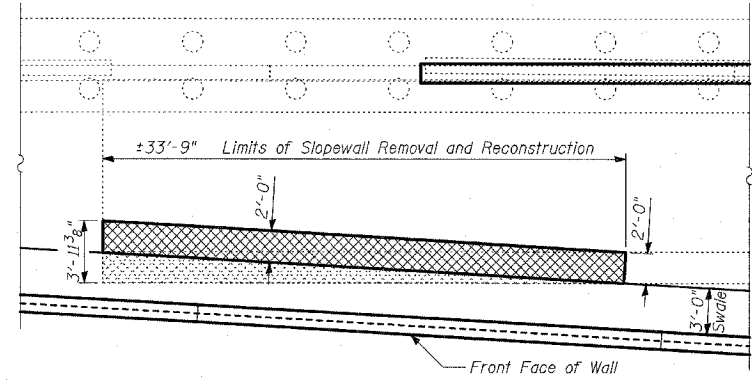


PILE LAYOUT

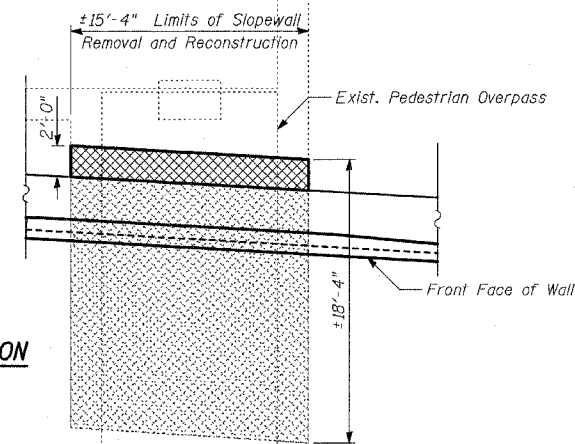
| Pile | Station at Working Point | Top of Wall El. | Top of Pile El. | Bot. of Wall El. | Section | Pile Tip El. | Pile Length |
|------|--------------------------|-----------------|-----------------|------------------|----------|--------------|-------------|
| P-1 | 1216+92.04 | 16.19 | 14.19 | 11.48 | W18x143 | -18.56 | 32'-9" |
| P-2 | 1216+99.52 | 16.07 | 14.07 | 11.23 | | -18.84 | 32'-11" |
| P-3 | 1217+07.01 | 15.96 | 13.96 | 10.98 | | -19.04 | 33'-0" |
| P-4 | 1217+14.50 | 15.84 | 13.84 | 10.73 | | -19.32 | 33'-2" |
| P-5 | 1217+21.99 | 15.73 | 13.73 | 10.48 | | -19.61 | 33'-4" |
| P-6 | 1217+29.48 | 15.61 | 13.61 | 10.23 | | -19.80 | 33'-5" |
| P-7 | 1217+36.96 | 15.50 | 13.50 | 9.98 | | -20.08 | 33'-7" |
| P-8 | 1217+44.45 | 15.38 | 13.38 | 9.73 | | -20.28 | 33'-8" |
| P-9 | 1217+51.94 | 15.27 | 13.27 | 9.48 | | -20.56 | 33'-10" |
| P-10 | 1217+59.43 | 15.15 | 13.15 | 9.23 | | -20.85 | 34'-0" |
| P-11 | 1217+66.91 | 15.04 | 13.04 | 8.98 | | -21.04 | 34'-1" |
| P-12 | 1217+74.40 | 14.92 | 12.92 | 8.73 | W18x143 | -21.33 | 34'-3" |
| P-13 | 1217+81.14 | 14.82 | 12.82 | 8.50 | W21x147 | -21.51 | 34'-4" |
| P-14 | 1217+88.13 | 14.71 | 12.71 | 8.27 | | -21.79 | 34'-6" |
| P-15 | 1217+95.12 | 14.61 | 12.61 | 8.04 | | -21.98 | 34'-7" |
| P-16 | 1218+02.10 | 14.50 | 12.50 | 7.80 | | -22.25 | 34'-9" |
| P-17 | 1218+09.09 | 14.39 | 12.39 | 7.57 | | -22.44 | 34'-10" |
| P-18 | 1218+16.08 | 14.29 | 12.29 | 7.34 | | -22.71 | 35'-0" |
| P-19 | 1218+23.07 | 14.18 | 12.18 | 7.10 | | -22.90 | 35'-1" |
| P-20 | 1218+30.06 | 14.07 | 12.07 | 6.87 | | -23.18 | 35'-3" |
| P-21 | 1218+37.05 | 13.97 | 11.97 | 6.64 | | -23.37 | 35'-4" |
| P-22 | 1218+44.04 | 13.86 | 11.86 | 6.40 | | -23.64 | 35'-6" |
