8-3-07 Letting, Item 075

FOR INDEX OF SHEETS
SEE SHEET 2

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	1
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4091(014)	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OUTER BELT WEST
FAU 8384

HIGH PRIORITY SAFE TEA-LU
SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
PROJECT NO. HPP-4091(014)
CITY OF EFFINGHAM
EFFINGHAM COUNTY, ILLINOIS
C-97-044-07

N

BRIDGE CONSTRUCTION
(SECTION 03-00098-00-BR)
STA. 414+62.00 TO STA. 416+70.00

STATION EQUATION
FAYETTE AVENUE
STA. 33+17.6[illegible]
STA. 133+17.6[illegible]

BEGIN CONSTRUCTION
FAYETTE AVENUE
(SECTION 05-00094-01-PV)
AT STA. 133+99.75

STATION EQUATION
FAYETTE AVENUE
STA. 138+99.88 (Bk)=
STA. 39+00.00 (Ahd)

END CONSTRUCTION
FAYETTE AVENUE
(SECTION 05-00094-01-PV)
AT STA. 39+85.20

LOCATION MAP
CITY OF EFFINGHAM

LOCATION OF SECTION INDICATED THUS: ■

APPROVED 3-29 20 07
Steve Wachter
CITY ENGINEER

PASSED 4-10 20 07
Maureen E Kastl
DISTRICT SEVEN ENGINEER OF
LOCAL ROADS & STREETS

Releasing For Bid Based on Limited Review 4/10 20 07
Christine M Reed
DEPUTY DIRECTOR OF HIGHWAYS,
REGION FOUR ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALES

PLAN	0	50	100
PROFILE (HORIZONTAL)	0	50	100
PROFILE (VERTICAL)	0	5	10
CROSS SECTIONS (HORIZONTAL)	0	10	20
CROSS SECTIONS (VERTICAL)	0	5	10

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123

UTILITY NOTE

THE LOCATIONS OF THOSE BURIED AND ABOVEGROUND UTILITIES SHOWN ARE APPROXIMATE, ARE SHOWN FOR CONTRACTOR INFORMATIONAL USE ONLY, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVEGROUND UTILITY LOCATION, IDENTIFICATION, AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS ASSOCIATED WITH BURIED AND ABOVEGROUND UTILITIES, REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR MUST CONTACT J.U.L.I.E. 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.

Contract No. 95503

FUNCTIONAL CLASSIFICATION - COLLECTOR
ADT - 5143 vpd
DESIGN SPEED - 45 MPH

LENGTH OF PROJECT
OUTER BELT WEST = 4053.26 Feet (0.77 Mile)
BRIDGE CONSTRUCTION = 208.00 Feet (0.04 Mile)
FAYETTE AVENUE = 585.33 Feet (0.11 Mile)
TOTAL = 4844.59 Feet (0.92 Mile)

HANSON

OUTER BELT WEST
SECTION 05-00094-01-PV
SECTION 03-00098-00-BR

PLANS DATED:
March 30, 2007

MILANO & GRUNLOH ENGINEERS, LLC
114 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
Phone: (217) 347-7262
(800) 677-2714
Fax #: (217) 342-3433
Web Address: www.mgengineers.com
Design Firm #: 184-003108

File name: S:\DWG\05\05014\dwg\Title Sht.dwg
Plot date: 03/30/07 at 12:00

CHARLES A. GRUNLOH
35131
REGISTERED PROFESSIONAL ENGINEER
OF ILLINOIS
3-30-07

Charles A. Grunloh
My License Expires 11-30-07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	2
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-405(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

INDEX OF SHEETS

MILANO & GRUNLOH ENGINEERS, LLC
84 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7262
(800) 677-2714
FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\Title Sht.dwg
Plot date: 03/30/07 at 12:00

INDEX OF SHEETS
OUTER BELT WEST
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	3
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-609(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

STANDARDS

000001-04	Standard Symbols, Abbreviations, and Patterns
280001-03	Temporary Erosion Control Systems
420001-06	Pavement Joints
420401-05	Bridge Approach Pavement
420601-04	7.2m (24') PCC Pavement
420701-01	Pavement Fabric
424001-04	Curb Ramps for Sidewalks
515001-02	Name Plate for Bridges
542301-01	Precast Reinforced Concrete Flared End Section
542606	Reinforced Concrete Pipe Tee
602301-01	Inlet, Type A
602306-01	Inlet, Type B
602401-01	Manhole, Type A
602601-01	Precast Reinforced Concrete Flat Slab Top
602701-01	Manhole Steps
604001-02	Frame and Lid, Type 1
604006-02	Frame and Grate, Type 3
604011-02	Frame and Grate, Type 3V
604036-01	Grate, Type 8
604041-01	Frame and Grate, Type 9
604066-01	Frame and Lid, Type 15
606001-03	Concrete Curb and Combination Concrete Curb and Gutter
606306-02	Corrugated PC Concrete Medians
701301-02	Lane Closure 2L, 2W Short Time Operations
701306-01	Lane Closure 2L, 2W Slow Moving Operations - Day Only for Speeds ≥ 45 MPH
701311-02	Lane Closure 2L, 2W Moving Operations - Day Only
701326-02	Lane Closure 2L, 2W Pavement Widening for Speeds > 45 MPH
701501-03	Urban Lane Closure, 2L 2W Undivided
702001-06	Traffic Control Devices
720001	Sign Panel Mounting Details
720006-01	Sign Panel Erection Details
780001-01	Typical Pavement Markings

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Plot date: 03/30/07 at 12:00

STANDARDS SHEET
OUTER BELT WEST
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 6384	*	EFFINGHAM	95	4
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-409(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

1. The following rates of application have been assumed in calculating plan quantities:

Crushed Stone	2.05 Tons/CY
Bituminous Concrete	115 lbs/Inch/SY
Bituminous Materials (Prime Coat) on Aggregate Bases	0.50 Gal/SY
Nitrogen Fertilizer Nutrient	90 lbs/Acre
Phosphorus Fertilizer Nutrient	90 lbs/Acre
Potassium Fertilizer Nutrient	90 lbs/Acre
Agricultural Ground Limestone	2 Tons/Acre
Mulch, Method 2	2 Tons/Acre
Temporary Erosion Control Seeding	100 lbs/Acre

2. Before ordering storm sewers, pipe culverts or pipe drains, the Contractor shall consult the Engineer for exact lengths.

3. The Engineer shall be the sole judge concerning curing time for the various bituminous lifts.

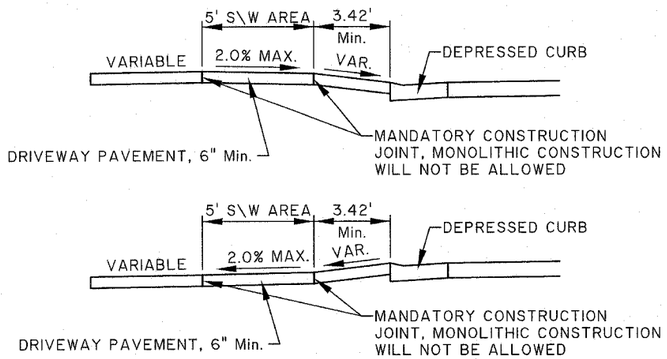
4. For the pay item Bituminous Materials (Prime Coat), the Contractor shall use either RC-70 or an emulsified polymer prime SS-1HP.

5. CURB AND GUTTER, WALKS AND SLABS

A. Concrete curb and gutter shall be in accordance with IDOT Std. Spec. Locate contraction joints at 20 ft on center, unless otherwise shown. Locate expansion joints at minimum 100 ft. on center, unless otherwise shown.

B. Concrete walks, islands, and other slabs shall be in accordance with IDOT Std. Spec. Unless otherwise shown, locate sidewalk contraction joints at 5 ft on center and expansions joints at 50 ft on center, unless otherwise shown, locate contraction joints in larger slabs at 15 ft intervals in each direction, reinforced with lubricated smooth dowel bars (3/4 in. diameter, 18 in. length, at 12 in. centers).

C. Concrete walks crossing through entrances shall be constructed in accordance with the detail shown below. Monolithically constructed sidewalks will not be allowed.



DETAIL OF SIDEWALK THROUGH ENTRANCES

6. PAVEMENT MARKING

A. Epoxy Pavement Marking on hot mix asphalt paving, concrete curbs, walks, and ramps as shown. Epoxy shall be factory mixed, quick-drying, non-bleeding traffic marking epoxy complying with AASHTO M248, Type S. Color shall be as indicated in the plans, except where another color is required by Code.

B. Clean surface in areas to receive markings. Epoxy markings and symbols with traffic marking paint. Apply paint with mechanical equipment to produce uniform straight edges. Apply two coats at manufacturer's recommended rates.

C. Epoxy Pavement Marking - Line 4 inches shall be constructed in accordance with the Standards, as shown on the Plans and as determined by the Engineer. The total quantity calculated consists of 2193 feet of White and 3017 of Yellow.

D. Epoxy Pavement Marking - Line 6 inches shall be constructed in accordance with the Standards, as shown on the Plans and as determined by the Engineer. The total quantity calculated consists of 600 feet of White.

E. Epoxy Pavement Marking - Line 12 inches shall be constructed in accordance with the Standards, as shown on the Plans and as determined by the Engineer. The total quantity calculated consists of 22 feet of Yellow.

F. Epoxy Pavement Marking - Line 24 inches shall be constructed in accordance with the Standards, as shown on the Plans and as determined by the Engineer. The total quantity calculated consists of 119 feet of White.

7. DISPOSAL

A. Remove from Owner's property and legally dispose of excess excavated material, trash, debris, and waste materials.

16. Only those trees designated by the Engineer shall be removed. The Contractor shall protect all remaining trees from damage due to his operations.

17. Removal of concrete pipe culverts and concrete encased clay pipe culverts will be paid for as pipe culvert removal. All other pipe culvert removal and headwall removal shall be considered included in the cost of Earth Excavation.

LEGEND

O	IRON PIN FOUND
O 1/4	1/4" IRON PIN FOUND
OIP	IRON PIPE FOUND
ONBW	NAIL & WASHER FOUND
ON	NAIL FOUND
OPK	PK NAIL FOUND
ORR	RAILROAD SPIKE FOUND
OT	"T" FENCE POST FOUND
O"X"	CHISELED "X" IN CONCRETE FOUND
ODH	DRILLED HOLE IN CONCRETE FOUND
	SURVEY DISC FOUND
	STONE FOUND
	TREE (DECIDUOUS)
	TREE (EVERGREEN)
	FIRE HYDRANT
	WATER METER
W	WATER MAIN (EXISTING)
w	WATER SERVICE LINE (EXISTING)
	VALVE (GAS OR WATER)
	GAS METER
G	GAS MAIN (EXISTING)
g	GAS SERVICE LINE (EXISTING)
⊡C	CABLE TV PEDESTAL
CT	UNDERGROUND CABLE TV (EXISTING)
⊡T	TELEPHONE PEDESTAL
	TELEPHONE MANHOLE
T	TELEPHONE CABLE (EXISTING)
t	TELEPHONE SERVICE WIRE (EXISTING)
	POWER POLE
	POWER POLE w/LIGHT
	GUY ANCHOR
	LIGHTPOLE (EXISTING)
⊡E	ELECTRIC PEDESTAL
OHE	OVERHEAD ELECTRIC (EXISTING)
E	UNDERGROUND ELECTRIC (EXISTING)
L/S	LANDSCAPING
	FENCE POST
	FENCE

MILANO & GRUNLOH ENGINEERS, LLC
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File name: S:\DWG\05\05014\dwg\Title Sht.dwg
Plot date: 03/30/07 at 12:00

GENERAL NOTES
OUTER BELT WEST
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	5
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4096(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR

CONTRACT #95503

ITEM NO.	PAY CODE NUMBER	ITEM	UNIT	TOTAL QTY	SECTION 05-00094-01-PV PARTICIPATING QUANTITY	SECTION 03-00098-00-BR PARTICIPATING QUANTITY	NON-PARTICIPATING QUANTITY
1	20100500	TREE REMOVAL, ACRES	ACRE	6.8	6.8		
2	20200100	EARTH EXCAVATION	CU YD	67877	67320	207	350
3	20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	195		195	
4	20800150	TRENCH BACKFILL	CU YD	302	302		
5	25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	6.9	6.7		0.2
6	28000300	TEMPORARY DITCH CHECKS	EACH	8	8		
7	28000400	PERIMETER EROSION BARRIER	FOOT	1107	1107		
8	28000500	INLET AND PIPE PROTECTION	EACH	6	6		
9	28000510	INLET FILTERS	EACH	63	63		
10	28100107	STONE RIRAP, CLASS A4	SQ YD	782		782	
11	28200200	FILTER FABRIC	SQ YD	782		782	
12	30200750	PROCESSING MODIFIED SOIL 14"	SQ YD	15115	15115		
13	30201500	LIME	TON	445	445		
14	35100100	AGGREGATE BASE COURSE, TYPE A	TON	1254	889		365
15	35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	450			450
16	40200700	AGGREGATE SURFACE COURSE, TYPE A 8"	SQ YD	38	38		
17	40800010	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	666	206		460
18	40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	187	50		137
19	42000300	PORTLAND CEMENT CONCRETE PAVEMENT 8"	SQ YD	12910	12450		460
20	42000500	PORTLAND CEMENT CONCRETE PAVEMENT 10"	SQ YD	547	547		
21	42001165	BRIDGE APPROACH PAVEMENT	SQ YD	240	240		
22	42001200	PAVEMENT FABRIC	SQ YD	13826	13366		460
23	42001300	PROTECTIVE COAT	SQ YD	19289	18755		534
24	42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	578	578		
25	42300400	PORTLAND CEMEMENT DRIVEWAY PAVEMENT 8 INCH	SQ YD	369	369		
26	42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	19342	19342		
27	42400800	DETECTABLE WARNINGS	SQ FT	28	28		
28	44000100	PAVEMENT REMOVAL	SQ YD	396	396		
29	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	1918	1534		384
30	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	501	471		30
31	44000920	BITUMINOUS CONCRETE SHOULDER REMOVAL	SQ YD	150	150		
32	50104400	CONCRETE HEADWALL REMOVAL	EACH	2	2		
33	50200100	STRUCTURE EXCAVATION	CU YD	369		369	
34	50300100	FLOOR DRAINS	EACH	4		4	
35	50300225	CONCRETE STRUCTURES	CU YD	89.9		89.9	
36	50300255	CONCRETE SUPERSTRUCTURE	CU YD	336.5		336.5	
37	50300260	BRIDGE DECK GROOVING	SQ YD	647		647	
38	50300280	CONCRETE ENCASEMENT	CU YD	12.6		12.6	
39	50300300	PROTECTIVE COAT	SQ YD	971		971	
40	50400735	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE BULB T-BEAMS 63"	FOOT	1030		1030	
41	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	74030		74030	
42	50800515	BAR SPLICERS	EACH	62		62	
43	50900105	ALUMINUM RAILING, TYPE L	FOOT	206		206	
44	51201700	FURNISHING STEEL PILES HP12X74	FOOT	590		590	
45	51201710	FURNISHING STEEL PILES HP12X84	FOOT	544		544	
46	51202305	DRIVING PILES	FOOT	1134		1134	
47	51203700	TEST PILE STEEL HP12X74	EACH	2		2	
48	51203710	TEST PILE STEEL HP12X84	EACH	1		1	
49	51500100	NAME PLATES	EACH	1		1	
50	54200637	PIPE CULVERTS, TYPE 1, CORRUGATED STEEL OR ALUMINUM CULVERT PIPE 12"	FOOT	40	40		
51	54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1	1		
52	54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	2	2		
53	54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	2	2		
54	54216185	REINFORCED CONCRETE PIPE TEE, 15" PIPE WITH 12" RISER	EACH	13	13		
56	54216560	REINFORCED CONCRETE PIPE TEE, 18" PIPE WITH 15" RISER	EACH	2	2		
57	55100700	STORM SEWER REMOVAL 15"	FOOT	132	132		
58	55100900	STORM SEWER REMOVAL 18"	FOOT	24	24		
59	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	104		104	
60	60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	166		166	
61	60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	23	23		
62	60219500	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 15 FRAME AND LID	EACH	1	1		
63	60219550	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 37 GRATE	EACH	1	1		
64	60221000	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	1		
65	60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2	2		
66	60221700	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 8 GRATE	EACH	1	1		

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File name: S:\DWG\05\05014\dwg\Quantities.dwg
Plot date: 03/30/07 at 12:00

SUMMARY OF QUANTITIES
OUTER BELT WEST
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	6
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-409(DIA)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

ITEM NO.	PAY CODE NUMBER	ITEM	UNIT	TOTAL QTY	SECTION 05-00094-01-PV PARTICIPATING QUANTITY	SECTION 03-00098-00-BR PARTICIPATING QUANTITY	NON-PARTICIPATING QUANTITY
67	60235700	INLETS, TYPE A, TYPE 3 FRAME AND GRATE	EACH	26	26		
68	60236200	INLETS, TYPE A, TYPE 8 GRATE	EACH	1	1		
69	60236600	INLETS, TYPE A, TYPE 9 FRAME AND GRATE	EACH	3	3		
70	60240220	INLETS, TYPE B, TYPE 3 FRAME AND GRATE	EACH	3	3		
71	60266600	VALVE BOXES TO BE ADJUSTED	EACH	2	2		
72	60500040	REMOVING MANHOLES	EACH	1	1		
73	60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	8743	8433		310
74	60611700	COMBINATION CONCRETE CURB AND GUTTER, TYPE B (SPECIAL)	FOOT	31			31
75	60624600	CORRUGATED MEDIAN	SQ FT	117	117		
76	63200310	GUARDRAIL REMOVAL	FOOT	60			60
77	67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	24	24		
78	67100100	MOBILIZATION	L SUM	1	1		
79	70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1		
80	70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1		
81	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1		
82	72000100	SIGN PANEL - TYPE 1	SQ FT	25.0	25.0		
83	72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	64	64		
84	* 78005100	EPOXY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	171	171		
85	* 78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	5214	3464		1750
86	* 78005130	EPOXY PAVEMENT MARKING - LINE 6"	FOOT	600	600		
87	* 78005150	EPOXY PAVEMENT MARKING - LINE 12"	FOOT	22	22		
88	* 78005180	EPOXY PAVEMENT MARKING - LINE 24"	FOOT	119	119		
89	78300105	PAVEMENT MARKING REMOVAL	FOOT	1771	626		1145
90	550A2520	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 12"	FOOT	1055	1055		
91	550A2530	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 15"	FOOT	2868	2868		
92	550A2540	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 18"	FOOT	395	395		
93	550A2730	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 3 15"	FOOT	33	33		
94	550B0450	STORM SEWERS, CLASS B, TYPE 2 36"	FOOT	11	11		
95	550B1560	STORM SEWERS, CLASS B, TYPE 6 18"	FOOT	243	243		
96	550B1620	STORM SEWERS, CLASS B, TYPE 6 36"	FOOT	173	173		
97	X0323080	DRAINAGE SCUPPERS, DS-12	EACH	2		2	
98	X0301834	STORM SEWER TO BE FILLED	FOOT	61	61		
99	X0322809	LATERAL MOVEMENT OF MOVEABLE CONCRETE BARRIER	L SUM	1			1
100	X0322939	RELOCATE EXISTING FLARED END SECTION	EACH	1	1		
101	X0323426	SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER CLEANING	EACH	63	63		
102	X0323895	GUARDRAIL POST REMOVAL	EACH	85			85
103	X6020074	INLETS, TYPE A, TYPE 3V FRAME AND GRATE	EACH	24	24		
104	X6020075	INLETS, TYPE B, TYPE 3V FRAME AND GRATE	EACH	2	2		
105	X6028300	INLETS REMOVED, SPECIAL	EACH	4	4		
106	X7240505	RELOCATE SIGN PANEL AND POST	EACH	7	7		
107	XX002208	6" DIAMETER PIPE BOLLARD, CONCRETE FILLED	EACH	12			12
108	XX003571	STORM SEWERS POLYVINYL CHLORIDE, STANDARD DIMENSION RATIO 26, 18"	FOOT	82	82		
109	Z0018900	DRILL AND GROUT DOWEL BARS	EACH	336	322		14
110	XX001022	INLETS ABANDONED, SPECIAL	EACH	1	1		

* SPECIALTY ITEMS

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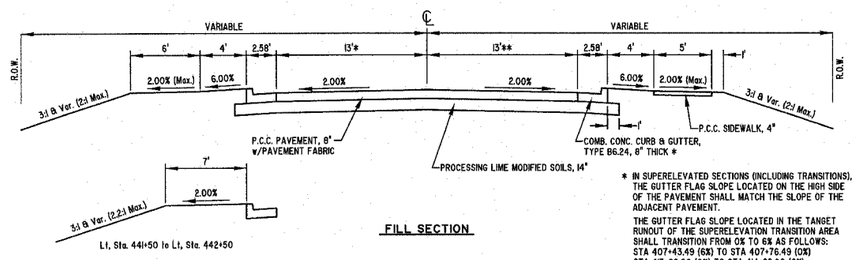
SUMMARY OF QUANTITIES
OUTER BELT WEST
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	7
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-409(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

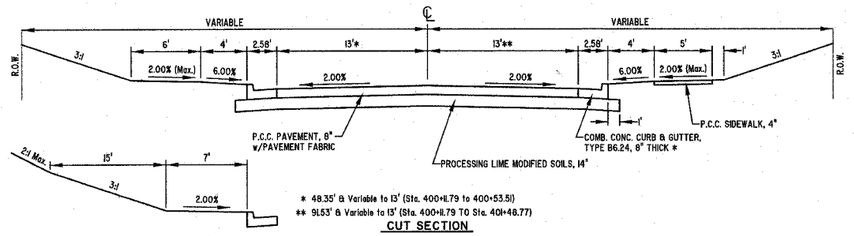


Lt, Sta. 441+50 to Lt, Sta. 442+50

FILL SECTION

* IN SUPERELEVATED SECTIONS (INCLUDING TRANSITIONS), THE GUTTER FLAG SLOPE LOCATED ON THE HIGH SIDE OF THE PAVEMENT SHALL MATCH THE SLOPE OF THE ADJACENT PAVEMENT.

THE GUTTER FLAG SLOPE LOCATED IN THE TANGET RUNOUT OF THE SUPERELEVATION TRANSITION AREA SHALL TRANSITION FROM 0% TO 6% AS FOLLOWS:
STA 407+43.49 (6%) TO STA 407+76.49 (0%)
STA 413+89.00 (0%) TO STA 414+22.00 (6%)
STA 422+86.89 (6%) TO STA 423+19.89 (0%)
STA 429+57.04 (0%) TO STA 429+90.04 (6%)



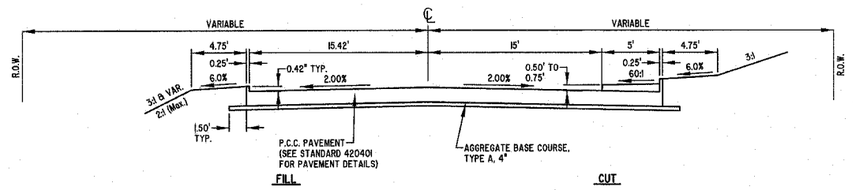
Lt, Sta. 408+50 to Lt, Sta. 409+00

* 48.35' & Variable to 13' (Sta. 400+11.79 to 400+53.51)
** 91.53' & Variable to 13' (Sta. 400+11.79 TO Sta. 401+48.77)

CUT SECTION

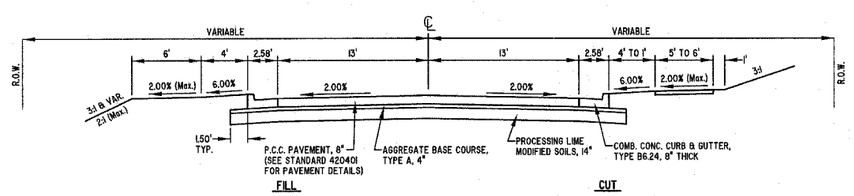
TYPICAL SECTION - OUTER BELT WEST

(URBAN SECTION)
STA. 400+11.79 TO STA. 413+32.00
STA. 418+00.00 TO STA. 442+73.05



TYPICAL SECTION - OUTER BELT WEST

(BRIDGE APPROACH PAVEMENT, SPECIAL)
STA. 414+32.00 TO STA. 414+62.00
STA. 416+70.00 TO STA. 417+00.00



TYPICAL SECTION - OUTER BELT WEST

(BRIDGE APPROACH PAVEMENT CONNECTOR, SPECIAL)
STA. 413+32.00 TO STA. 414+32.00
STA. 417+00.00 TO STA. 418+00.00

PAVEMENT DESIGN - OUTER BELT WEST

CLASS II STREET: LOCAL ROAD (80,000 lb Trucks)

	URBAN
STRUCTRUAL DESIGN TRAFFIC (2011):	PV=2211 SU=103 MU=257
ILLINOIS BEARING RATIO:	3.0
TRAFFIC FACTOR:	1.60

MILANO & GRUNLOH ENGINEERS, LLC
114 WEST WASHINGTON
P.O. BOX 897
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PHONE: (217) 347-7262
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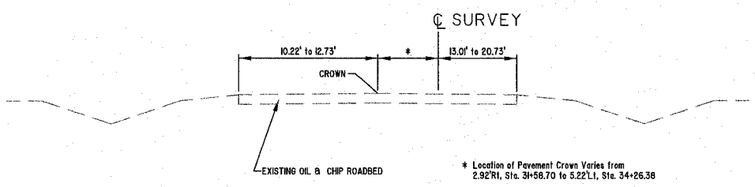
FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\Typical.dwg
Plot date: 05/30/07 at 12:00 F.A. 555,584,603

TYPICAL SECTIONS
OUTER BELT WEST
CITY OF EFFINGHAM, ILLINOIS

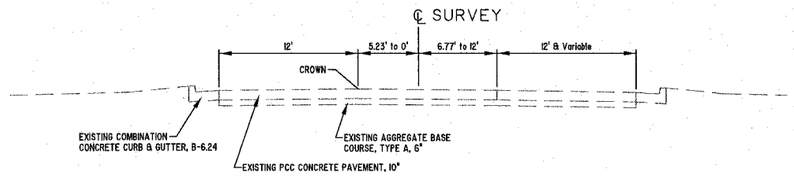
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	8
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-409(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



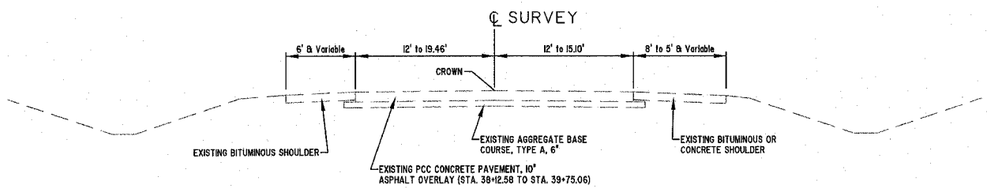
TYPICAL SECTION - FAYETTE AVENUE

(EXISTING)
STA. 31+58.70 TO STA. 34+26.38



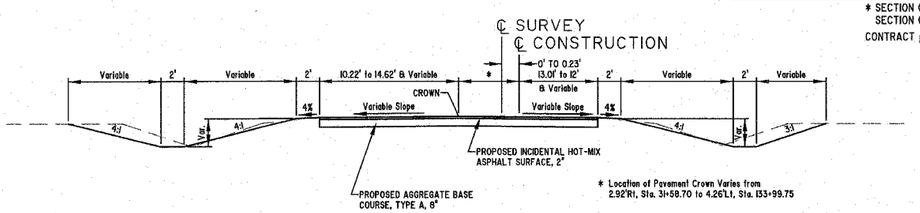
TYPICAL SECTION - FAYETTE AVENUE

(EXISTING)
STA. 34+26.38 TO STA. 37+58.60



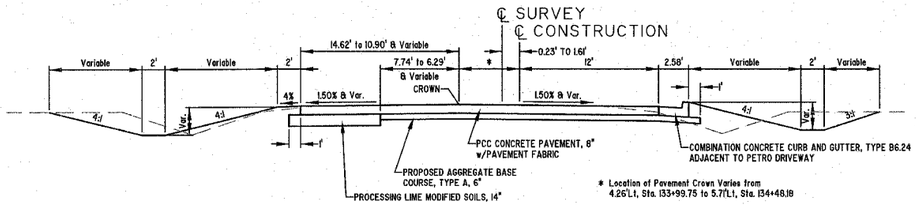
TYPICAL SECTION - FAYETTE AVENUE

(EXISTING)
STA. 37+58.60 TO STA. 39+75.06



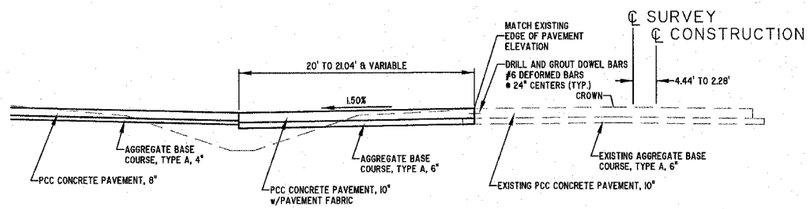
TYPICAL SECTION - FAYETTE AVENUE

(PROPOSED)
STA. 31+58.70 TO STA. 133+99.75
STATION EQUATION: SURVEY STA. 33+17.69 (Bk)=
CONSTRUCTION STA. 133+17.69 (Ahd)



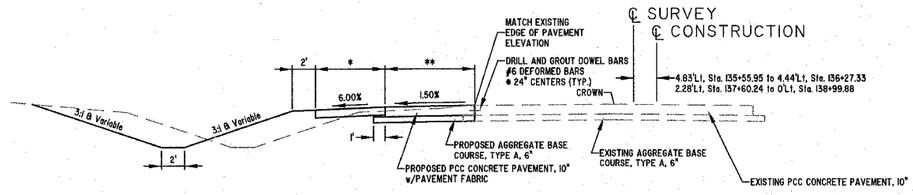
TYPICAL SECTION - FAYETTE AVENUE

(PROPOSED)
STA. 133+99.75 TO STA. 134+48.18



TYPICAL SECTION - FAYETTE AVENUE

(PROPOSED)
STA. 136+27.33 TO STA. 137+60.24



* 8' Shoulder (Sta. 135+24.69 to Sta. 136+36.62)
8' Shoulder (Sta. 137+50.96 to Sta. 137+85.75)
8' to 6' & Variable Shoulder (Sta. 137+85.75 to Sta. 39+85.20)

** 19.47' to 20' & Variable (Sta. 135+55.95 to Sta. 136+27.33)
21.04' to 1' & Variable (Sta. 137+60.24 to Sta. 139+75.06)

TYPICAL SECTION - FAYETTE AVENUE

(PROPOSED)
STA. 135+55.95 TO STA. 136+27.33
STA. 137+60.24 TO STA. 39+75.06
STATION EQUATION: CONSTRUCTION STA. 138+99.88 (Bk)=
SURVEY STA. 39+00.00 (Ahd)

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civil engineering surveying
114 WEST WASHINGTON
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(800) 677-2714
FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\Typical.dwg
Plot date: 03/30/07 at 12:00 F.B. 555,584,603

TYPICAL SECTIONS
FAYETTE AVENUE
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT= HPP-4098(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

PAVEMENT SCHEDULE

LOCATION	PCC PAVEMENT, 8"	PCC PAVEMENT, 10"	PCC DRIVEWAY PAVEMENT, 8"	PAVEMENT FABRIC	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC) SPECIAL	BRIDGE APPROACH PAVEMENT (SPECIAL)	CORRUGATED MEDIAN	BITUMINOUS MATERIALS (PRIME COAT)	HOT-MIX ASPHALT BASE COURSE, 8"	INCIDENTAL HOT-MIX ASPHALT SURFACING	AGGREGATE BASE COURSE TYPE A	PROCESSING MODIFIED SOIL, 14"	LIME	DOWEL BARS
	SY	SY	SY	SY	SY	SY	SF	GAL	SY	TON	TON	SY	TON	EACH
400+11.79 to 442+73.05	11342			11342	578	207					235	15115	445	
Rt, 404+41.96			369	369							84			
33+51 to 34+26								161		37	147			
34+26 to 34+46														
Lt, 35+56 to Lt, 39+47		547		547							132			
5+31.7 to 6+46.2	1008			1008			117				235			
Rt, 5+95.1	100			100				45		13	56			
TruckOMat Site	460			460				460	450	137	365			14
Lt, 134+48.18 to Lt, 39+75.06														264
74.7' Rt, 134+47.5 to 12' Rt, 134+48.2														29
18.1' Rt, 136+41.6 to 40.8' Rt, 136+78.5														29
Total	12910	547	369	13826	578	207	117	666	450	187	1254	15115	445	336

EPOXY PAVEMENT MARKING SCHEDULE

LOCATION	4" YELLOW FOOT	4" WHITE FOOT	6" WHITE FOOT	12" YELLOW FOOT	24" WHITE FOOT	SYMBOLS SQ FT
FAYETTE AVENUE						
31+58.7 TO 134+16	844					
63.0' Rt, 134+94.0 to 12.8' Rt, 39+19.4		443				
0.46' Rt, 135+35.8 to 39+91	1204					
12' Lt, 135+35.8 to 39+77.7			300			
24' Lt, 135+35.8 to 39+85.5			300			
33+00 to 39+65				22		
41 Rt, 134+67 to 135+12					45	
23.6' Rt, 136+99.0 to 24.0' Rt, 137+25.2					27	
135+53.8						42.7
136+31.1						42.7
137+08.4						42.7
137+85.8						42.7
OUTER BELT WEST						
400+38.5 TO 442+73.0	939					
0' Lt to 15.5' Lt, 400+39.5					16	
TRUCKOMAT ENTRANCE						
5+61.2 to 5.78.2	34					
0' Lt to 30.5' Lt, 5 +62.2					31	
TRUCKOMAT SITE						
Truck-Trailer Spaces		1430				
Vehicle Spaces		320				
TOTAL	3021	2193	600	22	119	170.8

PCC SIDEWALK, 4'

LOCATION	SF
Rt, Sta. 400+40 to Rt, Sta. 403+82	1750
Rt, Sta. 404+90 to Rt, Sta. 413+85.34	4477
Rt, Sta. 413+85.34 to Rt, Sta. 414+35.53	260
Rt, Sta. 417+03.53 to Rt, Sta. 417+50.00	240
Rt, Sta. 417+50.00 to Rt, Sta. 442+73.05	12615
TOTAL	19342

DETECTABLE WARNINGS

LOCATION	SF
Rt, Sta. 403+77 to Rt, Sta. 403+82	14
Rt, Sta. 404+90 to Rt, Sta 404+95	14
TOTAL	28

BOLLARDS	
LOCATION	EACH
TruckOMat Site	12

LATERAL MOVEMENT OF CONCRETE BARRIERS	
LOCATION	L SUM
TruckOMat Site	1

COMBINATION CONCRETE CURB AND GUTTER

LOCATION	TYPE B-6.24 LF	TYPE B (SPECIAL) LF
Rt, 34+10 to Rt, 34+44	57	
Rt, 36+42 to Rt, 36+77	45	
Lt, 36+35 to Lt, 36+52	81	
Lt, 37+69 to Rt, 37+71	180	
Lt, 400+16 to Lt, 414+29	1428	
Rt, 400+39 to 414+35	1416	
Lt, 416+97 to 442+73	2576	
Rt, 417+03 to Rt, 442+73	2571	
Rt, 403+71 to Rt, 403+93	58	
Rt, 404+84 to Rt, 405+03	21	
TruckOMat Site	310	31
TOTAL	8743	31

SEEDING, CLASS 2 (SPECIAL)

LOCATION	ACRE
Rt, 33+51 to Rt, 34+43	0.06
Lt, 33+51 to Lt, 34+16	0.08
Lt, 400+11.79 to Lt, 414+62	1.14
Rt, 400+11.79 to Rt, 414+62	1.19
Lt, 416+70 to Lt, 442+73.05	2.13
Rt, 416+70 to Rt, 442+73.05	1.80
Lt, 35+56 to Lt, 39+47	0.32
TruckOMat Site	0.20
TOTAL	6.9

SIGNS

LOCATION	OFFSET	STEEL SIGN SUPPORT FEET	SIGN PANEL TYPE I SQ FT	MESSAGE
400+39.96	21.67'LT	16	6.25	STOP
135+22.14	42.65'RT	16	6.25	STOP
136+56.78	65.07'LT	16	6.25	STOP
137+31.30	25.43'RT	16	6.25	STOP
TOTAL		64	25.0	

AGGREGATE SURFACE COURSE, TYPE A, 8"

LOCATION	SY
Lt, Sta. 33+07.30	14
Rt, Sta. 133+19.27	24
TOTAL	38

PIPE CULVERTS, TYPE 1, CORRUGATED METAL, 12"

LOCATION	FOOT
Lt, Sta. 33+07.30	20
Rt, Sta. 133+19.27	20
TOTAL	40

REMOVE EXISTING PIPE CULVERTS (INCLUDED IN CONTRACT PRICE FOR PIPE CULVERTS, TYPE 1)

LOCATION	FOOT
Lt, Sta. 33+07.30	20
Rt, Sta. 133+19.27	20
TOTAL	40

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION	EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE - (+) SHRINKAGE - (-)
SECTION 05-0094-01-PV				
33+35 to 39+85	530	645	515	-115
400+12 to 407+50	1720	1090	872	630
407+50 to 414+62	40100	250	200	39850
416+70 to 420+00	500	16800	13400	-16300
420+00 to 442+73	24470	28690	22952	-4220
TruckOMat Site	350			350
Sub-Total	67670	47475	37939	20195
SECTION 03-0098-00-BR				
414+62 to 415+00	191	229	183	-38
416+62 to 416+70	16	825	660	-809
Sub-Total	207	1054	843	-847
Total	67877	48529	38782	19348

Note: 25% Shrink Factor Used

ENTRANCE SCHEDULE

LOCATION	DESCRIPTION
FAYETTE AVENUE	
LT, STA. 33+07.30	REMOVE EXISTING CMP. INSTALL NEW CMP, AGGREGATE SURFACE QUANTITES SHOWN ON THIS SHEET
RT, STA. 33+07.30	REMOVE EXISTING CMP. INSTALL NEW CMP, AGGREGATE SURFACE QUANTITES SHOWN ON THIS SHEET
RT, STA. 134+64.24	INCLUDED WITH FAYETTE AVENUE QUANTITIES
LT, STA. 136+93.40	SEE SHEET 33, QUANTITES SHOWN ON THIS SHEET
OUTER BELT WEST	
RT, STA. 404+41.96	SEE SHEET 32, QUANTITES SHOWN ON THIS SHEET

NOTE: SEE SHEET 22 FOR REMOVAL QUANTITIES
SEE SHEET 25 FOR EROSION CONTROL QUANTITIES

MILANO & GRUNLOH ENGINEERS, LLC
84 WEST WASHINGTON
P.O. BOX 697
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PHONE: (217) 347-7262
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FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\Quantities.dwg
Plot date: 03/30/07 at 12:00

SCHEDULE OF QUANTITIES
OUTER BELT WEST AND
FAYETTE AVENUE
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	10
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4098(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

PROPOSED DRAINAGE STRUCTURE SCHEDULE

			STRUCTURE TYPE																	ELEVATIONS			
			INLETS						MANHOLES						TEES		END SECTIONS						
STRUCTURE NUMBER	STATION	OFFSET	TYPE A, TYPE 3 FRAME & GRATE	TYPE A, TYPE 3V FRAME & GRATE	TYPE A, TYPE 9 FRAME & GRATE	TYPE A, TYPE 8 GRATE	TYPE B, TYPE 3 FRAME & GRATE	TYPE B, TYPE 3V FRAME & GRATE	TYPE A, 4' DIA. ,TYPE 1 FRAME, CLOSED LID	TYPE A, 4' DIA. ,TYPE 15 FRAME & LID	TYPE A, 4' DIA. ,TYPE 37 GRATE	TYPE A, 5' DIA. ,TYPE 1 FRAME, CLOSED LID	TYPE A, 5' DIA. ,TYPE 1 FRAME, OPEN LID	TYPE A, 5' DIA. ,TYPE 8 GRATE	15"x12"	18"x15"	12" FLARED	15" FLARED	18" FLARED	LID OR GRATE FLOWLINE	(IN) INVERT	(OUT) INVERT	REMARKS
2	134+35.30	24.82'R											1							584.40	577.04(E)	577.04(S)	580.50(W); 577.75(N)
16	134+00.53	27.21'R																			582.86		Relocated 18" Flared End Section
17	134+08.49	36.75'L															1				582.80		
18	400+55.39	22'L										1								584.93	579.66(N)	578.56(S)	582.00(SW)
19	135+09.25	36.78'L							1											584.20	578.80(NE)	577.98(S)	
20	135+76.90	64.92'L				1														582.50		579.50(SW)	
21	400+79.81	22'L													1						579.96(E)	579.83(S)	
22	400+79.81	14.22'L					1													584.09	580.12(E)	580.02(W)	580.12(N)
23	400+79.81	25.37'R					1													583.72	580.58(N)	580.48(W)	
24	400+89.81	14.72'L	1																	584.10		580.20(S)	
25	400+89.81	22.72'R	1																	583.83		580.66(S)	
26	401+90	22'L													1						580.78(E)	580.65(S)	
27	401+90	14.72'L	1																	584.75	581.47(E)	580.84(W)	
28	401+90	14.72'R	1																	584.75		581.75(W)	
29	403+00	22'L													1						581.60(E)	581.47(S)	
30	403+00	14.72'L	1																	585.57	582.29(E)	581.66(W)	
31	403+00	14.72'R	1																	585.57		582.57(W)	
32	404+10	22'L							1											587.18	582.38(E)	582.28(S)	
33	404+10	14.72'L	1																	586.39	583.11(E)	582.42(W)	
34	404+10	14.72'R			1															586.39		583.39(W)	
35	407+40	22'L							1											586.56	581.63(E)	581.53(N)	
36	407+40	14.72'L		1																585.77	582.49(E)	581.70(W)	
37	407+40	14.72'R		1																585.77		582.77(W)	
38	407+90	22'L							1											585.46	580.61(S)	577.02(N)	580.61(E)
39	407+90	14.72'L		1																584.39		580.66(W)	
40	408+95	24.34'L													1						575.11(E)	574.98(N)	
41	408+95	14.72'L		1																580.97		575.20(W)	
42	410+00	22'L							1											577.64	572.90(S)	567.57(N)	573.81(E)
43	410+00	14.72'L		1																576.86		573.86(W)	
44	410+75	23.22'L													1						566.43(E)	566.13(N)	
45	410+75	14.72'L		1																573.17		569.22(W)	
46	411+50	22'L							1											570.14	564.68(S)	559.35(N)	566.31(E)
47	411+50	14.72'L		1																569.36		566.36(W)	
48	412+25	23.22'L													1						558.21(E)	557.91(N)	
49	412+25	14.72'L		1																565.61		561.00(W)	
50	413+00	22'L							1											562.64	556.46(S)	551.13(N)	558.81(E)
51	413+00	14.72'L		1																561.86		558.85(W)	
52	414+12	14.72'L		1																556.52		552.83(N)	
53	414+12	14.72'R		1																556.64		553.18(N)	
54	414+22	22'L							1											556.89	548.79(S)	540.86(W)	552.60(E)
55	414+22	14.22'L			1															556.10	552.75(E)	552.65(W)	552.75(S)
56	414+22	14.22'R			1															556.10	553.10(S)	553.00(W)	
57	414+50	51.45'L																1				540.00	
58	416+70	62.09'L																	1			530.20	
59	417+10	22'L							1											550.38	546.75(E)	546.00(N)	
60	417+10	14.22'L						1												550.17	546.89(E)	546.79(W)	546.89(N)
61	417+10	14.22'R						1												550.17	547.24(N)	547.14(W)	
62	417+20	14.72'L		1																550.18		546.97(S)	
63	417+20	14.72'R		1																550.18		547.32(S)	
64	418+08.46	66.85'L														1					531.84(E)	531.59(S)	
65	418+10	22'L							1											551.10	544.56(S)	543.00(W)	547.47(E)
66	418+10	14.72'L		1																550.89	547.61(E)	547.51(W)	
67	418+10	14.72'R		1																550.89		547.89(W)	
68	419+00	70'L							1											539.50	536.00(N)	532.50(S)	
69	419+30	22'L							1											553.84	550.20(N)	546.00(W)	550.17(E)
70	419+30	14.72'L		1																553.63	550.32(E)	550.22(W)	
71	419+30	14.72'R		1																553.63		550.59(W)	
72	419+39.06	60.90'L														1					542.35(E)	542.18(S)	
73	419+50	58.35'L																	1		544.00		
74	420+50	22'L							1											559.22	555.40(N)	552.52(S)	555.01(E)
75	420+50	14.72'L		1																558.43	555.15(E)	555.05(W)	
76	420+50	14.72'R		1																558.43		555.43(W)	
77	422+50	22'L							1											569.21	565.40(N)	559.32(S)	565.00(E)
78	422+50	14.72'L		1																568.42	565.04(W)	565.14(E)	
79	422+50	14.72'R		1																568.42		565.42(W)	
80	423+50.36	20.98'L													1						567.57(E)	567.41(S)	
81	423+50	14.72'R		1																573.41		570.41(W)	
82	424+50	22'L							1											579.28	573.58(N)	569.32(S)	574.34(E)
83	424+50	14.72'R		1																577.68		574.68(W)	
84	425+50	22'L							1											582.56	577.62(E)	575.50(S)	
85	425+50	14.72'R		1																580.96		577.96(W)	
86	426+50	22'L							1											584.79	579.85(E)	579.75(N)	
87	426+50	14.72'R	1																	583.19		580.19(W)	
88	427+12.50	21.14'L													1						579.40(E)	579.26(N)	
89	427+12.50	14.72'R	1																	584.04		581.04(W)	
SUBTOTAL			9	24	3	1	2	2	17	0	0	1	1	0	8	2	1	1	2				

MILANO & GRUNLOH ENGINEERS, LLC
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P.O. BOX 897
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FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\Quantities.dwg
Plot date: 05/30/07 at 12:00

SCHEDULE OF QUANTITIES
OUTER BELT WEST AND
FAYETTE AVENUE
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	II
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4059(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

PROPOSED DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NUMBER	STATION	OFFSET	STRUCTURE TYPE: INLETS: TYPE A, TYPE 3 FRAME & GRATE	INLETS: TYPE A, TYPE 3V FRAME & GRATE	INLETS: TYPE A, TYPE 9 FRAME & GRATE	INLETS: TYPE A, TYPE 8 GRATE	INLETS: TYPE B, TYPE 3 FRAME & GRATE	INLETS: TYPE B, TYPE 3V FRAME & GRATE	MANHOLES: TYPE A, 4' DIA. ,TYPE 1 FRAME, CLOSED LID	MANHOLES: TYPE A, 4' DIA. ,TYPE 15 FRAME & LID	MANHOLES: TYPE A, 4' DIA. ,TYPE 37 GRATE	MANHOLES: TYPE A, 5' DIA. ,TYPE 1 FRAME, CLOSED LID	MANHOLES: TYPE A, 5' DIA. ,TYPE 1 FRAME, OPEN LID	MANHOLES: TYPE A, 5' DIA. ,TYPE 8 GRATE	TEES: 15"x12"	TEES: 18"x15"	END SECTIONS: 12" FLARED	END SECTIONS: 15" FLARED	END SECTIONS: 18" FLARED	ELEVATIONS: LID OR GRATE FLOWLINE	ELEVATIONS: (IN) INVERT	ELEVATIONS: (OUT) INVERT	REMARKS
90	427+50	92.10'L																				555.00	Open End
91	427+56.90	67.10'L										1								567.35	555.65(E)	555.53(W)	561.65(NE)
92	427+75	48.35'L							1											578.60	571.55(E)	562.18(SW)	
93	427+75	22'L							1											585.59	578.78(S)	572.00(W)	581.35(N); 580.93(E)
94	427+75	14.72'R	1																	584.56		581.26(W)	
95	428+00	77.49'R																			559.00		Open End
96	428+50	20.76'L													1						582.07(E)	581.94(S)	
97	428+50	14.72'R	1																	585.14		582.34(W)	
98	429+25	22'L							1											587.26	582.62(N)	582.52(S)	582.62(E)
99	429+25	14.72'R	1																	585.79		582.89(W)	
100	429+50	90.03'L																				558.70	Open End
101	429+57.04	22'L													1						583.00(E)	582.85(S)	
102	429+57.04	14.72'L	1																	586.30		583.30(W)	
103	429+90.04	22'L													1						583.20(E)	583.07(S)	
104	429+90.04	14.72'L	1																	586.30		583.30(W)	
105	430+50	22'L													1						583.62(E)	583.49(S)	
106	430+50	14.72'L	1																	586.77	583.75(E)	583.65(W)	
107	430+50	14.72'R	1																	586.77		583.90(W)	
108	431+50	51.05'R									1									577.50		565.98(SW)	
109	432+00	22'L													1						584.68(E)	584.56(S)	
110	432+00	14.72'L	1																	587.94	584.81(E)	584.71(W)	
111	432+00	14.72'R	1																	587.94		584.96(W)	
112	433+25	22'L							1											589.72	585.53(N)	585.43(S)	585.53(E)
113	433+25	14.72'L	1																	588.93	585.67(E)	585.57(W)	
114	433+25	14.72'R	1																	588.93		585.95(W)	
115	435+50	22'L							1											592.62	588.37(N)	588.27(S)	588.37(E)
116	435+50	14.72'L	1																	591.83	588.51(E)	588.41(W)	
117	435+50	14.72'R	1																	591.83		588.79(W)	
118	437+75	22'L							1											595.74	591.52(E)	591.42(S)	
119	437+75	14.72'L	1																	594.95	591.66(E)	591.56(W)	
120	437+75	14.72'R	1																	594.95		591.94(W)	
121	441+50	14.72'L	1																	595.50		591.83(N)	
122	441+50	14.72'R	1																	595.50		592.19(N)	
123	441+60	15.29'L								1										595.50	591.73(E)	591.41(NW)	591.73(S)
124	441+60	14.22'R					1													595.50	592.09(S)	591.99(W)	
125	441+85.43	41.26'L																1				591.00	
128	138+67.03	44.48'L												1						583.10	578.79(N)	578.79(S)	579.82(E)
129	39+85.57	42.49'L																			580.40		Open End
SUBTOTAL			17	0	0	0	1	0	6	1	1	1	0	1	5	0	0	1	0				
SUBTOTAL (Sht 11)			9	24	3	1	2	2	17	0	0	1	1	0	8	2	1	1	2				
TOTAL			26	24	3	1	3	2	23	1	1	2	1	1	13	2	1	2	2				

