

district  
8/23/2006  
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FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

SBI 1E (BROWNS LOOP)  
SECTION (8C)B-2  
PROJECT: ACBROS-0185(024)  
WABASH COUNTY

C-97-053-04

S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1E	(8C)B-2	WABASH	36	1

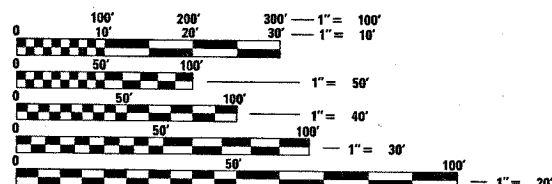
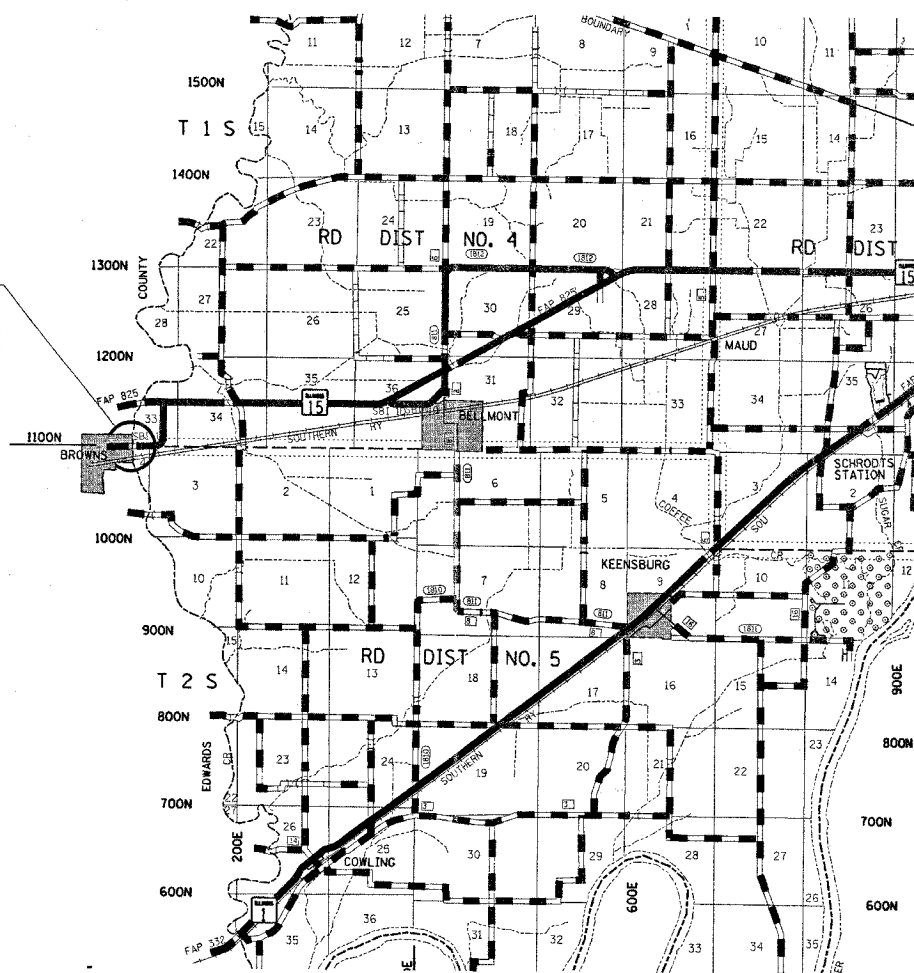
D-97-047-99



LOCATION OF SECTION INDICATED THUS: - ■ -

2003 ADT = 300

PROJECT LOCATION:  
SECTION (8C)B-2  
STRUCTURE #093-0022  
STATION 204 + 42.25



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

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

TOWNSHIP: ROAD DISTRICT NO. 5

CONTRACT NO. 94783

GROSS LENGTH = 667.52 FEET = 0.13 MILES  
NET LENGTH = 667.52 FEET = 0.13 MILES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED Aug 24, 2006  
Christ M. Reed  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 13, 2006  
Mike Line  
ENGINEER OF DESIGN AND ENVIRONMENT

October 13, 2006  
Milton R. Sees P.E.  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

PROJECT ENGINEER : BILL STANLEY  
SQUAD LEADER : JENNIFER WENTHE  
DESIGNER : JENNIFER WENTHE  
TELEPHONE : 217/342-3951 EX. 361

S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IE	(8C)B-2	WABASH	36	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

### GENERAL NOTES

THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS; THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2002; AND THE SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL.

THE WORK INCLUDED IN SECTION (8C)B-2 CONSISTS OF THE COMPLETE REMOVAL AND REPLACEMENT OF THE EXISTING STRUCTURE WITH A GRADE CHANGE, BITUMINOUS CONCRETE BINDER AND SURFACE COURSE, BASE COURSE WIDENING, BITUMINOUS SHOULDERS, EARTHWORK, GUARDRAIL, AND ANY OTHER WORK NECESSARY TO COMPLETE THIS SECTION. THE WORK SHALL BE COMPLETED USING A TEMPORARY ROAD CLOSURE.

A FOG COAT OF BITUMINOUS MATERIALS PRIME COAT SHALL BE APPLIED TO ALL BINDER LIFTS. THE CONTRACTOR SHALL USE EITHER RC-70 OR AN EMULSIFIED POLYMER PRIME PRODUCT CLASSIFIED AS SS-IHP.

THE CONTRACTOR SHALL PROVIDE INTERNET ACCESSIBILITY TO THE BITUMINOUS PLANT QUALITY CONTROL LAB SO THAT BITUMINOUS PLANT REPORTS CAN BE E-MAILED TO THE DISTRICT HEADQUARTERS. THIS WORK SHALL BE INCLUDED IN THE COST OF ALL BITUMINOUS ITEMS.

A UNIFORMLY STRAIGHT SAW CUT SHALL BE MADE AT LOCATIONS WHERE PROPOSED NEW CONSTRUCTION WILL ABUT EXISTING PAVEMENT. THE SAW CUT SHALL BE MADE FULL DEPTH THROUGH THE EXISTING PAVEMENT. THIS WORK WILL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT ITEMS INVOLVED AND NO EXTRA COMPENSATION WILL BE ALLOWED.

ALL DRIVEWAYS AND FIELD ENTRANCES BEING RECONSTRUCTED SHALL BE COMPLETED IN STAGES TO ALLOW ACCESS AT ALL TIMES. ACCESS TO PRIVATE PROPERTIES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AT ALL TIMES. IF NECESSARY, TEMPORARY DRIVEWAYS SHALL BE CONSTRUCTED BY THE CONTRACTOR AS DESIGNATED BY THE ENGINEER. THIS WORK WILL BE MEASURED AND PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR TEMPORARY ACCESS (PRIVATE ENTRANCES).

THE MATERIAL USED FOR AGGREGATE SURFACE COURSE, TYPE B SHALL BE CRUSHED STONE WITH A MINIMUM ILLINOIS BEARING RATIO OF 80.

PAVEMENT MARKING SHALL BE APPLIED IN ACCORDANCE WITH SECTION 780 OF THE STANDARD SPECIFICATIONS. SHORT TERM PAVEMENT MARKING SHALL BE APPLIED TO THE BITUMINOUS SURFACE COURSE AS SPECIFIED IN SECTION 703 OF THE STANDARD SPECIFICATIONS. TEMPORARY TAPE SHALL BE USED ON THE SURFACE COURSE.

THE TOTAL QUANTITY OF PAINT PAVEMENT MARKING - LINE 4" CONSISTS OF 167 FEET OF YELLOW AND 1,335 FEET OF WHITE.

THE BASE COURSE WIDENING SHALL, AT THE CONTRACTOR'S OPTION BE CONSTRUCTED OF EITHER PORTLAND CEMENT CONCRETE 8" THICK, OR BITUMINOUS CONCRETE, 10" THICK. ANY EXCAVATION REQUIRED FOR THE PLACEMENT OF THE BASE COURSE WIDENING SHALL BE PAID FOR AS EARTH EXCAVATION.

THE REMOVAL OF THE EXISTING SECTION MARKER LOCATED 22' LEFT STATION 202+00 AND RELOCATION TO 40' LEFT STATION 202+11 SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

THE EXISTING TREE LOCATED 34' RIGHT AT STATION 201+67 SHALL BE SAVED AND PROTECTED.

### GENERAL NOTES (Cont' d)

THE TREES LISTED IN THE TREE SCHEDULE SHALL BE APPROVED AND HAND PLANTED AT LOCATIONS AS DIRECTED BY THE ROADSIDE MAINTENANCE TECHNICIAN, TOM WILSON, (217)-342-8270. THE CONTRACTOR SHALL BE REQUIRED TO GIVE TWO WEEKS NOTICE TO SCHEDULE A TIME FOR THE LOCATIONS TO BE STAKED AND ON THE SAME DAY THE TREES SHALL BE DELIVERED TO THE JOBSITE FOR ACCEPTANCE OF THE PLANTING MATERIAL BY THE ROADSIDE MAINTENANCE TECHNICIAN.

THE CONTRACTOR SHALL BE REQUIRED TO GIVE THE RESIDENT 10 DAYS NOTICE PRIOR TO PILE DRIVING. (RESIDENT SHOULD SEE COMMITMENT FILE).

THE WATER LINE LOCATION AS SHOWN ON THE PLANS SHOULD BE CONSIDERED APPROXIMATE. AN ESTIMATED QUANTITY OF 2" DIAMETER PVC WATER SERVICE LINE HAS BEEN PROVIDED TO ALLOW FOR REPAIR AND ADJUSTMENT OF THE EXISTING LINE. FOR ANY QUESTIONS CONCERNING WATER SERVICE LINE LOCATIONS CONTACT KEN GROVE AT (217)-342-8315.

THE LOCATIONS AND/OR DEPTHS OF UNDERGROUND UTILITIES SHOWN HAVE BEEN TAKEN FROM INFORMATION FURNISHED BY THE UTILITY OWNERS AND MUST BE CONSIDERED APPROXIMATE. FIELD MARKINGS OF FACILITIES IN CRITICAL AREAS MAY BE OBTAINED BY PROVIDING A MINIMUM OF 96 HOURS ADVANCE NOTICE THROUGH THE J.U.L.I.E. SYSTEM BY CALLING 800-892-0123.

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE TO THIS PROJECT:

MIXTURE USE:	SURFACE COURSE	BINDER
PG GRADE:	PG 64-22	PG 64-22
RAP%:	10%	15%
DESIGN AIR VOIDS:	4.0% @ NDESIGN = 70	4.0% @ NDESIGN = 70
MIXTURE COMPOSITION:	IL-9.5	IL-19.0
FRICTION AGGREGATE:	MIXTURE C	N/A
MIXTURE USE:	BASE COURSE WIDENING	INCIDENTAL
PG GRADE:	PG 64-22	PG 64-22
RAP%:	15%	15%
DESIGN AIR VOIDS:	4.0% @ NDESIGN = 70	4.0% @ NDESIGN = 50
MIXTURE COMPOSITION:	IL-19.0	IL-9.5
FRICTION AGGREGATE:	N/A	MIXTURE C
MIXTURE USE:	SHOULDERS	
PG GRADE:	PG 58-22	
RAP%:	25%	
DESIGN AIR VOIDS:	2.0% @ NDESIGN = 30	
MIXTURE COMPOSITION:	N/A	
FRICTION AGGREGATE:	N/A	

THE FOLLOWING APPLICATION RATES HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

BITUMINOUS CONCRETE	112 LBS/SQ YD/IN
AGGREGATE	2.05 TONS/CU YD
BITUMINOUS MATERIALS (PRIME COAT)	0.05 GALLON/SQ YD

### INDEX OF SHEETS

SHEET NO.	ITEM
1	COVER SHEET
2	INDEX OF SHEETS AND GENERAL NOTES
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5	TYPICAL SECTIONS
6	BUTT JOINT DETAIL & TIES
7	QUANTITY SCHEDULES
8	ENTRANCE SCHEDULE
9-11	PLAN & PROFILE
12-32	BRIDGE PLANS
33	EROSION CONTROL DETAILS
34-36	CROSS SECTIONS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER SHEET NO. 36:

STD. NO.	DESCRIPTION
000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001	AREAS OF REINFORCEMENT BARS
280001-02	TEMPORARY EROSION CONTROL SYSTEMS
420001-06	PAVEMENT JOINTS
420401-05	BRIDGE APPROACH PAVEMENT
421001-01	BAR REINFORCEMENT FOR CRC PAVEMENT
515001-02	NAME PLATE FOR BRIDGES
542401	METAL END SECTION FOR PIPE CULVERTS
601101	CONCRETE HEADWALL FOR PIPE DRAIN
609006-02	BRIDGE APPROACH PAVEMENT (DRAIN DETAIL)
630001-06	STEEL PLATE BEAM GUARDRAIL
630301-03	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-02	TRAFFIC BARRIER TERMINAL TYPE 2
631031-05	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
666001	RIGHT OF WAY MARKERS
701001-01	OFF-RD OPERATIONS, 2L, 2W MORE THAN 15' AWAY
701006-02	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701301-02	LANE CLOSURE, 2L, 2W SHORT TIME OPERATIONS
701311-02	LANE CLOSURE, 2L, 2W MOVING OPERATIONS - DAY ONLY
702001-06	TRAFFIC CONTROL DEVICES
780001-01	TYPICAL PAVEMENT MARKINGS
BLR 21-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<p style="text-align: center;">INDEX OF SHEETS AND GENERAL NOTES</p> <p>SCALE: VERT. _____ HORIZ. _____</p> <p>DATE _____ DRAWN BY _____ CHECKED BY _____</p>

PLOT DATE = 8/23/2006  
FILE NAME = 83424  
USER NAME = distprod

S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IE	(8CIB-2	WABASH	36	3
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES			80% FED. 20% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE X071-2A
CODE NO	ITEM	UNIT		
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	253	253
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	135	135
20200100	EARTH EXCAVATION	CU YD	156	156
20400800	FURNISHED EXCAVATION	CU YD	569	569
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	82	82
* 25000200	SEEDING, CLASS 2	ACRE	0.3	0.3
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	20	20
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	20	20
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	20	20
* 25000700	AGRICULTURAL GROUND LIMESTONE	TON	0.4	0.4
* 25100115	MULCH, METHOD 2	ACRE	0.3	0.3
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	22	22
28000300	TEMPORARY DITCH CHECKS	EACH	4	4
28000400	PERIMETER EROSION BARRIER	FOOT	250	250
28000500	INLET AND PIPE PROTECTION	EACH	1	1
28100107	STONE RIPRAP, CLASS A4	SQ YD	1209	1209
28200200	FILTER FABRIC	SQ YD	1209	1209
35101400	AGGREGATE BASE COURSE, TYPE B	TON	19	19
35650700	BASE COURSE WIDENING	SQ YD	145	145
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	63	63
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	125	125
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	216	216
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	196	196
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	39	39
44000100	PAVEMENT REMOVAL	SQ YD	58	58
44000700	APPROACH SLAB REMOVAL	SQ YD	160	160
48202000	BITUMINOUS SHOULDERS SUPERPAVE	TON	103	103
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1
50105220	PIPE CULVERT REMOVAL	FOOT	30	30

SUMMARY OF QUANTITIES (Cont'd)			80% FED. 20% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE X071-2A
CODE NO	ITEM	UNIT		
50200100	STRUCTURE EXCAVATION	CU YD	377	377
50300100	FLOOR DRAINS	EACH	12	12
50300225	CONCRETE STRUCTURES	CU YD	183	183
50300255	CONCRETE SUPERSTRUCTURE	CU YD	279	279
50300260	BRIDGE DECK GROOVING	SQ YD	787	787
50300300	PROTECTIVE COAT	SQ YD	1061	1061
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	1
50500505	STUD SHEAR CONNECTORS	EACH	3636	3636
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	84260	84260
51201300	FURNISHING STEEL PILES HP8X36	FOOT	427	427
51201600	FURNISHING STEEL PILES HP12X53	FOOT	762	762
51201700	FURNISHING STEEL PILES HP12 X 74	FOOT	660	660
51202305	DRIVING PILES	FOOT	1849	1849
51203600	TEST PILE STEEL HP12X53	EACH	2	2
51203700	TEST PILE STEEL HP 12 X 74	EACH	1	1
51500100	NAME PLATES	EACH	1	1
54215547	METAL END SECTIONS 12"	EACH	6	6
542D0217	PIPE CULVERTS, CLASS D, TYPE 1 12"	FOOT	31	31
* 56200700	WATER SERVICE LINE 2"	FOOT	200	200
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	52	52
60100945	PIPE DRAINS 12"	FOOT	60	60
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	126	126
60900140	TYPE B INLET BOX, STANDARD 609006	EACH	4	4
60900515	CONCRETE THRUST BLOCKS	EACH	4	4
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	87.5	87.5
* 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4
* 63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	3	3
63200310	GUARDRAIL REMOVAL	FOOT	413	413
* 63300725	STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)	FOOT	12.5	12.5

\*SPECIALTY ITEMS

PLOT DATE = 8/23/2006  
 PLOT FILE = 84783.DWG  
 PLOT SCALE = AS SHOWN  
 USER NAME = dtravis

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		SUMMARY OF QUANTITIES

SCALE: VERT. DATE  
 HORIZ. DATE

DRAWN BY  
 CHECKED BY

S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IE	(BCIB-2)	WABASH	36	4
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES (Cont'd)			80% FED. 20% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE X071-2A
CODE NO	ITEM	UNIT		
66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	10	10
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	7	7
67100100	MOBILIZATION	L SUM	1	1
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	67	67
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	22	22
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1502	1502
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	5	5
* 78200520	BARRIER WALL MARKERS, TYPE B	EACH	6	6
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	3
* A2001016	TREE, ACER RUBRUM (RED MAPLE), 2" CALIPER, BALLED AND BURLAPPED	EACH	2	2
* A2002370	TREE, BETULA NIGRA (RIVER BIRCH), 8' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED	EACH	12	12
* A2006916	TREE, QUERCUS PALUSTRIS (PIN OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	3	3
* A2007616	TREE, TAXODIUM DISTICHUM (COMMON BALD CYPRESS), 2" CALIPER, BALLED AND BURLAPPED	EACH	11	11
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	4	4
X4066416	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N70	TON	62	62
X4066616	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N70	TON	162	162
X4080030	INCIDENTAL BITUMINOUS SURFACING, SUPERPAVE, N70	TON	9	9
X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1	1
X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1	1
Z0002600	BAR SPLICERS	EACH	56	56
⊙ Z0076600	TRAINEES	HOUR	500	500

⊙ Y080  
\* SPECIALTY ITEMS

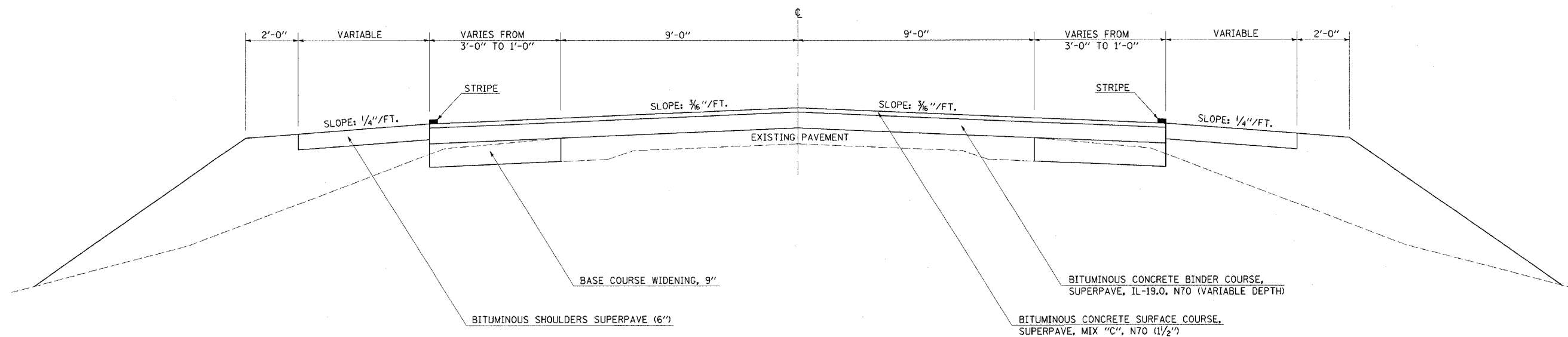
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NAME	DATE	
		SUMMARY OF QUANTITIES (Cont'd)

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HORIZ. DATE

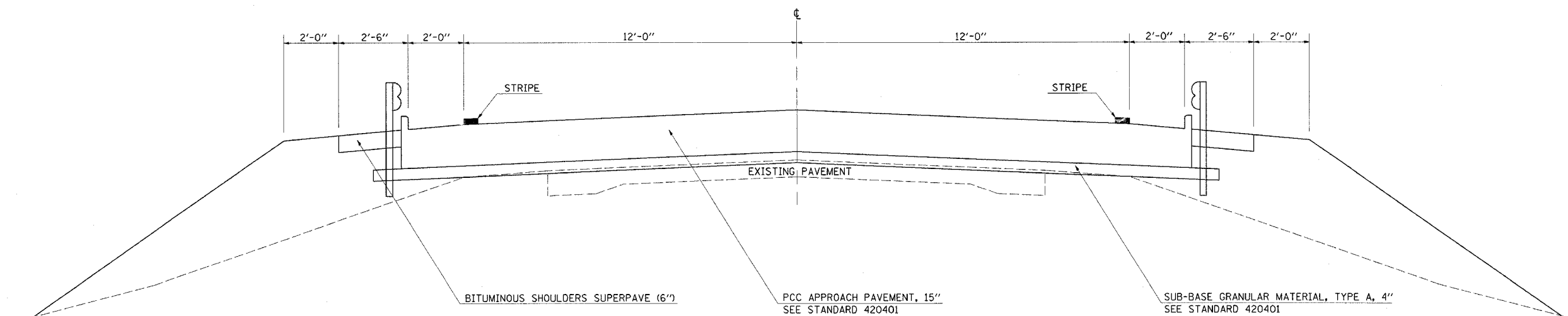
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S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IE	(8C)B-2	WABASH	36	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



**TYPICAL SECTION**

STA. 201+32.48 TO STA. 202+76.00  
 STA. 206+29.50 TO STA. 208+00.00



**TYPICAL SECTION**

STA. 202+76.00 TO STA. 203+06.00  
 STA. 205+99.50 TO STA. 206+29.50

REVISIONS	
NAME	DATE

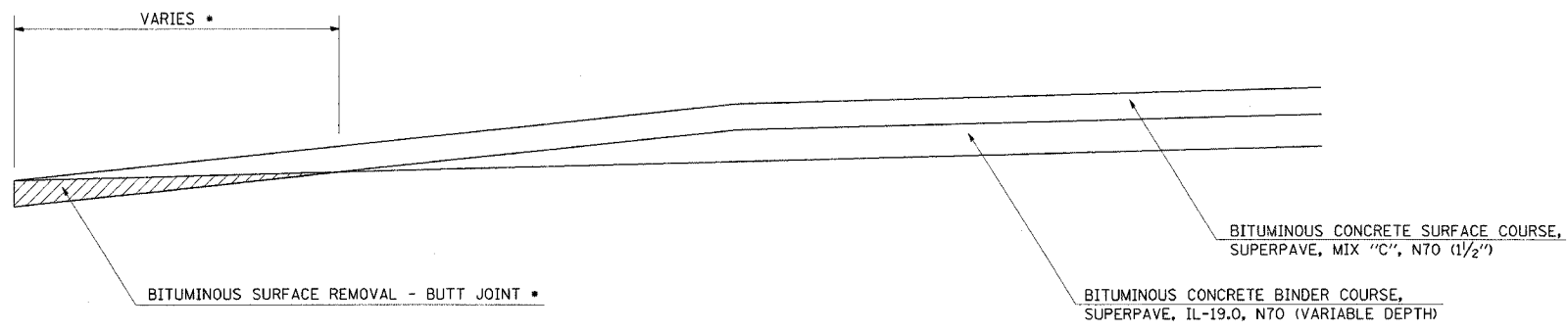
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**TYPICAL CROSS SECTIONS**

SCALE: VERT. HORIZ.  
 DATE

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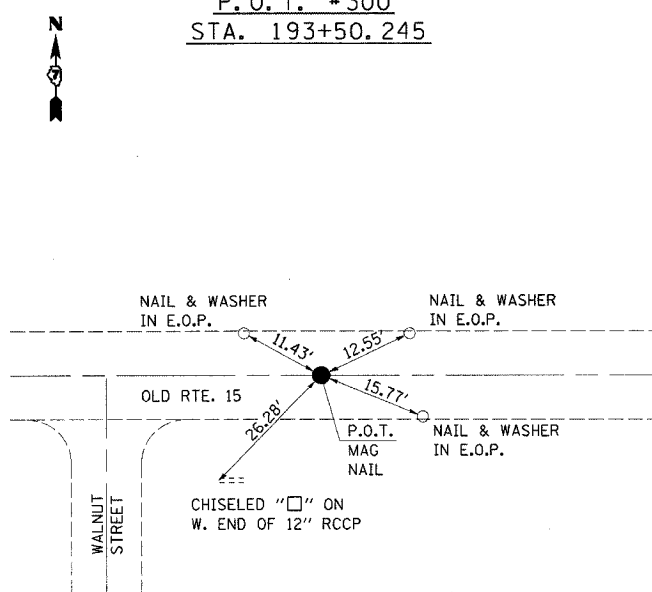
S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IE	(8C)B-2	WABASH	36	6
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



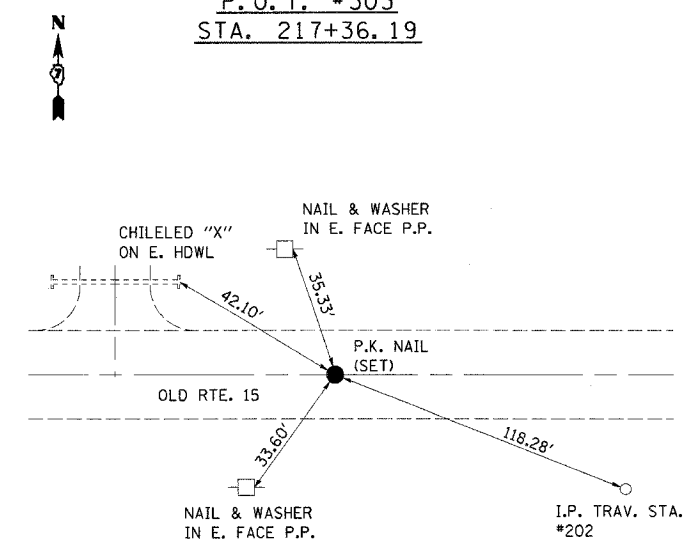
**BUTT JOINT DETAIL**

STA. 201+32.48 TO STA. 201+77.48    45'  
 STA. 207+50.00 TO STA. 208+00.00    50'

