

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	1
		ILLINOIS	CONTRACT NO. 90875	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

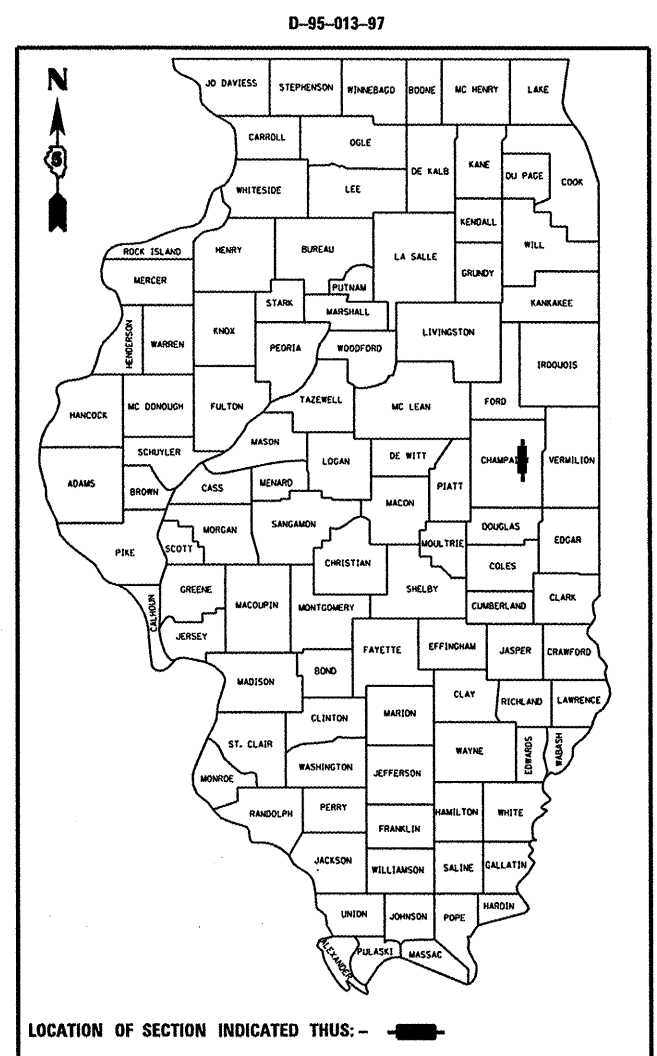
**PROPOSED
HIGHWAY PLANS**

F.A.I. ROUTE 74 (I-74)
SECTION (10-6HB-5)BR

**BRIDGE REPLACEMENT
CHAMPAIGN COUNTY**

C-95-013-97
UNDER C.H. 24 0.5 MIN OF MAYVIEW

SHEET NO.	INDEX OF SHEETS
1	COVER SHEET
2	GENERAL NOTES
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34-36	MAINTENANCE OF TRAFFIC
37-39	EROSION CONTROL PLAN
40-53	CROSS-SECTIONS
54-63	DISTRICT 5 STANDARDS



DESIGN DESIGNATION

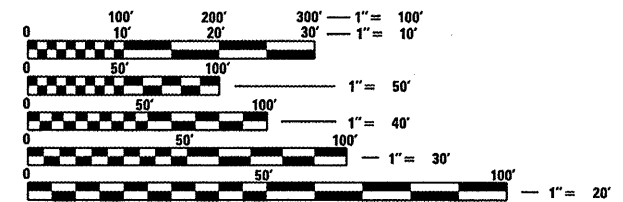
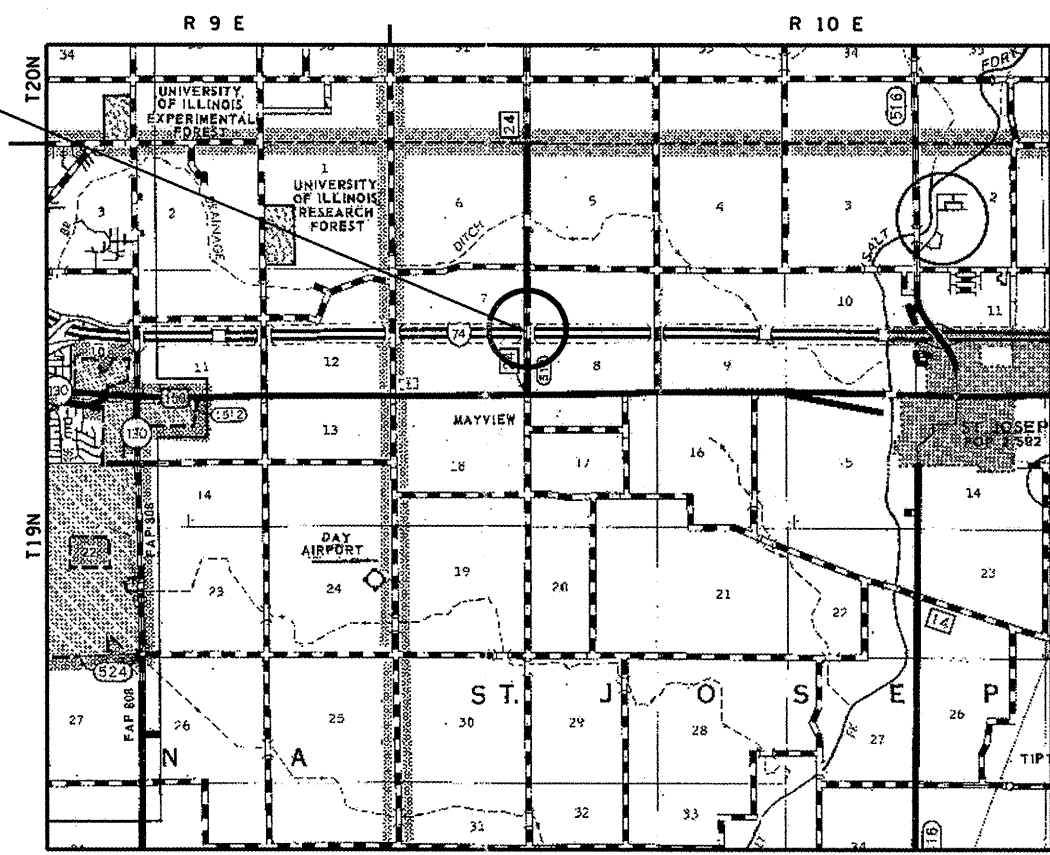
SECTION (10-6HB-5)BR:	I-74
C.H. 24	SPEED LIMIT: 65 MPH
SPEED LIMIT: 55 MPH	ADT = 29,200 (2006)
ADT = 650 (2006)	PV = 71.2 %
PV = 96 %	SU = 4.4 %
SU = 3 %	MU = 24.4 %
MU = 1 %	

HIGHWAY CLASSIFICATION
MAJOR COLLECTOR INTERSTATE

SECTION (10-6HB-5)BR
PROPOSED S.N. 010-0285
STATION 592+57.00
BRIDGE REPLACEMENT
OVER I-74

C.H. 24: IMPROVEMENT BEGINS
STA. 40+97.00
IMPROVEMENT ENDS
STA. 59+91.00

I-74: IMPROVEMENT BEGINS
STA. 590+47.00
IMPROVEMENT ENDS
STA. 594+67.00



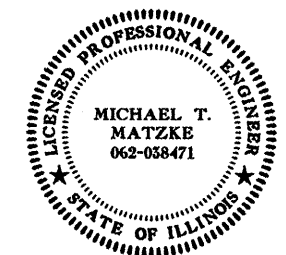
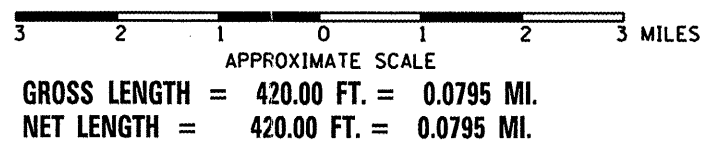
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: NANCY FASIG
SQUAD LEADER: JASON W. STULTS 217-465-4181

CONTRACT NO. 90875

LOCATION MAP



Michael T. Matzke
SIGNATURE
Oct. 20, 2009
DATE

LIC. EXP. DATE: Nov. 30, 2009
QUIGG ENGINEERING, INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED: 12/9/2009

Jason W. Stults
DEPUTY DIRECTOR OF HIGHWAYS, REGION THREE ENGINEER

Scott E. Stitt
ACTING ENGINEER OF DESIGN AND ENVIRONMENT

Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

IDOT HIGHWAY STANDARDS

- 000001-05 STANDARD SYMBOL ABBREVIATIONS AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 280001-05 TEMPORARY EROSION CONTROL SYSTEMS
- 406201-01 MAILBOX TURNOUT
- 420401-08 BRIDGE APPROACH PAVEMENT CONNECTOR
- 420701-02 PAVEMENT FABRIC
- 515001-03 NAME PLATE FOR BRIDGES
- 542401-01 METAL END SECTION FOR PIPE CULVERTS
- 601101-01 CONCRETE HEADWALL FOR PIPE DRAIN
- 602306-02 INLET-TYPE B
- 630001-08 STEEL PLATE BEAM GUARDRAIL
- 630301-05 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 631031-08 TRAFFIC BARRIER TERMINAL, TYPE 6
- 635006-03 REFLECTORS AND TERMINAL MARKER PLACEMENT
- 635011-02 REFLECTOR MARKER AND MOUNTING DETAILS
- 642001-01 SHOULDER RUMBLE STRIPS
- 665001-02 WOVEN WIRE FENCE
- 667101-01 PERMANENT SURVEY MARKERS
- 701101-02 OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5M) TO 24" (600mm) FROM PAVEMENT EDGE
- 701106-02 OFF-ROAD OPERATIONS, MULTI LANE, MORE THAN 15' (4.5M) AWAY
- 701400-04 APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
- 701406-05 LANE CLOSURE, FREEWAY/EXPRESSWAY-DAY OPERATIONS ONLY
- 701426-03 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS ≥ 45 MPH
- 701451-01 RAMP CLOSURE FREEWAY/EXPRESSWAY
- 701901-01 TRAFFIC CONTROL DEVICES
- 704001-06 TEMPORARY CONCRETE BARRIER
- 780001-02 TYPICAL PAVEMENT MARKINGS
- 781001-03 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

GENERAL NOTES

G.N.-100

ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

G.N.-105.07

EXISTING STATE-OWNED AND MAINTAINED UTILITY LINES ARE SHOWN ON THE PLANS TO INDICATE THEIR PRESENCE AND APPROXIMATE LOCATION. THE CONTRACTOR SHALL NOTIFY THE DISTRICT OPERATIONS ENGINEER TWO WEEKS PRIOR TO COMMENCING ANY EXCAVATION IN THE VICINITY OF THESE LINES. THE STATE WILL THEN LOCATE AND MARK THE HORIZONTAL LOCATIONS OF THE LINES AND PROVIDE ANY AVAILABLE INFORMATION AS TO THEIR DEPTH. SHOULD ANY OF THE LINES BE DAMAGED BY THE CONTRACTOR'S OPERATION, THE CONTRACTOR SHALL REPAIR THEM TO THE SATISFACTION OF THE ENGINEER AND AT NO COST TO THE STATE.

ALSO THERE MAY BE UTILITIES PRESENT WHICH WERE INSTALLED BY THE STATE BUT ARE MAINTAINED BY OTHERS (CITY, TOWN, ETC.) THE APPROXIMATE LOCATIONS OF THESE LINES ARE ALSO SHOWN ON THE PLANS ALONG WITH THE NAME OF THE MAINTAINING AGENCY. THE CONTRACTOR SHALL COORDINATE THE LOCATING OF THESE LINES WITH THE LOCAL AGENCY PRIOR TO COMMENCING ANY EXCAVATION OR BORING IN THEIR VICINITY. SHOULD THESE LINES BE DAMAGED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR SHALL REPAIR THEM TO THE SATISFACTION OF, AND AT NO COST TO, THE LOCAL AGENCY AND THE STATE.

