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| PROJECT REFERENCE NO. 1-5986B | SHEET NO. 132 |
| ROADWAY DESIGN ENGINEER SUSAN C LANCASTER SEAL 027373 ENGINEER SUSAN C LANCASTER 5/11/2021 | HYDRAULICS ENGINEER JOSHUA G DIXON PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G DIXON 5/11/2021 |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |
| Michael Baker Engineering, Inc. 8000 Regency Park Suite 600 Cary, NC 27518 NC License: E-1084 | SUNGATE DESIGN GROUP, P.A. 800 JONES FRANKLIN ROAD RALEIGH, NORTH CAROLINA 27609 NC CDR No. C-0890 |

-Y18RPA-

PIPE HYDRAULIC DATA
42" RCP Sta. 15+18 -Y18RPA-

| | | |
|-----------------------|----------|-----|
| DRAINAGE AREA | = 8.8 | AC |
| DESIGN FREQUENCY | = 25 | YRS |
| DESIGN DISCHARGE | = 44 | CFS |
| DESIGN HW ELEVATION | = 221.2 | FT |
| 100 YEAR DISCHARGE | = 52 | CFS |
| 100 YEAR HW ELEVATION | = 221.74 | FT |
| OVERTOPPING FREQUENCY | = 100 + | YRS |
| OVERTOPPING DISCHARGE | = 52 + | CFS |
| OVERTOPPING ELEVATION | = 226.10 | FT |

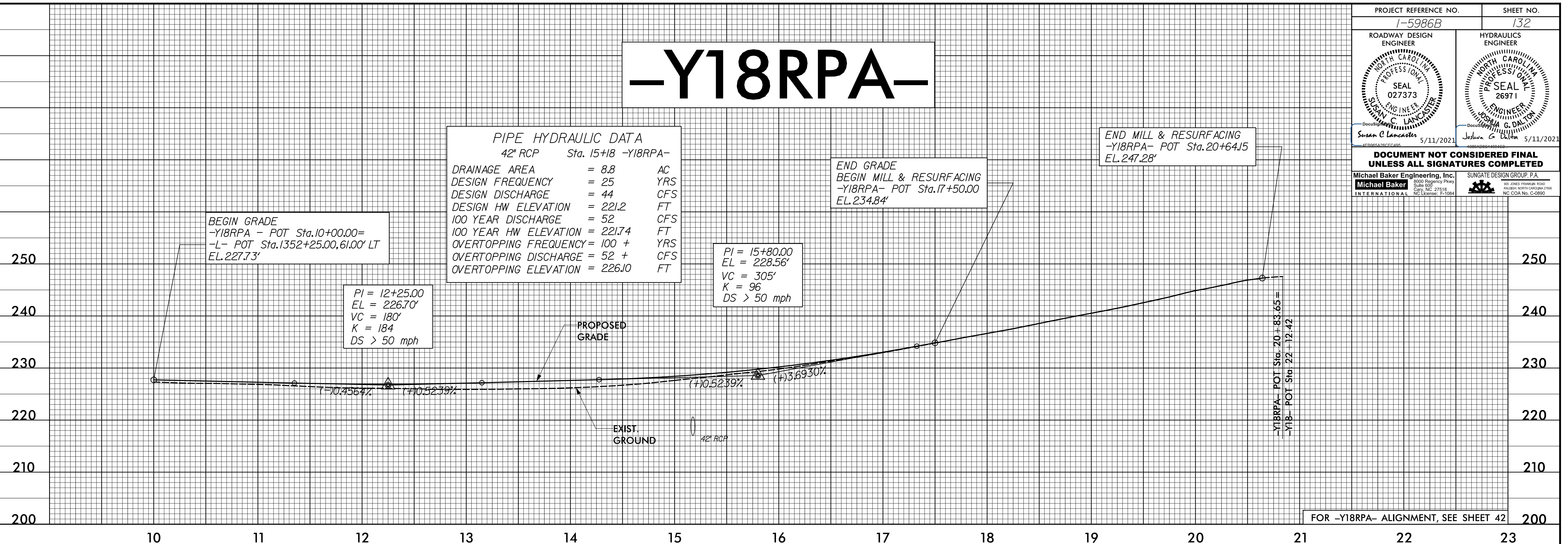
BEGIN GRADE
-Y18RPA - POT Sta.10+00.00=
-L- POT Sta.1352+25.00,61.00' LT
EL.227.73'

