



MAINTAINING TRAFFIC TYPICALS

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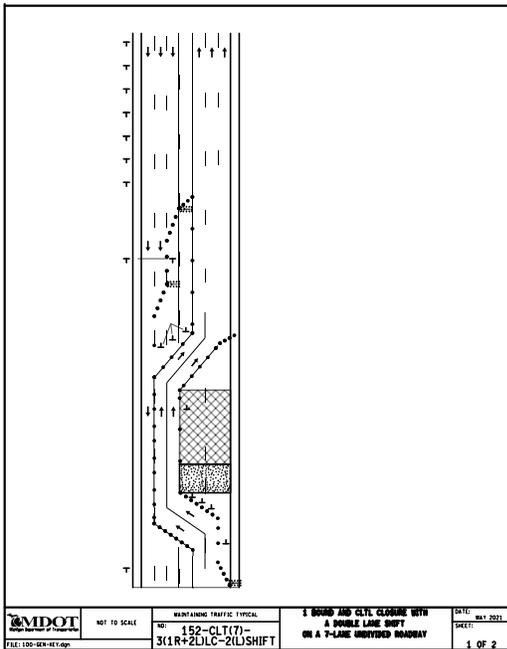
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TYPICAL NUMBER KEY

CODES

AB = ARROW BOARD AW = ADVANCE WARNING C = CLOSURE CLT = CENTER LEFT TURN LANE CROSS = CROSSOVER CruSha = CRUSH AND SHAPE EM = EARLY MERGE EnR = ENTRANCE RAMP ExR = EXIT RAMP FW = FREEWAY GEN = GENERAL INFORMATION GORE = FREEWAY GORE AREA IN = INSIDE INT = INTERSECTION L = LANE (L) = LEFT LC = LANE CLOSURE LD = LONG DURATION	LO = LANE OPEN O = OUTSIDE (LANE CLOSURE) OUT = OUTSIDE OF SHOULDER MID = MIDDLE OF INTERSECTION OR ROAD NFW = NON-FREEWAY PARK = PARKING LANE PCMS = PORTABLE CHANGEABLE MESSAGE SIGN (R) = RIGHT ROLL = ROLLING ROADBLOCK RUM = RUMBLE STRIP SD = SHORT DURATION SHL = SHOULDER CLOSURE SIGN = SIGN SP = SPECIAL SPEED = SPEED STA = STOPPED TRAFFIC ADVISORY TR = TRAFFIC REGULATOR TS = TEMPORARY SIGNAL ZIP = ZIPPER MERGE
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- 100 - GENERAL NOTES
- 110 - TRAFFIC REGULATORS
- 120 - NON-FREEWAY
- 130 - CENTER LEFT TURN (CLT) LANES
- 140 - PARKING LANES
- 150 - CLT 7 LANE SECTIONS
- 160 - SIGNAL WORK
- 200 - FREEWAY CLOSURES
- 210 - FREEWAY LANE SHIFTS
- 220 - FREEWAY ENTRANCE RAMPS
- 230 - FREEWAY EXIT RAMPS
- 300 - ADVANCE WARNINGS
- 310 - CROSSOVER CLOSURE
- 320 - CRUSH AND SHAPE
- 340 - MERGE SYSTEMS
- 350 - GORE LOCATIONS
- 360 - ROLLING ROADBLOCK
- 4000 - MAINTENANCE
- 5000 - SURVEY

EXAMPLE TYPICAL

CODE: 152-CTL(7)-3(1R+2L)LC-2(L)SHIFT

152 - TYPICAL NUMBER

CTL(7) = CENTER LEFT TURN LANE, 7 LANES TOTAL.

3(1R+2L)LC = 3 LANES CLOSED, (1 RIGHT LANE AND 2 LEFT LANES).

2(L)SHIFT = 2 LANES SHIFTED TO THE LEFT.

NOT TO SCALE

	NOT TO SCALE	MAINTAINING TRAFFIC TYPICAL	TYPICAL NUMBERING KEY	DATE: DECEMBER 2021
		NO: 100-GEN-KEY		SHEET: 1 OF 1

FILE: 100-GEN-KEY.dgn

DISTANCE BETWEEN TRAFFIC SIGNS, "D"

"D" DISTANCES	POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA)										
	25	30	35	40	45	50	55	60	65	70	75
D (FEET)	250	300	350	400	450	500	550	600	650	700	750

GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE, "B"

"B" LENGTHS	SPEED*, MPH (PRIOR TO WORK AREA)											
	20	25	30	35	40	45	50	55	60	65	70	75
B (FEET)	33	50	83	132	181	230	279	329	411	476	542	625

* POSTED SPEED, OFF-PEAK 85TH PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED.

MINIMUM MERGING TAPER LENGTH, "L" (FEET)

OFFSET (FEET)	POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA)										
	25	30	35	40	45	50	55	60	65	70	75
1	11	15	21	27	45	50	55	60	65	70	75
2	21	30	41	54	90	100	110	120	130	140	150
3	32	45	62	80	135	150	165	180	195	210	225
4	42	60	82	107	180	200	220	240	260	280	300
5	53	75	103	134	225	250	275	300	325	350	375
6	63	90	123	160	270	300	330	360	390	420	450
7	73	105	143	187	315	350	385	420	455	490	525
8	84	120	164	214	360	400	440	480	520	560	600
9	94	135	184	240	405	450	495	540	585	630	675
10	105	150	205	267	450	500	550	600	650	700	750
11	115	165	225	294	495	550	605	660	715	770	825
12	125	180	245	320	540	600	660	720	780	840	900
13	136	195	266	347	585	650	715	780	845	910	975
14	146	210	286	374	630	700	770	840	910	980	1050
15	157	225	307	400	675	750	825	900	975	1050	1125

NOT TO SCALE

	NOT TO SCALE	MAINTAINING TRAFFIC TYPICAL	"B", "D" AND "L" TABLES CHANNELIZING DEVICE SPACING, SIGN BORDER KEY, AND ROLL-AHEAD SPACING	DATE: MAY 2021
		NO: 101-GEN-SPACING-CHARTS		SHEET: 1 OF 3

THE FORMULAS FOR THE MINIMUM LENGTH OF A MERGING TAPER IN DERIVING THE "L" VALUES SHOWN IN THE ABOVE TABLES ARE AS FOLLOWS:

"L" = $\frac{W \times S^2}{60}$ WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 40 MPH OR LESS

"L" = W X S WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 45 MPH OR GREATER

L = MINIMUM LENGTH OF MERGING TAPER
 S = POSTED SPEED LIMIT IN MPH PRIOR TO WORK AREA
 W = WIDTH OF OFFSET

TYPES OF TAPERS

UPSTREAM TAPERS

- MERGING TAPER
- SHIFTING TAPER
- SHOULDER TAPER
- 2 TO 1 LANE ROAD TAPER

TAPER LENGTH

- L - MINIMUM
- 1/2 L - MINIMUM
- 1/3 L - MINIMUM
- 100' - MAXIMUM

DOWNSTREAM TAPERS
 (USE IS RECOMMENDED)

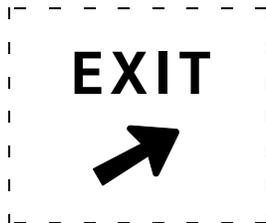
100' (PER LANE)

MAXIMUM SPACING FOR CHANNELIZING DEVICES

WORK ZONE SPEED LIMIT	DRUM AND 42" DEVICE SPACING (FT)		NIGHTTIME 42" DEVICE SPACING (FT)	
	TAPER	TANGENT	TAPER	TANGENT
< 45 MPH	1 x SPEED LIMIT	2 x SPEED LIMIT	25 FEET	50 FEET
≥ 45 MPH	50 FEET	100 FEET	25 FEET	50 FEET

SIGN OUTLINE KEY

DASHED OUTLINES INDICATE A SIGN THAT EXISTS ON SITE, AND NEEDS TO BE COVERED.



SOLID OUTLINES INDICATE A SIGN THAT IS TO BE PLACED ON THE PROJECT



NOT TO SCALE

	NOT TO SCALE	MAINTAINING TRAFFIC TYPICAL	"B", "D" AND "L" TABLES CHANNELIZING DEVICE SPACING SIGN BORDER KEY AND ROLL-AHEAD SPACING	DATE: MAY 2021
		NO: 101-GEN-SPACING-CHARTS		SHEET: 2 OF 3

GUIDELINES FOR ROLL-AHEAD DISTANCES FOR TMA VEHICLES – TEST LEVEL 2

WEIGHT OF TMA VEHICLE	PREVAILING SPEED (POSTED SPEED PRIOR TO WORK ZONE)	ROLL-AHEAD DISTANCE* (DISTANCE FROM FRONT OF TMA VEHICLE TO WORK AREA)
5.5 TONS (STATIONARY)	40 MPH OR LESS	25 FT

* ROLL-AHEAD DISTANCES ARE CALCULATED USING A 4,410 POUND IMPACT VEHICLE WEIGHT.

GUIDELINES FOR ROLL-AHEAD DISTANCES FOR TMA VEHICLES – TEST LEVEL 3

WEIGHT OF TMA VEHICLE	PREVAILING SPEED (POSTED SPEED PRIOR TO WORK ZONE)	ROLL-AHEAD DISTANCE* (DISTANCE FROM FRONT OF TMA VEHICLE TO WORK AREA)
5 TONS (MOBILE)	45 MPH	100 FT
	50-55 MPH	150 FT
	60-75 MPH	175 FT
12 TONS (STATIONARY)	45 MPH	25 FT
	50-55 MPH	25 FT
	60-75 MPH	50 FT

* ROLL-AHEAD DISTANCES ARE CALCULATED USING A 10,000 POUND IMPACT VEHICLE WEIGHT.



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 101-GEN-SPACING-CHARTS

"B", "D" AND "L" TABLES
CHANNELIZING DEVICE SPACING
SIGN BORDER KEY AND ROLL AHEAD SPACING

DATE: MAY 2021

SHEET: 3 OF 3

THE FOLLOWING NOTES APPLY IF CALLED FOR ON THE TRAFFIC TYPICAL

GENERAL NOTES

- G1: SEE GEN-SPACING-CHARTS FOR COMMON VALUES INCLUDING:
 D = DISTANCE BETWEEN TRAFFIC CONTROL DEVICES
 L = MINIMUM LENGTH OF TAPER
 B = LENGTH OF LONGITUDINAL BUFFER
 ROLL AHEAD DISTANCE
- G2: DISTANCE BETWEEN SIGNS, "D", THE VALUES FOR WHICH ARE SHOWN IN TYPICAL GEN-KEY ARE APPROXIMATE AND MAY NEED ADJUSTING AS DIRECTED BY THE ENGINEER.
- G3: ALL TEMPORARY SIGNS, TYPE III BARRICADES, THEIR SUPPORT SYSTEMS AND LIGHTING MUST MEET NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM REPORT 350 (NCHRP 350) TEST LEVEL 3, OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) TL-3 AS WELL AS THE CURRENT EDITION OF THE MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE STANDARD PLANS AND APPLICABLE SPECIAL PROVISIONS. ONLY DESIGNS AND MATERIALS APPROVED BY MDOT WILL BE ALLOWED.
- G4: DO NOT STORE EQUIPMENT, MATERIALS OR PERFORM WORK IN ESTABLISHED BUFFER AREAS.
- G5: ALL EXISTING PAVEMENT MARKINGS WHICH ARE IN CONFLICT WITH EITHER PROPOSED CHANGES IN TRAFFIC PATTERNS OR PROPOSED TEMPORARY TRAFFIC MARKINGS SHALL BE REMOVED BEFORE ANY CHANGE IS MADE IN THE TRAFFIC PATTERN. EXCEPTION WILL BE MADE FOR TRAFFIC PATTERNS FOR WORK LESS THAN THREE DAYS THAT ARE ADEQUATELY DELINEATED BY OTHER TRAFFIC CONTROL DEVICES.

SIGN NOTES

- S1: ALL NON-APPLICABLE SIGNING WITHIN THE CIA MUST BE MODIFIED TO FIT CONDITIONS, COVERED, OR REMOVED. FOR GUIDANCE SEE THE WORK ZONE SAFETY AND MOBILITY MANUAL, SECTIONS 6.01.09 AND 6.01.10.
- S2: R5-18b SIGNS ARE ONLY REQUIRED ON FREEWAY PROJECTS WITH A DURATION OF 15 DAYS OR LONGER OR NON-FREEWAY PROJECTS WITH A DURATION OF 90 DAYS OR LONGER. TO APPLY THIS TYPICAL WITHOUT R5-18b SIGNS, REMOVE THE SIGNS AND CONSOLIDATE THE SEQUENCE AS APPROPRIATE.
- S3: R5-18c IS ONLY REQUIRED IN THE INITIAL SIGNING SEQUENCE IN THE WORK ZONE. OMIT THIS SIGN IN SUBSEQUENT SEQUENCES IN THE SAME WORK ZONE.
- S4: ADDITIONAL SIGNING AND/OR ELONGATED SIGNING SEQUENCES SHOULD BE USED WHEN TRAFFIC VOLUMES ARE SIGNIFICANT ENOUGH TO CREATE BACKUPS BEYOND THE W20-5 SIGNS.
- S5: PLACE ADDITIONAL SPEED LIMIT SIGNS REFLECTING THE WORK ZONE SPEED AFTER EACH MAJOR CROSSROAD THAT INTERSECTS THE WORK ZONE, OR AFTER EACH ENTRANCE RAMP THAT COMES ONTO THE FREEWAY WHERE THE REDUCED SPEED IS IN EFFECT. PLACE ADDITIONAL SPEED LIMIT SIGNS AT INTERVALS ALONG THE ROADWAY SUCH THAT NO SPEED LIMIT SIGNS ARE MORE THAN 2 MILES APART. WHEN REDUCED SPEED LIMITS ARE UTILIZED IN THE WORK AREA, PLACE ADDITIONAL SPEED LIMIT SIGNS RETURNING TRAFFIC TO ITS NORMAL SPEED BEYOND THE LIMITS OF THE WORK AREA AS INDICATED. IF PERMANENT SIGNS DISPLAYING THE CORRECT SPEED LIMIT ARE POSTED, OMIT ALL W3-5b AND R2-1 SIGNS AND REDUCE SPACING ACCORDINGLY.
- S6: FABRICATE SPECIAL SIGNS IN ACCORDANCE WITH CURRENT SIGNING DESIGN STANDARDS.
- S7: PLACE ADDITIONAL R8-3 SIGNS AT A MAXIMUM 500' SPACING THROUGHOUT THE WORK ZONE.
- S8: WHEN SPEED LIMIT SIGNS CANNOT BE PLACED SIDE BY SIDE AS SHOWN, PLACE THEM "D" DISTANCE APART.
- S9: STOP SIGNS NOT REQUIRED IF SIGNALS ARE ON 4-WAY FLASHING RED. STOP AHEAD SIGNS ARE NOT REQUIRED IF THERE IS ADEQUATE VISIBILITY OF THE STOP SIGN OR IF SIGNALS ARE BEING USED TO CONTROL TRAFFIC.
- S10: PLACE REDUCED SPEED ZONE AHEAD SIGN (W3-5b) HERE WHEN USING A SPEED REDUCTION IN THIS DIRECTION.
- S11: THE NUMBER OF W1-6 SHIFT SIGNS TO PLACE FOR A SHIFT IS AS FOLLOWS:
 SHIFTS 4FT OR LESS, PLACE ONE W1-6(R)(L)
 SHIFTS 5FT TO 12FT, PLACE TWO W1-6(R)(L)
 SHIFTS MORE THAN 12FT, PLACE THREE OR MORE W1-6(R)(L) SIGNS DEPENDING UPON LENGTH OF SHIFT AND AS PER THE ENGINEER.
- S12: PLACE R2-1 SIGNS AS DETAILED IN NOTE S5 WHEN THERE IS A SPEED REDUCTION IN THIS DIRECTION

TRAFFIC REGULATOR NOTES

- TR1: TRAFFIC REGULATORS MUST FOLLOW ALL THE REQUIREMENTS IN THE STANDARD SPECIFICATIONS, THE STANDARD PLANS AND APPLICABLE SPECIAL PROVISIONS, THE CURRENT VERSIONS OF THE TRAFFIC REGULATOR'S INSTRUCTION MANUAL AND THE VIDEO "HOW TO SAFELY REGULATE TRAFFIC IN MICHIGAN". THE MAXIMUM DISTANCE BETWEEN THE TRAFFIC REGULATORS IS DETERMINED BY THE ROADWAY ADT, GEOMETRICS, AND AS DIRECTED BY THE ENGINEER.
- TR2: PROVIDE APPROPRIATE BALLOON LIGHTING TO SUFFICIENTLY ILLUMINATE TRAFFIC REGULATOR'S STATIONS WHEN TRAFFIC REGULATING IS ALLOWED DURING THE HOURS OF DARKNESS.

TEMPORARY TRAFFIC CONTROL DEVICE NOTES

- TC1: THE MAXIMUM DISTANCE IN FEET BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD NOT EXCEED 1.0 TIMES THE WORK ZONE SPEED LIMIT IN MPH FOR ROADWAYS WITH A POSTED WORK ZONE SPEED LIMIT LESS THAN 45 MPH AND SHOULD NOT EXCEED 50 FEET ON ROADWAYS WITH A POSTED WORK ZONE SPEED LIMIT OF 45 MPH OR GREATER. THE SPACING FOR 42 INCH CHANNELIZING DEVICE TAPERS ARE NOT TO EXCEED 25 FEET AT NIGHT.
- TC2: THE MAXIMUM DISTANCE IN FEET BETWEEN CHANNELIZING DEVICES IN A TANGENT SHOULD NOT EXCEED TWICE THE WORK ZONE SPEED LIMIT IN MPH FOR ROADWAYS WITH A POSTED WORK ZONE SPEED LIMIT LESS THAN 45 MPH AND SHOULD NOT EXCEED 100 FEET ON ROADWAYS WITH A POSTED WORK ZONE SPEED LIMIT OF 45 MPH OR GREATER. THE SPACING FOR 42 INCH CHANNELIZING DEVICE TANGENTS ARE NOT TO EXCEED 50 FEET AT NIGHT.
- TC3: TYPE III BARRICADES MUST BE LIGHTED FOR OVERNIGHT CLOSURES.
- TC4: WHEN THE HAUL ROAD IS NOT IN USE, PLACE LIGHTED TYPE III BARRICADES WITH "ROAD CLOSED" EXTENDING COMPLETELY ACROSS THE HAUL ROAD.
- TC5: USE OBJECT MARKER SIGNS IN LIEU OF THE TYPE B HIGH INTENSITY LIGHT SHOWN IN THE STANDARD PLAN FOR TEMPORARY CONCRETE BARRIER (R-53, AND R-126) WHEN USED WITH A TEMPORARY SIGNAL SYSTEM. THE OBJECT MARKERS MUST BE A MINIMUM OF 12 INCHES IN WIDTH AND 36 INCHES IN HEIGHT AND HAVE ORANGE AND WHITE RETROREFLECTIVE SHEETING. THE RETROREFLECTIVE SHEETING MUST HAVE ALTERNATING DIAGONAL ORANGE AND WHITE STRIPES SLOPING DOWNWARD AT AN ANGLE OF 45 DEGREES IN THE DIRECTION VEHICULAR TRAFFIC IS TO PASS.
- TC6: PLACE LIGHTED ARROW PANELS AS CLOSE TO THE BEGINNING OF TAPERS AS PRACTICAL, BUT NOT IN A MANNER THAT WILL OBSCURE OR CONFUSE APPROACHING MOTORISTS WHEN PHYSICAL LIMITATIONS RESTRICT PLACEMENT. IN CURBED SECTIONS, IF ARROW BOARD CANNOT BE PLACED BEHIND CURB, PLACE ARROW BOARD IN THE CLOSED LANE AS CLOSE TO THE BEGINNING OF TAPER AS POSSIBLE.
- TC7: ADDITIONAL TYPE III BARRICADES MAY BE REQUIRED TO COMPLETELY CLOSE OFF ROAD FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
- TC8: WHERE THE SHIFTED SECTION IS SHORTER THAN 600 FEET, A DOUBLE REVERSE CURVE SIGN (W24-1) CAN BE USED INSTEAD OF THE FIRST REVERSE CURVE SIGN, AND THE SECOND REVERSE CURVE SIGN CAN BE OMITTED.
- TC9: RUMBLE STRIPS ARE TO BE PLACED AS SPECIFIED IN THE CONTRACT. IF NOT SPECIFIED IN THE CONTRACT, PLACE RUMBLE STRIPS AS SHOWN, AND IN ACCORDANCE WITH THE RUMBLE STRIP MANUFACTURER'S RECOMMENDATIONS. AN ARRAY OF RUMBLE STRIPS CONTAINS THREE RUMBLE STRIPS. PLACE THE RUMBLE STRIPS IN THE ARRAY AT A CONSISTENT DISTANCE, BETWEEN 10' AND 20' APART.
- TC10: SEE THE WORK ZONE SAFETY AND MOBILITY MANUAL, PORTABLE CHANGEABLE MESSAGE SIGN GUIDELINES FOR RECOMMENDED AND CORRECT PCMS MESSAGING. STAGGER PCMS THAT ARE ON OPPOSING SIDES OF THE ROAD 1000 FEET FROM EACH OTHER.

RAMP NOTES

- RMP1: WHEN CONDITIONS ALLOW, E5-1 SIGNS MUST BE REMOVED OR COVERED AND CHANNELIZING DEVICES MUST BE POSITIONED TO ENABLE RAMP TRAFFIC TO DIVERGE IN A FREE MANNER
- RMP2: STOP AND YIELD CONDITIONS SHOULD BE AVOIDED WHENEVER PRACTICAL. WHEN CONDITIONS WARRANT, R1-1 SIGNS MAY BE USED IN PLACE OF R1-2 SIGNS. WHEN R-1 SIGNS ARE USED, W3-1 SIGNS MUST BE USED IN PLACE OF W3-2 SIGNS. CONSIDERATION SHOULD BE GIVEN TO CLOSING THE RAMP TO COMPLETE WORK TO ALLOW AN ADEQUATE MERGE DISTANCE. WORK SHOULD BE EXPEDITED TO AVOID THE STOP AND/OR YIELD CONDITIONS.



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

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THE FOLLOWING NOTES APPLY IF CALLED FOR ON THE TRAFFIC TYPICAL

SIGNAL NOTES

- SIG1: EXISTING SIGNAL MUST BE EITHER 4-WAY FLASHING RED, BAGGED, OR TURNED OFF.
- SIG2: SIGNAL IS IN OPERATION.
- SIG3: DELINEATE THE WORK ZONE AREA WITH 28 INCH CONES FOR DAYTIME WORK, OR 42 INCH CHANNELIZING DEVICES FOR NIGHTTIME WORK.
- SIG4: THE CONTRACTOR MUST HAVE A DESIGNATED SPOTTER IF THE AERIAL BUCKET TRUCK IS LOCATED OVER ACTIVE TRAVEL LANES.
- SIG5: THE LOWEST POINT OF THE BUCKET MAY NOT TRAVEL BELOW 14 FOOT VERTICAL CLEARANCE. THE CONTRACTOR MUST UTILIZE AN ALTERNATE SET UP, OR PLACE THE INTERSECTION IN A 4 WAY STOP IF THE 14 FOOT VERTICAL CLEARANCE IS COMPROMIZED. USE TRAFFIC REGULATORS TO CONTROL TRAFFIC THROUGH THE INTERSECTION WHEN TRAFFIC IS PLACED IN A 4 WAY STOP.
- SIG6: DELINEATE THE TRUCK WITH CHANNELIZING DEVICES. THE POSITION OF THE TRUCK MAY BE MOVED TO FACILITATE WORK.

MAINTENANCE AND SURVEYING NOTES

- MS1: WHENEVER STOPPING SIGHT DISTANCE EXISTS TO THE REAR, THE SHADOW VEHICLES SHOULD MAINTAIN THE RECOMENDED DISTANCE FROM THE WORK AREA AND PROCEED AT THE SAME SPEED. THE SHADOW VEHICLE SHOULD SLOW DOWN AND TRAVEL AT A FARTHER DISTANCE TO PROVIDE ADEQUATE SIGHT DISTANCE IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES.
- MS2: WORKERS OUTSIDE OF VEHICLES SHOULD WORK WITHIN 150' OF WORK VEHICLES WITH AN ACTIVATED BEACON, BETWEEN THE "BEGIN WORK CONVOY" SIGN AND THE "END WORK CONVOY" SIGN, OR BETWEEN THE "WORK ZONE BEGINS" AND "END ROAD WORK" SIGN.
- MS3: WORK OR SHADOW VEHICLES WITH OR WITHOUT A TMA MAY BE USED TO SEPARATE THE WORK SPACE FROM TRAFFIC. IF USED, THE VEHICLES SHOULD BE PARKED ACCORDING TO THE ROLL AHEAD DISTANCE TABLES.
- MS4: WORK AND SHADOW VEHICLES SHALL BE APPROPRIATELY EQUIPPED WITH AN ACTIVATED AMBER BEACON.
- MS5: WHEN WORKERS ARE OUTSIDE THEIR VEHICLES IN AN EXISTING LANE WHILE A MOBILE OPERATION IS OCCURRING DURING THE NIGHTTIME HOURS, CHANNELIZING DEVICES TO DELINEATE OPEN OR CLOSED LANES AT 50 FT SPACING MUST BE USED. AN EXAMPLE OF AN OPERATION (BUT NOT LIMITED TO) IS THE LAYOUT OF CONCRETE PATCHES.
- MS6: W21-6 AND W20-1 SIGNS MAY BE SUBSTITUTED AS DETERMINED BY THE TYPE OF WORK TAKING PLACE AS PER THE ENGINEER.



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SIGN NUMBER KEY



E5-1f
48" x 48"
60" x 48"



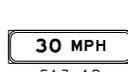
E5-2
48" x 36"



E5-2a
48" x 36"



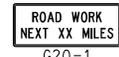
E5-3
48" x 36"



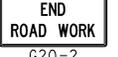
E13-1P
VAR x 24"



E13-1aP
36" x 24"



G20-1
60" x 24"



G20-2
48" x 24"



G20-4
36" x 18"



I-6a
18" x 18"
24" x 24"
30" x 30"



M1-1
18" x 18"
24" x 24"
36" x 36"
48" x 48"



M1-1
22.5" x 18"
30" x 24"
45" x 36"
60" x 48"



M1-2
18" x 18"
24" x 24"
36" x 36"
48" x 48"



M1-2
22.5" x 18"
30" x 24"
45" x 36"
60" x 48"



M1-3
18" x 18"
24" x 24"
36" x 36"
48" x 48"



M1-3
22.5" x 18"
30" x 24"
45" x 36"
60" x 48"



M1-4
18" x 18"
24" x 24"
36" x 36"
48" x 48"



M1-4
22.5" x 18"
30" x 24"
45" x 36"
60" x 48"



M1-5
18" x 18"
24" x 24"
30" x 30"
36" x 36"



M1-5a
18" x 18"
24" x 24"



M1-6
18" x 18"
24" x 24"
36" x 36"



M1-6
22.5" x 18"
30" x 24"
45" x 36"



M3-1
12" x 6"
18" x 9"
24" x 12"
30" x 15"
36" x 18"



M3-2
12" x 6"
18" x 9"
24" x 12"
30" x 15"
36" x 18"



M3-3
12" x 6"
18" x 9"
24" x 12"
30" x 15"
36" x 18"



M3-4
12" x 6"
18" x 9"
24" x 12"
30" x 15"
36" x 18"



M4-1
12" x 6"
18" x 9"
24" x 12"
30" x 15"
36" x 18"



M4-1a
12" x 6"
18" x 9"
24" x 12"
30" x 15"
36" x 18"



M4-2
12" x 6"
18" x 9"
24" x 12"
30" x 15"
36" x 18"



M4-3
12" x 6"
18" x 9"
24" x 12"
30" x 15"
36" x 18"



M4-4
18" x 9"
24" x 12"
30" x 15"
36" x 18"



M4-5
12" x 6"
18" x 9"
24" x 12"
30" x 15"
36" x 18"



M4-6
12" x 6"
18" x 9"
24" x 12"
30" x 15"
36" x 18"



M4-7
12" x 6"
18" x 9"
24" x 12"
30" x 15"
36" x 18"



M4-7a
12" x 6"
18" x 9"
24" x 12"
30" x 15"
36" x 18"



M4-8
12" x 6"
18" x 9"
24" x 12"
30" x 15"



M4-8a
24" x 18"



M4-8b
24" x 12"



M4-9L
30" x 24"
48" x 36"
60" x 48"



M4-9R
30" x 24"
48" x 36"
60" x 48"



M4-9j
30" x 24"
48" x 36"
60" x 48"



M4-9kL
30" x 30"
48" x 42"
60" x 54"



M4-9kR
30" x 30"
48" x 42"
60" x 54"



M4-9mL
30" x 30"
48" x 42"
60" x 54"



M4-9mR
30" x 30"
48" x 42"
60" x 54"



M4-9dL
12" x 18"



M4-9dR
12" x 18"



M4-9e
12" x 18"



M4-9f
12" x 18"



M4-9gL
12" x 18"



M4-9gR
12" x 18"



M4-9h
12" x 24"



M4-9i
12" x 18"



M4-10L
48" x 18"



M4-10R
48" x 18"



M4-11a
12" x 6"
18" x 9"
24" x 12"
30" x 15"
36" x 18"



M5-1L
12" x 9"
21" x 15"
30" x 21"



M5-1R
12" x 9"
21" x 15"
30" x 21"



M5-2L
12" x 9"
21" x 15"
30" x 21"



M5-2R
12" x 9"
21" x 15"
30" x 21"



M5-3
12" x 9"
21" x 15"
30" x 21"



M6-1L
12" x 9"
18" x 12"
21" x 15"
30" x 21"



M6-1R
12" x 9"
18" x 12"
21" x 15"
30" x 21"



M6-2L
12" x 9"
18" x 12"
21" x 15"
30" x 21"



M6-2R
12" x 9"
18" x 12"
21" x 15"
30" x 21"



M6-3
12" x 9"
18" x 12"
21" x 15"
30" x 21"



M6-4
12" x 9"
18" x 12"
21" x 15"
30" x 21"



M6-5
12" x 9"
18" x 12"
21" x 15"
30" x 21"



M6-6L
12" x 9"
18" x 12"
21" x 15"
30" x 21"



M6-6R
12" x 9"
18" x 12"
21" x 15"
30" x 21"



M6-7L
12" x 9"
18" x 12"
21" x 15"
30" x 21"



M6-7R
12" x 9"
18" x 12"
21" x 15"
30" x 21"

SEE MDOT SHS 13-WORK ZONE FOR SIGN DETAILS



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO:

103-GEN-SIGN

TRAFFIC TYPICAL
SIGN SHEET

DATE:
JUNE 2021

SHEET:

1 OF 5

SIGN NUMBER KEY

NORTH
10
KEEP LEFT
M8-1gL
36" x 66"

SOUTH
27
KEEP RIGHT
M8-1gR
36" x 66"

NORTH SOUTH
10 27
M8-2d
60" x 48"

OM-3L
12" x 36"
24" x 48"
36" x 72"

OM-3R
12" x 36"
24" x 48"
36" x 72"

STOP
R1-1
18" x 18"
24" x 24"
30" x 30"
36" x 36"
48" x 48"

FRONT BACK
STOP SLOW
R1-1a
18" x 18"
24" x 24"

YIELD
R1-2
18"
24"
30"
36"
48"
60"

TO ONCOMING TRAFFIC
R1-2aP
24" x 18"
36" x 30"
48" x 36"

SPEED LIMIT
XX
R2-1
18" x 24"
24" x 30"
30" x 36"
36" x 48"
48" x 60"

WHERE WORKERS PRESENT
45
R2-1a
48" x 60"

R3-1
24" x 24"
30" x 30"
36" x 36"
48" x 48"

R3-2
24" x 24"
30" x 30"
36" x 36"
48" x 48"

NO TURNS
R3-3
24" x 24"
36" x 36"
48" x 48"

R3-4
24" x 24"
30" x 30"
36" x 36"
48" x 48"

ONLY
R3-5L
30" x 36"
36" x 48"

ONLY
R3-5R
30" x 36"
36" x 48"

ONLY
R3-5a
30" x 36"
36" x 48"

R3-6L
30" x 36"
42" x 48"

R3-6R
30" x 36"
42" x 48"

LEFT LANE MUST TURN LEFT
R3-7L
30" x 30"
36" x 36"

RIGHT LANE MUST TURN RIGHT
R3-7R
30" x 30"
36" x 36"

ONLY ONLY
R3-8c
36" x 30"

ONLY ONLY
R3-8d
36" x 30"

DO NOT PASS
R4-1
12" x 18"
18" x 24"
24" x 30"
36" x 48"
48" x 60"

PASS WITH CARE
R4-2
12" x 18"
18" x 24"
24" x 30"
36" x 48"
48" x 60"

R4-7
12" x 18"
18" x 24"
24" x 30"
36" x 48"
48" x 60"

R4-8
18" x 24"
24" x 30"
36" x 48"
48" x 60"

STAY IN LANE
R4-9
18" x 24"
24" x 30"
36" x 48"
48" x 60"

DO NOT ENTER
R5-1
30" x 30"
36" x 36"
48" x 48"

WRONG WAY
R5-1a
30" x 18"
36" x 24"
42" x 30"

INJURE / KILL A WORKER \$7500+ 15 YEARS
R5-18b
48" x 60"

WORK ZONE BEGINS
R5-18c
48" x 48"

BEGIN WORK CONVOY
R5-18d
78" x 12"

END WORK CONVOY
R5-18e
72" x 12"

USE ALL LANES DURING BACKUPS
R5-18f
48" x 60"

FORM ONE LANE RIGHT
R5-18g
30" x 42"

DO NOT FOLLOW TRUCKS INTO WORK ZONE
R5-18h
48" x 60"

ONE WAY
R6-1L
36" x 12"
54" x 18"

ONE WAY
R6-1R
36" x 12"
54" x 18"

ONE WAY
R6-2L
12" x 16"
18" x 24"
24" x 30"
36" x 48"
48" x 60"

ONE WAY
R6-2R
12" x 16"
18" x 24"
24" x 30"
36" x 48"
48" x 60"

R8-3
12" x 12"
18" x 18"
24" x 24"
36" x 36"
48" x 48"

PEDESTRIAN CROSSWALK
R9-8
36" x 18"

SIDEWALK CLOSED
R9-9
24" x 12"
30" x 18"

SIDEWALK CLOSED USE OTHER SIDE
R9-10
24" x 12"
48" x 24"

SIDEWALK CLOSED AHEAD CROSS HERE
R9-11L
24" x 12"
48" x 36"

SIDEWALK CLOSED AHEAD CROSS HERE
R9-11R
24" x 12"
48" x 36"

SIDEWALK CLOSED CROSS HERE
R9-11aL
24" x 12"
48" x 24"

SIDEWALK CLOSED CROSS HERE
R9-11aR
24" x 12"
48" x 24"

STOP HERE ON RED
R10-6b
36" x 54"

ROAD CLOSED
R11-2
48" x 30"

RAMP CLOSED
R11-2a
48" x 30"

EXIT CLOSED
R11-2b
48" x 30"

CROSSOVER CLOSED
R11-2c
60" x 30"

ROAD CLOSED 10 MILES AHEAD LOCAL TRAFFIC ONLY
R11-3a
60" x 30"

BRIDGE OUT 10 MILES AHEAD LOCAL TRAFFIC ONLY
R11-3b
60" x 30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" x 30"

SEE MDOT SHS 13-WORK ZONE FOR SIGN DETAILS



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 103-GEN-SIGN

TRAFFIC TYPICALS SIGN SHEET

DATE: JUNE 2021
SHEET:

SIGN NUMBER KEY



W1-1L
18" x 18"
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W1-1R
18" x 18"
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W1-2L
18" x 18"
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W1-2R
18" x 18"
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W1-2bL
36" x 36"
48" x 48"



W1-2bR
36" x 36"
48" x 48"



W1-3L
18" x 18"
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W1-3R
18" x 18"
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W1-4L
18" x 18"
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W1-4R
18" x 18"
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W1-4bL
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W1-4bR
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W1-4cL
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W1-4cR
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W24-1L
30" x 30"
36" x 36"
48" x 48"

ALL LANES

W24-1cP
24" x 18"
30" x 24"



W24-1R
30" x 30"
36" x 36"
48" x 48"



W24-1aL
30" x 30"
36" x 36"
48" x 48"



W24-1aR
30" x 30"
36" x 36"
48" x 48"



W24-1bL
30" x 30"
36" x 36"
48" x 48"



W24-1bR
30" x 30"
36" x 36"
48" x 48"



W1-6L
24" x 12"
36" x 18"
48" x 24"
60" x 30"
96" x 48"



W1-6R
24" x 12"
36" x 18"
48" x 24"
60" x 30"
96" x 48"



W1-8L
12" x 18"
18" x 24"
24" x 30"
30" x 36"
36" x 48"



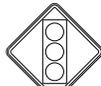
W1-8R
12" x 18"
18" x 24"
24" x 30"
30" x 36"
36" x 48"



W3-1
18" x 18"
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W3-2
18" x 18"
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W3-3
18" x 18"
30" x 30"
36" x 36"
48" x 48"



W3-4
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W3-4b
30" x 30"
36" x 36"
48" x 48"



W3-5
36" x 36"
48" x 48"



W3-5a
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W3-5b
30" x 30"
36" x 36"
48" x 48"



W4-1L
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W4-1R
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W4-2L
30" x 30"
36" x 36"
48" x 48"



W4-2R
30" x 30"
36" x 36"
48" x 48"



W4-3L
30" x 30"
36" x 36"
48" x 48"



W4-3R
30" x 30"
36" x 36"
48" x 48"



W4-5L
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W4-5R
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W4-5P
18" x 24"
24" x 30"



W4-6L
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W4-6R
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W4-7L
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W4-7R
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W5-1
30" x 30"
36" x 36"
48" x 48"



W5-2
18" x 18"
30" x 30"
36" x 36"
48" x 48"



W5-3
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W5-4
30" x 30"
36" x 36"
48" x 48"



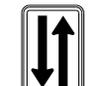
W6-1
30" x 30"
36" x 36"
48" x 48"



W6-2
30" x 30"
36" x 36"
48" x 48"



W6-3
30" x 30"
36" x 36"
48" x 48"



W6-4
12" x 18"



W7-1
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W7-1a
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W8-1
18" x 18"
24" x 24"
30" x 30"
36" x 36"
48" x 48"

SEE MDOT SHS 13-WORK ZONE FOR SIGN DETAILS



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO:

103-GEN-SIGN

TRAFFIC TYPICAL
SIGN SHEET

DATE:
JUNE 2021

SHEET:

3 OF 5

SIGN NUMBER KEY



W8-2
18" x 18"
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W8-3
18" x 18"
30" x 30"
36" x 36"
48" x 48"



W8-4
18" x 18"
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W8-5
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W8-5P
24" x 18"
30" x 24"
36" x 30"



W8-7
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W8-8
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W8-9
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W8-11
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W8-12
30" x 30"
36" x 36"
48" x 48"



W8-14
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W8-15
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W8-15P
24" x 18"
30" x 24"
36" x 30"



W8-17L
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W8-17R
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W8-17P
24" x 18"
30" x 24"
36" x 30"



W8-18
24" x 24"
36" x 36"
48" x 48"



W8-23
24" x 24"
36" x 36"
48" x 48"



W8-24
30" x 30"
36" x 36"
48" x 48"



W8-25
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W8-26
30" x 30"
48" x 48"



W9-1L
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W9-1R
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W9-2L
30" x 30"
36" x 36"
48" x 48"



W9-2R
30" x 30"
36" x 36"
48" x 48"



W9-3C
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W9-3L
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W9-3R
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W9-3a
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W9-3b
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W11-10
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W11-10a
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W11-24
36" x 36"
48" x 48"



W12-1
24" x 24"
30" x 30"
36" x 36"
48" x 48"



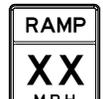
W12-2
18" x 18"
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W13-1P
18" x 18"
24" x 24"
30" x 30"



W13-2
24" x 30"
36" x 48"
48" x 60"



W13-3
24" x 30"
36" x 48"
48" x 60"



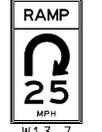
W13-4P
24" x 24"
36" x 36"



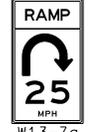
W13-6
24" x 42"
36" x 60"
48" x 84"



W13-6a
24" x 42"
36" x 60"
48" x 84"



W13-7
24" x 42"
36" x 60"
48" x 84"



W13-7a
24" x 42"
36" x 60"
48" x 84"



W14-3
36" x 24"
40" x 30"
48" x 36"
64" x 48"



W16-2P
18" x 12"
24" x 18"
30" x 24"



W16-4aP
18" x 12"
24" x 18"
30" x 24"
36" x 30"



W16-12P
24" x 18"



W16-13P
24" x 18"
30" x 24"



W20-1
24" x 24"
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W20-1a
24" x 24"
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W20-1b
24" x 24"
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W20-1c
24" x 24"
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W20-1d
24" x 24"
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W20-2
30" x 30"
36" x 36"
48" x 48"



W20-3
30" x 30"
36" x 36"
48" x 48"



W20-3a
30" x 30"
36" x 36"
48" x 48"

SEE MDOT SHS 13-WORK ZONE FOR SIGN DETAILS



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO:

103-GEN-SIGN

TRAFFIC TYPICALS
SIGN SHEET

DATE:
JUNE 2021

SHEET:

4 OF 5

SIGN NUMBER KEY



W20-3b
30" x 30"
36" x 36"
48" x 48"



W20-4
30" x 30"
36" x 36"
48" x 48"



W20-4c
36" x 36"
48" x 48"



W20-5C
30" x 30"
36" x 36"
48" x 48"



W20-5L
30" x 30"
36" x 36"
48" x 48"



W20-5L1
30" x 30"
36" x 36"
48" x 48"



W20-5L2
30" x 30"
36" x 36"
48" x 48"



W20-5R
30" x 30"
36" x 36"
48" x 48"



W20-5R1
30" x 30"
36" x 36"
48" x 48"



W20-5R2
30" x 30"
36" x 36"
48" x 48"



W20-5aL2
30" x 30"
36" x 36"
48" x 48"



W20-5aL3
30" x 30"
36" x 36"
48" x 48"



W20-5aR2
30" x 30"
36" x 36"
48" x 48"



W20-5aR3
30" x 30"
36" x 36"
48" x 48"



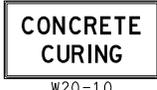
W20-7a
30" x 30"
36" x 36"
48" x 48"



W20-8
24" x 18"



W20-9
54" x 48"



W20-10
48" x 24"
66" x 30"



W20-11
12" x 18"



W20-12P
VARIABLE x 12"



W20-13P
VARIABLE x 12"



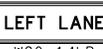
W20-14L
36" x 36"
48" x 48"



W20-14R
36" x 36"
48" x 48"



W20-14dP
36" x 12"
48" x 12"



W20-14bP
36" x 12"
48" x 12"



W20-15
36" x 36"
48" x 48"



W20-15a
36" x 36"
48" x 48"



W20-15c
48" x 54"



W20-15d
48" x 54"



W20-16
36" x 36"
48" x 48"



W20-17
36" x 36"
48" x 48"



W21-1
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W21-2
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W21-2
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W21-3
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W21-4
36" x 18"



W21-5
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W21-5aL
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W21-5aR
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W21-5bL
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W21-5bR
30" x 30"
36" x 36"
48" x 48"
60" x 60"



W21-6
24" x 24"
30" x 30"
36" x 36"
48" x 48"



W21-7
30" x 30"
36" x 36"
48" x 48"



W21-8
30" x 30"
36" x 36"
48" x 48"



W22-1
30" x 30"
36" x 36"
48" x 48"



W22-2
42" x 36"



W22-3
36" x 30"
42" x 36"



W23-1
48" x 24"



W23-2
36" x 36"
48" x 48"

SEE MDOT SHS 13-WORK ZONE FOR SIGN DETAILS



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO:

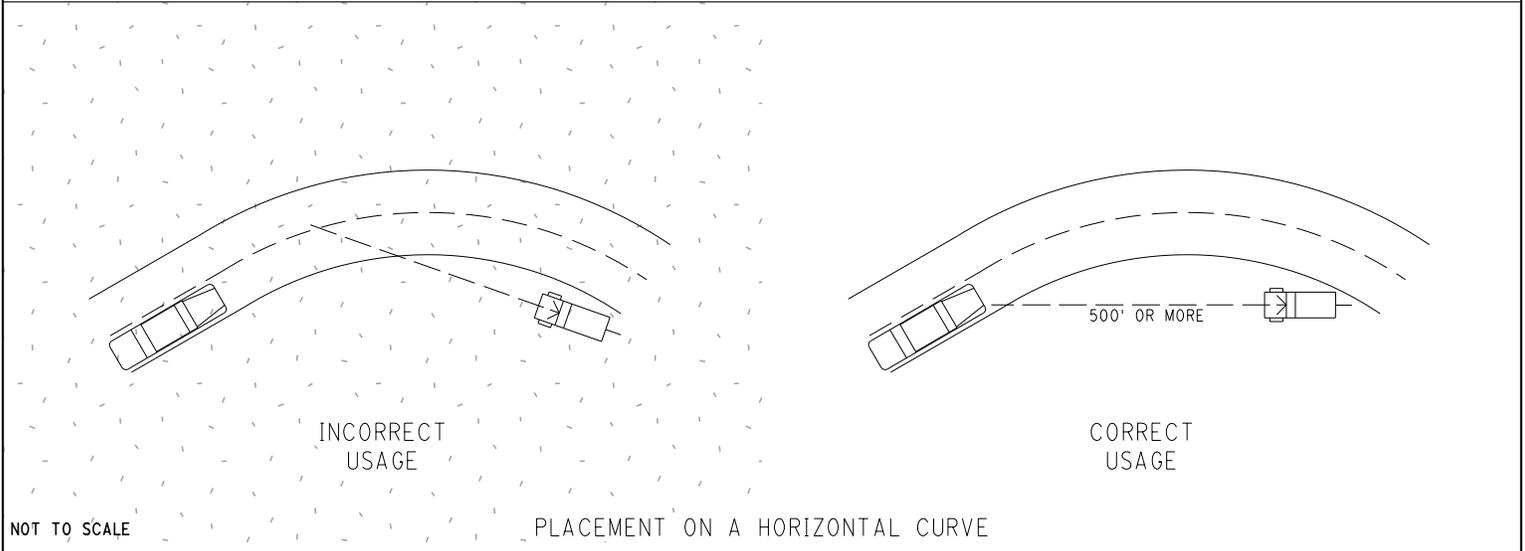
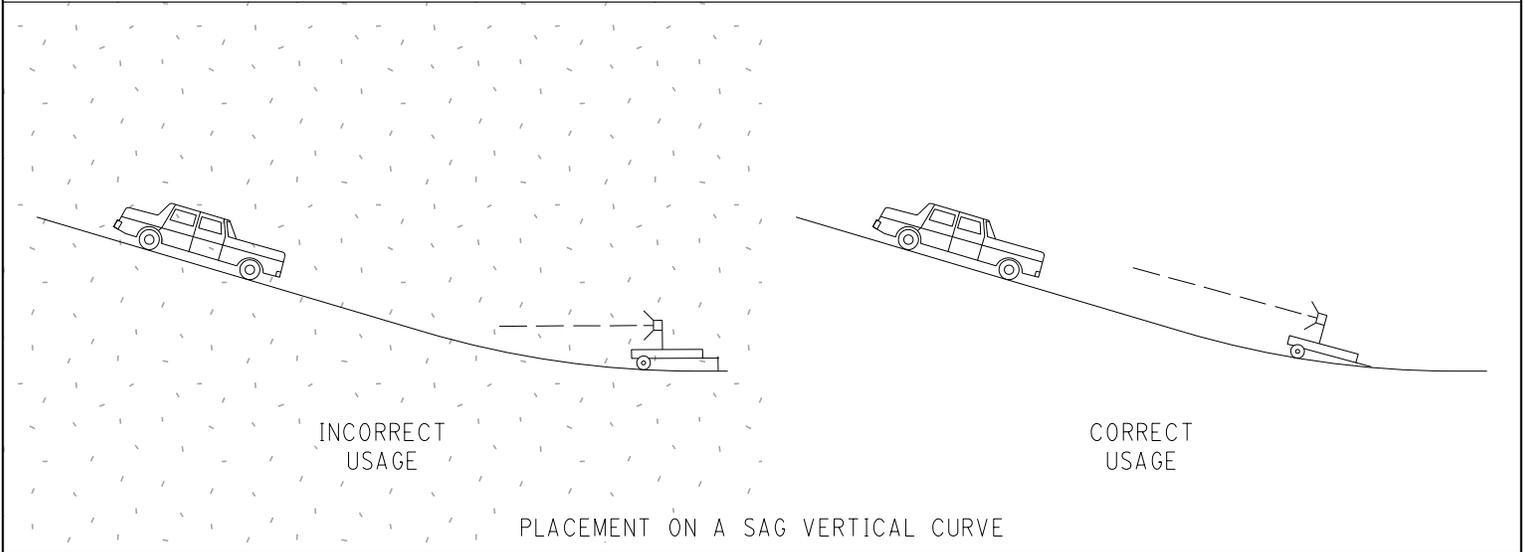
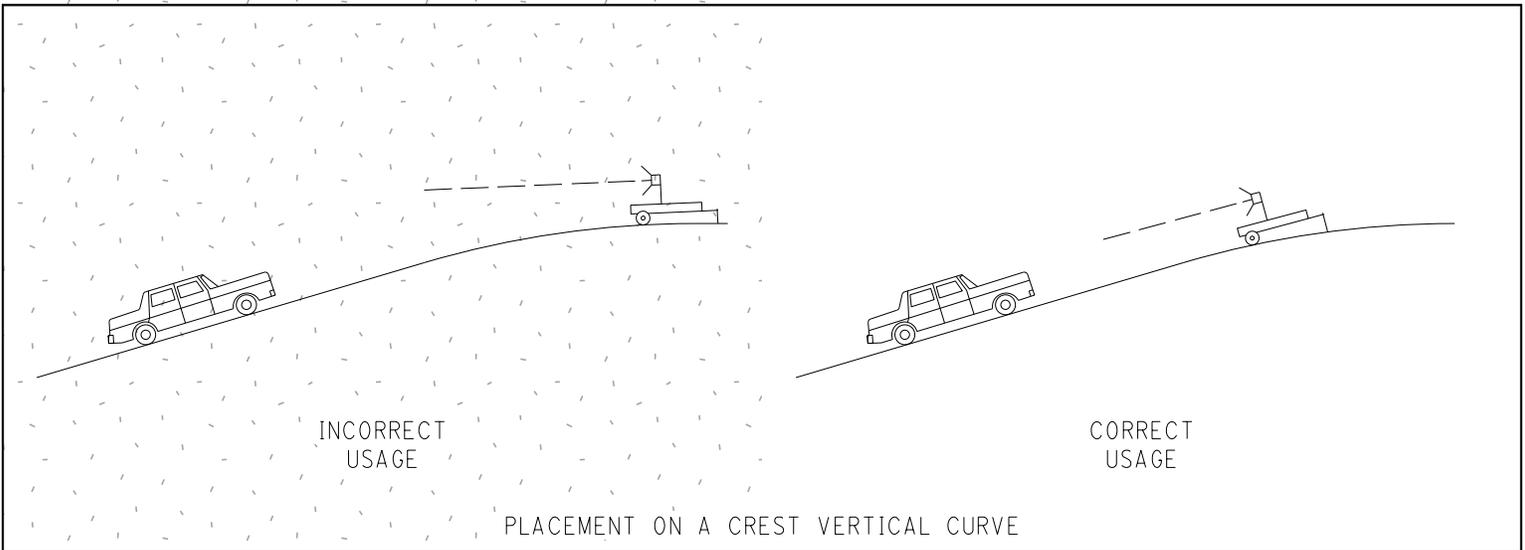
103-GEN-SIGN

TRAFFIC TYPICAL
SIGN SHEET

DATE:
JUNE 2021

SHEET:

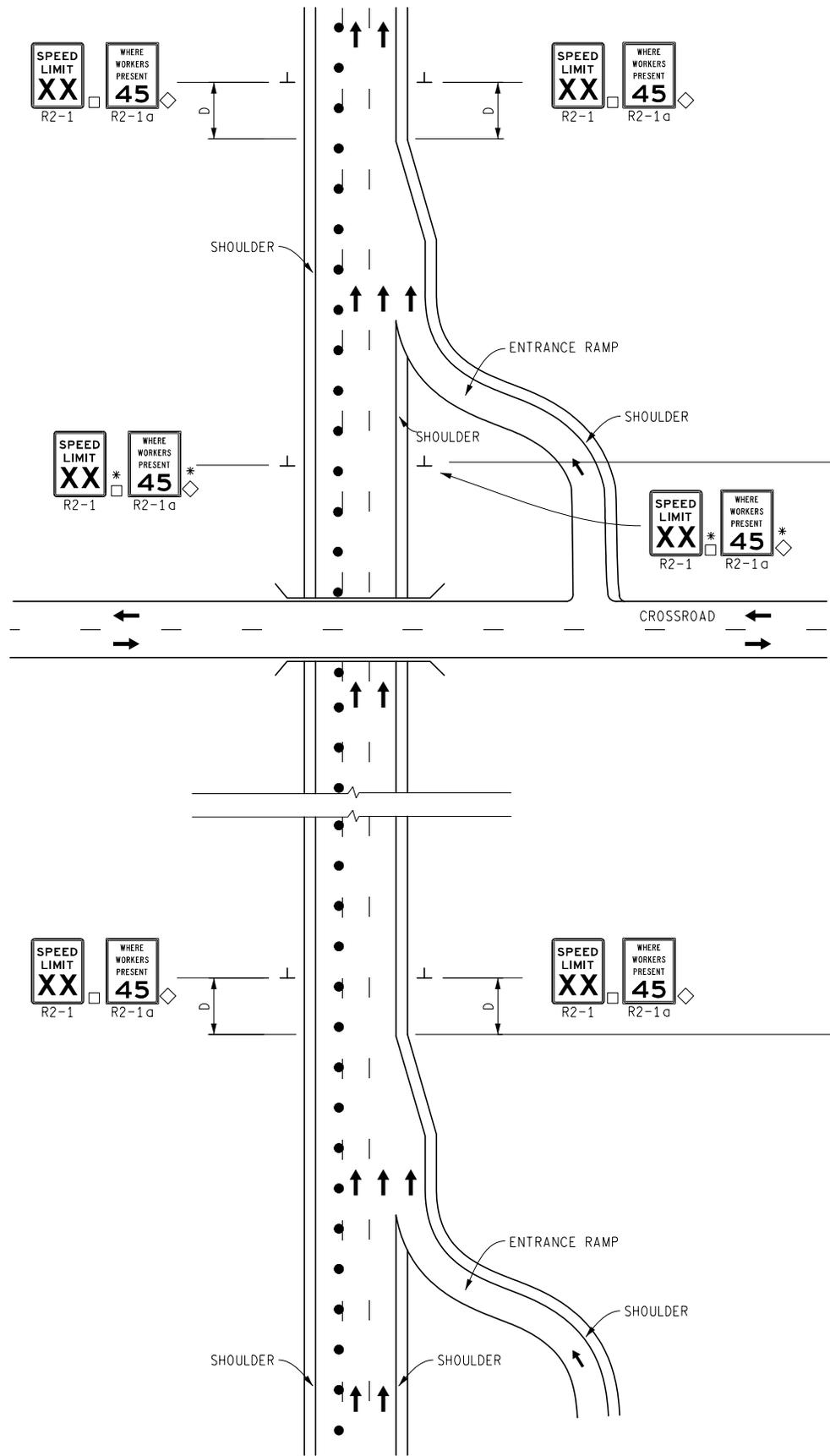
5 OF 5



NOTE:

ENSURE THE ARROW REMAINS CLEARLY LEGIBLE AT DISTANCES FROM 2,500 FEET TO 200 FEET, FROM ALL TRAFFIC LANES AND ROADWAY ENTRANCES. DO NOT PLACE THE LIGHTED ARROW ON A HORIZONTAL OR VERTICAL CURVE THAT MIGHT INTERFERE WITH THIS LEGIBILITY REQUIREMENT.

	NOT TO SCALE	MAINTAINING TRAFFIC TYPICAL	USE OF ARROW BOARD ON HILL OR CURVE AND WORK ZONE LAYOUT	DATE: MAY 2021
		NO: 104-GEN-AB		SHEET:
FILE: 104-GEN-AB.dgn				1 OF 1



KEY

- CHANNELIZING DEVICE
- ← TRAFFIC FLOW
- PLACE AS INDICATED IN NOTE S5
- ◇ R2-1a OPTIONAL

STANDARD NOTES

(SEE GEN-NOTES)

GENERAL: G1, G2, G3, G4

SIGNING: S1, S5, S8

DEVICES: TCD2

KEY

- CHANNELIZING DEVICE
- ↑ TRAFFIC FLOW
- ⚡ LIGHTED ARROW PANEL
- I TYPE III BARRICADE
- ◊ PART OF LEAD-IN SIGNING SEQUENCE
- PLACE SIGN AS INDICATED IN NOTE S5

STANDARD NOTES

(SEE GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S5, S8
 DEVICES: TCD1, TCD2, TCD3, TCD6

MAJOR INTERSECTION

MAJOR INTERSECTION

MAJOR INTERSECTION

GREATER THAN 2 MILES
 LESS THAN 4 MILES

LESS THAN 2 MILES

LESS THAN 2 MILES



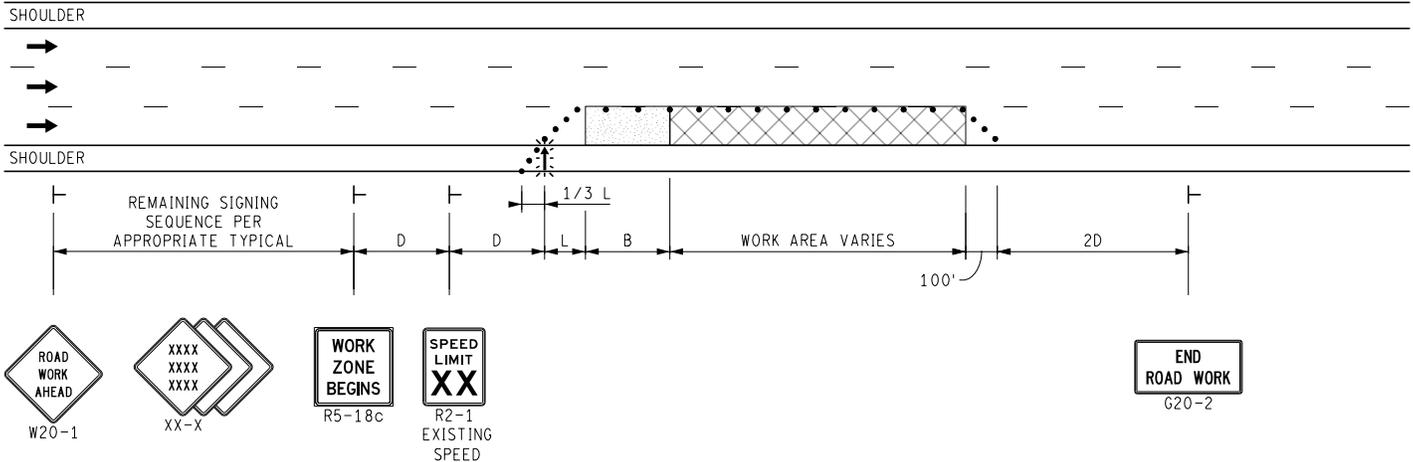
NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL
 NO:
106-GEN-SPEED-NFW

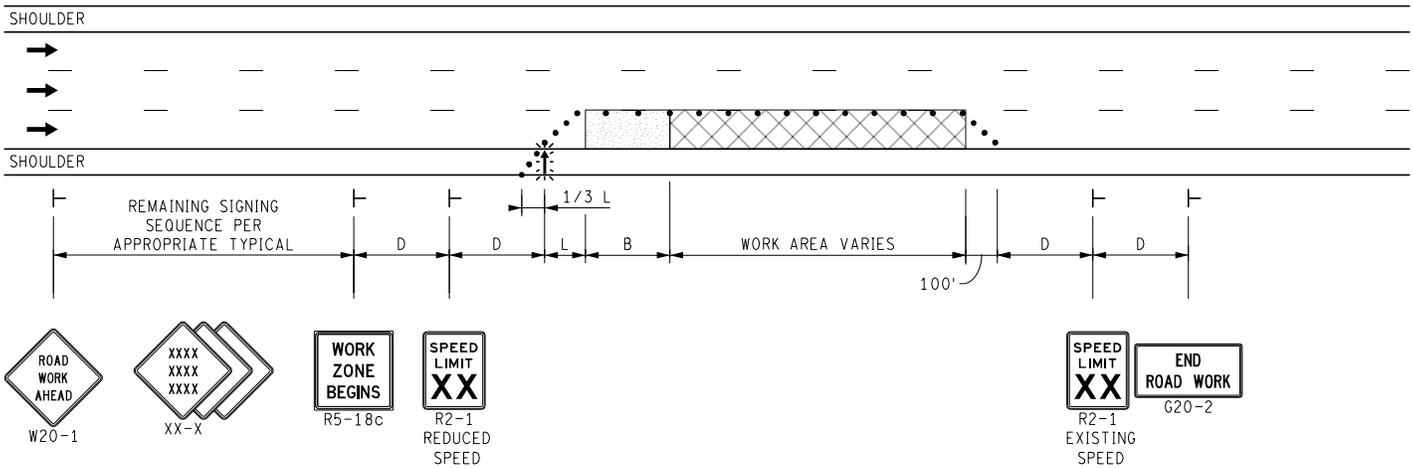
**SUPPLEMENTAL SPEED LIMIT
 TREATMENT ON A 2-WAY ROADWAY
 WHERE WORKERS PRESENT**

DATE:
 DECEMBER 2021
 SHEET:
1 OF 1

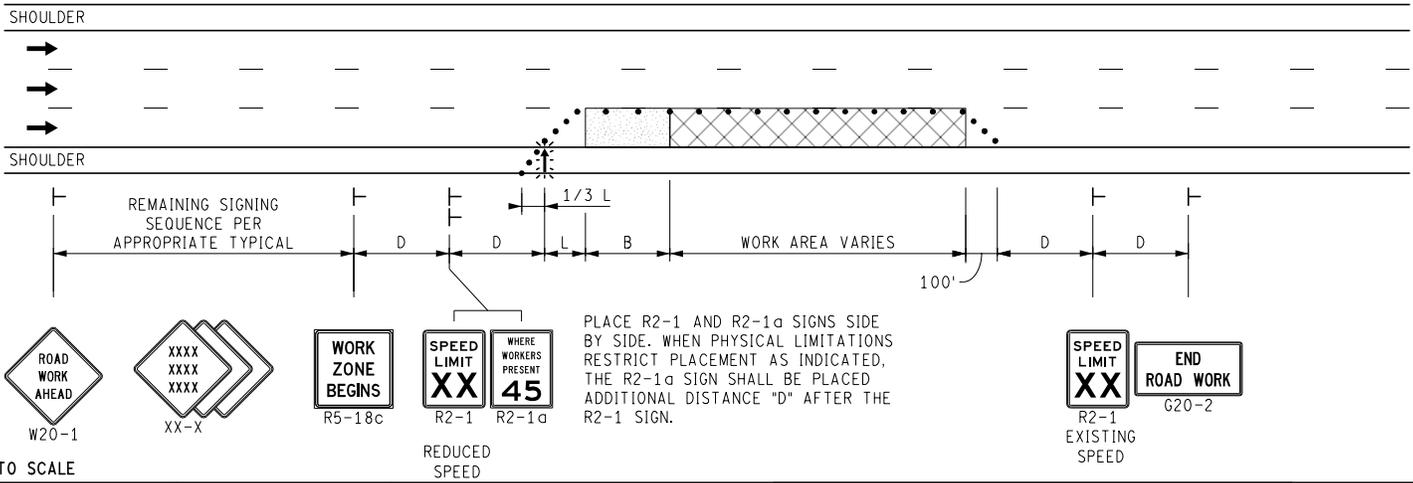
NO SPEED REDUCTION THROUGH WORK ZONE



REDUCED SPEED THROUGH WORK ZONE



REDUCED SPEED THROUGH WORK ZONE USING "WHERE WORKERS PRESENT"



NOT TO SCALE

	NOT TO SCALE	MAINTAINING TRAFFIC TYPICAL	SPEED LIMIT LAYOUT	DATE: MAY 2021
		NO: 107-GEN-SPEED		
FILE: 107-GEN-SPEED.dgn				1 OF 2

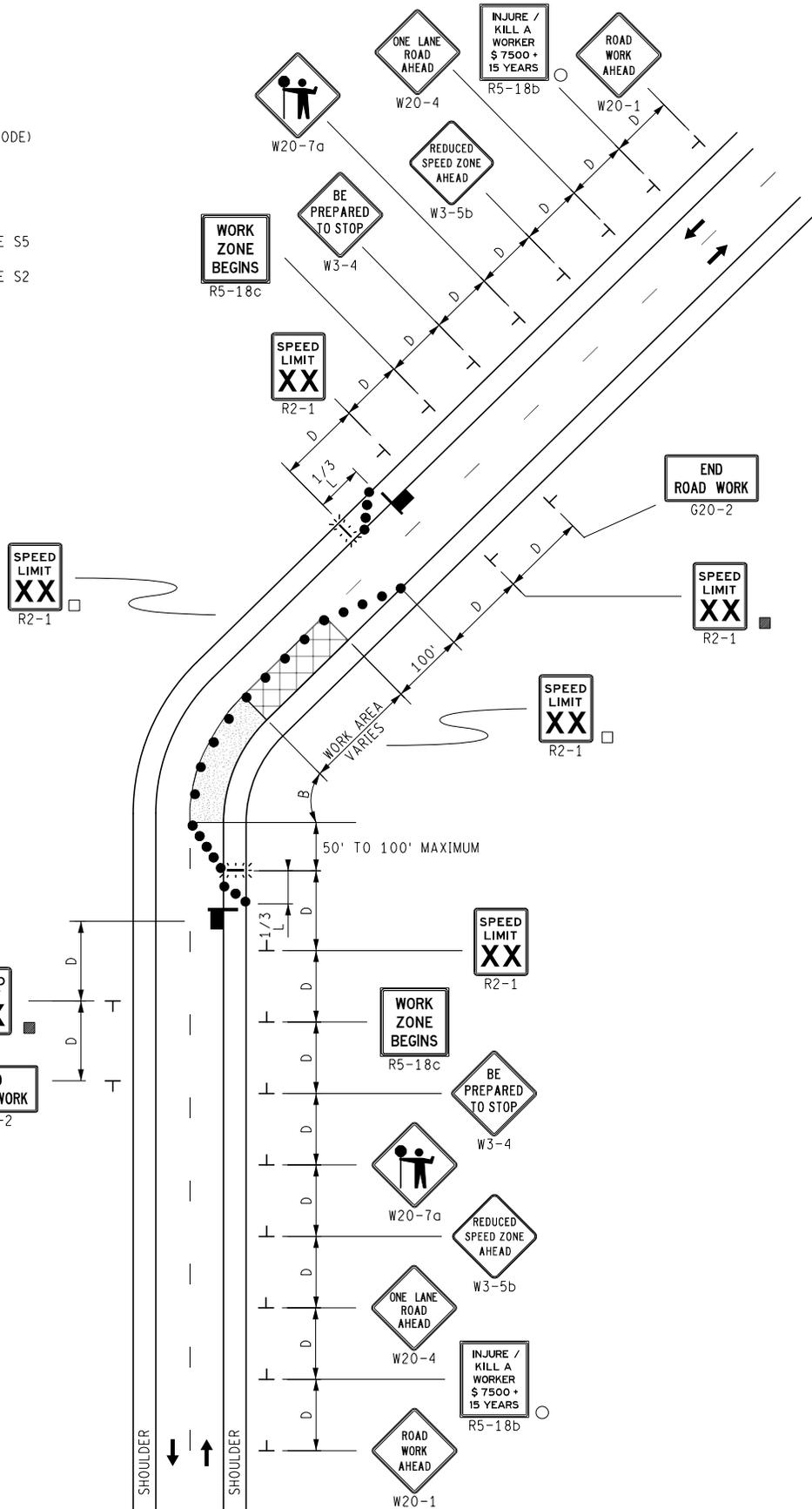
KEY

-  TRAFFIC REGULATOR
-  CHANNELIZING DEVICES
-  LIGHTED ARROW PANEL (CAUTION MODE)
-  TRAFFIC FLOW
-  REFLECTS EXISTING SPEED LIMIT
-  PLACE SIGN AS INDICATED IN NOTE S5
-  PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S4, S5
 TRAF REG: TR1, TR2
 DEVICES: TCD1, TCD2, TCD6



	NOT TO SCALE	MAINTAINING TRAFFIC TYPICAL	LANE CLOSURE UTILIZING TRAFFIC REGULATORS ON A 2-LANE UNDIVIDED ROADWAY	DATE: MAY 2021
		NO: 110-TR-NFW-2L		SHEET: 1 OF 1

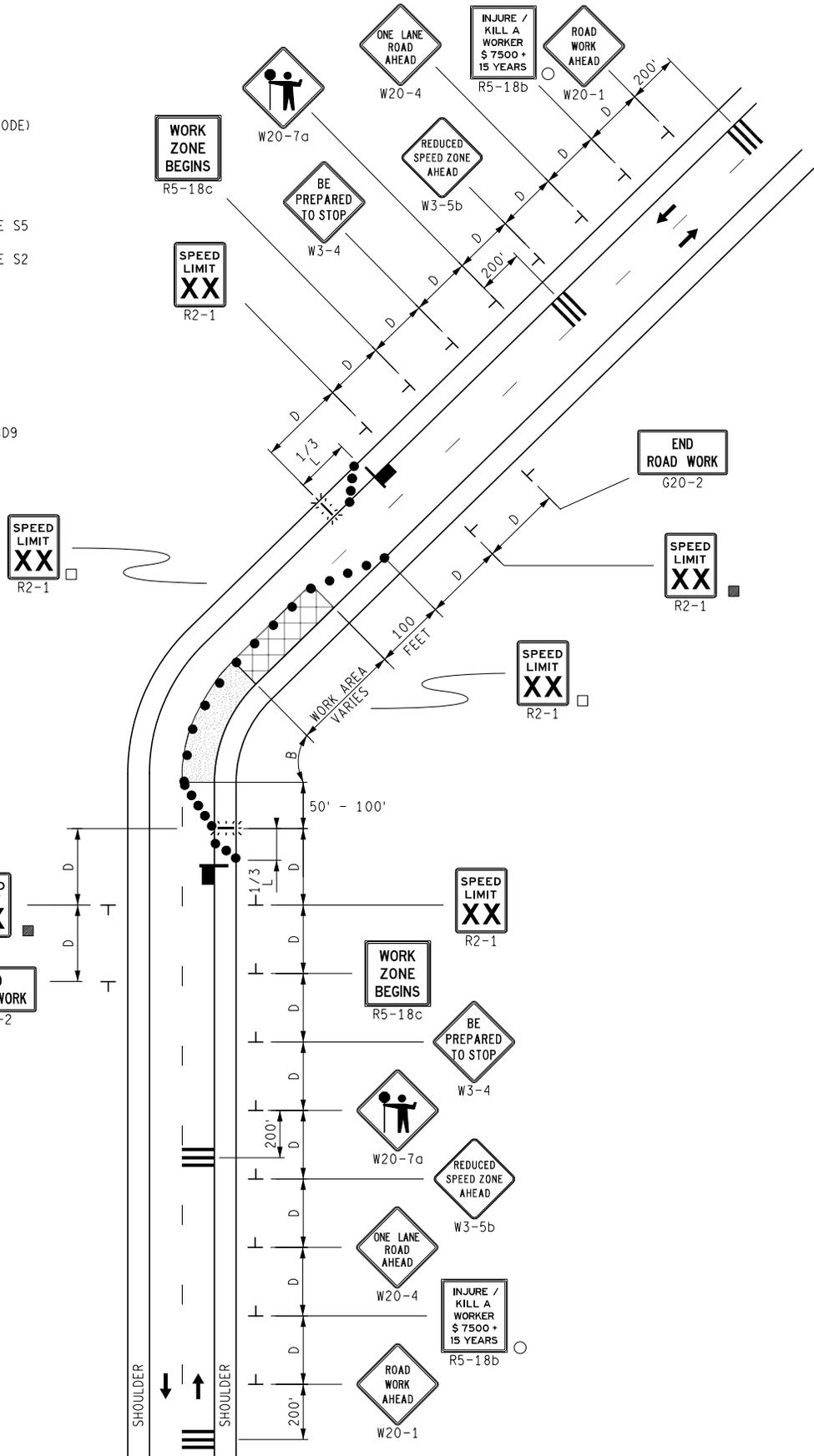
KEY

-  TRAFFIC REGULATOR
-  CHANNELIZING DEVICES
-  LIGHTED ARROW PANEL (CAUTION MODE)
-  TRAFFIC FLOW
-  REFLECTS EXISTING SPEED LIMIT
-  PLACE SIGN AS INDICATED IN NOTE S5
-  PLACE SIGN AS INDICATED IN NOTE S2
-  RUMBLE STRIPS (SEE NOTE TCD9)

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S4, S5
 TRAF REG: TR1, TR2
 DEVICES: TCD1, TCD2, TCD6, TCD9



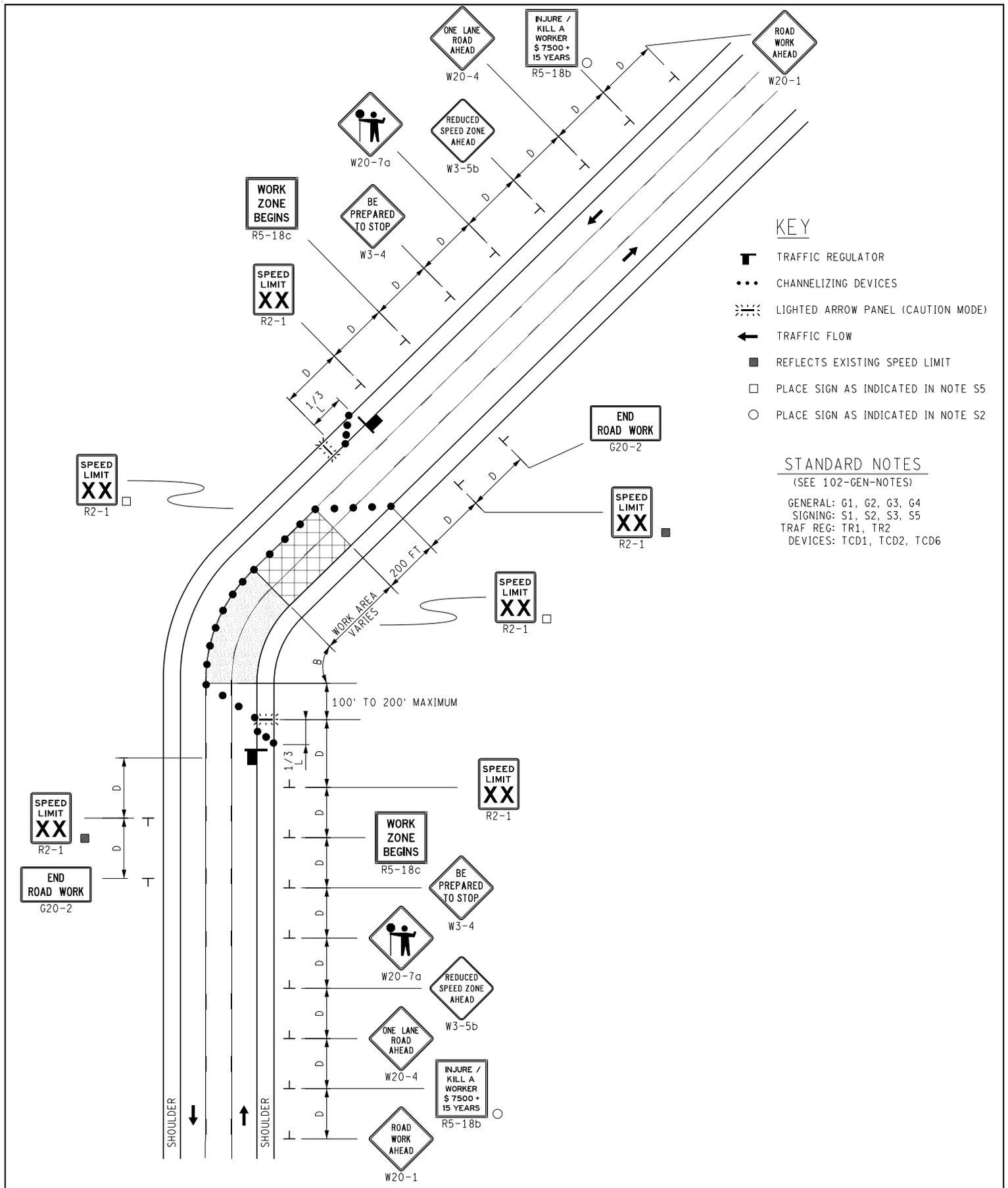
NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 111-
 TR-NFW-2L-RUM

LANE CLOSURE
 UTILIZING TRAFFIC REGULATORS
 ON A 2-LANE UNDIVIDED ROADWAY
 RUMBLE STRIPS

DATE: MAY 2021
 SHEET:



KEY

- ▬ TRAFFIC REGULATOR
- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL (CAUTION MODE)
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5
 TRAF REG: TR1, TR2
 DEVICES: TCD1, TCD2, TCD6



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO:

112-TR-CLT

**1-LANE AND CLTL CLOSURE
 UTILIZING TRAFFIC REGULATORS
 ON A 3-LANE UNDIVIDED ROADWAY**

DATE: MAY 2021
 SHEET:

NOTE

THIS TYPICAL IS ONLY TO BE USED WITHIN AN EXISTING WORK ZONE. INCLUDE ADDITIONAL LEAD IN WORK ZONE SIGNS WHEN USING THIS TYPICAL.