EXISTING DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NUMBER	STATION	OFFSET	STRUCTURE TYPE: INLETS: 2' DIA., TYPE 3 FRAME & GRATE	INLETS: 3' DIA., TYPE 3 FRAME & GRATE	MANHOLES: 4' DIA. ,T1 F, CL	MANHOLES: 5' DIA. ,T1 F, CL	MATERIAL: REINFORCED CONCRETE	MATERIAL: CONCRETE BLOCK	ELEVATIONS: LID OR FLOWLINE OF GRATE	ELEVATIONS: (IN) INVERT	ELEVATIONS: (OUT) INVERT	REMARKS
1	34+03.29	19.39'RT								582.78		End of 18" Flared End Section
2	34+34.48	25.96'RT			X		X		584.84	579.19(W)		To Be Removed
										577.04(E)	577.04(S)	
3	34+33.34	102.41'RT				X		X	583.67	576.38(E)		
										576.38(N)	576.38(S)	
4	34+39.97	26.08'RT	X				X		584.33	577.09(E)		24"x24" TEE
											577.09(W)	To be Abandoned
5	35+10.21	31.25'LT								577.98		Open End of 24" RCCP w/Headwall
												Remove Concrete Headwall
6	35+09.43	31.44'RT			X		X		584.06	579.97(SE)		
										577.69(N)	577.69(W)	
7	35+22.38	41.56'RT	X				X		583.61		580.56(NW)	
8	35+23.97	37.56'LT									579.20	Open End of 15" RCCP
9	35+40.46	35.63'LT	X				X		583.48	579.60(E)	579.60(W)	
10	35+99.21	35.15'LT	X				X		583.53	579.94(W)	579.94(W)	
11	36+13.73	38.95'LT								580.11		Open End of 15" RCCP
12	36+53.96	49.95'LT									580.54	Open End of 15" RCCP
13	36+71.58	54.69'LT	X				X		583.39		580.88(W)	
14	37+25.25	54.09'LT	X				X		583.50		580.45(E)	
15	37+50.27	50.32'LT									580.02	
126	442+26.87	34.83'LT									591.87	End of 15" Flared End Section
127	138+66.25	31.15'LT								578.69(N)		Remove Concrete Headwall

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FAX #: (217) 342-3433

File name: S:\DWG\05\050I4\dwg\Quantities.dwg
Plot date: 03/30/07 at 12:00

SCHEDULE OF QUANTITIES
OUTER BELT WEST AND
FAYETTE AVENUE
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	12
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-409(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

SCHEDULE OF QUANTITIES/DRAINAGE PIPE SCHEDULE

STORM SEWERS

FROM STRUCTURE	INVERT ELEVATION	TO STRUCTURE	INVERT ELEVATION	PIPE SLOPE %	STORM SEWER RUBBER GASKET, CLASS A TYPE 2, 12"	TYPE 2, 15"	TYPE 3, 15"	TYPE 2, 18"	SEWER, CLASS B TYPE 2 36"	SEWER, CLASS B, TYPE 6 18"	36"	STORM SEWERS, PVC, SDR 26 18"	TRENCH BACKFILL CU YD
19	578.80	20	579.50	1.00	70								18
16	582.86	2	580.50	-4.00				27					2
2	577.75	18	578.56	1.00								82	21
17	582.80	18	582.00	-2.00	34								0
18	579.66	21	579.83	0.74		19							0
21	579.96	22	580.02	1.00	5								0
22	580.12	23	580.48	1.00	37								9
22	580.12	24	580.20	1.00	8								0
23	580.58	25	580.66	1.00	8								0
21	579.83	26	580.65	0.74		102							0
26	580.78	27	580.84	1.00	5								0
27	581.47	28	581.75	1.00	28								8
26	580.65	29	581.47	0.74		102							0
29	581.60	30	581.66	1.00	5								8
30	582.29	31	582.57	1.00	28								0
29	581.47	32	582.26	0.74		104							0
32	582.38	33	582.42	1.00	5								0
33	583.11	34	583.39	1.00	28								8
35	581.63	36	581.70	1.00	5								0
36	582.49	37	582.77	1.00	28								8
35	581.53	38	580.61	-2.00		46							0
38	580.61	39	580.66	1.00	5								0
38	577.02	40	574.98	-2.00		98							0
40	575.11	41	575.20	1.00	8								0
40	574.98	42	572.90	-2.00		98							0
42	573.81	43	573.86	1.00	5								0
42	567.57	44	566.13	-2.00		68							0
44	566.43	45	569.22	40.00	7								0
44	566.13	46	564.68	-2.00		68							0
46	566.31	47	566.36	1.00	5								0
46	559.35	48	557.91	-2.00		68							0
48	558.21	49	561.00	40.00	7								0
48	557.91	50	556.46	-2.00		68							0
50	558.81	51	558.85	1.00	5								0
50	551.13	54	548.79	-2.00		117							0
52	552.83	55	552.75	-1.00	8								0
53	553.18	56	553.10	-1.00	8								0
54	552.60	55	552.65	1.00	5								0
55	552.75	56	553.00	1.00	25								8
54	540.86	57	540.00	-2.22			33						0
59	546.75	60	546.79	1.00	5								0
60	546.89	61	547.14	1.00	28								8
60	546.89	62	546.97	1.00	8								0
61	547.24	63	547.32	1.00	8								0
58	530.20	64	531.59	1.00				129					0
59	546.00	65	544.56	-1.50		96							0
64	531.84	65	543.00	26.37		42							0
65	547.47	66	547.51	1.00	5								0
66	547.61	67	547.89	1.00	28								8
64	531.59	68	532.50	1.00				86					0
68	536.00	72	542.18	16.21				34					0
69	546.00	72	542.35	-9.49		38							0
69	550.17	70	550.22	1.00	5								0
70	550.32	71	550.59	1.00	28								8
72	542.18	73	544.00	16.21				2					0
69	550.20	74	552.52	2.00		116							0
74	555.01	75	555.05	1.00	5								0
75	555.15	76	555.43	1.00	28								8
74	555.40	77	559.32	2.00		196							0
77	565.00	78	565.14	1.00	5								0
78	565.04	79	565.42	1.00	28								8
77	565.40	80	567.41	2.00		95							0
80	567.57	81	570.41	8.29	34								8
80	567.41	82	569.32	2.00		95							0
82	574.34	83	574.68	1.00	34								8
82	573.58	84	575.50	2.00		96							0
84	577.62	85	577.96	1.00	34								8
86	579.85	87	580.19	1.00	34								0
86	579.75	88	579.26	-0.80		58							0
88	579.40	89	581.04	4.75	34								0
88	579.26	93	578.78	-0.80		57							0
90	555.00	91	555.53	2.26							24		0
91	561.65	92	562.18	2.37		23							0
92	571.55	93	572.00	2.00		23							0
93	580.93	94	581.26	1.00	35								0
				Subtotal 1	768	1893	33	278	0	0	24	82	154

SCHEDULE OF QUANTITIES/DRAINAGE PIPE SCHEDULE

STORM SEWERS

FROM STRUCTURE	INVERT ELEVATION	TO STRUCTURE	INVERT ELEVATION	PIPE SLOPE %	STORM SEWER RUBBER GASKET, CLASS A TYPE 2, 12"	TYPE 2, 15"	TYPE 3, 15"	TYPE 2, 18"	SEWER, CLASS B TYPE 2 36"	SEWER, CLASS B, TYPE 6 18"	36"	STORM SEWERS, PVC, SDR 26 18"	TRENCH BACKFILL CU YD
91	555.65	95	559.00	2.26							149		30
93	581.35	96	581.94	0.80		70							8
96	582.07	97	582.34	0.80	34								8
96	581.94	98	582.52	0.80		70							0
98	582.62	99	582.89	0.80	34								8
100	558.70	108	565.98	3.00						243			30
98	582.62	101	582.85	0.71		26							0
101	583.00	102	583.30	5.43	6								0
101	582.85	103	583.07	0.71		25							0
103	583.20	104	583.30	1.79	6								0
103	583.07	105	583.49	0.71		52							0
105	583.62	106	583.65	1.00	5								0
106	583.75	107	583.90	1.00	28								8
105	583.49	109	584.56	0.71		142							0
109	584.68	110	584.71	0.50	6								0
110	584.81	111	584.96	0.50	28								8
109	584.56	112	585.43	0.71		119							0
112	585.53	113	585.57	1.00	5								0
113	585.67	114	585.95	1.00	28								8
112	585.53	115	588.27	1.24		221							0
115	588.37	116	588.41	1.00	5								0
116	588.51	117	588.79	1.00	28								8
115	588.37	118	591.42	1.38		221							0
118	591.52	119	591.56	1.00	5								0
119	591.66	120	591.94	1.00	28								8
121	591.81	123	591.73	-1.30	7								0
122	592.19	124	592.09	-1.46	8								0
123	591.73	124	591.99	1.00	26								8
123	591.41	125	591.00	-1.18		29							0
127	578.69	128	578.79	0.92					11				16
128	579.82	129	580.40	0.50				117					0
				Subtotal 2	287	975	0	117	11	243	149	0	148
				Subtotal 1	768	1893	33	278	0	0	24	82	154
				Total	1055	2868	33	395	11	243	173	82	302

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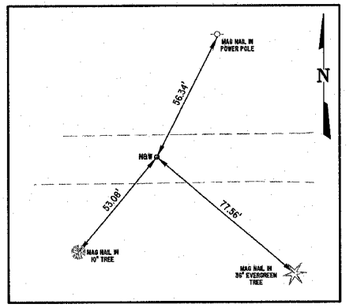
File name: S:\DWG\05\05094\dwg\Quantities.dwg
Plot date: 03/30/07 at 12:00

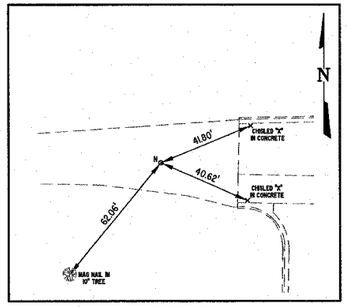
SCHEDULE OF QUANTITIES
OUTER BELT WEST AND
FAYETTE AVENUE
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 6384	*	EFFINGHAM	95	13
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-409(014)	

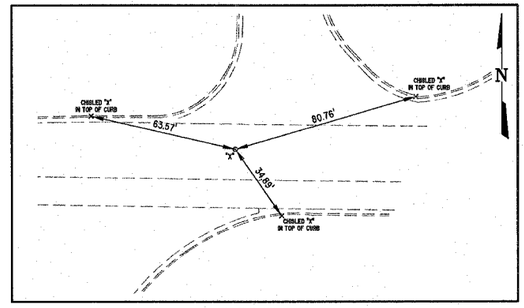
* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



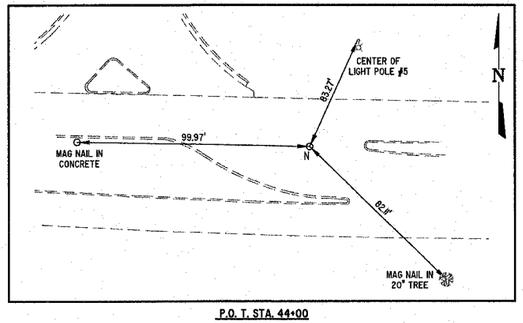
P.O.T. STA. 32+69.69
NAIL and WASHER FOUND
(FAYETTE AVENUE)



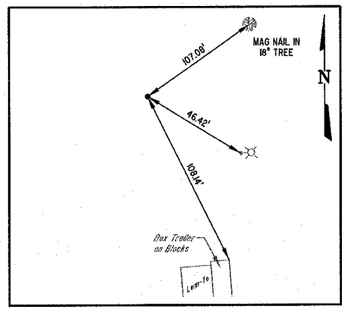
P.I. STA. 33+92.69
NAIL FOUND
(FAYETTE AVENUE)



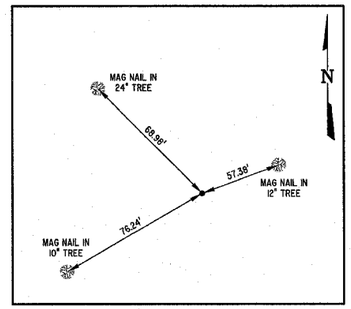
P.I. STA. 35+42.65
CHISELED "X" FOUND
(FAYETTE AVENUE)



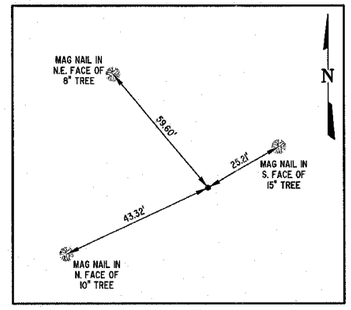
P.O. T. STA. 44+00
MAG NAIL FOUND
(FAYETTE AVENUE)



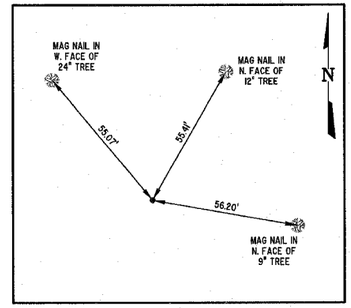
P.O.T. STA. 405+00
1/2" IRON PIN
(OUTER BELT WEST)



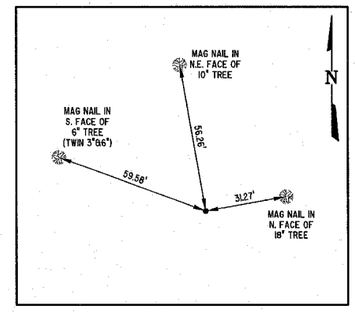
P.I. STA. 411+00.01
1/2" IRON PIN
(OUTER BELT WEST)



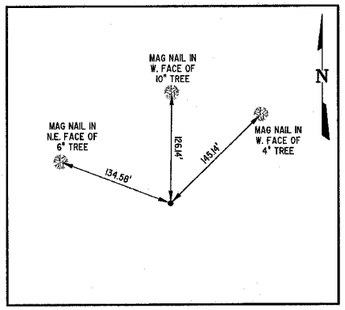
P.O.T. STA. 421+00
1/2" IRON PIN
(OUTER BELT WEST)



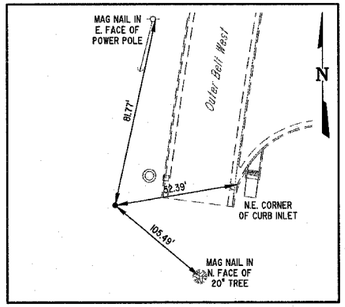
P.O.C. STA. 426+00
1/2" IRON PIN
(OUTER BELT WEST)



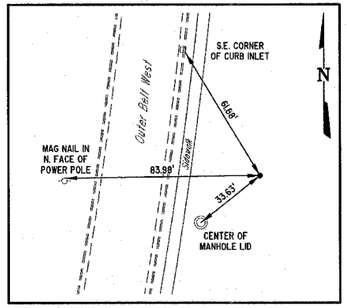
P.O.T. STA. 433+00
1/2" IRON PIN
(OUTER BELT WEST)



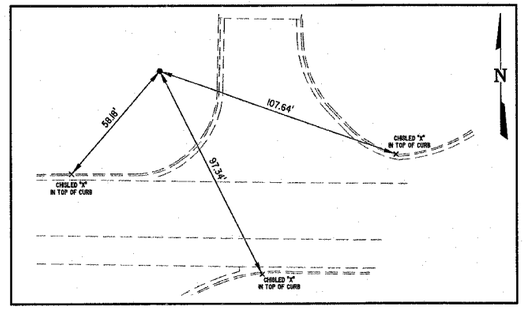
P.C. STA. 440+51.90
1/2" IRON PIN
(OUTER BELT WEST)



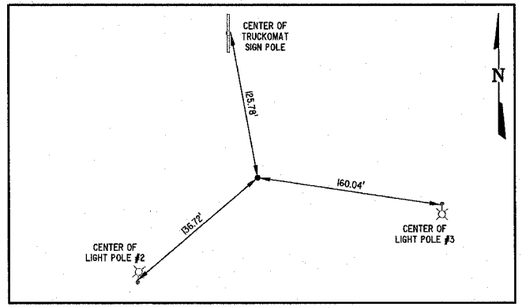
TRAVERSE POINT #4122
1/2" IRON PIN
STA. 442+67.35
35.00 LT



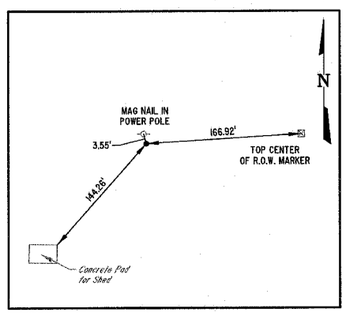
TRAVERSE POINT #4115
1/2" IRON PIN
STA. 449+51.63
54.20 RT



TRAVERSE POINT #427
1/2" IRON PIN
STA. 400+59.25
53.43 RT



TRAVERSE POINT #211
1/2" IRON PIN
STA 401+71.48
58.27 RT



TRAVERSE POINT #212
1/2" IRON PIN, STA. 405+23.66, 64.07 RT

MILANO & GRUNLOH ENGINEERS, LLC
114 WEST WASHINGTON
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(800) 677-2714
FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\Alignment Ties.dwg
Plot date: 03/30/07 at 12:00

REFERENCE TIES
CENTERLINE - FAYETTE AVENUE,
CENTERLINE - OUTER BELT WEST
AND TRAVERSE POINTS
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 6384	*	EFFINGHAM	95	14
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- NPP-409K(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

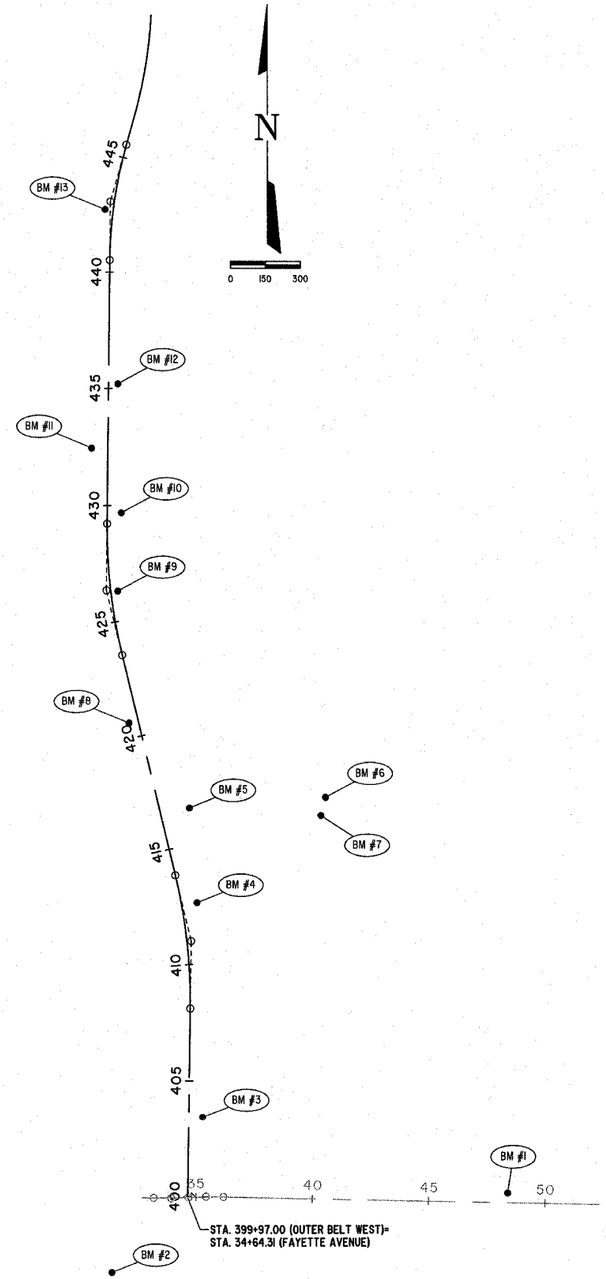
OUTER BELT WEST
PROPOSED CURVE #1
PI STA=411+00.01
Delta=4°24'42"
Da=02°30'00"
T=289.77'
R=2291.83'
L=576.47'
C=574.95'
E=18.25'
M=18.10'
PC STA=408+10.24
PT STA=413+86.71
M.S.E.=2.50%
ATTAIN:
STA 407+43.49 TO STA 408+32.49
STA 413+33.00 TO STA 414+22.00

PROPOSED CURVE #2
PI STA=426+39.94
Delta=4°14'28"
Da=02°30'00"
T=286.30'
R=2291.83'
L=569.55'
C=568.16'
E=17.81'
M=17.68'
PC STA=423+53.64
PT STA=429+23.29
M.S.E.=2.50%
ATTAIN:
STA 422+86.89 TO STA 423+75.89
STA 429+01.04 TO STA 429+90.04

PROPOSED CURVE #3
PI STA=443+05.32
Delta=15°07'01"
Da=03°00'00"
T=253.42'
R=1909.86'
L=503.90'
C=502.43'
E=16.74'
M=16.59'
PC STA=440+51.90
PT STA=445+55.80

FAYETTE AVENUE
SURVEY CENTERLINE
EXISTING CURVE#1
PI STA=33+92.69
Delta=3°21'50"
Da=02°14'36"
T=75.00'
R=2554.16'
L=149.96'
C=149.93'
E=1.10'
M=1.10'
PC STA=33+17.69
PRC STA=34+67.65

EXISTING CURVE#2
PI STA=35+42.65
Delta=3°32'20"
Da=02°21'36"
T=75.00'
R=2427.78'
L=149.95'
C=149.93'
E=1.16'
M=1.16'
PRC STA=34+67.65
PT STA=36+17.60



BM #1
TOP OF IRON PIN AT NORTHWEST CORNER OF OVERPASS
40.11'LT, STA. 48+39.19
ELEVATION=599.09

BM #2
CHISELED SQUARE IN CONCRETE BASE OF THE LIGHT POLE AT PETRO TRUCK ENTRANCE
ELEVATION=584.74

BM #3
TOP NORTHWEST CORNER OF THE NORTHERN MOST I-BEAM ALONG THE WEST SIDE OF TRUCKOMAT PAVEMENT AT 59.5'Rt, Sta. 403+43.4
ELEVATION=592.18

BM #4
RAILROAD SPIKE IN TREE AT 67'Rt, Sta. 412+55
ELEVATION=590.31

BM #5
RAILROAD SPIKE IN TREE AT 127'Rt, Sta. 416+52
ELEVATION=536.44

BM #6
CHISELED SQUARE IN NORTHWEST CONCRETE BRIDGE SUPPORT
ELEVATION=539.07

BM #7
RAILROAD SPIKE IN POWER POLE
ELEVATION=543.31

BM #8
RAILROAD SPIKE IN TREE AT 40'Lt, Sta. 420+65
ELEVATION=575.26

BM #9
RAILROAD SPIKE IN TREE AT 30'Rt, Sta. 426+30
ELEVATION=562.65

BM #10
RAILROAD SPIKE IN TREE AT 60'Rt, Sta. 429+70
ELEVATION=592.69

BM #11
RAILROAD SPIKE IN TREE AT 70'Lt, Sta. 432+45
ELEVATION=593.44

BM #12
RAILROAD SPIKE IN TREE AT 40'Rt, Sta. 435+20
ELEVATION=594.56

BM #13
TOP OF IRON PIN (CONTROL POINT #4122)
35'LT, STA. 442+67.35
ELEVATION=595.50

OUTER BELT WEST			
Station	Northing	Easting	Description
399+97.00	893688.875	915972.456	POT
408+10.24	894502.026	915984.683	PC
411+00.01	894791.759	915989.039	PI
413+86.71	895073.459	915921.147	PT
423+53.64	896013.468	915694.596	PC
426+39.94	896291.799	915627.516	PI
429+23.29	896578.078	915630.968	PT
440+51.90	897706.614	915644.576	PC
443+05.32	897960.014	915647.631	PI
446+55.79	898203.849	915716.665	PT

FAYETTE AVENUE			
Station	Northing	Easting	Description
32+69.69	893688.170	915777.874	POT
33+17.69	893687.306	915825.869	PC
33+92.69	893685.956	915900.857	PI
34+64.31	893688.875	915972.456	POC
34+67.65	893689.009	915975.795	PRC
35+42.65	893692.061	916050.733	PI
36+17.60	893690.482	916125.716	PT
45+00.00	893671.904	917007.921	POT

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(800) 677-8714
FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\Alignment Tiles.dwg
Plot date: 03/30/07 at 12:00

ALIGNMENT AND BENCHMARKS
OUTER BELT WEST AND
FAYETTE AVENUE
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	4	EFFINGHAM	95	15
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4098(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

NOTE: TYPE III BARRICADES (SEE STANDARD 702001-06) TO BE PLACED AT STA. 442+75.

TYPE III BARRICADES STANDARD 702001-06 DURING STAGES 1, 2 & 3

SIGN PLACEMENT (SEE STANDARD 701306-01) 800'±

STA. 39+58.72

STA. 39+58.72

USE TRAFFIC CONTROL STANDARD 701301-02 DURING STAGE 1

STA. 134+46.13

STAGE 1 CONSTRUCTION

NORTHBOUND CLOSED THROUGHOUT STAGES 2 & 3

TRAFFIC DRUMS

SIGN PLACEMENT (SEE STANDARD 701306-01) 450'±

EXIT RAMP (SOUTHBOUND I-70/57)

STAGE 2 CONSTRUCTION

NORTHBOUND CLOSED THROUGHOUT STAGES 2 & 3

TRAFFIC DRUMS

SIGN PLACEMENT (SEE STANDARD 701306-01) 450'±

STAGE 3 CONSTRUCTION

MILANO & GRUNLOH ENGINEERS, LLC 114 WEST WASHINGTON P.O. BOX 697 EFFINGHAM, ILLINOIS 62401 PHONE: (217) 347-7282 (800) 677-2714 FAX #: (217) 342-3433 File name: S:\DWG\05\05014\dwg\Stage Const.dwg Plot date: 03/30/07 at 12:00	STAGE CONSTRUCTION AND TRAFFIC CONTROL PLAN OUTER BELT WEST AND FAYETTE AVENUE CITY OF EFFINGHAM, ILLINOIS

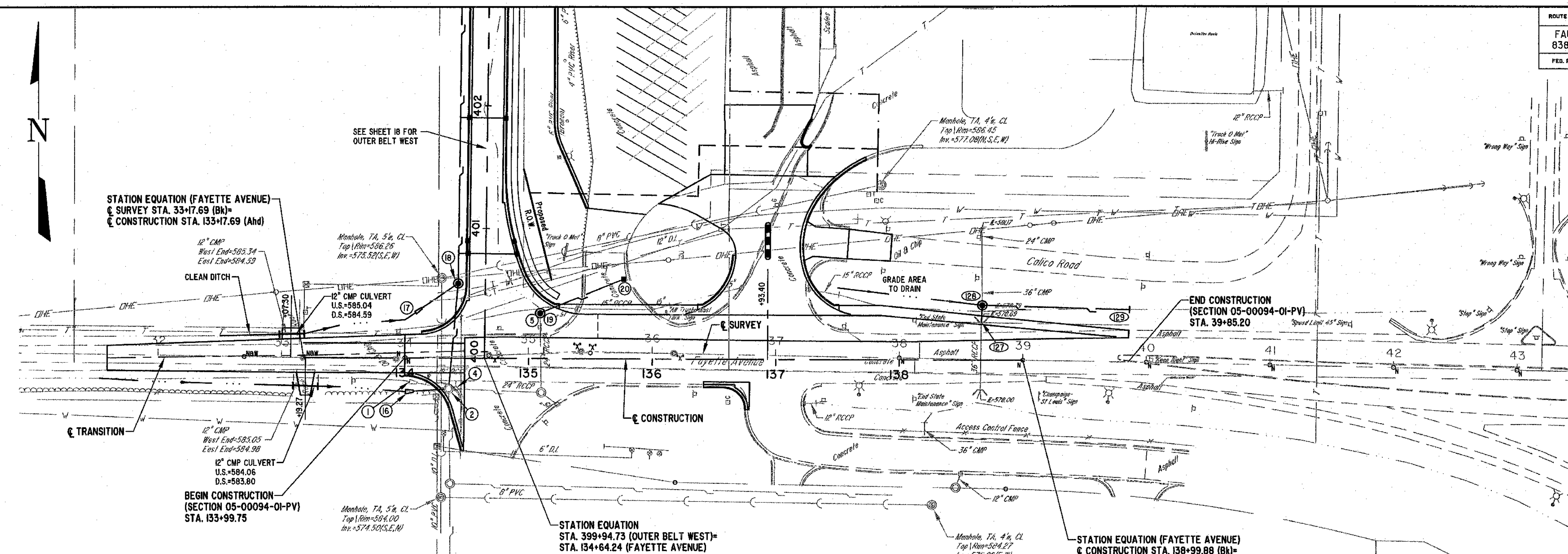
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	16
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4091(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

FAYETTE AVENUE SURVEY CENTERLINE

CURVE #1
PI STA=33+92.69
Delta=3°21'50"
Da=02°14'36"
T=75.00'
R=2554.16'
L=149.96'
C=149.93'
E=1.10'
M=1.10'
PC STA=33+17.69
PRC STA=34+67.65

CURVE #2
PI STA=35+42.65
Delta=3°32'20"
Da=02°21'36"
T=75.00'
R=2427.78'
L=149.95'
C=149.93'
E=1.16'
M=1.16'
PRC STA=34+67.65
PT STA=36+17.60



NOTE: STA. 33+17.69 to STA. 39+00 IS THE CENTERLINE OF SURVEY
STA. 133+17.69 to STA. 138+99.88 IS THE CENTERLINE OF CONSTRUCTION
SEE SHEET 9 FOR ENTRANCE SCHEDULE
SEE SHEET 31 FOR INTERSECTION GEOMETRICS
SEE SHEET 33 FOR GEOMETRICS OF ENTRANCES AT STA. 136+93.40

BM #1
TOP OF IRON PIN AT NORTHWEST CORNER OF OVERPASS
40.11'LT, STA. 48+39.19
ELEVATION=599.09

BM #2
CHISELED SQUARE IN CONCRETE BASE OF THE LIGHT POLE AT PETRO TRUCK ENTRANCE
ELEVATION=584.74

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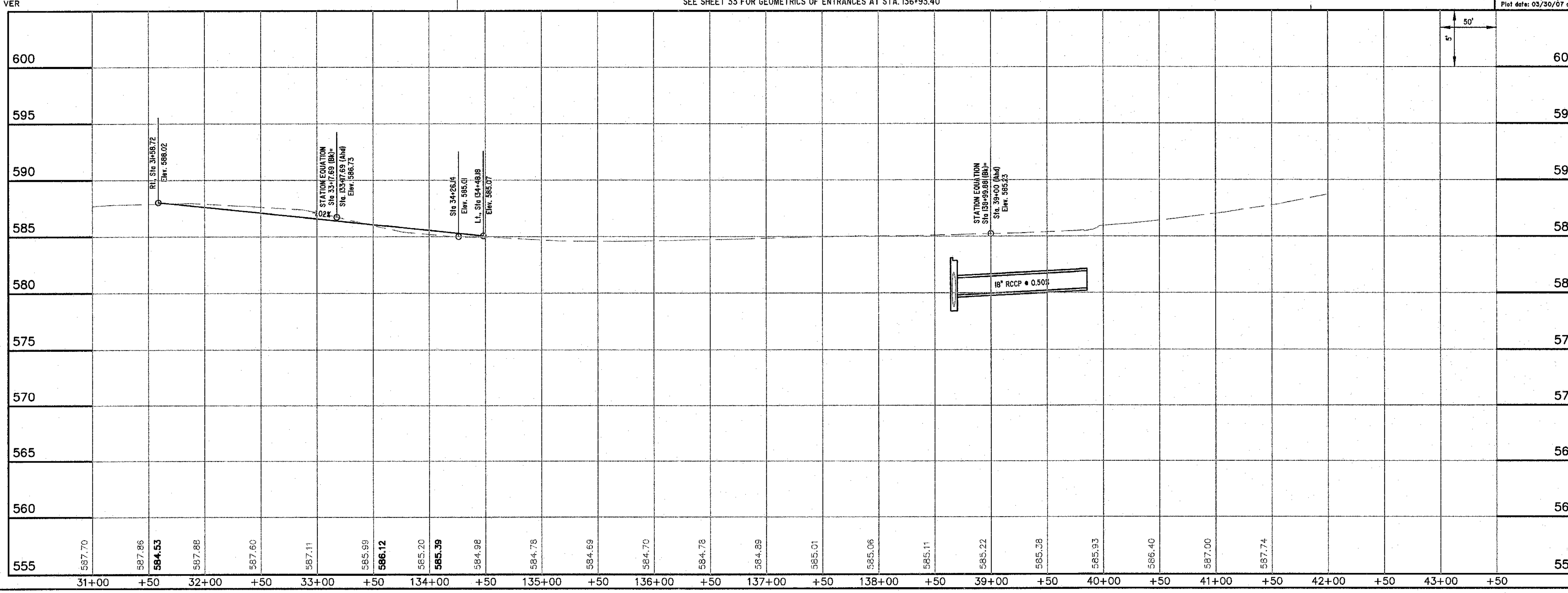
Fax #: (217) 342-3433
Web Address: www.mgengineers.com
Design Firm #: 184-003108

File name: S:\DWG\05\05014\dwg\Street Plans.dwg
Plot date: 03/30/07 at 12:00 F.B. 555,584,603

SCALES:
1" =50' HOR
1" =5' VER



FAYETTE AVENUE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	17
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4091(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR

CONTRACT #95503

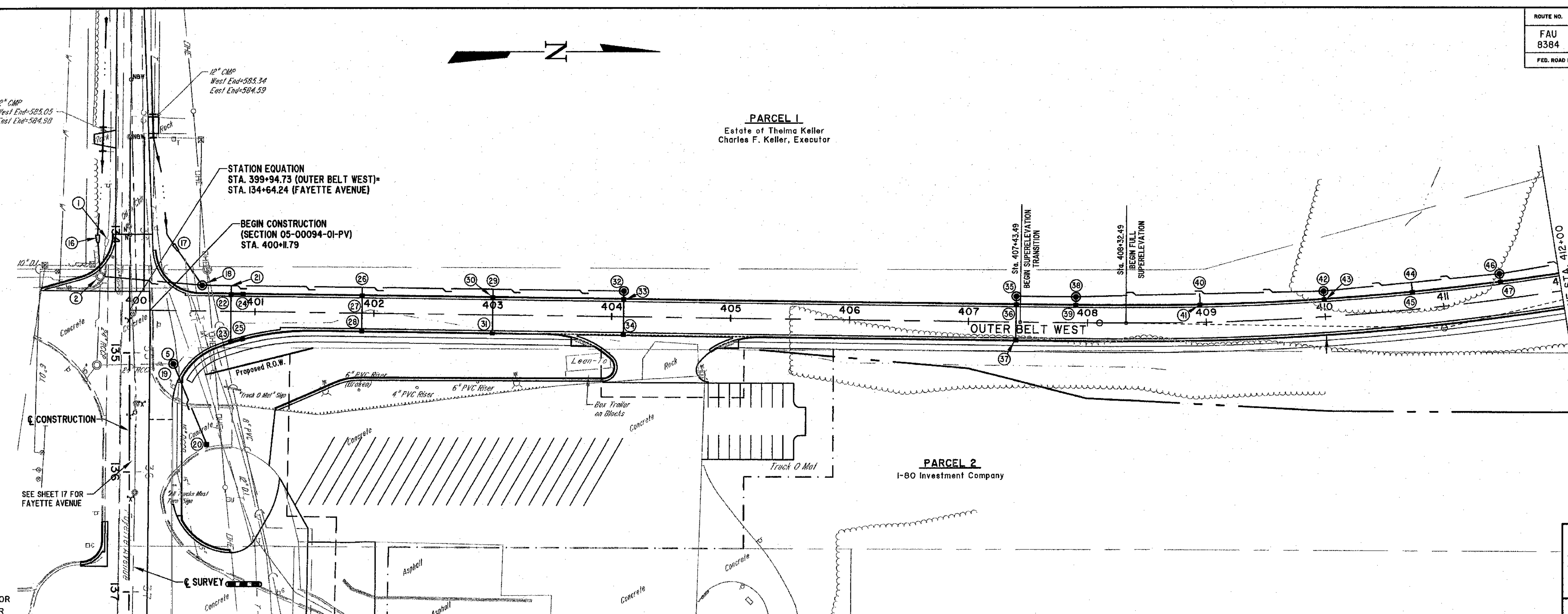
FAYETTE AVENUE SURVEY CENTERLINE

CURVE #1

PI STA=33+92.69
Delta=3°21'50"
Da=02°14'36"
T=75.00'
R=2554.16'
L=149.96'
C=149.93'
E=1.10'
M=1.10'
PC STA=33+17.69
PRC STA=34+67.65

CURVE #2

PI STA=35+42.65
Delta=3°32'20"
Da=02°21'36"
T=75.00'
R=2427.78'
L=149.95'
C=149.93'
E=1.16'
M=1.16'
PRC STA=34+67.65
PT STA=36+17.60



SCALES:
1" = 50' HOR
1" = 5' VER

OUTER BELT WEST

CURVE #1

PI STA=411+00.01
Delta=14°24'42"
Da=02°30'00"
T=289.77'
R=2291.83'
L=576.47'
C=574.95'
E=18.25'
M=18.10'
PC STA=408+10.24
PT STA=413+86.71
M.S.E.=2.50%
ATTAIN: STA 407+43.49 TO STA 408+32.49
STA 413+33.00 TO STA 414+22.00

BM #2

CHISELED SQUARE IN CONCRETE BASE OF THE LIGHT POLE AT PETRO TRUCK ENTRANCE
ELEVATION=584.74

BM #3

TOP NORTHWEST CORNER OF THE NORTHERN MOST I-BEAM ALONG THE WEST SIDE OF TRUCKOMAT PAVEMENT AT 59.5'Rt. Sta. 403+43.4
ELEVATION=592.18

MILANO & GRUNLOH ENGINEERS, LLC
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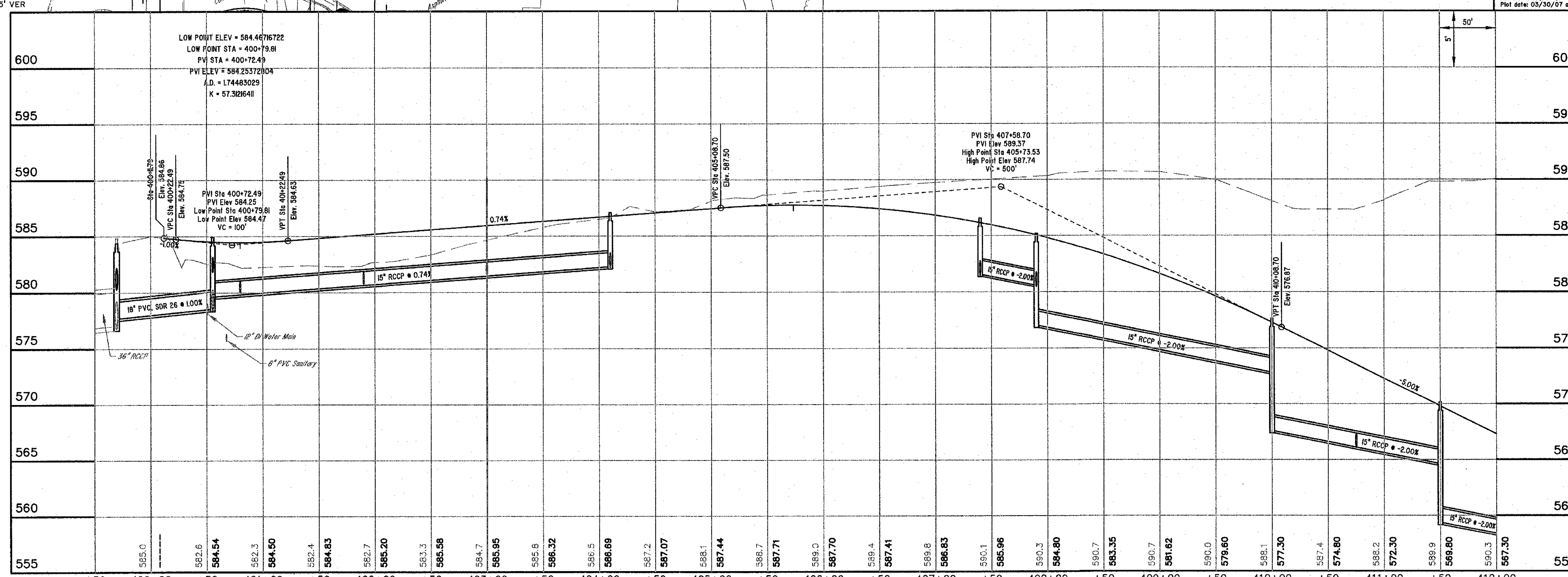
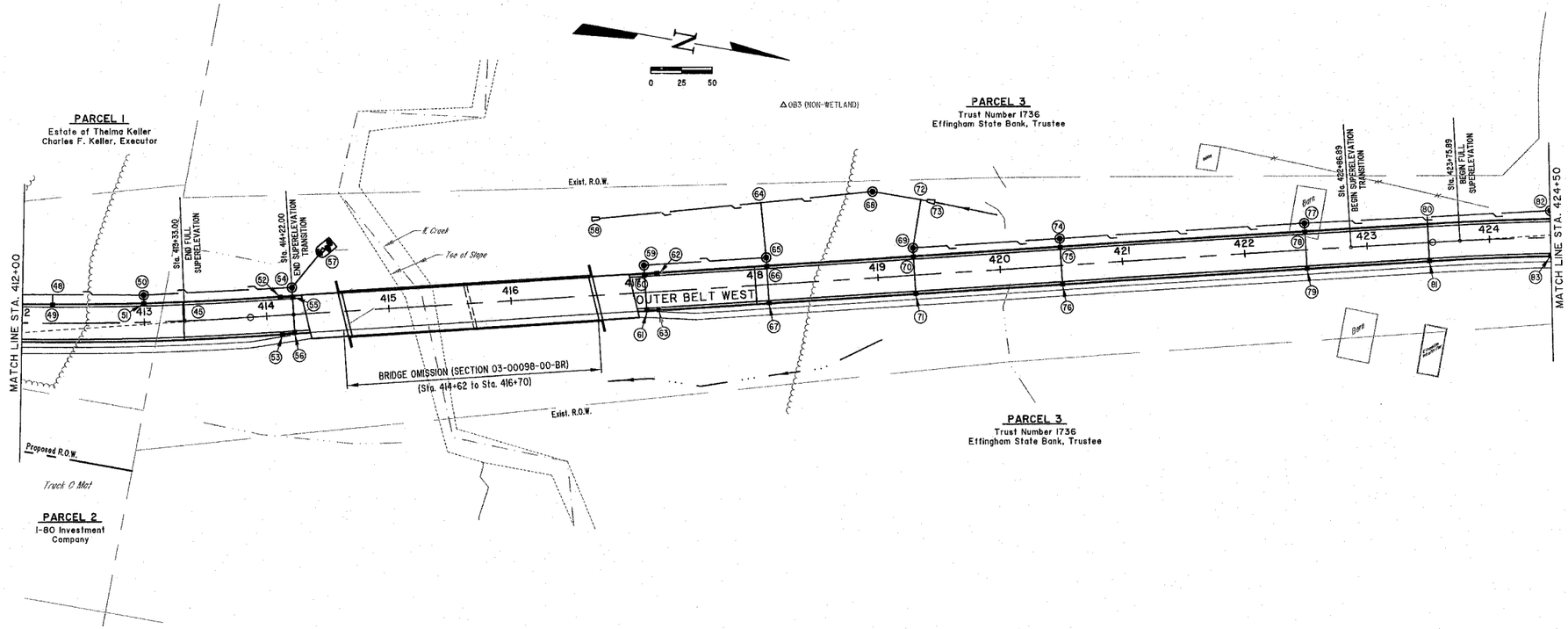
Web Address: www.mgengineers.com
Design Firm #: 184-003108

File name: S:\DWG\05\05014\dwg\Street Plans.dwg
Plot date: 03/30/07 at 12:00 F.B. 555,564



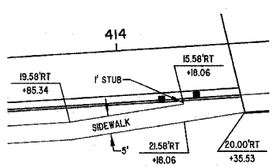
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	18
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-409(014)		

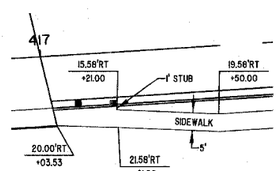
* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



OUTER BELT WEST
CURVE #1
PI STA=411+00.01
Delta=14°24'42"
Dc=02°30'00"
T=289.77'
R=2291.83'
L=576.47'
C=574.95'
E=18.25'
M=18.10'
PC STA=408+10.24
PT STA=413+86.71
M.S.E.=2.50%
ATTAIN: STA 407+43.49 TO STA 408+32.49
STA 413+33.00 TO STA 414+22.00

OUTER BELT WEST
CURVE #2
PI STA=426+39.94
Delta=14°14'28"
Dc=02°30'00"
T=286.30'
R=2291.83'
L=569.65'
C=568.18'
E=17.81'
M=17.68'
PC STA=423+53.64
PT STA=429+23.29
M.S.E.=2.50%
ATTAIN: STA 422+86.89 TO STA 423+75.89
STA 429+01.04 TO STA 429+90.04





BM #4
RAILROAD SPIKE IN TREE
AT 67'Rt, Sta. 412+55
ELEVATION=590.31

BM #5
RAILROAD SPIKE IN TREE
AT 127'Rt, Sta. 416+52
ELEVATION=536.44

BM #8
RAILROAD SPIKE IN TREE
AT 40'Lt, Sta. 420+65
ELEVATION=575.26

OUTER BELT WEST

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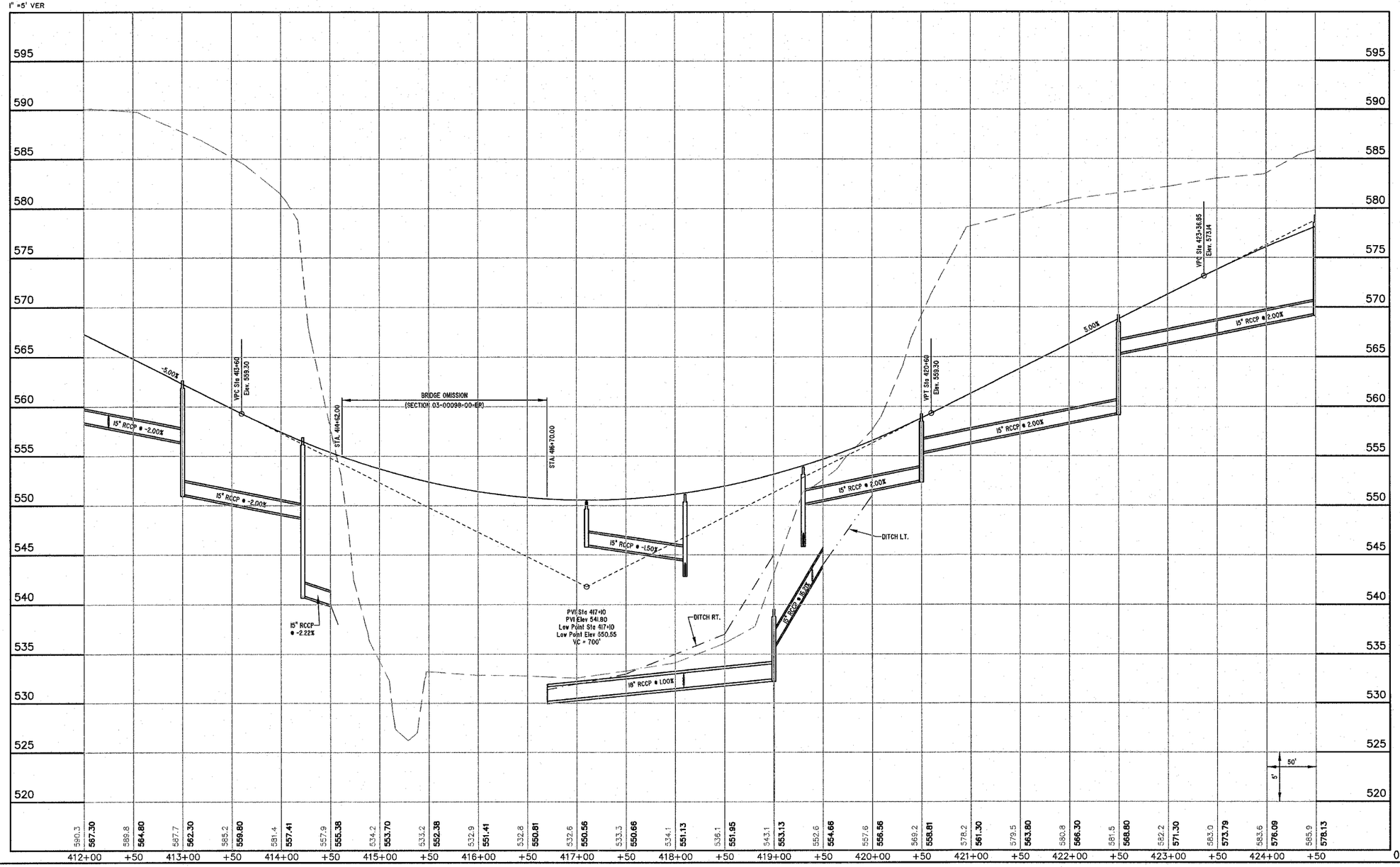
Design Firm #: 184-003108

File name: S:\DWG\05\05014\dwg\Street Plans.dwg
Plot date: 03/30/07 at 12:00
F.S. 555,564

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	19
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- NFP-408(014)		

