



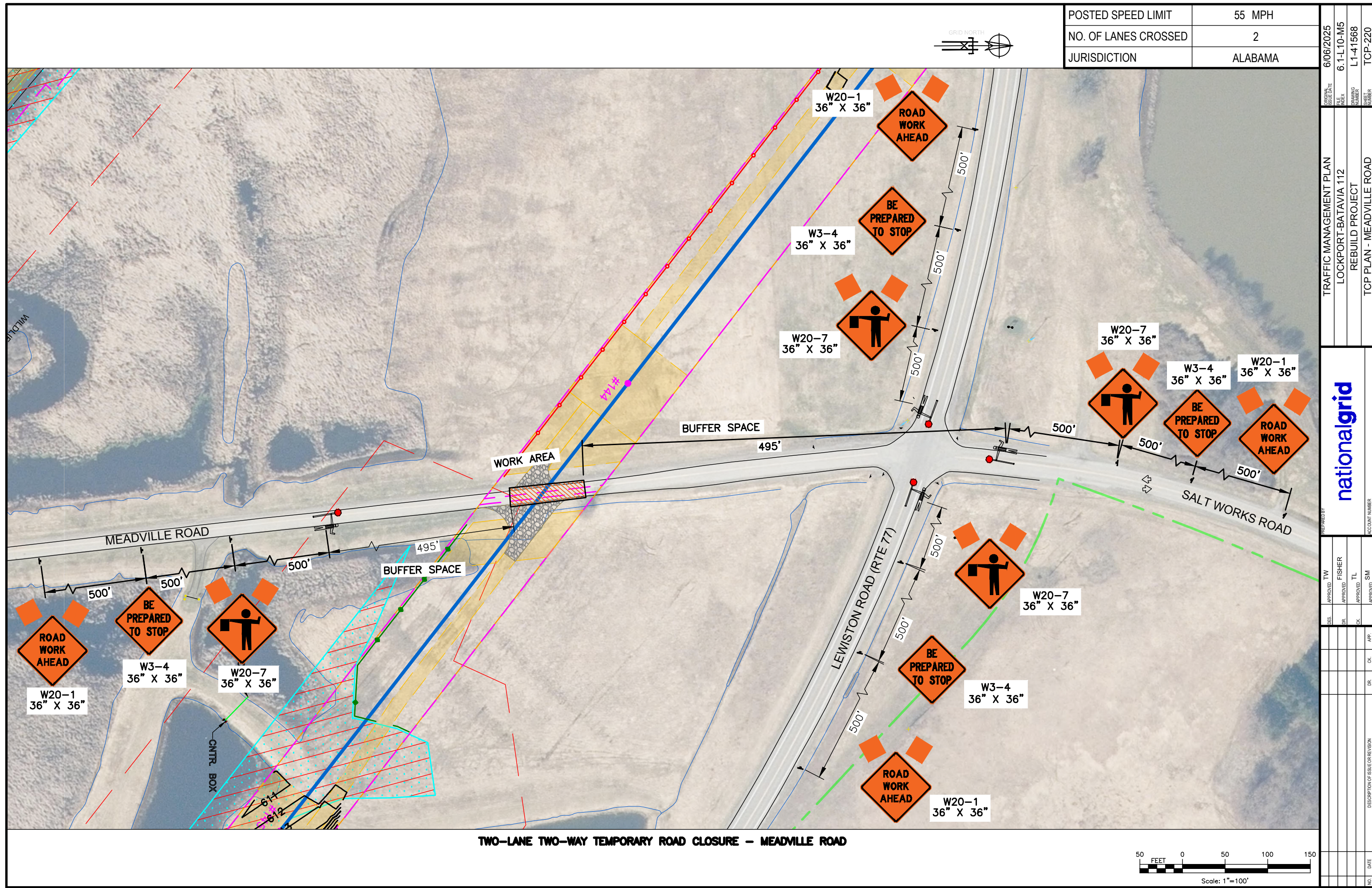
**Lockport-Batavia Line #112  
Rebuild Project**

**Appendix X**

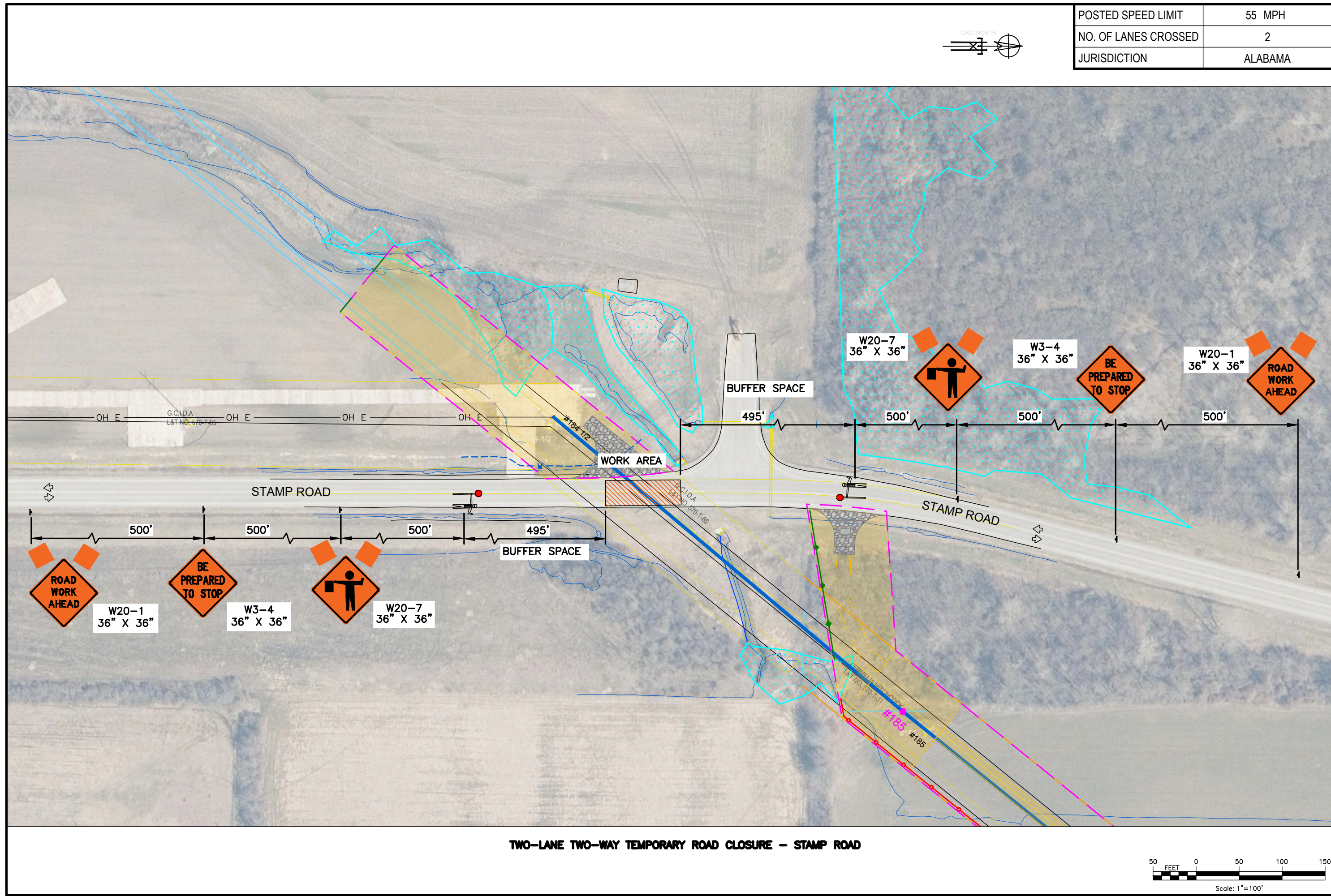
**Traffic Management Plans**

**Part 7 of 7**





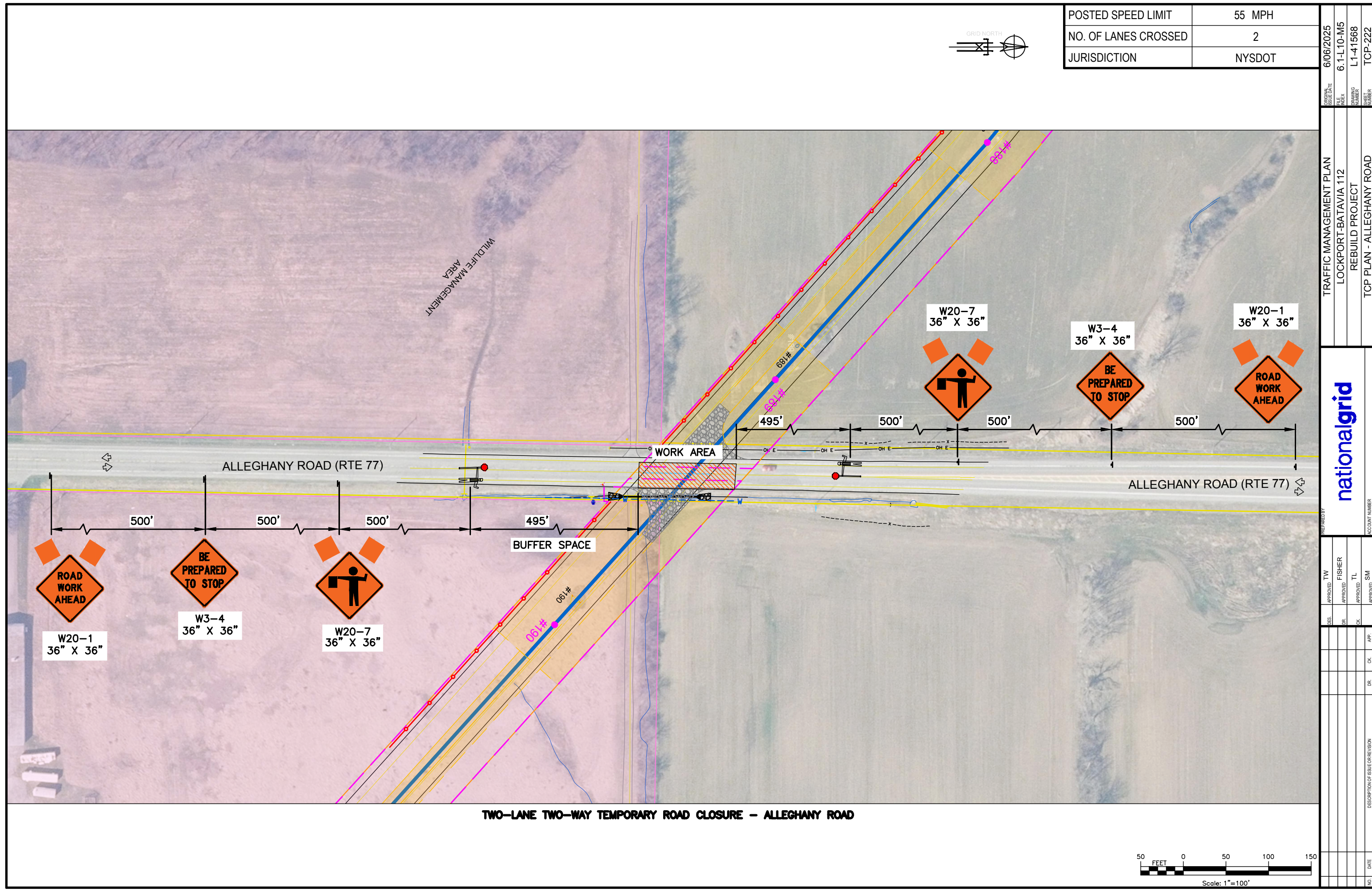




POSTED SPEED LIMIT	55 MPH
NO. OF LANES CROSSED	2
JURISDICTION	ALABAMA

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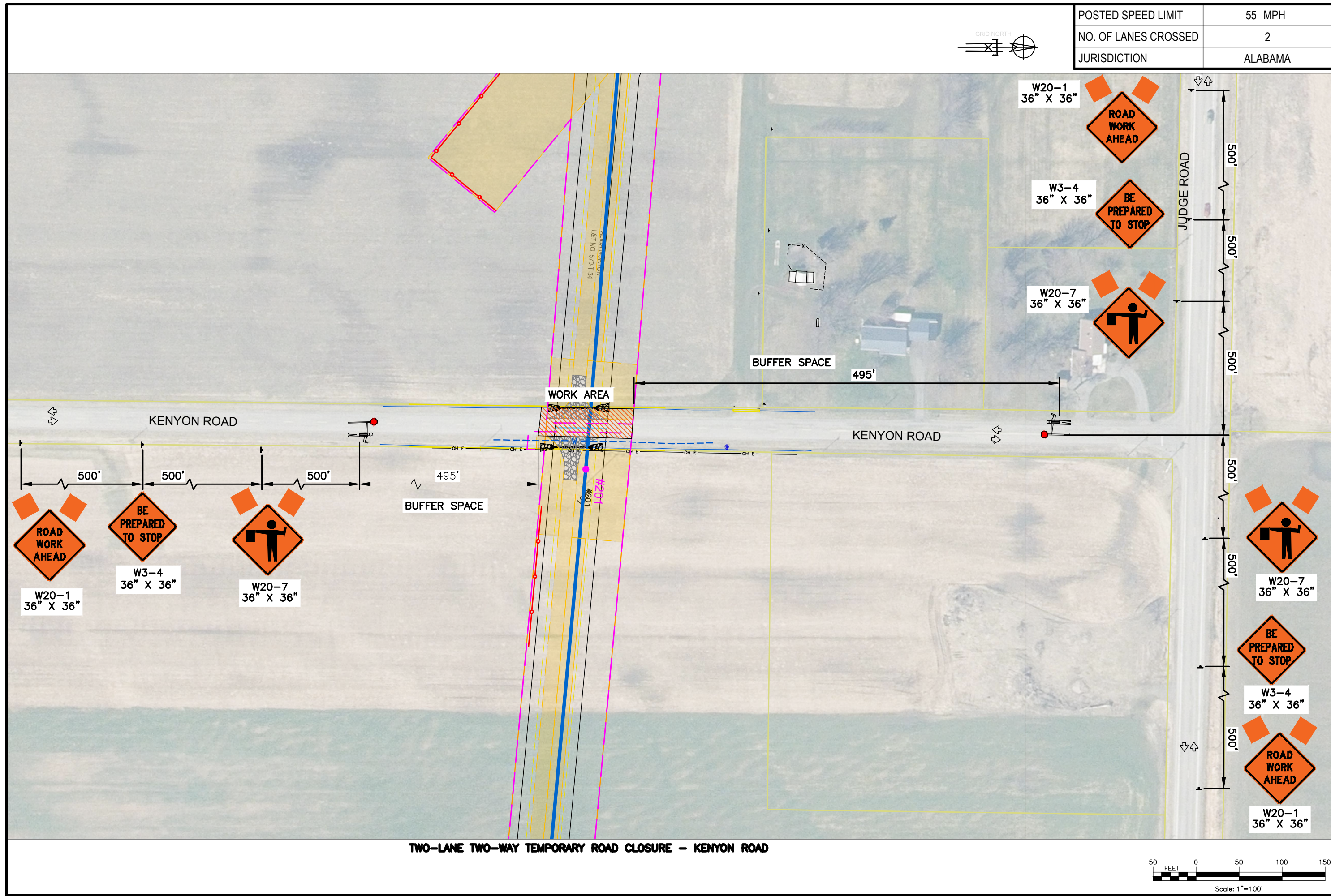




