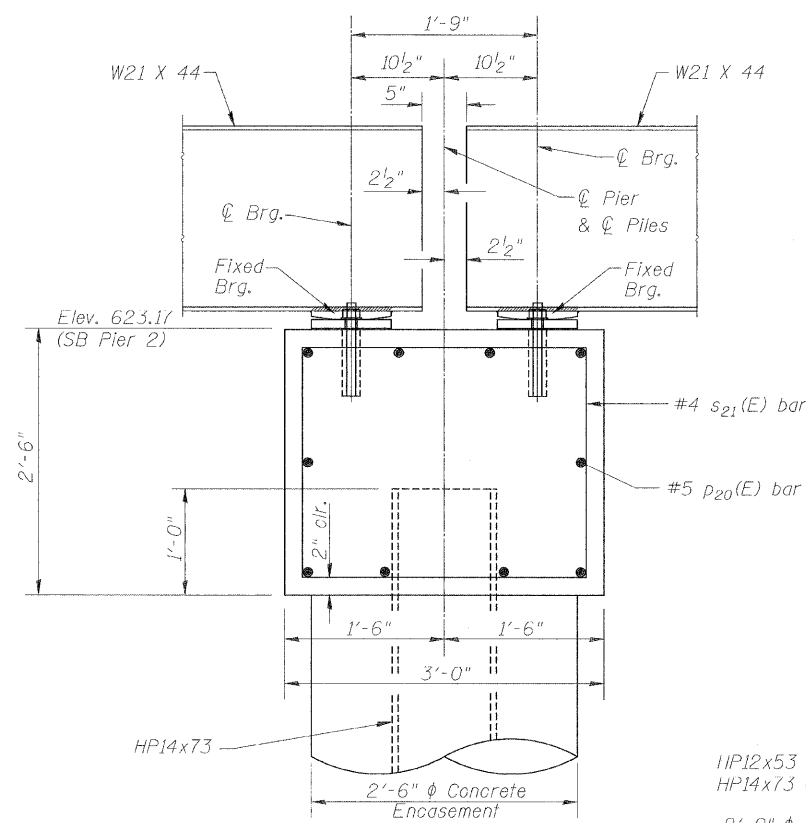
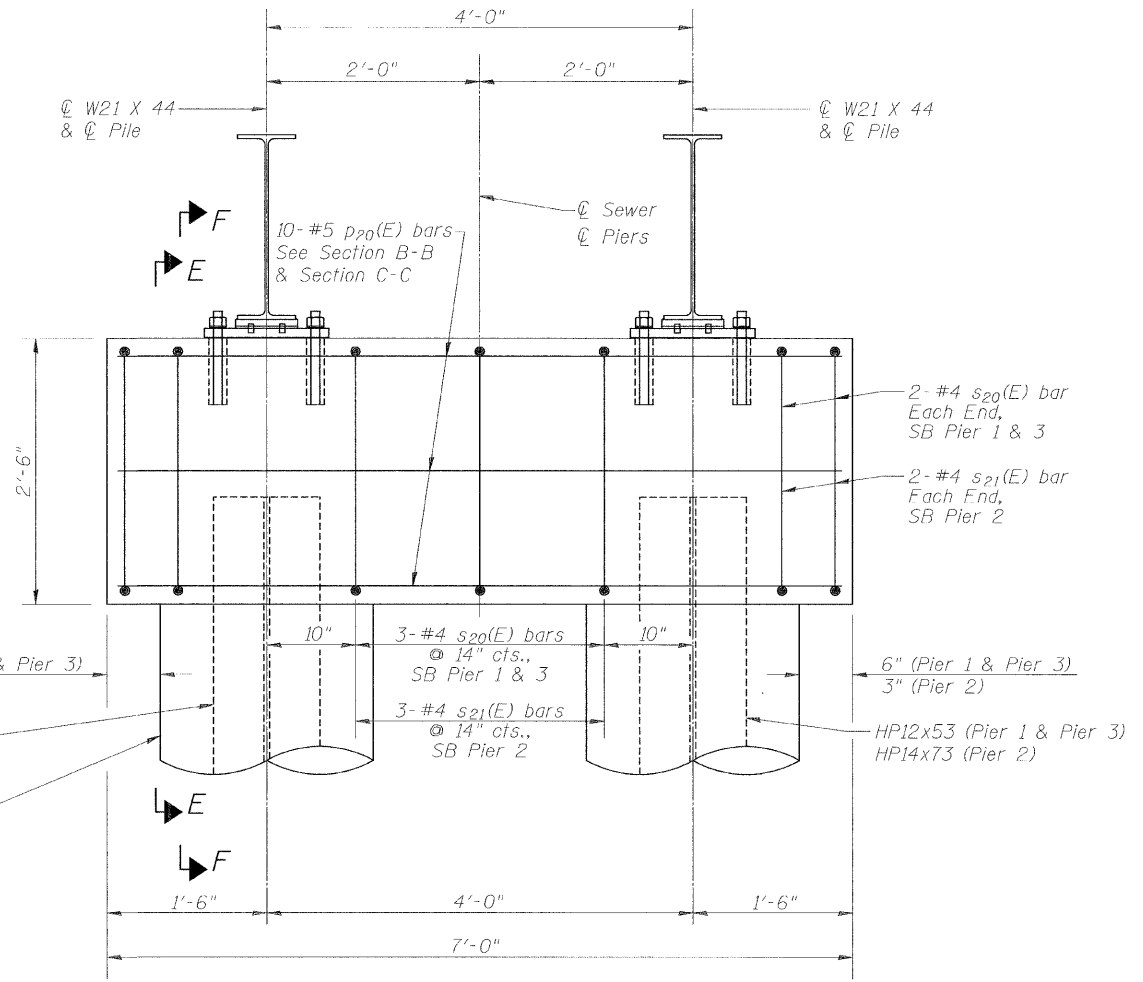