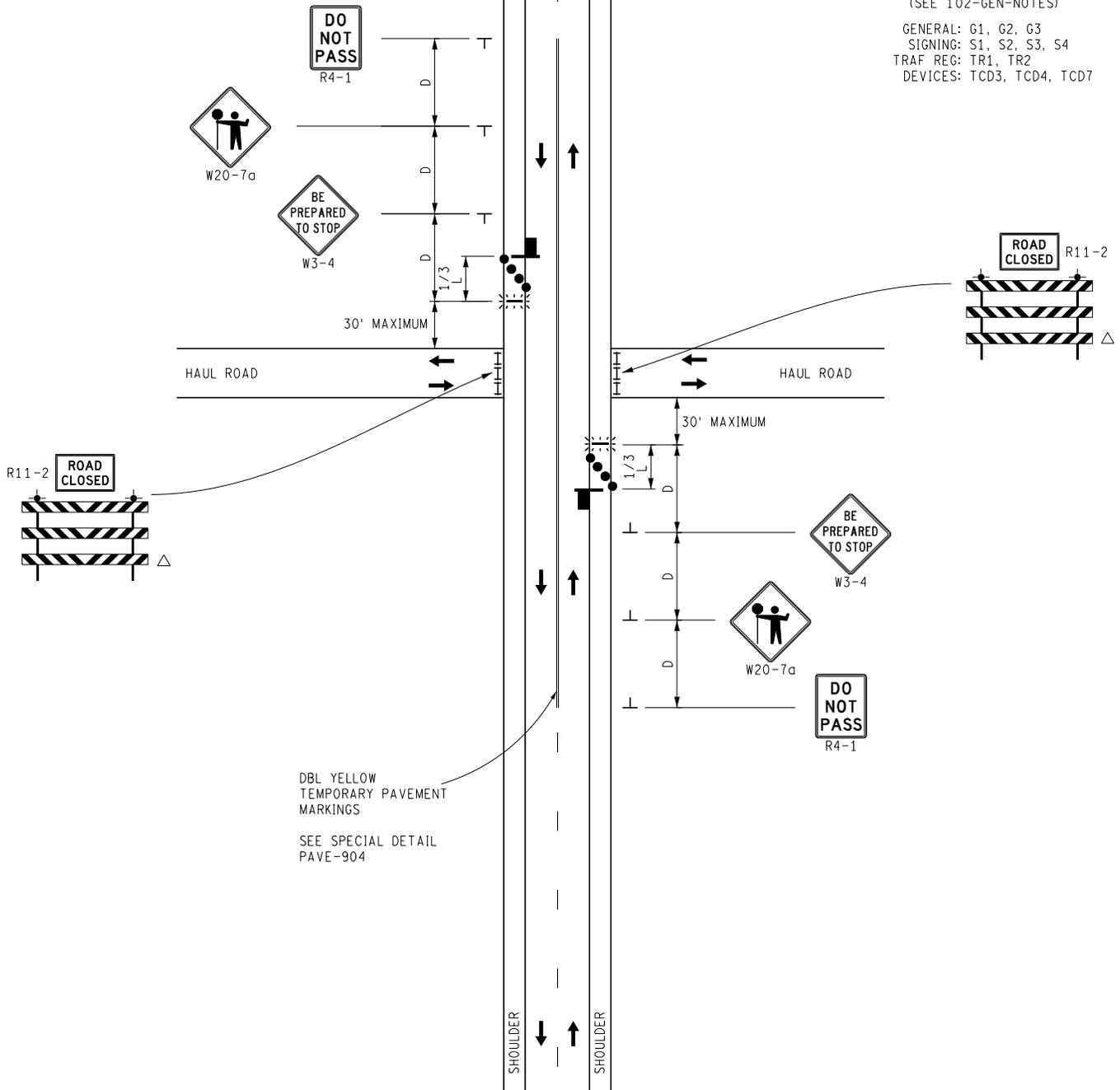
KEY

- CHANNELIZING DEVICES
- ▬ TRAFFIC REGULATOR
- ⚡ LIGHTED ARROW PANEL (CAUTION MODE)
- ← TRAFFIC FLOW
- △ PLACE BARRICADES AS INDICATED IN NOTE TCD7

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3
 SIGNING: S1, S2, S3, S4
 TRAF REG: TR1, TR2
 DEVICES: TCD3, TCD4, TCD7



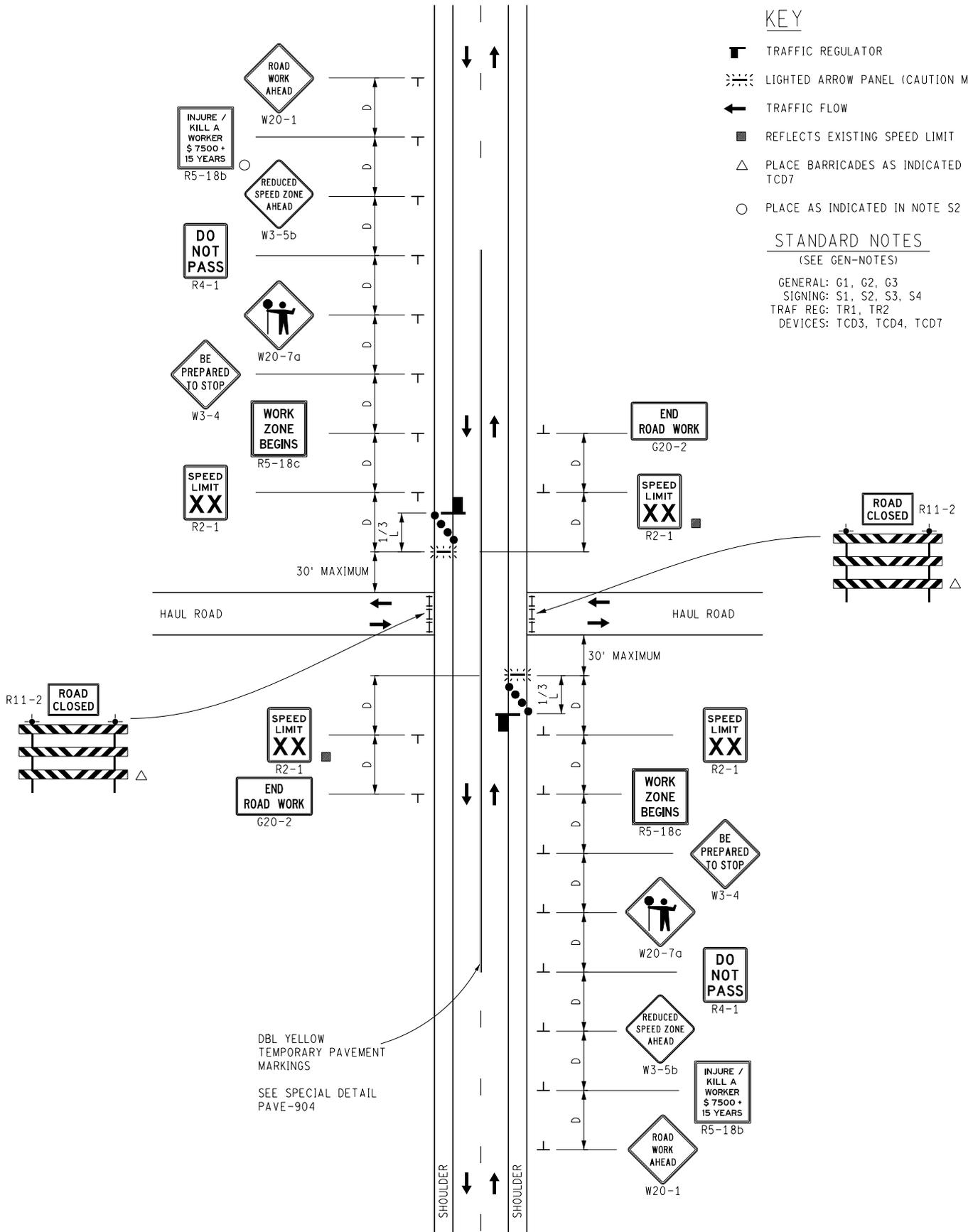
KEY

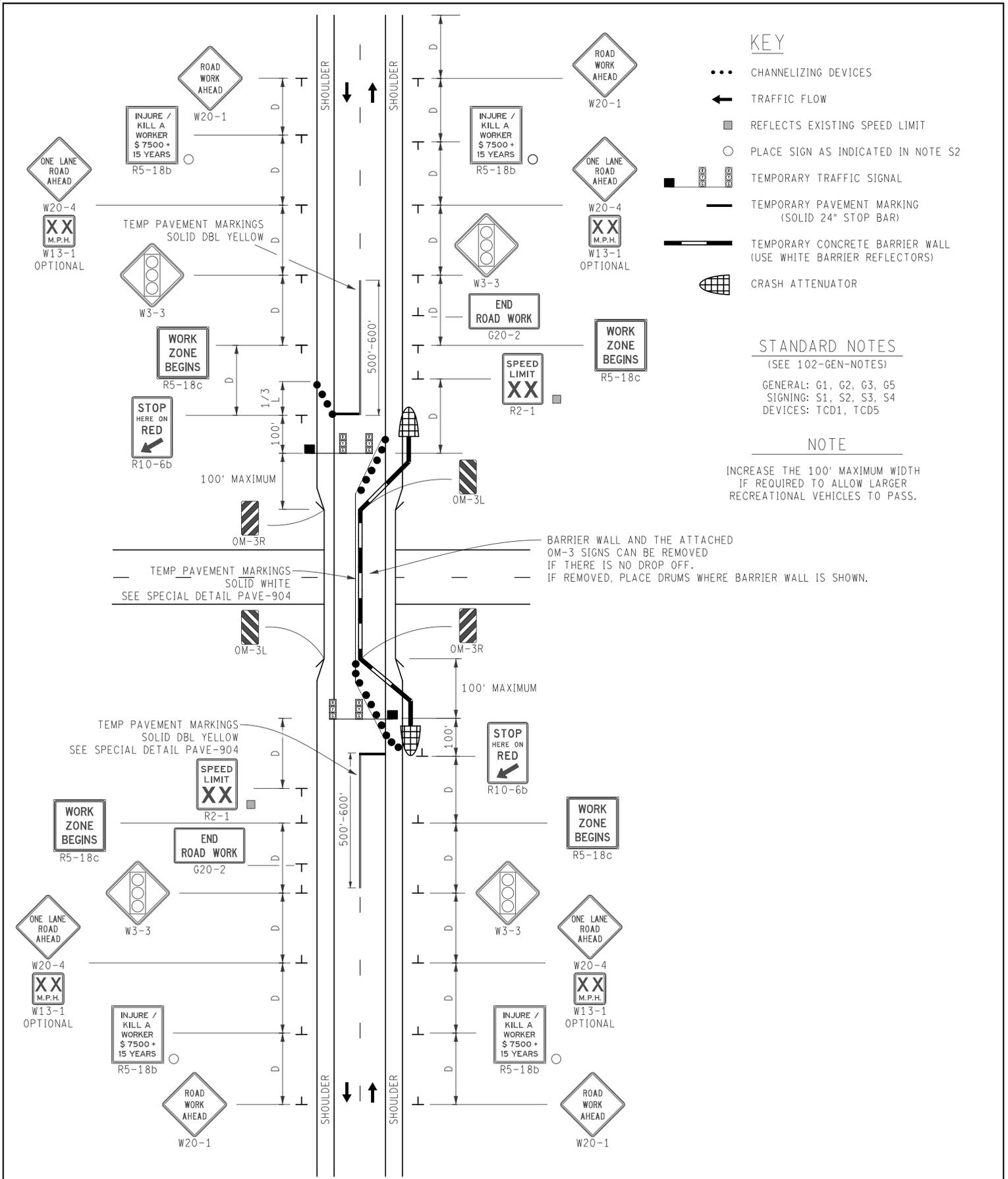
- TRAFFIC REGULATOR
- LIGHTED ARROW PANEL (CAUTION MODE)
- TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE BARRICADES AS INDICATED IN NOTE TCD7
- PLACE AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE GEN-NOTES)

GENERAL: G1, G2, G3
 SIGNING: S1, S2, S3, S4
 TRAF REG: TR1, TR2
 DEVICES: TCD3, TCD4, TCD7





	NOT TO SCALE	MAINTAINING TRAFFIC TYPICAL	TEMPORARY TRAFFIC SIGNAL WITH DUAL SIGNING ON A 2-LANE UNDIVIDED ROADWAY	DATE: JANUARY 2021
		NO: 120-TS-DUAL-SIGN		SHEET:
FILE: 120-TS-DUAL-SIGN.dgn				1 OF 1

KEY

- CHANNELIZING DEVICES
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S2
- TEMPORARY TRAFFIC SIGNAL
- TEMPORARY PAVEMENT MARKING (SOLID 24" STOP BAR)
- TEMPORARY CONCRETE BARRIER WALL (USE WHITE BARRIER REFLECTORS)
- CRASH ATTENUATOR

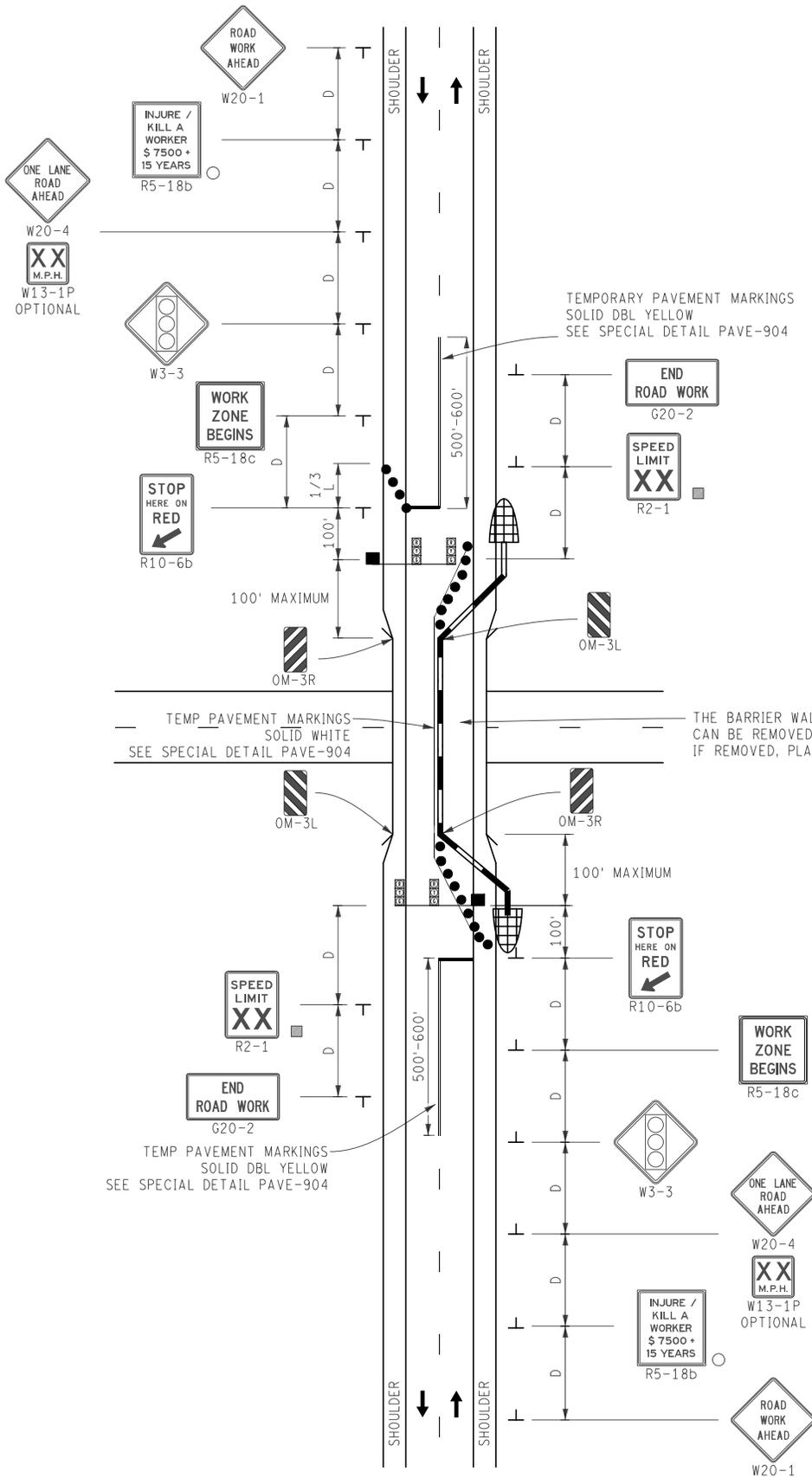
STANDARD NOTES

(SEE 102-GEN-NOTES)

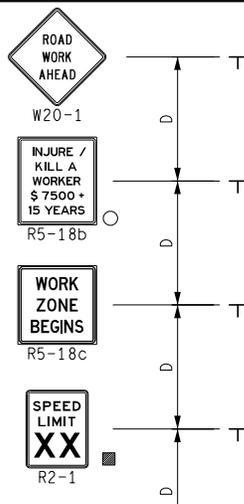
GENERAL: G1, G2, G3, G5
 SIGNING: S1, S2, S3, S4
 DEVICES: TCD1, TCD5

NOTE

INCREASE THE 100' MAXIMUM WIDTH IF REQUIRED TO ALLOW LARGER RECREATIONAL VEHICLES TO PASS.

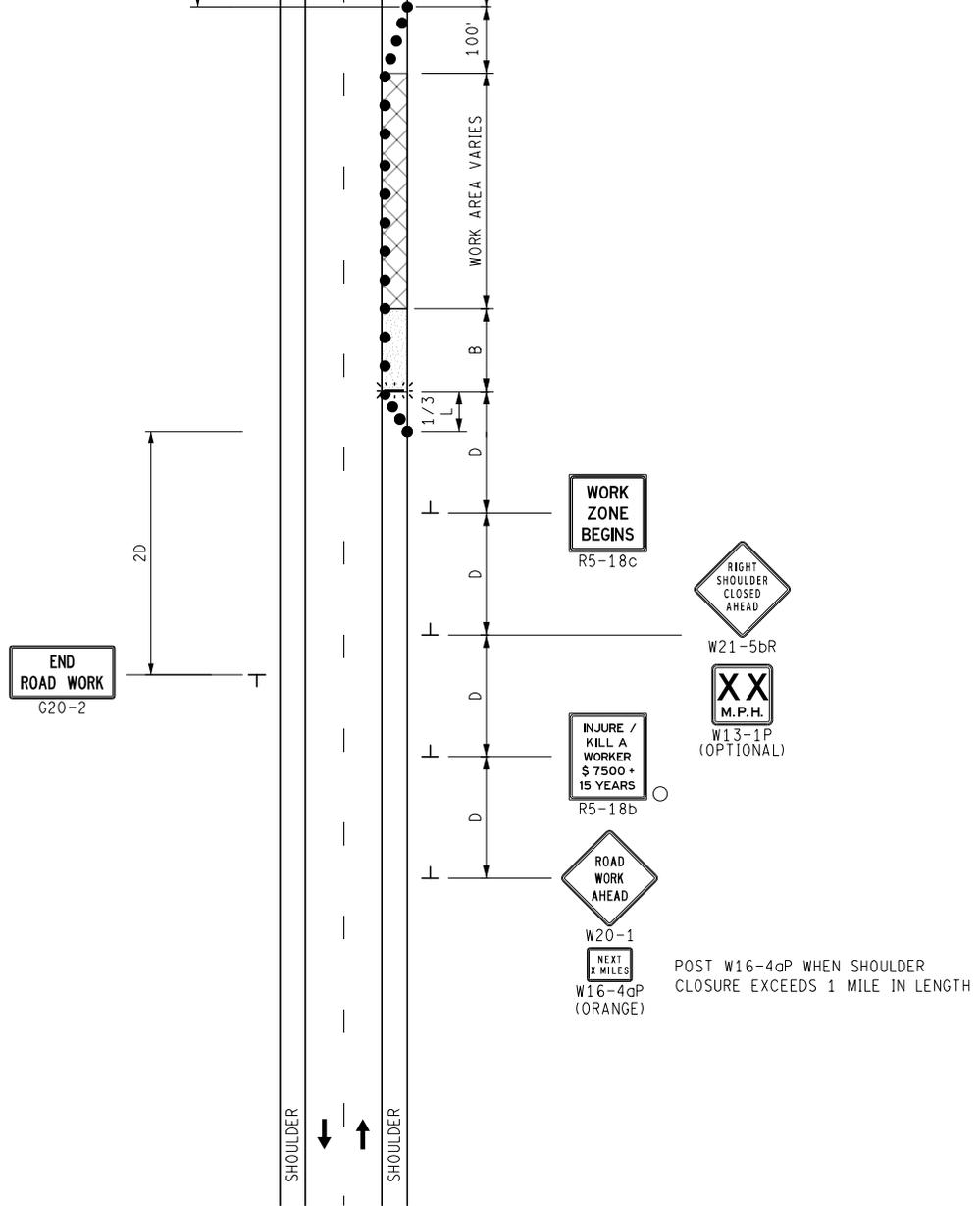


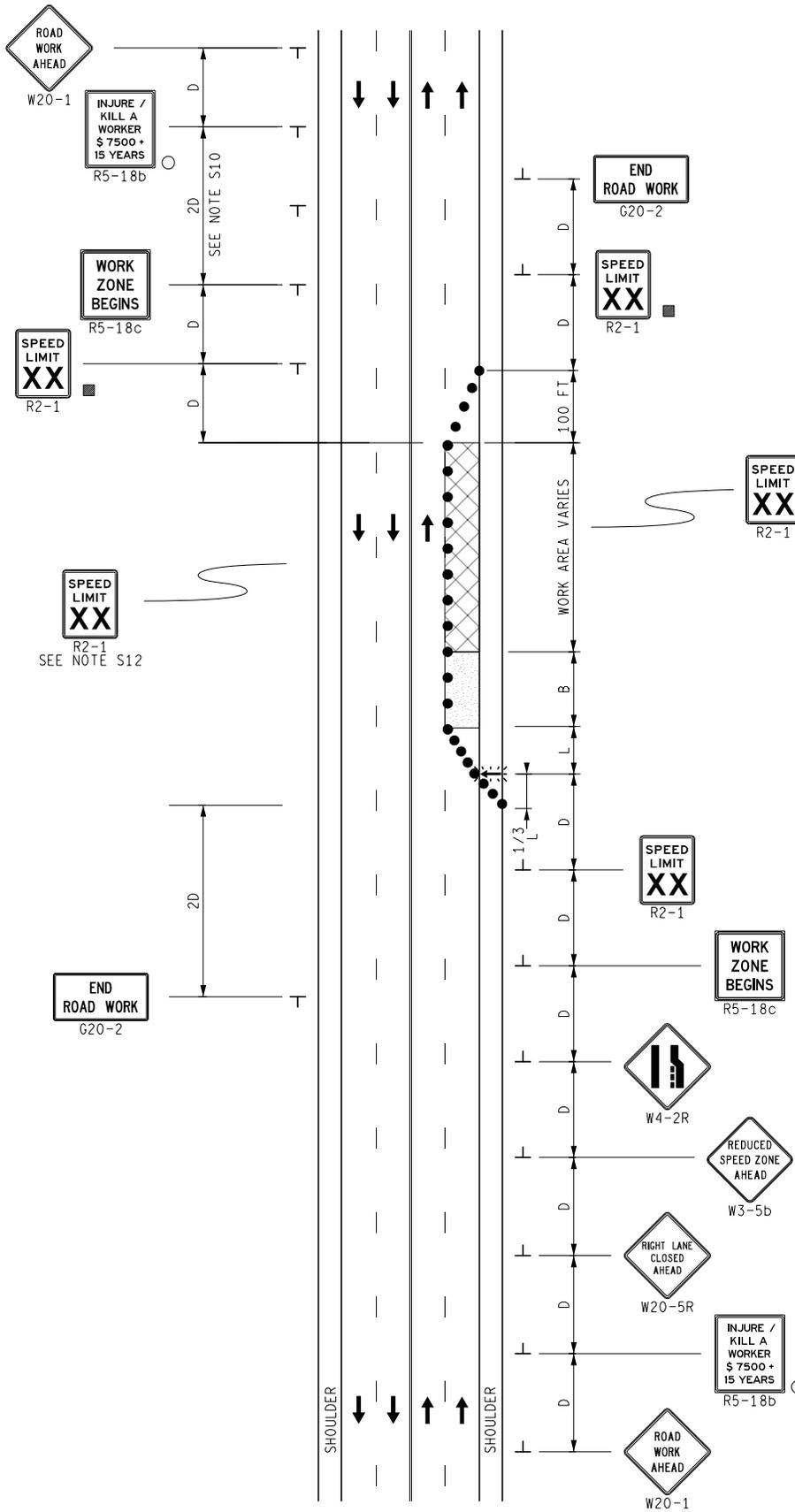
THE BARRIER WALL AND THE ATTACHED OM-3 SIGNS CAN BE REMOVED IF THERE IS NO DROP OFF. IF REMOVED, PLACE DRUMS WHERE BARRIER WALL IS SHOWN.



- KEY**
- CHANNELIZING DEVICES
 - ⚡ LIGHTED ARROW PANEL (CAUTION MODE)
 - ← TRAFFIC FLOW
 - REFLECTS EXISTING SPEED LIMIT
 - PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES
 (SEE 102-GEN-NOTES)
 GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5
 DEVICES: TCD1, TCD2, TCD6, TCD7





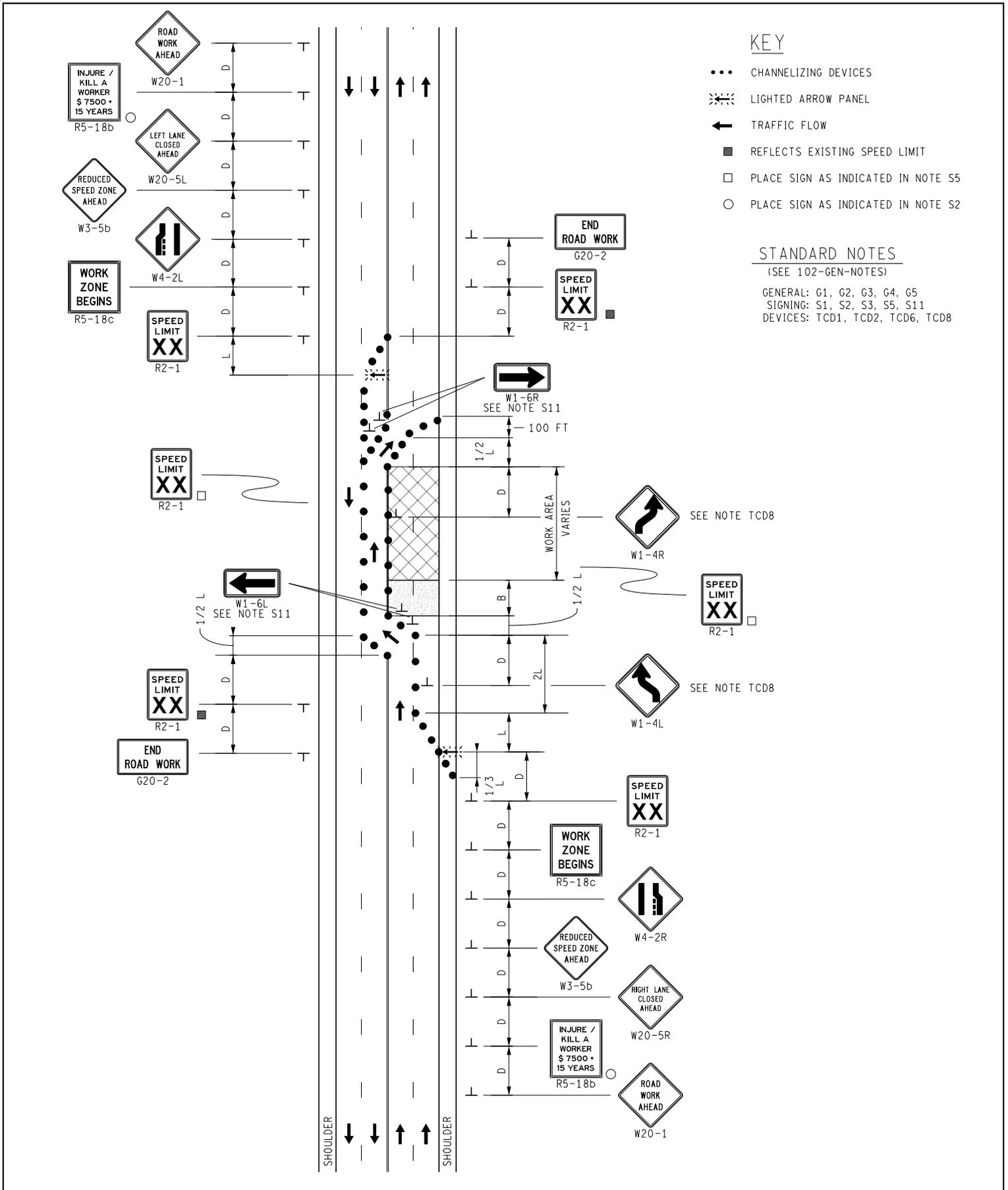
KEY

- CHANNELIZING DEVICES
- ⋈ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S10, S12
 DEVICES: TCD1, TCD2, TCD6



KEY

- CHANNELIZING DEVICES
- ★ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)
 GENERAL: G1, G2, G3, G4, G5
 SIGNING: S1, S2, S3, S5, S11
 DEVICES: TCD1, TCD2, TCD6, TCD8

	NOT TO SCALE	MAINTAINING TRAFFIC TYPICAL	2 LANE CLOSURES, LEFT AND RIGHT WITH A SINGLE LANE SHIFT ON A 4-LANE UNDIVIDED ROADWAY	DATE: MAY 2021
		NO: 124- NFW-2(R+L)LC-SHIFT		SHEET: 1 OF 1

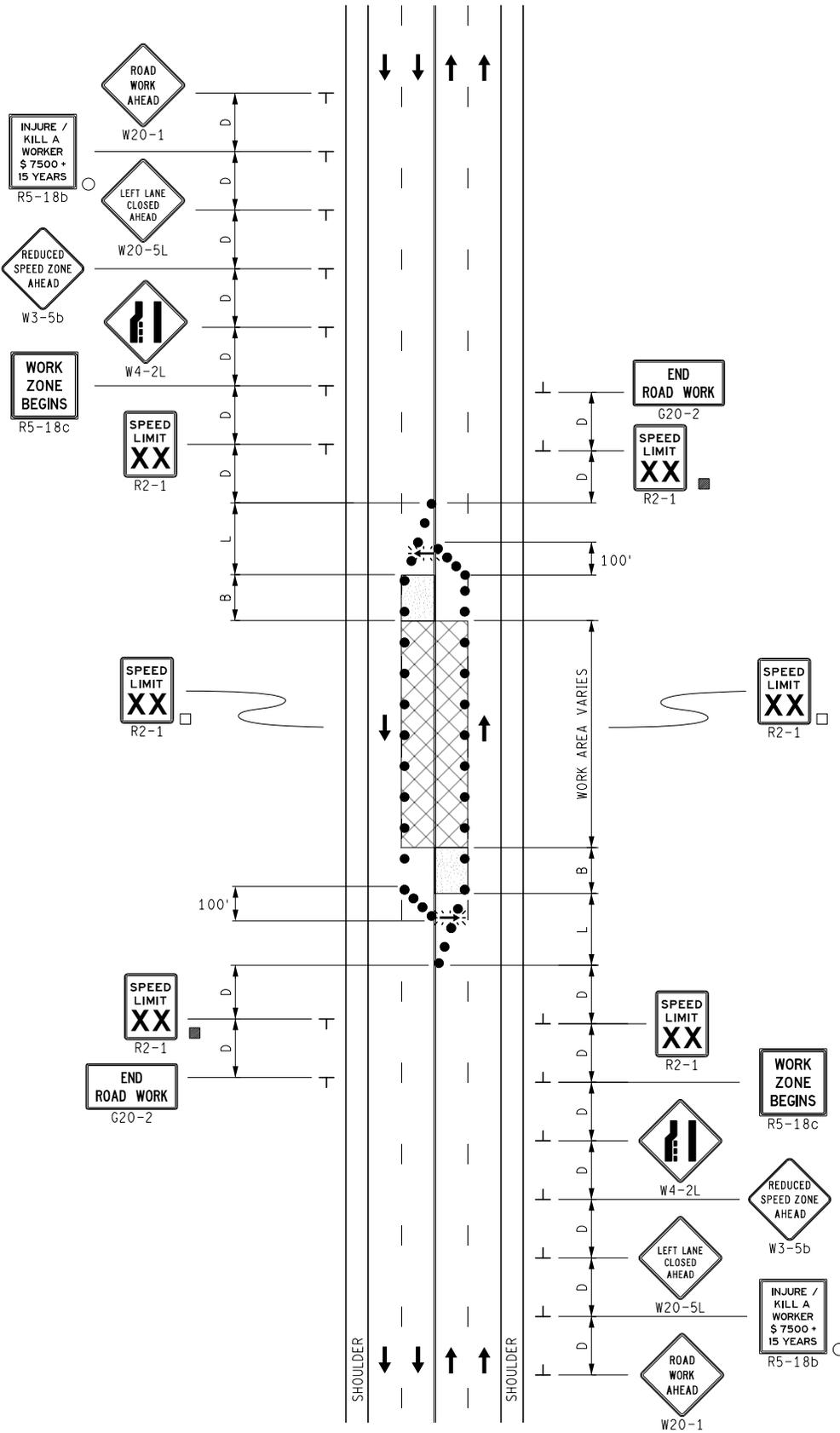
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5
 DEVICES: TCD1, TCD2, TCD6



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 125-NFW-2LC-(IN)

2-LANE CLOSURE (INSIDE LANES)
 ON A 4-LANE UNDIVIDED ROADWAY

DATE: MAY 2021
 SHEET:

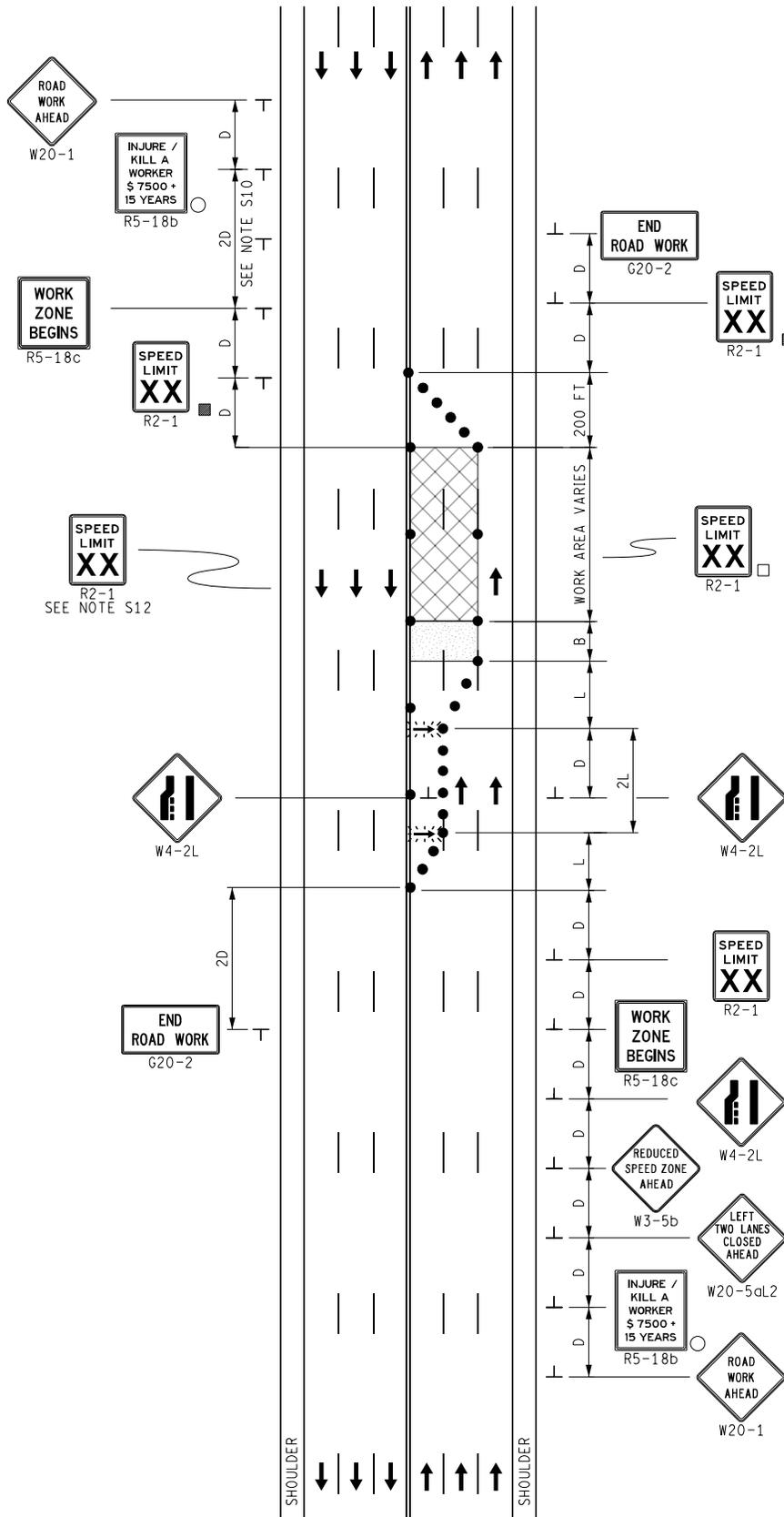
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S10, S12
 DEVICES: TCD1, TCD2, TCD6



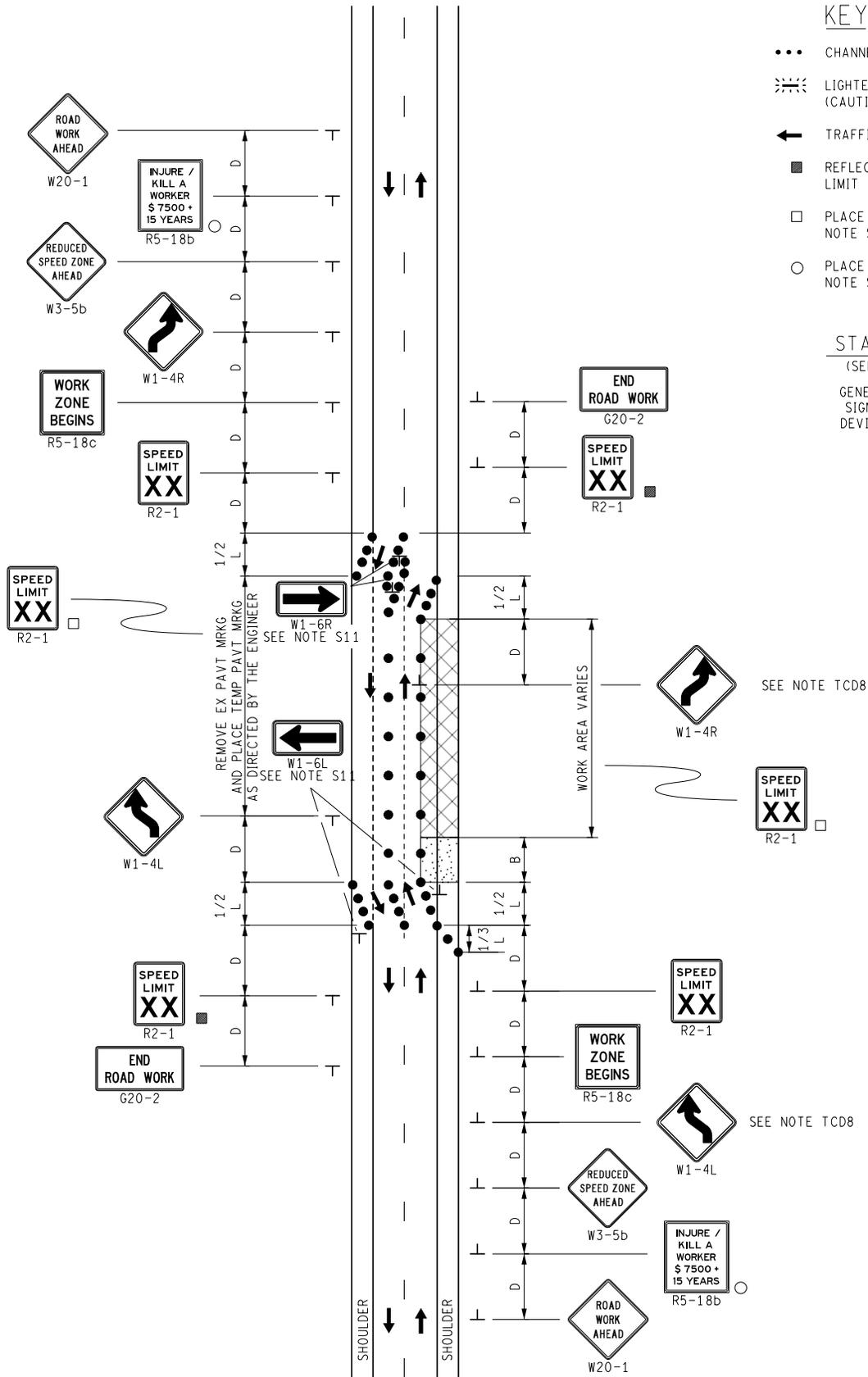
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL (CAUTION MODE)
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4, G5
 SIGNING: S1, S2, S3, S5, S11
 DEVICES: TCD1, TCD2, TCD6, TCD8



KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL (CAUTION MODE)
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S2

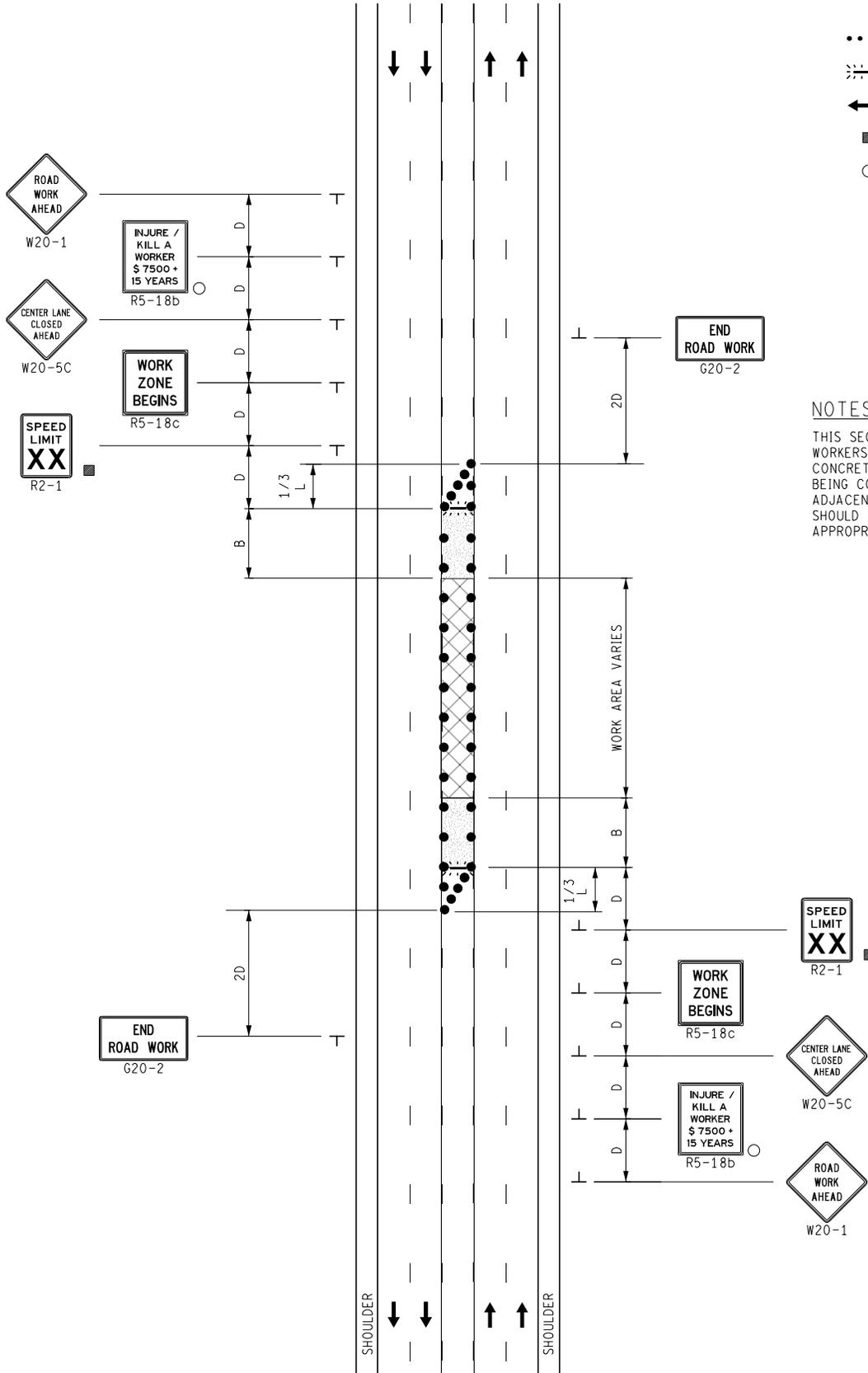
STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5
 DEVICES: TCD1, TCD2, TCD6

NOTES

THIS SEQUENCE SHOULD ONLY BE USED WHEN WORKERS ARE NOT PRESENT, E.G., FOR CURING CONCRETE OVERNIGHT, ETC. WHEN WORK IS BEING CONDUCTED IN THE CENTER LANE, AN ADJACENT LANE (IN ONE OR BOTH DIRECTIONS) SHOULD ALSO BE CLOSED UTILIZING THE APPROPRIATE TYPICAL SIGNING SEQUENCE



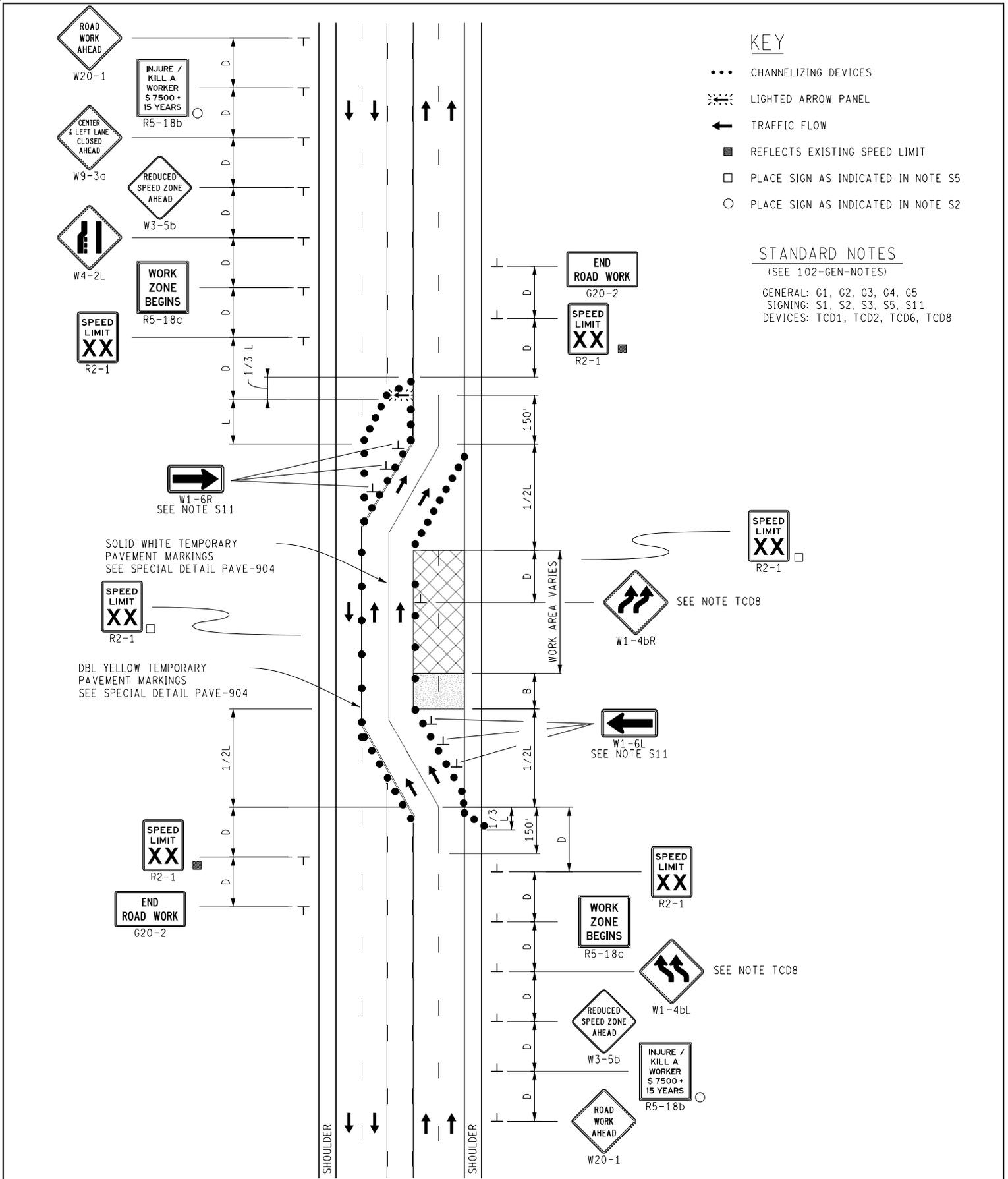
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4, G5
 SIGNING: S1, S2, S3, S5, S11
 DEVICES: TCD1, TCD2, TCD6, TCD8



	NOT TO SCALE	MAINTAINING TRAFFIC TYPICAL	1-BOUND CLOSURE WITH A DOUBLE LANE SHIFT ON A 5-LANE UNDIVIDED ROADWAY	DATE: JUNE 2021
		NO: 131-CLT-1(L)LC-SHIFT		SHEET: 1 OF 1

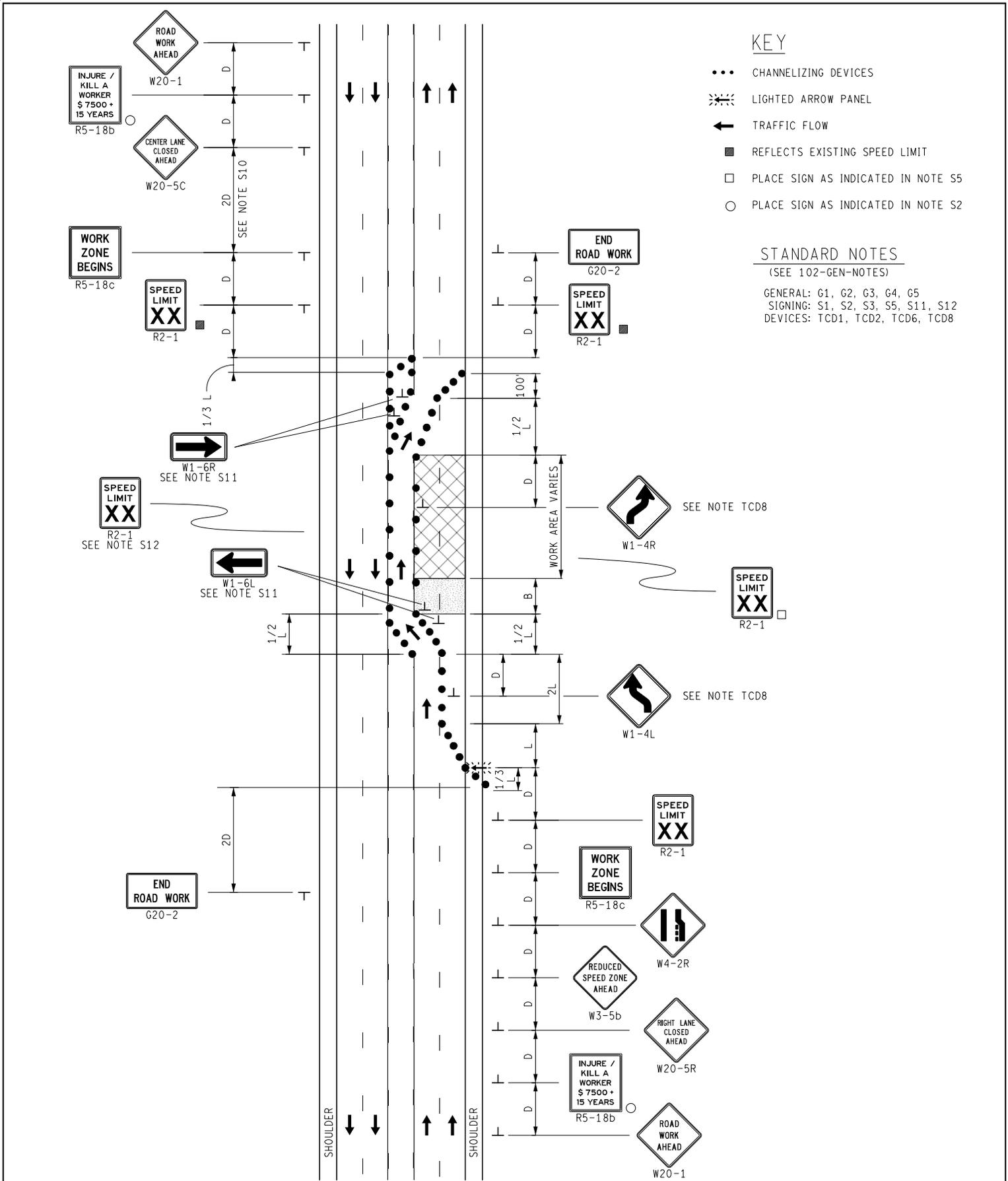
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4, G5
 SIGNING: S1, S2, S3, S5, S11, S12
 DEVICES: TCD1, TCD2, TCD6, TCD8



MDOT
 Michigan Department of Transportation

NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: **132-CLT-1(R)LC-SHIFT**

**1 BOUND CLOSURE
 WITH A SINGLE LANE SHIFT
 ON A 5-LANE UNDIVIDED ROADWAY**

DATE: JUNE 2021
 SHEET: **1 OF 1**

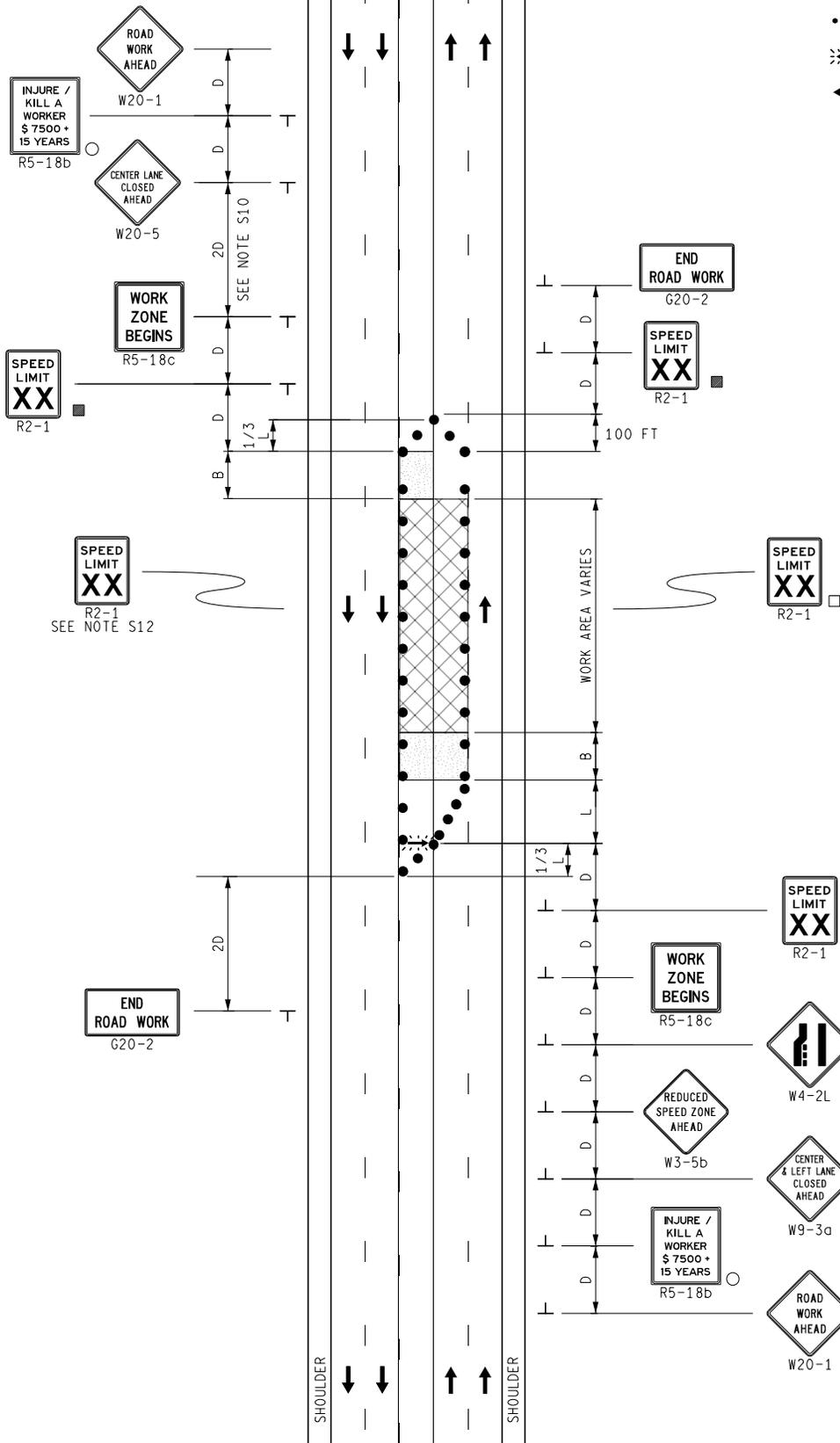
KEY

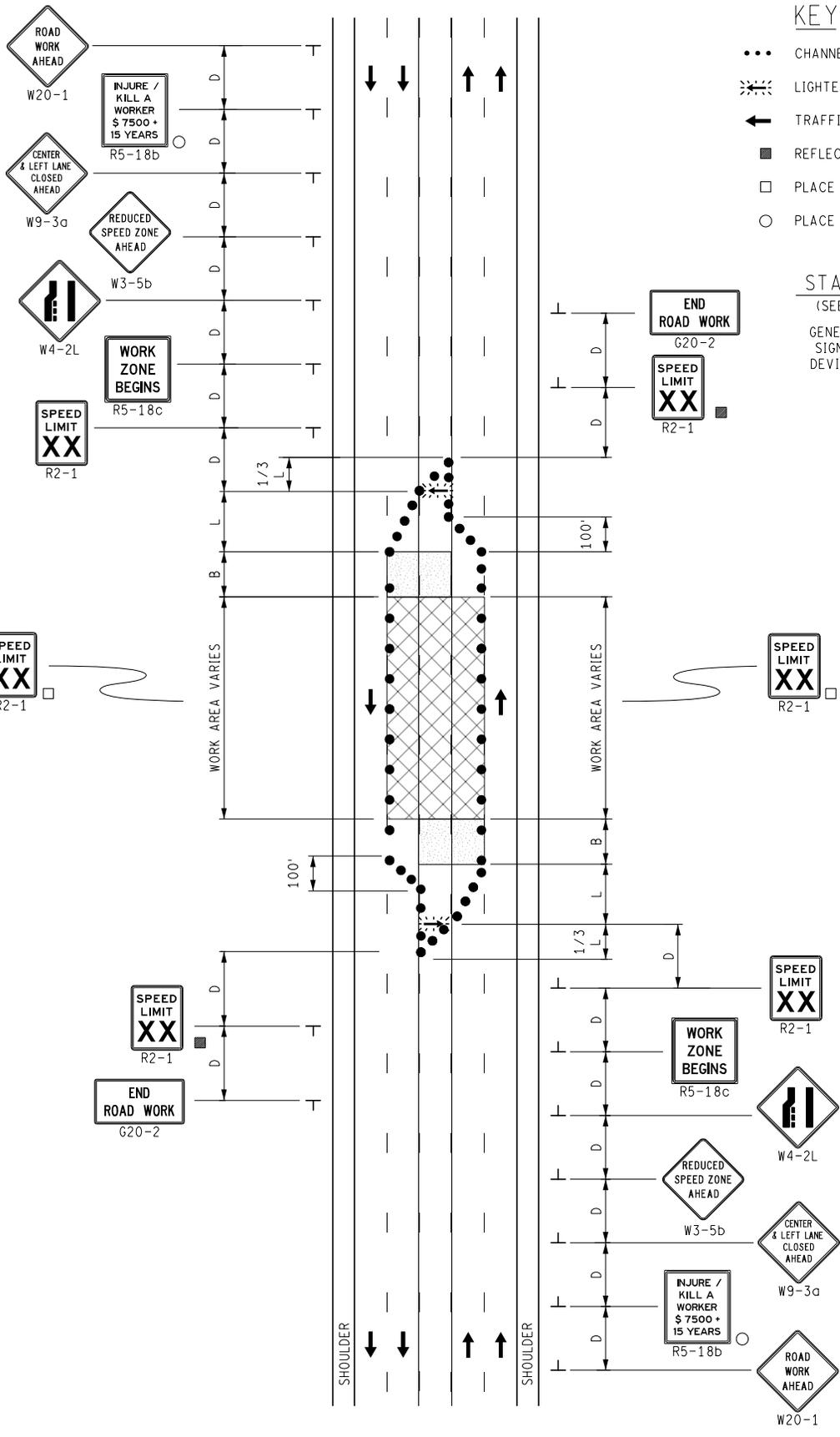
- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S10, S12
 DEVICES: TCD1, TCD2, TCD6



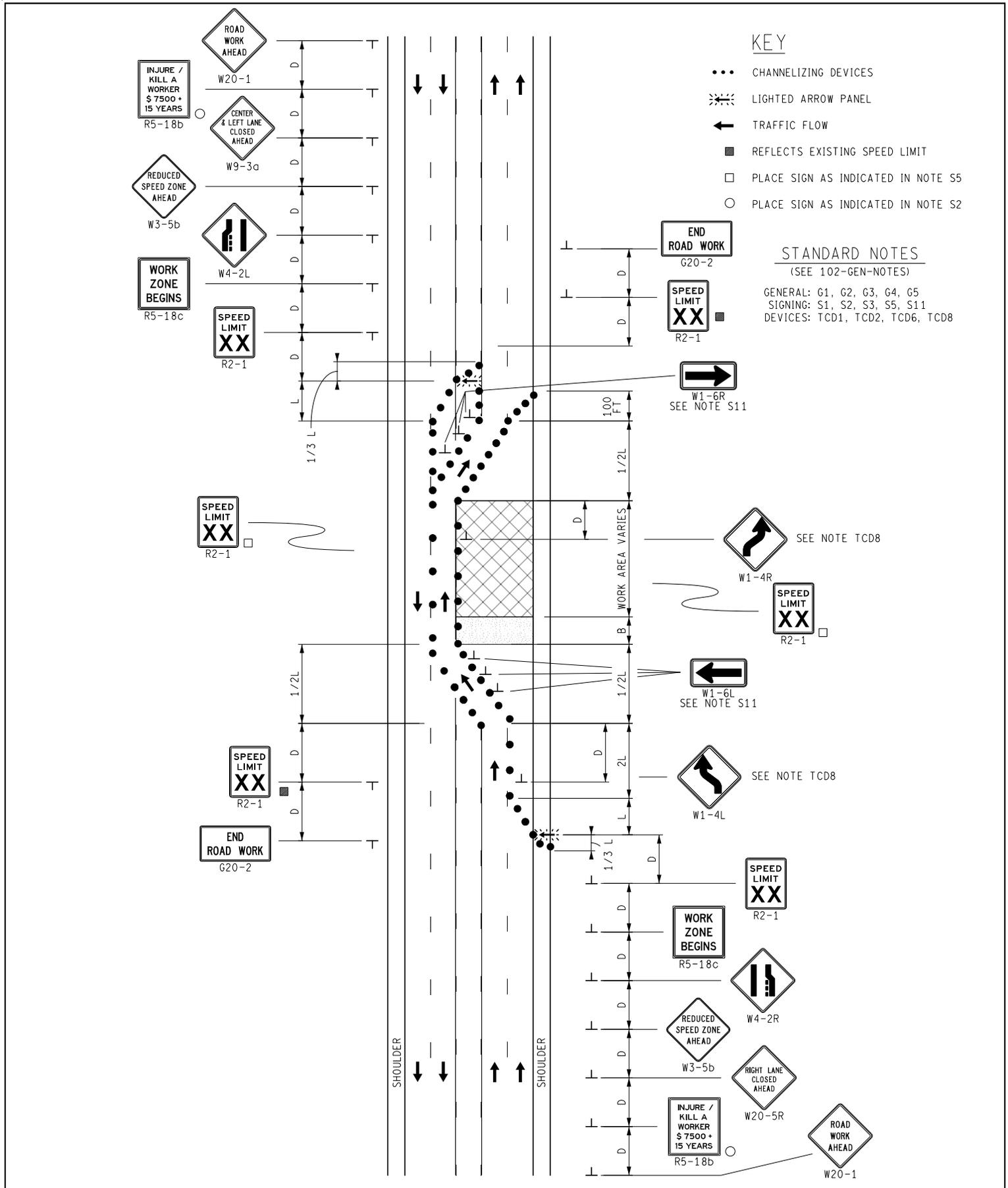


KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)
 GENERAL: G1, G2, G3, G4, G5
 SIGNING: S1, S2, S3, S5
 DEVICES: TCD1, TCD2, TCD6



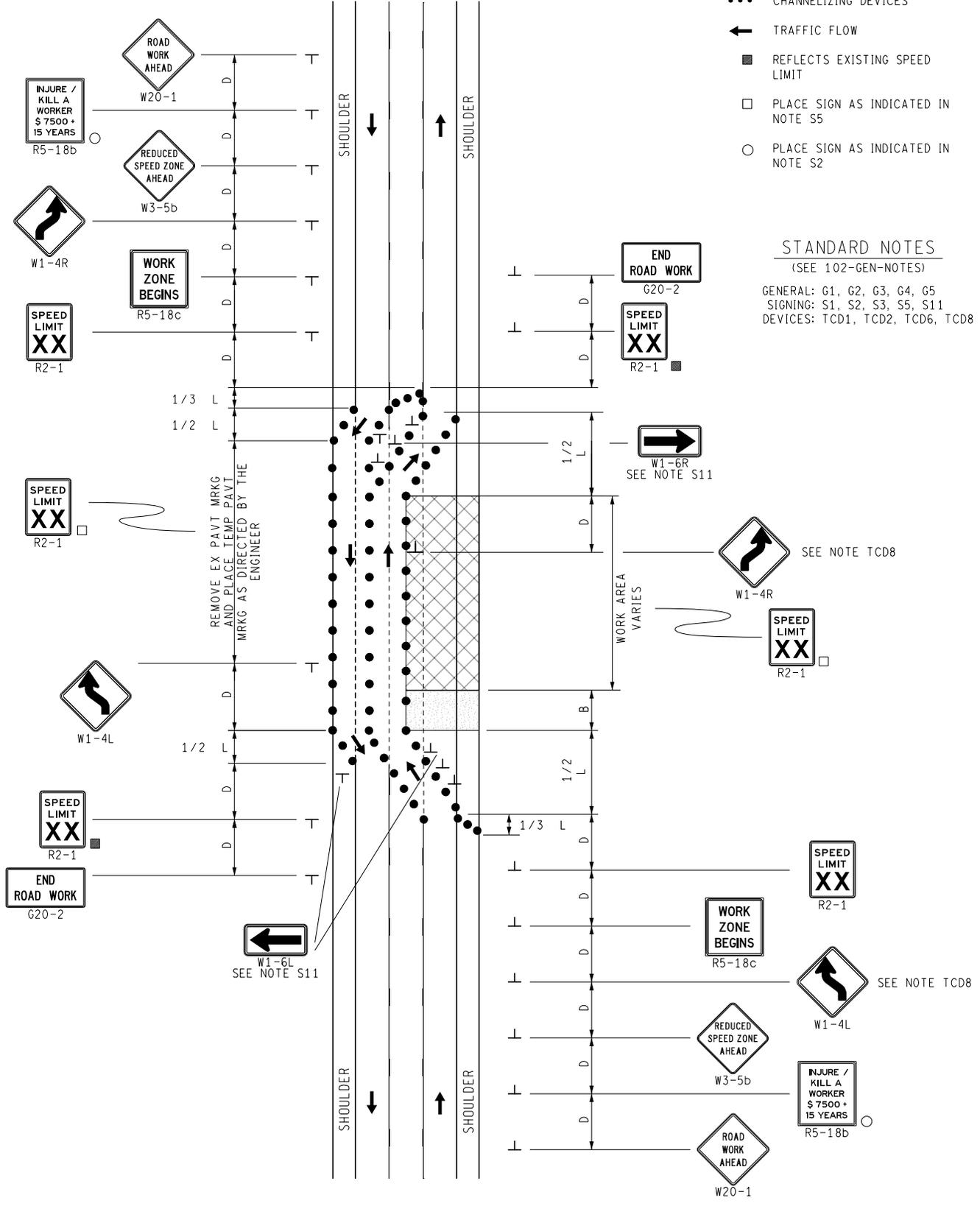
KEY

- CHANNELIZING DEVICES
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4, G5
 SIGNING: S1, S2, S3, S5, S11
 DEVICES: TCD1, TCD2, TCD6, TCD8



