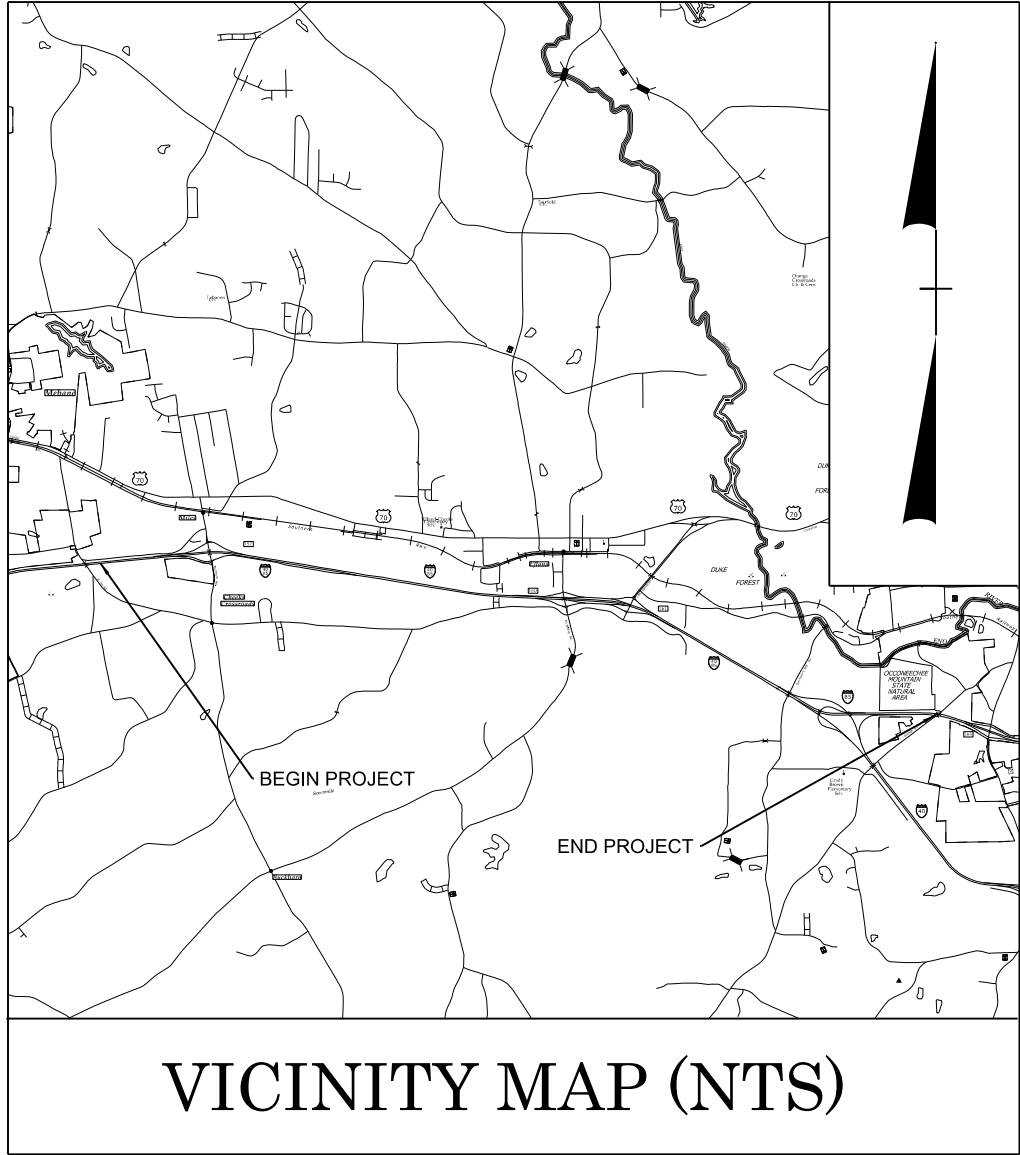


TIP PROJECT: I-5958

CONTRACT: C205227

See Sheet 1A For Index of Sheets



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

ORANGE COUNTY

LOCATION: *I-40/I-85 FROM WEST OF SR 1114 (BUCKHORN RD)
TO WEST OF SR 1006 (ORANGE GROVE RD)*

TYPE OF WORK: *PAVEMENT REHABILITATION, ITS, AND
BRIDGE REHABILITATION*

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5958	11	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
45910.1.2		PE	
45910.3.1	4591031	CONST.	
45910.3.2	4591031	CONST.	



PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT I-5958 = 7.556 MILES
LENGTH OF STRUCTURE TIP PROJECT I-5958 = 0.144 MILES
TOTAL LENGTH OF TIP PROJECT I-5958 = 7.700 MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS
1584 Yanceyville St., Greensboro NC, 27405

2024 STANDARD SPECIFICATIONS

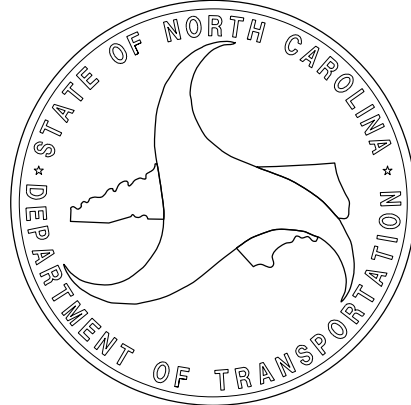
RIGHT OF WAY DATE:

