

PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5 C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 0.75" OPEN-GRADED ASPHALT FRICTION COURSE, TYPE F C-1 AT AN AVERAGE RATE OF 90 LBS. PER SQ. YD.
M	REPLACE EXISTING RUMBLE STRIPS
T	AGGREGATE SHOULDER BORROW
U	EXISTING PAVEMENT
V1	MILLING ASPHALT PAVEMENT 1.5"
V2	INCIDENTAL MILLING

NOTES:

* ALL INTERSECTING ROADS ARE TO BE RESURFACED TO THE ENDS OF THEIR RADII, THE MAIN LINE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE ANY TAPERS AND TURN LANES LOCATED BOTH ON THE MAIN LINE OR INTERSECTING PAVED ROADWAY.

* EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES.

* EXISTING MILLED RUMBLE STRIPS TO BE MILLED & REPLACED

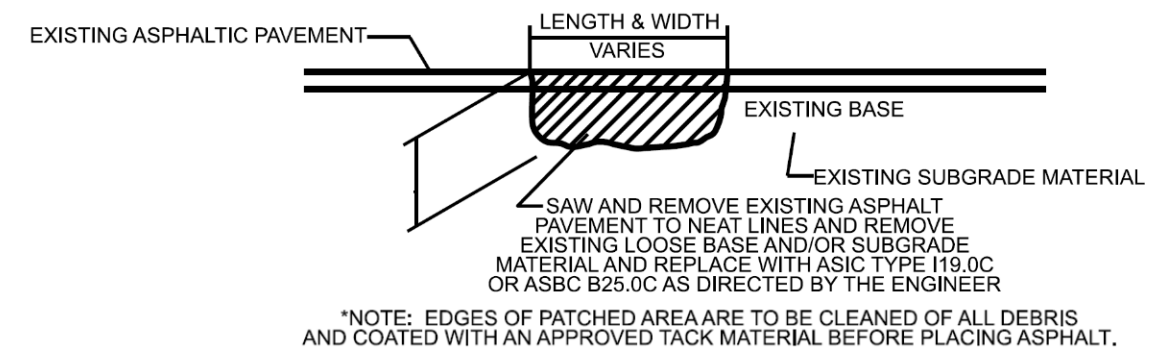
* 1.5" MILLING AND 1.5" OF S9.5C TO BE APPLIED 32' WIDE OR THE FULL WIDTH OF THE ROADWAY

* OPEN GRADE ASPHALT FRICTION COURSE IS TO BE APPLIED TO THE ACCELERATION & DECELERATION LANES

* IN AREAS WITH MEDIAN CONCRETE BARRIER WALL, THE CONTRACTOR SHALL MILL AS CLOSE TO THE WALL AS POSSIBLE, NOT TO EXCEED 6" FROM WALL

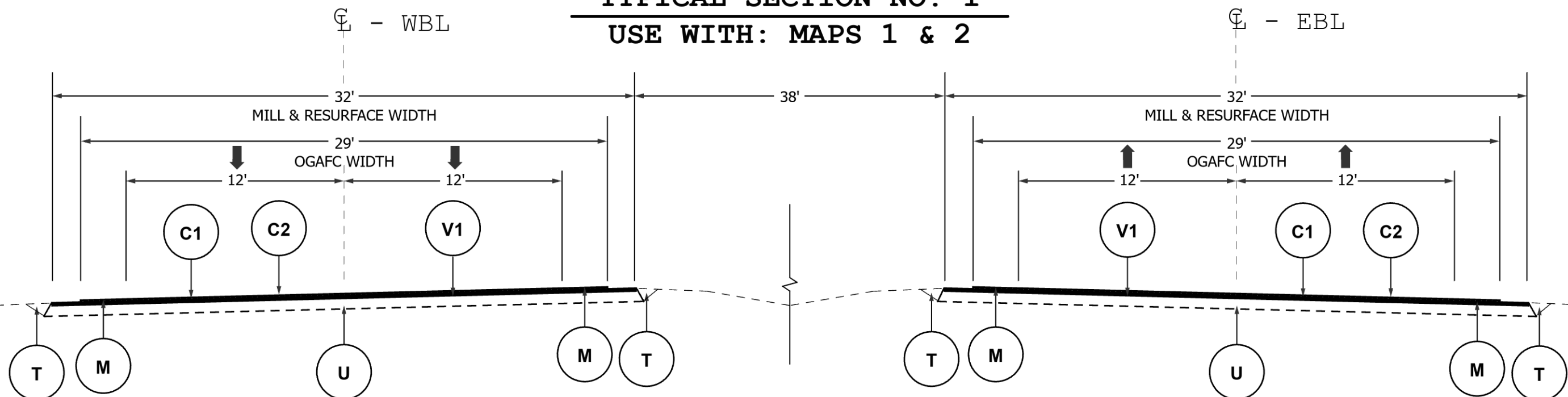
*SEE DETAIL DRAWING IN PLANS AND "NCDOT 2018 ROADWAY STANDARD DRAWINGS" (665.01 SHEET 2 OF 2) FOR PLACEMENT OF ASPHALT SHOULDERS MILLED RUMBLE STRIPS

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2023CPT.01.14.10941.1	2
STATE PROJECT NUMBER		DESCRIPTION
2023CPT.01.14.10941.1		P.E., CONST.