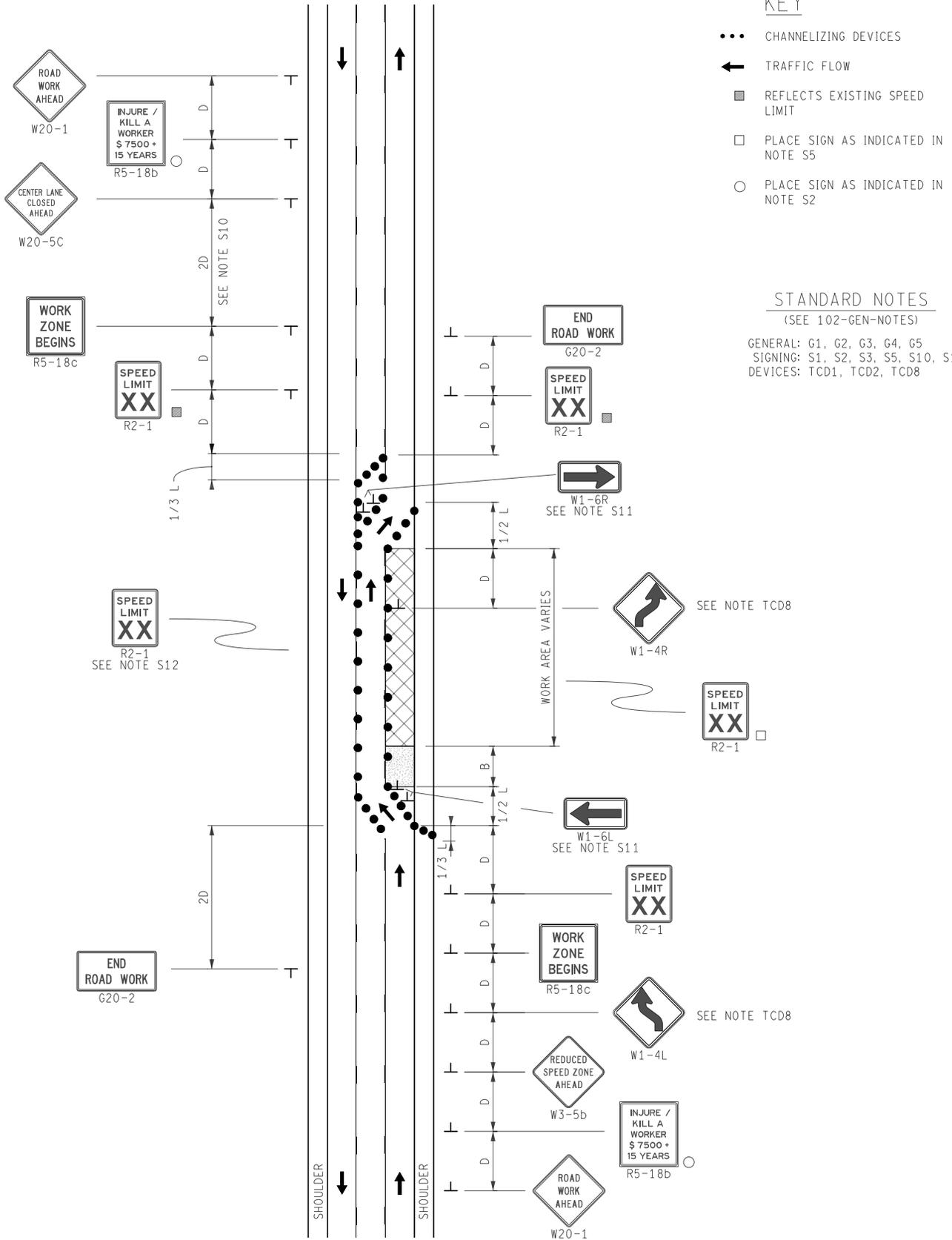
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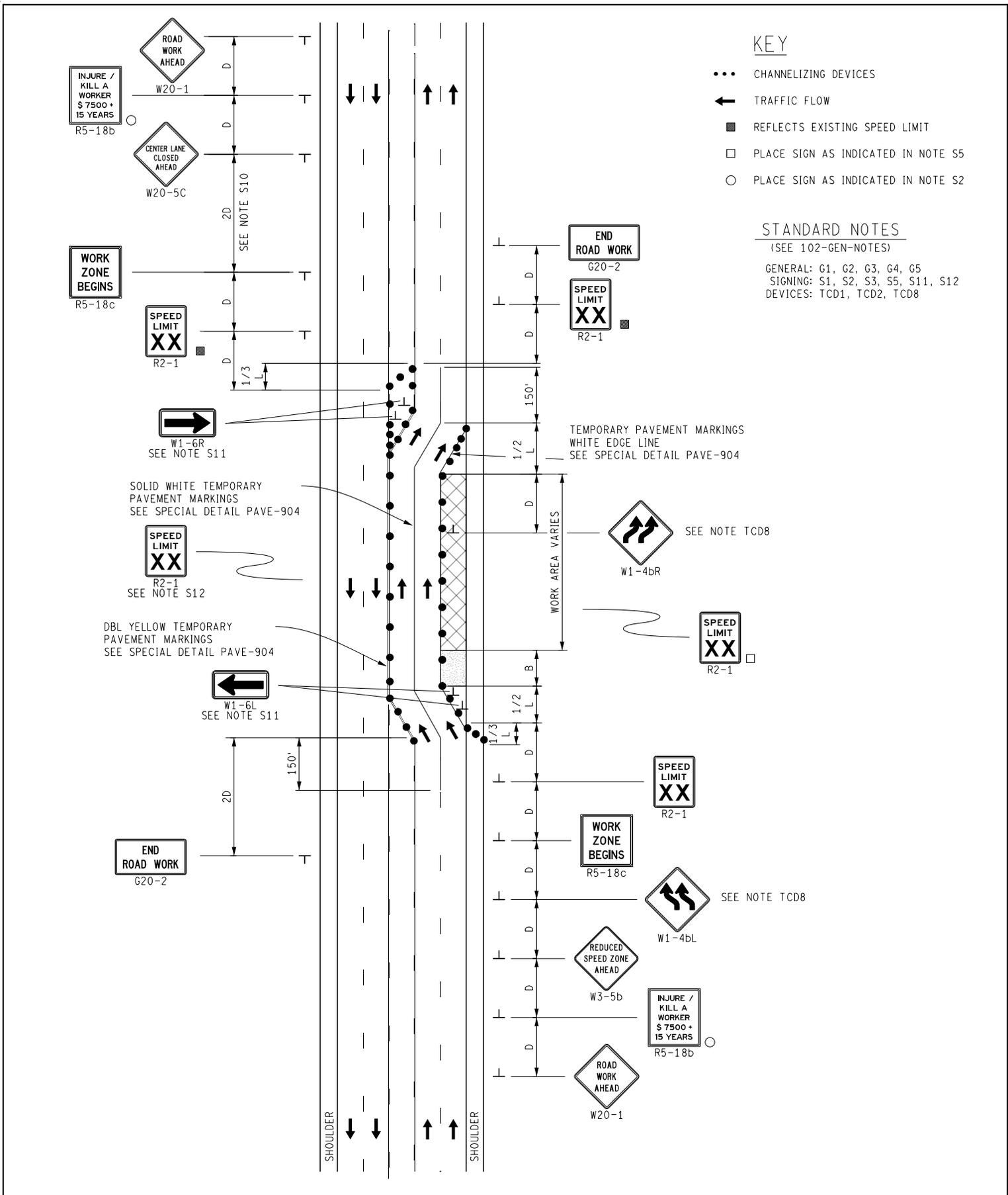
- CHANNELIZING DEVICES
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4, G5
 SIGNING: S1, S2, S3, S5, S10, S11, S12
 DEVICES: TCD1, TCD2, TCD8





	NOT TO SCALE	MAINTAINING TRAFFIC TYPICAL	DOUBLE LANE SHIFT ON A 5-LANE UNDIVIDED ROADWAY	DATE: JUNE 2021
		NO: 138-CLT-SHIFT-2(R)		SHEET: 1 OF 1

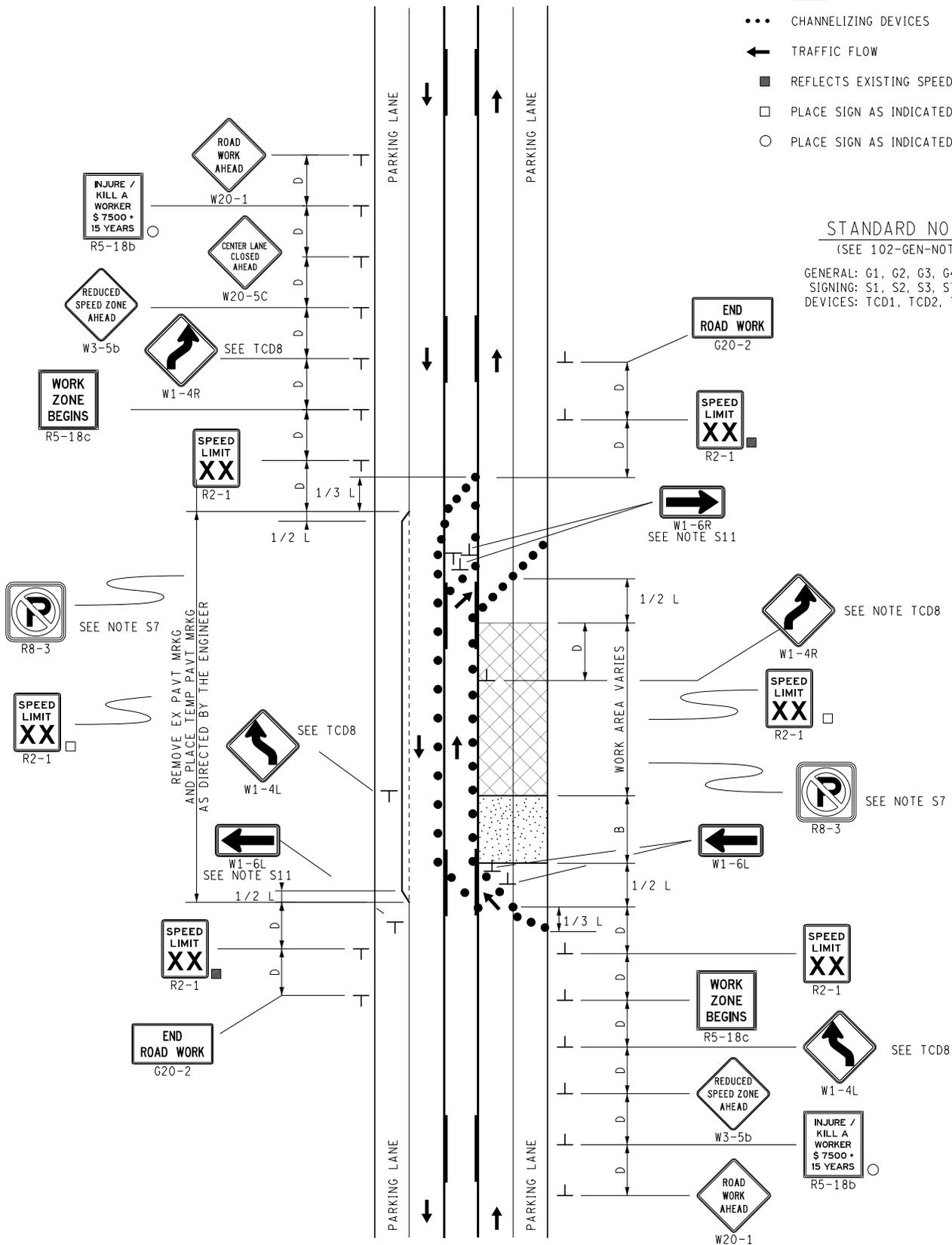
KEY

- CHANNELIZING DEVICES
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4, G5
 SIGNING: S1, S2, S3, S7, S11
 DEVICES: TCD1, TCD2, TCD6, TCD8



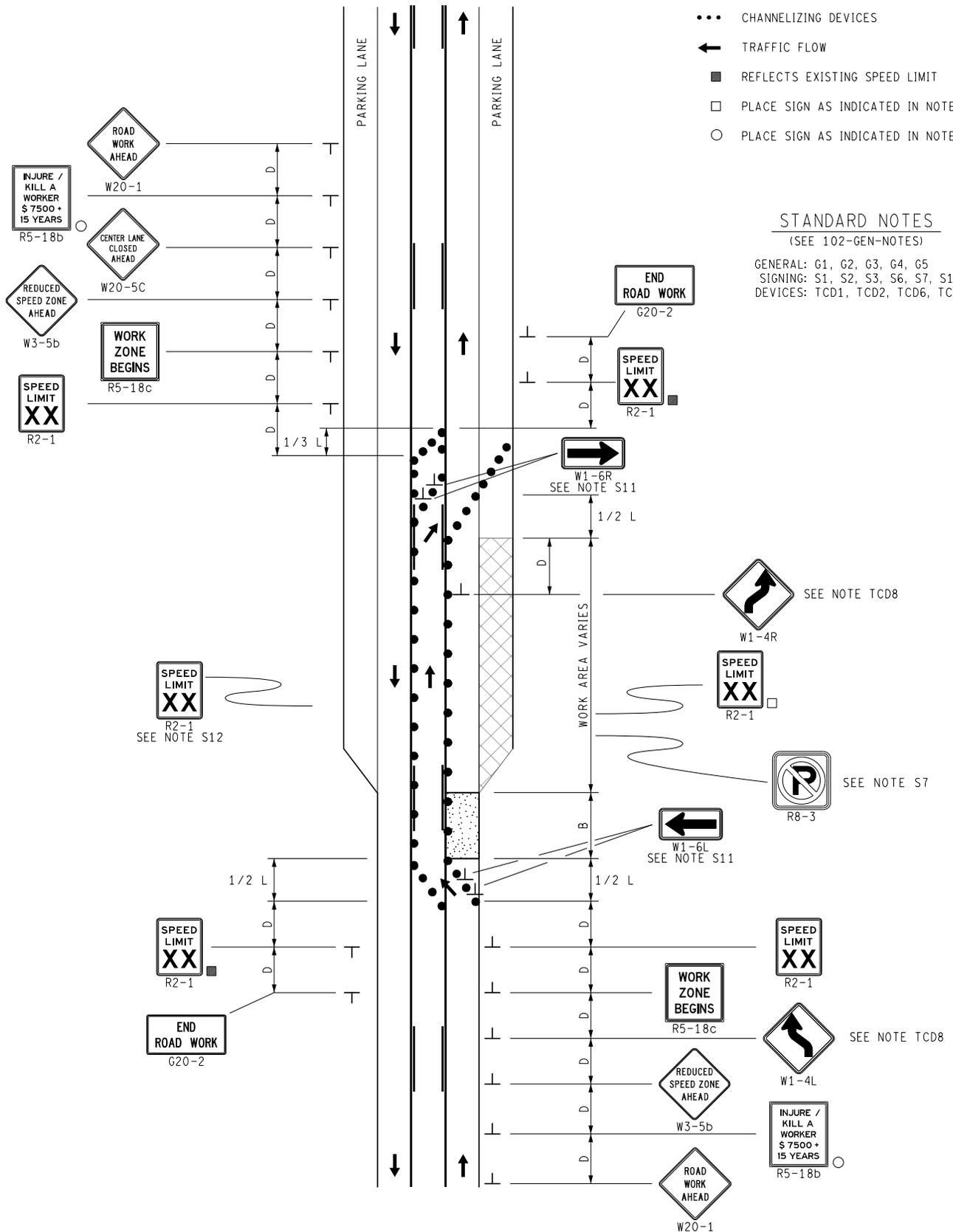
KEY

- CHANNELIZING DEVICES
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4, G5
 SIGNING: S1, S2, S3, S6, S7, S11, S12
 DEVICES: TCD1, TCD2, TCD6, TCD8



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 141-
 CLT-PARK-SHIFT

PARKING LANE CLOSURE
 WITH ONE BOUND SHIFTED
 ON AN UNDIVIDED ROADWAY

DATE: MAY 2021
 SHEET:

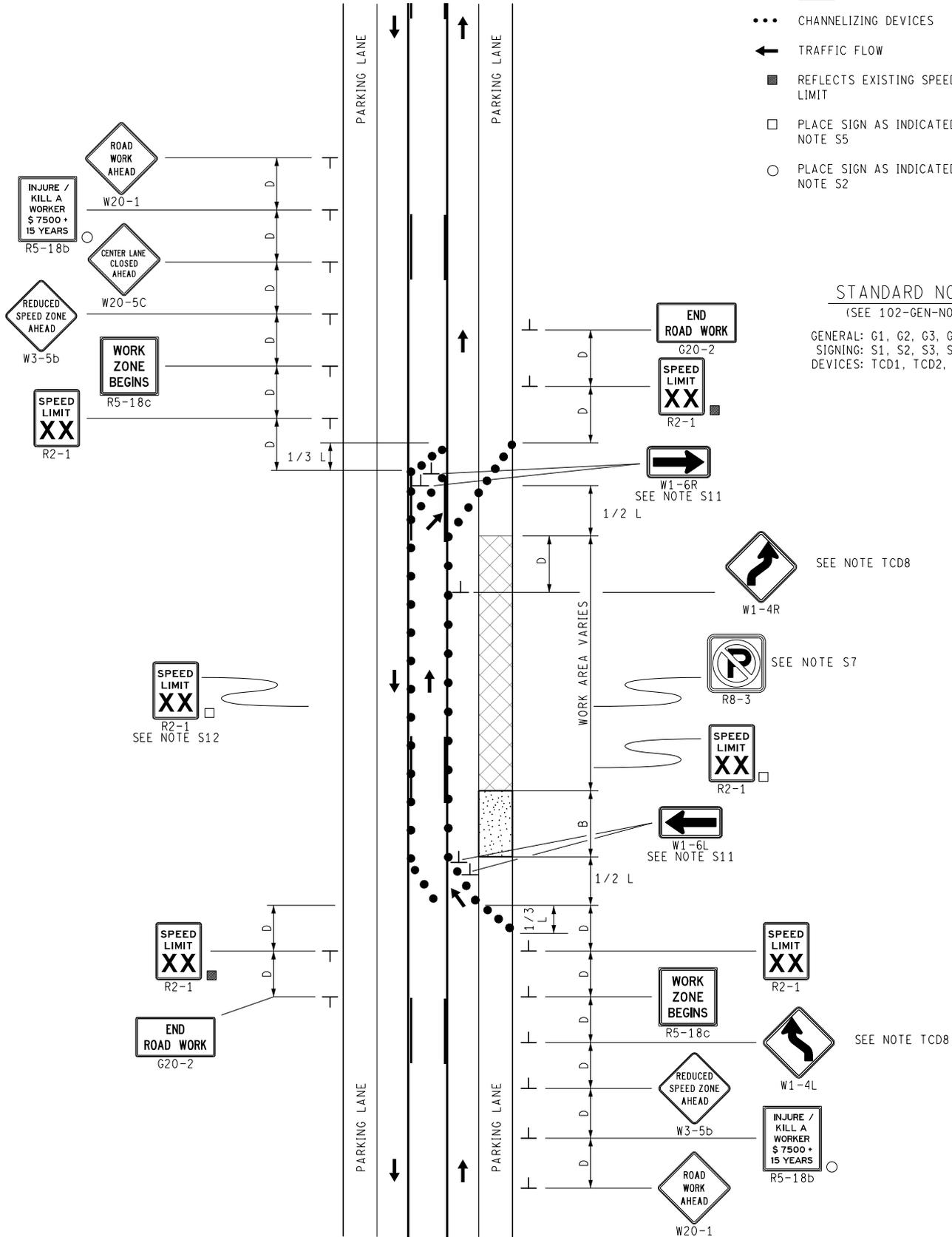
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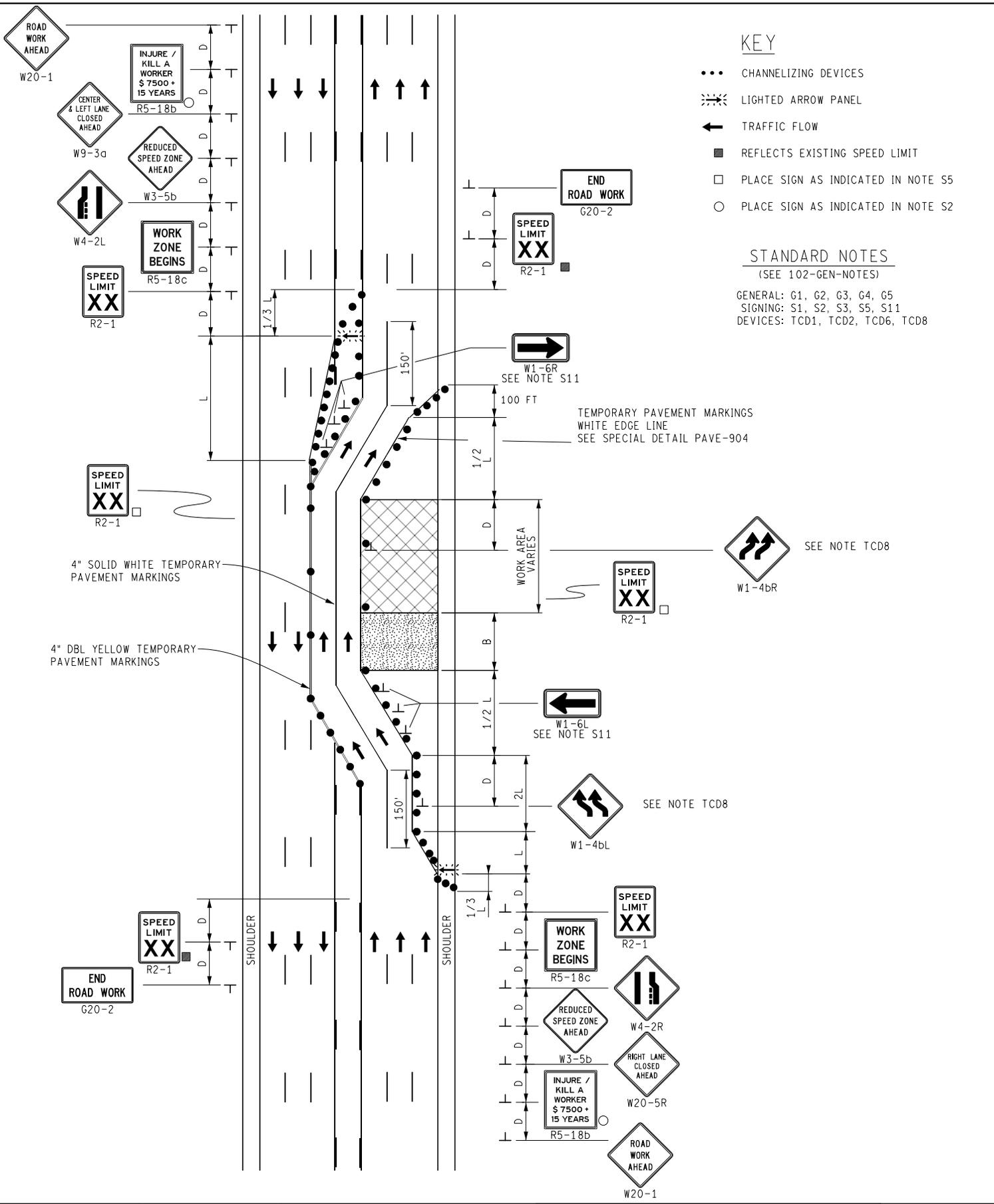
- CHANNELIZING DEVICES
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4, G5
 SIGNING: S1, S2, S3, S6, S7, S11, S12
 DEVICES: TCD1, TCD2, TCD6, TCD8





KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)
 GENERAL: G1, G2, G3, G4, G5
 SIGNING: S1, S2, S3, S5, S11
 DEVICES: TCD1, TCD2, TCD6, TCD8

	NOT TO SCALE	MAINTAINING TRAFFIC TYPICAL	2 LANE CLOSURES, LEFT AND RIGHT WITH A DOUBLE LANE SHIFT ON A 7 LANE UNDIVIDED ROADWAY	DATE: JUNE 2021
		NO: 150-CLT(7)- 2(R+L)LC-2(R)SHIFT		SHEET: 1 OF 1

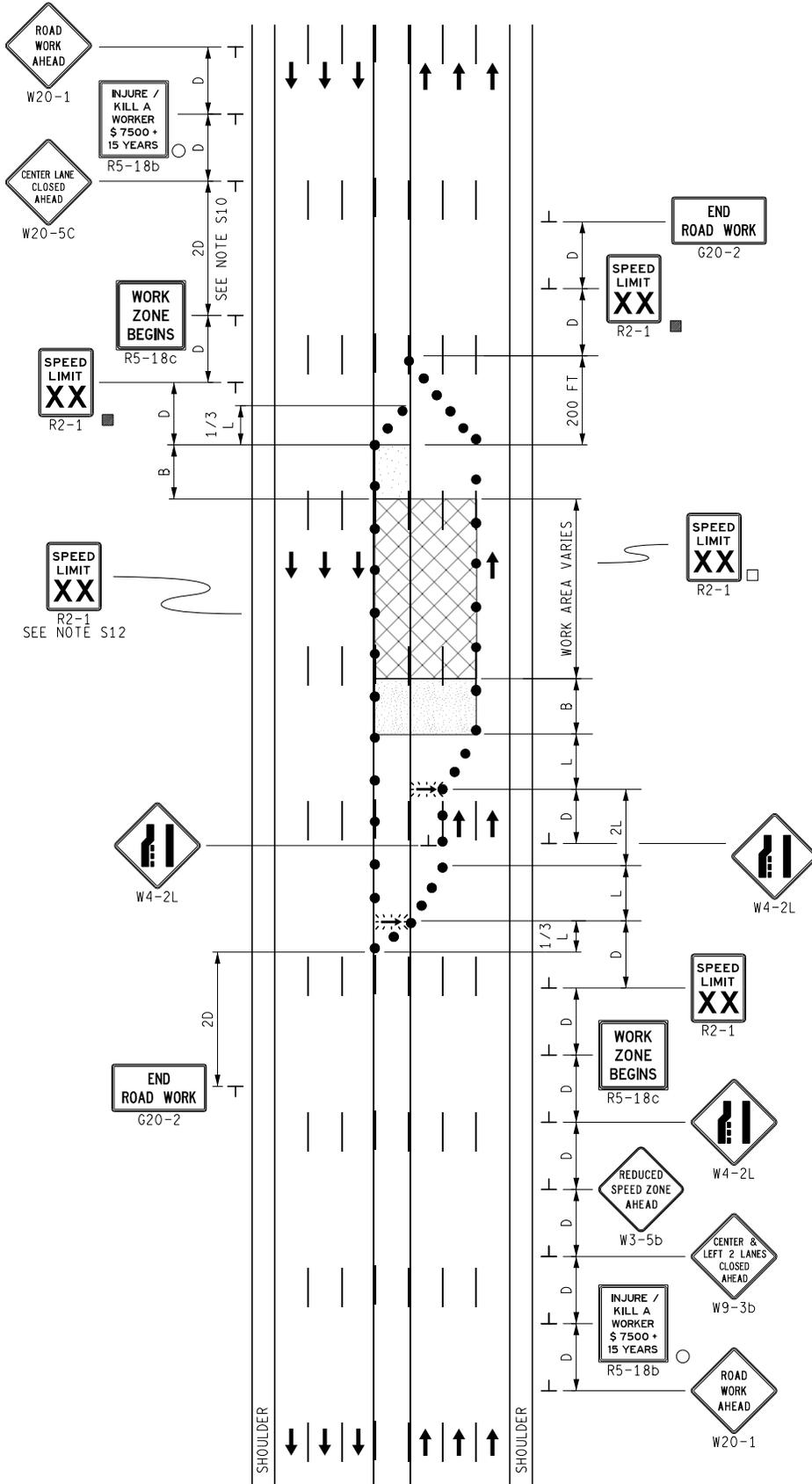
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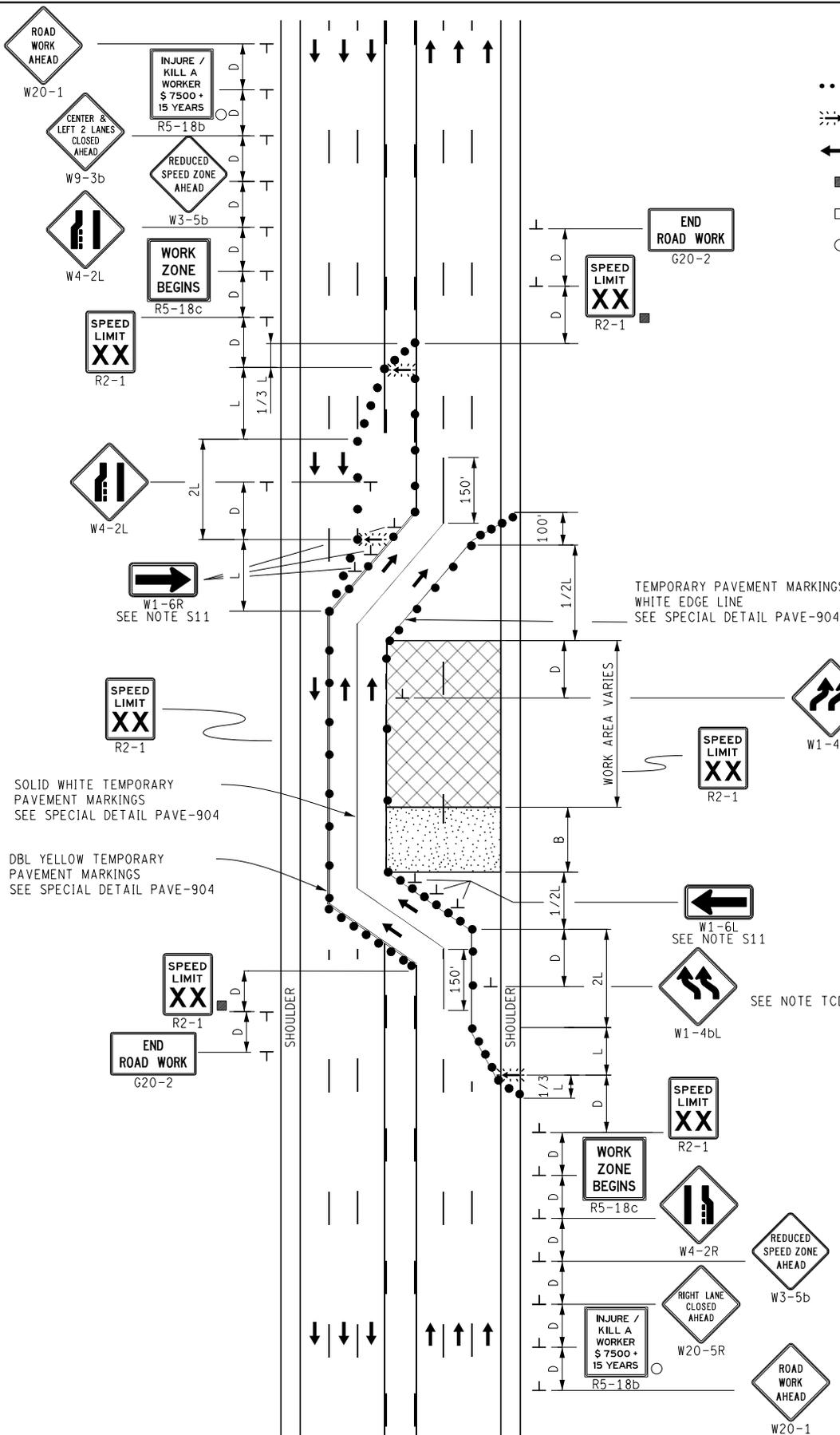
- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S10, S12
 DEVICES: TCD1, TCD2, TCD6





KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)
 GENERAL: G1, G2, G3, G4, G5
 SIGNING: S1, S2, S3, S5, S11
 DEVICES: TCD1, TCD2, TCD6, TCD8

TEMPORARY PAVEMENT MARKINGS
 WHITE EDGE LINE
 SEE SPECIAL DETAIL PAVE-904

SOLID WHITE TEMPORARY PAVEMENT MARKINGS
 SEE SPECIAL DETAIL PAVE-904

DBL YELLOW TEMPORARY PAVEMENT MARKINGS
 SEE SPECIAL DETAIL PAVE-904

SEE NOTE TCD8

SEE NOTE TCD8



NOT TO SCALE

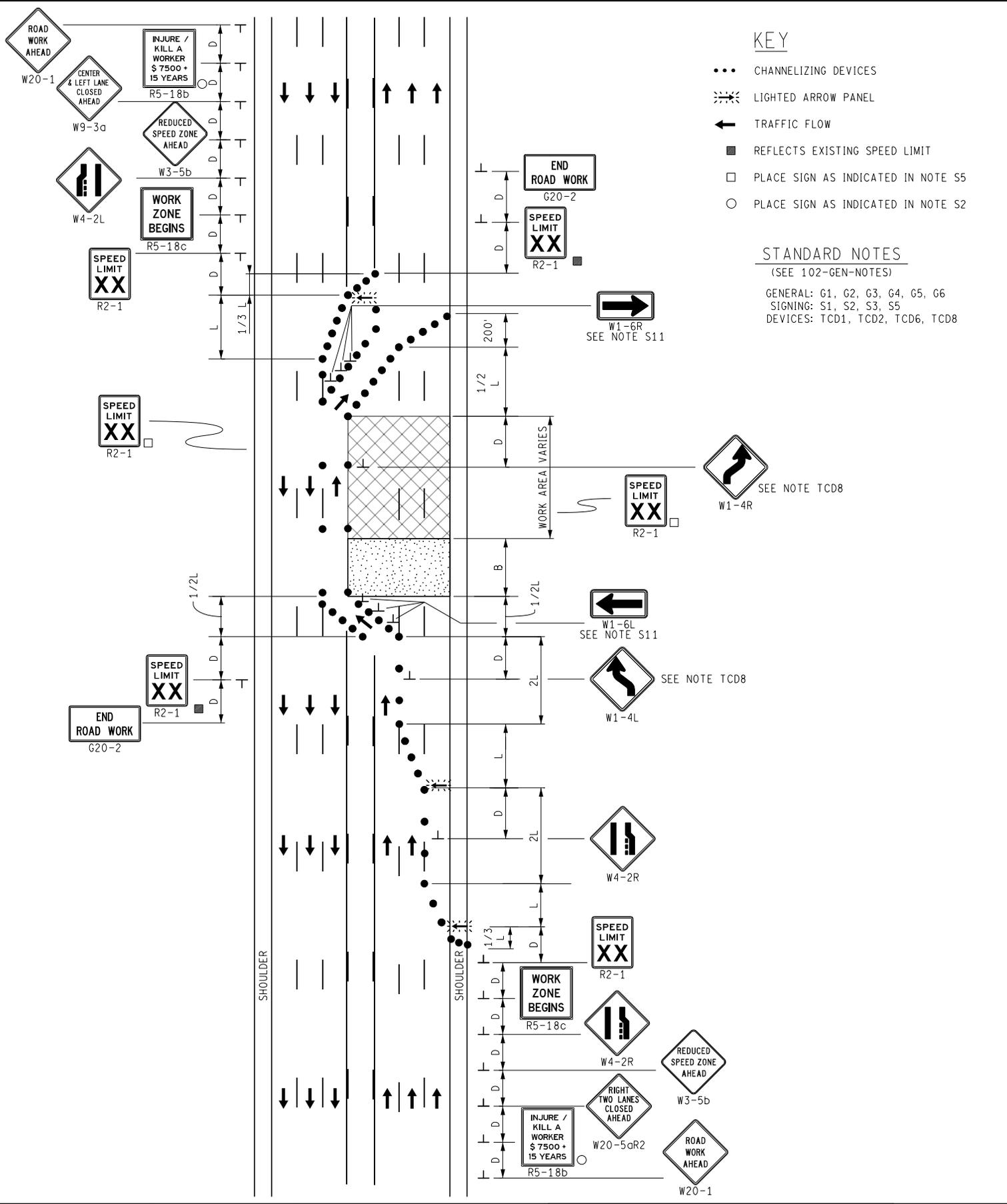
MAINTAINING TRAFFIC TYPICAL

NO: 152-CLT(7)-
 3(1R+2L)LC-2(L)SHIFT

7 LANE UNDIVIDED ROADWAY
 3 LANE CLOSURE, 1 RIGHT, 2 LEFT
 2 LANES SHIFTED LEFT

DATE: JUNE 2021

SHEET: 1 OF 1



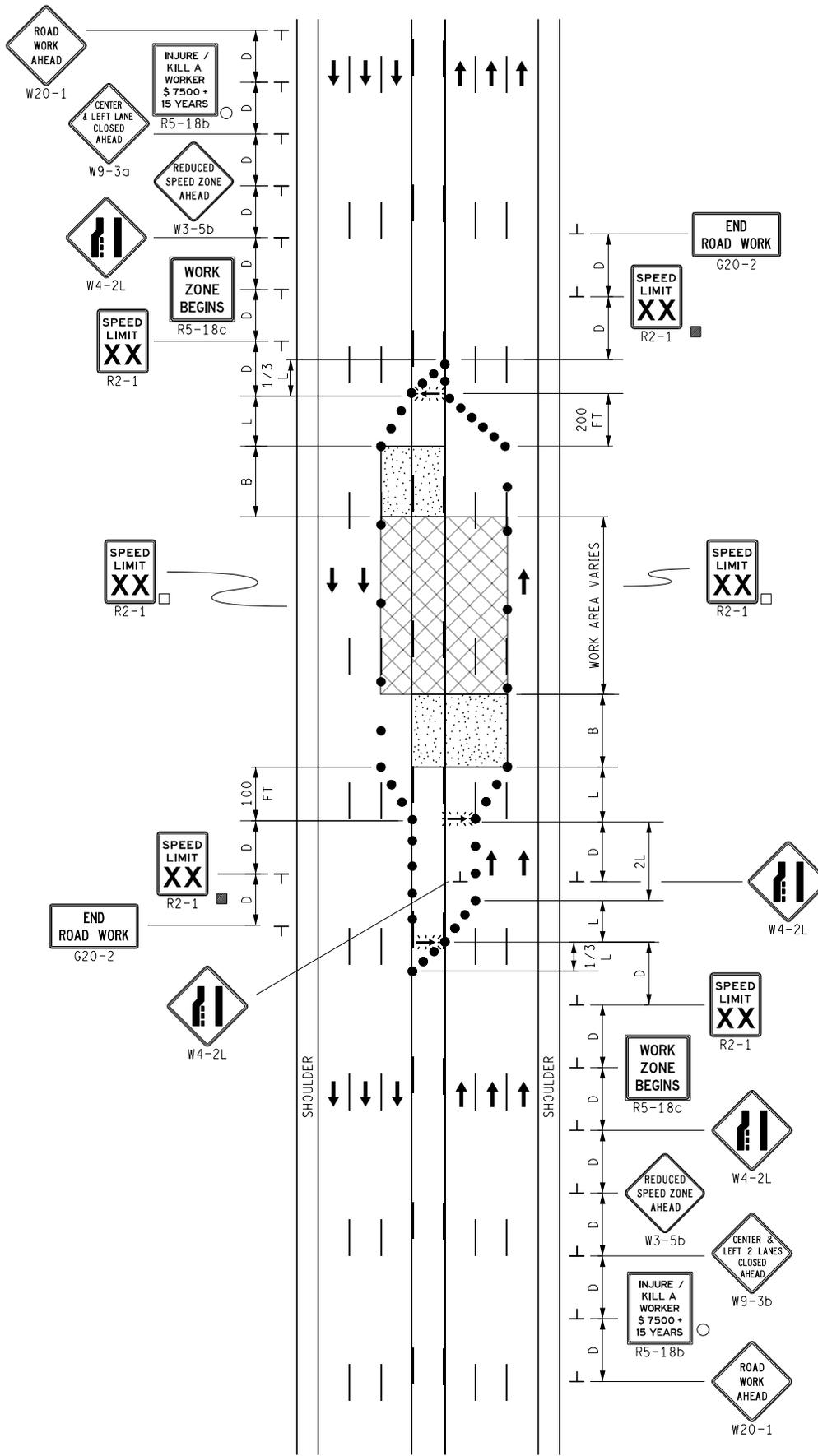
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES
(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4, G5, G6
 SIGNING: S1, S2, S3, S5
 DEVICES: TCD1, TCD2, TCD6, TCD8

	NOT TO SCALE	MAINTAINING TRAFFIC TYPICAL	7 LANE UNDIVIDED ROADWAY 3 LANE CLOSURE, 2 RIGHT, 1 LEFT 1 LANE SHIFTED LEFT	DATE: JUNE 2021
		NO: 153-CLT(7)- 3(2R+1L)LC-1(L)SHIFT		SHEET: 1 OF 1



KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5
 DEVICES: TCD1, TCD2, TCD6



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 154-
 CLT(7)-3(L)LC-(IN)

7 LANE UNDIVIDED ROADWAY
 3 LEFT LANE CLOSURES, INSIDE

DATE: MAY 2021

SHEET:

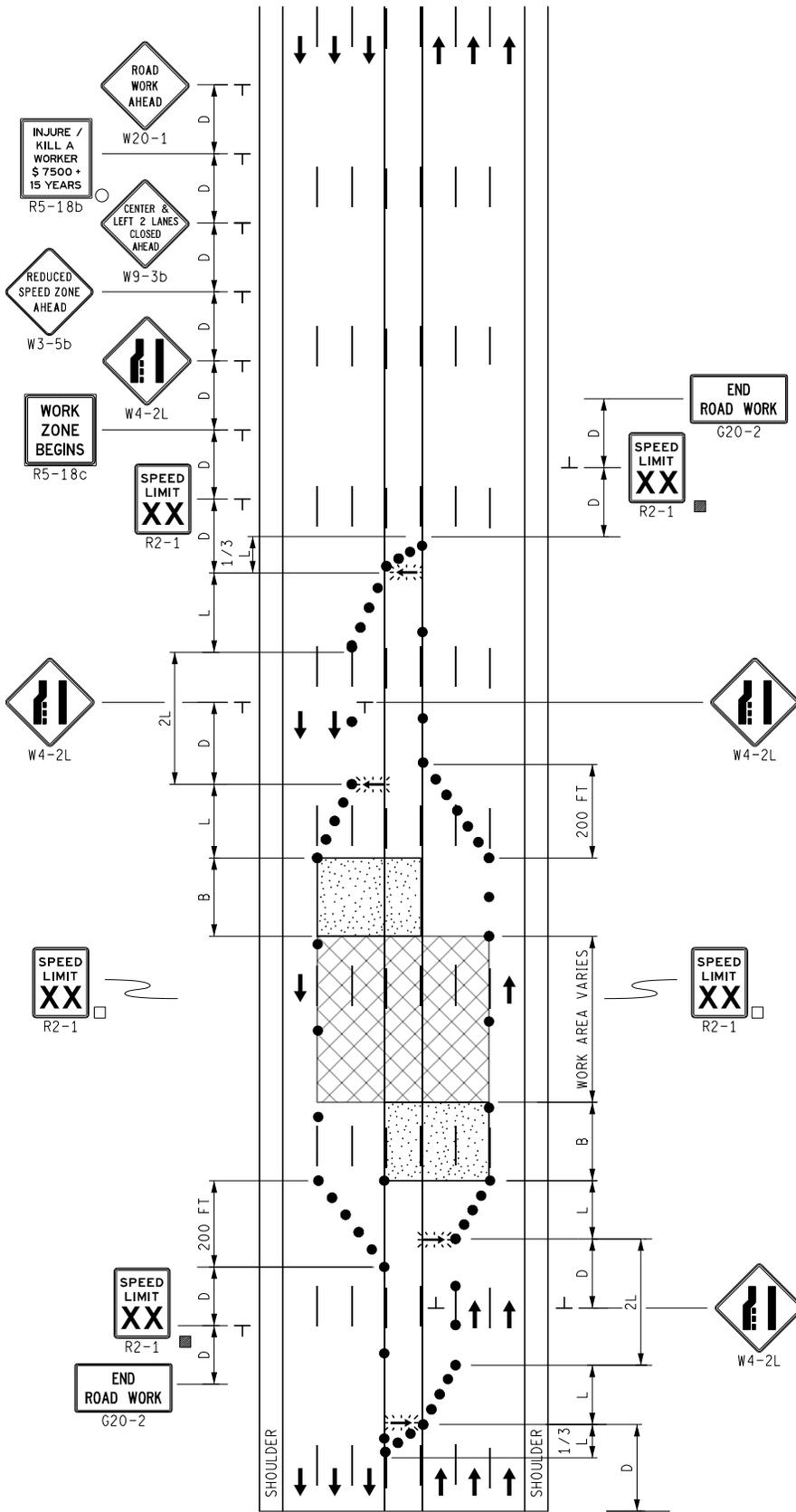
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5
 DEVICES: TCD1, TCD2, TCD6



A MATCH A



NOT TO SCALE

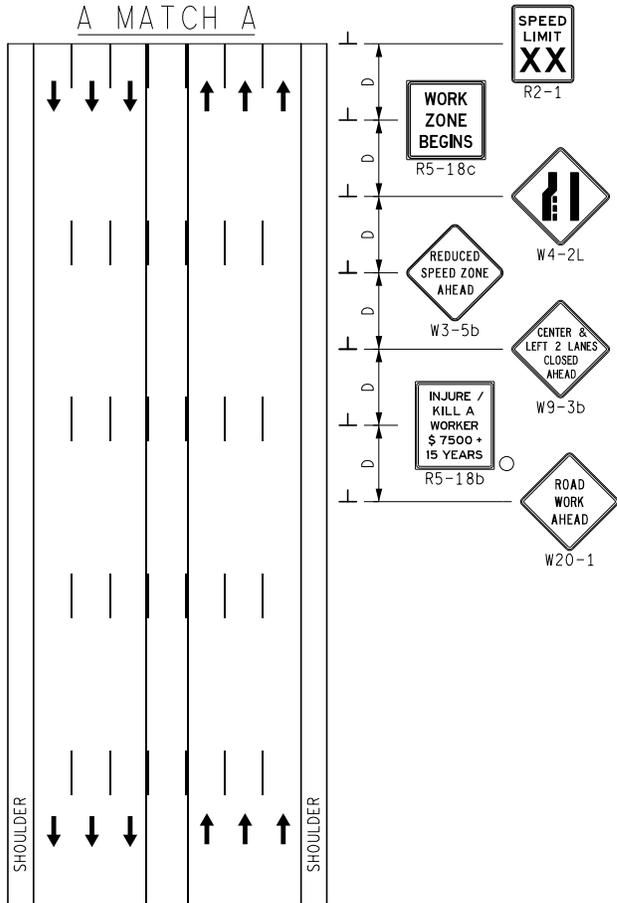
MAINTAINING TRAFFIC TYPICAL

NO: 155-
 CLT(7)-4(L)LC-(IN)

7 LANE UNDIVIDED ROADWAY
 4 LEFT LANE CLOSURE, INSIDE

DATE: MAY 2021
 SHEET:

A MATCH A



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 155-
CLT(7)-4(L)LC-(IN)

7 LANE UNDIVIDED ROADWAY
4 LEFT LANE CLOSURE, INSIDE

DATE: MAY 2021

SHEET:

2 OF 2

STANDARD NOTES

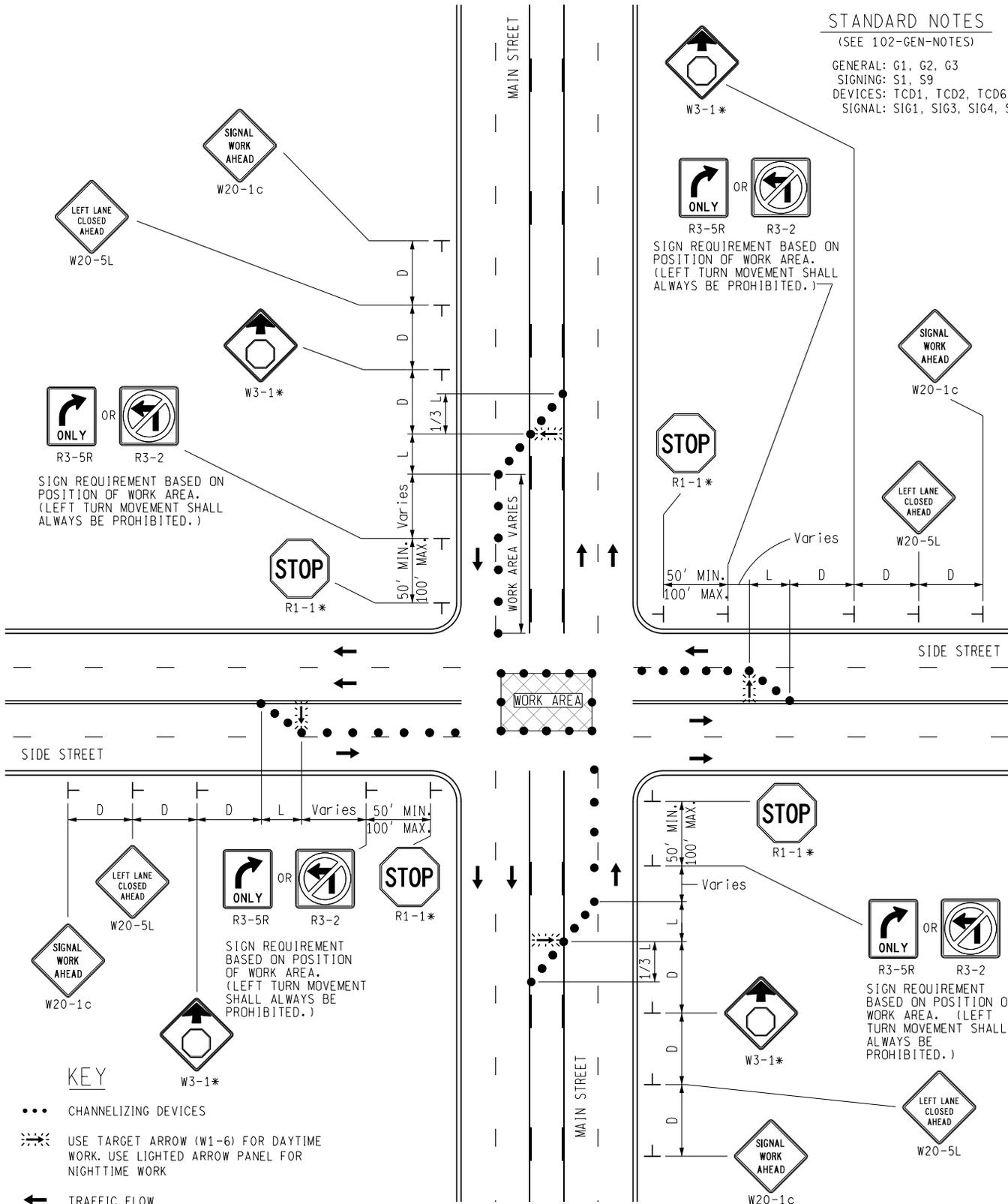
(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3

SIGNING: S1, S9

DEVICES: TCD1, TCD2, TCD6

SIGNAL: SIG1, SIG3, SIG4, SIG5



SIGN REQUIREMENT BASED ON POSITION OF WORK AREA. (LEFT TURN MOVEMENT SHALL ALWAYS BE PROHIBITED.)

SIGN REQUIREMENT BASED ON POSITION OF WORK AREA. (LEFT TURN MOVEMENT SHALL ALWAYS BE PROHIBITED.)

SIGN REQUIREMENT BASED ON POSITION OF WORK AREA. (LEFT TURN MOVEMENT SHALL ALWAYS BE PROHIBITED.)

SIGN REQUIREMENT BASED ON POSITION OF WORK AREA. (LEFT TURN MOVEMENT SHALL ALWAYS BE PROHIBITED.)

KEY

- CHANNELIZING DEVICES
- ➔ USE TARGET ARROW (W1-6) FOR DAYTIME WORK. USE LIGHTED ARROW PANEL FOR NIGHTTIME WORK
- ← TRAFFIC FLOW
- * SEE NOTE S9



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 160-INT-LD-CLT-MID

**SIGNAL WORK AT INTERSECTION
LONGER THAN 1 HOUR
ON A 5-LANE UNDIVIDED ROADWAY**

DATE: MAY 2021
SHEET:

KEY

- CHANNELIZING DEVICES
- ⚡ ARROW PANEL
- ← TRAFFIC FLOW
-  WORK VEHICLE WITH FLASHING OR ROTATING LIGHTS

STANDARD NOTES

(SEE 102-GEN-NOTES)

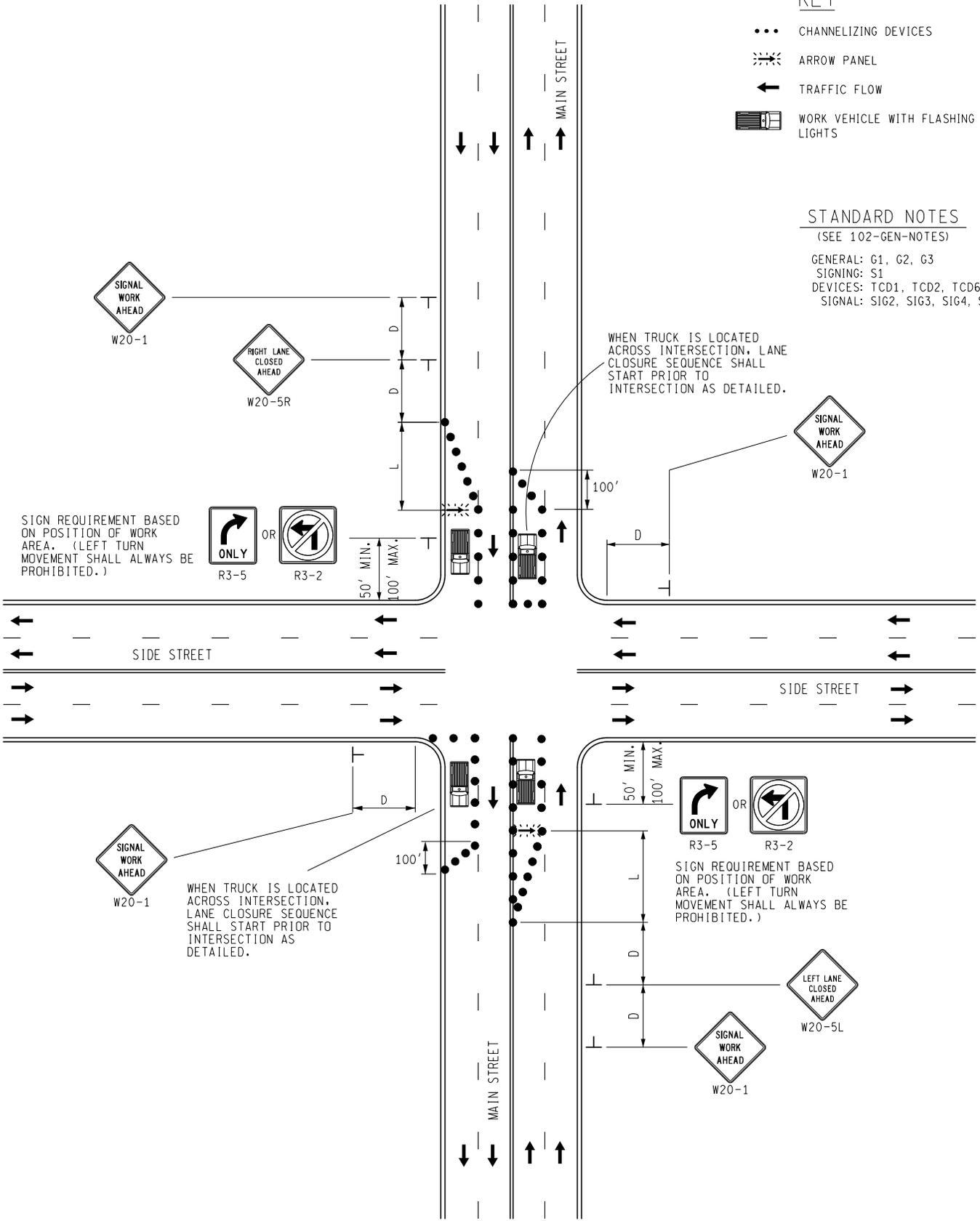
GENERAL: G1, G2, G3

SIGNING: S1

DEVICES: TCD1, TCD2, TCD6

SIGNAL: SIG2, SIG3, SIG4, SIG5

WHEN TRUCK IS LOCATED ACROSS INTERSECTION, LANE CLOSURE SEQUENCE SHALL START PRIOR TO INTERSECTION AS DETAILED.



WHEN TRUCK IS LOCATED ACROSS INTERSECTION, LANE CLOSURE SEQUENCE SHALL START PRIOR TO INTERSECTION AS DETAILED.

SIGN REQUIREMENT BASED ON POSITION OF WORK AREA. (LEFT TURN MOVEMENT SHALL ALWAYS BE PROHIBITED.)

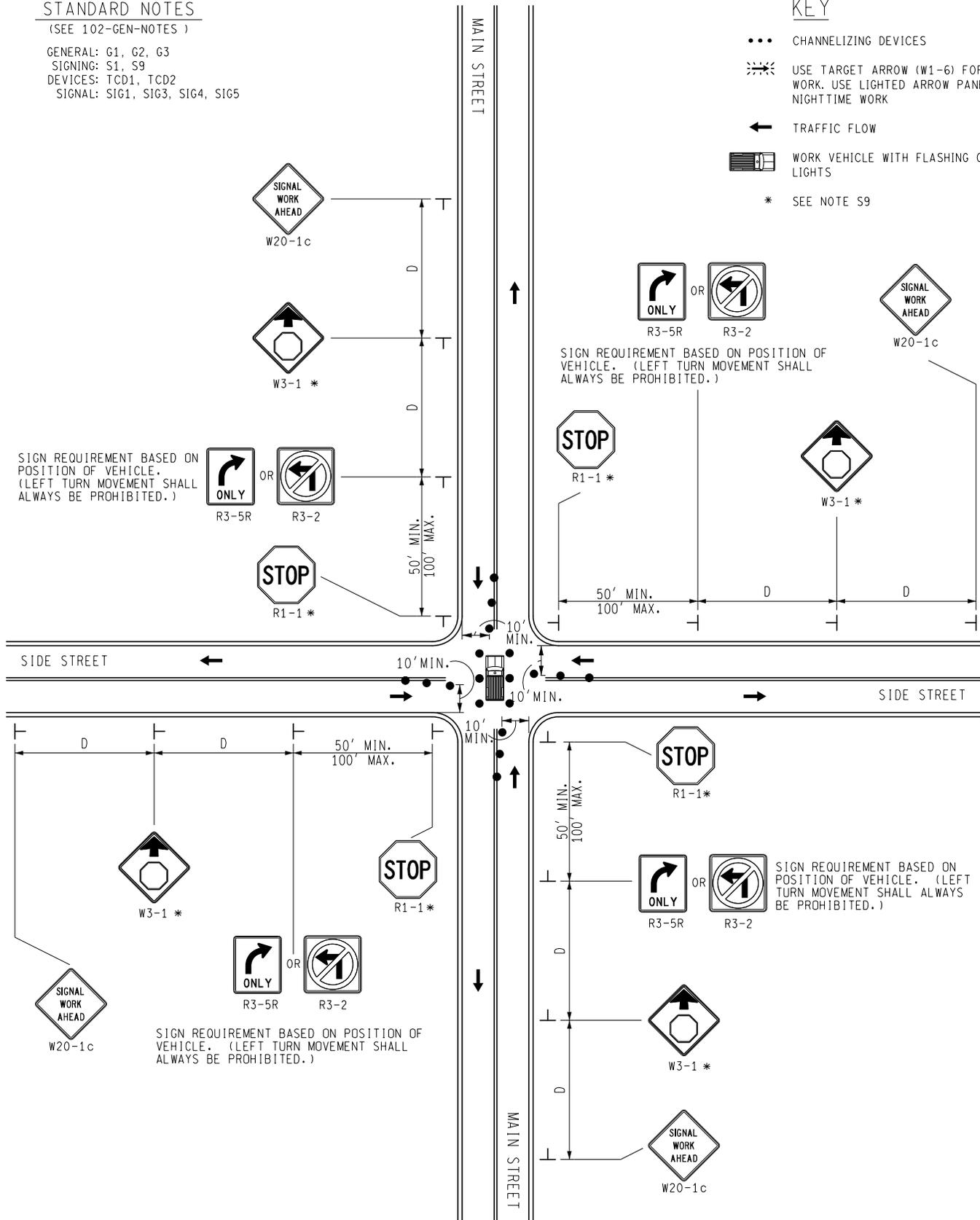
STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3
 SIGNING: S1, S9
 DEVICES: TCD1, TCD2
 SIGNAL: SIG1, SIG3, SIG4, SIG5

KEY

- CHANNELIZING DEVICES
- USE TARGET ARROW (W1-6) FOR DAYTIME WORK. USE LIGHTED ARROW PANEL FOR NIGHTTIME WORK
- TRAFFIC FLOW
- WORK VEHICLE WITH FLASHING OR ROTATING LIGHTS
- * SEE NOTE S9



SIGN REQUIREMENT BASED ON POSITION OF VEHICLE. (LEFT TURN MOVEMENT SHALL ALWAYS BE PROHIBITED.)

SIGN REQUIREMENT BASED ON POSITION OF VEHICLE. (LEFT TURN MOVEMENT SHALL ALWAYS BE PROHIBITED.)

SIGN REQUIREMENT BASED ON POSITION OF VEHICLE. (LEFT TURN MOVEMENT SHALL ALWAYS BE PROHIBITED.)

SIGN REQUIREMENT BASED ON POSITION OF VEHICLE. (LEFT TURN MOVEMENT SHALL ALWAYS BE PROHIBITED.)



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 162-INT-LD-MID

**SIGNAL WORK AT INTERSECTION
 LONGER THAN 1 HOUR
 ON A 2-LANE UNDIVIDED ROADWAY
 MIDDLE OF INTERSECTION**

DATE: MAY 2021

SHEET:

1 OF 1

KEY

← TRAFFIC FLOW



WORK VEHICLE WITH FLASHING OR ROTATING LIGHTS



SIGN IS ONLY REQUIRED IN ADVANCE OF WHERE WORK EQUIPMENT IS LOCATED OR WHERE WORK IS TAKING PLACE

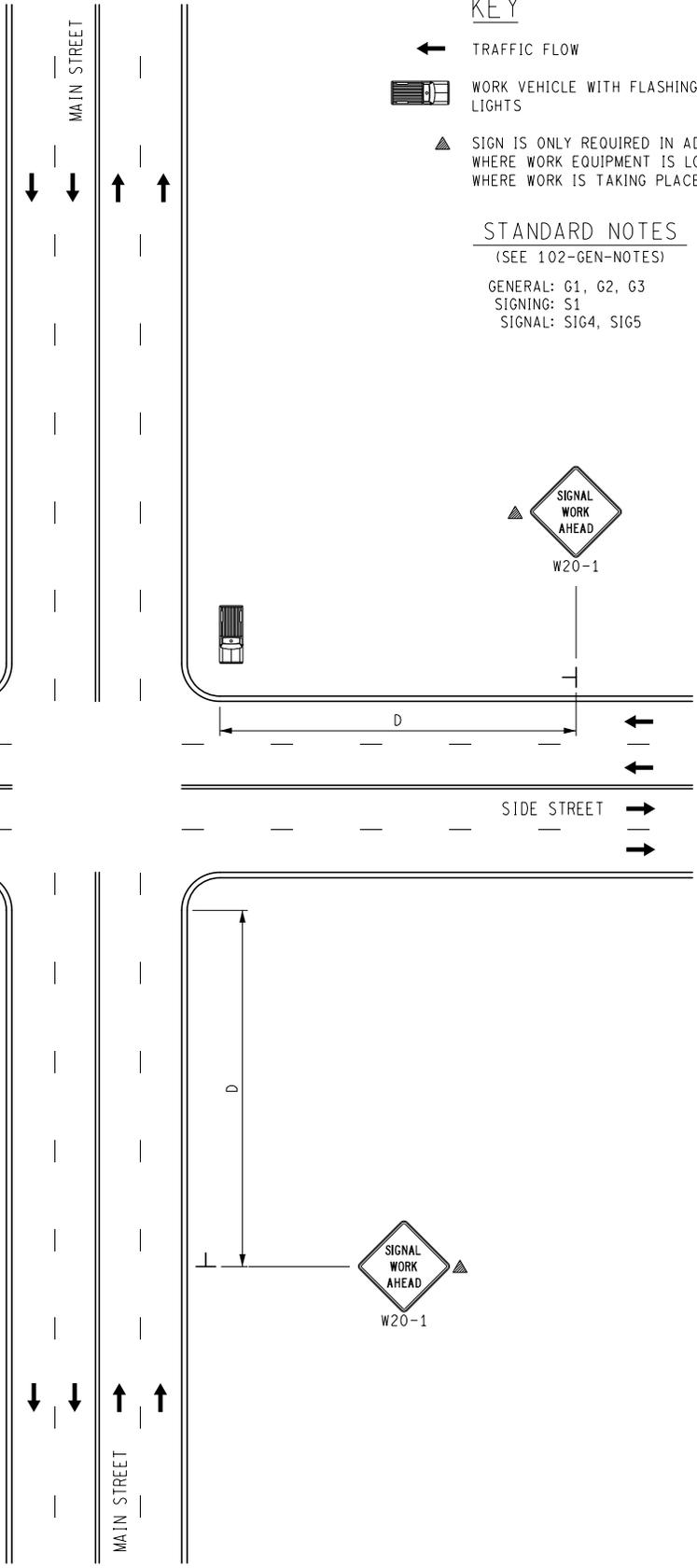
STANDARD NOTES

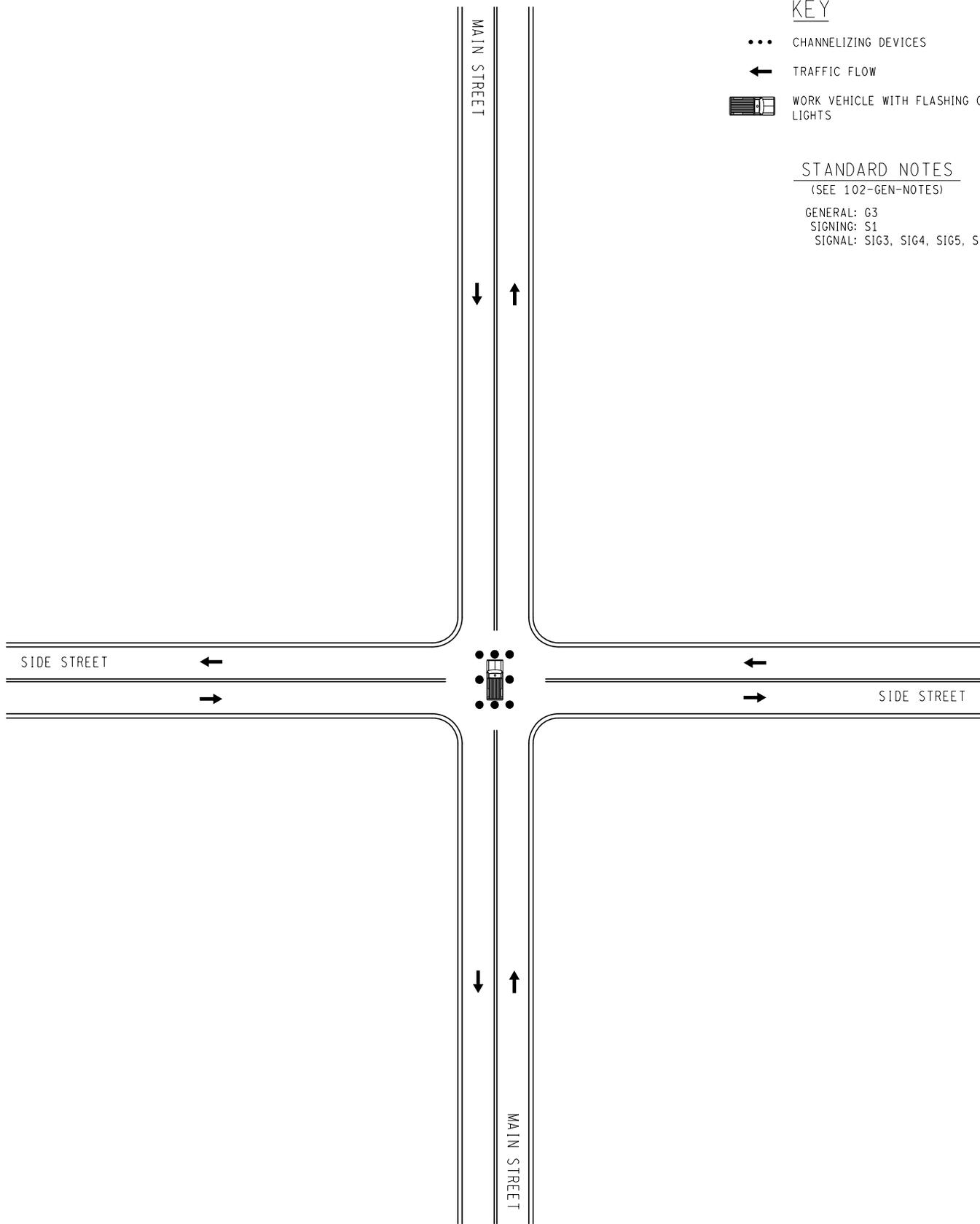
(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3

SIGNING: S1

SIGNAL: SIG4, SIG5





KEY

- CHANNELIZING DEVICES
- ← TRAFFIC FLOW
-  WORK VEHICLE WITH FLASHING OR ROTATING LIGHTS

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G3
 SIGNING: S1
 SIGNAL: SIG3, SIG4, SIG5, SIG6

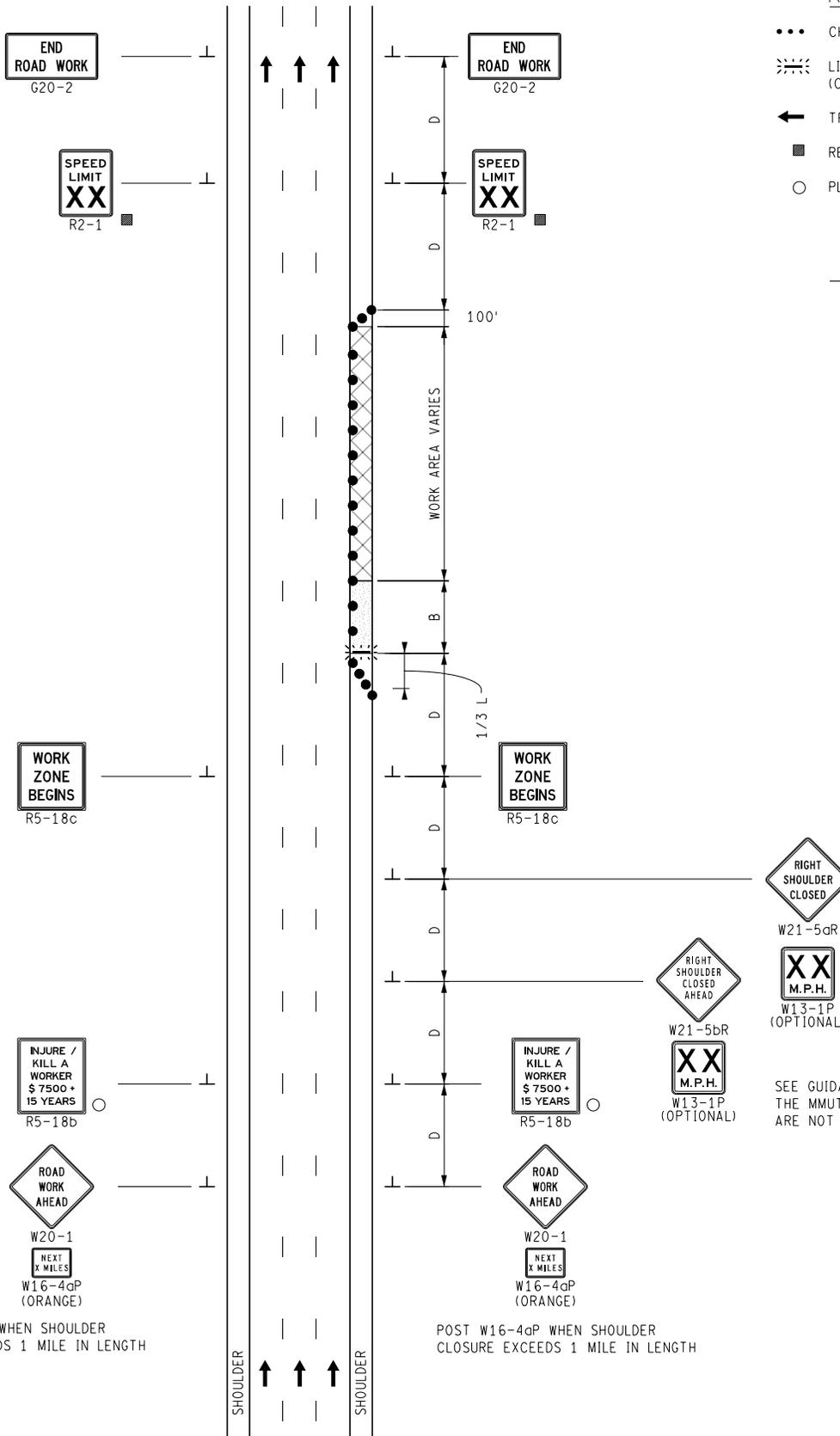
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL (CAUTION MODE)
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S2.

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S3, S5
 DEVICES: TCD1, TCD2, TCD6



SEE GUIDANCE NOTE 03 IN SECTION 66.07 OF THE MMUTCD FOR WHY THE SIGNS ON THE LEFT ARE NOT NEEDED

KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL (CAUTION MODE)
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S2.