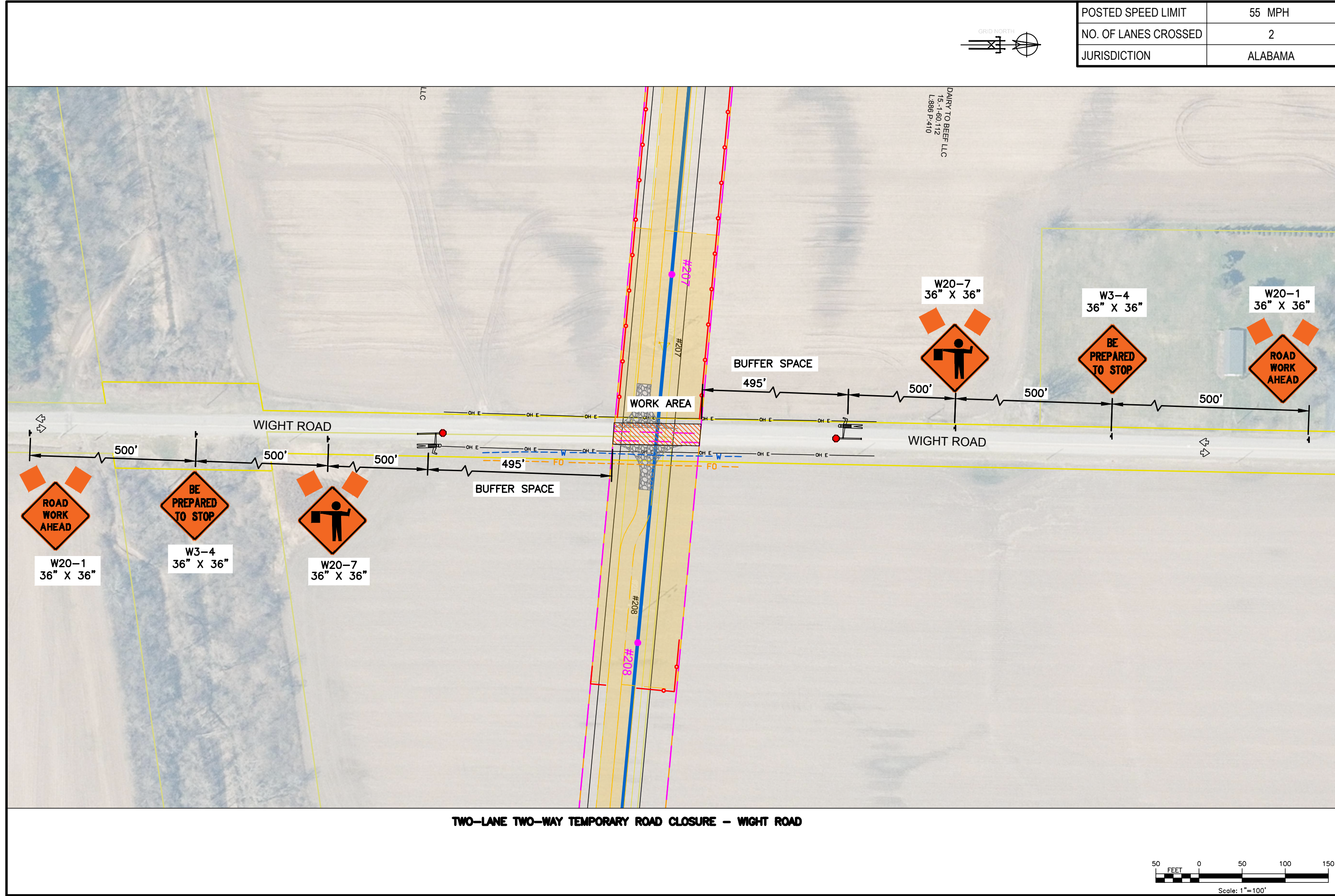


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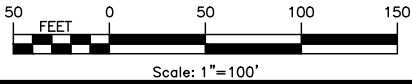
TWO-LANE TWO-WAY TEMPORARY ROAD CLOSURE - WIGHT ROAD

POSTED SPEED LIMIT	55 MPH
NO. OF LANES CROSSED	2
JURISDICTION	ALABAMA

ISSUE DATE	6/06/2025	TRAFFIC MANAGEMENT PLAN
FILE INDEX	6.1-L10-M5	LOCKPORT-BATAVIA 112
DRAWING NUMBER	L1-41568	REBUILD PROJECT
SHEET NUMBER	TCP-225	TCP PLAN - WIGHT ROAD

PREPARED BY	TW	APPROVED	DR	CK	APP
	FISHER	APPROVED	DR	CK	APP
	TL	APPROVED	DR	CK	APP
	SM	APPROVED	DR	CK	APP
NO.	DATE	DISCUSSION OF ISSUE OR REVISION			

**nationalgrid**



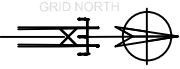
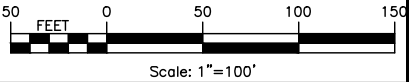


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MARSHALL YARD ENTRANCE - LEDGE ROAD



POSTED SPEED LIMIT	55 MPH
NO. OF LANES CROSSED	1
JURISDICTION	ALABAMA

ISSUE	APPROVED	TW	APPROVED	PREPARED BY	TRAFFIC MANAGEMENT PLAN	ORIGINAL ISSUE DATE	6/06/2025
DR	APPROVED	FISHER	APPROVED	LOCKPORT-BATAVIA 112	FILE INDEX	6.1-L10-M5	
CK	APPROVED	TL	APPROVED	REBUILD PROJECT	DRAWING NUMBER	L1-41568	
APP	APPROVED	SM	APPROVED	TCP PLAN - LEDGE ROAD	SUPER	TCP-226	
NO	DATE	DISCUSSION OF ISSUE OR REVISION	DR	CK	APP		



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DATE/TIME = 02-MAY-2024 16:11  
USER = ak11-bj1



GENERAL NOTES

1. THE TYPICAL DETAILS DEPICTED ON THE STANDARD SHEETS AND IN THE MUTCD, REFLECT THE MINIMUM REQUIREMENTS.
2. PROPOSED REVISIONS TO THE TRAFFIC CONTROL PLAN SHALL BE PROVIDED, IN WRITING, TO THE DOT ENGINEER FOR REVIEW AND APPROVAL BY THE REGIONAL DIRECTOR OR HIS/HER DESIGNEE FIVE (5) WORK DAYS PRIOR TO THE PLANNED IMPLEMENTATION OF SUCH PROPOSED REVISIONS, EXCEPT FOR CHANGES THAT ALTER THE SCOPE OF THE TRAFFIC CONTROL PLAN. SUCH CHANGES IN SCOPE MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL BY THE REGIONAL DIRECTOR OR HIS/HER DESIGNEE THIRTY (30) WORK DAYS PRIOR TO IMPLEMENTATION OF SUCH REVISIONS.
3. THE NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF STAFF WHO ARE AUTHORIZED TO SECURE LABOR, MATERIALS, AND EQUIPMENT FOR EMERGENCY REPAIRS OUTSIDE NORMAL WORKING HOURS SHALL BE PROVIDED, IN WRITING, TO THE NYSDOT ENGINEER. THE ENGINEER WILL PROVIDE THE SUBMITTED INFORMATION TO REGIONAL MANAGEMENT, THE NEW YORK STATE POLICE, THE RESIDENT ENGINEER, AND THE LOCAL POLICE.
4. STANDARD SHEET 619-503 MAY BE USED FOR AN OFFSITE DETOUR SETUP FOR BOTH LONG TERM AND SHORT TERM WORK DURATIONS.
5. REGIONAL HIGH-VOLUME RESTRICTIONS SHALL BE FOLLOWED. CONSULT WITH DOT ENGINEER IF EXCEPTION NEEDED.
6. PLAN AHEAD TO AVOID CONFLICTING WORK ZONES. CHECK FOR CONSTRUCTION PROJECTS, CLOSURES, & RESTRICTIONS AT [WWW.511NY.ORG](http://WWW.511NY.ORG), [WWW.DOT.NY.GOV/PROJECTS](http://WWW.DOT.NY.GOV/PROJECTS), AND WITH NYSDOT ENGINEER.
7. WORK ZONE INCIDENTS SHALL BE DOCUMENTED AND REPORTED USING EITHER THE DEPARTMENT'S WORK ZONE INCIDENT FORM, OR THE CONSTRUCTION INCIDENT REPORTING SYSTEM, AS APPROPRIATE.
8. CONSIDER CLOSURE WIDTH AND THE ABILITY TO ACCOMMODATE WIDE LOAD VEHICLES BEFORE ESTABLISHING WORK ZONES.
9. IF THE WORK ZONE AFFECTS AN EXISTING ACCESSIBLE AND DETECTABLE PEDESTRIAN FACILITY, ACCESSIBILITY AND DETECTABILITY SHALL BE PROVIDED ALONG THE ALTERNATE ROUTE.

ACTIVITY AREA

1. A 500' MINIMUM LONGITUDINAL DISTANCE SHALL BE MAINTAINED BETWEEN CONSTRUCTION OPERATIONS ON ALTERNATE SIDES OF THE ROADWAY, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
2. WHEN TWO OR MORE AREAS ARE ADJACENT, OVERLAP, OR ARE IN CLOSE PROXIMITY, THE CONTRACTOR SHALL ENSURE THERE ARE NO CONFLICTING SIGNS AND THAT LANE CONTINUITY IS MAINTAINED THROUGHOUT ALL WORK AREAS.

SIGNS

1. THE LOCATIONS OF THE SIGNS SHOWN ON THE WORK ZONE TRAFFIC CONTROL PLANS AND DETAILS MAY BE ADJUSTED BASED ON SIGHT DISTANCE AND OTHER CONSIDERATIONS. THE FINAL LOCATIONS OF SIGNS ARE SUBJECT TO APPROVAL OF THE ENGINEER.
2. FOR LONG TERM WORK DURATIONS, ANY EXISTING SIGNS, INCLUDING OVERHEAD SIGNS, WHICH CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL SIGN LAYOUT SHALL BE COVERED, REMOVED, STORED OR RESET, AS APPROVED BY THE ENGINEER. ALL APPROPRIATE EXISTING SIGNS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND/OR LOCATION UNLESS OTHERWISE REPLACED IN THIS CONTRACT.
3. SIGNS AT OR NEAR INTERSECTIONS SHALL BE PLACED SO THAT THEY DO NOT OBSTRUCT A MOTORIST'S LINE OF SIGHT.
4. SIGNS MOUNTED ON THE MEDIAN OF DIVIDED HIGHWAYS WHERE MEDIAN BARRIER IS IN PLACE MAY BE MOUNTED ON THE BARRIER WITH A SADDLE TYPE BRACKET OR OMITTED WITH THE APPROVAL OF THE DOT ENGINEER. LAYING THE SIGN DOWN IN A HORIZONTAL POSITION IS NOT PERMITTED.
5. THE DIMENSIONS OF WORK ZONE TRAFFIC CONTROL SIGNS ARE DESCRIBED IN THE MUTCD. ANY CHANGES TO THE DIMENSIONS SHALL BE APPROVED BY THE REGIONAL DIRECTOR OR BY HIS/HER DESIGNEE.
6. NYR9-12 SHALL BE USED IN PLACE OF NYR9-11 WHEN A REDUCED REGULATORY SPEED LIMIT SIGN IS AUTHORIZED.
7. RIGID AND FLEXIBLE "ROLL-UP" SIGNS MAY BE USED FOR MOBILE, SHORT DURATION AND SHORT-TERM STATIONARY WORK. RIGID SIGNS MUST BE MOUNTED AT LEAST 5 FEET ABOVE GRADE (7 FEET WHERE THERE ARE PEDESTRIANS OR PARKED CARS). FLEXIBLE SIGNS SHALL BE MOUNTED AT LEAST ONE FOOT ABOVE GRADE. MESH SIGNS SHALL NOT BE USED. USE RETRO REFLECTORIZED RIGID SIGNS FOR NIGHTTIME WORK.

LANE WIDTHS

1. UNLESS AUTHORIZED BY THE ENGINEER, THE MINIMUM LANE WIDTHS FOR WORK ZONE TRAVEL LANES SHALL BE AS FOLLOWS: FREEWAYS AND/OR EXPRESSWAYS IS 11'. THE MINIMUM LANE WIDTH FOR ALL OTHER TYPES OF ROADWAYS IS 10'.
2. A WRITTEN NOTE SHALL BE PROVIDED TO THE ENGINEER, A MINIMUM OF 21 CALENDAR DAYS IN ADVANCE OF PERFORMING ANY WORK THAT RESULTS IN THE REDUCED WIDTH OF AN EXISTING ROADWAY, SO THAT THE ENGINEER MAY NOTIFY THE REGIONAL PERMIT ENGINEER IN A TIMELY MANNER.
3. IF THE WORK ZONE AFFECTS PEDESTRIANS, A MINIMUM PEDESTRIAN PATHWAY WIDTH OF 5 FEET SHALL BE MAINTAINED UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
4. TEMPORARY BICYCLE ACCOMMODATIONS SHALL NOT BE LESS THAN WHAT CURRENTLY EXISTS UNLESS AUTHORIZED BY THE ENGINEER.