| P-23 | 1218+51.02 | 13.75 | 11.75 | 6.17 | | -23.83 | 35'-7" |
| P-24 | 1218+58.01 | 13.64 | 11.64 | 5.94 | | -24.11 | 35'-9" |
| P-25 | 1218+65.00 | 13.54 | 11.54 | 5.70 | | -24.30 | 35'-10" |
| P-26 | 1218+70.99 | 13.44 | 11.44 | 5.53 | | -24.47 | 35'-11" |
| P-27 | 1218+77.98 | 13.34 | 11.34 | 5.36 | | -24.66 | 36'-0" |
| P-28 | 1218+84.97 | 13.23 | 11.23 | 5.19 | | -24.85 | 36'-1" |
| P-29 | 1218+91.96 | 13.12 | 11.12 | 5.02 | | -25.04 | 36'-2" |
| P-30 | 1218+98.94 | 13.00 | 11.00 | 4.85 | | -25.17 | 36'-2" |
| P-31 | 1219+05.93 | 12.79 | 10.79 | 4.68 | | -25.38 | 36'-2" |
| P-32 | 1219+12.92 | 12.57 | 10.57 | 4.51 | | -25.51 | 36'-1" |
| P-33 | 1219+19.91 | 12.36 | 10.36 | 4.33 | | -25.73 | 36'-1" |
| P-34 | 1219+26.90 | 12.14 | 10.14 | 4.16 | | -25.86 | 36'-0" |
| P-35 | 1219+33.89 | 11.93 | 9.93 | 3.99 | | -26.07 | 36'-0" |
| P-36 | 1219+40.87 | 11.71 | 9.71 | 3.82 | | -26.21 | 35'-11" |
| P-37 | 1219+47.86 | 11.50 | 9.50 | 3.65 | | -26.42 | 35'-11" |
| P-38 | 1219+54.85 | 11.28 | 9.28 | 3.48 | | -26.55 | 35'-10" |
| P-39 | 1219+60.84 | 11.10 | 9.10 | 3.35 | | -26.65 | 35'-9" |
| P-40 | 1219+66.83 | 10.91 | 8.91 | 3.24 | | -26.84 | 35'-9" |
| P-41 | 1219+72.82 | 10.73 | 8.73 | 3.13 | W21x147 | -26.94 | 35'-8" |
| P-42 | 1219+78.81 | 10.54 | 8.54 | 3.02 | W21x182 | -25.04 | 33'-7" |
| P-43 | 1219+87.81 | 10.27 | 8.27 | 2.86 | Built-up | -31.15 | 39'-5" |
| P-44 | 1220+04.70 | 9.75 | 7.75 | 2.55 | Built-up | -31.50 | 39'-3" |
| P-45 | 1220+13.67 | 9.47 | 7.47 | 2.38 | W21x182 | -25.70 | 33'-2" |
| P-46 | 1220+19.66 | 9.29 | 7.29 | 2.27 | W21x147 | -27.80 | 35'-1" |
| P-47 | 1220+25.65 | 9.10 | 7.10 | 2.16 | | -27.90 | 35'-0" |
| P-48 | 1220+31.64 | 8.92 | 6.92 | 2.05 | | -28.00 | 34'-11" |
| P-49 | 1220+37.63 | 8.73 | 6.73 | 1.94 | | -28.10 | 34'-10" |
| P-50 | 1220+43.62 | 8.55 | 6.55 | 1.83 | W21x147 | -28.20 | 34'-9" |



