARNING FLAG	18x18	18x18

LEGEND

P= PROTECTIVE VEHICLE REQUIRED FOR EACH CLOSED LANE & EACH CLOSED LANE SHOULD BE 30 FEET OF THE WORK SPACE MINUS WITHIN THE STATIONARY CLOSURE, THE PROTECTIVE VEHICLE SHALL BE REPOSITIONED ACCORDINGLY.

TWA= TWA REQUIRED

NOTES

1. SHORT DURATION IS WORK THAT OCCUPIES A LOCATION FOR UP TO 1 HOUR.
2. OPERATIONS FOR PROTECTIVE VEHICLE SHALL BEGIN INSTANTLY AFTER THE CLOSURE SETBACKS ON AND BEHAVIOR PROPERLY ACQUIRED FOR ENTIRE DURATION OF THE OPERATION.
3. THERE SHALL BE NO WORKERS, EQUIPMENT OR OTHER VEHICLES IN THE ROLL AHEAD DISTANCE.
4. ADJACENT LANE CLOSURES ARE RECOMMENDED WHEN THE PRECONSTRUCTION SPEED LIMIT IS 45 MPH OR HIGHER.
5. IN URBAN CONDITIONS, ADVANCE WARNING SIGN SPACINGS MAY BE ADJUSTED IN ORDER TO ACCOMMODATE SIDE STREETS AND DRIVEWAYS.

WA-1L

W19-33

24000 LB PROTECTIVE VEHICLE WITH TWA (SEE TABLE 204-01)

SPITTER

ARROW PANEL

ARROW PANEL (CAUTION WIDE)

W20-1

WORK AREA

NEW YORK STATE OF OPPORTUNITY

Department of Transportation

U.S. CUSTOMARY STANDARD SHEET

WORK ZONE TRAFFIC CONTROL
MULTILANE UNDIVIDED ROADWAY
TWO-WAY LEFT TURN LANE
SHORT DURATION OPERATION

APPROVED XXXXXXXX XX, 20XX ISSUED UNDER ER XX-XXX

XXXXXXXXXXXXXXXXXXXXXXX 619-204

11"x17". Color. Standalone. Single source for all WZTC setups on NYS Highways.

PROPOSED

Work Zone Traffic Control Standard Sheets Master List Part 1 of 7

		PROPOSED	
Category	Sub- category	Proposed Standard Sheet Number	Proposed Standard Sheet Title
General Information 001 - 020		619- 001	Temporary Concrete Barrier (Total of 6 sheets)
		619- 002	Type III Construction Barricades (Total of 2 sheets)
		619- 004	Portable Temporary Wooden Sign Support
		619- 010	Work Zone Traffic Control General Notes
		619- 011	Work Zone Traffic Control Legends and Notes
		619- 012	Sign Table (Total of 2 sheets)

PROPOSED

Work Zone Traffic Control Standard Sheets

Master List Part 2 of 7

Special Applications	021 - 100	Mowing	619- 021	Two-lane Two-way Roadway - Work Beyond Shoulder - Mowing Operation
			619- 022	Two-lane Two-way Roadway - Shoulder Encroachment - Mowing Operation
			619- 023	Two-lane Two-way Roadway - Lane Encroachment - Mowing Operation
			619- 031	Freeway - Work Beyond Shoulder - Mowing Operation
			619- 032	Freeway - Shoulder Encroachment - Mowing Operation
			619- 033	Freeway - Lane Encroachment - Mowing Operation
			619- 041	Parkway - Lane Closure/ Encroachment - Mowing Operation
	Mulch/Herb	619- 050	Two-lane Two-way Roadway- Shoulder Closure/Encroachment - Mulching/Herbicide Operation	
		619- 051	Freeway - Shoulder Closure/Encroachment - Mulching/Herbicide Operation	
	Pvmt Mark	619- 060	Two-lane Two-way Roadway - Lane Closure - Pavement Marking Operations	
	Signal Work	619- 070	Two-lane Two-way Roadway - Work Beyond Shoulder - Signal Work	
		619- 071	Two-lane Two-way Roadway - Lane Closure/Encroachment - Signal Work	
		619- 080	All Roadways - Work Beyond Shoulder - All Durations	