PROTECTIVE VEHICLES

1. PROTECTIVE VEHICLES ARE DIVIDED INTO 2 CATEGORIES BASED ON THE GROSS VEHICLE WEIGHT (GVW):
  - PROTECTIVE VEHICLE LIGHT (PVL) SHALL HAVE A MINIMUM GVW OF 9,500 LBS. OR GREATER.
  - PROTECTIVE VEHICLE HEAVY (PVH) SHALL HAVE A MINIMUM GVW OF 22,000 LBS. OR GREATER.
2. IF THE PROTECTIVE VEHICLE ENCROACHES INTO THE TRAVEL LANE, OR IF IT REMAINS ENTIRELY ON THE SHOULDER OF ANY HIGH SPEED ROAD (45 MPH), IT SHALL BE EQUIPPED WITH A DEPLOYED TRUCK/TRAILER MOUNTED IMPACT ATTENUATOR (TMIA, SEE TABLE 011-01 ON SHEET 619-011). BALLAST MAY BE USED TO BRING A LIGHTER VEHICLE UP TO THE INDICATED WEIGHT PROVIDED THE BALLAST IS SECURELY CONTAINED WITHIN AN ENCLOSED BODY OR OTHERWISE SECURELY FASTENED TO THE VEHICLE PURSUANT TO FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION (FMCSA) CARGO SECUREMENT RULES, SUCH THAT:
  - THE BALLAST WILL NOT SEPARATE FROM THE VEHICLE UPON IMPACT AND
  - THE BALLAST WEIGHT WILL NOT EXCEED THE MANUFACTURER'S GROSS VEHICLE WEIGHT RATING (GVWR).
  - TRUCK/TRAILER MOUNTED IMPACT ATTENUATORS SHALL NOT BE MOUNTED/INSTALLED ON VEHICLES WITH A GROSS WEIGHT (GVW) LESS THAN WHAT IS MINIMALLY REQUIRED BY THE MANUFACTURER OF THE TMIA.
3. WHEN A PROTECTIVE VEHICLE(S) IS USED BETWEEN THE WORK VEHICLE (CREW) OR HAZARD AND THE TRAFFIC IN A MOVING OPERATION IT IS REFERRED TO AS A SHADOW VEHICLE(S).
4. WHEN A PROTECTIVE VEHICLE(S) IS USED BETWEEN THE WORK VEHICLE (CREW) OR HAZARD AND THE TRAFFIC IN A STATIONARY OPERATION IT IS REFERRED TO AS A BARRIER VEHICLE(S).
5. WHEN A PROTECTIVE VEHICLE IS USED IN ADVANCE OF EITHER MOVING OR STATIONARY OPERATIONS TO DISPLAY SIGN MESSAGES IT IS REFERRED TO AS AN ADVANCE WARNING VEHICLE. WHEN SIGNS ARE MOUNTED ON AN ADVANCED WARNING VEHICLE, THEY SHALL NOT OBSTRUCT VISIBILITY OF ANY LIGHTS (TAILLIGHTS OR WARNING LIGHTS), OR SIDE-VIEW MIRRORS ON THE VEHICLE, OR TRUCK MOUNTED ARROW BOARDS.
6. IN A MOVING OPERATION OR A STATIONARY OPERATION THAT OCCUPIES A LOCATION FOR UP TO 1 HOUR, THE OPERATOR SHALL REMAIN IN THE PROTECTIVE VEHICLE WITH THE SAFETY BELT AND HEADREST PROPERLY ADJUSTED, MAINTAIN VEHICLE SPACING, AND KEEP THE WHEELS ALIGNED WITH THE LANE STRIPING AND LANE TO MAINTAIN LANE DISCIPLINE AND TO STAY IN LANE IF STRUCK. THE PARKING BRAKE SHALL BE SET WHENEVER POSSIBLE. TWO-WAY RADIOS SHOULD BE USED TO COMMUNICATE BETWEEN THE OPERATOR AND THE WORK CREW.
7. IN A STATIONARY OPERATION THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR, ONCE THE PROTECTIVE VEHICLE HAS BEEN APPROPRIATELY PLACED, IT SHOULD BE UNOCCUPIED. UNOCCUPIED VEHICLE SHALL BE POSITIONED PARALLEL TO TRAFFIC, PARKING BRAKE SET, PLACED IN 2ND GEAR (MANUAL TRANSMISSIONS /ENGINE OFF) OR PARK / NEUTRAL (AUTOMATIC TRANSMISSIONS). THE FRONT WHEELS SHALL BE ALIGNED WITH THE LANE STRIPING AND LANE TO MAINTAIN LANE DISCIPLINE AND TO STAY IN LANE IF STRUCK.
8. NO WORK ACTIVITY, EQUIPMENT, VEHICLES AND/OR MATERIALS SHALL BE LOCATED BETWEEN THE PROTECTIVE VEHICLE AND THE ACTIVE WORK AREA (ROLL AHEAD DISTANCE).
9. DIRECT VERBAL COMMUNICATION BETWEEN THE PROTECTIVE VEHICLES AND THE WORK VEHICLE(S) / EQUIPMENT SHALL BE UTILIZED WHERE AVAILABLE.

CHANNELIZING DEVICES

1. WHERE POSSIBLE ALL CHANNELIZING AND GUIDING DEVICES ARE TO BE PLACED SO AS TO PROVIDE A MINIMUM 2' LATERAL CLEARANCE TO THE TRAVELED WAY.
2. A DROP-OFF OF GREATER THAN 24 INCHES WITHIN 10 FEET FROM THE EDGE OF THE TRAVELED WAY TO REMAIN AT THE END OF THE WORK SHIFT SHALL BE SEPARATED FROM TRAFFIC WITH POSITIVE BARRIER. FOR POSTED SPEED LIMIT OF 45 MPH AND LESS, A DROP-OFF OF GREATER THAN 24 INCHES WITHIN 10 FEET FROM THE EDGE OF THE TRAVELED WAY THAT IS 100 FEET OR LESS IN LENGTH WILL BE ALLOWED WITH CHANNELIZING DEVICES CONSISTING OF DRUMS, EXTRA TALL CONES, OR OVERSIZED VERTICAL PANELS ONLY AT A MAXIMUM SPACING OF 20 FEET FOR SHORT DURATIONS NOR TO EXCEED ONE WORK SHIFT.
3. TEMPORARY POSITIVE BARRIER MAY BE SUBSTITUTED WITH DRUM CHANNELIZING DEVICES, IN SOME CIRCUMSTANCES, WITH APPROVAL OF THE REGIONAL TRAFFIC ENGINEER BASED ON GUIDANCE FOUND IN THE HIGHWAY DESIGN MANUAL AND ENGINEERING JUDGEMENT.

PUBLIC ACCESS


1. PROPERTY OWNERS WHOSE DRIVEWAYS WILL BE MADE INACCESSIBLE SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO RESTRICTING USE OF THE DRIVEWAY. FOR MULTIPLE ACCESS PROPERTIES, AT LEAST ONE DRIVEWAY SHALL BE OPEN AT ALL TIMES. ACCESS SHALL BE RESTORED TO ALL DRIVEWAYS AS SOON AS POSSIBLE.
2. SUITABLE RAMPS SHALL BE INSTALLED TO MAINTAIN SMOOTH TRANSITIONS FROM RESIDENTIAL AND COMMERCIAL DRIVEWAYS TO AND FROM THE WORK AREA.

LANE CLOSURES

1. LANE CLOSURES SHALL BE LOCATED TO PROVIDE OPTIMUM VISIBILITY, I.E. BEFORE CURVES AND CRESTS, TO THE EXTENT CONDITIONS PERMIT.
2. THE ENGINEER MAY REQUIRE THAT ALL LANES BE RE-OPENED AT ANY TIME IF THE ROUTE IS NEEDED FOR EMERGENCY PURPOSES. THIS COULD INCLUDE INCIDENTS AT LOCATIONS OUTSIDE THE CONTRACT LIMITS.
3. EACH ARROW PANEL SHALL BE VISIBLE 1500 FEET IN ADVANCE FROM ANY POINT WITHIN THE ROADWAY.

TOLERANCE NOTE

1. ALL DIMENSIONS ON ANY 619 STANDARD SHEET ARE NOMINAL.
  - WHEN A DECIMAL POINT WITH SIGNIFICANT DIGIT(S) TO THE RIGHT OF IT IS/ARE PRESENT-TOLERANCE FOR EACH DIMENSION IS ONE HALF OF THE LAST SIGNIFICANT DIGIT IN THE UNITS SHOWN. (e.g. 1.0' IS 0.05' & 1.00" IS 0.005").
  - OTHERWISE, TOLERANCE FOR EACH DIMENSION IS THE LESSER OF 10% OF THE NOMINAL DIMENSION SHOWN OR 6" (e.g. TOLERANCE FOR 3' IS 3.6" & TOLERANCE FOR 10' IS 6").
2. TOLERANCE ARE NOT CUMULATIVE. ABOVE DOES NOT APPLY WHEN ANY RANGE, MAXIMUM OR MINIMUM DIMENSION OR A CONTEXT SPECIFIC TOLERANCE IS SPECIFIED.

<div><div>NEW YORK STATE OF OPPORTUNITY.</div></div> <div>Department of Transportation</div>		
U.S. CUSTOMARY STANDARD SHEET		
WORK ZONE TRAFFIC CONTROL GENERAL NOTES (SHEET 1 OF 2)		
<div>ERRATA 3 EFF. 05/01/24 ISSUED WITH EB 24-007</div> <div>ERRATA 2 EFF. 09/01/23 ISSUED WITH EB 23-016</div> <div>ERRATA 1 EFF. 05/01/23 ISSUED WITH EB 22-033</div>	<div>APPROVED DECEMBER 21, 2022</div> <div><i>Robert Limoges</i></div> <div>ROBERT LIMOGES, P.E. DIRECTOR, OTSM</div>	<div>ISSUED UNDER EI 22-033</div> <div>619-010</div>



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WORK DURATION DEFINITIONS

1. THERE ARE MAINLY FIVE WORK DURATIONS:
- A. LONG-TERM IS STATIONARY WORK THAT OCCUPIES A LOCATION MORE THAN 3 CONSECUTIVE DAYS.

B. INTERMEDIATE-TERM IS STATIONARY WORK THAT OCCUPIES A LOCATION MORE THAN ONE DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR NIGHTTIME WORK LASTING MORE THAN 1 HOUR.

C. SHORT-TERM IS STATIONARY DAYTIME WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR WITHIN A SINGLE DAYLIGHT PERIOD.

D. SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR. IT CAN BE PERFORMED DURING THE DAYTIME OR AT NIGHT IN ACCORDANCE WITH NOTES N1 TO N11 NOTES ON NIGHTTIME WORK.

E. MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY WHERE THE WORK AT ANY SPECIFIC LOCATION COMPLETES WITHIN 15 MINUTES. IT IS USED FOR VEHICLE BASED OPERATIONS AND DOES NOT INVOLVE WORKERS ON FOOT. IT CAN BE PERFORMED DURING THE DAYTIME OR AT NIGHT IN ACCORDANCE WITH NOTES N1 TO N10 NOTES ON NIGHTTIME WORK.
2. SPECIAL OPERATIONS ARE WORK OPERATIONS THAT DO NOT FIT INTO ONE OF THE ABOVE FIVE CATEGORIES. SPECIAL OPERATIONS INCLUDE:
- A. STOP AND GO OPERATIONS - WORK THAT COMPLETES WITHIN 5 MINUTES AND ALLOWS WORKERS ON FOOT.

B. OTHER OPERATIONS INCLUDING MOWING, MULCHING/HERBICIDE OPERATIONS, TEMPORARY ROAD/INTERSECTION CLOSURES, ETC.

ROADWAY TYPE DEFINITIONS

1. FREEWAY:
- A. INTERSTATE: INTERREGIONAL HIGH-SPEED, HIGH-VOLUME, DIVIDED FACILITIES WITH COMPLETE CONTROL OF ACCESS.

B. PARKWAY: DIVIDED HIGHWAYS FOR NON-COMMERCIAL TRAFFIC WITH FULL CONTROL OF ACCESS, GRADE PARKWAY SEPARATIONS, INTERCHANGES, AND OCCASIONAL AT-GRADE INTERSECTIONS. PARKWAYS ARE DESIGNATED BY LAW.
2. EXPRESSWAY: DIVIDED HIGHWAYS FOR THROUGH TRAFFIC WITH FULL OR PARTIAL CONTROL OF ACCESS AND GENERALLY WITH GRADE SEPARATIONS AT MAJOR CROSSROADS. ALL FREEWAY STANDARD SHEETS ARE APPLICABLE TO EXPRESSWAY.
3. NON-FREEWAY:
- A. MULTILANE DIVIDED HIGHWAY

B. MULTILANE UNDIVIDED HIGHWAY

C. TWO-LANE TWO-WAY ROADWAY


ALL NON-FREEWAYS CAN BE EITHER URBAN OR RURAL:

- URBAN: (MEETS MORE THAN 1 OF THE FOLLOWING CRITERIA)
- HIGH DENSITY DEVELOPMENT
  - ON-STREET PARKING
  - VARIED BUILDING SETBACKS
  - MULTI-STORY AND LOW-TO MEDIUM-RISE STRUCTURES FOR RESIDENTIAL
  - COMMERCIAL, AND EDUCATIONAL USES, STRUCTURES THAT ACCOMMODATE MIXED USES: COMMERCIAL, RESIDENTIAL, AND PARKING
  - LIGHT INDUSTRIAL, AND SOMETIMES HEAVY INDUSTRIAL, LAND USE
  - PROMINENT DESTINATIONS WITH SPECIALIZED STRUCTURES, E.G., LARGE THEATERS, SPORTS FACILITIES OR CONFERENCE CENTERS
  - HIGH LEVELS OF PEDESTRIAN AND BICYCLIST ACTIVITY, WITH NEARLY CONTINUOUS SIDEWALKS AND MARKED CROSSWALKS
  - HIGHER DENSITY OF TRANSIT STOPS AND ROUTES
  - DRIVEWAY DENSITIES GREATER THAN 25 DRIVEWAYS/MILE ON EACH SIDE OF THE ROAD
  - MINOR COMMERCIAL DRIVEWAY DENSITIES OF 10 DRIVEWAYS/MILE OR GREATER
  - MAJOR COMMERCIAL DRIVEWAYS
  - HIGH DENSITY OF CROSS STREETS

RURAL: DOES NOT MEET MORE THAN ONE OF THE ABOVE CRITERIA.