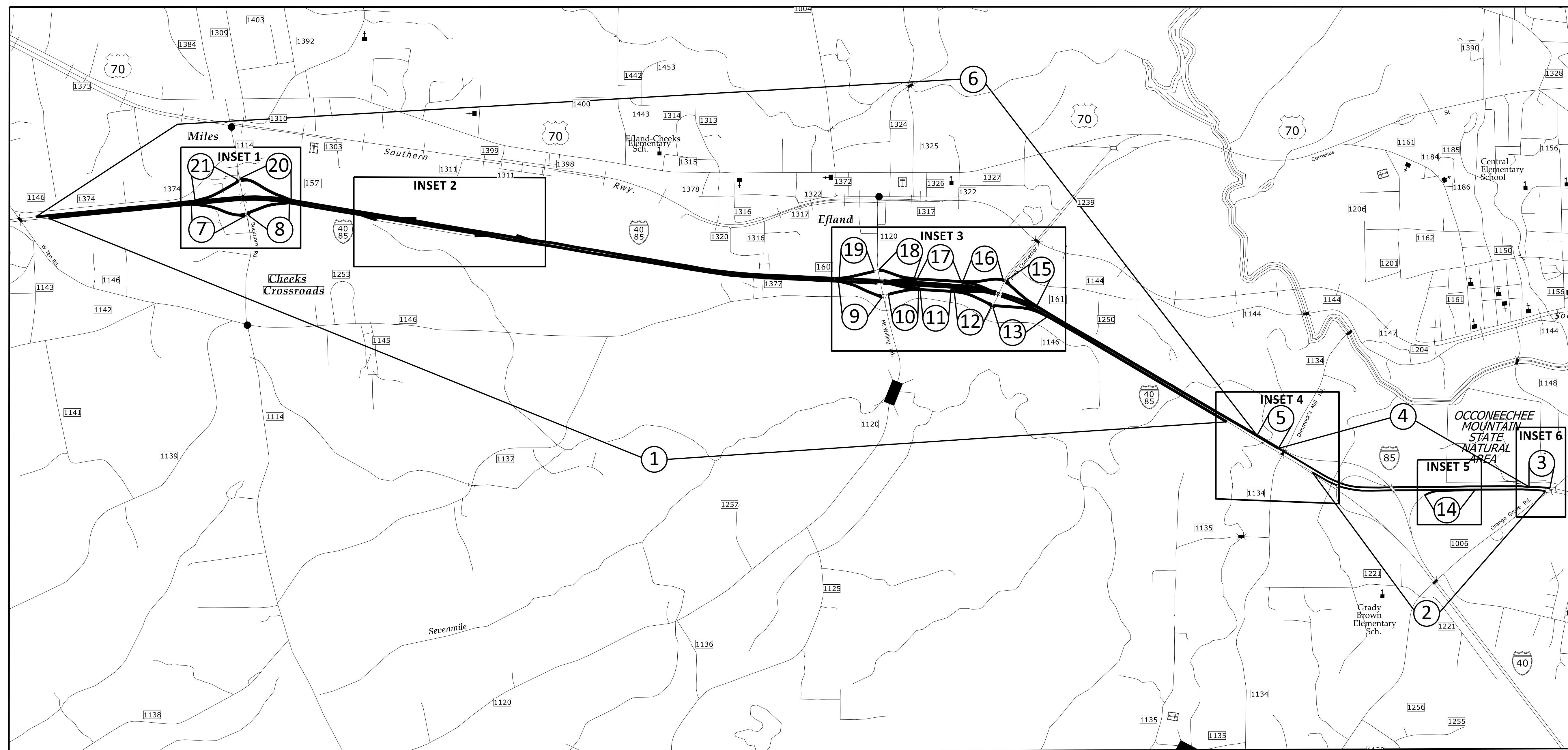
LETTING DATE:
NOVEMBER 17, 2026

ALEJANDRO MONSALVE
PROJECT ENGINEER

NEIL KEARNS
PROJECT DESIGN ENGINEER

TRUNG NGUYEN, P.E.
NCDOT CONTACT

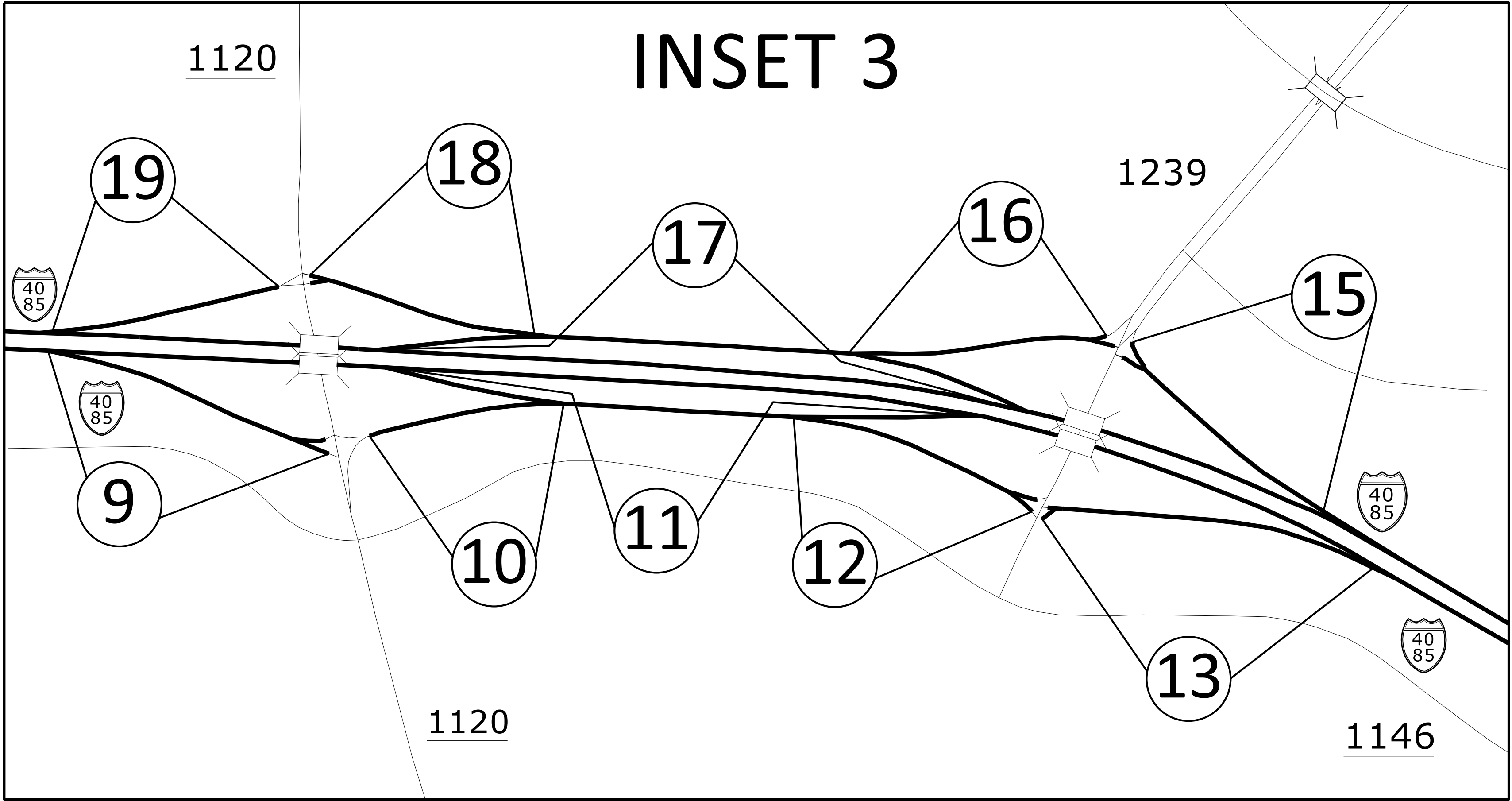
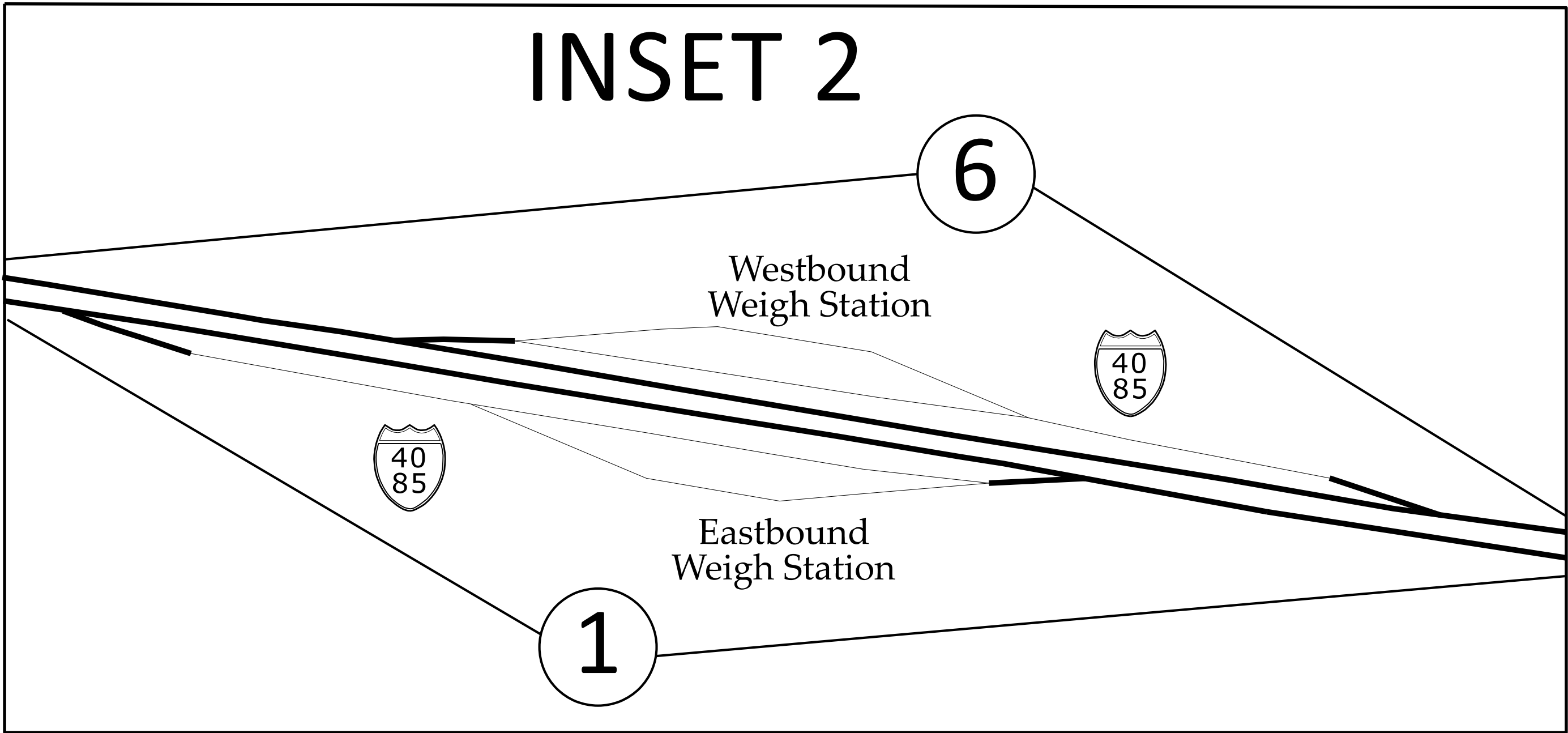
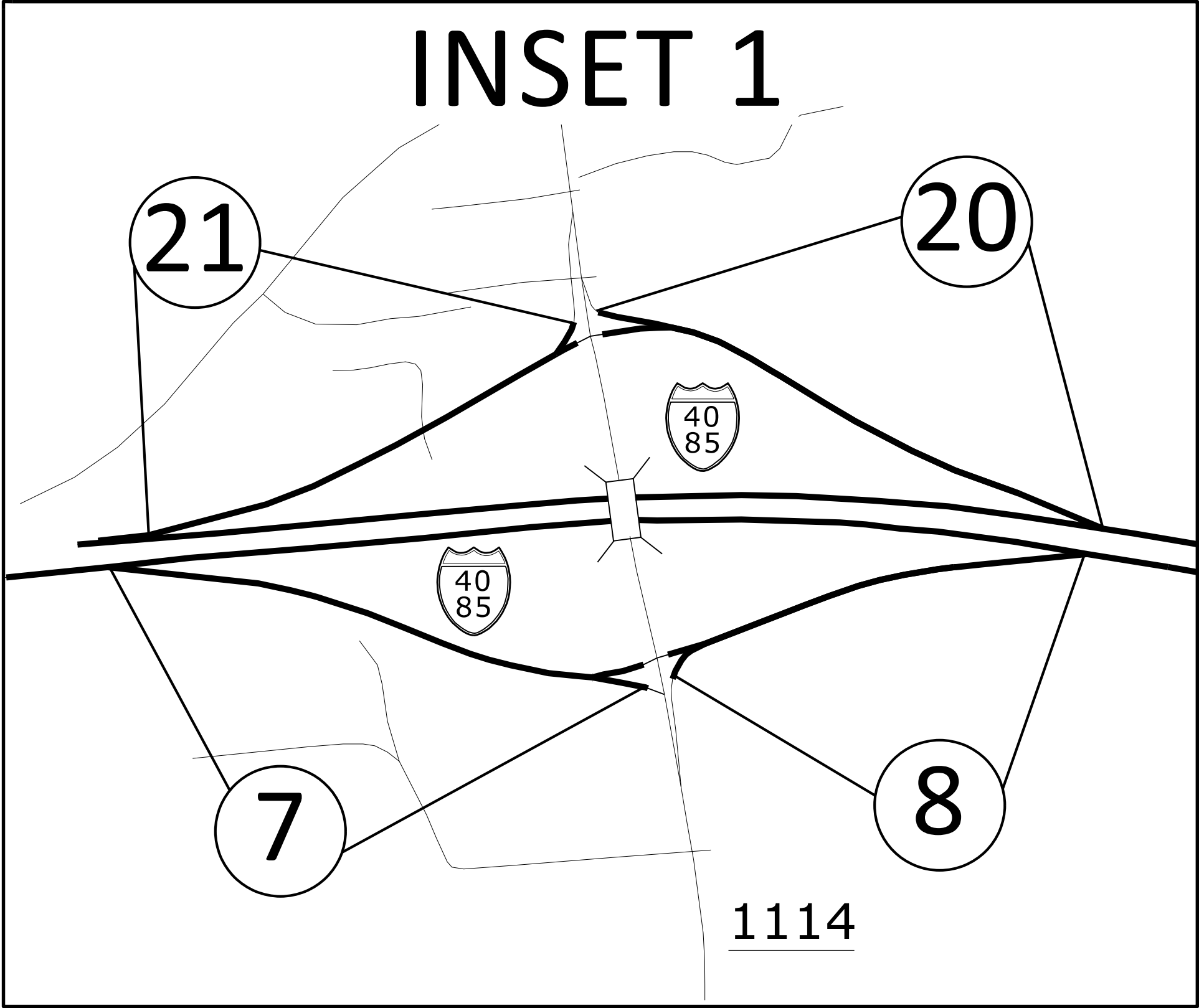




Map 1 I - 40 EB Full width @ 1-1/2" Mill
Map 2 I - 85 NB Full width @ 1-1/2" and 2-1/4" Mill
Map 3 I - 85 SB Full width @ 1-1/2" Mill
Map 4 I - 85 SB LT Shoulder, LT Ln & CL only @ 1-1/2" and 2-1/4" Mill
Map 5 I - 40 WB Full width @ 2-1/4" Mil
Map 6 I - 40 WB Full width @ 1-1/2" Mill
Map 7 I - 40 EB Exit Ramp to SR 1114
Map 8 I - 40 EB Entrance Ramp from SR 1114
Map 9 I - 40 EB Exit Ramp to SR 1120
Map 10 I - 40 EB Entrance Ramp from SR 1120
Map 11 I - 40 EB Loop between Maps 10 and 12

Map 12 I - 40 EB Exit Ramp to SR 1239
Map 13 I - 40 EB Entrance Ramp from SR 1239
Map 14 I - 85 EB Entrance Ramp from I - 40 WB
Map 15 I - 40 WB Exit Ramp to SR 1239
Map 16 I - 40 WB Entrance Ramp from SR 1239
Map 17 I - 40 WB Loop between Maps 16 and 18
Map 18 I - 40 WB Exit Ramp to SR 1120
Map 19 I - 40 WB Entrance Ramp from SR 1120
Map 20 I - 40 WB Exit Ramp to SR 1114
Map 21 I - 40 WB Entrance Ramp from SR 1114

ORANGE COUNTY
NORTH CAROLINA



INSET 1

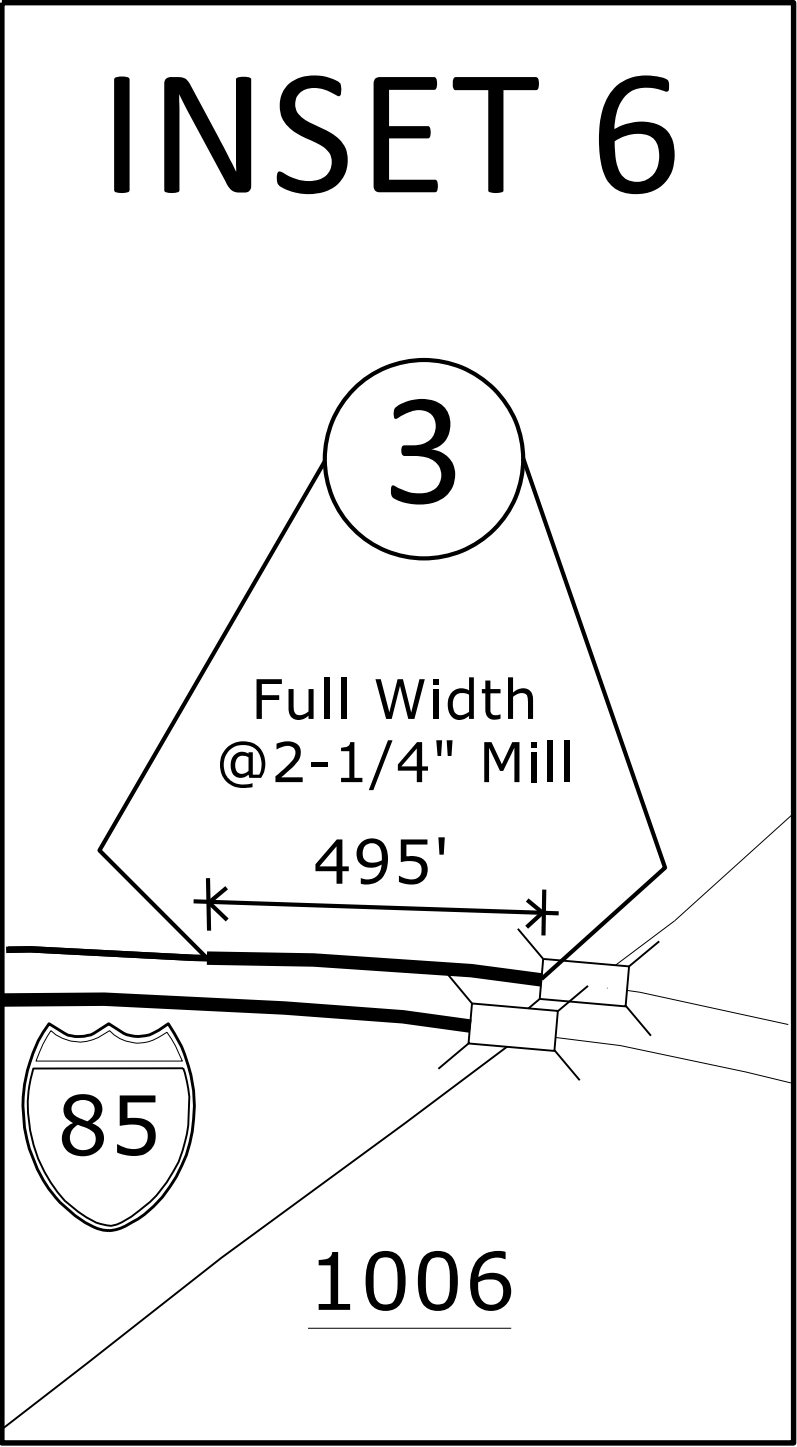
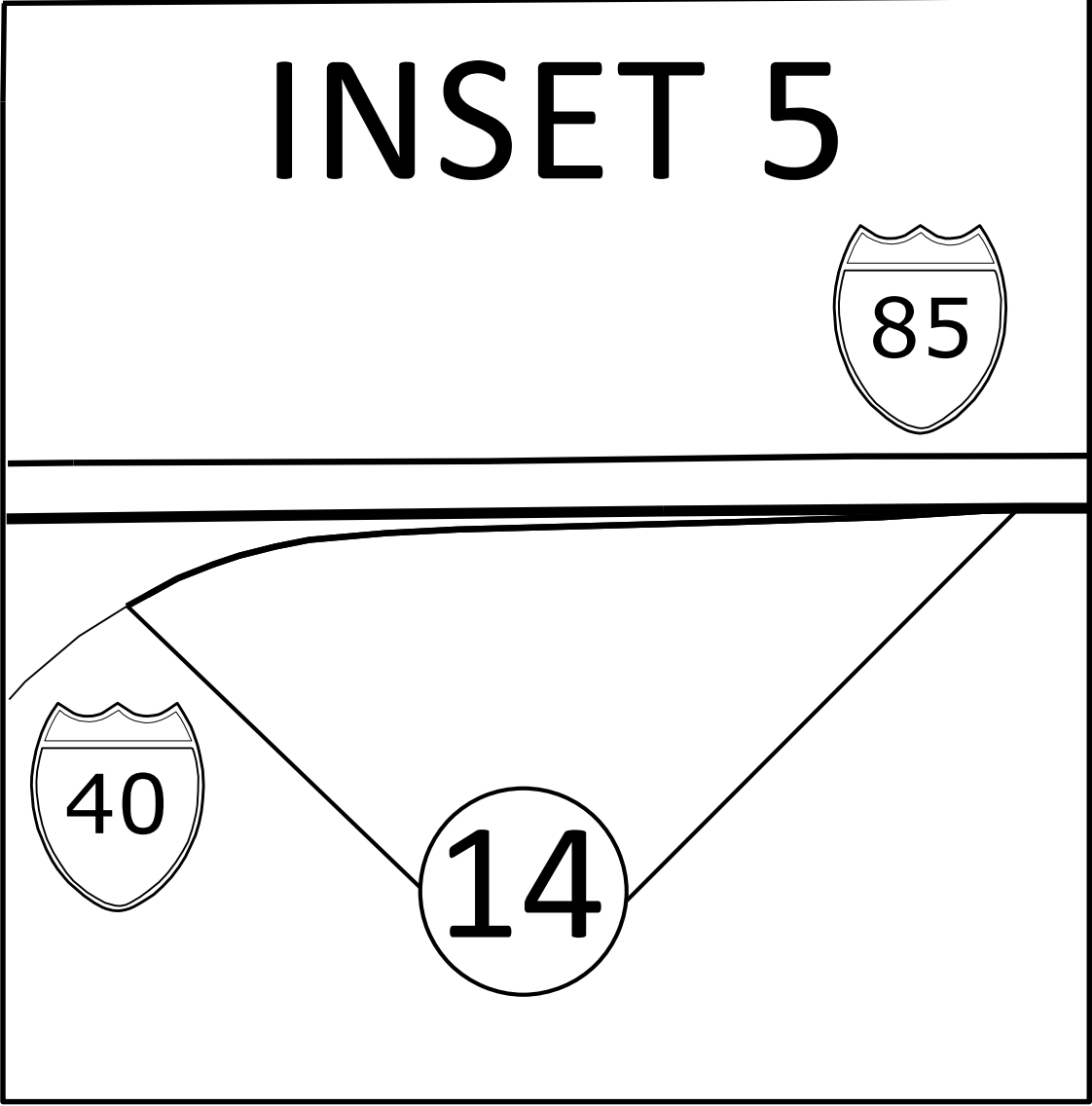
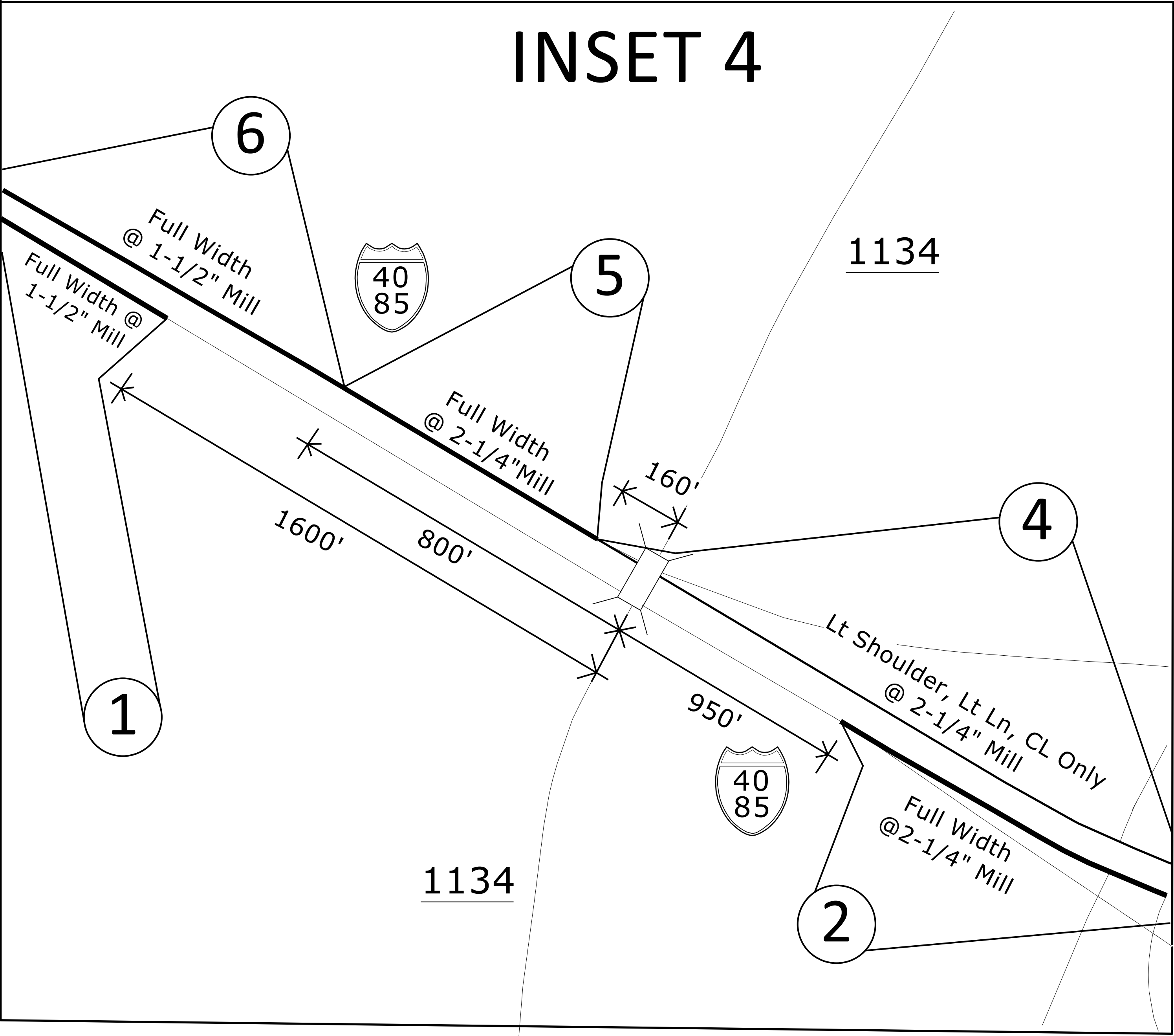
Maps 7, 8, 20 & 21:
Tie the ramps to existing joints.

