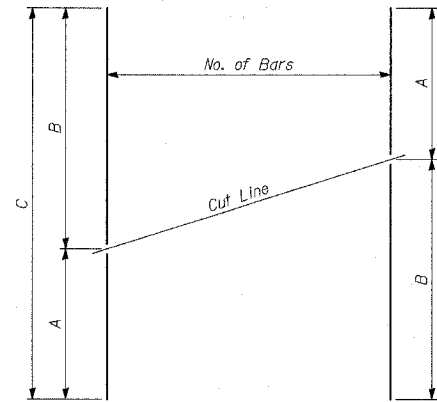


PILE LAYOUT

| Pile | Station at Working Point | Top of Parapet El. | Top of Pile El. | Bot. of Wall El. | Section | Pile Tip El. | Pile Length |
|------|--------------------------|--------------------|-----------------|------------------|----------|--------------|-------------|
| P-1 | 1328+30.45 | 9.10 | 4.60 | 2.41 | HP14x117 | -22.65 | 27'-3" |
| P-2 | 1328+36.86 | 9.11 | 4.61 | 2.31 | | -22.72 | 27'-4" |
| P-3 | 1328+43.27 | 9.13 | 4.63 | 2.21 | | -22.79 | 27'-5" |
| P-4 | 1328+50.66 | 9.14 | 4.64 | 2.10 | | -22.94 | 27'-7" |
| P-5 | 1328+57.06 | 9.15 | 4.65 | 2.00 | | -23.01 | 27'-8" |
| P-6 | 1328+64.45 | 9.17 | 4.67 | 1.89 | | -23.17 | 27'-10" |
| P-7 | 1328+71.84 | 9.18 | 4.68 | 1.78 | | -23.24 | 27'-11" |
| P-8 | 1328+79.23 | 9.19 | 4.69 | 1.67 | | -23.39 | 28'-1" |
| P-9 | 1328+91.47 | 9.22 | 4.72 | 1.00 | | -24.03 | 28'-9" |
| P-10 | 1328+98.86 | 9.23 | 4.73 | 1.18 | | -23.85 | 28'-7" |
| P-11 | 1329+06.25 | 9.25 | 4.75 | 1.35 | | -23.67 | 28'-5" |
| P-12 | 1329+13.64 | 9.26 | 4.76 | 1.53 | | -23.49 | 28'-3" |
| P-13 | 1329+21.03 | 9.27 | 4.77 | 1.71 | | -23.31 | 28'-1" |
| P-14 | 1329+28.42 | 9.29 | 4.79 | 1.89 | | -23.13 | 27'-11" |
| P-15 | 1329+35.81 | 9.30 | 4.80 | 2.06 | | -22.95 | 27'-9" |
| P-16 | 1329+43.20 | 9.32 | 4.82 | 2.24 | | -22.77 | 27'-7" |
| P-17 | 1329+50.59 | 9.33 | 4.83 | 2.42 | | -22.59 | 27'-5" |
| P-18 | 1329+57.98 | 9.34 | 4.84 | 2.59 | HP14x117 | -22.41 | 27'-3" |

BAR TABLE SCHEDULE

| Bar | No. of Sets Req'd | No. of Bars Per Set | A | B | C |
|---------------------|-------------------|---------------------|-------|-------|--------|
| v ₂₂ (E) | 1 | 31 | 3'-6" | 4'-1" | 7'-7" |
| v ₂₃ (E) | 1 | 26 | 4'-1" | 4'-6" | 8'-7" |
| v ₂₄ (E) | 1 | 26 | 5'-2" | 4'-8" | 9'-10" |
| v ₂₅ (E) | 1 | 26 | 4'-8" | 4'-1" | 8'-9" |
| v ₂₆ (E) | 1 | 26 | 4'-1" | 3'-7" | 7'-8" |



SERIES OF BAR CUTTING DIAGRAM

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

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|---------------------|-----|------|--------|-------|
| d(E) | 657 | #4 | 5'-3" | L |
| d ₁ (E) | 135 | #6 | 6'-6" | — |
| d ₂ (E) | 52 | #5 | 4'-7" | L |
| e(E) | 88 | #5 | 32'-2" | — |
| e ₁ (E) | 48 | #5 | 29'-8" | — |
| e ₂ (E) | 24 | #5 | 24'-8" | — |
| e ₃ (E) | 16 | #5 | 27'-2" | — |
| n(E) | 85 | #5 | 32'-2" | — |
| n ₁ (E) | 42 | #5 | 29'-8" | — |
| n ₂ (E) | 44 | #5 | 24'-8" | — |
| n ₃ (E) | 74 | #4 | 31'-8" | — |
| n ₄ (E) | 43 | #4 | 29'-8" | — |
| n ₅ (E) | 8 | #4 | 24'-8" | — |
| n ₆ (E) | 48 | #5 | 27'-2" | — |
| t(E) | 158 | #6 | 7'-2" | — |
| t ₁ (E) | 158 | #5 | 7'-2" | — |
| t ₂ (E) | 316 | #6 | 6'-8" | — |
| t ₃ (E) | 316 | #5 | 6'-8" | — |
| t ₄ (E) | 48 | #6 | 10'-0" | — |
| t ₅ (E) | 28 | #5 | 10'-0" | — |
| t ₆ (E) | 14 | #6 | 6'-11" | — |
| t ₇ (E) | 7 | #5 | 6'-11" | — |
| t ₈ (E) | 16 | #5 | 10'-3" | — |
| t ₉ (E) | 14 | #6 | 6'-4" | — |
| t ₁₀ (E) | 7 | #5 | 6'-4" | — |
| v(E) | 88 | #4 | 5'-11" | — |
| v ₁ (E) | 105 | #6 | 8'-9" | — |
| v ₂ (E) | 93 | #4 | 6'-2" | — |
| v ₃ (E) | 93 | #6 | 9'-0" | — |
| v ₄ (E) | 62 | #4 | 5'-2" | — |