NOTES FOR NIGHTTIME OPERATIONS:

- N1. WORK OCCURRING AFTER SUNSET AND BEFORE SUNRISE WILL BE CONSIDERED NIGHTTIME OPERATIONS.
- N2. ALL SIGNS, STOP/SLOW PADDLES AND RED FLAGS USED TO WARN/ALERT/CONTROL TRAFFIC SHALL BE RETROREFLECTIVE.
- N3. ALL WORKERS INVOLVED SHALL WEAR PROTECTIVE HELMETS AND NIGHTTIME APPAREL IN ACCORDANCE WITH §107-05A. HIGH VISIBILITY APPAREL AT ALL TIMES.
- N4. VEHICLES OPERATING ON THE PAVEMENT OF A CLOSED ROADWAY OR TRAVEL LANE SHALL DISPLAY ROTATING AMBER BEACONS OR FLASHING LED BEACONS AT ALL TIMES.
- N5. LEVEL I ILLUMINATION SHALL BE PROVIDED NEAR THE BEGINNING OF LANE CLOSURE TAPERS AND AT ROAD CLOSURES, INCLUDING THE SETUP AND REMOVAL OF THE CLOSURE TAPERS.
- N6. LEVEL II ILLUMINATION SHALL BE PROVIDED FOR FLAGGING STATIONS, ASPHALT PAVING, MILLING, AND CONCRETE PLACEMENT AND/OR REMOVAL OPERATIONS, INCLUDING BRIDGE DECKS, 50 FEET AHEAD OF AND 100 FEET BEHIND A PAVING OR MILLING MACHINE.
- N7. LEVEL III ILLUMINATION SHALL BE PROVIDED FOR PAVEMENT OR STRUCTURAL CRACK FILLING, JOINT REPAIR, PAVEMENT PATCHING AND REPAIRS, INSTALLATION OF SIGNAL EQUIPMENT OR OTHER ELECTRICAL/MECHANICAL EQUIPMENT, AND OTHER TASKS INVOLVING FINE DETAILS OR INTRICATE PARTS AND EQUIPMENT.
- N8. ALL LIGHTING SHALL BE DESIGNED, INSTALLED, AND OPERATED TO AVOID GLARE THAT AFFECTS TRAFFIC ON THE ROADWAY OR THAT CAUSES ANNOYANCE OR DISCOMFORT FOR RESIDENCES ADJOINING THE ROADWAY.
- N9. PRIOR TO THE START OF NIGHTTIME OPERATIONS, A WRITTEN NIGHTTIME OPERATIONS AND LIGHTING PLAN IS REQUIRED FOR APPROVAL FROM THE DOT ENGINEER.
- N10. SEE STANDARD SPECIFICATIONS §619 FOR ADDITIONAL REQUIREMENTS AND CONSIDERATIONS. REFER TO SECTION 619-3.19B FOR BALLOON LIGHTING REQUIREMENTS.
- N11. FLAGGERS SHALL USE A FLASHLIGHT WITH RED GLOW CONE/RED LED BATON FOR FLAGGING IN NON-ILLUMINATED FLAGGER STATIONS DURING NIGHTTIME OPERATIONS.



NEW YORK  
STATE OF  
OPPORTUNITY.

Department of  
Transportation

U.S. CUSTOMARY STANDARD SHEET

WORK ZONE TRAFFIC CONTROL  
GENERAL NOTES  
(SHEET 2 OF 2)




















APPROVED DECEMBER 21, 2022  
*Robert Limoges*  
ROBERT LIMOGES, P.E.  
DIRECTOR, OTSM

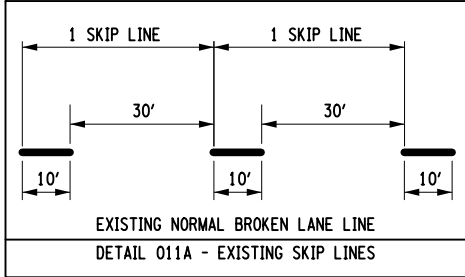
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619-010

















ERRATA 1 eff. 09/01/23  
ISSUED WITH EB 23-016




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DATE/TIME = 15-APR-2024 13:50  
USER = ak1r-bj1

WORK ZONE TRAFFIC CONTROL LEGEND	
SYMBOL	DESCRIPTION
	ARROW PANEL
	ARROW PANEL, CAUTION MODE
	ARROW PANEL TRAILER OR SUPPORT
	CHANGEABLE MESSAGE SIGN (PVMS)
	CHANNELIZING DEVICE
	CONE
	CRASH CUSHION/TEMPORARY IMPACT ATTENUATOR
	DIRECTION OF TEMPORARY TRAFFIC DETOUR
	DIRECTION OF TRAFFIC
	AUTOMATED FLAGGER ASSISTANCE DEVICE WITH OPERATOR
	FLAGGER
	FLAG TREE
	LUMINAIRE
	MOWER
	PARKWAY GRASS SHOULDER
	PAVEMENT MARKINGS THAT SHALL BE REMOVED FOR A LONG TERM PROJECT
	PORTABLE VARIABLE MESSAGE SIGN
	ORANGE FLAGS (MIN. 18" X 18")
	TRAILER FOR ARROW PANEL OR PORTABLE VARIABLE MESSAGE SIGN (PVMS)



WORK ZONE TRAFFIC CONTROL LEGEND	
SYMBOL	DESCRIPTION
	SIGN, TEMPORARY
	SPOTTER
	TEMPORARY POSITIVE BARRIER
	TEMPORARY POSITIVE BARRIER WITH WARNING LIGHTS
	TEMPORARY TRAFFIC SIGNAL HEAD
	TYPE III BARRICADE
	WARNING LIGHTS
	WORK AREA
	WORK VEHICLE
	WORK VEHICLE (MULCHING/HERBICIDE OPERATION)
	WORK VEHICLE (PAVEMENT MARKING)
	WORK VEHICLE (SIGNAL WORK)
	PROTECTIVE VEHICLE
	PROTECTIVE VEHICLE LIGHT
	PROTECTIVE VEHICLE HEAVY
	TRUCK/TRAILER MOUNTED IMPACT ATTENUATOR (TMIA)



**NEW YORK**  
STATE OF  
OPPORTUNITY.

**Department of  
Transportation**


U.S. CUSTOMARY STANDARD SHEET

WORK ZONE TRAFFIC CONTROL  
GENERAL TABLES AND LEGEND  
(SHEET 1 OF 2)

ERRATA 2 EFF. 09/01/23  
ISSUED WITH EB 23-016

ERRATA 1 EFF. 05/01/2023  
ISSUED WITH EB 22-033

APPROVED DECEMBER 21, 2022

  
ROBERT LIMOGES, P.E.  
DIRECTOR, OTSM

ISSUED UNDER EI 22-033

619-011



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TABLE 011-01: PROTECTIVE VEHICLE REQUIREMENTS <sup>A,B</sup>																					
CLOSURE TYPE	DURATION	MOBILE OPERATION AND STOP & GO				SHORT DURATION OPERATION				SHORT TERM OPERATION				INTERMEDIATE TERM OPERATION				LONG TERM OPERATION			
	ROAD TYPE & SPEED	FREEWAY	NON-FREEWAY			FREEWAY	NON-FREEWAY			FREEWAY	NON-FREEWAY			FREEWAY	NON-FREEWAY			FREEWAY	NON-FREEWAY		
			≥ 45 MPH	35 - 40 MPH	≤ 30 MPH		≥ 45 MPH	35 - 40 MPH	≤ 30 MPH		≥ 45 MPH	35 - 40 MPH	≤ 30 MPH		≥ 45 MPH	35 - 40 MPH	≤ 30 MPH		≥ 45 MPH	35 - 40 MPH	≤ 30 MPH
	EXPOSURE CONDITIONS (SEE NOTE 1)																				
LANE CLOSURE OR ENCROACHMENT	WORKERS ON FOOT OR WORK VEHICLE EXPOSED TO TRAFFIC	PVH+TMIA	PVH+TMIA	PVL+TMIA	PVL	PVH+TMIA	PVH+TMIA	PVL+TMIA	PVL	PVH+TMIA	PVH+TMIA	PVL+TMIA	PVL	PVH+TMIA	PVH+TMIA	PVL+TMIA	SEE NOTE 2	PVH+TMIA	PVH+TMIA	PVL+TMIA	SEE NOTE 2
	-NO WORKERS ON FOOT -NO WORK VEHICLE EXPOSED TO TRAFFIC -OTHER HAZARDS EXPOSED (IE EQUIPMENT, MATERIALS)					PVH+TMIA	PVH+TMIA	PVL	PVL	PVH+TMIA	PVH+TMIA	PVL	SEE NOTE 2	PVH+TMIA	PVH+TMIA	SEE NOTE 2	SEE NOTE 2	PVH+TMIA	PVH+TMIA	SEE NOTE 2	SEE NOTE 2
SHOULDER CLOSURE OR ENCROACHMENT	WORKERS ON FOOT OR WORK VEHICLE EXPOSED TO TRAFFIC	PVH+TMIA	PVH+TMIA	PVL+TMIA	PVL	PVH+TMIA	PVH+TMIA	PVL	PVL	PVH+TMIA	PVH+TMIA	PVL	PVL	PVH+TMIA	PVH+TMIA	SEE NOTE 2	SEE NOTE 2	PVH+TMIA	PVH+TMIA	SEE NOTE 2	SEE NOTE 2
	-NO WORKERS ON FOOT -NO WORK VEHICLE EXPOSED TO TRAFFIC -OTHER HAZARDS EXPOSED (IE EQUIPMENT, MATERIALS, EXCAVATION)					PVH+TMIA	PVH+TMIA	PVL	PVL	PVH+TMIA	PVH+TMIA	PVL	SEE NOTE 2	PVH+TMIA	SEE NOTE 3	SEE NOTE 2	SEE NOTE 2	PVH+TMIA	SEE NOTE 3	SEE NOTE 2	SEE NOTE 2
<b>LEGEND</b> PVL - PROTECTIVE VEHICLE LIGHT (MINIMUM GROSS WEIGHT 9,500 LBS. OR GREATER) (SEE NOTE 5) PVH - PROTECTIVE VEHICLE HEAVY (MINIMUM GROSS WEIGHT 22,000 LBS. OR GREATER) TMIA - TRUCK/TRAILER MOUNTED IMPACT ATTENUATOR  A. THESE PROTECTIVE VEHICLE REQUIREMENTS ARE NOT APPLICABLE TO PAVING AND MILLING OPERATIONS. A STANDARD BUFFER SPACE SHALL BE PROVIDED FOR THESE OPERATIONS IN ACCORDANCE WITH TABLE 011-03.  B. THESE PROTECTIVE VEHICLE REQUIREMENTS ARE NOT APPLICABLE TO FLAGGING OPERATIONS. PROTECTIVE VEHICLES WITH APPROPRIATE ROLL AHEAD DISTANCE MAY BE USED IN ADVANCE OF THE WORK AREA IF DEEMED NECESSARY BY THE DOT ENGINEER AND THEIR DESIGNEE.											<b>NOTES</b> 1. THE EXPOSURE CONDITIONS ASSUME THERE IS NO POSITIVE PROTECTION PRESENT. 2. EITHER A PROTECTIVE LIGHT (PVL) OR THE STANDARD BUFFER SPACE (SEE TABLE 011-03) SHALL BE PROVIDED. 3. EITHER A PROTECTIVE VEHICLE HEAVY (PVH) OR THE STANDARD BUFFER SPACE (SEE TABLE 011-03) SHALL BE PROVIDED. 4. TRUCK/TRAILER MOUNTED IMPACT ATTENUATORS (TMIA) SHALL NOT BE MOUNTED/INSTALLED ON VEHICLES WITH A GROSS VEHICLE WEIGHT (GVW) LESS THAN WHAT IS MINIMALLY REQUIRED BY THE MANUFACTURER OF THE TMIA. 5. THE USE OF A PROTECTIVE VEHICLE LIGHT (PVL) AS A SHADOW VEHICLE IS LIMITED TO NON-FREEWAY ROADWAYS WHERE THE POSTED SPEED LIMITS IS ≤ 40 MPH UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.										

TABLE 011-02: TAPER LENGTHS & NUMBER OF CONES CHART																
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	TAPER LENGTH: (FT.)/ * OF SKIP LINES/ * OF CHANNELIZING DEVICES									SHOULDER TAPER LENGTH: (FT.)/ * OF SKIP LINES/ * OF CHANNELIZING DEVICES						
	LATERAL SHIFT OF TRAFFIC FLOW PATH (FT.)									FOR SHOULDER WIDTH						
	4	5	6	7	8	9	10	11	12	≤ 4 FT.	5 - 7 FT.	8 FT.	9 FT.	10 FT.	11 FT.	12 FT.
25	40/1/2	80/2/3	80/2/3	80/2/3	80/2/3	120/3/4	120/3/4	120/3/4	120/3/4	40/1/2	40/1/2	40/1/2	40/1/2	40/1/2	40/1/2	40/1/2
30	80/2/3	80/2/3	80/2/3	120/3/4	120/3/4	160/4/5	160/4/5	160/4/5	200/5/6	40/1/2	40/1/2	40/1/2	40/1/2	80/2/3	80/2/3	80/2/3
35	80/2/3	120/3/4	120/3/4	160/4/5	160/4/5	200/5/6	200/5/6	240/6/7	240/6/7	40/1/2	40/1/2	80/2/3	80/2/3	80/2/3	80/2/3	80/2/3
40	120/3/4	160/4/5	160/4/5	200/5/6	240/6/7	240/6/7	280/7/8	320/8/9	320/8/9	40/1/2	80/2/3	80/2/3	80/2/3	120/3/4	120/3/4	120/3/4
45	200/5/6	240/6/7	280/7/8	320/8/9	360/9/10	400/10/11	440/11/12	520/13/14	560/14/15	80/2/3	80/2/3	120/3/4	120/3/4	120/3/4	120/3/4	160/4/5
50	200/5/6	240/6/7	320/8/9	360/9/10	400/10/11	440/11/12	520/13/14	560/14/15	600/15/16	80/2/3	120/3/4	160/4/5	160/4/5	160/4/5	160/4/5	160/4/5
55	240/6/7	280/7/8	320/8/9	400/10/11	440/11/12	520/13/14	560/14/15	600/15/16	680/17/18	80/2/3	120/3/4	160/4/5	160/4/5	160/4/5	200/5/6	200/5/6
60	240/6/7	320/8/9	360/9/10	440/11/12	480/12/13	560/14/15	600/15/16	680/17/18	720/18/19	80/2/3	120/3/4	160/4/5	200/5/6	200/5/6	240/6/7	240/6/7
65	280/7/8	320/8/9	400/10/11	480/12/13	520/13/14	600/15/16	640/16/17	720/18/19	800/19/20	80/2/3	160/4/5	200/5/6	240/6/7	240/6/7	280/7/8	280/7/8
* THIS TABLE WAS CREATED WITH REFERENCE TO MUTCD TABLE 6H-4. ** THE NUMBER OF CHANNELIZING DEVICES SHOWN IS CALCULATED BASED ON A 40FT DEVICE SPACING. THE NUMBER OF CHANNELIZING DEVICES CAN BE ADJUSTED AS NECESSARY.																