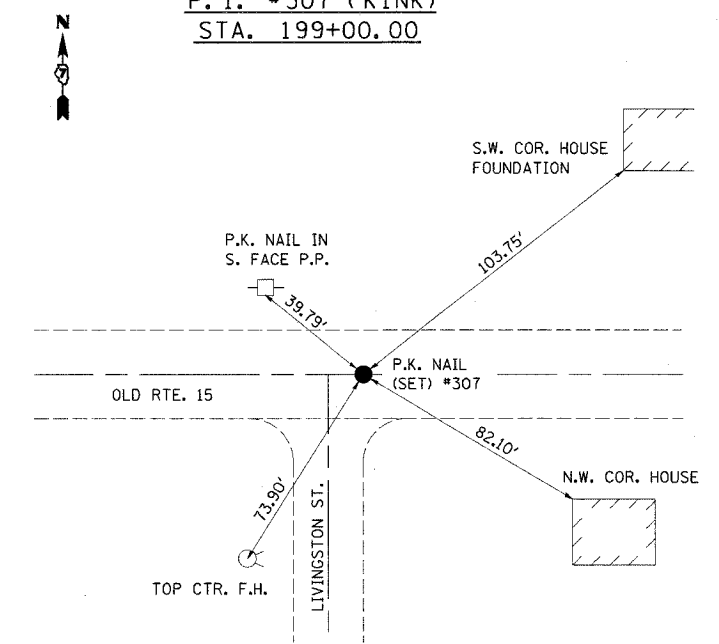
**P.O.T. #300**  
 STA. 193+50.245



**P.O.T. #303**  
 STA. 217+36.19



**P.I. #307 (KINK)**  
 STA. 199+00.00



**BENCHMARKS**

- BM #100** - ELEV. = 398.43  
RAILROAD SPIKE IN POWERPOLE ON N. SIDE OF INTERSECTION OF OLD ROUTE 15 AND LIVINGSTON STREET.  
STA. 198+65/20' LT.
- BM #101** - ELEV. = 398.80  
CHISELED SQUARE ON W. END OF S.W. WING WALL OF THE BONDAS CREEK BRIDGE.  
STA. 202+88/15.45' RT.
- BM #102** - ELEV. = 398.72  
CHISELED SQUARE ON E. END OF N.E. WING WALL OF THE BONDAS CREEK BRIDGE.  
STA. 205+95/15.45' LT
- BM #104** - ELEV. = 397.43  
CHISELED SQUARE IN CENTER OF W. HEADWALL OF THE E. ENTRANCE TO A HOUSE, W. OF TRAVERSE POINT 202 ON N. SIDE OF OLD ROUTE 15.  
STA. 216+83/21.10' LT.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**BUTT JOINT DETAIL & ALIGNMENT TIES**

SCALE: VERT.    DRAWN BY  
 HORIZ.        CHECKED BY  
 DATE

PLOT DATE = 8/23/2006  
 FILE NAME = #FILE#  
 USER NAME = #USER#

S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IE	18CIB-2	WABASH	36	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

LOCATION	FOOT	EACH	EACH	FOOT	FOOT	EACH	EACH	EACH	EACH
NW CORNER	100.0	1.0	1.0	0.0	0.0	0.0	1.0		1.0
SW CORNER	113.0	1.0	1.0	50.0	0.0	0.0	2.0		1.0
NORTH PARAPET								3.0	
SOUTH PARAPET								3.0	
NE CORNER	100.0	0.0	1.0	37.5	12.5	1.0	1.0		0.0
SE CORNER	100.0	1.0	1.0	0.0	0.0	0.0	1.0		1.0
TOTALS=	413.0	3.0	4.0	87.5	12.5	1.0	5.0	6.0	3.0

R. O. W. MARKERS SCHEDULE		
STATION	OFFSET	EACH
201+25.00	RT 22	1
201+25.00	RT 30	1
201+83.44	LT 22	1
201+83.49	LT 40	1
202+90.00	RT 45	1
203+50.00	RT 45	1
204+00.00	RT 55	1
205+10.00	LT 40	1
206+25.00	RT 55	1
207+25.00	RT 40	1
TOTALS=		10

STATION TO STATION	EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (25%)	EARTH FILL	EARTHWORK BALANCE, WASTE (+) OR SHORTAGE (-)
LOCATION	CU YD	CU YD	CU YD	CU YD
201+00.00 TO 201+50.00	18.9	14.2	0.0	14.2
201+50.00 TO 202+00.00	40.3	30.3	8.1	22.2
202+00.00 TO 202+50.00	43.9	33.0	58.2	-25.2
202+50.00 TO 202+91.00	18.5	13.9	138.1	-124.2
202+91.00 TO 203+06.00	0.0	0.0	71.0	-71.0
205+78.50 TO 206+14.50	0.0	0.0	138.4	-138.4
206+14.50 TO 206+50.00	4.1	3.1	110.0	-107.0
206+50.00 TO 207+00.00	14.1	10.5	108.3	-97.8
207+00.00 TO 207+50.00	11.1	8.3	51.3	-43.0
207+50.00 TO 208+00.00	5.1	3.8	2.5	1.3
TOTALS=	156.0	117.0	686.0	-569.0

STATION OFFSET		TREE REMOVAL (6 TO 15 UNITS DIAMETER)	TREE REMOVAL (OVER 15 UNITS DIAMETER)
STATION	OFFSET	UNITS	UNITS
202+00	RT 18	6	
202+00	RT 18	8	
202+10	RT 21	10	
202+10	LT 26	14	
202+10	LT 26	14	
202+50	RT 22	13	
202+50	LT 29	11	
202+60	LT 29	10	
202+60	LT 34	11	
202+70	RT 40	15	
204+90	LT 30		21
205+00	LT 33	9	
205+00	LT 33	10	
205+10	LT 33	11	
205+30	LT 40	15	
205+30	LT 40	7	
205+30	LT 40	12	
205+40	LT 29	10	
205+50	LT 27	14	
205+70	LT 30	12	
205+80	RT 45		18
206+00	RT 25	7	
206+00	LT 30	15	
206+00	LT 30		21
206+25	RT 37	9	
206+35	LT 30	10	
206+50	LT 30		30
207+00	LT 30		45
TOTALS=		253	135

STATION TO STATION	LENGTH	EXISTING PAVEMENT WIDTH	BASE COURSE WIDENING	BITUMINOUS MATERIALS (PRIME COAT)	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N70	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N70	BITUMINOUS SHOULDERS SUPERPAVE	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	BRIDGE APPROACH PAVEMENT	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	PAINT PAVEMENT MARKING - LINE 4"	SHORT-TERM PAVEMENT MARKING	WORK ZONE PAVEMENT MARKING REMOVAL
LOCATION	FEET	FEET	SQ YD	GALLON	TON	TON	TON	SQ YD	SQ YD	SQ YD	FOOT	FOOT	SQ FT
201+32.48 TO 201+77.48	45.0	18.0	13.8	10.3	0.0	8.6	7.7	102.5	0.0	0.0	101.3	4.5	1.5
201+77.48 TO 202+70.00	92.5	18.0	50.7	46.3	70.8	19.4	39.5	0.0	0.0	0.0	208.2	9.3	3.1
202+70.00 TO 202+76.00	6.0	18.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	19.6	13.5	0.6	0.2
202+76.00 TO 203+06.00	30.0	18.0	0.0	0.0	0.0	0.0	5.2	0.0	97.8	0.0	67.5	3.0	1.0
203+06.00 TO 205+99.50	293.5	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	660.4	29.4	9.8
205+99.50 TO 206+29.50	30.0	18.0	0.0	0.0	0.0	0.0	5.2	0.0	97.8	0.0	67.5	3.0	1.0
206+29.50 TO 206+35.50	6.0	18.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	19.6	13.5	0.6	0.2
206+35.50 TO 207+50.00	114.5	18.0	65.1	57.3	91.3	24.0	39.0	0.0	0.0	0.0	257.6	11.5	3.8
207+50.00 TO 208+00.00	50.0	18.0	15.2	11.4	0.0	9.6	3.9	113.9	0.0	0.0	112.5	5.0	1.7
TOTALS=			145.0	125.0	162.0	62.0	103.0	216.0	196.0	39.0	1502.0	67.0	22.0

STATION TO STATION	SEEDING, CLASS 2	TEMPORARY EROSION CONTROL SEEDING	NITROGEN FERTILIZER NURTIENT	PHOSPHORUS FERTILIZER NURTIENT	POTASSIUM FERTILIZER NURTIENT	MULCH, METHOD 2	AGRICULTURAL GROUND LIMESTONE
LOCATION	ACRE	POUND	POUND	POUND	POUND	ACRE	TON
201+00.0 TO 201+50.0	0.01	1.00	0.90	0.90	0.90	0.01	0.02
201+50.0 TO 202+00.0	0.01	1.00	0.90	0.90	0.90	0.01	0.02
202+00.0 TO 202+50.0	0.03	3.00	2.70	2.70	2.70	0.03	0.06
202+50.0 TO 202+91.0	0.04	4.00	3.60	3.60	3.60	0.04	0.08
205+93.5 TO 206+50.0	0.05	5.00	4.50	4.50	4.50	0.05	0.10
206+50.0 TO 207+00.0	0.03	3.00	2.70	2.70	2.70	0.03	0.06
207+00.0 TO 207+50.0	0.02	2.00	1.80	1.80	1.80	0.02	0.04
207+50.0 TO 208+00.0	0.02	2.00	1.80	1.80	1.80	0.02	0.04
208+00.0 TO 208+50.0	0.01	1.00	0.90	0.90	0.90	0.01	0.02
TOTAL=	0.30	22.00	20.00	20.00	20.00	0.30	0.40

STATION TO STATION	LENGTH	EXISTING PAVEMENT WIDTH	PAVEMENT REMOVAL	APPROACH SLAB REMOVAL
LOCATION	FEET	FEET	SQ YD	SQ YD
202+70.00 TO 202+73.50	3.5	18.0	7.0	0.0
202+73.50 TO 203+13.50	40.0	18.0	0.0	80.0
205+70.00 TO 206+10.00	40.0	18.0	0.0	80.0
206+10.00 TO 206+35.50	25.5	18.0	51.0	0.0
TOTALS=			58.0	160.0

REVISIONS	
NAME	DATE

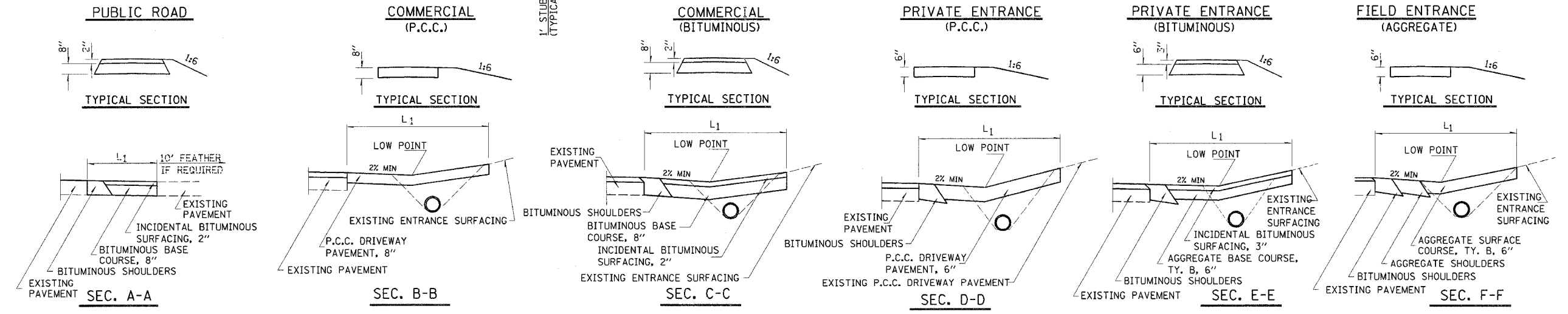
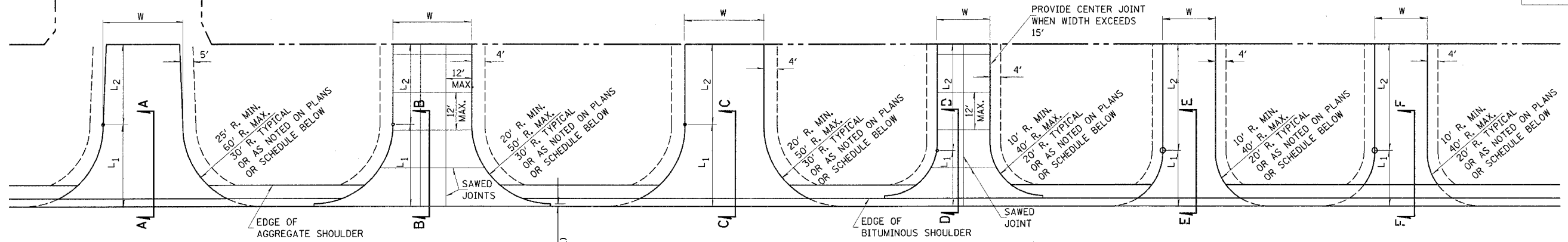
ILLINOIS DEPARTMENT OF TRANSPORTATION

**SCHEDULES**

SCALE: VERT. DATE  
HORIZ. DRAWN BY  
CHECKED BY

PLT DATE = 8/25/2006  
FILE NAME = W111111  
PLOT SCALE = #SCALE#  
USER NAME = #DISTRICT

S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IE	(8C)B-2	WABASH	36	8
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT NO.	



ENTRANCE SCHEDULE

TYPE	SIDE/STATION	WIDTH	LENGTH		RADI	AGGREGATE BASE, CSE. TY. B, 6"	BITUMINOUS BASE COURSE, 8"	AGGREGATE SURF. CSE. TYPE B	INCIDENTAL BITUMINOUS SURFACING	P.C.C. DRIVEWAY PAV'T		PCC PAVEMENT 8"
			L1	L2						6"	8"	
PE	RT 201+49.17	19	10	12	20	18.5		22.0	9.0			
FE	LT 201+96.00	20	20	10	20			16.3				
FE	LT 206+91.00	14	20	9	20			24.5				
FE	LT 207+75.00	16	20	10	20							

SIDE/STATION	CULVERT SCHEDULE	
	PIPE CULVERT REMOVAL (FOOT)	PIPE CULVERTS, CLASS D, TYPE 1 12" (FOOT)
RT 201+49.17	30	31
TOTALS =	30	31

NOTES

L1 = DISTANCE FROM EDGE OF PAVEMENT TO RADIUS POINT OR MAXIMUM DISTANCE OF 30'.  
 L2 = DISTANCE FROM RADIUS POINT OR MAXIMUM DISTANCE OF 30' FROM EDGE OF PAVEMENT TO R.O.W. LINE  
 MATERIAL USED TO CONSTRUCT L2 LENGTH SHALL BE THE SAME TYPE OF MATERIAL AS THE EXISTING ENTRANCE

THE THICKNESS OF THE BITUMINOUS SHOULDERS THROUGH COMMERCIAL ENTRANCES (BITUMINOUS) AND PUBLIC ROADS SHALL BE 10". THE COST OF THE EXTRA THICKNESS SHALL BE INCLUDED WITH THE BITUMINOUS SHOULDERS PAY ITEM.

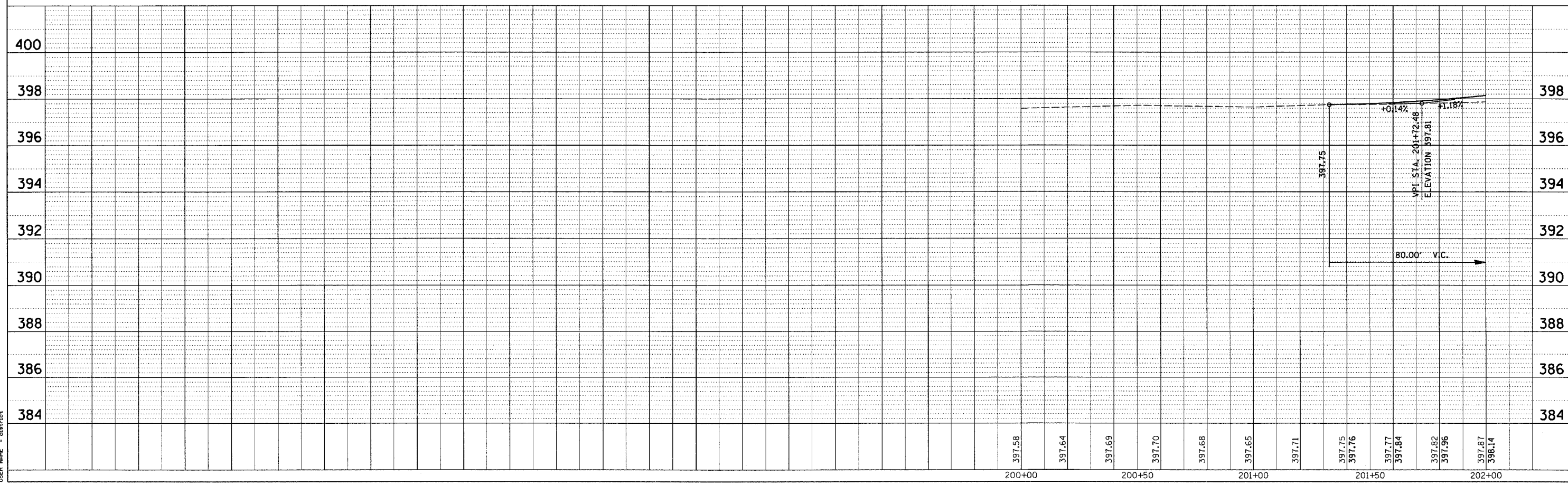
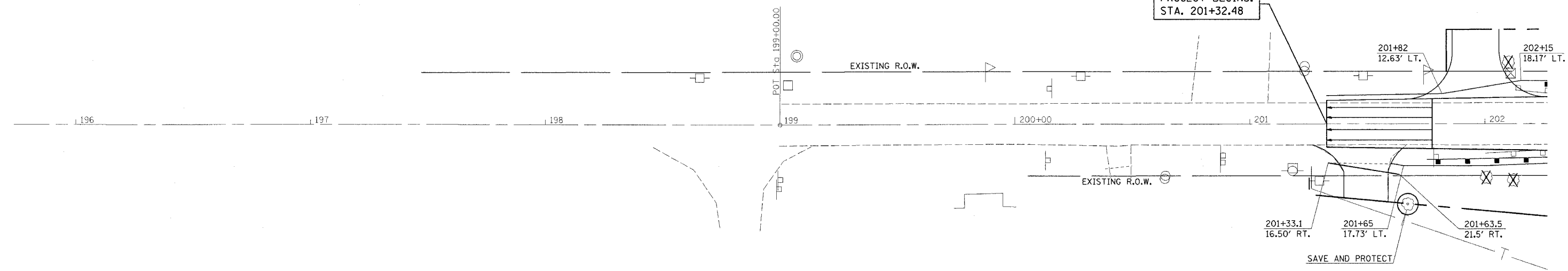
THE COST OF THE BITUMINOUS MATERIALS AND AGGREGATE (PRIME COAT) FOR ENTRANCES AND PUBLIC ROAD APPROACHES SHALL BE INCLUDED IN THE PAY ITEM INCIDENTAL BITUMINOUS SURFACING.



SBI RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1E	(BC)B-2	WABASH	36	9
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



PROJECT BEGINS:  
STA. 201+32.48



PLAN

DESIGNED BY	DATE
CHECKED BY	
NOTED BY	
DATE PLOTTED	
ALIGNMENT CHECKED	
CONSTRUCTION CHECKED	
CAD FILE NAME	
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PROFILE

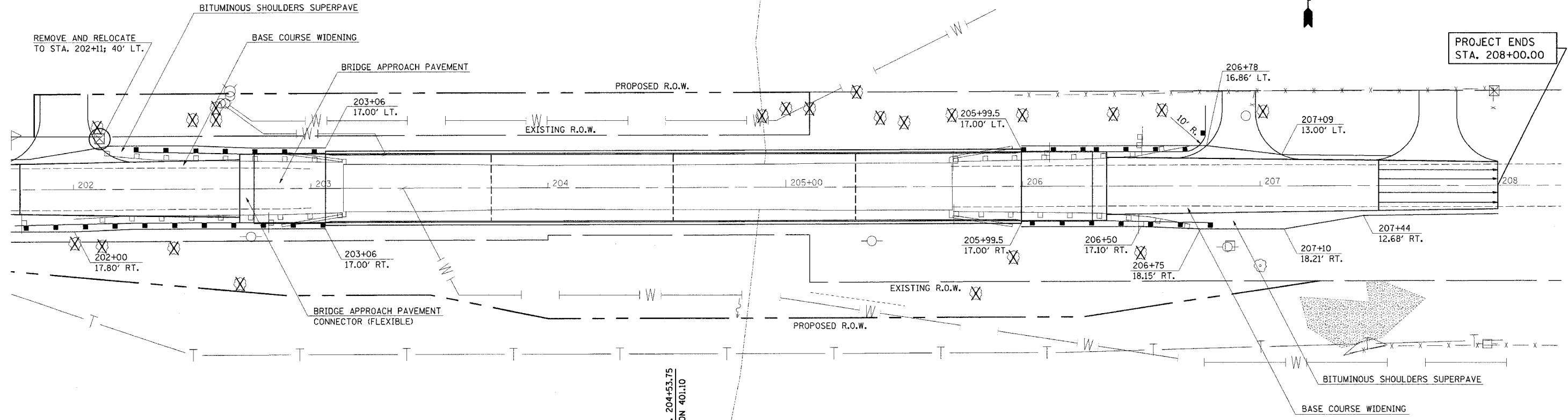
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DATE PLOTTED	
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PLOT DATE = 8/23/2008  
 PLOT SCALE = 1"=40'  
 USER NAME = district

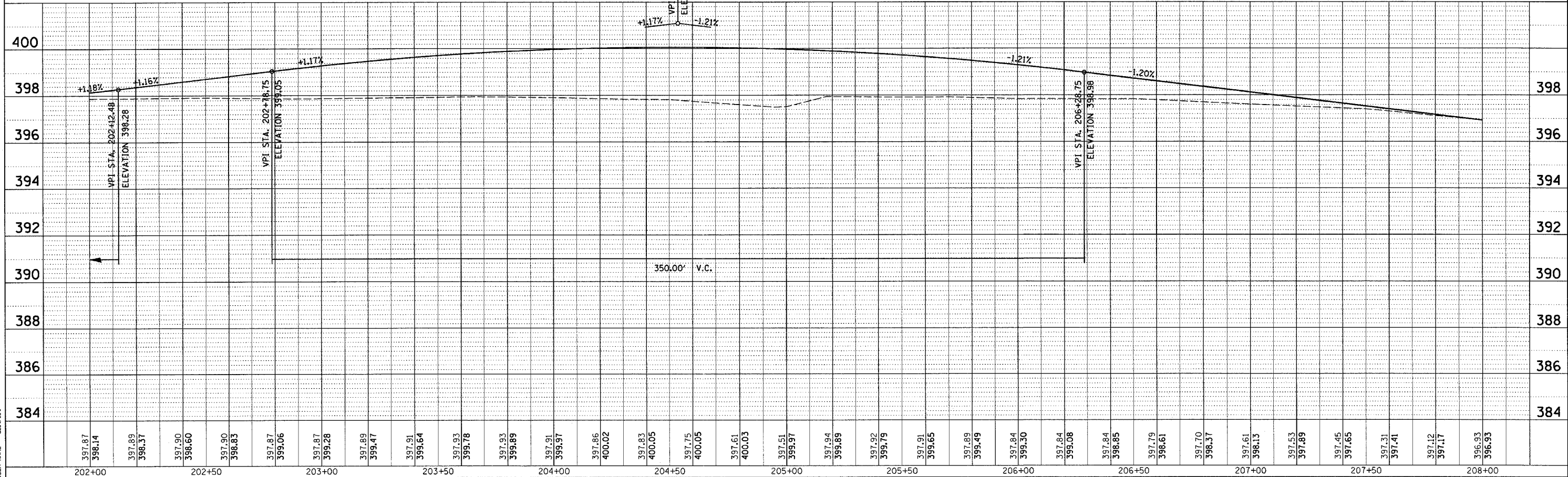
SBI RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1E	8CB-2	WABASH	36	10
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



PLAN	SURVEYED	DATE
	BY	
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	RT. OF WAY CHECKED	
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PROFILE	SURVEYED	DATE
	BY	
	PLOTTED	
	NOTED	
	RT. OF WAY CHECKED	
	FILE NAME	
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PLOT DATE = 8/29/2006  
 FILE NAME = #FILE#  
 PLOT SCALE = #SCALE#  
 USER NAME = #district#

