03-11-11 LETTING ITEM 055

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	1
	ILLINOIS	CONTRACT NO. 98898		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

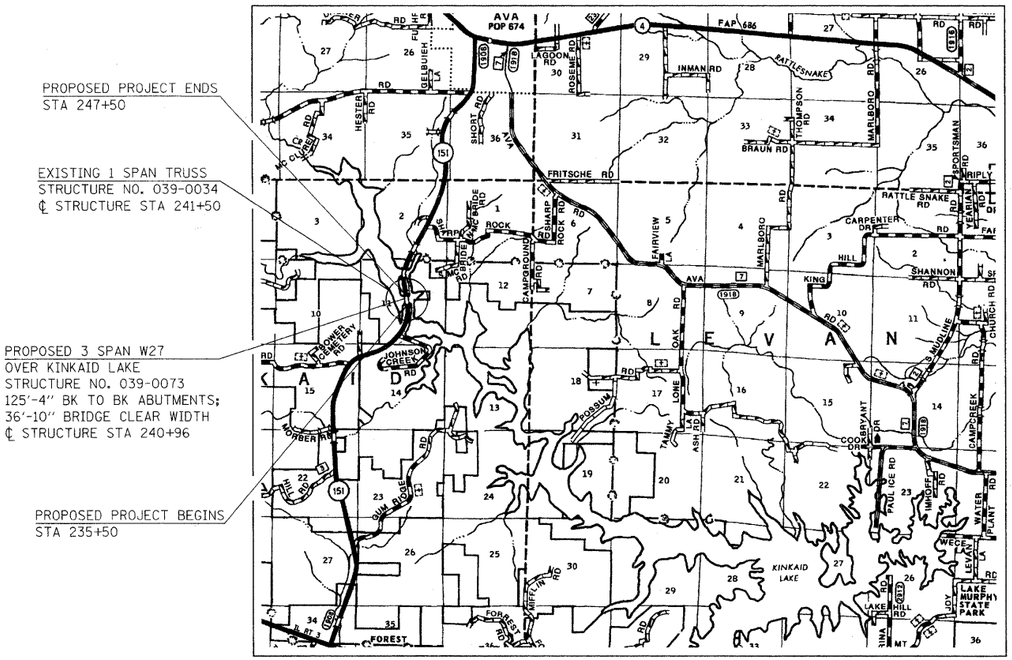
F.A.S. ROUTE 1908 (ILLINOIS 151)
SECTION (13B)I-2
PROJECT NO. ACBRS-1908(002)
STRUCTURE REPLACEMENT OVER
KINKAID LAKE
JACKSON COUNTY

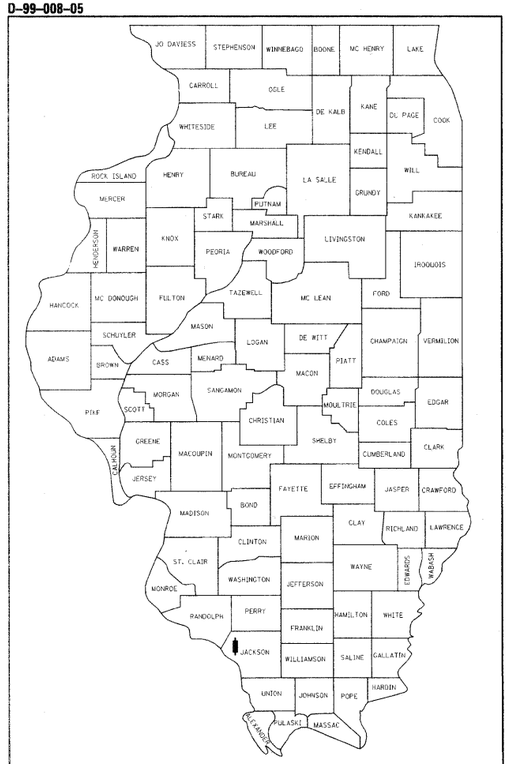
C-99-057-10

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3

HIGHWAY CLASSIFICATION

F.A.S. RTE 1908 – IL RTE 151
ADT = 1250 (2010); 1530 (2030)
DHV = 150 (2010); 185 (2030)
35% TRUCKS
FUNCTIONAL CLASS: MAJOR ARTERIAL (NON-URBAN)
DESIGN SPEED: 55 MPH
POSTED SPEED: 55 MPH





LOCATION OF SECTION INDICATED THUS: –

KINKAID TOWNSHIP

100' 200' 300' — 1" = 100'
0 10' 20' 30' — 1" = 10'
0 50' 100' — 1" = 50'
0 50' 100' — 1" = 40'
0 50' 100' — 1" = 30'
0 50' 100' — 1" = 20'

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

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

CONTRACT NO. 98898

ROADWAY LENGTH = 1,074.67 FT
BRIDGE LENGTH = 125.33 FT

NET LENGTH OF PROJECT = 1200 FT
GROSS LENGTH OF PROJECT = 1200 FT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Dec 16 20 10
Mary A. Harris
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

February 4 20 11
Scott E. Stitt P.E. /bc
acting ENGINEER OF DESIGN AND ENVIRONMENT

February 4 20 11
Christine M. Reed /bc
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PROJECT ENGINEER: DAVID PICHE (618) 549-2171
DESIGNER: MIKE STEPHENSON

GENERAL NOTES

THE THICKNESS OF HOT MIX ASPHALT MIXTURE 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 MIXTURE IS PLACED.

FACTORS USED FOR QUANTITY CALCULATIONS ARE AS FOLLOWS:

ALL HOT MIX ASPHALT:	2.016 TONS/CU. YD.
HOT MIX ASPHALT MATERIALS ON PAVEMENT:	0.09 GAL./SQ. YD.
AGGREGATE (PRIME COAT):	0.0015 TONS/SQ. YD.
ALL AGGREGATE:	2.05 TONS/CU. YD.
RIPRAP	1.50 TONS/CU YD

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE A CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK. THE CONTRACTOR, HOWEVER, WILL BE PAID FOR THE ACTUAL QUANTITY FURNISHED AT THE UNIT PRICE BID FOR THE WORK. CONSTRUCTION PLANS ARE AVAILABLE FOR REVIEW AT THE DISTRICT 9 OFFICE.

IN ADDITION TO THE REQUIREMENTS OF ARTICLE 107.16 THE CONTRACTOR SHALL PROTECT THE SURFACE OF ALL BRIDGE DECK AND BRIDGE APPROACH PAVEMENTS IN A MANNER SATISFACTORY TO THE ENGINEER BEFORE ANY EQUIPMENT IS ALLOWED TO CROSS THE STRUCTURE. PROTECTION SHALL BE PROVIDED FOR ALL EQUIPMENT AS DEFINED IN ARTICLE 101.17 REGARDLESS IF TRACK MOUNTED OR WHEELED.

AT ALL LOCATIONS WHERE HOT MIX ASPHALT OR CONCRETE PAVEMENT JOINS AN EXISTING HOT MIX ASPHALT OR CONCRETE PAVEMENT, A SAWED JOINT SHALL BE CONSTRUCTED. THE COST OF THIS JOINT SHALL BE INCLUDED IN THE TYPE OF PAVEMENT BEING CONSTRUCTED.

QUANTITIES SHOWN IN THE PLANS FOR BRIDGE DECK GROOVING AND PROTECTIVE COAT INCLUDE THE BRIDGE, THE BRIDGE APPROACH SLABS, AND THE BRIDGE APPROACH PAVEMENT CONNECTORS (PCC).

PROTECTIVE COAT SHALL BE APPLIED TO THE BRIDGE, THE BRIDGE APPROACH SLABS, AND THE BRIDGE APPROACH PAVEMENT CONNECTORS (PCC) IN ACCORDANCE WITH ARTICLE 503.19 OF THE STANDARD SPECIFICATIONS. THE PROTECTIVE COAT SHALL BE APPLIED REGARDLESS OF THE CURING METHOD USED. THE RATE OF APPLICATION FOR EACH COAT ON SAW CUT GROOVED AREAS SHALL BE 25 SQUARE YARDS PER GALLON OF MIXTURE.

REMOVAL OF EXISTING 12" BRIDGE APPROACH PAVEMENTS IS INCLUDED IN THE QUANTITY FOR PAVEMENT REMOVAL - SQ YD.

ALL OBSTRUCTIONS WHICH ARE WITHIN THE CLEAR ZONE SHOWN ON THE TYPICAL SECTION, AND ARE NOT SHIELDED BY THE PROPOSED GUARDRAIL, SHALL BE REMOVED BETWEEN STATION + AND STATION + . TYPICAL OBSTRUCTIONS ARE HEADWALLS, FOUNDATIONS, ETC. WHICH PROJECT 4 IN. OR MORE ABOVE THE GROUNDLINE: AND TREES WHICH WILL MATURE TO A DIAMETER OF 4 IN. OR GREATER.

THE TYPE 6A TEMPORARY TERMINAL GUARDRAIL SECTIONS SHOWN IN THE PLANS MAY BE REPLACED TO MATCH THE RAILING THAT THE CONTRACTOR CHOOSES TO USE ON THE TEMPORARY BRIDGE. NO EXTRA COMPENSATION SHALL BE ALLOWED IF THE TEMPORARY 6A TERMINALS SPECIFIED IN THE PLANS ARE CHANGED.

PRIOR TO PLACEMENT OF THE FINAL PAVEMENT MARKINGS, THE RESIDENT ENGINEER SHOULD CONTACT THE BUREAU OF OPERATIONS AND ARRANGE FOR INSPECTION AND APPROVAL OF THE PAVEMENT MARKING LAYOUT.

STATIONING OF THE PROPOSED SURFACE SHALL BE REQUIRED. STAMP STATIONING EVERY 300 FEET ON ALTERNATING SIDES OF THE PAVEMENT AND AS DIRECTED BY THE ENGINEER. THE STATION SYMBOL STAMPS USED SHALL BE 5 1/2" TALL AND OF A DESIGN APPROVED BY THE ENGINEER. THE STAMPS SHALL BE FURNISHED BY THE CONTRACTOR AND REMAIN HIS/HER PROPERTY.

ATTAINMENT OF PROPER CROWN SHALL BE FULLY ACCOMPLISHED WITH THE HOT MIX ASPHALT LEVELING BINDER AS DIRECTED BY THE ENGINEER.

THE EXISTING ROAD SIGNS THAT INTERFERE WITH CONSTRUCTION SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. AFTER THE CONSTRUCTION IS COMPLETED, THE CONTRACTOR WILL REPLACE THE SIGNS AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE INCLUDED IN TRAFFIC CONTROL AND PROTECTION (SPECIAL)- LOCATION 1.

THE ADVANCE DETECTOR LOOPS ARE TYPICALLY LOCATED 300 FEET IN ADVANCE OF THE STOP BAR. THE BUREAU OF OPERATIONS SHOULD APPROVE THE LOOP LOCATIONS PRIOR TO INSTALLATION.

THE ABANDONED TELEPHONE CABLE THAT CONFLICTS WITH CONSTRUCTION AND THE UTILITY POLES AT STATION 240+71.6, 19' RT AND STATION 242+15.1, 19.2' RT SHALL BE DISPOSED OF AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE INCLUDED IN THE COST OF CHANNEL EXCAVATION- CU YD.

THE ABANDONED STREAM GAUGE ATTACHED TO THE EXISTING BRIDGE AT THE NORTHEAST QUADRANT SHALL BE REMOVED AND DISPOSED OF AS DIRECTED BY THE ENGINEER. COST INCLUDED IN REMOVAL OF EXISTING STRUCTURES- EACH.

COMMITMENTS: NONE AS OF DECEMBER 17, 2010. REFER TO COMMITMENT FILE FOR ANY COMMITMENTS AFTER THIS DATE.

STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
420001-07	PAVEMENT JOINTS
420101-04	24' JOINTED PCC PAVEMENT
420401-08	BRIDGE APPROACH PAVEMENT CONNECTOR
421001-02	REINFORCEMENT FOR CONTINUOUSLY REINFORCED PCC PAVEMENT
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
542401-01	METAL END SECTIONS FOR PIPE CULVERTS
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
630001-09	STEEL PLATE BEAM GUARDRAIL
631011-07	TRAFFIC BARRIER TERMINAL, TYPE 2
631031-09	TRAFFIC BARRIER TERMINAL, TYPE 6
631032-06	TRAFFIC BARRIER TERMINAL, TYPE 6A
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER & MOUNTING DETAILS
701006-03	OFF-ROAD OPERATIONS, 2L 2W, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701201-04	LANE CLOSURE, 2L 2W, DAY ONLY, ON-ROAD TO 600 mm (24") OFF-ROAD, FOR SPEEDS ≥ 45 MPH
701301-04	LANE CLOSURE, 2L 2W, SHORT TIME OPERATIONS, FOR SPEEDS ≥ 45 MPH
701306-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS

INDEX OF SHEETS

Prepared By: Joe VanDeWiele
DISTRICT STUDIES AND PLANS ENGINEER

Examined By: James Travis Emery
DISTRICT LAND ACQUISITION ENGINEER

Examined By: Connie Nelson
DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By:
DISTRICT OPERATIONS ENGINEER

Examined By:
DISTRICT CONSTRUCTION ENGINEER

Examined By:
DISTRICT MATERIALS ENGINEER

Examined By:
DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: Danny Clayton
ASSISTANT REGIONAL ENGINEER

Approved By: Mary C. Lamie
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Dec. 16 2010
DATE

FILE NAME =	USER NAME = halstead	DESIGNED -	REVISED -
		DRAWN -	REVISED -
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	PLOT DATE = 12/10/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES; INDEX OF SHEETS AND STANDARDS

SHEET NO. OF SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	2
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

CODE NUMBER	ITEM DESCRIPTION	RURAL - JACKSON COUNTY HBP FUNDING 80% FEDERAL; 20% STATE CONSTRUCTION TYPE CODE 0011 SN 039-0073 UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	700
20200600	EXCAVATING AND GRADING EXISTING SHOULDER	UNIT	43
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	2825
20300100	CHANNEL EXCAVATION	CU YD	2144
20400800	FURNISHED EXCAVATION	CU YD	1445
20700220	POROUS GRANULAR EMBANKMENT	CU YD	247
* 25000200	SEEDING, CLASS 2	ACRE	0.6
* 25000350	SEEDING, CLASS 7	ACRE	0.8
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	86
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	54
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	54
* 25000700	AGRICULTURAL GROUND LIMESTONE	TON	1.2
* 25100630	EROSION CONTROL BLANKET	SQ YD	2776
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	80
28000400	PERIMETER EROSION BARRIER	FOOT	2585
28100109	STONE RIPRAP, CLASS A5	SQ YD	2762
28100801	STONE DUMPED RIPRAP, CLASS A1	TON	4185
28100809	STONE DUMPED RIPRAP, CLASS A5	TON	4836
28200200	FILTER FABRIC	SQ YD	2762
31100100	SUBBASE GRANULAR MATERIAL, TYPE A	TON	124
31101900	SUBBASE GRANULAR MATERIAL, TYPE C	TON	400
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	444
40600300	AGGREGATE (PRIME COAT)	TON	8
40600645	LEVELING BINDER (MACHINE METHOD), N90	TON	200
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	160
40600990	TEMPORARY RAMP	SQ YD	80
40603090	HOT - MIX ASPHALT BINDER COURSE, IL - 19.0, N90	TON	344
40603320	HOT - MIX ASPHALT SURFACE COURSE, MIX "C", N90	TON	214
42000501	PORTLAND CEMENT CONCRETE PAVEMENT 10" (JOINTED)	SQ YD	180
42001300	PROTECTIVE COAT	SQ YD	116
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	116
44000100	PAVEMENT REMOVAL	SQ YD	1242
44200140	PAVEMENT PATCHING, TYPE I, 12 INCH	SQ YD	4
48203100	HOT - MIX ASPHALT SHOULDERS	TON	1961
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50200100	STRUCTURE EXCAVATION	CU YD	565
50200300	COFFERDAM EXCAVATION	CU YD	76
50202901	COFFERDAM (LOCATION - 1)	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	303.9
50300255	CONCRETE SUPERSTRUCTURE	CU YD	344
50300260	BRIDGE DECK GROOVING	SQ YD	923
~~50300265~~	~~SEAL COAT CONCRETE~~	~~CU YD~~	~~295~~
50300280	CONCRETE ENCASEMENT	CU YD	29.7
50300300	PROTECTIVE COAT	SQ YD	1031
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1

CODE NUMBER	ITEM DESCRIPTION	RURAL - JACKSON COUNTY HBP FUNDING 80% FEDERAL; 20% STATE CONSTRUCTION TYPE CODE 0011 SN 039-0073 UNIT	QUANTITY
50500505	STUD SHEAR CONNECTORS	EACH	3222
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	109300
50800515	BAR SPLICERS	EACH	101
51202100	FURNISHING STEEL PILES HP14X117	FOOT	2143
51202305	DRIVING PILES	FOOT	2143
51204100	TEST PILE STEEL HP14X117	EACH	5
51204650	PILE SHOES	EACH	54
51300105	TEMPORARY BRIDGE COMPLETE	EACH	1
51500100	NAME PLATES	EACH	1
52100510	ANCHOR BOLTS, 3/4''	EACH	24
52100520	ANCHOR BOLTS, 1''	EACH	24
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	79
* 63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	6158
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4
63200310	GUARDRAIL REMOVAL	FOOT	6489
* 63300725	STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)	FOOT	52
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	17
67100100	MOBILIZATION	L SUM	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1
70104490	TRAFFIC CONTROL AND PROTECTION (SPECIAL), LOCATION 1	EACH	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
70106700	TEMPORARY RUMBLE STRIPS	EACH	6
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	1
70300100	SHORT TERM PAVEMENT MARKING	FOOT	244
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2840
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1028
70500100	TEMPORARY STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	364
70500670	TEMPORARY TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2840
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	12
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	4
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	87
* 78200520	BARRIER WALL MARKERS, TYPE B	EACH	6
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	2
78300100	PAVEMENT MARKING REMOVAL	SQ FT	67
86200300	UNINTERRUPTIBLE POWER SUPPLY, EXTENDED	EACH	1
X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	175
X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1
X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1
X5080600	MECHIANICAL SPLICERS	EACH	72
X7050169	TEMPORARY TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (FLARED)	EACH	2
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4''	FOOT	155
* ~~Z0065000~~	~~SETTING PILES IN ROCK~~	~~EACH~~	~~10~~
~~Z0076600~~	~~TRAINEES~~	~~HOURS~~	~~500~~

*SPECIALTY ITEM

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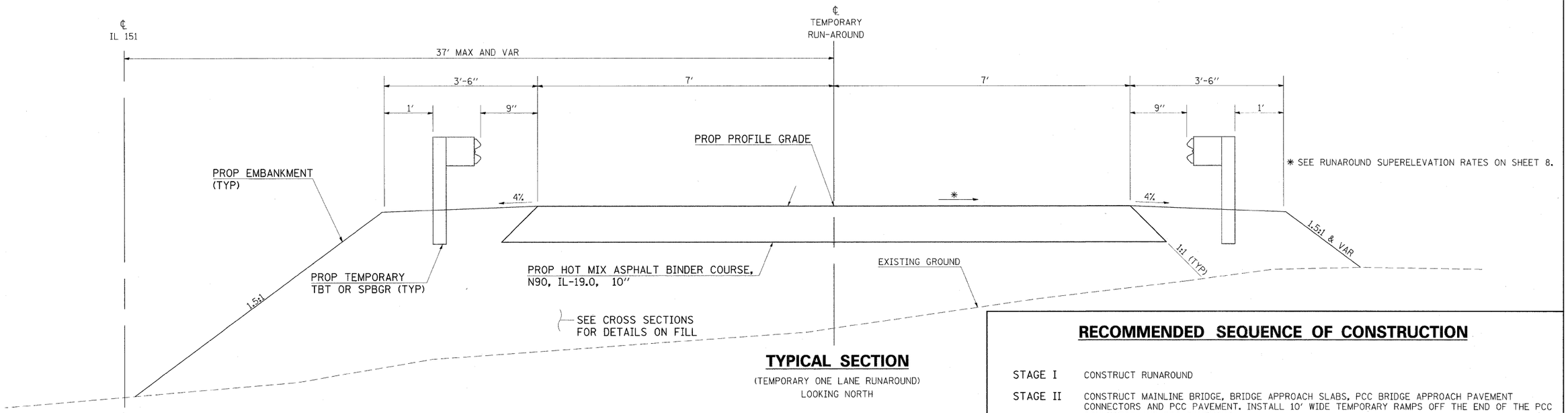
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	3
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		



TYPICAL SECTION

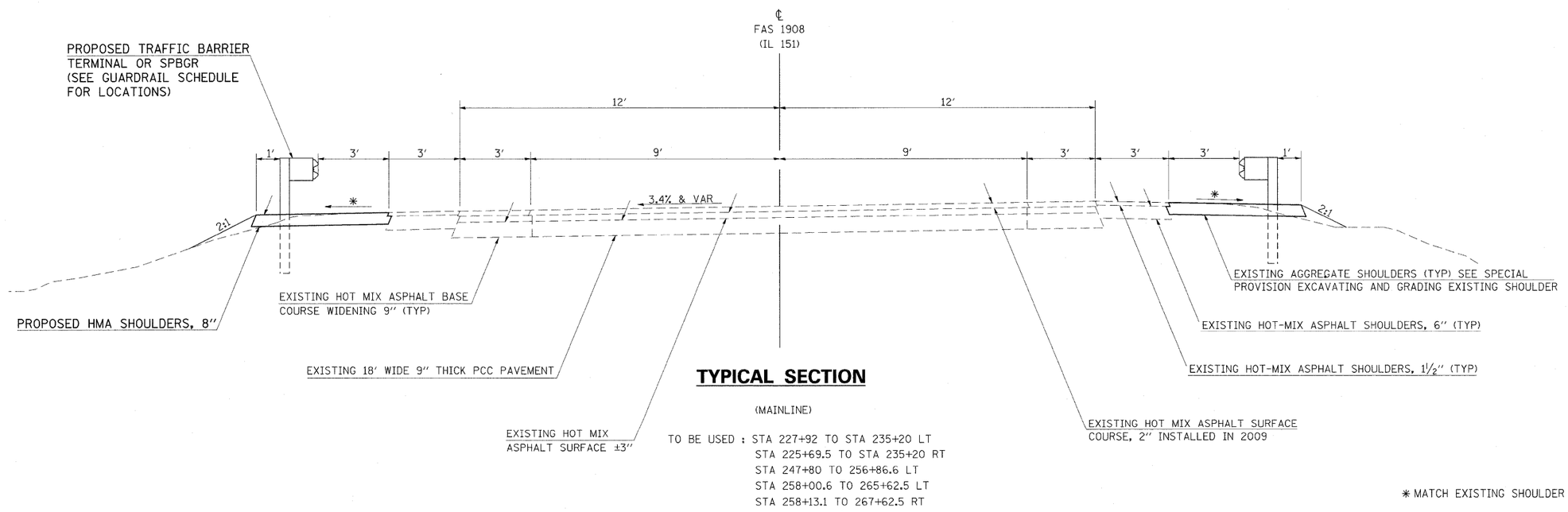
(TEMPORARY ONE LANE RUNAROUND)
LOOKING NORTH

TO BE USED: STA 0+00 TO STA 2+88
STA 4+38 TO STA 6+98

TEMPORARY BRIDGE OMISSION: STA 2+88 TO STA 4+38

RECOMMENDED SEQUENCE OF CONSTRUCTION

STAGE I	CONSTRUCT RUNAROUND
STAGE II	CONSTRUCT MAINLINE BRIDGE, BRIDGE APPROACH SLABS, PCC BRIDGE APPROACH PAVEMENT CONNECTORS AND PCC PAVEMENT. INSTALL 10′ WIDE TEMPORARY RAMPS OFF THE END OF THE PCC CONNECTOR AND PCC PAVEMENT. INSTALL TYPE 6 TERMINALS.
STAGE III	OPEN MAINLINE BRIDGE. CLOSE AND REMOVE RUNAROUND. REPLACE EXISTING GUARDRAIL. INSTALL HMA LEVELING BINDER AND SURFACE COURSE. INSTALL HMA SHOULDERS.



TYPICAL SECTION

(MAINLINE)

TO BE USED : STA 227+92 TO STA 235+20 LT
STA 225+69.5 TO STA 235+20 RT
STA 247+80 TO 256+86.6 LT
STA 258+00.6 TO 265+62.5 LT
STA 258+13.1 TO 267+62.5 RT

* MATCH EXISTING SHOULDER SLOPE

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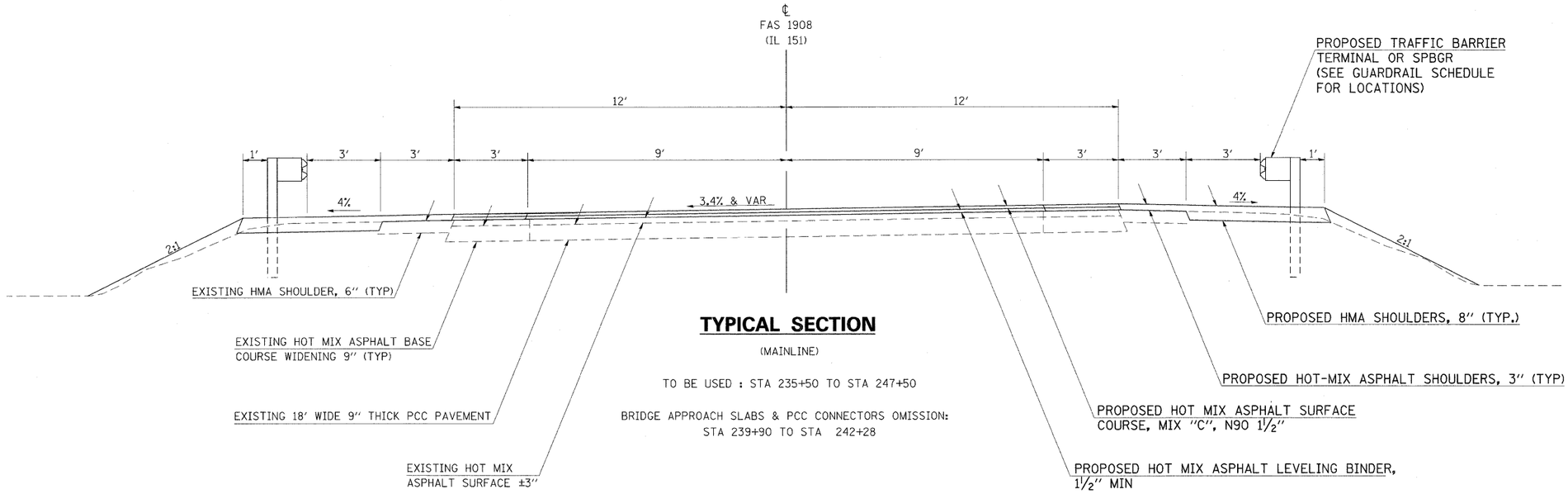
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SHEET NO. OF SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	4
		CONTRACT NO. 98898		
		ILLINOIS FED. AID PROJECT		

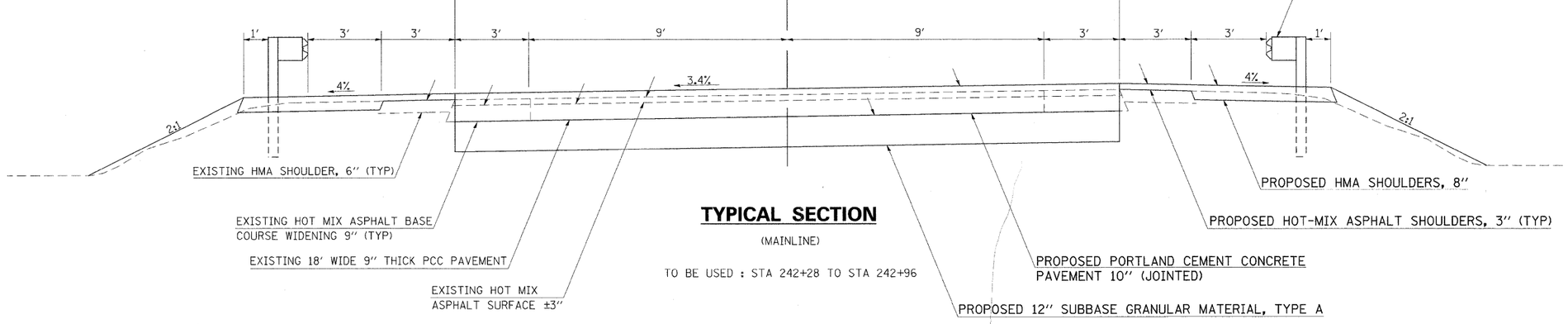


TYPICAL SECTION

(MAINLINE)

TO BE USED : STA 235+50 TO STA 247+50

BRIDGE APPROACH SLABS & PCC CONNECTORS OMISSION: STA 239+90 TO STA 242+28



TYPICAL SECTION

(MAINLINE)

TO BE USED : STA 242+28 TO STA 242+96

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

Location(s):	Hot Mix Asphalt Surface Course, Leveling Binder (Machine Method), N90
Mixture Use(s):	Hot Mix Asphalt Surface Course, Mix C, N90
AC/PG:	PG64-22
RAP% (Max):	10
Design Air Voids:	4.0%, 90 Gyration Design
Mixture Composition: (Gradation Mixture)	IL-9.5 mm or IL 12.5 mm
Friction Aggregate:	C Surface

Location(s):	Hot Mix Asphalt Binder Course
Mixture Use(s):	Hot Mix Asphalt Binder Course, N90, IL-19.0
AC/PG:	PG64-22
RAP% (Max):	10
Design Air Voids:	4.0%, 90 Gyration Design
Mixture Composition: (Gradation Mixture)	IL-19.0 mm
Friction Aggregate:	None

Location(s):	Hot Mix Asphalt Shoulders
Mixture Use(s):	Hot Mix Asphalt Shoulders
AC/PG:	PG58-22
RAP% (Max):	50
Design Air Voids:	2.0%, 30 Gyration Design
Mixture Composition: (Gradation Mixture)	Hot Mix Asphalt Aggregate Mixture, Superpave
Friction Aggregate:	None

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION AND MIXTURE REQUIREMENTS

SHEET NO. OF SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	5
		CONTRACT NO. 98898		
		ILLINOIS	FED. AID PROJECT	

SEEDING SCHEDULE

LOCATION				SEEDING CLASS 2	SEEDING CLASS 7	NITROGEN (N)	PHOSPHORUS (P)	POTASSIUM (K)	AGRICULTURAL GROUND LIMESTONE	TEMP. EROSION CONTROL SEEDING
				ACRES	ACRES	LBS	LBS	LBS	TON	LBS
MAINLINE										
LT STA	234+50	TO	240+30	0.2	0.2	26	18	18	0.4	20
RT STA	234+50	TO	240+15	0.1	0.1	13	9	9	0.2	10
RT STA	242+10	TO	246+50	0.1	0.1	13	9	9	0.2	10
LT STA	242+25	TO	248+50	0.2	0.2	26	18	18	0.4	20
RUNAROUND										
LT STA	0+00	TO	2+88		0.05	2				5
RT STA	2+00	TO	2+88		0.05	2				5
LT STA	4+38	TO	6+97		0.05	2				5
RT STA	4+38	TO	5+10		0.05	2				5
TOTALS				0.6	0.8	86	54	54	1.2	80

HMA BINDER COURSE AND SURFACE COURSE SCHEDULE

LOCATION IL 151	HOT-MIX ASPHALT BINDER COURSE	HOT-MIX ASPHALT LEVELING BINDER COURSE	HOT-MIX ASPHALT SURFACE COURSE
	TON	TON	TON
TEMP RUNAROUND SOUTH END	179.8		
TEMP RUNAROUND NORTH END	164.4		
STA 235+50 TO 239+90		98.5	
STA 242+96 TO 247+50		101.6	
STA 235+20 TO 239+90			105.3
STA 242+96 TO 247+80			108.4
TOTALS	344	200	214

EROSION CONTROL SCHEDULE

LOCATION				PERIMETER EROSION BARRIER	EROSION CONTROL BLANKET
				FOOT	SQ YD
MAINLINE					
LT STA	234+50	TO	240+30	580	863
RT STA	234+50	TO	240+20	570	300
RT STA	242+10	TO	246+50	440	310
LT STA	242+25	TO	248+50	625	722
RUNAROUND					
LT STA	1+00.	TO	2+88	200	235
RT STA	2+00	TO	2+88		69
RT STA	4+38	TO	5+10		56
LT STA	4+38	TO	6+00	170	221
TOTALS				2585	2776

BRIDGE DECK GROOVING AND PROTECTIVE COAT SCHEDULE

LOCATION IL 151	BRIDGE DECK GROOVING	PROTECTIVE COAT 50300300	PROTECTIVE COAT 42001300
	SQ YD	SQ YD	SQ YD
BRIDGE AND 3 BRIDGE APPROACH SLABS	820	1031	
BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	103		116
TOTALS	923	1031	116

PAVEMENT REMOVAL, TEMPORARY RAMP AND HMA SURFACE REMOVAL BUTT JOINT SCHEDULE

LOCATION IL 151	✳ PAVEMENT REMOVAL	TEMPORARY RAMP	HMA SURFACE REMOVAL BUTT JOINT
	SQ YD	SQ YD	SQ YD
STA 239+90 TO 240+98	360		
STA 242+02 TO 242+28	87		
STA 242+28 TO 242+96	181		
RUNAROUND SOUTH END	321		
RUNAROUND NORTH END	293		
STA 235+20 TO 235+25		13.5	
STA 247+75 TO 247+80		13.5	
STA 239+80 TO 239+90		26.5	
STA 242+96 TO 243+06		26.5	
STA 235+20 TO 235+50			80
STA 247+50 TO 247+80			80
TOTALS	1242	80	160

✳ QUANTITY INCLUDES REMOVAL OF EXISTING 3' WIDE HMA SHOULDERS AS SHOWN ON SHEET 9.

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	PLOT DATE = 12/15/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULES

SHEET NO. OF SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	6
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		

EARTHWORK SCHEDULE

LOCATION (STAGE)	* EARTH EXCAVATION	SHRINKAGE FACTOR FOR EARTH EXCAVATION	EARTH EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR SHRINKAGE	** EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	SHRINKAGE FACTOR FOR FURNISHED EXCAVATION	FURNISHED EXCAVATION	WASTE	CHANNEL EXCAVATION (WASTE)
	CU YD	%	CU YD	CU YD	CU YD	%	CU YD	CU YD	CU YD
IL 151 AND DETOUR									
STAGE 1	13	25	10	1094	-1084	25	1445	0	
STAGE 2	75	25	56	54	2	25	0	2	2144
STAGE 3	612	25	459	204	255	25	0	255	
TOTALS	700						1445		2144

* CUTS FROM CROSS-SECTIONS
** FILLS FROM CROSS-SECTIONS

SUGGESTED EARTHWORK STAGING SEQUENCE
STAGE 1: CONSTRUCTION OF RUNAROUND EMBANKMENT
STAGE 2: MAINLINE CUTS AND FILLS NEAR STRUCTURE
STAGE 3: REMOVAL OF RUNAROUND AND FINAL GRADING

HMA SHOULDER SCHEDULE

LOCATION IL 151			HOT MIX ASPHALT SHOULDERS
			TONS
LT STA 227+92	TO	235+20	208.3
RT STA 225+69.5	TO	235+20	272.0
STA 235+20	TO	239+90	321.8
STA 239+90	TO	240+18.5	5.6
STA 241+74	TO	242+28	10.8
STA 242+28	TO	247+80	377.5
RT SIDEROAD			15.6
LT STA 247+80	TO	256+86.5	259.5
LT STA 258+00	TO	265+62.5	218.1
RT STA 258+13	TO	267+62.5	271.7
TOTALS			1961

TERMINALS AND GUARDRAIL

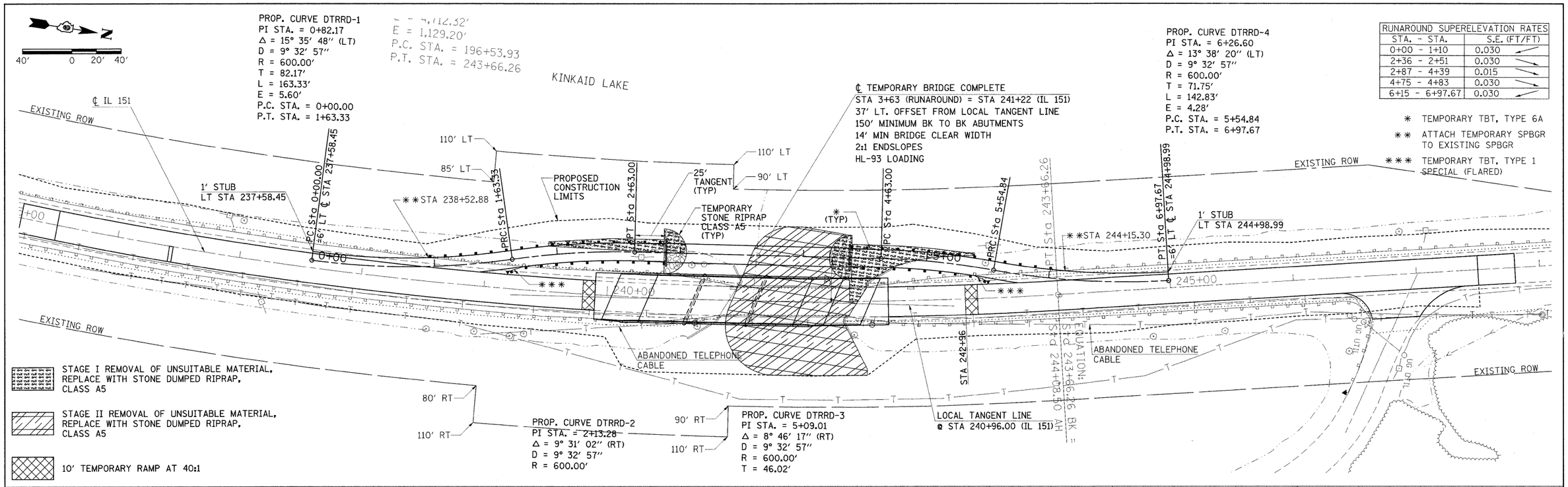
LOCATION IL 151	TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL FLARED (TEMP)	TRAFFIC BARRIER TERMINAL TYPE 6	TRAFFIC BARRIER TERMINAL TYPE 6A (TEMP)	SPBGR TYPE A	SPBGR TYPE A (TEMP)	GURDRAIL REMOVAL	TERM. MARKER D.A.	GUARDRAIL MARKER	BARRIER WALL MARKER	SPBGR (SHORT RADIUS)
	EACH	EACH	EACH	FOOT	FOOT	FOOT	EACH	EACH	EACH	FOOT
MAINLINE										
LT STA 227+92 TO 241+08						1316				
LT STA 242+08 TO 256+86						1436				
LT STA 258+00 TO 265+62.5				762.5		762.5		11		
RT STA 225+69.5 TO 240+92						1522.5				
RT STA 241+92 TO 246+60						432.5				
SIDE ROAD				50		70				52.5
RT STA 258+13 TO 267+62.5				949.5		949.5		13		
LT STA 227+92 TO 239+85.5				1193.5				17		
LT STA 242+24.8 TO 256+86.6				1420				20		
RT STA 225+69.5 TO 239+68.5				1399				19		
RT STA 242+09 TO 246+34				383				7		
LT STA 239+83 TO 240+26		1								
LT STA 241+82 TO 242+25		1								
RT STA 239+67 TO 240+10		1								
RT STA 241+66 TO 242+09		1								
RUNAROUND										
LT STA 239+15 TO 239+52.5	1						1			
LT STA 242+72.5 TO 243+10	1						1			
LT STA 240+03 TO 240+47			2							
LT STA 241+97 TO 242+41			2							
LT STA 238+52.88 TO 240+03					150					
LT STA 239+52.5 TO 240+03					50					
LT STA 242+41 TO 244+15					132					
LT STA 242+41 TO 242+72.5					32					
TOTALS	2	4	4	6158	364	6489	2	87	6	52.5

RIPRAP SCHEDULE

LOCATION	STONE RIPRAP CLASS A5	FILTER FABRIC
	SQ YD	SQ YD
MAINLINE - IL 151		
SOUTH ABUTMENT AREA	* 864	864
STREAMBED	* 282	282
NORTH ABUTMENT AREA	*1350	1350
RUNAROUND		
SOUTH BRIDGE CONE	133	133
NORTH BRIDGE CONE	133	133
TOTALS	2762	2762

FOR STONE DUMPED RIPRAP LOCATIONS, SEE CROSS-SECTIONS

*DENOTES PERMANENT INSTALLATION



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PLOT DATE = 12/15/2010	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY RUNAROUND PLAN AND PROFILE

