RECOMMENDED SIGN SPACING = X (1)		
RURAL HIGHWAYS	60-65 MPH	800'±
RURAL ROADS	45-55 MPH	500'±
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.		

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)	
TAPER	TANGENT
10'	20'

SPEED REDUCTION AHEAD SIGN SPACING = Z					
EXISTING SPEED LIMIT (MPH)	45	50	55	60	65
SPACING (feet)	230	470	740	1030	1340

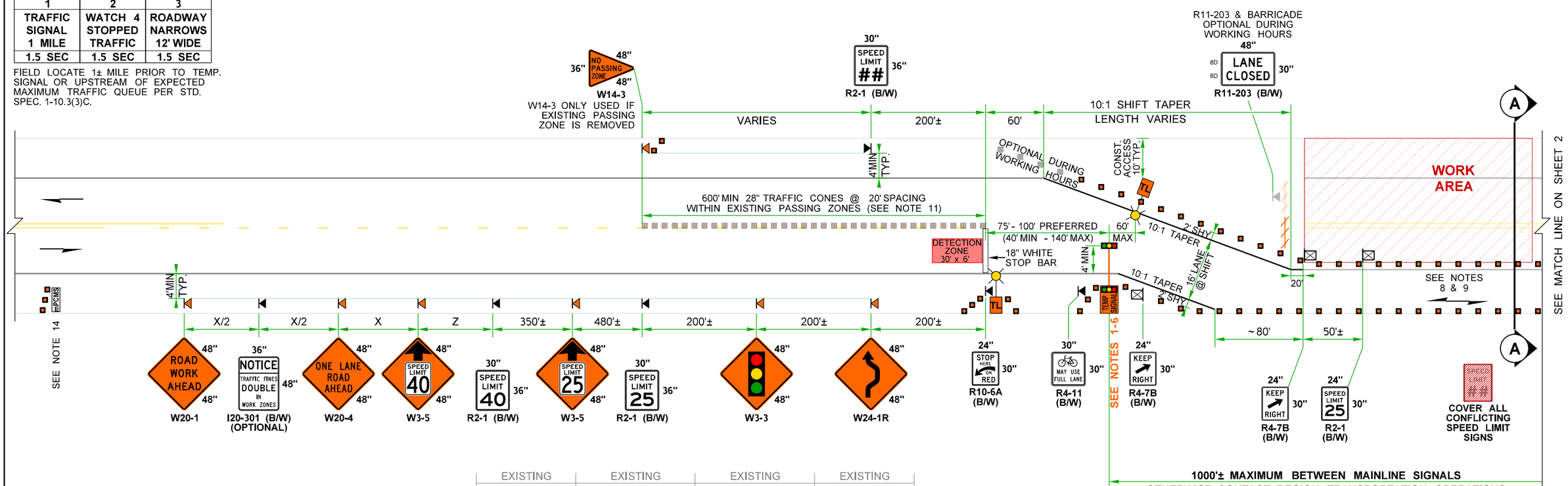
WAIT-TIME DISPLAY VMS		
GREEN	YELLOW	RED
25 MPH ZONE	(Blank)	WAIT #:##

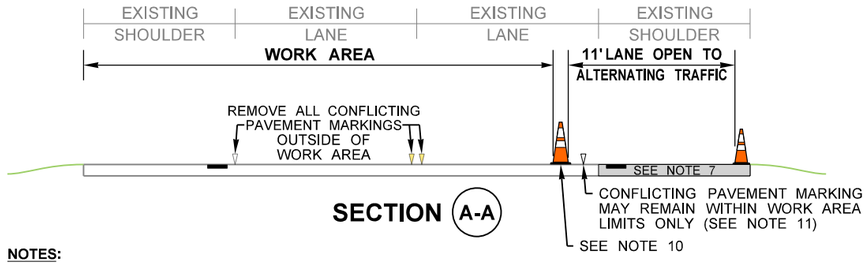
#:## = MINUTES:SECONDS UNTIL GREEN.
LOCATE VMS ON TEMP SIGNAL MAST ARM.

FOR DRIVEWAY, BUSINESS ACCESS, AND INTERSECTING ROADWAY DETAILS SEE TC347, SHEET 3.

mPCMS		
1	2	3
TRAFFIC SIGNAL 1 MILE	WATCH 4 STOPPED TRAFFIC	ROADWAY NARROWS 12' WIDE
1.5 SEC	1.5 SEC	1.5 SEC

FIELD LOCATE 1± MILE PRIOR TO TEMP. SIGNAL OR UPSTREAM OF EXPECTED MAXIMUM TRAFFIC QUEUE PER STD. SPEC. 1-10.3(3)C.





LEGEND:

- CLASS B TRIPOD-MOUNTED SIGN LOCATION (1' MIN HEIGHT)
- CLASS B TRIPOD-MOUNTED SIGN LOCATION (5' MIN HEIGHT)
- 28" TRAFFIC CONES (SEE NOTE 10)
- TYPE 3 BARRICADE
- PROTECTIVE VEHICLE
- TEMPORARY TRAFFIC SIGNAL (SEE NOTES 1 - 6)
- COMPACT TEMP. TRAFFIC SIGNAL (SEE NOTES 1 - 6)
- TEMPORARY LIGHTING (SEE NOTE 6)
- mini PORTABLE CHANGEABLE MESSAGE SIGN (SEE NOTE 14)

NOTES:

1. **ALL TEMPORARY TRAFFIC SIGNAL TIMING PLANS MUST BE APPROVED BY THE ENGINEER. THIS SIGNAL TIMING PLAN ACCOMMODATES BOTH VEHICLES AND BICYCLES EVERY CYCLE.** THE SIGNAL IS TIMED FOR VEHICLES, BUT THE **ALL-RED CLEARANCE INTERVAL IS EXTENDED EVERY TIME** TO ALLOW BICYCLES TO CLEAR THE LANE CLOSURE FROM THE STOP BAR AT THE END OF THE YELLOW PHASE. THIS WILL INCREASE TRAFFIC QUEUES AND DELAYS TO ALL BECAUSE IT REDUCES THE WORK ZONE CAPACITY.
2. TEMPORARY SIGNALS ARE FULLY ACTUATED CONTROLLED VIA VIDEO AND/OR RADAR DETECTION. WHEN NO VEHICLES DETECTED IN ANY DIRECTION, ALL TRAFFIC SIGNAL REST IN RED DISPLAY UNTIL THE NEXT VEHICLE IS DETECTED AND RECEIVES THE GREEN DISPLAY IMMEDIATELY TO MINIMIZE DISPLAYS.
3. TRAFFIC CONTROL MANAGER, TRAFFIC CONTROL SUPERVISOR (PRIMARY AND ALTERNATE), AND WSDOT ENGINEER SHALL BE NOTIFIED VIA EM AIL, TEXT, AND/OR PAGE IF ANY TEMPORARY SIGNAL MALFUNCTIONS.
4. AVOID PLACING TEMPORARY SIGNALS WITHIN OR IMMEDIATELY FOLLOWING HORIZONTAL & VERTICAL CURVES BY ADJUSTING LONGITUDINAL BUFFER SPACE OR EXTENDING WORK AREA.
5. **TEMPORARY TRAFFIC SIGNALS LOCATED WITHIN 1/4 MILE OF A RAILROAD GRADE CROSSING SHALL BE EVALUATED FOR RAILROAD PREEMPTION. CONTACT REGION TRAFFIC OPERATIONS.**
6. WHEN PRACTICAL, PROVIDE AT LEAST 4 FEET OF LATERAL CLEARANCE FROM TRAVEL LANE TO TEMPORARY SIGNAL AND TEMPORARY LIGHTING. ACCEPTABLE TO PLACE THESE DEVICES BEHIND EXISTING GUARDRAIL OR BARRIER, BUT VERIFY STRUCTURAL LOADING ON TEMP. SIGNAL MAST ARM IS SUFFICIENT. IF A GRAVEL LEVELING PAD IS NEEDED, CONTACT ENGINEER PRIOR TO INSTALLING.
7. EXISTING CENTERLINE AND SHOULDER RUMBLE STRIPS MAY REMAIN. SWEEP SHOULDER AND VERIFY EXISTING ITS BOXES AND CATCH BASINS ARE TRAFFIC WORTHY.

