

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
HIGHWAY DIVISION 6

# PLANS

**Letting Date: JUNE 19, 2024**

**CONTRACT ID: DF00482**

**TIP NO.: HS-2006AC & HS-2006AD**

**FEDERAL AID NO.: HSIP-4931(207), HSIP-4931(208)**

**WBS ELEMENT NO.: 49312.3.33, 49312.3.34**


**ROUTE NO.: NC 210 & NC 71**

**LOCATION: VARIOUS**

**COUNTY: CUMBERLAND, HARNETT, & ROBESON**

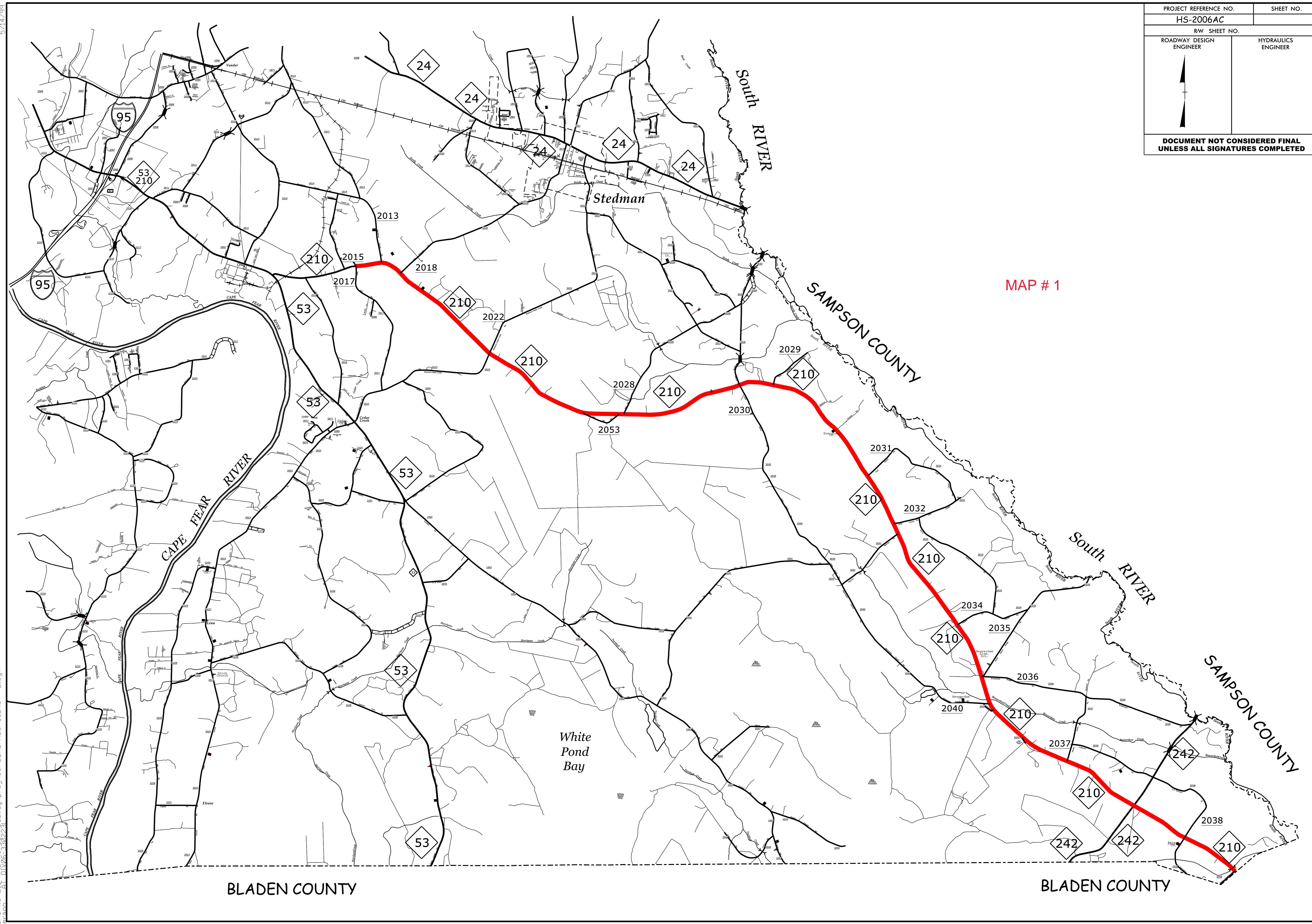
**LENGTH OF PROJECT: 36.67 MILES**

**TYPE OF WORK: SINUSOIDAL MILLED RUMBLE STRIPES & PAVEMENT MARKINGS**

PROJECT REFERENCE NO.	SHEET NO.
HS-2006AC	
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

