

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 RAMP, AT-GRADE INTERSECTIONS AND DRIVEWAYS.		

MAXIMUM CHANNELIZATION DEVICE SPACING	
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 ##:##

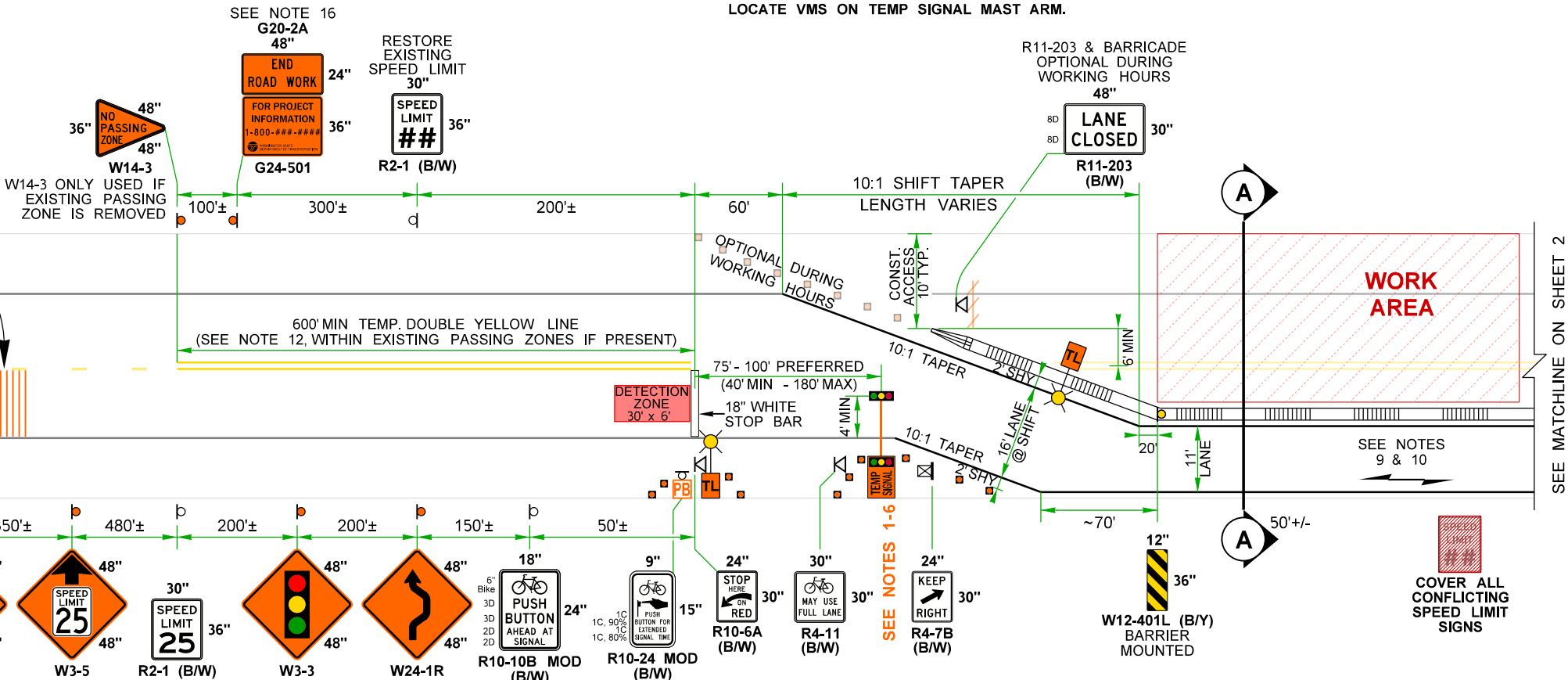
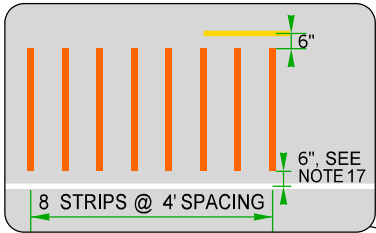
##:## = MINUTES:SECONDS UNTIL GREEN.  
LOCATE VMS ON TEMP SIGNAL MAST ARM.

FOR DRIVEWAY, BUSINESS ACCESS,  
AND INTERSECTING ROADWAY DETAILS  
SEE TC340, SHEET 3.

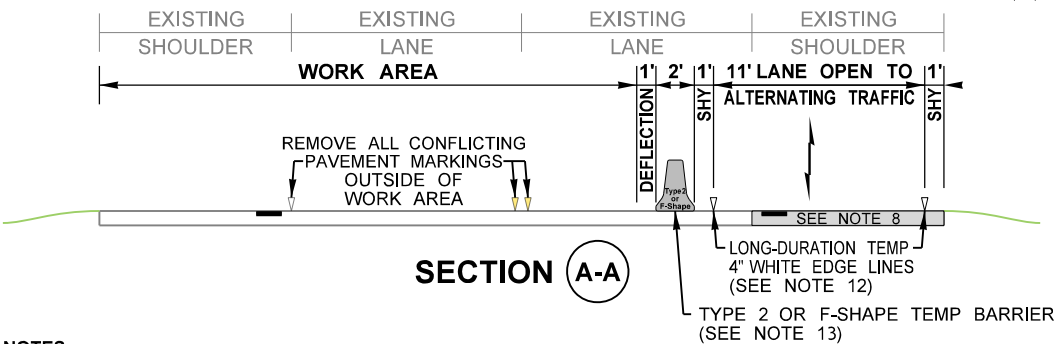
mPCMS		
1	2	3
TRAFFIC SIGNAL 1.5 MILES	WATCH 4 STOPPED TRAFFIC	ROADWAY NARROWS 13' WIDE
1.5 SEC	1.5 SEC	1.5 SEC

FIELD LOCATE 1.5+/- MILES PRIOR TO TEMP SIGNAL. RELOCATE TO REMAIN 0.5± MILE IN ADVANCE OF TRAFFIC QUEUE IF NEEDED.

LOCATE PER STD. SPEC. 1-10.3(3)C.



LEGEND:	
	CLASS A SIGN LOCATION (POST OR BARRIER-MOUNTED)
	CLASS A TRIPOD-MOUNTED SIGN LOCATION (1' MIN HEIGHT)
	CLASS A TRIPOD-MOUNTED SIGN LOCATION (5' MIN HEIGHT)
	28" TRAFFIC CONES (SEE NOTE 11)
	UNANCHORED TEMPORARY BARRIER (SEE NOTE 13)
	SLOPED BARRIER TERMINAL (SEE NOTE 13)
	TYPE 3 BARRICADE
	PROTECTIVE VEHICLE
	TEMPORARY TRAFFIC SIGNAL (SEE NOTES 1 - 6)
	COMPACT TEMP. TRAFFIC SIGNAL (SEE NOTES 1 - 6)
	TEMPORARY BICYCLE PUSH-BUTTON (SEE NOTES 1, 6, & 7)
	TEMPORARY LIGHTING (SEE NOTE 6)
	ADHESIVE TEMPORARY RUMBLE STRIPS (SEE NOTE 17)
	miniPORTABLE CHANGEABLE MESSAGE SIGN (SEE NOTE 18)



#### NOTES:

1. ALL TEMPORARY TRAFFIC SIGNAL TIMING PLANS MUST BE APPROVED BY THE ENGINEER. TWO SEPARATE SIGNAL TIMING PLANS NEEDED: (1) DEFAULT TIMING PLAN DESIGNED ONLY FOR VEHICLES. (2) MODIFIED SIGNAL TIMING, ACTIVATED BY THE BICYCLE PUSH-BUTTON, THAT EXTENDS THE ALL-RED CLEARANCE INTERVAL ONCE TO ALLOW BICYCLES TO CLEAR THE LANE CLOSURE FROM THE STOPBAR AT THE END OF THE YELLOW PHASE. AFTERWARDS, DEFAULT SIGNAL TIMING RESUMES.
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 WHICH RECEIVES THE IMMEDIATE GREEN DISPLAY TO MINIMIZE DISPLAYS.

