

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 717 (IL 10)
SECTION 101B-1
PROJECT
LOGAN COUNTY
C-96-517-07

INDEX OF SHEETS

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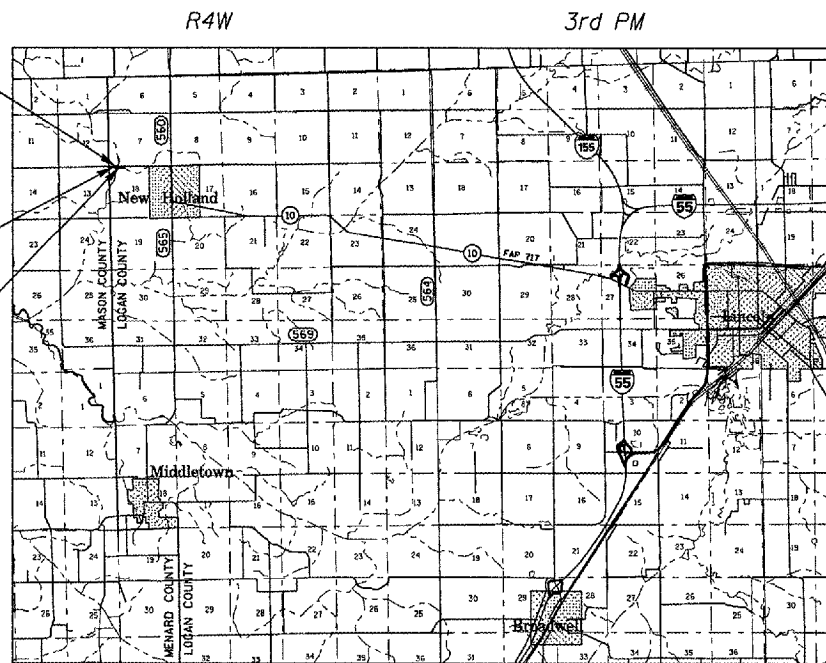
HIGHWAY STANDARDS

000001-04	630301-04	701306-01
280001-03	631031-06	701311-02
420401-05	635006-02	701321-08
482011-02	635011-01	701326-02
503001-02	666001	702001-06
515001-02	701001-01	704001-03
601101	701006-02	780001-01
630001-07	701301-02	781001-02

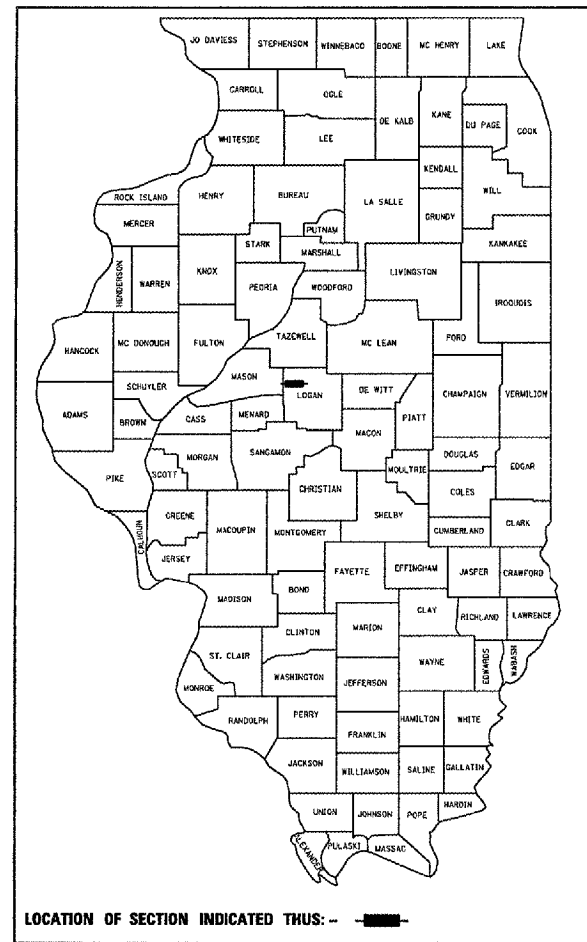
STA 254+75.91
EX SN 054-0070 PR SN 054-0507
TOTAL REMOVAL AND REPLACEMENT OF THE EXISTING STRUCTURE WITH A THREE SPAN WIDE FLANGE BRIDGE SUPPORTED ON INTEGRAL ABUTMENTS AND PILE BENT PIERS. THE BACK-TO-BACK OF ABUTMENT MEASURES 259'-6" IN LENGTH.

PROJECT BEGINS
STA 250+86.19

PROJECT ENDS
STA 258+49.59



LOCATION MAP
SCALE 0 1 2 3 4 5 MILES



LOCATION OF SECTION INDICATED THUS: -

ADT= 1,750 2005

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

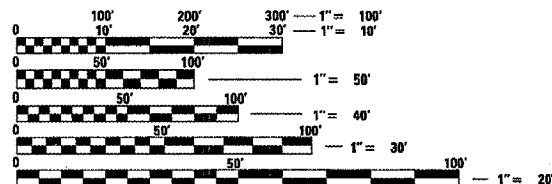
SUBMITTED DEC. 14 2006

Christ H. Reed
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

February 2, 2007
Terri E. Harman
ENGINEER OF DESIGN AND ENVIRONMENT

February 2, 2007
Michael R. Sewell, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**



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

CONTRACT NO. 72A04

NET LENGTH OF PROJECT: 763.40 FEET = 0.14 MILES
GROSS LENGTH OF PROJECT: 763.40 FEET = 0.14 MILES

PROJECT ENGINEER: SAL MADONIA (217) 782-4761
SOJAD LEADER: JEFF MYERS (217) 524-7940

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	2
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

GENERAL NOTES

- ALL OF THE DISTURBED AREAS WITHIN THE RIGHT OF WAY NOT COVERED BY SURFACING MATERIAL SHALL BE SEEDED.
- CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE AND EROSION PROTECTION FOR THE DURATION OF THIS PROJECT.
- SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED SHALL BE DETERMINED BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE JULIE NUMBER IS 800-892-0123. A MINIMUM OF FORTY-EIGHT HOURS ADVANCE NOTICE IS REQUIRED. ANY DAMAGE TO THE UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE, INCLUDING TEMPORARY REPAIRS WHICH MAY BE REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS.
- THE LOCATIONS OF THOSE BURIED AND ABOVEGROUND UTILITIES SHOWN ARE APPROXIMATE, ARE SHOWN FOR CONTRACTOR INFORMATIONAL USE ONLY, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTIONS PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVEGROUND UTILITY LOCATION, IDENTIFICATION, AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS ASSOCIATED WITH BURIED AND ABOVEGROUND UTILITIES, REMAINS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE THICKNESS OF HOT-MIX ASPHALT SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HOT-MIX ASPHALT IS PLACED.
- WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

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

GRANULAR MATERIALS	2.05	TONS/CU YD
BITUMINOUS MATERIAL (PRIME COAT)	0.00038	TON/SQ YD
HOT-MIX ASPHALT SURFACE COURSE	112	LBS/SQ YD/IN
HOT-MIX ASPHALT BINDER COURSE	112	LBS/SQ YD/IN
AGGREGATE (PRIME COAT)	0.002	TON/SQ YD
RIPRAP	1.75	TON/CU YD

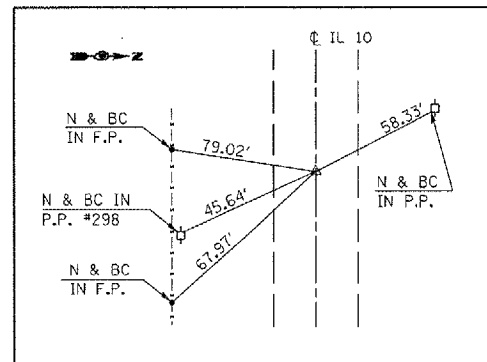
- ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.
- UNLESS NOTED OTHERWISE, STATIONS AND OFFSETS REFER TO CENTERLINE OF PROJECT.
- LAYOUT OF RIPRAP MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.
- EVERY TREE SHALL BE SAVED IF POSSIBLE. THE ENGINEER IN THE FIELD WILL VERIFY AND MARK ALL TREES REQUIRED TO BE REMOVED. SHOULD THE ENGINEER'S DECISION INCREASE OR DECREASE THE QUANTITIES OF WORK TO BE PERFORMED FROM THE PLANS, THE CONTRACTOR SHALL ACCEPT PAYMENT AS STATED IN ARTICLE 104.02 OF THE STANDARD SPECIFICATIONS. TREES OUTSIDE THE LIMITS OF CONSTRUCTION SHALL NOT BE DISTURBED UNLESS DESIGNATED BY THE ENGINEER.
- IN ADDITION TO FIELD SURVEYS AND AERIAL SURVEYS, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD. SUCH VARIATIONS SHALL NOT BE A CAUSE FOR ADDITIONAL COMPENSATION DUE TO A CHANGE IN THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.
- THE GRADING AND SHAPING OF THE DITCHES SHALL BE DONE IN SUCH A MANNER TO ESTABLISH POSITIVE FLOW BETWEEN DRAINAGE STRUCTURES, OR BETWEEN THE EXISTING ELEVATION AT THE UPSTREAM END OF THE GRADING TO THE DOWNSTREAM DRAINAGE STRUCTURE.
- FINAL VERTICAL ADJUSTMENT OF GUARDRAIL IF REQUIRED SHALL NOT BE PAID FOR SEPARATELY BUT INCLUDED IN THE COST OF STEEL PLATE BEAM GUARD RAIL, TYPE A.
- ANY REFERENCES OR CALL-OUTS IN THESE PLANS TO "BITUMINOUS CONCRETE" SHALL BE INTERPRETED TO MEAN "HOT-MIX ASPHALT".
- SLOPEWALL REMOVAL IS NOT TO BE PAID FOR SEPARATELY BUT INCLUDED IN THE COST OF REMOVAL OF EXISTING STRUCTURES.

COMMITMENTS

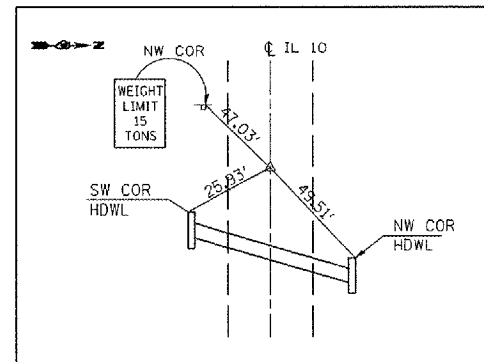
NO COMMITMENTS HAVE BEEN MADE ON THIS PROJECT.

BENCHMARKS

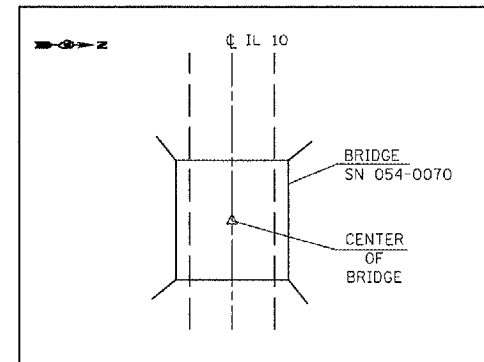
- BM #1253 - A 16 "D" NAIL IN P.P. #260 0.87 MILES EAST OF TR 3900E NAVD '88 = 533.705
- BM #1254 - A CHSLD [] IN TOP OF S.E. H.W. OF BRIDGE SN#054-0070 NAVD '88 = 529.255
- BM #1255 - A 16 "D" NAIL IN P.P. +/- 850' EAST OF BRIDGE NAVD '88 = 520.237
- BM #1256 - A 16 "D" NAIL IN BACK SIDE OF P.P. #295A STA 275+25 NAVD '88 = 542.801



P.I. 207 STA 278+10.62
SET: PK NAIL IN CHSLD "X"



P.O.T. STA 244+67.10
SET: PK NAIL IN CHSLD "X"



P.I. STA 254+75.91
STAR DRILL NAIL IN CHSLD "X"

The following mixture requirements are applicable for this project:

Mixture Use(s)	Hot-Mix Asphalt Surface Course, Mix "C", N50	Hot-Mix Asphalt Binder Course, IL-19, N50	Hot-Mix Asphalt Base Course Widening, 10"	Leveling Binder (Machine Method) Superpave, N50	Hot-Mix Asphalt Shoulders
AC/PG:	PG 64-22	PG 64-22	PG 64-22	PG 64-22	PG 58-22
RAP %: (Max)	15%	25%	25%	25%	50%
Design Air Voids:	4.0 @ Ndesign = 50	4.0 @ Ndesign = 50	4.0 @ Ndesign = 50	4.0 @ Ndesign = 50	2.0 @ Ndesign = 30
Mixture Composition: (Gradation Mixture)	IL 9.5 or 12.5	IL 19.0	IL 19.0	IL 9.5	BAM
Friction Aggregate:	MIX "C"	N/A	N/A	N/A	N/A

IDOT DISTRICT 6

EXAMINED November 29, 2006
[Signature]
OPERATIONS ENGINEER

EXAMINED Dec 11, 06
[Signature]
PROJECT IMPLEMENTATION ENGINEER

EXAMINED Dec 2, 06
[Signature]
PROGRAM DEVELOPMENT ENGINEER

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

FAP 717 (IL 10)
Section: 101B-1
Logan County

SCALE: VERT. _____
HORIZ. _____
DATE _____

DRAWN BY _____
CHECKED BY _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	3
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES				BRRP FUNDS 80% FED 20% STATE SN 054-0507
				CONSTRUCTION TYPE CODE
TOTAL				X071-2A
CODE NO.	PAY ITEM	UNITS	QUANTITY	
20200100	EARTH EXCAVATION	CU YD	2,135	2,135
20200500	EARTH EXCAVATION (WIDENING)	CU YD	85	85
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	120	120
25000200	SEEDING, CLASS 2	ACRE	0.3	0.3
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	30	30
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	30	30
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	30	30
25100630	EROSION CONTROL BLANKET	SQ YD	1,168	1,168
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	32	32
28000400	PERIMETER EROSION BARRIER	FOOT	1,582	1,582
28100109	STONE RIPRAP, CLASS A5	SQ YD	1,657	1,657
28200200	FILTER FABRIC	SQ YD	1,657	1,657
35600716	HOT-MIX ASPHALT BASE COURSE WIDENING, 10"	SQ YD	324	324
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	0.6	0.6
40600300	AGGREGATE (PRIME COAT)	TON	3	3
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	37	37
40600895	CONSTRUCTING TEST STRIP	EACH	1	1
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	544	544
40600990	TEMPORARY RAMP	SQ YD	36	36
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	222	222
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	108	108
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	222	222
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	44	44
44000100	PAVEMENT REMOVAL	SQ YD	316	316

SUMMARY OF QUANTITIES				BRRP FUNDS 80% FED 20% STATE SN 054-0507
				CONSTRUCTION TYPE CODE
TOTAL				X071-2A
CODE NO.	PAY ITEM	UNITS	QUANTITY	
48101200	AGGREGATE SHOULDERS, TYPE B	TON	115	115
48203100	HOT-MIX ASPHALT SHOULDERS	TON	99	99
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1
50200100	STRUCTURE EXCAVATION	CU YD	288	288
50300100	FLOOR DRAINS	EACH	14	14
50300225	CONCRETE STRUCTURES	CU YD	118.2	118.2
50300255	CONCRETE SUPERSTRUCTURE	CU YD	325.9	325.9
50300260	BRIDGE DECK GROOVING	SQ YD	1,071	1,071
50300280	CONCRETE ENCASEMENT	CU YD	3.2	3.2
50300300	PROTECTIVE COAT	SQ YD	1,142	1,142
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	1
50500505	STUD SHEAR CONNECTORS	EACH	3,132	3,132
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	75,520	75,520
50800515	BAR SPLICERS	EACH	762	762
51201400	FURNISHING STEEL PILES HP10X42	FOOT	790	790
51201900	FURNISHING STEEL PILES HP14X89	FOOT	1,255	1,255
51202305	DRIVING PILES	FOOT	2,045	2,045
51203400	TEST PILE STEEL HP10X42	EACH	2	2
51203900	TEST PILE STEEL HP14X89	EACH	2	2
51205200	TEMPORARY SHEET PILING	SO FT	1,093	1,093
51500100	NAME PLATES	EACH	1	1
52100520	ANCHOR BOLTS, 1"	EACH	24	24
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	67	67
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	133	133

PLOT DATE: 12/13/2006
 FILE NAME: c:\puro\meta\051405\ah\soqdgn
 PLOT SCALE: 1/8"=1'-0"

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		SUMMARY OF QUANTITIES FAP 717 (IL 10) SECTION 101B-1 LOGAN COUNTY SCALE: VERT. _____ HORIZ. _____ DATE _____
DRAWN BY _____		CHECKED BY _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	4
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SUMMARY OF QUANTITIES

BRRP FUNDS
80% FED
20% STATE
SN 054-0507

CONSTRUCTION
TYPE CODE

CODE NO.	PAY ITEM	UNITS	TOTAL	
			QUANTITY	X071-2A
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	275	275
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4
* 63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	4	4
63200310	GUARDRAIL REMOVAL	FOOT	576	576
66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	4	4
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MD	9	9
67100100	MOBILIZATION	L SUM	1	1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1
70101205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL)	EACH	1	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	5	5
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	133	133
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	15	15
70400100	TEMPORARY CONCRETE BARRIER	FOOT	600	600
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	600	600
* 78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	1,718	1,718
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	11	11
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	12	12
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4
78300100	PAVEMENT MARKING REMOVAL	SO FT	503	503
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	11	11
X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1	1
X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1	1

SUMMARY OF QUANTITIES

BRRP FUNDS
80% FED
20% STATE
SN 054-0507

CONSTRUCTION
TYPE CODE

CODE NO.	PAY ITEM	UNITS	TOTAL	
			QUANTITY	X071-2A
Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2
Z0030330	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 3	EACH	2	2
52100530	ANCHOR BOLTS, 1 1/4"	EACH	24	24
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	666	666

PLT DATE = 12/12/2006
PLT TIME = 10:55 AM
PLT SCALE = 1/8" = 1' IN

■ SFTY-3N
* SPECIALTY ITEMS

Rev.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

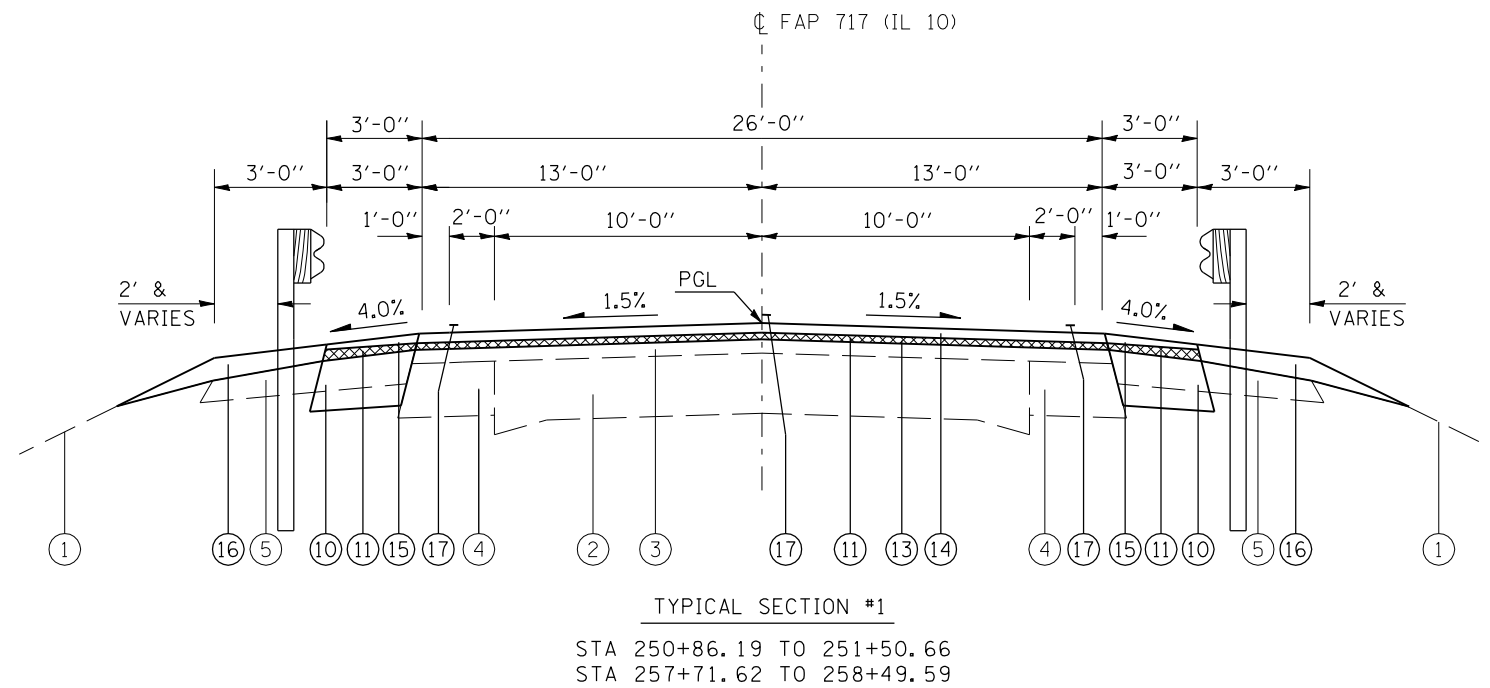
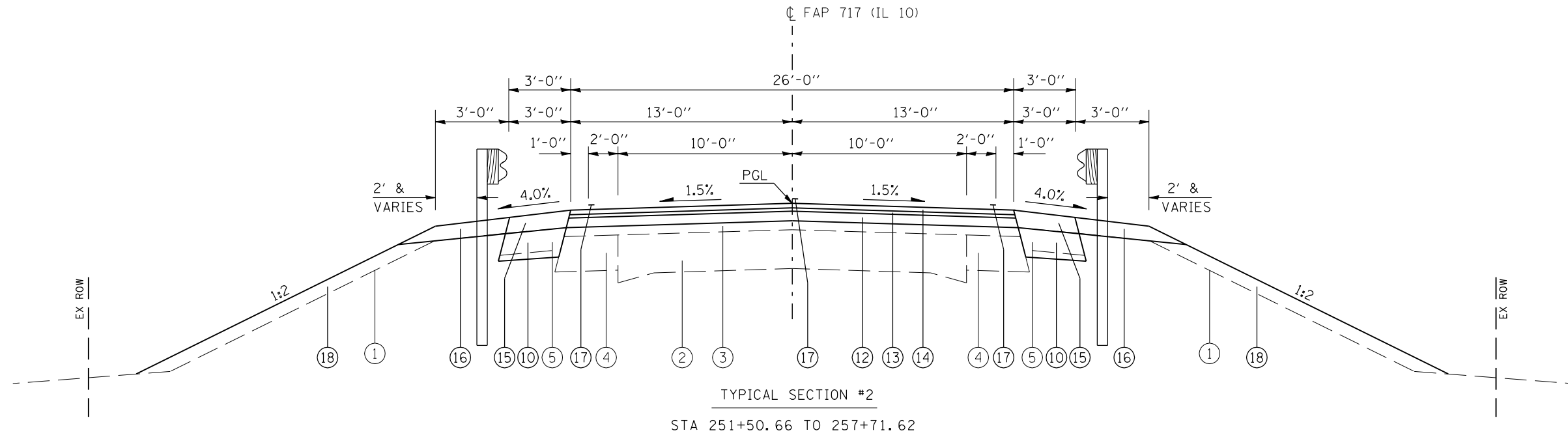
SUMMARY OF QUANTITIES

FAP 717 (IL 10)
SECTION 101B-1
LOGAN COUNTY

SCALE: VERT.
DATE: HORIZ.

DRAWN BY
CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	5
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING LEGEND

- ① EXISTING GROUND
- ② 9-6-9 PAVEMENT
- ③ BITUMINOUS OVERLAY (7")
- ④ BIT BASE COURSE WIDENING (9")
- ⑤ AGGREGATE SHOULDERS

PROPOSED LEGEND

- ⑩ HOT-MIX ASPHALT BASE COURSE WIDENING, 10"
- ⑪ HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
- ⑫ HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 (THICK VAR)
- ⑬ LEVELING BINDER (MACHINE METHOD), N50 (3/4 ")
- ⑭ HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 1 1/2 " "
- ⑮ HOT-MIX ASPHALT SHOULDERS (THICKNESS VARIES)
- ⑯ AGGREGATE SHOULDERS, TYPE B (6")
- ⑰ PAINT PAVEMENT MARKING - 5"
- ⑱ EMBANKMENT

BRIDGE AND APPROACH PAVEMENT OMISSION
STA 253+16.16 TO STA 256+35.66

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TYPICAL SECTIONS
FAP 717 (IL 10)
Section: 101B-1
Logan County

SCALE: NOT DRAWN TO SCALE DRAWN BY TEC
DATE: CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	6
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EARTHWORK SCHEDULE					
LOCATION		EARTH EXCAVATION	EXCAVATION ADJUSTED FOR SHRINKAGE (25%)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
		CU YDS	CU YDS	CU YDS	CU YDS
CHANNEL					
STA 13+87	TO	STA 14+06	138.0	103.5	24.3
STA 14+06	TO	STA 14+58	1,515.8	1,136.9	0
STA 14+58	TO	STA 14+80	432.6	324.5	0
STA 14+80	TO	STA 15+04	17.0	12.8	0
STA 15+04	TO	STA 15+15	11.6	8.7	0
STA 15+15	TO	STA 15+35	15.6	11.7	0
TOTAL			2,130.6	1,598.0	24.3
ROADWAY					
STA 250+86	TO	STA 251+50	0.0	0.0	3
STA 251+50	TO	STA 252+00	0.0	0.0	7.1
STA 252+00	TO	STA 253+36	0.0	0.0	129.5
STA 255+26	TO	STA 257+00	0.0	0.0	96.4
STA 257+00	TO	STA 257+50	0.0	0.0	10.8
STA 257+50	TO	STA 258+50	0.0	0.0	8.1
TOTAL			0.0	0.0	254.9
COMBINED TOTAL			2,131	1,598.0	279.2
EARTH EXCAVATION			2,131		BALANCE +1,318.8

EARTH EXCAVATION (WIDENING)			
			CU YDS
LT STA 250+86.00	TO	STA 252+00	9.5
LT STA 252+00.00	TO	STA 252+50	4.4
LT STA 252+50.00	TO	STA 253+00	4.6
LT STA 253+00.00	TO	STA 253+65	6.3
LT STA 255+87.00	TO	STA 257+00	11.1
LT STA 257+00.00	TO	STA 257+50	4.4
LT STA 257+50.00	TO	STA 258+50	8.5
TOTAL			49
RT STA 250+86.00	TO	STA 252+00	9.1
RT STA 252+00.00	TO	STA 252+50	4.4
RT STA 252+50.00	TO	STA 253+01	4.8
RT STA 256+42.00	TO	STA 257+00	4.6
RT STA 257+00.00	TO	STA 257+50	3.8
RT STA 257+50.00	TO	STA 258+50	7.7
TOTAL			34
TOTAL			83

PERIMETER EROSION BARRIER			
LOCATION			FOOT
LT & RT STA 250+86	TO	STA 254+36	789
LT & RT STA 254+98	TO	STA 258+50	793
TOTAL			1,582

LEVELING BINDER (MACHINE METHOD), N50				
LOCATION			WIDTH (FOOT)	TON
STA 251+50.66	TO	STA 253+16.16	26.00	20.1
STA 256+35.66	TO	STA 257+71.62	26.00	16.5
TOTAL				37

HOT-MIX ASPHALT BASE COURSE WIDENING, 10"					
LOCATION			WIDTH (FOOT)	SO YD	
LT STA 250+86.19	TO	STA 253+64.98	3.00	92.9	
LT STA 255+86.99	TO	STA 258+49.59	3.00	87.5	
RT STA 250+86.19	TO	STA 253+10.16	3.00	74.7	
RT STA 256+41.66	TO	STA 258+49.59	3.00	69.3	
TOTAL				324	

STONE RIPRAP, CLASS A5 FILTER FABRIC			
LOCATION			SO YD
LT STA 254+38.93	TO	STA 254+90.27	144.4
TOTAL			144

CONSTRUCTING TEST STRIP		
LOCATION		EACH
SURFACE		1

PRIME COAT					
LOCATION			WIDTH	BITUMINOUS MATERIALS TON	AGGREGATE TON
STA 250+86.19	TO	STA 253+16.16	32.0'	0.31	1.64
STA 256+35.66	TO	STA 258+49.59	32.0'	0.29	1.52
TOTAL				0.6	3

SEEDING RELATED ITEMS											
LOCATION			LEFT SQ FT	RIGHT SQ FT	TOTAL AREA W/SLOPE 1.12 SQ FT	TEMPORARY EROSION CONTROL SEEDING POUND	NITROGEN POUND	PHOSPHORUS POUND	POTASSIUM POUND	SEEDING, CLASS 2 ACRE	EROSION CONTROL BLANKET SQ YD
STA 250+86	TO	STA 253+36	2,855	2,196	5,657	13.0	11.7	11.7	11.7	0.13	628.6
STA 253+36	TO	STA 254+26	0	202	226	0.5	0.5	0.5	0.5	0.01	25.1
STA 254+26	TO	STA 254+36	440	395	935	2.1	1.9	1.9	1.9	0.02	0.0
STA 254+98	TO	STA 255+26	1,284	1,134	2,708	6.2	5.6	5.6	5.6	0.06	0.0
STA 255+26	TO	STA 256+16	0	708	793	1.8	1.6	1.6	1.6	0.02	88.1
STA 256+16	TO	STA 258+50	1,349	2,075	3,835	8.8	7.9	7.9	7.9	0.09	426.1
TOTAL			5,928	6,710	14,155	32	29	29	29	0.3	1,168

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF QUANTITIES
 FAP 717 (IL 10)
 SECTION 101B-1
 LOGAN COUNTY
 SCALE: VERT. HORIZ.
 DATE: DRAWN BY CHECKED BY

PLOT DATE = 12/12/2006
 PLOT SCALE = 1/8"=1'-0"
 PLOT SCALE = 1/8"=1'-0"

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	7
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT				
LOCATION		WIDTH	SQ YD	
STA 250+86.19	TO	STA 251+50.66	32.00'	229.2
STA 253+11.16	TO	STA 253+16.16	33.33'	18.5
STA 256+35.66	TO	STA 256+40.66	33.33'	18.5
STA 257+71.62	TO	STA 258+49.59	32.00'	277.2
TOTAL				543.4

PAVEMENT REMOVAL					
LOCATION		WIDTH	SQ YD		
RT STA 253+10.16	TO	STA 253+64.98	STAGE 1	13.00'	79.2
RT STA 255+86.99	TO	STA 256+41.66	STAGE 1	13.00'	79.0
LT STA 253+10.16	TO	STA 253+64.98	STAGE 2	13.00'	79.2
LT STA 255+86.99	TO	STA 256+41.66	STAGE 2	13.00'	79.0
TOTAL					316

TEMPORARY RAMP				
LOCATION		WIDTH	SQ YD	
STA 250+86.19	TO	STA 250+91.19	32.0'	17.8
STA 258+44.59	TO	STA 258+49.59	32.0'	17.8
TOTAL				35.6

AGGREGATE SHOULDERS, TYPE B				
LOCATION			TON	
LT STA 250+86.19	TO	STA 253+46.16		29.6
LT STA 256+05.66	TO	STA 258+49.59		27.8
LT TOTAL				57.4
RT STA 250+86.19	TO	STA 253+46.16		29.6
RT STA 256+05.66	TO	STA 258+49.59		27.8
RT TOTAL				57.4
GRAND TOTAL				115

TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)				
LOCATION			EACH	
LT STA 252+28.01	TO	STA 252+78.01		1.0
LT STA 257+36.31	TO	STA 257+86.31		1.0
RT STA 251+65.51	TO	STA 252+15.51		1.0
RT STA 256+36.31	TO	STA 256+86.31		1.0
TOTAL				4

HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50							
LOCATION			AVERAGE THICK (INCH)		WIDTH (FOOT)	TON	
STA 251+65.00	TO	STA 252+00.00	0.0	TO	3.6	26.00'	10.2
STA 252+00.00	TO	STA 252+50.00	3.6	TO	5.7	26.00'	37.6
STA 252+50.00	TO	STA 253+16.16	5.7	TO	8.1	26.00'	73.9
STA 256+35.66	TO	STA 257+00.00	8.4	TO	5.0	26.00'	69.7
STA 257+00.00	TO	STA 257+50.00	5.0	TO	2.2	26.00'	29.1
STA 257+50.00	TO	STA 257+60.00	2.2	TO	0.0	26.00'	1.8
TOTAL							222

STEEL PLATE BEAM GUARD RAIL, TYPE A				
LOCATION			FOOT	
LT STA 252+78.01	TO	STA 253+15.51		37.5
LT STA 256+36.31	TO	STA 257+36.31		100.0
RT STA 252+15.51	TO	STA 253+15.51		100.0
RT STA 256+36.31	TO	STA 256+73.81		37.5
TOTAL				275