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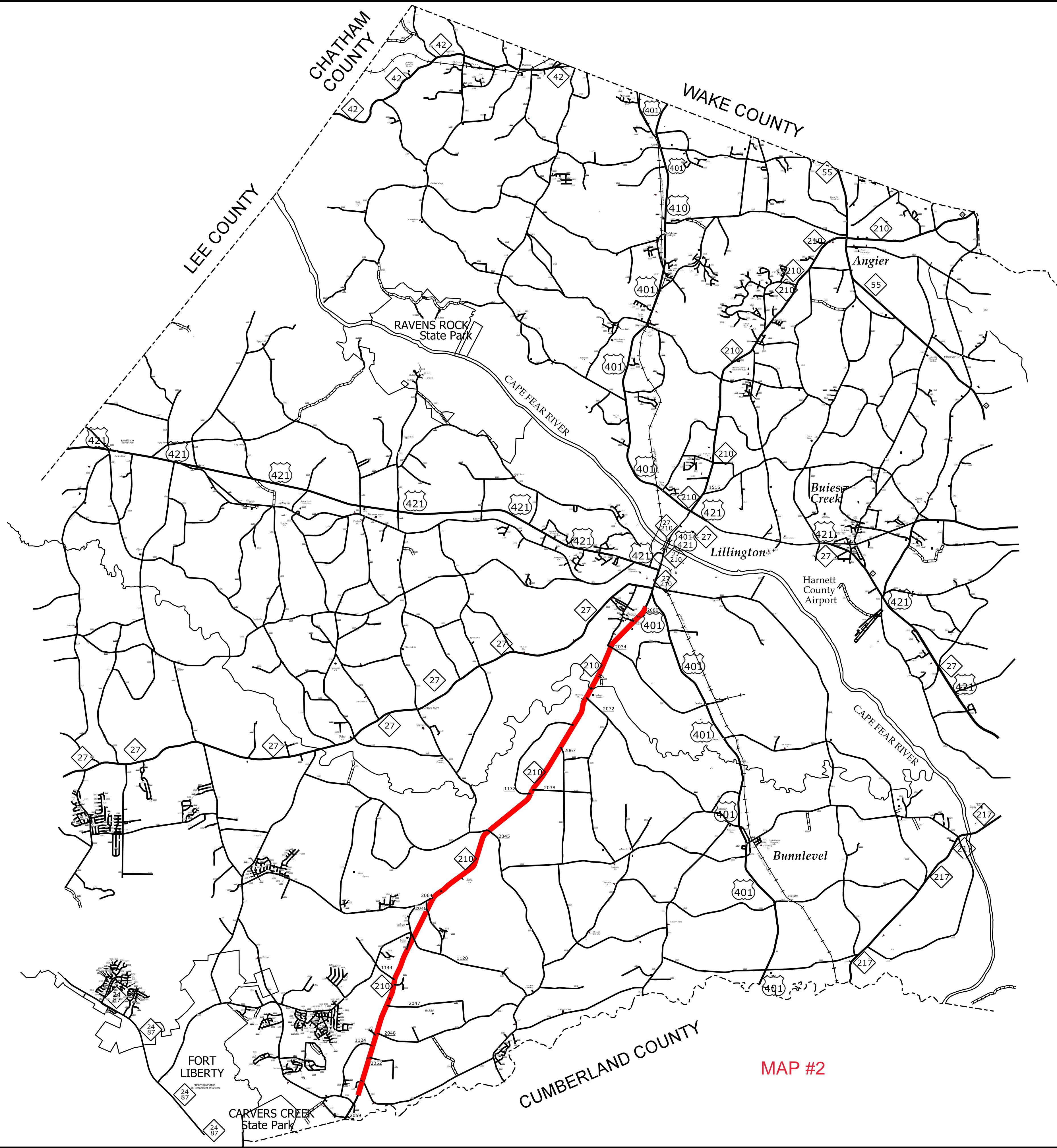


MAP # 1

BLADEN COUNTY

BLADEN COUNTY


PROJECT REFERENCE NO.	SHEET NO.
HS-2006AC	
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