INSET 2

Maps 1 and 6:
Tie the weigh station's ramps to existing joints.

INSET 3

Maps 9, 10, 11, 12, 13, 15, 16, 17, 18 & 19:
Tie the ramps to existing joints.
*Do not Pave any Concrete bridge.



INSET 4

Map 1: Pave Full width @ 1-1/2" Mill From
Pvmt joint 710' East of SR 1146 TO
1600' West of SR 1134.

Map 2: Pave Full width @ 2-1/4" Mill From
950' East of SR 1134 TO
SR 1006 Concrete Bridge joint.

Map 4: Pave LT Shoulder, LT Ln & CL only
@ 2-1/4" Mill From 495' West of SR 1006
Concrete Bridge joint TO 160' West of SR 1134.

Map 5: Pave Full width @ 2-1/4" Mill From
160' West of SR 1134 TO Pvmt joint 800' West
of SR 1134.

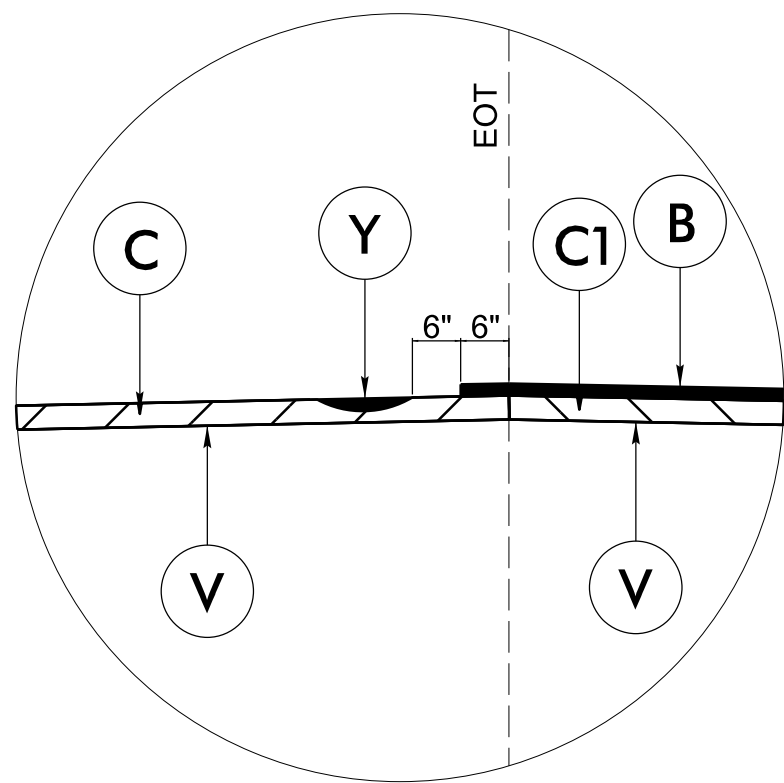
Map 6: Pave Full width @ 1-1/2" Mill From
Pvmt joint 800' West of SR 1134 TO
Pvmt joint 430' East of SR 1146.

INSET 5

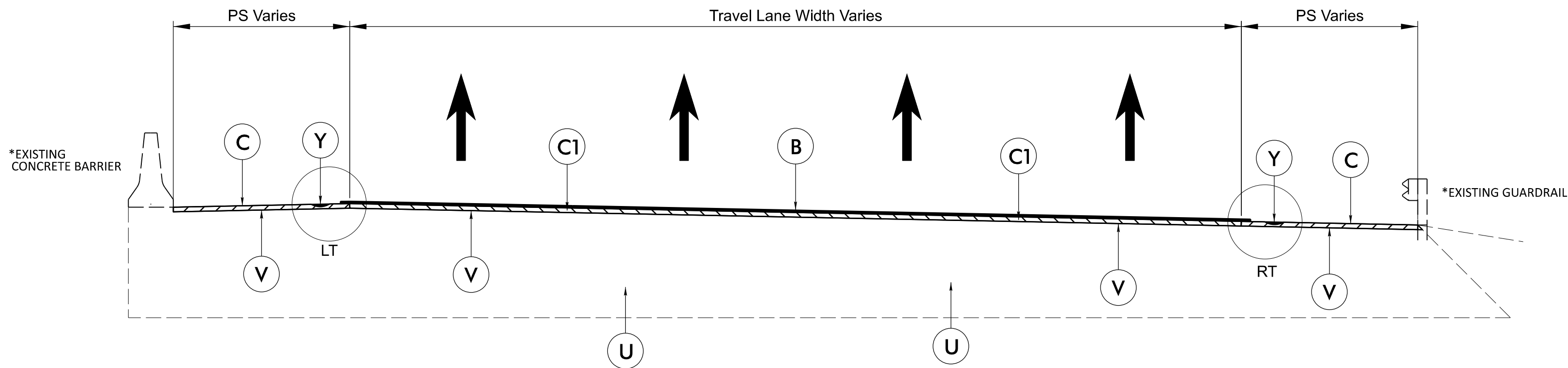
Map 14
Tie the entrance ramp from I-40 WB
to existing joint.

INSET 6

Map 3: Pave Full width @ 1-1/2" Mill From
SR 1006 Concrete Bridge joint TO
495' West of SR 1006 Concrete Bridge joint.

