

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	22	1

(2021-922 PT1 & 2122-921 PT1) I-1 **62986**

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

**F.A.I. ROUTE 90/94 (DAN RYAN EXPRESSWAY)
SECTION (2021-922 PT1 & 2122-921 PT1) I-1
INSTALLATION OF FLUTED KNEE WALL ALONG WENTWORTH AVENUE
FROM 850-FEET SOUTH OF 47th STREET TO 47th STREET
COOK COUNTY
C-91-244-05**

INDEX OF SHEETS

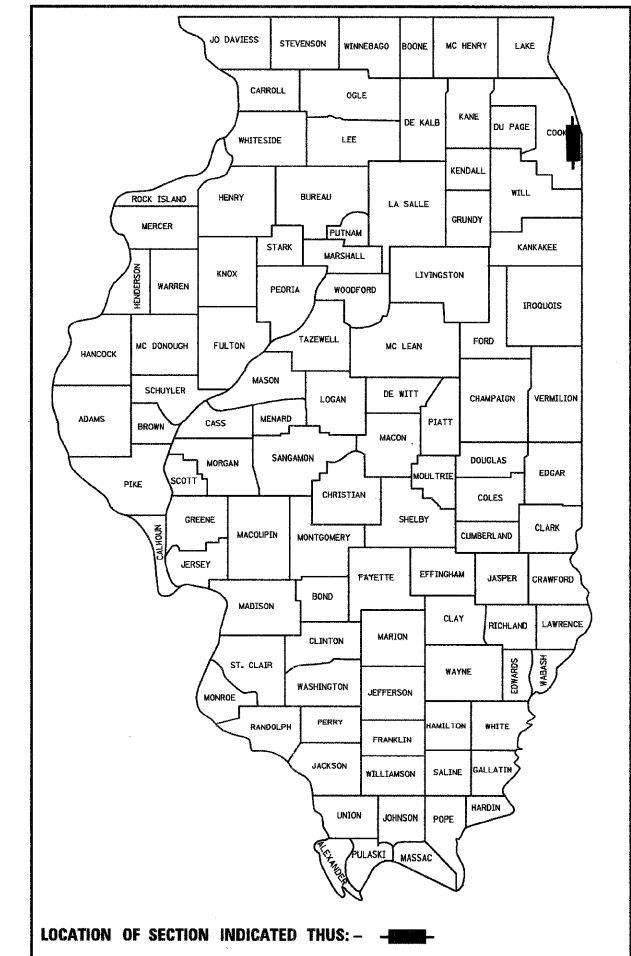
SHEET	DESCRIPTION
1	COVER SHEET, INDEX OF SHEETS, LIST OF ILLINOIS DOT HIGHWAY STANDARDS
2	GENERAL NOTES AND PROJECT COMMITMENTS
3	SUMMARY OF QUANTITIES
4	EXISTING AND PROPOSED TYPICAL SECTIONS
5-13	ALIGNMENT PLANS, SURVEY TIES AND CONTROL POINTS
14-16	EXISTING AND PROPOSED ROADWAY PLANS
17-18	ROADWAY DETAILS
19	STRUCTURAL DETAILS
20	TC-17 DISTRICT 1, TRAFFIC CONTROL FOR SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES
21	TC-18 DISTRICT 1, SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS
22	TC-22 DISTRICT 1, ARTERIAL ROAD INFORMATION SIGN

DESIGN NUMBER

D-91-244-05

IDOT HIGHWAY STANDARDS

STANDARD	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
664001-02	CHAIN LINK FENCE
701601-00	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701901-01	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-02	SIGN PANEL ERECTION DETAILS



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED JANUARY 8, 2009

Diana M. O'Hanrahan
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 8, 2009
Charles J. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT

May 8, 2009
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**



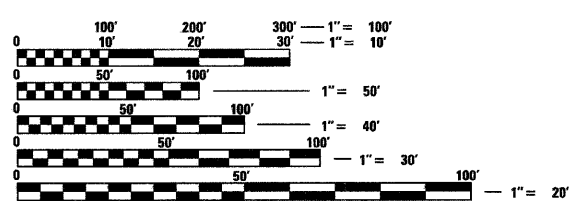
PROJECT LOCATED IN CITY OF CHICAGO

DESIGN DESIGNATION

WENTWORTH AVE: 6259 (20) URBAN COLLECTOR

ADT	DESIGN POSTED (2020) SPEED	DESIGN SPEED
11,000	30	25

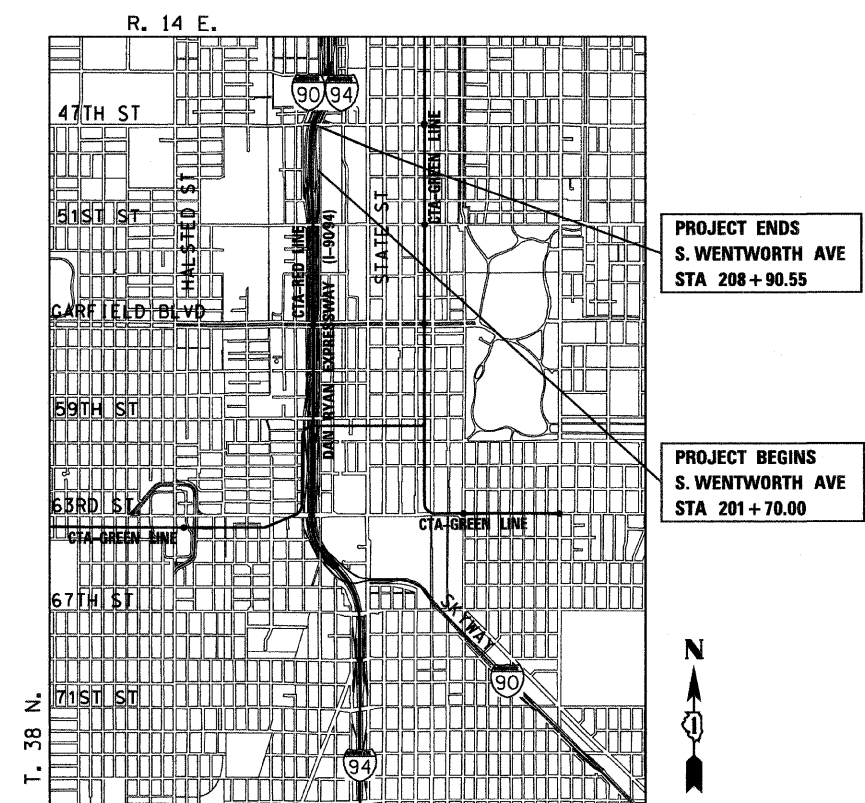
FRONTAGE ROADS:
WENTWORTH AVE 11,000 30 25



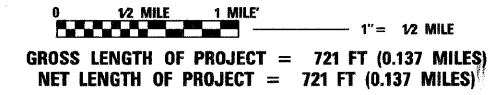
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

BEFORE EXCAVATING CALL:
CHICAGO UTILITY ALERT NETWORK
(312) 744-7000

CONTRACT NO. 62986



LOCATION MAP



DISTRICT ONE DESIGNCONSULTANT SERVICES PROJECT MANAGER
RAJENDRA SHAH (847) 705-4555

ROBERT M. GOVEIA
01/08/2009 DATE 11/30/2009 EXPIRES

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	22	2
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
* (2021-922 PT1 & 2122-921 PT1) I-1		62986		

GENERAL NOTES:

1. ALL WORK IN THIS CONTRACT SHALL BE COMPLETED WITHIN 30 WORKING DAYS.
2. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
3. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
4. THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS TO PROTECT AND PROVIDE ACCESS TO ABUTTING PROPERTY, UTILITIES, PEDESTRIANS, AND VEHICULAR TRAFFIC.
5. THIS CONTRACT DOES NOT INCLUDE QUANTITIES FOR THE PAY ITEMS "SOIL STABILIZERS" AND "APPLYING DUST SUPPRESSION AGENTS". IT HAS BEEN DETERMINED THAT THESE ITEMS ARE NOT NEEDED FOR THE WORK ASSOCIATED WITH THIS CONTRACT. IF THE ENGINEER DETERMINES THAT THIS WORK IS NECESSARY, PAYMENT SHALL BE MADE IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.
6. THE CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH:
 - CONTRACT 62301 - NORTHBOUND LOCAL LANES (GARFIELD BOULEVARD TO 31ST STREET)
 - CONTRACT 62583 - LIGHTING AND SURVEILLANCE 31ST ST TO I-57 INTERCHANGE
 - CONTRACT 60A03 - INSTALLATION OF FENCING AND GATING (63RD ST TO 47TH ST)
 - CONTRACT 60A72 - ROADSIDE EMBANKMENT LANDSCAPING
 - CONTRACT 60A78 - GATEWAY LANDSCAPING AND IRRIGATION AT 47TH STREET
7. THE LOCATION OF VARIOUS ITEMS SUCH AS PAVEMENT, RETAINING WALLS, AND DRAINAGE STRUCTURES BUILT IN CONTRACTS UNDER CONSTRUCTION DURING THE PREPARATION OF THESE PLANS IS BASED ON THE PUBLISHED CONTRACT PLAN DRAWINGS AVAILABLE DURING DESIGN. THE CONTRACTOR MUST FIELD VERIFY LIMITS, LOCATIONS, AND ELEVATIONS OF THESE PREVIOUSLY CONSTRUCTED ITEMS.
8. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS. THE ENGINEER OR AN AUTHORIZED SURVEYOR AGENT WILL WITNESS OR OTHERWISE REFERENCE AND RESET MONUMENTS AS NECESSARY. ALL PROPERTY CORNERS EXCEPT THOSE WITHIN AREAS WHERE THE SCHEDULE, IF PROVIDED, SHOWS PLACEMENT OF R.O.W. MARKERS SHALL REMAIN UNDISTURBED.
9. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS WHICH WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE.
10. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF EXISTING PLANT MATERIAL FOR WHICH THE CONTRACT DOES NOT PROVIDE REMOVAL. THE PROTECTION OF EXISTING PLANT MATERIAL AND THE REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 201 OF THE STANDARD SPECIFICATIONS.
11. ALL RELOCATION OF EXISTING SIGNS IN CONFLICT WITH PROPOSED CONSTRUCTION SHALL CONFORM TO ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS. EXISTING SIGNS TO BE RELOCATED IN PROPOSED CONCRETE MEDIAN SURFACE SHALL BE INSTALLED USING A SLEEVE OR BY CORING THE CONCRETE MEDIAN SURFACE. THE SLEEVE AND CORING OPERATIONS SHALL BE AS DIRECTED AND APPROVED BY THE ENGINEER. THE SLEEVES AND CORING WILL NOT BE MEASURED FOR PAYMENT, BUT SHALL BE INCLUDED IN THE COST OF THE CONCRETE MEDIAN SURFACE.
12. THE INTENT OF THE CONTRACT DOCUMENTS IS TO CONSTRUCT THE FLUTED KNEE WALL BEHIND THE EXISTING CURB AND GUTTER. ANY DAMAGE TO THE EXISTING CURB AND GUTTER SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE.
13. CONTRACTOR SHALL MATCH ALL WORK COMPLETED IN CONTRACT 62586.
14. TRAFFIC CONTROL ALONG THE FRONTAGE ROADS AND RAMPS SHALL BE PAID FOR AS TRAFFIC CONTROL AND PROTECTION (SPECIAL).
15. THE CONTRACTOR SHALL PROTECT ALL BLUNT ENDS OF THE KNEE WALL FOR TRAFFIC SAFETY. ALL TEMPORARY PROTECTION DEVICES USED FOR THIS PURPOSE SHALL BE NCHRP 350 COMPLIANT AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (SPECIAL).
16. CHAIN LINK FENCE, 4' (SPECIAL) SHALL BE INSTALLED AT ALL LOCATIONS WHERE THE EXISTING CHAIN LINK FENCE IS REMOVED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
17. THE CONTRACTOR MUST COORDINATE CONSTRUCTION ACTIVITIES WITH THE RESPECTIVE UTILITIES OF THE CITY OF CHICAGO. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR MUST CALL THE CHICAGO UTILITY ALERT NETWORK (C.U.A.N.) AT (312) 744-7000 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRICAL, TELEPHONE, CABLE AND GAS FACILITIES (48 HOUR NOTIFICATION IS REQUIRED). THE CONTRACTOR MUST CONTACT THE CITY OF CHICAGO DEPARTMENT OF WATER MANAGEMENT, PERMIT SECTION AT (312) 747-7893 FOR WATER AND CITY SEWER LOCATIONS.

AECOM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 59TH ST TO 47TH ST (NORTHBOUND KNEE WALLS)
GENERAL NOTES AND PROJECT COMMITMENTS

SCALE: NONE
 DATE: JANUARY 14, 2009
 DRAWN BY: PHP
 CHECKED BY: NJH

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SUMMARY OF QUANTITIES

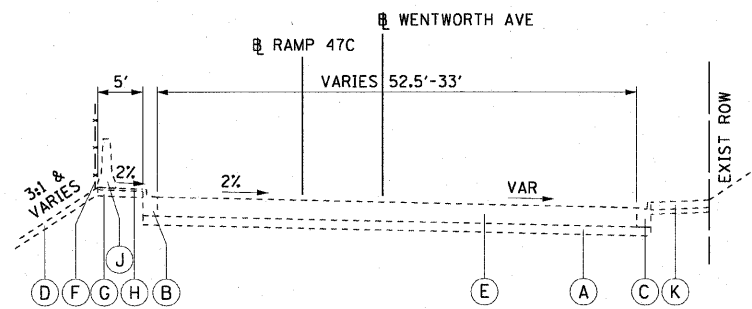
100% STATE

CODE NO.	ITEM	UNIT	QUANTITY	URBAN ROADWAY SFTY-4A
20200100	EARTH EXCAVATION	CU YD	126	126
21101645	TOPSOIL FURNISH AND PLACE, 12"	SO YD	82	82
25000210	SEEDING, CLASS 2A	ACRE	0.02	0.02
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	2	2
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	2	2
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	2	2
25100630	EROSION CONTROL BLANKET	SO YD	82	82
28000510	INLET FILTERS	EACH	14	14
42001300	PROTECTIVE COAT	SO YD	103	103
44004250	PAVED SHOULDER REMOVAL	SO YD	354	354
66400550	CHAIN LINK FENCE, 4' (SPECIAL)	FOOT	722	722
66410300	CHAIN LINK FENCE REMOVAL	FOOT	643	643
67100100	MOBILIZATION	L SUM	1	1
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	4	4
X0322256	TEMPORARY INFORMATION SIGNING	SO FT	26	26
X0324640	FLUTED KNEEWALL	FOOT	718	718
X0324700	WALL MOUNTED SIGN SUPPORT FOR TYPE I PANEL (SPECIAL)	EACH	2	2
X6065740	CONCRETE MEDIAN SURFACE, 5" (MODIFIED)	SO FT	922	922
X032147a	TEMPORARY CONCRETE BARRIER (REMOVE)	FOOT	643	643
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
Z0029999	IMPACT ATTENUATOR REMOVAL	EACH	1	1
Z0030020	IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	1	1

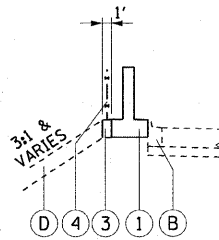
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REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 90/94 (DAN RYAN EXPRESSWAY) 59TH ST TO 47TH ST (NORTHBOUND KNEE WALLS)
NAME	DATE	
		SUMMARY OF QUANTITIES

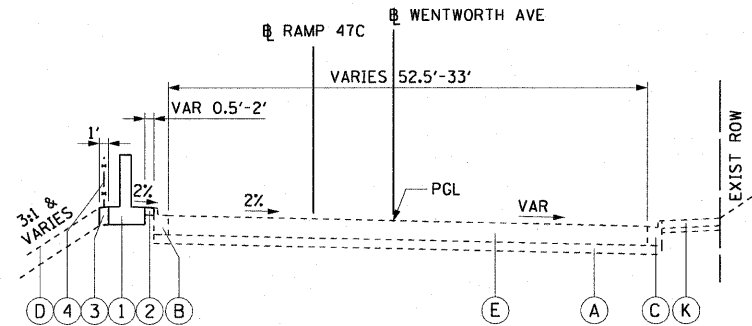
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DATE: JANUARY 14, 2009 CHECKED BY: NJH



① EX TYPICAL SECTION
S. WENTWORTH AVENUE
STA 202+48.60 TO STA 206+14.00



STA 201+70.00 TO STA 202+93.84



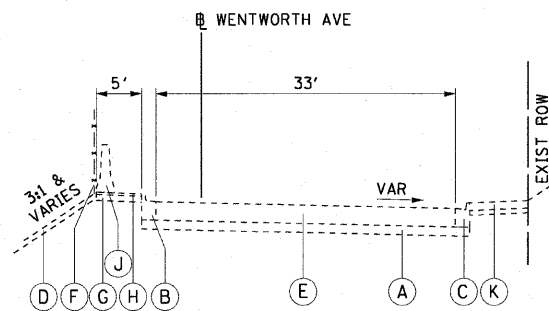
① PR TYPICAL SECTION
S. WENTWORTH AVENUE
STA 201+70.00 TO STA 206+14.00

EXISTING LEGEND:

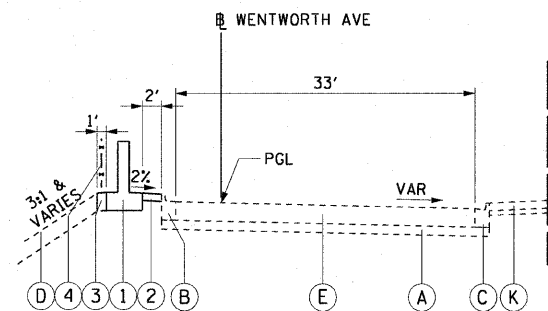
- (A) SUB-BASE GRANULAR MATERIAL, TYPE B, 8"
- (B) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (MODIFIED)
- (C) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-V.12
- (D) GRASS AREA
- (E) PORTLAND CEMENT CONCRETE PAVEMENT, 10" (JOINTED)
- (F) CHAIN LINK FENCE, 4'
- (G) AGGREGATE BASE COURSE, TYPE B, 4"
- (H) BITUMINOUS SHOULDERS, 1 1/2"
- (J) TEMPORARY CONCRETE BARRIER
- (K) PCC SIDEWALK, 5" AND SAND CUSHION, 3"

PROPOSED LEGEND:

- ① FLUTED KNEE WALL
- ② CONCRETE MEDIAN SURFACE, 5" (MODIFIED)
- ③ SEEDING CLASS 2A / TOPSOIL FURNISH AND PLACE, 12" / EROSION CONTROL BLANKET
- ④ CHAIN LINK FENCE, 4' (SPECIAL)



② EX TYPICAL SECTION
S. WENTWORTH AVENUE
STA 206+14.00 TO STA 208+90.55



② PR TYPICAL SECTION
S. WENTWORTH AVENUE
STA 206+14.00 TO STA 208+90.55

REVISIONS	
NAME	DATE

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CURVE EKWELLO1
P.I. STA= 9+04.39
N= 1,861,874.35
E= 1,176,076.45
 Δ = 10° 52' 16"
D= 5° 40' 05"
R= 1,010.83'
T= 96.18'
L= 191.79'
E= 4.56'
 θ = N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 8+08.21
N= 1,861,778.19
E= 1,176,078.94
P.T. STA= 10+00.00
N= 1,861,968.30
E= 1,176,055.87

CURVE EKWELLO2
P.I. STA= 10+99.36
N= 1,862,065.35
E= 1,176,034.61
 Δ = 23° 41' 58"
D= 21° 47' 07"
R= 263.00'
T= 55.18'
L= 108.78'
E= 4.56'
 θ = N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 10+44.17
N= 1,862,011.45
E= 1,176,002.13
P.T. STA= 11+52.96
N= 1,862,109.97
E= 1,176,002.13

CURVE EKWELLO3
P.I. STA= 12+18.75
N= 1,862,163.15
E= 1,175,963.41
 Δ = 2° 58' 46"
D= 2° 15' 54"
R= 2,529.60'
T= 65.78'
L= 131.54'
E= 0.85'
 θ = N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 11+52.96
N= 1,862,109.97
E= 1,176,002.13
P.T. STA= 12+84.51
N= 1,862,218.28
E= 1,175,927.50

CURVE EKWELLO4
P.I. STA= 13+72.28
N= 1,862,291.83
E= 1,175,879.60
 Δ = 5° 48' 38"
D= 3° 18' 45"
R= 1,729.58'
T= 87.77'
L= 175.40'
E= 2.22'
 θ = N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 12+84.51
N= 1,862,218.28
E= 1,175,927.50
P.T. STA= 14+59.61
N= 1,862,369.86
E= 1,175,839.39

CURVE EKWELLO5
P.I. STA= 19+10.50
N= 1,862,770.39
E= 1,175,632.97
 Δ = 12° 45' 31"
D= 6° 11' 38"
R= 925.00'
T= 103.41'
L= 205.97'
E= 5.76'
 θ = N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 18+07.09
N= 1,862,678.46
E= 1,175,680.34
P.T. STA= 20+13.07
N= 1,862,870.51
E= 1,175,607.06

CURVE EKWELLO6
P.I. STA= 21+01.89
N= 1,862,957.45
E= 1,175,589.82
 Δ = 5° 16' 59"
D= 6° 48' 23"
R= 841.78'
T= 38.83'
L= 77.62'
E= 0.89'
 θ = N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 20+63.05
N= 1,862,918.90
E= 1,175,594.54
P.T. STA= 21+40.67
N= 1,862,996.27
E= 1,175,588.66

BENCH MARK NO. 3528 ELEV. 16.20
DESCRIPTION:
CROSS CUT ON NORTHWESTERLY BOLT OF FIRE HYDRANT AT THE NORTHWEST CORNER OF 45TH ST AND WENTWORTH AVE

BENCH MARK NO. 3530 ELEV. 18.18
DESCRIPTION:
CROSS CUT ON SOUTHEAST BOLT OF LIGHT POLE BASE AT THE NORTHWEST CORNER OF 51ST ST AND WELLS ST

BENCH MARK NO. 3531 ELEV. 17.55
DESCRIPTION:
CROSS CUT ON NORTHEASTERLY FLANGE BOLT OF FIRE HYDRANT AT THE NORTHEAST CORNER OF GARFIELD BLVD AND WELLS ST

BENCH MARK NO. 3532 ELEV. 18.84
DESCRIPTION:
HORIZONTAL BOLT ON CTA "EL" STRUCTURE, EAST SIDE OF WELLS ST ABOUT 50 FEET NORTH OF 59TH PL.