NOTES CONTINUED ON SHEET 2.

SIMPLE TEMPORARY SIGNAL-CONTROLLED ALTERNATING 1-LANE, 2-WAY TRAFFIC 25 WZSL + CHANNELIZING DEVICES (45+ MPH HIGHWAYS, 7 DAYS OR LESS)

NOT TO SCALE

FILE NAME	C:\Users\LIntzF\OneDrive - WashIngton State Department of TransportatIon\Desktop\Work Zone TCPs\347SDHwy45+AltTrafficSImpleTempSignalRS25WZSLSharedLn.dgn							Plot 1
TIME	10:02:02 AM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.	PLAN REF NO TC347
DATE	8/1/2024				JOB NUMBER			
PLOTTED BY	LintzF				CONTRACT NO.	LOCATION NO.		SHEET 1 OF 3 SHEETS
DESIGNED BY								
ENTERED BY								
CHECKED BY								
PROJ. ENGR.								
REGIONAL ADM.		REVISION	DATE	BY				

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

Washington State Department of Transportation

TYPICAL TRAFFIC CONTROL PLANS

FOR DRIVEWAY, BUSINESS ACCESS, AND INTERSECTING ROADWAY DETAILS SEE TC347, SHEET 3.

WAIT-TIME DISPLAY VMS		
GREEN	YELLOW	RED
25 MPH ZONE	(Blank)	WAIT #:##

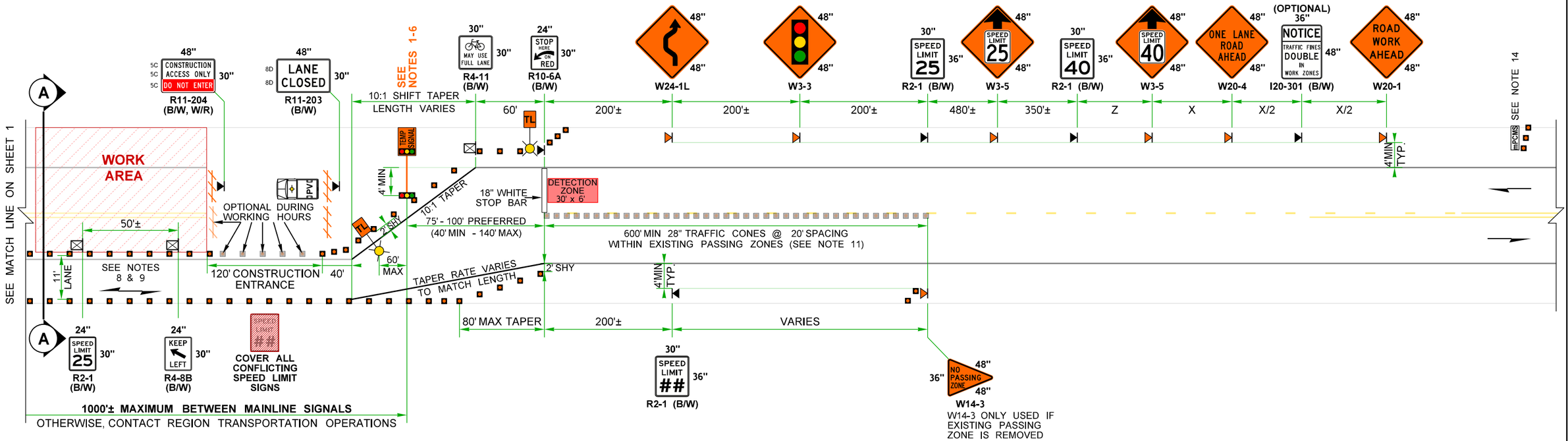
#:## = MINUTES:SECONDS UNTIL GREEN.
LOCATE VMS ON TEMP SIGNAL MAST ARM.

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)	
TAPER	TANGENT
10'	20'

SPEED REDUCTION AHEAD SIGN SPACING = Z					
EXISTING SPEED LIMIT (MPH)	45	50	55	60	65
SPACING (feet)	230	470	740	1030	1340

FIELD LOCATE 1± MILE PRIOR TO TEMP. SIGNAL OR UPSTREAM OF EXPECTED MAXIMUM TRAFFIC QUEUE PER STD. SPEC. 1-10.3(3)C.

mPCMS		
1	2	3
TRAFFIC SIGNAL 1 MILE	WATCH 4 STOPPED TRAFFIC	ROADWAY NARROWS 12' WIDE
1.5 SEC	1.5 SEC	1.5 SEC



NOTES: CONTINUED FROM SHEET 1.

8. BICYCLISTS ARE COMBINED WITH VEHICULAR TRAFFIC THROUGH THE LANE CLOSURE.

9. ACCOMMODATE PEDESTRIANS VIA SHUTTLE THROUGH LANE CLOSURE OR ANOTHER METHOD THE ENGINEER ACCEPTS.

10. 36" TRAFFIC CONES, 42" TALL CHANNELIZATION DEVICES, OR TRAFFIC SAFETY DRUMS OK.

11. EXISTING CENTERLINE PAVEMENT MARKINGS MAY VARY. IF PASSING ZONE PRESENT WITHIN 600' OF TEMPORARY STOP BAR, PLACE 28" TRAFFIC CONES AT 20' SPACING TO CREATE NO PASSING ZONE. PLACE BLACK PREFORMED TAPE OVER CONFLICTING PAVEMENT MARKINGS BETWEEN STOP BAR AND TEMPORARY BARRIER AS SHOWN.

12. SEE **STANDARD SPECIFICATIONS** FOR ADDITIONAL REQUIREMENTS:
- **1-10.3(3)K** PORTABLE TEMPORARY TRAFFIC CONTROL SIGNAL
- **6-10.3(5)** TEMPORARY BARRIER
- **8-23.3(4)B** TEMPORARY PAVEMENT MARKINGS - LONG DURATION
- **9-35.14** PORTABLE TEMPORARY TRAFFIC CONTROL SIGNAL

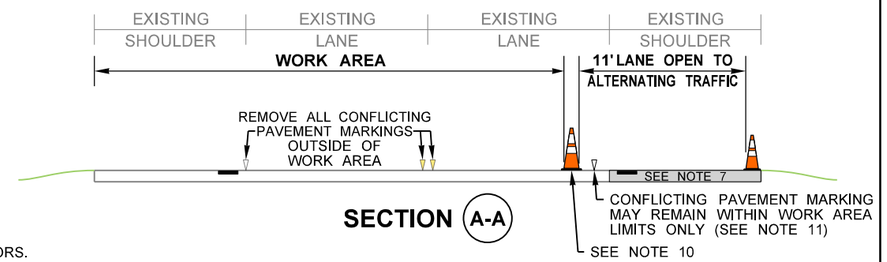
13. FOR PROJECT-SPECIFIC REQUIREMENTS, SEE SPECIAL PROVISIONS.

14. FULL-SIZE PCMS MAY BE USED IN LIEU OF mPCMS WHERE SPACE ALLOWS.

15. REMOVE OR COVER ALL CONFLICTING SIGNAGE PER STD. SPEC. 1-10.3(3)A. BLACK 1/8" ABS OR 1/4" PLYWOOD TEMP. SIGN COVER PERMITTED.

16. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.

17. CONTACT WSDOT COMMERCIAL VEHICLE SERVICES AT LEAST 7 DAYS IN ADVANCE OF ROADWAY WIDTH RESTRICTIONS. 30 DAY NOTICE REQUIRED ON MAJOR FREIGHT CORRIDORS.