**SECTION E-E  
SEWER BRIDGE PIER 1  
& SEWER BRIDGE PIER 3**

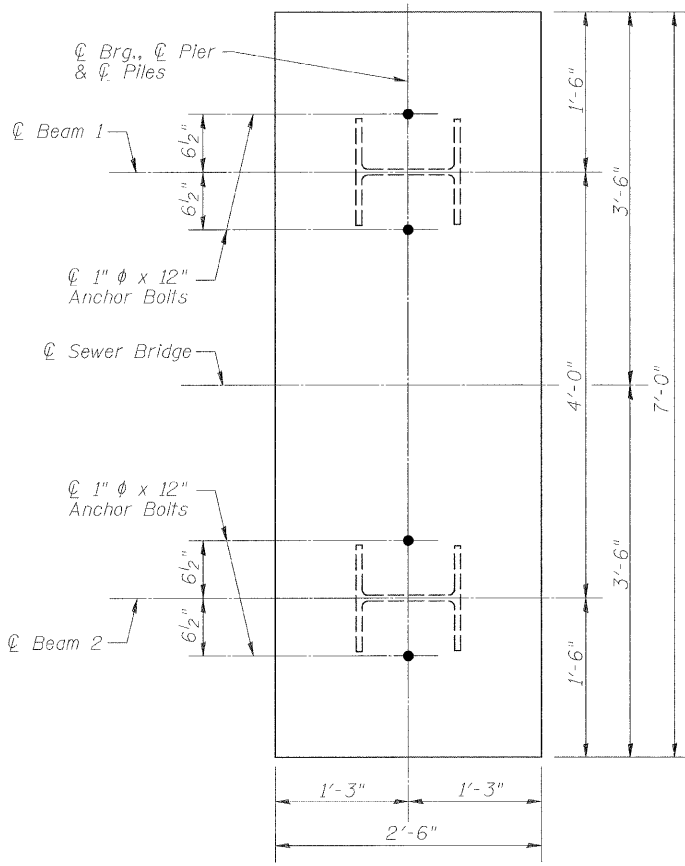
(Looking North @ Pier 1, Looking South @ Pier 3)