BENCH MARK NO. 3533 ELEV. 19.71
DESCRIPTION:
BRASS DISK (CTA MONUMENT) AT THE SOUTHWEST CORNER OF 63RD ST AND HARVARD ST

BENCH MARK NO. 3535 ELEV. 19.31
DESCRIPTION:
FOUND CROSS CUT ON SOUTHERLY FLANGE BOLT OF FIRE HYDRANT AT THE NORTHEAST CORNER OF 59TH ST AND WENTWORTH AVE

BENCH MARK NO. 3536 ELEV. 18.37
DESCRIPTION:
CROSS CUT ON SOUTHEASTERLY FLANGE BOLT OF FIRE HYDRANT AT THE SOUTHEAST CORNER OF GARFIELD BLVD AND WENTWORTH AVE

BENCH MARK NO. 3537 ELEV. 17.71
DESCRIPTION:
CROSS CUT ON NORTHEASTERLY FLANGE BOLT OF FIRE HYDRANT AT THE NORTHEAST CORNER OF 51ST ST AND WENTWORTH AVE

BENCH MARK NO. 3538 ELEV. 17.31
DESCRIPTION:
CROSS CUT ON EASTERLY FLANGE BOLT OF FIRE HYDRANT AT THE NORTHEAST CORNER OF 47TH ST AND LASALLE ST

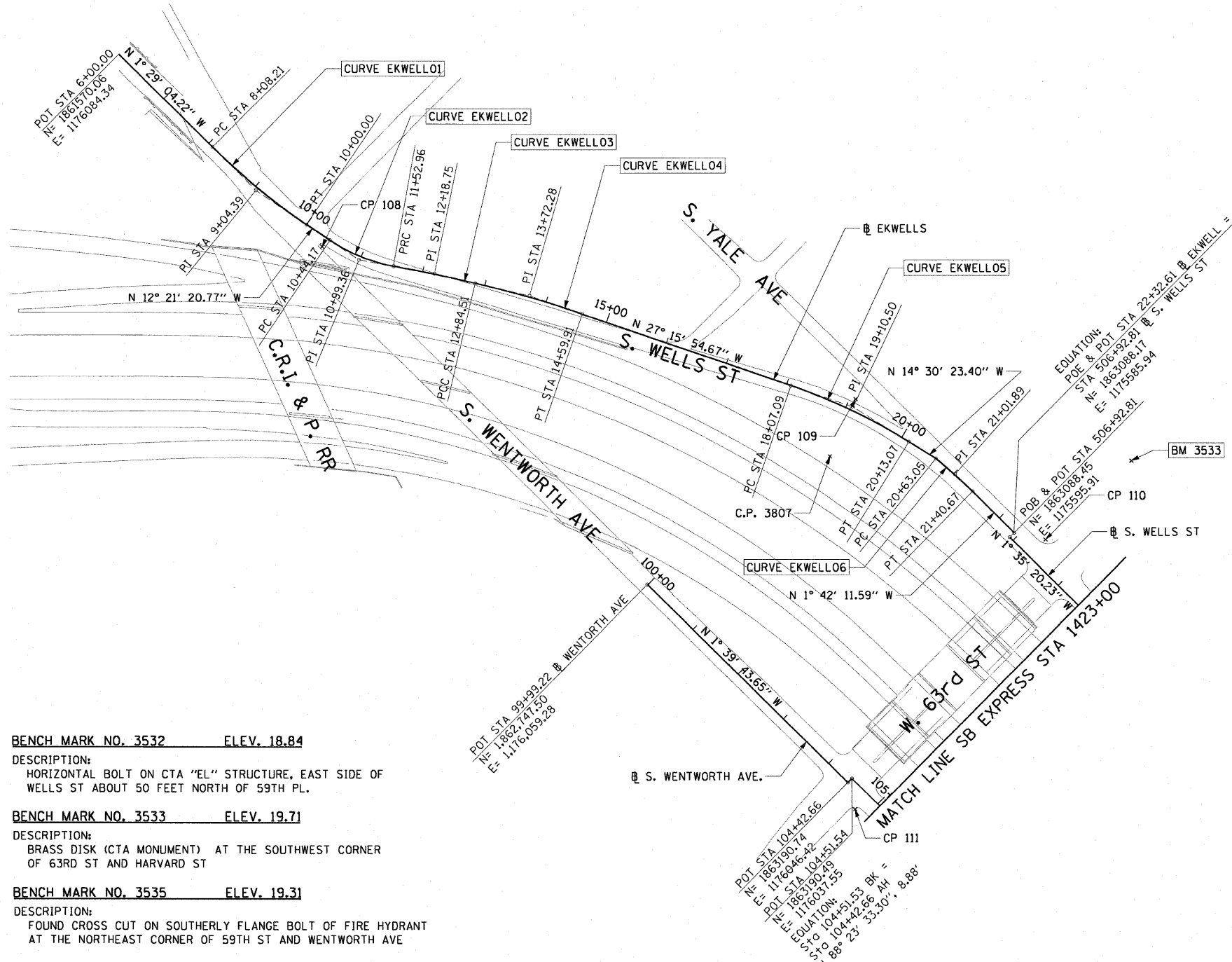
NOTES:
1. AVERAGE GRID TO GROUND CONVERSION FACTOR = 1.000010988654360

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (NORTHBOUND KNEE WALLS)

ALIGNMENT PLAN

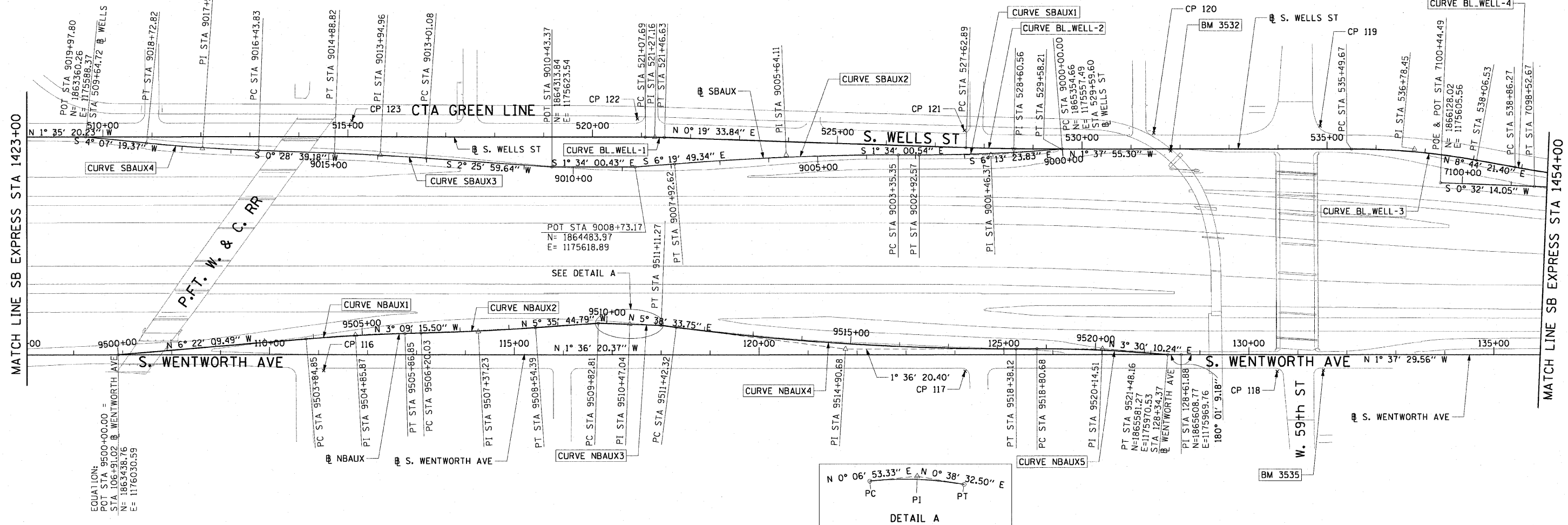
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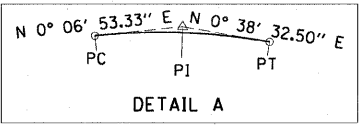
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	22	6
STA. TO STA.				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
* (2021-922 PT1 & 2122-921 PT1) I-1 62986				

CURVE SBAUX1	CURVE SBAUX2	CURVE SBAUX3	CURVE SBAUX4
P.I. STA= 9001+46.37	P.I. STA= 9005+64.11	P.I. STA= 9013+94.96	P.I. STA= 9017+58.36
N= 1,865,209.16	N= 1,864,791.41	N= 1,863,962.56	N= 1,863,599.16
E= 1,175,573.36	E= 1,175,584.78	E= 1,175,608.62	E= 1,175,605.59
Δ= 4° 39' 23"	Δ= 4° 45' 49"	Δ= 1° 57' 20"	Δ= 3° 38' 40"
D= 1° 35' 30"	D= 1° 02' 30"	D= 1° 02' 30"	D= 1° 35' 30"
R= 3600.00'	R= 5500.00'	R= 5500.00'	R= 3600.00'
T= 146.37'	T= 228.77'	T= 93.88'	T= 114.53'
L= 292.57'	L= 457.27'	L= 187.72'	L= 228.99'
E= 2.97'	E= 4.76'	E= 0.80'	E= 1.82'
ϕ= N/A	ϕ= N/A	ϕ= N/A	ϕ= N/A
T.R.= N/A	T.R.= N/A	T.R.= N/A	T.R.= N/A
S.E. RUN= N/A	S.E. RUN= N/A	S.E. RUN= N/A	S.E. RUN= N/A
P.C. STA= 9000+00.00	P.C. STA= 9003+35.35	P.C. STA= 9013+01.08	P.C. STA= 9016+43.83
N= 1,865,354.66	N= 1,865,020.09	N= 1,864,056.35	N= 1,863,713.69
E= 1,175,557.49	E= 1,175,578.53	E= 1,175,612.60	E= 1,175,606.54
P.T. STA= 9002+92.57	P.T. STA= 9007+92.62	P.T. STA= 9014+88.82	P.T. STA= 9018+72.82
N= 1,865,062.84	N= 1,864,564.03	N= 1,863,868.69	N= 1,863,484.92
E= 1,175,577.36	E= 1,175,610.01	E= 1,175,607.83	E= 1,175,597.35



CURVE NBAUX1	CURVE NBAUX2	CURVE NBAUX3	CURVE NBAUX4	CURVE NBAUX5	CURVE BL_WELL-1	CURVE BL_WELL-2	CURVE BL_WELL-3
P.I. STA= 9504+85.87	P.I. STA= 9507+37.23	P.I. STA= 9510+47.04	P.I. STA= 9514+90.68	P.I. STA= 9520+14.51	P.I. STA= 521+27.16	P.I. STA= 528+60.56	P.I. STA= 536+78.45
N= 1,863,921.64	N= 1,864,172.66	N= 1,864,481.34	N= 1,864,923.14	N= 1,865,447.69	N= 1,864,522.25	N= 1,865,255.64	N= 1,866,073.22
E= 1,175,976.69	E= 1,175,962.85	E= 1,175,939.03	E= 1,175,977.06	E= 1,175,962.35	E= 1,175,556.14	E= 1,175,560.31	E= 1,175,537.02
Δ= 3° 12' 54"	Δ= 2° 26' 29"	Δ= 0° 31' 39"	Δ= 7° 14' 54"	Δ= 5° 06' 31"	Δ= 1° 54' 54"	Δ= 1° 57' 29"	Δ= 10° 22' 17"
D= 1° 35' 30"	D= 1° 02' 30"	D= 0° 24' 38"	D= 1° 02' 30"	D= 1° 54' 35"	D= 4° 55' 05"	D= 1° 00' 09"	D= 4° 02' 16"
R= 3600.00'	R= 5500.00'	R= 13952.00'	R= 5500.00'	R= 3000.00'	R= 1165.00'	R= 5715.00'	R= 1419.00'
T= 101.03'	T= 117.20'	T= 64.23'	T= 348.36'	T= 133.83'	T= 19.47'	T= 97.67'	T= 128.78'
L= 202.00'	L= 234.36'	L= 128.46'	L= 695.79'	L= 267.48'	L= 38.94'	L= 195.31'	L= 256.86'
E= 1.42'	E= 1.25'	E= 0.15'	E= 11.02'	E= 2.98'	E= 0.16'	E= 0.83'	E= 5.83'
ϕ= N/A	ϕ= N/A	ϕ= N/A	ϕ= N/A	ϕ= 2.4	ϕ= N/A	ϕ= N/A	ϕ= N/A
T.R.= N/A	T.R.= N/A	T.R.= N/A	T.R.= N/A	T.R.= 11' (0')	T.R.= N/A	T.R.= N/A	T.R.= N/A
S.E. RUN= N/A	S.E. RUN= N/A	S.E. RUN= N/A	S.E. RUN= N/A	S.E. RUN= 66' (0')	S.E. RUN= N/A	S.E. RUN= N/A	S.E. RUN= N/A
P.C. STA= 9503+84.85	P.C. STA= 9506+20.03	P.C. STA= 9509+82.81	P.C. STA= 9511+42.32	P.C. STA= 9518+80.68	P.C. STA= 521+07.69	P.C. STA= 527+62.89	P.C. STA= 535+49.67
N= 1,863,821.23	N= 1,864,055.64	N= 1,864,417.11	N= 1,864,576.47	N= 1,865,313.91	N= 1,864,502.79	N= 1,865,157.98	N= 1,865,944.49
E= 1,175,987.89	E= 1,175,969.30	E= 1,175,938.90	E= 1,175,942.80	E= 1,175,966.10	E= 1,175,556.68	E= 1,175,559.75	E= 1,175,540.68
P.T. STA= 9505+86.85	P.T. STA= 9508+54.39	P.T. STA= 9511+11.27	P.T. STA= 9518+38.12	P.T. STA= 9521+48.16	P.T. STA= 521+46.63	P.T. STA= 529+58.21	P.T. STA= 538+06.53
N= 1,864,022.51	N= 1,864,289.30	N= 1,864,545.57	N= 1,865,271.36	N= 1,865,581.27	N= 1,864,541.72	N= 1,865,353.27	N= 1,866,200.51
E= 1,175,971.13	E= 1,175,951.42	E= 1,175,939.75	E= 1,175,967.30	E= 1,175,970.53	E= 1,175,556.25	E= 1,175,557.53	E= 1,175,556.58



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 59TH ST TO 47TH ST (NORTHBOUND KNEE WALLS)

ALIGNMENT PLAN

SCALE: 1"=100'
 DATE: JANUARY 14, 2009

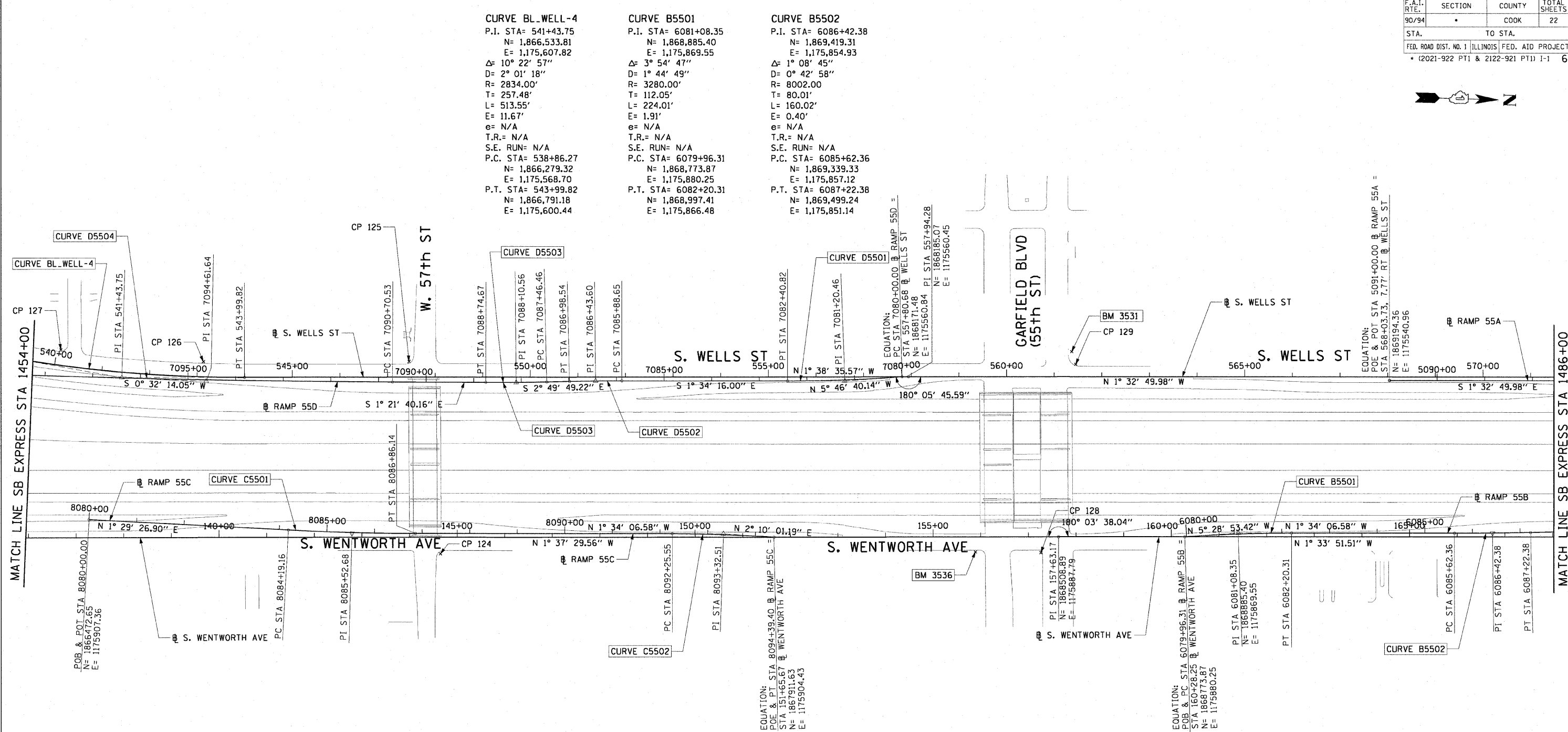
DRAWN BY: NJH
 CHECKED BY: RMG

NOTES:
 1. AVERAGE GRID TO GROUND CONVERSION FACTOR = 1.000010988654360
 2. FOR BENCH MARK INFORMATION, SEE SHEET 1 OF ALIGNMENT PLAN SHEETS.



