

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2005-0341	COOK	41	4
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

60A05

PROP. CURVE SBDR10
P.I. STA = 1539+47.07
N_i = 1,874,803.43
E_i = 1,175,912.56
Δ = 25° 26' 39" (LT)
D = 3° 49' 11"
R = 1,500.00'
T = 338.65'
L = 666.13'
E = 37.75'
e = 5.9%
S.A. = END CONTINUOUSLY ROTATING PLANE AT STA 1537+03.93
T.R. = 68.20'
S.E. RUN = 315.00'
S.R. = STA 1541+69.55 TO STA 1545+52.75
P.C. STA = 1536+08.42
N_i = 1,874,493.81
E_i = 1,175,775.38
P.T. STA = 1542+74.55
N_f = 1,875,141.96
E_f = 1,175,903.41

PROP. CURVE EL4300
P.C. STA = 714+54.39
N_i = 1,875,675.42
E_i = 1,175,825.74
Δ = 0° 54' 33" (LT)
D = 0° 31' 15"
R = 11,000.00'
T = 87.27'
L = 174.54'
E = 0.35'
P.C. STA = 713+67.12
N_i = 1,875,762.70
E_i = 1,175,826.31
P.T. STA = 715+41.66
N_f = 1,875,588.15
E_f = 1,175,826.55

PROP. CURVE SWTH1
P.I. STA = 13+21.89
N_i = 1,874,747.97
E_i = 1,175,711.50
Δ = 28° 04' 24" (LT)
D = 4° 27' 01"
R = 1,287.50'
T = 321.89'
L = 630.84'
E = 39.63'
e = MATCH EXISTING
T.R. = MATCH EXISTING
S.E. RUN = MATCH EXISTING
P.C. STA = 10+00.00
N_i = 1,874,459.70
E_i = 1,175,568.28
P.T. STA = 16+30.84
N_f = 1,875,069.72
E_f = 1,175,702.20

PROP. CURVE EL4301
P.I. STA = 723+10.32
N_i = 1,874,819.53
E_i = 1,175,833.74
Δ = 23° 55' 56" (RT)
D = 3° 49' 11"
R = 1,500.00'
T = 317.91'
L = 626.54'
E = 33.32'
e = 5.9%
S.A. = STA 719+00.06 TO STA 720+38.59
S.R. = STA 725+72.77 TO STA 727+63.41 (1.83%)
P.C. STA = 719+92.41
N_i = 1,875,137.42
E_i = 1,175,830.77
P.T. STA = 726+18.95
N_f = 1,874,527.76
E_f = 1,175,707.50

PROP. CURVE A4701
P.I. STA = 5072+36.79
N_i = 1,874,030.16
E_i = 1,175,360.65
Δ = 14° 54' 56" (LT)
D = 4° 11' 07"
R = 1,369.00'
T = 179.20'
L = 356.38'
E = 11.68'
e = MATCH EXISTING
T.R. = MATCH EXISTING
S.E. RUN = MATCH EXISTING
P.C. STA = 5070+57.59
N_i = 1,874,189.71
E_i = 1,175,442.25
P.T. STA = 5074+13.97
N_f = 1,873,854.99
E_f = 1,175,322.86

PROP. CURVE A4700
P.I. STA = 5064+21.82
N_i = 1,874,765.22
E_i = 1,175,731.41
Δ = 22° 28' 55" (RT)
D = 3° 31' 33"
R = 1,625.00'
T = 322.97'
L = 637.62'
E = 31.78'
e = 4.4%
S.A. = STA 5060+00 (3.58%) TO 5061+21.86
S.R. = STA 5067+13.48 TO 5067+83.48
P.C. STA = 5060+98.86
N_i = 1,875,087.21
E_i = 1,175,756.48
P.T. STA = 5067+36.48
N_f = 1,874,477.28
E_f = 1,175,585.12

PROP. CURVE C4300
P.I. STA = 7054+50.07
N_i = 1,875,794.51
E_i = 1,175,741.50
Δ = 6° 44' 11" (RT)
D = 3° 49' 11"
R = 1,500.00'
T = 88.28'
L = 176.36'
E = 2.60'
e = 4.6%
S.A. = STA 7053+09.79 TO 7053+87.79
S.R. = STA 7055+12.15 TO 7055+90.15
P.C. STA = 7053+61.79
N_i = 1,875,881.65
E_i = 1,175,727.39
P.T. STA = 7055+38.15
N_f = 1,875,706.31
E_f = 1,175,745.28