SCALE: 1″=40′ | SHEET NO. OF SHEETS | STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	8
		CONTRACT NO. 98898		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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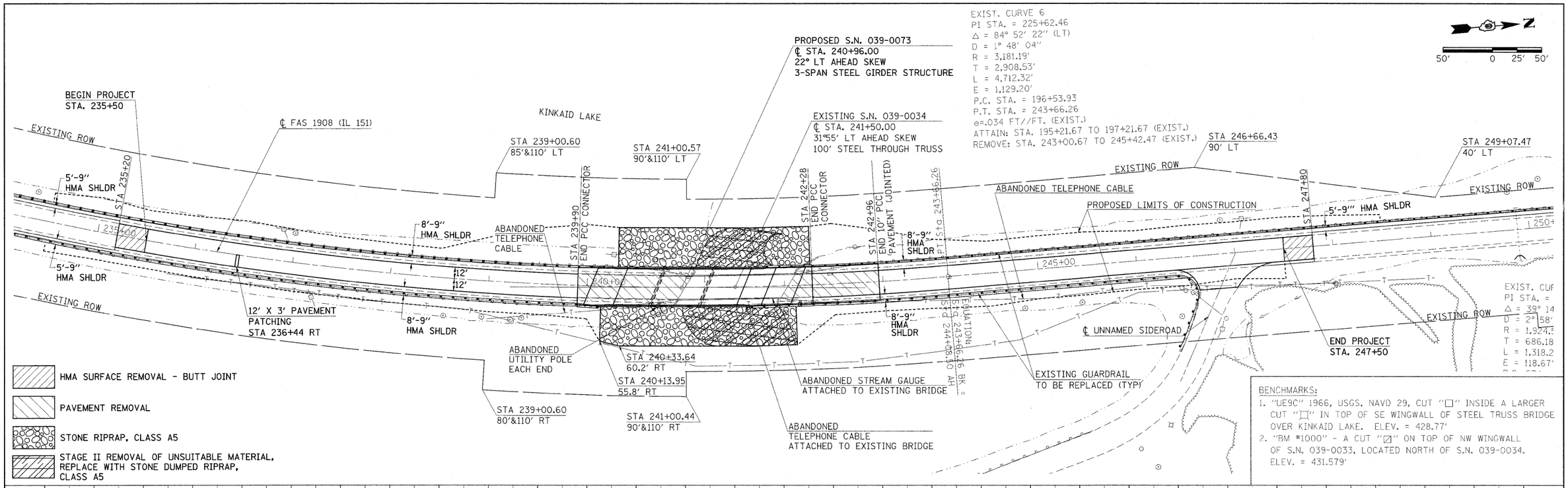

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	DRAWN -	REVISED -	
PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -	
PLOT DATE = 12/15/2010	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 PLAN AND PROFILE

SCALE: 1"=50' | SHEET NO. OF SHEETS | STA. 235+00.00 TO STA. 250+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	9
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			

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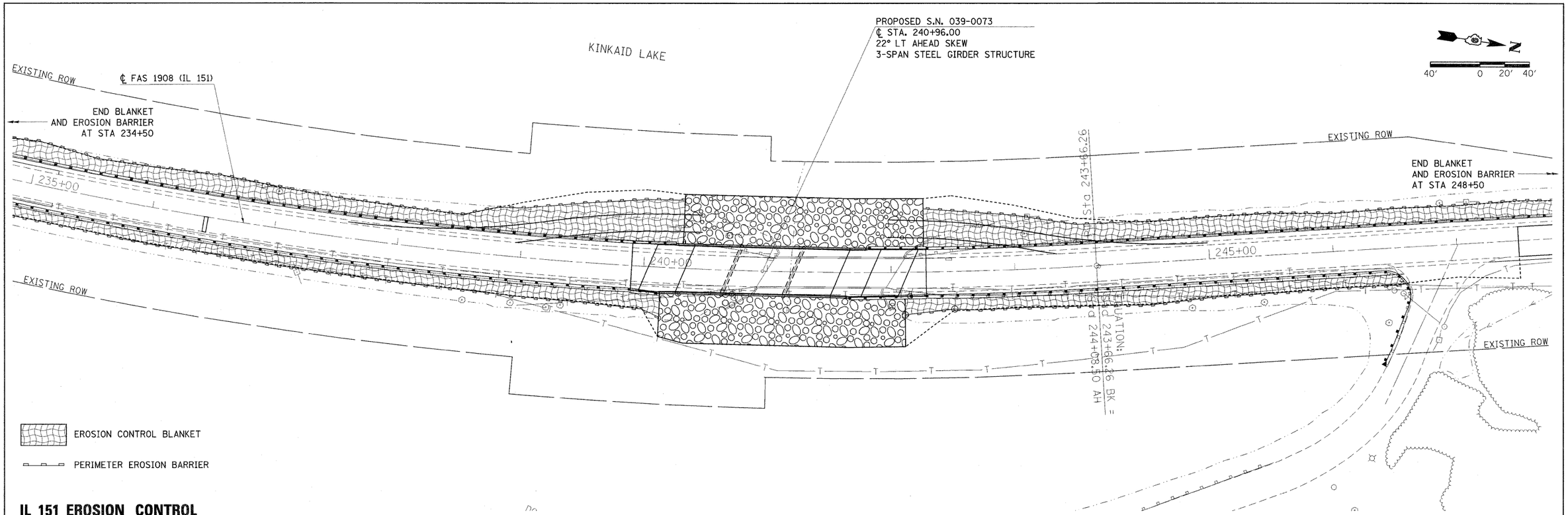
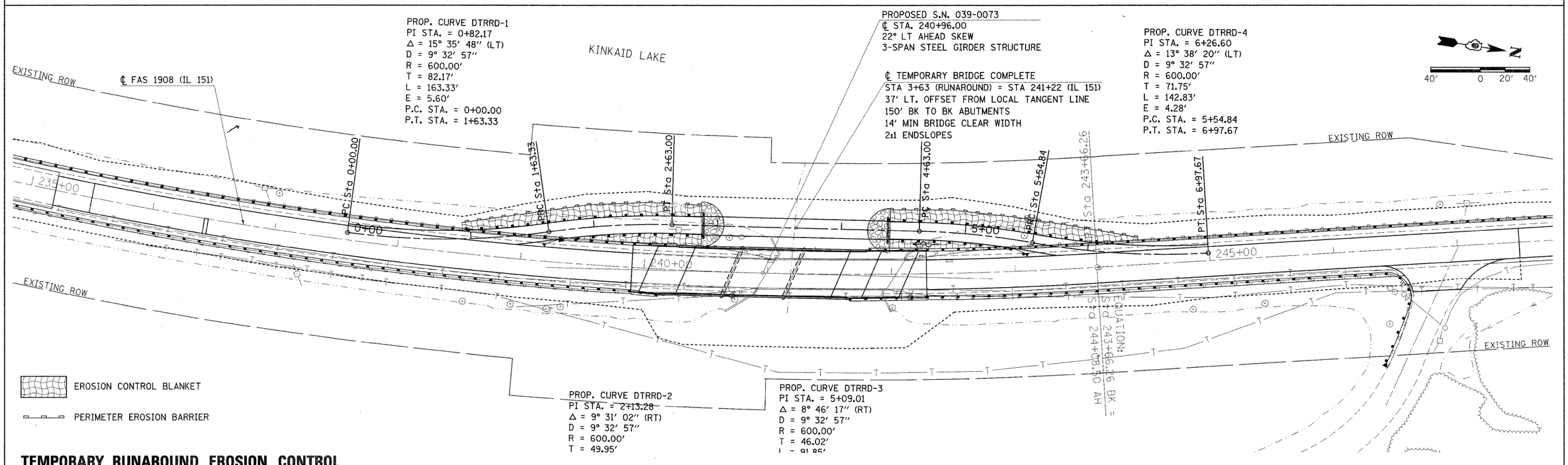


IL 151 EROSION CONTROL



TEMPORARY RUNAROUND EROSION CONTROL

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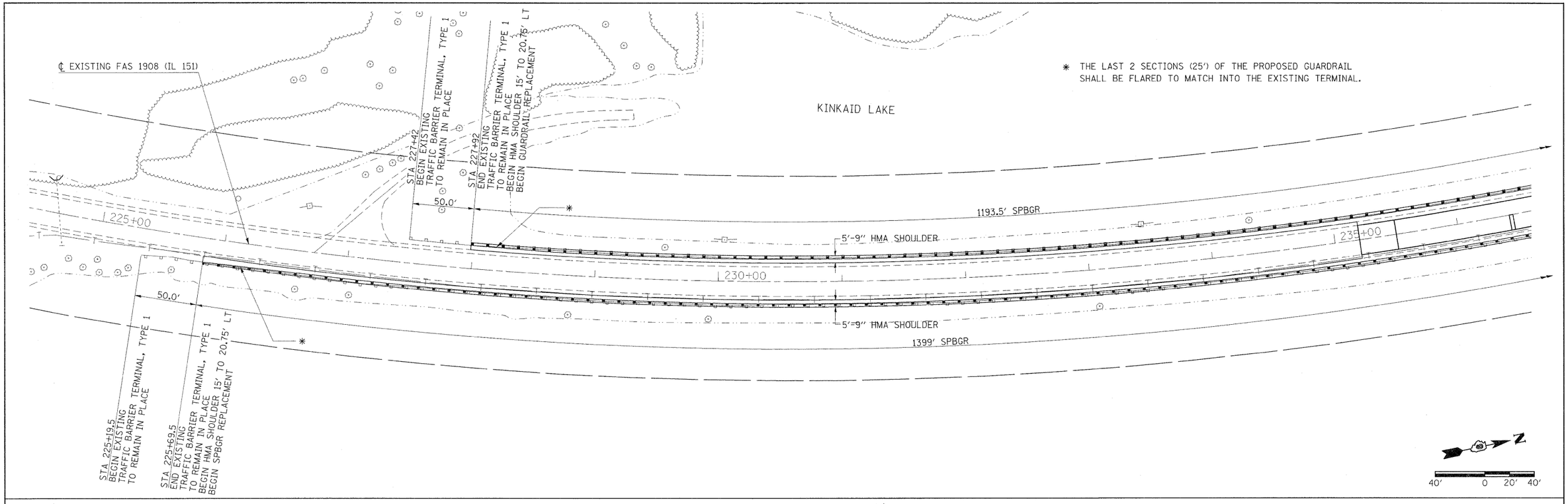
	PLOT DATE = 12/10/2010	DATE -	REVISED -

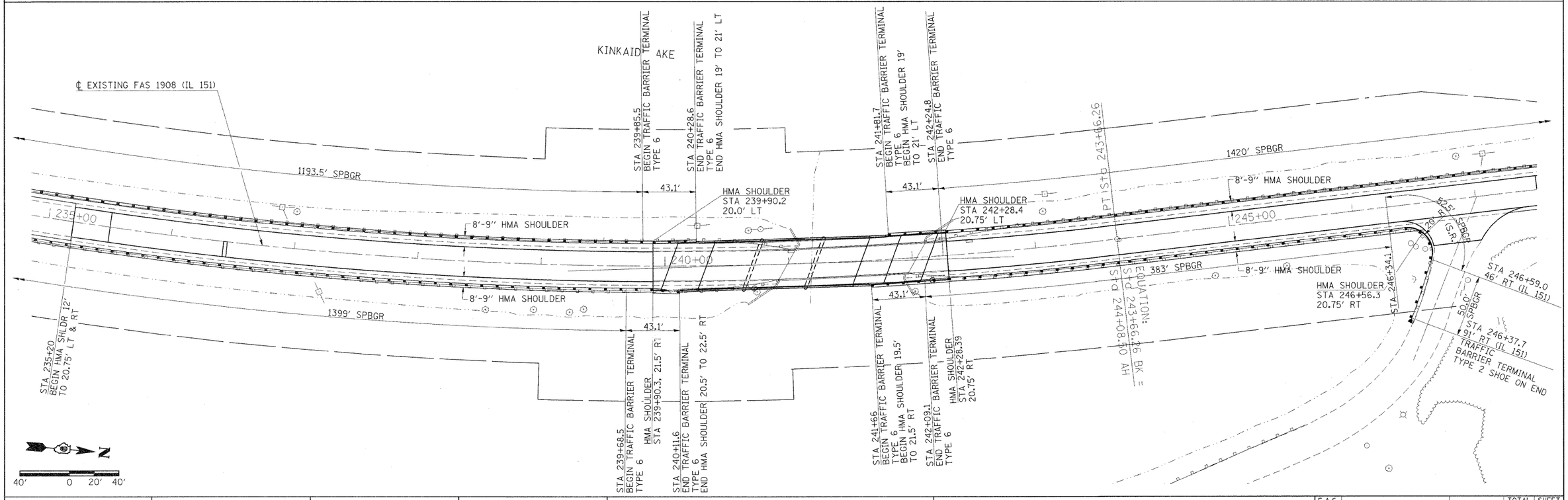
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN

SCALE: 1″=40′ | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	10
		CONTRACT NO. 98898		
		ILLINOIS	FED. AID PROJECT	





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	PLOT DATE = 12/10/2010	DATE -	REVISED -

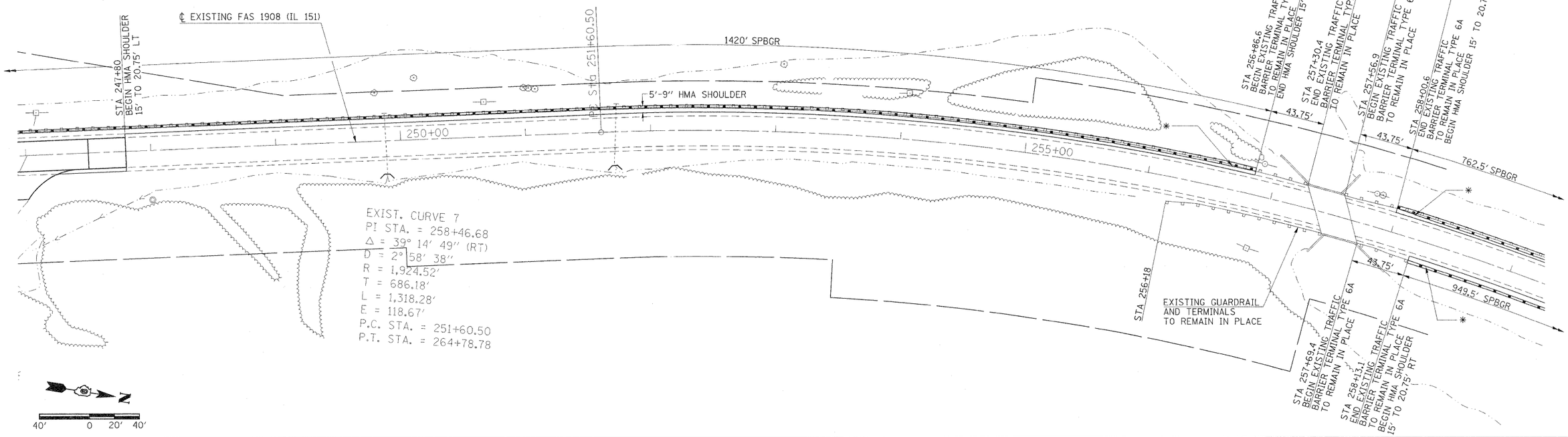
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

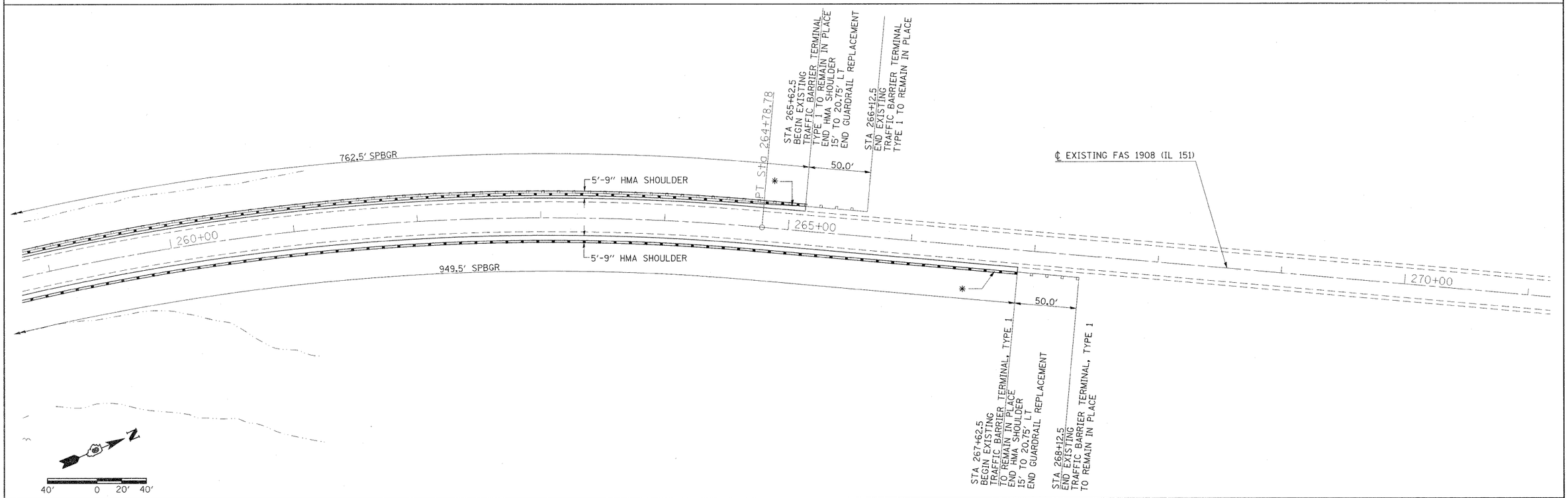
HMA SHOULDER AND GUARDRAIL LAYOUT

SCALE: 1"=40' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	11
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			

* THE LAST 2 SECTIONS (25') OF THE PROPOSED GUARDRAIL SHALL BE FLARED TO MATCH INTO THE EXISTING TERMINAL.





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	PLOT DATE = 12/10/2010	DATE -	REVISED -

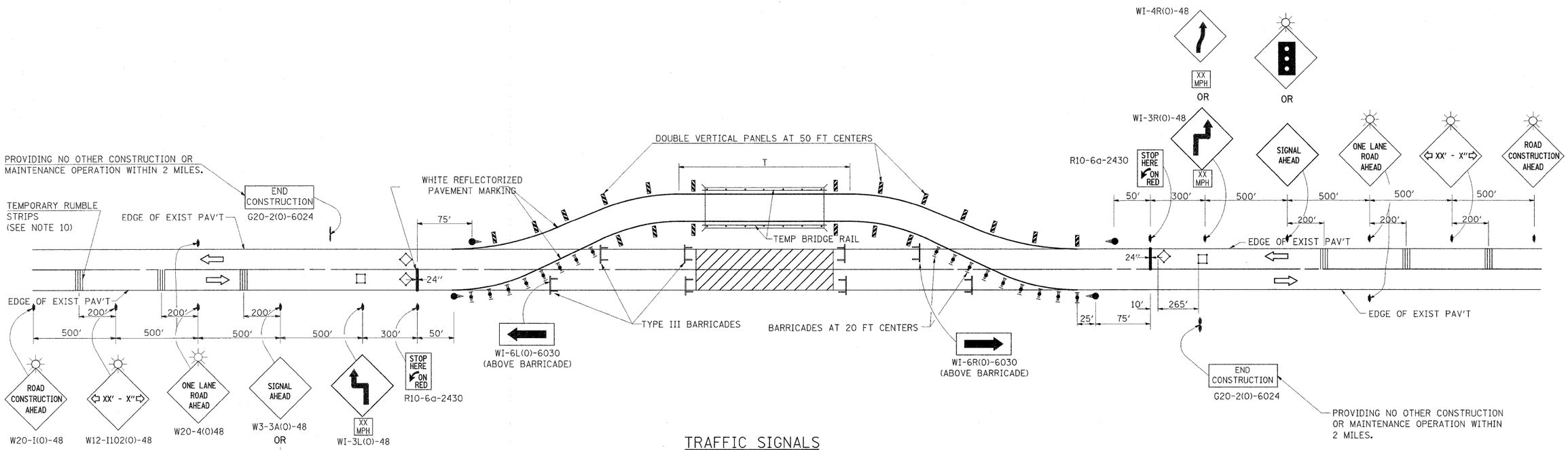
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HMA SHOULDER AND GUARDRAIL LAYOUT

SCALE: 1"=40' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	12
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		

TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TO BE USED WITH ONE LANE DETOUR



TRAFFIC SIGNALS

SEQUENCE OF OPERATIONS							
PHASE		A			B		
INTERVAL		1	2	3	4	5	6
NORTH BOUND EASTBOUND	OR	G	Y	R	R	R	R
SOUTHBOUND WESTBOUND	OR	R	R	R	G	Y	R

SYMBOLS

- INDUCTION LOOP DETECTOR
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- BARRICADE OR DRUM WITH STEADY BURNING LIGHT
- DOUBLE VERTICAL PANEL
- TRAFFIC SIGNAL
- FLASHING BEACON
- TYPE III BARRICADE

TYPICAL APPLICATION

BRIDGE CONSTRUCTION

CULVERT CONSTRUCTION

TWO-LANE, TWO WAY TRAFFIC, RURAL TEMPORARY ONE LANE RUNAROUND DAY OR NIGHT OPERATIONS.

WHERE, AT ANY TIME, ANY VEHICLE, EQUIPMENT, MEN OR THEIR ACTIVITIES REQUIRE THE CLOSURE OF BOTH LANES AND A TEMPORARY ONE LANE RUNAROUND IS CONSTRUCTED.

GENERAL NOTES

1. THE ENGINEER MUST BE NOTIFIED AT LEAST 72 HOURS PRIOR TO PLACING THE TEMPORARY SIGNALS IN OPERATION SO THAT ARRANGEMENTS CAN BE MADE TO INSPECT THE INSTALLATION AND SET THE TIMING OF THE SIGNALS.
2. BARRIER WALL GUARDRAIL MARKKERS SHALL BE ATTACHED TO THE TEMPORARY BRIDGE RAIL AT 25 FOOT CENTERS. SEE STANDARDS 704001 AND 635011.
3. ALL BARRICADE LIGHTS SHALL BE BIDIRECTIONAL.
4. ON PAVED RUNAROUNDS, REFLECTIVE EDGE LINES SHALL BE USED WHEN THE CLOSURE TIME EXCEEDS FOUR DAYS OR WHEN THE NORMAL POSTED SPEED OUTSIDE THE AREA OF OPERATIONS EXCEEDS 50 MILES PER HOUR. REFLECTORIZED PAVEMENT MARKING TAPE SHALL BE USED FOR MARKING THE EDGE LINES ON THE EXISTING PAVEMENT. EITHER TAPE OR REFLECTORIZED PAVEMENT MARKING PAINT MAY BE USED FOR MARKINGS ON THE PAVED RUN-AROUNDS. RAISED REFLECTIVE PAVEMENT MARKERS AT 25 FT CENTERS MAY BE USED IN LIEU OF TAPE OR PAINT WHERE THE PAVEMENT MARKING IS TO BE PLACED ADJACENT TO BARRICADES OR VERTICAL PANELS.
5. THE EXISTING CENTERLINE AND EDGE LINE MARKINGS WHICH CONFLICT WITH THE DETOUR TRAFFIC PATTERN SHALL BE REMOVED AS SOON AS TRAFFIC IS DIRECTED TO THE DETOUR, AND REPLACED WITH TEMPORARY OR PERMA-NENT PAVEMENT MARKING AS SOON AS THE HIGHWAY IS REOPENED.
6. A CURVE SIGN WILL BE REQUIRED AT THE EXIT END OF THE RUNAROUNDS IF (T) IS EQUAL TO OR GREATER THAN 1,000 FEET.
7. THE ADVISORY SAFE SPEED TO BE SHOWN BELOW THE REVERSE CURVE (TURN) SIGNS SHALL BE DETERMINED AT THE SIGHT AND APPROVED BY THE ENGINEER.
8. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
9. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT THE FIELD CONDITIONS.
10. TEMPORARY RUMBLE STRIPS SHALL BE INSTALLED WHERE SHOWN, WHEN REQUIRED. THE COST SHALL BE INCLUDED IN PRICE FOR TRAFFIC CONTROL AND PROTECTION, (SPECIAL)- LOCATION 1 - EACH.
11. THE SIGNAL INSTALLATION SHALL MEET THE REQUIREMENTS OF ARTICLE 701.18(b)

REVISIONS

REDRAWN	9-20-93
REVISED	8-23-94
REVISED	2-28-97
REVISED	7-10-01
REVISED	01-09-07
REVISED	05-06-08

STD. 9-33

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		DATE -	REVISED -

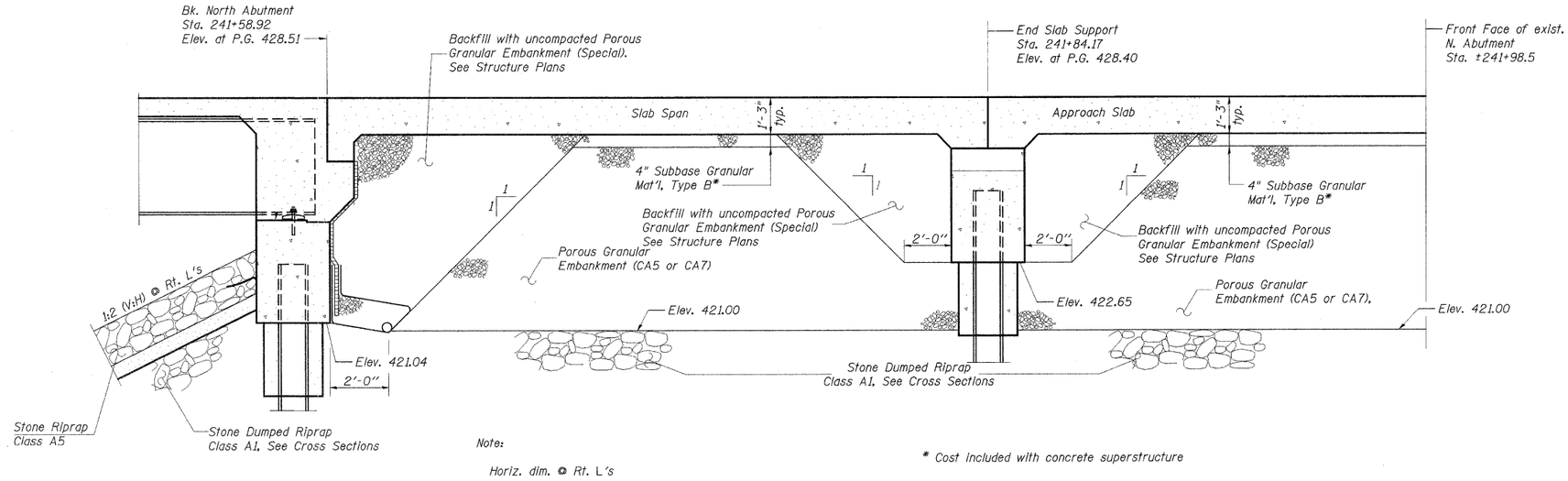
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL:
TRAFFIC CONTROL AND PROTECTION (SPECIAL)- LOCATION 1

SHEET NO. OF SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	13
		CONTRACT NO. 98898		
		ILLINOIS	FED. AID PROJECT	

PGE DETAIL



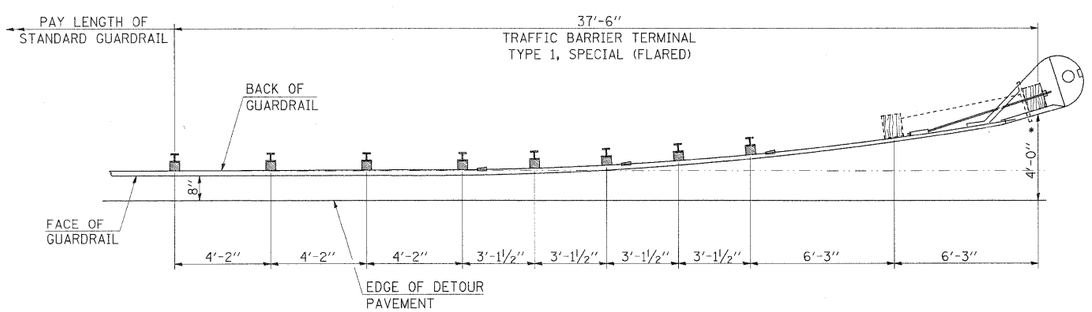
Note:

Horiz. dim. @ Rt. L's

* Cost included with concrete superstructure

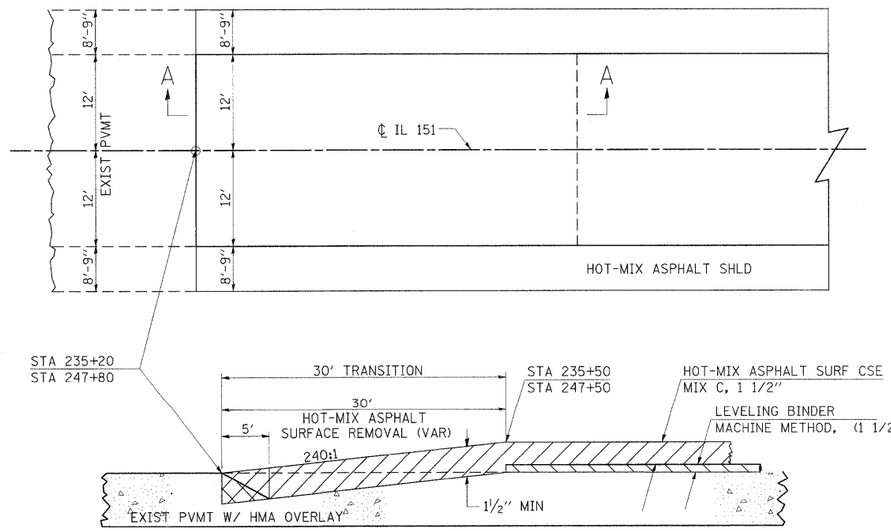
TEMPORARY TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED)

PLAN VIEW



* POST OFFSET DIMENSION GIVEN TO THE CENTER OF THE TRAFFIC FACE OF THE BLOCKOUT.

BUTT JOINT



SECTION A-A

5' TEMPORARY RAMP AT 40:1

REVISIONS

DRAWN	10-17-90
REVISED	01-11-07
REVISED	3-25-08
REVISED	

STD. 9-86

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	PLOT DATE = 12/10/2010	DATE -	REVISED -

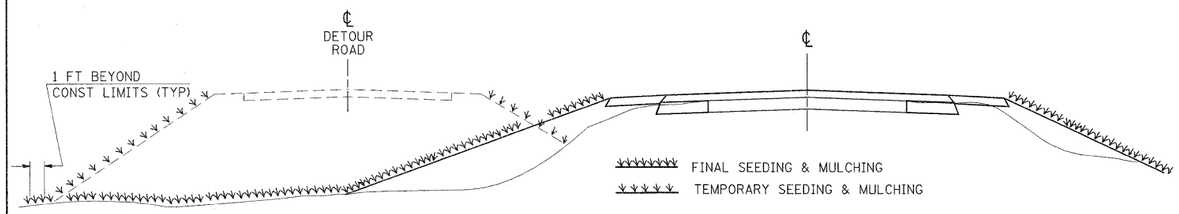
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS: BUTT JOINT; TBT TYPE 1 SP (FLARED); PGE

SHEET NO. OF SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13BI-2	JACKSON	71	14
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		

SEEDING & MULCHING
(WITH DETOUR ROAD)



GENERAL NOTES

THE DETOUR SLOPES SHALL BE SEEDED IMMEDIATELY UPON COMPLETION OF THE STAGE I GRADING.

IN GENERAL, ALL EARTH SURFACES DISTURBED DURING CONSTRUCTION OPERATIONS SHALL BE SEEDED UPON COMPLETION OF ALL GRADING OPERATIONS.

FERTILIZER NUTRIENTS SHALL BE APPLIED TO ALL SEEDED AREAS. LIMESTONE SHALL BE APPLIED TO ALL AREAS OF FINAL SEEDING.

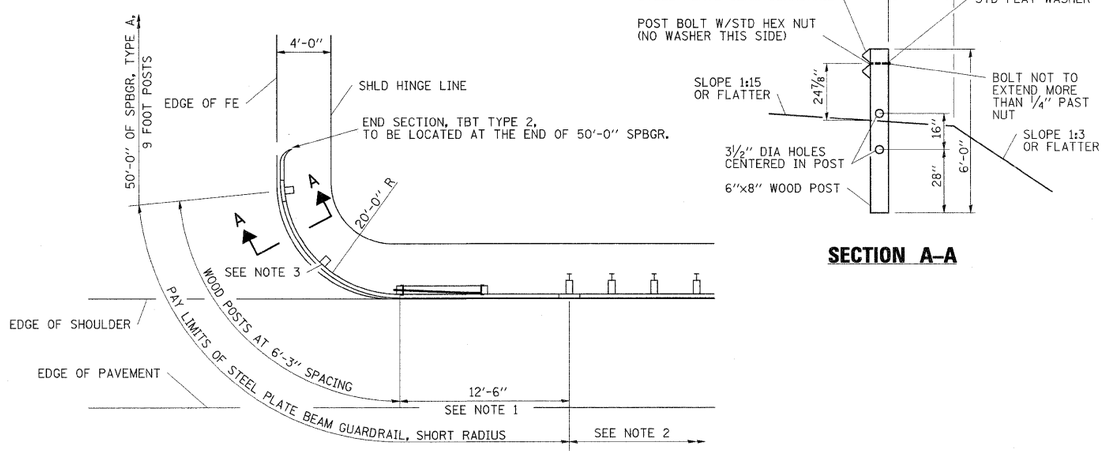
THE RATES OF APPLICATION OF SEED, FERTILIZER, MULCH AND LIMESTONE, THE METHOD OF MULCHING AND THE SEED MIXTURES SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS.

SECTIONS 250 AND 251 OF THE STANDARD SPECIFICATIONS SHALL GOVERN THIS WORK EXCEPT AS SPECIFIED HEREIN OR AS NOTED IN THE SPECIAL PROVISIONS.

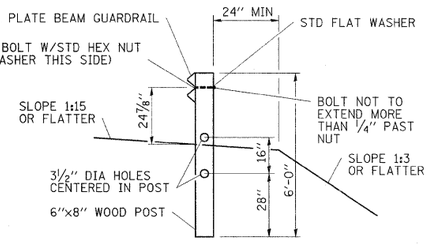
STD. 9-13

REVISIONS	
REDRAWN	2-15-89
REVISED	8-15-94
REVISED	3-27-08
REVISED	

SHORT RADIUS GUARDRAIL DETAILS



PLAN

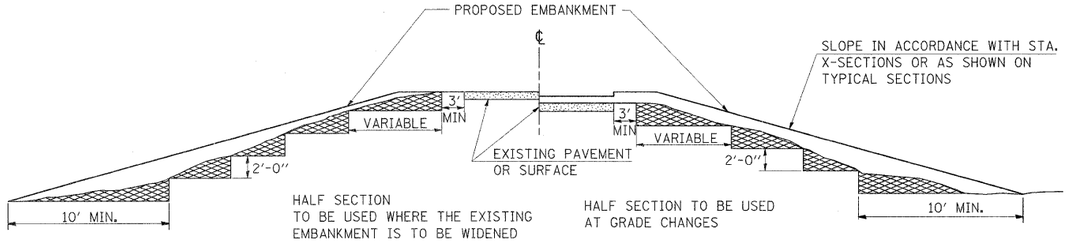


SECTION A-A

NOTES

1. CONSTRUCT ACCORDING TO STANDARD 631011 FOR TRAFFIC BARRIER TERMINAL TYPE 2, EXCEPT DELETE END SECTION AND SPLICE INTO RADIUS GUARDRAIL.
2. STEEL PLATE BEAM GUARDRAIL TYPE A, TYPE B, OR TRAFFIC BARRIER TERMINAL AS SPECIFIED.
3. THE RAIL IS NOT BOLTED TO THE POST LOCATED AT THE MIDPOINT OF THE CURVE.

TYPICAL CROSS SECTION SHOWING STEP CONSTRUCTION ON EXISTING FILL

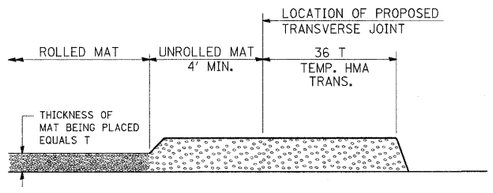


MATERIAL TO BE REMOVED AND REPLACED IN THE EMBANKMENT IN ACCORDANCE WITH ART. 205.04 OF THE STANDARD SPECIFICATION. COST TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED BECAUSE OF THIS WORK.

STD. 9-16

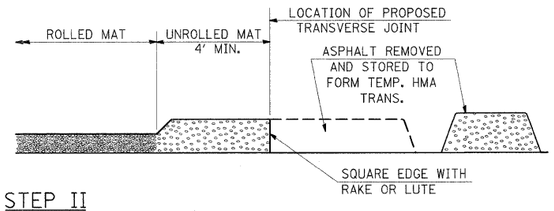
REVISIONS	
REDRAWN	2-15-89
REVISED	8-15-94
CHECKED	6-3-99
RESIZED	5-7-08

TEMPORARY HOT-MIX ASPHALT TRANSITIONS



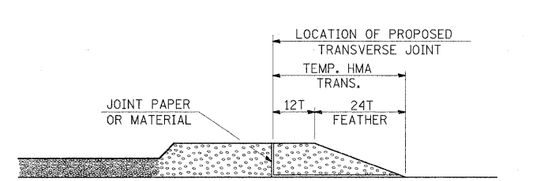
STEP I

1. PLACE HOT-MIX ASPHALT MAT, LENGTH 36 TIMES THE THICKNESS OF THE MAT BEING PLACED PAST THE PROPOSED TRANSVERSE JOINT LOCATION USING NORMAL OPERATING PROCEDURES.
2. EXTREME CARE SHOULD BE TAKEN TO MAINTAIN ENOUGH MATERIAL IN FRONT OF THE SCREED TO MAINTAIN REQUIRED PAVING DEPTH.



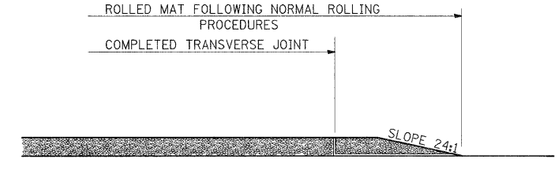
STEP II

1. MOVE THE PAVER OUT OF THE WAY AND REMOVE THE ASPHALT FROM THE AREA OF THE PROPOSED TEMPORARY HOT-MIX ASPHALT TRANSITION.
2. SQUARE UP THE END OF THE MAT WITH A RAKE OR LUTE.
3. NOTE THAT THE MAT WITHIN 4' OF THE END OF JOINT IS NOT TO BE ROLLED AT THIS TIME.



STEP III

1. JOINT PAPER OR OTHER PRESELECTED JOINT MATERIAL IS THEN PLACED IN THE CLEARED AREA AND THE EXCESS ASPHALT USED TO HAND FORM A TRANSITION TO THE DIMENSIONS SHOWN ABOVE.
2. NOTE THAT IN CONSTRUCTING THE TRANSITION, THE MAT DEPTH IS CONTINUED AS PART OF THE TRANSITION BEFORE FORMING THE FEATHER.



STEP IV

1. COMPLETE TEMPORARY TRANSITION BY ROLLING.
2. TO RESUME PAVING, AT THE JOINT, REMOVE TEMPORARY TRANSITION AND DISPOSE OF THE MATERIAL ACCORDING TO ART. 202.03 OF THE STD. SPECS. (COST INCLUDED IN THE CONTRACT).
3. CONSTRUCTING THE TEMPORARY TRANSITIONS WILL NOT BE PAID FOR SEPARATELY IN ACCORDANCE WITH ARTICLE 406.14 OF THE STANDARD SPECIFICATIONS.