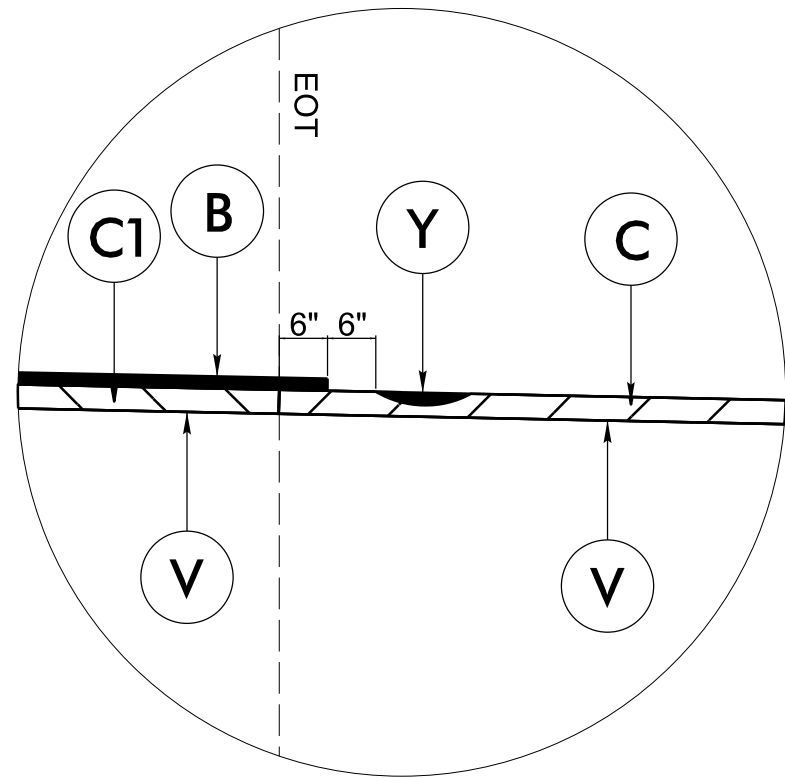


LT

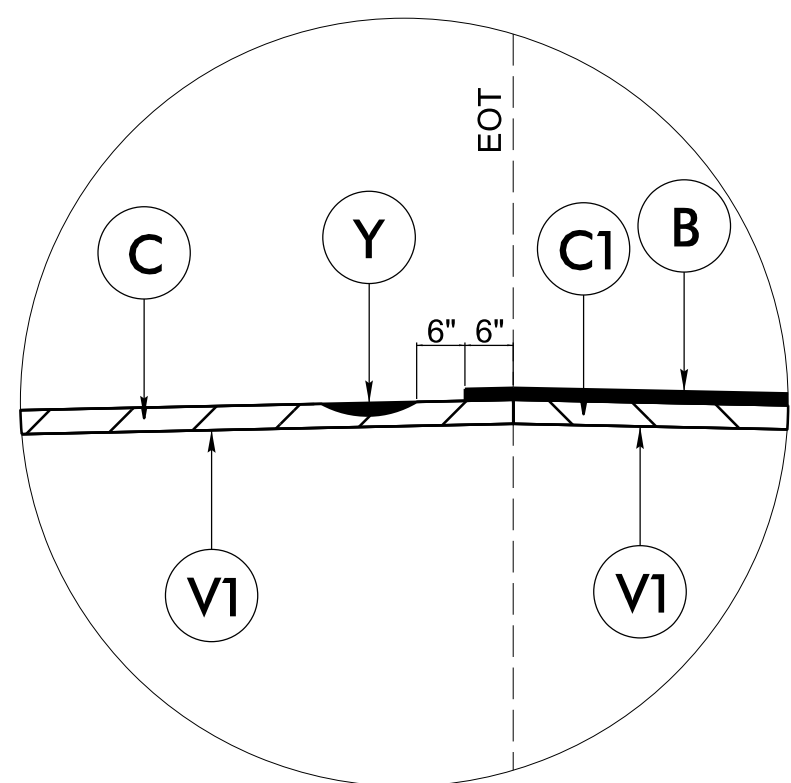


TYPICAL SECTION NO. 1

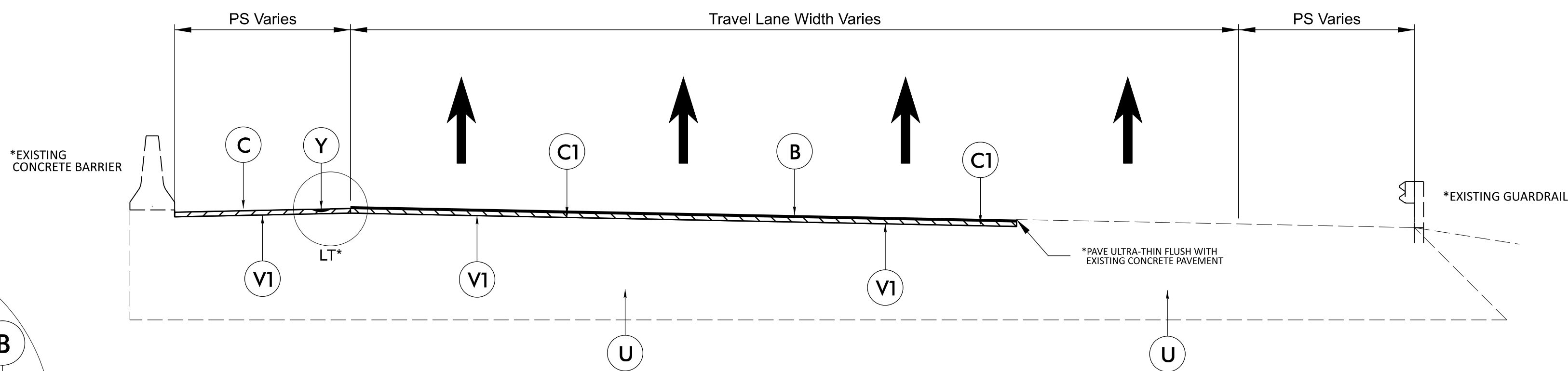
Map 1 I - 40 EB
Map 6 I - 40 WB



RT



LT*



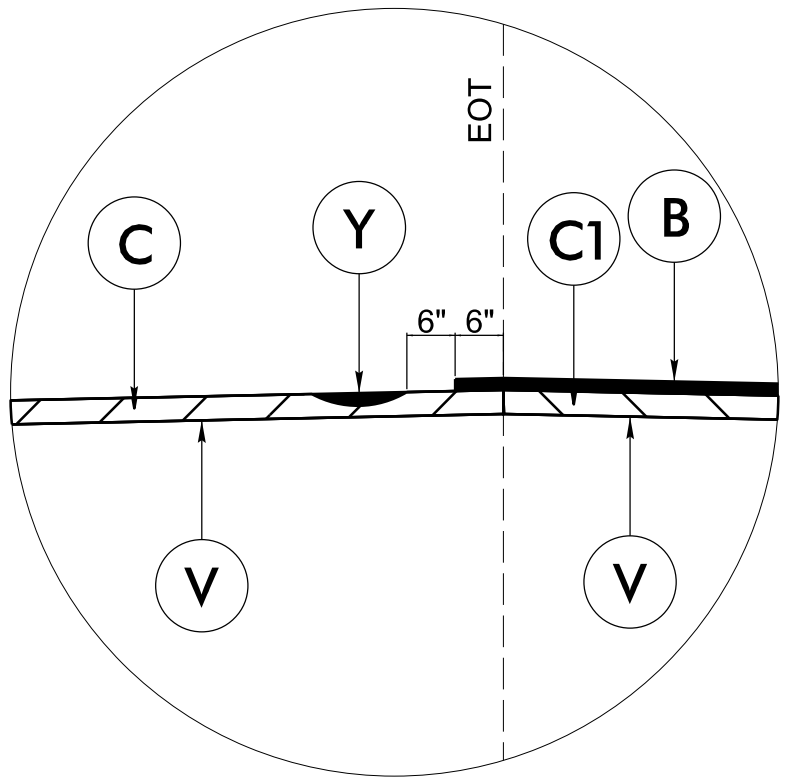
TYPICAL SECTION NO. 2

Map 1 I - 40 EB

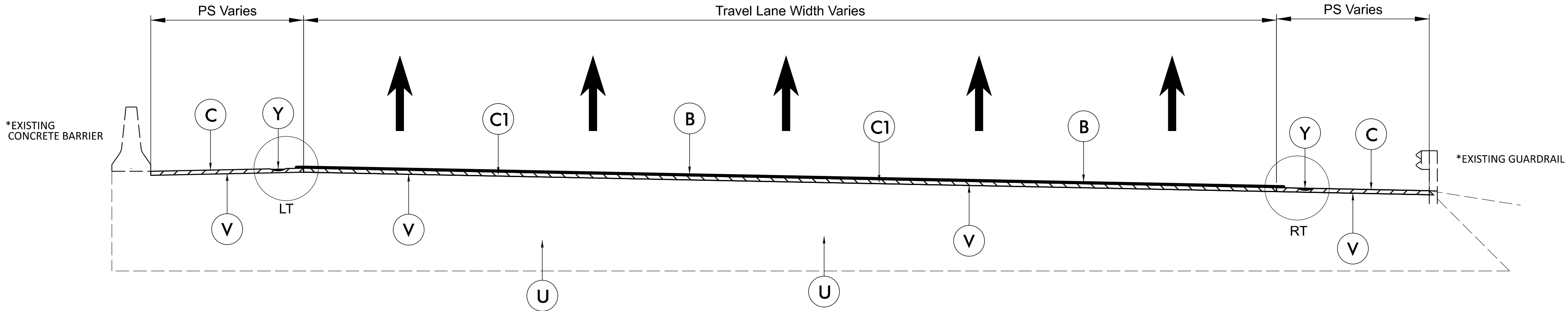
NOTE: 1) RUMBLE STRIPS MUST BE INSTALLED BEFORE PLACING ULTRA-THIN TO INSURE DIMENSIONAL ACCURACY

2) WHERE THERE IS EXISTING NOVACHIP, MILL 2 1/4", OTHERWISE MILL 1 1/2"

PAVEMENT SCHEDULE	
B	ULTRA THIN BONDED WEARING COURSE, 5/8"
C	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
U	EXISTING PAVEMENT
V	MILL ASPHALT PAVEMENT, 1 1/2" DEPTH
V1	MILL ASPHALT PAVEMENT, 2 1/4" DEPTH
Y	RUMBLE STRIPS