G.N.-105.09A

ALL ELEVATIONS SHOWN IN THE PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. (NAVD 88)

G.N.-201

TREES THAT INTERFERE WITH THE CONSTRUCTION OPERATIONS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER. ANY TREE DUE TO ITS LOCATION AND DEEMED SUITABLE FOR SAVING BY THE ENGINEER SHALL BE PROTECTED DURING CLEARING AND SUBSEQUENT CONSTRUCTION OPERATIONS.

G.N.-205

BENCHING PROCEDURES SHALL BE USED IN AREAS WHERE EXISTING EMBANKMENTS ARE WIDENED FOR THE PROPOSED PAVEMENT. STEPS SHALL BE CUT INTO THE EXISTING EMBANKMENT SLOPES AND SHALL HAVE THE FOLLOWING DIMENSIONS:
HORIZONTAL: 2 FT
VERTICAL: 1 FT

G.N.-250C

SEEDING, CLASS 7 AND MULCH, METHOD 2 IS INCLUDED IN THIS CONTRACT TO SEED NEW EARTH SHOULDERS DURING TIME PERIODS WHEN PERMANENT SEEDING IS NOT ALLOWED. SOME OR ALL OF THE CLASS 7 SEEDING AND MULCH WILL BE DELETED IF IT IS POSSIBLE TO PLACE PERMANENT SEEDING ON EARTH SHOULDERS AT THE TIME OF THEIR COMPLETION.

G.N.-302

WHERE SMALL QUANTITIES OF LIME MODIFICATION ARE SHOWN IN THE PLANS, SUBBASE GRANULAR MATERIAL, TYPE A MAY BE SUBSTITUTED AND CONSTRUCTED ACCORDING TO THE APPLICABLE PORTIONS OF SECTION 311. THE DEPTH OF THE SUBBASE GRANULAR MATERIAL SHALL BE THE SAME AS THE PROPOSED DEPTH OF THE LIME MODIFICATION. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR PROCESSING LIME MODIFIED SOILS OF THE DEPTH SPECIFIED. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

G.N.-406

THE QUANTITIES INCLUDED IN THE PLANS FOR HOT-MIX ASPHALT RESURFACING ARE INTENDED TO GIVE THE COVERAGE SHOWN ON THE TYPICAL CROSS SECTIONS. IT IS NOT INTENDED TO INCREASE THE THICKNESS OF THE HOT-MIX ASPHALT MIXTURE IN ORDER TO USE ALL OF THE QUANTITIES INCLUDED IN THE CONTRACT.

GENERAL NOTES (CONTINUED)

G.N.-406H

MIXTURE REQUIREMENTS

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

LOCATION(S):	I-74	I-74	I-74 HOT-MIX ASPHALT SHOULDERS TOP LIFT AND C.H. 24	I-74 HOT-MIX ASPHALT SHOULDERS BOTTOM LIFT AND C.H. 24 FLEXIBLE CONNECTOR AND
MIXTURE USE(S):	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E" N105	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N105	HOT-MIX ASPHALT SURFACE COURSE MIX "C", N50 & INCIDENTAL	HOT-MIX ASPHALT BINDER COURSE IL 19.0, N50
AC/PG:	SBS PG 70-22	SBS PG 70-22	PG 64-22	PG 64-22
RAP % (MAX.)	10	10	15	25
DESIGN AIR VOIDS:	4.0% @ N DESIGN =105	4.0% @ N DESIGN =105	4.0% @ N DESIGN =50	4.0% @ N DESIGN =50
MIXTURE COMPOSITION (GRADATION):	IL 9.5	IL 19.0	IL 9.5	IL 19.0
FRICTION AGGREGATE:	MIX "E"	N/A	MIX "C"	N/A

G.N.-406.05b

ALL LEVELING BINDER OR BINDER SHALL BE GIVEN A FOG COAT OF PRIME BEFORE THE SURFACE COURSE IS PLACED WHEN DIRECTED BY ENGINEER.

THE FOG COAT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER GALLON FOR BITUMINOUS MATERIAL (PRIME COAT) AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

G.N.-406.10

FOR MULTILANE RESURFACING

WHEN BEGINNING THE RESURFACING WITH NEW MIXTURES FOR LEVELING BINDER, BINDER COURSE, AND SURFACE COURSE MIXTURES, THE WORK WILL BE CONFINED TO THE INSIDE TRAFFIC LANE (PASSING LANE) FIRST. THE WORK WILL REMAIN ON THE INSIDE LANE UNTIL THE MIX HAS BEEN ADJUSTED AND APPROVED BY THE ENGINEER BEFORE ANY RESURFACING IS ALLOWED ON THE OUTSIDE (DRIVING) TRAFFIC LANE (S).

ANY DELAYS OR INCONVENIENCES CAUSED BY THE IN COMPLYING WITH THIS REQUIREMENT WILL BE CONSIDERED INCIDENTAL TO THE VARIOUS HOT-MIX ASPHALT PAY ITEMS, AS SHOWN IN THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

G.N.-506

ALL FINAL SURFACES OF THE BEAMS SHALL BE PAINTED WITH LIGHT GREY (MUNSELL COLOR STANDARD - 10Y 7/1) EXCEPT THE EXTERIOR SURFACES OF THE EXTERIOR BEAMS WHICH SHALL BE PAINTED WITH INTERSTATE GREEN (MUNSELL COLOR STANDARD 7.5G 4/8).

G.N.-550

BEFORE ORDERING STORM SEWERS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS

G.N.-631

IF THE CONTRACTOR ELECTS TO USE THE ALTERNATE MOUNTING METHOD OF THRU DRILLING THE MOUNTING HOLES FOR THE TRAFFIC BARRIER TERMINALS, TYPE 6, THE HOLES SHALL BE DRILLED USING A CORE DRILL. A HAMMER DRILL WILL NOT BE ALLOWED.

G.N.-703A

SHORT TERM PAVEMENT MARKING SHALL BE APPLIED TO THE PAVEMENT AFTER ANY OF THE FOLLOWING: COLD MILLING AND/OR PLACING BITUMINOUS MATERIALS (PRIME COAT), LEVELING BINDER (MACHINE METHOD), BINDER AND SURFACE COURSES. SHORT TERM PAVEMENT MARKING PLACED ON THE SURFACE, SHALL COINCIDE WITH THE FINAL PAVEMENT STRIPING. SHORT TERM PAVEMENT MARKING PLACED PRIOR TO THE SURFACE SHALL COINCIDE WITH THE EXISTING PAVEMENT MARKINGS. USE 4 FEET PER 40 FEET (OR 10% PER STATION).

G.N.-781

RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH STANDARD 781001, AND THE DETAILS SHOWN IN THE PLANS. IF THERE IS ANY DISCREPANCY BETWEEN THE STANDARD AND THE DETAILS IN THE PLANS, THE DETAILS IN THE PLANS SHALL GOVERN. THE FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING THE RAISED REFLECTIVE PAVEMENT MARKERS AND THE RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED MIDWAY IN THE 30 FOOT (9 m) SPACE BETWEEN THE DASHED CENTERLINE STRIPES (WHEN APPLICABLE).

G.N.-1004.01

COARSE AGGREGATE GRADATION CA-10 MAY BE USED WHENEVER COARSE AGGREGATE CA-6 IS SPECIFIED IN THE STANDARD SPECIFICATIONS.

G.N.-Z0038

AN ALUMINUM TABLET OF THE TYPE SHOWN ON STANDARD 667101 SHALL BE PLACED ON THE PROPOSED STRUCTURE AS DIRECTED BY THE ENGINEER. THE BENCH MARK ELEVATION WILL BE ESTABLISHED AND MARKED BY THE DEPARTMENT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR PERMANENT BENCH MARKS.

COMMITMENTS

THE FIELD/RESIDENT ENGINEER SHALL CONTACT STUDIES & PLANS CONCERNING ANY MAJOR PLAN CHANGES TO MAKE SURE NO PREVIOUS COMMITMENTS (NOT LISTED) WERE MADE AFFECTING THE DESIGN, AND TO ALLOW IMPROVEMENTS IN THE DESIGN FOR FUTURE PROJECTS.

SEEDING SHALL BE COMPLETED AS DESIGNATED IN THE STORM WATER POLLUTION PREVENTION PLAN. ALL AREAS OF POTENTIAL FOR EROSION SHALL BE SEED BY OCTOBER 1ST.

RATES OF APPLICATION

THE FOLLOWING FACTORS WERE USED FOR ESTIMATING PLAN QUANTITIES AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES.

HOT - MIX ASPHALT BASE COURSE	0.056	TON/SQ YD/IN
HOT - MIX ASPHALT SURFACE COURSE.	0.056	TON/SQ YD/IN
AGGREGATE (SURFACE, BASE & BACK FILL)	2.05	TON/CU YD
PRIME COAT FOR HOT - MIX ASPHALT:		
ON PAVEMENT	0.08	GALLONS/SQ YD
FOG COAT ON NEW BINDER	0.05	GALLONS/SQ YD
AGGREGATE (PRIME COAT):		
ON EXISTING PAVEMENT	0.002	TON/SQ YD
FOG COAT ON NEW BINDER	0.001	TON/SQ YD
LIME	0.02	TON/SQ YD

FILE NAME	USER NAME	DESIGNED	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				GENERAL NOTES				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\FWIDOT\DAWSONKB\0176650\06	dawnorkb	MTM	-	SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.				SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.				74	(10-6H8-5)BR	CHAMPAIGN	63	2
	0875-2-gennote.dgn	DRAWN	JJS									CONTRACT NO. 90875				
	PLOT SCALE = 100.0000' / IN.	CHECKED	LLQ									ILLINOIS FED. AID PROJECT				
	PLOT DATE = 12/17/2009	DATE	JULY 2009													

SUMMARY OF QUANTITIES				100% STATE STRUCTURES X771-2A
CODE NUMBER	PAY ITEM	UNIT	QUANTITY	
20200100	EARTH EXCAVATION	CU YD	2499	2499
20400800	FURNISHED EXCAVATION	CU YD	10,839	10,839
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	122	122
25000200	SEEDING, CLASS 2	ACRE	4.25	4.25
25000350	SEEDING, CLASS 7	ACRE	4.25	4.25
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	382.5	382.5
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	382.5	382.5
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	382.5	382.5
25100115	MULCH, METHOD 2	ACRE	4.25	4.25
25100630	EROSION CONTROL BLANKET	SQ YD	18,661	18,661
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	425	425
28000305	TEMPORARY DITCH CHECKS	FOOT	372	372
28000400	PERIMETER EROSION BARRIER	FOOT	4130	4130
28000500	INLET AND PIPE PROTECTION	EACH	14	14
31000600	PROCESSING LIME STABILIZED SOIL MIXTURE 12"	SQ YD	3,808	3,808
31001500	LIME	TON	77	77
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	205	205
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	782	782
40600300	AGGREGATE (PRIME COAT)	TON	15.5	15.5
40600982	HOT - MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	122	122
40600990	TEMPORARY RAMP	SQ YD	356	356
40603080	HOT - MIX ASPHALT BINDER COURSE, IL 19.0, N50	TON	1455	1455
40603245	POLYMERIZED HOT - MIX ASPHALT BINDER COURSE, IL-19.0, N105	TON	596	596
40603310	HOT - MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	440	440
40603575	POLYMERIZED HOT - MIX ASPHALT SURFACE COURSE, MIX "E", N105	TON	220	220
40800010	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	32	32
40800030	AGGREGATE (PRIME COAT)	TON	0.3	0.3
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	14	14
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	100	100
44000100	PAVEMENT REMOVAL	SQ YD	327	327