PROPOSED

Work Zone Traffic Control Standard Sheets

Master List Part 3 of 7

Mobile Operations 101 - 200	619- 101	Two-lane Two-way Roadway - Right Shoulder Closure - Mobile Operation
	619- 102	Two-lane Two-way Roadway - Lane Closure - Mobile Operation
	619- 103	Freeway - Right Shoulder Closure - Mobile Operation (Total of 2 Sheets)
	619- 104	Freeway - Right Lane Closure - Mobile Operation (Total of 2 Sheets)
	619- 105	Freeway - Right Two-Lane Closure - Mobile Operation (Total of 2 Sheets)
	619- 106	Freeway - Left Lane/Shoulder Closure - Mobile Operation - Under 5 minutes
	619- 107	Freeway - Left Lane or Shoulder Closure - Mobile Operation - 5 to 15 minutes
	619- 108	Freeway - Left Two-Lane/Shoulder Closure - Mobile Operation
	619- 109	Freeway - Shoulder Closure on Ramp - Mobile Operation
	619- 110	Parkway - Lane Encroachment - Mobile Operation
	619- 111	Two-lane Two-way Roadway - Road Closure - Mobile Operation
	619- 112	Two-lane Two-way Roadway - Intersection Closure - Mobile Operation

PROPOSED

Work Zone Traffic Control Standard Sheets

Master List Part 4 of 7

Short Duration Operations 201 - 300	619- 201	Two-lane Two-way Roadway - Right Shoulder Closure - Short Duration Operation
	619- 202	Two-lane Two-way Roadway - Interior Lane Closure - Short Duration Operation
	619- 203	Two-lane Two-way Roadway - Exterior Lane Closure - Short Duration Operation
	619- 204	Two-lane Two-way Roadway (Rural) - Center Left Turn/Interior Lane Closure - Short Duration
	619- 205	Two-lane Two-way Roadway (Urban) - Center Left Turn/Interior Lane Closure - Short Duration
	619- 206	Freeway- Right Shoulder Closure - Short Duration Operation (Total of 2 Sheets)
	619- 207	Freeway - Right Lane Closure - Short Duration Operation (Total of 2 Sheets)
	619- 208	Freeway - Right Two-Lane Closure - Short Duration Operation (Total of 2 Sheets)
	619- 209	Freeway - Left Shoulder Closure - Short Duration Operation
	619- 210	Freeway - Left Lane Closure - Short Duration Operation
	619- 211	Freeway - Left Two Lane Closure - Short Duration Operation
	619- 212	Freeway - Left Shoulder Closure on Exit Ramp - Short Duration Operation
	619- 213	Parkway - Right/Left Lane Closure - Short Duration Operation

