

**NOTES**

FOR TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE SPECIAL PROVISIONS.

SELECT THE APPROPRIATE STANDARD SHORING DESIGN FOR TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC IN LIEU OF SUBMITTING CONTRACTOR SHORING DESIGN. USE STANDARD SHORING DESIGN ONLY WHEN ALL OF THE FOLLOWING CRITERIA ARE MET:

- MAXIMUM HEIGHT OF SHORING EXCAVATION IS 11 FEET
- GROUNDWATER TABLE IS NOT ABOVE BOTTOM OF THE EXCAVATION
- BACKFILL SLOPE IS 2:1 OR FLATTER
- TRAFFIC SURCHARGE EQUAL TO 240 PSF
- SOLDIER PILE SPACING OF 6 FEET
- TIMBER LAGGING SHALL HAVE A MINIMUM THICKNESS OF 3 INCHES

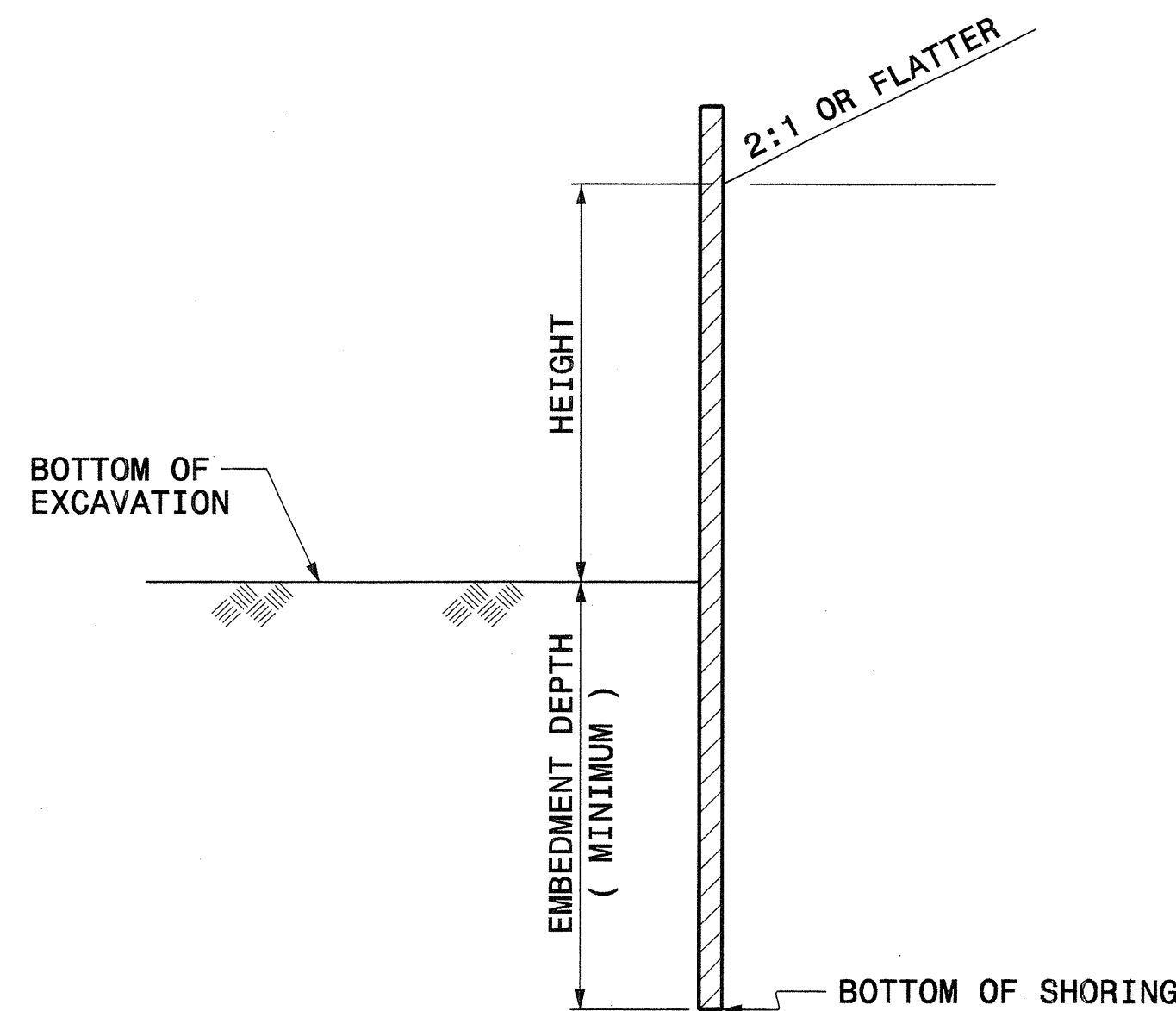
SUBMIT "STANDARD SHORING SELECTION" FORM TO ENGINEER PRIOR TO CONSTRUCTION OF SHORING.