GUARDRAIL REMOVAL				
LOCATION			FOOT	
LT STA 252+51.48	TO	STA 253+64.98		113.5
LT STA 255+86.99	TO	STA 257+61.97		175.0
RT STA 251+89.16	TO	STA 253+64.98		175.8
RT STA 255+86.99	TO	STA 256+99.01		112.0
TOTAL				576

HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50				
LOCATION			WIDTH (FOOT)	TON
STA 250+86.19	TO	STA 253+16.16	26.00	55.8
STA 256+35.66	TO	STA 258+49.59	26.00	51.9
TOTAL				108

TRAFFIC BARRIER TERMINAL, TYPE 6				
LOCATION			EACH	
LT STA 253+15.51	TO	STA 253+46.76		1
LT STA 256+05.06	TO	STA 256+36.31		1
RT STA 253+15.51	TO	STA 253+46.76		1
RT STA 256+05.06	TO	STA 256+36.31		1
TOTAL				4

FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS				
LOCATION			EACH	
LT STA 253+85.00				1
LT STA 254+25.00				1
LT STA 255+00.00				2
TOTAL				4

BRIDGE APPROACH PAVEMENT				
LOCATION		WIDTH	SQ YD	
STA 253+16.16	TO	STA 253+46.16	33.33'	111.10
STA 256+05.66	TO	STA 256+35.66	33.33'	111.10
TOTAL				222

HOT-MIX ASPHALT SHOULDER							
LOCATION			THICKNESS (INCH)		WIDTH (FOOT)	TON	
LT STA 250+86.19	TO	STA 253+16.16	2.00	TO	10.00	3.00'	25.8
LT STA 256+35.66	TO	STA 258+49.59	10.00	TO	2.00	3.00'	24.0
RT STA 250+86.19	TO	STA 253+16.16	2.00	TO	10.00	3.00'	25.8
RT STA 256+35.66	TO	STA 258+49.59	10.00	TO	2.00	3.00'	24.0
TOTAL							99

BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)				
LOCATION		WIDTH	SQ YD	
STA 253+10.16	TO	STA 253+16.16	33.33'	22.2
STA 256+35.66	TO	STA 256+41.66	33.33'	22.2
TOTAL				44

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF QUANTITIES
 FAP 717 (IL 10)
 SECTION 101B-1
 LOGAN COUNTY

SCALE: VERT. _____
 HORIZ. _____
 DATE _____ DRAWN BY _____
 CHECKED BY _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	8
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ENGINEER'S FIELD OFFICE, TYPE A	
LOCATION	CAL MO
JOBSITE	9
TOTAL 9	

RELOCATE TEMPORARY CONCRETE BARRIER			
LOCATION		FOOT	
STA 251+75	TO	STA 257+75	600
TOTAL			600

MOBILIZATION	
LOCATION	L SUM
JOBSITE	1
TOTAL 1	

PAINT PAVEMENT MARKING - LINE 5"			
	EDGE LINES	SKIP-DASH	COMBINED
	WHITE	YELLOW	
LOCATION	FOOT	FOOT	FOOT
STA 250+86.19	TO	STA 258+49.59	1527
			191
TOTAL			1,718

TRAFFIC CONTROL AND PROTECTION	
STANDARD 701306	1 L SUM
STANDARD 701326	1 L SUM
STANDARD 701321 SPECIAL	1 EACH

RAISED REFLECTIVE PAVEMENT MARKER			
LOCATION		EACH	
STA 250+86.16	TO	STA 258+49.59	11
TOTAL			11

IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	
LOCATION	EACH
STA 251+75	1
STA 256+88	1
TOTAL 2	

TRAFFIC CONTROL SURVEILLANCE	
LOCATION	CAL DA
JOBSITE	5
TOTAL 5	

GUARDRAIL MARKERS, TYPE A			
LOCATION		EACH	
LT STA 252+78	TO	STA 257+36	6
LT STA 252+16	TO	STA 256+74	6
TOT			12

IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 3	
LOCATION	EACH
STA 251+75	1
STA 256+88	1
TOTAL 2	

TEMPORARY BRIDGE TRAFFIC SIGNALS	
LOCATION	EACH
JOBSITE (for staging, 2 signals)	1
TOTAL 1	

TERMINAL MARKER - DIRECT APPLIED			
LOCATION		EACH	
LT STA 252+28.01			1
LT STA 257+86.31			1
RT STA 251+65.51			1
RT STA 256+86.31			1
TOTAL			4

BRIDGE DECK GROOVING			
LOCATION		WIDTH	SO YD
STA 253+16.16	TO	STA 253+46.16	30.83' 102.77
STA 256+05.66	TO	STA 256+35.66	30.83' 102.77
TOTAL			206

SHORT-TERM PAVEMENT MARKING			
LOCATION		FOOT	
STA 250+86.19	TO	STA 253+16.16	3 APPLICATIONS 69
STA 256+35.66	TO	STA 258+49.59	3 APPLICATIONS 64
TOTAL			133

PAVEMENT MARKING REMOVAL			
LOCATION		SO FT	
LT STA 250+86.19	TO	STA 258+49.59	318
RT STA 250+86.19	TO	STA 253+16.16	96
RT STA 256+35.66	TO	STA 258+49.59	89
TOTAL			503

WORK ZONE PAVEMENT MARKING REMOVAL			
LOCATION		SO FT	
STA 250+86.19	TO	STA 253+16.16	7.6
STA 256+35.66	TO	STA 258+49.59	7.1
TOTAL			15

RAISED REFLECTIVE PAVEMENT MARKER REMOVAL			
LOCATION		EACH	
STA 250+86.16	TO	STA 258+49.59	11
TOTAL			11

TEMPORARY CONCRETE BARRIER			
LOCATION	FOOT		
STA 251+75	TO	STA 257+75	600
TOTAL		600	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF QUANTITIES
 FAP 717 (IL 10)
 SECTION 101B-1
 LOGAN COUNTY

SCALE: VERT. DRAWN BY
 HORIZ. CHECKED BY
 DATE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	9
STA. 245+80		TO STA. 251+80		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SW 1/4, SEC 7, T20N, R4W, 3rd PM

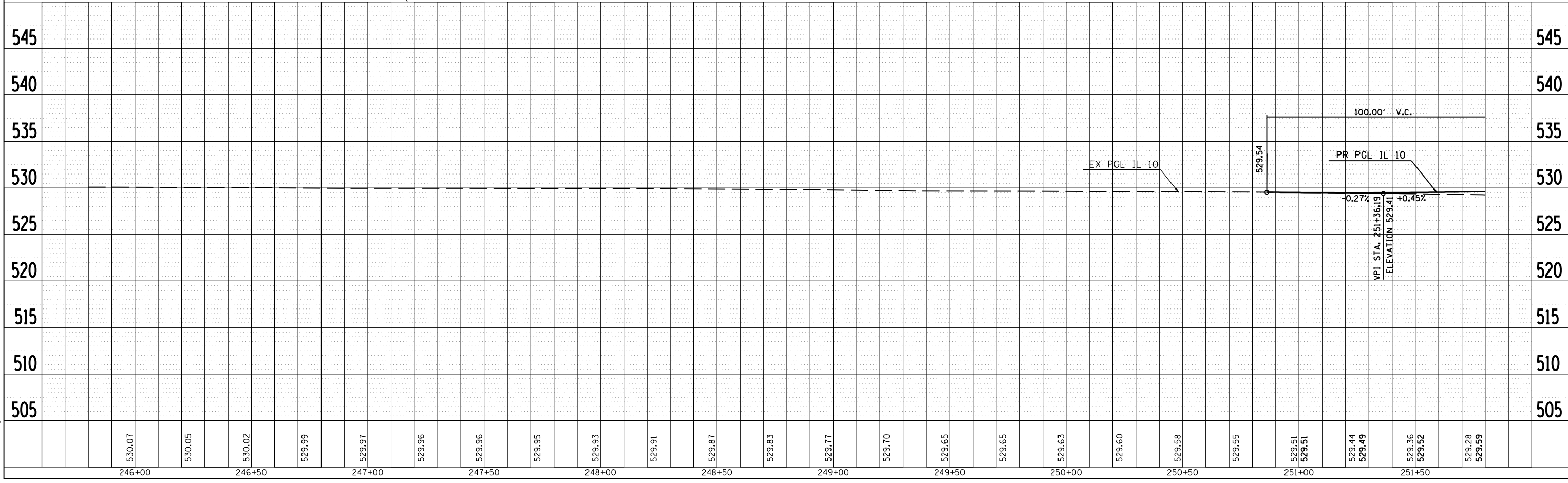
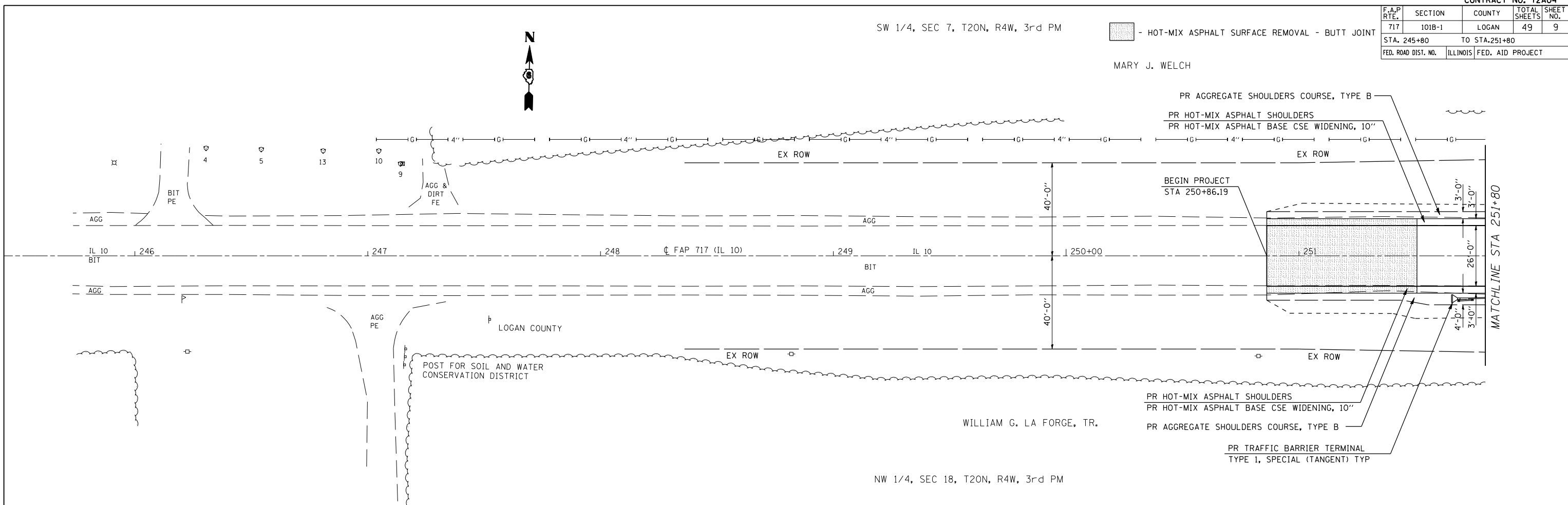
■ - HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

MARY J. WELCH

PLAN	SURVEYED	BY	DATE
PLOTTED			
CHECKED			
NO. OF WAY CHECKED			
CADD FILE NAME			

PROFILE	SURVEYED	BY	DATE
PLOTTED			
CHECKED			
BY			
STRUCTURE NOTATIONS CHKD			

PLOT DATE = 12/12/2006
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 PLOT SCALE = 42,3529 / IN.
 USER NAME = laughlin-1



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	10
STA. 251+80		TO STA. 257+60		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

- STONE RIPRAP, CLASS A5
- PAVEMENT REMOVAL

- PR AGGREGATE SHOULDERS COURSE, TYPE B
- PR HOT-MIX ASPHALT SHOULDERS
- PR HOT-MIX ASPHALT BASE CSE WIDENING, 10"
- PR TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT) TYP

- PR BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) TYPICAL
- PR BRIDGE APPROACH PAVEMENT STD 420401 TYPICAL

- PR HOT-MIX ASPHALT SHOULDERS
- PR HOT-MIX ASPHALT BASE CSE WIDENING, 10"

- PR HOT-MIX ASPHALT SHOULDERS
- PR HOT-MIX ASPHALT BASE CSE WIDENING, 10"

- PR HOT-MIX ASPHALT SHOULDERS
- PR HOT-MIX ASPHALT BASE CSE WIDENING, 10"
- PR AGGREGATE SHOULDERS COURSE, TYPE B

- PR HOT-MIX ASPHALT SHOULDERS
- PR HOT-MIX ASPHALT BASE CSE WIDENING, 10"
- PR AGGREGATE SHOULDERS COURSE, TYPE B

SW 1/4, SEC 7, T20N, R4W, 3rd PM

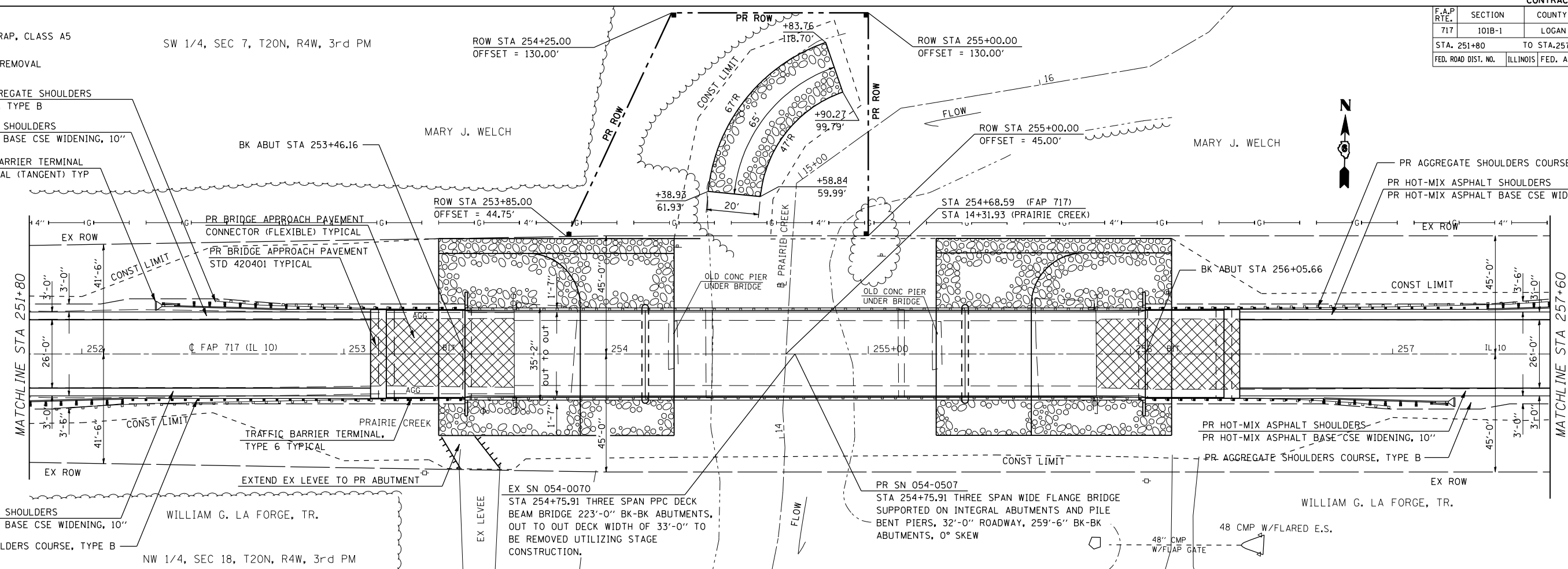
ROW STA 254+25.00
OFFSET = 130.00'

ROW STA 255+00.00
OFFSET = 130.00'

ROW STA 255+00.00
OFFSET = 45.00'

MATCHLINE STA 251+80

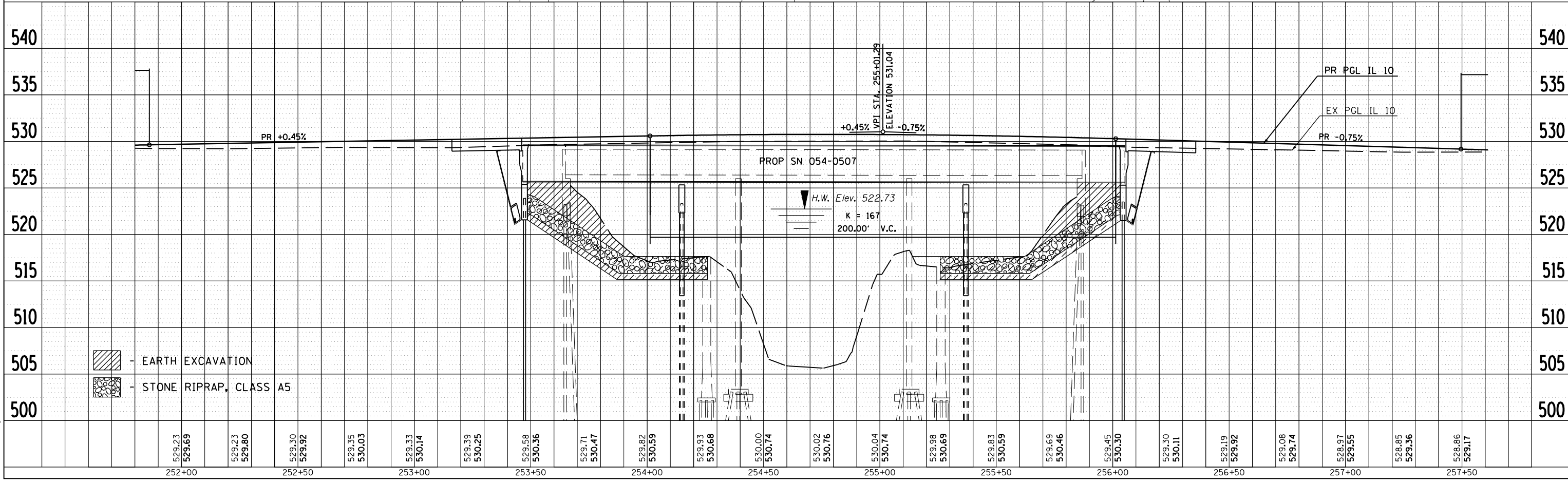
MATCHLINE STA 257+60



DATE	BY	REVISION

DATE	BY	REVISION

PLOT DATE = 12/12/2006
 FILE NAME = c:\p\proj\114653485\shp&p.dgn
 PLOT SCALE = 42,3529 / IN.
 USER NAME = laughlin-1

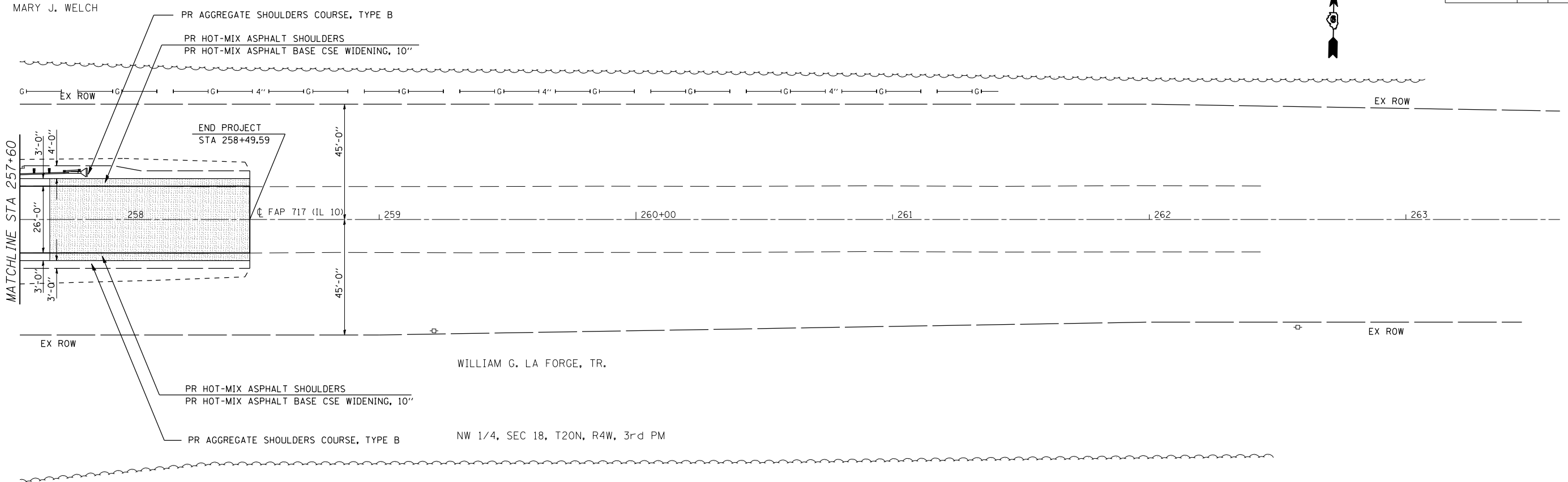


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	11
STA. 257+60		TO STA.263+60		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SW 1/4, SEC 7, T20N, R4W, 3rd PM

- HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT



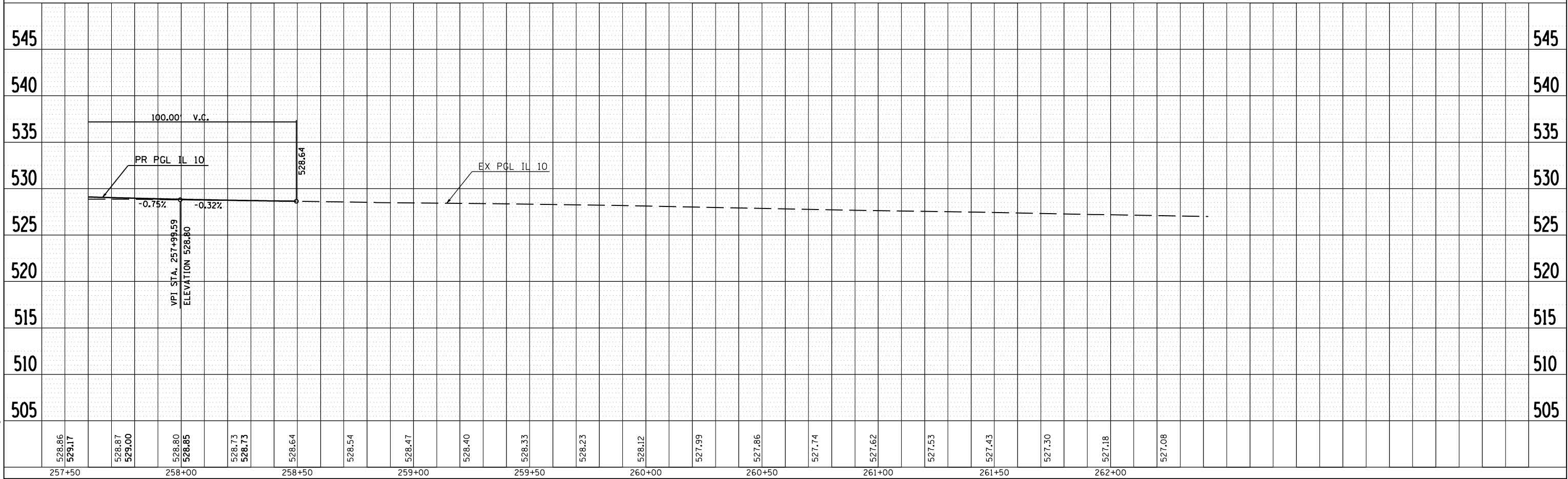
WILLIAM G. LA FORGE, TR.

NW 1/4, SEC 18, T20N, R4W, 3rd PM

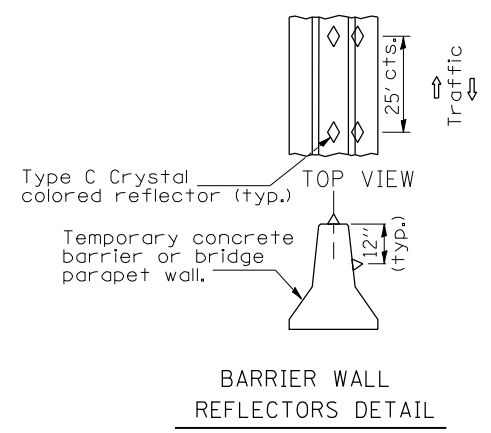
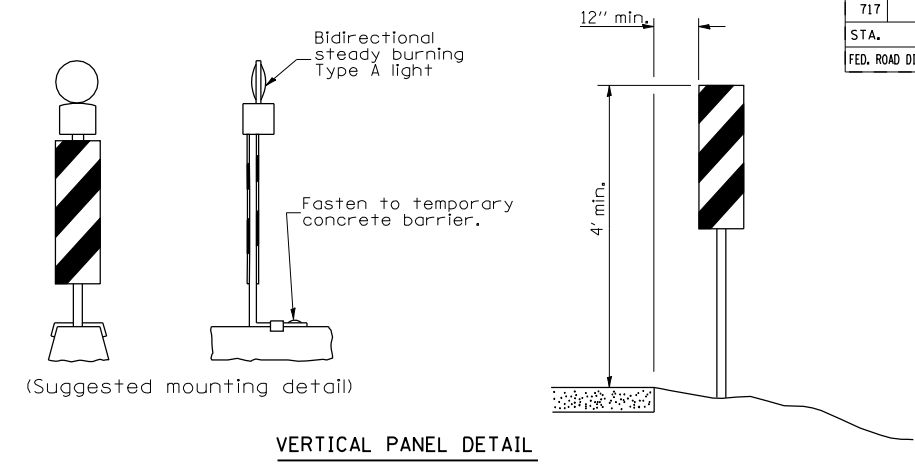
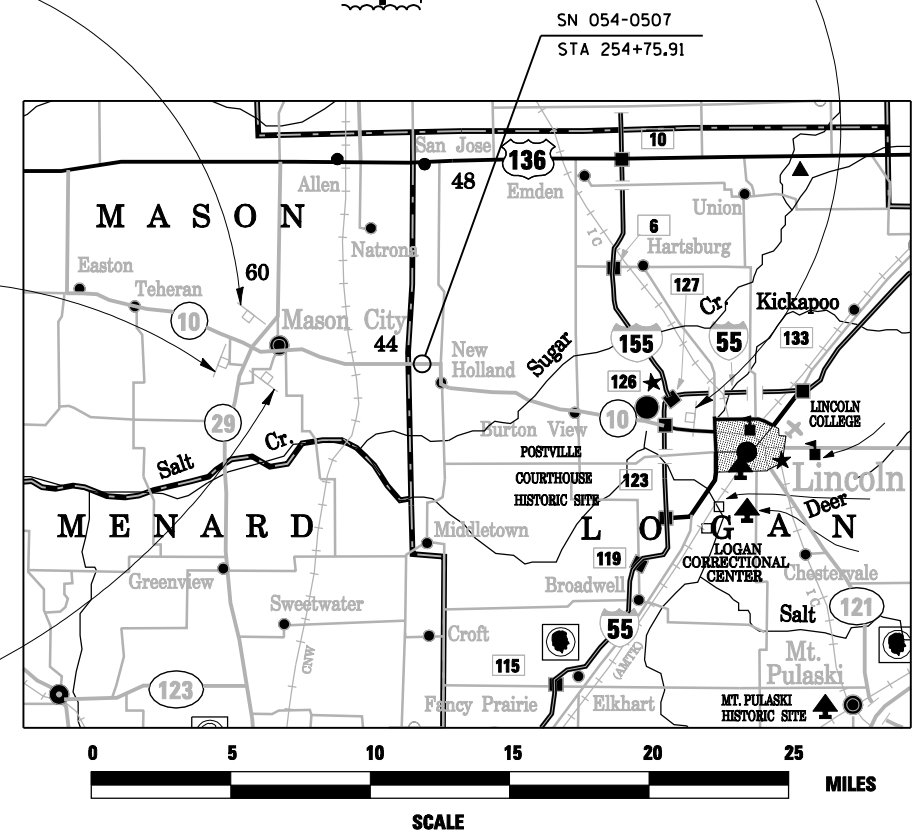
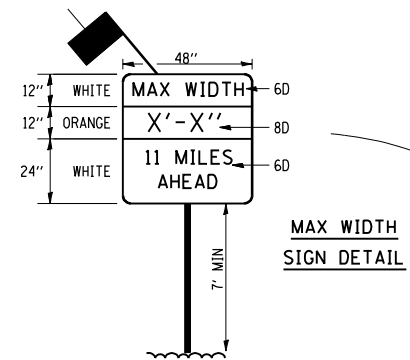
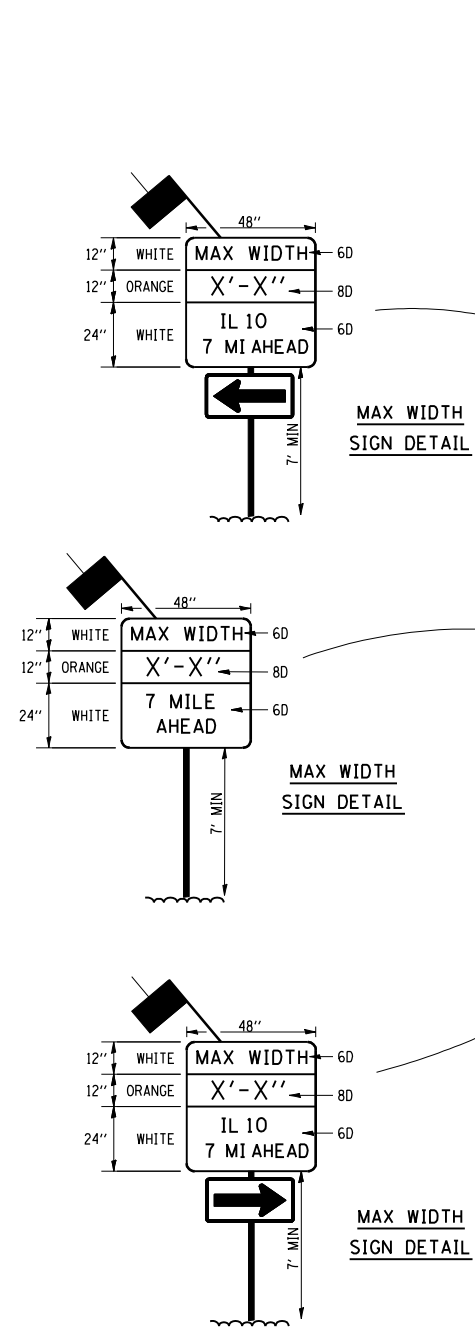
PLAN	SURVEYED	BY	DATE
NOTED			
PLOTTED			
CHECKED			
DATE			

PROFILE	SURVEYED	BY	DATE
NOTED			
PLOTTED			
CHECKED			
DATE			

PLOT DATE = 12/12/2006
 FILE NAME = c:\projects\6853485\shp&p.dgn
 PLOT SCALE = 42.3529' / IN.
 USER NAME = laughlin-1



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	12
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



GENERAL NOTES

This Standard is used where, at any time any vehicle, equipment, workers, or their activities will encroach on one lane of a bridge. Traffic signals and a positive barrier are required.

Temporary concrete barrier shall be according to Standard 704001.

Bi-directional lights shall be used at night along the centerline where the work area is separated from the travel lane using barricades or drums. Monodirectional lights shall be used at night on all other barricades or drums.

Existing or temporary pavement marking shall be on both sides of the open lane from stop bar to stop bar.

Actual Max Widths are to be measured by the Engineer after temporary concrete barrier wall is placed for Stage 1. Width shall be remeasured and signs updated for Stage 2.

Highway Standard 701321 shall be referenced for additional information.

Actual distances for Max Widths signs are to be verified by the Engineer prior to being placed.

