TEMPORARY SHORING NOTES

SHORING LOCATION NO. 1

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION. TEMPORARY SHORING IS REQUIRED FOR THE DETOUR CONSTRUCTION FROM STATION 13+38+/- -L-, 22' LT., TO STATION 13+53+/- -L-, 22' LT.

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 13+38+/- -L-, 22' LT., TO STATION 13+53+/- -L-, 22' LT., FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

> UNIT WEIGHT $(\gamma) = 120 \text{ LB/CF}$ FRICTION ANGLE (ϕ) = 30 DEGREES COHESION (c) = 0 LB/SFGROUNDWATER ELEVATION = 2180 FT

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION 13+38+/- -L-, 22' LT., TO STATION 13+53+/- -L-, 22' LT. MAY NOT PENETRATE BELOW ELEVATION 2166 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 13+38+/- -L-, 22' LT., TO STATION 13+53+/- -L-, 22' LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

SHORING LOCATION NO. 2

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION. TEMPORARY SHORING IS REQUIRED FOR THE END BENT INSTALLATION FROM STATION 12+62+/- -L-, 21' LT., TO STATION 12+77+/- -L-, 21' LT.

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 12+62+/- -L-, 21' LT., TO STATION 12+77+/- -L-, 21' LT., FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

> UNIT WEIGHT (γ) = 120 LB/CF FRICTION ANGLE (ϕ) = 30 DEGREES COHESION (c) = 0 LB/SFGROUNDWATER ELEVATION = 2182 FT

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION 12+62+/- -L-, 21' LT., TO STATION 12+77+/- -L-, 21' LT. MAY NOT PENETRATE BELOW ELEVATION 2175 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 12+62+/- -L-, 21' LT., TO STATION 12+77+/- -L-, 21' LT.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 12+62+/- -L-, 21' LT., TO STATION 12+77+/- -L-, 21' LT. SEE 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 12+62+/- -L-, 21' LT., TO STATION 12+77+/- -L-, 21' LT. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

	SHORING LOCATION NO.	BEGIN STATION AND OFFSET	END STATION AND OFFSET	ESTIMATED AVERAGE HEIGHT	ESTIMATED MAXIMUM HEIGHT	SHORING LOCATION TYPE
	NO. 1	STA. 13+38+/L- 22 FT. LT.	STA. 13+53+/L- 22 FT. LT.	4.5 FT.	6.0 FT.	ROADWAY
•	NO. 2	STA. 12+62+/L- 21 FT. LT.	STA. 12+77+/L- 21 FT. LT.	5.5 FT.	7.0 FT.	STRUCTURE

APPROVED: Shiping Yang DATE: 3/17/2020

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TEMPORARY SHORING NOTES