STD. 9-26

REVISIONS	
REDRAWN	2-15-89
REVISED	8-15-94
REVISED	01-09-07
RESIZED	05-8-08

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS: SEEDING & MULCHING; STEP CONSTRUCTION ON EXISTING FILL; TEMP HOT-MIX ASPHALT TRANSITIONS; SHORT RADIUS GUARDRAIL

SHEET NO. OF SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13BI)-2	JACKSON	71	15
		CONTRACT NO. 98898		
		ILLINOIS FED. AID PROJECT		

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

430 425 420 415

426.11

EXIST ROW AT 85' LT

EXIST ROW AT 80' RT

℄ TEL

235+50.00

PROPOSED PROJECT BEGINS AT STA 235+50

425.90

EXIST ROW AT 85' LT

EXIST ROW AT 80' RT

℄ TEL

235+00.00

425.72

EXIST ROW AT 85' LT

EXIST ROW AT 80' RT

℄ TEL

234+50.00

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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

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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGES I AND II

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 234+50.00 TO STA. 235+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	16
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

430 425 420 415

426.91

℄

EXIST ROW AT 85' LT

TEL

EXIST ROW AT 80' RT

237+00.00

426.63

236+50.00

426.37

236+00.00

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

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

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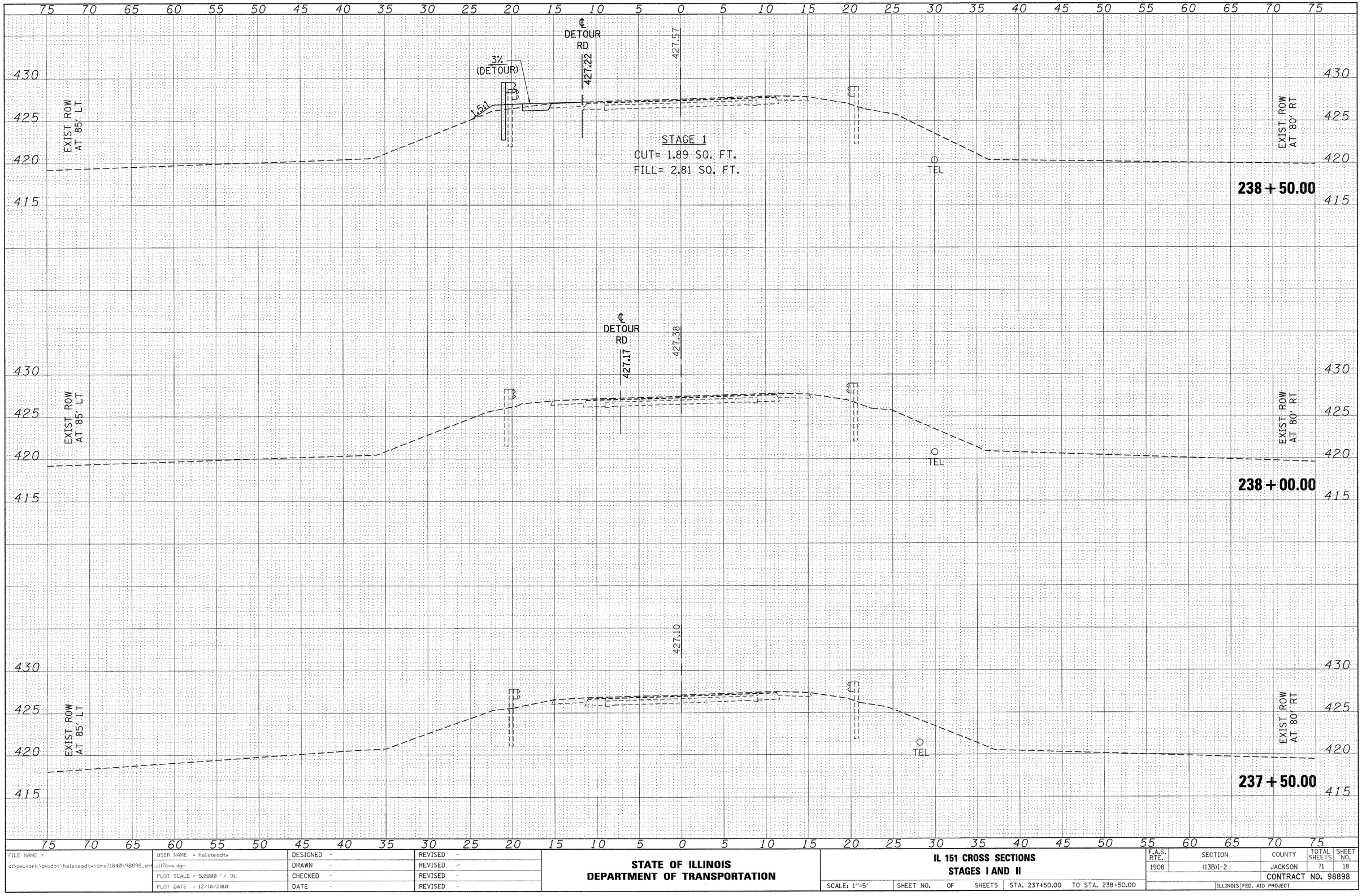
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGES I AND II

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 236+00.00 TO STA. 237+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	17
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		



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

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

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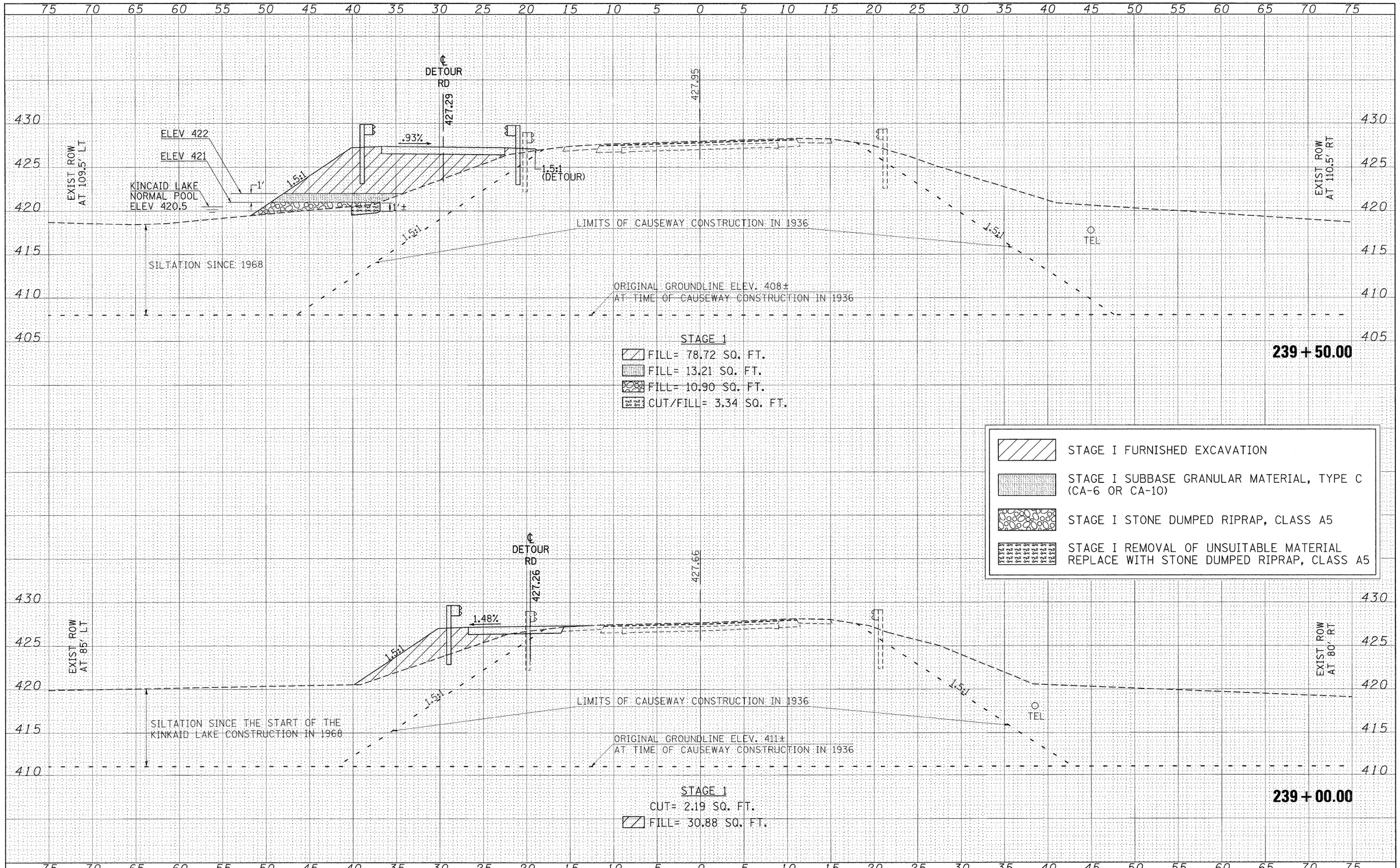
	PLOT DATE = 12/10/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGES I AND II

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 237+50.00 TO STA. 238+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	18
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		



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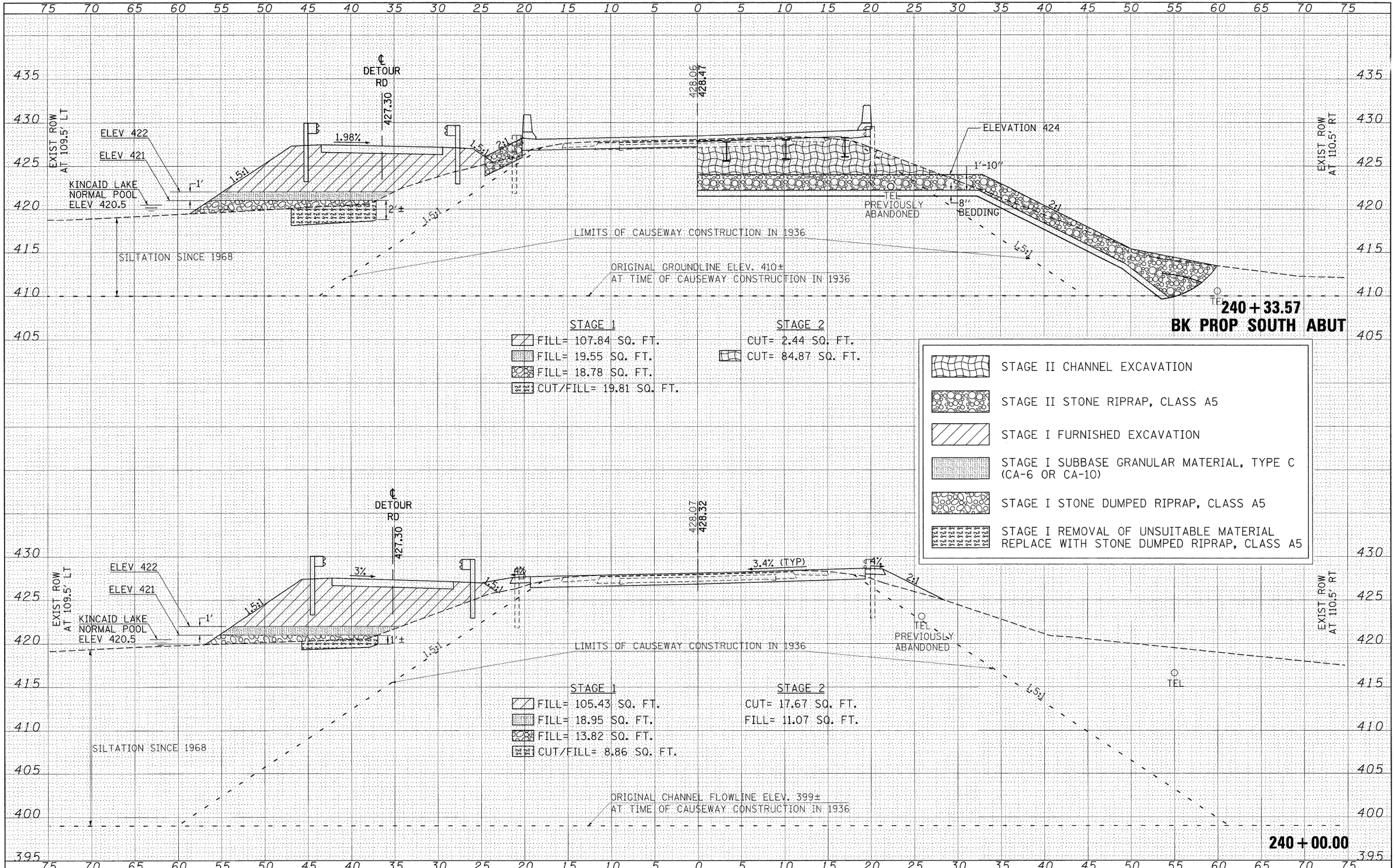
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGES I AND II

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 239+00.00 TO STA. 239+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	19
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			



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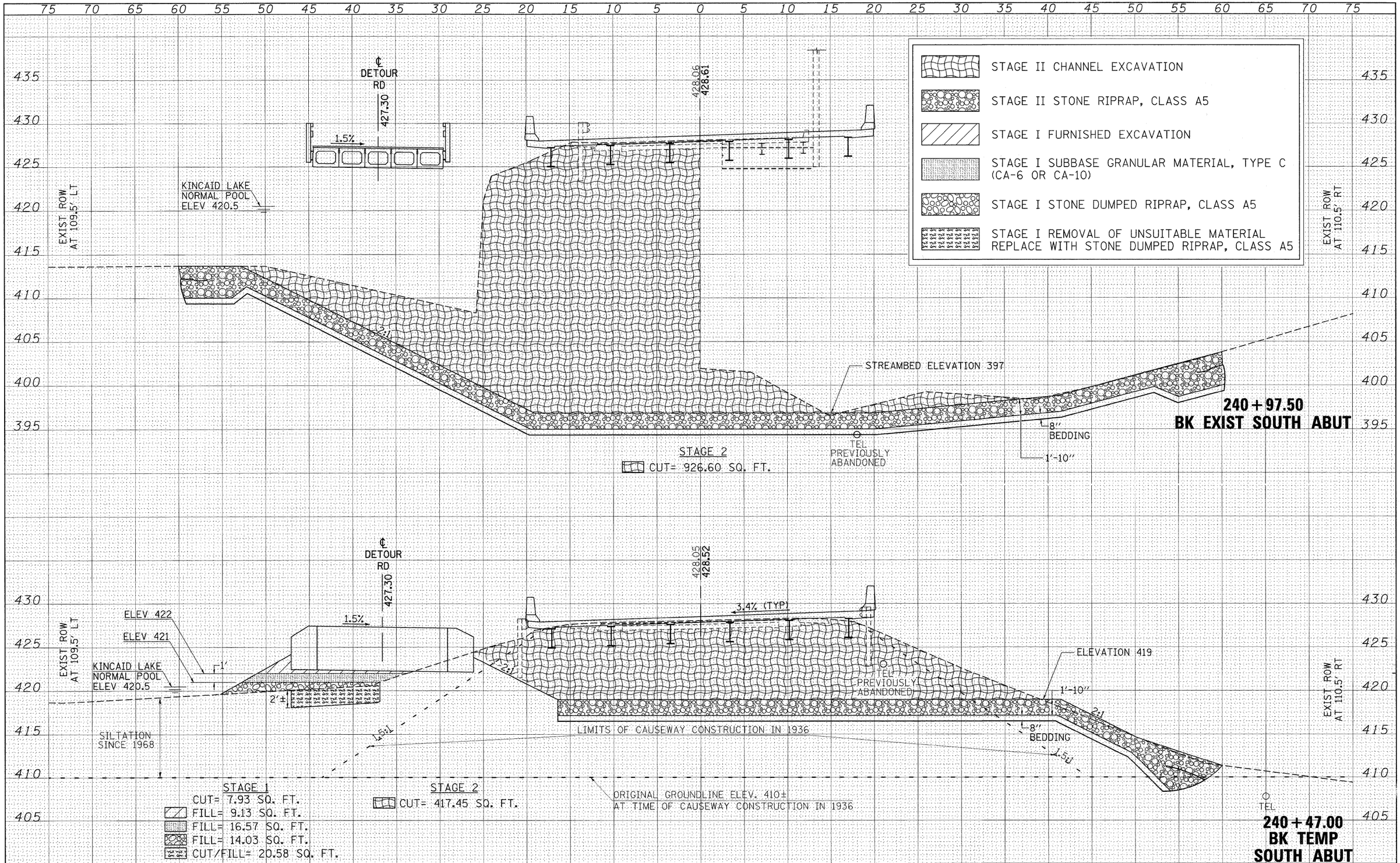
	PLOT DATE = 12/15/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGES I AND II

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 240+00.00 TO STA. 240+33.57

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	20
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			



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

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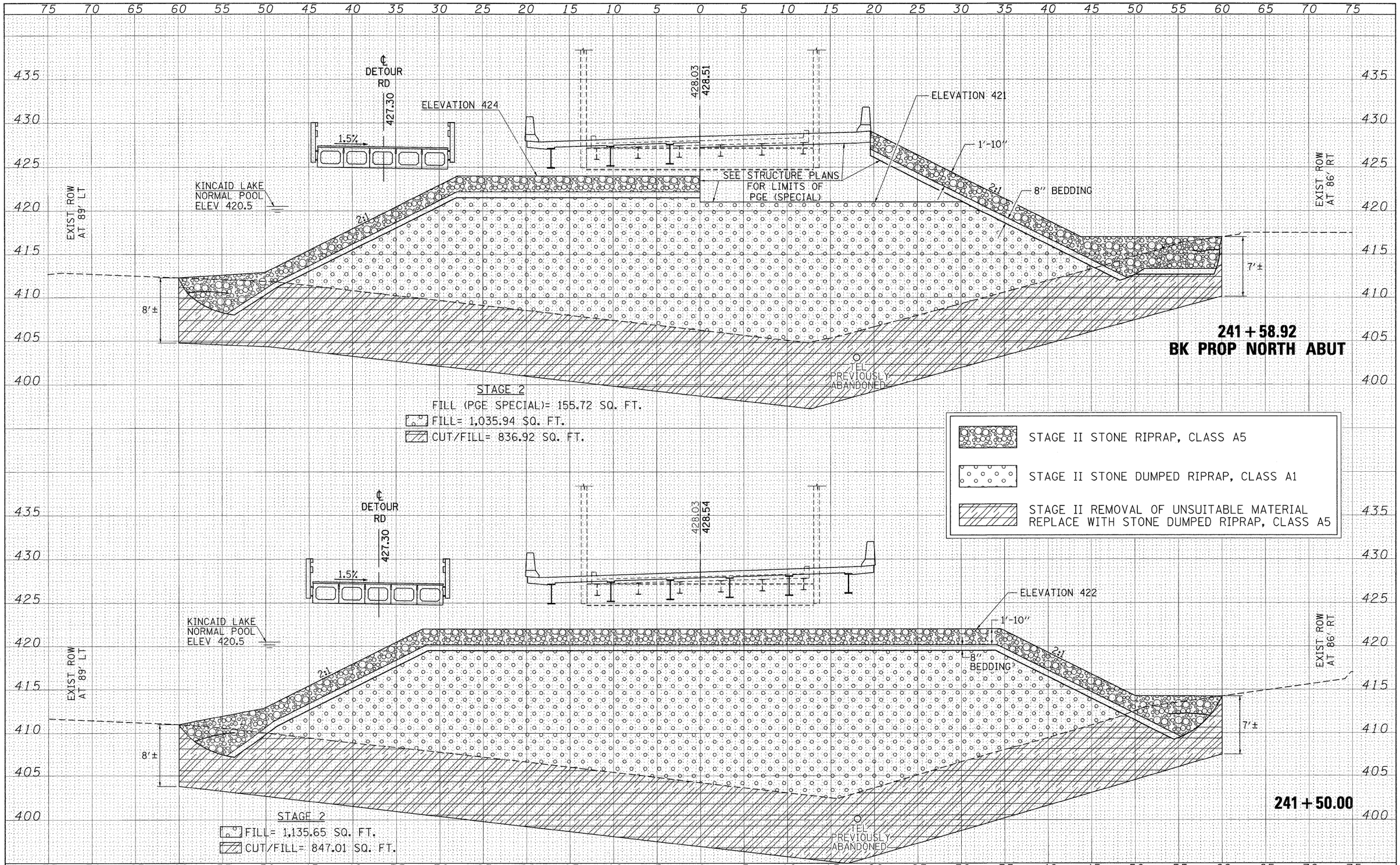
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGES I AND II

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 240+47.00 TO STA. 240+97.50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	21
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			



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

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

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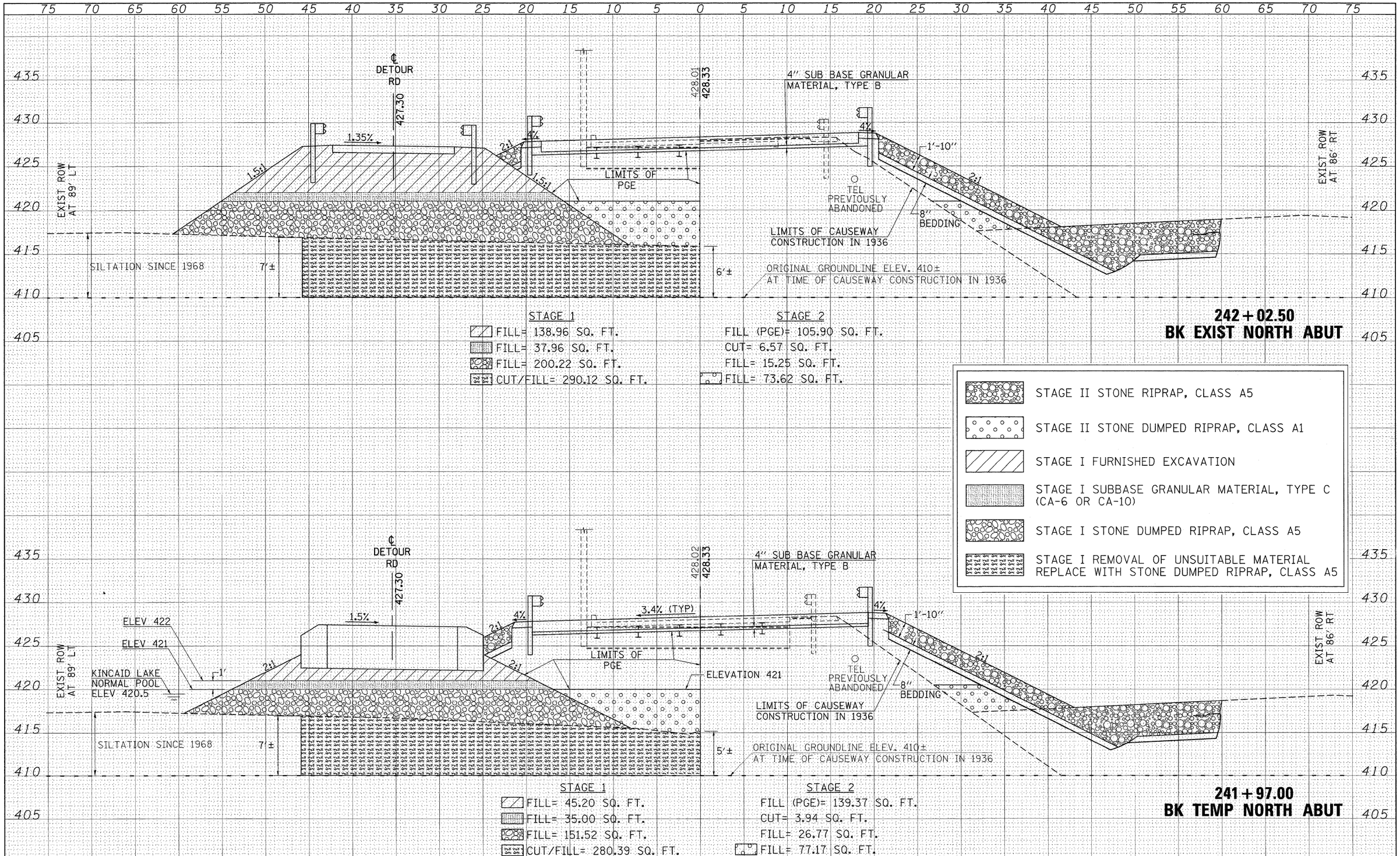
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGES I AND II

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 241+50.00 TO STA. 241+58.92

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	22
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY / ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — NOTE BOOK — NO. — BY — DATE

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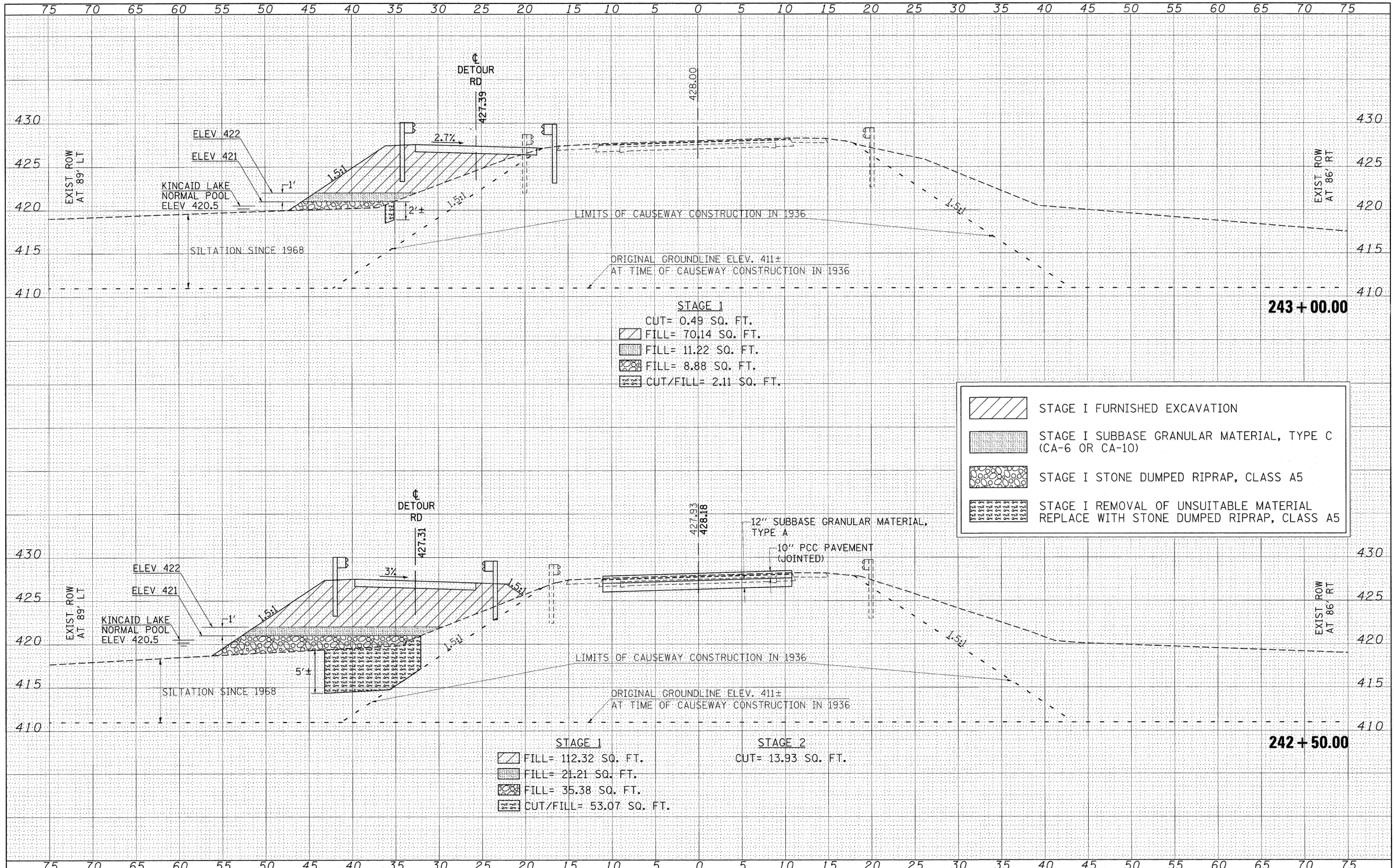
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGES I AND II

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 241+97.00 TO STA. 242+02.50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	23
		CONTRACT NO. 98898		
		ILLINOIS FED. AID PROJECT		



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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGES I AND II

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 242+50.00 TO STA. 243+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	24
		CONTRACT NO. 98898		
		ILLINOIS FED. AID PROJECT		

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

427.97

EXIST ROW AT 89' LT

EXIST ROW AT 86' RT

TEL

245 + 50.00

428.05

EXIST ROW AT 89' LT

EXIST ROW AT 86' RT

TEL

245 + 00.00

℄ DETOUR RD

427.84

428.03

3% (DETOUR)

EXIST ROW AT 89' LT

EXIST ROW AT 86' RT

STAGE 1
FILL= 0.90 SQ. FT.

244 + 50.00

TEL

STATION EQUATION
243 + 66.26 BK = 244 + 08.50 AH

℄ DETOUR RD

427.55

427.98

1.9% (DETOUR)

1.5:1

EXIST ROW AT 89' LT

EXIST ROW AT 86' RT

STAGE 1
CUT= 1.95 SQ. FT.
FILL= 18.61 SQ. FT.

243 + 50.00

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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

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

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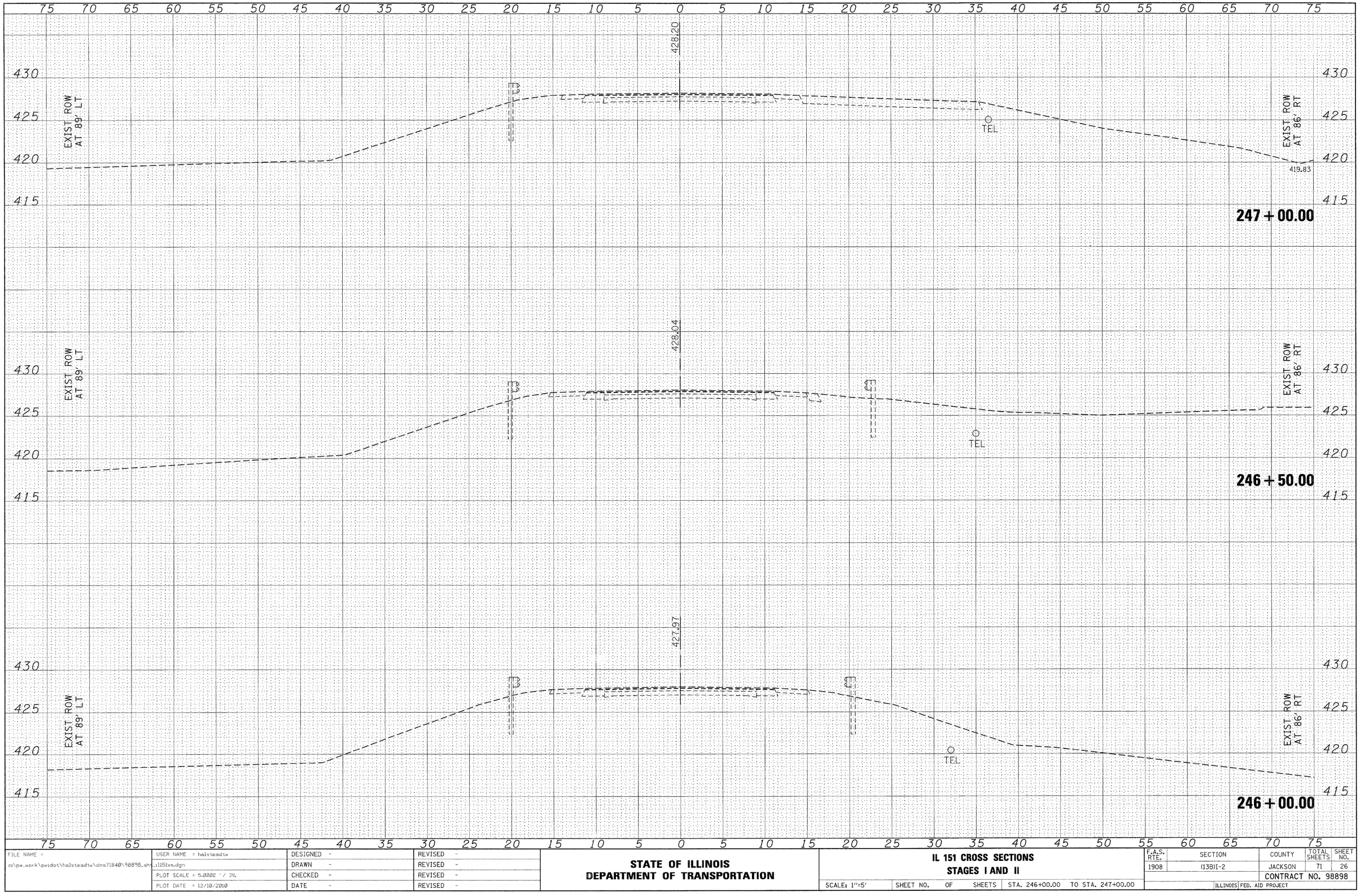
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGES I AND II

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 243+50.00 TO STA. 245+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	25
		CONTRACT NO. 98898		
		ILLINOIS FED. AID PROJECT		



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

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

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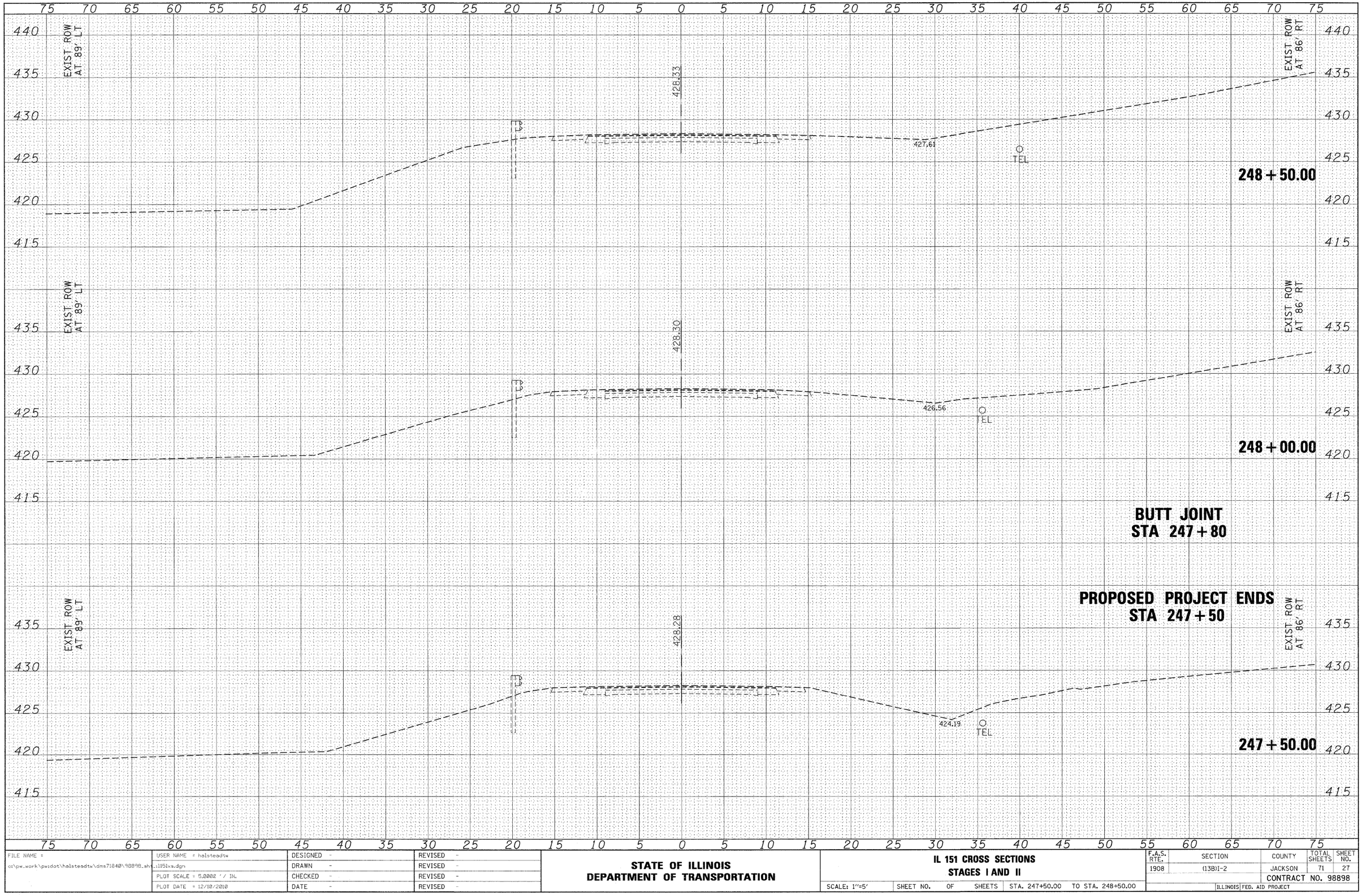
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGES I AND II

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 246+00.00 TO STA. 247+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	26
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		



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

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

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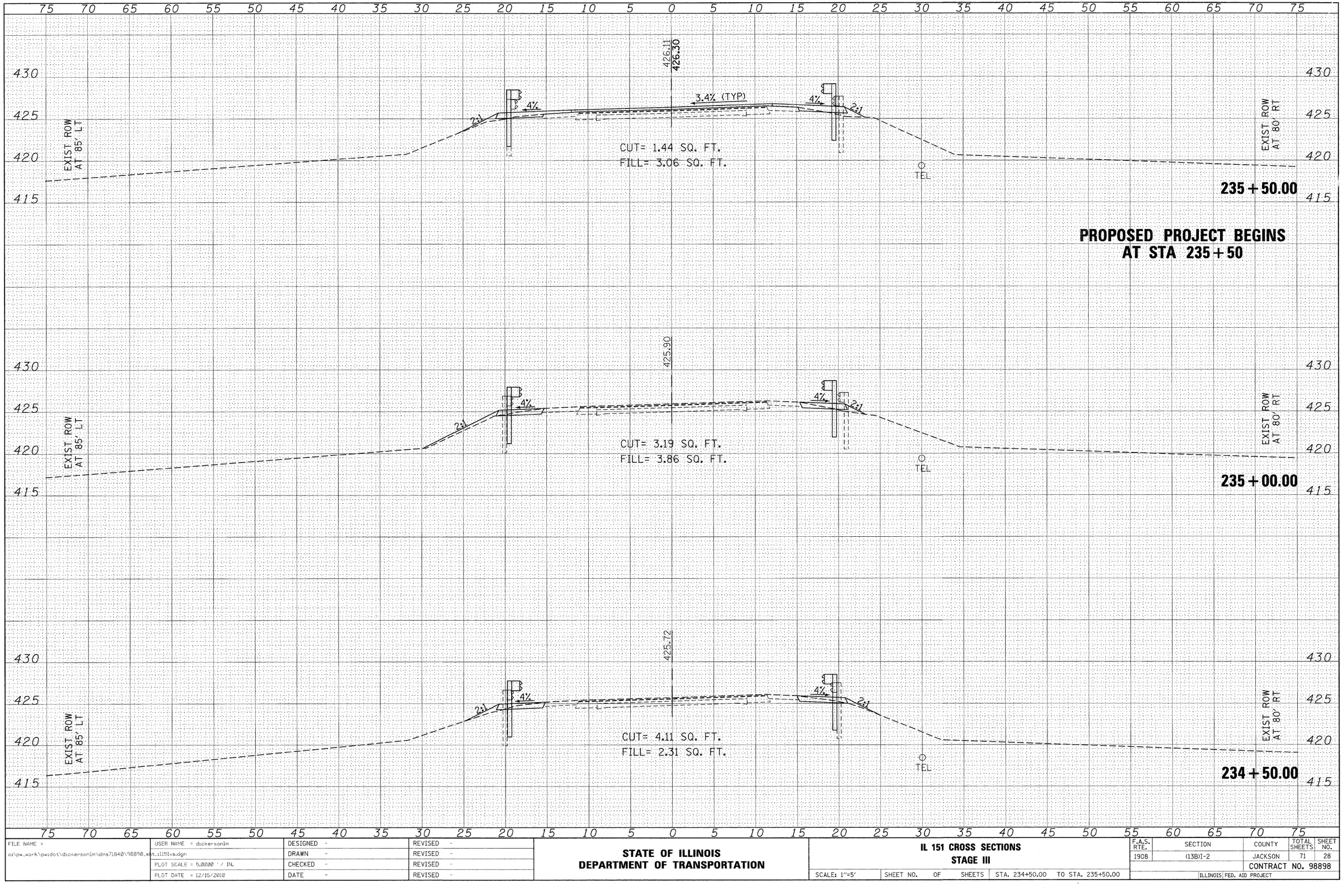
	PLOT DATE = 12/10/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGES I AND II

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 247+50.00 TO STA. 248+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	27
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS		
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ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS		
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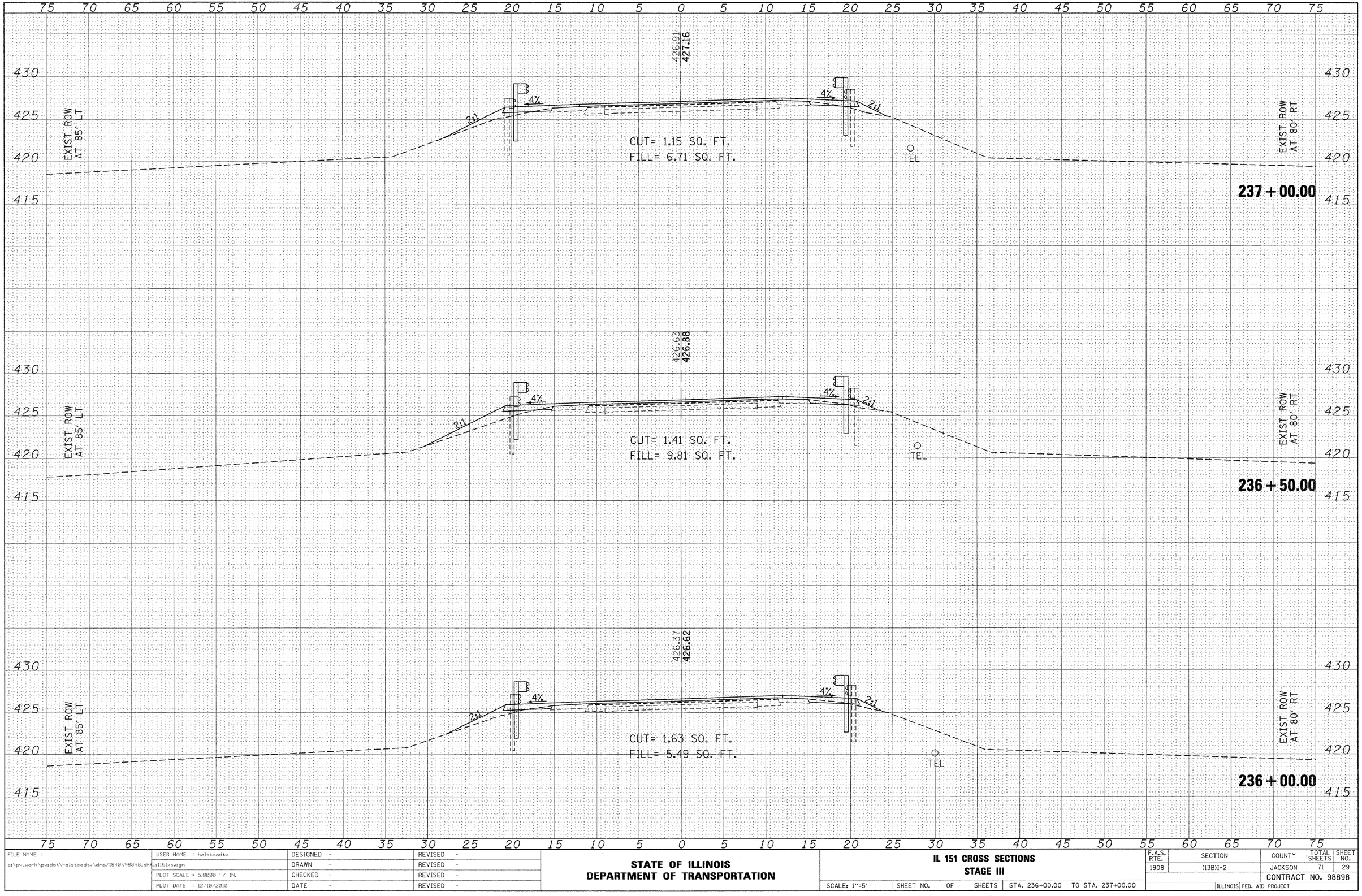
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGE III

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 234+50.00 TO STA. 235+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	28
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY

NO.	NOTE BOOK	SURVEYED	BY
		PLOTTED	
		TEMPLATE	
		AREAS	
		AREAS CHECKED	

DATE

ORIGINAL SURVEY

NO.	NOTE BOOK	SURVEYED	BY
		PLOTTED	
		TEMPLATE	
		AREAS	
		AREAS CHECKED	

DATE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGE III

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 236+00.00 TO STA. 237+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	29
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

430 425 420 415

427.57
427.82

EXIST ROW AT 85' LT

2:1 4% 4% 2:1

EXIST ROW AT 80' RT

TEL

CUT= 1.47 SQ. FT.
FILL= 3.67 SQ. FT.