REVISIONS	
NAME	DATE

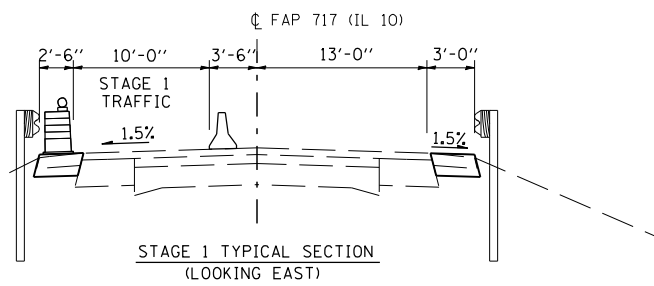
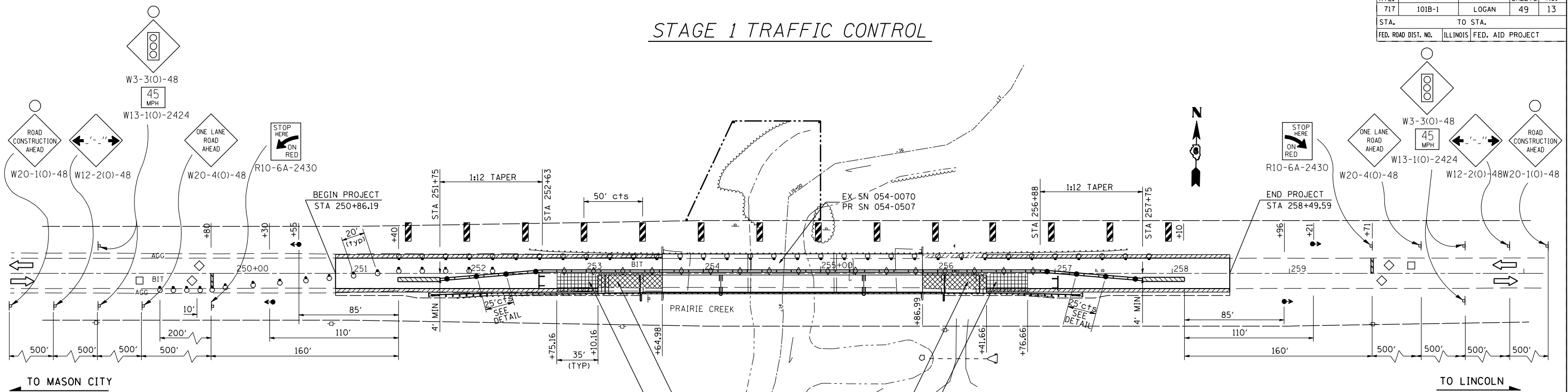
ILLINOIS DEPARTMENT OF TRANSPORTATION
STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
 FAP 717 (IL 10)
 Section: 101B-1
 Logan County

SCALE: VERT. / HORIZ.
 DATE: DRAWN BY: CHECKED BY:

PLOT DATE = 12/12/2006
 FILE NAME = c:\p\projects\653405\sh.t\stage.dgn
 PLOT SCALE = 84.7847 / IN.
 USER NAME = laughlin-1

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	13
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STAGE 1 TRAFFIC CONTROL



Preliminary Stage

1. Set up traffic control as per TC&P 701326.
2. Construct Hot-Mix Asphalt Base Cse Widening, 10" LT.
3. Install temporary bridge traffic signals, temporary concrete barrier, vertical panels, drums, and impact attenuators as per staging plan sheets and TC&P 701321 including removal of conflicting pavement markings.

Sequence of Stage 1 Construction

1. Divert traffic to the Stage 1 lane.
2. Remove Guardrail RT. Locations are indicated on schedule of quantities.
3. Remove Pavement and Approach Slab RT. Locations are indicated on schedule of quantities.
4. Install Temporary Sheet Piling
5. Remove and Replace Structure RT.
6. Construct Hot-Mix Asphalt Base Cse Widening, 10" RT.
7. Construct Approach Pavement, Pavement Connectors, and Ramps RT.
8. Install Guardrail RT.

LEGEND

- PAVEMENT REMOVAL
- IMPACT ATTENUATOR, NARROW
- TEMPORARY BARRIER WALL
- HOT-MIX ASPHALT BINDER COURSE) RAMP
- HOT-MIX ASPHALT BASE CSE WID, 10"
- DOUBLE VERTICAL PANEL
- SIGN
- INDUCTION LOOP DETECTOR
- TEMPORARY BRIDGE TRAFFIC SIGNALS
- DRUM WITH STEADY BURNING LIGHT
- 24" STOP BAR
- TYPE III BARRICADES
- TYPE C BIDIRECTIONAL REFLECTOR
- STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS

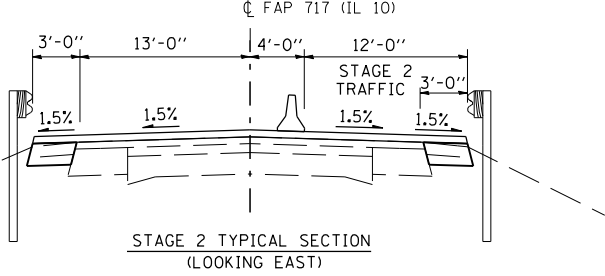
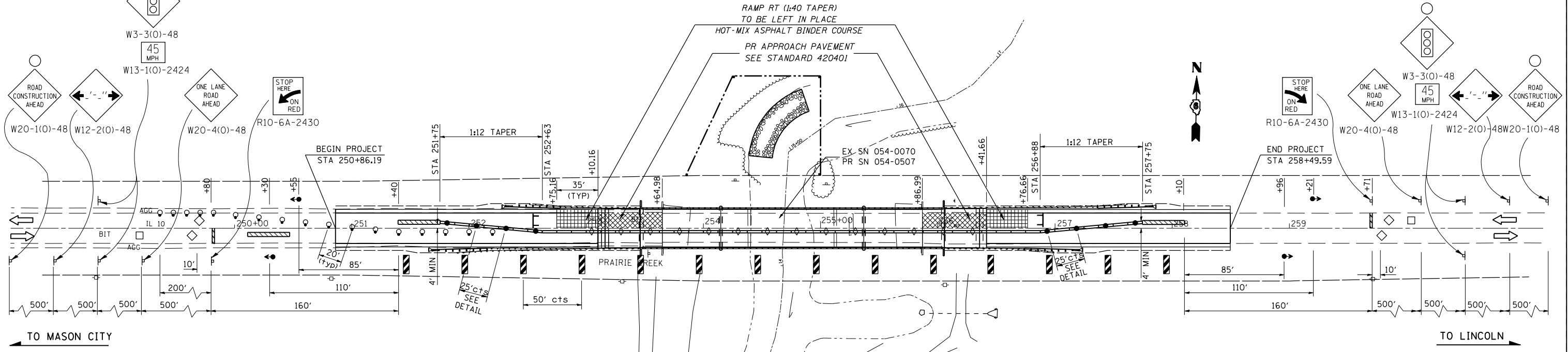
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STAGE 1 TRAFFIC CONTROL
STANDARD 701321 (SPECIAL)
 FAP 717 (IL 10)
 Section: 101B-1
 Logan County
 SCALE: 1" = 40'
 DATE _____ DRAWN BY _____ CHECKED BY _____

PLOT DATE = 12/12/2006
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 PLOT SCALE = 84.7876 / IN.
 USER NAME = laughlin-1

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	14
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STAGE 2 TRAFFIC CONTROL



Sequence of Stage 2 Construction

1. Relocate Temporary Concrete Barrier, impact attenuators, and conflicting pavement markings.
2. Divert traffic to Stage 2 Lane.
3. Remove Guardrail LT. Locations are indicated the staging plan sheets and the schedule of quantities.
4. Remove Pavement and Approach Slab LT. Locations are indicated the staging plan sheets and the schedule of quantities.
5. Remove and Replace Structure LT.
6. Construct Approach Pavement, Pavement Connectors, and Ramps LT.
7. Install Guardrail LT.
8. Remove Temporary Concrete Barrier, Temporary traffic bridge traffic signals, Impact attenuators, and other associated TC&P 701321 (SPECIAL) items.
9. Remove conflicting pavement markings and open roadway to two-way traffic.

Final Phase

1. Set traffic control as per TC&P 701306.
2. Mill Butt Joints. Locations are indicated the plan sheets and schedule of quantities.
3. Place binder course to establish profile as indicated on the plan and profile sheets.
4. Place leveling binder and surface course.
5. Place aggregate shoulders and adjust guardrail as needed.
6. Install Traffic Barrier Terminals.
7. Construct final Pavement Markings

LEGEND

- PAVEMENT REMOVAL
- IMPACT ATTENUATOR, NARROW
- TEMPORARY BARRIER WALL
- HOT-MIX ASPHALT BINDER COURSE) RAMP
- HOT-MIX ASPHALT BASE CSE WID, 10"
- DOUBLE VERTICAL PANEL
- SIGN
- INDUCTION LOOP DETECTOR
- TEMPORARY BRIDGE TRAFFIC SIGNALS
- DRUM WITH STEADY BURNING LIGHT
- 24" STOP BAR
- TYPE III BARRICADES
- TYPE C BIDIRECTIONAL REFLECTOR
- STEADY BURNING LIGHTS AND DOUBLE VERTICAL PANELS

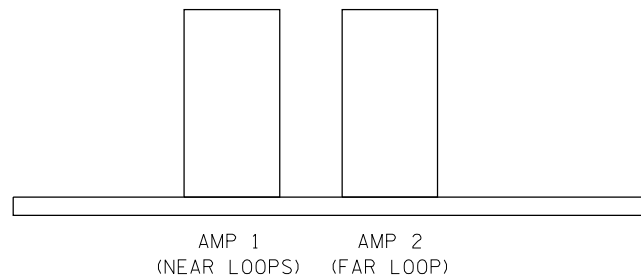
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STAGE 2 TRAFFIC CONTROL
STANDARD 701321 (SPECIAL)
 FAP 717 (IL 10)
 Section: 101B-1
 Logan County
 SCALE: 1" = 40'
 DATE _____ DRAWN BY _____
 CHECKED BY _____

PLOT DATE = 12/12/2006
 FILE NAME = c:\p\projects\653405\sh2\stage.dgn
 PLOT SCALE = 84.7876 / IN.
 USER NAME = laughlin-1

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	15
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

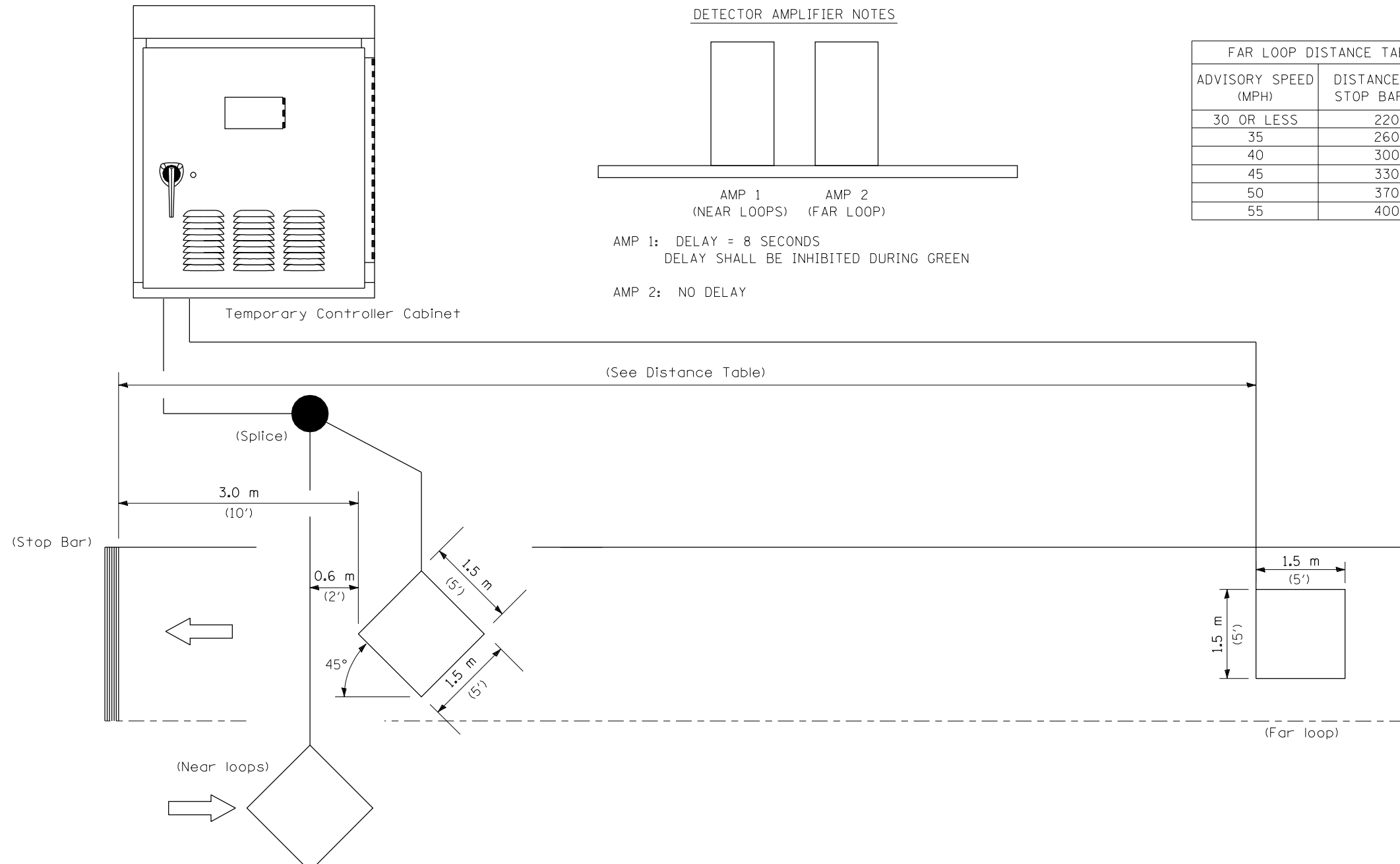
DETECTOR AMPLIFIER NOTES



AMP 1: DELAY = 8 SECONDS
 DELAY SHALL BE INHIBITED DURING GREEN

AMP 2: NO DELAY

ADVISORY SPEED (MPH)	DISTANCE FROM STOP BAR (FT.)
30 OR LESS	220
35	260
40	300
45	330
50	370
55	400



NOTE: All loops centered in lane.

INDUCTION LOOP DETECTOR




REVISIONS	
NAME	DATE

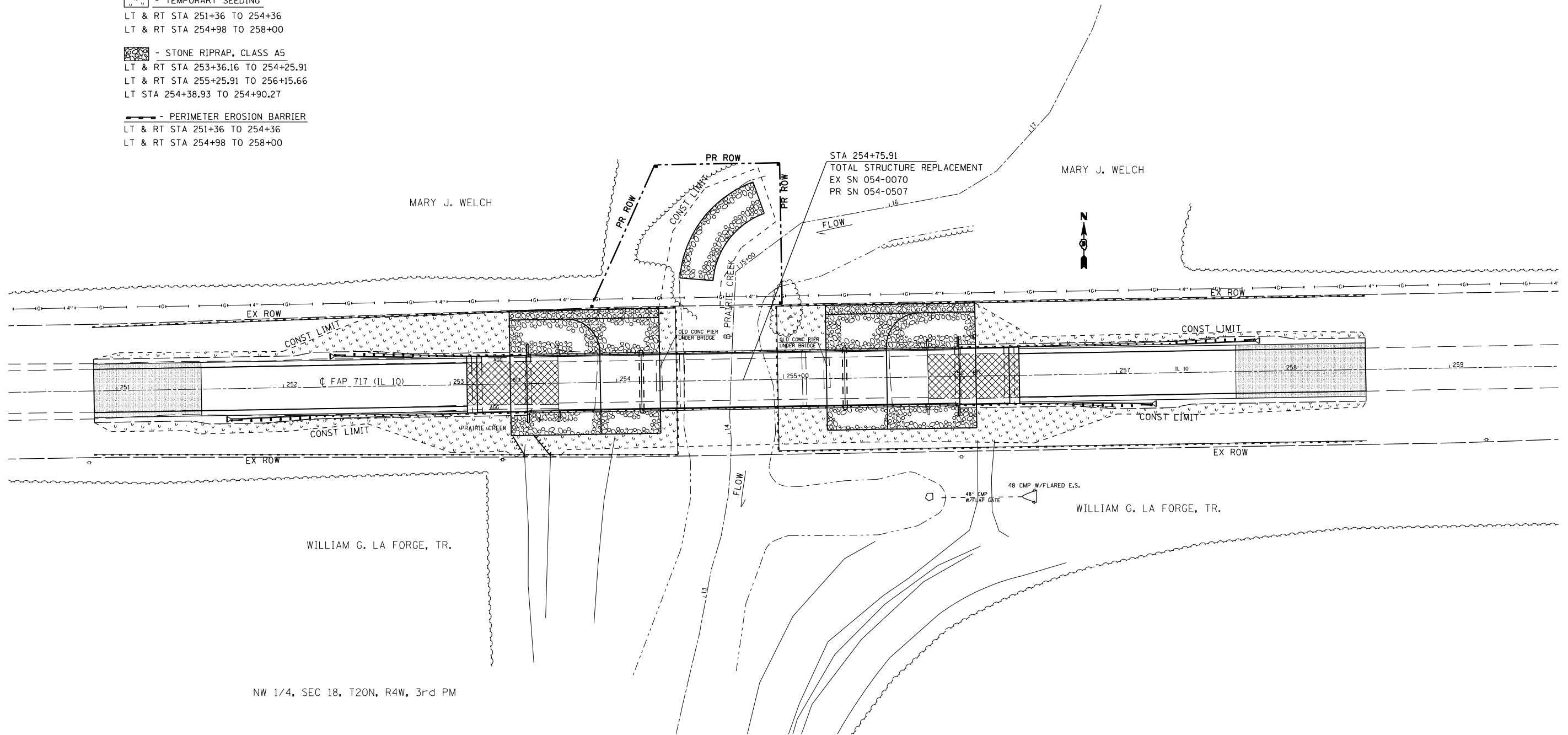
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TEMPORARY BRIDGE TRAFFIC SIGNAL
 LOOP PLACEMENT DETAIL SHEET
 FAP 717 (IL 10)
 Section: 101B-1
 Logan County
 SCALE: DATE JUNE 16, 2004
 DRAWN BY KDA
 CHECKED BY

PLOT DATE = 12/12/2006
 FILE NAME = c:\p\projects\653405\sh.t.sage.dgn
 PLOT SCALE = 84.7876 / IN.
 USER NAME = laughlin-1

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	16
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SW 1/4, SEC 7, T20N, R4W, 3rd PM

-  - TEMPORARY SEEDING
LT & RT STA 251+36 TO 254+36
LT & RT STA 254+98 TO 258+00
-  - STONE RIPRAP, CLASS A5
LT & RT STA 253+36.16 TO 254+25.91
LT & RT STA 255+25.91 TO 256+15.66
LT STA 254+38.93 TO 254+90.27
-  - PERIMETER EROSION BARRIER
LT & RT STA 251+36 TO 254+36
LT & RT STA 254+98 TO 258+00



NW 1/4, SEC 18, T20N, R4W, 3rd PM

PLOT DATE = 12/12/2006
FILE NAME = c:\p\projects\653405\sh\erision.dgn
PLOT SCALE = 63.5294 / IN.
USER NAME = laughlin-1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EROSION CONTROL PLAN
 FAP 717 (IL 10)
 Section: 101B-1
 Logan County
 SCALE: 1" = 30'
 DATE _____ DRAWN BY _____
 CHECKED BY _____

Benchmark: B.M. # 1254, Chiseled "□" on top of S.E. wingwall of S.N. 054-0070. Elev. 529.26

Existing Structure: S.N. 054-0070 was originally built in 1931 as S.B.I. Route 120 Sec. 101 B & C as a thru truss on closed abutments and solid wall piers on untreated timber piles. In 1979 the original bridge was removed and replaced with a 3-span PPC Deck Beam bridge as FA Route 717 Sec. 101 BR, 223'-0" bk. to bk. abutments, 33'-0" out to out deck. The substructure consists of pile bent abutments on concrete piles and solid wall piers on concrete piles. The existing structure is to be removed and replaced utilizing stage construction.

No Salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	POST	SHEET NO.
F.A.P. 717	101B-1	LOGAN	49	17	23 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

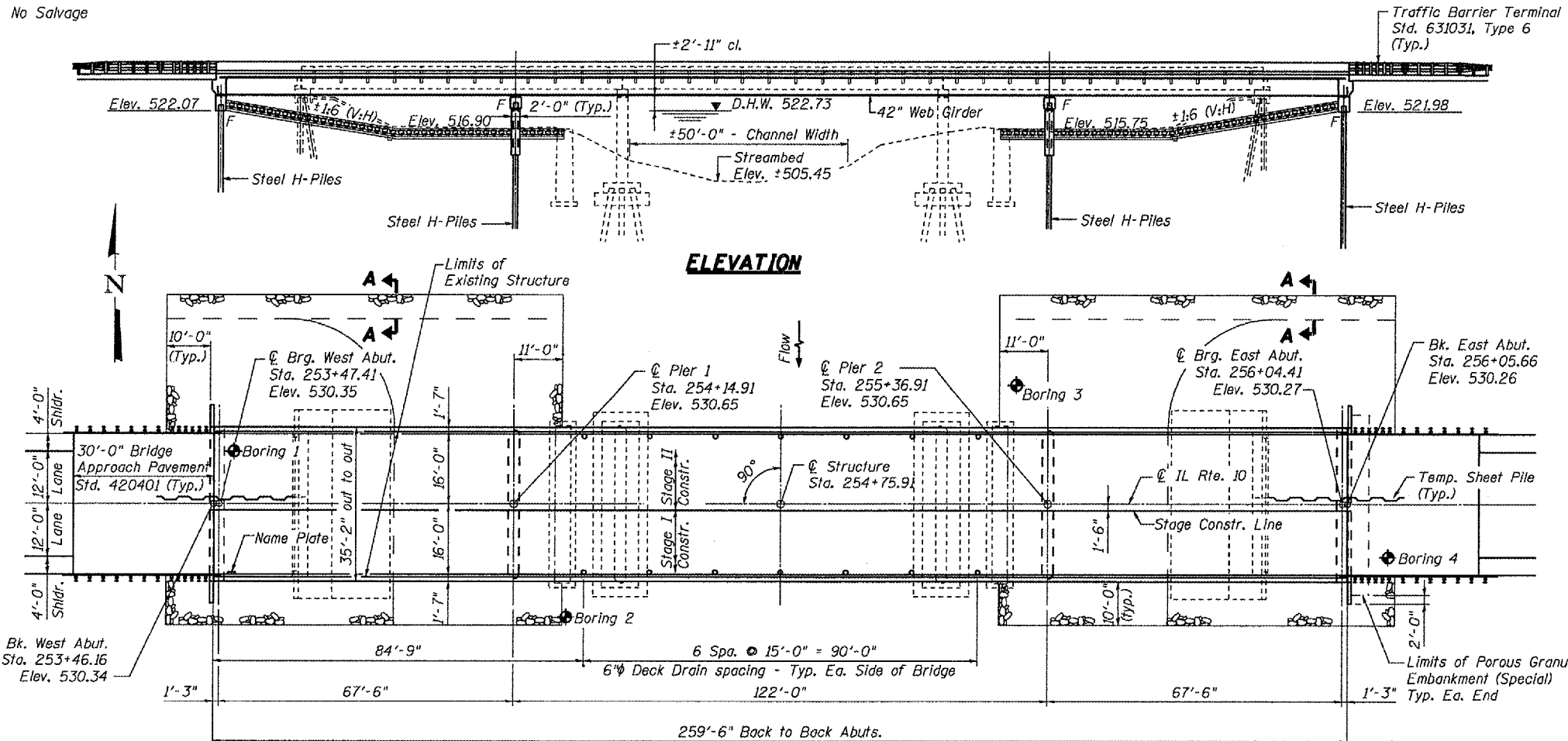
Contract #72A04

INDEX OF SHEETS

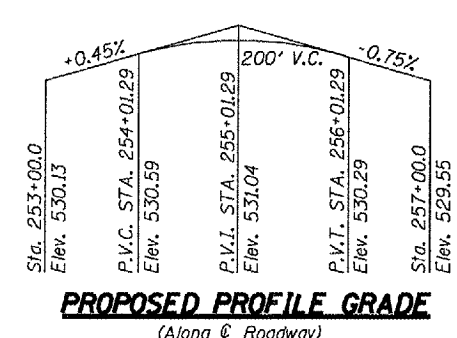
1. General Plan & Elevation
2. General Information
3. Stage Construction Details
4. Temporary Concrete Barrier
- 5.-6. Top Of Slab Elevations
7. Superstructure
8. Diaphragm Details
9. Superstructure Details
- 10.-11. Structural Steel Details
12. Bearing Details
13. West Abutment
14. East Abutment
15. Pier 1
16. Pier 2
17. Bar Splicer Details
- 18.-23. Boring Logs

STATION 254+75.91
BUILT BY
STATE OF ILLINOIS
F.A.P. RT. 717 SEC. 101B-1
LOADING HS20
STR. NO. 054-0507

NAME PLATE
See Std. 515001



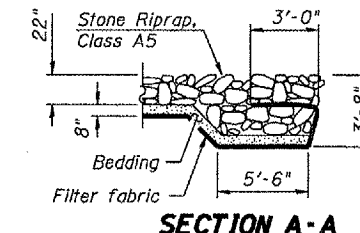
ELEVATION
PLAN



PROPOSED PROFILE GRADE
(Along & Roadway)

WATERWAY INFORMATION

Drainage Area = 102 sq. mi.		Exist. Low Grade Elev. 526.79 @ Sta. 262+44		Prop. Low Grade Elev. 529.17 @ Sta. 257+50	
Flood Yr.	Q	Opening Sq. Ft.	Nat. H.W.E.	Head - Ft.	Headwater El.
10	4299	1772	1789	0.17	0.17
Design	50	6545	1893	0.37	0.37
Base	100	7498	1942	0.44	0.45
Overtopping					
Max. Calc.	500	9776	2036	0.71	0.74



SECTION A-A

SCOUR TABLE

Design Scour Elevation (Ft.)	W. Abutment	Pier 1	Pier 2	E. Abutment
	522.07	516.90	515.75	521.98

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

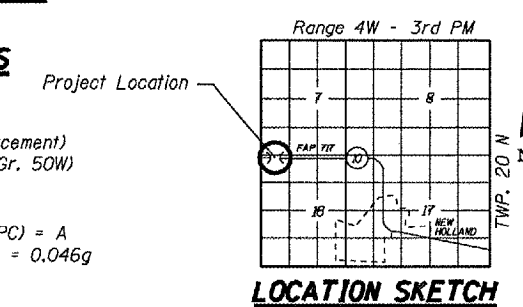
DESIGN SPECIFICATIONS
2002 AASHTO

DESIGN STRESSES

FIELD UNITS
f_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (M270 Gr. 50W)

SEISMIC DATA

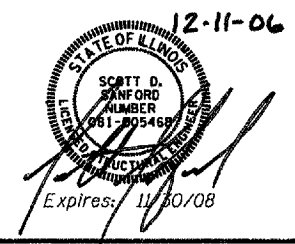
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.046g
Site Coefficient (S) = 1.5



LOCATION SKETCH

GENERAL PLAN & ELEVATION
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

DESIGNED	D.J.T. & S.D.S.
CHECKED	J.J.P. & S.D.S.
DRAWN	L.M.G. & D.L.H.
CHECKED	D.J.T. & S.D.S.

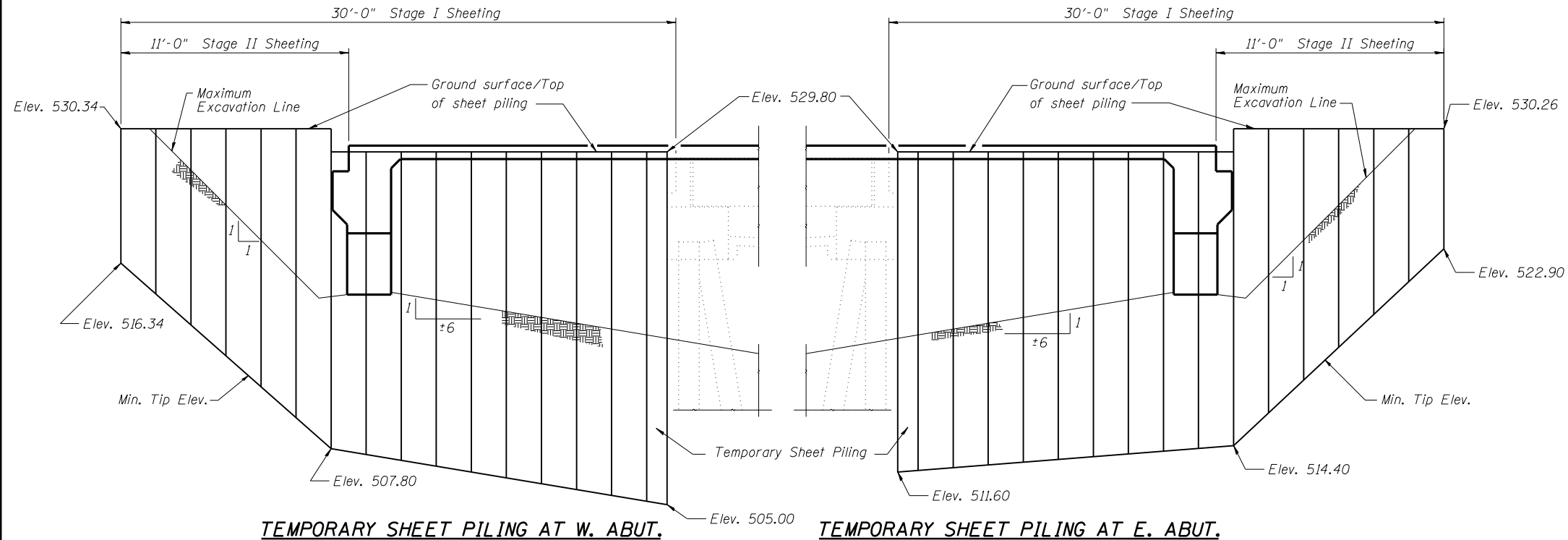


APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ray E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2 23 SHEETS
F.A.P. 717	101B-1	LOGAN	49	18	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

Contract #72A04



TEMPORARY SHEET PILING AT W. ABUT.

TEMPORARY SHEET PILING AT E. ABUT.

If the Contractor chooses to alter the Temporary Cantilevered Sheet Piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for a review and acceptance by the Engineer.

Minimum Required Section Modulus = 19 in³/ft.

GENERAL NOTES

Fasteners shall be AASHTO M 164, Type 1, mechanically galvanized bolts in painted areas and M 164 Type 3 in unpainted areas. Bolts 7/8" φ, holes 15/16" φ, unless otherwise noted.

Calculated weight of Structural Steel = 275,110 Lbs.
All structural steel shall be AASHTO M270 Grade 50W.
No field welding is permitted except as specified in the contract documents.
Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.
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 1/8 inch (0.01 Ft.). Adjustment shall be made either by grinding the surface or by shimming the bearing.

Structural steel shall only be painted 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 a Department approved zinc rich primer. 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".

The Contractor shall drive test piles to 110% of the nominal required bearing specified in permanent locations at substructures specified or approved by the Engineer before ordering the remainder of piles.

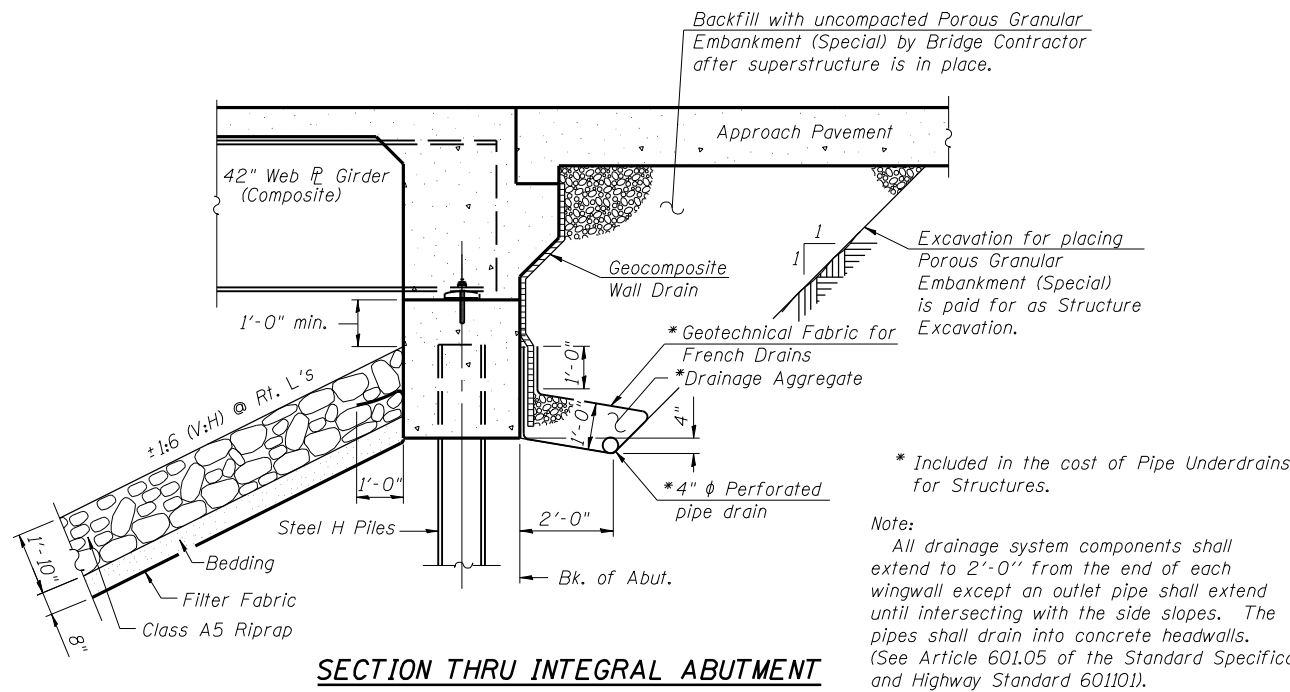
In lieu of hammer selection criteria and use of the FHWA Modified Gates formula specified in Section 512 of the Standard Specifications, the Contractor shall conduct a wave equation analysis to establish the driving criteria at all pile foundations which specify a nominal required bearing above 600 kips. The analysis and calculations shall be submitted to the Engineer for approval.

