PROJECT REFERENCE NO.	SHEET NO.
W-5306	9

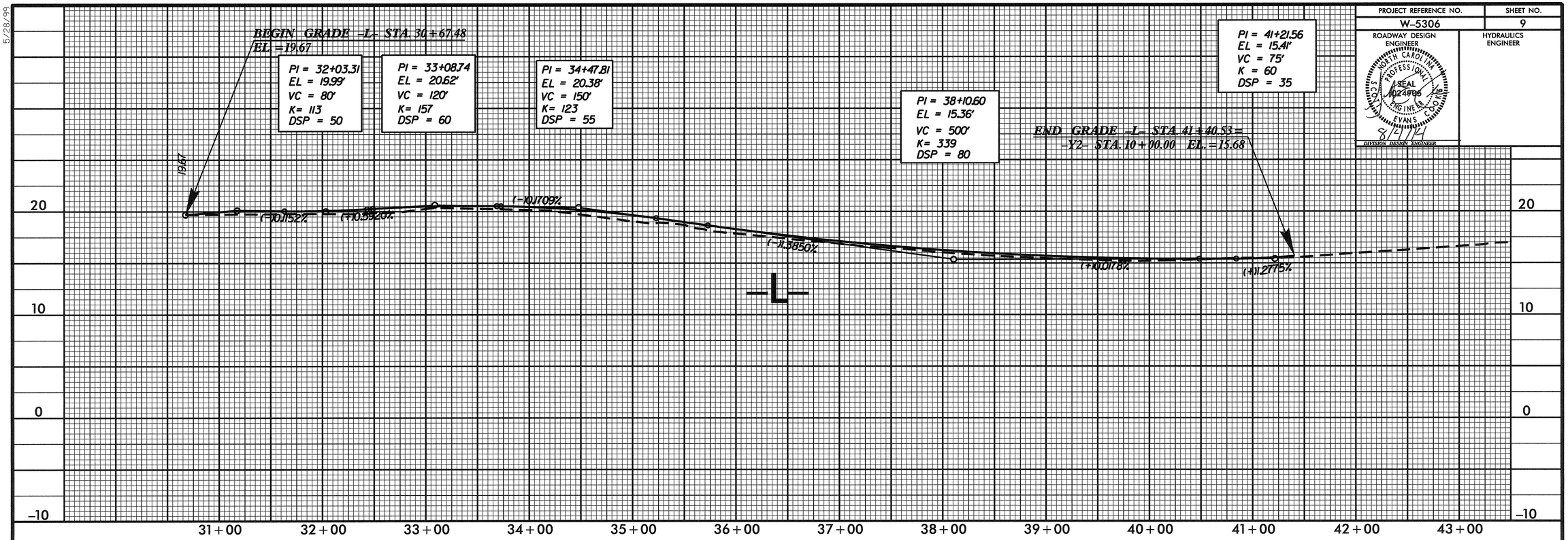
ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 024905 ENGINEER SCOTT EVANS COOK

8/4/14

DIVISION DESIGN ENGINEER



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5/28/99

PROJECT REFERENCE NO.	SHEET NO.
W-5306	10

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 024905 ENGINEER EVAN S. COOKE

8/19/99

DIVISION DESIGN ENGINEER

HYDRAULICS ENGINEER

BEGIN GRADE -Y1- STA. 10+81.65 EL. =17.00

PI = 12+67.43
EL = 19.81'
VC = 75'
K = 25
DSP = 30

PI = 13+59.99
EL = 18.47'
VC = 75'
K = 22
DSP = 20

END GRADE -Y1- STA. 14+02.25 = -RABSB- STA. 17+93.01 EL. =19.32

PI = 14+02.25
EL = 19.32'