3. TRAFFIC CONTROL MANAGER, TRAFFIC CONTROL SUPERVISOR (PRIMARY AND ALTERNATE), AND WSDOT ENGINEER SHALL BE NOTIFIED VIA EMAIL, 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. PROVIDE 2+ FEET OF LATERAL CLEARANCE FROM TRAVEL LANE TO TEMP SIGNAL, PUSH-BUTTON, 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. BICYCLE PUSH BUTTON IS A MODIFIED PORTABLE PEDESTRIAN PUSH BUTTON THAT IS MOUNTED ON A PUSH-CART OR TRAILER BUT ALSO MAY BE MOUNTED ON A 4x4 WOODEN POST WHERE IT REMAINS ACCESSIBLE TO BICYCLES WITHOUT HAVING TO DISMOUNT.
8. EXISTING SHOULDER PAVEMENT MAY NEED TO BE REBUILT TO FULL-DEPTH TO HANDLE TRAFFIC LONG TERM. AT A MINIMUM, REMOVE EXISTING RUMBLE STRIP VIA MILL & HMA FILL.

NOTES CONTINUED ON SHEET 2.

## ADVANCED TEMPORARY SIGNAL-CONTROLLED ALTERNATING 1-LANE, 2-WAY TRAFFIC 25 WZSL + TEMP BARRIER + RUMBLE STRIPS (45+ MPH HIGHWAYS, 8+ DAYS) NOT TO SCALE

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TIME	9:27:03 AM
DATE	1/25/2023
PLOTTED BY	LintzF
DESIGNED BY	
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	
REGIONAL ADM.	
REVISION	
DATE	
BY	
REGION NO.	10
STATE	WASH
JOB NUMBER	
CONTRACT NO.	
LOCATION NO.	
FED.AID PROJ.NO.	
DATE	
P.E. STAMP BOX	



Washington State  
Department of Transportation

TYPICAL TRAFFIC CONTROL PLANS

Plot 1  
PLAN REF NO  
TC340  
SHEET  
1  
OF  
6  
SHEETS

FOR DRIVEWAY, BUSINESS ACCESS,  
AND INTERSECTING ROADWAY DETAILS  
SEE TC340, 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.

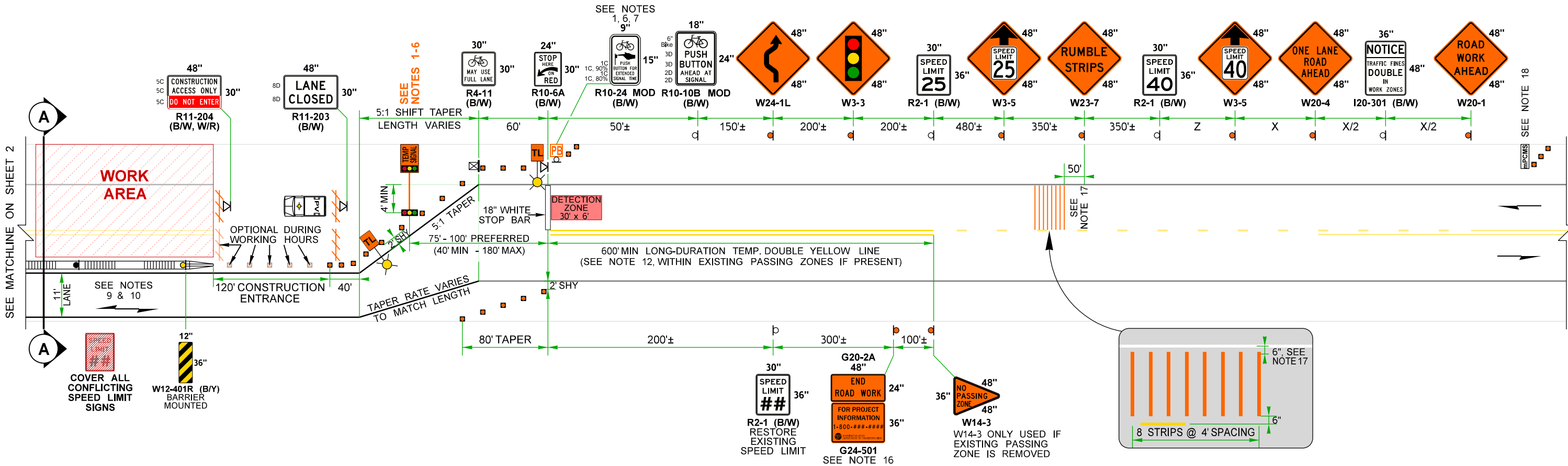
MAXIMUM CHANNELIZATION DEVICE SPACING	
TAPER	TANGENT
10'	20'

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

FIELD LOCATE 1.5+/- MILES PRIOR  
TO TEMP SIGNAL. RELOCATE TO  
REMAIN 0.5± MILE IN ADVANCE  
OF TRAFFIC QUEUE IF NEEDED.

LOCATE PER STD. SPEC. 1-10.3(3)C.

mPCMS		
1	2	3
TRAFFIC SIGNAL 1.5 MILES	WATCH 4 STOPPED TRAFFIC	ROADWAY NARROWS 13' WIDE
1.5 SEC	1.5 SEC	1.5 SEC



NOTES: CONTINUED FROM SHEET 1

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

10. ACCOMODATE PEDESTRIANS VIA SHUTTLE THROUGH LANE CLOSURE OR ANOTHER METHOD THE ENGINEER ACCEPTS.

11. 36" TRAFFIC CONES, 42" TALL CHANNELIZATION DEVICES, OR TRAFFIC SAFETY DRUMS OK.

12. EXISTING CENTERLINE PAVEMENT MARKINGS MAY VARY. IF PASSING ZONE PRESENT WITHIN 600' OF TEMPORARY STOPBAR, REMOVE EXISTING CENTERLINE MARKING AND INSTALL LONG-DURATION TEMP. DOUBLE YELLOW LINE (MAY BE SUPPLEMENTED WITH SURFACE-MOUNTED TYPE 2YY RPMs @ 40' SPACING). ALL OTHER CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED (THOSE WITHIN THE WORK AREA MAY REMAIN AS SHOWN).

13. TYPE 2 OR F-SHAPED TEMPORARY BARRIER PERMITTED. SLOPED CONCRETE TERMINAL ALLOWED FOR REGULATORY WORK ZONE SPEED LIMITS 25 MPH OR LESS. TYPE 2 TEMPORARY BARRIER AND SLOPED CONCRETE TERMINAL PER STANDARD PLAN K80-32. F-SHAPED TEMPORARY BARRIER PER STANDARD PLAN C-60.10 (C-60.15 IF SCUPPERS USED FOR DRAINAGE) AND STANDARD PLAN C-60.80 FOR F-SHAPE CONCRETE BARRIER TERMINAL.

14. 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

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

16. WSDOT PROJECT ENGINEERING OFFICE WILL PROVIDE PHONE NUMBER.

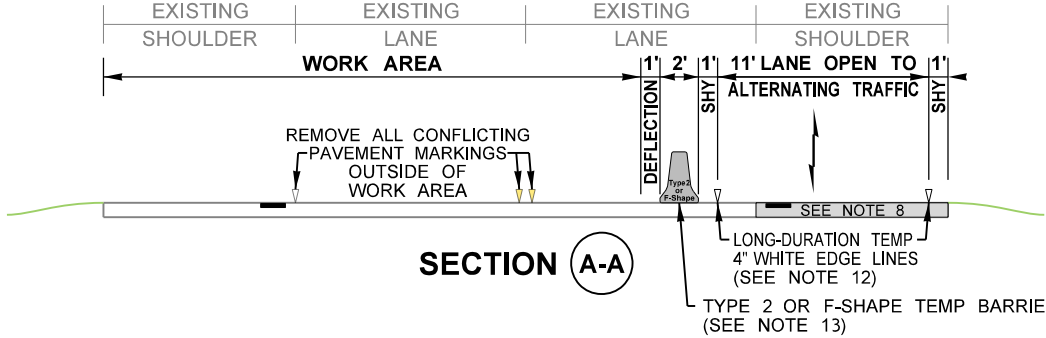
17. SECURE TEMPORARY RUMBLE STRIPS TO PAVEMENT VIA ADHESIVE (DO NOT USE PRIMER). FOR ROADWAYS WITH SHOULDERS LESS THAN 4 FEET, PROVIDE A 4-FOOT CLEAR PATH FOR BICYCLES MEASURED FROM EDGE OF PAVED SHOULDER. AVOID PLACING THEMP WITHIN HORIZONTAL CURVES, ADJUST SIGN SPACING IF NEEDED. USE THE FOLLOWING:  
\* Advanced Traffic Marking (ATM) Self-Adhesive Rumble Strips (1/4" x 4", Orange)  
\* Stop-Painting (1/4" x 4", Orange)  
\* Seton (1/4" x 4", Orange)

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

19. REMOVE OR COVER ALL CONFLICTING SIGNAGE PER STANDARD SPECIFICATIONS 1-10.3(3)A.


20. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.

