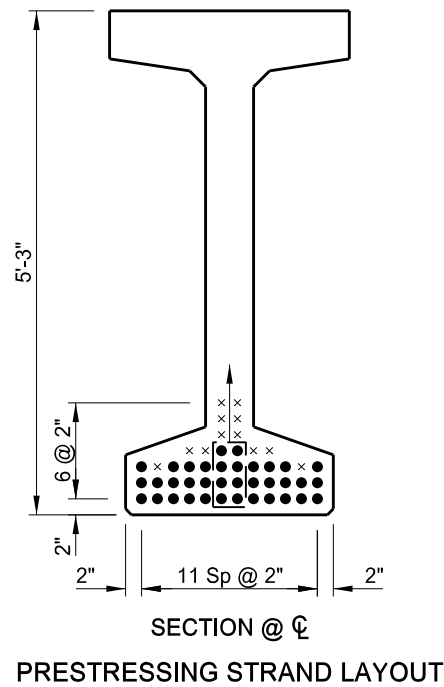
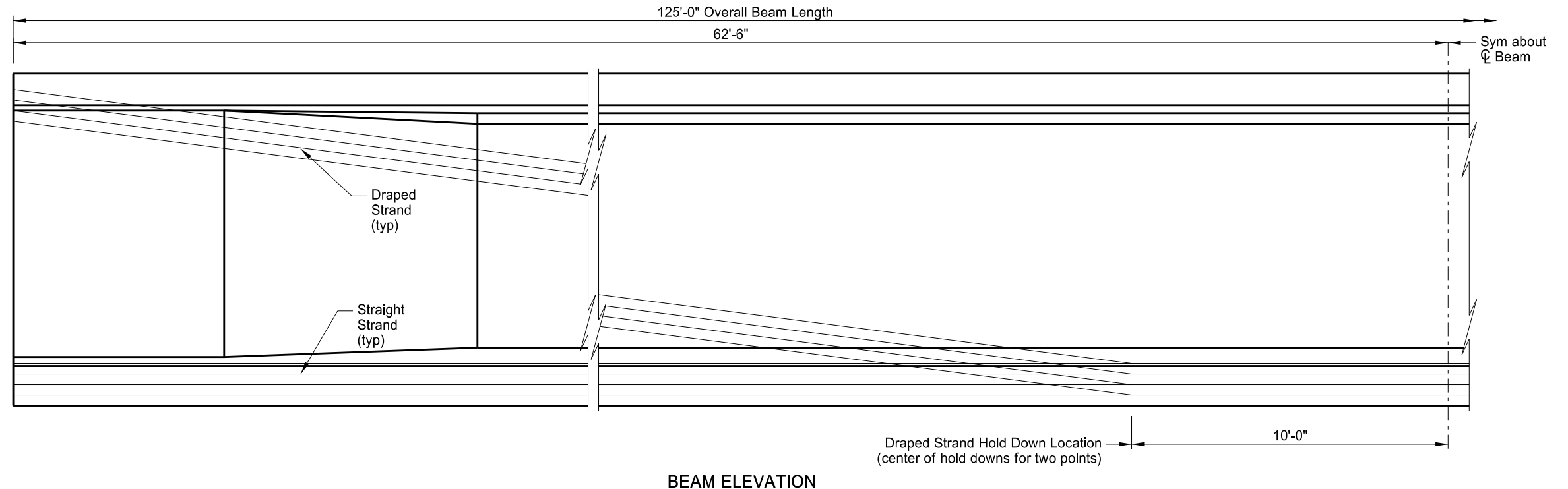
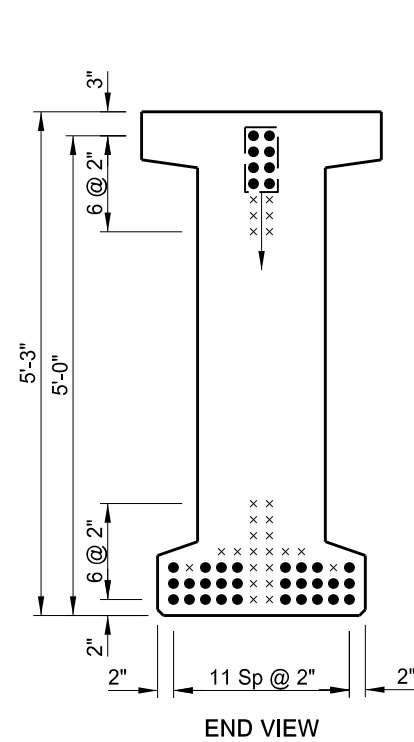


STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	IM-2-094(186)217	170	13



**KEY:**  
 × Vacant Strand Location  
 ● Filled Strand Location (Bonded)  
 [ ] or [ ] Indicates Locations of Draped Strands

BEAM SECTION DATA			
Beam Weight = 787.9 lbs/ft + 5337 lbs			
Beam Length	125	ft	
Total Beam Weight	51.9	tons	
Cross Sectional Area at End	1182.75	in <sup>2</sup>	
Cross Sectional Area at Midspan	732	in <sup>2</sup>	
C.G. from Bottom of Beam at Midspan	31.17	in	
Midspan Moment of Inertia (I)	392,056	in <sup>4</sup>	
Midspan Section Modulus (S <sub>b</sub> )	12,578	in <sup>3</sup>	
MINIMUM CONCRETE COMPRESSIVE STRENGTH			
Detensioning Strength (f <sub>ci</sub> )	7.0	ksi	
Acceptance Strength (f <sub>c</sub> )	7.0	ksi	
PRESTRESSING STRAND DATA			
0.6" Diameter Grade 270 Prestressing Strands			
Initial Prestress = 0.75 * f <sub>pu</sub>			
	Number	Y Distance (inches)	
		Midspan	End
Straight Strands	28	3.86	3.86
Draped Strands	8	5.00	57.00
<b>Total Strands</b>	<b>36</b>	<b>4.11</b>	<b>15.67</b>
PRESTRESS LOSSES			
Elastic Shortening Loss	18.02	ksi	
Long Term Losses	23.41	ksi	
<b>Total Losses</b>	<b>41.43</b>	<b>ksi</b>	
PRESTRESS FORCES			
Initial Prestress Force	1,581.9	kips	
Final Prestress Force after Losses	1,258.3	kips	
ESTIMATED CAMBER			
Midspan Camber at Strand Release	2.50	inches	

This drawing is preliminary and not for construction or implementation purposes.

I-94/PETTIBONE INTERCHANGE	
125'-0" BEAM LENGTH	
PRE-TENSIONED 63" PRESTRESSED I-BEAM	
DRAWING NO.	94-217.146-13