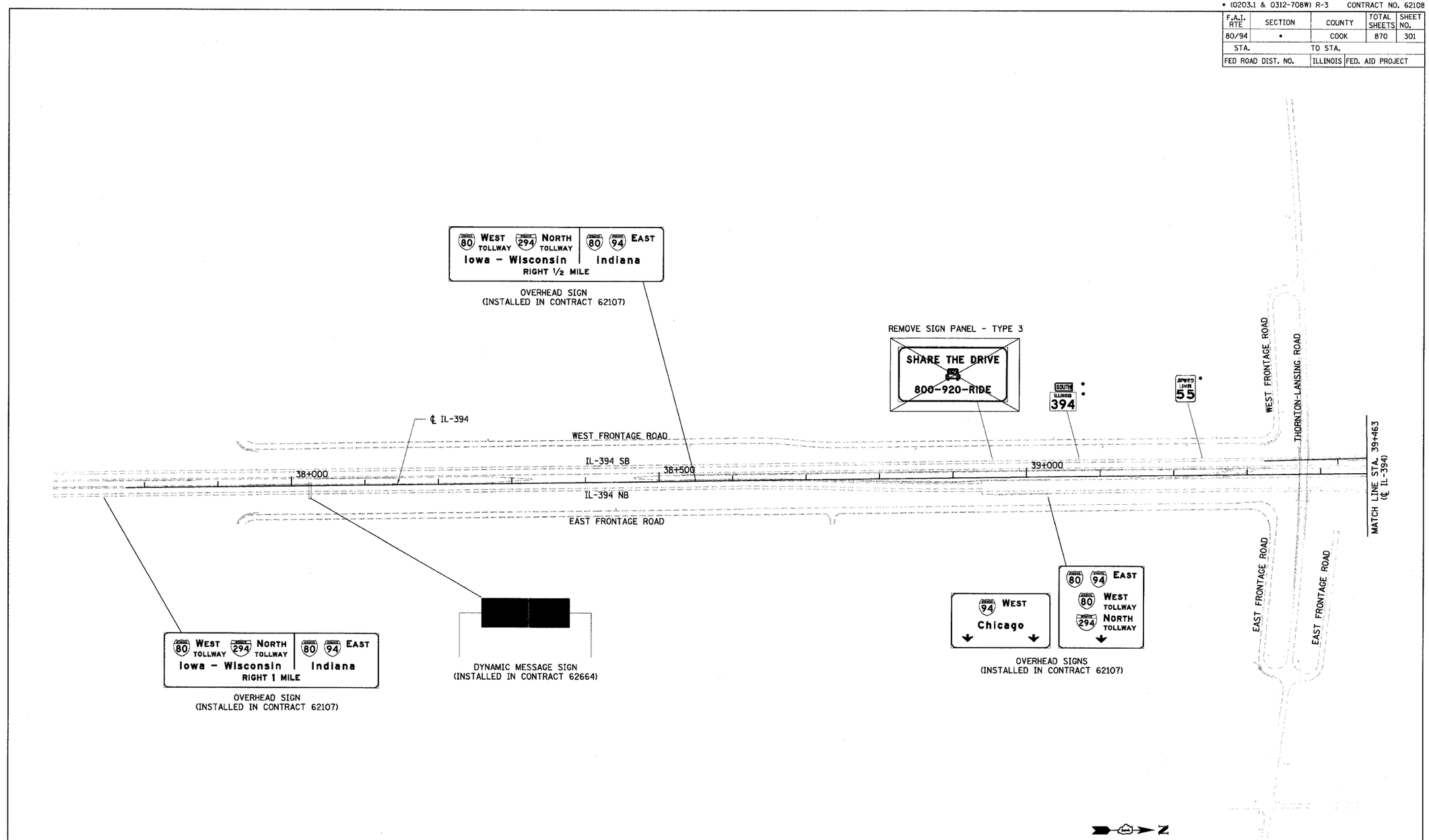
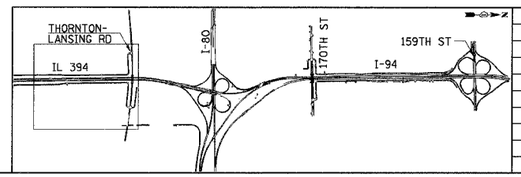
* (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	*	COOK	870	301
STA.		TO STA.		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



NOTE:
- WHERE EXISTING SIGNS INTERFERE WITH CONSTRUCTION OPERATIONS, SEE ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.



SS-1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EXISTING SIGNING STRIP MAP

HORIZ SCALE: 1:2500
VERT SCALE: NONE
DATE: JULY 18, 2005
DRAWN BY: JYMC
CHECKED BY: JES

HNTB

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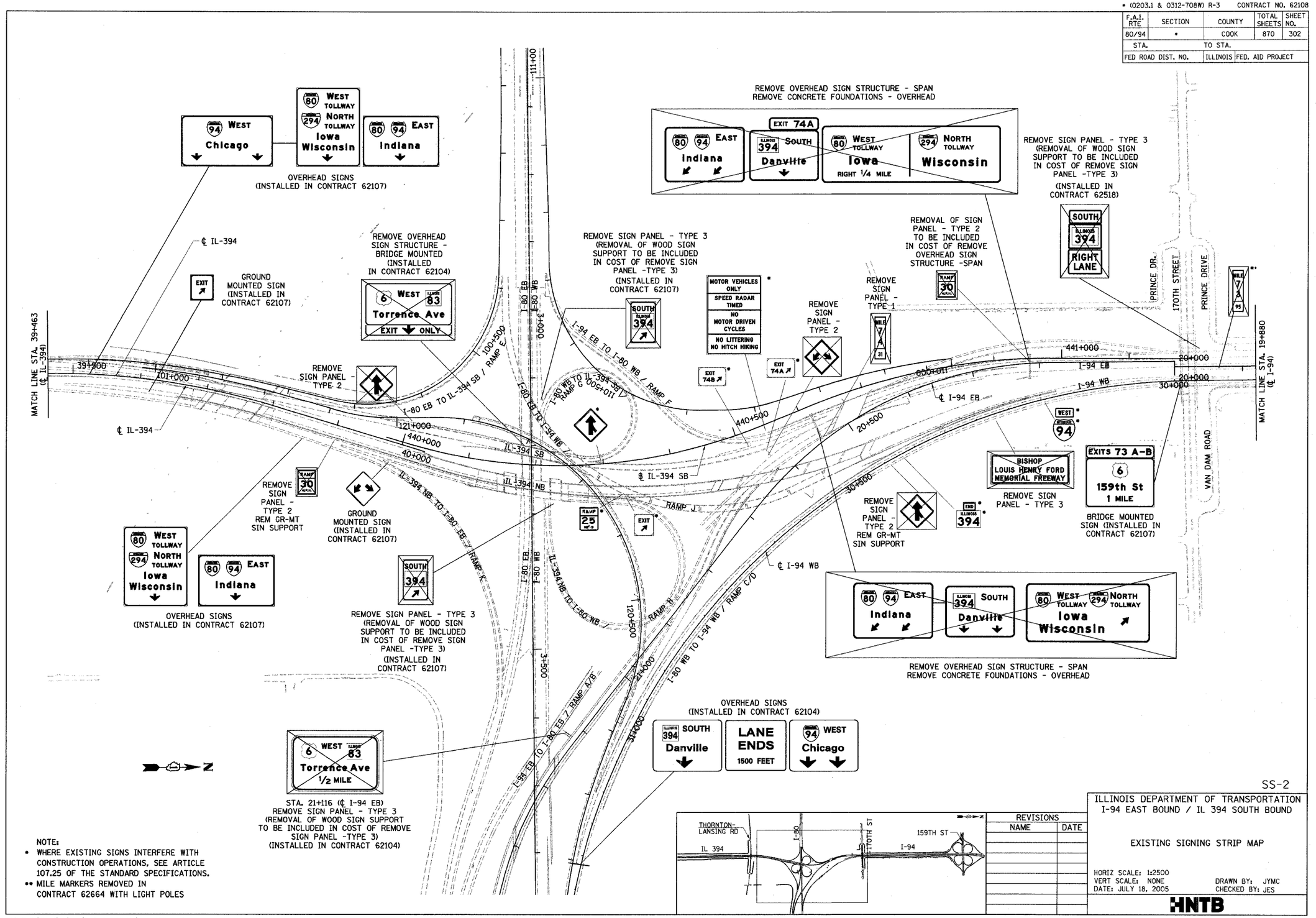
slauer 19-AUG-2005 12:56

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	302
STA.		TO STA.		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



NOTE:
- WHERE EXISTING SIGNS INTERFERE WITH CONSTRUCTION OPERATIONS, SEE ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.
- •• MILE MARKERS REMOVED IN CONTRACT 62664 WITH LIGHT POLES

SS-2

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EXISTING SIGNING STRIP MAP

HORIZ SCALE: 1:2500
VERT SCALE: NONE
DATE: JULY 18, 2005
DRAWN BY: JYMC
CHECKED BY: JES

HNTB

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slauer 19-AUG-2005 12:55

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	303
STA.		TO STA.		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

REMOVE SIGN PANEL - TYPE 3
(REMOVAL OF WOOD SIGN SUPPORT TO BE INCLUDED IN COST OF REMOVE SIGN PANEL -TYPE 3)
(INSTALLED IN CONTRACT 62107)

REMOVE SIGN PANEL - TYPE 3
(REMOVAL OF WOOD SIGN SUPPORT TO BE INCLUDED IN COST OF REMOVE SIGN PANEL -TYPE 3)
(INSTALLED IN CONTRACT 62518)

REMOVE SIGN PANEL - TYPE 2

MATCH LINE STA. 19+880 (℄ I-94)

PRINCE DRIVE
I-94 EB
I-94 WB
VAN DAM RD.
159TH STREET
10-000
19+500
19+000
18+500
℄ I-94

REMOVE SIGN PANEL - TYPE 3 REM GR-MT SIN SUPPORT

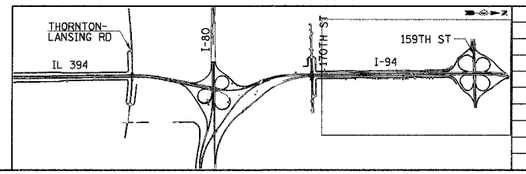
CANTILEVER MOUNTED SIGN
(INSTALLED IN CONTRACT 62107)

GROUND MOUNTED SIGN
(INSTALLED IN CONTRACT 62107)

OVERHEAD SIGNS
(INSTALLED IN CONTRACT 62107)

BRIDGE MOUNTED SIGN
(INSTALLED IN CONTRACT 62107)

NOTE:
- • WHERE EXISTING SIGNS INTERFERE WITH CONSTRUCTION OPERATIONS, SEE ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.
- •• MILE MARKERS REMOVED IN CONTRACT 62664 WITH LIGHT POLES



REVISIONS	
NAME	DATE

SS-3

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EXISTING SIGNING STRIP MAP

HORIZ SCALE: 1:2500
VERT SCALE: NONE
DATE: JULY 18, 2005
DRAWN BY: JYMC
CHECKED BY: JES

HNTB

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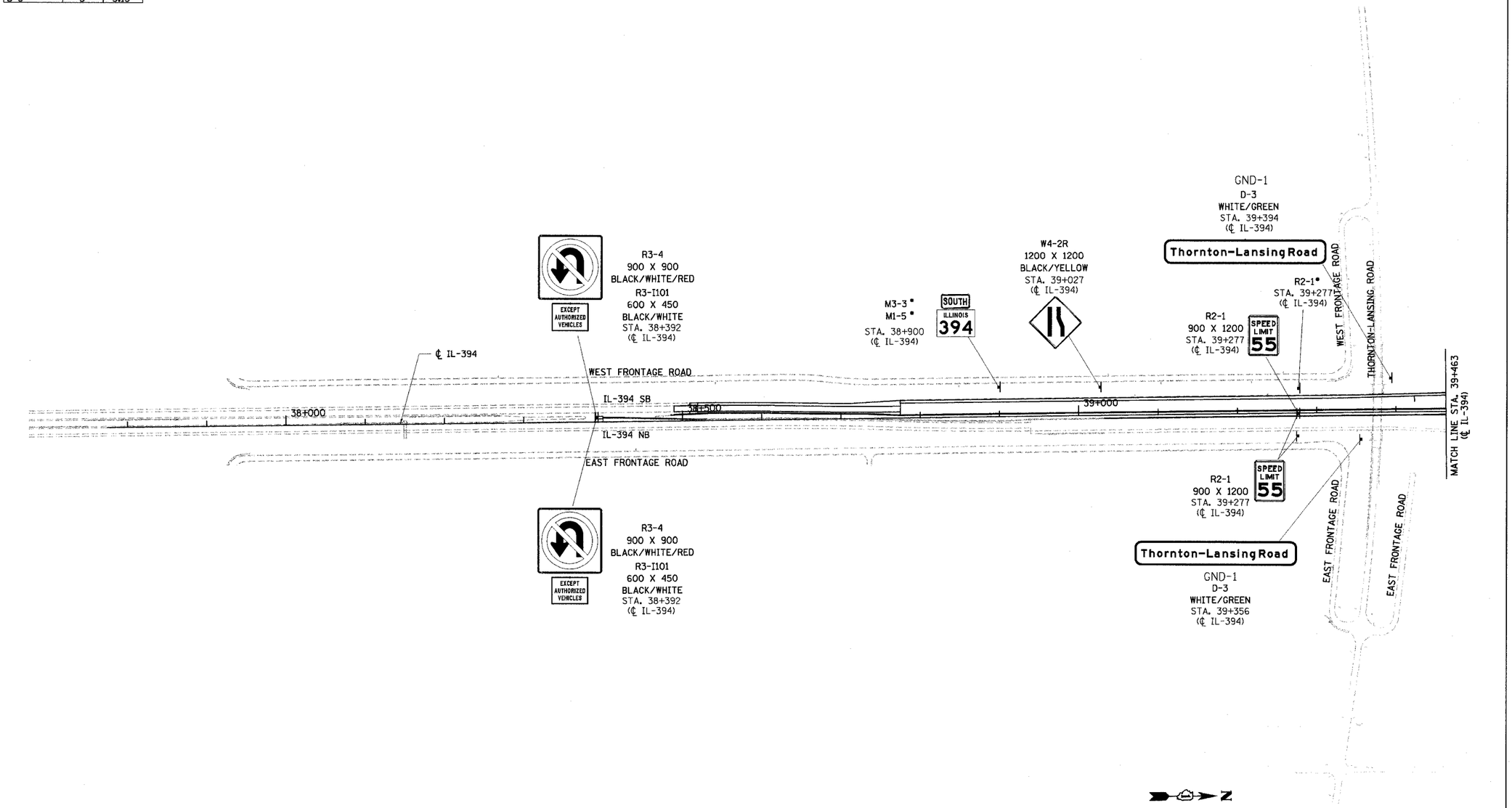
slauer 19-AUG-2005 12:54

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

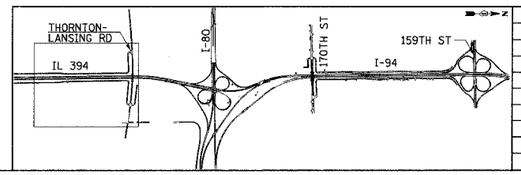
F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	304
STA.		TO STA.		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

NAME	TYPE	AREA
M1-5	2	1.08
M3-3	1	0.54
R2-1	2	1.08
R3-4	1	0.81
R3-I101	1	0.27
W4-2R	2	1.44
D-3	3	5.13



NOTE:
1. SIGNS SHALL BE GROUND MOUNTED ON WOOD SIGN SUPPORTS UNLESS OTHERWISE SPECIFIED.

2. SIGN PANELS DESIGNATED WITH A "•" SHOW SUGGESTED LOCATIONS FOR EXISTING SIGNS THAT MAY HAVE BEEN AFFECTED BY ROADWAY RECONFIGURATION. THESE SIGNS ARE COVERED UNDER ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.



REVISIONS	
NAME	DATE

SS-4

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

PROPOSED SIGNING STRIP MAP

HORIZ SCALE: 1:2500
VERT SCALE: NONE
DATE: JULY 18, 2005
DRAWN BY: JYMC
CHECKED BY: JES

HNTB

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slauer 19-AUG-2005 12:53

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	305
STA.		TO STA.		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

NAME	TYPE	AREA
M1-5	2	1.08
M3-3	1	0.54
R2-1	2	1.08
W4-1R	2	1.44
W4-3R	2	1.44
W9-1	2	1.44
W13-3	2	1.08
D-3	3	2.30
D-10	1	0.36

TS-4
STA. 440+757 (℄ IL-394 SB)
SIGN PANEL - TYPE 3
DRILLED SHAFT CONCRETE FOUNDATIONS
OVERHEAD SIGN STRUCTURE - SPAN,
TYPE II-A (1.37M X 1.60M): 28.00M

℄ OF SIGN SUPPORT STRUCTURE
6.63m
1SO16S394-LT
EXIT 74A
ILLINOIS 394 SOUTH
Danville
1.45m
750
1SO16S394-RT
EXIT 74B
INDIANA 80 WEST TOLLWAY
ILLINOIS 294 NORTH TOLLWAY
Iowa
Wisconsin
7.42m
1.20m
℄ OF SIGN SUPPORT STRUCTURE
WALKWAY
10.88m
450 3.6m 3.6m 3.6m 4.37m 3.0m 450

D10
WHITE/GREEN
STA. 441+033
(℄ IL-394SB)
MILE MARKER 74.1

BME-1
STA. 440+193 (℄ IL-394 SB)
OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED
SIGN PANEL - TYPE 3
EXIT 161
6 WEST ILLINOIS 83
Torrence Ave ↗
1B016I080R160.6
℄ OF SIGN SUPPORT STRUCTURE
1.15m
WALKWAY

W4-1
1200 X 1200
BLACK/YELLOW
STA. 110+704
(℄ RAMP F)

STA. 440+474
(℄ IL-394 SB)
M3-3
900 X 600
BLACK/WHITE
M1-5
1200 X 900
BLACK/WHITE
SOUTH ILLINOIS 394

RAMP 45 M.P.H.
W13-3
900 X 1200
BLACK/YELLOW
STA. 440+757
(℄ IL-394 SB)

GND S-1
STA. 440+915
0.70 RT (℄ IL-394 SB)
SIGN PANEL - TYPE 3

GND-2
170th St.
D-3
WHITE/GREEN
STA. 19+963
(℄ I-94)

W9-1
1200 X 1200
BLACK/YELLOW
STA. 39+473
(℄ IL-394)
RIGHT LANE ENDS

℄ IL-394

W4-1R*
STA. 39+902
(℄ IL-394)

W4-3R
1200 X 1200
BLACK/YELLOW
STA. 39+908
(℄ IL-394)

STA. 440+567.* 17.00 LT (℄ IL-394 SB)
EXIT 74B ↗

R2-1
900 X 1200
BLACK/WHITE
STA. 440+363
(℄ IL-394 SB)
SPEED LIMIT 55

EXIT 74 ↗

PRINCE DR.
170TH STREET
PRINCE DRIVE
FH-1

MATCH LINE STA. 39+463 (℄ IL-394)
MATCH LINE STA. 19+880 (℄ I-94)

39+500 101+000 100+500 I-80 EB TO IL-394 SB / RAMP E
I-80 EB 111+00 I-80 WB 3+000
I-94 EB TO IL-394 SB / RAMP E
I-80 EB TO I-94 WB / RAMP F
I-94 EB TO I-80 WB / RAMP F
121+000 110+000 40+000 IL-394 SB
IL-394 NB TO I-80 EB / RAMP K
IL-394 NB
RAMP J
I-94 EB 441+000 I-94 WB
℄ IL-394 SB
20+000 30+000 20+500 30+500

W13-3
900 X 1200
BLACK/YELLOW
STA. 39+856
(℄ IL-394)
TN-5 TRUSS
RAMP 45 M.P.H.

RAMP 25 M.P.H.
W13-3*
STA. 440+150
(℄ IL-394 SB)

℄ I-94 EB
I-80 EB I-80 WB
I-80 WB TO I-94 WB / RAMP C/D
I-94 EB TO I-80 WB / RAMP D
RAMP B
120+000 3+500 2+000 312+000
℄ I-94 WB

D10
WHITE/GREEN
STA. 30+128
(℄ I-94WB)
MILE MARKER 74.1

W4-3R
1200 X 1200
BLACK/YELLOW
STA. 30+178
(℄ I-94 WB)

170th St.
GND-2
D-3
WHITE/GREEN
STA. 19+999
(℄ I-94)

R2-1
900 X 1200
STA. 20+423
(℄ I-94 EB)
CS-2 CANTILEVER

D10
WHITE/GREEN
STA. 30+450
(℄ I-94WB)
MILE MARKER 74.3

W4-1R
1200 X 1200
BLACK/YELLOW
STA. 30+527
(℄ I-94 WB)

CS-2
STA. 20+423 (℄ I-94 EB)
SIGN PANEL - TYPE 3
DRILLED SHAFT CONCRETE FOUNDATIONS
OVERHEAD SIGN STRUCTURE - CANTILEVER, TYPE III-C-A (0.90M X 2.14M): 11.84M
4.95m 6.89m
1C016I094R074.3
EXIT 161
6 WEST ILLINOIS 83
Torrence Ave
½ MILE
℄ OF SIGN SUPPORT STRUCTURE
2.65m
WALKWAY
6.89m
450 3.6m 3.6m 3.6m 3.6m 450

LEFT LANE ENDS
1C016I094L074.2
CW-4
STA. 30+786 (℄ I-94 WB)
SEE SIGNING DETAILS FOR LAYOUT

D10
WHITE/GREEN
STA. 21+777.635
(℄ I-94 EB)
MILE MARKER 74.2

CS-3
STA. 20+935 (℄ I-94 EB)
SEE SIGNING DETAILS FOR LAYOUT
EXIT 161
6 WEST ILLINOIS 83
Torrence Ave
EXIT ONLY
1C016I094R074.3

D10
WHITE/GREEN
STA. 21+099.503
(℄ I-94 EB)
MILE MARKER 74.4
MOUNTED ON TUBULAR TRAFFIC SIGN POST

THORNTON-LANSING RD
IL 394
I-80
170TH ST
159TH ST
I-94

LEGEND FOR FIRE HYDRANT ACCESS HOLE SIGNS

FH-1 HYDRANT ACC.

TO BE LOCATED AT FIRE HYDRANT ACCESS HOLES. SEE "FIRE HYDRANT ACCESS" AND "HYDRANT ACCESS SIGN LAYOUT AND LOCATION DETAILS".

NOTE:
1. ALL MILE MARKERS ON THIS SHEET WILL BE PAID FOR AS METAL POST - TYPE A AND SIGN PANEL, TYPE 1 UNLESS OTHERWISE NOTED. SEE MILE MARKER SIGN AND POST DETAIL.
2. SIGNS SHALL BE GROUND MOUNTED ON WOOD SIGN SUPPORTS UNLESS OTHERWISE SPECIFIED.
3. SIGN PANELS DESIGNATED WITH A "*" SHOW SUGGESTED LOCATIONS FOR EXISTING SIGNS THAT MAY HAVE BEEN AFFECTED BY ROADWAY RECONFIGURATION. THESE SIGNS ARE COVERED UNDER ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

SS-5

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

PROPOSED SIGNING STRIP MAP

HORIZ SCALE: 1:2500
VERT SCALE: NONE
DATE: JULY 18, 2005
DRAWN BY: JYMC
CHECKED BY: JES

HNTB

j:\34562\CADD\T1\cda\Contract19_SB\ss190054a.dgn
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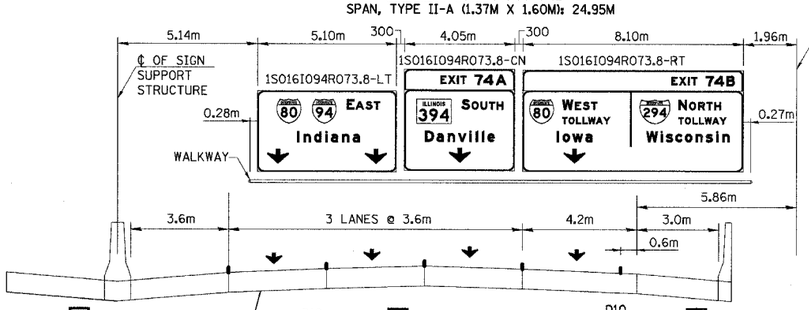
NAME	TYPE	AREA (SQ M)
M1-1	1	0.81
M3-2	1	0.54
M3-4	1	0.54
R2-1	2	1.08
W4-3R	2	1.44
W13-3	2	1.08
D-10	1	0.36

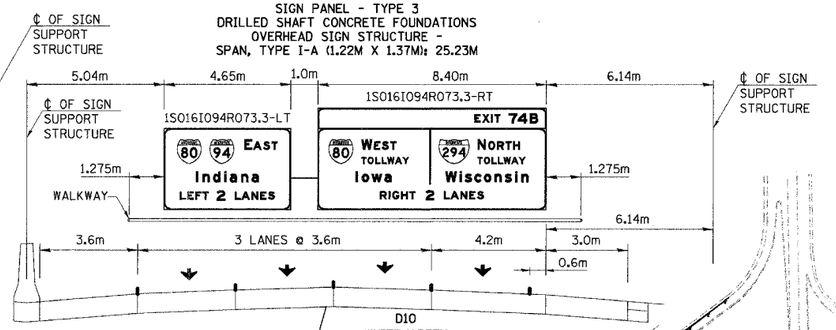
• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	306
STA.		TO STA.		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

TS-3
STA. 19+686 (℄ I-94)
SIGN PANEL - TYPE 3
DRILLED SHAFT CONCRETE FOUNDATIONS
OVERHEAD SIGN STRUCTURE -
SPAN, TYPE II-A (1.37M X 1.60M): 24.95M



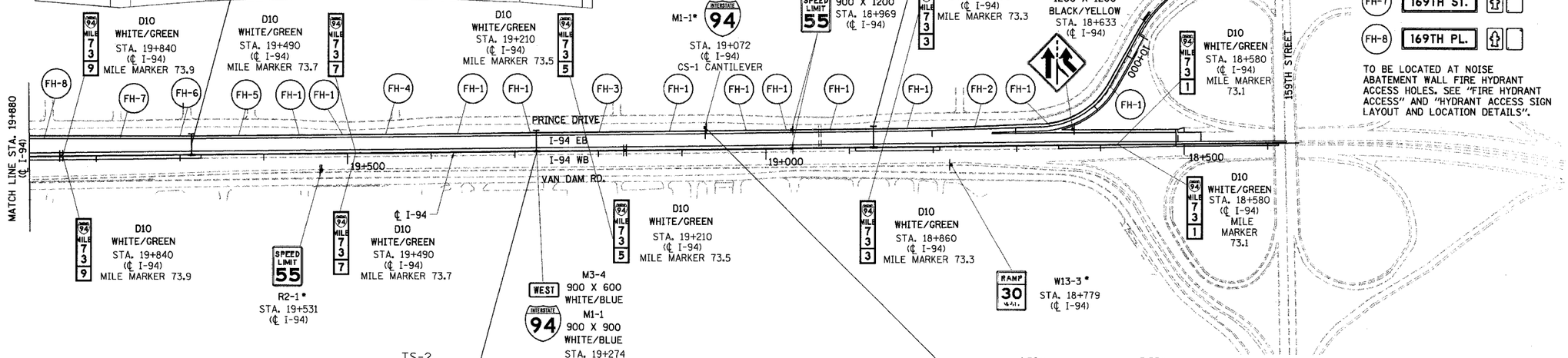
TS-1
STA. 18+871 (℄ I-94)
SIGN PANEL - TYPE 3
DRILLED SHAFT CONCRETE FOUNDATIONS
OVERHEAD SIGN STRUCTURE -
SPAN, TYPE I-A (1.22M X 1.37M): 25.23M



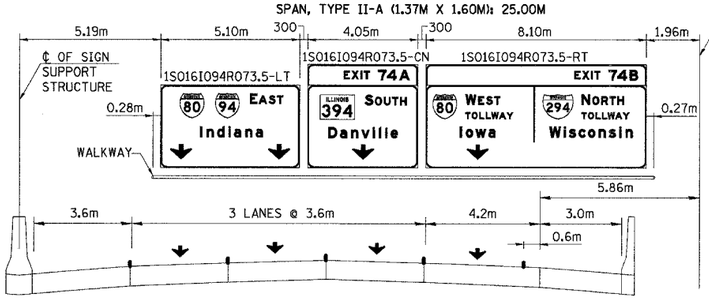
LEGEND FOR FIRE HYDRANT ACCESS HOLE SIGNS

FH-1	HYDRANT ACC.
FH-2	164TH ST.
FH-3	166TH ST.
FH-4	167TH PL.
FH-5	168TH ST.
FH-6	168TH PL.
FH-7	169TH ST.
FH-8	169TH PL.

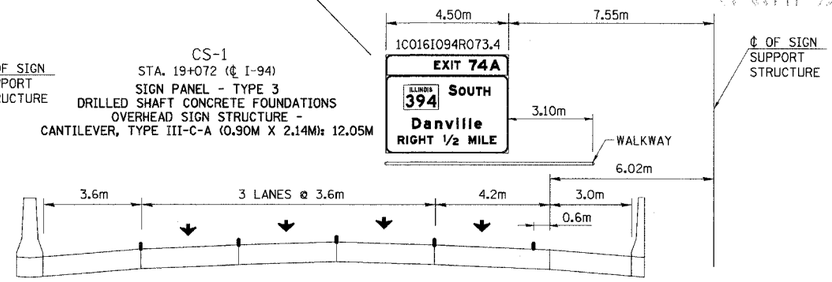
TO BE LOCATED AT NOISE ABATEMENT WALL FIRE HYDRANT ACCESS HOLES. SEE "FIRE HYDRANT ACCESS" AND "HYDRANT ACCESS SIGN LAYOUT AND LOCATION DETAILS".



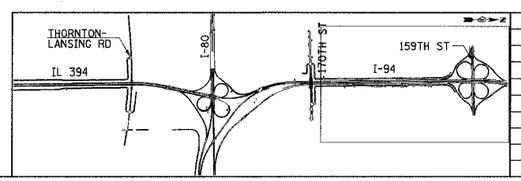
TS-2
STA. 19+274 (℄ I-94)
SIGN PANEL - TYPE 3
DRILLED SHAFT CONCRETE FOUNDATIONS
OVERHEAD SIGN STRUCTURE -
SPAN, TYPE II-A (1.37M X 1.60M): 25.00M



CS-1
STA. 19+072 (℄ I-94)
SIGN PANEL - TYPE 3
DRILLED SHAFT CONCRETE FOUNDATIONS
OVERHEAD SIGN STRUCTURE -
CANTILEVER, TYPE III-C-A (0.90M X 2.14M): 12.05M



NOTE:
1. ALL MILE MARKERS ON THIS SHEET WILL BE MOUNTED ON TUBULAR TRAFFIC SIGN POST IN BOTH DIRECTIONS OF TRAFFIC AND PAID FOR UNDER SIGN PANEL - TYPE 1. SEE MILE MARKER SIGN AND POST DETAIL.
2. SIGNS SHALL BE GROUND MOUNTED ON WOOD SIGN SUPPORTS UNLESS OTHERWISE SPECIFIED.
3. SIGN PANELS DESIGNATED WITH A "•" SHOW SUGGESTED LOCATIONS FOR EXISTING SIGNS THAT MAY HAVE BEEN AFFECTED BY ROADWAY RECONFIGURATION. THESE SIGNS ARE COVERED UNDER ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.



REVISIONS	
NAME	DATE

SS-6

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

PROPOSED SIGNING STRIP MAP

HORIZ SCALE: 1:2500
VERT SCALE: NONE
DATE: JULY 18, 2005
DRAWN BY: JYMC
CHECKED BY: JES

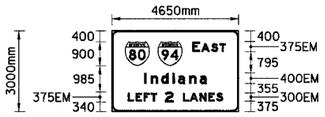
HNTB

j:\345628\CADD\T18\cdas\Contract19_SBS\ss190064a.dgn
slauer 19-AUG-2005 12:52

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	307
STA.		TO STA.		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SIGN DETAIL
1:100



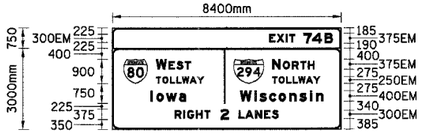
SIGN NUMBER	TS-1 (1 OF 2 PANELS)
WIDTH x HGHT.	4650mm x 3000mm
BORDER WIDTH	50mm
CORNER RADIUS	228mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White /White

SYMBOL	X	Y	WID	HT
M1_1	1675	1700	900	900
M1_1	475	1700	900	900

Dimensions are in mm
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH	SERIES-SIZE
E	A	S	T											EM375,EM300
2950	3276	3644	3950										1224	
I	n	d	i	a	n	a								EM400/300
1175	1419	1804	2217	2421	2835	3219							2302	
L	E	F	T	2	L	A	N	E	S					EM300,EM375
580	867	1153	1419	1939	2604	2849	3216	3537	3824				3493	

SIGN DETAIL
1:100



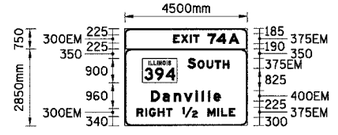
SIGN NUMBER	TS-1 (2 OF 2 PANELS)
WIDTH x HGHT.	8400mm x 3750mm
BORDER WIDTH	50mm
CORNER RADIUS	228mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White /White

SYMBOL	X	Y	WID	HT
M1_1	4450	1700	1125	900
M1_1	400	1700	900	900
VERT DIV LINE	4100	950	50	2000

Dimensions are in mm
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH	SERIES-SIZE
E	X	I	T	7	4	B								EM300,EM375
5760	6046	6372	6495	7018	7348	7797							2341	
N	O	R	T	H										EM375,EM300
5875	6266	6597	6903	7189									1556	
W	E	S	T											EM375,EM300
1600	2070	2357	2664										1286	
T	O	L	L	W	A	Y								EM250
5875	6114	6389	6627	6831	7115	7386							1765	
T	O	L	L	W	A	Y								EM250
1600	1839	2114	2353	2556	2840	3111							1765	
I	o	w	a											EM400/300
1400	1620	1970	2453										1311	
W	i	s	c	o	n	s	i	n						EM400/300
4690	5222	5414	5762	6114	6506	6880	7260	7494					3065	
R	I	G	H	T	2	L	A	N	E	S				EM300,EM375
2290	2612	2750	3070	3376	3974	4642	4886	5254	5574	5860			3820	

SIGN DETAIL
1:100



SIGN NUMBER	CS-1
WIDTH x HGHT.	4500mm x 3600mm
BORDER WIDTH	50mm
CORNER RADIUS	228mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White /White

SYMBOL	X	Y	WID	HT
SRMB_3	650	1600	1275	900

Dimensions are in mm
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH	SERIES-SIZE
E	X	I	T	7	4	A								EM300,EM375
1780	2068	2393	2516	3040	3370	3820							2420	
S	O	U	T	H										EM375,EM300
2300	2677	3006	3312	3598									1540	
D	a	n	v	i	l	l	e							EM400/300
965	1395	1807	2181	2596	2829	3061	3264						2559	
R	I	G	H	T	1/2	M	I	L	E					EM300,EM375
435	756	895	1215	1521	2119	3044	3403	3541	3827				3616	

X & Y locations are measured from the lower left corner of sign panel.

SI-1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

SIGNING DETAILS

HORIZ SCALE: NONE
VERT SCALE: NONE
DATE: JULY 18, 2005
DRAWN BY: JYMC
CHECKED BY: JES

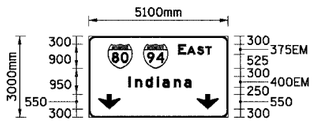
HNTB

J:\345628\CADD\T1\cds\Contract19_SB\si190014a.dgn
kfox 11-JUL-2005 16:50

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	308
STA.		TO STA.		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SIGN DETAIL
1:100



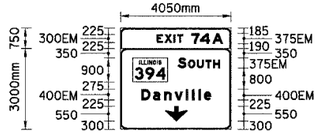
SIGN NUMBER	TS-2 (1 OF 3 PANELS)
WIDTH x HGHT.	5100mm x 3000mm
BORDER WIDTH	50mm
CORNER RADIUS	228mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White /White

SYMBOL	X	Y	WID	HT
M1_1	2000	1800	900	900
M1_1	700	1800	900	900
ARDOWN	3950	300	800	550
ARDOWN	350	300	800	550

Dimensions are in mm
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH	SERIES/SIZE
E	A	S	T											EM375,EM300
3275	3603	3969	4275										1224	
I	n	d	i	a	n	a								EM400/300
1450	1694	2080	2493	2697	3110	3495							2303	

SIGN DETAIL
1:100



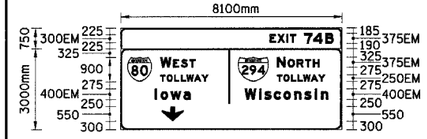
SIGN NUMBER	TS-2 (2 OF 3 PANELS)
WIDTH x HGHT.	4050mm x 3750mm
BORDER WIDTH	50mm
CORNER RADIUS	228mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White /White

SYMBOL	X	Y	WID	HT
SRMB_3	450	1600	1275	900
ARDOWN	1645	300	800	550

Dimensions are in mm
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH	SERIES/SIZE
E	X	I	T	7	4	A								EM300,EM375
1330	1617	1942	2065	2589	2919	3369							2420	
S	O	U	T	H										EM375,EM300
2100	2484	2806	3112	3398									1540	
D	a	n	v	i	l	l	e							EM400/300
765	1202	1607	1981	2397	2829	2861	3071						2566	

SIGN DETAIL
1:100



SIGN NUMBER	TS-2 (3 OF 3 PANELS)
WIDTH x HGHT.	8100mm x 3750mm
BORDER WIDTH	50mm
CORNER RADIUS	228mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White /White

SYMBOL	X	Y	WID	HT
M1_1	250	1775	900	900
M1_1	4300	1775	1125	900
ARDOWN	1505	300	800	550
VERT DIV LINE	3950	950	50	2000

Dimensions are in mm
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH	SERIES/SIZE
E	X	I	T	7	4	B								EM300,EM375
5455	5741	6067	6190	6713	7043	7492							2346	
N	O	R	T	H										EM375,EM300
5725	6122	6447	6753	7039									1556	
W	E	S	T											EM375,EM300
1450	1920	2208	2514										1286	
T	O	L	L	W	A	Y								EM250
1450	1689	1964	2203	2406	2690	2961							1765	
T	O	L	L	W	A	Y								EM250
5725	5964	6239	6477	6681	6965	7236							1765	
W	i	s	c	o	n	s	i	n						EM400/300
4540	5074	5264	5617	5969	6356	6730	7112	7344					3070	
I	o	w	a											EM400/300
1250	1475	1820	2308										1315	

X & Y locations are measured from the lower left corner of sign panel.

SI-2

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

SIGNING DETAILS

HORIZ SCALE: NONE
VERT SCALE: NONE
DATE: JULY 18, 2005
DRAWN BY: JYMC
CHECKED BY: JES

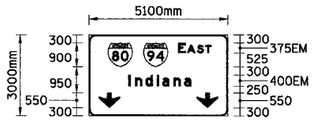
HNTB

J:\345628\CADD\T1\dgds\Contract19_SB\si190024a.dgn
kfox 12-JUL-2005 08:53

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	309
STA.		TO STA.		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SIGN DETAIL
1:100



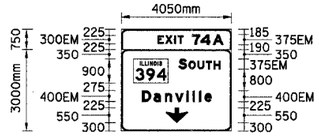
SIGN NUMBER	TS-3 (1 OF 3 PANELS)
WIDTH x HGHT.	5100mm x 3000mm
BORDER WIDTH	50mm
CORNER RADIUS	228mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White /White

SYMBOL	X	Y	WID	HT
M1_1	2000	1800	900	900
M1_1	700	1800	900	900
ARDOWN	3950	300	800	550
ARDOWN	350	300	800	550

Dimensions are in mm
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH	SERIES-SIZE
E	A	S	T											EM375,EM300
3275	3603	3969	4275										1224	
l	n	d	i	a	n	a								EM400/300
1450	1694	2080	2493	2697	3110	3495							2303	

SIGN DETAIL
1:100



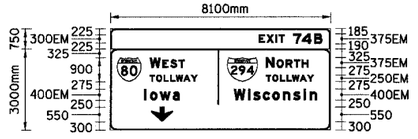
SIGN NUMBER	TS-3 (2 OF 3 PANELS)
WIDTH x HGHT.	4050mm x 3750mm
BORDER WIDTH	50mm
CORNER RADIUS	228mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White /White

SYMBOL	X	Y	WID	HT
SRMB_3	450	1600	1275	900
ARDOWN	1645	300	800	550

Dimensions are in mm
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH	SERIES-SIZE
E	X	I	T	7	4	A								EM300,EM375
1330	1617	1942	2065	2589	2919	3369							2420	
S	O	U	T	H										EM375,EM300
2100	2484	2806	3112	3398									1540	
D	a	n	v	i	l	l	e							EM400/300
765	1202	1607	1981	2397	2629	2861	3071						2566	

SIGN DETAIL
1:100



SIGN NUMBER	TS-3 (3 OF 3 PANELS)
WIDTH x HGHT.	8100mm x 3750mm
BORDER WIDTH	50mm
CORNER RADIUS	228mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White /White

SYMBOL	X	Y	WID	HT
M1_1	250	1775	900	900
M1_1	4300	1775	1125	900
ARDOWN	1505	300	800	550
VERT DIV LINE	3950	950	50	2000

Dimensions are in mm
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)													LENGTH	SERIES-SIZE
E	X	I	T	7	4	B								EM300,EM375
5455	5741	6067	6190	6713	7043	7492							2346	
N	O	R	T	H										EM375,EM300
5725	6122	6447	6753	7039									1556	
W	E	S	T											EM375,EM300
1450	1920	2208	2514										1286	
T	O	L	L	W	A	Y								EM250
1450	1689	1964	2203	2406	2690	2961							1765	
T	O	L	L	W	A	Y								EM250
5725	5964	6239	6477	6681	6965	7236							1765	
W	I	s	c	o	n	s	I	n						EM400300
4540	5074	5264	5617	5969	6356	6730	7112	7344					3070	
I	o	w	a											EM400300
1250	1475	1820	2308										1315	

X & Y locations are measured from the lower left corner of sign panel.

SI-3

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

SIGNING DETAILS

HORIZ SCALE: NONE
VERT SCALE: NONE
DATE: JULY 18, 2005

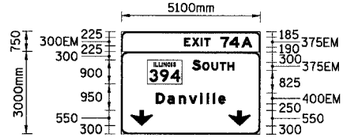
DRAWN BY: JYMC
CHECKED BY: JES

HNTB

J:@345628CADD@T18@dsd@Contract19_SB@sI190034a.dgn
kfox 12-JUL-2005 09:04

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	310
STA.		TO STA.		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SIGN DETAIL
1:100



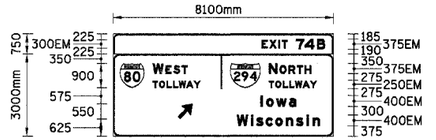
SIGN NUMBER	TS-4 (1 OF 2 PANELS)
WIDTH x HGHT.	5100mm x 3750mm
BORDER WIDTH	50mm
CORNER RADIUS	228mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White /White

SYMBOL	X	Y	WID	HT
SRMB_3	955	1800	1275	900
ARDOWN	3950	300	800	550
ARDOWN	350	300	800	550

Dimensions are in mm
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)																LENGTH	SERIES/SIZE
E	X	I	T	7	4	A											EM300,EM375
2310	2596	2922	3045	3644	3974	4422										2492	
S	O	U	T	H													EM375,EM300
2605	2983	3311	3617	3903												1540	
D	a	n	v	i	l	l	e										EM400/300
1270	1699	2112	2486	2900	3134	3366	3568									2558	

SIGN DETAIL
1:100



SIGN NUMBER	TS-4 (2 OF 2 PANELS)
WIDTH x HGHT.	8100mm x 3750mm
BORDER WIDTH	50mm
CORNER RADIUS	228mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White /White

SYMBOL	X	Y	WID	HT
M1_1	245	1750	900	900
M1_1	4295	1750	1125	900
ARMED	2375	625	450	710
VERT DIV LINE	3955	1725	50	1225

Dimensions are in mm
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)																LENGTH	SERIES/SIZE
E	X	I	T	7	4	B											EM300,EM375
5455	5741	6067	6190	6713	7043	7492										2340	
W	E	S	T														EM375,EM300
1450	1920	2207	2514													1556	
N	O	R	T	H													EM375,EM300
5725	6116	6447	6753	7039												1286	
T	O	L	L	W	A	Y											EM250
1450	1689	1964	2203	2406	2690	2961										1765	
T	O	L	L	W	A	Y											EM250
5725	5964	6239	6477	6681	6965	7236										1765	
I	o	w	a														EM400/300
5415	5636	5985	6469													1312	
W	I	S	C	O	N	S	I	N									EM400/300
4540	5072	5264	5612	5964	6356	6730	7110	7344								3065	

X & Y locations are measured from the lower left corner of sign panel.

SI-4

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

SIGNING DETAILS

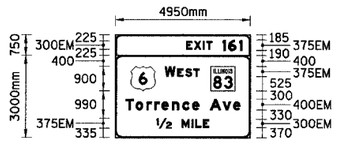
HORIZ SCALE: NONE
VERT SCALE: NONE
DATE: JULY 18, 2005
DRAWN BY: JYMC
CHECKED BY: JES

HNTB

J:\345628\CADD\T1\cds\Contract19_SB\sl190044a.dgn
kfox 12-JUL-2005 09:04

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	311
STA.		TO STA.		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SIGN DETAIL
1:100



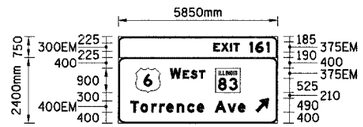
SIGN NUMBER	CS-2
WIDTH x HGHT.	4950mm x 3750mm
BORDER WIDTH	50mm
CORNER RADIUS	228mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White /White

SYMBOL	X	Y	WID	HT
M1_4	560	1700	900	900
SRMB_2	3495	1700	900	900

Dimensions are in mm
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)																LENGTH	SERIES/SIZE
E	X	I	T	1	6	1											EM300,EM375
2595	2881	3207	3330	3929	4139	4540										2057	
W	E	S	T														EM375,EM300
1800	2270	2558	2864													1286	
T	o	r	r	e	n	c	e		A	v	e						EM400/300
370	746	1138	1430	1689	2076	2461	2813	3072	3472	3942	4325					4215	
½	M	I	L	E													EM375,EM300
1510	2434	2794	2932	3218												1932	

SIGN DETAIL
1:100



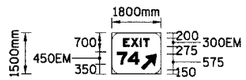
SIGN NUMBER	BME-1
WIDTH x HGHT.	5850mm x 3150mm
BORDER WIDTH	50mm
CORNER RADIUS	228mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White /White

SYMBOL	X	Y	WID	HT
SRMB_2	3575	1100	900	900
M1_4	640	1100	900	900
ARMED	5050	400	400	631

Dimensions are in mm
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)																LENGTH	SERIES/SIZE
E	X	I	T	1	6	1											EM300,EM375
3495	3781	4107	4230	4829	5039	5440										2057	
W	E	S	T														EM375,EM300
1900	2370	2658	2964													1286	
T	o	r	r	e	n	c	e		A	v	e						EM400/300
450	825	1217	1510	1768	2155	2540	2892	3152	3552	4022	4404					4214	

SIGN DETAIL
1:100



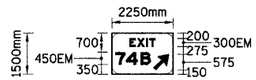
SIGN NUMBER	GND S-1
WIDTH x HGHT.	1800mm x 1500mm
BORDER WIDTH	38mm
CORNER RADIUS	200mm
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White /White

SYMBOL	X	Y	WID	HT
ARMED	1075	150	470	740

Dimensions are in mm
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)																LENGTH	SERIES/SIZE
E	X	I	T														EM300
420	708	1032	1156													960	
7	4																EM450
190	586															817	

SIGN DETAIL
1:100



SIGN NUMBER	GND S-2
WIDTH x HGHT.	2250mm x 1500mm
BORDER WIDTH	38mm
CORNER RADIUS	200mm
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White /White

SYMBOL	X	Y	WID	HT
ARMED	1525	150	470	740

Dimensions are in mm
Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)																LENGTH	SERIES/SIZE
E	X	I	T														EM300
645	931	1257	1381													958	
1	6	1															EM450
125	521	1059														1300	

X & Y locations are measured from the lower left corner of sign panel.

REVISIONS	
NAME	DATE

SI-5

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

SIGNING DETAILS

HORIZ SCALE: NONE
VERT SCALE: NONE
DATE: JULY 18, 2005

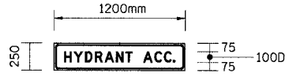
DRAWN BY: JYMC
CHECKED BY: JES

HNTB

J:\834562\CADD\T1\dgn\Contract19_SB\sl190054a.dgn
kfox 12-JUL-2005 09:04

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	312
STA.		TO STA.		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SIGN DETAIL
1:25

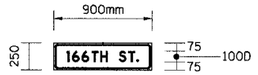


Dimensions are in mm
Letter locations are panel edge to lower left corner

SIGN NUMBER	FH-1: Hydrant Acc.
WIDTH x HGHT.	1200mm x 250mm
BORDER WIDTH	16mm
CORNER RADIUS	30mm
MOUNTING	Noise Abatement Wall
BACKGROUND	TYPE: Reflective
	COLOR: White
LEGEND/BORDER	TYPE: Reflective
	COLOR: Red /Red

LETTER POSITIONS (X)															LENGTH	SERIES/SIZE
H	Y	D	R	A	N	T		A	C	C	.					D100
91	179	283	375	463	567	655	717	817	920	1008	1088				1020	

SIGN DETAIL
1:25

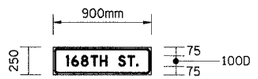


Dimensions are in mm
Letter locations are panel edge to lower left corner

SIGN NUMBER	FH-3: 166th St.
WIDTH x HGHT.	900mm x 250mm
BORDER WIDTH	16mm
CORNER RADIUS	30mm
MOUNTING	Noise Abatement Wall
BACKGROUND	TYPE: Reflective
	COLOR: White
LEGEND/BORDER	TYPE: Reflective
	COLOR: Red /Red

LETTER POSITIONS (X)															LENGTH	SERIES/SIZE
1	6	6	T	H		S	T	.								D100
118	171	258	348	428	496	598	684	762							667	

SIGN DETAIL
1:25

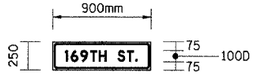


Dimensions are in mm
Letter locations are panel edge to lower left corner

SIGN NUMBER	FH-5: 168th St.
WIDTH x HGHT.	900mm x 250mm
BORDER WIDTH	16mm
CORNER RADIUS	30mm
MOUNTING	Noise Abatement Wall
BACKGROUND	TYPE: Reflective
	COLOR: White
LEGEND/BORDER	TYPE: Reflective
	COLOR: Red /Red

LETTER POSITIONS (X)															LENGTH	SERIES/SIZE
1	6	8	T	H		S	T	.								D100
117	166	254	346	427	495	596	683	758							663	

SIGN DETAIL
1:25



Dimensions are in mm
Letter locations are panel edge to lower left corner

SIGN NUMBER	FH-7: 169th St.
WIDTH x HGHT.	900mm x 250mm
BORDER WIDTH	16mm
CORNER RADIUS	30mm
MOUNTING	Noise Abatement Wall
BACKGROUND	TYPE: Reflective
	COLOR: White
LEGEND/BORDER	TYPE: Reflective
	COLOR: Red /Red

LETTER POSITIONS (X)															LENGTH	SERIES/SIZE
1	6	9	T	H		S	T	.								D100
115	171	259	343	425	493	593	681	763							671	

SIGN DETAIL
1:25

Dimensions are in mm
Letter locations are panel edge to lower left corner

SIGN NUMBER	FH-2: 164th St.
WIDTH x HGHT.	900mm x 250mm
BORDER WIDTH	16mm
CORNER RADIUS	30mm
MOUNTING	Noise Abatement Wall
BACKGROUND	TYPE: Reflective
	COLOR: White
LEGEND/BORDER	TYPE: Reflective
	COLOR: Red /Red

LETTER POSITIONS (X)															LENGTH	SERIES/SIZE
1	6	4	T	H		S	T	.								D100
116	165	252	350	432	500	600	688	763							670	

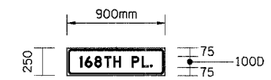
SIGN DETAIL
1:25

Dimensions are in mm
Letter locations are panel edge to lower left corner

SIGN NUMBER	FH-4: 167th Pl.
WIDTH x HGHT.	900mm x 250mm
BORDER WIDTH	16mm
CORNER RADIUS	30mm
MOUNTING	Noise Abatement Wall
BACKGROUND	TYPE: Reflective
	COLOR: White
LEGEND/BORDER	TYPE: Reflective
	COLOR: Red /Red

LETTER POSITIONS (X)															LENGTH	SERIES/SIZE
1	6	7	T	H		P	L	.								D100
114	169	250	343	424	492	592	685	766							674	

SIGN DETAIL
1:25



Dimensions are in mm
Letter locations are panel edge to lower left corner

SIGN NUMBER	FH-6: 168th Pl.
WIDTH x HGHT.	900mm x 250mm
BORDER WIDTH	16mm
CORNER RADIUS	30mm
MOUNTING	Noise Abatement Wall
BACKGROUND	TYPE: Reflective
	COLOR: White
LEGEND/BORDER	TYPE: Reflective
	COLOR: Red /Red

LETTER POSITIONS (X)															LENGTH	SERIES/SIZE
1	6	8	T	H		P	L	.								D100
113	162	250	342	423	492	592	684	759							668	

SIGN DETAIL
1:25

Dimensions are in mm
Letter locations are panel edge to lower left corner

SIGN NUMBER	FH-8: 169th Pl.
WIDTH x HGHT.	900mm x 250mm
BORDER WIDTH	16mm
CORNER RADIUS	30mm
MOUNTING	Noise Abatement Wall
BACKGROUND	TYPE: Reflective
	COLOR: White
LEGEND/BORDER	TYPE: Reflective
	COLOR: Red /Red

LETTER POSITIONS (X)															LENGTH	SERIES/SIZE
1	6	9	T	H		P	L	.								D100
113	168	255	342	423	491	591	684	764							674	

APPROXIMATE LOCATION OF ACCESS HOLES FOR SIGNS:

FH-1:
- STA. 10+070± (℄ 159TH)
- STA. 10+158± (℄ 159TH)
- STA. 18+923±
- STA. 18+975±
- STA. 19+023±
- STA. 19+115±
- STA. 19+281±
- STA. 19+368±
- STA. 19+505±
- STA. 19+557±
- STA. 19+936±

FH-2:
- STA. 18+750±

FH-3:
- STA. 19+199±

FH-4:
- STA. 19+454±

FH-5:
- STA. 19+630±

FH-6:
- STA. 19+700±

FH-7:
- STA. 19+771±

FH-8:
- STA. 19+862±

NOTE:
1. X & Y LOCATIONS ARE MEASURED FROM THE LOWER LEFT CORNER OF SIGN PANEL.
2. ALL STATIONING ARE OFF ℄ I-94 UNLESS OTHERWISE NOTED.

SI-6

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

SIGNING DETAILS

HORIZ SCALE: NONE
VERT SCALE: NONE
DATE: JULY 18, 2005

DRAWN BY: JYMC
CHECKED BY: JES

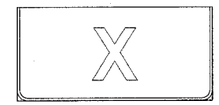
HNTB

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/394	*	COOK	870	313
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

SIGN NUMBER	1C016I094L074.2
WIDTH x HGHT.	3220mm x 1480mm
BORDER WIDTH	50mm
CORNER RADIUS	225mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Yellow
LEGEND/BORDER	TYPE: Reflective
	COLOR: Red / Black

Dimensions are in mm
Letter locations are panel edge to lower left corner

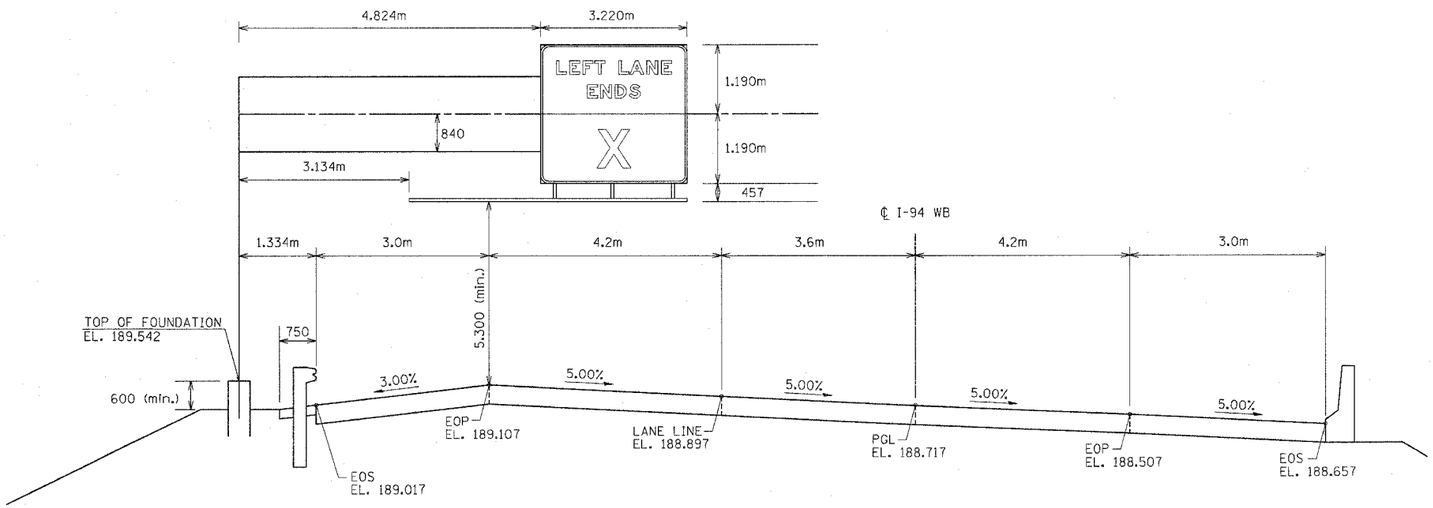
Y FONT	LETTER POSITIONS (X)														LENGTH	SERIES/SIZE
828	L	E	F	T		L	A	N	E							EM300
EM	351	637	925	1189	1413	1713	1957	2325	2647						2518	
303	E	N	D	S												EM300
EM	1029	1315	1637	1942											1162	



SIGN NUMBER	1C016I094L074.2
WIDTH x HGHT.	3220mm x 900mm
BORDER WIDTH	50mm
CORNER RADIUS	225mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Pure White
LEGEND/BORDER	TYPE: Reflective
	COLOR: Red / Black

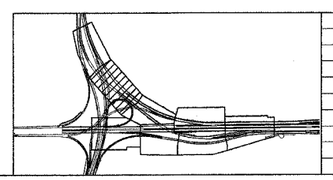
Dimensions are in mm
Letter locations are panel edge to lower left corner

Y FONT	LETTER POSITIONS (X)														LENGTH	SERIES/SIZE
150	X															EM600
EM	1347														526	



STA. 30+786 ℄ I-94 WB
CROSS SECTION LOOKING DOWN STATION
SN 1C016I094L074.2

SI-7



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EASTBOUND / IL 394 SOUTHBOUND

SIGN PANEL
MOUNTING DETAILS

DRAWN BY: CTT
CHECKED BY: RCH
DATE: JULY 18, 2005

McDonough Associates Inc.
Engineers / Architects

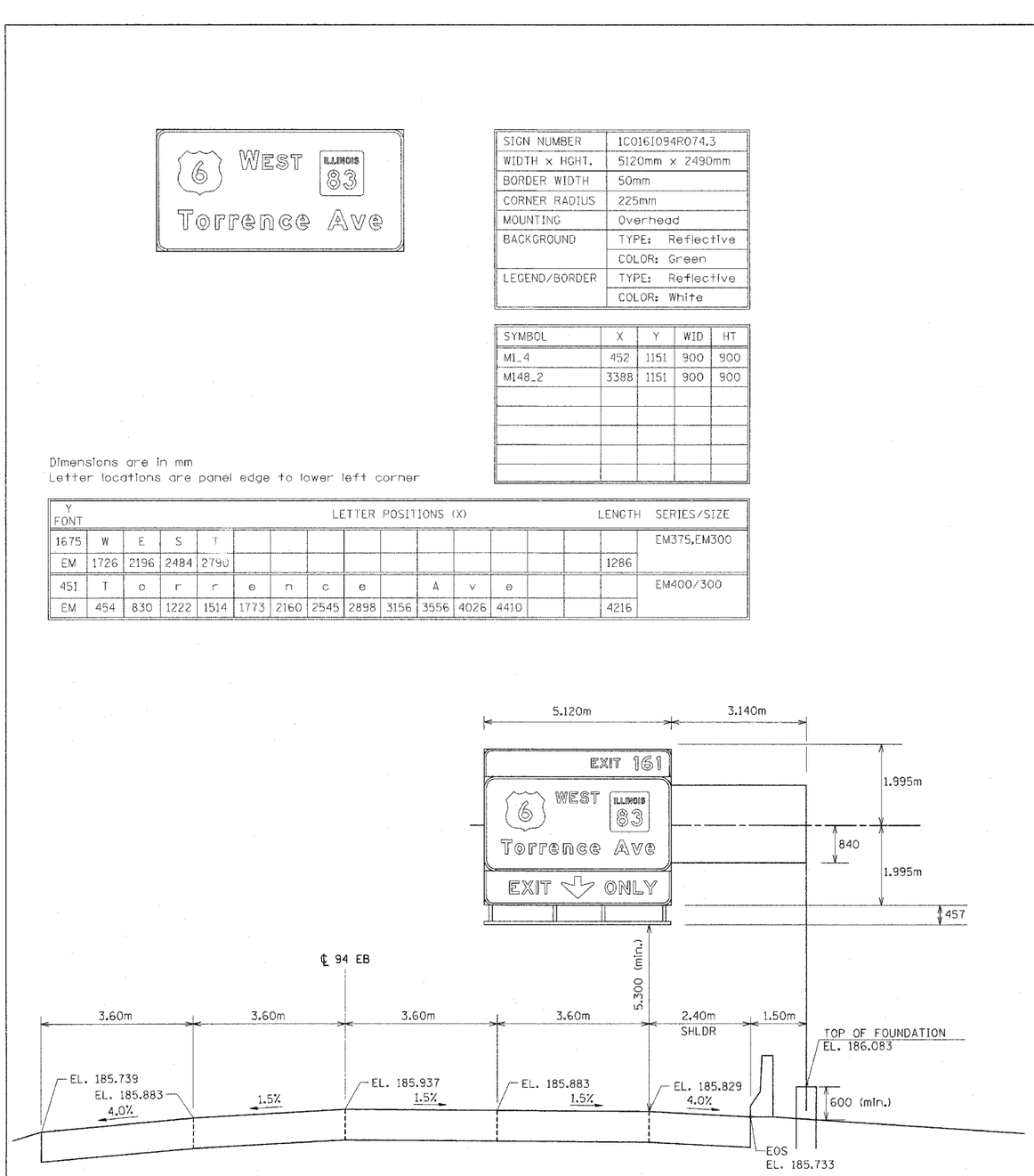
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/394	*	COOK	870	314
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

SIGN NUMBER	1C016I094RO74.3
WIDTH x HGHT.	5120mm x 2490mm
BORDER WIDTH	50mm
CORNER RADIUS	225mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White

SYMBOL	X	Y	WID	HT
M1_4	452	1151	900	900
M148_2	3388	1151	900	900

Dimensions are in mm
Letter locations are panel edge to lower left corner

Y FONT	LETTER POSITIONS (X)														LENGTH	SERIES/SIZE
1675	W	E	S	T												EM375,EM300
EM	1726	2196	2484	2790											1286	
451	T	o	r	r	e	n	c	e		A	v	e				EM400/300
EM	454	830	1222	1514	1773	2160	2545	2898	3156	3556	4026	4410			4216	

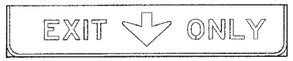


STA. 20+935 ℄ I-94 EB
CROSS SECTION LOOKING SOUTH
SN 1C016I094RO74.3

SIGN NUMBER	1C016I094RO74.3
WIDTH x HGHT.	5120mm x 750mm
BORDER WIDTH	50mm
CORNER RADIUS	225mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White

Dimensions are in mm
Letter locations are panel edge to lower left corner

Y FONT	LETTER POSITIONS (X)														LENGTH	SERIES/SIZE
225	E	X	I	T	1	6	1									EM300,EM375
EM	2764	3050	3376	3499	4098	4308	4709								2057	



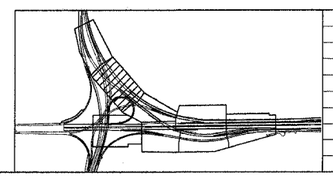
SIGN NUMBER	1C016I094RO74.3
WIDTH x HGHT.	5120mm x 750mm
BORDER WIDTH	50mm
CORNER RADIUS	225mm
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Yellow
LEGEND/BORDER	TYPE: Reflective
	COLOR: Red / Black

SYMBOL	X	Y	WID	HT
ARDOWN	2262	170	600	412

Dimensions are in mm
Letter locations are panel edge to lower left corner

Y FONT	LETTER POSITIONS (X)														LENGTH	SERIES/SIZE
225	E	X	I	T												EM300
EM	1002	1288	1614	1738											958	
225	O	N	L	Y												EM300
EM	3161	3490	3811	4056											1199	

SI-8



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EASTBOUND / IL 394 SOUTHBOUND

SIGN PANEL
MOUNTING DETAILS

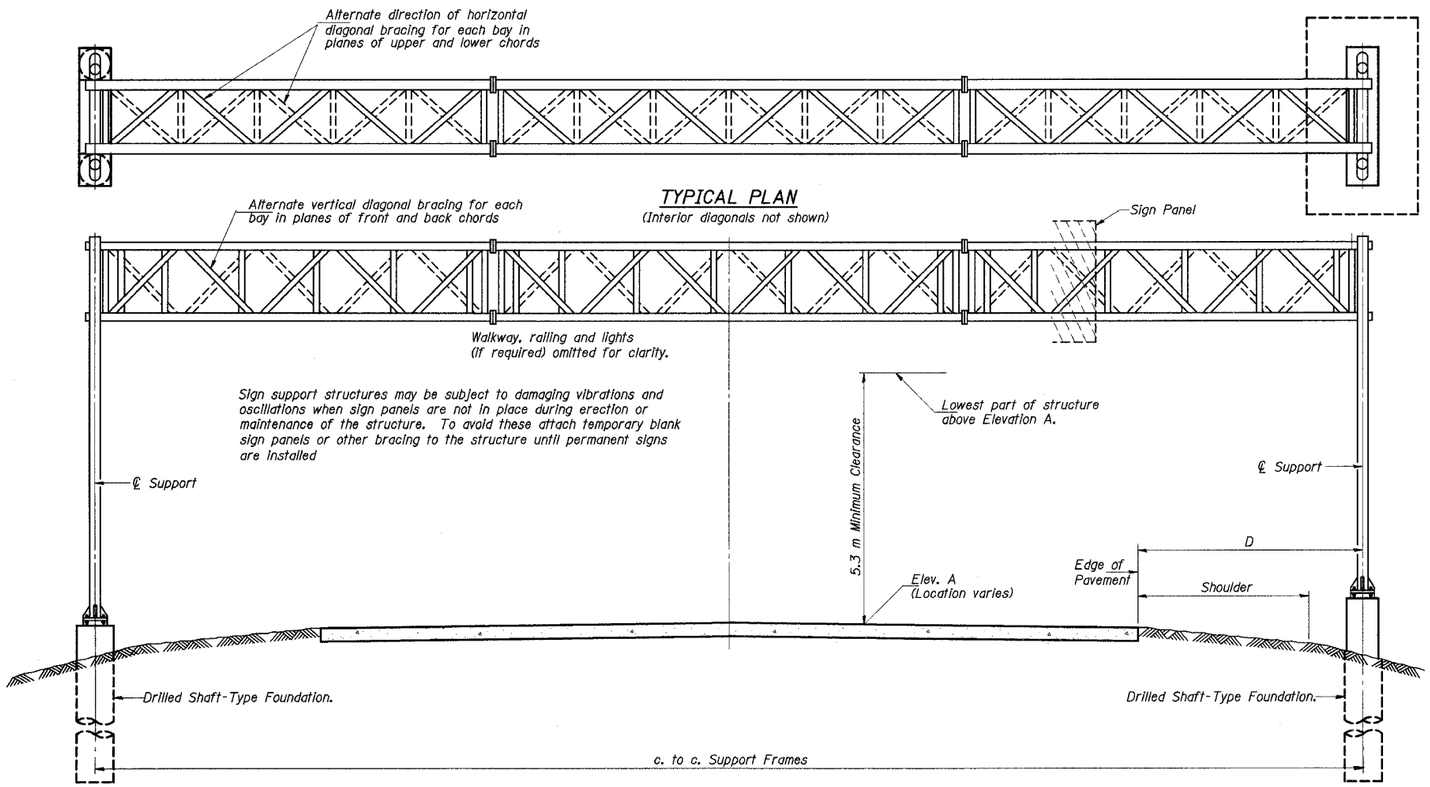
DATE: JULY 18, 2005
DRAWN BY: CTT
CHECKED BY: RCH

McDonough Associates Inc.
Engineers / Architects

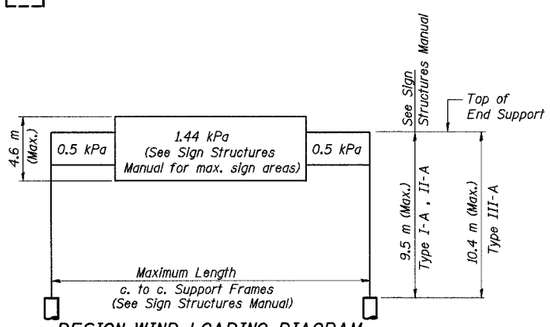
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	315
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108



TYPICAL PLAN
(Interior diagonals not shown)



DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards and Sign Manual Tables. Installations not within dimensional limits shown require special analysis for all components.

TYPICAL ELEVATION
(Looking at Face of Signs)

Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

Structure Number	Station	Design Truss Type	c. to c. Supports (m)	Elev. A ** (m)	Dim. D (m)	Height of Tallest Sign (m)	Total Sign Area (m^2)
IS016I094R073.3	18+871	I-A	25.23	183.143	6.14	3.750	45.450
IS016I094R073.5	19+274	II-A	25.00	183.314	5.86	3.750	60.865
IS016I094R073.8	19+686	II-A	24.95	183.535	5.86	3.750	60.865
IS016S394R	440+757 (IL-394)	II-A	28.00	186.351	10.88	3.750	49.500

Note: all stationing is based on I - 94 unless noted otherwise.

NUMBER	REVISION	DATE

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

MEASUREMENTS: All dimensions are in millimeters (mm) except as noted.

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 145 km/h WIND VELOCITY

WIND LOADING: 1.44 kPa normal to Sign Panel Area and truss elements not behind sign Loading Diagram.

WALKWAY LOADING: Dead load plus 2.2 kN concentrated live load.

DESIGN STRESSES:

FIELD UNITS
f'c = 24 MPa
fy = 400 MPa (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specifications.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B with a minimum yield of 241 MPa, or A500 Grade B or C with a minimum yield of 319 MPa. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270M Gr. 250, Gr. 345 or Gr. 345W*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer. The steel pipe and stiffening ribs at the base plate for the column shall have a minumum longitudinal Charpy V-Notch (CVN) energy of 20 J. at 4° C. (Zone 2) before galvanizing.

