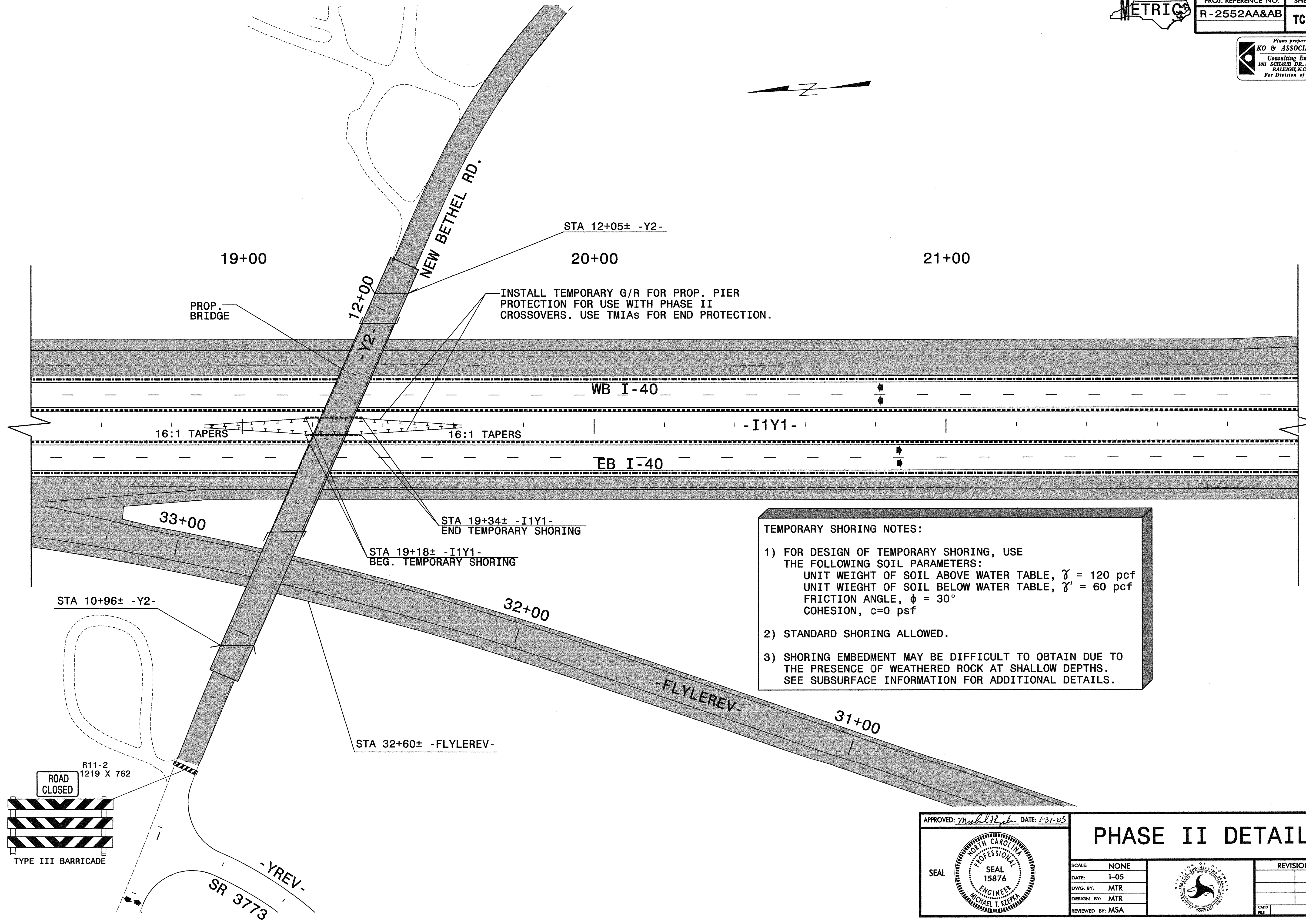
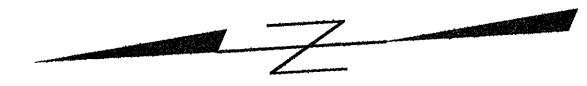


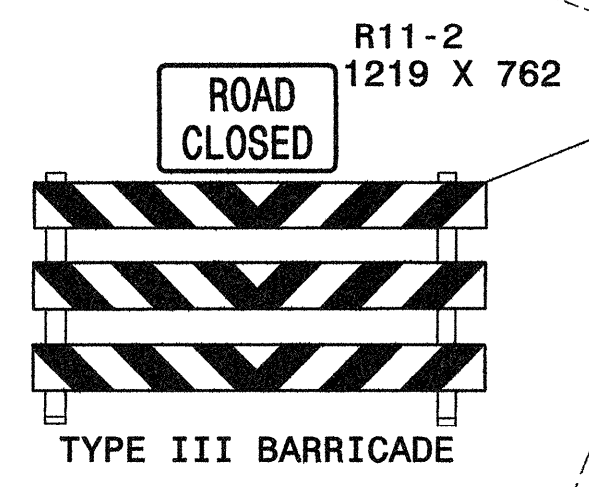


Plans prepared by:  
**KO & ASSOCIATES, P.C.**  
 Consulting Engineers  
 1011 SCHAUH DR., SUITE #202  
 RALEIGH, N.C. 27606  
 For Division of Highways

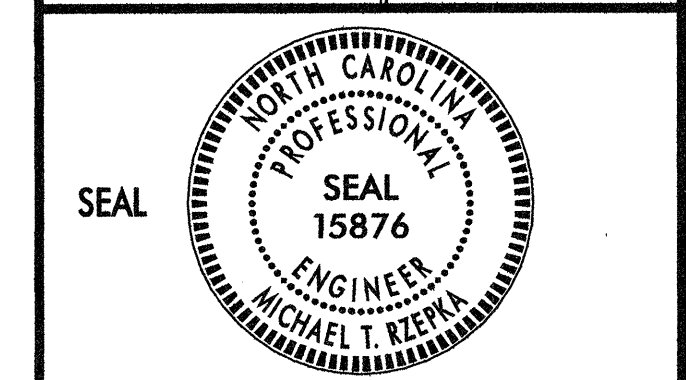


**TEMPORARY SHORING NOTES:**

- 1) FOR DESIGN OF TEMPORARY SHORING, USE THE FOLLOWING SOIL PARAMETERS:  
 UNIT WEIGHT OF SOIL ABOVE WATER TABLE,  $\gamma = 120$  pcf  
 UNIT WIEGHT OF SOIL BELOW WATER TABLE,  $\gamma' = 60$  pcf  
 FRICTION ANGLE,  $\phi = 30^\circ$   
 COHESION,  $c=0$  psf
- 2) STANDARD SHORING ALLOWED.
- 3) SHORING EMBEDMENT MAY BE DIFFICULT TO OBTAIN DUE TO THE PRESENCE OF WEATHERED ROCK AT SHALLOW DEPTHS. SEE SUBSURFACE INFORMATION FOR ADDITIONAL DETAILS.



APPROVED: *Michael T. Kzepl* DATE: 1-31-05



## PHASE II DETAIL

|                  |  |           |
|------------------|--|-----------|
| SCALE: NONE      |  | REVISIONS |
| DATE: 1-05       |  |           |
| DWG. BY: MTR     |  |           |
| DESIGN BY: MTR   |  |           |
| REVIEWED BY: MSA |  |           |

\$FILE\$ \$DATE\$ \$TIME\$