SIMPLE TEMPORARY SIGNAL-CONTROLLED ALTERNATING 1-LANE, 2-WAY TRAFFIC 25 WZSL + CHANNELIZING DEVICES (45+ MPH HIGHWAYS, 7 DAYS OR LESS)

NOT TO SCALE

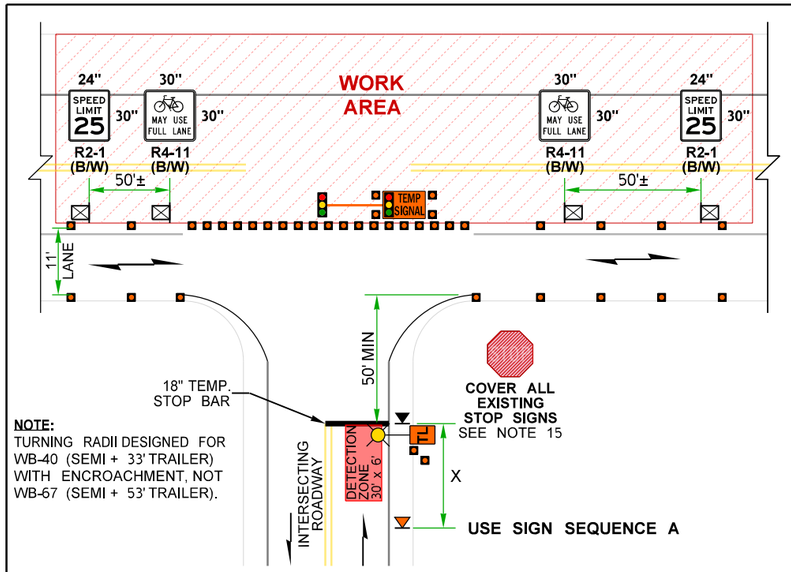
FILE NAME	C:\Users\LIntzF\OneDrive - Washington State Department of Transportation\Desktop\Work Zone TCPs\347SDHwy45+AltTrafficSimpleTempSignalRS25WZSLSharedLn.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.	Plot 2
TIME	10:02:03 AM							PLAN REF NO TC347
DATE	8/1/2024							
PLOTTED BY	LintzF							
DESIGNED BY					JOB NUMBER			SHEET 2 OF 3 SHEETS
ENTERED BY								
CHECKED BY					CONTRACT NO.		LOCATION NO.	
PROJ. ENGR.								
REGIONAL ADM.		REVISION	DATE	BY				

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

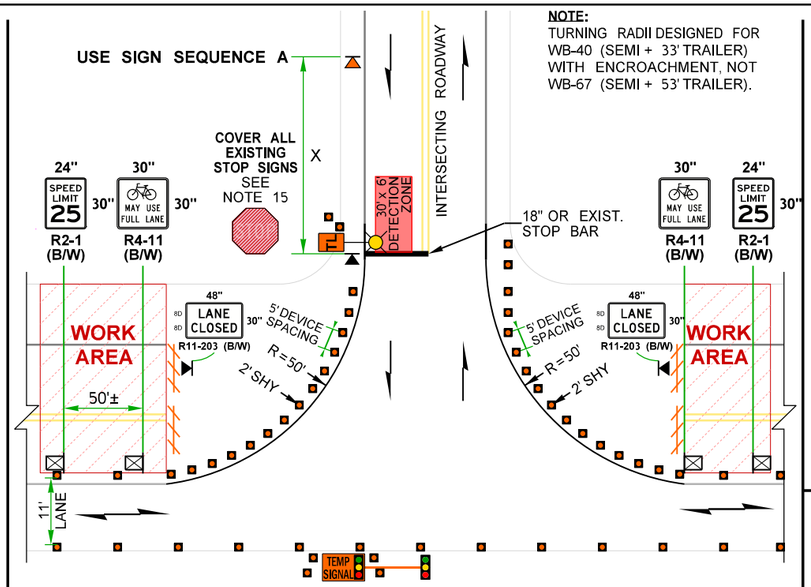
Washington State Department of Transportation

TYPICAL TRAFFIC CONTROL PLANS



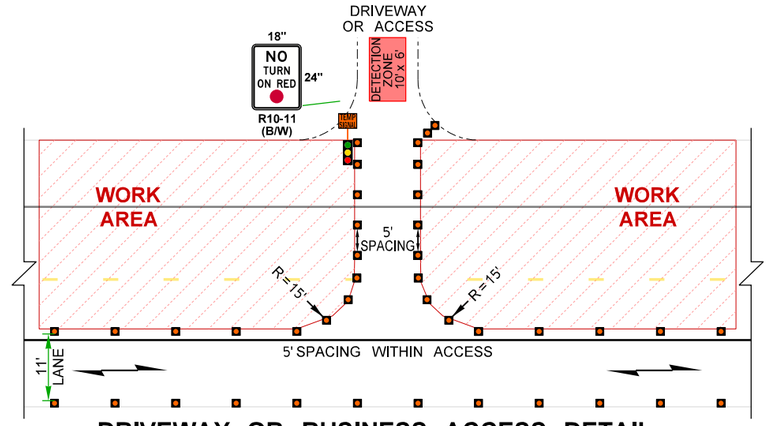
NOTE:
TURNING RADII DESIGNED FOR WB-40 (SEMI + 33' TRAILER) WITH ENCROACHMENT, NOT WB-67 (SEMI + 53' TRAILER).

UNSIGNALIZED INTERSECTING ROADWAY DETAIL
OPPOSITE OF LANE CLOSURE (SIGNAL FAR-SIDE)

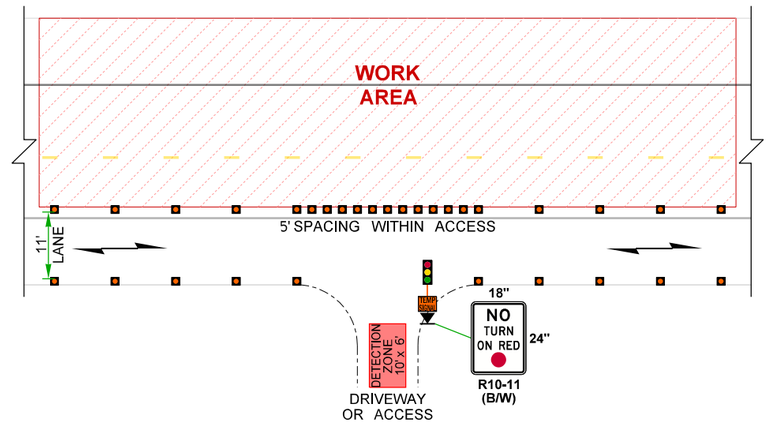


NOTE:
TURNING RADII DESIGNED FOR WB-40 (SEMI + 33' TRAILER) WITH ENCROACHMENT, NOT WB-67 (SEMI + 53' TRAILER).

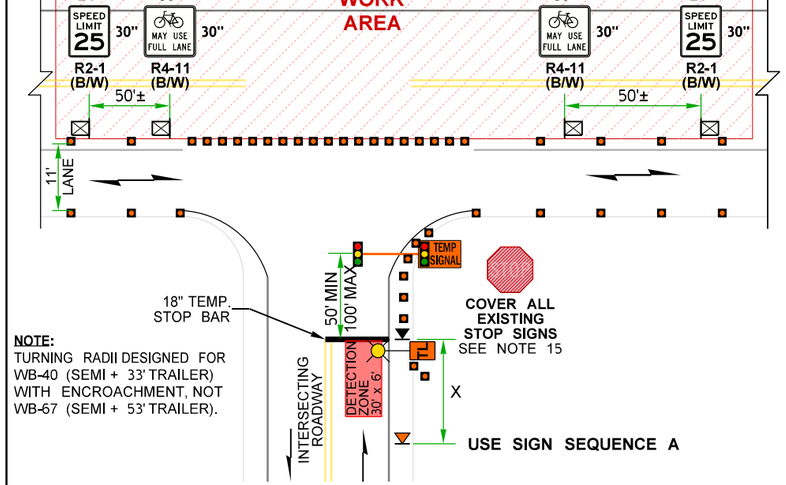
UNSIGNALIZED INTERSECTING ROADWAY DETAIL
SAME SIDE AS LANE CLOSURE (SIGNAL FAR-SIDE)