* SPECIALTY ITEM

SUMMARY OF QUANTITIES				100% STATE STRUCTURES X771-2A
CODE NUMBER	PAY ITEM	UNIT	QUANTITY	
44000198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	3734	3734
44004300	PAVEMENT BREAKING	SQ YD	3176	3176
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	1,056	1,056
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	75	75
48203100	HOT-MIX ASPHALT SHOULDERS	TON	544	544
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1
50105220	PIPE CULVERT REMOVAL	FOOT	38	38
50157300	PROTECTIVE SHIELD	SQ YD	430	430
50200100	STRUCTURE EXCAVATION	CU YD	208	208
50300225	CONCRETE STRUCTURES	CU YD	111.9	111.9
50300255	CONCRETE SUPERSTRUCTURE	CU YD	342.4	342.4
50300260	BRIDGE DECK GROOVING	SQ YD	810	810
50300280	CONCRETE ENCASEMENT	CU YD	8.6	8.6
50300300	PROTECTIVE COAT	SQ YD	1127	1127
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	1
50500505	STUD SHEAR CONNECTORS	EACH	1872	1872
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	90,650	90,650
50800515	BAR SPLICERS	EACH	62	62
51100100	SLOPE WALL 4 INCH	SQ YD	424	424
51201600	FURNISHING STEEL PILES HP 12 X 53	FOOT	780	780
51202000	FURNISHING STEEL PILES HP 14 X 102	FOOT	574	574
51202305	DRIVING PILES	FOOT	1,354	1,354
51203600	TEST PILE STEEL HP 12 X 53	EACH	2	2
51204000	TEST PILE STEEL HP 14 X 102	EACH	1	1
51500100	NAME PLATES	EACH	1	1
52100520	ANCHOR BOLTS, 1"	EACH	36	36
54200223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	43	43
54215553	METAL END SECTIONS 18"	EACH	2	2
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	2	2
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	38	38

* SPECIALTY ITEM

FILE NAME =	USER NAME = dawnsorkb	DESIGNED - MTM	REVISED -
ct:\p\work\PI\1001\DAWSORKB\0176650\05	0875-3-4-500.dgn	DRAWN - JJS	REVISED -
	PLOT SCALE = 100.0000' / IN.	CHECKED - LLO	REVISED -
	PLOT DATE = 12/17/2009	DATE - JULY 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N.T.S.	SHEET NO. 1 OF 2 SHEETS	STA.	TO STA.	F.A.I. RTE. 74	SECTION (10-6HB-5)BR	COUNTY CHAMPAIGN	TOTAL SHEETS 63	SHEET NO. 3
							CONTRACT NO. 90875	
ILLINOIS FED. AID PROJECT								

SUMMARY OF QUANTITIES				100% STATE STRUCTURES X771-2A
CODE NUMBER	PAY ITEM	UNIT	QUANTITY	
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	119	119
60240380	INLETS, ^{TYPE} B, WITH SALVAGED GRATE	EACH	1	1
60255500	MANHOLES TO BE ADJUSTED	EACH	4	4
60260200	INLETS TO BE ADJUSTED (SPECIAL)	EACH	1	1
* 63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	2,012.5	2,012.5
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4
63200310	GUARDRAIL REMOVAL	FOOT	2,946	2,946
63400105	GUARD POSTS	EACH	8	8
63400205	GUARD POSTS REMOVAL	EACH	8	8
64200105	SHOULDER RUMBLE STRIP	FOOT	1680	1680
66502405	WOVEN WIRE FENCE REMOVAL ^{AND} REPLACEMENT	FOOT	246	246
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	7	7
67100100	MOBILIZATION	L SUM	1	1
70100700	TRAFFIC CONTROL AND PROTECTION, ^{STANDARD} 701406	L SUM	1	1
70100820	TRAFFIC CONTROL AND PROTECTION, 701451	L SUM	1	1
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
70101900	TRAFFIC CONTROL AND PROTECTION (DETOUR 1)	L SUM	1	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	208	208
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	142	142
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1880	1880
* 78001110	PAINT PAVEMENT MARKING-LINE 4"	FOOT	5255	5255
* 78003110	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B -LINE 4"	FOOT	220	220
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	20	20
* 78200100	MONODIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH	77	77
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	28	28
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	20	20
X0323583	SPEED INDICATOR SIGN	CAL DA	368	368
X0323830	DRAINAGE SCUPPERS, DS-11	EACH	4	4
X5080600	MECHANICAL SPLICERS	EACH	36	36

* SPECIALTY ITEM

SUMMARY OF QUANTITIES				100% STATE STRUCTURES X771-2A
CODE NUMBER	PAY ITEM	UNIT	QUANTITY	
X7011005	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	L SUM	1	1
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	70	70
* X7800610	URETHANE PAVEMENT MARKING - LINE 4"	FOOT	2,800	2,800
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2
Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2
Z0038700	PERMANENT BENCH MARKS	EACH	1	1
Z0050000	REMOVAL AND REINSTALLATION OF EXISTING IMPACT ATTENUATORS	EACH	2	2

* SPECIALTY ITEM

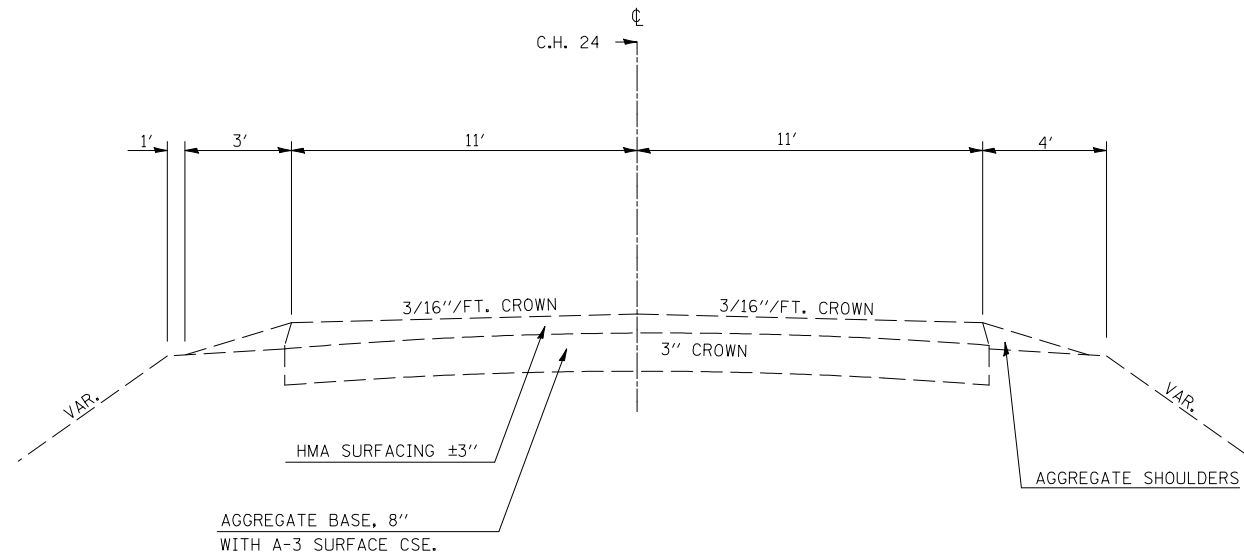
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	PLOT DATE = 12/17/2009	DATE - JULY 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

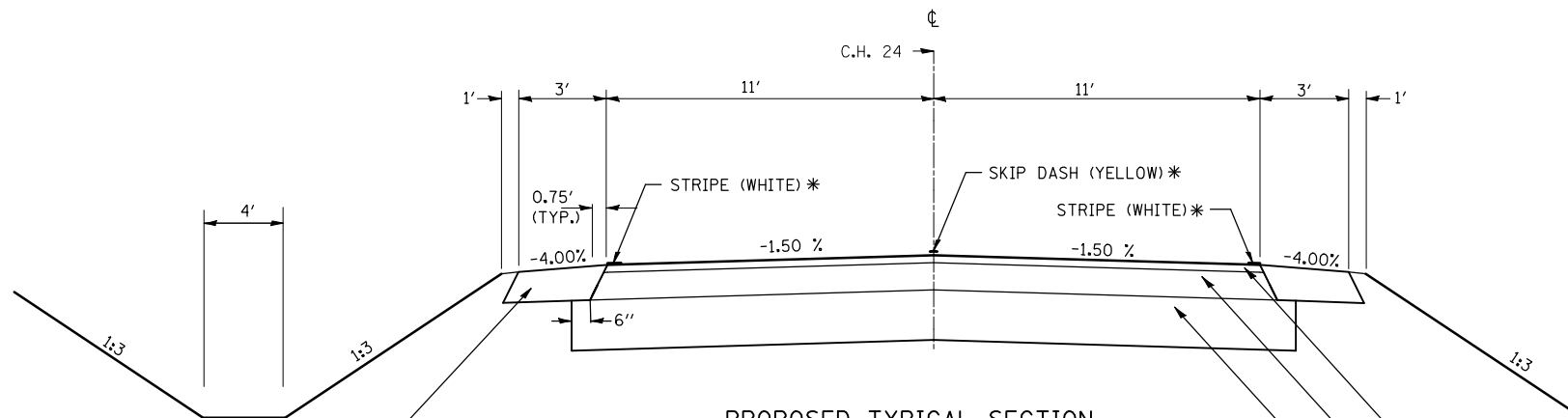
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	4
CONTRACT NO. 90875			ILLINOIS FED. AID PROJECT	



EXISTING TYPICAL SECTION

STA. 36+00.00 TO STA. 65+00.00
BRIDGE OMISSION STA. 49+27.57 TO 51+53.75

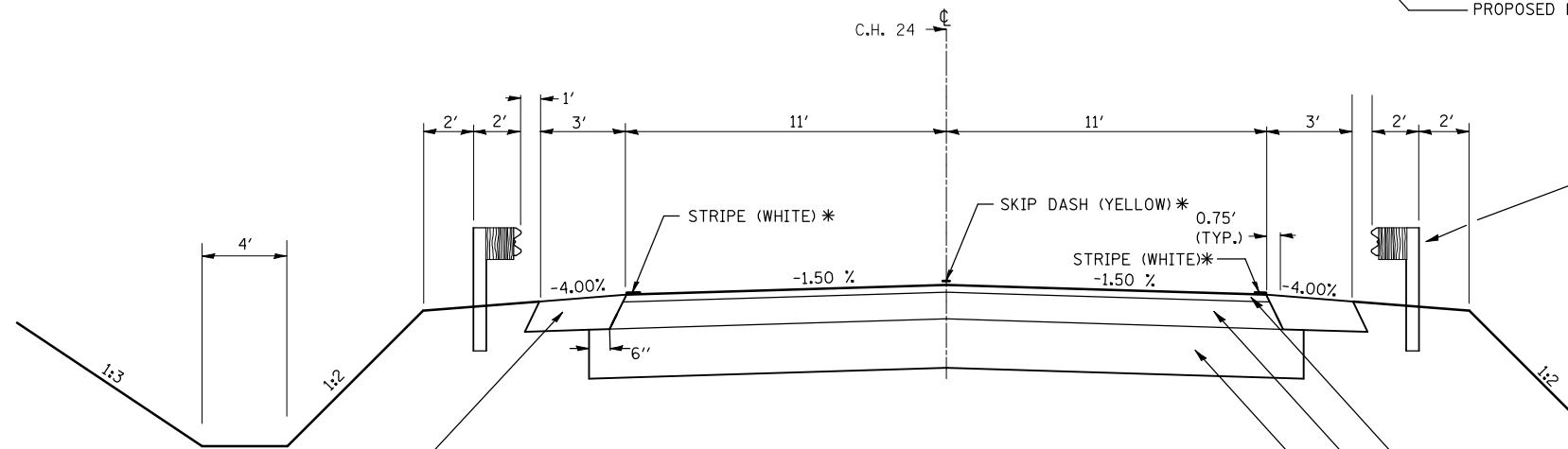


PROPOSED TYPICAL SECTION

STA. 40+97.00 TO STA. 43+26.35
STA. 57+75.15 TO STA. 59+91.00
HOT-MIX ASPHALT-BUTT JOINTS:
STA. 40+97.00 TO STA. 41+22.00
STA. 59+66.00 TO STA. 59+91.00