FASTENERS FOR STEEL TRUSSES: All bolts noted as "high strenght" (HS) must satisfy the requirements of AASHTO M164 (ASTM A325), ASTM A444, or an Engineer approved alternate. and must have matching lock nuts and washers. All bolts, u-bolts, eye bolts, lock nuts and washers not specified to be "high strength" must satisfy the requirements of ASTM A307 Gr B. All lock nuts must have nylon or steel inserts. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the Standard Specifications. Rotational capacity ("ROCAP") testing will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts, and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

STEEL PIPE: DN indicates nominal diameter.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to AASHTO M314 Gr. 250 or 380 (36 or 55) with a minimum Charpy V-Notch (CVN) energy of 20 J at 5° C.

CONCRETE SURFACES: All concrete surfaces above an elevation 150 mm below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seat Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

*If M270M Gr. 345W steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

**Contractor to confirm this elevation and report to the engineer if any discrepancy found.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE- SPAN, TYPE I-A (1.22M x 1.37M)	m	25.2
OVERHEAD SIGN STRUCTURE-SPAN, TYPE II-A (1.37M x 1.60M)	m	78.0
OVERHEAD SIGN STRUCTURE-SPAN, TYPE III-A (1.53M x 2.14M)*	m	-
OVERHEAD SIGN WALKWAY TYPE A	m	70.0
CONCRETE FOUNDATIONS	m	-
DRILLED SHAFT CONCRETE FOUNDATIONS	m^3	70.4

*NOTE:

This pay item refers to truss size w/Dimension a=1.52m and Dimension b=2.13m.

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OS-A-1(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

OVERHEAD SIGN STRUCTURES
GENERAL PLAN & ELEVATION
ALUMINUM TRUSS & STEEL SUPPORTS

DATE: JUL 18, 2005
SCALE ---

HNTB

JBeauchamp
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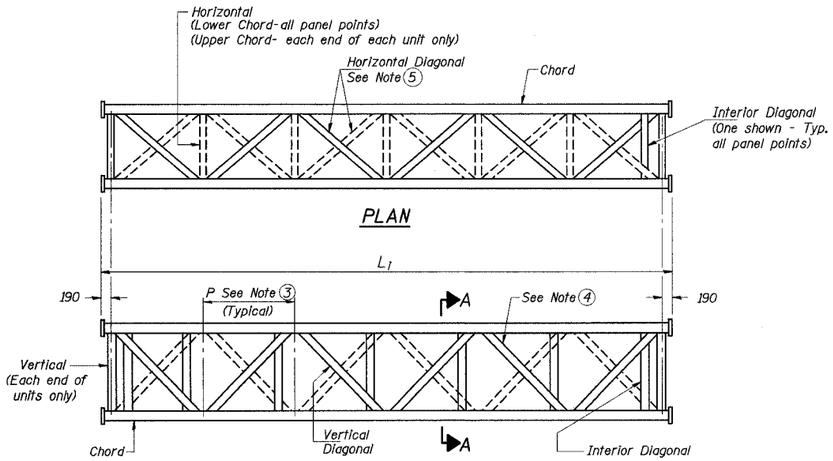
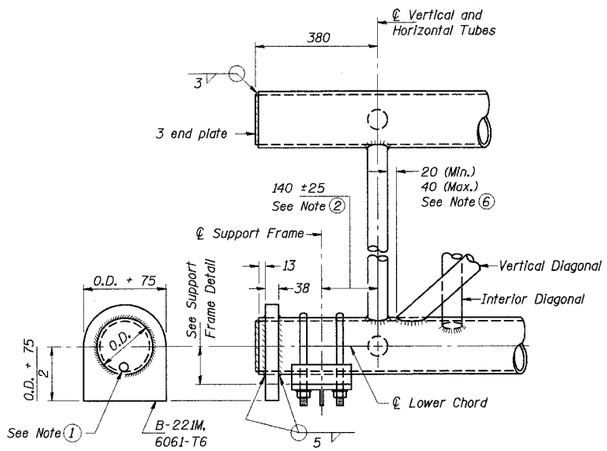
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	316
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

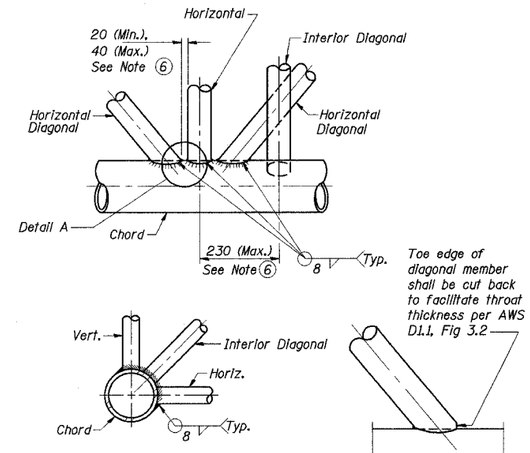
* (0203.1 & 0312-708WI R3 CONTRACT NO. 62108



ELEVATION
TYPICAL INTERIOR UNIT
Even number of panels/interior unit required.

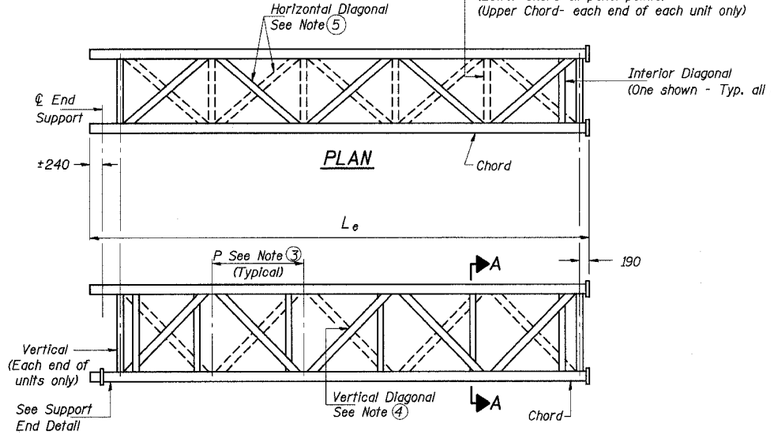


SUPPORT END DETAIL FOR EXTERIOR UNIT

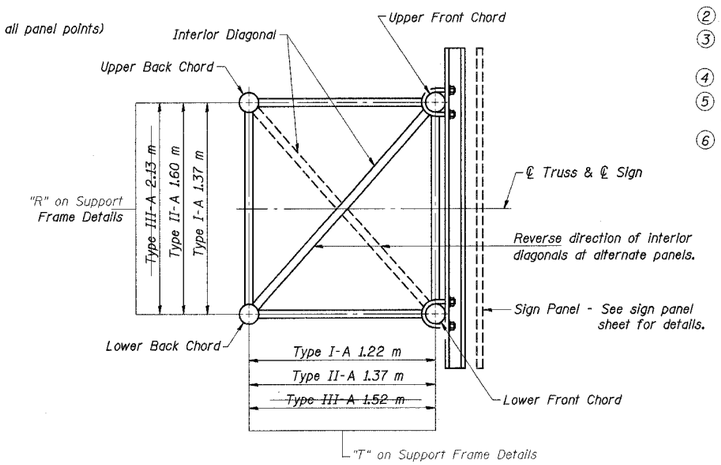


TYPICAL JOINT DETAILS

DETAIL A



ELEVATION
TYPICAL EXTERIOR UNIT
Even or odd number of panels/exterior units allowed.



SECTION A-A

NOTES

1. Contractor may alternatively use standard aluminum drive-fit cap to close end. 13 mm ϕ drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)
2. 140 mm end dimension may vary by ±25 mm to provide uniform panel spacing (P).
3. Panel spacing (P) shall be uniform for entire truss and between 1.20 m and 1.50 m for Type I-A or 1.20 m and 1.65 m for Types II-A and III-A.
4. Vertical Diagonals in front and back face shall alternate.
5. Hidden lines show wind bracing alternates direction between planes of top and bottom chords.
6. All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a 20 mm minimum to 40 mm maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

NUMBER	REVISION	DATE

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OS-A-2(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

OVERHEAD SIGN STRUCTURES
ALUMINUM TRUSS DETAILS
FOR TRUSS TYPES I-A, II-A AND III-A

DATE: JUL 18, 2005
SCALE ---

HNTB

JReuschemp
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

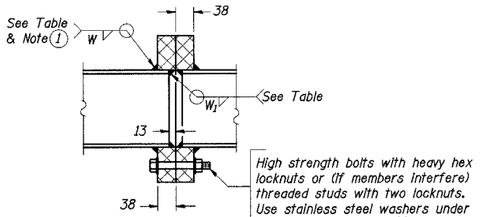
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	317
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108

TRUSS UNIT TABLE

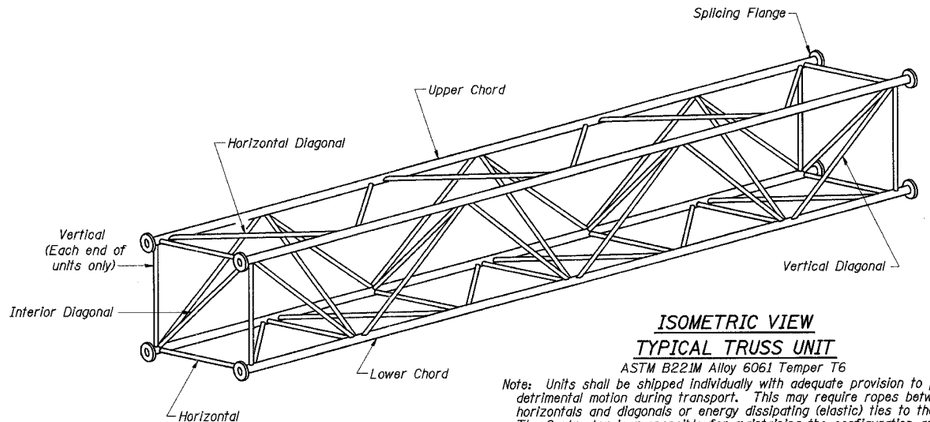
Structure Number	Station	Design Truss Type	Exterior Units (2)			Interior Unit				Upper & Lower chord		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals		Camber at Midspan	Splicing Flange					
			No. Panels per Unit	Unit Lgth.(L_e) (m)	Panel Lgth.(P) (m)	No. Req'd.	No. Panels per Unit	Unit Lgth.(L_1) (m)	Panel Lgth.(P) (m)	O.D.	Wall	O.D.	Wall		Bolts		Weld Sizes		A	B
															No./Splice	Dia.	W	W_1		
IS016I094R073.3	18+871	I-A	6	8.634	1.344	1	6	8.444	1.344	127	8	64	8	64	6	22	8	6	222	298
IS016I094R073.5	19+274	II-A	5	8.070	1.500	1	6	9.380	1.500	140	8	76	8	41	6	22	10	6	235	311
IS016I094R073.8	19+686	II-A	5	8.070	1.500	1	6	9.380	1.500	140	8	76	8	41	6	22	10	6	235	311
IS016S394R	440+757 (IL-394)	II-A	6	9.570	1.500	1	6	9.380	1.500	152	8	76	8	53	6	22	10	6	260	349

Note: all stationing is based on I - 94 unless noted otherwise.



SECTION B-B

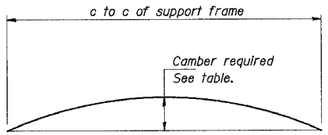
(1) Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.



ISOMETRIC VIEW TYPICAL TRUSS UNIT

ASTM B221M Alloy 6061 Temper T6

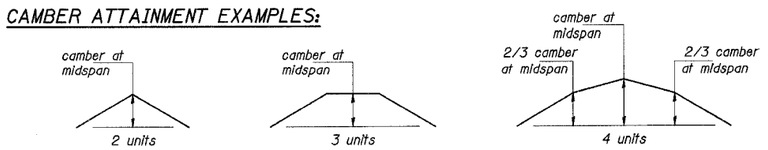
Note: Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection of the units.



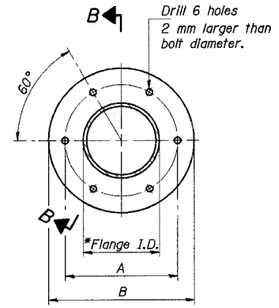
CAMBER DIAGRAM

Camber curve shown is theoretical. Actual camber attained by slope changes at splices between units.

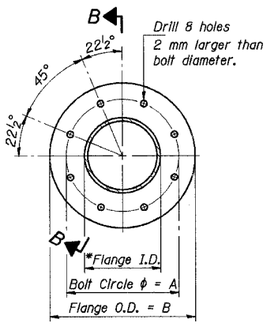
CAMBER ATTAINMENT EXAMPLES:



Camber shown is for fabrication only, measured with truss fully supported. (No-load condition)



TRUSS TYPES I-A, II-A, & III-A



TRUSS TYPES II-A & III-A

SPLICING FLANGES

ASTM B221M, Alloy 6061-T6
or ASTM B209M, Alloy 6061-T651
*To fit O.D. of Chord with maximum gap of 2 mm.

NUMBER	REVISION	DATE

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OS4-A-2(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

OVERHEAD SIGN STRUCTURES
ALUMINUM TRUSS DETAILS
FOR TRUSS TYPES I-A, II-A AND III-A

DATE: JUL 18, 2005
SCALE ---

HNTB

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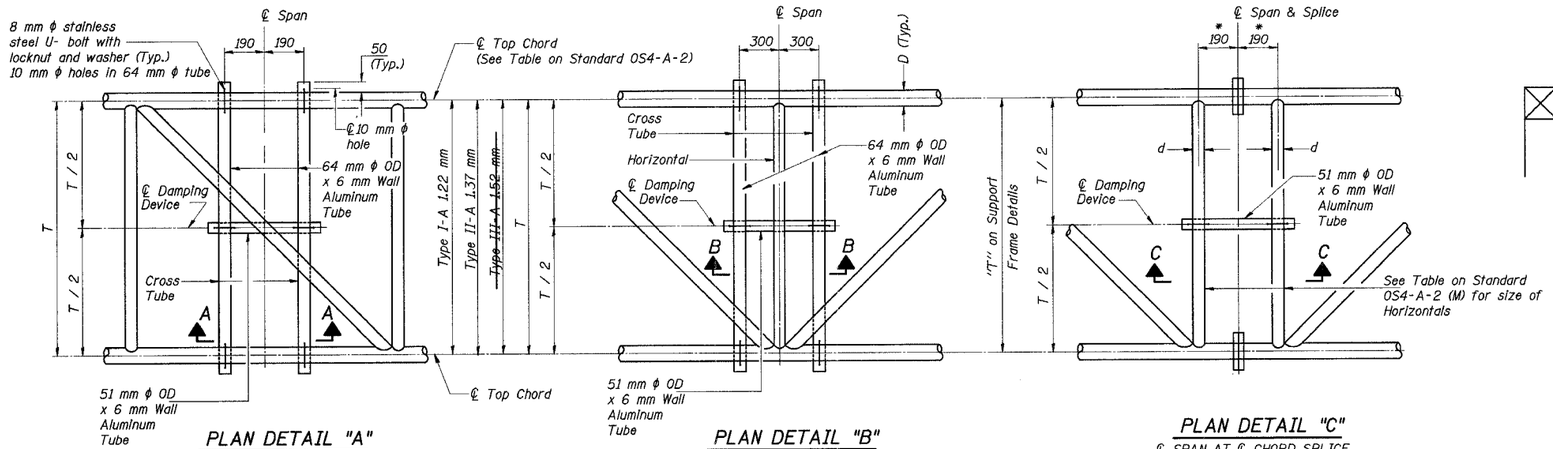
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	318
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

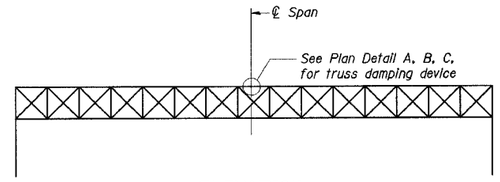
* Center of horizontal to center of splice dimension may vary. Verify before drilling holes in mounting tube.



PLAN DETAIL "A"
℄ SPAN BETWEEN PANEL POINTS

PLAN DETAIL "B"
℄ SPAN AT PANEL POINT

PLAN DETAIL "C"
℄ SPAN AT ℄ CHORD SPLICE



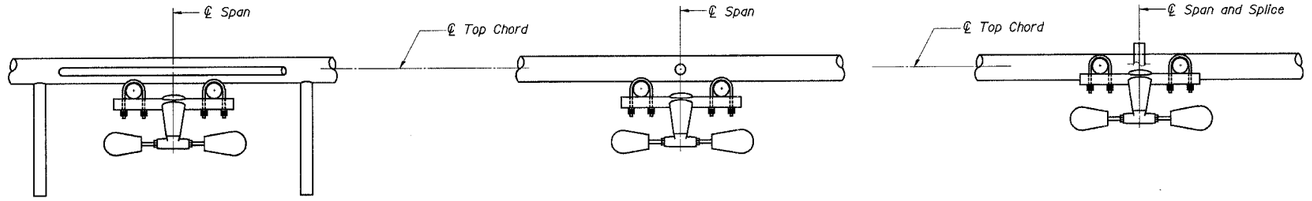
ELEVATION
Aluminum Overhead Sign Truss

NOTES

Damper: One damper per truss. (14 Kg Stockbridge-Type Aluminum) Cost included in "Overhead Sign Structure..."

Materials: Aluminum tubes shall be ASTM B221M alloy 6061 Temper T6. Cost included in "Overhead Sign Structure..."

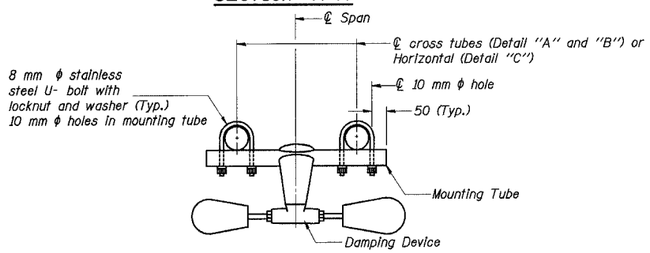
All dimensions are in millimeters (mm) except as noted



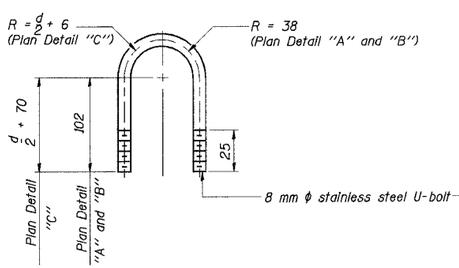
SECTION A-A

SECTION B-B

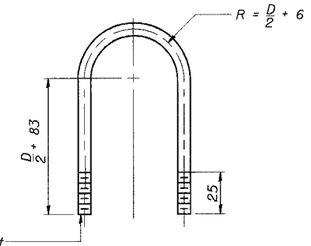
SECTION C-C



TRUSS DAMPING DEVICE CONNECTION DETAIL
(Typical)



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL
(Typical)



TOP CHORD TO CROSS TUBE U-BOLT DETAIL
(Typical - Detail "A" and "B")

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OS-A-D(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

OVERHEAD SIGN STRUCTURE
DAMPING DEVICE

DATE: JUL 18, 2005
SCALE ---

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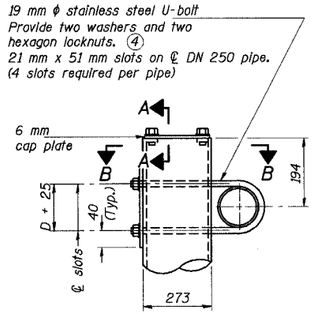
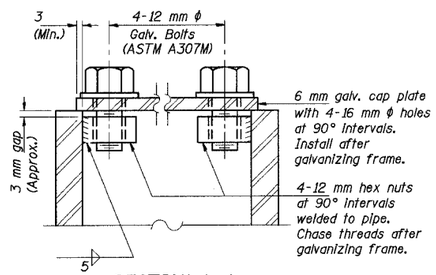
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	•	COOK	870	319
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

• (0203.1 & 0312-708W) R3 CONTRACT NO. 62108

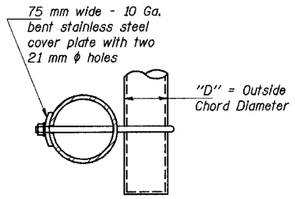


DETAIL A

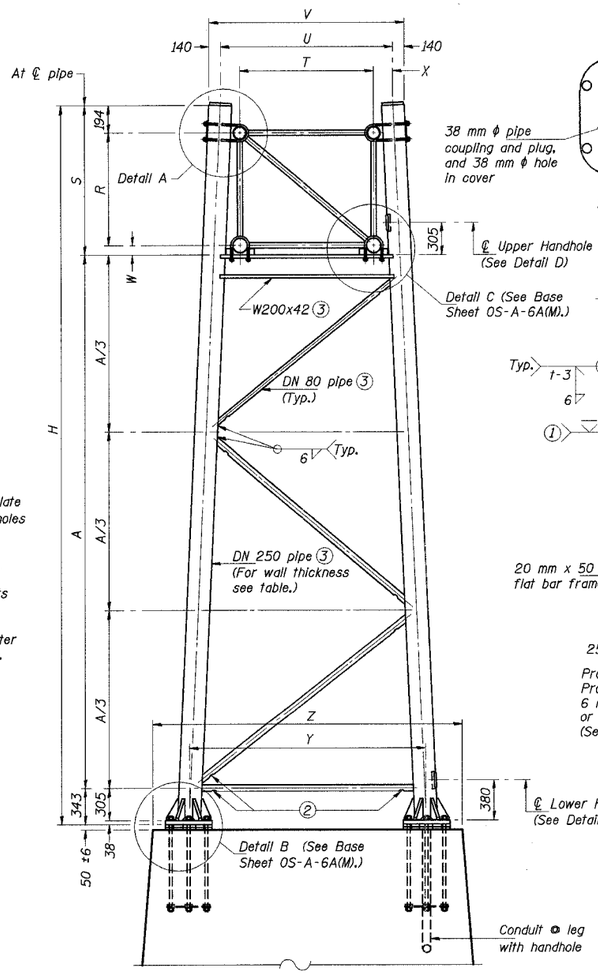


SECTION A-A

As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.

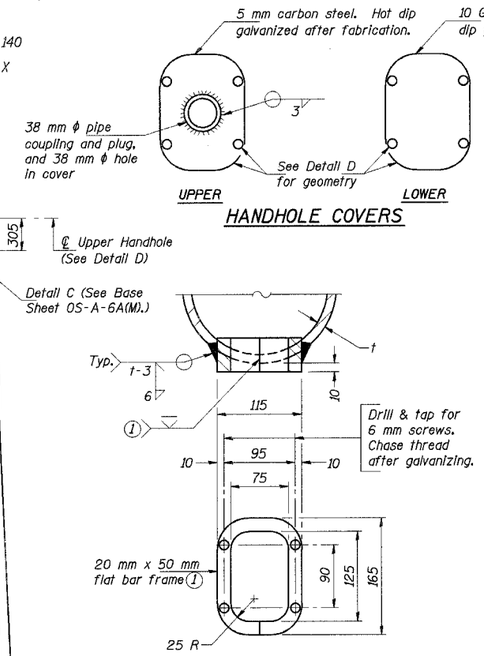


SECTION B-B



FOR FOUNDATION DETAILS SEE BASE SHEET OS-F3(M) (Spread Footing) or OS4-F3(M) (Drilled Shaft).

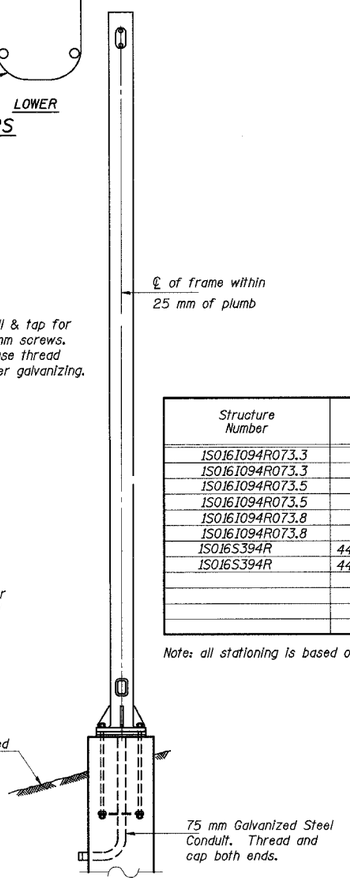
SIDE ELEVATION



HANDHOLE COVERS

Provide 165 mm x 115 mm cover. Provide 4-8 mm ϕ holes in cover for 6 mm round head hot dip galvanized or stainless steel machine screws. (See cover details)

DETAIL D



END ELEVATION

Support Design Loads: See Base Sheet OS-A-1(M) for design and loading criteria.
Load combinations checked include deadload plus:
a) 100% wind normal to sign, 20% parallel to sign
b) 60% wind normal to sign, 30% parallel to sign

(1) In lieu of fabricated handhole frame as shown, may cut from 50 mm plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 12.7 µm or less.

(2) Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred. (Typ.)

(3) Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet OS-A-1(M).

(4) See General Notes for fasteners.

(5) Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.

Structure Number	Station	Support Left	Support Right	Truss Type	Pipe Wall Thickness	H (m)	A (m)
IS016I094R073.3	18+871		✓	I-A	7	8.361	6.358
IS016I094R073.3	18+871	✓		I-A	7	7.585	5.582
IS016I094R073.5	19+274		✓	II-A	9	8.466	6.213
IS016I094R073.5	19+274	✓		II-A	9	7.700	5.447
IS016I094R073.8	19+686		✓	II-A	9	8.466	6.213
IS016I094R073.8	19+686	✓		II-A	9	7.700	5.447
IS016S394R	440+757 (IL-394)		✓	II-A	9	9.103	6.850
IS016S394R	440+757 (IL-394)	✓		II-A	9	8.990	6.738

Note: all stationing is based on I - 94 unless noted otherwise.

NUMBER	REVISION	DATE

DN 250 PIPE TRUSS SUPPORT FRAME

Truss Type	Dimensions R (m)	S (m)	T (m)	U (m)	V (m)	W (mm)	X (mm)	Y (m)	Z (m)
I-A	1.37	1.66	1.22	1.68	1.96	100	230	2.52	3.28
II-A (5)	1.60	1.91	1.37	1.85	2.13	120	240	2.52	3.28

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OS-A-6(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME FOR ALUMINUM TRUSS

DATE: JUL 18, 2005
SCALE ---

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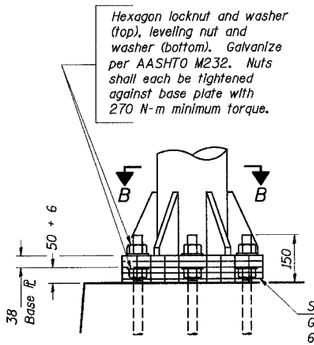
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	320
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

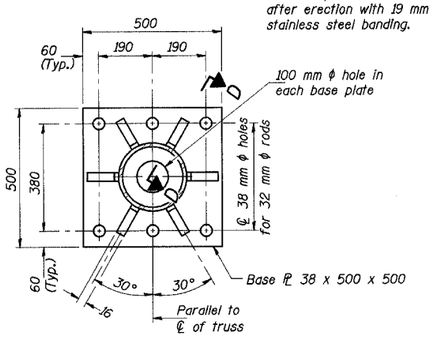
* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108



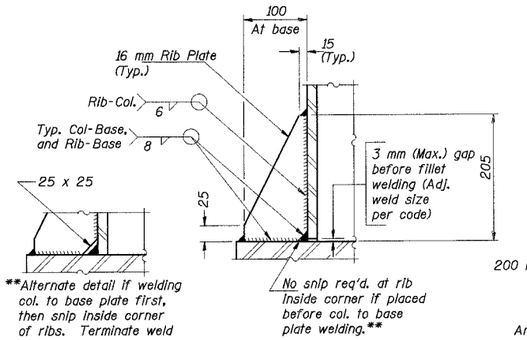
DETAIL B

Ribs shall be cut to fit slope of pipe.

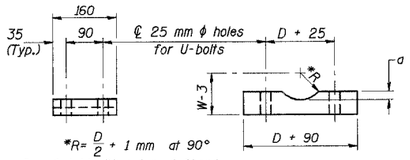
Stainless Steel Standard Grade Wire Cloth, 76 mm wide, 6 mm maximum opening with a minimum wire diameter of 1.5 mm with a minimum 50 mm lap. Secure to base plate after erection with 19 mm stainless steel banding.



SECTION B-B



SECTION D-D



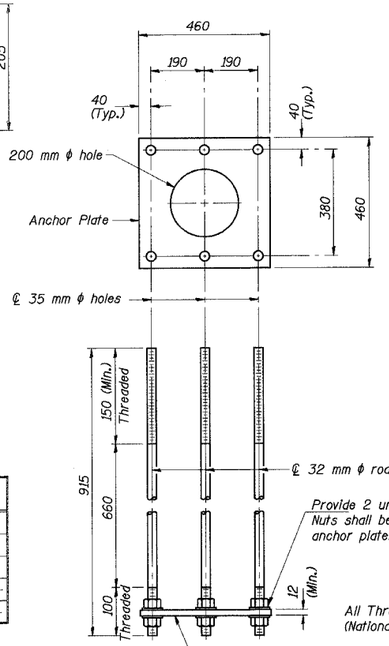
*$R = \frac{D}{2} + 1$ mm at 90°

D = Outside Diameter of Chord.
For W, see Base Sheet OS-A-6.

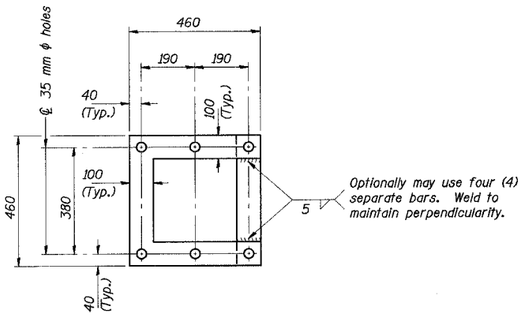
SADDLE SHIM DETAIL

ASTM B26M Alloy 356-F
or
ASTM B209M Alloy 6061-T651
(4 required per sign truss)

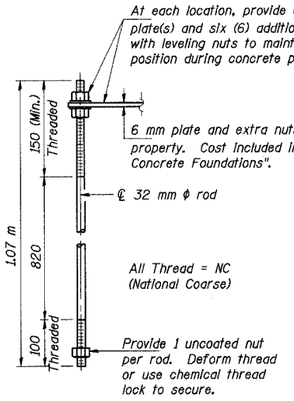
Truss Chord Nominal Dia.	a
127	19
140	21
152	22
165	24
178	25



ANCHOR ROD DETAIL
Spread Footing Foundation

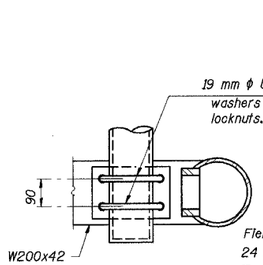


POSITIONING PLATE(S)

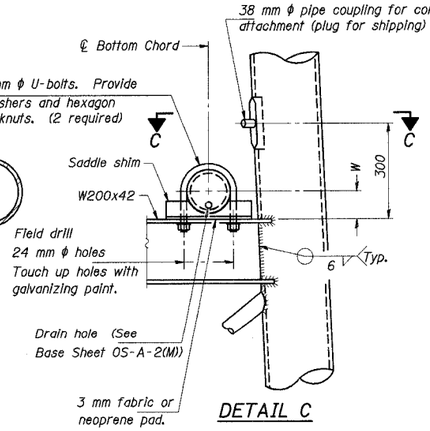


ANCHOR ROD DETAIL
Drilled Shaft Foundation

Anchor rods shall conform to AASHTO M314M Grade 250 or 380 (36 or 55) and meet Charpy V-Notch (CVN) energy of 20 J at 5°C. Galvanize upper 305 mm per AASHTO M232. No welding shall be permitted on rods.



SECTION C-C
(Handhole cover not shown)



DETAIL C

DN 250 PIPE SUPPORT FRAME DETAILS

NUMBER	REVISION	DATE

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OS-A-6A(M) 11/1/2002

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ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME DETAILS
ALUMINUM TRUSS

DATE: JUL 18, 2005
SCALE ---

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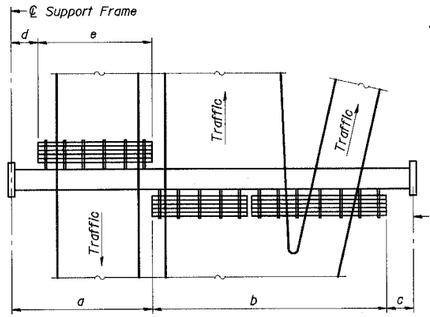
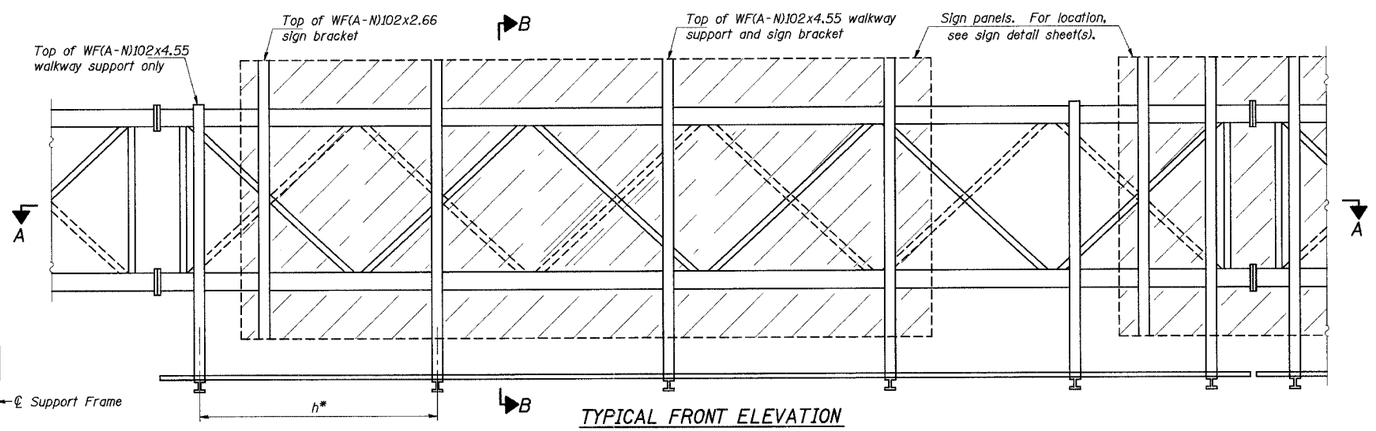
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	321
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

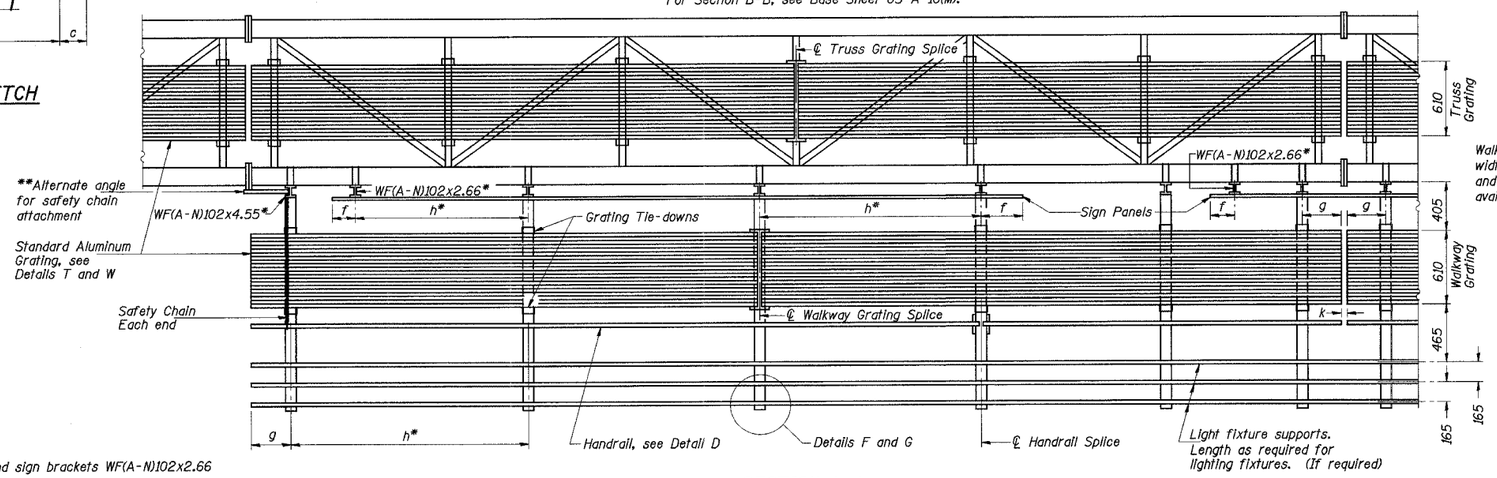
* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108



PLAN
WALKWAY AND HANDRAIL SKETCH
(Road plan beneath truss varies)



TYPICAL FRONT ELEVATION
With lights and handrail omitted for clarity.
For Section B-B, see Base Sheet OS-A-10(M).



Walkway and Truss Grating width dimensions are nominal and may vary ±13 mm based on available standard widths.

BRACKET TABLE

WF(A-N)102x2.66 or WF(A-N)102x4.55 ASTM B308M, Alloy 6061-T6		
Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	2.45	2
2.45	4.3	3
4.3	6.15	4
6.15	8.0	5
8.0	9.85	6

Notes: *Space walkway brackets WF(A-N)102x4.55and sign brackets WF(A-N)102x2.66 for efficiency and within limits shown:

f = 300 mm maximum, 100 mm minimum (End of sign to ℄ of nearest bracket)
g = 300 mm maximum, 100 mm minimum (End of walkway grating to ℄ of nearest support bracket)
h = 1.85 m maximum (℄ to ℄ sign and/or walkway support brackets, WF(A-N)102x2.66or WF(A-N)102x4.55)
k = 50 mm maximum gap between adjacent walkway grating sections and handrail ends

**If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet OS-A-11(M).

For Details T and W, Section B-B and Grating Splice Details, see Base Sheet OS-A-10(M).
For Details D, F, G and P and Handrail Splice Details, see Base Sheet OS-A-11(M).

SECTION A-A

Handrail and walkway shall span a minimum of three brackets between splices and/or gap joints.
Place all sign and walkway brackets as close to panel points as practical.
Grating, handrail and light support splices placed as needed.

Truss grating to facilitate inspection shall run full length (center to center of support frames) ±305 mm on overhead trusses. Cost of truss grating is included in "Overhead Sign Structure".

Structure Number	Station	a (m)	b *** (m)	c (m)	d (m)	e (m)	Walkway Grating and Handrail Lengths
ISO16I094R073.3	18+871	3.765	16.600	4.865	-	-	16.600
ISO16I094R073.5	19+274	4.915	18.400	1.685	-	-	18.400
ISO16I094R073.8	19+686	4.865	18.400	1.685	-	-	18.400
ISO16S394R	440+757 (IL-394)	5.180	16.600	6.220	-	-	16.600

Note: all stationing is based on I - 94 unless noted otherwise.
***b dimension shown above is based on g = 200mm and h = 1.80m

NUMBER	REVISION	DATE

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OS-A-9(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS

DATE: JUL 18, 2005
SCALE ---

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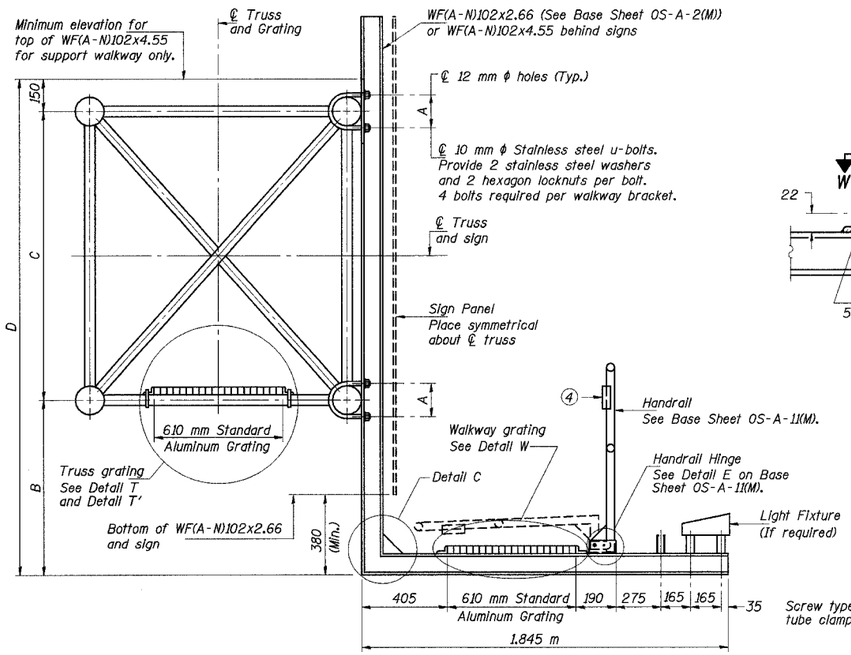
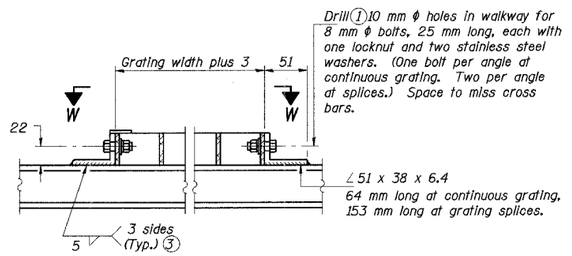
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	322
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

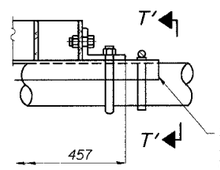
* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108



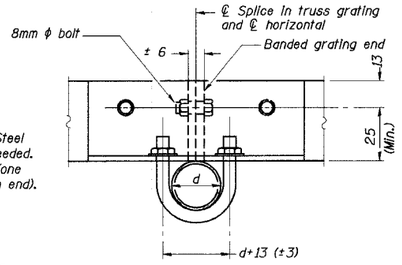
SECTION B-B



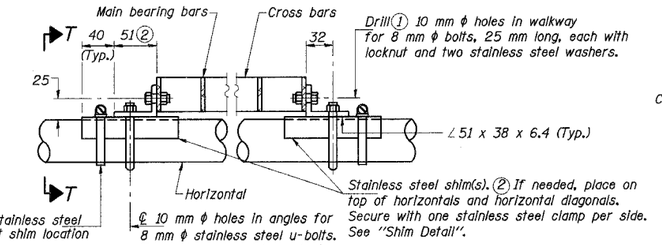
DETAIL W
(Walkway grating)



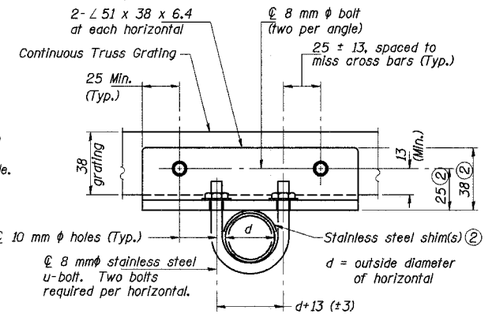
DETAIL T'
(Truss grating splice)
Details not shown same as Detail T.
Alternate materials may be used subject to the Engineer's review and approval.



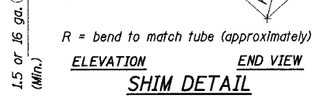
SECTION T'-T'



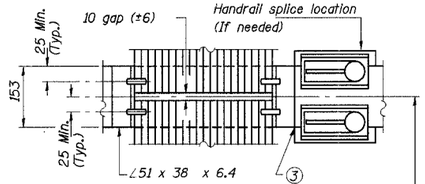
DETAIL T



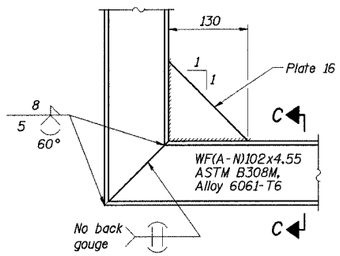
SECTION T-T



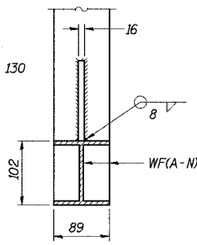
SHIM DETAIL



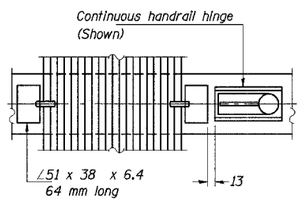
(AT WALKWAY GRATING SPLICE)



DETAIL C
(See Detail P, Base Sheet OS-A-1(M).)



SECTION C-C



(CONTINUOUS WALKWAY GRATING)

SECTION W-W

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars shall be 5 mm x 38 mm on 30 mm centers and conform to ASTM B221M Alloy 6061-T6.
Cross bars shall be 5 mm x 38 mm on 102 mm centers and conform to ASTM B221M Alloy 6063-T5 or 6061-T6

OR

Aluminum Grating with modified "I" sections for main bearing bars shall meet the following requirements:
Main bars shall conform to ASTM B221M Alloy 6061-T6 and have a minimum section modulus equal to 1.16 x 10^3 mm^3 per bar, a depth of 38 mm, spaced on 30 mm centers.
Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 100 mm centers.

(1) Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
(2) Stainless steel shims shall be placed as shown in Detail T If needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
(3) If Handrail Joint present, weld angle to WF(A-N)102 and 6 mm extension bars. (See Base Sheet OS-A-1(M).)
(4) ℄ 3 mm x 13 mm x 50 mm welded to handrail posts to protect locations that contact grating.

Structure Number	Station	A	B	C	D
IS0161094R073.3	18+871	0.137	1.570	1.370	3.090
IS0161094R073.5	19+274	0.150	1.455	1.600	3.205
IS0161094R073.8	19+686	0.150	1.455	1.600	3.205
IS016S394R	440+757 (IL-394)	0.162	1.455	1.600	3.205

Note: all stationing is based on I - 94 unless noted otherwise.

NUMBER	REVISION	DATE

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OS-A-10(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS

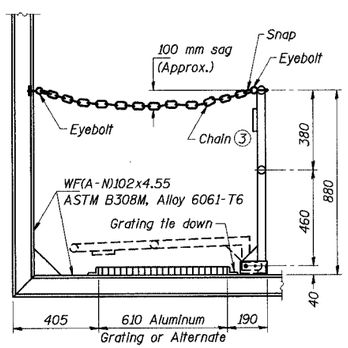
DATE: JUL 18, 2005
SCALE ---

HNTB

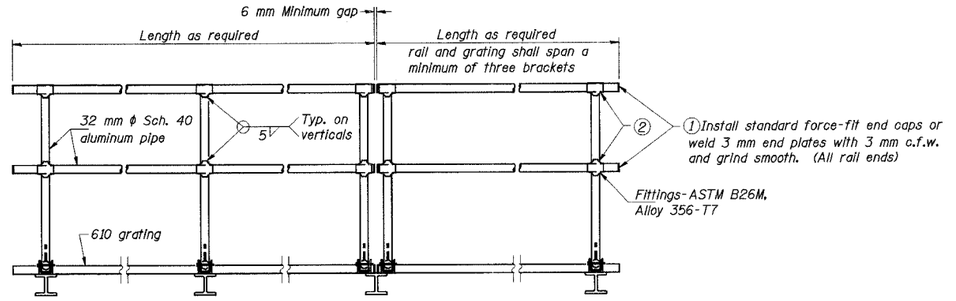
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	323
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108

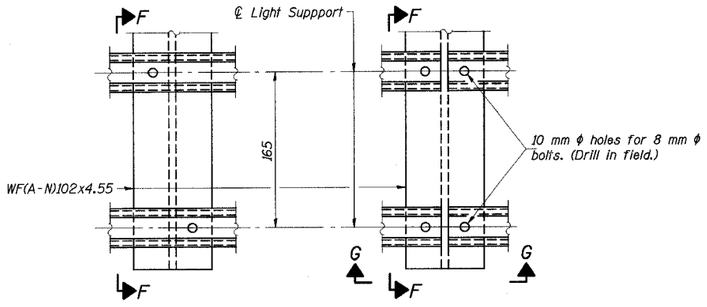


SIDE ELEVATION
(Showing safety chain w/o sign)



FRONT ELEVATION

(2) Horizontal handrail member shall be continuous thru fitting. Provide 12 mm ϕ hole in fitting for 10 mm ϕ bolt. Field drill 12 mm ϕ hole in horizontal rail member. Provide locknut and two stainless steel washers for bolt. (Use 8 mm eyebolts in 12 mm ϕ holes on top rail at ends only.)

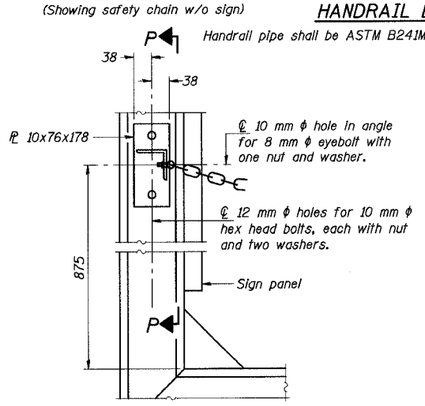


DETAIL F

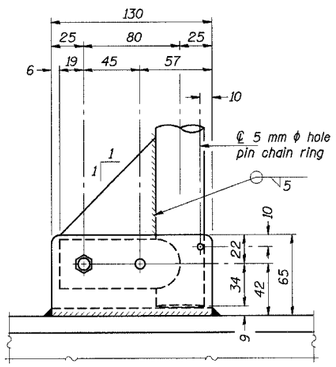
DETAIL G

HANDRAIL DETAILS

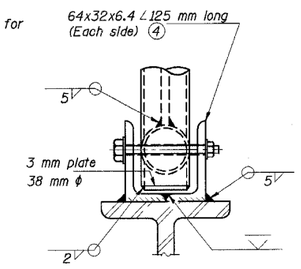
Handrail pipe shall be ASTM B241M, Alloy 6063-T6 or Alloy 6061-T6.



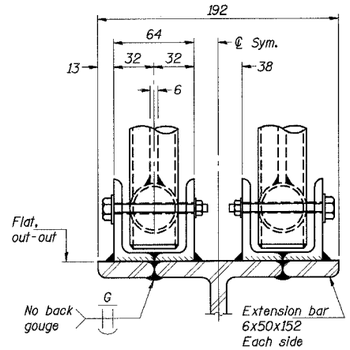
ALTERNATE SAFETY CHAIN ATTACHMENT
(With Sign Present)
Items not shown same as "Side Elevation" of "Handrail Details"



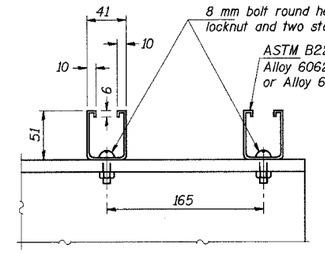
SIDE ELEVATION



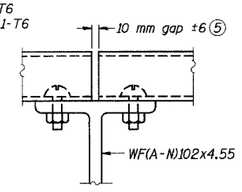
FRONT ELEVATION
See "ELEVATION" at right for dimensions.



ELEVATION AT HANDRAIL JOINT (4)
Details not shown same as "FRONT ELEVATION"



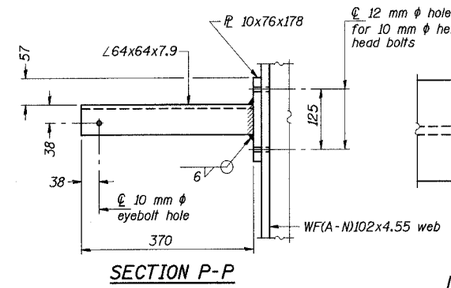
SECTION F-F



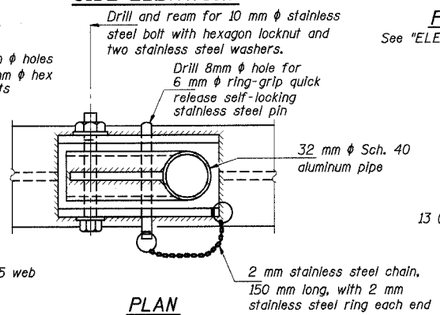
SECTION G-G

LIGHTING FIXTURE MOUNTS (IF REQUIRED)

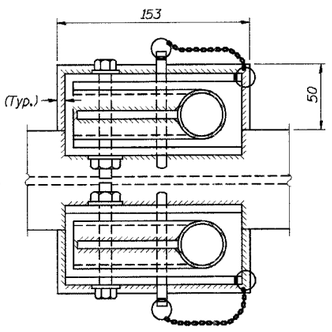
(5) Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.



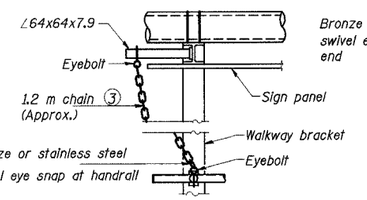
SECTION P-P



PLAN
DETAIL E HANDRAIL HINGE



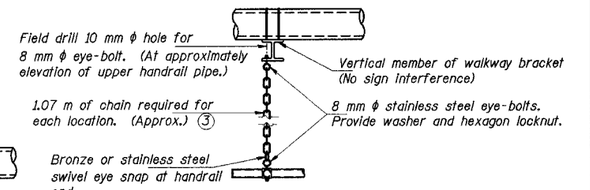
PLAN AT HANDRAIL JOINT
Details not shown same as "PLAN"



ALTERNATE SAFETY CHAIN ATTACHMENT
Details not shown similar to "Safety Chain" Details (Walkway omitted for clarity)

(3) 5 mm galvanized steel chain, approximately 40 links per meter. Chain to be hot dip galvanized after manufacture and suitable for prolonged exterior exposure. Alternate materials may be substituted with the Engineer's approval.

(4) Extrusions may be used in lieu of the details shown, with approval of the Engineer.



SAFETY CHAIN
One required for each end of each walkway.

Note: All eyebolts, bolts, nuts and washers shall be stainless steel. For material, see General Notes.

NUMBER	REVISION	DATE

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OS-A-11(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

OVERHEAD SIGN STRUCTURES
ALUMINUM HANDRAIL DETAILS

DATE: JUL 18, 2005
SCALE ---

HNTB

JRaughtamp
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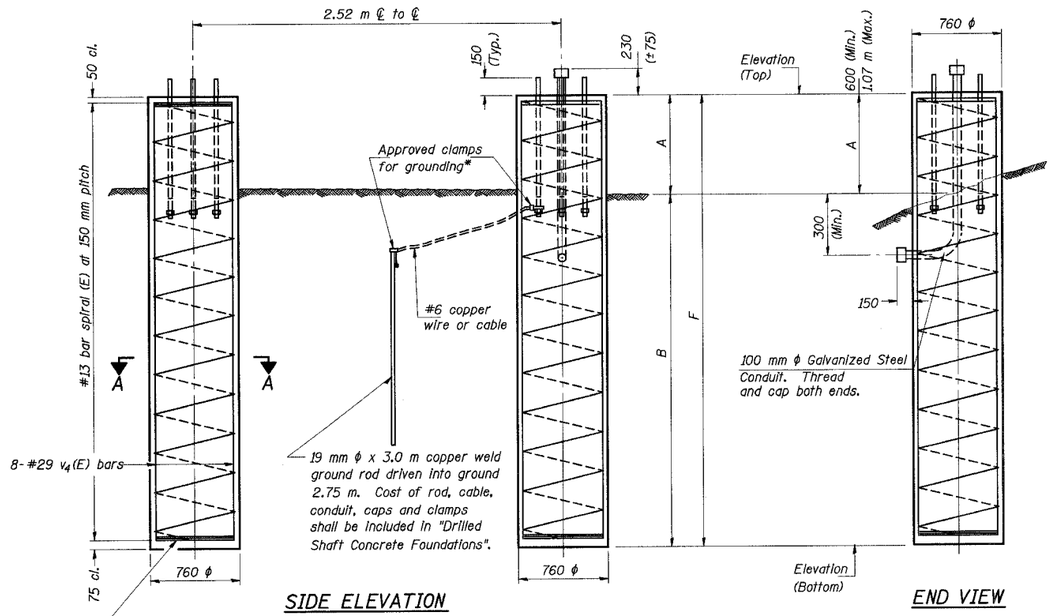
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	•	COOK	870	324
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

• (0203.1 & 0312-708W) R3 CONTRACT NO. 62108

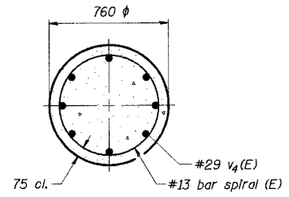
For anchor rod size and placement, see Support Frame Detail Sheet.

**Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.*



SIDE ELEVATION

END VIEW



SECTION A-A

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
v4(E)	16	#29	D less 127	——
#13 bar spiral (E) - see "SIDE ELEVATION"				

NOTES:

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 120 kPa, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 300 mm by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

Concrete shall be placed monolithically, without construction joints.

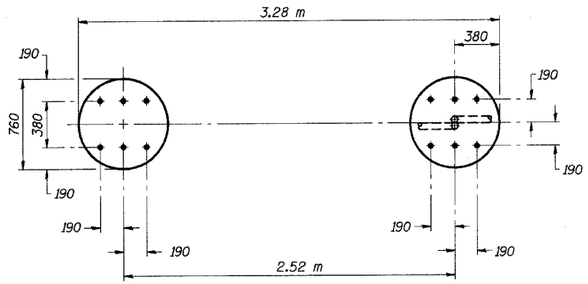
No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Backfill shall be placed per Article 502 of Standard Specifications. and prior to erection of support frame.

A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 150 mm below finished ground line. Cost included in "Drilled Shaft Concrete Foundations".

Conduit in foundation is incidental to "Drilled Shaft Concrete Foundation" for sign structures pay item.

At caissons extending into granular soil or at locations where the underground water extends within a sand layer, a temporary casing should be required. At water locations, the temporary casing should extend down to the top of clay layer and sealed at least 150mm into the cohesive soil.
ALL WORK AND MATERIALS SHALL BE INCLUDED FOR PAYMENT UNDER "DRILLED SHAFT CONCRETE FOUNDATIONS".



PLAN

Structure Number	Station	Left Foundation					Right Foundation					Class SI Concrete (cu. m)
		Eleavation top (m) *	Eleavation Bottom (m)	A (m)	B (m)	F (m)	Eleavation top (m) *	Eleavation Bottom (m)	A (m)	B (m)	F (m)	
IS016I094R073.3	18+871	-	-	-	-	-	183.162	173.20	1.10	8.862	9.962	9.1
IS016I094R073.5	19+274	-	-	-	-	-	183.343	176.41	1.10	5.833	6.933	6.3
IS016I094R073.8	19+686	-	-	-	-	-	183.564	176.90	1.10	5.564	6.664	6.1
IS016S394R	440+757 (IL-394)	185.855	175.430	0.600	9.825	10.425	185.743	179.34	1.10	5.303	6.403	15.3

Note: all stationing is based on I - 94 unless noted otherwise.

*Contractor to confirm this elevation and report to the engineer if any discrepancy found.

NUMBER	REVISION	DATE

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OS4-F3(M) 11/1/2002

DETAILS FOR DN 250 SUPPORT FRAME
TYPE I-A or II-A TRUSS

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

OVERHEAD SIGN STRUCTURES
DRILLED SHAFT DETAILS

DATE: JUL 18, 2005
SCALE ---

HNTB

JBeacham
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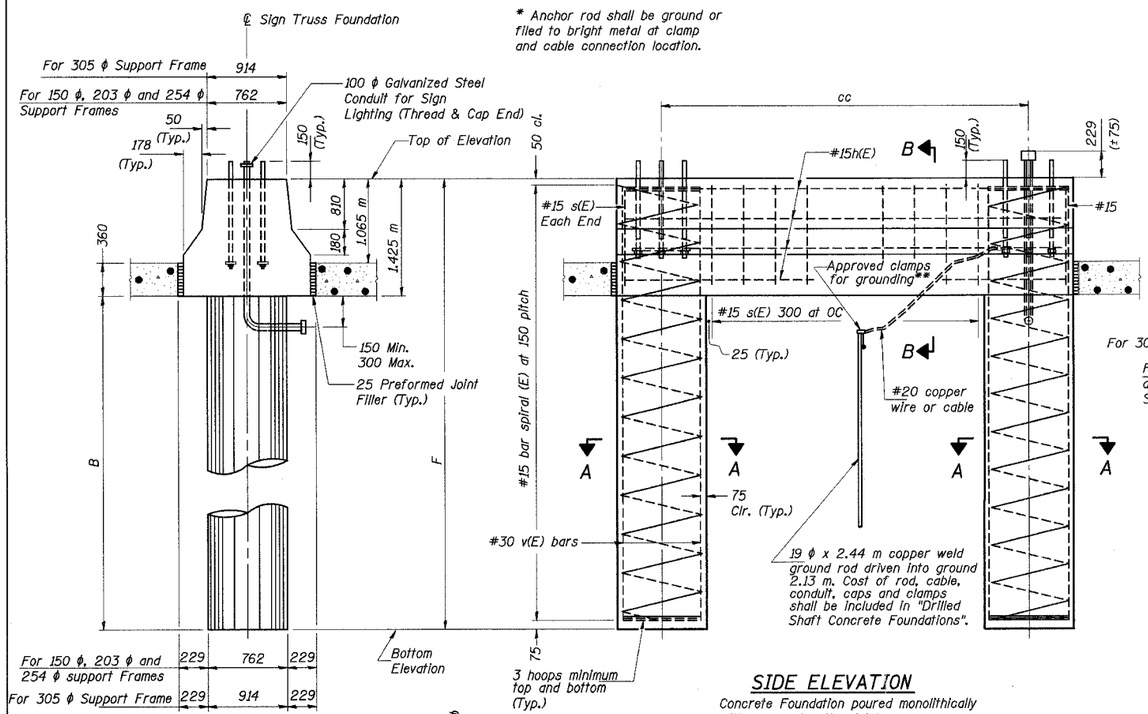
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	325
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108



NOTES:

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 305 by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance.

Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 150 below finished ground line. Cost included in "Drilled Shaft Concrete Foundation".

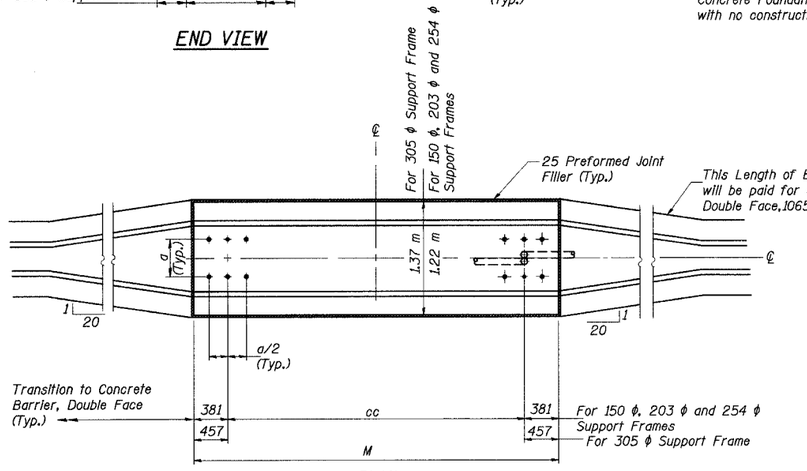
At caissons extending into granular soil or at locations where the underground water extends within a sand layer, a temporary casing should be required. At water locations, the temporary casing should extend down to the top of clay layer and sealed at least 150mm into the cohesive soil.
ALL WORK AND MATERIALS SHALL BE INCLUDED FOR PAYMENT UNDER "DRILLED SHAFT CONCRETE FOUNDATIONS".

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
h(E)	10	#15	M less 100	
s(E)	Varies	#15	Varies	
v(E)	16	#30	D less 127	
v(E)	24	#30	D less 127	
#15(E) bar spiral _ see Side Elevation				

150 ϕ, 203 ϕ and 254 ϕ Support Frame

305 ϕ Support Frame

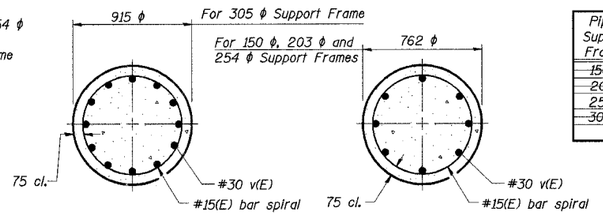


Structure Number	Station	Left Foundation				Right Foundation				Class SI Concrete (Cu. m)
		Elevation top (m) *	Elevation Bottom (m)	B (m)	F (m)	Elevation top (m) *	Elevation Bottom (m)	B (m)	F (m)	
IS0161094R073.3	18+871	183.938	175.04	7.473	8.898	-	-	-	-	11.3
IS0161094R073.5	19+274	184.109	176.70	5.984	7.409	-	-	-	-	10.0
IS0161094R073.8	19+686	184.330	174.40	8.505	9.930	-	-	-	-	12.3

Note: all stationing is based on I - 94 unless noted otherwise.

*Contractor to confirm this elevation and report to the engineer if any discrepancy found.

Conduit in foundation is incidental to "Drilled Shaft Concrete Foundation" for sign structures pay item.



SECTION A-A

Pipe Support Frames	cc	M	a	a/2
~~150 ϕ~~	~~2.13 m~~	~~2.90 m~~	~~275~~	~~140~~
~~203 ϕ~~	~~2.29 m~~	~~3.05 m~~	~~343~~	~~171~~
~~254 ϕ~~	~~2.52 m~~	~~3.28 m~~	~~381~~	~~191~~
~~305 ϕ~~	~~2.75 m~~	~~3.66 m~~	~~457~~	~~229~~

Note: All dimensions are in millimeters unless otherwise noted.

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OS4-MED(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

OVERHEAD SIGN STRUCTURES
MEDIAN SUPPORT FOUNDATION
DETAILS

DATE: JUL 18, 2005
SCALE ---

HNTB

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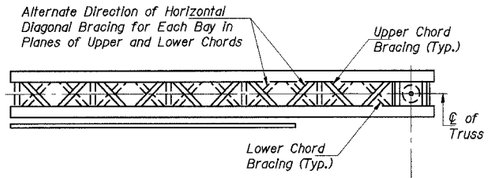
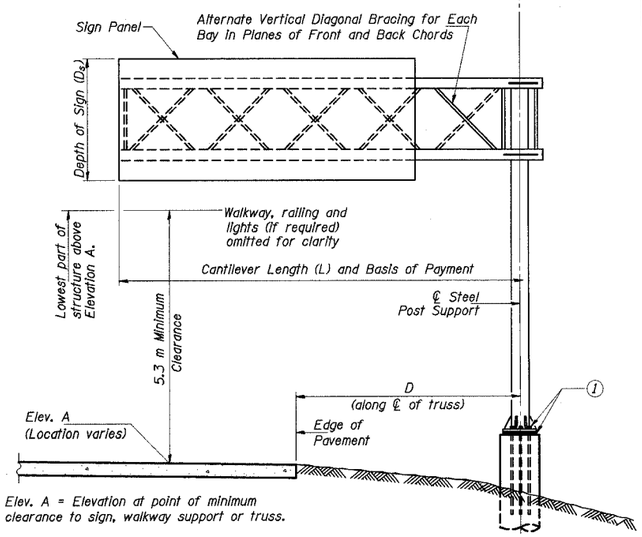
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	326
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108



TYPICAL PLAN
(Walkway not shown)



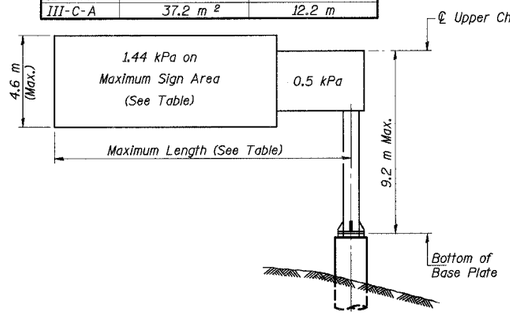
Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

TYPICAL ELEVATION
Looking in Direction of Traffic

Sign support structures may be subject to damaging vibrations and oscillations when sign panels are not in place during erection or maintenance of the structure. To avoid these vibrations and oscillations, consideration should be given to attaching temporary blank sign panels to the structure.

Structure Number	Station	Design Truss Type	Cantilever Length (L) (m)	Elev. A	Dim. D (m)	D_s (m)	Total Sign Area (m^2)
IC016I094R073.4	19+072 (I-94)	III-C-A	12.05	183.272	6.020	3.60	16.2
IC016I094R074.3	20+423 (I-94 EB)	III-C-A	11.84	185.933	6.885	3.75	18.6

Truss Type	Maximum Sign Area	Maximum Length
I-C-A	15.8 m^2	7.6 m
II-C-A	31.6 m^2	9.2 m
III-C-A	37.2 m^2	12.2 m



DESIGN WIND LOADING DIAGRAM
Parameters shown are basis for I.D.O.T. Standards Installations not within dimensional limits shown require special analysis for all components.

(1) After adjustments to level truss and insure adequate vertical clearance, all top and leveling nuts shall be tightened against the base plate with a minimum torque of 270 N · m. Stainless steel mesh shall then be placed around the perimeter of the base plate. Secure to base plate with stainless steel banding.

Note: Trusses shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The contractor is responsible for maintaining the configuration and protection of the trusses.

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

MEASUREMENTS: All dimensions are in millimeters (mm) except as noted.

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 145 km/h WIND VELOCITY

WIND LOADING: 1.44 kPa normal to Sign Panel Area and truss elements not behind sign Loading Diagram.

WALKWAY LOADING: Dead load plus 2.2 kN concentrated live load.

DESIGN STRESSES:

FIELD UNITS
f'c = 24 MPa
fy = 400 MPa (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specifications.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B with a minimum yield of 241 MPa, or A500 Grade B or C with a minimum yield of 319 MPa. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53.
All Structural Steel Plates and Shapes shall conform to AASHTO M270M Gr. 250, Gr. 345 or Gr. 345W*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.
The steel pipe and stiffening ribs at the base plate for the column shall have a minumum longitudinal Charpy V-Notch (CVN) energy of 20 J. at 4° C. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASTO M164 (ASTM A325M), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if members interfere) must satisfy the requirements of ASTM A449, ASTM A193M, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A Stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04(f) of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts, and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

STEEL PIPE: DN indicates nominal diameter.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to AASHTO M314 Gr. 250 or 380 (36 or 55) with a minimum Charpy V-Notch (CVN) energy of 20 J at 5° C.