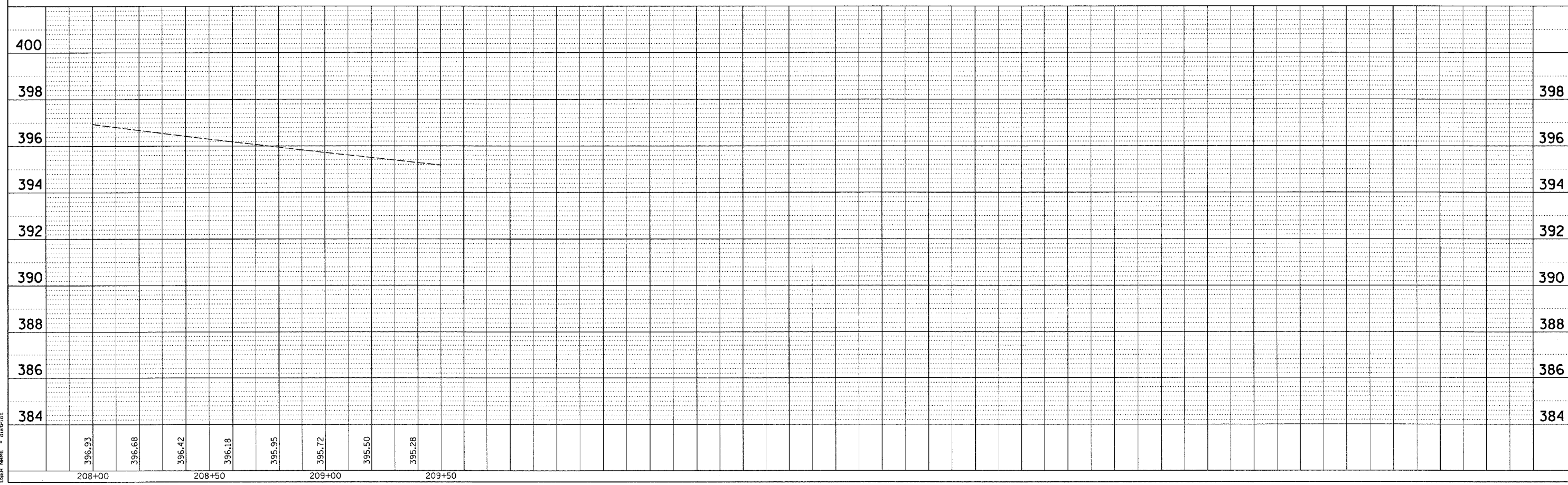
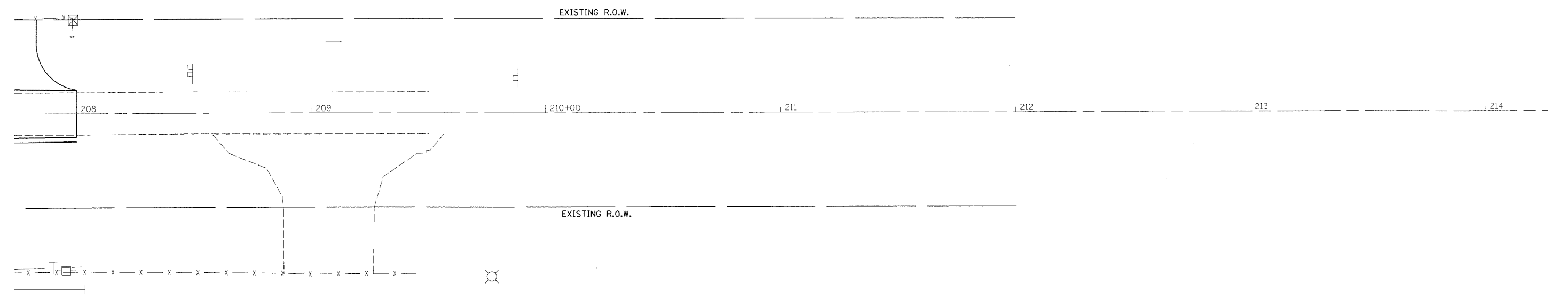
SBI RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1E	(BC)B-2	WABASH	36	11
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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PROFILE  
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PLOT DATE = 8/23/2006  
 FILE NAME = #FILE#  
 USER NAME = dshp101



Bench Mark: Chiseled "□" on west end of southwest wingwall structure 093-0017, Elev. 398.80

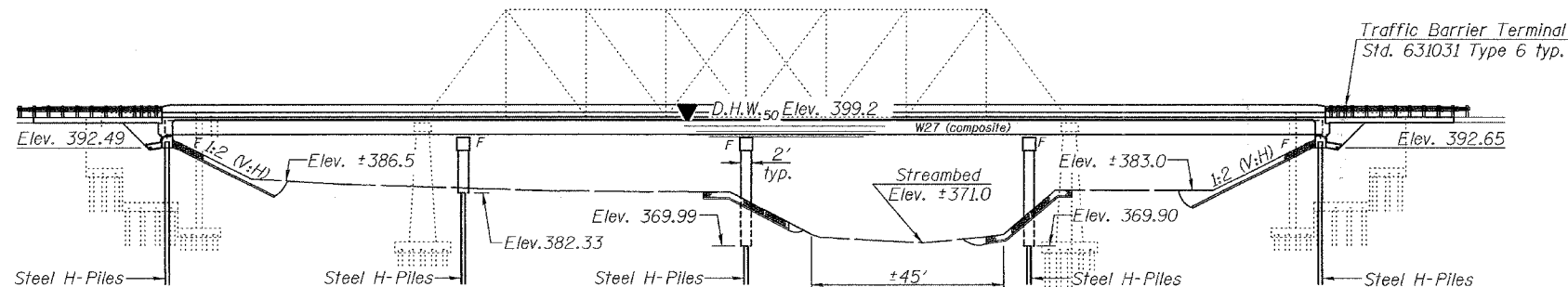
Existing Structure: S.N. 093-0017 built 1922 as S.B.I. Route 1, Section 8-B, at Station 204+42.25.  
Structure consists of one span steel through truss with reinforced concrete end spans on solid piers and closed abutments. 257'-6" back-to-back abutments. 20'-0" clear roadway width.  
Existing structure to be removed and replaced. Road to be closed and traffic detoured during construction.

No salvage

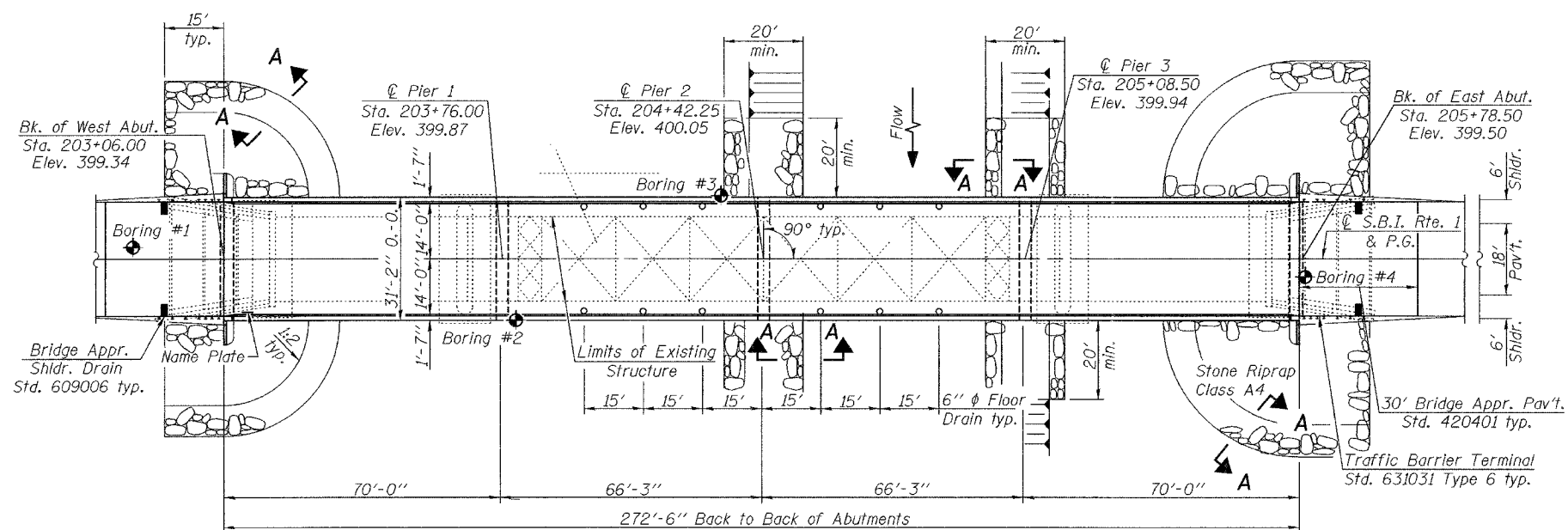
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
S.B.I. 1	(8C)B-2	WABASH	36	12	21 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

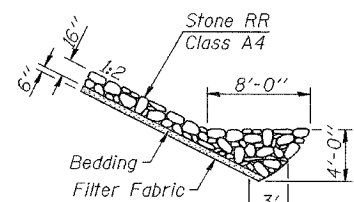
Contract #94783



ELEVATION



PLAN

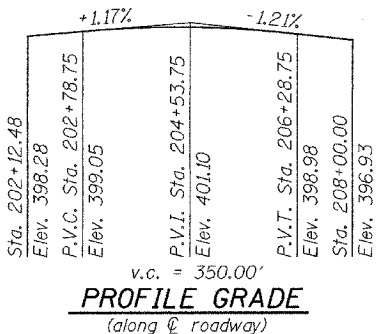


SECTION A-A

STATION 204+42.25  
BUILT 200 BY  
STATE OF ILLINOIS  
S.B.I. RTE. 1 - SEC. (8C)B-2  
LOADING HL93  
STR. NO. 093-0022

NAME PLATE

See Std. 515001



PROFILE GRADE  
(along centerline roadway)

DESIGNED	Denny W. Coulter
CHECKED	Richard J. Chan
DRAWN	R. Sommer
CHECKED	DHC/CCC

September 18, 2004  
EXAMINED  
PASSED  
ENGINEER OF BRIDGE DESIGN  
ENGINEER OF BRIDGES AND STRUCTURES



Expires 11-30-2006

WATERWAY INFORMATION

Exist. Low Grade Elev. 394.7 @ Sta. 213+00/195+00  
Prop. Low Grade Elev. 394.7 @ Sta. 213+00/195+00  
Drainage Area = 237.6 mi<sup>2</sup>

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
10	5468	3540	3664	397.1	0.0	0.0	397.2	397.2	397.2	397.2
Design	50	7579	3540	3664	399.2	0.1	0.1	399.3	399.3	399.3
Base	100	8460	3540	3664	399.7	0.1	0.1	399.8	399.8	399.8
Overtopping	6	4700	3200	3302	394.7	0.0	0.0	394.7	394.7	394.7

10 Year Velocity through Existing Bridge = 1.5 fps 10 Year Velocity through Proposed Bridge = 1.5 fps

LOADING HL 93

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

DESIGN SPECIFICATIONS

1998 AASHTO LRFD with 1999 thru 2003 Interims

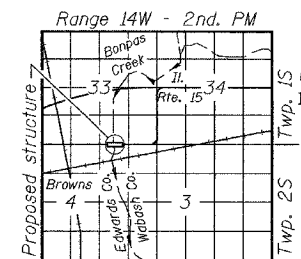
DESIGN STRESSES

FIELD UNITS

f<sub>c</sub> = 3,500 psi  
f<sub>y</sub> = 60,000 psi (reinforcement)  
f<sub>y</sub> = 50,000 psi (AASHTO M270 Grade 50W)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2  
Bedrock Acceleration Coefficient (A) = 9.25%g  
Site Coefficient (S) = 1.2



LOCATION SKETCH

GENERAL PLAN  
BROWNS ROAD OVER  
BONPAS CREEK  
S.B.I. ROUTE 1 - SECTION (8C)B-2  
WABASH COUNTY  
STATION 204+42.25  
STRUCTURE NO. 093-0022

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO. 2
S.B.I. 1	(8C)B-2	WABASH	36	13	21 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #94783

**GENERAL NOTES**

Fasteners shall be high strength bolts AASHTO M 164, Type 3 in unpainted areas and mechanically galvanized AASHTO M 164, Type 1 or 2 in painted areas. Bolts  $\frac{7}{8}$ "  $\phi$ , open holes  $\frac{5}{16}$ "  $\phi$ , unless otherwise noted. Calculated weight of Structural Steel = 239,760 lbs. All structural steel shall be AASHTO M 270 Grade 50W. Field welding of construction accessories will not be permitted to beams. Anchor bolts shall be set before bolting diaphragms over supports. The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material except fill plates.

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of  $\frac{1}{8}$  inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two  $\frac{1}{8}$ " adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

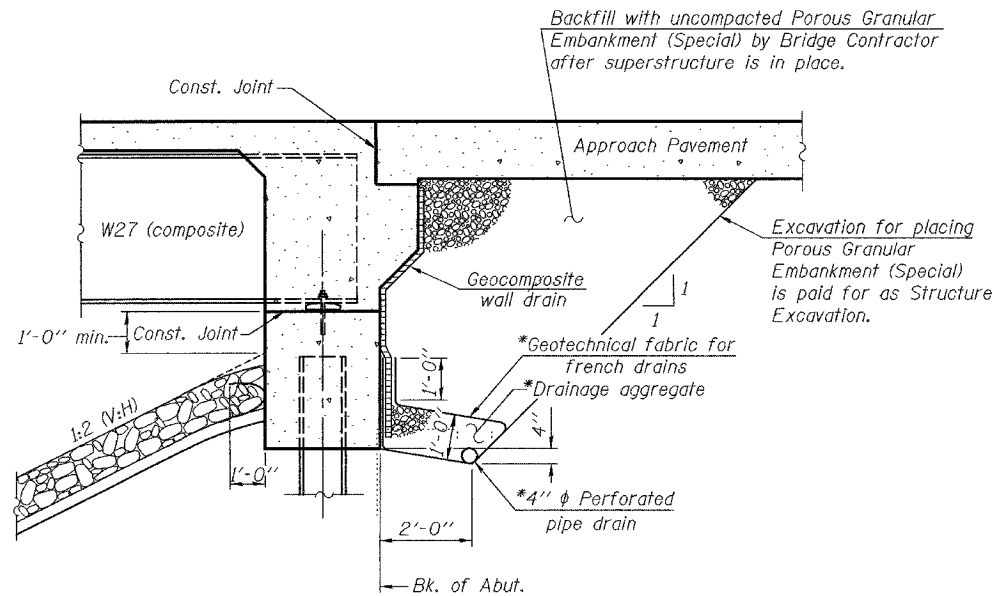
The Contractor shall drive one HP 12x53 test pile in a permanent location at Pier 1 and one HP12x74 test pile in a permanent location at Pier 3 as directed by the Engineer before ordering the remainder of piles.

In addition to all other requirements of section 512 of the Standard Specifications, splices for steel H-Piles shall develop the full capacity of the steel's cross sectional area of the pile for tension, shear and bending forces. One approved method of achieving this requirement is full penetration butt welding of the entire cross section. Other types of splices meeting the full capacity requirement may be allowed subject to the approval of the Engineer. Any proposal by the Contractor to use an alternate splice method must include adequate documentation demonstrating that the full tension, shear and bending capacities will be met. Appropriate welder qualifications will be required for the positions and processes used in splicing all piles. Nondestructive testing of completed welds will be limited to visual inspection.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

AASHTO M 270 Grade 50W structural steel shall only be painted, at the ends of the beams, for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Those areas shall be primed in the shop with an inorganic zinc rich primer per AASHTO M 300, Type 1. No field painting shall be required. All structural steel shall be cleaned as specified in the special provision for "Surface Preparation and Painting Requirements for Weathering Steel".

All Construction joints shall be bonded.



**SECTION THRU INTEGRAL ABUTMENT**

(Horiz. dim. @ Rt. L's)

\*Included in the cost of Pipe Underdrains for Structures.

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 slopes. 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.		82	82
Stone Riprap, Class A4	Sq. Yd.		1209	1209
Filter Fabric	Sq. Yd.		1209	1209
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		376.4	376.4
Floor Drains	Each	12		12
Bridge Deck Grooving	Sq. Yd.	787		787
Protective Coat	Sq. Yd.	1061		1061
Concrete Structures	Cu. Yd.		182.9	182.9
Concrete Superstructure	Cu. Yd.	279.1		279.1
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	3636		3636
Reinforcement Bars, Epoxy Coated	Pound	68810	15450	84260
Furnishing Steel Piles HP 8x36	Foot		427	427
Furnishing Steel Piles HP 12x53	Foot		762	762
Furnishing Steel Piles HP 12x74	Foot		660	660
Driving Piles	Foot		1849	1849
Test Pile Steel HP 12x53	Each		1	1
Test Pile Steel HP 12x74	Each		1	1
Name Plates	Each			1
Geocomposite Wall Drain	Sq. Yd.		51.3	51.3
Pipe Underdrains for Structures 4"	Foot		126	126
Underwater Structure Excavation Protection-Location 1	Each		1	1
Underwater Structure Excavation Protection-Location 2	Each		1	1
Bar Splacers	Each	56		56

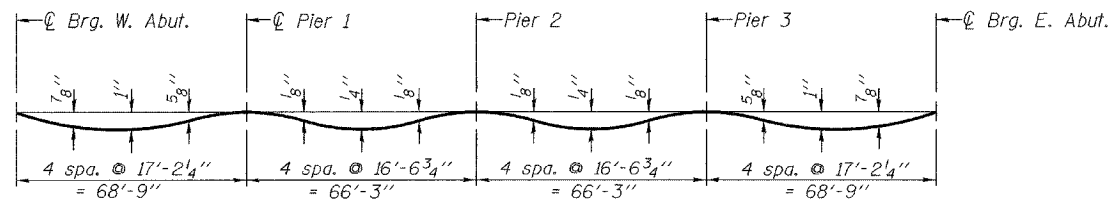
DESIGNED	Dewey Coultas
CHECKED	Chi Cheung Chau
DRAWN	R. Sommer
CHECKED	D.H.C./C.C.C.

EXAMINED	September 18 2006 Thomas J. Domagala ENGINEER OF BRIDGE DESIGN
PASSED	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

**GENERAL DATA**  
S.B.I. RT. 1 SEC. (8C)B-2  
WABASH COUNTY  
STATION 204+42.25  
STRUCTURE No. 093-0022

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3 21 SHEETS
S.B.I. 1	(8C)B-2	WABASH	36	14	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-	Contract #94783		

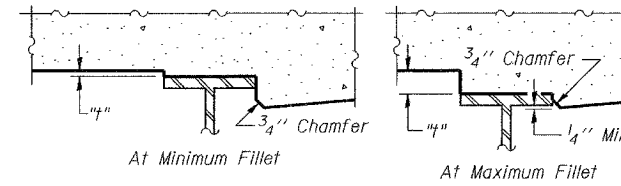


**DEAD LOAD DEFLECTION DIAGRAM**

(Includes weight of concrete only.)

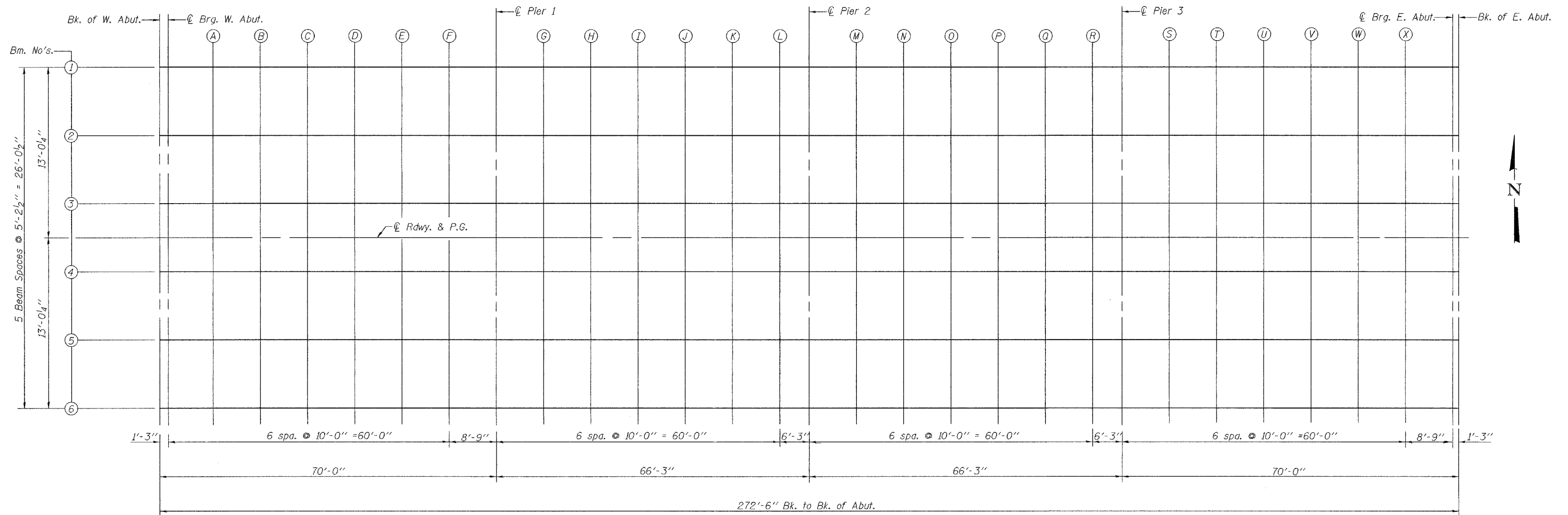
Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets 4 & 5 of 21.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown sht's. 4 & 5 of 21 minus slab thickness, equals the fillet heights "t" above top flange of beams.

**FILLET HEIGHTS**



**PLAN**

DESIGNED	Dewey Coultas
CHECKED	Chi Cheung Chau
DRAWN	R. Sommer
CHECKED	D.H.C./C.C.C.

EXAMINED	September 18 2006 Thomas J. Demagalki ENGINEER OF BRIDGE DESIGN
PASSED	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

**TOP OF SLAB ELEVATIONS**  
S.B.I. RT. 1 SEC. (8C)B-2  
WABASH COUNTY  
STATION 204+42.25  
STRUCTURE No. 093-0022

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO. 4
S.B.I. 1	(8C)B-2	WABASH	36	15	21 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #94783

**BEAM 1**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK W ABUT	20306.00	-13.021	399.135	399.135
CL BRG W ABUT	20307.25	-13.021	399.147	399.147
A	20317.25	-13.021	399.242	399.283
B	20327.25	-13.021	399.329	399.403
C	20337.25	-13.021	399.410	399.493
D	20347.25	-13.021	399.483	399.559
E	20357.25	-13.021	399.551	399.603
F	20367.25	-13.021	399.611	399.635
CL PIER #1	20376.00	-13.021	399.658	399.658
G	20386.00	-13.021	399.705	399.709
H	20396.00	-13.021	399.746	399.755
I	20406.00	-13.021	399.780	399.798
J	20416.00	-13.021	399.807	399.825
K	20426.00	-13.021	399.827	399.841
L	20436.00	-13.021	399.841	399.846
CL PIER #2	20442.25	-13.021	399.846	399.846
M	20452.25	-13.021	399.848	399.856
N	20462.25	-13.021	399.844	399.859
O	20472.25	-13.021	399.832	399.852
P	20482.25	-13.021	399.815	399.829
Q	20492.25	-13.021	399.790	399.795
R	20502.25	-13.021	399.758	399.760
CL PIER #3	20508.50	-13.021	399.735	399.735
S	20518.50	-13.021	399.692	399.721
T	20528.50	-13.021	399.643	399.698
U	20538.50	-13.021	399.587	399.665
V	20548.50	-13.021	399.524	399.606
W	20558.50	-13.021	399.454	399.526
X	20568.50	-13.021	399.377	399.413
CL BRG E ABUT	20577.25	-13.021	399.305	399.305
BK E ABUT	20578.50	-13.021	399.294	399.294

**BEAM 2**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK W ABUT	20306.00	-7.813	399.222	399.222
CL BRG W ABUT	20307.25	-7.813	399.234	399.234
A	20317.25	-7.813	399.328	399.369
B	20327.25	-7.813	399.416	399.489
C	20337.25	-7.813	399.496	399.580
D	20347.25	-7.813	399.570	399.645
E	20357.25	-7.813	399.637	399.689
F	20367.25	-7.813	399.697	399.722
CL PIER #1	20376.00	-7.813	399.744	399.744
G	20386.00	-7.813	399.792	399.795
H	20396.00	-7.813	399.833	399.841
I	20406.00	-7.813	399.866	399.884
J	20416.00	-7.813	399.893	399.911
K	20426.00	-7.813	399.914	399.927
L	20436.00	-7.813	399.927	399.932
CL PIER #2	20442.25	-7.813	399.932	399.932
M	20452.25	-7.813	399.935	399.943
N	20462.25	-7.813	399.930	399.945
O	20472.25	-7.813	399.919	399.938
P	20482.25	-7.813	399.901	399.916
Q	20492.25	-7.813	399.876	399.882
R	20502.25	-7.813	399.845	399.847
CL PIER #3	20508.50	-7.813	399.822	399.822
S	20518.50	-7.813	399.779	399.807
T	20528.50	-7.813	399.729	399.784
U	20538.50	-7.813	399.673	399.751
V	20548.50	-7.813	399.610	399.693
W	20558.50	-7.813	399.540	399.613
X	20568.50	-7.813	399.464	399.500
CL BRG E ABUT	20577.25	-7.813	399.391	399.391
BK E ABUT	20578.50	-7.813	399.380	399.38

**BEAM 3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK W ABUT	20306.00	-2.604	399.303	399.303
CL BRG W ABUT	20307.25	-2.604	399.315	399.315
A	20317.25	-2.604	399.409	399.450
B	20327.25	-2.604	399.497	399.570
C	20337.25	-2.604	399.577	399.661
D	20347.25	-2.604	399.651	399.727
E	20357.25	-2.604	399.718	399.770
F	20367.25	-2.604	399.779	399.803
CL PIER #1	20376.00	-2.604	399.826	399.826
G	20386.00	-2.604	399.873	399.877
H	20396.00	-2.604	399.914	399.923
I	20406.00	-2.604	399.948	399.966
J	20416.00	-2.604	399.975	399.992
K	20426.00	-2.604	399.995	400.008
L	20436.00	-2.604	400.008	400.014
CL PIER #2	20442.25	-2.604	400.013	400.013
M	20452.25	-2.604	400.016	400.024
N	20462.25	-2.604	400.011	400.027
O	20472.25	-2.604	400.000	400.020
P	20482.25	-2.604	399.982	399.997
Q	20492.25	-2.604	399.958	399.963
R	20502.25	-2.604	399.926	399.928
CL PIER #3	20508.50	-2.604	399.903	399.903
S	20518.50	-2.604	399.860	399.888
T	20528.50	-2.604	399.811	399.866
U	20538.50	-2.604	399.754	399.833
V	20548.50	-2.604	399.691	399.774
W	20558.50	-2.604	399.622	399.694
X	20568.50	-2.604	399.545	399.581
CL BRG E ABUT	20577.25	-2.604	399.472	399.472
BK E ABUT	20578.50	-2.604	399.462	399.462

**RDWY. & P.G.**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK W ABUT	20306.00	0.000	399.344	399.344
CL BRG W ABUT	20307.25	0.000	399.356	399.356
A	20317.25	0.000	399.450	399.491
B	20327.25	0.000	399.537	399.611
C	20337.25	0.000	399.618	399.702
D	20347.25	0.000	399.692	399.767
E	20357.25	0.000	399.759	399.811
F	20367.25	0.000	399.819	399.844
CL PIER #1	20376.00	0.000	399.866	399.866
G	20386.00	0.000	399.914	399.917
H	20396.00	0.000	399.954	399.963
I	20406.00	0.000	399.988	400.006
J	20416.00	0.000	400.015	400.033
K	20426.00	0.000	400.036	400.049
L	20436.00	0.000	400.049	400.054
CL PIER #2	20442.25	0.000	400.054	400.054
M	20452.25	0.000	400.056	400.065
N	20462.25	0.000	400.052	400.067
O	20472.25	0.000	400.041	400.060
P	20482.25	0.000	400.023	400.037
Q	20492.25	0.000	399.998	400.004
R	20502.25	0.000	399.967	399.969
CL PIER #3	20508.50	0.000	399.943	399.943
S	20518.50	0.000	399.901	399.929
T	20528.50	0.000	399.851	399.906
U	20538.50	0.000	399.795	399.873
V	20548.50	0.000	399.732	399.815
W	20558.50	0.000	399.662	399.734
X	20568.50	0.000	399.586	399.622
CL BRG E ABUT	20577.25	0.000	399.513	399.513
BK E ABUT	20578.50	0.000	399.502	399.502

DESIGNED	Dewey Coultas
CHECKED	Chi Cheung Chau
DRAWN	R. Sommer
CHECKED	D.H.C./C.C.C.