PROPOSED HOT-MIX ASPHALT
SURFACE COURSE, MIX "C", N50 - 224 LB/SQ YD
PROPOSED HOT-MIX ASPHALT
BINDER COURSE, IL 19.0, N50 - 784 LB/SQ YD
PROPOSED LIME STABILIZED SOIL MIXTURE - 12"

**PROPOSED AGGREGATE
SHOULDERS, TYPE B, 6"
TYPICAL



PROPOSED TYPICAL SECTION

STA. 43+26.25 TO STA. 57+75.15
BRIDGE OMISSION STA. 49+09.50 TO 51+29.50

PROPOSED GUARDRAIL
SEE PLANS FOR LOCATION

* NOTE: USE URETHANE PAVEMENT-LINE 4"
ACROSS CONCRETE SURFACE AREAS
(APPROACH PAVEMENT AND BRIDGE DECK)

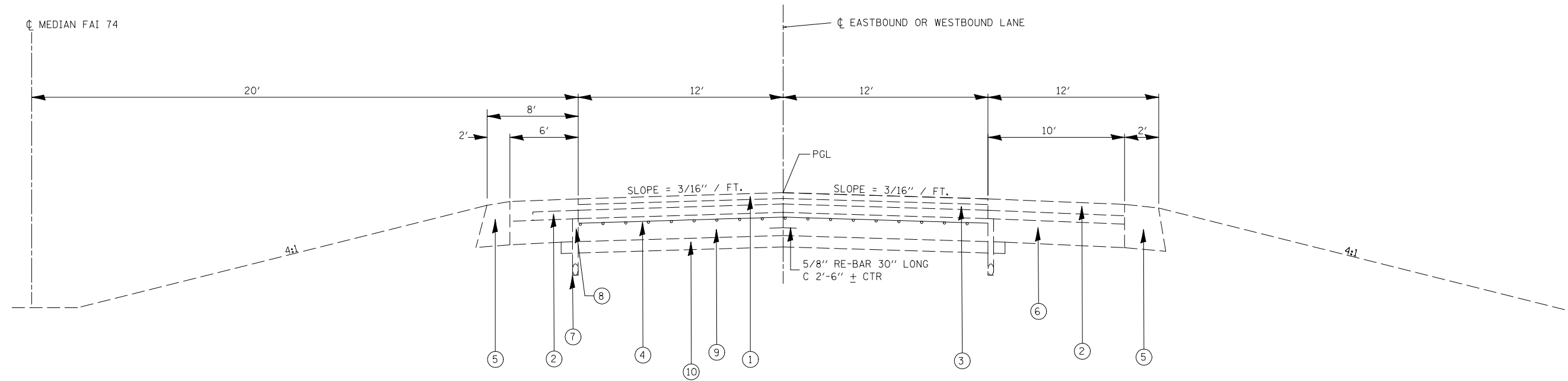
PROPOSED HOT-MIX ASPHALT
SURFACE COURSE, MIX "C", N50 - 224 LB/SQ YD
PROPOSED HOT-MIX ASPHALT
BINDER COURSE, IL 19.0, N50 - 784 LB/SQ YD
(TWO LIFTS-2-1/4" MIN. DEPTH, 6" MAX)
PROPOSED LIME STABILIZED SOIL MIXTURE - 12"

** PROPOSED AGGREGATE
SHOULDERS, TYPE B, 6"
TYPICAL

NOTE: SEE PLANS FOR DITCH ELEVATIONS

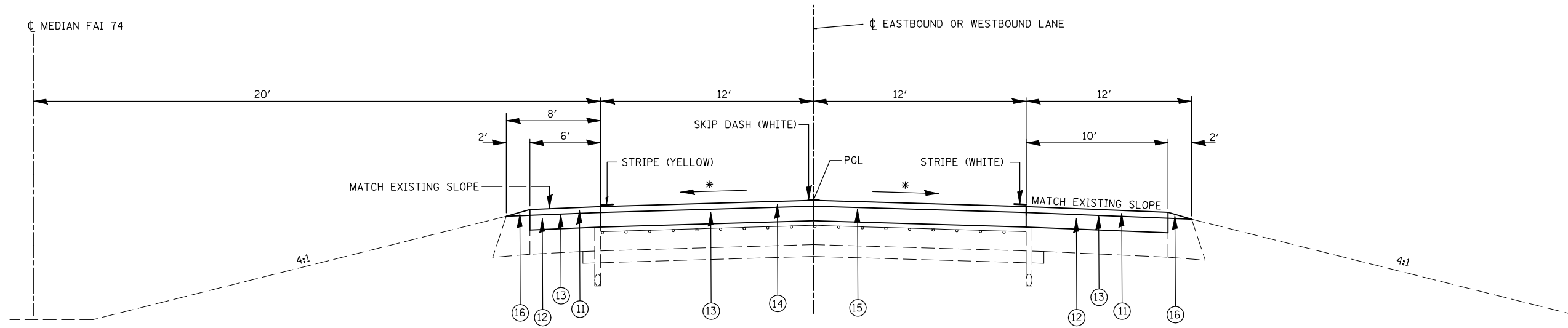
** SHALL INCLUDE ADDITIONAL AGG.
TO TOP OF STABILIZED SUBGRADE,
INCIDENTAL TO AGG, SHOULDERS, TY B.

FILE NAME =	USER NAME = dawsonkb	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	C.H. 24 TYPICAL SECTIONS			F.A.I. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et:\pw\work\PWIDOT\DAWSONKB\d0176650\0590875-5-6-typical.dgn		DRAWN - JJS	REVISED -		74	(10-6HB-5)BR	CHAMPAIGN	63	5				
PLOT SCALE = 100.0000' / IN.		CHECKED - MTM	REVISED -		SCALE: NTS			SHEET NO. 1 OF 2 SHEETS		STA. TO STA.		CONTRACT NO. 90875	
PLOT DATE = 12/17/2009		DATE - JULY 2009	REVISED -		ILLINOIS FED. AID PROJECT								



I-74 EXISTING TYPICAL SECTION

STATION 590+47.0 TO STATION 594+67.0



I-74 PROPOSED TYPICAL SECTION

STATION 590+47.00 TO STATION 594+67.00

- ① EXISTING BITUMINOUS CONCRETE SURFACE COURSE MIX E, 1 3/4"
- ② EXISTING BITUMINOUS SHOULDERS
- ③ EXISTING BITUMINOUS BINDER COURSE - VARIES 1" TO 4 3/4"
- ④ EXISTING PAVEMENT FABRIC
- ⑤ EXISTING AGGREGATE SHOULDER, TYPE B
- ⑥ EXISTING AGGREGATE SHOULDER - 7"
- ⑦ EXISTING PIPE UNDERDRAIN 4"
- ⑧ EXISTING BITUMINOUS PLUG
- ⑨ EXISTING STANDARD REINFORCED P.C.C. PAVEMENT - 10"
- ⑩ EXISTING SUB-BASE GRANULAR MATERIAL - 6"

- ⑪ PROPOSED HMA SHOULDERS (USE HMA SURFACE COURSE, MIX "C", N50 - 196 LB/SQ YD, FOR SHOULDER TOP LIFT)
- ⑫ PROPOSED HMA SHOULDERS (USE HMA BINDER COURSE, IL-19.0, N50, 532 LB/SQ YD (2-1/4" MIN. DEPTH), FOR SHOULDER BOTTOM LIFT)
- ⑬ PROPOSED HMA SURFACE REMOVAL, VARIABLE DEPTH
- ⑭ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N105 - 196 LB/SQ YD
- ⑮ PROPOSED POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N105 - 532 LB/SQ YD (2-1/4" MIN. DEPTH)
- ⑯ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B

* MATCH EXISTING SLOPE
MINIMUM SLOPE SHALL BE 3/16" / FT.

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FILE NAME =	USER NAME = dawsonkb	DESIGNED - MTM	REVISED -
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PLOT DATE = 12/17/2009		DATE - JULY 2009	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

I-74 TYPICAL SECTIONS

SCALE: N.T.S. SHEET NO. 2 OF 2 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	6
CONTRACT NO. 90875				
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				

PROPOSED SCHEDULE OF STEEL PLATE BEAM GUARDRAIL					
LOCATION	SPBGR TYPE A (6' POST)	TYPE 6 TERMINAL	TYPE 1 TERMINAL, SPECIAL (TANGENT)	TERMINAL MARKER-DIRECT APPLIED	GUARDRAIL REMOVAL
I-74					
EASTBOUND RT. STA 589+58.56 TO 592+58.56					300
WESTBOUND RT. STA 592+55.71 TO 595+55.71					300
COUNTY HIGHWAY					
LT. STA. 44+01.35 TO STA. 48+51.35	450				
LT. STA. 51+87.65 TO STA. 57+50.15	562.5				
RT. STA. 43+51.35 TO STA. 48+51.35	500				
RT. STA. 51+87.65 TO STA. 56+87.65	500				
LT. STA. 48+51.35 TO STA. 48+94.50		1			
RT. STA. 48+51.35 TO STA. 48+94.50		1			
LT. STA. 51+44.50 TO STA. 51+87.65		1			
RT. STA. 51+44.50 TO STA. 51+87.65		1			
LT. STA. 43+76.35 TO STA. 44+01.35			1	1	
RT. STA. 43+26.35 TO STA. 43+51.35			1	1	
LT. STA. 57+50.15 TO STA. 57+75.15			1	1	
RT. STA. 56+87.65 TO STA. 57+12.65			1	1	
LT. STA. 44+25.7 TO STA. 49+52.45					527
LT. STA. 50+86.3 TO STA. 57+25.67					640
RT. STA. 43+63.41 TO STA. 49+52.45					589
RT. STA. 50+86.3 TO STA. 56+75.51					590
TOTAL	2,012.5	4	4	4	2946

PERMANENT SEEDING SCHEDULE					
LOCATION	SEEDING CLASS 2	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	EROSION CONTROL BLANKET
	ACRE	POUND	POUND	POUND	SQ YD
COUNTY ROAD					
LT. STA. 40+97.0 TO STA. 49+64.3	1.0	90.0	90.0	90.0	4598
LT. STA. 50+74.5 TO STA. 59+91.0	1.0	90.0	90.0	90.0	4357
RT. STA. 40+97.0 TO STA. 49+64.3	1.0	90.0	90.0	90.0	4543
RT. STA. 50+74.5 TO STA. 59+91.0	1.0	90.0	90.0	90.0	4758
I-74					
AREA IN BETWEEN EB. & WB. I-74	0.25	22.5	22.5	22.5	405
TOTAL	4.25	382.5	382.5	382.5	18661

SCHEDULE OF REMOVE AND REINSTALL EXISTING IMPACT ATTENUATORS	
LOCATION	EACH
LT. STA. 50+19.5	1
RT. STA. 50+19.5	1
TOTAL	2

WOVEN WIRE FENCE REMOVAL & REPLACEMENT	
LOCATION	FOOT
LT. STA. 48+69.35 TO STA. 49+19.63	94
RT. STA. 49+19.63 TO STA. 49+19.63	71
RT. STA. 51+17.06 TO STA. 51+29.65	81
TOTAL	246

DRAINAGE SCHEDULE				
LOCATION	STORM SEWER, TYPE 1 12"	INLET, TYPE B WITH SALVAGE GRATE	INLETS TO BE ADJUSTED (SPECIAL)	MANHOLES TO BE ADJUSTED
	FOOT	EACH	EACH	EACH
RT. STA. 55+49.80	2	1	1	
LT. STA. 49+38.92				1
RT. STA. 49+40.59				1
RT. STA. 50+76.77				1
LT. STA. 51+00.00				1
TOTAL	2	1	1	4

TEMPORARY CONCRETE BARRIER SCHEDULE	
LOCATION	FOOT
WB. RT. STA. 591+97.0 TO STA. 596+07.0	410
EB. RT. STA. 589+07.0 TO STA. 593+17.0	410
WB. LT. STA. 591+97.0 TO STA. 597+27.0	530
EB. LT. STA. 587+87.0 TO STA. 593+17.0	530
TOTAL	1880

