# PROJ. REFERENCE NO. U-5839 TMP-2A Infrastructure Consulting Services, Inc. dba RAMEY KEMP ASSOCIATES 8210 University Executive Park Drive, Suite 220 Charlotte. NC 28262 NC License No. F-1489 www.rameykemp.com

# TEMPORARY SHORING NOTES

### TEMPORARY SHORING 1

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 23+24± 5.4± FT LT OF -L- TO STATION 23+75± 1.7± FT LT OF -L-. FOR THE FOLLOWINGS ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT = 120 LB/CF FRICTION ANGLE (F) = 30 DEGREES COHESION (C) = 0 LB/SF GROUNDWATER ELEVATION = N/A FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 23+24± 5.4± FT LT OF -L- TO STATION 23+75± 1.7± FT LT OF -L-. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION 23+24± 5.4± FT LT OF -L- TO STATION 23+75± 1.7± FT LT OF -L- MAY NOT PENETRATE BELOW ELEVATION 2,640 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 23+24± 5.4± FT LT OF -L-TO STATION 23+75± 1.7± FT LT OF -L-. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING FROM STATION 23+24± 5.4± FT LT OF -L- TO STATION 23+75± 1.7± FT LT OF -L-. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

## TEMPORARY SHORING 2

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 25+41± 3.9± FT RT OF -L- TO STATION 25+79± 4.9± FT RT OF -L-. FOR THE FOLLOWINGS ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT = 120 LB/CF FRICTION ANGLE (F) = 30 DEGREES COHESION (C) = 0 LB/SF GROUNDWATER ELEVATION = N/A FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 25+41± 3.9± FT RT OF -L- TO STATION 25+79± 4.9± FT RT OF -L-. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 25+41± 3.9± FT RT OF -L-TO STATION 25+79± 4.9± FT RT OF -L-. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING FROM STATION 25+41± 3.9± FT RT OF -L- TO STATION 25+79± 4.9± FT RT OF -L-. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

### TEMPORARY SHORING 3

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

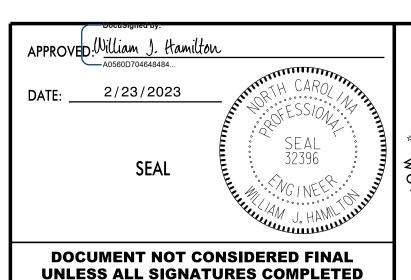
DESIGN TEMPORARY SHORING FROM STATION 30+14± 2.7± FT LT OF -L- TO STATION 30+64± 2.7± FT LT OF -L-. FOR THE FOLLOWINGS ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

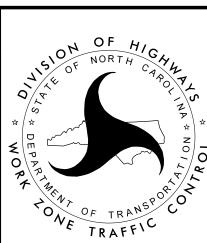
UNIT WEIGHT = 120 LB/CF FRICTION ANGLE (F) = 30 DEGREES COHESION (C) = 0 LB/SF GROUNDWATER ELEVATION = N/A FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 30+14± 2.7± FT LT OF -L- TO STATION 30+64± 2.7± FT LT OF -L-. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 30+14± 2.7± FT LT OF -L-TO STATION 30+64± 2.7± FT LT OF -L-. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING FROM STATION 30+14± 2.7± FT LT OF -L- TO STATION 30+64± 2.7± FT LT OF -L-. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.





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