FULL DEPTH PATCHING

TYPICAL SECTION NO. 1 USE WITH: MAPS 1 & 2



PAVEMENT SCHEDULE

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NOTES:

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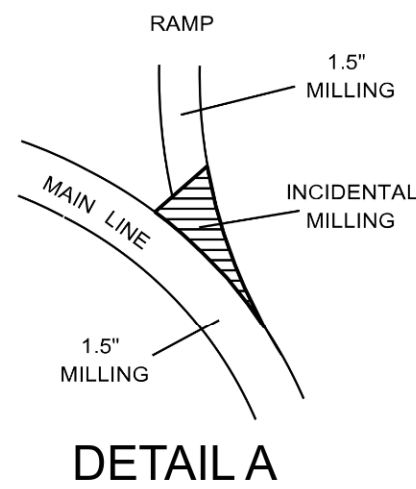
* EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES.

* EXISTING MILLED RUMBLE STRIPS TO BE MILLED & REPLACED

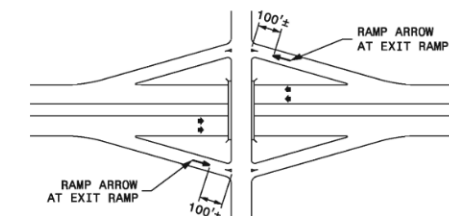
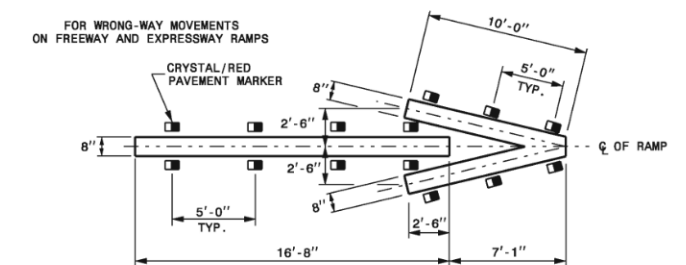
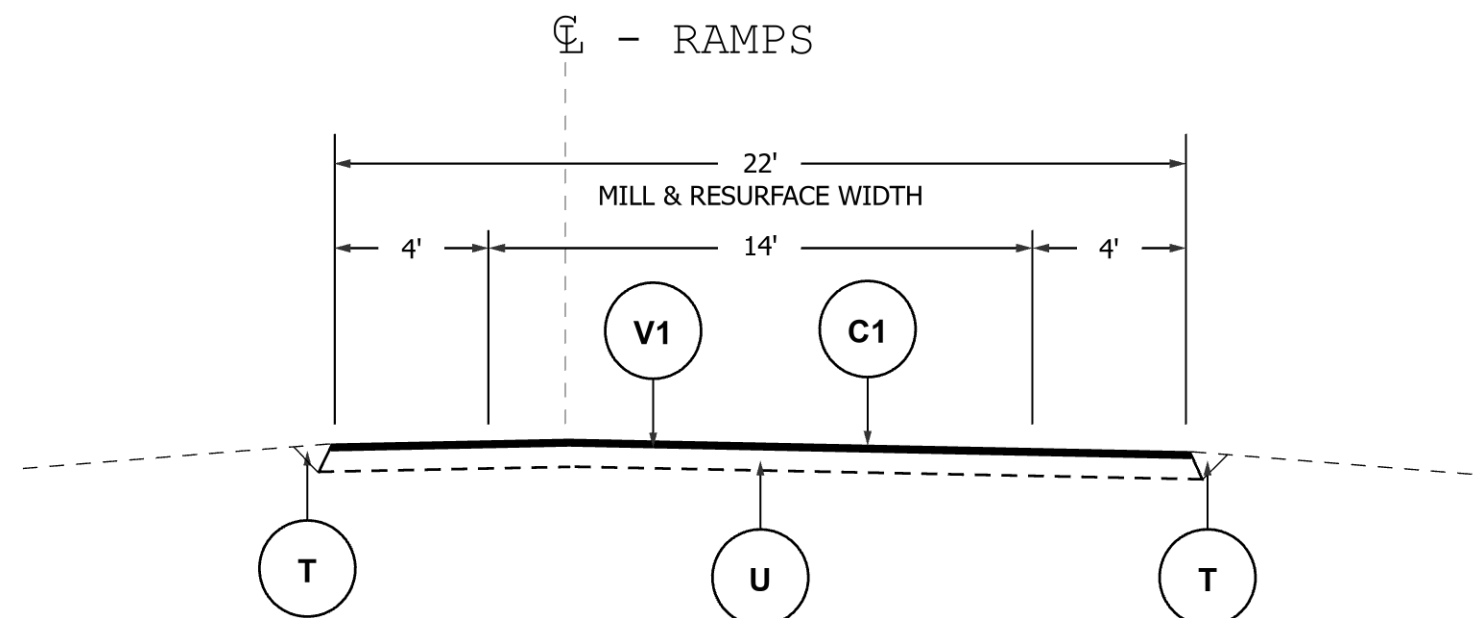
* 1.5" MILLING AND 1.5" OF S9.5C TO BE APPLIED 22' WIDE OR THE FULL WIDTH OF THE ROADWAY

*SEE DETAIL DRAWING IN PLANS AND "NCDOT 2018 ROADWAY STANDARD DRAWINGS" (665.01 SHEET 2 OF 2) FOR PLACEMENT OF ASPHALT SHOULDERS MILLED RUMBLE STRIPS

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2023CPT.01.14.10941.1	3
STATE PROJECT NUMBER		DESCRIPTION
2023CPT.01.14.10941.1		P.E., CONST.