SHOULDER RUMBLE STRIP SCHEDULE	
LOCATION	FOOT
EB. RT. STA. 590+47.0 TO STA. 594+67.0	420
EB. LT. STA. 590+47.0 TO STA. 594+67.0	420
WB. RT. STA. 590+47.0 TO STA. 594+67.0	420
WB. LT. STA. 590+47.0 TO STA. 594+67.0	420
TOTAL	1680

SCHEDULE OF PAVEMENT REMOVAL	
LOCATION	SQ YD
STA. 42+21.0 TO STA. 42+74.0	130
STA. 48+98.75 TO STA. 49+26.75	68
STA. 51+12.25 TO STA. 51+40.25	68
STA. 58+15.0 TO STA. 58+40.0	61
TOTAL	327

PAVING SCHEDULE																
LOCATION	HOT-MIX ASPHALT SHOULDERS		HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	POLY. HMA BINDER COURSE IL-19.0, N105	POLY HMA SURFACE COURSE MIX "E" N105	LIME	PROCESSING LIME STABILIZED SOIL MIXTURE - 12"	AGGREGATE WEDGE SHOULDER TYPE B	BITUMINOUS MATERIALS (PRIME COAT)	AGGREGATE (PRIME COAT)	HMA BINDER COURSE IL-19.0, N50	HMA SURFACE COURSE, MIX "C", N50	AGGREGATE SHOULDERS, TYPE B, 6"	HMA SURFACE REMOVAL, VARIABLE DEPTH	PAVEMENT BREAKING	BRIDGE APPROACH PAVEMENT CONNECTOR FLEXIBLE
	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 SHLDR., TOP LIFT	HOT-MIX ASPHALT BINDER COURSE IL-19.0, N50 SHLDR., BOT. LIFT														
I-74																
STA. 590+47.0 TO STA. 594+67.0	146	398		596	220			75	373	7.5						
EB. STA. 590+47.0 TO STA. 594+67.0														1867		
WB. STA. 590+47.0 TO STA. 594+67.0														1867		
COUNTY ROAD																
STA. 48+64.5 TO STA. 48+79.5																50
STA. 51+59.5 TO STA. 51+74.5																50
STA. 40+97.0 TO STA. 59+91.0									409	8.0		440	1,056			
STA. 40+97.0 TO STA. 41+22.0			61													
STA. 59+66.0 TO STA. 59+91.0			61													
STA. 41+37.66 TO STA. 59+43.35											1455					
STA. 41+39.82 TO STA. 49+09.5						38	1874									
STA. 51+29.5 TO STA. 59+35.05						39	1934									
STA. 42+74.0 TO STA. 48+98.75															1527	
STA. 51+40.25 TO STA. 58+15.0															1649	
TOTAL	146	398	122	596	220	77	3808	75	782	15.5	1455	440	1,056	3734	3176	100

PAVEMENT MARKING SCHEDULE					
LOCATION	PAINT PAVEMENT MARKING LINE - 4"	URETHANE PAVEMENT MARKING LINE 4"	RAISED REFLECTIVE PAVEMENT MARKER	PREFORMED PLASTIC PVT.MRKNG. TYPE B, LINE 4"	SHORT TERM PAVEMENT MARKING
	FOOT	FOOT	EACH	FOOT	FOOT
I-74					
STA. 590+47.0 TO STA. 594+67.0		1680	20	220	208
COUNTY ROAD					
LT. STA. 40+97.0 TO STA. 59+91.0	1614	280			
RT. STA. 40+97.0 TO STA. 59+91.0	1614	280			
CL. STA. 40+97.0 TO STA. 59+91.0	410				
CL. STA. 40+97.0 TO STA. 51+55.0	785	280			
CL. STA. 48+84.0 TO STA. 59+91.0	832	280			
TOTAL	5255	2800	20	220	208

EARTHWORK SCHEDULE				
LOCATION	EARTH EX. (CUT)	EARTH EX. ADJ. FOR SHRINKAGE	EMBANKMENT (FILL)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU YD	CU YD	CU YD	CU YD
STA. 40+97.0 TO STA. 49+66.0 (NORTH SIDE)	1016	762	6486	-5724
STA. 50+70.0 TO STA. 59+91.0 (SOUTH SIDE)	1483	1112	6174	-5062
I-74 MEDIAN NEAR ATTENUATORS				
STA. 591+61.75 TO STA. 592+41.75			22	-22
STA. 592+41.75 TO STA. 592+72.25			9	-9
STA. 592+72.25 TO STA. 593+52.25			22	-22
TOTAL	2499	1874	12,713	-10,839

USED 25% SHRINKAGE

ENTRANCE AND MAIL BOX TURNOUT SCHEDULE				
LOCATION	BIT. MTRL. (PRIME COAT)	AGGREGATE (PRIME COAT)	INCIDENTAL HMA SURFACING	AGG. SURF. CSE, TY B.
	GALLON	TON	TON	TON
RT. STA. 42+52.5	5	0.10	2	87
LT. STA. 58+36.0	5	0.10	2	69
RT. STA 58+34.0	22	0.10	10	49
TOTAL	32	0.30	14	205

EROSION AND SEDIMENT CONTROL SCHEDULE						
LOCATION	PERIMETER EROSION BARRIER	TEMPORARY EROSION CONTROL SEEDING	SEEDING CLASS 7	MULCH METHOD 2	TEMP. DITCH CHECK	INLET AND PIPE PROTECTION
	FOOT	POUNDS	ACRE	ACRE	FOOT	EACH
COUNTY ROAD						
LT. STA. 40+97.0 TO STA. 49+64.3	1004	100	1.0	1.0		
LT. STA. 50+74.5 TO STA. 59+91.0	1049	100	1.0	1.0		
RT. STA. 40+97.0 TO STA. 49+64.3	994	100	1.0	1.0		
RT. STA. 50+74.5 TO STA. 59+91.0	1083	100	1.0	1.0		
LT. STA. 41+00.0					12	
RT. STA. 41+00.0					12	
LT. STA. 43+00.0					12	
RT. STA. 43+00.0					12	
LT. STA. 44+00.0					12	
RT. STA 44+00.0					12	
LT. STA. 45+00.0					12	
RT. STA. 45+00.0					12	
LT. STA. 46+00.0					12	
RT. STA. 46+00.0					12	
LT. STA. 47+00.0					12	
RT. STA. 47+00.0					12	
LT. STA. 48+00.0					12	
RT. STA. 48+00.0					12	
LT. STA. 49+00.0					12	
RT. STA. 49+00.0					12	
LT. STA. 51+15.0					12	
RT. STA. 51+15.0					12	
LT. STA. 53+00.0					12	
RT. STA. 53+00.0					12	
LT. STA. 54+00.0					12	
RT. STA. 54+00.0					12	
LT. STA. 55+00.0					12	
RT. STA. 55+00.0					12	
LT. STA. 55+75.0					12	
RT. STA. 55+75.0					12	
LT. STA. 57+00.0					12	
RT. STA. 57+00.0					12	
LT. STA. 59+20.0					12	
RT. STA. 59+20.0					12	
RT. STA. 59+65.0					12	
RT. STA. 42+39.7 O.S. 26.1'						1
RT. STA. 42+77.2 O.S. 26.4'						1
LT. STA. 49+38.6 O.S. 86.4'						1
LT. STA. 49+38.9 O.S. 67.9'						1
RT. STA. 49+40.5 O.S. 65.6'						1
RT. STA. 49+45.3 O.S. 83.6'						1
RT. STA. 50+92.5 O.S. 80.5'						1
RT. STA. 50+96.3 O.S. 61.9'						1
LT. STA. 50+99.0 O.S. 87.0'						1
LT. STA. 51+00.0 O.S. 68.1'						1
LT. STA. 55+47.5 O.S. 44.0'						1
RT. STA. 55+49.8 O.S. 41.4'						1
LT. STA. 59+49.9 O.S. 21.5'						1
RT. STA. 59+49.9 O.S. 22.3'						1
I-74						
AREA INBETWEEN EB. & WB. I-74		25	0.25	0.25		
TOTAL	4130	425	4.25	4.25	372	14

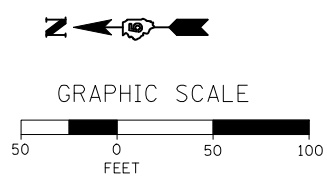
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

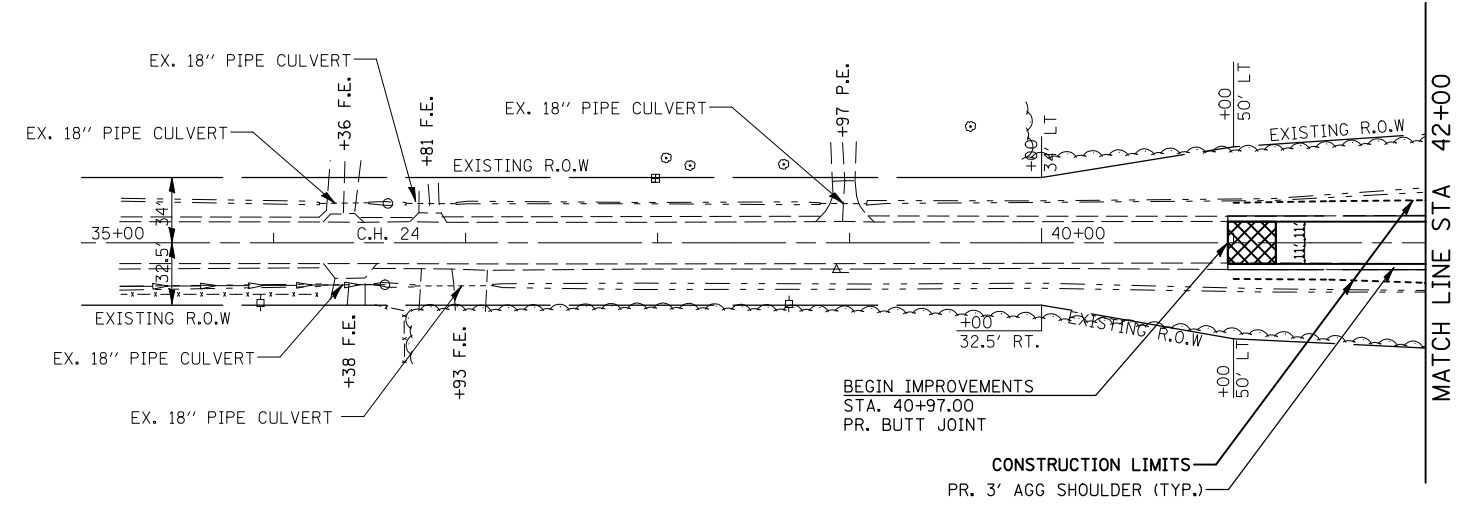
SCHEDULE OF QUANTITIES

SCALE: N.T.S. SHEET NO. 1 OF 2 SHEETS STA. TO STA.