PROP. CURVE NBDR09
P.I. STA = 2539+31.62
N_i = 1,874,770.97
E_i = 1,175,969.46
Δ = 23° 53' 35" (LT)
D = 3° 57' 05"
R = 1,450.00'
T = 306.79'
L = 604.67'
E = 32.10'
e = 6.0%
S.A. = END CONTINUOUSLY ROTATING PLANE AT STA 2536+24.82
T.R. = 33.10'
S.E. RUN = 320.00'
S.R. = STA 2541+22.82 TO STA 2544+75.92
P.C. STA = 2536+24.82
N_i = 1,874,487.21
E_i = 1,175,852.82
P.T. STA = 2542+29.49
N_f = 1,875,077.65
E_f = 1,175,961.17

PROP. CURVE SBLOC06
P.I. STA = 3539+38.89
N_i = 1,874,807.75
E_i = 1,175,816.77
Δ = 22° 47' 56" (LT)
D = 3° 23' 54"
R = 1,686.00'
T = 339.94'
L = 670.88'
E = 33.93'
e = 5.7%
S.A. = END CONTINUOUSLY ROTATING PLANE AT STA 3537+00.25
T.R. = 68.79'
S.E. RUN = 380.00'
S.R. = STA 3541+43.17 TO STA 3545+91.96
P.C. STA = 3535+98.96
N_i = 1,874,493.12
E_i = 1,175,688.05
P.T. STA = 3542+69.84
N_f = 1,875,147.67
E_f = 1,175,813.52

PROP. CURVE NBLOC07
P.I. STA = 4539+56.47
N_i = 1,874,785.65
E_i = 1,176,076.72
Δ = 28° 53' 07" (LT)
D = 3° 52' 17"
R = 1,480.00'
T = 381.17'
L = 746.13'
E = 48.30'
e = 5.9%
S.A. = END CONTINUOUSLY ROTATING PLANE AT STA 4536+66.66
T.R. = 68.49'
S.E. RUN = 393.00'
S.R. = STA 4541+90.43 TO STA 4546+51.92
P.C. STA = 4535+75.30
N_i = 1,874,442.48
E_i = 1,175,910.80
P.T. STA = 4543+21.43
N_f = 1,875,166.27
E_f = 1,176,056.22

PROP. CURVE B4700
P.I. STA = 6065+87.40
N_i = 1,874,784.51
E_i = 1,176,124.85
Δ = 24° 04' 19" (LT)
D = 4° 24' 27"
R = 1,300.00'
T = 277.18'
L = 546.17'
E = 29.22'
e = 4.9%
S.A. = STA 6061+55.16 TO 6063+58.24
S.R. = STA 6068+08.40 TO 4546+51.92
P.C. STA = 6063+10.23
N_i = 1,874,525.73
E_i = 1,176,025.56
P.T. STA = 6068+56.40
N_f = 1,875,061.29
E_f = 1,176,109.94

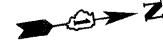
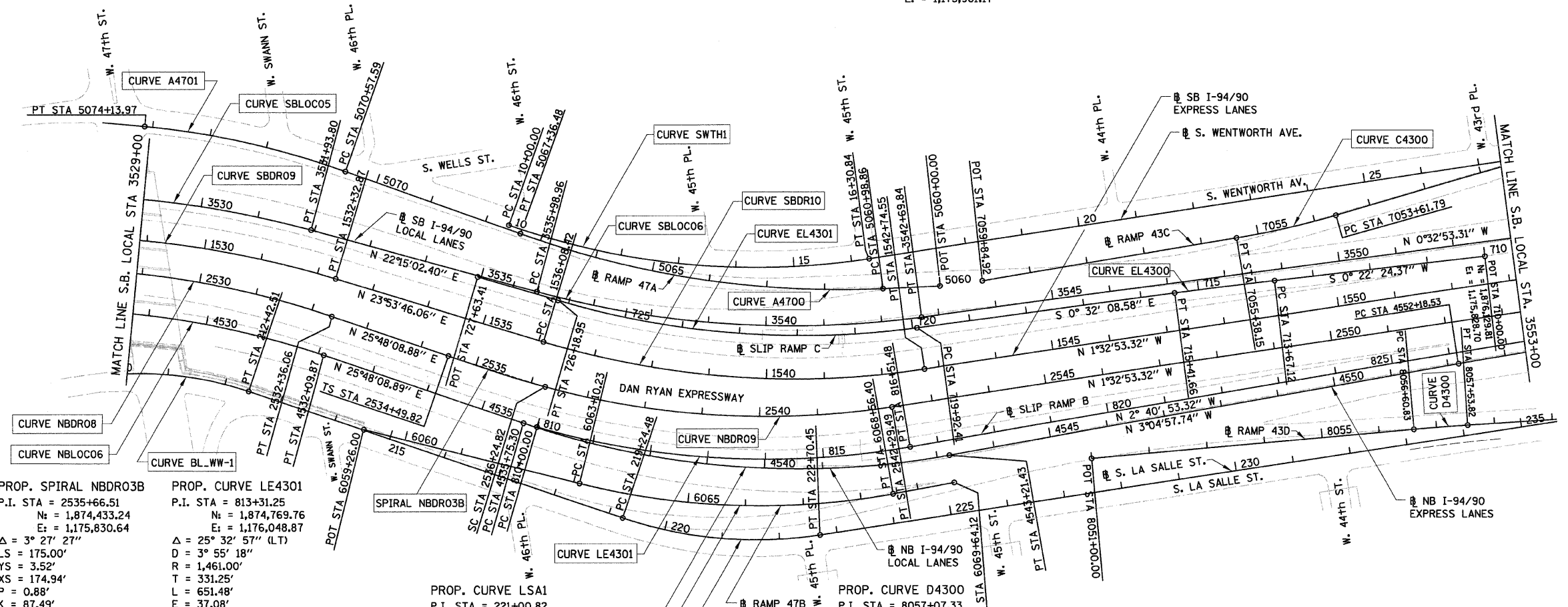
PROP. CURVE BL-WW-1
P.I. STA = 211+05.58
N_i = 1,873,849.12
E_i = 1,175,736.29
Δ = 27° 13' 24" (RT)
D = 9° 44' 58"
R = 587.69'
T = 142.30'
L = 279.23'
E = 16.98'
e = MATCH EXISTING
T.R. = MATCH EXISTING
S.E. RUN = MATCH EXISTING
P.C. STA = 209+63.28
N_i = 1,873,706.87
E_i = 1,175,740.12
P.T. STA = 212+42.51
N_f = 1,873,977.37
E_f = 1,175,797.95