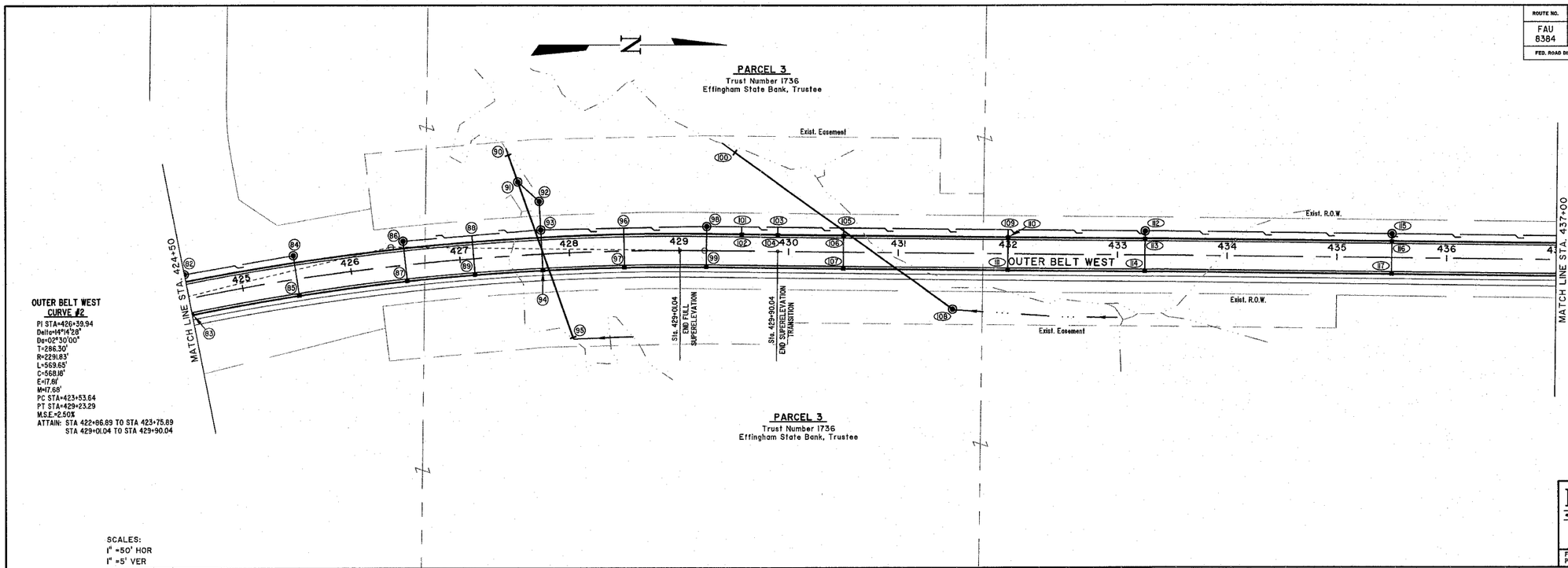
* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

SCALES:
1" =50' HOR
1" =5' VER



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8364	*	EFFINGHAM	95	20
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-409(CO14)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



OUTER BELT WEST
CURVE #2
PI STA=426+39.94
Delta=14°14'28"
Dc=02°30'00"
T=286.30'
R=2291.83'
L=569.65'
C=568.16'
E=17.86'
M=17.68'
PC STA=423+53.64
PT STA=429+23.29
M.S.E.=2.50%
ATTAIN: STA 422+86.89 TO STA 423+75.89
STA 429+01.04 TO STA 429+90.04

BM #9
RAILROAD SPIKE IN TREE
AT 30'Rt, Sta. 426+30
ELEVATION=562.65

BM #10
RAILROAD SPIKE IN TREE
AT 60'Rt, Sta. 429+70
ELEVATION=592.69

BM #11
RAILROAD SPIKE IN TREE
AT 70'Lt, Sta. 432+45
ELEVATION=593.44

BM #12
RAILROAD SPIKE IN TREE
AT 40'Rt, Sta. 435+20
ELEVATION=594.58

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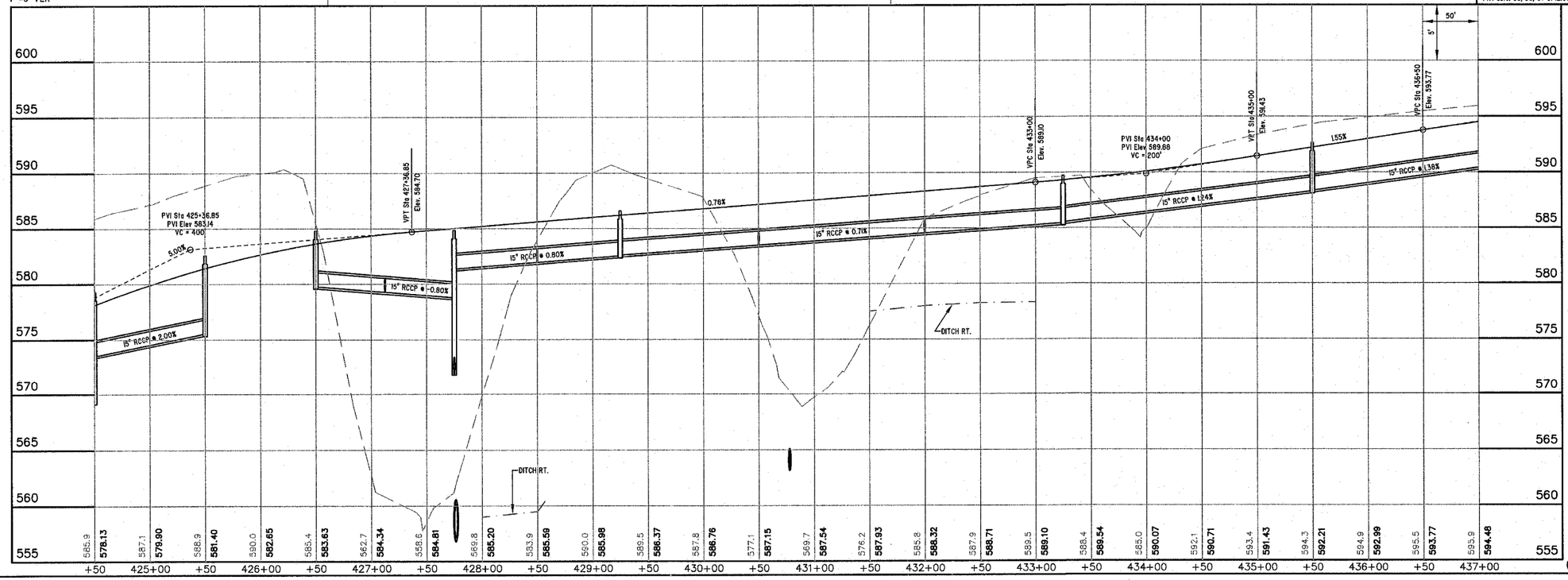
Web Address: www.mgengineers.com
Design Firm #: 184-003108

File name: S:\DWG\05\05016\dwg\Street Plans.dwg
Plot date: 03/30/07 at 12:00 F.B. 555,584

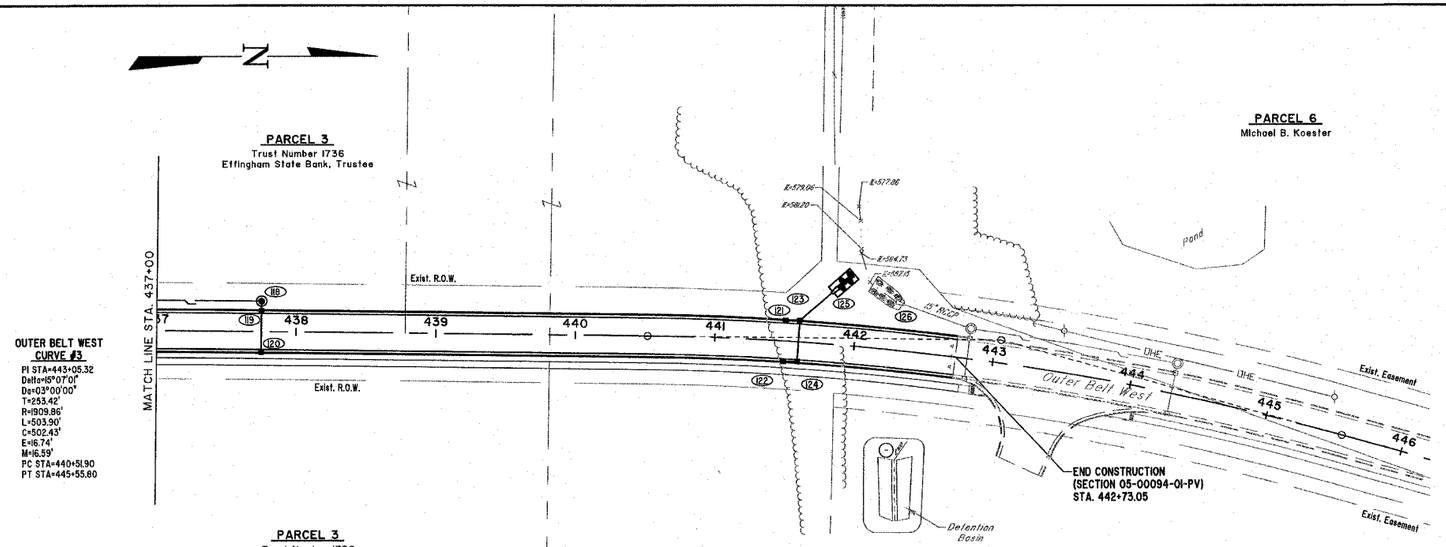
SCALES:
1" =50' HOR
1" =5' VER



OUTER BELT WEST

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	21
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-6019(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



OUTER BELT WEST
CURVE #3
PI STA=443+05.32
Delta=15°07'01"
Dc=03°00'00"
T=253.42'
R=1909.86'
L=503.90'
C=502.43'
E=16.74'
M=16.39'
PC STA=440+51.90
PT STA=445+55.80

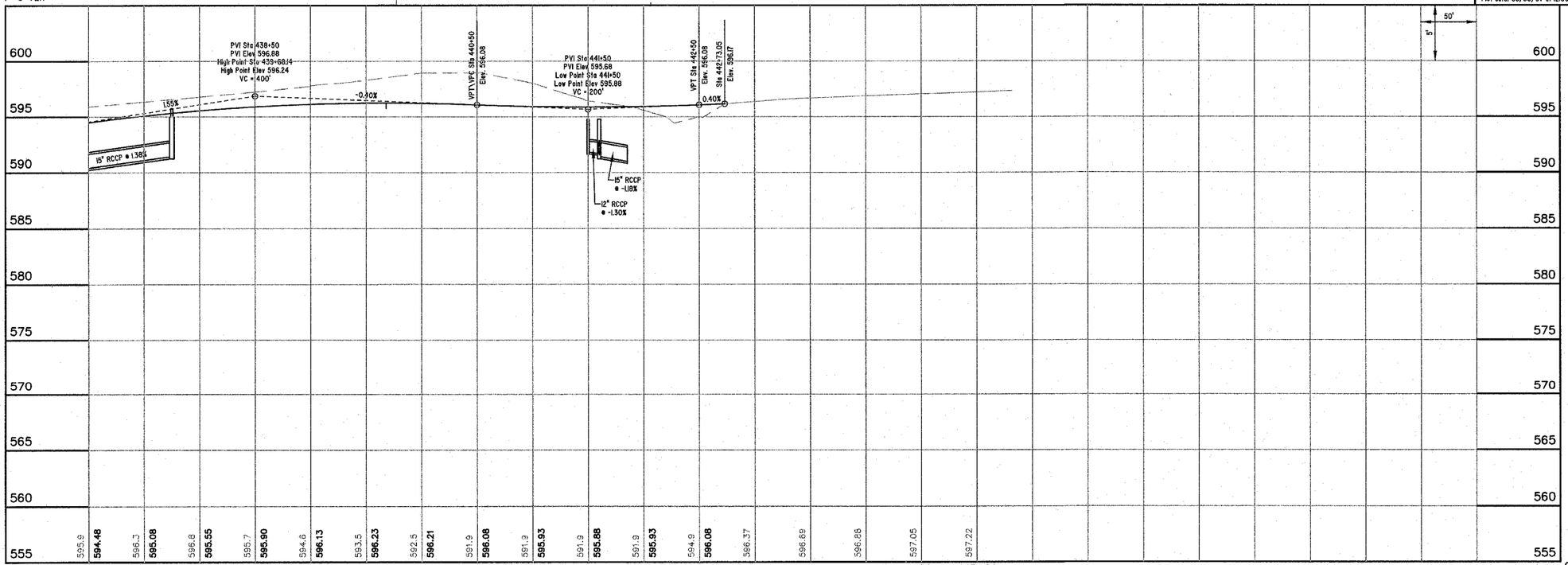
BM #12
RAILROAD SPIKE IN TREE
AT 40'RT, Sta. 435+20
ELEVATION=594.58

BM #13
TOP OF IRON PIN
(CONTROL POINT #4122)
35'LT, STA. 442+67.35
ELEVATION=595.50

MILANO & GRUNLOH ENGINEERS, LLC
114 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
Phone: (217) 347-7262
(800) 677-2714
Fax #: (217) 342-3433
Web Address: www.mgengineers.com
Design Firm #: 184-003108

File name: S:\DWG\05\05014\dwg\Street Plans.dwg
Plot date: 03/30/07 at 12:00
P.B. 555,584

SCALES:
1" =50' HOR
1" =5' VER



OUTER BELT WEST

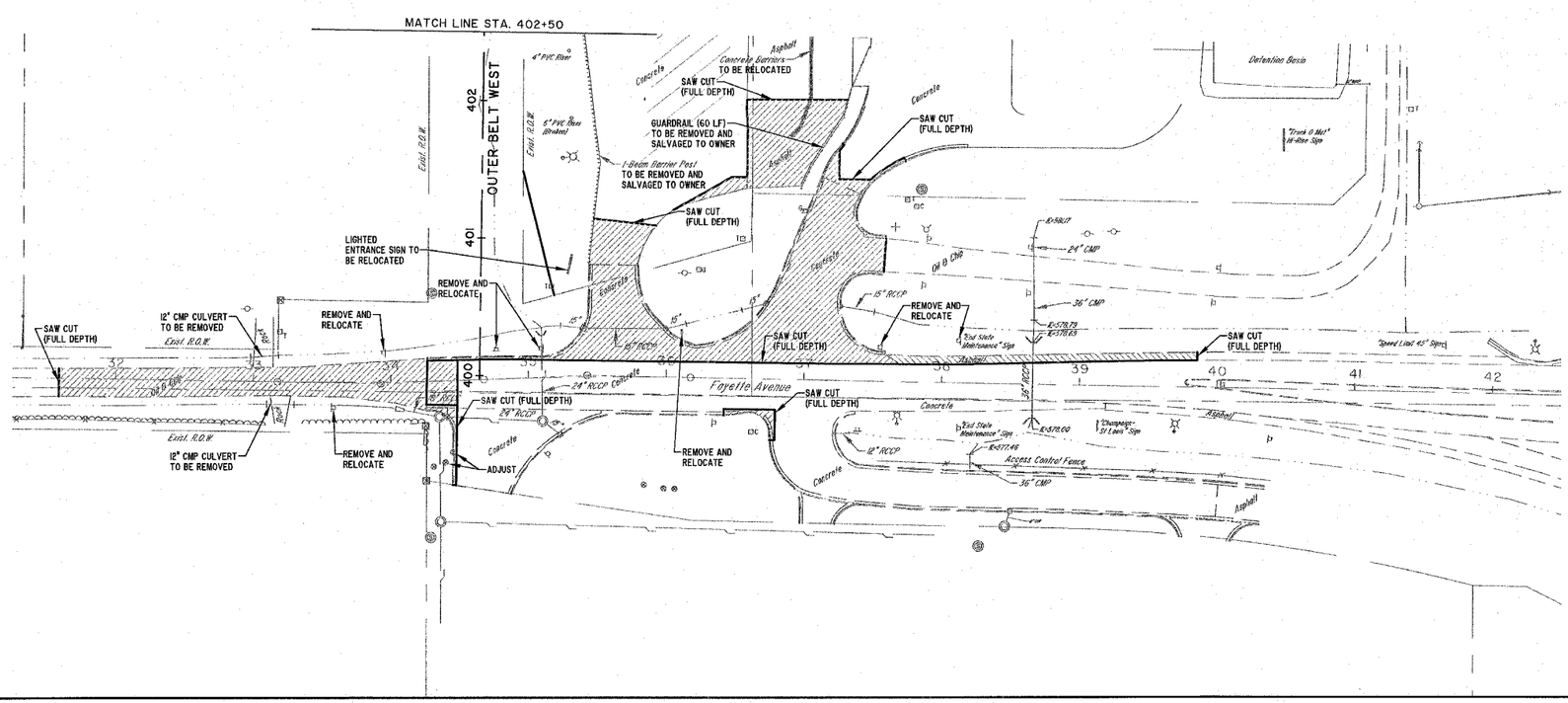
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	22
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4098(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

FAYETTE AVENUE SURVEY CENTERLINE

CURVE #1
PI STA=33+92.69
Delta=3°21'50"
Dc=02°14'36"
T=75.00'
R=2554.16'
L=149.96'
C=149.93'
E=1.10'
M=1.10'
PC STA=33+17.69
PRC STA=34+67.65

CURVE #2
PI STA=35+42.65
Delta=3°32'20"
Dc=02°21'36"
T=75.00'
R=2427.78'
L=149.95'
C=149.93'
E=1.16'
M=1.16'
PRC STA=34+67.65
PT STA=36+17.60



LEGEND
- PAVEMENT REMOVAL & CURB AND GUTTER REMOVAL
- BITUMINOUS SHOULDER REMOVAL
- BUILDING STRUCTURE REMOVAL

LOCATION	PAVEMENT REMOVAL	DRIVEWAY PAVEMENT REMOVAL	CURB & GUTTER REMOVAL	BITUMINOUS SHOULDER REMOVAL	GUARDRAIL POST REMOVAL	GUARDRAIL REMOVAL
	SY		LF	SY	EACH	LF
Rt, 403+93 to Rt, 404+79		31				
31+59 to 34+49	396					
Rt, 34+25 to Rt, 34+49			69			
Lt, 35+18 to Lt, 37+68		1492				
Rt, 36+42 to Rt, 36+79		11	48			
Lt, 34+27 to 35+46			169			
Lt, 37+58 to Lt, 37+70			185			
Lt, 37+59 to Lt, 39+85				150		
TruckOMat Site		384	30		85	60
	396	1918	501	150	85	60

STORM SEWER REMOVAL		
LOCATION	15" RCCP FOOT	18" RCCP FOOT
Rt, Sta. 34+03 to 34+40		24
Lt, Sta. 35+24 to 35+40	16	
Lt, Sta. 35+40 to 35+99	58	
Lt, Sta. 35+99 to 36+14	15	
Lt, Sta. 36+54 to 36+72	18	
Lt, Sta. 37+25 to 37+50	25	
TOTAL	132	24

STORM SEWER TO BE FILLED	
LOCATION	24" RCCP FOOT
Rt, Sta. 35+10 to Lt, Sta. 35+10	61

INLETS TO BE REMOVED (SPECIAL)	
LOCATION	EACH
Lt, Sta. 35+40	1
Lt, Sta. 35+99	1
Lt, Sta. 36+72	1
Lt, Sta. 37+25	1
TOTAL	4

CONCRETE HEADWALL REMOVAL	
LOCATION	EACH
Lt, Sta. 35+10	1
Lt, Sta. 38+66	1
TOTAL	2

INLETS TO BE ABANDONED (SPECIAL)	
LOCATION	EACH
Rt, Sta. 34+40	1

VALVE BOXES TO BE ADJUSTED	
LOCATION	EACH
Rt, Sta. 34+38	1
Rt, Sta. 34+44	1
TOTAL	2

MANHOLES TO BE REMOVED	
LOCATION	EACH
Rt, Sta. 34+35	1

PAVEMENT MARKING REMOVAL	
LOCATION	LF
34+26 to 39+68.5	626
TruckOMat Site	1145
Total	1771

RELOCATE EXISTING FLARED END SECTION		
EXISTING LOCATION	PROPOSED LOCATION	EACH
19.39'Rt, Sta. 34+03.29	27.15'Rt, Sta. 34+00	1

RELOCATE SIGN PANEL AND POST		
LOCATION	EACH	MESSAGE
Rt, 33+58	1	SPEED LIMIT - 45 MPH
Lt, 33+95	1	LOCAL TRAFFIC
Lt, 34+77	1	INTERSTATE DIRECTION
Lt, 35+10	1	END SPEED ZONE
Lt, 36+10	1	ALL TRUCKS MUST TURN
Lt, 37+55	1	FRONTAGE ROAD
Lt, 38+12	1	END STATE MAINTENANCE
Total	7	

TREE REMOVAL	
LOCATION	ACRE
400+11.79 to 414+62	2.36
416+70 to 442+73.05	4.48
TOTAL	6.8

MILANO & GRUNLOH ENGINEERS, LLC
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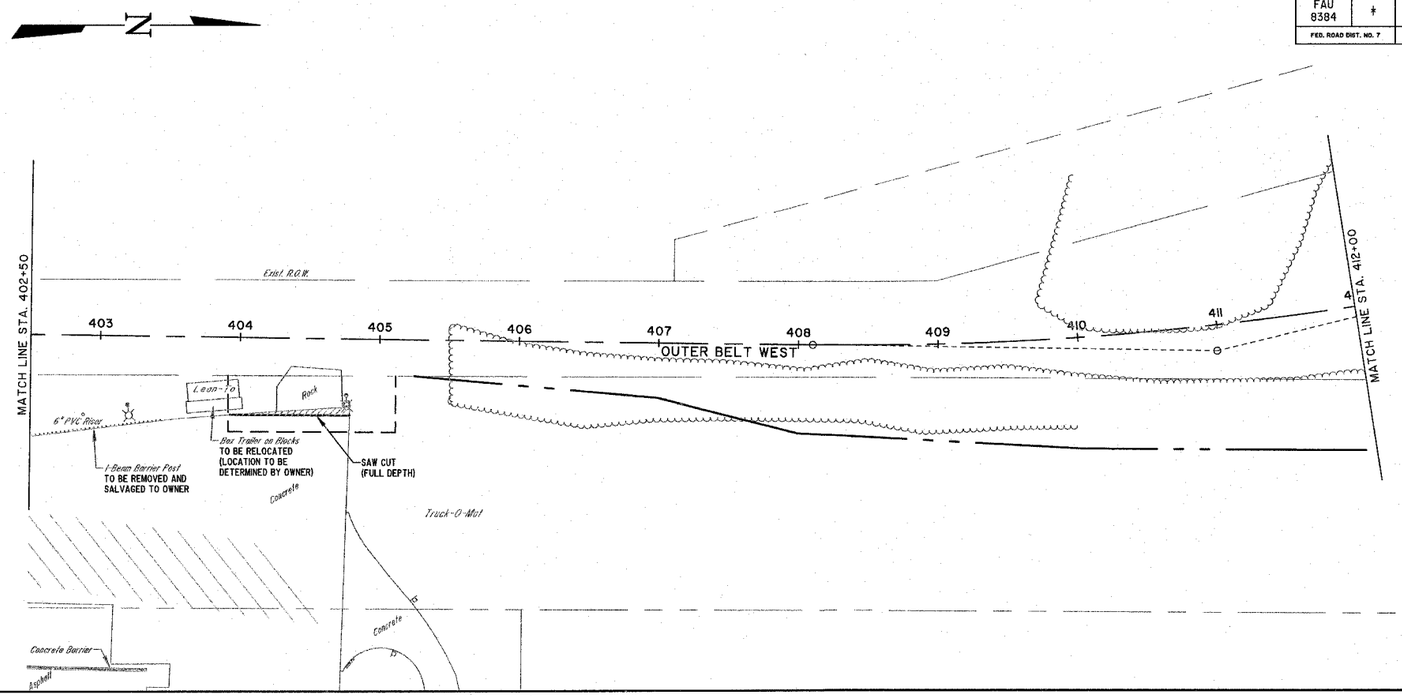
FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\Removal Plan.dwg
Plot date: 03/30/07 at 12:00
F.B. 555,584,603

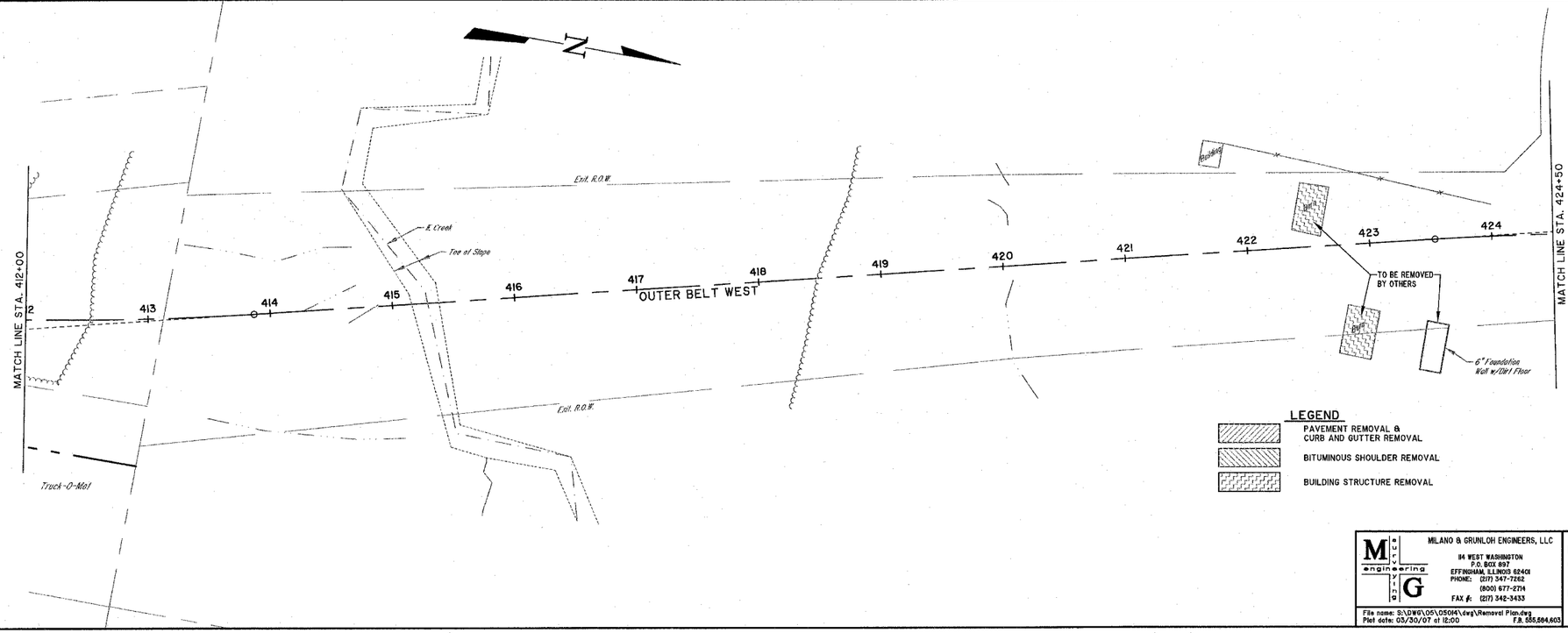
REMOVAL PLAN
FAYETTE AVENUE
STA. 31+50 TO STA 42+50
EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	23
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4098(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



OUTER BELT WEST
CURVE #1
PI STA=411+00.01
Delta=14°24'42"
De=02°30'00"
T=289.77'
R=2291.83'
L=576.47'
C=574.95'
E=18.25'
M=18.10'
PC STA=408+10.24
PT STA=413+86.71



OUTER BELT WEST
CURVE #1
PI STA=411+00.01
Delta=14°24'42"
De=02°30'00"
T=289.77'
R=2291.83'
L=576.47'
C=574.95'
E=18.25'
M=18.10'
PC STA=408+10.24
PT STA=413+86.71

OUTER BELT WEST
CURVE #2
PI STA=426+39.94
Delta=14°14'28"
De=02°30'00"
T=286.30'
R=2291.83'
L=569.65'
C=568.18'
E=17.69'
M=17.68'
PC STA=423+53.64
PT STA=429+23.29

LEGEND
- PAVEMENT REMOVAL & CURB AND GUTTER REMOVAL
- BITUMINOUS SHOULDER REMOVAL
- BUILDING STRUCTURE REMOVAL

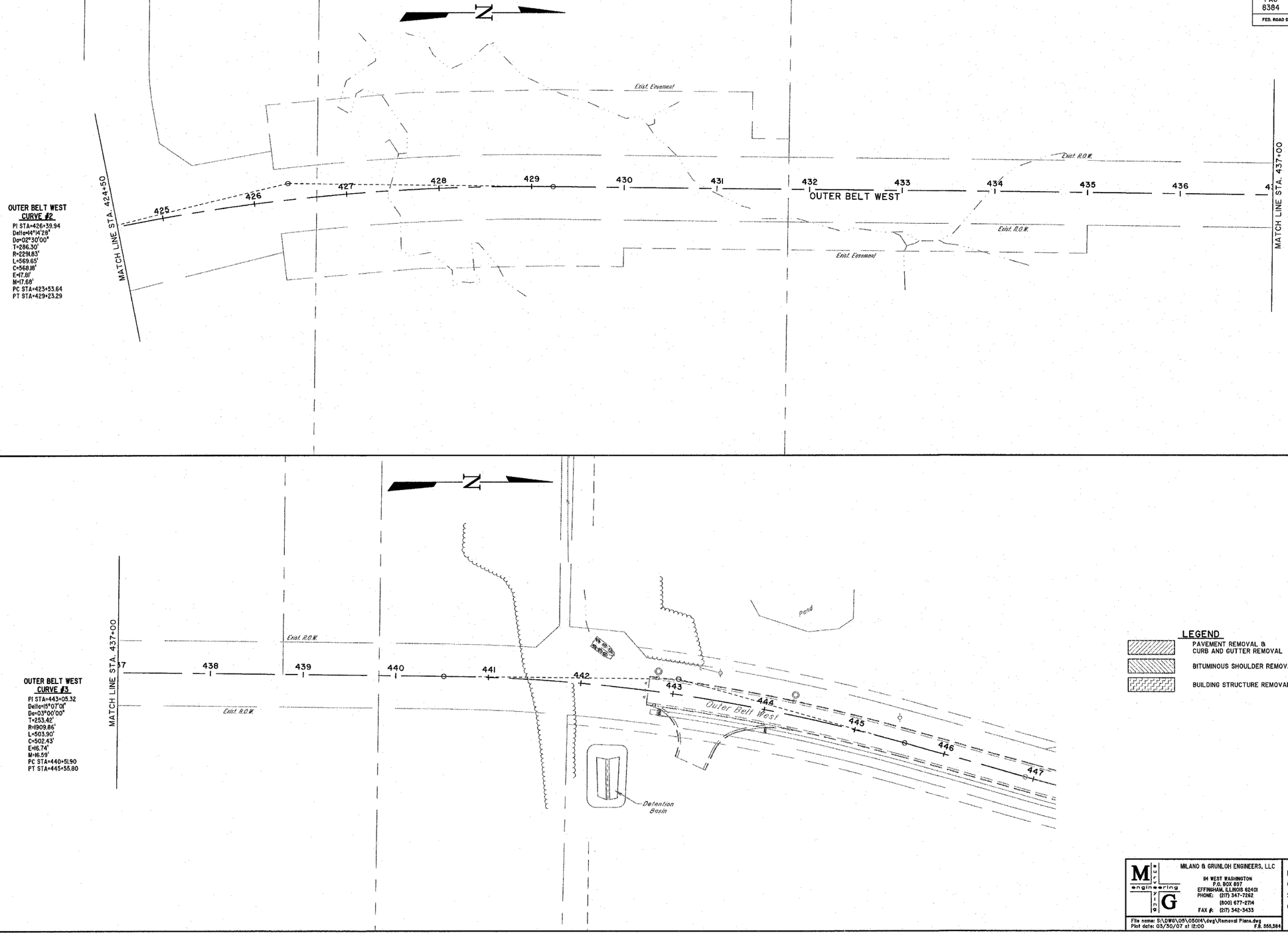
MILANO & GRUNLOH ENGINEERS, LLC
114 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7262
(800) 677-2714
FAX #: (217) 342-3433

File name: S:\DWG\05\05004\dwg\Removal Plan.dwg
Plot date: 03/30/07 at 12:00
F.B. 555,564,603

REMOVAL PLAN
OUTER BELT WEST
STA. 399+50 TO STA 424+50
EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 6384	*	EFFINGHAM	95	24
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4059(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



OUTER BELT WEST
CURVE #2
PI STA=426+39.94
Delta=14°14'28"
Dc=02°30'00"
T=286.30'
R=2291.83'
L=569.65'
C=568.18'
E=17.81'
M=17.68'
PC STA=423+53.64
PT STA=429+23.29

OUTER BELT WEST
CURVE #3
PI STA=443+05.32
Delta=15°07'01"
Dc=03°00'00"
T=253.42'
R=1909.86'
L=503.90'
C=502.43'
E=16.74'
M=16.59'
PC STA=440+51.90
PT STA=445+55.80

LEGEND
- PAVEMENT REMOVAL & CURB AND GUTTER REMOVAL
- BITUMINOUS SHOULDER REMOVAL
- BUILDING STRUCTURE REMOVAL

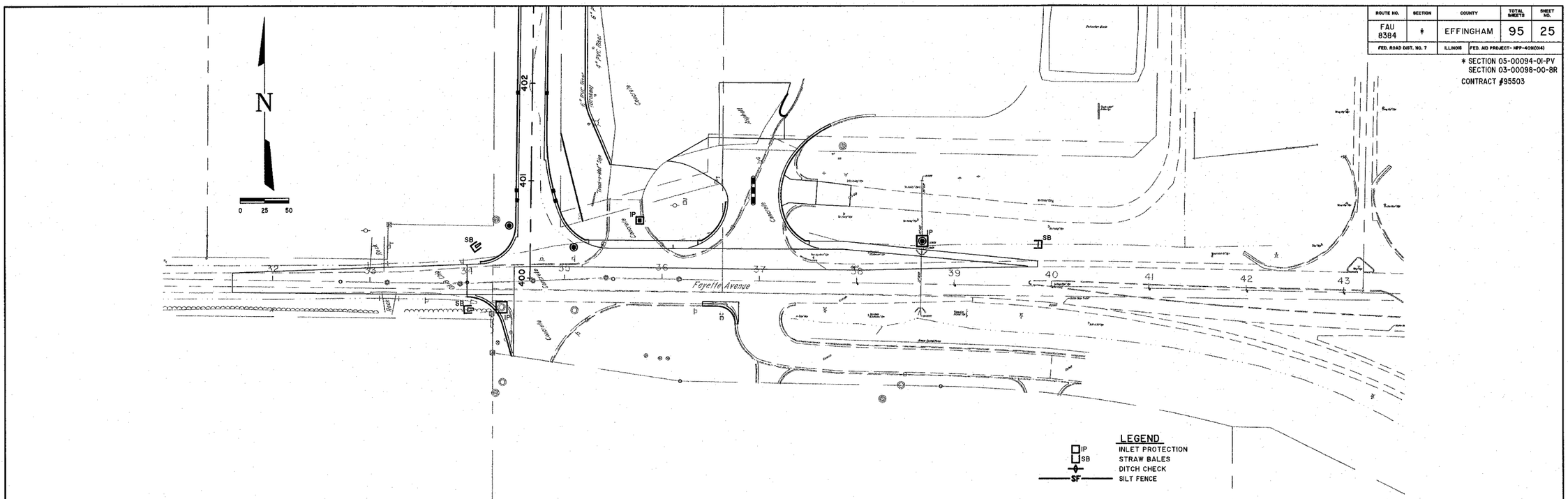
MILANO & GRUNLOH ENGINEERS, LLC
84 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7282
(800) 677-2714
FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\Removal Plans.dwg
Plot date: 03/30/07 at 12:00
F.A. 555,584

REMOVAL PLAN
OUTER BELT WEST
STA 424+50 TO STA 447+00
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	25
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4081(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



EROSION CONTROL SCHEDULE					
LOCATION	INLET AND PIPE PROTECTION	INLET FILTERS	TEMPORARY DITCH CHECKS	PERIMETER EROSION BARRIER	SEDIMENT CONTROL
	EACH	EACH	EACH	FOOT	EACH
FAYETTE AVENUE					
Lt, 134+08.5	1				
Rt, 134+00.5	1				
Rt, 134+35.3		1			1
Lt, 135+76.9		1			1
Lt, 138+67.0		1			1
Lt, 39+85.6	1				
OUTER BELT WEST					
400+79.8 to 441+60		60			60
Rt, 416+70 to 419+00			4		
Lt, 416+70 to 419+25				255	
Rt, 416+70 to 418+75				205	
Rt, 419+50	1				
Rt, 419+50 to 420+00			1		
Lt, 426+75 to 431+00				488	
Rt, 428+00	1				
Rt, 428+50 to 428+56.7			1		
Rt, 431+50 to 433+00			2		
Lt, 441+25 to 442+73				159	
Lt, 441+60	1				
TOTAL	6	63	8	1107	63

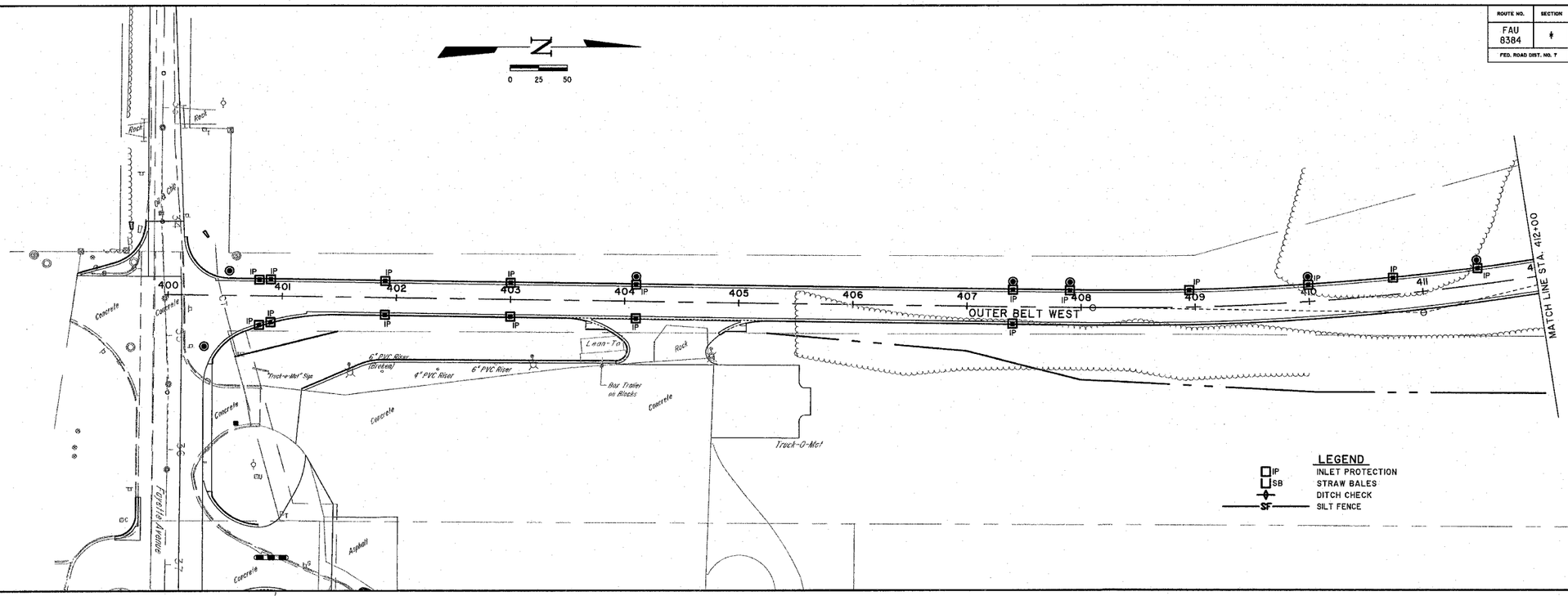
MILANO & GRUNLOH ENGINEERS, LLC
84 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7262
(800) 677-2714
FAX #: (217) 342-3433

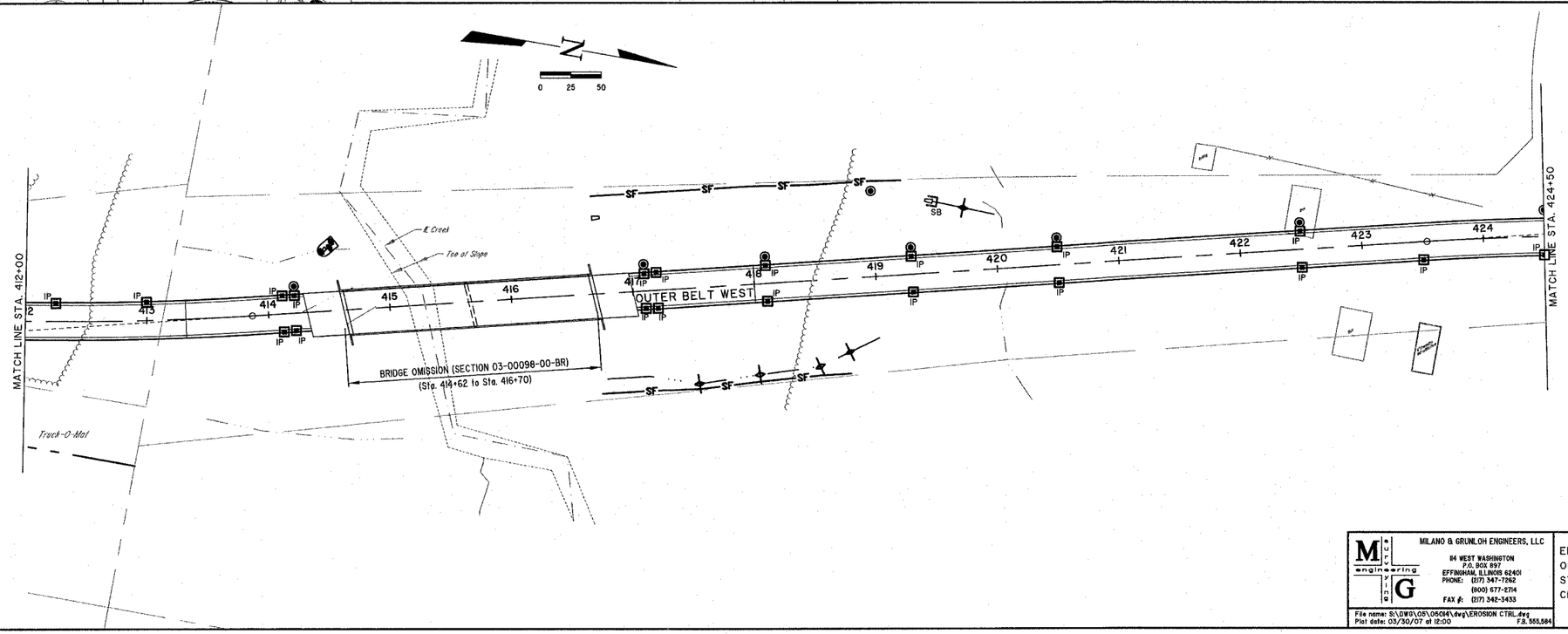
File name: S:\DWG\05\05014\dwg\EROSION CTRL.dwg
Plot date: 03/30/07 at 12:00
F.B. 555,564

EROSION CONTROL PLAN
FAYETTE AVENUE
STA. 32+00 TO STA 42+00
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 6384	*	EFFINGHAM	95	26
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-409(CH4)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503





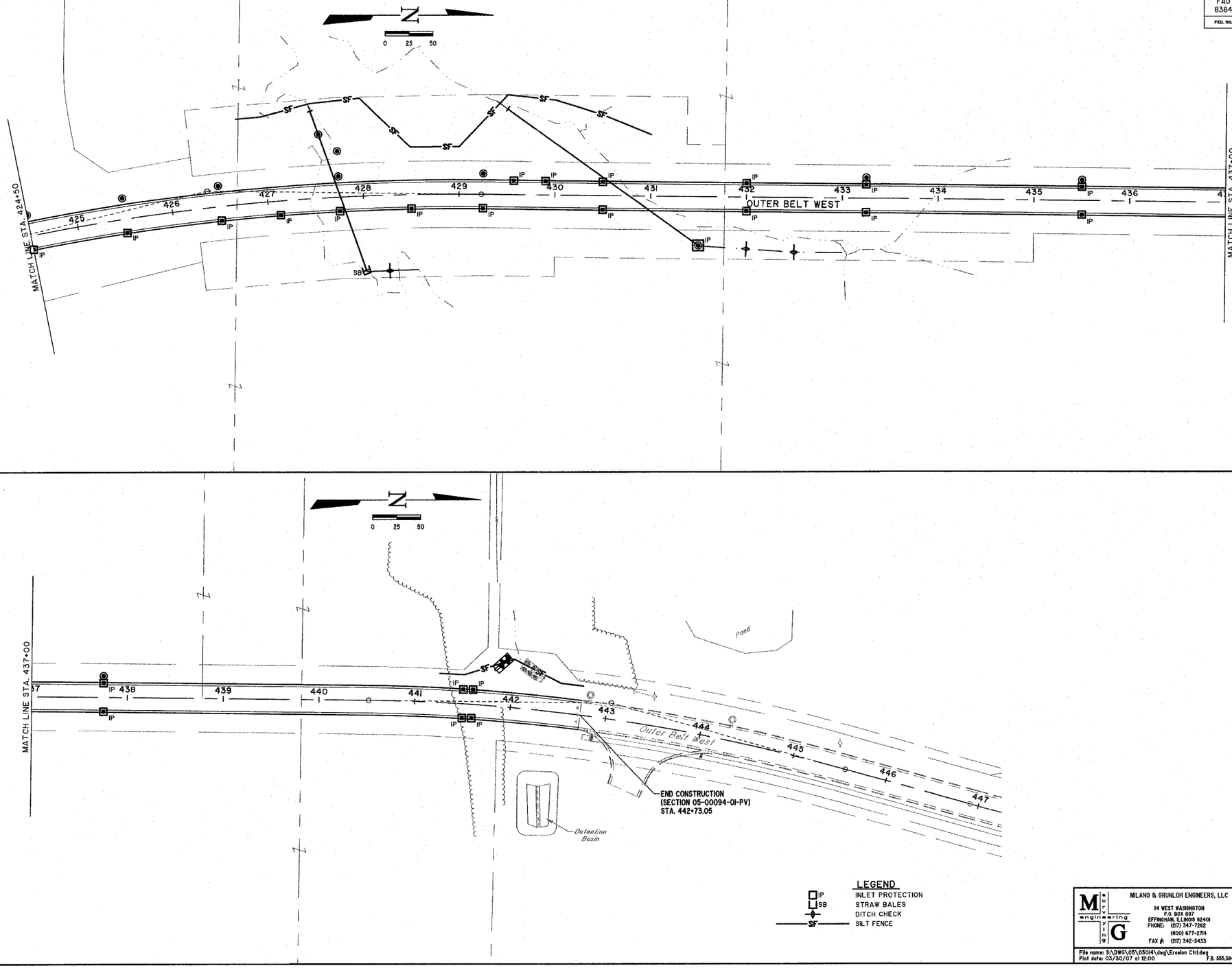
MILANO & GRUNLOH ENGINEERS, LLC
84 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7262
(800) 677-2714
FAX #: (217) 342-3433

File name: S:\DWG\05\05064\dwg\EROSION CTRL.dwg
Plot date: 03/30/07 at 12:00 F.P. 555,584

EROSION CONTROL PLAN
OUTER BELT WEST
STA. 399+50 TO STA 424+50
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 6384	*	EFFINGHAM	95	27
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4019(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



LEGEND

- IP — INLET PROTECTION
- SB — STRAW BALES
- DITCH CHECK
- SF — SILT FENCE

MILANO & GRUNLOH ENGINEERS, LLC
14 WEST WASHINGTON
P.O. BOX 697
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7262
(800) 677-2714
FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\Erosion Ctrldwg
Plot date: 03/30/07 at 12:00
F.B. 555,584

EROSION CONTROL PLAN
OUTER BELT WEST
STA 424+50 TO STA 447+00
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	28
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4091(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR

CONTRACT #95503

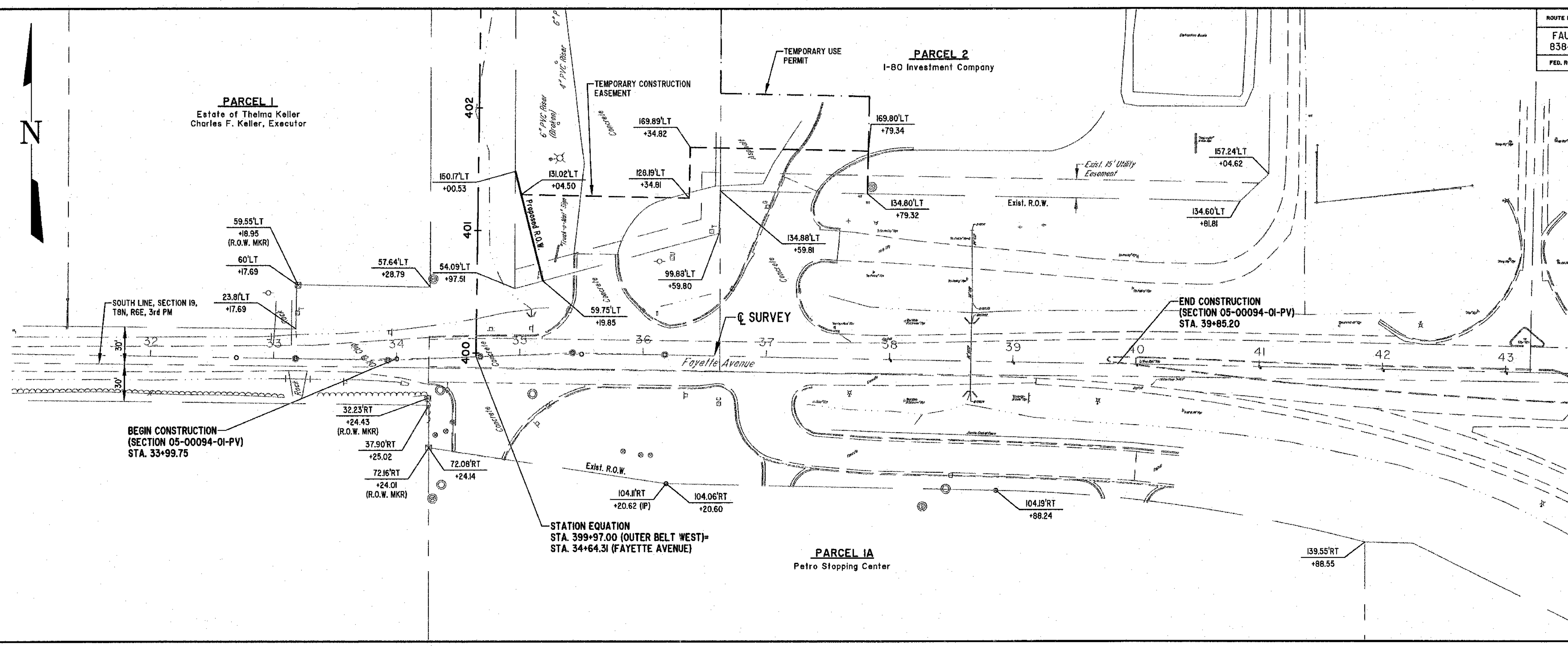
FAYETTE AVENUE SURVEY CENTERLINE

CURVE #1

PI STA=33+92.69
Delta=3°21'50"
Da=02°14'36"
T=75.00'
R=2554.16'
L=149.96'
C=149.93'
E=1.10'
M=1.10'
PC STA=33+17.69
PRC STA=34+67.65

CURVE #2

PI STA=35+42.65
Delta=3°32'20"
Da=02°21'36"
T=75.00'
R=2427.78'
L=149.95'
C=149.93'
E=1.16'
M=1.16'
PRC STA=34+67.65
PT STA=36+17.60



MILANO & GRUNLOH ENGINEERS, LLC
114 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7262
(800) 677-2714
FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\ROW Plan.dwg
Plot date: 03/30/07 at 12:00 F.B. 555,584

RIGHT OF WAY PLAN
FAYETTE AVENUE
STA. 32+00 TO STA 42+00
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 6384	*	EFFINGHAM	95	29
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-409N(004)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

FAYETTE AVENUE SURVEY CENTERLINE
CURVE #1
PI STA=33+92.69
Delta=3°21'50"
Da=02°14'36"
T=75.00'
R=2554.16'
L=149.96'
C=149.93'
E=1.10'
M=1.10'
PC STA=33+17.69
PRC STA=34+67.65

CURVE #2
PI STA=35+42.65
Delta=3°32'20"
Da=02°21'36"
T=75.00'
R=2427.78'
L=149.95'
C=149.93'
E=1.15'
M=1.16'
PRC STA=34+67.65
PT STA=36+17.60

N

146.48'LT +17.04
146.37'LT +53.22
145.14'LT +92.77 (R.O.W. MKR)

BEGIN CONSTRUCTION (SECTION 05-00094-01-PV) STA. 400+11.79

37.8'LT +52.90

PARCEL 1
Estate of Thelma Keller
Charles F. Keller, Executor

Exist. R.O.W.