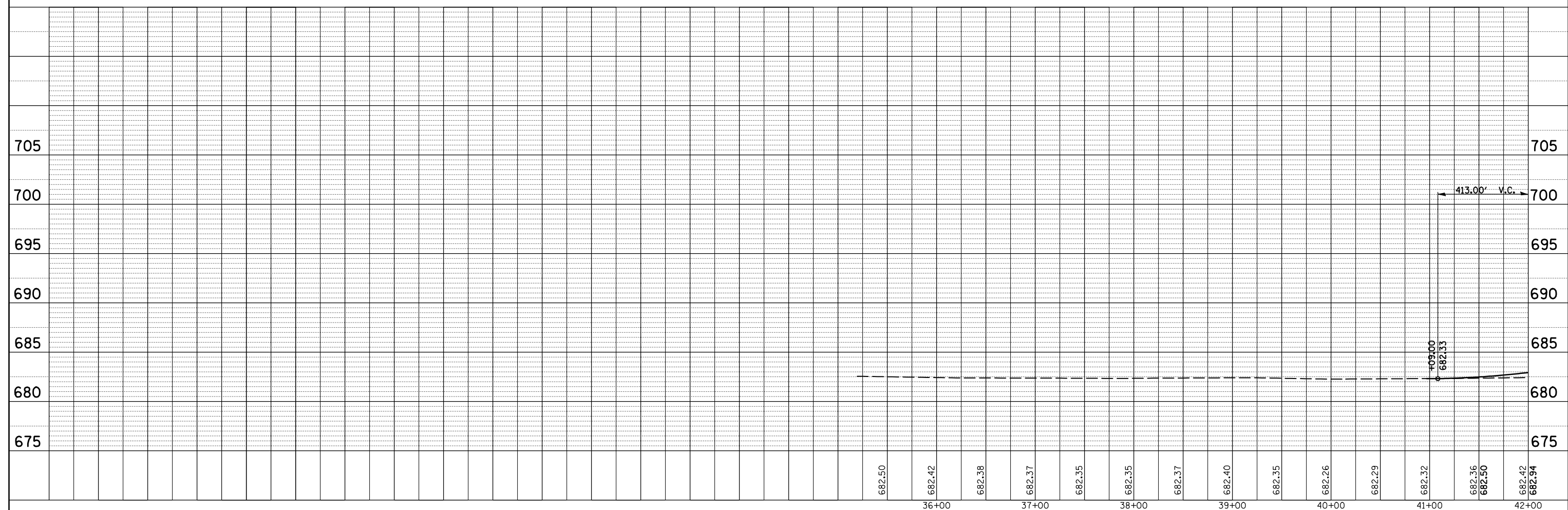
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	8
ILLINOIS FED. AID PROJECT			CONTRACT NO. 90875	



PLAN	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK		
	NO.		
	CHECKED		
	FILE NAME		



PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK		
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	NOTATION		



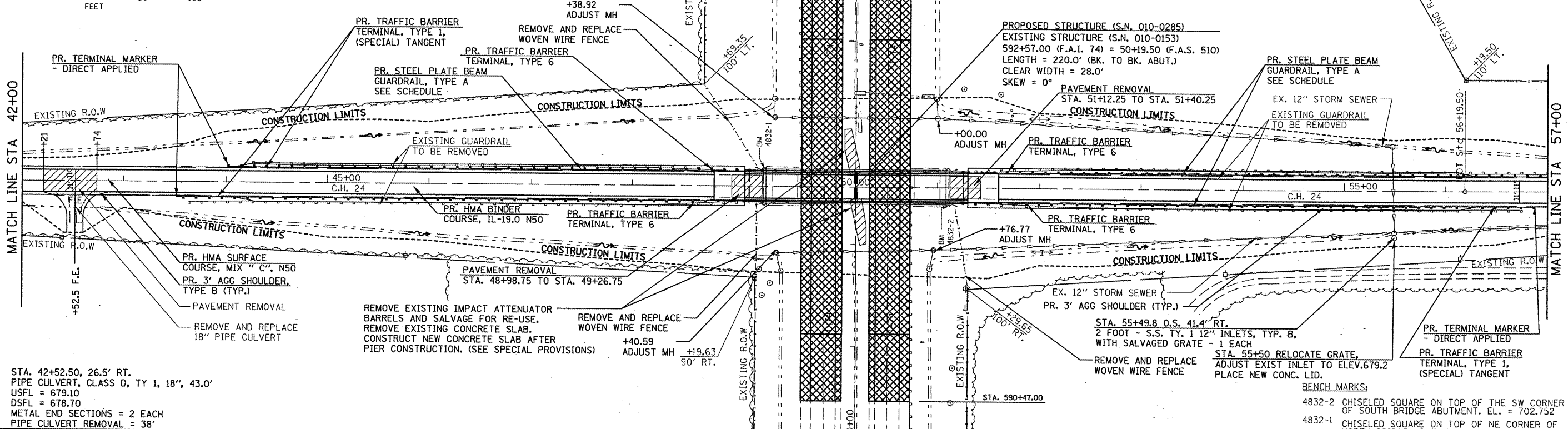
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	PLOT SCALE = 100.0000' / IN.	CHECKED - LLQ	REVISED -							CONTRACT NO. 90875		
	PLOT DATE = 12/17/2009	DATE - JULY 2009	REVISED -					FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



50 0 50 100
FEET

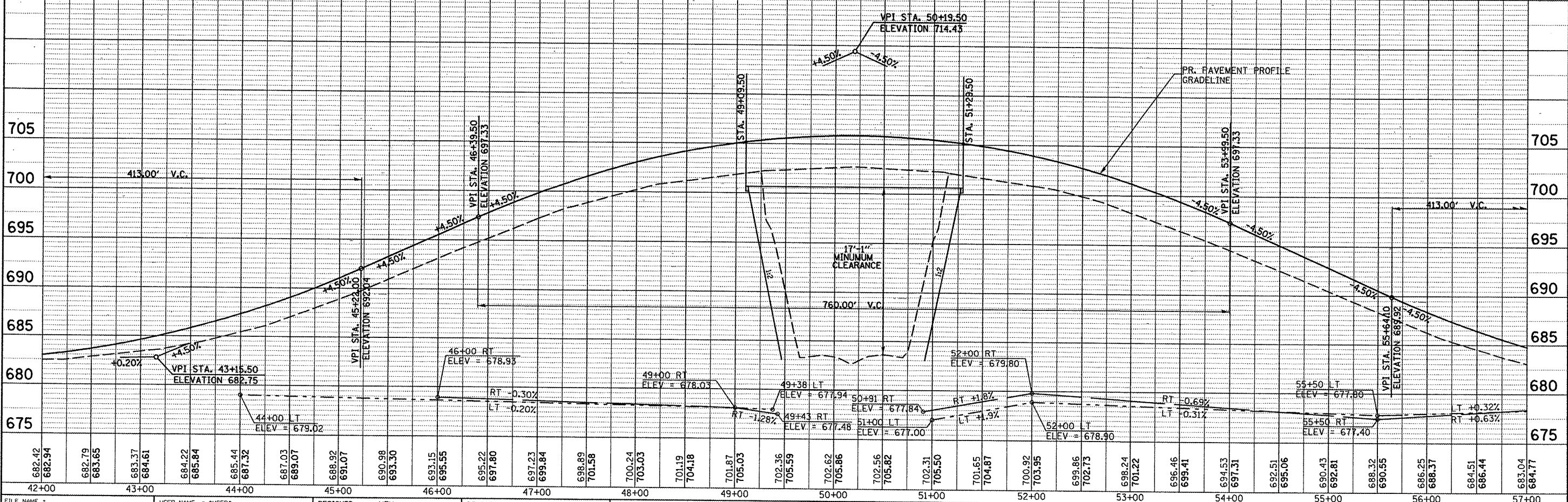
MATCH LINE STA 42+00

MATCH LINE STA 57+00



STA. 42+52.50, 26.5' RT.
PIPE CULVERT, CLASS D, TY 1, 18", 43.0'
USFL = 679.10
DSFL = 678.70
METAL END SECTIONS = 2 EACH
PIPE CULVERT REMOVAL = 38'

BENCH MARKS:
4832-2 CHISELED SQUARE ON TOP OF THE SW CORNER OF SOUTH BRIDGE ABUTMENT. EL. = 702.752
4832-1 CHISELED SQUARE ON TOP OF NE CORNER OF NORTH BRIDGE ABUTMENT. EL. = 702.735



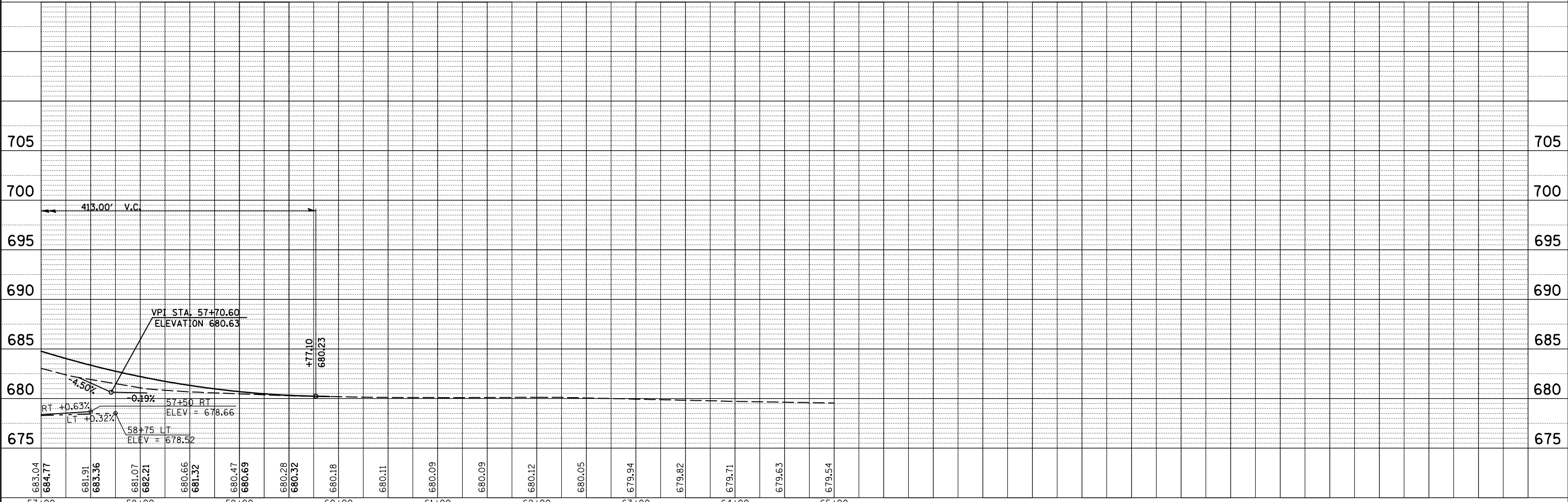
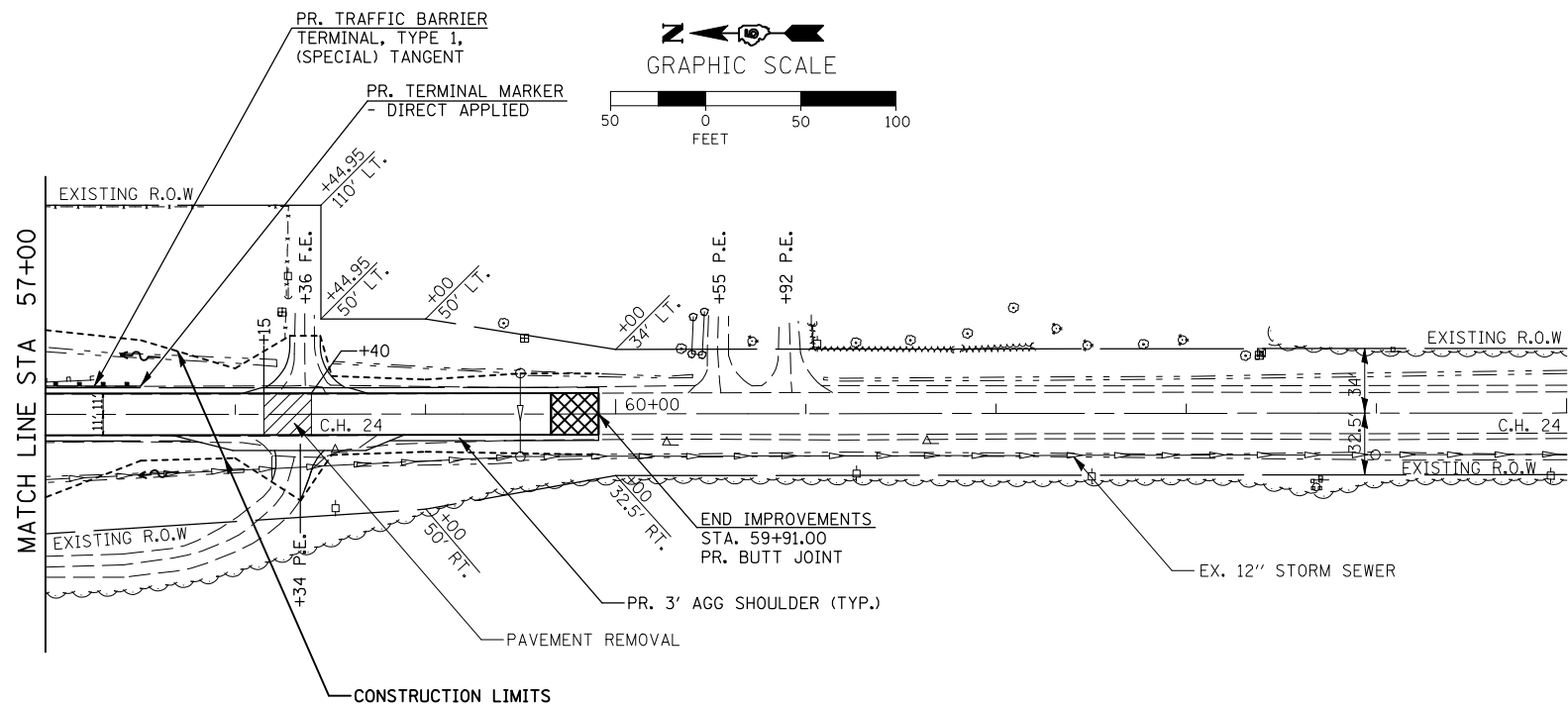
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#FILE#		DRAWN - JJS	REVISED -			74	(10-6HB-5)BR	CHAMPAIGN	63	10	
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PLOT DATE = #DATE#		DATE - JULY 2009	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