MAP #2

REVISIONS

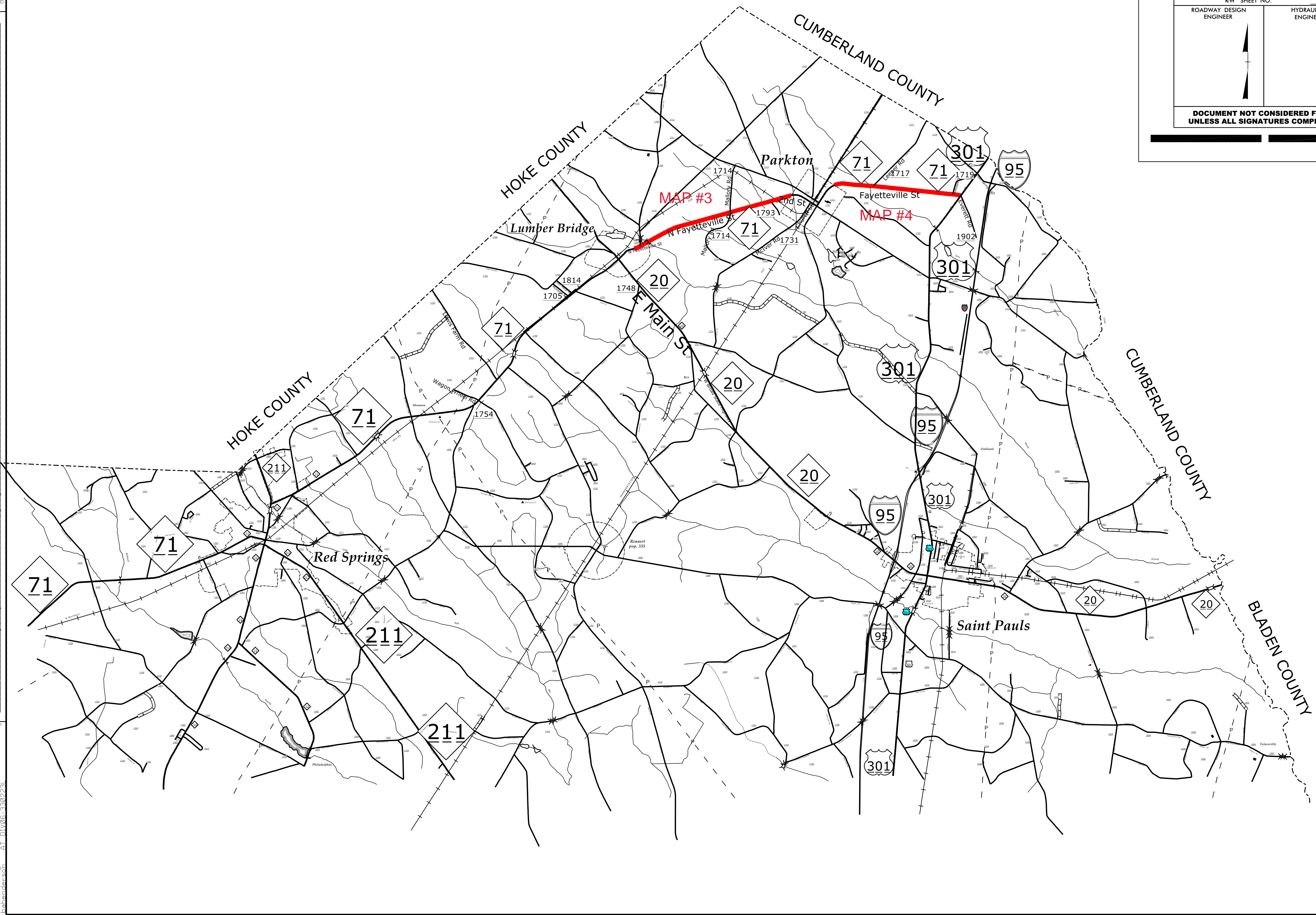
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PROJECT REFERENCE NO. <i>HS-2006AD</i>	SHEET NO.
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