TABLE 011-03 LONGITUDINAL BUFFER SPACE	
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	DISTANCE (FT.)/ * OF SKIP LINES
25	155 / 4
30	200 / 5
35	250 / 6
40	305 / 8
45	360 / 9
50	425 / 11
55	495 / 13
65	645 / 16
* THIS TABLE IS THE SAME AS MUTCD TABLE 6C-2.	


TABLE 011-04: ROLL AHEAD DISTANCE FOR PROTECTIVE VEHICLES					
ROLL AHEAD DISTANCE (FT.)/* OF SKIP LINES FOR VEHICLES					
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	PROTECTIVE VEHICLES WEIGHING 9,500 TO 21,999 LBS. GVW		PROTECTIVE VEHICLES WEIGHING 22,000 LBS. OR GREATER GVW		
	STATIONARY OPERATION	MOVING OPERATION (15 MPH MAX.)	STATIONARY OPERATION	MOVING OPERATION (15 MPH MAX.)	
≥ 60	200/5	240/6	160/4	200/5	
45 - 55	160/4	200/5	120/3	160/4	
≤ 40	120/3	120/3	80/2	120/3	

TABLE 011-05 FLARE RATES FOR POSITIVE BARRIER					
TYPE OF POSITIVE BARRIER	POSTED SPEED LIMIT				
	30 MPH	40 MPH	50 MPH	55 MPH	65 MPH
TEMPORARY POSITIVE BARRIER	8:1	11:1	14:1	16:1	20:1
BOX BEAM OR HEAVY POST CORRUGATED BEAM	7:1	9:1	11:1	12:1	15:1

TABLE 011-06 ADVANCE WARNING SIGN SPACING					
ROAD TYPE	DISTANCE BETWEEN SIGNS			SIGN LEGEND	
	A (FT.)	B (FT.)	C (FT.)	XX	YY
URBAN (≤ 30 MPH*)	100	100	100	AHEAD	AHEAD
URBAN (35-40 MPH*)	200	200	200	AHEAD	AHEAD
URBAN (≥ 45 MPH*)	350	350	350	1000 FT.	AHEAD
RURAL	500	500	500	1500 FT.	1000 FT.
FREEWAY	1000	1500	2640	1 MILE	1/2 MILE
* PRECONSTRUCTION POSTED SPEED LIMIT. ** THIS TABLE IS THE SAME AS MUTCD TABLE NY6H-3.					

TABLE 011-07 TAPER LENGTH FOR TEMPORARY TRAFFIC CONTROL ZONES	
TYPE OF TAPER	TAPER LENGTH (L)
MERGING TAPER	L
SHIFTING TAPER	L/2
SHOULDER TAPER	L/3
ONE-LANE, TWO-WAY TRAFFIC TAPER	50 FT. MIN -100 FT. MAX
DOWNSTREAM TAPER	50 FT. MIN -100 FT. MAX
* THIS TABLE IS THE SAME AS MUTCD TABLE 6C-3.	

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**Department of  
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WORK ZONE TRAFFIC CONTROL  
GENERAL TABLES AND LEGEND  
(SHEET 2 OF 2)

APPROVED DECEMBER 21, 2022  
*Robert Limoges*  
ROBERT LIMOGES, P.E.  
DIRECTOR, OTSM

ISSUED UNDER EI 22-033  
**619-011**



WORK ZONE TRAFFIC CONTROL SIGN TABLE					
SIGN	SIGN DESIGNATION	COLOR CODE	NON-FREEWAY	EXPRESSWAY	FREEWAY
	E5-1	C	-----	72"X60"	72"X60"
	G20-1	A	36"X18"	48"X24"	48"X24"
	G20-2	A	36"X18"	48"X24"	48"X24"
	G20-4	A	36"X18"	-----	-----
	G20-5aP	A	24"X18"	36"X24"	36"X24"
	M1-1	G	1 OR 2 DIGITS 24"X24"	36"X36"	36"X36"
	M1-1+	G	3 DIGITS 30"X24"	45"X36"	45"X36"
	M1-4	B	1 OR 2 DIGITS 24"X24"	36"X36"	36"X36"
	M1-4+	B	3 DIGITS 30"X24"	45"X36"	45"X36"
	M3-1	SEE NOTE 3	24"X12"	36"X18"	36"X18"
	M3-2				
	M3-3				
	M3-4				
	M4-8	A	24"X12"	36"X18"	36"X18"
	M4-8a	A	24"X18"	24"X18"	24"X18"
	M4-9 M4-9L M4-9R	A	30"X24"	48"X36"	48"X36"
	M4-9a	A	30"X24"	30"X24"	-----
	M4-9b	A	30"X24"	30"X24"	-----
	M4-9c	A	30"X24"	30"X24"	-----
	M4-10L	A	48"X18"	48"X18"	48"X18"
	M4-10R				
	M5-1	SEE NOTE 3	21"X15"	30"X21"	30"X21"
	M5-2	SEE NOTE 3	21"X15"	30"X21"	30"X21"
	M6-1	SEE NOTE 3	21"X15"	30"X21"	30"X21"
	M6-2				
	M6-3				
	M6-4				
	NYM3-1	B	24"X24"	36"X36"	36"X36"
	NYM3-2	B	30"X24"	45"X36"	45"X36"
	NYM3-3	B	30"X24"	45"X36"	45"X36"

WORK ZONE TRAFFIC CONTROL SIGN TABLE					
SIGN	SIGN DESIGNATION	COLOR CODE	NON-FREEWAY	EXPRESSWAY	FREEWAY
	NYR9-11	B	24"X42"	48"X84"	48"X84"
	NYR9-12	B	24"X36"	36"X54"	48"X72"
	NYW4-17	A	36"X36"	48"X48"	48"X48"
	NYW8-30	A	48"X24"	48"X24"	48"X24"
	NYW8-31	A	48"X24"	48"X24"	48"X24"
	NYW8-32	A	48"X24"	48"X24"	48"X24"
	NYW8-33	A	48"X24"	48"X24"	48"X24"
	R1-1	D	36"X36"	36"X36"	48"X48"
	R1-2	E	36"X36"X36"	48"X48"X48"	60"X60"X60"
	R2-1	B	24"X30" OR 30"X36" (SEE NOTE 5)	36"X48"	36"X48"
	R2-11	B	24"X30"	36"X48"	36"X48"
	R2-12	B	24"X36"	36"X54"	36"X54"
	R4-1	B	24"X30"	36"X48"	36"X48"
	R4-7	B	24"X30"	36"X48"	36"X48"
	R4-7c NARROW	B	18"X30"	-----	-----
	R4-8	B	24"X30"	36"X48"	36"X48"
	R4-8c NARROW	B	18"X30"	-----	-----
	R4-9	B	24"X30"	36"X48"	36"X48"
	R5-1	E	36"X36"	36"X36"	48"X48"
	R8-3	E	24"X24"	36"X36"	48"X48"
	R9-8	B	36"X18"	36"X18"	-----
	R9-9	B	24"X12"	24"X12"	-----
	R9-10	B	24"X12"	24"X12"	-----
	R9-10L R9-10R	B	24"X12"	24"X12"	-----
	R9-11L R9-11R	B	24"X18"	24"X18"	-----
	R9-11aL R9-11aR	B	24"X12"	24"X12"	-----
	R10-6	B	24"X36"	24"X36"	-----

WORK ZONE TRAFFIC CONTROL SIGN TABLE					
SIGN	SIGN DESIGNATION	COLOR CODE	NON-FREEWAY	EXPRESSWAY	FREEWAY
	R11-2	B	48"X30"	48"X30"	48"X30"
	R11-2 (MOD.)				
	R11-3a	B	60"X30"	60"X30"	-----
	W1-4L W1-4R	A	36"X36"	48"X48"	48"X48"
	W1-4bL W1-4bR	A	36"X36"	48"X48"	48"X48"
	W1-4cL W1-4cR	A	36"X36"	48"X48"	48"X48"
	W1-6L	A	48"X24"	60"X30"	60"X30"
	W1-6R	A			
	W1-8L	A (NO BORDER)	18"X24"	30"X36"	30"X36"
	W1-8R	A (NO BORDER)			
	W3-1	A <sup>4</sup>	36"X36"	48"X48"	48"X48"
	W3-2	A <sup>4</sup>	36"X36"	48"X48"	48"X48"
	W3-3	A <sup>4</sup>	36"X36"	48"X48"	48"X48"
	W3-4	A	36"X36"	48"X48"	48"X48"
	W3-5	A <sup>4</sup>	36"X36"	48"X48"	48"X48"
	W4-1L W4-1R	A	36"X36"	48"X48"	48"X48"
	W4-2L W4-2R	A	36"X36"	48"X48"	48"X48"

WORK ZONE TRAFFIC CONTROL SIGN TABLE					
SIGN	SIGN DESIGNATION	COLOR CODE	NON-FREEWAY	EXPRESSWAY	FREEWAY
	NYW23-1	A	36"X36"	48"X48"	48"X48"
	G20-5aP	6F.12	24"X18"	36"X24"	36"X24"
	E5-2	6F.28	48"X36"	48"X36"	48"X36"
	E5-2a	6F.28	48"X36"	48"X36"	48"X36"

COLOR CODE LEGEND	
CODE	DESCRIPTION
A	BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND
B	BLACK LEGEND AND BORDER ON A WHITE BACKGROUND
C	WHITE LEGEND AND BORDER ON A GREEN BACKGROUND
D	WHITE LEGEND AND BORDER ON A RED BACKGROUND
E	RED LEGEND AND BORDER ON A WHITE BACKGROUND
F	BLACK LEGEND AND BORDER ON A FLOURESCENT YELLOW GREEN BACKGROUND
G	WHITE LEGEND AND BORDER ON A BLUE AND RED BACKGROUND

- NOTES:
- DIMENSIONS ARE SHOWN AS WIDTH X HEIGHT.
  - FOR SIGNAGE NOT SHOWN ON THESE TABLES REFER TO THE M.U.T.C.D.
  - COLORS FOR DIRECTION PLAQUES, ADVANCE TURN ARROWS, AND DIRECTIONAL ARROWS SHALL MATCH THE ROUTE OR INTERSTATE SIGN THAT THEY SUPPLEMENT AS PER THE M.U.T.C.D.
  - MULTICOLORED SYMBOL IMPOSED ON SIGN WITH BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND.
  - FOR R2-1 SIGN LARGER DIMENSIONS SHALL BE USED WHEN SIGN FACES MULTIPLE LANES ON A CONVENTIONAL ROAD.

**NEW YORK**  
STATE OF  
OPPORTUNITY.

**Department of  
Transportation**

U.S. CUSTOMARY STANDARD SHEET

WORK ZONE TRAFFIC CONTROL  
SIGN TABLE  
(SHEET 1 OF 3)

APPROVED DECEMBER 2, 2021




















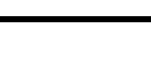

ISSUED UNDER EI 21-028


















*Robert Limoges*  
ROBERT LIMOGES, P.E.  
DIRECTOR, OTSM





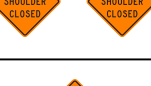







619-012



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USER = ak1-bj1


WORK ZONE TRAFFIC CONTROL SIGN TABLE					
SIGN	SIGN DESIGNATION	COLOR CODE	NON-FREEWAY	EXPRESSWAY	FREEWAY
	W5-1	A	36"X36"	48"X48"	48"X48"
	W5-4	A	36"X36"	48"X48"	48"X48"
	W6-3	A	36"X36"	48"X48"	48"X48"
	W7-3aP	A	24"X18"	36"X30"	36"X30"
	W8-1	A	36"X36"	48"X48"	48"X48"
	W8-3	A	36"X36"	48"X48"	48"X48"
	W8-7	A	36"X36"	48"X48"	48"X48"
	W8-8	A	36"X36"	48"X48"	48"X48"
	W8-9	A	36"X36"	48"X48"	48"X48"
	W8-12	A	36"X36"	-----	-----
	W8-14	A	36"X36"	48"X48"	48"X48"
	W8-15	A	36"X36"	48"X48"	48"X48"
	W8-17	A	36"X36"	48"X48"	48"X48"
	W8-17p	A	24"X18"	30"X24"	30"X24"
	W8-23	A	36"X36"	48"X48"	48"X48"
	W8-24	A	36"X36"	48"X48"	48"X48"
	W9-3	A	36"X36"	48"X48"	48"X48"
	W11-1L* W11-1R	A OR F	36"X36"	36"X36"	-----
	W11-2L* W11-2R	F	36"X36"	36"X36"	-----
	W11-15L* W11-15R	F	36"X36"	36"X36"	-----
	NYW5-32P*	A	24"X18"	24"X18"	-----