SLOPEWALL REMOVAL AND RECONSTRUCTION

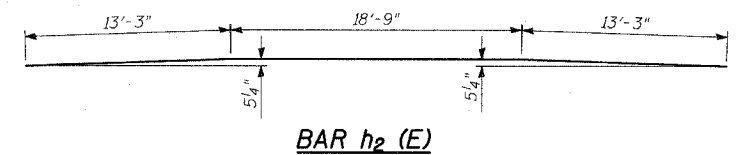
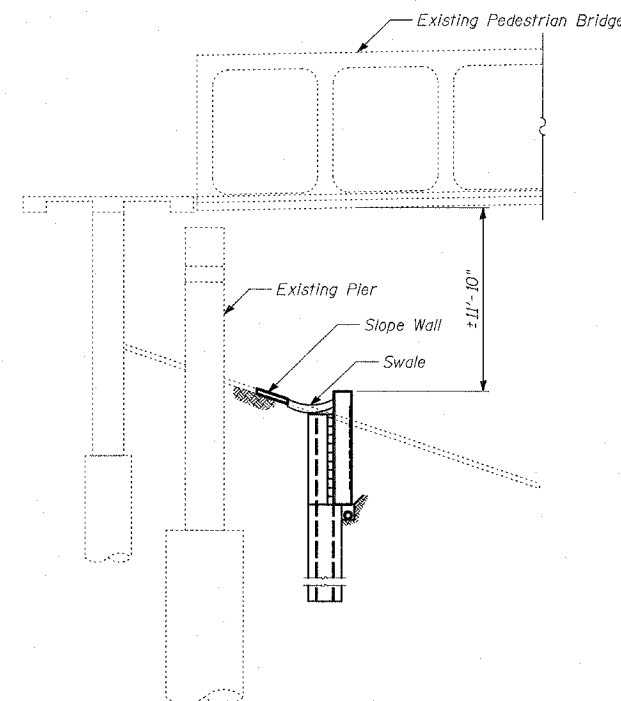
LEGEND

- Slopewall Removal and Reconstruction
- Slopewall Removal



BILL OF MATERIAL

| Bar | No. | Size | Length | Shape | |
|--|-----|------|---------|-------|--------|
| h(E) | 94 | #5 | 32'-2" | | |
| h ₁ (E) | 84 | #5 | 29'-8" | | |
| h ₂ (E) | 15 | #5 | 43'-5" | | |
| h ₃ (E) | 15 | #5 | 43'-5" | | |
| v(E) | 31 | #4 | 9'-3" | | |
| v ₁ (E) | 31 | #4 | 10'-4" | | |
| v ₂ (E) | 31 | #4 | 11'-5" | | |
| v ₃ (E) | 31 | #4 | 12'-6" | | |
| v ₄ (E) | 31 | #4 | 13'-7" | | |
| v ₅ (E) | 31 | #4 | 14'-8" | | |
| v ₆ (E) | 31 | #4 | 15'-5" | | |
| v ₇ (E) | 62 | #4 | 7'-8" | | |
| v ₈ (E) | 62 | #4 | 7'-6" | | |
| v ₉ (E) | 29 | #4 | 14'-8" | | |
| v ₁₀ (E) | 31 | #4 | 13'-11" | | |
| v ₁₁ (E) | 31 | #4 | 13'-2" | | |
| Reinforcement Bars, Epoxy Coated | | | | POUND | 10,390 |
| Protective Coat | | | | SQ YD | 262 |
| Concrete Structures | | | | CU YD | 104 |
| Furnishing and Erecting Structural Steel | | | | POUND | 2,770 |
| Furnishing Soldier Piles (W Section) | | | | FOOT | 1,676 |
| Furnishing Soldier Piles (Built-up Section) | | | | FOOT | 79 |
| Drilling and Setting Soldier Piles (In Soil) | | | | CU FT | 9,038 |