45.47'LT +10.18
45.47'LT +00

400 401 402 403 404 405 406 407 408 409 410 411

OUTER BELT WEST

MATCH LINE STA. 412+00

30.8'RT +52.70
29.84'RT +48.83
34.84'RT +29.86
53.43'RT +59.25
27.39'RT +91.62
26.17'RT +11.61
25.42'RT +86.61
26.04'RT +25
39.27'RT +00
63.26'RT +00
79.30'RT +00
67.38'RT +92.02
66.17'RT +12.02

Proposed R.O.W.
Exist. R.O.W.
Proposed R.O.W.
6" PVC Riser (Broken)
4" PVC Riser
6" PVC Riser
Truck-o-Mat Sign
Carport
Rock
Concrete
Concrete
Concrete
Concrete
Truck-O-Mat

TEMPORARY CONSTRUCTION EASEMENT
TEMPORARY CONSTRUCTION EASEMENT

PARCEL 2
I-80 Investment Company

171.20'RT +29.00
171.47'RT +70.69
132.77'RT +12.69
132.0'RT +87.68

TEMPORARY USE PERMIT

195.70'RT +14.79
192.77'RT +13.30

Fayette Avenue
Asphalt
Concrete
Concrete

OUTER BELT WEST
CURVE #1
PI STA=411+00.01
Delta=4°24'42"
Da=02°30'00"
T=289.77'
R=2291.83'
L=575.47'
C=574.95'
E=18.25'
M=18.10'
PC STA=408+10.24
PT STA=413+86.71

N

PARCEL 1
Estate of Thelma Keller
Charles F. Keller, Executor

PARCEL 3
Trust Number 1736
Effingham State Bank, Trustee

81.10'LT +42.43
51.87'LT +12.67
75'LT +00
110.26'LT +38.31
100'LT +35.81

Exit. R.O.W.
E Creek
Top of Slope

MATCH LINE STA. 412+00

413 414 415 416 417 418 419 420 421 422 423 424

OUTER BELT WEST

MATCH LINE STA. 424+50

71.3'RT +97.44
75'RT +00

Exit. R.O.W.
Truck-O-Mat
Proposed R.O.W.

120.23'RT +87.50
103.61'RT +90.83

PARCEL 2
I-80 Investment Company

PARCEL 3
Trust Number 1736
Effingham State Bank, Trustee

OUTER BELT WEST
CURVE #1
PI STA=411+00.01
Delta=4°24'42"
Da=02°30'00"
T=299.77'
R=2291.83'
L=575.47'
C=574.95'
E=18.25'
M=18.10'
PC STA=408+10.24
PT STA=413+86.71

OUTER BELT WEST
CURVE #2
PI STA=426+39.94
Delta=4°14'28"
Da=02°30'00"
T=286.30'
R=2291.83'
L=569.55'
C=568.19'
E=17.81'
M=17.68'
PC STA=423+53.64
PT STA=429+23.29

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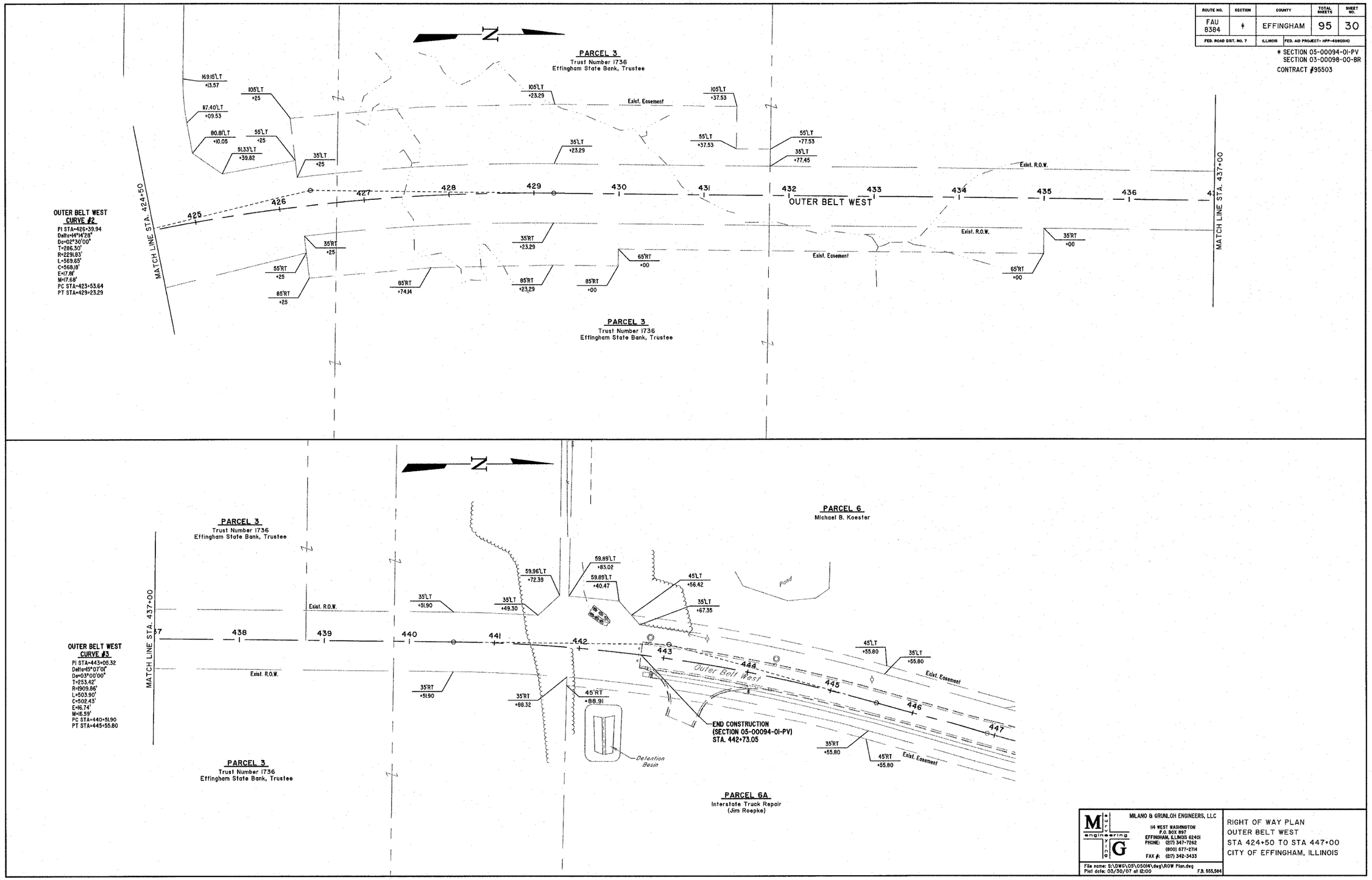
PHONE: (217) 347-7282
(800) 677-2714
FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\ROW Plan.dwg
Plot date: 03/30/07 at 12:00
F.B. 555,584

RIGHT OF WAY PLAN
OUTER BELT WEST
STA. 399+50 TO STA 424+50
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	30
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4091(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



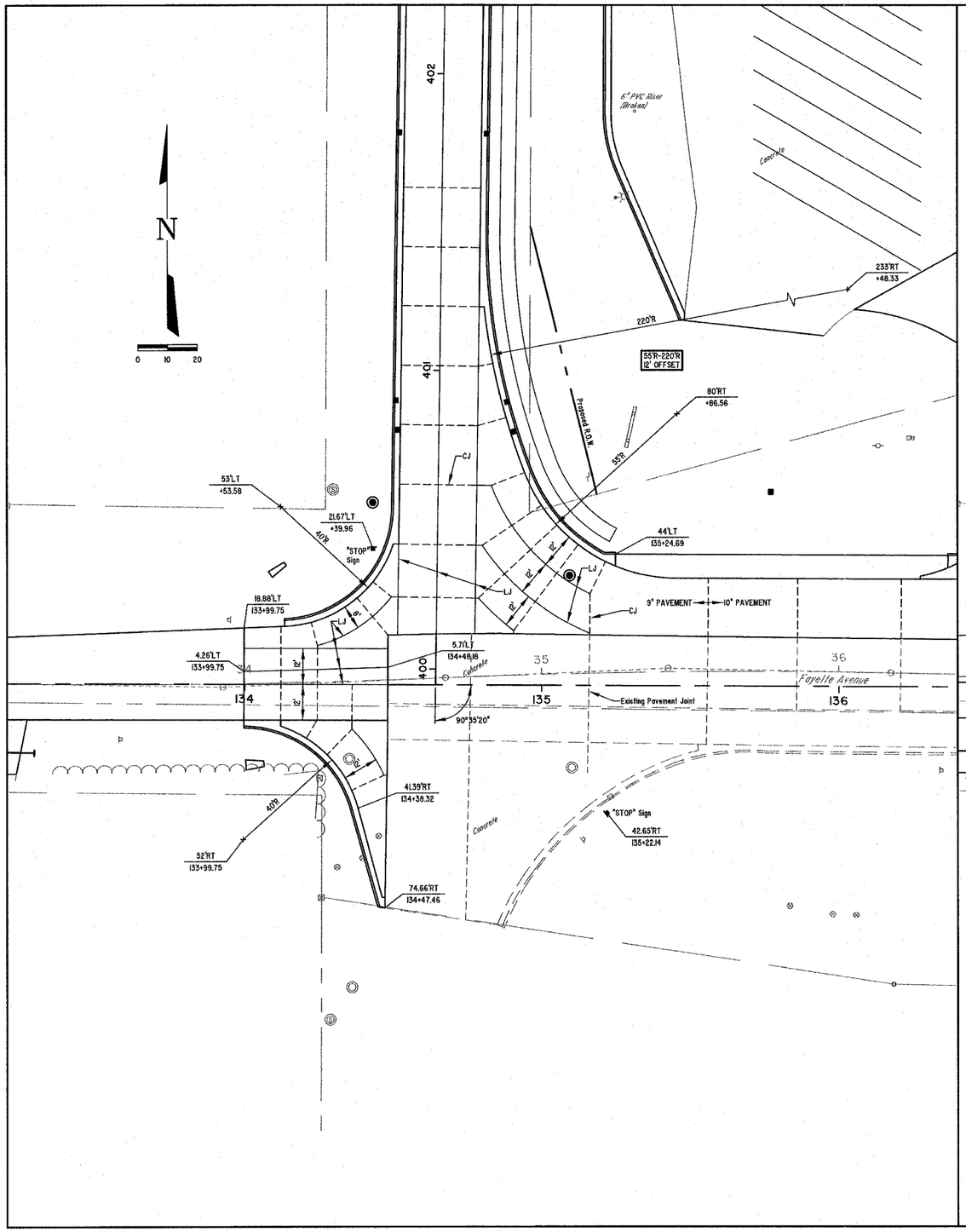
MILANO & GRUNLOH ENGINEERS, LLC
114 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7262
(800) 677-2714
FAX #: (217) 342-3433

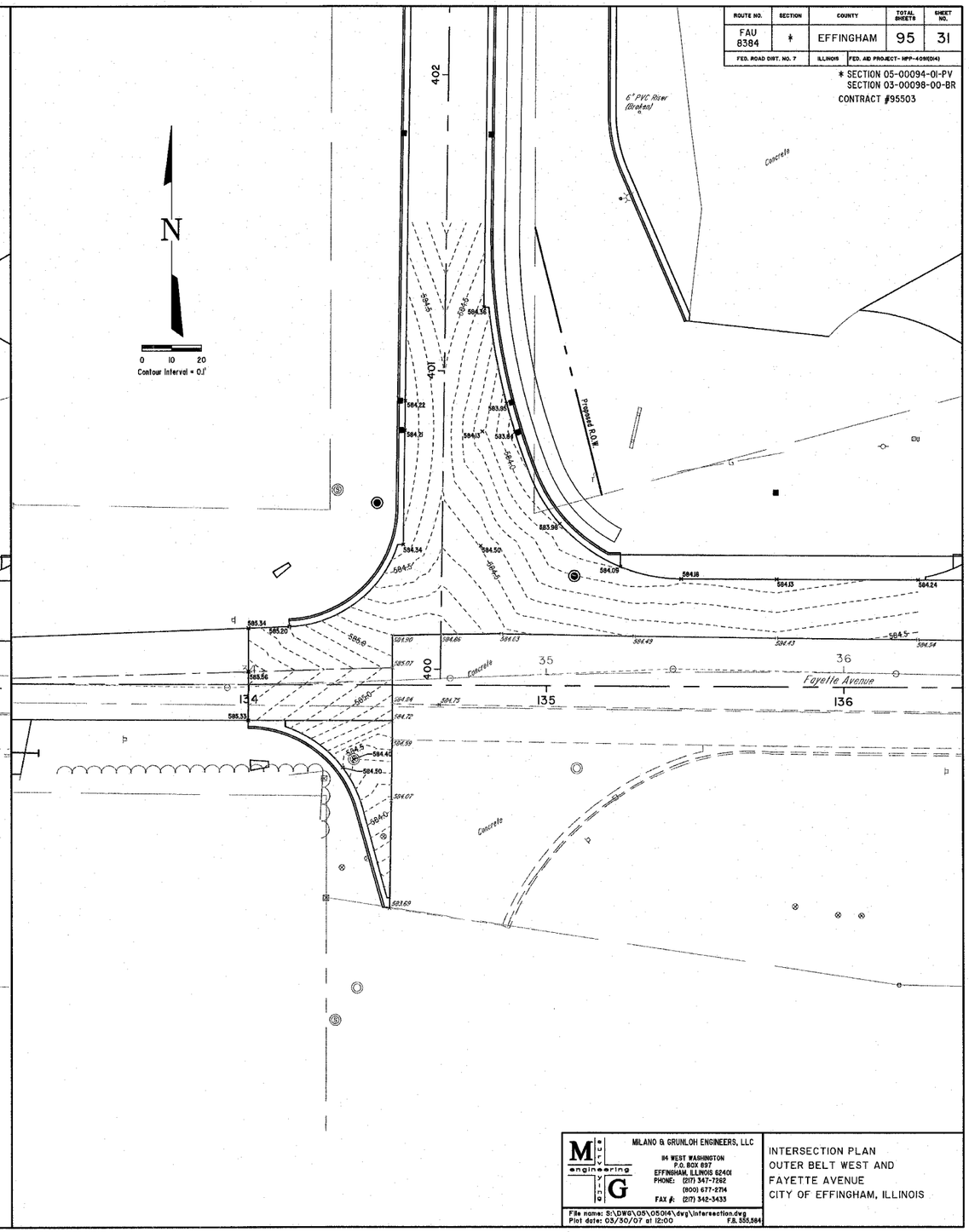
File name: S:\DWG\05\05014\dwg\ROW Plan.dwg
Plot date: 03/30/07 at 12:00
F.B. 555,564

RIGHT OF WAY PLAN
OUTER BELT WEST
STA 424+50 TO STA 447+00
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	31
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-409(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503





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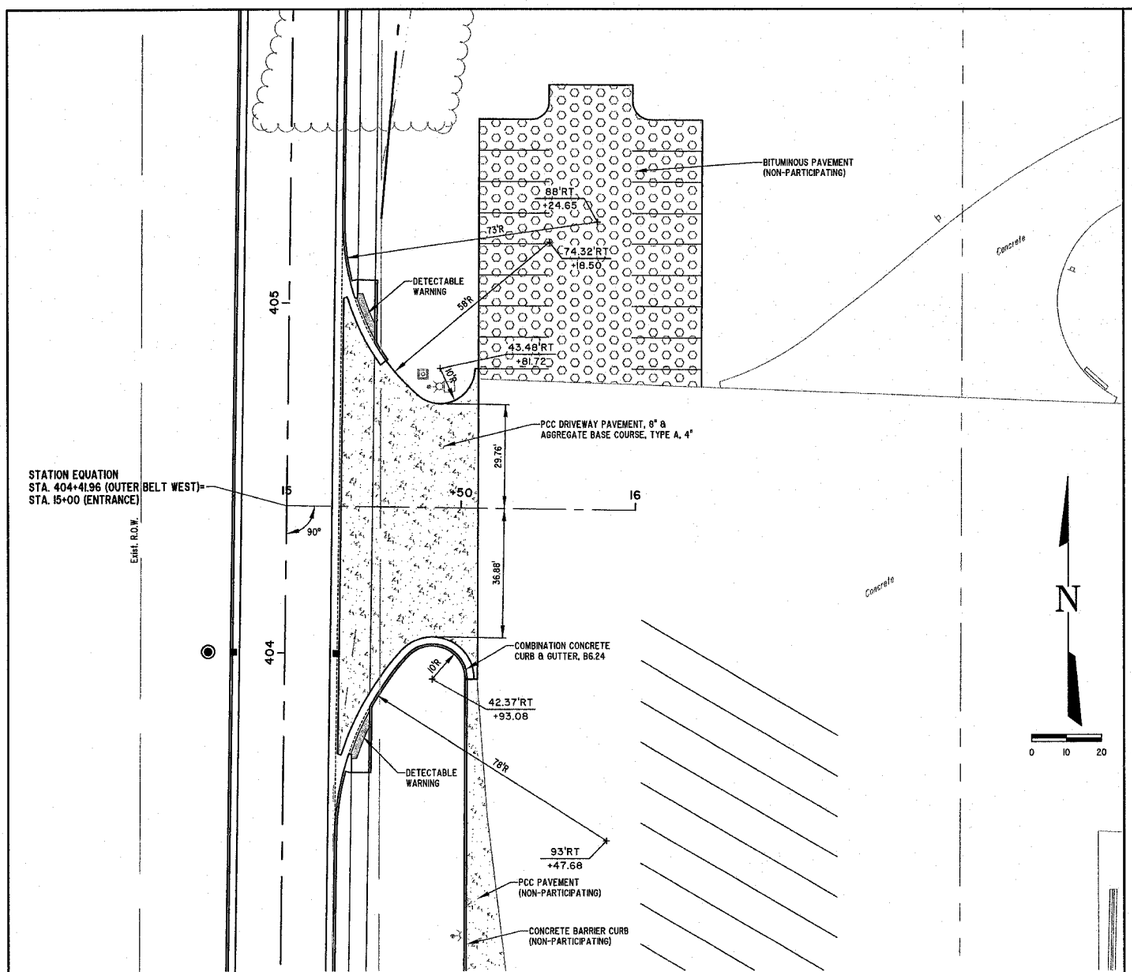
114 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7282
(800) 677-2714
FAX #: (217) 342-3433

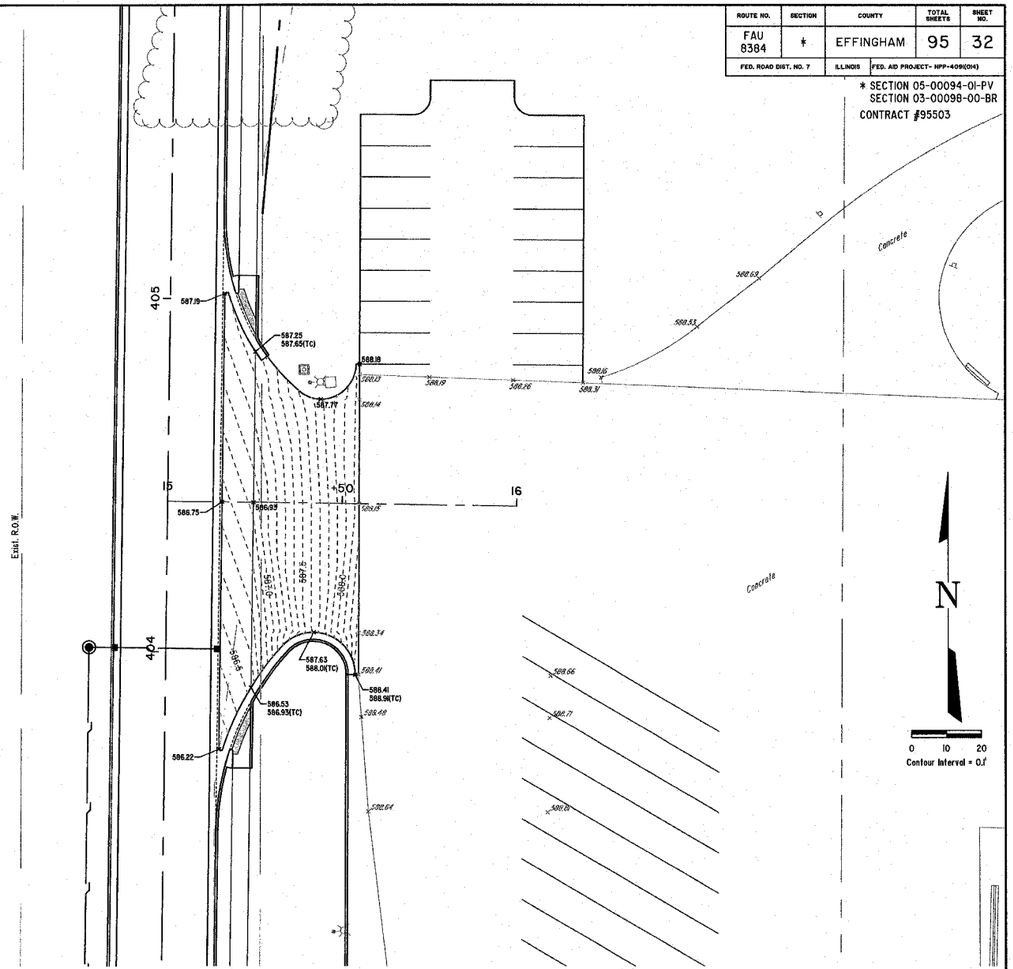
File name: S:\DWG\05\05014\dwg\intersection.dwg
Plot date: 05/30/07 at 12:00
F.A. 555,564

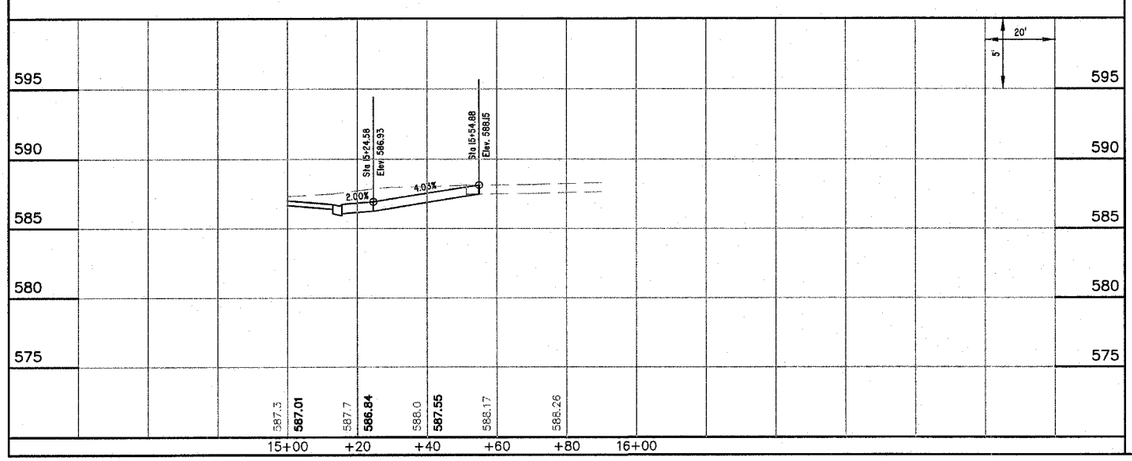
INTERSECTION PLAN
OUTER BELT WEST AND
FAYETTE AVENUE
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	32
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-409(OH)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503







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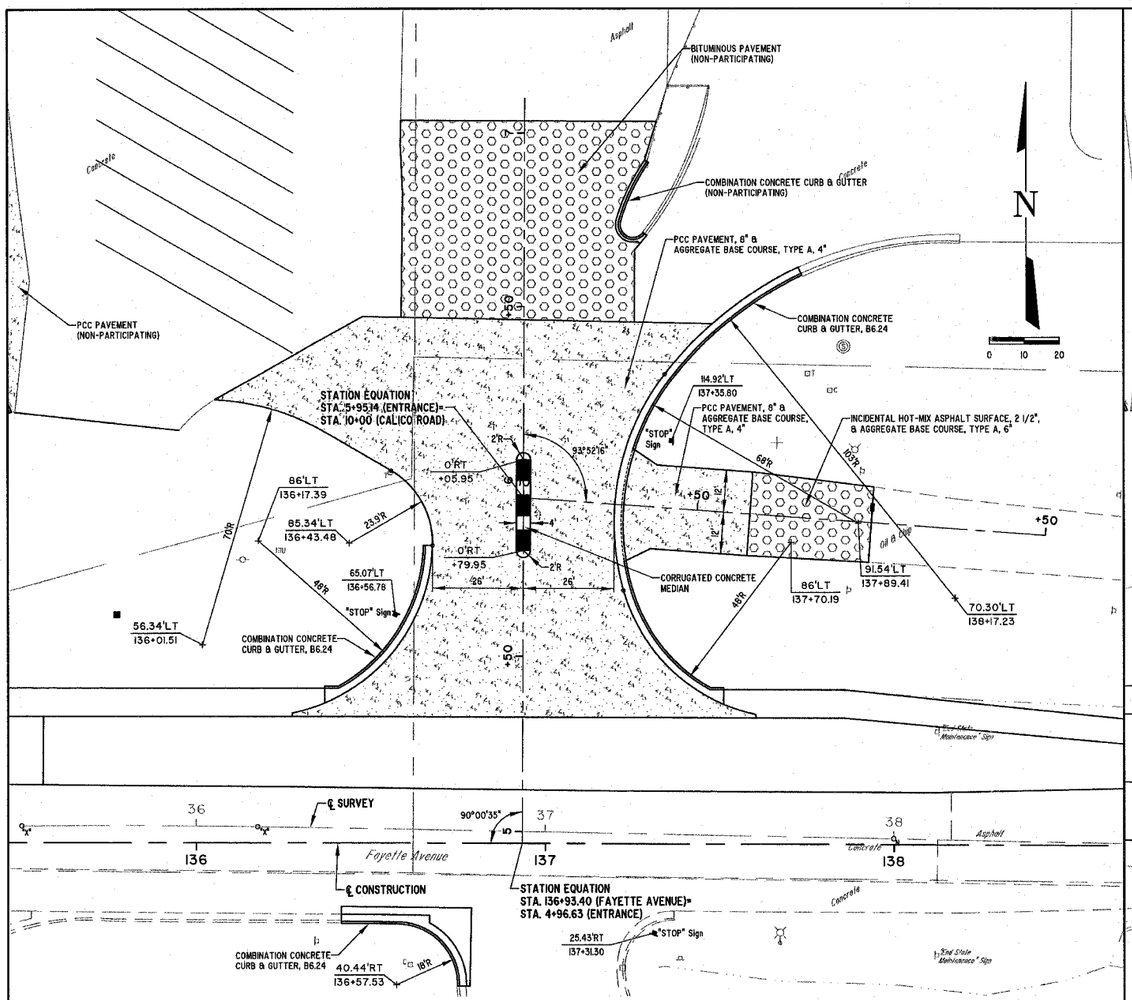
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7262
(800) 677-2714
FAX #: (217) 342-3433

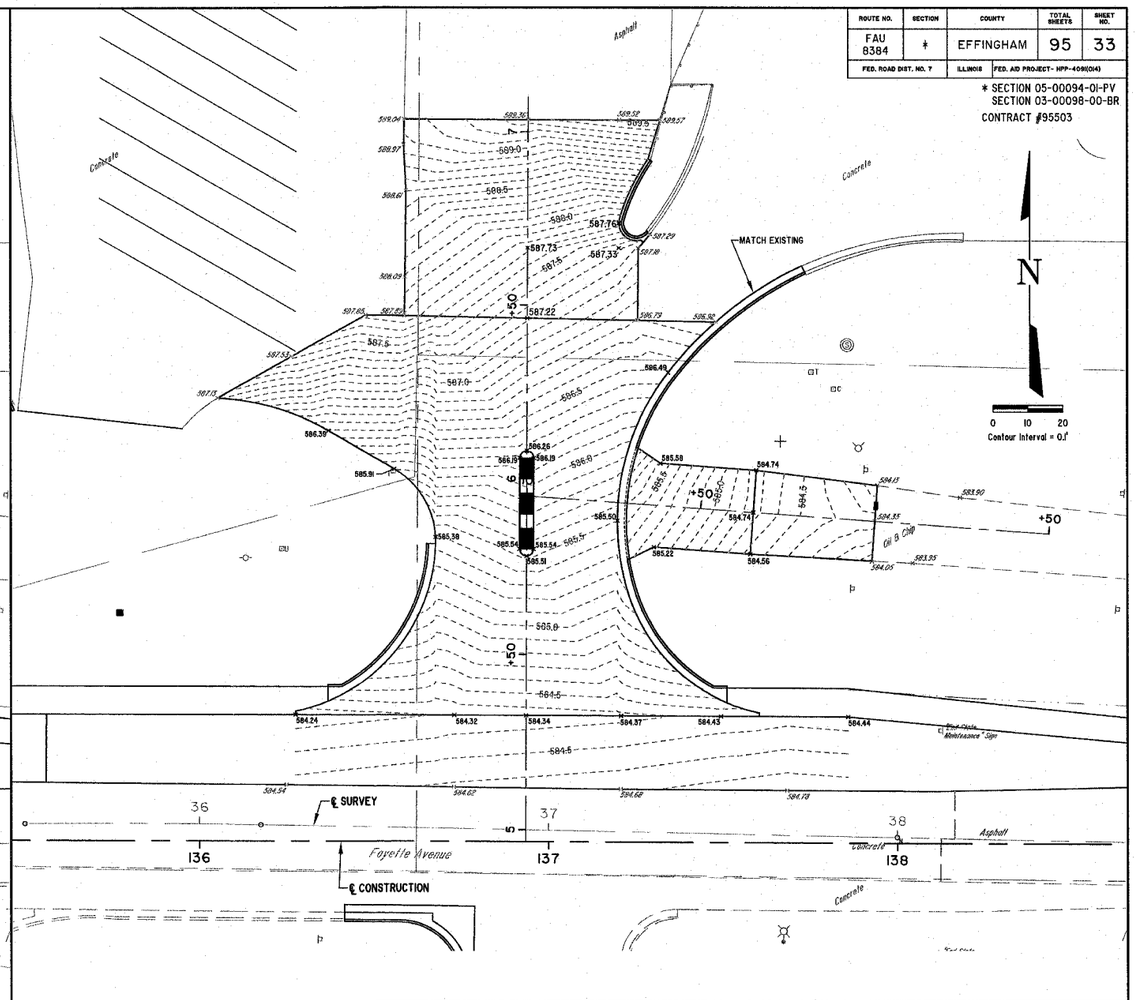
File name: S:\DWG\05\05014\dwg\Entrances.dwg
Plot date: 05/30/07 at 12:00

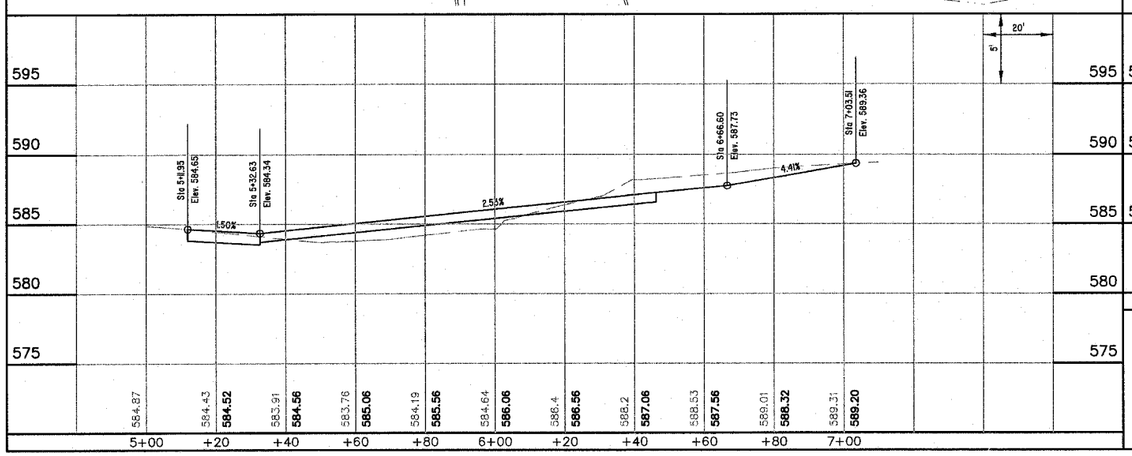
ENTRANCE PLAN
TRUCKOMAT WEST ENTRANCE
OUTER BELT WEST
CITY OF EFFINGHAM, ILLINOIS

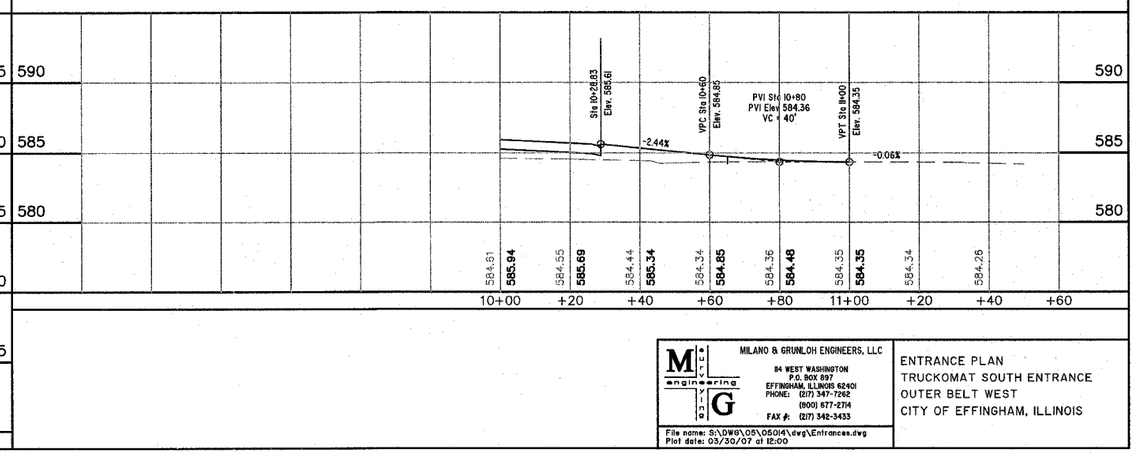
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	33
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4098(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503









MILANO & GRUNLOH ENGINEERS, LLC
84 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7262
(800) 677-2714
FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\Entrances.dwg
Plot date: 03/30/07 at 12:00

ENTRANCE PLAN
TRUCKOMAT SOUTH ENTRANCE
OUTER BELT WEST
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 6384	1	EFFINGHAM	95	34
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4019(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

Existing R.O.W.

400 401 402 403 404 405 406

36 37

Fayette Avenue

BUMPER POST TO BE INSTALLED AROUND EXISTING LIGHT POLE (3 LOCATIONS) (SEE DETAIL ON SHEET 38) (NON-PARTICIPATING)

COMBINATION CONCRETE CURB AND GUTTER, B6.24 (GUTTER SLOPE TO MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT) (NON-PARTICIPATING)

6" PVC Riser (Broken)

6" PVC Riser

6" PVC Riser

PCC PAVEMENT, 8" @ AGGREGATE BASE COURSE, TYPE A, 4" (NON-PARTICIPATING)

ACCESS COVERS FOR EXISTING PVC RISERS (3 LOCATIONS) (SEE DETAIL ON SHEET 38) (NON-PARTICIPATING)

50ft

50'

ROUTE ELECTRIC CABLE FROM EXISTING SIGN LOCATION (NON-PARTICIPATING)

RELOCATED LIGHTED ENTRANCE SIGN (NON-PARTICIPATING)

Concrete

60°

65'

56.29'

4" WHITE

15'

4'

242.49'

67.81'

INCIDENTAL HOT MIX SURFACING, 2" @ HOT MIX BASE COURSE, 6" (NON-PARTICIPATING)

Concrete

Asphalt

Concrete Barriers TO BE RELOCATED (NON-PARTICIPATING)

RELOCATED CONCRETE BARRIER

Asphalt

Asphalt

Compgl

15'

Soils

COMBINATION CONCRETE CURB & GUTTER, TYPE B (SPECIAL) (SEE DETAIL ON SHEET 38) (NON-PARTICIPATING)

N

0 10 20

4" WHITE

24'

20'

20'

20'

77.05'

10'

INCIDENTAL HOT MIX SURFACING, 2 1/2" @ AGGREGATE BASE COURSE, TYPE A, 6" (NON-PARTICIPATING)

15' Max Width to 17' Sign

Concrete

15' Max Width to 17' Sign

"Directions" Sign

MILANO & GRUNLOH ENGINEERS, LLC
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FAX #: (217) 342-3433

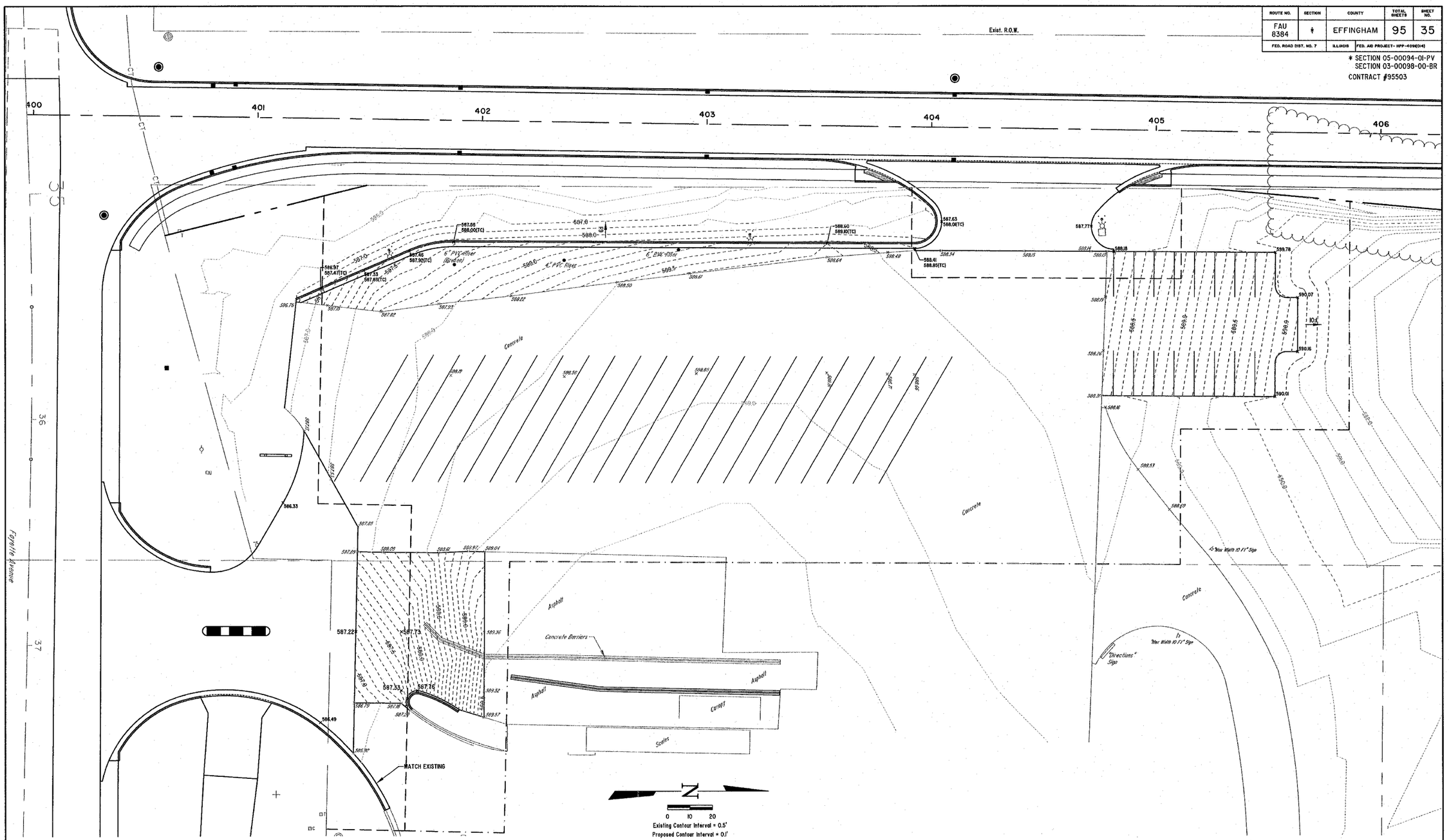
File name: S:\DWG\05\05014\dwg\TM Site.dwg
Plot date: 03/30/07 at 12:00

F.A. 555,564,603

SITE PAVING PLAN
TRUCKOMAT
OUTER BELT WEST
EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 6384	*	EFFINGHAM	95	35
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-409(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



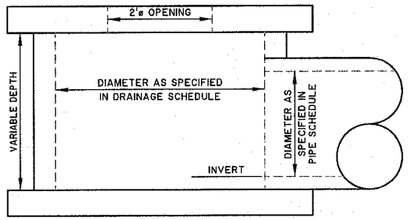
MILANO & GRUNLOH ENGINEERS, LLC
84 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7282
(800) 677-2714
FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\TM Site.dwg
Plot date: 03/30/07 at 12:00 F.B. 555,584,603

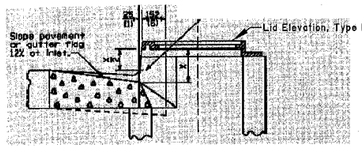
SITE GRADING PLAN
TRUCKOMAT
OUTER BELT WEST
EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 6384	*	EFFINGHAM	95	36
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4019(014)	

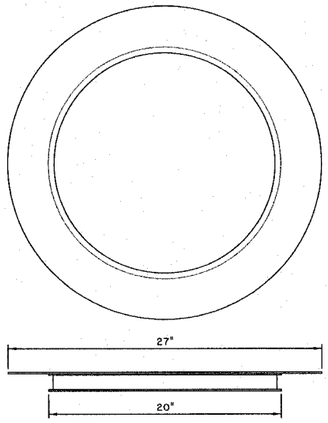
* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



DETAIL OF RESTRICTED DEPTH MANHOLE

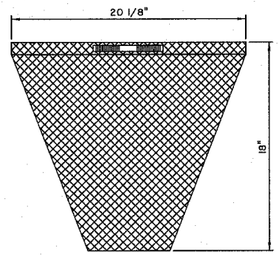


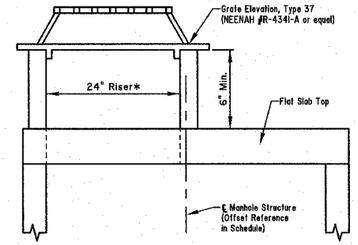
TYPE 15 FRAME & LID



GENERAL NOTES:
FRAME: Top flange fabricated from ⅛" flat stock. Base rim fabricated from 1½" x ½" x ⅛" channel. All domestic steel conforming to ASTM-A36.
SEDIMENT BAG: Bag fabricated from 4 oz./sq.yd. non-woven polypropylene geotextile reinforced with polyester mesh. Bag secured to base rim with a stainless steel strap and lock.

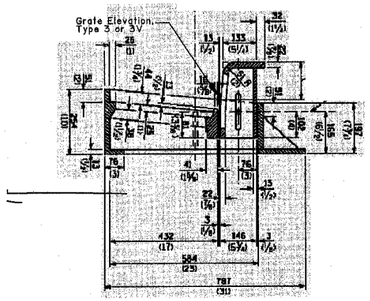
INLET PROTECTION FILTER



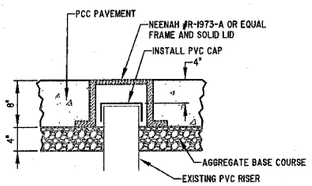


* Included in the price of the Manhole structure

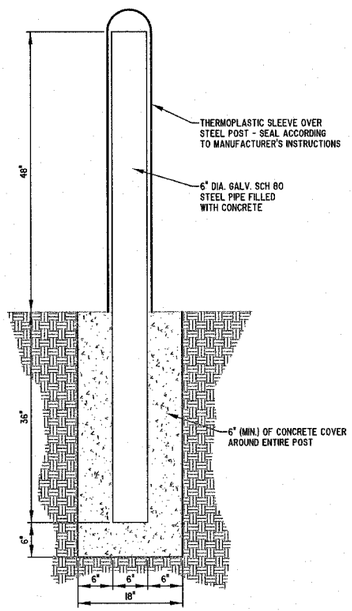
TYPE 37 GRATE



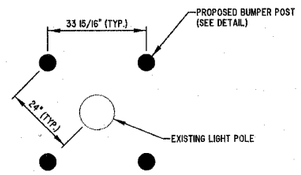
TYPE 3 or 3V GRATE



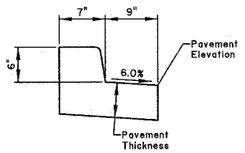
ACCESS COVER DETAIL



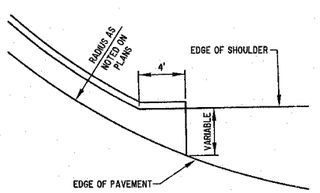
BUMPER POST DETAIL



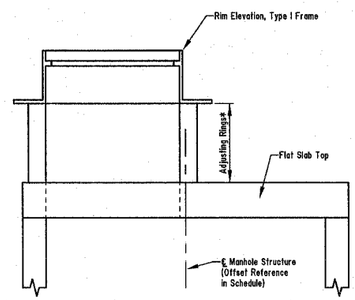
BUMPER POST LAYOUT



COMBINATION CONCRETE CURB AND GUTTER, TYPE B (SPECIAL)
SCALE: 1"=1'



CONCRETE CURB AND GUTTER TRANSITION DETAIL



* Included in the price of the Manhole structure

TYPE 1 FRAME & LID

MILANO & GRUNLOH ENGINEERS, LLC
84 WEST WASHINGTON
P.O. BOX 897
EFFINGHAM, ILLINOIS 62401
PHONE: (217) 347-7262
(800) 677-2714
FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\Details.dwg
Plot date: 05/30/07 at 12:00

MISCELLANOUS DETAILS
OUTER BELT WEST
CITY OF EFFINGHAM, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	4	EFFINGHAM	95	37
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4018(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

N

0 10 20

4" YELLOW

4" DOUBLE YELLOW (DETAIL "A")

4" DOUBLE YELLOW (DETAIL "B")

12" YELLOW 45° @ 30' SPACING

24" WHITE

6" WHITE

6" PVC Riser (Broken)

Centerline

Proposed R.O.W.

Rock

Oil & Chip

Concrete

Fayette Avenue

402

401

10' TYP.

30' TYP.

+55.54

+38.54

17.0'

5+61.21

10'

8' TYP.