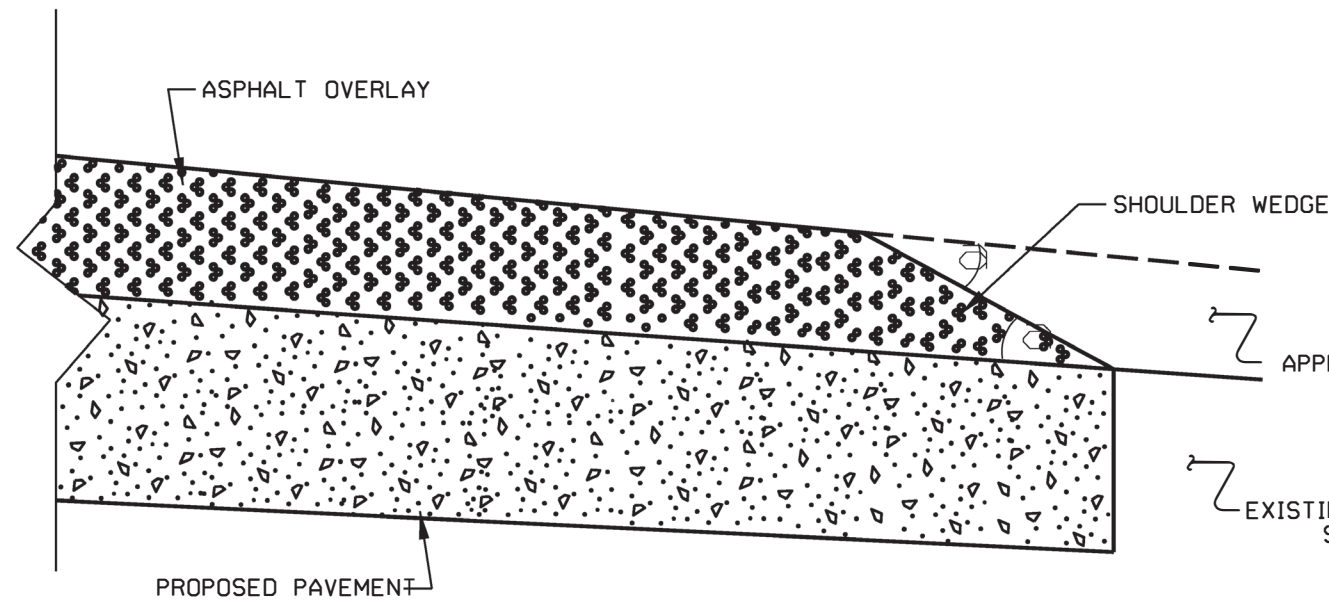


TYPICAL SECTION NO. 2 USE WITH: MAPS 3 & 4



DETAIL B

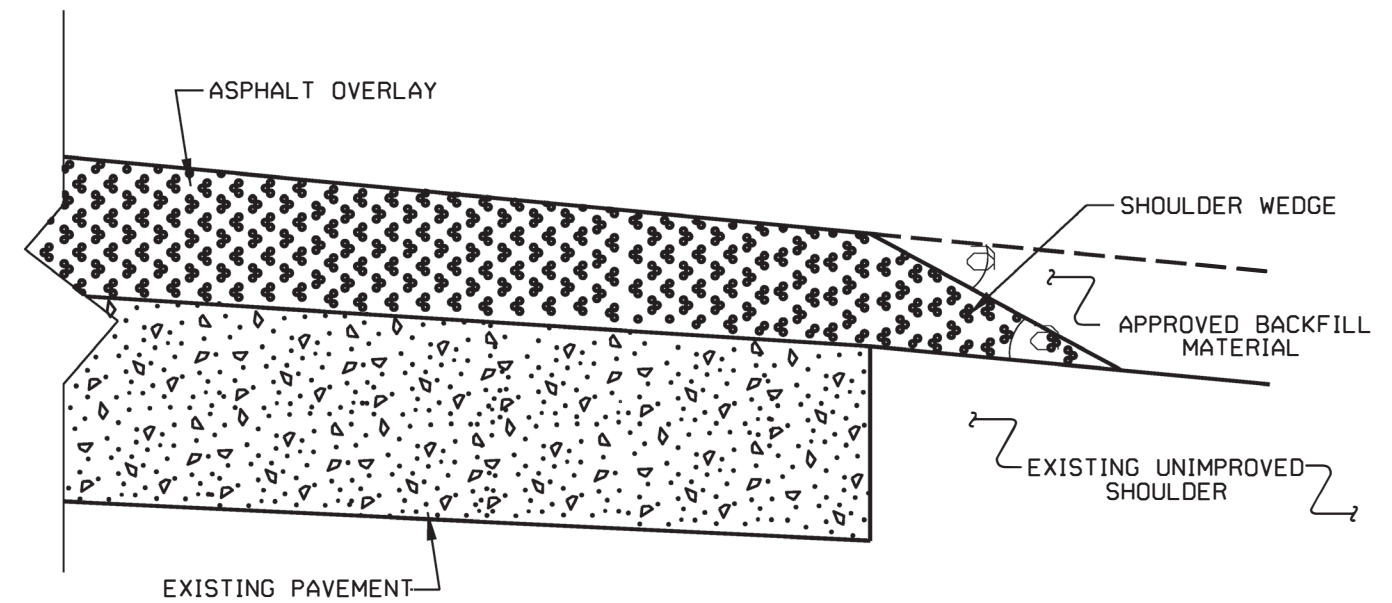
STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2023CPT.01.14.10941.1	4
STATE PROJECT NUMBER		DESCRIPTION
2023CPT.01.14.10941.1		P.E., CONST.



- NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.

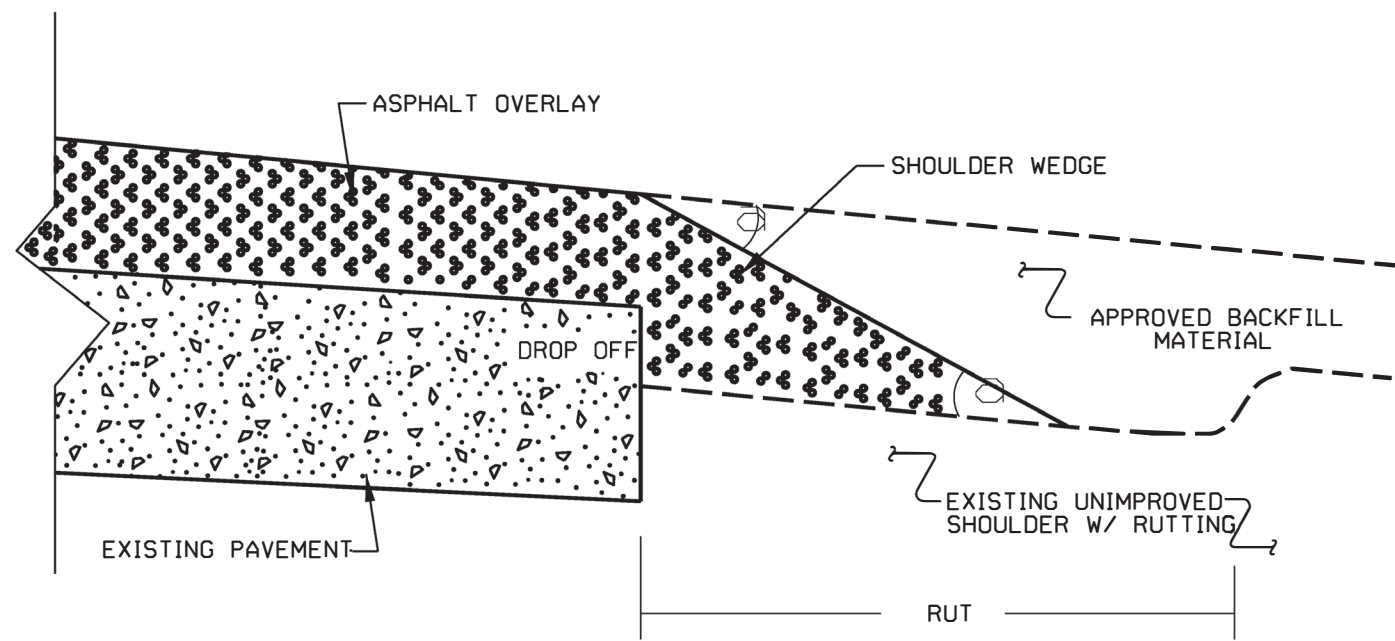
SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ Widening or with Existing Paved Shoulder having no dropoffs)



SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ NO Widening)



SHOULDER WEDGE DETAIL

(Resurfacing Adjacent to Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

CONTRACT STANDARDS AND DEVELOPMENT UNIT
 Office 919-707-6950 FAX 919-250-4119

SHOULDER WEDGE DETAILS

ORIGINAL BY: T.SPELL DATE: 7-19-11
 MODIFIED BY: DATE: 10/16/12
 CHECKED BY: DATE:
 FILE SPEC: susr/details/stand/shoulderwedge1.dgn

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2023CPT.01.14.10941.1	5
STATE PROJECT NUMBER		DESCRIPTION
2023CPT.01.14.10941.1		P.E., CONST.