Two 1/8 inch adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

The Contractor is advised that the existing PPC Deck Beams are in deteriorated condition with reduced load carrying capacity. It is the contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Porous Granular Embankment (Special)	Cu. Yd.		120	120
Stone Riprap, Class A5	Sq. Yd.		1,513	1,513
Filter Fabric	Sq. Yd.		1,513	1,513
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		288	288
Floor Drains	Each	14		14
Concrete Structures	Cu. Yd.		118.2	118.2
Concrete Superstructure	Cu. Yd.	325.9		325.9
Bridge Deck Grooving	Sq. Yd.	865		865
Concrete Encasement	Cu. Yd.		3.2	3.2
Protective Coat	Sq. Yd.	1,142		1,142
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	3,132		3,132
Reinforcement Bars, Epoxy Coated	Lb.	65,620	9,900	75,520
Furnishing Steel Piles HP10x42	Foot		790	790
Furnishing Steel Piles HP14x89	Foot		1,255	1,255
Driving Piles	Foot		2,045	2,045
Test Piles Steel HP10x42	Each		2	2
Test Piles Steel HP14x89	Each		2	2
Temporary Sheet Piling	Sq. Ft.		1,093	1,093
Name Plates	Each	1		1
Anchor Bolts, 1"	Each		24	24
Anchor Bolts, 1 1/4"	Each		24	24
Geocomposite Wall Drain	Sq. Yd.		67	67
Pipe Underdrains for Structures 4"	Foot		133	133
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1
Asbestos Bearing Pad Removal	Each	66		66
Bar Splicers	Each	674	88	762



SECTION THRU INTEGRAL ABUTMENT

DESIGNED D.J.T. & S.D.S.
CHECKED J.J.P. & S.D.S.
DRAWN L.M.G. & D.L.H.
CHECKED D.J.T. & S.D.S.



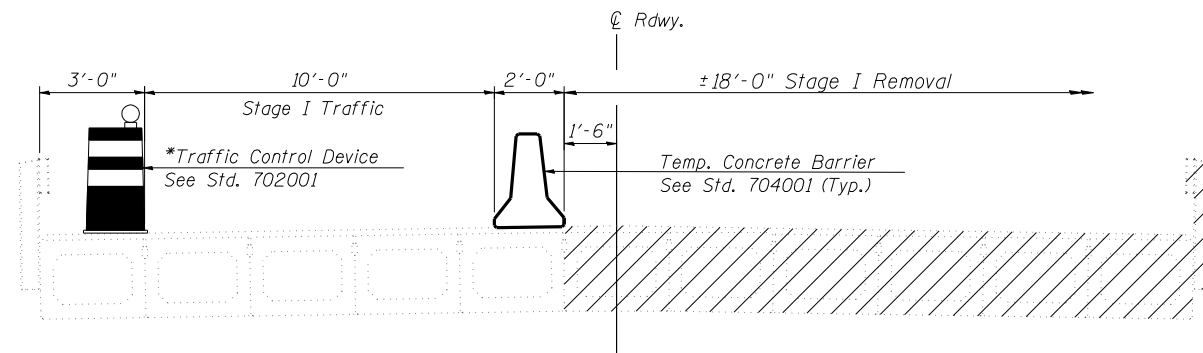
GENERAL INFORMATION
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

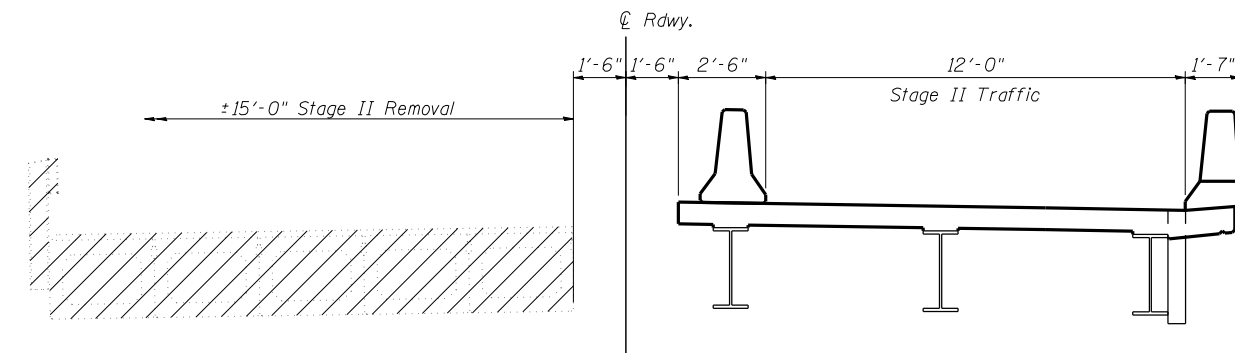
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 717	101B-1	LOGAN	49	19
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 3
23 SHEETS

Contract #72A04

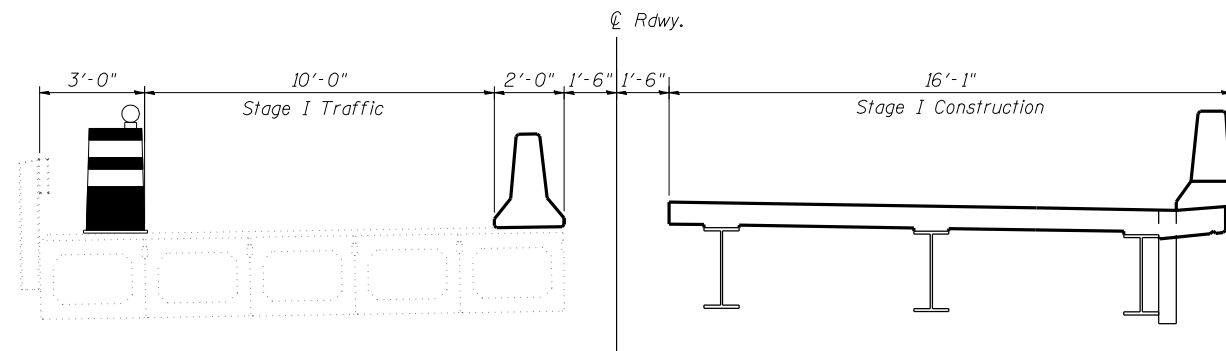


STAGE I REMOVAL

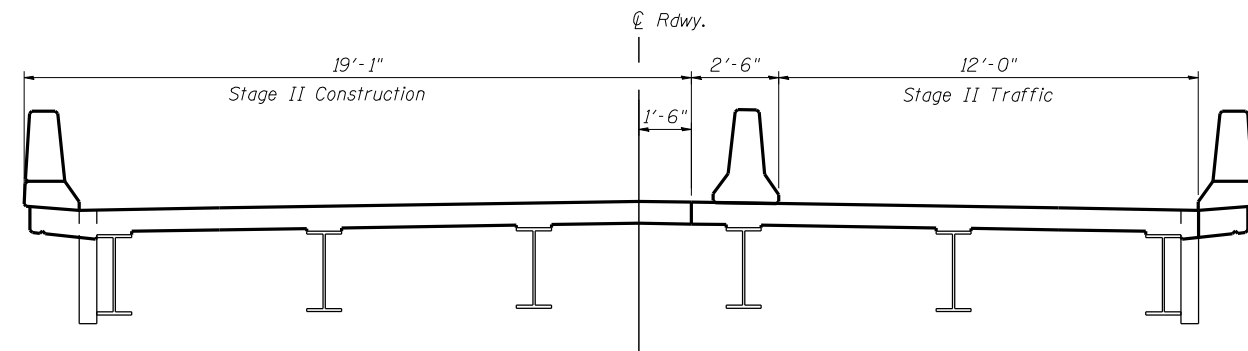


STAGE II REMOVAL

*Traffic Control Device is required to avoid wheel load contact over the north fascia beam. Device can be temporarily moved to permit wide vehicles to cross subject to approval by the Engineer. In no case should wheel loads be permitted over the north fascia beam.



STAGE I CONSTRUCTION



STAGE II CONSTRUCTION

Note:
All Cross-Sections are looking East.
Hatched area indicates "Removal of Existing Structures".
For details of Temporary Concrete Barrier, see sheet 4 of 23.
For quantity of Temporary Concrete Barrier, see Roadway Plans.

DESIGNED	D.J.T. & S.D.S.
CHECKED	J.J.P. & S.D.S.
DRAWN	L.M.G. & D.L.H.
CHECKED	D.J.T. & S.D.S.

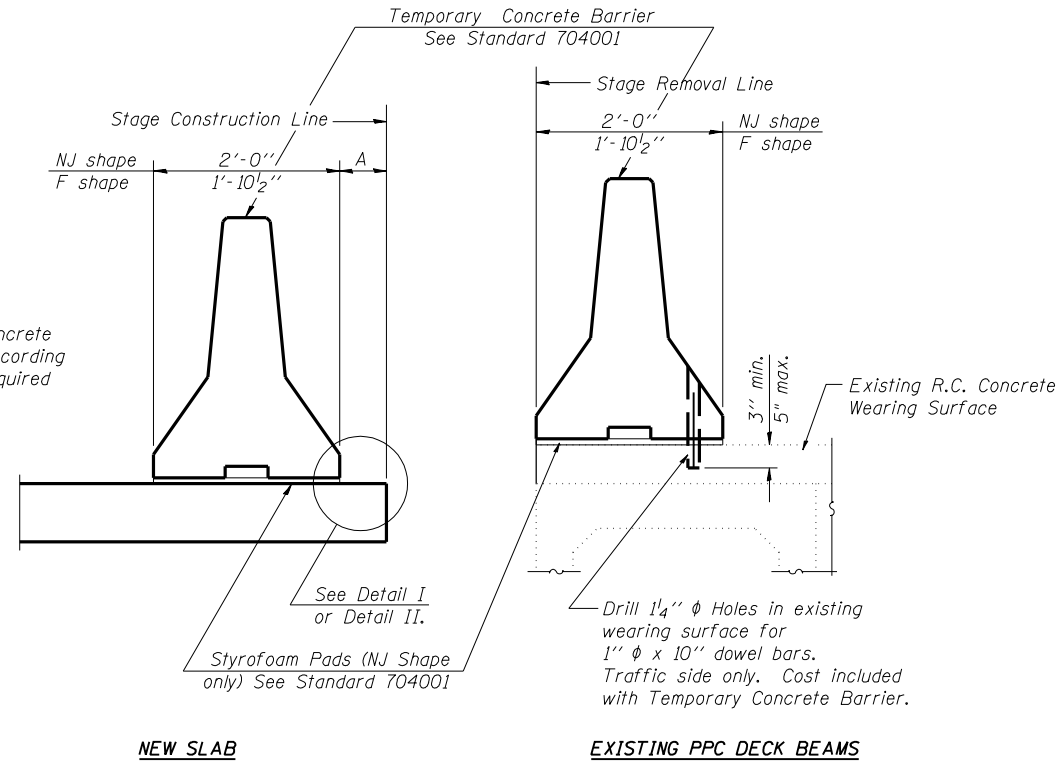


STAGE CONSTRUCTION DETAILS
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 4 23 SHEETS
F.A.P. 717	101B-1	LOGAN	49	20	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #72A04

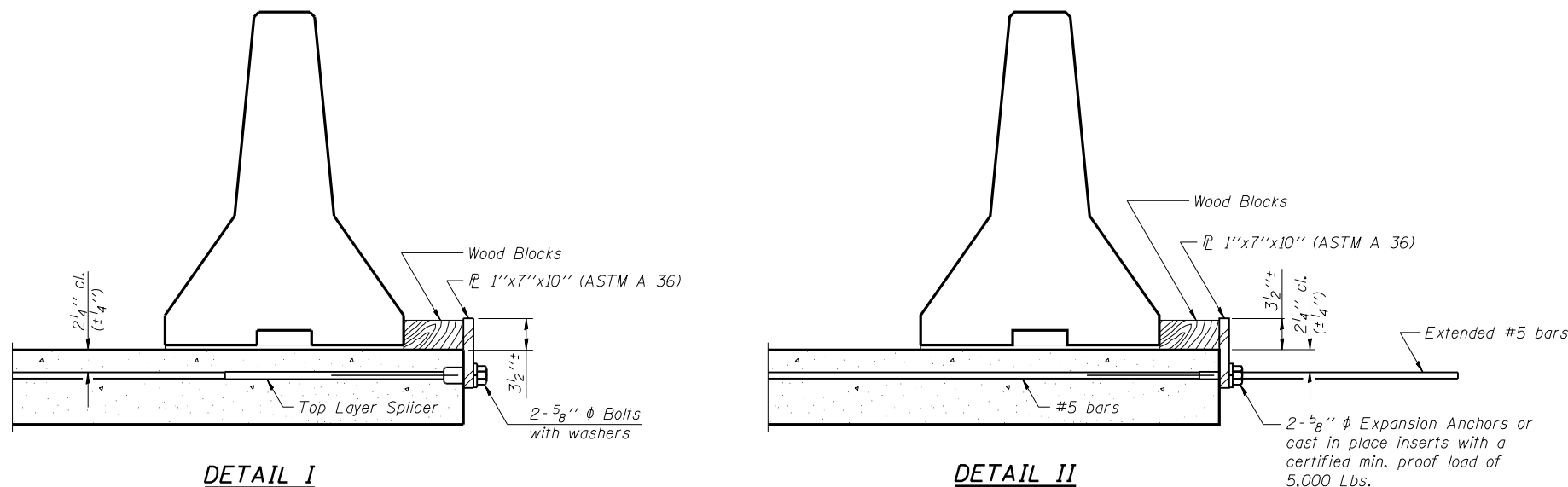


When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".

NOTES

- Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{P} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.
- Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel \bar{P} to the concrete slab with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.
- Cost of anchorage is included with Temporary Concrete Barrier.

SECTIONS THRU SLAB

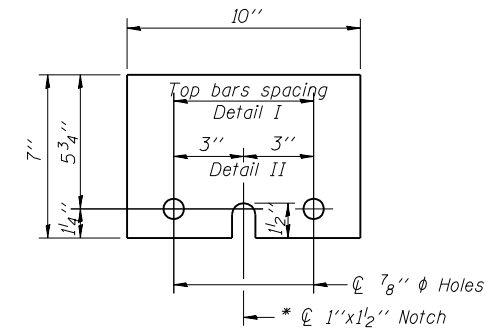


DETAIL I

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.

DETAIL II

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



1" x 7" x 10"

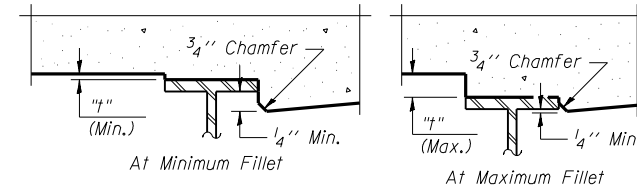
* Required only with Detail II

DESIGNED	D.J.T. & S.D.S.
CHECKED	J.J.P. & S.D.S.
DRAWN	L.M.G. & D.L.H.
CHECKED	D.J.T. & S.D.S.

WHKS & CO.
ENGINEERS PLANNERS LAND SURVEYORS
MASON CITY, IOWA DUBUQUE, IOWA AMES, IOWA
E. DUBUQUE, ILLINOIS SPRINGFIELD, ILLINOIS ROCHESTER, MINNESOTA

TEMPORARY CONCRETE BARRIER
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

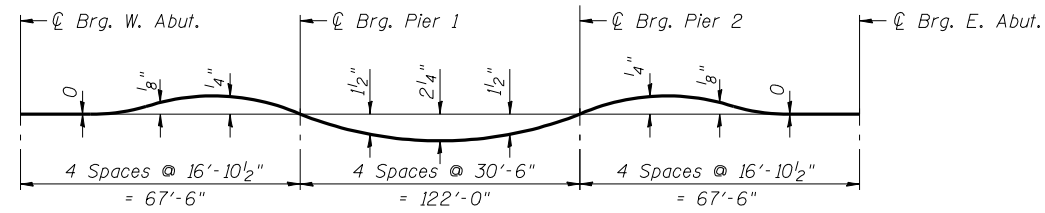
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 717	101B-1	LOGAN	49	21
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 5
23 SHEETS

Contract #72A04



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 this sheet and sheet 6 of 23.

All elevations and offsets are in feet.

To determine "t": After all structural steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of girders.

FILLET HEIGHTS

GIRDER 1					GIRDER 2				GIRDER 3				CL ROADWAY & P.G.L.						
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W Abut	25346.16	-15.000	530.092	530.092	Bk W Abut	25346.16	-9.000	530.201	530.201	Bk W Abut	25346.16	-3.000	530.295	530.295	Bk W Abut	25346.16	0.000	530.342	530.342
CL Brg W Abut	25347.41	-15.000	530.098	530.098	CL Brg W Abut	25347.41	-9.000	530.207	530.207	CL Brg W Abut	25347.41	-3.000	530.301	530.301	CL Brg W Abut	25347.41	0.000	530.348	530.348
A	25357.41	-15.000	530.143	530.144	A	25357.41	-9.000	530.252	530.253	A	25357.41	-3.000	530.346	530.347	A	25357.41	0.000	530.393	530.394
B	25367.41	-15.000	530.188	530.187	B	25367.41	-9.000	530.297	530.297	B	25367.41	-3.000	530.391	530.391	B	25367.41	0.000	530.438	530.437
C	25377.41	-15.000	530.233	530.226	C	25377.41	-9.000	530.342	530.335	C	25377.41	-3.000	530.436	530.429	C	25377.41	0.000	530.483	530.476
D	25387.41	-15.000	530.278	530.263	D	25387.41	-9.000	530.387	530.372	D	25387.41	-3.000	530.481	530.466	D	25387.41	0.000	530.528	530.513
E	25397.41	-15.000	530.323	530.303	E	25397.41	-9.000	530.432	530.412	E	25397.41	-3.000	530.526	530.506	E	25397.41	0.000	530.573	530.553
F	25407.41	-15.000	530.366	530.352	F	25407.41	-9.000	530.476	530.462	F	25407.41	-3.000	530.570	530.556	F	25407.41	0.000	530.616	530.602
CL Brg Pier 1	25414.91	-15.000	530.396	530.396	CL Brg Pier 1	25414.91	-9.000	530.505	530.505	CL Brg Pier 1	25414.91	-3.000	530.599	530.599	CL Brg Pier 1	25414.91	0.000	530.646	530.646
G	25424.91	-15.000	530.430	530.466	G	25424.91	-9.000	530.539	530.576	G	25424.91	-3.000	530.633	530.670	G	25424.91	0.000	530.680	530.716
H	25434.91	-15.000	530.457	530.540	H	25434.91	-9.000	530.567	530.649	H	25434.91	-3.000	530.661	530.743	H	25434.91	0.000	530.707	530.790
I	25444.91	-15.000	530.479	530.608	I	25444.91	-9.000	530.589	530.718	I	25444.91	-3.000	530.682	530.812	I	25444.91	0.000	530.729	530.858
J	25454.91	-15.000	530.495	530.665	J	25454.91	-9.000	530.604	530.774	J	25454.91	-3.000	530.698	530.868	J	25454.91	0.000	530.745	530.915
K	25464.91	-15.000	530.505	530.704	K	25464.91	-9.000	530.614	530.814	K	25464.91	-3.000	530.708	530.907	K	25464.91	0.000	530.755	530.954
L	25474.91	-15.000	530.509	530.719	L	25474.91	-9.000	530.618	530.829	L	25474.91	-3.000	530.712	530.922	L	25474.91	0.000	530.759	530.969
M	25484.91	-15.000	530.507	530.708	M	25484.91	-9.000	530.616	530.817	M	25484.91	-3.000	530.710	530.911	M	25484.91	0.000	530.757	530.958
N	25494.91	-15.000	530.498	530.675	N	25494.91	-9.000	530.608	530.784	N	25494.91	-3.000	530.701	530.878	N	25494.91	0.000	530.748	530.925
O	25504.91	-15.000	530.484	530.622	O	25504.91	-9.000	530.594	530.732	O	25504.91	-3.000	530.687	530.826	O	25504.91	0.000	530.734	530.872
P	25514.91	-15.000	530.464	530.556	P	25514.91	-9.000	530.573	530.666	P	25514.91	-3.000	530.667	530.759	P	25514.91	0.000	530.714	530.806
Q	25524.91	-15.000	530.438	530.482	Q	25524.91	-9.000	530.547	530.591	Q	25524.91	-3.000	530.641	530.685	Q	25524.91	0.000	530.688	530.732
CL Brg Pier 2	25536.91	-15.000	530.399	530.399	CL Brg Pier 2	25536.91	-9.000	530.508	530.508	CL Brg Pier 2	25536.91	-3.000	530.602	530.602	CL Brg Pier 2	25536.91	0.000	530.649	530.649
R	25546.91	-15.000	530.359	530.343	R	25546.91	-9.000	530.469	530.452	R	25546.91	-3.000	530.562	530.546	R	25546.91	0.000	530.609	530.593
S	25556.91	-15.000	530.314	530.294	S	25556.91	-9.000	530.423	530.404	S	25556.91	-3.000	530.517	530.497	S	25556.91	0.000	530.564	530.544
T	25566.91	-15.000	530.262	530.250	T	25566.91	-9.000	530.372	530.359	T	25566.91	-3.000	530.466	530.453	T	25566.91	0.000	530.512	530.500
U	25576.91	-15.000	530.205	530.201	U	25576.91	-9.000	530.314	530.310	U	25576.91	-3.000	530.408	530.404	U	25576.91	0.000	530.455	530.451
V	25586.91	-15.000	530.142	530.142	V	25586.91	-9.000	530.251	530.252	V	25586.91	-3.000	530.345	530.345	V	25586.91	0.000	530.392	530.392
W	25596.91	-15.000	530.072	530.074	W	25596.91	-9.000	530.182	530.183	W	25596.91	-3.000	530.275	530.277	W	25596.91	0.000	530.322	530.324
CL Brg E Abut	25604.41	-15.000	530.017	530.017	CL Brg E Abut	25604.41	-9.000	530.126	530.126	CL Brg E Abut	25604.41	-3.000	530.220	530.220	CL Brg E Abut	25604.41	0.000	530.267	530.267
Bk E Abut	25605.66	-15.000	530.007	530.007	Bk E Abut	25605.66	-9.000	530.117	530.117	Bk E Abut	25605.66	-3.000	530.210	530.210	Bk E Abut	25605.66	0.000	530.257	530.257

Note: For Elevation Location Plan see sheet 6 of 23.

DESIGNED	D.J.T. & S.D.S.
CHECKED	J.J.P. & S.D.S.
DRAWN	L.M.G. & D.L.H.
CHECKED	D.J.T. & S.D.S.



E-S

10-22-04

TOP OF SLAB ELEVATIONS
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. F.A.P. 717	SECTION 101B-1	COUNTY LOGAN	TOTAL SHEETS 49	SHEET NO. 22	SHEET NO. 6 23 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		

Contract #72A04

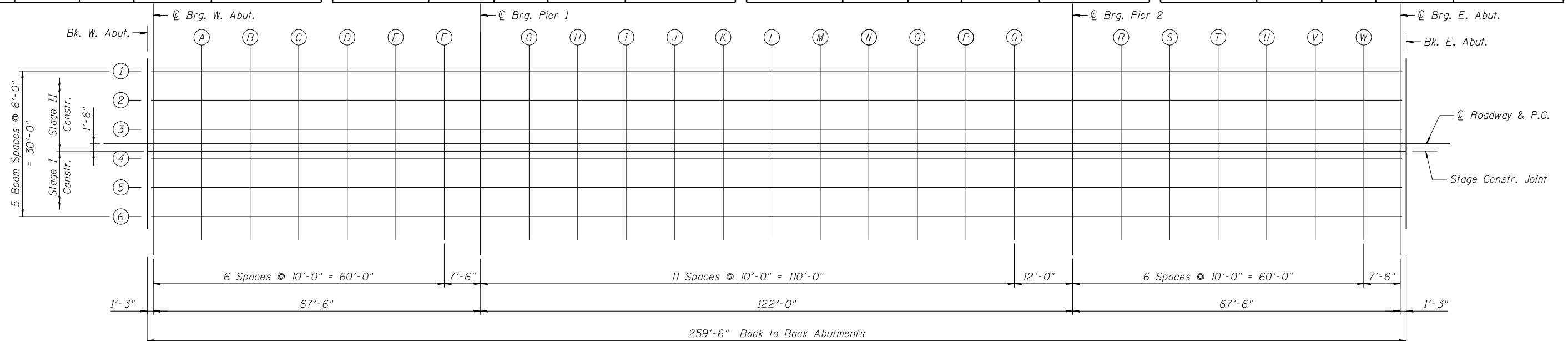
STAGE CONSTRUCTION JOINT

GIRDER 4

GIRDER 5

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W Abut	25346.16	1.500	530.318	530.318	Bk W Abut	25346.16	3.000	530.295	530.295	Bk W Abut	25346.16	9.000	530.201	530.201	Bk W Abut	25346.16	15.000	530.092	530.092
CL Brg W Abut	25347.41	1.500	530.324	530.324	CL Brg W Abut	25347.41	3.000	530.301	530.301	CL Brg W Abut	25347.41	9.000	530.207	530.207	CL Brg W Abut	25347.41	15.000	530.098	530.098
A	25357.41	1.500	530.369	530.371	A	25357.41	3.000	530.346	530.347	A	25357.41	9.000	530.252	530.253	A	25357.41	15.000	530.143	530.144
B	25367.41	1.500	530.414	530.414	B	25367.41	3.000	530.391	530.391	B	25367.41	9.000	530.297	530.297	B	25367.41	15.000	530.188	530.187
C	25377.41	1.500	530.459	530.453	C	25377.41	3.000	530.436	530.429	C	25377.41	9.000	530.342	530.335	C	25377.41	15.000	530.233	530.226
D	25387.41	1.500	530.504	530.489	D	25387.41	3.000	530.481	530.466	D	25387.41	9.000	530.387	530.372	D	25387.41	15.000	530.278	530.263
E	25397.41	1.500	530.549	530.530	E	25397.41	3.000	530.526	530.506	E	25397.41	9.000	530.432	530.412	E	25397.41	15.000	530.323	530.303
F	25407.41	1.500	530.593	530.579	F	25407.41	3.000	530.570	530.556	F	25407.41	9.000	530.476	530.462	F	25407.41	15.000	530.366	530.352
CL Brg Pier 1	25414.91	1.500	530.622	530.622	CL Brg Pier 1	25414.91	3.000	530.599	530.599	CL Brg Pier 1	25414.91	9.000	530.505	530.505	CL Brg Pier 1	25414.91	15.000	530.396	530.396
G	25424.91	1.500	530.656	530.693	G	25424.91	3.000	530.633	530.670	G	25424.91	9.000	530.539	530.576	G	25424.91	15.000	530.430	530.466
H	25434.91	1.500	530.684	530.766	H	25434.91	3.000	530.661	530.743	H	25434.91	9.000	530.567	530.649	H	25434.91	15.000	530.457	530.540
I	25444.91	1.500	530.706	530.835	I	25444.91	3.000	530.682	530.812	I	25444.91	9.000	530.589	530.718	I	25444.91	15.000	530.479	530.608
J	25454.91	1.500	530.722	530.892	J	25454.91	3.000	530.698	530.868	J	25454.91	9.000	530.604	530.774	J	25454.91	15.000	530.495	530.665
K	25464.91	1.500	530.731	530.931	K	25464.91	3.000	530.708	530.907	K	25464.91	9.000	530.614	530.814	K	25464.91	15.000	530.505	530.704
L	25474.91	1.500	530.735	530.946	L	25474.91	3.000	530.712	530.922	L	25474.91	9.000	530.618	530.829	L	25474.91	15.000	530.509	530.719
M	25484.91	1.500	530.733	530.935	M	25484.91	3.000	530.710	530.911	M	25484.91	9.000	530.616	530.817	M	25484.91	15.000	530.507	530.708
N	25494.91	1.500	530.725	530.901	N	25494.91	3.000	530.701	530.878	N	25494.91	9.000	530.608	530.784	N	25494.91	15.000	530.498	530.675
O	25504.91	1.500	530.711	530.849	O	25504.91	3.000	530.687	530.826	O	25504.91	9.000	530.594	530.732	O	25504.91	15.000	530.484	530.622
P	25514.91	1.500	530.691	530.783	P	25514.91	3.000	530.667	530.759	P	25514.91	9.000	530.573	530.666	P	25514.91	15.000	530.464	530.556
Q	25524.91	1.500	530.664	530.709	Q	25524.91	3.000	530.641	530.685	Q	25524.91	9.000	530.547	530.591	Q	25524.91	15.000	530.438	530.482
CL Brg Pier 2	25536.91	1.500	530.625	530.625	CL Brg Pier 2	25536.91	3.000	530.602	530.602	CL Brg Pier 2	25536.91	9.000	530.508	530.508	CL Brg Pier 2	25536.91	15.000	530.399	530.399
R	25546.91	1.500	530.586	530.569	R	25546.91	3.000	530.562	530.546	R	25546.91	9.000	530.469	530.452	R	25546.91	15.000	530.359	530.343
S	25556.91	1.500	530.540	530.521	S	25556.91	3.000	530.517	530.497	S	25556.91	9.000	530.423	530.404	S	25556.91	15.000	530.314	530.294
T	25566.91	1.500	530.489	530.476	T	25566.91	3.000	530.466	530.453	T	25566.91	9.000	530.372	530.359	T	25566.91	15.000	530.262	530.250
U	25576.91	1.500	530.432	530.427	U	25576.91	3.000	530.408	530.404	U	25576.91	9.000	530.314	530.310	U	25576.91	15.000	530.205	530.201
V	25586.91	1.500	530.368	530.369	V	25586.91	3.000	530.345	530.345	V	25586.91	9.000	530.251	530.252	V	25586.91	15.000	530.142	530.142
W	25596.91	1.500	530.299	530.300	W	25596.91	3.000	530.275	530.277	W	25596.91	9.000	530.182	530.183	W	25596.91	15.000	530.072	530.074
CL Brg E Abut	25604.41	1.500	530.243	530.243	CL Brg E Abut	25604.41	3.000	530.220	530.220	CL Brg E Abut	25604.41	9.000	530.126	530.126	CL Brg E Abut	25604.41	15.000	530.017	530.017
Bk E Abut	25605.66	1.500	530.234	530.234	Bk E Abut	25605.66	3.000	530.210	530.210	Bk E Abut	25605.66	9.000	530.117	530.117	Bk E Abut	25605.66	15.000	530.007	530.007



PLAN



NOTE

Work this sheet with sheet 5 of 23.

TOP OF SLAB ELEVATIONS
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

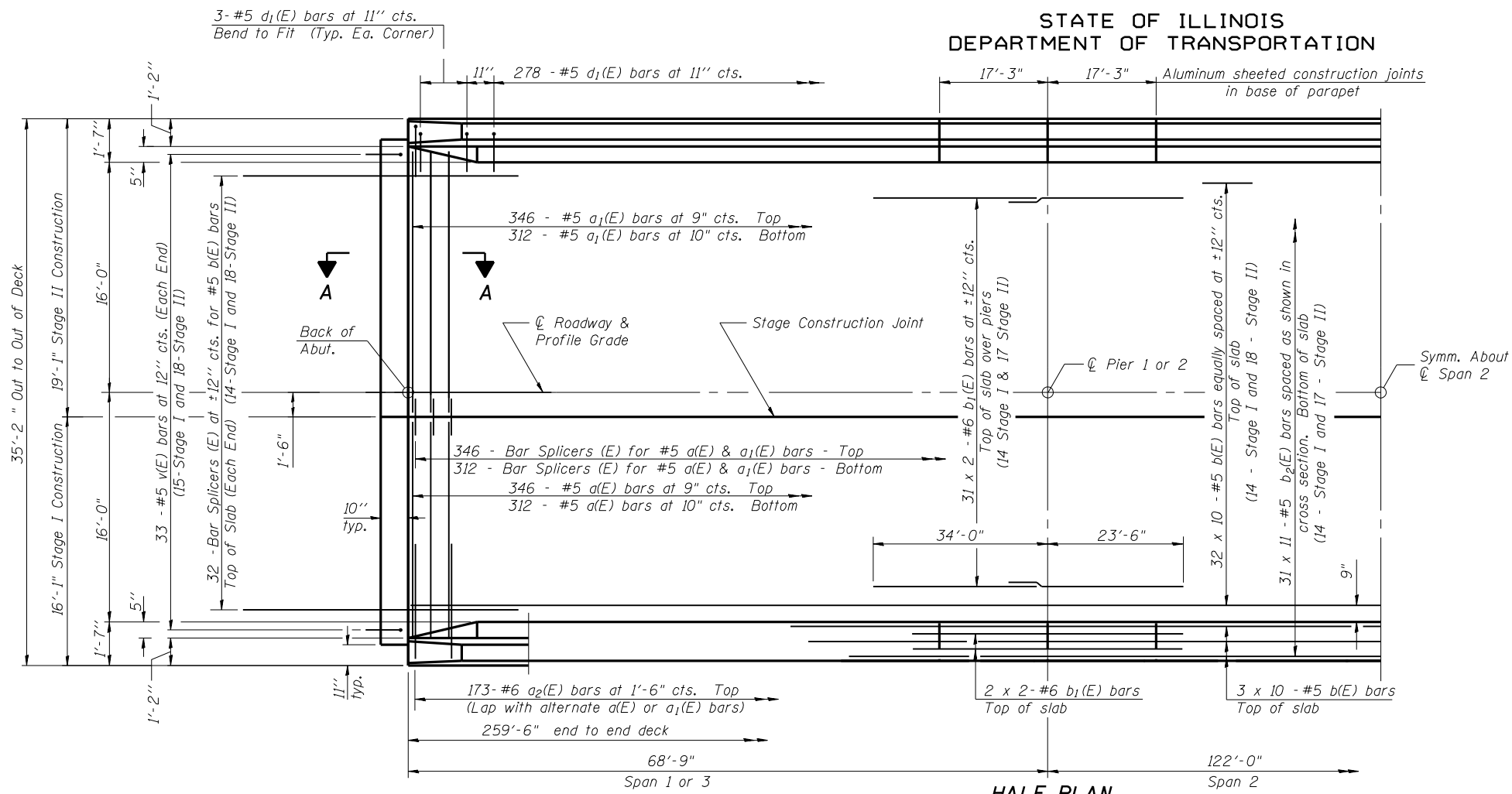
DESIGNED	D.J.T. & S.D.S.
CHECKED	J.J.P. & S.D.S.
DRAWN	L.M.G. & D.L.H.
CHECKED	D.J.T. & S.D.S.