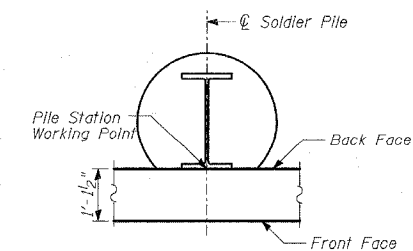


BAR TABLE SCHEDULE

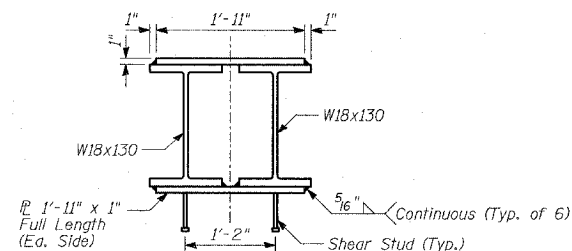
| Bar | No. of Sets Req'd | No. of Bars Per Set | A | B | C |
|---------------------|-------------------|---------------------|--------|--------|---------|
| v(E) | 1 | 31 | 4'-4" | 4'-11" | 9'-3" |
| v ₁ (E) | 1 | 31 | 4'-11" | 5'-5" | 10'-4" |
| v ₂ (E) | 1 | 31 | 5'-5" | 6'-0" | 11'-5" |
| v ₃ (E) | 1 | 31 | 6'-0" | 6'-6" | 12'-6" |
| v ₄ (E) | 1 | 31 | 6'-6" | 7'-1" | 13'-7" |
| v ₅ (E) | 1 | 31 | 7'-1" | 7'-7" | 14'-8" |
| v ₆ (E) | 1 | 31 | 7'-7" | 7'-10" | 15'-5" |
| v ₉ (E) | 1 | 29 | 7'-6" | 7'-2" | 14'-8" |
| v ₁₀ (E) | 1 | 31 | 7'-2" | 6'-9" | 13'-11" |
| v ₁₁ (E) | 1 | 31 | 6'-9" | 6'-5" | 13'-2" |

LAP SPLICES

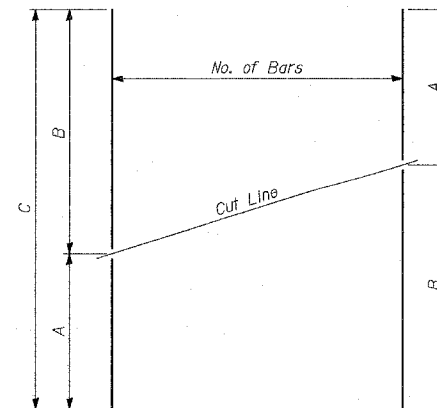
| Bar | Lap |
|-----|-------|
| #4 | 1'-8" |
| #5 | 2'-2" |
| #6 | 2'-7" |
| #8 | 4'-6" |



SOLDIER PILE WORKING POINT



BUILT-UP SECTION



SERIES OF BAR CUTTING DIAGRAM

See table for dimensions. Make all cuts normal to bar axis

| REVISIONS | |
|-----------|------|
| NAME | DATE |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94 (DAN RYAN EXPRESSWAY)
 RETAINING WALL ALONG LAFAYETTE AVE.
 EXIT RAMP AT 93RD ST.
 WALL 35
 PILE LAYOUT, DETAILS & BILL OF MATERIAL
 S.N. 016-W947
 SCALE: N.T.S.
 DATE: MARCH 25, 2005

DESIGNED BY: MI, MAF
 DRAWN BY: MAF, DJR
 CHECKED BY: TD, MI

TYLIN INTERNATIONAL

NOTES:

1. For Section Thru Slopewall, see Sheet 7 of 13.