24'LT 135+35.75

12'LT 135+35.75

0.46'LT 135+35.75

0.46'RT 135+35.75

135+53.75

136+31.09

137+08.42

1.82'RT 31+56.72

2.76'RT 31+58.72

0.44'RT 32+44.95

5.82'LT 133+77.57

133+87.41

3.77'LT 134+15.15

1.96'LT 134+14.88

0.12'LT 134+14.88

2'R TO OUTSIDE EDGE

200'R TO OUTSIDE EDGE

41'RT 134+66.86

41.99'RT 134+66.40

41.57'RT 135+11.88

63.03'RT 134+94.05

77.35'RT 134+65.95

122'RT 135+86.91

12'RT 135+86.91

24.56'RT 136+98.49

34.77'RT 136+98.37

23.57'RT 136+98.96

23.99'RT 137+25.18

32.43'RT 137+38.82

72.76'RT 137+35.59

40.86'R TO CENTER OF MARKING

NOTE

MATCH LINE STA. 137+50

NOTE: STATION & OFFSET ARE TO THE CENTER OF THE STRIPE. (UNLESS NOTED OTHERWISE)

4"
7"
4"

DETAIL "A"
DOUBLE LINE PAVEMENT MARKING

4"
4"

DETAIL "B"
DOUBLE LINE PAVEMENT MARKING

MILANO & GRUNLOH ENGINEERS, LLC
84 WEST WASHINGTON
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PHONE: (217) 347-7262
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FAX #: (217) 342-3433

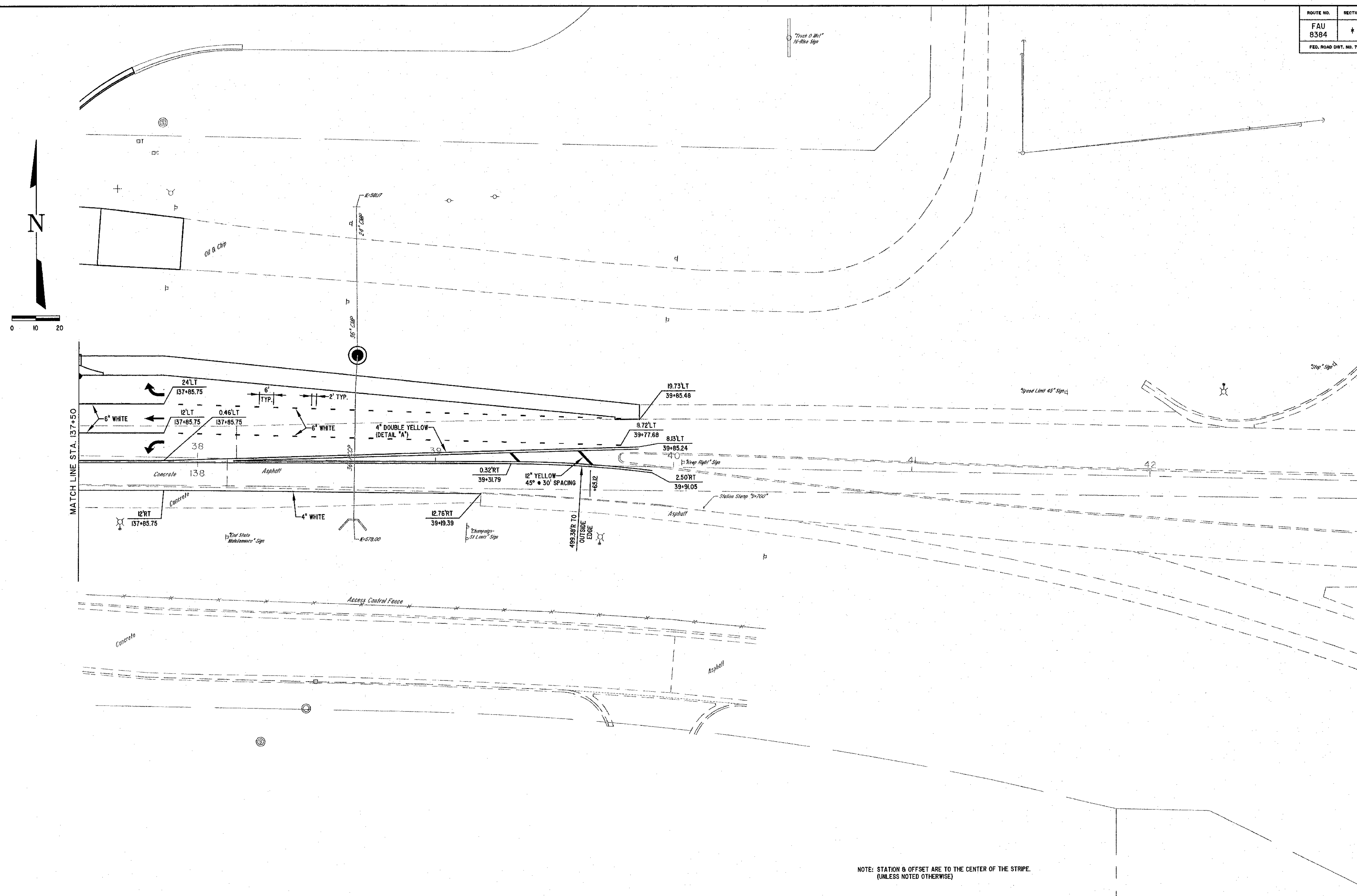
File name: S:\DWG\05\05014\dwg\PavMrk.dwg
Plot date: 05/30/07 at 12:00

PAVEMENT MARKING PLAN
OUTER BELT WEST AND
FAYETTE AVENUE
EFFINGHAM, ILLINOIS

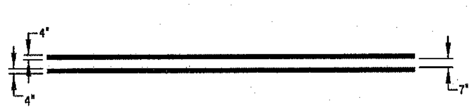
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	38
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-409I(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR

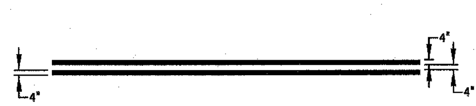
CONTRACT #95503



NOTE: STATION & OFFSET ARE TO THE CENTER OF THE STRIPE.
(UNLESS NOTED OTHERWISE)



DETAIL "A"
DOUBLE LINE PAVEMENT MARKING



DETAIL "B"
DOUBLE LINE PAVEMENT MARKING

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114 WEST WASHINGTON
P.O. BOX 897
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PHONE: (217) 347-7262
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FAX #: (217) 342-3433

File name: S:\DWG\05\05014\dwg\PavMrk.dwg
Plot date: 03/30/07 at 12:00

PAVEMENT MARKING PLAN
FAYETTE AVENUE
EFFINGHAM, ILLINOIS

Bench Mark: #5 - Railroad spike in tree at 127' Rt. Sta. 416+52. Elev. 536.44
#6 - Chiseled square in northwest existing concrete bridge support, Elev. 539.07

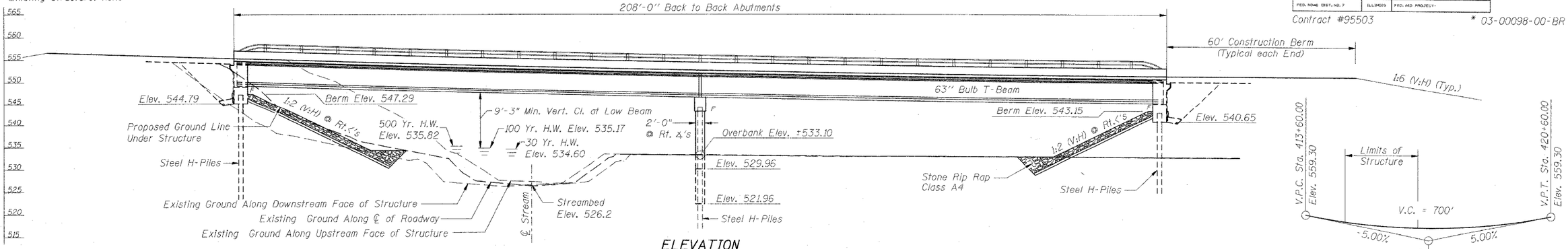
Existing Structure: None

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	39
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 01
23 SHEETS

Contract #95503

* 03-00098-00-BR

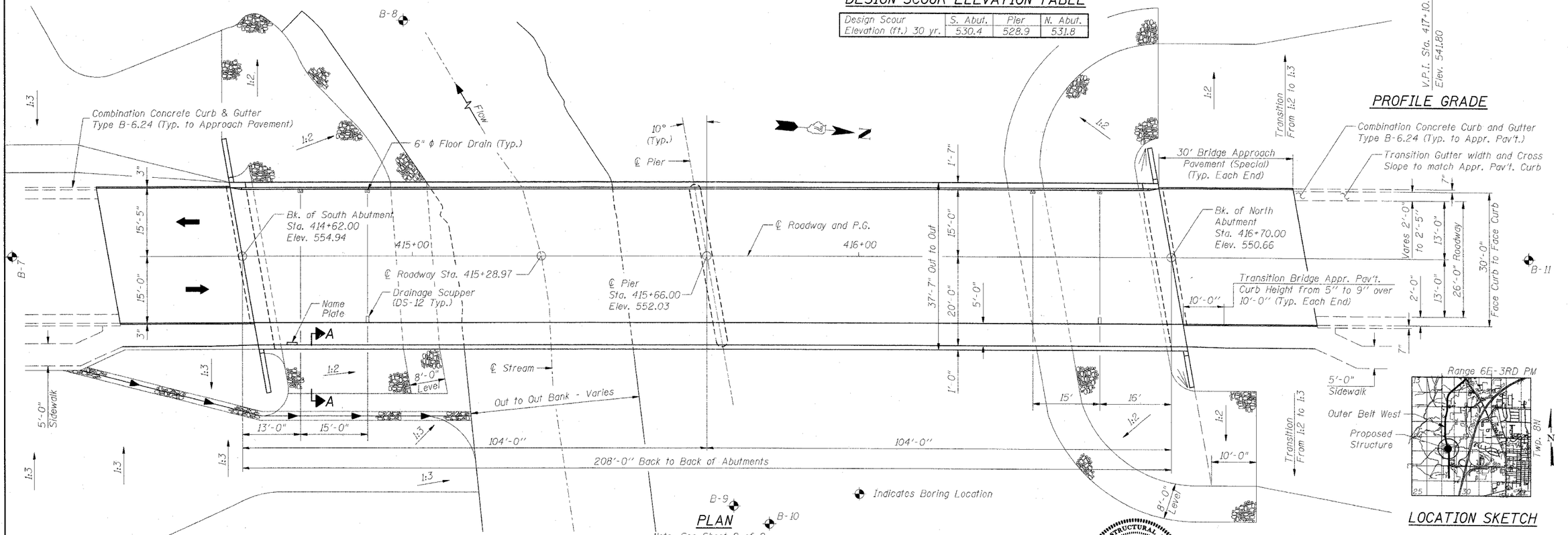


ELEVATION

PROFILE GRADE

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.) 30 yr.	S. Abut.	Pier	N. Abut.
	530.4	528.9	531.8



PLAN

Note: See Sheet 2 of 2 For Section A-A.

LOCATION SKETCH

DESIGN STRESSES

FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)

PRECAST PRESTRESSED UNITS
f'_c = 6,000 psi
f'_{ci} = 5,000 psi
f'_s = 270,000 psi (1/2" ϕ Low Lax Strands)
f_{si} = 201,960 psi (1/2" ϕ Low Lax Strands)

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

AASHTO 2002

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.075g
Site Coefficient (S) = 1.0

"I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS BRIDGE DESIGN IS STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING SHOWN ON THE PLANS. THE DESIGN IS AN ECONOMICAL ONE FOR THE STYLE OF STRUCTURE AND COMPLIES WITH REQUIREMENTS OF THE CURRENT 'AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.'"

LICENSED STRUCTURAL ENGINEER
JEFFREY J. TATAREK
081-005159
STATE OF ILLINOIS

SIGNATURE
3/29/07
DATE
LIC. EXP. DATE : 11/30/07

LAYOUT	WNM	12/20/07
DRAWN	DAP	01/12/07
REVIEWED	JJT	01/15/07

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GENERAL PLAN AND ELEVATION
OUTER BELT WEST OVER TRIBUTARY
TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071

DATE 03/29/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	40
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 02
23 SHEETS

Contract #95503

* 03-00098-00-BR

INDEX OF SHEETS

WATERWAY INFORMATION

Drainage Area = 2.22 Sq. Mi. Low Grade Elev. 550.66 @ Sta. 416+70.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	30	2195	N/A	460	534.60	N/A	0.29	534.60	534.89
Base	100	2999	N/A	560	535.17	N/A	0.32	535.17	535.49
Overtopping									
Max. Calc.	500	4113	N/A	640	535.82	N/A	0.40	535.82	536.22

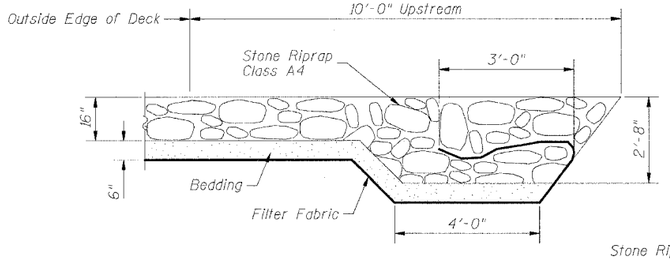
TRIBUTARY TO LITTLE WABASH RIVER
BUILT BY
EFFINGHAM COUNTY
SECTION 03-00098-00-BR
LOCAL ROAD - STA. 415+66
STRUCTURE NO. 025-6009 - LOADING HS20

NAME PLATE

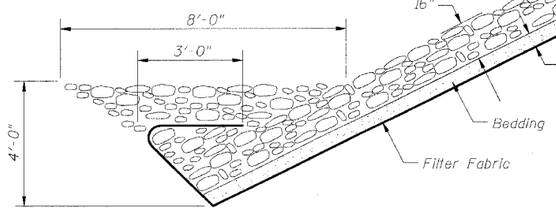
See Std. 515001

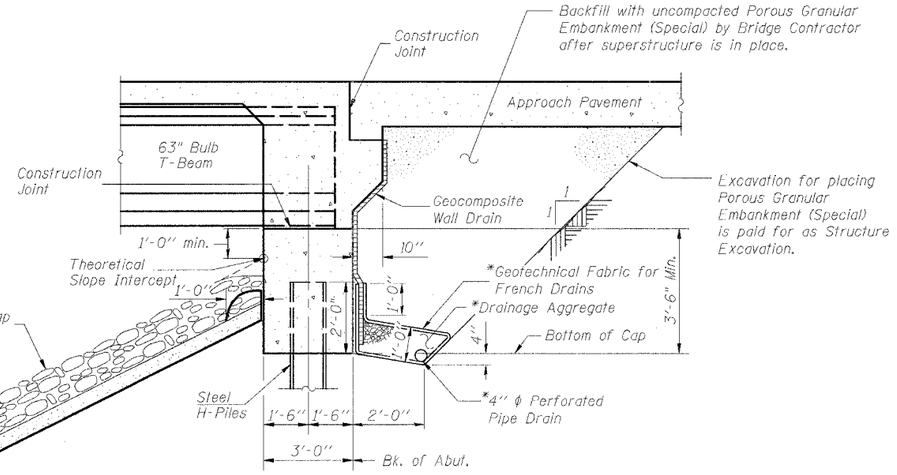
GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
4. The embankment configuration shown shall be the minimum that must be placed, compacted and allowed to settle for 30 days prior to construction of the abutments.
5. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
6. In lieu of the hammer selection criteria and use of the FHWA Modified Gates formula specified in Section 512 of the Standard Specifications, the Contractor shall conduct a wave equation analysis to establish the driving criteria at all pile foundations which specify a nominal required bearing above 600 kips. The analysis and calculations shall be submitted to the Engineer for approval.
7. All embedded and separate bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 (as applicable).



SECTION A-A





SECTION THRU INTEGRAL ABUTMENT & SLOPEWALL

(Horiz. dim. @ Rt. ∠'s to Back of Abutment)

* Included in the cost of Pipe Underdrains for Structures 4".

Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slope. At the South Abutment, pipe shall wrap around wingwalls and intersect slope in front of the Abutment. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.	-	195	195
Stone Riprap, Class A4	Sq. Yd.	-	782	782
Filter Fabric	Sq. Yd.	-	782	782
Structure Excavation	Cu. Yd.	-	369	369
Floor Drains	Each	4	-	4
Concrete Structures	Cu. Yd.	-	89.9	89.9
Concrete Superstructure	Cu. Yd.	336.5		336.5
Bridge Deck Grooving	Sq. Yd.	647	-	647
Concrete Encasement	Cu. Yd.	-	12.6	12.6
Protective Coat	Sq. Yd.	971	-	971
Furnishing and Erecting Precast Prestressed Concrete Bulb T-Beams 63"	Foot	1030	-	1030
Reinforcement Bars, Epoxy Coated	Pounds	62540	11490	74030
Bar Splicers	Each	62	-	62
Aluminum Railing, Type L	Foot	206	-	206
Furnishing Steel Piles, HP12x74	Foot	-	590	590
Furnishing Steel Piles, HP12x84	Foot	-	544	544
Driving Piles	Foot	-	1134	1134
Test Pile Steel, HP 12x74	Each		2	2
Test Pile Steel, HP 12x84	Each	-	1	1
Name Plates	Each	1	-	1
Geocomposite Wall Drains	Sq. Yd.	-	104	104
Pipe Underdrains for Structures 4"	Foot	-	166	166
Drainage Scupper, DS-12	Each	2	-	2

GENERAL NOTES
OUTER BELT WEST OVER TRIBUTARY
TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
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STRUCTURE NO. 025-6009

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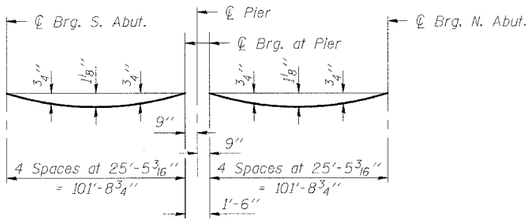
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	41
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT -	

SHEET NO. 03
23 SHEETS

Contract #95503

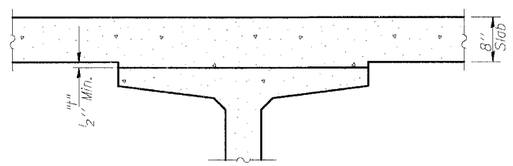
* 03-00098-00-BR



DEAD LOAD DEFLECTION DIAGRAM

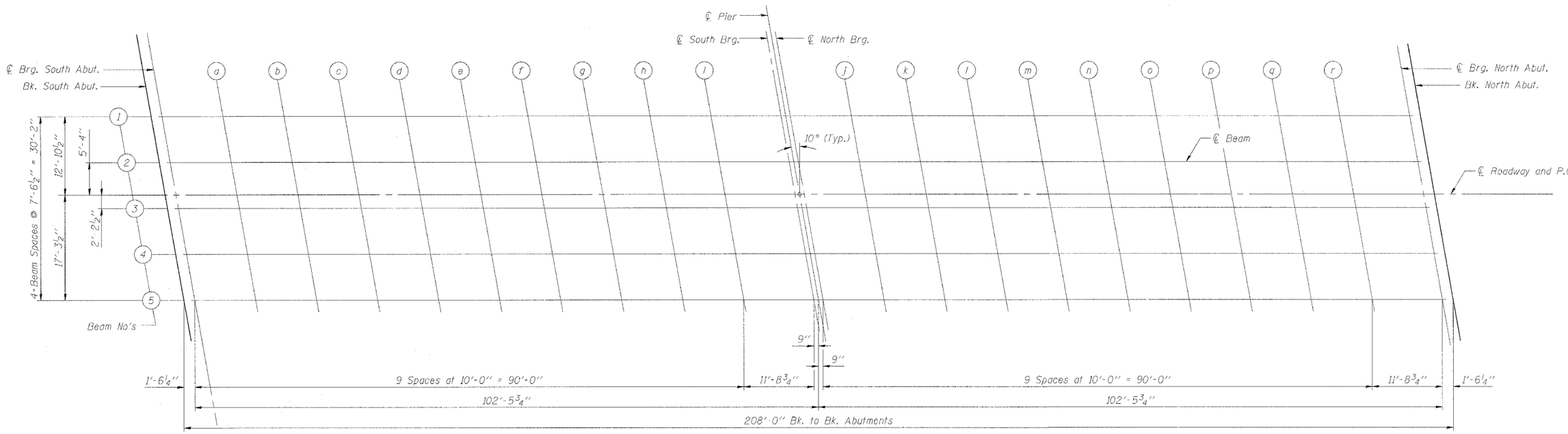
(Includes weight of concrete only, excluding beams.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted or dead load deflections as shown on sheet 4 of 23.



To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals on the diagrammatic plan. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" minus slab thickness, equals the fillet heights "t" above top flanges of beams.

FILLET HEIGHTS



DIAGRAMMATIC PLAN

TOP OF SLAB ELEVATIONS (SHEET 1)
OUTER BELT WEST OVER TRIBUTARY
TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071

DATE 03/29/07

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DRAWN	DAP	01/12/07
REVIEWED	JJT	01/15/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	42
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 04
23 SHEETS

Contract #95503

* 03-00098-00-BR

BEAM #1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	414+59.73	-12.88'	554.77	554.77
℄ S. Abut.	414+61.25	-12.88'	554.71	554.71
a	414+71.25	-12.88'	554.36	554.39
b	414+81.25	-12.88'	554.03	554.08
c	414+91.25	-12.88'	553.71	553.78
d	415+01.25	-12.88'	553.41	553.48
e	415+11.25	-12.88'	553.11	553.20
f	415+21.25	-12.88'	552.84	552.92
g	415+31.25	-12.88'	552.58	552.64
h	415+41.25	-12.88'	552.33	552.38
i	415+51.25	-12.88'	552.09	552.12
℄ S. Brg. at Pier	415+62.97	-12.88'	551.84	551.84
℄ Pier	415+63.73	-12.88'	551.82	551.82
℄ N. Brg. at Pier	415+64.49	-12.88'	551.81	551.81
j	415+74.49	-12.88'	551.60	551.63
k	415+84.49	-12.88'	551.42	551.47
l	415+94.49	-12.88'	551.25	551.31
m	416+04.49	-12.88'	551.09	551.17
n	416+14.49	-12.88'	550.94	551.03
o	416+24.49	-12.88'	550.82	550.90
p	416+34.49	-12.88'	550.70	550.77
q	416+44.49	-12.88'	550.60	550.65
r	416+54.49	-12.88'	550.51	550.54
℄ N. Abut.	416+66.21	-12.88'	550.43	550.43
Bk. N. Abut.	416+67.73	-12.88'	550.42	550.42

BEAM #2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	414+61.05	-5.33'	554.87	554.87
℄ S. Abut.	414+62.57	-5.33'	554.82	554.82
a	414+72.57	-5.33'	554.47	554.50
b	414+82.57	-5.33'	554.14	554.19
c	414+92.57	-5.33'	553.82	553.89
d	415+02.57	-5.33'	553.52	553.60
e	415+12.57	-5.33'	553.23	553.32
f	415+22.57	-5.33'	552.95	553.03
g	415+32.57	-5.33'	552.69	552.76
h	415+42.57	-5.33'	552.45	552.50
i	415+52.57	-5.33'	552.21	552.24
℄ S. Brg. at Pier	415+64.29	-5.33'	551.96	551.96
℄ Pier	415+65.05	-5.33'	551.94	551.94
℄ N. Brg. at Pier	415+65.82	-5.33'	551.93	551.93
j	415+75.82	-5.33'	551.73	551.75
k	415+85.82	-5.33'	551.55	551.56
l	415+95.82	-5.33'	551.38	551.44
m	416+05.82	-5.33'	551.22	551.30
n	416+15.82	-5.33'	551.08	551.17
o	416+25.82	-5.33'	550.95	551.03
p	416+35.82	-5.33'	550.84	550.91
q	416+45.82	-5.33'	550.74	550.79
r	416+55.82	-5.33'	550.65	550.68
℄ N. Abut.	416+67.53	-5.33'	550.57	550.57
Bk. N. Abut.	416+69.05	-5.33'	550.56	550.56

℄ ROADWAY AND PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	416+62.00	0.00'	554.94	554.94
℄ S. Abut.	414+63.52	0.00'	554.89	554.89
a	414+73.52	0.00'	554.54	554.57
b	414+83.52	0.00'	554.21	554.26
c	414+93.52	0.00'	553.90	553.97
d	415+03.52	0.00'	553.60	553.67
e	415+13.52	0.00'	553.31	553.40
f	415+23.52	0.00'	553.03	553.11
g	415+33.52	0.00'	552.78	552.84
h	415+43.52	0.00'	552.53	552.58
i	415+53.52	0.00'	552.30	552.33
℄ S. Brg. at Pier	415+65.23	0.00'	552.05	552.05
℄ Pier	415+66.00	0.00'	552.03	552.03
℄ N. Brg. at Pier	415+66.76	0.00'	552.02	552.02
j	415+76.76	0.00'	551.82	551.84
k	415+86.76	0.00'	551.64	551.69
l	415+96.76	0.00'	551.47	551.53
m	416+06.76	0.00'	551.31	551.39
n	416+16.76	0.00'	551.17	551.26
o	416+26.76	0.00'	551.05	551.13
p	416+36.76	0.00'	550.93	551.00
q	416+46.76	0.00'	550.84	550.89
r	416+56.76	0.00'	550.75	550.78
℄ N. Abut.	416+68.48	0.00'	550.67	550.67
Bk. N. Abut.	416+70.00	0.00'	550.66	550.66

BEAM #3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	414+62.39	2.21'	554.89	554.89
℄ S. Abut.	414+63.91	2.21'	554.83	554.83
a	414+73.91	2.21'	554.49	554.51
b	414+83.91	2.21'	554.16	554.21
c	414+93.91	2.21'	553.84	553.91
d	415+03.91	2.21'	553.54	553.62
e	415+13.91	2.21'	553.25	553.34
f	415+23.91	2.21'	552.98	553.06
g	415+33.91	2.21'	552.72	552.79
h	415+43.91	2.21'	553.48	552.53
i	415+53.91	2.21'	552.25	552.28
℄ S. Brg. at Pier	415+65.63	2.21'	552.00	552.00
℄ Pier	415+66.39	2.21'	551.98	551.98
℄ N. Brg. at Pier	415+67.15	2.21'	551.96	551.96
j	415+77.15	2.21'	551.77	551.79
k	415+87.15	2.21'	551.58	551.63
l	415+97.15	2.21'	551.42	551.48
m	416+07.15	2.21'	551.26	551.34
n	416+17.15	2.21'	551.12	551.21
o	416+27.15	2.21'	551.00	551.08
p	416+37.15	2.21'	550.89	550.96
q	416+47.15	2.21'	550.79	550.84
r	416+57.15	2.21'	550.71	550.73
℄ N. Abut.	416+68.87	2.21'	550.63	550.63
Bk. N. Abut.	416+70.39	2.21'	550.62	550.62

BEAM #4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	414+63.72	9.75'	554.69	554.69
℄ S. Abut.	414+65.24	9.75'	554.63	554.63
a	414+75.24	9.75'	554.29	554.32
b	414+85.24	9.75'	553.96	554.01
c	414+95.24	9.75'	553.65	553.72
d	415+05.24	9.75'	553.35	553.43
e	415+15.24	9.75'	553.06	553.15
f	415+25.24	9.75'	552.79	552.87
g	415+35.24	9.75'	552.54	552.61
h	415+45.24	9.75'	552.29	552.35
i	415+55.24	9.75'	552.07	552.10
℄ S. Brg. at Pier	415+66.96	9.75'	551.82	551.82
℄ Pier	415+67.72	9.75'	551.08	551.80
℄ N. Brg. at Pier	415+68.48	9.75'	551.79	551.79
j	415+78.48	9.75'	551.59	551.62
k	415+88.48	9.75'	551.41	551.46
l	415+98.48	9.75'	551.24	551.31
m	416+08.48	9.75'	551.09	551.17
n	416+18.48	9.75'	550.95	551.04
o	416+28.48	9.75'	550.83	550.91
p	416+38.48	9.75'	550.72	550.79
q	416+48.48	9.75'	550.63	550.68
r	416+58.48	9.75'	550.55	550.57
℄ N. Abut.	416+70.20	9.75'	550.47	550.47
Bk. N. Abut.	416+71.72	9.75'	550.46	550.46

BEAM #5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	414+65.05	17.29'	554.62	554.62
℄ S. Abut.	414+66.57	17.29'	554.56	554.56
a	414+76.57	17.29'	554.22	554.25
b	414+86.57	17.29'	553.90	553.95
c	414+96.57	17.29'	553.58	553.65
d	415+06.57	17.29'	553.29	553.36
e	415+16.57	17.29'	553.00	553.09
f	415+26.57	17.29'	552.73	552.81
g	415+36.57	17.29'	552.48	552.55
h	415+46.57	17.29'	552.24	552.29
i	415+56.57	17.29'	552.01	552.04
℄ S. Brg. at Pier	415+68.29	17.29'	551.76	551.76
℄ Pier	415+69.05	17.29'	551.75	551.75
℄ N. Brg. at Pier	415+69.81	17.29'	551.73	551.73
j	415+79.81	17.29'	551.54	551.57
k	415+89.81	17.29'	551.36	551.41
l	415+99.81	17.29'	551.20	551.27
m	416+09.81	17.29'	551.05	551.13
n	416+19.81	17.29'	550.91	551.00
o	416+29.81	17.29'	550.79	550.87
p	416+39.81	17.29'	550.68	550.75
q	416+49.81	17.29'	550.59	550.64
r	416+59.81	17.29'	550.51	550.54
℄ N. Abut.	416+71.53	17.29'	550.44	550.44
Bk. N. Abut.	416+73.05	17.29'	550.43	550.43

TOP OF SLAB ELEVATIONS (SHEET 2)
OUTER BELT WEST OVER TRIBUTARY
TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	43
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT -	

SHEET NO. 05
23 SHEETS

Contract #95503

* 03-00098-00-BR

WEST CURB LINE

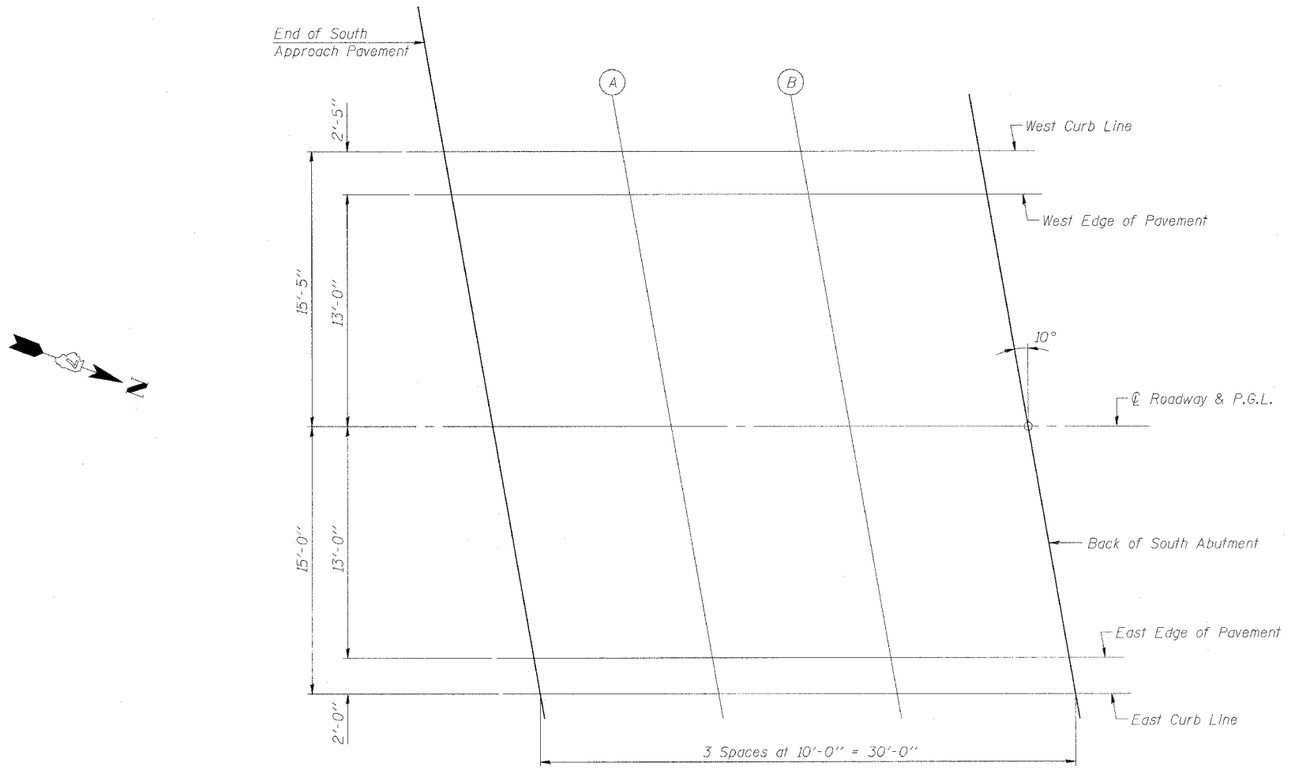
Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	414+29.28	-15.42'	555.87
A	414+39.28	-15.42'	555.48
B	414+49.28	-15.42'	555.10
Bk. S. Abut.	414.59.28	-15.42'	554.73

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	414+29.71	-13.00'	555.90
A	414+39.71	-13.00'	555.51
B	414+49.71	-13.00'	551.13
Bk. S. Abut.	414+59.71	-13.00'	554.76

℄ ROADWAY & PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	414+32.00	0.00'	556.07
A	414+42.00	0.00'	555.68
B	414+52.00	0.00'	555.30
Bk. S. Abut.	414+62.00	0.00'	554.94



PLAN

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	414+34.29	13.00'	555.72
A	414+44.29	13.00'	555.33
B	414+54.29	13.00'	554.96
Bk. S. Abut.	414+64.29	13.00'	554.60

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	414+34.64	15.00'	555.67
A	414+44.64	15.00'	555.28
B	414+54.64	15.00'	554.91
Bk. S. Abut.	414+64.64	15.00'	554.55

TOP OF SOUTH APPROACH SLAB ELEVATIONS
OUTER BELT WEST OVER TRIBUTARY
TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
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ROUTE FAC.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	44
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 06
23 SHEETS

Contract #95503

* 03-00098-00-BR

WEST CURB LINE

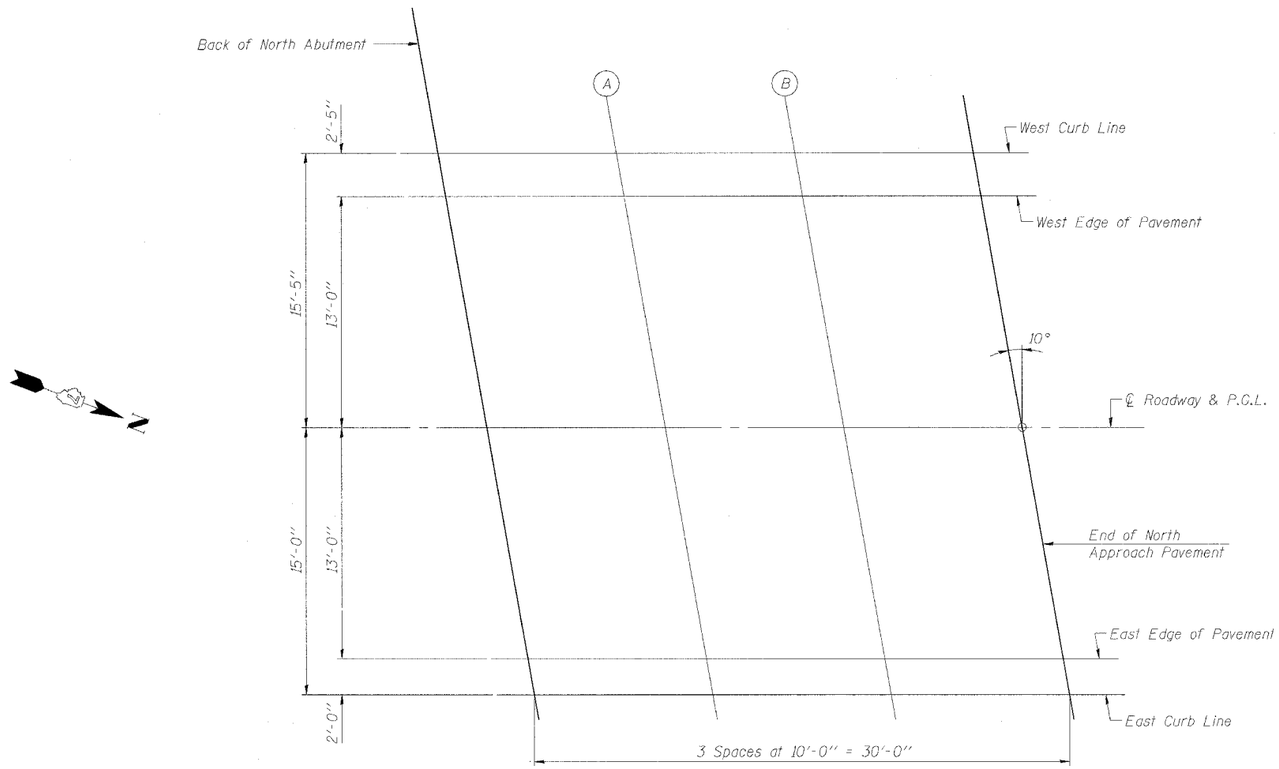
Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	416+67.28	-15.42'	550.37
A	416+77.28	-15.42'	550.32
B	416+87.28	-15.42'	550.28
End N. Appr. Pav't.	416+97.28	-15.42'	550.25

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	416+67.71	-13.00'	550.42
A	416+77.71	-13.00'	550.36
B	416+87.71	-13.00'	550.33
End N. Appr. Pav't.	416+97.71	-13.00'	550.30

℄ ROADWAY & PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	416+70.00	0.00'	550.66
A	416+80.00	0.00'	550.61
B	416+90.00	0.00'	550.58
End N. Appr. Pav't.	417+00.00	0.00'	550.56



PLAN

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	416+72.29	13.00'	550.39
A	416+82.29	13.00'	550.34
B	416+92.29	13.00'	550.31
End N. Appr. Pav't.	417+02.29	13.00'	550.29

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	416+72.64	15.00'	550.35
A	416+82.64	15.00'	550.30
B	416+92.64	15.00'	550.27
End N. Appr. Pav't.	417+02.64	15.00'	550.25

TOP OF NORTH APPROACH SLAB ELEVATIONS
OUTER BELT WEST OVER TRIBUTARY
TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 0552071

DATE 03/29/07

LAYOUT	MRM	12/20/07
DRAWN	DAP	01/12/07
REVIEWED	AJT	01/15/07

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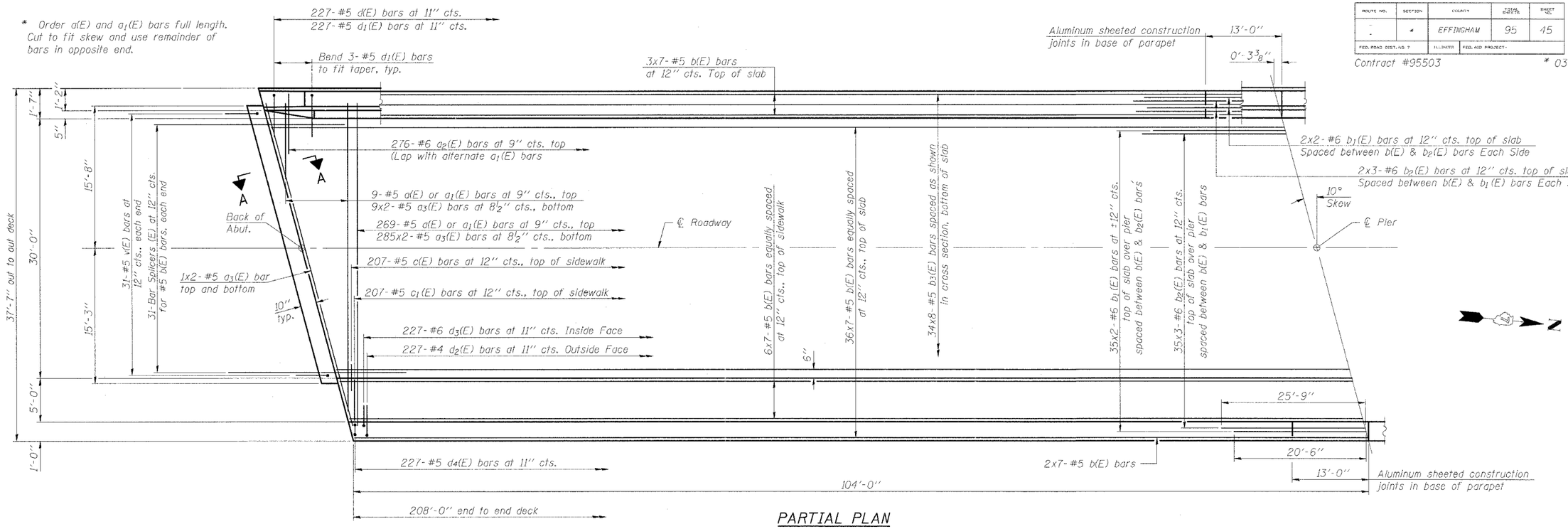
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	45
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 07
23 SHEETS

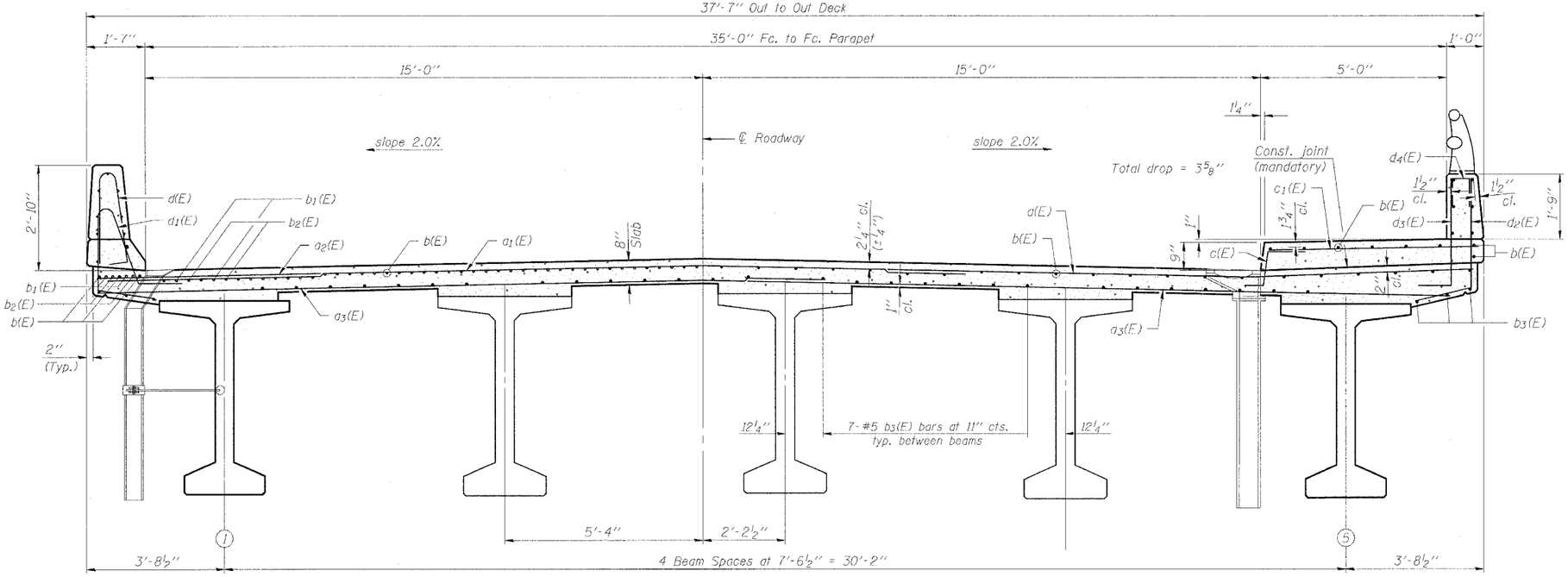
Contract #95503

* 03-00098-00-BR

* Order a(E) and a_1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.



PARTIAL PLAN



NEAR PIER — NEAR MIDSPAN

CROSS SECTION
(Looking North)

Notes:
See Sheets 08 and 09 of 23 for superstructure details and Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 4x3-#5 etc. indicates 4 lines of bars with 3 lengths per line.
See Sheet 08 of 23 for parapet reinforcement.
See Bar Splicer (Coupler) Details, Sheet 20 of 23.
See Sheet 12 of 23 for Section A-A.

MIN. BAR LAPS

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

SUPERSTRUCTURE
OUTER BELT WEST OVER TRIBUTARY TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071

DATE 03/29/07

LAYOUT	MNM	12/29/07
DRAWN	DAP	01/12/07
REVIEWED	JJT	01/15/07

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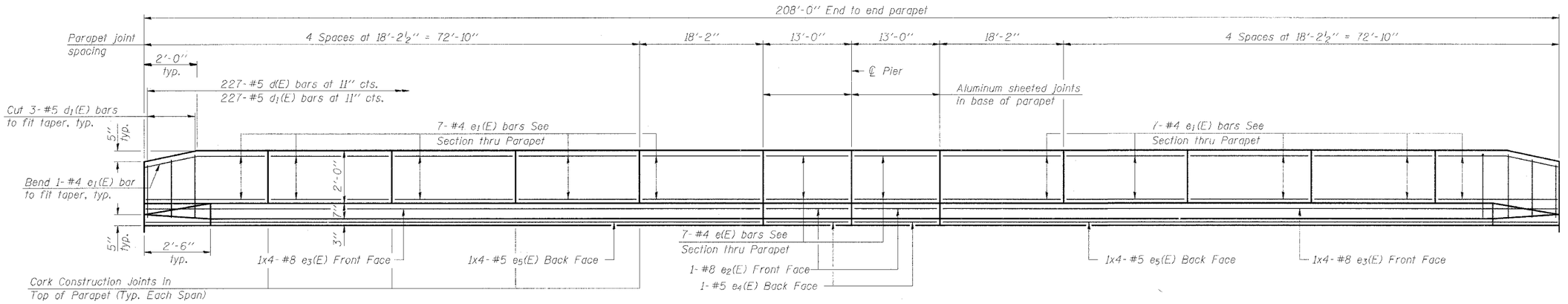
ROUTE FAI.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
"	*	EFFINGHAM	95	46
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

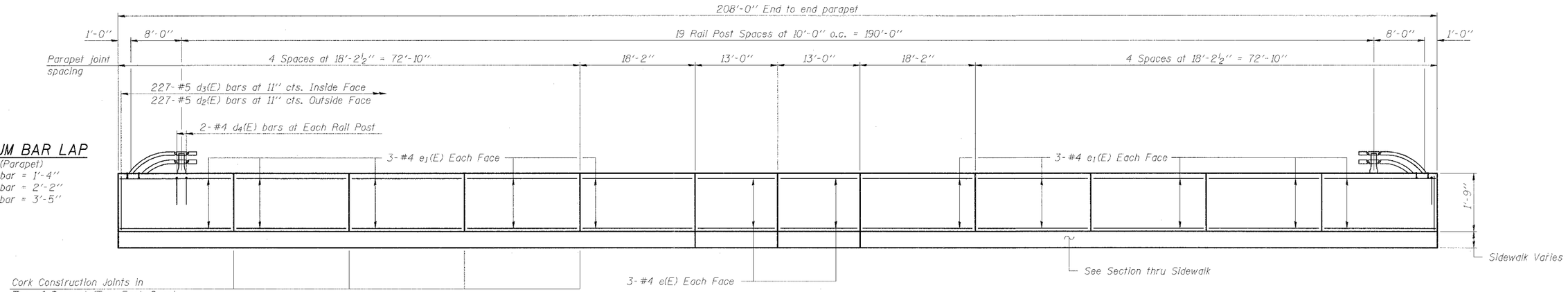
SHEET NO. 08
23 SHEETS

Contract #95503

* 03-00098-00-BR



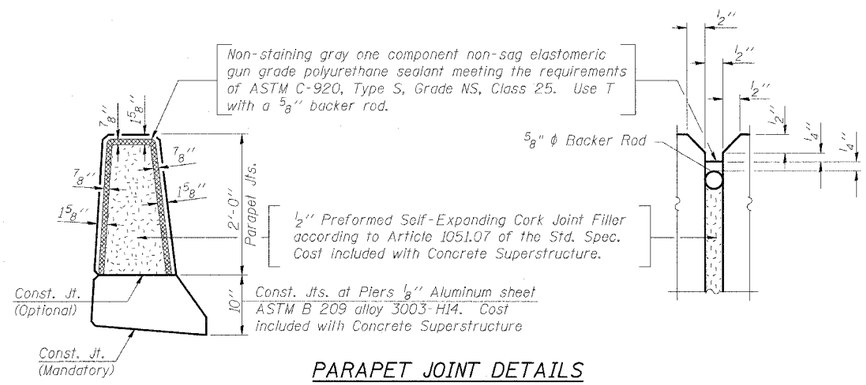
INSIDE ELEVATION OF PARAPET



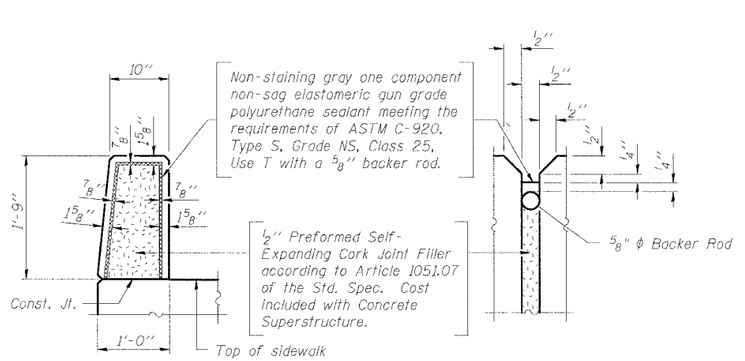
INSIDE ELEVATION OF SIDEWALK PARAPET

MINIMUM BAR LAP

(Parapet)
#4 bar = 1'-4"
#5 bar = 2'-2"
#8 bar = 3'-5"



PARAPET JOINT DETAILS



SIDEWALK PARAPET JOINT DETAILS

Notes:
Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
The exterior surfaces of the floor drains shall be coated or pigmented by the manufacturer with a color that matches the concrete.
The clamping device and inserts shall be galvanized according to AASHTO M 232.