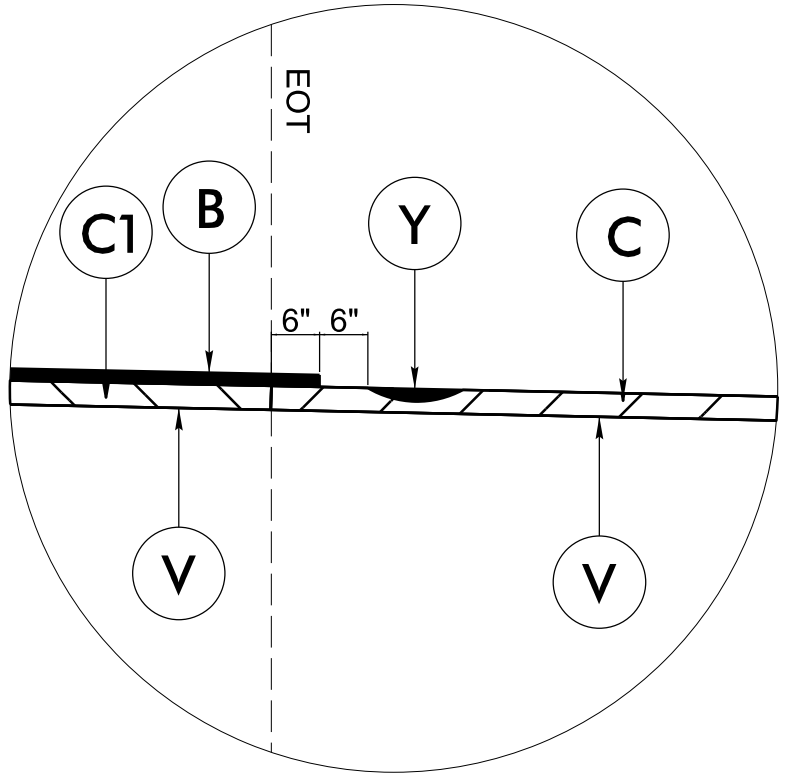


LT

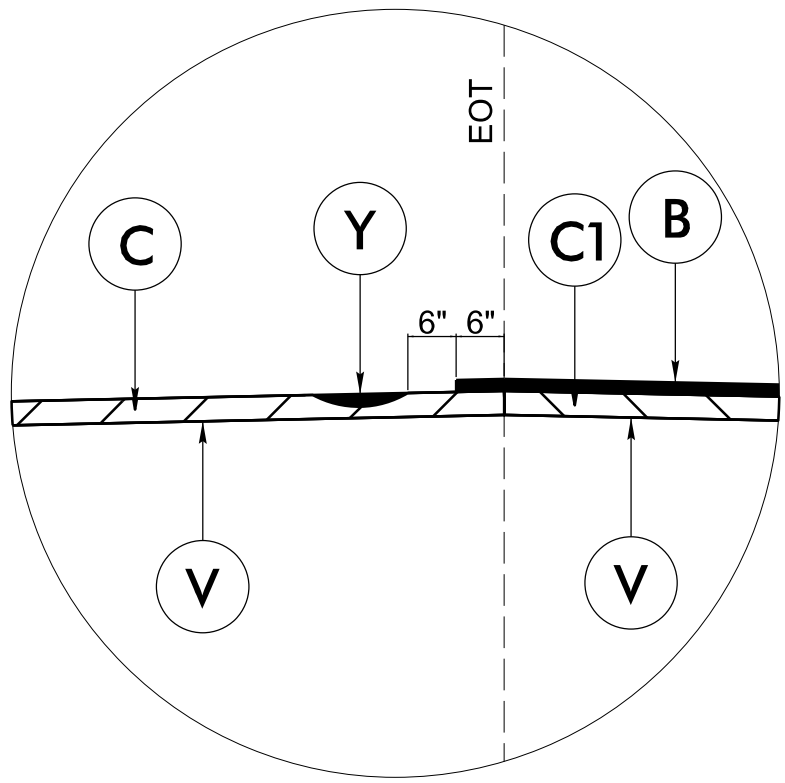


TYPICAL SECTION NO. 3

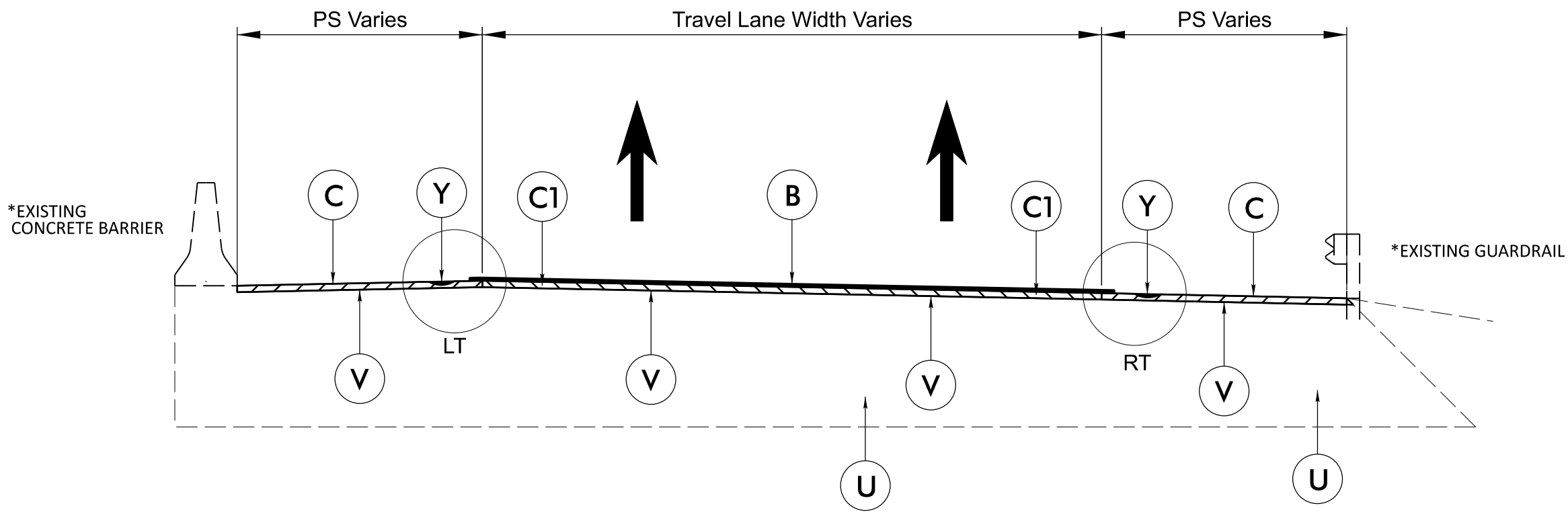
Map 1 I - 40 EB
Map 6 I - 40 WB



RT

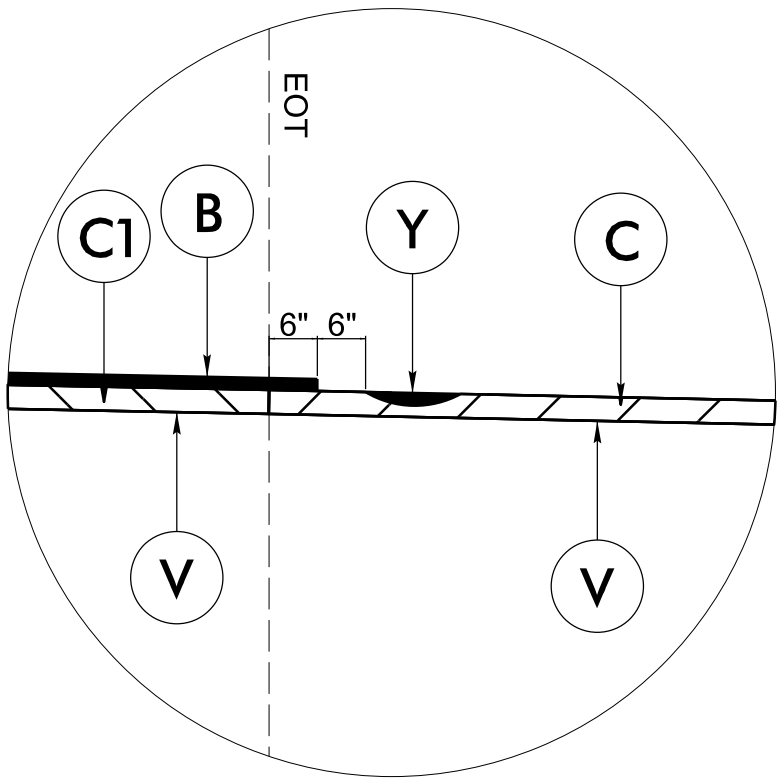


LT



TYPICAL SECTION NO. 4

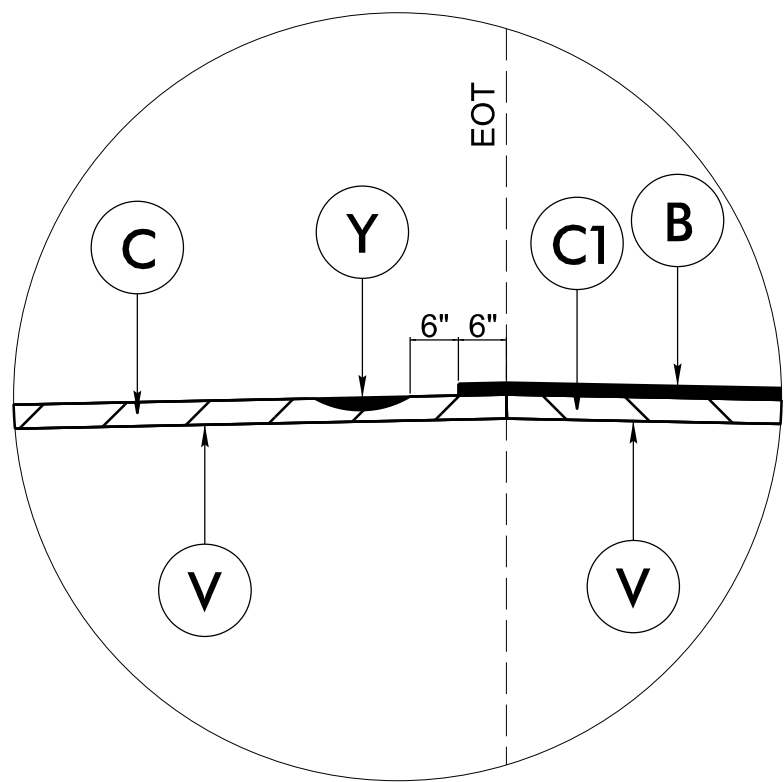
Map 2 I - 85 NB
Map 3 I - 85 SB



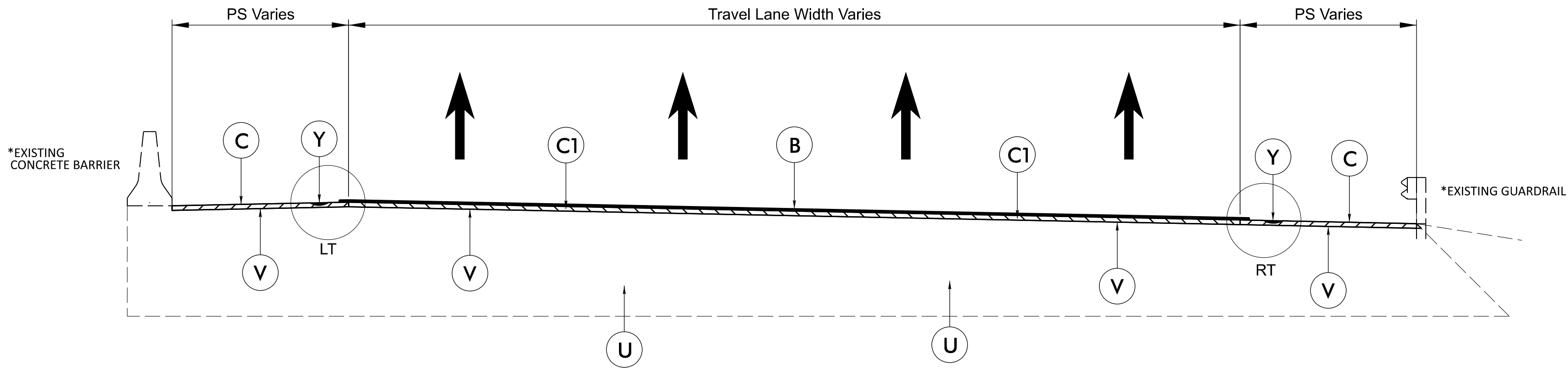
RT

NOTE: 1) RUMBLE STRIPS MUST BE INSTALLED BEFORE PLACING ULTRA-THIN TO INSURE DIMENSIONAL ACCURACY
2) WHERE THERE IS EXISTING NOVACHIP, MILL 2 1/4", OTHERWISE MILL 1 1/2"

PAVEMENT SCHEDULE	
B	ULTRA THIN BONDED WEARING COURSE, 5/8"
C	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
U	EXISTING PAVEMENT
V	MILL ASPHALT PAVEMENT, 1 1/2" DEPTH
V1	MILL ASPHALT PAVEMENT, 2 1/4" DEPTH
Y	RUMBLE STRIPS

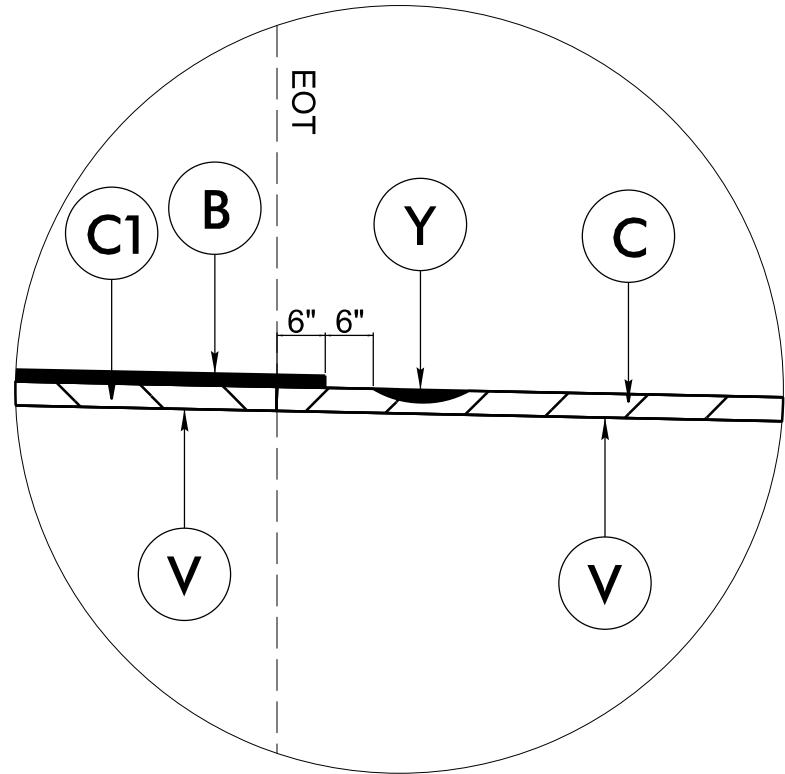


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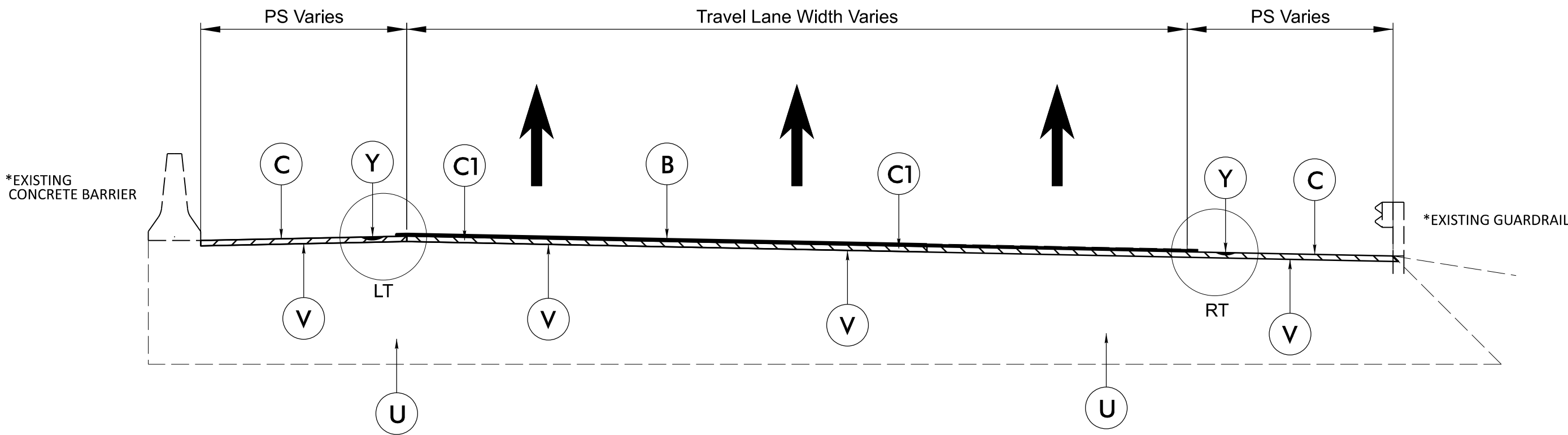


TYPICAL SECTION NO. 5

Map 2 I - 85 NB



RT



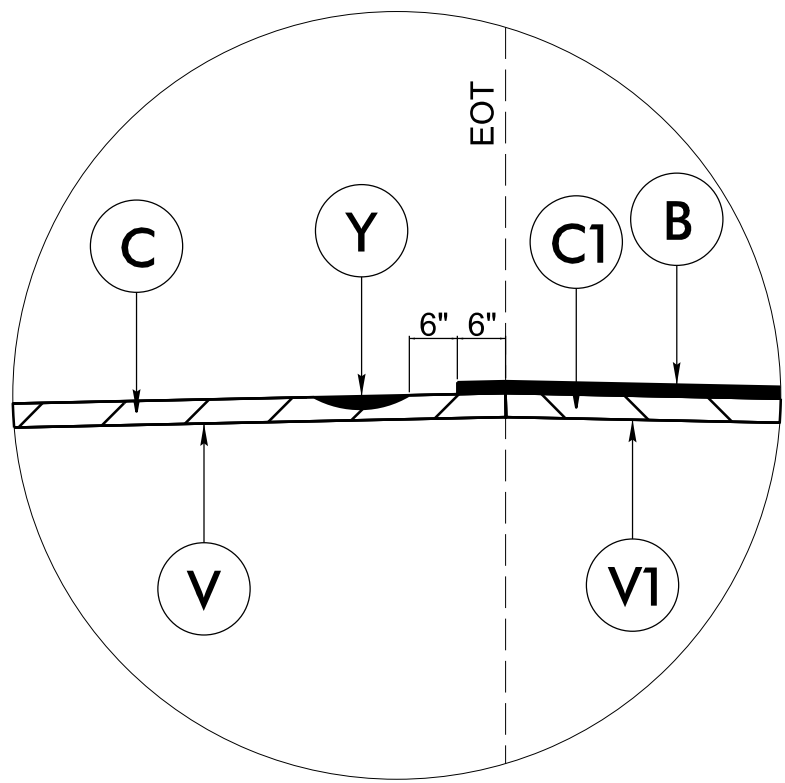
TYPICAL SECTION NO. 6

Map 2 I - 85 NB

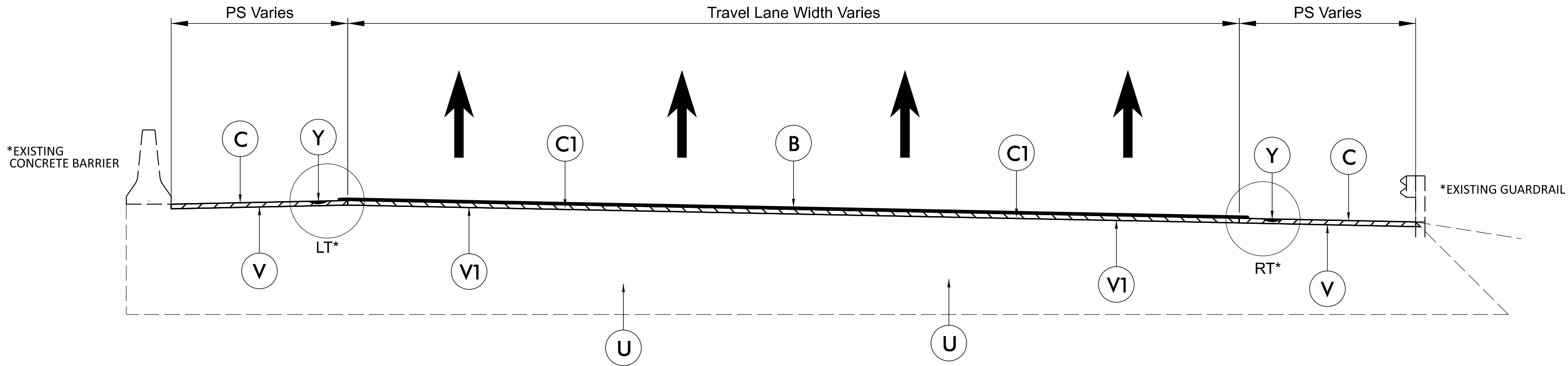
NOTE: 1) RUMBLE STRIPS MUST BE INSTALLED BEFORE PLACING ULTRA-THIN TO INSURE DIMENSIONAL ACCURACY

2) WHERE THERE IS EXISTING NOVACHIP, MILL 2 ¼", OTHERWISE MILL 1 ½"

PAVEMENT SCHEDULE	
B	ULTRA THIN BONDED WEARING COURSE, 5/8"
C	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
U	EXISTING PAVEMENT
V	MILL ASPHALT PAVEMENT, 1½" DEPTH
V1	MILL ASPHALT PAVEMENT, 2¼" DEPTH
Y	RUMBLE STRIPS