WORK ZONE TRAFFIC CONTROL SIGN TABLE					
SIGN	SIGN DESIGNATION	COLOR CODE	NON-FREEWAY	EXPRESSWAY	FREEWAY
	W13-1P	A	24"X24"	30"X30"	30"X30"
	W13-4	A	36"X36"	36"X36"	36"X36"
	W13-4P	A	48"X48"X36"	-----	-----
	W16-2P	A	24"X18"	30"X24"	-----
	W16-4P	SEE NOTE 3 A OR F	30"X24"	-----	-----
	W16-5PL W16-5PR	A	24"X18"	-----	-----
	W16-7PL W16-7PR	SEE NOTE 3 A OR F	24"X12"	30"X18"	-----
	W16-9P	SEE NOTE 3 A OR F	24"X12"	30"X18"	-----
	W20-1	A	36"X36"	48"X48"	48"X48"
	W20-2	A	36"X36"	48"X48"	48"X48"
	W20-3	A	36"X36"	48"X48"	48"X48"
	W20-4	A	36"X36"	48"X48"	48"X48"
	W20-5	A	36"X36"	48"X48"	48"X48"
	W20-5a	A	36"X36"	48"X48"	48"X48"
	W20-5a	A	36"X36"	48"X48"	48"X48"
	W20-5a	A	36"X36"	48"X48"	48"X48"
	W20-7	A	36"X36"	48"X48"	48"X48"

WORK ZONE TRAFFIC CONTROL SIGN TABLE					
SIGN	SIGN DESIGNATION	COLOR CODE	NON-FREEWAY	EXPRESSWAY	FREEWAY
	W21-1	A	36"X36"	48"X48"	48"X48"
	W21-4	A	36"X18"	48"X24"	48"X24"
	W21-5	A	36"X36"	48"X48"	48"X48"
	W21-5aL W21-5aR	A	36"X36"	48"X48"	48"X48"
	W21-5bL W21-5bR	A	36"X36"	48"X48"	48"X48"
	W21-5bL W21-5bR	A	36"X36"	48"X48"	48"X48"
	W21-8	A	36"X36"	48"X48"	48"X48"
	W22-1	A	36"X36"	48"X48"	48"X48"
	W22-2	A	42"X36"	42"X36"	42"X36"
	W22-3	A	42"X36"	42"X36"	42"X36"
	W23-1	A	48"X24"	48"X24"	48"X24"
	W23-2	A	36"X36"	48"X48"	48"X48"

COLOR CODE LEGEND	
CODE	DESCRIPTION
A	BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND
B	BLACK LEGEND AND BORDER ON A WHITE BACKGROUND
C	WHITE LEGEND AND BORDER ON A GREEN BACKGROUND
D	WHITE LEGEND AND BORDER ON A RED BACKGROUND
E	RED LEGEND AND BORDER ON A WHITE BACKGROUND
F	BLACK LEGEND AND BORDER ON A FLOURESCENT YELLOW GREEN BACKGROUND
G	WHITE LEGEND AND BORDER ON A BLUE AND RED BACKGROUND

- NOTES:
- DIMENSIONS ARE SHOWN AS WIDTH X HEIGHT.
  - FOR SIGNAGE NOT SHOWN ON THESE TABLES REFER TO THE M.U.T.C.D.
  - WHEN USED IN CONJUNCTION WITH A BICYCLE SIGN (W11-1) OR PEDESTRIAN CROSSING (W11-2) COLOR CODE SHALL MATCH.
- A FLOURESCENT YELLOW-GREEN BACKGROUND COLOR SHALL BE USED FOR THIS SIGN PLAQUE.



**NEW YORK**  
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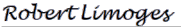
**Department of  
Transportation**

U.S. CUSTOMARY STANDARD SHEET

WORK ZONE TRAFFIC CONTROL  
SIGN TABLE  
(SHEET 2 OF 3)

APPROVED DECEMBER 2, 2021

ISSUED UNDER EI 21-028

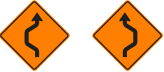


  
ROBERT LIMOGES, P.E.  
DIRECTOR, OTSM







619-012

ERRATA 1 EFF. 05/01/24  
ISSUED WITH EB 24-007



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USER = ak1+bj1


WORK ZONE TRAFFIC CONTROL SIGN TABLE					
SIGN	SIGN DESIGNATION	COLOR CODE	NON-FREEWAY	EXPRESSWAY	FREEWAY
	W24-1L W24-1R	A	36"X36"	48"X48"	48"X48"
	W24-1aL W24-1aR	A	36"X36"	48"X48"	48"X48"
	W24-1bL W24-1bR	A	36"X36"	48"X48"	48"X48"

WORK ZONE TRAFFIC CONTROL SIGN TABLE					
SIGN	SIGN DESIGNATION	COLOR CODE	NON-FREEWAY	EXPRESSWAY	FREEWAY
	R2-1	B	24"X30" OR 30"X36" (SEE NOTE 3)	36"X48"	36"X48"
	NYR2-2	B	24"X30" OR 30"X36" (SEE NOTE 3)	36"X48"	36"X48"
	NYR2-3	B	24"X30" OR 30"X36" (SEE NOTE 3)	36"X48"	36"X48"
	NYR2-4	B	24"X30" OR 30"X36" (SEE NOTE 3)	36"X48"	36"X48"
	NYR2-5	B	24"X30" OR 30"X36" (SEE NOTE 3)	36"X48"	36"X48"
	NYR2-6	B	24"X30" OR 30"X36" (SEE NOTE 3)	36"X48"	36"X48"

COLOR CODE LEGEND	
CODE	DESCRIPTION
A	BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND
B	BLACK LEGEND AND BORDER ON A WHITE BACKGROUND
C	WHITE LEGEND AND BORDER ON A GREEN BACKGROUND
D	WHITE LEGEND AND BORDER ON A RED BACKGROUND
E	RED LEGEND AND BORDER ON A WHITE BACKGROUND
F	BLACK LEGEND AND BORDER ON A FLOURESCENT YELLOW GREEN BACKGROUND
G	WHITE LEGEND AND BORDER ON A BLUE AND RED BACKGROUND

- NOTES:
- DIMENSIONS ARE SHOWN AS WIDTH X HEIGHT.
  - FOR SIGNAGE NOT SHOWN ON THESE TABLES REFER TO THE M.U.T.C.D.
  - FOR R2-1 SIGN LARGER DIMENSIONS SHALL BE USED WHEN SIGN FACES MULTIPLE LANES ON A CONVENTIONAL ROAD.

ERRATA 1 EFF. 05/01/24  
ISSUED WITH EB 24-007



NEW YORK

STATE OF OPPORTUNITY.

Department of Transportation

U.S. CUSTOMARY STANDARD SHEET

WORK ZONE TRAFFIC CONTROL  
SIGN TABLE  
(SHEET 3 OF 3)

APPROVED DECEMBER 2, 2021

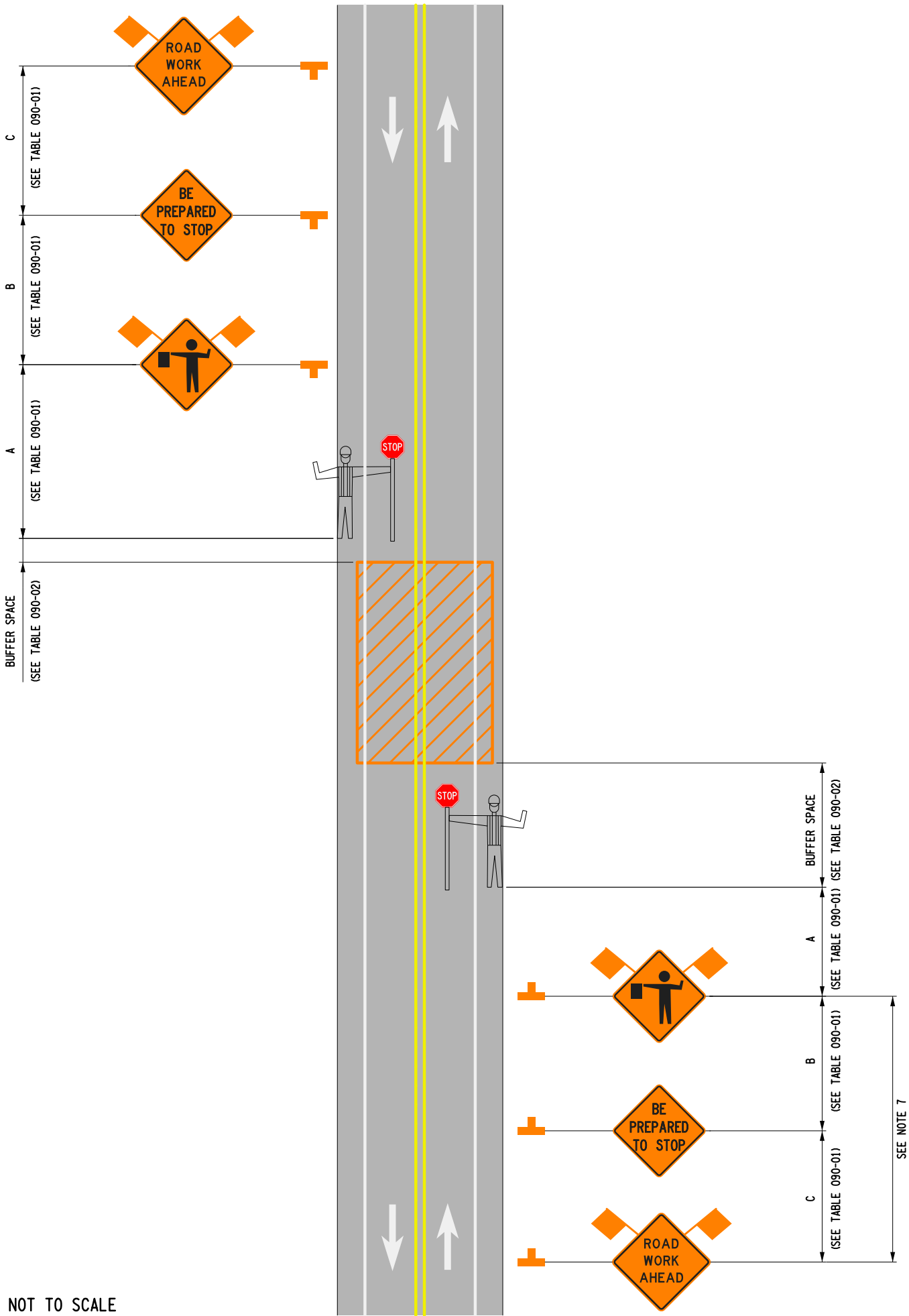
ISSUED UNDER EI 21-028

Robert Limoges

ROBERT LIMOGES, P.E.  
DIRECTOR, OTSM

619-012





NOT TO SCALE

TABLE 090-01: ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS			SIGN LEGEND	
	A (FT.)	B (FT.)	C (FT.)	XX	YY
URBAN (≤ 30 MPH*)	100	100	100	AHEAD	AHEAD
URBAN (35-40 MPH*)	200	200	200	AHEAD	AHEAD
URBAN (≥ 45 MPH*)	350	350	350	1000 FT.	AHEAD
RURAL	500	500	500	1500 FT.	1000 FT.

\* PRECONSTRUCTION POSTED SPEED LIMIT

TABLE 090-02: LONGITUDINAL BUFFER SPACE

PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	DISTANCE (FT.)/ # OF SKIP LINES
25	155/4
30	200/5
35	250/6
40	305/8
45	360/9
50	425/11
55	495/13

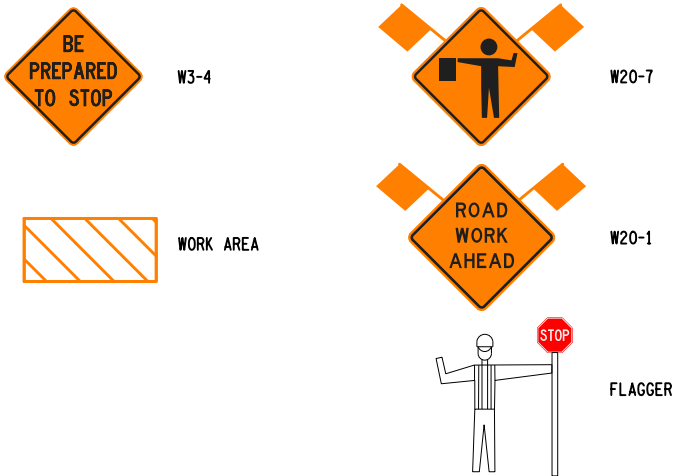
TABLE 090-03: REQUIRED SIGN SIZE\*

SIGN	NON-FREEWAY	FREEWAY
W3-4	36x36	48x48
W20-1	36x36	48x48
W20-7	36x36	48x48
WARNING FLAG	18x18	18x18

\*FREEWAY SIZES MAY BE USED ON NON-FREEWAY, IF SPACE CONSTRAINTS DO NOT EXIST.

NOTES:

- DURATION OF THE CLOSURE SHALL NOT EXCEED 5 MINUTES.
- IN URBAN CONDITIONS, ADVANCE WARNING SIGN SPACINGS MAY BE ADJUSTED IN ORDER TO ACCOMMODATE SIDE STREETS AND DRIVEWAYS. IF THERE IS A CONFLICT, MOVE THE SIGN UPSTREAM.
- FLAGGER SYMBOL SIGN (W20-7) AND "BE PREPARED TO STOP" (W3-4) SHALL BE REMOVED, COVERED OR TURNED AWAY FROM ROAD USERS WHEN FLAGGING OPERATIONS ARE NOT OCCURRING.
- FOR MULTI LANE ROADWAYS, A SITE SPECIFIC PLAN IS REQUIRED ILLUSTRATING PROPOSED STRATEGIES / SIGNAGE TO REDUCE THE ROAD TO A SINGLE LANE ON EACH APPROACH TO THE WORK AREA.
- TRAFFIC IN BOTH DIRECTIONS WILL BE STOPPED FOR THE ENTIRE DURATION OF THE WORK. THE WORK SHALL BE SUSPENDED DURING PERIODS OF POOR VISIBILITY AND DURING PEAK HOURS.
- WORK SHOULD BE SCHEDULED DURING NON-PEAK HOURS.
- PRIOR TO PLACING THE ADVANCE WARNING SIGNS, CONSIDERATION NEEDS TO BE GIVEN TO THE EXPECTED VOLUME OF TRAFFIC THAT NEEDS TO BE HELD AND DISTANCES B AND C INCREASED IF NEEDED.