238 + 50.00

427.38
427.63

EXIST ROW AT 85' LT

2:1 4% 4% 2:1

EXIST ROW AT 80' RT

TEL

CUT= 1.71 SQ. FT.
FILL= 4.68 SQ. FT.

238 + 00.00

427.10
427.35

EXIST ROW AT 85' LT

2:1 4% 4% 2:1

EXIST ROW AT 80' RT

TEL

CUT= 0.91 SQ. FT.
FILL= 5.71 SQ. FT.

237 + 50.00

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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

ORIGINAL SURVEY	BY	DATE
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NO.	PLOTTED	
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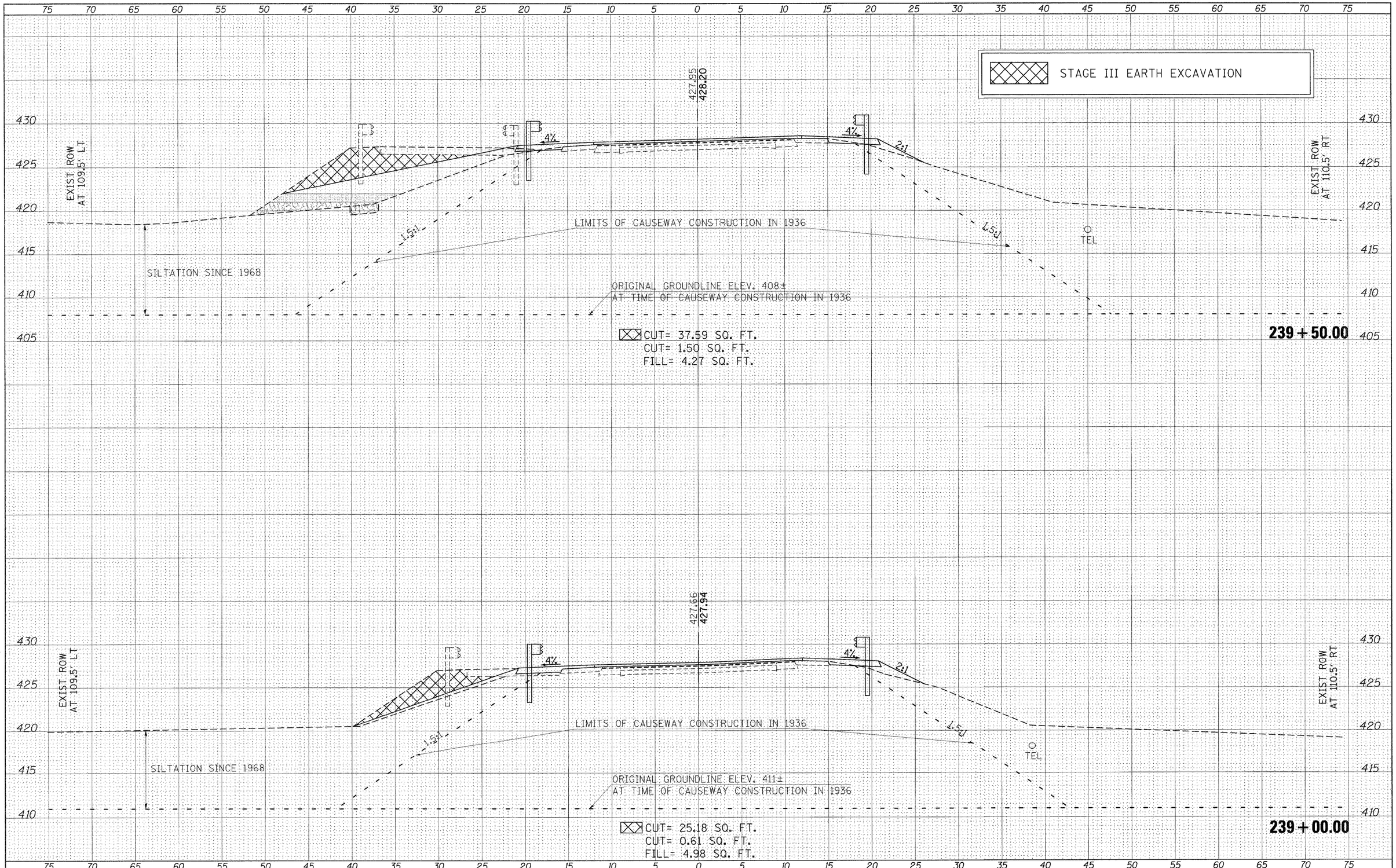
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGE III

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 237+50.00 TO STA. 238+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	30
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		



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NOTE BOOK	SURVEYED	
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	TEMPLATE	
	AREAS	
	AREAS CHECKED	

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NOTE BOOK	SURVEYED	
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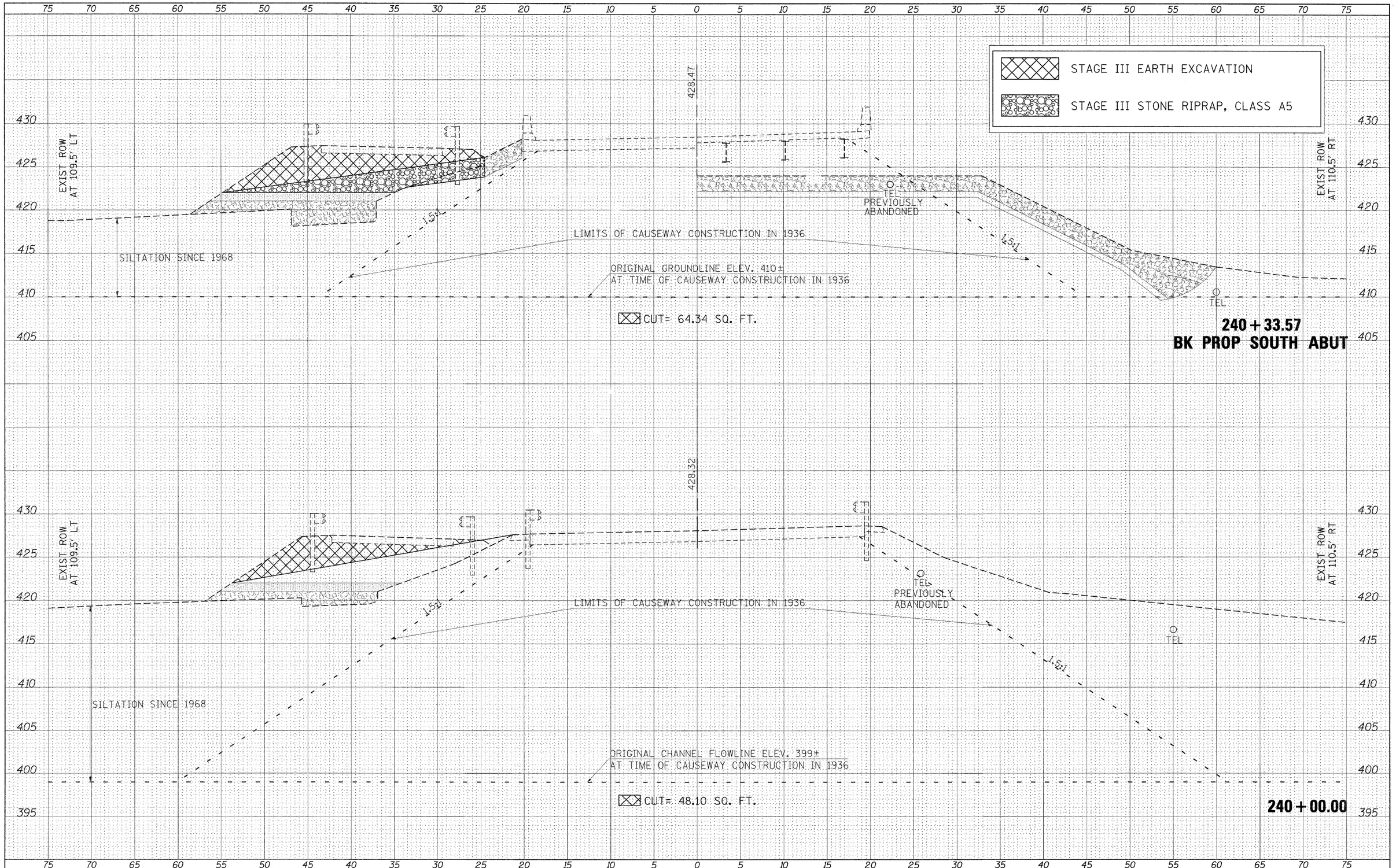
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGE III

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 239+00.00 TO STA. 239+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	31
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		



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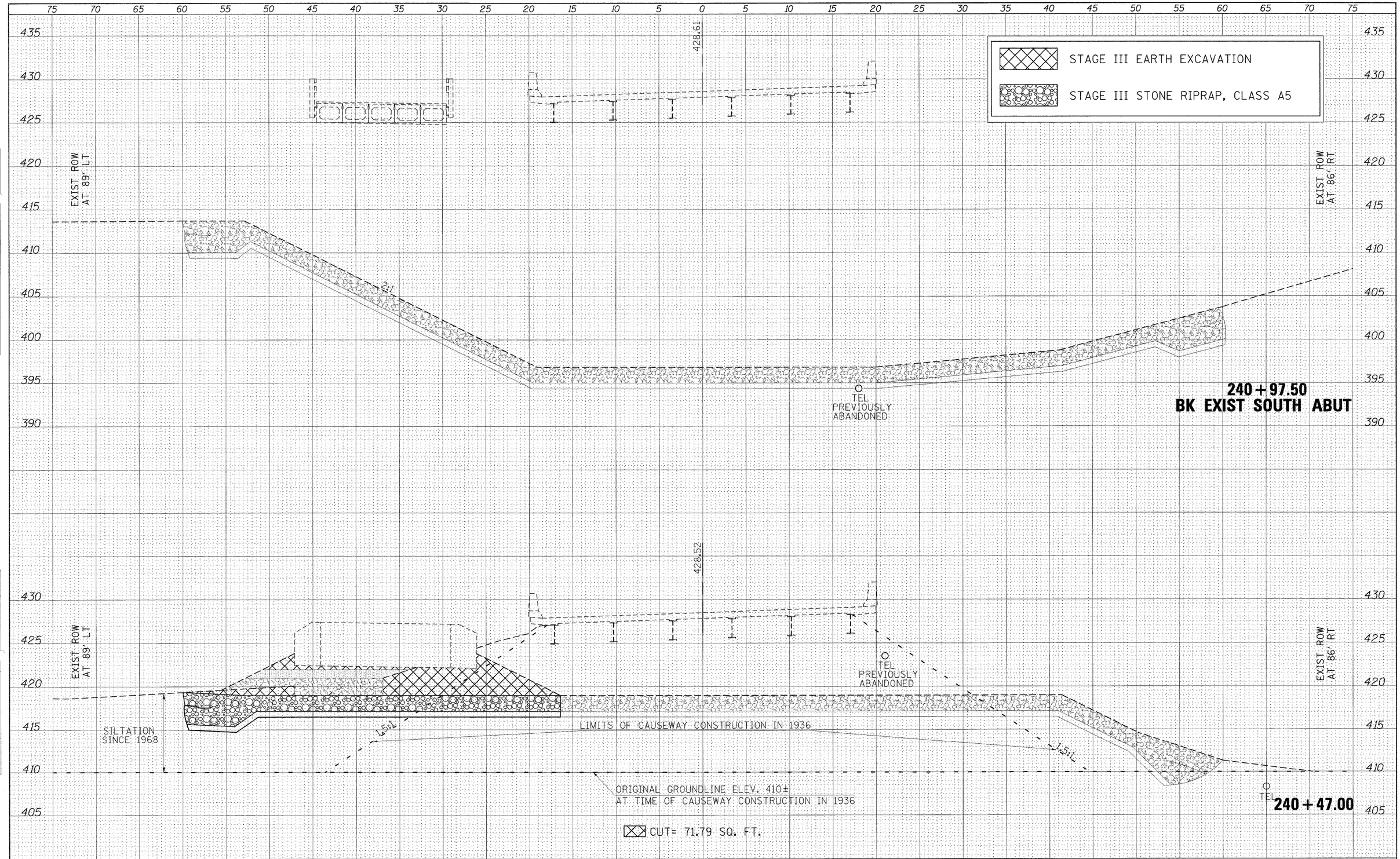
	PLOT DATE = 12/10/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGE III

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 240+00.00 TO STA. 240+33.57

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	32
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		



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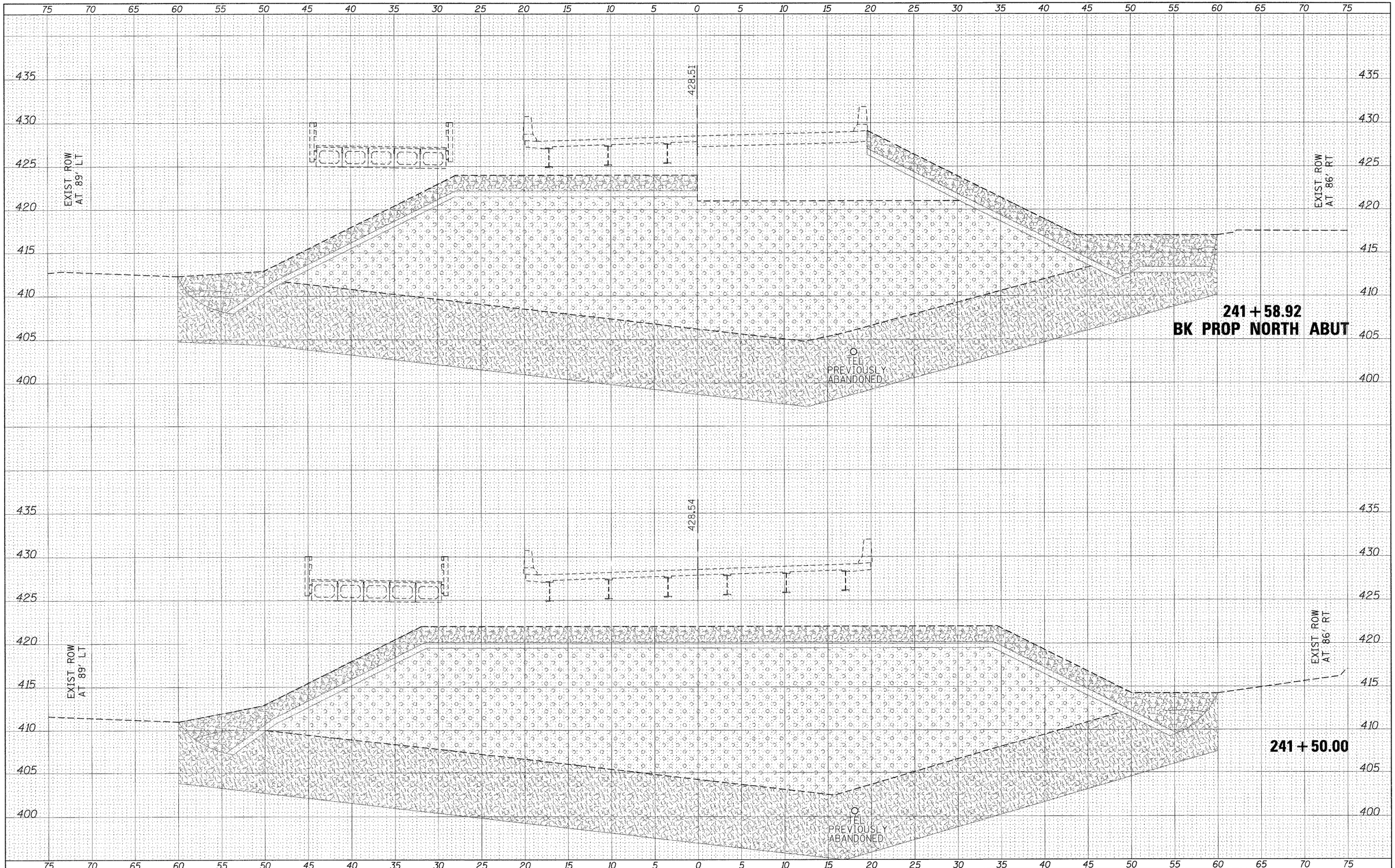
	PLOT DATE = 12/10/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGE III

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 240+47.00 TO STA. 240+97.50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	33
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY

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

ORIGINAL SURVEY

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

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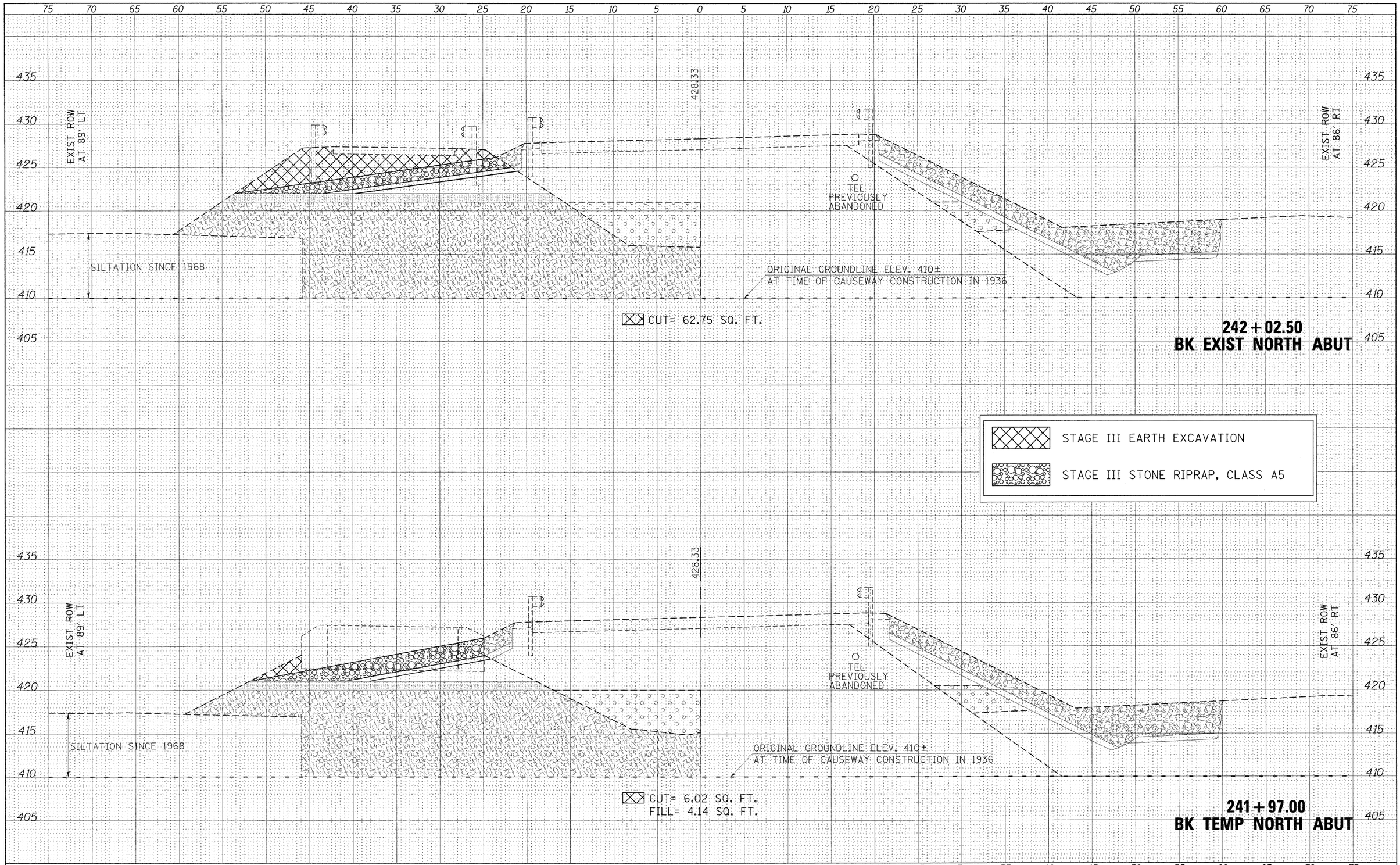
	PLOT DATE = 12/10/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGE III

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 241+50.00 TO STA. 241+58.92

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	34
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			



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

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	PLOT DATE = 12/10/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGE III

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 241+97.00 TO STA. 242+02.50

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	35
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		

STAGE III EARTH EXCAVATION

427.55 | 427.98 | 428.23

EXIST ROW AT 89' LT

4% | 4% | 2:1

EXIST ROW AT 86' RT

CUT= 13.30 SQ. FT.
CUT= 1.04 SQ. FT.
FILL= 5.23 SQ. FT.

243+50.00

428.00 | 428.25

EXIST ROW AT 89' LT

4% | 3.4% | 4% | 2:1

EXIST ROW AT 86' RT

LIMITS OF CAUSEWAY CONSTRUCTION IN 1936

SILTATION SINCE 1968

ORIGINAL GROUNDLINE ELEV. 411±
AT TIME OF CAUSEWAY CONSTRUCTION IN 1936

CUT= 32.98 SQ. FT.
CUT= 1.45 SQ. FT.
FILL= 6.07 SQ. FT.

243+00.00

427.18

EXIST ROW AT 89' LT

4% | 4% | 2:1

EXIST ROW AT 86' RT

LIMITS OF CAUSEWAY CONSTRUCTION IN 1936

SILTATION SINCE 1968

ORIGINAL GROUNDLINE ELEV. 411±
AT TIME OF CAUSEWAY CONSTRUCTION IN 1936

CUT= 44.97 SQ. FT.
CUT= 1.76 SQ. FT.
FILL= 6.94 SQ. FT.

242+50.00

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	PLOT DATE = 12/15/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGE III

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 242+50.00 TO STA. 243+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	36
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			

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

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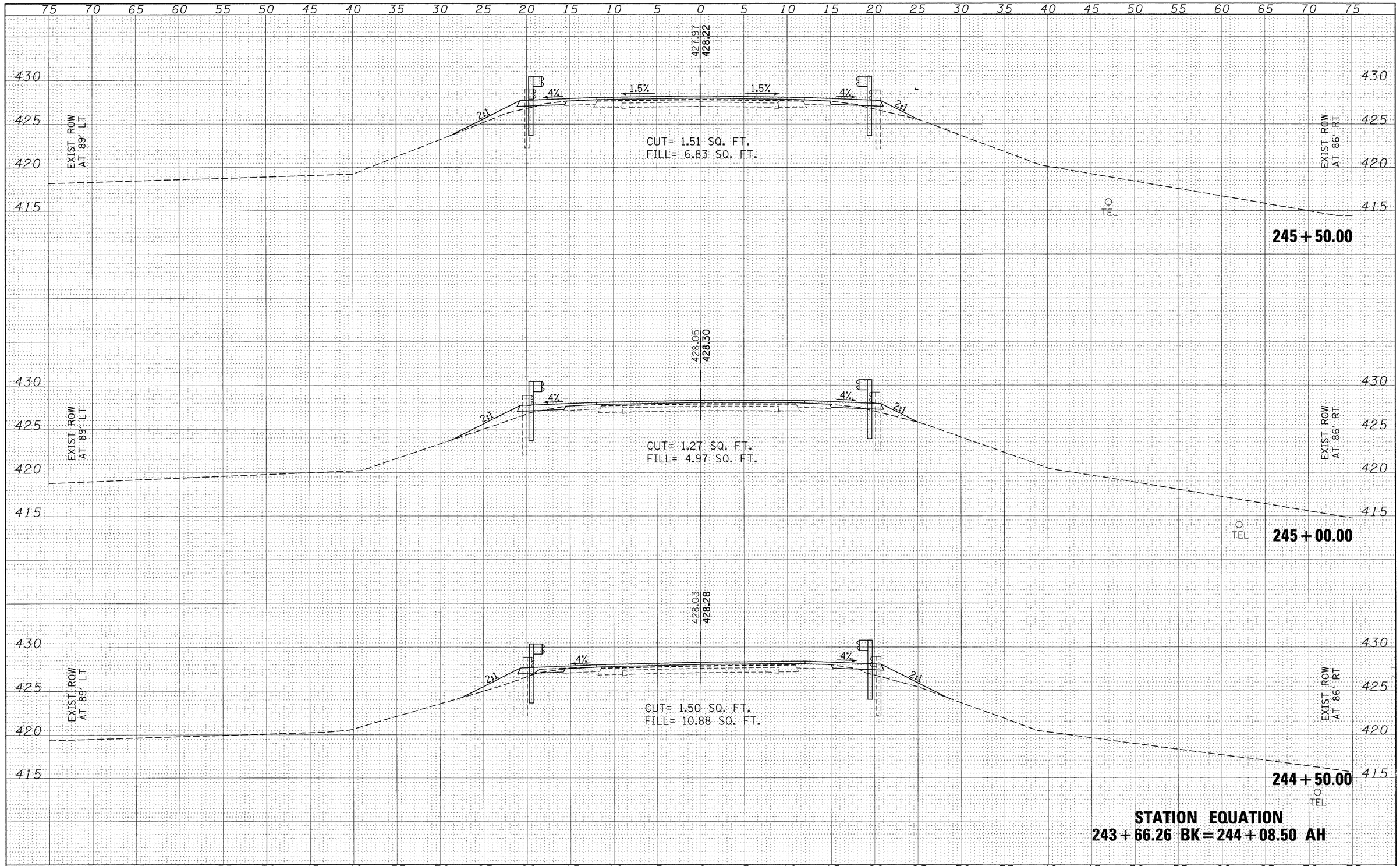

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	

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

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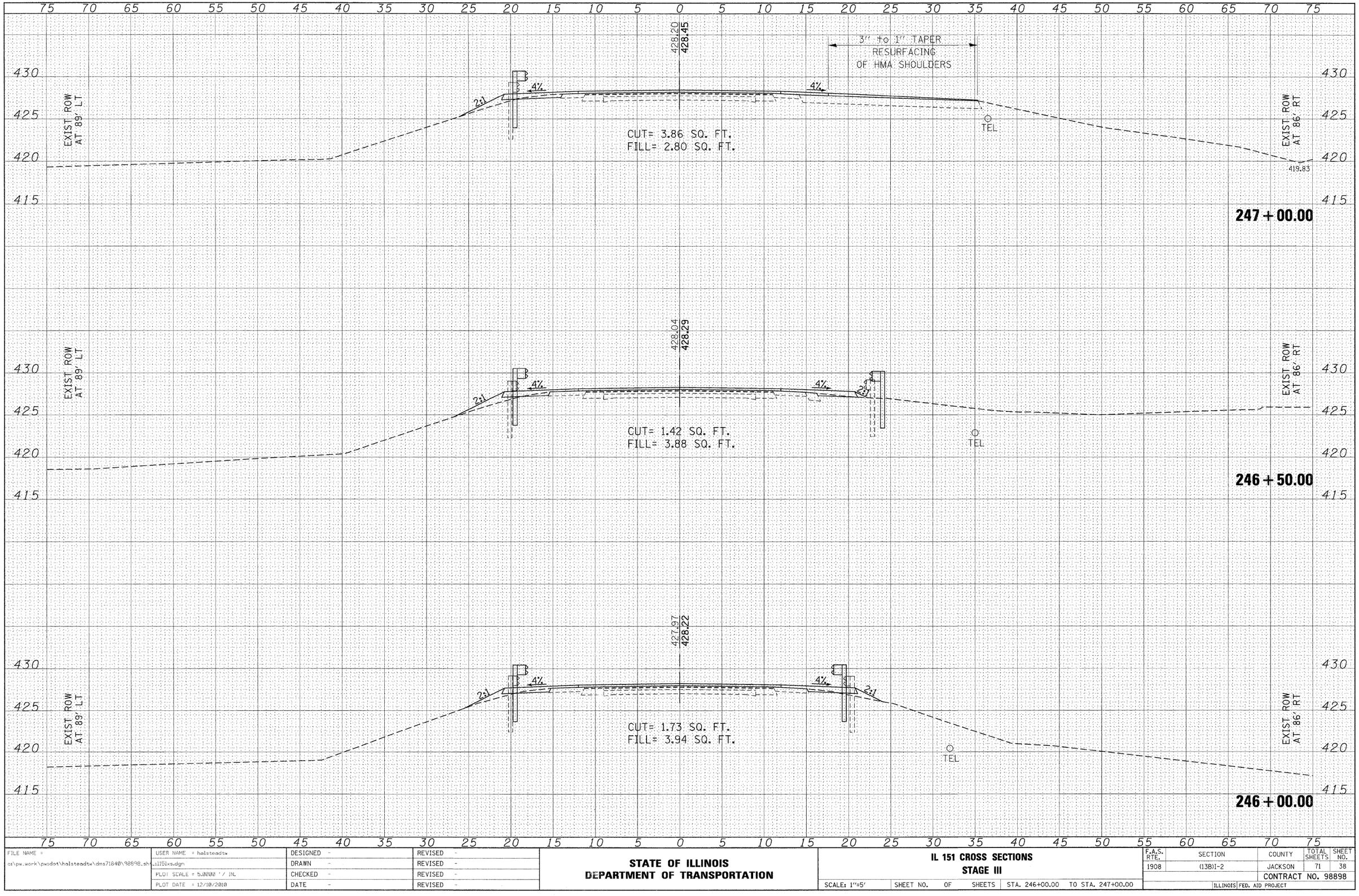
	PLOT DATE = 12/15/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGE III

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 243+50.00 TO STA. 245+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	37
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			



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	PLOT SCALE = 5.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/10/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGE III

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 246+00.00 TO STA. 247+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	38
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		

EXIST ROW AT 89' LT

EXIST ROW AT 86' RT

428.33

4%

2:1

427.61

TEL

CUT= 3.24 SQ. FT.
FILL= 0.10 SQ. FT.

248+50.00

EXIST ROW AT 89' LT

EXIST ROW AT 86' RT

428.30

4%

2:1

426.56

TEL

CUT= 1.59 SQ. FT.
FILL= 1.97 SQ. FT.

248+00.00

BUTT JOINT
STA 247+80

PROPOSED PROJECT ENDS
STA 247+50

EXIST ROW AT 89' LT

EXIST ROW AT 86' RT

428.28
428.47

4%

4%

2:1

2:1

424.19

TEL

CUT= 1.95 SQ. FT.
FILL= 7.86 SQ. FT.

247+50.00

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

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

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	PLOT DATE = 12/10/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 151 CROSS SECTIONS
STAGE III

SCALE: 1"=5' | SHEET NO. OF SHEETS | STA. 247+50.00 TO STA. 248+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	39
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		

Bench Mark: "BM #1000" - A cut ☒ on top of NW wingwall of S.N. 039-0033, located north of S.N. 039-0034. Elev. 431.579
"UE9C" 1966, USGS, NAVD 29, Cut □ inside a larger cut □ in top of SE wingwall of S.N. 039-0034. Elev. 428.77

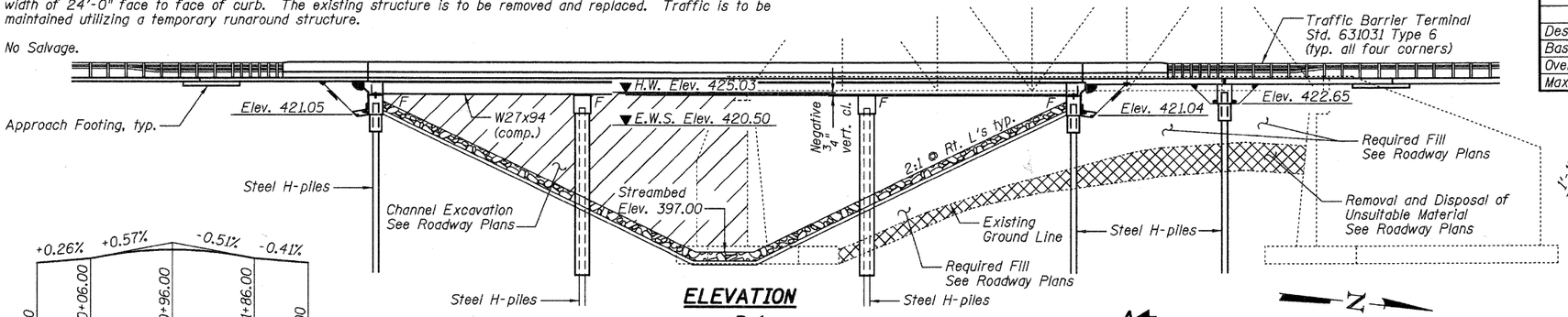
Existing Structure: S.N. 039-0034 was built in 1935 at Sta. 241+50. The structure is a single span skewed (31°55') steel Pratt through truss on closed abutments. The structure is 100'-0" center to center of bearings and has a deck width of 24'-0" face to face of curb. The existing structure is to be removed and replaced. Traffic is to be maintained utilizing a temporary runaround structure.

No Salvage.

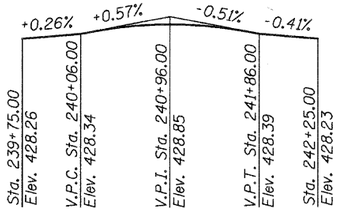
WATERWAY INFORMATION

Drainage Area = 27.49 sq. mi. Low Grade Elev. 424.90 @ Sta. 231+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	5074	1462	1459	423.71	0.09	0.08	423.80	423.79
Design	50	8230	1552	1570	425.03	0.52	0.34	425.55	425.37
Base	100	9644	1552	1570	425.58	0.76	0.54	426.34	426.12
Overtopping	-	8007	1552	1570	424.97	0.49	0.33	425.46	425.30
Max. Calc.	500	13360	1552	1570	426.85	0.86	1.20	427.71	428.05

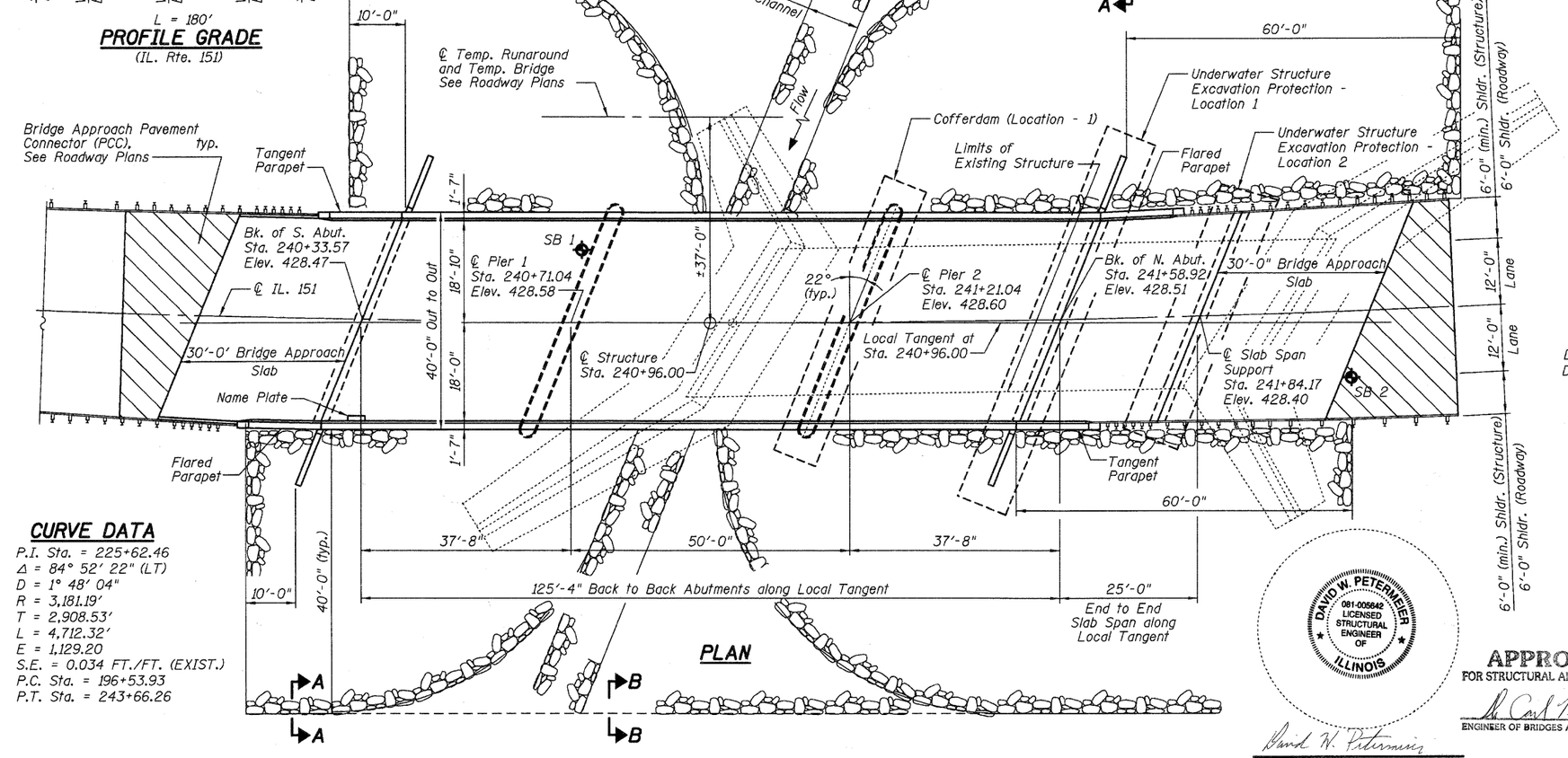


ELEVATION

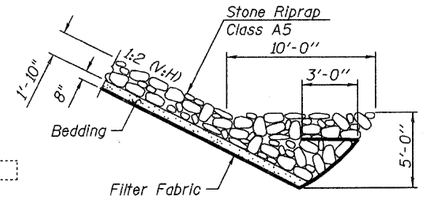


PROFILE GRADE

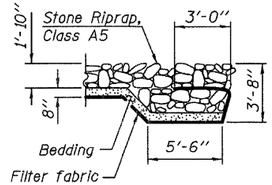
(IL. Rte. 151)



PLAN



SECTION A-A



SECTION B-B

LOADING HL-93

Allow 50#/Sq. Ft. for future wearing surface.

DESIGN SPECIFICATIONS

AASHTO LRFD Bridge Design Specifications, 4th Edition, with 2009 Interims.