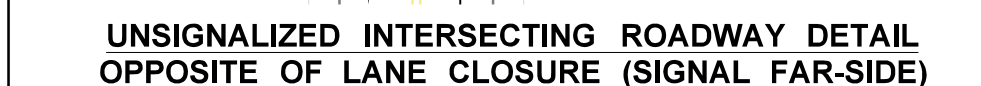
21. CONTACT WSDOT COMMERCIAL VEHICLE SERVICES AT LEAST 7 DAYS IN ADVANCE OF ROADWAY WIDTH RESTRICTIONS.



## ADVANCED TEMPORARY SIGNAL-CONTROLLED ALTERNATING 1-LANE, 2-WAY TRAFFIC 25 WZSL + TEMP BARRIER + RUMBLE STRIPS (45+ MPH HIGHWAYS, 8+ DAYS)

NOT TO SCALE

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DATE 1/25/2023					10	WASH				TC340
PLOTTED BY LintzF					JOB NUMBER					SHEET 2 OF 6 SHEETS
DESIGNED BY										
ENTERED BY										
CHECKED BY										
PROJ. ENGR.					CONTRACT NO.		LOCATION NO.			
REGIONAL ADM.		REVISION		DATE	BY				DATE	TYPICAL TRAFFIC CONTROL PLANS
								P.E. STAMP BOX	DATE	
									P.E. STAMP BOX	
<div><p>Washington State Department of Transportation</p></div>										



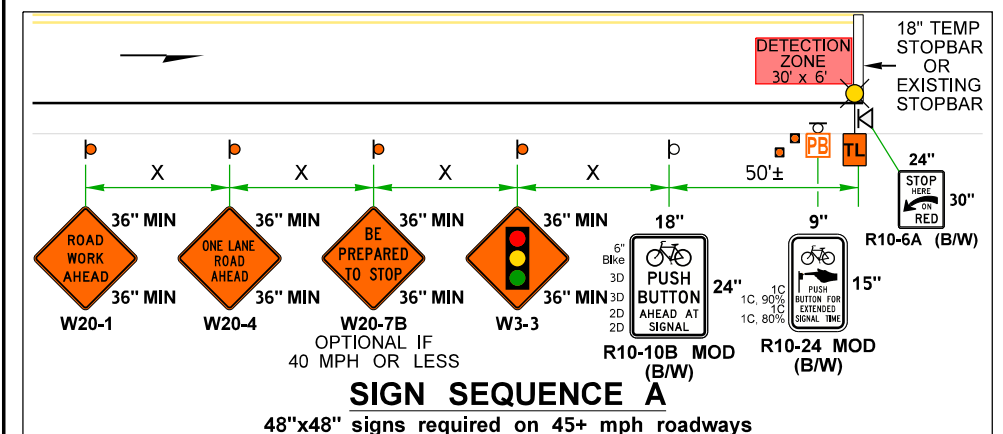
**ADVANCED TEMPORARY SIGNAL-CONTROLLED ALTERNATING 1-LANE, 2-WAY TRAFFIC  
25 WZSL + TEMP BARRIER + RUMBLE STRIPS (45+ MPH HIGHWAYS, 8+ DAYS)**



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



**NOTES:**  
22. FOR LEGEND, TABLES, AND ADDITIONAL NOTES: SEE TC340, SHEETS 4 & 5.

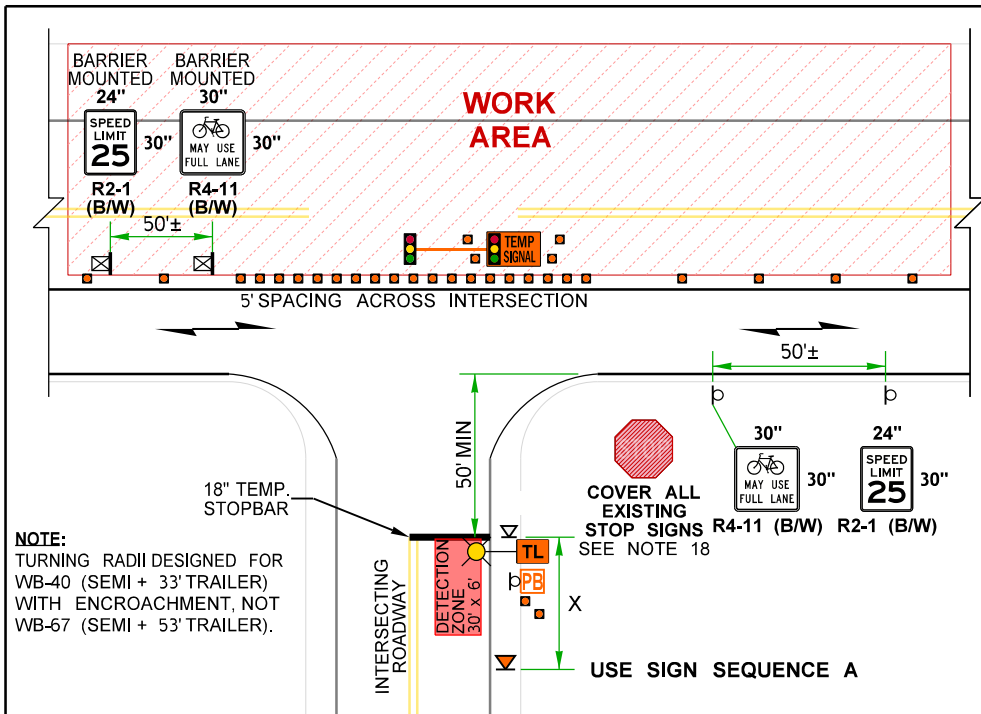


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PROJ. ENGR.																			
REGIONAL ADM.						REVISION		DATE		BY									

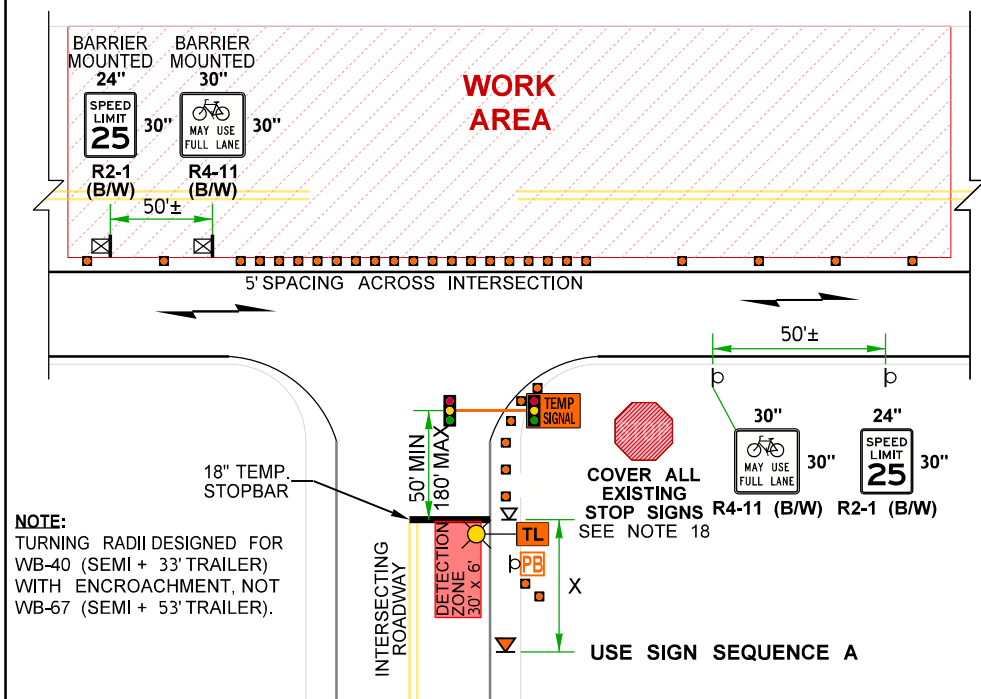




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DATE 1/25/2023				10 WASH						TC340	
PLOTTED BY LintzF				JOB NUMBER							
DESIGNED BY						LOCATION NO.				SHEET 5 OF 6 SHEETS	
ENTERED BY											
CHECKED BY				CONTRACT NO.						TYPICAL TRAFFIC CONTROL PLANS	
PROJ. ENGR.											
REGIONAL ADM.		REVISION		DATE		BY		DATE P.E. STAMP BOX		DATE P.E. STAMP BOX	