PI = 12+25.00
EL = 226.70'
VC = 180'
K = 184
DS > 50 mph

PI = 15+80.00
EL = 228.56'
VC = 305'
K = 96
DS > 50 mph

END GRADE
BEGIN MILL & RESURFACING
-Y18RPA- POT Sta.17+50.00
EL.234.84'

END MILL & RESURFACING
-Y18RPA- POT Sta.20+64.15
EL.247.28'



FOR -Y18RPA- ALIGNMENT, SEE SHEET 42

-Y18RPB-

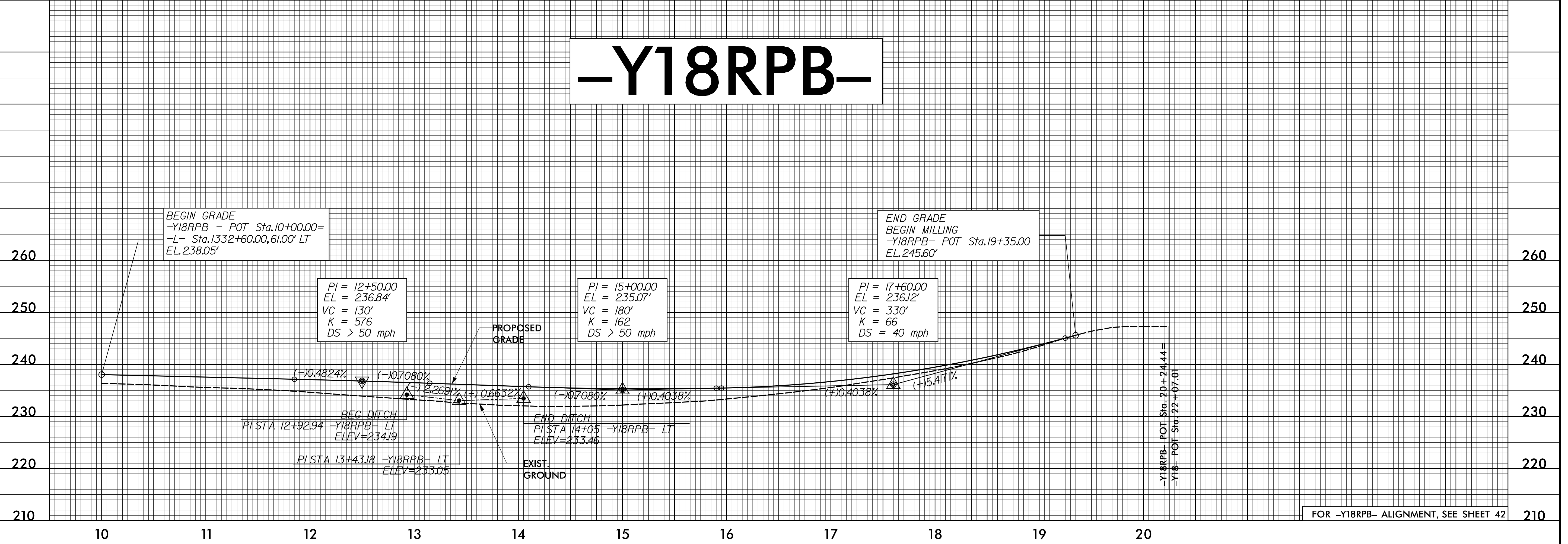
BEGIN GRADE
-Y18RPB - POT Sta.10+00.00=
-L- Sta.1332+60.00,61.00' LT
EL.238.05'

PI = 12+50.00
EL = 236.84'
VC = 130'
K = 576
DS > 50 mph

PI = 15+00.00
EL = 235.07'
VC = 180'
K = 162
DS > 50 mph

PI = 17+60.00
EL = 236.12'
VC = 330'
K = 66
DS = 40 mph

END GRADE
BEGIN MILLING
-Y18RPB- POT Sta.19+35.00
EL.245.60'



FOR -Y18RPB- ALIGNMENT, SEE SHEET 42

5/28/19

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