DESIGN STRESSES

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 36,000 psi (M270 Grade 36 structural steel)
f_y = 50,000 psi (M270 Grade 50 structural steel)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 3
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.329 g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.764 g
Soil Site Class = D

CURVE DATA

P.I. Sta. = 225+62.46
Δ = 84° 52' 22" (LT)
D = 1° 48' 04"
R = 3,181.19'
T = 2,908.53'
L = 4,712.32'
E = 1,129.20
S.E. = 0.034 FT./FT. (EXIST.)
P.C. Sta. = 196+53.93
P.T. Sta. = 243+66.26

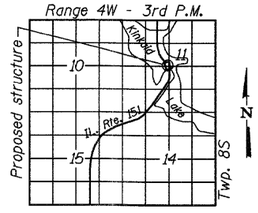
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (feet)	S. Abut.	Pier 1	Pier 2	N. Abut.
	418.6	391.22	391.22	418.6

STATION 240+96.00
BUILT 201_ BY
STATE OF ILLINOIS
F.A.S. RTE. 1908 SEC. (13B)I-2
LOADING HL-93
STRUCTURE NO. 039-0073

NAME PLATE

See Std. 515001



LOCATION SKETCH

Note:
For General Notes, Total Bill of Material, and Index of Sheets, see sheet 2 of 32.

DAVID W. PETERMEIER
081-005642
LICENSED STRUCTURAL ENGINEER OF ILLINOIS

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES

DAVID W. PETERMEIER
EDWARDSVILLE, ILLINOIS
ILLINOIS LICENSED STRUCTURAL
ENGINEER NO. 081-005642
EXPIRES NOVEMBER 30, 2012
12/3/10

MODJESKI and MASTERS
Experience great bridges.

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 151 OVER KINKAID LAKE
F.A.S. RTE. 1908 SEC. (13B)I-2
JACKSON COUNTY
STATION 240+96.00
STRUCTURE NO. 039-0073

FILE NAME =	USER NAME =	DESIGNED - RLM	REVISED -
		CHECKED - MJP	REVISED -
	PLOT SCALE =	DRAWN - AEC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - RLM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	40
		CONTRACT NO. 98898		
		ILLINOIS FED. AID PROJECT		

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $^{7}/_{8}$ in. ϕ, holes $^{15}/_{16}$ in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 73,940 lbs. of Grade 50 and 5,130 lbs. of Grade 36.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions

Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to their 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 bearings.

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

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Blue, Munsell No. 10B 3/6. See Special Provision for "Cleaning and Painting New Metal Structures".

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

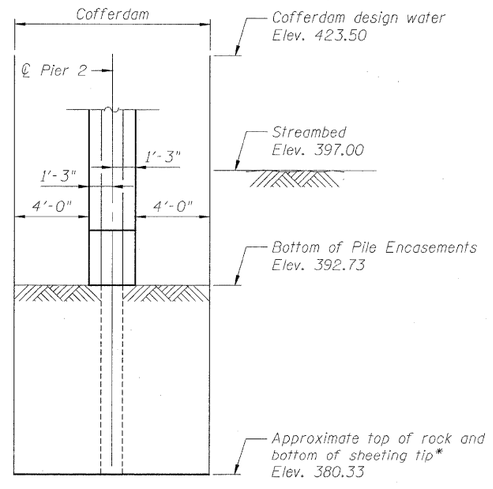
In lieu of the hammer selection criteria and use of the FHWA Modified Gates formula specified in Section 512 of the Standard Specifications, the Contractor shall conduct a wave equation analysis to establish the driving criteria at all pile foundations which specify a nominal required bearing above 600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

Slipforming of the parapets is not allowed.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A5	Sq. Yd.		2,496	2,496
Filter Fabric	Sq. Yd.		2,496	2,496
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		565	565
Cofferdam Excavation	Cu. Yd.		76	76
Cofferdam (Location - 1)	Each		1	1
Concrete Structures	Cu. Yd.		303.9	303.9
Concrete Superstructure	Cu. Yd.	344.0		344.0
Bridge Deck Grooving	Sq. Yd.	820		820
Concrete Encasement	Cu. Yd.		29.7	29.7
Protective Coat	Sq. Yd.	1,007	24	1,031
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	3,222		3,222
Reinforcement Bars, Epoxy Coated	Pound	87,750	21,550	109,300
Bar Splicers	Each	101		101
Furnishing Steel Piles HP14x117	Foot		2,143	2,143
Driving Piles	Foot		2,143	2,143
Test Pile Steel HP14x117	Each		5	5
Pile Shoes	Each		54	54
Name Plates	Each	1		1
Anchor Bolts, $^{3}/_{4}$"	Each		24	24
Anchor Bolts, 1"	Each		24	24
Geocomposite Wall Drain	Sq. Yd.		79	79
Pipe Underdrains for Structures 4"	Foot		155	155
Porous Granular Embankment, Special	Cu. Yd.		175	175
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1
Mechanical Splicers	Each		72	72

INDEX OF SHEETS



SECTION THRU COFFERDAM

* Key sheeting into rock

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		CHECKED - MJP	REVISED -
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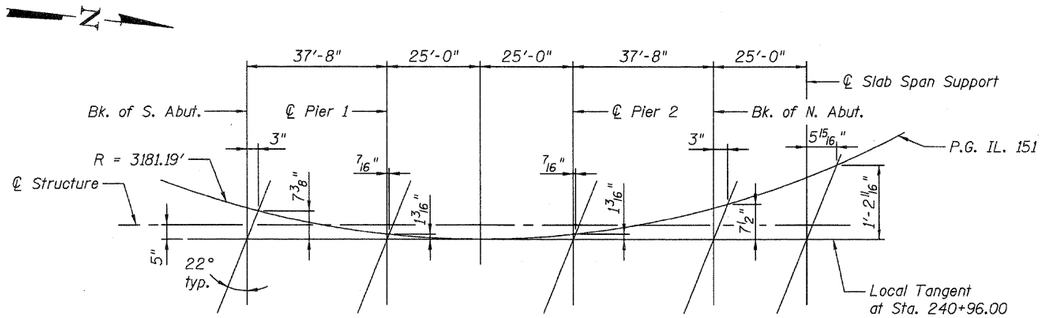
	PLOT DATE = 01/14/2011	CHECKED - RLM	REVISED -

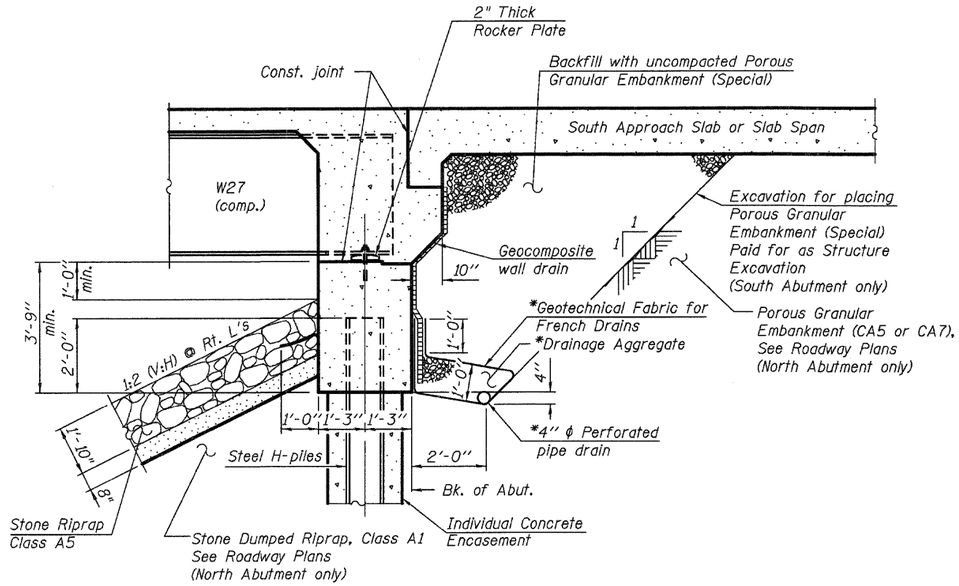
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL STRUCTURE DATA
STRUCTURE NO. 039-0073
SHEET NO. 2 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(138)I-2	JACKSON	71	41
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		



OFFSET SKETCH

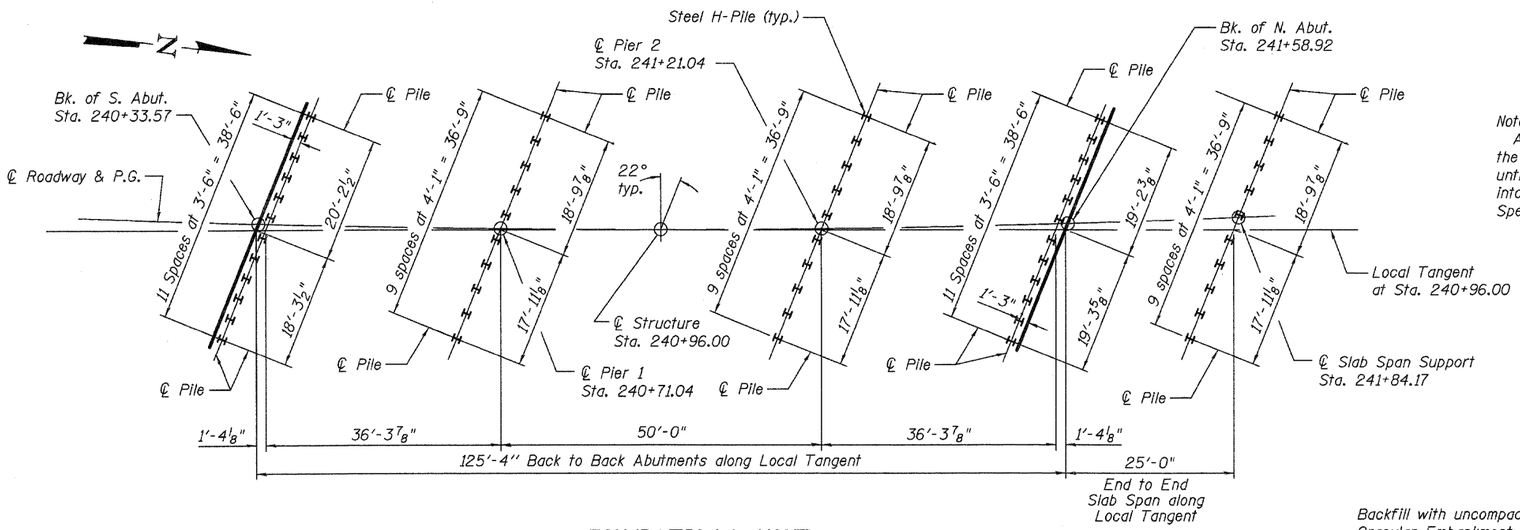


SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. ℄ Rt. L's)

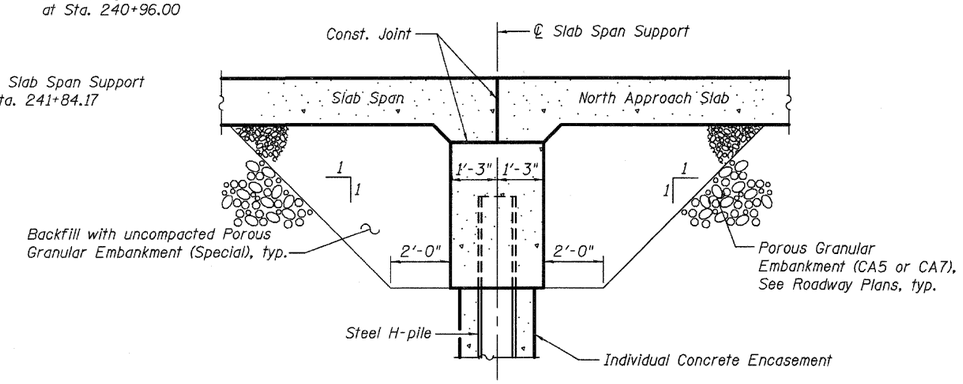
*Included in the cost of Pipe Underdrains for Structures 4".

Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



FOUNDATION LAYOUT

Note:
Pile encasement not shown for clarity.



SECTION THRU SLAB SPAN SUPPORT

(Horiz. dim. ℄ Rt. L's)

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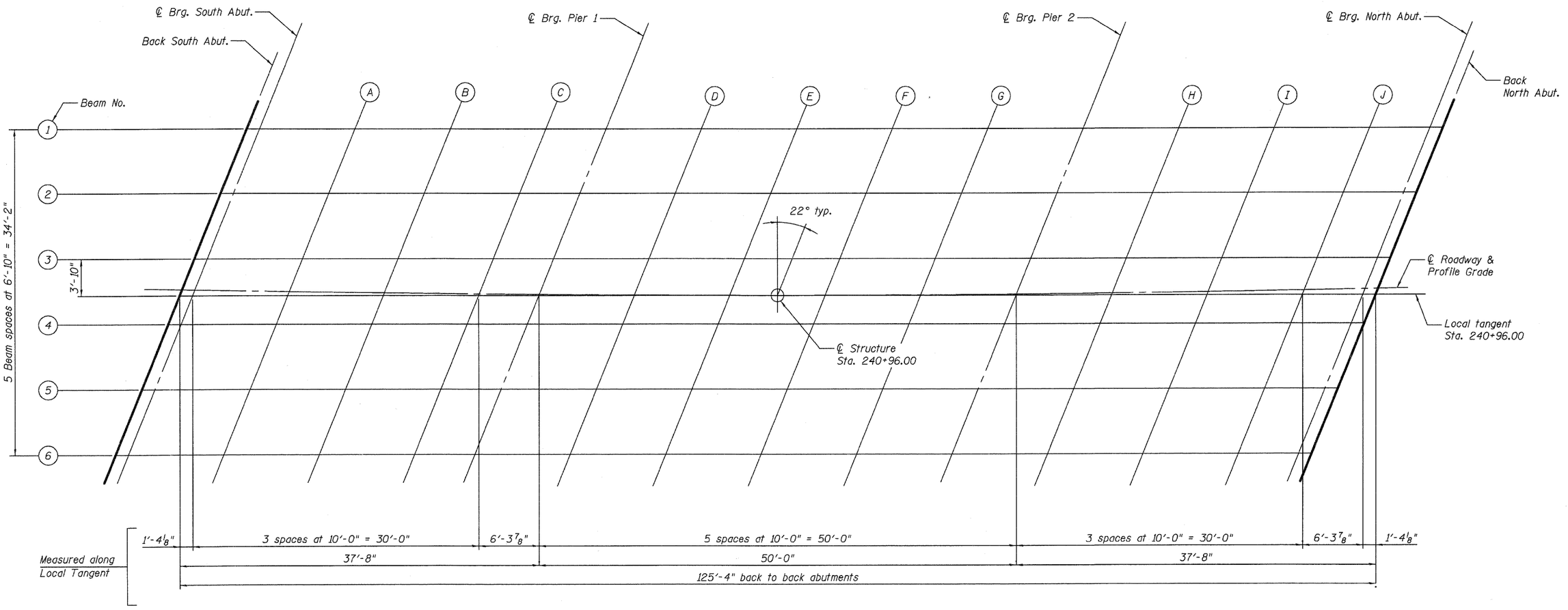
	PLOT DATE = 12/02/2010	CHECKED - RLM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOUNDATION LAYOUT
STRUCTURE NO. 039-0073
SHEET NO. 3 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	42
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			



PLAN

MODJESKI and MASTERS
Experience great bridges.

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	PLOT DATE = 12/02/2010	CHECKED - MJP	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 039-0073
SHEET NO. 4 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	43
			CONTRACT NO. 98898	
		ILLINOIS	FED. AID PROJECT	

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back South Abut.	240+40.10	-17.01	427.92	427.92
℄ Brg. South Abut.	240+41.46	-17.03	427.93	427.93
A	240+51.51	-17.19	427.95	427.96
B	240+61.56	-17.31	427.98	427.99
C	240+71.62	-17.41	427.99	427.99
℄ Brg. Pier 1	240+77.97	-17.45	428.00	428.00
D	240+88.03	-17.49	428.01	428.03
E	240+98.08	-17.50	428.02	428.05
F	241+08.14	-17.48	428.02	428.04
G	241+18.19	-17.42	428.01	428.02
℄ Brg. Pier 2	241+28.25	-17.34	428.00	428.00
H	241+38.30	-17.22	427.98	427.99
I	241+48.35	-17.07	427.96	427.98
J	241+58.41	-16.89	427.94	427.95
℄ Brg. North Abut.	241+64.76	-16.76	427.92	427.92
Back North Abut.	241+66.11	-16.73	427.91	427.91

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back South Abut.	240+37.45	-10.13	428.15	428.15
℄ Brg. South Abut.	240+38.81	-10.15	428.15	428.15
A	240+48.84	-10.32	428.18	428.19
B	240+58.87	-10.45	428.20	428.21
C	240+68.90	-10.55	428.22	428.22
℄ Brg. Pier 1	240+75.24	-10.60	428.23	428.23
D	240+85.27	-10.65	428.24	428.26
E	240+95.31	-10.67	428.25	428.28
F	241+05.34	-10.65	428.25	428.28
G	241+15.37	-10.61	428.24	428.26
℄ Brg. Pier 2	241+25.41 241+35.44	-10.53	428.23	428.23
H		-10.42	428.22	428.23
I	241+45.47	-10.28	428.20	428.21
J	241+55.50	-10.11	428.18	428.19
℄ Brg. North Abut.	241+61.84	-9.99	428.16	428.16
Back North Abut.	241+63.19	-9.96	428.16	428.16

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back South Abut.	240+34.82	-3.25	428.37	428.37
℄ Brg. South Abut.	240+36.17	-3.27	428.37	428.37
A	240+46.17	-3.44	428.40	428.41
B	240+56.18	-3.58	428.43	428.44
C	240+66.20	-3.69	428.45	428.45
℄ Brg. Pier 1	240+72.52	-3.75	428.46	428.46
D	240+82.53	-3.80	428.47	428.49
E	240+92.55	-3.83	428.48	428.51
F	241+02.56	-3.83	428.48	428.51
G	241+12.57	-3.79	428.48	428.49
℄ Brg. Pier 2	241+22.58	-3.72	428.47	428.47
H	241+32.59	-3.62	428.46	428.46
I	241+42.60	-3.49	428.44	428.45
J	241+52.61	-3.33	428.42	428.43
℄ Brg. North Abut.	241+58.93	-3.21	428.40	428.40
Back North Abut.	241+60.28	-3.18	428.40	428.40

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Experience great bridges.

FILE NAME =	USER NAME =	DESIGNED - MJP	REVISED -
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	PLOT SCALE =	DRAWN - PRC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - MJP	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 039-0073
SHEET NO. 5 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	44
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		

℄ ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations
Back South Abut.	240+33.57	0.00	428.47
℄ Brg. South Abut.	240+34.92	0.00	428.48
A	240+44.85	0.00	428.52
B	240+54.79	0.00	428.55
C	240+64.74	0.00	428.57
℄ Brg. Pier 1	240+71.04	0.00	428.58
D	240+81.01	0.00	428.60
E	240+91.00	0.00	428.61
F	241+01.00	0.00	428.61
G	241+11.01	0.00	428.61
℄ Brg. Pier 2	241+21.04	0.00	428.60
		0.00	
H	241+31.08	0.00	428.58
I	241+41.13		428.56
J	241+51.20	0.00	428.54
℄ Brg. North Abut.	241+57.56	0.00	428.51
Back North Abut.	241+58.92	0.00	428.51

LOCAL TANGENT AT STA. 240+96.00

Location	Station	Offset	Theoretical Grade Elevations
Back South Abut.	240+33.34	0.62	428.49
℄ Brg. South Abut.	240+34.69	0.59	428.50
A	240+44.69	0.41	428.53
B	240+54.68	0.27	428.56
C	240+64.68	0.15	428.58
℄ Brg. Pier 1	240+71.00	0.10	428.59
D	240+81.00	0.04	428.60
E	240+91.00	0.00	428.61
F	241+01.00	0.00	428.61
G	241+11.00	0.04	428.61
℄ Brg. Pier 2	241+21.00	0.10	428.60
H	241+31.00	0.19	428.59
I	241+41.00	0.32	428.57
J	241+50.99	0.48	428.55
℄ Brg. North Abut.	241+57.31	0.59	428.54
Back North Abut.	241+58.66	0.62	428.53

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back South Abut.	240+32.19	3.64	428.59	428.59
℄ Brg. South Abut.	240+33.54	3.61	428.60	428.60
A	240+43.52	3.43	428.63	428.64
B	240+53.51	3.28	428.65	428.66
C	240+63.50	3.17	428.68	428.68
℄ Brg. Pier 1	240+69.81	3.11	428.69	428.69
D	240+79.80	3.04	428.70	428.72
E	240+89.79	3.01	428.71	428.74
F	240+99.78	3.00	428.71	428.74
G	241+09.78	3.03	428.71	428.73
℄ Brg. Pier 2	241+19.77	3.09	428.71	428.71
H	241+29.76	3.18	428.69	428.70
I	241+39.74	3.30	428.68	428.69
J	241+49.73	3.45	428.66	428.66
℄ Brg. North Abut.	241+56.04	3.57	428.64	428.64
Back North Abut.	241+57.39	3.59	428.64	428.64

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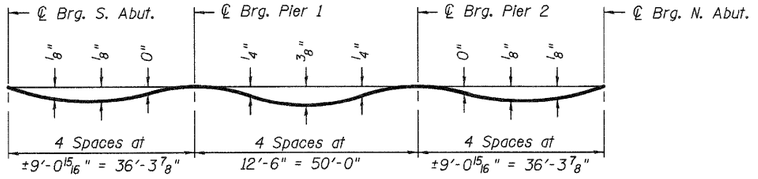
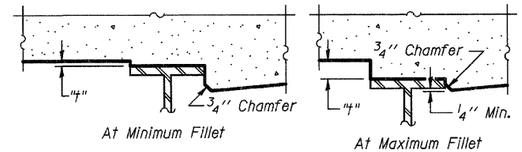
FILE NAME =	USER NAME =	DESIGNED - MJP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TOP OF SLAB ELEVATIONS STRUCTURE NO. 039-0073	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - RLM	REVISED -			1908	(13B)I-2	JACKSON	71	45
	PLOT SCALE =	DRAWN - PRC	REVISED -					CONTRACT NO. 98898		
	PLOT DATE = 12/02/2010	CHECKED - MJP	REVISED -		SHEET NO. 6 OF 32 SHEETS		ILLINOIS	FED. AID PROJECT		



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets 5 thru 7 of 32.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on sheet 4 of 32. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 5 thru 7 of 32, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back South Abut.	240+29.58	10.53	428.82	428.82
℄ Brg. South Abut.	240+30.92	10.50	428.82	428.82
A	240+40.89	10.31	428.85	428.86
B	240+50.85	10.15	428.88	428.89
C	240+60.82	10.03	428.90	428.91
℄ Brg. Pier 1	240+67.12	9.96	428.91	428.91
D	240+77.09	9.89	428.93	428.94
E	240+87.06	9.85	428.94	428.97
F	240+97.02	9.83	428.94	428.97
G	241+06.99	9.85	428.94	428.96
℄ Brg. Pier 2	241+16.96	9.90	428.94	428.94
H	241+26.93	9.98	428.93	428.93
I	241+36.90	10.10	428.92	428.93
J	241+46.87	10.24	428.90	428.90
℄ Brg. North Abut.	241+53.16	10.35	428.88	428.88
Back North Abut.	241+54.51	10.37	428.88	428.88

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back South Abut.	240+26.97	17.42	429.04	429.04
℄ Brg. South Abut.	240+28.31	17.39	429.04	429.04
A	240+38.26	17.19	429.08	429.09
B	240+48.20	17.03	429.11	429.12
C	240+58.15	16.89	429.13	429.13
℄ Brg. Pier 1	240+64.43	16.82	429.14	429.14
D	240+74.38	16.74	429.16	429.17
E	240+84.33	16.69	429.17	429.20
F	240+94.28	16.67	429.18	429.21
G	241+04.22	16.68	429.18	429.19
℄ Brg. Pier 2	241+14.17	16.72	429.17	429.17
H	241+24.12	16.79	429.17	429.17
I	241+34.07	16.90	429.15	429.16
J	241+44.01	17.03	429.13	429.14
℄ Brg. North Abut.	241+50.29	17.13	429.12	429.12
Back North Abut.	241+51.64	17.16	429.12	429.12

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 039-0073
SHEET NO. 7 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	46
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End South Appr. Slab	240+10.57	-18.00	427.75
A	240+20.53	-18.00	427.80
B	240+30.50	-18.00	427.85
Back South Abut.	240+40.48	-18.00	427.89

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End South Appr. Slab	240+08.33	-12.00	427.95
A	240+18.26	-12.00	428.00
B	240+28.21	-12.00	428.04
Back South Abut.	240+38.17	-12.00	428.08

℄ ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations
End South Appr. Slab	240+03.86	0.00	428.33
A	240+13.76	0.00	428.38
B	240+23.66	0.00	428.43
Back South Abut.	240+33.57	0.00	428.47

LOCAL TANGENT AT STA. 240+96.00

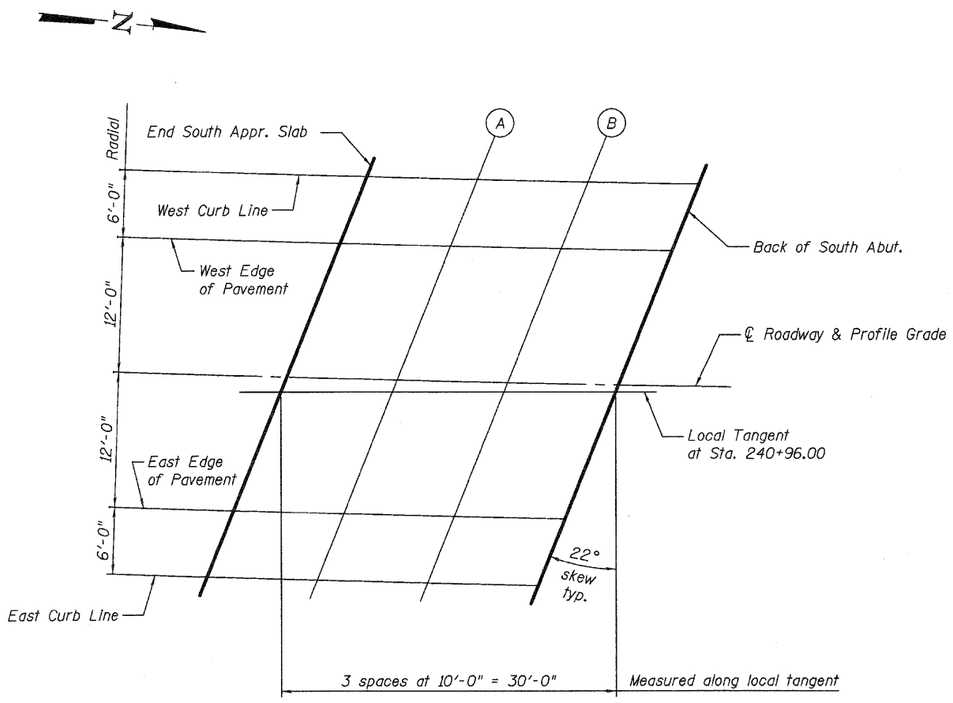
Location	Station	Offset	Theoretical Grade Elevations
End South Appr. Slab	240+03.36	1.35	428.38
A	240+13.35	1.07	428.42
B	240+23.35	0.83	428.46
Back South Abut.	240+33.34	0.62	428.49

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End South Appr. Slab	239+99.43	12.00	428.73
A	240+09.28	12.00	428.77
B	240+19.14	12.00	428.82
Back South Abut.	240+29.02	12.00	428.86

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End South Appr. Slab	239+97.23	18.00	428.93
A	240+07.06	18.00	428.96
B	240+16.90	18.00	429.01
Back South Abut.	240+26.75	18.00	429.06



PLAN

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	PLOT SCALE =	DRAWN - PRC	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SOUTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 039-0073
SHEET NO. 8 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	47
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
Back North Abut.	241+66.66	-18.00	427.87
A	241+76.82	-18.00	427.83
B	241+86.99	-18.00	427.78
End Slab Span	241+92.08	-18.00	427.75

WEST EDGE OF PAVEMENT

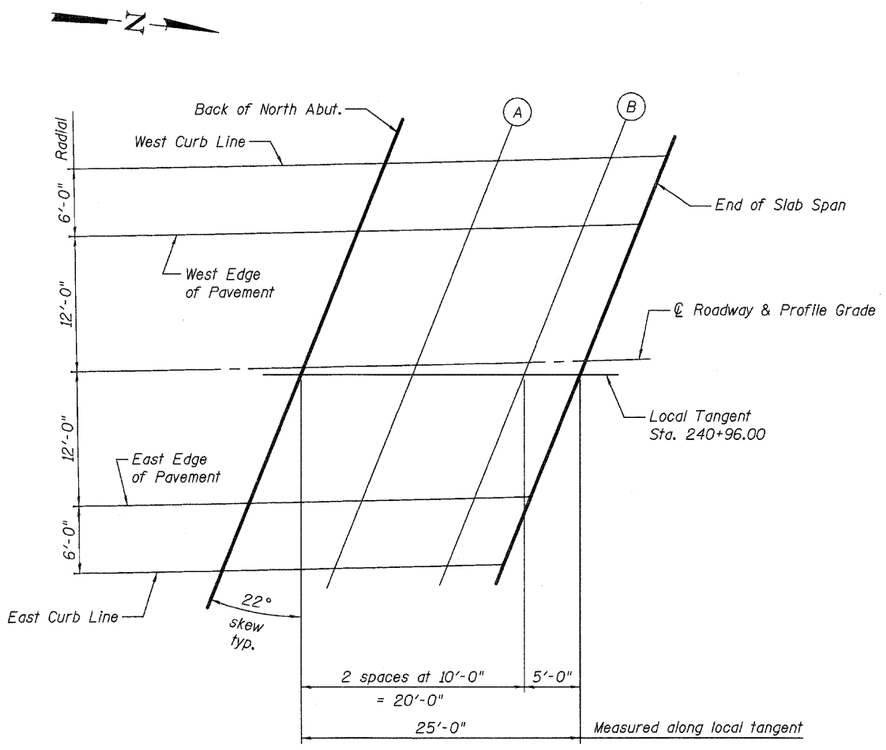
Location	Station	Offset	Theoretical Grade Elevations
Back North Abut.	241+64.07	-12.00	428.08
A	241+74.20	-12.00	428.04
B	241+84.35	-12.00	427.99
End Slab Span	241+89.43	-12.00	427.97

℄ ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations
Back North Abut.	241+58.92	0.00	428.51
A	241+69.01	0.00	428.47
B	241+79.11	0.00	428.43
End Slab Span	241+84.17	0.00	428.40

LOCAL TANGENT AT STA. 240+96.00

Location	Station	Offset	Theoretical Grade Elevations
Back North Abut.	241+58.66	0.62	428.53
A	241+68.65	0.83	428.50
B	241+78.65	1.07	428.47
End Slab Span	241+83.64	1.21	428.45



PLAN

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Back North Abut.	241+53.82	12.00	428.94
A	241+63.86	12.00	428.90
B	241+73.92	12.00	428.86
End Slab Span	241+78.95	12.00	428.84

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
Back North Abut.	241+51.28	18.00	429.15
A	241+61.30	18.00	429.11
B	241+71.34	18.00	429.07
End Slab Span	241+76.36	18.00	429.05

MODJESKI and MASTERS
Experience great bridges.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB SPAN SLAB ELEVATIONS
STRUCTURE NO. 039-0073
SHEET NO. 9 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	42
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End of Slab Span	241+92.08	-18.00	427.75
A	242+02.27	-18.00	427.71
B	242+12.48	-18.00	427.67
End North Appr. Slab	242+22.70	-18.00	427.63

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End of Slab Span	241+89.43	-12.00	427.97
A	241+99.60	-12.00	427.93
B	242+09.79	-12.00	427.88
End North Appr. Slab	242+19.99	-12.00	427.84

℄ ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations
End of Slab Span	241+84.17	0.00	428.40
A	241+94.30	0.00	428.36
B	242+04.43	0.00	428.31
End North Appr. Slab	242+14.59	0.00	428.27

LOCAL TANGENT AT STA. 240+96.00

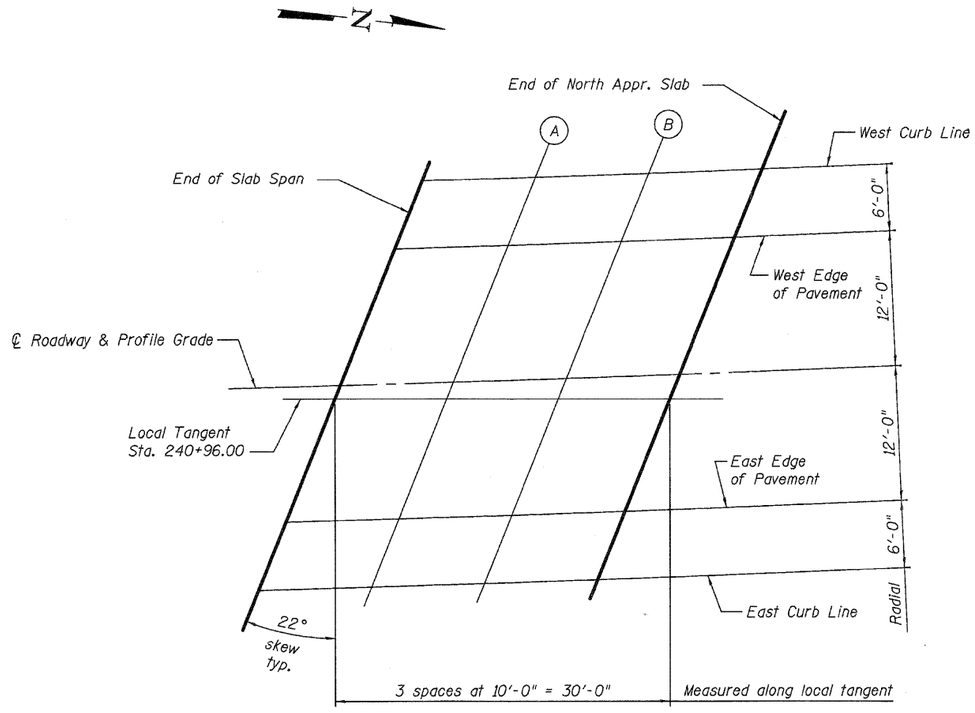
Location	Station	Offset	Theoretical Grade Elevations
End of Slab Span	241+83.65	1.21	428.45
A	241+93.64	1.50	428.41
B	242+03.63	1.82	428.38
End North Appr. Slab	242+13.61	2.18	428.35

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End of Slab Span	241+78.95	12.00	428.84
A	241+89.03	12.00	428.79
B	241+99.13	12.00	428.74
End North Appr. Slab	242+09.23	12.00	428.70

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End of Slab Span	241+76.36	18.00	429.05
A	241+86.42	18.00	429.00
B	241+96.49	18.00	428.96
End North Appr. Slab	242+06.57	18.00	428.92



PLAN

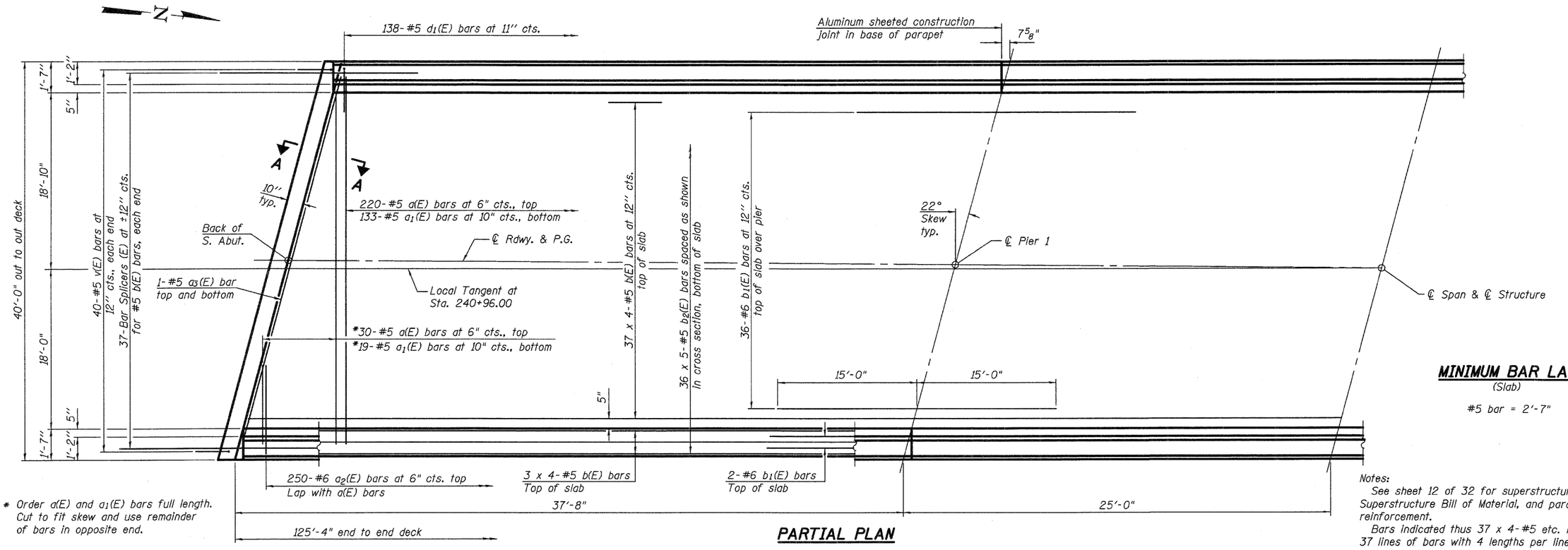
MODJESKI and MASTERS
Experience great bridges.

FILE NAME =	USER NAME =	DESIGNED - MJP	REVISED -
		CHECKED - RLM	REVISED -
	PLOT SCALE =	DRAWN - PRC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - MJP	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF NORTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 039-0073
SHEET NO. 10 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	49
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			



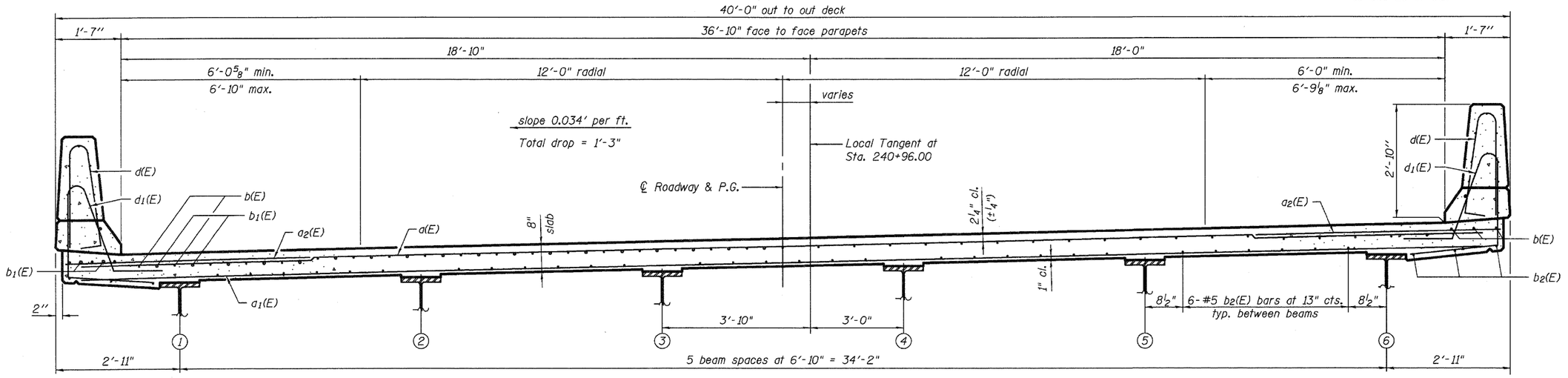
* Order d(E) and a_1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

PARTIAL PLAN

MINIMUM BAR LAP
(Slab)

#5 bar = 2'-7"

Notes:
See sheet 12 of 32 for superstructure details, Superstructure Bill of Material, and parapet reinforcement.
Bars indicated thus 37 x 4-#5 etc. indicates 37 lines of bars with 4 lengths per line.
For details of Section A-A, see sheet 13 of 32.
For details of bar splicers, see sheets 13 and 29 of 32.