September 18 2006

EXAMINED	Thomas J. Demagabek
PASSED	Ralph E. Anderson

ENGINEER OF BRIDGES AND STRUCTURES

TOP OF SLAB ELEVATIONS  
S.B.I. RT. 1 SEC. (8C)B-2  
WABASH COUNTY  
STATION 204+42.25  
STRUCTURE No. 093-0022



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO. S.B.I. 1	SECTION (8C)B-2	COUNTY WABASH	SHEET NO. 36	SHEET 16	SHEET NO. 5 21 SHEETS
FED. ROAD DIST. NO. 7		BLDG. NO.	FED. AID PROJECT		

Contract #94783

**BEAM 4**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK W ABUT	20306.00	2.604	399.303	399.303
CL BRG W ABUT	20307.25	2.604	399.315	399.315
A	20317.25	2.604	399.409	399.450
B	20327.25	2.604	399.497	399.570
C	20337.25	2.604	399.577	399.661
D	20347.25	2.604	399.651	399.727
E	20357.25	2.604	399.718	399.770
F	20367.25	2.604	399.779	399.803
CL PIER #1	20376.00	2.604	399.826	399.826
G	20386.00	2.604	399.873	399.877
H	20396.00	2.604	399.914	399.923
I	20406.00	2.604	399.948	399.966
J	20416.00	2.604	399.975	399.992
K	20426.00	2.604	399.995	400.008
L	20436.00	2.604	400.008	400.014
CL PIER #2	20442.25	2.604	400.013	400.013
M	20452.25	2.604	400.016	400.024
N	20462.25	2.604	400.011	400.027
O	20472.25	2.604	400.000	400.020
P	20482.25	2.604	399.982	399.997
Q	20492.25	2.604	399.958	399.963
R	20502.25	2.604	399.926	399.928
CL PIER #3	20508.50	2.604	399.903	399.903
S	20518.50	2.604	399.860	399.888
T	20528.50	2.604	399.811	399.866
U	20538.50	2.604	399.754	399.833
V	20548.50	2.604	399.691	399.774
W	20558.50	2.604	399.622	399.694
X	20568.50	2.604	399.545	399.581
CL BRG E ABUT	20577.25	2.604	399.472	399.472
BK E ABUT	20578.50	2.604	399.462	399.462

**BEAM 5**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK W ABUT	20306.00	7.813	399.222	399.222
CL BRG W ABUT	20307.25	7.813	399.234	399.234
A	20317.25	7.813	399.328	399.369
B	20327.25	7.813	399.416	399.489
C	20337.25	7.813	399.496	399.580
D	20347.25	7.813	399.570	399.645
E	20357.25	7.813	399.637	399.689
F	20367.25	7.813	399.697	399.722
CL PIER #1	20376.00	7.813	399.744	399.744
G	20386.00	7.813	399.792	399.795
H	20396.00	7.813	399.833	399.841
I	20406.00	7.813	399.866	399.884
J	20416.00	7.813	399.893	399.911
K	20426.00	7.813	399.914	399.927
L	20436.00	7.813	399.927	399.932
CL PIER #2	20442.25	7.813	399.932	399.932
M	20452.25	7.813	399.935	399.943
N	20462.25	7.813	399.930	399.945
O	20472.25	7.813	399.919	399.938
P	20482.25	7.813	399.901	399.916
Q	20492.25	7.813	399.876	399.882
R	20502.25	7.813	399.845	399.847
CL PIER #3	20508.50	7.813	399.822	399.822
S	20518.50	7.813	399.779	399.807
T	20528.50	7.813	399.729	399.784
U	20538.50	7.813	399.673	399.751
V	20548.50	7.813	399.610	399.693
W	20558.50	7.813	399.540	399.613
X	20568.50	7.813	399.464	399.500
CL BRG E ABUT	20577.25	7.813	399.391	399.391
BK E ABUT	20578.50	7.813	399.380	399.380

**BEAM 6**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK W ABUT	20306.00	13.021	399.135	399.135
CL BRG W ABUT	20307.25	13.021	399.147	399.147
A	20317.25	13.021	399.242	399.283
B	20327.25	13.021	399.329	399.403
C	20337.25	13.021	399.410	399.493
D	20347.25	13.021	399.483	399.559
E	20357.25	13.021	399.551	399.603
F	20367.25	13.021	399.611	399.635
CL PIER #1	20376.00	13.021	399.658	399.658
G	20386.00	13.021	399.705	399.709
H	20396.00	13.021	399.746	399.755
I	20406.00	13.021	399.780	399.798
J	20416.00	13.021	399.807	399.825
K	20426.00	13.021	399.827	399.841
L	20436.00	13.021	399.841	399.846
CL PIER #2	20442.25	13.021	399.846	399.846
M	20452.25	13.021	399.848	399.856
N	20462.25	13.021	399.844	399.859
O	20472.25	13.021	399.832	399.852
P	20482.25	13.021	399.815	399.829
Q	20492.25	13.021	399.790	399.795
R	20502.25	13.021	399.758	399.760
CL PIER #3	20508.50	13.021	399.735	399.735
S	20518.50	13.021	399.692	399.721
T	20528.50	13.021	399.643	399.698
U	20538.50	13.021	399.587	399.665
V	20548.50	13.021	399.524	399.606
W	20558.50	13.021	399.454	399.526
X	20568.50	13.021	399.377	399.413
CL BRG E ABUT	20577.25	13.021	399.305	399.305
BK E ABUT	20578.50	13.021	399.294	399.294

DESIGNED	Dewey Coultas
CHECKED	Chi Cheung Chau
DRAWN	R. Sommer
CHECKED	D.H.C./C.C.C.

September 18 2006

EXAMINED	Thomas J. Domagala
PASSED	Ralph E. Anderson

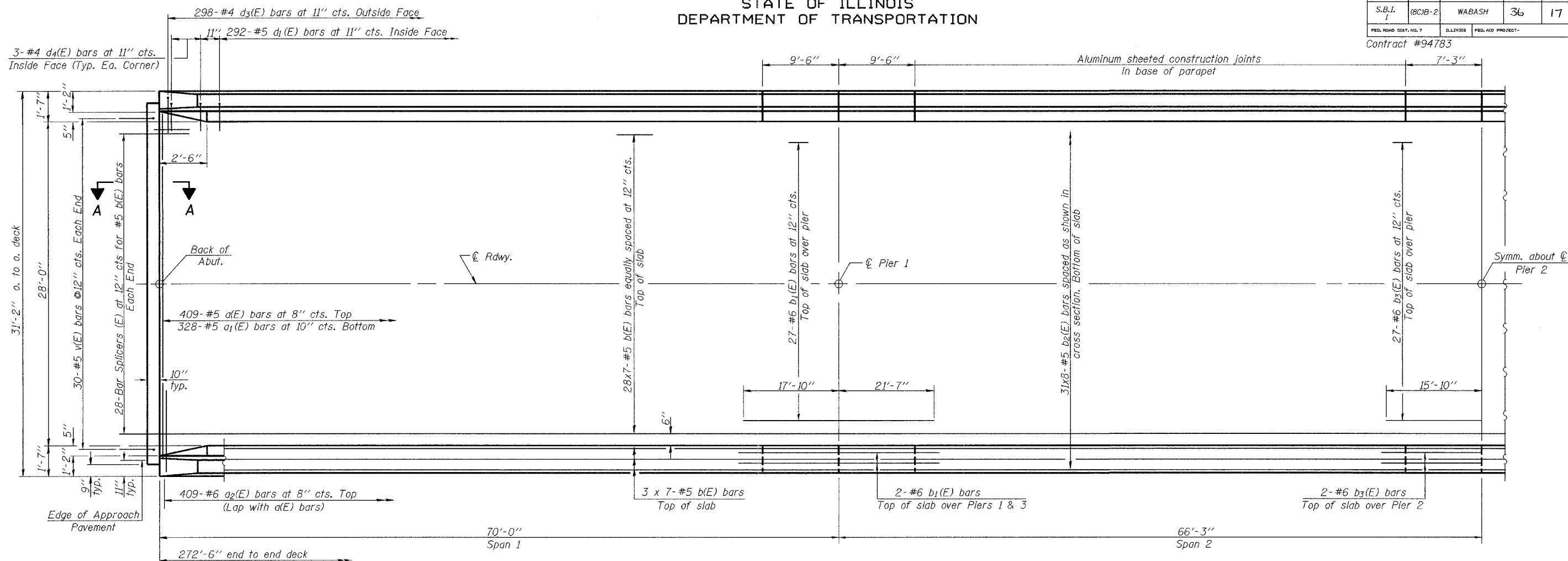
ENGINEER OF BRIDGE DESIGN  
ENGINEER OF BRIDGES AND STRUCTURES

**TOP OF SLAB ELEVATIONS**  
**S.B.I. RT. 1 SEC. (8C)B-2**  
**WABASH COUNTY**  
**STATION 204+42.25**  
**STRUCTURE No. 093-0022**



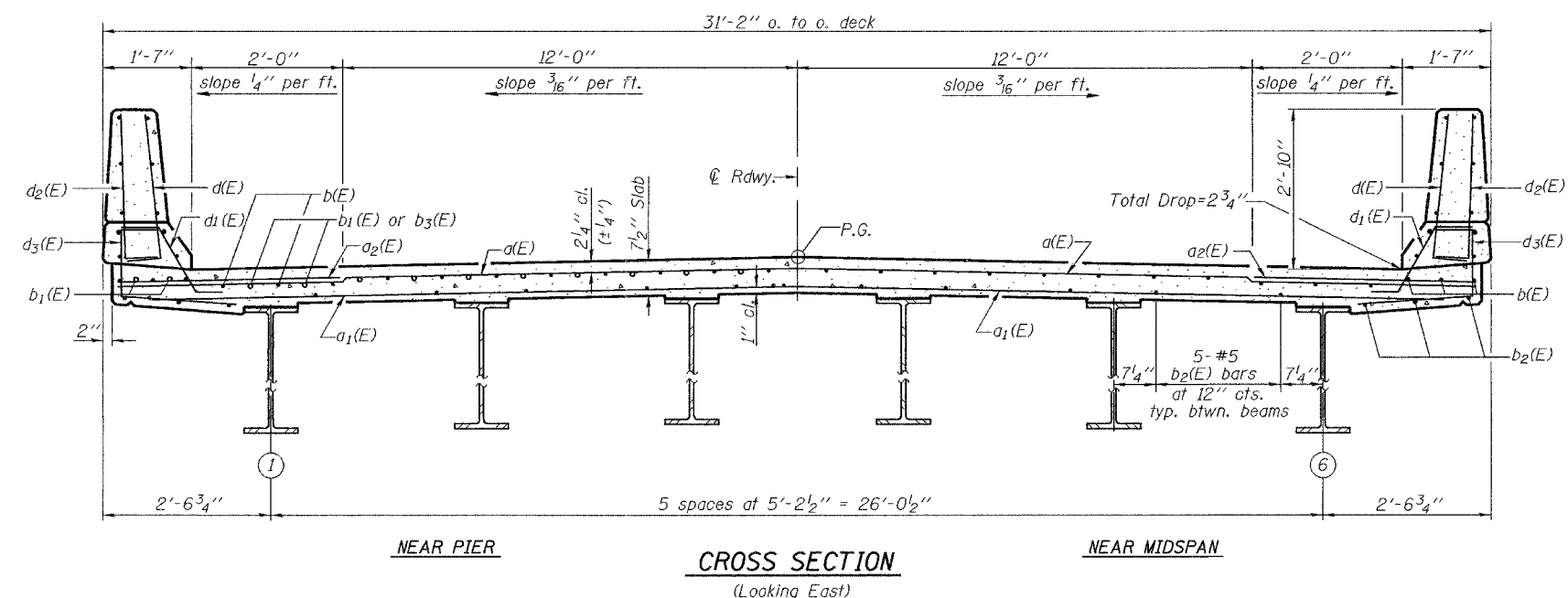
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	STATION	SHEET NO.	SHEET NO. 6 21 SHEETS
S.B.I. 1	(8C)B-2	WABASH	36	17	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-	Contract #94783		



PLAN

MIN. BAR LAP  
#5 bar = 1'-8"



Notes: See Sheet 7 of 21 for superstructure details and Bill of Material.  
Reinforcement bars designated (E) shall be epoxy coated.  
Bars indicated thus 32 x 7-#5 etc. indicates 32 lines of bars with 7 lengths per line.  
See Sheet 7 of 21 for parapet reinforcement.  
See Sheet 8 of 21 for Section A-A.

DESIGNED	Dewey Coultas
CHECKED	Chi Cheung Chau
DRAWN	R. Sommer
CHECKED	D.H.C./C.C.C.

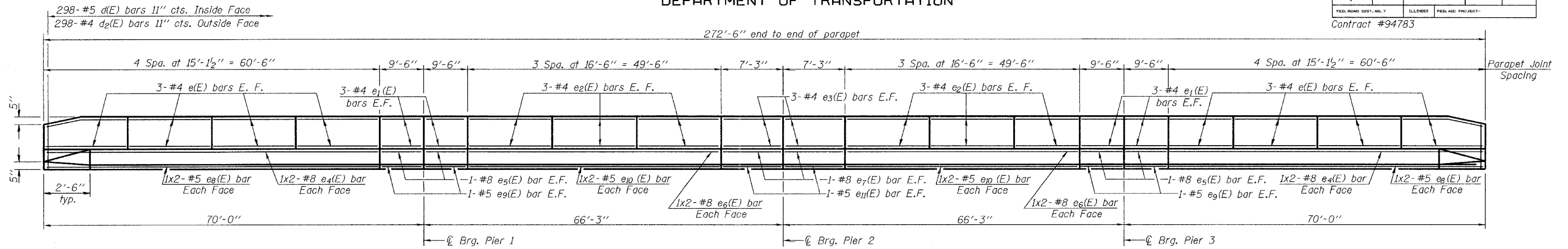
EXAMINED	September 18 2006 Thomas J. Demagala ENGINEER OF BRIDGE DESIGN
PASSED	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

**SUPERSTRUCTURE**  
S.B.I. RT. 1 SEC. (8C)B-2  
WABASH COUNTY  
STATION 204+42.25  
STRUCTURE No. 093-0022

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. 7
S.B.I. 1	(8C)B-2	WABASH	36	18	21 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		

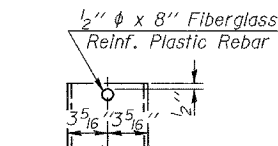
Contract #94783



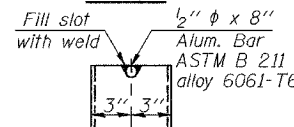
INSIDE ELEVATION OF PARAPET

MIN. BAR LAPS

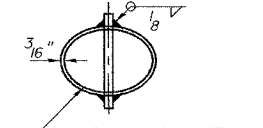
#5 bar = 1'-8"  
#8 bar = 3'-5"



FIBERGLASS PIPE

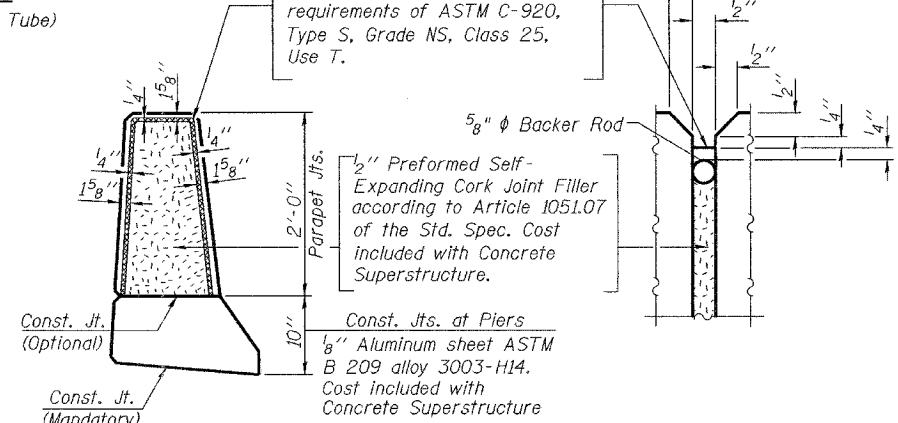


ALUMINUM TUBE



6" O.D. Aluminum Tube  
alloy 6061-T6 or  
6" diameter Fiberglass Pipe  
TOP PLAN  
(Showing Aluminum Tube)

Non-staining gray one component non-sag elastomeric gun grade polyurethane sealant meeting the requirements of ASTM C-920, Type S, Grade NS, Class 25, Use T.



PARAPET JOINT DETAILS

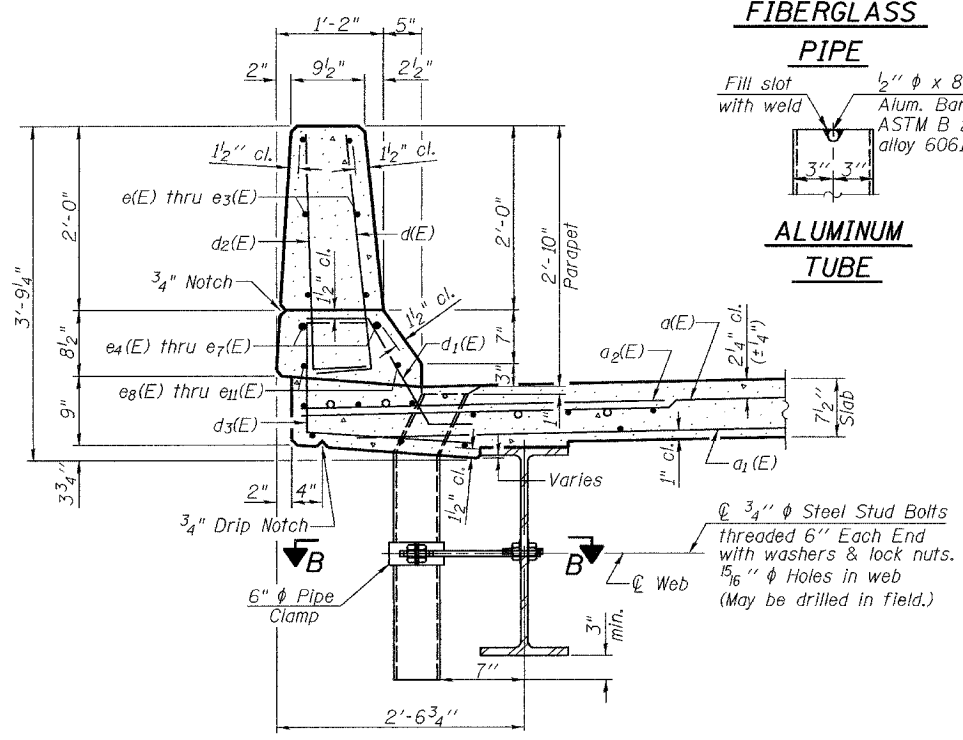
Notes: Floor drains need not be painted.  
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

SUPERSTRUCTURE  
BILL OF MATERIAL

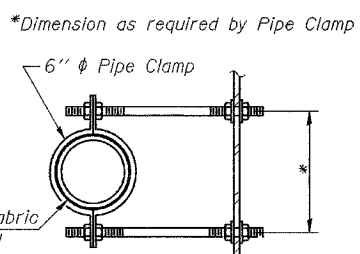
Bar	No.	Size	Length	Shape
a(E)	409	#5	30'-6"	—
a1(E)	328	#5	29'-1"	—
a2(E)	818	#6	6'-0"	—
b(E)	238	#5	40'-4"	—
b1(E)	62	#6	39'-5"	—
b2(E)	248	#5	35'-6"	—
b3(E)	31	#6	31'-8"	—
d(E)	596	#5	3'-0"	—
d1(E)	584	#5	2'-5"	—
d2(E)	596	#4	3'-0"	—
d3(E)	596	#4	3'-4"	—
d4(E)	12	#4	2'-2"	—
e(E)	96	#4	14'-10"	—
e1(E)	48	#4	9'-3"	—
e2(E)	72	#4	16'-3"	—
e3(E)	24	#4	7'-0"	—
e4(E)	16	#8	32'-0"	—
e5(E)	16	#8	9'-3"	—
e6(E)	16	#8	26'-6"	—
e7(E)	8	#8	7'-0"	—
e8(E)	16	#5	31'-0"	—
e9(E)	16	#5	9'-3"	—
e10(E)	16	#5	25'-6"	—
e11(E)	8	#5	7'-0"	—
m(E)	4	#6	29'-4"	—
m1(E)	6	#6	30'-10"	—
m2(E)	24	#6	7'-6"	—
m3(E)	10	#6	4'-10"	—
m4(E)	4	#6	2'-3"	—
s(E)	72	#5	6'-10"	—
s1(E)	62	#4	8'-10"	—
v(E)	60	#5	3'-8"	—
Reinforcement Bars Epoxy Coated		Pound	68810	
Concrete Superstructure		Cu. Yds.	279.1	

Reinforcement bars designated (E) shall be epoxy coated.  
Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.

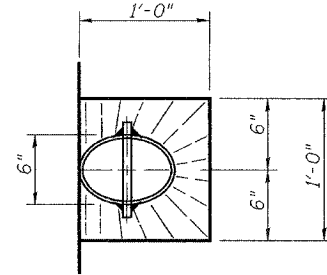
SUPERSTRUCTURE DETAILS  
S.B.I. RT. 1 SEC. (8C)B-2  
WABASH COUNTY  
STATION 204+42.25  
STRUCTURE No. 093-0022



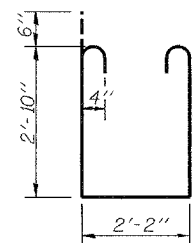
SECTION THRU PAPAPET



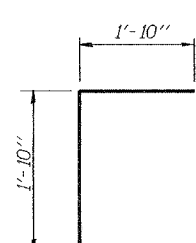
SECTION B-B



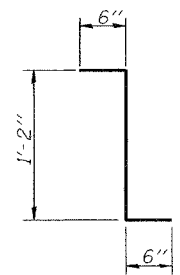
TOP PLAN  
(Showing Tube Section)  
(West Parapet)



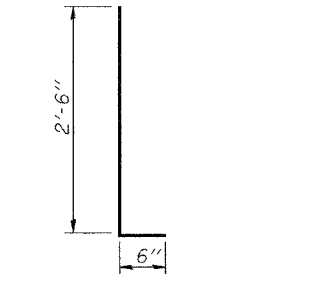
BAR s1(E)



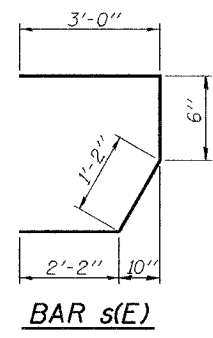
BAR v(E)



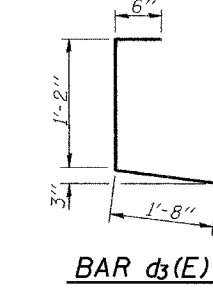
BAR d4(E)



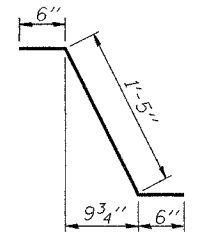
BARS d(E) & d2(E)



BAR s(E)



BAR d3(E)



BAR d1(E)

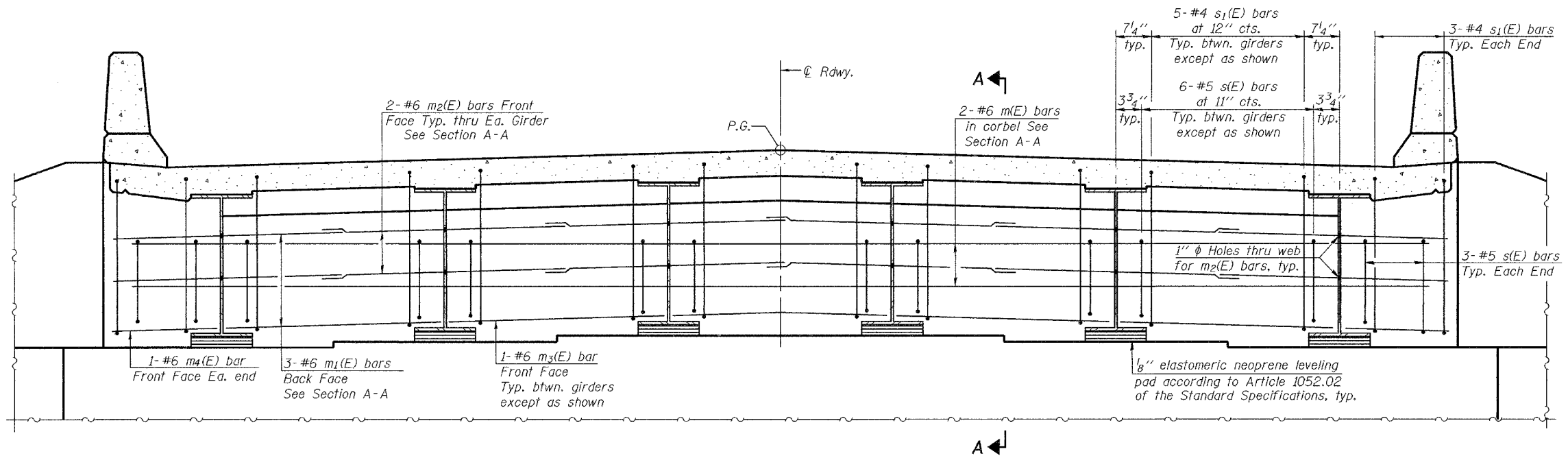
DESIGNED	Dewey Coultas
CHECKED	Chi Cheung Chau
DRAWN	R. Sommer
CHECKED	D.H.C./C.C.C.