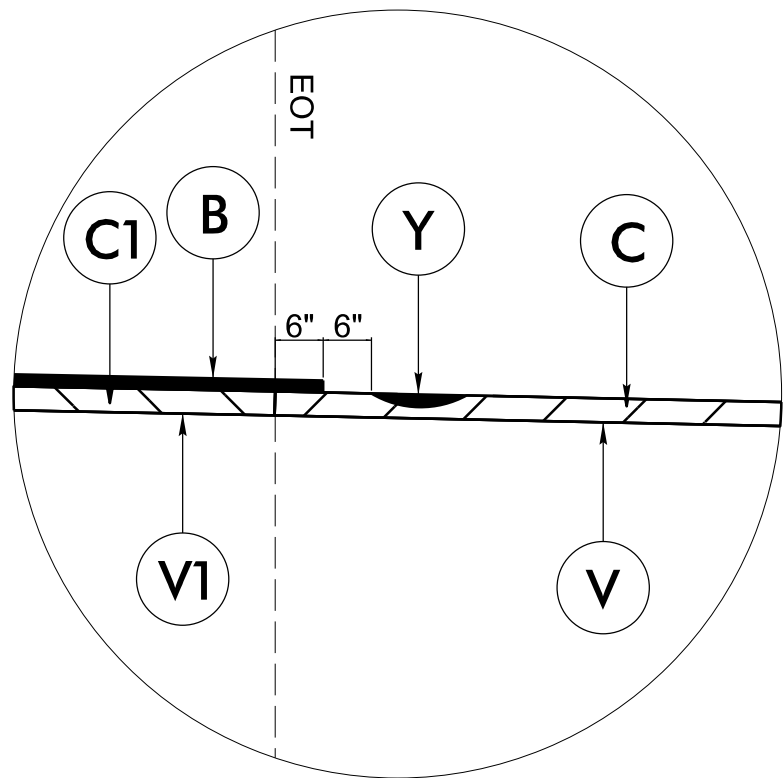


LT*

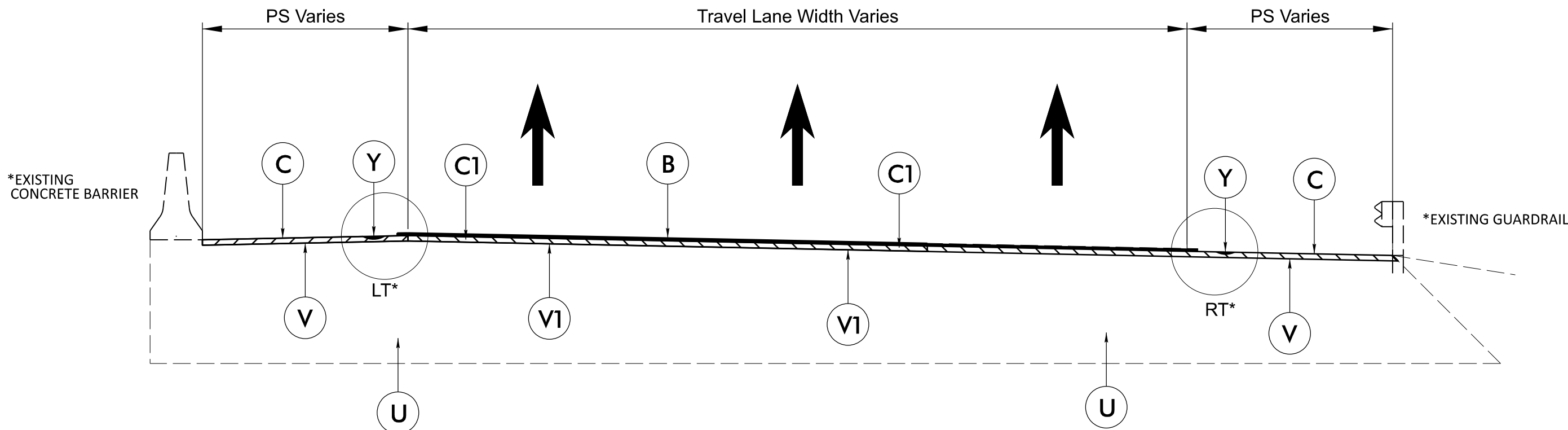


TYPICAL SECTION NO. 7

Map 2 I - 85 NB



RT*



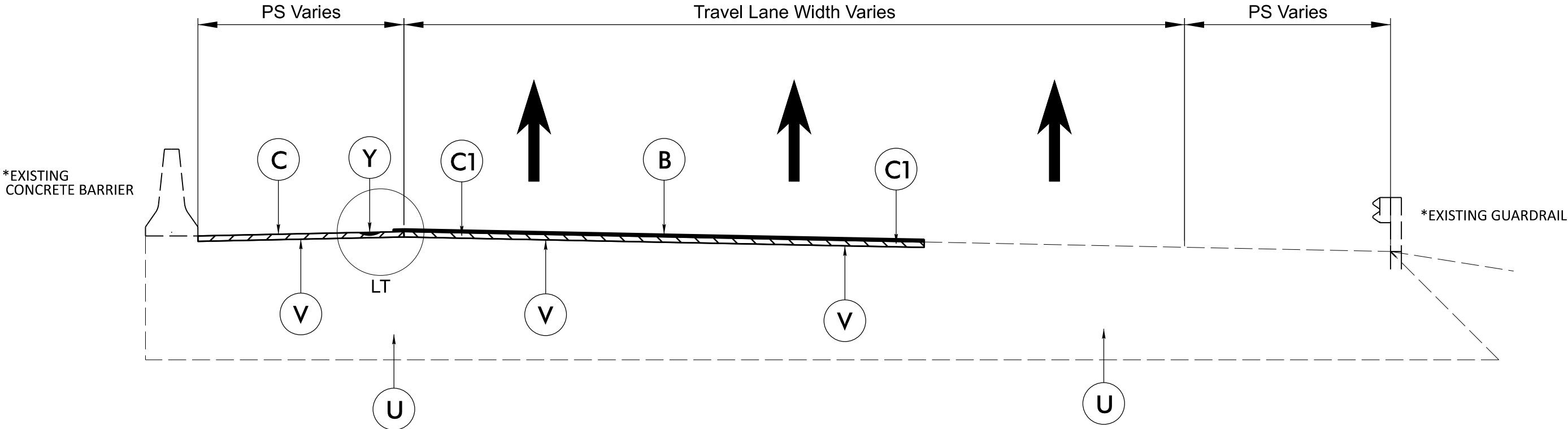
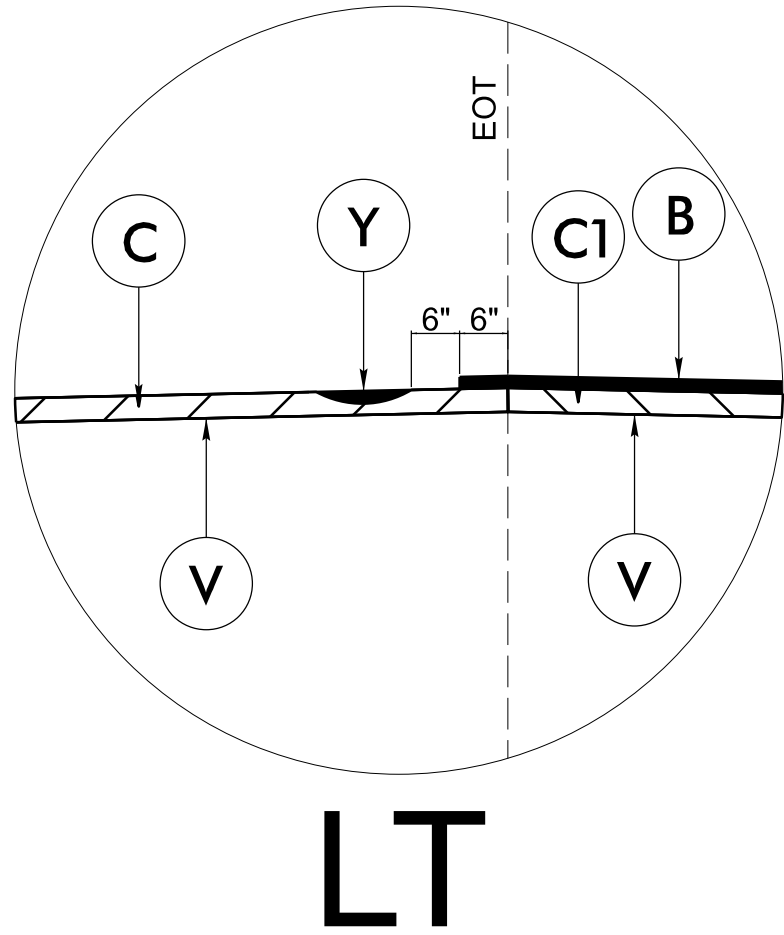
TYPICAL SECTION NO. 8

Map 2 I - 85 NB

NOTE: 1) RUMBLE STRIPS MUST BE INSTALLED BEFORE PLACING ULTRA-THIN TO INSURE DIMENSIONAL ACCURACY

2) WHERE THERE IS EXISTING NOVACHIP, MILL 2 ¼", OTHERWISE MILL 1 ½"

PAVEMENT SCHEDULE	
B	ULTRA THIN BONDED WEARING COURSE, 5/8"
C	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
U	EXISTING PAVEMENT
V	MILL ASPHALT PAVEMENT, 1½" DEPTH
V1	MILL ASPHALT PAVEMENT, 2¼" DEPTH
Y	RUMBLE STRIPS

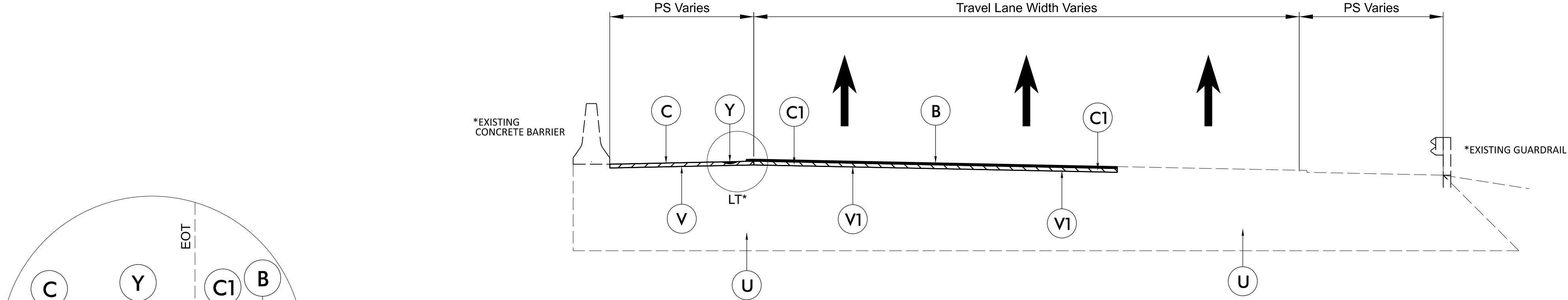


TYPICAL SECTION NO. 9
Map 4 I - 85 SB

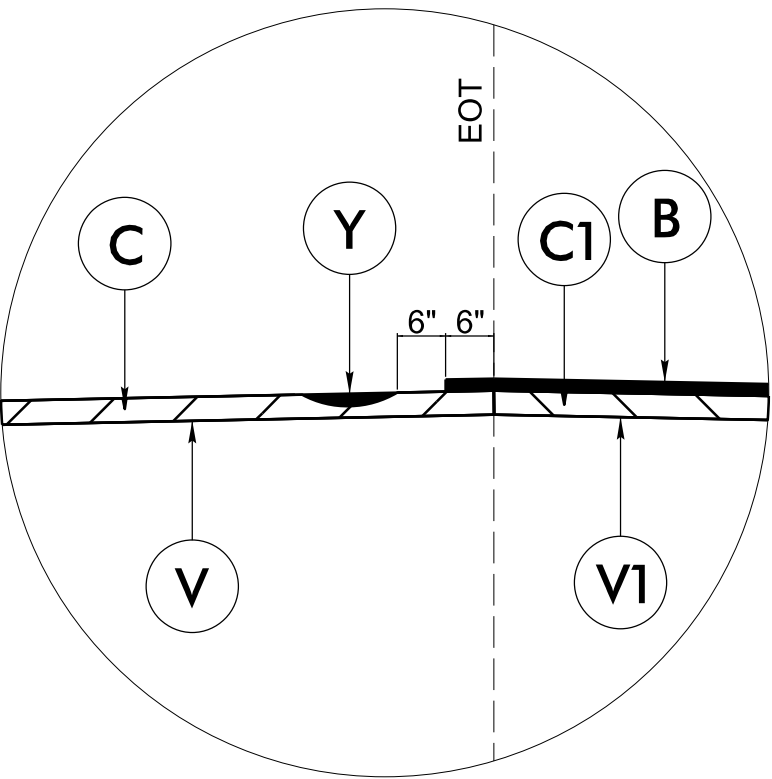
NOTE: 1) RUMBLE STRIPS MUST BE INSTALLED BEFORE PLACING ULTRA-THIN TO INSURE DIMENSIONAL ACCURACY

2) WHERE THERE IS EXISTING NOVACHIP, MILL 2 ¼", OTHERWISE MILL 1 ½"

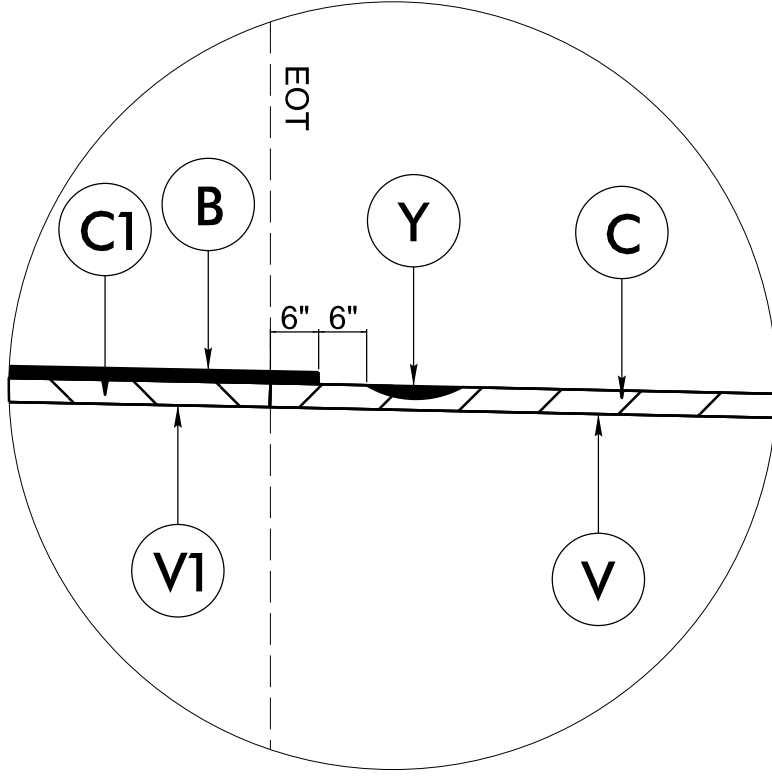
PAVEMENT SCHEDULE	
B	ULTRA THIN BONDED WEARING COURSE, 5/8"
C	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
U	EXISTING PAVEMENT
V	MILL ASPHALT PAVEMENT, 1½" DEPTH
V1	MILL ASPHALT PAVEMENT, 2¼" DEPTH
Y	RUMBLE STRIPS



