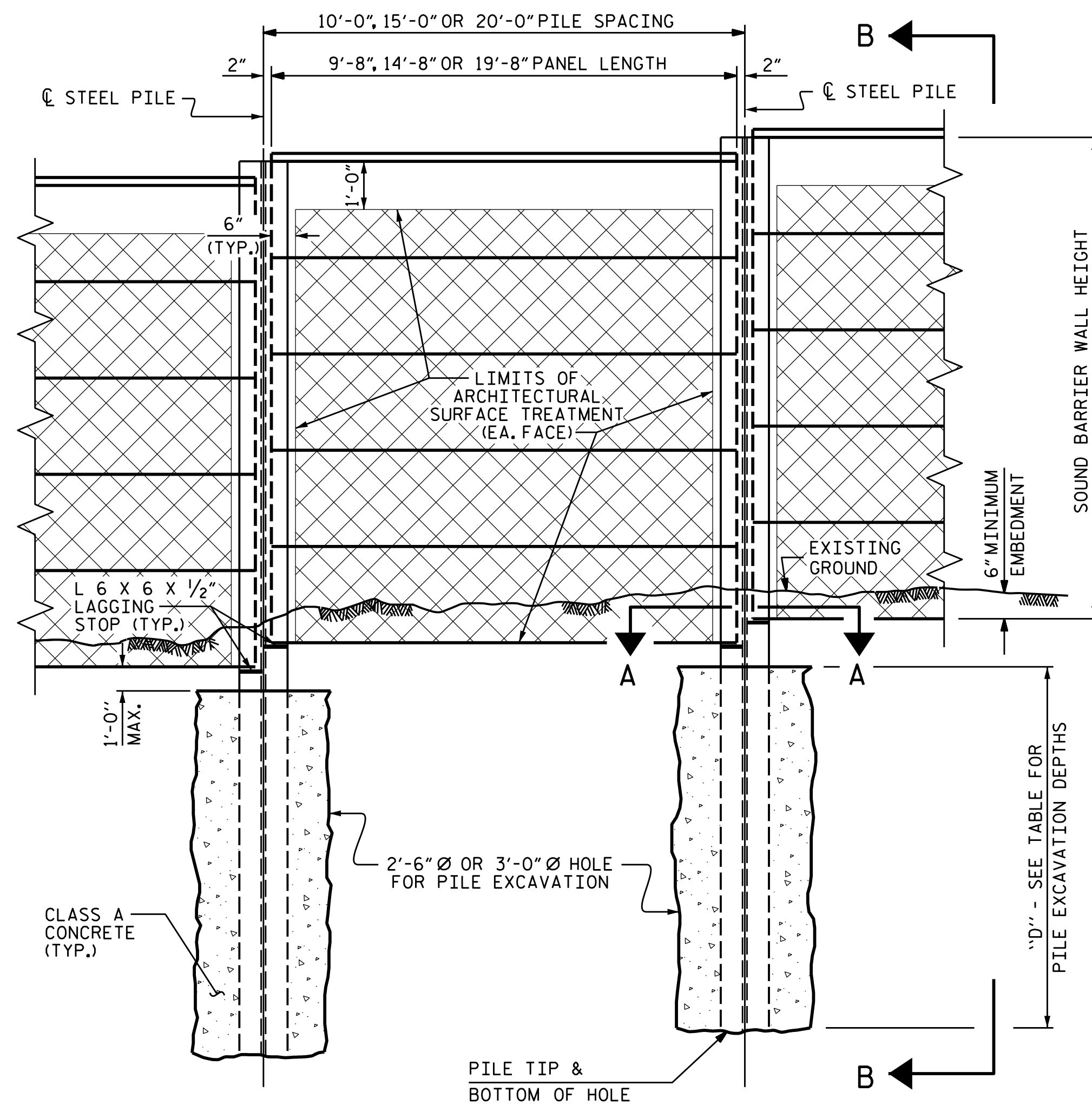


12/14/2023 11:38:42 AM c:\pwworking\king\ecom\_ds21\_na\_2020\d0267668\I2513AAAB\_SMU\_NW04.dgn

