

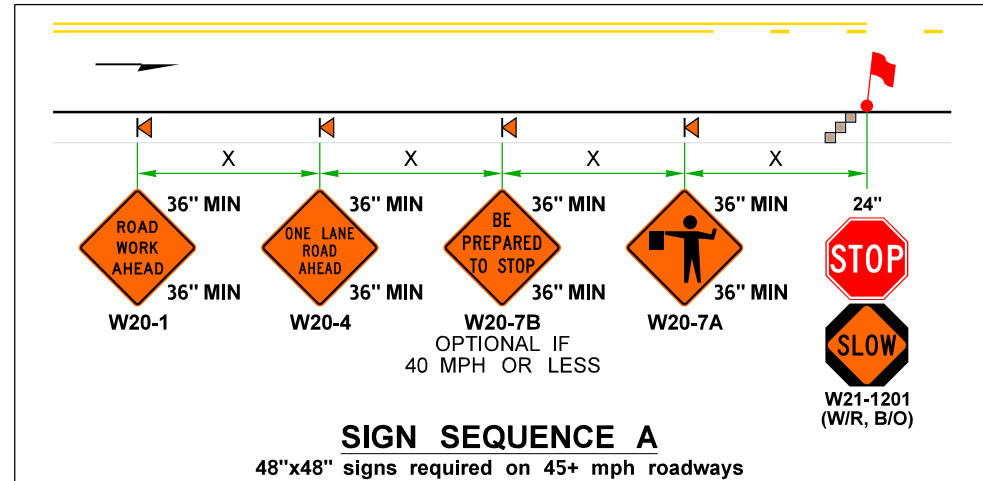
11. FOR LEGEND, TABLES, AND ADDITIONAL NOTES: SEE TC424, SHEET 1.

13. SINGLE FLAGGER (WITH RED FLAG/RED GLOW CONE FLASHLIGHT) MAY BE ADDED TO THE INTERSECTING ROADWAY APPROACH TO HELP GUIDE ALTERNATING & TURNING TRAFFIC.