PROP. SPIRAL NBDR03B
P.I. STA = 2535+66.51
N_i = 1,874,433.24
E_i = 1,175,830.64
Δ = 3° 27' 27"
LS = 175.00'
YS = 3.52'
XS = 174.94'
P = 0.88'
K = 87.49'
LT = 116.69'
ST = 58.35'
LC = 174.97'
T.S. STA = 2534+49.82
N_f = 1,874,328.19
E_f = 1,175,779.85
S.C. STA = 2536+24.82
N_f = 1,874,487.21
E_f = 1,175,852.82

PROP. CURVE LE4301
P.I. STA = 813+31.25
N_i = 1,874,769.76
E_i = 1,176,048.87
Δ = 25° 32' 57" (LT)
D = 3° 55' 18"
R = 1,461.00'
T = 331.25'
L = 651.48'
E = 37.08'
e = 5.9%
S.A. = STA 810+00.00 (4.45%) TO 810+67.35
T.R. = 71.04'
S.E. RUN = 208.68'
S.R. = STA 815+81.92 TO STA 818+61.64
P.C. STA = 810+00.00
N_i = 1,874,464.55
E_i = 1,175,920.15
P.T. STA = 816+51.48
N_f = 1,875,100.65
E_f = 1,176,033.38

PROP. CURVE LSA1
P.I. STA = 221+00.82
N_i = 1,874,750.89
E_i = 1,176,169.92
Δ = 27° 20' 30" (LT)
D = 7° 54' 10"
R = 725.00'
T = 176.34'
L = 345.97'
E = 21.14'
e = MATCH EXISTING
T.R. = MATCH EXISTING
S.E. RUN = MATCH EXISTING
P.C. STA = 219+24.48
N_i = 1,874,591.98
E_i = 1,176,093.48
P.T. STA = 222+70.45
N_f = 1,874,927.16
E_f = 1,176,164.84

PROP. CURVE D4300
P.I. STA = 8057+07.33
N_i = 1,876,018.11
E_i = 1,176,112.42
Δ = 1° 19' 55" (RT)
D = 1° 25' 57"
R = 4,000.00'
T = 46.49'
L = 92.99'
E = 0.27'
e = 2.3%
S.A. = STA 8056+54.83 TO 8056+63.83
S.R. = STA 8057+50.82 TO 8057+59.82
P.C. STA = 8056+60.83
N_i = 1,875,971.65
E_i = 1,176,110.86
P.T. STA = 8057+53.82
N_f = 1,876,064.53
E_f = 1,176,115.06



- NOTES:
1. AVERAGE GRID TO GROUND CONVERSION FACTOR = 1.000010988654360
 2. FOR BENCH MARK INFORMATION, SEE SHEET ALT-16 OF ALIGNMENT PLAN SHEETS.
 3. FOR RAMP P.O.T. INFORMATION, SEE SHEET ALT-16 OF ALIGNMENT PLAN SHEETS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SOUTHBOUND FENCE & GATES (47TH ST TO 31ST ST)

ALIGNMENT PLAN

SCALE: 1"=100'
DATE: 10/23/08

DRAWN BY: JDC
CHECKED BY: RS

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com

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