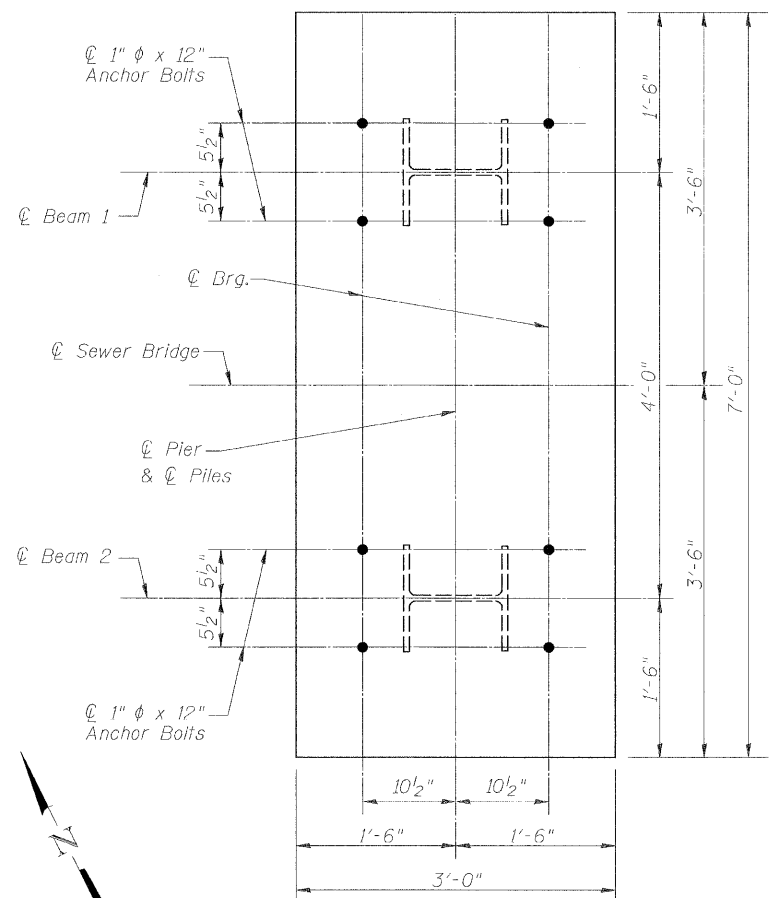
**SECTION F-F  
SEWER BRIDGE PIER 2**



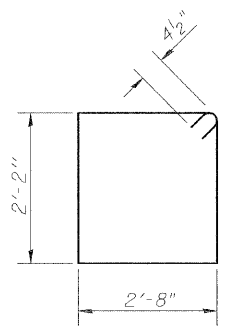
**ELEVATION  
SEWER BRIDGE PIER 1,  
SEWER BRIDGE PIER 2,  
& SEWER BRIDGE PIER 3**



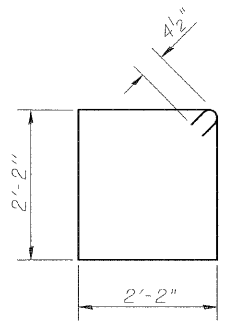
**ANCHOR BOLT LAYOUT  
SEWER BRIDGE PIER 1  
& SEWER BRIDGE PIER 3**



**ANCHOR BOLT LAYOUT  
SEWER BRIDGE PIER 2**



**BAR s21(E)**



**BAR s20(E)**

**PILE DATA - SB PIER 1**

Type: Steel HP12x53  
Nominal Required Bearing: 37 kips  
Factored Resistance Available: 20 kips  
Est. Length: 36'-0"  
No. Production Piles: 2  
No. Test Piles: 0

**PILE DATA - SB PIER 2**

Type: HP 14x73  
Nominal Required Bearing: 132 Kips  
Factored Resistance Available: 73 Kips  
Est. Length: 40'-0"  
No. Production Piles: 1  
No. Test Piles: 1

Pre-drill to elevation 582.0. Cost included in Driving Piles (See Special Provisions).  
Install Piles to capacity shown or to a minimum tip elevation of 581.67, whichever is lower.

**PILE DATA - SB PIER 3**

Type: Steel HP12x53  
Nominal Required Bearing: 69 kips  
Factored Resistance Available: 38 kips  
Est. Length: 36'-0"  
No. Production Piles: 2  
No. Test Piles: 0

Note:  
For Boring Logs, see Roadway Bridge Plans, sheets 20-22.

**SEWER BRIDGE  
BILL OF MATERIAL**

| Bar                                    | No. | Size    | Length | Shape |
|--|-----|---------|--------|-------|
| p20(E)                                 | 30  | #5      | 6'-2"  | —     |
| s20(E)                                 | 14  | #4      | 9'-5"  | □     |
| s21(E)                                 | 7   | #4      | 10'-5" | □     |
| Concrete Structures                    |     | Cu. Yd. | 5.2    |       |
| Reinforcement Bars, Epoxy Coated       |     | Pound   | 330    |       |
| Furnishing Steel Piles HP12x53         |     | Foot    | 144    |       |
| Furnishing Steel Piles HP14x73         |     | Foot    | 40     |       |
| Furnishing & Erecting Structural Steel |     | Pound   | 14,690 |       |
| Driving Piles                          |     | Foot    | 184    |       |
| Test Pile Steel HP14x73                |     | Each    | 1      |       |
| Concrete Encasement                    |     | Cu. Yd. | 13.1   |       |
| Anchor Bolts, 1"                       |     | Each    | 16     |       |



345 EAST ASH AVENUE, SUITE B  
DECATUR, ILLINOIS 62526  
PH. 217-875-4800