NEAR PIER **NEAR MIDSPAN**

CROSS SECTION
Looking North

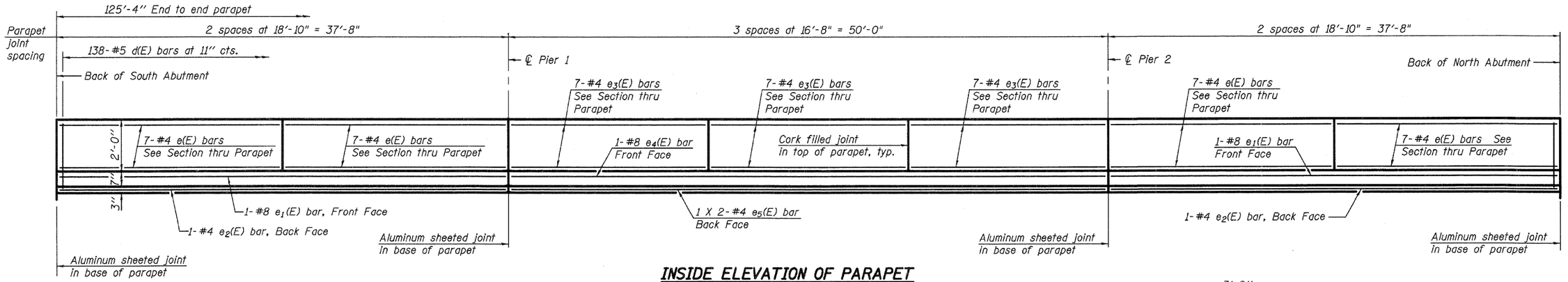
MODJESKI and MASTERS
Experience great bridges.

FILE NAME =	USER NAME =	DESIGNED - RLM	REVISED -
		CHECKED - MJP	REVISED -
	PLOT SCALE =	DRAWN - PRC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - MJP	REVISED -

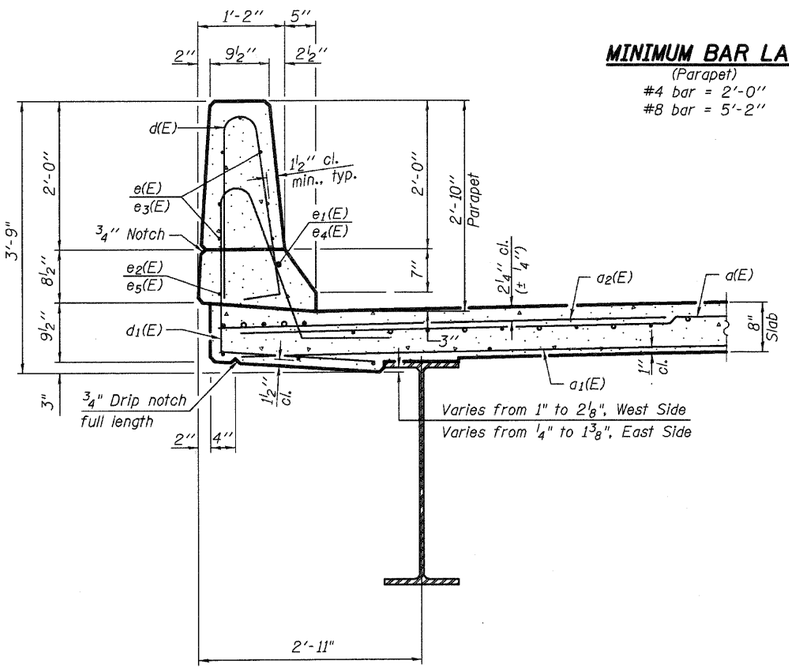
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 039-0073
SHEET NO. 11 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	50
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			



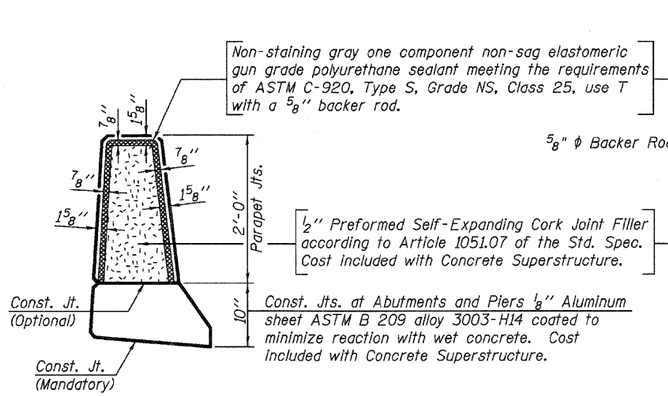
INSIDE ELEVATION OF PARAPET



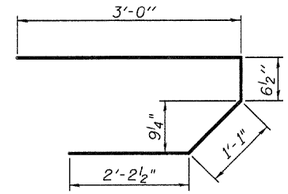
SECTION THRU PARAPET

MINIMUM BAR LAP

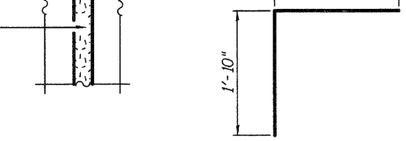
(Parapet)
#4 bar = 2'-0"
#8 bar = 5'-2"



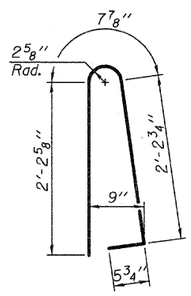
PARAPET JOINT DETAILS



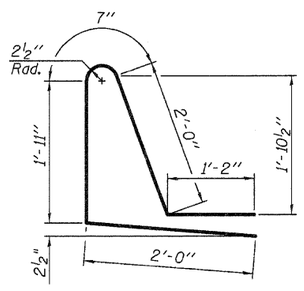
BAR s(E)



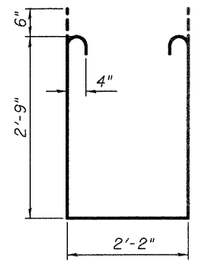
BAR v(E)



BAR d(E)



BAR d1(E)



BAR s1(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	250	#5	39'-4"	——
a1(E)	152	#5	38'-10"	——
a2(E)	500	#6	6'-6"	——
a3(E)	4	#5	42'-5"	——
b(E)	172	#5	33'-3"	——
b1(E)	80	#6	30'-0"	——
b2(E)	180	#5	27'-1"	——
d(E)	276	#5	5'-7"	
d1(E)	276	#5	7'-8"	
e(E)	56	#4	18'-6"	——
e1(E)	4	#8	37'-4"	——
e2(E)	4	#4	37'-4"	——
e3(E)	42	#4	16'-4"	——
e4(E)	2	#8	49'-8"	——
e5(E)	4	#4	25'-10"	——
m(E)	10	#6	42'-10"	——
m1(E)	24	#6	9'-11"	——
m2(E)	10	#6	7'-0"	——
m3(E)	4	#6	2'-9"	——
s(E)	82	#5	6'-10"	
s1(E)	72	#4	8'-8"	
v(E)	80	#5	3'-9"	
Reinforcement Bars, Epoxy Coated		Pound	44,360	
Concrete Superstructure		Cu. Yd.	180.0	
Bridge Deck Grooving		Sq. Yd.	486	
Protective Coat		Sq. Yd.	618	

Bars indicated thus 1 x 2-#4 etc. indicates 1 line of bars with 2 lengths per line.

MODJESKI and MASTERS
Experience great bridges.

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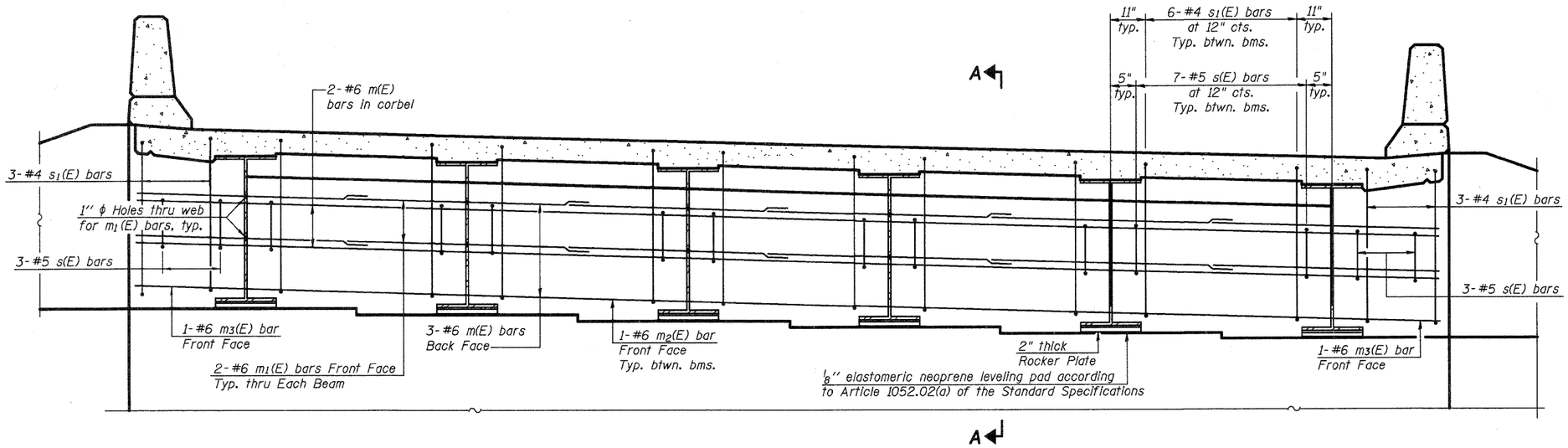
		CHECKED - RLM	REVISED -
	PLOT SCALE =	DRAWN - PRC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - MJP	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

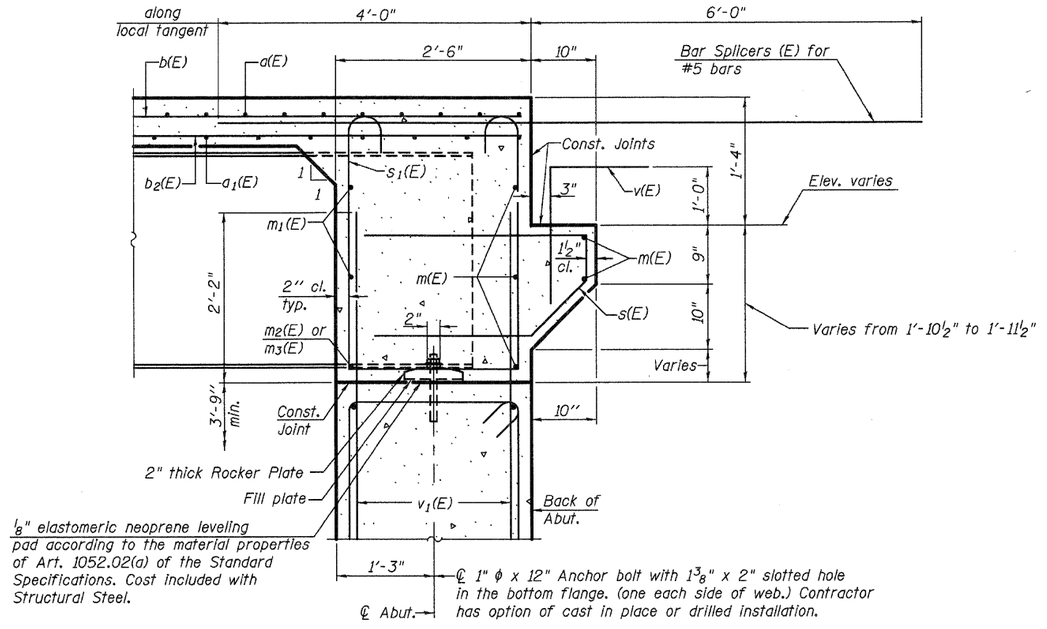
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 039-0073
SHEET NO. 12 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	61
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			



DIAPHRAGM ELEVATION AT ABUTMENT

South Abutment - shown, looking south
North Abutment - similar



SECTION A-A

Dimensions at right angles to abutment, except as shown.

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 12 of 32.
Concrete in diaphragm is included with Concrete Superstructure on sheet 12 of 32.
For details of bars s(E) & s_1(E) see sheet 12 of 32.
The s(E) and s_1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
For details of bar v(E), see sheets 11 and 12 of 32.
For details of bar v_1(E), see sheets 23 and 24 of 32.

MIN. BAR LAP

#6 bar = 3'-4"

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Experience great bridges.

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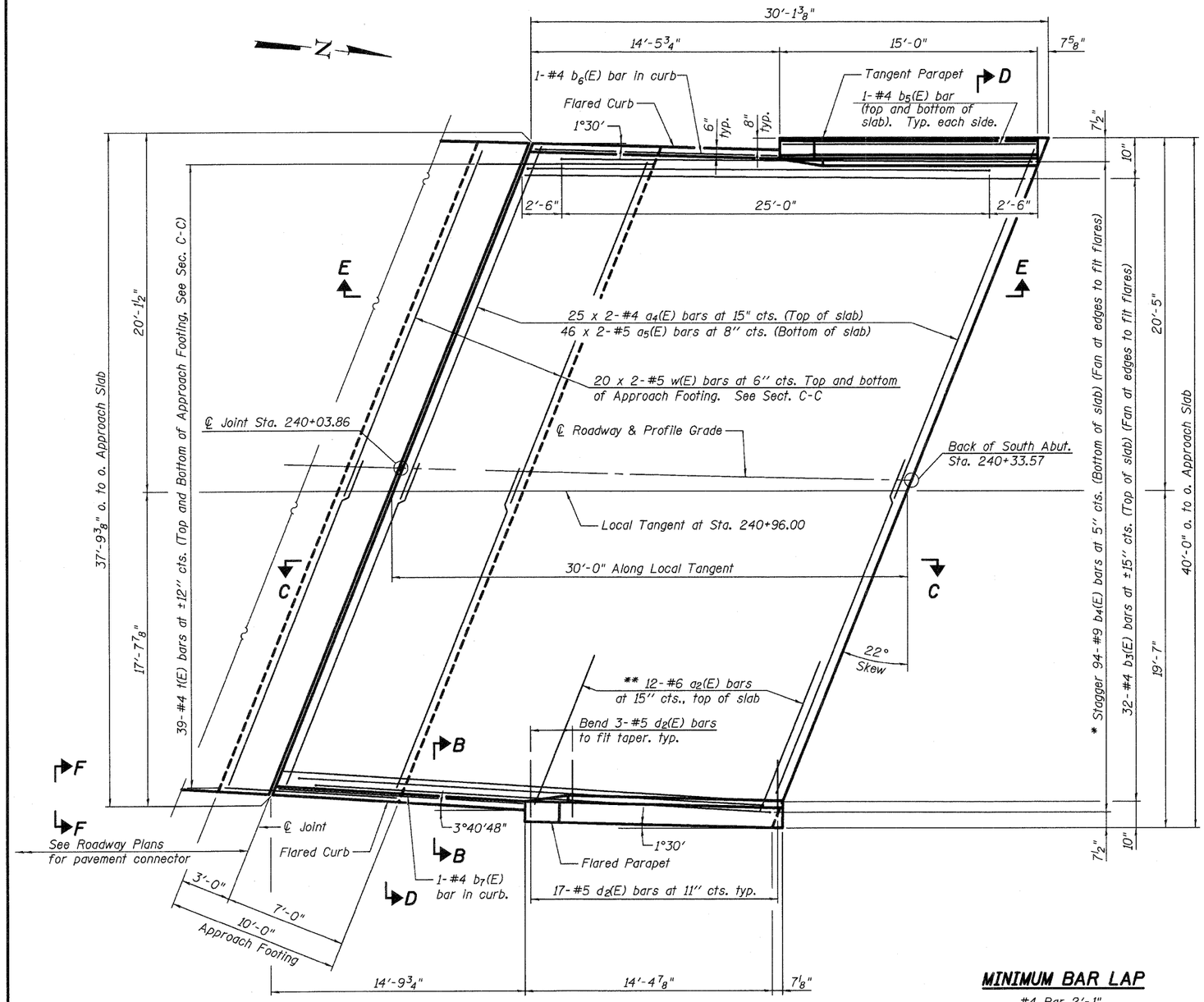
		CHECKED - RLM	REVISED -
	PLOT SCALE =	DRAWN - PRC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - MJP	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS
STRUCTURE NO. 039-0073
SHEET NO. 13 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	52

CONTRACT NO. 98898
ILLINOIS FED. AID PROJECT

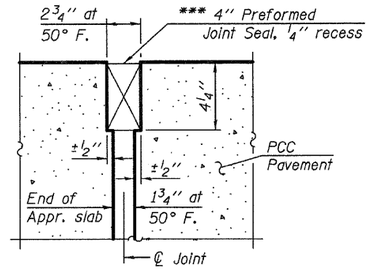


PLAN

* Tilt #9 $b_4(E)$ bars as required to maintain clearance.
** Space between $a_4(E)$ bars, typ. each parapet.

MINIMUM BAR LAP

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

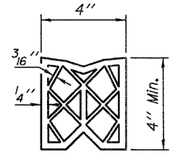


RIGID PAVEMENT

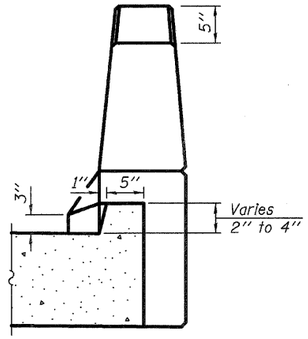
DETAIL A

See sheet 15 of 32 for location of Detail A.

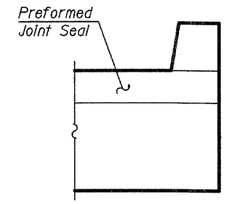
*** Cost included with Concrete Superstructure.



PREFORMED JOINT SEAL



VIEW B-B



VIEW F-F

Notes:
See sheet 15 of 32 for Sections C-C & D-D and View E-E.
$a_2(E)$, $a_4(E)$ and $a_5(E)$ bar spacings measured along local tangent.
Bars indicated thus 25 x 2 -#4 etc. indicates 25 lines of bars with 2 lengths per line.

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Experience great bridges.

FILE NAME =	USER NAME =	DESIGNED - MJP	REVISED -
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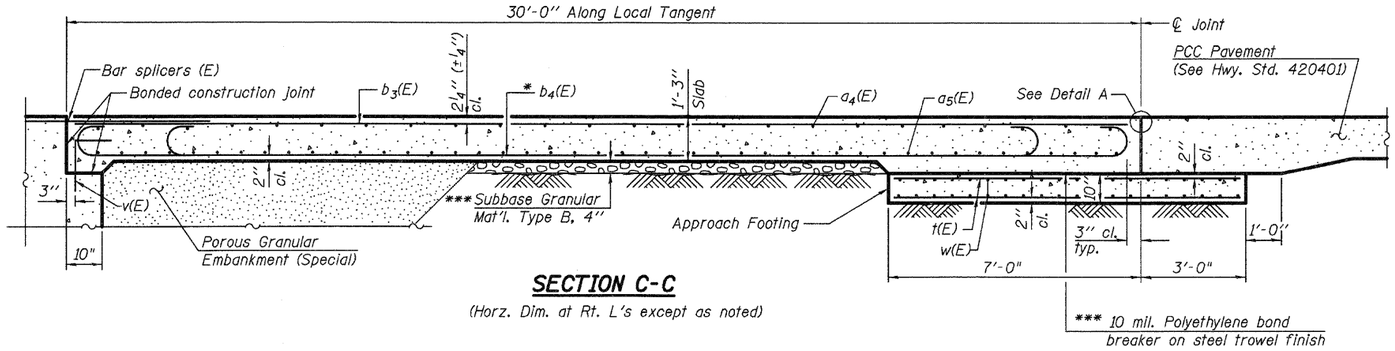
	PLOT SCALE =	DRAWN - PRC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - MJP	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

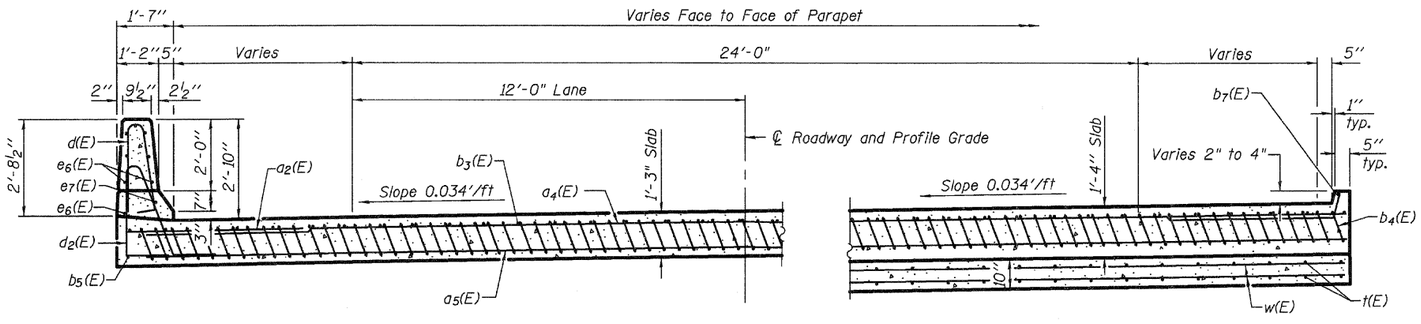
BRIDGE APPROACH SLAB – SOUTH
STRUCTURE NO. 039-0073
SHEET NO. 14 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	53
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		



SECTION C-C

(Horz. Dim. at Rt. L's except as noted)

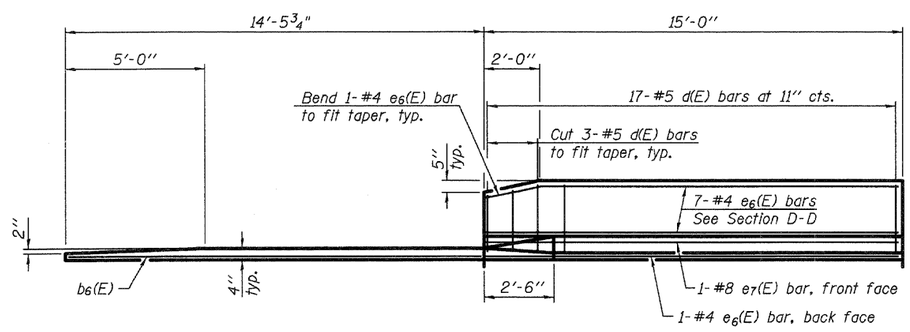


NEAR ABUTMENT

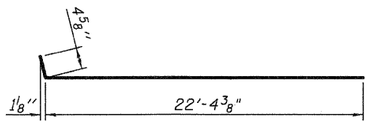
AT APPROACH FOOTING

SECTION D-D

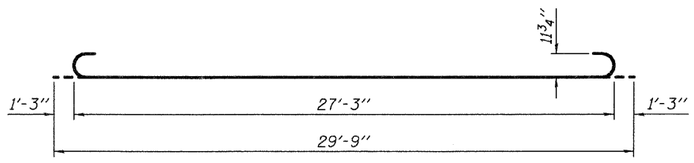
(See Plan for dimensions not shown)



VIEW E-E



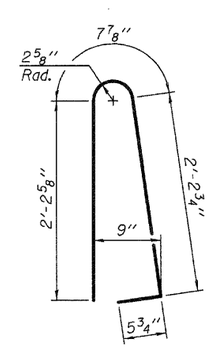
BAR a_4(E)



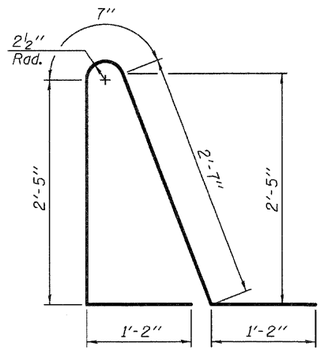
BAR b_4(E)

Notes:

See sheet 14 of 32 for Detail A.
Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheets 11, 12 and 13 of 32.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet 29 of 32.
Cost of excavation for approach footing included with Concrete Structures.
For Porous Granular Embankment (Special) and drainage treatment details, see sheet 3 of 32.
For additional parapet details, see sheet 12 of 32.



BAR d(E)



BAR d_2(E)

* Tilt #9 b_4(E) bars as required to maintain clearance.

*** Cost included with Concrete Superstructure.

SOUTH APPROACH BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_2(E)	24	#6	6'-6"	
a_4(E)	50	#4	22'-9"	
a_5(E)	92	#5	22'-8"	
b_3(E)	32	#4	29'-8"	
b_4(E)	94	#9	29'-9"	
b_5(E)	4	#4	14'-8"	
b_6(E)	1	#4	14'-1"	
b_7(E)	1	#4	14'-6"	
d(E)	34	#5	5'-7"	
d_2(E)	34	#5	7'-11"	
e_6(E)	16	#4	14'-8"	
e_7(E)	2	#8	14'-8"	
t(E)	78	#4	10'-5"	
w(E)	80	#5	22'-0"	
Concrete Superstructure			Cu. Yd.	58.6
Concrete Structures			Cu. Yd.	12.6
Bridge Deck Grooving			Sq. Yd.	116
Protective Coat			Sq. Yd.	138
Reinforcement Bars, Epoxy Coated			Pound	16,470

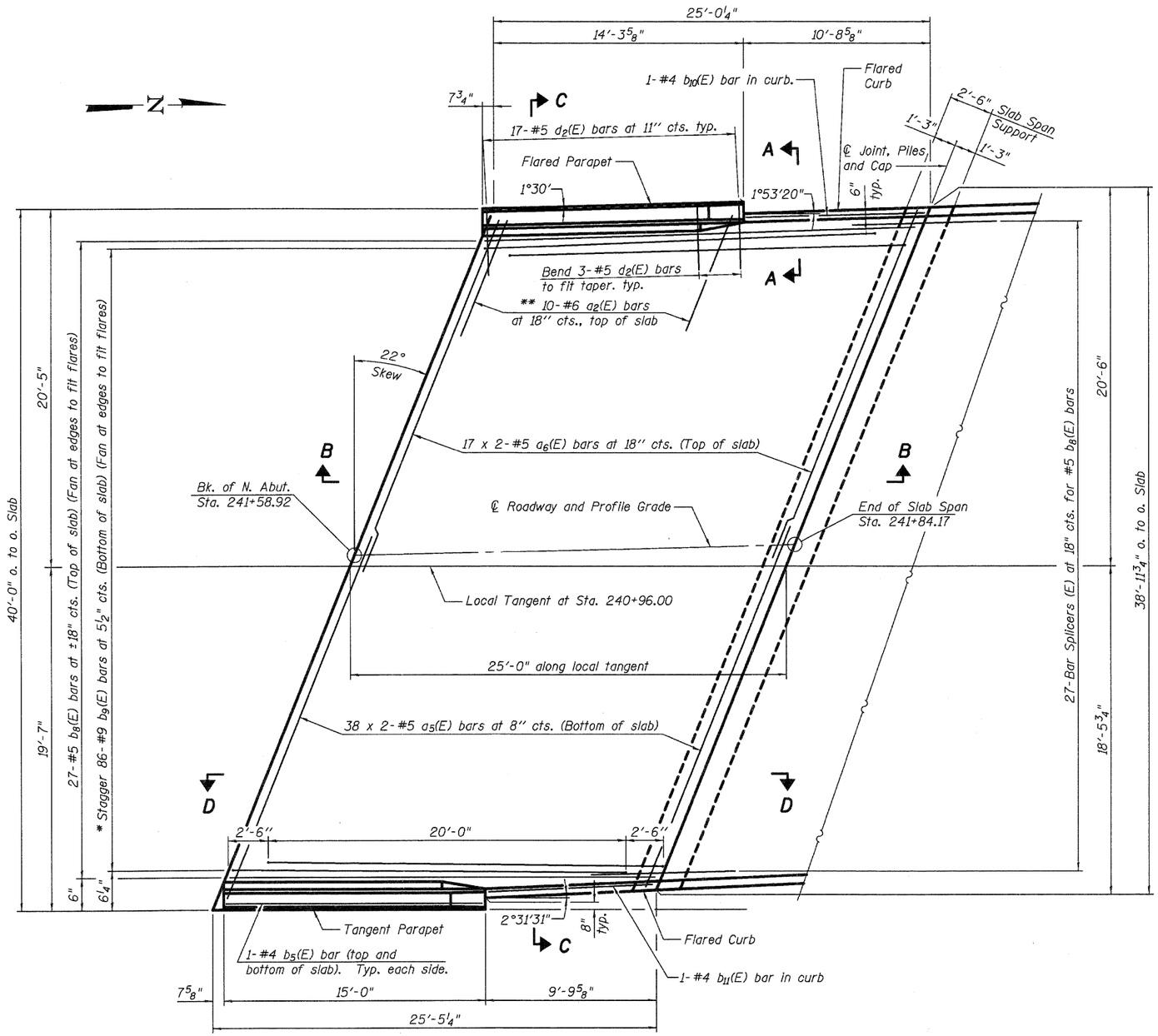
MODJESKI and MASTERS
Experience great bridges.

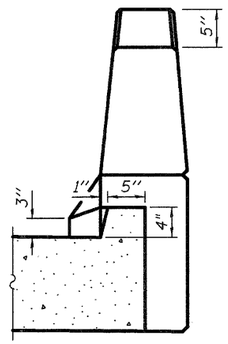
FILE NAME =	USER NAME =	DESIGNED - MJP	REVISED -
		CHECKED - RLM	REVISED -
	PLOT SCALE =	DRAWN - PRC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - MJP	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB – SOUTH
STRUCTURE NO. 039-0073
SHEET NO. 15 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	15
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			





VIEW A-A

PLAN

* Tilt #9 $b_9(E)$ bars as required to maintain clearance.
** Space between $a_6(E)$ bars, typ. each parapet.

MINIMUM BAR LAP

#5 Bar 2'-7"

Notes:
See sheet 17 of 32 for Sections B-B, C-C and View D-D.
$d_2(E)$, $a_5(E)$, and $a_6(E)$ bar spacings measured along local tangent.
Bars indicated thus 17 x 2-#5 etc. indicates 17 lines of bars with 2 lengths per line.

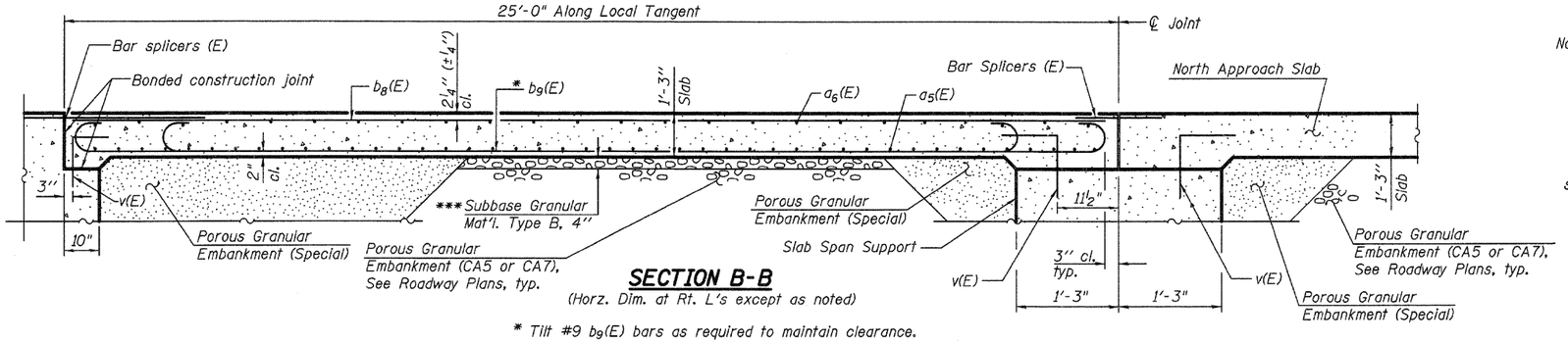
MODJESKI and MASTERS
Experience great bridges.

FILE NAME =	USER NAME =	DESIGNED - MJP	REVISED -
		CHECKED - RLM	REVISED -
	PLOT SCALE =	DRAWN - AEC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - MJP	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SLAB SPAN DETAILS
STRUCTURE NO. 039-0073
SHEET NO. 16 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	55
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			



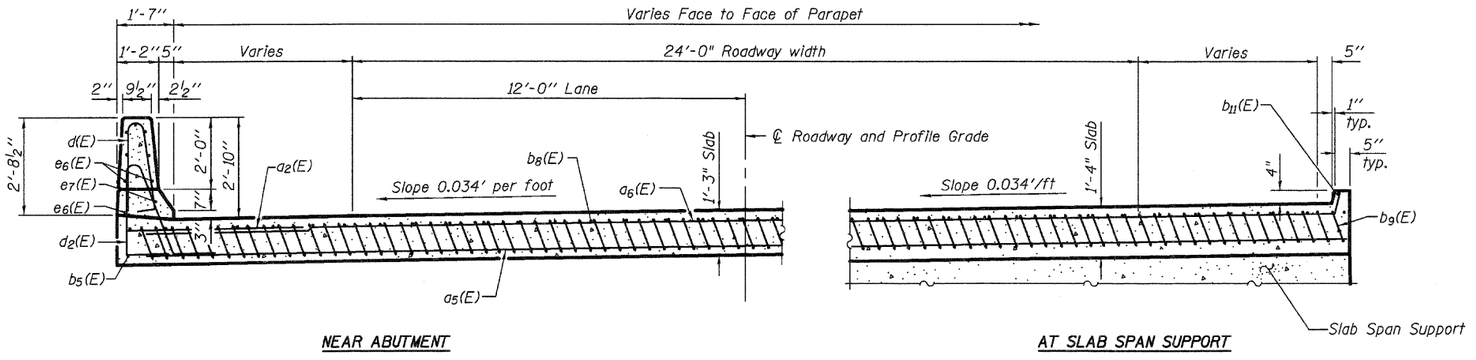
SECTION B-B

(Horz. Dim. at Rt. L's except as noted)

* Tilt #9 b_9(E) bars as required to maintain clearance.

*** Cost included with Concrete Superstructure.

Notes:
See sheet 16 of 32 for View A-A.
Slab and parapet concrete shall be paid for as Concrete Superstructure.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheets 11, 12, 13 and 27 of 32.
For bar splicer details, see sheet 29 of 32.
Cost of excavation included with Concrete Structures.
For Porous Granular Embankment (Special) and drainage treatment details, see sheet 3 of 32.
For additional parapet details, see sheet 12 of 32.
For Slab Span Support details, see sheet 27 of 32.

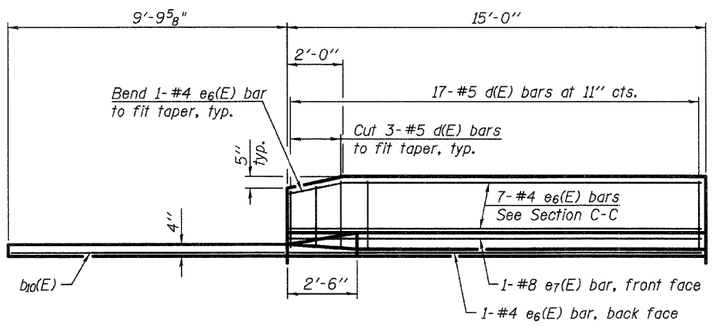


NEAR ABUTMENT

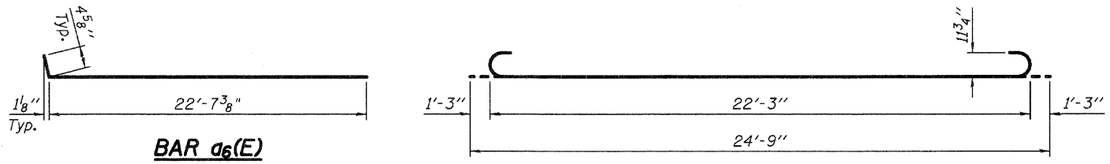
AT SLAB SPAN SUPPORT

SECTION C-C

(See Plan for dimensions not shown)

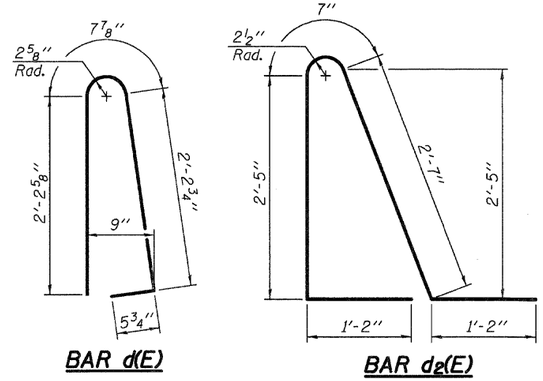


VIEW D-D



BAR a_6(E)

BAR b_9(E)



BAR d(E)

BAR d_2(E)

SLAB SPAN BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_2(E)	20	#6	6'-6"	——
a_5(E)	76	#5	22'-8"	——
a_6(E)	34	#5	23'-0"	——
b_5(E)	4	#4	14'-8"	——
b_8(E)	27	#5	24'-8"	——
b_9(E)	86	#9	24'-9"	——
b_{10}(E)	1	#4	10'-4"	——
b_{11}(E)	1	#4	9'-5"	——
d(E)	34	#5	5'-7"	
d_2(E)	34	#5	7'-11"	
e_6(E)	16	#4	14'-8"	——
e_7(E)	2	#8	14'-8"	——
Concrete Superstructure			Cu. Yd.	50.0
Bridge Deck Grooving			Sq. Yd.	99
Protective Coat			Sq. Yd.	119
Reinforcement Bars, Epoxy Coated			Pound	11,510

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FILE NAME =	USER NAME =	DESIGNED - MJP	REVISED -
		CHECKED - RLM	REVISED -
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	PLOT DATE = 12/02/2010	CHECKED - MJP	REVISED -

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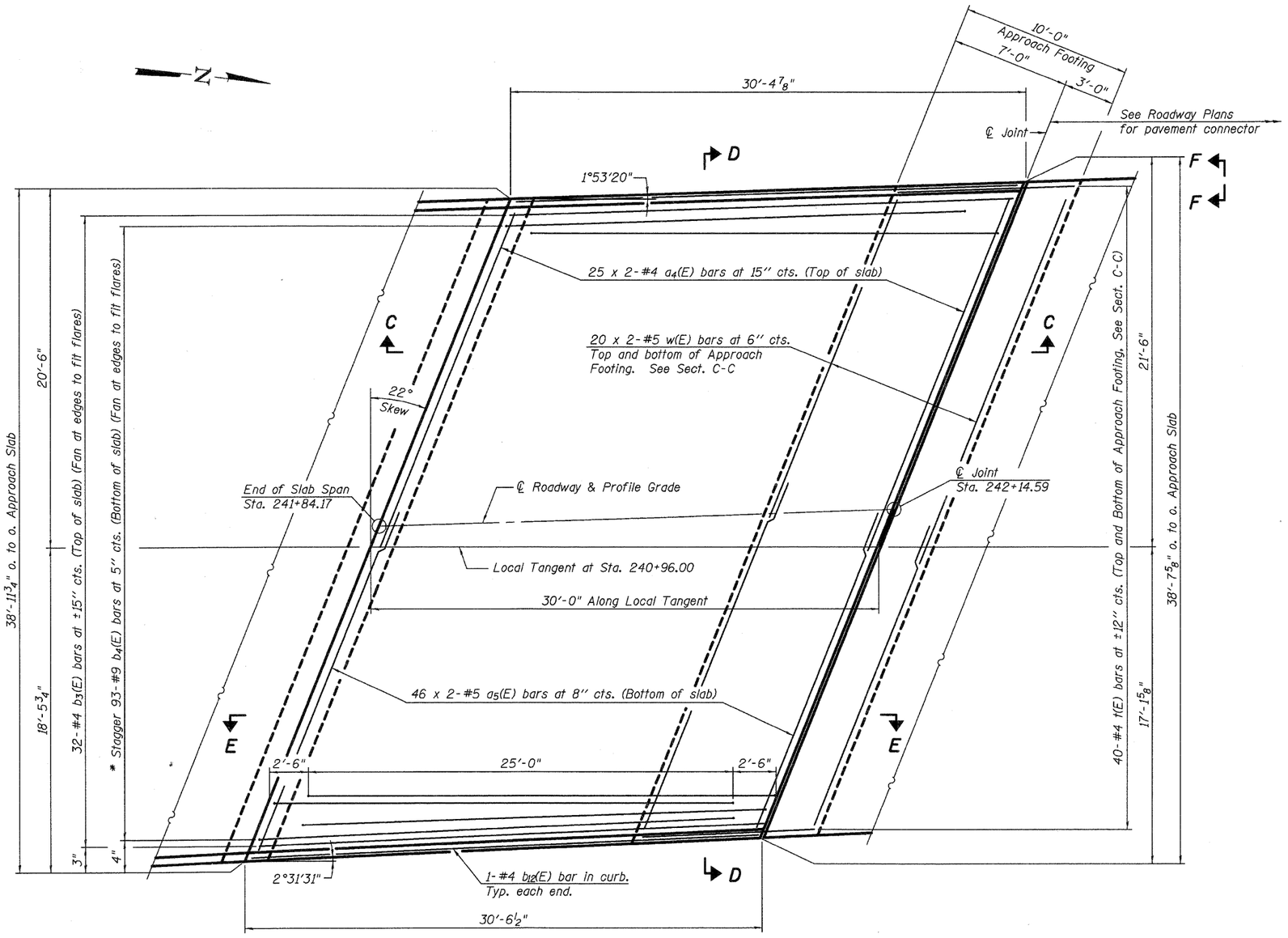
SLAB SPAN DETAILS
STRUCTURE NO. 039-0073
SHEET NO. 17 OF 32 SHEETS

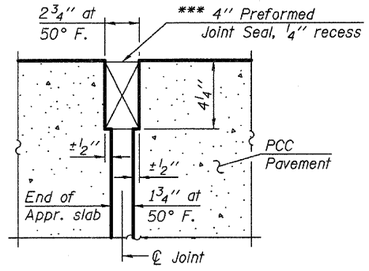
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	32	17

CONTRACT NO. 98898
ILLINOIS FED. AID PROJECT



PLAN

* Tilt #9 $b_4(E)$ bars as required to maintain clearance.