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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	22	7
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	
				(2021-922 PT1 & 2122-921 PT1) I-1 62986



CURVE BL_WELL-4
P.I. STA= 541+43.75
N= 1,866,533.81
E= 1,175,607.82
Δ= 10° 22' 57"
D= 2° 01' 18"
R= 2834.00'
T= 257.48'
L= 513.55'
E= 11.67'
e= N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 538+86.27
N= 1,866,279.32
E= 1,175,568.70
P.T. STA= 543+99.82
N= 1,866,791.18
E= 1,175,600.44

CURVE B5501
P.I. STA= 6081+08.35
N= 1,868,885.40
E= 1,175,869.55
Δ= 3° 54' 47"
D= 1° 44' 49"
R= 3280.00'
T= 112.05'
L= 224.01'
E= 1.91'
e= N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 6079+96.31
N= 1,868,773.87
E= 1,175,880.25
P.T. STA= 6082+20.31
N= 1,868,997.41
E= 1,175,866.48

CURVE B5502
P.I. STA= 6086+42.38
N= 1,869,419.31
E= 1,175,854.93
Δ= 1° 08' 45"
D= 0° 42' 58"
R= 8002.00'
T= 80.01'
L= 160.02'
E= 0.40'
e= N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 6085+62.36
N= 1,869,339.33
E= 1,175,857.12
P.T. STA= 6087+22.38
N= 1,869,499.24
E= 1,175,851.14

CURVE C5501
P.I. STA= 8085+52.68
N= 1,867,025.15
E= 1,175,921.74
Δ= 3° 03' 33"
D= 1° 08' 45"
R= 5000.00'
T= 133.52'
L= 266.97'
E= 1.78'
e= N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 8084+19.16
N= 1,866,891.67
E= 1,175,918.26
P.T. STA= 8086+86.14
N= 1,867,158.61
E= 1,175,918.08

CURVE C5502
P.I. STA= 8093+32.51
N= 1,867,025.15
E= 1,175,900.39
Δ= 3° 44' 08"
D= 1° 44' 49"
R= 3280.00'
T= 106.96'
L= 213.84'
E= 1.74'
e= N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 8092+25.55
N= 1,867,697.83
E= 1,175,903.32
P.T. STA= 8094+39.40
N= 1,867,911.63
E= 1,175,904.43

CURVE D5501
P.I. STA= 7081+20.46
N= 1,868,051.63
E= 1,175,572.97
Δ= 4° 12' 24"
D= 1° 44' 49"
R= 3280.00'
T= 120.46'
L= 240.82'
E= 2.21'
e= N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 7080+00.00
N= 1,868,171.48
E= 1,175,560.84
P.T. STA= 7082+40.82
N= 1,867,931.21
E= 1,175,576.27

CURVE D5502
P.I. STA= 7086+43.60
N= 1,867,528.58
E= 1,175,587.31
Δ= 1° 15' 33"
D= 1° 08' 45"
R= 5000.00'
T= 54.95'
L= 109.89'
E= 0.30'
e= N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 7085+88.65
N= 1,867,583.50
E= 1,175,585.81
P.T. STA= 7088+98.54
N= 1,867,473.70
E= 1,175,590.03

CURVE D5503
P.I. STA= 7088+10.56
N= 1,867,361.81
E= 1,175,595.56
Δ= 1° 28' 09"
D= 1° 08' 45"
R= 5000.00'
T= 64.11'
L= 128.21'
E= 0.41'
e= N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 7087+46.46
N= 1,867,425.84
E= 1,175,592.39
P.T. STA= 7088+74.67
N= 1,867,297.72
E= 1,175,597.08

CURVE D5504
P.I. STA= 7094+61.64
N= 1,866,710.92
E= 1,175,611.02
Δ= 1° 53' 54"
D= 0° 14' 34"
R= 23606.00'
T= 391.11'
L= 782.14'
E= 3.24'
e= N/A
T.R.= N/A
S.E. RUN= N/A
P.C. STA= 7090+70.53
N= 1,867,101.91
E= 1,175,601.73
P.T. STA= 7098+52.67
N= 1,866,319.83
E= 1,175,607.36

- NOTES:**
- AVERAGE GRID TO GROUND CONVERSION FACTOR = 1.000010988654360
 - FOR BENCH MARK INFORMATION, SEE SHEET 1 OF ALIGNMENT PLAN SHEETS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (NORTHBOUND KNEE WALLS)

ALIGNMENT PLAN

SCALE: 1"=100'
DATE: JANUARY 14, 2009
DRAWN BY: NJH
CHECKED BY: RMG



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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	22	8
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
• (2021-922 PT1 & 2122-921 PT1) I-1				62986



CURVE C4701
 P.I. STA= 8068+34.90
 N= 1,872,302.10
 E= 1,175,769.16
 Δ= 2° 04' 05"
 D= 1° 08' 45"
 R= 5000.00'
 T= 90.24'
 L= 180.47'
 E= 0.81'
 e= N/A
 T.R.= N/A
 S.E. RUN= N/A
 P.C. STA= 8067+44.66
 N= 1,872,211.86
 E= 1,175,768.33
 P.T. STA= 8069+25.12
 N= 1,872,392.31
 E= 1,175,766.72

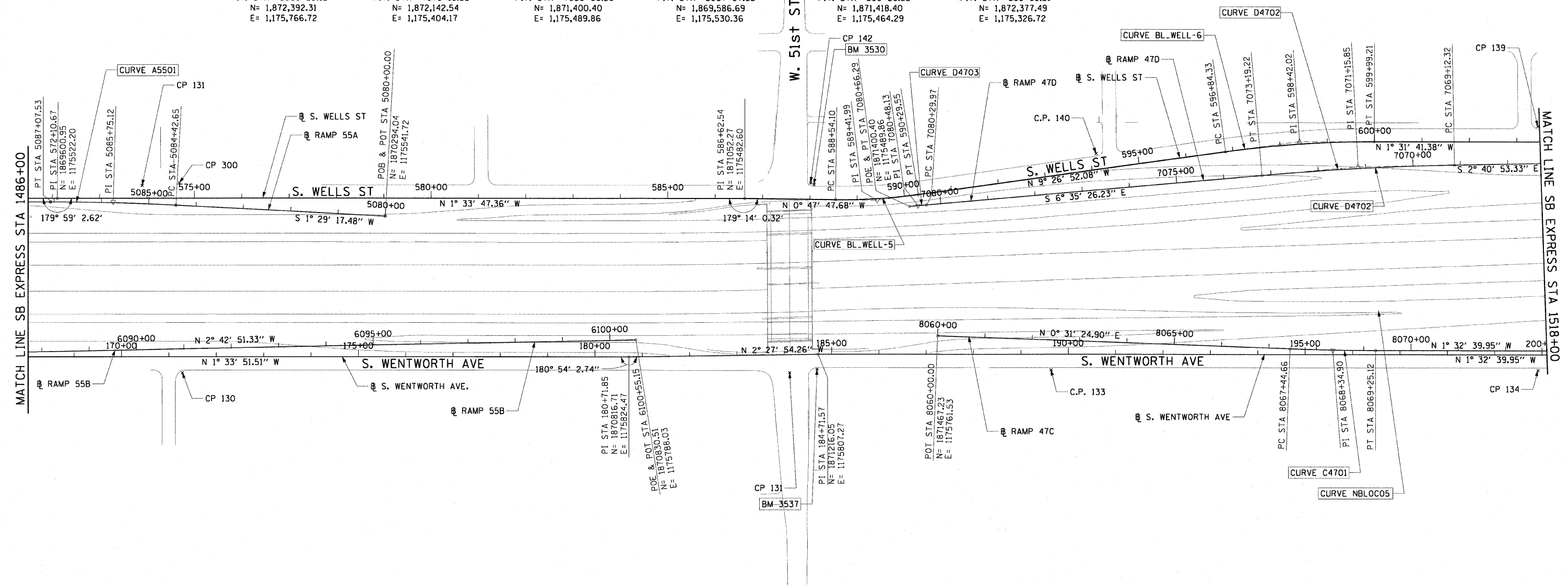
CURVE D4702
 P.I. STA= 7071+15.85
 N= 1,872,344.72
 E= 1,175,380.81
 Δ= 3° 54' 33"
 D= 0° 57' 38"
 R= 5964.00'
 T= 203.53'
 L= 406.91'
 E= 3.47'
 e= N/A
 T.R.= N/A
 S.E. RUN= N/A
 P.C. STA= 7069+12.32
 N= 1,872,548.03
 E= 1,175,371.29
 P.T. STA= 7073+19.22
 N= 1,872,142.54
 E= 1,175,404.17

CURVE D4703
 P.I. STA= 7080+48.13
 N= 1,871,418.45
 E= 1,175,487.83
 Δ= 0° 11' 56"
 D= 0° 32' 51"
 R= 10464.00'
 T= 18.16'
 L= 36.32'
 E= 0.02'
 e= N/A
 T.R.= N/A
 S.E. RUN= N/A
 P.C. STA= 7080+29.97
 N= 1,871,436.49
 E= 1,175,485.75
 P.T. STA= 7080+66.29
 N= 1,871,400.40
 E= 1,175,489.86

CURVE A5501
 P.I. STA= 5085+75.12
 N= 1,869,719.11
 E= 1,175,526.79
 Δ= 3° 02' 07"
 D= 1° 08' 45"
 R= 5000.00'
 T= 132.48'
 L= 264.89'
 E= 1.75'
 e= N/A
 T.R.= N/A
 S.E. RUN= N/A
 P.C. STA= 5084+42.65
 N= 1,869,851.55
 E= 1,175,530.23
 P.T. STA= 5087+07.53
 N= 1,869,586.69
 E= 1,175,530.36

CURVE BL.WELL-5
 P.I. STA= 589+41.99
 N= 1,871,331.70
 E= 1,175,478.71
 Δ= 8° 39' 04"
 D= 4° 55' 51"
 R= 1162.00'
 T= 87.89'
 L= 175.45'
 E= 3.32'
 e= N/A
 T.R.= N/A
 S.E. RUN= N/A
 P.C. STA= 588+54.10
 N= 1,871,243.82
 E= 1,175,479.94
 P.T. STA= 590+29.55
 N= 1,871,418.40
 E= 1,175,464.29

CURVE BL.WELL-6
 P.I. STA= 598+42.02
 N= 1,872,219.86
 E= 1,175,330.92
 Δ= 7° 55' 11"
 D= 2° 30' 55"
 R= 2278.00'
 T= 157.69'
 L= 314.87'
 E= 5.45'
 e= N/A
 T.R.= N/A
 S.E. RUN= N/A
 P.C. STA= 596+84.33
 N= 1,872,064.31
 E= 1,175,356.80
 P.T. STA= 599+99.21
 N= 1,872,377.49
 E= 1,175,326.72



- NOTES:**
1. AVERAGE GRID TO GROUND CONVERSION FACTOR = 1.000010988654360
 2. FOR BENCH MARK INFORMATION, SEE SHEET 1 OF ALIGNMENT PLAN SHEETS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 59TH ST TO 47TH ST (NORTHBOUND KNEE WALLS)

ALIGNMENT PLAN

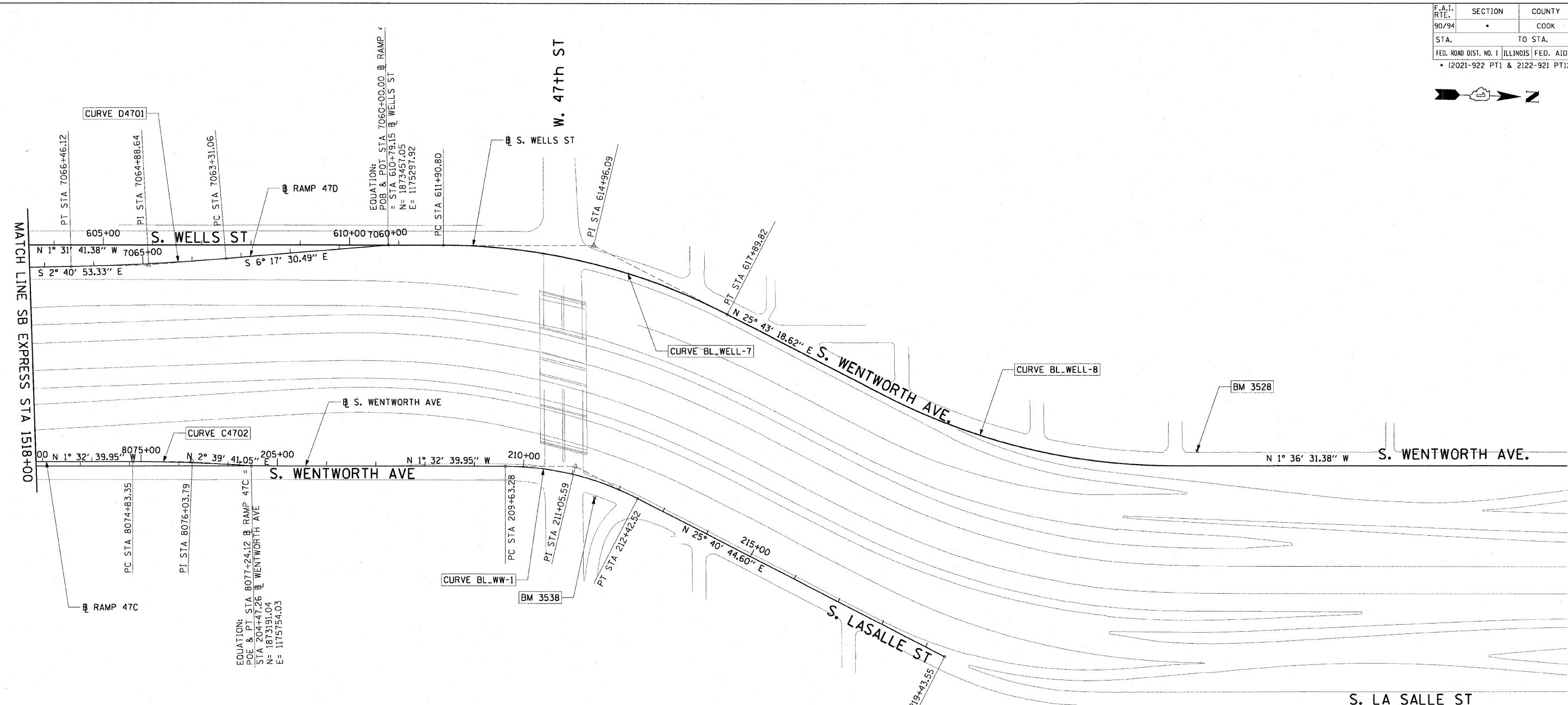
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 DATE: JANUARY 14, 2009

DRAWN BY: NJH
 CHECKED BY: RMG

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	22	9
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
		• (2021-922 PT1 & 2122-921 PT1) I-1 62986		



<p>CURVE D4701 P.I. STA= 7064+88.64 N= 1,872,971.35 E= 1,175,351.47 Δ= 3° 36' 37" D= 1° 08' 45" R= 5000.00' T= 157.58' L= 315.06' E= 2.48' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 7063+31.06 N= 1,873,127.98 E= 1,175,334.20 P.T. STA= 7066+46.12 N= 1,872,813.94 E= 1,175,358.84</p>	<p>CURVE C4702 P.I. STA= 8076+03.79 N= 1,873,070.73 E= 1,175,748.43 Δ= 4° 12' 21" D= 1° 44' 49" R= 3280.00' T= 120.44' L= 240.77' E= 2.21' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 8074+83.35 N= 1,872,950.33 E= 1,175,751.68 P.T. STA= 8077+24.12 N= 1,873,191.04 E= 1,175,754.03</p>	<p>CURVE BL_WELL-8 P.I. STA= 624+60.62 N= 1,874,753.20 E= 1,175,710.42 Δ= 27° 19' 50" D= 4° 27' 01" R= 1287.50' T= 313.03' L= 614.15' E= 37.51' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 621+47.59 N= 1,874,471.18 E= 1,175,574.56 P.T. STA= 627+61.73 N= 1,875,066.11 E= 1,175,701.63</p>	<p>CURVE BL_WELL-7 P.I. STA= 614+96.09 N= 1,873,873.84 E= 1,175,286.80 Δ= 27° 15' 00" D= 4° 32' 57" R= 1259.50' T= 305.29' L= 599.02' E= 36.47' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 611+90.80 N= 1,873,568.66 E= 1,175,294.94 P.T. STA= 617+89.82 N= 1,874,148.87 E= 1,175,419.29</p>	<p>CURVE BL_WW-1 P.I. STA= 211+05.59 N= 1,873,849.12 E= 1,175,736.28 Δ= 27° 13' 25" D= 9° 44' 58" R= 587.69' T= 142.30' L= 279.23' E= 16.98' e= N/A T.R.= N/A S.E. RUN= N/A P.C. STA= 209+63.28 N= 1,873,706.87 E= 1,175,740.12 P.T. STA= 212+42.52 N= 1,873,977.37 E= 1,175,797.95</p>
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- NOTES:**
- AVERAGE GRID TO GROUND CONVERSION FACTOR = 1.000010988654360
 - FOR BENCH MARK INFORMATION, SEE SHEET 1 OF ALIGNMENT PLAN SHEETS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
 59TH ST TO 47TH ST (NORTHBOUND KNEE WALLS)

ALIGNMENT PLAN

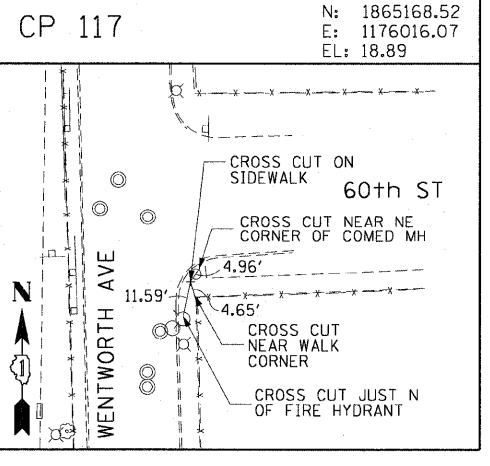
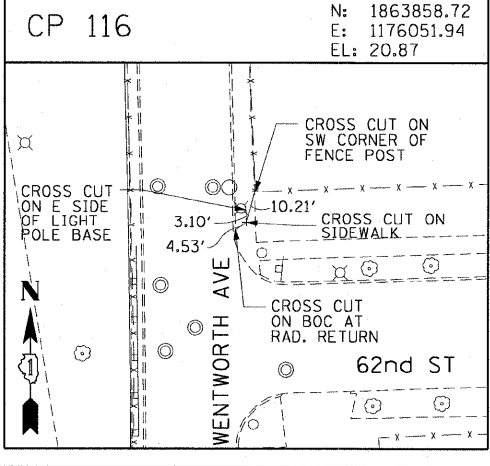
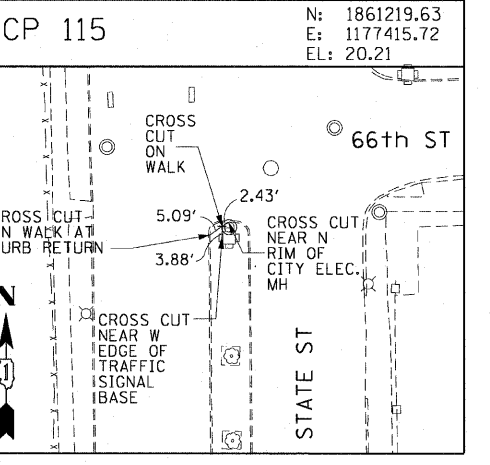
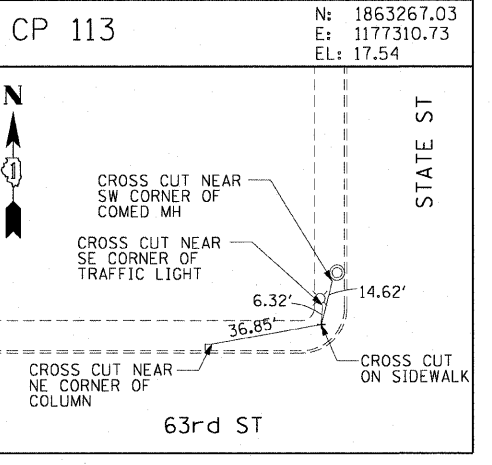
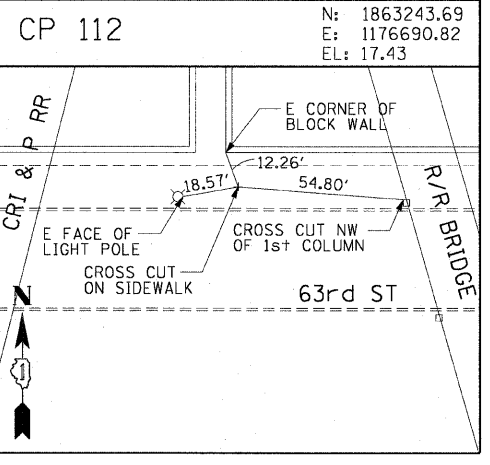
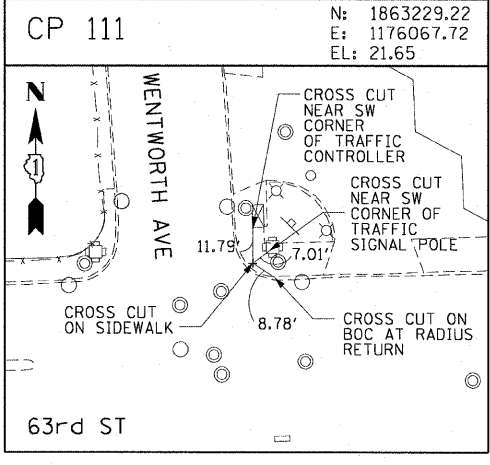
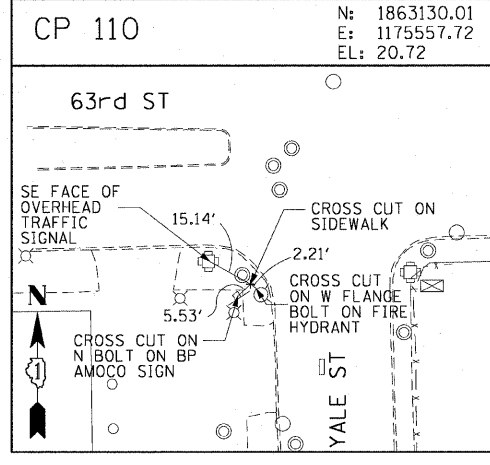
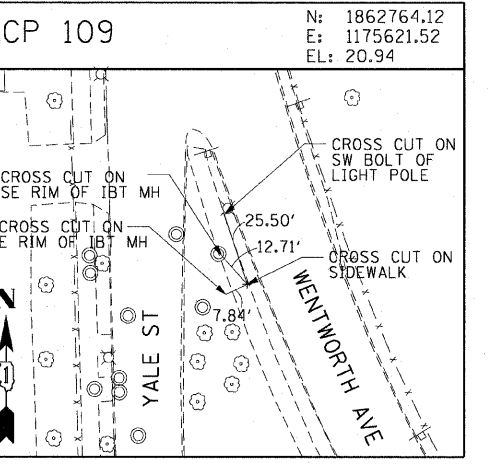
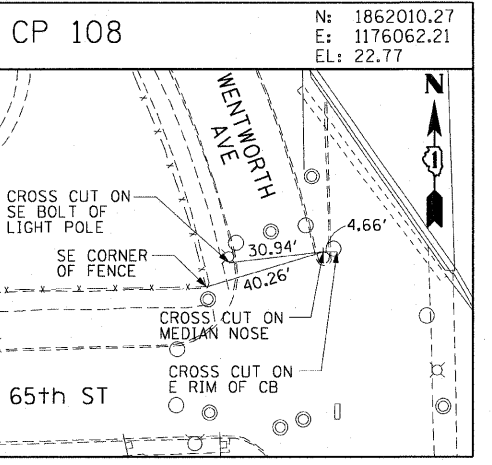
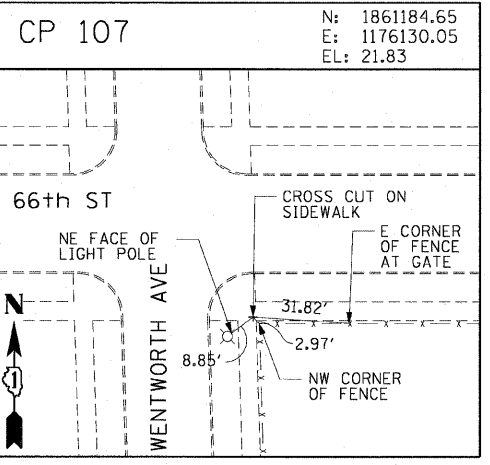
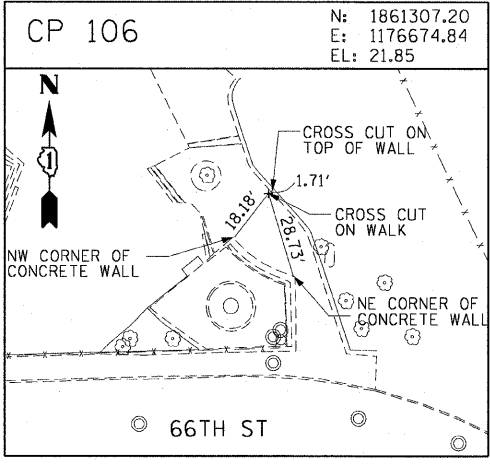
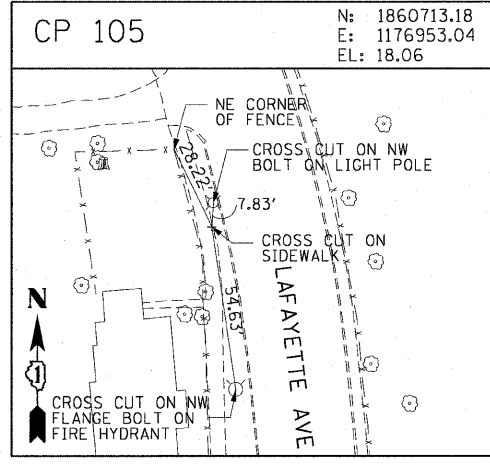
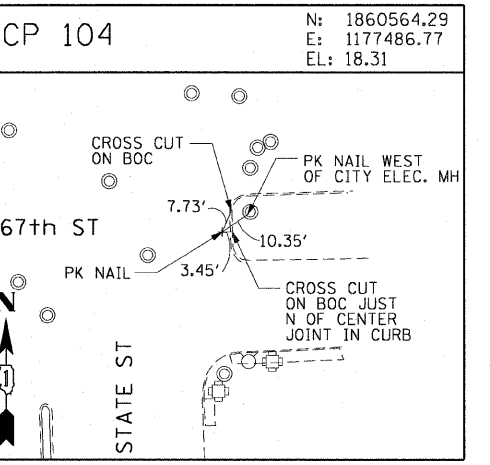
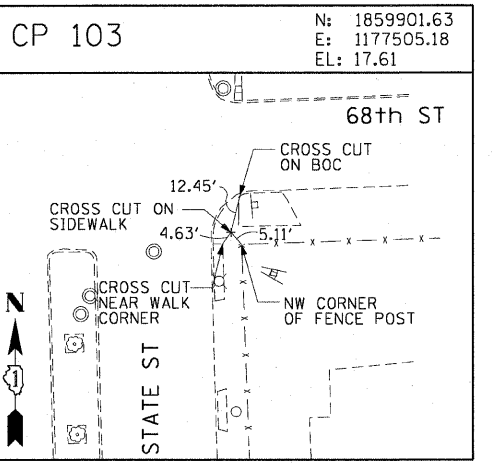
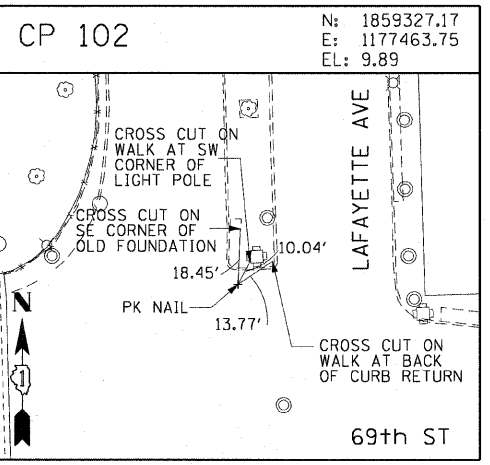
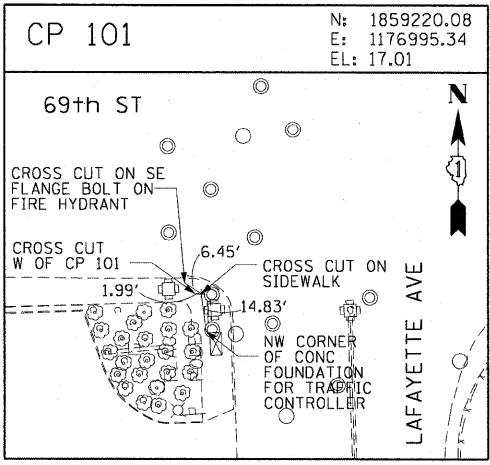
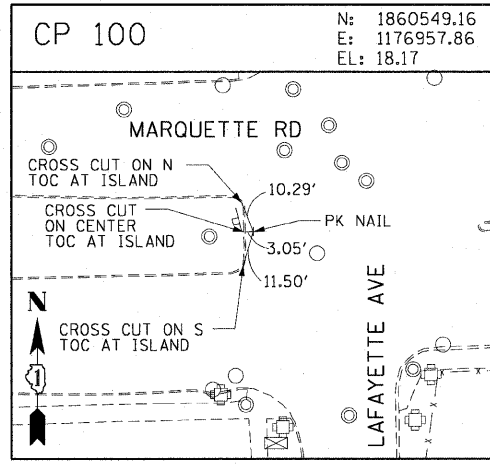
SCALE: 1"=100'
 DATE: JANUARY 14, 2009