DATE	
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	CHECKED		
	FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	NOTED		
	CHECKED		
	STRUCTURE		
	NOTATION		



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		CHECKED - LLQ	REVISED -
		DATE - JULY 2009	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

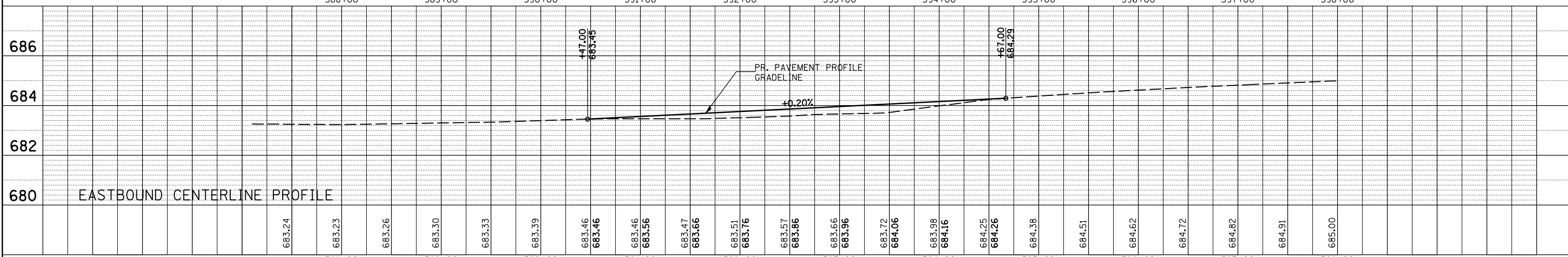
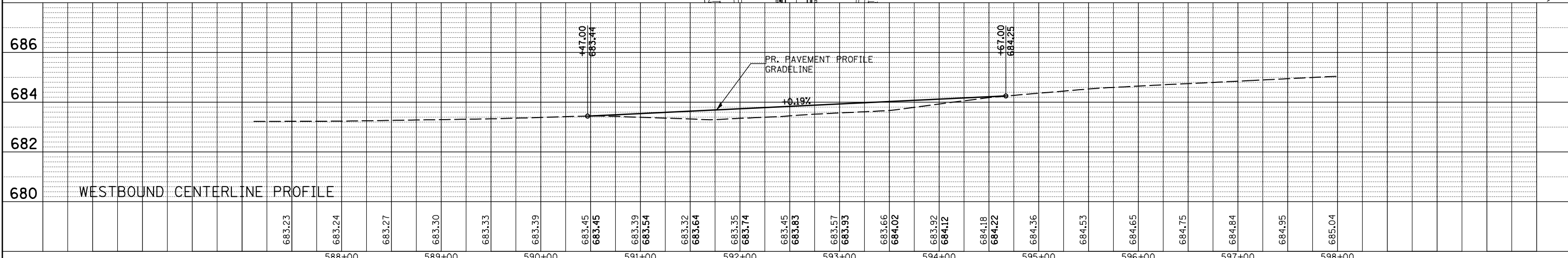
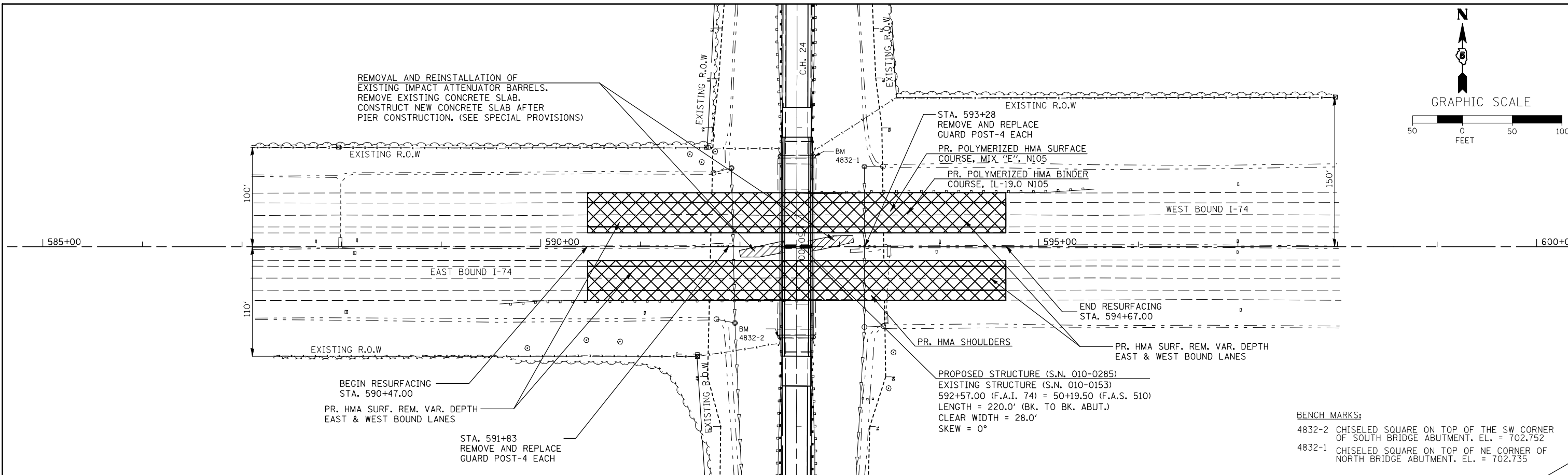
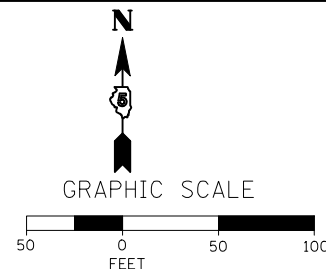
PLAN AND PROFILE

SCALE: 1:50 SHEET NO. 3 OF 3 SHEETS STA. 57+00 TO STA. 65+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	11
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 90875	

PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATION CHKD	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATION CHKD	
	NOTE BOOK NO.	
	CADD FILE NAME	



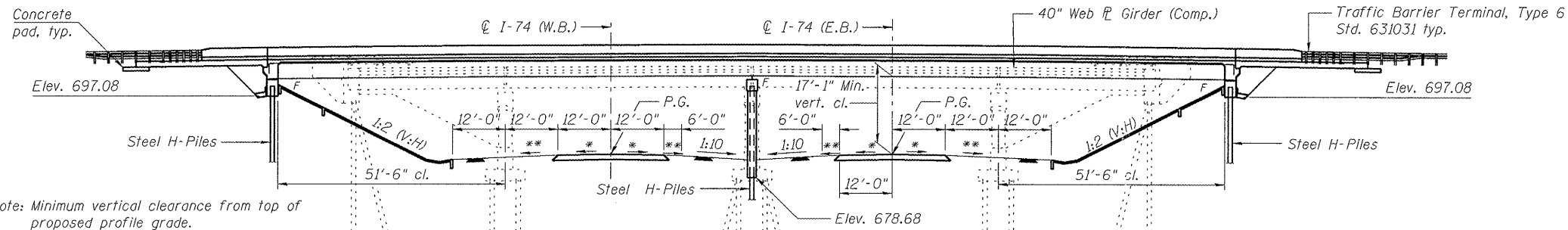
FILE NAME =	USER NAME = dawsonkb	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAI 74 PLAN AND PROFILE	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pwork\p\WIDOT\DAWSONKB\0176650\0590875-9-12-plnprf.dgn		CHECKED -	REVISED -			74	(10-6HB-5)BR	CHAMPAIGN	63	12
PLOT SCALE = 100.0000' / IN.		DRAWN -	REVISED -			CONTRACT NO. 90875				
PLOT DATE = 12/17/2009		CHECKED -	REVISED -			FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Bench Mark: Chiseled square on top of the Southwest abutment of structure SN 010-0153.
Elevation = 702.75

Existing Structure: S.N. 010-0153 a four span PPC I beam bridge that was built in 1958 as FAI-5 Section 10-6HB-5. The substructure consists of open stub abutments and multiple round columned piers. Both the abutments and the piers are founded on concrete piles. The Back to Back dimension measures 185'-6" while the Out to Out width measures 34'-6". The Contractor shall remove the existing structure as required and replace it with a two span plate girder on integral abutments. The road will be closed and traffic detoured during construction.

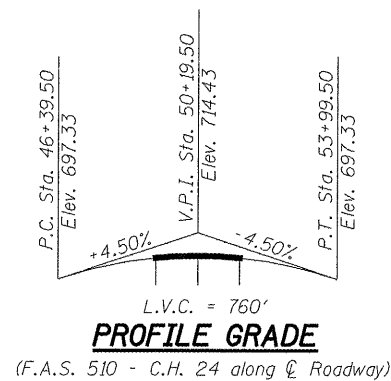
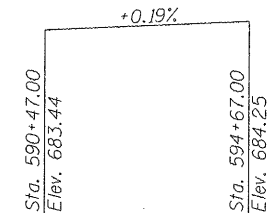
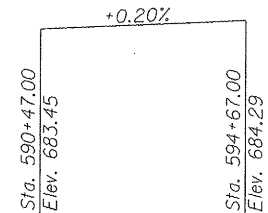
No Salvage



Note: Minimum vertical clearance from top of proposed profile grade.