DRIVEWAY OR BUSINESS ACCESS DETAIL
SAME SIDE AS LANE CLOSURE

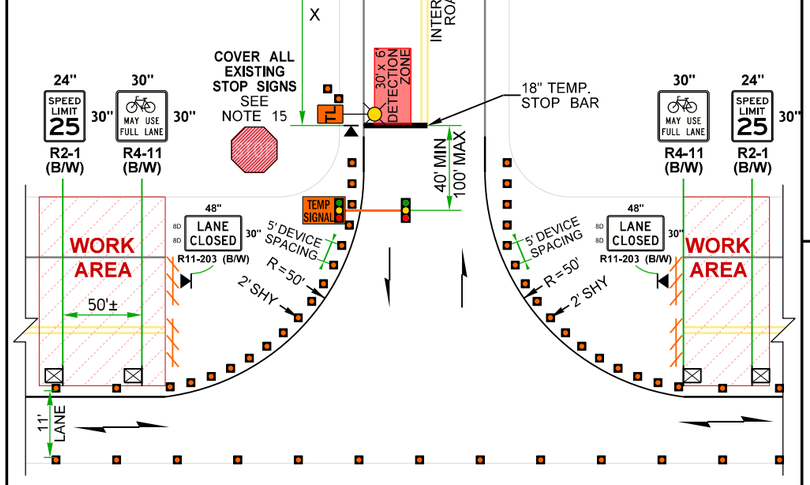


DRIVEWAY OR BUSINESS ACCESS DETAIL
OPPOSITE OF LANE CLOSURE



NOTE:
TURNING RADII DESIGNED FOR WB-40 (SEMI + 33' TRAILER) WITH ENCROACHMENT, NOT WB-67 (SEMI + 53' TRAILER).

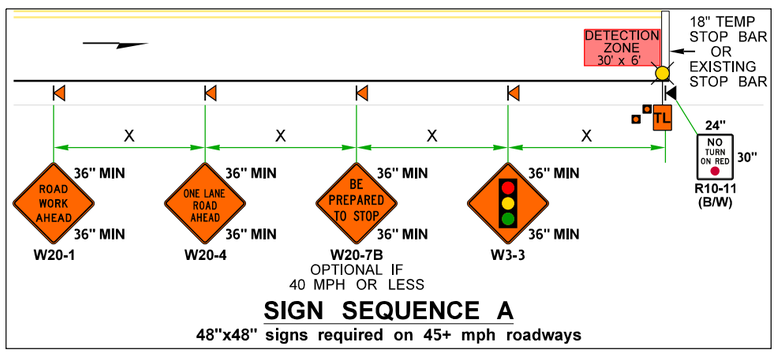
UNSIGNALIZED INTERSECTING ROADWAY DETAIL
OPPOSITE OF LANE CLOSURE (SIGNAL NEAR-SIDE)



NOTE:
TURNING RADII DESIGNED FOR WB-40 (SEMI + 33' TRAILER) WITH ENCROACHMENT, NOT WB-67 (SEMI + 53' TRAILER).

UNSIGNALIZED INTERSECTING ROADWAY DETAIL
SAME SIDE AS LANE CLOSURE (SIGNAL NEAR-SIDE)

NOTES:
18. FOR LEGEND, TABLES, AND ADDITIONAL NOTES: SEE TC347, SHEETS 4 & 5.



SIGN SEQUENCE A
48"x48" signs required on 45+ mph roadways

SIMPLE TEMPORARY SIGNAL-CONTROLLED ALTERNATING 1-LANE, 2-WAY TRAFFIC 25 WZSL + CHANNELIZING DEVICES (45+ MPH HIGHWAYS, 7 DAYS OR LESS)

NOT TO SCALE

FILE NAME	C:\Users\LIntzF\OneDrive - WashIngton State Department of TransportatIon\Desktop\Work Zone TCPs\347SDHwy45+AltTrafficSImpleTempSignalRS25WZSLSharedLn.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.	Plot 3
TIME	10:02:03 AM							PLAN REF NO TC347
DATE	8/1/2024				JOB NUMBER			
PLOTTED BY	LintzF							SHEET 3 OF 3 SHEETS
DESIGNED BY					CONTRACT NO.		LOCATION NO.	
ENTERED BY								
CHECKED BY								
PROJ. ENGR.								
REGIONAL ADM.		REVISION	DATE	BY				

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

Washington State Department of Transportation

TYPICAL TRAFFIC CONTROL PLANS

RECOMMENDED SIGN SPACING = X (1)		
RURAL HIGHWAYS	60-65 MPH	800'±
RURAL ROADS	45-55 MPH	500'±
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.		

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)	
TAPER	TANGENT
10'	20'

SPEED REDUCTION AHEAD SIGN SPACING = Z					
EXISTING SPEED LIMIT (MPH)	45	50	55	60	65
SPACING (feet)	230	470	740	1030	1340

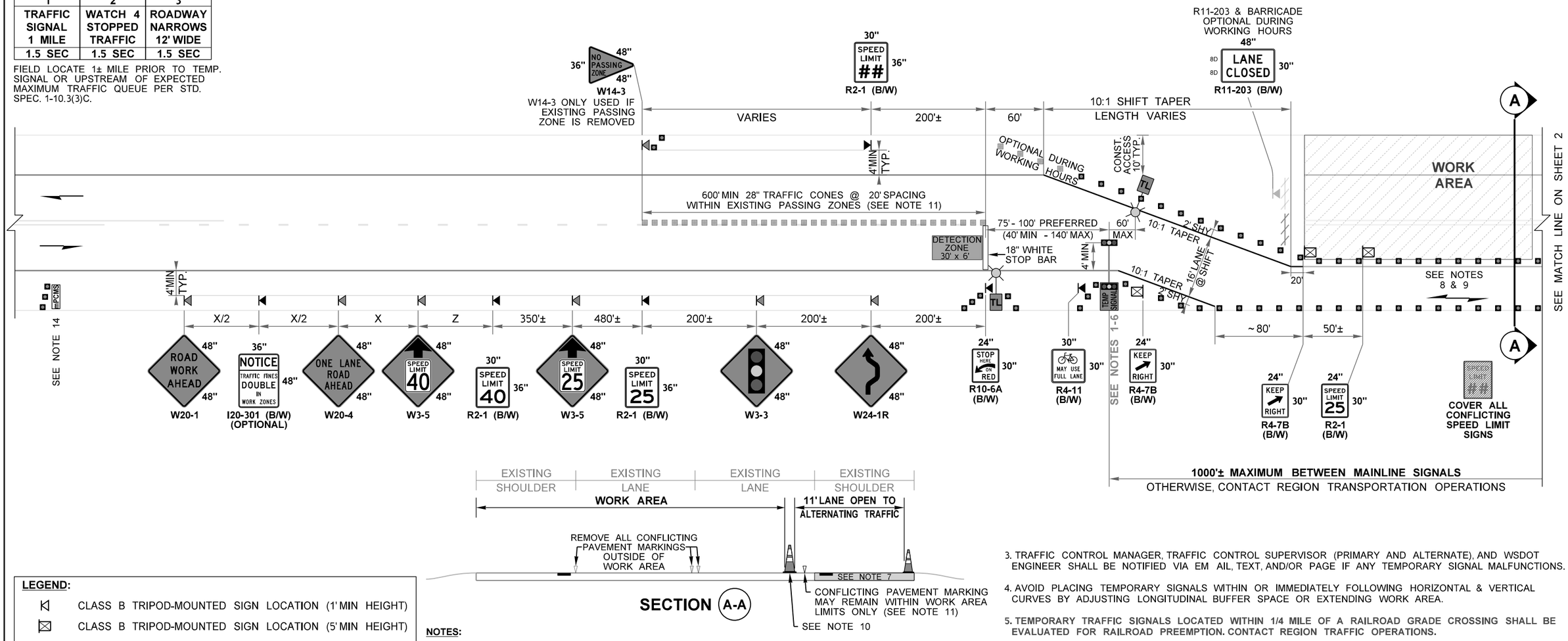
WAIT-TIME DISPLAY VMS		
GREEN	YELLOW	RED
25 MPH ZONE	(Blank)	WAIT #:##

#:## = MINUTES:SECONDS UNTIL GREEN.
LOCATE VMS ON TEMP SIGNAL MAST ARM.