DO NOT USE THE STANDARD SHORING DESIGNS WHEN VERY SOFT SOIL OR MUCK IS PRESENT WITHIN THE SHORING EMBEDMENT ZONE.

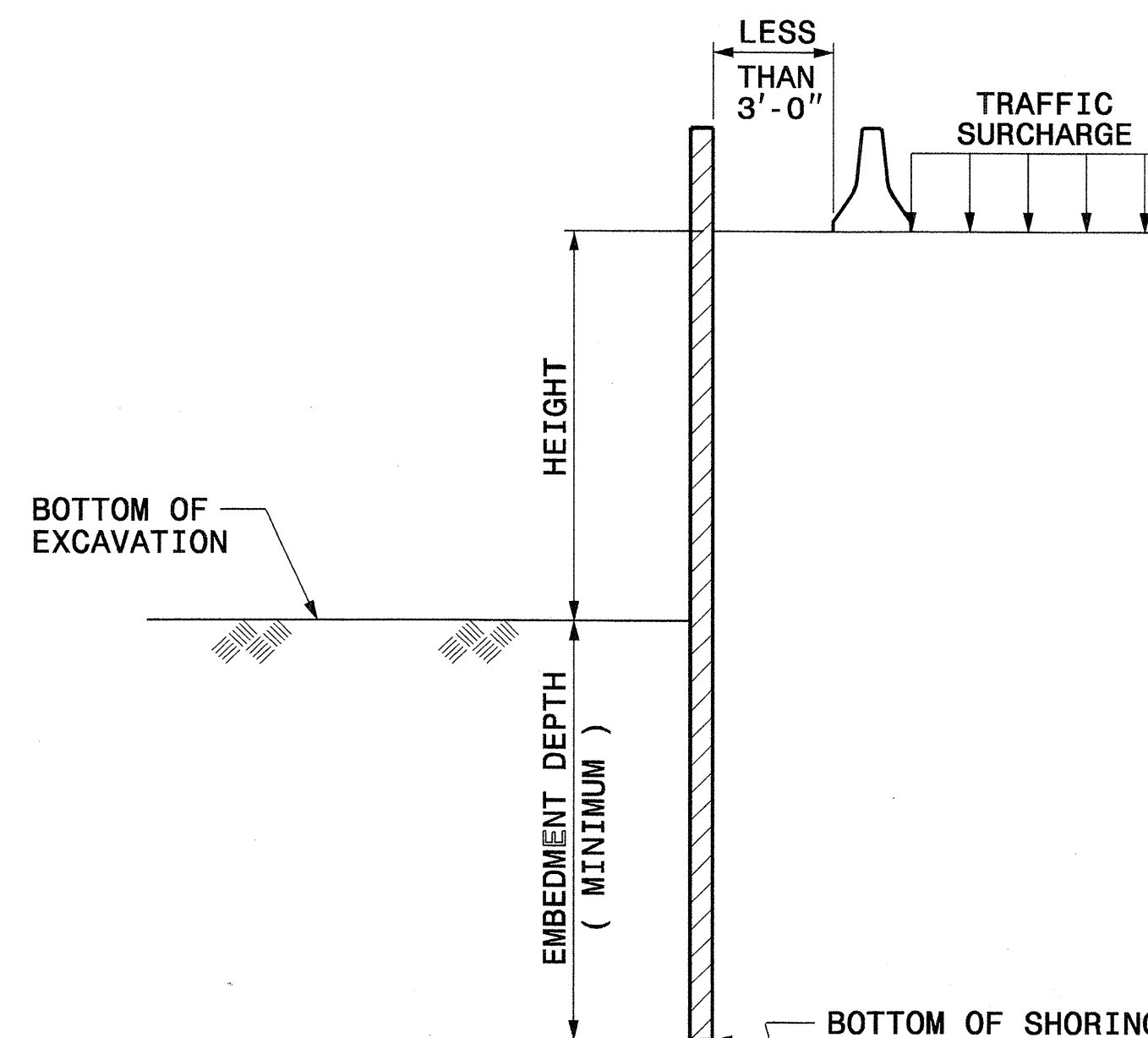
CONTRACTOR MUST VERIFY LOCATION OF GROUNDWATER TABLE PRIOR TO CONSTRUCTION OF SHORING.