CONCRETE SURFACES: All concrete surfaces above an elevation 150 mm below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seat Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

*If M270M Gr. 345W steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

NUMBER	REVISION	DATE

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE I-C-A	m	-
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE II-C-A	m	-
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE III-C-A	m	23.9
OVERHEAD SIGN WALKWAY-CANTILEVER TYPE A	m	15.2
DRILLED SHAFT CONCRETE FOUNDATIONS	m^3	21.60

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OSC-A-1(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

CANTILEVER SIGN STRUCTURES
GENERAL PLAN & ELEVATION
ALUMINUM TRUSS & STEEL POST

DATE: JUL 18, 2005
SCALE ---

HNTB

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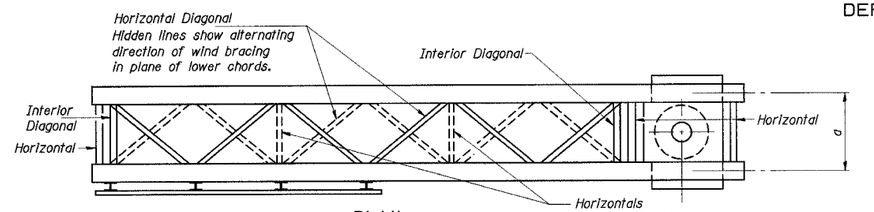
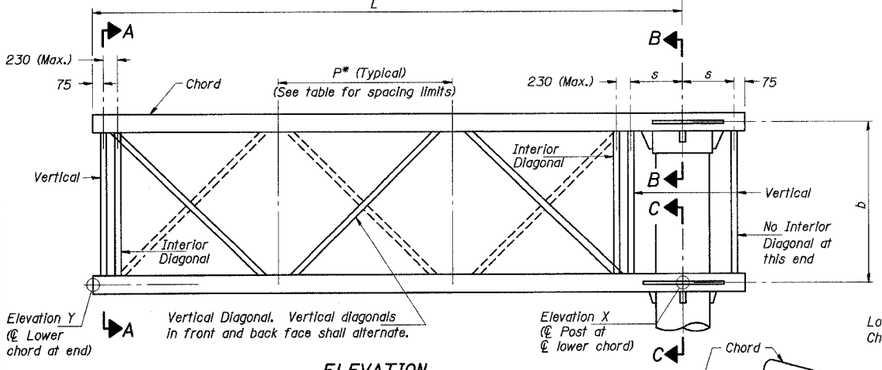
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	327
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108



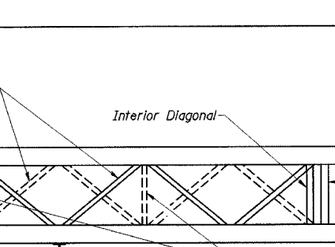
PLAN
(Walkway not shown)



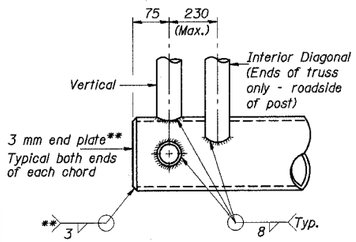
ELEVATION
(Sign and walkway omitted for clarity)

TYPICAL TRUSS UNIT
For Section B-B and Section C-C, see Base Sheet OSC-A-3.

Note: There are twice as many horizontal diagonals as ther are vertical diagonals.



POST END JOINT DETAIL

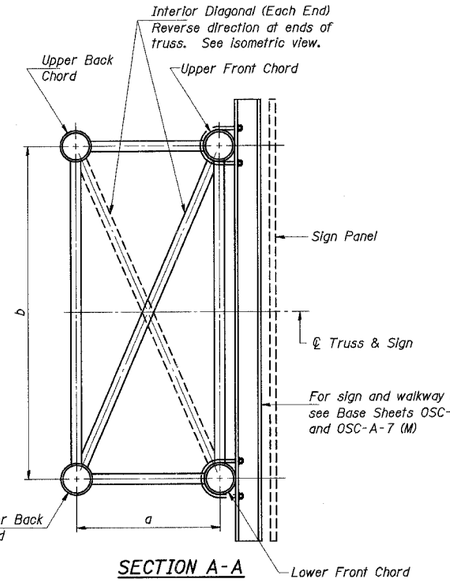


CANTILEVER END JOINT DETAIL

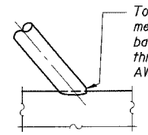
**Contractor may alternatively use standard aluminum drive-fit cap to close ends.

SHOP CAMBER TABLE

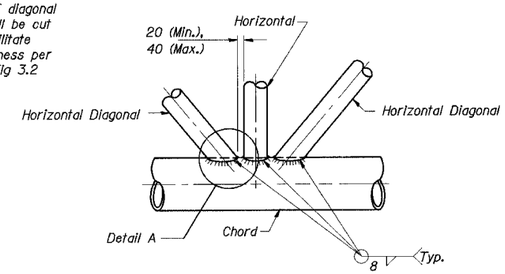
Unit Length (L)	Shop Camber at End
~~4.6~~	~~40~~
~~4.9-5.2~~	~~45~~
~~5.5-6.1~~	~~50~~
~~6.4-6.7~~	~~60~~
~~7.0-7.6~~	~~65~~
~~7.9-8.2~~	~~70~~
~~8.5-9.1~~	~~76~~
~~9.5-9.8~~	~~83~~
~~10.1-10.7~~	~~90~~
~~10.8-11.5~~	~~102~~
11.6-12.2	114



SECTION A-A



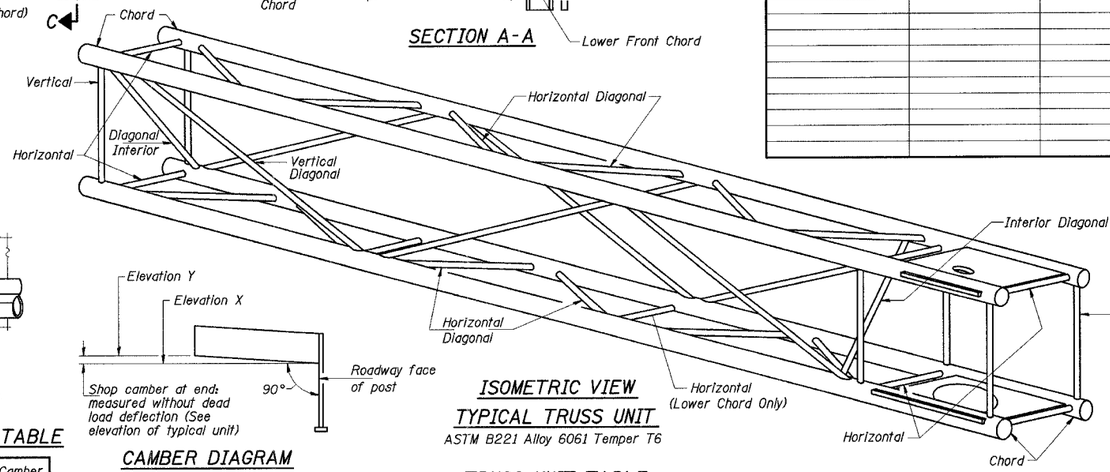
DETAIL A



TRUSS INTERIOR JOINT DETAILS

All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a 20 mm minimum to 40 mm maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

Structure Number	Station	Truss Type	Design Length (L) (m)	Number of Panels Per Unit	Panel Length (P)* (m)
IC0161094R073.4	19+072 (I-94)	III-C-A	12.05	8	1.430
IC0161094R074.3	20+423 (I-94 EB)	III-C-A	11.84	8	1.403



CAMBER DIAGRAM
(For Fabrication Only)

ISOMETRIC VIEW
TYPICAL TRUSS UNIT
ASTM B221 Alloy 6061 Temper T6

TRUSS UNIT TABLE

Truss Type	Dimension "a"	Dimension "b" (m)	Dimension "s"	Limits for Panel Spacing (P)* (m)	Up. & Low. Chord O.D.	Up. & Low. Chord Wall	Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals O.D.	Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals Wall
~~I-C-A~~	~~610~~	~~1.37~~	~~405~~	~~0.915 Min. to 1.22 Max.~~	~~127~~	~~8~~	~~64~~	~~8~~
~~II-C-A~~	~~915~~	~~1.68~~	~~535~~	~~1.07 Min. to 1.37 Max.~~	~~165~~	~~8~~	~~83~~	~~8~~
~~III-C-A (10.7 Max.)~~	~~915~~	~~2.13~~	~~535~~	~~1.22 Min. to 1.68 Max.~~	~~178~~	~~10~~	~~89~~	~~10~~
III-C-A (>10.7 to 12.2)	915	2.13	535	1.22 Min. to 1.68 Max.	203	10	89	10

$*P = \frac{L - s - 75}{\#\ Panels}$

NUMBER	REVISION	DATE

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OSC-A-2(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

CANTILEVER SIGN STRUCTURES
TRUSS DETAILS
ALUMINUM TRUSS & STEEL POST

DATE: JUL 18, 2005
SCALE ---

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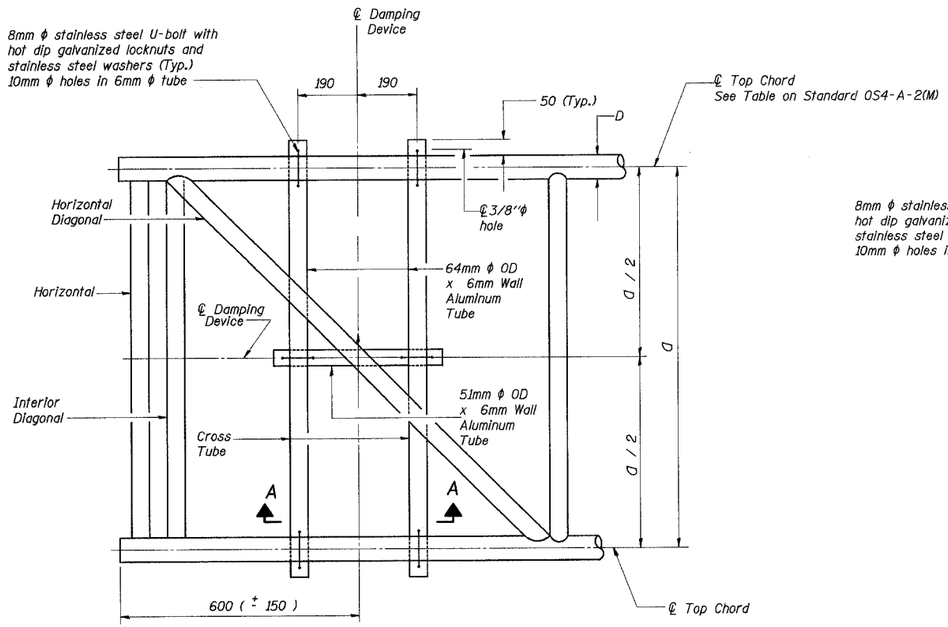
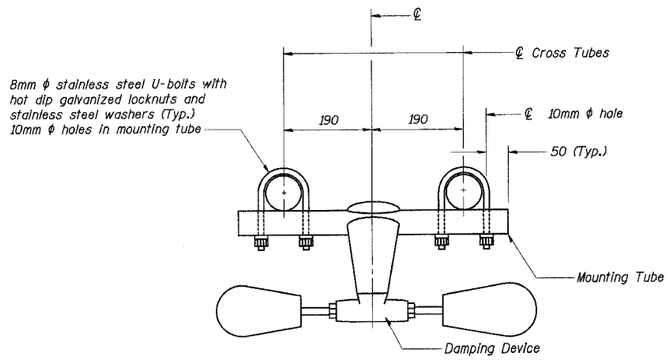
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	328
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

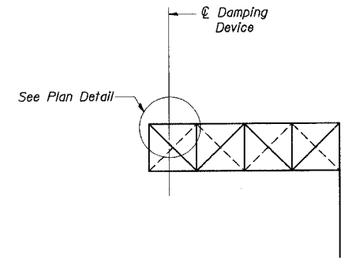
* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108



PLAN DETAIL



TRUSS DAMPING DEVICE CONNECTION DETAIL



ELEVATION

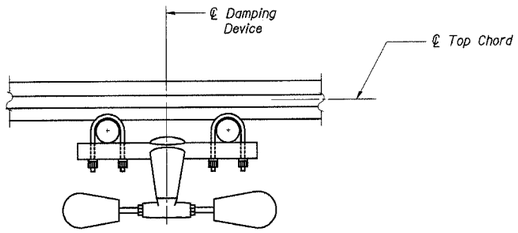
Aluminum Cantilever Sign Structure

GENERAL NOTES

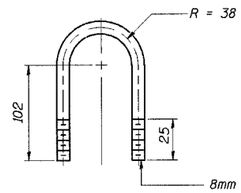
Damper: One damper per truss. (14 Kg Stockbridge-Type Aluminum)

Materials: Aluminum tubes shall be ASTM B221(M) alloy 6061 temper T6

All dimensions are in millimeters (mm) except as noted.

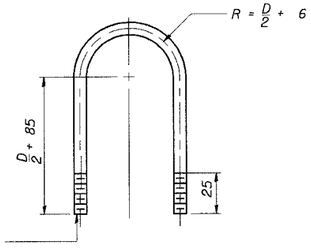


SECTION A-A



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL

(Typical)



TOP CHORD TO CROSS TUBE U-BOLT DETAIL

(Typical)

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OSC-A-D(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

CANTILEVER SIGN STRUCTURE
DAMPING DEVICE

DATE: JUL 18, 2005
SCALE ---

HNTB

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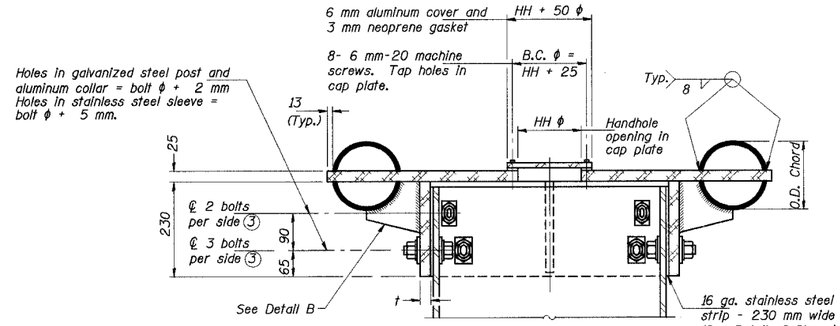
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	•	COOK	870	329
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

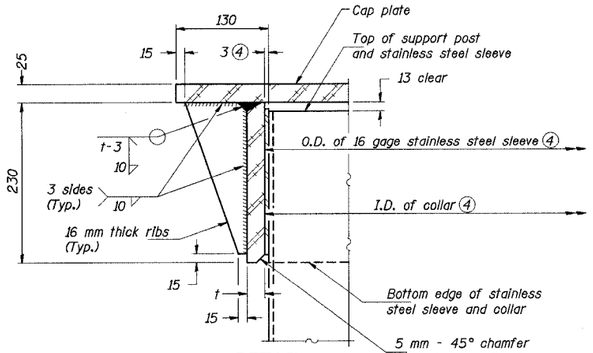
• (0203.1 & 0312-708W) R3 CONTRACT NO. 62108



SECTION B-B

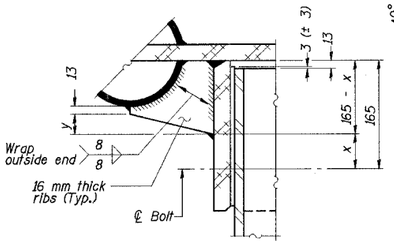
Bolts, washers (including contoured washers), and locknuts shall be stainless steel.

④ Collar I.D. shall be manufactured to correspond to O.D. of actual galvanized post and stainless steel sleeve plus 3 mm (±2 mm). Maximum gap between post and collar at any location equals 3 mm before tightening bolts.



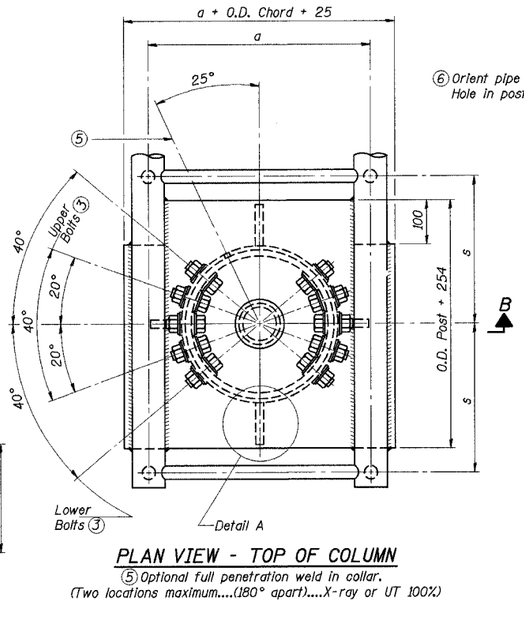
DETAIL A

(Two locations)



DETAIL B

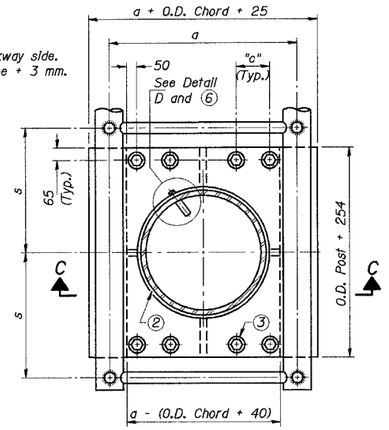
Two locations
(For details not shown, see Detail C)



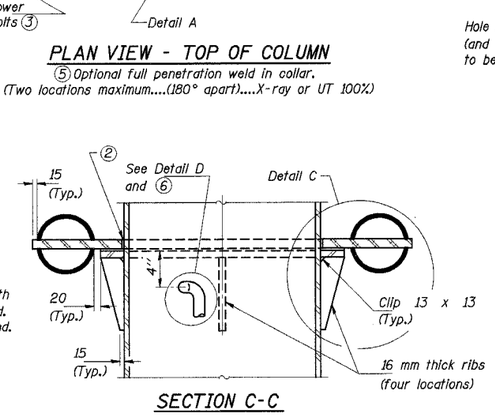
PLAN VIEW - TOP OF COLUMN

⑤ Optional full penetration weld in collar.
(Two locations maximum....(180° apart)....X-ray or UT 100%)

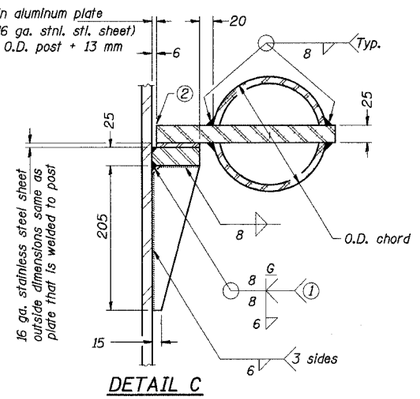
⑥ Orient pipe toward walkway side.
Hole in post = O.D. pipe + 3 mm.



SECTION THRU POST ABOVE LOWER CHORDS



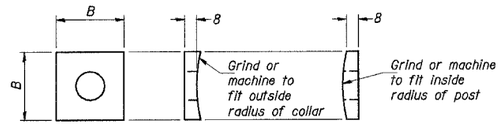
SECTION C-C



DETAIL C

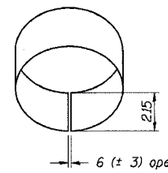
①Grind top if required to fully seat aluminum plate and stainless steel sheet.

②After tightening lower connection bolts, fill gap with non-hardening, silicone caulk suitable for exterior exposure and acceptable to the Engineer. Cost is included in "Overhead Sign Structure Cantilever".



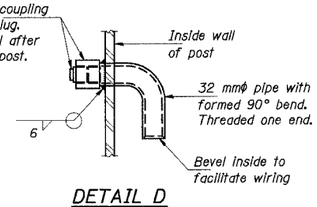
CONTOURED WASHERS

Bolt Dia.	Contoured Washers	
	Hole Dia.	B
~~22~~	~~25~~	~~64~~
~~25~~	~~29~~	~~75~~
32	35	83



DETAIL OF STAINLESS STEEL SLEEVE

Weld to post after galvanizing.
(Prepare post surface to insure tight, uniform fit and allow welding.)
Welds to be 40 mm long at 150 mm cts. along top edge and at 6 mm opening.



DETAIL D

NUMBER	REVISION	DATE

Truss Type	Post Size	Upper & Lower Connection Bolt Diameter ③	Lower Juncture Bolt Spacing Dimension "c" ③	Opening in Cap Plate "HH"	Collar Thickness (t)	Side Ribs	
						x	y
~~I-C-A~~	~~406 ϕ (124 kg/m)~~	~~22~~	~~85~~	~~205~~	~~16~~	~~45~~	~~56~~
~~II-C-A~~	~~610 ϕ (152 kg/m)~~	~~25~~	~~90~~	~~305~~	~~22~~	~~50~~	~~32~~
III-C-A (10.7 Max.)	610ϕ (186 kg/m)	32	~~90~~	~~305~~	~~22~~	~~50~~	~~25~~
III-C-A (>10.7 to 12.2)	610ϕ (254 kg/m)	32	90	305	22	50	25

③ Upper and lower connection bolts in collar and bolts at lower chord connection must be high strength with matching locknuts. Connection bolts shall have two stainless steel flat washers each.

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OSC-A-3(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

CANTILEVER SIGN STRUCTURES
JUNCTURE DETAILS
ALUMINUM TRUSS & STEEL POST

DATE: JUL 18, 2005
SCALE ---

HNTB

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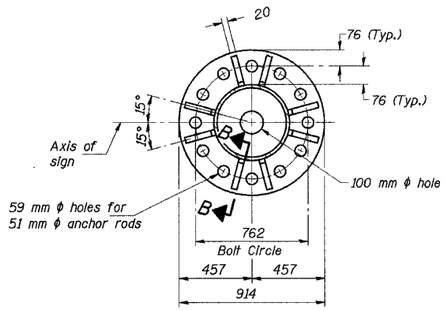
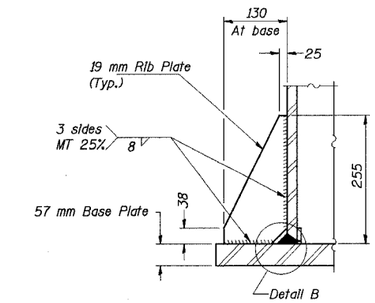
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	330
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

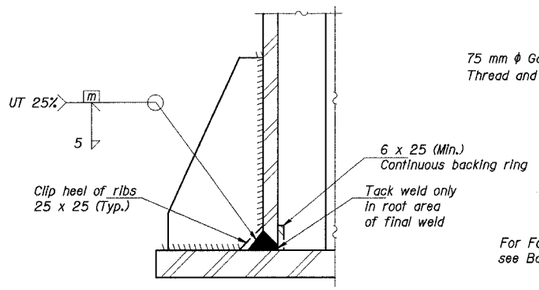
* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108



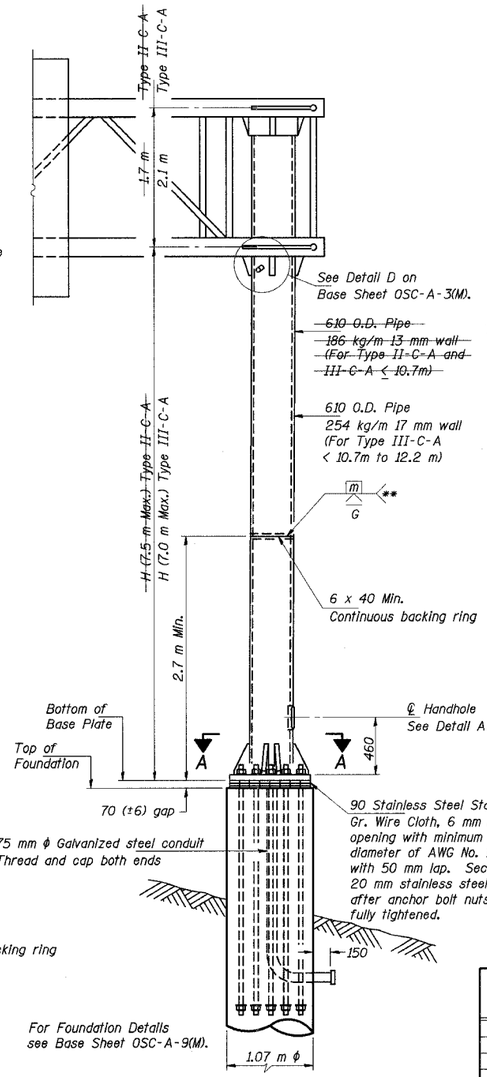
SECTION A-A



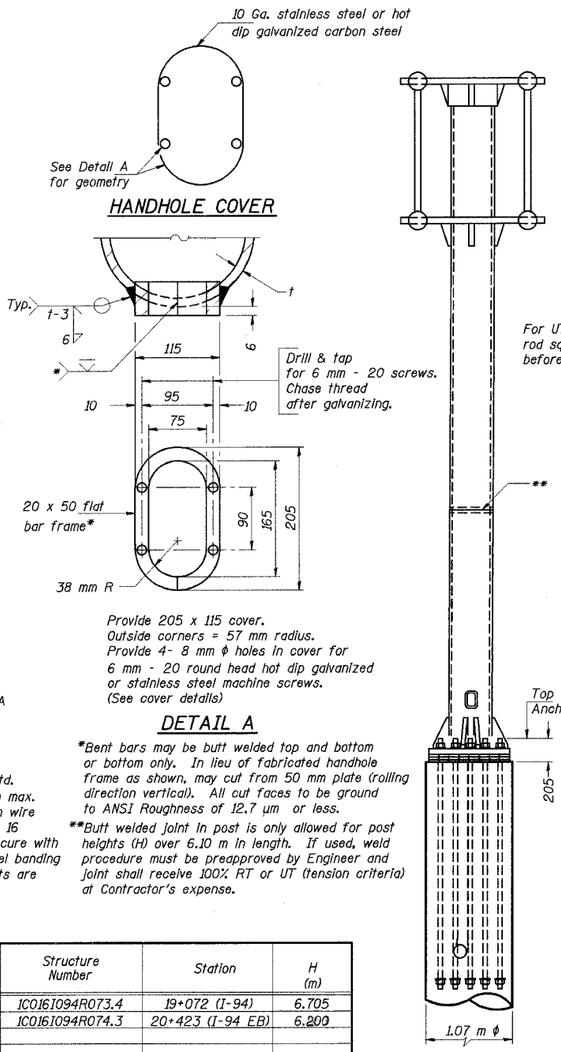
SECTION B-B



DETAIL B
(Typical rib)



FRONT ELEVATION

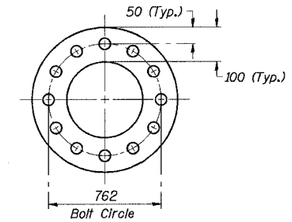


DETAIL A

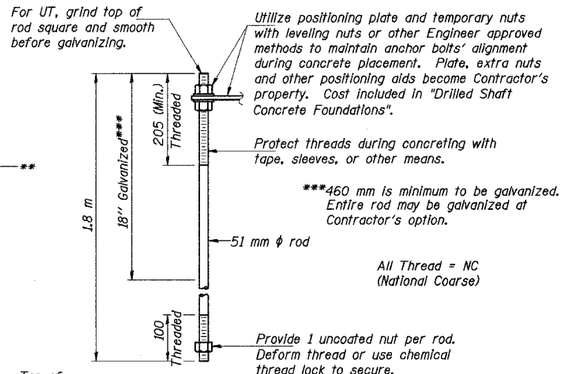
*Bent bars may be butt welded top and bottom or bottom only. In lieu of fabricated handhole frame as shown, may cut from 50 mm plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 12.7 µm or less.

**Butt welded joint in post is only allowed for post heights (H) over 6.10 m in length. If used, weld procedure must be preapproved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

SIDE ELEVATION



SUGGESTED POSITIONING PLATE



ANCHOR ROD DETAIL

Anchor rods shall conform to AASHTO M314 Grade 380 (55) and meet Charpy V-Notch (CVN) energy of 20 J at - 12 ° C. before galvanizing. Galvanize the upper 460 mm (minimum***) and associated M291, Grade A, C or DH heavy hex nuts and hardened washers per AASHTO M232. No welding shall be permitted on rods. Provide an unfinished nut at bottom, a hexagon locknut and washer above base plate and a leveling nut and washer below base plate. Nuts shall each be tightened with 270 N-m minimum torque against base plate. Before or after threading, but before galvanizing, each anchor rod shall be ultrasonically tested (UT) by a Level II or III inspector, qualified in accord with ANSI guidelines, using a straight beam, 13 mm ϕ 3.5 mhz. transducer, to insure no rejectable flaws exist in the upper 460 mm (tension criteria). Cost of testing included in "Drilled Shaft Concrete Foundations".

Structure Number	Station	H (m)
IC0161094R073.4	19+072 (I-94)	6.705
IC0161094R074.3	20+423 (I-94 EB)	6.200

NUMBER	REVISION	DATE

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OSC-A-5(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

CANTILEVER SIGN STRUCTURES
TYPE II-C-A & III-C-A
TRUSS SUPPORT POST

DATE: JUL 18, 2005
SCALE ---

HNTB

JBeauchamp
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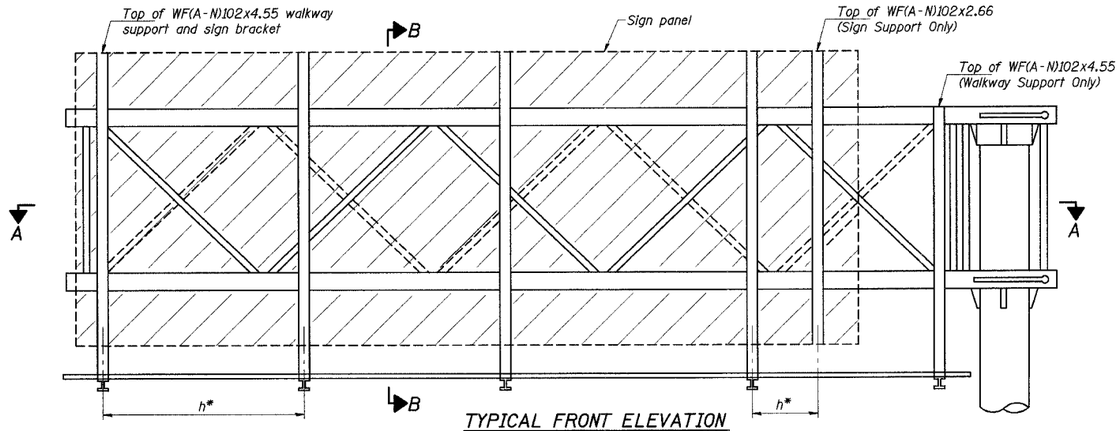
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	•	COOK	870	331
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

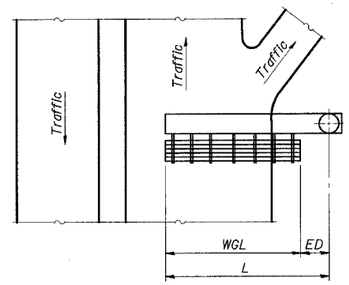
• (0203.1 & 0312-708W) R3 CONTRACT NO. 62108

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TYPICAL FRONT ELEVATION

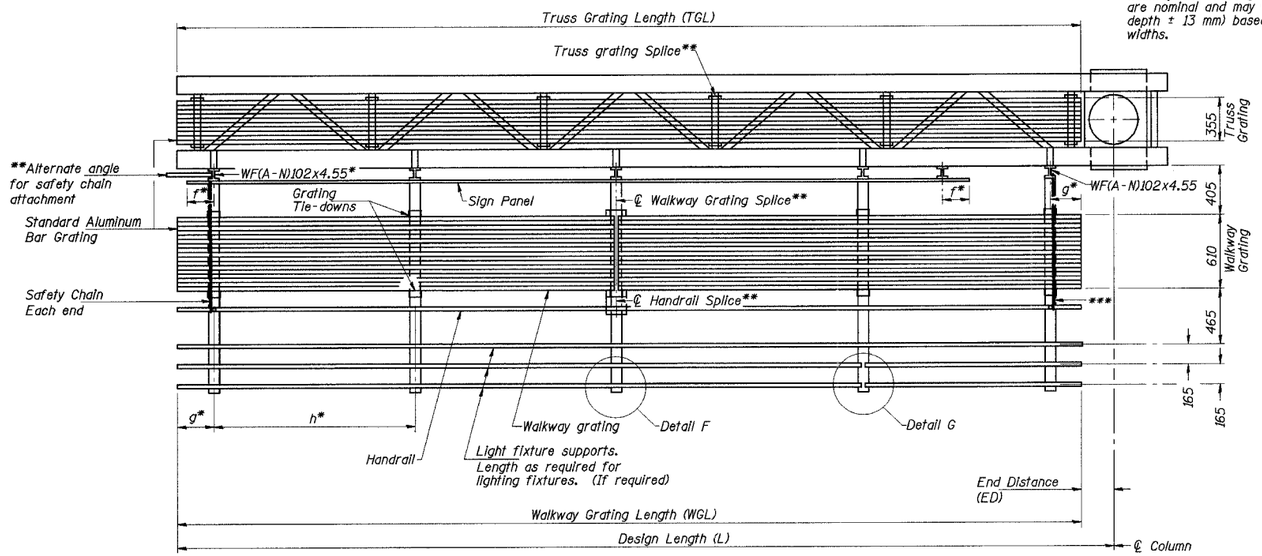
With lights and handrail omitted for clarity.



PLAN

WALKWAY AND HANDRAIL SKETCH

(Road plan beneath truss varies)



Walkway and truss grating dimensions are nominal and may vary (width ± 13 mm, depth ± 13 mm) based on available standard widths.

Structure Number	Station	WGL **** (m)	ED (m)	TGL (m)
IC016I094R073.4	19+072 (I-94)	7.600	4.450	11.595
IC016I094R074.3	20+423 (I-94 EB)	7.600	4.235	11.380

****WGL dimension shown above is based on g = 200mm and h = 1.80m

Notes: *Space walkway brackets WF(A-N)102x4.55and sign brackets WF(A-N)102x2.66 for efficiency and within limits shown:

f = 300 maximum, 100 minimum (End of sign to ℄ of nearest bracket)
g = 300 maximum, 100 minimum (End of walkway to ℄ of nearest bracket)
h = 1.85 m maximum (℄ to ℄ sign and/or walkway support brackets, WF(A-N)102x2.66or WF(A-N)102x4.55)

***If walkway bracket at safety chain location is behind sign, add angle to bracket.

For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-A-7(M).
For details of handrail, handrail splice, safety chain and Details F and G, see Base Sheet OSC-A-8(M).

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in "Overhead Sign Structure Cantilever".

Handrail and walkway grating shall span a minimum of three brackets between splices.
**Use and location of handrail or grating splices are optional, based on lengths needed and material availability.

$$TGL = L - \left(\frac{\text{Post O.D.}}{2} + 150\right)$$

SECTION A-A

NUMBER	REVISION	DATE

BRACKET TABLE

WF(A-N)4x1.79 or WF(A-N)4x3.06
ASTM B308, Alloy 6061-T6

Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	2.45	2
2.45	4.3	3
4.3	6.15	4
6.15	8.0	5
8.0	9.85	6

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OSC-A-6(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

CANTILEVER SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS
ALUMINUM TRUSS & STEEL POST

DATE: JUL 18, 2005
SCALE ---

HNTB

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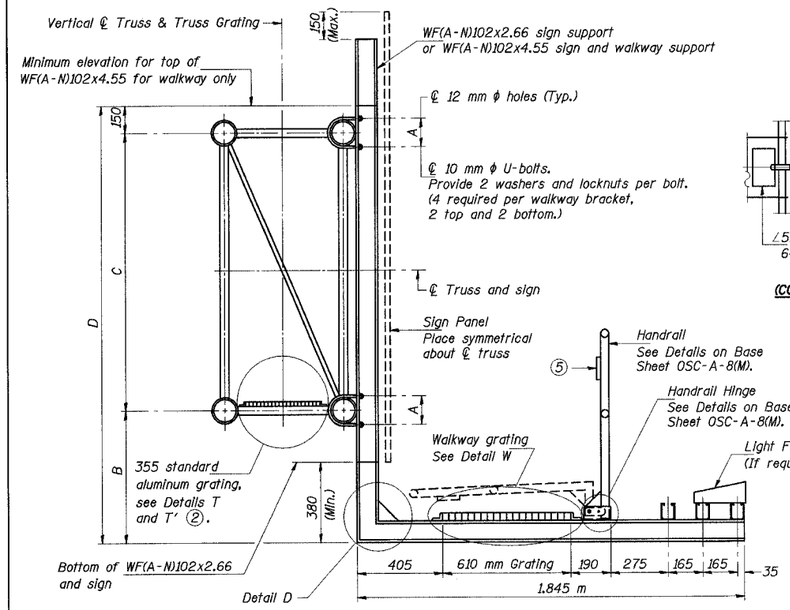
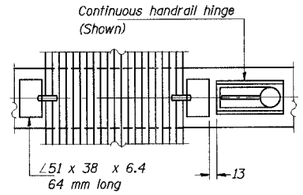
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	•	COOK	870	332
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

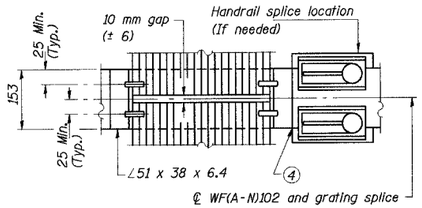
• (0203.1 & 0312-708W) R3 CONTRACT NO. 62108



SECTION B-B

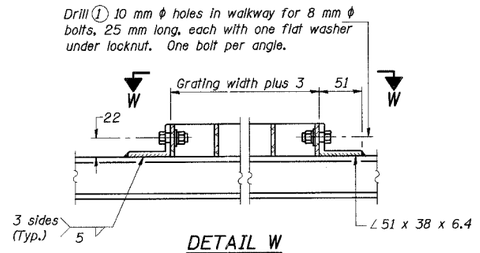


(CONTINUOUS WALKWAY GRATING)

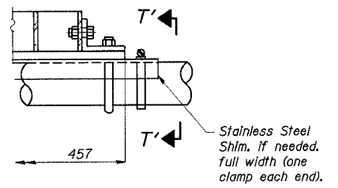


(AT WALKWAY GRATING SPLICE)

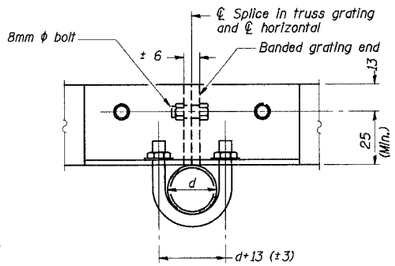
SECTION W-W



DETAIL W
(Walkway grating)



DETAIL T'
(Truss grating splice)
Details not shown same as Detail T.
Alternate materials may be used subject to the Engineer's review and approval.



SECTION T'-T'

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars (MBB) shall be 5 mm x 38 mm on 30 mm centers and conform to ASTM B211 Alloy 6061-T6.

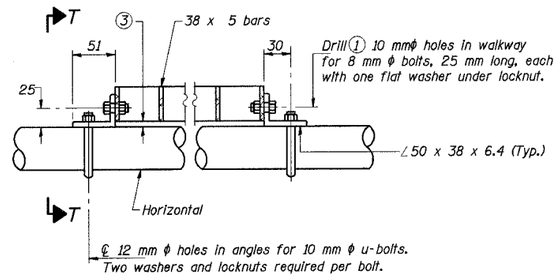
Cross bars (CB) shall be 5 mm x 38 mm on 102 mm centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

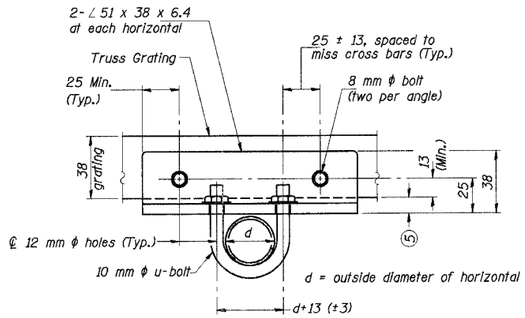
Aluminum Grating with modified "T" sections for main bearing bars shall meet the following requirements:

Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 1.16 x 10^3 mm^3 per bar, a depth of 38 mm , spaced on 30 mm centers.

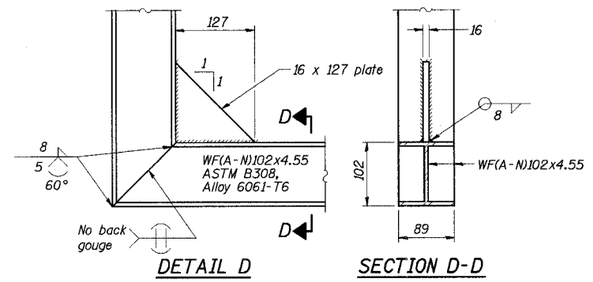
Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 100 mm centers.



DETAIL T
(Truss grating at horizontal)



SECTION T-T



DETAIL D
(See Detail P, Base Sheet OSC-A-8(M).)

SECTION D-D

NUMBER	REVISION	DATE

① Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.

② When truss grating must be spliced, use suggested detail or other methods subject to the Engineer's review and approval. Locate splice to avoid interference between cross bars and bolt locations.

③ If Handrail Joint present, weld angle to WF(A-N)102 and 6 mm extension bars. (See Base Sheet OSC-A-8(M).)

④ ℄ 3 mm x 13 mm x 50 mm welded to handrail posts to protect locations that contact grating.

⑤ Tube to grating gap may vary from 0 to 13mm (Max.) to align walkway, allow for camber, etc.Continuous Truss Grating

Structure Number	Station	A (m)	B (m)	C (m)	D (m)
IC0161094R073.4	19+072 (I-94)	0.213	1.115	2.130	3.395
IC0161094R074.3	20+423 (I-94 EB)	0.213	1.190	2.130	3.470

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OSC-A-7(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

CANTILEVER SIGN STRUCTURES
WALKWAY DETAILS
ALUMINUM TRUSS & STEEL POST

DATE: JUL 18, 2005
SCALE ---

HNTB

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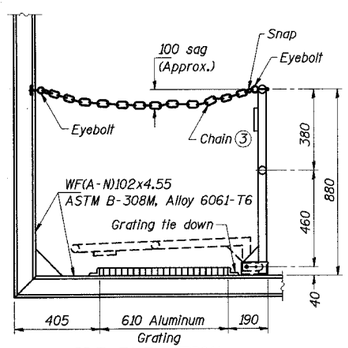
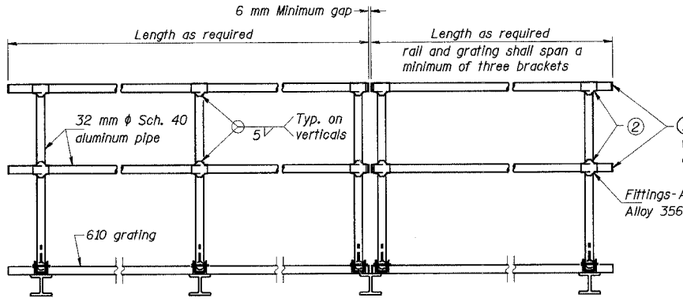
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	•	COOK	870	333
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

• (0203.1 & 0312-708W) R3 CONTRACT NO. 62108



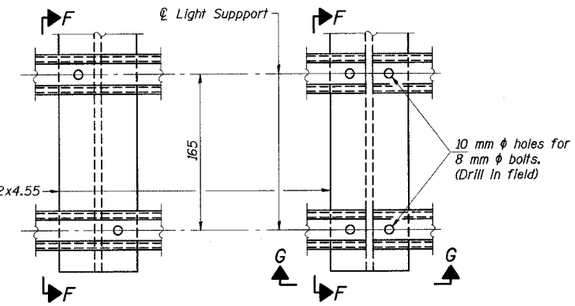
SIDE ELEVATION
(Showing Safety Chain W/O Sign)



FRONT ELEVATION

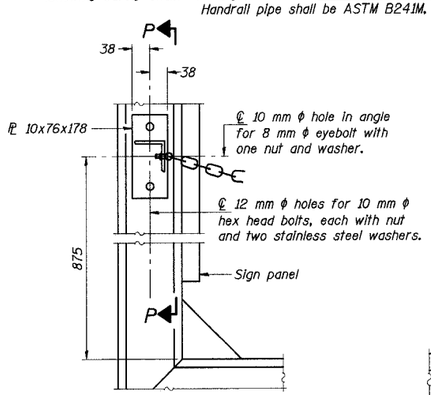
HANDRAIL DETAILS
Handrail pipe shall be ASTM B241M, Alloy 6063-T6 or Alloy 6061-T6.

(2) Horizontal handrail member shall be continuous thru fitting. Provide 12 mm ϕ hole in fitting for 10 mm ϕ bolt. Field drill 12 mm ϕ hole in horizontal rail member. Provide locknut and two stainless steel washers for bolt. (Use 8 mm eyebolts in 12 mm ϕ holes on top rail at ends only.)

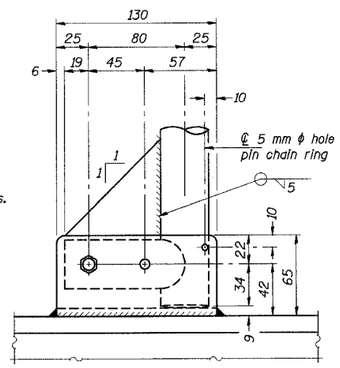


DETAIL F

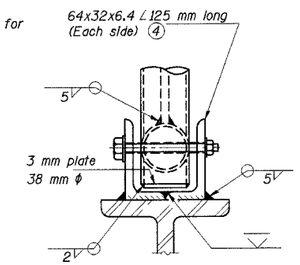
DETAIL G



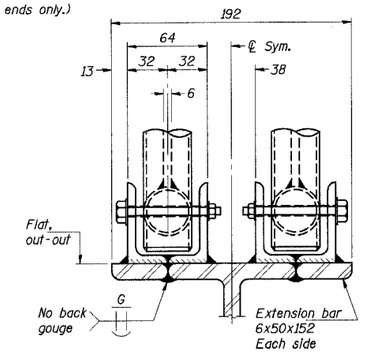
ALTERNATE SAFETY CHAIN ATTACHMENT
(With Sign Present)
Items not shown same as "Side Elevation" of "Handrail Details"



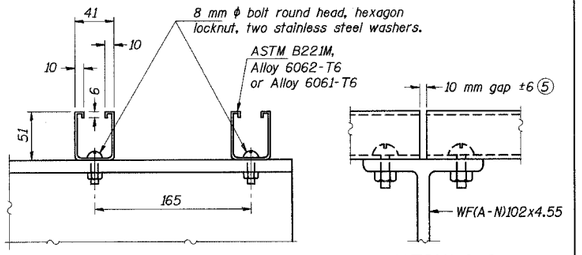
SIDE ELEVATION



FRONT ELEVATION
See "ELEVATION" at right for dimensions.



ELEVATION AT HANDRAIL JOINT (4)
Details not shown same as "FRONT ELEVATION"

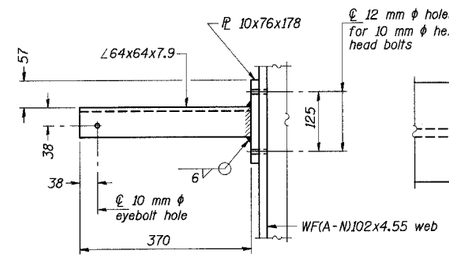


SECTION F-F

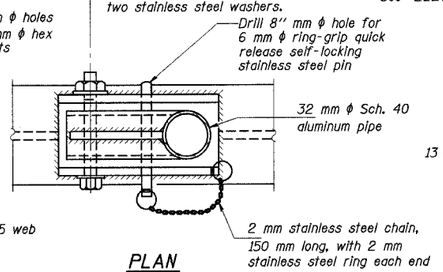
SECTION G-G

LIGHTING FIXTURE MOUNTS (IF REQUIRED)

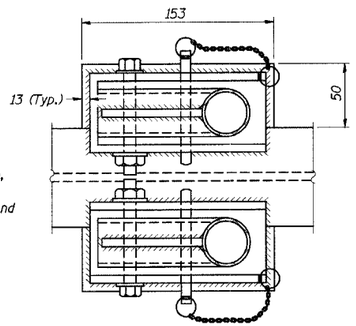
(5) Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.



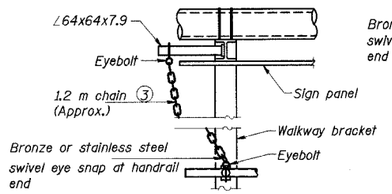
SECTION P-P



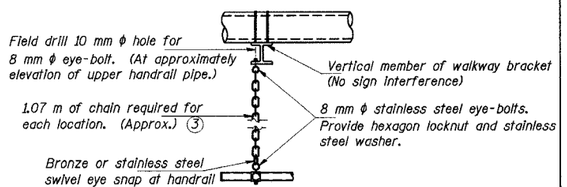
PLAN
DETAIL E HANDRAIL HINGE



PLAN AT HANDRAIL JOINT
Details not shown same as "PLAN"



ALTERNATE SAFETY CHAIN ATTACHMENT
Details not shown similar to "Safety Chain" Details
(Walkway omitted for clarity)



SAFETY CHAIN
One required for each end of each walkway.

(3) 5 mm galvanized steel chain, approximately 40 links per meter. Chain to be hot dip galvanized after manufacture and suitable for prolonged exterior exposure. Alternate materials may be substituted with the Engineer's approval.

(4) Extrusions may be used in lieu of the details shown, with approval of the Engineer.

NUMBER	REVISION	DATE

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OSC-A-8(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

CANTILEVER SIGN STRUCTURES
HANDRAIL DETAILS
ALUMINUM TRUSS & STEEL POST

DATE: JUL 18, 2005
SCALE ---

HNTB

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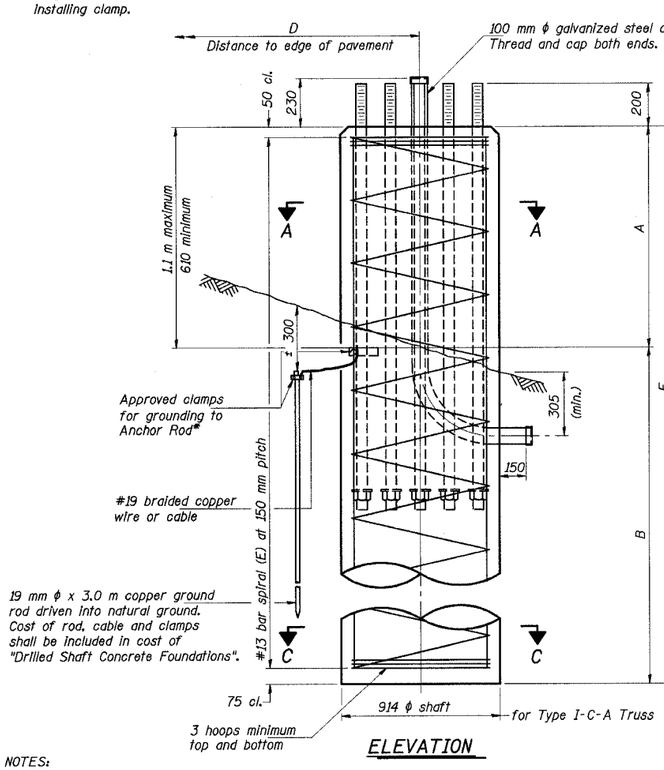
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	334
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

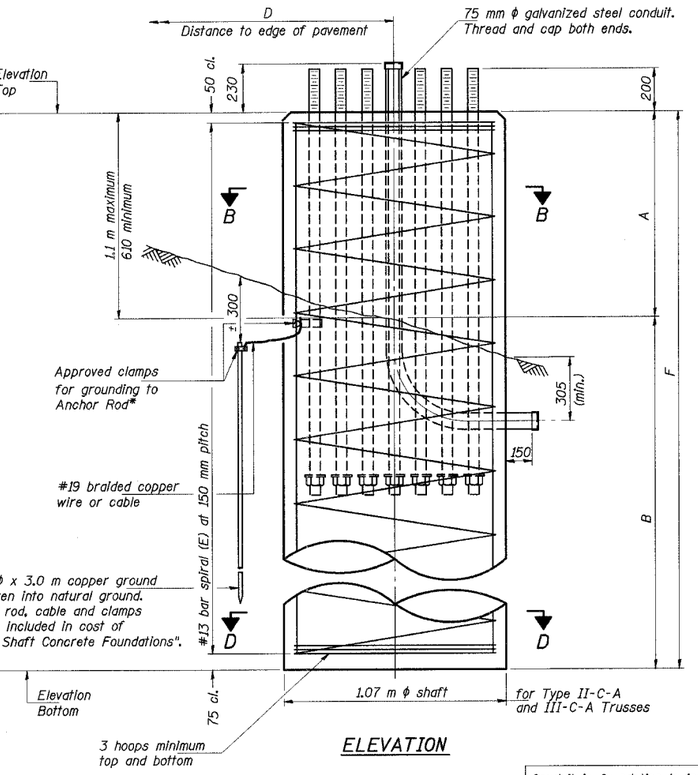
* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

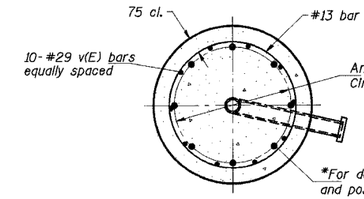
*Grind anchor rod to bright finish at ground clamp location before installing clamp.



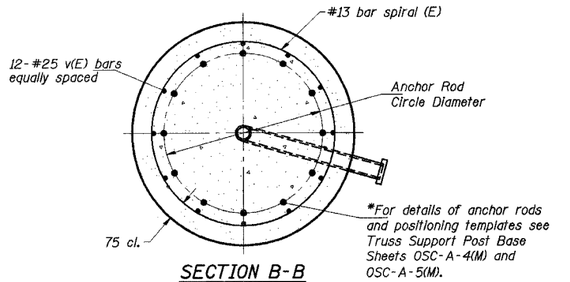
ELEVATION



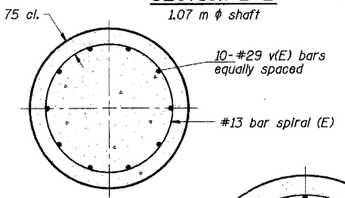
ELEVATION



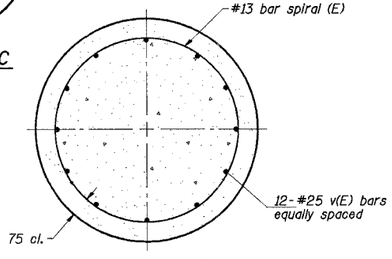
SECTION A-A
914 ϕ shaft



SECTION B-B
1.07 m ϕ shaft



SECTION C-C
914 ϕ shaft



SECTION D-D
1.07 m ϕ shaft

NOTES:

The foundation dimensions shown in the Foundation Design Table are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 120 kPa, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown in the Foundation Data Table will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 300 mm by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 150 mm below finished ground line. Cost included in "Drilled Shaft Concrete Foundation".

Conduit in foundation is incidental to "Drilled Shaft Concrete Foundation" for sign structures pay item.

FOUNDATION DATA TABLE

Structure Number	Station	Truss Type	Shaft Diameter (m)	Elevation Top	Elevation Bottom	A (m)	B (m)	F (m)	Class SI Concrete Cubic Meters
IC0161094L073.4	19+072 (I-94)	III-C-A	1.07	182.938	172.60	0.789	9.549	10.338	9.3
IC0161094R074.3	20+423 (I-94 EB)	III-C-A	1.07	186.244	172.60	0.699	12.945	13.640	12.3

FOUNDATION DESIGN TABLE

Truss Type	Post Base Sheet	Maximum Cantilever Length (m)	Maximum Total Sign Area (sq m)	Shaft Diameter (m)	"B" Depth (m)	Anchor Rods No.	Anchor Rods Diameter (mm)	Anchor Rod Circle Diameter (mm)
~~I-C-A~~	~~OSC-A-4(M)~~	~~7.6~~	~~15.8~~	~~0.92~~	~~4.7~~	~~8~~	~~51~~	~~560~~
~~II-C-A~~	~~OSC-A-5(M)~~	~~9.2~~	~~15.8~~	~~1.07~~	~~4.6~~	~~12~~	~~51~~	~~762~~
~~II-C-A~~	~~OSC-A-5(M)~~	~~9.2~~	~~31.6~~	~~1.07~~	~~6.6~~	~~12~~	~~51~~	~~762~~
~~III-C-A~~	~~OSC-A-5(M)~~	~~10.7~~	~~15.8~~	~~1.07~~	~~5.8~~	~~12~~	~~51~~	~~762~~
~~III-C-A~~	~~OSC-A-5(M)~~	~~10.7~~	~~23.2~~	~~1.07~~	~~6.9~~	~~12~~	~~51~~	~~762~~
~~III-C-A~~	~~OSC-A-5(M)~~	~~10.7~~	~~37.2~~	~~1.07~~	~~8.1~~	~~12~~	~~51~~	~~762~~
III-C-A	OSC-A-5(M)	12.2	37.2	1.07	9.1	12	51	762

NUMBER	REVISION	DATE

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

OSC-A-9(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

CANTILEVER SIGN STRUCTURES
DRILLED SHAFT
ALUMINUM TRUSS & STEEL POST

DATE: JUL 18, 2005
SCALE ---

HNTB

JBeauchamp
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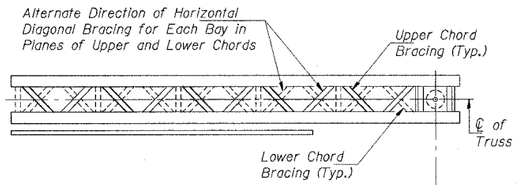
06-JUL-2005 15:53

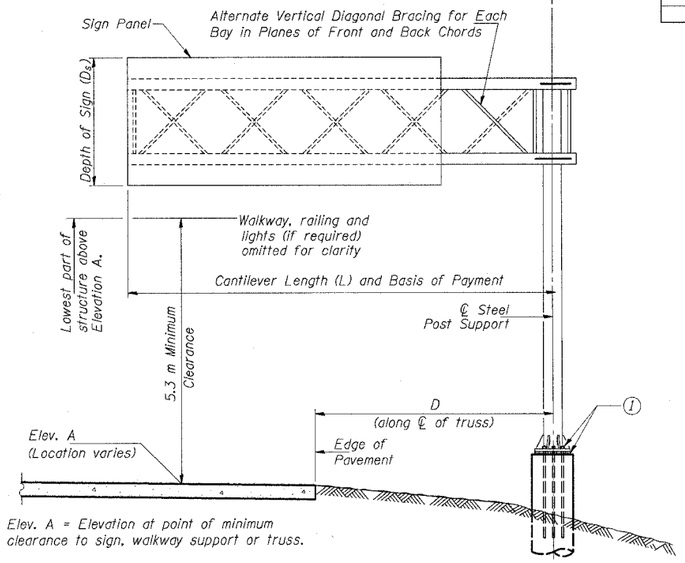
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	*	COOK	870	335
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* (0203.1 & 0312-708W) R-3 CONTRACT # 62108



TYPICAL PLAN

(Walkway not shown)



Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

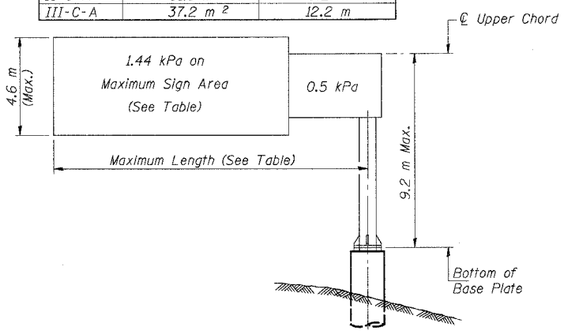
TYPICAL ELEVATION

Looking in Direction of Traffic

Sign support structures may be subject to damaging vibrations and oscillations when sign panels are not in place during erection or maintenance of the structure. To avoid these vibrations and oscillations, consideration should be given to attaching temporary blank sign panels to the structure.

Structure Number	Station	Design Truss Type	Cantilever Length (L)	Elev. A	Dim. D	Ds	Total Sign Area
IC0161094L074.2	30+786	II-C-A	8.044	189.107	4.334	2.380	7.664
IC0161094R074.3	20+935	II-C-A	8.260	185.829	3.900	3.990	20.429

Truss Type	Maximum Sign Area	Maximum Length
I-C-A	15.8 m²	7.6 m
II-C-A	31.6 m²	9.2 m
III-C-A	37.2 m²	12.2 m



DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards Installations not within dimensional limits shown require special analysis for all components.

(1) *After adjustments to level truss and insure adequate vertical clearance, all top and leveling nuts shall be tightened against the base plate with a minimum torque of 270 N · m. Stainless steel mesh shall then be placed around the perimeter of the base plate. Secure to base plate with stainless steel banding.*

Note: Trusses shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The contractor is responsible for maintaining the configuration and protection of the trusses.

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

MEASUREMENTS: All dimensions are in millimeters (mm) except as noted.

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 145 km/h WIND VELOCITY

WIND LOADING: 1.44 kPa normal to Sign Panel Area and truss elements not behind sign Loading Diagram.

WALKWAY LOADING: Dead load plus 2.2 kN concentrated live load.

DESIGN STRESSES:

FIELD UNITS
f'c = 24 MPa
fy = 400 MPa (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specifications.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B with a minimum yield of 241 MPa, or A500 Grade B or C with a minimum yield of 319 MPa. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270M Gr. 250, Gr. 345 or Gr. 345W*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer. The steel pipe and stiffening ribs at the base plate for the column shall have a minumum longitudinal Charpy V-Notch (CVN) energy of 20 J. at 4° C. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" (HS) must satisfy the requirements of AASTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if members interfere) must satisfy the requirements of ASTM A449, ASTM A193M, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04(f) of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts, and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

STEEL PIPE: DN indicates nominal diameter.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to AASHTO M314 Gr. 250 or 380 (36 or 55) with a minimum Charpy V-Notch (CVN) energy of 20 J at 5° C.

CONCRETE SURFACES: All concrete surfaces above an elevation 150 mm below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seat Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

*If M270M Gr. 345W steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

CSS-1

NUMBER	REVISION	DATE

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
~~OVERHEAD SIGN STRUCTURE CANTILEVER TYPE I-C-A~~	~~m~~	~~———~~
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE II-C-A	m	16.304
~~OVERHEAD SIGN STRUCTURE CANTILEVER TYPE III C A~~	~~m~~	~~———~~
OVERHEAD SIGN WALKWAY-CANTILEVER TYPE A	m	9.270
DRILLED SHAFT CONCRETE FOUNDATIONS	m³	17.50

CANTILEVER SIGN STRUCTURES GENERAL PLAN & ELEVATION ALUMINUM TRUSS & STEEL POST

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 80/94 (INTERSTATE 80/294)
OVERHEAD SIGN STRUCTURES
I-94 WB & I-94 EB
COOK COUNTY SECTION (0203.1 & 0312.708W) R-3

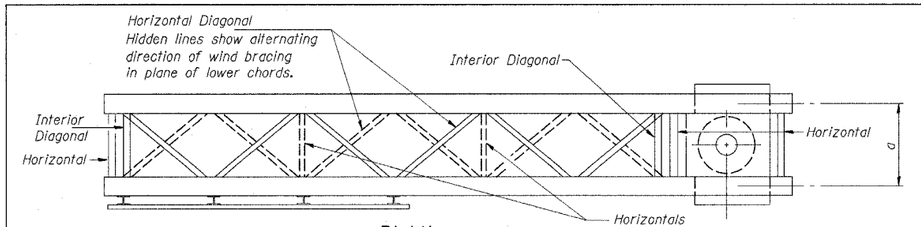
DESIGNED BY DRAWN BY
DATE: March 1, 2005 CHECKED BY CHECKED BY

McDonough Associates Inc.
Engineers / Architects

OSC-A-1(M) 11/1/2002

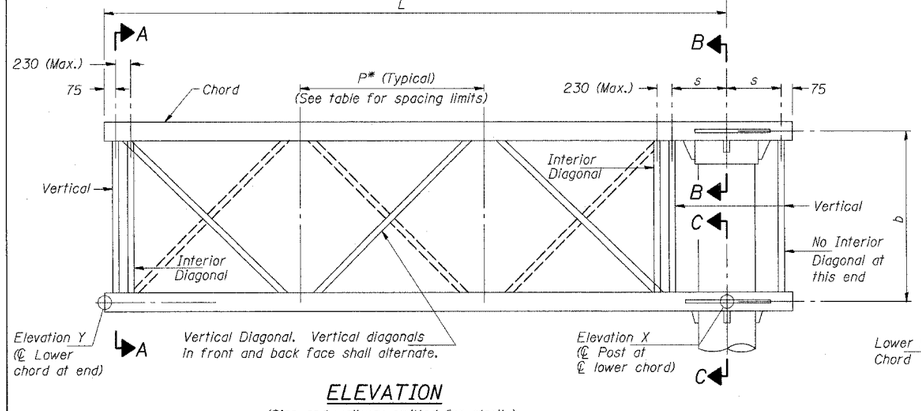
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	*	COOK	870	336
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* (0203.1 & 0312-708W) R-3 CONTRACT # 62108



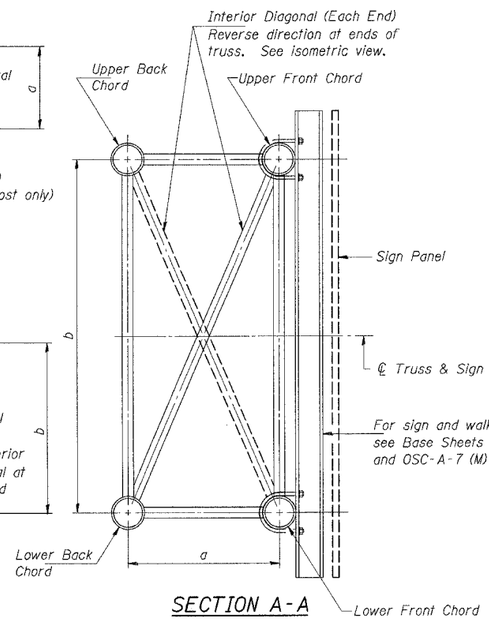
PLAN

(Walkway not shown)

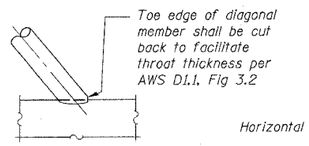


ELEVATION

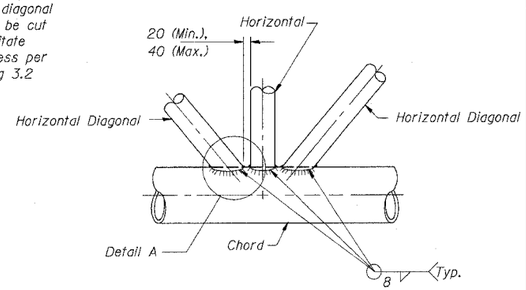
(Sign and walkway omitted for clarity)



SECTION A-A



DETAIL A



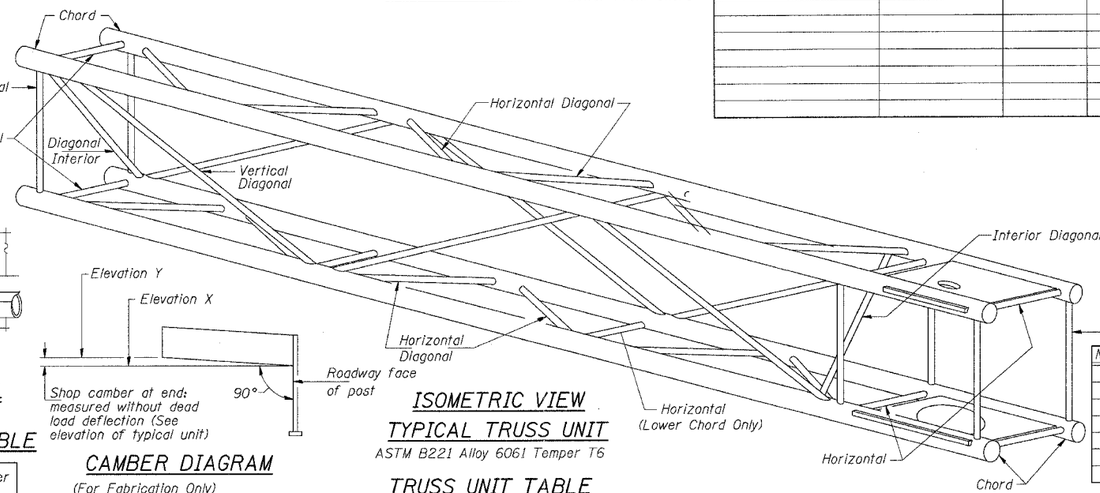
TRUSS INTERIOR JOIT DETAILS

All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a 20 mm minimum to 40 mm maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

Structure Number		Truss Type	Design Length (L)	Number of Panels Per Unit	Panel Length (P)*
IC0161094L074.2	30+786	II-C-A	8.044	6	1.239
IC0161094R074.3	20+935	II-C-A	8.260	6	1.275

TYPICAL TRUSS UNIT

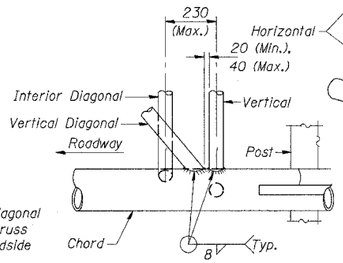
For Section B-B and Section C-C, see Base Sheet OSC-A-3.



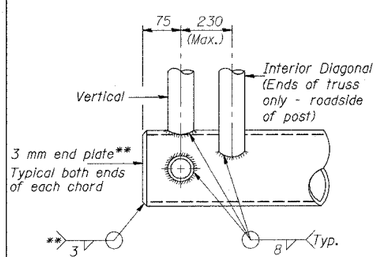
ISOMETRIC VIEW TYPICAL TRUSS UNIT

ASTM B221 Alloy 6061 Temper T6

Note: There are twice as many horizontal diagonals as ther are vertical diagonals.