8/17/99

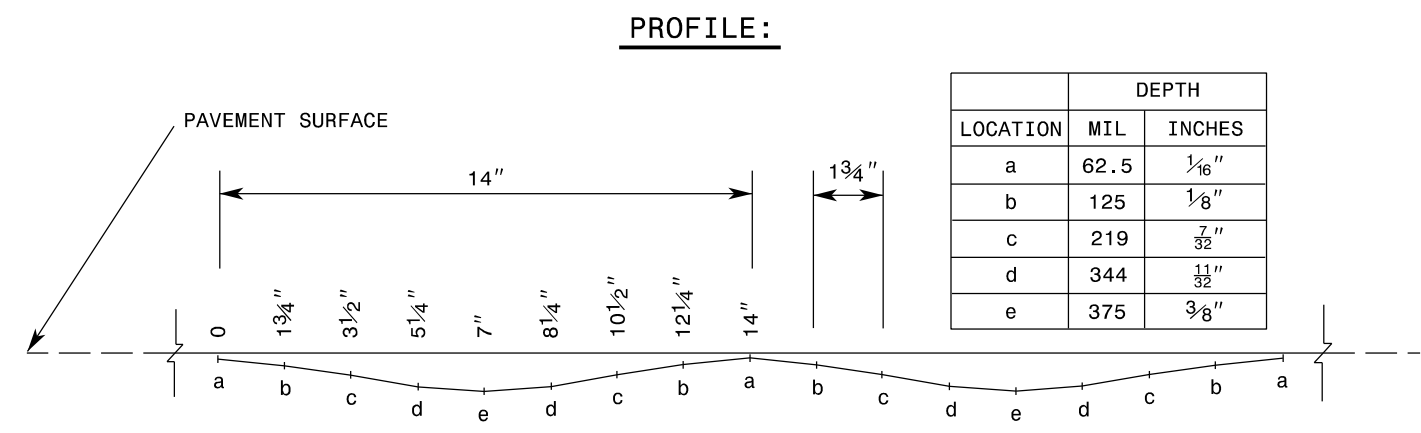
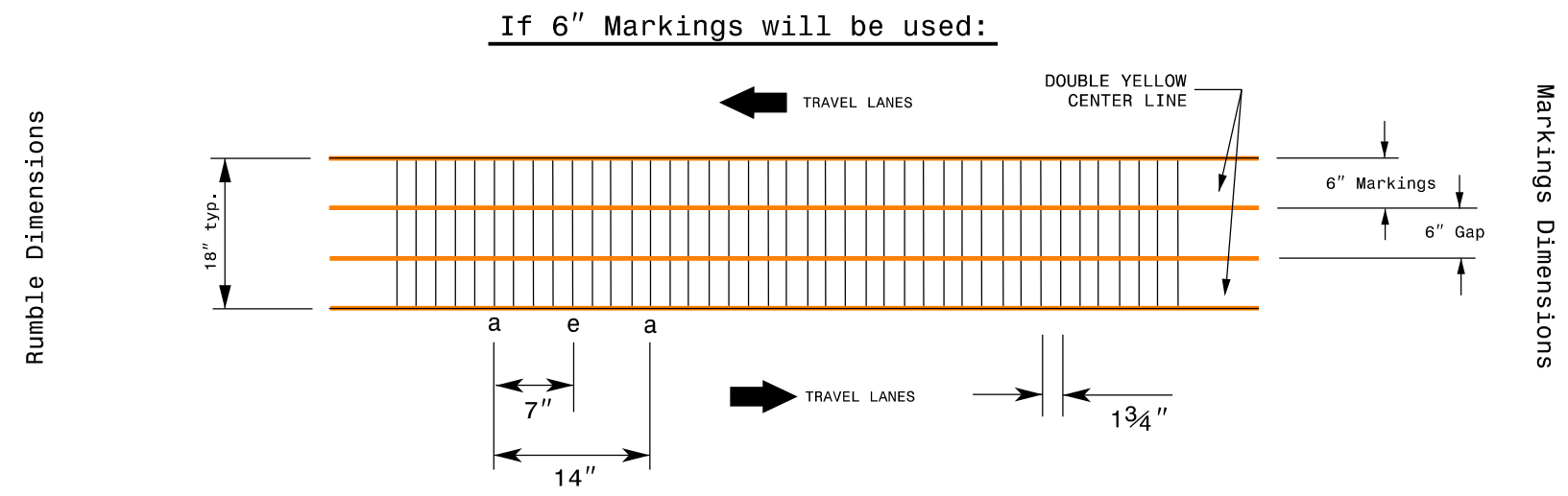