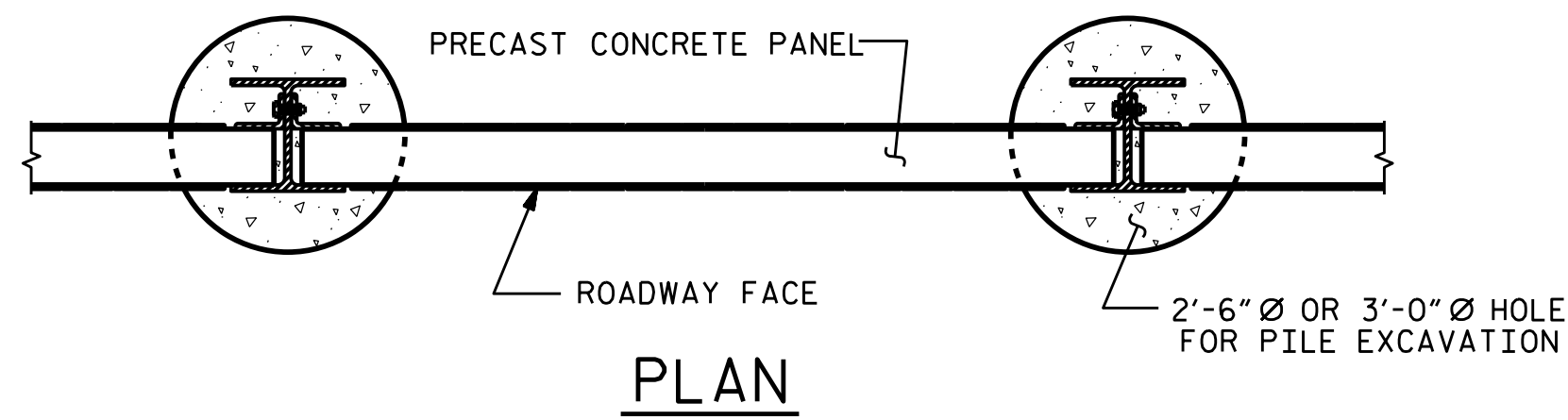
BILL OF MATERIAL	
SOUND BARRIER WALL	1605 S.F.
ARCHITECTURAL SURFACE TREATMENT	
WALL -NW5C-	2788 S.F.
EXIST. WALL EAST OF SMOKEY PACK HIGHWAY	9465 S.F.
EXIST. WALL WEST OF SAND HILL ROAD	11450 S.F.
APPLICATION OF SOUND BARRIER WALL COATING	LUMP SUM
QUANTITIES PROVIDED ARE APPROXIMATE AND ARE FOR BID PURPOSES ONLY.	
ARCHITECTURAL SURFACE TREATMENT	
TEXTURE OPTION:	DRystack
STAIN OPTION:	FED. COLORS # 26420/36373/36173/26081

BEGIN WALL STATION	END WALL STATION	SLOPE	MAX. WALL HEIGHT (ft)	PILE EXCAVATION DEPTHS, "D" (ft)		
				S = 10ft	S = 15ft	S = 20ft
-NW5C- 43+10	-NW5C- 43+85*	6:1	23	9	10	11