POST END JOINT DETAIL



CANTILEVER END JOINT DETAIL

**Contractor may alternatively use standard aluminum drive-fit cap to close ends.

SHOP CAMBER TABLE

Unit Length (L)	Shop Camber at End
4.6	40
4.9-5.2	45
5.5-6.1	50
6.4-6.7	60
7.0-7.6	65
7.9-8.2	70
8.5-9.1	76
9.5-9.8	83
10.1-10.7	90
10.8-11.5	102
11.6-12.2	114

CAMBER DIAGRAM

(For Fabrication Only)

TRUSS UNIT TABLE

Truss Type	Dimension "a"	Dimension "b" (m)	Dimension "s"	Limits for Panel Spacing (P)* (m)	Up. & Low. Chord O.D.	Up. & Low. Chord Wall	Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals O.D.	Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals Wall
~~I-C-A~~	~~610~~	~~1.37~~	~~405~~	~~0.915 Min. to 1.22 Max.~~	~~127~~	~~8~~	~~64~~	~~8~~
II-C-A	915	1.68	535	1.07 Min. to 1.37 Max.	165	8	83	8
~~III-C-A (10.7 Max.)~~	~~915~~	~~2.13~~	~~535~~	~~1.22 Min. to 1.68 Max.~~	~~178~~	~~10~~	~~89~~	~~10~~
~~III-C-A (>10.7 to 12.2)~~	~~915~~	~~2.13~~	~~535~~	~~1.22 Min. to 1.68 Max.~~	~~203~~	~~10~~	~~89~~	~~10~~

$*P = \frac{L - s - 75}{\#\ Panels}$

NUMBER	REVISION	DATE

CSS-2

OSC-A-2(M) 11/1/2002

CANTILEVER SIGN STRUCTURES TRUSS DETAILS ALUMINUM TRUSS & STEEL POST

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 80/94 (INTERSTATE 80/294)
OVERHEAD SIGN STRUCTURES
I-94 WB & I-94 EB
COOK COUNTY SECTION (0203.1 & 0312.708W) R-3

DESIGNED BY DRAWN BY
DATE: March 1, 2005 CHECKED BY CHECKED BY

McDonough Associates Inc.
Engineers / Architects

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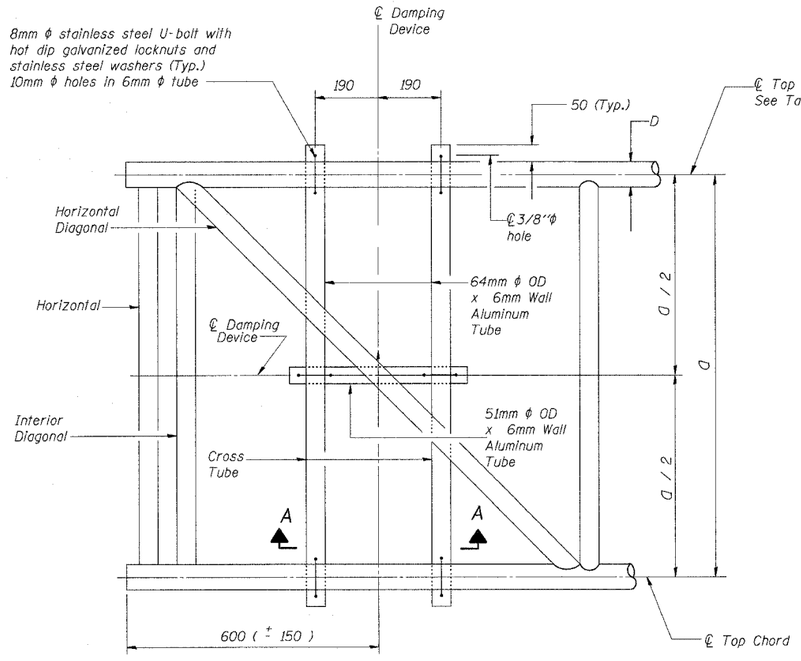
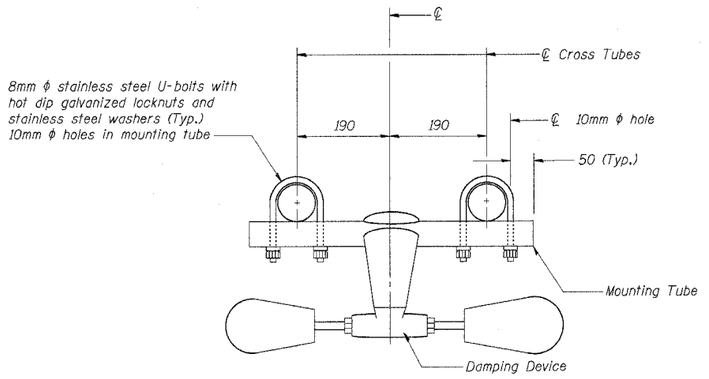
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	337
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

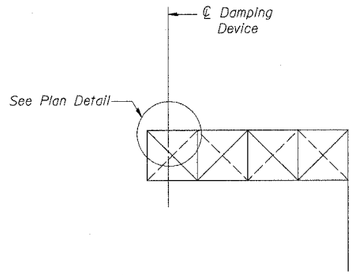
• (0203.1 & 0312-708W) R-3 CONTRACT # 62108



PLAN DETAIL



TRUSS DAMPING DEVICE CONNECTION DETAIL



ELEVATION

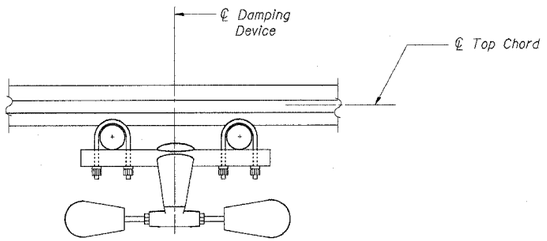
Aluminum Cantilever Sign Structure

GENERAL NOTES

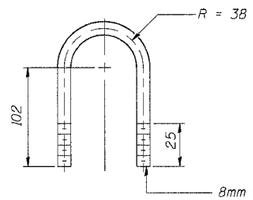
Damper: One damper per truss. (14 Kg Stockbridge-Type Aluminum)

Materials: Aluminum tubes shall be ASTM B221(M) alloy 6061 temper T6

All dimensions are in millimeters (mm) except as noted.

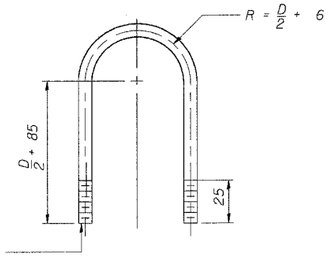


SECTION A-A



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL

(Typical)



TOP CHORD TO CROSS TUBE U-BOLT DETAIL

(Typical)

OSC-A-D(M) 11/1/2002

CSS-3

CANTILEVER SIGN STRUCTURE
DAMPING DEVICE

REVISIONS	
NAME	DATE

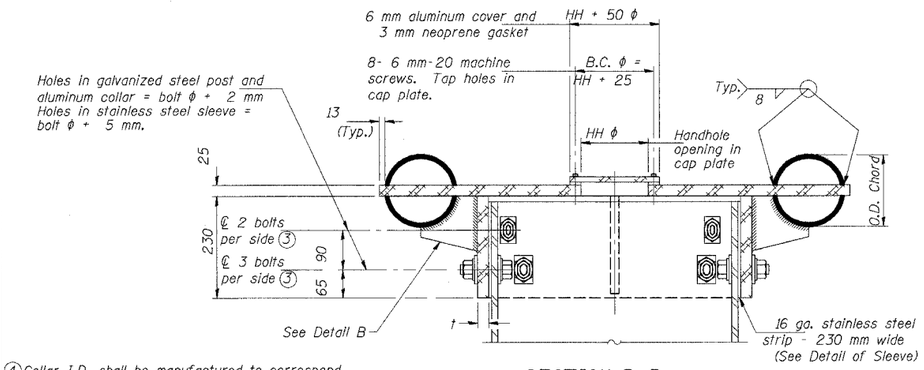
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 80/94 (INTERSTATE 80/294)
OVERHEAD SIGN STRUCTURES
I-94 WB & I-94 EB
COOK COUNTY SECTION (0203.1 & 0312.708W) R-3

DESIGNED BY DRAWN BY
DATE: March 1, 2005 CHECKED BY CHECKED BY

McDonough Associates Inc.
Engineers / Architects

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	*	COOK	870	338
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

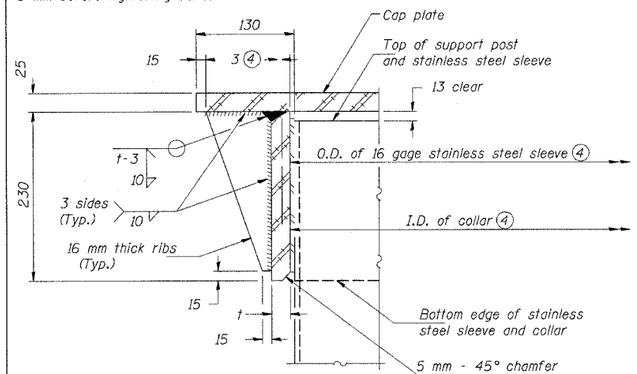
* (0203.1 & 0312-708W) R-3 CONTRACT = 62108



SECTION B-B

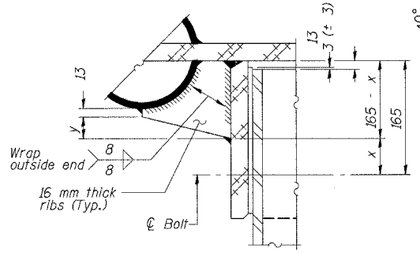
Bolts, washers (including contoured washers), and locknuts shall be stainless steel.

④ Collar I.D. shall be manufactured to correspond to O.D. of actual galvanized post and stainless steel sleeve plus 3 mm (±2 mm). Maximum gap between post and collar at any location equals 3 mm before tightening bolts.



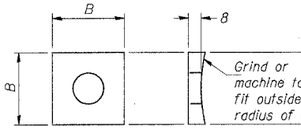
DETAIL A

(Two locations)



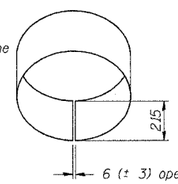
DETAIL B

Two locations
(For details not shown, see Detail C)



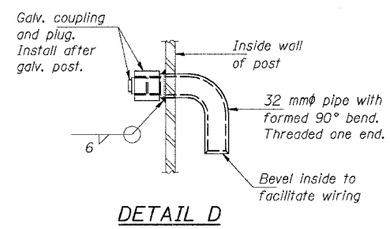
CONTOURED WASHERS

Bolt Dia.	Contoured Washers	
	Hole Dia.	B
22	25	64
25	29	75
32	35	83

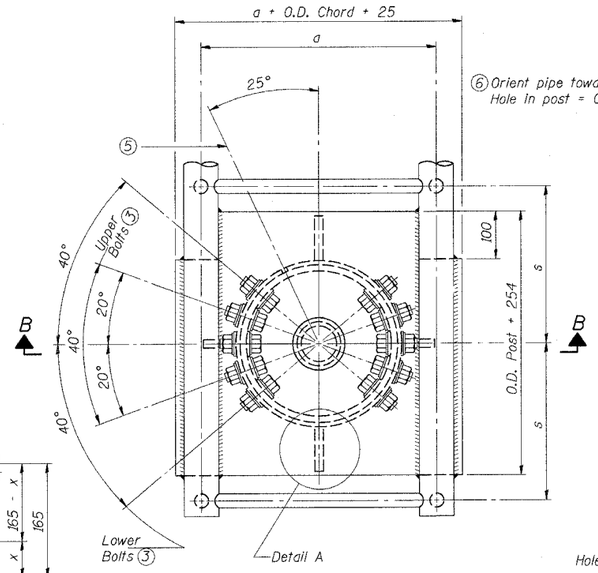


DETAIL OF STAINLESS STEEL SLEEVE

Weld to post after galvanizing.
(Prepare post surface to insure tight, uniform fit and allow welding.)
Welds to be 40 mm long at 150 mm cts. along top edge and at 6 mm opening.



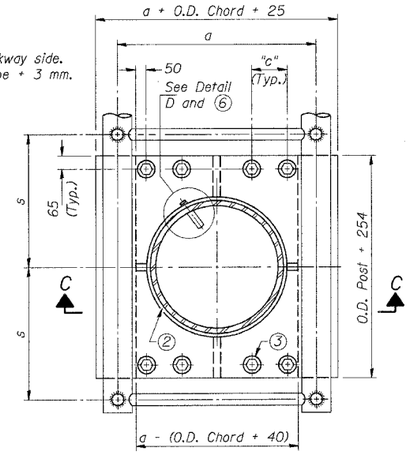
DETAIL D



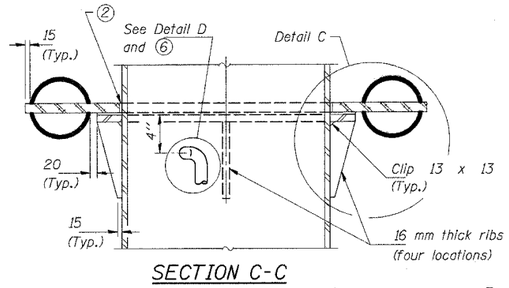
PLAN VIEW - TOP OF COLUMN

⑤ Optional full penetration weld in collar.
(Two locations maximum....(180° apart)....X-ray or UT 100%)

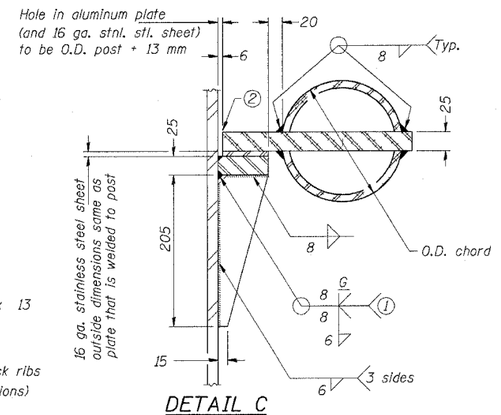
⑥ Orient pipe toward walkway side. Hole in post = O.D. pipe + 3 mm.



SECTION THRU POST ABOVE LOWER CHORDS



SECTION C-C



DETAIL C

Truss Type	Post Size	Upper & Lower Connection Bolt Diameter ③	Lower Juncture Bolt Spacing Dimension "c" ③	Opening in Cap Plate "HH"	Collar Thickness (t)	Side Ribs	
						x	y
~~I-C-A~~	~~406 ϕ (124 kg/m)~~	~~22~~	~~85~~	~~205~~	~~16~~	~~45~~	~~56~~
II-C-A	610 ϕ (152 kg/m)	25	90	305	22	50	32
~~III-C-A (10.7 Max.)~~	~~610ϕ (186 kg/m)~~	~~32~~	~~90~~	~~305~~	~~22~~	~~50~~	~~25~~
~~III-C-A (>10.7 to 12.2)~~	~~610ϕ (254 kg/m)~~	~~32~~	~~90~~	~~305~~	~~22~~	~~50~~	~~25~~

③ Upper and lower connection bolts in collar and bolts at lower chord connection must be high strength with matching locknuts. Connection bolts shall have two stainless steel flat washers each.

① Grind top if required to fully seat aluminum plate and stainless steel sheet.

② After tightening lower connection bolts, fill gap with non-hardening, silicone caulk suitable for exterior exposure and acceptable to the Engineer. Cost is included in "Overhead Sign Structure Cantilever".

CSS-4

NUMBER	REVISION	DATE

OSC-A-3(M) 11/1/2002

CANTILEVER SIGN STRUCTURES
JUNCTURE DETAILS
ALUMINUM TRUSS & STEEL POST

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 80/94 (INTERSTATE 80/294)
OVERHEAD SIGN STRUCTURES
I-94 WB & I-94 EB
COOK COUNTY SECTION (0203.1 & 0312.708W) R-3

DESIGNED BY DRAWN BY
DATE: March 1, 2005 CHECKED BY CHECKED BY

McDonough Associates Inc.
Engineers / Architects

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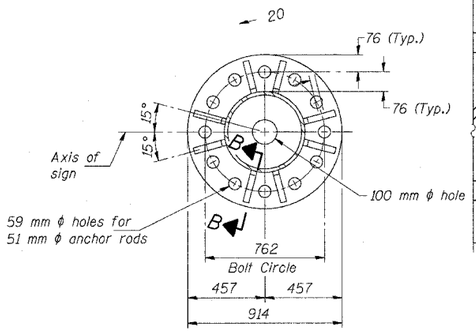
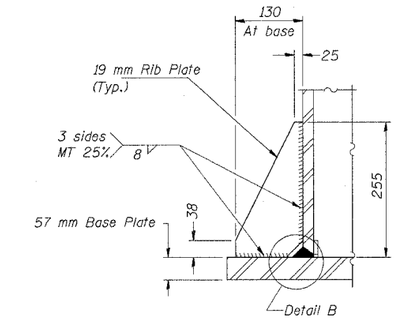
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	*	COOK	870	339
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

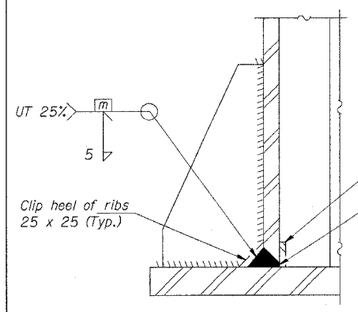
* (0203.1 & 0312-708W) R-3 CONTRACT * 62108



SECTION A-A

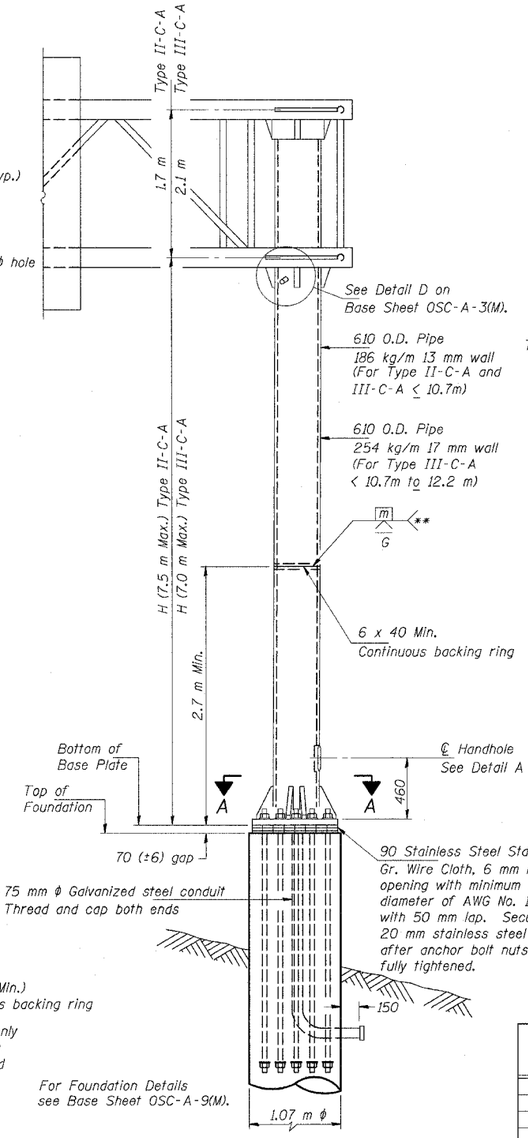


SECTION B-B



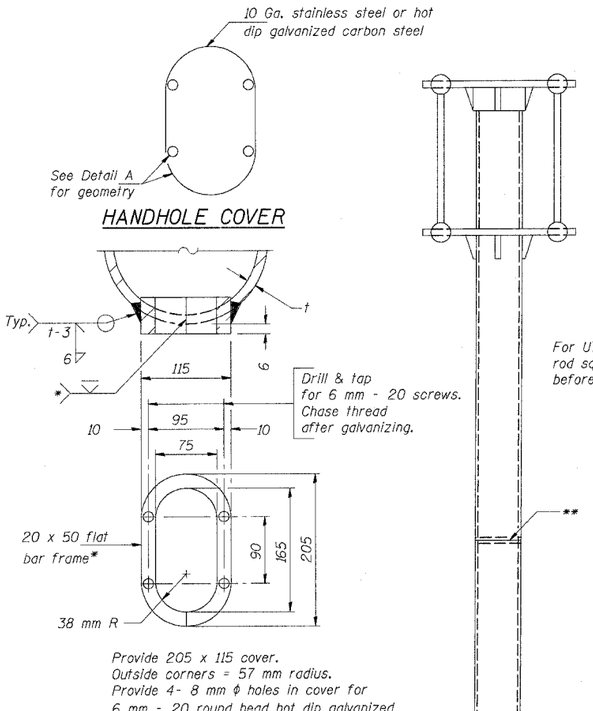
DETAIL B

(Typical rib)



FRONT ELEVATION

For Foundation Details see Base Sheet OSC-A-9(M).



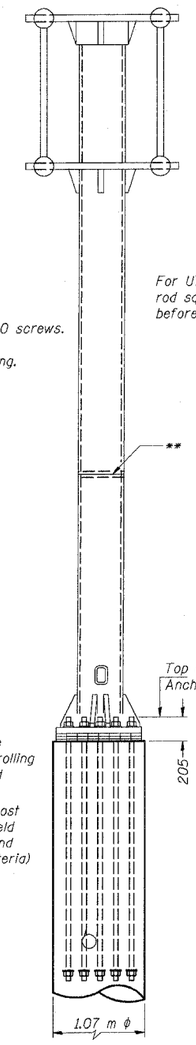
Provide 205 x 115 cover.
Outside corners = 57 mm radius.
Provide 4- 8 mm ϕ holes in cover for 6 mm - 20 round head hot dip galvanized or stainless steel machine screws.
(See cover details)

DETAIL A

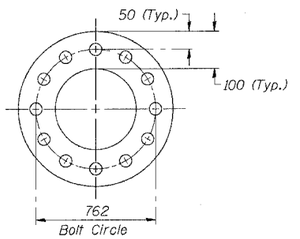
*Bent bars may be butt welded top and bottom or bottom only. In lieu of fabricated handhole frame as shown, may cut from 50 mm plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 12.7 µm or less.

**Butt welded joint in post is only allowed for post heights (H) over 6.10 m in length. If used, weld procedure must be preapproved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

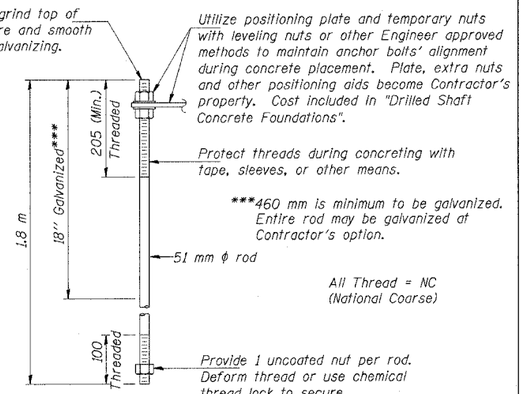
Structure Number	Station	H
IC016I094L074.2	30+786	5.602
IC016I094R074.3	20+935	6.588



SIDE ELEVATION



SUGGESTED POSITIONING PLATE



ANCHOR ROD DETAIL

Anchor rods shall conform to AASHTO M314 Grade 380 (55) and meet Charpy V-Notch (CVN) energy of 20 J at - 12 ° C. before galvanizing. Galvanize the upper 460 mm (minimum***) and associated M291, Grade A, C or DH heavy hex nuts and hardened washers per AASHTO M232. No welding shall be permitted on rods. Provide an unfinished nut at bottom, a hexagon locknut and washer above base plate and a leveling nut and washer below base plate. Nuts shall each be tightened with 270 N-m minimum torque against base plate. Before or after threading, but before galvanizing, each anchor rod shall be ultrasonically tested (UT) by a Level II or III inspector, qualified in accord with ANSI guidelines, using a straight beam, 13 mm ϕ 3.5 mhz. transducer, to insure no rejectable flaws exist in the upper 460 mm (tension criteria). Cost of testing included in "Drilled Shaft Concrete Foundations".

CSS-5

NUMBER	REVISION	DATE

OSC-A-5(M) 11/1/2002

CANTILEVER SIGN STRUCTURES TYPE II-C-A & III-C-A TRUSS SUPPORT POST ALUMINUM TRUSS & STEEL POST

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 80/94 (INTERSTATE 80/294)
OVERHEAD SIGN STRUCTURES
I-94 WB & I-94 EB
COOK COUNTY SECTION (0203.1 & 0312.708W) R-3

DESIGNED BY DRAWN BY
DATE: March 1, 2005 CHECKED BY CHECKED BY

McDonough Associates Inc.
Engineers / Architects

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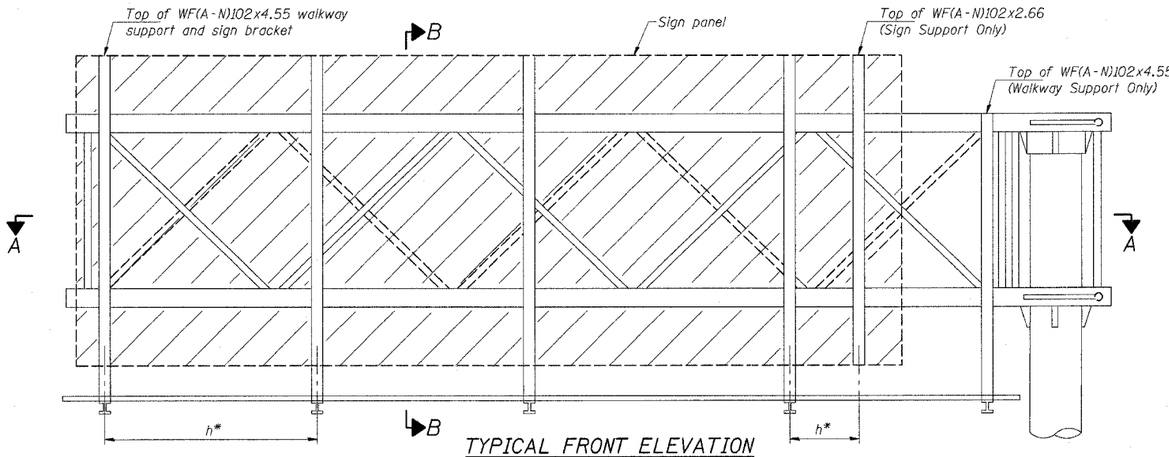
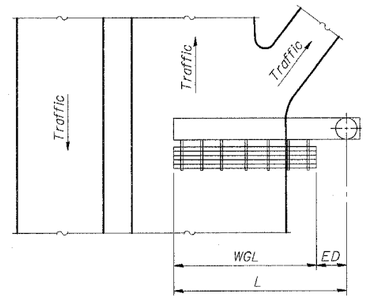
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	*	COOK	870	340
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

* (0203.1 & 0312-708W) R-3 CONTRACT * 62108



TYPICAL FRONT ELEVATION

With lights and handrail omitted for clarity.

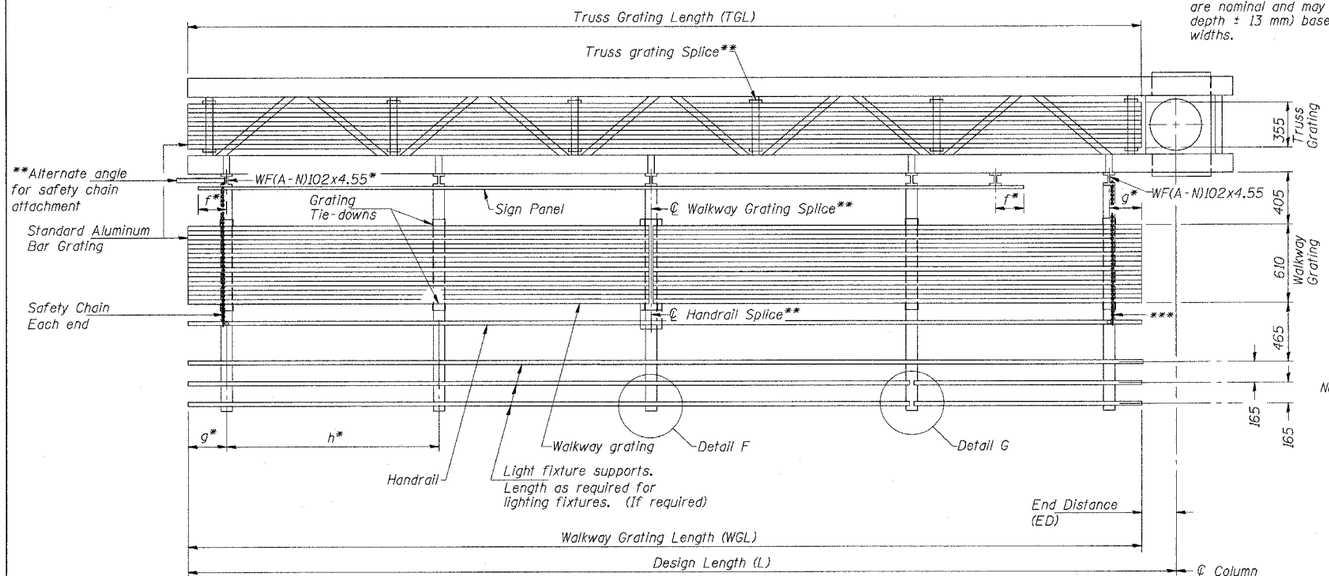


PLAN

WALKWAY AND HANDRAIL SKETCH

(Road plan beneath truss varies)

Walkway and truss grating dimensions are nominal and may vary (width ± 13 mm, depth ± 13 mm) based on available standard widths.



Structure Number	Station	WGL	ED	TGL
IC0161094L074.2	30+786	4.910	3.134	7.589
IC0161094R074.3	20+935	4.360	3.900	7.805

Notes: *Space walkway brackets WF(A-N)102x4.55and sign brackets WF(A-N)102x2.66 for efficiency and within limits shown:

f = 300 maximum, 100 minimum (End of sign to ℄ of nearest bracket)
g = 300 maximum, 100 minimum (End of walkway to ℄ of nearest bracket)
h = 1.85 m maximum (℄ to ℄ sign and/or walkway support brackets, WF(A-N)102x2.66or WF(A-N)102x4.55)

***If walkway bracket at safety chain location is behind sign, add angle to bracket.

For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-A-7(M).
For details of handrail, handrail splice, safety chain and Details F and G, see Base Sheet OSC-A-8(M).

CSS-6

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in "Overhead Sign Structure Cantilever".

SECTION A-A

Handrail and walkway grating shall span a minimum of three brackets between splices.
**Use and location of handrail or grating splices are optional, based on lengths needed and material availability.

$$TGL = L - \left(\frac{\text{Post O.D.}}{2} + 150\right)$$

NUMBER	REVISION	DATE

BRACKET TABLE

WF(A-N)4x1.79 or WF(A-N)4x3.06
ASTM B308, Alloy 6061-T6

Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	2.45	2
2.45	4.3	3
4.3	6.15	4
6.15	8.0	5
8.0	9.85	6

CANTILEVER SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS
ALUMINUM TRUSS & STEEL POST

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 80/94 (INTERSTATE 80/294)
OVERHEAD SIGN STRUCTURES
I-94 WB & I-94 EB
COOK COUNTY SECTION (0203.1 & 0312.708W) R-3

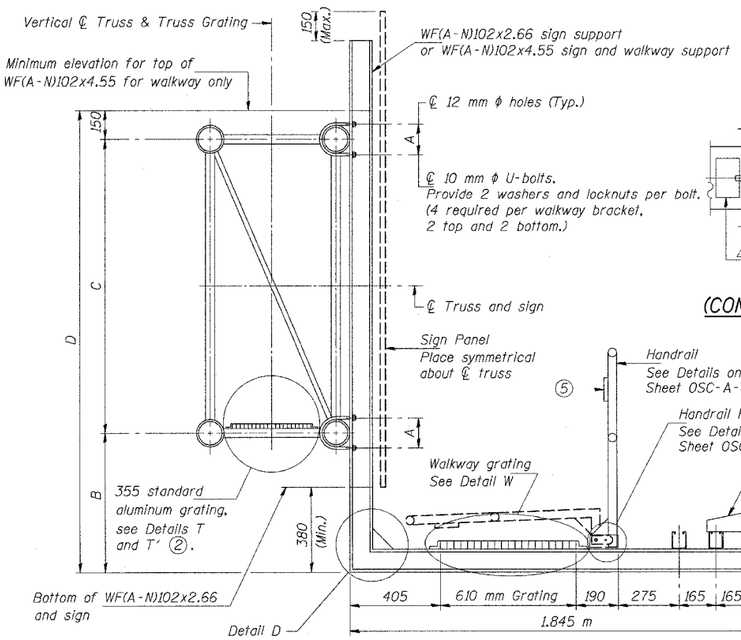
DESIGNED BY DRAWN BY
DATE: March 1, 2005 CHECKED BY CHECKED BY

McDonough Associates Inc.
Engineers / Architects

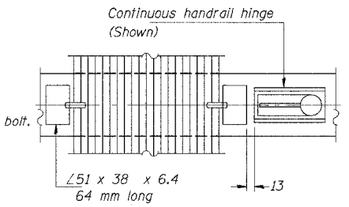
OSC-A-6(M) 11/1/2002

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	341
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

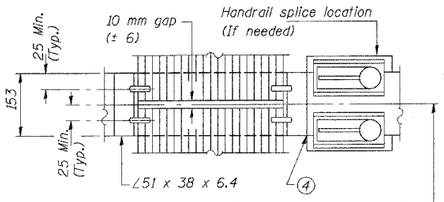
• (0203.1 & 0312-708W) R-3 CONTRACT # 62108



SECTION B-B

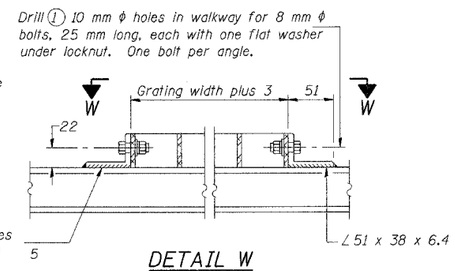


(CONTINUOUS WALKWAY GRADING)

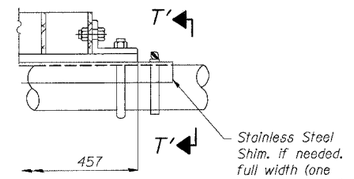


(AT WALKWAY GRATING SPLICE)

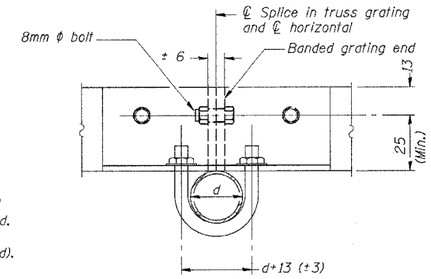
SECTION W-W



DETAIL W
(Walkway grating)



DETAIL T'
(Truss grating splice)
Details not shown same as Detail T.
Alternate materials may be used subject to the Engineer's review and approval.



SECTION T'-T'

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars (MBB) shall be 5 mm x 38 mm on 30 mm centers and conform to ASTM B211 Alloy 6061-T6.

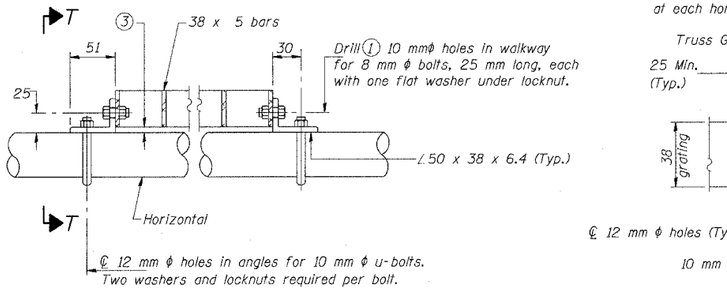
Cross bars (CB) shall be 5 mm x 38 mm on 102 mm centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

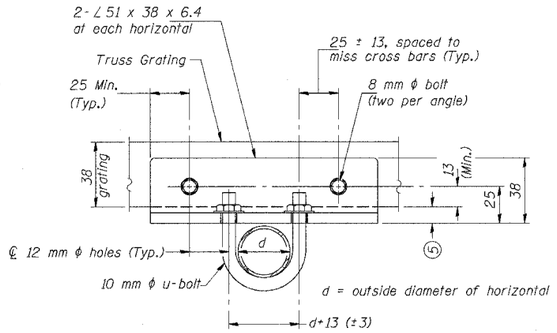
Aluminum Grating with modified "T" sections for main bearing bars shall meet the following requirements:

Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 1.16 x 10^3 mm^3 per bar, a depth of 38 mm , spaced on 30 mm centers.

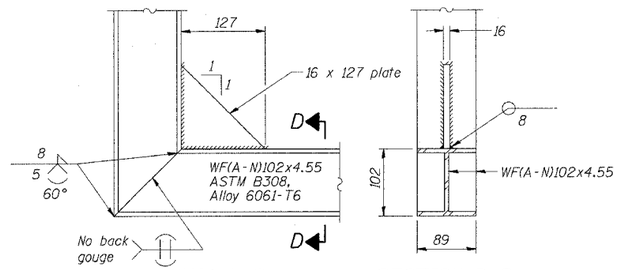
Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 100 mm centers.



DETAIL T
(Truss grating at horizontal)



SECTION T-T



DETAIL D
(See Detail P, Base Sheet OSC-A-8(M).)

SECTION D-D

CSS-7

NUMBER	REVISION	DATE

(1) Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.

(2) When truss grating must be spliced, use suggested detail or other methods subject to the Engineer's review and approval. Locate splice to avoid interference between cross bars and bolt locations.

(3) If Handrail Joint present, weld angle to WF(A-N)102 and 6 mm extension bars. (See Base Sheet OSC-A-8(M).)

(4) ℄ 3 mm x 13 mm x 50 mm welded to handrail posts to protect locations that contact grating.

(5) Tube to grating gap may vary from 0 to 13mm (Max.) to align walkway, allow for camber, etc.Continuous Truss Grating

Structure Number	Station	A	B	C	D
IC0161094L074.2	30+786	178	0.807	1.68	2.637
IC0161094R074.3	20+935	178	1.612	1.68	3.442

CANTILEVER SIGN STRUCTURES WALKWAY DETAILS ALUMINUM TRUSS & STEEL POST

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 80/94 (INTERSTATE 80/294)
OVERHEAD SIGN STRUCTURES
I-94 WB & I-94 EB
COOK COUNTY SECTION (0203.1 & 0312.708W) R-3

DESIGNED BY DRAWN BY
DATE: March 1, 2005 CHECKED BY CHECKED BY

McDonough Associates Inc.
Engineers / Architects

OSC-A-7(M) 11/1/2002

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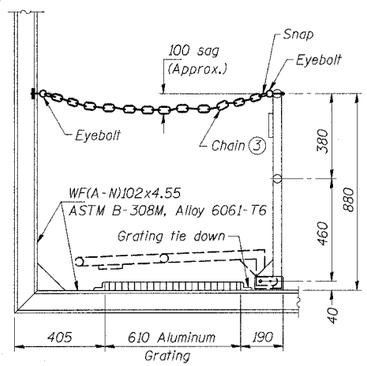
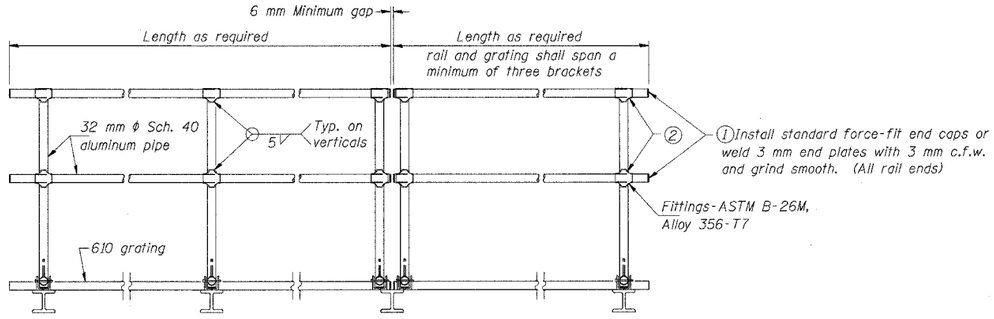
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	342
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

• (0203.1 & 0312-708W) R-3 CONTRACT # 62108



SIDE ELEVATION

(Showing Safety Chain W/O Sign)

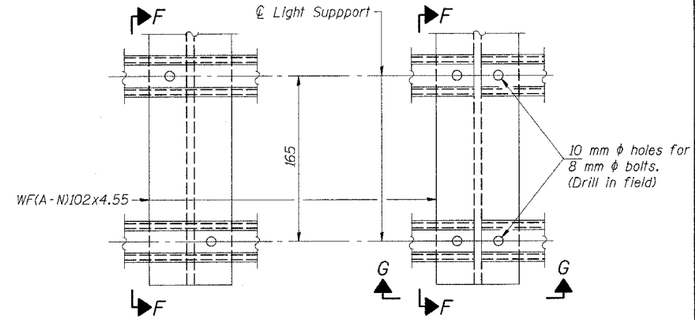


FRONT ELEVATION

HANDRAIL DETAILS

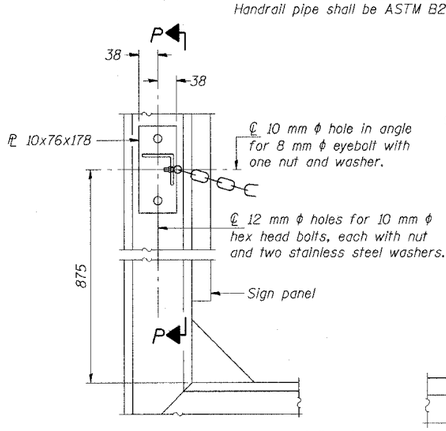
Handrail pipe shall be ASTM B241M, Alloy 6063-T6 or Alloy 6061-T6.

(2) Horizontal handrail member shall be continuous thru fitting. Provide 12 mm ϕ hole in fitting for 10 mm ϕ bolt. Field drill 12 mm ϕ hole in horizontal rail member. Provide locknut and two stainless steel washers for bolt. (Use 8 mm eyebolts in 12 mm ϕ holes on top rail at ends only.)



DETAIL F

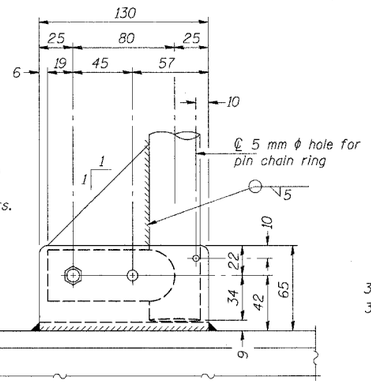
DETAIL G



ALTERNATE SAFETY CHAIN ATTACHMENT

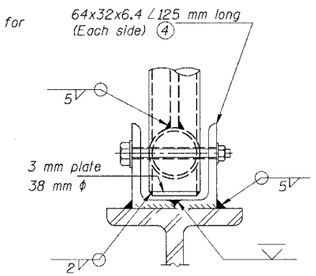
(With Sign Present)

Items not shown same as "Side Elevation" of "Handrail Details"



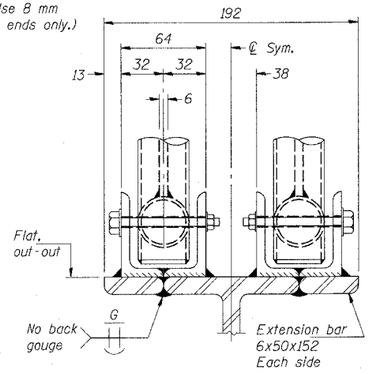
SIDE ELEVATION

Drill and ream for 10 mm ϕ stainless steel bolt with hexagon locknut and two stainless steel washers.



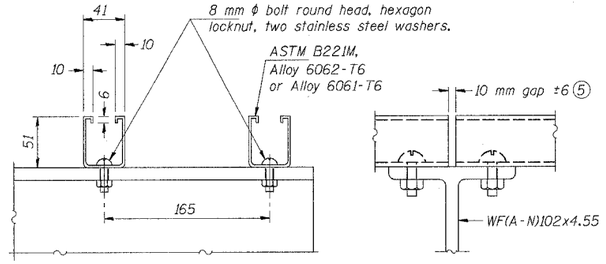
FRONT ELEVATION

See "ELEVATION" at right for dimensions.



ELEVATION AT HANDRAIL JOINT (4)

Details not shown same as "FRONT ELEVATION"

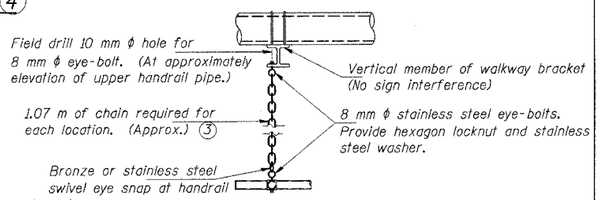


SECTION F-F

SECTION G-G

LIGHTING FIXTURE MOUNTS (IF REQUIRED)

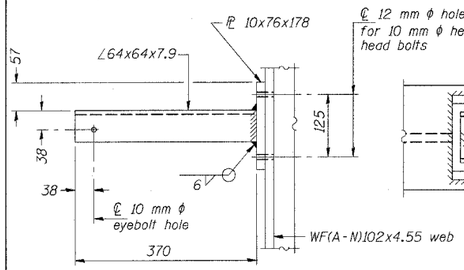
(5) Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.



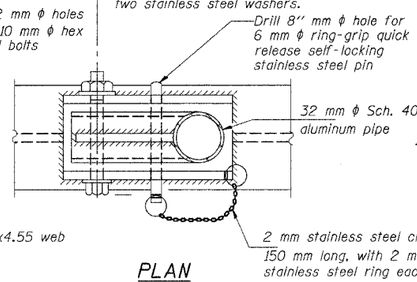
SAFETY CHAIN

One required for each end of each walkway.

CSS-8



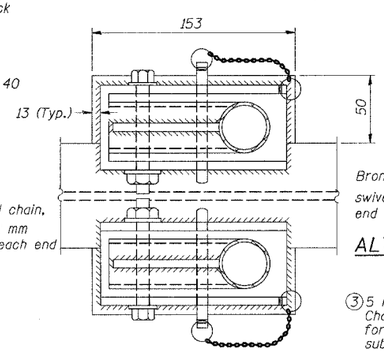
SECTION P-P



PLAN

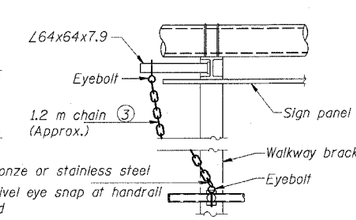
DETAIL E HANDRAIL HINGE

NUMBER	REVISION	DATE



PLAN AT HANDRAIL JOINT

Details not shown same as "PLAN"



ALTERNATE SAFETY CHAIN ATTACHMENT

Details not shown similar to "Safety Chain" Details (Walkway omitted for clarity)

(3) 5 mm galvanized steel chain, approximately 40 links per meter. Chain to be hot dip galvanized after manufacture and suitable for prolonged exterior exposure. Alternate materials may be substituted with the Engineer's approval.

(4) Extrusions may be used in lieu of the details shown, with approval of the Engineer.

OSC-A-8(M) 11/1/2002

CANTILEVER SIGN STRUCTURES HANDRAIL DETAILS ALUMINUM TRUSS & STEEL POST

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 80/94 (INTERSTATE 80/294)
OVERHEAD SIGN STRUCTURES
I-94 WB & I-94 EB
COOK COUNTY SECTION (0203.1 & 0312.708W) R-3

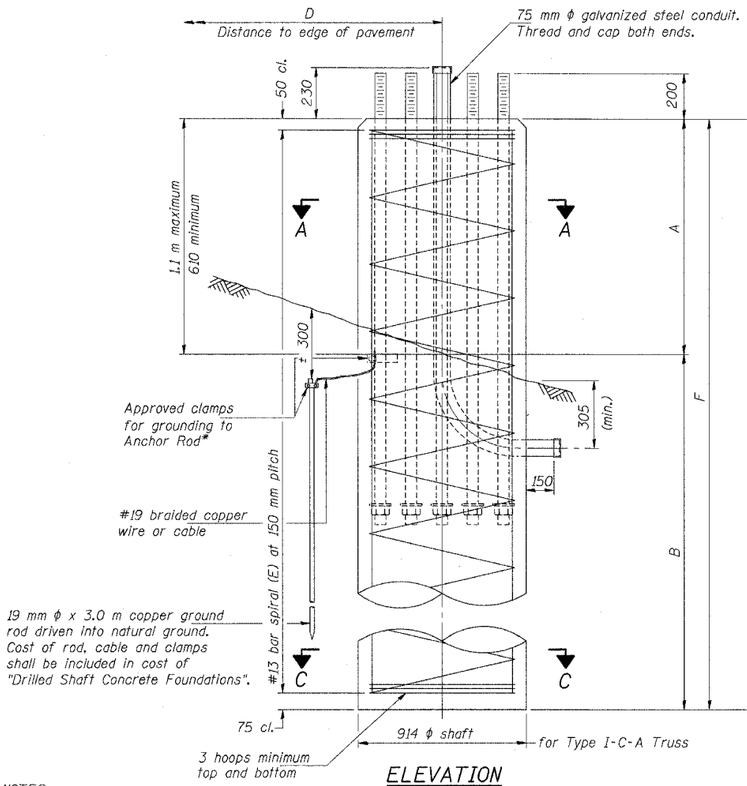
DESIGNED BY DRAWN BY
DATE: March 1, 2005 CHECKED BY CHECKED BY

McDonough Associates Inc.
Engineers / Architects

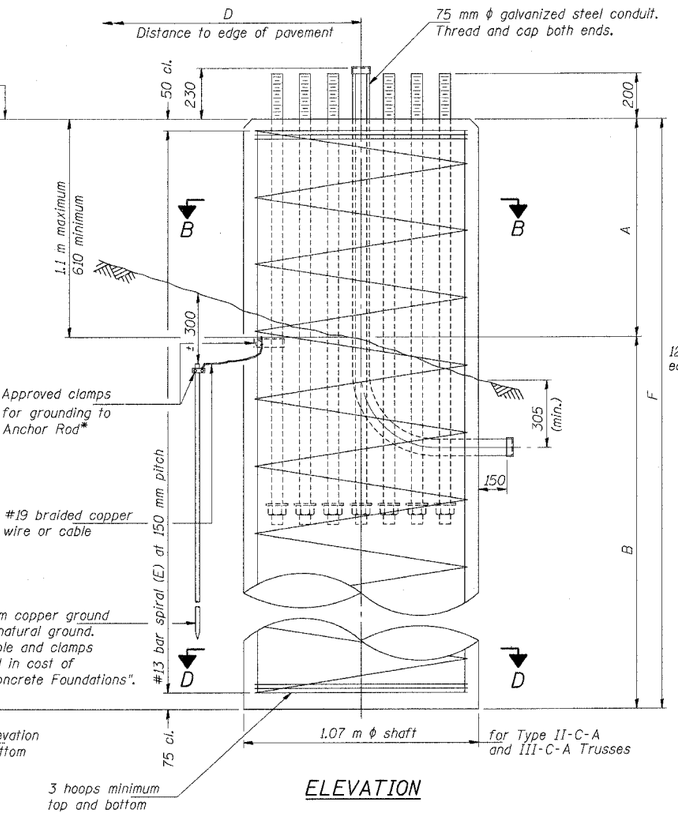
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	343
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

• (0203.1 & 0312-708W) R-3 CONTRACT # 62108

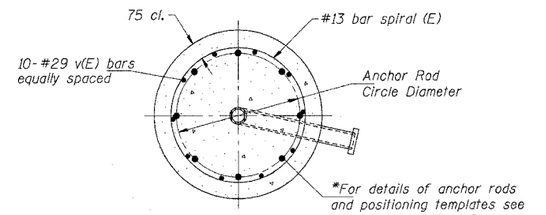
*Grind anchor rod to bright finish at ground clamp location before installing clamp.



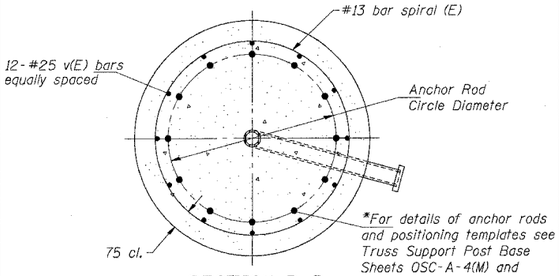
ELEVATION



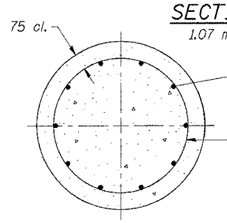
ELEVATION



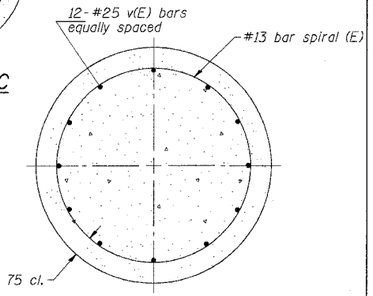
SECTION A-A
914 ϕ shaft



SECTION B-B
1.07 m ϕ shaft



SECTION C-C
914 ϕ shaft



SECTION D-D
1.07 m ϕ shaft

NOTES:

The foundation dimensions shown in the Foundation Design Table are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 120 kPa, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown in the Foundation Data Table will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 300 mm by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 150 mm below finished ground line. Cost included in "Drilled Shaft Concrete Foundation".

FOUNDATION DATA TABLE

Structure Number	Station	Truss Type	Shaft Diameter	Elevation Top	Elevation Bottom	A	B	F	Class SI Concrete Cubic Meters
IC0161094L074.2	30+786	II-C-A	1.07	189.542	178.700	0.610	10.232	10.842	9.75
IC0161094R074.3	20+935	II-C-A	1.07	186.083	177.473	0.610	8.00	8.61	7.75

FOUNDATION DESIGN TABLE

Truss Type	Post Base Sheet	Maximum CantileverLength (m)	Maximum Total Sign Area (sq m)	Shaft Diameter (m)	"B" Depth (m)	Anchor Rods No.	Anchor Rods Diameter (mm)	Anchor Rod Circle Diameter (mm)
I-C-A	OSC-A-4(M)	7.6	15.8	0.92	4.7	8	51	560
II-C-A	OSC-A-5(M)	9.2	15.8	1.07	4.6	12	51	762
II-C-A	OSC-A-5(M)	9.2	31.6	1.07	6.6	12	51	762
III-C-A	OSC-A-5M)	10.7	15.8	1.07	5.8	12	51	762
III-C-A	OSC-A-5(M)	10.7	23.2	1.07	6.9	12	51	762
III-C-A	OSC-A-5(M)	10.7	37.2	1.07	8.1	12	51	762
III-C-A	OSC-A-5(M)	12.2	37.2	1.07	9.8	12	51	762

CSS-9

NUMBER	REVISION	DATE

OSC-A-9(M) 11/1/2002

CANTILEVER SIGN STRUCTURES DRILLED SHAFT ALUMINUM TRUSS & STEEL POST

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 80/94 (INTERSTATE 80/294)
OVERHEAD SIGN STRUCTURES
I-94 WB & I-94 EB
COOK COUNTY SECTION (0203.1 & 0312.708W) R-3

DESIGNED BY DRAWN BY
DATE: March 1, 2005 CHECKED BY CHECKED BY

McDonough Associates Inc.
Engineers / Architects

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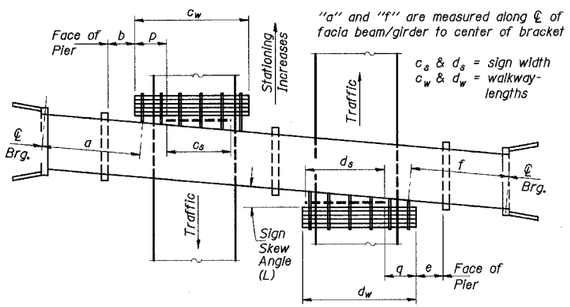
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	•	COOK	870	344
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

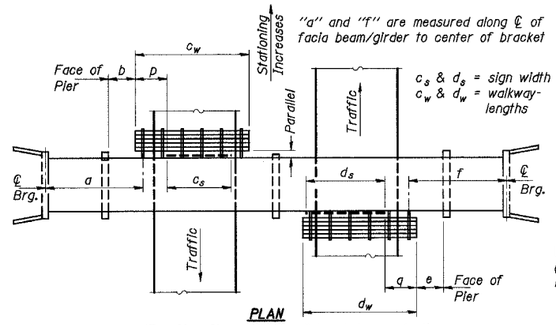
• (0203.1 & 0312-708W) R3 CONTRACT NO. 62108



PLAN
(Left Sign Skew > 15°)

WALKWAY AND HANDRAIL SKETCH

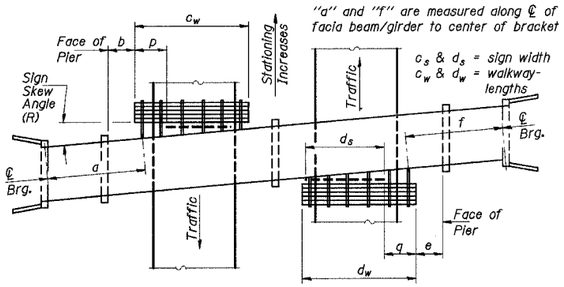
(Road plan beneath structure varies.)



PLAN
(For Sign Skew ≤ 15°, all brackets constant)

WALKWAY AND HANDRAIL SKETCH

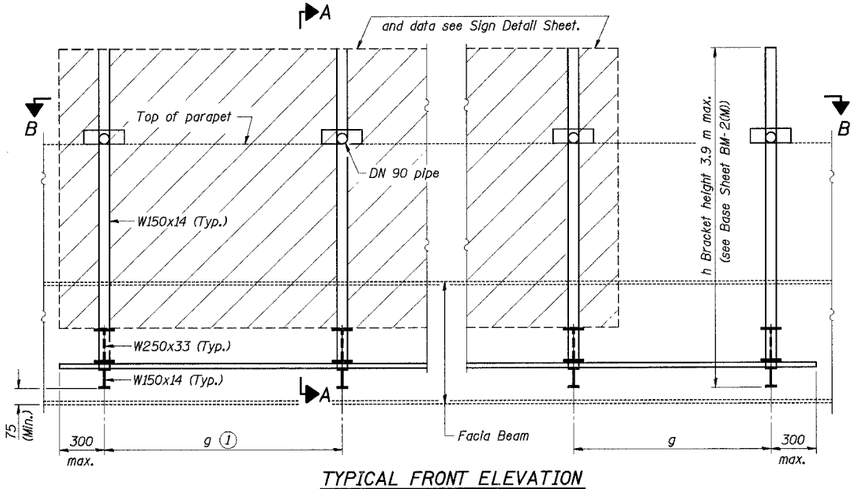
(Road plan beneath structure varies.)



PLAN
(Right Sign Skew > 15°)

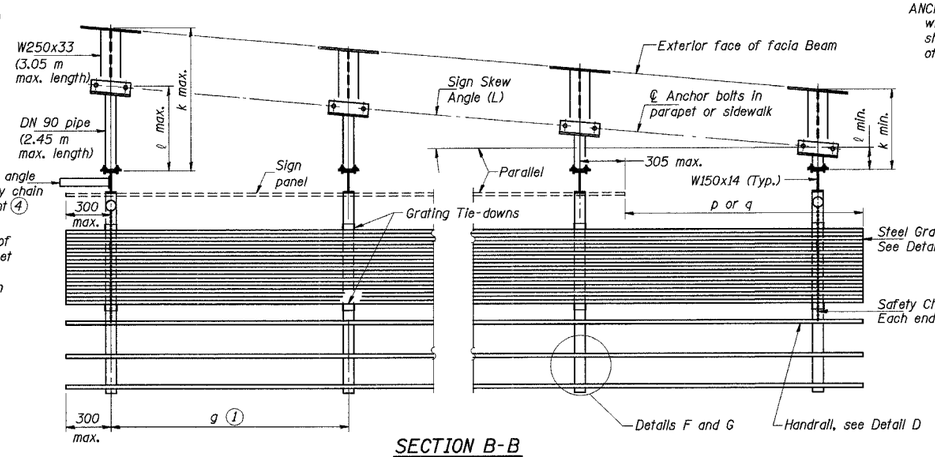
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath structure varies.)



TYPICAL FRONT ELEVATION

(With lights, safety chain and handrail omitted for clarity.)



SECTION B-B

(Shown: Left Sign Skew >15°)

Structure Number	Sign Skew Angle (L) or (R)	Bridge Station	Bridge Structure Number	Contract Route Designation	a (m)	b (m)	c_s (m)	c_w (m)	d_s (m)	d_w (m)	e (m)	f (m)	g (m)	No. of Brackets (Total)	p (m)	q (m)	Total Grating/ Hndrl. Lengths (c_w + d_w) (m)
1B016 1080R160.6	0	440+193.335	SN 016-2796		-	-	-	-	5.85	7.00	-	20.148	1.65	5	-	1.15	7.00

Dimensions a, b, e, f & g may vary as approved by the Engineer, see (1).
When c_w < c_s and/or d_w < d_s, use alternate brackets without walkway supports where applicable, see (3).

GENERAL NOTES

SPECIFICATIONS:

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications") (2)

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 130 km/h WIND VELOCITY PLUS 30% GUST FACTOR
WIND LOADING: 1.7kPa normal to Sign Panel Area plus 2.3 kPa normal to truss elements not behind sign Loading Diagram.
WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

MINIMUM CLEARANCE: 75 mm greater than bridge members at all locations. (All Obstructions)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 Structural Welding Code (Steel) and the Standard Specifications.

MATERIALS: All Structural Steel Pipe shall be ASTM A53 Grade B with a minimum yield of 241 MPa, or A500 Grade B or C with a minimum yield of 319 MPa. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53.
All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 250 or Gr. 345 (M183, M223 Gr. 345.).

HIGH STRENGTH BOLTS: All bolts, washers, nuts and locknuts shall satisfy the requirements of ASTM designation A307M unless noted as "H.S." which shall require AASHTO M164 (A325M), ASTM A449, or approved alternate. All fasteners shall be hot dip galvanized per AASHTO M232 unless otherwise specified.

STEEL PIPE: DN (Diameter Nominal) indicates standard pipe size

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: All-threaded rod conforming to ASTM A307M, 19mm ϕ x 305 mm long, each with one plate washer and locknut and be hot dip galvanized per AASHTO M232. They shall be either cast into the concrete or epoxy grouted in accordance with Section 584 of the Standard Specifications. Minimum embedment in concrete shall be 230 mm.

(1) Bracket spacing g ≤ 1.8 m max. Spacing shall be uniform if possible but may vary ±150 mm to miss existing obstruction, (rail post, light poles, web stiffeners, splice plates, etc.). Adjust bracket lengths accordingly on skewed structures.
(2) Any design modifications shall be based on the current version of applicable specifications and submitted for the Engineer's approval.
(3) Unit price includes grating, handrail, brackets, supports, anchor bolts, fasteners, fabrication, delivery, erection, field drilling and other necessary items. Limits of payment are based on grating length (cw, dw) unless otherwise specified. For Section A-A and dimensions k & ℓ, see Base Sheet BM-2(M). For Safety Chain Details and Details D, F and G, see Base Sheet BM-4(M).
(4) If walkway bracket at safety chain location is behind sign, add angle to bracket. See detail on Base Sheet BM-4(M).

NUMBER	REVISION	DATE

TOTAL BILL of MATERIAL

(3) OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED	m	7.00

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

BM-1(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

BRIDGE MOUNT SIGN STRUCTURES
GENERAL PLAN AND ELEVATION

DATE: JUL 18, 2005
SCALE ---

HNTB

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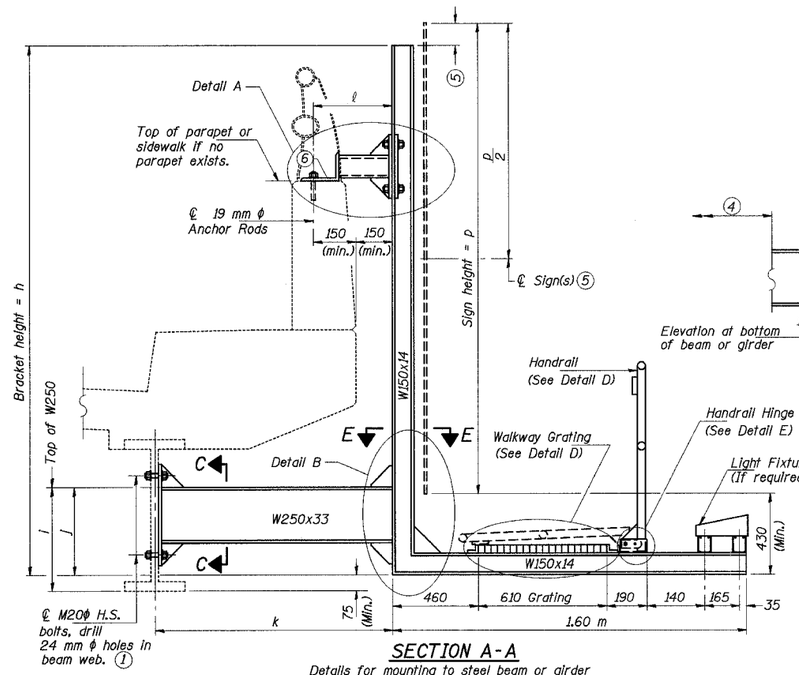
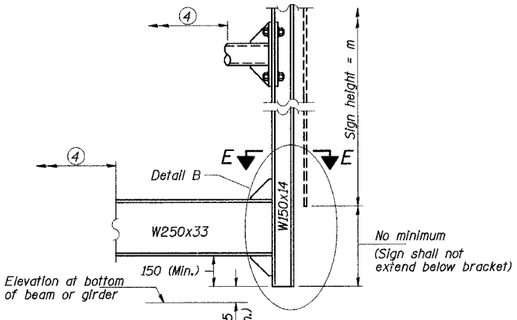
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	•	COOK	870	345
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

• (0203.1 & 0312-708W) R3 CONTRACT NO. 62108

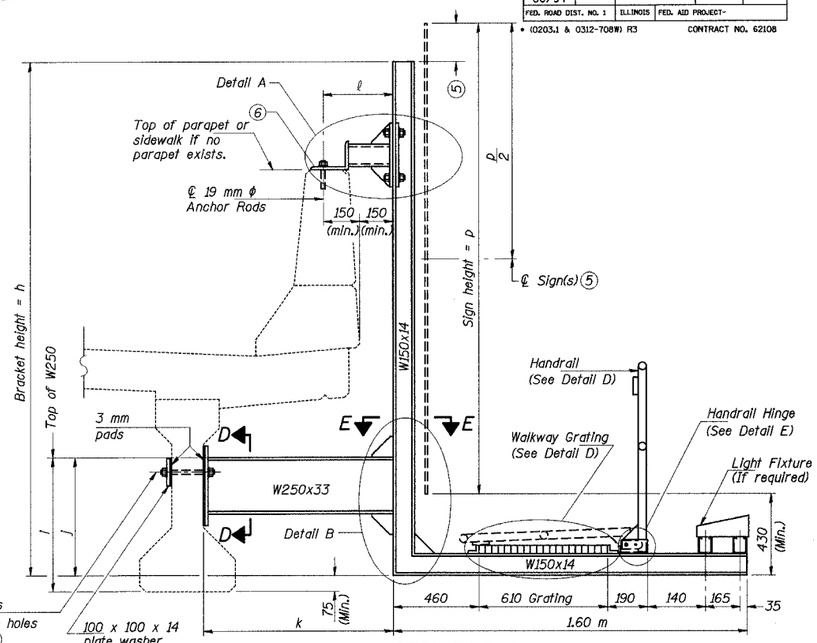


SECTION A-A
Details for mounting to steel beam or girder
& Details for mounting with existing parapet mounted rail



SECTION A-A
Alternate with no lights or walkways

(4) For attachment details of DN 90 pipe and W250x33, see other sections as applicable.



SECTION A-A
Details for mounting to PPC I Beam or Bulb "T"
& Details for mounting to parapet w/o rail

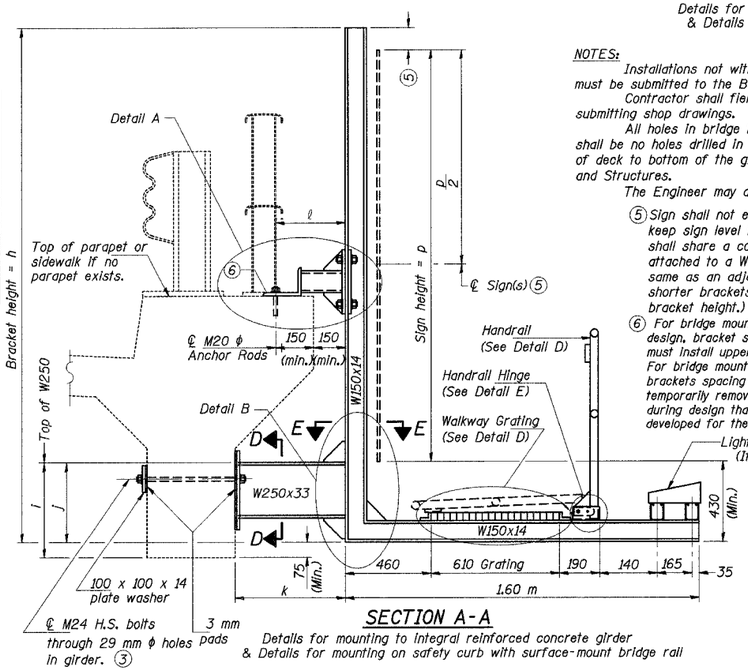
Structure Number	Station	h (m) (3.70 m max.)	I (m)	J (m)	k max. (m) (3.05 m max.)	ℓ max. (m) (2.45 m max.)	p (3.35 m max.)
1B0161080R160.6	440+193.335	3.58	0.872	0.672	1.175	0.340	3.15

For Details A & B, Sections C-C, D-D and E-E, see Base Sheet BM-3(M).
For Details D & E, see Base Sheet BM-4(M).

(1) Holes in new steel members may be drilled in the fabrication shop or in the field. Field drill existing members.

(2) For new PPC I beams, holes shall be formed during casting. For existing PPC I beams, prestressing strand locations shall be determined and spaced to miss strands by 150 mm min. Minimize spalling during field drilling of existing beams.

(3) For new construction, form holes. For existing RC beams, locate primary reinforcement and space holes to miss by 150 mm min. Minimize spalling and concrete fracturing/damage during field drilling of existing concrete. Spalls over 6 mm deep or beyond the coverage of the 100x100 plate washer shall be repaired with epoxy mortar before installing washer.



SECTION A-A
Details for mounting to integral reinforced concrete girder
& Details for mounting on safety curb with surface-mount bridge rail

NOTES:

Installations not within dimensional limits shown require special analysis for all components and must be submitted to the Bureau of Bridges and Structures for approval.

Contractor shall field check all pertinent existing bridge dimensions shown on plans before submitting shop drawings.

All holes in bridge beams or girders should be located in the middle half of the member. There shall be no holes drilled in the lower quarter of the member's depth. (For R.C. girder, depth = bottom of deck to bottom of the girder.) Proposed exceptions must be approved by the Bureau of Bridges and Structures.

The Engineer may adjust dimension "I" to meet the above condition and to keep the sign level.

(5) Sign shall not extend more than 150 mm above top of bracket, and this dimension may vary to keep sign level if bridge is on grade or vertical curve. Multiple signs of various heights shall share a common horizontal centerline and use equal bracket heights. If no sign is attached to a W150x14 vertical (bracket only supporting walkway), dimension h shall be the same as an adjacent bracket with a sign attached, unless Engineer specifically directs shorter brackets due to locational restraints on future uses. (See Detail A for minimum bracket height.)

(6) For bridge mounted sign structures installed on new bridges with railing, during design, bracket spacing must be coordinated with railing post spacing and the Contractor must install upper brackets prior to railing installation.
For bridge mounted sign structrues installed on existing bridges with railing, during design, brackets spacing must be coordinated with railing post spacing and the Contractor must temporarily remove sections of railing to facilitate upper bracket installation. If it is determined during design that existing railings can't be removed, alternate upper connection details must be developed for the contract plans and approved by the Bureau of Bridges and Structures.