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S3, S5
 DEVICES: TCD1, TCD2, TCD6

SEE GUIDANCE NOTE 03 IN SECTION 6G.07 OF THE MMUTCD FOR WHY THE SIGNS ON THE RIGHT ARE NOT NEEDED



W21-5aL



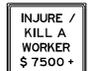
W13-1P (OPTIONAL)



W21-5bL



W13-1P (OPTIONAL)



R5-18b

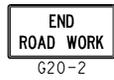


W20-1



W16-4aP (ORANGE)

POST W16-4aP WHEN SHOULDER CLOSURE EXCEEDS 1 MILE IN LENGTH



G20-2



R2-1



G20-2



R2-1



R5-18c



R5-18c

100'

WORK AREA VARIES

B

1/3 L

SHOULDER

SHOULDER

KEY

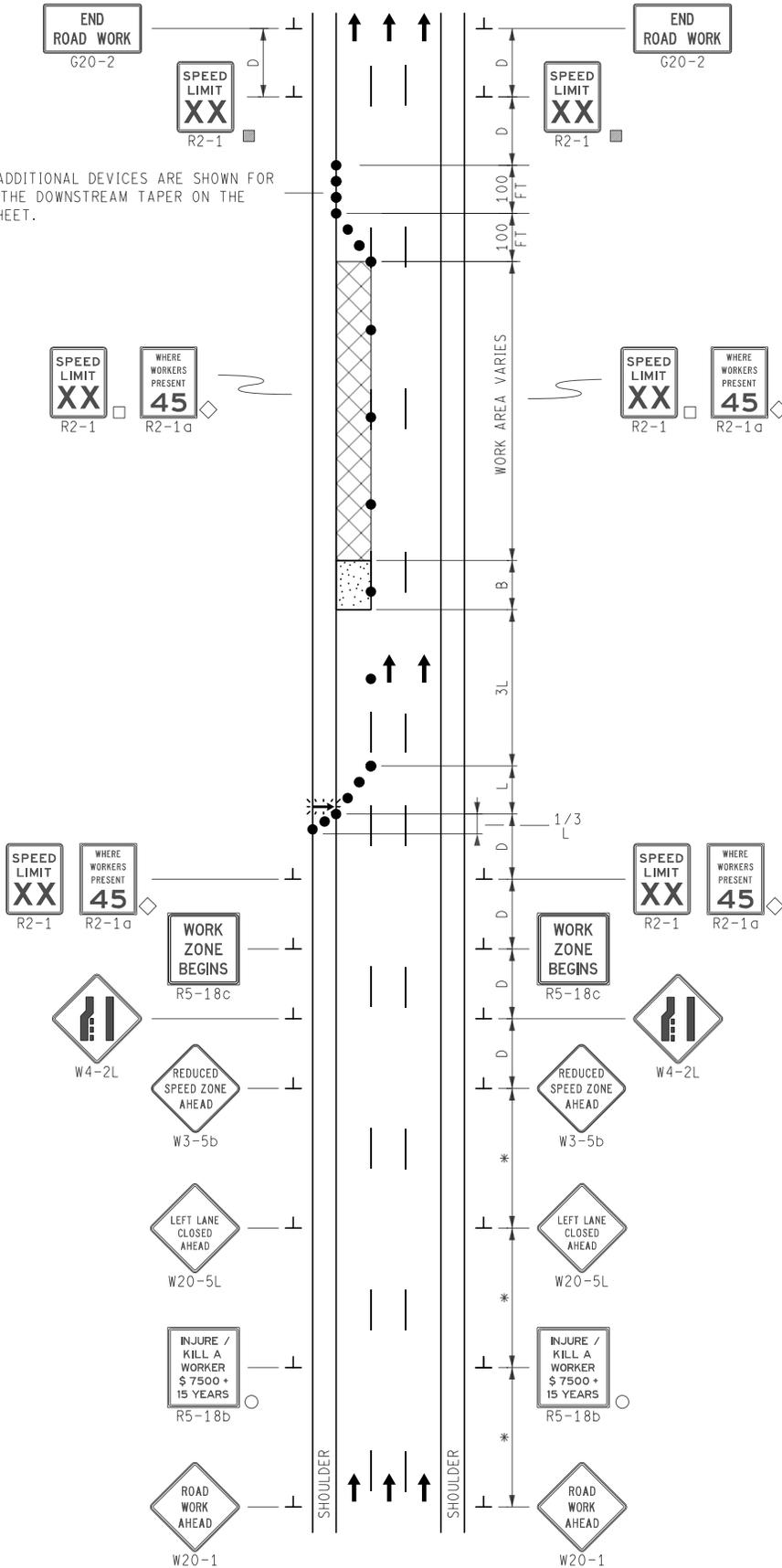
- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL
- * PLACE SIGNS AT A SPACING OF D ON DIVIDED ROADWAYS AND 2D ON FREEWAYS

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S8
 DEVICES: TCD1, TCD2, TCD6

THESE ADDITIONAL DEVICES ARE SHOWN FOR USE IN THE DOWNSTREAM TAPER ON THE NEXT SHEET.



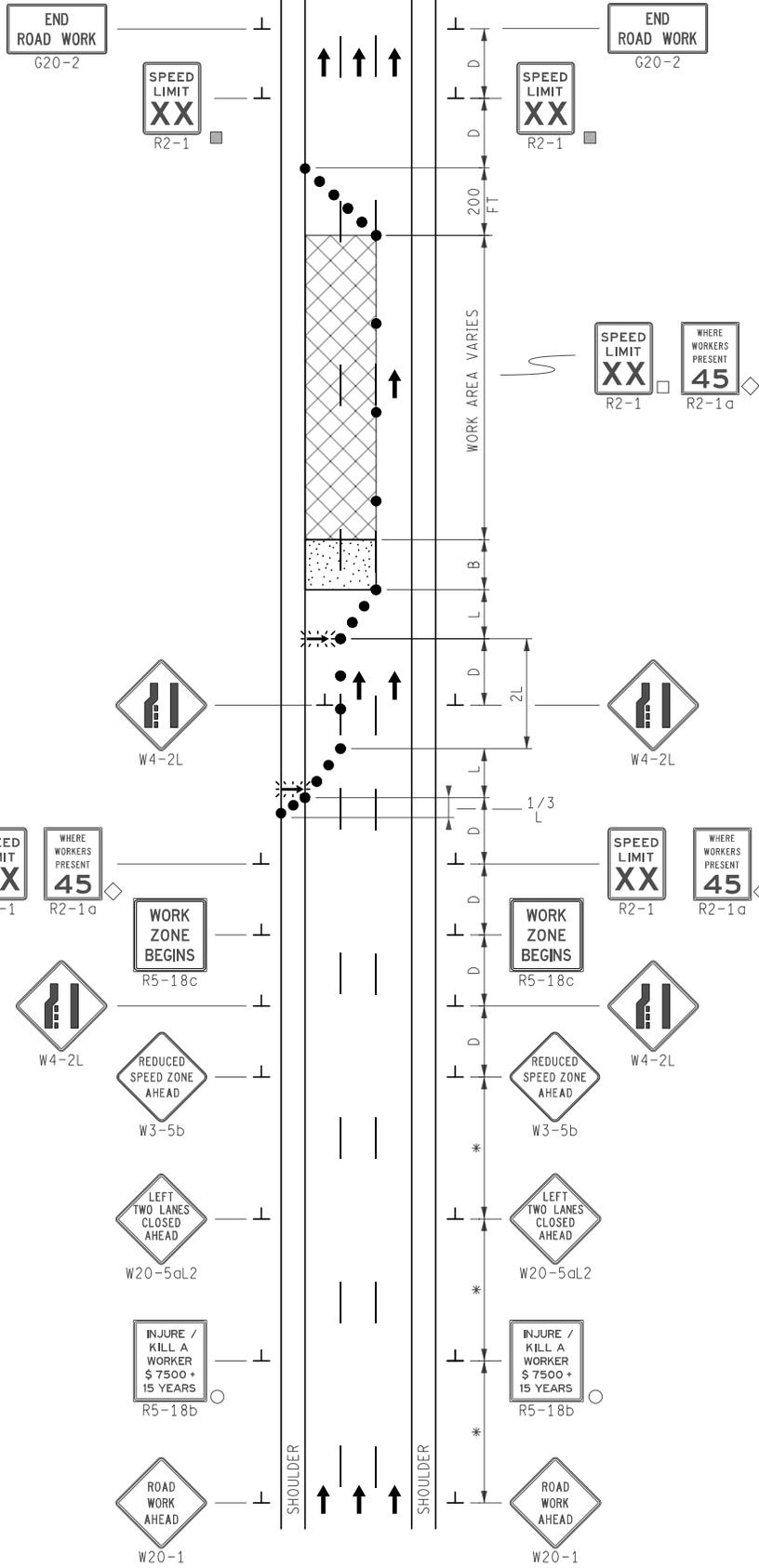
NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO:
 202-FW-(1-2)LC-(L)

1-LANE TO 2-LANE CLOSURE
 ON A 3-LANE FREEWAY
 OR DIVIDED ROADWAY

DATE:
 DECEMBER 2021
 SHEET:



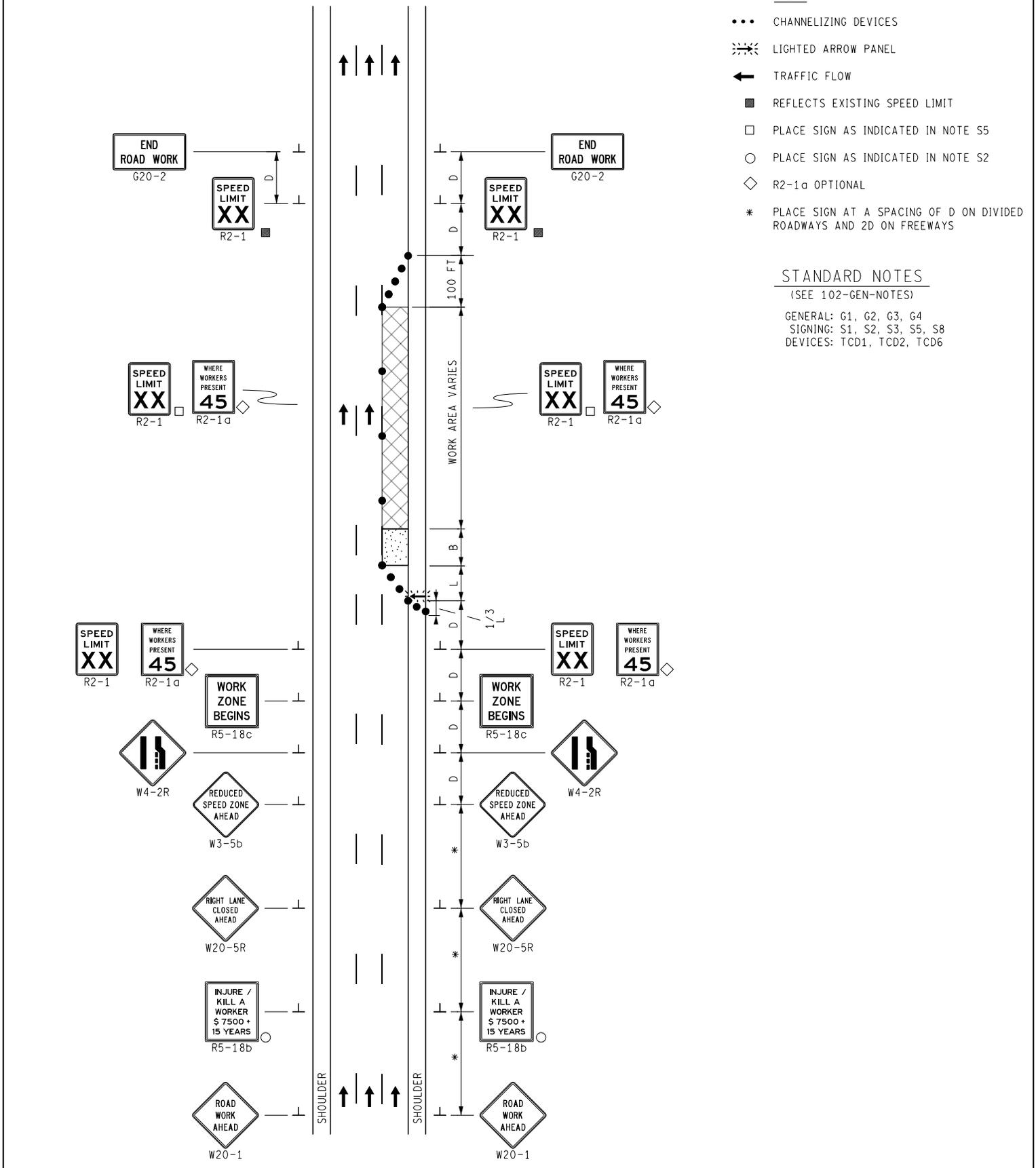
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL
- * PLACE SIGN AT A SPACING OF D ON DIVIDED ROADWAYS AND 2D ON FREEWAYS

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S8
 DEVICES: TCD1, TCD2, TCD6



	NOT TO SCALE	MAINTAINING TRAFFIC TYPICAL	SINGLE RIGHT LANE CLOSURE ON A FREEWAY OR DIVIDED ROADWAY	DATE: MAY 2021
		NO: 203-FW-1LC-(R)		SHEET:
FILE: 203-FW-1LC-(R).dgn			1 OF 1	

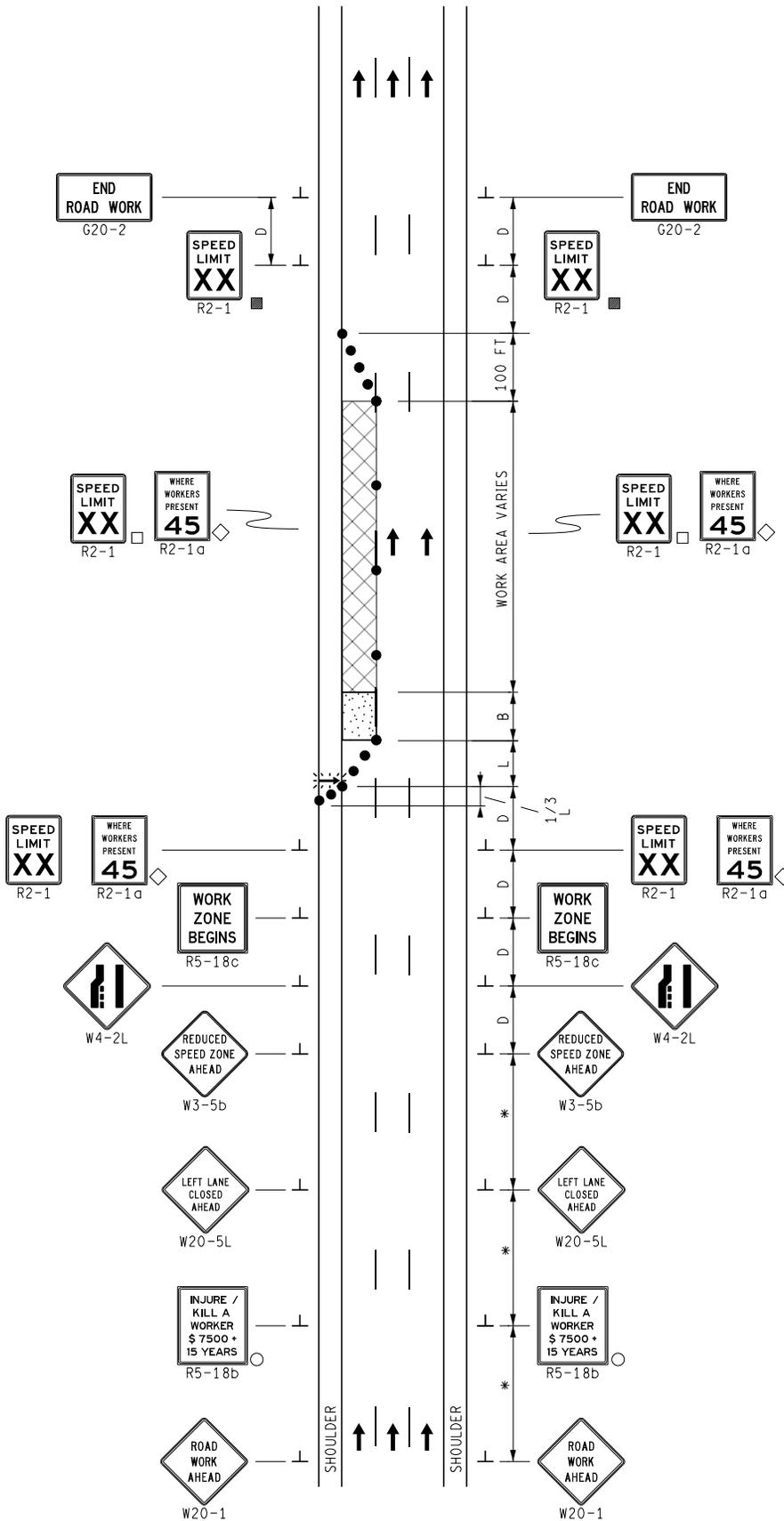
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL
- * PLACE SIGN AT A SPACING OF D ON DIVIDED ROADWAYS AND 2D ON FREEWAYS

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S8
 DEVICES: TCD1, TCD2, TCD6



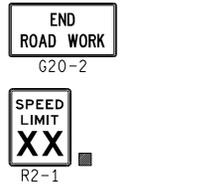
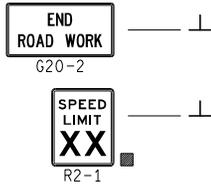
NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 204-FW-1LC-(L)

SINGLE LEFT LANE CLOSURE
 ON A FREEWAY
 OR DIVIDED ROADWAY

DATE: MAY 2021
 SHEET:



KEY

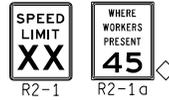
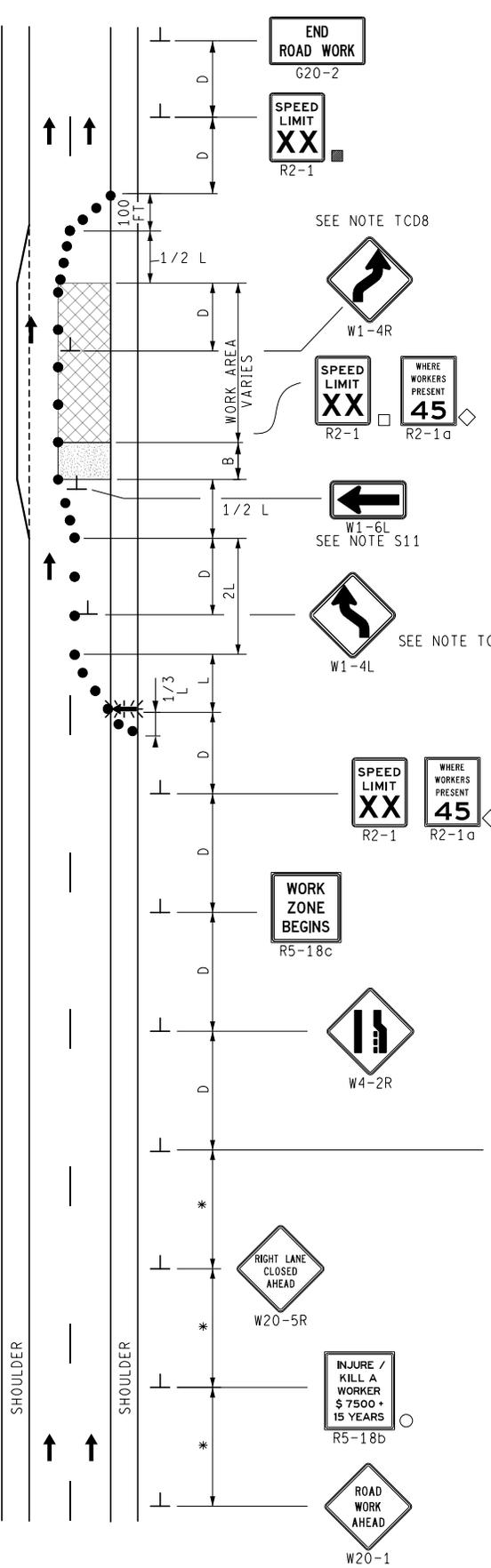
- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL
- * PLACE SIGNS AT A SPACING OF D ON DIVIDED ROADWAYS AND 2D ON FREEWAYS

REMOVE EX PAVT MRKG AND PLACE TEMP PAVT MRKG AS DIRECTED BY THE ENGINEER

CHANNELEZING DEVICES ARE NOT REQUIRED ON THE LEFT SIDE OF THE TRAVEL LANE, WHEN TEMPORARY PAVEMENT MARKINGS ARE USED TO DELINEATE THE EDGE LINE.

STANDARD NOTES
(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G5
SIGNING: S1, S2, S3, S5, S8, S11
DEVICES: TCD1, TCD2, TCD6, TCD8



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 205-FW-1LC-(R)-SHIFT

SINGLE LANE CLOSURE WITH SHIFT ON A FREEWAY OR DIVIDED ROADWAY

DATE: MAY 2021
SHEET:

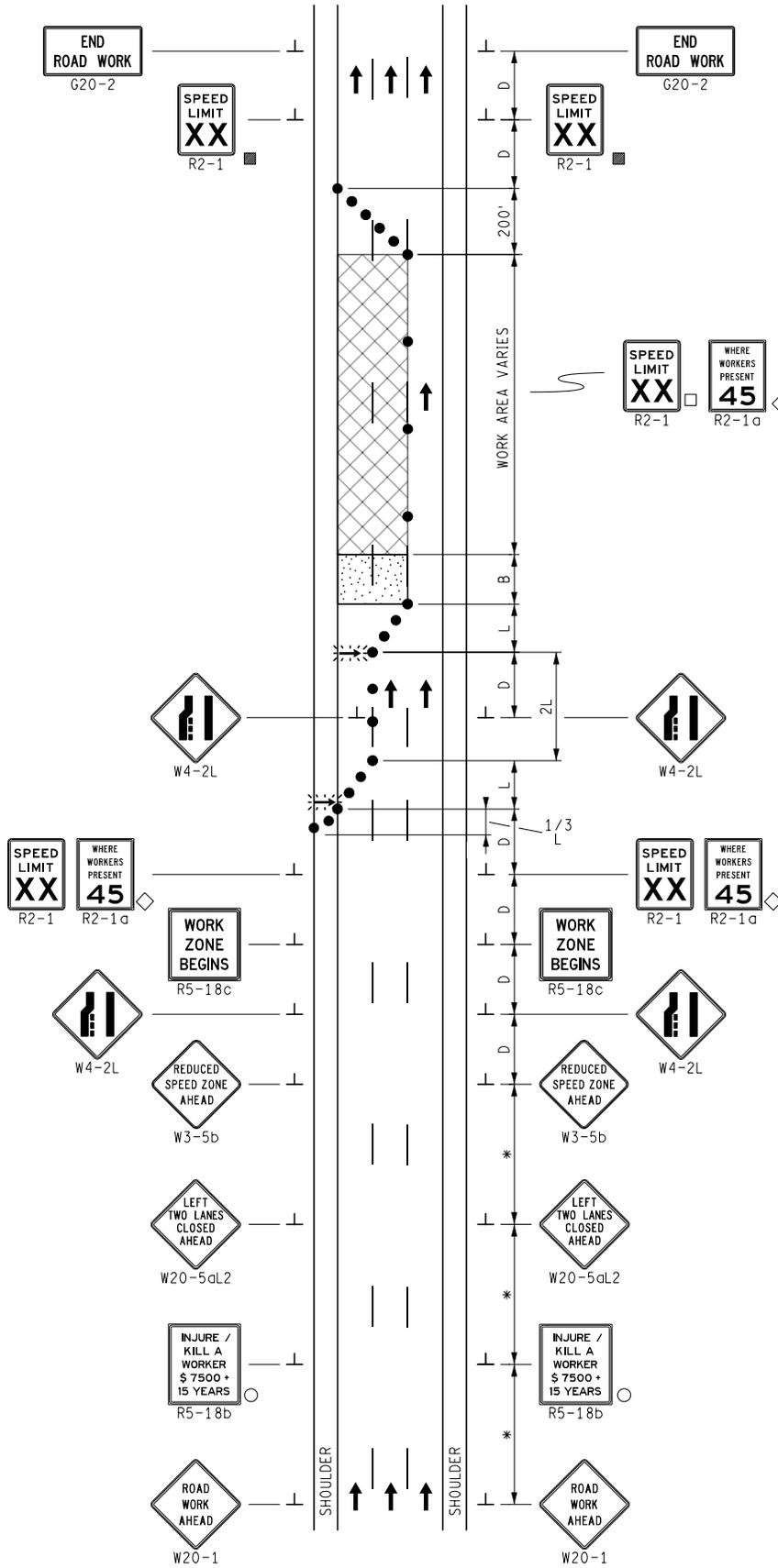
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL
- * PLACE SIGNS AT A SPACING OF D ON DIVIDED ROADWAYS AND 2D ON FREEWAYS

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S8
 DEVICES: TCD1, TCD2, TCD6



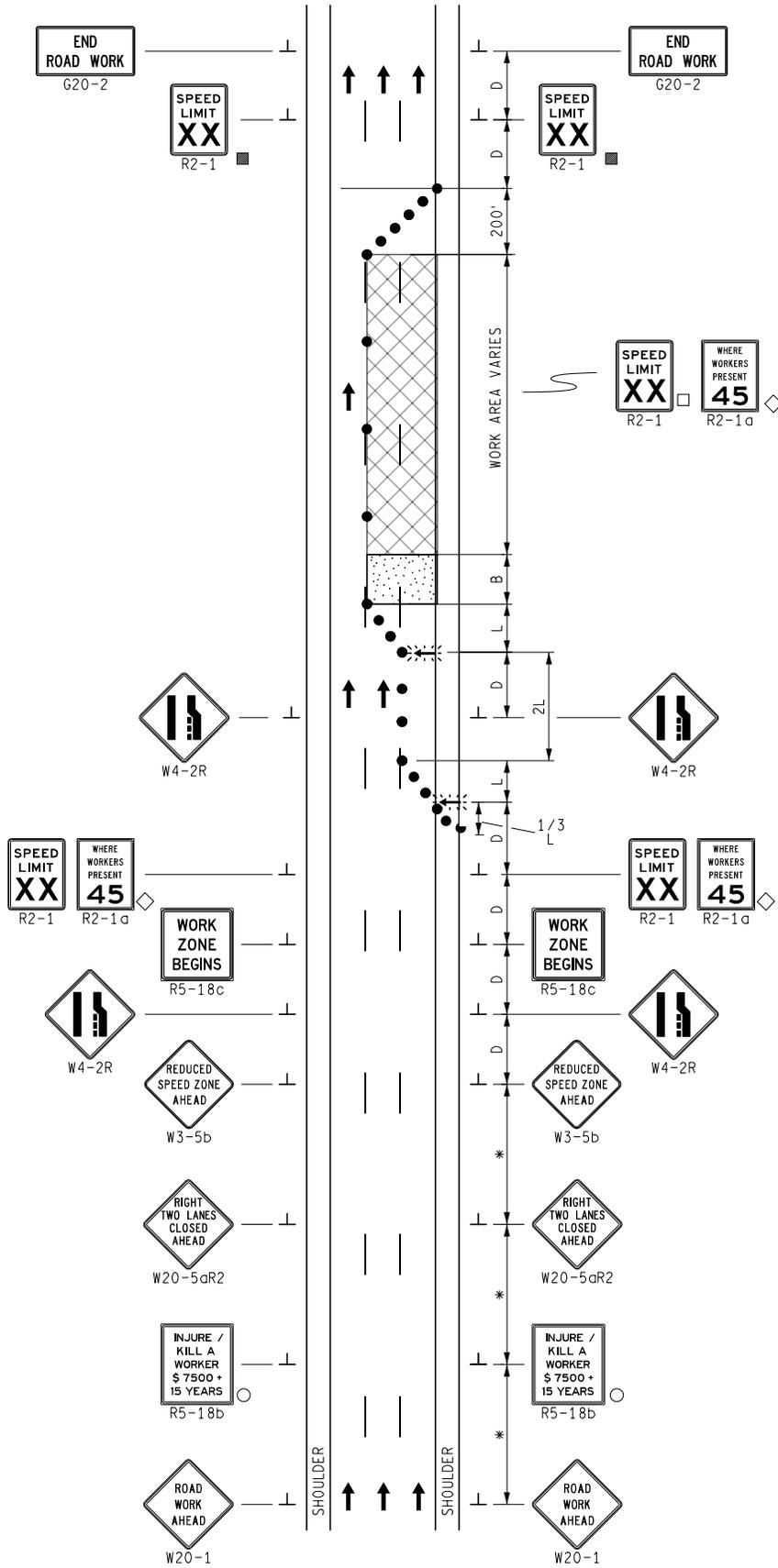
KEY

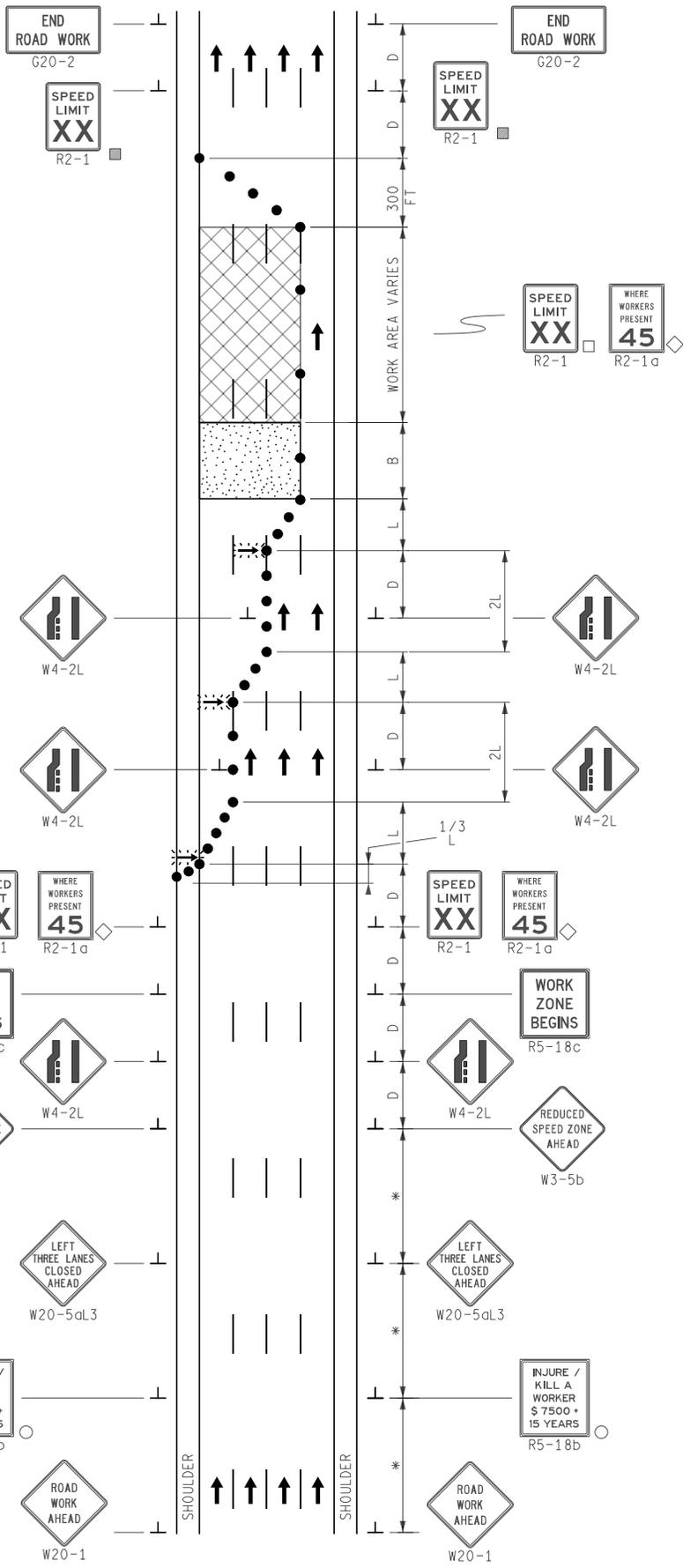
- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL
- * PLACE SIGNS AT A SPACING OF D ON DIVIDED ROADWAYS AND 2D ON FREEWAYS

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S8
 DEVICES: TCD1, TCD2, TCD6





KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL
- * PLACE SIGNS AT A SPACING OF D ON DIVIDED ROADWAYS AND 2D ON FREEWAYS

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S6, S8
 DEVICES: TCD1, TCD2, TCD6



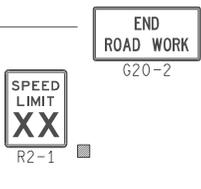
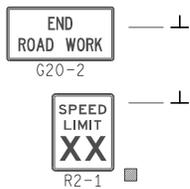
NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 208-FW-3LC-(L)

**LEFT 3-LANE CLOSURE
 ON A 4-LANE FREEWAY
 OR DIVIDED ROADWAY**

DATE: DECEMBER 2021
 SHEET:

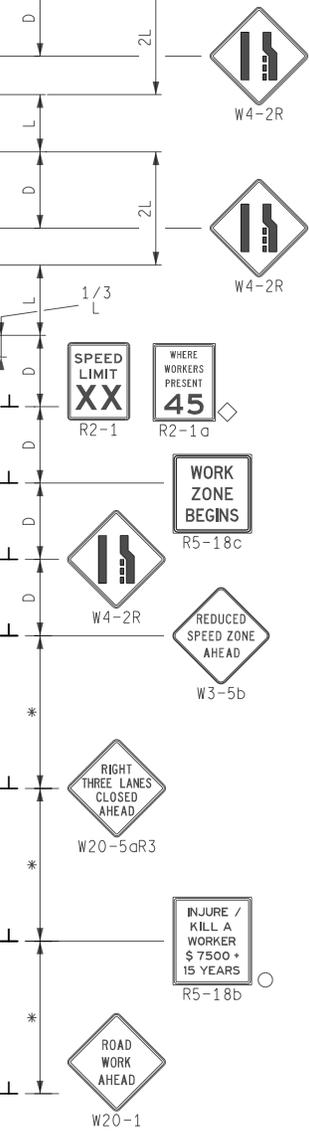
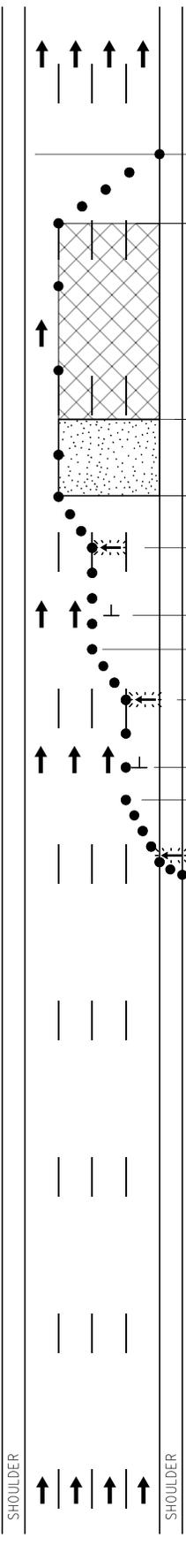
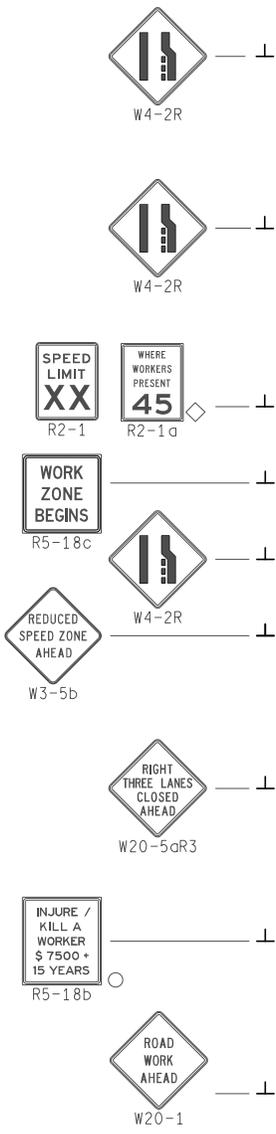


KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL
- * PLACE SIGNS AT A SPACING OF D ON DIVIDED ROADWAYS AND 2D ON FREEWAYS

STANDARD NOTES
(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
SIGNING: S1, S2, S3, S5, S6, S8
DEVICES: TCD1, TCD2, TCD6



KEY

- CHANNELIZING DEVICES
- ← TRAFFIC FLOW
- PLACE SIGN AS INDICATED IN NOTE S5
- ◇ R2-1a OPTIONAL

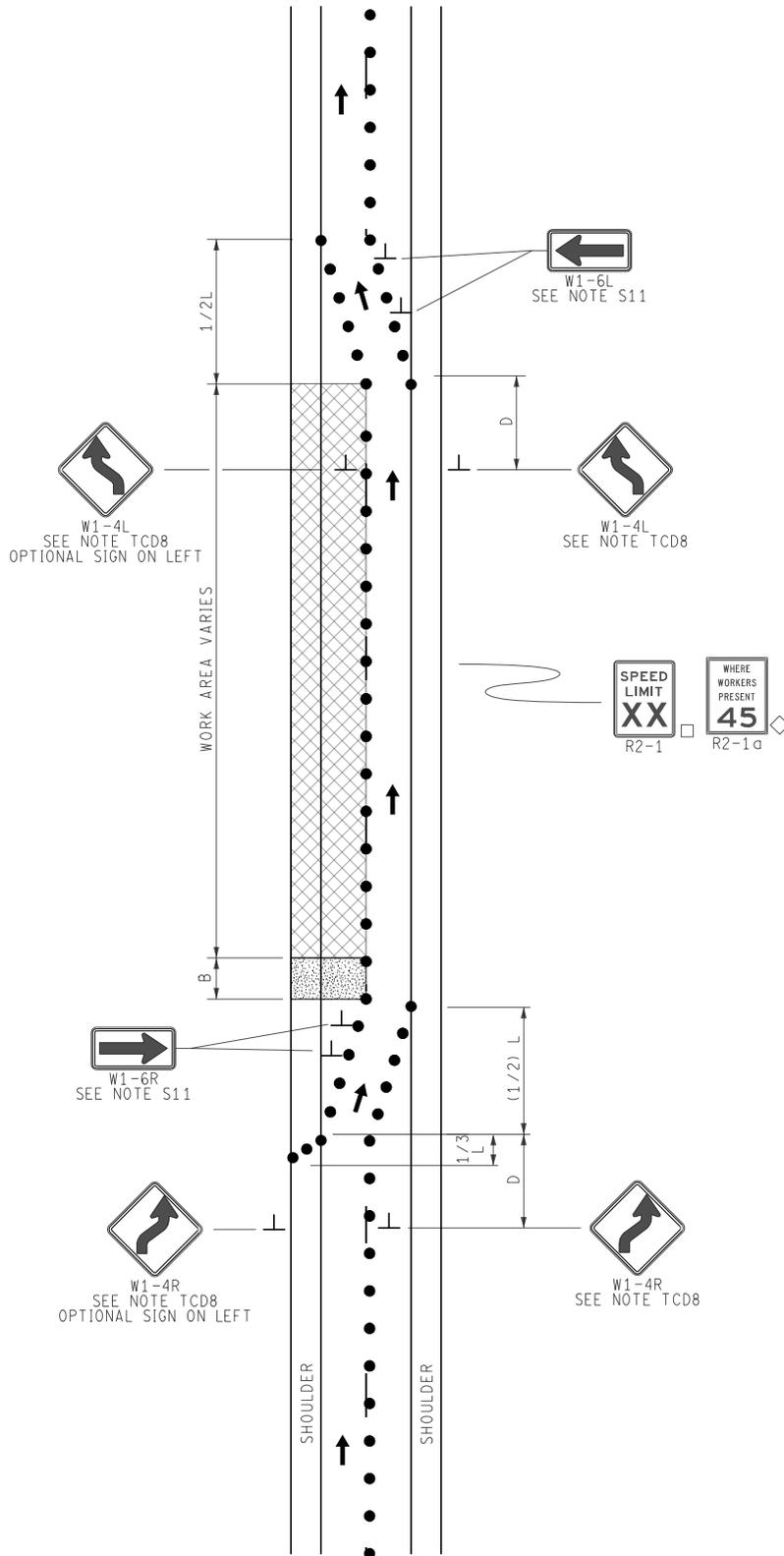
STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G5
 SIGNING: S1, S5, S8, S11
 DEVICES: TCD1, TCD2, TCD8

NOTE

PLACE ADDITIONAL SIGNS THAT ARE REQUIRED FOR A LANE CLOSURE.



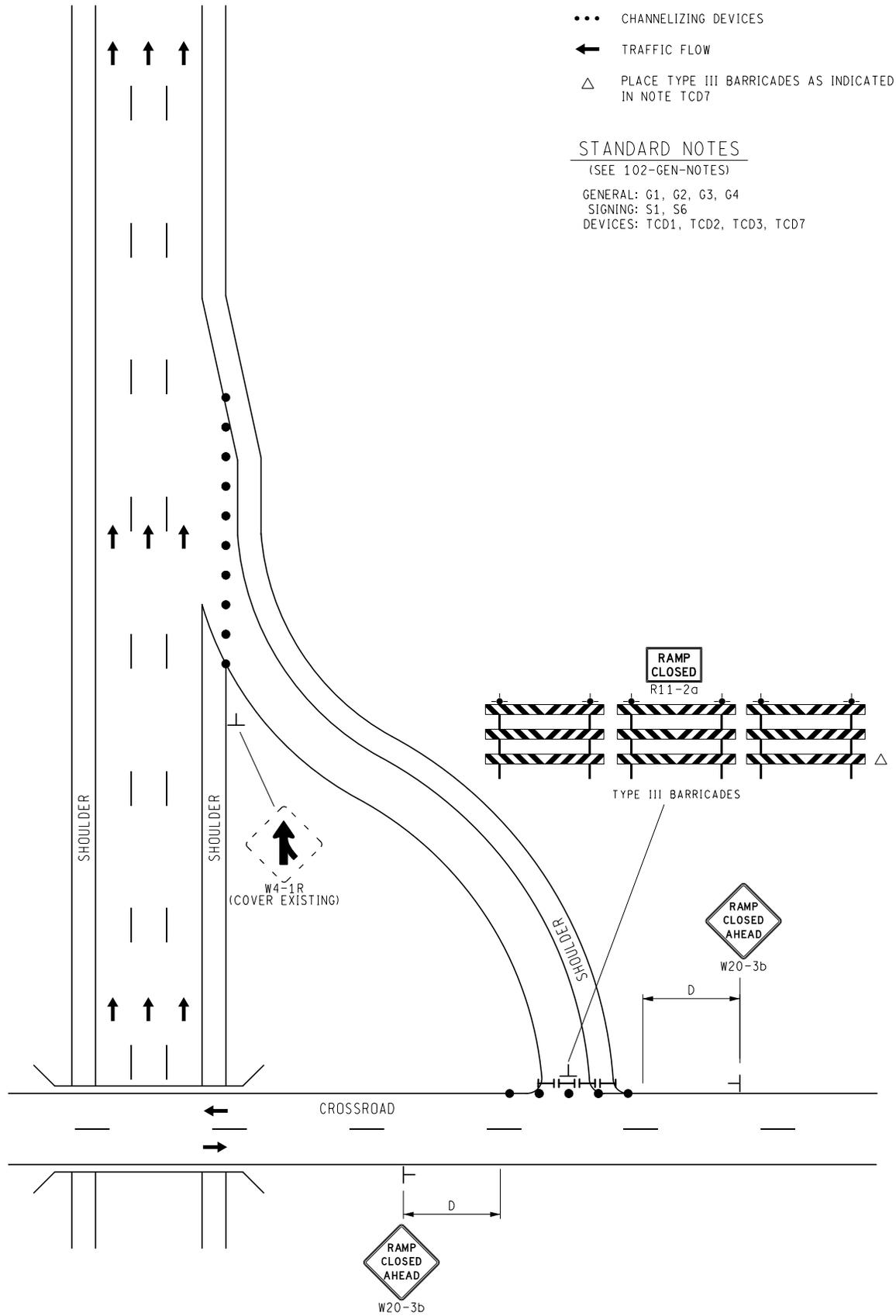
KEY

- CHANNELIZING DEVICES
- ← TRAFFIC FLOW
- △ PLACE TYPE III BARRICADES AS INDICATED IN NOTE TCD7

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S6
 DEVICES: TCD1, TCD2, TCD3, TCD7



KEY

- CHANNELIZING DEVICES
- ← TRAFFIC FLOW

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4

SIGNING: S1

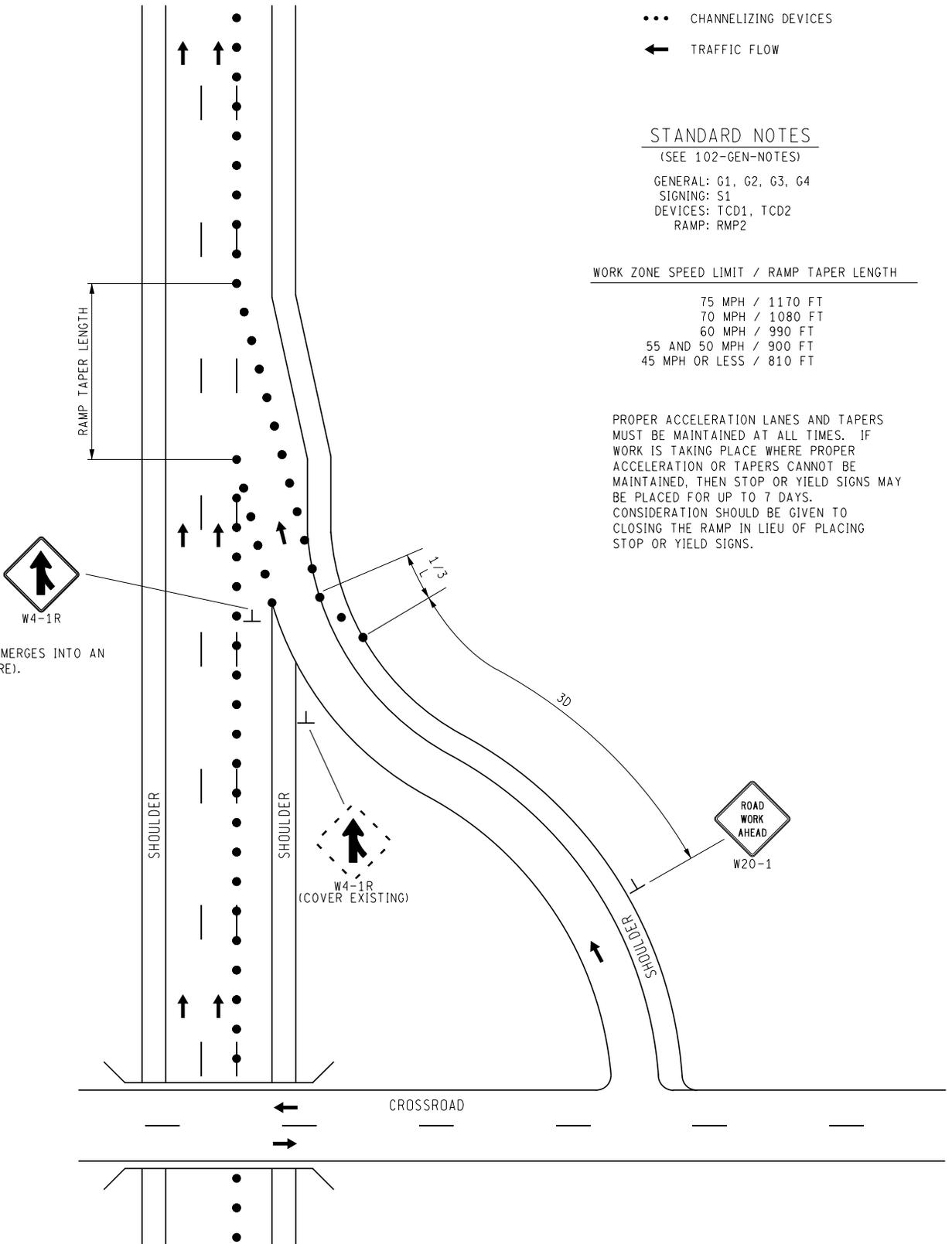
DEVICES: TCD1, TCD2

RAMP: RMP2

WORK ZONE SPEED LIMIT / RAMP TAPER LENGTH

75 MPH	/	1170 FT
70 MPH	/	1080 FT
60 MPH	/	990 FT
55 AND 50 MPH	/	900 FT
45 MPH OR LESS	/	810 FT

PROPER ACCELERATION LANES AND TAPERS MUST BE MAINTAINED AT ALL TIMES. IF WORK IS TAKING PLACE WHERE PROPER ACCELERATION OR TAPERS CANNOT BE MAINTAINED, THEN STOP OR YIELD SIGNS MAY BE PLACED FOR UP TO 7 DAYS. CONSIDERATION SHOULD BE GIVEN TO CLOSING THE RAMP IN LIEU OF PLACING STOP OR YIELD SIGNS.



USE W4-1 WHEN TRAFFIC MERGES INTO AN OPEN LANE (AS SHOWN HERE).



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 221-FW-EnR-0
-LC-FREE

FREEFLOW CONDITION
FREEWAY ENTRANCE RAMP
TREATMENT ON A FREEWAY
WITH OUTSIDE LANE CLOSURE

DATE: MAY 2021
SHEET:

1 OF 1

KEY

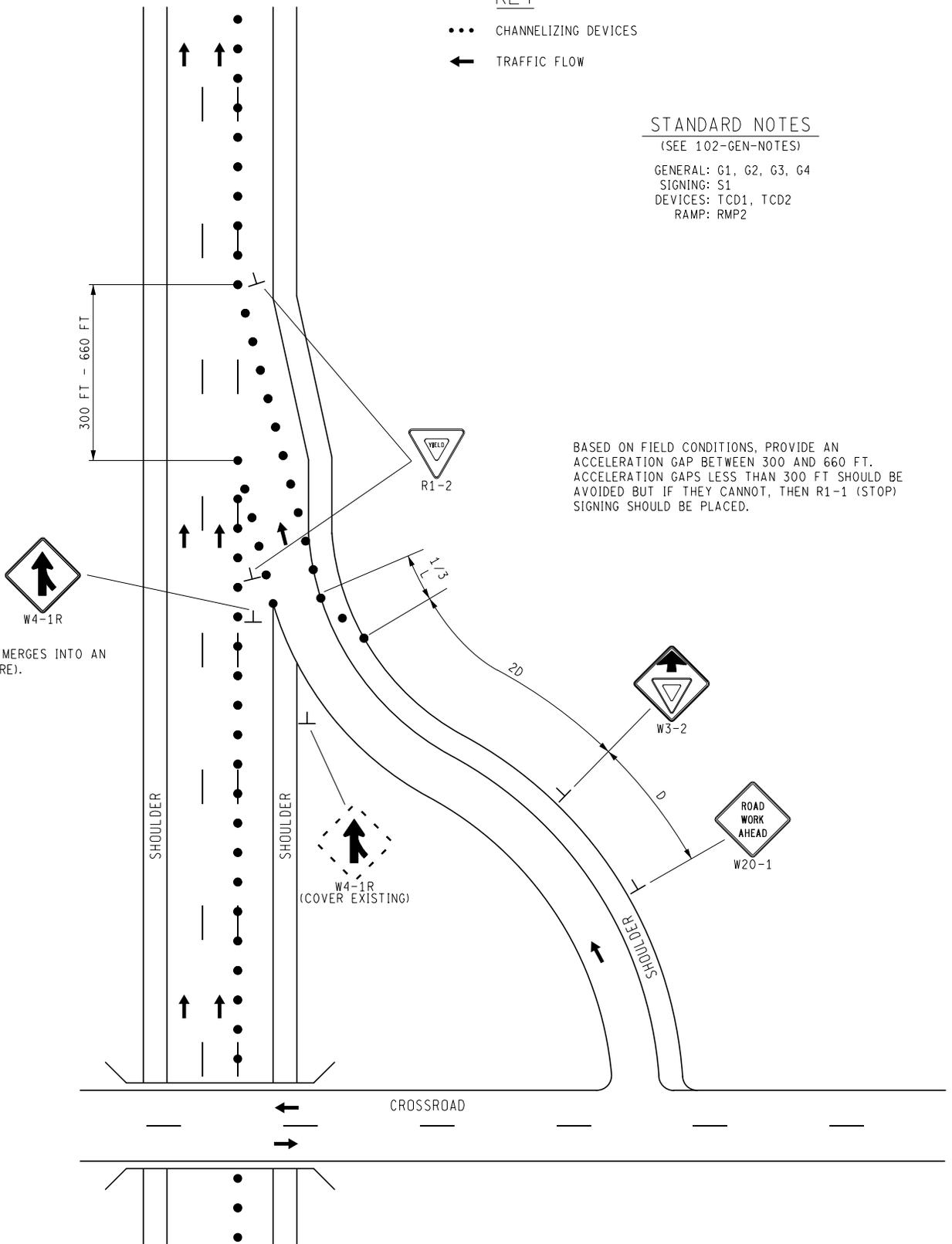
- CHANNELIZING DEVICES
- ← TRAFFIC FLOW

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1
 DEVICES: TCD1, TCD2
 RAMP: RMP2

BASED ON FIELD CONDITIONS, PROVIDE AN ACCELERATION GAP BETWEEN 300 AND 660 FT. ACCELERATION GAPS LESS THAN 300 FT SHOULD BE AVOIDED BUT IF THEY CANNOT, THEN R1-1 (STOP) SIGNING SHOULD BE PLACED.



USE W4-1 WHEN TRAFFIC MERGES INTO AN OPEN LANE (AS SHOWN HERE).

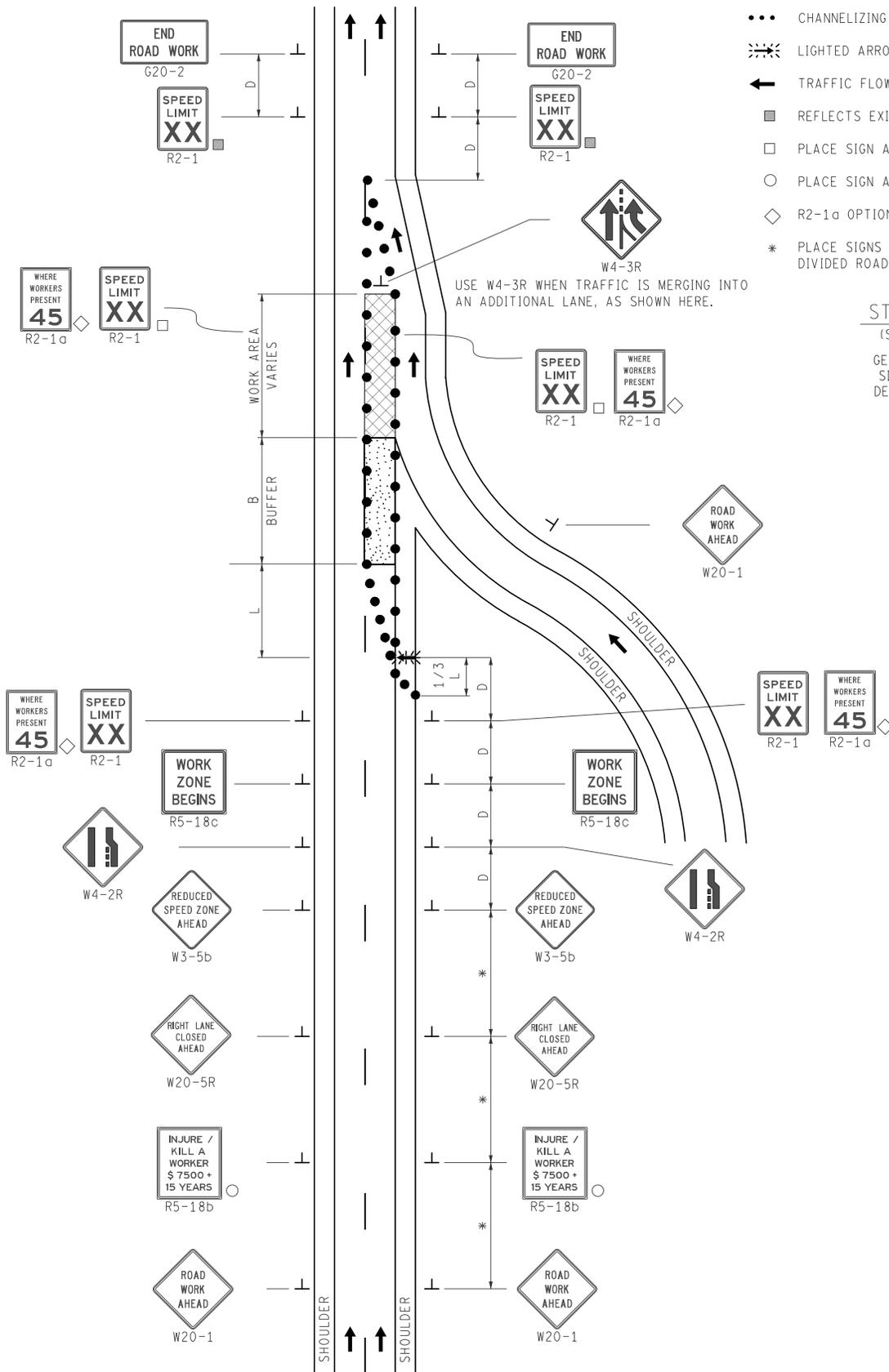
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL
- * PLACE SIGNS AT A SPACING OF D ON DIVIDED ROADWAYS AND 2D ON FREEWAYS

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S8
 DEVICES: TCD1, TCD2, TCD6

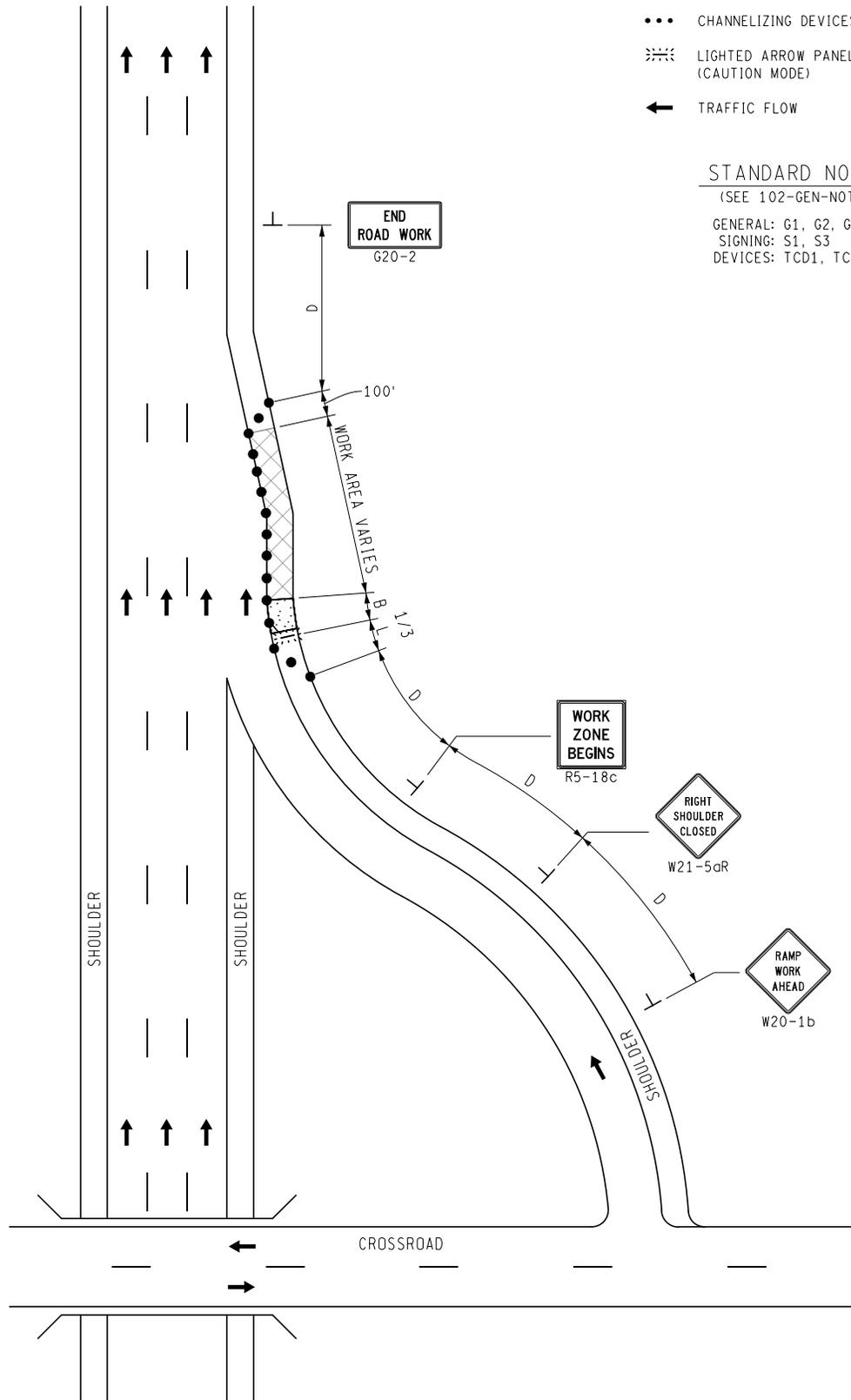


KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL (CAUTION MODE)
- ← TRAFFIC FLOW

STANDARD NOTES

(SEE 102-GEN-NOTES)
 GENERAL: G1, G2, G3, G4
 SIGNING: S1, S3
 DEVICES: TCD1, TCD2



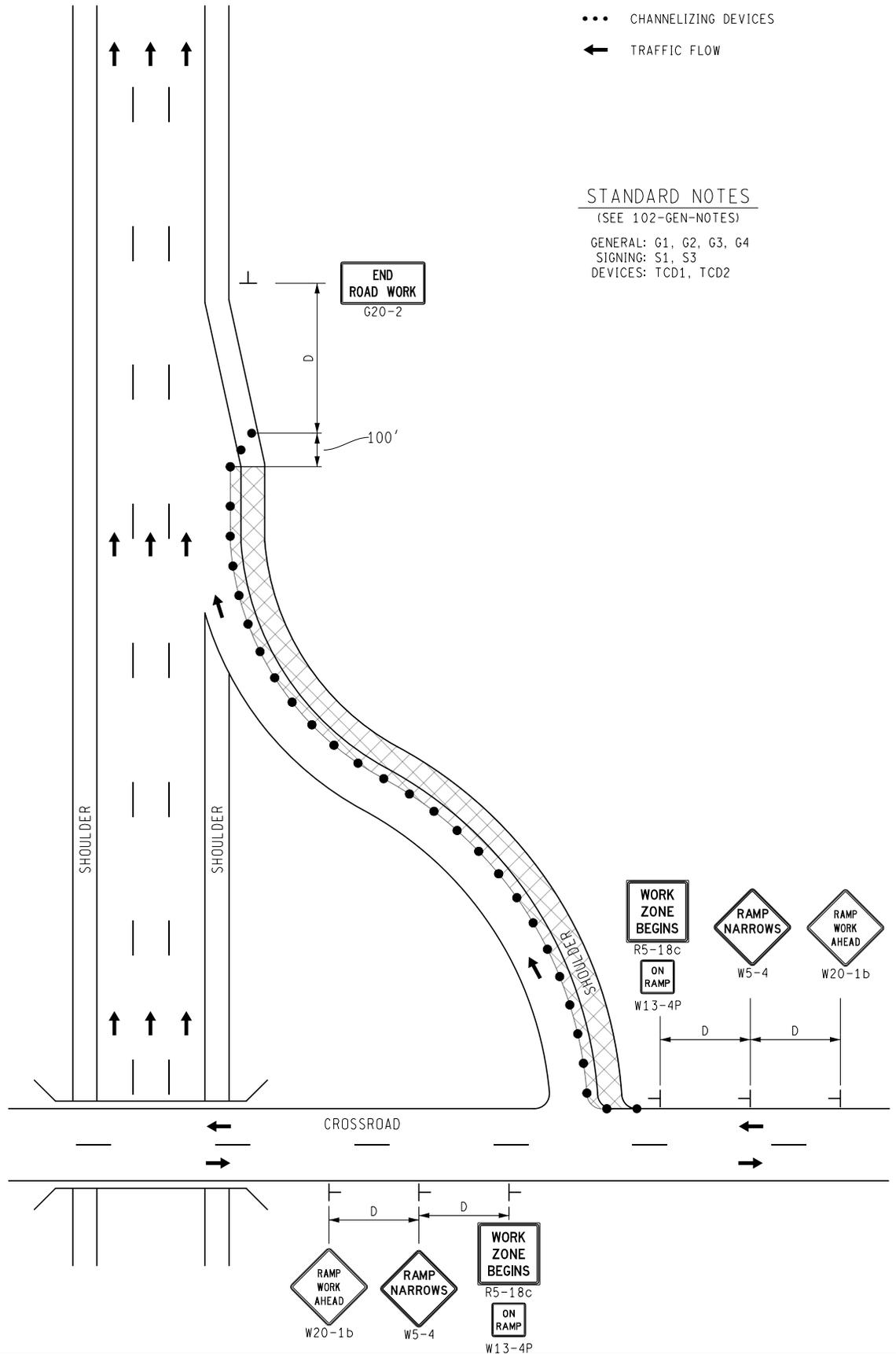
KEY

- CHANNELIZING DEVICES
- ← TRAFFIC FLOW

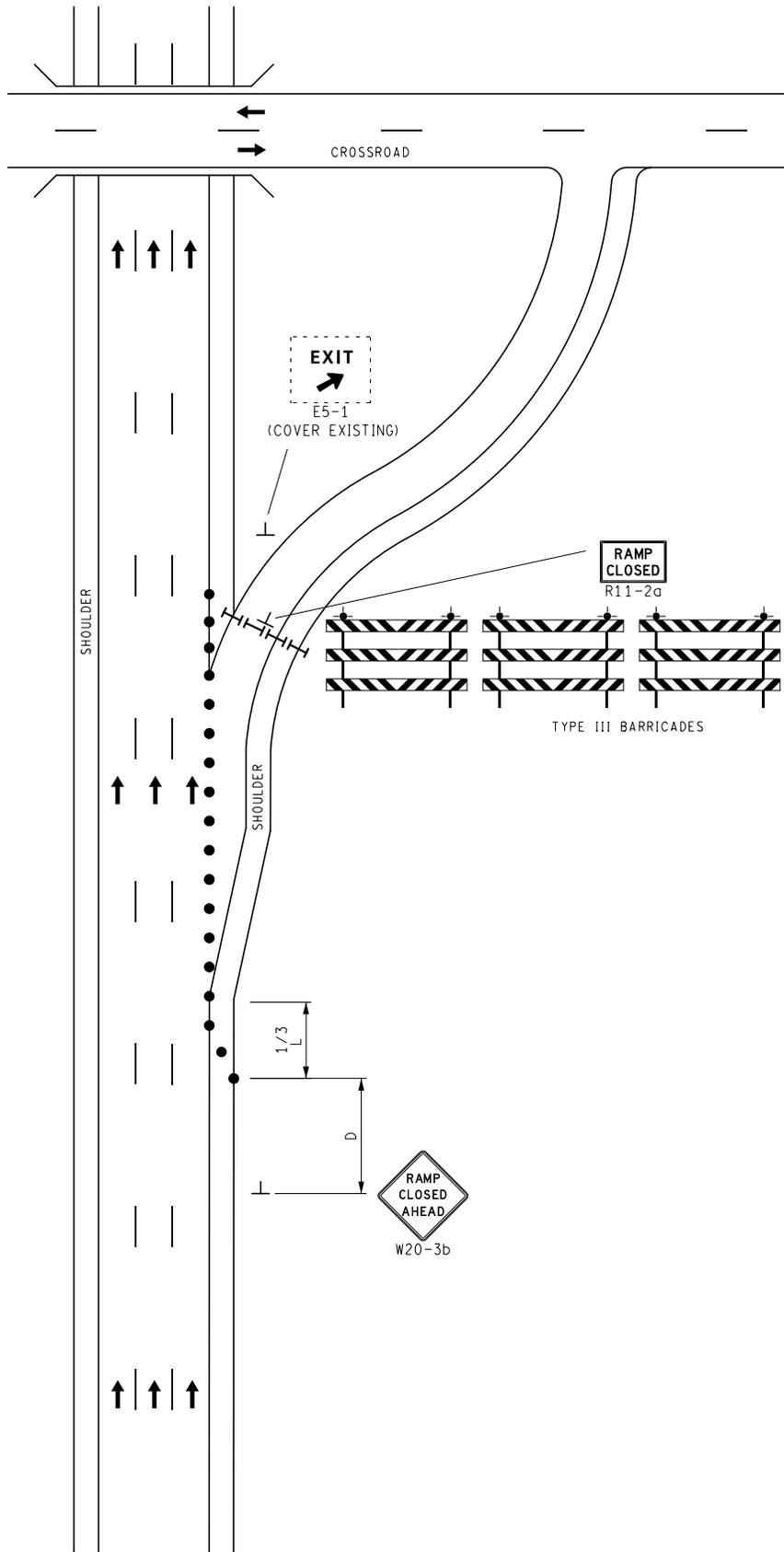
STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S3
 DEVICES: TCD1, TCD2



	NOT TO SCALE	MAINTAINING TRAFFIC TYPICAL	1-LANE SHIFT WITH REDUCED LANE WIDTH ON A 1-LANE FREEWAY ENTRANCE RAMP	DATE: MAY 2021
		NO: 225-FW-EnR-SHL-SHIFT		SHEET: 1 OF 1



KEY

- CHANNELIZING DEVICES
- ← TRAFFIC FLOW
- △ PLACE TYPE III BARRICADES AS INDICATED IN NOTE TCD7

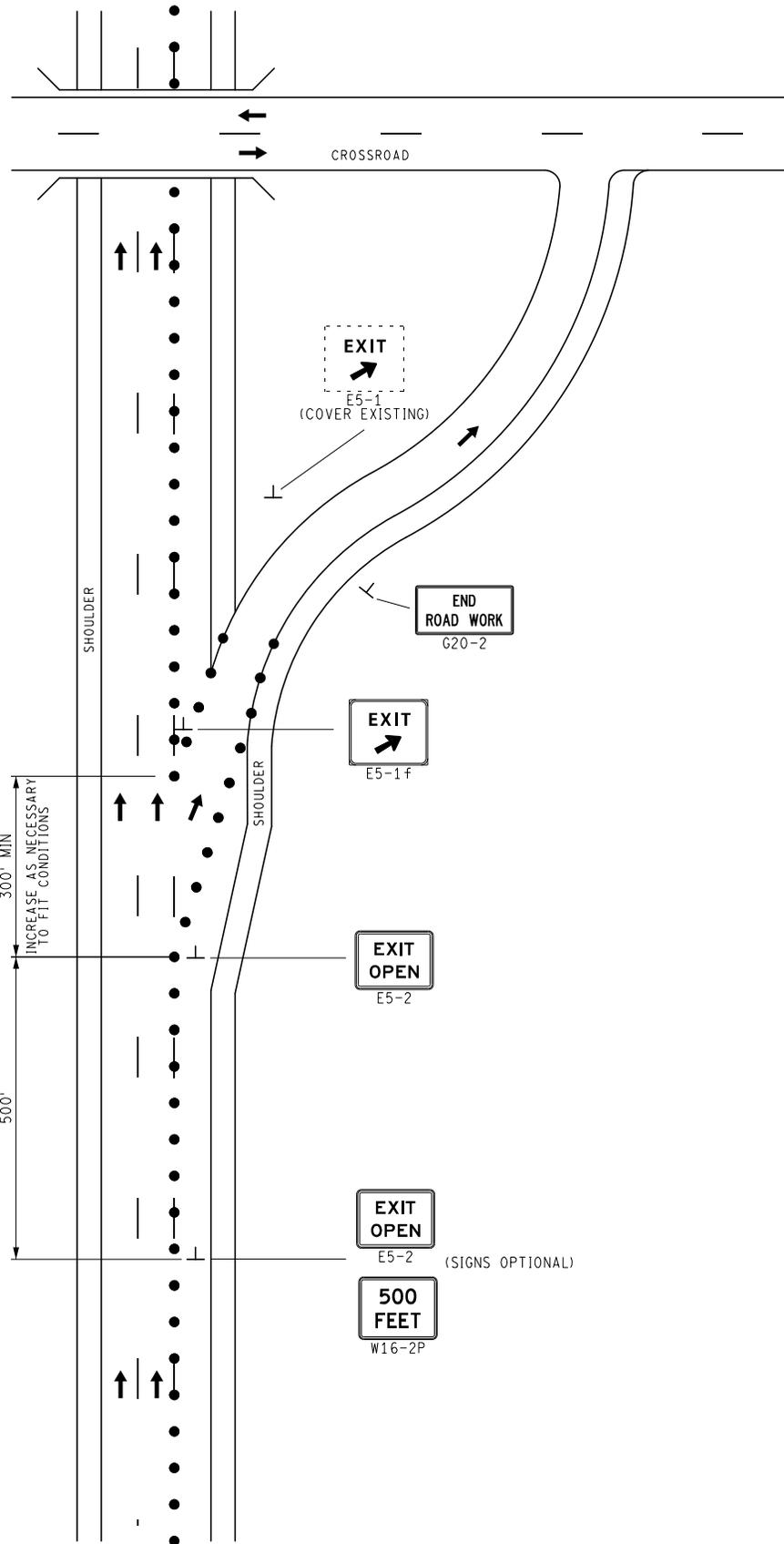
STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4

SIGNING: S1, S6

DEVICES: TCD1, TCD2, TCD3, TCD7



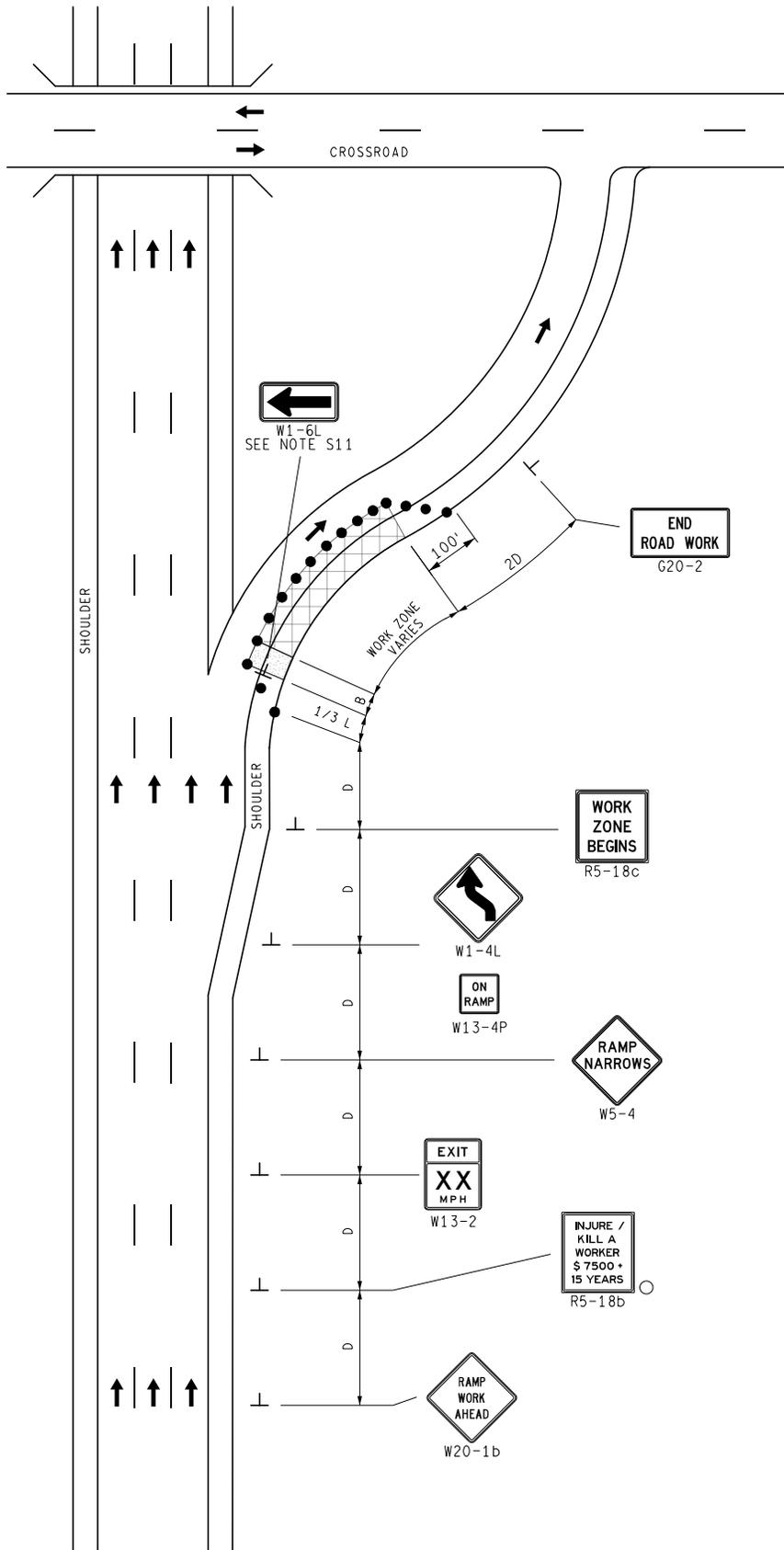
KEY

- CHANNELIZING DEVICES
- ← TRAFFIC FLOW

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1
 DEVICES: TCD1, TCD2
 RAMP: RMP1



KEY

- CHANNELIZING DEVICES
- ← TRAFFIC FLOW
- PLACE SIGN AS INDICATED IN NOTE S2

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S11
 DEVICES: TCD1, TCD2



NOT TO SCALE

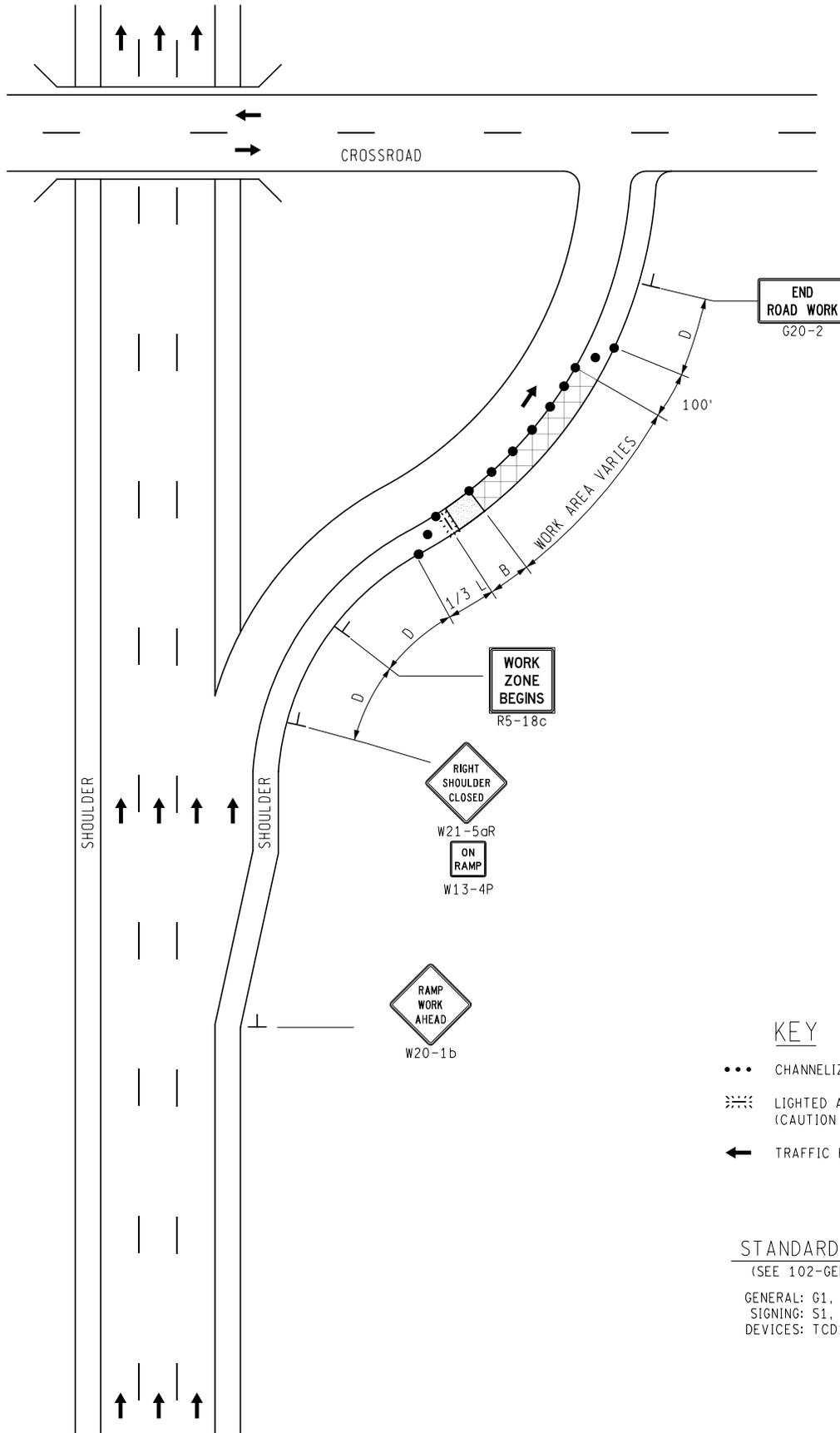
MAINTAINING TRAFFIC TYPICAL

NO:
 232-FW-ExR-SHIFT

1-LANE SHIFT
 WITH REDUCED LANE WIDTH
 ON A 1-LANE FREEWAY EXIT RAMP

DATE:
 MAY 2021

SHEET:



END
ROAD WORK
G20-2

WORK
ZONE
BEGINS
R5-18c

RIGHT
SHOULDER
CLOSED

W21-5cR

ON
RAMP

W13-4P

RAMP
WORK
AHEAD

W20-1b

KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL (CAUTION MODE)
- ← TRAFFIC FLOW

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
SIGNING: S1, S6
DEVICES: TCD1, TCD2

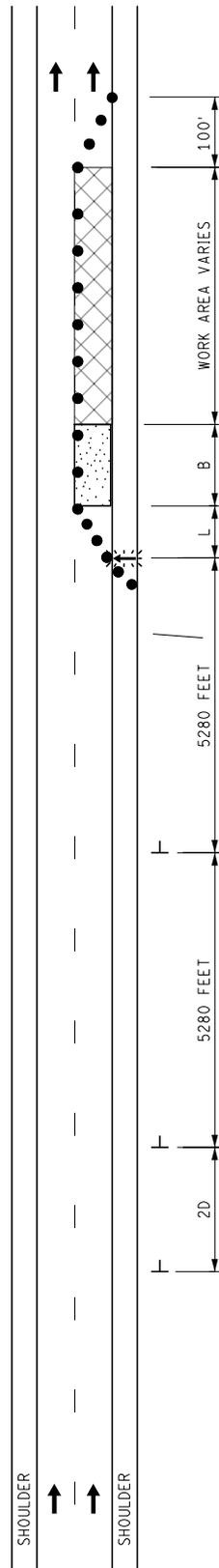
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- PLACE THESE OR OTHER APPROPRIATE WARNING SIGNS FOR THE TRAFFIC CONTROL LAYOUT

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G3
SIGNING: S1, S2, S6



PLACE ADDITIONAL SIGNAGE PER THE RELEVANT TYPICAL. THE ONLY "ROAD WORK AHEAD" SIGNS (W20-1) TO BE USED IN THIS LAYOUT ARE THE ONES SHOWN BEFORE THE W20-5 SIGNS.