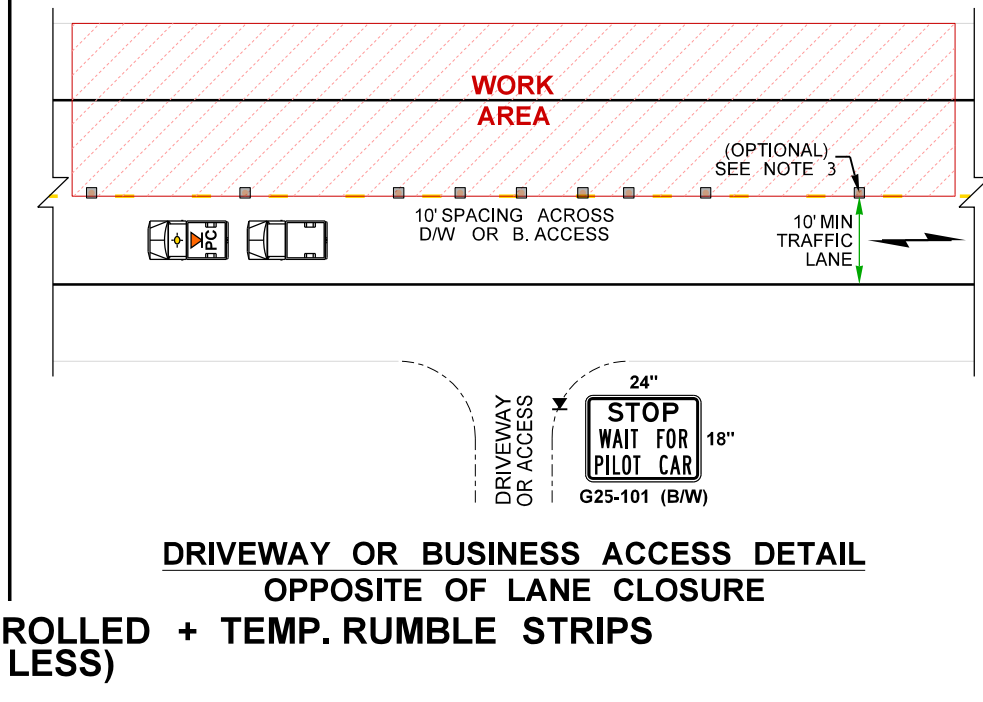
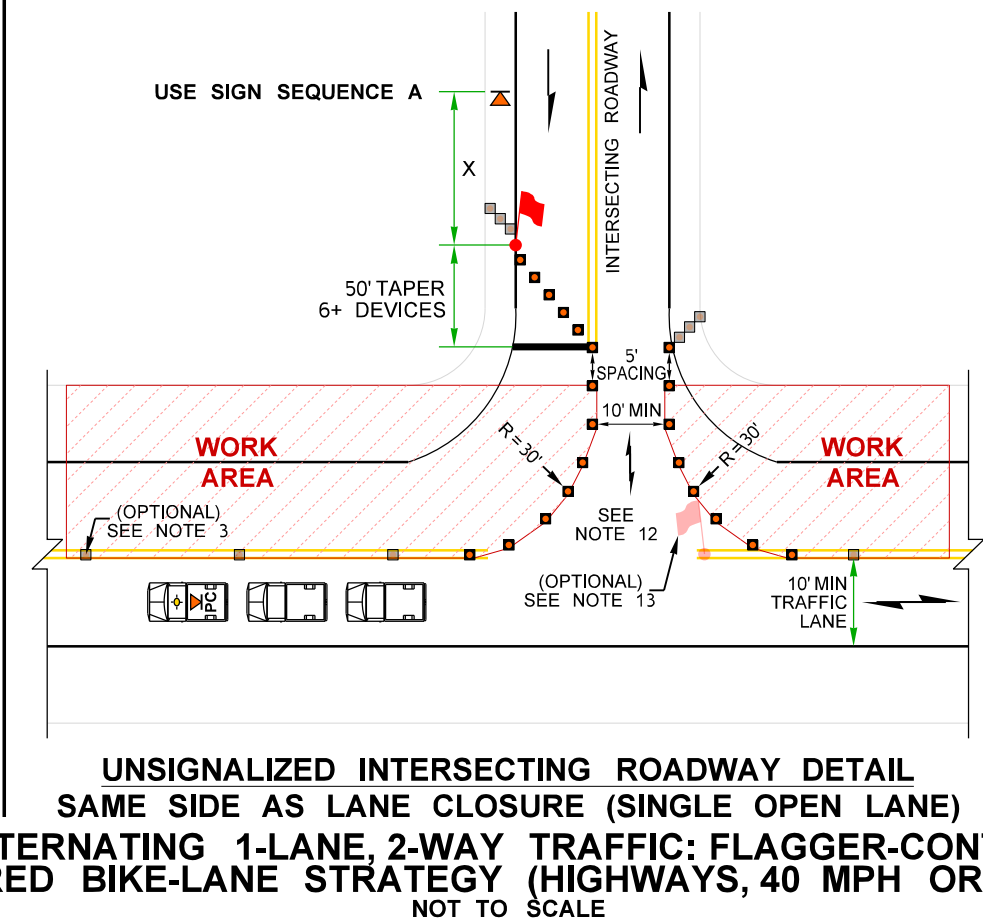
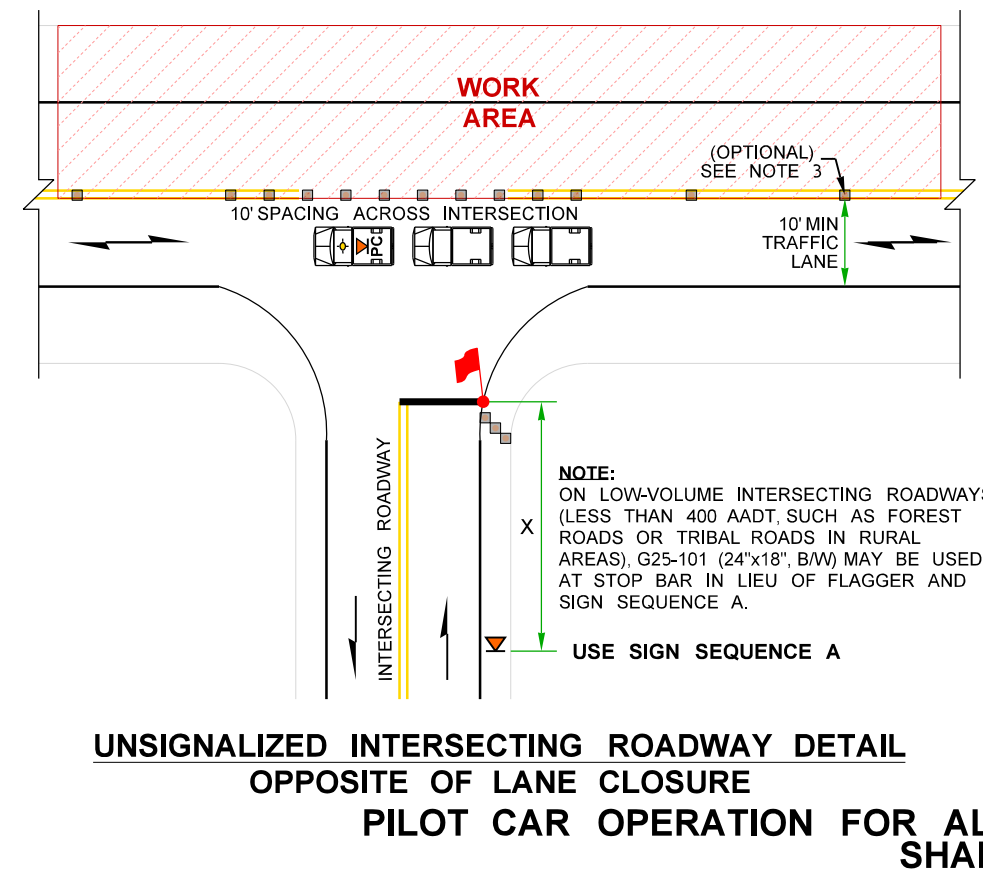
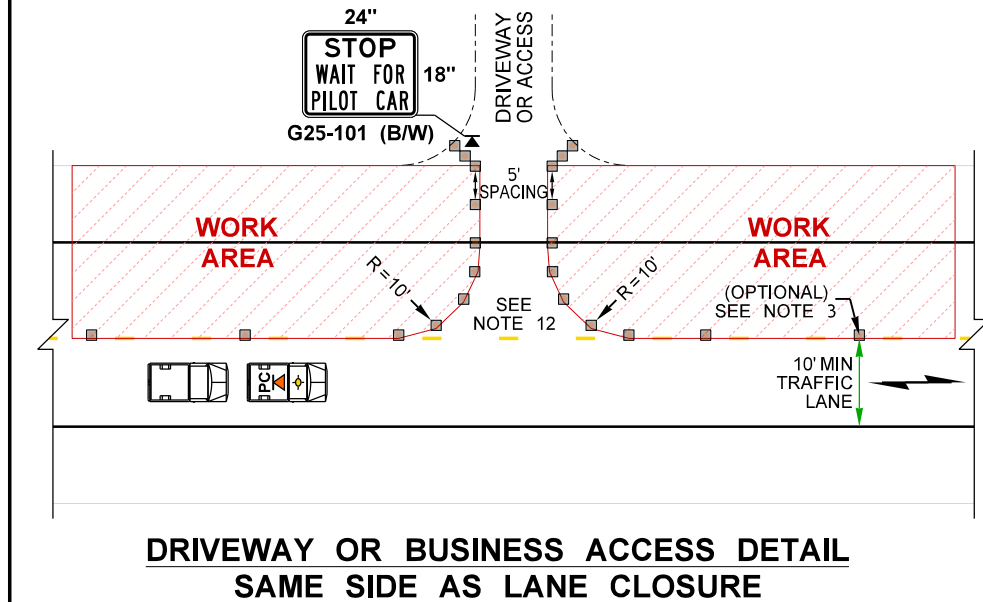
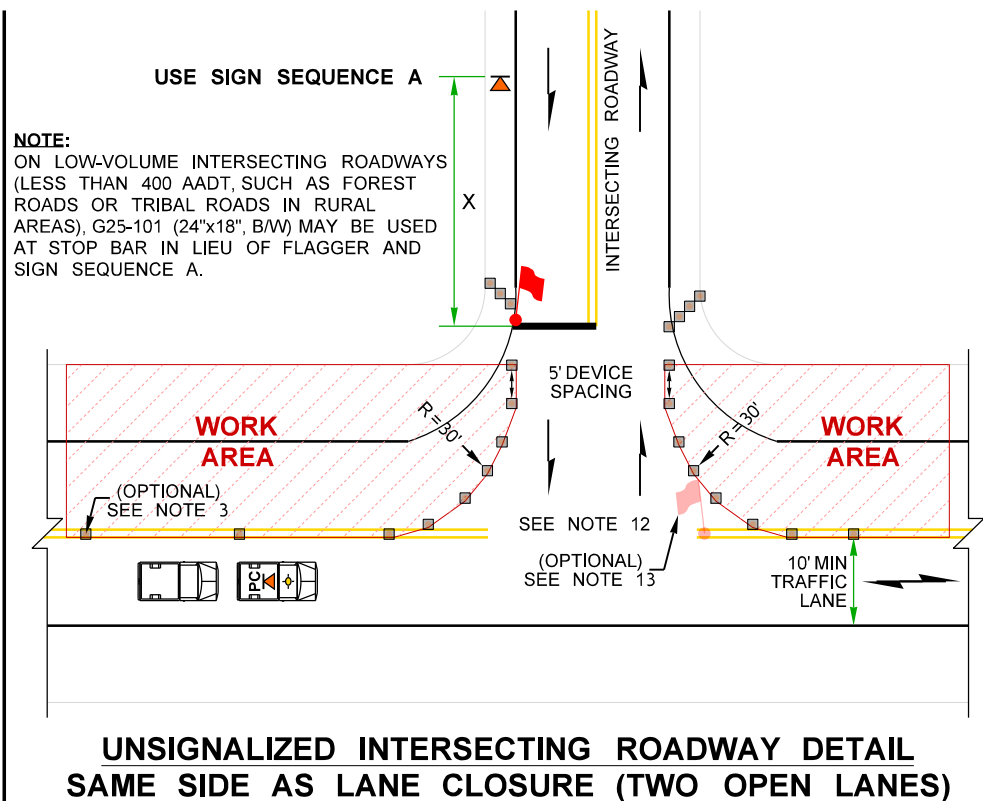
SIGN SEQUENCE A