FOR DRIVEWAY, BUSINESS ACCESS, AND INTERSECTING ROADWAY DETAILS SEE TC347, SHEET 3.

mPCMS		
1	2	3
TRAFFIC SIGNAL 1 MILE	WATCH 4 STOPPED TRAFFIC	ROADWAY NARROWS 12' WIDE
1.5 SEC	1.5 SEC	1.5 SEC

FIELD LOCATE 1± MILE PRIOR TO TEMP. SIGNAL OR UPSTREAM OF EXPECTED MAXIMUM TRAFFIC QUEUE PER STD. SPEC. 1-10.3(3)C.



LEGEND:

- CLASS B TRIPOD-MOUNTED SIGN LOCATION (1' MIN HEIGHT)
- CLASS B TRIPOD-MOUNTED SIGN LOCATION (5' MIN HEIGHT)
- 28" TRAFFIC CONES (SEE NOTE 10)
- TYPE 3 BARRICADE
- PROTECTIVE VEHICLE
- TEMPORARY TRAFFIC SIGNAL (SEE NOTES 1 - 6)
- COMPACT TEMP. TRAFFIC SIGNAL (SEE NOTES 1 - 6)
- TEMPORARY LIGHTING (SEE NOTE 6)
- mini PORTABLE CHANGEABLE MESSAGE SIGN (SEE NOTE 14)

NOTES:

1. ALL TEMPORARY TRAFFIC SIGNAL TIMING PLANS MUST BE APPROVED BY THE ENGINEER. **THIS SIGNAL TIMING PLAN ACCOMMODATES BOTH VEHICLES AND BICYCLES EVERY CYCLE.** THE SIGNAL IS TIMED FOR VEHICLES, BUT THE **ALL-RED CLEARANCE INTERVAL IS EXTENDED EVERY TIME** TO ALLOW BICYCLES TO CLEAR THE LANE CLOSURE FROM THE STOP BAR AT THE END OF THE YELLOW PHASE. THIS WILL INCREASE TRAFFIC QUEUES AND DELAYS TO ALL BECAUSE IT REDUCES THE WORK ZONE CAPACITY.
2. TEMPORARY SIGNALS ARE FULLY ACTUATED CONTROLLED VIA VIDEO AND/OR RADAR DETECTION. WHEN NO VEHICLES DETECTED IN ANY DIRECTION, ALL TRAFFIC SIGNAL REST IN RED DISPLAY UNTIL THE NEXT VEHICLE IS DETECTED AND RECEIVES THE GREEN DISPLAY IMMEDIATELY TO MINIMIZE DISPLAYS.
3. TRAFFIC CONTROL MANAGER, TRAFFIC CONTROL SUPERVISOR (PRIMARY AND ALTERNATE), AND WSDOT ENGINEER SHALL BE NOTIFIED VIA EM AIL, TEXT, AND/OR PAGE IF ANY TEMPORARY SIGNAL MALFUNCTIONS.
4. AVOID PLACING TEMPORARY SIGNALS WITHIN OR IMMEDIATELY FOLLOWING HORIZONTAL & VERTICAL CURVES BY ADJUSTING LONGITUDINAL BUFFER SPACE OR EXTENDING WORK AREA.
5. TEMPORARY TRAFFIC SIGNALS LOCATED WITHIN 1/4 MILE OF A RAILROAD GRADE CROSSING SHALL BE EVALUATED FOR RAILROAD PREEMPTION. CONTACT REGION TRAFFIC OPERATIONS.
6. WHEN PRACTICAL, PROVIDE AT LEAST 4 FEET OF LATERAL CLEARANCE FROM TRAVEL LANE TO TEMPORARY SIGNAL AND TEMPORARY LIGHTING. ACCEPTABLE TO PLACE THESE DEVICES BEHIND EXISTING GUARDRAIL OR BARRIER, BUT VERIFY STRUCTURAL LOADING ON TEMP. SIGNAL MAST ARM IS SUFFICIENT. IF A GRAVEL LEVELING PAD IS NEEDED, CONTACT ENGINEER PRIOR TO INSTALLING.
7. EXISTING CENTERLINE AND SHOULDER RUMBLE STRIPS MAY REMAIN. SWEEP SHOULDER AND VERIFY EXISTING ITS BOXES AND CATCH BASINS ARE TRAFFIC WORTHY.

NOTES CONTINUED ON SHEET 2.

SIMPLE TEMPORARY SIGNAL-CONTROLLED ALTERNATING 1-LANE, 2-WAY TRAFFIC 25 WZSL + CHANNELIZING DEVICES (45+ MPH HIGHWAYS, 7 DAYS OR LESS)

NOT TO SCALE

FILE NAME	C:\Users\LIntzF\OneDrive - WashIngton State Department of TransportatIon\Desktop\Work Zone TCPs\347SDHwy45+AltTrafficSImpleTempSignalRS25WZSLSharedLn.dgn							Plot 1
TIME	10:02:04 AM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.	PLAN REF NO TC347
DATE	8/1/2024							
PLOTTED BY	LintzF				JOB NUMBER			SHEET 1 OF 3 SHEETS
DESIGNED BY								
ENTERED BY								
CHECKED BY					CONTRACT NO.	LOCATION NO.		
PROJ. ENGR.								
REGIONAL ADM.		REVISION	DATE	BY				

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

Washington State Department of Transportation

TYPICAL TRAFFIC CONTROL PLANS

FOR DRIVEWAY, BUSINESS ACCESS, AND INTERSECTING ROADWAY DETAILS SEE TC347, SHEET 3.

WAIT-TIME DISPLAY VMS		
GREEN	YELLOW	RED
25 MPH ZONE	(Blank)	WAIT #:##

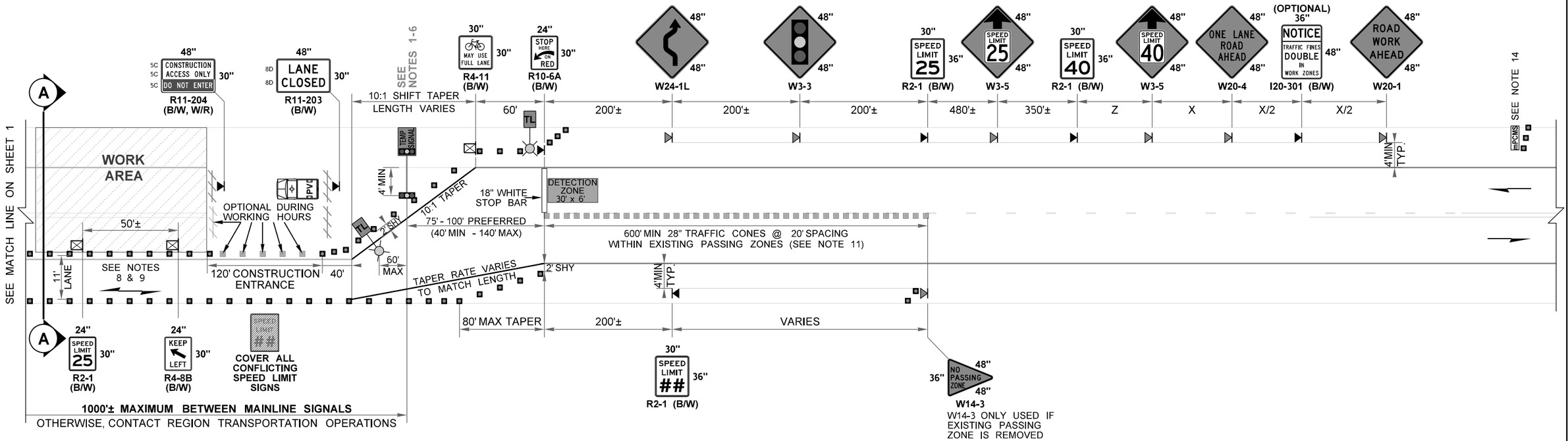
#:## = MINUTES:SECONDS UNTIL GREEN. LOCATE VMS ON TEMP SIGNAL MAST ARM.