NUMBER	REVISION	DATE

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

BM-2(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

BRIDGE MOUNT SIGN STRUCTURES
WALKWAY AND CONNECTION DETAILS

DATE: JUL 18, 2005
SCALE ---

HNTB

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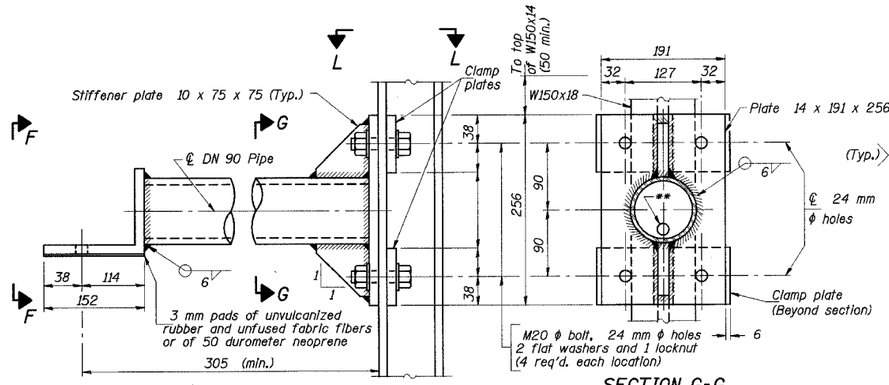
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

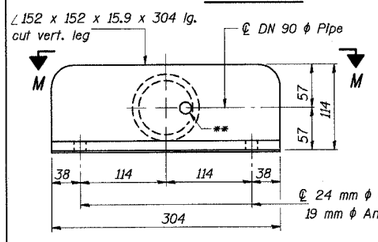
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	•	COOK	870	346
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

• (0203.1 & 0312-708W) R3 CONTRACT NO. 62108



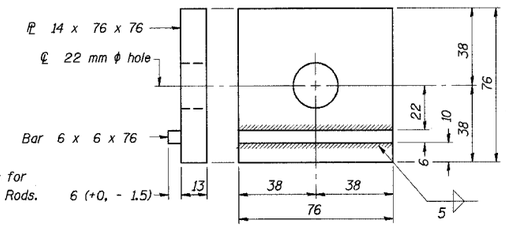
DETAIL A

SECTION G-G

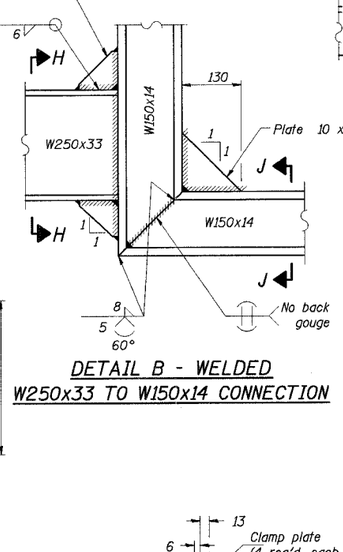


VIEW F-F

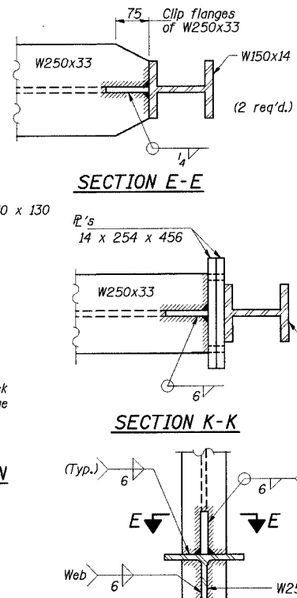
** 21 mm ϕ holes for galvanizing. After galvanizing, install M22, A307 hot-dip galvanized bolt to close hole in angle. (No bolt required in 14 mm plate.)



CLAMP PLATE DETAILS

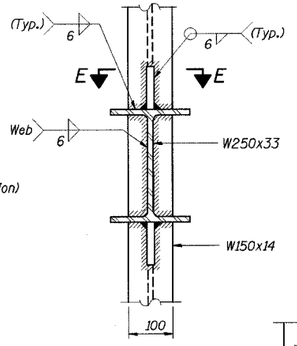


DETAIL B - WELDED
W250x33 TO W150x14 CONNECTION

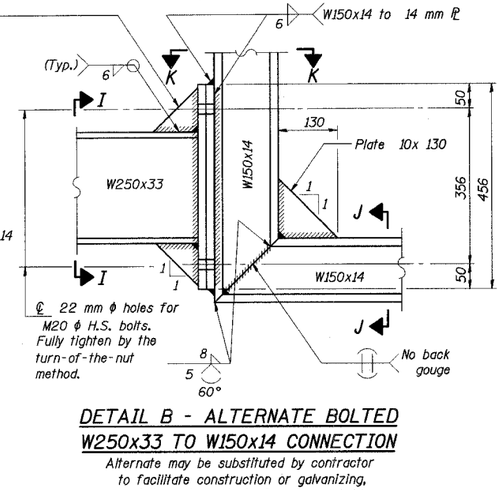


SECTION E-E

SECTION K-K

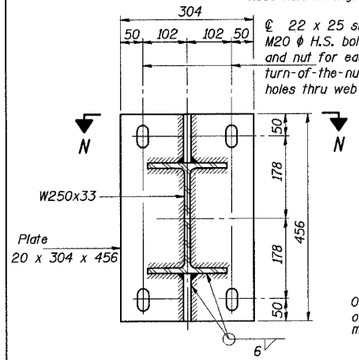


SECTION H-H



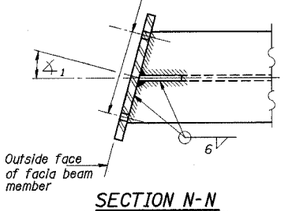
DETAIL B - ALTERNATE BOLTED
W250x33 TO W150x14 CONNECTION

Alternate may be substituted by contractor to facilitate construction or galvanizing, especially on long struts for skewed bridges.



SECTION C-C

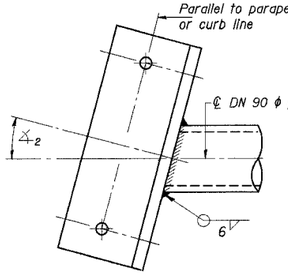
Steel beam or girder connection plate details



SECTION N-N

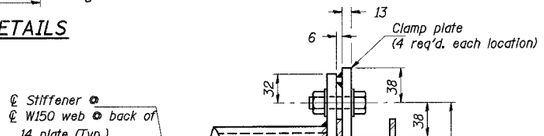
Skewed connection detail for W250x33 to facia beam.

Note: For constant slab overhang at facia beam, ∠1 = ∠2 = sign angle. For flared beams or other special cases where ∠1 ≠ ∠2, ∠1 = sign angle.

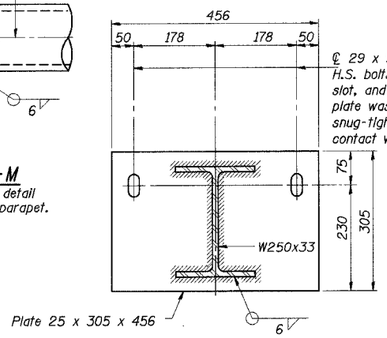


SECTION M-M

Skewed connection detail for DN 90 pipe to parapet.

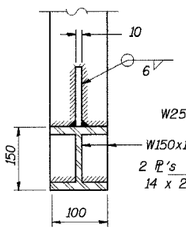


SECTION L-L

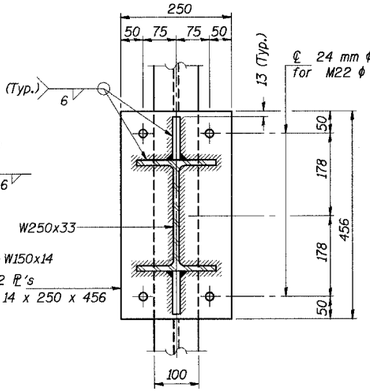


SECTION D-D

Concrete beam or girder connection plate details.



SECTION J-J



SECTION I-I

NUMBER	REVISION	DATE

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

BM-3(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

BRIDGE MOUNT SIGN STRUCTURES
CONNECTION DETAILS

DATE: JUL 18, 2005
SCALE ---

HNTB

JBeauchamp
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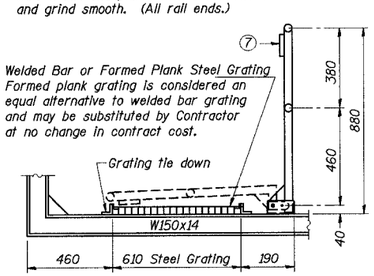
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	347
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

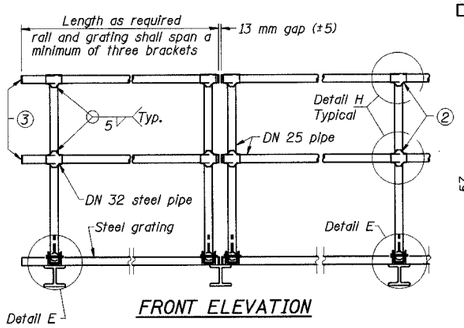
* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108

③ Install standard force-fit end caps or weld 3 mm end plates with 3 mm c.f.w. and grind smooth. (All rail ends.)

Welded Bar or Formed Plank Steel Grating
Formed plank grating is considered an equal alternative to welded bar grating and may be substituted by Contractor at no change in contract cost.

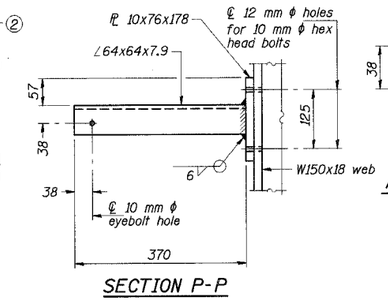


SIDE ELEVATION

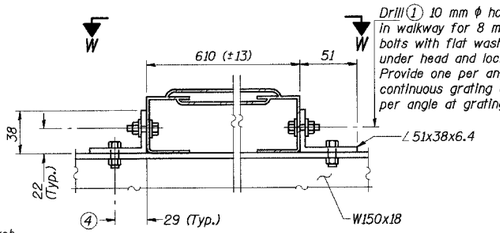


FRONT ELEVATION

DETAIL D HANDRAIL

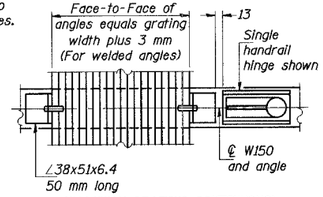


SECTION P-P

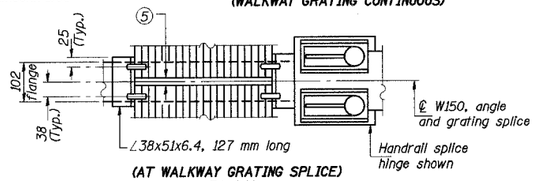


ALTERNATE FORMED PLANK GRATING DETAILS

Plank Grating: nominal depth = 64 (±13); perforated or expanded steel sheet with a non-skid surface (non-serrated) concentrated load capacity = 2.2 kN with 1.83 m clear span.

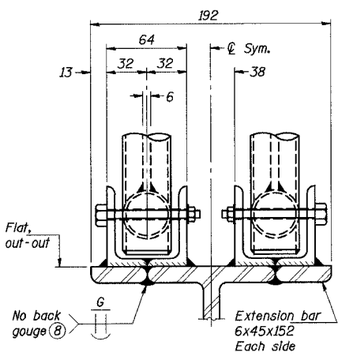


(WALKWAY GRATING CONTINUOUS)

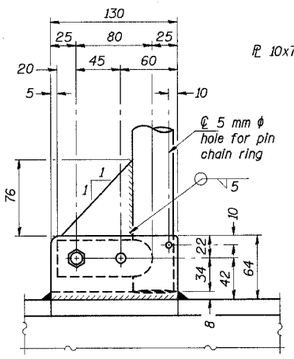


(AT WALKWAY GRATING SPLICE)

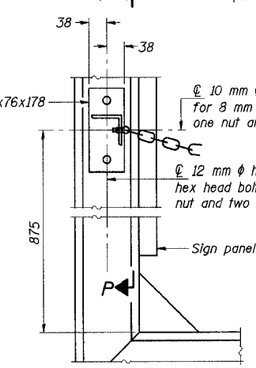
PLAN
(Showing welded angles ④)



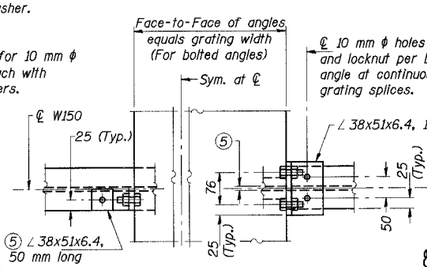
ELEVATION AT HANDRAIL JOINT
(Details not shown same as "FRONT ELEVATION")



SIDE ELEVATION

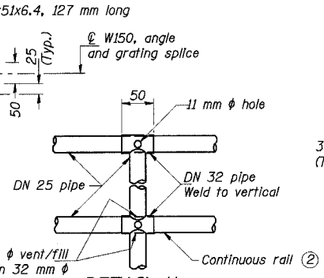


SAFETY CHAIN ATTACHMENT
(With Sign Present)
Items not shown same as "SIDE ELEVATION" and "SAFETY CHAIN"

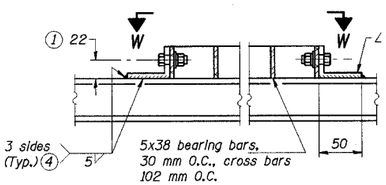


GRATING CONTINUOUS AT GRATING SPLICE

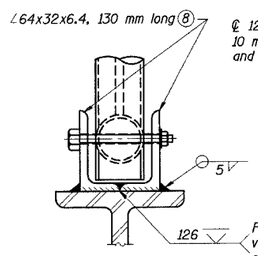
VIEW W-W
(Showing bolted angles ④)



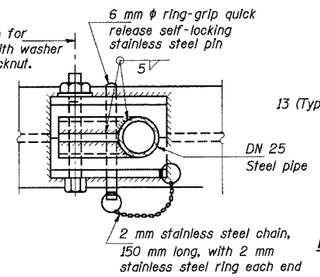
DETAIL H
Welds 5 mm continuous



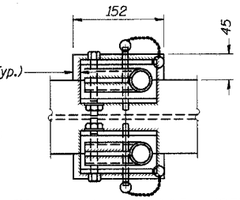
WELDED BAR GRATING DETAILS
(Showing optional welded angle attachment 4)



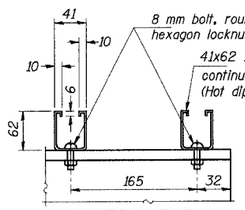
FRONT ELEVATION
(See above Elevations for dimensions.)



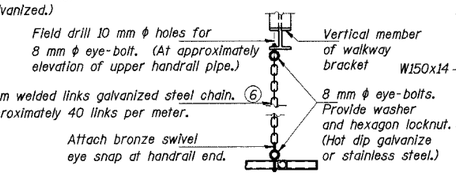
PLAN AT SINGLE HANDRAIL HINGE
DETAIL E



PLAN AT HANDRAIL JOINT
(For Details, see Elevations.)

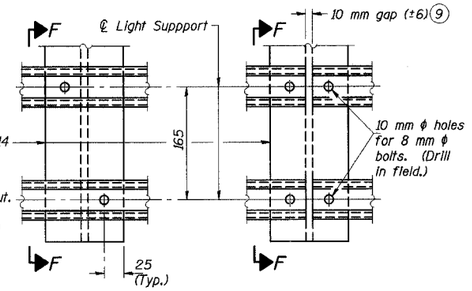


SECTION F-F
LIGHTING FIXTURE MOUNTS
(If required)



No Sign at Bracket

SAFETY CHAIN
One (1) required for each end of each walkway.



DETAIL F

DETAIL G

NUMBER	REVISION	DATE

NOTES

① Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.

② Horizontal rail member shall be continuous thru DN 32 pipe. Provide 12 mm ϕ hole in fitting for 10 mm ϕ bolt. Field drill 12 mm ϕ hole in horizontal rail member. Provide washer and locknut for bolt. (Use 8 mm eyebolts in 12 mm ϕ holes on top rail at ends only.)

④ Grating tie-down angles may be either bolted to W150x14 after galvanizing or welded to W150x14 before galvanizing, at the Contractor's option. (No weld on grating side.)

⑤ 10 mm (±6) gap between grating panels at splice.

⑥ Chain to be hot dip galvanized after manufacture and suitable for prolonged exterior exposure. Alternate materials may be substituted with the Engineer's approval. Approximately 1.07 m long chain per location. Maximum sag with handrail erected = 100 mm.

⑦ PL 3x13x50 welded to handrail posts to protect locations that contact grating.

⑧ Extrusions may be used in lieu of details shown, with approval by Engineer.

⑨ Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

BM-4(M) 11/1/2002

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

BRIDGE MOUNT SIGN STRUCTURES
WALKWAY DETAILS

DATE: JUL 18, 2005
SCALE ---

HNTB

JBeauchamp
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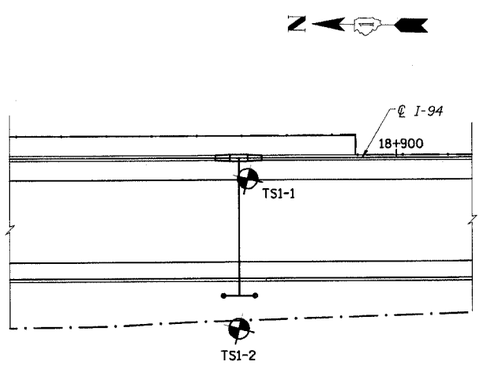
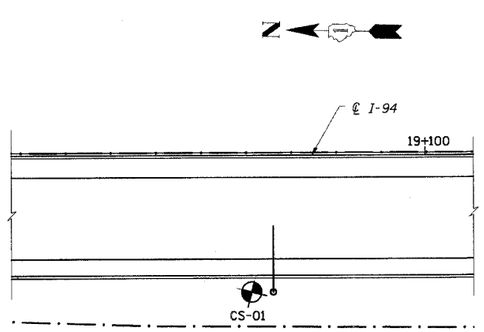
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	348
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

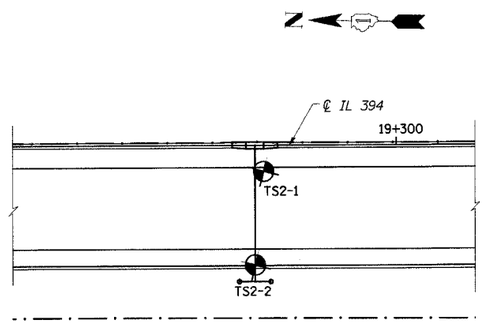
* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108



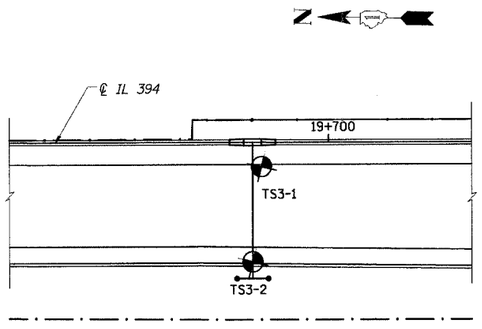
PLAN



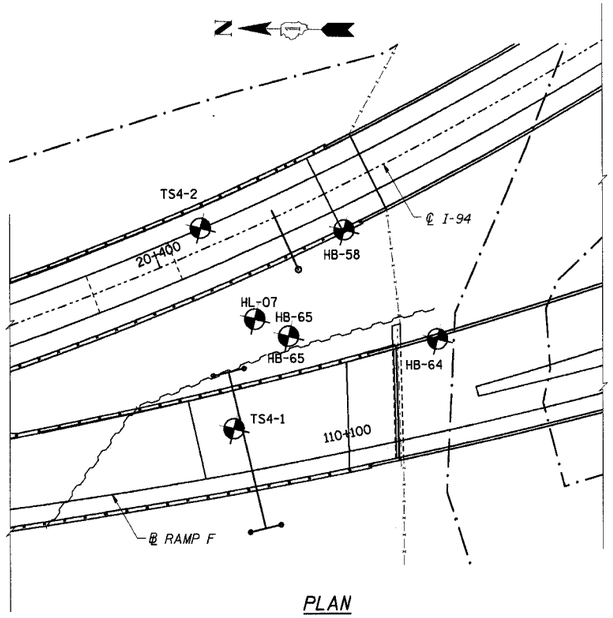
PLAN



PLAN



PLAN



PLAN

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

PROPOSED SIGN STRUCTURES
BORING LOCATIONS
I-94 & IL 394

DATE: JUL 18, 2005
SCALE 1:500

HNTB

JBeauchamp
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	•	COOK	870	349
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

• (0203.1 & 0312-708W) R3 CONTRACT NO. 62108

Wang Engineering, INC.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephones 630 953-9928
Faxs 630 953-9938

BORING LOG TS1-1

WEI Job No.: 665-05-06

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: T36N, R14E, Cook Co.

Datum: NGVD
Elevation: 182.34 m
North: 547552.29 m
East: 362502.47 m
Station:
Offset:

Page 1 of 1

Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample Type	Sample No.	SPT Values (blw/150 mm)	Qu (kPa)	Moisture Content (%)
182.0	305-mm thick ASPHALT --PAVEMENT--						
182.0	76-mm thick CRUSHED STONE --BASE COURSE--						
	Very stiff, brown and gray SILTY CLAY --FILL--	1		1	7 5 6	335 P	17
		2		2	4 5 6	260 B	23
180.7	Medium dense, brown SILT						
180.4	Stiff brown CLAY	3		3	5 4 5	144 P	30
179.9	Medium dense, brown SILT	4		4	6 6 3	NP	30
179.1	Loose, gray SILT	5		5	3 2 4	NP	25
178.4	Soft to medium stiff, gray CLAY	6		6	2 2 3	71 B	26
		7		7	1 3 3	47 B	23
176.9	Stiff gray CLAY	8		8	2 4 4	125 B	28
		9		9	1 3 5	172 B	20
		10		10	3 6 7	181 B	20
174.6	Very stiff, gray CLAY	8		11	4 6 7	220 B	19
		9		12	5 7 10	299 B	18
173.2	Boring terminated at 9.14 m						

GENERAL NOTES				WATER LEVEL DATA	
Begin Drilling	08-30-2004	Complete Drilling	08-30-2004	While Drilling ▽	DRY
Drilling Contractor	Groundbreaking Exploration	Drill Rig	CME45 TMR	At Completion of Drilling ▼	DRY
Driller	G&J	Logger	H. Suhail	Time After Drilling	NA
Drilling Method	3.25-in ID HSA; Boring backfilled upon completion			Depth to Water ▽	NA
Checked by	L. Iordache			The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.	

BORING LOG TS1-2

WEI Job No.: 665-05-06

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: T36N, R14E, Cook Co.

Datum: NGVD
Elevation: 181.90 m
North: 547553.63 m
East: 362475.00 m
Station:
Offset:

Page 1 of 1

Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample Type	Sample No.	SPT Values (blw/150 mm)	Qu (kPa)	Moisture Content (%)
181.6	330-mm thick ASPHALT --PAVEMENT--						
181.4	CRUSHED STONE AGGREGATE --BASE COURSE--						
	Very stiff, brown SILTY CLAY	1		1	17 13 12	NP	12
		2		2	7 6 7	251 S	24
180.2	Loose, brown SILT						
		3		3	5 4 4	NP	26
178.7	Soft, gray CLAY	4		4	3 3 4	NP	25
		5		5	0 0 2	32 B	24
177.2	Medium stiff to stiff, gray CLAY	6		6	0 1 3	39 B	25
		7		7	1 2 2	118 B	27
		8		8	1 3 3	55 B	25
		9		9	2 1 4	165 B	21
		10		10	1 2 4	118 B	22
175.6	Boring terminated at 9.14 m	8		11	1 2 3	133 B	20
		9		12	3 4 5	189 B	19

GENERAL NOTES				WATER LEVEL DATA	
Begin Drilling	08-26-2004	Complete Drilling	08-26-2004	While Drilling ▽	1.68 m
Drilling Contractor	Groundbreaking Exploration	Drill Rig	CME45 TMR	At Completion of Drilling ▼	DRY
Driller	G&E	Logger	B. Fugiel	Time After Drilling	NA
Drilling Method	3.25-in ID HSA; Boring backfilled upon completion			Depth to Water ▽	NA
Checked by	L. Iordache			The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.	

BORING LOG TS2-1

WEI Job No.: 665-05-06

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: T36N, R14E, Cook Co.

Datum: NGVD
Elevation: 183.17 m
North: 547149.32 m
East: 362506.44 m
Station:
Offset:

Page 1 of 1

Profile Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample Type	Sample No.	SPT Values (blw/150 mm)	Qu (kPa)	Moisture Content (%)
183.2	266-mm thick ASPHALT --PAVEMENT--						
182.9	115-mm thick CRUSHED STONE --BASE COURSE--						
182.0	Medium dense, brown, medium grained SAND --FILL--	1		1	3 4 5	NP	7
	Hard, brown and gray CLAY	2		2	1 5 7	604 B	20
181.2	Medium dense, brown SILT						
		3		3	2 3 4	NP	27
180.0	Medium stiff to stiff, gray CLAY	4		4	1 3 3	NP	23
		5		5	2 3 4	94 B	29
		6		6	2 3 3	103 B	27
		7		7	1 2 2	79 B	22
176.2	Very stiff, gray CLAY	8		8	2 3 4	125 B	21
		9		9	2 3 4	165 B	21
		10		10	3 5 7	204 B	20
174.6	SAND OR SILT	8		11	4 5 6	212 B	20
173.3	Very stiff gray CLAY						
		9		12	3 5 7	204 B	20
174.0	Boring terminated at 9.14 m						

GENERAL NOTES				WATER LEVEL DATA	
Begin Drilling	08-30-2004	Complete Drilling	08-30-2004	While Drilling ▽	7.77 m
Drilling Contractor	Groundbreaking Exploration	Drill Rig	CME45 TMR	At Completion of Drilling ▼	7.62 m
Driller	G&J	Logger	H. Suhail	Time After Drilling	NA
Drilling Method	3.25-in ID HSA; Boring backfilled upon completion			Depth to Water ▽	NA
Checked by	L. Iordache			The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.	

Note:
For boring TS2-2, see Sheet No.300 of 795 sheets.

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

PROPOSED SIGN STRUCTURES
BORING LOGS TS1-1, TS1-2 & TS2-1

DATE: JUL 18, 2005
SCALE ---

HNTB

JBeauchamp
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	•	COOK	870	350
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

• (0203.1 & 0312-708W) R3 CONTRACT NO. 62108

Wang Engineering, INC.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG TS2-2

WEI Job No.: 665-05-06

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: T36N, R14E, Cook Co.

Datum: NGVD
Elevations: 183.47 m
Northx: 547150.66 m
East: 362489.25 m
Station:
Offset:

Elevation (m)	Depth (m)	SOIL AND ROCK DESCRIPTION	Sample Type	Recovery	Sample No.	SPT Values (blw/150 mm)	Qu (kPa)	Moisture Content (%)
183.1	0	330-mm thick ASPHALT --PAVEMENT--						
182.9	0.3	CRUSHED STONE AGGREGATE --BASE COURSE--						
	0.6	Very stiff, brown and gray SILTY CLAY			1	15 12 5	NP	13
	1.5				2	3 5 5	369 B	20
181.0	2.1				3	4 5 6	361 B	21
	3	Medium dense, brown SILT			4	8 9 10	NP	21
180.3	3.8	Medium stiff to stiff, gray CLAY			5	3 2 3	94 B	25
	4.5				6	3 3 3	172 B	31
178.7	5.3	Stiff, gray SILTY CLAY			7	2 4 4	103 B	19
178.0	6	Stiff, gray CLAY			8	2 3 4	189 B	21
	7.5				9	1 3 4	118 S	20
176.5	7.6	Stiff, gray SANDY CLAY with interbedded sand lenses			10	3 4 5	168 P	13
174.8	9	Stiff, gray CLAY			11	4 5 6	144 P	15
174.3	9.1	Boring terminated at 9.14 m			12	3 5 6	181 B	20

GENERAL NOTES

Begin Drilling: 08-26-2004 Complete Drilling: 08-26-2004
Drilling Contractor: Groundbreaking Exploration Drill Rig: CME45 TMR
Driller: G&E Logger: B. Fugiel Checked by: L. Iordache
Drilling Method: 3.25-in ID HSA; Boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 2.44 m
At Completion of Drilling: 8.23 m
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

BORING LOG TS3-1

WEI Job No.: 665-05-06

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: T36N, R14E, Cook Co.

Datum: NGVD
Elevations: 182.65 m
Northx: 546737.31 m
East: 362511.67 m
Station:
Offset:

Elevation (m)	Depth (m)	SOIL AND ROCK DESCRIPTION	Sample Type	Recovery	Sample No.	SPT Values (blw/150 mm)	Qu (kPa)	Moisture Content (%)
182.5	0	178-mm thick ASPHALT --PAVEMENT--						
182.3	0.2	127-mm thick CRUSHED STONE --BASE COURSE--						
182.0	0.6	Dark brown, LOAM --TOPSOIL--			1	2 4 3	NP	18
	1.1	Stiff, brown and gray CLAY			2	3 3 4	133 B	19
	1.5				3	1 3 2	118 B	30
175.5	2.1	Loose, gray SILT to SILTY LOAM with traces of organic matter			4	2 2 2	149 B	29
	3				5	0 1 1	NP	34
	3.8				6	1 0 1	NP	26
177.2	5.3	Loose, gray, fine grained SAND			7	0 1 1	NP	28
176.4	6.1	Stiff to very stiff gray CLAY			8	2 2 6	NP	22
	7.5				9	3 5 7	181 B	21
	9				10	3 6 7	236 B	20
173.5	9.1	Boring terminated at 9.14 m			11	4 5 4	212 B	20
					12	4 7 9	236 B	20

GENERAL NOTES

Begin Drilling: 08-30-2004 Complete Drilling: 08-30-2004
Drilling Contractor: Groundbreaking Exploration Drill Rig: CME45 TMR
Driller: G&J Logger: H. Suhail Checked by: L. Iordache
Drilling Method: 3.25-in ID HSA; Boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 4.11 m
At Completion of Drilling: 3.96 m
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

BORING LOG TS3-2

WEI Job No.: 665-05-06

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: T36N, R14E, Cook Co.

Datum: NGVD
Elevations: 182.78 m
Northx: 546738.73 m
East: 362494.21 m
Station:
Offset:

Elevation (m)	Depth (m)	SOIL AND ROCK DESCRIPTION	Sample Type	Recovery	Sample No.	SPT Values (blw/150 mm)	Qu (kPa)	Moisture Content (%)
182.5	0	330-mm thick ASPHALT --PAVEMENT--						
182.2	0.3	CRUSHED STONE AGGREGATE --BASE COURSE--						
	0.6	Hard, brown SILTY CLAY			1	16 8 6	NP	14
	1.5				2	4 5 7	487 B	21
180.8	2.1				3	3 6 9	NP	21
	3	Medium dense, brown SAND			4	7 11 13	NP	22
180.3	3.8	Medium dense, brown SILT			5	1 2 3	110 B	23
178.6	5.3	Stiff to very stiff, gray CLAY			6	2 3 4	157 B	20
	6				7	3 4 5	267 B	20
	7.5				8	2 4 4	181 B	20
	9				9	3 4 5	189 B	20
	10				10	3 4 5	172 B	20
173.6	9.1	Boring terminated at 9.14 m			11	3 4 5	181 B	20
					12	4 5 7	196 B	17

GENERAL NOTES

Begin Drilling: 08-26-2004 Complete Drilling: 08-26-2004
Drilling Contractor: Groundbreaking Exploration Drill Rig: CME45 TMR
Driller: G&E Logger: B. Fugiel Checked by: L. Iordache
Drilling Method: 3.25-in ID HSA; Boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 1.98 m
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

PROPOSED SIGN STRUCTURES
BORING LOGS TS2-2, TS3-1,TS3-2

DATE: JUL 18, 2005
SCALE ---

HNTB

JBeauchamp
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	•	COOK	870	351
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

• (0203.1 & 0312-708W) R3 CONTRACT NO. 62108

Wang Engineering, INC.
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Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG TS4-1

Page 1 of 1

WEI Job No.: 665-05-06

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: T36N, R14E, Cook Co.

Datum: NGVD
Elevations: 185.64 m
North: 546016.86 m
East: 362528.14 m
Station:
Offset:

Depth (m)	Elevation (m)	Soil and Rock Description
0	185.6	Very stiff to hard, brown and gray SILTY CLAY with interbedded sand --FILL--
3	182.9	Medium dense, brown LOAM --FILL--
3	182.4	Stiff, brown and gray SILTY CLAY
4	181.7	Medium dense, brown SILT
5	181.3	Medium stiff, brown SILTY CLAY LOAM Qp= 0.98 tsf
5	180.8	Very stiff, brown SILTY CLAY
7	180.1	Stiff, gray CLAY
8	179.4	Loose, gray SILT
9	178.9	Medium stiff to very stiff, gray CLAY
12	173.4	Boring terminated at 12.19 m

Sample No.	Sample Type / recovery	SPT Values (bw/150 mm)	Qu (kPa)	Moisture Content (%)
1		7 5 7	288 B	18
2		4 6 8	361 B	17
3		4 5 7	456 B	17
4		2 10 15	290 B	17
5		3 5 10	172 B	18
6		4 10 6	NP	20
7		3 3 4	212 B	26
8		3 3 6	133 B	27
9		3 4 4	NP	21
10		2 3 4	157 B	21
11		WOH WOH 2	55 B	23
12		2 2 2	133 B	22
13		WOH WOH 1	236 B	20
14		2 4 9	283 B	20

GENERAL NOTES

Begin Drilling: 09-28-2004 Complete Drilling: 09-28-2004
Drilling Contractor: Patrick Drilling Drill Rig: CME55 TMR
Driller: K&B Logger: J. Kasnick Checked by: B. Fugiel
Drilling Method: 3.25-in ID HSA; Boring grouted upon completion

WATER LEVEL DATA

While Drilling: 5.94 m
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

BORING LOG TS4-2

Page 1 of 1

WEI Job No.: 665-05-06

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: T36N, R14E, Cook Co.

Datum: NGVD
Elevations: 182.73 m
North: 546023.37 m
East: 362564.75 m
Station:
Offset:

Depth (m)	Elevation (m)	Soil and Rock Description
0	182.7	203-mm thick ASPHALT --PAVEMENT--
0	182.4	CRUSHED STONE AGGREGATE --BASE COURSE--
1	181.7	Soft to stiff, brown and gray SILTY CLAY
3	180.3	Loose, gray SILTY LOAM
4	179.8	Stiff to very stiff, gray CLAY
9	173.6	Boring terminated at 9.14 m

Sample No.	Sample Type / recovery	SPT Values (bw/150 mm)	Qu (kPa)	Moisture Content (%)
1		7 7 6	110 B	20
2		3 2 4	39 B	23
3		2 4 4	157 B	17
4		3 4 4	NP	23
5		1 3 3	118 B	21
6		1 3 5	172 B	20
7		2 3 4	153 B	20
8		2 5 5	196 B	20
9		2 5 6	212 B	21
10		3 4 6	260 B	20
11		4 6 10	299 B	20
12		3 5 8	314 B	19

GENERAL NOTES

Begin Drilling: 09-28-2004 Complete Drilling: 09-28-2004
Drilling Contractor: Patrick Drilling Drill Rig: CME55 TMR
Driller: K&B Logger: J. Kasnick Checked by: B. Fugiel
Drilling Method: 3.25-in ID HSA; Boring backfilled upon completion

WATER LEVEL DATA

While Drilling: DRY
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

BORING LOG CS-01

Page 1 of 1

WEI Job No.: 665-05-06

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: T36N, R14E, Cook Co.

Datum: NGVD
Elevations: 182.31 m
North: 547356.63 m
East: 362483.62 m
Station:
Offset:

Depth (m)	Elevation (m)	Soil and Rock Description
0	182.0	330-mm Thick ASPHALT --PAVEMENT--
0	181.7	CRUSHED STONE AGGREGATE --BASE COURSE--
1	181.0	Very stiff, black and gray SILTY CLAY --FILL--
2	180.0	Stiff to very stiff, brown SILTY CLAY
5	177.1	Stiff to very stiff, gray SILTY CLAY
8	174.0	Stiff to very stiff, gray CLAY
9	173.2	Boring terminated at 9.14 m

Sample No.	Sample Type / recovery	SPT Values (bw/150 mm)	Qu (kPa)	Moisture Content (%)
1		2 3 3 S	NP	13
2		5 6 6	335 P	27
3		3 3 4	181 B	23
4		4 6 8	314 B	28
5		3 3 4	157 B	26
6		3 5 5	322 B	15
7		3 3 4	236 S	20
8		3 4 5	172 B	21
9		3 4 5	157 B	21
10		3 3 4	125 B	20
11		WOH 4 5	189 B	19
12		4 5	283 B	19

GENERAL NOTES

Begin Drilling: 08-26-2004 Complete Drilling: 08-26-2004
Drilling Contractor: Groundbreaking Exploration Drill Rig: CME45 TMR
Driller: G&E Logger: B. Fugiel Checked by: L. Iordache
Drilling Method: 3.25-in ID HSA; Boring backfilled upon completion

WATER LEVEL DATA

While Drilling: DRY
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

PROPOSED SIGN STRUCTURES
BORING LOGS TS4-1, TS4-2, CS-01

DATE: JUL 18, 2005
SCALE ---

HNTB

JBeauchamp
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	352
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108

Wang Engineering, INC.
Consulting Geotechnical and Environmental Engineers
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1145 Main Street
Lombard, IL 60148
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Fax: 630 953-9938

BORING LOG HB-58

WEI Job No.: 665-05-01

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: Sections 25&26, T36N, R14E, Cook Co.

Datum: NGVD
Elevation: 183.03 m
North: 545996.95 m
East: 362564.59 m
Station: 204+33.45
Offset: 7.53 RT

Profile	Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample Type / recovery	Sample No.	SPT Values (blw/150 mm)	N Values (blw/150 mm)	Qu (kPa)	Moisture Content (%)
	182.7	305-mm thick, ASPHALT --PAVEMENT--							
		Hard, gray SILTY CLAY --FILL--	1		1	6 7 8		431 P	12
	180.4	Stiff to very stiff, brown and gray CLAY	2		2	11 8 6		287 P	21
			3		3	3 3 4		149 B	23
			4		4	2 4 4		157 B	21
			5		5	2 2 3		118 B	20
			6		6	2 3 3		142 B	19
			7		7	2 3 3		144 P	21
			8		8	1 2 3		133 B	20
			9		9	1 3 3		189 B	20
	171.6	Hard, gray SILTY CLAY	10		10	1 3 4		196 B	21
			11		11	3 4 6		243 B	15
			12		12	4 5 5		283 B	20
			13		13	3 8 11		275 S	18
			14		14	10 15 18		644 B	13
	170.4	Dense, gray SAND	15		15	18 28 33		NP	16
	170.2	Hard, gray SILTY CLAY							
	169.4	Very dense, gray SILT							

GENERAL NOTES

Begin Drilling: 03-26-2002 Complete Drilling: 03-26-2002
Drilling Contractor: Patrick Drilling Drill Rig: CME 75
Driller: K & C Logger: E. Datz Checked by: N. Davis
Drilling Method: 3.25-inch ID HSA, Boring grouted after completion.

WATER LEVEL DATA

While Drilling: ▽ 12.50 m
At Completion of Drilling: ▼ 6.71 m
Time After Drilling: NA
Depth to Water: ▽ NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Wang Engineering, INC.
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Fax: 630 953-9938

BORING LOG HB-58

WEI Job No.: 665-05-01

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: Sections 25&26, T36N, R14E, Cook Co.

Datum: NGVD
Elevation: 183.03 m
North: 545996.95 m
East: 362564.59 m
Station: 204+33.45
Offset: 7.53 RT

Profile	Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample Type / recovery	Sample No.	SPT Values (blw/150 mm)	N Values (blw/150 mm)	Qu (kPa)	Moisture Content (%)
	167.8	Boring terminated at 15.24 m	15		16	11 25 49		NP	18

GENERAL NOTES

Begin Drilling: 03-26-2002 Complete Drilling: 03-26-2002
Drilling Contractor: Patrick Drilling Drill Rig: CME 75
Driller: K & C Logger: E. Datz Checked by: N. Davis
Drilling Method: 3.25-inch ID HSA, Boring grouted after completion

WATER LEVEL DATA

While Drilling: ▽ 12.50 m
At Completion of Drilling: ▼ 6.71 m
Time After Drilling: NA
Depth to Water: ▽ NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

PROPOSED SIGN STRUCTURES
BORING LOGS HB-58

DATE: JUL 18, 2005
SCALE ___

HNTB

JReynolds
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	*	COOK	870	352A
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT-	

* (0203.1 & 0312-708W) R3 CONTRACT NO. 62108

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Lombard, IL 60148
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Faxs 630 953-9938

BORING LOG HB-64

WEI Job No.: 665-05-01

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: Sections 25&26, T36N, R14E, Cook Co.

Datum: NGVD
Elevation: 182.09 m
North: 545986.62 m
East: 362545.01 m
Station: 440+718.24
Offset: 0.38 LT

Profile	Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample Type / recovery	Sample No.	SPT Values (bw/150 mm)	Qu (kPa)	Moisture Content (%)
	181.9	Dark brown SILTY CLAY LOAM --TOPSOIL--						
		Very stiff, brown CLAY to SILTY CLAY			1	2 4 6	359	19
			1		2	2 5 6	>431	18
			2		3	3 5 8	196	19
			3		4	2 4 4	243	19
	178.7	Very stiff, gray CLAY	4		5	1 2 3	157	21
			5		6	1 2 4	118	21
			6		7	3 3 4	125	21
			7		8	3 3 4	142	22
			8		9	2 4 5	196	21
			9		10	2 4 6	212	20

Profile	Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample Type / recovery	Sample No.	N Values (bw/150 mm)	Qu (kPa)	Moisture Content (%)
			8		11	4 5 6	283	18
			9		12	3 5 7	260	19
	172.4	Very stiff, gray SILTY CLAY	10		13	5 10 15	361	15
	170.9	Dense, gray SILT	11		14	20 25 24	NP	15
	169.6	Very dense, gray gravelly SAND	12		15	12 21 50/102	NP	11
			13					
			14					
			15					

GENERAL NOTES				WATER LEVEL DATA	
Begin Drilling	11-28-2002	Complete Drilling	11-28-2002	While Drilling	12.65 m
Drilling Contractor	Patrick Drilling	Drill Rig	CME 75	At Completion of Drilling	12.50 m
Driller	K & C	Logger	B. Fugiel	Time After Drilling	NA
Drilling Method	3.25-inch ID HSA, Boring grouted after completion	Checked by	E. Datz	Depth to Water	NA

The stratification lines represent the approximate boundary between soil types, the actual transition may be gradual.

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1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Faxs 630 953-9938

BORING LOG HB-64

WEI Job No.: 665-05-01

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: Sections 25&26, T36N, R14E, Cook Co.

Datum: NGVD
Elevation: 182.09 m
North: 545986.62 m
East: 362545.01 m
Station: 440+718.24
Offset: 0.38 LT

Profile	Elevation (m)	SOIL AND ROCK DESCRIPTION	Depth (m)	Sample Type / recovery	Sample No.	SPT Values (bw/150 mm)	Qu (kPa)	Moisture Content (%)
			16					
	165.9	Boulder-size DOLOSTONE clast --Recovery: 58%-- --RQD= 58%--	17		17			
	164.4	Hard, gray SILTY CLAY with cobbles	18					
	163.9	Boring terminated at 18.19 m	19					
			20					
			21					
			22					

GENERAL NOTES				WATER LEVEL DATA	
Begin Drilling	11-28-2002	Complete Drilling	11-28-2002	While Drilling	12.65 m
Drilling Contractor	Patrick Drilling	Drill Rig	CME 75	At Completion of Drilling	12.50 m
Driller	K & C	Logger	B. Fugiel	Time After Drilling	NA
Drilling Method	3.25-inch ID HSA, Boring grouted after completion	Checked by	E. Datz	Depth to Water	NA

The stratification lines represent the approximate boundary between soil types, the actual transition may be gradual.

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

PROPOSED SIGN STRUCTURES
BORING LOGS HB-64

DATE: JUL 18, 2005
SCALE ---

HNTB

JReuschem
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08-JUL-2005 15:33

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 80/94	•	COOK	870	352B
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

• (0203.1 & 0312-708W) R3 CONTRACT NO. 62108

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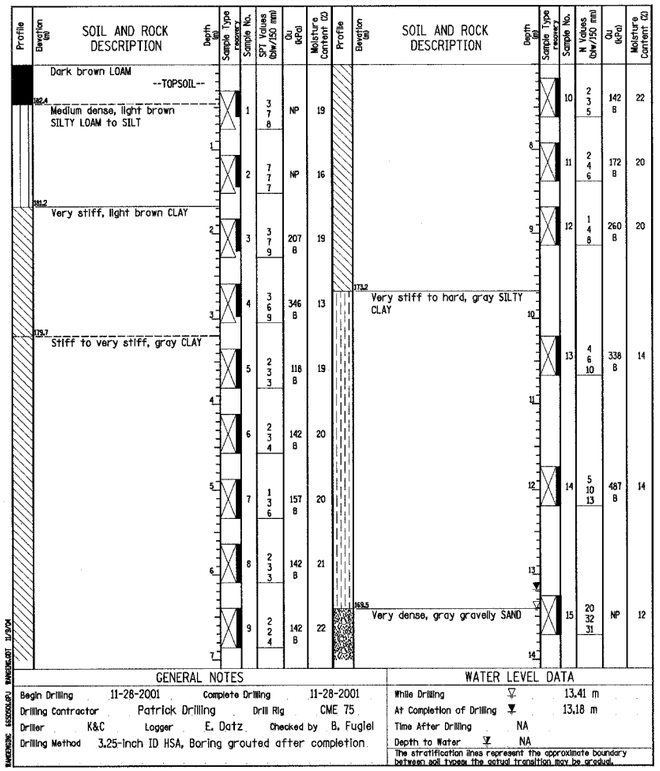
Page 1 of 2

BORING LOG HB-65

WEI Job No.: 665-05-01

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: Sections 25&26, T36N, R14E, Cook Co.

Datum NGVD
Elevations 182.89 m
Norths 546003.31 m
Easts 362533.09 m
Stations 440+744.66
Offsets 7.23 LT



GENERAL NOTES				WATER LEVEL DATA		
Begin Drilling	11-28-2001	Complete Drilling	11-28-2001	While Drilling	▽	13.41 m
Drilling Contractor	Patrick Drilling	Drill Rig	CME 75	At Completion of Drilling	▼	13.18 m
Driller	K&C	Logger	E. Datz	Time After Drilling		NA
Drilling Method	3.25-inch ID HSA, Boring grouted after completion.		Checked by B. Fuglel	Depth to Water	▽	NA

The stratification lines represent the approximate boundary between soil types the actual transition may be gradual.

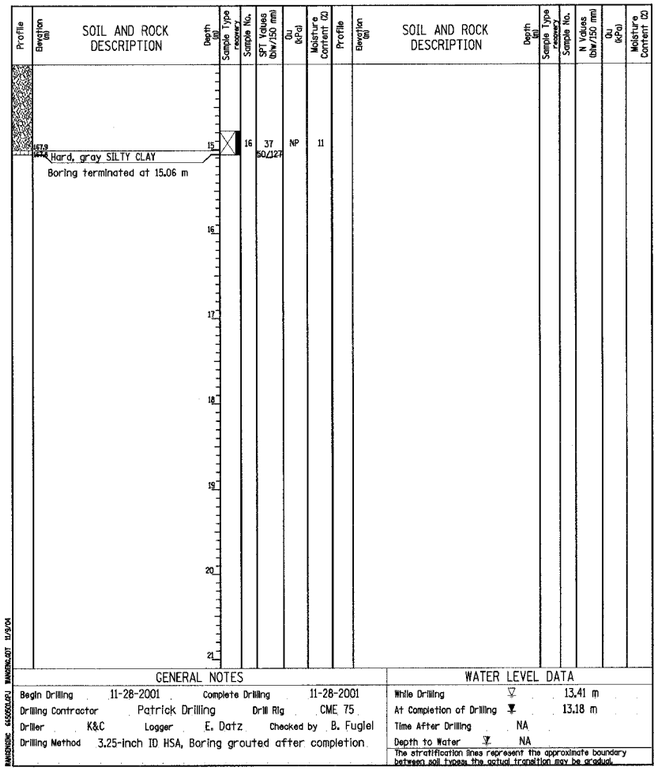
Page 2 of 2

BORING LOG HB-65

WEI Job No.: 665-05-01

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: Sections 25&26, T36N, R14E, Cook Co.

Datum NGVD
Elevations 182.89 m
Norths 546003.31 m
Easts 362533.09 m
Stations 440+744.66
Offsets 7.23 LT



GENERAL NOTES				WATER LEVEL DATA		
Begin Drilling	11-28-2001	Complete Drilling	11-28-2001	While Drilling	▽	13.41 m
Drilling Contractor	Patrick Drilling	Drill Rig	CME 75	At Completion of Drilling	▼	13.18 m
Driller	K&C	Logger	E. Datz	Time After Drilling		NA
Drilling Method	3.25-inch ID HSA, Boring grouted after completion.		Checked by B. Fuglel	Depth to Water	▽	NA

The stratification lines represent the approximate boundary between soil types the actual transition may be gradual.

Wang Engineering, INC.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

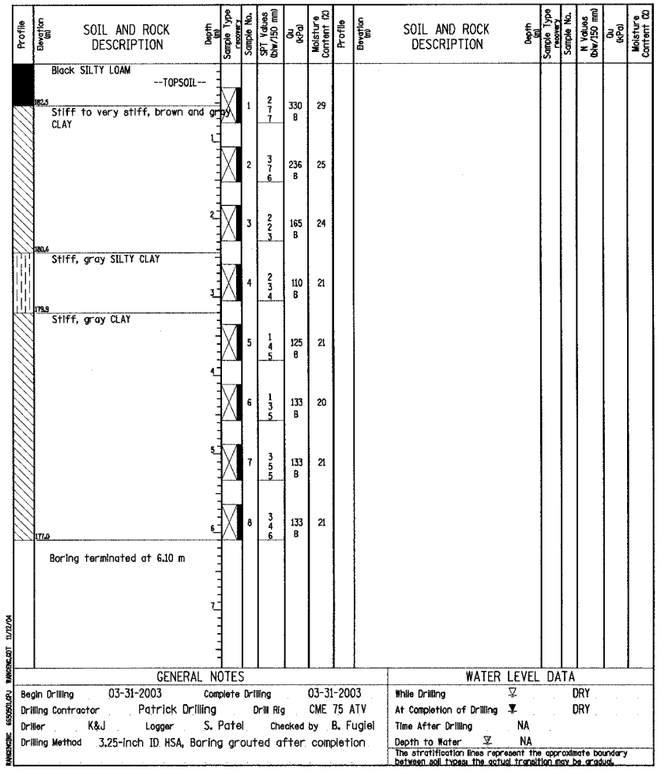
Page 1 of 1

BORING LOG HL-07

WEI Job No.: 665-05-01

Client: HNTB Corporation
Project: IL 394 (FAP 94) IDOT D-91-012-01
Location: Sections 25&26, T36N, R14E, Cook Co.

Datum NGVD
Elevations 183.07 m
Norths 546013.20 m
Easts 362546.29 m
Stations 440+750
Offsets 11.75 RT



GENERAL NOTES				WATER LEVEL DATA		
Begin Drilling	03-31-2003	Complete Drilling	03-31-2003	While Drilling	▽	DRY
Drilling Contractor	Patrick Drilling	Drill Rig	CME 75 ATV	At Completion of Drilling	▼	DRY
Driller	K&J	Logger	S. Patel	Time After Drilling		NA
Drilling Method	3.25-inch ID HSA, Boring grouted after completion.		Checked by B. Fuglel	Depth to Water	▽	NA

The stratification lines represent the approximate boundary between soil types the actual transition may be gradual.

DESIGNED	PY
CHECKED	DD
DRAWN	LK
CHECKED	DD

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-80/94/US 6 (KINGERY EXPRESSWAY)

PROPOSED SIGN STRUCTURES
BORING LOGS HB-65 & HL-07

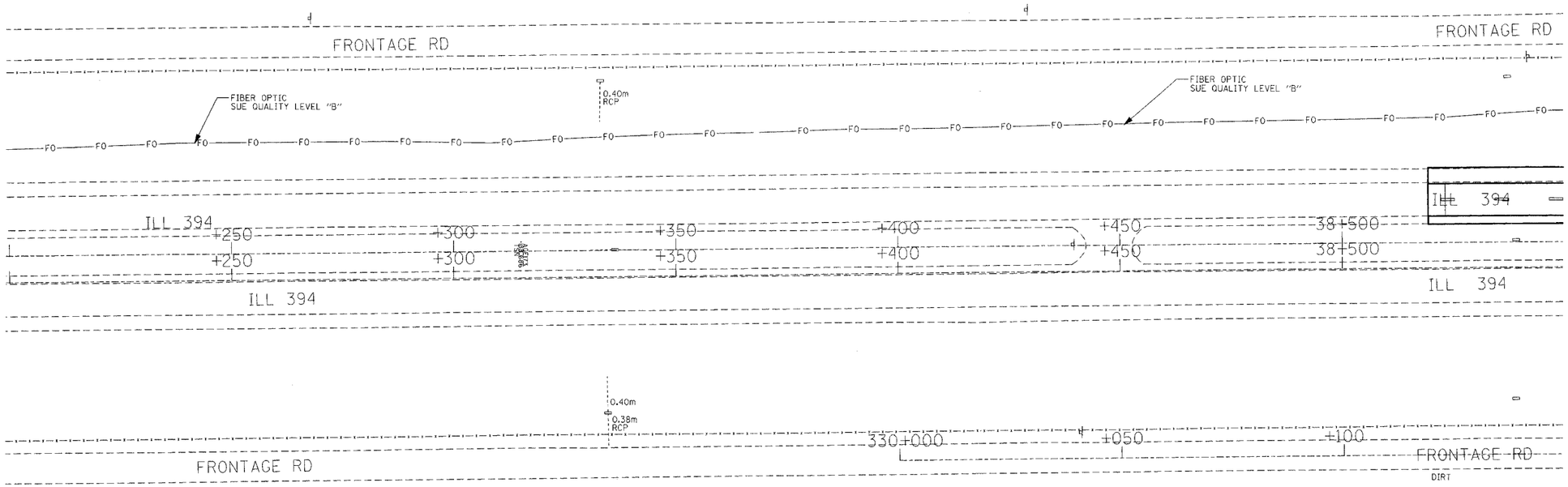
DATE: JUL 18, 2005
SCALE ---

HNTB

JReynhams
ER\34562\CADD\bs1\Signs\Contract19\cds\bp190814a.dgn
29-JUL-2005 15:33

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	353
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



T	TELEPHONE
W	WATER
G	GAS
CTV	CABLE TELEVISION
FO	FIBER OPTIC
E	ELECTRIC

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TBE SUE PAGE NO: 6 of 52
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205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970

SUE Quality Level "A" : Test Holes
SUE Quality Level "B" : Designating

Utilities shown on these plans as depicted in the legend have been investigated by TBE Group, Inc in accordance with SUE Industry Standards as of 2/8/02.
All other information shown has been provided to TBE Group, Inc by others.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

E.of IL RT.83/US RT.6 to E.Burnham Ave.
I-80/I-94 Burnham Ave. to State Line
I-80/I-94 (Tollway)E.of I-94 to W. of RT.83/US 6.
I-94/IL RT. 394 S.of US 6 to 186th Street(N.bound & S.bound)

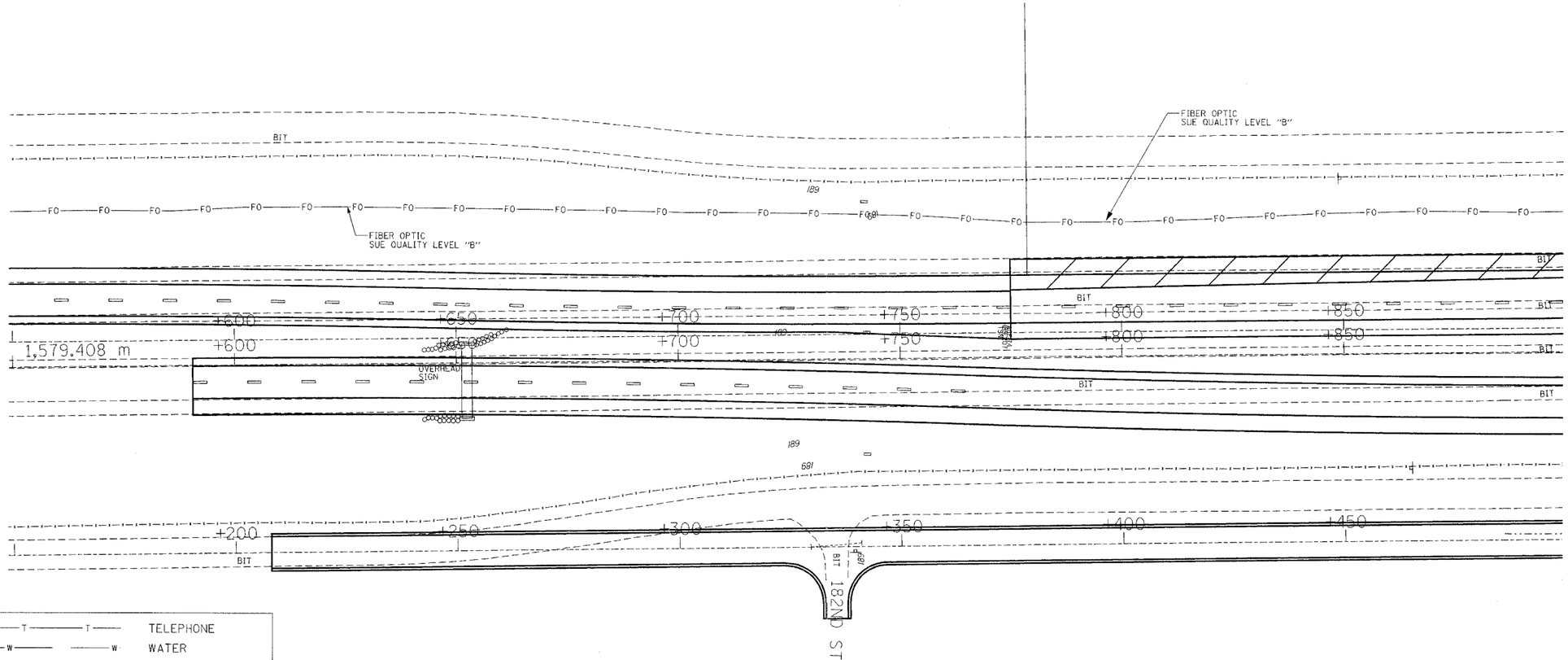
Contract No. 62110, 62111,62114,62105,62107,62108

SCALE : 500 DRAWN BY : JAC

SOL "B" DATE : 2/8/02 CHECKED BY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	354
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



T	TELEPHONE
W	WATER
G	GAS
CTV	CABLE TELEVISION
FO	FIBER OPTIC
E	ELECTRIC

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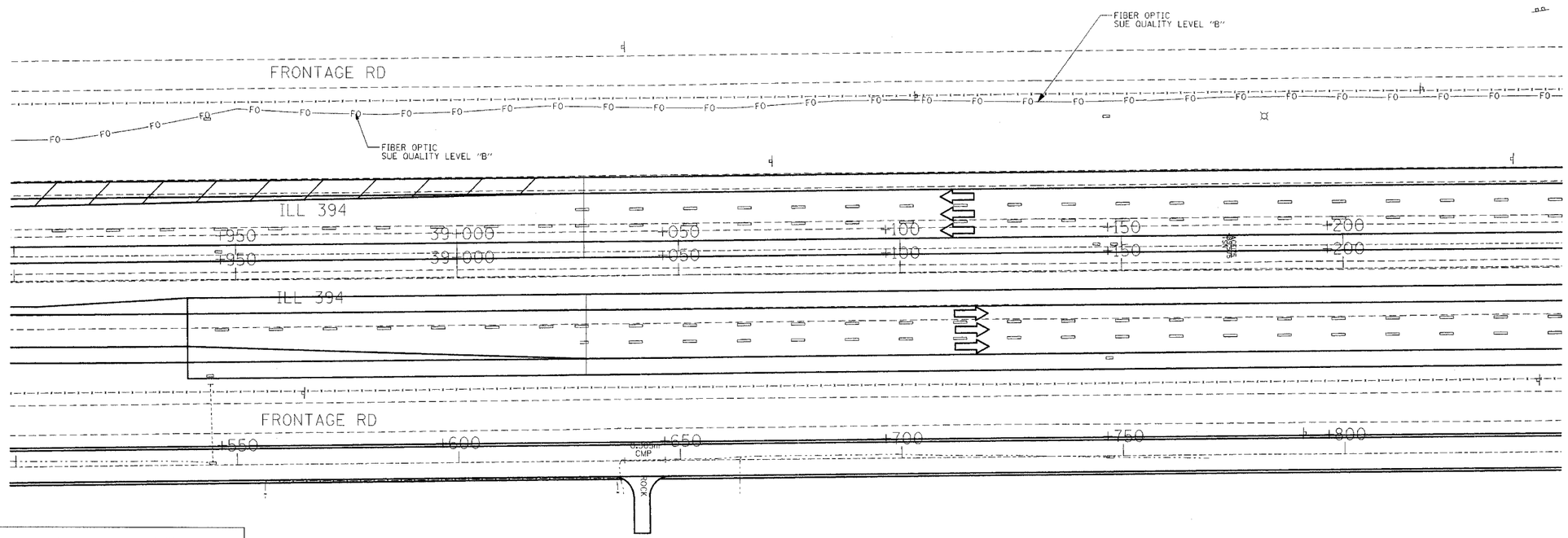
Contract No. 62110, 62111,62114,62105,62107,62108

SCALE : 500 DRAWN BY : JAC

SQL "B" DATE : 2/8/02 CHECKED BY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	355
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



T T	TELEPHONE
W W	WATER
G G	GAS
CTV CTV CTV	CABLE TELEVISION
FO FO FO	FIBER OPTIC
E E	ELECTRIC

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DYNASTY GROUP, INC. SURVEYORS AND SURVEYORS

205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

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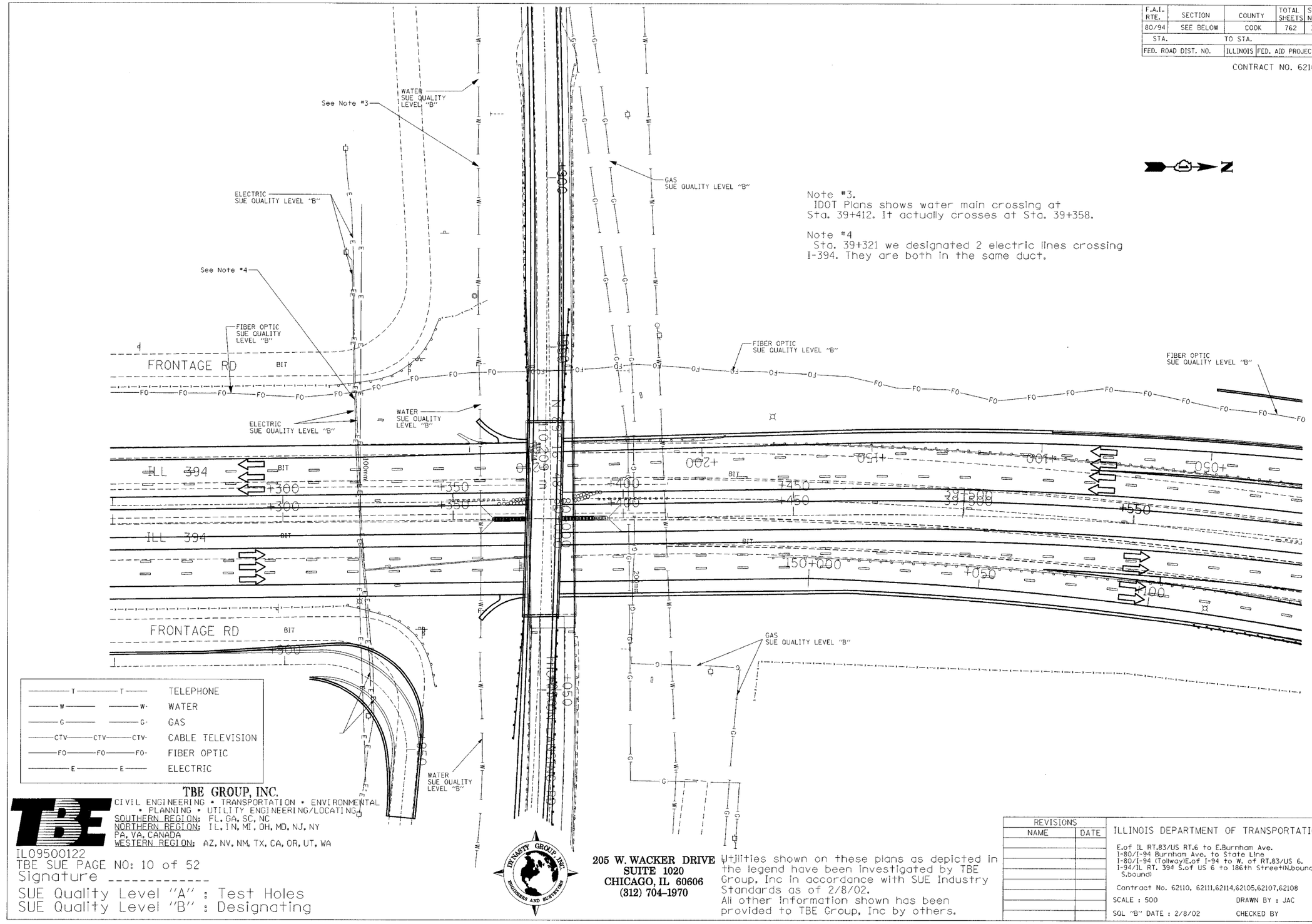
Contract No. 62110, 62111,62114,62105,62107,62108

SCALE : 500 DRAWN BY : JAC

SQL "B" DATE : 2/8/02 CHECKED BY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	356
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



Note #3.
IDOT Plans shows water main crossing at Sta. 39+412. It actually crosses at Sta. 39+358.

Note #4
Sta. 39+321 we designated 2 electric lines crossing I-394. They are both in the same duct.