DRAWN BY: NJH
 CHECKED BY: RMG



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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	22	10
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (2021-922 PT1 & 2122-921 PT1) I-1 62986				



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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (NORTHBOUND KNEE WALLS)

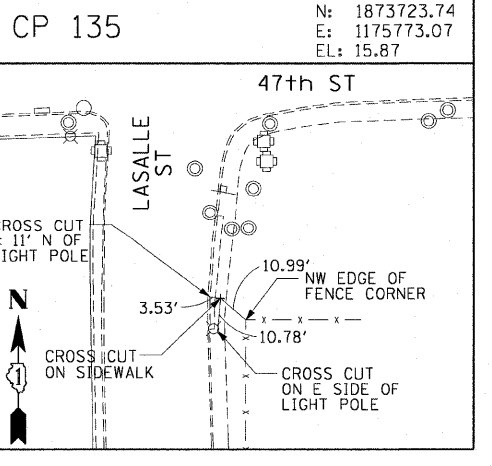
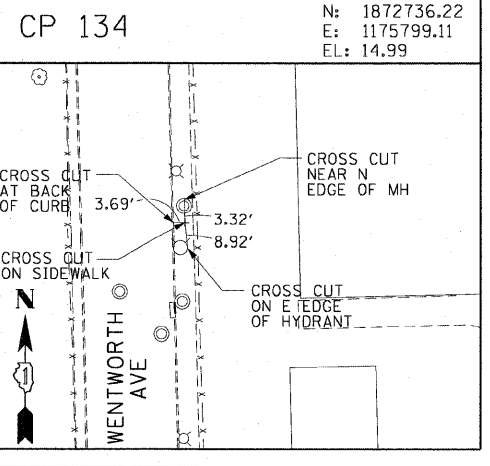
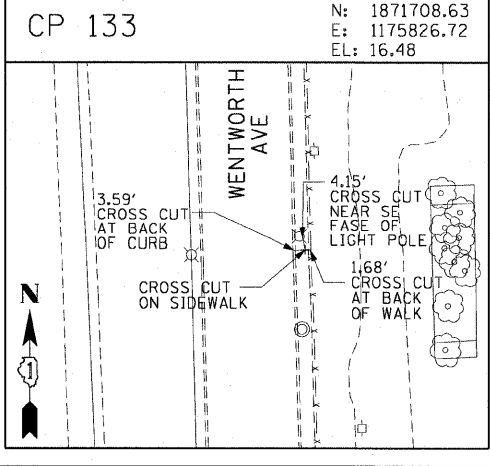
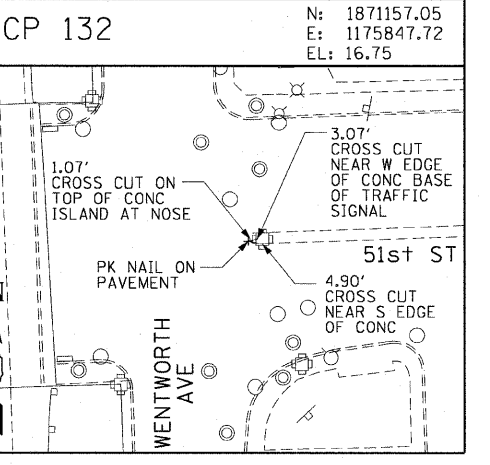
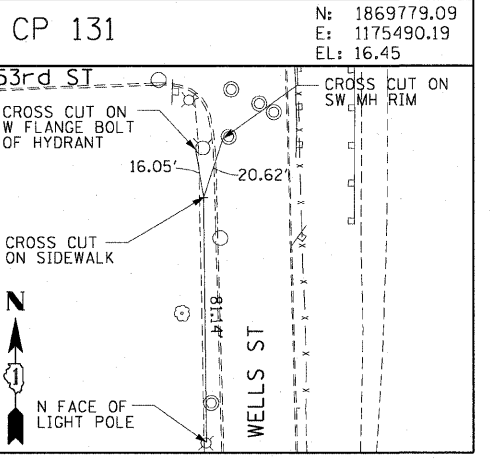
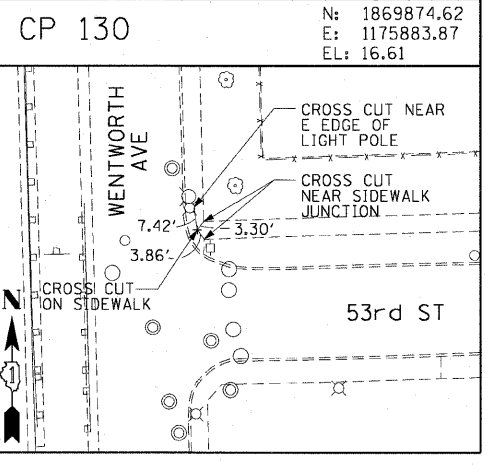
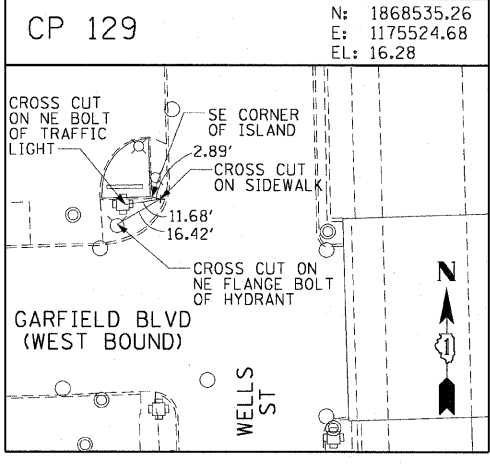
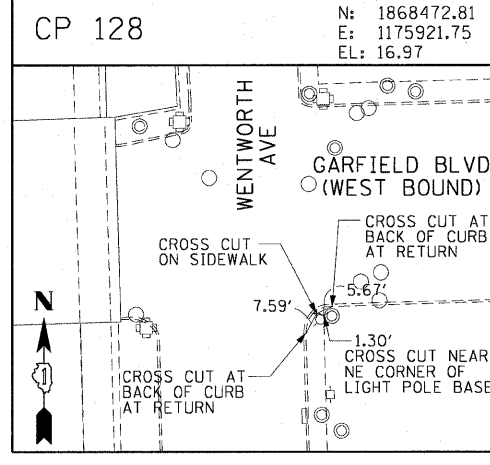
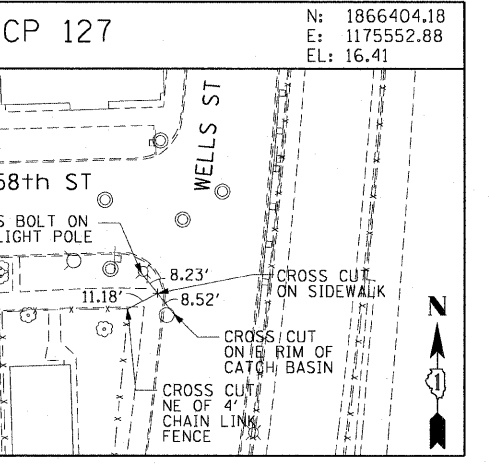
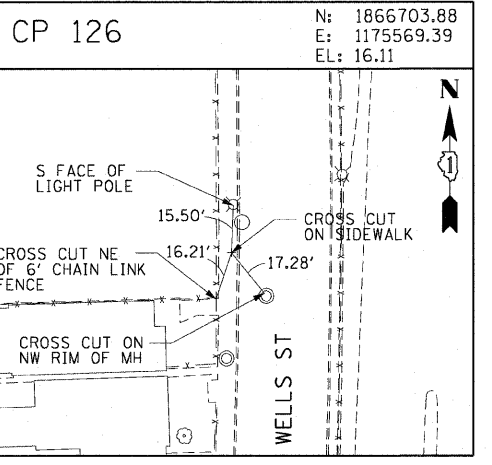
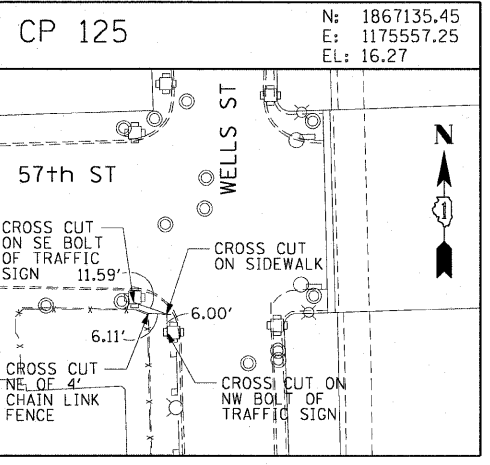
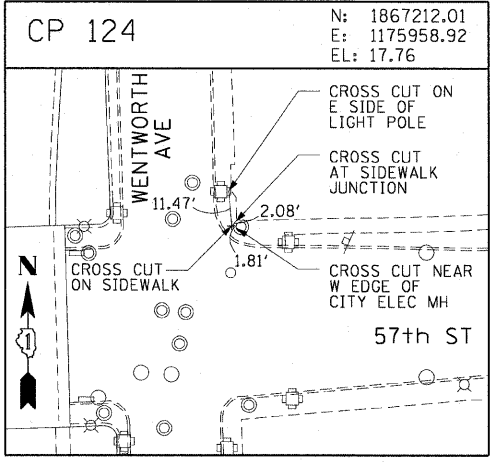
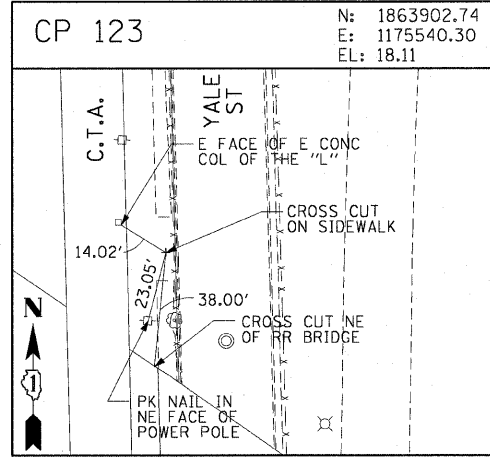
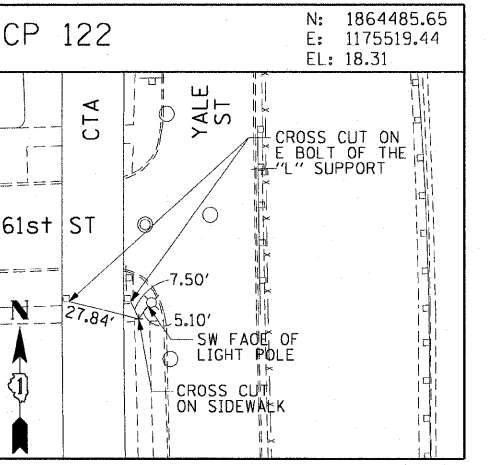
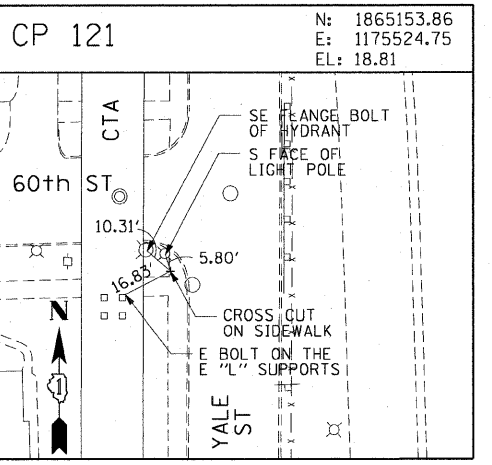
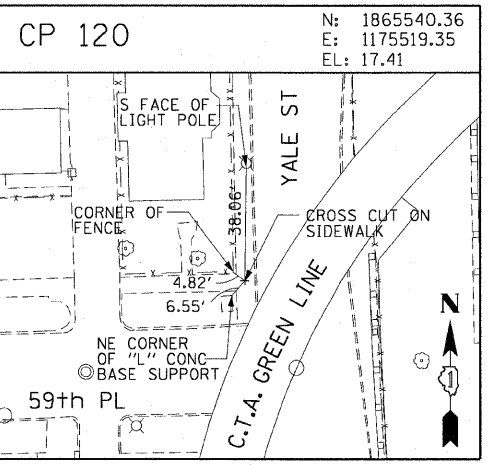
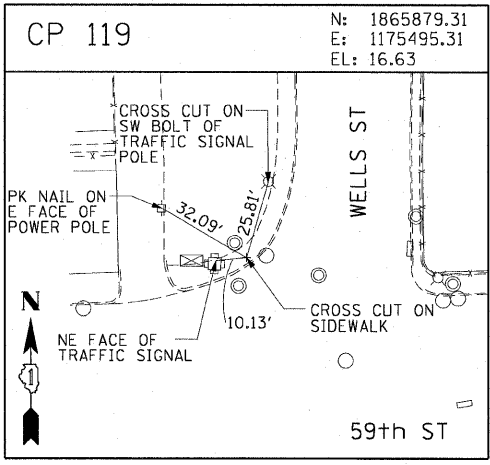
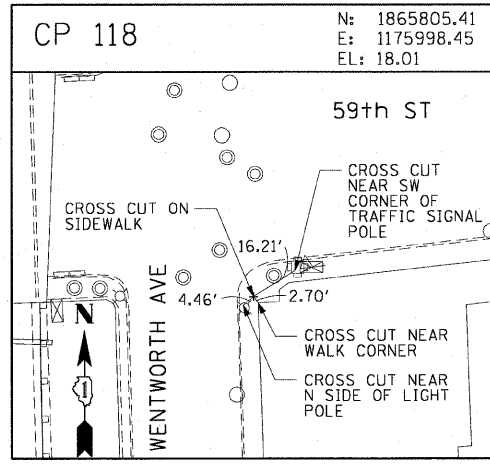
SURVEY TIES AND CONTROL POINTS

SCALE: 1"=30'
DATE: JANUARY 14, 2009

DRAWN BY: MRK
CHECKED BY: JAL

V:\cs\proj\2009\10468\10468.dwg\1128-rmc-wrll - fence\contract 29\1291020.dwg 1/13/2009 12:06:42 PM

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	22	11
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
		* (2021-922 PT1 & 2122-921 PT1) 1-1 62986		



AECOM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59th ST TO 47th ST (NORTHBOUND KNEE WALLS)