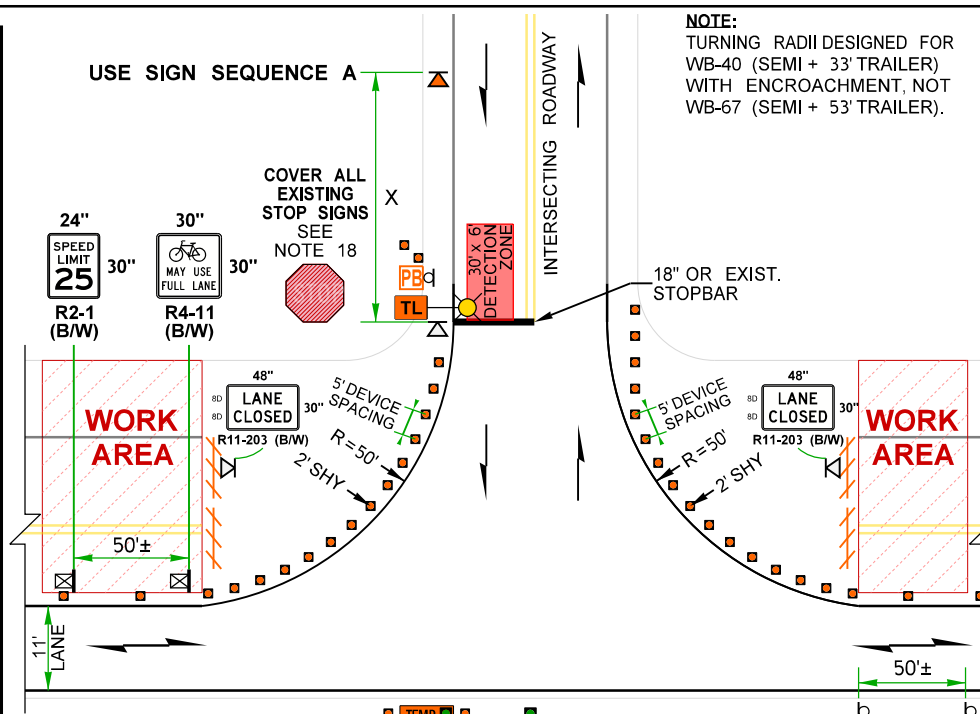
**UNSIGNALIZED INTERSECTING ROADWAY DETAIL  
OPPOSITE OF LANE CLOSURE (SIGNAL FAR-SIDE)**



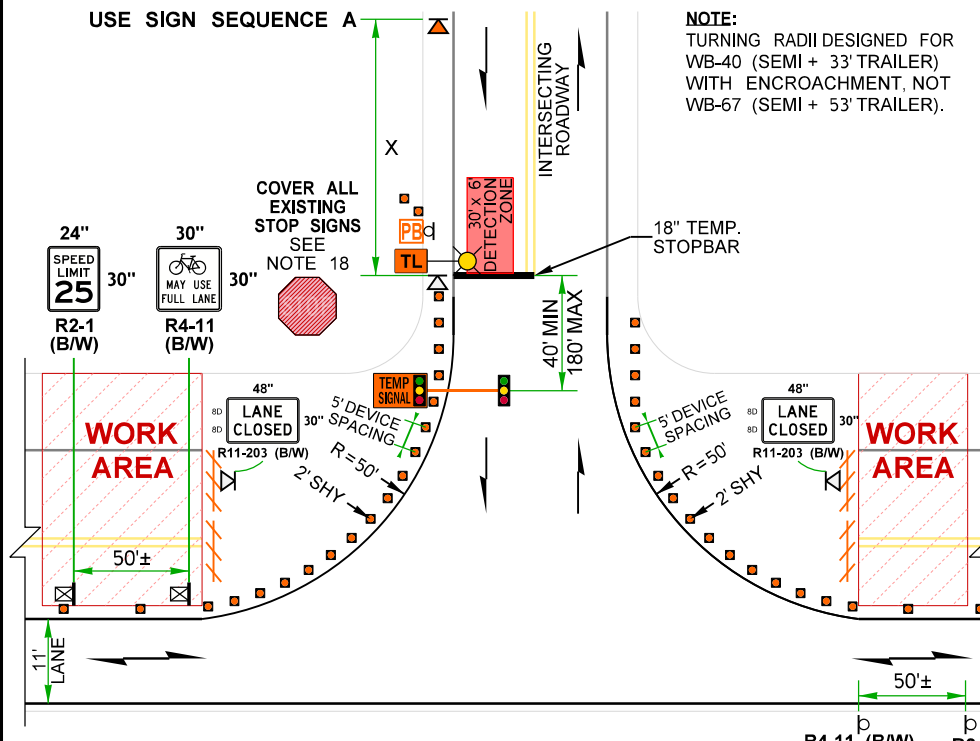
**UNSIGNALIZED INTERSECTING ROADWAY DETAIL  
OPPOSITE OF LANE CLOSURE (SIGNAL NEAR-SIDE)**

**ADVANCED TEMPORARY SIGNAL-CONTROLLED ALTERNATING 1-LANE, 2-WAY TRAFFIC  
25 WZSL + CHANNELIZATION DEVICES + RUMBLE STRIPS (45+ MPH HIGHWAYS, 8+ DAYS)**

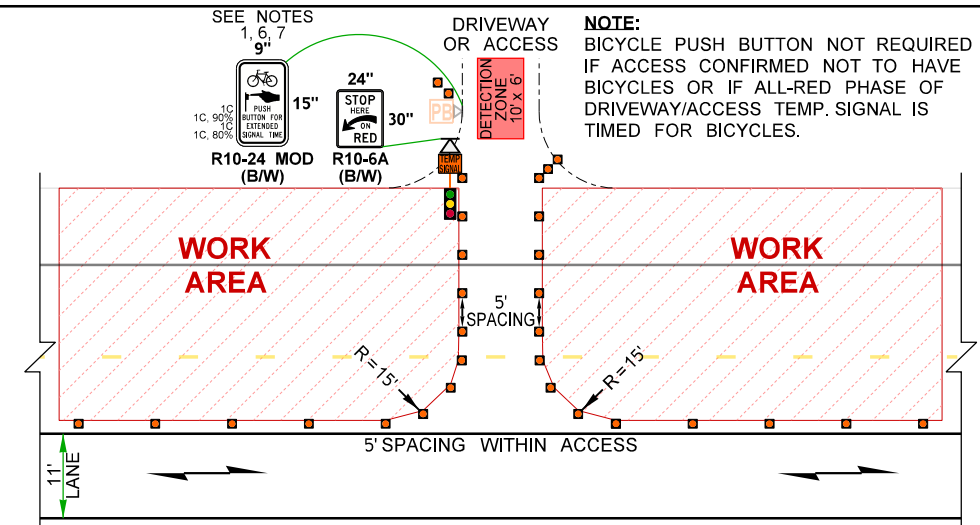
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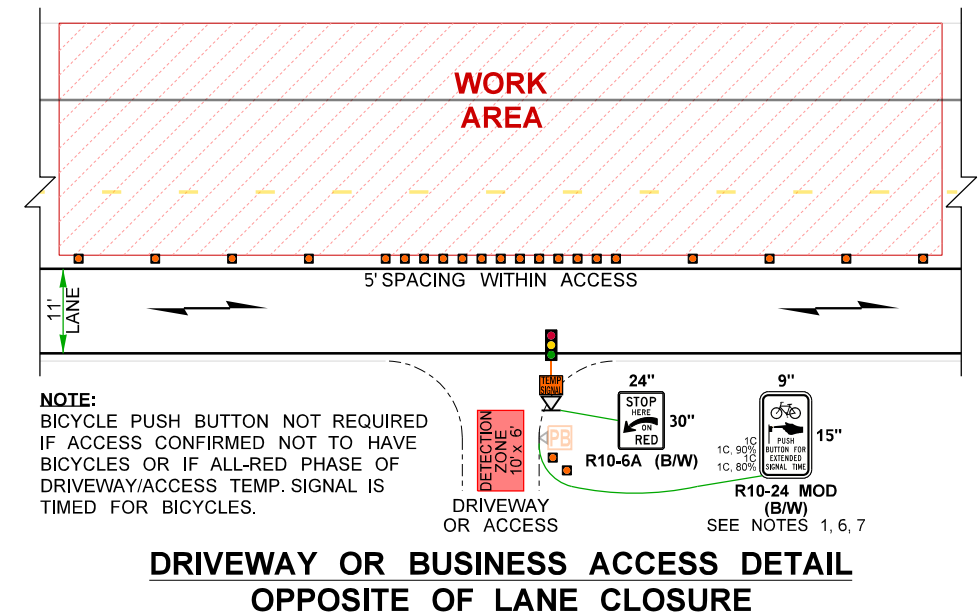
**UNSIGNALIZED INTERSECTING ROADWAY DETAIL  
SAME SIDE AS LANE CLOSURE (SIGNAL FAR-SIDE)**