September 18 2006  
EXAMINED Thomas J. Domagalak  
ENGINEER OF BRIDGE DESIGN  
PASSED Ralph E. Anderson  
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8 21 SHEETS
S.B.I. 1	(8C)B-2	WABASH	36	19	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

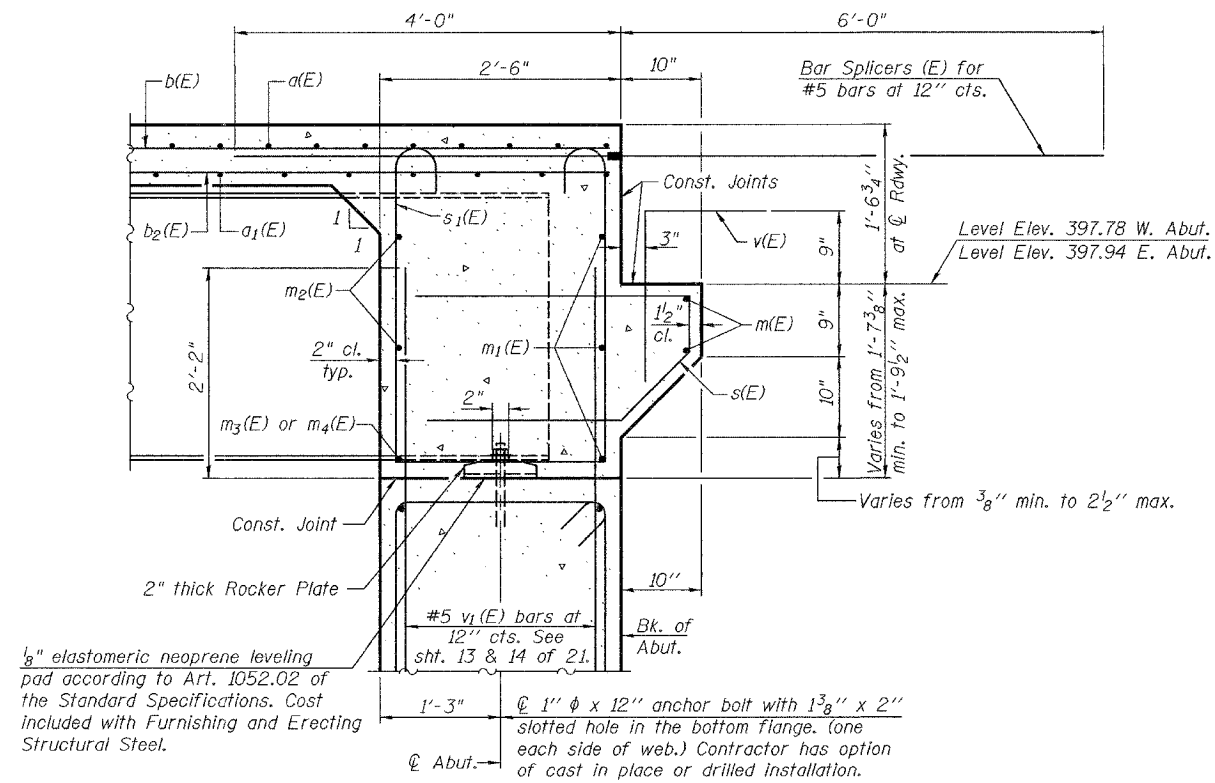
Contract #94783



DIAPHRAGM ELEVATION AT ABUTMENT

Notes: Reinforcement bars in diaphragm are billed with superstructure on sheet 7 of 21.  
Concrete in diaphragm is included with Concrete Superstructure on sheet 7 of 21.  
For details of bars s(E) & s<sub>1</sub>(E) see sheet 7 of 21.  
See sheet 9 of 21 for holes thru web for m<sub>2</sub>(E) bars.  
For anchor bolt details see sheet 12 of 21.  
For Bar Splicer (E) details see sheet 11 of 21.

**MIN. BAR LAP**  
#6 bar = 2'-9"



SECTION A-A

DESIGNED	Dewey Coultas
CHECKED	Chi Cheung Chau
DRAWN	R. Sommer
CHECKED	D.H.C./C.C.C.

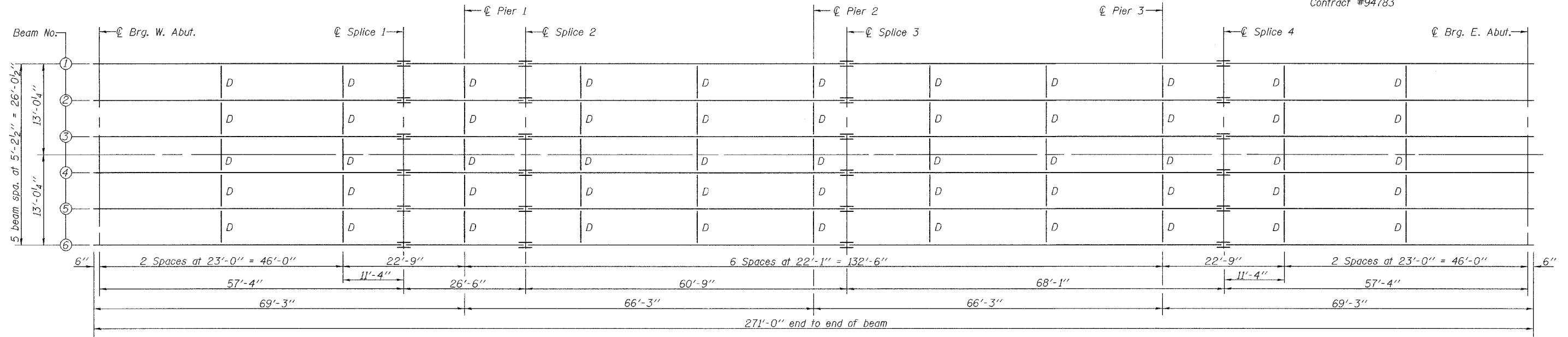
EXAMINED	September 18 2006 Thomas J. Domagala ENGINEER OF BRIDGE DESIGN
PASSED	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

**DIAPHRAGM DETAILS**  
S.B.I. RT. 1 SEC. (8C)B-2  
WABASH COUNTY  
STATION 204+42.25  
STRUCTURE No. 093-0022

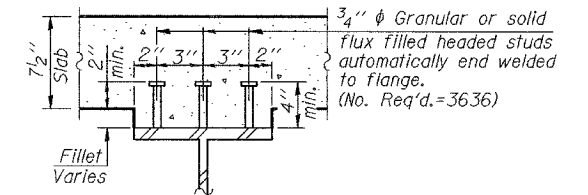
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO. S.B.I. 1	SECTION (8C)B-2	COUNTY WABASH	SHEET NO. 36	SHEET 20	SHEET NO. 9 21 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	

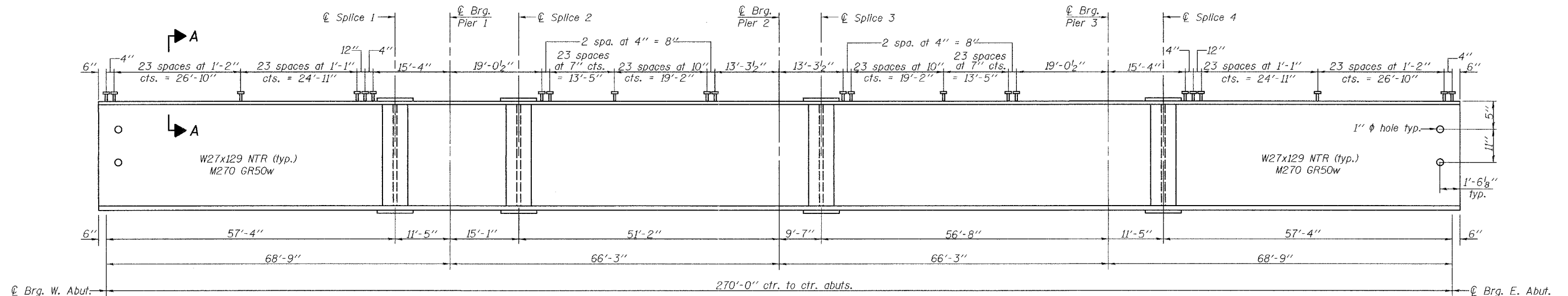
Contract #94783



FRAMING PLAN



SECTION A-A



BEAM ELEVATION

\*TOP OF BEAM ELEVATION

Location	℄ Brg. W. Abut.	℄ Splice 1	℄ Pier 1	℄ Splice 2	℄ Pier 2	℄ Splice 3	℄ Pier 3	℄ Splice 4	℄ Brg. E. Abut.
Beam 1	398.47	398.86	398.90	398.96	399.06	399.09	398.97	398.95	398.63
Beam 2	398.56	398.95	398.99	399.05	399.15	399.17	399.06	399.04	398.72
Beam 3	398.64	399.03	399.07	399.13	399.23	399.25	399.14	399.12	398.80
Beam 4	398.64	399.03	399.07	399.13	399.23	399.25	399.14	399.12	398.80
Beam 5	398.56	398.95	398.99	399.05	399.15	399.17	399.06	399.04	398.72
Beam 6	398.47	398.86	398.90	398.96	399.06	399.09	398.97	398.95	398.63

\*For fabrication only.

DESIGNED	Dewey Coultas
CHECKED	Chi Cheung Chau
DRAWN	R. Sommer
CHECKED	D.H.C./C.C.C.

September 18 2006  
EXAMINED *Thomas J. Domagalak*  
ENGINEER OF BRIDGE DESIGN  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

Notes: "NTR" denotes members to which Notch Toughness Requirements are applicable.  
All beams shall be AASHTO M270 Grade 50W  
For remainder of structural steel details see sheet 10 of 21.

STRUCTURAL STEEL  
S.B.I. RT. 1 SEC. (8C)B-2  
WABASH COUNTY  
STATION 204+42.25  
STRUCTURE No. 093-0022

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

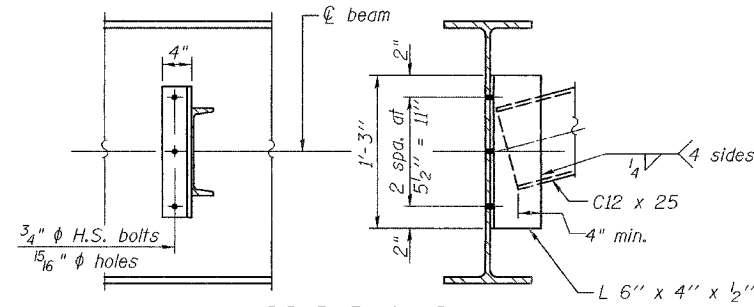
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 1	(8C)B-2	WABASH	36	21
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Contract #94783

	0.4 Sp. 1 & 0.6 Sp. 4	Piers 1 or 3	0.5 Sp. 2 & 0.5 Sp. 3	Pier 2
Is	(in <sup>4</sup> ) 4760	4760	4760	4760
Ic (n)	(in <sup>4</sup> ) 12159	4760	12159	4760
Ic (sn)	(in <sup>4</sup> ) 8737	4760	8737	4760
Ss	(in <sup>3</sup> ) 345	345	345	345
Sc (n)	(in <sup>3</sup> ) 500	345	500	345
Sc (sn)	(in <sup>3</sup> ) 447	345	447	345
DC1	(k/ft.) 0.650	0.650	0.650	0.650
M DC1	(k) 240	318	100	193
DC2	(k/ft.) 0.150	0.150	0.150	0.150
M DC2	(k) 60	62	30	43
DW	(k/ft.) 0.260	0.260	0.260	0.260
M DW	(k) 104	108	52	74
M <sub>u</sub> +Imp	(k) 704	419	567	381
Ma (Strength I)	(k) 1763	1370	1233	1073
Mr	(k) 2252		2283	
fs DC1	(k.s.i.) 8.3	11.1	3.5	6.7
fs DC2	(k.s.i.) 1.6	2.2	0.8	1.5
fs DW	(k.s.i.) 2.8	3.8	1.4	2.6
fs 1.3 (I+I)	(k.s.i.) 22.0	18.9	17.7	17.2
fs (Service II)	(k.s.i.) 34.7	35.9	23.4	28.0
fs (Total)(Strength I)	(k.s.i.)	47.7		37.3
Vsr	(k) 22.7		23.1	

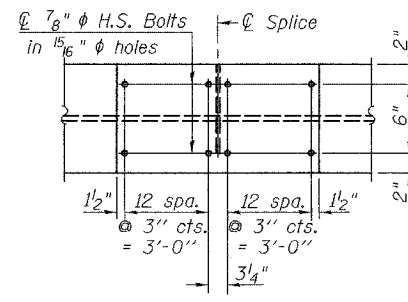
	Abuts.	Piers 1 or 3	Pier 2
R DC1	(k) 17.6	50.2	39.1
R DC2+DW	(k) 11.6	31.0	25.5
R <sub>u</sub>	(k) 49.5	73.1	70.5
R Imp.	(k) 12.3	14.0	13.9
R (Total)	(k) 91.0	168.3	149.0

Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs due to non-composite loads.  
Ic(n) and Sc(n) are the moment of inertia and section modulus of the composite section used in computing fs due to short-term composite loads.  
Ic(sn) and Sc(sn) are the moment of inertia and section modulus of the composite section used in computing fs due to long-term composite loads.  
DC1 is the dead load acting on the non-composite section.  
DC2 is the dead load acting on the long-term composite section.  
DW is the dead load acting on the long-term composite section due to wearing surface.  
Ma (Strength I)=1.25(MDC1+DC2)+1.5M(DW)+1.75(M<sub>u</sub>+Imp).  
Mr is the full plastic moment capacity computed in accordance with 6.10.3.1.3 and 6.10.4.2.  
fs (Service II) is the sum of the stresses due to DC1+DC2+DW+1.3(I+Imp).  
fs (Total) (Strength I) (Non-compact section) is the sum of the stresses due to 1.25(DC1+DC2)+1.5DW+1.75(I+Imp).  
Vsr is the maximum shear range in the span 0.75 (I+Imp).

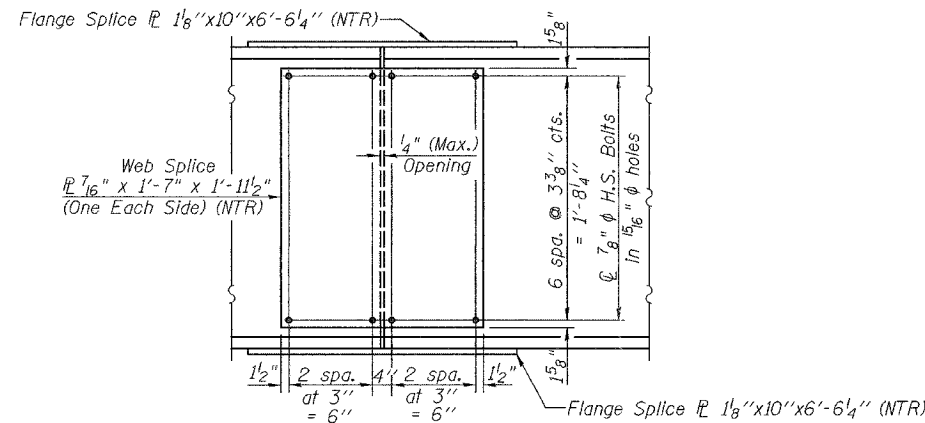


**DIAPHRAGM D**

(55 Required)  
All diaphragm material shall be AASHTO M270 Grade 50W.

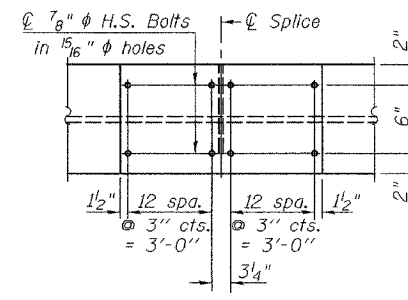


**TOP FLANGE SPLICE**

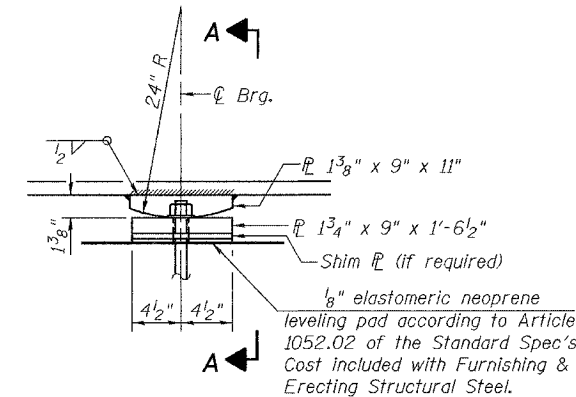


**SPLICE DETAIL**

(24 Required)



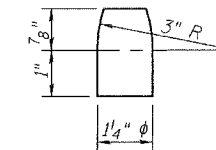
**BOTTOM FLANGE SPLICE**



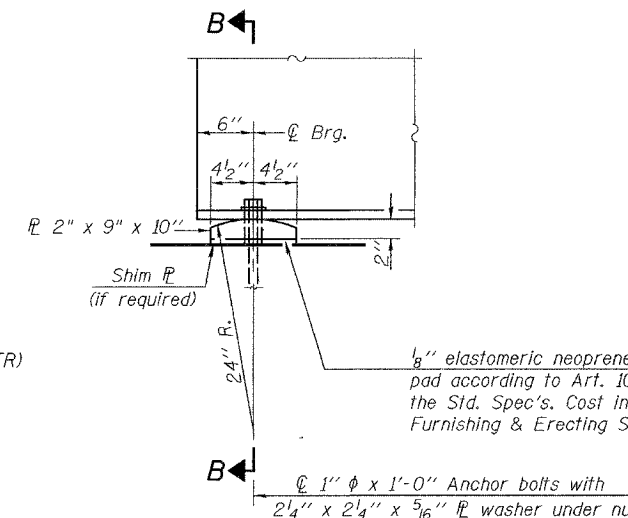
**ELEVATION**

**FIXED BEARINGS AT PIERS**

(18 Required)



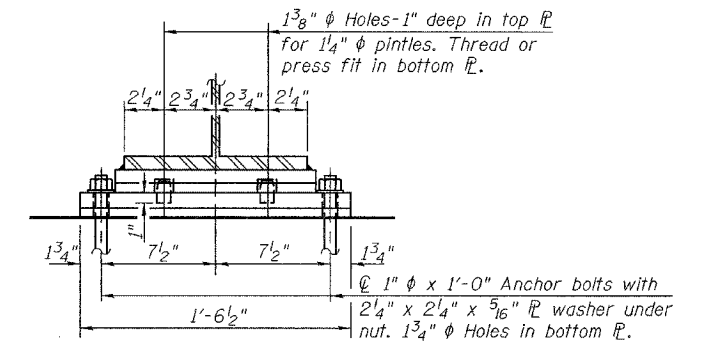
**PINTLE**



**ELEVATION AT ABUTMENTS**

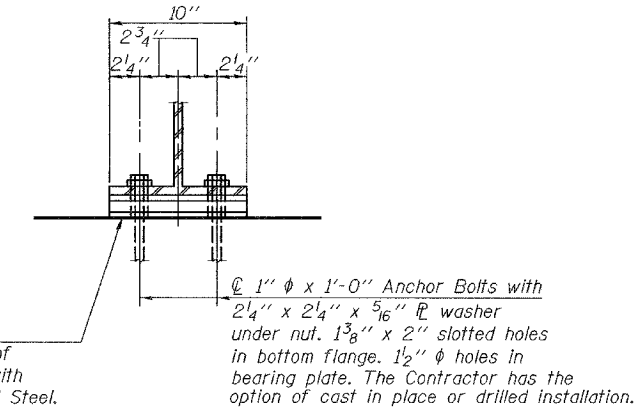
**ABUTMENT BEARING**

(12 Required)



**SECTION A-A**

Note: For Anchor Bolt details, See Sheet 12 of 21.  
All bearing plates and pintles shall be AASHTO M270 Grade 50W.



**SECTION B-B**

DESIGNED	Dewey Coultas
CHECKED	Chi Cheung Chau
DRAWN	R. Sommer
CHECKED	D.H.C./C.C.C.

September 18 2006  
EXAMINED Thomas J. Domagala  
PASSED Ralph E. Anderson

Note: All splice plates shall be AASHTO M 270 Grade 50W.  
"NTR" denotes members to which Notch Toughness Requirements are applicable.  
Two hardened washers shall be required over all oversized holes.

**STRUCTURAL STEEL**  
S.B.I. RT. 1 SEC. (8C)B-2  
WABASH COUNTY  
STATION 204+42.25  
STRUCTURE No. 093-0022

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 11 21 SHEETS
S.B.I. 1	(8C)B-2	WABASH	36	22	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-	Contract #94783		

**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 =  $1.25 \times f_y \times A_t$   
(Tension in kips)
- ② Minimum \*Pull-out Strength =  $1.25 \times f_{s_{allow}} \times A_t$   
(Tension in kips)

Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $f_{s_{allow}}$  = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)  
 $A_t$  = 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	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

The diameter of this part is the same as the diameter of the bar spliced.

The diameter of this part is equal or larger than the diameter of bar spliced.

**ROLLED THREAD DOWEL BAR**



**\*\*ONE PIECE**

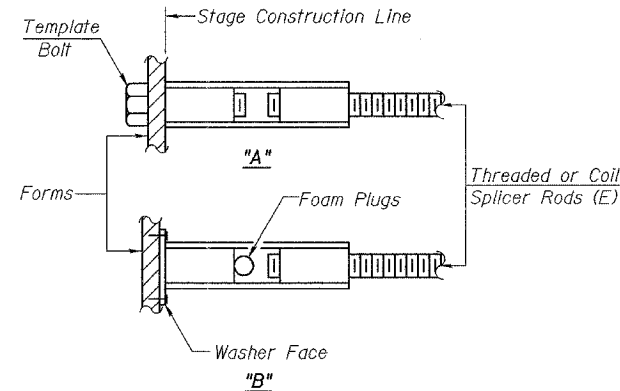
Wire Connector



**WELDED SECTIONS**

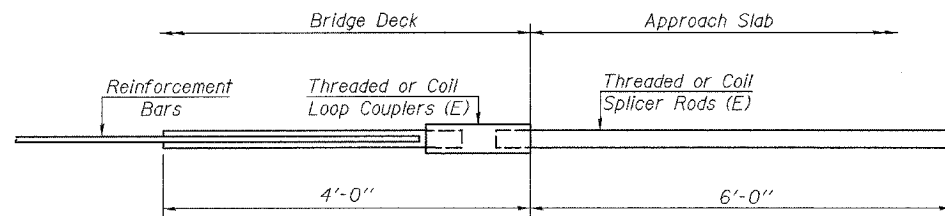
**BAR SPLICER ASSEMBLY ALTERNATIVES**

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



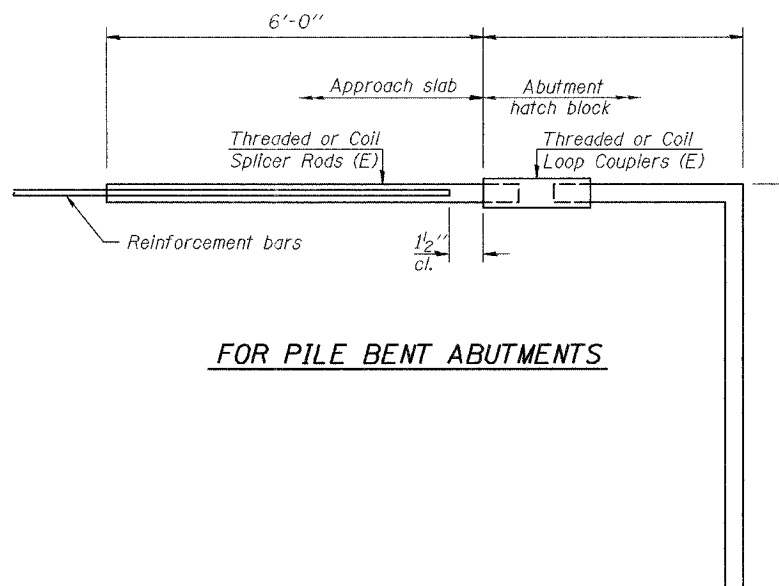
**INSTALLATION AND SETTING METHODS**

"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.



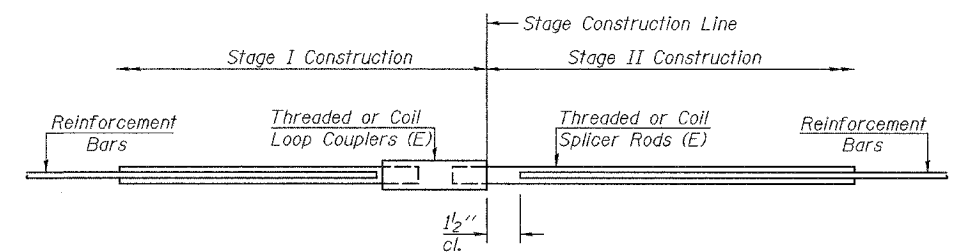
**FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 56



**FOR PILE BENT ABUTMENTS**

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 0



**STANDARD**

Bar Size	No. Assemblies Required	Location
#7		Abutts.
#7		Piers
#4		Piers
#5		Deck
#6		Diaphragms

**BAR SPLICER ASSEMBLY DETAILS**

S.B.I. RT. 1 SEC. (8C)B-2  
WABASH COUNTY  
STATION 204+42.25  
STRUCTURE No. 093-0022

DESIGNED	Dewey Coultas
CHECKED	Chi Cheung Chau
DRAWN	R. Sommer
CHECKED	D.H.C./C.C.C.