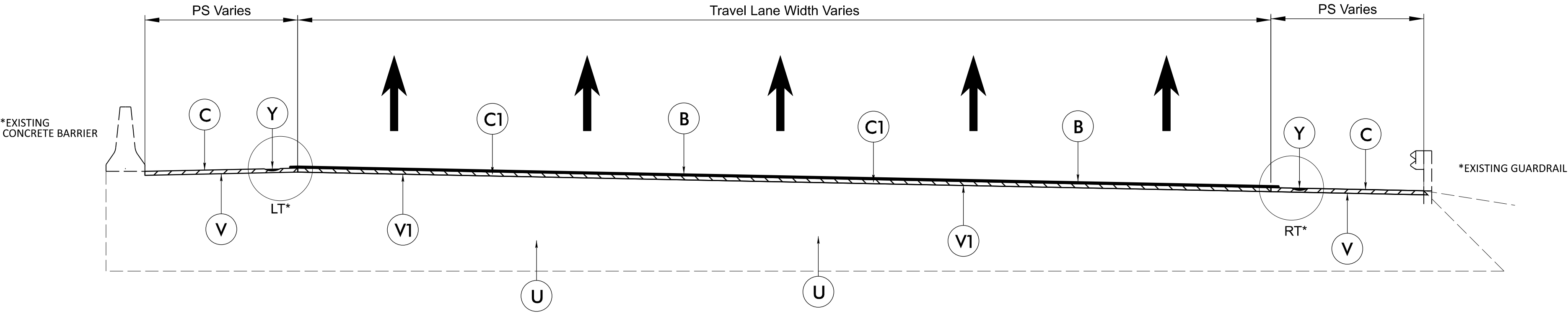
TYPICAL SECTION NO. 10
Map 4 I - 85 SB



LT*



RT*

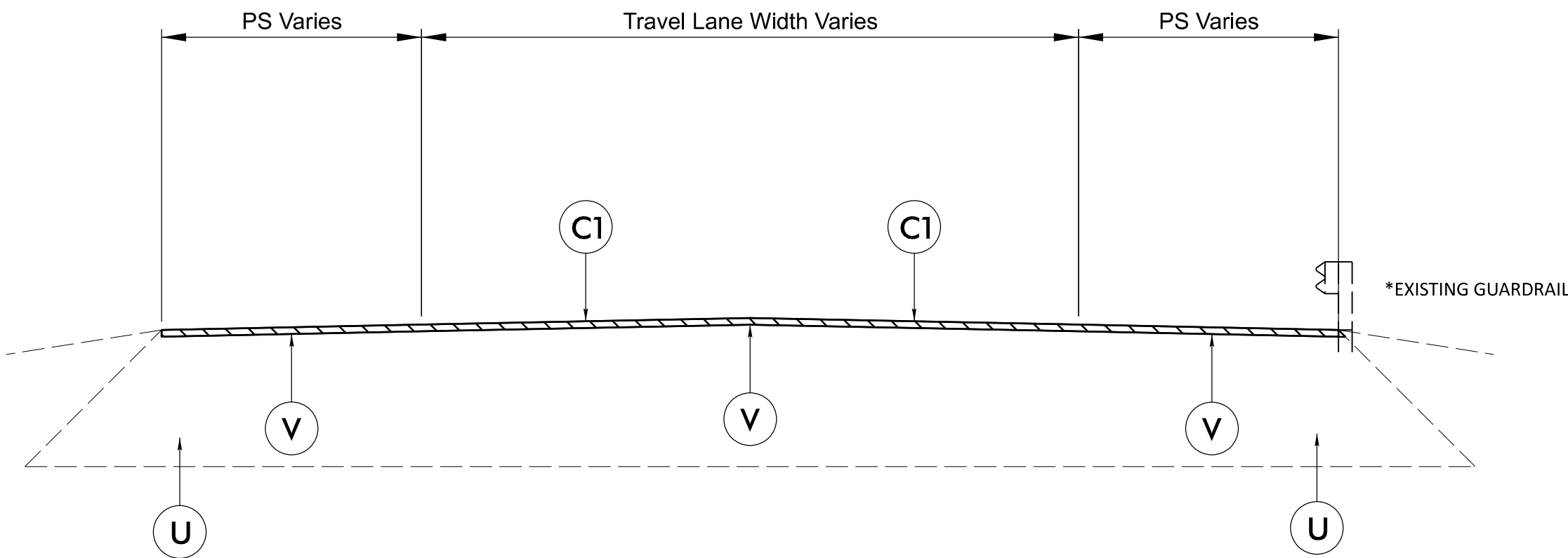


TYPICAL SECTION NO. 11
Map 5 I - 40 WB

NOTE: 1) RUMBLE STRIPS MUST BE INSTALLED BEFORE PLACING ULTRA-THIN TO INSURE DIMENSIONAL ACCURACY

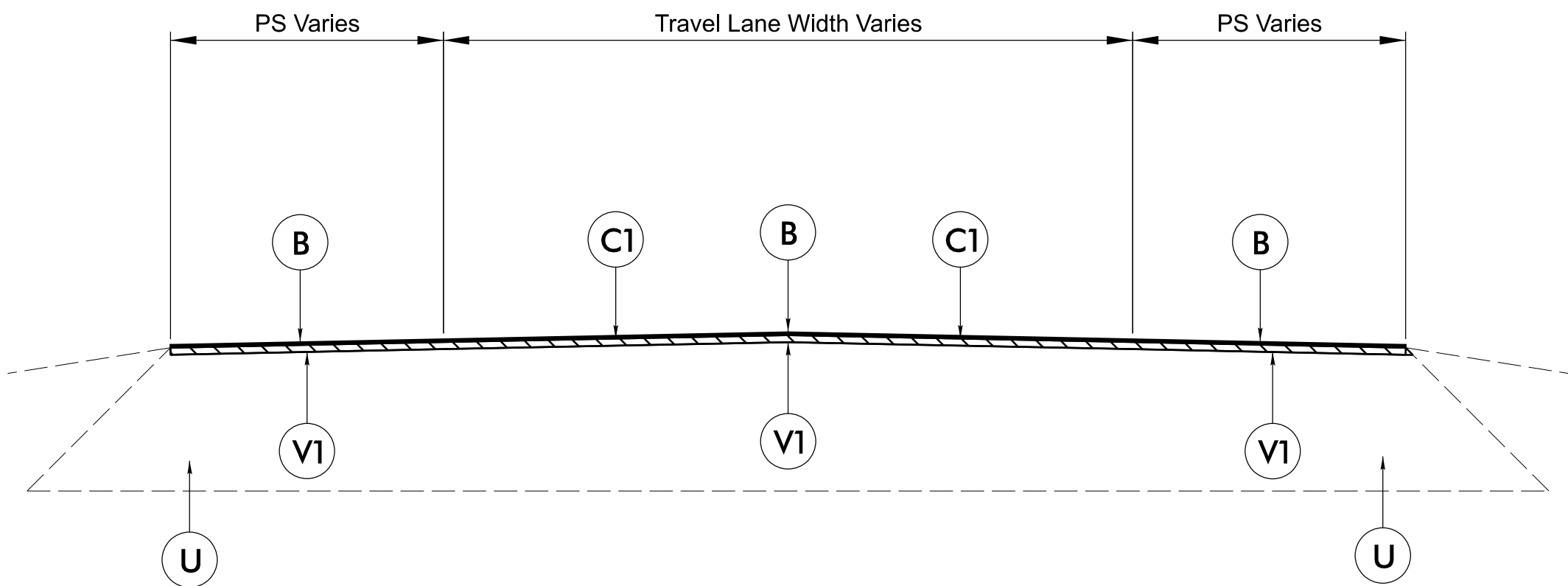
2) WHERE THERE IS EXISTING NOVACHIP, MILL 2 ¼", OTHERWISE MILL 1 ½"

PAVEMENT SCHEDULE	
B	ULTRA THIN BONDED WEARING COURSE, 5/8"
C	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
U	EXISTING PAVEMENT
V	MILL ASPHALT PAVEMENT, 1½" DEPTH
V1	MILL ASPHALT PAVEMENT, 2¼" DEPTH
Y	RUMBLE STRIPS



TYPICAL SECTION NO. 12

- Map 7 I - 40 EB Exit Ramp to SR 1114
- Map 8 I - 40 EB Entrance Ramp from SR 1114
- Map 9 I - 40 EB Exit Ramp to SR 1120
- Map 10 I - 40 EB Entrance Ramp from SR 1120
- Map 11 I - 40 EB Loop between Maps 10 and 12
- Map 12 I - 40 EB Exit Ramp to SR 1239
- Map 13 I - 40 EB Entrance Ramp from SR 1239
- Map 15 I - 40 WB Exit Ramp to SR 1239
- Map 16 I - 40 WB Entrance Ramp from SR 1239
- Map 17 I - 40 WB Loop between Maps 16 and 18
- Map 18 I - 40 WB Exit Ramp to SR 1120
- Map 19 I - 40 WB Entrance Ramp from SR 1120
- Map 20 I - 40 WB Exit Ramp to SR 1114
- Map 21 I - 40 WB Entrance Ramp from SR 1114



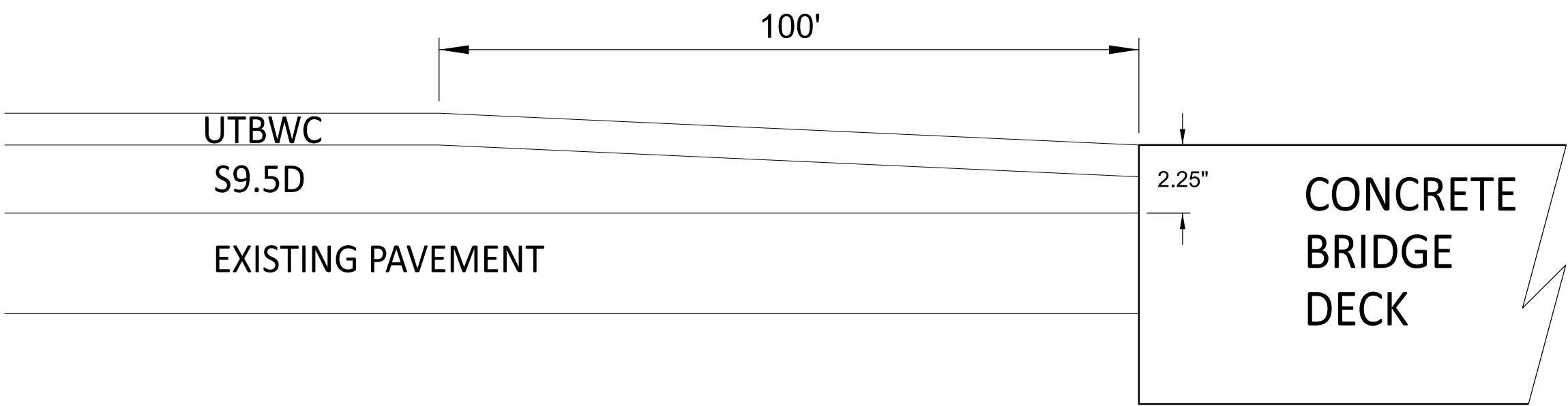
TYPICAL SECTION NO. 13

- Map 14 I - 85 EB Entrance Ramp from I - 40 WB

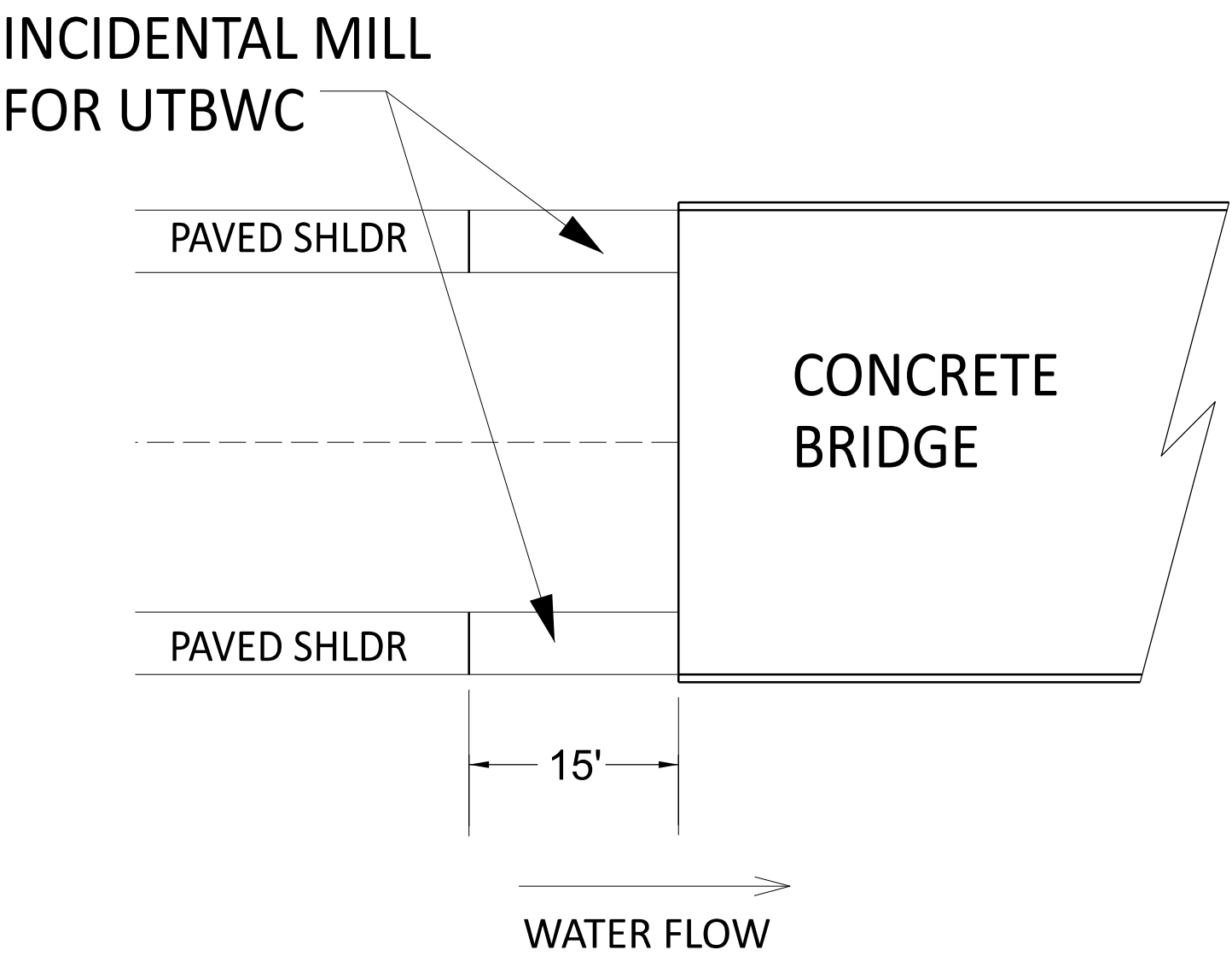
NOTE: 1) RUMBLE STRIPS MUST BE INSTALLED BEFORE PLACING ULTRA-THIN TO INSURE DIMENSIONAL ACCURACY

2) WHERE THERE IS EXISTING NOVACHIP, MILL 2 ¼", OTHERWISE MILL 1 ½"