48"x48" signs required on 45+ mph roadways

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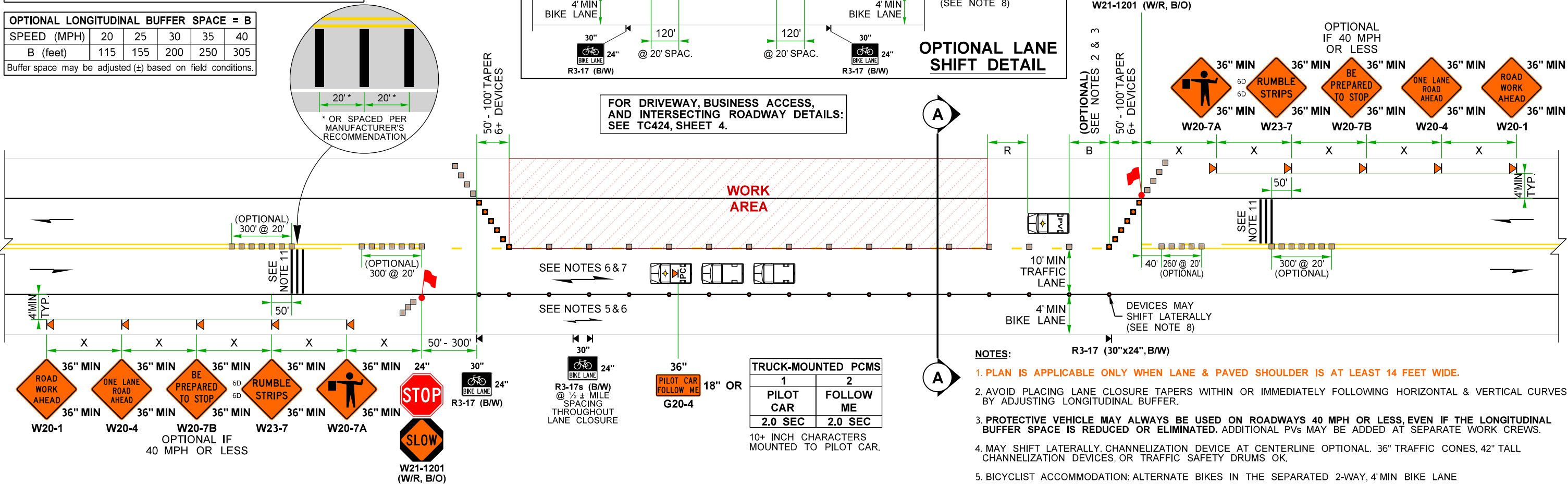
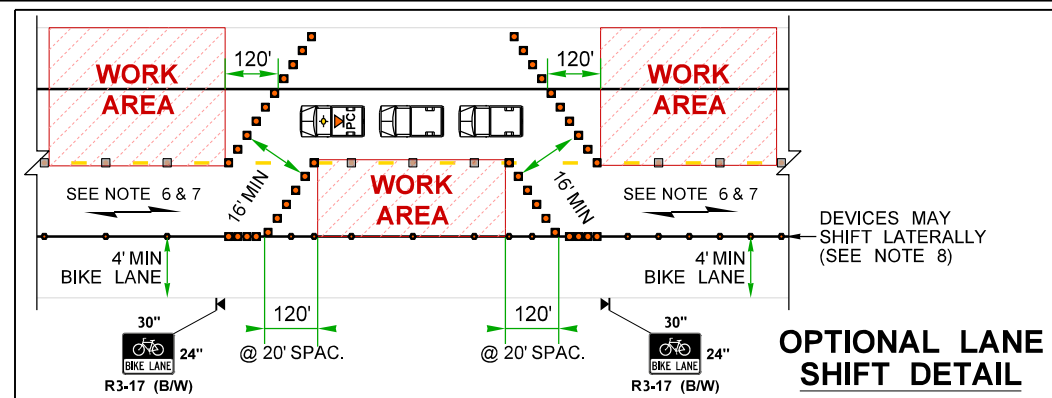
NOTE:
ON LOW-VOLUME INTERSECTING ROADWAYS
(LESS THAN 400 AADT, SUCH AS FOREST
ROADS OR TRIBAL ROADS IN RURAL
AREAS), G25-101 (24"x18", B/W) MAY BE USED
AT STOP BAR IN LIEU OF FLAGGER AND
SIGN SEQUENCE A.