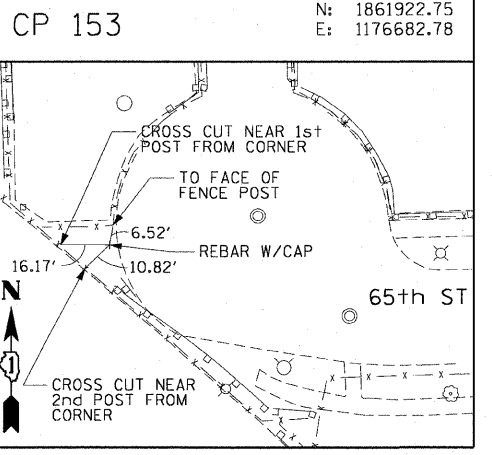
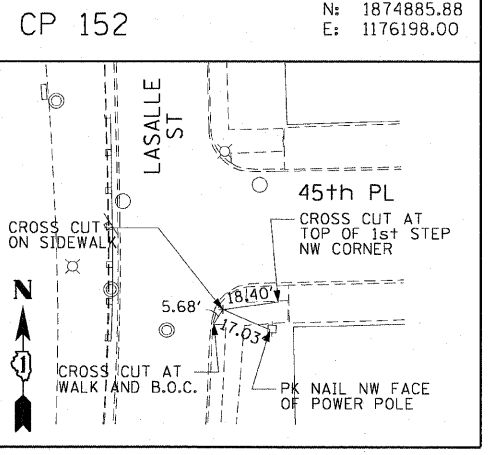
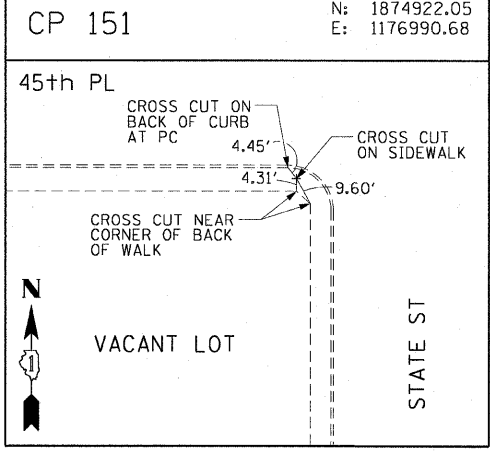
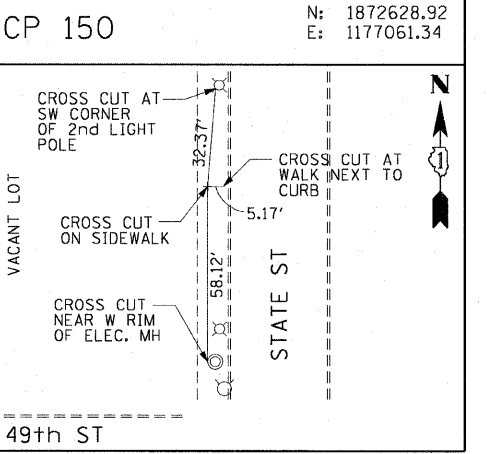
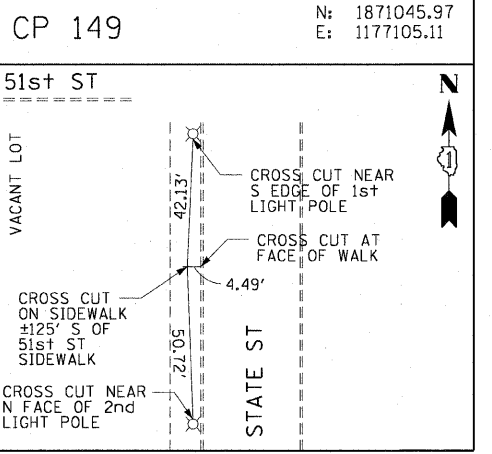
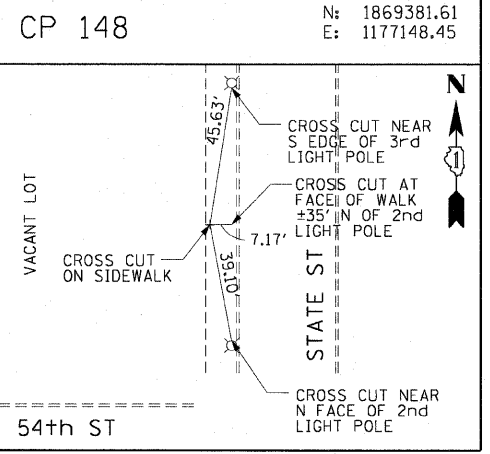
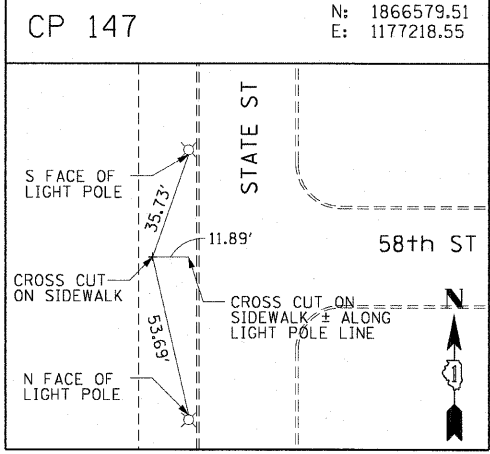
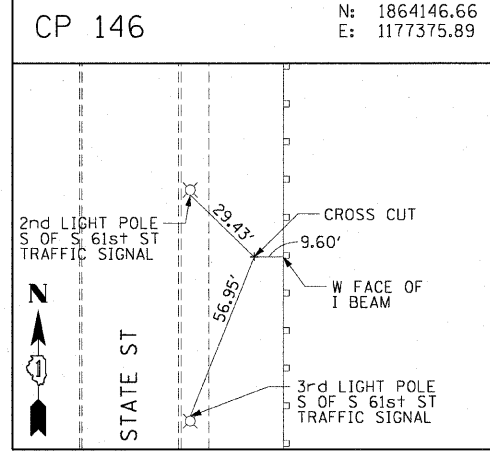
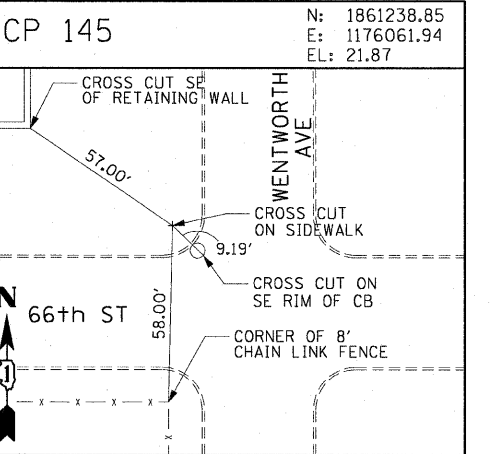
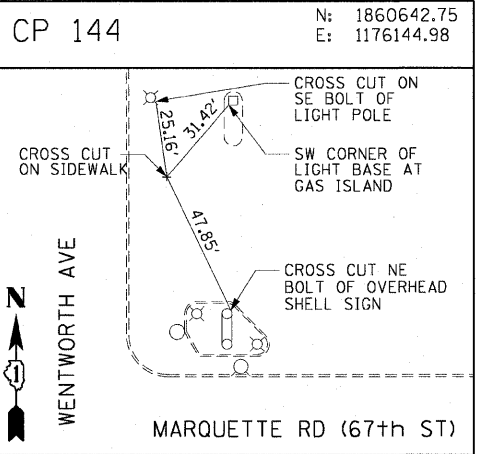
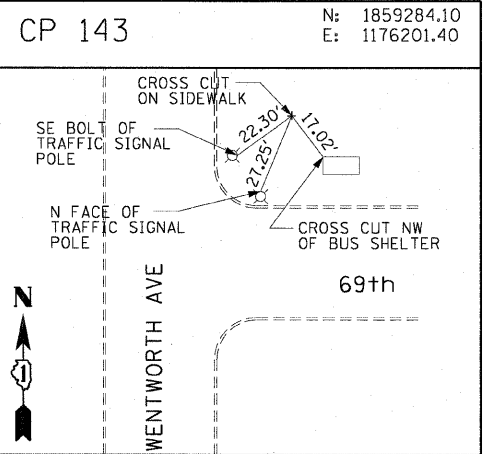
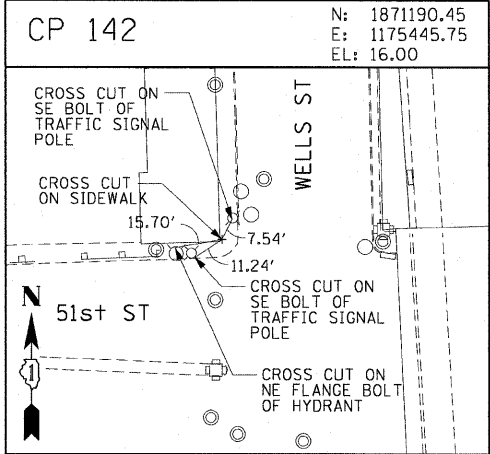
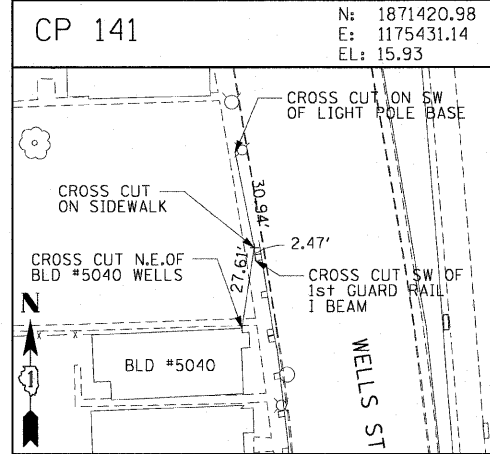
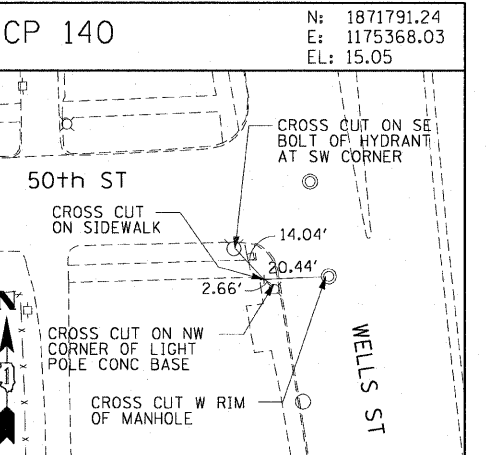
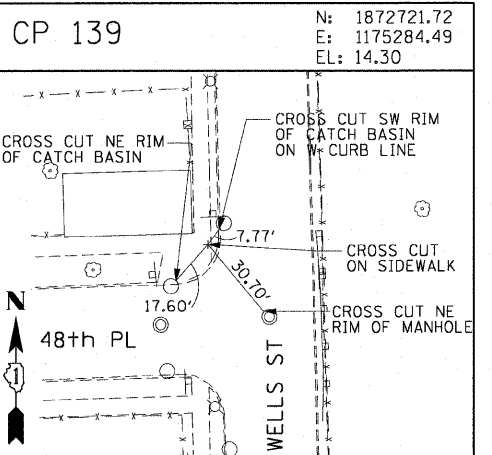
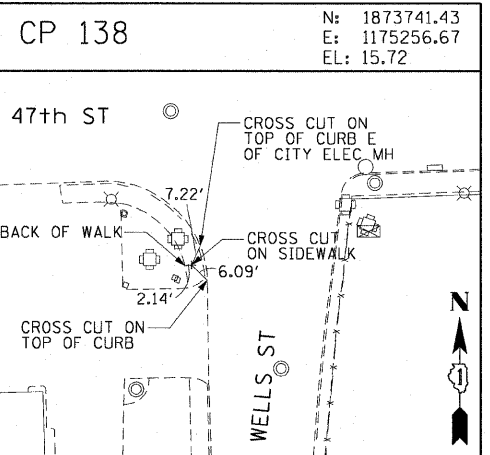
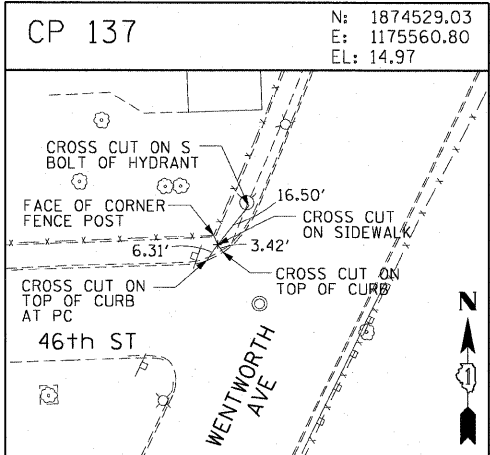
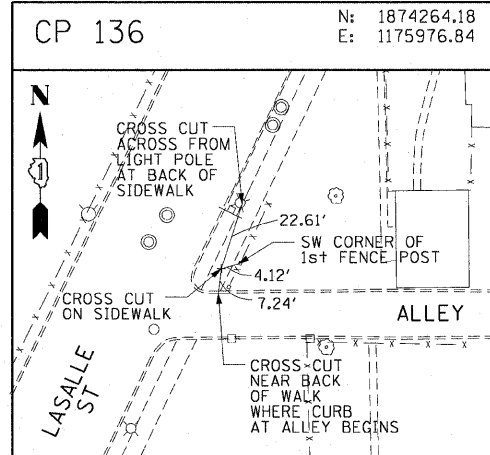
SURVEY TIES AND CONTROL POINTS

SCALE: 1"=30'
DATE: JANUARY 14, 2009

DRAWN BY: MRK
CHECKED BY: JAL

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	22	12
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
		• (2021-922 PT1 & 2122-921 PT1) 1-1		62986



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NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (NORTHBOUND KNEE WALLS)

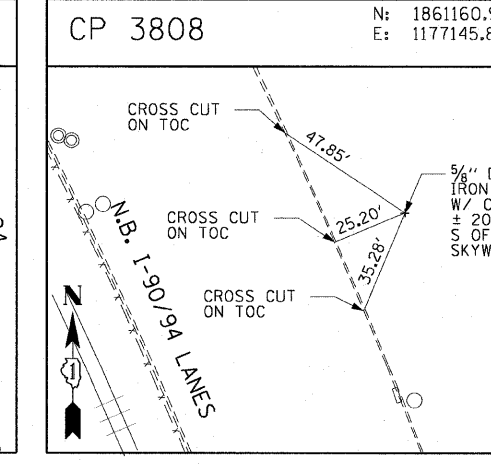
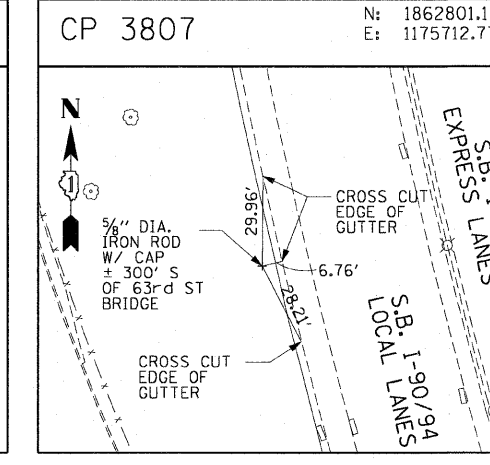
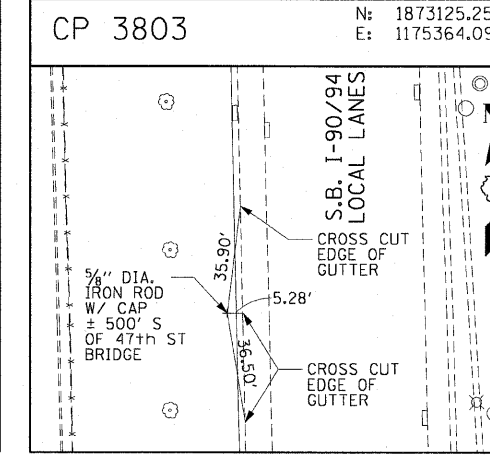
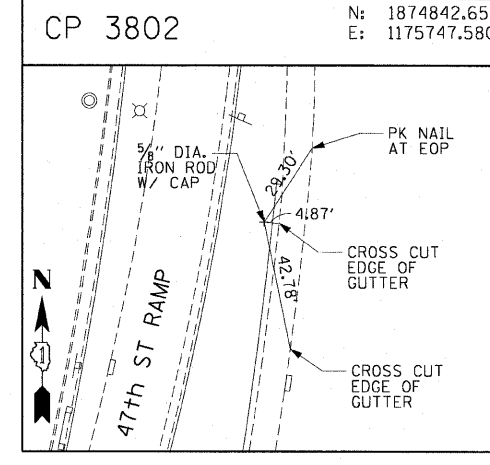
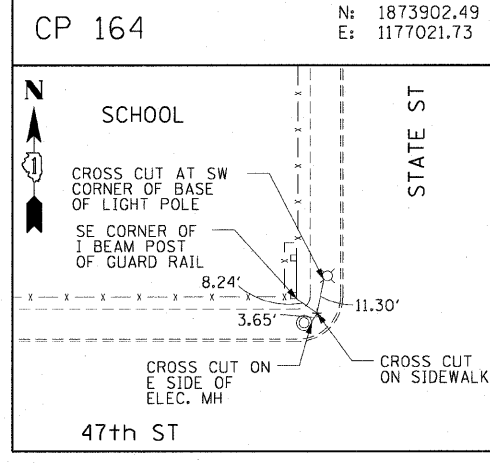
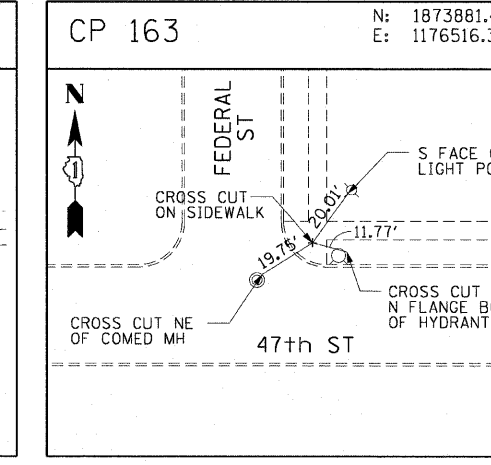
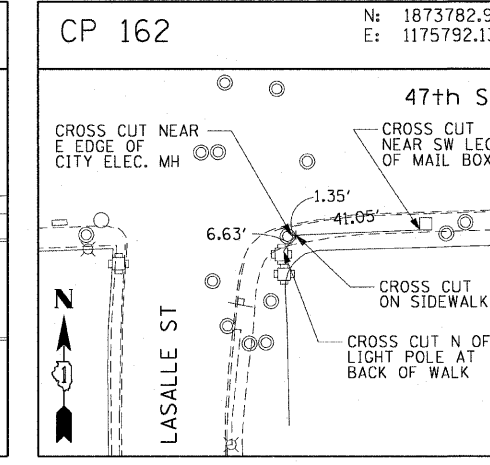
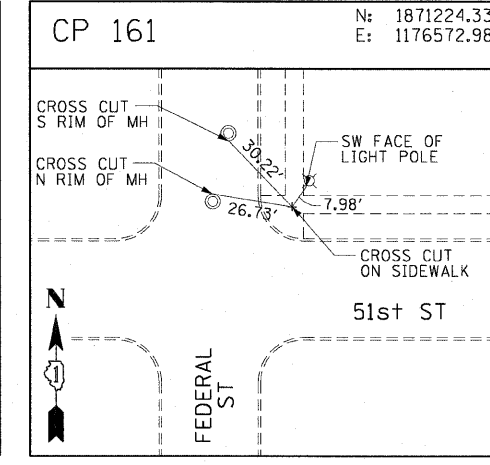
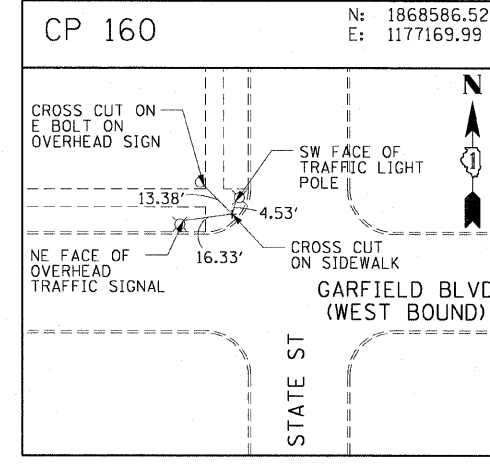
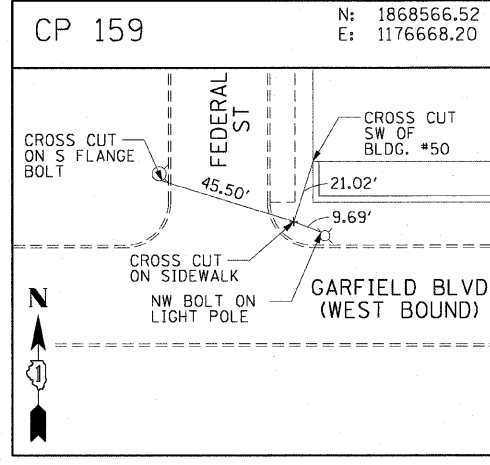
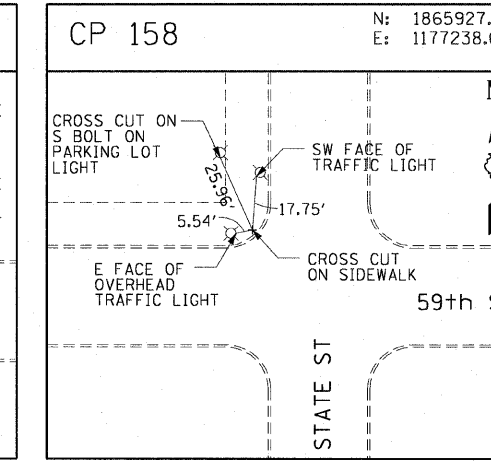
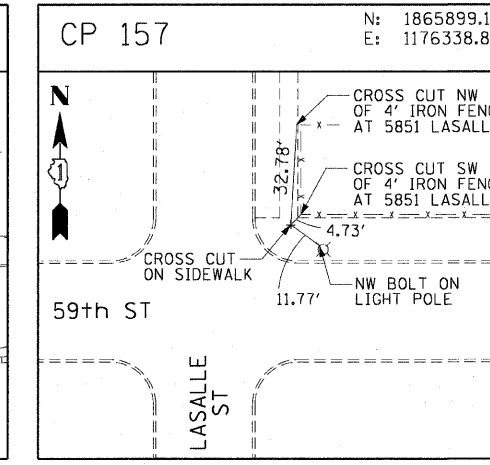
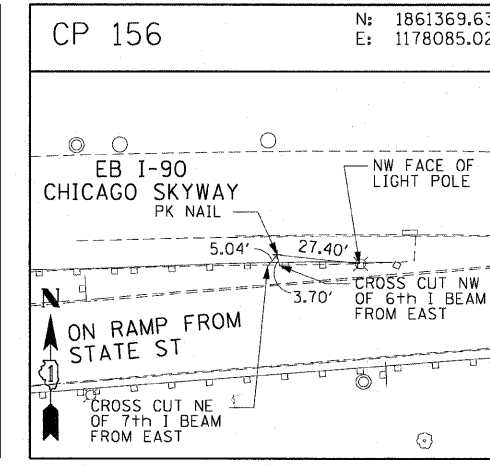
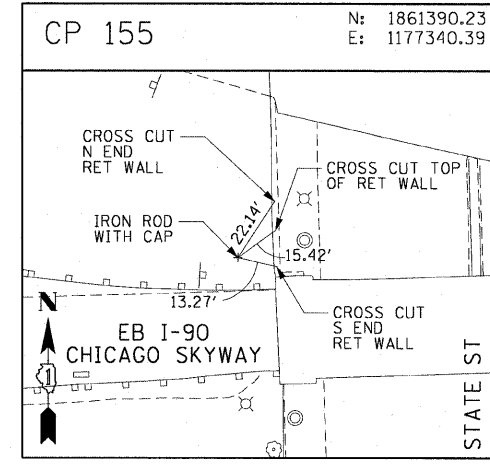
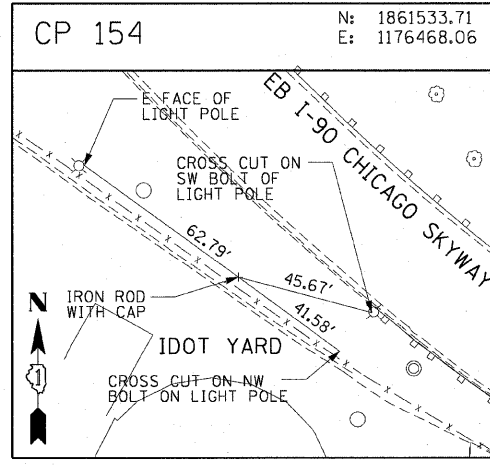
SURVEY TIES AND CONTROL POINTS

SCALE: 1"=30'
DATE: JANUARY 14, 2009

DRAWN BY: MRK
CHECKED BY: JAL

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	22	13
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
		* (2021-922 PT1 & 2122-921 PT1) I-1 62986		



