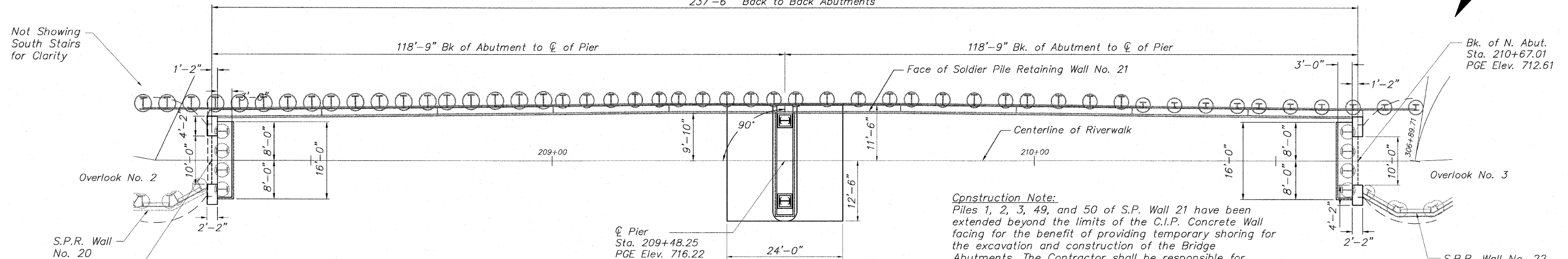


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

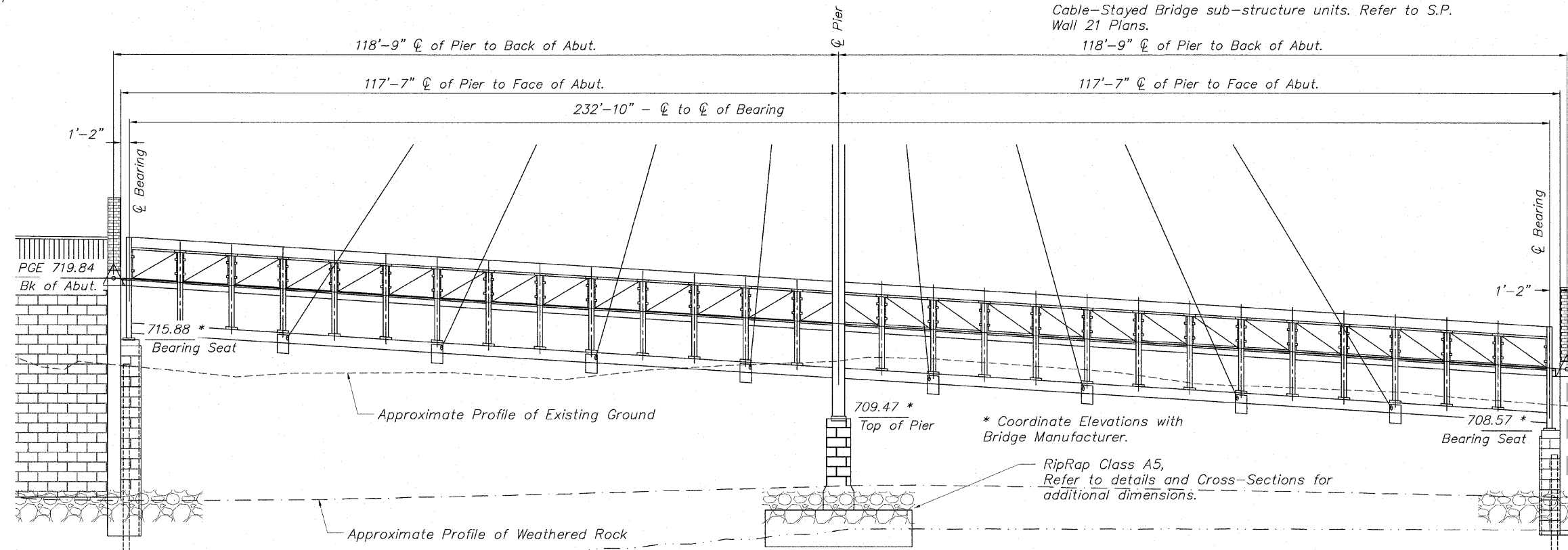


237'-6" Back to Back Abutments



**SUBSTRUCTURE LAYOUT**

**Construction Note:**  
Piles 1, 2, 3, 49, and 50 of S.P. Wall 21 have been extended beyond the limits of the C.I.P. Concrete Wall facing for the benefit of providing temporary shoring for the excavation and construction of the Bridge Abutments. The Contractor shall be responsible for additional slope protection beyond at no additional cost to the contract. The contractor shall coordinate the construction of S.P. Wall 21 with the limits of the Cable-Stayed Bridge sub-structure units. Refer to S.P. Wall 21 Plans.



**SUBSTRUCTURE PROFILE**

**Abutment Reaction Table**

	+ Downward Load		- Upward Load	
	P (Kips)	H (Kips)	L (Kips)	
Dead Load	30.9			
Uniform Live Load	23.7 / -8.1			
Vehicle Load	10.0			
Wind Uplift (20 psf)	24.2 / -8.1			
Wind	±7.3	10.1		
Wind at 45°	±6.7	5.3	9.7	
Thermal				3.5

P - Vertical Load Each Base Plate (4 per Bridge)  
H - Horizontal Load Per Abutment (2 per Bridge)  
L - Longitudinal Load Each Base Plate (4 per Bridge)

**Cable Tower Reaction Table**

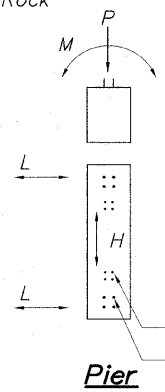
	+ Downward Load		- Upward Load	
	P (Kips)	M (K-Ft.)	L (Kips)	
Dead Load	177.0			
Uniform Live Load	91.2	52.8		
Wind Uplift (20 psf)	14.9 / -7.6			
Wind	14.9 / -7.6	182.6		
Wind at 45°	±8.4	149	7.9	

P - Vertical Load Each Base Plate (2 per Pier)  
M - Moment Load Per Pier (1 per Pier)  
L - Longitudinal Load Each Base Plate (2 per Pier)

**Installation Tower Reaction Table**

	+ Downward Load		- Upward Load	
	P (Kips)	H (Kips)		
Dead Load	44.6			
Construction LL (20 psf)	17.9			
Wind	±8.8	34.6		
Wind at 45°				19.1

P - Vertical Load Each Base Plate (2 per Pier)  
H - Horizontal Load Per Pier (1 per Pier)



**SUBSTRUCTURE LAYOUT  
CABLE-STAYED PEDESTRIAN BRIDGE  
PEDESTRIAN RIVERWALK  
ALONG THE ROCK RIVER  
WINNEBAGO COUNTY  
SECTION NO. 06-00543-00-BT  
STATION 209+48.25  
STRUCTURE NO. 6350**

DESIGNED	CTB
CHECKED	AAG
DRAWN	JAW
PEER REVIEWED	

**McClure**  
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SHEET NO. 2  
II SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00543-00-BT	WINNEBAGO	148	57
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 85521	

H:\05-08 RIVERWALK MUSEUM\DESIGN\DRAWINGS\STRUCTURAL\CPRE108-08 BRIDGES-6350 SUPER.DWG. STR6350 DETAILS (2). 10/26/2010 2:37:05 PM. 11. JMT