——T——T——	TELEPHONE
——W——W——	WATER
——G——G——	GAS
——CTV——CTV——CTV——	CABLE TELEVISION
——FO——FO——FO——	FIBER OPTIC
——E——E——	ELECTRIC

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SUITE 1020
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SCALE : 500
DRAWN BY : JAC
SQL "B" DATE : 2/8/02
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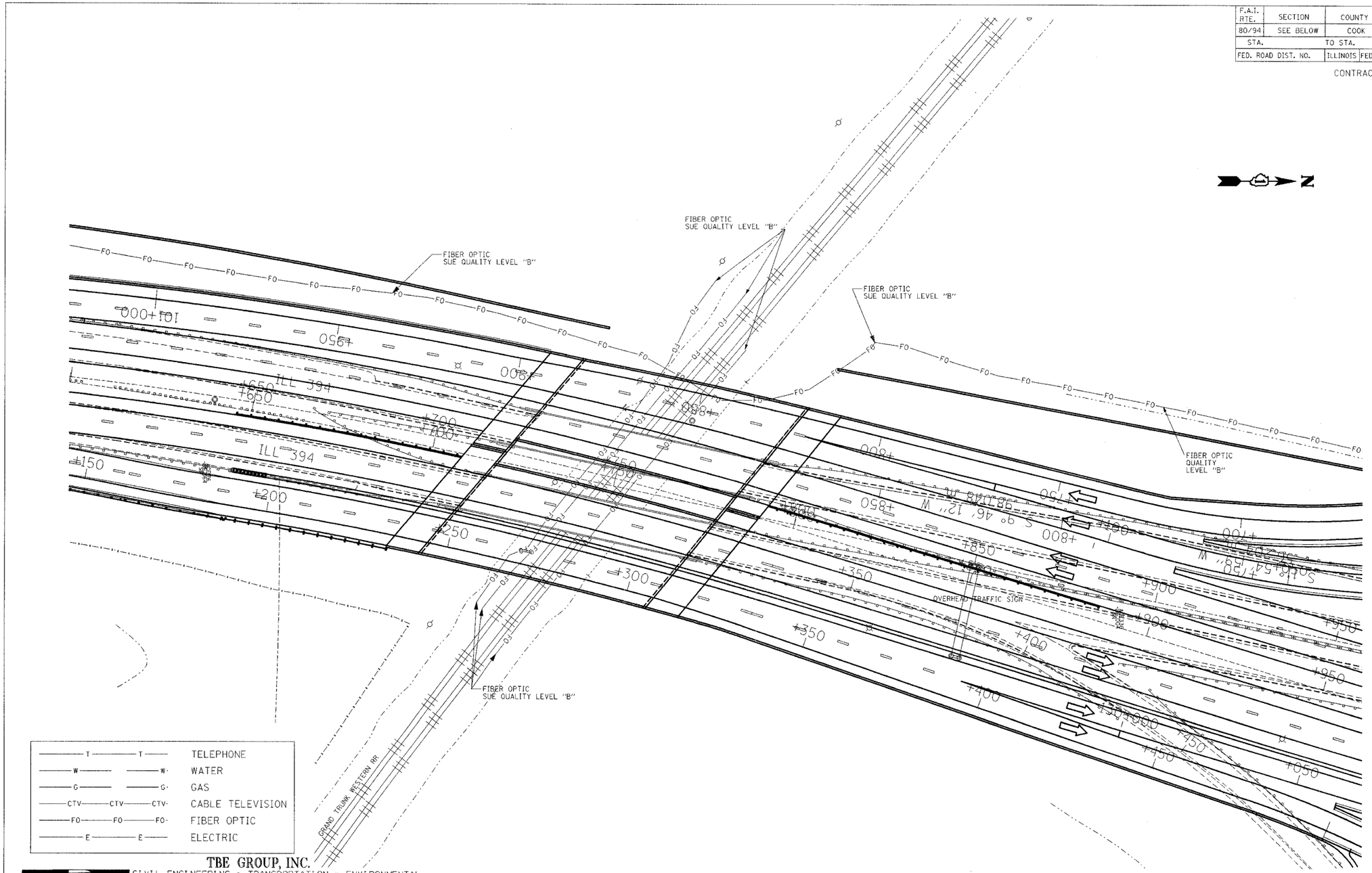
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	357
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



——T——T——	TELEPHONE
——W——W—	WATER
——G——G—	GAS
——CTV——CTV——CTV—	CABLE TELEVISION
——FO——FO——FO—	FIBER OPTIC
——E——E——	ELECTRIC

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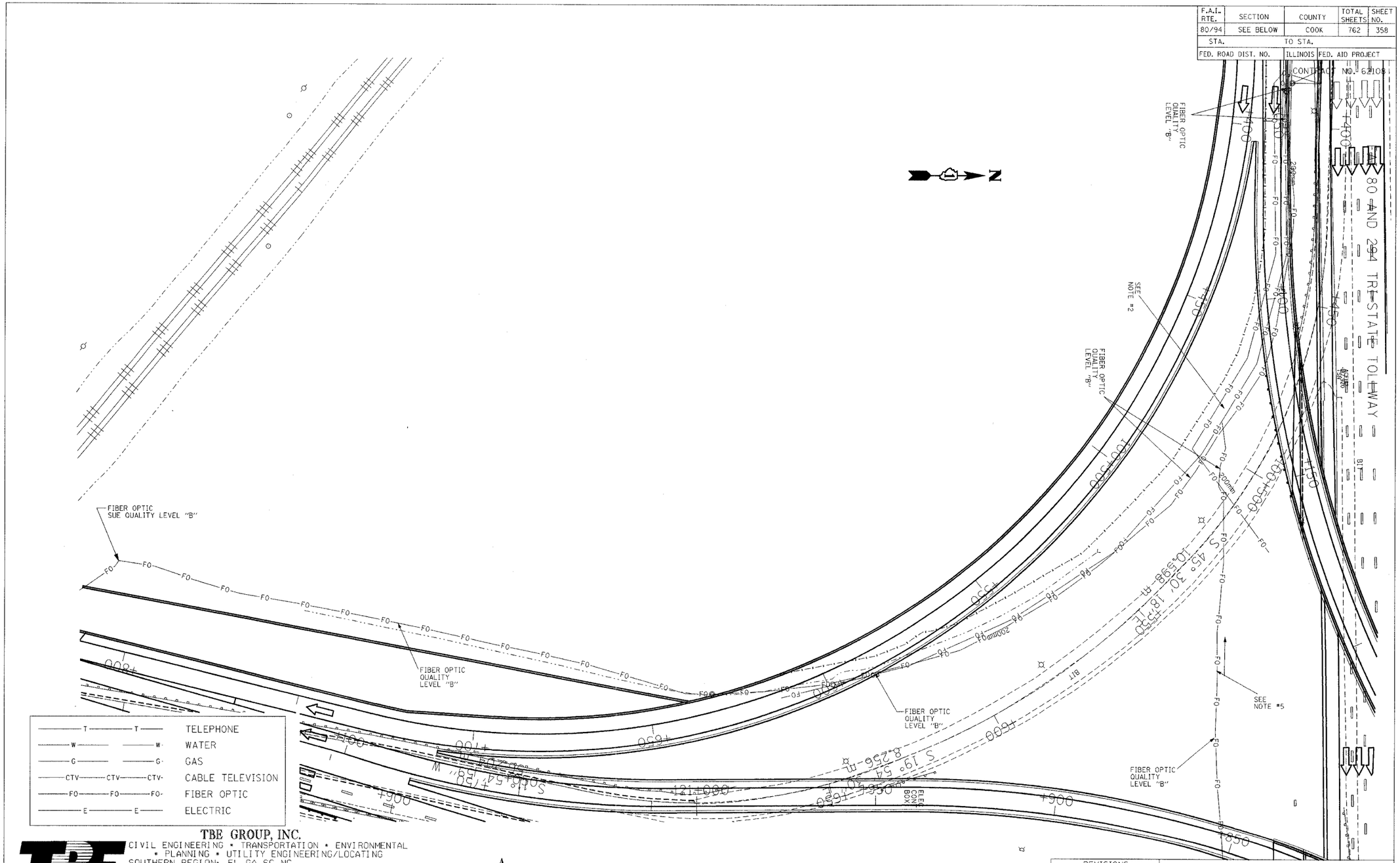
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	358
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



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DYNASTY GROUP, INC. ENGINEERS AND SURVEYORS

205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970

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Contract No. 62110, 62111,62114,62105,62107,62108

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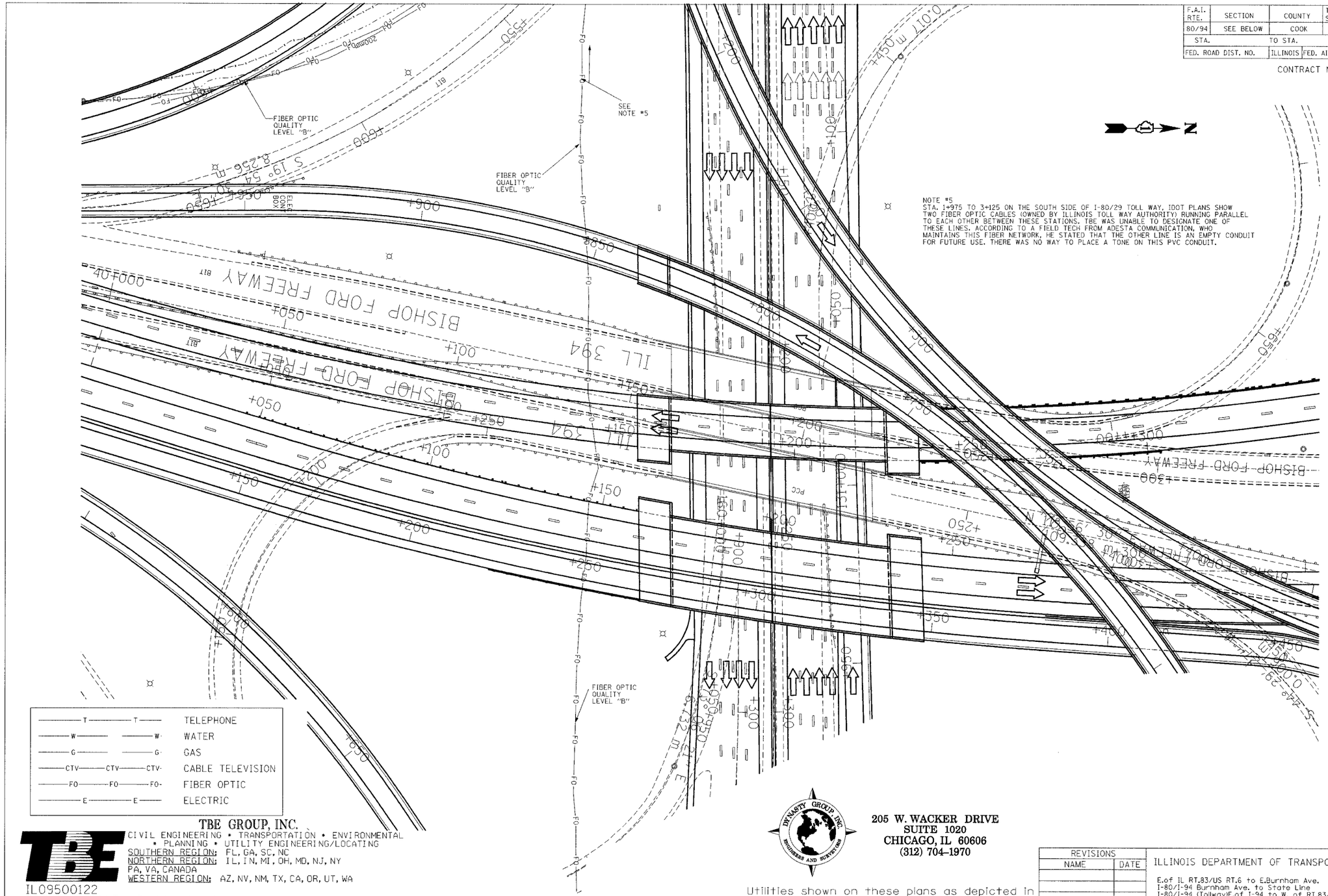
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	359
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



T T	TELEPHONE
W W	WATER
G G	GAS
CTV CTV CTV	CABLE TELEVISION
FO FO FO	FIBER OPTIC
E E	ELECTRIC

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TBE SUE PAGE NO: 14 of 52
Signature _____
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205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970

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ILLINOIS DEPARTMENT OF TRANSPORTATION

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I-80/I-94 Burnham Ave. to State Line
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I-94/IL RT. 394 S.of US 6 to 186th Street(N.bound & S.bound)

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SCALE : 500 DRAWN BY : JAC

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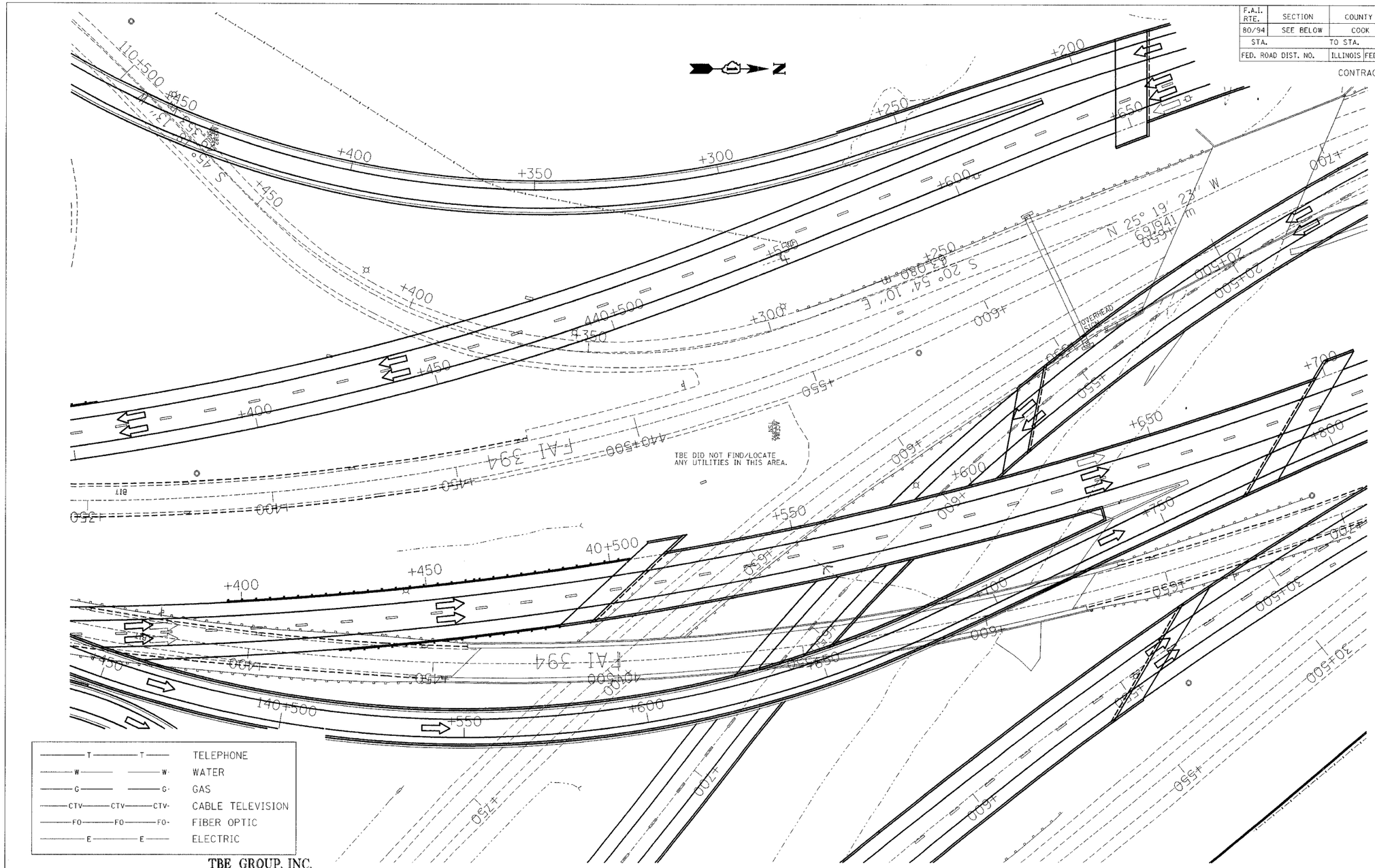
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	360
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



——T——T——	TELEPHONE
——W——W—	WATER
——G——G—	GAS
—CTV—CTV—CTV—	CABLE TELEVISION
—FO—FO—FO—	FIBER OPTIC
——E——E——	ELECTRIC

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SCALE : 500
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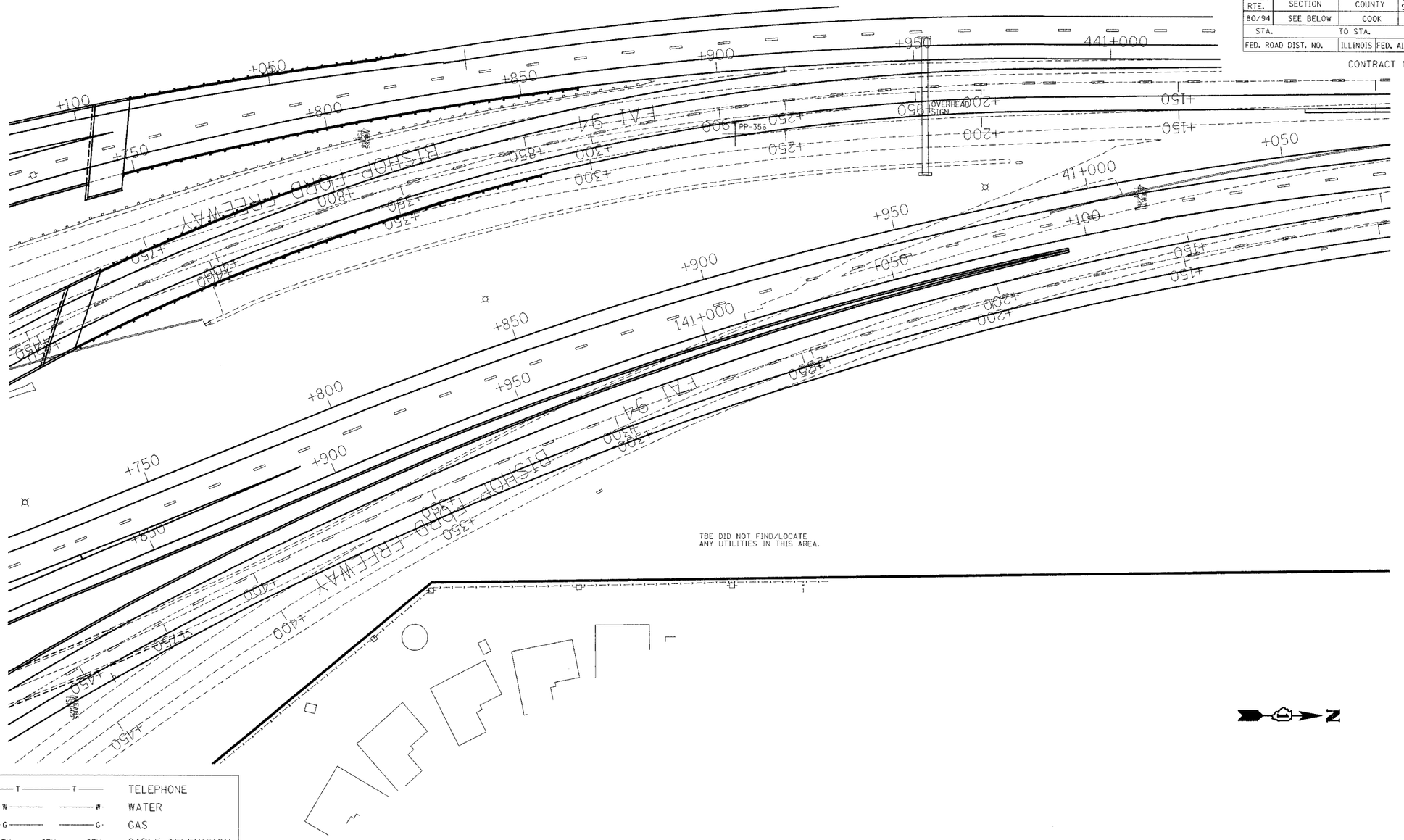
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	361
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



—T—T—	TELEPHONE
—W— —W—	WATER
—G— —G—	GAS
—CTV—CTV—CTV—	CABLE TELEVISION
—FO—FO—FO—	FIBER OPTIC
—E—E—	ELECTRIC

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205 W. WACKER DRIVE
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I-94/IL RT. 394 S.of US 6 to 186th Street(N.bound & S.bound)

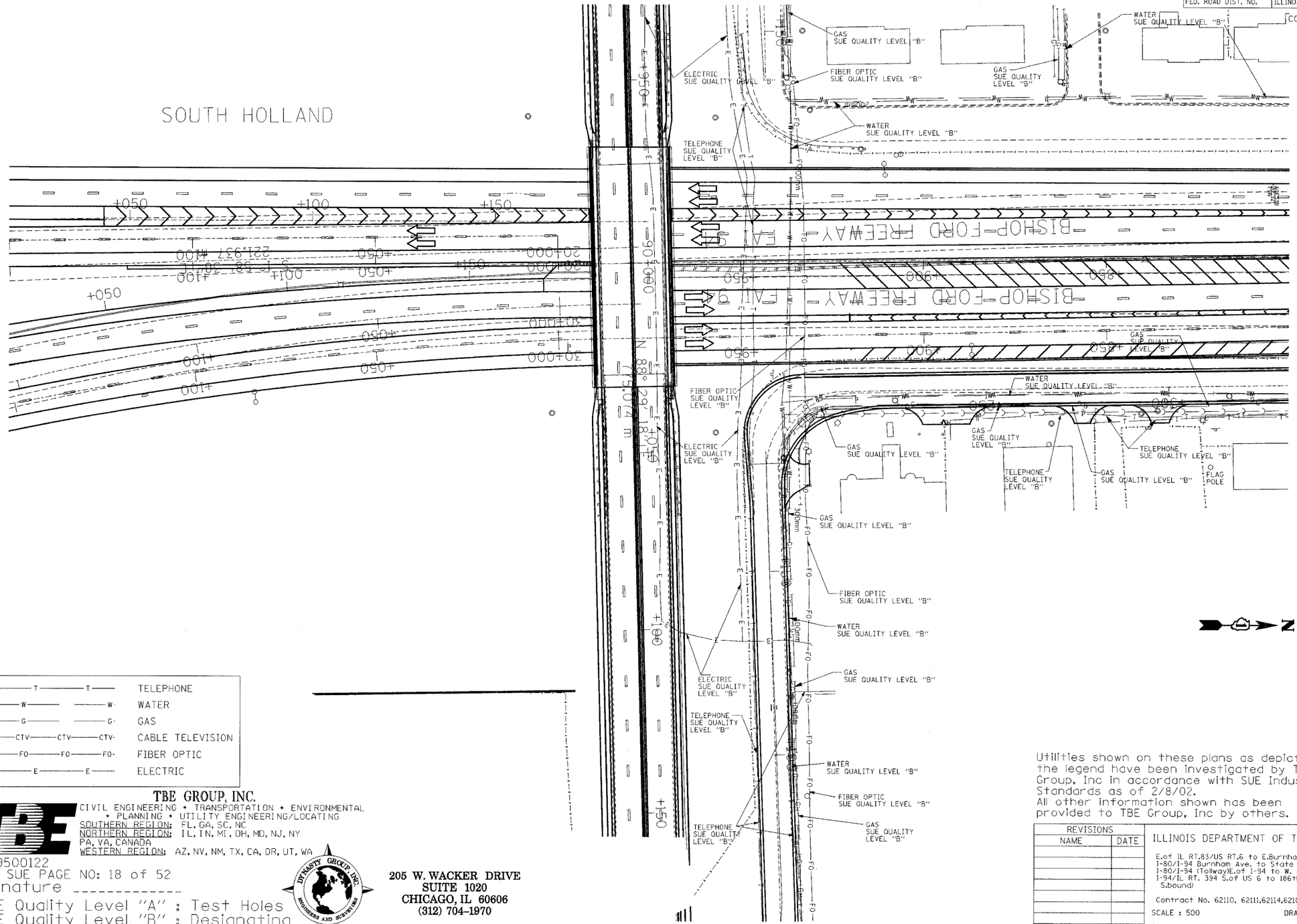
Contract No. 62110, 62111,62114,62105,62107,62108

SCALE : 500 DRAWN BY : JAC

SOL "B" DATE : 2/8/02 CHECKED BY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	362
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



T T	TELEPHONE
W W	WATER
G G	GAS
CTV CTV CTV	CABLE TELEVISION
FO FO FO	FIBER OPTIC
E E	ELECTRIC

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DYNASTY GROUP INC. ENGINEERS AND SURVEYORS

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CHICAGO, IL 60606
(312) 704-1970

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

E.of IL RT.83/US RT.6 to E.Burnham Ave.
I-80/I-94 Burnham Ave. to State Line
I-80/I-94 (Tollway)E.of I-94 to W. of RT.83/US 6.
I-94/IL RT. 394 S.of US 6 to 186th StreetN.bound & S.bound

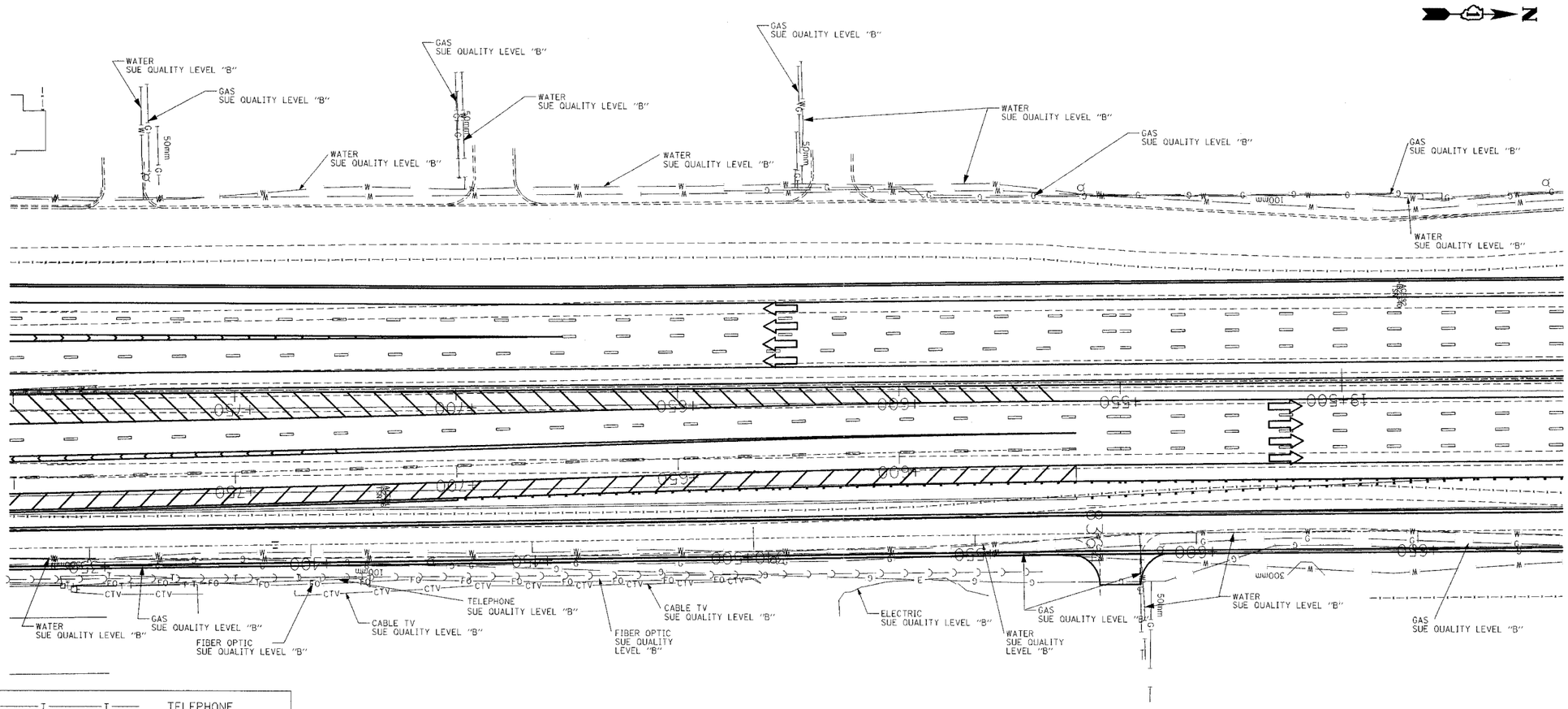
Contract No. 62110, 62111,62114,62105,62107,62108

SCALE : 500 DRAWN BY : JAC

SQL "B" DATE : 2/8/02 CHECKED BY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	363
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62108



——T——T——	TELEPHONE
——W——W·	WATER
——G——G·	GAS
——CTV——CTV——CTV-	CABLE TELEVISION
——FO——FO——FO-	FIBER OPTIC
——E——E——	ELECTRIC

TBE GROUP, INC.

CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL
* PLANNING * UTILITY ENGINEERING/LOCATING
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NORTHERN REGION: IL, IN, MI, OH, MD, NJ, NY
PA, VA, CANADA
WESTERN REGION: AZ, NV, NM, TX, CA, OR, UT, WA

IL09500122
TBE SUE PAGE NO: 20 of 52
Signature _____________

SUE Quality Level "A" : Test Holes
SUE Quality Level "B" : Designating

DYNASTY GROUP, INC.
ENGINEERS AND SURVEYORS

205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970

Utilities shown on these plans as depicted in the legend have been investigated by TBE Group, Inc in accordance with SUE Industry Standards as of 2/8/02.
All other information shown has been provided to TBE Group, Inc by others.

REVISIONS	
NAME	DATE

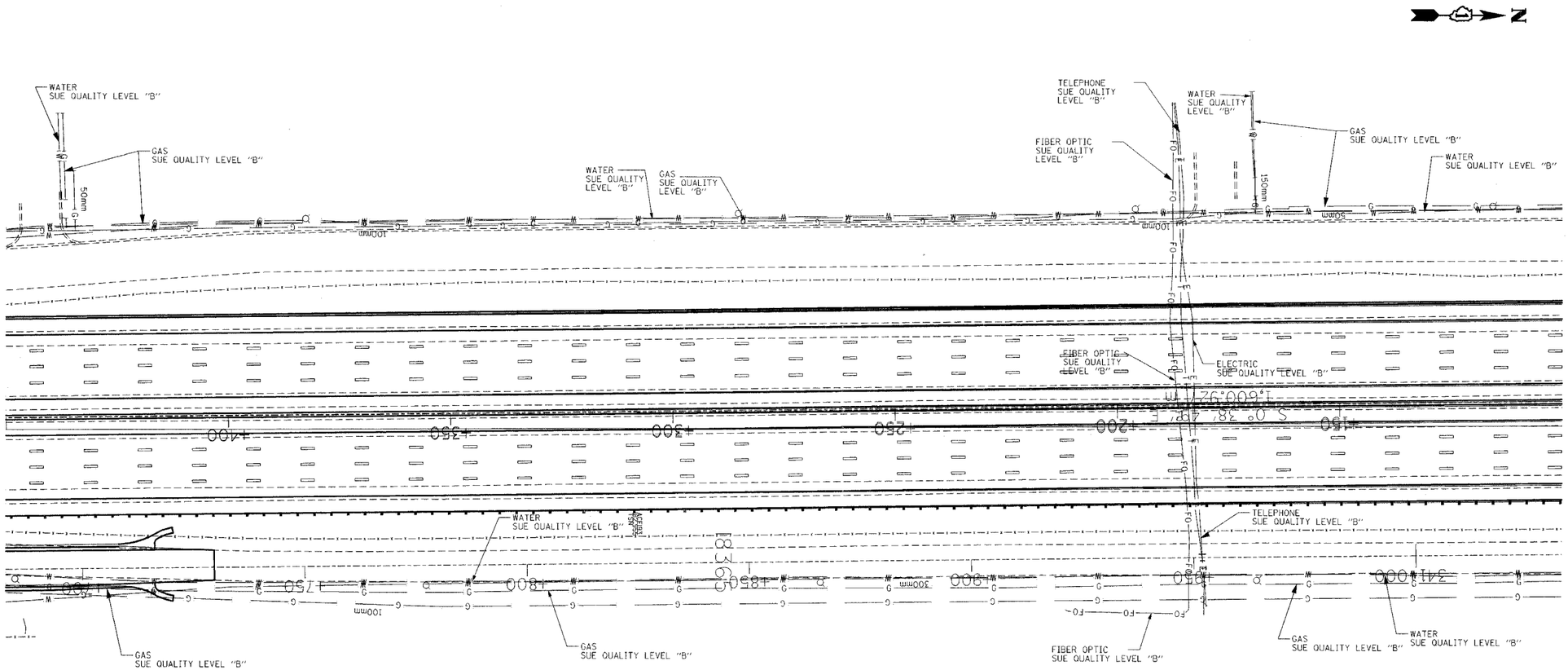
ILLINOIS DEPARTMENT OF TRANSPORTATION

E.of IL RT.83/US RT.6 to E.Burnham Ave.
I-80/I-94 Burnham Ave. to State Line
I-80/I-94 (Tollway)E.of I-94 to W. of RT.83/US 6.
I-94/IL RT. 394 S.of US 6 to 186th Street(N.bound & S.bound)

Contract No. 62110, 62111,62114,62105,62107,62108
SCALE : 500
DRAWN BY : JAC
SQL "B" DATE : 2/8/02
CHECKED BY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	364
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



T T	TELEPHONE
W W	WATER
G G	GAS
CTV CTV CTV	CABLE TELEVISION
FO FO FO	FIBER OPTIC
E E	ELECTRIC

TBE GROUP, INC.

CIVIL ENGINEERING • TRANSPORTATION • ENVIRONMENTAL • PLANNING • UTILITY ENGINEERING/LOCATING

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WESTERN REGION: AZ, NV, NM, TX, CA, OR, UT, WA

IL09500122

205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970

TBE SUE PAGE NO: 21 of 52

Signature _____

SUE Quality Level "A" : Test Holes

SUE Quality Level "B" : Designating

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

E.of IL RT.83/US RT.6 to E.Burnham Ave.
I-80/I-94 Burnham Ave. to State Line
I-80/I-94 (Tollway)E.of I-94 to W. of RT.83/US 6.
I-94/IL RT. 394 S.of US 6 to 186th Street(N.bound & S.bound)

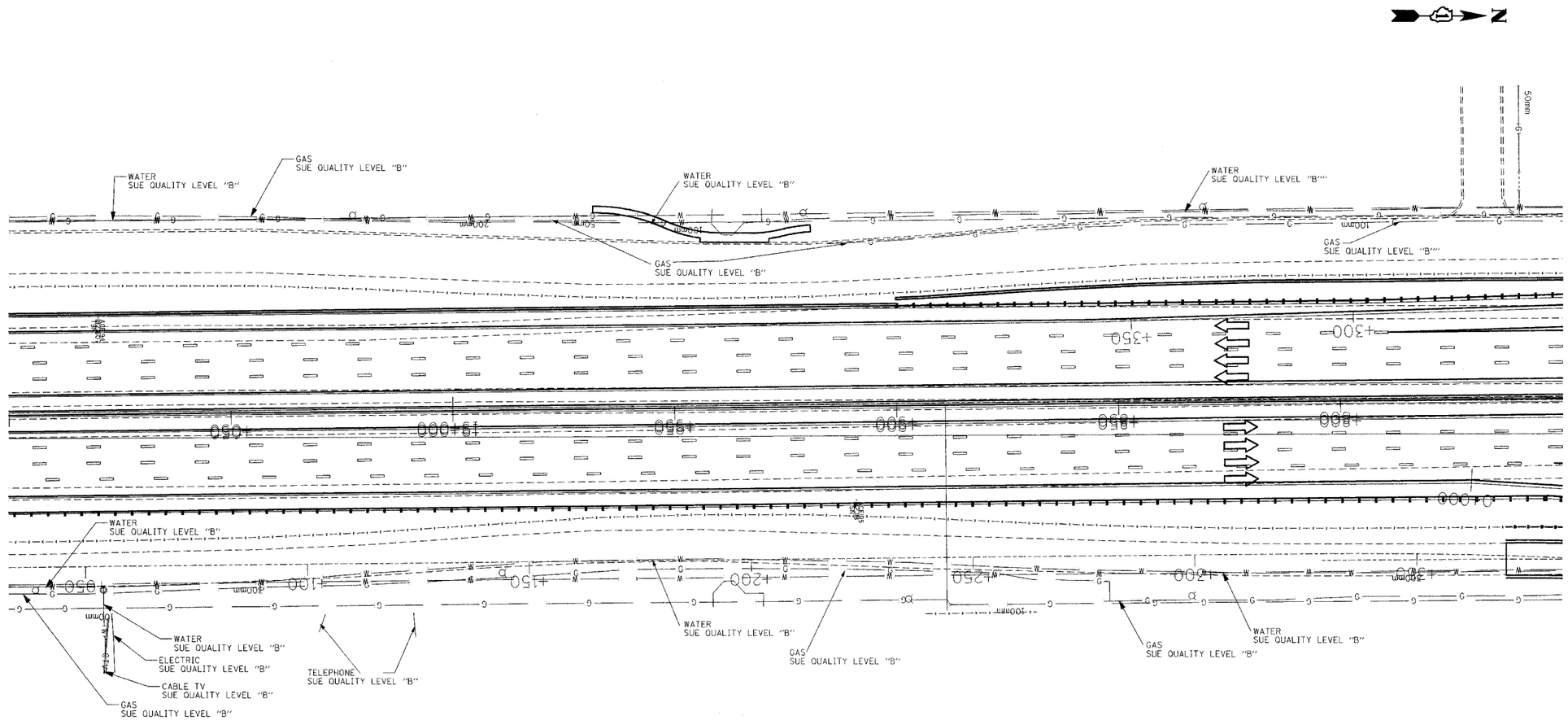
Contract No. 62110, 62111,62114,62105,62107,62108

SCALE : 500 DRAWN BY : JAC

SQL "B" DATE : 2/8/02 CHECKED BY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	365
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



T T	TELEPHONE
W W	WATER
G G	GAS
CTV CTV CTV	CABLE TELEVISION
FO FO FO	FIBER OPTIC
E E	ELECTRIC

TBE GROUP, INC.

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WESTERN REGION: AZ, NV, NM, TX, CA, OR, UT, WA

IL09500122

TBE SUE PAGE NO: 22 of 52

Signature _____

SUE Quality Level "A" : Test Holes
SUE Quality Level "B" : Designating

DYNASTY GROUP, INC. ENGINEERS AND SURVEYORS

205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970

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REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

E.of IL RT.83/US RT.6 to E.Burnham Ave.
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I-80/I-94 (Tollway)E.of I-94 to W. of RT.83/US 6.
I-94/IL RT. 394 S.of US 6 to 186th Street(N.bound & S.bound)

Contract No. 62110, 62111,62114,62105,62107,62108

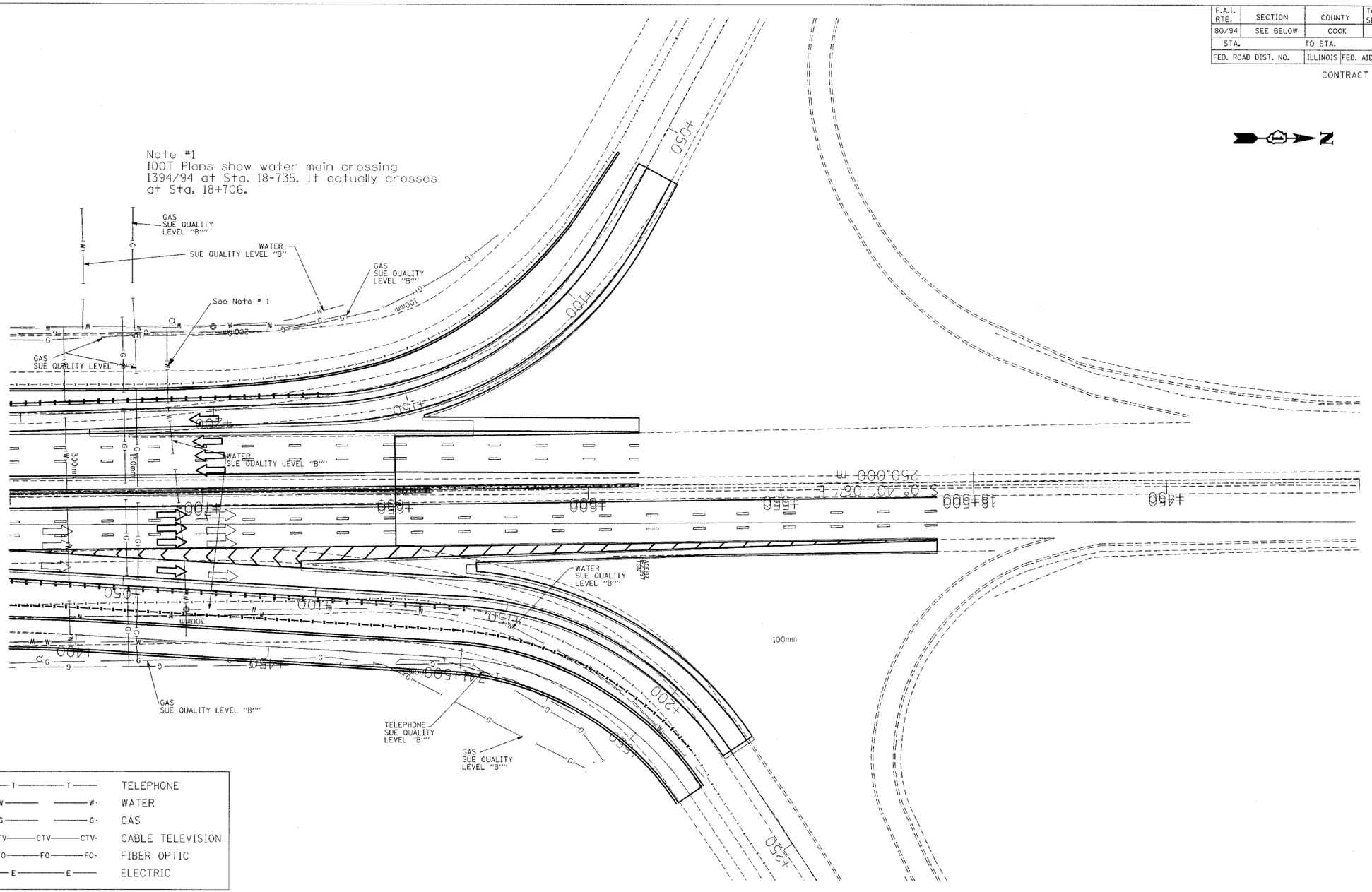
SCALE : 500 DRAWN BY : JAC

SQL "B" DATE : 2/8/02 CHECKED BY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	366
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108

Note #1
IDOT Plans show water main crossing I394/94 at Sta. 18-735. It actually crosses at Sta. 18+706.



T T	TELEPHONE
W W	WATER
G G	GAS
CTV CTV CTV	CABLE TELEVISION
FO FO FO	FIBER OPTIC
E E	ELECTRIC

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DYNASTY GROUP INC. ENGINEERS AND SURVEYORS

205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970

IL09500122
TBE SUE PAGE NO: 23 of 52
Signature _____
SUE Quality Level "A" : Test Holes
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I-94/IL RT. 394 S.of US 6 to 186th Street(N.bound & S.bound)

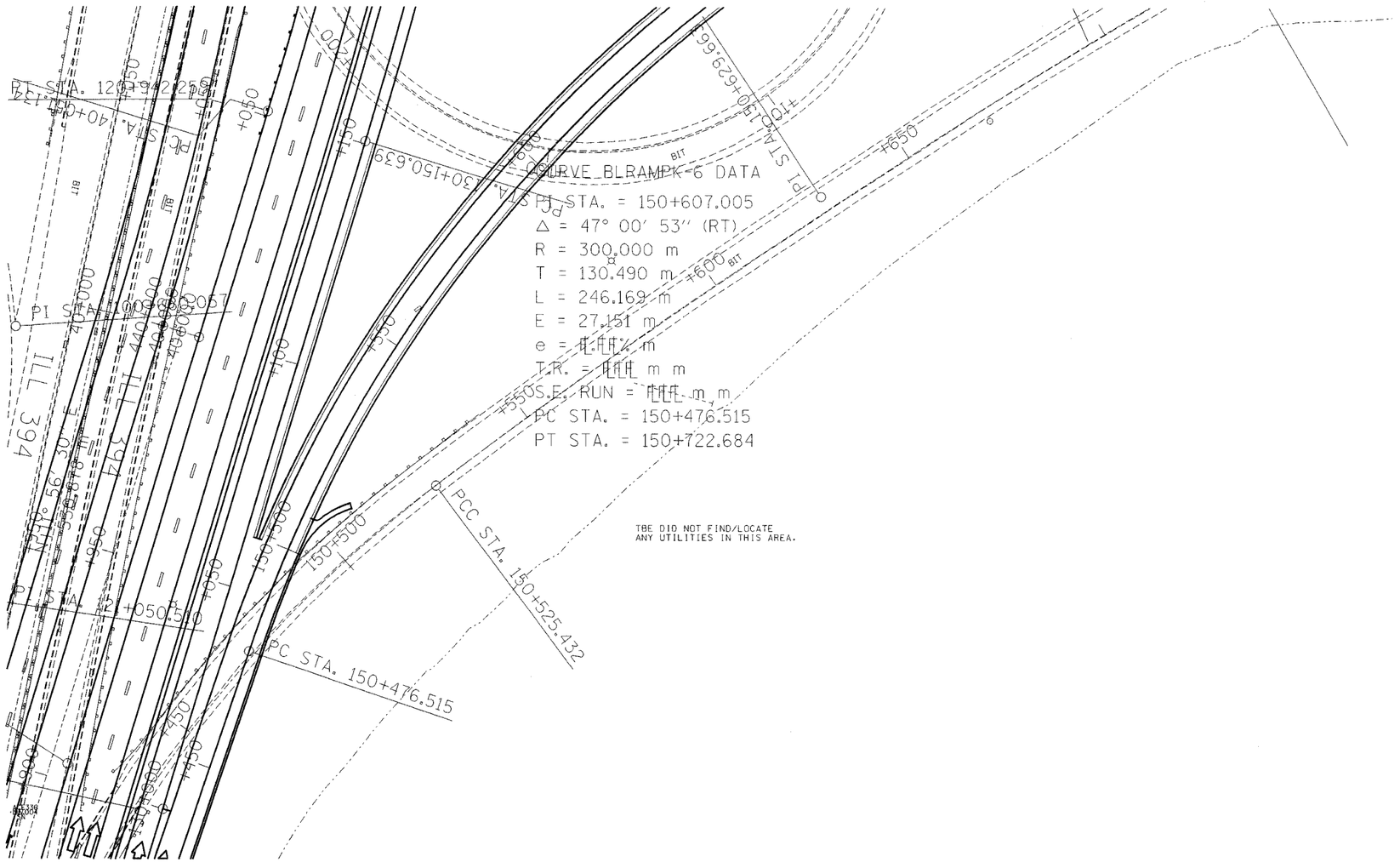
Contract No. 62110, 62111,62114,62105,62107,62108

SCALE : 500 DRAWN BY : JAC

SQL "B" DATE : 2/8/02 CHECKED BY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	367
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



—T—T—	TELEPHONE
—W—W—	WATER
—G—G—	GAS
—CTV—CTV—CTV—	CABLE TELEVISION
—FO—FO—FO—	FIBER OPTIC
—E—E—	ELECTRIC

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WESTERN REGION: AZ, NV, NM, TX, CA, OR, UT, WA

IL09500122
TBE SUE PAGE NO: 47 of 52
Signature _____
SUE Quality Level "A" : Test Holes
SUE Quality Level "B" : Designating

DYNASTY GROUP, INC. ENGINEERS AND SURVEYORS

205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970

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I-94/IL RT. 394 S.of US 6 to 186th Street(N.bound & S.bound)

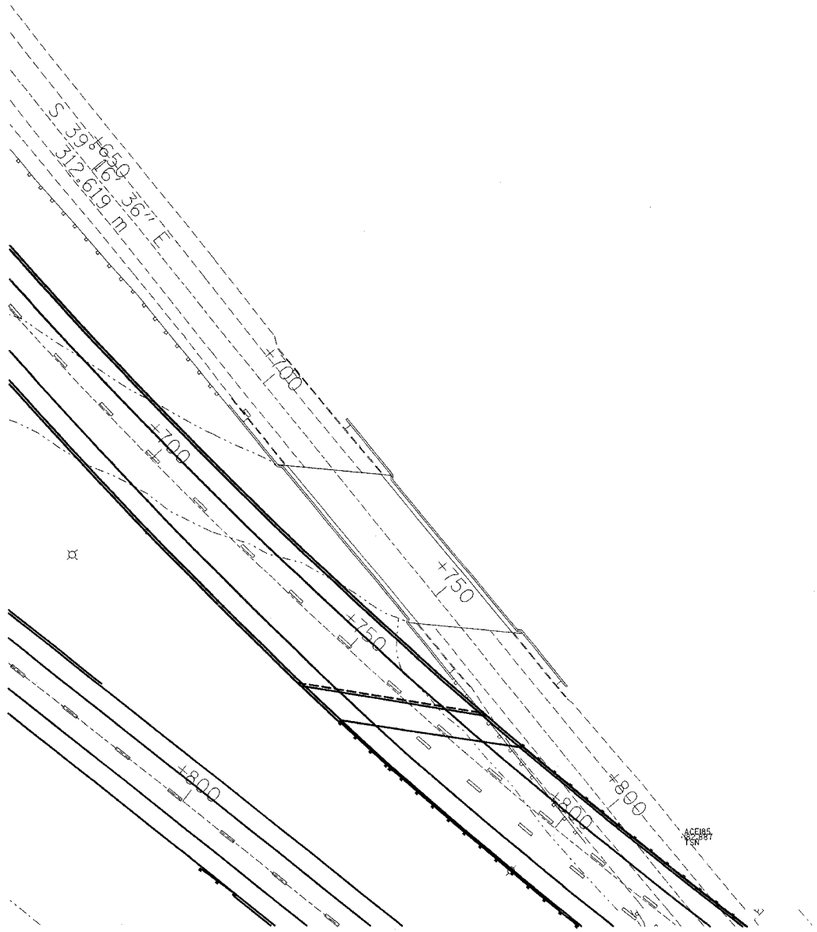
Contract No. 62110, 62111,62114,62105,62107,62108

SCALE : 500 DRAWN BY : JAC

SOL "B" DATE : 2/8/02 CHECKED BY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	368
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



TBE DID NOT FIND/LOCATE
ANY UTILITIES IN THIS AREA.

N

——T——T——	TELEPHONE
——W——W——	WATER
——G——G——	GAS
——CTV——CTV——CTV——	CABLE TELEVISION
——FO——FO——FO——	FIBER OPTIC
——E——E——	ELECTRIC

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PA, VA, CANADA
WESTERN REGION: AZ, NV, NM, TX, CA, OR, UT, WA

IL09500122
TBE SUE PAGE NO: 48 of 52
Signature _____
SUE Quality Level "A" : Test Holes
SUE Quality Level "B" : Designating

DYNASTY GROUP, INC. ENGINEERS AND SURVEYORS

205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970

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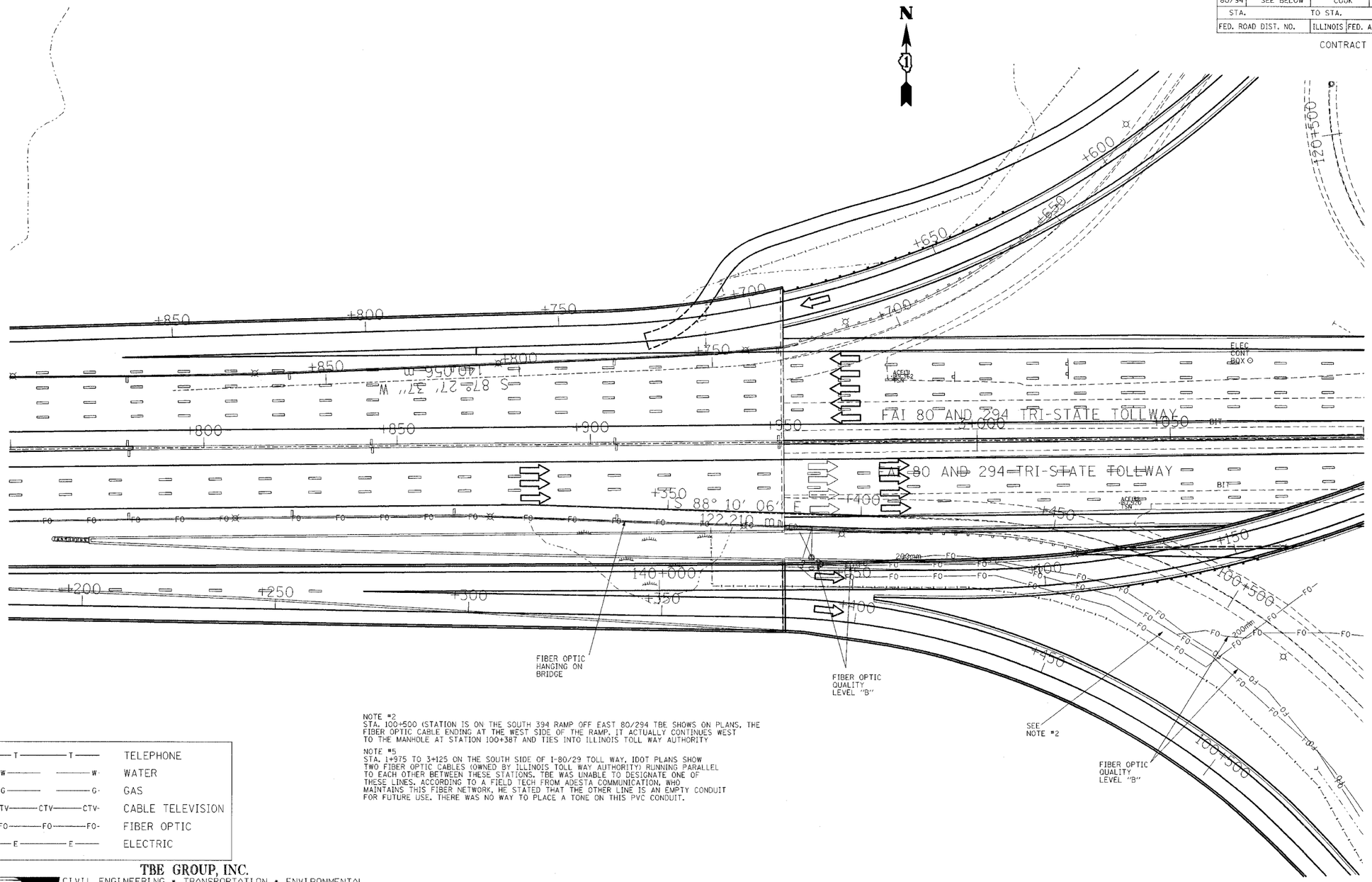
Contract No. 62110, 62111,62114,62105,62107,62108

SCALE : 500 DRAWN BY : JAC

SQL "B" DATE : 2/8/02 CHECKED BY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	369
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



NOTE #2
STA. 100+500 (STATION IS ON THE SOUTH 394 RAMP OFF EAST 80/294 TBE SHOWS ON PLANS, THE FIBER OPTIC CABLE ENDING AT THE WEST SIDE OF THE RAMP. IT ACTUALLY CONTINUES WEST TO THE MANHOLE AT STATION 100+387 AND TIES INTO ILLINOIS TOLL WAY AUTHORITY

NOTE #5
STA. 1+975 TO 3+125 ON THE SOUTH SIDE OF I-80/29 TOLL WAY, IDOT PLANS SHOW TWO FIBER OPTIC CABLES (OWNED BY ILLINOIS TOLL WAY AUTHORITY) RUNNING PARALLEL TO EACH OTHER BETWEEN THESE STATIONS. TBE WAS UNABLE TO DESIGNATE ONE OF THESE LINES. ACCORDING TO A FIELD TECH FROM ADESTA COMMUNICATION, WHO MAINTAINS THIS FIBER NETWORK, HE STATED THAT THE OTHER LINE IS AN EMPTY CONDUIT FOR FUTURE USE. THERE WAS NO WAY TO PLACE A TONE ON THIS PVC CONDUIT.

T	TELEPHONE
W	WATER
G	GAS
CTV	CABLE TELEVISION
FO	FIBER OPTIC
E	ELECTRIC

TBE GROUP, INC.
CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL
* PLANNING * UTILITY ENGINEERING/LOCATING
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PA, VA, CANADA
WESTERN REGION: AZ, NV, NM, TX, CA, OR, UT, WA

IL09500122

TBE SUE PAGE NO: 4 of 52
Signature _____
SUE Quality Level "A" : Test Holes
SUE Quality Level "B" : Designating

DYNASTY GROUP, INC. ENGINEERS AND SURVEYORS

205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970

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REVISIONS	
NAME	DATE

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I-80/I-94 (TollwayE.of I-94 to W. of RT.83/US 6.
I-94/IL RT. 394 S.of US 6 to 186th StreetN.bound & S.bound)

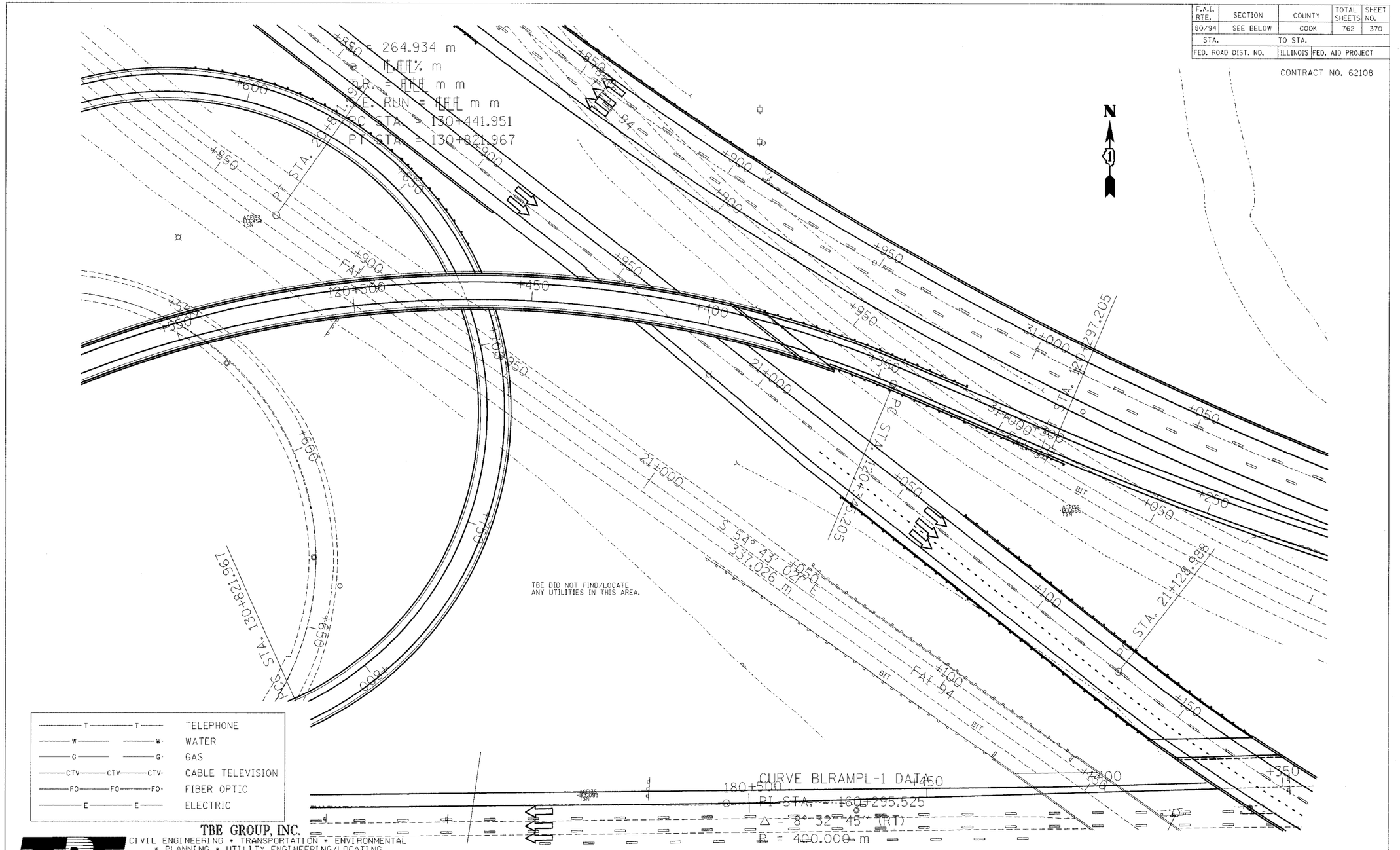
Contract No. 62110, 62111,62114,62105,62107,62108

SCALE : 500 DRAWN BY : JAC

SQL "B" DATE : 2/8/02 CHECKED BY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	SEE BELOW	COOK	762	370
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62108



——T——T——	TELEPHONE
——W——W·	WATER
——G——G·	GAS
—CTV—CTV—CTV-	CABLE TELEVISION
—FO—FO—FO-	FIBER OPTIC
——E——E——	ELECTRIC

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PA, VA, CANADA
WESTERN REGION: AZ, NV, NM, TX, CA, OR, UT, WA

IL09500122
TBE SUE PAGE NO: 49 of 52
Signature ____________
SUE Quality Level "A" : Test Holes
SUE Quality Level "B" : Designating

DYNASTY GROUP, INC.
ENGINEERS AND SURVEYORS

205 W. WACKER DRIVE
SUITE 1020
CHICAGO, IL 60606
(312) 704-1970

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REVISIONS	
NAME	DATE

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I-94/IL RT. 394 S.of US 6 to 186th Street(N.bound & S.bound)

Contract No. 62110, 62111,62114,62105,62107,62108

SCALE : 500
DRAWN BY : JAC
SQL "B" DATE : 2/8/02
CHECKED BY

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	371
STA. 18+375		TO STA. 18+725		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

20m 0 10m 20m 30m

HORIZ. SCALE: 1:500

LIMIT OF CONSTRUCTION

PROPOSED ℄ I-94

I-94 WB

I-94 EB

18+400 18+450 18+500 18+550 18+600 18+650 18+700

MATCH LINE STA 18+725

182.5

182

LIMIT OF CONSTRUCTION

159TH STREET EAST TO I-94 EB

10+000 10+050 10+100 10+150 10+200

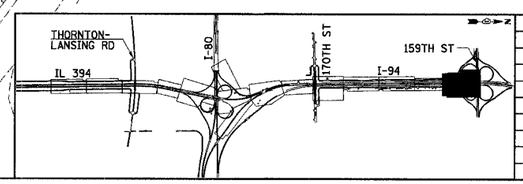
PRINCE DRIVE

LIMIT OF CONSTRUCTION

9+950

LEGEND

- ---190--- EXISTING CONTOUR
- EXISTING DITCH LINE
- —190— PROPOSED CONTOUR
- PROPOSED DITCH FLOW
- PROPOSED DITCH LINE
- PROPOSED SWALE
- PROPOSED SUMMIT
- PROPOSED MANHOLE
- PROPOSED INLET
- PROPOSED CATCH BASIN
- PROPOSED END SECTION



REVISIONS	
NAME	DATE

IG - 1

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

GRADING PLAN
IL-94
STA. 18+375 TO STA. 18+725

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: BAJ
CHECKED BY: JES

HNTB

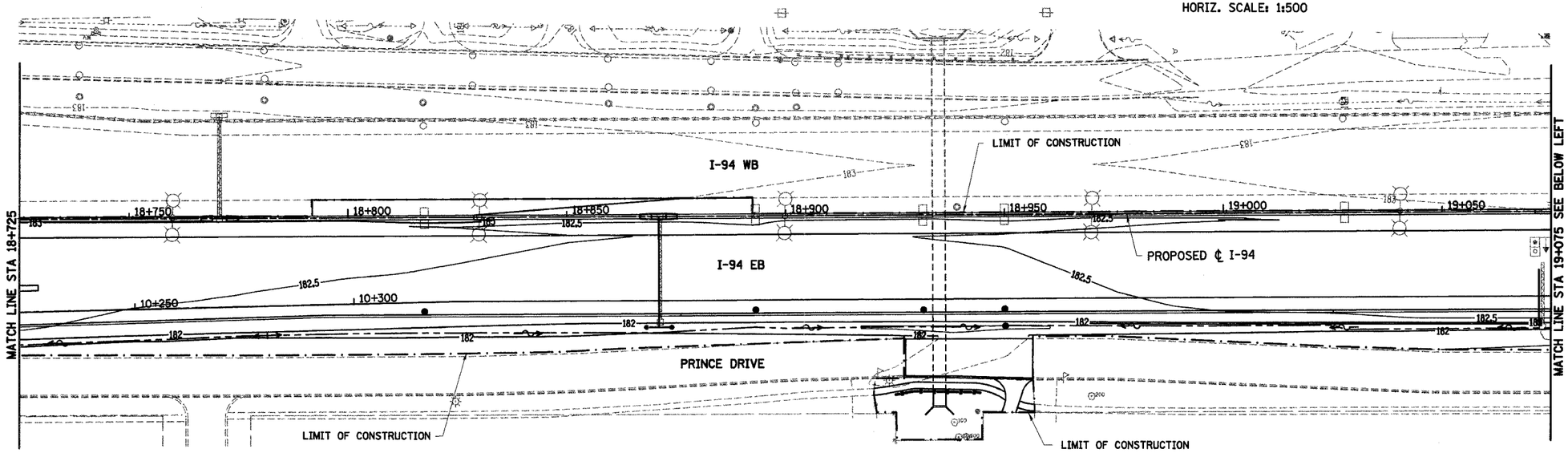
J:\345628\CADD\T1\cds\Contract19_SB\IG190014a.dgn
k-fox 12-JUL-2005 12:04

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	372
STA. 18+725		TO STA. 19+425		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

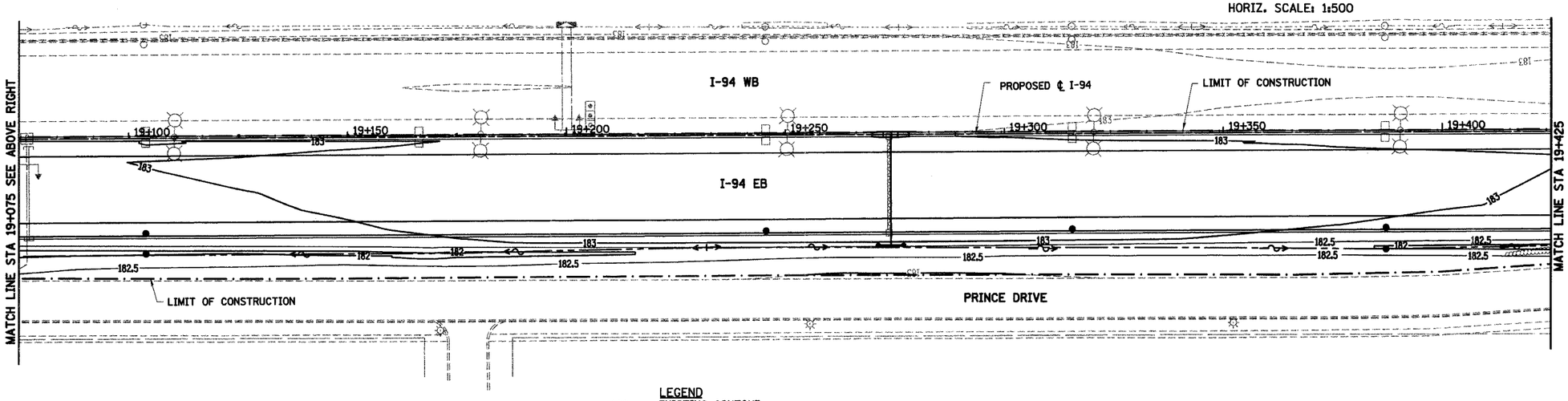
20m 0 10m 20m 30m

HORIZ. SCALE: 1:500



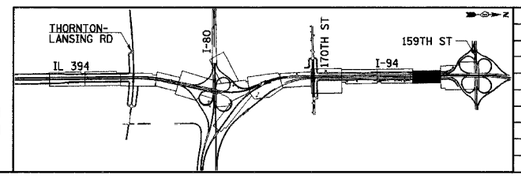
20m 0 10m 20m 30m

HORIZ. SCALE: 1:500



LEGEND

---190---	EXISTING CONTOUR
	EXISTING DITCH LINE
—190—	PROPOSED CONTOUR
	PROPOSED DITCH FLOW
	PROPOSED DITCH LINE
	PROPOSED SWALE
	PROPOSED SUMMIT
	PROPOSED MANHOLE
	PROPOSED INLET
	PROPOSED CATCH BASIN
	PROPOSED END SECTION



REVISIONS	
NAME	DATE

IG - 2

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

GRADING PLAN
IL-94
STA. 18+725 TO STA. 19+425

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: BAJ
CHECKED BY: JES

HNTB

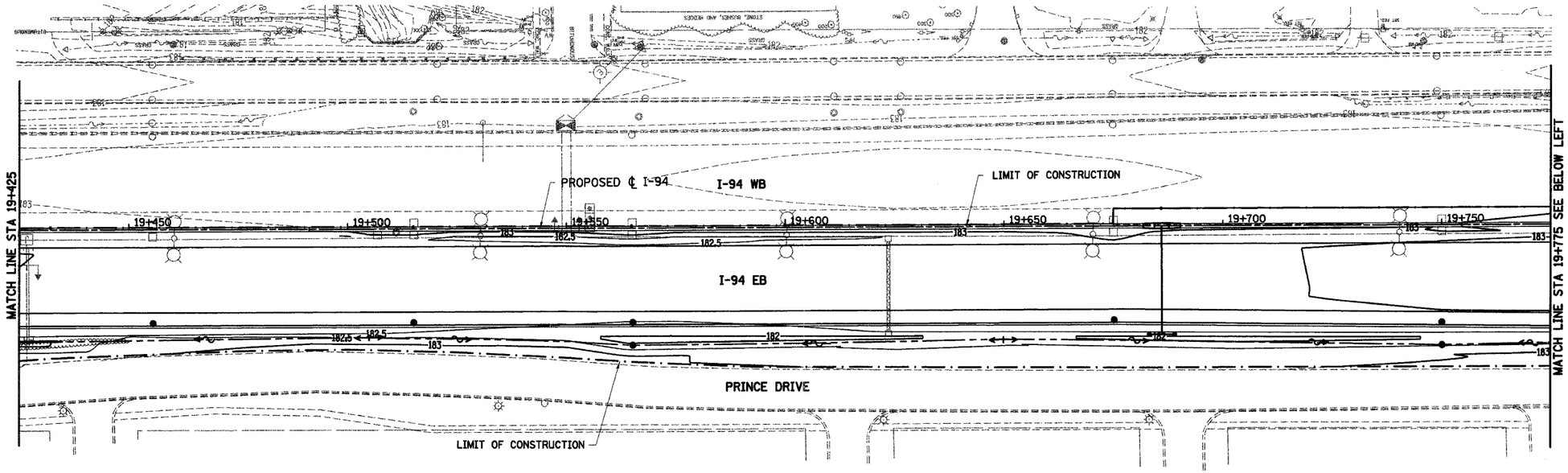
J:\345628\CADD\ITI\Codes\Contract19_SB\IG190024a.dgn
kfox 12-JUL-2005 12:09

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	373
STA. 19+425		TO STA. IL-394 SB 441+075		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

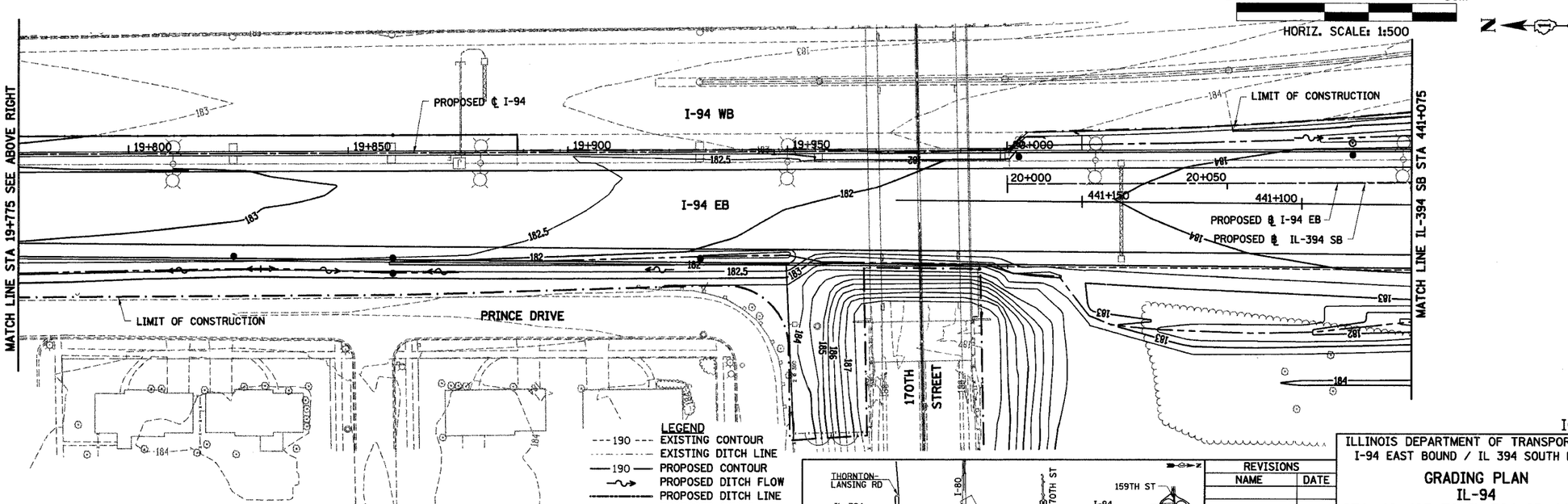
20m 0 10m 20m 30m

HORIZ. SCALE: 1:500



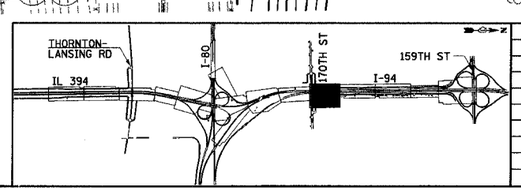
20m 0 10m 20m 30m

HORIZ. SCALE: 1:500



LEGEND

---190---	EXISTING CONTOUR
	EXISTING DITCH LINE
—190—	PROPOSED CONTOUR
	PROPOSED DITCH FLOW
	PROPOSED DITCH LINE
	PROPOSED SWALE
	PROPOSED SUMMIT
	PROPOSED MANHOLE
	PROPOSED INLET
	PROPOSED CATCH BASIN
	PROPOSED END SECTION



REVISIONS	
NAME	DATE

IG - 3

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

GRADING PLAN
IL-94
STA. 19+425 TO IL-394 SB 441+075

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: BAJ
CHECKED BY: JES

HNTB

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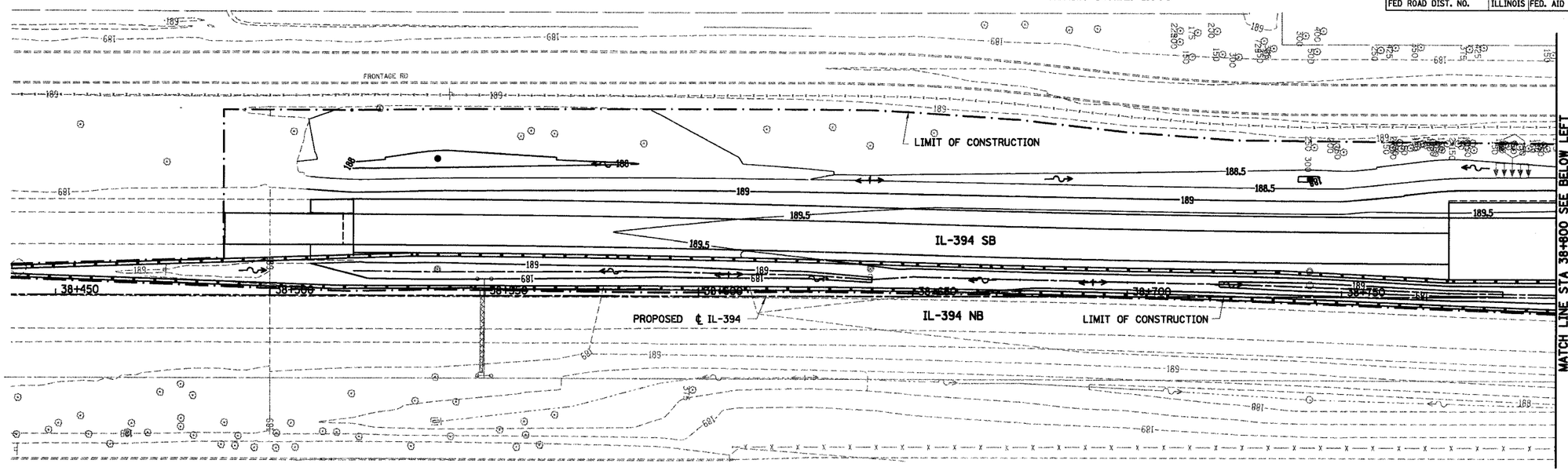
kfox 12-JUL-2005 12:09