SUMMARY OF QUANTITIES

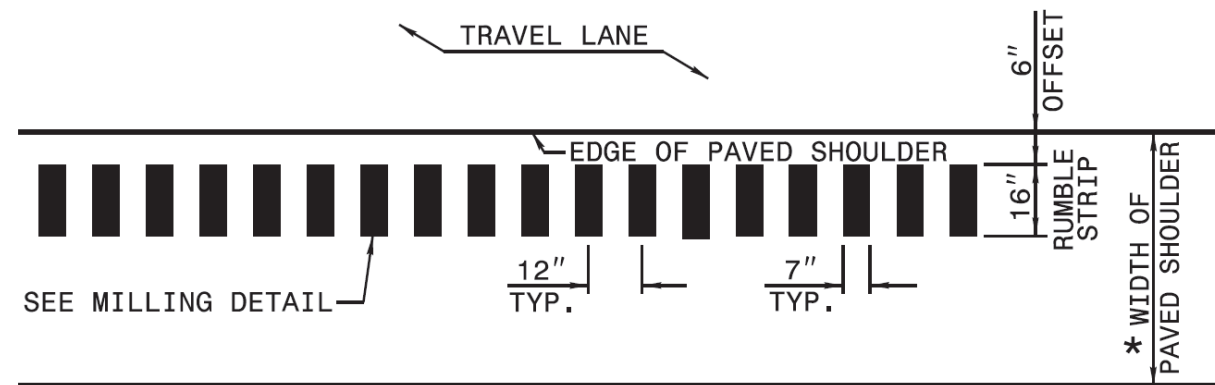
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	MATERIALS TRANSFER VEHICLE REQUIRED	LENGTH	WIDTH	0000100000-N	1245000000-E	1260000000-E	1297000000-E	1330000000-E	1523000000-E	1575000000-E	1577000000-E	1662000000-E	1705000000-E	1840000000-E
													MOBILIZATION	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	MILLING ASPHALT PAVEMENT (1½")	INCIDENTAL MILLING	ASPHALT CONC SURFACE COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	POLYMER MODIFIED ASPHALT BINDER FOR PLANT MIX	OPEN-GRADED ASPHALT FRICTION COURSE, FC-1 MODIFIED	PATCHING EXISTING PAVEMENT, FULL DEPTH	MILLED RUMBLE STRIPS (ASPHALT CONCRETE)
													MI	FT	LS	SMI	TON	SY	SY	TONS	TONS	TON	TONS
2023CPT.01.14.10941.1	Washington	1	US-64 E	BRIDGE #109 TO BRIDGE #113	1	2	MD	NO	NO	YES	3.40	32	1	1.70	272	63,829	3,931	6,251	376	115	1,885	30	35,904
2023CPT.01.14.10941.1	Washington	2	US-64 W	BRIDGE #112 TO BRIDGE #108	1	2	MD	NO	NO	YES	3.40	32	*	1.70	272	63,829	3,150	6,186	373	115	1,893	36	35,904
2023CPT.01.14.10941.1	Washington	3	RMP-6661 (ENTRANCE RAMP)	SR 1375 NORTHLINE RD TO US 64 E	2	2		NO	NO	YES	0.17	22	*	0.09	14	2,194	320	203	12			4	
2023CPT.01.14.10941.1	Washington	4	RMP-6658 (EXIT RAMP)	US 64 W TO NC 37 (BEASLEY RD)	2	2		NO	NO	YES	0.27	22	*	0.14	22	3,485	300	323	20			4	
GRAND TOTAL												1	3.62	580	133,337	7,701	12,963	781	230	3,778	74	71,808	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	MATERIALS TRANSFER VEHICLE REQUIRED	LENGTH	WIDTH	4413000000-E	4423000000-N	4457000000-N	4688000000-E		4695000000-E	4700000000-E	4709000000-E	4725000000-E	
													WORK ZONE ADV/GEN WARNING SIGNING	WORK ZONE DIGITAL SPEED LIMIT SIGNS	TEMPORARY TRAFFIC CONTROL (SP)	THERMOPLASTIC PAVEMENT MARKING LINES (6", 90 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING LINES (6", 90 MILS) YELLOW	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS)	THERMO PAVEMENT MARKING LINES (24" 90 MILS) (SP)	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS), LT ARROW	
													MI	FT	SF	EA	LS	LF	LF	LF	LF	LF
2023CPT.01.14.10941.1	Washington	1	US-64 E	BRIDGE #109 TO BRIDGE #113	1	2	MD	NO	NO	YES	3.40	32	190	5	1	22,950	17,952					
2023CPT.01.14.10941.1	Washington	2	US-64 W	BRIDGE #112 TO BRIDGE #108	1	2	MD	NO	NO	YES	3.40	32	190	*	*	22,950	17,952					
2023CPT.01.14.10941.1	Washington	3	RMP-6661 (ENTRANCE RAMP)	SR 1375 NORTHLINE RD TO US 64 E	2	2		NO	NO	YES	0.17	22	88		*	898	898		400		3	
2023CPT.01.14.10941.1	Washington	4	RMP-6658 (EXIT RAMP)	US 64 W TO NC 37 (BEASLEY RD)	2	2		NO	NO	YES	0.27	22	16		*	1,426	1,426	37	600	45		
GRAND TOTAL												7.24		484	5	1	48,224	38,228	37	1,000	45	3

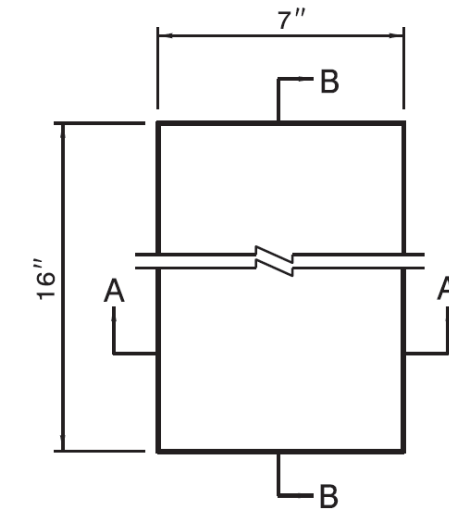
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	MATERIALS TRANSFER VEHICLE REQUIRED	LENGTH	WIDTH	4810000000-E		4820000000-E	4825000000-E	4835000000-E	4845000000-N	4900000000-N	4905100000-N	
													PAINT PAVEMENT MARKING LINES (4") WHITE	PAINT PAVEMENT MARKING LINES (4") YELLOW	PAINT PAVEMENT MARKING LINES (8") WHITE	PAINT PAVEMENT MARKING LINES (12")	PAINT PAVEMENT MARKING LINES (24")	PAINT PAVEMENT MARKING SYMBOL (LT ARROW)	PERMANENT RAISED PAVEMENT MARKERS	NON-CAST IRON SNOWPLOWABLE PAVEMENT MARKER	
													MI	FT	LF	LF	LF	LF	EA	EA	EA
2023CPT.01.14.10941.1	Washington	1	US-64 E	BRIDGE #109 TO BRIDGE #113	1	2	MD	NO	NO	YES	3.40	32	22,950	17,952						214	
2023CPT.01.14.10941.1	Washington	2	US-64 W	BRIDGE #112 TO BRIDGE #108	1	2	MD	NO	NO	YES	3.40	32	22,950	17,952						214	
2023CPT.01.14.10941.1	Washington	3	RMP-6661 (ENTRANCE RAMP)	SR 1375 NORTHLINE RD TO US 64 E	2	2		NO	NO	YES	0.17	22	898	898		400		3			
2023CPT.01.14.10941.1	Washington	4	RMP-6658 (EXIT RAMP)	US 64 W TO NC 37 (BEASLEY RD)	2	2		NO	NO	YES	0.27	22	1,426	1,426	37	600	45		14		
GRAND TOTAL												7.24		48,224	38,228	37	1,000	45	3	14	428

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2023CPT.01.14.10941.1	6
STATE PROJECT NUMBER		DESCRIPTION
2023CPT.01.14.10941.1		P.E., CONST.