IN THE CASE OF THIS ILLUSTRATED EXAMPLE, A RIGHT LANE CLOSURE, TYPICAL 203-FW-1LC-(R) WOULD BE USED.



KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- SEE NOTE TCD10
- Ⓢ SENSOR

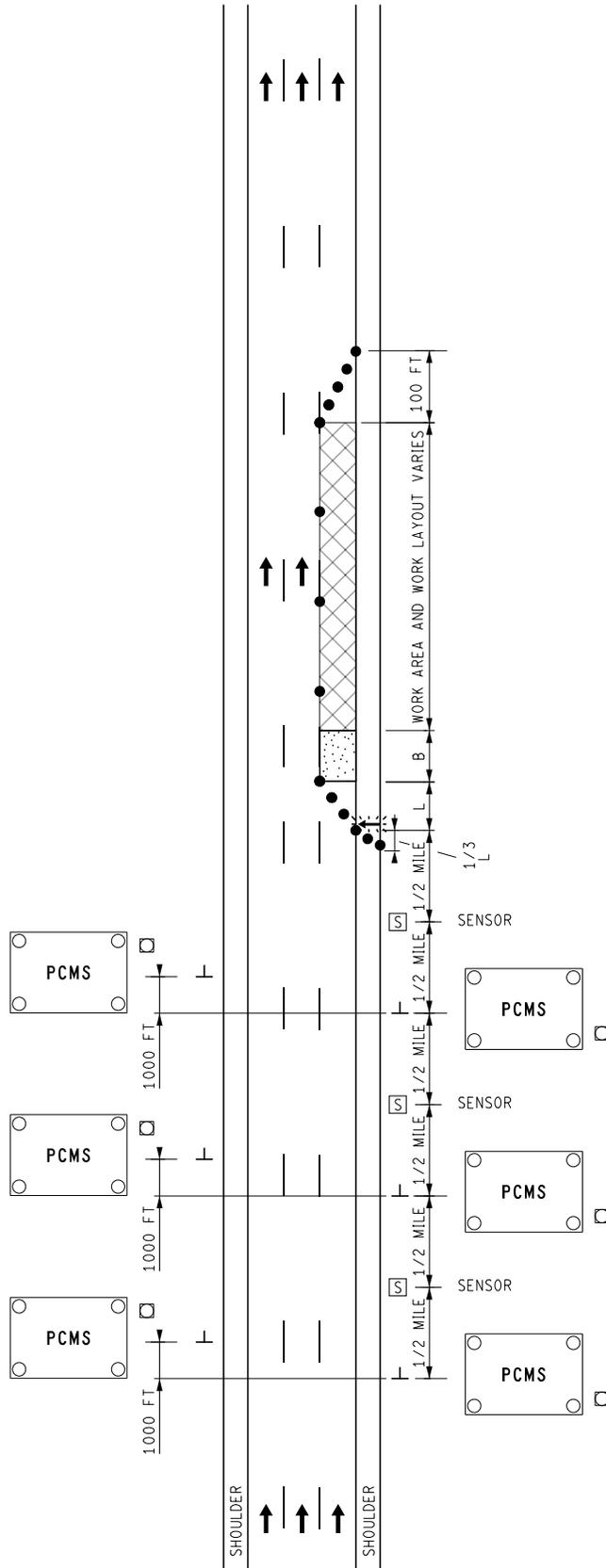
STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
SIGNING: S4
DEVICES: TCD6, TCD10

ADDITIONAL SENSORS AND PCMS MAY BE ADDED FOR A LONGER CALCULATED BACKUP.

USE ADDITIONAL WORK ZONE SIGNS PER APPROPRIATE TYPICAL.



KEY

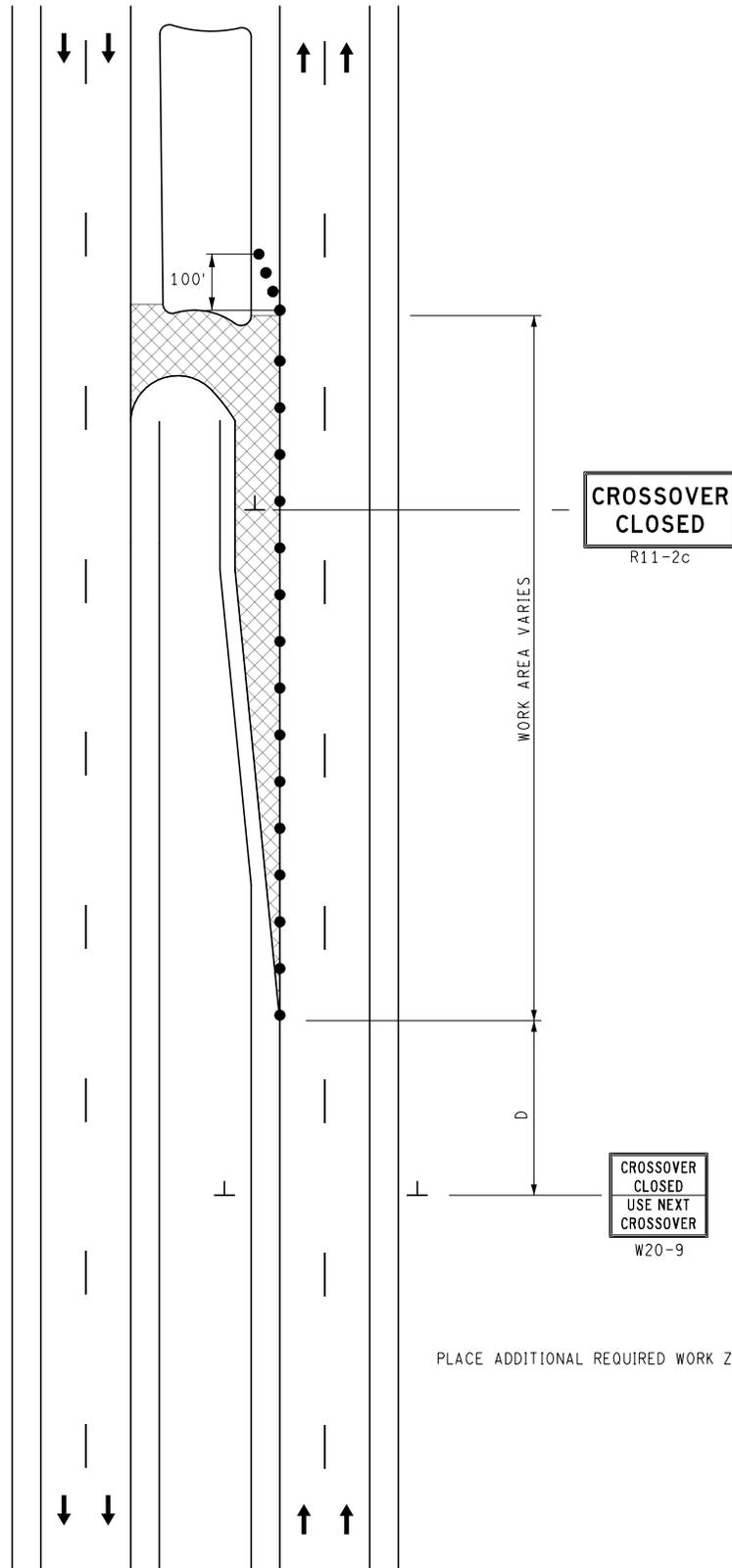
••• CHANNELIZING DEVICES

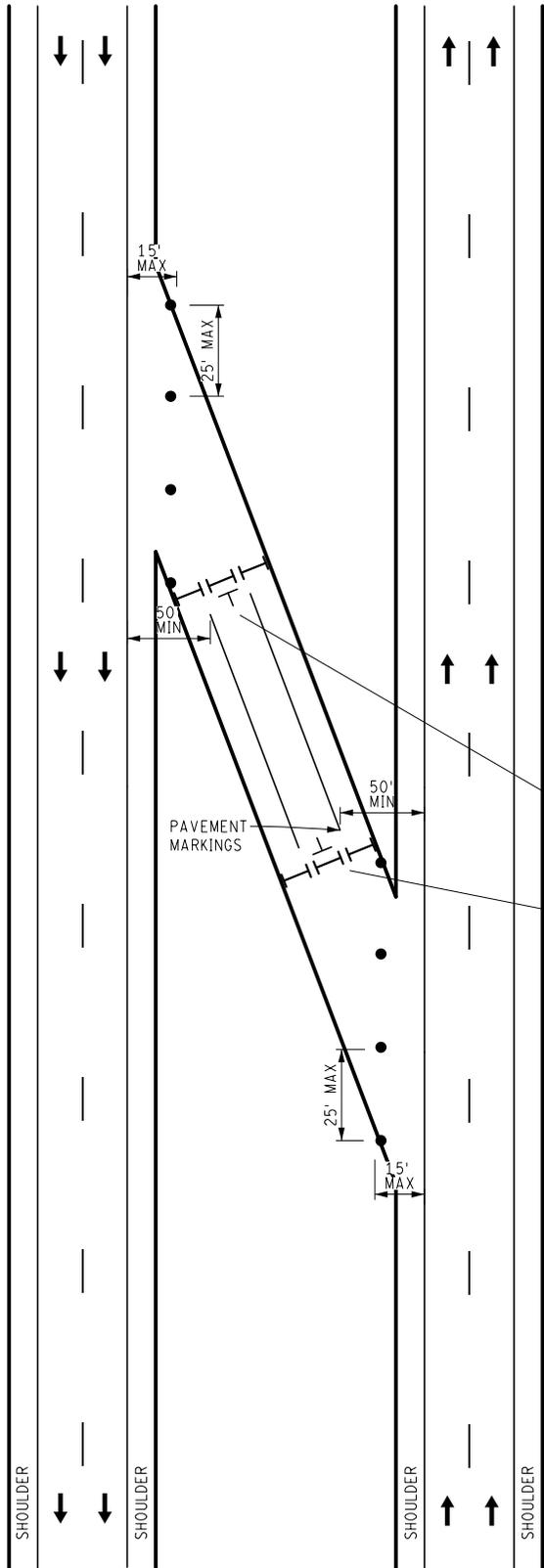
← TRAFFIC FLOW

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3
 SIGNING: S1, S2, S3, S5
 DEVICES: TCD1, TCD2





KEY

- DELINEATORS
- ← TRAFFIC FLOW
- △ PLACE TYPE III BARRICADE AS INDICATED IN NOTE TCD7

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4, G5

SIGNING: S1.

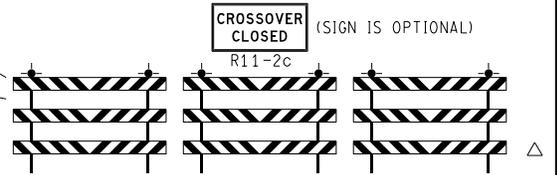
DEVICES: TCD1, TCD2, TCD3, TCD4, TCD7

NOTES

EPOXY DELINEATORS ON THE PAVEMENT IN THE CROSSOVER 15' MAX FROM THE EDGELINE AND SPACE AT 25 FEET MAX.

PLACE APPROPRIATE NUMBER OF TYPE III BARRICADES TO CLOSE LANE.

REMOVE PAVEMENT MARKINGS WITHIN 50 FEET OF ACTIVE LANES, ON CLOSED CROSSOVERS.



TYPE III BARRICADES



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 311-SP-CROSS
C-FW-(1)

TEMPORARY SINGLE CROSSOVER
CLOSURE

DATE: MAY 2021

SHEET:

1 OF 1

KEY

- DELINEATORS
- ← TRAFFIC FLOW
- TEMPORARY BARRIER WALL
- △ PLACE TYPE III BARRICADE AS INDICATED IN NOTE TCD7

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4, G5

SIGNING: S1

DEVICES: TCD1, TCD2, TCD3, TCD4, TCD7

NOTES

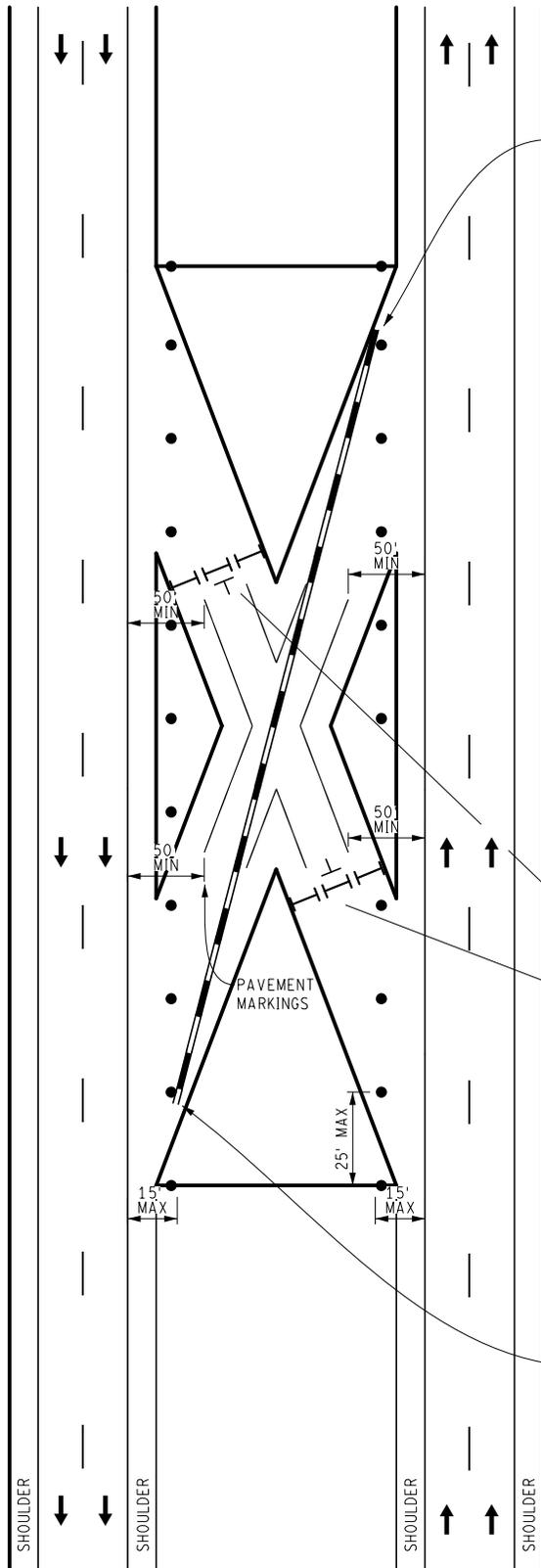
EPOXY DELINEATORS ON THE PAVEMENT IN THE CROSSOVER 15' FROM THE EDGELINE AND SPACE AT 25 FEET MAX.

DELINEATORS ARE ONLY TO BE PLACED ON PAVED AREAS IN THE CROSSOVER. THE DELINEATORS NOT IN THE CROSSOVER LANES ARE FOR PAVED AREAS WHERE THE ENTIRE BOX AREA IS PAVED.

USE APPROPRIATE END TREATMENT PER STANDARD PLAN R-126 ON BARRIER WALL.

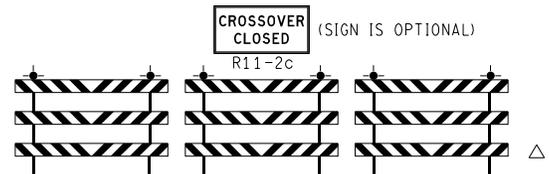
PLACE APPROPRIATE NUMBER OF TYPE III BARRICADES TO CLOSE LANE.

REMOVE PAVEMENT MARKINGS WITHIN 50 FEET OF ACTIVE LANES, ON CLOSED CROSSOVERS.



USE APPROPRIATE END TREATMENT IF MINIMUM LATERAL OFFSET DISTANCE IS NOT MET PER SPECIAL DETAIL R-126

USE APPROPRIATE END TREATMENT IF MINIMUM LATERAL OFFSET DISTANCE IS NOT MET PER SPECIAL DETAIL R-126



TYPE III BARRICADES (BARRICADES ARE OPTIONAL)

KEY

- • CHANNELIZING DEVICES
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S2
- PLACE SIGN AS INDICATED IN NOTE S5

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3

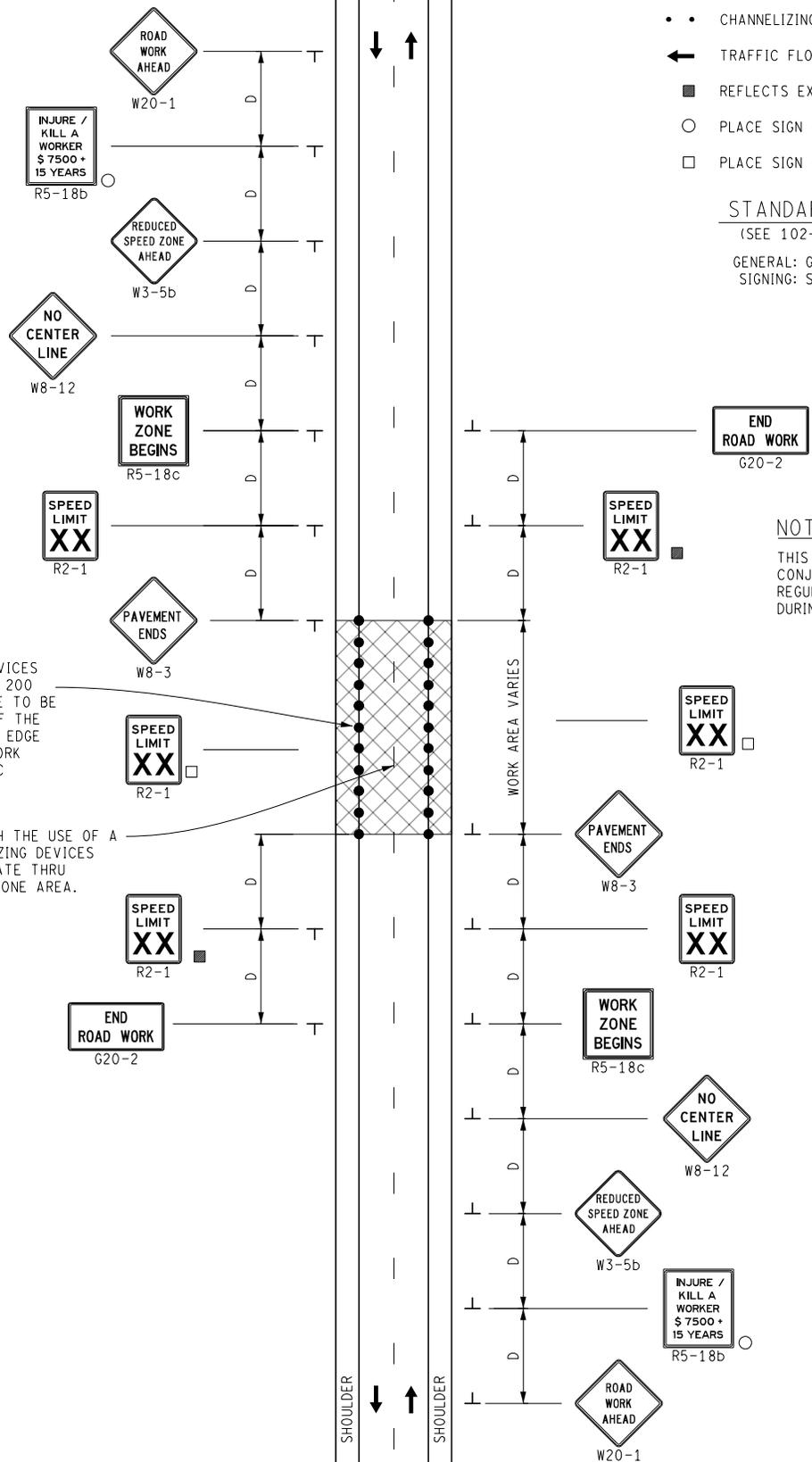
SIGNING: S1, S2, S3, S5

NOTES

THIS TYPICAL IS TO BE USED IN CONJUNCTION WITH A TRAFFIC REGULATOR TYPICAL FOR WORK DURING THE DAYTIME.

42 INCH CHANNELIZING DEVICES AT 100 FT OR DRUMS AT 200 FT. SPACING. DEVICES ARE TO BE PLACED ON BOTH SIDES OF THE ROAD TO DELINEATE THE EDGE OF THE ROADWAY WHEN WORK ZONE IS OPEN TO TRAFFIC OVERNIGHT.

DURING ACTIVE WORK WITH THE USE OF A PILOT VEHICLE, CHANNELIZING DEVICES MUST BE USED TO SEPARATE THRU TRAFFIC AND THE WORK ZONE AREA.



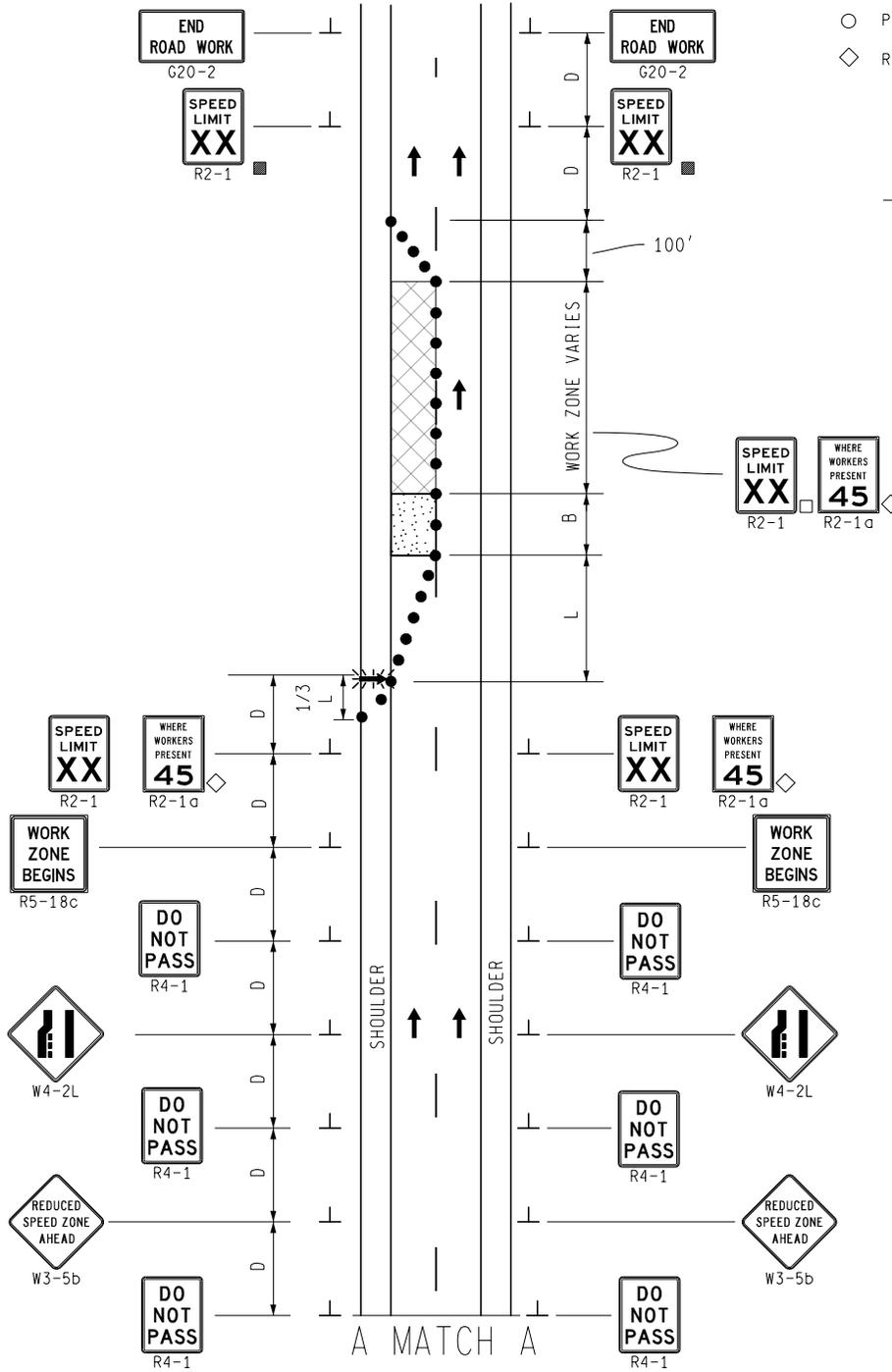
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S6, S8
 DEVICES: TCD1, TCD2, TCD6, TCD10



NOT TO SCALE

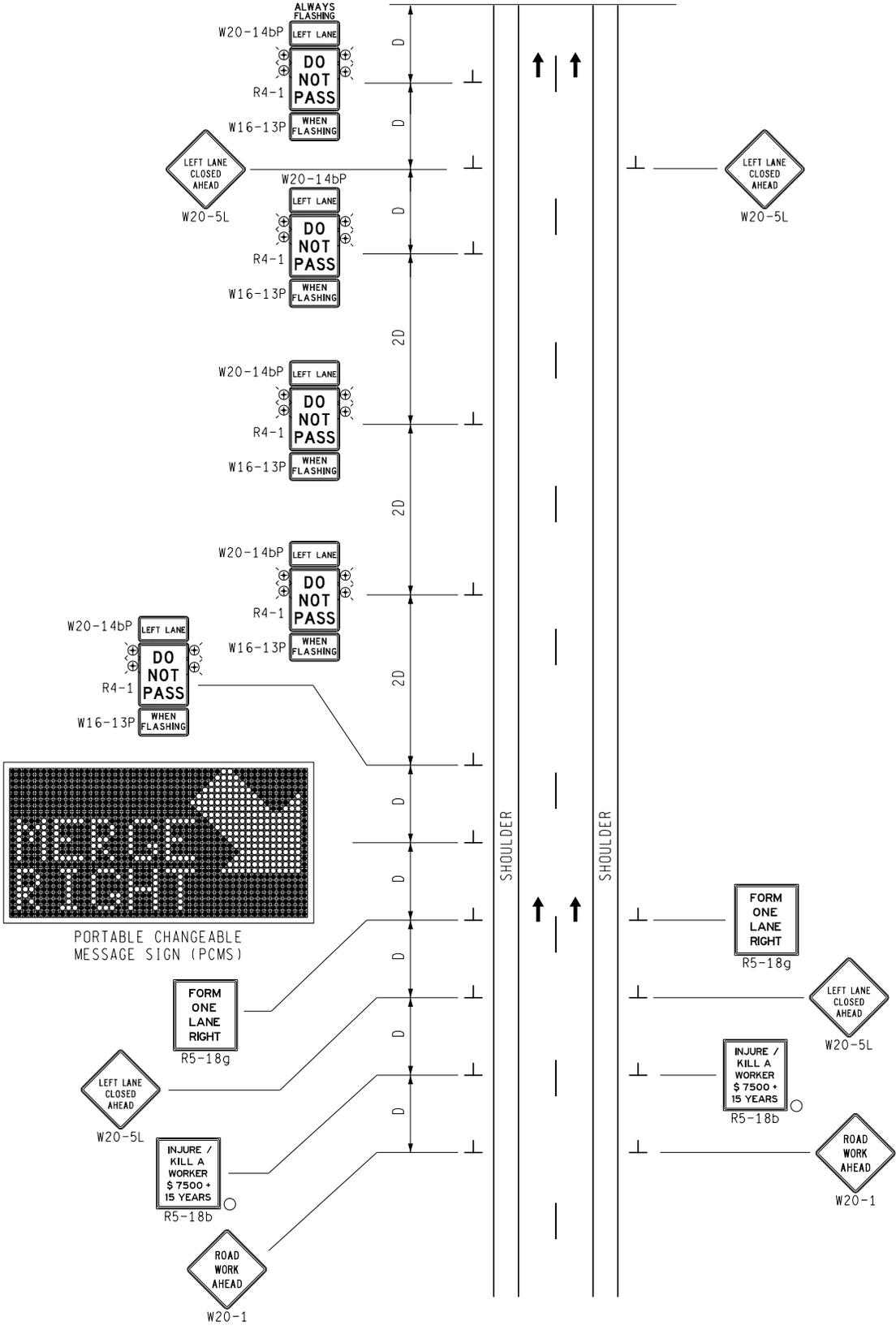
MAINTAINING TRAFFIC TYPICAL

NO:
340-SP-EM-1LC-(L)

**SINGLE LANE CLOSURE
 WITH EARLY MERGE
 ON A 2-LANE FREEWAY**

DATE:
 MAY 2021
 SHEET:

A MATCH A



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO:
340-SP-EM-1LC-(L)

**SINGLE LANE CLOSURE
WITH EARLY MERGE
ON A 2-LANE FREEWAY**

DATE:
MAY 2021

SHEET:

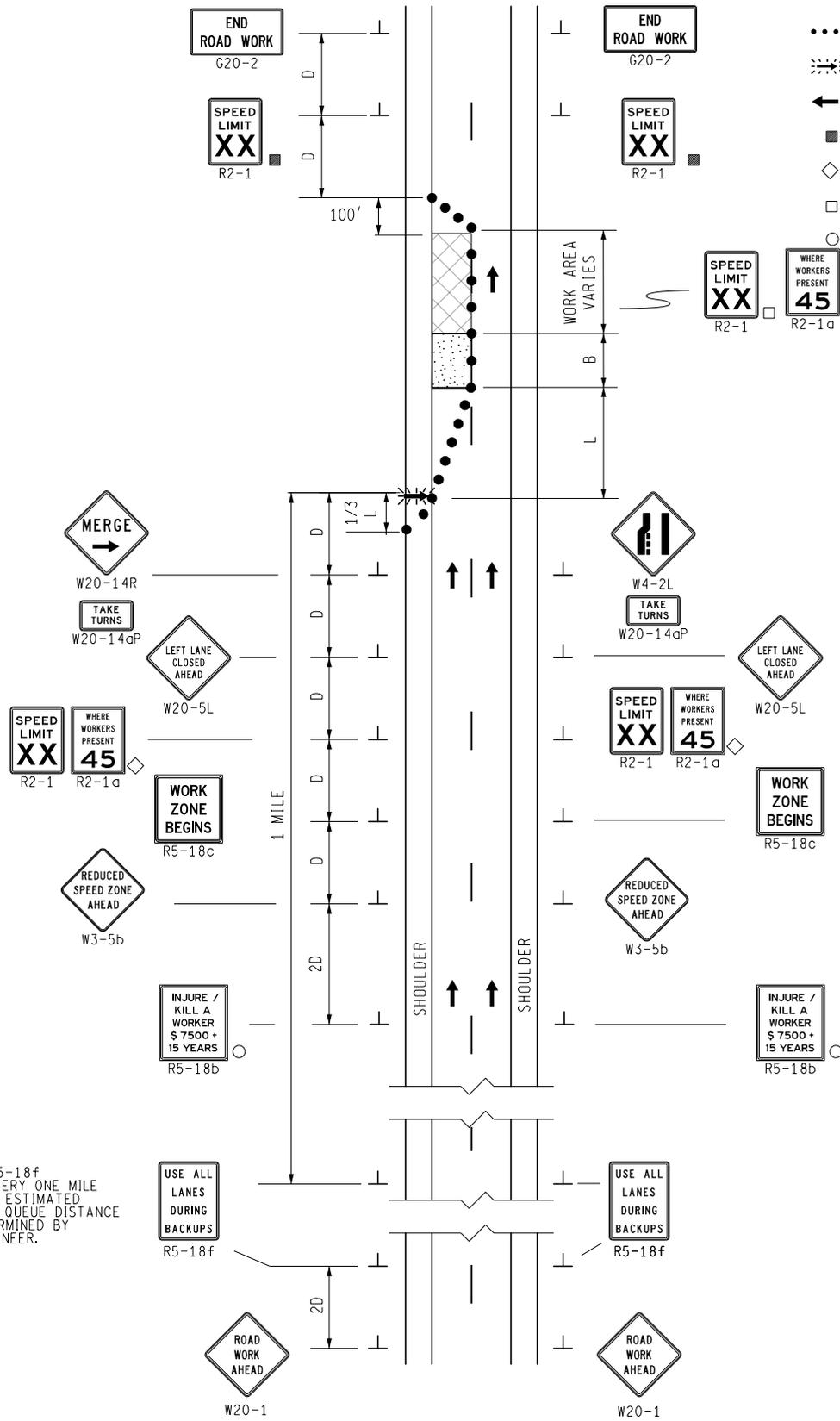
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- ◇ R2-1a OPTIONAL
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

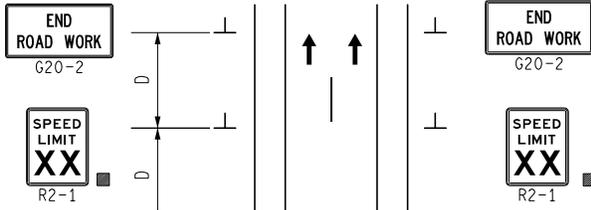
STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S6, S8
 DEVICES: TCD1, TCD2, TCD6



PLACE R5-18f SIGNS EVERY ONE MILE FOR THE ESTIMATED MAXIMUM QUEUE DISTANCE AS DETERMINED BY THE ENGINEER.

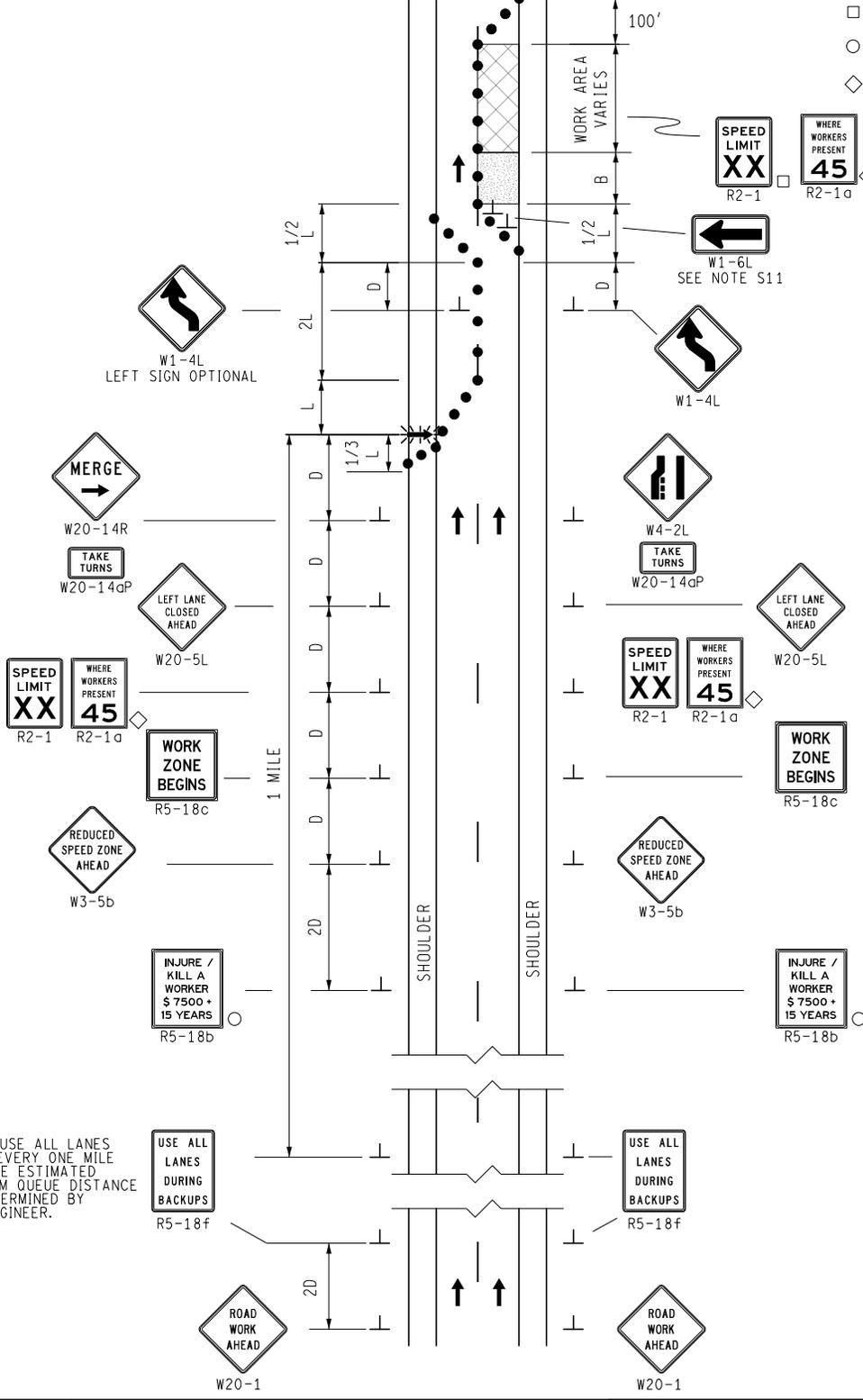


KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL

STANDARD NOTES
(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
SIGNING: S1, S2, S3, S5, S6, S8, S11
DEVICES: TCD1, TCD2, TCD6



PLACE USE ALL LANES SIGNS EVERY ONE MILE FOR THE ESTIMATED MAXIMUM QUEUE DISTANCE AS DETERMINED BY THE ENGINEER.

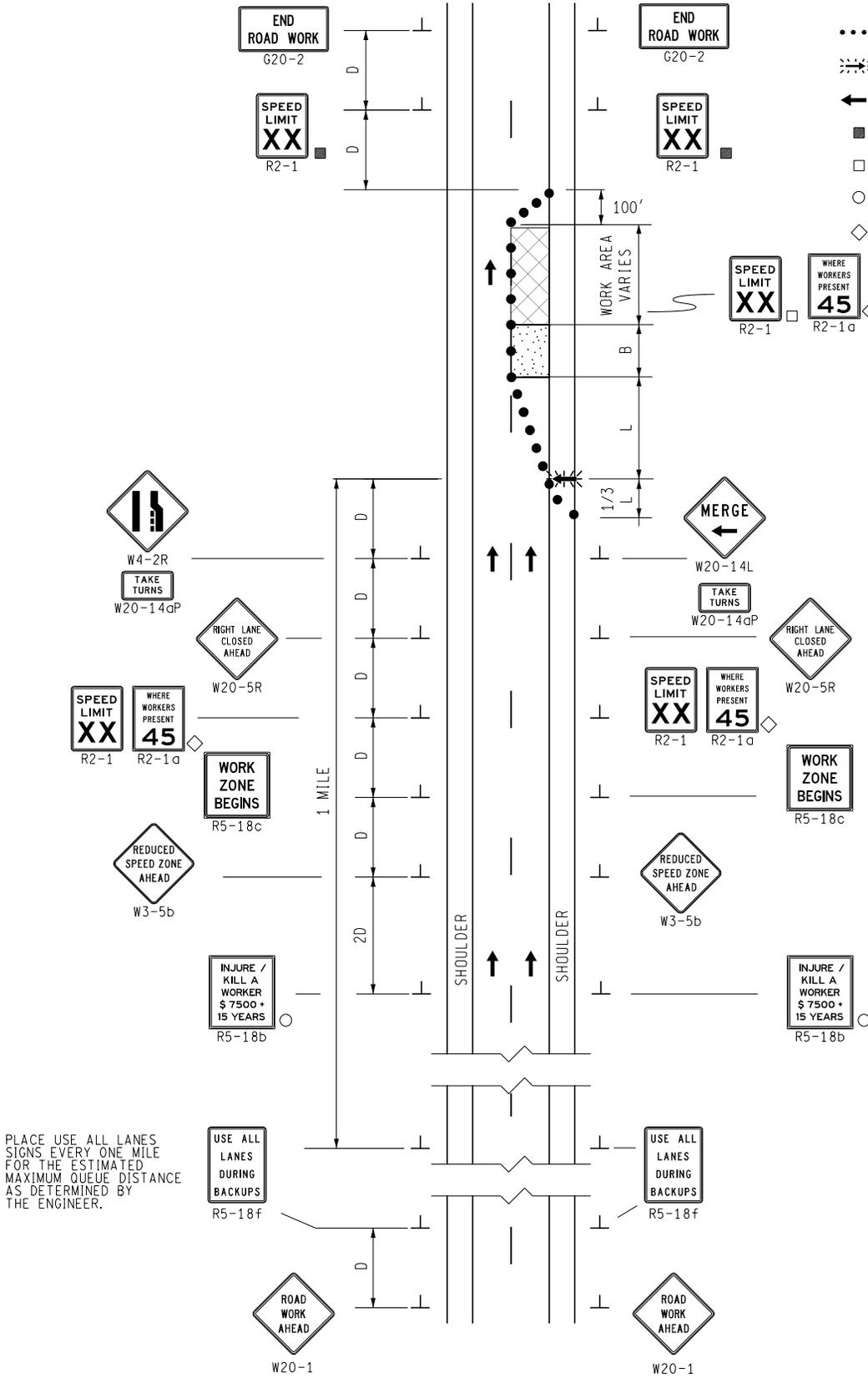
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S6, S8
 DEVICES: TCD1, TCD2, TCD6



PLACE USE ALL LANES SIGNS EVERY ONE MILE FOR THE ESTIMATED MAXIMUM QUEUE DISTANCE AS DETERMINED BY THE ENGINEER.

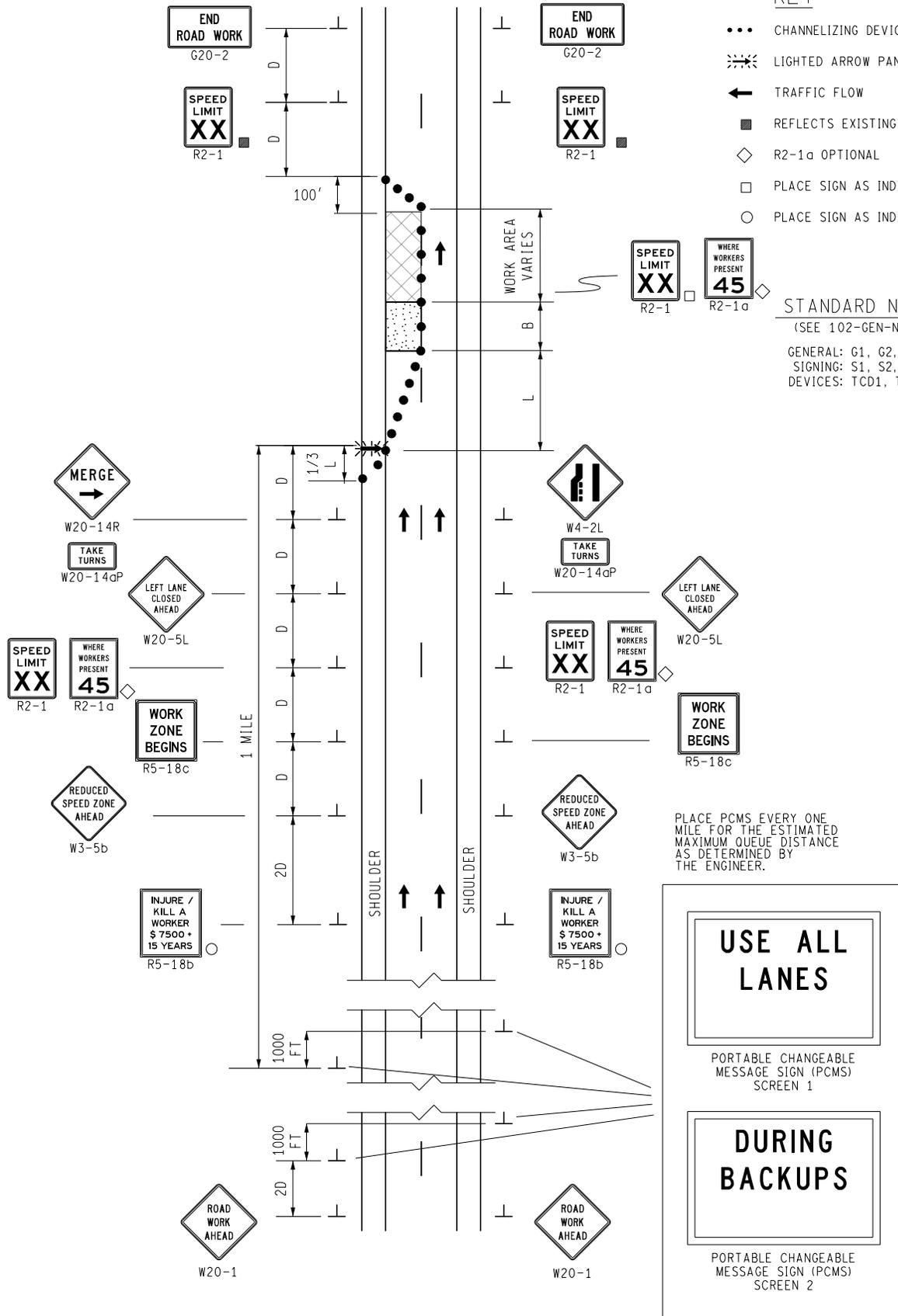
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- ◇ R2-1a OPTIONAL
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2

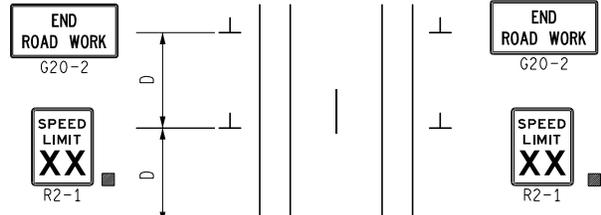
STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S6, S8
 DEVICES: TCD1, TCD2, TCD6



PLACE PCMS EVERY ONE MILE FOR THE ESTIMATED MAXIMUM QUEUE DISTANCE AS DETERMINED BY THE ENGINEER.

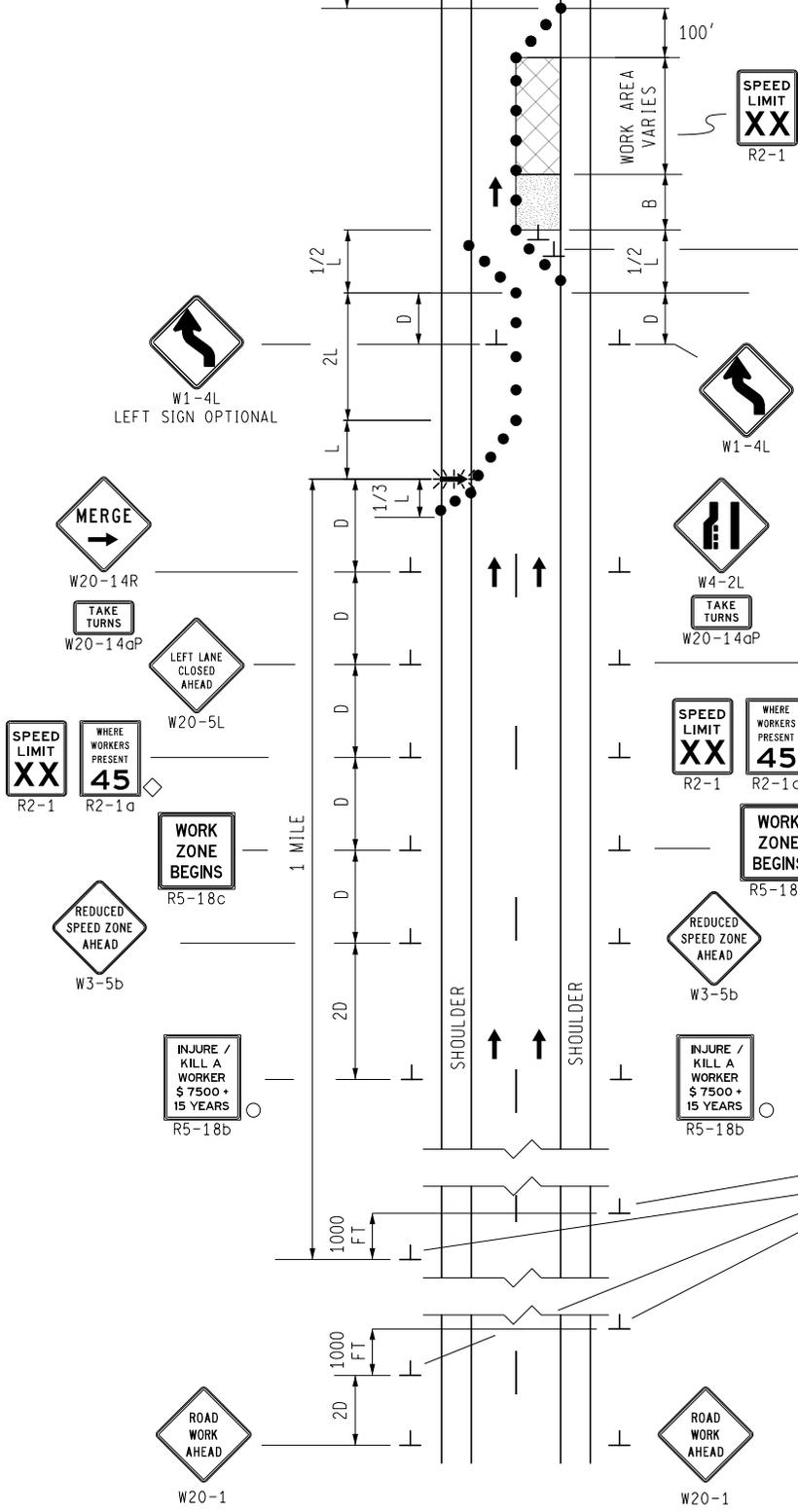


KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- ◇ R2-1a OPTIONAL
- PLACE AS INDICATED IN NOTE S2

STANDARD NOTES
(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
SIGNING: S1, S2, S3, S5, S6, S8, S11
DEVICES: TCD1, TCD2, TCD6, TCD10



PLACE PCMS EVERY ONE MILE FOR THE ESTIMATED MAXIMUM QUEUE DISTANCE AS DETERMINED BY THE ENGINEER.

USE ALL LANES

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) SCREEN 1

DURING BACKUPS

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) SCREEN 2



NOT TO SCALE

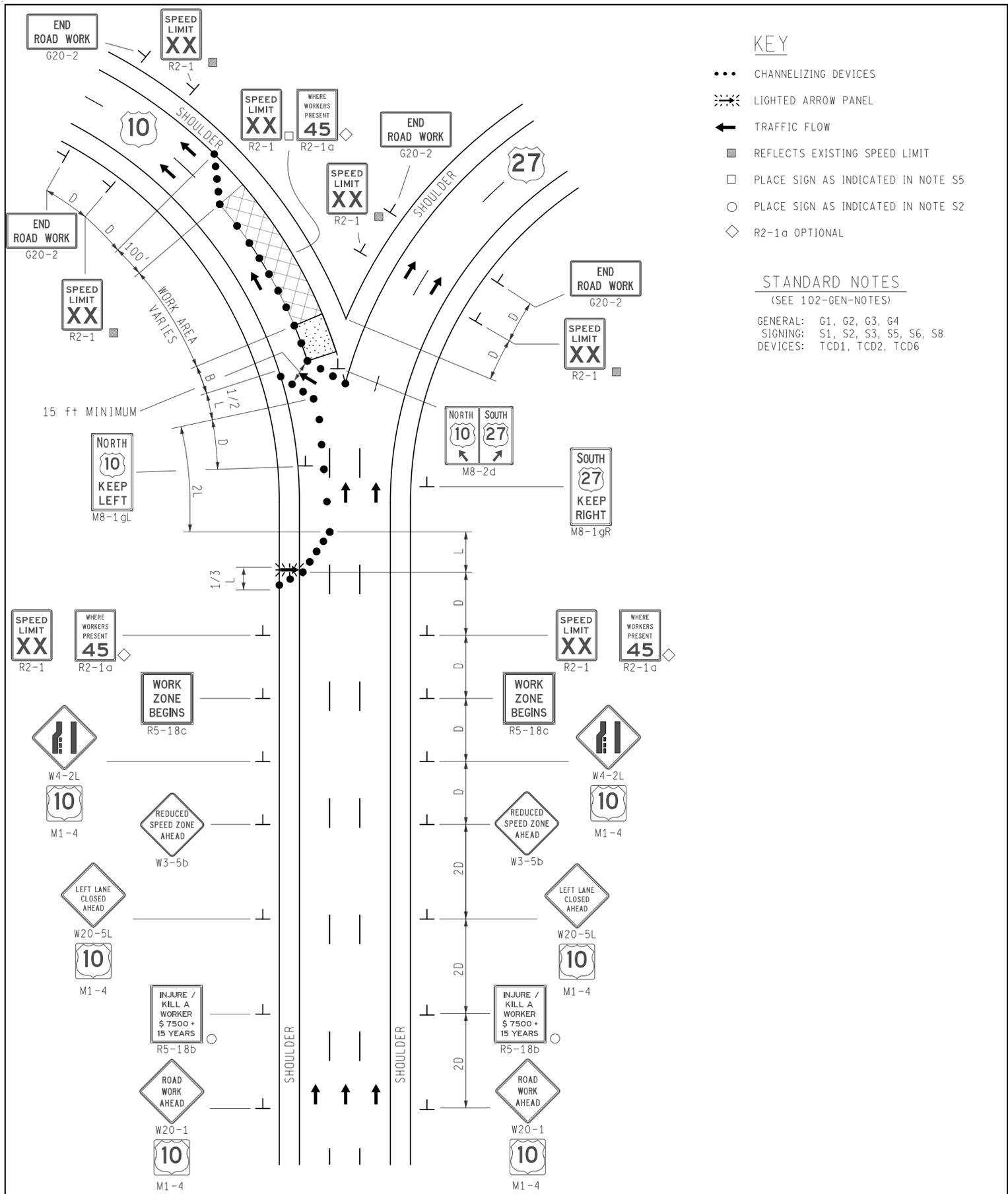
MAINTAINING TRAFFIC TYPICAL

NO: 345-SP-ZIP-1LC-SHIFT-PCMS

**SINGLE LEFT LANE CLOSURE
WITH SHIFT AND PCMS ZIPPER MERGE
ON A 2-LANE FREEWAY**

DATE: JUNE 2021

SHEET:



KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S5, S6, S8
 DEVICES: TCD1, TCD2, TCD6



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 350-
 SP-GORE-1LC-(L)

**SINGLE LANE CLOSURE
 IN ADVANCE OF GORE WITH SHIFT
 ON A 3-LANE FREEWAY**

DATE:
 DECEMBER 2021
 SHEET:

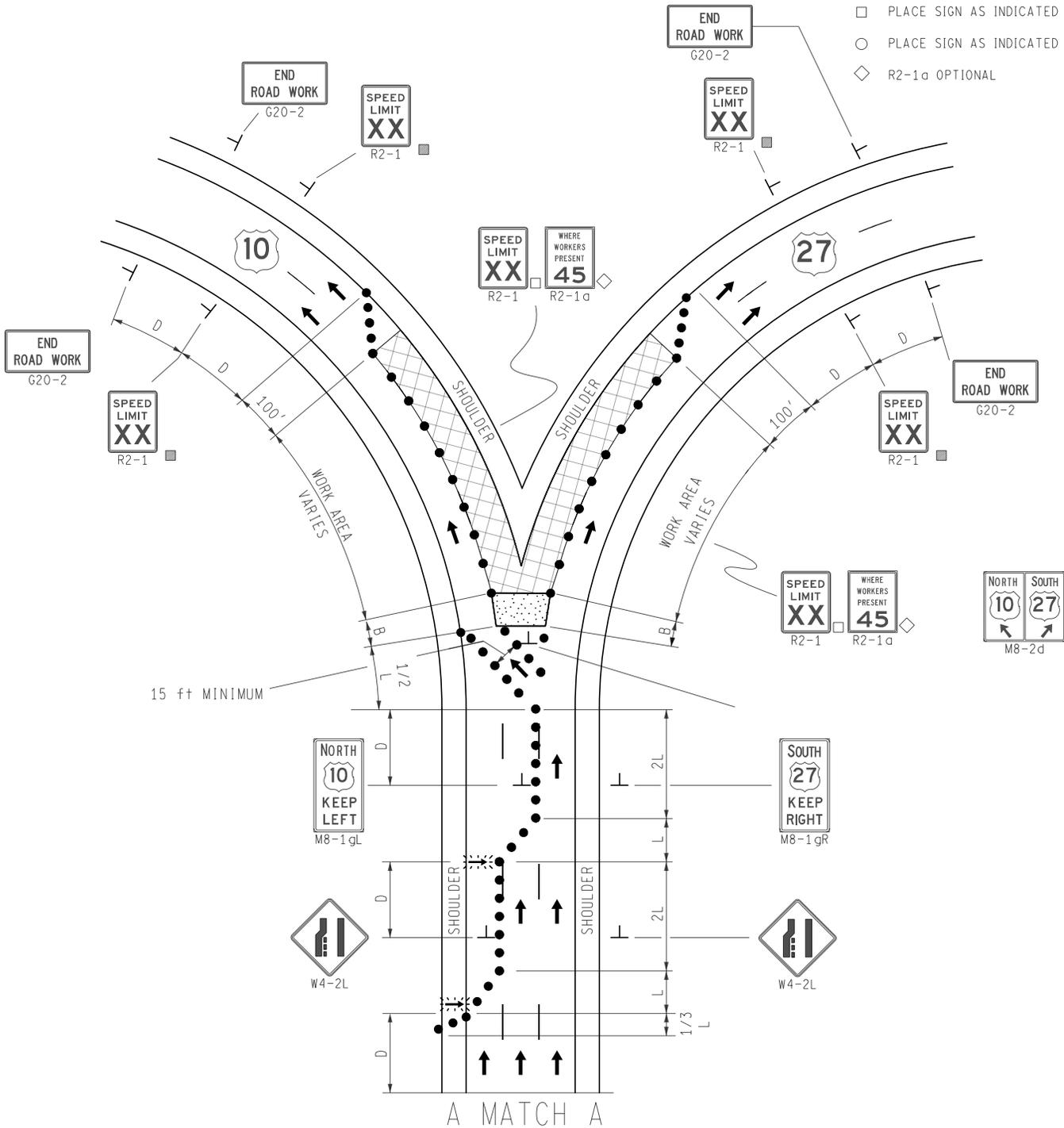
STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4, G5
 SIGNING: S1, S2, S3, S5, S6, S8
 DEVICES: TCD1, TCD2, TCD6

KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL



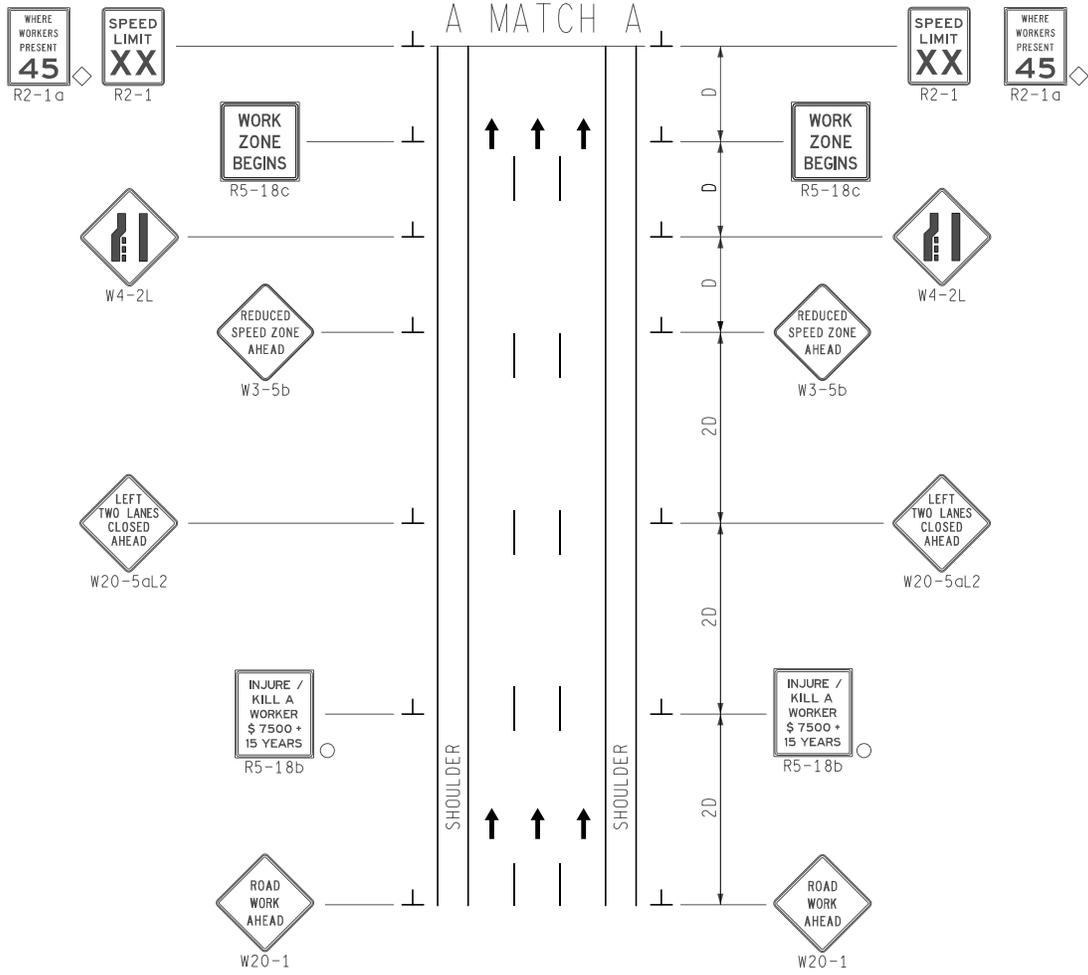
NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 351-
 SP-GORE-2LC-(L)

**2-LANE CLOSURE
 IN ADVANCE OF GORE WITH SHIFT
 ON A 3-LANE FREEWAY**

DATE:
 DECEMBER 2021
 SHEET:



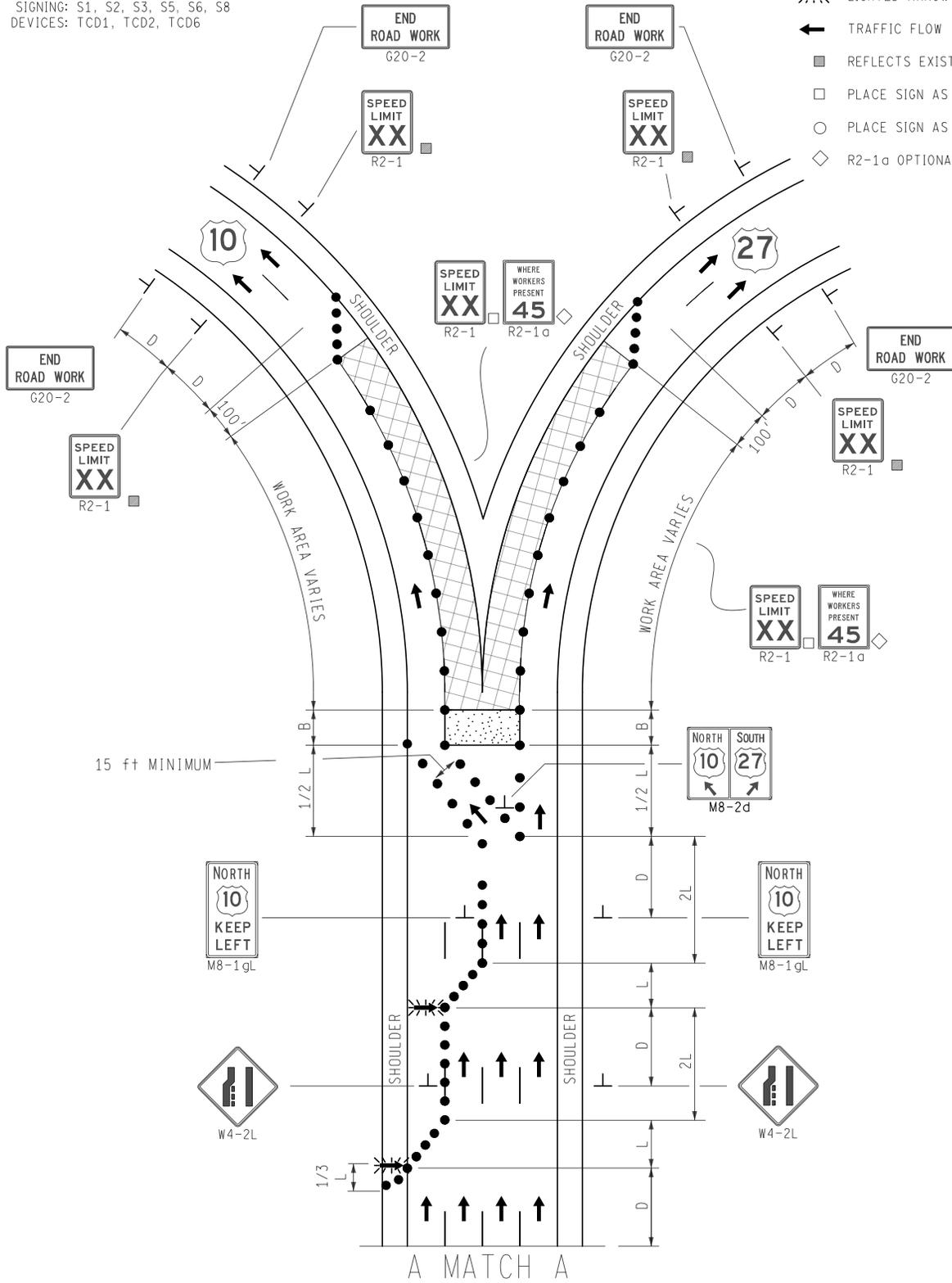
STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4, G5
 SIGNING: S1, S2, S3, S5, S6, S8
 DEVICES: TCD1, TCD2, TCD6

KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL

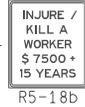
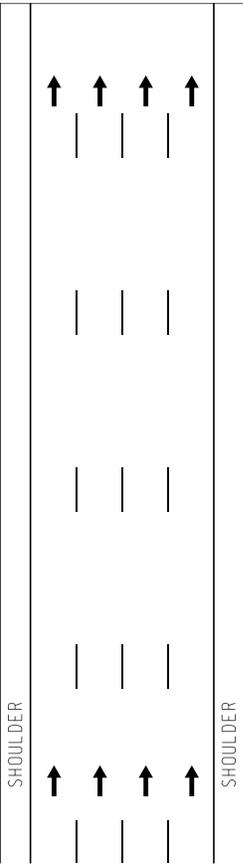


A MATCH A

	NOT TO SCALE	MAINTAINING TRAFFIC TYPICAL	2-LANE CLOSURE IN ADVANCE OF GORE WITH SHIFT ON A 4-LANE FREEWAY	DATE: NOVEMBER 2021
		NO: 352- SP-GORE(4)-2LC-(L)		SHEET:
FILE: 352-SP-GORE(4)-2LC-(L).dgn			1 OF 2	



A MATCH A



D
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2D
2D

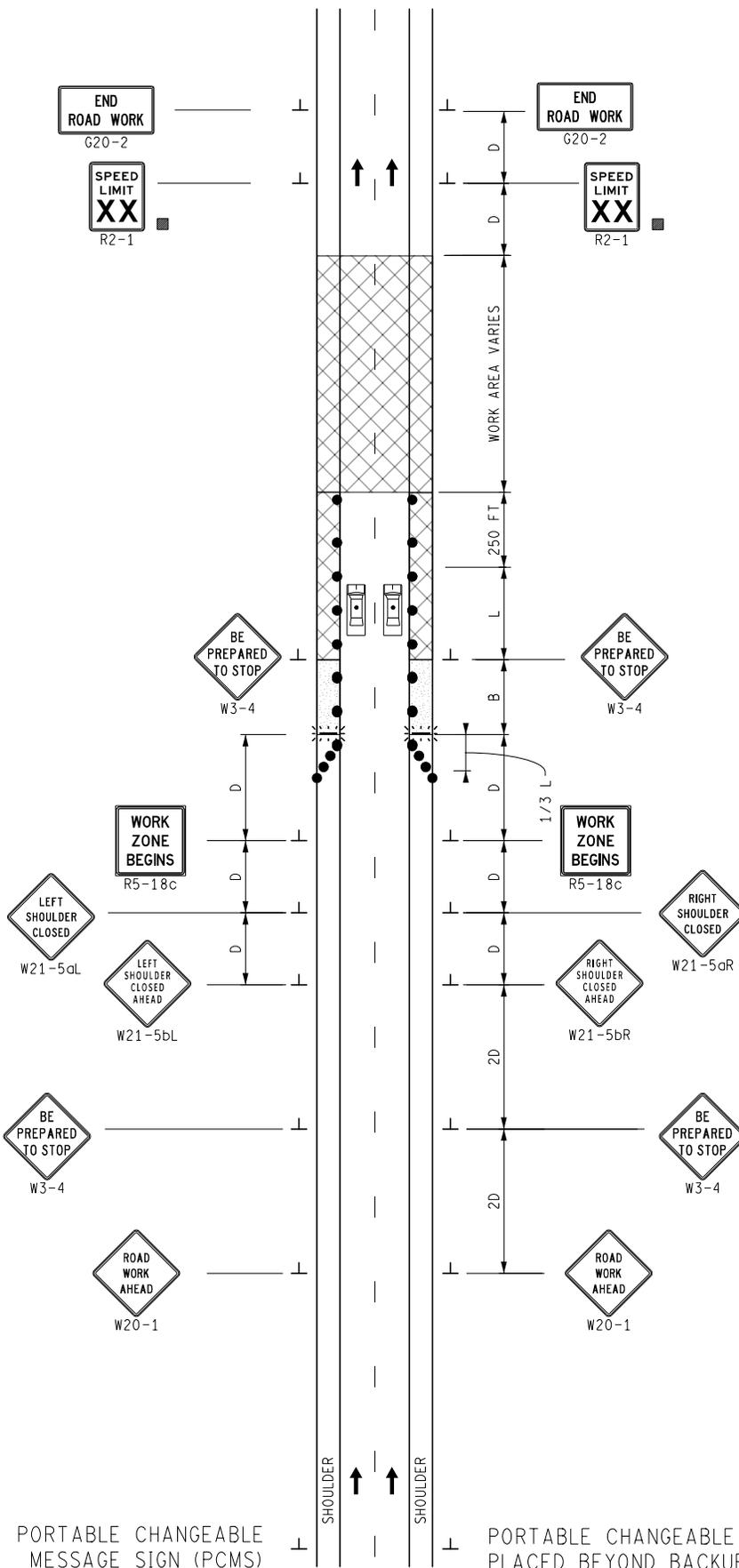
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- PLACE SIGN AS INDICATED IN NOTE S5
- PLACE SIGN AS INDICATED IN NOTE S2
- ◇ R2-1a OPTIONAL
- POLICE VEHICLE WITH LIGHT BAR OR CONSTRUCTION VEHICLE WITH PERMANENTLY AFFIXED ROTATING BEACON OR STROBE LIGHT

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S4, S5, S6
 TRAF REG: TR1, TR2
 DEVICES TCD1, TCD2, TCD10



PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) PLACED BEYOND BACKUP AND STAGGERED 1000 FT



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

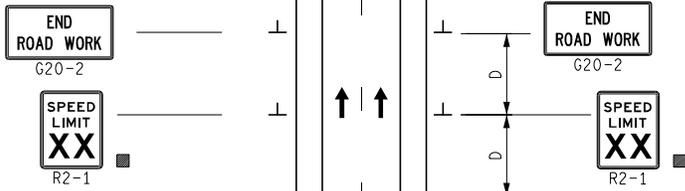
NO:

360-SP-ROLL

ROLLING ROADBLOCK
 ON A TWO LANE FREEWAY

DATE: MAY 2021

SHEET:



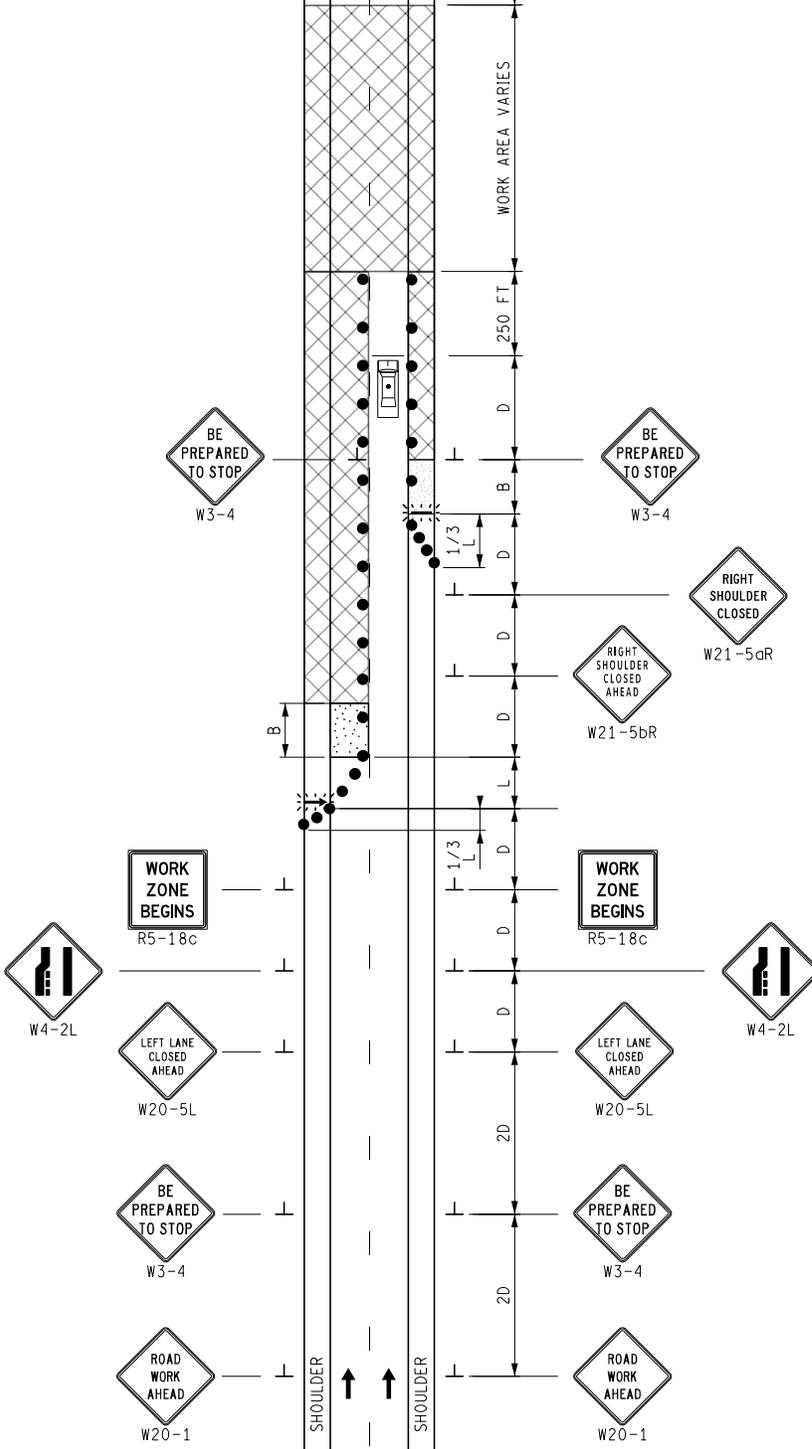
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- 🚓 POLICE VEHICLE WITH LIGHT BAR OR CONSTRUCTION VEHICLE WITH PERMANENTLY AFFIXED ROTATING BEACON OR STROBE LIGHT

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S4, S5, S6
 TRAF REG: TR1, TR2
 DEVICES TCD1, TCD2, TCD10



PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
 PLACED BEYOND BACKUP AND STAGGERED 1000 FT



NOT TO SCALE

MAINTAINING TRAFFIC TYPICAL

NO: 361-SP-ROLL-LC

**ROLLING ROADBLOCK
 ON A TWO LANE FREEWAY
 WITH A LANE CLOSURE**

DATE: MAY 2021
 SHEET:

1 OF 1



MAINTENANCE MAINTAINING TRAFFIC TYPICALS

 FILE: Cover for Maintenance.dgn		COVER SHEET	COVER SHEET	DATE: JUNE 2021
		NO:		

NOTES

1. FOR SHORT-DURATION OR MOBILE OPERATIONS, NO SIGNS ARE REQUIRED IF APPROPRIATELY EQUIPPED VEHICLES ARE USED.
2. IF THE OPERATION HAS VEHICLE(S) PARKED ON THE SHOULDER OR VEHICLES ACCESSING THE WORK SITE VIA THE HIGHWAY OR CROSSING THE HIGHWAY TO PERFORM OPERATIONS, A "ROAD WORK AHEAD" SIGN OR AN ARROW BOARD IN CAUTION MODE SHALL BE USED.
3. WORK VEHICLES SHOULD BE PARKED AS FAR OFF THE TRAVELED WAY AS PRACTICAL.
4. IF THE WORK SPACE IS IN THE MEDIAN OF A DIVIDED ROADWAY, ADVANCE WARNING SIGNS SHALL BE PLACED IN BOTH DIRECTIONS OF TRAVEL.
5. VEHICLES AND PERSONNEL SHOULD ALL BE LOCATED AND PARKED ON THE SAME SIDE OF THE ROADWAY TO THE EXTENT PRACTICAL.

KEY

← TRAFFIC FLOW

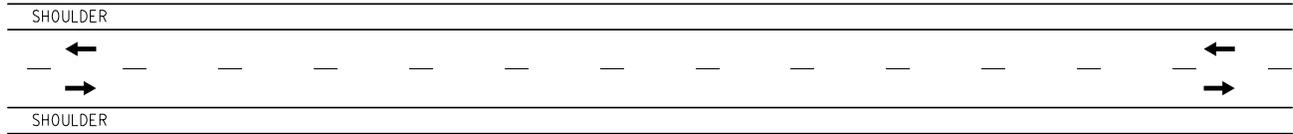
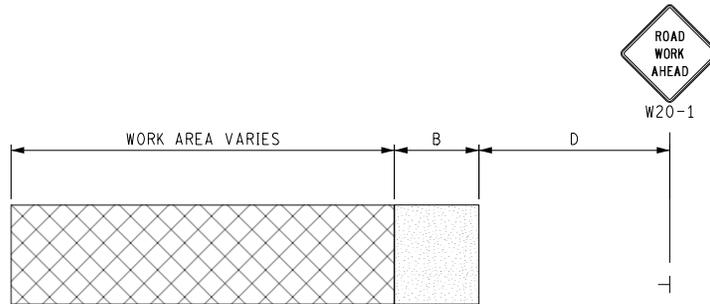
STANDARD NOTES

(SEE 102-GEN-NOTES)

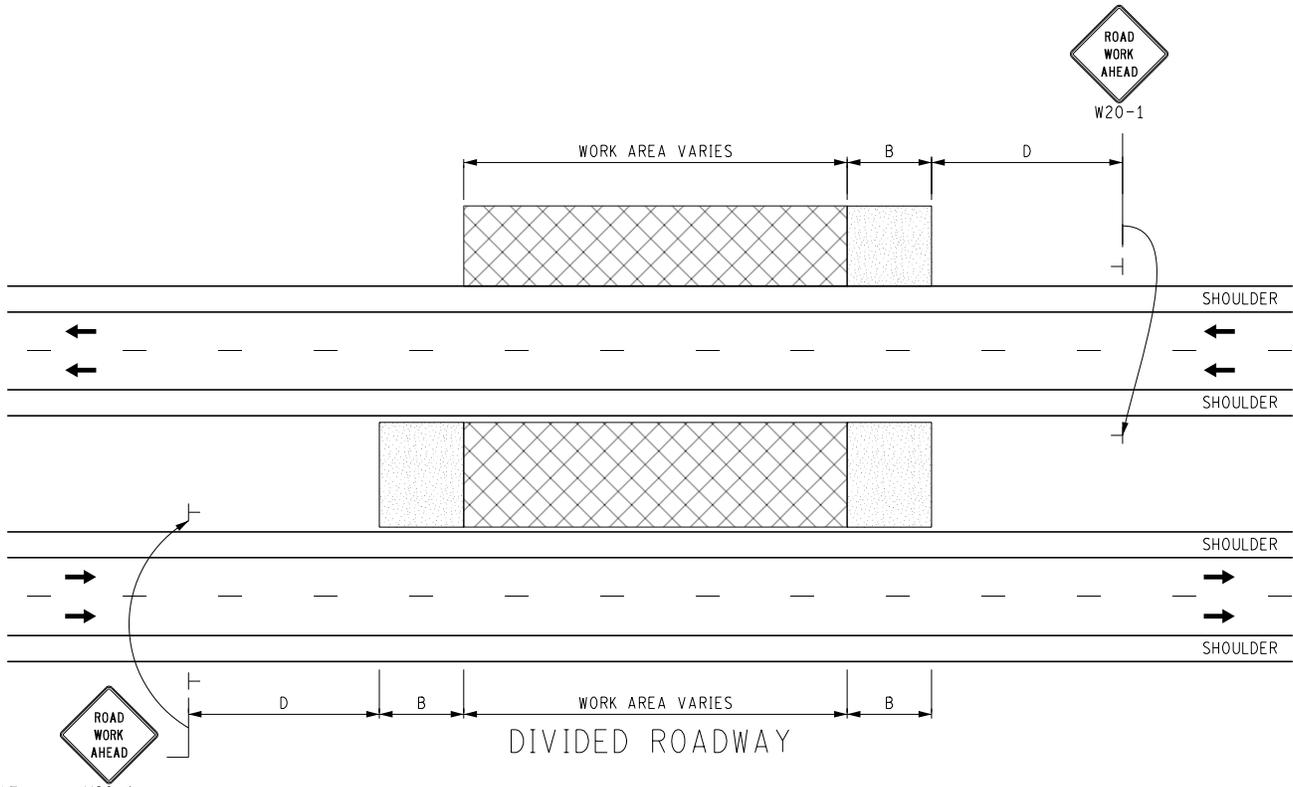
GENERAL: G1, G3, G4

SIGNING: S1

MAINT & SURV: MS2, MS4



TWO LANE, TWO WAY ROADWAY



DIVIDED ROADWAY

NOT TO SCALE

W20-1



MAINTENANCE
MAINTAINING TRAFFIC
TYPICAL

DURATION:

ALL

WORK OUTSIDE SHOULDER

DATE:
MAY 2021

NO:
4000-M-SHL-OUT

SHEET:
1 OF 1

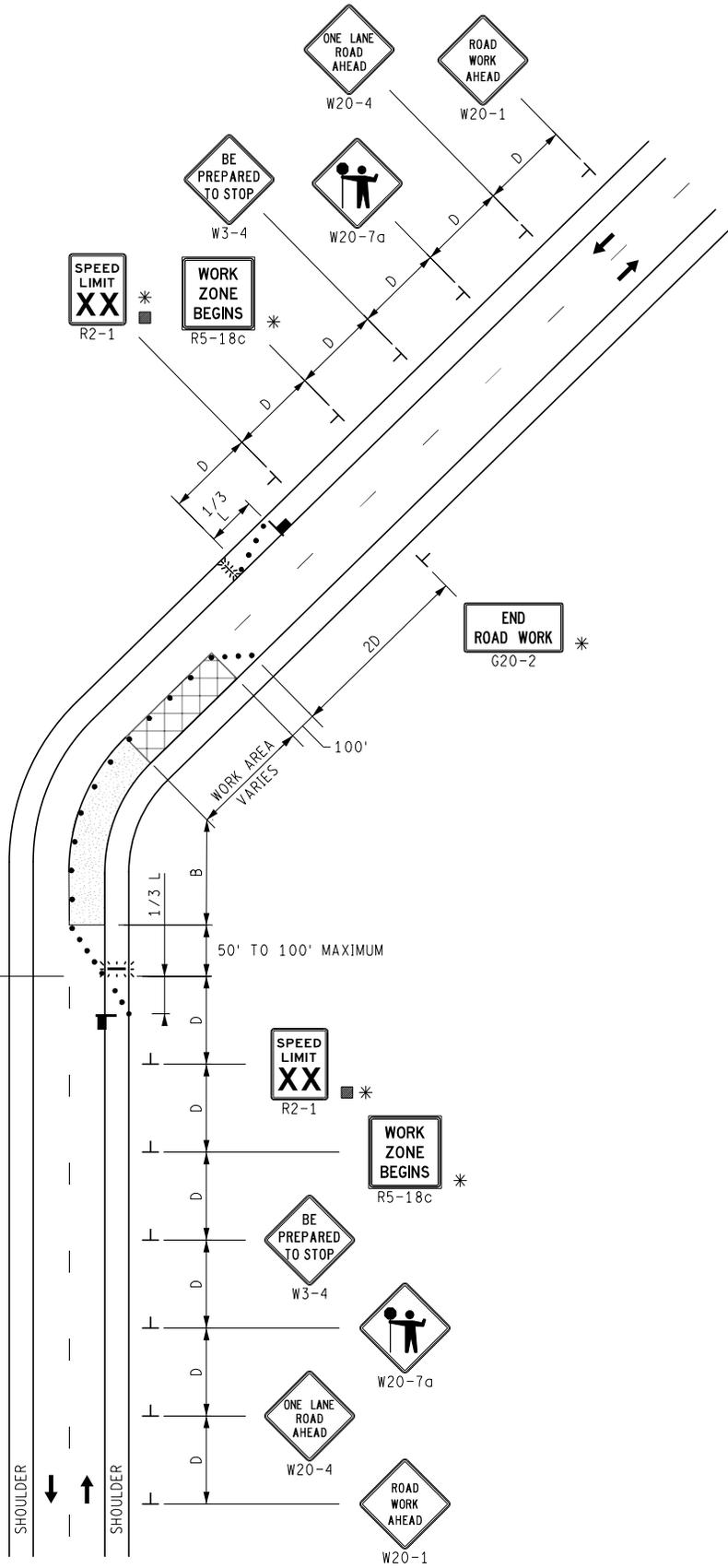
KEY

-  TRAFFIC REGULATOR
-  CHANNELIZING DEVICES
-  LIGHTED ARROW PANEL (CAUTION MODE)
-  TRAFFIC FLOW
-  REFLECTS EXISTING SPEED LIMIT
-  * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY
-  □ PLACE AS INDICATED IN NOTE 55

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S3, S4, S5
 TRAF REG: TR1, TR2
 DEVICES: TCD1, TCD2, TCD6
 MAINT & SURV: MS2, MS3, MS4



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	LANE CLOSURE FOR A TWO-LANE, TWO-WAY ROADWAY UTILIZING TRAFFIC REGULATORS NO SPEED REDUCTION	DATE: MAY 2021 NO: 4110A- M-TR-NFW-2L SHEET: 1 OF 1
	FILE: 4110A-M-TR-NFW-2L.dgn			

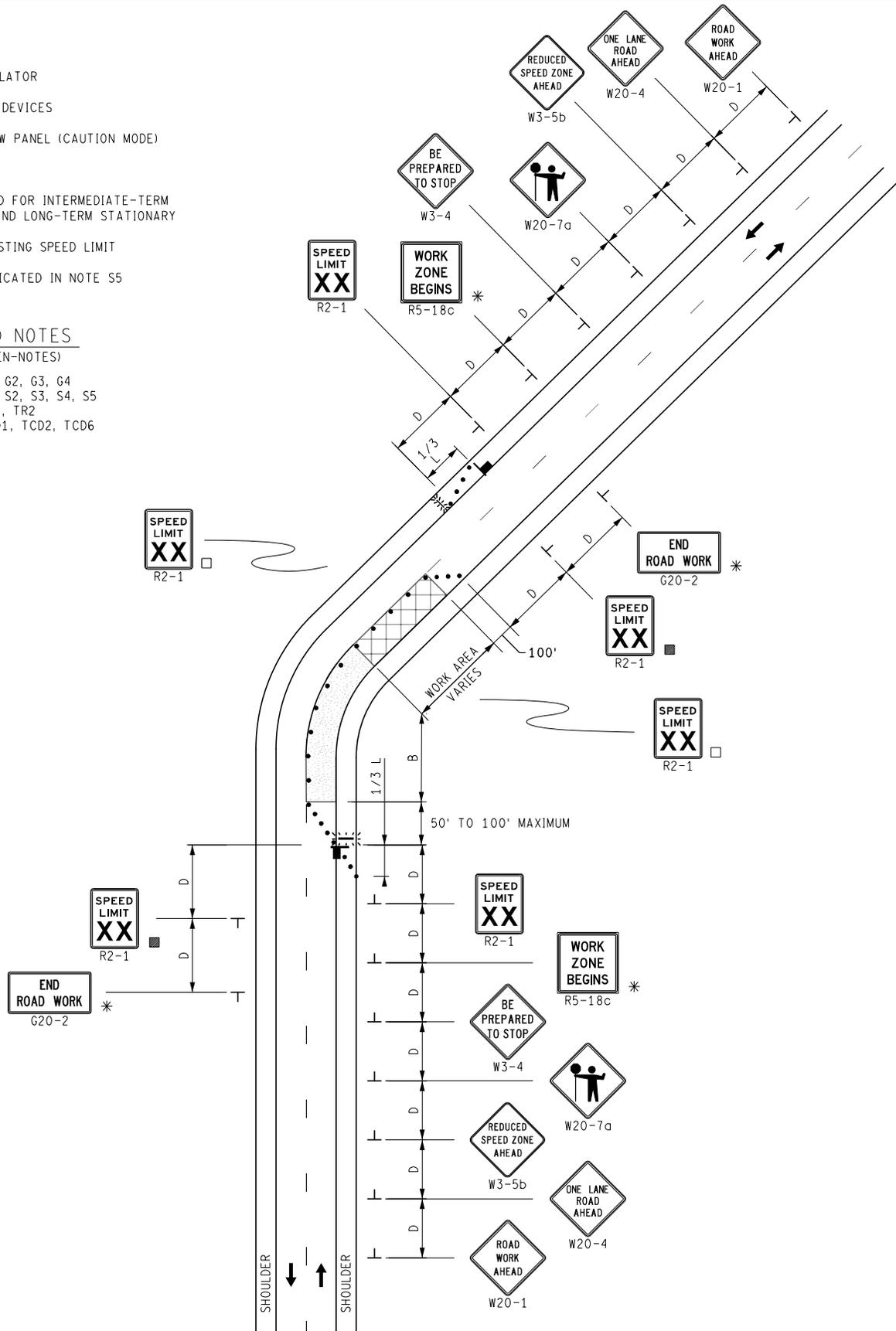
KEY

-  TRAFFIC REGULATOR
-  CHANNELIZING DEVICES
-  LIGHTED ARROW PANEL (CAUTION MODE)
-  TRAFFIC FLOW
- * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY
-  REFLECTS EXISTING SPEED LIMIT
-  PLACE AS INDICATED IN NOTE S5

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S4, S5
 TRAF REG: TR1, TR2
 DEVICES: TCD1, TCD2, TCD6



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	LANE CLOSURE FOR A TWO-LANE, TWO-WAY ROADWAY UTILIZING TRAFFIC REGULATORS WITH A MAXIMUM 10 MPH SPEED REDUCTION	DATE: MAY 2021
				NO: 4110B-M-TR-NFW-2L
FILE: 4110B-M-TR-NFW-2L.dgn				SHEET: 1 OF 1

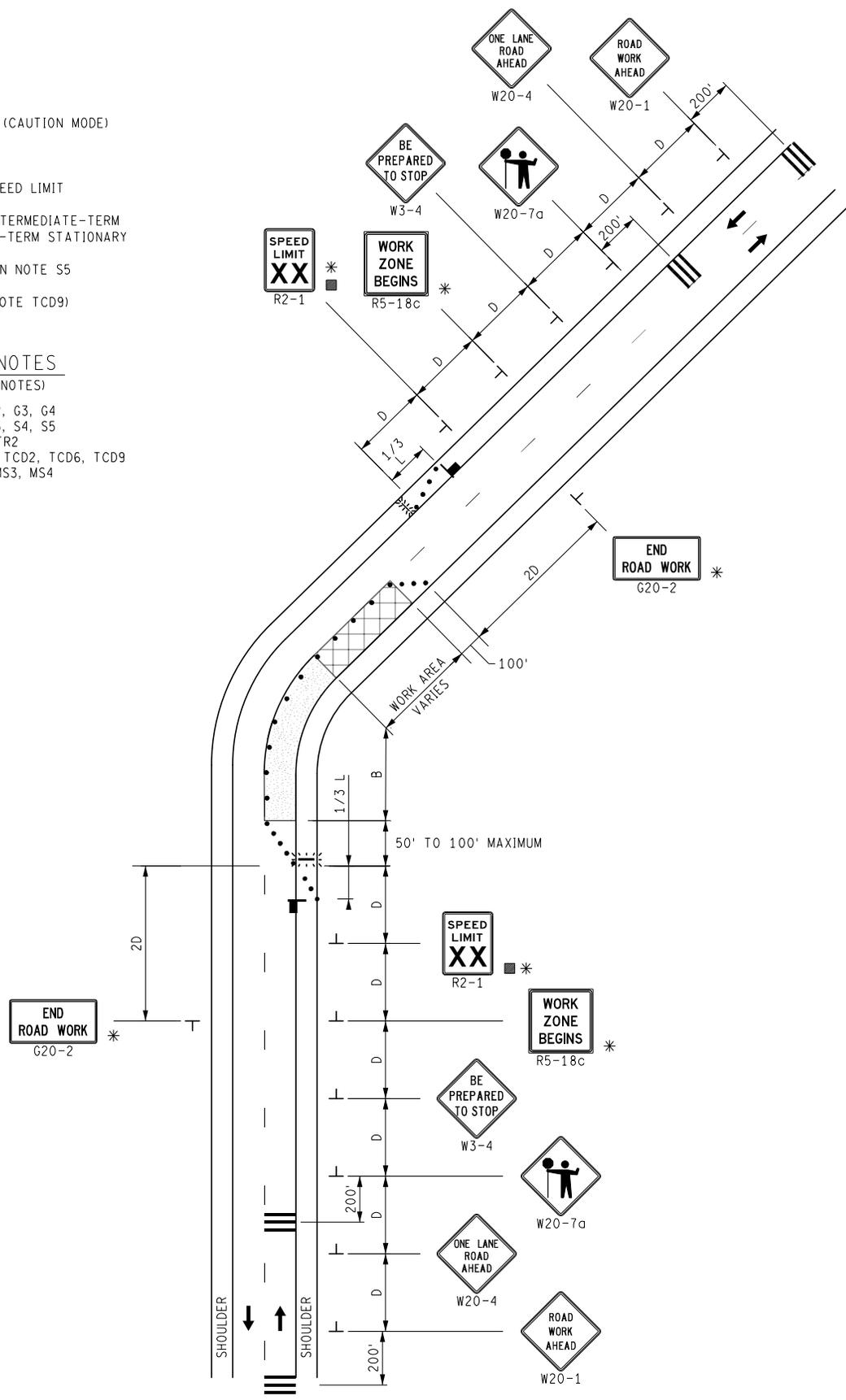
KEY

-  TRAFFIC REGULATOR
-  CHANNELIZING DEVICES
-  LIGHTED ARROW PANEL (CAUTION MODE)
-  TRAFFIC FLOW
-  REFLECTS EXISTING SPEED LIMIT
-  * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY
-  □ PLACE AS INDICATED IN NOTE S5
-  RUMBLE STRIPS (SEE NOTE TCD9)

STANDARD NOTES

(SEE 102-GEN-NOTES)

- GENERAL: G1, G2, G3, G4
- SIGNING: S1, S3, S4, S5
- TRAF REG: TR1, TR2
- DEVICES: TCD1, TCD2, TCD6, TCD9
- MAINT & SURV: MS2, MS3, MS4



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	LANE CLOSURE FOR A TWO-LANE, TWO-WAY ROADWAY UTILIZING TRAFFIC REGULATORS, RUMBLE STRIPS, AND NO SPEED REDUCTION	DATE: JUNE 2021 NO: 4111A-M-TR- NFW-2L-RUM SHEET:
	FILE: 4111A-M-TR-NFW-2L-RUM.dgn			1 OF 1

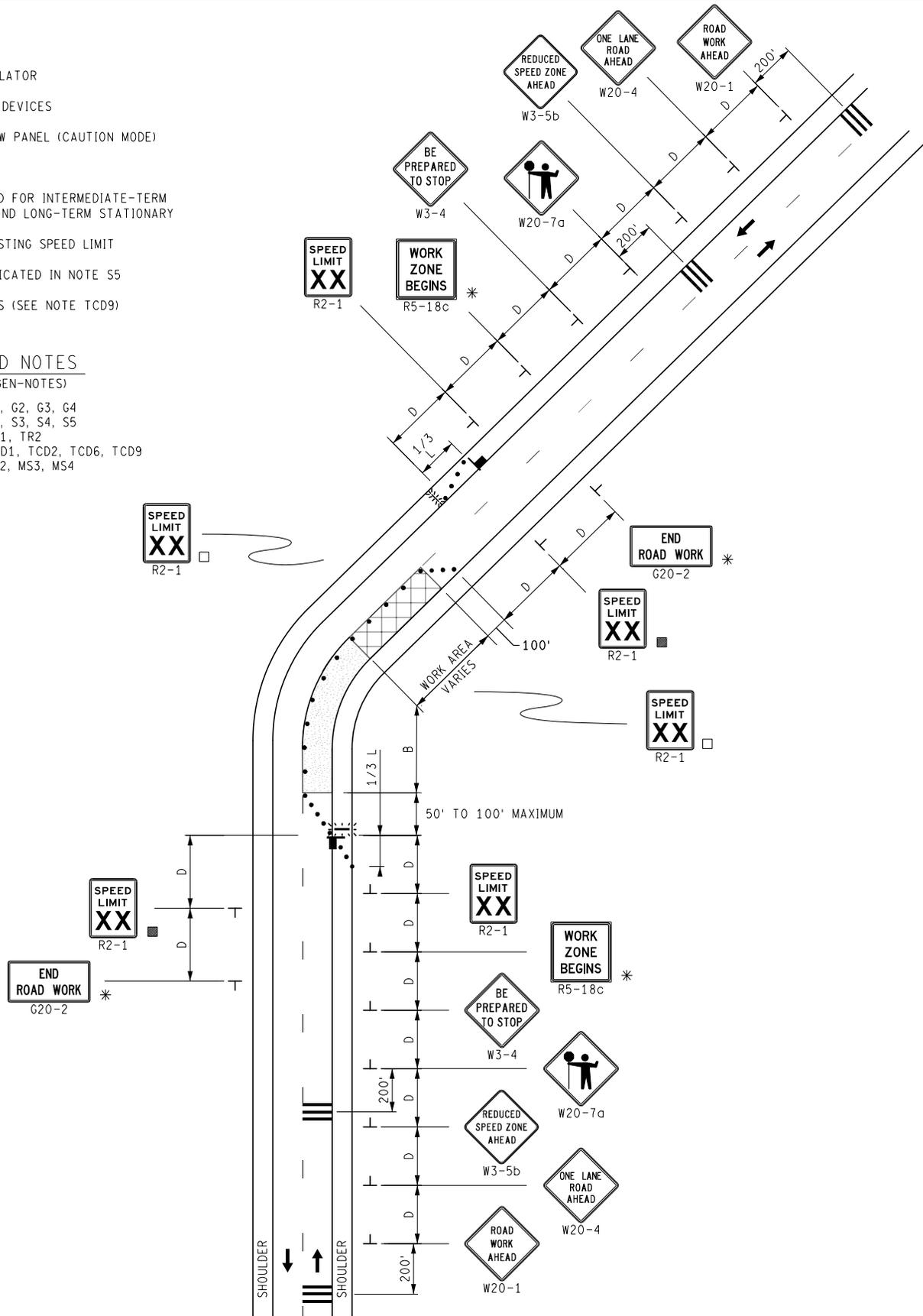
KEY

-  TRAFFIC REGULATOR
-  CHANNELIZING DEVICES
-  LIGHTED ARROW PANEL (CAUTION MODE)
-  TRAFFIC FLOW
-  * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY
-  REFLECTS EXISTING SPEED LIMIT
-  PLACE AS INDICATED IN NOTE S5
-  RUMBLE STRIPS (SEE NOTE TCD9)

STANDARD NOTES

(SEE 102-GEN-NOTES)

- GENERAL: G1, G2, G3, G4
- SIGNING: S1, S3, S4, S5
- TRAF REG: TR1, TR2
- DEVICES: TCD1, TCD2, TCD6, TCD9
- MAINT & SURV: MS2, MS3, MS4



NOT TO SCALE

 Michigan Department of Transportation	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	LANE CLOSURE FOR A TWO-LANE, TWO WAY ROADWAY UTILIZING TRAFFIC REGULATORS AND RUMBLE STRIPS WITH A MAXIMUM 10 MPH SPEED REDUCTION	DATE: JUNE 2021
	FILE: 4111B-M-TR-NFW-2L-RUM.dgn			

KEY

- CHANNELIZING DEVICES
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- TEMPORARY TRAFFIC SIGNAL
- TEMPORARY PAVEMENT MARKING (SOLID 24" STOP BAR)
- TEMPORARY CONCRETE BARRIER WALL
- CRASH ATTENUATOR

NOTES

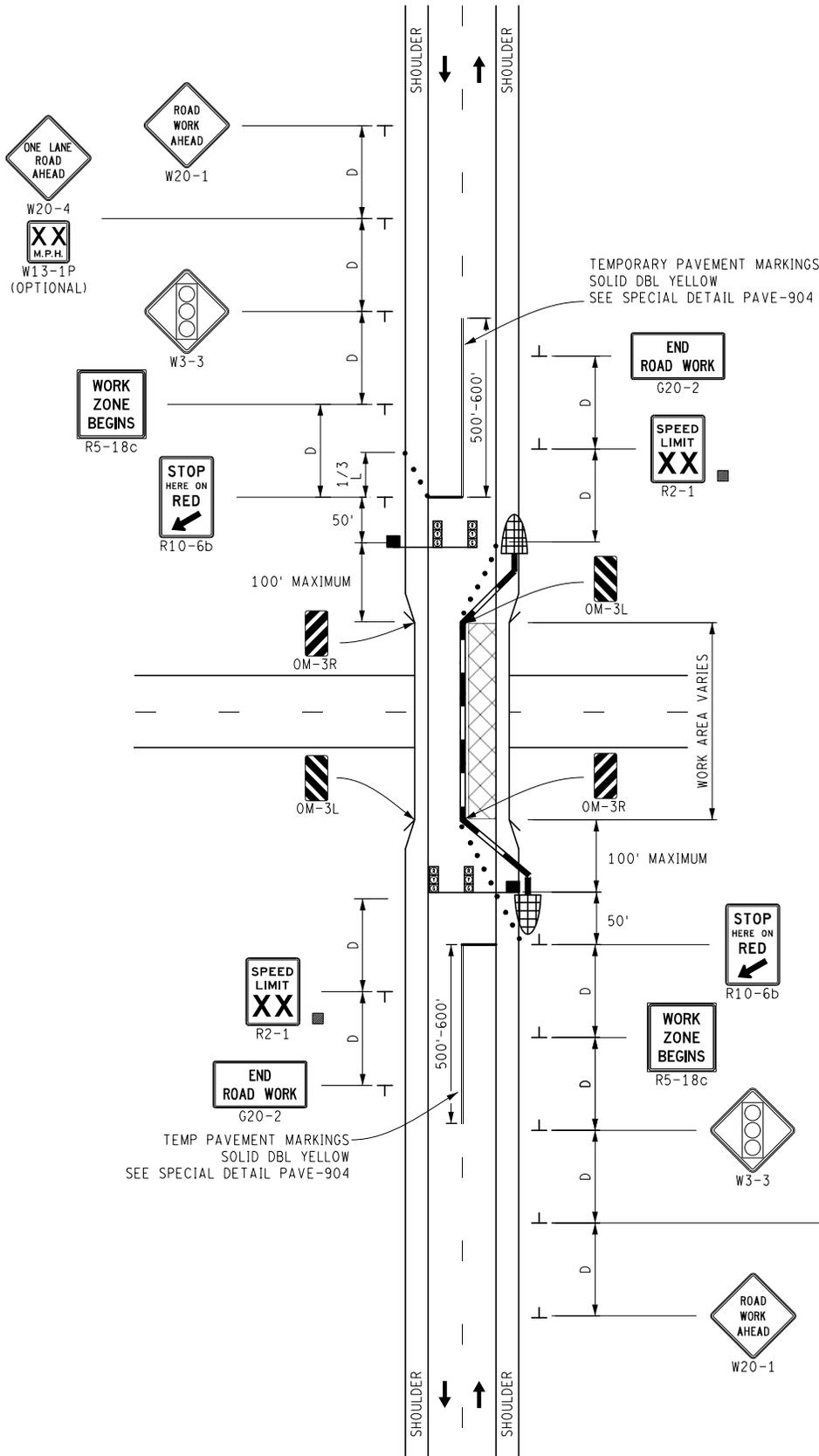
SEE TABLE 6-11 IN DESIGN MANUAL, EDGE DROP TREATMENT FOR BARRIER WALL USAGE GUIDELINES.

BARRIER WALL AND OM-3 SIGNS MAY BE REMOVED AND REPLACED WITH CHANNELIZING DEVICES IF THERE IS NO DROP OFF.

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G5
 SIGNING: S1, S3, S4
 DEVICES: TCD1, TCD5
 MAINT & SURV MS2, MS3, MS4



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY	TEMPORARY TRAFFIC SIGNAL ON A TWO-LANE, TWO-WAY ROADWAY NO SPEED REDUCTION (WITH TEMPORARY BARRIER WALL)	DATE: MAY 2021
				NO: 4121-M-TS
	FILE: 4121-M-TS.dgn			SHEET: 1 OF 1

KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL (CAUTION MODE)
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY

STANDARD NOTES

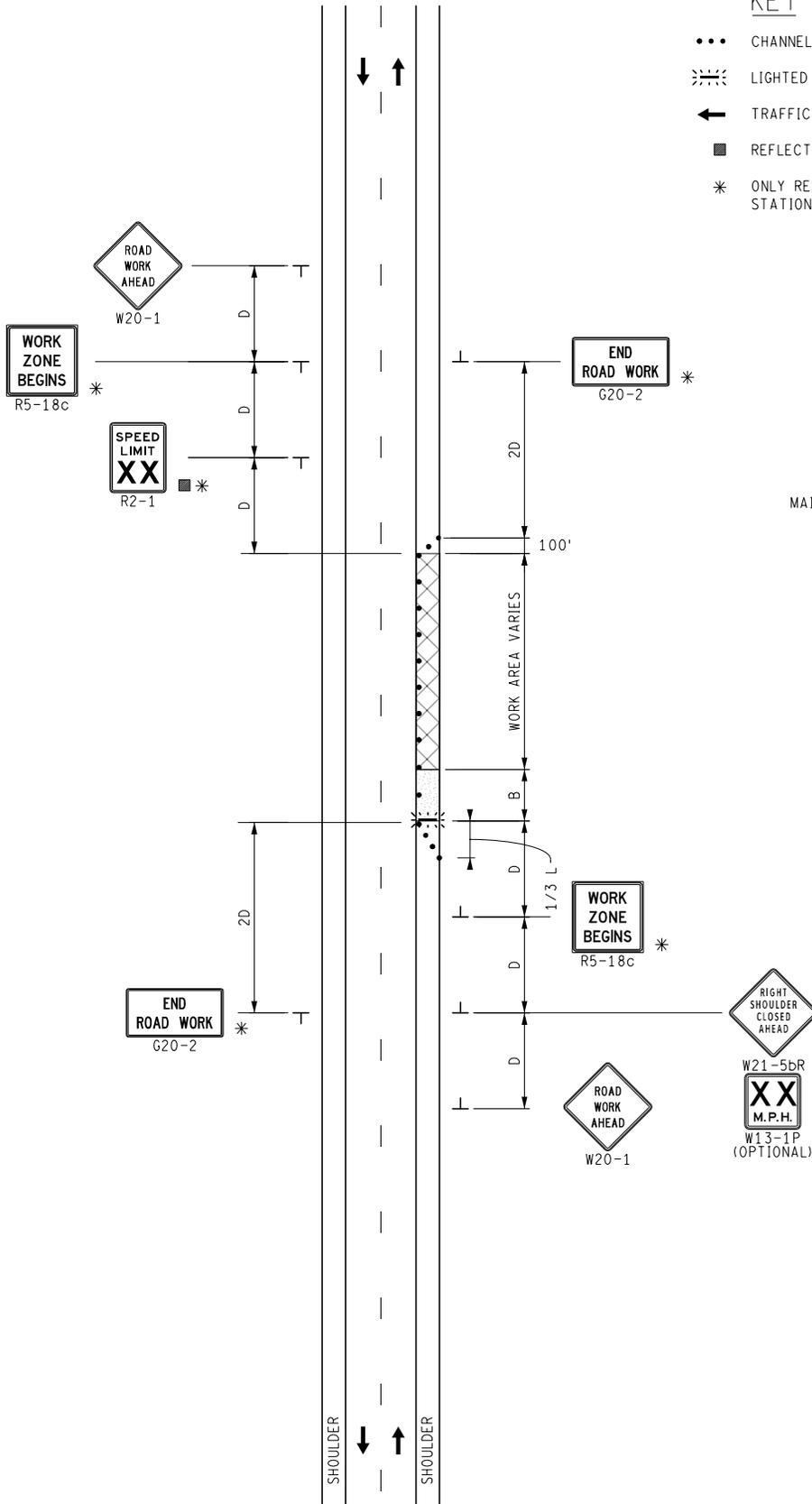
(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4

SIGNING: S1, S3

DEVICES: TCD1, TCD2, TCD6

MAINT & SURV: MS2, MS3, MS4



NOT TO SCALE

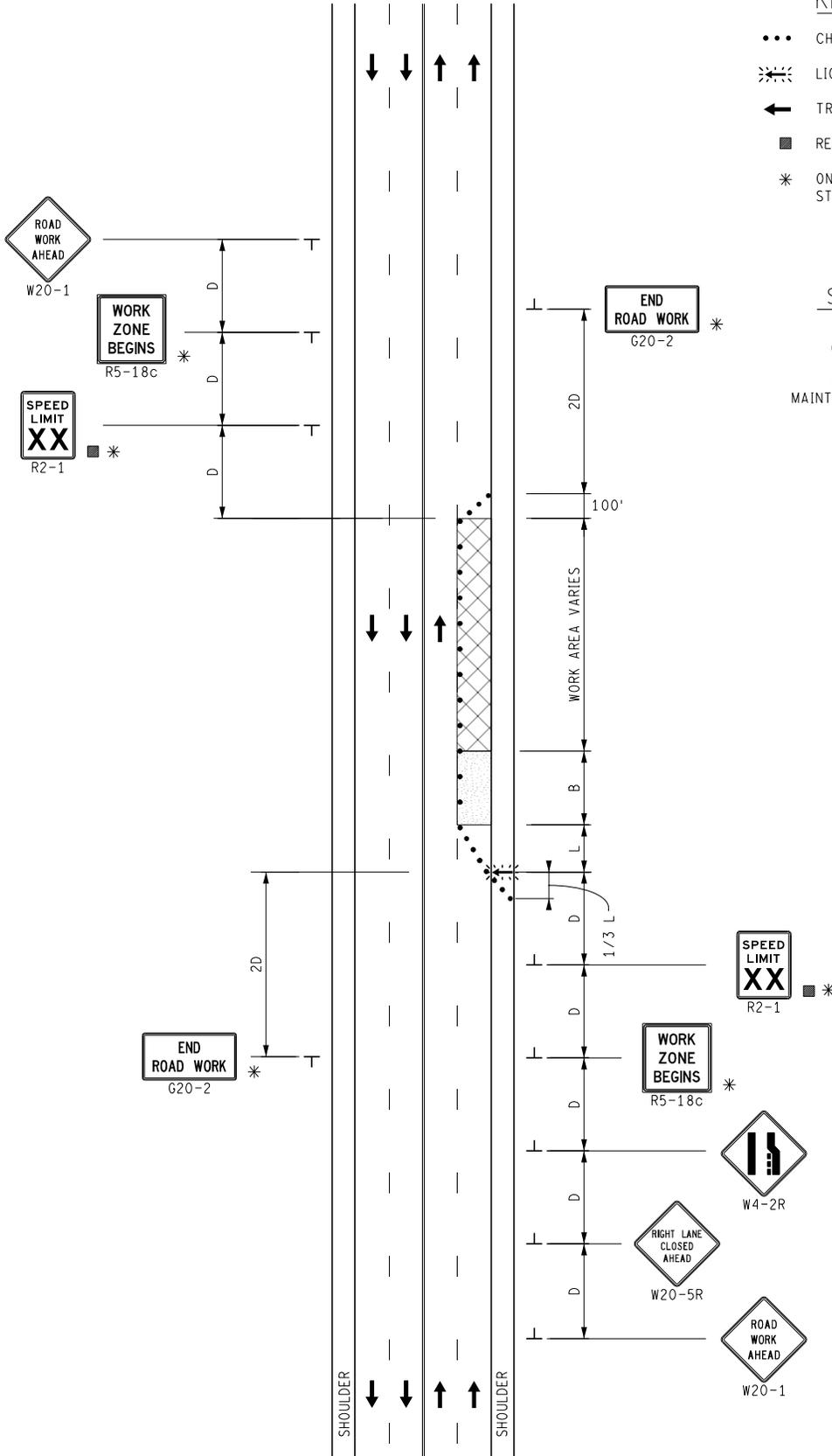
	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-TERM STATIONARY, SHORT DURATION LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY	SHOULDER CLOSURE ON A TWO-LANE, TWO-WAY ROADWAY	DATE: MAY 2021
				NO: 4122-M-NFW-SHL
FILE: 4122-M-NFW-SHL.dgn				SHEET: 1 OF 1

KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY

STANDARD NOTES

(SEE 102-GEN-NOTES)
 GENERAL: G1, G2, G3, G4
 SIGNING: S1, S3
 DEVICES: TCD1, TCD2, TCD6
 MAINT & SURV MS2, MS3, MS4



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	RIGHT LANE CLOSURE ON AN UNDIVIDED MULTI-LANE ROADWAY, NO SPEED REDUCTION	DATE: MAY 2021
				NO: 4123A-M-NFW-1LC-(R)
FILE: 4123A-M-NFW-1LC-(R).dgn				SHEET: 1 OF 1

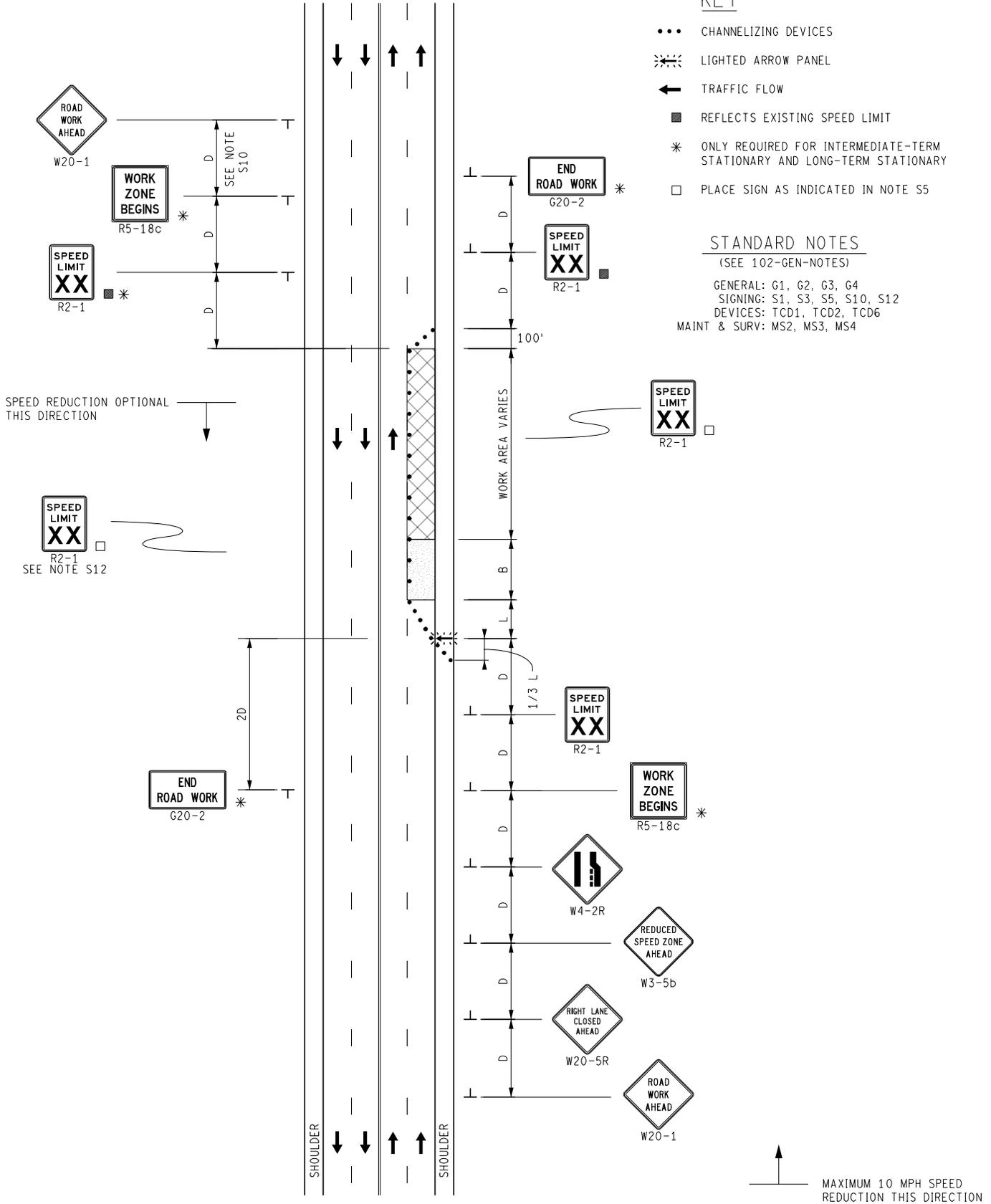
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY
- PLACE SIGN AS INDICATED IN NOTE S5

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S3, S5, S10, S12
 DEVICES: TCD1, TCD2, TCD6
 MAINT & SURV: MS2, MS3, MS4



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	ONE-LANE CLOSURE ON AN UNDIVIDED MULTI-LANE ROADWAY, WITH A MAXIMUM 10 MPH SPEED REDUCTION	DATE: MAY 2021
				NO: 4123B-M-NFW-1LC-(R)
FILE: 4123B-M-NFW-1LC-(R).dgn				SHEET: 1 OF 1

KEY

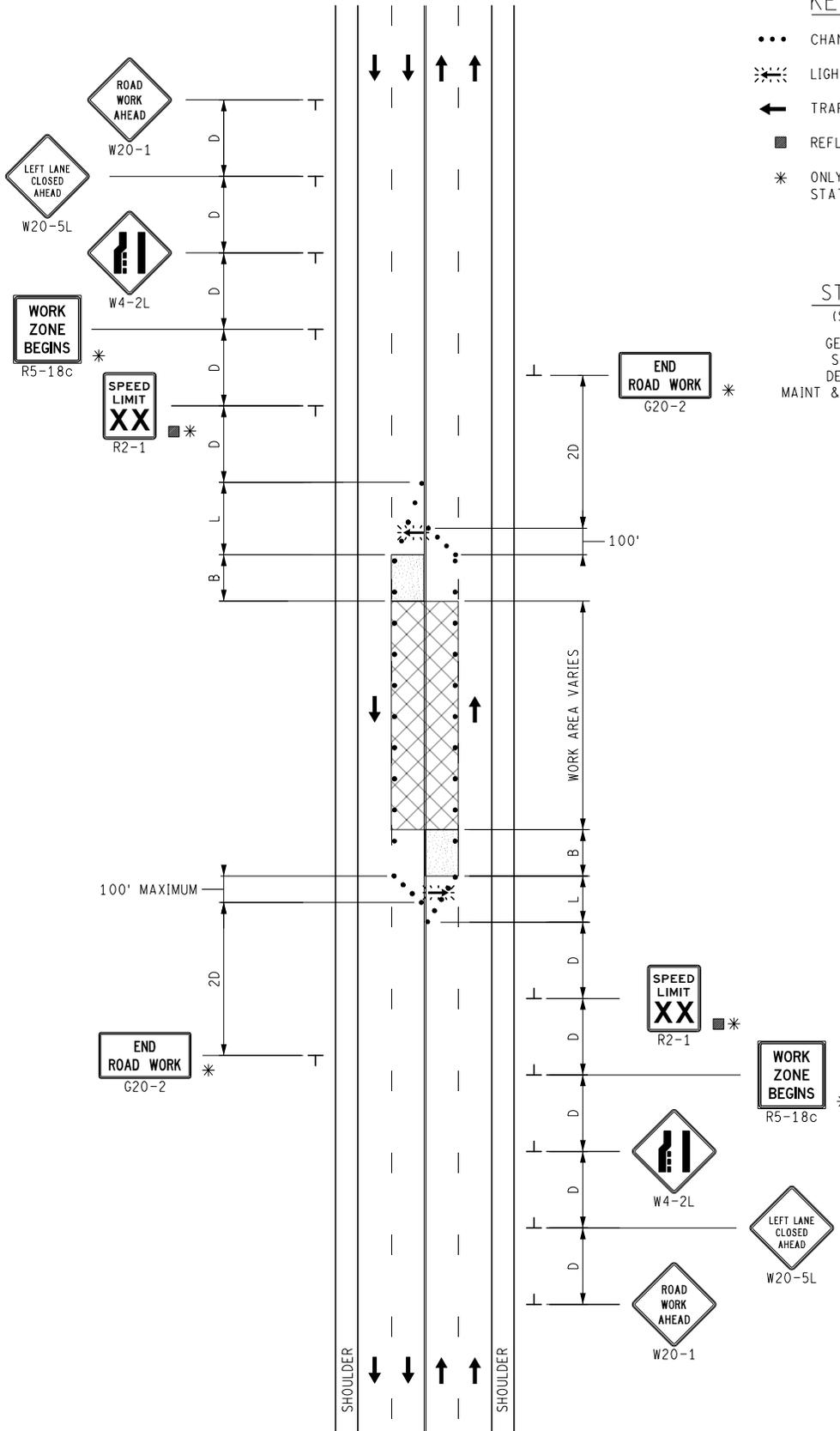
- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
SIGNING: S1, S3

DEVICES: TCD1, TCD2, TCD6
MAINT & SURV: MS2, MS3, MS4



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	2-LANE CLOSURE, INSIDE OF A MULTI-LANE UNDIVIDED ROADWAY, NO SPEED REDUCTION	DATE: MAY 2021
				NO: 4125A-M-NFW-2LC-(IN)
FILE: 4125A-M-NFW-2LC-(IN).dgn			SHEET: 1 OF 1	

KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY
- PLACE SIGN AS INDICATED IN NOTE S5

STANDARD NOTES

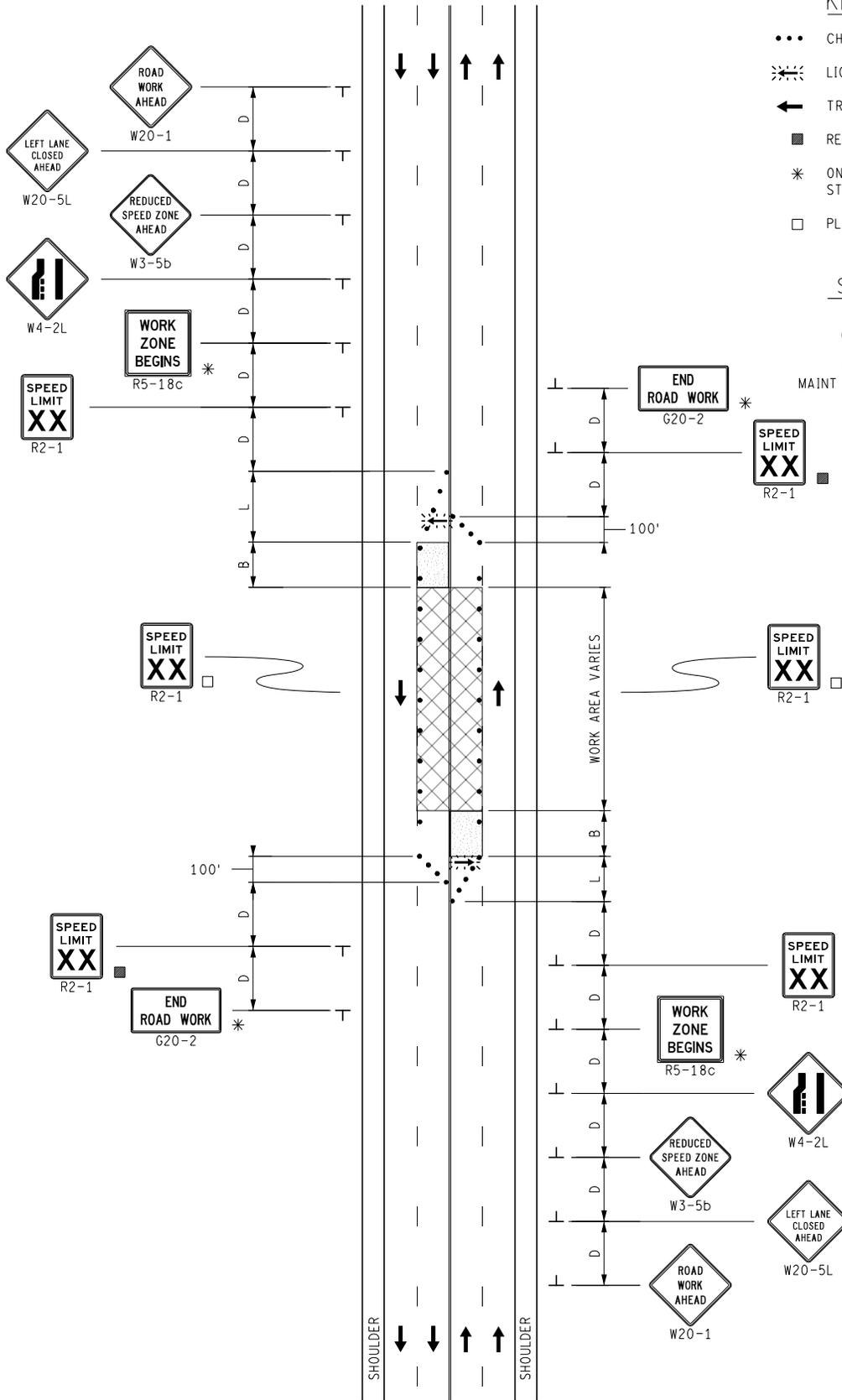
(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4

SIGNING: S1, S3, S5

DEVICES: TCD1, TCD2, TCD6

MAINT & SURV: MS2, MS3, MS4



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	2-LANE CLOSURE, INSIDE OF A MULTI-LANE UNDIVIDED ROADWAY, WITH A MAXIMUM 10 MPH SPEED REDUCTION	DATE: MAY 2021
				NO: 4125B-M-NFW-2LC-(IN)
FILE: 4125B-M-NFW-2LC-(IN).dgn				SHEET: 1 OF 1

KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY

STANDARD NOTES

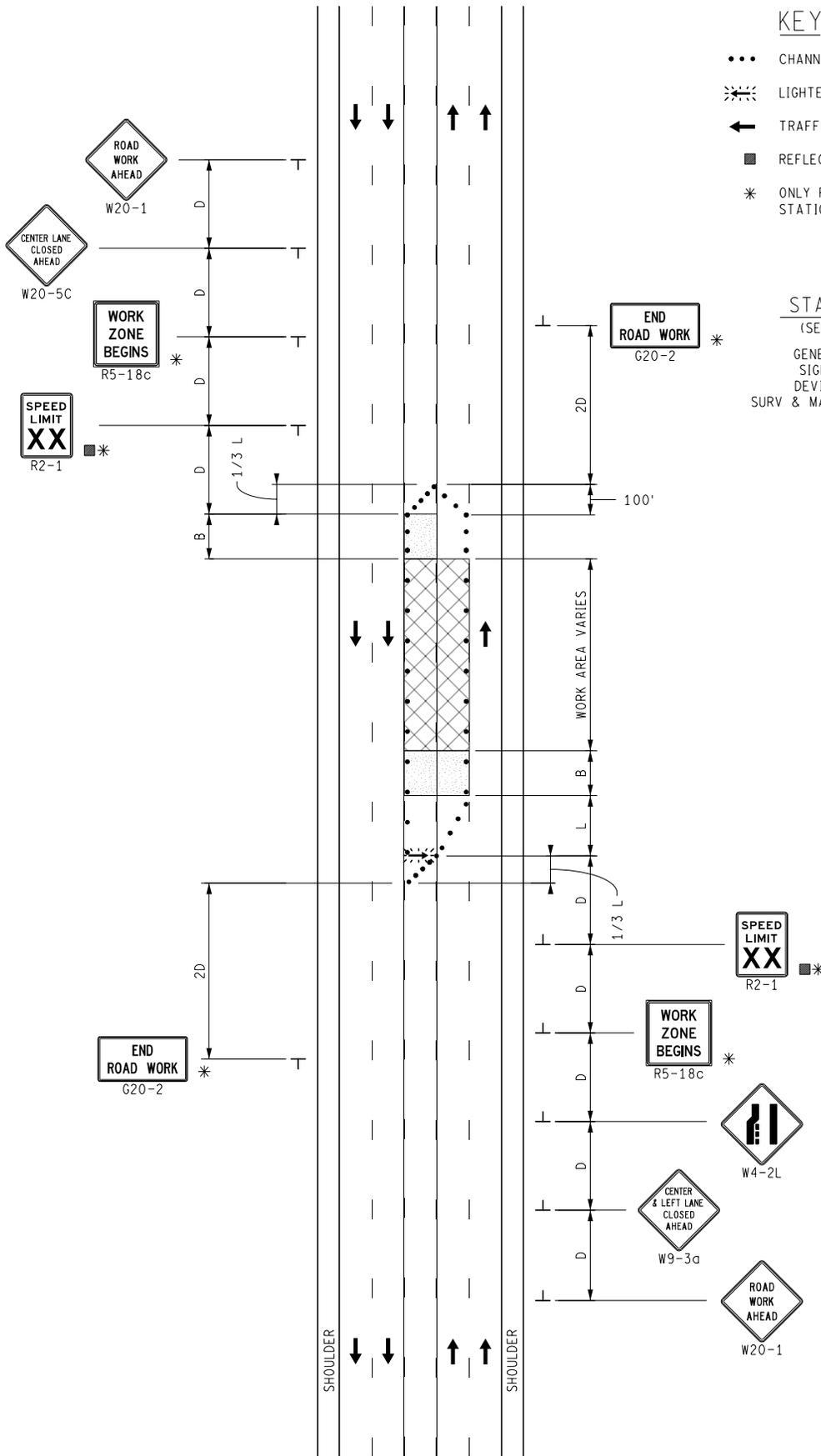
(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4

SIGNING: S1, S3

DEVICES: TCD1, TCD2, TCD6

SURV & MAINT: M2, M3, M4



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	CENTER AND LEFT LANE CLOSURE OF A MULTI-LANE UNDIVIDED ROADWAY, NO SPEED REDUCTION	DATE: MAY 2021
				NO: 4133A-M-CLT-1LC-(L)
FILE: 4133A-M-CLT-1LC-(L).dgn				SHEET: 1 OF 1

SPEED REDUCTION OPTIONAL
THIS DIRECTION

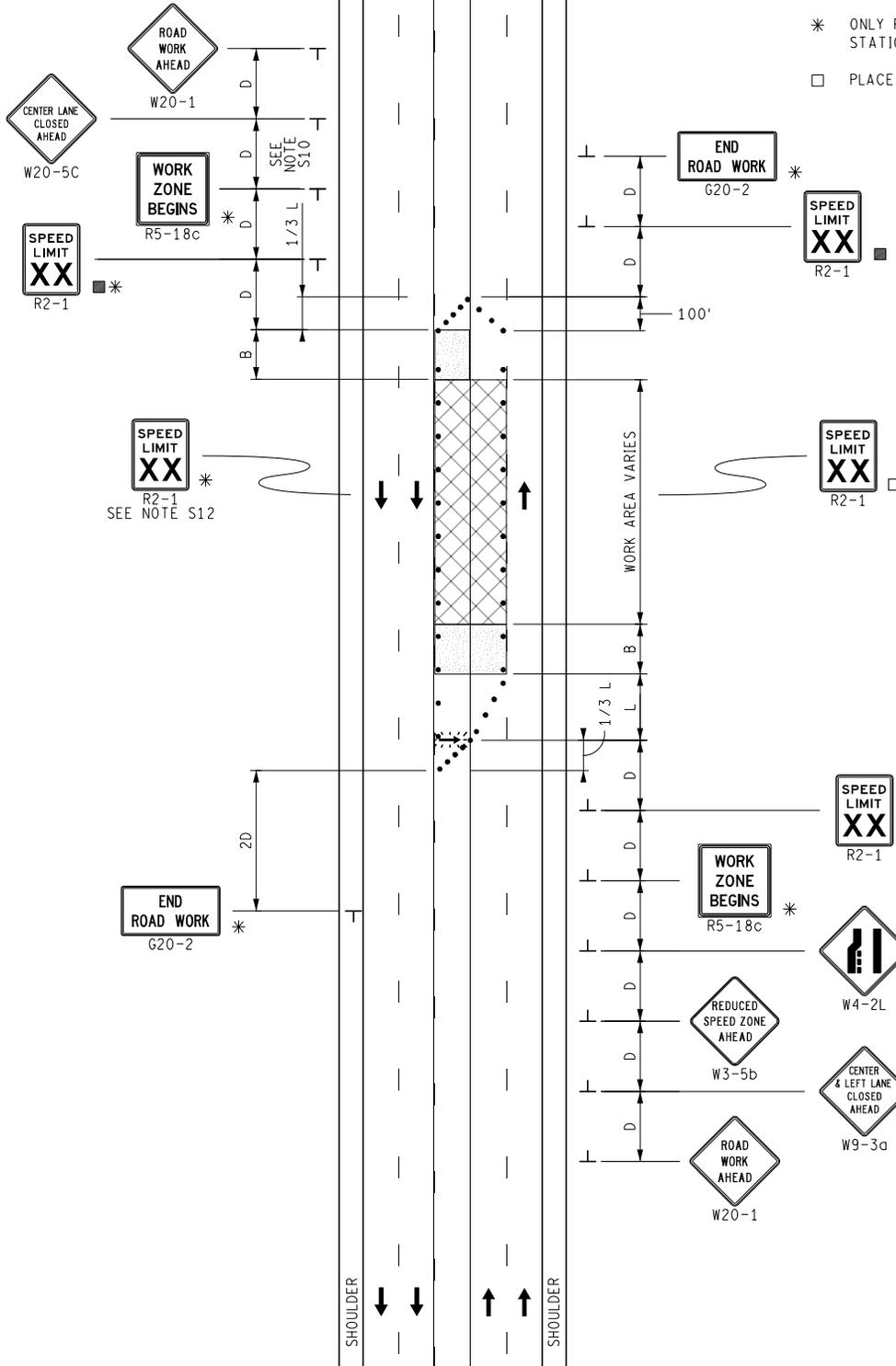
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY
- PLACE SIGN AS INDICATED IN NOTE S5

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
SIGNING: S1, S3, S5, S10, S12
DEVICES: TCD1, TCD2, TCD6
MAINT & SURV: MS2, MS3, MS4



↑
MAXIMUM 10 MPH SPEED
REDUCTION THIS DIRECTION

NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	CENTER AND LEFT LANE CLOSURE OF A MULTI-LANE UNDIVIDED ROADWAY, WITH A MAXIMUM 10 MPH SPEED REDUCTION	DATE: MAY 2021
	FILE: 4133B-M-CLT-1LC-(L).dgn			NO: 4133B- M-CLT-1LC-(L)

KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY

STANDARD NOTES

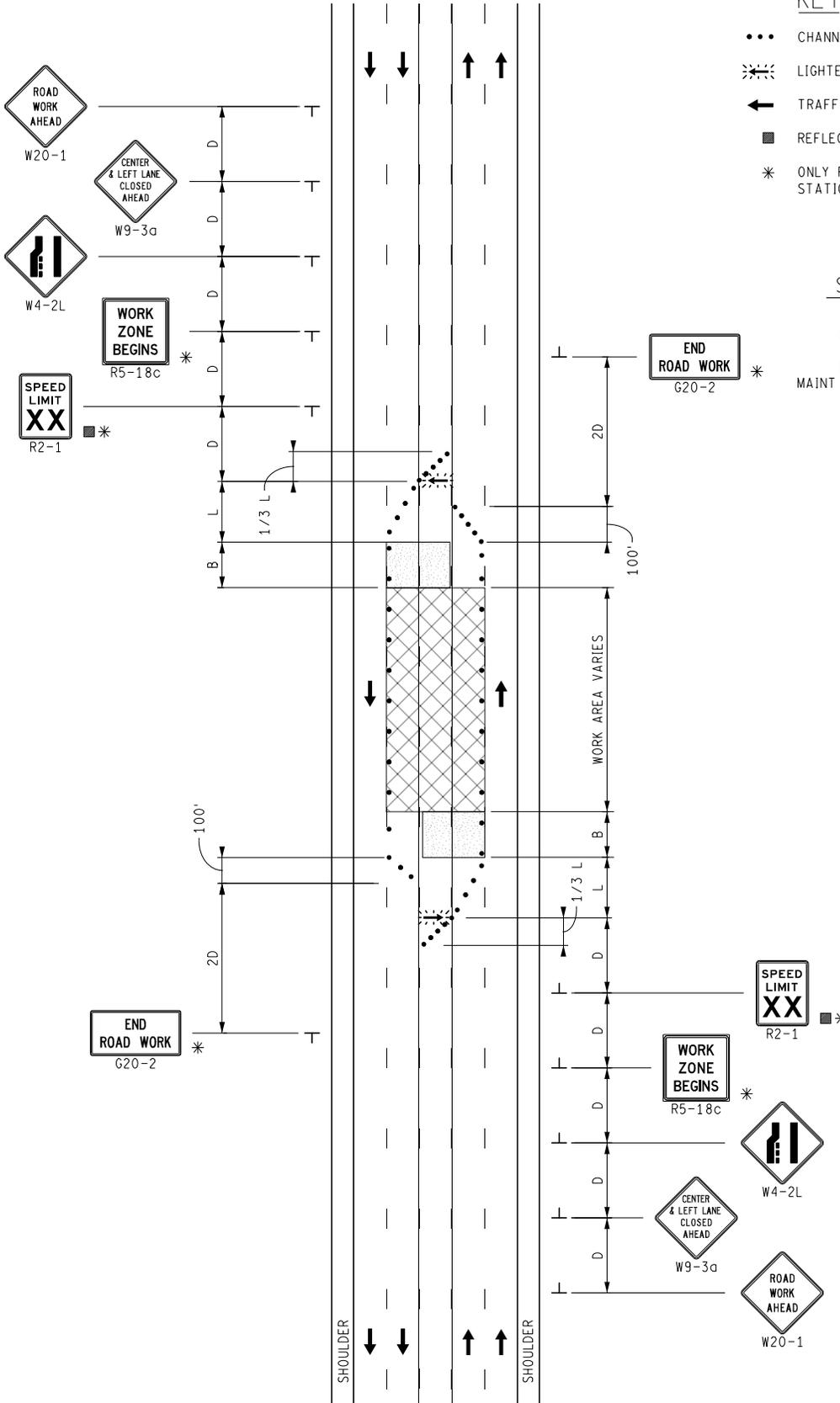
(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4

SIGNING: S1, S3

DEVICES: TCD1, TCD2, TCD6

MAINT & SURV: MS2, MS3, MS4



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	CLOSURE OF CENTER LANE AND LEFT LANES OF A MULTI-LANE UNDIVIDED ROADWAY, NO SPEED REDUCTION	DATE: MAY 2021
	FILE: 4134A-M-CLT-2(L)LC-(IN).dgn			NO: 4134A-M-CLT-2(L)LC-(IN) SHEET: 1 OF 1

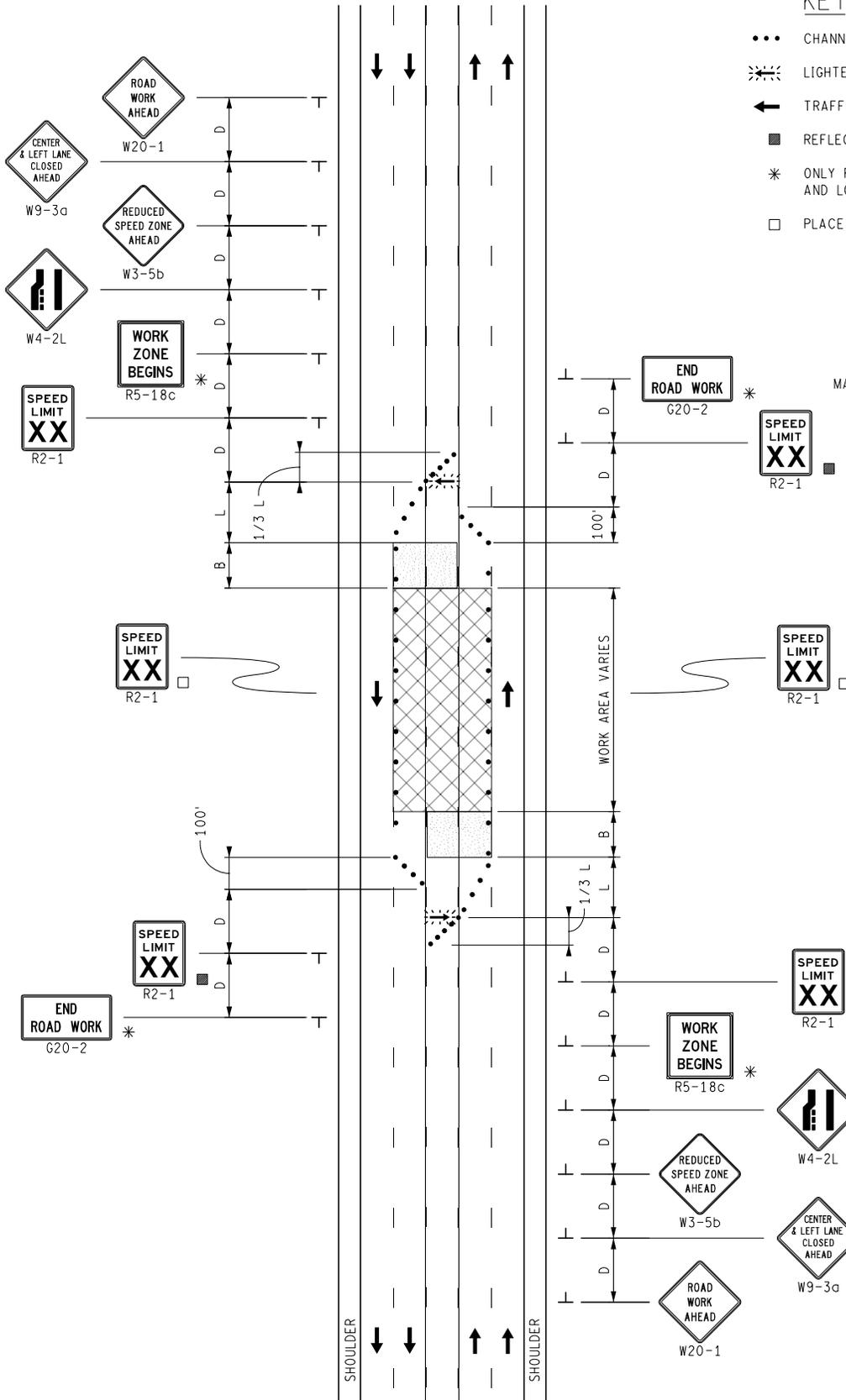
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY
- PLACE SIGN AS INDICATED IN NOTE S5

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S3, S5
 DEVICES: TCD1, TCD2, TCD6
 MAINT & SURV: MS2, MS3, MS4

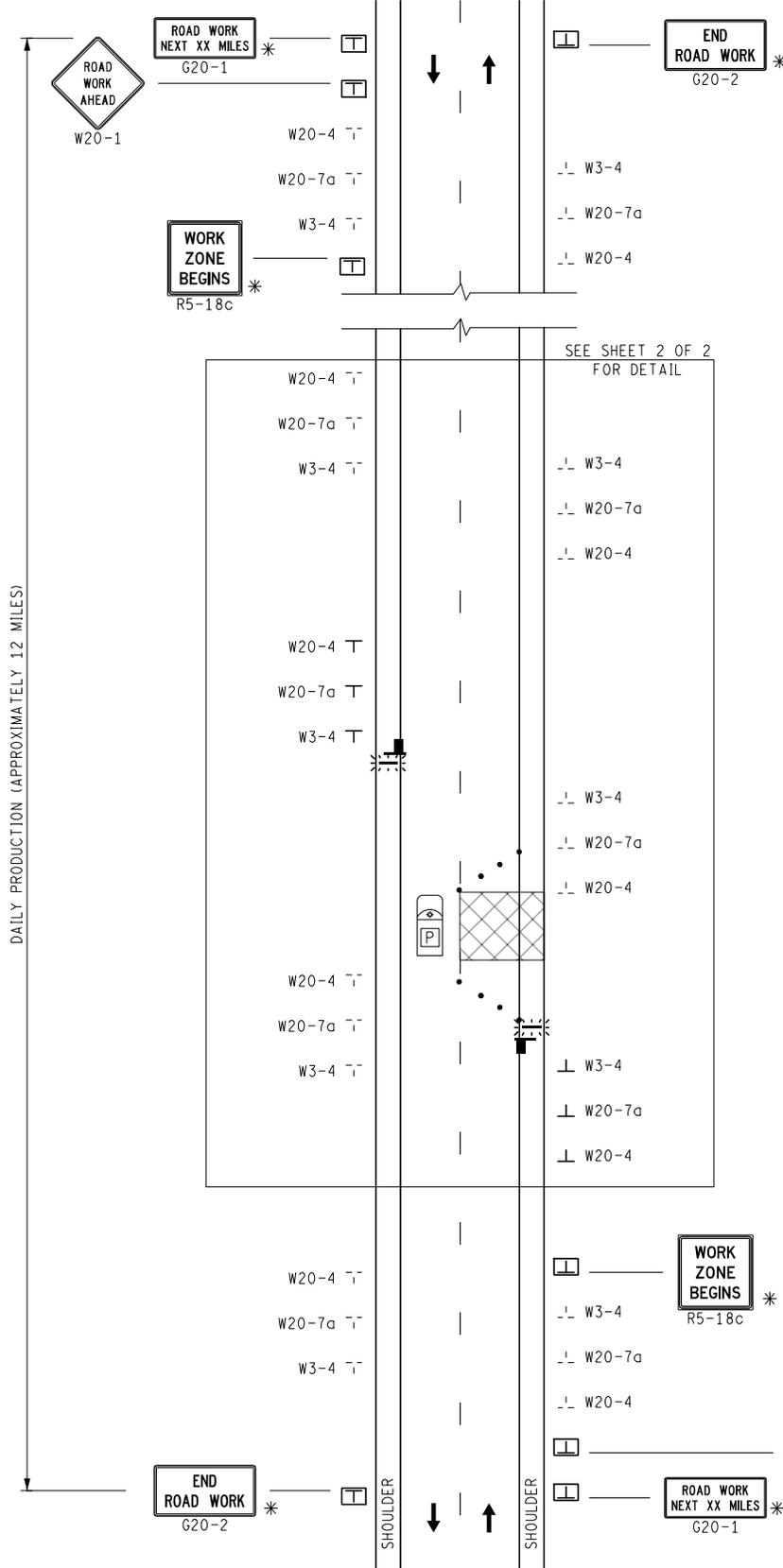


NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	CLOSURE OF CENTER LANE AND LEFT LANES OF A MULTI-LANE UNDIVIDED ROADWAY, WITH A MAXIMUM 10 MPH SPEED REDUCTION	DATE: MAY 2021
	FILE: 4134B-M-CLT-2(L)LC-(IN).dgn			NO: 4134B-M-CLT-2(L)LC-(IN)

KEY

- CHANNELIZING DEVICES
- ⋮ LIGHTED ARROW PANEL (CAUTION MODE)
- ← TRAFFIC FLOW
- ▬ TRAFFIC REGULATOR
- ☐ PILOT CAR
- ⊥ SIGN (FACE VISIBLE TO TRAFFIC)
- ⊥ SIGN (FUTURE/PAST LOCATION OR FACE DOWN WITH LEGS FOLDED)
- ☐ SIGN (STATIONARY FOR LENGTH OF PROJECT - DOES NOT "LEAP")
- * SIGN OPTIONAL



NOTES

A SERIES OF SIGNS AT EACH FLAGGING LOCATION INCLUDES W20-4, W20-7a, AND W3-4:



THREE (3) SERIES OF SIGNS ARE REQUIRED FOR EACH DIRECTION OF TRAVEL.