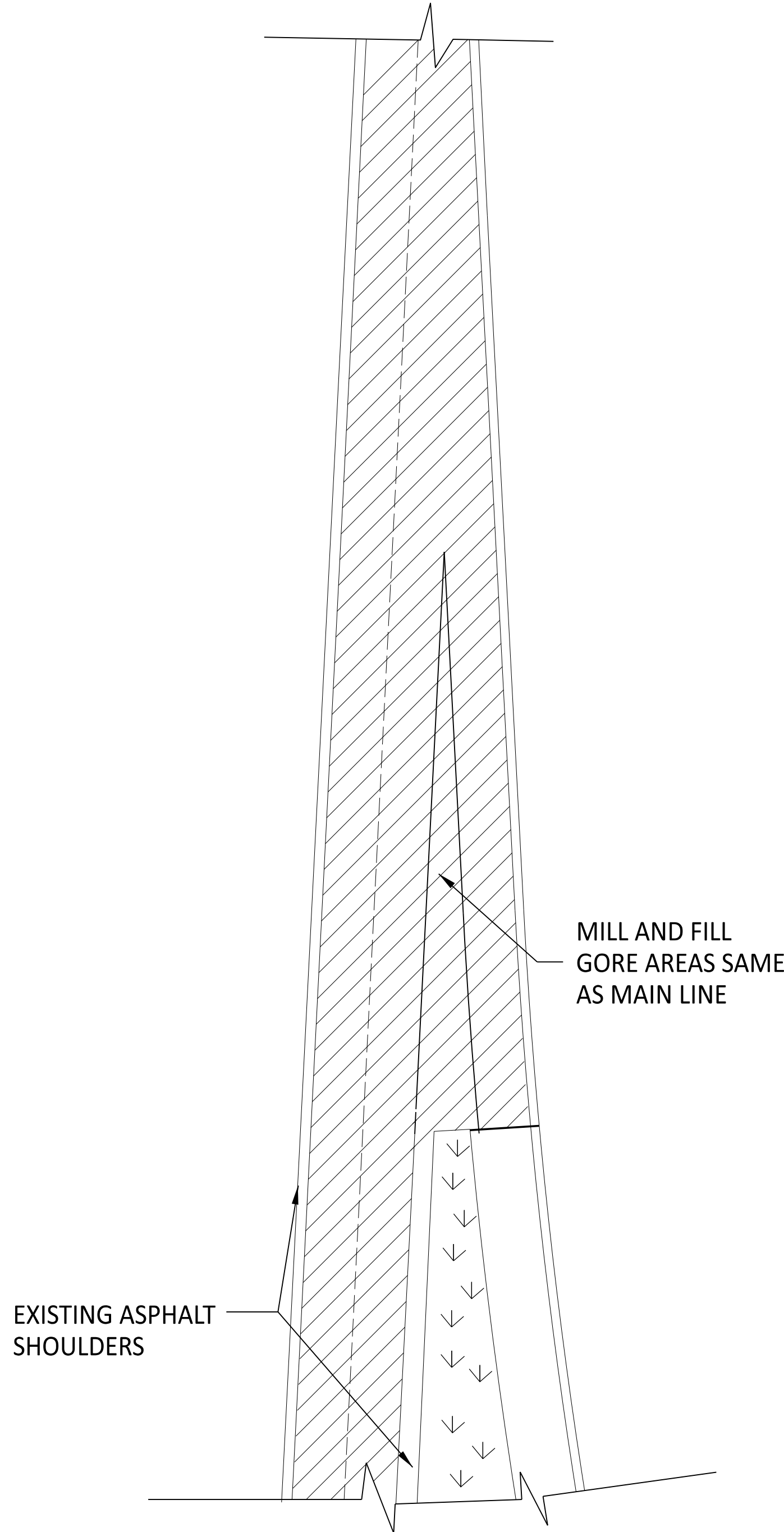
PAVEMENT SCHEDULE	
B	ULTRA THIN BONDED WEARING COURSE, 5/8"
C	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
U	EXISTING PAVEMENT
V	MILL ASPHALT PAVEMENT, 1½" DEPTH
V1	MILL ASPHALT PAVEMENT, 2¼" DEPTH
Y	RUMBLE STRIPS



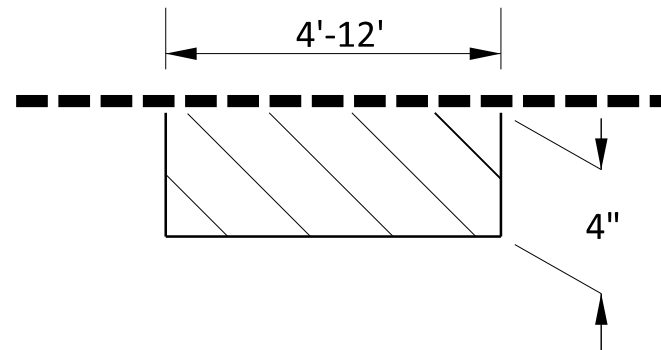
**INCIDENTAL MILLING PAVEMENT
DETAIL AT CONCRETE BRIDGES**



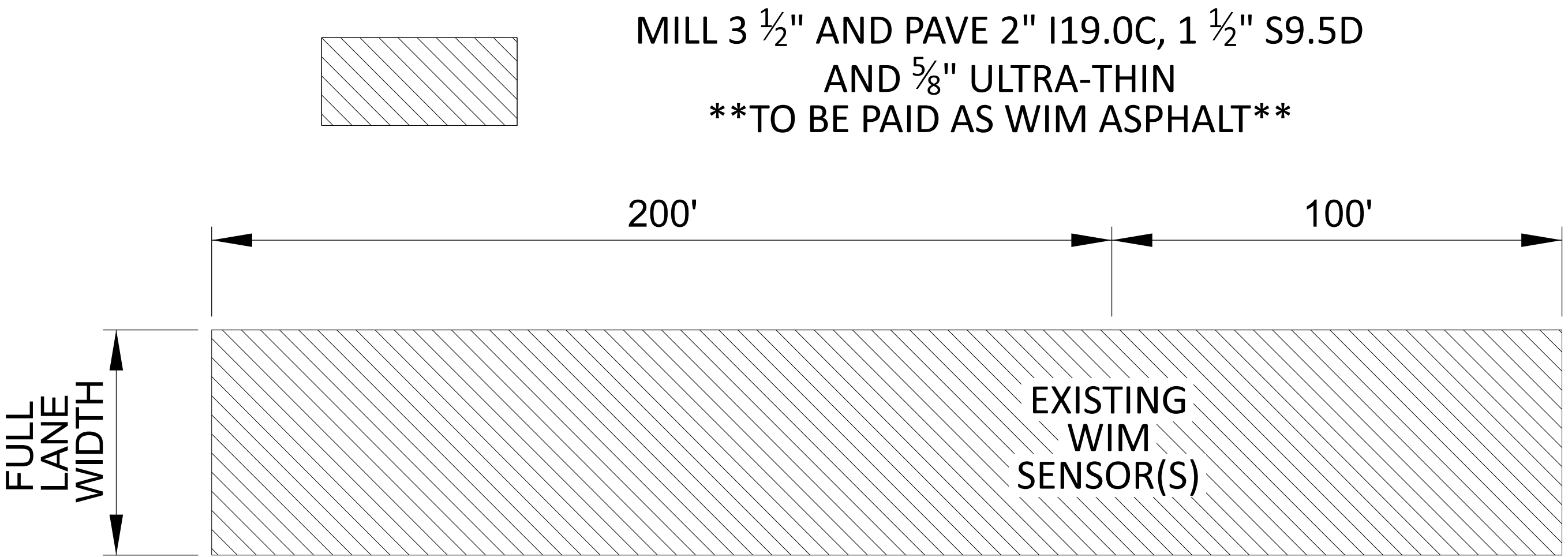
MILLING DETAIL 1



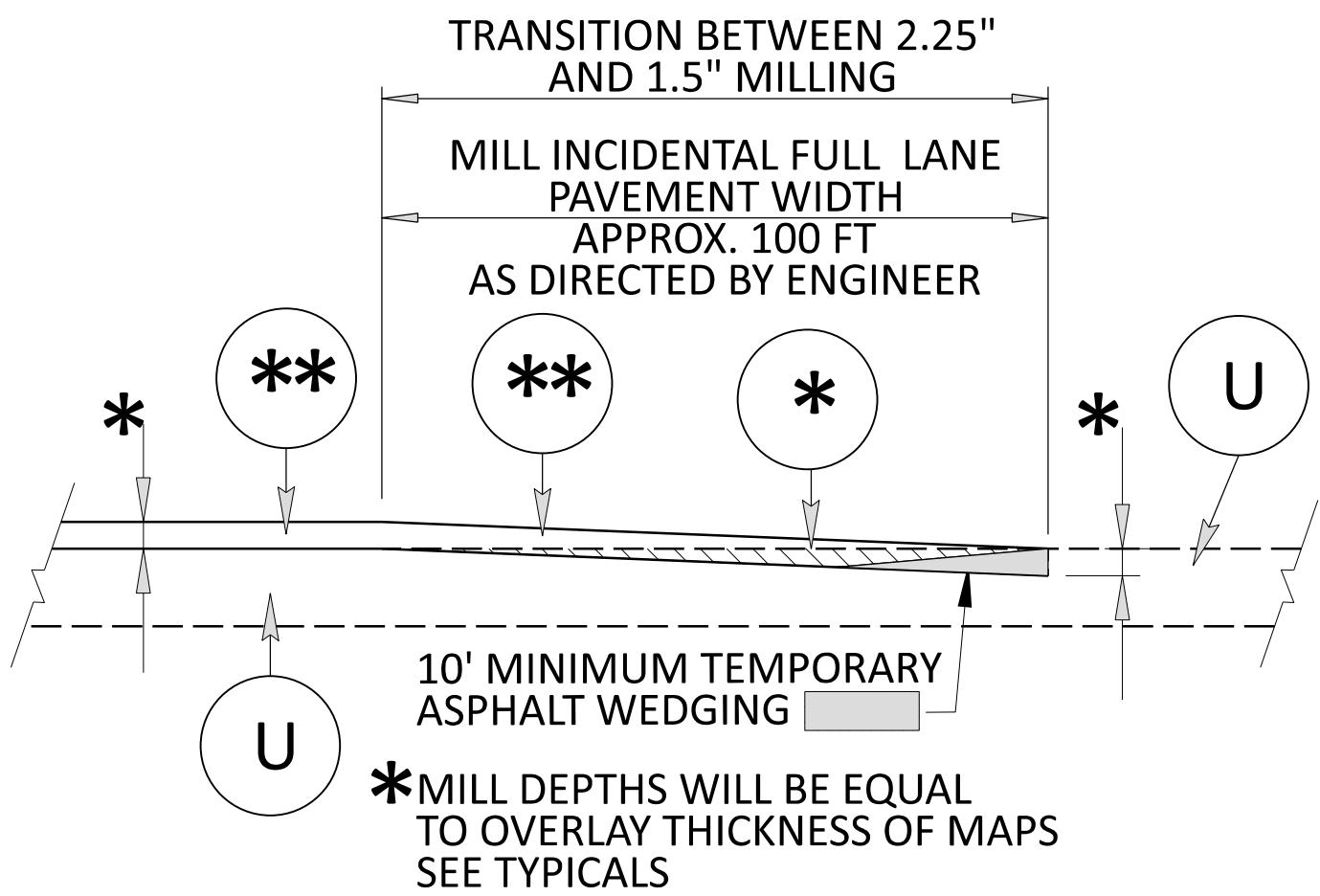
DETAIL - GORE AREAS



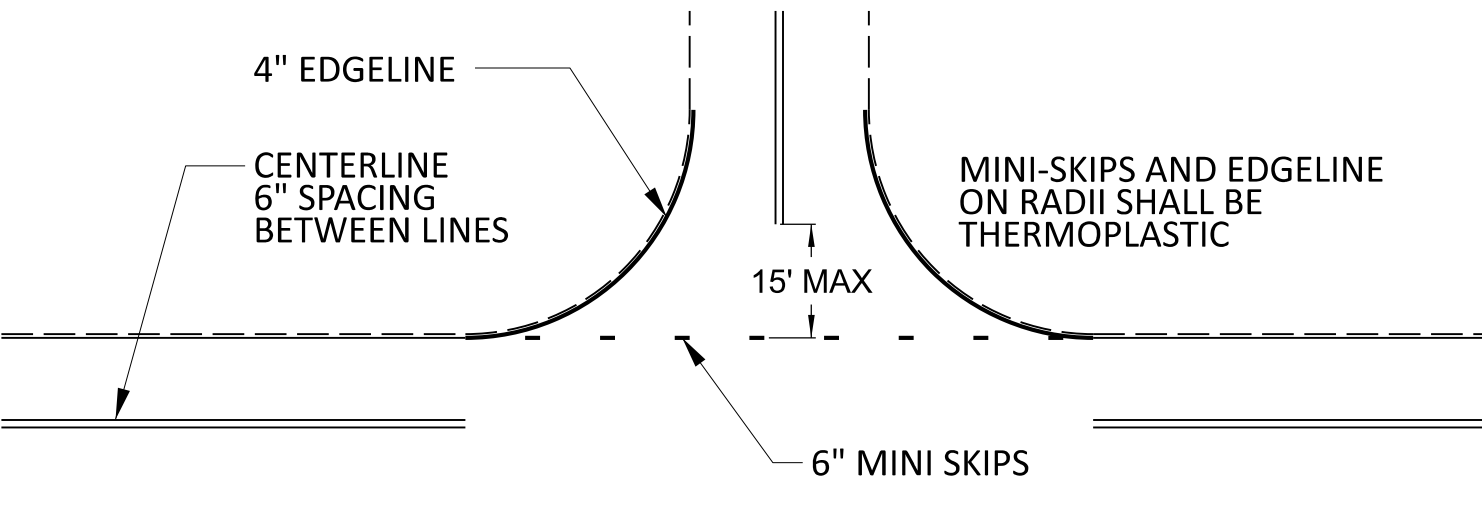
**PATCHING EXISTING
PAVEMENT DETAIL**



WIM SENSOR PAVING DETAIL



INCIDENTAL MILLING AT TRANSITIONS DETAIL



NOTE: MINI SKIPS SHALL BE PLACED ON A 8' CYCLE, CONTAINING A 6' AND 2' SKIP, THE WIDTH OF THE SKIP SHALL BE 6".

**TO BE USED AT ALL
NON-SIGNALIZED INTERSECTIONS
(NOT TO SCALE)**

NOTE: 1) RUMBLE STRIPS MUST BE INSTALLED BEFORE PLACING ULTRA-THIN TO INSURE DIMENSIONAL ACCURACY

2) WHERE THERE IS EXISTING NOVACHIP, MILL 2 1/4", OTHERWISE MILL 1 1/2"

PAVEMENT SCHEDULE	
B	ULTRA THIN BONDED WEARING COURSE, 5/8"
C	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D TO BE APPLIED AT AN AVERAGE RATE OF 168 LBS PER SQ YD.
U	EXISTING PAVEMENT
V	MILL ASPHALT PAVEMENT, 1 1/2" DEPTH
V1	MILL ASPHALT PAVEMENT, 2 1/4" DEPTH
Y	RUMBLE STRIPS