PROPOSED

Work Zone Traffic Control Standard Sheets

Master List Part 5 of 7

Short Term Operations	301 - 400	619- 301	Freeway (8FT+ Shoulder)- Right Shoulder Closure - Short Term Operation
		619- 302	Multi-Lane Divided Roadway - Right Lane Closure - Short Term Operation
		619- 303	Multi-Lane Divided Roadway - Right Two-Lane Closure - Short Term Operation
		619- 304	Freeway (<8FT Shoulder) - Left Lane Closure - Short Term Operation
		619- 305	Freeway (<8FT Shoulder) - Left Two-Lane Closure - Short Term Operation
		619- 306	Parkway (<8FT Shoulder) - Right Lane Closure - Short Term Operation
		619- 307	Two-lane Two-way Roadway - Lane Closure with Flaggers - Short Term Operation
		619- 308	Two-lane Two-way Roadway - Lane Closure with Flaggers Prior to Intersection - Short Term Operation
		619- 309	Two-lane Two-way Roadway - Lane Closure with AFAD - Short Term Operation (Total of 2 Sheets)
		619- 310	Two-lane Two-way Roadway - Shoulder Closure with No Lane Encroachment - Short Term Operation
		619- 311	Two-lane Two-way Roadway (Low Speed Urban) - Right Lane Closure - Short Term Operation
		619- 312	Multi-lane Undivided Roadway - Center Turn Lane Closure - Short Term Operation
		619- 313	Two-lane Two-way Roadway - Right Lane Closure Through Intersection - Short Term Operation
		619- 314	Two-lane Two-way Roadway - Lane Closure with Moving Flaggers - Short Term Operation
		619- 315	Freeway - Shoulder Closure at Ramp Approach - Short Term Operation
		619- 316	Freeway - Partial Exit Ramp Closure - Short Term Operation
		619- 317	Multi Lane Divided Roadway - Single Lane Closure - Short Term
		619- 318	Freeway - Single Lane Closure at Entrance Ramp - Short Term Operation
		619- 319	Freeway - Single Lane Closure at Exit Ramp - Short Term Operation
		619- 321	Two-lane Two-way Roadway - Sidewalk Detour Diversion - Short Term Operation
619- 322	Two-lane Two-way Roadway - Crosswalk Closure and Pedestrian Detour - Short Term Operation		
619- 323	Two-lane Two-way Roadway - Flagging Operation at Intersection - Short Term Operation		
619- 324	Two-lane Two-way Roadway - Single Lane Shift with Center Turn Lane - Short Term Operation		

PROPOSED

Work Zone Traffic Control Standard Sheets

Master List Part 6 of 7

Intermediate Operations	401 - 500	619- 401	Freeway (8FT+ Shoulder)- Right Shoulder Closure - Intermediate Term Operation
		619- 402	Multi-Lane Divided Roadway - Right Lane Closure - Intermediate Term Operation
		619- 403	Multi-Lane Divided Roadway - Right Two-Lane Closure - Intermediate Operation
		619- 407	Two-lane Two-way Roadway - Lane Closure with Flaggers - Intermediate Term Operation
		619- 410	Two-lane Two-way Roadway - Shoulder Closure with No Lane Encroachment - Intermediate Term Operation
		619- 412	Multi-lane Undivided Roadway - Center Turn Lane Closure - Intermediate Term Operation
		619- 414	Multi Lane Divided Roadway - Single Lane Closure - Intermediate Term
		619- 415	Freeway - Shoulder Closure at Ramp Approach - Intermediate Operation
		619- 416	Freeway - Partial Exit Ramp Closure - Intermediate Operation
		619- 417	Freeway - Single Lane Closure near Entrance Ramp - Intermediate Operation
		619- 418	Freeway - Single Lane Closure near Exit Ramp - Intermediate Operation
		619- 419	Two-lane Two-way Roadway - Sidewalk Detour Diversion - Intermediate Operation
		619- 420	Two-lane Two-way Roadway - Crosswalk Closure and Pedestrian Detour - Intermediate Operation
		619- 421	Two-lane Two-way Roadway - Flagging Operation at Intersection - Intermediate Operation
		619- 422	Two-lane Two-way Roadway - Single Lane Shift with Center Turn Lane - Intermediate Operation
		619- 423	Multi-lane Two-way Roadway - Double Interior Lane Closure - Intermediate Operation
619- 424	Two-lane Two-way Roadway - Temporary Traffic Signal - Intermediate Operation		