TWO (2) SERIES OF SIGNS ARE ALLOWED TO BE VISIBLE AT ONE TIME IN EACH DIRECTION.

NO MORE THAN FOUR (4) MILES FROM ROAD WORK AHEAD SIGN TO OPERATION IS PERMITTED AT ANY TIME.

WHEN OPERATION (PROGRESSING TOWARD THE TRAFFIC REGULATOR) MOVES WITHIN 500 FEET OF THE REGULATOR, THE FLAGGING STATION MUST BE MOVED TO THE NEXT STATION BY POSITIONING A SECOND TRAFFIC REGULATOR AT THE NEW STATION.

WHEN OPERATION (MOVING AWAY FROM THE TRAFFIC REGULATOR) PASSES THE ADJACENT FLAGGING STATION, THE FLAGGING STATION MUST BE MOVED AND THE PILOT CAR WILL HOLD TRAFFIC UNTIL THE TRAFFIC REGULATOR IS SET AT THE NEW STATION.

TRAFFIC REGULATOR MUST REMAIN WITH LIGHTED ARROW PANEL AT ALL TIMES.

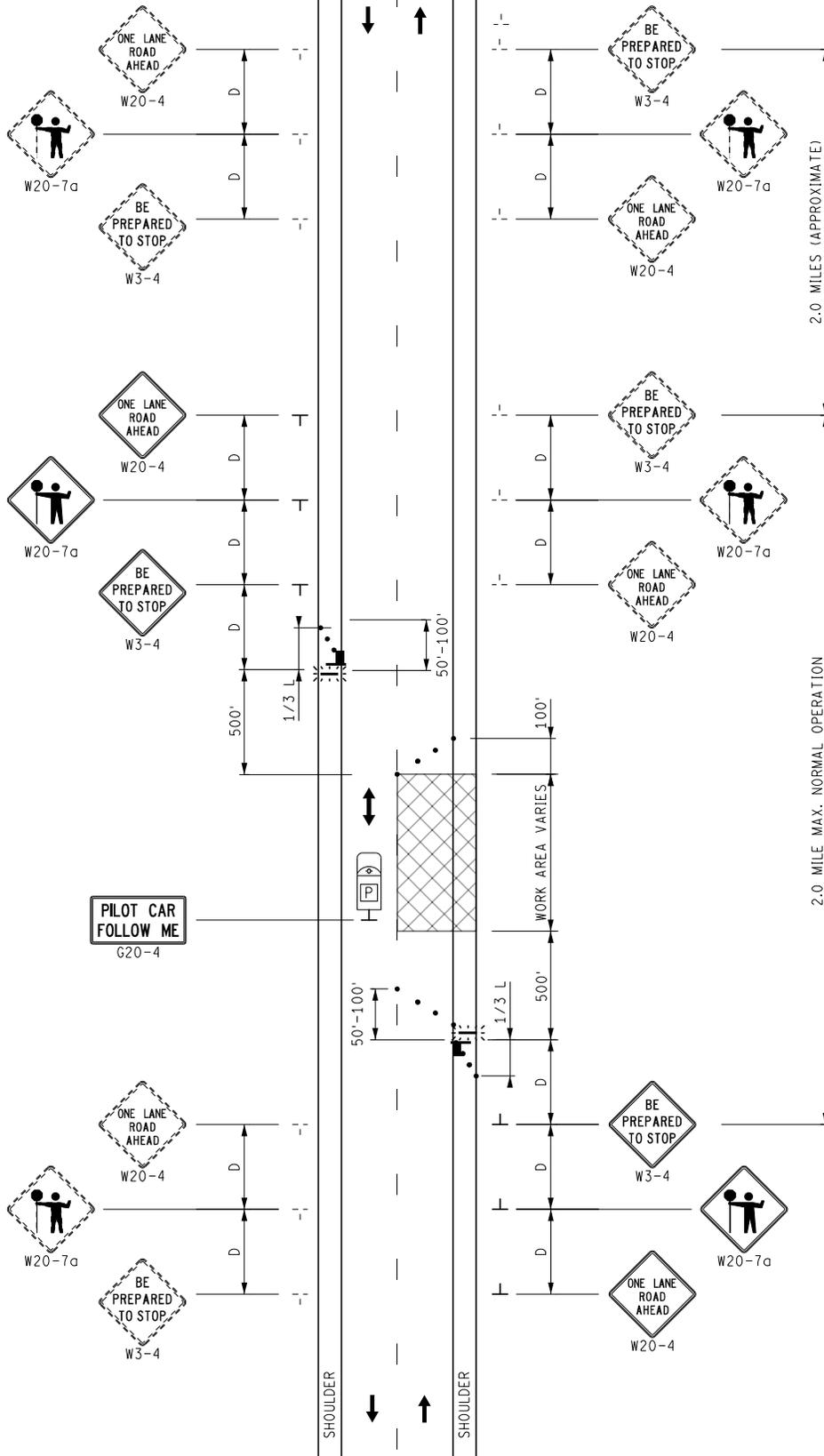
STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S2, S3, S4, S5
 TRAF REG: TR1, TR2
 DEVICES: TCD1, TCD2, TCD6
 MAINT & SURV: MS2, MS3, MS4, MS5

NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: MOBILE SHORT DURATION SHORT-TERM STATIONARY	LEAP FROG LANE CLOSURE ON A TWO-LANE, TWO-WAY ROADWAY	DATE: MAY 2021
				NO: 4180-M-TR-NFW-2L
FILE: 4180-M-TR-NFW-2L.dgn				SHEET: 1 OF 2



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: MOBILE SHORT DURATION SHORT-TERM STATIONARY	LEAP FROG LANE CLOSURE ON A TWO-LANE, TWO-WAY ROADWAY	DATE: MAY 2021
				NO: 4180-M-TR-NFW-2L
FILE: 4180-M-TR-NFW-2L.dgn				SHEET: 2 OF 2

KEY

- CHANNELIZING DEVICES
- ⋈ LIGHTED ARROW PANEL (CAUTION MODE)
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY

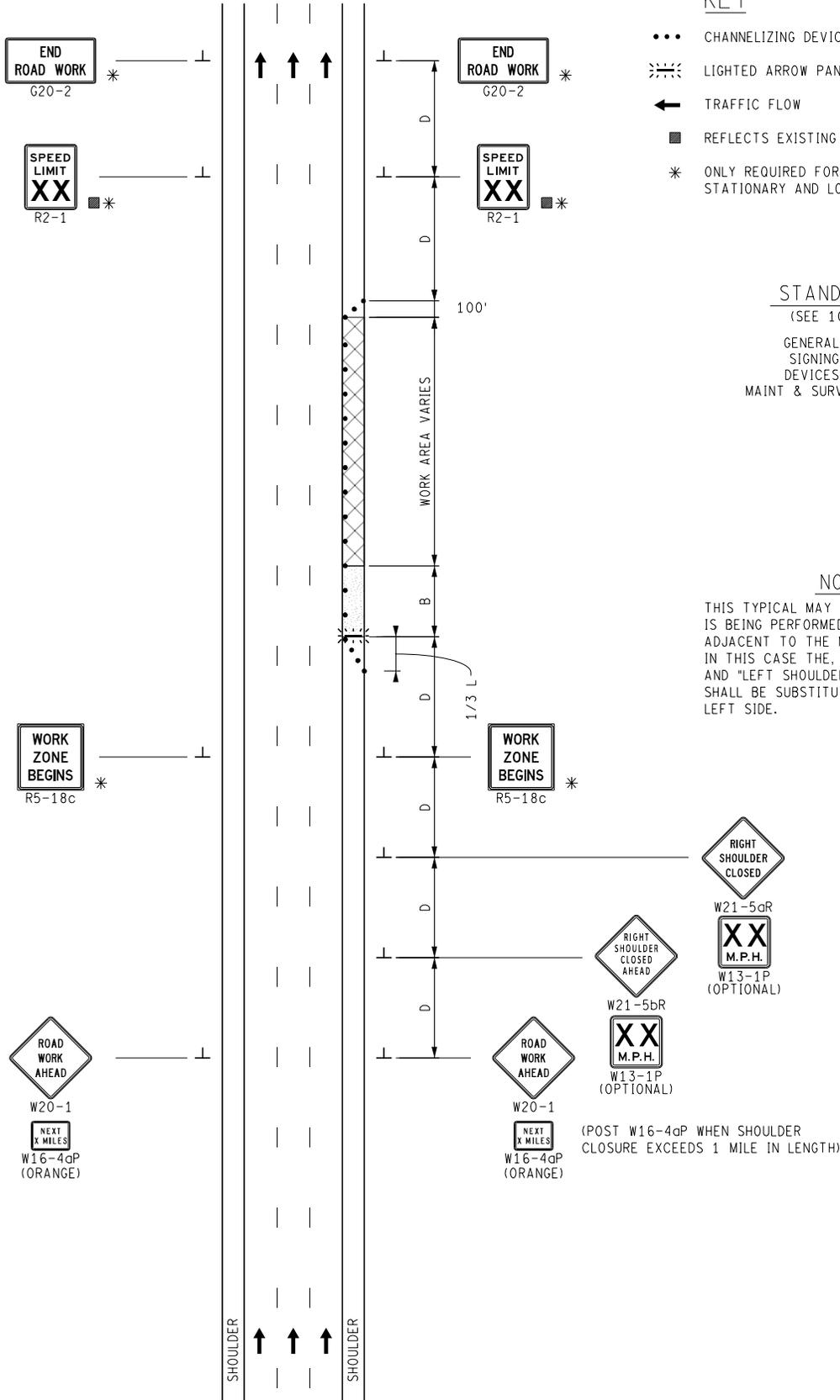
STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S3
 DEVICES: TCD1, TCD2, TCD6
 MAINT & SURV MS2, MS3, MS4

NOTE

THIS TYPICAL MAY ALSO BE USED WHEN WORK IS BEING PERFORMED IN THE SHOULDER ADJACENT TO THE MEDIAN OF THE ROADWAY. IN THIS CASE THE, "LEFT SHOULDER CLOSED" AND "LEFT SHOULDER CLOSED AHEAD" SIGNS SHALL BE SUBSTITUTED AND PLACED ON THE LEFT SIDE.



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	SHOULDER CLOSURE ON A DIVIDED ROADWAY OR FREEWAY		DATE: MAY 2021
					NO: 4200-M-FW-SHL
					SHEET: 1 OF 1

FILE: 4200-M-FW-SHL.dgn

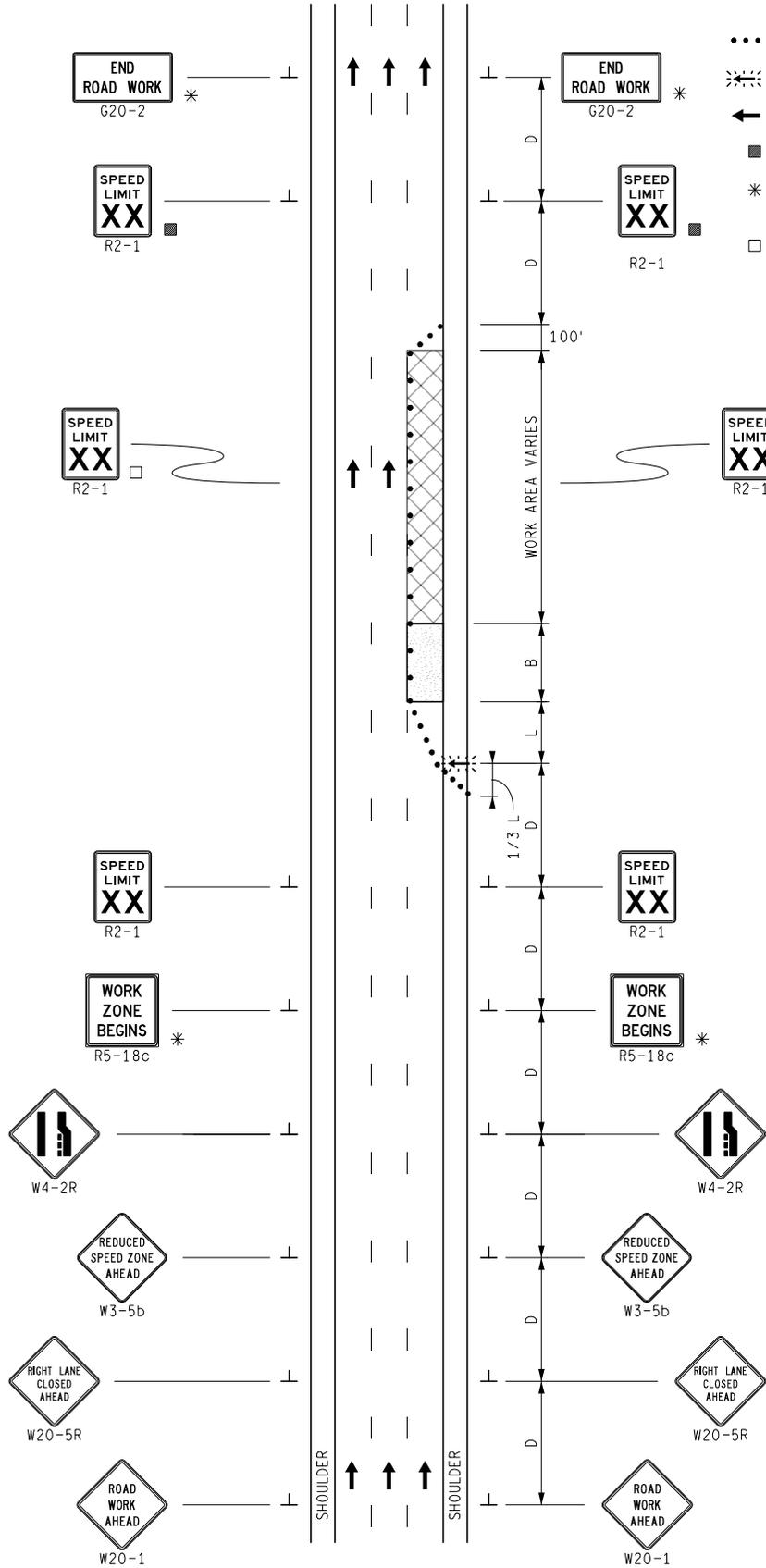
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY
- PLACE SIGN AS INDICATED IN NOTE S5

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S3, S5
 DEVICES: TCD1, TCD2, TCD6
 MAINT & SURV: MS2, MS3, MS4



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	SINGLE RIGHT LANE CLOSURE ON A FREEWAY USING A 10 MPH STEP DOWN IN SPEED LIMIT	DATE: MAY 2021
	FILE: 4203A-M-FW-1LC-(R).dgn			NO: 4203A- M-FW-1LC-(R)
				SHEET: 1 OF 1

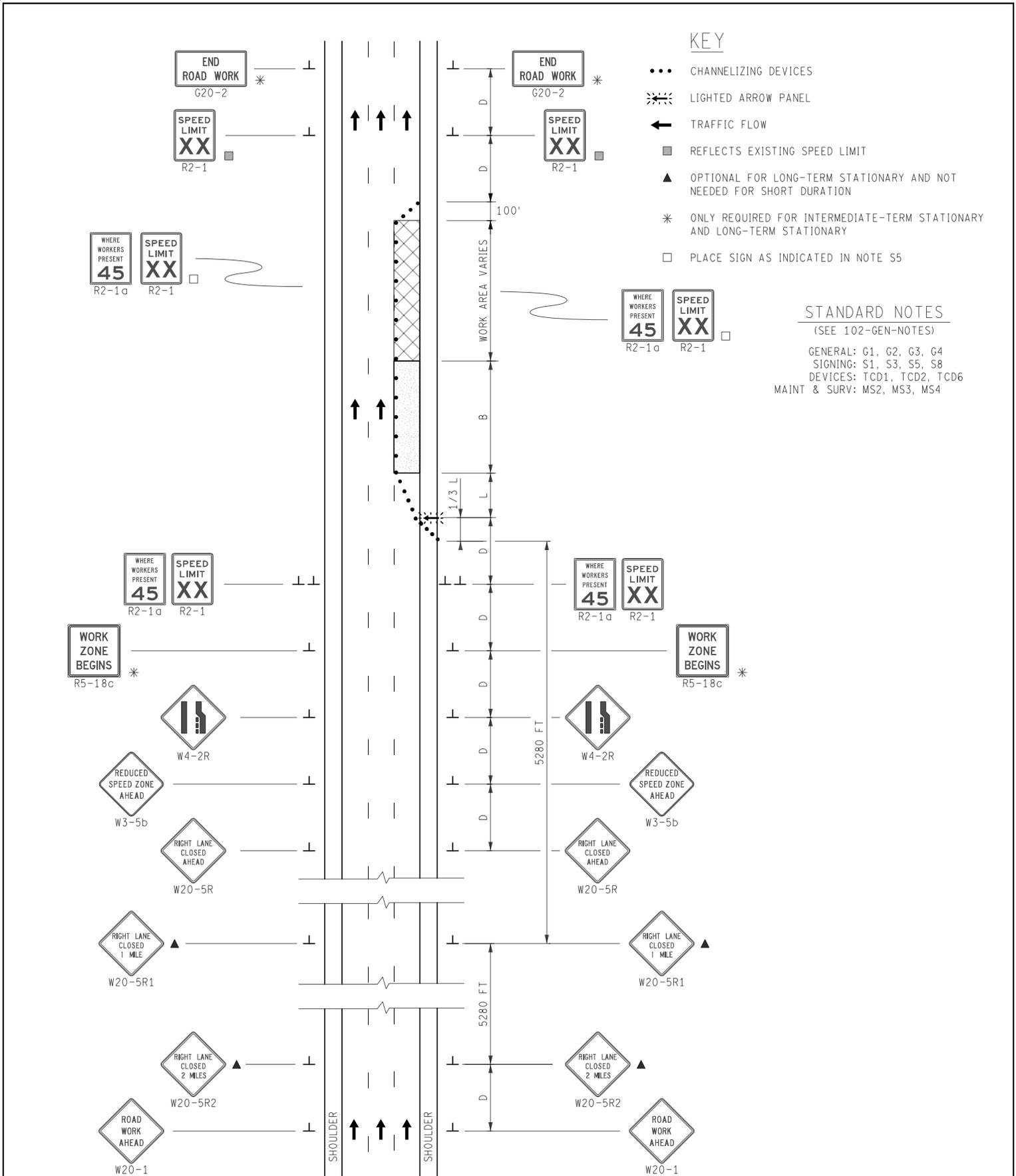
KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW
- REFLECTS EXISTING SPEED LIMIT
- ▲ OPTIONAL FOR LONG-TERM STATIONARY AND NOT NEEDED FOR SHORT DURATION
- * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY
- PLACE SIGN AS INDICATED IN NOTE S5

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S3, S5, S8
 DEVICES: TCD1, TCD2, TCD6
 MAINT & SURV: MS2, MS3, MS4



NOT TO SCALE

	<p>MAINTENANCE MAINTAINING TRAFFIC TYPICAL</p>	<p>DURATION: APPLIES TO ALL DURATIONS</p>	<p>SINGLE LANE CLOSURE ON A FREEWAY USING "WHERE WORKERS PRESENT" AND A 10 MPH STEP DOWN IN SPEED LIMIT 2 MILE ADVANCED WARNING</p>	<p>DATE: DECEMBER 2021 NO: 4203B- M-FW-1LC-(R) SHEET: 1 OF 1</p>
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KEY

- CHANNELIZING DEVICES
- ← TRAFFIC FLOW

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4

SIGNING: S1

DEVICES: TCD1, TCD2

RAMP: RMP2

WORK ZONE SPEED LIMIT / RAMP TAPER LENGTH

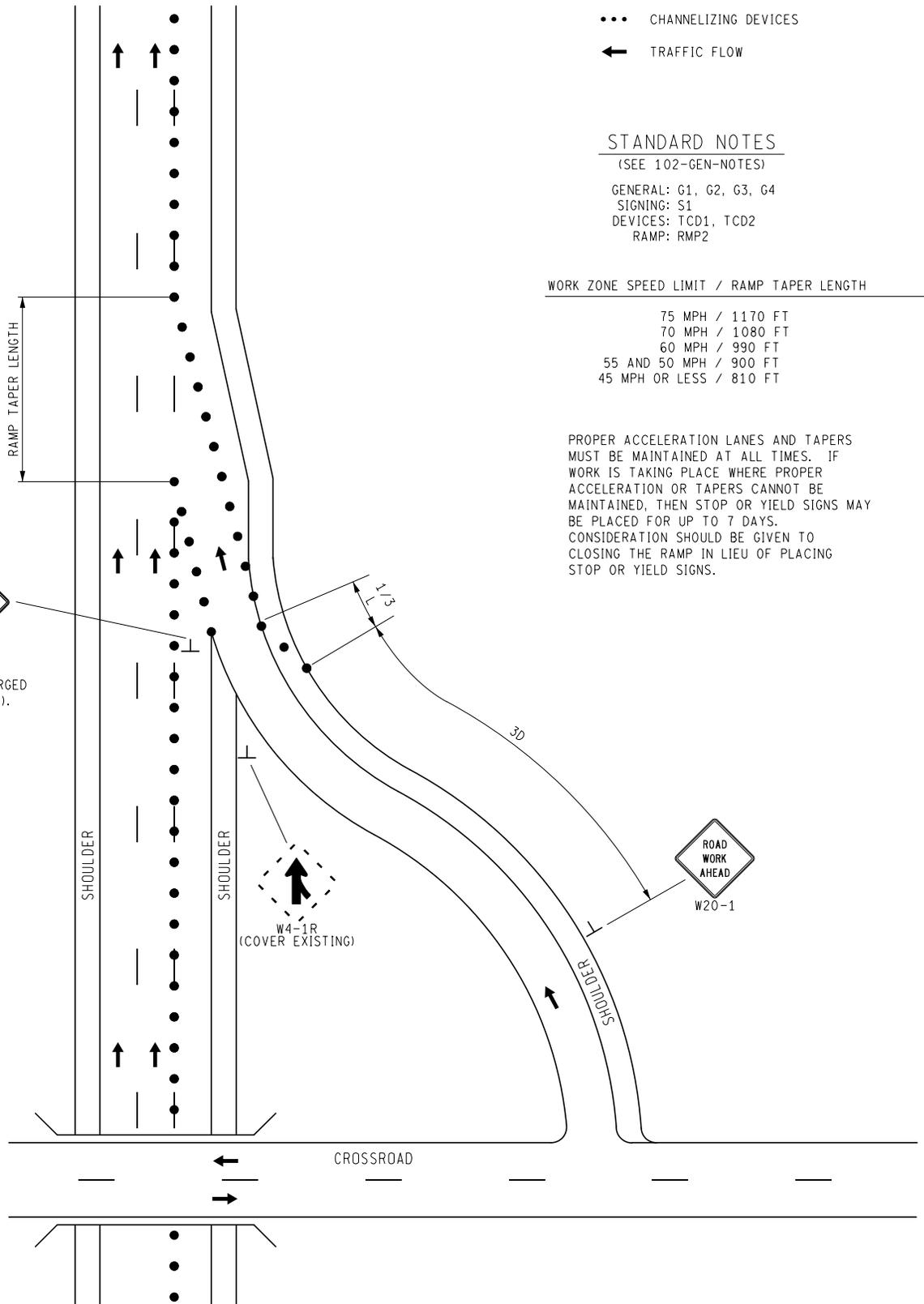
75 MPH	/	1170 FT
70 MPH	/	1080 FT
60 MPH	/	990 FT
55 AND 50 MPH	/	900 FT
45 MPH OR LESS	/	810 FT

PROPER ACCELERATION LANES AND TAPERS MUST BE MAINTAINED AT ALL TIMES. IF WORK IS TAKING PLACE WHERE PROPER ACCELERATION OR TAPERS CANNOT BE MAINTAINED, THEN STOP OR YIELD SIGNS MAY BE PLACED FOR UP TO 7 DAYS. CONSIDERATION SHOULD BE GIVEN TO CLOSING THE RAMP IN LIEU OF PLACING STOP OR YIELD SIGNS.



W4-1R

USE W4-1 WHEN HAVING TRAFFIC MERGED INTO AN OPEN LANE (AS SHOWN HERE).



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	OUTSIDE LANE CLOSURE ON A FREEWAY THROUGH ENTRANCE RAMP AREA FREEFLOW CONDITION	DATE: MAY 2021
	FILE: 4221-FW-EnR-0-LC-FREE.dgn			NO: 4221-FW EnR-0-LC-FREE

KEY

••• CHANNELIZING DEVICES

← TRAFFIC FLOW

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4

SIGNING: S1

DEVICES: TCD1, TCD2

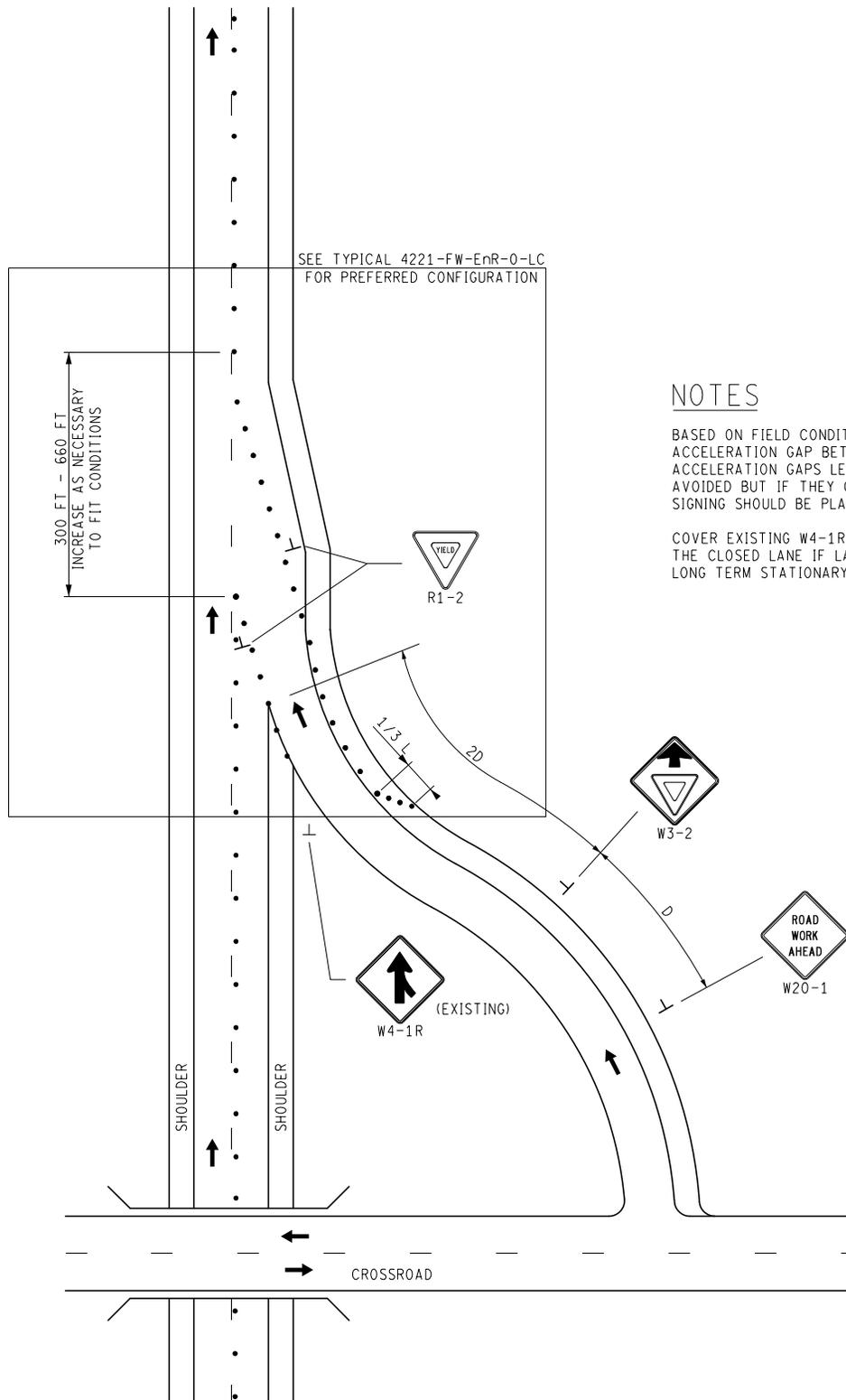
RAMP: RMP2

MAINT & SURV: MS2, MS3, MS4

NOTES

BASED ON FIELD CONDITIONS, PROVIDE AN ACCELERATION GAP BETWEEN 300 AND 660 FT. ACCELERATION GAPS LESS THAN 300 FT SHOULD BE AVOIDED BUT IF THEY CANNOT, THEN R1-1 (STOP) SIGNING SHOULD BE PLACED.

COVER EXISTING W4-1R SIGN AND POST A W4-1R SIGN IN THE CLOSED LANE IF LANE CLOSURE IS IN PLACE FOR A LONG TERM STATIONARY DURATION.



NOT TO SCALE



MAINTENANCE
MAINTAINING TRAFFIC
TYPICAL

DURATION:
LONG-TERM STATIONARY
INTERMEDIATE-TERM STATIONARY
SHORT-TERM STATIONARY

OUTSIDE LANE CLOSURE ON A FREEWAY
THROUGH ENTRANCE RAMP AREA
YIELD CONDITION

DATE:
MAY 2021

NO: 4222-FW
EnR-0-LC-YIELD

SHEET:
1 OF 1

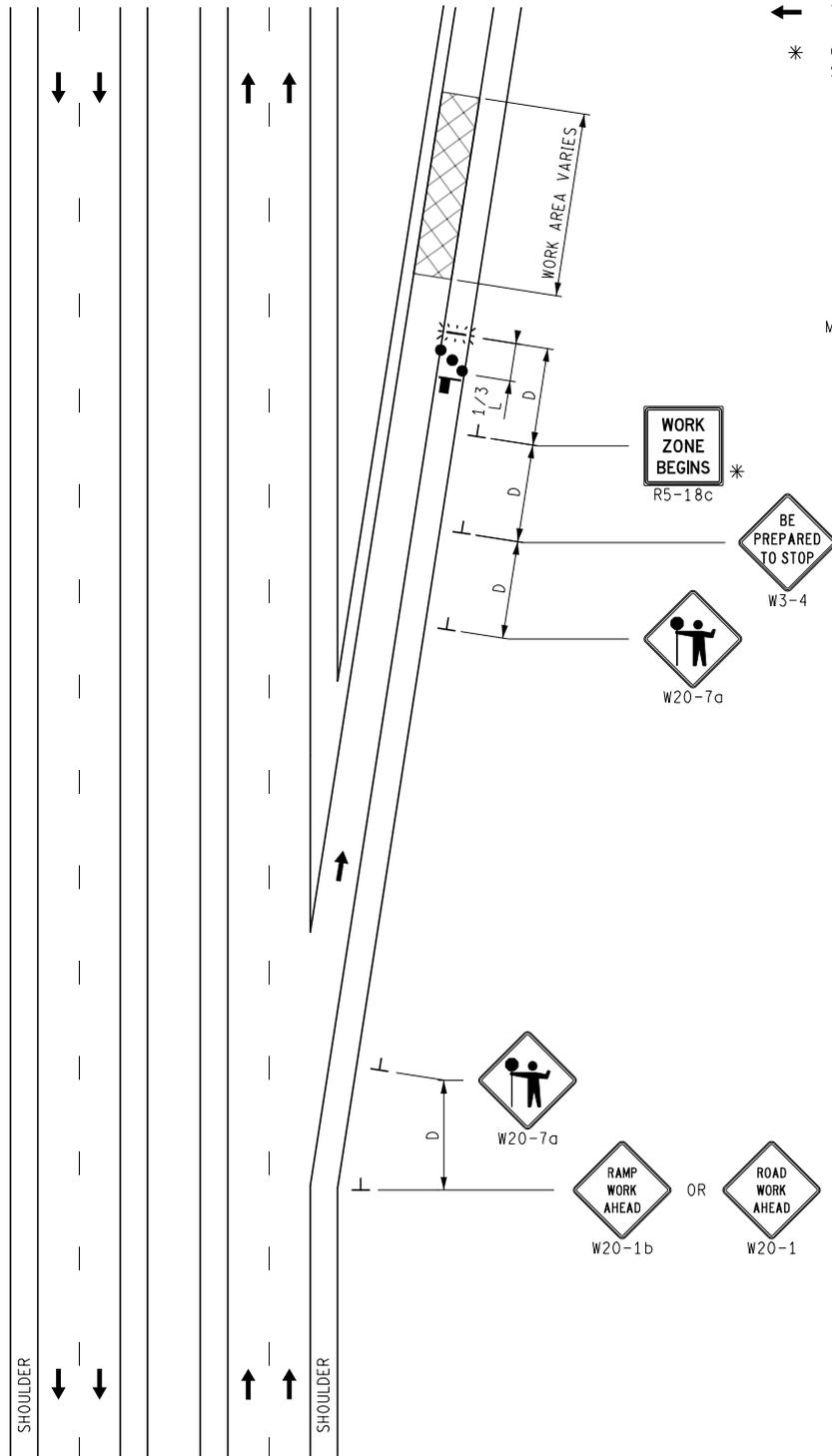
FILE: 4222-FW-EnR-0-LC-YIELD.dgn

KEY

-  TRAFFIC REGULATOR
-  CHANNELIZING DEVICES
-  LIGHTED ARROW PANEL (CAUTION MODE)
-  TRAFFIC FLOW
-  * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY

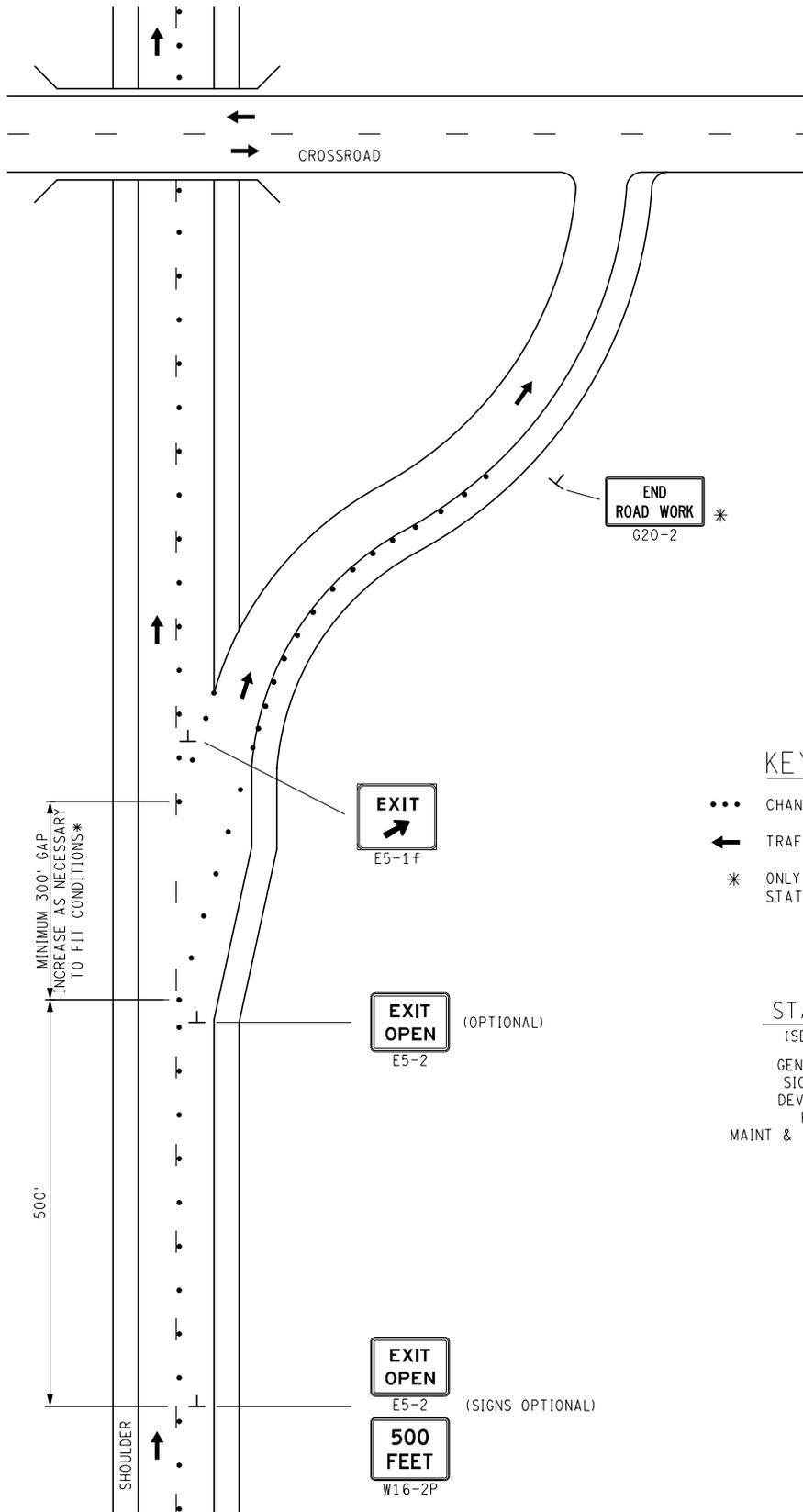
STANDARD NOTES
(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1, S3, S4
 TRAF REG: TR1, TR2
 DEVICES: TCD1, TCD2, TCD6
 MAINT & SURV: MS2, MS3, MS4



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	WORK OPERATIONS ON EXIT RAMPs	DATE: MAY 2021
				NO: 4224-M-FW-ExR-TR
FILE: 4224-M-FW-ExR-TR.dgn				SHEET: 1 OF 1



KEY

- CHANNELIZING DEVICES
- ← TRAFFIC FLOW
- * ONLY REQUIRED FOR INTERMEDIATE-TERM STATIONARY AND LONG-TERM STATIONARY

STANDARD NOTES

(SEE 102-GEN-NOTES)

- GENERAL: G1, G2, G3, G4
- SIGNING: S1
- DEVICES: TCD1, TCD2
- RAMP: RMP1
- MAINT & SURV: MS2, MS3, MS4

NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: LONG-TERM STATIONARY INTERMEDIATE-TERM STATIONARY SHORT-TERM STATIONARY	EXIT RAMP TREATMENT ON A FREEWAY WITH OUTSIDE LANE CLOSURE	DATE: MAY 2021
				NO: 4231-M-FW-ExR-0-LC
FILE: 4231-M-FW-ExR-0-LC.dgn				SHEET: 1 OF 1

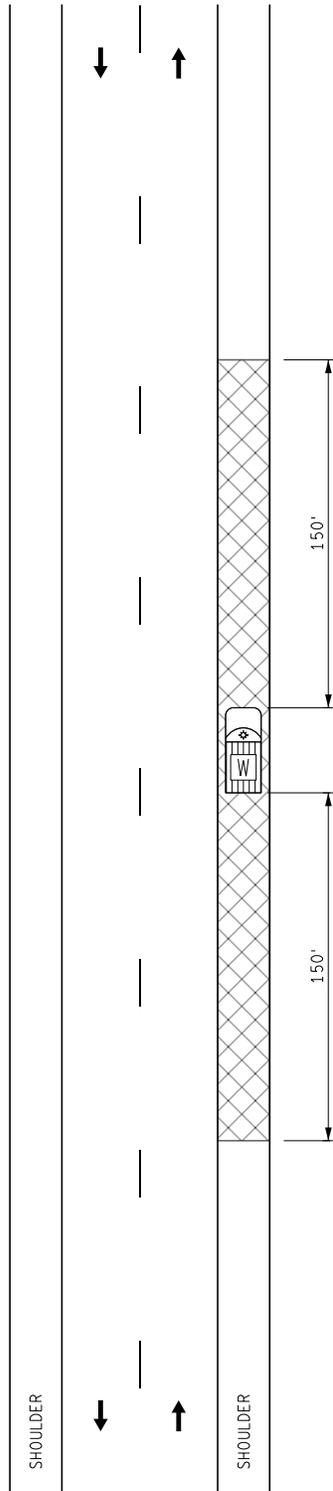
KEY



VEHICLE FROM WHICH WORK IS BEING PERFORMED



TRAFFIC FLOW



STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4

SIGNING: S1

MAINT & SURV: MS2, MS3, MS4

NOTES

AT A MINIMUM, MAINTAINING TRAFFIC SHALL CONSIST OF AN APPROPRIATELY MARKED VEHICLE WITH A ROTATING BEACON. NO SIGNS OR CHANNELIZING DEVICES ARE REQUIRED.

THE FOLLOWING FACTORS SHOULD BE CONSIDERED IN DETERMINING THE NEED FOR ADDITIONAL ADVANCE WARNING:

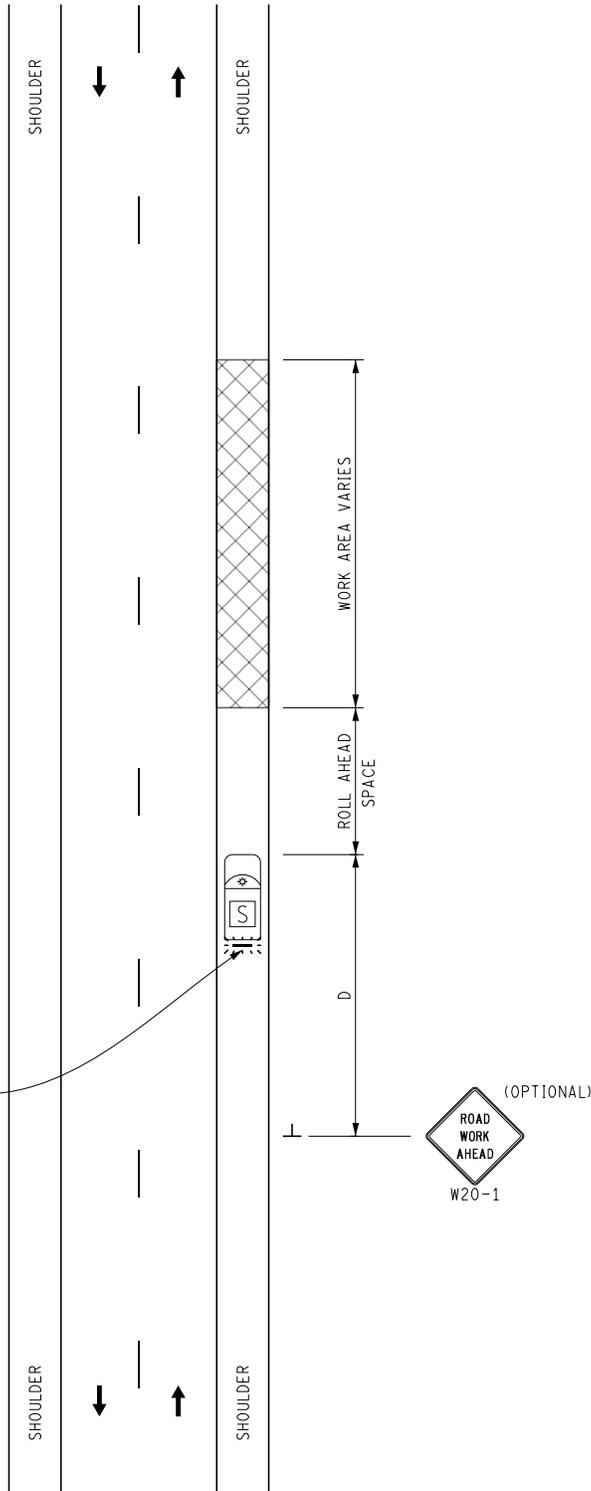
1. TRAFFIC VOLUME
2. POSTED AND OPERATING SPEED LIMITS
3. HORIZONTAL AND VERTICAL ALIGNMENTS
4. URBAN OR RURAL SITE
5. WORK TYPE
6. AVAILABLE SHOULDER WIDTH

NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: MOBILE	SHOULDERS WORK WITH TRAFFIC VOLUMES LESS THAN 10,000 ADT AND ADEQUATE SIGHT DISTANCES	DATE: MAY 2021
				NO: 4400-M-NFW-SHL-MOB
FILE: 4400-M-SHL-MOB.dgn				SHEET: 1 OF 1

KEY

-  LIGHTED ARROW PANEL (CAUTION MODE)
-  TRAFFIC FLOW
-  SHADOW VEHICLE WITH OPTIONAL TRUCK MOUNTED ATTENUATOR



STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4

SIGNING: S1

MAINT & SURV: MS2, MS3, MS4

NOTES

THERE MUST BE EITHER AN APPROPRIATELY MARKED VEHICLE WITH A ROTATING BEACON OR OPTIONAL W20-1 SIGNS TO INDICATE TO THE PUBLIC THAT WORK IS BEING DONE IN THE AREA.

LIGHTED ARROW PANEL (CAUTION MODE)

(OPTIONAL)

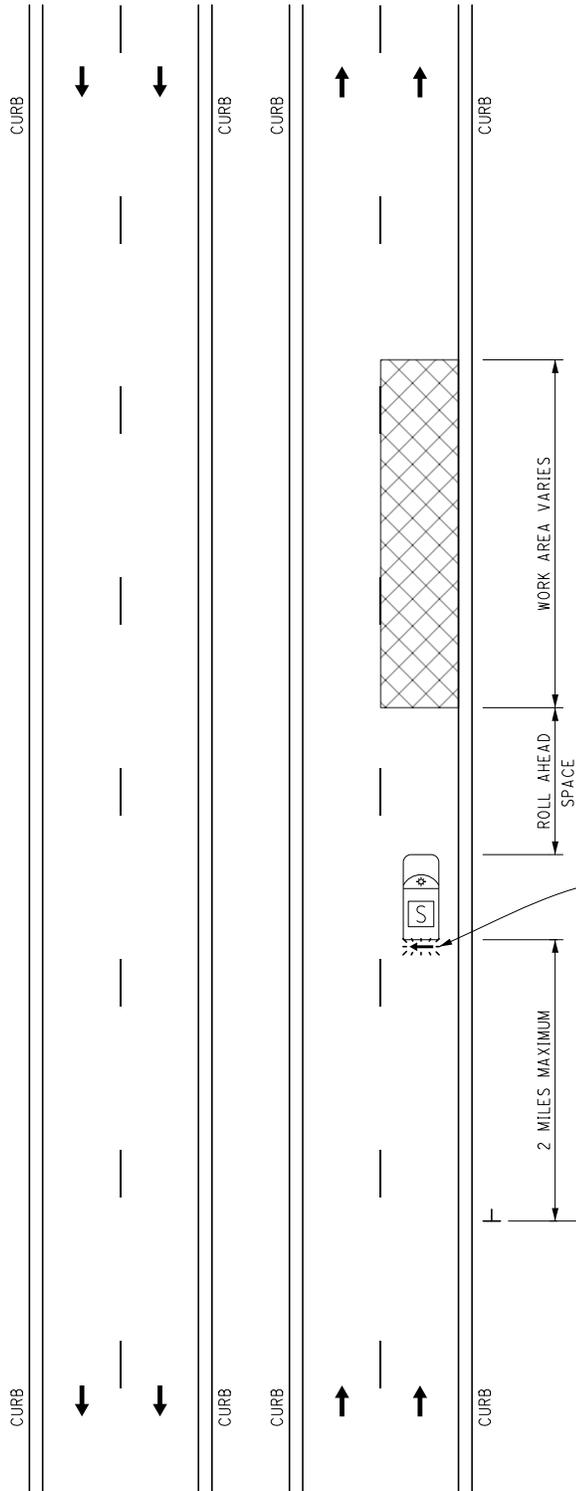


NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-DURATION MOBILE	SHOULDER WORK ON A TWO-LANE, TWO-WAY ROADWAY	DATE: MAY 2021
				NO: 4401-M-NFW-SHL-2L
FILE: 4401-M-NFW-SHL-2L.dgn				SHEET: 1 OF 1

KEY

-  LIGHTED ARROW PANEL
-  TRAFFIC FLOW
-  SHADOW VEHICLE WITH OPTIONAL TRUCK MOUNTED ATTENUATOR



NOTES

"ROAD WORK AHEAD" SIGN SHALL BE WITHIN TWO MILES OF WORK AREA.

THIS DETAIL IS ONLY ALLOWED IN AREAS WITHOUT SHOULDERS AND SPEED LIMITS OF 45 MPH OR LESS. USED FOR PATROLLING, MINOR PATCHING AND OTHER ACTIVITIES IN AREAS WITH CURBED ROADWAY.

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4

SIGNING: S1

MAINT & SURV: MS1, MS2, MS3, MS4, MS5

LIGHTED ARROW PANEL (ARROW MODE)

NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-DURATION MOBILE	LANE CLOSURE ON A DIVIDED ROADWAY WITH CURBS AND SPEED LIMITS 45 MPH OR LESS	DATE: MAY 2021
				NO: 4402-M-NFW-1LC
FILE: 4402-M-NFW-1LC.dgn				SHEET: 1 OF 1

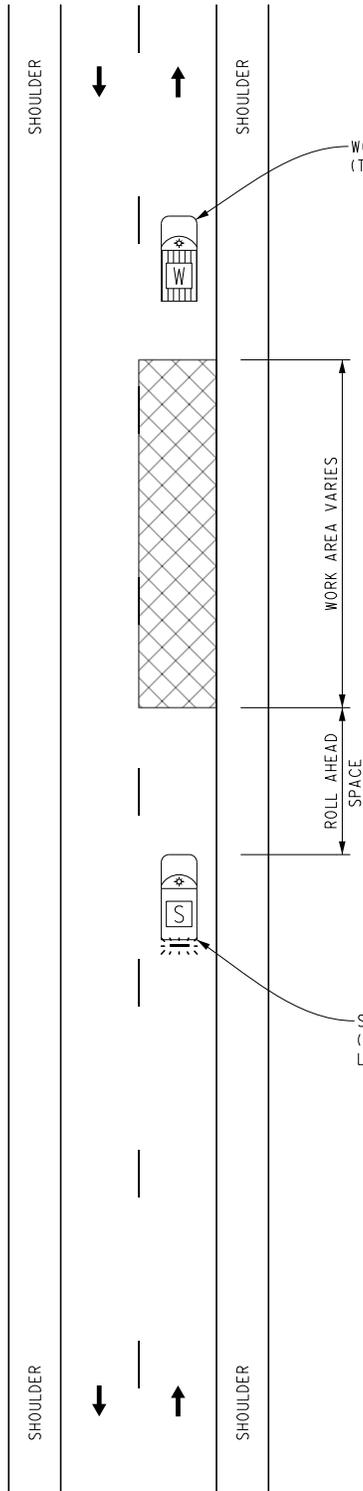
KEY

☀️ LIGHTED ARROW PANEL (CAUTION MODE)

← TRAFFIC FLOW

☀️ S SHADOW VEHICLE WITH OPTIONAL TRUCK MOUNTED ATTENUATOR

☀️ W WORK VEHICLE WITH OPTIONAL TRUCK MOUNTED ATTENUATOR



NOTES

WHERE VEHICLE TRAFFIC CANNOT EFFECTIVELY SELF REGULATE, ONE OR TWO TRAFFIC REGULATORS SHALL BE USED.

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G3, G4
 SIGNING: S1
 MAINT & SURV: MS1, MS2, MS3, MS4, MS5

NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-DURATION MOBILE	MOBILE OPERATION ON A TWO-LANE ROADWAY		DATE: MAY 2021
					NO: 4403-M-NFW-2L
FILE: 4403-M-NFW-2L.dgn					SHEET: 1 OF 1

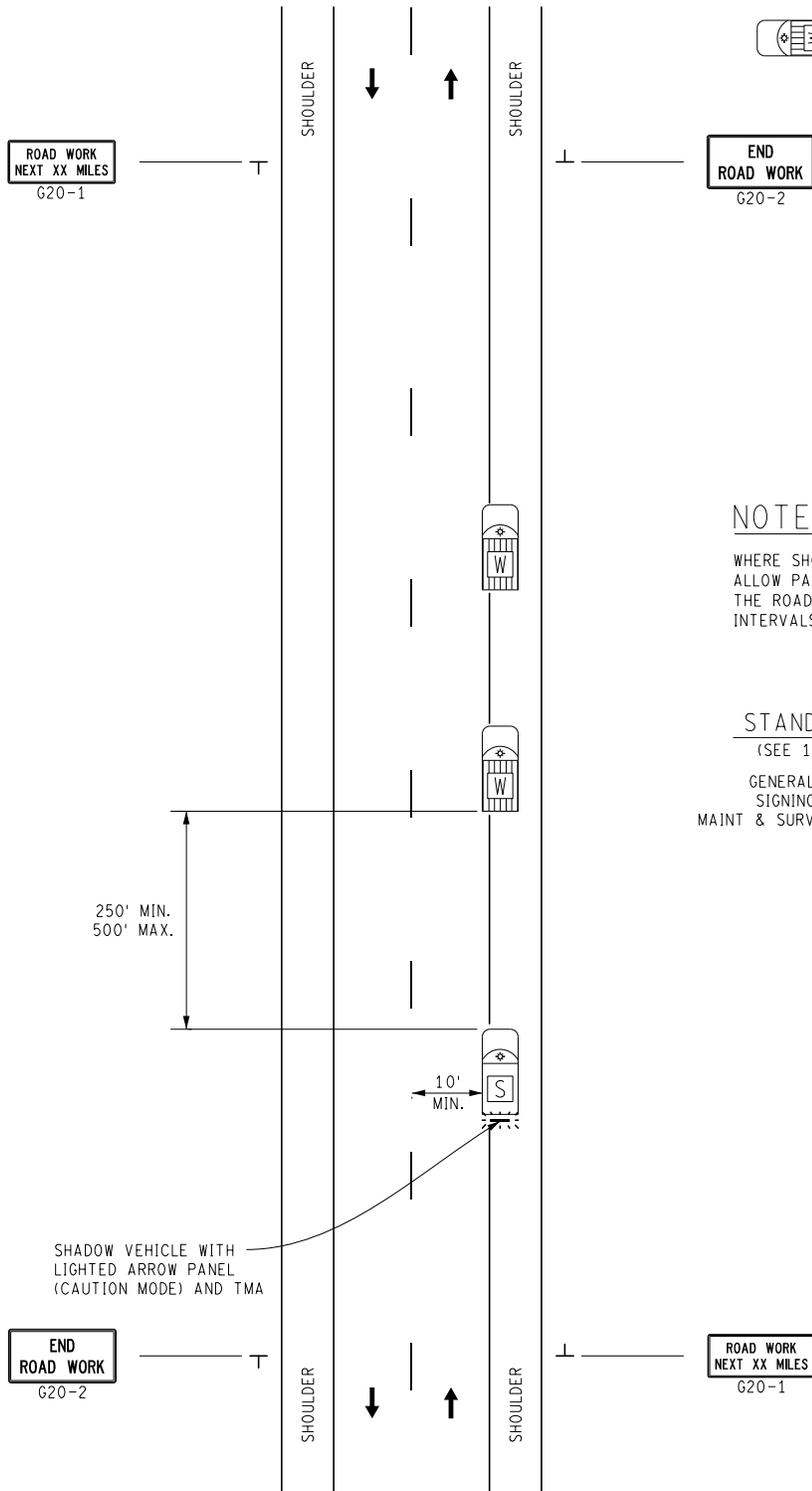
KEY

 LIGHTED ARROW PANEL (TRUCK MOUNTED) (CAUTION MODE)

 TRAFFIC FLOW

 SHADOW VEHICLE WITH TRUCK MOUNTED ATTENUATOR

 WORK VEHICLE



NOTES

WHERE SHOULDERS ARE NARROW AND INSUFFICIENT WIDTH EXISTS TO ALLOW PASSING, THE CONVOY SHALL CEASE OPERATION AND PULL OFF THE ROADWAY TO ALLOW QUEUED TRAFFIC TO PASS AT REASONABLE INTERVALS.

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G3, G4

SIGNING: S1

MAINT & SURV: MS1, MS2, MS3, MS4, MS5

NOT TO SCALE

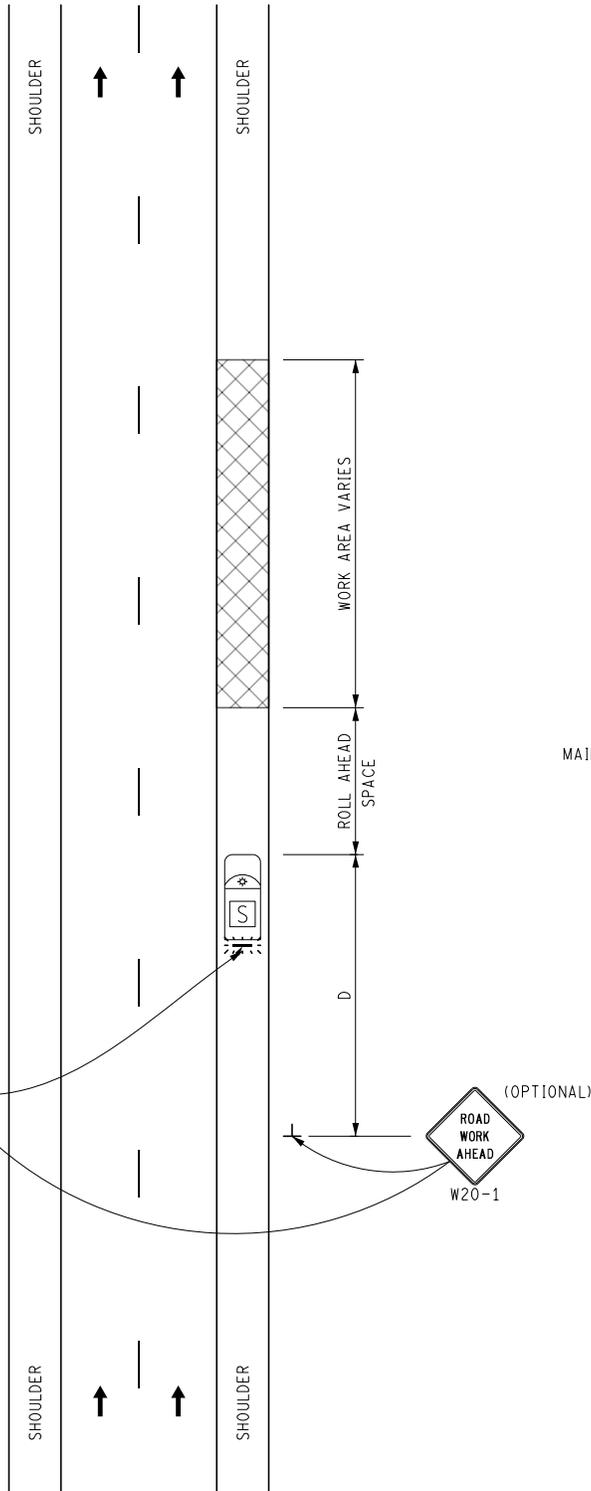
	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: MOBILE	SHOULDER WORK ON A TWO-LANE, TWO-WAY ROADWAY WITH LANE ENCROACHMENTS		DATE: MAY 2021
					NO: 4405-M-NFW-SHL
					SHEET: 1 OF 1
FILE: 4405-M-NFW-SHL.dgn					

KEY

 LIGHTED ARROW PANEL (CAUTION MODE)

 TRAFFIC FLOW

 SHADOW VEHICLE WITH OPTIONAL TRUCK MOUNTED ATTENUATOR



NOTES

THERE MUST BE EITHER AN APPROPRIATELY MARKED VEHICLE WITH A ROTATING BEACON OR OPTIONAL W20-1 SIGNS TO INDICATE TO THE PUBLIC THAT WORK IS BEING DONE IN THE AREA.

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4

SIGNING: S1

MAINT & SURV: MS2, MS3, MS4

LIGHTED ARROW PANEL (CAUTION MODE)

(OPTIONAL)

ROAD WORK AHEAD
W20-1

NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-DURATION MOBILE	SHOULDER WORK ON A DIVIDED ROADWAY OR FREEWAY	DATE: MAY 2021
				NO: 4420-M-FW-SHL
	FILE: 4420-M-FW-SHL.dgn			SHEET: 1 OF 1

KEY

 LIGHTED ARROW PANEL

 TRAFFIC FLOW

 SHADOW VEHICLE WITH OPTIONAL TRUCK MOUNTED ATTENUATOR

 WORK VEHICLE WITH OPTIONAL TRUCK MOUNTED ATTENUATOR

STANDARD NOTES

(SEE 102-GEN-NOTES)

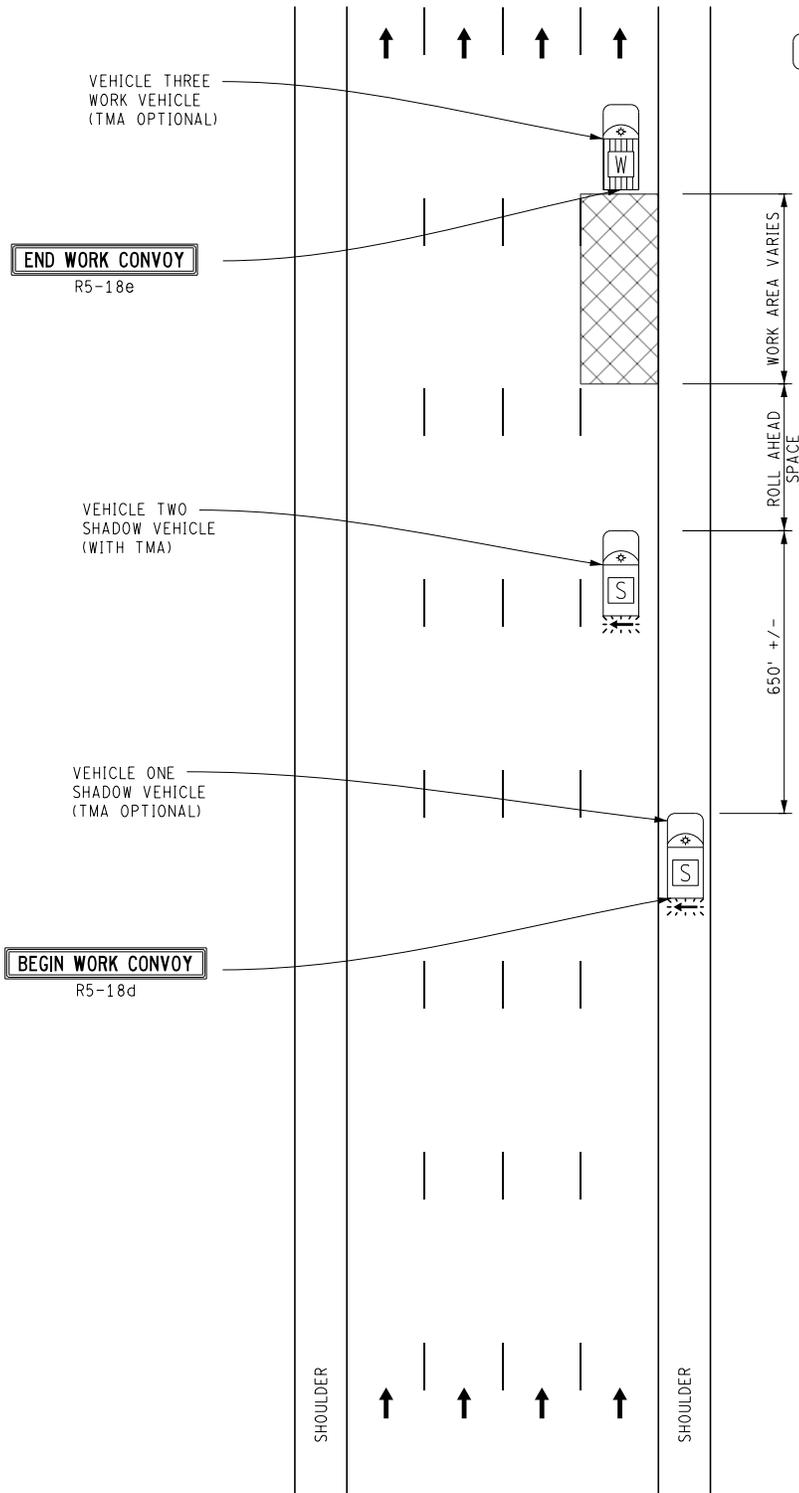
GENERAL: G1, G3, G4

SIGNING: S1

MAINT & SURV: MS1, MS2, MS3, MS4, MS5

NOTES

1. THIS TYPICAL ALSO MAY BE USED WHEN WORK IS BEING PERFORMED IN THE LANE ADJACENT TO THE MEDIAN OF THE ROADWAY. IN THIS CASE, THE "LEFT LANE CLOSED AHEAD" SIGNS SHALL BE SUBSTITUTED.