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)	
TAPER	TANGENT
10'	20'

SPEED REDUCTION AHEAD SIGN SPACING = Z					
EXISTING SPEED LIMIT (MPH)	45	50	55	60	65
SPACING (feet)	230	470	740	1030	1340

FIELD LOCATE 1± MILE PRIOR TO TEMP. SIGNAL OR UPSTREAM OF EXPECTED MAXIMUM TRAFFIC QUEUE PER STD. SPEC. 1-10.3(3)C.

mPCMS		
1	2	3
TRAFFIC SIGNAL 1 MILE	WATCH 4 STOPPED TRAFFIC	ROADWAY NARROWS 12' WIDE
1.5 SEC	1.5 SEC	1.5 SEC



NOTES: CONTINUED FROM SHEET 1.

8. BICYCLISTS ARE COMBINED WITH VEHICULAR TRAFFIC THROUGH THE LANE CLOSURE.

9. ACCOMMODATE PEDESTRIANS VIA SHUTTLE THROUGH LANE CLOSURE OR ANOTHER METHOD THE ENGINEER ACCEPTS.

10. 36" TRAFFIC CONES, 42" TALL CHANNELIZATION DEVICES, OR TRAFFIC SAFETY DRUMS OK.

11. EXISTING CENTERLINE PAVEMENT MARKINGS MAY VARY. IF PASSING ZONE PRESENT WITHIN 600' OF TEMPORARY STOP BAR, PLACE 28" TRAFFIC CONES AT 20' SPACING TO CREATE NO PASSING ZONE. PLACE BLACK PREFORMED TAPE OVER CONFLICTING PAVEMENT MARKINGS BETWEEN STOP BAR AND TEMPORARY BARRIER AS SHOWN.

12. SEE **STANDARD SPECIFICATIONS** FOR ADDITIONAL REQUIREMENTS:
- **1-10.3(3)K** PORTABLE TEMPORARY TRAFFIC CONTROL SIGNAL
- **6-10.3(5)** TEMPORARY BARRIER
- **8-23.3(4)B** TEMPORARY PAVEMENT MARKINGS - LONG DURATION
- **9-35.14** PORTABLE TEMPORARY TRAFFIC CONTROL SIGNAL

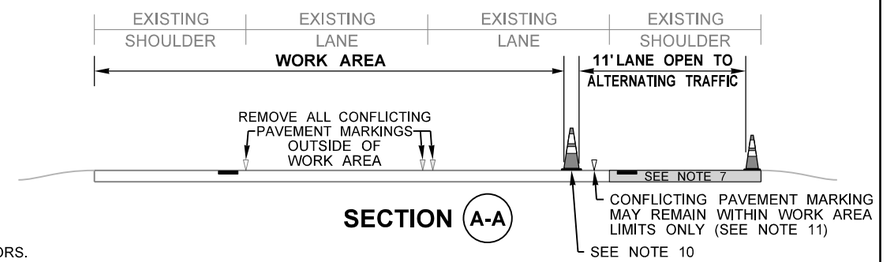
13. FOR PROJECT-SPECIFIC REQUIREMENTS, SEE SPECIAL PROVISIONS.

14. FULL-SIZE PCMS MAY BE USED IN LIEU OF mPCMS WHERE SPACE ALLOWS.

15. REMOVE OR COVER ALL CONFLICTING SIGNAGE PER STD. SPEC. 1-10.3(3)A. BLACK 1/8" ABS OR 1/4" PLYWOOD TEMP. SIGN COVER PERMITTED.

16. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.

17. CONTACT WSDOT COMMERCIAL VEHICLE SERVICES AT LEAST 7 DAYS IN ADVANCE OF ROADWAY WIDTH RESTRICTIONS. 30 DAY NOTICE REQUIRED ON MAJOR FREIGHT CORRIDORS.



SIMPLE TEMPORARY SIGNAL-CONTROLLED ALTERNATING 1-LANE, 2-WAY TRAFFIC 25 WZSL + CHANNELIZING DEVICES (45+ MPH HIGHWAYS, 7 DAYS OR LESS)

NOT TO SCALE

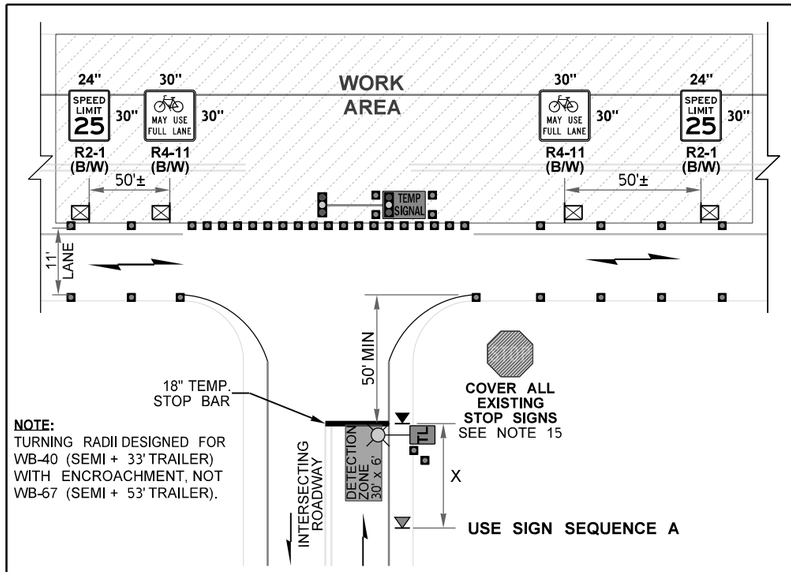
FILE NAME	C:\Users\LIntzF\OneDrive - Washington State Department of Transportation\Desktop\Work Zone TCPs\347SDHwy45+AltTrafficSimpleTempSignalRS25WZSLSharedLn.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO.	Plot 2
TIME	10:02:04 AM							PLAN REF NO TC347
DATE	8/1/2024							
PLOTTED BY	LintzF				JOB NUMBER			SHEET 2 OF 3 SHEETS
DESIGNED BY								
ENTERED BY								
CHECKED BY					CONTRACT NO.		LOCATION NO.	
PROJ. ENGR.								
REGIONAL ADM.		REVISION	DATE	BY				

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

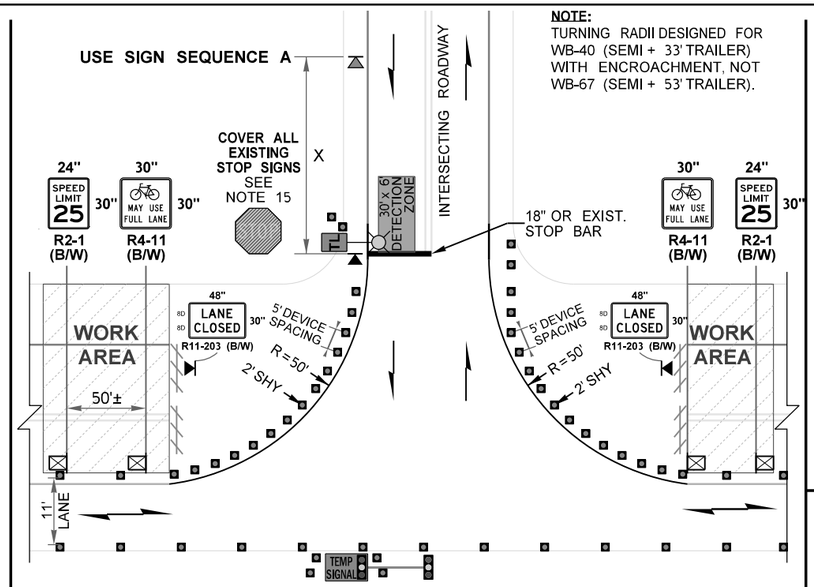
Washington State Department of Transportation