Department of  
Transportation

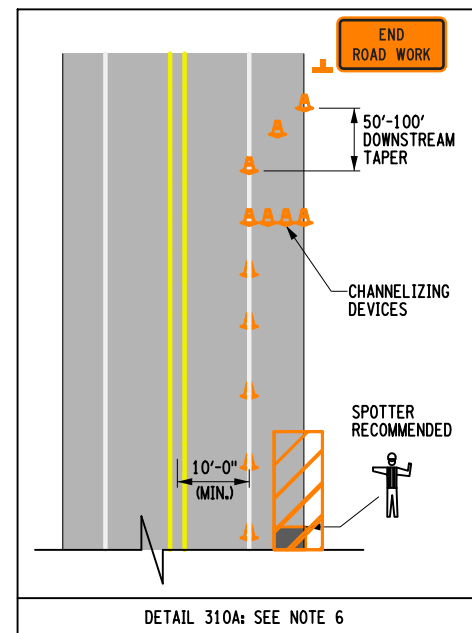
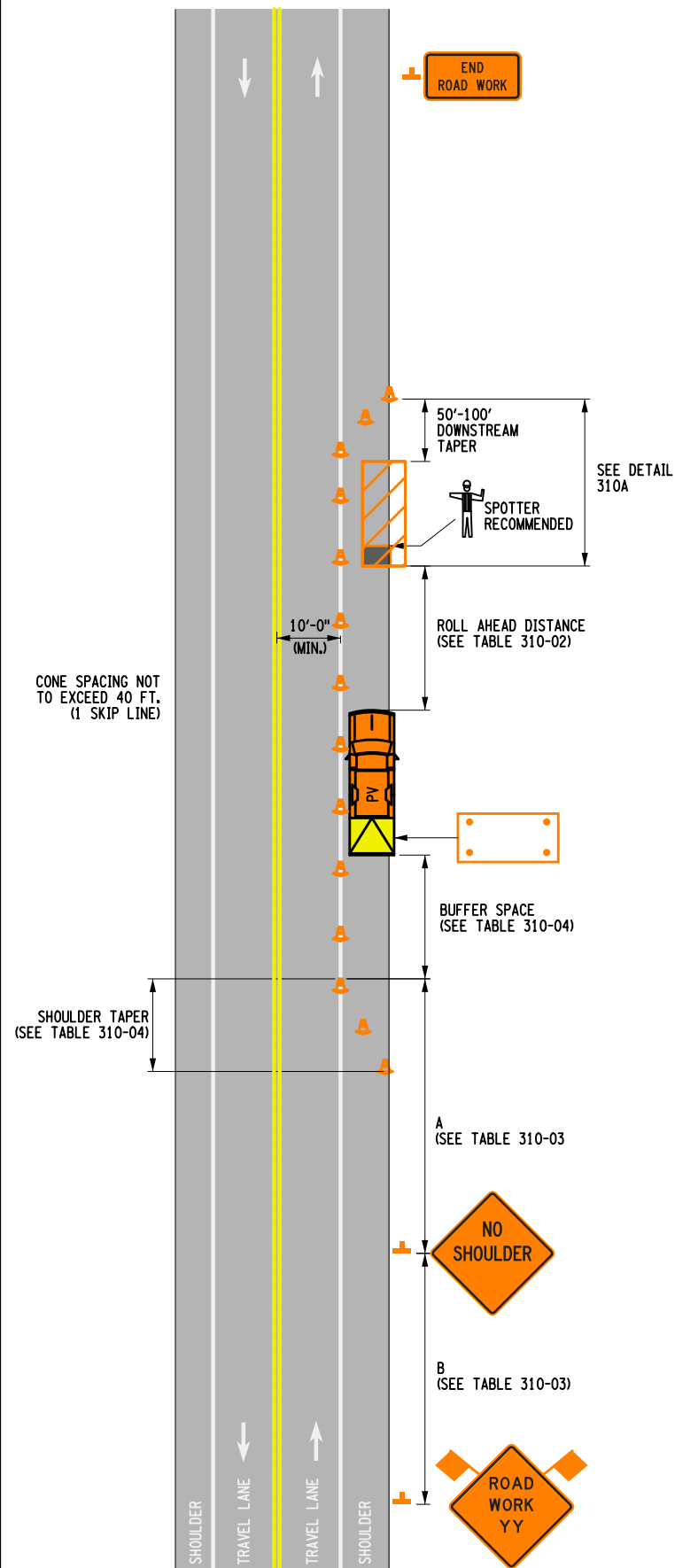
U.S. CUSTOMARY STANDARD SHEET

WORK ZONE TRAFFIC CONTROL  
TWO-LANE TWO-WAY ROADWAY  
TEMPORARY ROAD CLOSURE

APPROVED DECEMBER 2, 2021  
*Robert Limoges*  
ROBERT LIMOGES, P.E.  
DIRECTOR, OTSM

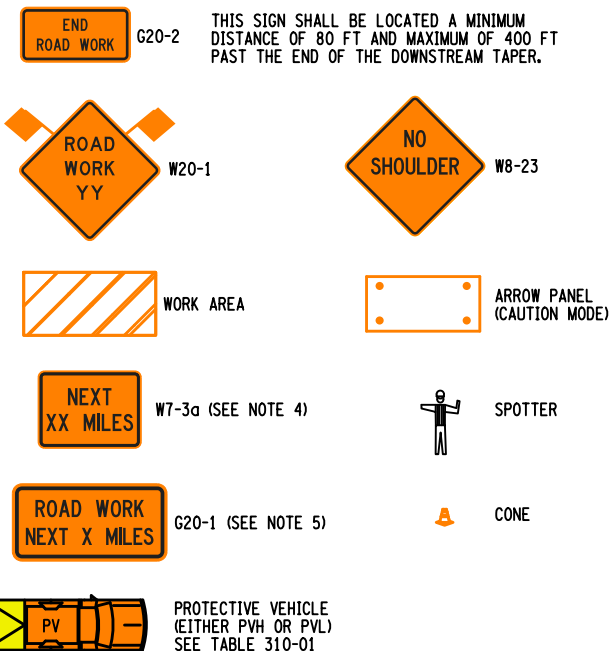
ISSUED UNDER EI 21-028  
619-090





NOTES:

1. SHORT-TERM STATIONARY IS DAYTIME WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR WITHIN A SINGLE DAYLIGHT PERIOD.
2. THE PROTECTIVE VEHICLE(S) SHALL MAINTAIN THE APPROPRIATE ROLL AHEAD DISTANCE, BE AN UNOCCUPIED TRUCK POSITIONED PARALLEL TO TRAFFIC, PARKING BRAKE SET, PLACED IN 2ND GEAR (MANUAL TRANSMISSIONS /ENGINE OFF) OR PARK / NEUTRAL (AUTOMATIC TRANSMISSIONS) AND HAVE THE FRONT WHEELS ALIGNED WITH THE LANE STRIPING.
3. THERE SHALL BE NO WORKERS, EQUIPMENT OR OTHER VEHICLES IN THE BUFFER SPACE OR THE ROLL AHEAD DISTANCE.
4. XX IS THE EXPECTED OVERALL LENGTH OF THE OPERATION TO BE COMPLETED WITHIN THE WORK DAY. A SUPPLEMENTAL DISTANCE PLAQUE W7-3a SHALL BE USED WITH SIGN W20-1 WHEN THE DISTANCE BETWEEN THE ADVANCE WARNING SIGNS AND WORK MAY BECOME GREATER THAN 2 MILES AS A RESULT OF THE FOLLOWING SITUATIONS:
  - MULTIPLE WORK LOCATIONS ARE ANTICIPATED WITHIN XX MILES FROM THE W20-1 SIGN
  - WORK AREA WILL BE RELOCATED DURING THE DURATION OF THE WORK WITHIN XX MILES FROM THE W20-1 SIGN.THE SUPPLEMENT SIGN W7-3a SHALL INDICATE THE MAXIMUM ANTICIPATED DISTANCE BETWEEN THE W20-1 SIGN AND THE FARTHEST WORK LOCATION.
5. WHEN MULTIPLE WORK LOCATIONS EXIST WITHIN XX MILES FROM THE W20-1 SIGN, A G20-1 SIGN SHALL BE PLACED EVERY TWO MILES INDICATING THE DISTANCE FROM THE SIGN TO THE FARTHEST WORK LOCATION.
6. CHANNELIZING DEVICES SHALL BE PLACED TRANSVERSELY A MINIMUM OF EVERY 800' AS SHOWN WHEN A PAVED SHOULDER HAVING A WIDTH OF 8' OR GREATER IS CLOSED FOR A DISTANCE GREATER THAN 800'.
7. IN URBAN CONDITIONS, ADVANCE WARNING SIGN SPACINGS MAY BE ADJUSTED IN ORDER TO ACCOMMODATE SIDE STREETS AND DRIVEWAYS. IF THERE IS A CONFLICT, MOVE THE SIGN UPSTREAM.



REFER TO SHEET 2 OF 2 FOR ALL TABLES

<div><div><div>NEW YORK</div><div>STATE OF OPPORTUNITY.</div></div><div>Department of Transportation</div></div>	
U.S. CUSTOMARY STANDARD SHEET	
WORK ZONE TRAFFIC CONTROL NON-FREEWAY SHOULDER CLOSURE SHORT TERM OPERATION (SHEET 1 OF 2)	
ERRATA 2 EFF. 09/01/23 ISSUED WITH EB 23-016	APPROVED DECEMBER 2, 2021 Robert Limoges ROBERT LIMOGES, P.E. DIRECTOR, OTSM
ERRATA 1 EFF. 01/01/23 ISSUED WITH EB 22-050	ISSUED UNDER EI 21-028 619-310

NOT TO SCALE



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USER = akir-bj1


TABLE 310-01: PROTECTIVE VEHICLE REQUIREMENTS				
CLOSURE TYPE	ROAD TYPE & SPEED	NON-FREEWAY		
		≥ 45 MPH	35 - 40 MPH	≤ 30 MPH
	EXPOSURE CONDITIONS (SEE NOTE 1)			
LANE CLOSURE OR ENCROACHMENT	WORKERS ON FOOT OR WORK VEHICLE EXPOSED TO TRAFFIC	PVH+TMIA	PVL+TMIA	PVL
	-NO WORKERS ON FOOT -NO WORK VEHICLE EXPOSED TO TRAFFIC -OTHER HAZARDS EXPOSED (IE EQUIPMENT, MATERIALS)	PVH+TMIA	PVL	SEE NOTE 2
SHOULDER CLOSURE OR ENCROACHMENT	WORKERS ON FOOT OR WORK VEHICLE EXPOSED TO TRAFFIC	PVH+TMIA	PVL	PVL
	-NO WORKERS ON FOOT -NO WORK VEHICLE EXPOSED TO TRAFFIC -OTHER HAZARDS EXPOSED (IE EQUIPMENT, MATERIALS, EXCAVATION)	PVH+TMIA	PVL	SEE NOTE 2
LEGEND PVL - PROTECTIVE VEHICLE LIGHT (MINIMUM GROSS WEIGHT 9,500 LBS. OR GREATER) (SEE NOTE 4) PVH - PROTECTIVE VEHICLE HEAVY (MINIMUM GROSS WEIGHT 22,000 LBS. OR GREATER) TMIA - TRUCK/TRAILER MOUNTED IMPACT ATTENUATOR				
NOTES 1. THE EXPOSURE CONDITIONS ASSUME THERE IS NO POSITIVE PROTECTION PRESENT. 2. EITHER A PROTECTIVE LIGHT (PVL) OR THE STANDARD BUFFER SPACE (SEE TABLE 011-03) SHALL BE PROVIDED. 3. TRUCK/TRAILER MOUNTED IMPACT ATTENUATORS (TMIA) SHALL NOT BE MOUNTED/INSTALLED ON VEHICLES WITH A GROSS VEHICLE WEIGHT (GVW) LESS THAN WHAT IS MINIMALLY REQUIRED BY THE MANUFACTURER OF THE TMIA. 4. THE USE OF A PROTECTIVE VEHICLE LIGHT (PVL) AS A SHADOW VEHICLE IS LIMITED TO NON-FREEWAY ROADWAYS WHERE THE POSTED SPEED LIMITS IS ≤ 40 MPH UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.				

TABLE 310-02: ROLL AHEAD DISTANCE FOR PROTECTIVE VEHICLES		
ROLL AHEAD DISTANCE (FT.)/# OF SKIP LINES FOR VEHICLES		
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	STATIONARY OPERATION	
	PROTECTIVE VEHICLES WEIGHING 9,500 TO 21,999 LBS. GVW	PROTECTIVE VEHICLES WEIGHING 22,000 LBS. OR GREATER GVW
≥ 60	200/5	160/4
45 - 55	160/4	120/3
≤ 40	120/3	80/2

TABLE 310-03: ADVANCE WARNING SIGN SPACING				
ROAD TYPE	DISTANCE BETWEEN SIGNS		SIGN LEGEND	
	A (FT.)	B (FT.)	XX	YY
URBAN (≤ 30 MPH*)	100	100	AHEAD	AHEAD
URBAN (35-40 MPH*)	200	200	AHEAD	AHEAD
URBAN (≥ 45 MPH*)	350	350	1000 FT.	AHEAD
RURAL	500	500	1500 FT.	1000 FT.
* PRECONSTRUCTION POSTED SPEED LIMIT				

TABLE 310-04: LONGITUDINAL BUFFER SPACE AND TAPER LENGTHS											
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	LONGITUDINAL BUFFER SPACE DISTANCE (FT.)/ # OF SKIP LINES	TAPER LENGTH: (FT.)/ # OF SKIP LINES/ # OF CHANNELIZING DEVICES			SHOULDER TAPER LENGTH: (FT.)/ # OF SKIP LINES/ # OF CHANNELIZING DEVICES						
		LATERAL SHIFT OF TRAFFIC FLOW PATH (FT.)			FOR SHOULDER WIDTH						
		10	11	12	≤ 4 FT.	5 - 7 FT.	8 FT.	9 FT.	10 FT.	11 FT.	12 FT.
25	155 / 4	120/3/4	120/3/4	120/3/4	40/1/2	40/1/2	40/1/2	40/1/2	40/1/2	40/1/2	40/1/2
30	200 / 5	160/4/5	160/4/5	200/5/6	40/1/2	40/1/2	40/1/2	40/1/2	80/2/3	80/2/3	80/2/3
35	250 / 6	200/5/6	240/6/7	240/6/7	40/1/2	40/1/2	80/2/3	80/2/3	80/2/3	80/2/3	80/2/3
40	305 / 8	280/7/8	320/8/9	320/8/9	40/1/2	80/2/3	80/2/3	80/2/3	120/3/4	120/3/4	120/3/4
45	360 / 9	440/11/12	520/13/14	560/14/15	80/2/3	80/2/3	120/3/4	120/3/4	120/3/4	120/3/4	160/4/5
50	425 / 11	520/13/14	560/14/15	600/15/16	80/2/3	120/3/4	160/4/5	160/4/5	160/4/5	160/4/5	160/4/5
55	495 / 13	560/14/15	600/15/16	680/17/18	80/2/3	120/3/4	160/4/5	160/4/5	160/4/5	200/5/6	200/5/6

TABLE 310-05: REQUIRED SIGN SIZES*		
SIGN	NON-FREEWAY	FREEWAY
G20-1	36x18	48x24
G20-2	36x18	48x24
W7-3a	24x18	36x30
W8-23	36x36	48x48
W20-1	36x36	48x48
WARNING FLAG	18x18	18x18
*FREEWAY SIZES MAY BE USED ON NON-FREEWAY, IF SPACE CONSTRAINTS DO NOT EXIST.		