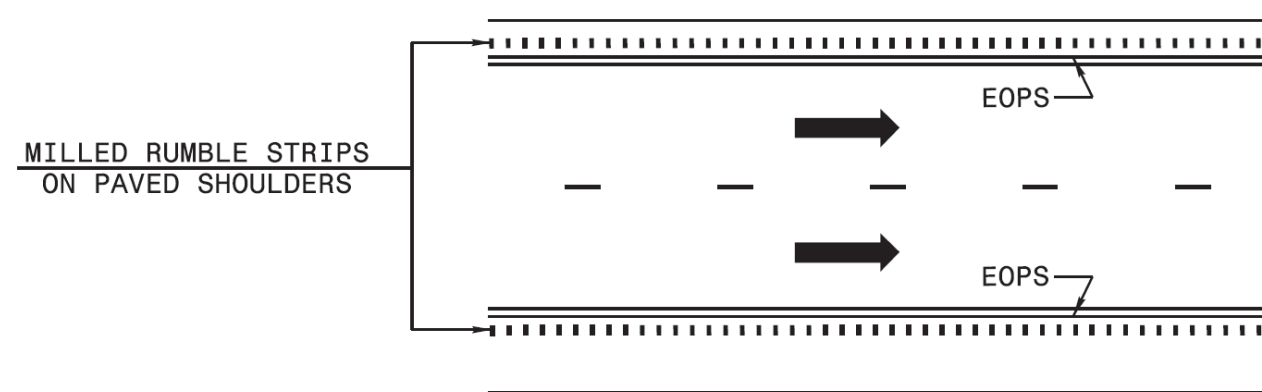


* FOR WIDTHS SEE TYPICAL SECTIONS AND PLAN SHEETS

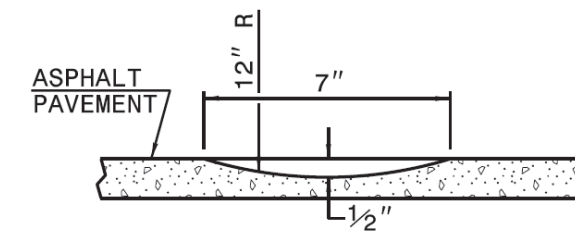
**PLAN VIEW
PAVED SHOULDER**



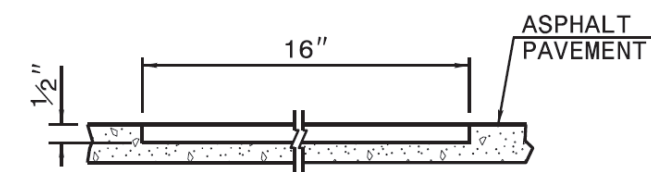
**PLAN VIEW
MILLING DETAIL**



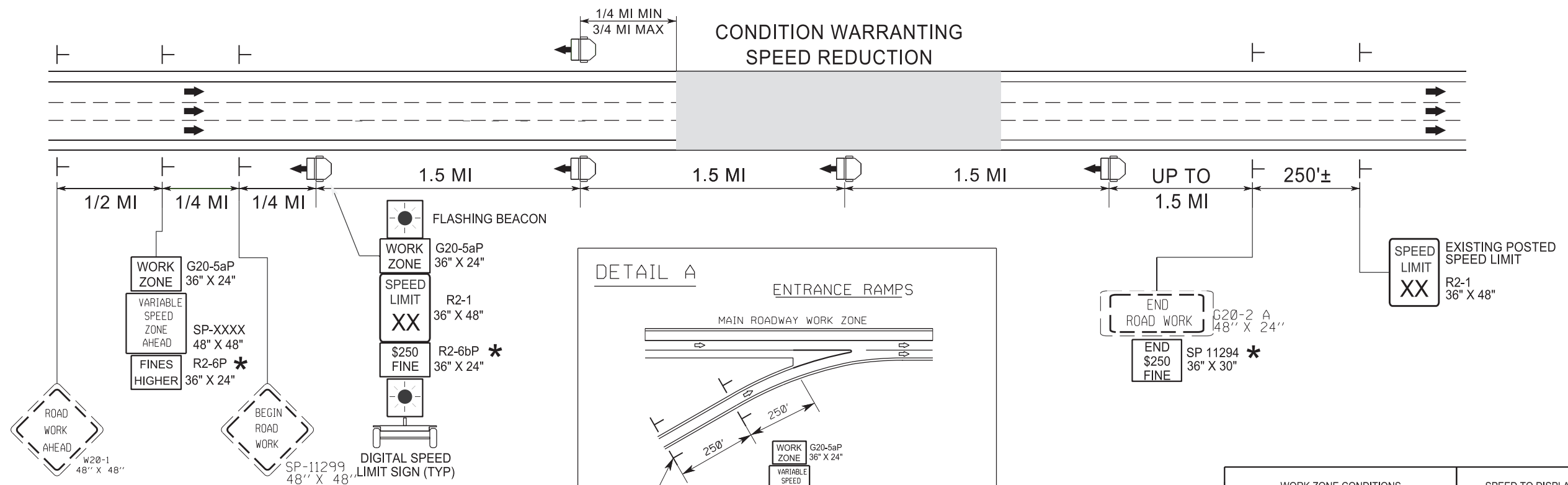
LANE TREATMENT



SECTION A-A



SECTION B-B



* USE ONLY IF ORDINANCED. SEE NOTE 5 BELOW.