EXAMINED	September 18 2006	Thomas J. Domagala
PASSED		Ralph E. Anderson

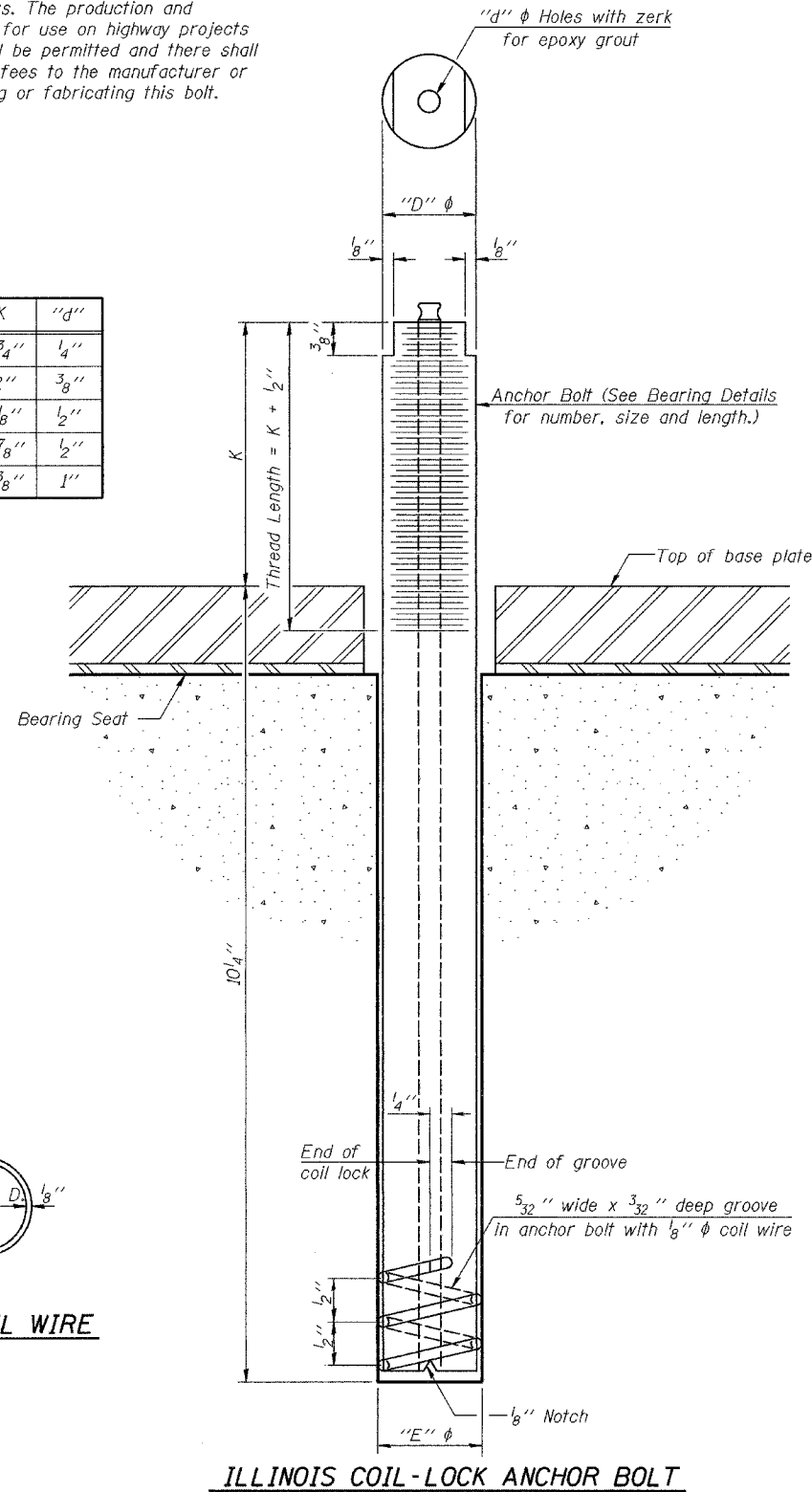
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 12
S.B.I. 1	(8C)B-2	WABASH	36	23	21 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

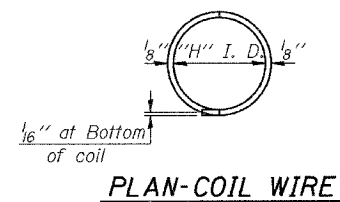
Contract #94783

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K	"d"
1"	1 1/8"	1 3/16"	1 3/4"	1/4"
1 1/4"	1 3/8"	1 1/16"	2"	3/8"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 13/16"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



ILLINOIS COIL-LOCK ANCHOR BOLT



PLAN-COIL WIRE

**MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT**

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.  
The coil wire shall be made of any suitable soft steel wire.  
The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.  
The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

**INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT**

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

**ALTERNATE ANCHOR BOLTS**

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.

- The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
1. A threaded rod stud with nut and washer of the type specified.
  2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Type
Abuts.	A307
Piers	A307

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

**GENERAL NOTES**

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.  
Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.  
The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for Furnishing and Erecting Structural Steel.

**ANCHOR BOLT DETAILS  
FOR BEARINGS  
S.B.I. RT. 1 SEC. (8C)B-2  
WABASH COUNTY  
STATION 204+42.25  
STRUCTURE No. 093-0022**

DESIGNED	Dewey Coultas
CHECKED	Chi Cheung Chau
DRAWN	R. Sommer
CHECKED	D.H.C./C.C.C.

EXAMINED	September 18 2006 Thomas J. Demagala ENGINEER OF BRIDGE DESIGN
PASSED	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

ABB-1 10-22-04



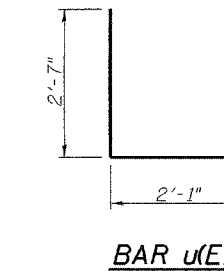
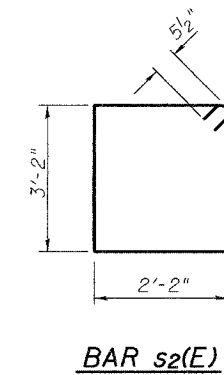
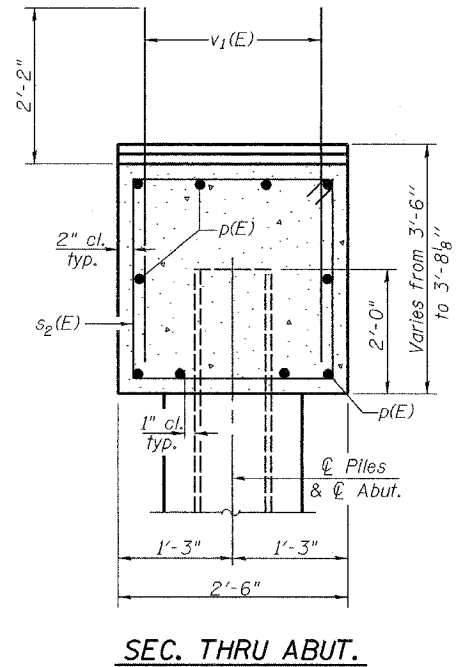
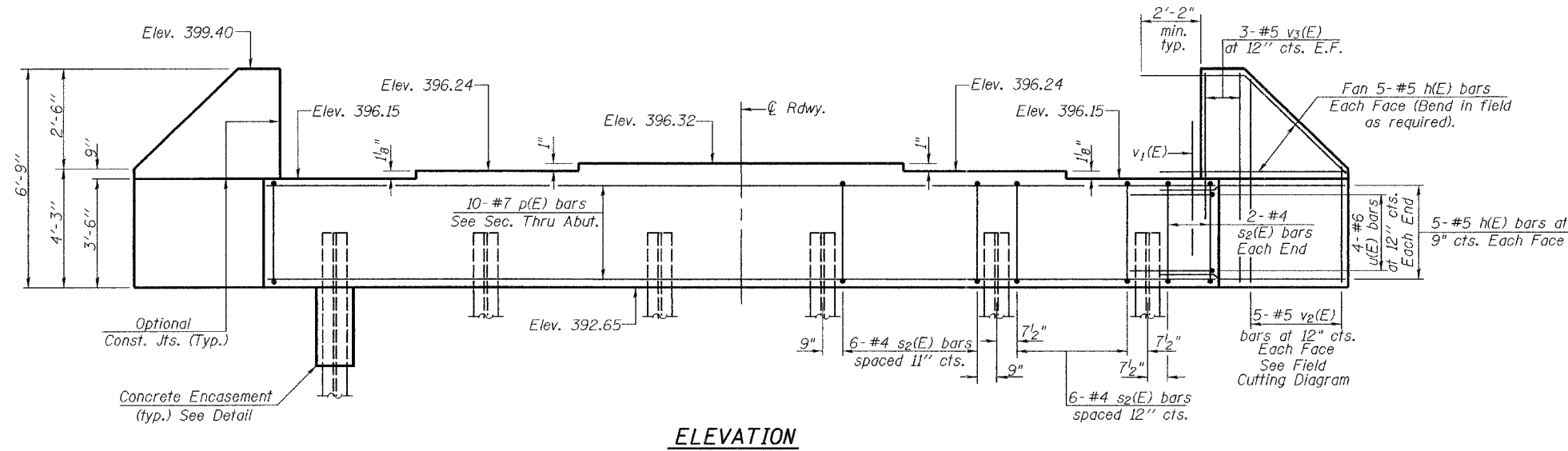


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO. S.B.I. 1	SECTION (8C)B-2	COUNTY WABASH	TOTAL SHEETS 36	SHEET NO. 25	SHEET NO. 14 21 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

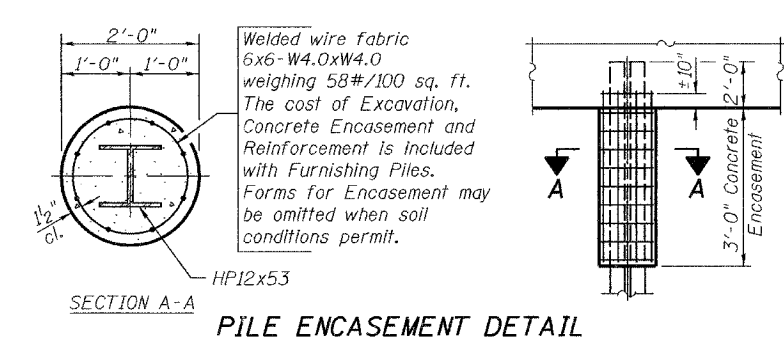
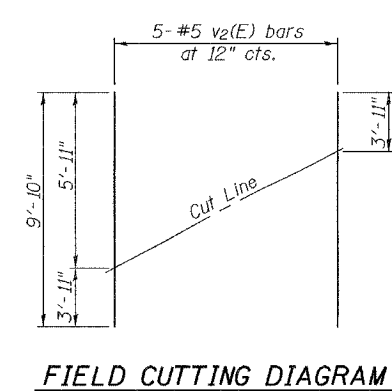
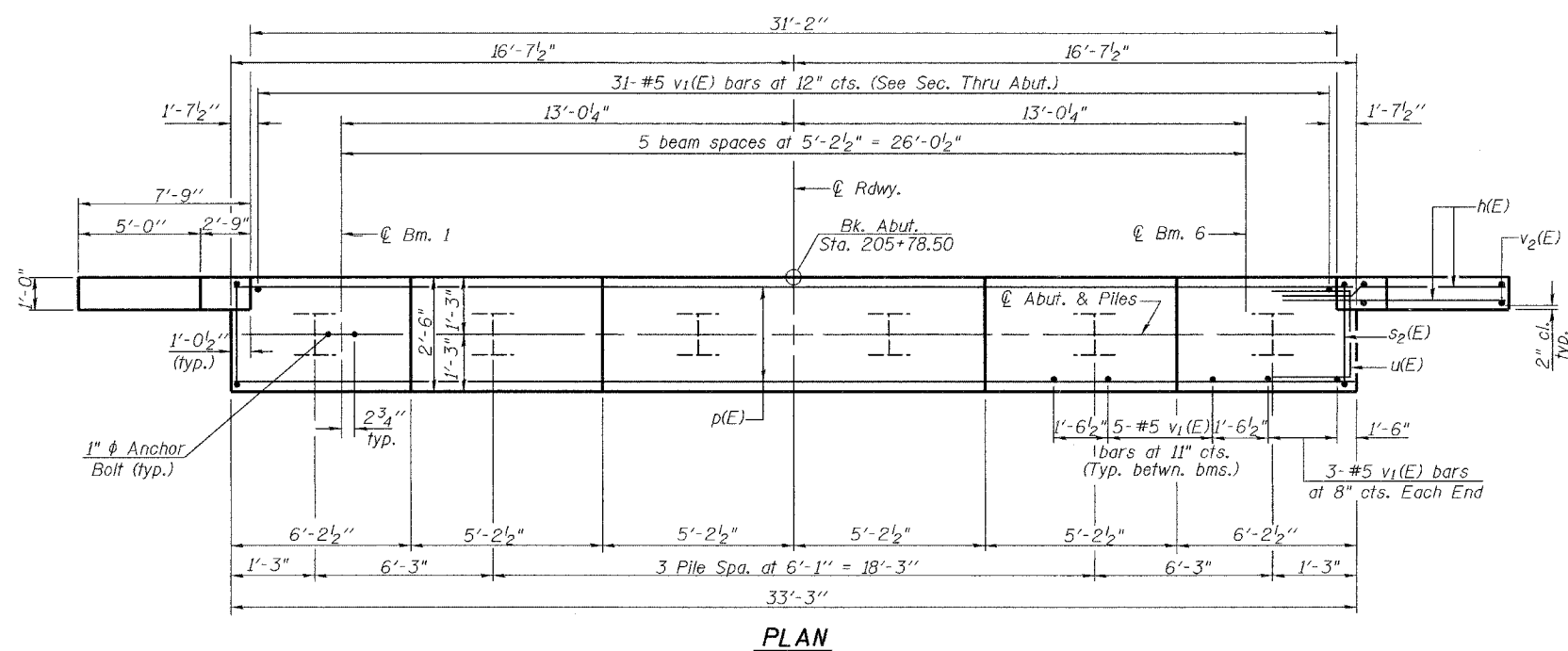
Contract #94783

Notes:  
Pour steps monolithically with cap.  
Reinforcement bars designated (E) shall be epoxy coated.  
Space reinforcement in cap to miss anchor bolts.  
For anchor bolt installation details see sheet 12 of 21.  
For bar splicer details see sheet 11 of 21.



**BILL OF MATERIAL**

Bar No.	Size	Length	Shape
h(E)	40 #5	10'-4"	—
p(E)	10 #7	32'-11"	—
s <sub>2</sub> (E)	34 #4	11'-7"	□
u(E)	8 #6	7'-3"	□
v <sub>1</sub> (E)	62 #5	4'-4"	—
v <sub>2</sub> (E)	10 #5	9'-10"	—
v <sub>3</sub> (E)	12 #5	6'-5"	—
Concrete Structures	Cu. Yd.	14.2	
Reinforcement Bars, Epoxy Coated	Pound	1920	
Furnishing Steel Piles HP12x53	Foot	354	
Driving Piles	Foot	354	
Structure Excavation	Cu. Yd.	117.2	



**PILE DATA**

Type: HP12x53  
 Nominal Required Bearing: 376 kips  
 Factored Resistance Available: 188 kips  
 Est. Length: 59'  
 No. Required: 6

DESIGNED	Dewey Coultas
CHECKED	Chi Cheung Chau
DRAWN	R. Sommer
CHECKED	D.H.C./C.C.C.

September 18 2006  
 EXAMINED *Thomas J. Domagalaki*  
 ENGINEER OF PROFESSIONAL DESIGN  
 PASSED *Ralph E. Anderson*  
 ENGINEER OF BRIDGES AND STRUCTURES

**EAST ABUTMENT**  
 S.B.I. RT. 1 SEC. (8C)B-2  
 WABASH COUNTY  
 STATION 204+42.25  
 STRUCTURE No. 093-0022

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

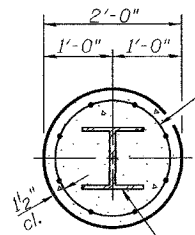
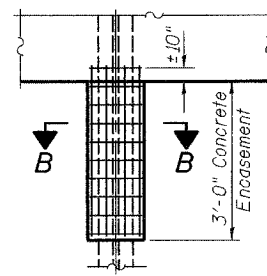
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 15
S.B.I. 1	(8C)B-2	WABASH	36	26	21 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #94783

**PILE DATA**

Type: Steel HP12x53  
Nominal Req'd. Bearing: 354 kips  
Factored Resistance Available: 177 kips  
Est. Length: 68'  
No. Required: 6+1 Test Pile

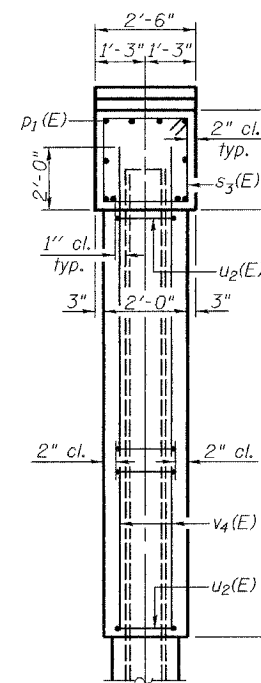
Note: Drive all Piles only to the Nominal Required Bearing including Test Pile.



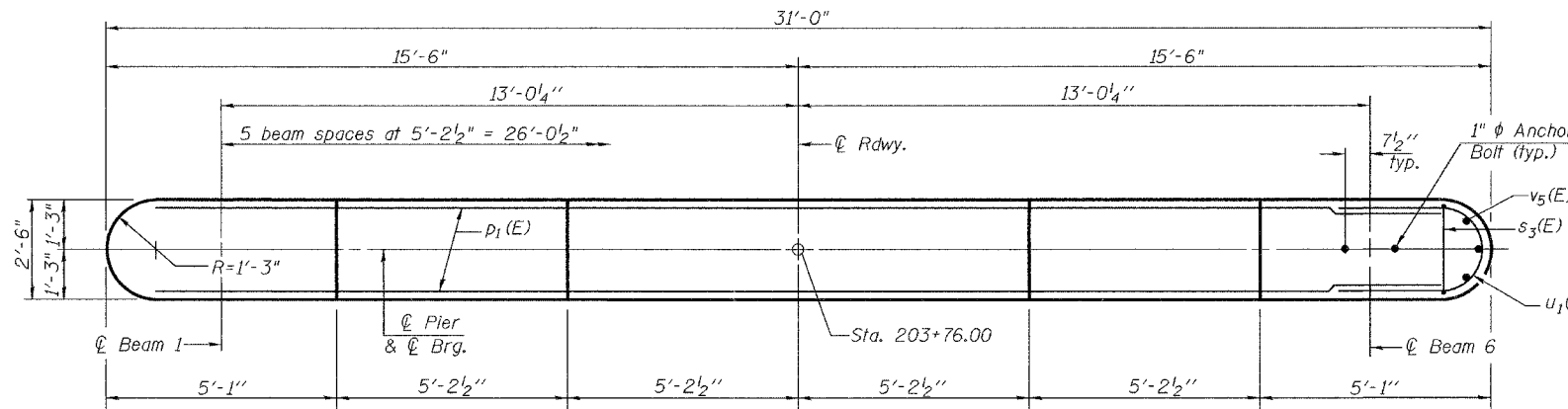
Welded wire fabric 6x6-W4.0xW4.0 weighing 58#/100 sq. ft. The cost of Excavation, Concrete Encasement and Reinforcement is included with Furnishing Piles. Forms for Encasement may be omitted when soil conditions permit.

SECTION B-B  
HP12x53

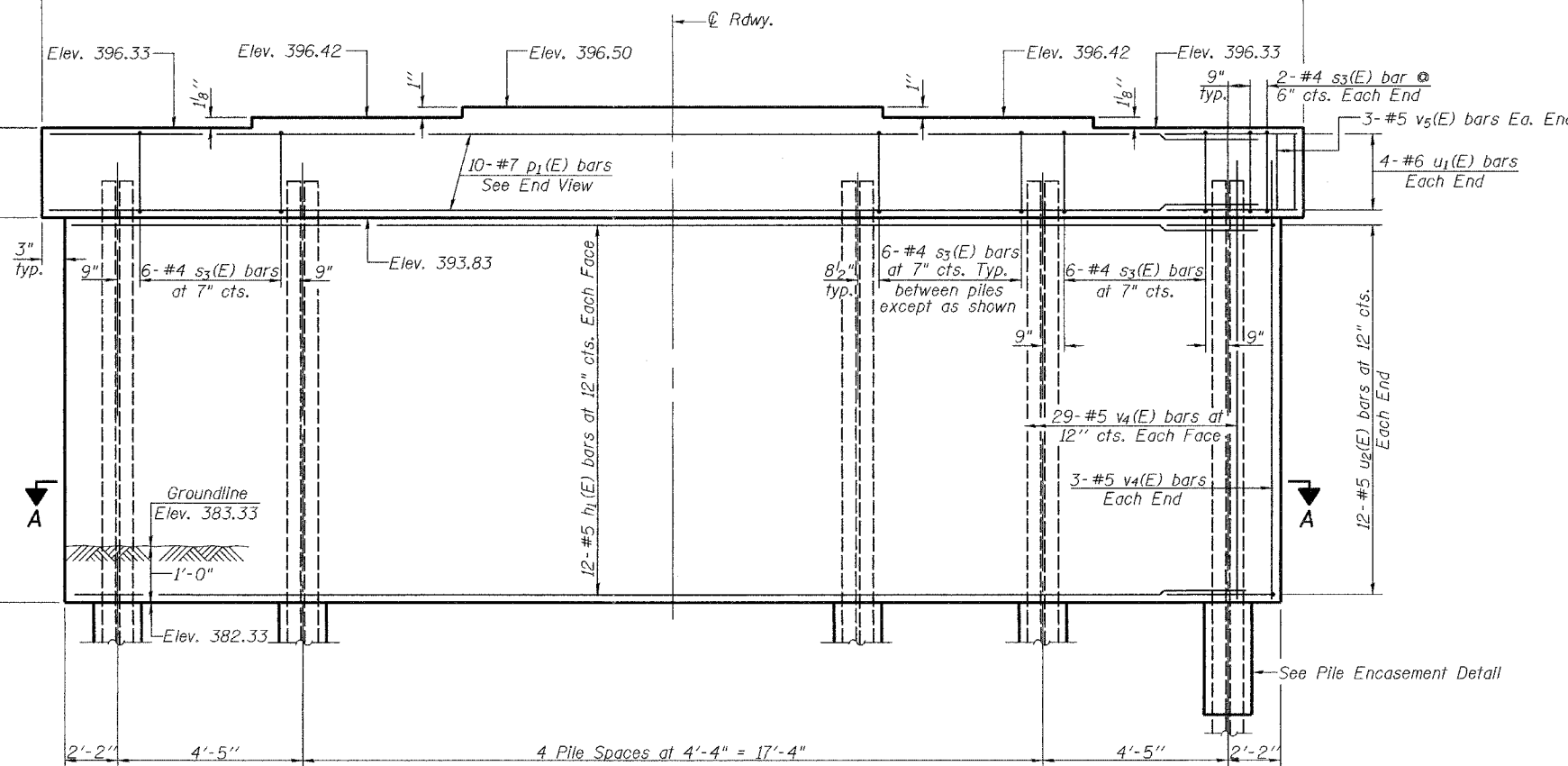
**PILE ENCASMENT DETAILS**



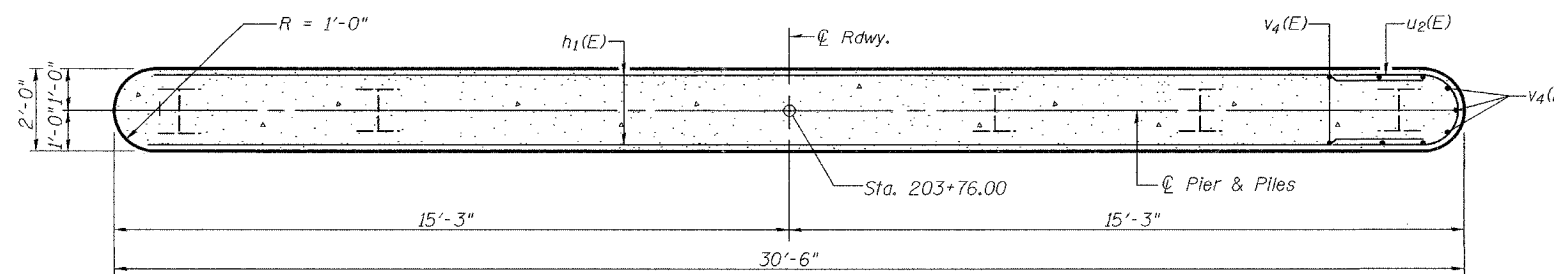
**END VIEW**



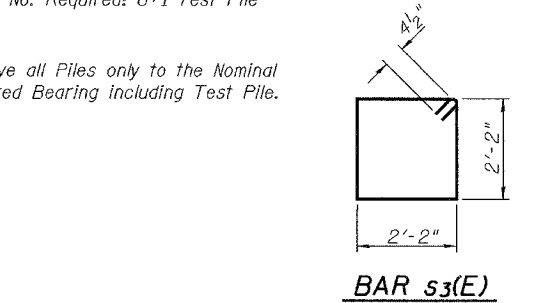
**TOP PLAN**



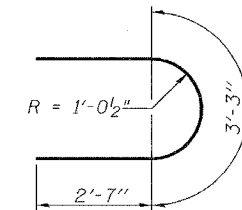
**ELEVATION**  
(Looking East)



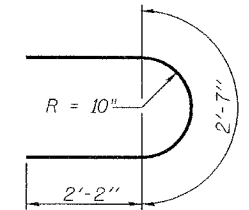
**SECTION A-A**



**BAR s3(E)**



**BAR u1(E)**



**BAR u2(E)**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h1(E)	24	#5	28'-6"	—
p1(E)	10	#7	28'-6"	—
s3(E)	40	#4	9'-5"	□
u1(E)	8	#6	8'-5"	U
u2(E)	24	#5	6'-11"	U
v4(E)	64	#5	13'-4"	—
v5(E)	6	#5	2'-2"	—
Concrete Structures			Cu. Yd.	32.9
Reinforcement Bars, Epoxy Coated			Pound	2730
Furnishing Steel Piles HP12x53			Foot	408
Structure Excavation			Cu. Yd.	7.4
Test Pile Steel HP 12x53			Each	1
Driving Piles			Foot	408

Notes:  
Pour steps monolithically with cap.  
Reinforcement bars designated (E) shall be epoxy coated.  
For anchor bolt installation details see sheet 12 of 21.  
Place Reinforcement bars in Cap to miss Anchor Bolts.

DESIGNED Dewey Coultas  
CHECKED Chi Cheung Chau  
DRAWN R. Sommer  
CHECKED D.H.C./C.C.C.