15.77

(+)1.5109%

(-)1.4435%

(+)1.9998%

(+)2.0004%

-Y1-

BEGIN GRADE -Y1A- STA. 13+40.00 EL. =18.74

PI = 13+77.52
EL = 18.71'
VC = 65'
K = 27
DSP = 25

(-)0.0765%

(+)2.3404%

END GRADE -Y1A- STA. 14+14.96 = -RABSB- 17+67.96 EL. =19.52

-Y1A-

BEGIN GRADE -Y1B- STA. 13+40.00 EL. =18.78

(+)0.5147%

END GRADE -Y1B- STA. 14+04.11 = -RABSB- STA. 18+18.47 EL. =19.11

-Y1B-

10+00 11+00 12+00 13+00 14+00 14+00 14+00

20 10 0 -10

PI = 11+27.97
EL = 17.29'
VC = 75'
K = 103
DSP = 50

PI = 12+27.89
EL = 19.29'

BEGIN GRADE -Y2- STA. 10+00.00 = -L- STA. 41+40.53 EL. =15.65

END GRADE -Y2- STA. 12+27.89 = -RABSB- STA. 19+11.94 EL. =19.29

15.72

(+)1.2716%

(+)2.0037%

2.0202

1.9999%

-Y2-

BEGIN GRADE -Y2A- STA. 11+70.00 EL. =18.00

(+)1.6106%

19.11

END GRADE -Y2A- STA. 12+38.74 -RABSB- STA 18+86.01 EL. =19.11

-Y2A-

BEGIN GRADE -Y2B- STA. 11+70.00 EL. =18.11

(+)2.5697%

END GRADE -Y2B- STA. 12+31.01 -RABSB- STA. 19+32.44 EL. =19.43

-Y2B-

10+00 11+00 12+00 13+00 12+00 12+00

20 10 0 -10

13

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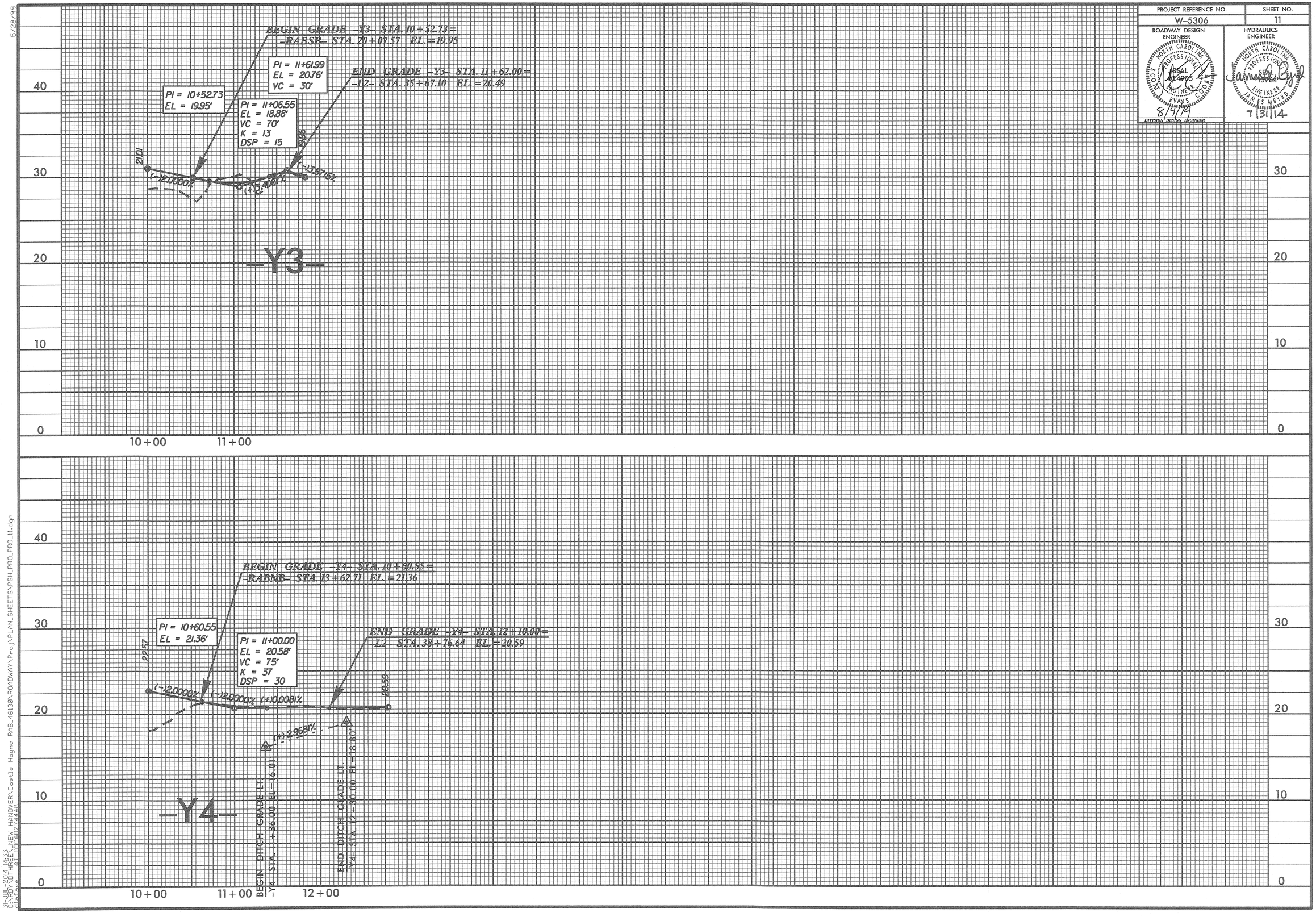
PROJECT REFERENCE NO.	SHEET NO.
W-5306	11