AECOM

REVISIONS	
NAME	DATE

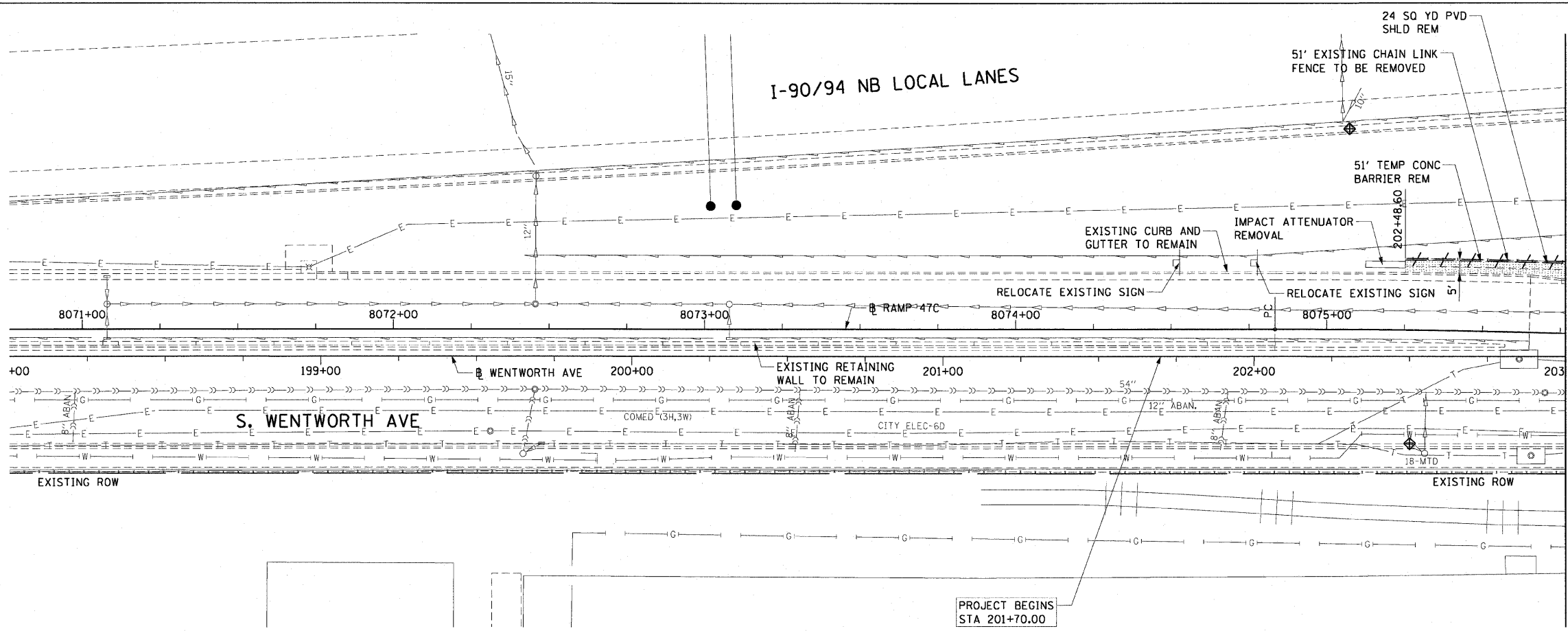
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (NORTHBOUND KNEE WALLS)
SURVEY TIES AND CONTROL POINTS

SCALE: 1"=30'
DATE: JANUARY 14, 2009

DRAWN BY: MRK
CHECKED BY: JAL

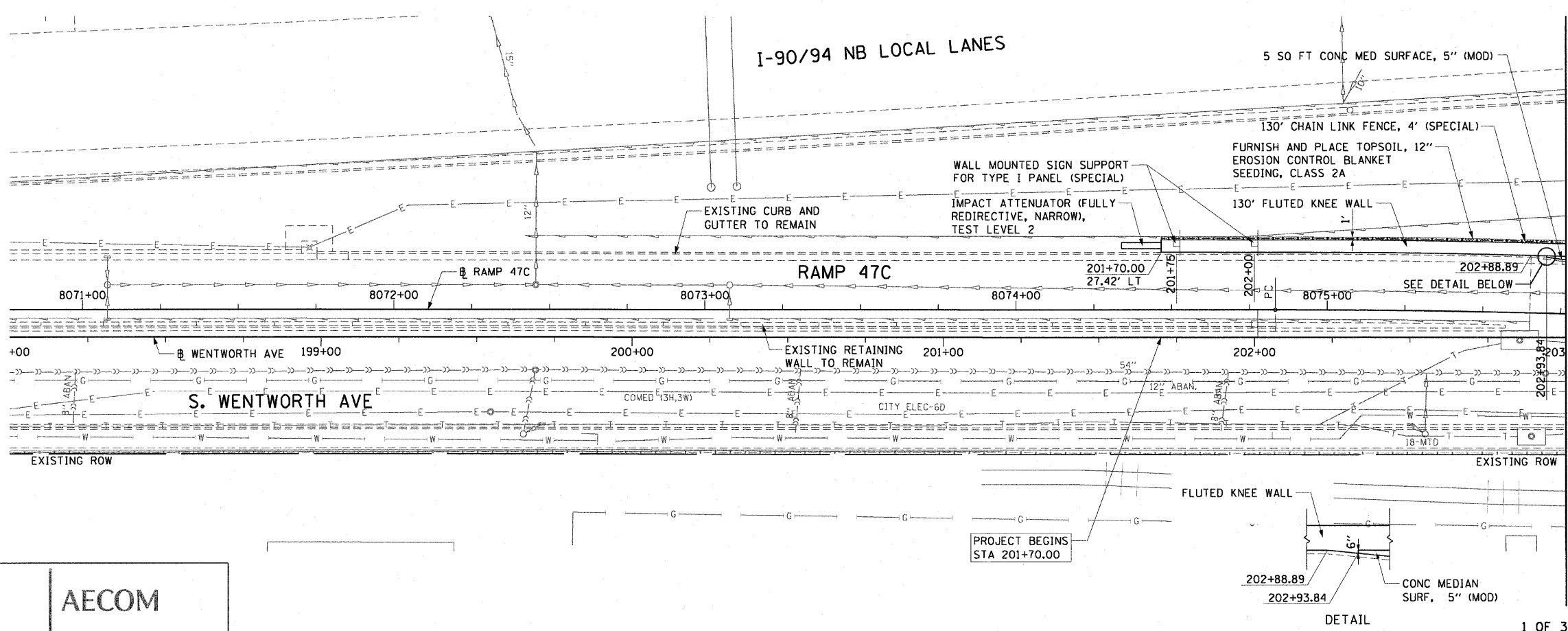
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	22	14
STA. 201+70.00		TO STA. 203+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (2021-922 PT1) & 2122-921 PT1) I-1 62986				

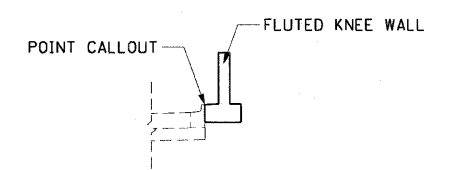


- LEGEND:**
- AREA REMOVALS
 - LINEAR REMOVALS
 - INLET FILTER

**EXISTING CONDITIONS AND REMOVAL
PROPOSED IMPROVEMENTS**



- NOTES:**
1. SEE STRUCTURAL DETAILS FOR FLUTED KNEE WALL DETAILS.
 2. ALL POINT CALLOUTS ARE TAKEN AT THE EDGE OF THE KNEE WALL BASE (SEE BELOW).
 3. SEE ROADWAY DETAILS FOR CONCRETE MEDIAN DETAILS.
 4. SEE ROADWAY DETAILS FOR WALL MOUNTED SIGN SUPPORT DETAILS.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (NORTHBOUND KNEE WALLS)
**EXISTING AND PROPOSED ROADWAY PLANS
WENTWORTH AVENUE**

SCALE: 1"=20'
DATE: JANUARY 14, 2009


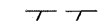

DRAWN BY: PHP
CHECKED BY: NJH

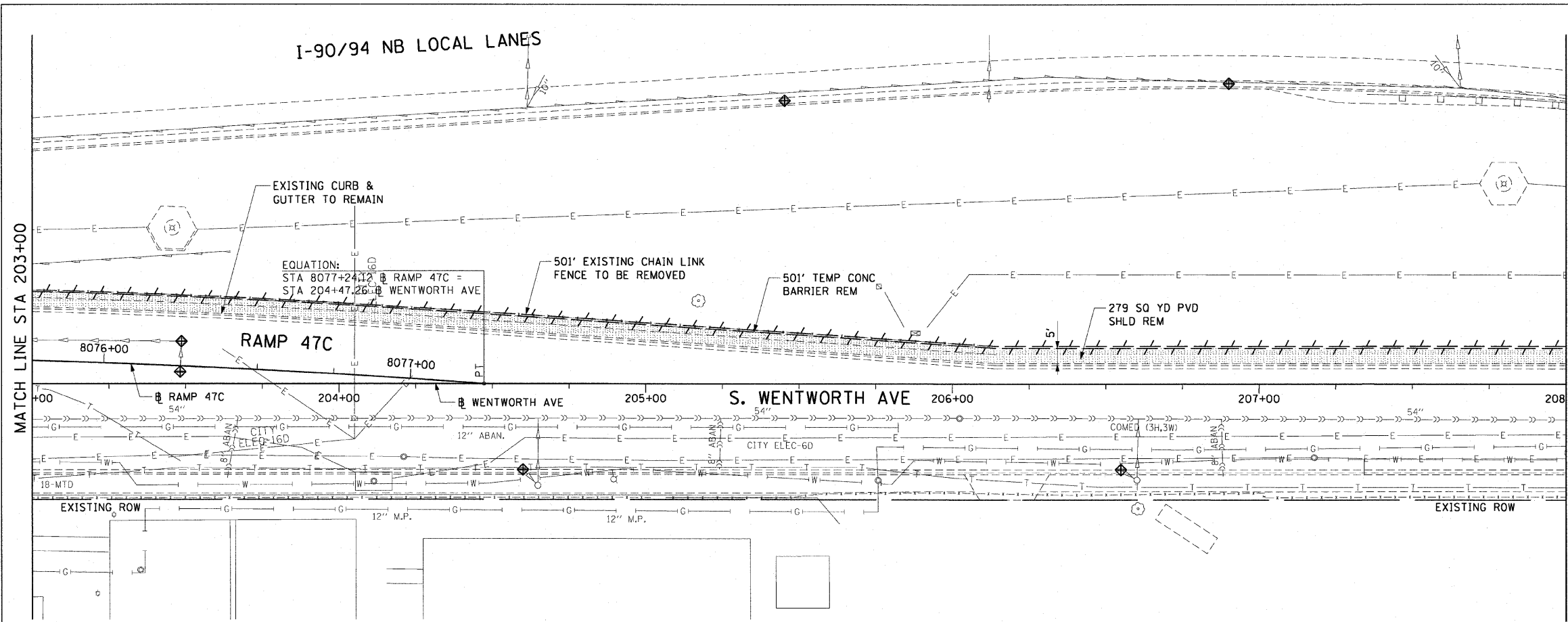
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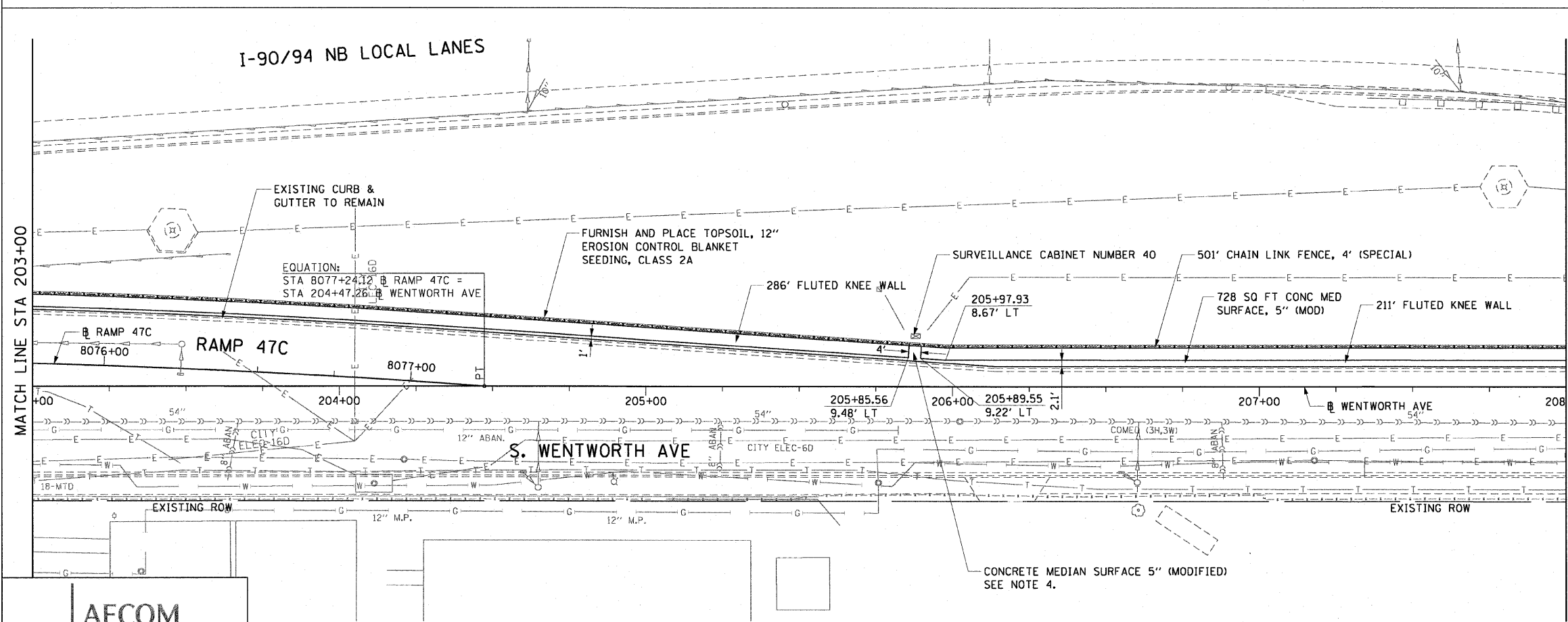
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	22	15
STA. 203+00		TO STA. 208+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (2021-922 PT1 & 2122-921 PT1) I-1 62986				

LEGEND:

-  AREA REMOVALS
-  LINEAR REMOVALS
-  INLET FILTER



EXISTING CONDITIONS AND REMOVAL
PROPOSED IMPROVEMENTS



NOTES:

1. SEE STRUCTURAL DETAILS FOR FLUTED KNEE WALL DETAILS.
2. ALL POINT CALLOUTS ARE TAKEN AT THE EDGE OF THE KNEE WALL BASE.
3. SEE ROADWAY DETAILS FOR CONCRETE MEDIAN DETAILS.
4. THE GAP IN THE FLUTED KNEE WALL AT APPROXIMATELY STATION 205+87 SHALL BE IN LINE WITH SURVEILLANCE CABINET NUMBER 40.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (NORTHBOUND KNEE WALLS)




EXISTING AND PROPOSED ROADWAY PLANS
WENTWORTH AVENUE

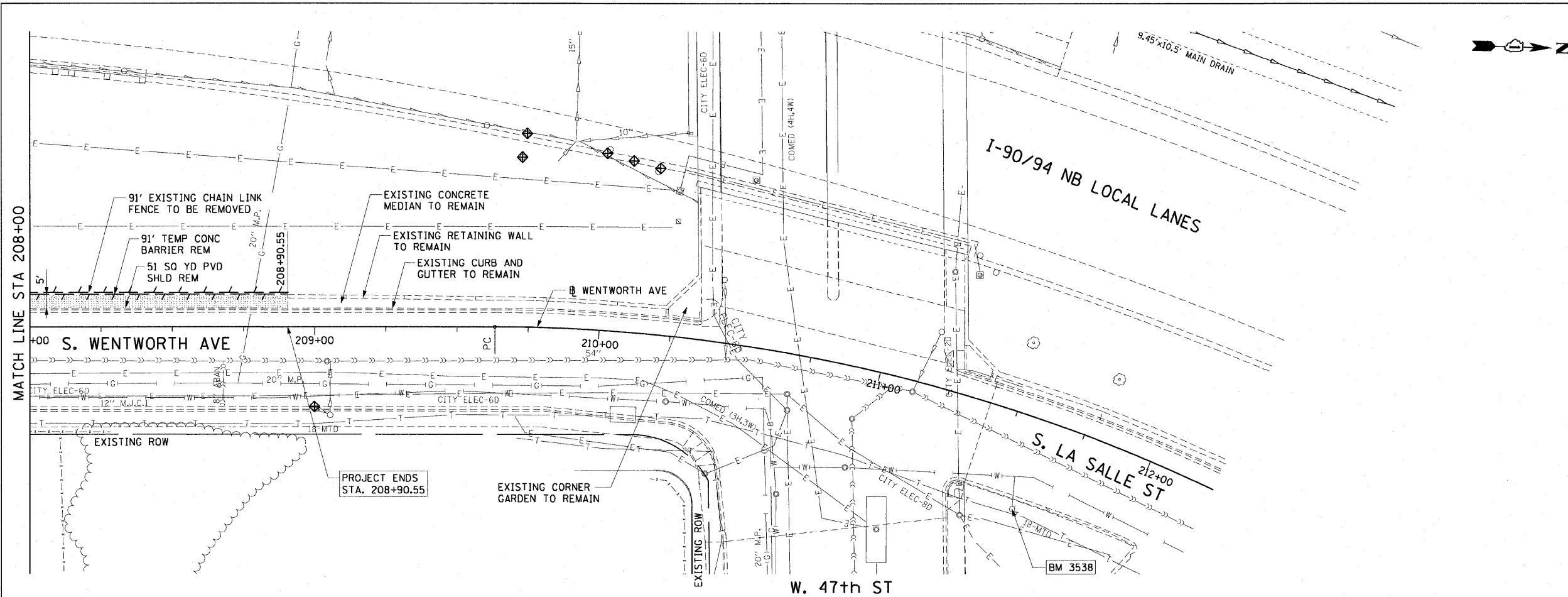
SCALE: 1"=20'
DATE: JANUARY 14, 2009
DRAWN BY: PHP
CHECKED BY: NJH

AECOM

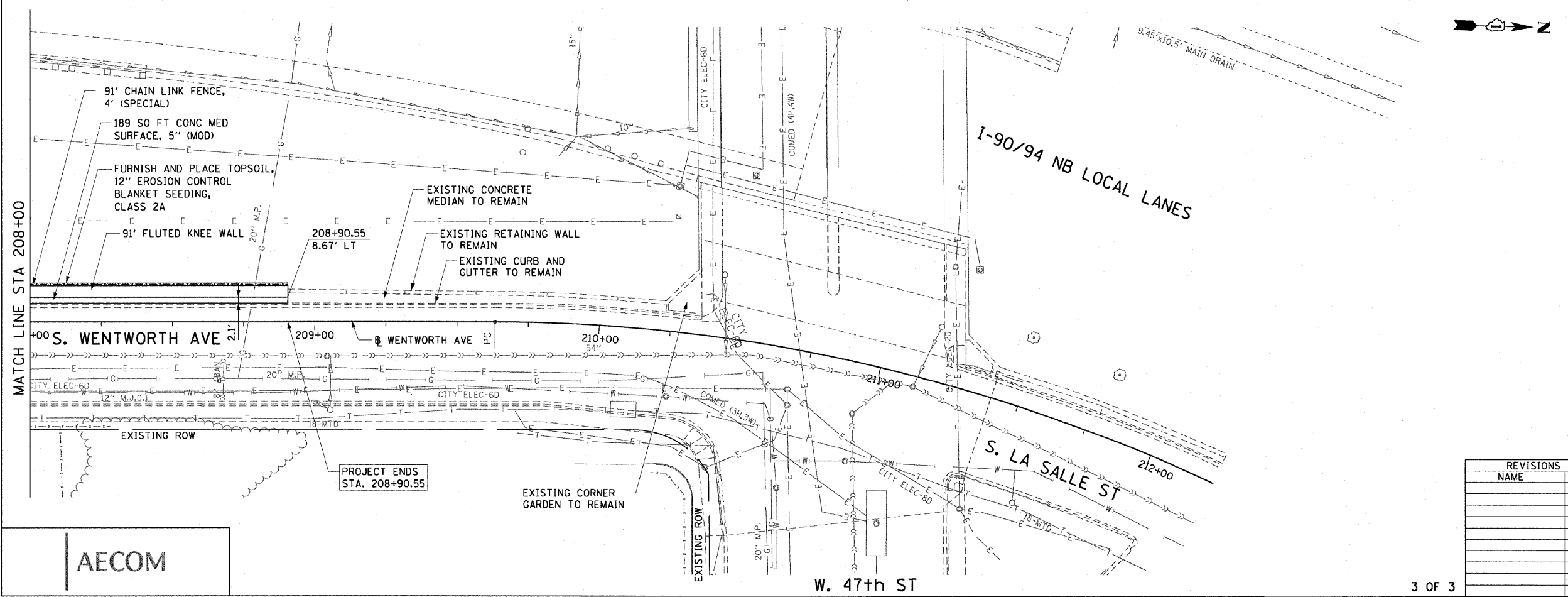
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94		COOK	22	16
STA. 208+00		TO STA. 208+90.55		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
• (2021-922 PT1 & 2122-921 PT1) I-1 62986				

- LEGEND:**
-  AREA REMOVALS
 -  LINEAR REMOVALS
 -  INLET FILTER



**EXISTING CONDITIONS AND REMOVAL
PROPOSED IMPROVEMENTS**



- NOTES:**
1. SEE STRUCTURAL DETAILS FOR FLUTED KNEE WALL DETAILS.
 2. ALL POINT CALLOUTS ARE TAKEN AT THE EDGE OF THE KNEE WALL BASE.
 3. SEE ROADWAY DETAILS FOR CONCRETE MEDIAN DETAILS.
 4. THE STEM OF THE FLUTED KNEE WALL SHALL MATCH THE EXISTING RETAINING WALL FLUTED PARAPET.