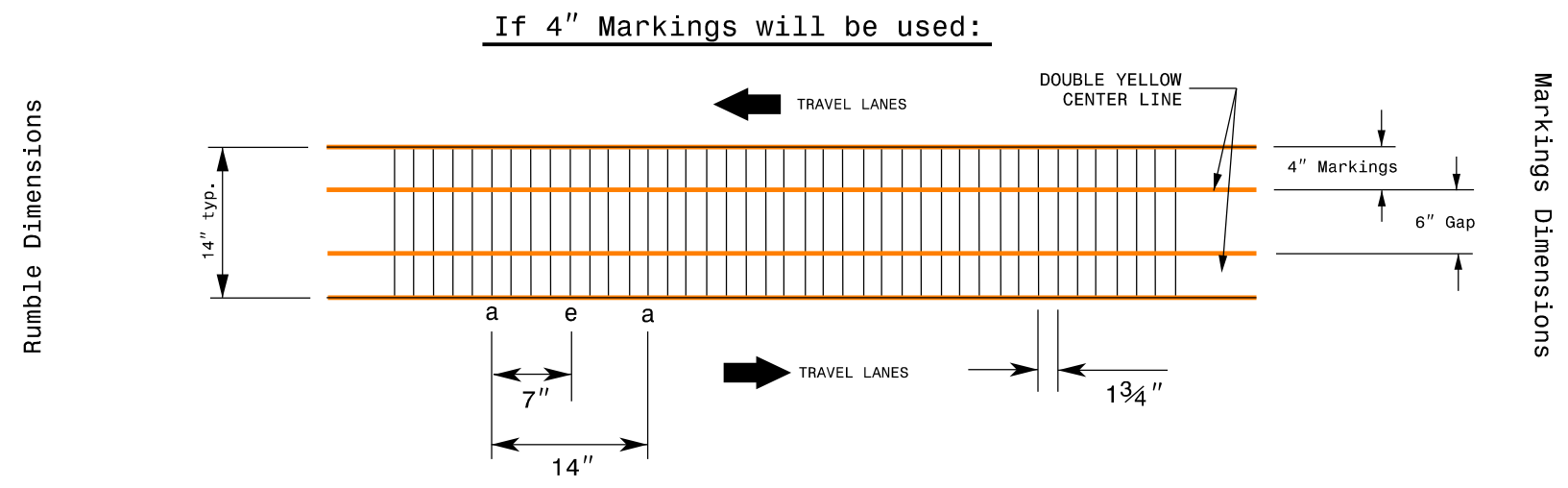
REVISIONS