NOTES

1. THE DIGITAL SPEED LIMITS SIGNS WILL BE INSTALLED (TRAILER MOUNTED OR STATIONARY MOUNTED) IN ADVANCE OF AND SPACED APPROXIMATELY 1.5 MILES THROUGHOUT THE THE PROJECT LIMITS, UNLESS DIRECTED OTHERWISE.
2. WITHIN 1/4 TO 3/4 MILE UPSTREAM OF CONDITION WARRANTING A SPEED REDUCTION, PLACE A DIGITAL SPEED LIMIT SIGN ON BOTH THE INSIDE AND OUTSIDE SHOULDERS, UNLESS DIRECTED OTHERWISE BY THE ENGINEER. AT ALL OTHER LOCATIONS DOWNSTREAM, PLACE A SINGLE DIGITAL SPEED LIMIT SIGN ON THE OUTSIDE SHOULDER.

IF SIGNS ARE NOT HIGHLY VISIBLE TO ALL MOTORISTS, SUPPLEMENTAL DIGITAL SPEED LIMIT SIGNS ARE PERMITTED ON THE MEDIAN SHOULDER.
3. THE DIGITAL SPEED LIMIT SIGNS TAKE PRECEDENCE OVER EXISTING SPEED LIMIT SIGNS AND SHOULD REMAIN UPRIGHT AND VISIBLE AT ALL TIMES. ALL EXISTING SPEED LIMIT SIGNS SHALL BE COVERED OR REMOVED FOR DURATION OF THE PROJECT.
4. NCDOT HAS SOLE AUTHORITY OF THE SPEED LIMITS DISPLAYED ON THE DIGITAL SPEED LIMIT SIGNS.
5. THE WORK ZONE VARIABLE SPEED LIMIT AND THE \$250 SPEEDING PENALTY ARE SEPARATE ORDINANCES THAT MUST BE SIGNED BY THE STATE TRAFFIC ENGINEER TO BE VALID AND ENFORCEABLE. WITHOUT SIGNED ORDINANCES, THE SPEED LIMIT ON A FACILITY SHALL REMAIN UNCHANGED AND/OR HIGHER FINES SIGNS SHALL NOT BE USED.
6. THE REDUCED SPEED SHALL BE DISPLAYED A MINIMUM OF 1/4 MILE AND A MAXIMUM OF 3/4 MILE IN ADVANCE OF AND THROUGHOUT THE AREA MEETING CONDITIONS LISTED IN THE CHART. THE EXISTING SPEED LIMIT SHALL BE DISPLAYED ON ALL OTHER DIGITAL SPEED LIMIT SIGNS.
7. THE SPEED DISPLAYED SHALL BE THE LOWER OF THE EXISTING SPEED LIMIT OR THE SPEED IN THE WORK ZONE CONDITION CHART.
8. THE BEACONS ON THE DIGITAL SPEED LIMIT SIGNS SHALL ONLY FLASH DURING TIMES THE SPEED IS REDUCED, AND REMAIN OFF AT ALL OTHER TIMES.

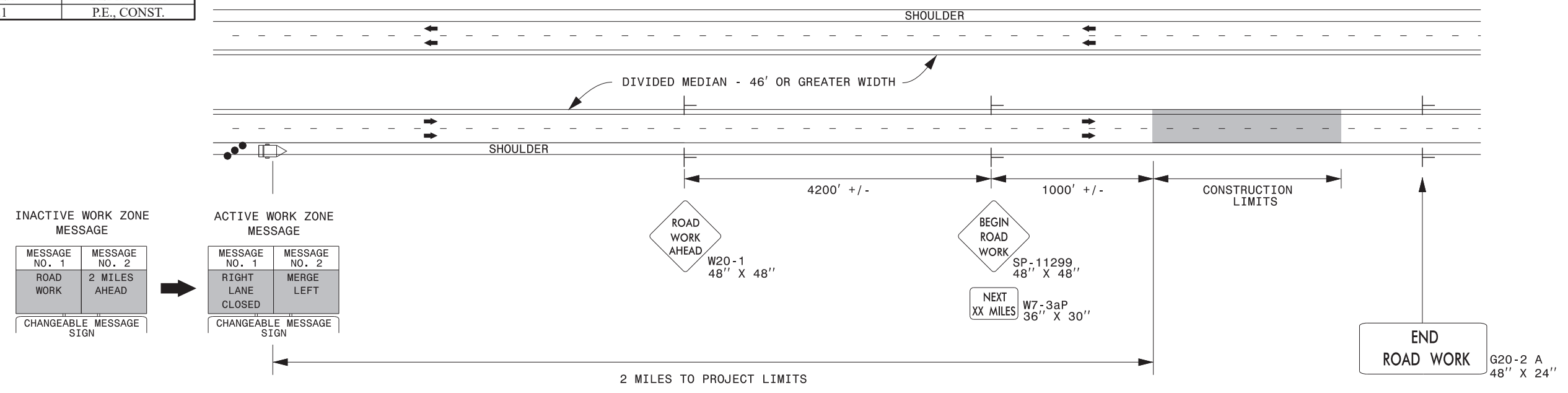
	WORK ZONE CONDITIONS	SPEED TO DISPLAY (SEE NOTE 6 & 7)
LANE CLOSURES	2 LANES REDUCED TO 1 LANE	55
	3 LANES REDUCED TO 1 LANE	55
	3 LANES REDUCED TO 2 LANES	60
	4 LANES REDUCED TO 1 LANE	55
	4 LANES REDUCED TO 2 LANES	60
CONTINUOUS BARRIER (LENGTH OF BARRIER GREATER THAN 1 MILE)	4 LANES REDUCED TO 3 LANES	65
	1 OPEN LANE WITH CONTINUOUS BARRIER ON BOTH SHOULDERS	55
	1 OPEN LANE WITH CONTINUOUS BARRIER ON 1 SHOULDER	60
	3 OR 2 OPEN LANES WITH CONTINUOUS BARRIER ON BOTH SHOULDERS	60
	3 OR 2 OPEN LANES WITH CONTINUOUS BARRIER ON 1 SHOULDER	65
	4 OPEN LANES WITH BARRIER CONTINUOUS ON BOTH SHOULDERS	65
	4 OPEN LANES WITH BARRIER CONTINUOUS ON 1 SHOULDER	EXISTING
	UNEVEN LANES	60

