

**TOP PLAN**

Note:  
Pier 2 is still within super-elevated roadway, and profile of top of cap is similar to Pier 1. See Elevation Table.

**ELEVATION TABLE**

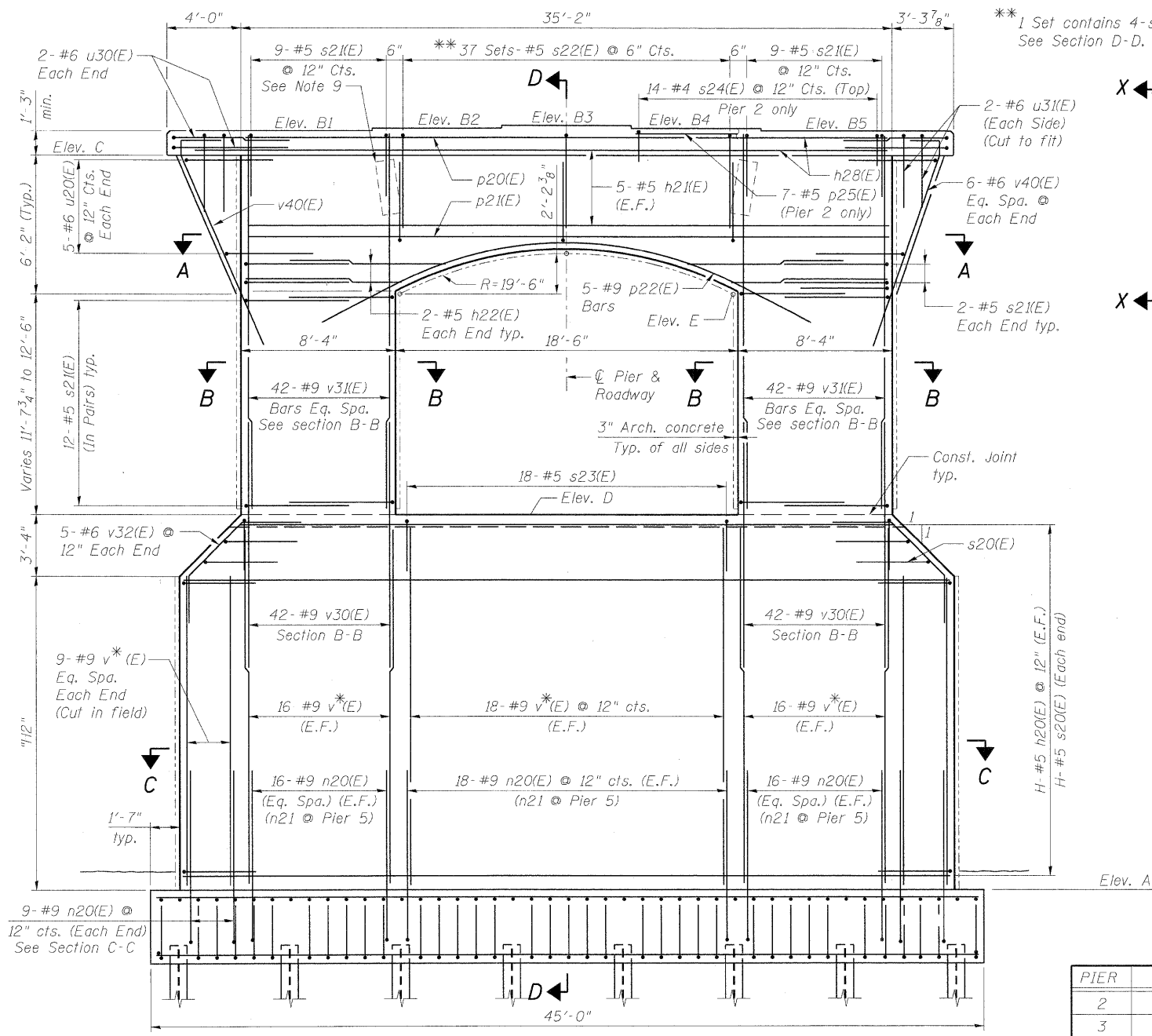
PIER	A	B1	B2	B3	B4	B5	C	D	E
2	680.50	721.19	721.35	721.51	721.61	721.71	719.94	702.13	713.77
3	679.00	720.18	720.32	720.45	720.30	720.15	718.83	700.15	712.66
4	682.50	718.58	718.72	718.85	718.70	718.54	717.23	698.95	711.06
5	687.00	716.49	716.62	716.76	716.60	716.45	715.14	696.97	708.97