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County	Map_Number	Description	From	To	WBS	TIP
Cumberland	1	NC 210 Center and Edge Line Rumbles with 6" Thermo from Bladen County to Fayetteville	0	18.34	49312.3.33	HS-2006AC
Harnett	2	NC 210 Center and Edge Line Rumbles with 6" Thermo from Cumberland County to Lillington	0.59	13.71	49312.3.33	HS-2006AC
Robeson	3	NC 71 Center and Edge Line Rumbles with 6" Thermo from Lumber Bridge to Parkton	20.92	23.88	49312.3.34	HS-2006AD
Robeson	4	NC 71 Center and Edge Line Rumbles with 6" Thermo from Parkton to US 301	24.89	27.14	49312.3.34	HS-2006AD

See Table 2 within Rumble Strip Policy for Design Guidance



REFERENCE DRAWING ID: Sin.CL

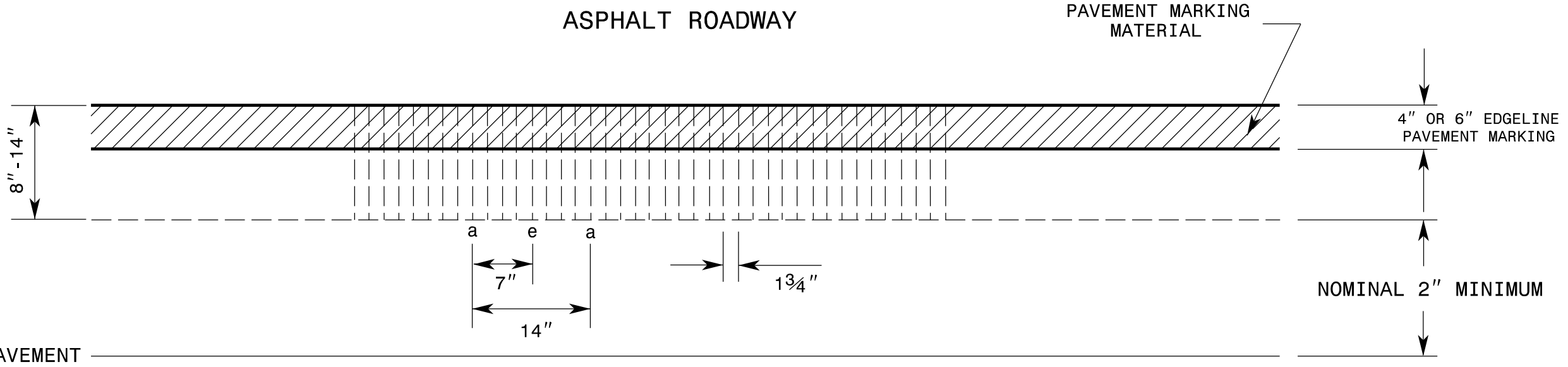
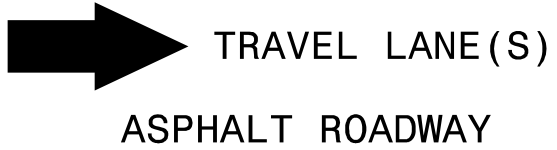
DRAFT REFERENCE DRAWING: FEBRUARY 2023

NOTES:

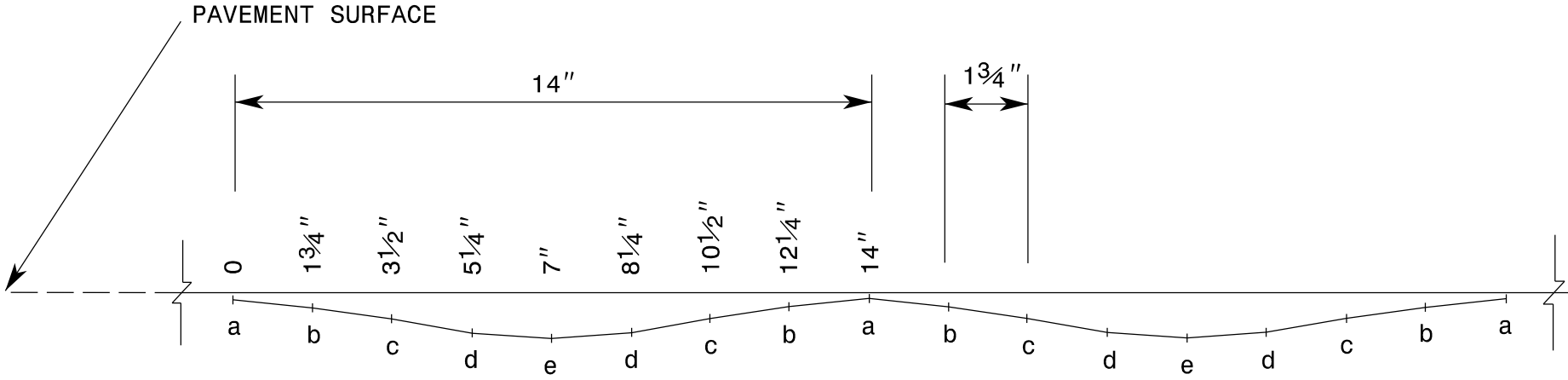
- 1) Specification in table taken from MNDOT Research Project Final Report 2016-23: *Sinusoidal Rumble Strip Design Optimization Study By: Terhaar et. al, June 2016*
- 2) USING A VACUUM, REMOVE ALL DEBRIS FROM THE MILLINGS JUST PRIOR TO PLACING ANY PAVEMENT MARKINGS.
- 3) ENSURE GLASS BEADS ARE SPREAD UNIFORMLY OVER THE ENTIRE SURFACE OF THE PAVEMENT MARKING MATERIAL.

See Table 1 within Rumble Strip Policy for Design Guidance

PLAN VIEW



PROFILE VIEW



LOCATION	DEPTH	
	MIL	INCHES
a	62.5	1/16"
b	125	1/8"
c	219	7/32"
d	344	11/32"
e	375	3/8"

REFERENCE DRAWING ID: Sin.Stripe

DRAFT REFERENCE DRAWING: FEBRUARY 2023

NOTES:

- 1) Specification in table taken from MNDOT Research Project Final Report 2016-23: *Sinusoidal Rumble Strip Design Optimization Study By: Terhaar et. al, June 2016*
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