\$\$\$\$\$SYTIME\$\$\$\$\$
 \$\$\$DESIGN\$\$\$\$\$
 \$\$\$USERNAME\$\$\$

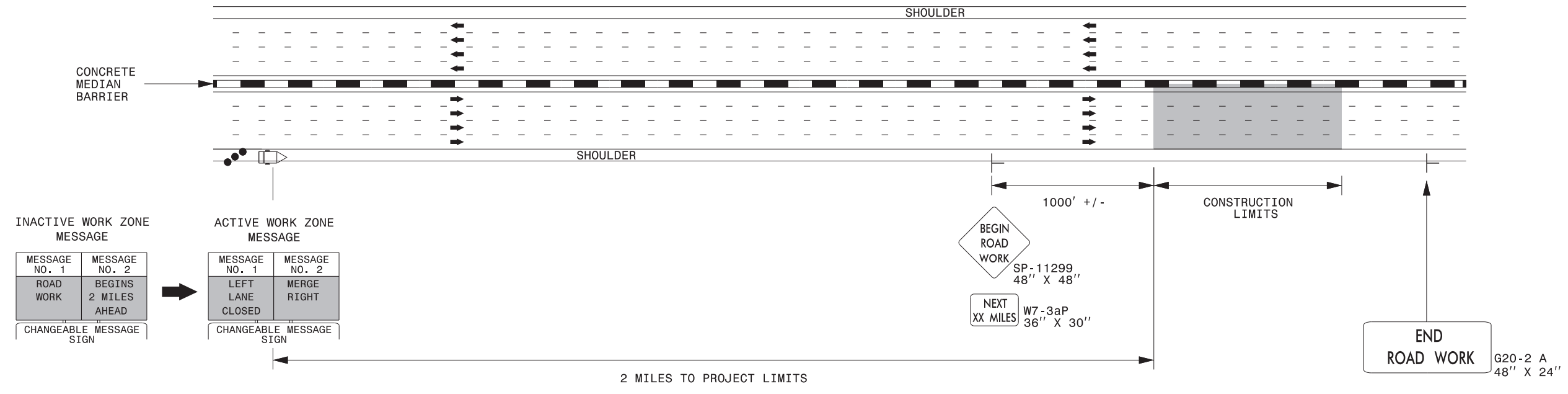
APPROVED: _____		WORK ZONE VARIABLE SPEED LIMIT REDUCTION
DATE: _____		
SEAL		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2023CPT.01.14.10941.1	8
STATE PROJECT NUMBER		DESCRIPTION
2023CPT.01.14.10941.1		P.E., CONST.

DIVIDED MEDIANS WITH WIDTHS 46' OR GREATER



DIVIDED MEDIANS WITH WIDTHS LESS THAN 46' OR WITH PERMANENT MEDIAN BARRIER

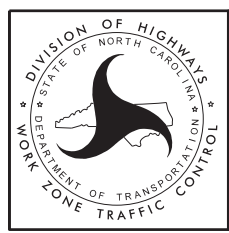


NOTES:

- 1) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 6' AS MEASURED FROM THE EDGE OF PAVEMENT.
- 2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
- 3) FOR MEDIAN WIDTHS LESS THAN 46' (MEASURED EDGELINE TO EDGELINE) USE THE BOTTOM DRAWING.
- 4) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 5) INSTALL "ROAD WORK AHEAD" (W20-1) ALONG ENTRANCE RAMP 500' PRIOR TO RAMP TERMINAL, AND "END ROAD WORK" (G20-2a) AT THE END OF EXIT RAMP WITHIN THE WORK ZONE.
- 6) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER AND WITH DIVIDED MEDIANS OF 46' OR GREATER. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND

- CHANGEABLE MESSAGE SIGN (CMS)
- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW
- TRAFFIC DRUM



**RESURFACING ADVANCE
WARNING SIGNS FOR
HIGH SPEED FACILITIES
≥ 60 MPH**

3/23/2015 C:\Users\rmgarrett\Downloads\Resurfacing_AdvWarn_HSpd.dgn User:rmgarrett