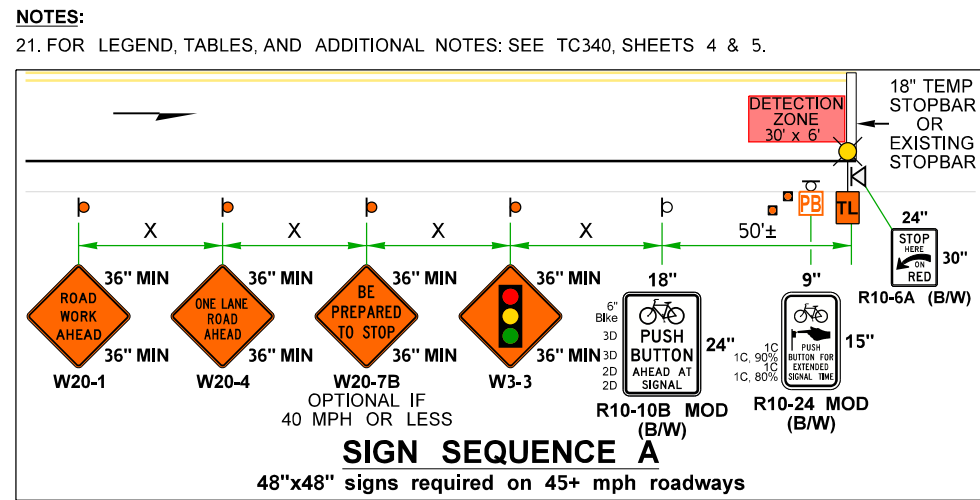
**UNSIGNALIZED INTERSECTING ROADWAY DETAIL  
SAME SIDE AS LANE CLOSURE (SIGNAL NEAR-SIDE)**



**DRIVEWAY OR BUSINESS ACCESS DETAIL  
SAME SIDE AS LANE CLOSURE**



**DRIVEWAY OR BUSINESS ACCESS DETAIL  
OPPOSITE OF LANE CLOSURE**



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ENTERED BY										
CHECKED BY										
PROJ. ENGR.										
REGIONAL ADM.										
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				10	WASH					
						JOB NUMBER				
						CONTRACT NO.				
						LOCATION NO.				
						DATE				
						P.E. STAMP BOX				





FOR DRIVEWAY, BUSINESS ACCESS,  
AND INTERSECTING ROADWAY DETAILS  
SEE TC340, 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.

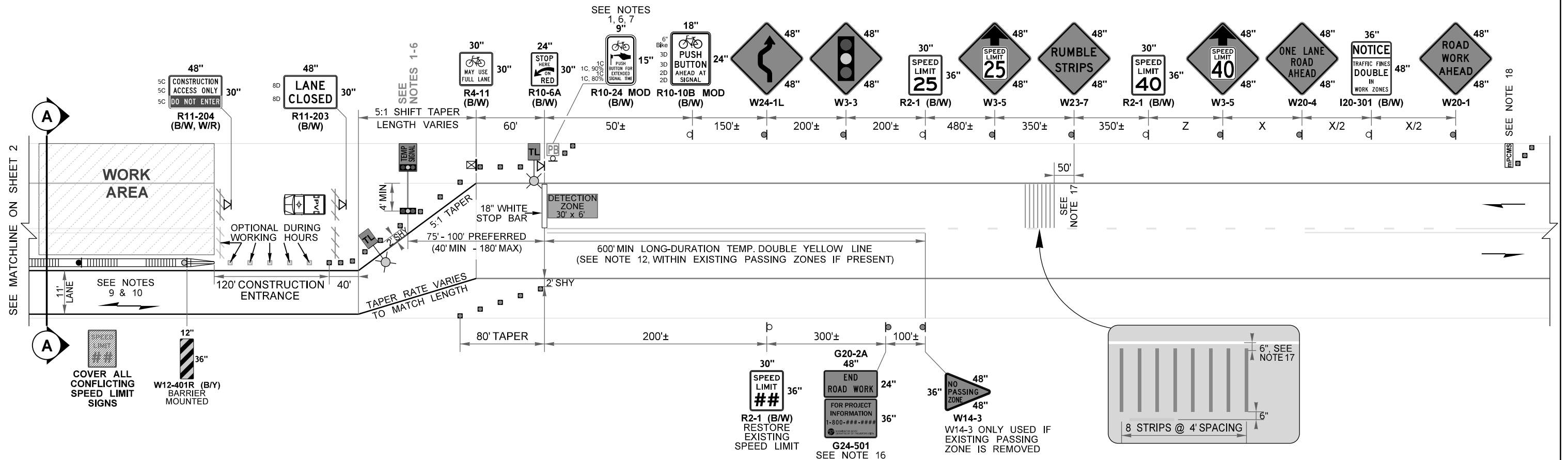
MAXIMUM CHANNELIZATION DEVICE SPACING	
TAPER	TANGENT
10'	20'

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

FIELD LOCATE 1.5+/- MILES PRIOR  
TO TEMP SIGNAL. RELOCATE TO  
REMAIN 0.5± MILE IN ADVANCE  
OF TRAFFIC QUEUE IF NEEDED.

LOCATE PER STD. SPEC. 1-10.3(3)C.

mPCMS		
1	2	3
TRAFFIC SIGNAL 1.5 MILES	WATCH 4 STOPPED TRAFFIC	ROADWAY NARROWS 13' WIDE
1.5 SEC	1.5 SEC	1.5 SEC



NOTES: CONTINUED FROM SHEET 1

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

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

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13. TYPE 2 OR F-SHAPED TEMPORARY BARRIER PERMITTED. SLOPED CONCRETE TERMINAL ALLOWED FOR REGULATORY WORK ZONE SPEED LIMITS 25 MPH OR LESS. TYPE 2 TEMPORARY BARRIER AND SLOPED CONCRETE TERMINAL PER STANDARD PLAN K80-32. F-SHAPED TEMPORARY BARRIER PER STANDARD PLAN C-60.10 (C-60.15 IF SCUPPERS USED FOR DRAINAGE) AND STANDARD PLAN C-60.80 FOR F-SHAPE CONCRETE BARRIER TERMINAL.