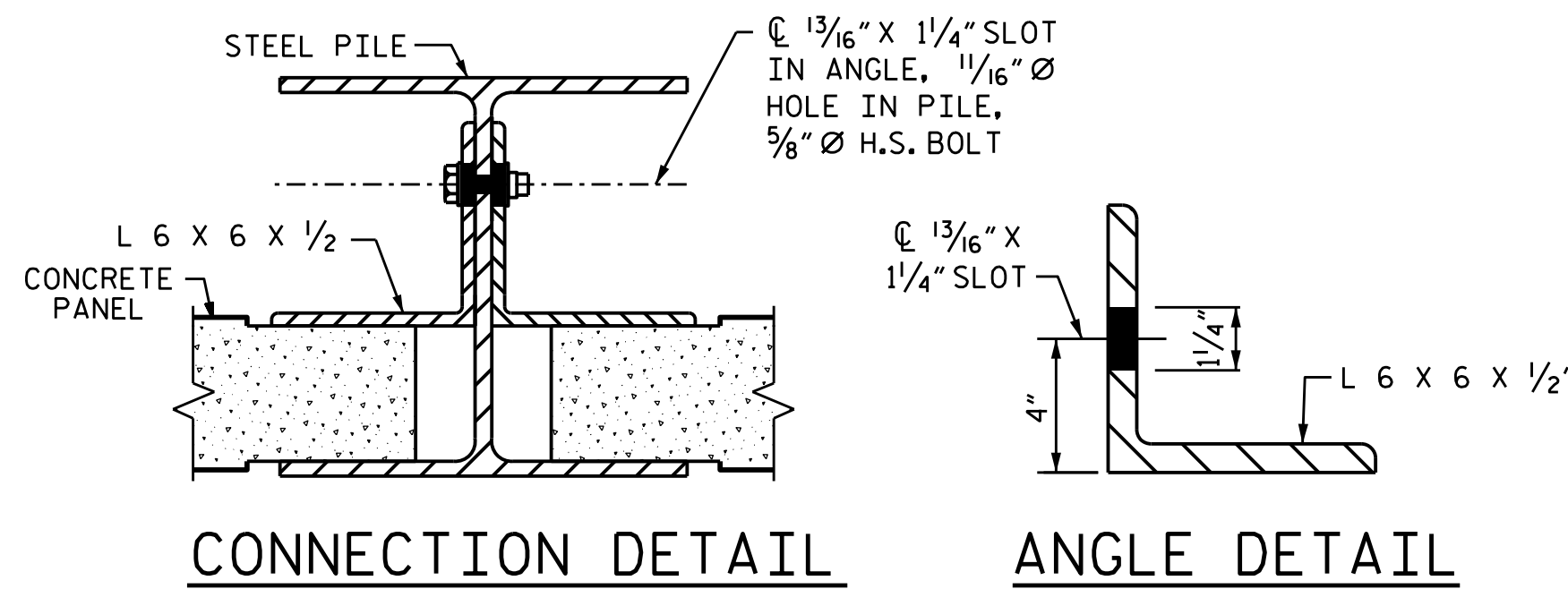
STEEL PILES DESIGN WIND PRESSURE = 40 PSF			
PILE SPACING	MAXIMUM WALL HEIGHT (H)	MINIMUM W SIZE STEEL PILES	MINIMUM HP SIZE STEEL PILES
10'-0"	H ≤ 15'	W 12 X 40 W 14 X 48	HP 12 X 53 HP 14 X 73
	15' < H ≤ 20'	W 12 X 45 W 14 X 48	HP 12 X 53 HP 14 X 73
	20' < H ≤ 25'	W 12 X 65 W 14 X 61	HP 12 X 53 HP 14 X 73
	25' < H ≤ 29'	W 12 X 87 W 14 X 90	HP 14 X 73
15'-0"	H ≤ 15'	W 12 X 40 W 14 X 48	HP 12 X 53 HP 14 X 73
	15' < H ≤ 20'	W 12 X 53 W 14 X 61	HP 12 X 53 HP 14 X 73
	20' < H ≤ 25'	W 12 X 72 W 14 X 90	HP 12 X 74 HP 14 X 73
	25' < H ≤ 29'	W 12 X 120 W 14 X 90	HP 14 X 89
20'-0"	H ≤ 15'	W 12 X 40 W 14 X 48	HP 12 X 53 HP 14 X 73
	15' < H ≤ 20'	W 12 X 58 W 14 X 61	HP 12 X 63 HP 14 X 73
	20' < H ≤ 25'	W 12 X 96 W 14 X 90	HP 14 X 89
	25' < H ≤ 29'	W 12 X 152 W 14 X 109	HP 14 X 117