WHKS & CO.
ENGINEERS PLANNERS LAND SURVEYORS
MASON CITY, IOWA DUBUQUE, IOWA AMES, IOWA
E. DUBUQUE, ILLINOIS SPRINGFIELD, ILLINOIS ROCHESTER, MINNESOTA

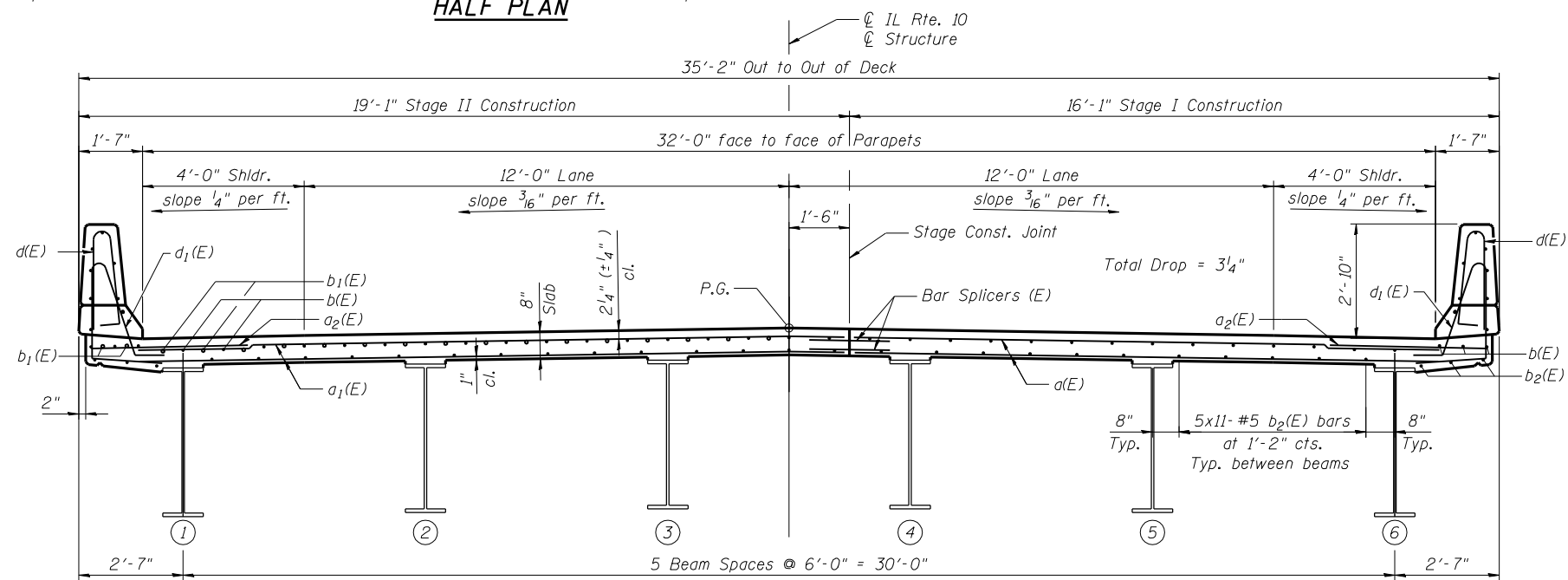
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 7
F.A.P. 717	101B-1	LOGAN	49	23	23 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #72A04



HALF PLAN



CROSS SECTION
(Looking East)

Notes:
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet 9 of 23 for parapet reinforcement and Bill of Material.
See Sheet 18 of 23 for Bar Splicer details.
See Sheet 8 of 23 for Section A-A and Abutment Diaphragm details.
See Sheet 1 of 23 for floor drain spacing.

MINIMUM BAR LAP

#5 bar = 1'-8"
#6 bar = 2'-7"

SUPERSTRUCTURE
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

DESIGNED D.J.T. & S.D.S.
CHECKED J.J.P. & S.D.S.
DRAWN L.M.G. & D.L.H.
CHECKED D.J.T. & S.D.S.



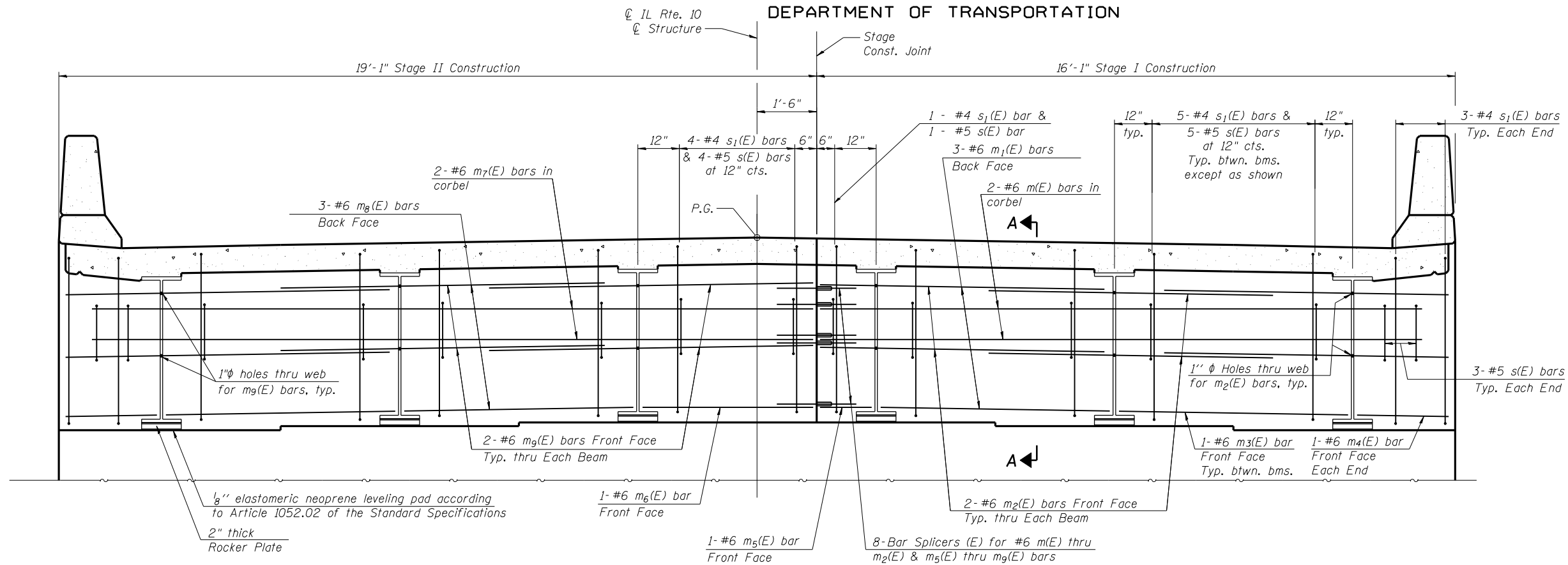
S-1-0

10-22-04

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8 23 SHEETS
F.A.P. 717	101B-1	LOGAN	49	24	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

Contract #72A04

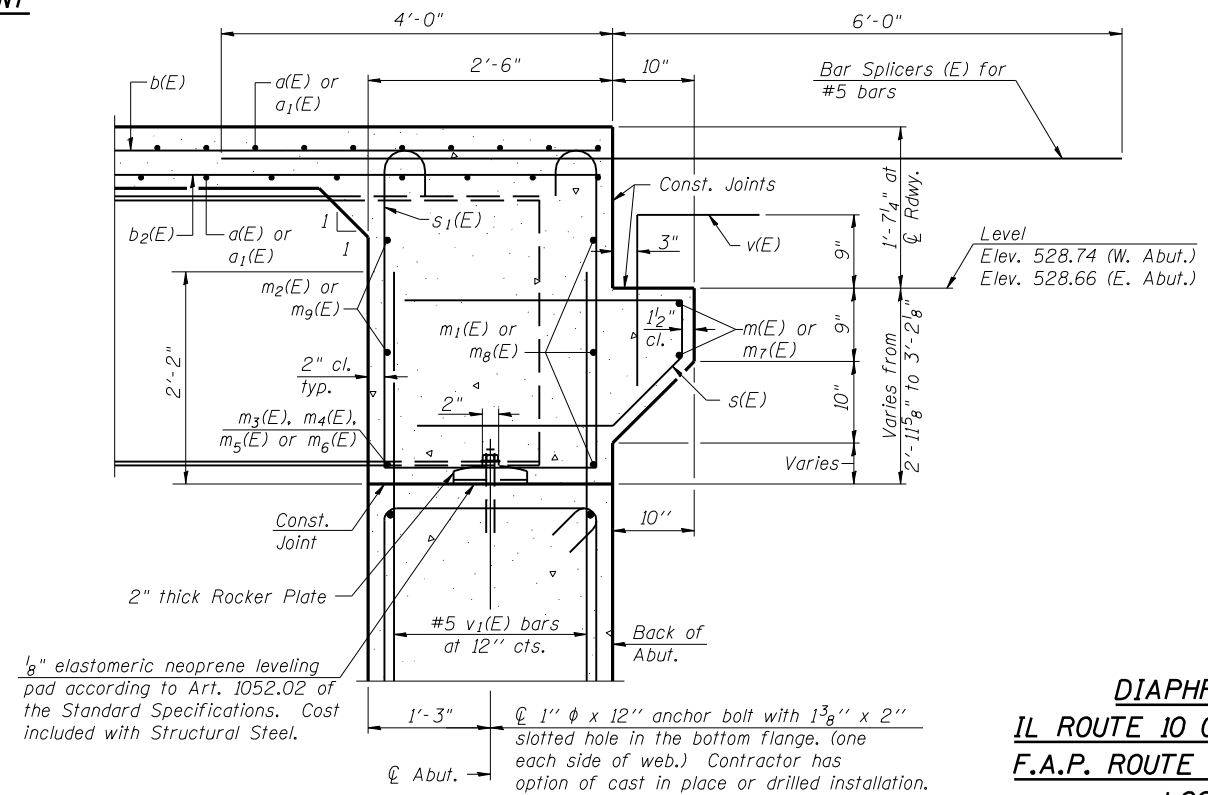


DIAPHRAGM ELEVATION AT EAST ABUTMENT

(Looking East)
(West Abutment, Looking West similar by mirror image)

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 9 of 23.
Concrete in diaphragm is included with Concrete Superstructure on sheet 9 of 23.
For details of bars s(E) & s₁(E) see sheet 9 of 23.
For details of bar v₁(E) see sheets 13 and 14 of 23.

MIN. BAR LAP
#6 bar = 2'-7"



SECTION A-A

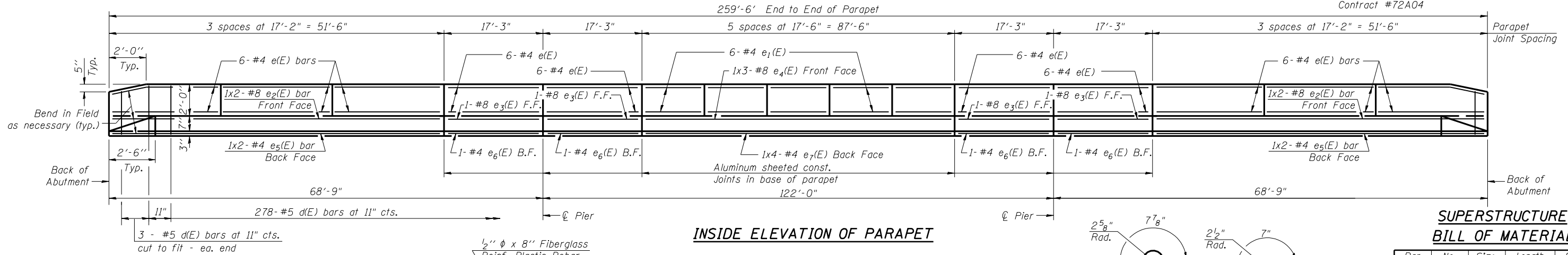
DIAPHRAGM DETAILS
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

DESIGNED	D.J.T. & S.D.S.
CHECKED	J.J.P. & S.D.S.
DRAWN	L.M.G. & D.L.H.
CHECKED	D.J.T. & S.D.S.



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

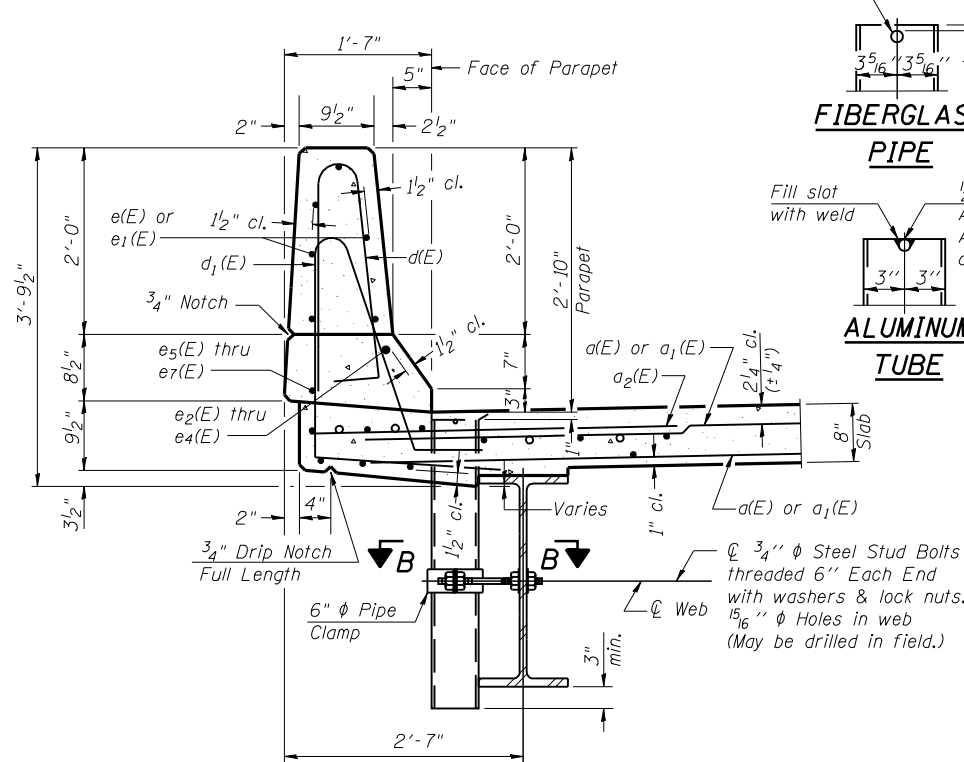
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F.A.P. 717	101B-1	LOGAN	49	25	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			
Contract #72A04					



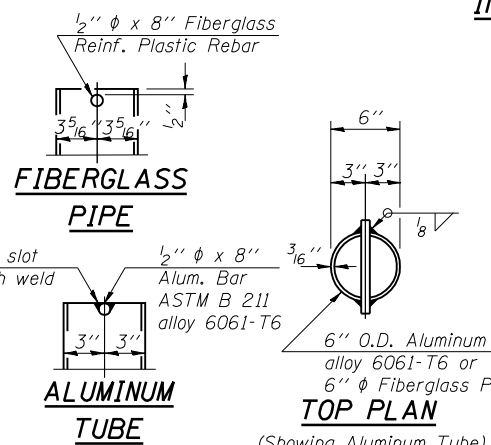
INSIDE ELEVATION OF PARAPET

SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	658	#5	15'-5"	—
a ₁ (E)	658	#5	18'-5"	—
a ₂ (E)	346	#6	6'-0"	—
b(E)	380	#5	27'-5"	—
b ₁ (E)	140	#6	30'-1"	—
b ₂ (E)	341	#5	25'-2"	—
d(E)	568	#5	5'-7"	—
d ₁ (E)	568	#5	7'-4"	—
e(E)	120	#4	17'-0"	—
e ₁ (E)	60	#4	17'-3"	—
e ₂ (E)	8	#8	27'-4"	—
e ₃ (E)	8	#8	17'-0"	—
e ₄ (E)	8	#8	31'-5"	—
e ₅ (E)	8	#4	26'-4"	—
e ₆ (E)	8	#4	17'-0"	—
e ₇ (E)	8	#4	22'-11"	—
m(E)	4	#6	14'-11"	—
m ₁ (E)	6	#6	15'-10"	—
m ₂ (E)	12	#6	7'-2"	—
m ₃ (E)	8	#6	5'-8"	—
m ₄ (E)	4	#6	2'-3"	—
m ₅ (E)	2	#6	1'-3"	—
m ₆ (E)	2	#6	4'-3"	—
m ₇ (E)	4	#6	17'-11"	—
m ₈ (E)	6	#6	18'-10"	—
m ₉ (E)	12	#6	8'-2"	—
s(E)	62	#5	6'-4"	—
s ₁ (E)	62	#4	11'-4"	—
v(E)	66	#5	3'-1"	—
Reinforcement Bars, Epoxy Coated		Pound	65,620	
Concrete Superstructure		Cu. Yd.	325.9	



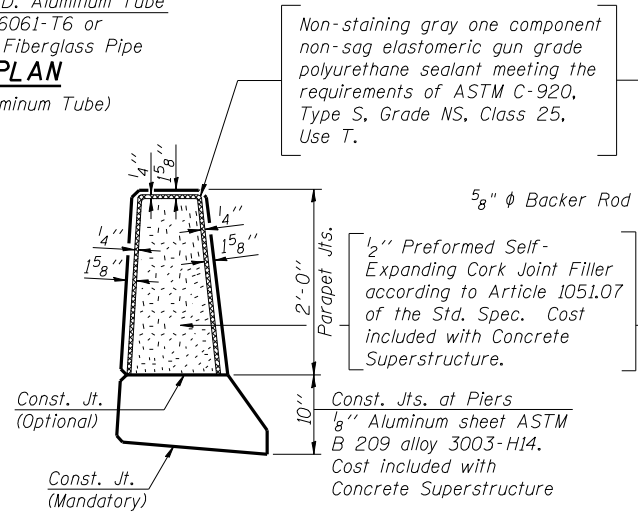
SECTION THRU PARAPET



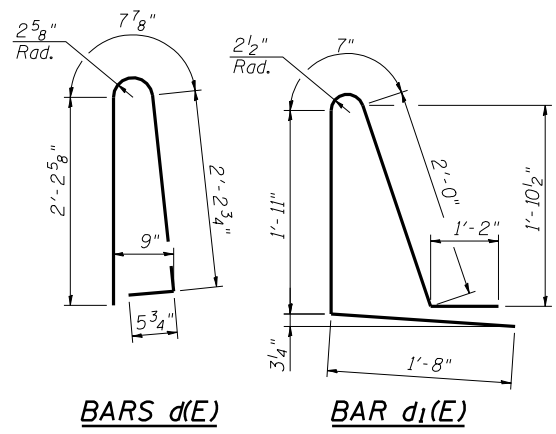
FIBERGLASS
PIPE

ALUMINUM
TUBE

TOP PLAN
(Showing Aluminum Tube)

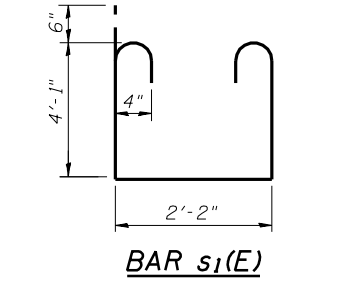


PARAPET JOINT DETAILS

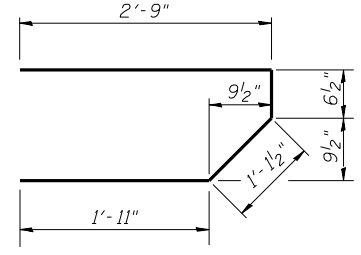


BARS d(E)

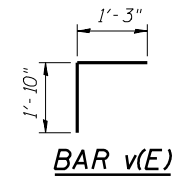
BAR d₁(E)



BAR s₁(E)



BAR s(E)



BAR v(E)

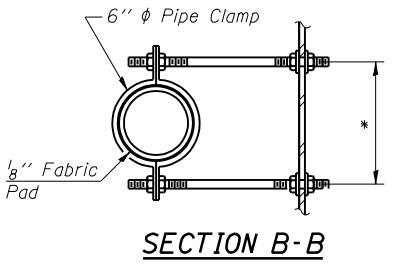
Notes:
The exterior surfaces of the floor drains shall not be painted.
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

MINIMUM BAR LAP

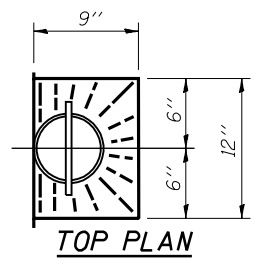
#4 bar = 1'-4"
#8 bar = 3'-5"

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

* Dimension as required by Pipe Clamp



SECTION B-B



TOP PLAN

DESIGNED	D.J.T. & S.D.S.
CHECKED	J.J.P. & S.D.S.
DRAWN	L.M.G. & D.L.H.
CHECKED	D.J.T. & S.D.S.

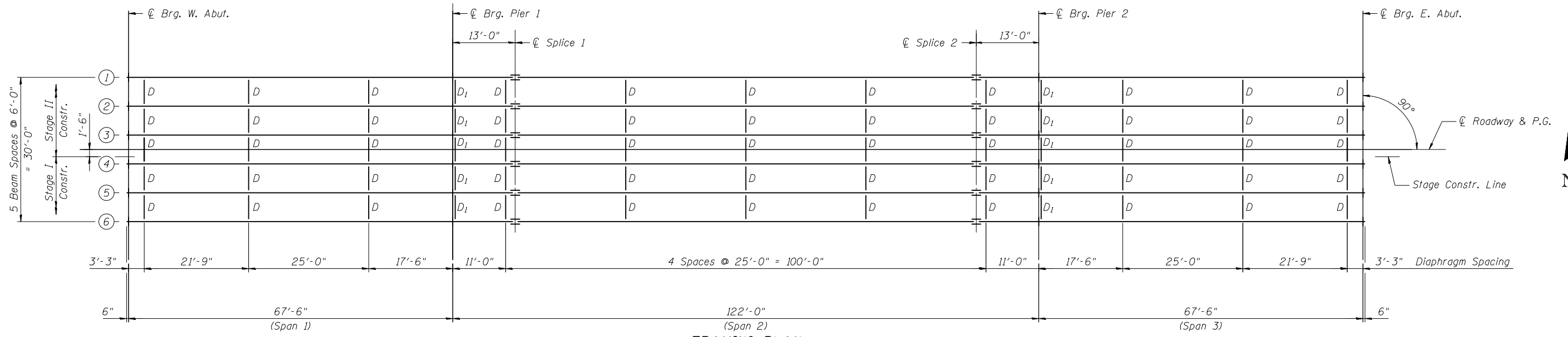
WHKS & CO.
ENGINEERS PLANNERS LAND SURVEYORS
MASON CITY, IOWA DUBUQUE, IOWA AMES, IOWA
E. DUBUQUE, ILLINOIS SPRINGFIELD, ILLINOIS ROCHESTER, MINNESOTA

SUPERSTRUCTURE DETAILS
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

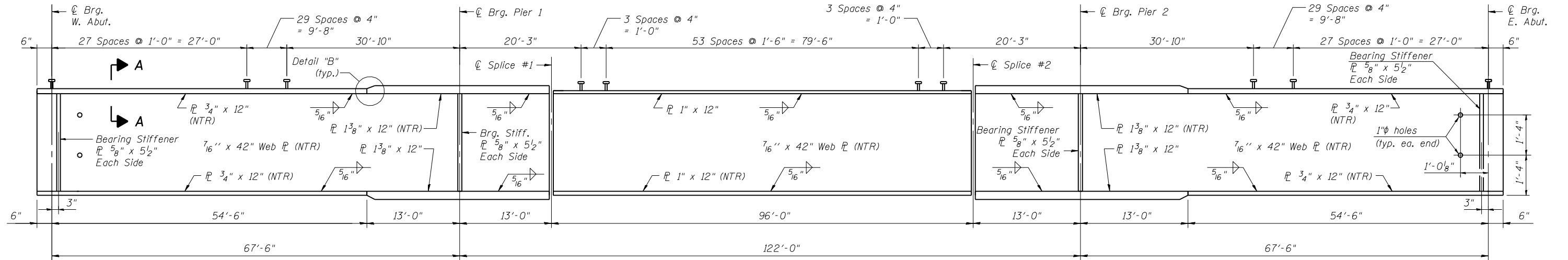
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 10 23 SHEETS
F.A.P. 717	101B-1	LOGAN	49	26	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

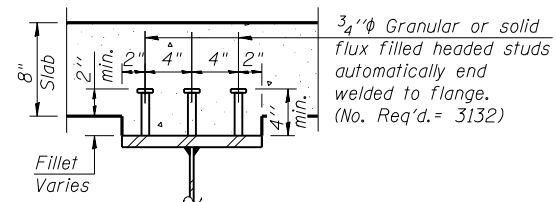
Contract #72A04



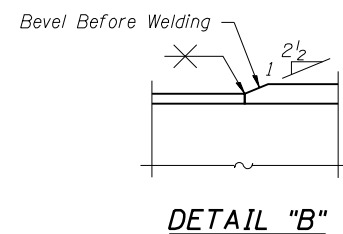
FRAMING PLAN



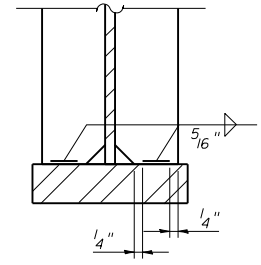
GIRDER ELEVATION



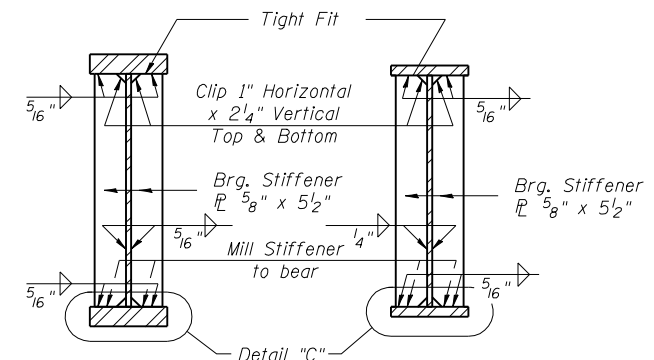
SECTION A-A



DETAIL "B"



DETAIL "C"



SECTION AT PIER

SECTION AT ABUTMENT

Notes: All dimensions are measured along the centerline of girder.
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
For Splice Details, Top of Web Elevations, Camber Details, Diaphragm Details and Moment & Reaction Tables see Sheet 11 of 23.

STRUCTURAL STEEL DETAILS
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

DESIGNED	D.J.T. & S.D.S.
CHECKED	J.J.P. & S.D.S.
DRAWN	L.M.G. & D.L.H.
CHECKED	D.J.T. & S.D.S.

WHKS & CO.
ENGINEERS PLANNERS LAND SURVEYORS
MASON CITY, IOWA DUBUOQUE, IOWA AMES, IOWA
E. DUBUOQUE, ILLINOIS SPRINGFIELD, ILLINOIS ROCHESTER, MINNESOTA

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. F.A.P. 717	SECTION 101B-1	COUNTY LOGAN	TOTAL SHEETS 49	SHEET NO. 27	SHEET NO. 11 23 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

Contract #72A04

	0.4 Sp. 1	Pier	0.5 Sp. 2
I_s	(in ⁴) 10926	18227	13797
I_c (n)	(in ⁴) 27333		31856
I_c (3n)	(in ⁴) 20641		24064
S_s	(in ³) 502	814	627
S_c (n)	(in ³) 703		834
S_c (3n)	(in ³) 645		769
Z	(in ³)		
ϕ	(k/ft.) 0.742	1.251	0.766
$M\phi$	(k) 72	-1275	582
$s\phi$	(k/ft.) 0.450		0.450
$Ms\phi$	(k) 72		402
$M\ddagger$	(k) 412	-492	735
M (Imp)	(k) 107	-113	147
$5_3[M\ddagger + M(\text{Imp})]$	(k) 865	-1008	1470
Ma	(k) 1312	-2968	3190
Mu	(k) 2888		4000
$fs\phi$ non-comp	(ksi) 1.7	-18.8	11.1
$fs\phi$ comp	(ksi) 1.3		6.3
$fs5_3(\ddagger + \text{Imp})$	(ksi) 14.8	-14.9	21.2
fs (Overload)	(ksi) 17.8	-33.7	38.6
fs (Total)	(ksi)	-43.8	
VR	(k) 47.0		42.0

	Abut.	Pier
$R\phi$	(k) 22	134
$R\ddagger$	(k) 32	53
Imp.	(k) 9	13
R (Total)	(k) 63	200

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).

I_c and S_c are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.

I_c and S_c are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads. (see AASHTO 10.38)

VR is the maximum Live Load + Impact shear range in span.

Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.

Ma (Applied Moment) = $1.3[M\phi + Ms\phi + 5_3(M\ddagger + M(\text{Imp}))]$.

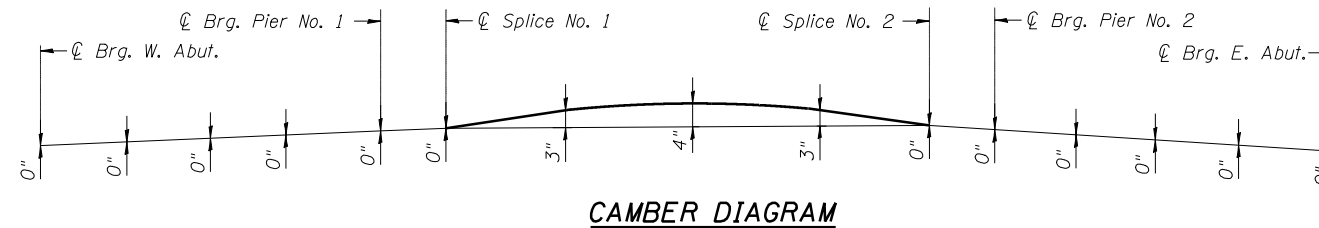
The Plastic Moment capacity (Mu) is computed according to AASHTO 10.48.1 and 10.50.1.1.

fs (Overload) is the sum of the stresses due to $M\phi + Ms\phi + 5_3(M\ddagger + M(\text{Imp}))$.

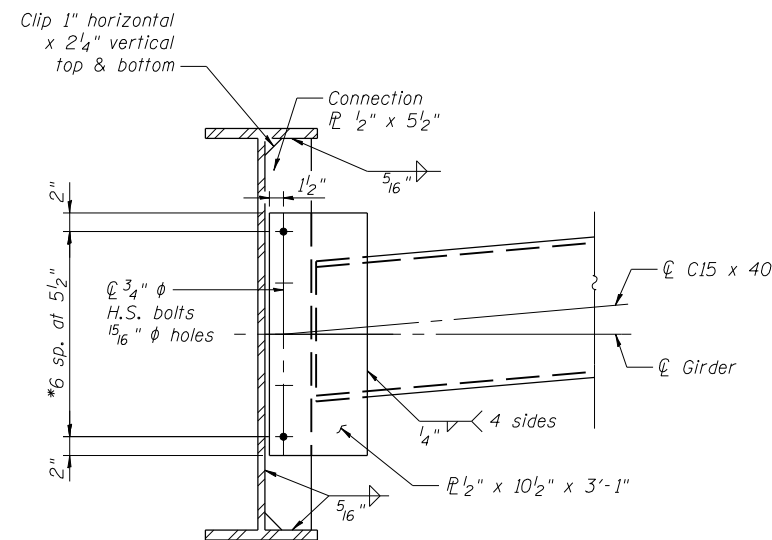
fs (Total) (Non-compact section) is the sum of the stresses due to $1.3[M\phi + Ms\phi + 5_3(M\ddagger + M(\text{Imp}))]$.