14. 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

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

16. WSDOT PROJECT ENGINEERING OFFICE WILL PROVIDE PHONE NUMBER.

17. SECURE TEMPORARY RUMBLE STRIPS TO PAVEMENT VIA ADHESIVE (DO NOT USE PRIMER). FOR ROADWAYS WITH SHOULDERS LESS THAN 4 FEET, PROVIDE A 4-FOOT CLEAR PATH FOR BICYCLES MEASURED FROM EDGE OF PAVED SHOULDER. AVOID PLACING TEMP WITHIN HORIZONTAL CURVES, ADJUST SIGN SPACING IF NEEDED. USE THE FOLLOWING:

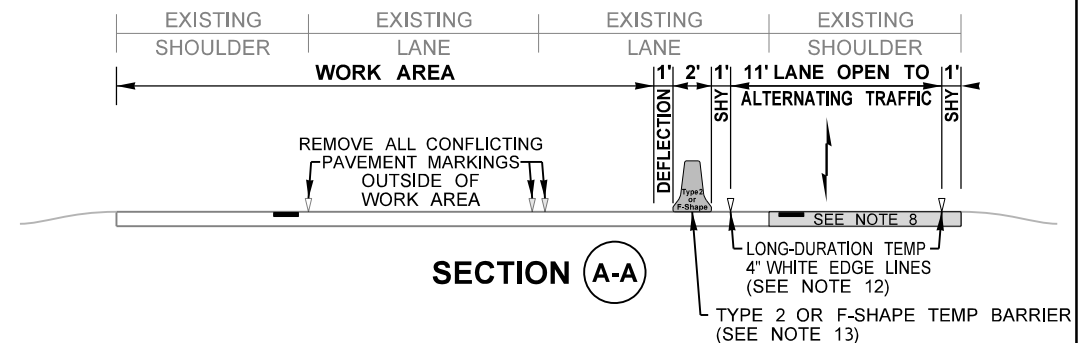
\* Advanced Traffic Marking (ATM) Self-Adhesive Rumble Strips (1/4" x 4", Orange)  
\* Stop-Painting (1/4" x 4", Orange)  
\* Seton (1/4" x 4", Orange)

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

19. REMOVE OR COVER ALL CONFLICTING SIGNAGE PER STANDARD SPECIFICATIONS 1-10.3(3)A.

20. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.

21. CONTACT WSDOT COMMERCIAL VEHICLE SERVICES AT LEAST 7 DAYS IN ADVANCE OF ROADWAY WIDTH RESTRICTIONS.

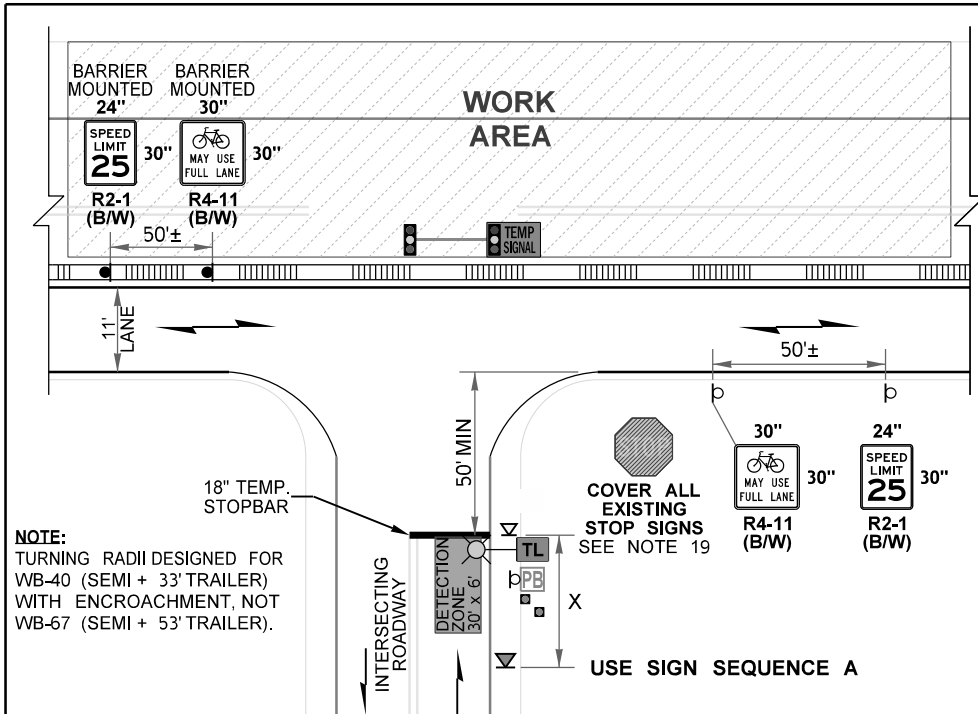


## ADVANCED TEMPORARY SIGNAL-CONTROLLED ALTERNATING 1-LANE, 2-WAY TRAFFIC 25 WZSL + TEMP BARRIER + RUMBLE STRIPS (45+ MPH HIGHWAYS, 8+ DAYS)

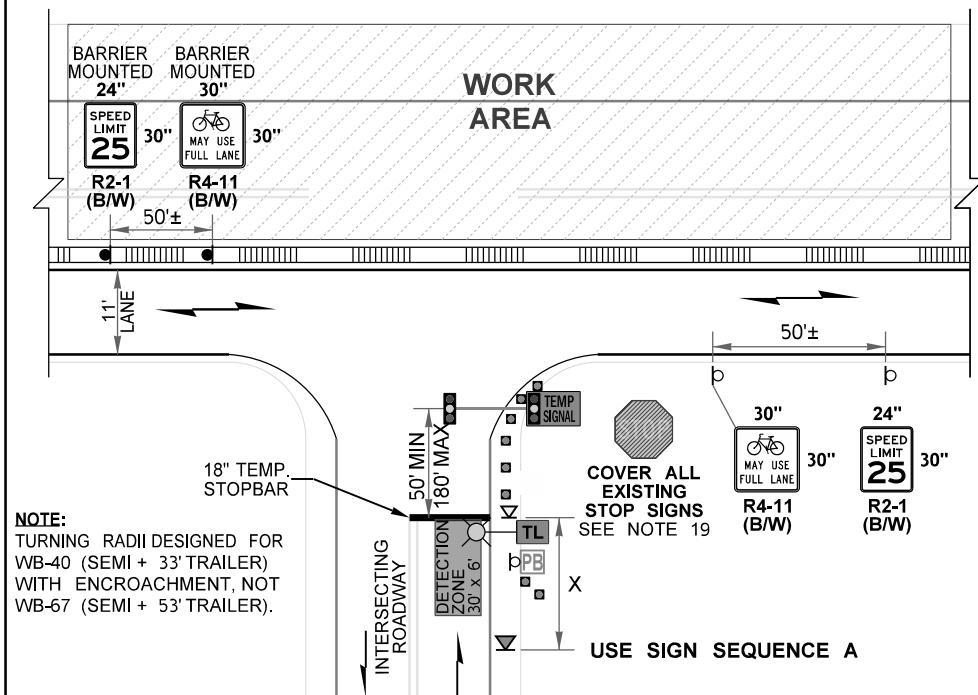
**NOT TO SCALE**

[illegible]



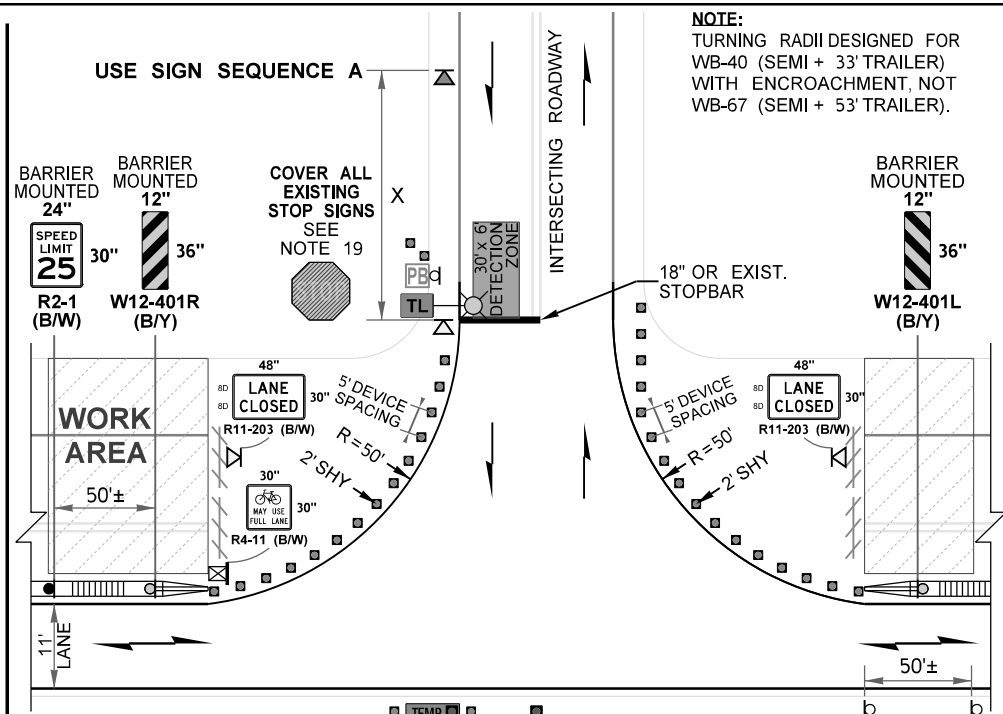


UNSIGNALIZED INTERSECTING ROADWAY DETAIL  
OPPOSITE OF LANE CLOSURE (SIGNAL FAR-SIDE)