NEW YORK  
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U.S. CUSTOMARY STANDARD SHEET

WORK ZONE TRAFFIC CONTROL  
NON-FREEWAY  
SHOULDER CLOSURE  
SHORT TERM OPERATION  
(SHEET 2 OF 2)

APPROVED DECEMBER 2, 2021  
Robert Limoges  
ROBERT LIMOGES, P.E.  
DIRECTOR, OTSM

ISSUED UNDER EI 21-028  
  
619-310



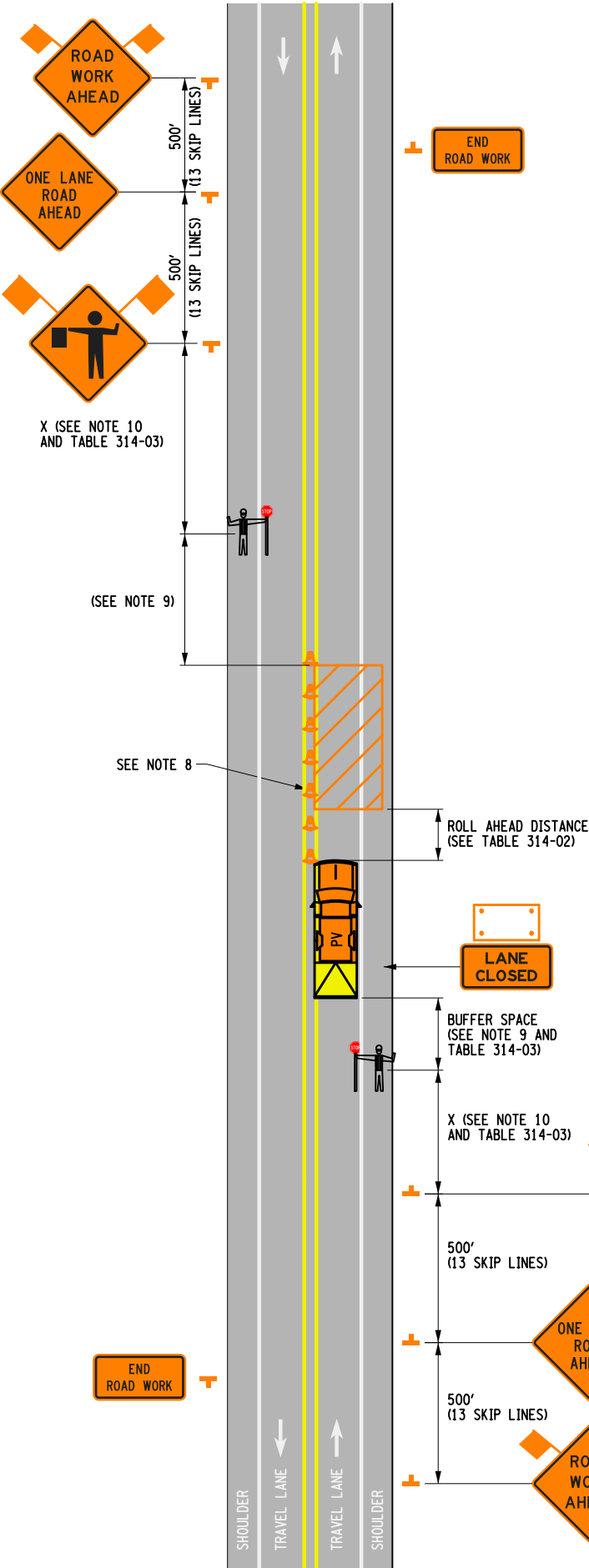


TABLE 314-02: ROLL AHEAD DISTANCE FOR PROTECTIVE VEHICLES		
ROLL AHEAD DISTANCE (FT.)/# OF SKIP LINES FOR VEHICLES		
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	STATIONARY OPERATION	
	PROTECTIVE VEHICLES WEIGHING 9,500 TO 21,999 LBS. GVW	PROTECTIVE VEHICLES WEIGHING 22,000 LBS. OR GREATER GVW
45 - 55	160/4	120/3
≤ 40	120/3	80/2

TABLE 314-01: PROTECTIVE VEHICLE REQUIREMENTS				
CLOSURE TYPE	ROAD TYPE & SPEED	NON-FREEWAY		
		≥ 45 MPH	35 - 40 MPH	≤ 30 MPH
LANE CLOSURE OR ENCROACHMENT	WORKERS ON FOOT OR WORK VEHICLE EXPOSED TO TRAFFIC	PVH+TMIA	PVL+TMIA	PVL
	-NO WORKERS ON FOOT -NO WORK VEHICLE EXPOSED TO TRAFFIC -OTHER HAZARDS EXPOSED (IE EQUIPMENT, MATERIALS)	PVH+TMIA	PVL	SEE NOTE 2
SHOULDER CLOSURE OR ENCROACHMENT	WORKERS ON FOOT OR WORK VEHICLE EXPOSED TO TRAFFIC	PVH+TMIA	PVL	PVL
	-NO WORKERS ON FOOT -NO WORK VEHICLE EXPOSED TO TRAFFIC -OTHER HAZARDS EXPOSED (IE EQUIPMENT, MATERIALS, EXCAVATION)	PVH+TMIA	PVL	SEE NOTE 2

LEGEND  
PVL - PROTECTIVE VEHICLE LIGHT (MINIMUM GROSS WEIGHT 9,500 LBS. OR GREATER) (SEE NOTE 4)  
PVH - PROTECTIVE VEHICLE HEAVY (MINIMUM GROSS WEIGHT 22,000 LBS. OR GREATER)  
TMIA - TRUCK/TRAILER MOUNTED IMPACT ATTENUATOR

NOTES  
1. THE EXPOSURE CONDITIONS ASSUME THERE IS NO POSITIVE PROTECTION PRESENT.  
2. EITHER A PROTECTIVE VEHICLE LIGHT (PVL) OR THE STANDARD BUFFER SPACE (SEE TABLE 314-03) SHALL BE PROVIDED.  
3. TRUCK/TRAILER MOUNTED IMPACT ATTENUATORS (TMIA) SHALL NOT BE MOUNTED/INSTALLED ON VEHICLES WITH A GROSS VEHICLE WEIGHT (GVW) LESS THAN WHAT IS MINIMALLY REQUIRED BY THE MANUFACTURER OF THE TMIA.  
4. THE USE OF A PROTECTIVE VEHICLE LIGHT (PVL) AS A SHADOW VEHICLE IS LIMITED TO NON-FREEWAY ROADWAYS WHERE THE POSTED SPEED LIMITS IS ≤ 40 MPH UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.

TABLE 314-03: LONGITUDINAL BUFFER SPACE / STOPPING SIGHT DISTANCE (X)	
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	LONGITUDINAL BUFFER SPACE DISTANCE (FT.) / # OF SKIP LINES
25	155/4
30	200/5
35	250/6
40	305/8
45	360/9
50	425/11
55	495/13

TABLE 314-04: REQUIRED SIGN SIZES*		
SIGN	NON-FREEWAY	FREEWAY
G20-1	36x18	48x24
G20-2	36x18	48x24
NYW8-33	48x24	48x24
W7-3a	24x18	36x30
W3-4	36x36	48x48
W20-1	36x36	48x48
W20-4	36x36	48x48
W20-7	36x36	48x48
WARNING FLAG	18x18	18x18

\*FREEWAY SIZES MAY BE USED ON NON-FREEWAY, IF SPACE CONSTRAINTS DO NOT EXIST.

- NOTES:
- SHORT-TERM STATIONARY IS DAYTIME WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR WITHIN A SINGLE DAYLIGHT PERIOD.
  - FLAGGER SYMBOL SIGN (W20-7), "BE PREPARED TO STOP" SIGN (W3-4), AND "ONE LANE ROAD AHEAD" SIGN (W20-4) SHALL BE REMOVED, COVERED OR TURNED AWAY FROM ROAD USERS WHEN FLAGGING OPERATIONS ARE NOT OCCURRING.
  - IF THE TRAFFIC IS EXPECTED TO QUEUE PAST THE W20-4 SIGN, A W3-4 SIGN SHOULD BE ADDED HALFWAY BETWEEN THE W20-4 AND W20-1 SIGNS.
  - APPROVED LED STOP/SLOW PADDLES SHOULD BE USED FOR THIS OPERATION.
  - XX IS THE EXPECTED OVERALL LENGTH OF THE OPERATION TO BE COMPLETED WITHIN THE WORK DAY. A SUPPLEMENTAL DISTANCE PLAQUE W7-3a SHALL BE USED WITH SIGN W20-1 WHEN THE DISTANCE BETWEEN THE ADVANCE WARNING SIGNS AND WORK MAY BECOME GREATER THAN 2 MILES AS A RESULT OF THE FOLLOWING SITUATIONS:
    - \*MULTIPLE FLAGGING LOCATIONS ARE ANTICIPATED WITHIN XX MILES FROM THE W20-1 SIGN
    - \*WORK AREA WILL BE RELOCATED DURING THE DURATION OF THE WORK WITHIN X MILES FROM THE W20-1 SIGN
  - WHEN MULTIPLE FLAGGING LOCATIONS EXIST WITHIN XX MILES FROM THE W20-1 SIGN, A G20-1 SIGN SHALL BE PLACED EVERY TWO MILES INDICATING THE DISTANCE FROM THE SIGN TO THE FARTHEST FLAGGING LOCATION.
  - WHEN MOVING, THE PROTECTIVE VEHICLE SHALL MAINTAIN THE APPROPRIATE ROLL AHEAD DISTANCE AND THE OPERATOR SHALL REMAIN IN THE VEHICLE WITH THE SAFETY BELT AND HEADREST PROPERLY ADJUSTED AND KEEP WHEELS ALIGNED WITH THE LANE STRIPING AND LANE. WHEN STATIONARY FOR A PERIOD OF MORE THAN 1 HOUR, THE PROTECTIVE VEHICLE SHALL BE AN UNOCCUPIED TRUCK POSITIONED PARALLEL TO TRAFFIC, PARKING BRAKE SET, PLACED IN 2ND GEAR (MANUAL TRANSMISSIONS /ENGINE OFF) OR PARK / NEUTRAL (AUTOMATIC TRANSMISSIONS) AND HAVE THE FRONT WHEELS ALIGNED WITH THE LANE STRIPING.
  - CHANNELIZING DEVICE SPACING (CENTER TO CENTER) SHALL NOT EXCEED 40' IN THE ACTIVE WORK SPACE.
  - THE FLAGGER SHALL BE CLEARLY VISIBLE TO THE FIRST APPROACHING ROAD USER AT ALL TIMES AND SHOULD BE VISIBLE TO OTHER ROAD USERS. THE FLAGGER SHALL BE STATIONED SUFFICIENTLY IN ADVANCE OF THE WORKERS TO WARN THEM (FOR EXAMPLE, WITH AUDIBLE WARNING DEVICES SUCH AS HORNS OR WHISTLES) OF APPROACHING DANGER BY OUT-OF-CONTROL/NON-COMPLIANT VEHICLES. THE FLAGGER SHALL STAND ALONE, AWAY FROM OTHER WORKERS, WORK VEHICLES, OR EQUIPMENT. THE FLAGGER SHALL IDENTIFY AN ESCAPE ROUTE TO AVOID BEING STRUCK BY AN ERRANT VEHICLE.
  - FLAGGERS SHALL BE POSITIONED TO ENSURE ADEQUATE STOPPING SIGHT DISTANCE (X) FOR THE APPROACHING ROAD USERS. IF THE REQUIRED DISTANCE (X) CANNOT BE ACHIEVED DUE TO AN OBSTRUCTION CAUSED BY HORIZONTAL/VERTICAL CURVES OR OTHER FEATURES THEN THE ACTIVITY AREA SHOULD BE MODIFIED TO A POINT WHERE ADEQUATE STOPPING SIGHT DISTANCE CAN BE ACHIEVED.
  - TO PROVIDE COORDINATION OF THE CONTROL OF THE TRAFFIC, THE FLAGGERS MUST BE ABLE TO COMMUNICATE WITH EACH OTHER ORALLY, ELECTRONICALLY VIA TWO WAY RADIOS OR VISUALLY. IF NECESSARY, AN ADDITIONAL FLAGGER(S) MAY POSITIONED WITHIN VISIBILITY OF THE OTHER FLAGGERS TO COORDINATE THE FLAGGING OPERATION IN AREAS WHERE HILLS, CURVES OR OTHER OBJECTS HINDER EFFECTIVE COMMUNICATION BETWEEN THE FLAGGERS.

Department of Transportation

U.S. CUSTOMARY STANDARD SHEET

WORK ZONE TRAFFIC CONTROL  
TWO-LANE TWO-WAY ROADWAY  
LANE CLOSURE WITH MOVING FLAGGERS  
SHORT TERM OPERATION

APPROVED JANUARY 10, 2025

Robert Limoges  
ROBERT LIMOGES, P.E.  
DIRECTOR, OTSM

ISSUED UNDER EI 25-001

619-314

NOT TO SCALE

THIS SIGN SHALL BE LOCATED A MINIMUM DISTANCE OF 80 FT AND MAXIMUM OF 400 FT PAST THE END OF THE DOWNSTREAM TAPER.