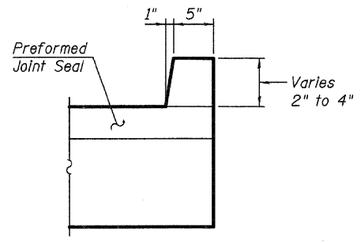
RIGID PAVEMENT

DETAIL A

See sheet 19 of 32 for location of Detail A.

*** Cost included with Concrete Superstructure.

PREFORMED JOINT SEAL



VIEW F-F

MINIMUM BAR LAP

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

Notes:
See sheet 19 of 32 for Sections C-C & D-D and View E-E.
$a_4(E)$ and $a_5(E)$ bar spacings measured along local tangent.
Bars indicated thus 25 x 2 -#4 etc. indicates 25 lines of bars with 2 lengths per line.

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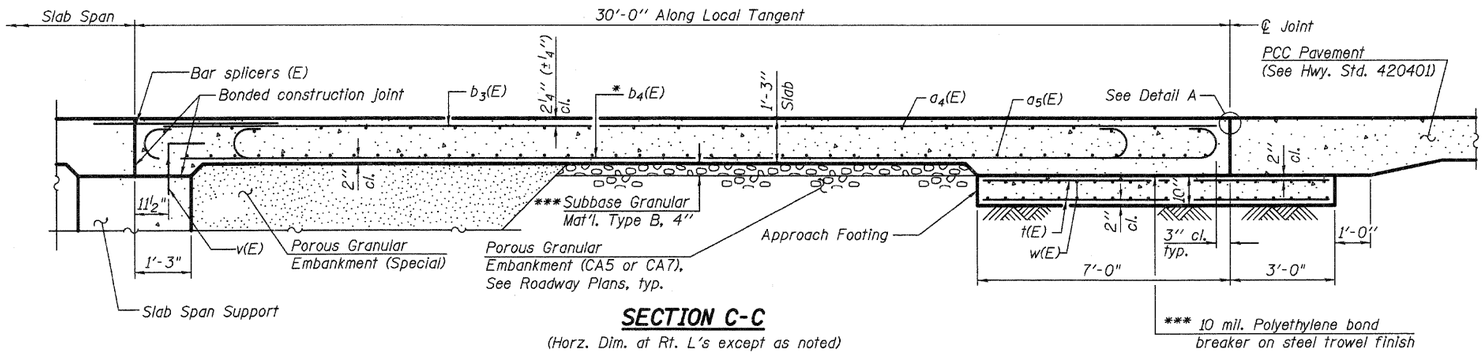
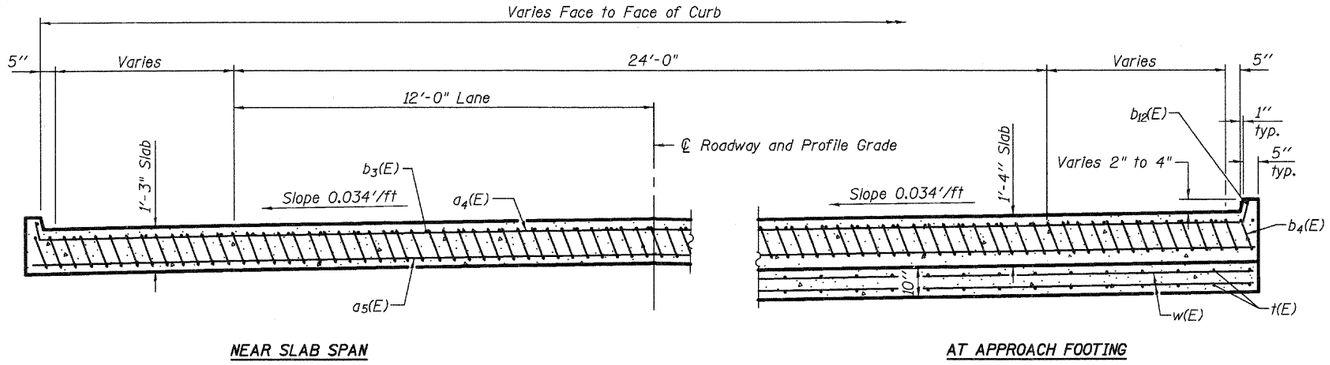
BRIDGE APPROACH SLAB – NORTH
STRUCTURE NO. 039-0073
SHEET NO. 18 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	57
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			



SECTION C-C

(Horz. Dim. at Rt. L's except as noted)

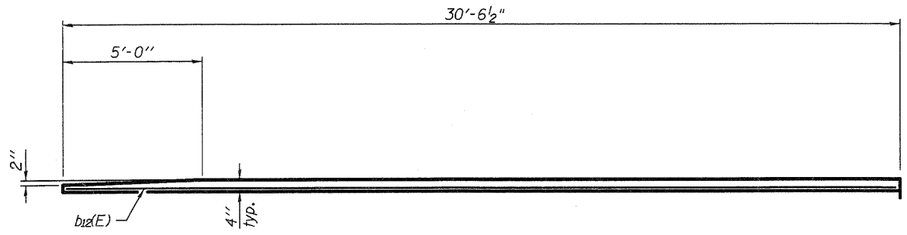


NEAR SLAB SPAN

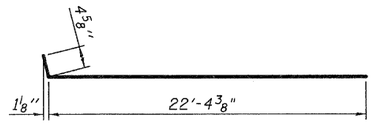
AT APPROACH FOOTING

SECTION D-D

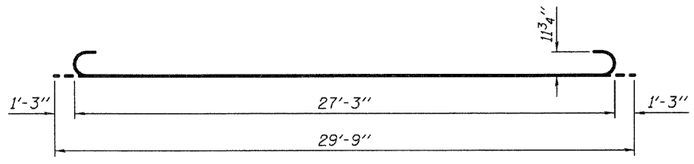
(See Plan for dimensions not shown)



VIEW E-E



BAR a_4(E)



BAR b_4(E)

Notes:

See sheet 18 of 32 for Detail A.
Approach slab and curb shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheets 12 and 27 of 32.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet 29 of 32.
Cost of excavation for approach footing included with Concrete Structures.
For Porous Granular Embankment (Special) and drainage treatment details, see sheet 3 of 32.
For Slab Span Support details, see sheet 27 of 32.

* Tilt #9 b_4(E) bars as required to maintain clearance.

*** Cost included with Concrete Superstructure.

NORTH APPROACH BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_4(E)	50	#4	22'-9"	
a_5(E)	92	#5	22'-8"	
b_3(E)	32	#4	29'-8"	
b_4(E)	93	#9	29'-9"	
b_{12}(E)	2	#4	30'-2"	
t(E)	80	#4	10'-5"	
w(E)	80	#5	22'-0"	
Concrete Superstructure			Cu. Yd.	55.4
Concrete Structures			Cu. Yd.	12.9
Bridge Deck Grooving			Sq. Yd.	119
Protective Coat			Sq. Yd.	132
Reinforcement Bars, Epoxy Coated			Pound	15,410

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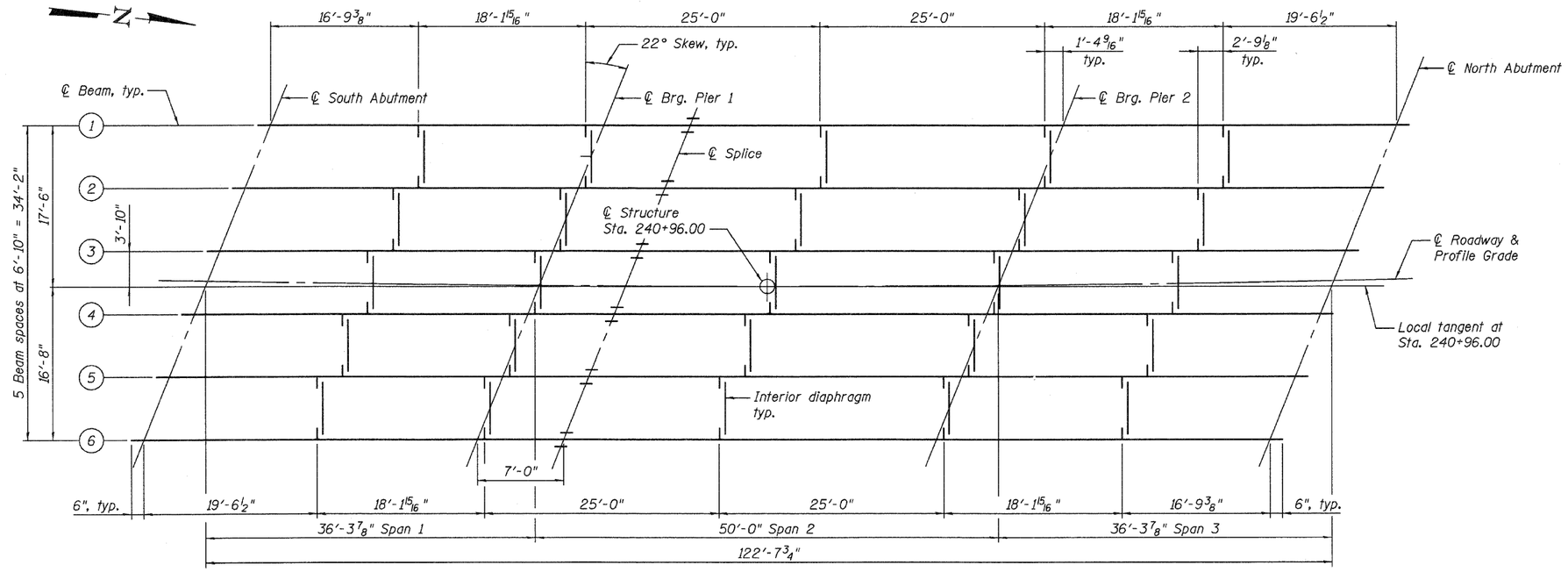
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB – NORTH
STRUCTURE NO. 039-0073
SHEET NO. 19 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	65

CONTRACT NO. 98898
ILLINOIS FED. AID PROJECT



FRAMING PLAN

Notes:
All diaphragms shall be installed as steel is erected and secured with erection pins and bolts. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
For beam elevation, field splice and interior diaphragm details, see sheet 21 of 32.
For details of diaphragms at the abutments, see sheet 13 of 32.

INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Pier 1 or Pier 2	0.5 Sp. 2
I_s	(in^4)	3270	3270	3270
$I_c(n)$	(in^4)	10119	——	10119
$I_c(3n)$	(in^4)	7517	——	7517
S_s	(in^3)	243	243	243
$S_c(n)$	(in^3)	383	——	383
$S_c(3n)$	(in^3)	347	——	347
DC1	(k/')	0.810	0.810	0.810
M_{DC1}	('k)	65.8	156.6	96.4
DC2	(k/')	0.150	0.150	0.150
M_{DC2}	('k)	12.2	29.0	17.9
DW	(k/')	0.342	0.342	0.342
M_{DW}	('k)	27.8	66.2	40.7
M_{L+IM}	('k)	336.4	317.8	360.1
M_u (Strength I)	('k)	728.0	887.6	834.1
* $\phi_f M_n$, $\phi_f M_{nc}$	('k)	1977	1141	1977
f_s DC1	(ksi)	3.249	7.733	4.760
f_s DC2	(ksi)	0.422	1.432	0.619
f_s DW	(ksi)	0.961	3.269	1.407
f_s 1.3(L+IM)	(ksi)	13.702	20.402	14.667
f_s (Service II)	(ksi)	18.334	32.836	21.453
V_r	(k)	20.1	——	18.1

* Compact sections

INTERIOR GIRDER REACTION TABLE			
		N. Abut. or S. Abut.	Pier 1 or Pier 2
R_{DC1}	(k)	10.4	39.3
R_{DC2}	(k)	1.9	7.3
R_{DW}	(k)	4.4	16.6
R_{L+IM}	(k)	59.7	87.6
R_{Total}	(k)	76.4	150.8

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.^{4} and in.^{3}).
$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads (in.^{4} and in.^{3}).
$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in.^{4} and in.^{3}).
DC1: Un-factored non-composite dead load (kips/ft.).
M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
M_{L+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
M_u (Strength I): Factored design moment (kip-ft.). $1.25\,(M_{DC1} + M_{DC2}) + 1.5\,M_{DW} + 1.75\,M_{L+IM}$
$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).
$\phi_f M_{nc}$: Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).
f_s (Service II): Sum of stresses as computed from the moments below (ksi). $M_{DC1} + M_{DC2} + M_{DW} + 1.3\,M_{L+IM}$
V_r: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

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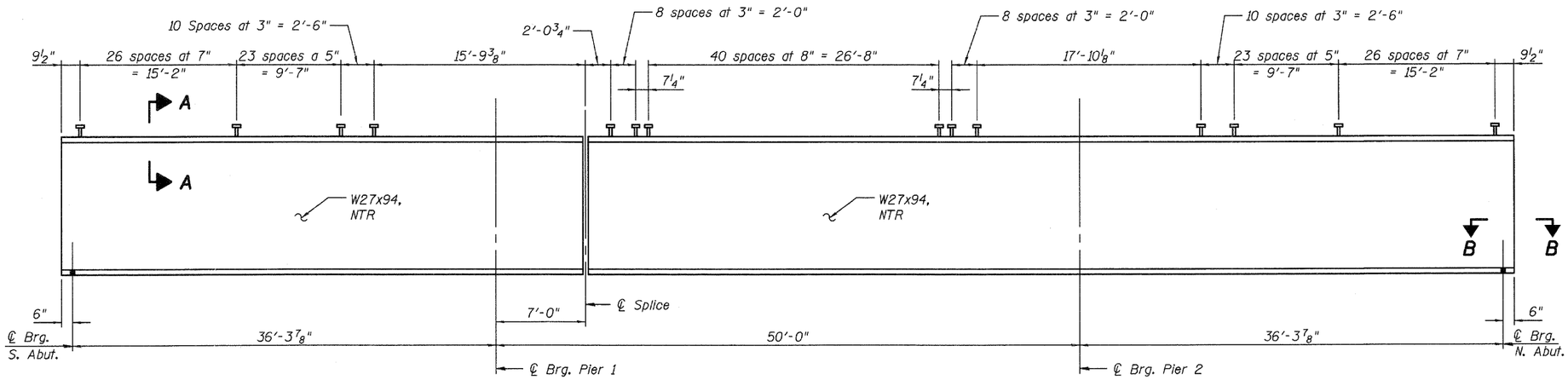
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN AND DESIGN DATA
STRUCTURE NO. 039-0073
SHEET NO. 20 OF 32 SHEETS

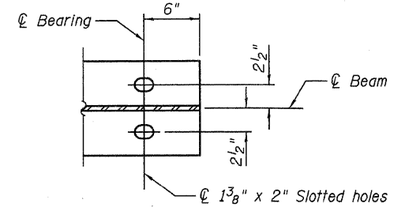
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	59

CONTRACT NO. 98898
ILLINOIS FED. AID PROJECT



BEAM ELEVATION

(6 Required)



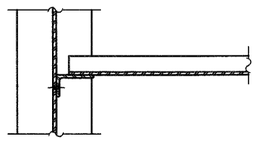
SECTION B-B

(N. Abut. end shown
S. Abut. end similar)

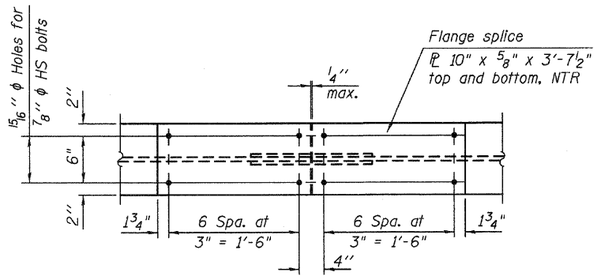
*TOP OF BEAM ELEVATIONS

Location	Bm. #1	Bm. #2	Bm. #3	Bm. #4	Bm. #5	Bm. #6
℄ Brg. at South Abut.	427.22	427.44	427.67	427.89	428.11	428.34
℄ Brg. at Pier 1	427.22	427.44	427.67	427.90	428.13	428.36
℄ Splice	427.22	427.45	427.68	427.91	428.14	428.37
℄ Brg. at Pier 2	427.21	427.45	427.68	427.92	428.15	428.39
℄ Brg. at North Abut.	427.21	427.45	427.69	427.93	428.17	428.41

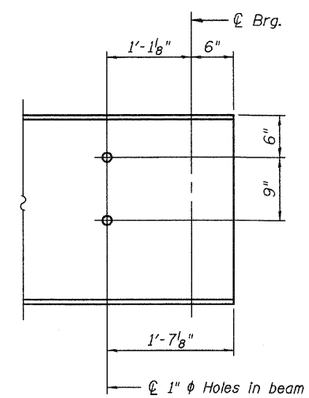
* For fabrication only



SECTION C-C

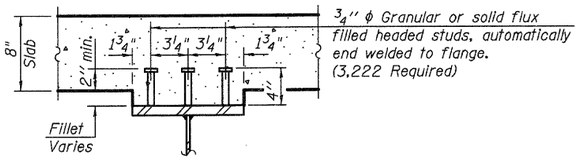


PLAN

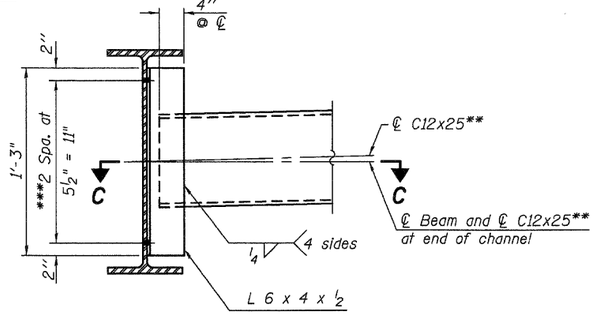


END OF GIRDER ELEVATION

(N. Abut. end shown
S. Abut. end similar)

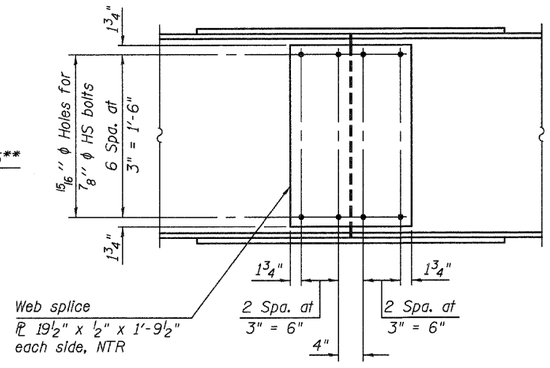


SECTION A-A



INTERIOR DIAPHRAGM

(25 Required)



ELEVATION

SPLICE DETAIL

(6 Required)

Notes:
Two hardened washers required for each set of oversized holes.
See the Framing Plan on sheet 20 of 32 for locations of interior diaphragms.
**C12x30 can be used as an alternate channel size to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
The alternate, If utilized, shall be provided at no additional cost to the Department.
***3/4" ϕ HS bolts, 15/16" ϕ holes

Notes:
Beams and splice plates shall be AASHTO M270 Grade 50.
Diaphragms and diaphragm connection angles shall be AASHTO M270 Grade 36.
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

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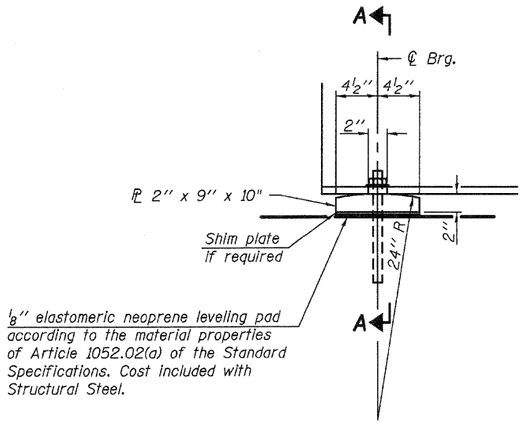
	PLOT DATE = 12/02/2010	CHECKED - MJP	REVISED -

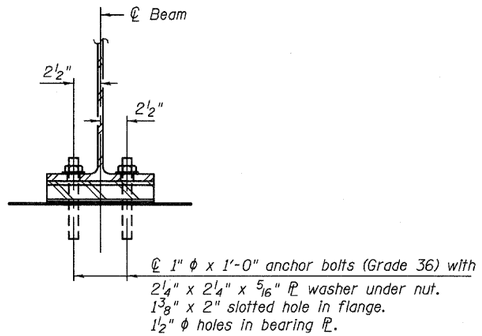
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS
STRUCTURE NO. 039-0073
SHEET NO. 21 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	60
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		



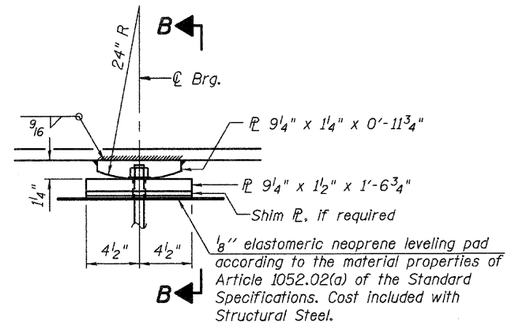
ELEVATION AT ABUTMENT



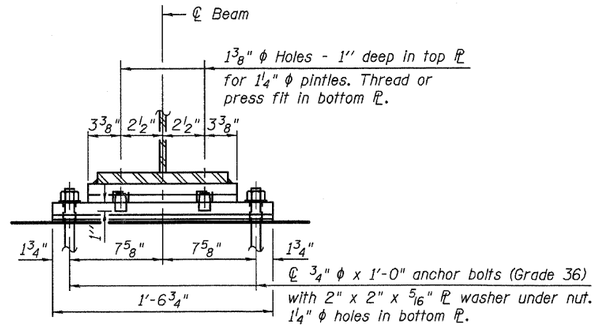
SECTION A-A

FIXED BEARING AT ABUTMENT

(12 Required)



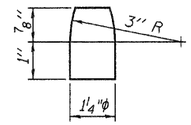
ELEVATION AT PIER



SECTION B-B

FIXED BEARING AT PIER

(12 Required)



PINTLE

(24 Required)

Notes:

Bearing plates and pintles shall be AASHTO M270 Grade 50.

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

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

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

Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, ¾"	Each	24
Anchor Bolts, 1"	Each	24

MODJESKI and MASTERS
Experience great bridges.

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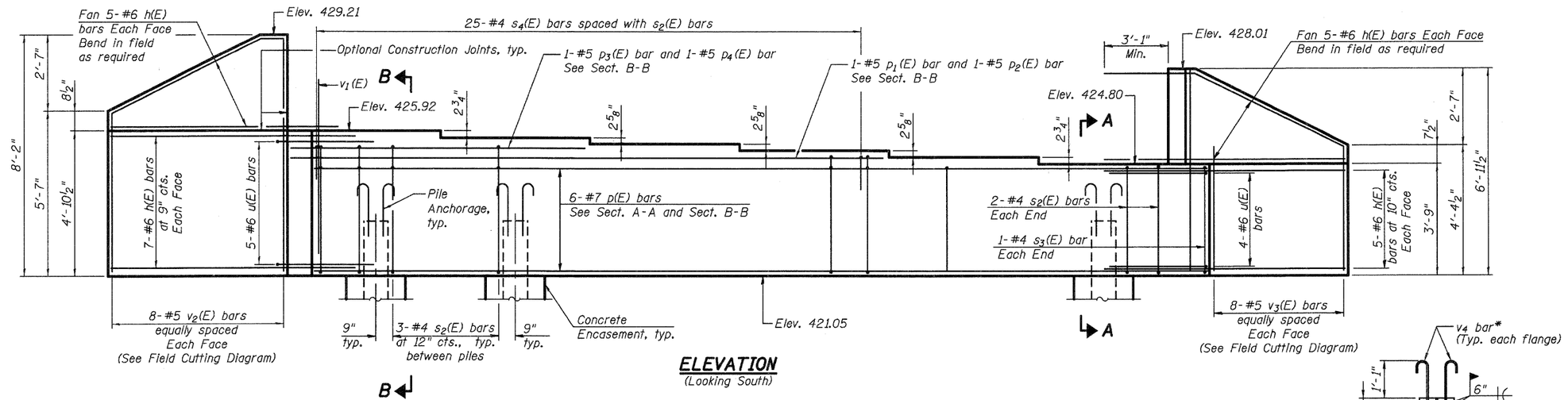
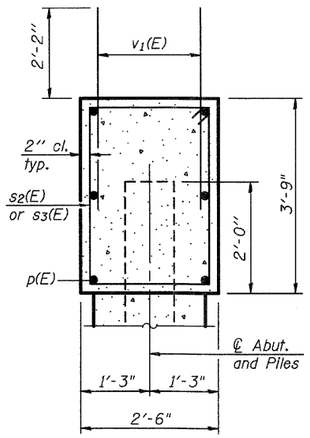
BEARING DETAILS
STRUCTURE NO. 039-0073
SHEET NO. 22 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	61

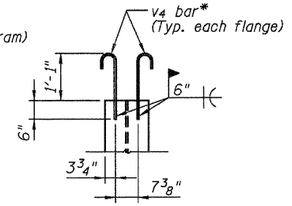
CONTRACT NO. 98898
ILLINOIS FED. AID PROJECT



ELEVATION
(Looking South)



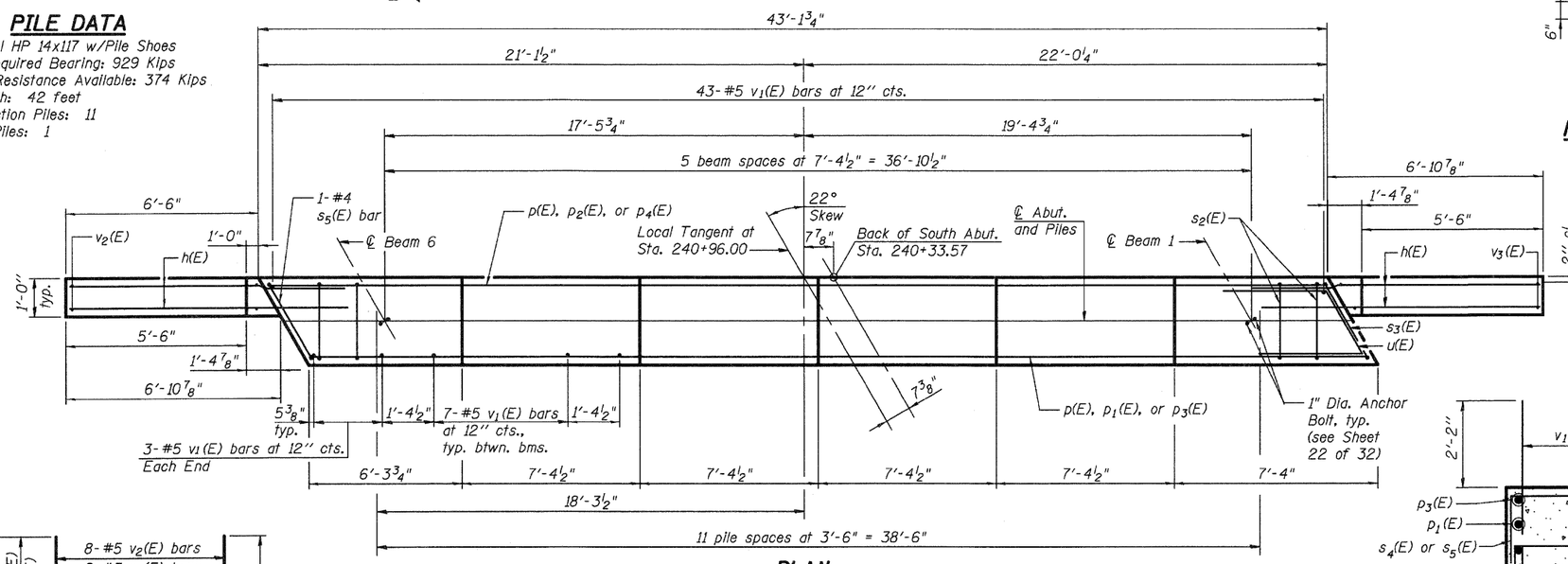
SECTION A-A



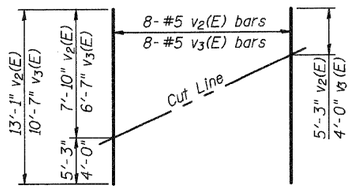
PILE ANCHORAGE

PILE DATA

Type: Steel HP 14x117 w/Pile Shoes
Nominal Required Bearing: 929 Kips
Factored Resistance Available: 374 Kips
Est. Length: 42 feet
No. Production Piles: 11
No. Test Piles: 1

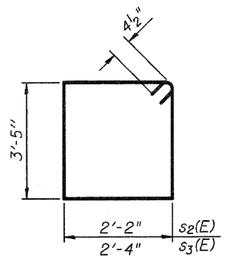


PLAN

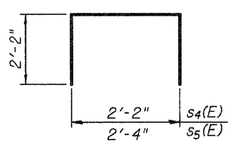


FIELD CUTTING DIAGRAM

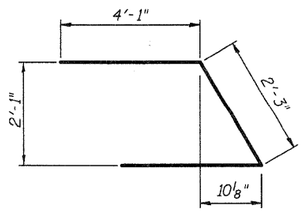
Order v_2(E) and v_3(E) full length. Cut as shown and use remainder of bars in opposite face.



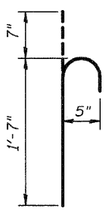
BARS s_2(E) & s_3(E)



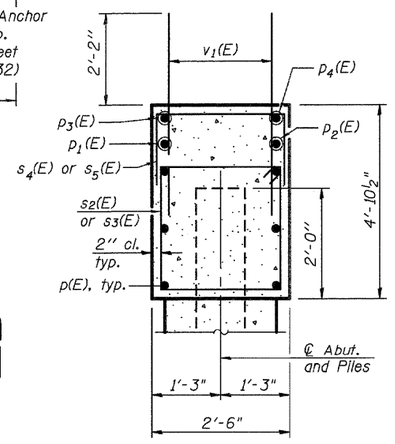
BARS s_4(E) & s_5(E)



BAR u(E)



BAR v_4*



SECTION B-B

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	44	#6	10'-6"	——
p(E)	6	#7	42'-10"	——
p_1(E)	1	#5	28'-1"	——
p_2(E)	1	#5	29'-1"	——
p_3(E)	1	#5	13'-4"	——
p_4(E)	1	#5	14'-4"	——
s_2(E)	37	#4	11'-11	
s_3(E)	2	#4	12'-3"	
s_4(E)	25	#4	6'-6"	
s_5(E)	1	#4	6'-8"	
u(E)	9	#6	10'-5"	
v_1(E)	84	#5	4'-4"	——
v_2(E)	8	#5	13'-1"	——
v_3(E)	8	#5	10'-7"	——
* v_4	48	#5	2'-2"	
Structure Excavation		Cu. Yd.	189	
Concrete Structures		Cu. Yd.	20.5	
Concrete Encasement		Cu. Yd.	6.6	
Protective Coat		Sq. Yd.	12	
Reinforcement Bars, Epoxy Coated		Pound	2,450	
Furnishing Steel Piles HP 14x117		Foot	462	
Driving Piles		Foot	462	
Test Pile Steel HP 14x117		Each	1	
Pile Shoes		Each	12	

* Cost of v_4 bars included with Furnishing Steel Piles HP14x117.

Notes:
Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For details of piles and Concrete Encasement, see sheet 28 of 32.

MODJESKI and MASTERS
Experience great bridges.

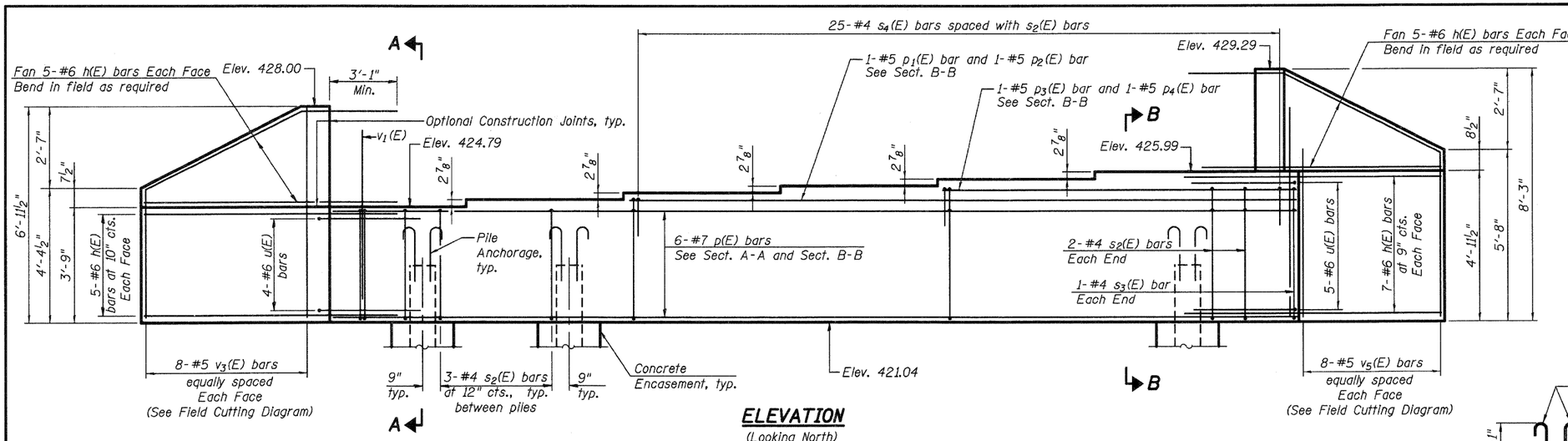
FILE NAME =	USER NAME =	DESIGNED - MJP	REVISED -
		CHECKED - RLM	REVISED -
	PLOT SCALE =	DRAWN - AEC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - RLM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

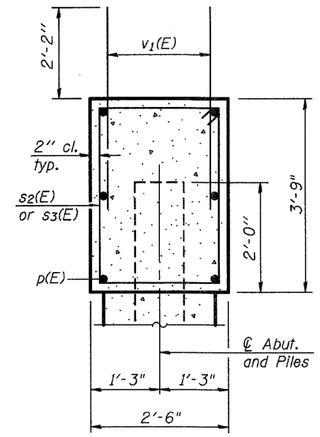
SOUTH ABUTMENT DETAILS
STRUCTURE NO. 039-0073
SHEET NO. 23 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	23

CONTRACT NO. 98898
ILLINOIS FED. AID PROJECT



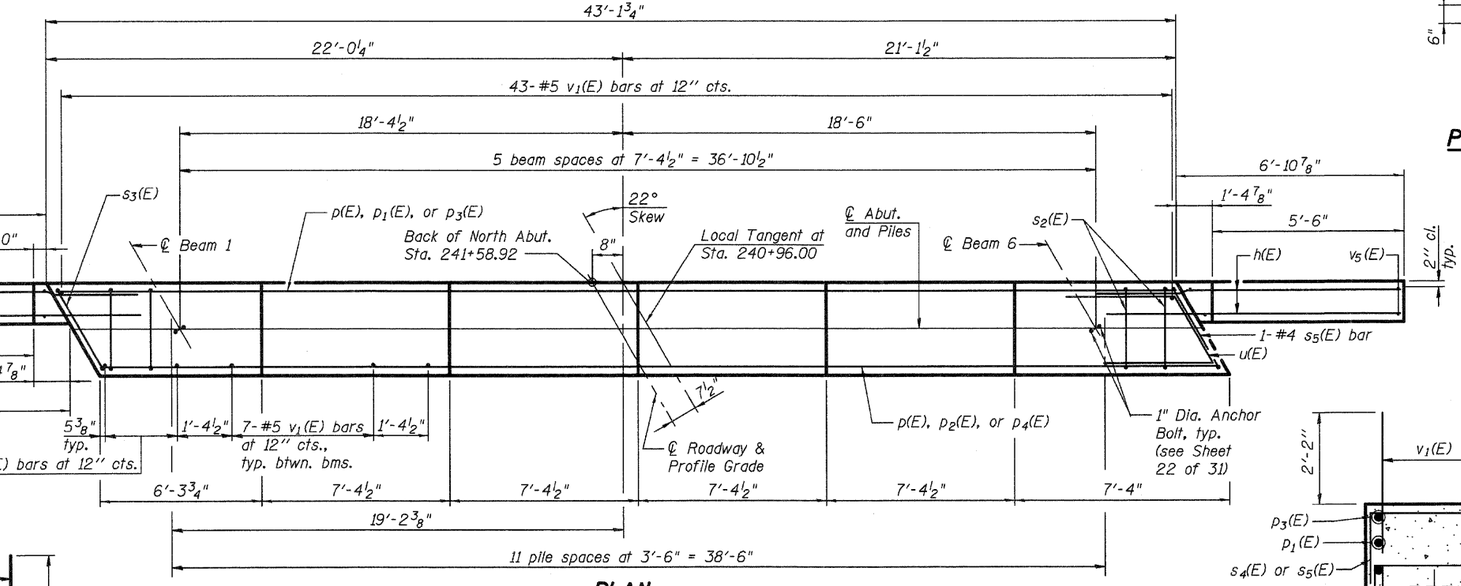
ELEVATION
(Looking North)



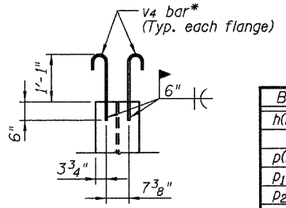
SECTION A-A

PILE DATA

Type: Steel HP 14x117 w/Pile Shoes
Nominal Required Bearing: 929 Kips
Factored Resistance Available: 374 Kips
Est. Length: 44 feet
No. Production Piles: 11
No. Test Piles: 1



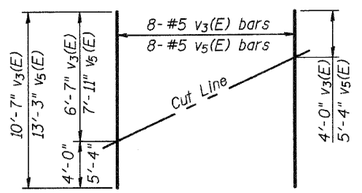
PLAN



PILE ANCHORAGE

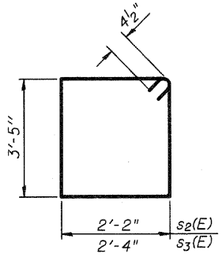
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	44	#6	10'-6"	
p(E)	6	#7	42'-10"	
p_1(E)	1	#5	28'-1"	
p_2(E)	1	#5	29'-1"	
p_3(E)	1	#5	13'-4"	
p_4(E)	1	#5	14'-4"	
s_2(E)	37	#4	11'-11	
s_3(E)	2	#4	12'-3"	
s_4(E)	25	#4	6'-6"	
s_5(E)	1	#4	6'-8"	
u(E)	9	#6	10'-5"	
v_1(E)	84	#5	4'-4"	
v_3(E)	8	#5	10'-7"	
* v_4	48	#5	2'-2"	
v_5(E)	8	#5	13'-3"	
Concrete Structures		Cu. Yd.	20.7	
Concrete Encasement		Cu. Yd.	6.6	
Protective Coat		Sq. Yd.	12	
Reinforcement Bars, Epoxy Coated		Pound	2,460	
Furnishing Steel Piles HP 14x117		Foot	484	
Driving Piles		Foot	484	
Test Pile Steel HP 14x117		Each	1	
Pile Shoes		Each	12	
Underwater Structure Excavation Protection - Location 1		Each	1	

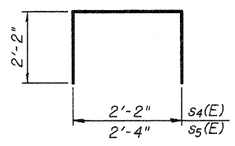


FIELD CUTTING DIAGRAM

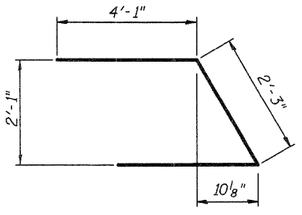
Order v_3(E) and v_5(E) full length. Cut as shown and use remainder of bars in opposite face.



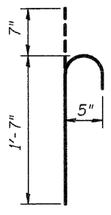
BARS s_2(E) & s_3(E)



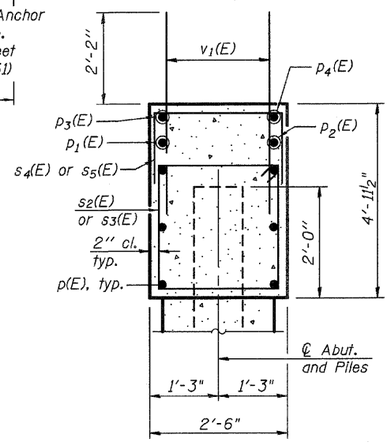
BARS s_4(E) & s_5(E)



BAR u(E)



BAR v_4*



SECTION B-B

* Cost of v_4 bars included with Furnishing Steel Piles HP14x117.

Notes:
Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.
For details of piles and Concrete Encasement, see sheet 28 of 32.
If a portion of the concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete for concrete encasements shall be tremied according to Article 503.08 of the Standard Specifications to the elevation of the top of concrete encasement. A construction joint shall be placed between the top of the concrete encasement and the bottom of the abutment cap. Concrete for concrete structures shall be placed above the waterline. No portion of the abutment cap shall be tremied concrete.