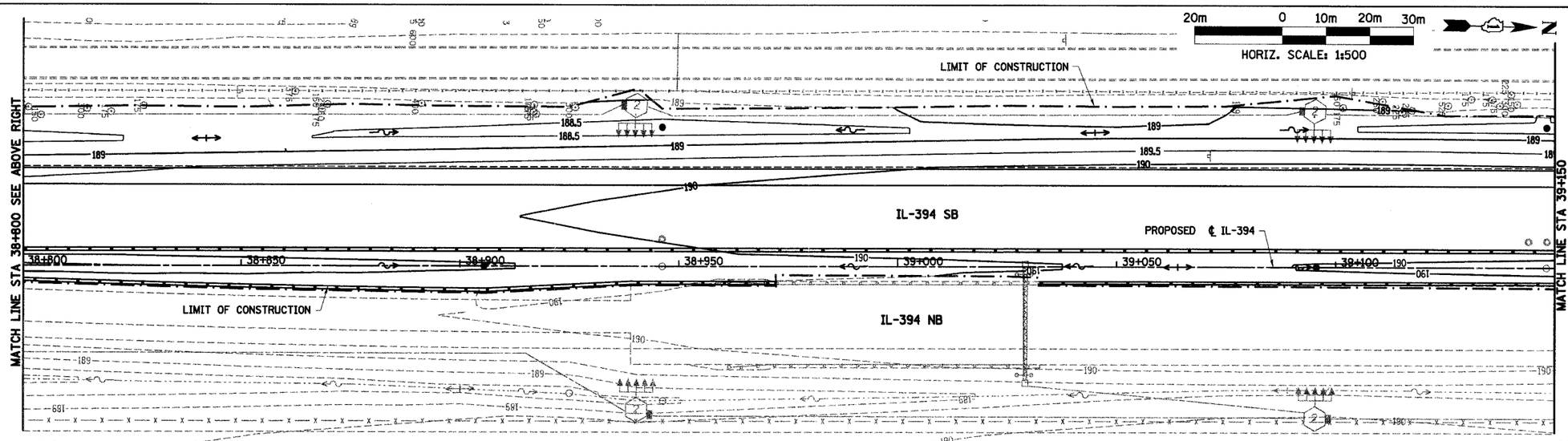
• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	374
STA. 38+519.442		TO STA. 39+150		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

20m 0 10m 20m 30m

HORIZ. SCALE: 1:500





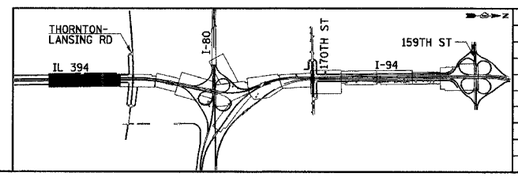
20m 0 10m 20m 30m

HORIZ. SCALE: 1:500

IG - 4

LEGEND

- 190 EXISTING CONTOUR
- EXISTING DITCH LINE
- 190 PROPOSED CONTOUR
- PROPOSED DITCH FLOW
- PROPOSED DITCH LINE
- PROPOSED SWALE
- PROPOSED SUMMIT
- PROPOSED MANHOLE
- PROPOSED INLET
- PROPOSED CATCH BASIN
- PROPOSED END SECTION



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

GRADING PLAN
IL-394
STA. 38+519.440 TO STA. 38+150

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: BAJ
CHECKED BY: JES

HNTB

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kfox 12-JUL-2005 12:09

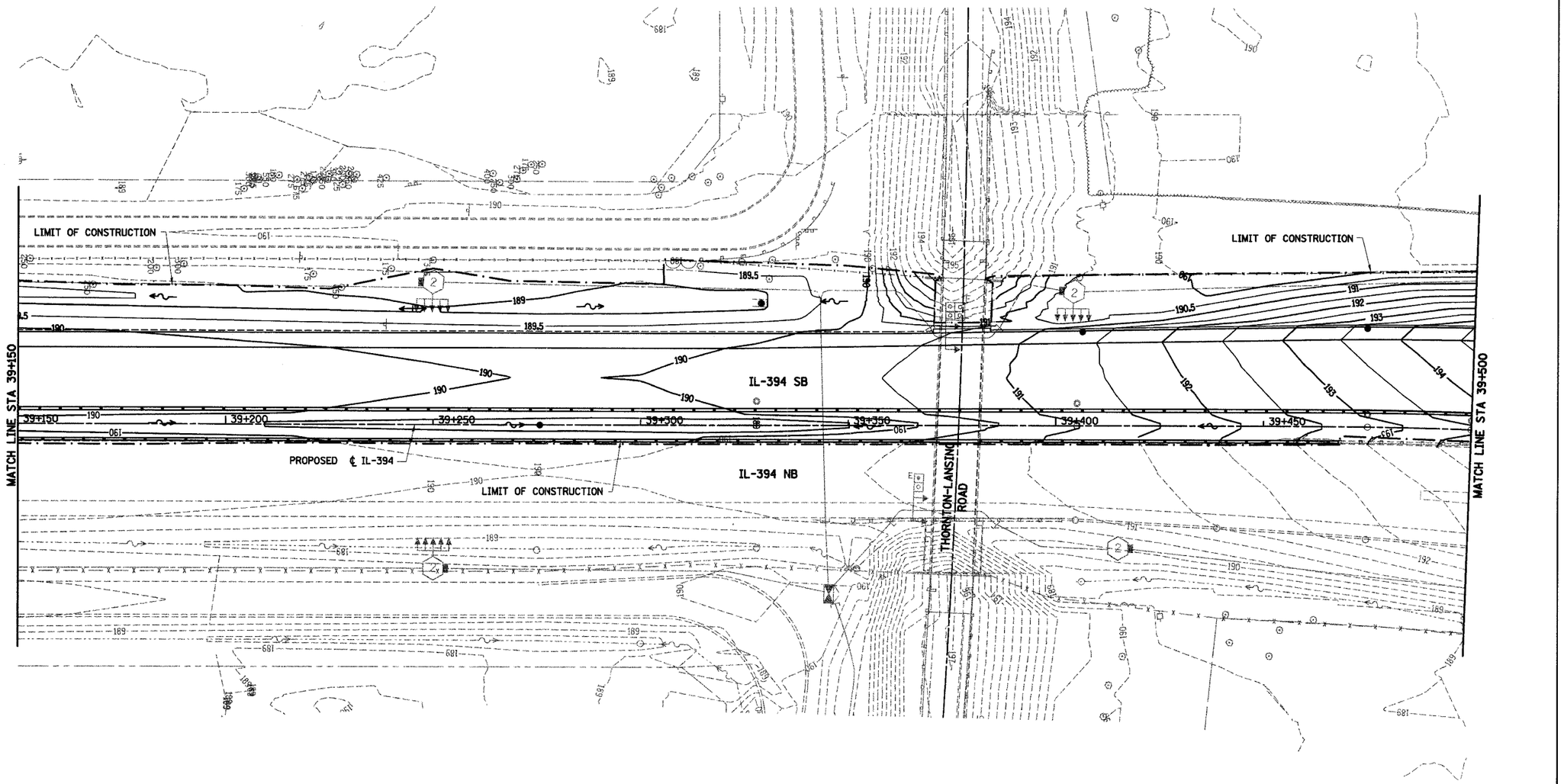
• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	375
STA. 39+150		TO STA. 39+500		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

N

20m 0 10m 20m 30m

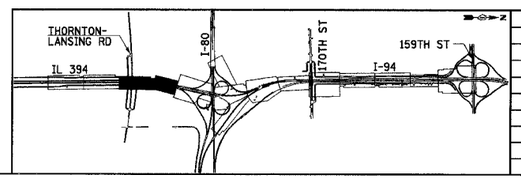
HORIZ. SCALE: 1:500



LEGEND

- ---190--- EXISTING CONTOUR
- EXISTING DITCH LINE
- —190— PROPOSED CONTOUR
- PROPOSED DITCH FLOW
- PROPOSED DITCH LINE
- PROPOSED SWALE
- PROPOSED SUMMIT
- PROPOSED MANHOLE
- PROPOSED INLET
- PROPOSED CATCH BASIN
- PROPOSED END SECTION

IG - 5



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

GRADING PLAN
IL-394
STA. 39+150 TO STA. 39+500

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: BAJ
CHECKED BY: JES

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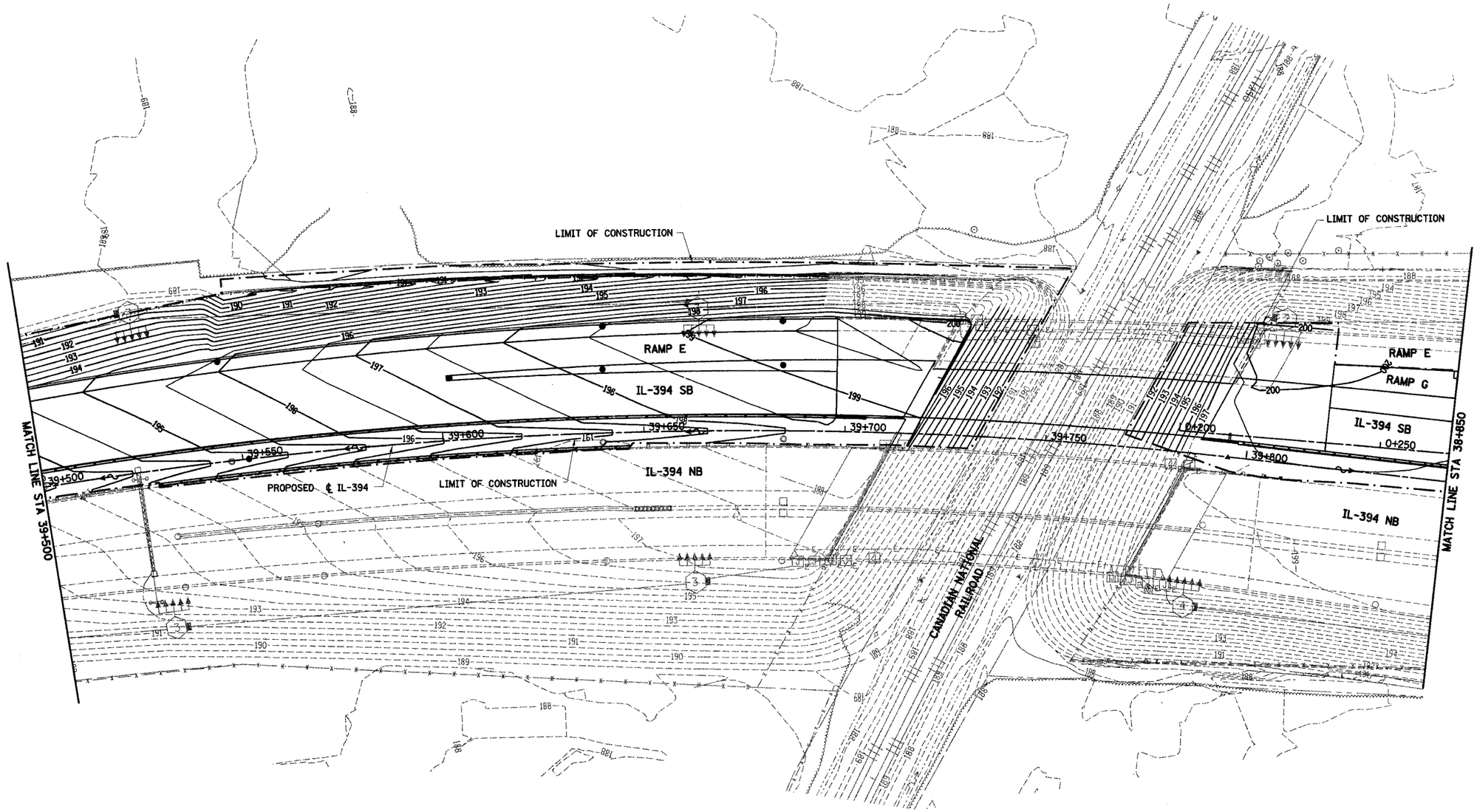
kfox 12-JUL-2005 12:09

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	376
STA. 39+500		TO STA. 39+850		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

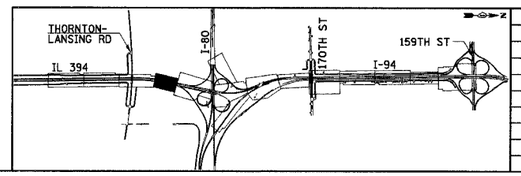
20m 0 10m 20m 30m

HORIZ. SCALE: 1:500



LEGEND

---190---	EXISTING CONTOUR
·-·-·-·-·	EXISTING DITCH LINE
—190—	PROPOSED CONTOUR
	PROPOSED DITCH FLOW
	PROPOSED DITCH LINE
	PROPOSED SWALE
	PROPOSED SUMMIT
	PROPOSED MANHOLE
	PROPOSED INLET
	PROPOSED CATCH BASIN
	PROPOSED END SECTION



REVISIONS	
NAME	DATE

IG - 6

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

GRADING PLAN
IL-394
STA. 39+500 TO STA. 39+850

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: BAJ
CHECKED BY: JES

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kfox 12-JUL-2005 12:09

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	377
STA. 39+850		TO STA. IL-394 SB 440+200		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

20m 0 10m 20m 30m

HORIZ. SCALE: 1:500

N

LIMIT OF CONSTRUCTION

PROPOSED ℄ RAMP G

RAMP E

RAMP G

121+000

121+100

121+050

120+900

120+950

120+850

DRAINAGE STRUCTURES BY OTHERS

LIMIT OF CONSTRUCTION

STA 34+50

34+00

33+50

33+00

MATCH LINE IL-394 SB STA 440+200

MATCH LINE STA 38+850

39+850

39+900

39+950

LIMIT OF CONSTRUCTION

PROPOSED ℄ IL-394

PROPOSED ℄ IL-394 SB

IL-394 SB

440+000

440+050

440+100

440+150

IL-394 NB

I-80 EB

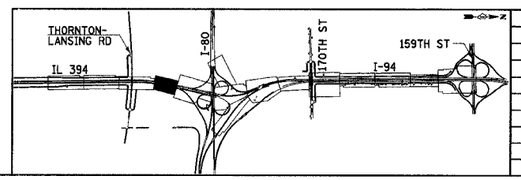
LIMIT OF CONSTRUCTION

RAMP H

RAMP K

LEGEND

- EXISTING CONTOUR
- EXISTING DITCH LINE
- PROPOSED CONTOUR
- PROPOSED DITCH FLOW
- PROPOSED DITCH LINE
- PROPOSED SWALE
- PROPOSED SUMMIT
- PROPOSED MANHOLE
- PROPOSED INLET
- PROPOSED CATCH BASIN
- PROPOSED END SECTION



IG - 7

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

I-94 EAST BOUND / IL 394 SOUTH BOUND

GRADING PLAN

IL-394 / IL-394 SB STA. 39+850 TO IL-394 SB STA. 440+200

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005

DRAWN BY: BAJ
CHECKED BY: JES

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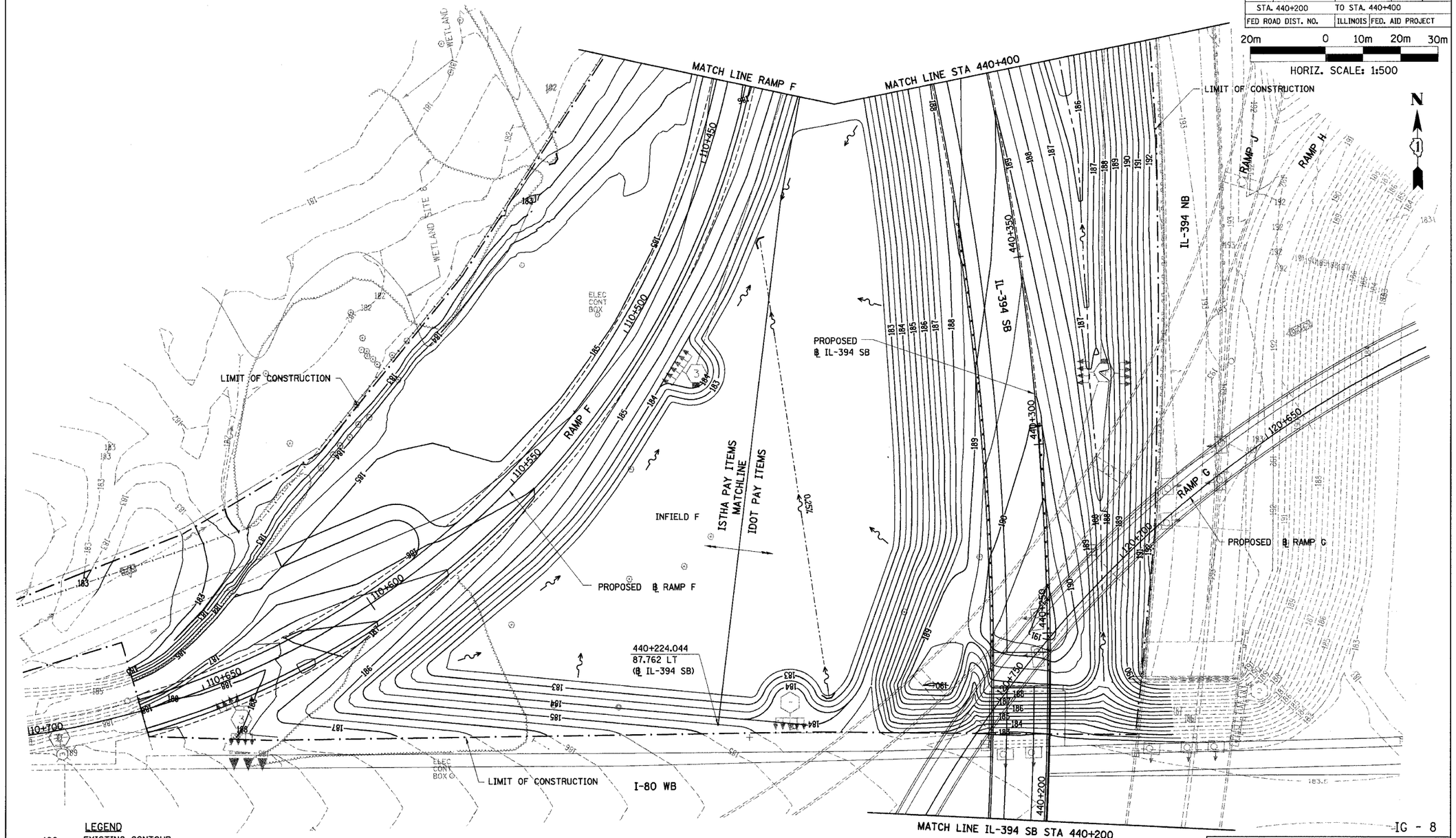
kfox 12-JUL-2005 12:09

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	378
STA. 440+200		TO STA. 440+400		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

20m 0 10m 20m 30m

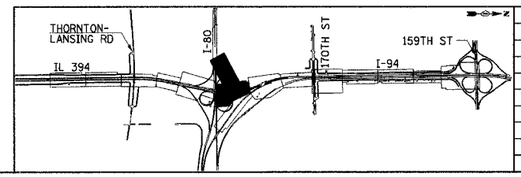
HORIZ. SCALE: 1:500



N

LEGEND

- 190 EXISTING CONTOUR
- EXISTING DITCH LINE
- 190 PROPOSED CONTOUR
- PROPOSED DITCH FLOW
- PROPOSED DITCH LINE
- PROPOSED SWALE
- PROPOSED SUMMIT
- PROPOSED MANHOLE
- PROPOSED INLET
- PROPOSED CATCH BASIN
- PROPOSED END SECTION



REVISIONS	
NAME	DATE

IG - 8

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

GRADING PLAN
IL-394
STA. 440+200 TO STA. 440+400

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: BAJ
CHECKED BY: JES

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• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	379
STA. 440+400		TO STA. 440+750		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

20m 0 10m 20m 30m

HORIZ. SCALE: 1:500

LIMIT OF CONSTRUCTION

PROPOSED ℄ IL-394 SB

PROPOSED ℄ RAMP F

440+551.123
16.251 LT
(℄ IL-394 SB)

MATCH LINE RAMP F

ISTHA PAY ITEMS
MATCHLINE
IDOT PAY ITEMS

RAMP F

IL-394 SB

THORN CREEK

MATCH LINE STA 440+400

MATCH LINE STA 440+750

PROPOSED ℄ I-94 EB

I-94 EB

LIMIT OF CONSTRUCTION

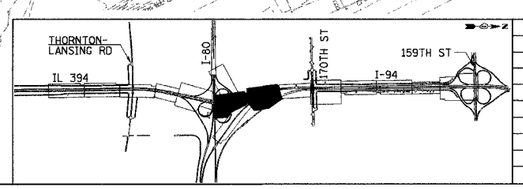
IL-394 NB

RAMP J

LIMIT OF CONSTRUCTION

LEGEND

- 190 — EXISTING CONTOUR
- EXISTING DITCH LINE
- 190 — PROPOSED CONTOUR
- PROPOSED DITCH FLOW
- PROPOSED DITCH LINE
- PROPOSED SWALE
- PROPOSED SUMMIT
- PROPOSED MANHOLE
- PROPOSED INLET
- PROPOSED CATCH BASIN
- PROPOSED END SECTION



REVISIONS	
NAME	DATE

IG - 9

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

GRADING PLAN
IL-394
STA. 440+400 TO STA. 440+750

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005

DRAWN BY: BAJ
CHECKED BY: JES

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• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	380
STA. 440+750		TO STA. 441+075		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

20m 0 10m 20m 30m

HORIZ. SCALE: 1:500

LIMIT OF CONSTRUCTION

WEST FRONTAGE ROAD

PROPOSED ℄ MAINTENANCE ACCESS ROAD

SEDIMENT BASIN CONSTRUCTED IN PREVIOUS CONTRACT TO BE FILLED, SEE EARTHWORK SCHEDULE FOR VOLUMES

PROPOSED ℄ RAMP F

PROPOSED ℄ IL-394 SB

IL-394 SB

PROPOSED ℄ I-94 EB

I-94 EB

IL-394 NB

I-94 WB

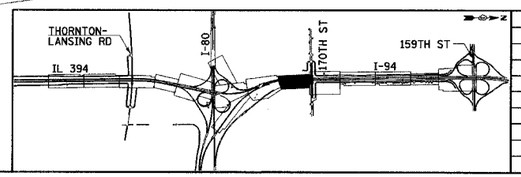
LIMIT OF CONSTRUCTION

MATCH LINE STA 440+750

MATCH LIN STA 441+075

LEGEND

- EXISTING CONTOUR
- EXISTING DITCH LINE
- PROPOSED CONTOUR
- PROPOSED DITCH FLOW
- PROPOSED DITCH LINE
- PROPOSED SWALE
- PROPOSED SUMMIT
- PROPOSED MANHOLE
- PROPOSED INLET
- PROPOSED CATCH BASIN
- PROPOSED END SECTION



IG - 10

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

GRADING PLAN
IL-394
STA. 440+750 TO STA. 441+075

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: BAJ
CHECKED BY: JES

HNTB

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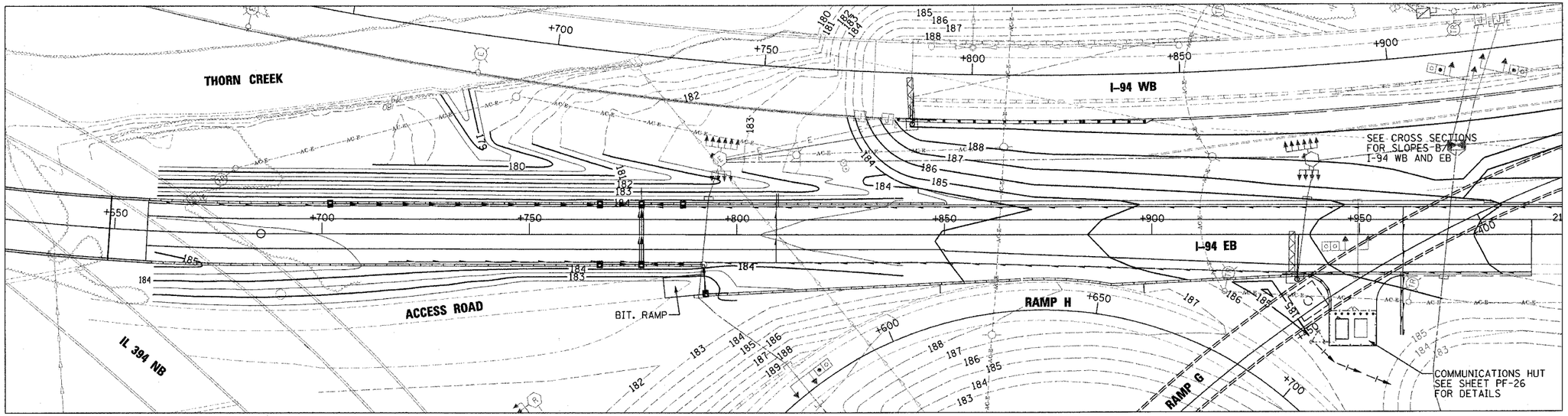
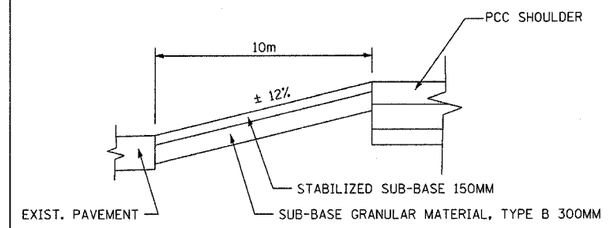
✱ (0203.1 & 0312-708W) R-3 CONTRACT #62108

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/394	✱	COOK	870	381
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	





BITUMINOUS RAMP
FOR MAINTENANCE ROAD

IG-11

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EASTBOUND / IL 394 SOUTHBOUND

GRADING PLANS

DATE: JULY 18, 2005 DRAWN BY: CHECKED BY:

McDonough Associates Inc.
Engineers / Architects

...\Contract 1911519013e.dgn 8/15/2005 8:22:01 AM

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	382
STA.		TO STA.		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

EROSION AND SEDIMENT CONTROL GENERAL NOTES

1. THE WORK DESCRIBED ON THESE DRAWINGS IS AN INTEGRAL PART OF THE STORM WATER POLLUTION PREVENTION PLAN USED TO OBTAIN A NPDES PERMIT FROM IEPA FOR THE CONSTRUCTION OF THIS PROJECT. FULL COMPLIANCE WITH ALL TERMS OF THE NPDES PERMIT MUST BE STRICTLY ADHERED TO.

2. THE PURPOSE OF THE EROSION AND SEDIMENT CONTROL MEASURES INCLUDED FOR THIS PROJECT IS TO LIMIT THE SEDIMENT POLLUTION IMPACT, OF ANY STORM WATER DISCHARGES THAT ORIGINATE ON THIS SITE OR OFF-SITE FLOWS THAT FLOW OVER THE DISTURBED AREAS, ON DOWNSTREAM AREAS.

3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT SEDIMENT TRANSPORT OFF THE SITE IS REDUCED BY A COMBINATION OF MINIMIZATION OF EROSION AT THE SOURCE AND INSTALLATION OF SPECIFIC MEASURES TO CONTROL OR REDUCE THE TRANSPORT OF SEDIMENT. A COPY OF THE EROSION AND SEDIMENT CONTROL SCHEDULE BEING IMPLEMENTED BY THE CONTRACTOR WILL BE ON THE CONSTRUCTION SITE AT ALL TIMES.

4. TO THE MAXIMUM EXTENT POSSIBLE, ALL FLOWS ORIGINATING OFF THE CONSTRUCTION SITE WILL BE DIVERTED AROUND DISTURBED AREAS OR WILL BE CONVEYED THROUGH THE SITE IN A MANNER THAT UNTREATED ON-SITE RUNOFF DOES NOT MIX WITH THE OFF-SITE RUNOFF.

5. ALL RUNOFF ORIGINATING ON DISTURBED AREAS ASSOCIATED WITH THIS PROJECT WILL PASS THROUGH ONE OR MORE MEASURES THAT WILL REDUCE OVERLAND FLOW RATES AS WELL AS CURTAIL ON AND OFF-SITE SEDIMENT IMPACTS OF THE CONSTRUCTION ACTIVITY.

6. ALL PERMANENT SEDIMENT BASINS, PERMANENT STORM WATER CONTROL MEASURES, AND RUNOFF CONTROL MEASURES REQUIRED TO KEEP OFF-SITE RUNOFF FROM FLOWING OVER THE CONSTRUCTION AREA WILL BE INSTALLED BEFORE CLEARING AND STRIPPING OF THE SITE PROCEEDS. PRIOR TO PROCEEDING WITH GENERAL EARTHWORK ON A PROJECT THE CONTRACTOR WILL OBTAIN APPROVAL OF HIS PROPOSED EARTHWORK AND STABILIZATION SCHEDULE.

7. A MAXIMUM OF 4 HECTARES MAY BE IN SOME STAGE OF GRADING AT A SINGLE TIME. ADDITIONAL AREAS (UP TO 4 HECTARES) MAY BE CLEARED BUT WILL NOT BE STRIPPED OF VEGETATION UNTIL THE GRADED AREAS HAVE BEEN PROTECTED FROM EROSION THROUGH INSTALLATION OF EITHER TEMPORARY OR PERMANENT MEASURES. WHENEVER POSSIBLE, THE GRADING WILL BE COMPLETED TO THE DESIGN GRADE AND THE PERMANENT VEGETATION PLAN IMPLEMENTED PRIOR TO STARTING GRADING ACTIVITIES ON THE NEXT SITE.

   (A) WHEN BALANCING EARTHWORK (BORROW FROM A CUT USED AS FILL AT A LOCATION DISTANT FROM THE CUT) THE ENGINEER WILL CONSIDER ALLOWING MORE THAN 4 HECTARES OF GRADING AT A TIME. THE 4 HECTARE LIMITATION DOES NOT INCLUDE HAUL ROADS, BRIDGE CONSTRUCTION WORK AREAS NOR STORAGE AREAS.

   (B) VARIATIONS TO THE ABOVE MAY BE CONSIDERED BY THE ENGINEER UNDER ALL THE FOLLOWING CONDITIONS:

   - IF THE CONTRACTOR FALLS BEHIND SCHEDULE THROUGH NO FAULT OF HIS OWN.
   - THE CONTRACTOR MUST PRESENT A SCHEDULE DEMONSTRATING THE NEED FOR SUCH VARIATION IN ORDER TO COMPLETE THE WORK ON TIME.
   - THE CONTRACTOR MUST COMPLY WITH ALL OTHER CONTRACT REQUIREMENTS.

8. DISTURBED AREAS ARE TO BE PROTECTED FROM EROSION IN A TIMELY MANNER. UPON COMPLETION OF GRADING OR CONSTRUCTION, THE AREA WILL BE STABILIZED (USING PERMANENT MEASURES WHEN POSSIBLE) WITHIN 7 CALENDAR DAYS. TEMPORARY STABILIZATION THROUGH USE OF GROUND COVER, MULCHING, OR OTHER APPROVED MEASURES WILL BE INSTALLED WHENEVER SITE DEVELOPMENT WORK, GRADING OR OTHER EARTH DISTURBING ACTIVITIES CEASE TO BE CONTINUOUS FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. THE 7/14 DAY REQUIREMENT IS TAKEN TO MEAN THAT THE STABILIZATION OPERATION IS COMPLETE OR NEARING COMPLETION IN THE DEFINED TIME.

9. STABILIZATION OF CUT OR FILL SLOPES WITH TEMPORARY OR PERMANENT EROSION CONTROL MEASURES IS REQUIRED WHENEVER THE CUT OR FILL ACTIVITY REACHES 3 METERS VERTICALLY OR THE FINISHED SLOPE HEIGHT EQUALS 10 METERS, WHICHEVER IS MORE RESTRICTIVE. ONCE THE STABILIZATION MEASURES ARE INSTALLED, THE PLACEMENT OF FILL EXCAVATION ACTIVITIES ARE ALLOWED TO PROCEED.

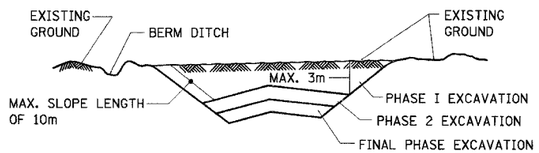
10. THE CONTRACTOR SHALL DESIGNATE ONE OF HIS EMPLOYEES AS RESPONSIBLE FOR IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PLAN ON ALL DISTURBED AREAS. THIS PERSON IS TO BE KNOWLEDGEABLE ABOUT INSTALLATION AND MAINTENANCE OF THE REQUIRED MEASURES. THIS EMPLOYEE IS TO HAVE THE AUTHORITY TO CARRY OUT THE IMPLEMENTATION OF ANY INSTRUCTIONS CONCERNING THE EROSION AND SEDIMENT CONTROL PLAN GIVEN BY THE ENGINEER. ALL MEASURES WILL BE INSPECTED BY THIS INDIVIDUAL AND THE ENGINEER ON A REGULAR BASIS (AT LEAST ONCE EVERY 7 DAYS) AND AFTER RAINFALL EVENTS GREATER THAN 13mm.

(GENERAL NOTES CONTINUE ON NEXT SHEET.)

EROSION AND SEDIMENT CONTROL LEGEND

SC	SEDIMENT CONTROL
EC	EROSION CONTROL
	SC, STABILIZED CONSTRUCTION ENTRANCE (SCSCE)
	SC, SILT FENCE (SCSF) PLAN
	SC, SILT FENCE (SCSF) SECTION
	DIVERSION DIKE
TD	TEMPORARY DITCH
	DITCH FLOW
	EC, TEMPORARY PIPE SLOPE DRAIN
	EC, TEMPORARY CHANNEL DIVERSION
MAX =	MAXIMUM
MIN =	MINIMUM
	STONE RIPRAP (CLASS AS SHOWN ON PLAN)
	STONE OUTLET STRUCTURE SEDIMENT TRAP
	TEMPORARY STREAM CROSSING
DB	DEWATERING BASIN
TP	TREE TRUNK PROTECTION
DSIF	SC, DRAINAGE STRUCTURE INLET FILTER
— XXX —	TEMPORARY FENCE PLAN
X X X	TEMPORARY FENCE SECTION
	INLET AND PIPE PROTECTION
	DITCH CHECK TEMPORARY
	SEDIMENT BASIN
	SEEDING CLASS 2A AND 150mm TOPSOIL WITH EROSION CONTROL BLANKET
	SEEDING CLASS 4 AND 100mm COMPOST WITH EROSION CONTROL BLANKET
	SEEDING CLASS 4B WITH COMPOST FURNISH & PLACE
	SODDING SALT TOLERANT WITH 300mm TOPSOIL FURNISH AND PLACE, 100mm COMPOST FURNISH AND PLACE
	TEMPORARY EROSION CONTROL SEEDING

EXCAVATION PHASING PLAN-CUT SECTION



NOTES:

1. ALL CUT SLOPES SHALL BE EXCAVATED AND STABILIZED (PLACE TOPSOIL, PREPARE SEEDBED, APPLY SEED, PROTECT SLOPE WITH MULCH OR EROSION BLANKET) AS THE WORK PROGRESSES.

2. CONSTRUCTION SEQUENCE FOR EXCAVATION:
   (A) EXCAVATE AND STABILIZE BERM, SIDE AND OUTLET DITCHES, PROVIDE SEDIMENT TRAPS FOR DITCHES.

   (B) PERFORM PHASE 1 EXCAVATION AND STABILIZE SLOPES WITH PERMANENT SEEDING.

   (C) PERFORM PHASE 2 EXCAVATION AND STABILIZE SLOPES WITH PERMANENT SEEDING. OVERSEED PHASE 1 SLOPES, IF REQUIRED.

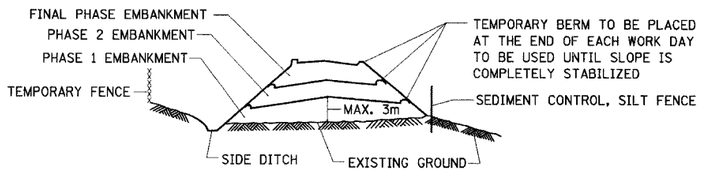
   (D) PERFORM FINAL PHASE EXCAVATION, AND STABILIZE WITH PERMANENT VEGETATIVE PLAN ON THE ENTIRE SLOPE. STABILIZE SURFACE DRAIN DITCHES. OVERSEED PHASE 1 & 2 SLOPES, IF REQUIRED, AS DETERMINED BY THE ENGINEER.

3. IF PERMANENT SEEDING CANNOT BE PLACED DUE TO CONTRACT REQUIREMENTS REGARDING PLANTING SEASONS, THE CUT SLOPE IS TO HAVE TOPSOIL PLACED AND SEEDBED PREPARED PRIOR TO USING TEMPORARY STABILIZATION WITH STRAW MULCH OR TEMPORARY SEEDING WITH EROSION BLANKET.

4. THE CONTRACTOR HAS THE OPTION OF DELAYING TOPSOIL AND/OR SEEDING BEYOND THE 3m VERTICAL LIMITATION. (SEE GENERAL NOTE 9) IF SO THE CUT SLOPE MUST BE TEMPORARILY STABILIZED, AT NO COST TO THE DEPARTMENT.

5. ONCE THE EXCAVATION WITHIN A SPECIFIC AREA HAS BEGUN, THE OPERATION SHALL BE CONTINUOUS FROM STRIPPING THROUGH THE COMPLETION OF THE GRADING AND PLACEMENT OF SLOPE STABILIZATION MEASURES. ANY INTERRUPTIONS IN THE OPERATION 14 DAYS OR MORE MUST BE APPROVED BY THE ENGINEER. ANY VIOLATIONS OF THIS REQUIREMENT WILL RESULT IN THE CONTRACTOR ASSUMING THE RESPONSIBILITY OF PLACING TEMPORARY STABILIZATION AT HIS OWN COST AND EXPENSE AS DIRECTED BY THE ENGINEER.

EMBANKMENT PHASING PLAN-FILL SECTION



NOTES:

1. THE EMBANKMENT WILL BE MADE IN STAGES NOT TO EXCEED 3m. THE EMBANKMENT SLOPES WILL BE STABILIZED USING TEMPORARY MEASURES BEFORE BEGINNING NEXT STAGE.

2.(A) AT THE END OF EACH WORK DAY TEMPORARY BERMS (EARTH) AND TEMPORARY PIPE SLOPE DRAINS WILL BE CONSTRUCTED ALONG THE TOP EDGE(S) OF THE EMBANKMENT TO INTERCEPT SURFACE RUNOFF.

2.(B) IN LIEU OF PERFORMING WORK DESCRIBED IN 2(A) AT THE END OF EACH WORK DAY, THE CONTRACTOR MAY EMPLOY A "CERTIFIED CONSULTANT METEOROLOGIST" TO PROVIDE A WRITTEN DAILY WEATHER FORECAST TO THE DEPARTMENT'S ENGINEER. SHOULD THE FORECAST PREDICT A 10% (OR LESS) CHANCE OF PRECIPITATION IN THE NEXT 36 HOUR TIME PERIOD, THE BERMS AND SLOPE DRAINS NEED NOT BE DONE THAT DAY. ON WORK DAYS PRECEDING NON-WORK DAYS, THE FORECAST MUST EXTEND TO THE SCHEDULED RESUMPTION OF WORK.

3. CONSTRUCTION SEQUENCE FOR EMBANKMENT

   (A) EXCAVATE AND STABILIZE SIDE DITCH AND/OR INSTALL PROPOSED PERIMETER CONTROLS AT THE TOE OF SLOPE.
   (B) PLACE PHASE 1 EMBANKMENT AND STABILIZE WITH TEMPORARY SEEDING AND MULCH.
   (C) PLACE PHASE 2 EMBANKMENT AND STABILIZE WITH TEMPORARY SEEDING AND MULCH.
   (D) PLACE FINAL PHASE EMBANKMENT AND STABILIZE WITH PERMANENT VEGETATIVE PLAN ON THE ENTIRE SLOPE.

4. ONCE THE PLACEMENT OF FILL WITHIN A SPECIFIC AREA HAS BEGUN, THE OPERATION SHALL BE CONTINUOUS FROM STRIPPING THROUGH THE COMPLETION OF THE GRADING AND PLACEMENT OF PERMANENT VEGETATIVE PLAN. ANY INTERRUPTIONS IN THE OPERATION OF 14 DAYS OR MORE MUST BE APPROVED BY THE ENGINEER. ANY VIOLATION OF THIS REQUIREMENT WILL RESULT IN THE CONTRACTOR ASSUMING THE RESPONSIBILITY OF PLACING TEMPORARY STABILIZATION AT HIS OWN COST AND EXPENSE AS DIRECTED BY THE ENGINEER.

EC-1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION AND SEDIMENT CONTROLS GENERAL NOTES AND LEGEND

HORIZ SCALE: NONE
VERT SCALE: NONE
DATE: JULY 18, 2005
DRAWN BY: BJM / LBP
CHECKED BY: MAM

HNTB

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	383
STA.		TO STA.		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

EROSION AND SEDIMENT CONTROLS GENERAL NOTES (CONTD.)

11. SEDIMENT TRAPS, SEDIMENT BASINS, DITCHES, SEDIMENT CONTROL, SILT FENCE, STONE OUTLET STRUCTURES, EARTH BERMS, ETC. SHALL BE INSPECTED REGULARLY AND MAINTAINED DURING THE CONSTRUCTION SEASON AS WELL AS THE WINTER MONTHS AND OTHER TIMES WHEN THE PROJECT IS CLOSED DOWN. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP. ALL SEDIMENTS SHALL BE REMOVED TO AN APPROVED SITE. STONE OUTLET STRUCTURES SHALL HAVE SEDIMENT REMOVED WHEN IT REACHES 50% THE HEIGHT OF THE CONTROL DEVICE. THESE SPOILS WILL BE REMOVED TO AN APPROVED SITE.

12. SALVAGED TOPSOIL SHALL BE PLACED ON WELL DRAINED LAND AWAY FROM INTERMITTENT AND LIVE STREAMS OR WETLANDS WITH THE APPROPRIATE RUNOFF CONTROL AND SEDIMENT CONTROL MEASURES INSTALLED AROUND THE STORAGE SITE, AND STABILIZED IMMEDIATELY AFTER FINAL SHAPING OF THE PILE IN ACCORDANCE WITH MULCH, METHOD 2. THE CONTRACTOR WILL PROVIDE AN ADEQUATE QUANTITY OF SILT FENCE TO CONTROL THE PERIMETER OF THE STOCKPILE.

13. MATERIALS EXCAVATED FOR THE CONSTRUCTION OR CLEANOUT OF SEDIMENT TRAPS OR SEDIMENT BASINS SHALL NOT BE STOCKPILED IN (THE VICINITY OF) THE TRAP OR BASIN. IT WILL EITHER BE PLACED IN AN EMBANKMENT OR WASTED AS DIRECTED BY THE ENGINEER.

14. EXCAVATION TO BE USED FOR EMBANKMENTS SHALL NOT BE STOCKPILED UNLESS PERIMETER CONTROLS ARE UTILIZED. WHEN THIS MATERIAL IS STOCKPILED FOR THE CONVENIENCE OF THE CONTRACTOR THE COST OF THE CONTROLS ARE BORNE BY THE CONTRACTOR. IF THE MATERIAL IS STOCKPILED AT THE DIRECTION OF THE ENGINEER THE DEPARTMENT WILL ASSUME THE COSTS OF THE CONTROLS.

15. SEDIMENT LADEN DEWATERING DISCHARGE MUST BE DIRECTED TO AN APPROVED SEDIMENT TRAPPING MEASURE PRIOR TO RELEASE FROM THE SITE.

16. WHEN THE CONTRACTOR REQUESTS A CHANGE TO POSTPONE COMPLETION OF THE EXCAVATION OF A SPECIFIC AREA AS A CONTINUOUS OPERATION AND PLACING THE TOPSOIL AS DEFINED IN THE STANDARD SPECIFICATIONS, THE ENGINEER MAY ALLOW THE CONTRACTOR TO STABILIZE THE AREA USING TEMPORARY STABILIZATION WITH STRAW MULCH PROVIDING THE FOLLOWING CONDITIONS ARE MET:

(A) ALL AREAS BEING STABILIZED ARE 3:1 SLOPES OR FLATTER.

(B) THE CONTRACTOR BEARS THE COST OF PREPARING THE SEED BED AND STABILIZING THE AREA WITH TEMPORARY STABILIZATION WITH STRAW MULCH.

(C) ALL REQUIRED SEDIMENT CONTROL MEASURES FOR THE SECTION OF ROAD IN QUESTION HAVE BEEN INSTALLED AND ARE BEING MAINTAINED.

17. SEEDING USAGE

CLASS 2A SALT TOLERANT ROADSIDE MIX USED FOR NEW CONSTRUCTION OF LIMITED ACCESS ROUTES INTENDED TO BE MOWED BY IDOT.

CLASS 4 NATIVE GRASS AND FORB MIX USED ON ALL INACCESSIBLE AREAS, IN WIDE RIGHT-OF-WAY AREAS OR INTERCHANGES, SLOPES STEEPER THAN 3:1 (GREATER THAN 10 FEET IN HEIGHT), AND ALL SLOPES STEEPER THAN 2:1 (GREATER THAN 6 FEET IN HEIGHT).

CLASS 4B WETLAND GRASS AND SEDGE MIXTURE FOR WETLAND MITIGATION SITES

SODDING SALT TOLERANT, USED IN AREAS ADJACENT TO OTHER AREAS REQUIRING A HIGH ORDER OF APPEARANCE INTENDED TO BE MOWED BY SOMEONE OTHER THAN IDOT

18. TEMPORARY EROSION CONTROL SEEDING USED ON SHORT TERM TEMPORARY SEEDING.

TOP SOIL PLACEMENT:
TOPSOIL WILL BE PLACED ON FINAL SLOPES WHICH WILL NOT BE DISTURBED BY FUTURE CONSTRUCTION. TOPSOIL WILL NOT BE PLACED ON SURFACES WHICH WILL BE PAVED IN THE FUTURE NOR ON TEMPORARILY STEEP SLOPES.

19. SEDIMENT CONTROL DRAINAGE STRUCTURE INLET FILTER SHALL BE INSTALLED AND MAINTAINED AT EACH EXISTING AND PROPOSED INLET WITHIN THE PROJECT LIMITS.

20. INLET AND PIPE PROTECTION: INSPECT REGULARLY AND AFTER EVERY STORM. MAKE REPAIRS AS NECESSARY TO ENSURE THAT THE MEASURE IS IN GOOD WORKING ORDER. CLEAN OR REMOVE AND REPLACE THE FILTER FABRIC IF IT BECOMES CLOGGED. WORK IS INCLUDED IN COST OF INLET AND PIPE PROTECTION.

EC-2

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION AND SEDIMENT CONTROLS GENERAL NOTES AND STRATEGY

HORIZ SCALE: NONE
VERT SCALE: NONE
DATE: JULY 18, 2005
DRAWN BY: BAJ
CHECKED BY: MAM

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F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	384
STA.		TO STA.		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

EROSION AND SEDIMENT CONTROL (ESC) STRATEGY (CONTD.)

DISTURBED AREA:

I-94 EB, STA. 18+500.000 TO STA. 19+175.000, 0.62 HA
RECIEVING WATERS: STORM SEWER SOUTH TO OUTLET 26

I-94 EB, STA. 19+625.000 TO STA. 20+000.000, 0.46 HA
RECIEVING WATERS: STORM SEWER EAST TO OUTLET 24

1. ERECT PERIMETER EROSION BARRIER (PEB) AS SHOWN ON THE "DURING CONSTRUCTION" PANEL TO SEPARATE THE EXISTING DITCH FLOW FROM THE DISTURBED AREA.
2. ERECT TEMPORARY FENCE ALONG CONSTRUCTION LIMITS WHERE NOTED ON THE "DURING CONSTRUCTION" PANEL.
3. CUT AND/OR FILL FOR TEMPORARY DITCHES.
4. STABILIZE TEMPORARY DITCHES WITH TEMPORARY EROSION CONTROL SEEDING
5. ADD TEMPORARY DITCH CHECK, URETHANE FOAM/GEOTEXTILE (TDC, UP/G) IN TEMPORARY DITCHES AT 250mm VERTICAL INCREMENTS.
6. INSTALL SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER (SC, DSIF) AT EXISTING INLET STRUCTURES.
7. CONSTRUCT INLET AND PIPE PROTECTION AS SHOWN IN THE "DURING CONSTRUCTION" PANEL.
8. CONSTRUCT EMBANKMENT IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL (ESC) GENERAL NOTES.
9. SEED AND STABILIZE AS SHOWN IN THE "FINAL CONDITION" PANEL.
   SEEDING USAGE:

   CLASS 2A SALT TOLERANT ROADSIDE MIX USED FOR NEW CONSTRUCTION OF LIMITED ACCESS ROUTES INTENDED TO BE MOWED BY IDOT

   CLASS 4 NATIVE GRASS AND FORB MIX USED IN ALL INACCESSIBLE AREAS, IN WIDE RIGHT-OF-WAY AREAS OR INTERCHANGES, SLOPES STEEPER THAN 3:1 (GREATER) THAN 10 FEET IN HEIGHT), AND ALL SLOPES STEEPER THAN 2:1 (GREATER THAN 6 FEET IN HEIGHT)

   SODDING SALT TOLERANT, USED IN AREAS ADJACENT TO OTHER AREAS REQUIRING A HIGH ORDER OF APPEARANCE INTENDED TO BE MOWED BY SOMEONE OTHER THAN IDOT

DISTURBED AREA:

I-94 EB, STA. 19+175.000 TO STA. 19+625.000, 0.37 HA
RECIEVING WATERS: STORM SEWER SOUTH TO OUTLET 25

1. ERECT TEMPORARY FENCE ALONG CONSTRUCTION LIMITS WHERE NOTED ON THE "DURING CONSTRUCTION" PANEL.
2. CUT AND/OR FILL FOR TEMPORARY DITCHES.
3. STABILIZE TEMPORARY DITCHES WITH TEMPORARY EROSION CONTROL SEEDING
4. ADD TEMPORARY DITCH CHECK, URETHANE FOAM/GEOTEXTILE (TDC, UP/G) IN TEMPORARY DITCHES AT 250mm VERTICAL INCREMENTS.
5. INSTALL SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER (SC, DSIF) AT EXISTING INLET STRUCTURES.
6. CONSTRUCT INLET AND PIPE PROTECTION AND SHOWN IN THE "DURING CONSTRUCTION" PANEL.
7. CONSTRUCT EMBANKMENT IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL (ESC) GENERAL NOTES.
8. SEED AND STABILIZE AS SHOWN IN THE "FINAL CONDITION" PANEL.
   SEEDING USAGE:

   CLASS 2A SALT TOLERANT ROADSIDE MIX USED FOR NEW CONSTRUCTION OF LIMITED ACCESS ROUTES INTENDED TO BE MOWED BY IDOT

   SODDING SALT TOLERANT, USED IN AREAS ADJACENT TO OTHER AREAS REQUIRING A HIGH ORDER OF APPEARANCE INTENDED TO BE MOWED BY SOMEONE OTHER THAN IDOT

DISTURBED AREA:

IL 394 SB STA. 38+500.000 TO STA. 39+675.000, 2.58 HA
RECIEVING WATERS: STORM SEWER SOUTH TO OUTLET 22

1. ERECT TEMPORARY FENCE ALONG CONSTRUCTION LIMITS WHERE NOTED ON THE "DURING CONSTRUCTION" PANEL.
2. CUT AND/OR FILL FOR TEMPORARY DITCHES.
3. STABILIZE TEMPORARY DITCHES WITH TEMPORARY EROSION CONTROL SEEDING
4. ADD TEMPORARY DITCH CHECK, URETHANE FOAM/GEOTEXTILE (TDC, UP/G) IN TEMPORARY DITCHES AT 250mm VERTICAL INCREMENTS.
5. INSTALL SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER (SC, DSIF) AT EXISTING INLET STRUCTURES.
6. CONSTRUCT INLET AND PIPE PROTECTION AND TEMPORARY PIPE SLOPE DRAINS AS SHOWN IN THE "DURING CONSTRUCTION" PANEL.
7. CONSTRUCT EMBANKMENT IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL (ESC) GENERAL NOTES.
8. SEED AND STABILIZE AS SHOWN IN THE "FINAL CONDITION" PANEL.
   SEEDING USAGE:

   CLASS 2A SALT TOLERANT ROADSIDE MIX USED FOR NEW CONSTRUCTION OF LIMITED ACCESS ROUTES INTENDED TO BE MOWED BY IDOT

   CLASS 4 NATIVE GRASS AND FORB MIX USED IN ALL INACCESSIBLE AREAS, IN WIDE RIGHT-OF-WAY AREAS OR INTERCHANGES, SLOPES STEEPER THAN 3:1 (GREATER) THAN 10 FEET IN HEIGHT), AND ALL SLOPES STEEPER THAN 2:1 (GREATER THAN 6 FEET IN HEIGHT)

DISTURBED AREA:

IL 394 SB, STA. 39+675.000 (℄ IL 394) TO STA. 440+200.000 (℄ 394 SB), 1.41 HA
RECIEVING WATERS: STORM SEWER NORTH/EAST TO THORN CREEK

IL 394 SB, STA. 440+200.000 TO STA. 440+700.000, 5.93 HA
RECIEVING WATERS: DITCHES NORTH TO THORN CREEK

1. ERECT TEMPORARY FENCE ALONG CONSTRUCTION LIMITS WHERE NOTED ON THE "DURING CONSTRUCTION" PANEL.
2. CUT AND/OR FILL FOR TEMPORARY DITCHES.
3. STABILIZE TEMPORARY DITCHES WITH TEMPORARY EROSION CONTROL SEEDING
4. ADD TEMPORARY DITCH CHECK, URETHANE FOAM/GEOTEXTILE (TDC, UP/G) IN TEMPORARY DITCHES AT 250mm VERTICAL INCREMENTS.
5. INSTALL SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER (SC, DSIF) AT EXISTING INLET STRUCTURES.
6. CONSTRUCT INLET AND PIPE PROTECTION AND TEMPORARY PIPE SLOPE DRAINS AS SHOWN IN THE "DURING CONSTRUCTION" PANEL.
7. CONSTRUCT EMBANKMENT IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL (ESC) GENERAL NOTES.
8. SEED AND STABILIZE AS SHOWN IN THE "FINAL CONDITION" PANEL.
   SEEDING USAGE:

   CLASS 2A SALT TOLERANT ROADSIDE MIX USED FOR NEW CONSTRUCTION OF LIMITED ACCESS ROUTES INTENDED TO BE MOWED BY IDOT

   CLASS 4 NATIVE GRASS AND FORB MIX USED IN ALL INACCESSIBLE AREAS, IN WIDE RIGHT-OF-WAY AREAS OR INTERCHANGES, SLOPES STEEPER THAN 3:1 (GREATER) THAN 10 FEET IN HEIGHT), AND ALL SLOPES STEEPER THAN 2:1 (GREATER THAN 6 FEET IN HEIGHT)

   CLASS 4B WETLAND GRASS AND SEDGE MIXTURE FOR WETLAND MIGRATION SITES

DISTURBED AREA:

IL 394 SB, STA. 440+700.000 TO 441+150.000, 4.05 HA
RECIEVING WATERS: STORM SEWER AND DITCH SOUTH TO THORN CREEK

1. ERECT TEMPORARY FENCE ALONG CONSTRUCTION LIMITS WHERE NOTED ON THE "DURING CONSTRUCTION" PANEL.
2. CUT AND/OR FILL FOR TEMPORARY DITCHES.
3. STABILIZE TEMPORARY DITCHES WITH TEMPORARY EROSION CONTROL SEEDING
4. ADD TEMPORARY DITCH CHECK, URETHANE FOAM/GEOTEXTILE (TDC, UP/G) IN TEMPORARY DITCHES AT 250mm VERTICAL INCREMENTS.
5. INSTALL SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER (SC, DSIF) AT EXISTING INLET STRUCTURES.
6. CONSTRUCT INLET AND PIPE PROTECTION AND TEMPORARY PIPE SLOPE DRAINS AS SHOWN IN THE "DURING CONSTRUCTION" PANEL.
7. CONSTRUCT EMBANKMENT IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL (ESC) GENERAL NOTES.
8. SEED AND STABILIZE AS SHOWN IN THE "FINAL CONDITION" PANEL.
   SEEDING USAGE:

   CLASS 2A SALT TOLERANT ROADSIDE MIX USED FOR NEW CONSTRUCTION OF LIMITED ACCESS ROUTES INTENDED TO BE MOWED BY IDOT

   CLASS 4 NATIVE GRASS AND FORB MIX USED IN ALL INACCESSIBLE AREAS, IN WIDE RIGHT-OF-WAY AREAS OR INTERCHANGES, SLOPES STEEPER THAN 3:1 (GREATER) THAN 10 FEET IN HEIGHT), AND ALL SLOPES STEEPER THAN 2:1 (GREATER THAN 6 FEET IN HEIGHT)

   CLASS 4B WETLAND GRASS AND SEDGE MIXTURE FOR WETLAND MITIGATION SITES

   SODDING SALT TOLERANT, USED IN AREAS ADJACENT TO OTHER AREAS REQUIRING A HIGH ORDER OF APPEARANCE INTENDED TO BE MOWED BY SOMEONE OTHER THAN IDOT

EC-3

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION AND SEDIMENT CONTROLS STRATEGY

HORIZ SCALE: NONE
VERT SCALE: NONE
DATE: JULY 18, 2005

DRAWN BY: JPH
CHECKED BY: MAM

HNTB

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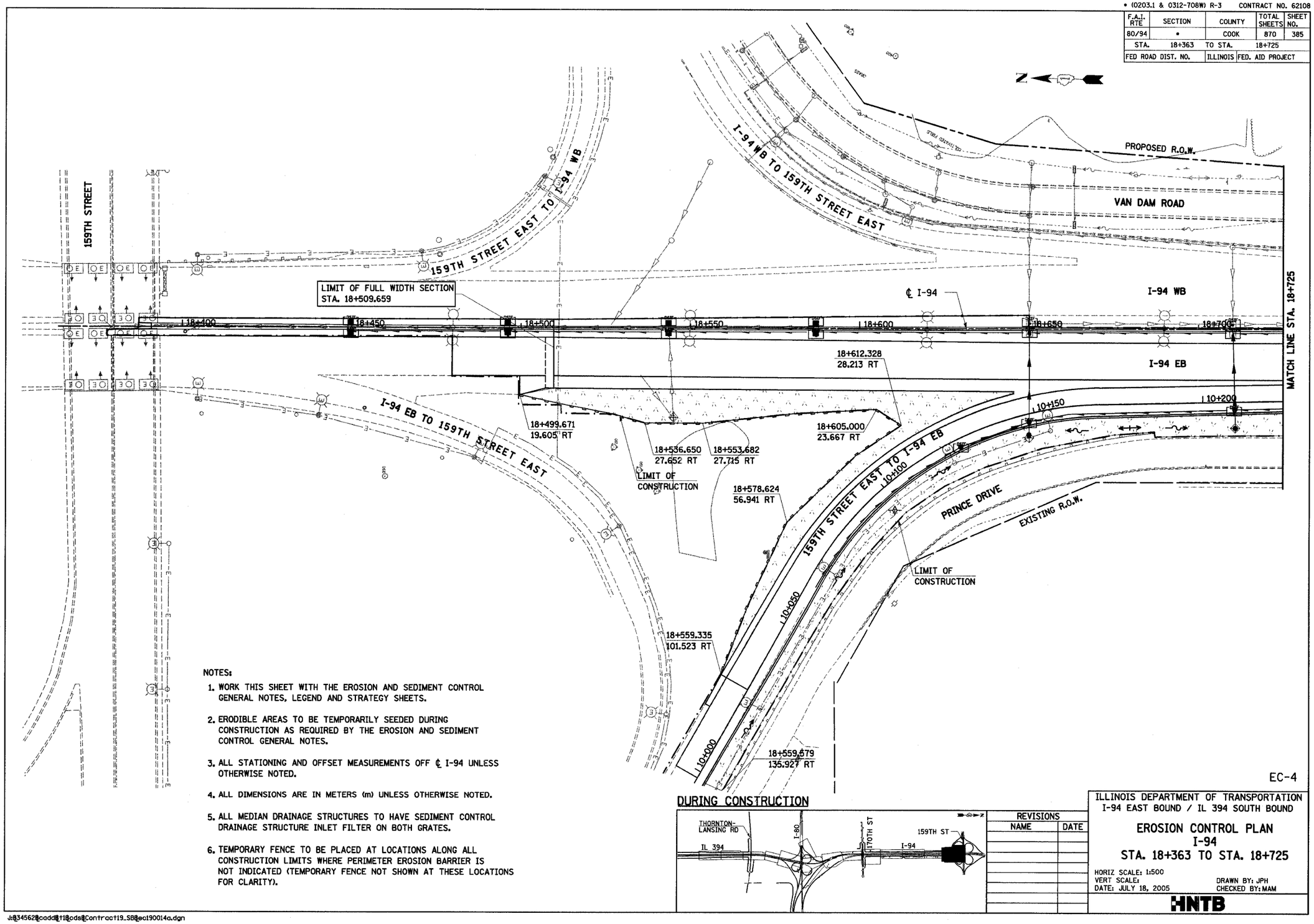
• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	385
STA. 18+363		TO STA. 18+725		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ERODIBLE AREAS TO BE TEMPORARILY SEEDED DURING CONSTRUCTION AS REQUIRED BY THE EROSION AND SEDIMENT CONTROL GENERAL NOTES.
3. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ I-94 UNLESS OTHERWISE NOTED.
4. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.
5. ALL MEDIAN DRAINAGE STRUCTURES TO HAVE SEDIMENT CONTROL DRAINAGE STRUCTURE INLET FILTER ON BOTH GRATES.
6. TEMPORARY FENCE TO BE PLACED AT LOCATIONS ALONG ALL CONSTRUCTION LIMITS WHERE PERIMETER EROSION BARRIER IS NOT INDICATED (TEMPORARY FENCE NOT SHOWN AT THESE LOCATIONS FOR CLARITY).

EC-4

DURING CONSTRUCTION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION CONTROL PLAN
I-94
STA. 18+363 TO STA. 18+725

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: JPH
CHECKED BY: MAM

HNTB

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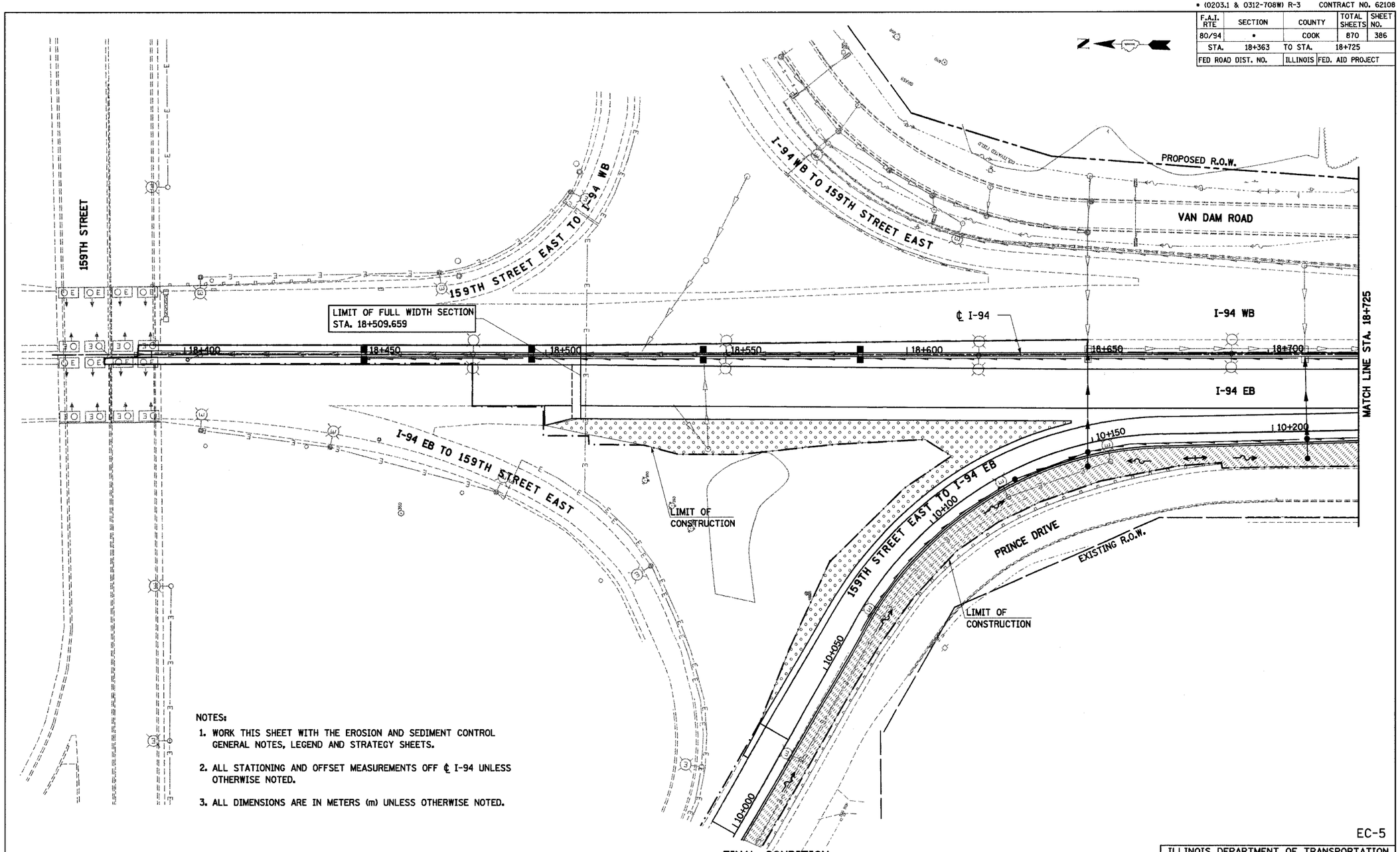
• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	386
STA. 18+363		TO STA. 18+725		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

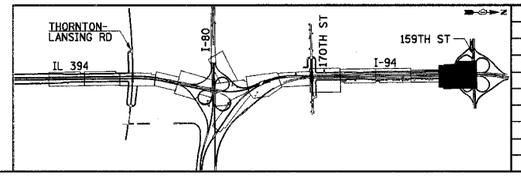


NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ I-94 UNLESS OTHERWISE NOTED.
3. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.

EC-5

FINAL CONDITION



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION CONTROL PLAN
I-94
STA. 18+363 TO STA. 18+725

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: JPH
CHECKED BY: MAM

HNTB

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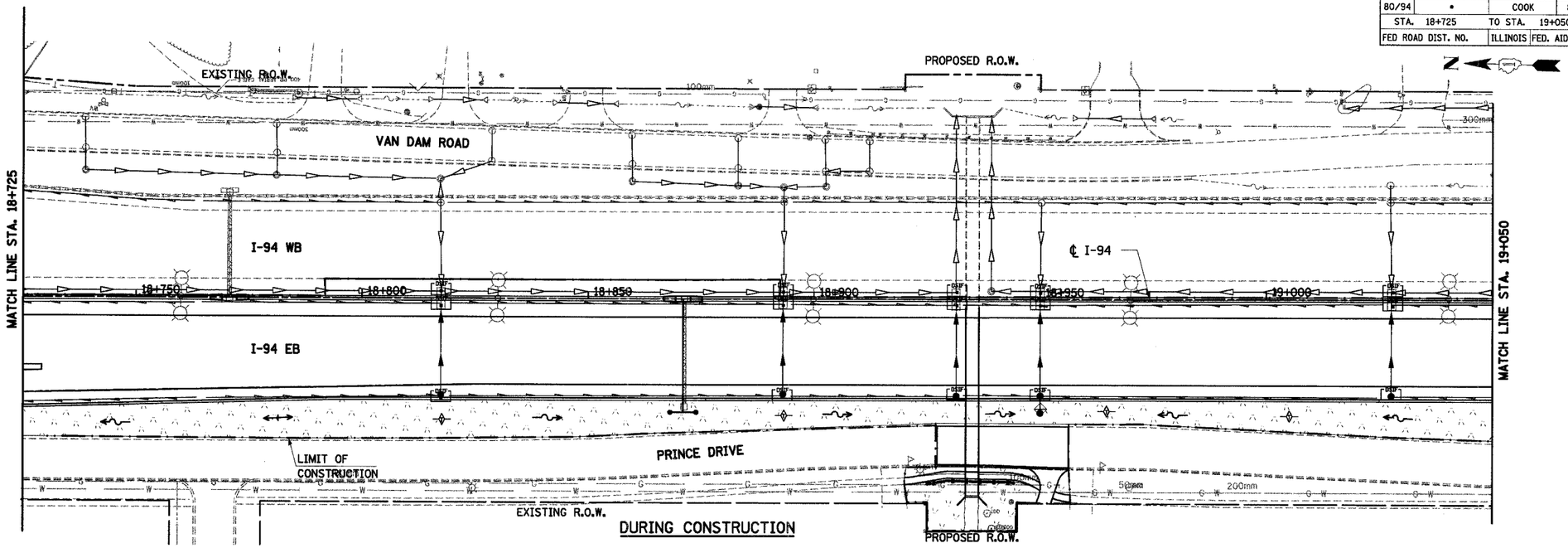
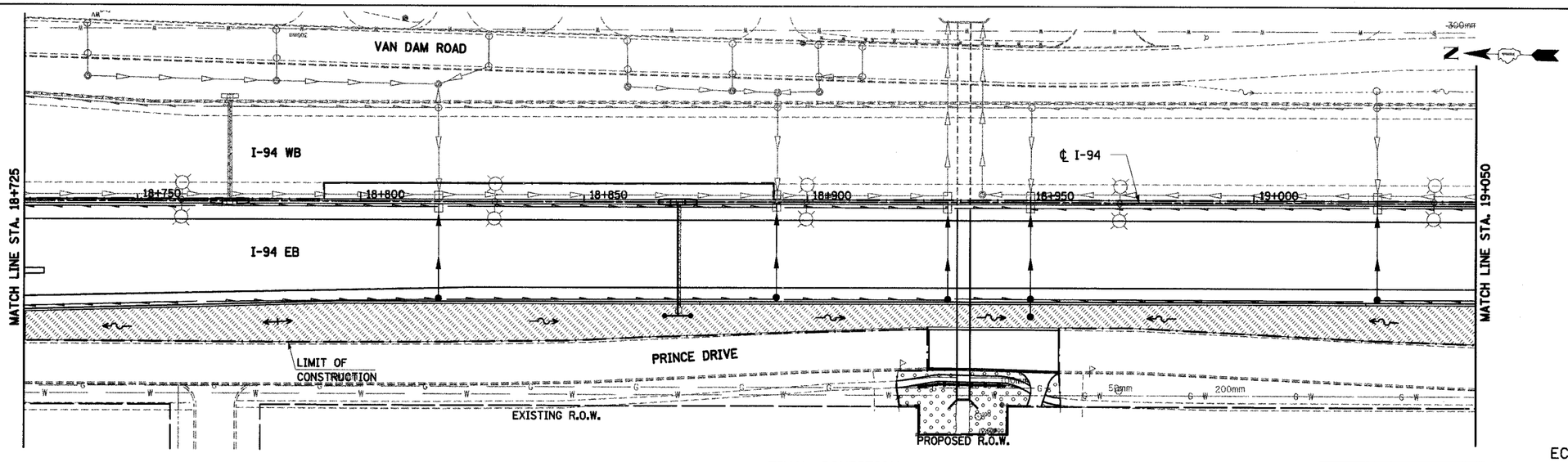
• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	387
STA. 18+725		TO STA. 19+050		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



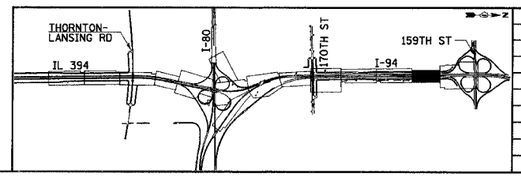
DURING CONSTRUCTION



NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ERODIBLE AREAS TO BE TEMPORARILY SEEDED DURING CONSTRUCTION AS REQUIRED BY THE EROSION AND SEDIMENT CONTROL GENERAL NOTES.
3. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ I-94 UNLESS OTHERWISE NOTED.
4. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.
5. ALL MEDIAN DRAINAGE STRUCTURES TO HAVE SEDIMENT CONTROL DRAINAGE STRUCTURE INLET FILTER ON BOTH GRATES.
6. TEMPORARY FENCE TO BE PLACED AT LOCATIONS ALONG ALL CONSTRUCTION LIMITS WHERE PERIMETER EROSION BARRIER IS NOT INDICATED (TEMPORARY FENCE NOT SHOWN AT THESE LOCATIONS FOR CLARITY).