**h20(E) & s20(E) BARS**

PIER	H (Quantity)
2	22
3	22
4	17
5	11

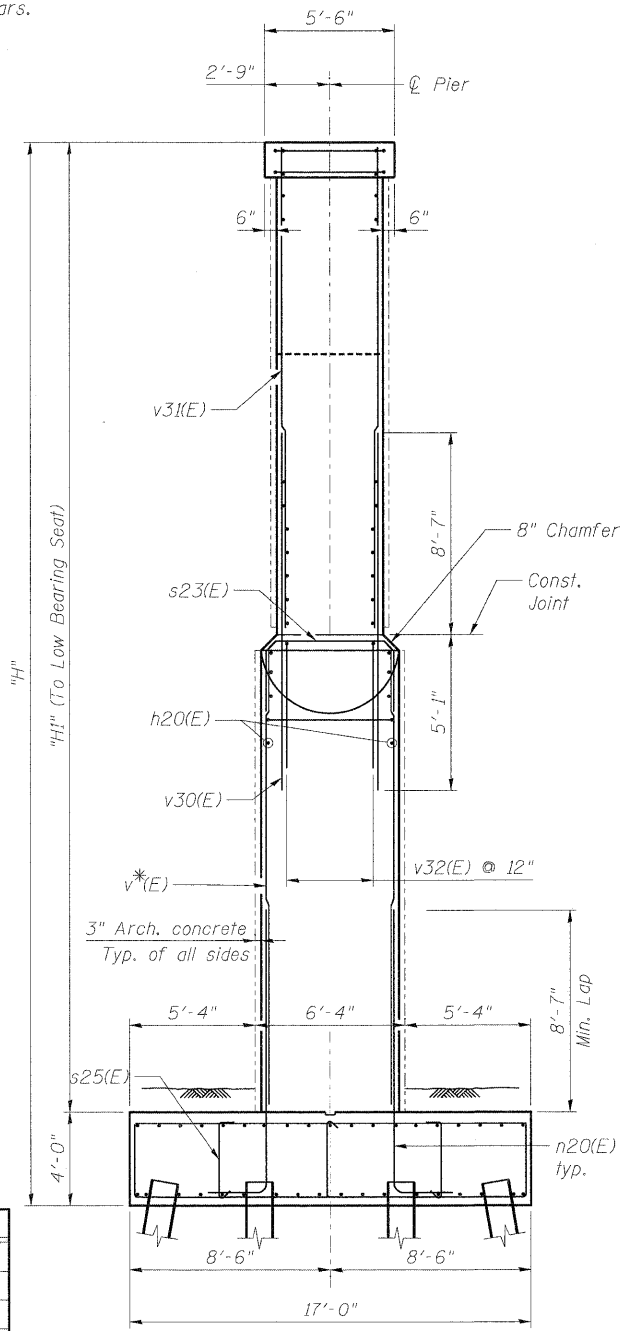
**PIER TABLE**

PIER	H	H1	H2
2	44'-8 1/4"	40'-8 1/4"	18'-3 1/2"
3	45'-1 3/4"	41'-1 3/4"	17'-9 3/4"
4	40'-0 1/2"	36'-0 1/2"	13'-1 1/2"
5	33'-5 1/2"	29'-5 1/2"	6'-7 3/4"



**ELEVATION**

\*\*1 Set contains 4-s22(E) bars. See Section D-D.



**END VIEW**

**PILE DATA-Pier 2**

Type: HP14x73 with pile shoes  
Nominal Required Bearing: 382 kips  
Factored Resistance Available: 210 kips  
Est. Length: 61 feet  
No. Production Piles: 31  
No. Test Piles: 1

**PILE DATA-Pier 3**

Type: HP14x73 with pile shoes  
Nominal Required Bearing: 464 kips  
Factored Resistance Available: 255 kips  
Est. Length: 57 feet  
No. Production Piles: 31  
No. Test Piles: 1

**PILE DATA-Pier 4**

Type: HP14x73 with pile shoes  
Nominal Required Bearing: 428 kips  
Factored Resistance Available: 235 kips  
Est. Length: 56 feet  
No. Production Piles: 31  
No. Test Piles: 1

**PILE DATA-Pier 5**

Type: HP14x73 with pile shoes  
Nominal Required Bearing: 400 kips  
Factored Resistance Available: 220 kips  
Est. Length: 42 feet  
No. Production Piles: 31  
No. Test Piles: 1

**NOTES:**

- Use the following minimum lap lengths except as noted:  
#5: 3'-3" #6: 3'-10" #9: 8'-7"
- See sheet S44 for sections A-A thru D-D.
- Space reinforcement in cap to miss anchor bolts.
- Four steps monolithically with cap.
- For footing plan, see sheet S45.
- For details of piles, see sheet S48.
- For Bill of Materials see sheet S46 and S47.
- Bridge seat elevations based on bearing heights shown on Sheets S35-S36. Any deviation from these heights shall be accounted for by the Contractor. Additional costs incurred due to these changes shall be at the Contractor's expense.
- See sheet SM11 of Multi-use Trail Bridge for cable anchorage details.

PIER	*Bar
2	v20(E)
3	v20(E)
4	v22(E)
5	None

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FILE NAME =	USER NAME = akaschell	DESIGNED - MJF	REVISIONS -
0456024_042_PierDtls2.dgn		CHECKED - AJK	REVISIONS -
	PLOT SCALE =	DRAWN - RMG	REVISIONS -
	PLOT DATE = 11/9/2011	CHECKED - AJK	REVISIONS -



**CITY OF ST. CHARLES**

**PIERS 2 THRU 5 DETAILS**  
**STRUCTURE NO. 045-6024 RED GATE ROAD OVER THE FOX RIVER**  
SHEET NO. S42 OF S56 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	04-00092-00-BR	KANE	440	264
CONTRACT NO. 63650			ILLINOIS FED. AID PROJECT	

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