MODJESKI and MASTERS
Experience great bridges.

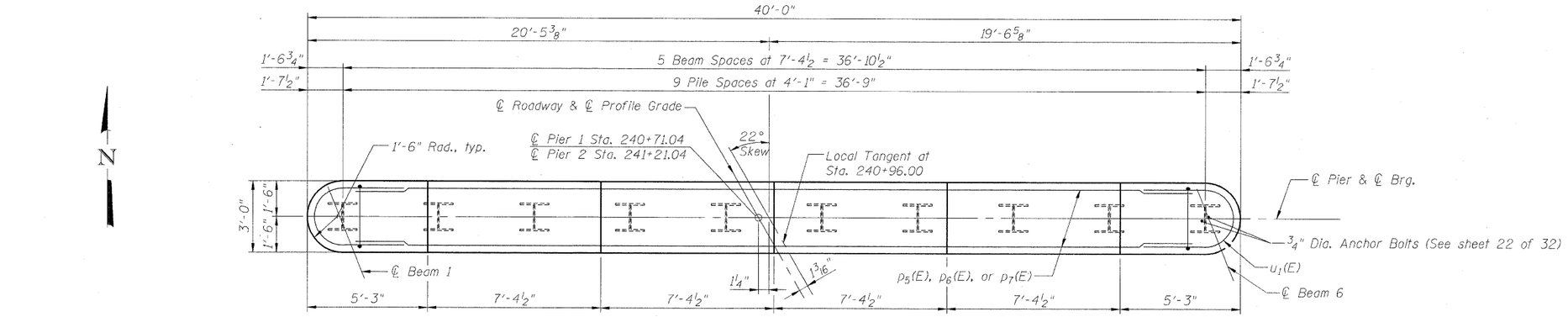
FILE NAME =	USER NAME =	DESIGNED - MJP	REVISED -
		CHECKED - RLM	REVISED -
	PLOT SCALE =	DRAWN - AEC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - RLM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

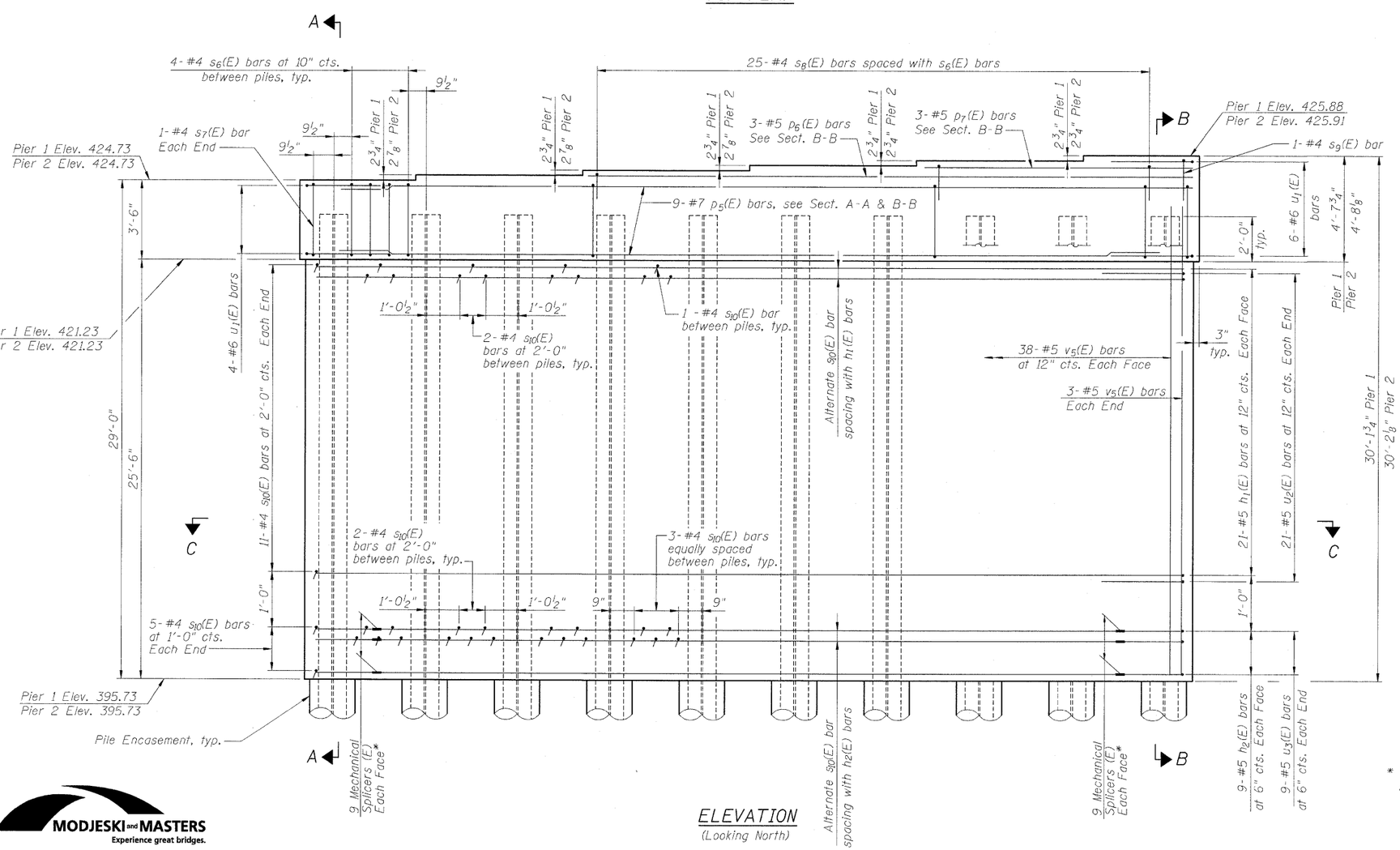
NORTH ABUTMENT DETAILS
STRUCTURE NO. 039-0073
SHEET NO. 24 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13BI-2	JACKSON	71	65

CONTRACT NO. 98898
ILLINOIS FED. AID PROJECT



TOP PLAN



ELEVATION
(Looking North)

PIER 1 PILE DATA

Type: Steel HP14x117 w/Pile Shoes
Nominal Required Bearing: 929 Kips
Factored Resistance Available: 407 Kips
Est. Length: 42 ft
No. Production Piles: 9
No. Test Piles: 1

PIER 2 PILE DATA

Type: Steel HP14x117 w/Pile Shoes
Nominal Required Bearing: 929 Kips
Factored Resistance Available: 407 Kips
Est. Length: 43 ft
No. Production Piles: 9
No. Test Piles: 1

BILL OF MATERIAL
TOTAL FOR PIER 1 AND PIER 2

Bar	No.	Size	Length	Shape
$h_1(E)$	84	#5	37'-0"	——
$h_2(E)$	36	#5	31'-9"	——
$p_5(E)$	18	#7	37'-0"	——
$p_6(E)$	6	#5	25'-8"	——
$p_7(E)$	6	#5	10'-11"	——
$s_6(E)$	72	#4	12'-5"	□
$s_7(E)$	4	#4	11'-9"	□
$s_8(E)$	50	#4	7'-0"	⌐ ¬
$s_9(E)$	2	#4	6'-8"	⌐ ¬
$s_{10}(E)$	1018	#4	2'-11"	⌐ ¬
$u_1(E)$	20	#6	10'-3"	⊐ ⊏
$u_2(E)$	84	#5	10'-2"	⊐ ⊏
$u_3(E)$	36	#5	8'-6"	⊐ ⊏
$v_5(E)$	164	#5	27'-6"	——
Structure Excavation		Cu. Yd.	376	
Cofferdam Excavation		Cu. Yd.	76	
Cofferdam (Location - 1)		Each	1	
Concrete Structures		Cu. Yd.	219.9	
Concrete Encasement		Cu. Yd.	11.0	
Reinforcement Bars, Epoxy Coated		Pound	15,110	
Furnishing Steel Piles HP14x117		Foot	765	
Driving Piles		Foot	765	
Test Pile Steel HP14x117		Each	2	
Pile Shoes		Each	20	

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For sections thru the pier, see sheet 26 of 32.
For details of piles, see sheet 28 of 32.
For details of mechanical splicers, see sheet 29 of 32.

* The Contractor has the option to use a mechanical splice or shop welded splice per AWS D1.4.

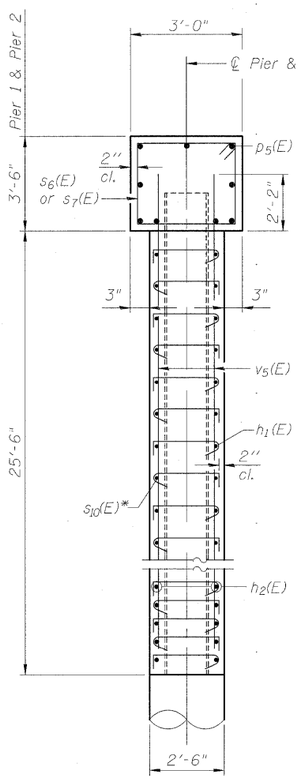
MODJESKI and MASTERS
Experience great bridges.

FILE NAME =	USER NAME =	DESIGNED - MJP	REVISED -
		CHECKED - RLM	REVISED -
	PLOT SCALE =	DRAWN - AEC	REVISED -
	PLOT DATE = 01/14/2011	CHECKED - RLM	REVISED -

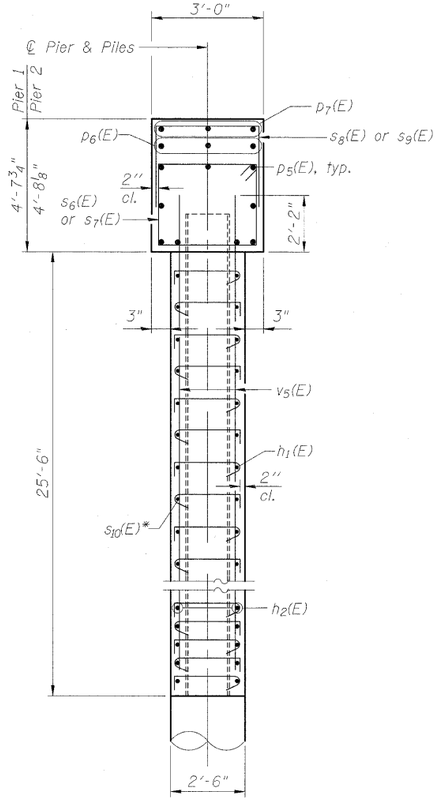
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER DETAILS
STRUCTURE NO. 039-0073
SHEET NO. 25 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)1-2	JACKSON	71	64
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			

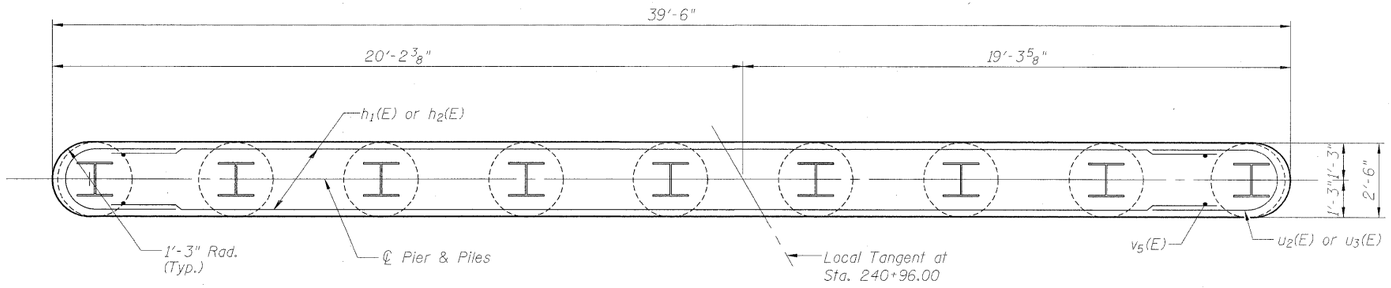


SECTION A-A

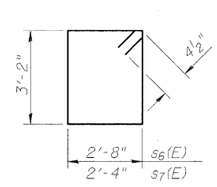


SECTION B-B

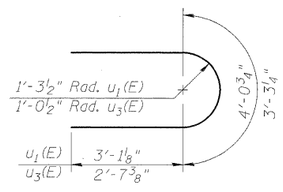
* Alternate the 90 degree hooked ends of $s_{10}(E)$ bars between rows.



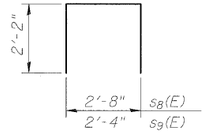
SECTION C-C



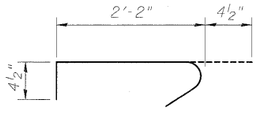
BAR $s_6(E)$ & $s_7(E)$



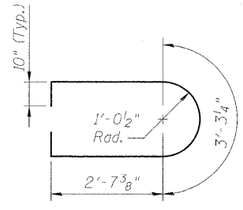
BARS $u_1(E)$ & $u_3(E)$



BAR $s_8(E)$ & $s_9(E)$



BAR $s_{10}(E)$



BAR $u_2(E)$

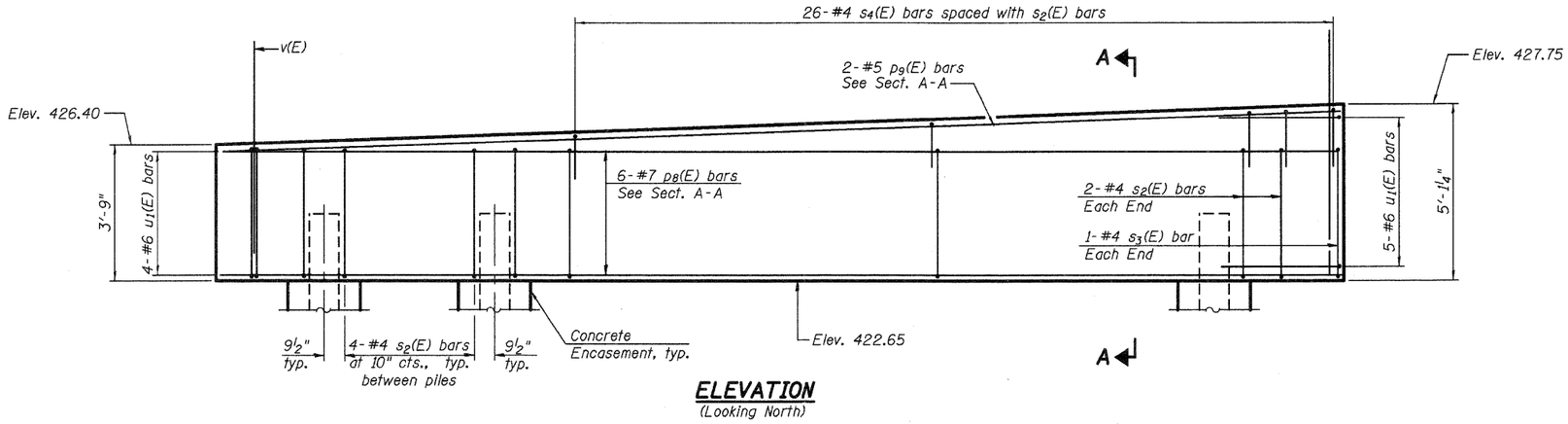
MODJESKI and MASTERS
Experience great bridges.

FILE NAME =	USER NAME =	DESIGNED - MJP	REVISED -
		CHECKED - RLM	REVISED -
	PLOT SCALE =	DRAWN - AEC	REVISED -
	PLOT DATE = 01/14/2011	CHECKED - RLM	REVISED -

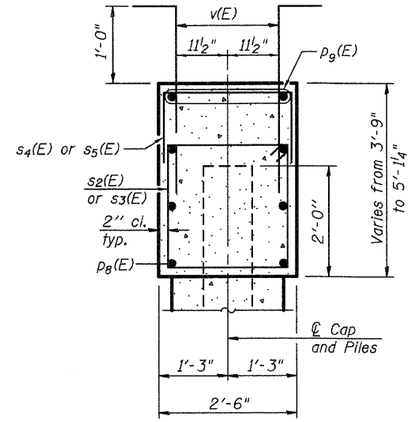
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS PIER DETAILS
STRUCTURE NO. 039-0073
SHEET NO. 26 OF 32 SHEETS

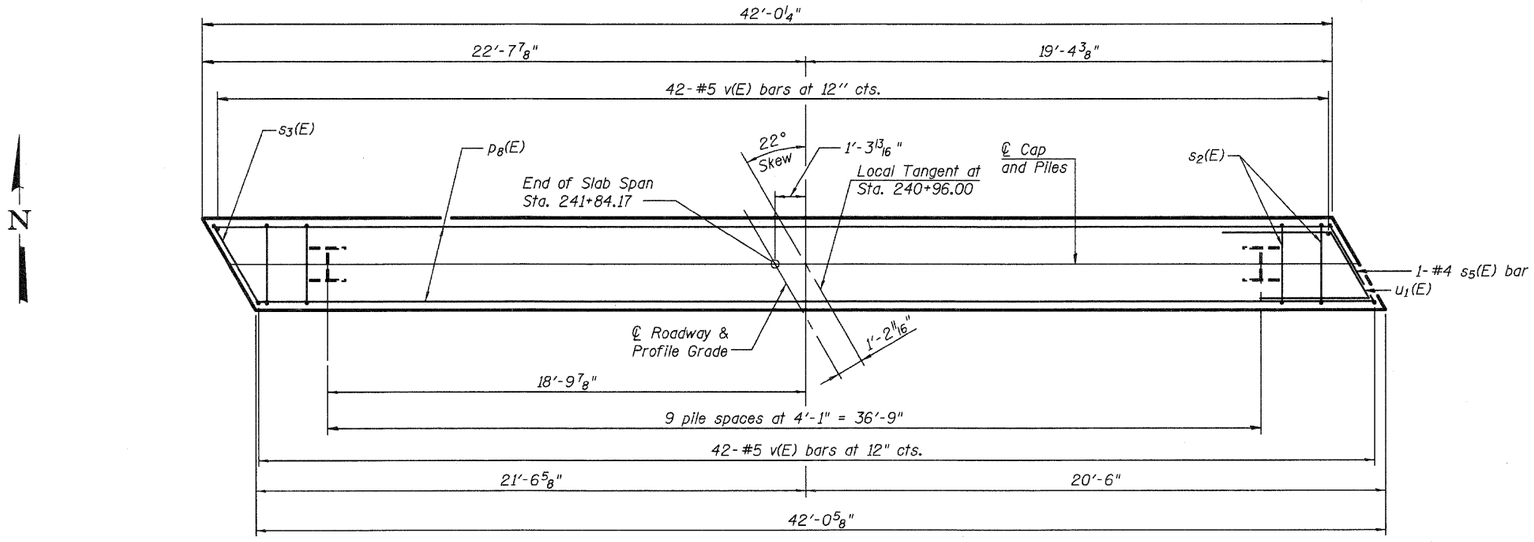
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	65
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			



ELEVATION
(Looking North)



SECTION A-A



PLAN

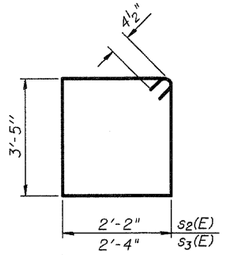
N

BILL OF MATERIAL

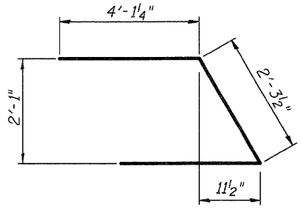
Bar	No.	Size	Length	Shape
$p_8(E)$	6	#7	41'-8"	
$p_9(E)$	2	#5	41'-8"	
$s_2(E)$	40	#4	11'-11	
$s_3(E)$	2	#4	12'-3"	
$s_4(E)$	26	#4	6'-6"	
$s_5(E)$	1	#4	6'-8"	
$u_1(E)$	9	#6	10'-6"	
v(E)	84	#5	3'-9"	
Concrete Structures		Cu. Yd.	17.3	
Concrete Encasement		Cu. Yd.	5.5	
Reinforcement Bars, Epoxy Coated		Pound	1,530	
Furnishing Steel Piles HP 14x117		Foot	432	
Driving Piles		Foot	432	
Test Pile Steel HP 14x117		Each	1	
Pile Shoes		Each	10	
Underwater Structure Excavation Protection - Location 2		Each	1	

PILE DATA

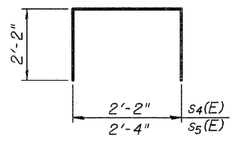
Type: Steel HP 14x117 w/Pile Shoes
Nominal Required Bearing: 929 Kips
Factored Resistance Available: 374 Kips
Est. Length: 48 feet
No. Production Piles: 9
No. Test Piles: 1



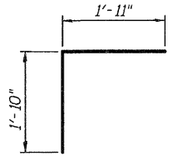
BARS $s_2(E)$ & $s_3(E)$



BAR $u_1(E)$



BARS $s_4(E)$ & $s_5(E)$



BAR v(E)

Notes:
For details of piles and Concrete Encasement, see sheet 28 of 32.
If a portion of the concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete for concrete encasements shall be tremied according to Article 503.08 of the Standard Specifications to the elevation of the top of concrete encasement. A construction joint shall be placed between the top of the concrete encasement and the bottom of the slab span support cap. Concrete for concrete structures shall be placed above the waterline. No portion of the slab span support shall be tremied concrete.

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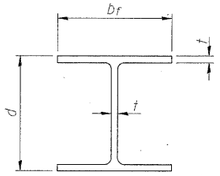
FILE NAME =	USER NAME =	DESIGNED - MJP	REVISED -
		CHECKED - RLM	REVISED -
	PLOT SCALE =	DRAWN - AEC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - RLM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

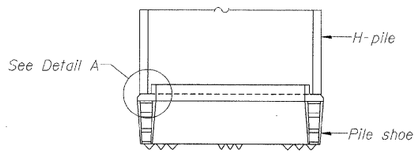
SLAB SPAN SUPPORT DETAILS
STRUCTURE NO. 039-0073
SHEET NO. 27 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	66
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		

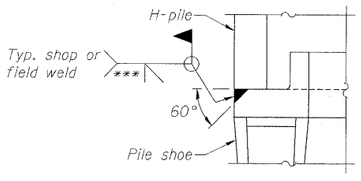


STEEL PILE TABLE

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

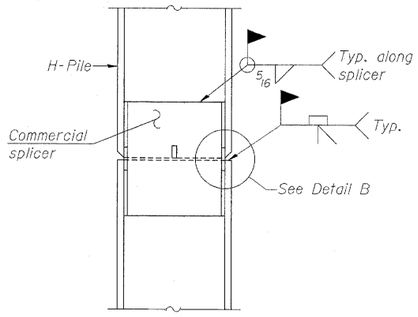


ELEVATION

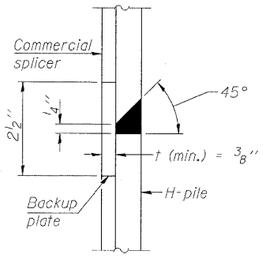


DETAIL A

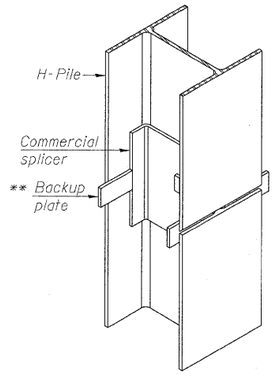
H-PILE SHOE ATTACHMENT



ELEVATION

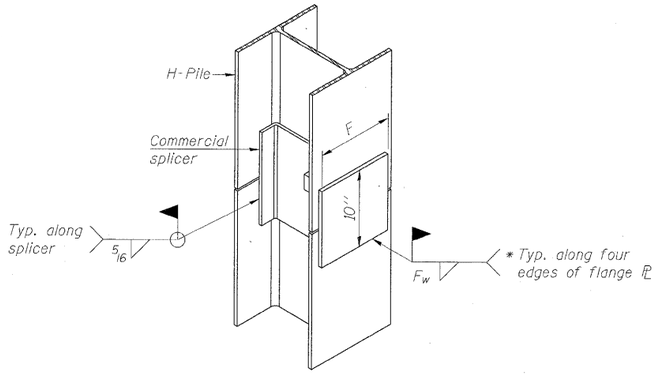


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



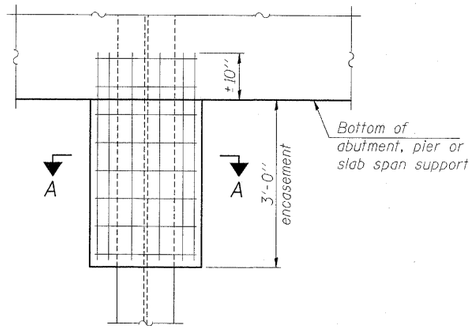
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

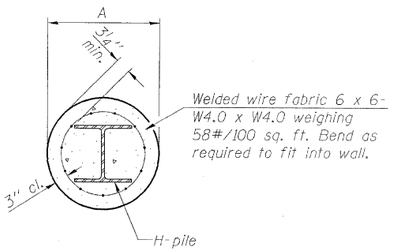
* Interrupt welds 1/4" from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer (5/16" min.).



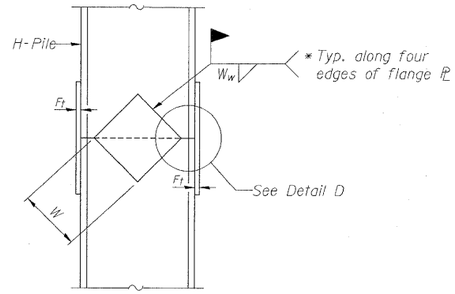
ELEVATION



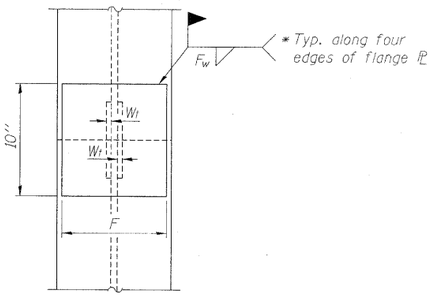
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

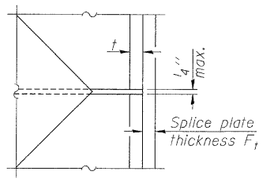
PILE ENCASEMENT



ELEVATION



END VIEW



DETAIL D

Designation	F	F_f	F_w	W	W_f	W_w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	1/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

WELDED PLATE FIELD SPLICE

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

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F-HP 7-1-10

FILE NAME =	USER NAME =	DESIGNED - RLM	REVISED -
		CHECKED - MJP	REVISED -
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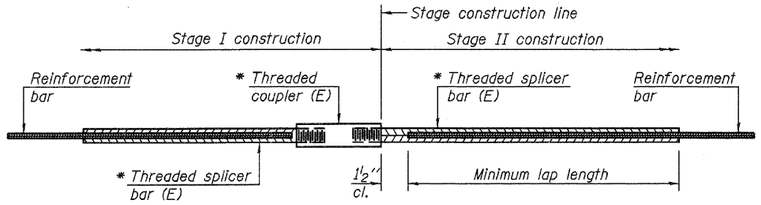
	PLOT DATE = 01/14/2011	CHECKED - RLM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 039-0073
SHEET NO. 28 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13BJI-2	JACKSON	71	67
		CONTRACT NO. 98898		
		ILLINOIS FED. AID PROJECT		



STANDARD BAR SPLICER ASSEMBLY

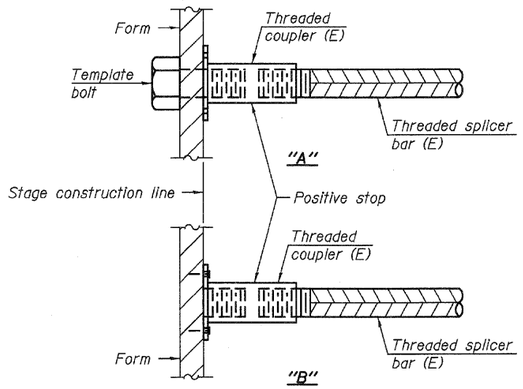
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Top bar lap, Class B

Threaded splicer bar length = min. lap length + 1½" + thread length

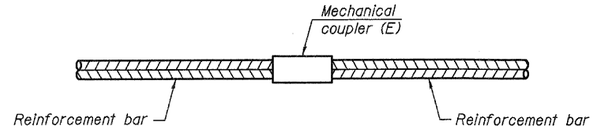
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



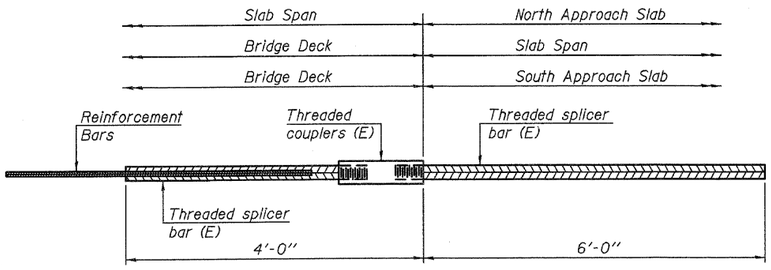
INSTALLATION AND SETTING METHODS

"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.



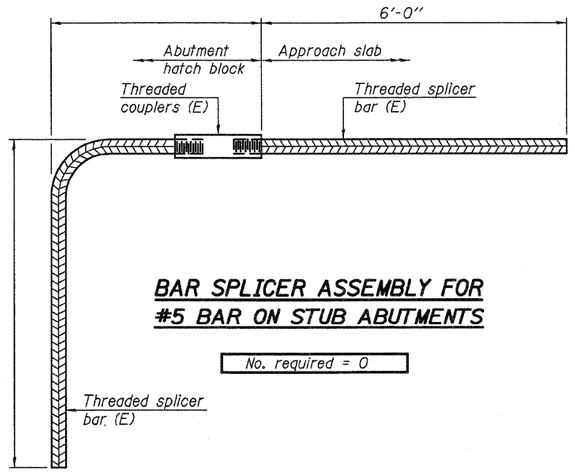
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
Pier 1 Wall	#5	36
Pier 2 Wall	#5	36



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required = 101



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 0

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

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

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See special provision for Mechanical Splicers.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

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BSD-1 7-1-10

FILE NAME =	USER NAME =	DESIGNED - RLM	REVISED -
		CHECKED - MJP	REVISED -
	PLOT SCALE =	DRAWN - AEC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - RLM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 039-0073
SHEET NO. 29 OF 32 SHEETS

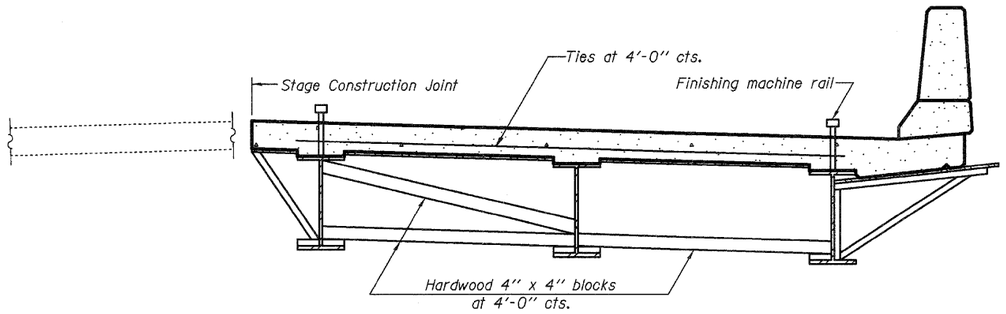
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)1-2	JACKSON	71	
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			

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

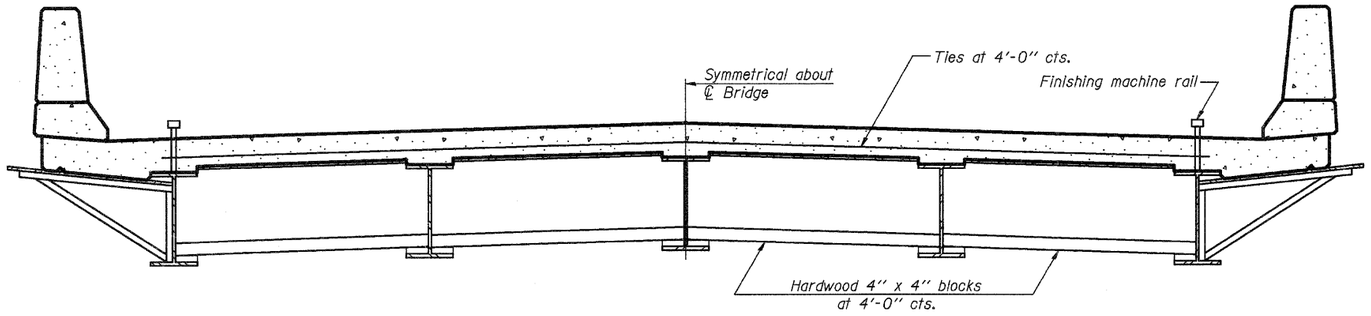
The finishing machine rails shall be placed on the top flange of the exterior beams.

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

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



FORM BRACES FOR STAGE CONSTRUCTION



FORM BRACES FOR STANDARD CONSTRUCTION

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SB-1 7-1-10

FILE NAME =	USER NAME =	DESIGNED - RLM	REVISED -
		CHECKED - MJP	REVISED -
	PLOT SCALE =	DRAWN - AEC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - RLM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER FORMING BRACKETS FOR SUPERSTRUCTURES WITH W27 BEAMS AND SMALLER STRUCTURE NO. 039-0073

SHEET NO. 30 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)1-2	JACKSON	71	69

CONTRACT NO. 98898

ILLINOIS FED. AID PROJECT

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation
Boring Log
Sheet 1 of 2

ILL 151 Over Kinkaid Lake
Route: IL 151 Structure Number: 039-0034 Date: 06/09/2003
Section: Bored By: Bryan Keller
County: Jackson Location: 1.6 MI N of ILL 3 Checked By: Rob Graeff

Boring No 1-S
Station 240+73
Offset 13' LT CL
Ground Surface 427.9 Ft

Surf Wat Elev: 420.5
Ground Water Elevation
when Drilling 423.4
At Completion
At: Hrs:

DEPTH	BLOW	Qu tsf	W%		DEPTH	BLOW	Qu tsf	W%
Bituminous Shoulder						WH	0.3B	25
425.9						WH		
				400.9				
Medium, very moist, Brown mottled grey, Silty Clay A7-6	WH			Very loose, wet, grey, very		1		
	1	0.7B	19	fine Silty Sand		WH		19
	2			91% Sand		1		
423.4				7% Silt				
Stiff, very moist, grey, Silty	5.0 1			2% Clay	30.0	1		
Clay Loam A-6	1	1.9B	20			1		
	2					2		
420.9				395.9				
Stiff, very, moist, grey, Silty Clay	1			Very loose, wet, grey, Sandy		1		
A-6 with a Sand Layer	6	1.1B	23	Gravel with Silty Clay Layers		1		17
	1			and Rotten Wood		2		
418.4				58% Sand; 7% Silt				
Very stiff, moist, brown, Silty	10.0 1			1% Clay; 34% Gravel 393.4				
Clay A-6	2	2.1B	23	Very loose to loose, wet, grey,	35.0	9		
	2			very fine Silty Sand with some		3		18
415.9				Gravel		1		
Stiff, moist, grey, Silty Clay	1			81% Sand				
Loam A-6 with some	2	1.4S	22	7% Silt				
Boulders and Gravel	2			1% Clay		WH		
				11% Gravel		WH		
				388.4		WH		
	15.0 1			Soft to medium, very moist, grey,	40.0	WH		
	1	1.8S	16	Silty Clay Loam A-6		WH	0.5S	27
	1					1		
410.9								
Stiff, very moist, grey, Silty Clay	WH							
A-6	1	1.8B	20					
	3							
408.4				383.9				
Soft, very moist, grey, Silty	20.0 1			Hard, dry, grey, Sandstone 382.9	45.0	100/5"		
Clay Loam A-6 with Sand	WH	0.4S	27	Bottom of hole = 45.0 ft.				
Layers	1			Free water observed at 4.5 ft.				
				Elevation referenced to BK S				
	WH			Abut Sta 240+99 Elev= 428.0 ft				
	WH	0.3B	26	To convert "N" values to "N60"				
	WH			values multiply by 1.25.				
	25.0 WH				50.0			

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

Sheet 2 of 2
Date: 06/09/2003

Route: IL 151
Section:
County: Jackson

Boring No: 1-S
Station: 240+73
Offset: 13' LT CL
Ground Surface: 427.9 Ft

DEPTH	BLOW	Qu tsf	W%		DEPTH	BLOW	Qu tsf	W%
55.0					80.0			
60.0					85.0			
65.0					90.0			
70.0					95.0			
75.0					100.0			

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

MODJESKI and MASTERS
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FILE NAME =	USER NAME =	DESIGNED - RLM	REVISED -
		CHECKED - MJP	REVISED -
	PLOT SCALE =	DRAWN - PRC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - RLM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS
STRUCTURE NO. 039-0073
SHEET NO. 31 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	71	70
		CONTRACT NO. 98898		
	ILLINOIS	FED. AID PROJECT		

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Nine Materials

Bridge Foundation Boring Log

Sheet 1 of 2

ILL 151 Over Kinkaid Lake
Route: IL 151 Structure Number: 039-0034 Date: 06/12/2003
Section: Bored By: Bryan Keller
County: Jackson Location: 4.6 MI N of ILL 3 Checked By: Rob Graeff

Boring No 2-S
Station 242+11
Offset 12' RT CL
Ground Surface 427.9 Ft

Surf Wat Elev: 420.5
Ground Water Elevation
When Drilling 400.9
At Completion
At: Hrs:

DEPTH	BLOW	Qu tsf	W%	DEPTH	BLOW	Qu tsf	W%
Bituminous Shoulder					WH	0.4B	30
					WH		
425.9				400.9			
Stiff, moist, brown, Silty Clay	2			Very loose, wet, grey, very fine	WR		
A-6	3	1.7B	17	Silty Sand	WR		29
	4			85% Sand	WR		
423.4				12% Silt			
Medium to stiff, very moist, 5.0	1			3% Clay 30.0	1		
brown, Silty Clay A-6	2	1.0B	18		1		
	2				2		
420.9							
Soft, very moist, brown to grey,	WH				1		
Silty Clay A7-6	WH	0.3S	23		1		
	WH				2		
418.4				393.4			
Medium to stiff, very moist, 10.0	WH			Soft, very ,moist, grey, Silt Loam 35.0	1		
b . Silty Clay A7-6	1	1.0P	21	A-4 with Rotten Wood and	1	0.4B	21
	WH			Sandy Gravel Layers	1		
415.9				390.9			
Stiff, very moist, brown, Silty	WH			Medium to stiff, very moist, grey,	1		
Clay A7-6 with some	1	1.1B	18	Clay A7-6	2	1.0B	27
Gravel	1				1		
413.4				388.4			
Stiff, very moist, grey, Clay 15.0	1			Medium, very ,moist, grey, Silty 40.0	WH		
A7-6	1	1.1S	22	Clay A7-6	1	0.9B	32
	2				1		
410.9				383.4			
Medium, very moist, grey mottled	WH						
brown, Clay A7-6 with some	WH	0.9B	26				
Gravel	WH						
408.4							
Soft, very moist, grey, Silty 20.0	1			Very dense, wet, grey 45.0	100/12"		
Clay Loam A-6 with Sand	2	0.3S	18	Sandy Gravel			12
Layers	2			381.9			
	1			Hard, dry, grey, Sandstone 380.4	100/2"		
	WH	0.4S	22				
	1			Cored from 47.5 ft to 52.5 ft.			
				Hard, dry, grey, Sandstone			
				100% Recovery			
25.0	WH			100% RQD 50.0			

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

Sheet 2 of 2

Route: IL 151
Section:
County: Jackson
Date: 06/12/2003

Boring No: 2-S
Station: 242+11
Offset: 12' RT CL
Ground Surface: 427.9 Ft

DEPTH	BLOW	Qu tsf	W%	DEPTH	BLOW	Qu tsf	W%
375.4							
Cored from 52.5 ft to 57.5 ft							
Hard, dry, grey, Sandstone							
with Clay Shale Seams							
92% Recovery 55.0					80.0		
78% RQD							
370.4							
Bottom of hole = 57.5 ft.							
Free water observed at 27.0 ft							
Elevation referenced to BK N. 60.0					85.0		
ite 242+02 Ele = 428.0							
To convert "N" values to "N60" values multiply by 1.25.							
65.0					90.0		
70.0					95.0		
75.0					100.0		

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

MODJESKI and MASTERS
Experience great bridges.

FILE NAME =	USER NAME =	DESIGNED - RLM	REVISED -
		CHECKED - MJP	REVISED -
	PLOT SCALE =	DRAWN - PRC	REVISED -
	PLOT DATE = 12/02/2010	CHECKED - RLM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS
STRUCTURE NO. 039-0073
SHEET NO. 32 OF 32 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1908	(13B)I-2	JACKSON	[illegible]	[illegible]
		CONTRACT NO. 98898		
	ILLINOIS FED. AID PROJECT			