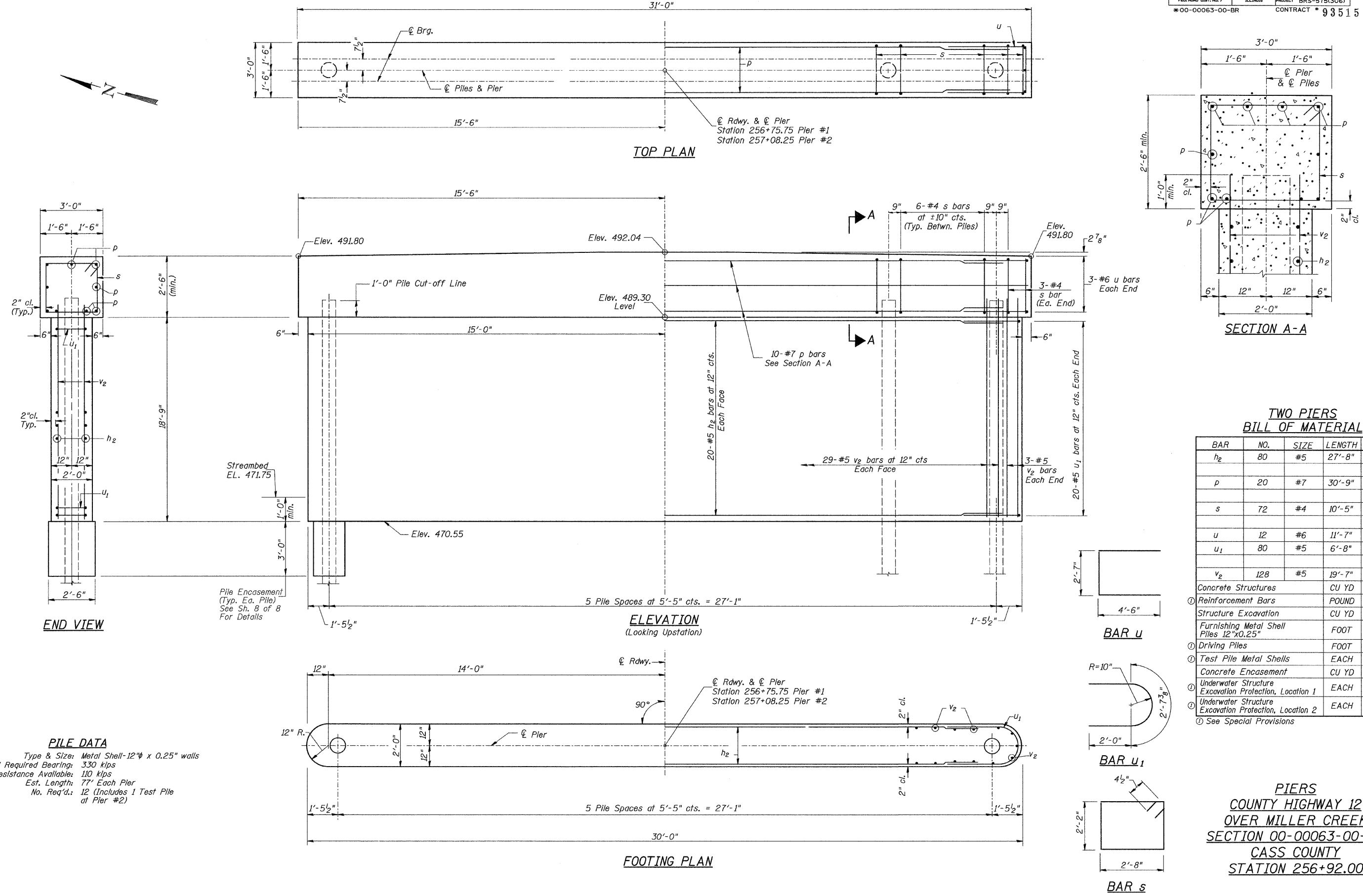


NOTES:
All edges shall have standard
3/4" chamfer.



**TWO PIERS
BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
h ₂	80	#5	27'-8"	—
p	20	#7	30'-9"	—
s	72	#4	10'-5"	□
u	12	#6	11'-7"	□
u ₁	80	#5	6'-8"	□
v ₂	128	#5	19'-7"	—
Concrete Structures		CU YD	93.3	
① Reinforcement Bars		POUND	7,450	
Structure Excavation		CU YD	30	
Furnishing Metal Shell Piles 12"x0.25"		FOOT	847	
① Driving Piles		FOOT	847	
① Test Pile Metal Shells		EACH	1	
Concrete Encasement		CU YD	5.5	
① Underwater Structure Excavation Protection, Location 1		EACH	1	
② Underwater Structure Excavation Protection, Location 2		EACH	1	

① See Special Provisions

PILE DATA
Type & Size: Metal Shell-12"φ x 0.25" walls
Nominal Required Bearing: 330 kips
Allowable Resistance Available: 110 kips
Est. Length: 77' Each Pier
No. Req'd.: 12 (Includes 1 Test Pile at Pier #2)

**PIERS
COUNTY HIGHWAY 12
OVER MILLER CREEK
SECTION 00-00063-00-BR
CASS COUNTY
STATION 256+92.00**