SUPERSTRUCTURE DETAILS (SHEET 1)
OUTER BELT WEST OVER TRIBUTARY TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071
DATE 03/29/07

LAYOUT	MRM	12/20/07
DRAWN	DAP	01/12/07
REVIEWED	JJT	01/15/07

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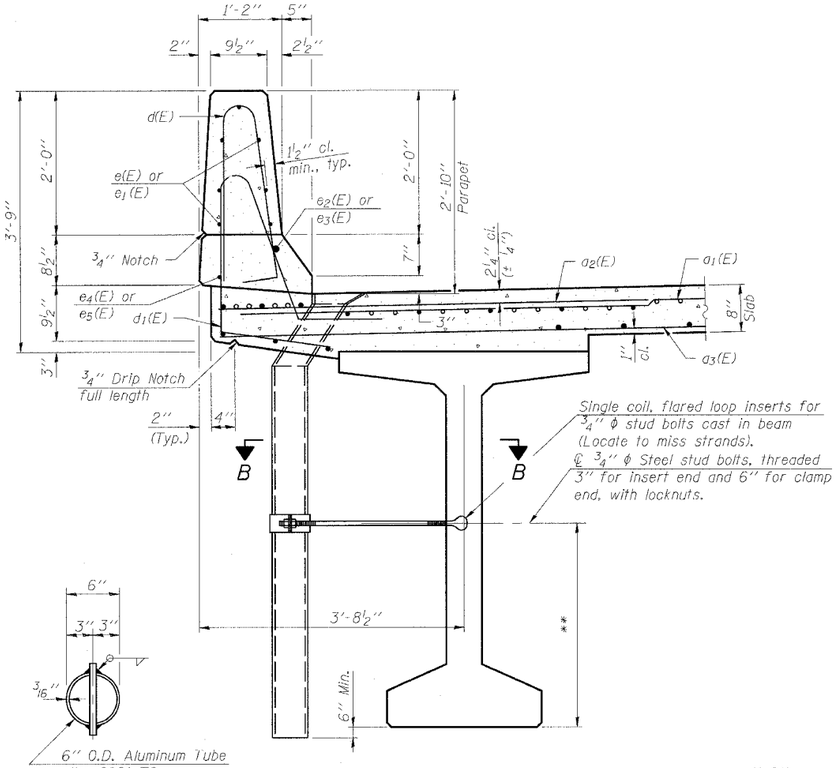
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	47
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 09
23 SHEETS

Contract #95503

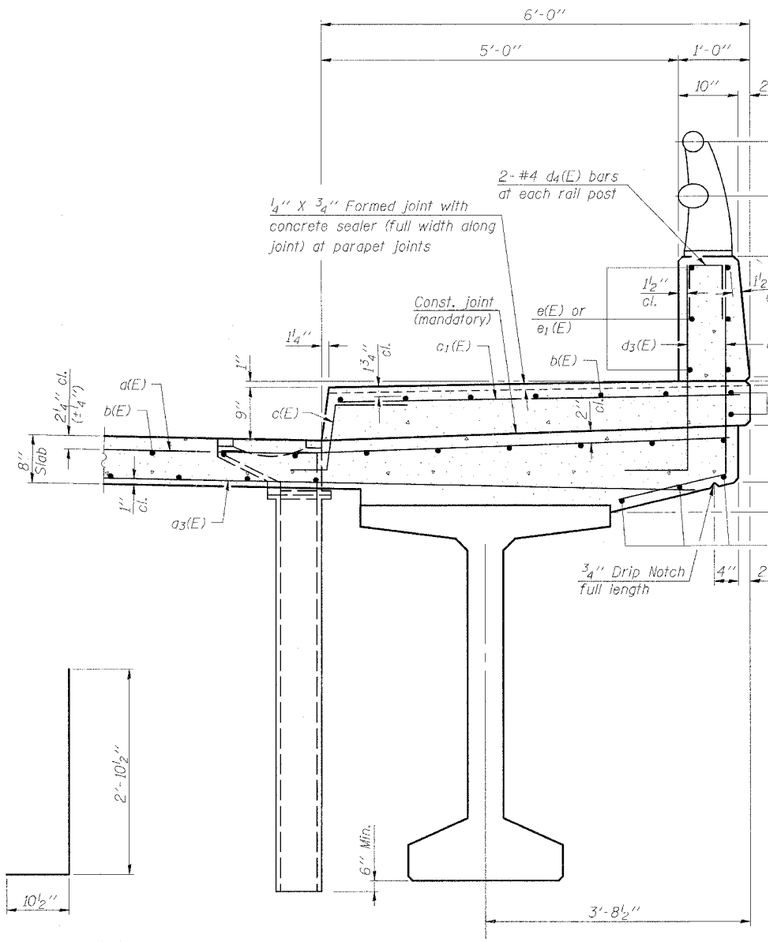
* 03-00098-00-BR



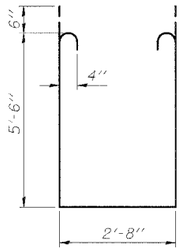
TOP PLAN
(Showing Aluminum Tube)

SECTION THRU PARAPET

**For insert locations See sheet 14 of 23.

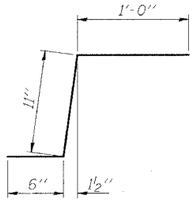


SECTION THRU SIDEWALK

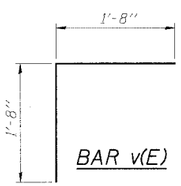


BAR s1(E)

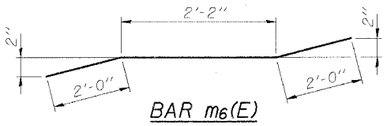
BAR d3(E)



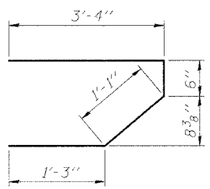
BAR c(E)



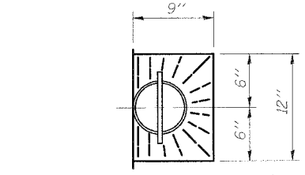
BAR v(E)



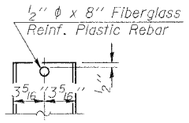
BAR m6(E)



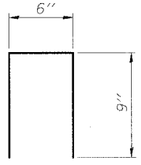
BAR s(E)



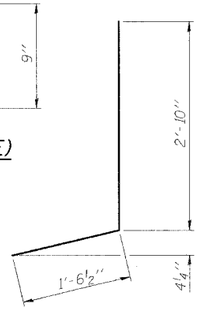
TOP PLAN



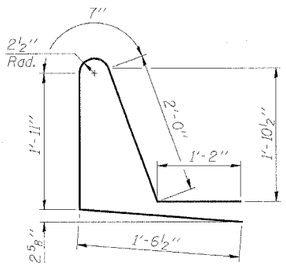
FIBERGLASS PIPE



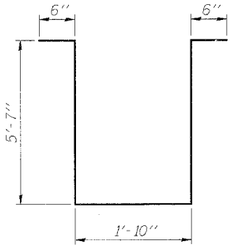
BAR d4(E)



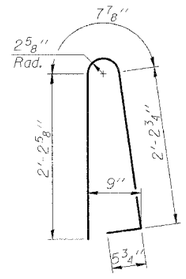
BAR d2(E)



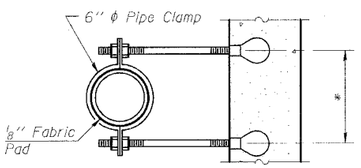
BAR d1(E)



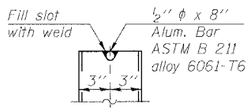
BAR s2(E)



BAR d(E)



SECTION A-A
* Dimension as required by Pipe Clamp



ALUMINUM TUBE

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	278	#5	15'-10"	
a1(E)	278	#5	23'-6"	
a2(E)	276	#6	6'-0"	
a3(E)	596	#5	19'-9"	
b(E)	329	#5	31'-7"	
b1(E)	74	#6	21'-10"	
b2(E)	111	#6	18'-11"	
b3(E)	272	#5	27'-11"	
c(E)	207	#5	2'-5"	
c1(E)	207	#5	5'-7"	
d(E)	227	#5	5'-7"	
d1(E)	227	#5	7'-3"	
d2(E)	227	#4	4'-5"	
d3(E)	227	#6	3'-9"	
d4(E)	40	#4	2'-0"	
e(E)	26	#4	12'-9"	
e1(E)	130	#4	17'-11"	
e2(E)	2	#8	12'-9"	
e3(E)	8	#8	25'-3"	
e4(E)	2	#5	12'-9"	
e5(E)	8	#5	24'-4"	
m(E)	8	#6	16'-8"	
m1(E)	16	#6	20'-4"	
m2(E)	30	#6	9'-9"	
m3(E)	16	#6	5'-1"	
m4(E)	4	#6	2'-5"	
m5(E)	24	#4	6'-10"	
m6(E)	5	#8	6'-2"	
s(E)	68	#5	5'-8"	
s1(E)	44	#4	14'-8"	
s2(E)	16	#4	14'-0"	
v(E)	62	#5	3'-4"	
Reinforcement Bars, Epoxy Coated		Pound	62540	
Concrete Superstructure		Cu. Yds.	336.5	

Bars indicated thus 1x3-#5 etc. indicates 1 line of bars with 3 lengths per line.

LAYOUT	MMM	12/20/07
DRAWN	DAP	01/12/07
REVIEWED	MJT	01/15/07

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SUPERSTRUCTURE DETAILS (SHEET 2)
OUTER BELT WEST OVER TRIBUTARY
TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071

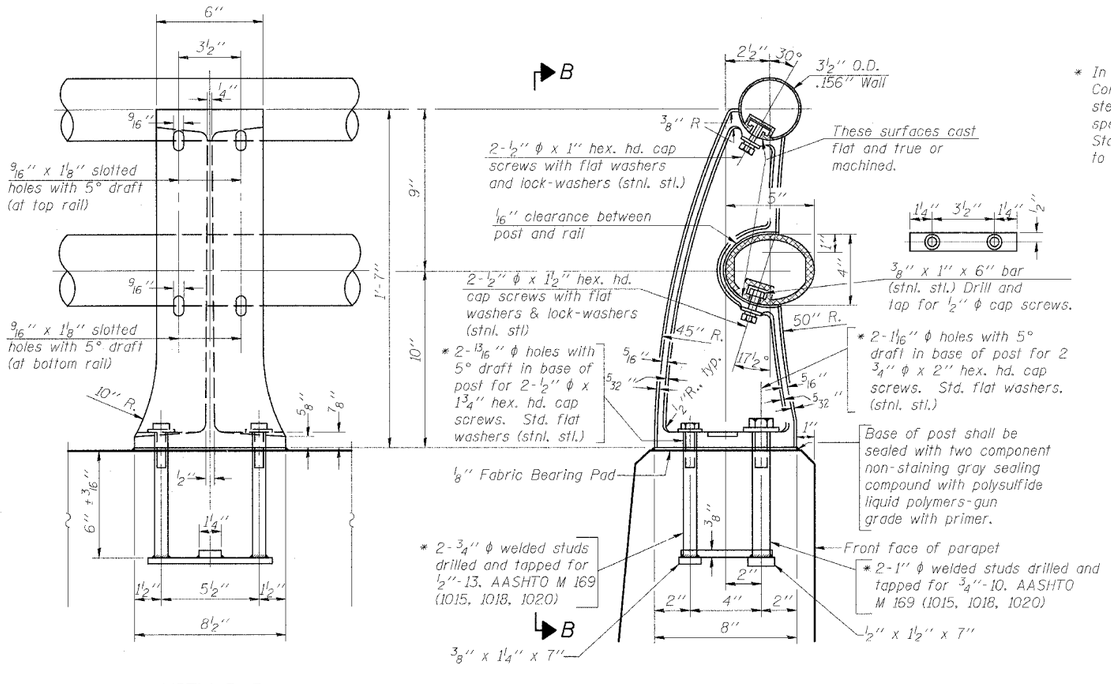
DATE 03/29/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	48
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT=		

SHEET NO. 10
23 SHEETS

Contract #95503

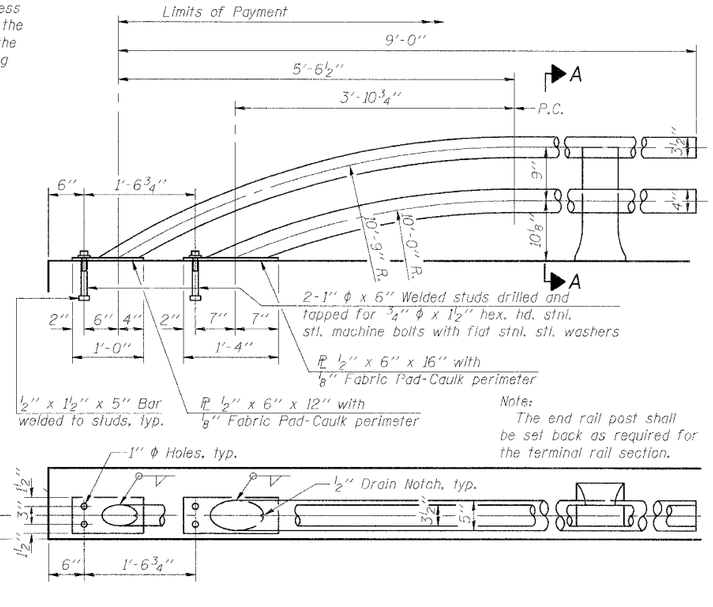
* 03-00098-00-BR



VIEW B-B

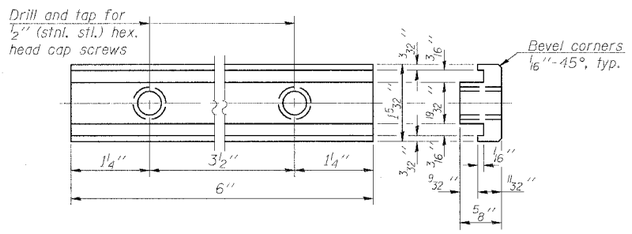
SECTION A-A

* In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting stainless steel anchor rods of the same diameter and grade as the specified cap screws according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

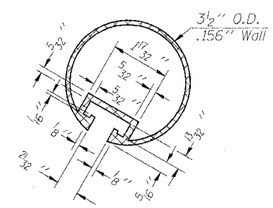


RAIL TERMINAL SECTION

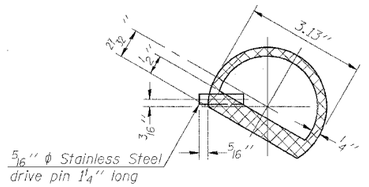
RAIL POST DETAILS



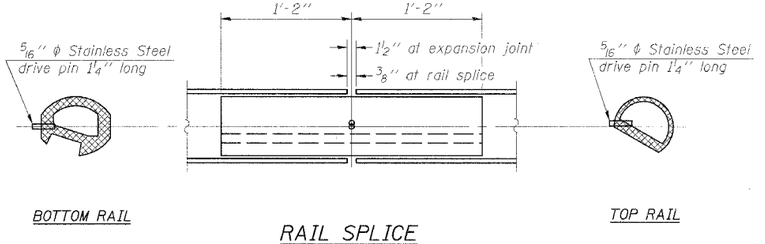
RAIL POST CLAMP BAR
For Top Rail



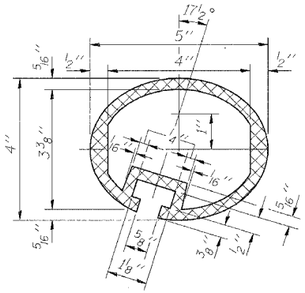
SECTION THRU TOP RAIL



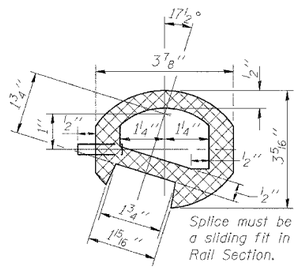
SECTION THRU SPLICE
For Top Rail



RAIL SPLICE



SEC. THRU ELLIPTICAL RAIL SECTION



SEC. THRU SPLICE

Notes:
All Posts shall be normal to parapet.
All joints in rail shall be spliced per detail.
Provide 1-⅛" and 2-1/16" Aluminum Shims for 25% of the Posts. Rail elements shall be parallel to Grade-high spots will be ground and low spots shimmed.
See sheet 08 of 23 for rail post spacing.

BILL OF MATERIAL

Item	Unit	Quantity
Aluminum Railing, Type L	Foot	206

ALUMINUM RAILING, TYPE L
OUTER BELT WEST OVER TRIBUTARY TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071

DATE 03/29/07

LAYOUT	WMM	12/20/07
DRAWN	DAP	01/12/07
REVIEWED	JJT	01/15/07

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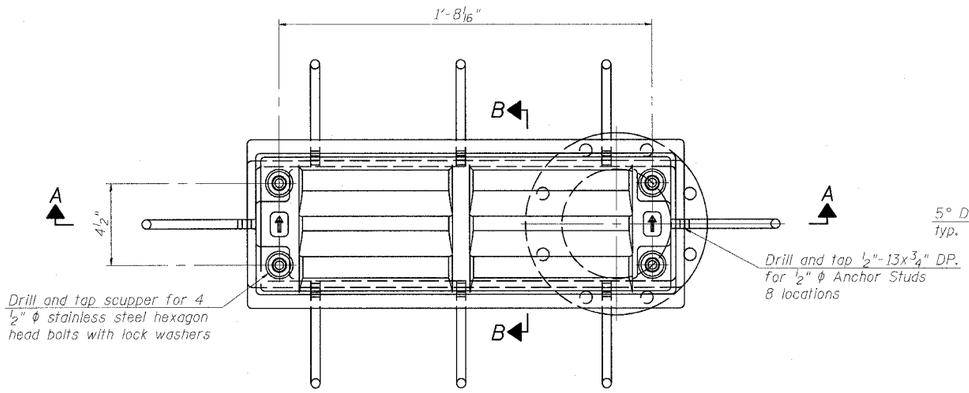
R-20

11-1-06 (7'-0" to 10'-0" Post spacing)

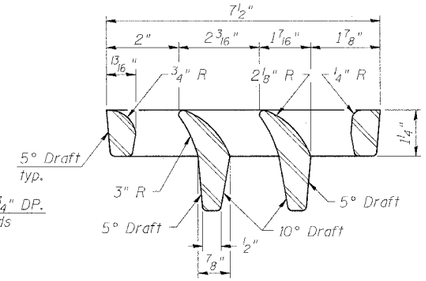
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	49
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 11
23 SHEETS

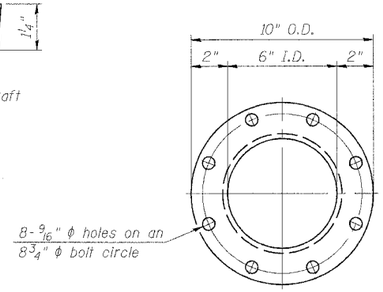
Contract #95503 * 03-00098-00-BR

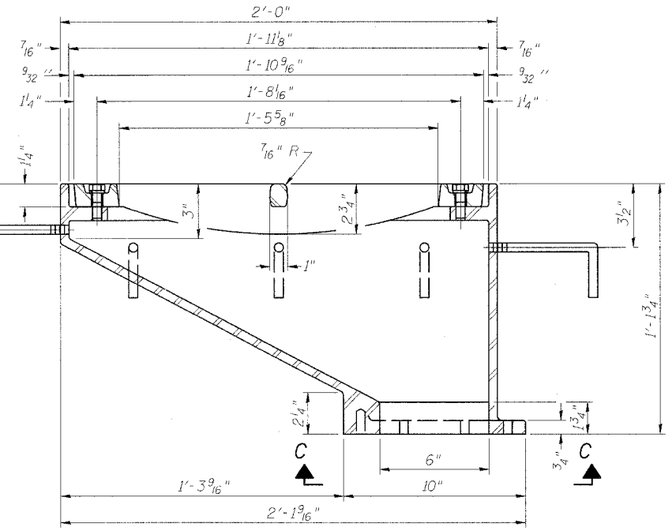


PLAN



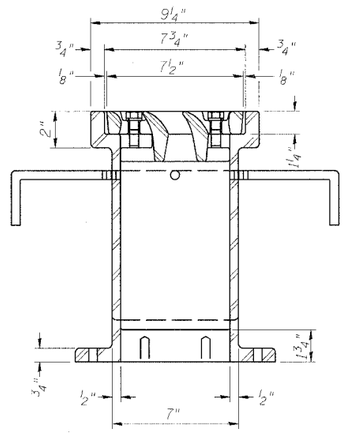
VANE GRATE DETAIL



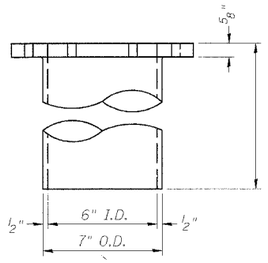


SECTION A-A

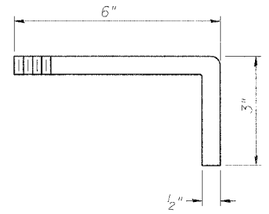
See sheet of for scupper location relative to parapet.



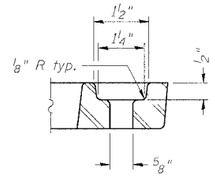
SECTION B-B



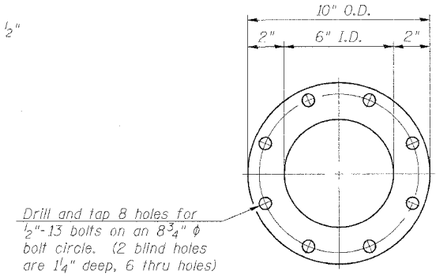
DOWNSPOUT



ANCHOR STUD DETAIL



BOLT HOLE DETAIL



VIEW C-C

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-12.

Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-12	Each	2

DRAINAGE SCUPPER, DS-12
OUTER BELT WEST OVER TRIBUTARY
TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071

DATE 03/29/07

LAYOUT	MAM	12/20/07
DRAWN	DAP	01/12/07
REVIEWED	JJT	01/15/07

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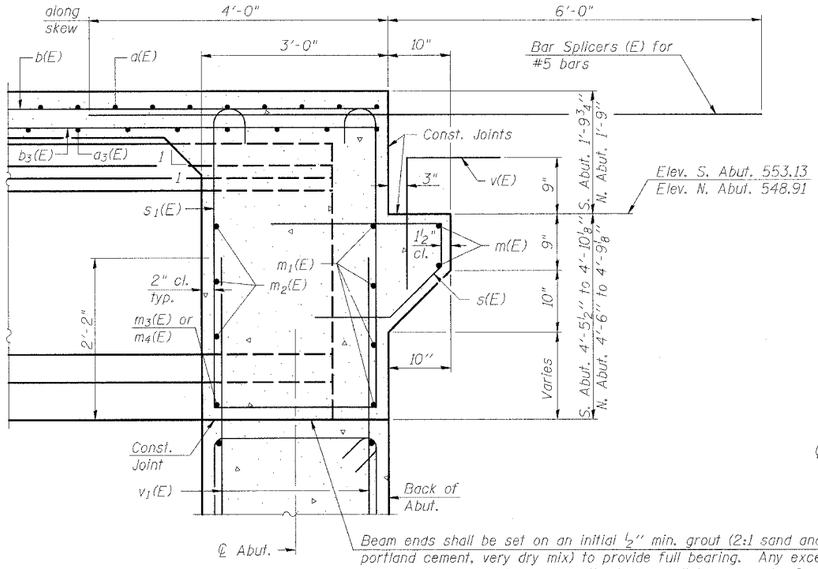
DS-12

11-1-06

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	50
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT -		

SHEET NO. 12
23 SHEETS

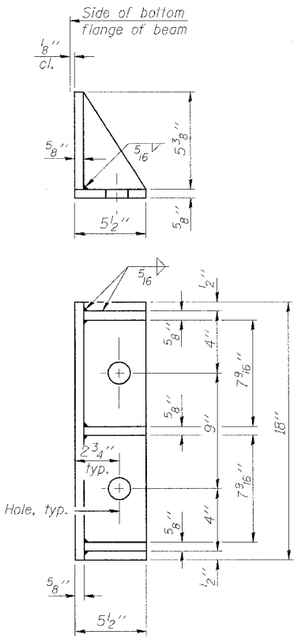
Contract #95503 * 03-00098-00-BR



Beam ends shall be set on an initial ½" min. grout (2:1 sand and portland cement, very dry mix) to provide full bearing. Any excess grout squeezed out from under the beam shall be removed. Cost included with Concrete Structures.

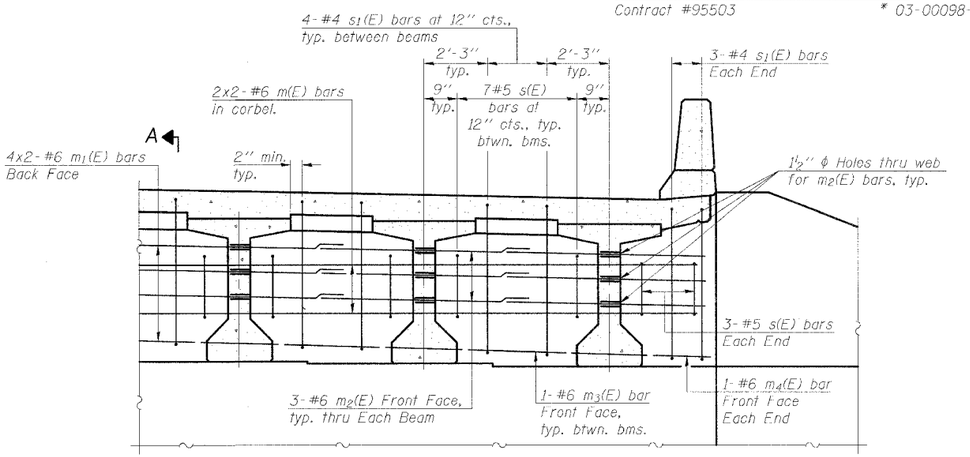
SECTION A-A

Dimensions at right angles to abutment, except as shown.



SIDE RETAINER

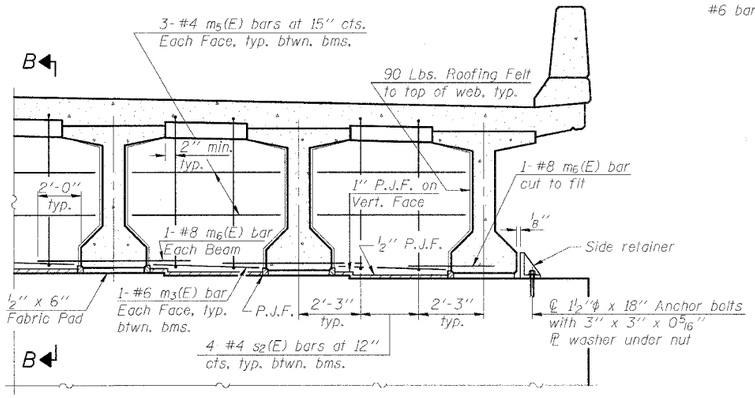
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



DIAPHRAGM ELEVATION AT ABUTMENT

MIN. BAR LAP

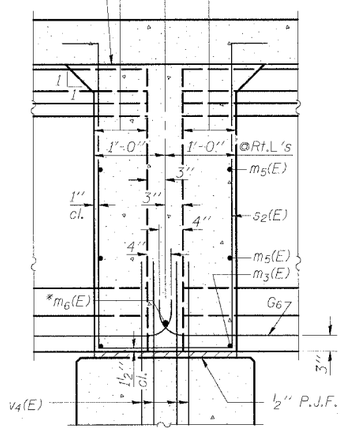
#6 bar = 2'-9"



DIAPHRAGM AT PIER

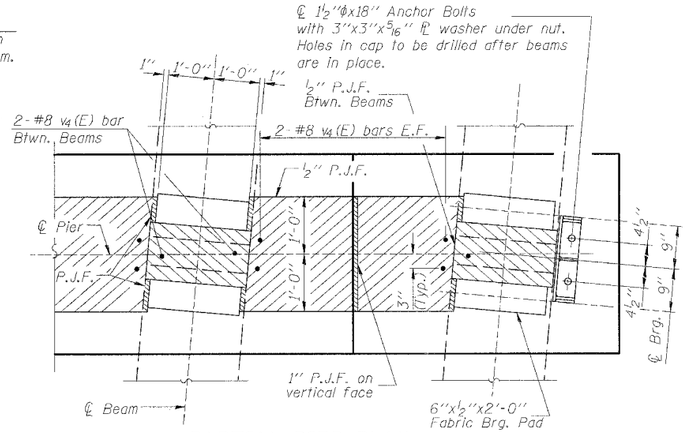
Pour diaphragm flush with bott. of slab. Concrete in slab above this line shall be placed not less than 45 min. nor more than 90 min. after diaphragm has been poured.

Roofing felt shall be bonded to side of beam embedded into diaphragm.



SECTION B-B

Dimensions along ℄ of beam, except as shown.



PARTIAL PIER PLAN

* Tightly fasten the #8 bars together with No. 9 wire ties.

Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet 09 of 23.

Concrete in diaphragm is included with Concrete Superstructure on sheet 09 of 23.

For details of bars s(E), $s_1(E)$ and $s_2(E)$ see sheet 09 of 23.

The s(E), $s_1(E)$ and $s_2(E)$ bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

Cost of 90 Lb. roofing felt is included with Concrete Superstructure.

The side retainer shall be galvanized after shop fabrication according to AASHTO M 111. Cost of side retainer and anchor bolts shall be included with Concrete Structures.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

DIAPHRAGM DETAILS
OUTER BELT WEST OVER TRIBUTARY TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071

DATE 03/29/07

LAYOUT	KNM	12/20/07
DRAWN	DJP	01/12/01
REVIEWED	JJT	01/15/01

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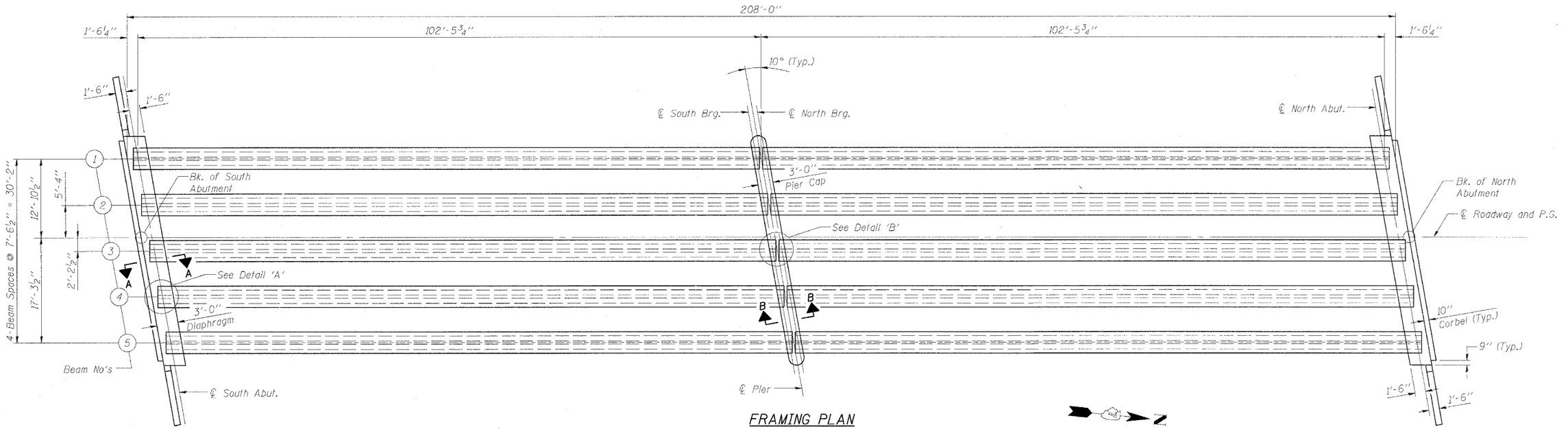
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	51
FED. ROAD DIST. NO. 7	ILL. PROJECT-	FED. AID PROJECT-		

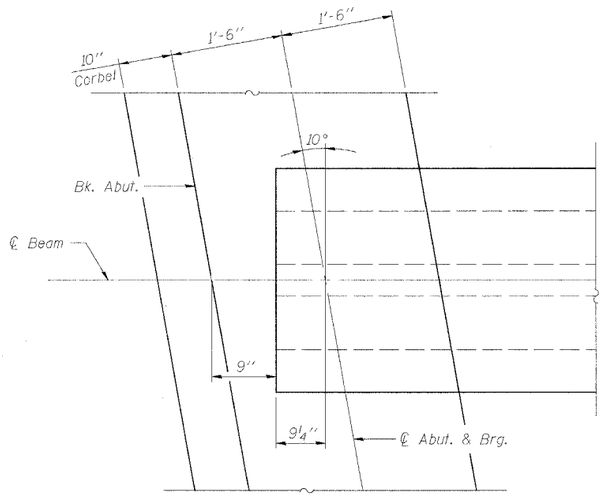
SHEET NO. 13
23 SHEETS

Contract #95503

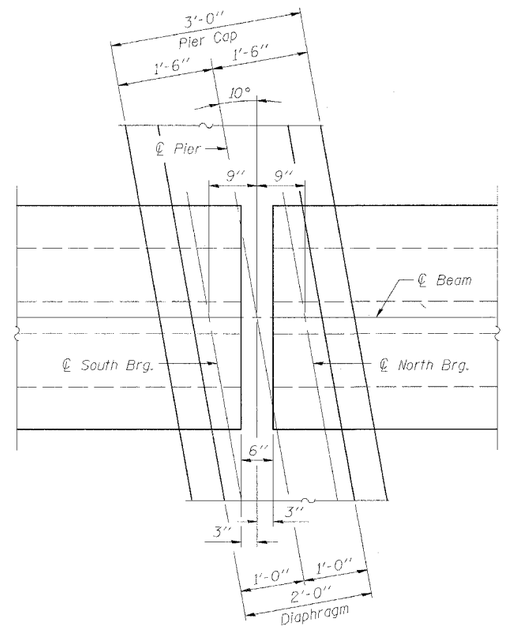
* 03-00098-00-BR



FRAMING PLAN



DETAIL 'A'



DETAIL 'B'

Notes:
See Sheet 12 of 23 for Section A-A and B-B.

FRAMING PLAN
OUTER BELT WEST OVER TRIBUTARY
TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071

DATE 03/29/07

LAYOUT	MNM	12/20/07
DRAWN	DJP	01/12/07
REVIEWED	JJT	01/15/07

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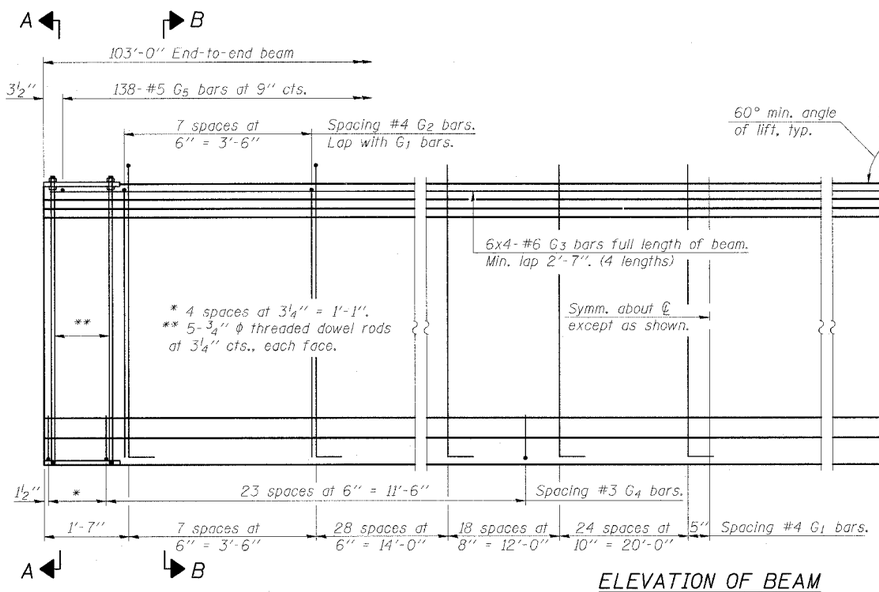
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	52
FED. ROAD DIST. NO. 7		ILL. ROUTE	FED. AID PROJECT-	

SHEET NO. 14
23 SHEETS

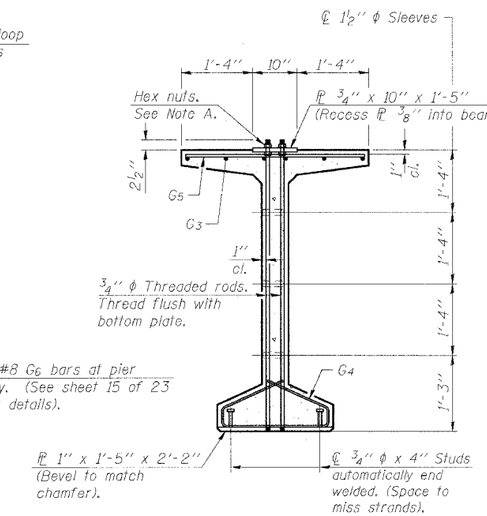
Contract #95503

* 03-00098-00-BR

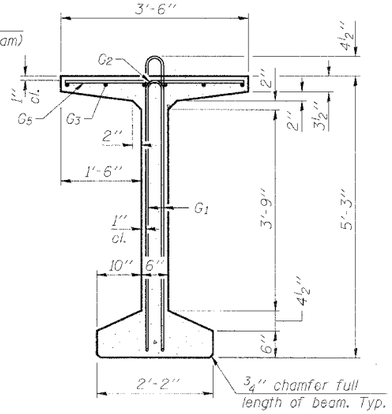


ELEVATION OF BEAM
(Showing reinforcement & dimensions)

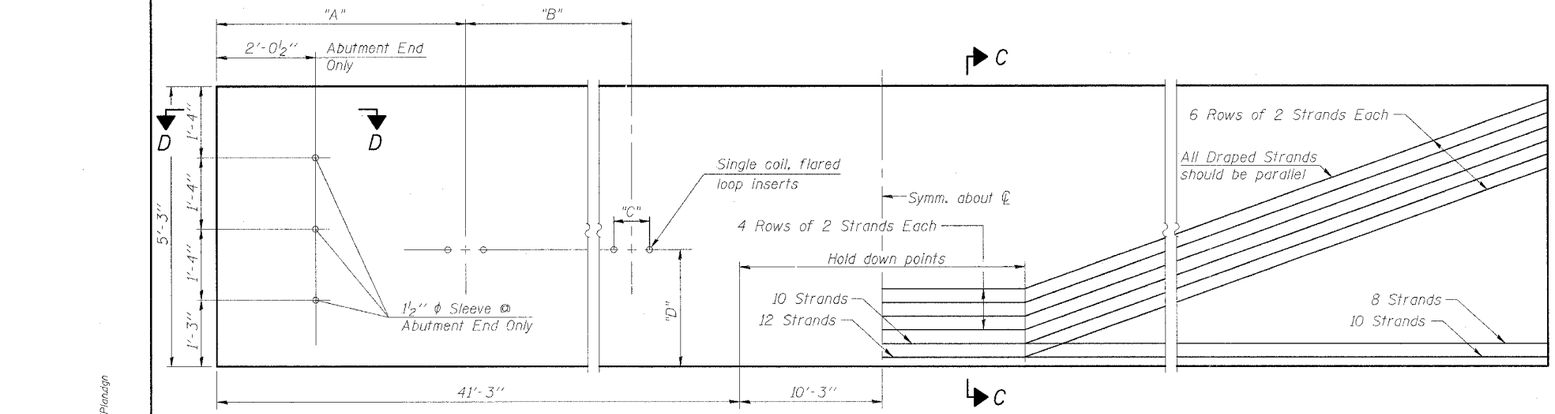
Note A:
Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.



SECTION A-A

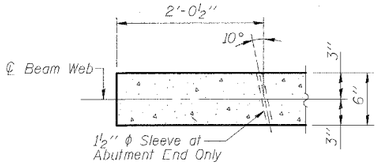


SECTION B-B

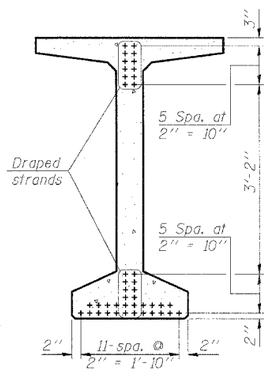


"C" - As required by pipe clamp
"D" - Locate as required to miss strand pattern

ELEVATION OF BEAM
(Showing prestressing steel)



SECTION D-D



SECTION C-C

*** BAR LIST
ONE BEAM ONLY

Bar	No.	Size	Length	Shape
G_1	156	#4	11'-11"	
G_2	16	#4	10'-2"	
G_3	24	#6	27'-9"	
G_4	56	#3	4'-11"	
G_5	138	#5	3'-4"	
G_6	3	#8	3'-9"	

*** For information only

Notes:
See sheet 15 of 23 for additional details and Bill of Material.
Required release strength, f'ci, shall be 5000 psi.

INTERIOR BEAM MOMENT TABLE			
		0.4 Sp. 1 0.6 Sp. 2	Pier 1
I	(in^4)	392638	
I'	(in^4)	774483	
S_b	(in^3)	12224	
S_b'	(in^3)	16353	
S_t	(in^3)	12715	
S_t'	(in^3)	49519	
$w_{\text{℄}}$	(k/')	1.563	
$M_{\text{℄}}$	('k)	1943.6	
$s_{\text{℄}}$	(k/')	0.582	0.582
$M_{s\text{℄}}$	('k)	429.5	738.1
M_{L}	('k)	862.1	789.2
$M_{Imp.}$	('k)	190.5	174.4

DIMENSION FROM ABUTMENT END OF BEAM TO ℄ FLOOR DRAIN

Span	Beam	"A"	"B"
1	1	14'-6¼"	15'-0"
1	5	17'-9⅜"	-
2	1	12'-11¾"	15'-0"
2	5	18'-3½"	-

INTERIOR BEAM REACTION TABLE			
		Abut.	Pier 1 Span 1 Pier 1 Span 2
	$R_{\text{℄}}$ (k)	79.8	79.8
*	$R_{s\text{℄}}$ (k)	22.4	37.3
*	R_L (k)	43.8	37.0
*	Imp. (k)	9.7	8.2
	R_{Total} (k)	155.7	162.3

* The total $R_{s\text{℄}}$, R_L, and impact reactions are assumed to be distributed evenly to each bearing line at a pier regardless of the span ratios. The bearing design at a pier is based on the maximum reactions of either span.

I: Non-composite moment of inertia of beam section ($in.^4$).
I': Composite moment of inertia of beam section ($in.^4$).
S_b: Non-composite section modulus for the bottom fiber of the prestressed beam ($in.^3$).
S_b': Composite section modulus for the bottom fiber of the prestressed beam ($in.^3$).
S_t: Non-composite section modulus for the top fiber of the prestressed beam ($in.^3$).
S_t': Composite section modulus for the top fiber of the prestressed beam ($in.^3$).
$w_{\text{℄}}$: Un-factored non-composite dead load (kips/ft.).
$M_{\text{℄}}$: Un-factored moment due to non-composite dead load conservatively taken at 0.5 of the span (kip-ft.).
$s_{\text{℄}}$: Un-factored long-term composite (superimposed) dead load (kips/ft.).
$M_{s\text{℄}}$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
M_L: Un-factored live load moment on the composite section (kip-ft.).
M_{Imp}: Un-factored moment due to impact on the composite section (kip-ft.).

LAYOUT	MJW	12/20/07
DRAWN	DAP	01/12/07
REVIEWED	JJT	01/15/07

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63" PPC BULB T-BEAM
OUTER BELT WEST OVER TRIBUTARY TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

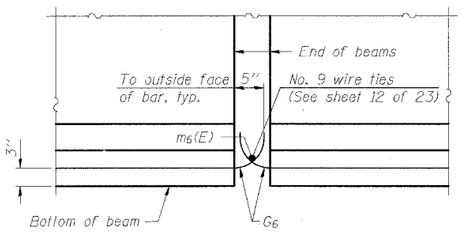
JOB NO. 0552071

DATE 03/29/07

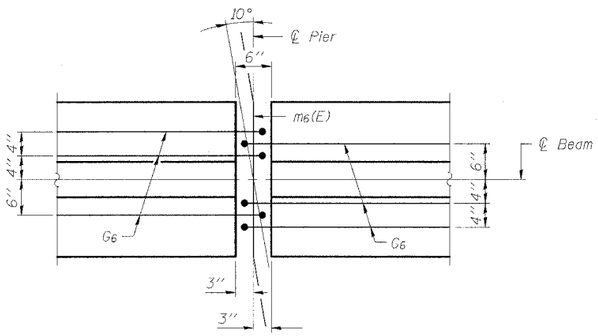
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	53
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 15
23 SHEETS

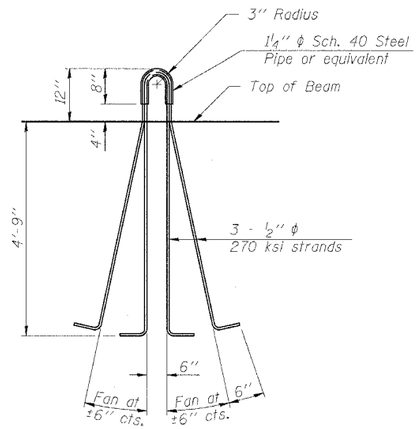
Contract #95503 * 03-00098-00-BR



ELEVATION OF BEAM AT PIER



PLAN OF BEAM AT PIER



LIFTING LOOP DETAIL

NOTES

Inserts for ¾" ϕ threaded dowel rods, when specified, are to be two strut, coil type for interior beams and single coil, flared loop type for exterior beams.

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.

The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

Non-prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60.

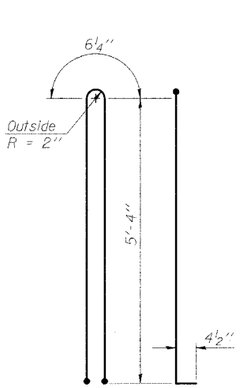
A minimum 2½" ϕ lifting pin shall be used to engage the lifting loops during handling.

Cut G_6 bars when necessary to maintain 1½" clearance.

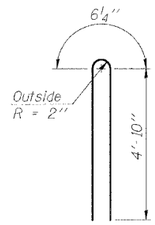
The bottom plates and studs shall be galvanized according to AASHTO M111.

Threaded rods shall be ASTM F 1554 Grade 55.

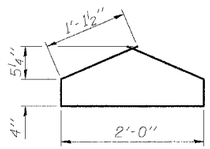
The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A 780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to all portions of the I-beam or Bulb-T beam, except the top surface of the top flange and the bottom surface of the bottom flange, starting at each beam end and extending out a distance of 63 inches. The sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.



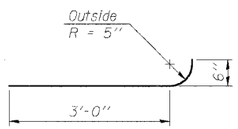
BAR G1



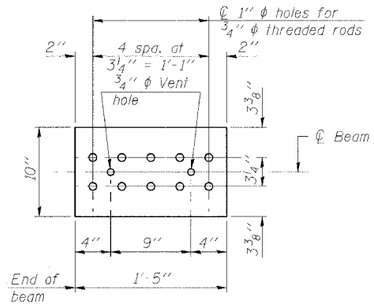
BAR G2



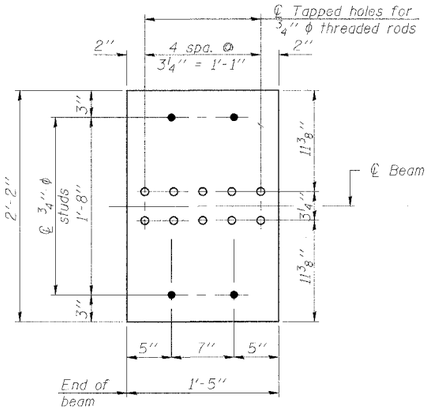
BAR G4



BAR G6



TOP PLATE



BOTTOM PLATE

See bearing details for pintle hole locations when required.

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete Bulb T-Beams, 63"	Ft.	1030

63" PPC BULB T-BEAM DETAILS
OUTER BELT WEST OVER TRIBUTARY TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071

DATE 03/29/07

LAYOUT	WMM	12/20/07
DRAWN	DAP	01/12/07
REVIEWED	JJT	01/15/07

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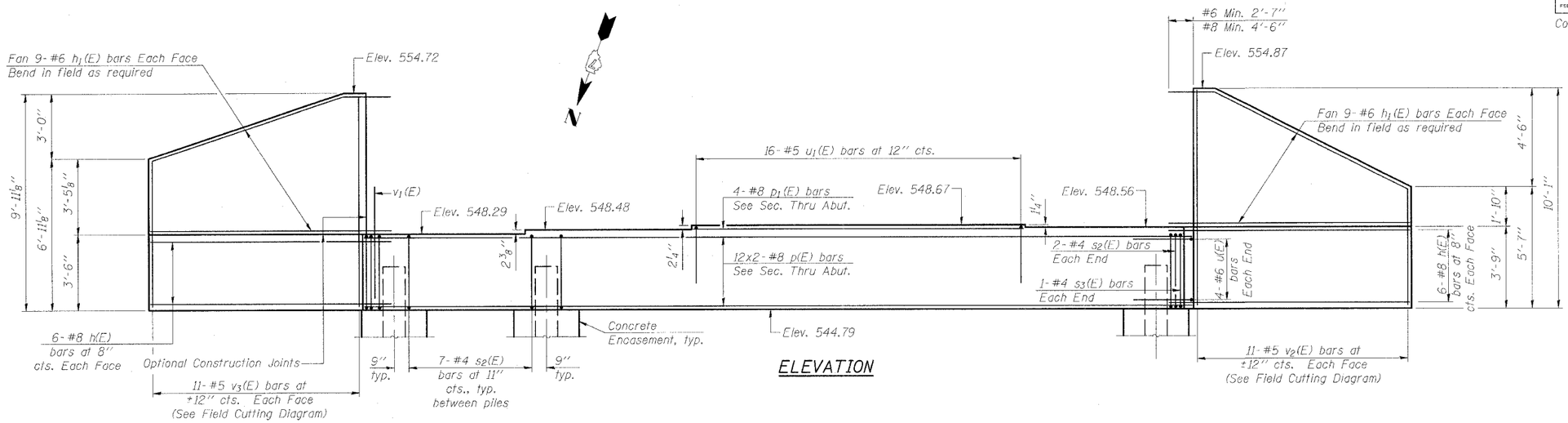
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	54
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT=		

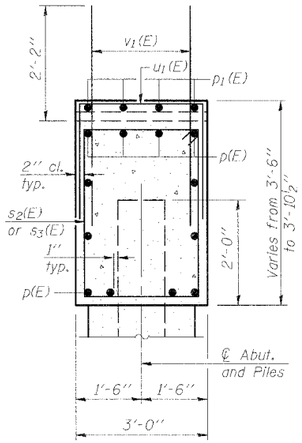
SHEET NO. 16
23 SHEETS

Contract #95503 * 03-00098-00-BR

Notes: Pour steps monolithically with cap.