PROPOSED

Work Zone Traffic Control Standard Sheets Master List Part 7 of 7

Long Term Operations	501 - 600	619- 501	Freeway (8FT+ Shoulder)- Right Shoulder Closure - Long Term Operation
		619- 502	Freeway - Multi Lane Shift - Long Term Operations
		619- 503	Two-lane Two-way Roadway - Offsite Detour - Long Term Operations
		619- 504	Multi-lane Divided Roadway - Single Lane Closure - Long Term Operations
		619- 517	Freeway - Single Lane Closure near Entrance Ramp - Long Term Operations
		619- 518	Freeway - Single Lane Closure near Exit Ramp - Long Term Operations
		619- 519	Two-lane Two-way Roadway - Sidewalk Detour Diversion - Long Term Operations
		619- 520	Two-lane Two-way Roadway - Crosswalk Closure and Pedestrian Detour - Long Term Operations
		619- 523	Multi-lane Undivided Roadway - Double Interior Lane Closure - Long Term Operations
		619- 524	Two-lane Two-way Roadway - Temporary Traffic Signal - Long Term Operations

Altogether, replacing and combining the current 27 Standard Sheets and 54 Typical Application drawings, including new drawings, will result in almost 100 new sheets.

PROPOSED **Work Zone Traffic Control Standard Sheets**

The current WZTC Manual webpage (See: <https://webapps.dot.ny.gov/part-ii-typical-application-index>) will be updated to point to the new Standard Sheets instead of the Typical Application drawings (which will be rescinded). This will allow easy access to anyone needing guidance on WZTC setups for NYS highways including those within and outside the Department.

PROPOSED Work Zone Traffic Control Standard Sheets

Existing webpage

The screenshot shows a web browser window with the URL webapps.dot.ny.gov/part-ii-typical-application-index. The page header includes the date "October 13, 2021 | 5:45 pm" and "COVID-19 Vaccines". The navigation menu includes "Services", "News", "Government", and "COVID-19 Vaccine". The main content area is titled "Part II: Typical Application Index" and "WORK ZONE TRAFFIC CONTROL". A search bar is visible with a "HOME" button. Below the search bar, there is a message: "Please open each of the below search results in a new tab or window to alleviate an occasional error that may occur when using...". The search results show "56 results found" and a list of items, including "Conventional Roadway, Mobile Operation" and "TATS-C2 Signal Work Lane Encroachment Lane Closure". A "DOWNLOAD" button is visible next to the search results.

FILTER

- + All Roadway Types
- + Conventional Roadway
- + Freeway or Expressway
- + Parkway
- + General Operation
- + Mobile Operation
- + Short Duration Operation
- + Short Term Operation

FILTER

- + All Roadway Types
- + Conventional Roadway
- + Freeway or Expressway
- + Parkway
- + General Operation
- + Mobile Operation
- + Short Duration Operati

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- ➔ **1st clearance review opportunity began 3/8/2021 with comments due 4/16/2021**
 - ❑ **1,648 comments were received**
 - ❑ **Unable to stay on schedule for a 1/1/2022 effective date due to comment volume**
 - ❑ **Extensive changes warranted another review**
- ➔ **2nd clearance review opportunity began 9/13/2021 with comments due 10/1/2021**
 - ❑ **Almost 500 comments were received**
 - ❑ **Comment resolution is to be completed by 12/1/2021 to remain on schedule for an effective date of 5/1/2022**

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- ➔ **Changes included in the new Standard Sheets**
 - ❑ **Protective vehicles (shadow, barrier, advanced warning) minimum weight requirement increased from 18,000 to 24,000 pounds**
 - ❑ **Protective vehicle required more often**
 - ❑ **Additional truck mounted impact attenuators (TMIAAs) are required**
 - ❑ **Roll ahead distances increased and buffer space no longer optional in most cases**
 - ❑ **Warning flags added to 1st and 3rd advance warning signs (except for Long Term Ops)**
 - ❑ **"State Law" sign (NYR9-11) required for long term work**

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Questions & Answers



Additional Information



**Department of
Transportation**

Geoffrey W. Wood, P.E.

Director, Highway Safety & Traffic Operations Bureau
Chairman, Work Zone Safety Working Group

New York State Department of Transportation

50 Wolf Road, POD 53

Albany, NY 12232

Desk: (518) 457-8900

geoffrey.wood@dot.ny.gov