FILE NAME C:\Users\LintzF\OneDrive - Washington State Department of Transportation\Desktop\Work Zone TCPs\424Hwy40-AltTrafficFlaggerPilotCarOpRumbleStrips.dgn										<div><p>Washington State Department of Transportation</p></div>										Plot																					
TIME 11:19:59 AM								REGION NO.												STATE		FED.AID PROJ.NO.										PLAN REF									
DATE 5/16/2025								10												WASH												TC42									
PLOTTED BY LintzF																						<div><div>DATE</div><div>P.E. STAMP BOX</div></div> <div><div>DATE</div><div>P.E. STAMP BOX</div></div>										SHEET									
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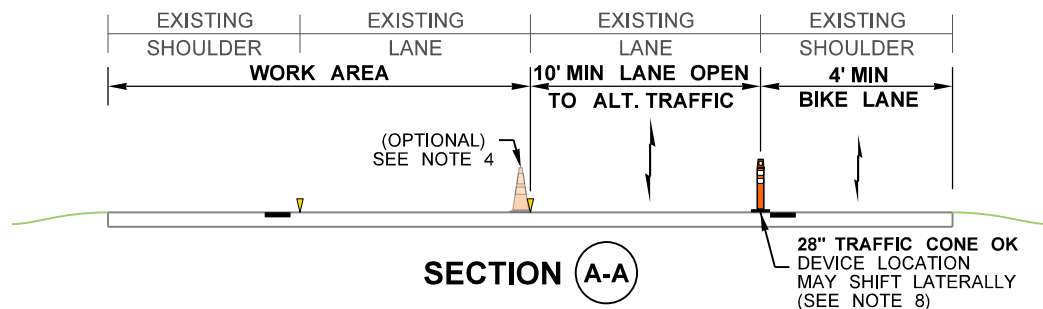
OPTIONAL LONGITUDINAL BUFFER SPACE = B					
SPEED (MPH)	20	25	30	35	40
B (feet)	115	155	200	250	305
Buffer space may be adjusted (±) based on field conditions.					

MAXIMUM CHANNELIZATION	
DEVICE	SPACING (feet)
MPH	TAPER TANGENT
35 - 40	10-20 60
20 - 30	10-20 40




- NOTES:**

1. PLAN IS APPLICABLE ONLY WHEN LANE IS PAVED SHOULDER IS AT LEAST 14 FEET WIDE.
2. AVOID PLACING LANE CLOSURE TAPERS WITHIN OR IMMEDIATELY FOLLOWING HORIZONTAL & VERTICAL CURVES BY ADJUSTING LONGITUDINAL BUFFER.
3. PROTECTIVE VEHICLE MAY ALWAYS BE USED ON ROADWAYS 40 MPH OR LESS, EVEN IF THE LONGITUDINAL BUFFER SPACE IS REDUCED OR ELIMINATED. ADDITIONAL PVs MAY BE ADDED AT SEPARATE WORK CREWS.
4. MAY SHIFT Laterally. Channelization device at centerline optional. 36" traffic cones, 42" tall channelization devices, or traffic safety drums OK.
5. BICYCLIST ACCOMMODATION: ALTERNATE BIKES IN THE SEPARATED 2-WAY, 4' MIN BIKE LANE
6. PEDESTRIAN ACCOMMODATIONS (ENGINEER TO ACCEPT ANY ALTERNATIVE STRATEGIES):
 - (A) ALTERNATE BOTH BIKE & PEDS IN THE SEPARATE 2-WAY, BIKE LANE (4' MIN, 8' WIDTH PREFERRED)
 - (B) PROVIDE FREE PED SHUTTLE (PILOT CAR, WORK VEHICLE, VAN, OR BUS MAY BE USED)
7. PILOT CAR OPERATOR TO DRIVE SPEED PRUDENT FOR WORK ZONE CONDITIONS, STOPPING TRAFFIC IF NECESSARY, UP TO A MAXIMUM SPEED OF 35 MPH (25 MPH AT LANE SHIFT).
8. 28" TRAFFIC CONE OK. DEVICE MAY SHIFT Laterally BUT PROVIDE 4' MIN BIKE LANE & 10' MIN TRAFFIC LANE.
9. SEE STANDARD SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS:
 - 1-07.8(1) HIGH-VISIBILITY APPAREL
 - 1-10.3(1)A FLAGGERS AND NIGHTTIME ILLUMINATION
 - 1-10.3(2)A TRAFFIC CONTROL PROCEDURES
 - 9-35.1 24-INCH STOP/SLOW PADDLE SIZE
10. FOR PROJECT-SPECIFIC REQUIREMENTS, SEE SPECIAL PROVISIONS.
11. AVOID PLACING TEMPORARY TRANSVERSE RUMBLE STRIPS WITHIN HORIZONTAL CURVES, ADJUST SIGN SPACING IF NEEDED. USE ONE OF THE FOLLOWING RUMBLE STRIPS:
 - * PSS Roadquake 2 Temporary Portable Rumble Strip (Black)
 - * PSS Roadquake 2F Temporary Portable Rumble Strip (Black)
12. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.
13. EXISTING PAVEMENT MARKINGS MAY VARY.