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 024905 ENGINEER EVANS COOK
8/4/14
DIVISION DESIGN ENGINEER

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 15964 ENGINEER JAMES A. BYRD
7/31/14



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5/28/99

PROJECT REFERENCE NO.	SHEET NO.
W-5306	12

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 024905 ENGINEER JOHN EVANS
8/4/14
DIVISION DESIGN ENGINEER

HYDRAULICS ENGINEER

PI = 10+40.00
EL = 21.90'

PI = 11+02.99
EL = 20.65'
VC = 75'
K = 27
DSP = 25

PI = 13+24.62
EL = 22.49'
VC = 75'
K = 57
DSP = 40

BEGIN GRADE -Y5- STA. 10+40.00 = -RABNB- STA. 14+66.31 EL. = 21.90

END GRADE -Y5- STA. 15+75.00 = -L- STA. 51+31.97 EL. = 21.54

22.20

21.54

(-)2.00000%

(-)2.00000%

(+)0.83824%

(-)0.48666%

-Y5-

10+00 11+00 12+00 13+00 14+00 15+00

BEGIN GRADE -Y6- STA. 10+33.51 EL. = 18.94

END GRADE -Y6- STA. 11+26.41 = -RABNB- STA. 15+58.38 EL. = 21.26

PI = 11+26.41
EL = 21.26'

PI = 10+87.76
EL = 20.48'
VC = 40'
K = 36
DSP = 30

BEGIN GRADE -Y6A- STA. 10+72.28 EL. = 20.00

END GRADE -Y6A- STA. 11+31.71 = -RABNB- STA. 15+45.73 EL. = 21.33

BEGIN GRADE -Y6B- STA. 10+82.35 EL. = 20.28

PI = 11+04.38
EL = 20.82'
VC = 32'
K = 19
DSP = 30

END GRADE -Y6B- STA. 11+27.15 = -RABNB- STA. 15+70.79 EL. = 20.99

18.42

21.87

20.00

21.33

20.28

20.99

(+)11.46112%

(+)3.10487%

(+)2.00000%

(+)2.23677%

(+)2.42954%

(+)0.74084%

PI = 10+40.00
EL = 19.00'
VC = 40'
K = 24
DSP = 20

-Y6-

-Y6A-

-Y6B-

10+00 11+00 11+00 12+00 11+00

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PROJECT REFERENCE NO.	SHEET NO.
W-5306	13