AECOM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (NORTHBOUND KNEE WALLS)

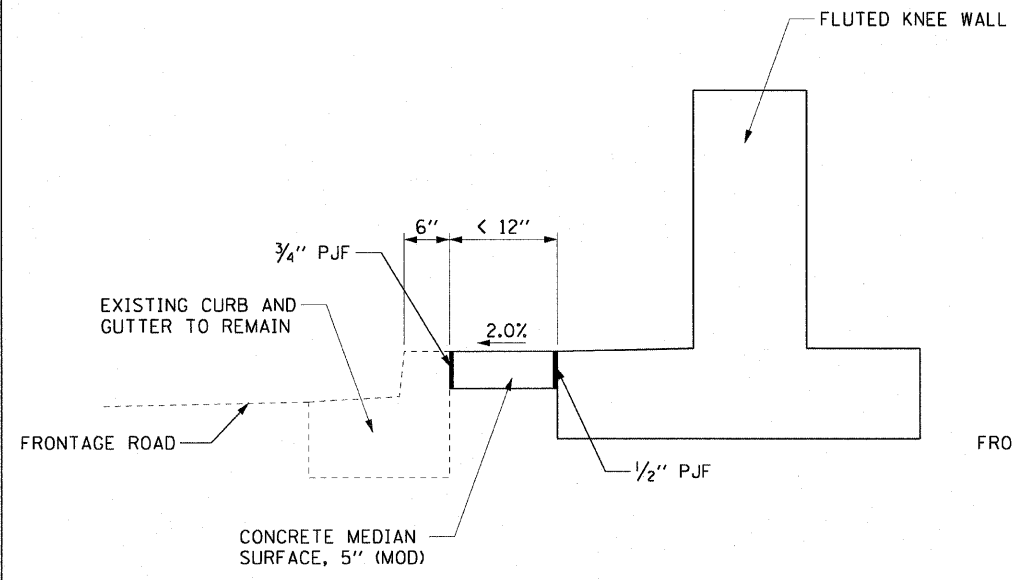
**EXISTING AND PROPOSED ROADWAY PLANS
WENTWORTH AVENUE**

SCALE: 1"=20'
DATE: JANUARY 14, 2009

DRAWN BY: AMM/MRK
CHECKED BY: JAL

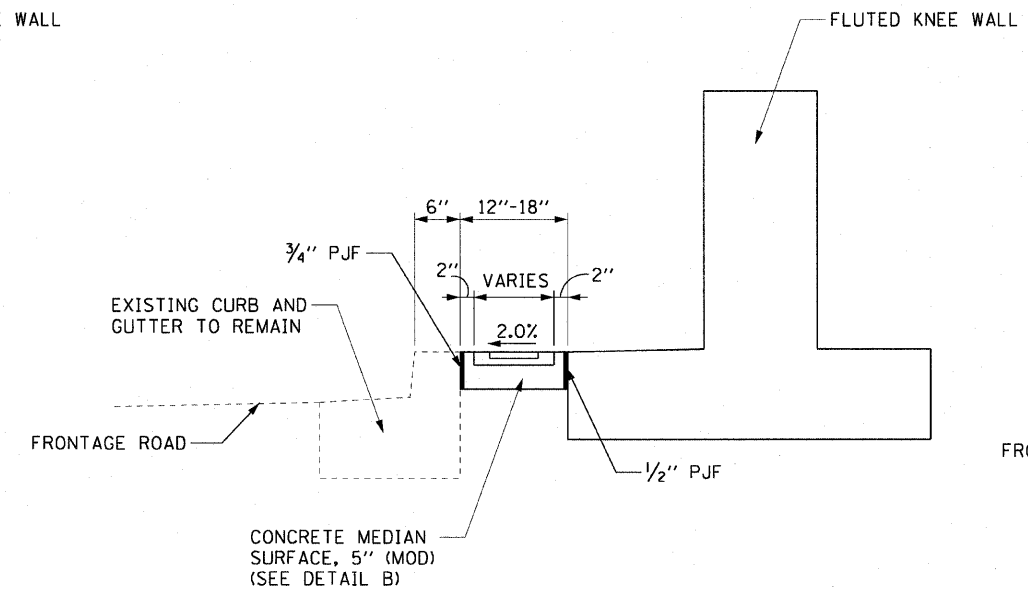
V:\uscbt\p207\p40468\p40468.dwg\IN28_knee_wal1.dwg\p207\contract 29\p2900202.dwg 12/28/09 PM

THIS OPTION WILL BE USED WHEN THE CARRIAGE WALK AREA MEASURES < 12" IN WIDTH



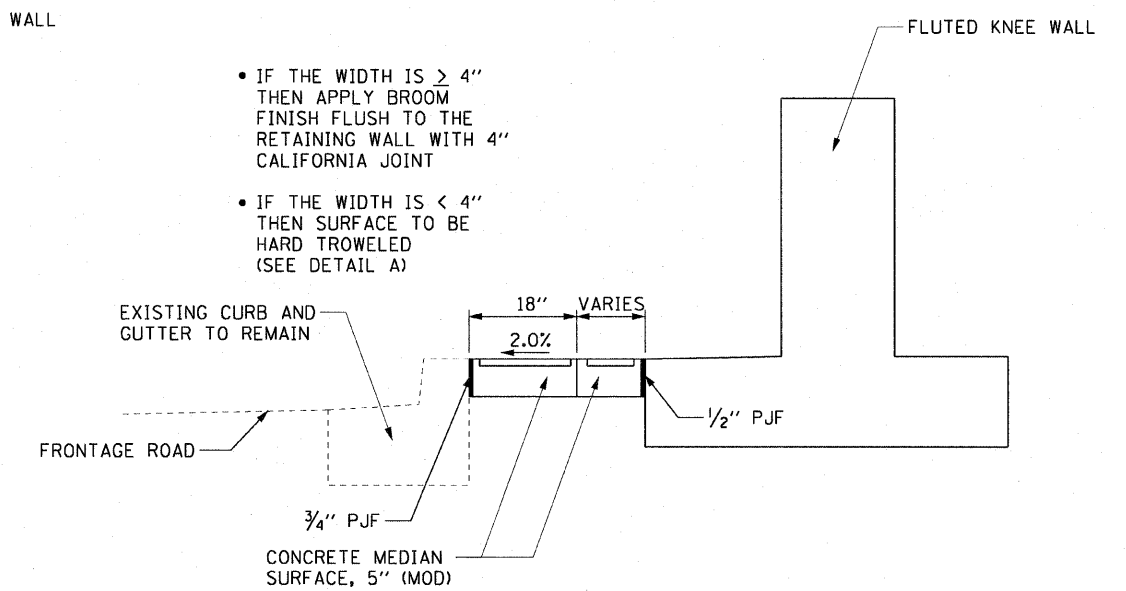
CARRIAGE WALK
AREA < 12" WIDE

THIS OPTION WILL BE USED WHEN THE CARRIAGE WALK AREA MEASURES 12" TO 18" IN WIDTH

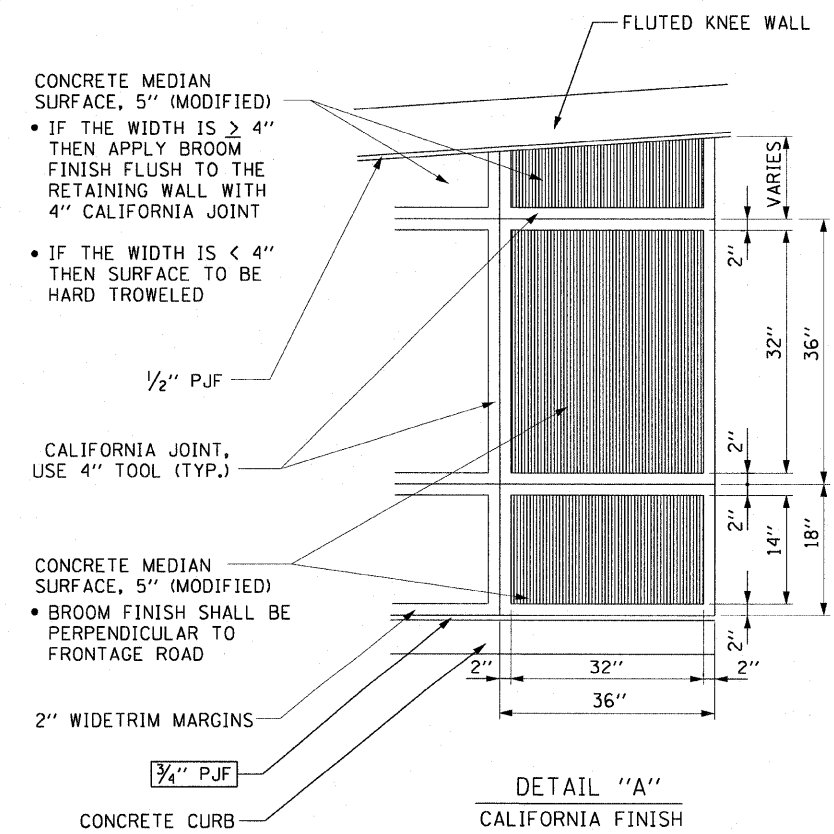


CARRIAGE WALK
AREA 12" TO 18" WIDE

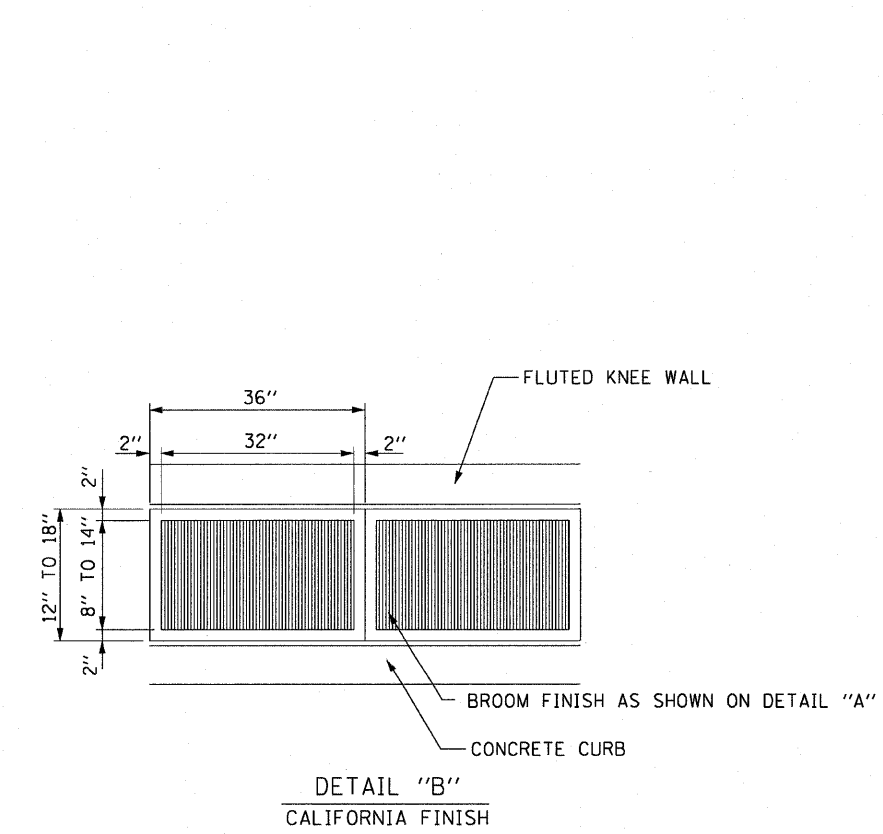
THIS OPTION WILL BE USED WHEN THE CARRIAGE WALK AREA MEASURES > 18" IN WIDTH



CARRIAGE WALK
AREA > 18" WIDE



DETAIL "A"
CALIFORNIA FINISH



DETAIL "B"
CALIFORNIA FINISH

AECOM

REVISIONS	
NAME	DATE

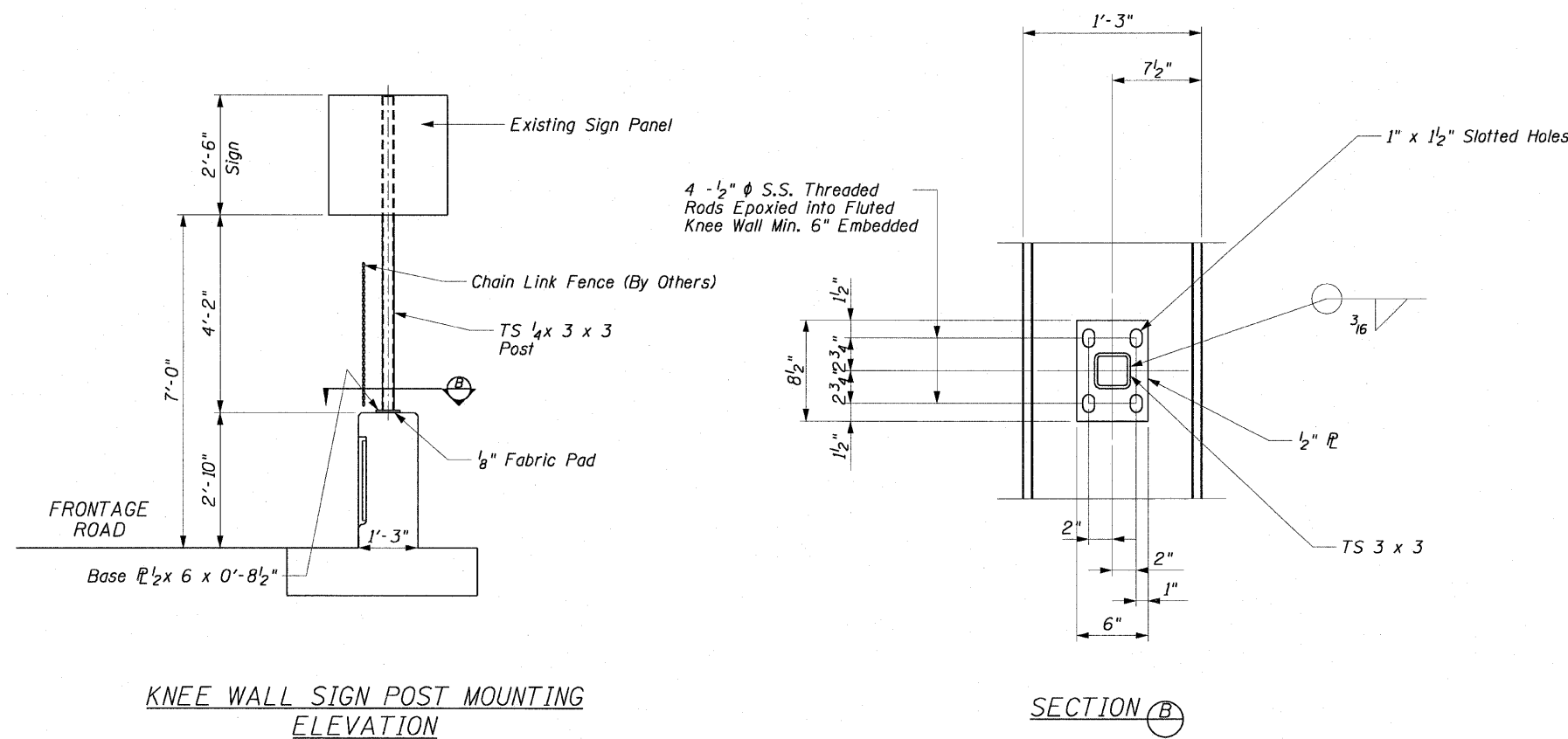
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (NORTHBOUND KNEE WALLS)
ROADWAY DETAILS
CONCRETE MEDIAN SURFACE, 5" (MODIFIED)
CARRIAGE WALK AND CALIFORNIA FINISH DETAIL

SCALE: NONE
DATE: JANUARY 14, 2009

DRAWN BY: PHP
CHECKED BY: NJH

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WALL MOUNTED SIGN SUPPORT FOR TYPE 1 PANEL (SPECIAL) DETAILS



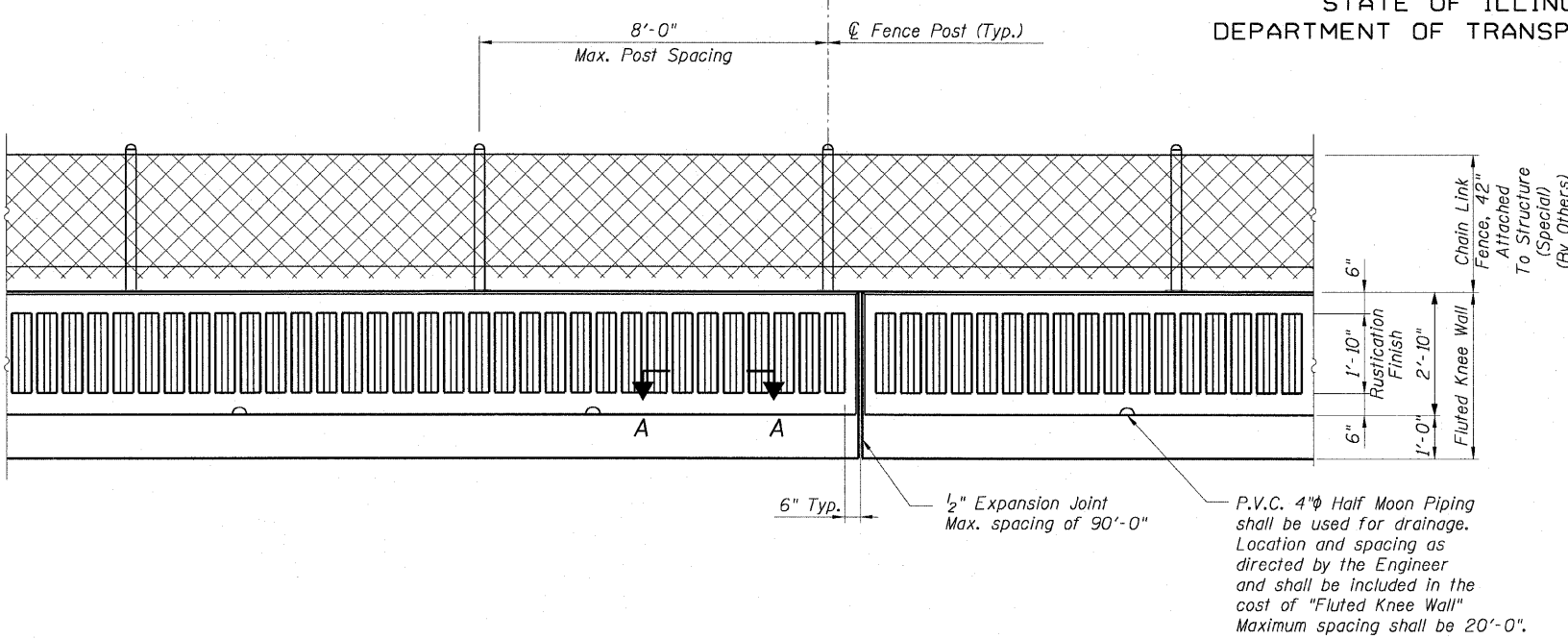
NOTE

When drilling and epoxy grouting the anchor rods, the Contractor shall use the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by IDOT. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures. The capsule or the adhesive cartridge shall be sealed with pre-measured amounts of the adhesive chemical. This associated materials and work performed shall be included in the cost of Wall Mounted Sign Support for Type 1 Panel (Special).

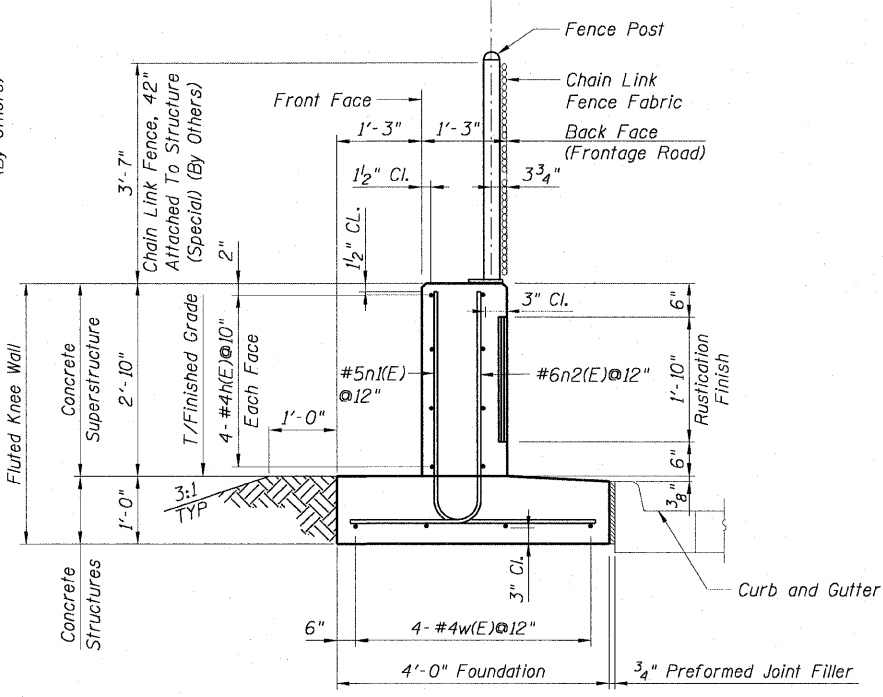
REVISIONS	
NAME	DATE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	22	19
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
* (2021-922 PT1) & 2122-921 PT1) 1-1 62986				

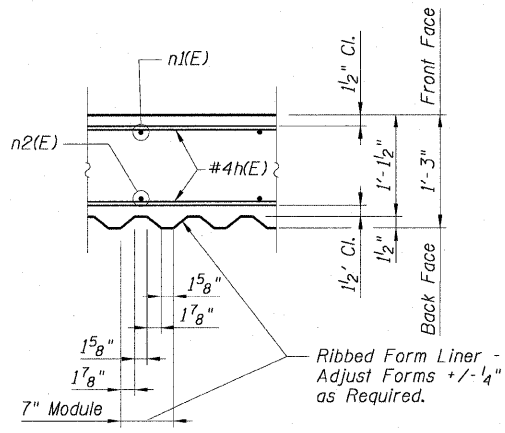


BACK FACE ELEVATION - FLUTED KNEE WALL AND CHAIN LINK FENCE

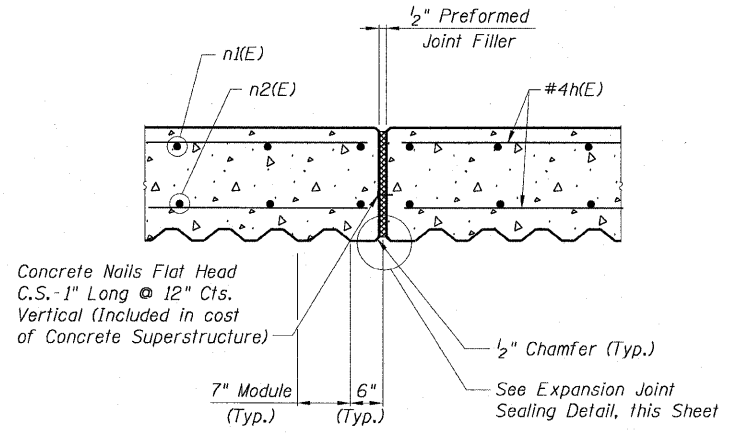


TYPICAL SECTION
FLUTED KNEE WALL

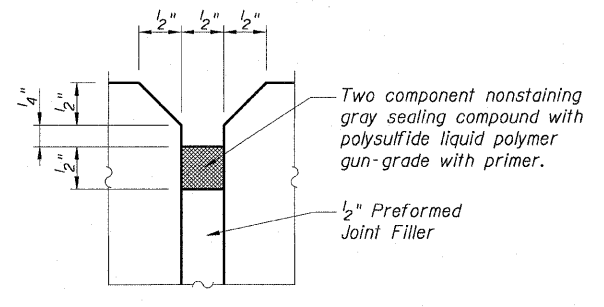
- NOTES:**
1. Reinforcement bar shall conform to the requirements of AASHTO M-31 or M-322 Grade 60.
 2. Concrete: $f'c = 3500$ psi
 3. Fluted knee wall shall be paid for per foot as "Fluted Knee Wall." Included in the cost of "Fluted Knee Wall" shall be "Concrete Superstructures" stem, "Concrete Structures" foundation, reinforcement bars (epoxy coated), rustication finish, protective coat, expansion joint filler and sealing compound.
 4. At locations where Fluted Knee Wall abuts a rigid structure, a 1/2" thick preformed expansion joint filler (PJF) conforming to the shape of the structure shall be installed between the wall and the structure. 3/4" PJF shall be installed where Fluted Knee Wall footing abuts curb and gutter. The cost shall be included in "Fluted Knee Wall."
 5. Quantities shown in "Bill of Material" are for one (1) foot of "Fluted Knee Wall."
 6. Chain Link Fence will not be paid for in this Contract, but shall be furnished and installed in Contract 63003.
 7. Protective Coat shall be applied according to Section 503.19 of the Standard Specifications to the top of stem and to the face of stem and top of footing on the Frontage Road side of the Knee Wall.
 8. Minimum lap length for #4 bars shall be 1'-8".