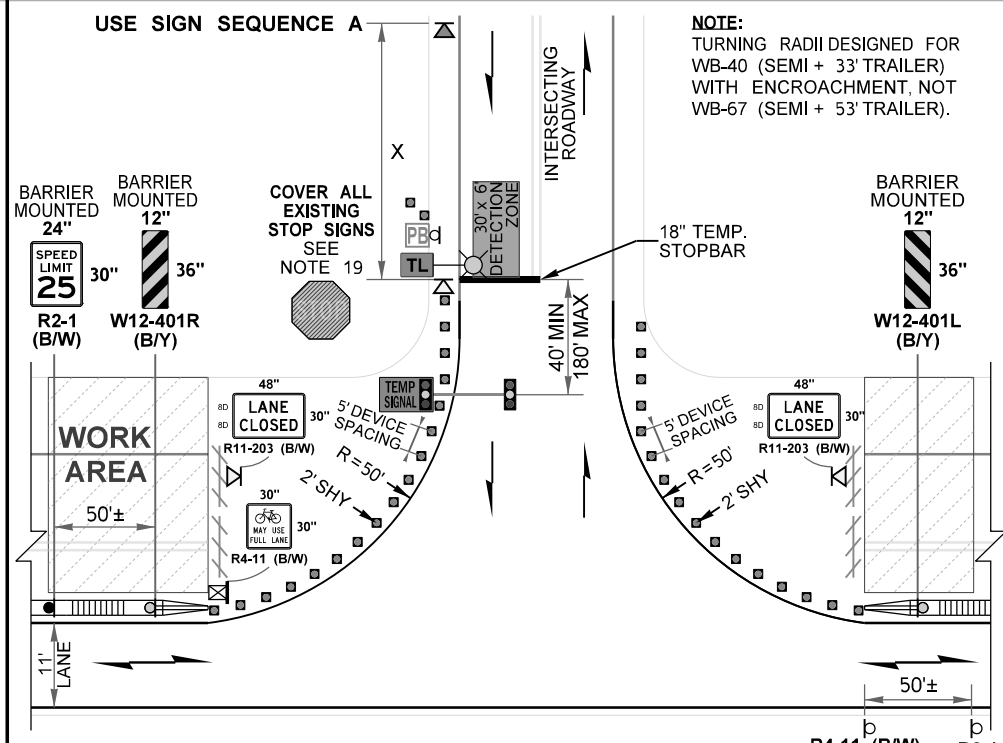


UNSIGNALIZED INTERSECTING ROADWAY DETAIL  
OPPOSITE OF LANE CLOSURE (SIGNAL NEAR-SIDE)

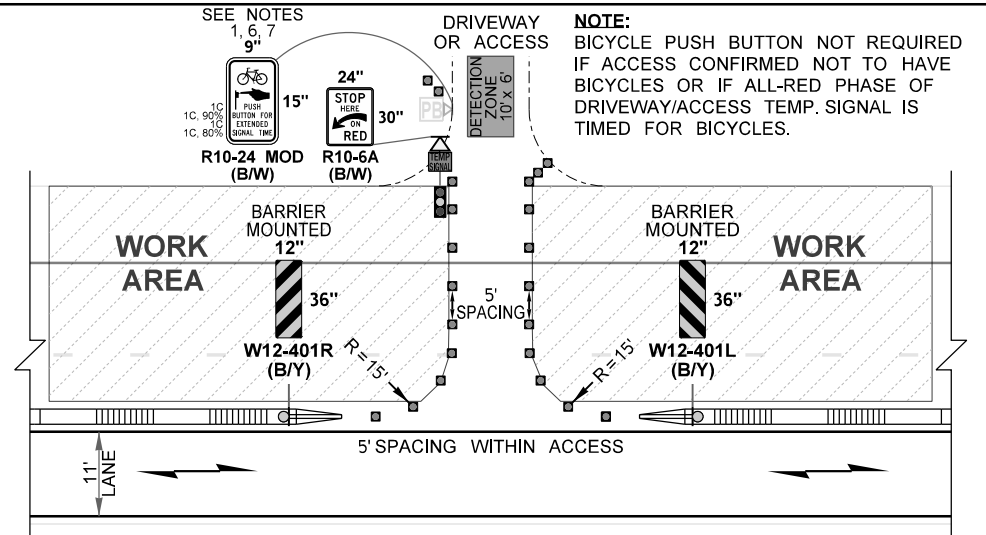
ADVANCED TEMPORARY SIGNAL-CONTROLLED ALTERNATING 1-LANE, 2-WAY TRAFFIC  
25 WZSL + TEMP BARRIER + RUMBLE STRIPS (45+ MPH HIGHWAYS, 8+ DAYS)  
NOT TO SCALE



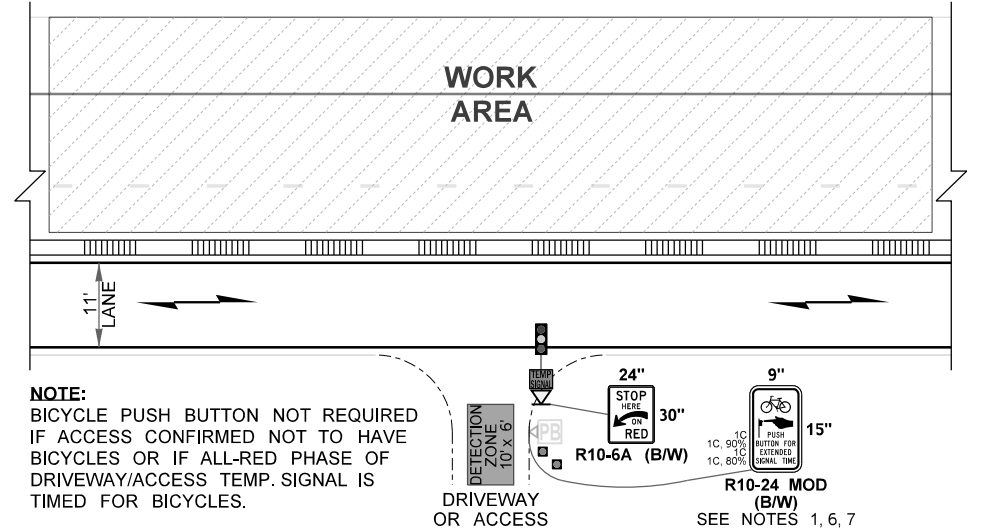
UNSIGNALIZED INTERSECTING ROADWAY DETAIL  
SAME SIDE AS LANE CLOSURE (SIGNAL FAR-SIDE)



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

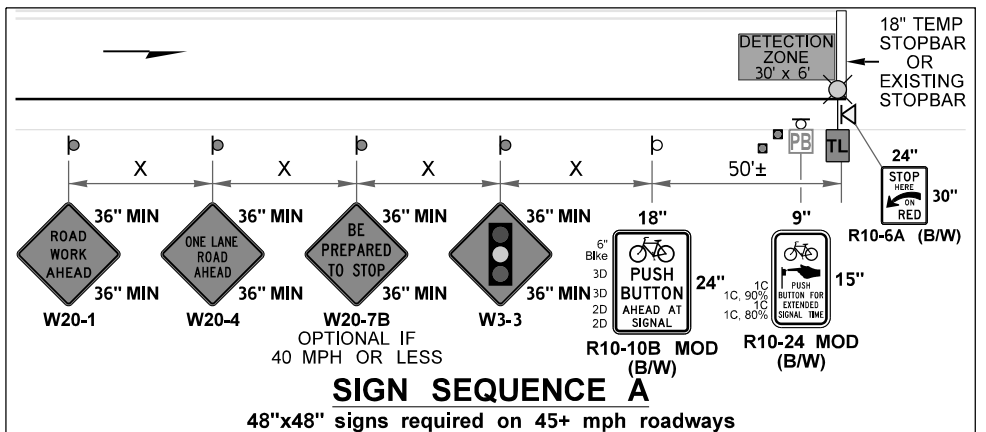


DRIVEWAY OR BUSINESS ACCESS DETAIL  
SAME SIDE AS LANE CLOSURE



DRIVEWAY OR BUSINESS ACCESS DETAIL  
OPPOSITE OF LANE CLOSURE

NOTES:  
22. FOR LEGEND, TABLES, AND ADDITIONAL NOTES: SEE TC340, SHEETS 4 & 5.