ELEVATION

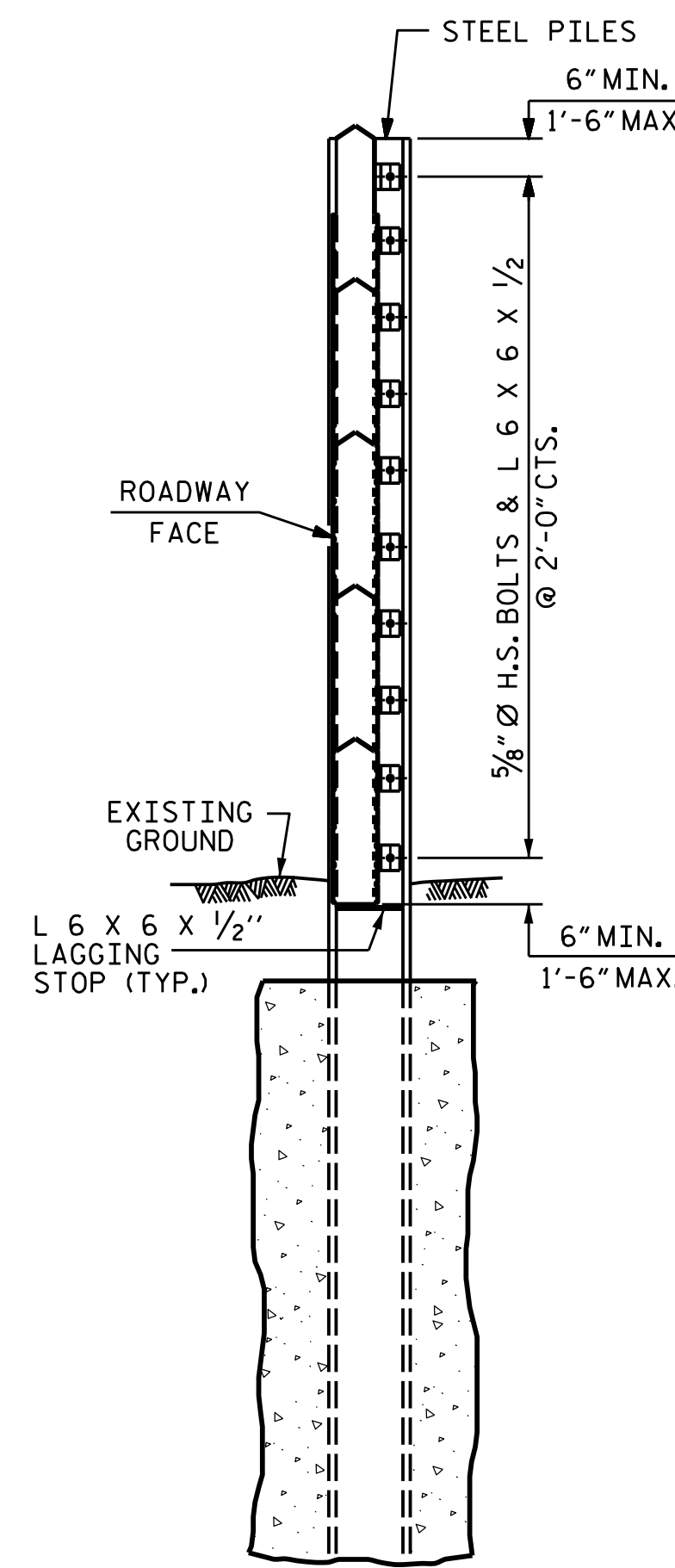


PLAN

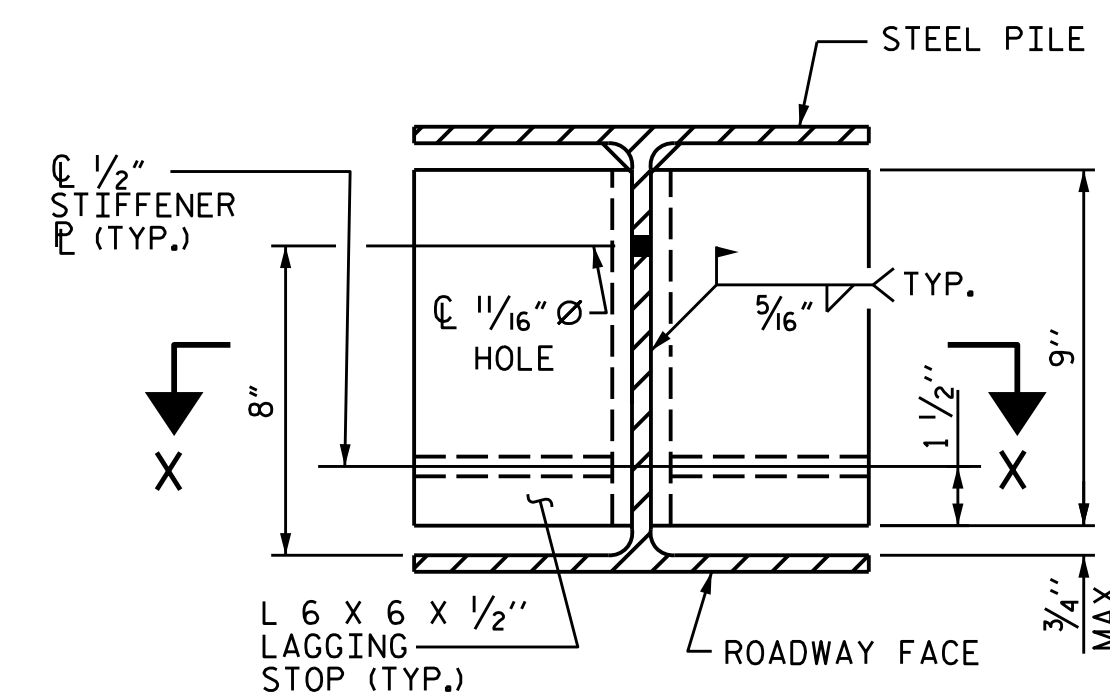


CONNECTION DETAIL

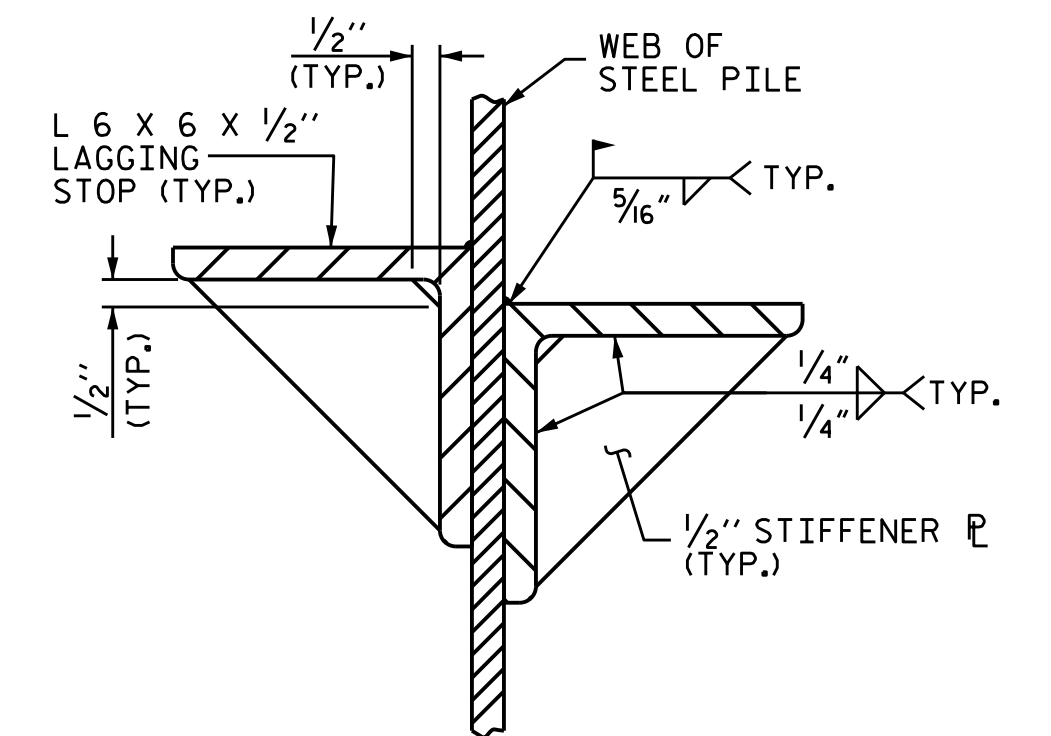
ANGLE DETAIL



SECTION B-B



SECTION A-A



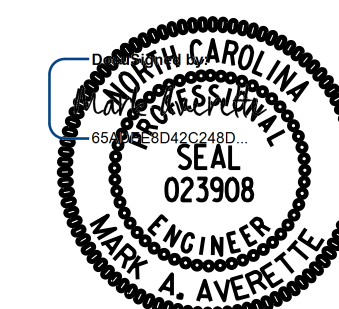
SECTION X-X

PROJECT NO. **I-2513AA/AB**  
**BUNCOMBE** COUNTY  
 STATION: **63+46.57 -Y-**

SHEET 4 OF 5

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**SOUND BARRIER WALL  
 (STEEL PILES)  
 -NW5C-**



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DRAWN BY : **T. BANKOVICH** DATE : **7-23**  
 CHECKED BY : **M.A. AVERETTE** DATE : **7-23**  
 DESIGN ENGINEER OF RECORD: **M.A. AVERETTE** DATE : **7-23**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	NW-4
1			3			TOTAL SHEETS
2			4			5

**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**