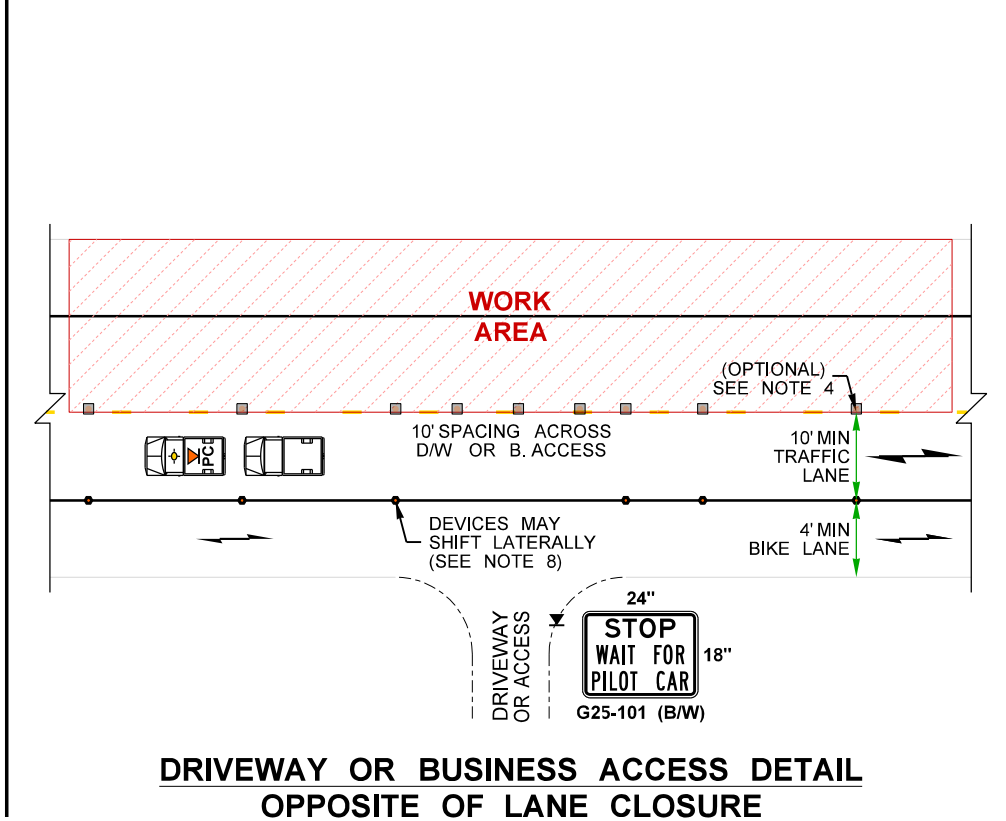
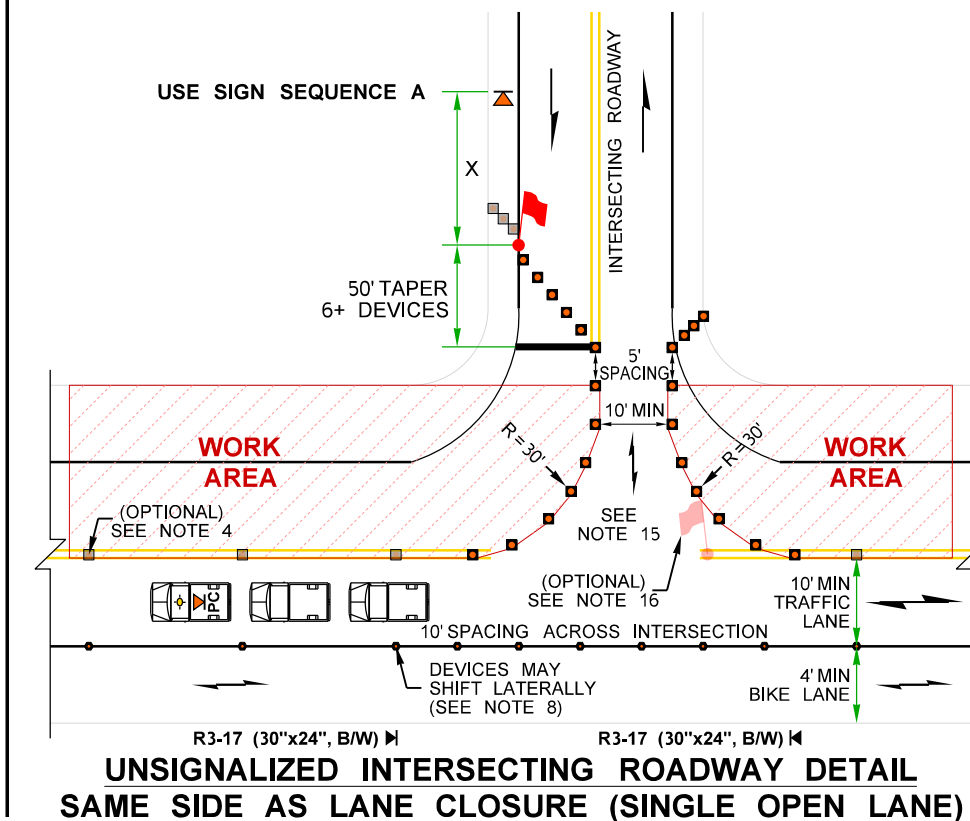
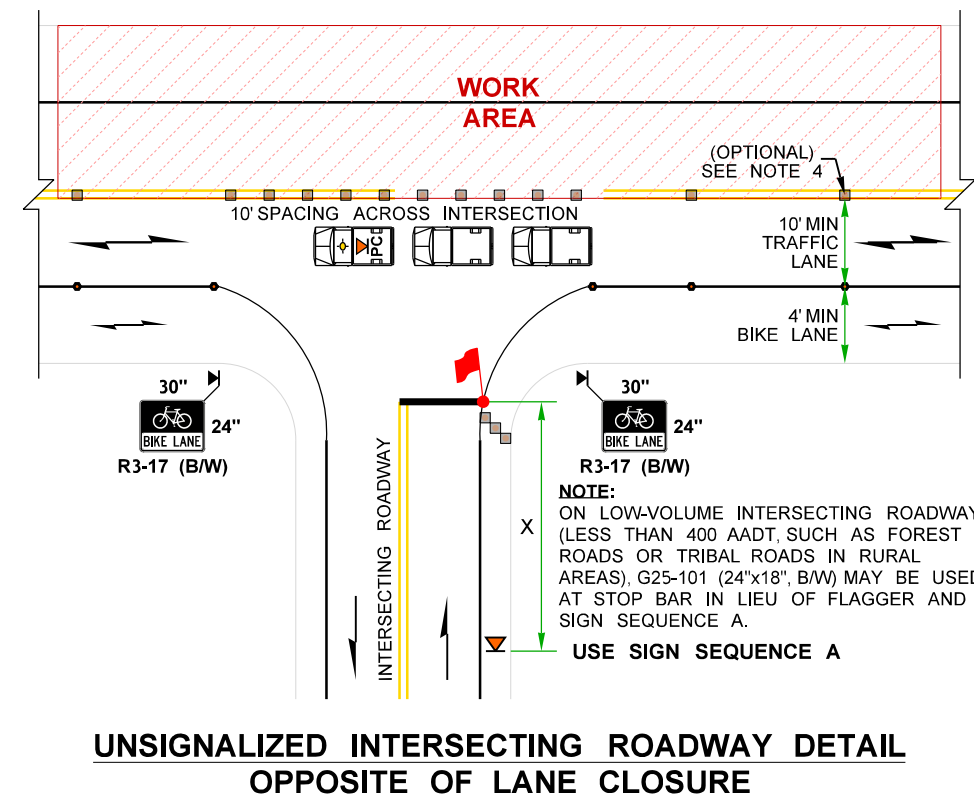