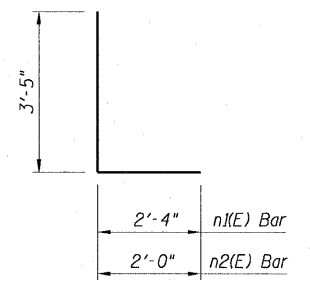
SECTION A-A



EXPANSION JOINT DETAIL



EXPANSION JOINT
SEALING DETAIL



BARS #5n1(E) and #6n2(E)

LEGEND:

	Chain Link Fabric
	Rustication Finish
	Earth
	Concrete

QUANTITIES PER FOOT OF FLUTED KNEE WALL

ITEM	UNIT	QUANTITY
Reinforcement Bars, Epoxy Coated	Pound	23
Concrete Superstructure	Cu. Yd.	0.14
Concrete Structures	Cu. Yd.	0.15
Rustication Finish	Sq. Ft.	1.8
Protective Coat	Sq. Yd.	0.62

REVISIONS

NAME	DATE

Sheet 51 of 1

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
59TH ST TO 47TH ST (NORTHBOUND KNEE WALLS)

FLUTED KNEE WALL STANDARD DETAILS

SCALE: None
DATE: JANUARY 14, 2009

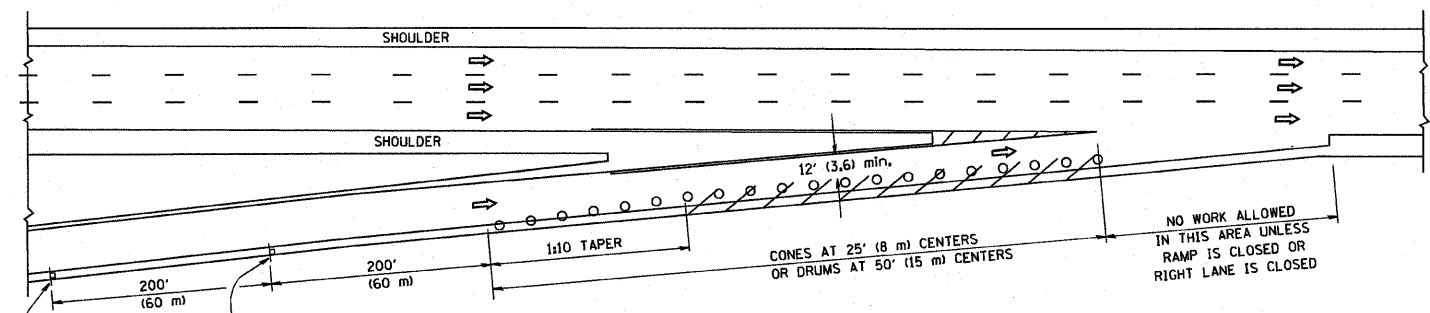
DRAWN BY: CHD
CHECKED BY: MJP

AECOM

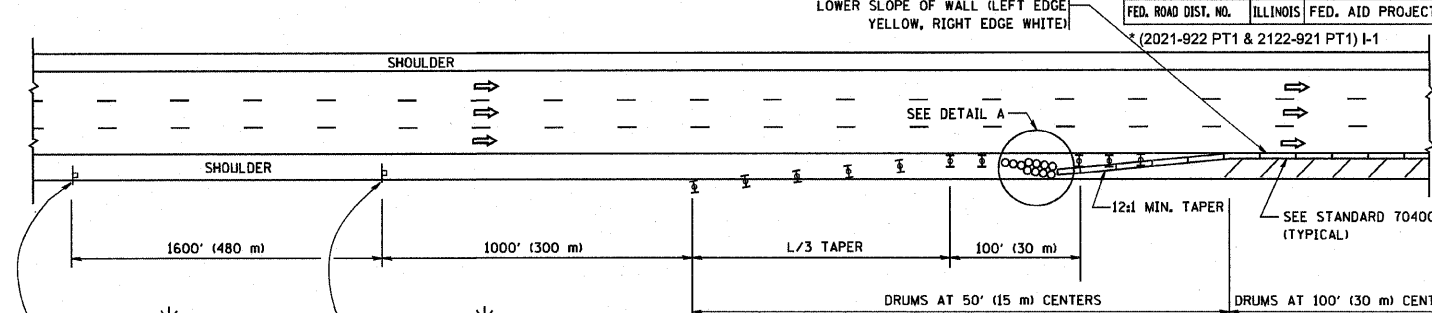
PARTIAL RAMP CLOSURE DETAILS

SHOULDER CLOSURE DETAILS

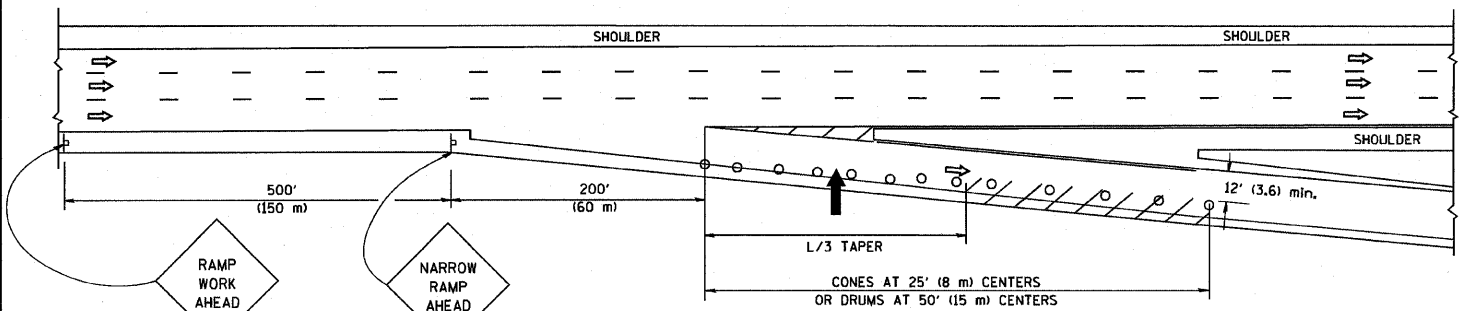
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	22	20
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
(2021-922 PT1 & 2122-921 PT1) I-1				



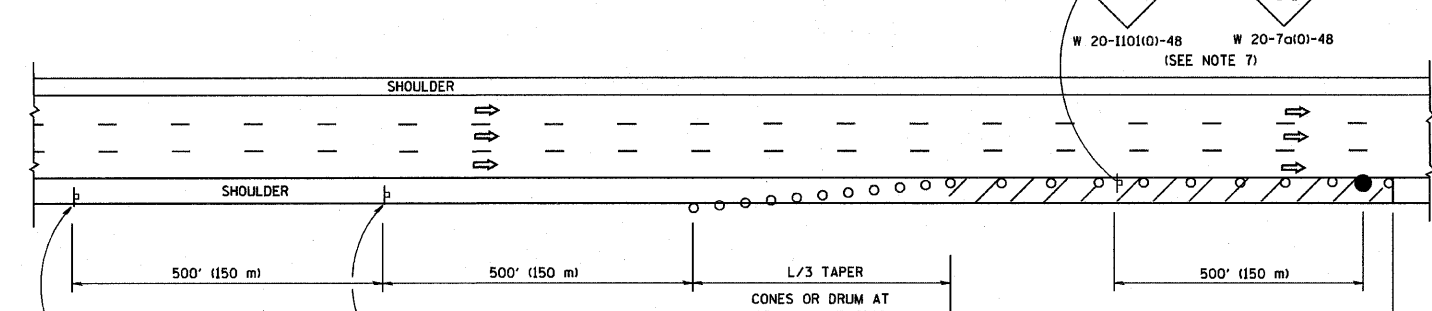
TYPICAL ENTRANCE RAMP



PERMANENT SHOULDER CLOSURE

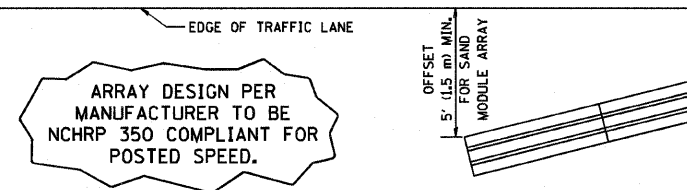


TYPICAL EXIT RAMP



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:
 1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCR OACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



DETAIL "A"
 IMPACT ATTENUATOR, TEMPORARY
 (SEE NOTE 5)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
DWS	11/96
JAF	12/02
NCHRP 350	04/03
JAF	2/06
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL DETAILS
 FOR FREEWAY
 SHOULDER CLOSURES
 PARTIAL RAMP CLOSURES

DESIGNED BY: DWS
 DRAWN BY:
 CHECKED BY:

SCALE: NONE

SYMBOLS

- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

GENERAL NOTES

- THE "L" DISTANCE EQUALS:
 SPEED LIMIT FORMULAS
 45 mph (80 km/h) METRIC ENGLISH
 OR GREATER: L=0.65(W)(S) L=(W)(S)
 W = WIDTH OF OFFSET IN FEET (METERS)
 S = NORMAL POSTED SPEED MPH (KM/H)
- PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.
- THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE "TRAFFIC BARRIER TERMINAL, TYPE III, TEMPORARY" DEVICE TO MEET NCHRP350 FOR POSTED SPEED.
- AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
- THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
 - FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
 - THE WORK AVTIVITY REQUIRES FREQUENT ENCR OACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.

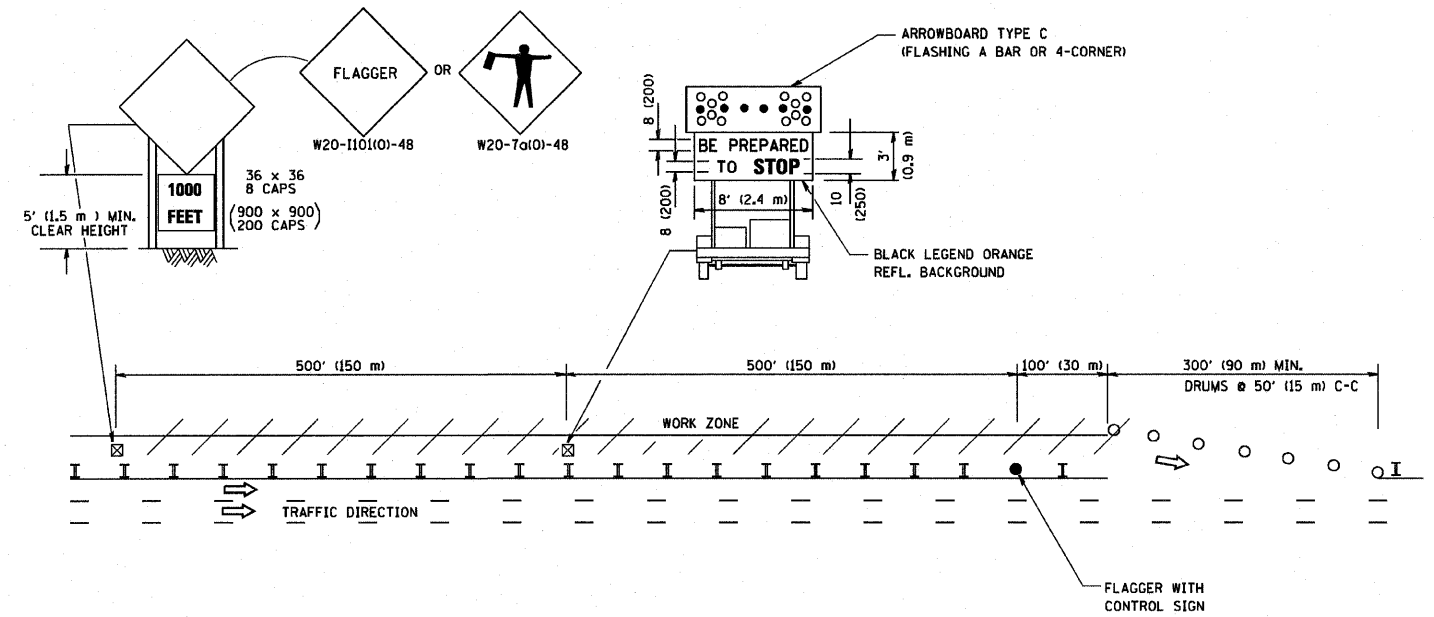
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	22	21

STA.	TO STA.
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

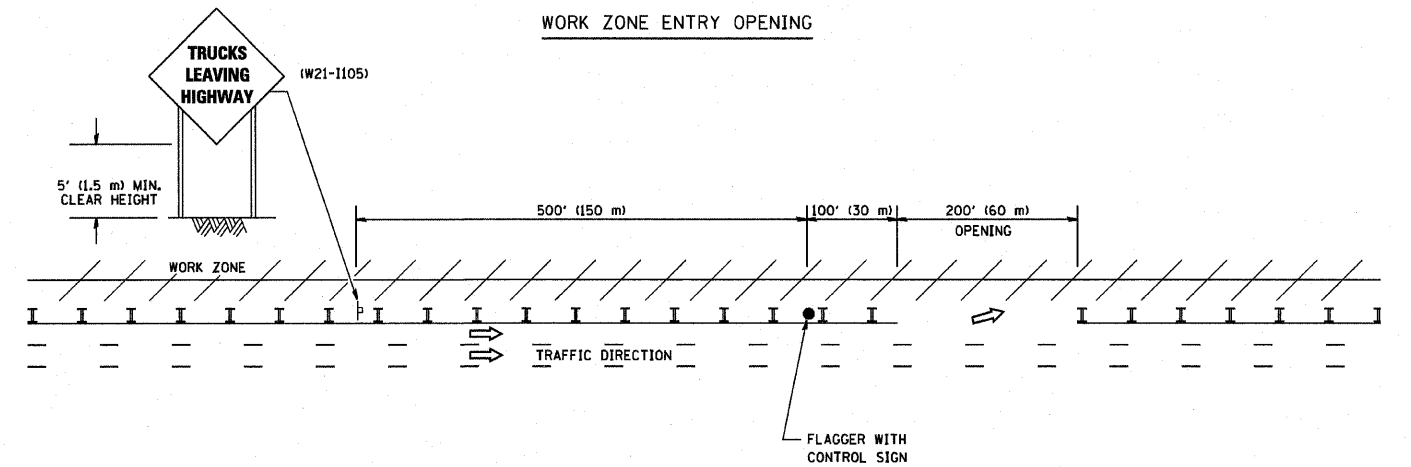
*(2021-922 PT1 & 2122-921 PT1) I-1

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. The Arrowboard, the Flagger Ahead trailer mounted sign, and the Trucks Leaving Highway sign shall be removed or turned away from traffic and the exit and entry openings shall be closed when the flagging operation ceases.
2. Work Zone Exit Openings should be a minimum of one half mile apart.
3. Exiting the work zone at any place other than at a Work Zone Exit Opening will be prohibited.
4. All vehicles shall enter the work zone at entry openings, using their turn signals to warn motorists

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

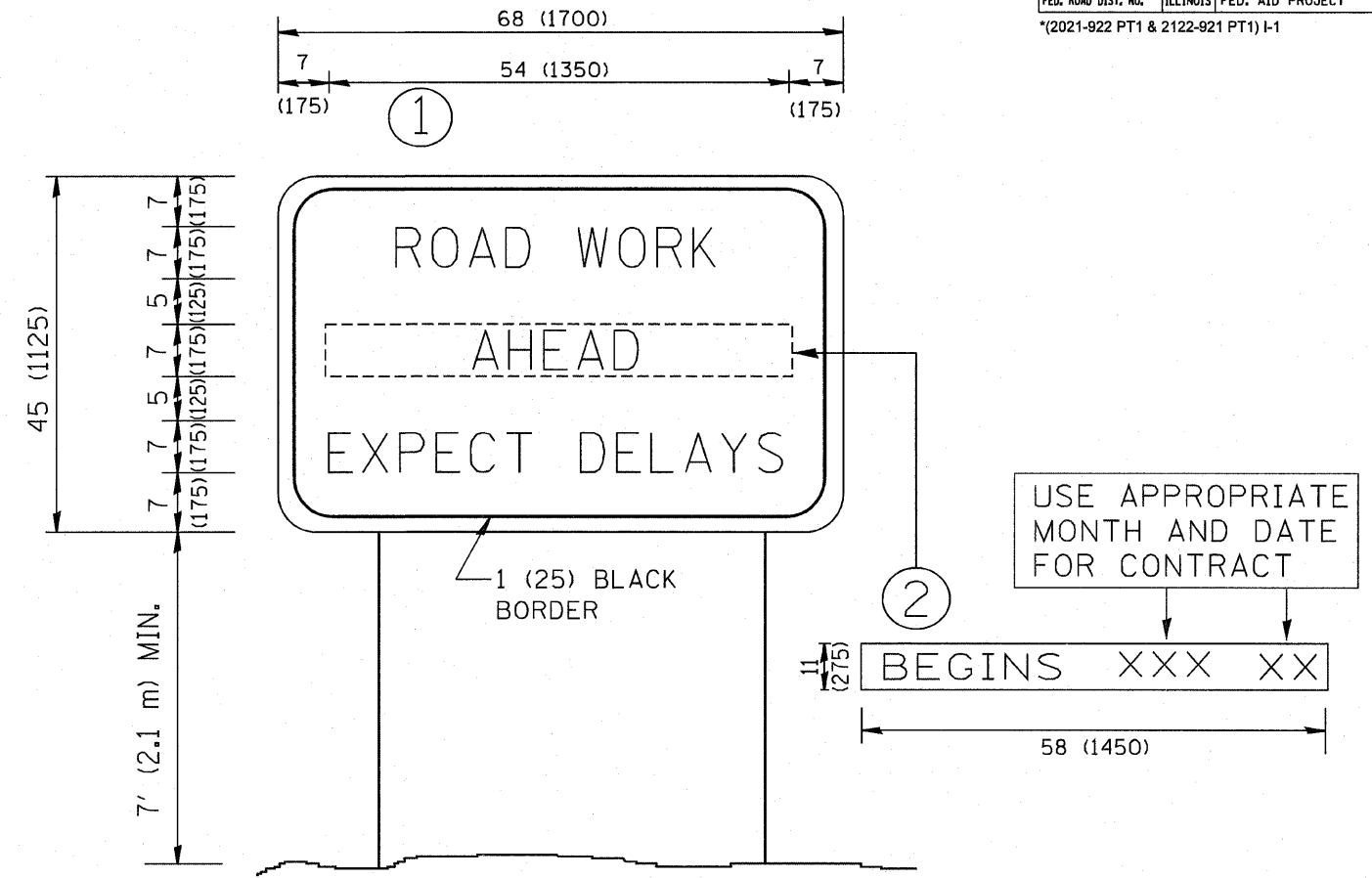
REVISIONS	
NAME	DATE
DWS	8/98
JAF	4/03
JAF	2/06
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
SIGNING FOR FLAGGING OPERATIONS
AT WORK ZONE OPENINGS

SCALE: NONE

DRAWN BY CADD
CHECKED BY
TC-18

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	*	COOK	22	22
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
*(2021-922 PT1 & 2122-921 PT1) I-1				



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99
C. JUCIUS	1-31-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

SCALE: NONE

DRAWN BY DESIGN
CHECKED BY
TC22

PLOT DATE = 2/1/2007
 FILE NAME = 241441422.dgn
 PLOT SCALE = 50.000 / IN.
 USER NAME = bauer-dl