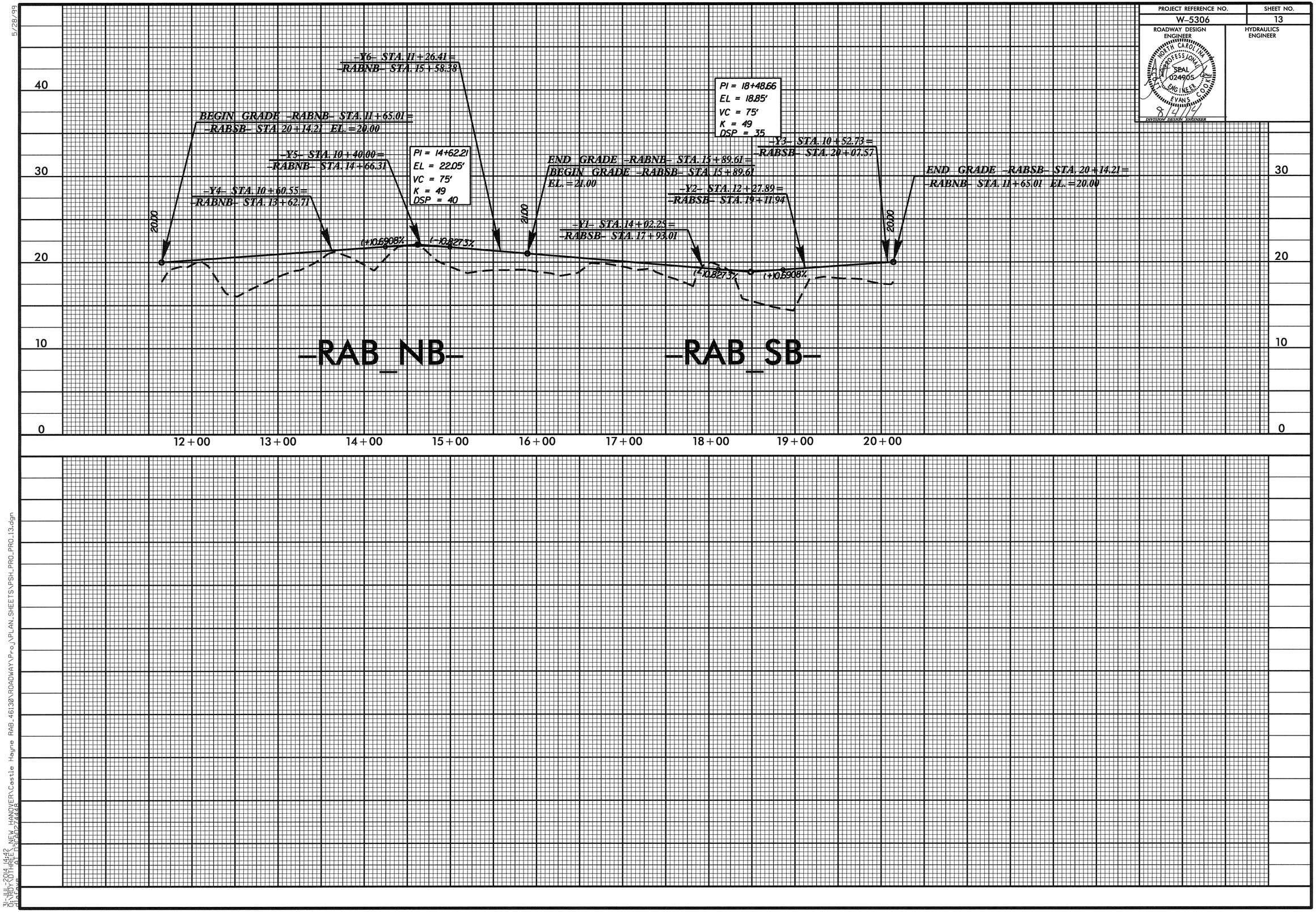
ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 024905 ENGINEER SCOTT EVANS COOKE

8/4/14

DIVISION DESIGN ENGINEER



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