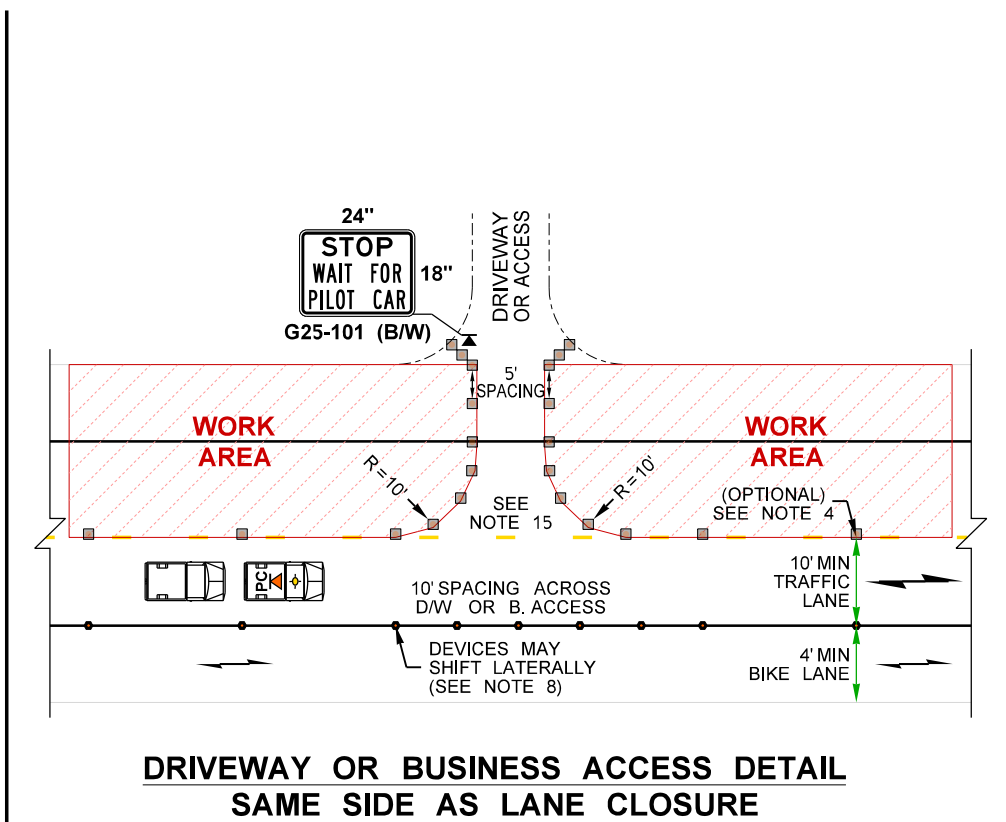
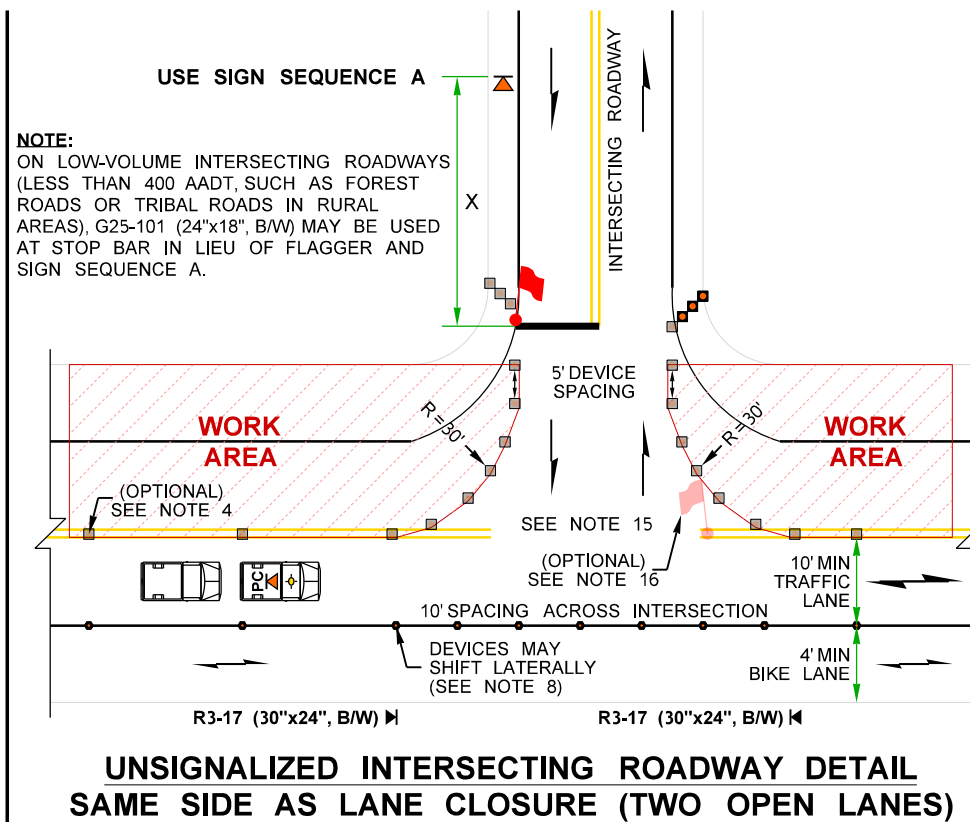
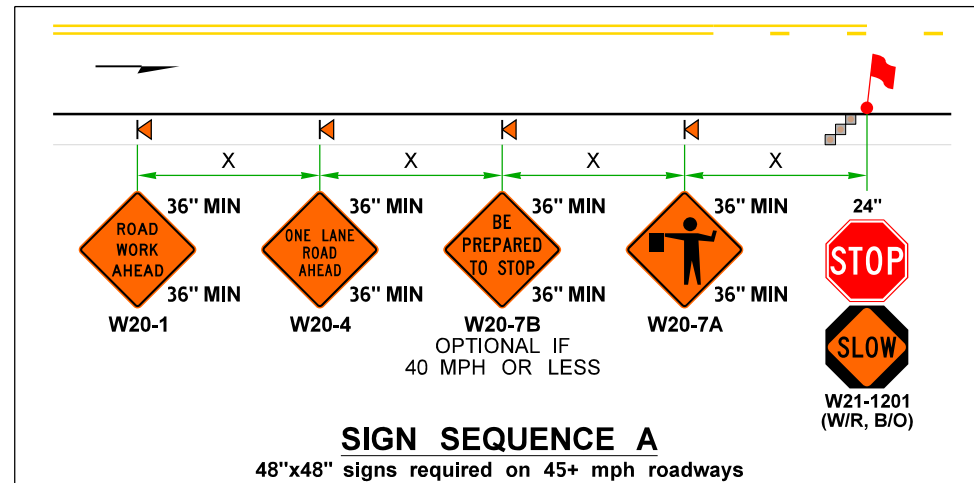