September 18 2006  
EXAMINED Thomas J. Domagala  
PASSED Ralph E. Anderson

**PIER 1**  
S.B.I. RT. 1 SEC. (8C)B-2  
WABASH COUNTY  
STATION 204+42.25  
STRUCTURE No. 093-0022

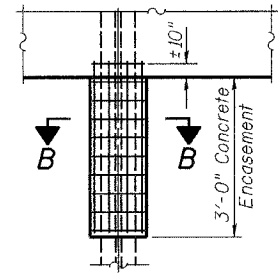
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO. S.B.I. 1	SECTION (8C)B-2	COUNTY WABASH	SHEET NO. 36	SHEET NO. 27	SHEET NO. 16 21 SHEETS
FED. ROAD DIST. NO. 7		S.L. NOTE		FED. AID PROJECT	

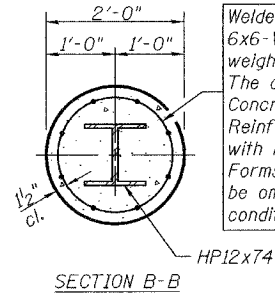
Contract #94783

**PILE DATA**

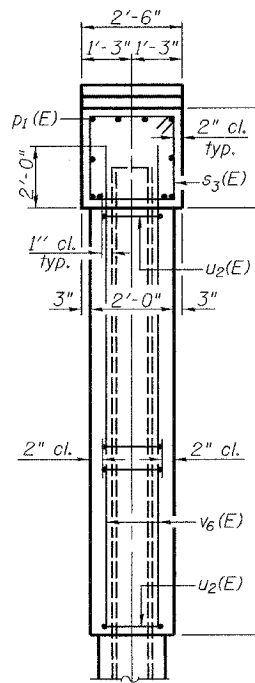
Type: Steel HP12x74  
Nominal Req'd. Bearing: 458 kips  
Factored Resistance Available: 229 kips  
Est. Length: 60'  
No. Required: 6



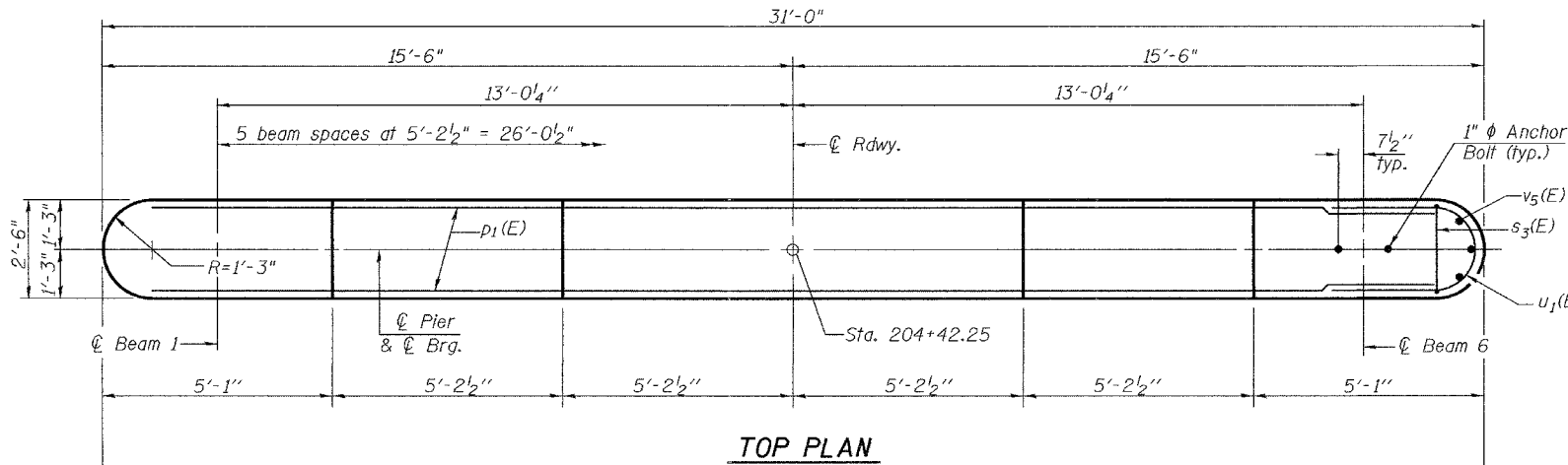
Welded wire fabric  
6x6-W4.0xW4.0  
weighing 58#/100 sq. ft.  
The cost of Excavation,  
Concrete Encasement and  
Reinforcement is included  
with Furnishing Piles.  
Forms for Encasement may  
be omitted when soil  
conditions permit.



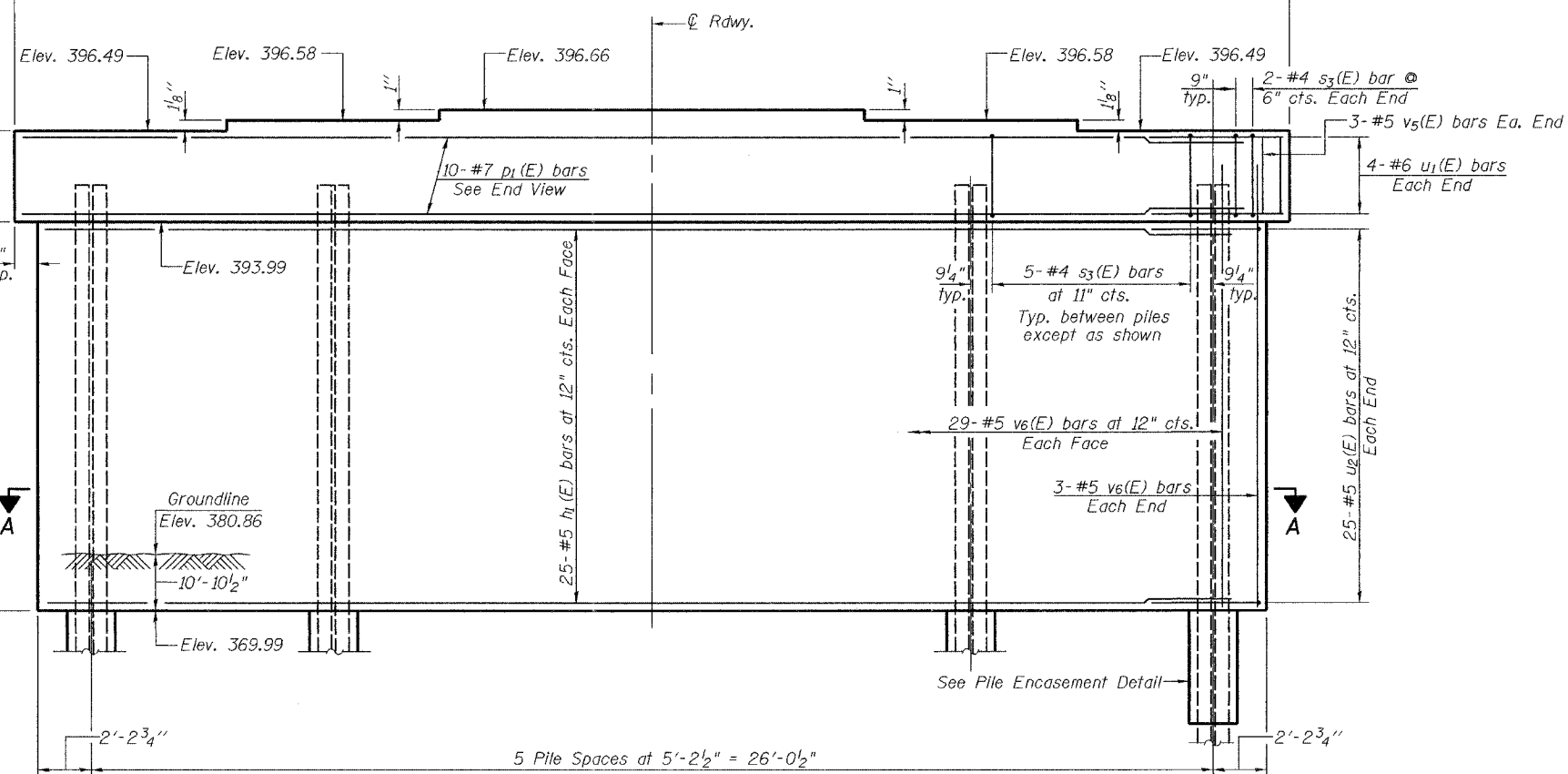
**PILE ENCASEMENT DETAILS**



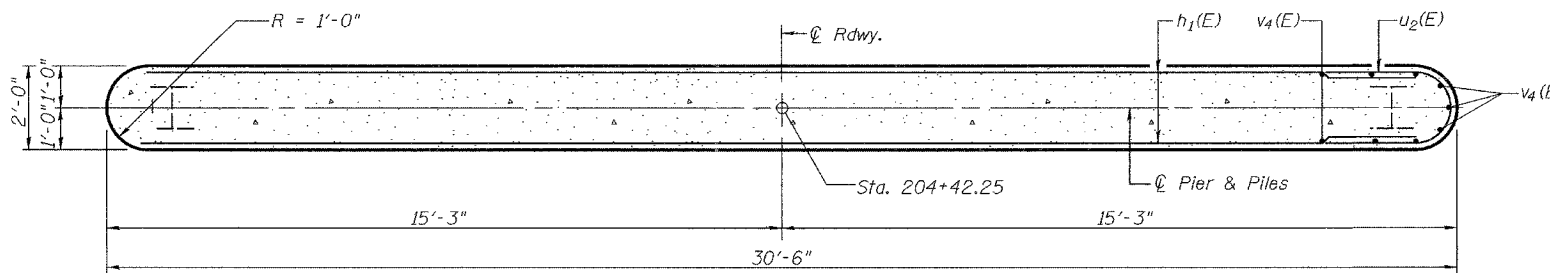
**END VIEW**



**TOP PLAN**



**ELEVATION**  
(Looking East)

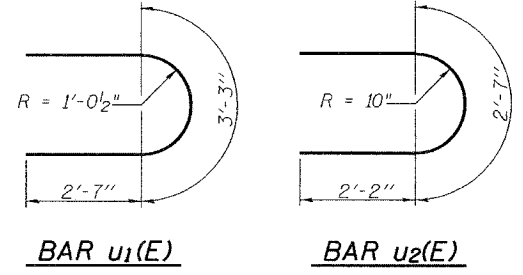
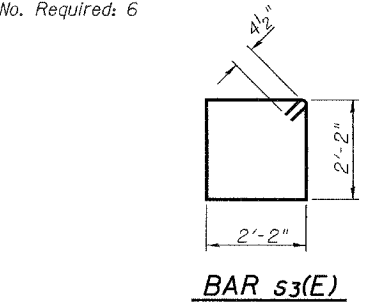


**SECTION A-A**

Notes:  
Pour steps monolithically with cap.  
Reinforcement bars designated (E) shall be epoxy coated.  
For anchor bolt installation details see sheet 12 of 21.  
Place Reinforcement bars in Cap to miss Anchor Bolts.

DESIGNED	Dewey Coultas
CHECKED	Chi Cheung Chau
DRAWN	R. Sommer
CHECKED	D.H.C./C.C.C.

EXAMINED	September 18 2006	Thomas J. Domagala
PASSED		Ralph E. Anderson



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h1(E)	50	#5	28'-6"	—
p1(E)	10	#7	28'-6"	—
s3(E)	29	#4	9'-5"	□
u1(E)	8	#6	8'-5"	⌋
u2(E)	50	#5	6'-11"	⌋
v6(E)	64	#5	25'-10"	—
v5(E)	6	#5	2'-2"	—
Concrete Structures		Cu. Yd.	60.8	
Reinforcement Bars, Epoxy Coated		Pound	4450	
Furnishing Steel Piles HP12x74		Foot	360	
Structure Excavation		Cu. Yd.	80.2	
Driving Piles		Foot	360	
Underwater Structure Excavation Protection Location 1		Each	1	

**PIER 2**  
**S.B.I. RT. 1 SEC. (8C)B-2**  
**WABASH COUNTY**  
**STATION 204+42.25**  
**STRUCTURE No. 093-0022**

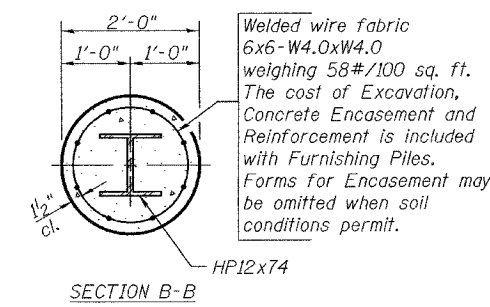
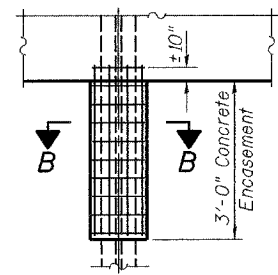
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. 1	(8C)B-2	WABASH	36	28
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

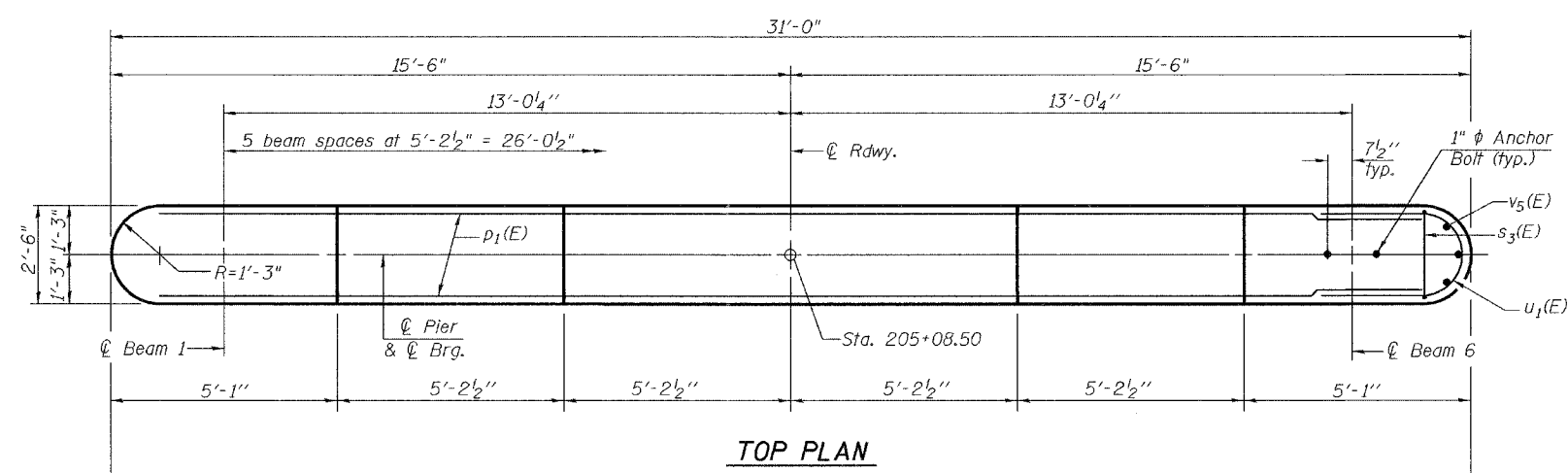
Contract #94783

**PILE DATA**

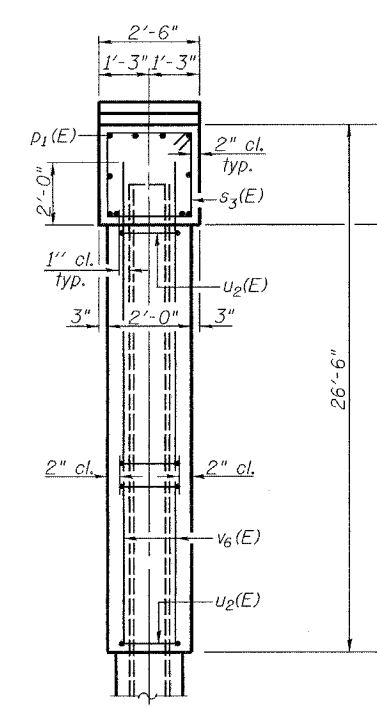
Type: Steel HP12x74  
Nominal Req'd. Bearing: 458 kips  
Factored Resistance Available: 229 kips  
Est. Length: 60'  
No. Required: 5 +1 Test Pile



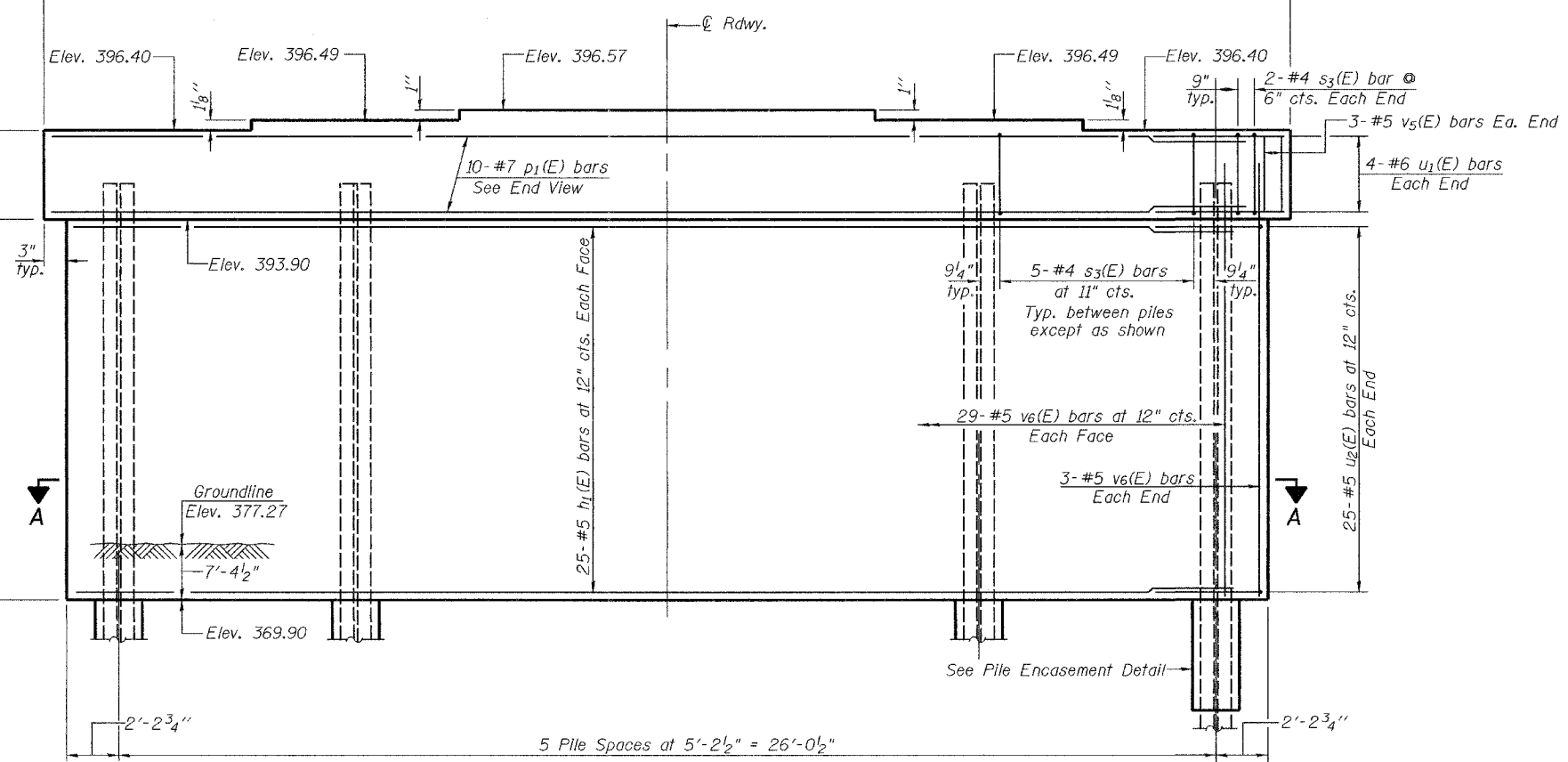
**PILE ENCASMENT DETAILS**



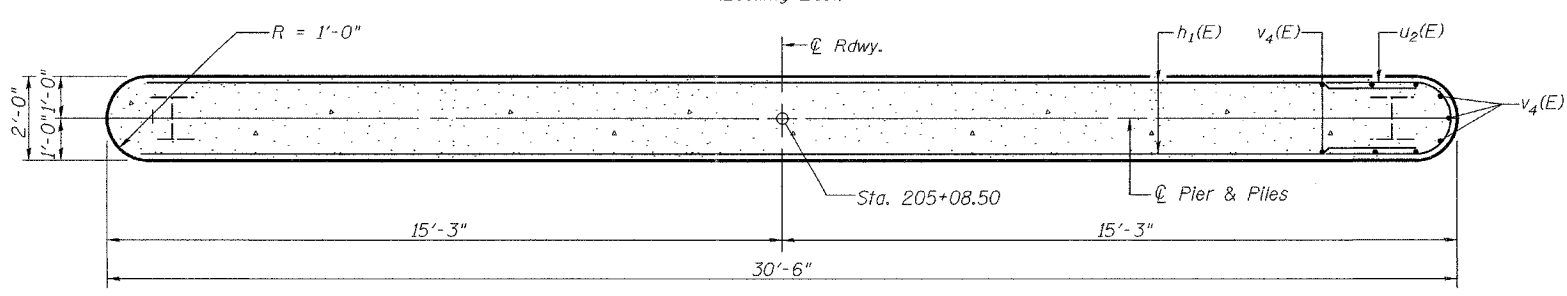
**TOP PLAN**



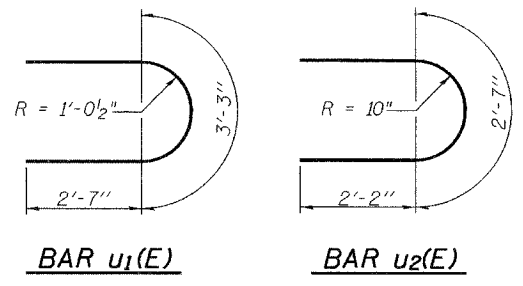
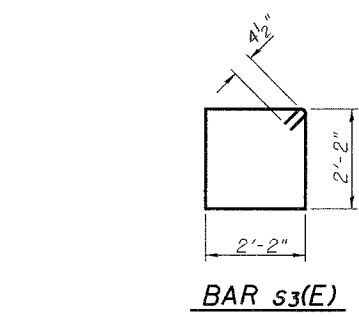
**END VIEW**



**ELEVATION**  
(Looking East)



**SECTION A-A**



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h1(E)	50	#5	28'-6"	—
p1(E)	10	#7	28'-6"	—
s3(E)	29	#4	9'-5"	□
u1(E)	8	#6	8'-5"	U
u2(E)	50	#5	6'-11"	U
v6(E)	64	#5	25'-10"	—
v5(E)	6	#5	2'-2"	—
Concrete Structures		Cu. Yd.	60.8	
Reinforcement Bars, Epoxy Coated		Pound	4450	
Furnishing Steel Piles HP12x74		Foot	300	
Structure Excavation		Cu. Yd.	54.4	
Test Pile Steel HP 12x74		Each	1	
Driving Piles		Foot	300	
Underwater Structure Excavation Protection Location 2		Each	1	

Notes:  
Pour steps monolithically with cap.  
Reinforcement bars designated (E) shall be epoxy coated.  
For anchor bolt installation details see sheet 12 of 21.  
Place Reinforcement bars in Cap to miss Anchor Bolts.

DESIGNED Dewey Coultas  
CHECKED Chi Cheung Chau  
DRAWN R. Sommer  
CHECKED D.H.C./C.C.C.

September 18 2006  
EXAMINED Thomas J. Domagalaki  
PASSED Ralph E. Anderson

**PIER 3**  
S.B.I. RT. 1 SEC. (8C)B-2  
WABASH COUNTY  
STATION 204+42.25  
STRUCTURE No. 093-0022

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO.
S.B.I. 1	(8C)B-2	WABASH	36	29	21 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

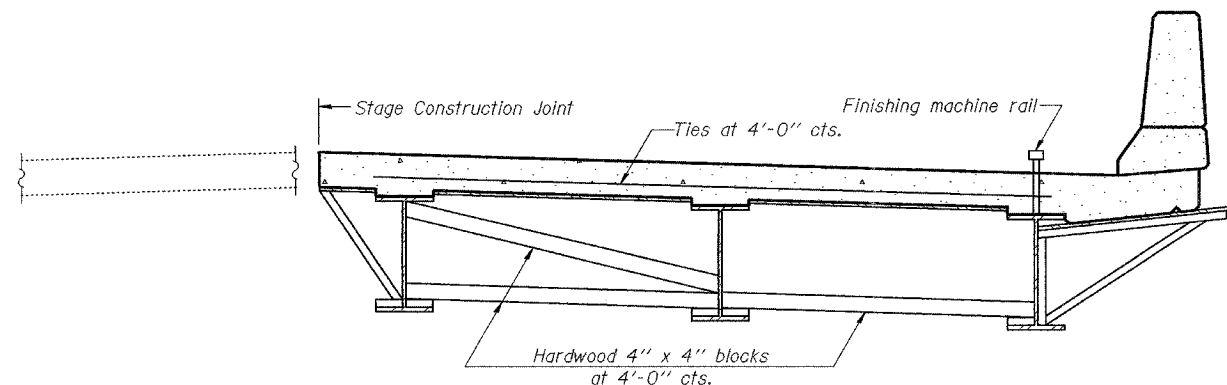
Contract #94783

When cantilever forming brackets are used, the work shall be done according to Article 503.06, except as modified below and in the details shown on this sheet.

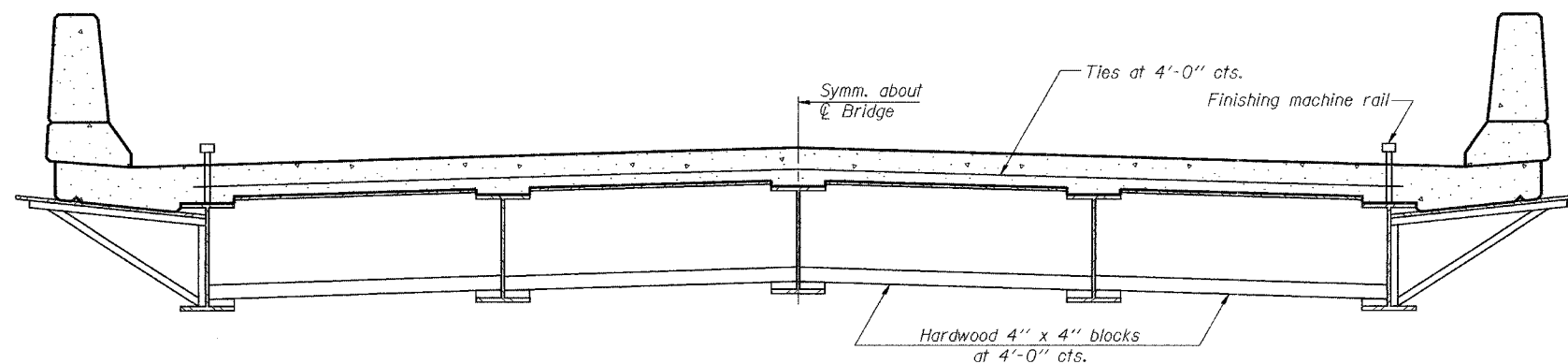
The finishing machine rails shall be placed on the top flange of the exterior beams.

The beams, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.

For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.



FORM BRACES FOR  
STAGE CONSTRUCTION



FORM BRACES FOR  
STANDARD CONSTRUCTION

DESIGNED	Dewey Coultas
CHECKED	Chi Cheung Chau
DRAWN	R. Sommer
CHECKED	D.H.C./C.C.C.