| Bar | No. | Size | Length | Shape |
|--|-----|------|--------|--------|
| v ₅ (E) | 62 | #6 | 8'-0" | — |
| v ₆ (E) | 62 | #4 | 4'-9" | — |
| v ₇ (E) | 77 | #6 | 7'-7" | — |
| v ₈ (E) | 31 | #4 | 4'-8" | — |
| v ₉ (E) | 34 | #6 | 7'-6" | — |
| v ₁₀ (E) | 31 | #4 | 4'-5" | — |
| v ₁₁ (E) | 31 | #6 | 7'-3" | — |
| v ₁₂ (E) | 31 | #4 | 4'-3" | — |
| v ₁₃ (E) | 31 | #6 | 7'-1" | — |
| v ₁₄ (E) | 31 | #4 | 4'-0" | — |
| v ₁₅ (E) | 31 | #6 | 6'-10" | — |
| v ₁₆ (E) | 31 | #4 | 3'-10" | — |
| v ₁₇ (E) | 31 | #6 | 6'-8" | — |
| v ₁₈ (E) | 31 | #4 | 3'-7" | — |
| v ₁₉ (E) | 31 | #6 | 6'-5" | — |
| v ₂₀ (E) | 31 | #4 | 3'-5" | — |
| v ₂₁ (E) | 31 | #6 | 6'-3" | — |
| v ₂₂ (E) | 31 | #4 | 7'-7" | — |
| v ₂₃ (E) | 26 | #4 | 8'-7" | — |
| v ₂₄ (E) | 26 | #4 | 9'-10" | — |
| v ₂₅ (E) | 26 | #4 | 8'-9" | — |
| v ₂₆ (E) | 26 | #4 | 7'-8" | — |
| v ₂₇ (E) | 78 | #5 | 12'-9" | L |
| w(E) | 48 | #5 | 29'-8" | — |
| w ₁ (E) | 16 | #5 | 28'-0" | — |
| w ₂ (E) | 192 | #5 | 33'-9" | — |
| w ₃ (E) | 16 | #5 | 15'-6" | — |
| w ₄ (E) | 8 | #5 | 6'-2" | J |
| w ₅ (E) | 8 | #5 | 6'-11" | J |
| w ₆ (E) | 12 | #5 | 11'-6" | — |
| w ₇ (E) | 24 | #5 | 5'-8" | — |
| Reinforcement Bars, Epoxy Coated | | | | |
| | | | CU YD | 53,240 |
| Concrete Structures | | | | |
| | | | CU YD | 430 |
| Protective Coat | | | | |
| | | | SQ YD | 618 |
| Furnishing Soldier Piles (HP Section) | | | | |
| | | | CU YD | 502 |
| Drilling and Setting Soldier Piles (in Soil) | | | | |
| | | | CU YD | 2,562 |

Reinforcement bars designated (E) shall be epoxy coated.

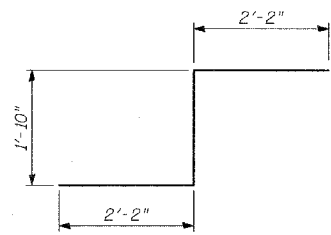
MARK TABLE

| Bar | A | B |
|--------------------|-------|--------|
| d(E) | 11" | 4'-4" |
| d ₂ (E) | 10" | 3'-9" |
| n(E) | 8" | 2'-11" |
| n ₁ (E) | 1'-0" | 3'-10" |
| n ₂ (E) | 8" | 3'-3" |
| n ₃ (E) | 1'-0" | 4'-2" |

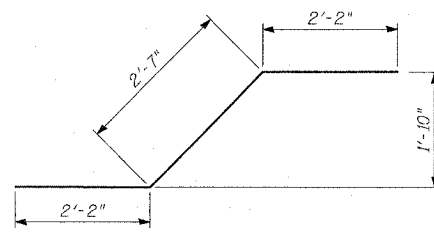
BARS v₂₇(E)

* - Cut bars to fit in field

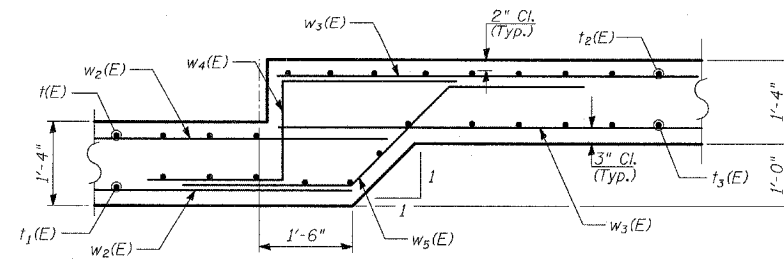
BARS d(E), d₂(E), n(E), n₁(E), n₂(E) & n₃(E)



BARS w₄(E)



BARS w₅(E)



DETAIL 1

LAP SPLICES

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

REVISIONS

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94 (DAN RYAN EXPRESSWAY)
 RETAINING WALL ALONG LAFAYETTE AVE.
 77TH PL. TO 78TH ST.
 WALL 73B
 PILE LAYOUT, DETAILS & BILL OF MATERIAL
 S.N. 016-W973 DESIGNED BY: TD
 SCALE: N.T.S. DRAWN BY: PL
 DATE: MARCH 25, 2005 CHECKED BY: TD, MI