Girder	¢ Brg. W. Abut.	¢ Brg. Pier No. 1	¢ Splice 1	¢ Splice 2	¢ Brg. Pier No. 2	¢ Brg. E. Abut.
1	529.31	529.52	529.56	529.60	529.54	529.22
2	529.42	529.63	529.67	529.71	529.65	529.33
3	529.51	529.72	529.76	529.80	529.74	529.43
4	529.51	529.72	529.76	529.80	529.74	529.43
5	529.42	529.63	529.67	529.71	529.65	529.33
6	529.31	529.52	529.56	529.60	529.54	529.22

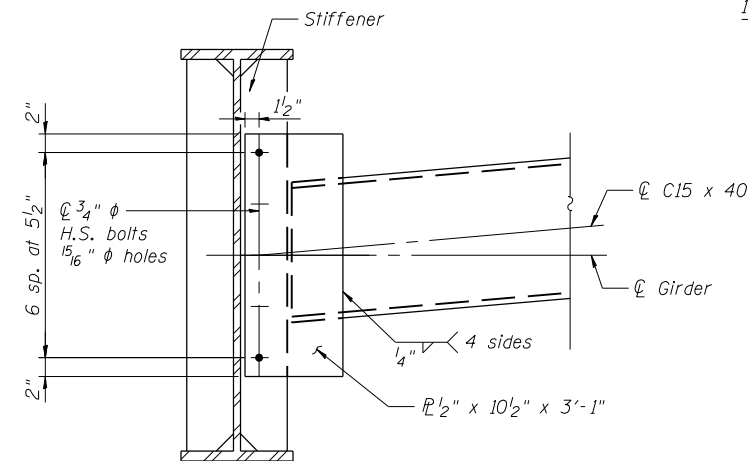
Top of web elevations at the splices have been adjusted for dead load deflection.
* For Fabrication Only



* $2\frac{3}{16}$ " vertical x $\frac{1}{16}$ " slotted holes in connection ϕ at south side of Girder 3 only. Provide $\frac{5}{16}$ " hardened washers for all slotted holes. The bolts for slotted holes shall only be finger tightened prior to pouring the Stage II deck then fully tightened after completion of the pour. The top of the slotted holes shall be located at the final diaphragm bolt locations.



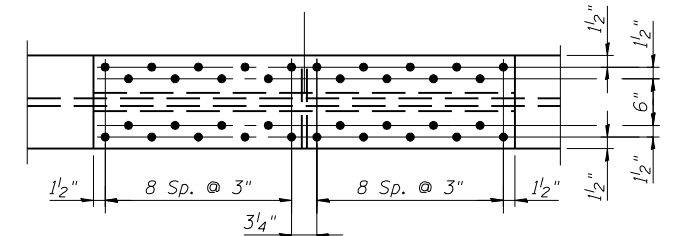
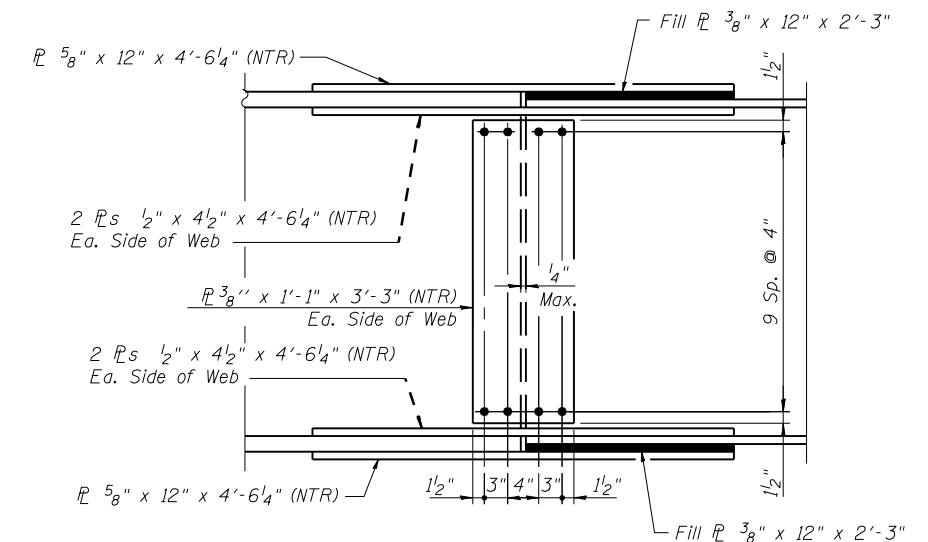
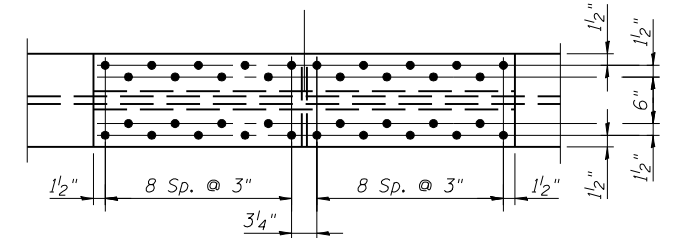
DIAPHRAGM D
55 Required



DIAPHRAGM D1
10 Required

Note:

Two hardened washers required for each set of oversized holes.
All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.



FIELD SPICE DETAIL
(Splice 1 shown
Splice 2 similar by rotation thru 180°)

DESIGNED	D.J.T. & S.D.S.
CHECKED	J.J.P. & S.D.S.
DRAWN	L.M.G. & D.L.H.
CHECKED	D.J.T. & S.D.S.

WHKS & CO.
ENGINEERS PLANNERS LAND SURVEYORS
MASON CITY, IOWA DUBUQUE, IOWA AMES, IOWA
E. DUBUQUE, ILLINOIS SPRINGFIELD, ILLINOIS ROCHESTER, MINNESOTA

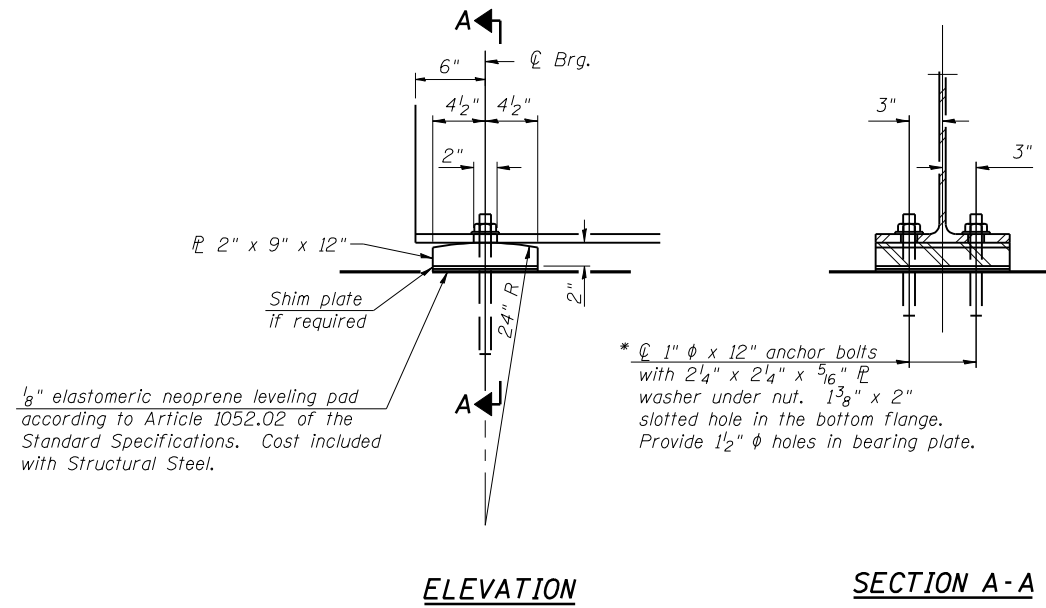
STRUCTURAL STEEL DETAILS
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
F.A.P. 717	101B-1	LOGAN	49	28	12
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-	23 SHEETS		

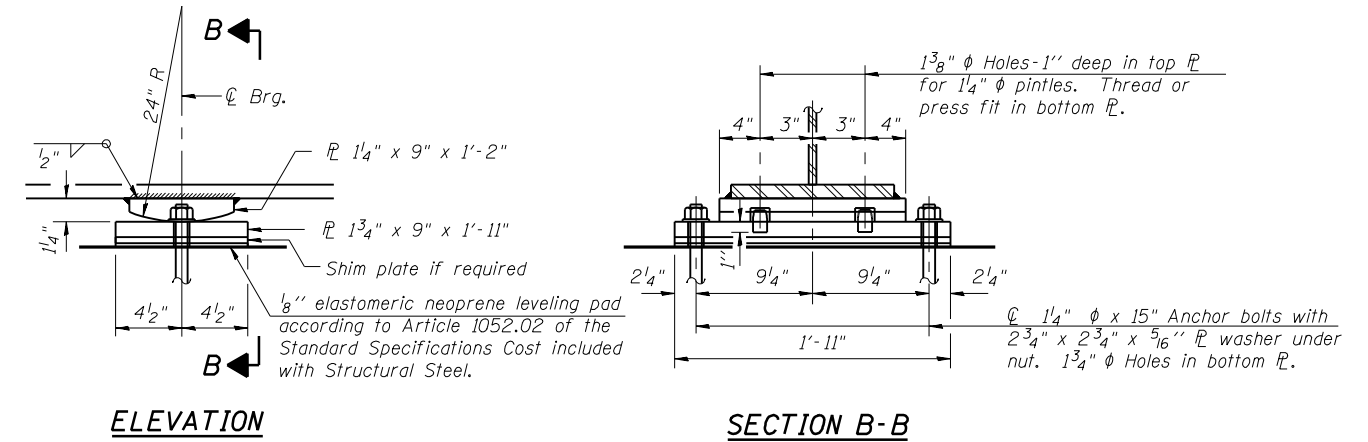
Contract #72A04

* Prior to beginning the deck pour, the anchor bolts at the abutments shall be installed and the nuts tightened in accordance with Section 521.06. Chemical adhesive shall be allowed to properly cure according to the manufacturer's instructions before the nuts are tightened.

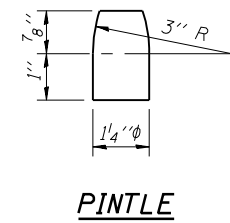


FIXED BEARING AT ABUTMENT

Notes:
Anchor bolts at fixed bearings may be built into the masonry.



FIXED BEARING AT PIER



DESIGNED	D.J.T. & S.D.S.
CHECKED	J.J.P. & S.D.S.
DRAWN	L.M.G. & D.L.H.
CHECKED	D.J.T. & S.D.S.

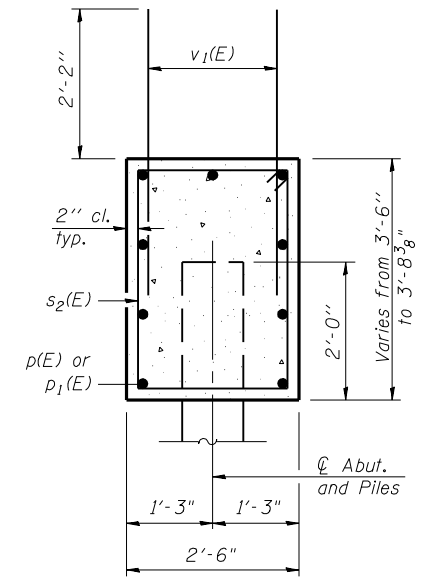
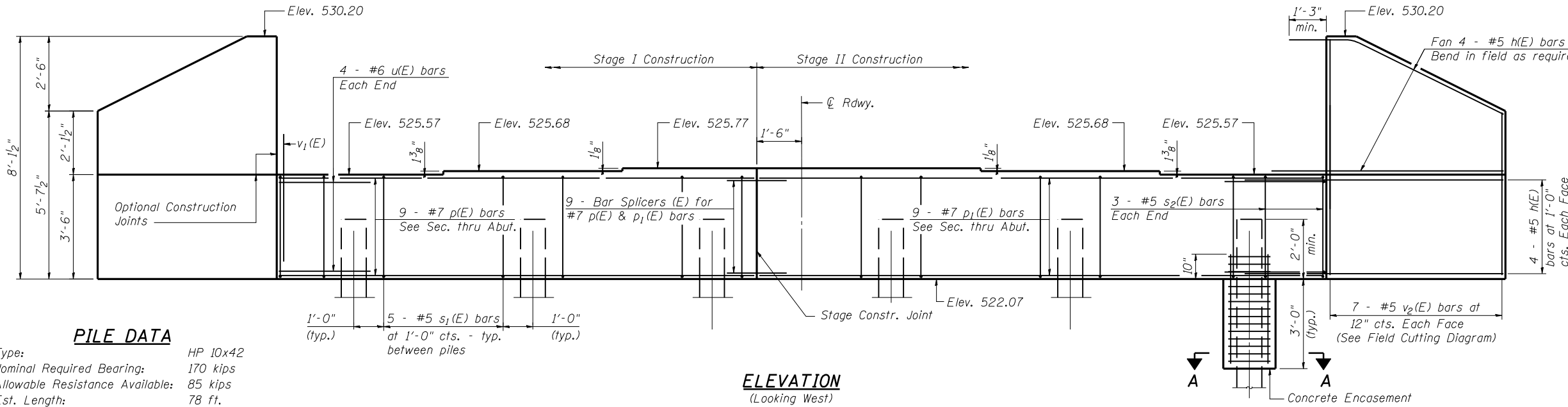


BEARING DETAILS
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. F.A.P. 717	SECTION 101B-1	COUNTY LOGAN	TOTAL SHEETS 49	SHEET NO. 29	SHEET NO. 13 23 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

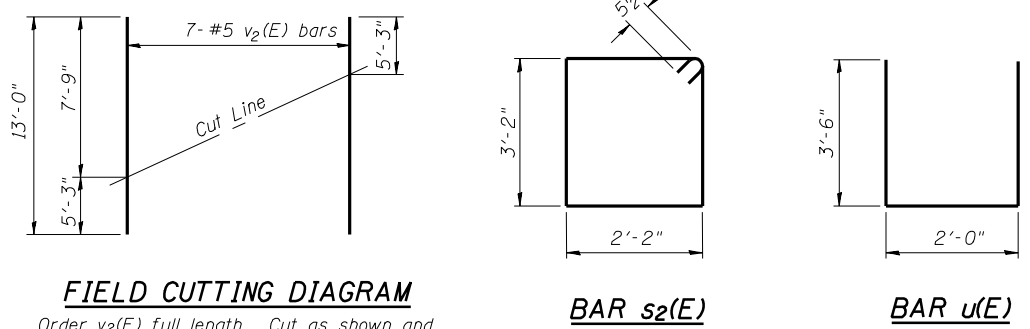
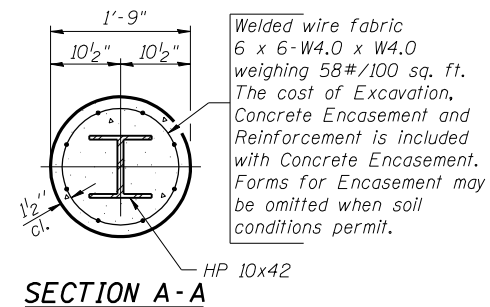
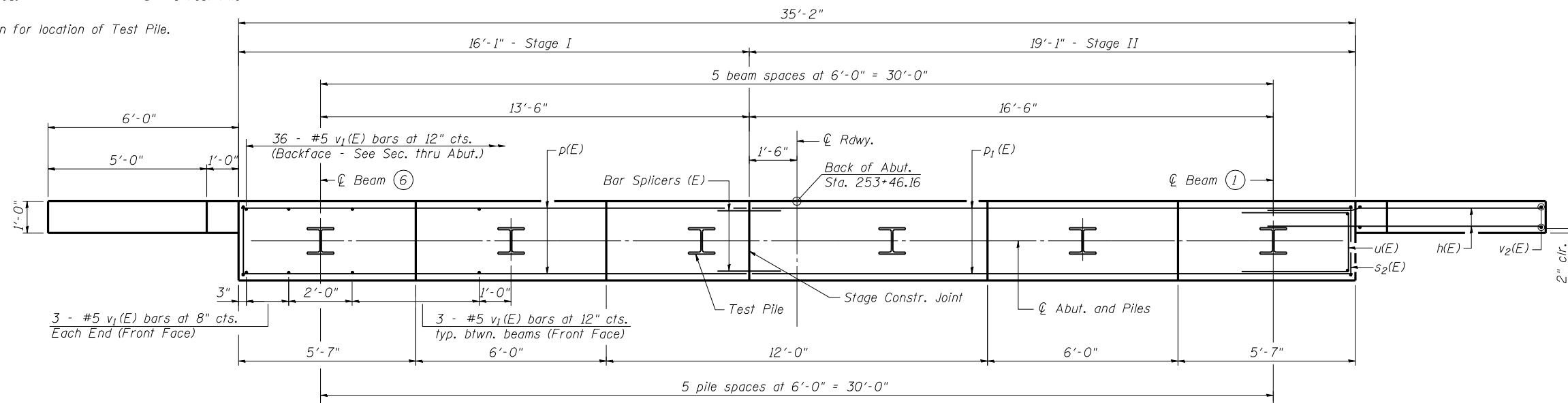
Contract #72A04



PILE DATA

Type: HP 10x42
Nominal Required Bearing: 170 kips
Allowable Resistance Available: 85 kips
Est. Length: 78 ft.
No. Required: 5 + 1 Test Pile*

* See plan for location of Test Pile.



**WEST ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	32	#5	7'-11"	—
p(E)	9	#7	15'-10"	—
p ₁ (E)	9	#7	18'-10"	—
s ₂ (E)	31	#5	11'-7"	□
u(E)	8	#6	9'-0"	—
v ₁ (E)	67	#5	4'-4"	—
v ₂ (E)	14	#5	13'-0"	—
Structure Excavation		Cu. Yd.	85	
Concrete Structures		Cu. Yd.	14.9	
Concrete Encasement		Cu. Yd.	1.6	
Reinforcement Bars, Epoxy Coated		Pound	1,880	
Furnishing Steel Piles HP10x42		Foot	390	
Driving Piles		Foot	390	
Test Piles Steel HP10x42		Each	1	

Notes:
The Steel H-piles shall be according to AASHTO M270 Grade 50.
Pour steps monolithically with cap.

**WEST ABUTMENT
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507**

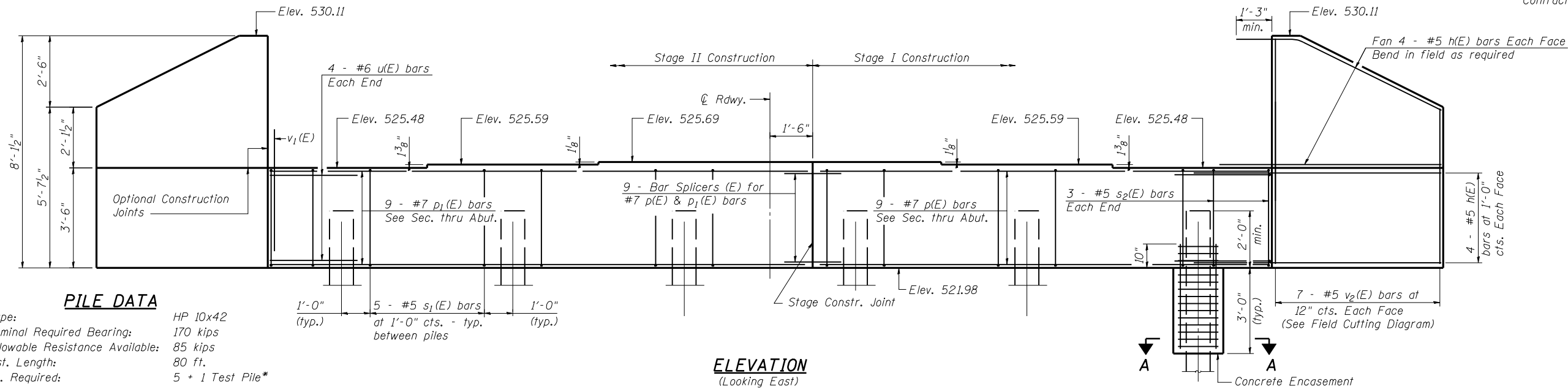
DESIGNED D.J.T. & S.D.S.
CHECKED J.J.P. & S.D.S.
DRAWN L.M.G. & D.L.H.
CHECKED D.J.T. & S.D.S.



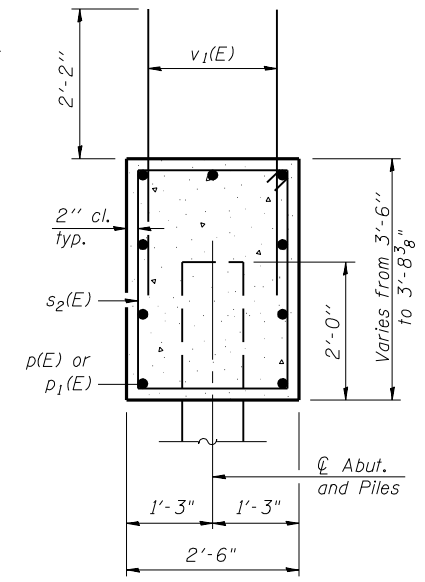
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 14 23 SHEETS
F.A.P. 717	101B-1	LOGAN	49	30	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #72A04



ELEVATION
(Looking East)

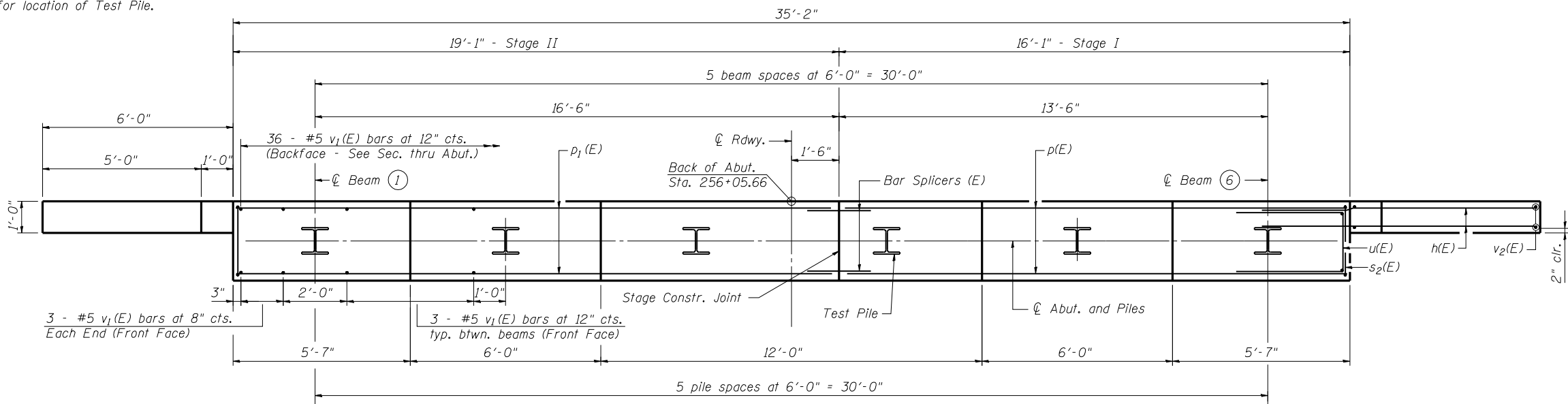


SEC. THRU ABUT.

PILE DATA

Type: HP 10x42
Nominal Required Bearing: 170 kips
Allowable Resistance Available: 85 kips
Est. Length: 80 ft.
No. Required: 5 + 1 Test Pile*

* See plan for location of Test Pile.

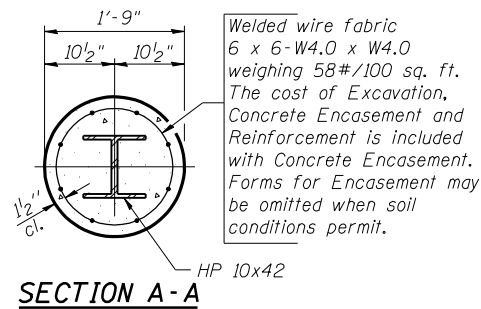


PLAN

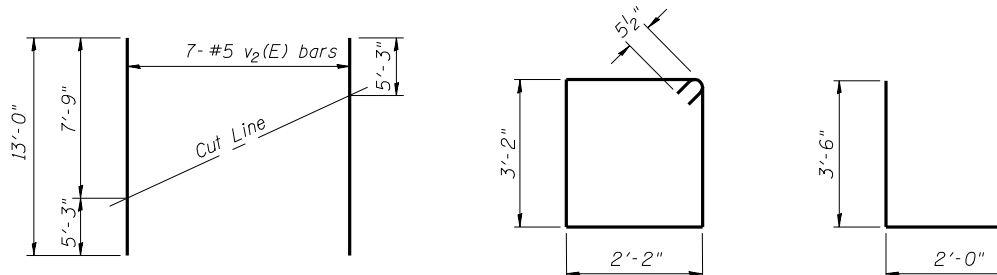
**EAST ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	32	#5	7'-11"	—
p(E)	9	#7	15'-10"	—
p1(E)	9	#7	18'-10"	—
s2(E)	31	#5	11'-7"	□
u(E)	8	#6	9'-0"	—
v1(E)	67	#5	4'-4"	—
v2(E)	14	#5	13'-0"	—
Structure Excavation		Cu. Yd.	85	
Concrete Structures		Cu. Yd.	14.9	
Concrete Encasement		Cu. Yd.	1.6	
Reinforcement Bars, Epoxy Coated		Pound	1,880	
Furnishing Steel Piles HP10x42		Foot	400	
Driving Piles		Foot	400	
Test Piles Steel HP10x42		Each	1	

Notes:
The Steel H-piles shall be according to AASHTO M270 Grade 50.
Pour steps monolithically with cap.



SECTION A-A



FIELD CUTTING DIAGRAM

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

BAR s2(E)

BAR u(E)

DESIGNED D.J.T. & S.D.S.
CHECKED J.J.P. & S.D.S.
DRAWN L.M.G. & D.L.H.
CHECKED D.J.T. & S.D.S.



AI-0

10-22-04

**EAST ABUTMENT
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507**

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

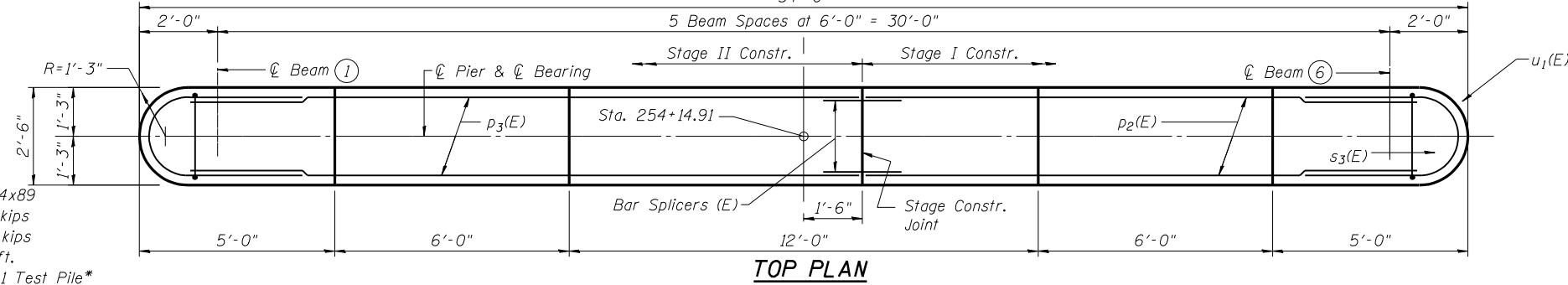
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 15 23 SHEETS
F.A.P. 717	101B-1	LOGAN	49	31	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

Contract #72A04

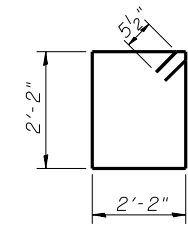
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
The Steel H-piles shall be according to AASHTO M270 Grade 50.

PILE DATA

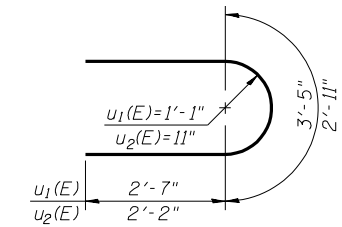
Type: HP 14x89
Nominal Required Bearing: 704 kips
Allowable Resistance Available: 235 kips
Est. Length: 127 ft.
No. Required: 5 + 1 Test Pile*
* See Section A-A for location of Test Pile.



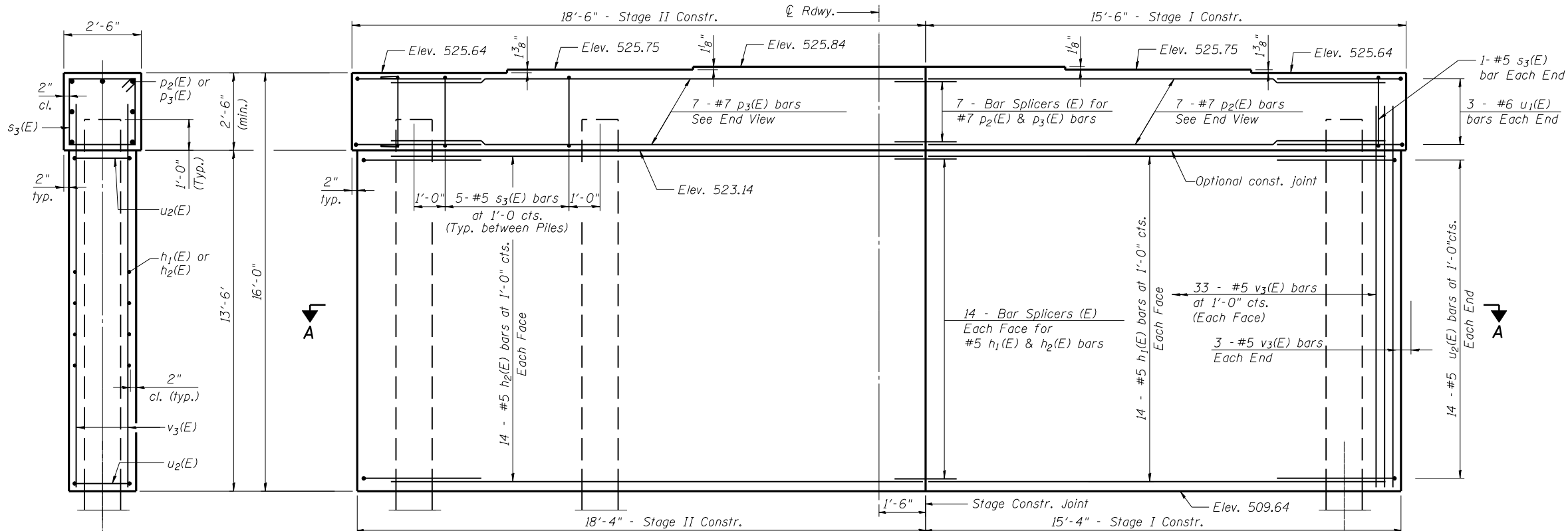
TOP PLAN



BAR s₃(E)

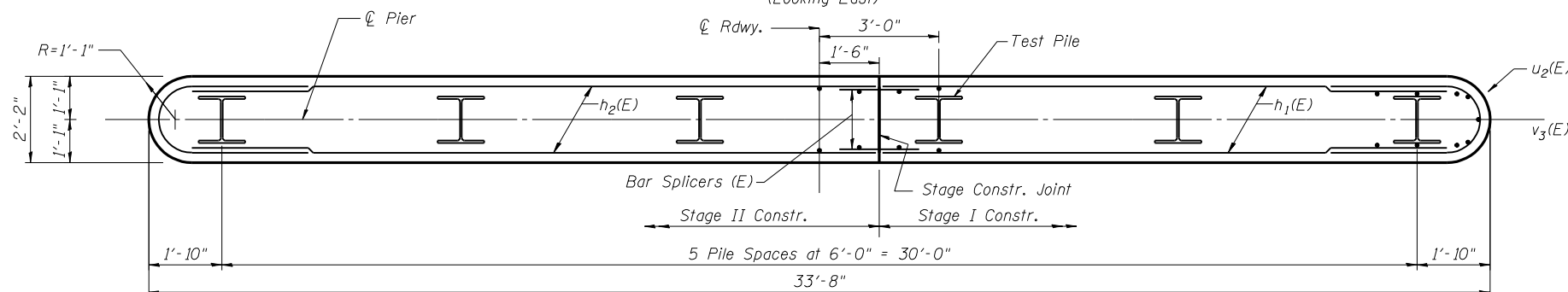


BARS u₁(E) & u₂(E)



ELEVATION
(Looking East)

END VIEW



SECTION A-A

**PIER 1
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h ₁ (E)	28	#5	14'-1"	—
h ₂ (E)	28	#5	17'-1"	—
p ₂ (E)	7	#7	14'-1"	—
p ₃ (E)	7	#7	17'-1"	—
s ₃ (E)	27	#5	9'-7"	□
u ₁ (E)	6	#6	8'-7"	U
u ₂ (E)	28	#5	7'-3"	U
v ₃ (E)	72	#5	15'-4"	—
Structure Excavation		Cu. Yd.	64	
Concrete Structures		Cu. Yd.	44.2	
Reinforcement Bars, Epoxy Coated		Pound	3,070	
Furnishing Steel Piles HP14x89		Foot	635	
Driving Piles		Foot	635	
Test Piles Steel HP14x89		Each	1	

PIER 1
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

DESIGNED D.J.T. & S.D.S.
CHECKED J.J.P. & S.D.S.
DRAWN L.M.G. & D.L.H.
CHECKED D.J.T. & S.D.S.