TYPICAL TRAFFIC CONTROL PLANS



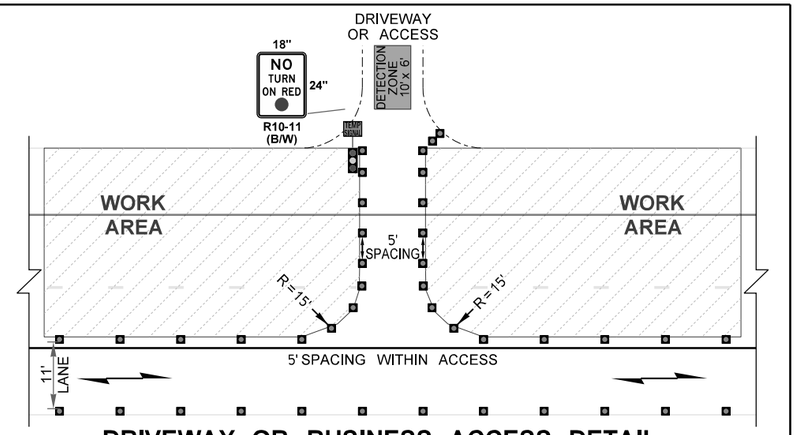
NOTE:
TURNING RADII DESIGNED FOR WB-40 (SEMI + 33' TRAILER) WITH ENCROACHMENT, NOT WB-67 (SEMI + 53' TRAILER).

UNSIGNALIZED INTERSECTING ROADWAY DETAIL
OPPOSITE OF LANE CLOSURE (SIGNAL FAR-SIDE)

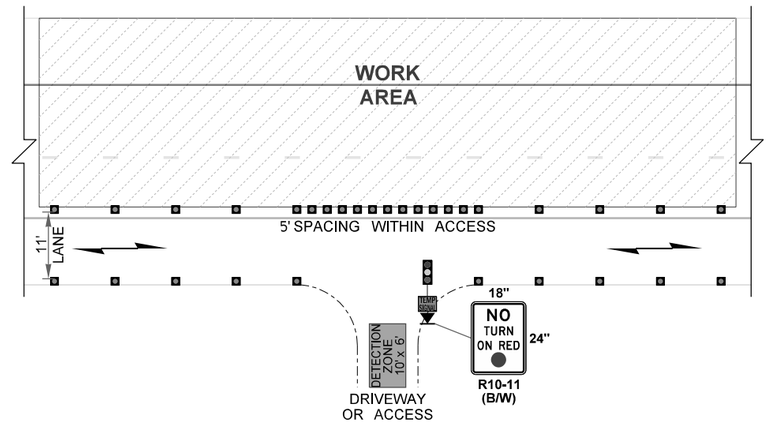


NOTE:
TURNING RADII DESIGNED FOR WB-40 (SEMI + 33' TRAILER) WITH ENCROACHMENT, NOT WB-67 (SEMI + 53' TRAILER).

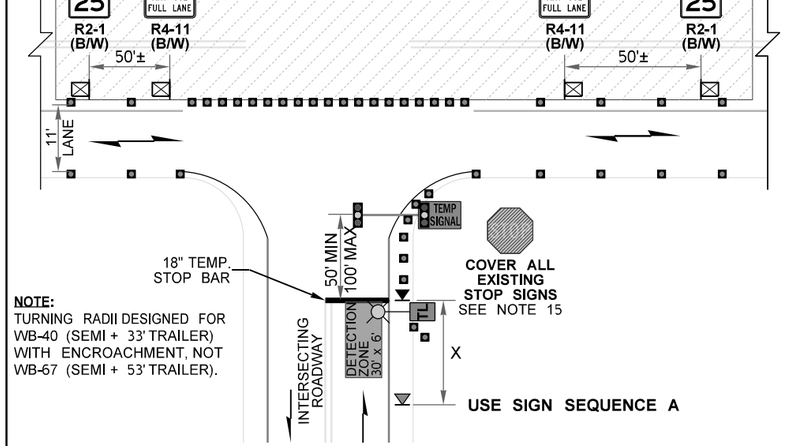
UNSIGNALIZED INTERSECTING ROADWAY DETAIL
SAME SIDE AS LANE CLOSURE (SIGNAL FAR-SIDE)



DRIVEWAY OR BUSINESS ACCESS DETAIL
SAME SIDE AS LANE CLOSURE

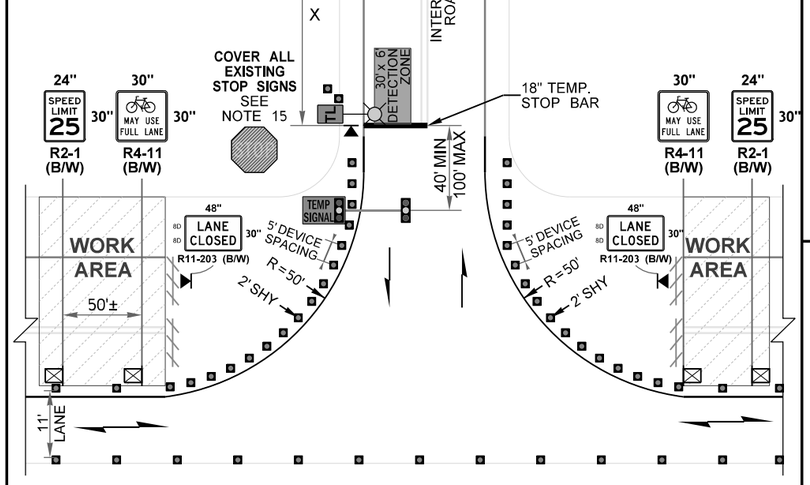


DRIVEWAY OR BUSINESS ACCESS DETAIL
OPPOSITE OF LANE CLOSURE



NOTE:
TURNING RADII DESIGNED FOR WB-40 (SEMI + 33' TRAILER) WITH ENCROACHMENT, NOT WB-67 (SEMI + 53' TRAILER).

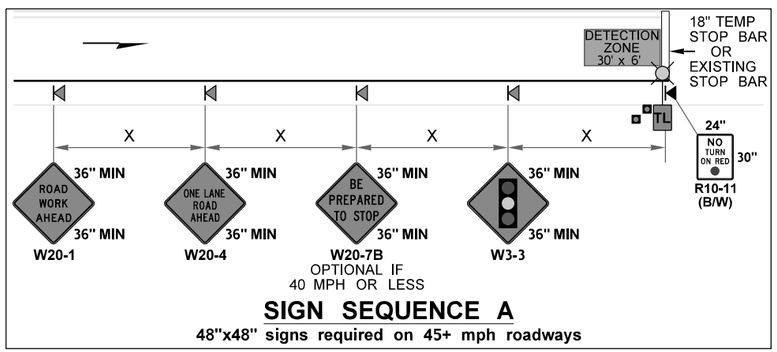
UNSIGNALIZED INTERSECTING ROADWAY DETAIL
OPPOSITE OF LANE CLOSURE (SIGNAL NEAR-SIDE)



NOTE:
TURNING RADII DESIGNED FOR WB-40 (SEMI + 33' TRAILER) WITH ENCROACHMENT, NOT WB-67 (SEMI + 53' TRAILER).

UNSIGNALIZED INTERSECTING ROADWAY DETAIL
SAME SIDE AS LANE CLOSURE (SIGNAL NEAR-SIDE)

NOTES:
18. FOR LEGEND, TABLES, AND ADDITIONAL NOTES: SEE TC347, SHEETS 4 & 5.