September 18 2006  
EXAMINED *Thomas J. Demagala*  
ENGINEER OF BRIDGE DESIGN  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

CANTILEVER FORMING BRACKETS  
FOR SUPERSTRUCTURES WITH  
W27 BEAMS AND SMALLER  
S.B.I. RT. 1 SEC. (8C)B-2  
WABASH COUNTY  
STATION 204+42.25  
STRUCTURE No. 093-0022



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**Illinois Department of Transportation SOIL BORING LOG** Page 1 of 2  
Date 4/6/04

ROUTE SBI1 (Old IL 15) DESCRIPTION Bonpas Creek in Browns, IL LOGGED BY E. Sandschafer

SECTION (8C)B-1 LOCATION S 12 - 33, N 12 - 4, SEC., TWP. 1S & 2S, RING. 14W, 3 PM

COUNTY Wabash DRILLING METHOD Hollow Stem Auger and Split Spoon HAMMER TYPE Auto 140#

STRUCT. NO.	Station	D	B	U	M	Surface Water Elev.	D	B	U	M
093-0017	Proposed 093-0022	E	L	C	O	372.49 ft	E	L	C	O
		P	O	S	I	Stream Bed Elev.	P	O	S	I
		T	W	S	H	370.99 ft	T	W	S	H
BORING NO.	Station	H	S	Qu	T	Groundwater Elev.:	H	S	Qu	T
2	203+80					First Encounter				
15.50ft	15.50ft					Upon Completion				
Ground Surface Elev.	384.55 ft	(ft)	(6")	(tsf)	(%)	372.6 ft				
						After 24 * Hrs.	(ft)	(6")	(tsf)	(%)
						384.6 ft				
Topsoil. 384.35										
Gray, SILTY LOAM w/organics. 2 0.6 23										
382.55 3 1 1 1.4 19										
Soft, very damp, brown mottled gray, SILTY LOAM w/low organics. 4 0.4 15 4 B										
360.05 0 2 0.8 22										
Medium, very damp, gray, SILTY CLAY. 2 0.8 22										
357.55 0 0 0.1 27										
Very soft, wet, gray, SILT MUCK. 0 0 B										
376.05 0 0 0.2 31										
Soft to medium, damp, gray, SILTY CLAY. 1 0.5 21 2 B										
372.55 0 2 0.6 17										
Medium, damp, gray, CLAY w/ some silt. 2 0.6 17 2 B										
367.55 0 0 0.2 29										
Medium, damp, gray, SILTY CLAY. 3 0.7 16 3 B										
366.35 2 0.6 24 2 B										
Black, ORGANICS w/ thin sand lenses. 2 0.6 24 2 B										
345.05 0 1 345.05										

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 SOIL BORING LOG** Page 2 of 2  
Date 4/6/04

ROUTE SBI1 (Old IL 15) DESCRIPTION Bonpas Creek in Browns, IL LOGGED BY E. Sandschafer

SECTION (8C)B-1 LOCATION S 12 - 33, N 12 - 4, SEC., TWP. 1S & 2S, RING. 14W, 3 PM

COUNTY Wabash DRILLING METHOD Hollow Stem Auger and Split Spoon HAMMER TYPE Auto 140#

STRUCT. NO.	Station	D	B	U	M	Surface Water Elev.	D	B	U	M
093-0017	Proposed 093-0022	E	L	C	O	372.49 ft	E	L	C	O
		P	O	S	I	Stream Bed Elev.	P	O	S	I
		T	W	S	H	370.99 ft	T	W	S	H
BORING NO.	Station	H	S	Qu	T	Groundwater Elev.:	H	S	Qu	T
2	203+80					First Encounter				
15.50ft	15.50ft					Upon Completion				
Ground Surface Elev.	384.55 ft	(ft)	(6")	(tsf)	(%)	372.6 ft				
						After 24 * Hrs.	(ft)	(6")	(tsf)	(%)
						384.6 ft				
Loose to medium, wet, gray, fine grained, SAND. 3% passing #200 sieve. 2 20										
Adjacent landowner told of standpipe in this area that flowed constantly. Pipe was present some years ago but is not currently. Sealed hole with bentonite. 3 13 19										
Few 3/8" pebbles. 5% passing #200 sieve (continued). 12 12										
335.05 13 3.6 7										
Very stiff, moist, gray, CLAY SHALE w/ some sand. 32 3.6 7 26 S										
330.05 0 0.2 29										
Very dense, moist, gray, SANDY CLAY SHALE. 60" 60" 60"										
Extent of exploration. 50"										
Benchmark: BM #102 Elev = 388.72' Sta 205+95 Rt 15.45' Chiseled square on E and of NE wingwall of existing bridge.										
*Note: Artesian condition noted at 24 hours in open bore hole. -60										

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 SOIL BORING LOG** Page 1 of 2  
Date 4/7/04

ROUTE SBI1 (Old IL 15) DESCRIPTION Bonpas Creek in Browns, IL LOGGED BY E. Sandschafer

SECTION (8C)B-1 LOCATION S 12 - 33, N 12 - 4, SEC., TWP. 1S & 2S, RING. 14W, 3 PM

COUNTY Wabash DRILLING METHOD Hollow Stem Auger and Split Spoon HAMMER TYPE Auto 140#

STRUCT. NO.	Station	D	B	U	M	Surface Water Elev.	D	B	U	M
093-0017	Proposed 093-0022	E	L	C	O	372.49 ft	E	L	C	O
		P	O	S	I	Stream Bed Elev.	P	O	S	I
		T	W	S	H	370.99 ft	T	W	S	H
BORING NO.	Station	H	S	Qu	T	Groundwater Elev.:	H	S	Qu	T
3	204+32					First Encounter				
36.00ft Lt	36.00ft Lt					Upon Completion				
Ground Surface Elev.	383.43 ft	(ft)	(6")	(tsf)	(%)	358.9 ft				
						After 24 * Hrs.	(ft)	(6")	(tsf)	(%)
						383.4 ft				
Topsoil. 383.43										
Soft, damp, brown, CLAY LOAM w/few pebbles. 3 1.0 29										
378.93 3 0.4 27 3 B										
Medium, damp, brown, SILTY CLAY w/some black specks and organics. 5 0.6 27 4 B										
376.43 0 0 0.2 35										
Soft, damp, gray, SILTY LOAM w/ some black organics. 0 0 B										
335.05 13 3.6 7										
Very stiff, moist, gray, CLAY SHALE w/ some sand. 32 3.6 7 26 S										
330.05 0 0.2 29										
Very dense, moist, gray, SANDY CLAY SHALE. 60" 60" 60"										
Extent of exploration. 50"										
Benchmark: BM #102 Elev = 388.72' Sta 205+95 Rt 15.45' Chiseled square on E and of NE wingwall of existing bridge.										
*Note: Artesian condition noted at 24 hours in open bore hole. -60										

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 SOIL BORING LOG** Page 2 of 2  
Date 4/7/04

ROUTE SBI1 (Old IL 15) DESCRIPTION Bonpas Creek in Browns, IL LOGGED BY E. Sandschafer

SECTION (8C)B-1 LOCATION S 12 - 33, N 12 - 4, SEC., TWP. 1S & 2S, RING. 14W, 3 PM

COUNTY Wabash DRILLING METHOD Hollow Stem Auger and Split Spoon HAMMER TYPE Auto 140#

STRUCT. NO.	Station	D	B	U	M	Surface Water Elev.	D	B	U	M
093-0017	Proposed 093-0022	E	L	C	O	372.49 ft	E	L	C	O
		P	O	S	I	Stream Bed Elev.	P	O	S	I
		T	W	S	H	370.99 ft	T	W	S	H
BORING NO.	Station	H	S	Qu	T	Groundwater Elev.:	H	S	Qu	T
3	204+32					First Encounter				
36.00ft Lt	36.00ft Lt					Upon Completion				
Ground Surface Elev.	383.43 ft	(ft)	(6")	(tsf)	(%)	358.9 ft				
						After 24 * Hrs.	(ft)	(6")	(tsf)	(%)
						383.4 ft				
Very loose, wet, gray, fine grained, SAND w/sea shells. 8% passing #200 sieve. (continued). 0 0 24										
336.93 50.6"										
Soft, dark gray, CLAY SHALE. 50.6"										
Hard, dark gray, thinly layered, CLAY SHALE. 50.1"										
Extent of exploration. 50.1"										
Benchmark: BM #102 Elev = 388.72' Sta 205+95 Rt 15.45' Chiseled square on E end of NE wingwall of existing bridge.										
*Note: Artesian condition noted at 24 hours in open bore hole, although flow rate was very low, and not as great as Bore #2. Sealed hole with bentonite. -60										

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)

BORING DATA  
S.B.I. RT. 1 SEC. (8C)B-2  
WABASH COUNTY  
STATION 204+42.25  
STRUCTURE No. 093-0022





S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IE	(8C)B-2	WABASH	36	33
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

**EROSION CONTROL GENERAL NOTES**

**EROSION CONTROL MEASURES AT THE START OF CONSTRUCTION:**

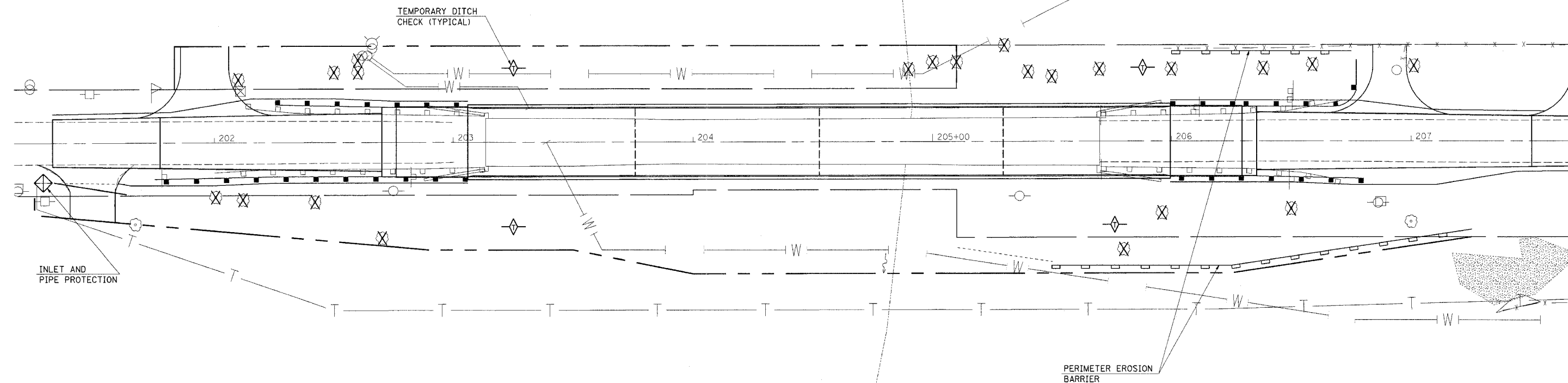
1. THE AREAS OF EXCAVATION AND EMBANKMENT PLACEMENT SHALL BE MANAGED FOR THE PURPOSES OF CONTROLLING EROSION WITHIN THE IMPROVEMENT AREA, REDUCING WATER FLOW BY TEMPORARY DIVERSION, MINIMIZING SILTATION AT THE RIGHT-OF-WAY LINE, AND ESTABLISHING VEGETATIVE COVER WHICH WILL BECOME PERMANENT VEGETATION AND ACT AS AN EROSION CONTROL BARRIER. WORK AT THE START OF CONSTRUCTION SHALL CONSIST OF THE FOLLOWING:
  - (a) AREAS OF EXISTING VEGETATION (WOODS AND GRASSLANDS) OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE IDENTIFIED FOR PRESERVING AND SHALL BE PROTECTED FROM MOWING, BRUSH CUTTING, TREE REMOVAL, AND OTHER ACTIVITIES THAT WOULD BE DETRIMENTAL TO THEIR MAINTENANCE AND DEVELOPMENT.
  - (b) DEAD, DISEASED, OR UNSUITABLE VEGETATION WITHIN THE SITE SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.
  - (c) BARE AND SPARSELY VEGETATED GROUND IN HIGHLY ERODIBLE AREAS AS DETERMINED BY THE ENGINEER SHALL BE TEMPORARILY SEEDED AT THE START OF CONSTRUCTION WHEN NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN SEVEN CALENDAR DAYS.

**EROSION CONTROL MEASURES DURING CONSTRUCTION:**

1. DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION LIMITS AS OUTLINED PREVIOUSLY HEREIN SHALL BE PROTECTED FROM DAMAGING EFFECTS OF CONSTRUCTION. THE CONTRACTOR SHALL NOT USE THIS AREA FOR PARKING OF VEHICLES OR CONSTRUCTION EQUIPMENT, STORAGE OF MATERIALS, OR OTHER CONSTRUCTION RELATED ACTIVITIES.
  - (a) WITHIN THE CONSTRUCTION ZONE, CRITICAL AREAS WHICH HAVE A HIGH FLOW OF WATER, AS DETERMINED BY THE ENGINEER, SHALL REMAIN UNDISTURBED UNTIL CONTINUOUS OPERATIONS CAN ENSURE TIMELY COMPLETION OF WORK IN THESE AREAS TO MINIMIZE SOIL EROSION.
  - (b) EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN FOURTEEN CALENDAR DAYS.

**EROSION CONTROL MEASURES AFTER FINAL GRADING:**

1. EXCAVATION AND EMBANKMENT AREAS SHALL BE PERMANENTLY SEEDED WHEN FINAL GRADED.
  - (a) TEMPORARY EROSION CONTROL SYSTEMS SHALL REMAIN IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY WITH ALL PROPOSED TURF AREAS SEEDED AND A PROPER STAND ESTABLISHED.



PLOT DATE = 8/23/2006  
 FILE NAME = #FILEL#  
 PLOT SCALE = #SCALE#  
 USER NAME = #USER#

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**EROSION CONTROL**

SCALE: VERT. DATE: HORIZ.

DRAWN BY: CHECKED BY:

S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1E	(8C)B-2	WABASH	36	34
STA. 201+50.00		TO STA. 202+50.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

FINAL SURVEY

DATE: \_\_\_\_\_ BY: \_\_\_\_\_

REVISIONS: \_\_\_\_\_

PLOTTED: \_\_\_\_\_

TEMPLATE: \_\_\_\_\_

AREAS CHECKED: \_\_\_\_\_

NO. \_\_\_\_\_

ORIGINAL SURVEY

DATE: \_\_\_\_\_ BY: \_\_\_\_\_

REVISIONS: \_\_\_\_\_

PLOTTED: \_\_\_\_\_

TEMPLATE: \_\_\_\_\_

AREAS CHECKED: \_\_\_\_\_

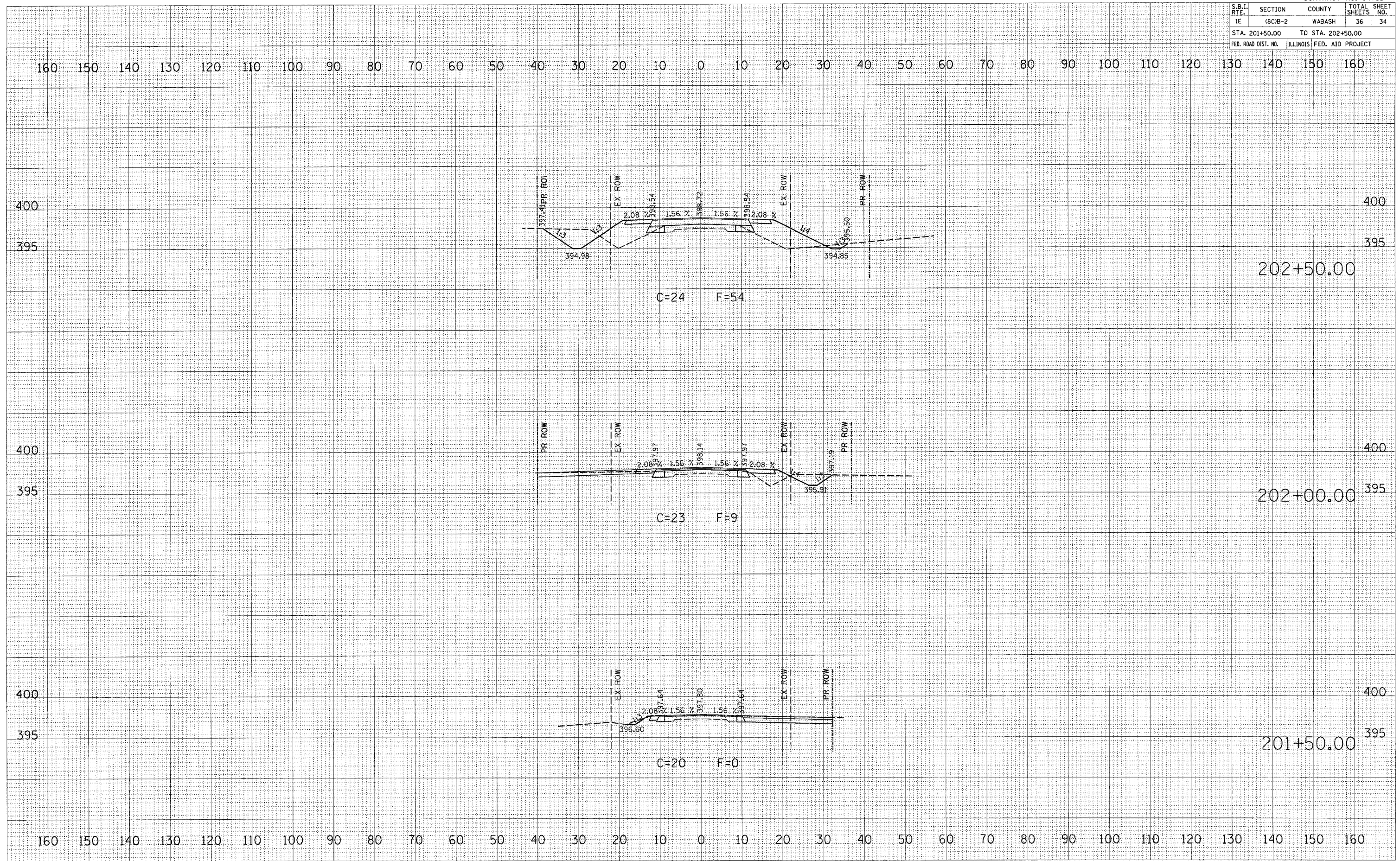
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PLOT DATE \* \* \* \* \*

FILE NAME \* \* \* \* \*

PLOT SCALE \* \* \* \* \*

USER NAME \* \* \* \* \*



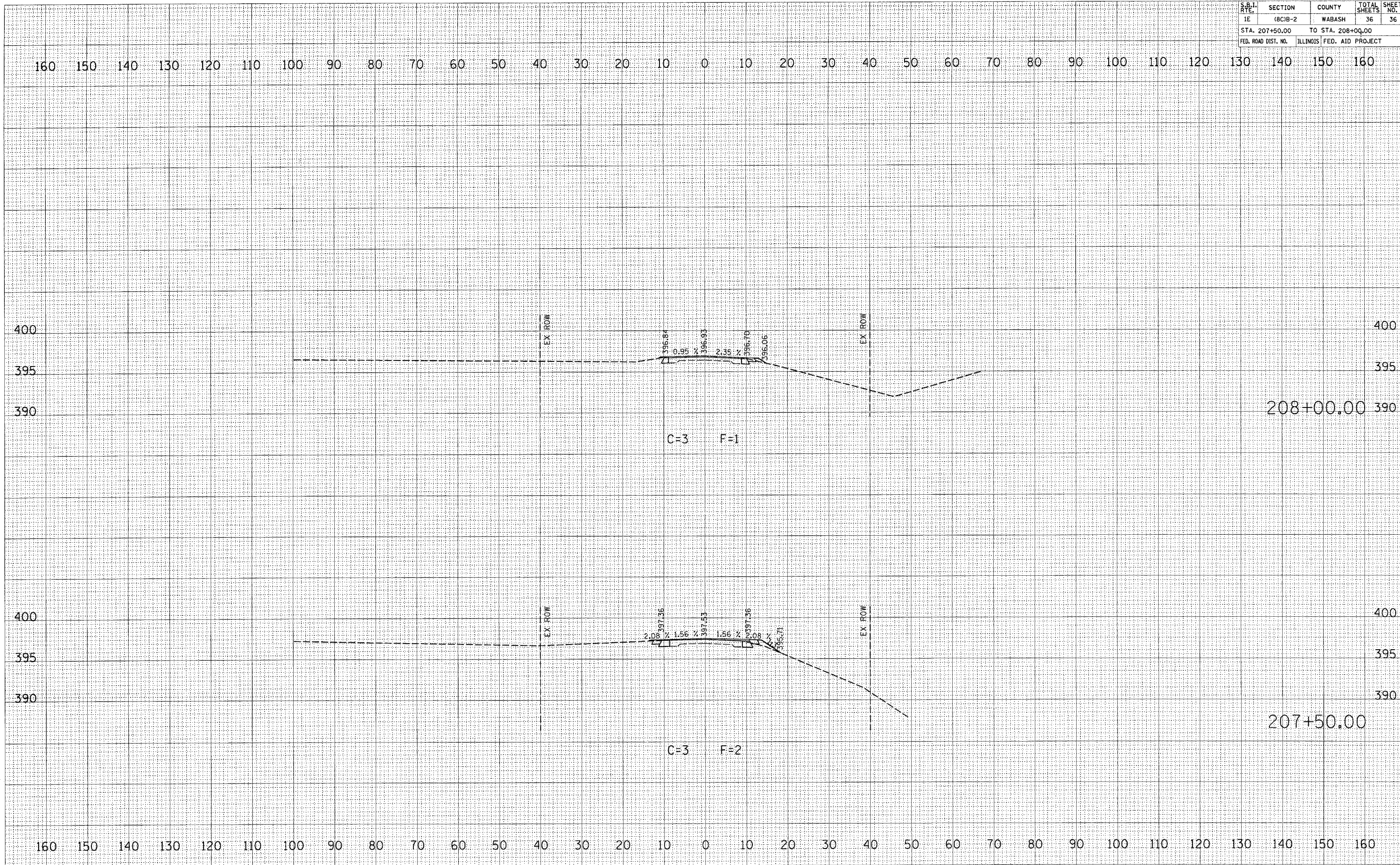


S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1E	(B)B-2	WABASH	36	36
STA. 207+50.00		TO STA. 208+00.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		

PLOT DATE = #DATE#  
 FILE NAME = #FILE#  
 USER NAME = #USER#



S.B.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1E	(8C)B-2	WABASH	36	35
STA. 206+50.00 TO STA. 207+00.00				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

BY: \_\_\_\_\_ DATE: \_\_\_\_\_

FINAL SURVEY \_\_\_\_\_

NOTE BOOK NO. \_\_\_\_\_

AREAS CHECKED \_\_\_\_\_

BY: \_\_\_\_\_ DATE: \_\_\_\_\_

ORIGINAL SURVEY \_\_\_\_\_

NOTE BOOK NO. \_\_\_\_\_

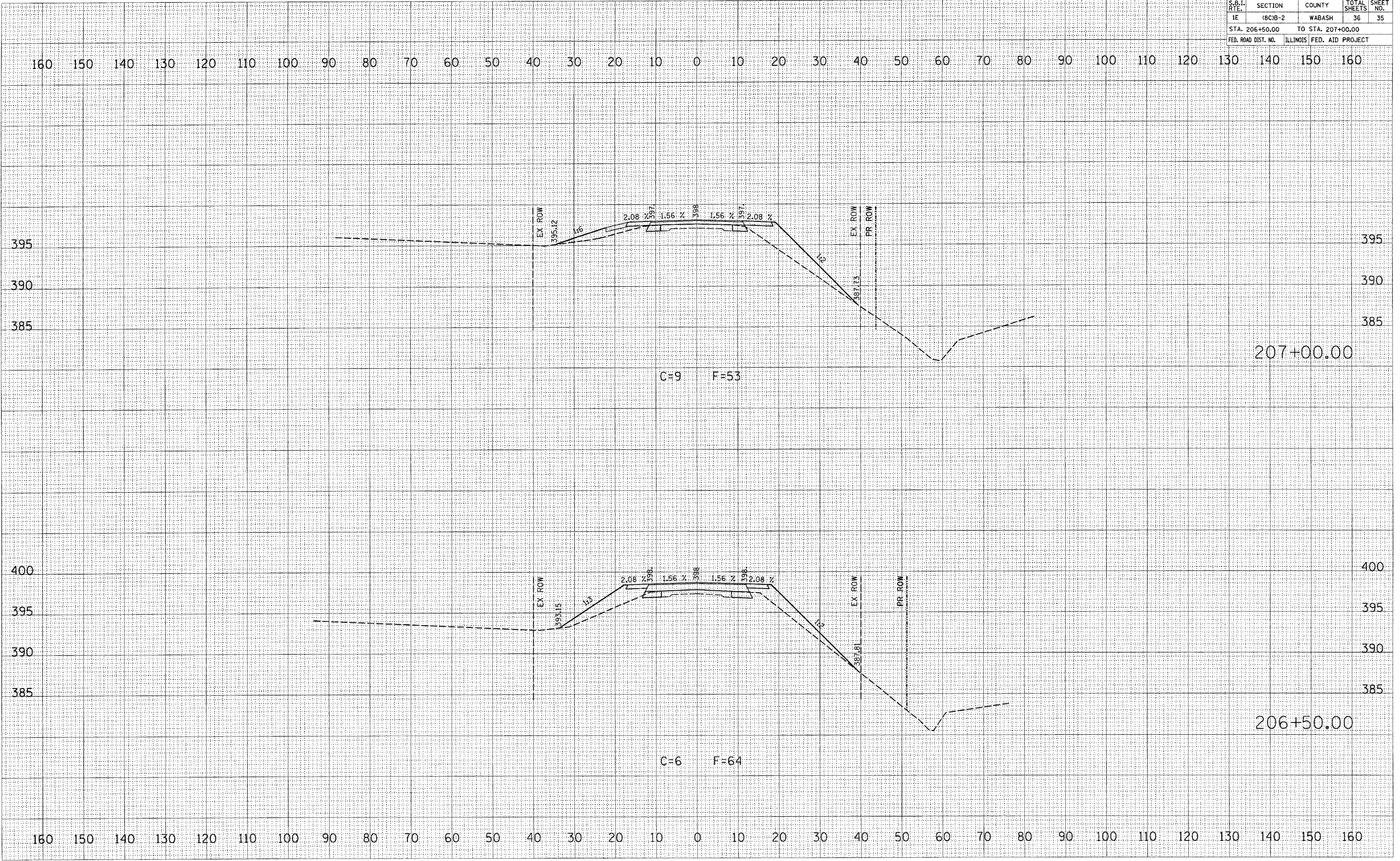
AREAS CHECKED \_\_\_\_\_

PLOT DATE \* \* \* DATES \* \* \*

FILE NAME \* \* \* FILE# \* \* \*

PLOT SCALE \* \* \* SCALE \* \* \*

USER NAME \* \* \* USER# \* \* \*



160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

395  
390  
385

207+00.00

C=9 F=53

400  
395  
390  
385

206+50.00

C=6 F=64

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160