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 717	101B-1	LOGAN	49	32
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

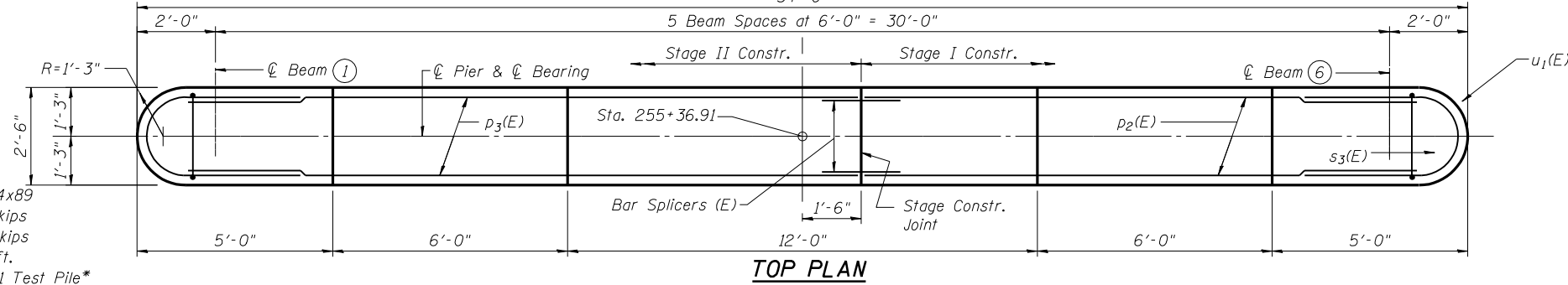
SHEET NO. 16
23 SHEETS

Contract #72A04

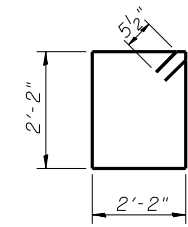
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
The Steel H-piles shall be according to AASHTO M270 Grade 50.

PILE DATA

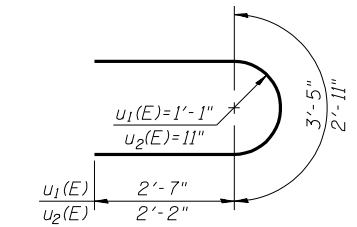
Type: HP 14x89
Nominal Required Bearing: 704 kips
Allowable Resistance Available: 235 kips
Est. Length: 124 ft.
No. Required: 5 + 1 Test Pile*
* See Section A-A for location of Test Pile.



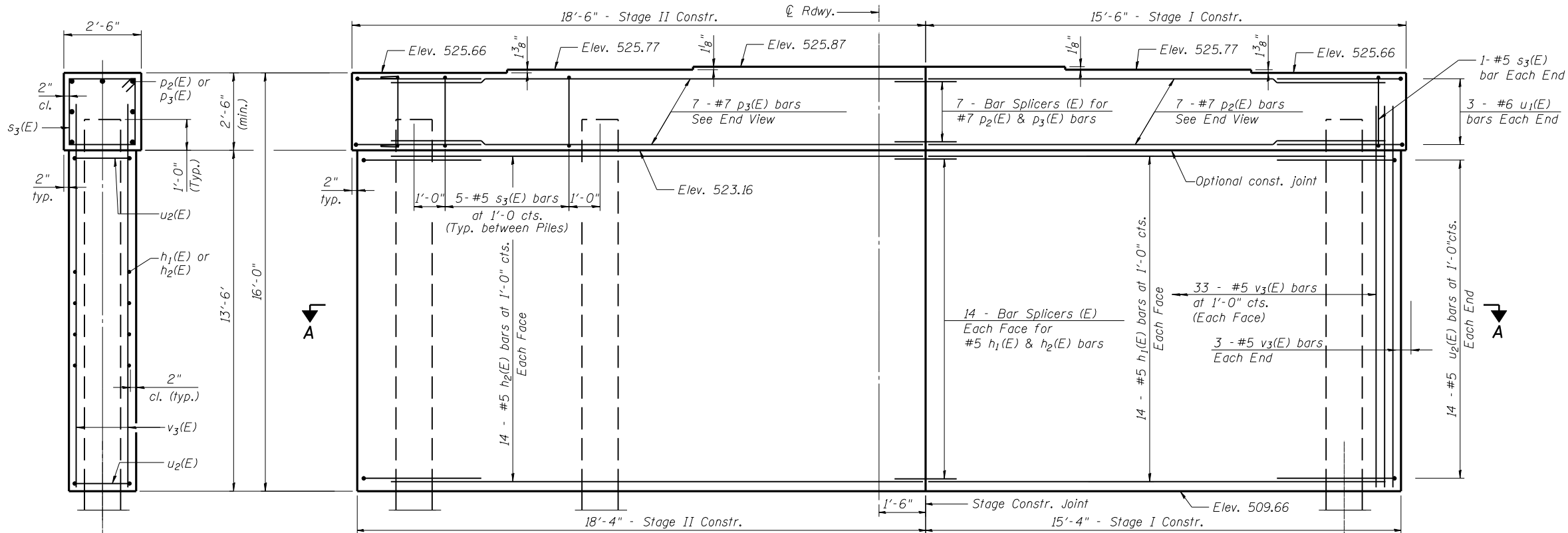
TOP PLAN



BAR s3(E)

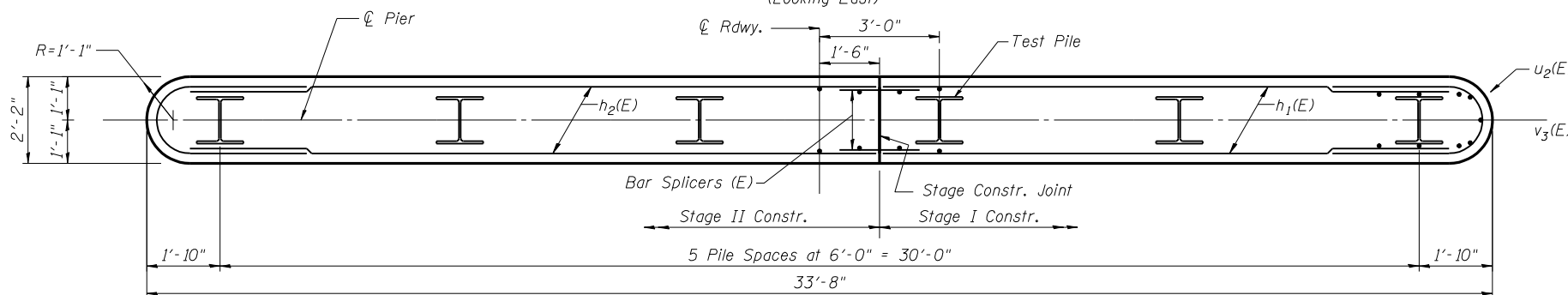


BARS u1(E) & u2(E)



ELEVATION
(Looking East)

END VIEW



SECTION A-A

**PIER 2
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h1(E)	28	#5	14'-1"	—
h2(E)	28	#5	17'-1"	—
p2(E)	7	#7	14'-1"	—
p3(E)	7	#7	17'-1"	—
s3(E)	27	#5	9'-7"	□
u1(E)	6	#6	8'-7"	U
u2(E)	28	#5	7'-3"	U
v3(E)	72	#5	15'-4"	—
Structure Excavation			Cu. Yd.	54
Concrete Structures			Cu. Yd.	44.2
Reinforcement Bars, Epoxy Coated			Pound	3,070
Furnishing Steel Piles HP14x89			Foot	635
Driving Piles			Foot	635
Test Piles Steel HP14x89			Each	1

PIER 2
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

DESIGNED D.J.T. & S.D.S.
CHECKED J.J.P. & S.D.S.
DRAWN L.M.G. & D.L.H.
CHECKED D.J.T. & S.D.S.



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 17 23 SHEETS
F.A.P. 717	101B-1	LOGAN	49	33	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #72A04

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

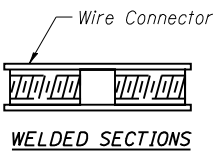
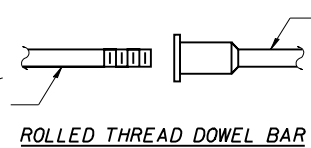
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
- ② Minimum *Pull-out Strength (Tension in kips) = $1.25 \times f_{s_{allow}} \times A_t$

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

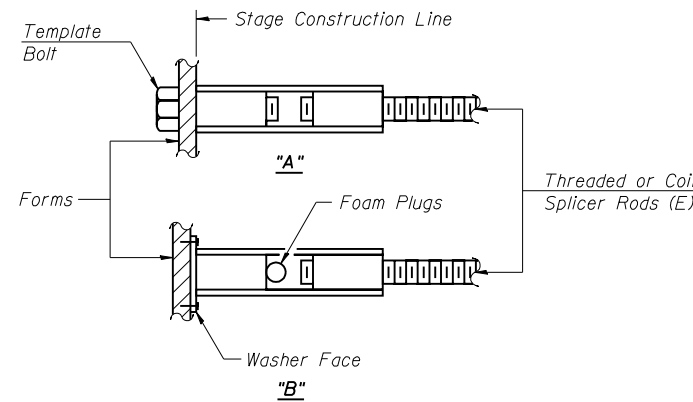
Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

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



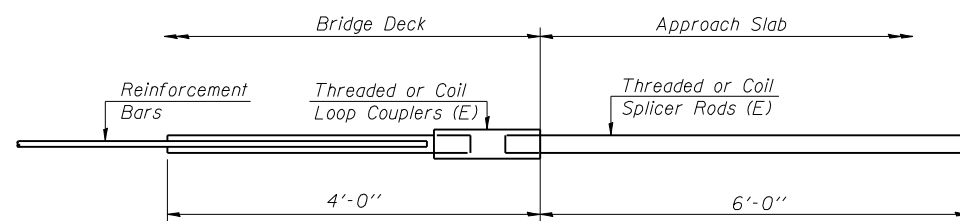
BAR SPLICER ASSEMBLY ALTERNATIVES

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



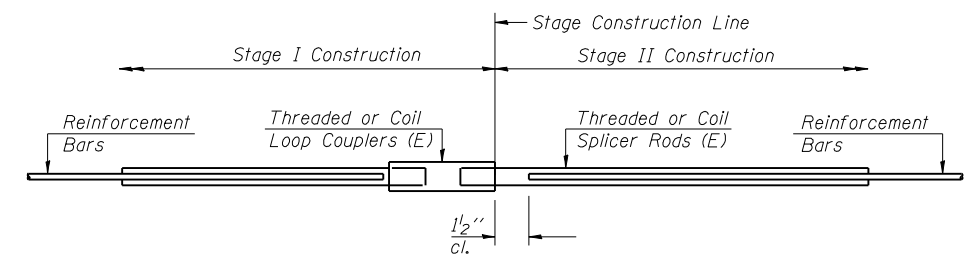
INSTALLATION AND SETTING METHODS

"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 ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 64



STANDARD

Bar Size	No. Assemblies Required	Location
#5	658	Deck
#6	16	Abut. Diaphragms
#7	18	Abut. Caps
#5	56	Pier Walls
#7	14	Pier Caps

DESIGNED	D.J.T. & S.D.S.
CHECKED	J.J.P. & S.D.S.
DRAWN	L.M.G. & D.L.H.
CHECKED	D.J.T. & S.D.S.



BSD-1

10-22-04

BAR SPLICERS DETAILS
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. F.A.P. 717	SECTION 101B-1	COUNTY LOGAN	TOTAL SHEETS 49	SHEET NO. 34
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 18
23 SHEETS

Contract #72A04



Illinois Department
of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Page 1 of 3

Date 8/15/06

ROUTE FA 717 DESCRIPTION IL 10 over Prairie Creek LOGGED BY M. Tappan

SECTION 101 BR LOCATION NW 14, SEC. 18, TWP. 20 N, RNG. 4 W, 3 PM

COUNTY Logan DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO.	Station	BORING NO.	Station	Offset	Ground Surface Elev.	D	B	U	M	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After	Hrs.	Plugged	(ft)	/8"	(taf)	(%)	
064-0070 Ex	064-0607 Pr	1 W. Abut	253+47	12.0ft Lt	529.5					507	506	505.5	505.5	Washed	Plugged							
Tan and Light Grey Moist SILT (Fill)																						
Light Grey V. Moist SILT LOAM (continued)																						
w/Fine Grained Sand Seams																						
506.50																						
SAND																						
Grey Fine Grained SAND Free Water																						
Sampler Advanced by Weight of Hammer																						
Grey and Olive Brown Moist SILTY CLAY LOAM (Fill)																						
Grey Medium Grained SAND w/ Woody Organic Material Washed																						
Grey w/Loam Seams																						
Washed																						
Dark Grey																						
Black Moist SILTY CLAY w/ Gastropod Shells																						
Black V. Moist SILTY CLAY LOAM w/Organic Material, Gastropod Shells																						
Light Grey V. Moist SILT LOAM																						
w/Loam Seams																						
Grey Medium Grained SAND w/ 4" Silt Seam																						

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



Illinois Department
of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Page 2 of 3

Date 8/15/06

ROUTE FA 717 DESCRIPTION IL 10 over Prairie Creek LOGGED BY M. Tappan

SECTION 101 BR LOCATION NW 14, SEC. 18, TWP. 20 N, RNG. 4 W, 3 PM

COUNTY Logan DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO.	Station	BORING NO.	Station	Offset	Ground Surface Elev.	D	B	U	M	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After	Hrs.	Plugged	(ft)	/8"	(taf)	(%)	
064-0070 Ex	064-0607 Pr	1 W. Abut	253+47	12.0ft Lt	529.5					507	506	505.5	505.5	Washed	Plugged							
Washed SAND (continued)																						
Grey Fine Grained SAND Washed																						
Grey Medium Grained SAND w/ 14" Gravel Washed																						
Washed																						
Grey Medium Grained SAND Washed																						
w/14" Gravel Washed																						

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
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)

DESIGNED D.J.T. & S.D.S.
CHECKED J.J.P. & S.D.S.
DRAWN L.M.G. & D.L.H.
CHECKED D.J.T. & S.D.S.



BORING LOGS
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 717	101B-1	LOGAN	49	37
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 21
23 SHEETS

Contract #72A04



Illinois Department of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Page 1 of 3

Date 8/14/06

ROUTE FA 717 DESCRIPTION IL 10 over Prairie Creek LOGGED BY M. Tappan

SECTION 101 BR LOCATION NW 14, SEC. 18, TWP. 20 N, RNG. 4 W, 3 PM

COUNTY Logan DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 054-0070 Ex 054-0507 Pr Station 254+72	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. 507 ft Stream Bed Elev. 506 ft Groundwater Elev.: First Encounter 502.1 ft Upon Completion Washed ft After 72 Hrs. 515.6 ft	D E P T H	B L O W S	U C S	M O I S T
BORING NO. 3 Pier 2 Station 255+26 Offset 27.0ft Lt Ground Surface Elev. 518.1 ft	(ft)	/ft	(tsf)	(%)	(ft)	/ft	(tsf)	(%)	(%)

Brown and Grey Moist SILTY CLAY LOAM	1				SAND (continued)	1			
Distrubed Sample	3	2.0	22		Grey Fine Grained SAND Washed	2			
	5	P				4			
Dark Grey V. Moist	1				Washed	1			
	2	0.7	27			2			
	3	B				5			
SAND	510.60								
Grey Moist V. Fine Grained SAND	1								
	2								
	3								
V. Moist	1				Grey V. Moist SILTY CLAY w/Silt Seams	0			
	1				Washed	1	0.4	37	
	2				Begin Washed with Bentonite/Water Mud	2	B		
	10					2			
Grey V. Moist Fine Grained SAND w/2" Silt Loam Seam	1				Grey V. Moist SILT LOAM w/ Some Organic Material				
	1								
	3								
Grey Fine Grained SAND Free Water	0				Washed	0	0	36	
	2				Sampler Advanced by Weight of Hammer	0	0	Slump	
	4					0			
Medium Grained	0								
	1								
	3								
Fine Grained Washed	1				Washed	0	0	29	
	2				Sampler Advanced by Weight of	0	0	Slump	
	3					0			
	20					478.10	-40		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Page 2 of 3

Date 8/14/06

ROUTE FA 717 DESCRIPTION IL 10 over Prairie Creek LOGGED BY M. Tappan

SECTION 101 BR LOCATION NW 14, SEC. 18, TWP. 20 N, RNG. 4 W, 3 PM

COUNTY Logan DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 054-0070 Ex 054-0507 Pr Station 254+72	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. 507 ft Stream Bed Elev. 506 ft Groundwater Elev.: First Encounter 502.1 ft Upon Completion Washed ft After 72 Hrs. 515.6 ft	D E P T H	B L O W S	U C S	M O I S T
BORING NO. 3 Pier 2 Station 255+26 Offset 27.0ft Lt Ground Surface Elev. 518.1 ft	(ft)	/ft	(tsf)	(%)	(ft)	/ft	(tsf)	(%)	(%)

Hammer SAND and GRAVEL					Augers Sinking SAND and GRAVEL (continued)				
Grey Medium to Coarse Grained SAND w/Some 1/4" Gravel	0				Grey Coarse Grained SAND Washed - 5' in augers	0			
	6					20			
	19					35			
	-45					-65			
Grey Medium Grained SAND Washed - 4' in augers					Grey Medium Grained Sandy GRAVEL Washed - 8' in augers				
	20					0			
	14					9			
	17					30			
	-80					-70			
Grey Medium Grained SAND Washed - 3' in augers					Grey Medium Grained SAND Washed				
	0					25			
	6					17			
	19					29			
	-85					-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
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)

DESIGNED D.J.T. & S.D.S.
CHECKED J.J.P. & S.D.S.
DRAWN L.M.G. & D.L.H.
CHECKED D.J.T. & S.D.S.



BORING LOGS
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 717	101B-1	LOGAN	49	38
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

SHEET NO. 22
23 SHEETS

Contract #72A04



Illinois Department
of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Page 3 of 3

Date 8/14/06

ROUTE FA 717 DESCRIPTION IL 10 over Prairie Creek LOGGED BY M. Tappan

SECTION 101 BR LOCATION NW 14, SEC. 18, TWP. 20 N, RNG. 4 W, 3 PM

COUNTY Logan DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO.	054-0070 Ex	D	B	U	M	Surface Water Elev.	507 ft	D	B	U	M
Station	054-0507 Pr	E	L	C	O	Stream Bed Elev.	506 ft	E	L	C	O
	254+72	P	O	S	I			P	O	S	I
BORING NO.	3 Pier 2	T	W	S	S	Groundwater Elev.:		T	W	S	S
Station	255+26	H	S	Qu	T	∇ First Encounter	502.1 ft	H	S	Qu	T
Offset	27.0ft Lt					∇ Upon Completion	Washed ft				
Ground Surface Elev.	518.1 ft	(ft)	/8"	(taf)	(%)	∇ After	72 Hrs. 515.6 ft	(ft)	/8"	(taf)	(%)

SAND and GRAVEL (continued)

Washed SAND and GRAVEL (continued)

Grey Medium Grained Sandy GRAVEL Washed

Black V. Well Indurated SILTSTONE
Auger Refusal - Boring Completed

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



Illinois Department
of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Page 1 of 3

Date 8/16/06

ROUTE FA 717 DESCRIPTION IL 10 over Prairie Creek LOGGED BY M. Tappan

SECTION 101 BR LOCATION NW 14, SEC. 18, TWP. 20 N, RNG. 4 W, 3 PM

COUNTY Logan DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO.	054-0070 Ex	D	B	U	M	Surface Water Elev.	507 ft	D	B	U	M
Station	054-0507 Pr	E	L	C	O	Stream Bed Elev.	506 ft	E	L	C	O
	254+72	P	O	S	I			P	O	S	I
BORING NO.	4 E. Abut	T	W	S	S	Groundwater Elev.:		T	W	S	S
Station	256+11	H	S	Qu	T	∇ First Encounter	510.5 ft	H	S	Qu	T
Offset	12.0ft Rt					∇ Upon Completion	Washed ft				
Ground Surface Elev.	529.5 ft	(ft)	/8"	(taf)	(%)	∇ After	Hrs. Plugged ft	(ft)	/8"	(taf)	(%)

Black Moist SILTY CLAY (Fill)

Dark Grey Moist LOAM with Sand
Loam Seams and Gastropod
Shells

Grey Moist LOAM w/Silt Loam
Seams

Grey V. Moist SILT LOAM w/Fine
Grained Sand Seams and Organic
Material

Grey Fine Grained SAND w/Silt
Loam Seams

Washed

Grey Moist LOAM

Grey Wet Dirty Medium Grained
SAND

Free Water

Grey V. Fine Grained SAND w/3"
Grey Clay Seam

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
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)

DESIGNED D.J.T. & S.D.S.
CHECKED J.J.P. & S.D.S.
DRAWN L.M.G. & D.L.H.
CHECKED D.J.T. & S.D.S.



BORING LOGS
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507



Illinois Department of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Page 2 of 3

Date 8/19/06

ROUTE FA 717 DESCRIPTION IL 10 over Prairie Creek LOGGED BY M. Tappan

SECTION 101 BR LOCATION NW 14, SEC. 18, TWP. 20 N, RNG. 4 W, 3 PM

COUNTY Logan DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. <u>054-0070 Ex</u>				Surface Water Elev. <u>507</u> ft				
Station <u>254+72</u>	D	B	U	M	E	L	C	O
	E	L	C	O	P	O	S	I
	P	O	S	I	T	W	S	S
BORING NO. <u>4 E. Abut</u>	H	S	Qu	T	H	S	Qu	T
Station <u>256+11</u>								
Offset <u>12.0ft Rt</u>								
Ground Surface Elev. <u>529.5</u> ft		(ft)	(ft)	(%)	(ft)	(ft)	(taf)	(%)

Grey Fine Grained SAND w/Silt Loam Seams (continued)					Washed SAND and GRAVEL (continued)							
487.00												
Grey V. Moist SILT												
4												
Washed		4	0.9	28	Grey Medium to Coarse Grained SAND w/Some 1/4" Gravel							
-45		7	B		Washed							
3												
Grey Moist SILT			1.0	24	Grey Dirty Medium Grained Sandy GRAVEL							
Washed		3	S-11		Washed							
-50		4										
3												
Washed		3	1.2	28	Grey Medium Grained Sandy GRAVEL							
-55		5	B		Washed							
471.50												
SAND and GRAVEL												
5												
Grey Medium Grained Sandy GRAVEL					Washed							
-80		6										
		11										

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
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DESIGNED D.J.T. & S.D.S.
CHECKED J.J.P. & S.D.S.
DRAWN L.M.G. & D.L.H.
CHECKED D.J.T. & S.D.S.

WHKS & CO.

ENGINEERS PLANNERS LAND SURVEYORS

MASON CITY, IOWA DUBUOUE, IOWA AMES, IOWA
E. DUBUOUE, ILLINOIS SPRINGFIELD, ILLINOIS ROCHESTER, MINNESOTA



Illinois Department of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Page 3 of 3

Date 8/19/06

ROUTE FA 717 DESCRIPTION IL 10 over Prairie Creek LOGGED BY M. Tappan

SECTION 101 BR LOCATION NW 14, SEC. 18, TWP. 20 N, RNG. 4 W, 3 PM

COUNTY Logan DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. <u>054-0070 Ex</u>				Surface Water Elev. <u>507</u> ft				
Station <u>254+72</u>	D	B	U	M	E	L	C	O
	E	L	C	O	P	O	S	I
	P	O	S	I	T	W	S	S
BORING NO. <u>4 E. Abut</u>	H	S	Qu	T	H	S	Qu	T
Station <u>256+11</u>								
Offset <u>12.0ft Rt</u>								
Ground Surface Elev. <u>529.5</u> ft		(ft)	(ft)	(%)	(ft)	(ft)	(taf)	(%)

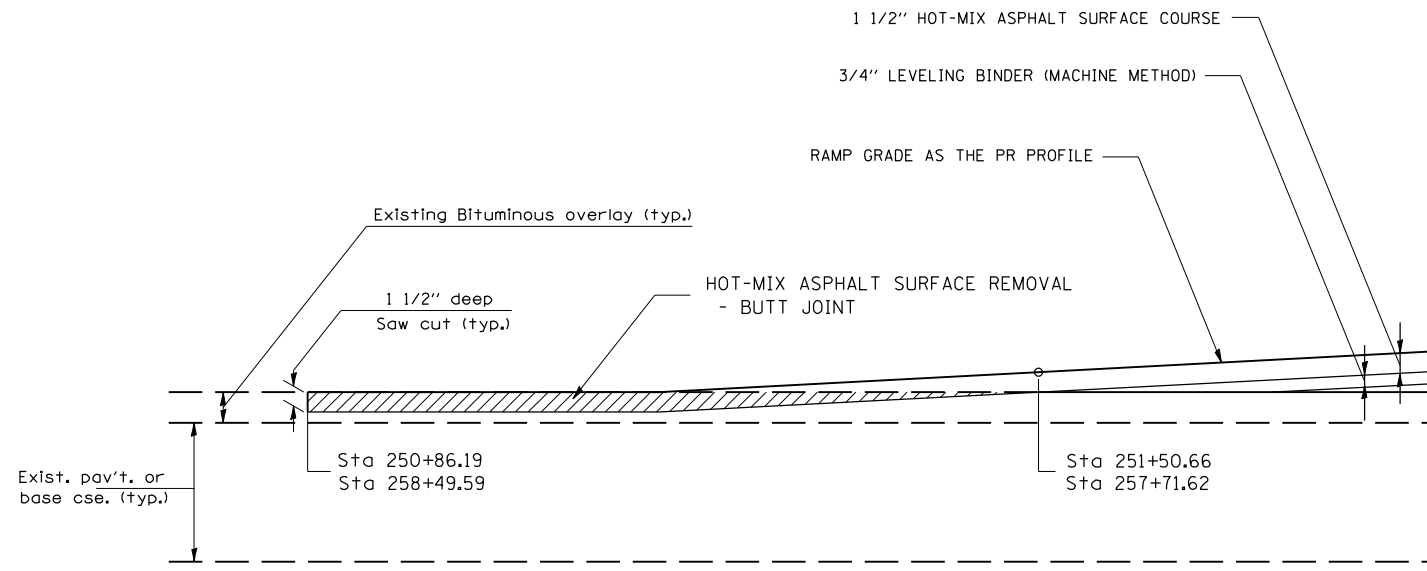
SAND and GRAVEL (continued)					Washed SAND and GRAVEL (continued)							
4												
Washed		4	0.9	28	Grey Medium to Coarse Grained SAND w/Some 1/4" Gravel							
-45		7	B		Washed							
3												
Grey Moist SILT			1.0	24	Grey Dirty Medium Grained Sandy GRAVEL							
Washed		3	S-11		Washed							
-50		4										
3												
Washed		3	1.2	28	Grey Medium Grained Sandy GRAVEL							
-55		5	B		Washed							
499.50												
SAND and GRAVEL												
5												
Grey Medium Grained Sandy GRAVEL					Washed							
-80		6										
		11										

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
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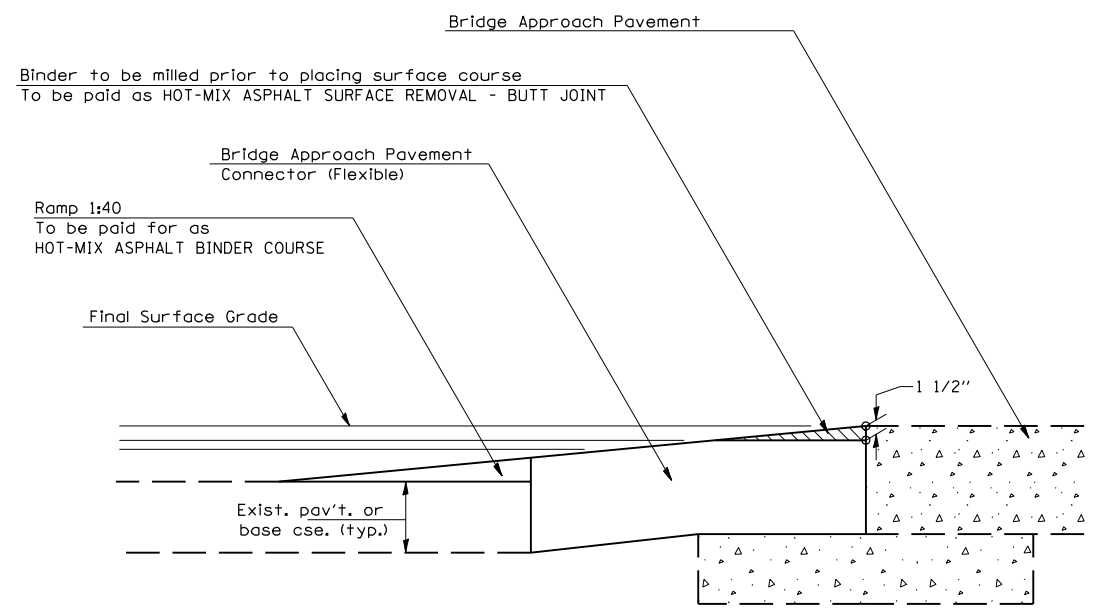
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BORING LOGS
IL ROUTE 10 OVER PRAIRIE CREEK
F.A.P. ROUTE 717 - SECTION 101B-1
LOGAN COUNTY
STATION 254+75.91
STRUCTURE NO. 054-0507

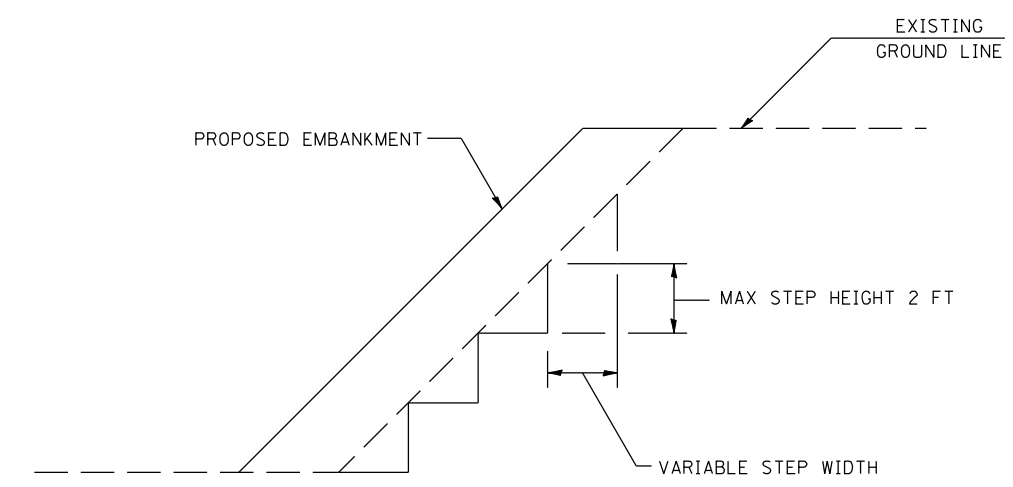
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	40
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



BUTT JOINT DETAIL



**RAMP DETAIL AT SN 054-0507
TO BE PLACED DURING STAGING
SEE STAGING PLANS FOR LOCATIONS**



NOTE:
THIS DETAIL APPLIES TO SIDEHILL FILLS WHERE THE EXISTING SLOPE IS GREATER THAN 12 FT HIGH AND / OR STEEPER THAN 1:3.
STEPS MAY BE CUT IN CONJUNCTION WITH NEW FILL PLACEMENT.