ELEVATION



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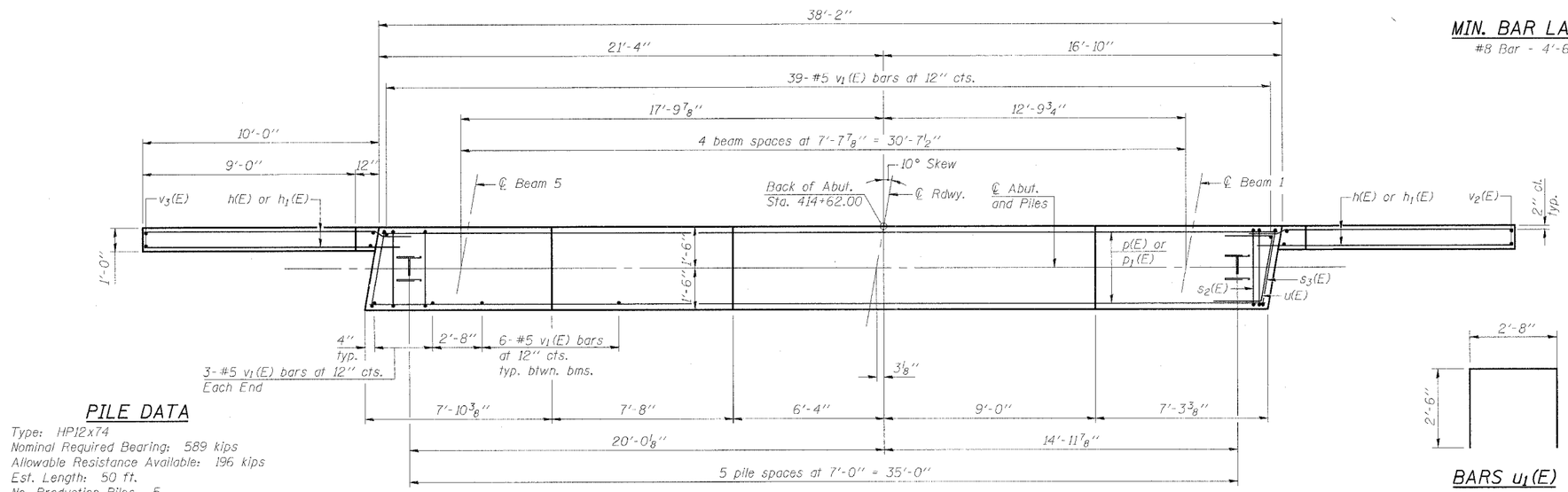


PLAN

PILE DATA

Type: HP12x74
Nominal Required Bearing: 589 kips
Allowable Resistance Available: 196 kips
Est. Length: 50 ft.
No. Production Piles: 5
No. Test Piles: 1

MIN. BAR LAPS

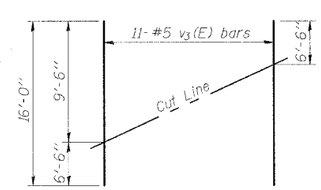
#8 Bar - 4'-6"

BARS u1(E)

BILL OF MATERIAL

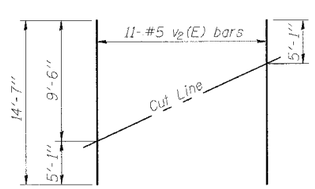
Bar	No.	Size	Length	Shape
h(E)	24	#8	14'-4"	
h1(E)	36	#6	13'-6"	
p(E)	16	#8	21'-2"	
p1(E)	4	#8	15'-0"	
s2(E)	32	#4	12'-5"	
s3(E)	2	#4	12'-6"	
u(E)	8	#6	7'-10"	
u1(E)	16	#5	7'-8"	
v1(E)	69	#5	4'-4"	
v2(E)	11	#5	14'-7"	
v3(E)	11	#5	16'-0"	
Structure Excavation		Cu. Yd.	172	
Concrete Structures		Cu. Yd.	22	
Reinforcement Bars, Epoxy Coated		Pound	3880	
Furnishing Steel Piles, HP12x74		Foot	250	
Driving Steel Piles		Foot	250	
Test Pile, HP12x74		Each	1	
Concrete Encasement		Cu. Yd.	2.10	

For details of piles and Concrete Encasement, see sheet 19 of 23.



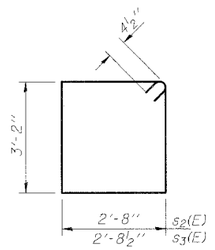
FIELD CUTTING DIAGRAM - EAST WING

Order v3(E) full length. Cut as shown and use remainder of bars in opposite face.

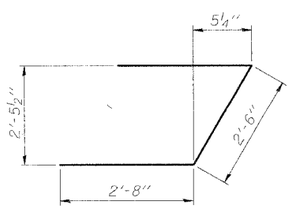


FIELD CUTTING DIAGRAM - WEST WING

Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



BARS s2(E) & s3(E)



BAR u(E)

SOUTH ABUTMENT
OUTER BELT WEST OVER TRIBUTARY
TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071
DATE 03/29/07

LAYOUT	MWM	12/29/07
DRAWN	DMP	01/12/07
RECHECKED	JJT	01/15/07

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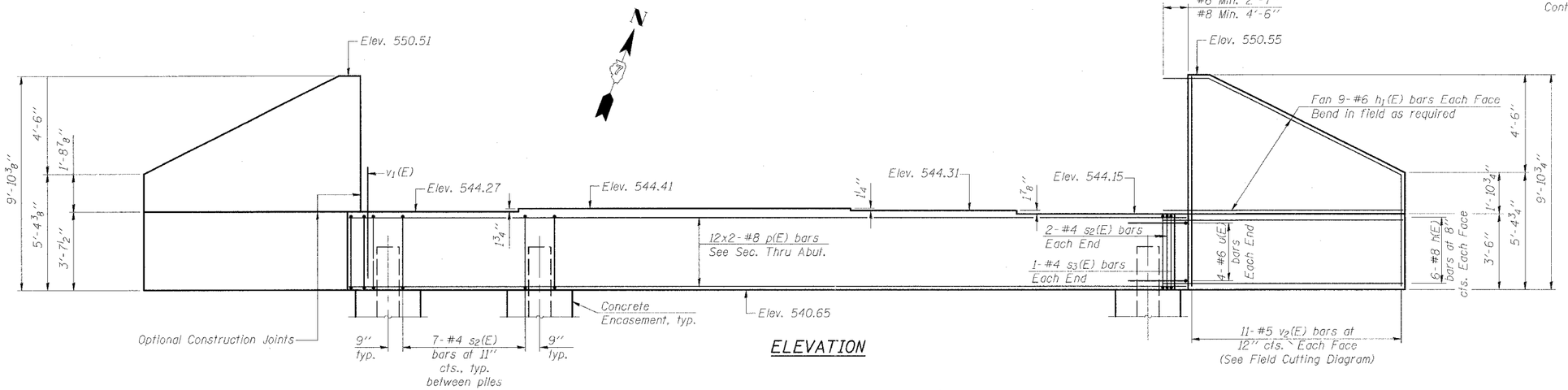
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	55
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		

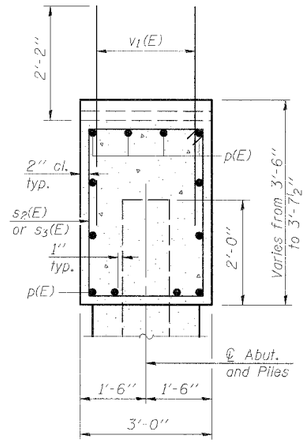
SHEET NO. 17
23 SHEETS

Contract #95503 * 03-00098-00-BR

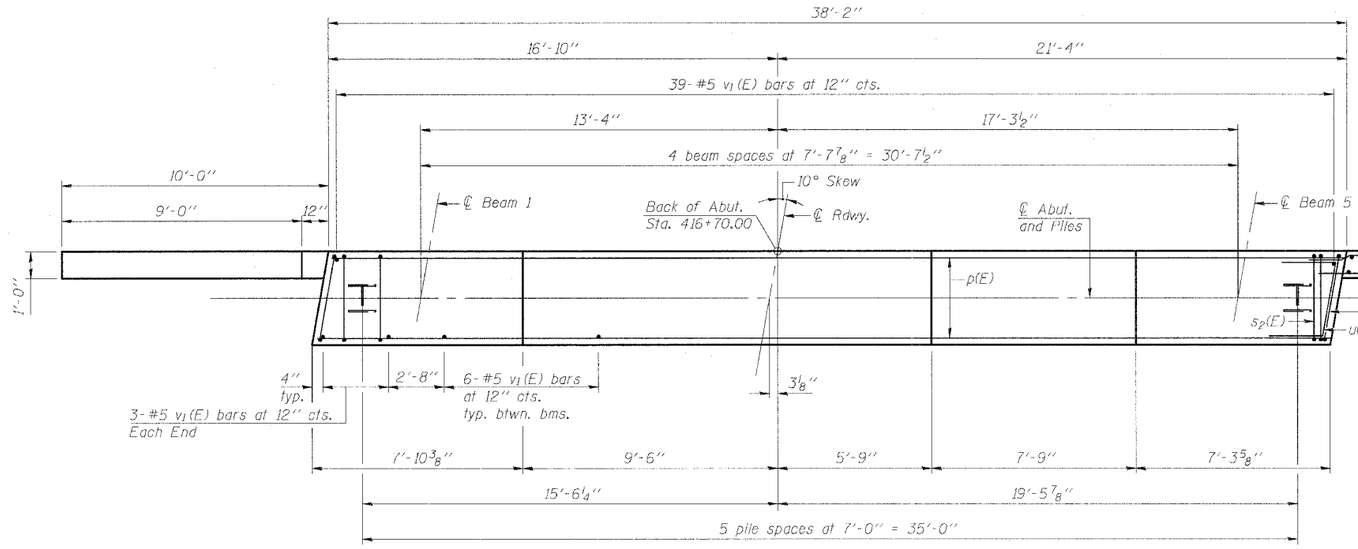
Notes: Pour steps monolithically with cap.



ELEVATION



SEC. THRU ABUT.



PLAN

MIN. BAR LAPS

#8 Bar - 4'-6"

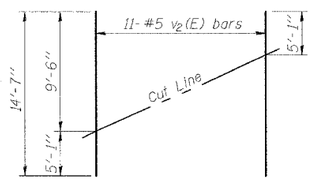
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	24	#8	14'-4"	
h1(E)	36	#6	13'-6"	
p(E)	16	#8	21'-2"	
s2(E)	32	#4	12'-5"	
s3(E)	2	#4	12'-6"	
u(E)	8	#6	7'-10"	
v1(E)	69	#5	4'-4"	
v2(E)	22	#5	14'-7"	
Structure Excavation		Cu. Yd.	170	
Concrete Structures		Cu. Yd.	21.3	
Reinforcement Bars, Epoxy Coated		Pound	3580	
Furnishing Steel Piles, HP12x74		Foot	340	
Driving Steel Piles		Foot	340	
Test Pile, HP12x74		Each	1	
Concrete Encasement		Cu. Yd.	2.10	

For details of piles and Concrete Encasement, see sheet 19 of 23.

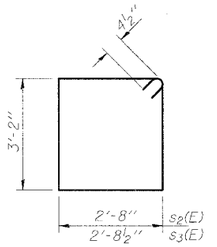
PILE DATA

Type: HP12x74
Nominal Required Bearing: 589 kips
Allowable Resistance Available: 196 kips
Est. Length: 68 ft.
No. Production Piles: 5
No. Test Piles: 1

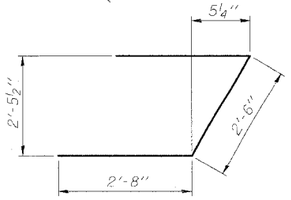


FIELD CUTTING DIAGRAM

Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



BARS s2(E) & s3(E)



BAR u(E)

NORTH ABUTMENT
OUTER BELT WEST OVER TRIBUTARY
TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071

DATE 03/29/07

LAYOUT	MNM	12/20/07
DRAWN	DAP	01/12/07
REVIEWED	JJT	01/15/07

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	56
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 18
23 SHEETS

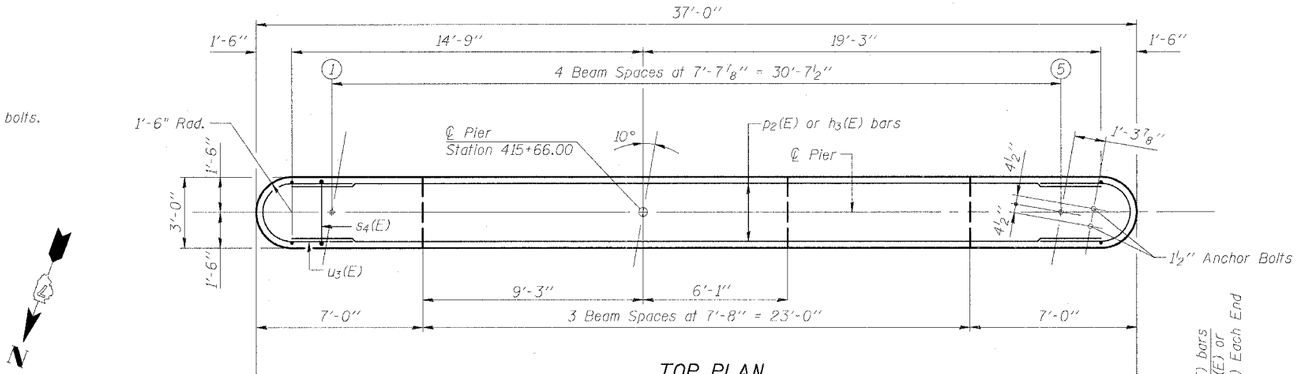
Contract #95503

* 03-00098-00-BR

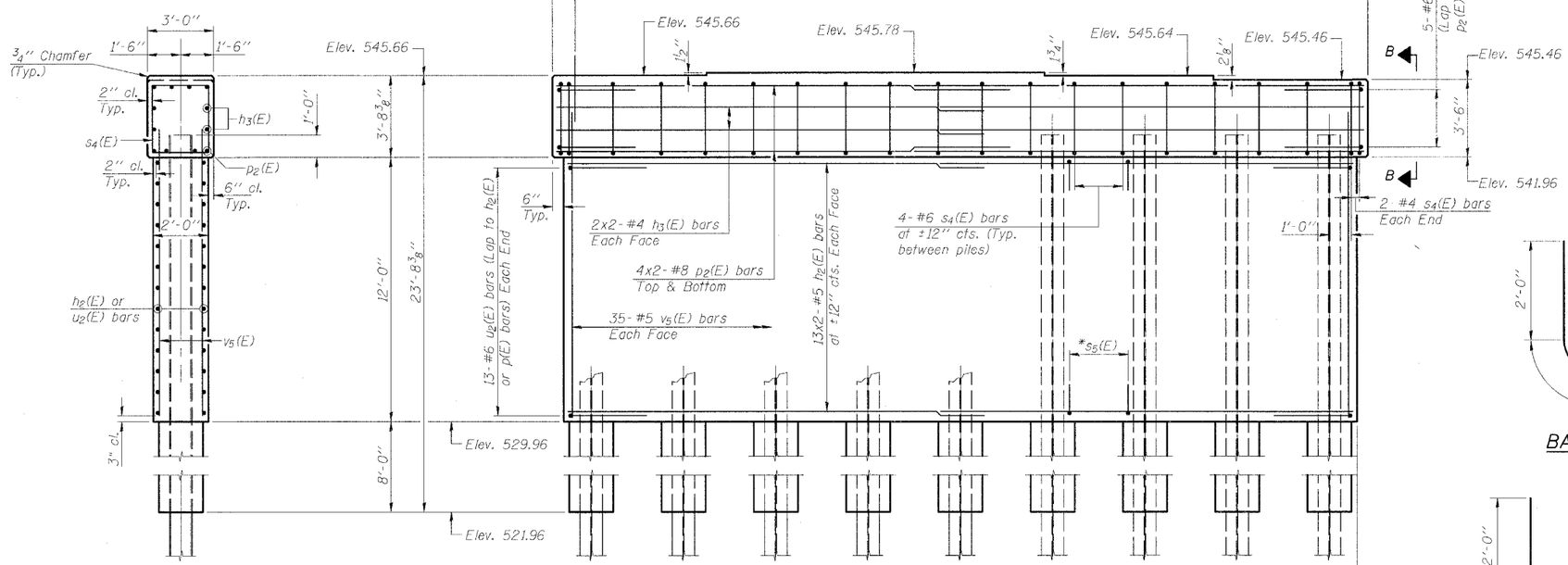
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of piles, see sheet 19 of 23.

MIN. BAR LAPS

#4 Bar - 1'-4"
#5 Bar - 1'-8"
#6 Bar - 2'-0"
#8 Bar - 3'-5"



TOP PLAN



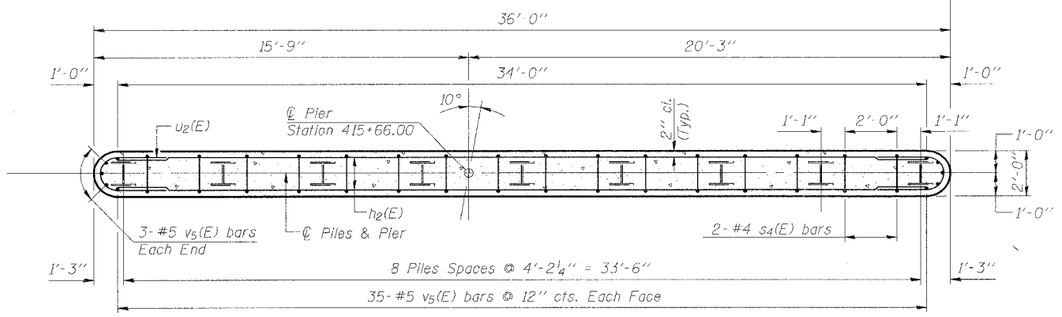
END VIEW

ELEVATION

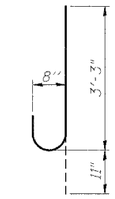
(Looking North Upstation)

PILE DATA

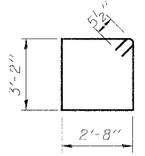
Type: HP12x84
Nominal Required Bearing: 664 kips
Allowable Resistance Available: 210 kips
Est. Length: 68 ft.
No. Production Piles: 8
No. Test Piles: 1



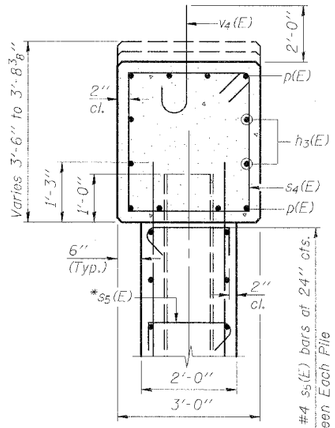
PILE LAYOUT & ENCASEMENT WALL PLAN



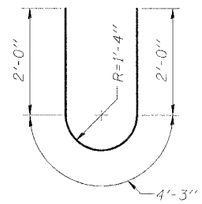
BAR v4(E)



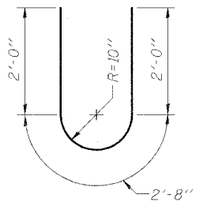
BAR s4(E)



SEC. B-B



BAR u3(E)



BAR u2(E)

BAR s5(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h2(E)	26	#5	17'-10"	
h3(E)	8	#4	17'-8"	
p2(E)	16	#8	18'-9"	
s4(E)	36	#6	12'-7"	
s5(E)	112	#4	2'-9"	
u2(E)	34	#6	6'-8"	
u3(E)	10	#6	8'-3"	
v4(E)	24	#8	4'-2"	
v5(E)	76	#5	13'-0"	
Structure Excavation		Cu. Yd.	27	
Concrete Structures		Cu. Yd.	46.6	
Reinforcement Bars, Epoxy Coated		Pound	4030	
Furnishing Steel Piles HP12x84		Foot	544	
Driving Steel Piles		Foot	544	
Test Piles Steel, HP12x84		Each	1	
Concrete Encasement		Cu. Yd.	8.4	

* Alternate placement of 90° hooks in each face of encasement in each vertical line of s5(E) bars.

PIER
OUTER BELT WEST OVER TRIBUTARY TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071

DATE 03/29/07

LAYOUT	MWM	12/20/07
DRAWN	DAP	01/12/07
REVIEWED	JJT	01/15/07

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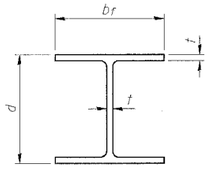
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	57
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT=		

SHEET NO. 19
23 SHEETS

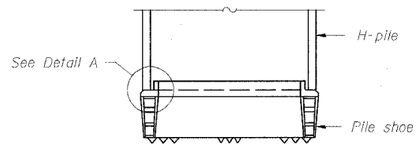
Contract #95503

* 03-00098-00-BR

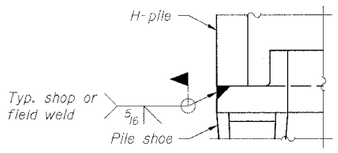


STEEL PILE TABLE

Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"

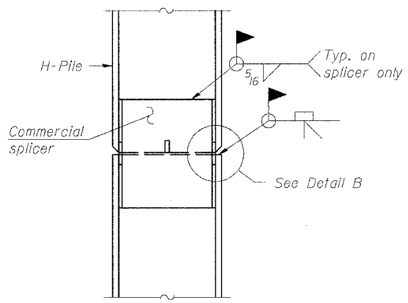


ELEVATION

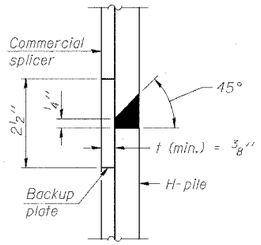


DETAIL A

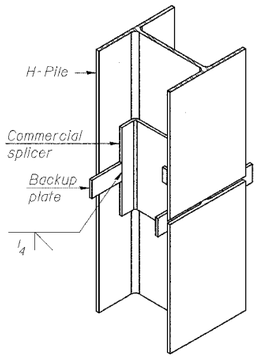
H-PILE SHOE ATTACHMENT



ELEVATION

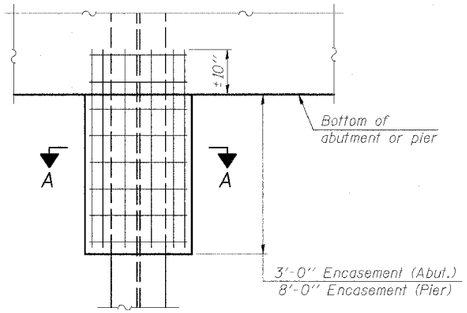


DETAIL "B"



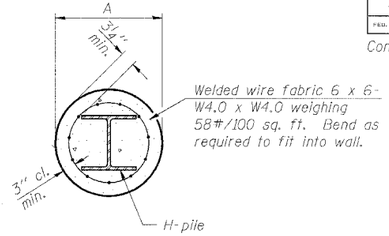
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



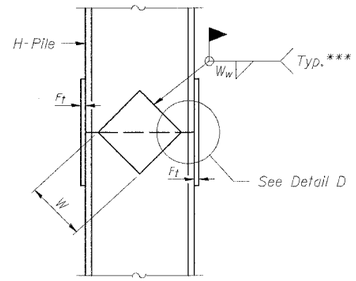
ELEVATION

PILE ENCASEMENT

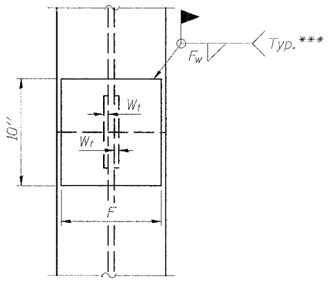


Note:
Forms for encasement may be omitted when soil conditions permit.

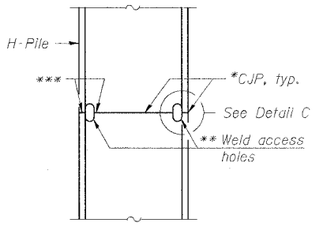
SECTION A-A



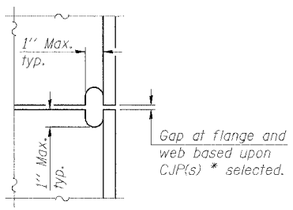
ELEVATION



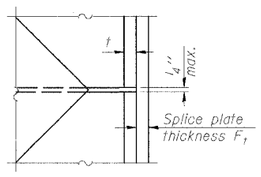
END VIEW



ELEVATION



DETAIL C



DETAIL D

COMPLETE PENETRATION WELD SPLICE

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

* Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.

** Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.

*** Interrupt welds 1/4" from end of each pile.

WELDED PLATE FIELD SPLICE

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

STEEL H-PILES
OUTER BELT WEST OVER TRIBUTARY TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071

DATE 03/29/07

LAYOUT	MNM	12/20/07
DRAWN	DAP	01/12/07
REVIEWED	AJT	01/15/07

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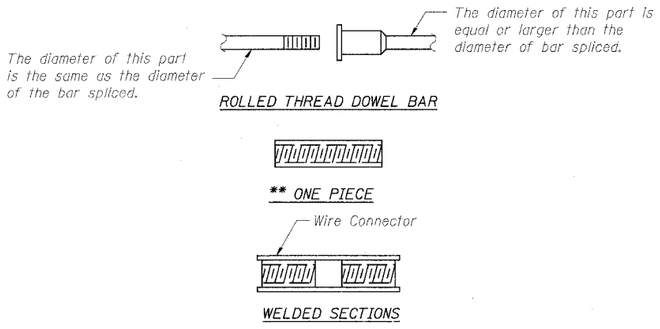
ROUTE NO.	SECTION	COUNTY	FEDERAL SHEETING	SHEET NO.
-	*	EFFINGHAM	95	58
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT=	

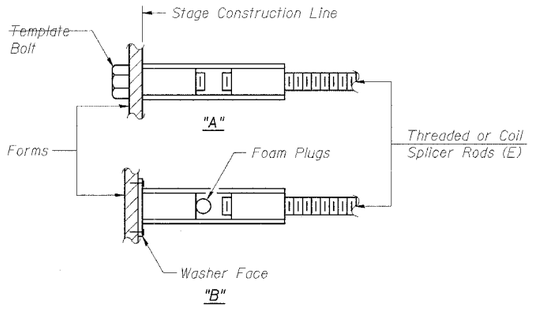
SHEET NO. 20
23 SHEETS

Contract #95503 * 03-00098-00-BR



BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

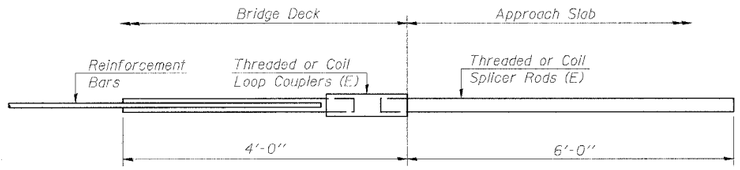
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$

② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$

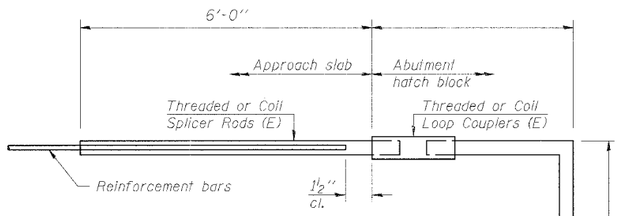
Where f_y = Yield strength of lapped reinforcement bars in ksi.
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



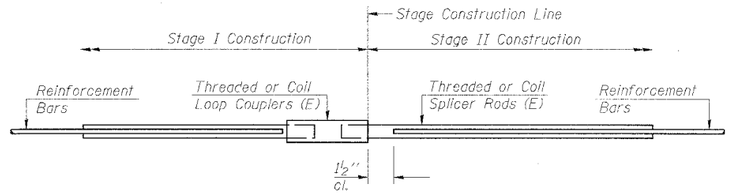
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 62



FOR STUB ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 0



STANDARD

Bar Size	No. Assemblies Required	Location
	0	

BAR SPLICER ASSEMBLY DETAILS
OUTER BELT WEST OVER TRIBUTARY
TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071

DATE 03/29/07

LAYOUT	MNM	12/20/07
DRAWN	DAP	01/12/07
REVIEWED	JJT	01/15/07

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BSD-1 11-1-06

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	59
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT -		

SHEET NO. 21
23 SHEETS

Contract #95503

* 03-00098-00-BR

Illinois Department of Transportation
Division of Highways
Hanson Professional Services Inc.

SOIL BORING LOG

Page 1 of 1

Date 12/06

ROUTE Outer Belt West DESCRIPTION Outer Belt West Over Tributary to Little Wabash River LOGGED BY RGC

SECTION 03-00098-00-BR LOCATION SW 1/4, SEC. 25, TWP. 8 N, RNG. 6 E

COUNTY Effingham DRILLING METHOD 3-3/4" HSA HAMMER TYPE auto

STRUCT. NO. 025-6009
Station 415+66.00

BORING NO. B-07
Station 413+98
Offset 2.00ft Rt.
Ground Surface Elev. 581.40 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter dry ft
Upon Completion dry ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Dark brown CLAYEY TOPSOIL 580.90			
Very stiff, Yellow brown fine SAND SILTY CLAY, trace small gravel	10		
	20		13.7
-5	21		
	5		
	8		11.3
-10	14		
569.40			
Hard, brown, fine SANDY CLAYEY SILT, trace coarse sand and some large gravel	18		
	31	11.3	7.8
-15	39	B	
563.40			
Hard, gray, fine SANDY CLAYEY SILT, trace coarse sand and small gravel	14		
	21	12.0	8.8
-20	32	S	
Hard, gray, fine SANDY CLAYEY SILT, trace coarse sand and small gravel (continued)			
	7		
	9	5.2	11.0
-25	14	S	
	5		
	6	7.9	10.6
	9	S	
	5		
	7	8.5	11.2
-30	10	S	
	4		
	7	9.6	10.4
-35	10	B	
	5		
	6	8.2	9.9
541.40 -40	10	BS	

End of Boring

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Hanson Professional Services Inc.

SOIL BORING LOG

Page 1 of 2

Date 12/06

ROUTE Outer Belt West DESCRIPTION Outer Belt West Over Tributary to Little Wabash River LOGGED BY RGC

SECTION 03-00098-00-BR LOCATION SW 1/4, SEC. 25, TWP. 8 N, RNG. 6 E

COUNTY Effingham DRILLING METHOD 3-3/4" HSA HAMMER TYPE auto

STRUCT. NO. 025-6009
Station 415+66.00

BORING NO. B-08
Station 414+98
Offset 53.00ft Lt.
Ground Surface Elev. 528.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter dry ft
Upon Completion dry ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Brown SILTY CLAY, trace sand and gravel (FILL) 524.50			
Hard, gray fine SANDY CLAYEY SILT, trace to some coarse sand and small gravel	7		
	18	13.2	9.3
-5	20	S	
	7		
	17	11.6	9.5
-10	19	S	
	5		
	8	9.5	11.1
-15	11	S	
	5		
	8	8.7	10.9
-20	15	B	
Hard, gray fine SANDY CLAYEY SILT, trace to some coarse sand and small gravel (continued)			
	4		
	5	5.2	14.9
-25	12	B	
500.00			
Very stiff, gray fine SANDY SILT, trace clay, some coarse sand and small gravel	9		
	17	3.9	7.9
-30	21	B	
497.00			
Very stiff, geenish gray and gray very fine SANDY SILTY CLAY, trace coarse sand and silt seams	4		
	5	3.7	19.9
-35	7	B	
492.00			
Very stiff, gray fine SANDY SILTY CLAY, trace coarse sand and small gravel	3		
	4	3.5	16.9
-40	6	B	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Hanson Professional Services Inc.

SOIL BORING LOG

Page 2 of 2

Date 12/06

ROUTE Outer Belt West DESCRIPTION Outer Belt West Over Tributary to Little Wabash River LOGGED BY RGC

SECTION 03-00098-00-BR LOCATION SW 1/4, SEC. 25, TWP. 8 N, RNG. 6 E

COUNTY Effingham DRILLING METHOD 3-3/4" HSA HAMMER TYPE auto

STRUCT. NO. 025-6009
Station 415+66.00

BORING NO. B-08
Station 414+98
Offset 53.00ft Lt.
Ground Surface Elev. 528.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter dry ft
Upon Completion dry ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Very stiff, gray fine SANDY SILTY CLAY, traco coarse sand and small gravel (continued)			
	6		
	9	4.9	14.1
-45	11	B	
	4		
	5	2.7	18.3
478.00 -50	8	B	
End of Boring			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

LAYOUT	MKM	12/20/07
DRAWN	DAP	01/12/07
REVIEWED	JJT	01/15/07

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BORINGS (SHEET 1)
OUTER BELT WEST OVER TRIBUTARY
TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071

DATE 03/29/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	60
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 22
23 SHEETS

Contract #95503

* 03-00098-00-BR

Illinois Department of Transportation
Division of Highways
Hanson Professional Services Inc.

SOIL BORING LOG

Date 1/3/06

ROUTE Outer Belt West DESCRIPTION Outer Belt West Over Tributary to Little Wabash River LOGGED BY RGC

SECTION 03-00098-00-BR LOCATION SW 1/4, SEC. 25, TWP. 8 N, RNG. 6 E

COUNTY Effingham DRILLING METHOD 3-3/4" HSA HAMMER TYPE auto

STRUCT. NO. 025-6009
Station 415+66.00

BORING NO. B-09
Station 415+72
Offset 56.00ft Rt.
Ground Surface Elev. 532.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encountr.: 528.5 ft
Upon Completion dry ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Dark brown CLAYEY TOPSOIL 531.60			
Medium dense, brown SILTY fine to coarse SAND, trace small gravel and sandstone fragments			
-5	5		12.2
	8		
524.00			
Hard, gray fine SANDY SILT, some clay, coarse sand and small gravel	4		
-10	10		10.9
	10		
	7		
-15	14	11.1	7.9
	16	BS	
	5		
-20	11	5.4	7.3
	13	BS	
Hard, gray fine SANDY SILT, some clay, coarse sand and small gravel (continued)			
-25	17	6.6	9.0
	20	S	
499.00			
Very stiff, greenish gray and gray fine SANDY SILTY CLAY, trace small gravel	3		
-35	5	3.7	18.7
	8	S	
493.50			
Hard, gray, fine SANDY CLAYEY SILT, trace coarse sand and small gravel	3		
492.00 -40	6	5.4	14.4
	8	BS	
End of Boring			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Hanson Professional Services Inc.

SOIL BORING LOG

Date 1/3/06

ROUTE Outer Belt West DESCRIPTION Outer Belt West Over Tributary to Little Wabash River LOGGED BY RGC

SECTION 03-00098-00-BR LOCATION SW 1/4, SEC. 25, TWP. 8 N, RNG. 6 E

COUNTY Effingham DRILLING METHOD 3-3/4" HSA HAMMER TYPE auto

STRUCT. NO. 025-6009
Station 415+66.00

BORING NO. B-10
Station 415+80
Offset 60.00ft Rt.
Ground Surface Elev. 532.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encountr. 528.0 ft
Upon Completion dry ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Dark brown CLAYEY TOPSOIL 531.40			
Medium dense, brown SILTY fine to coarse SAND, sandstone fragments			
-5	4		9.6
	7		
524.50			
Hard, gray, fine SANDY CLAYEY SILT, trace coarse sand and small gravel	7		
-10	14		11.0
	14		
	5		
-15	7	7.0	11.7
	12	B	
	5		
-20	8	9.7	10.7
	11	B	
Hard, gray, fine SANDY CLAYEY SILT, trace coarse sand and small gravel (continued)			
-25	8	8.3	12.3
	11	B	
-30	8	5.0	12.2
	9	BS	
-35	6	5.6	15.5
	8	BS	
-40	5	4.5	14.9
	9	BS	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penstrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Hanson Professional Services Inc.

SOIL BORING LOG

Date 1/3/06

ROUTE Outer Belt West DESCRIPTION Outer Belt West Over Tributary to Little Wabash River LOGGED BY RGC

SECTION 03-00098-00-BR LOCATION SW 1/4, SEC. 25, TWP. 8 N, RNG. 6 E

COUNTY Effingham DRILLING METHOD 3-3/4" HSA HAMMER TYPE auto

STRUCT. NO. 025-6009
Station 415+66.00

BORING NO. B-10
Station 415+80
Offset 60.00ft Rt.
Ground Surface Elev. 532.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encountr. 528.0 ft
Upon Completion dry ft
After Hrs. ft

DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Hard, gray, fine SANDY CLAYEY SILT, trace coarse sand and small gravel (continued)			
-40	5	6.0	14.3
	8	BS	
-45	3		
	4	3.1	15.1
482.00 -50	7	BS	
End of Boring			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

LAYOUT	MAM	12/20/07
DRAWN	DAP	01/12/01
REVIEWED	JJT	01/15/07

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BORINGS (SHEET 2)
OUTER BELT WEST OVER TRIBUTARY
TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071

DATE 03/29/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	*	EFFINGHAM	95	61
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT=		

SHEET NO. 23
23 SHEETS

Contract #95503 * 03-00098-00-BR

Illinois Department of Transportation
Division of Highways
Hanson Professional Services Inc.

SOIL BORING LOG

Page 1 of 1

Date 1/06

ROUTE Outer Belt West DESCRIPTION Outer Belt West Over Tributary to Little Wabash River LOGGED BY RGC

SECTION 03-00098-00-BR LOCATION SW 14, SEC. 25, TWP. 8 N, RNG. 6 E

COUNTY Effingham DRILLING METHOD 3-3/4" HSA HAMMER TYPE auto

STRUCT. NO. 025-6009
Station 415+66.00

BORING NO. B-11
Station 417+50
Offset
Ground Surface Elev. 533.40 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 528.4 ft
Upon Completion 528.4 ft
After Hrs. ft

	DEPTH (ft)	BLOWS (6")	UCS Qu (tsf)	MOIST (%)
Dark brown CLAYEY TOPSOIL 532.80				
Very stiff, brown, fine SANDY CLAY		1		
		3 4	2.4 S	15.1
530.40				
Brown and gray, fine to medium SANDY CLAYEY SILT				14.5
				17.5
	-5			17.4
				13.2
527.40				
Loose, brown SILTY fine to medium SAND, some coarse sand and small gravel		4		
		3 4		15.9
		2		
		1		17.6
	-10	0		
522.40				
Hard, gray, fine SANDY SILTY CLAY, trace coarse sand and small gravel		2		
		3 5	3.5 P	12.4
		2		
		3	5.0	12.1
518.40	-15	6	B	
End of Boring				
	-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

LAYOUT	WNM	12/20/07
DRAWN	DAP	01/12/07
REVIEWED	JJT	01/15/07

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BORINGS (SHEET 3)
OUTER BELT WEST OVER TRIBUTARY
TO LITTLE WABASH RIVER
LOCAL ROAD SEC. 03-00098-00-BR
EFFINGHAM COUNTY
STATION 415+66.00
STRUCTURE NO. 025-6009

HANSON

JOB NO. 05S2071
DATE 03/29/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	62
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-405E(04)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

133+50

Ex. R\W

583.33

584.07

-2.77'

585.99

583.56

33+00

587.11

32+50

Ex. R\W

584.49

586.59

-1.28'

587.11

32+00

Ex. R\W

584.55

587.09

-0.21'

587.60

31+50

Ex. R\W

585.51

587.59

-1.70'

587.88

31+00

Ex. R\W

587.86

587.70

FAYETTE AVENUE

10'

5'

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	63
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-6096(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

134+00

134+50

135+00

135+50

136+00

136+50

584.73

584.62

584.58

584.70

584.94

585.19

585.56

582.37

585.45

582.45

4.27'

20.5'

8.0'

8.0'

LIMITS OF EARTHWORK CALCULATIONS

LIMITS OF EARTHWORK CALCULATIONS

EX. R/W

EX. UE

FAYETTE AVENUE

10'

5'

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	64
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4096(004)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

39+50

FILL AREA = 0.0 (SF)
CUT AREA = 0.7 (SF)

585.38

39+00

FILL AREA = 0.0 (SF)
CUT AREA = 9.7 (SF)

585.22

138+50

585.10

138+00

585.03

137+50

584.96

137+00

584.84

FAYETTE AVENUE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	65
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4059(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

400+00

400+50

FILL AREA = 130.0 (SF)
CUT AREA = 1.2 (SF)

401+00

FILL AREA = 75.2 (SF)
CUT AREA = 0.0 (SF)

401+50

FILL AREA = 92.9 (SF)
CUT AREA = 0.0 (SF)

402+00

FILL AREA = 74.5 (SF)
CUT AREA = 0.0 (SF)

402+50

FILL AREA = 68.0 (SF)
CUT AREA = 0.0 (SF)

584.54 582.6 585.0

584.50 582.3

584.83 582.4

585.20 582.7

585.58 583.3

Ex. R\W

R\W

OUTER BELT WEST

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	66
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4098(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

405+50
FILL AREA = 0.0 (SF)
CUT AREA = 69.5 (SF)
587.71
588.6

405+00
FILL AREA = 0.0 (SF)
CUT AREA = 65.7 (SF)
587.44
588.1

404+50
FILL AREA = 0.0 (SF)
CUT AREA = 96.9 (SF)
587.07
587.2

404+00
FILL AREA = 0.5 (SF)
CUT AREA = 48.1 (SF)
586.69
586.5

403+50
FILL AREA = 18.7 (SF)
CUT AREA = 14.8 (SF)
586.32
585.8

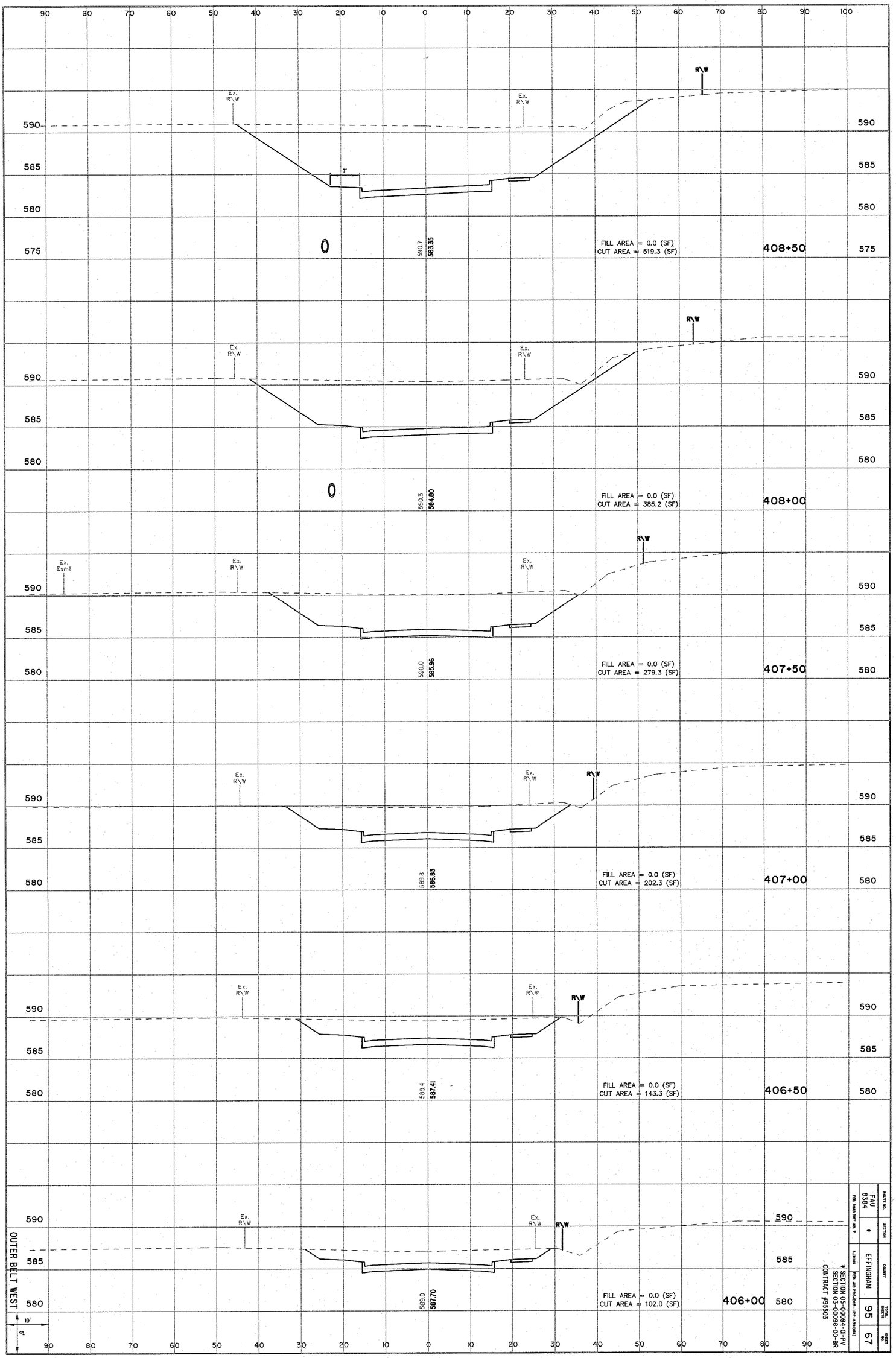
403+00
FILL AREA = 30.8 (SF)
CUT AREA = 2.4 (SF)
585.94
584.7
12" RCCP @ 1.00%

6:1

Ex. R\W

OUTER BELT WEST

10'
5'



ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
FAU 8384	*	EFFINGHAM	95	67

FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT: HPP-4000(041)

* SECTION 03-00098-01-FV
SECTION 03-00098-00-BR
CONTRACT #95303

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	68
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-409(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

410+50

FILL AREA = 0.0 (SF)
CUT AREA = 1056.1 (SF)

574.80
587.3

410+00

FILL AREA = 0.0 (SF)
CUT AREA = 937.7 (SF)

577.30
588.1

409+50

FILL AREA = 0.0 (SF)
CUT AREA = 866.2 (SF)

579.60
590.0

409+00

FILL AREA = 0.0 (SF)
CUT AREA = 682.5 (SF)

581.62
590.7

7'
4'
2%
2%

OUTER BELT WEST

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	69
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT - HPP-4018(014)		

* SECTION 03-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

Ex. R\W

R\W

589.8
569.80

FILL AREA = 0.0 (SF)
CUT AREA = 2061.4 (SF)

411+50

Ex. R\W

R\W

588.2
572.30

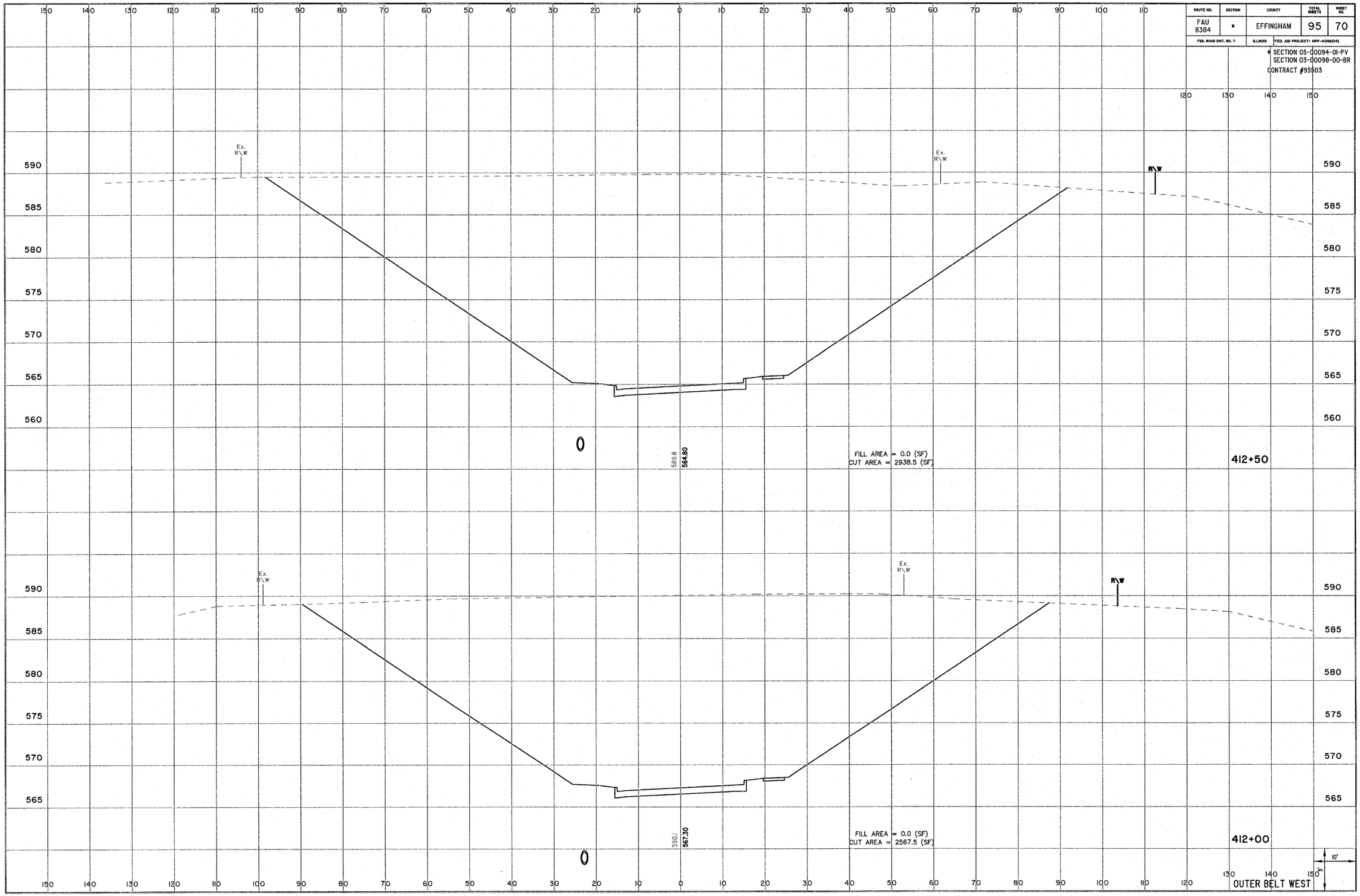
FILL AREA = 0.0 (SF)
CUT AREA = 1404.6 (SF)