THE CONTRACTOR HAS THE OPTION OF USING SOLDIER PILES SET IN DRILLED HOLES WITH A SHORTENED LENGTH EQUAL TO 75% OF THE EMBEDMENT DEPTHS SHOWN IN THE TABLE. FOR DRILLING REQUIREMENTS, SEE TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC SPECIAL PROVISION.

IF DESIGN EMBEDMENT DEPTH IS NOT ACHIEVED, THEN NOTIFY THE ENGINEER IMMEDIATELY.



**TEMPORARY SHORING**  
(SLOPING OR LEVEL WITH TRAFFIC SURCHARGE, NO BARRIER IMPACT)



**TEMPORARY SHORING - BARRIER SUPPORTED**  
(LEVEL WITH TRAFFIC SURCHARGE, WITH BARRIER IMPACT)

**GROUNDWATER TABLE CONDITIONS**

- 1) WHEN WATER TABLE IS ABOVE THE BOTTOM OF EXCAVATION, SUBMIT CONTRACTOR SHORING DESIGN TO THE ENGINEER FOR APPROVAL.
- 2) WHEN WATER TABLE IS BELOW THE BOTTOM OF EXCAVATION AND ABOVE THE BOTTOM OF SHORING, USE "WATER TABLE" CASE.
- 3) WHEN WATER TABLE IS BELOW BOTTOM OF SHORING, USE "NO WATER TABLE" CASE.

CASE	HEIGHT (FT)	TEMPORARY SHORING					TEMPORARY SHORING - BARRIER SUPPORTED				
		CANTILEVER SHEETING		DRIVEN SOLDIER PILE			CANTILEVER SHEETING		DRIVEN SOLDIER PILE		
		MINIMUM EMBEDMENT DEPTH (FT)	MINIMUM SECTION MODULUS (IN <sup>3</sup> / FT OF WALL)	MINIMUM EMBEDMENT DEPTH (FT)			MINIMUM EMBEDMENT DEPTH (FT)	MINIMUM SECTION MODULUS (IN <sup>3</sup> / FT OF WALL)	MINIMUM EMBEDMENT DEPTH (FT)		
			HP 10x42	HP 12x53	HP 14x73			HP 10x42	HP 12x53	HP 14x73	
"NO WATER TABLE"	< 6	7.5	3.0	8.0	8.0	8.0	11.0	10.0	9.5	9.5	9.5
	7	8.5	4.5	9.5	9.5	9.5	12.0	12.0	10.5	10.5	10.5
	8	10.0	6.5	10.5	10.5	10.5	12.5	14.0	11.5	11.5	11.5
	9	11.0	9.5	--	12.0	12.0	13.5	16.5	--	12.5	12.5
	10	12.5	13.0	--	--	13.5	14.0	19.5	--	13.5	13.5
	11	13.5	17.0	--	--	14.5	15.0	22.5	--	--	14.5
"WATER TABLE"	< 6	11.5	4.5	11.5	11.5	11.5	16.0	12.0	13.0	13.0	13.0
	7	13.0	7.0	13.0	13.0	13.0	17.0	14.5	14.5	14.5	14.5
	8	15.0	10.0	--	15.0	15.0	18.0	17.0	--	15.5	15.5
	9	17.0	14.0	--	17.0	17.0	19.0	20.0	--	17.0	17.0
	10	18.5	19.5	--	--	18.5	20.0	23.5	--	--	18.5
	11	20.5	26.0	--	--	--	21.0	28.0	--	--	20.0



**DESIGN SERVICES UNIT**  
**STANDARDS AND SPECIAL DESIGN**  
Office 919-250-4128 FAX 919-250-4119

**STANDARD TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC**

ORIGINAL BY: SOILS & FOUNDATIONS DATE: 10-2001  
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 CHECKED BY: [Signature] DATE: 6/17/04  
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