**PILOT CAR OPERATION FOR ALTERNATING 1-LANE, 2-WAY TRAFFIC: FLAGGER-CONTROLLED + TEMP. RUMBLE STRIPS
SEPARATED BICYCLE LANE STRATEGY (HIGHWAYS, 40 MPH OR LESS)**

NOT TO SCALE

FILE NAME C:\Users\LintzF\OneDrive - Washington State Department of Transportation\Desktop\Work Zone TCPs\424Hwy40-AltTrafficFlaggerPilotCarOpRumbleStrips.dgn										<div><p>Washington State Department of Transportation</p></div>		Plot 3	
TIME	11:19:59 AM				REGION NO.	STATE	FED.AID PROJ.NO.		PLAN REF NO				
DATE	5/16/2025				10	WASH			TC424				
PLOTTED BY	LintzF				JOB NUMBER								
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PROJ. ENGR.								OF					
REGIONAL ADM.		REVISION	DATE	BY			P.E. STAMP BOX	DATE	4				
										P.E. STAMP BOX	DATE	SHEETS	
										TYPICAL TRAFFIC CONTROL PLANS			

16. SINGLE FLAGGER (WITH RED FLAG/RED GLOW CONE FLASHLIGHT) MAY BE ADDED TO THE INTERSECTING ROADWAY APPROACH TO HELP GUIDE ALTERNATING & TURNING TRAFFIC.