TYPICAL SIDEHILL FILL STEPPING DETAIL

PLOT DATE = 12/12/2006
FILE NAME = c:\p\projects\653405\shdetail.dgn
PLOT SCALE = 1/8"=1'-0" / IN.
USER NAME = laughlin-1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
MISCELLANEOUS DETAILS
FAP 717 (IL 10)
Section: 101B-1
Logan County
SCALE: VERT. / HORIZ.
DATE
DRAWN BY
CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	41
STA. 251+00.00		TO STA. 251+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

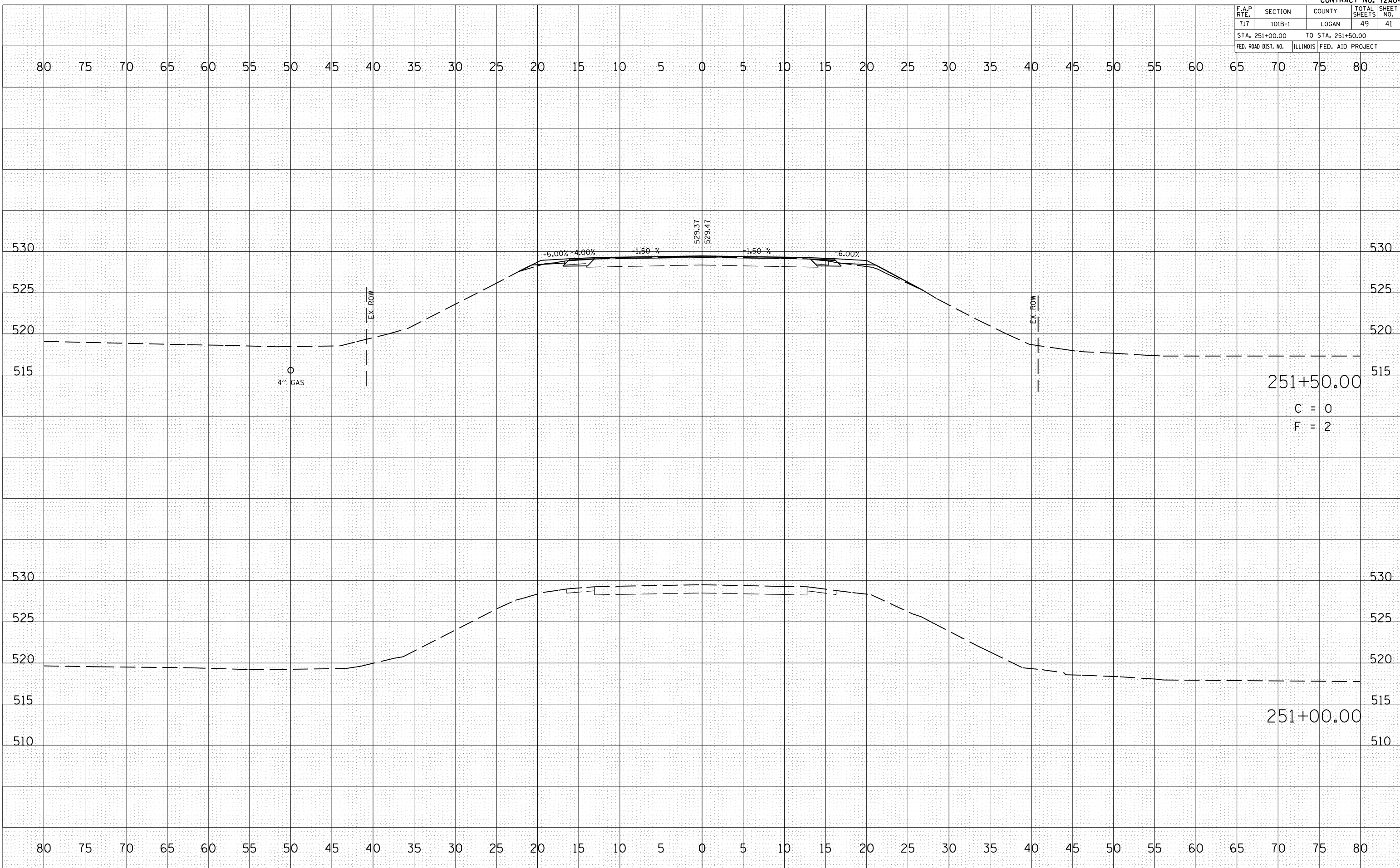
BY	DATE

NO.	AREAS CHECKED

BY	DATE

NO.	AREAS CHECKED

PLOT DATE = 12/12/2006
 FILE NAME = 101B-1.dwg
 PLOT SCALE = 10.0000
 USER NAME = laughlin-1



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	42
STA. 252+00.00		TO STA. 253+00.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

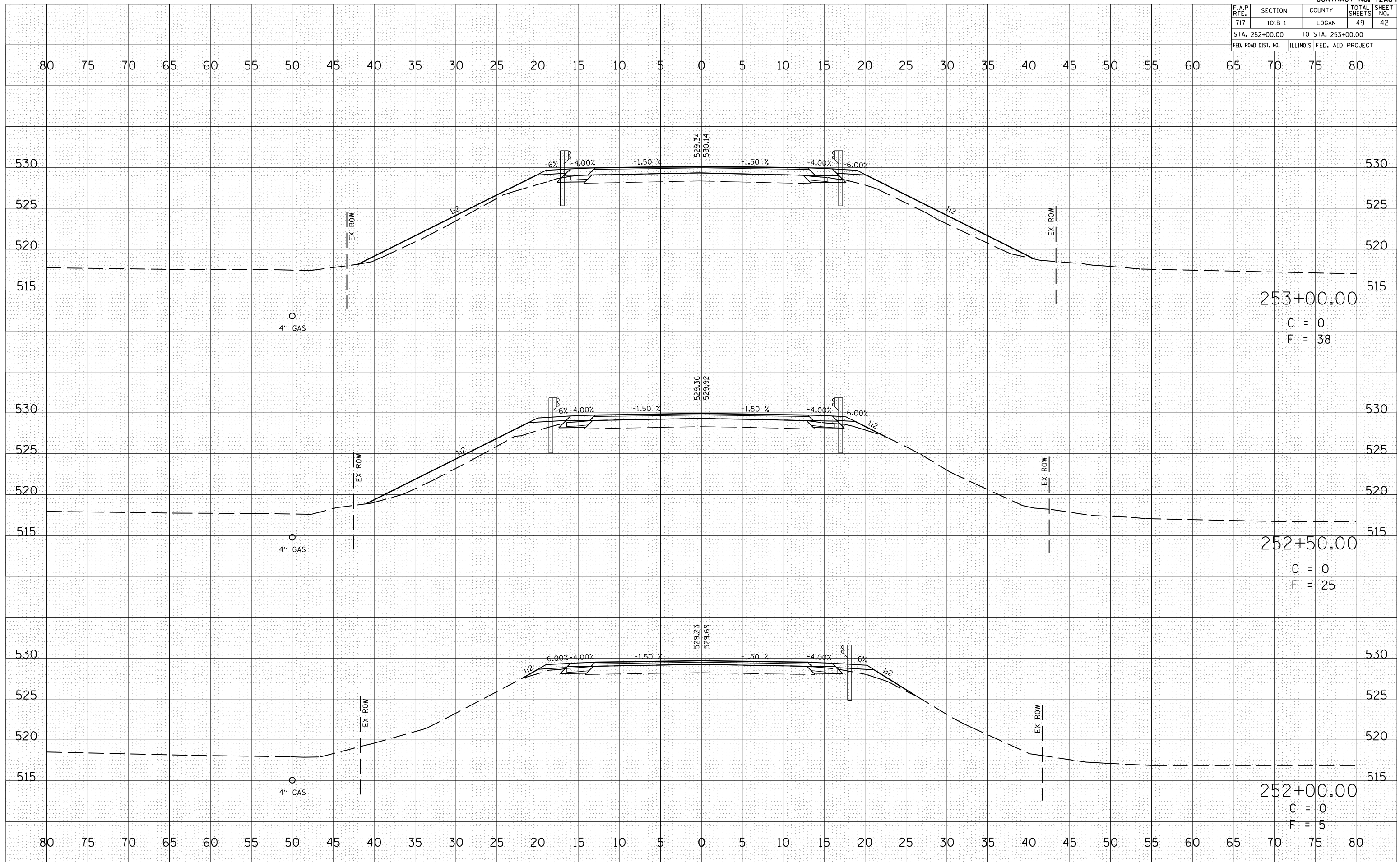
BY	DATE

FINAL SURVEY	SURVEYED	PLOTTED	DATE	NO.

BY	DATE

ORIGINAL SURVEY	SURVEYED	PLOTTED	DATE	NO.

PLOT DATE = 12/12/2006
FILE NAME = 101B-1.dwg
PLOT SCALE = 1/8" = 1'-0"
USER NAME = laughlin-1



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	43
STA. 253+50.00		TO STA. 254+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BY: _____ DATE: _____

NO. _____

FINAL SURVEY SURVEYED PLOTTED NO. _____ DATE: _____

NO. _____

NO. _____

NO. _____

NO. _____

NO. _____

NO. _____

BY: _____ DATE: _____

NO. _____

ORIGINAL SURVEY SURVEYED PLOTTED NO. _____ DATE: _____

NO. _____

NO. _____

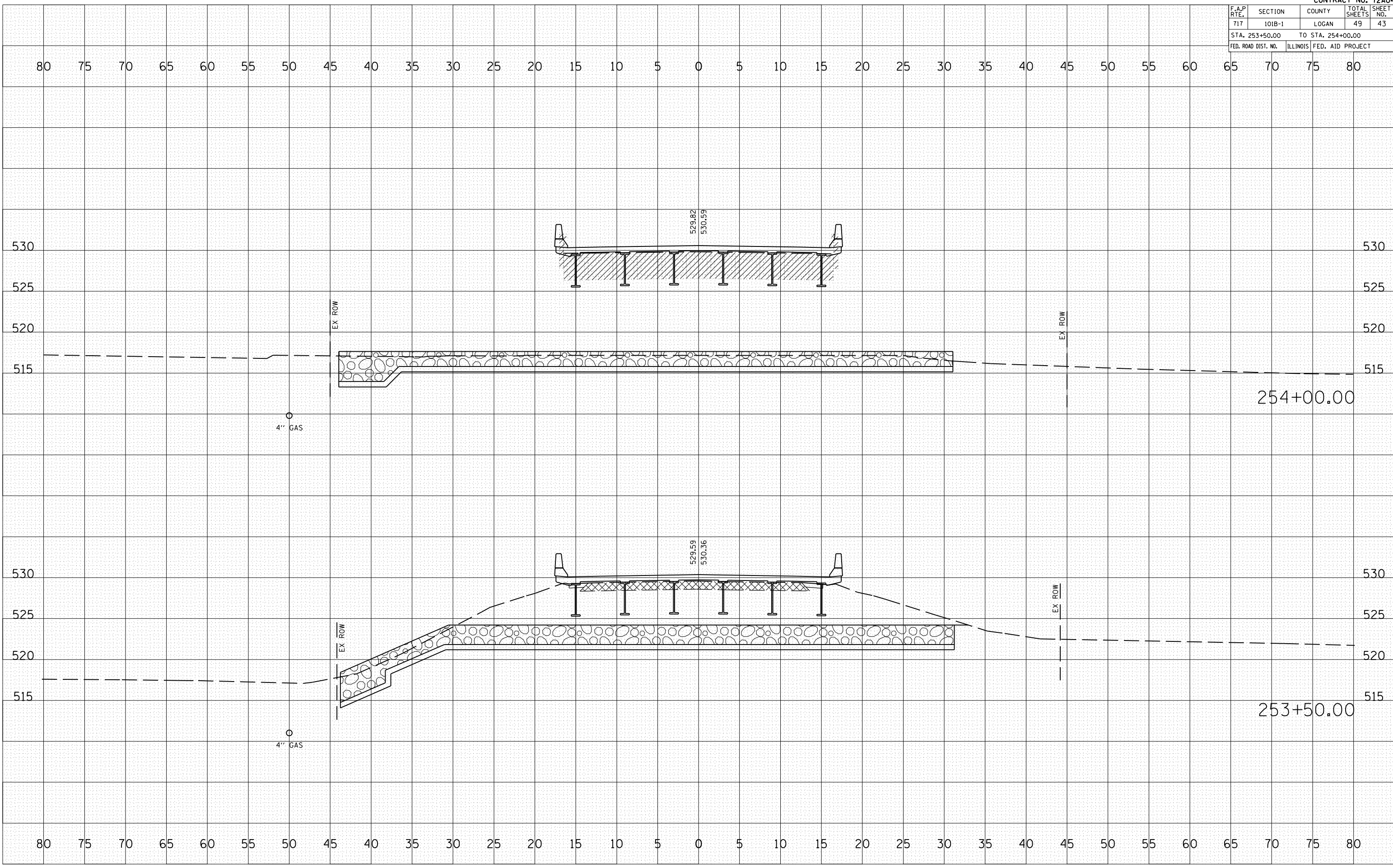
NO. _____

NO. _____

NO. _____

NO. _____

PLOT DATE = 12/12/2006
 FILE NAME = 253+50.dwg
 PLOT SCALE = 10.000000
 USER NAME = laughlin-1

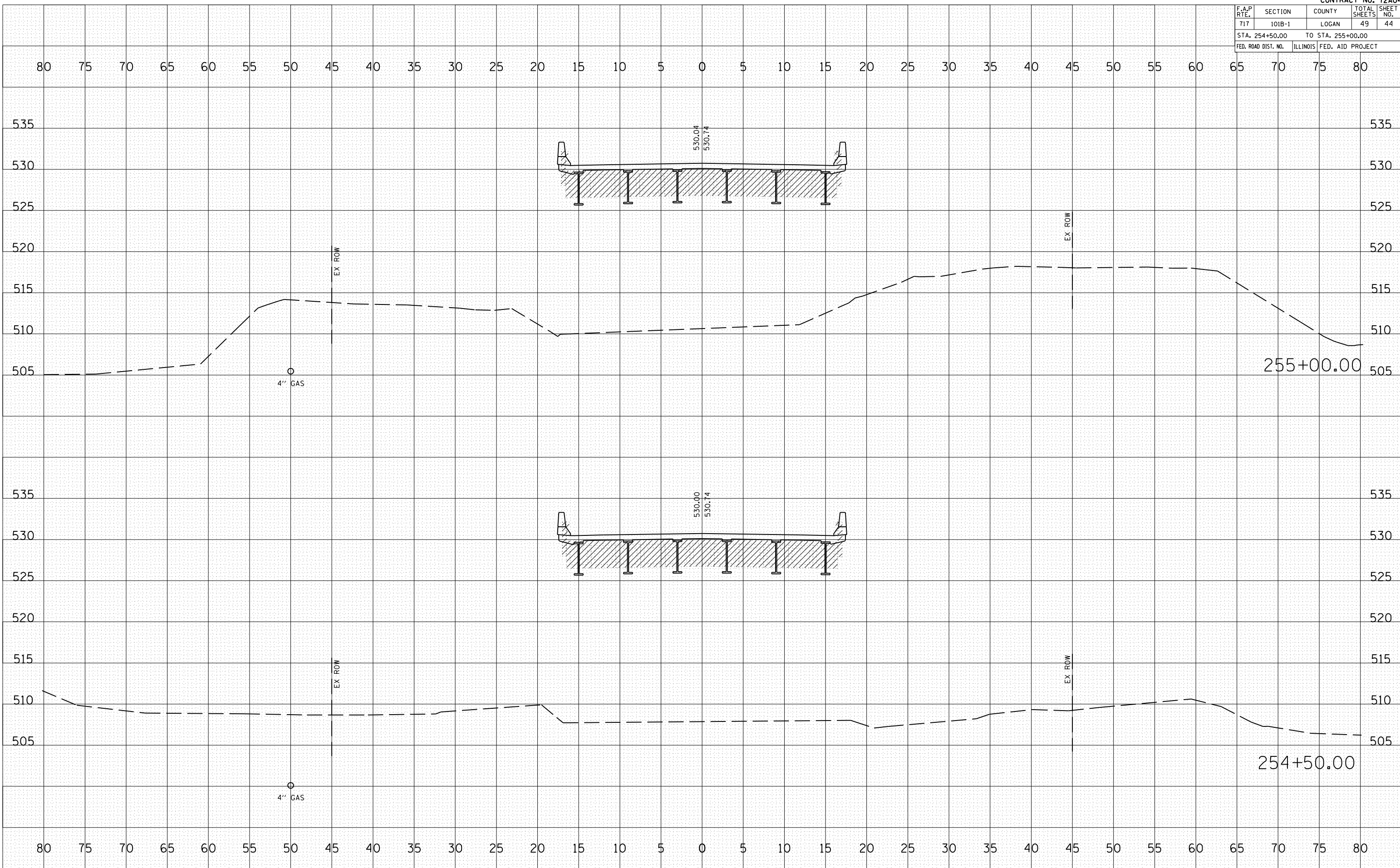


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	44
STA. 254+50.00		TO STA. 255+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BY	DATE

BY	DATE

PLOT DATE = 12/12/2006
 FILE NAME = 121206
 PLOT SCALE = 10.5582
 USER NAME = laughlin-1



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	45
STA. 255+50.00		TO STA. 256+50.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

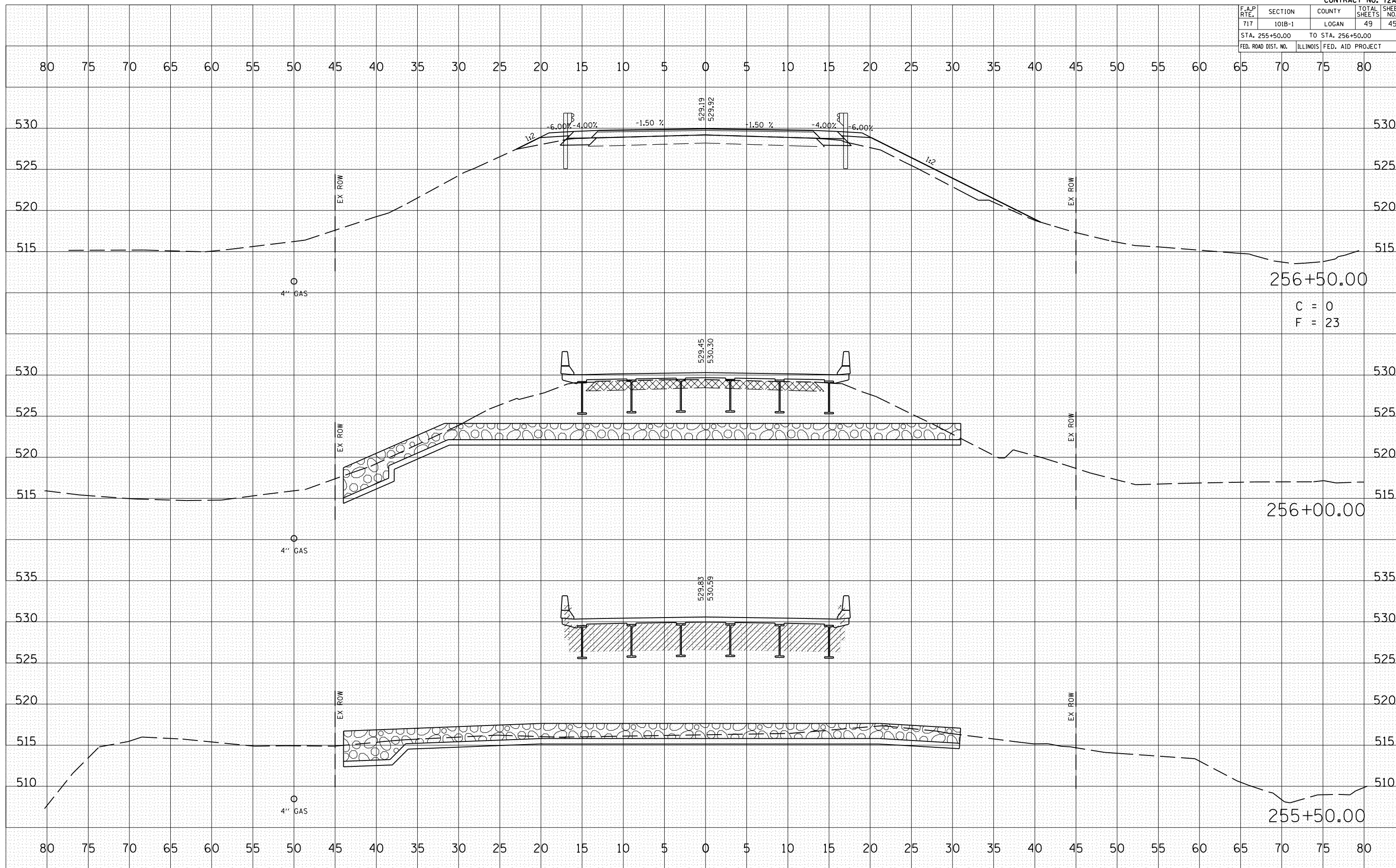
BY	DATE

FINAL SURVEY	SURVEYED	PLOTTED	DATE	NO.

BY	DATE

ORIGINAL SURVEY	SURVEYED	PLOTTED	DATE	NO.

PLOT DATE = 12/12/2006
 FILE NAME = 42011.dwg
 PLOT SCALE = 10.0000
 USER NAME = laughlinr1



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	46
STA. 257+00.00		TO STA. 258+00.00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BY	DATE

NO.	AREAS CHECKED

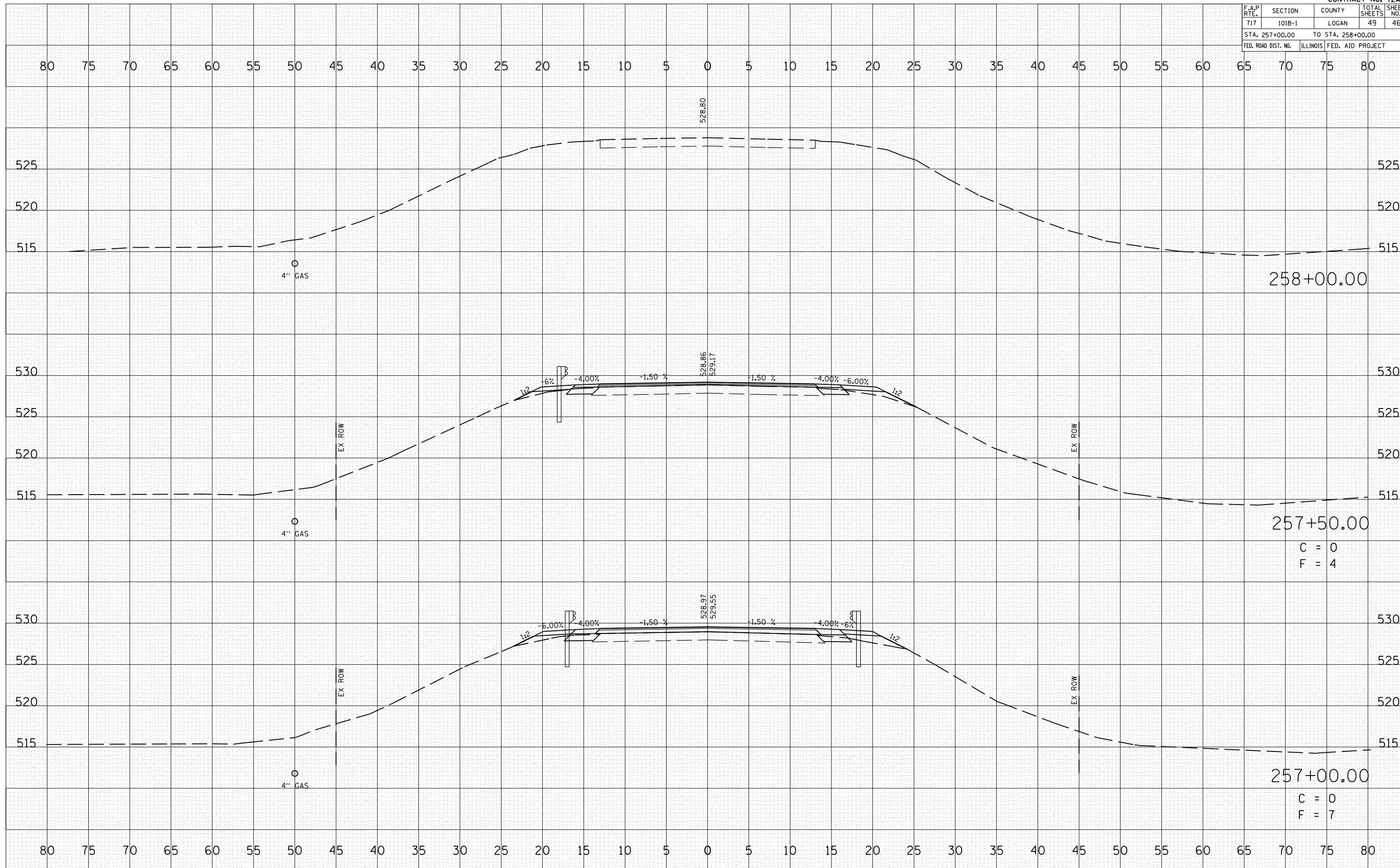
NO.	AREAS CHECKED

BY	DATE

NO.	AREAS CHECKED

NO.	AREAS CHECKED

PLOT DATE = 12/12/2006
 FILE NAME = 220111.dwg
 PLOT SCALE = 10.5582
 USER NAME = laughlinr1



C = 0
 F = 4

C = 0
 F = 7

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	47
STA. 13+90.29		TO STA. 14+06.06		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

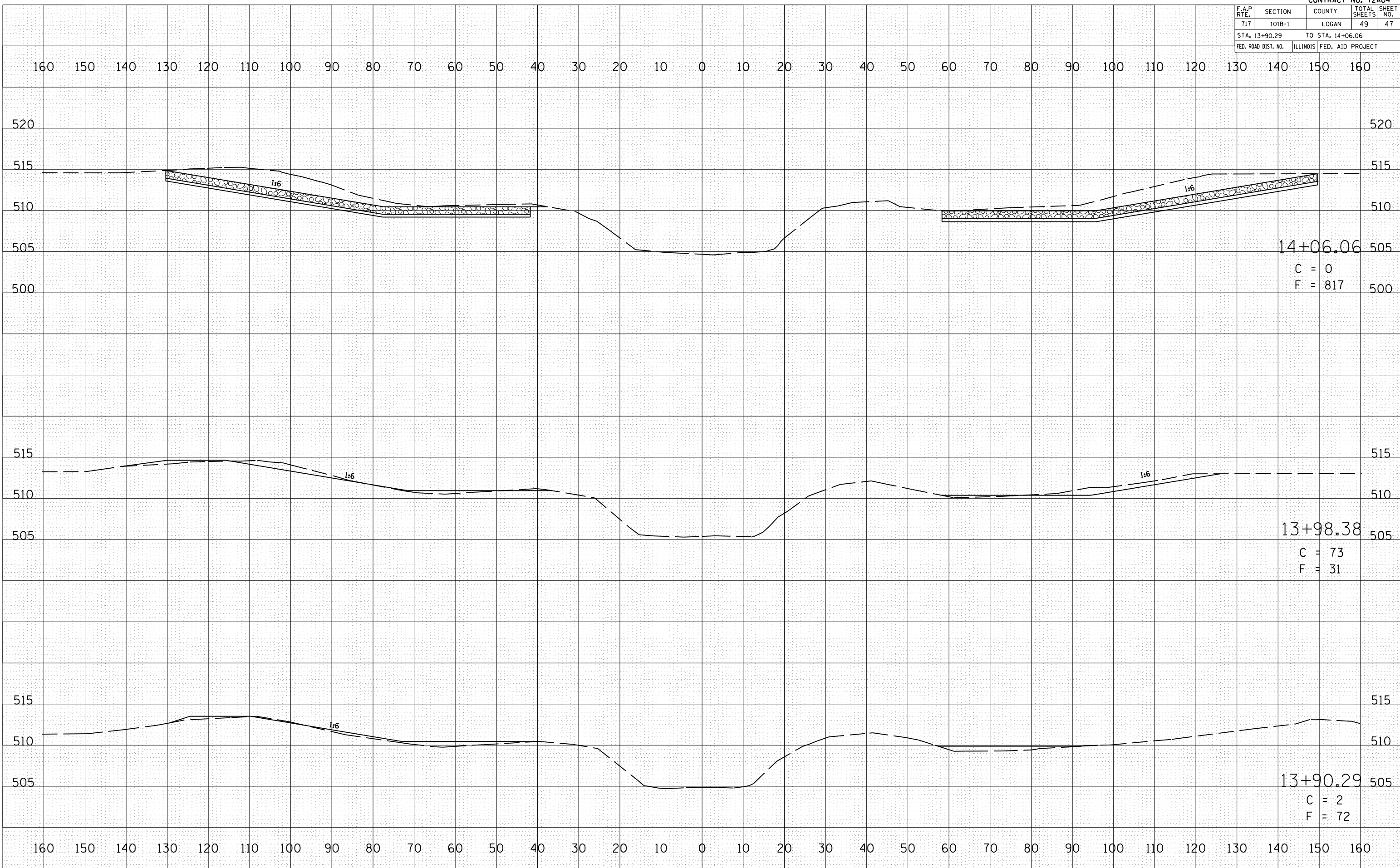
BY	DATE

FINAL SURVEY	SURVEYED	PLOTTED	DATE	AREAS CHECKED

BY	DATE

ORIGINAL SURVEY	SURVEYED	PLOTTED	DATE	AREAS CHECKED

PLOT DATE = 12/12/2006
 FILE NAME = 211765
 PLOT SCALE = 211765 IN.
 USER NAME = laughlinr1



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	48
STA. 14+57.84		TO STA. 14+91.59		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

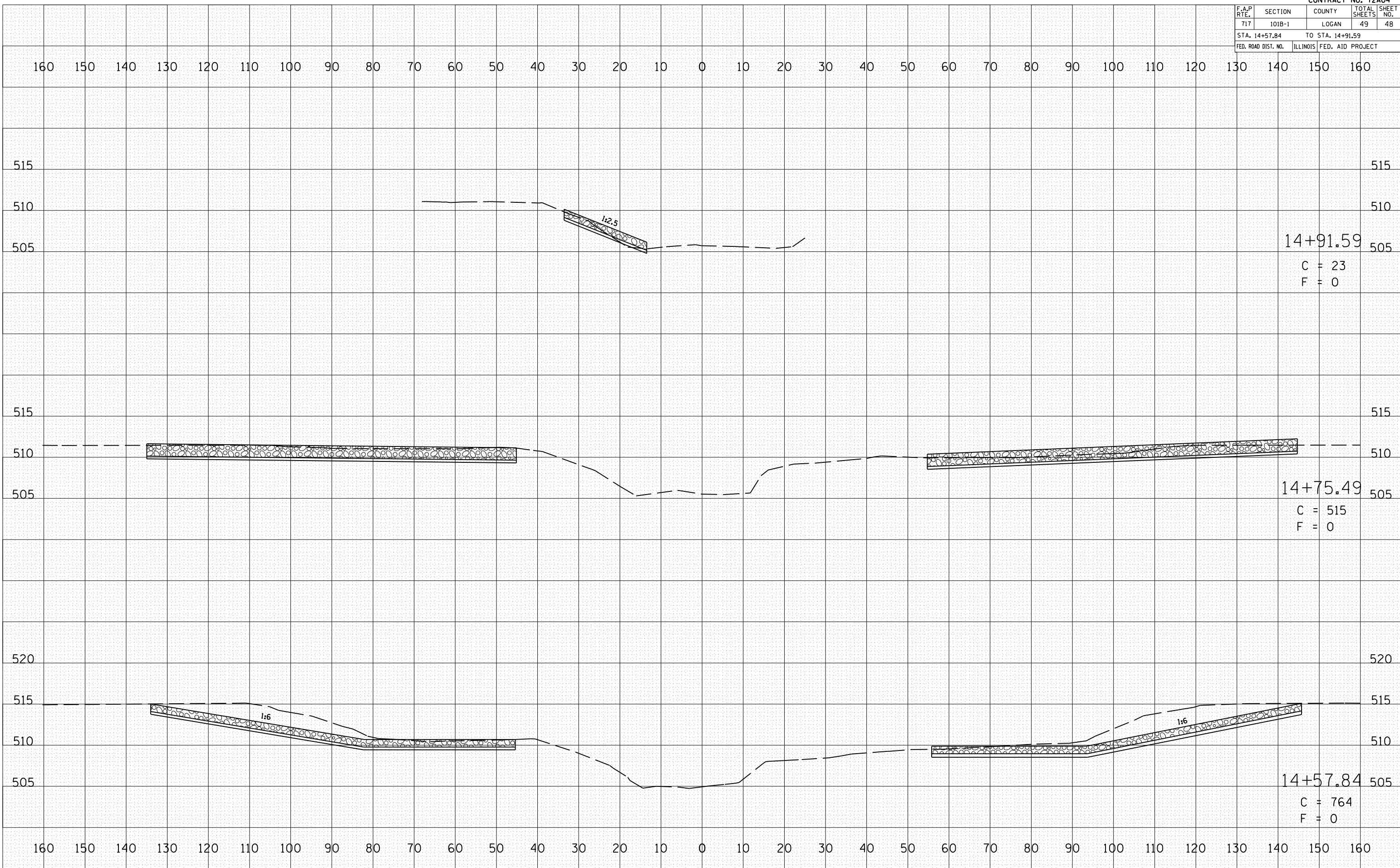
BY	DATE

FINAL SURVEY	SURVEYED	PLOTTED	DATE

BY	DATE

ORIGINAL SURVEY	SURVEYED	PLOTTED	DATE

PLOT DATE = 12/12/2006
 FILE NAME = 14+57.84 TO 14+91.59
 PLOT SCALE = 2:1 (764' IN)
 USER NAME = laughlinr1



CHANNEL CROSS SECTIONS PRAIRIE CREEK

CONTRACT NO. 72A04				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
717	101B-1	LOGAN	49	49
STA. 15+04.44			TO STA. 15+25.28	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BY	DATE

FINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	AREAS CHECKED

BY	DATE

ORIGINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	AREAS CHECKED

PLOT DATE = 12/12/2006
FILE NAME = 211765
PLOT SCALE = 211765 IN.
USER NAME = laughlinr1