FINAL CONDITION



REVISIONS	
NAME	DATE

EC-6

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION CONTROL PLAN
I-94
STA. 18+725 TO STA. 19+050

HORIZ SCALE: 1:500
VERT SCALE: NONE
DATE: JULY 18, 2005

DRAWN BY: JPH
CHECKED BY: MAM

HNTB

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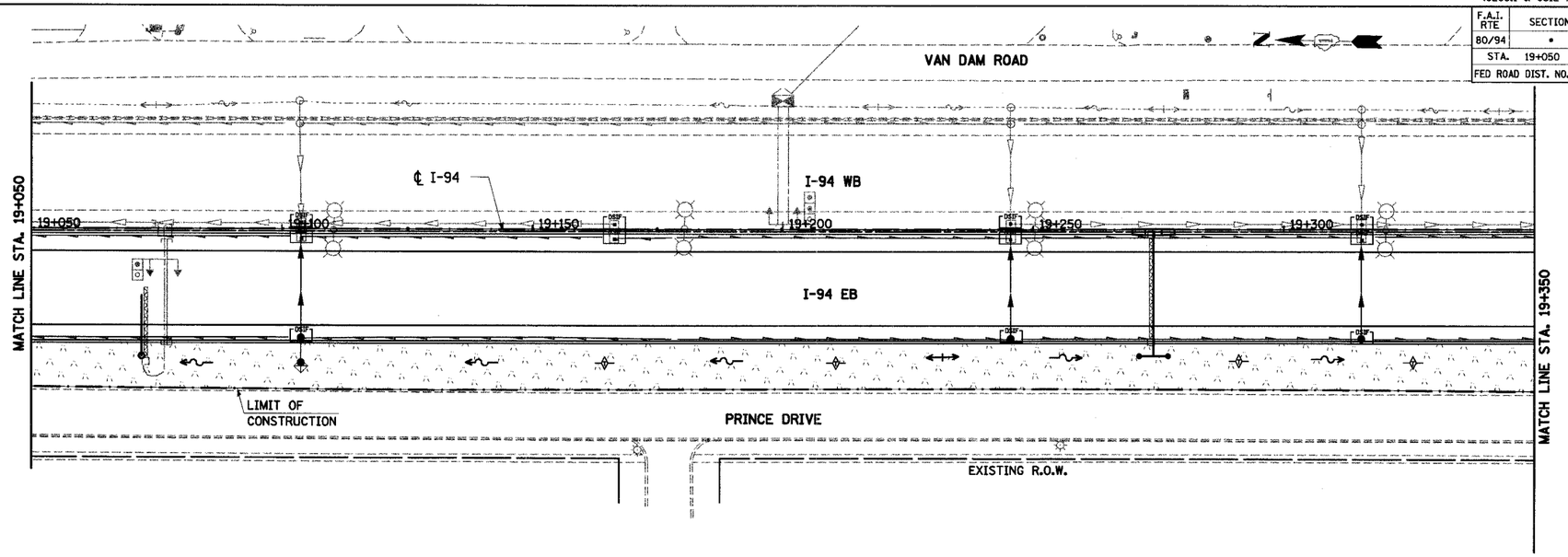
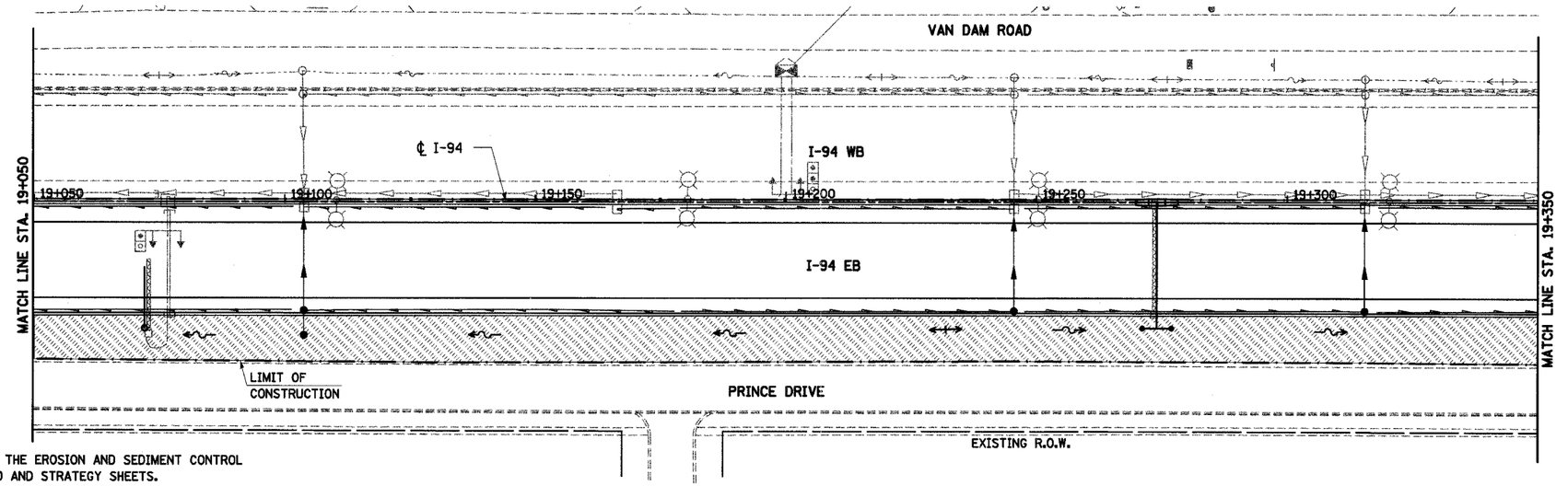
kfox 12-JUL-2005 10:57

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	388
STA. 19+050		TO STA. 19+350		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



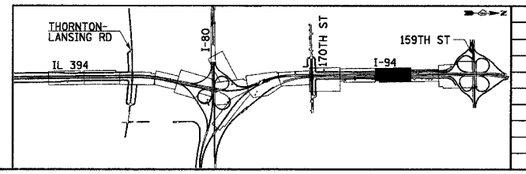
DURING CONSTRUCTION



NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ERODIBLE AREAS TO BE TEMPORARILY SEEDED DURING CONSTRUCTION AS REQUIRED BY THE EROSION AND SEDIMENT CONTROL GENERAL NOTES.
3. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ I-94 UNLESS OTHERWISE NOTED.
4. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.
5. ALL MEDIAN DRAINAGE STRUCTURES TO HAVE SEDIMENT CONTROL DRAINAGE STRUCTURE INLET FILTER ON BOTH GRATES.
6. TEMPORARY FENCE TO BE PLACED AT LOCATIONS ALONG ALL CONSTRUCTION LIMITS WHERE PERIMETER EROSION BARRIER IS NOT INDICATED (TEMPORARY FENCE NOT SHOWN AT THESE LOCATIONS FOR CLARITY).

FINAL CONDITION



REVISIONS	
NAME	DATE

EC-7

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION CONTROL PLAN
I-94
STA. 19+050 TO STA. 19+350

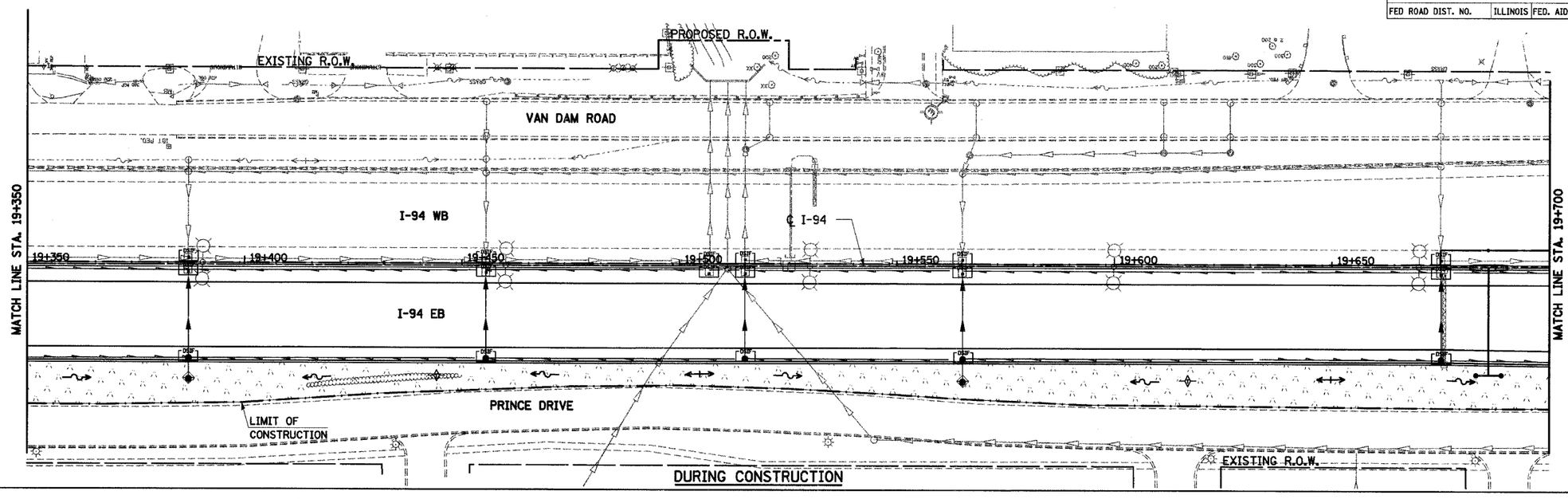
HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: JPH
CHECKED BY: MAM

HNTB

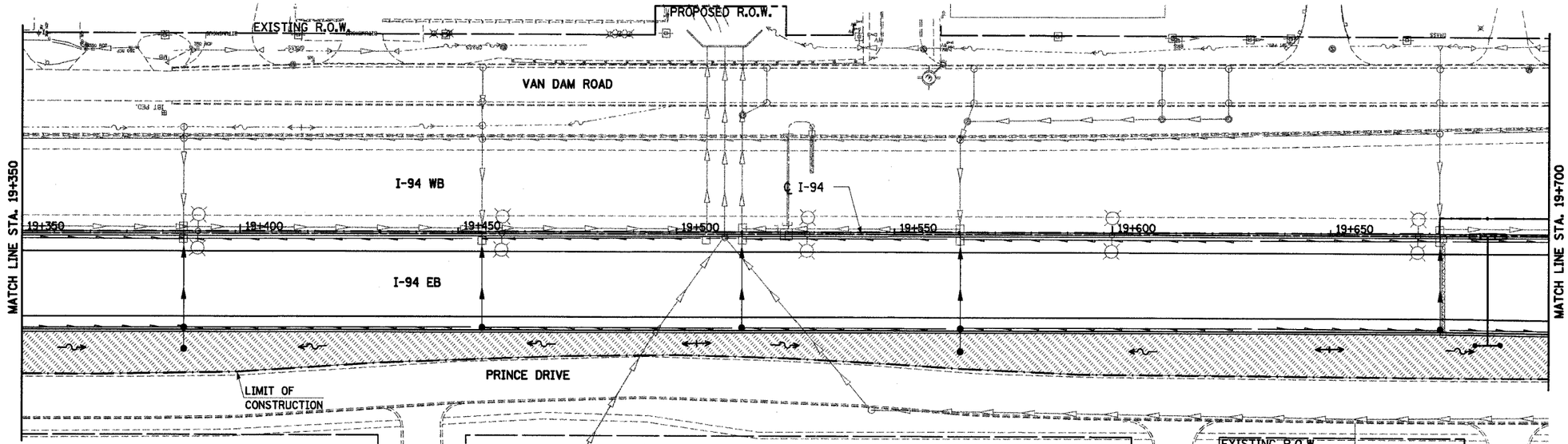
J:\345628\cadd\tif\cds\Contract19_SB\ec190044a.dgn
kfox 12-JUL-2005 10:57

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	389
STA. 19+350		TO STA. 19+700		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



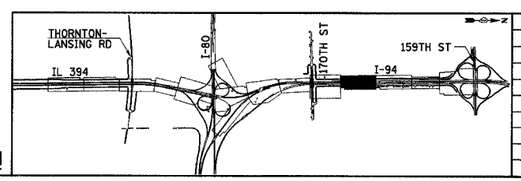
DURING CONSTRUCTION



NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ERODIBLE AREAS TO BE TEMPORARILY SEEDED DURING CONSTRUCTION AS REQUIRED BY THE EROSION AND SEDIMENT CONTROL GENERAL NOTES.
3. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ I-94 UNLESS OTHERWISE NOTED.
4. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.
5. ALL MEDIAN DRAINAGE STRUCTURES TO HAVE SEDIMENT CONTROL DRAINAGE STRUCTURE INLET FILTER ON BOTH GRATES.
6. TEMPORARY FENCE TO BE PLACED AT LOCATIONS ALONG ALL CONSTRUCTION LIMITS WHERE PERIMETER EROSION BARRIER IS NOT INDICATED (TEMPORARY FENCE NOT SHOWN AT THESE LOCATIONS FOR CLARITY).

FINAL CONDITION



REVISIONS	
NAME	DATE

EC-8

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION CONTROL PLAN
I-94
STA. 19+350 TO STA. 19+700

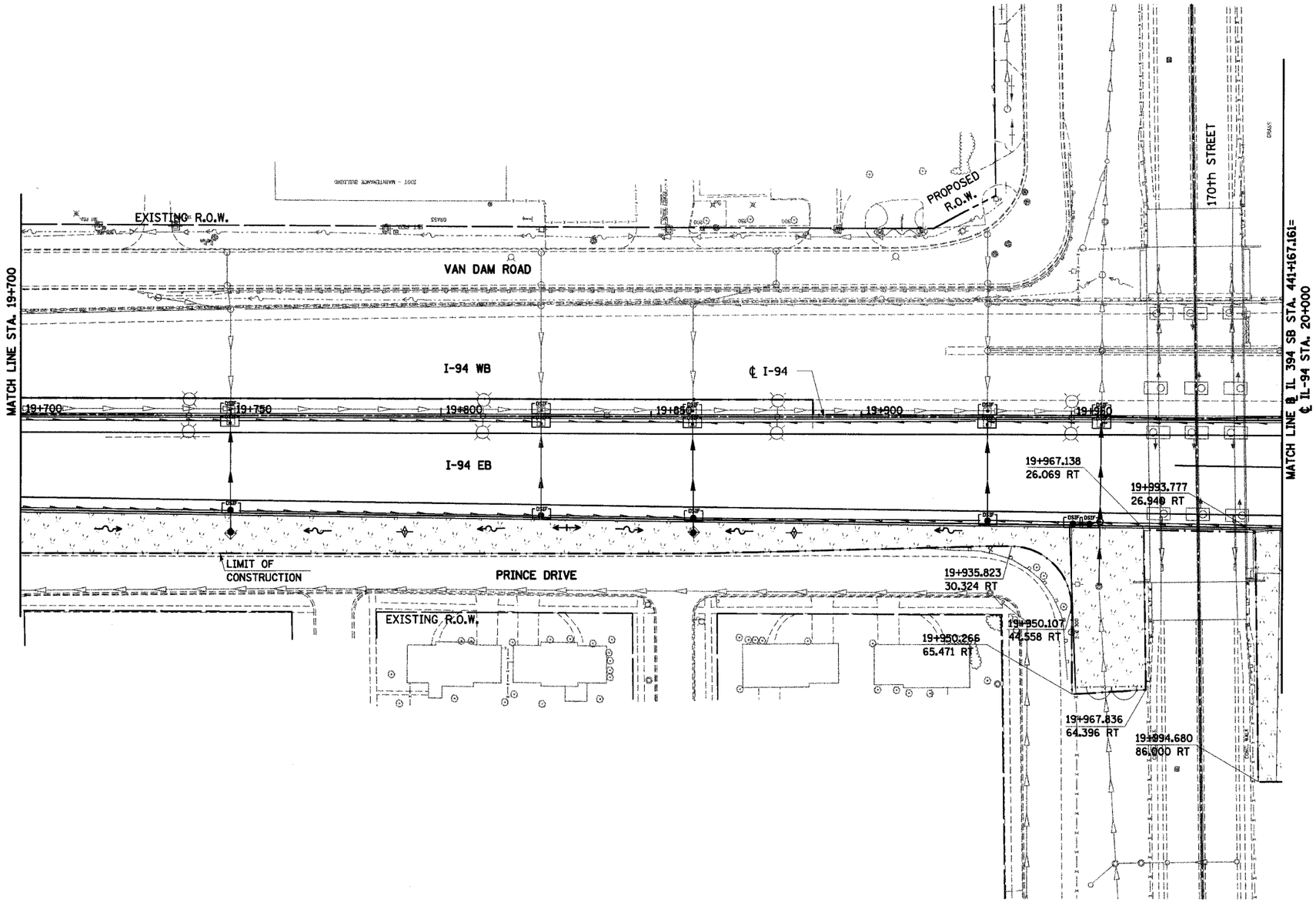
HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: JPH
CHECKED BY: MAM

HNTB

J:\34562\caddd\t1\cads\Contract19_SB\ec190054a.dgn
kfox 12-JUL-2005 10:58

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

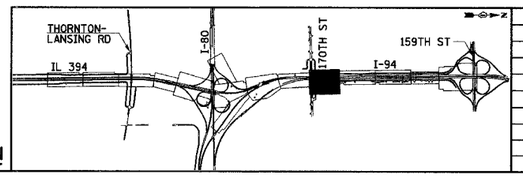
F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	390
STA.	19+700	TO STA.	20+000	
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ERODIBLE AREAS TO BE TEMPORARILY SEEDED DURING CONSTRUCTION AS REQUIRED BY THE EROSION AND SEDIMENT CONTROL GENERAL NOTES.
3. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ I-94 UNLESS OTHERWISE NOTED.
4. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.
5. ALL MEDIAN DRAINAGE STRUCTURES TO HAVE SEDIMENT CONTROL DRAINAGE STRUCTURE INLET FILTER ON BOTH GRATES.
6. TEMPORARY FENCE TO BE PLACED AT LOCATIONS ALONG ALL CONSTRUCTION LIMITS WHERE PERIMETER EROSION BARRIER IS NOT INDICATED (TEMPORARY FENCE NOT SHOWN AT THESE LOCATIONS FOR CLARITY).

DURING CONSTRUCTION



REVISIONS	
NAME	DATE

EC-9

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION CONTROL PLAN
I-94
STA. 19+700 TO STA. 20+000

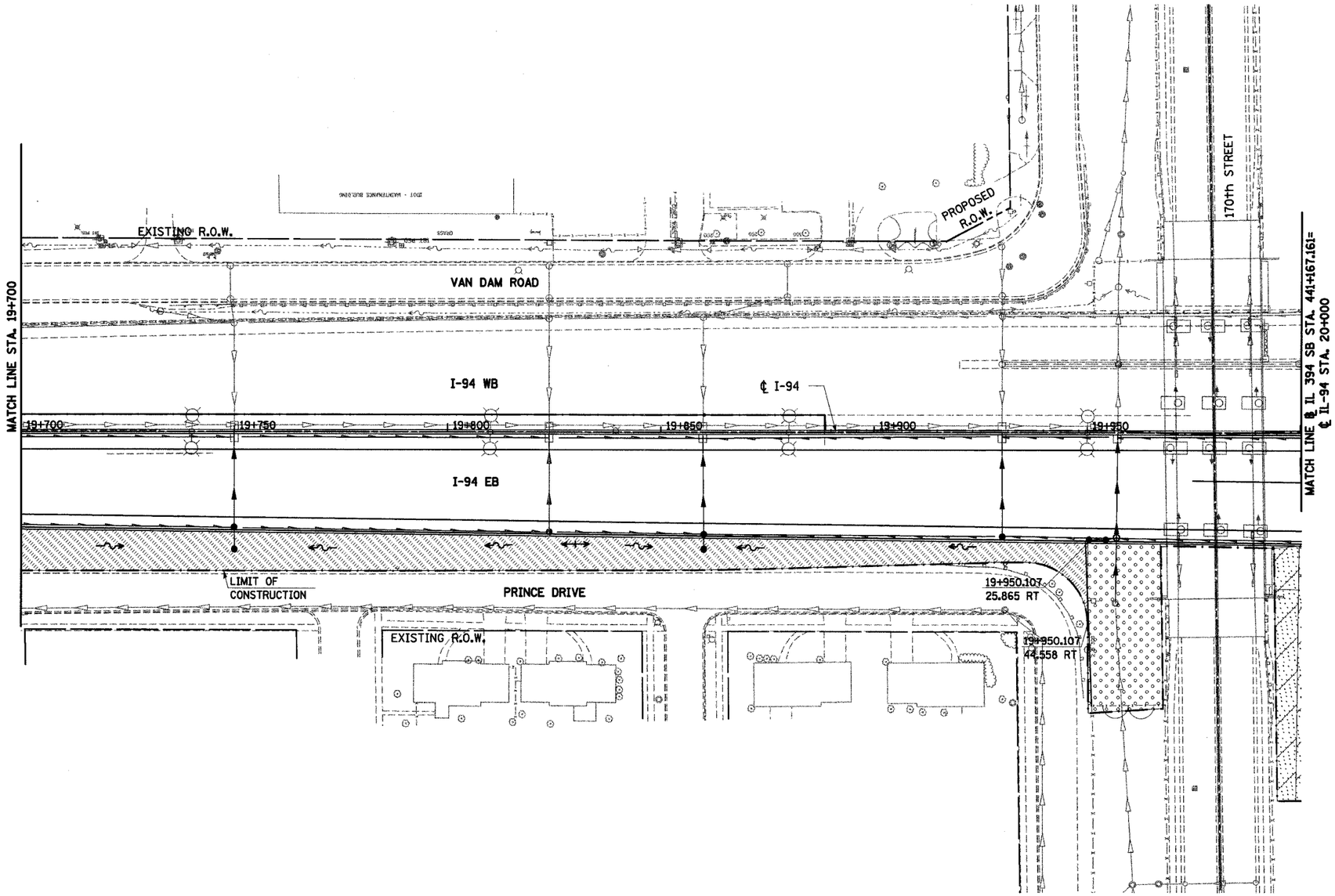
HORIZ SCALE:
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: JPH
CHECKED BY: MAM

HNTB

J:\34562\caddd\11ods\Contract19_SB\ec190064a.dgn
MAMiller 12-JUL-2005 13:06

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

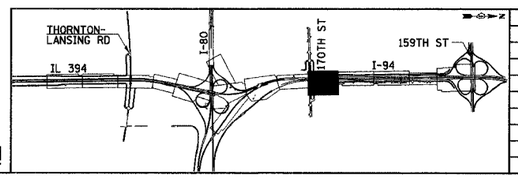
F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	391
STA.	19+700	TO STA.	20+000	
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ I-94 UNLESS OTHERWISE NOTED.
3. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.

FINAL CONDITION



REVISIONS	
NAME	DATE

EC-10

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION CONTROL PLAN
I-94
STA. 19+700 TO STA. 20+000

HORIZ SCALE:
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: JPH
CHECKED BY: MAM

HNTB

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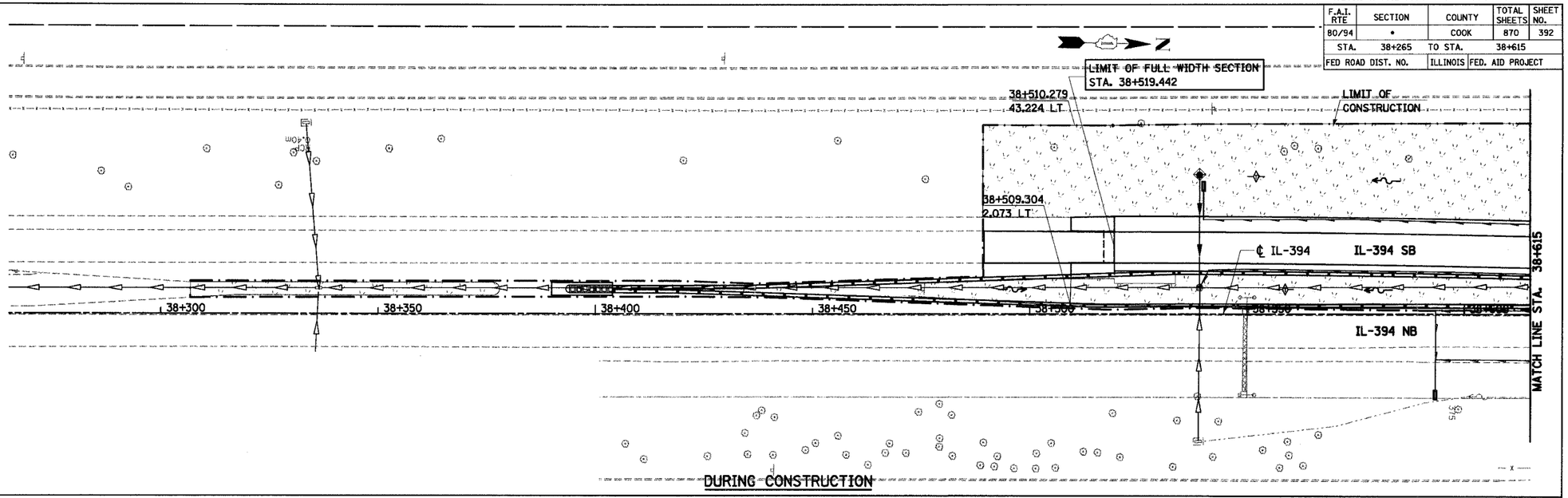
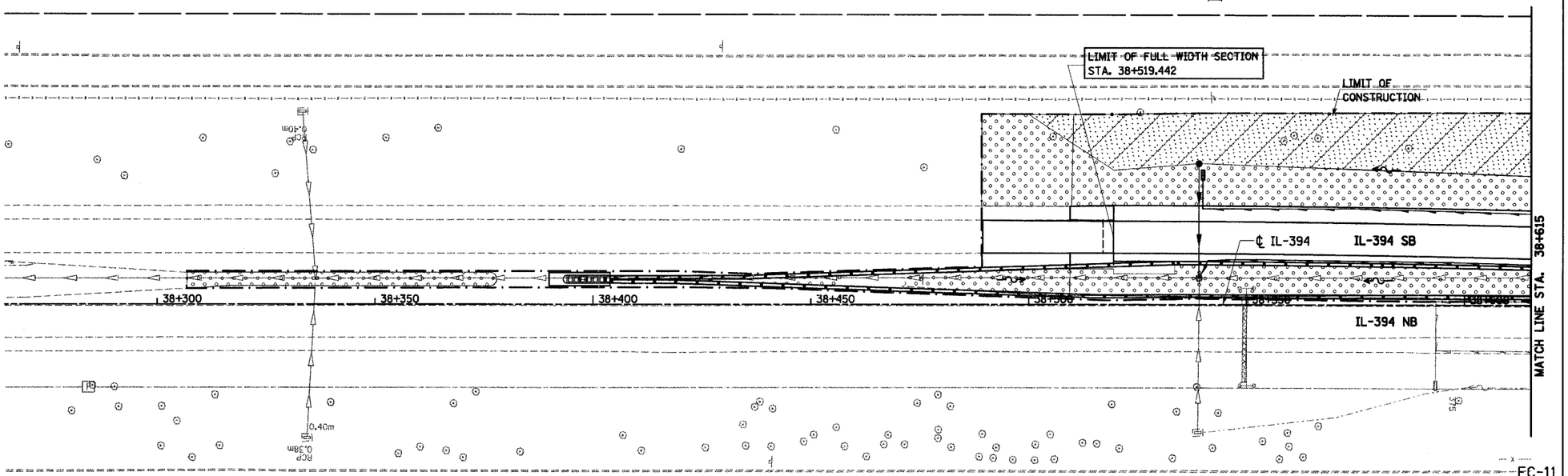
MAMiller 12-JUL-2005 12:45

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	392
STA. 38+265		TO STA. 38+615		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



DURING CONSTRUCTION

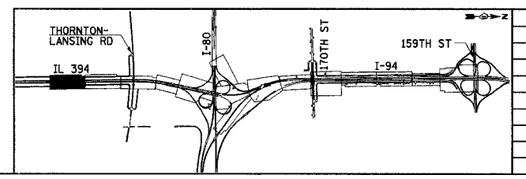


EC-11

NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ERODIBLE AREAS TO BE TEMPORARILY SEEDED DURING CONSTRUCTION AS REQUIRED BY THE EROSION AND SEDIMENT CONTROL GENERAL NOTES.
3. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ IL-394 UNLESS OTHERWISE NOTED.
4. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.
5. TEMPORARY FENCE TO BE PLACED AT LOCATIONS ALONG ALL CONSTRUCTION LIMITS WHERE PERIMETER EROSION BARRIER IS NOT INDICATED (TEMPORARY FENCE NOT SHOWN AT THESE LOCATIONS FOR CLARITY).
6. CLASS 4 SEEDING SHOULD BE ON BACK SLOPE OF 394 LEFT DITCH.

FINAL CONDITION



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION CONTROL PLAN
IL 394
STA. 38+265 TO STA. 38+615

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: JPH
CHECKED BY: MAM

HNTB

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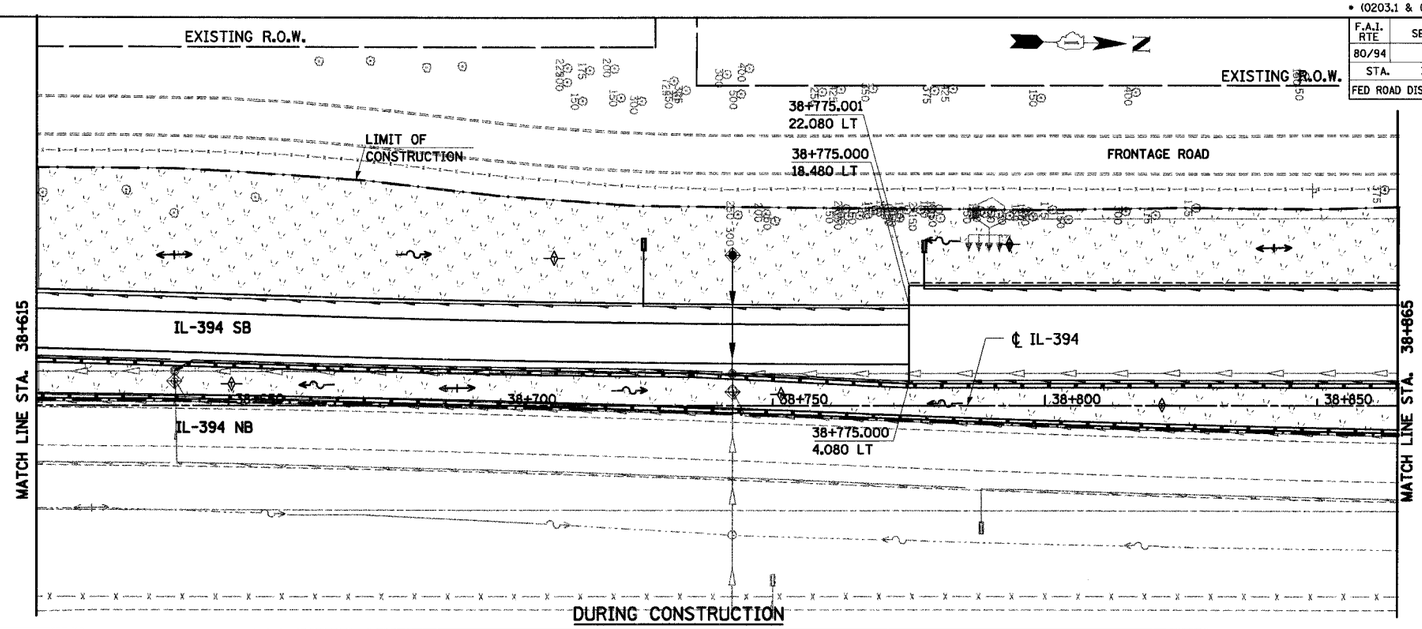
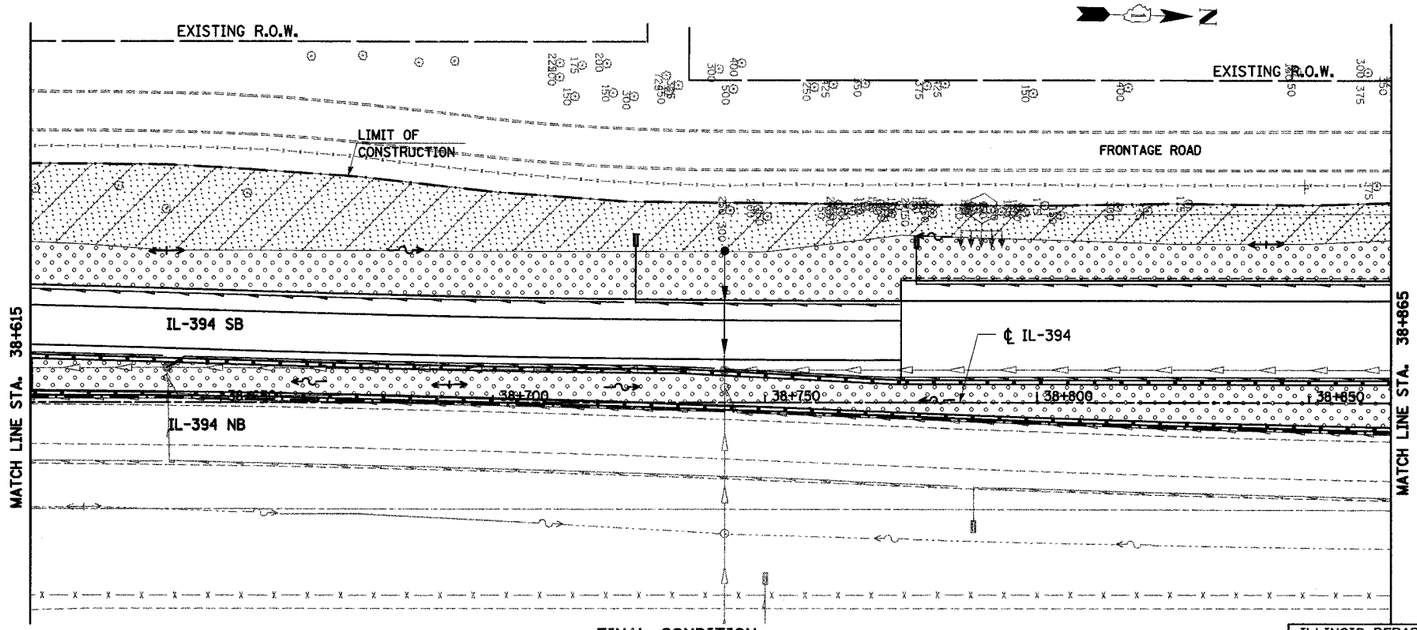
MAMiller 12-JUL-2005 12:22

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

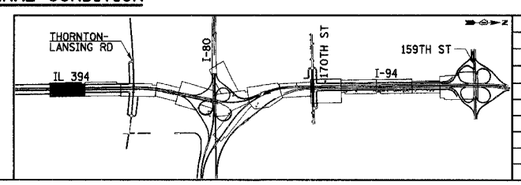
F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	393
STA.	38+615	TO STA.	38+865	
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



DURING CONSTRUCTION



FINAL CONDITION



NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ERODIBLE AREAS TO BE TEMPORARILY SEEDED DURING CONSTRUCTION AS REQUIRED BY THE EROSION AND SEDIMENT CONTROL GENERAL NOTES.
3. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ IL-394 UNLESS OTHERWISE NOTED.
4. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.
5. TEMPORARY FENCE TO BE PLACED AT LOCATIONS ALONG ALL CONSTRUCTION LIMITS WHERE PERIMETER EROSION BARRIER IS NOT INDICATED (TEMPORARY FENCE NOT SHOWN AT THESE LOCATIONS FOR CLARITY).
6. CLASS 4 SEEDING SHOULD BE ON BACK SLOPE OF 394 LEFT DITCH.

REVISIONS	
NAME	DATE

EC-12

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION CONTROL PLAN
IL 394
STA. 38+615 TO STA. 38+865

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: JPH
CHECKED BY: MAM

HNTB

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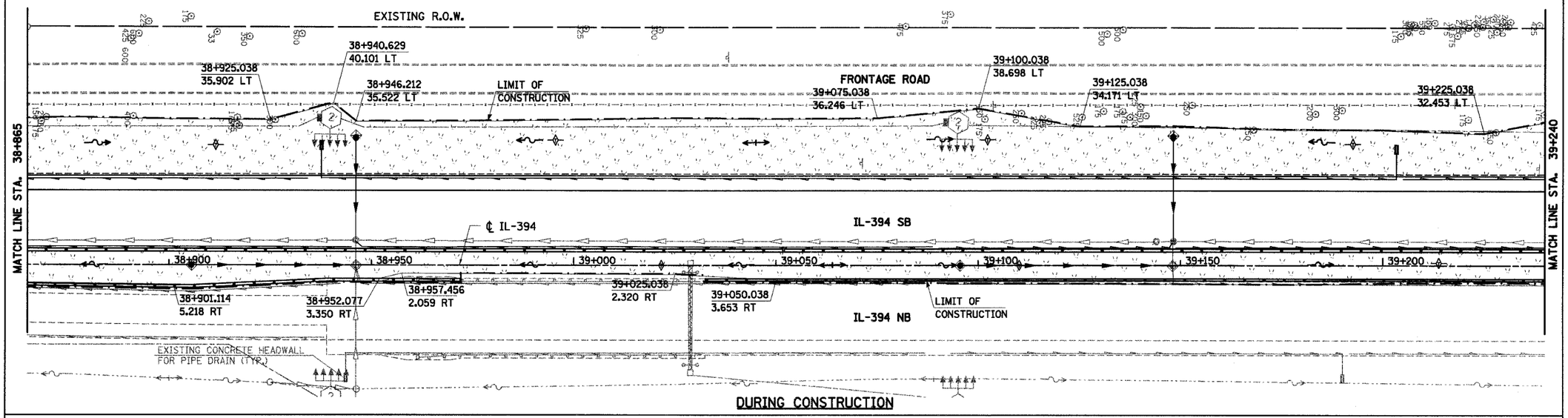
MAMiller 12-JUL-2005 12:23

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

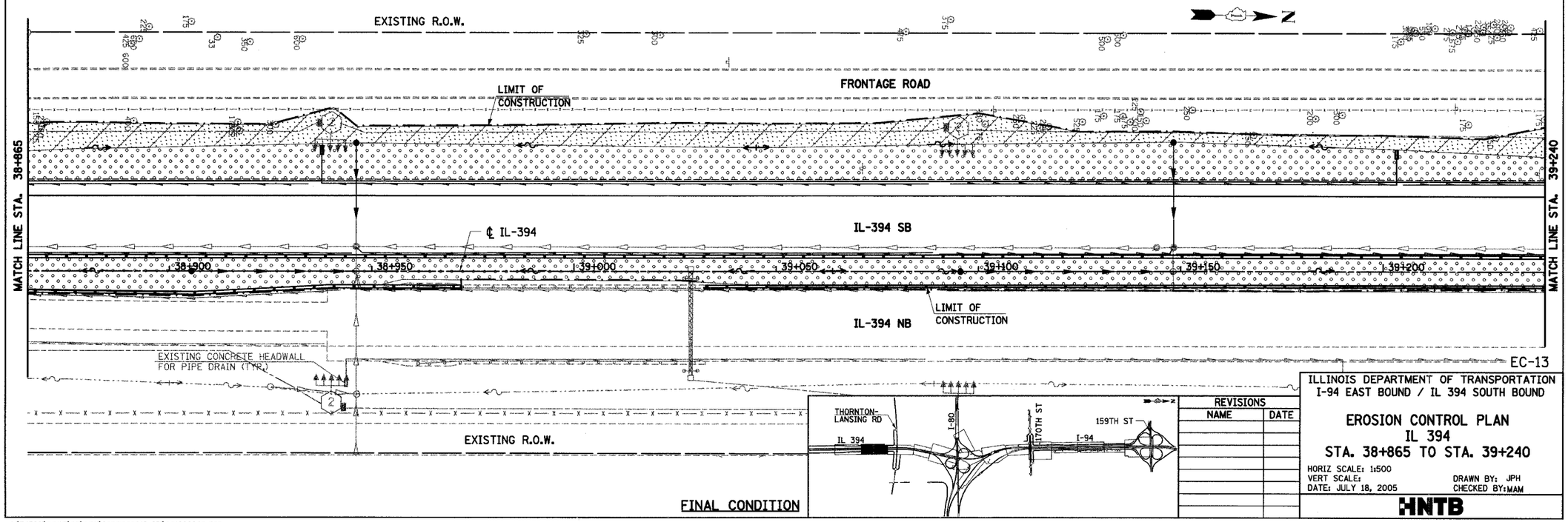
F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	394
STA. 38+865		TO STA. 39+240		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ERODIBLE AREAS TO BE TEMPORARILY SEEDED DURING CONSTRUCTION AS REQUIRED BY THE EROSION AND SEDIMENT CONTROL GENERAL NOTES.
3. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ IL-394 UNLESS OTHERWISE NOTED.
4. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.
5. TEMPORARY FENCE TO BE PLACED AT LOCATIONS ALONG ALL CONSTRUCTION LIMITS WHERE PERIMETER EROSION BARRIER IS NOT INDICATED (TEMPORARY FENCE NOT SHOWN AT THESE LOCATIONS FOR CLARITY).
6. CLASS 4 SEEDING SHOULD BE ON BACK SLOPE OF 394 LEFT DITCH.



DURING CONSTRUCTION



FINAL CONDITION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION CONTROL PLAN
IL 394
STA. 38+865 TO STA. 39+240

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: JPH
CHECKED BY: MAM

HNTB

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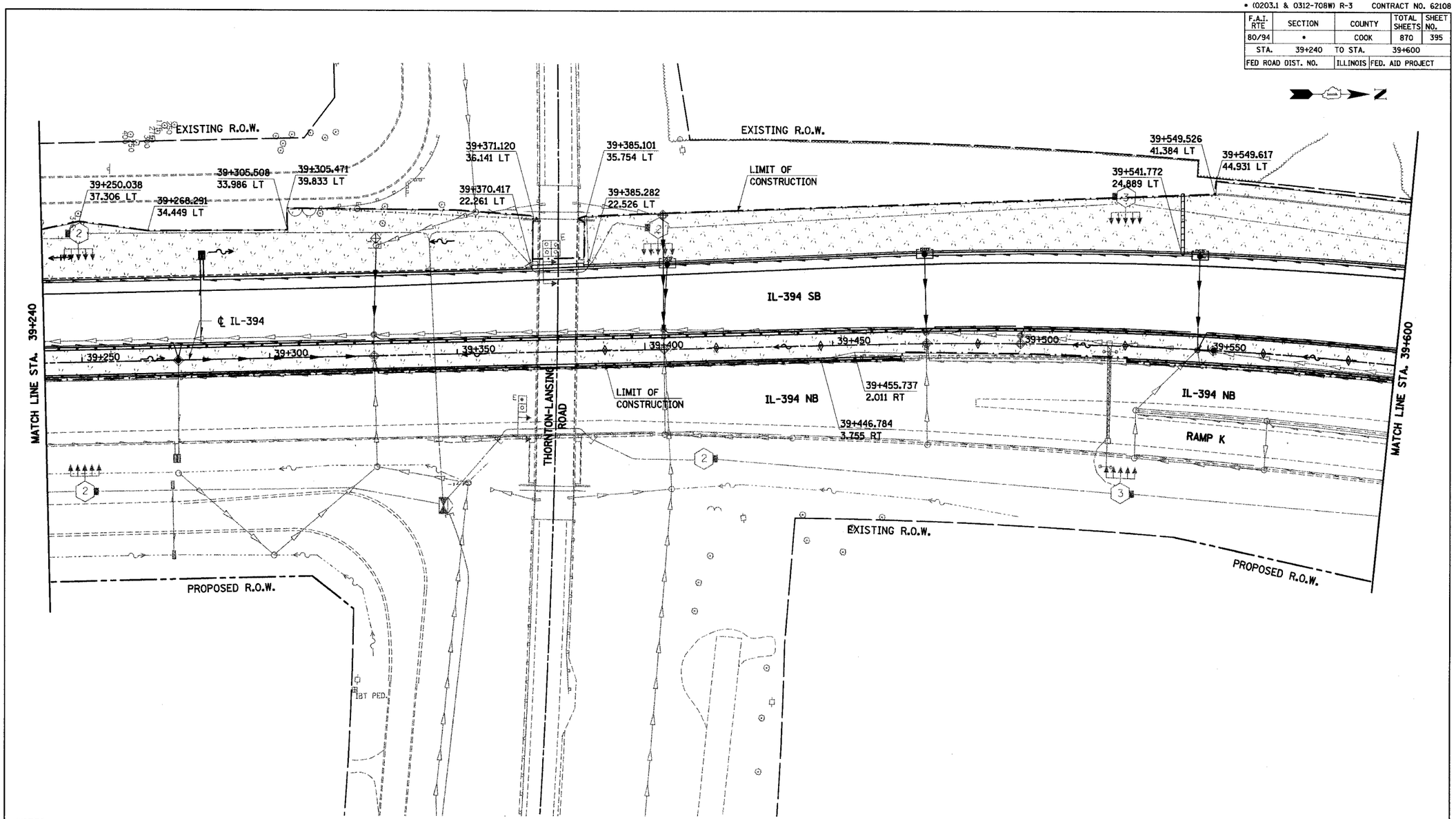
MAMiller 12-JUL-2005 12:24

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

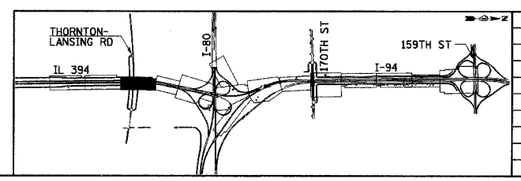
F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	395
STA. 39+240		TO STA. 39+600		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ERODIBLE AREAS TO BE TEMPORARILY SEEDED DURING CONSTRUCTION AS REQUIRED BY THE EROSION AND SEDIMENT CONTROL GENERAL NOTES.
3. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ IL-394 UNLESS OTHERWISE NOTED.
4. SEDIMENT TRAPS TO BE PLACED AT OUTLET OF ALL SLOPE DRAINS (NOT SHOWN FOR CLARITY).
5. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.
6. TEMPORARY FENCE TO BE PLACED AT LOCATIONS ALONG ALL CONSTRUCTION LIMITS WHERE PERIMETER EROSION BARRIER IS NOT INDICATED (TEMPORARY FENCE NOT SHOWN AT THESE LOCATIONS FOR CLARITY).

DURING CONSTRUCTION



REVISIONS	
NAME	DATE

EC-14

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION CONTROL PLAN
IL 394
STA. 39+240 TO STA. 39+600

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: JPH
CHECKED BY: MAM

HNTB

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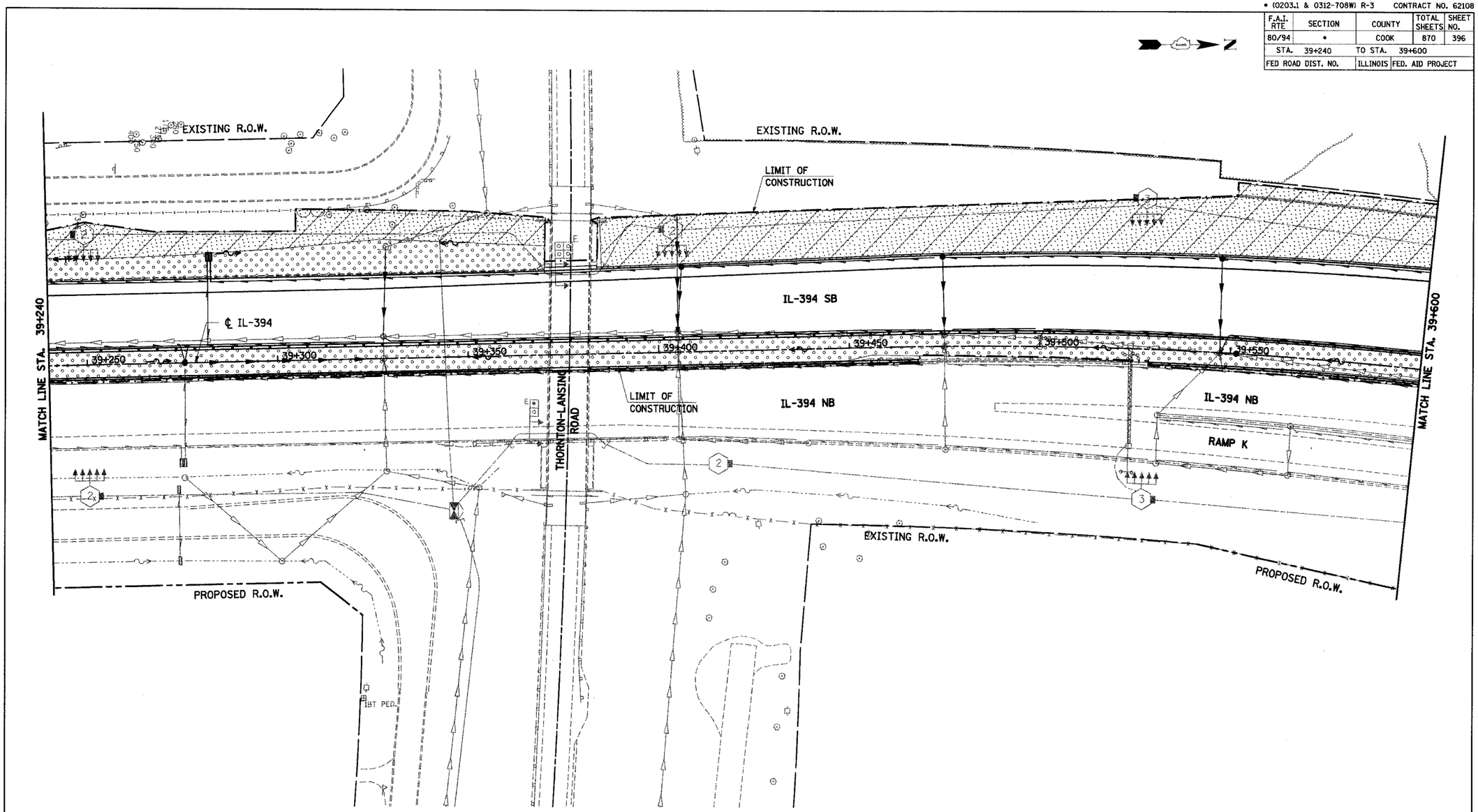
MAMiller 12-JUL-2005 12:25

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

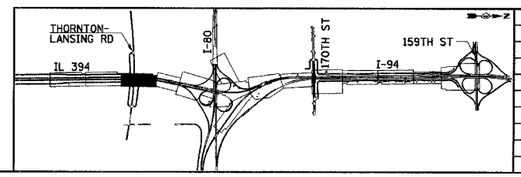
F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	396
STA. 39+240		TO STA. 39+600		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ IL-394 UNLESS OTHERWISE NOTED.
3. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.
4. CLASS 4 SEEDING SHOULD BE ON BACK SLOPE OF 394 LEFT DITCH.

FINAL CONDITION



REVISIONS	
NAME	DATE

EC-15

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION CONTROL PLAN
IL 394
STA. 39+240 TO STA. 39+600

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: JPH
CHECKED BY: MAM

HNTB

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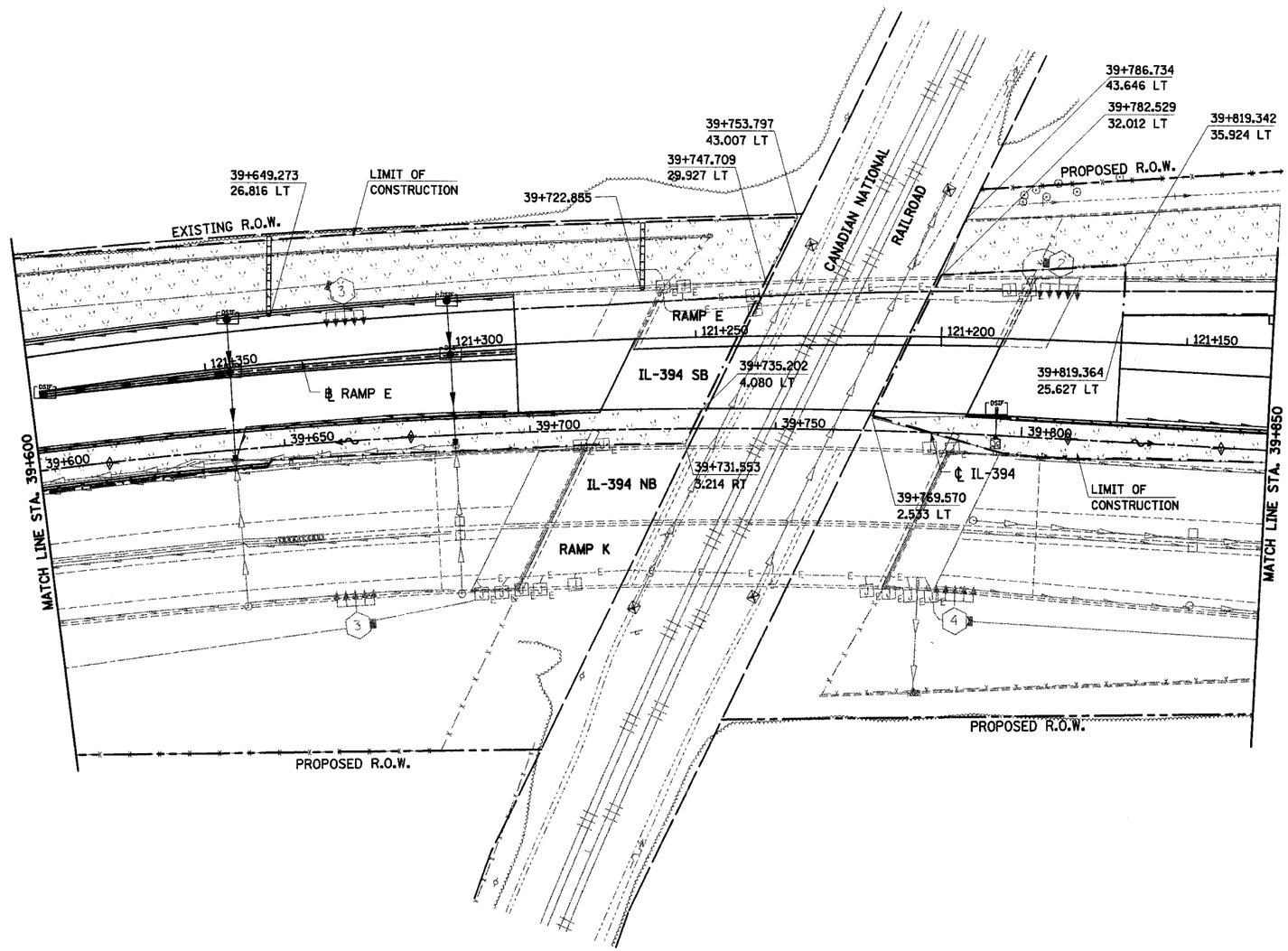
MAMiller 12-JUL-2005 12:26

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

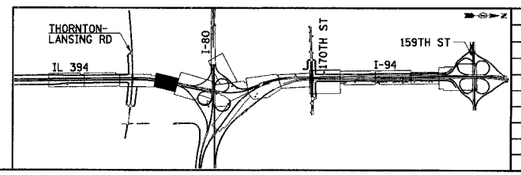
F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	397
STA. 39+600		TO STA. 39+850		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ERODIBLE AREAS TO BE TEMPORARILY SEEDED DURING CONSTRUCTION AS REQUIRED BY THE EROSION AND SEDIMENT CONTROL GENERAL NOTES.
3. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ IL-394 UNLESS OTHERWISE NOTED.
4. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.
5. SEDIMENT TRAPS TO BE PLACED AT OUTLET OF ALL SLOPE DRAINS (NOT SHOWN FOR CLARITY).
6. TEMPORARY FENCE TO BE PLACED AT LOCATIONS ALONG ALL CONSTRUCTION LIMITS WHERE PERIMETER EROSION BARRIER IS NOT INDICATED (TEMPORARY FENCE NOT SHOWN AT THESE LOCATIONS FOR CLARITY).

DURING CONSTRUCTION



REVISIONS	
NAME	DATE

EC-16

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION CONTROL PLAN
IL 394
STA. 39+600 TO STA. 39+850

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: JPH
CHECKED BY: MAM

HNTB

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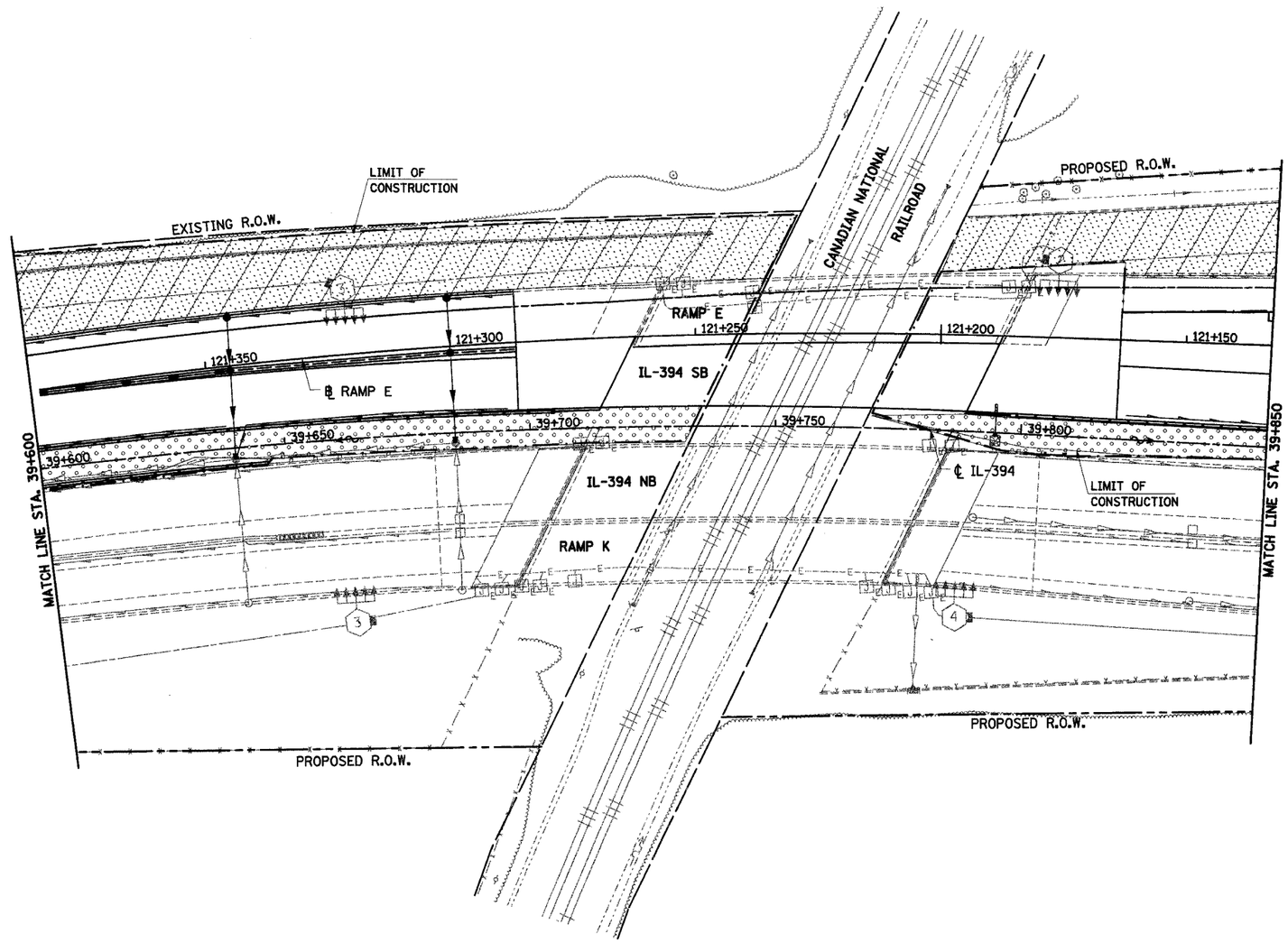
MAMiller 12-JUL-2005 12:26

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

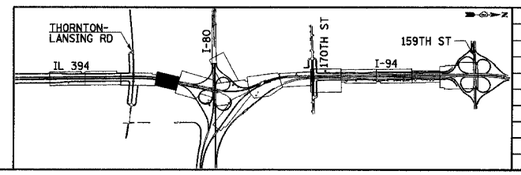
F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	398
STA. 39+600		TO STA. 39+850		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ IL-394 UNLESS OTHERWISE NOTED.
3. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.

FINAL CONDITION



REVISIONS	
NAME	DATE

EC-17

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

EROSION CONTROL PLAN
IL 394
STA. 39+600 TO STA. 39+850

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: JPH
CHECKED BY: MAM

HNTB

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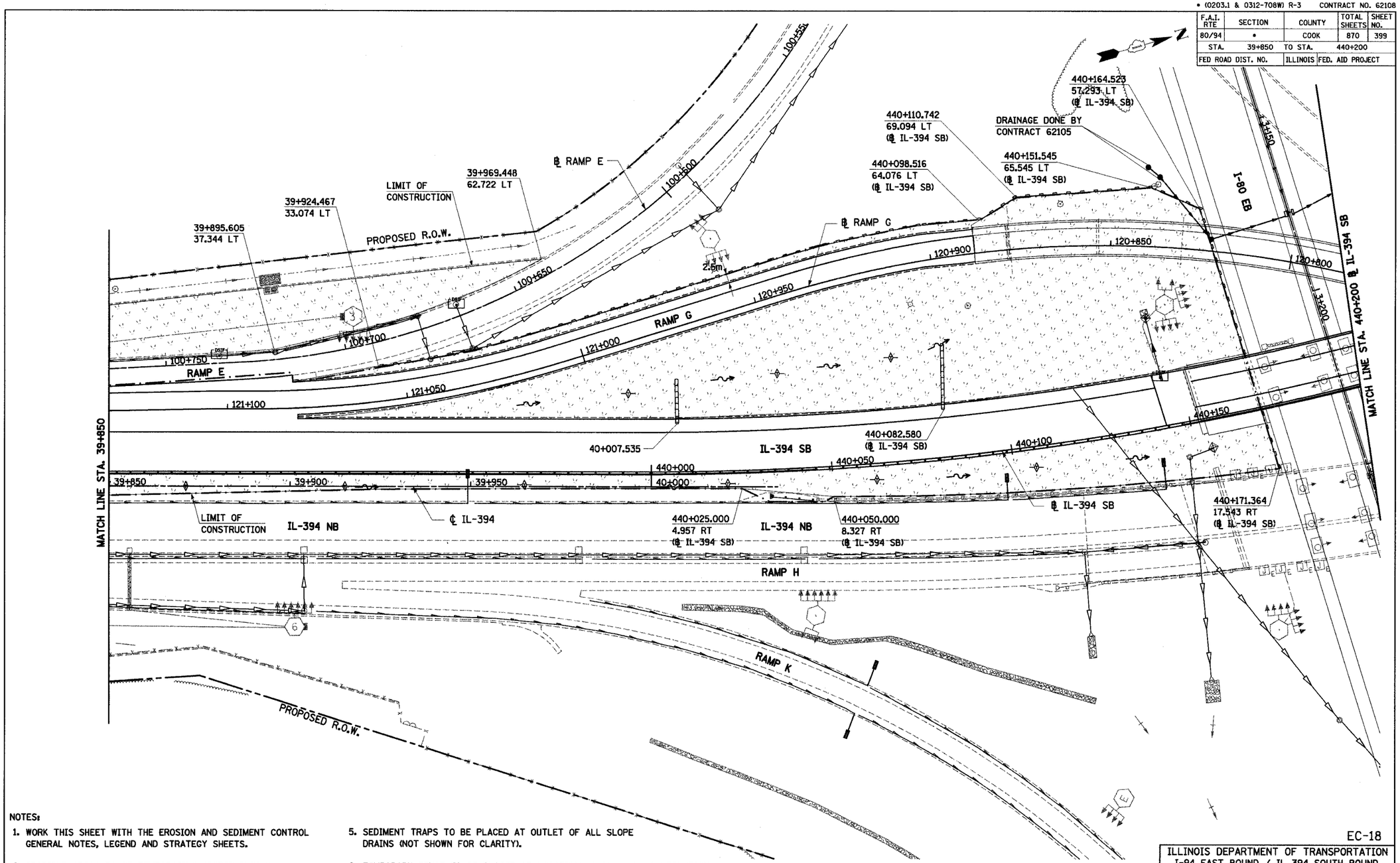
MAMiller 12-JUL-2005 12:27

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

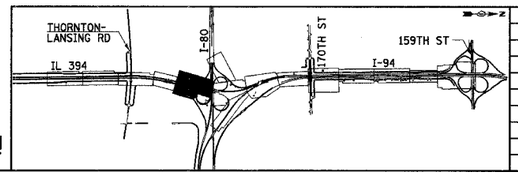
F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	399
STA.	39+850	TO STA.	440+200	
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ERODIBLE AREAS TO BE TEMPORARILY SEEDED DURING CONSTRUCTION AS REQUIRED BY THE EROSION AND SEDIMENT CONTROL GENERAL NOTES.
3. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ IL-394 UNLESS OTHERWISE NOTED.
4. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.
5. SEDIMENT TRAPS TO BE PLACED AT OUTLET OF ALL SLOPE DRAINS (NOT SHOWN FOR CLARITY).
6. TEMPORARY FENCE TO BE PLACED AT LOCATIONS ALONG ALL CONSTRUCTION LIMITS WHERE PERIMETER EROSION BARRIER IS NOT INDICATED (TEMPORARY FENCE NOT SHOWN AT THESE LOCATIONS FOR CLARITY).
7. COORDINATE EROSION CONTROL WITH CONTRACT 62348 AND CONTRACT 62105.

DURING CONSTRUCTION



REVISIONS	
NAME	DATE

EC-18

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND
EROSION CONTROL PLAN
IL 394
STA. 39+850 (℄ IL 394) TO
STA. 440+200 (℄ IL 394 SB)

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: JPH
CHECKED BY: MAM

HNTB

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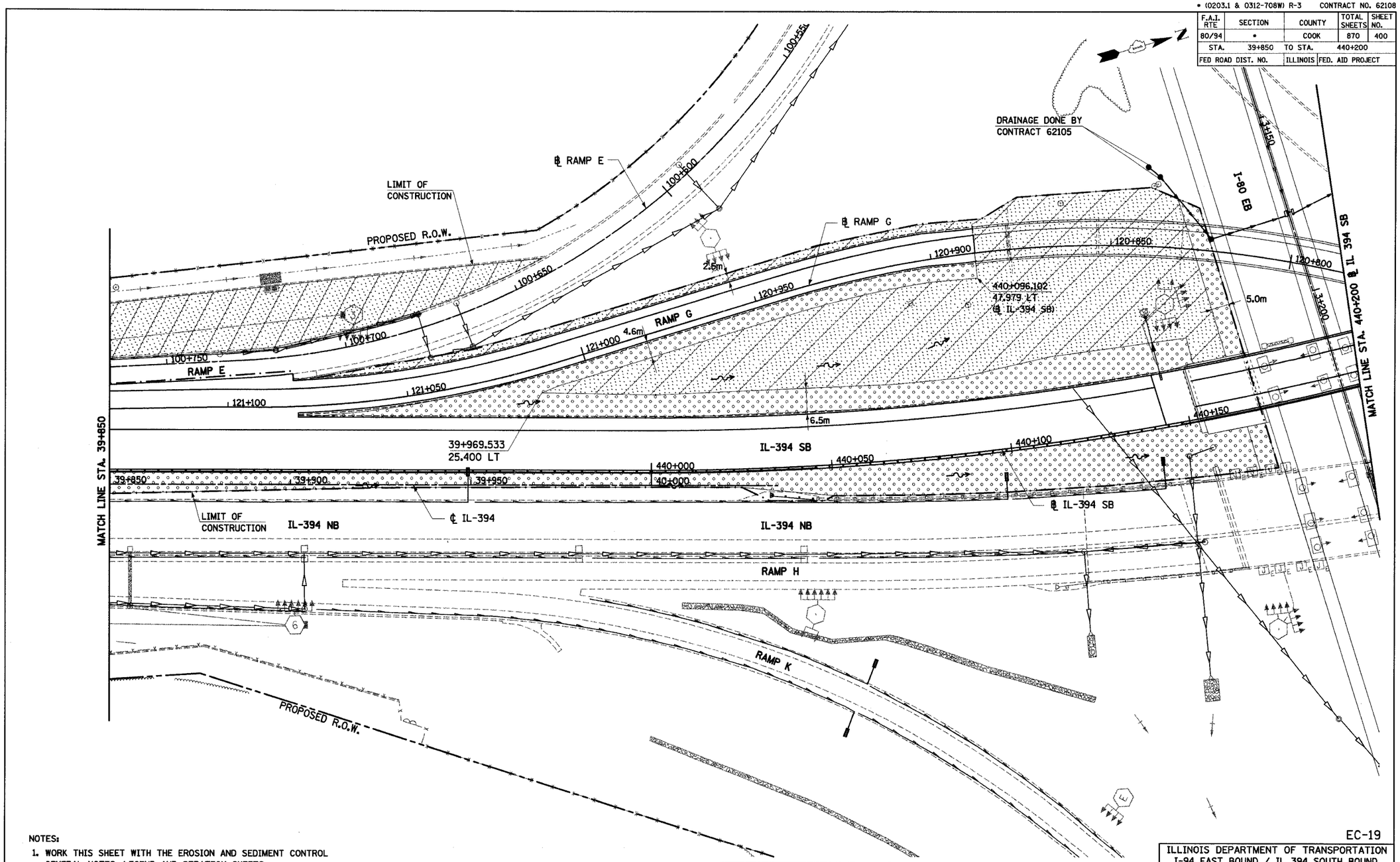
MAMiller 12-JUL-2005 13:25

• (0203.1 & 0312-708W) R-3 CONTRACT NO. 62108

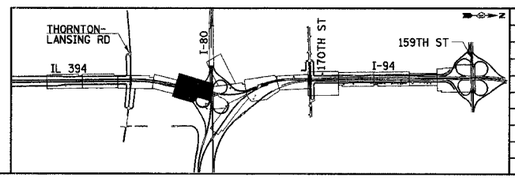
F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	•	COOK	870	400
STA. 39+850		TO STA. 440+200		
FED ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



NOTES:

1. WORK THIS SHEET WITH THE EROSION AND SEDIMENT CONTROL GENERAL NOTES, LEGEND AND STRATEGY SHEETS.
2. ALL STATIONING AND OFFSET MEASUREMENTS OFF ℄ IL-394 UNLESS OTHERWISE NOTED.
3. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.
4. COORDINATE EROSION CONTROL WITH CONTRACT 62348 AND CONTRACT 62105.

FINAL CONDITION



REVISIONS	
NAME	DATE

EC-19

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND
EROSION CONTROL PLAN
IL 394
STA. 39+850 (℄ IL 394) TO
STA. 440+200 (℄ IL 394 SB)

HORIZ SCALE: 1:500
VERT SCALE:
DATE: JULY 18, 2005
DRAWN BY: JPH
CHECKED BY: MAM

HNTB

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MAMiller 12-JUL-2005 13:24