SIGN SEQUENCE A
48"x48" signs required on 45+ mph roadways

SIMPLE TEMPORARY SIGNAL-CONTROLLED ALTERNATING 1-LANE, 2-WAY TRAFFIC 25 WZSL + CHANNELIZING DEVICES (45+ MPH HIGHWAYS, 7 DAYS OR LESS)

NOT TO SCALE

FILE NAME	C:\Users\LIntzF\OneDrive - Washington State Department of Transportation\Desktop\Work Zone TCPs\347SDHwy45+AltTrafficSimpleTempSignalRS25WZSLSharedLn.dgn				REGION NO.	STATE	FED.AID PROJ.NO.	Plot 3
TIME	10:02:05 AM				10	WASH		PLAN REF NO TC347
DATE	8/1/2024				JOB NUMBER			
PLOTTED BY	LintzF							SHEET 3 OF 3 SHEETS
DESIGNED BY					CONTRACT NO.		LOCATION NO.	
ENTERED BY								
CHECKED BY								
PROJ. ENGR.								
REGIONAL ADM.		REVISION	DATE	BY				

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

Washington State Department of Transportation

TYPICAL TRAFFIC CONTROL PLANS

WORK ZONE MICROSTATION CELLS: Updated work zone cells incorporated (July 2024).

WSDOT CAE automatically updates cell libraries on WSDOT and on-site consultant staff computers (no action needed); however, external users or off-site consultants must manually install them. For additional information e-mail HQCAEHelpDesk@wsdot.wa.gov.

Division 4 in WSDOT Plans Preparation Manual, Section 400.06(29), provides updated work zone cell library policy and information for PS&Es. See https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/manuals/plans-preparation-manual

TYPICAL TCP USAGE EXPLANATION:

Plots 1-3: Simple temporary signal-controlled 1-lane, 2-way alternating traffic on 45+ mph, 2-lane highways with channelizing devices separating work area for short-duration closures (7 days or less). Details for driveway, business access, and/or intersecting roadways included in Plot 3.

Other Alternating Traffic TCPs (45+ mph): See Typical Traffic Control Plan Library (https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/plan-sheet-library/work-zone-typical-traffic-control-plans-tcp)
* TC320s for flagger-controlled alternating traffic plans
* TC330s for other variations of AFAD-controlled alternating traffic plans
* TC340s for temporary signal-controlled alternating traffic plans, including a 35 mph regulatory speed limit version.
* TC350s for traffic holds

If not published yet, they will be added in the future.

Other Alternating Traffic TCPs (40 mph or less): See Typical Traffic Control Plan Library (https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/plan-sheet-library/work-zone-typical-traffic-control-plans-tcp)
* TC420s for flagger-controlled alternating traffic
* TC430s for AFAD-controlled alternating traffic
* TC440s for temporary signal-controlled alternating traffic plans
* TC450s for traffic holds

If not published yet, they will be added in the future.

DESIGNER NOTES:

A. Temporary Traffic Signals located within 1/4 mile of a railroad grade crossing shall be evaluated for railroad preemption per WSDOT Manual 1330.04(7)(b). Note, this process tends to take up to 6 months due to collaboration with railroads.

B. These typical traffic control plans may be modified for site specific situations and/or WSDOT Region Traffic Operations standard practices. **Typical TCPs are not "Standard Plans".**

C. Per WSDOT Executive Order E1060 (https://wwwi.wsdot.wa.gov/publications/policies/fulltext/1060.pdf); speed limit reductions and advisory speeds must be approved for work zones. Submit speed reduction reductions & advisory speed requests for work zones through WSDOT Region Transportation Operations. See Traffic Manual Section 5-18 for additional information for documentation and notification requirements.

D. See MUTCD Table 6F-1 for additional temporary sign size information. Work zone signs are usually smaller than those used permanently.

E. WAC 468-95-300 modifies MUTCD Table 6-1 "Recommended Advance Warning Sign Minimum Spacing". Sign spacing may be adjusted for field conditions based on engineering judgement. The Sign Spacing table is acceptable to use in Typical TCPs; however, site-specific traffic control plans should include actual sign spacing values (withÀ) that have been verified in the field, on SR view, or via Google Maps.

F. The temporary sign spacing between W3-5 (speed reduction ahead) and R2-1 (speed limit) signage is based on Exhibit 2-8 in Chapter 2 of the WSDOT Traffic Manual (https://www.wsdot.wa.gov/publications/manuals/fulltext/m51-02/chapter2.pdf).

G. For traffic control plans with durations of 7 days or less, Class B construction signs are used and are typically tripod-mounted (1-foot, 5-foot when behind channelizing devices) but barrier-mounted signs are also acceptable.

H. For this Typical TCP, the work zone design speed is based on the 25 mph continuous regulatory speed limit for sign spacing, channelizing device spacing, buffer, roll ahead distances.

I. Lane closure tapers for temporary signal alternating traffic is typically 50'-100' per closed lane with 6 devices minimum (10'-20' spacing on the taper) regardless of the posted speed limit or lane width per MUTCD 6C.08, Paragraph 15. Never use "L" for these tapers. This Typical TCP 10:1 tapers (but this can be reduced to 5:1 tapers in restricted areas) in lieu of actual taper distances to account for the additional lane shift behind centerline due to varying shoulder widths (10' shoulders shown in Typical TCP) which impacts the taper length. Site-specific traffic control plans may use this Typical TCP as reference and modify it from stopbar to stopbar using curvilinear alignment.

J. Channelization devices types may be modified (vertical panel channelizing devices prohibited). Warning lights on channelizing devices is being phased out in Washington. Contact Region Traffic Operations for information regarding their standard practices.

DESIGNER NOTES: (continued)

K. Maximum channelizing device spacing table for tangents is reduced to 20' spacing to enhance delineation through the lane closure, even though 40' allowed in WAC 468-95-301 for 25 mph. Channelization spacing may ALWAYS be reduced. To allow construction access into the work area, truck & trailers need about 120' gap in devices to maneuver--so these devices are optional during working hours to allow that movement.

L. Per MUTCD Section 6C.06, longitudinal buffer spaces are optional. This Typical TCP uses a 40' tangent & 120' construction access as the 160' longitudinal buffer (155' buffer for 25 mph). A protective vehicle has been added in the closed lane behind the first set of Type 3 barricades with just a 40' buffer to keep the distance between signals minimized (which maximizes traffic capacity).

M. The lateral buffer (transverse distance between open travel lanes and work area) is optional. No lateral buffer has been provided in these Typical TCPs due to the low speeds of alternating traffic when channelizing devices used but a 1' lateral deflection distance used for temporary barrier (for their deflection space) due to 25 mph speeds versus the typical 3 feet. Actual work area limits may be modified.

N. See Design Manual Chapter 1610 for temporary barrier design & sloped concrete barrier terminal (allowed 25 mph or less). See Design Manual Chapter 1620 for temporary impact attenuators (required 30+ mph, approved Temporary Impact Attenuator list required to be provided on TCPs).

O. Placing Type 3 barricades or channelizing devices transversely (at 0° and 3-foot spacing) is an optional strategy to stop move errant drivers traveling within the closed lane(s). This Typical TCP uses several Type 3 barricades strategically placed.

P. In lieu of portable trailer-mounted traffic signals, WSDOT HQ has a timber-pole mounted traffic signal variation that is more economical if traffic signals remain in place for 4 months or longer. For additional information, contact HQworkzone@wsdot.wa.gov.

Q. If distance between mainline temporary lights exceed 200 feet, perform Light Level Criteria calculations per Design Manual 1040.10. At intersections, a single 200W+ class light at the stopbar is sufficient if the stop line for the cross-street is within 75 feet from the edge line of the main roadway.

SIMPLE TEMPORARY SIGNAL-CONTROLLED ALTERNATING 1-LANE, 2-WAY TRAFFIC 25 WZSL + RUMBLE STRIPS (45+ MPH HIGHWAYS, 7 DAYS OR LESS)

INFORMATIONAL USE ONLY

DO NOT INCLUDE THIS SHEET IN CONTRACT PS&Es or TCP SUBMITTALs.

DESIGNER GUIDANCE

Plot 4

TC347