411+00

OUTER BELT WEST

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	70
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-409(C04)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	71
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-405B(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

590
585
580
575
570
565
560

Ex. R\W

585.2
559.80

FILL AREA = 0.0 (SF)
CUT AREA = 2630.9 (SF)

413+50

590
585
580
575
570
565
560

Ex. R\W

Ex. R\W

587.7
562.30

FILL AREA = 0.0 (SF)
CUT AREA = 2884.8 (SF)

413+00

10'

OUTER BELT WEST

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	72
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-405(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95303

Ex. R\W

12" RCCP @ 1.00%

573.8
556.47

FILL AREA = 0.0 (SF)
CUT AREA = 1626.6 (SF)

414+22

Ex. R\W

581.4
557.41

FILL AREA = 0.0 (SF)
CUT AREA = 2085.5 (SF)

414+00

OUTER BELT WEST

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	73
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4016(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

532.7
550.66

FILL AREA = 1425.1 (SF)
CUT AREA = 34.8 (SF)

416+70

554.5
554.94

FILL AREA = 257.9 (SF)
CUT AREA = 270.9 (SF)

414+62

OUTER BELT WEST

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	74
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4098(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

555 550 545 540 535 530 525

Ex. R\W

0

533.3
550.66

FILL AREA = 1728.8 (SF)
CUT AREA = 2.0 (SF)

Ex. R\W

533.00

417+50

555 550 545 540 535 530 525

Ex. R\W

12" RCCP @ 1.00%

2:1

2:1

Ex. R\W

532.20

532.6
550.55

FILL AREA = 1451.4 (SF)
CUT AREA = 6.3 (SF)

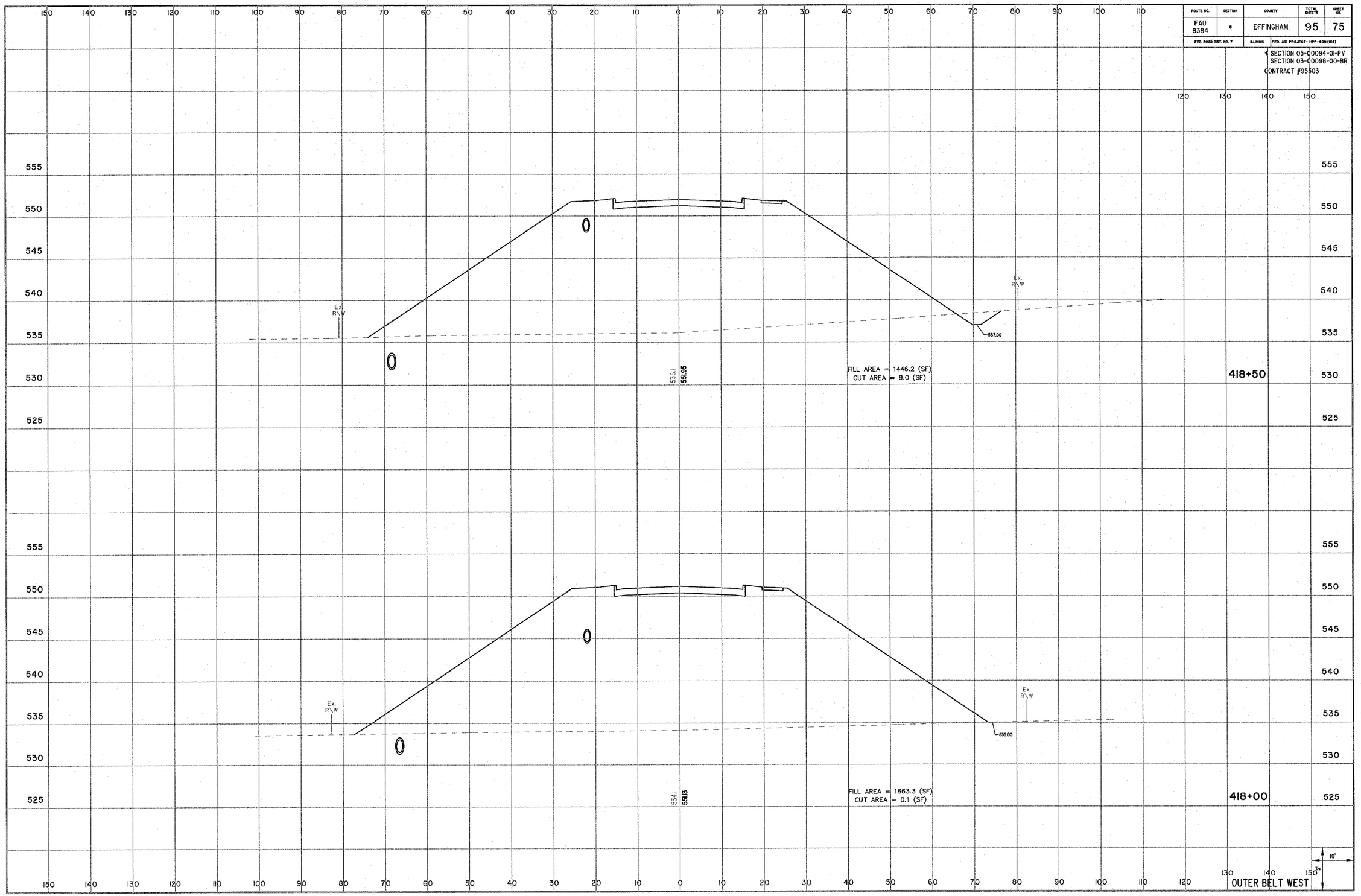
417+10

10'

OUTER BELT WEST

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	75
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4608(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	76
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4018(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

421+00

FILL AREA = 0.0 (SF)
CUT AREA = 1528.5 (SF)

561.30

578.2

420+50

FILL AREA = 0.0 (SF)
CUT AREA = 922.6 (SF)

558.81

559.2

12" RCSP @ 100%

420+00

FILL AREA = 3.6 (SF)
CUT AREA = 104.9 (SF)

556.56

557.6

419+50

FILL AREA = 88.5 (SF)
CUT AREA = 119.4 (SF)

554.66

562.6

419+00

FILL AREA = 782.9 (SF)
CUT AREA = 25.9 (SF)

553.13

543.1

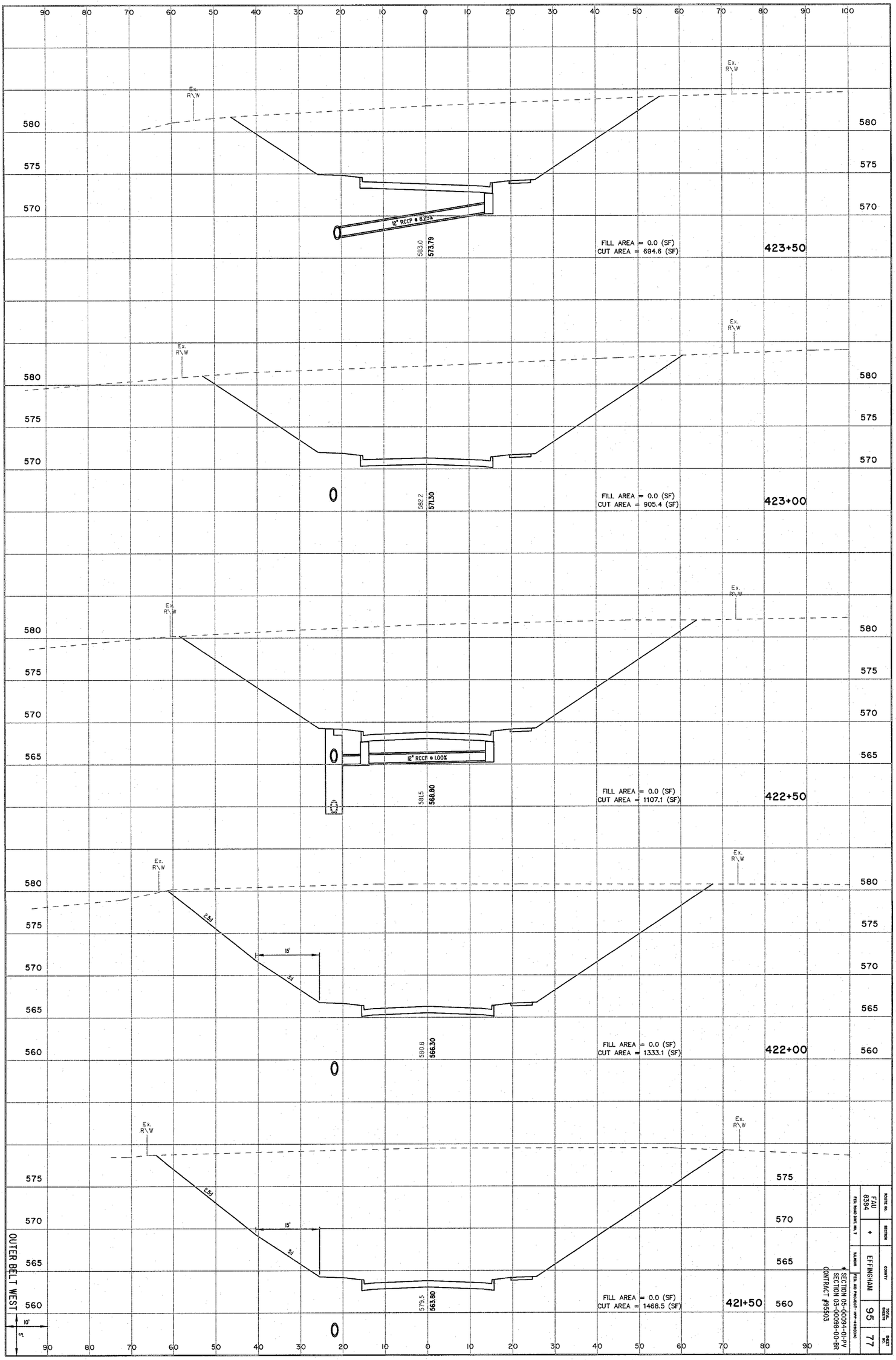
545.00

EX. R\W

OUTER BELT WEST

10'

5'



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
FAU 8384	#	EFFINGHAM	95	77
FED. ROAD DIST. NO. 7				

SECTION 03-00094-01-PV
SECTION 03-00096-00-BR
CONTRACT #95103

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	78
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- HPP-4098(014)	

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

426+00

FILL AREA = 0.0 (SF)
CUT AREA = 525.5 (SF)

590.0
582.65

425+50

FILL AREA = 0.0 (SF)
CUT AREA = 527.2 (SF)

588.9
581.40
12" RCCP @ 1.00%

425+00

FILL AREA = 0.0 (SF)
CUT AREA = 509.0 (SF)

587.1
579.90

424+50

FILL AREA = 0.0 (SF)
CUT AREA = 537.0 (SF)

585.9
578.42
12" RCCP @ 1.00%

424+00

FILL AREA = 0.0 (SF)
CUT AREA = 528.8 (SF)

583.6
576.09

OUTER BELT WEST

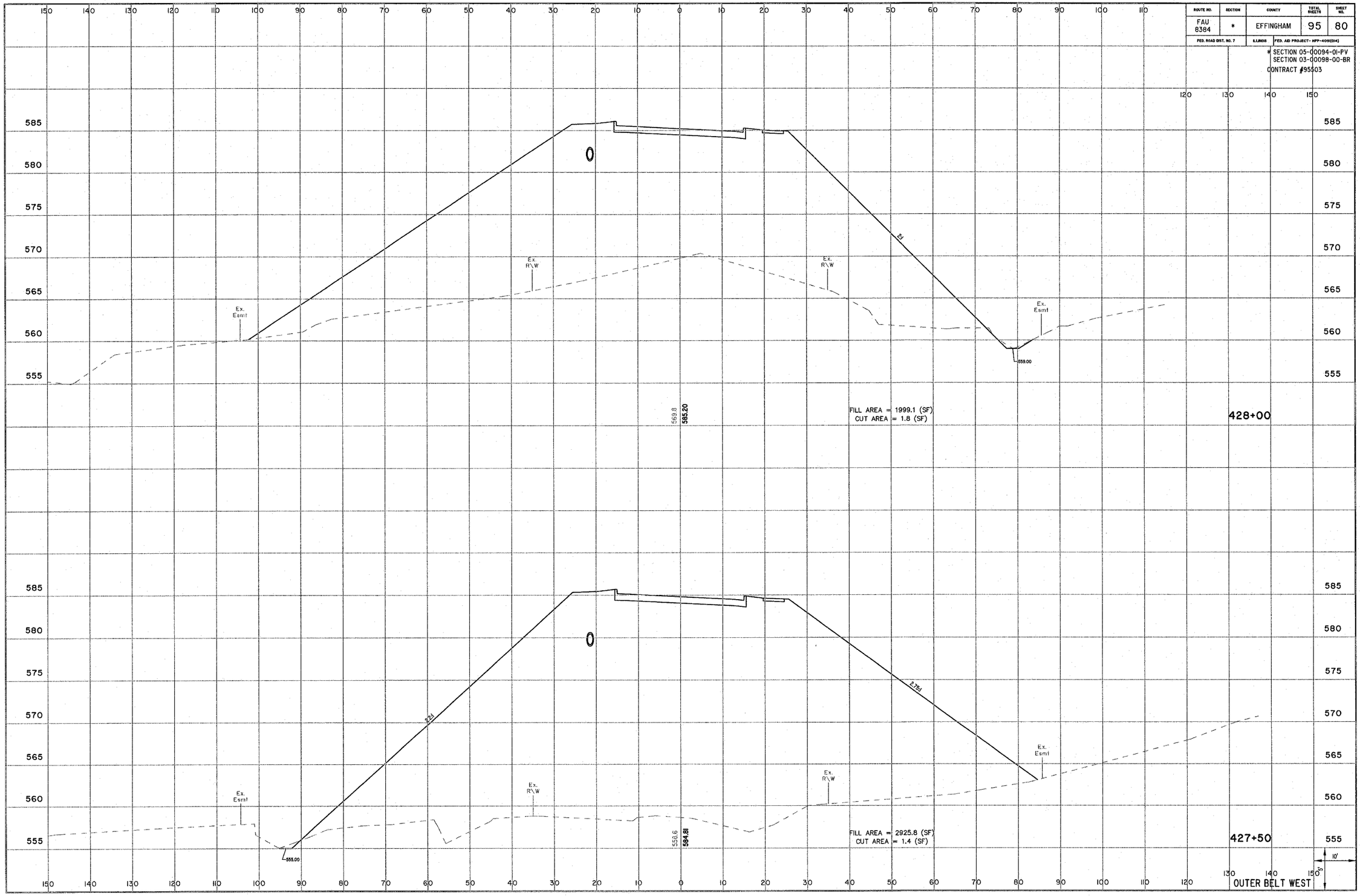
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	79
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4098(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

15'
3:1
2.25:1
0
Ex. Esmt
Ex. R\W
Ex. Esmt
Ex. R\W
562.7
584.34
FILL AREA = 2174.6 (SF)
CUT AREA = 0.0 (SF)
427+00
Ex. Esmt
Ex. R\W
Ex. R\W
Ex. Esmt
12" RCCP @ 1.00%
565.4
583.63
FILL AREA = 0.0 (SF)
CUT AREA = 111.9 (SF)
426+50
10'
5%
OUTER BELT WEST

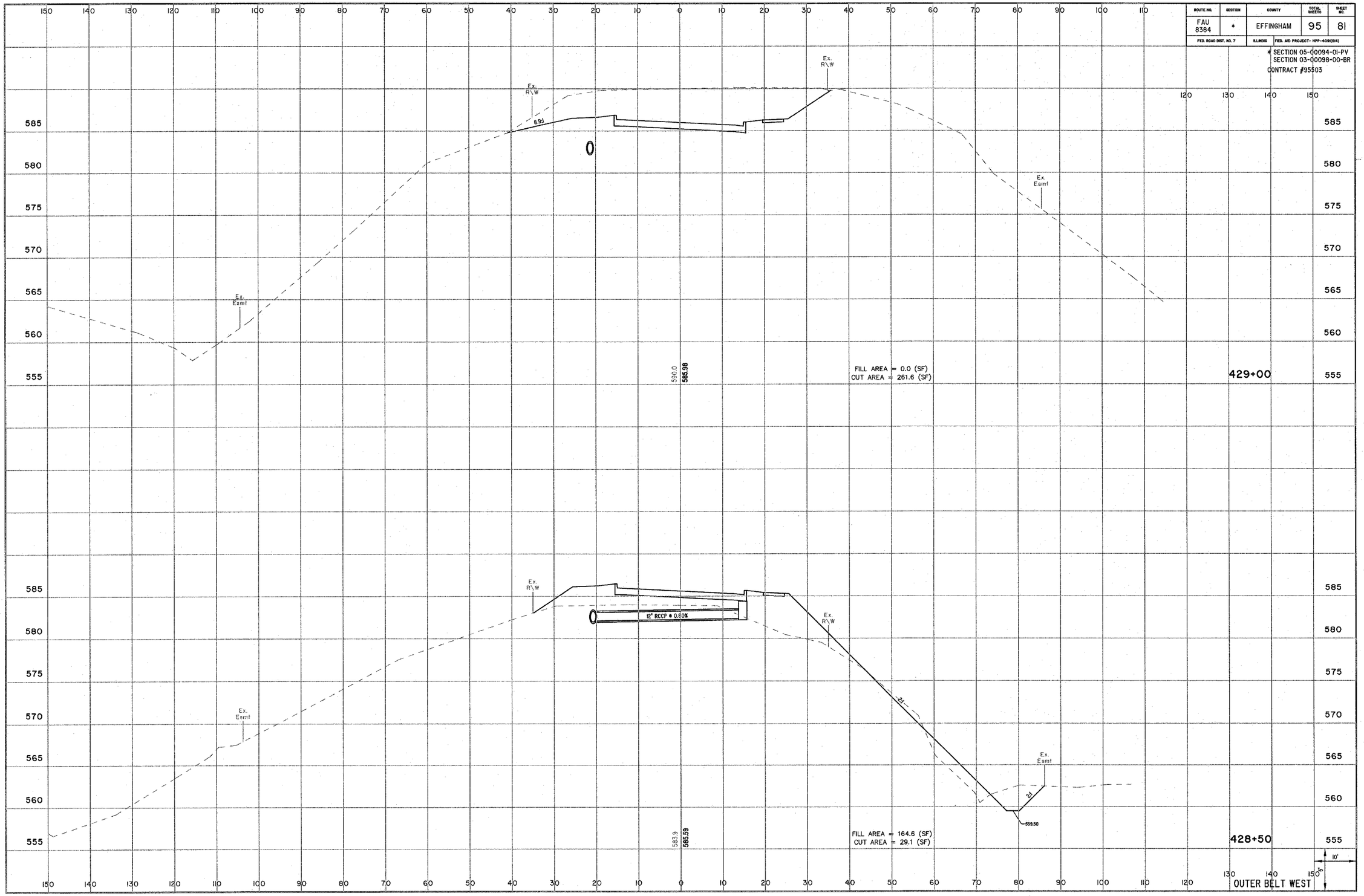
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	80
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-409(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



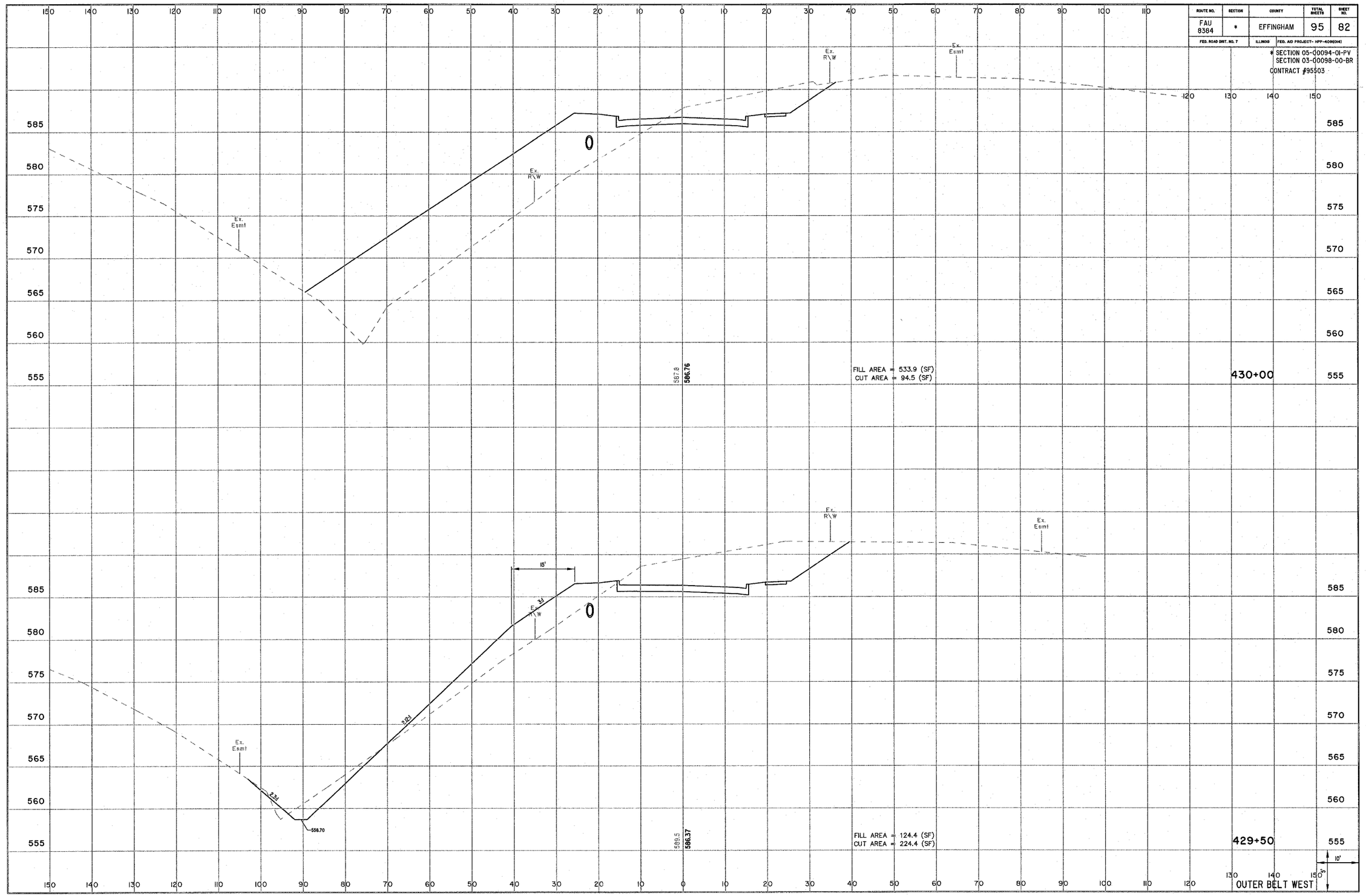
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	81
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4098(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	82
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-40W(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	83
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4098(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

585
580
575
570
565

Ex. Esmt
7.8:1
Ex. R\W
0
15:1
16.6:1
Ex. Esmt
585.00
Ex. R\W
587.54
569.7
FILL AREA = 1119.7 (SF)
CUT AREA = 0.0 (SF)
431+00

585
580
575
570
565
560
555

Ex. Esmt
2.8:1
Ex. R\W
12" RCCP @ 0.50%
20:1
Ex. R\W
1.26%
586.50
Ex. Esmt
577.1
587.05
FILL AREA = 1089.9 (SF)
CUT AREA = 0.0 (SF)
430+50

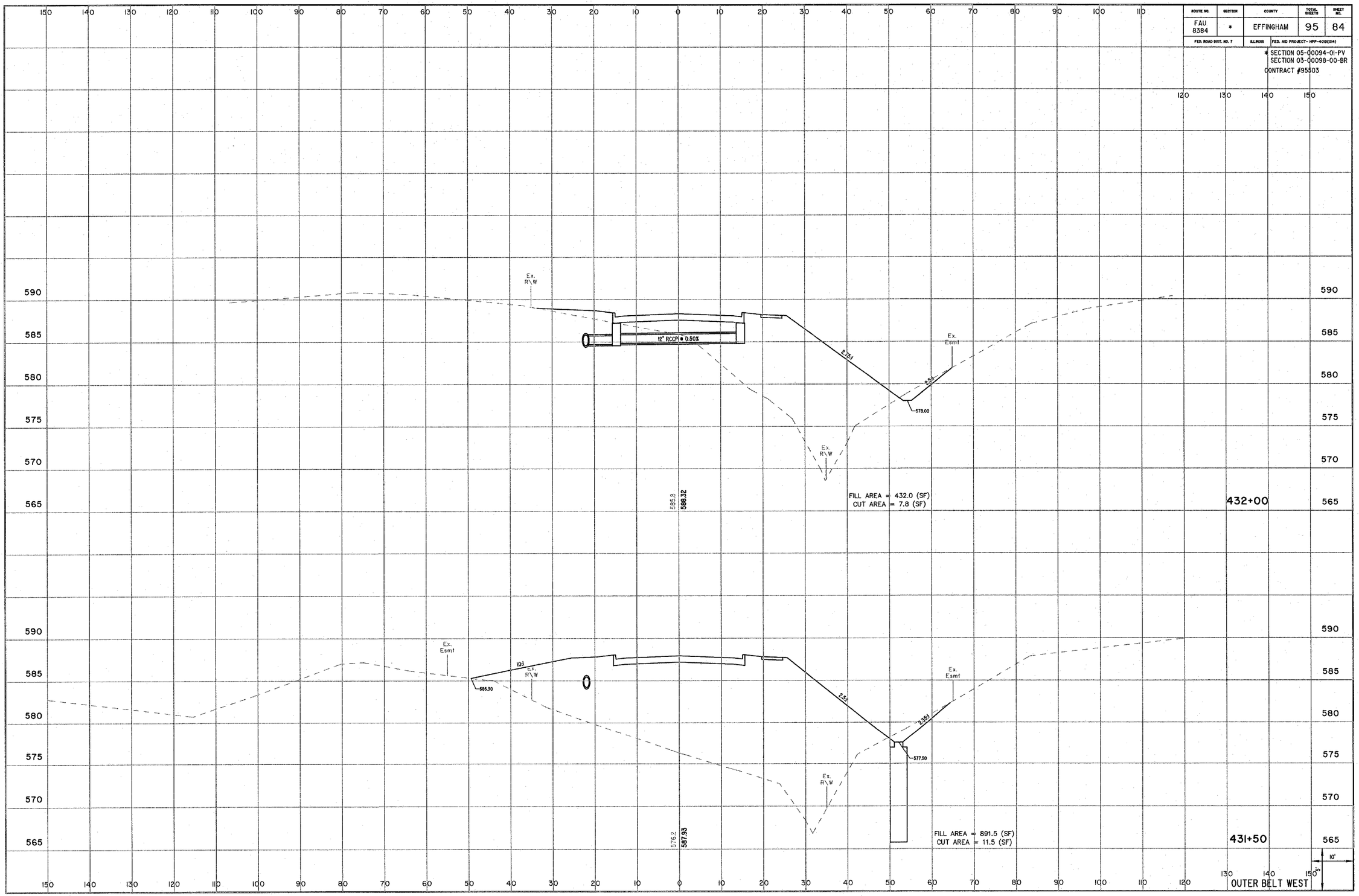
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

10'
5%

OUTER BELT WEST

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	84
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4008(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	85
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-409(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

434+50
FILL AREA = 16.7 (SF)
CUT AREA = 71.4 (SF)
590.71

434+00
FILL AREA = 195.1 (SF)
CUT AREA = 0.0 (SF)
590.07

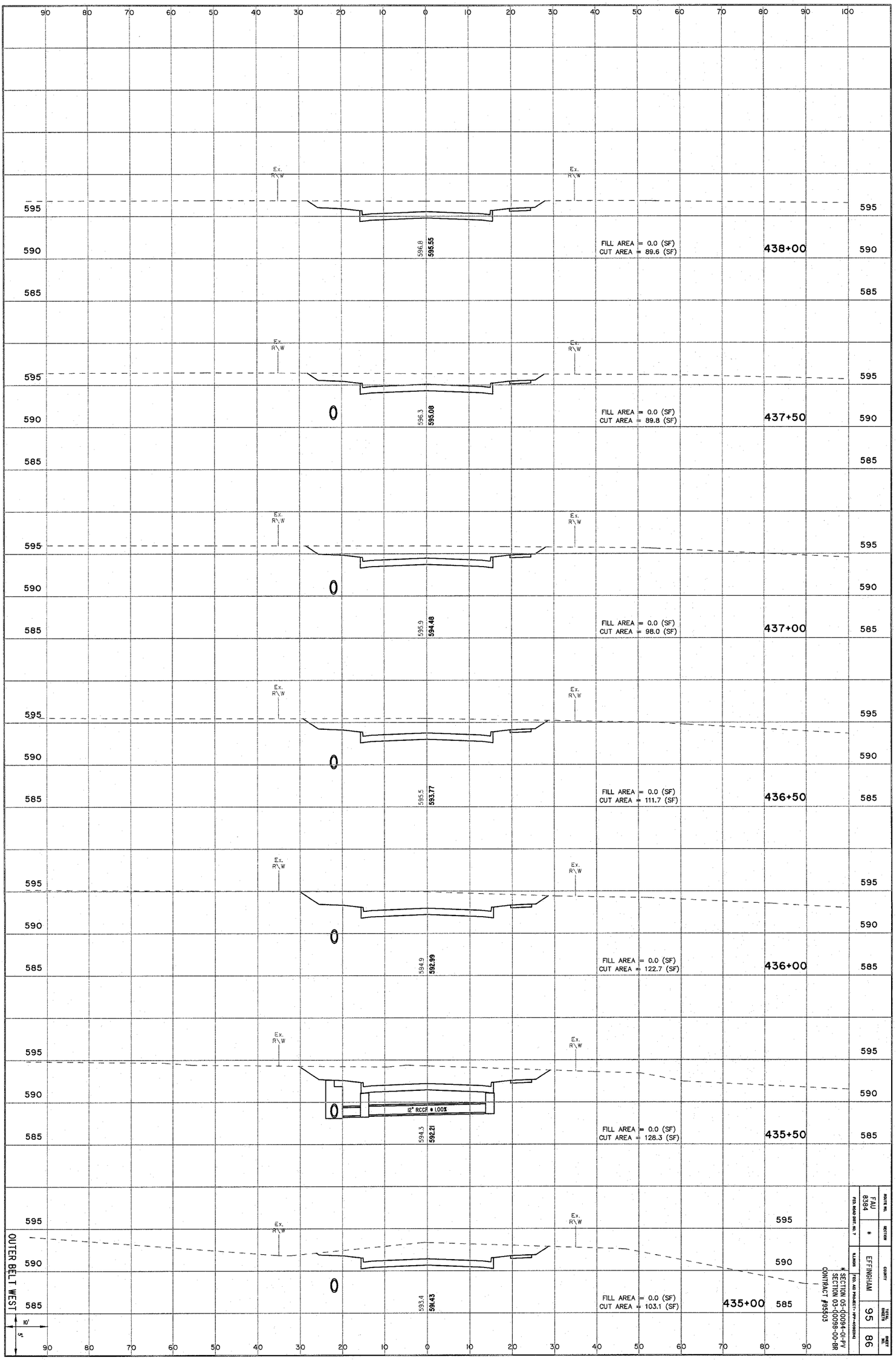
433+50
FILL AREA = 146.2 (SF)
CUT AREA = 27.4 (SF)
589.54

433+00
FILL AREA = 190.8 (SF)
CUT AREA = 47.7 (SF)
589.10

432+50
FILL AREA = 305.1 (SF)
CUT AREA = 36.9 (SF)
588.71

Ex. Esmt
Ex. R\W
578.32
578.25
384

OUTER BELT WEST



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	86
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT

* SECTION 05-00094-01-PV
SECTION 03-00099-00-BR
CONTRACT #99503

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	87
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4098(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

438+50
FILL AREA = 0.0 (SF)
CUT AREA = 95.1 (SF)
597.2
595.90

439+00
FILL AREA = 0.0 (SF)
CUT AREA = 112.6 (SF)
597.8
596.13

439+50
FILL AREA = 0.0 (SF)
CUT AREA = 140.2 (SF)
598.3
596.23

440+00
FILL AREA = 0.0 (SF)
CUT AREA = 175.3 (SF)
598.9
596.21

440+50
FILL AREA = 0.0 (SF)
CUT AREA = 184.9 (SF)
599.0
596.08

441+00
FILL AREA = 0.0 (SF)
CUT AREA = 141.3 (SF)
598.0
595.93

441+50
FILL AREA = 2.1 (SF)
CUT AREA = 61.7 (SF)
596.4
595.88

EX. R\W

OUTER BELT WEST

10'
5'

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	88
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4098(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

445+00 | 444+50 | 444+00 | 443+50 | 443+00 | 442+50 | 442+00

FILL AREA = 19.1 (SF)
CUT AREA = 4.6 (SF)

FILL AREA = 53.1 (SF)
CUT AREA = 31.2 (SF)

597.22 | 597.05 | 596.88 | 596.69 | 596.37 | 595.0 | 596.08 | 595.6 | 596.93

Ex. R\W
Ex. Esmt

OUTER BELT WEST

10'
5'

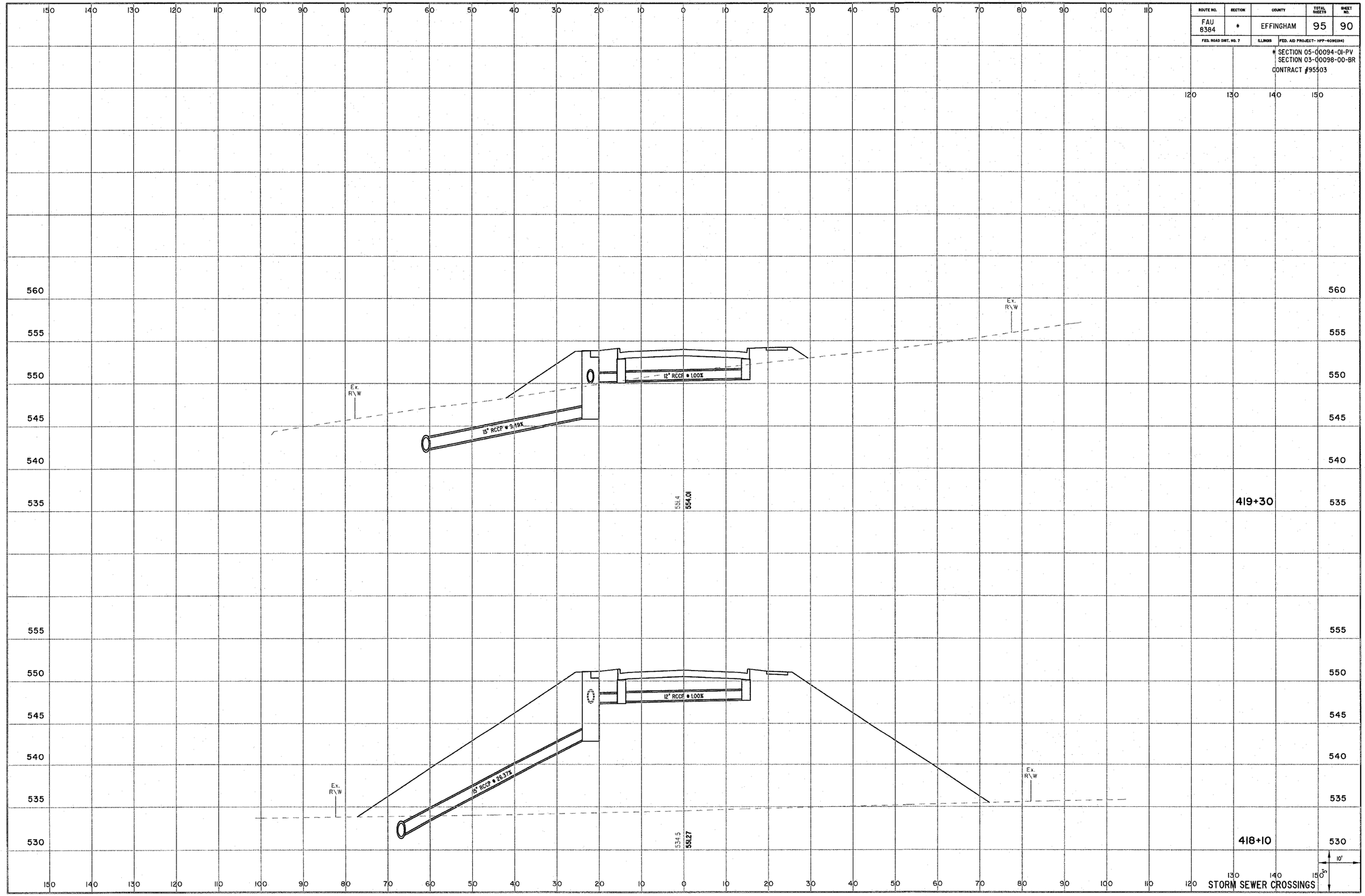
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	89
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4019(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

STORM SEWER CROSSINGS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	90
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4019(044)		

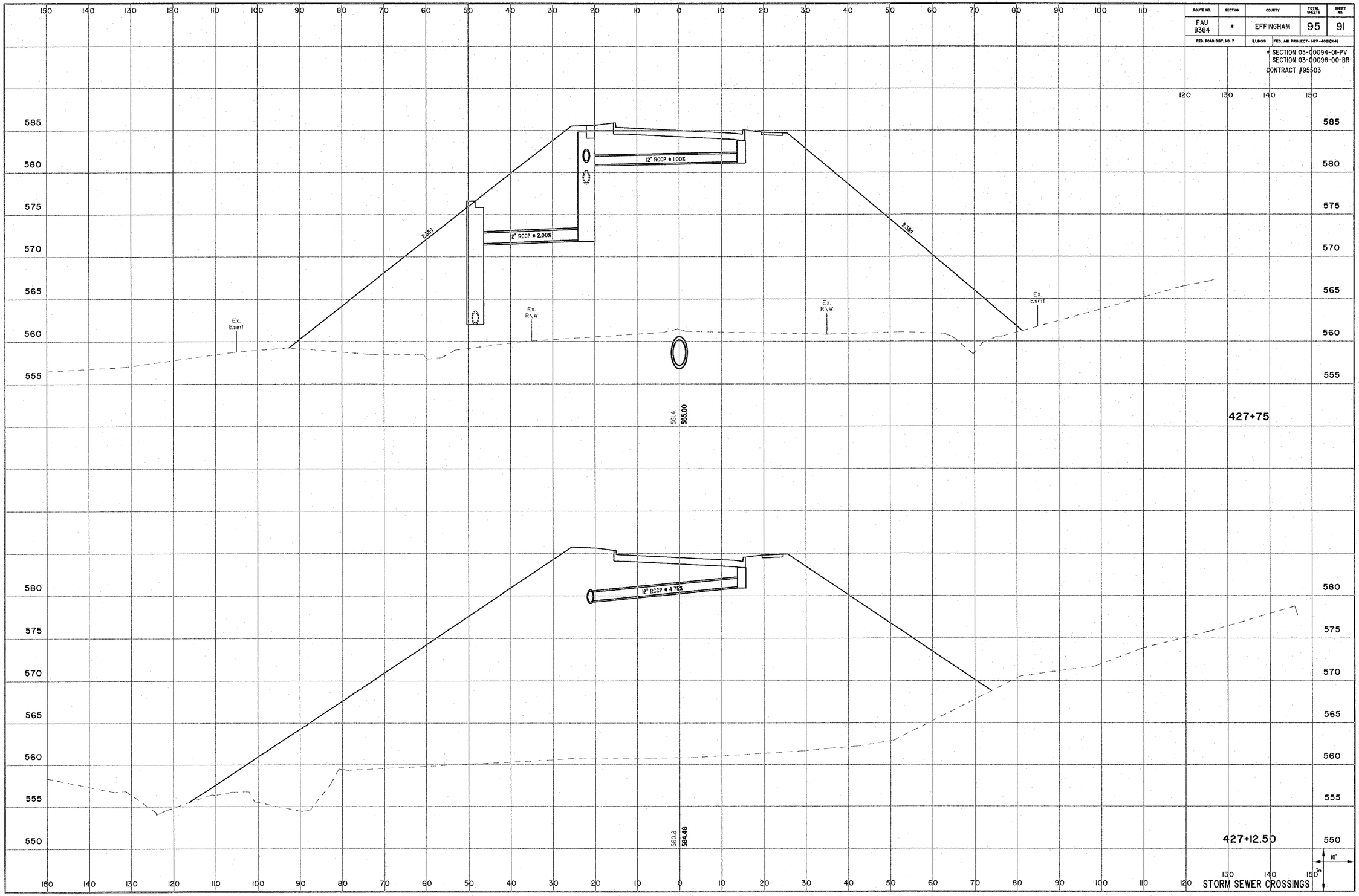
* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



STORM SEWER CROSSINGS

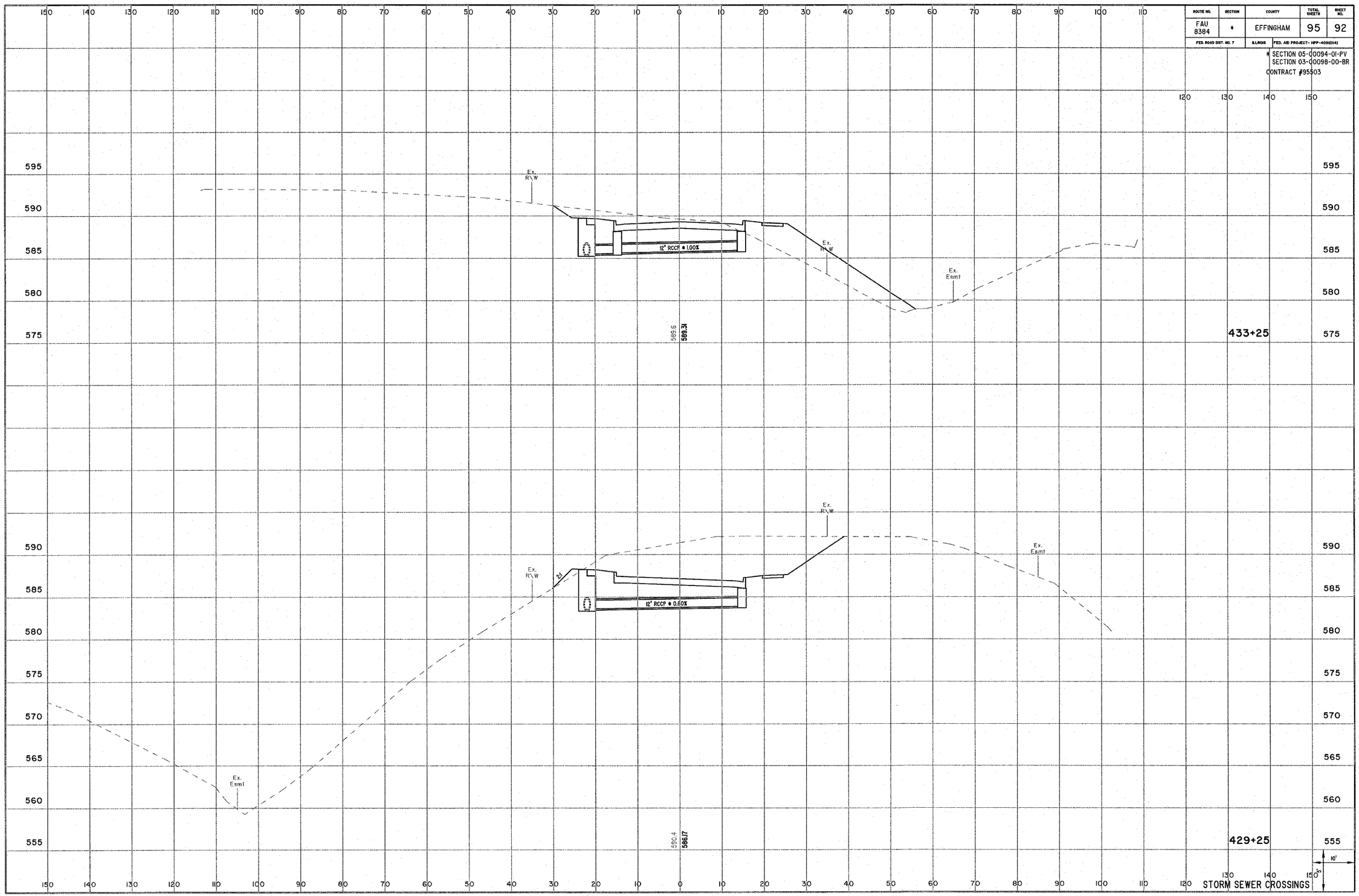
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	91
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4098(034)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	92
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4098(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	93
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4098(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

441+60

437+75

12" RCCP @ 1.00%

12" RCCP @ 1.00%

595.88

596.3

595.33

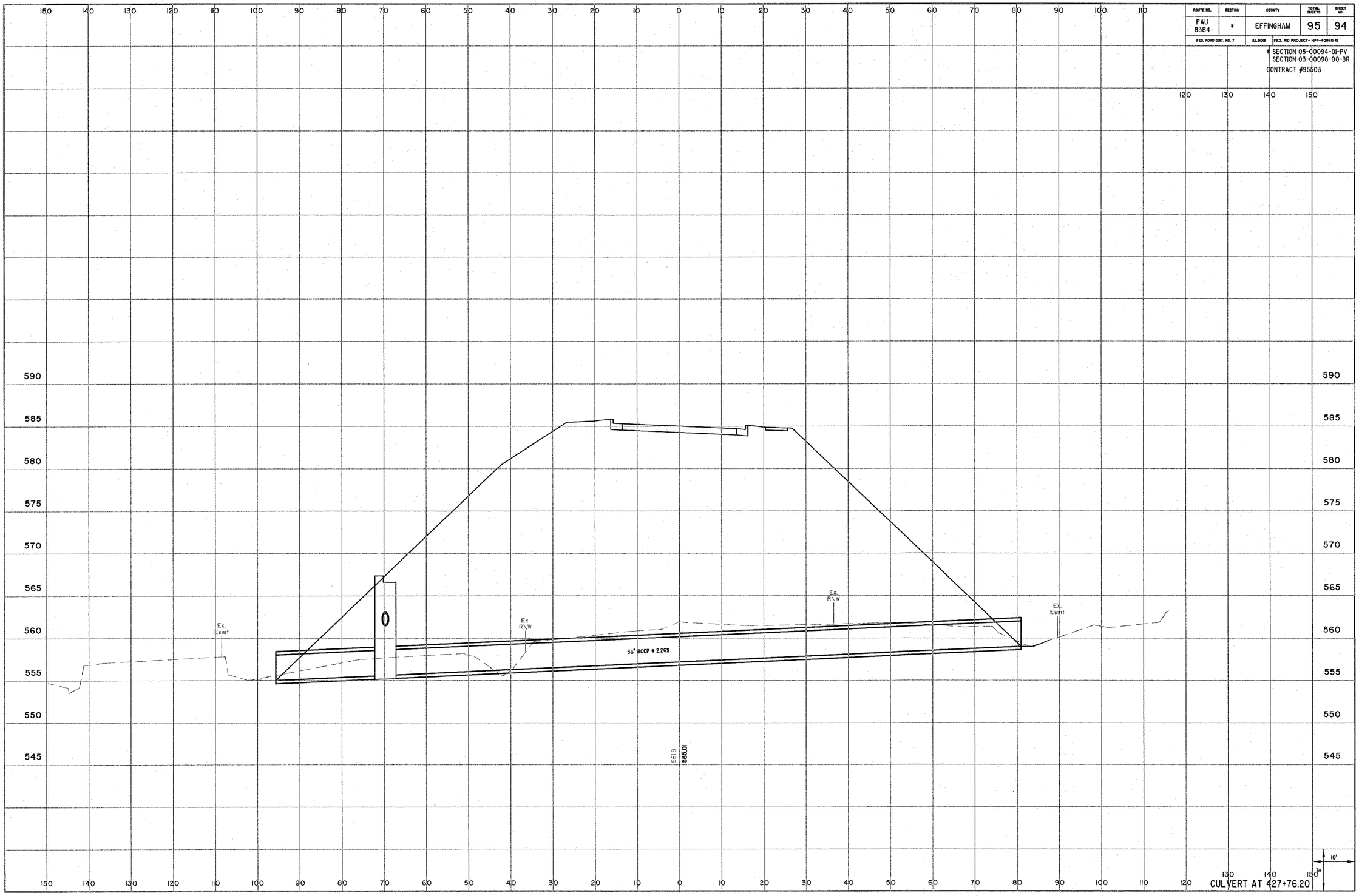
596.6

Ex. R/W

STORM SEWER CROSSINGS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	94
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4099(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8384	*	EFFINGHAM	95	95
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT- HPP-4096(014)		

* SECTION 05-00094-01-PV
SECTION 03-00098-00-BR
CONTRACT #95503

Ex. Esmt

Ex. R\W

Ex. R\W

Ex. Esmt

18" RCCP @ 3.00%

570.3
587.36

10'
5'

CULVERT AT 430+77.63