**FOR ALTERNATING 1-LANE, 2-WAY TRAFFIC: FLAGGER-CONTROLLED + TEMP. RUMBLE STRIPS
SEPARATED BICYCLE LANE STRATEGY (HIGHWAYS, 40 MPH OR LESS)**

FILE NAME C:\Users\LintzF\OneDrive - Washington State Department of Transportation\Desktop\Work Zone TCPS\424Hwy40-AltTrafficFlagger\PilotCarOpRumbleStrips.dgn													Plot 4	
TIME	11:20:00 AM				REGION NO.	STATE	FED.AID PROJ.NO.						PLAN REF NO	
DATE	5/16/2025				10	WASH							TC424	
PLOTTED BY	LintzF				JOB NUMBER		LOCATION NO.						SHEET	
DESIGNED BY					CONTRACT NO.								4	
ENTERED BY													OF	
CHECKED BY													4	
PROJ. ENGR.													SHEETS	
REGIONAL ADM.													TYPICAL TRAFFIC CONTROL PLANS	
													DATE	
													P.E. STAMP BOX	
													DATE	
													P.E. STAMP BOX	

WORK ZONE MICROSTATION CELLS: Updated work zone cells incorporated (April 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 HQCAEHlpDesk@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:

Plot 1: Pilot Car Operation for flagger-controlled 1-lane, 2-way alternating traffic on the mainline for 2-lane highways 40 mph or less with a shared bicycle-vehicle lane with portable temporary rumble strips in advance.

Plot 2: Details for intersecting roadways and driveway/business access for Plot 1.

Plot 3: Pilot Car Operation for flagger-controlled 1-lane, 2-way alternating traffic on the mainline for 2-lane highways 40 mph or less with a separated bicycle lane with portable temporary rumble strips in advance. Separated bike lanes maximize vehicle capacity (minimizing queue & delays) especially when high bicycle volumes are expected and mainline flaggers are 1500'+ apart.

Plot 4: Details for intersecting roadways and driveway/business access for 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 AFAD-controlled alternating traffic plans
- * TC340s for temporary signal-controlled alternating traffic plans
- * 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 other variations of 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. Contact Region Transportation Operations to determine which Typical TCP(s) to utilize, as their are several variations available (or soon will be).
- B. These typical traffic control plans may be modified for site specific situations and/or WSDOT Region Transportation Operations standard practices. **Typical TCPs are not "Standard Plans".**
- C. **Do not use intermittent (old: "variable") regulatory work zone speed limit reductions for flagging or AFAD operations.** Instead, maintain the existing speed limit (or continuous regulatory work zone speed limit reduction, if applicable). See WSDOT Traffic Manual Section 5-18 and Executive Order E1060 regulatory speed limit reductions & advisory speed approval policy for work zones thru Region Transportation Operations.
- 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 (with Å) that have been verified in the field, on SR view, or via Google Maps.
- F. When positioned behind channelizing devices, temporary signs should be mounted at 5' minimum.
- G. For this Typical TCP, the work zone design speed is based on the existing posted speed limit for sign spacing, channelizing device spacing, buffer, and roll ahead distances.
- H. "Flagger tapers" are always 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.
- I. Channelization devices types may be modified (vertical panel channelizing devices prohibited). 28" reflective traffic cones are recommended on flagger-controlled alternating traffic (especially for access delineation to maintain visibility for turning motorists). 36" reflective traffic cones, 42" tall channelizing devices, or traffic safety drums may be used. Warning lights on channelizing devices is being phased out in Washington. Contact Region Transportation Operations for information regarding their standard practices.
- J. Maximum channelizing device spacing table for tangents is based on WAC 468-95-301 and may ALWAYS be reduced.
- K. Sequential arrow boards are prohibited at flagger tapers per WSDOT standard practice and per MUTCD Guidance TA-10.
- L. Per MUTCD Section 6C.06, longitudinal buffer spaces are optional. Using longitudinal buffer spaces listed in MUTCD Table 6C-2 is recommended as best practice when feasible, but may be adjusted based on engineering judgement. The Longitudinal Buffer Space table is acceptable in Typical TCPs; however, site-specific traffic control plans should include actual buffer distances that have been verified in the field, on SR view, or via Google Maps.
- 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. Actual work area limits may be modified.
- N. On roadways 40 mph or less, WSDOT best practice is to place a protective vehicle (PV) in the closed lane in advance of the work area with a full longitudinal buffer space to provide errant vehicles an opportunity to stop before impacting the PV. On roadways 40 mph or less, the longitudinal buffer is optional and may be eliminated (still okay to use PV, upgrading to transportable attenuator is not required). Additional PVs (or TAs) may be added prior to multiple work crews within a work area. Contact Region Transportation Operations for their standard practice.
- O. Placing channelizing devices transversely (at 0° and 3-foot spacing) is an optional strategy to stop move errant drivers traveling within the closed lane(s) but is not shown in the Typical TCP.
- P. The downstream taper of 50'-100' is required on 1-lane, 2-way traffic configurations.
- Q. Duration of traffic holds for driveways, business accesses, and/or roadway approaches is listed as 5 minutes in this Typical Traffic Control Plan, but may be adjusted. Contact Region Transportation Operations for additional guidance.
- R. When utilizing temporary portable transverse rumble strips in Contracts, include the following General Special Provisions for Materials, Specification, Measurement, and Payment. <https://wsdot.wa.gov/publications/fulltext/projectdev/gspspdf/egsp1.pdf>
- * 1-10.2(9-35).OPT1.GR1 (Temp Rumble Strip Materials GSP)
 - * 1-10.3(3).OPT5.GR1 (Temp Rumble Strip Specifications GSP)
 - * 1-10.4(2).OPT8.GR1 (Temp Rumble Strip Measurement GSP)
 - * 1-10.5(2).OPT6.GR1 (Temp Rumble Strip Payment GSP)

PILOT CAR OPERATION FOR ALTERNATING 1-LANE, 2-WAY TRAFFIC: FLAGGER-CONTROLLED + TEMP. RUMBLE STRIPS (HIGHWAYS, 40 MPH OR LESS)

	INFORMATIONAL USE ONLY	Plot 5
	DO NOT INCLUDE THIS SHEET IN CONTRACT PS&Es or TCP SUBMITTALS.	TC424
	DESIGNER GUIDANCE	