SIGN SEQUENCE A

48"x48" signs required on 45+ mph roadways

FILE NAME	C:\Users\LintzF\OneDrive - Washington State Department of Transportation\Desktop\Work Zone TCPs\340Hwy45+AltTrafficAdvTempSignalRS25WZSLSharedLn.dgn	REGION NO.	10	STATE	WASH	FED.AID PROJ.NO.	
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DATE	1/25/2023	CONTRACT NO.				LOCATION NO.	
DESIGNED BY	LintzF						
ENTERED BY							
CHECKED BY							
PROJ. ENGR.							
REGIONAL ADM.							
REVISION							
DATE							
BY							



TYPICAL TRAFFIC CONTROL PLANS

Plot 3  
SHEET  
3  
OF  
6  
SHEETS



FILE NAME C:\Users\LintzF\OneDrive - Washington State Department of Transportation\Desktop\Work Zone TCPs\340Hwy45+AltTrafficAdvTempSignalRS25WZSLSharedLn.dgn										Plot 5	
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DATE 1/25/2023					10	WASH				TC340	
PLOTTED BY LintzF					JOB NUMBER						
DESIGNED BY											
ENTERED BY											
CHECKED BY					CONTRACT NO.		LOCATION NO.			SHEET 5 OF 6 SHEETS	
PROJ. ENGR.								DATE		TYPICAL TRAFFIC CONTROL PLANS	
REGIONAL ADM.			REVISION	DATE	BY		P.E. STAMP BOX	DATE	P.E. STAMP BOX		
										Washington State Department of Transportation	





**NOT TO SCALE**



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



**Washington State  
Department of Transportation**

**WORK ZONE MICROSTATION CELLS:**

**This Typical Traffic Control Plan has updated work zone cells (as of January 2023) already incorporated.** An extensive library of updated work zone cells are now available that appear as full color in Microstation, working with both a black or white CAD background. These updated cells have been programmed to automatically print in grayscale when printing in black/white but the color table must be up to date first (Settings -> Color Table. In the Color Table, select File -> Default and click Attach and Close).

(1) WSDOT CAE automatically updates WSDOT staff cell libraries (no action needed).

(2) External users must ensure they are using the current version of WSDOT CAE Resources.

See <https://wsdot.wa.gov/engineering-standards/design-topics/engineering-applications/software-resource-updates>  
For additional information e-mail [HQCAEHHelpDesk@wsdot.wa.gov](mailto:HQCAEHHelpDesk@wsdot.wa.gov).

**UPDATING OLD TRAFFIC CONTROL PLAN CELLS:**

See Plans Preparation Manual Division 4 (updated February 2023) for more information; particularly 400.06(29), and Examples 4-48 thru 4-62. In summary, traffic control & staged traffic plans can be in full color or black/white (via grayscale); however, the "old" wireframe signs can still be used. Please do not delete the background on the new signs if used--it breaks the cell and prevents updating it in future plans. When reusing old control plans, designers should update all the work zone tables at a minimum.

Be aware when WSDOT transitions to Microstation Connect (expected sometime in 2023), plans created in Microstation V8i (current version) do not seamlessly carry over. We anticipate a vast majority of existing traffic control plans will need to be partially or completely recreated.

For technical support and guidance see <https://wsdot.wa.gov/engineering-standards/design-topics/engineering-applications/technical-support-guidance>

**TYPICAL TCP USAGE EXPLANATION:**

**Advanced temporary signals:** Advanced temporary signals use video/radar detection with signal timings for vehicles (not bicycles) traveling the work zone speed limit through the lane closure to maximize traffic capacity and delays to vehicular traffic. Bicycles are accommodated once only when the bicycle push button is activated (the red clearance time is extended once before resuming signal timing for vehicles).

**Plots 1-3:** Advanced temporary signal-controlled 1-lane, 2-way alternating traffic on 45+ mph, 2-lane highways with **temporary traffic barrier** separating work area. Details for driveway, business access, and/or intersecting roadways included. Plots intended for long-duration closures of 8+ days and utilize Class A construction signs.

**Plots 4-6:** Advanced temporary signal-controlled 1-lane, 2-way alternating traffic on 45+ mph, 2-lane highways with **channelization devices (not temporary barrier)** separating work area. Details for driveway, business access, and/or intersecting roadways included. Plots intended for long-duration closures of 8+ days and utilize Class A construction signs.

**Other Temporary Signal 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>)

\* TC341: Simple temporary signals (without the bicycle push button/dual timing) with a vehicle-bicycle shared lane for long-duration (8+ day) closures. Plan limited to mainline temporary signals within 1000 feet on lower volume roadways.

\* TC343: Simple temporary signals (without the bicycle push button/timing) with separate bicycle lanes for long-duration (8+ day) closures. Contact Region Traffic Operations for guidance.

For temporary signals in place for 7 days or less, contact [HQworkzone@wsdot.wa.gov](mailto:HQworkzone@wsdot.wa.gov). 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>)

\* TC440s for temporary signal-controlled alternating traffic plans

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. Contact Region Traffic Operations to determine which Typical TCP(s) to utilize, as there are several variations available (or soon will be).

C. 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".

D. Region Traffic Operations must approve all regulatory speed limit reductions and advisory speeds in work zones. See WSDOT Traffic Manual Section 5-18 and Executive Order E1060 for details.

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

F. 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 (withA) that have been verified in the field, on SR view, or via Google Maps.

G. 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>).

H. For 8+ day traffic control plans, Class A construction signs will be used and are typically mounted per Standard Plan K-80.10; however, tripod-mounted (1-foot, 5-foot when behind channelization devices) and barrier-mounted signs are also used in these plans. For 7 day or less plans, Class B construction signs are used and consist of tripod-mounted (1-foot, 5-foot when behind channelization devices) and barrier-mounted signs.

I. For this Typical TCP, the work zone design speed is based on the 25 mph continuous regulatory speed limit for sign spacing, channelization device spacing, buffer, roll ahead distances, and use of concrete barrier terminals. If 30 mph or higher speed limits are used, temporary impact attenuators shall be used. If the 8+ day bypass needs to be designed at a lower speed (15 mph or 20 mph), then add a W13-1P advisory speed plaque below the W24-1 series signs based on the design speed in addition to using the 25 mph regulatory speed limit.

J. 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 uses 5:1 or 10:1 tapers 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.

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

L. Maximum channelization 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.

M. 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).

N. The lateral buffer (tranverse 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 channelization 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.

O. 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).

P. Placing Type 3 barricades or channelization 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.

**Q. 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](mailto:HQworkzone@wsdot.wa.gov).**

R. All PS&Es using 2023 Standard Specifications, use the following two General Special Provisions that update temporary traffic signal specifications: <https://wsdot.wa.gov/publications/fulltext/projectdev/gspspdf/egsp1.pdf>

\* 1-10.3(3)K.OPT1.2024.GR1 (Portable Temporary Traffic Control Signal Specification)

\* 1-10.3(3)K(9-35.14).OPT1.2024.GR1 (Portable Temporary Traffic Control Material Specification)

S. When utilizing temporary transverse rumble strips in Contracts, include the following Section 1-10 General Special Provisions for Specification, Measurement, and Payment. <https://wsdot.wa.gov/publications/fulltext/projectdev/gspspdf/egsp8.pdf>

\* 8-23.2(9-34).OPT1.GR8 (Temporary Adhesive Transverse Rumble Strip Materials GSP)

\* 8-23.3(4)A.OPT1.GR8 (Temporary Adhesive Transverse Rumble Strip Specifications GSP)

\* 8-23.4.OPT1.GR8 (Temporary Adhesive Transverse Rumble Strip Measurement GSP)

\* 8-23.5.OPT1.GR8 (Temporary Adhesive Transverse Rumble Strip Payment GSP)

**ADVANCED TEMPORARY SIGNAL-CONTROLLED ALTERNATING 1-LANE, 2-WAY TRAFFIC  
25 WZSL + RUMBLE STRIPS (45+ MPH HIGHWAYS, 8+ DAYS)**

**INFORMATIONAL USE ONLY**

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

**DESIGNER GUIDANCE**

Plot 7

**TC340**