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-DURATION MOBILE	MOBILE OPERATION ON A MULTI-LANE ROADWAY		DATE: MAY 2021
					NO: 4421-M-FW-1LC
					SHEET: 1 OF 1

FILE: 4421-M-FW-1LC.dgn

KEY

-  LIGHTED ARROW PANEL
-  TRAFFIC FLOW
-  SHADOW VEHICLE WITH OPTIONAL TRUCK MOUNTED ATTENUATOR
-  WORK VEHICLE WITH OPTIONAL TRUCK MOUNTED ATTENUATOR

STANDARD NOTES

(SEE 102-GEN-NOTES)

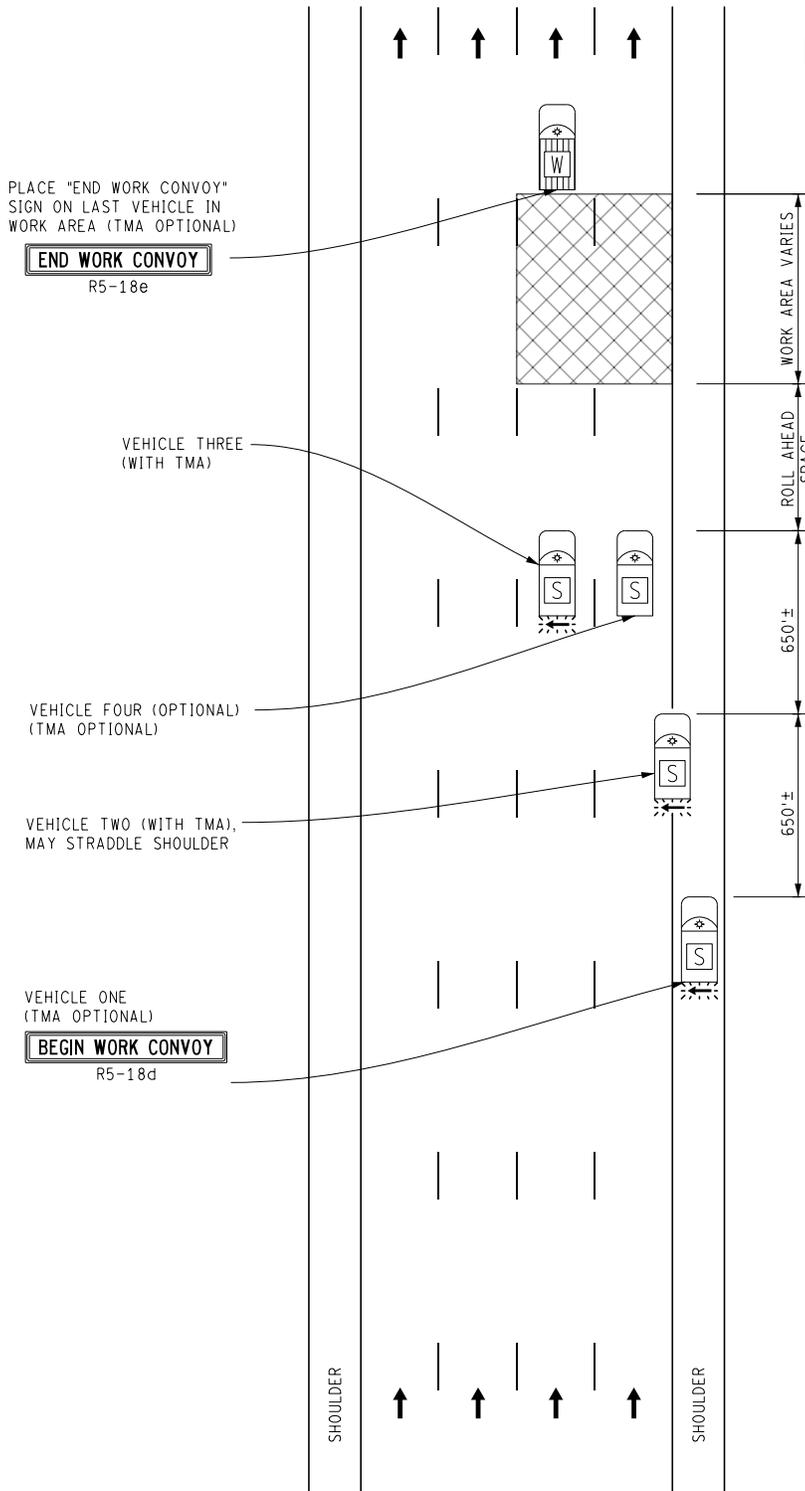
GENERAL: G1, G2, G3, G4

SIGNING: S1

MAINT & SURV: MS1, MS2, MS3, MS4, MS5

NOTES

1. THIS TYPICAL ALSO MAY BE USED WHEN WORK IS BEING PERFORMED IN THE LANE ADJACENT TO THE MEDIAN OF THE ROADWAY. IN THIS CASE, THE "LEFT TWO LANES CLOSED AHEAD" SIGNS SHALL BE SUBSTITUTED.



NOT TO SCALE

	MAINTENANCE MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-DURATION MOBILE	MOBILE OPERATION ON A MULTI-LANE ROADWAY - 2 LANES	DATE: MAY 2021
				NO: 4422-M-FW-2LC
FILE: 4422-M-FW-2LC.dgn				SHEET: 1 OF 1



SURVEY MAINTAINING TRAFFIC TYPICALS

 FILE: Cover for Survey.dgn		COVER SHEET	SURVEY COVER SHEET	DATE: MAY 2021
		NO:		
				1 OF 1

KEY

← TRAFFIC FLOW

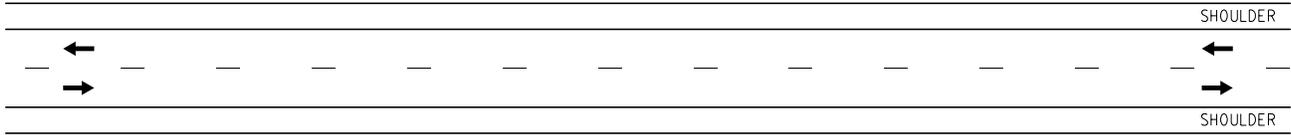
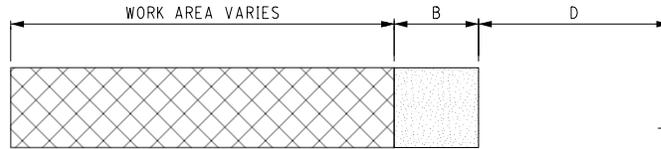
STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G4
SIGNING: S1
MAINT & SURV: MS2, MS4



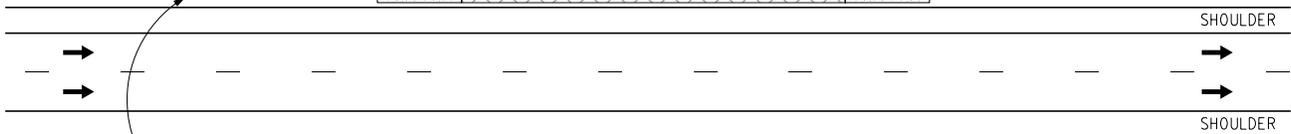
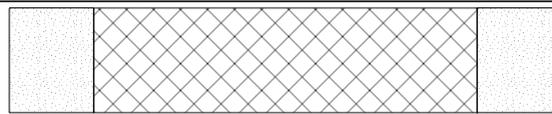
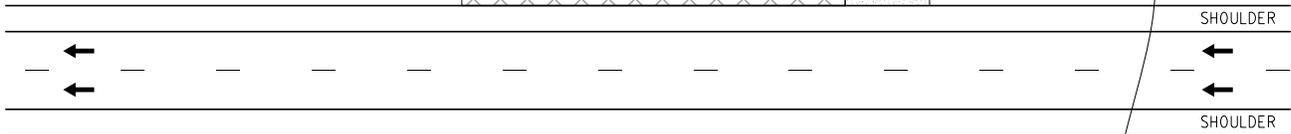
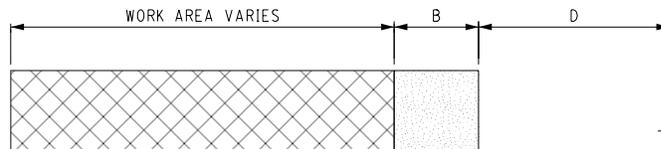
W21-6



UNDIVIDED MULTI-LANE ROADWAY



W21-6



W21-6

DIVIDED ROADWAY

NOTES

1. FOR SHORT-DURATION OR MOBILE OPERATIONS, NO SIGNS ARE REQUIRED IF APPROPRIATELY EQUIPPED VEHICLES ARE USED.
2. IF THE OPERATION HAS VEHICLE(S) PARKED ON THE SHOULDER OR VEHICLES ACCESSING THE WORK SITE VIA THE HIGHWAY OR CROSSING THE HIGHWAY TO PERFORM OPERATIONS, A W21-6 SIGN, W20-1 SIGN, OR AN ARROW BOARD IN CAUTION MODE SHALL BE USED.
3. WORK VEHICLES SHOULD BE PARKED AS FAR OFF THE TRAVELED WAY AS PRACTICAL.
4. IF THE WORK SPACE IS IN THE MEDIAN OF A DIVIDED ROADWAY, ADVANCE WARNING SIGNS SHALL BE PLACED IN BOTH DIRECTIONS OF TRAVEL.
5. VEHICLES AND PERSONNEL SHOULD ALL BE LOCATED AND PARKED ON THE SAME SIDE OF THE ROADWAY TO THE EXTENT PRACTICAL.

NOT TO SCALE

	SURVEYING MAINTAINING TRAFFIC TYPICAL	DURATION: APPLIES TO ALL DURATIONS	WORK OUTSIDE SHOULDER	DATE: MAY 2021
				NO: 5000-S-SHL-OUT
FILE: 5000-S-SHL-OUT.dgn				SHEET: 1 OF 1

KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL (CAUTION MODE)
- ← TRAFFIC FLOW
- ▬ TRAFFIC REGULATOR

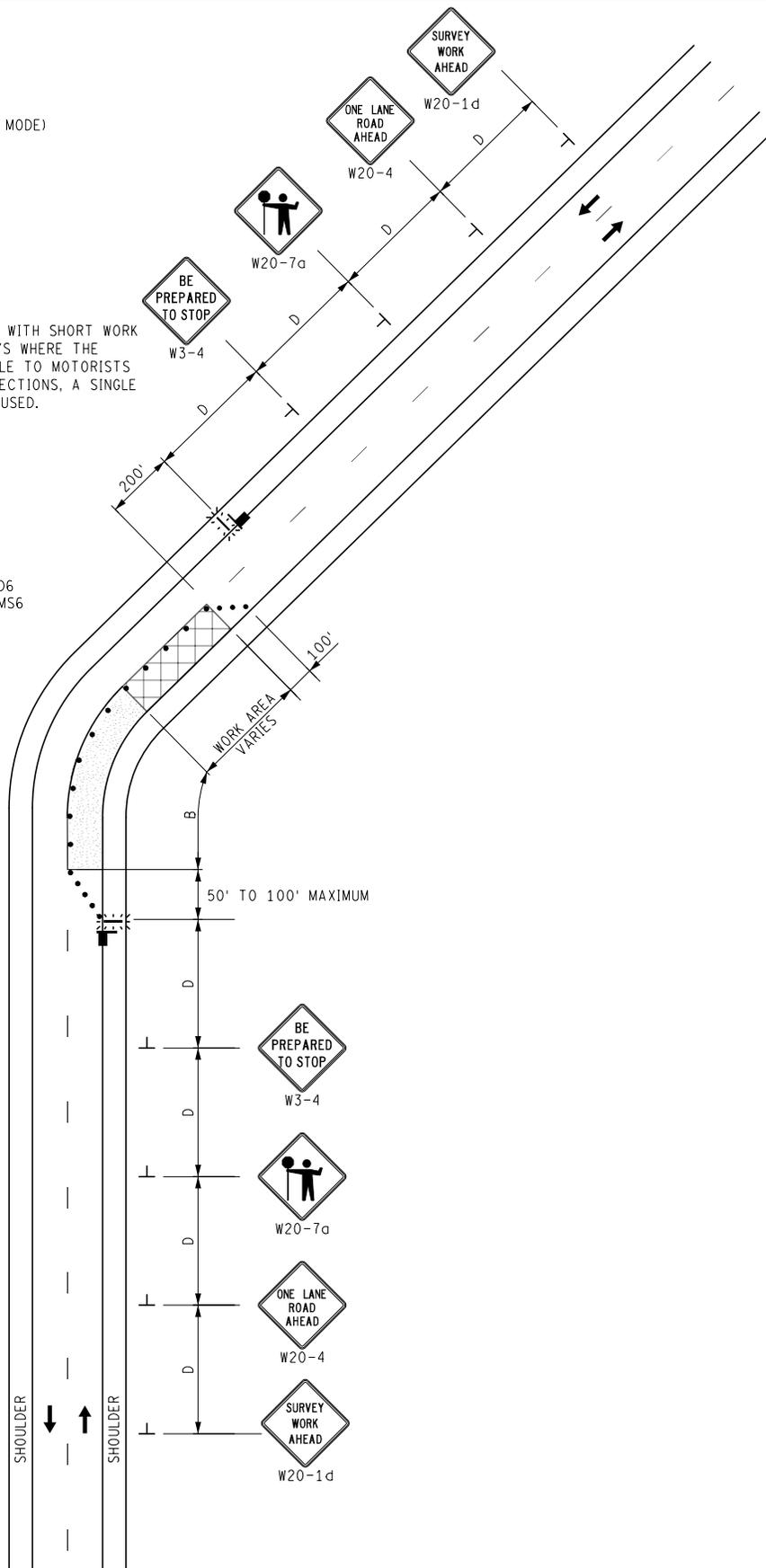
NOTES

1. FOR LOW VOLUME SITUATIONS WITH SHORT WORK ZONES ON STRAIGHT ROADWAYS WHERE THE TRAFFIC REGULATOR IS VISIBLE TO MOTORISTS APPROACHING FROM BOTH DIRECTIONS, A SINGLE TRAFFIC REGULATOR MAY BE USED.

STANDARD NOTES

(SEE 102-GEN-NOTES)

- GENERAL: G1, G2, G3, G4
- SIGNING: S1
- TRAF REG: TR1, TR2, TR3
- DEVICES: TCD1, TCD2, TCD6
- MAINT & SURV: MS2, MS3, MS4, MS6



NOT TO SCALE

	SURVEYING MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-TERM STATIONARY	LANE CLOSURE ON A TWO-LANE, TWO-WAY ROADWAY UTILIZING TRAFFIC REGULATORS	DATE: MAY 2021
				NO: 5110-S-TR-NFW-2L
FILE: 5110-S-TR-NFW-2L.dgn				SHEET: 1 OF 1

KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL (CAUTION MODE)
- ← TRAFFIC FLOW
-  SHADOW VEHICLE WITH OPTIONAL TRUCK MOUNTED ATTENUATOR

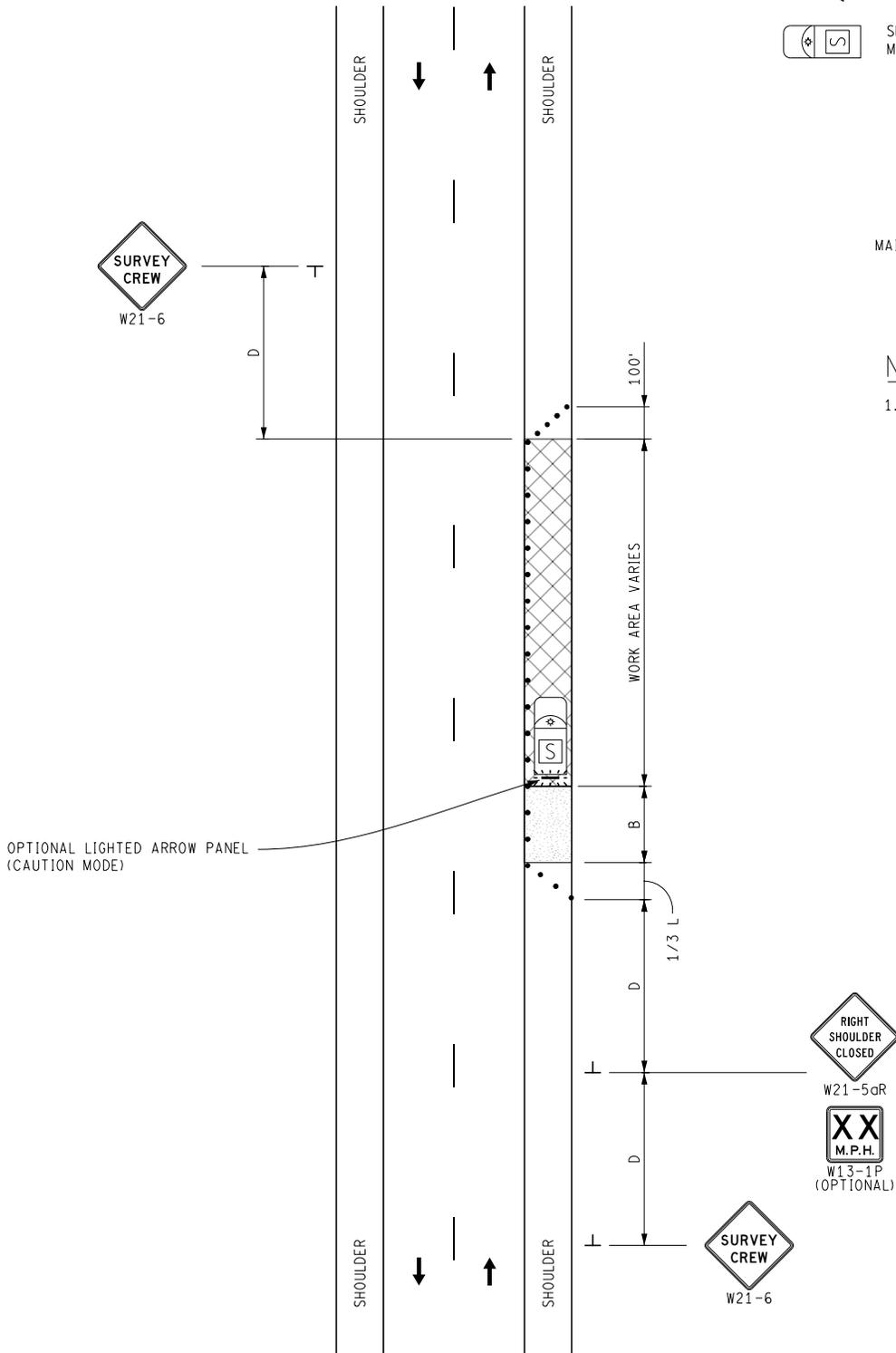
STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1
 DEVICES: TCD1, TCD2, TCD6
 MAINT & SURV: MS1, MS2, MS3, MS4, MS6

NOTES

1. IF MINOR ENCROACHMENT INTO THE TRAVEL LANE OCCURS, ALL LANES SHOULD BE A MINIMUM OF 10 FEET IN WIDTH, OTHERWISE THE APPROPRIATE LANE CLOSURE SHOULD BE USED.



NOT TO SCALE

	SURVEYING MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-TERM STATIONARY	SHOULDER CLOSURE ON A TWO-LANE, TWO-WAY ROADWAY		DATE: MAY 2021
					NO: 5122-S-NFW-SHL
FILE: 5122-S-NFW-SHL.dgn					SHEET: 1 OF 1

KEY

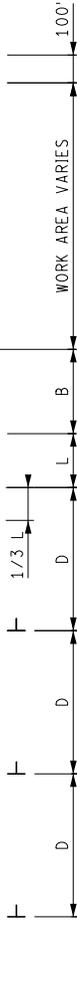
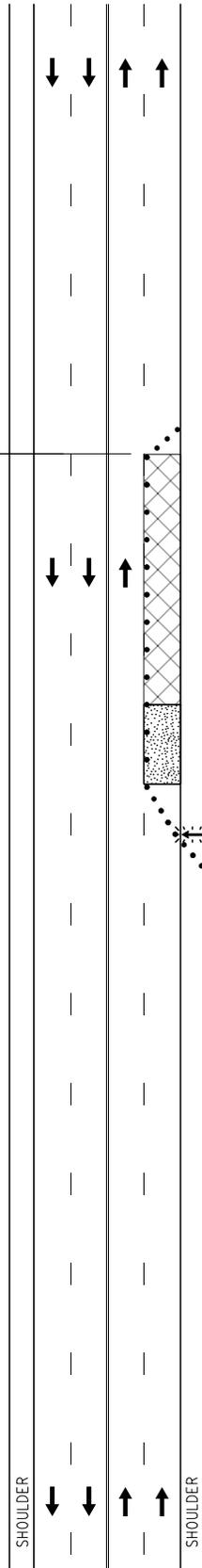
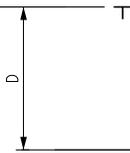
- CHANNELIZING DEVICES
- ⊘ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW

NOTES

1. FOR SHORT DURATION OPERATIONS, AT LEAST ONE ADVANCE WARNING SIGN (W21-6 OR W20-1) MUST BE USED.

STANDARD NOTES
(SEE 102-GEN-NOTES)

- GENERAL: G1, G2, G3, G4
- SIGNING: S1
- DEVICES: TCD1, TCD2, TCD6
- MAINT & SURV: MS2, MS3, MS4, MS6



NOT TO SCALE

	SURVEYING MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-TERM STATIONARY SHORT DURATION	SINGLE LANE CLOSURE ON AN UNDIVIDED MULTI-LANE ROADWAY	DATE: MAY 2021
				NO: 5123-S-NFW-1LC-(R)
FILE: 5123-S-NFW-1LC-(R).dgn				SHEET: 1 OF 1

KEY

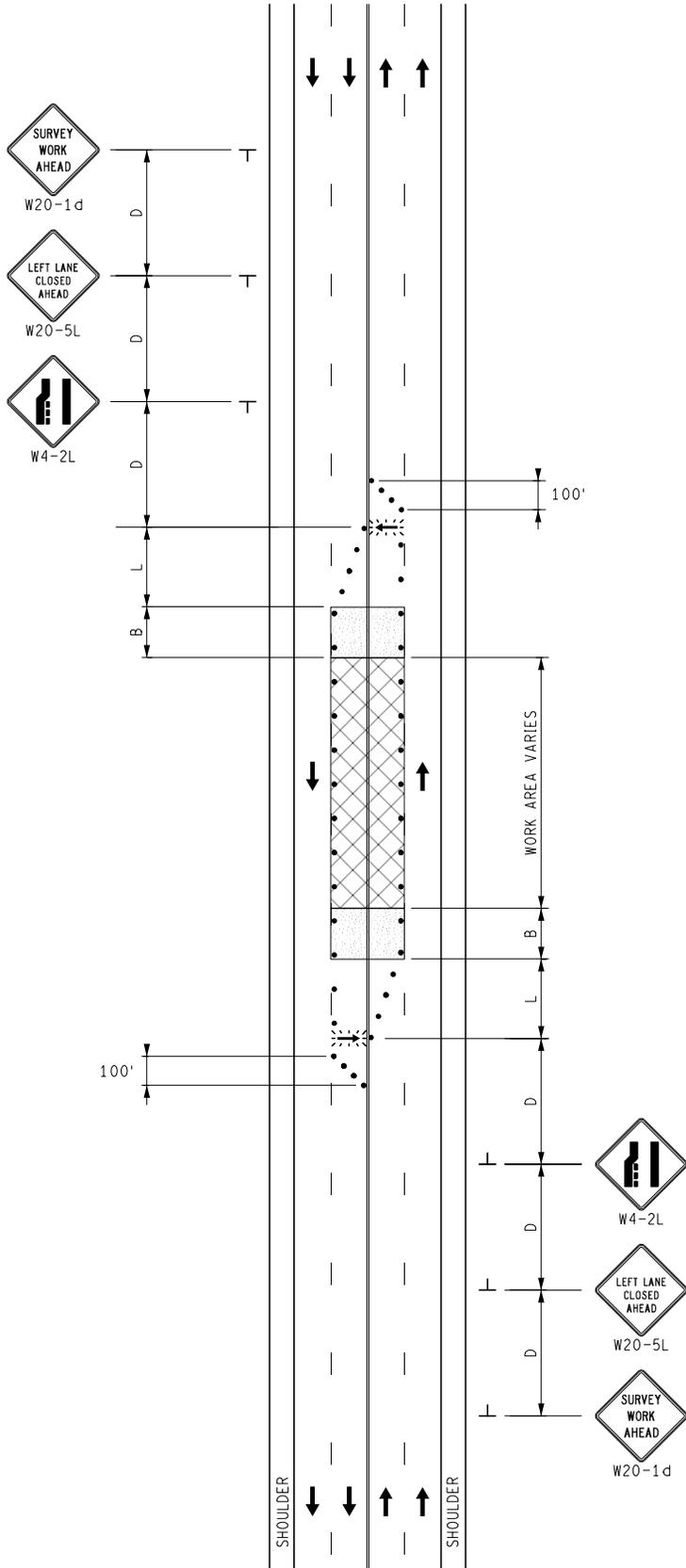
- CHANNELIZING DEVICES
- ⊘ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW

NOTES

1. FOR SHORT DURATION OPERATIONS, AT LEAST ONE ADVANCE WARNING SIGN (W20-1 OR W21-6) SHALL BE USED.

STANDARD NOTES
(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
SIGNING: S1
DEVICES: TCD1, TCD2, TCD6
MAINT & SURV: MS2, MS3, MS4, MS6



NOT TO SCALE

	SURVEYING MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-TERM STATIONARY SHORT DURATION	LANE CLOSURE - INSIDE TWO LANES OF AN UNDIVIDED MULTI-LANE ROADWAY	DATE: MAY 2021
				NO: 5125-S-NFW-2LC-(IN)
FILE: 5125-S-NFW-2LC-(IN).dgn				SHEET: 1 OF 1

KEY

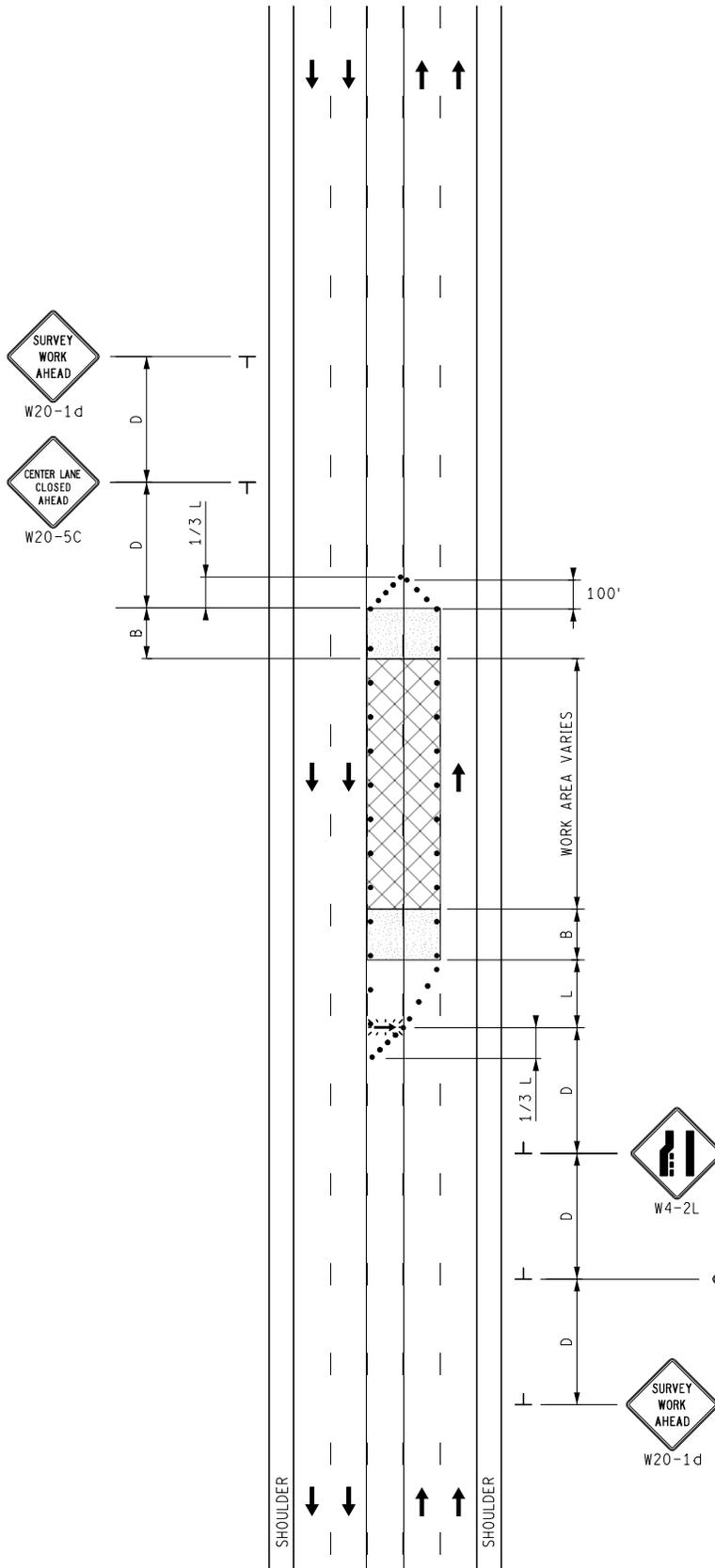
- CHANNELIZING DEVICES
- ⊘ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW

NOTES

1. FOR SHORT DURATION OPERATIONS, AT LEAST ONE ADVANCE WARNING SIGN (W21-6 OR W20-1) SHALL BE USED.

STANDARD NOTES
(SEE 102-GEN-NOTES)

- GENERAL: G1, G2, G3, G4
- SIGNING: S1
- DEVICES: TCD1, TCD2, TCD6
- MAINT & SURV: MS2, MS3, MS4, MS6



NOT TO SCALE

	SURVEYING MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-TERM STATIONARY SHORT DURATION	CENTER AND LEFT LANE CLOSURE OF AN UNDIVIDED MULTI-LANE ROADWAY	DATE: MAY 2021
				NO: 5133-S-CLT-1LC-(L)
FILE: 5133-S-CLT-1LC-(L).dgn				SHEET: 1 OF 1

KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW

NOTES

1. IF THE WORK SPACE IS LESS THAN $\frac{1}{2}$ MILE FROM THE BEGINNING OF THE PASSING LANE, THE PASSING LANE SHOULD BE CLOSED FROM THE BEGINNING.
2. IF THERE IS LESS THAN 1000 FEET OF PASSING LANE REMAINING BEYOND THE WORK SPACE, THE PASSING LANE SHOULD BE CLOSED TO THE END.
3. COVER CONFLICTING PERMANENT ADVANCED PASSING LANE SIGNS PRIOR TO THE WORK SPACE.

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1
 DEVICES: TCD1, TCD2, TCD6
 MAINT & SURV: MS2, MS3, MS4, MS6

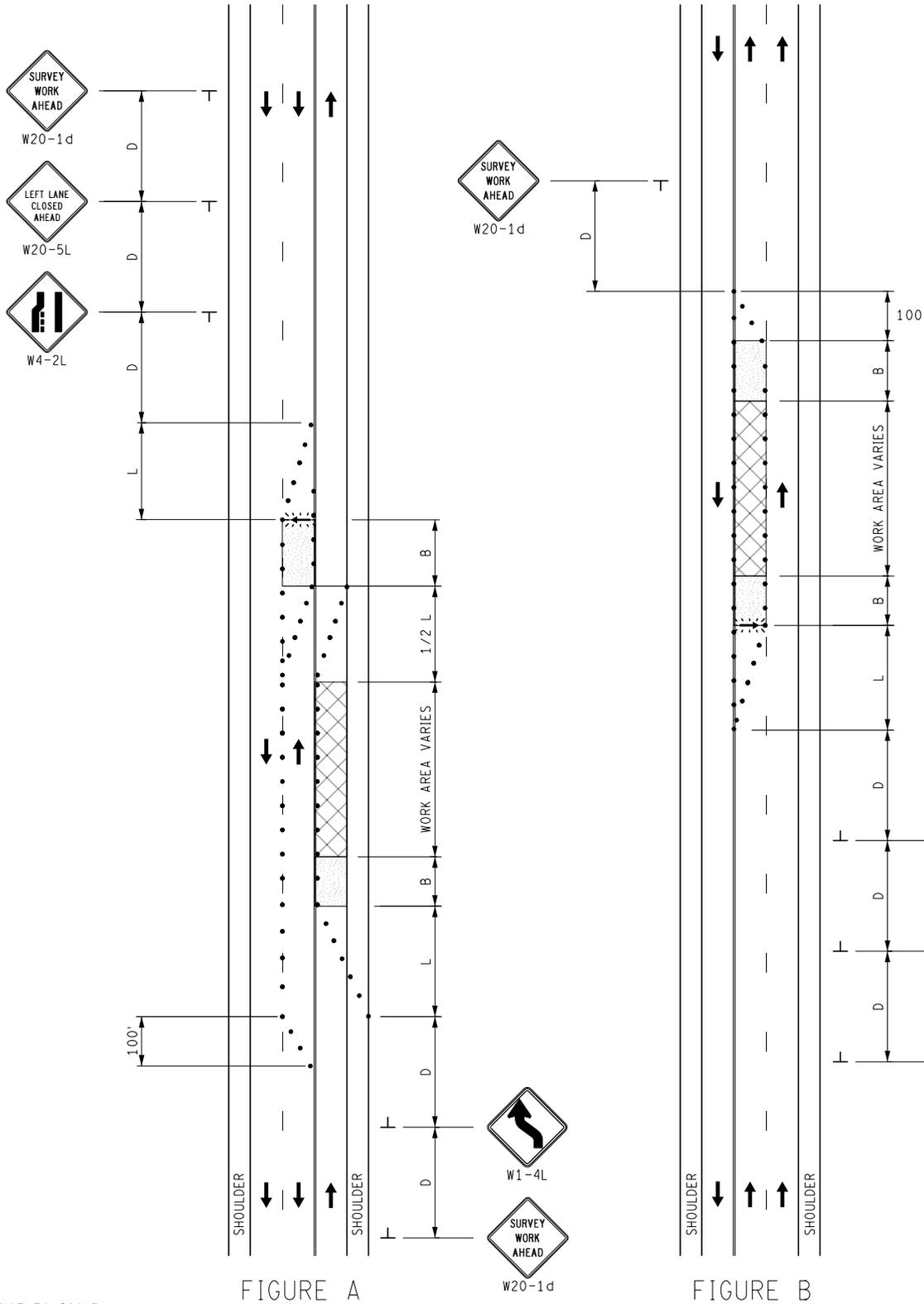


FIGURE A

FIGURE B

NOT TO SCALE

	SURVEYING MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-TERM STATIONARY	LANE CLOSURE ON A 3-LANE, TWO-WAY ROADWAY	DATE: MAY 2021
	FILE: 5181-S-NFW-1LC.dgn			NO: 5181-S-NFW-1LC
				SHEET: 1 OF 1

KEY

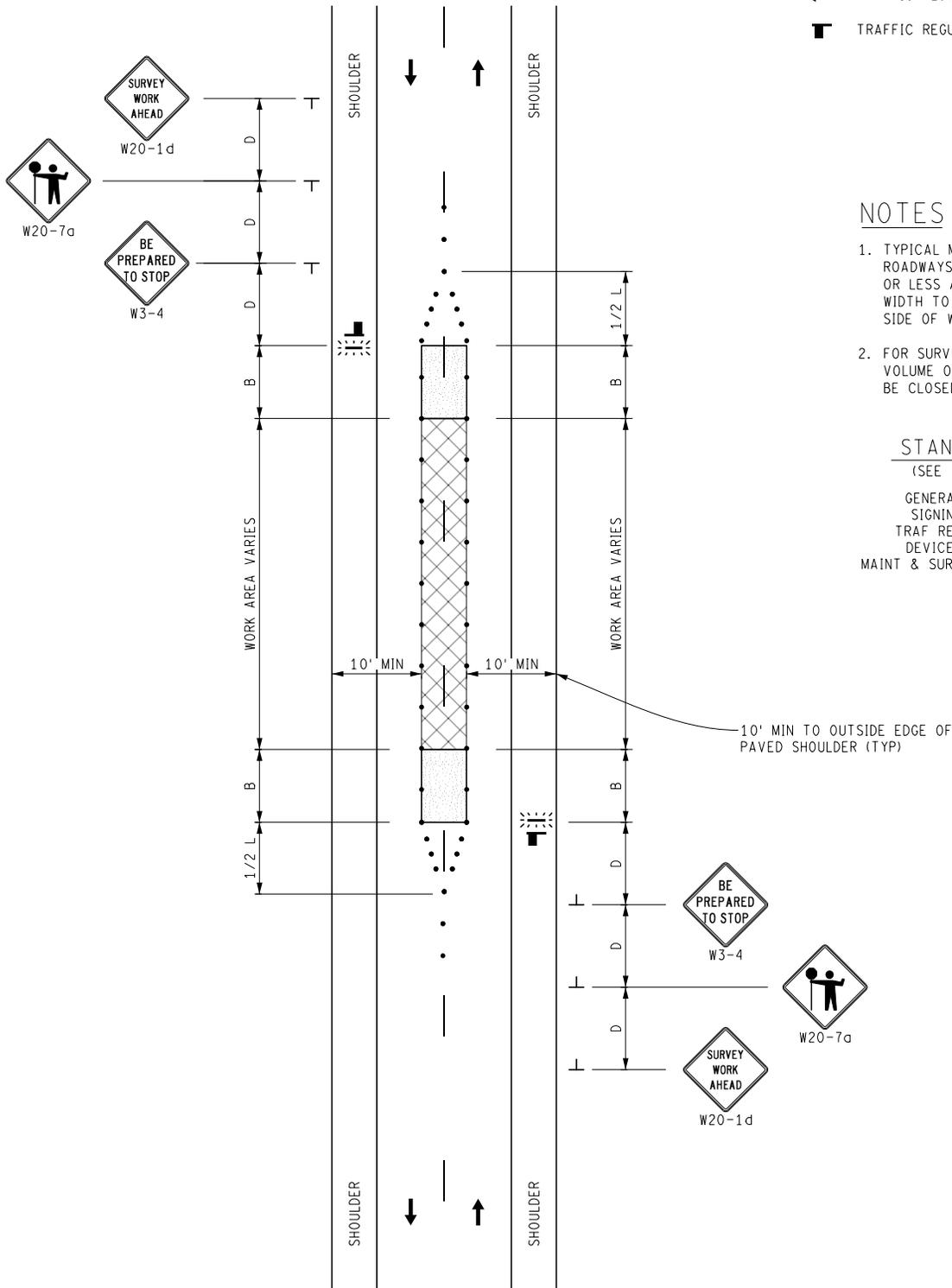
- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL (CAUTION MODE)
- ← TRAFFIC FLOW
- TRAFFIC REGULATOR

NOTES

1. TYPICAL MAY ONLY BE USED ON LOW VOLUME ROADWAYS WITH POSTED SPEED LIMIT OF 55 MPH OR LESS AND SUFFICIENT LANE AND SHOULDER WIDTH TO ALLOW 10 FT TRAVEL LANES ON EACH SIDE OF WORK SPACE.
2. FOR SURVEYING ON THE CENTERLINE OF A HIGH VOLUME OR HIGHER SPEED ROAD, ONE LANE SHALL BE CLOSED USING APPROPRIATE LANE CLOSURE.

STANDARD NOTES

(SEE 102-GEN-NOTES)
 GENERAL: G1, G2, G3, G4
 SIGNING: S1
 TRAF REG: TR1, TR2
 DEVICES: TCD1, TCD2, TCD6
 MAINT & SURV: MS2, MS3, MS4, MS6



NOT TO SCALE

	SURVEYING MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-TERM STATIONARY	CLOSURE OF THE CENTER OF A TWO-LANE, TWO-WAY ROADWAY UTILIZING TRAFFIC REGULATORS FOR POSTED SPEEDS OF 55 MPH OR LESS	DATE: MAY 2021
				NO: 5182A-S-NFW-MID
FILE: 5182A-S-NFW-MID.dgn			SHEET: 1 OF 1	

KEY

••• CHANNELIZING DEVICES

← TRAFFIC FLOW

 WORK VEHICLE

NOTES

1. TYPICAL MAY ONLY BE USED ON LOW VOLUME ROADWAYS WITH POSTED SPEED LIMIT OF 55 MPH OR LESS AND SUFFICIENT LANE AND SHOULDER WIDTH TO ALLOW 10 FT TRAVEL LANES ON EACH SIDE OF WORK SPACE.

STANDARD NOTES

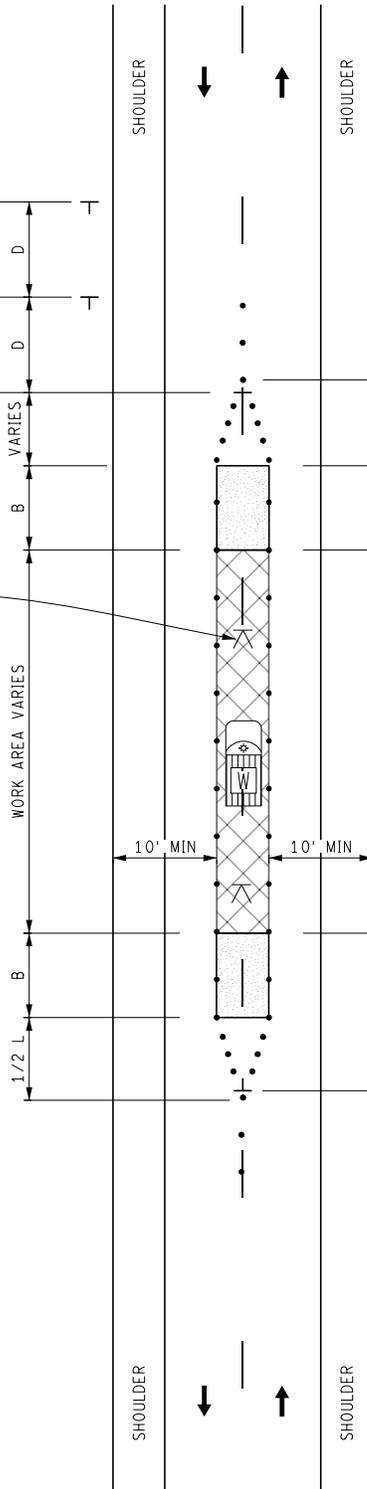
(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1
 DEVICES: TCD1, TCD2, TCD6
 MAINT & SURV: MS2, MS3, MS4, MS6

(OMIT WHEN SPEED LIMIT IS BELOW 55 MPH)



INSTRUMENT (TYP)



10' MIN TO OUTSIDE EDGE OF PAVED SHOULDER (TYP)



(OMIT WHEN SPEED LIMIT IS BELOW 55 MPH)

NOT TO SCALE

 FILE: 5182B-S-NFW-MID.dgn	SURVEYING MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-TERM STATIONARY	CLOSURE OF THE CENTER OF A TWO-LANE, TWO-WAY ROADWAY WITH LOW TRAFFIC VOLUMES	DATE: MAY 2021
				NO: 5182B-S-NFW-MID
				SHEET: 1 OF 1

KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL (CAUTION MODE)
- ← TRAFFIC FLOW
-  SHADOW VEHICLE WITH AMBER BEACON AND OPTIONAL TRUCK MOUNTED ATTENUATOR

NOTES

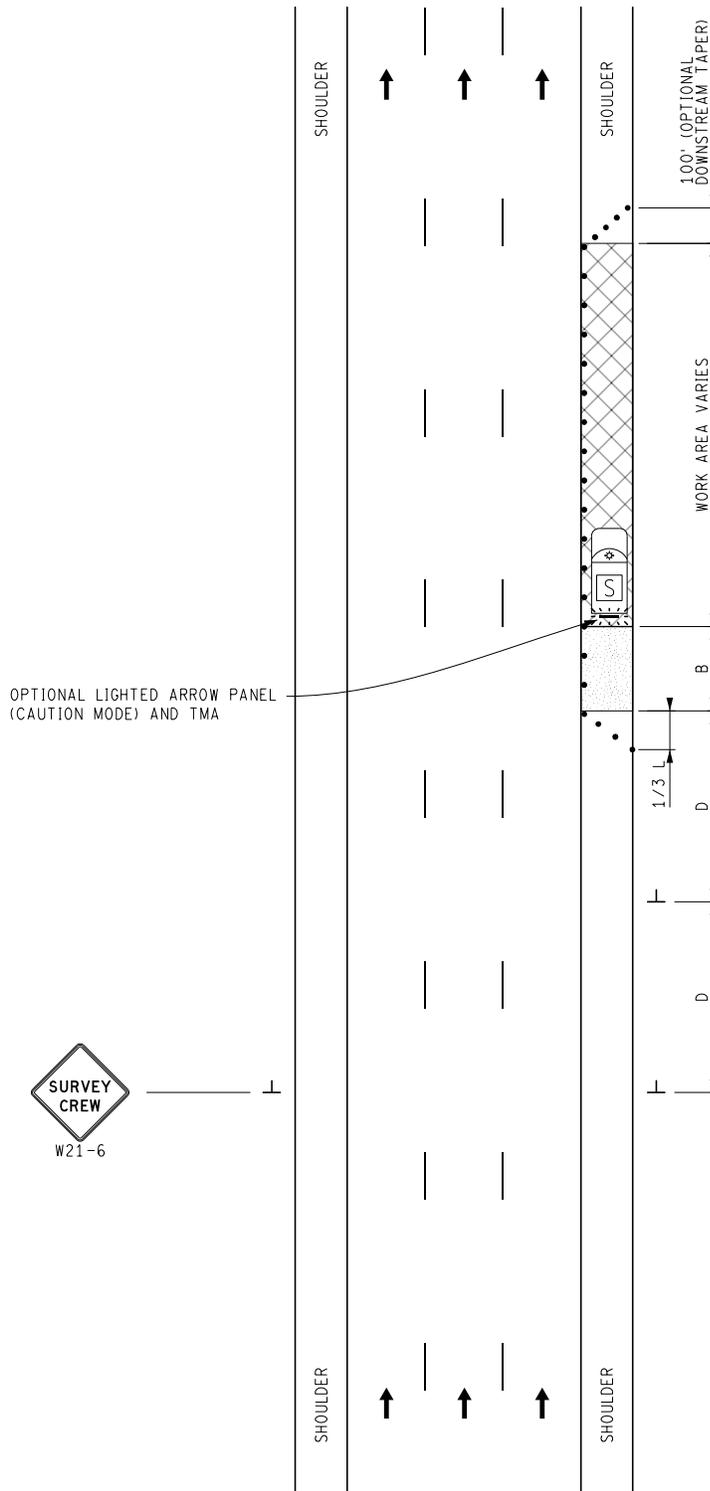
THIS TYPICAL ALSO MAY BE USED WHEN WORK IS BEING PERFORMED ON THE LEFT SHOULDER ADJACENT TO THE MEDIAN OF THE FREEWAY. IN THAT CASE, THE "LEFT SHOULDER CLOSED" SIGN SHALL BE SUBSTITUTED.

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1
 DEVICES: TCD1, TCD2, TCD6
 MAINT & SURV: MS2, MS3, MS4, MS6

SEE GUIDANCE NOTE 03 IN SECTION 66.07 OF THE MMUTCD FOR WHY THE SIGN ON THE SIDE WITHOUT THE SHOULDER CLOSURE IS NOT NEEDED.



OPTIONAL LIGHTED ARROW PANEL (CAUTION MODE) AND TMA



NOT TO SCALE

 FILE: 5200-S-FW-SHL.dgn	SURVEYING MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-TERM STATIONARY	SHOULDER CLOSURE ON A DIVIDED ROADWAY OR FREEWAY		DATE: MAY 2021
					NO: 5200-S-FW-SHL
				SHEET: 1 OF 1	

KEY

- CHANNELIZING DEVICES
- ⊘ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW

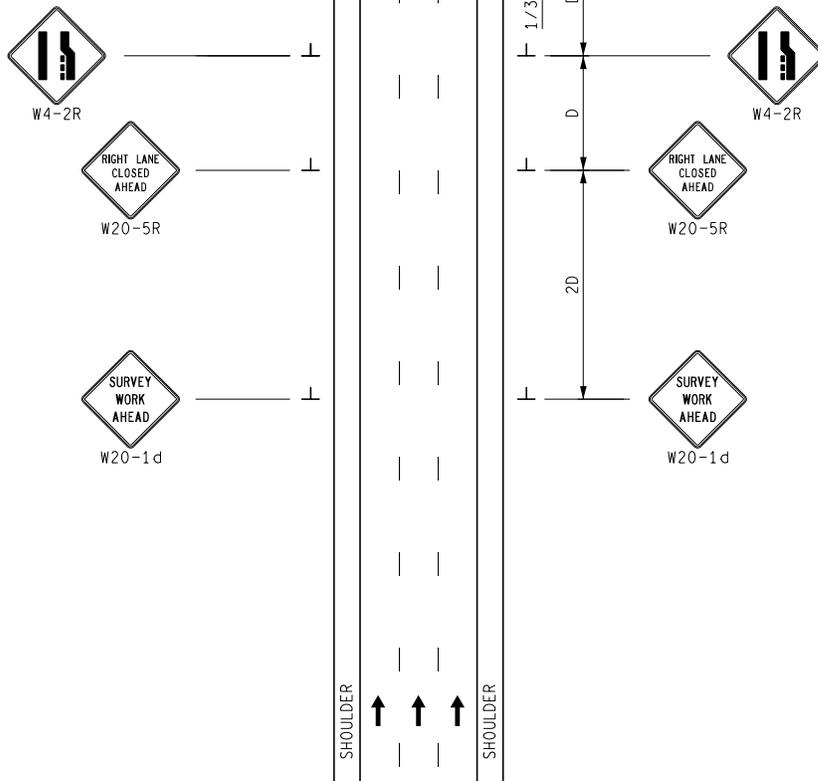
NOTES

1. THIS TYPICAL MAY ALSO BE USED WHEN WORK IS BEING PERFORMED IN THE LANE ADJACENT TO THE MEDIAN. IN THIS CASE, THE "LEFT LANE CLOSED AHEAD" SIGNS AND THE CORRECT CORRESPONDING LANE ENDS SIGN SHALL BE SUBSTITUTED.

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1
 DEVICES: TCD1, TCD2, TCD6
 MAINT & SURV: MS2, MS3, MS4, MS6



NOT TO SCALE

	SURVEYING MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-TERM STATIONARY	SINGLE LANE CLOSURE ON A FREEWAY	DATE: MAY 2021
				NO: 5203-S-FW-1LC
				SHEET: 1 OF 1

FILE: 5203-S-FW-1LC.dgn

KEY

- CHANNELIZING DEVICES
- ⚡ LIGHTED ARROW PANEL
- ← TRAFFIC FLOW

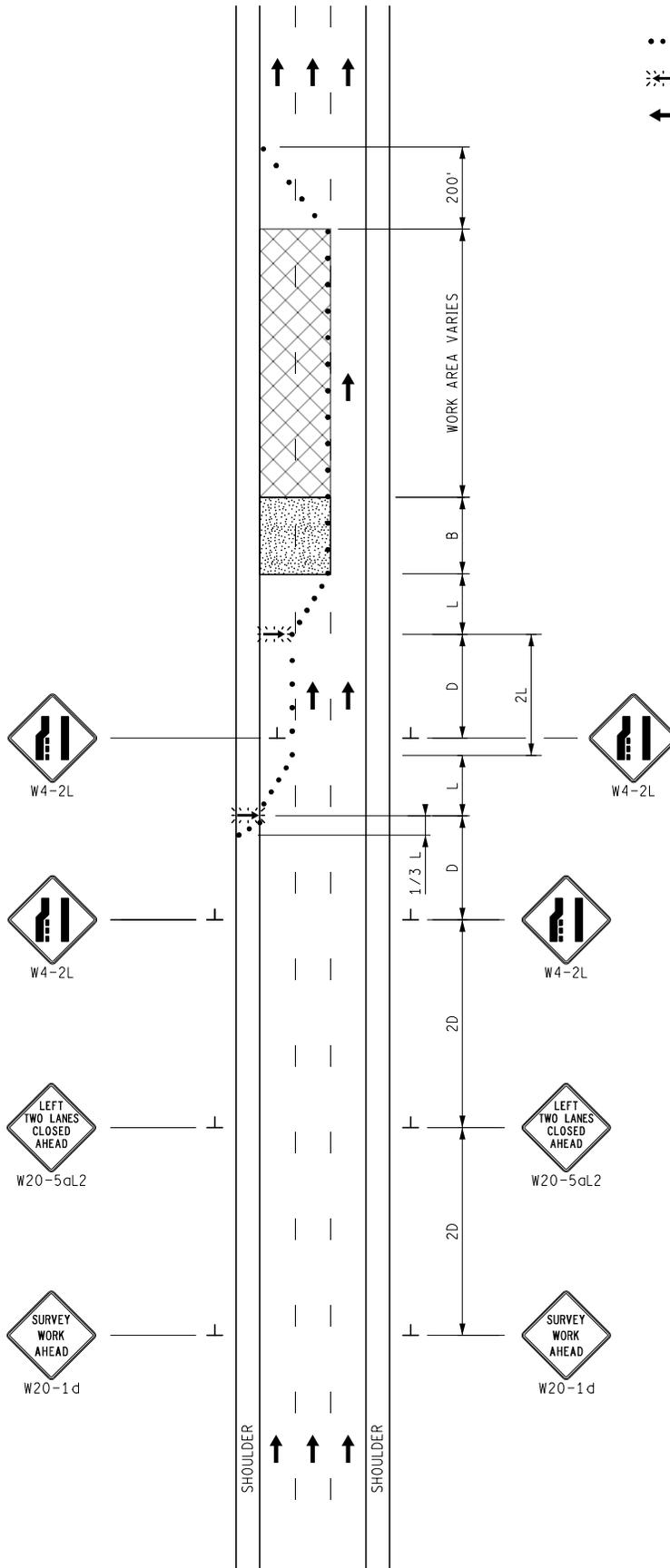
NOTES

1. THIS TYPICAL MAY ALSO BE USED WHEN WORK IS BEING PERFORMED IN THE LANE ADJACENT TO THE OUTSIDE OF THE FREEWAY. IN THAT CASE, W20-5aL2 AND W4-2L MUST BE SUBSTITUTED WITH W20-5aR2 AND W4-2R.
2. A LIGHTED ARROW PANEL IN ARROW MODE IS REQUIRED FOR EACH LANE CLOSURE.

STANDARD NOTES

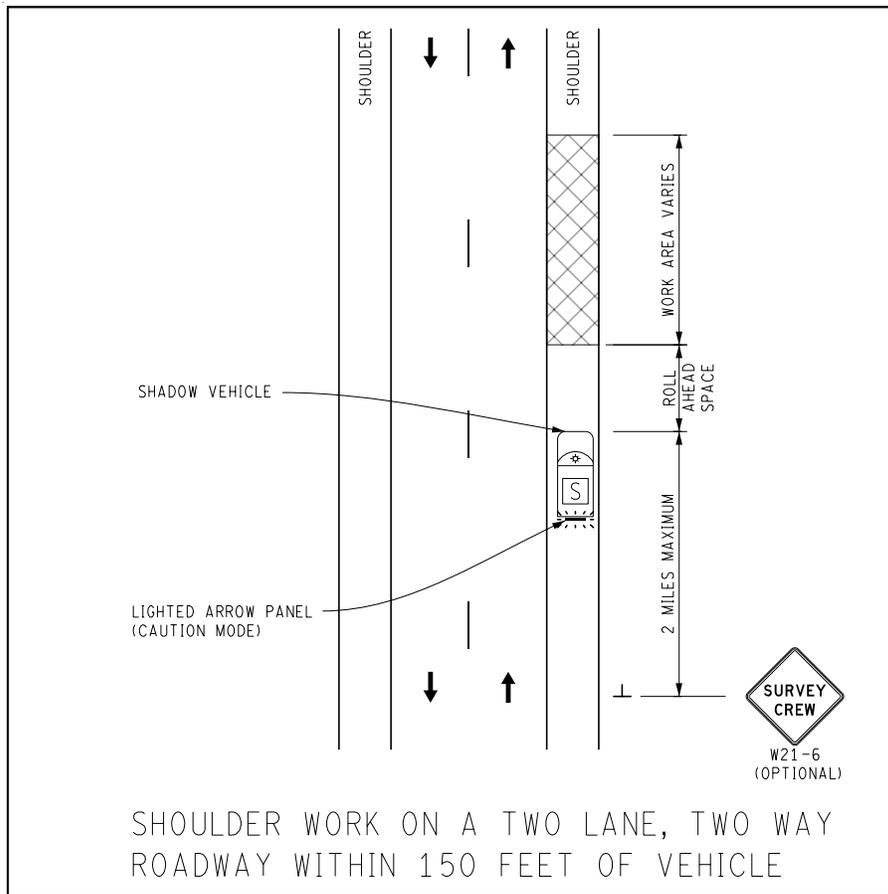
(SEE 102-GEN-NOTES)

- GENERAL: G1, G2, G3, G4
- SIGNING: S1
- DEVICES: TCD1, TCD2, TCD6
- MAINT & SURV: MS2, MS3, MS4, MS6

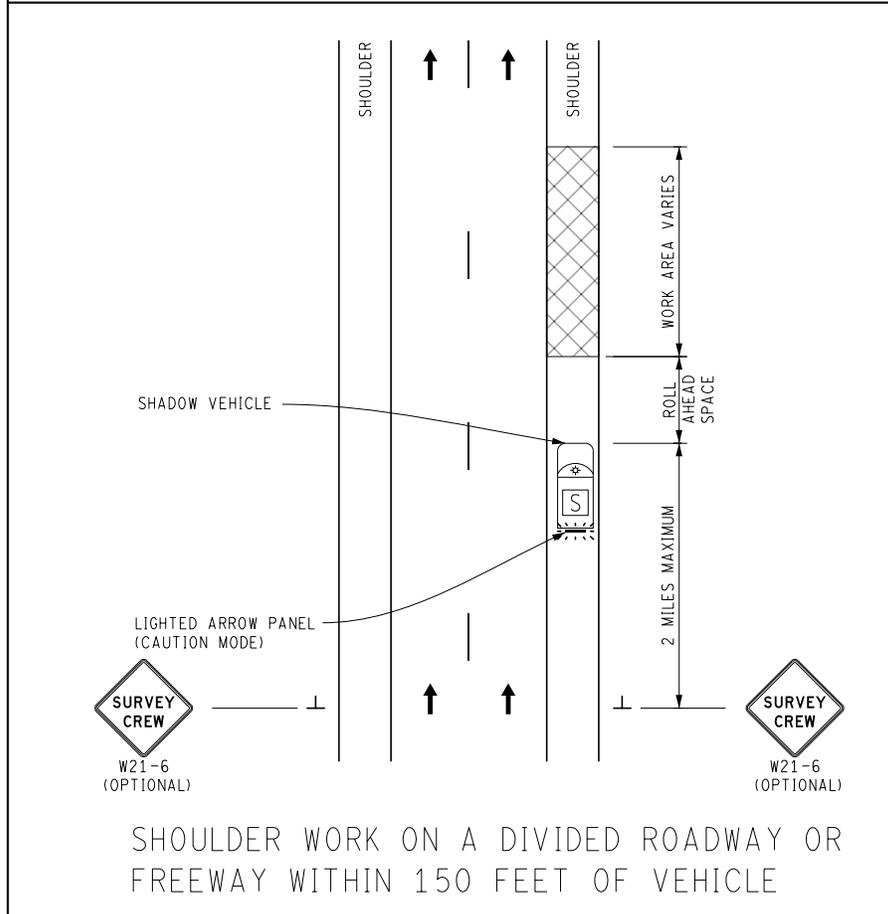


NOT TO SCALE

	SURVEYING MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT-TERM STATIONARY	TWO-LANE CLOSURE ON A FREEWAY	DATE: MAY 2021
				NO: 5205-S-FW-2LC-(L)
FILE: 5205-S-FW-2LC-(L).dgn				SHEET: 1 OF 1



SHOULDER WORK ON A TWO LANE, TWO WAY ROADWAY WITHIN 150 FEET OF VEHICLE



SHOULDER WORK ON A DIVIDED ROADWAY OR FREEWAY WITHIN 150 FEET OF VEHICLE

KEY

LIGHTED ARROW PANEL (CAUTION MODE)

TRAFFIC FLOW

SHADOW VEHICLE

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
SIGNING: S1

MAINT & SURV: MS1, MS2, MS3, MS4, MS6

NOTES

1. AT A MINIMUM, MAINTAINING TRAFFIC SHALL CONSIST OF A VEHICLE WITH AN AMBER BEACON. NO SIGNS OR CHANNELIZING DEVICES ARE REQUIRED.
2. IF THE OPERATION HAS A VEHICLE(S) PARKED ON THE SHOULDER OR VEHICLE(S) ACCESSING THE WORK SITE VIA THE HIGHWAY OR CROSSING THE HIGHWAY TO PERFORM OPERATIONS, A "SURVEY CREW" SIGN(S) SHOULD BE USED. THE W21-6 SIGN(S) SHOULD BE PLACED PRIOR TO WORK ARE TO INDICATE TO THE PUBLIC THAT A SURVEY CREW IS IN THE AREA. THE ADVANCED SIGNAGE SHOULD BE WITHIN 2 MILES OF THE SURVEY AREA.
3. WORK IN THE ROADWAY COINCIDES WITH GAPS IN THE TRAFFIC SO FLOW IS NOT IMPEDED. A SPOTTER SHOULD BE USED AND LOCATED SUFFICIENTLY IN ADVANCE OF THE WORKERS TO WARN WORKERS OF APPROACHING TRAFFIC.
4. DO NOT USE THIS TYPICAL IF TRAFFIC MUST BE CONTROLLED TO GAIN SAFE ACCESS TO THE WORK SPACE DUE TO HIGH TRAVEL SPEEDS OR TRAFFIC VOLUMES. USE THE APPROPRIATE LANE CLOSURE TYPICAL.

NOT TO SCALE



SURVEYING
MAINTAINING TRAFFIC
TYPICAL

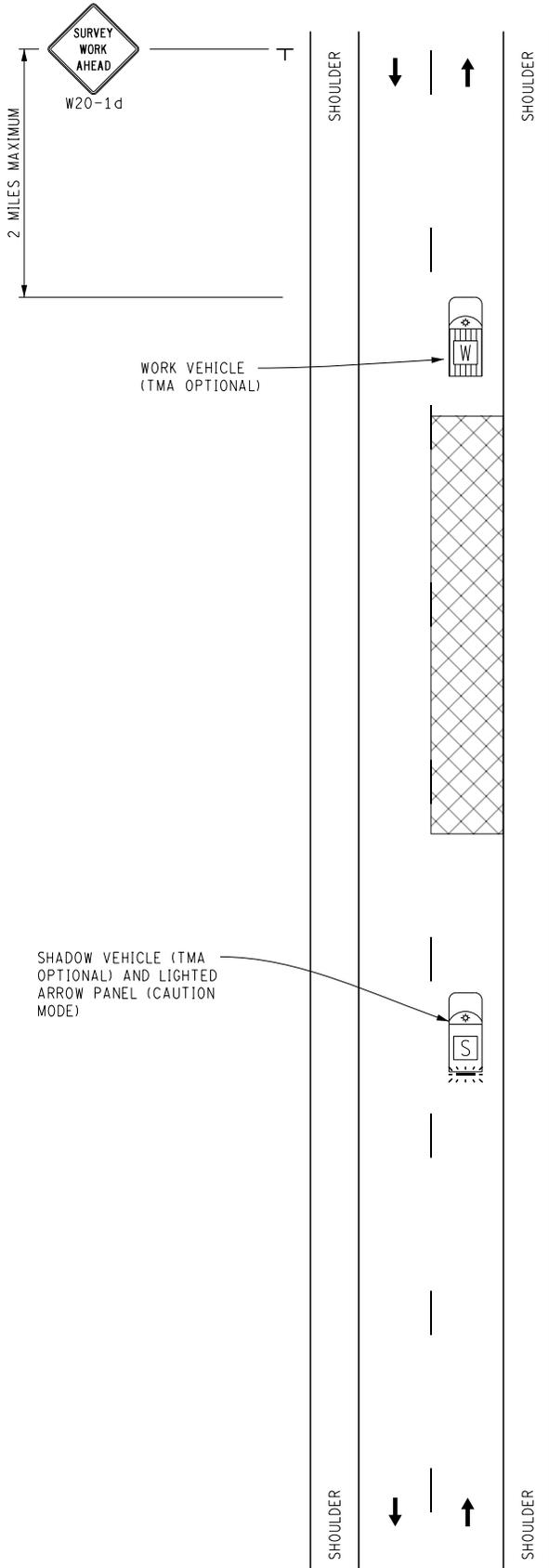
DURATION:
SHORT DURATION
MOBILE

SHOULDER WORK ON A
DIVIDED ROADWAY, FREEWAY, OR
TWO-LANE, TWO-WAY ROADWAY
WITHIN 150 FEET OF VEHICLE

DATE:
MAY 2021

NO:
5401-S-SHL

SHEET:
1 OF 1



KEY

-  LIGHTED ARROW PANEL (CAUTION MODE)
-  TRAFFIC FLOW
-  SHADOW VEHICLE
-  WORK VEHICLE

NOTES

1. IF A LIGHTED ARROW PANEL IS USED, IT SHALL BE IN CAUTION MODE.
2. THE SIGN(S) SHOULD BE PLACED PRIOR TO WORK AREA TO INDICATE TO THE PUBLIC THAT A SURVEY CREW IS IN THE AREA. THE ADVANCED SIGNAGE SHOULD BE WITHIN 2 MILES OF THE SURVEY AREA.
3. WHERE PRACTICAL AND WHEN NEEDED, THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW VEHICULAR TRAFFIC TO PASS.

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4
 SIGNING: S1
 MAINT & SURV: MS1, MS2, MS3, MS4, MS5, MS6

NOT TO SCALE

	SURVEYING MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT DURATION MOBILE	MOBILE OPERATION ON A TWO-LANE ROADWAY WITHIN 150 FEET OF WORK VEHICLE	DATE: MAY 2021
				NO: 5403-S-NFW-2L
FILE: 5403-S-NFW-2L.dgn				SHEET: 1 OF 1

KEY

 LIGHTED ARROW PANEL

 TRAFFIC FLOW

 SHADOW VEHICLE WITH OPTIONAL TRUCK MOUNTED ATTENUATOR

 WORK VEHICLE WITH OPTIONAL TRUCK MOUNTED ATTENUATOR

NOTES

1. THIS TYPICAL ALSO MAY BE USED WHEN WORK IS BEING PERFORMED IN THE LANE ADJACENT TO THE MEDIAN OF THE ROADWAY. IN THIS CASE, THE "LEFT LANE CLOSED AHEAD" SIGNS SHALL BE SUBSTITUTED.
2. THE LEAD IN SIGNS SHOULD BE PLACED PRIOR TO THE WORK AREA TO INDICATE TO THE PUBLIC THAT A SURVEY CREW IS IN THE AREA. THE ADVANCED SIGNAGE SHOULD BE WITHIN 2 MILES OF THE SURVEY AREA.

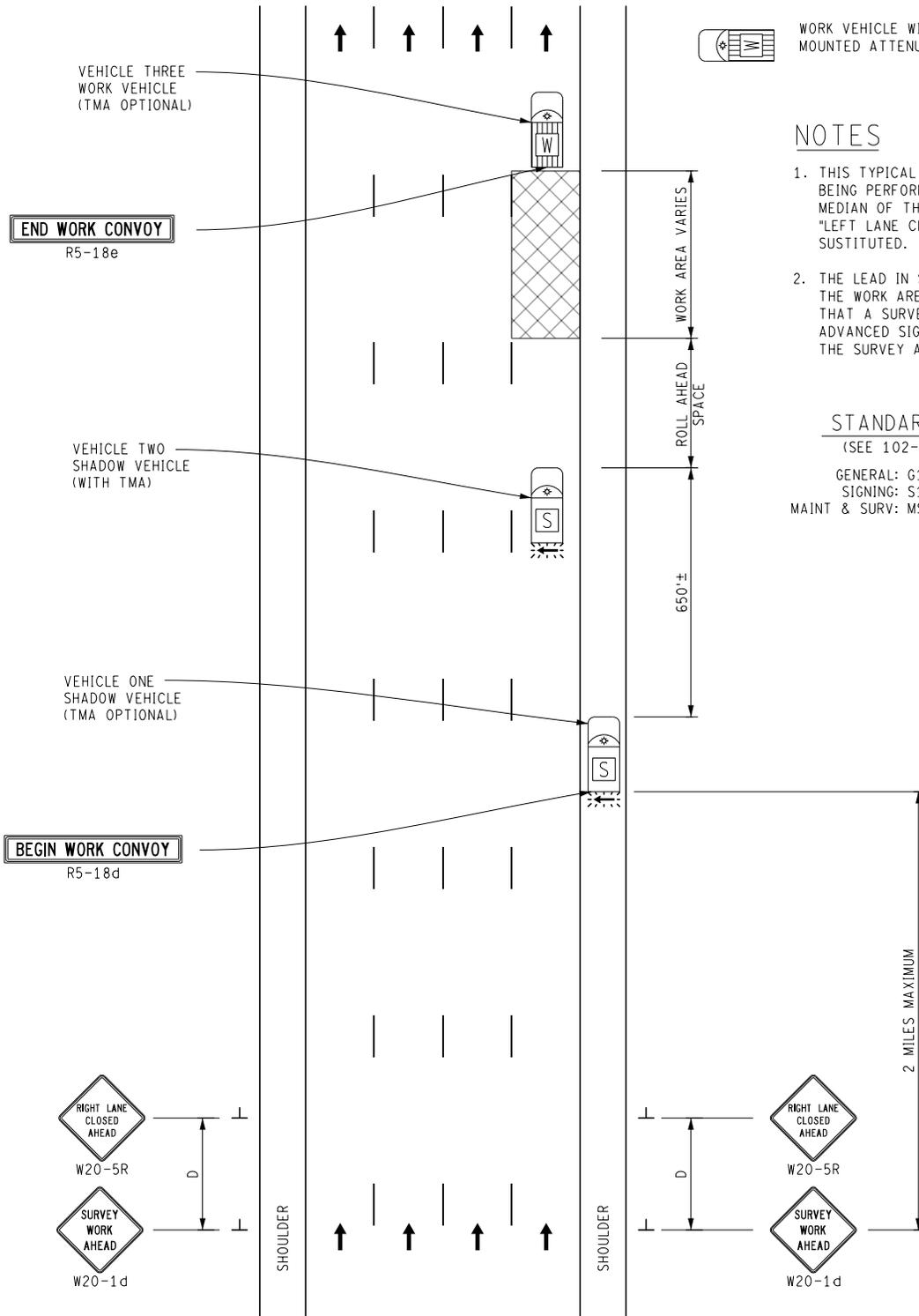
STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4

SIGNING: S1

MAINT & SURV: MS1, MS2, MS3, MS4, MS5, MS6



NOT TO SCALE

	SURVEYING MAINTAINING TRAFFIC TYPICAL	DURATION: SHORT DURATION MOBILE	MOBILE OPERATION ON A MULTI-LANE ROADWAY	DATE: MAY 2021
				NO: 5421-S-FW-1LC
FILE: 5421-S-FW-1LC.dgn				SHEET: 1 OF 1

KEY

-  LIGHTED ARROW PANEL
-  TRAFFIC FLOW
-  SHADOW VEHICLE WITH OPTIONAL TRUCK MOUNTED ATTENUATOR
-  WORK VEHICLE WITH OPTIONAL TRUCK MOUNTED ATTENUATOR

NOTES

1. THIS TYPICAL ALSO MAY BE USED WHEN WORK IS BEING PERFORMED IN THE LANE ADJACENT TO THE MEDIAN OF THE ROADWAY. IN THIS CASE, THE "LEFT TWO LANES CLOSED AHEAD" SIGNS SHALL BE SUBSTITUTED.
2. THE LEAD IN SIGNS SHOULD BE PLACED PRIOR TO THE WORK AREA TO INDICATE TO THE PUBLIC THAT A SURVEY CREW IS IN THE AREA. THE ADVANCED SIGNAGE SHOULD BE WITHIN 2 MILES OF THE SURVEY AREA.

STANDARD NOTES

(SEE 102-GEN-NOTES)

GENERAL: G1, G2, G3, G4

SIGNING: S1

MAINT & SURV: MS1, MS2, MS3, MS4, MS5, MS6

PLACE "END WORK CONVOY" SIGN ON LAST VEHICLE IN WORK AREA (TMA OPTIONAL)

END WORK CONVOY
R5-18e

VEHICLE THREE (WITH TMA)

VEHICLE FOUR (OPTIONAL) (TMA OPTIONAL)

VEHICLE TWO (WITH TMA), MAY STRADDLE SHOULDER

VEHICLE ONE (TMA OPTIONAL)

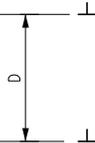
BEGIN WORK CONVOY
R5-18d



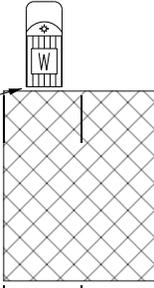
W20-5dR2



W20-1d



SHOULDER



WORK AREA VARIES

ROLL AHEAD SPACE

650'±

650'±

SHOULDER

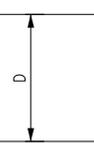
SHOULDER



W20-5dR2



W20-1d



2 MILES MAXIMUM

NOT TO SCALE



SURVEYING
MAINTAINING TRAFFIC
TYPICAL

DURATION:
SHORT DURATION
MOBILE

MOBILE OPERATION
ON A MULTILANE ROADWAY - 2 LANES

DATE: MAY 2021
NO: 5422-S-FW-2LC
SHEET: 1 OF 1