* = 3/16"/ft
** = 1/2"/ft

ELEVATION
(Looking East)



DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 36,000$ psi (M270 Grade 36)
 $f_y = 50,000$ psi (M270 Grade 50)

SEISMIC DATA

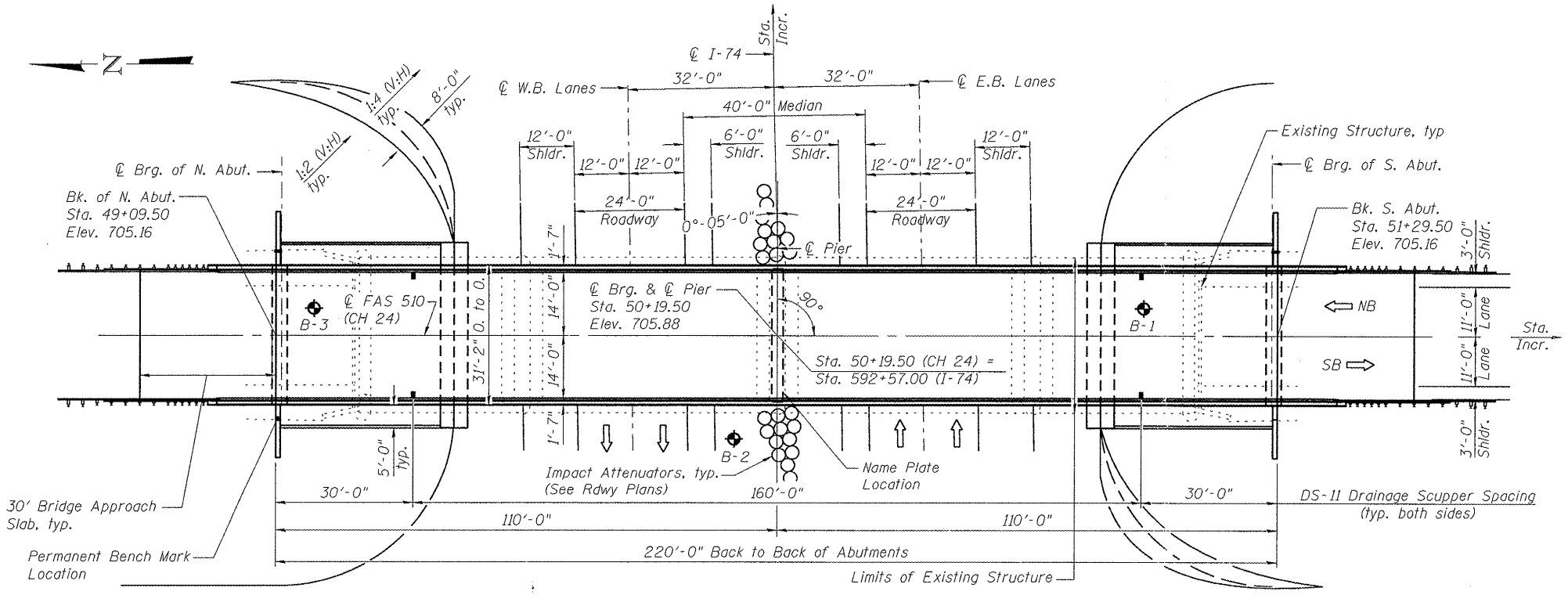
Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.13g
 Design Spectral Acceleration at 0.2 sec. ($S_{D0.2}$) = 0.22g
 Soil Site Class = D

LOADING HL-93

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

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims



Indicates Boring Location

PLAN

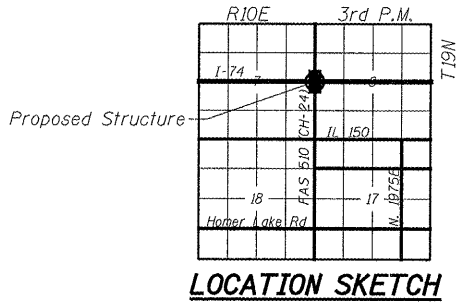
LICENSED STRUCTURAL ENGINEER
 JOHN S. PERADOTTI
 81-005871
 JACKSONVILLE
 STATE OF ILLINOIS
 JOHN S. PERADOTTI, S.E.
 ILLINOIS STRUCTURAL NO. 5671
 EXPIRES: NOVEMBER 30, 2010

APPROVED
For Structural Adequacy Only

Ralph E. Anderson
Engineer of Bridges & Structures

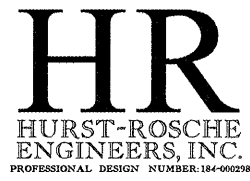
STATION 50+19.50
BUILT 2011 BY
STATE OF ILLINOIS
F.A.S. RT. 510 SEC. (10-6HB-5)BR
LOADING HL-93
STRUCTURE NO. 010-0285

NAME PLATE
See Std. 515001



GENERAL PLAN & ELEVATION
F.A.S. ROUTE 510 (CH 24) OVER
F.A.I. ROUTE 74
SECTION (10-6HB-5)BR
CHAMPAIGN COUNTY
STATION 50+19.50
STRUCTURE NO. 010-0285

DESIGNED	CJC / MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB



SHEET NO. 1 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6HB-5)BR	CHAMPAIGN	63	13
SN 010-0285			CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

GENERAL NOTES

- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$ in. ϕ , holes $\frac{9}{16}$ in. ϕ , unless otherwise noted.
- Calculated weight of Grade 36 Structural Steel = 16,930 lbs
Calculated weight of Grade 50 Structural Steel = 262,520 lbs.
- 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 $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. All final surfaces of the beams shall be painted with light grey (Munsell color Standard 10Y 7/1) except the exterior surfaces of the exterior beams which shall be painted with interstate green (Munsell color Standard 7.5G 4/8). See Special Provision for "Cleaning and Painting New Metal Structures".
- The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations of substructures specified or approved by the Engineer before ordering the remainder of piles.
- Sloped wall shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.
- The Contractor is advised that the existing PPC I beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the conditions of the beams when developing construction procedures for removal and replacement of the Superstructure.
- If the Contractor's procedures for existing PPC I beam removal or replacement of new beams involves the placement of heavy equipment on the existing deck, a detailed procedure shall be provided which includes calculations, sealed by an Illinois licensed Structural Engineer, verifying the adequacy of the existing structure, for the proposed loads. This cost shall be included in the contract unit cost, each, for Removal of Existing Structure.
- 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.
- Slip forming of the parapets will not be allowed.

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

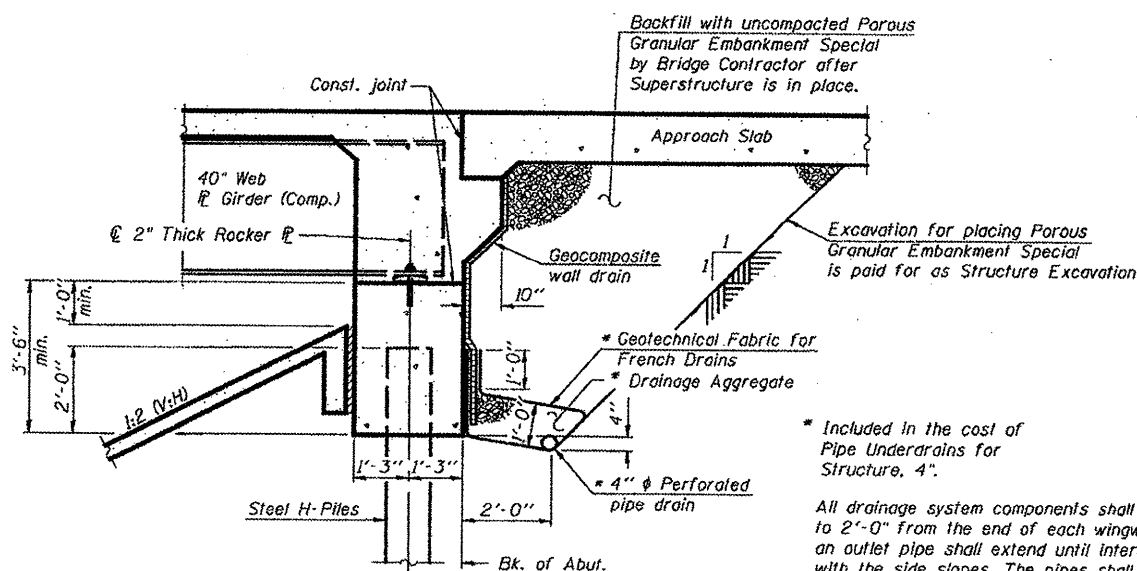
INDEX OF SHEETS

- General Plan and Elevation
- General Data
- Top of Slab Elevation Plan
- Top of Slab Elevations
- Top of North Approach Slab Elevations
- Top of South Approach Slab Elevations
- Superstructure Plan
- Superstructure Details
- Integral Abutment Diaphragm Details
- Bridge Approach Slab Details
- Bridge Approach Slab Details
- Framing Plan
- Structural Steel Details
- Bearing Details
- Abutments
- Pier
- HP Pile Details
- Bar Splicer Assembly Details
- Drainage Scupper, DS-II
- Subsurface Diagram

TOTAL BILL OF MATERIAL

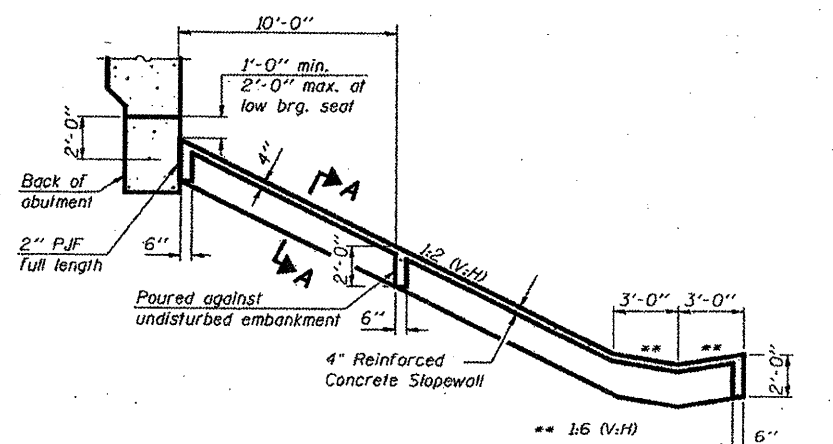
ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.	--	122	122
Removal of Existing Structures	Each	1	--	1
Structure Excavation	Cu. Yd.	--	208	208
Protective Coat	Sq. Yd.	1127	--	1127
Bridge Deck Grooving	Sq. Yd.	810	--	810
Furnishing & Erecting Structural Steel	L. Sum	1	--	1
Furnishing Steel Piles HP12x53	Foot	--	780	780
Furnishing Steel Piles HP14x102	Foot	--	574	574
Driving Piles	Foot	--	1354	1354
Reinforcement Bars, Epoxy Coated	Pounds	76,865	13,785	90,650
Name Plates	Each	--	1	1
Stud Shear Connectors	Each	1872	--	1872
Bar Splicers	Each	62	--	62
Drainage Scuppers, DS-II	Each	4	--	4
Slope Wall 4"	Sq. Yd.	--	424	424
Concrete Structures	Cu. Yd.	--	111.9	111.9
Concrete Superstructure	Cu. Yd.	342.4	--	342.4
Pipe Underdrains for Structures 4"	Foot	--	119	119
Protective Shield	Sq. Yd.	430	--	430
Concrete Encasement	Cu. Yd.	--	8.6	8.6
Anchor Bolts, 1"	Each	--	36	36
Geocomposite Wall Drain	Sq. Yd.	--	38	38
Test Pile Steel HP12x53	Each	--	2	2
Test Pile Steel HP14x102	Each	--	1	1
Braced Excavation	Cu. Yd.	--	x	x
Mechanical Splicers	Each	--	36	36
Permanent Bench Marks	Each	1	--	1

* Protective Shield required only for spans 2 & 3 of the existing structure.

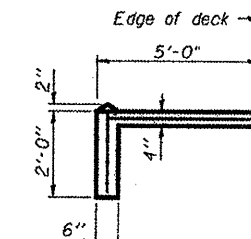


SECTION THRU INTEGRAL ABUTMENT

* Included in the cost of Pipe Underdrains for Structure, 4".
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 Specification and Highway Standard 601.01.)



SECTION THRU CONCRETE SLOPEWALL



SECTION A-A

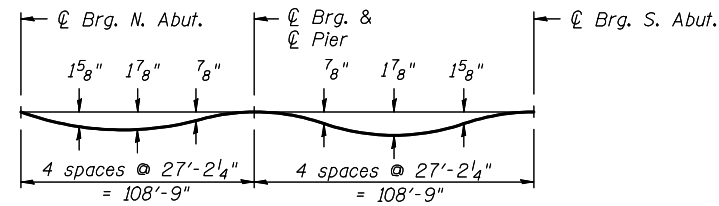
**GENERAL DATA
STRUCTURE NO. 010-0285**

SHEET NO. 2	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
20 SHEETS	74	(10-6HB-5)BR	CHAMPAIGN	63	14
SN 010-0285			CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

DESIGNED CJC / MEB
CHECKED JSP
DRAWN UJ
CHECKED MEB



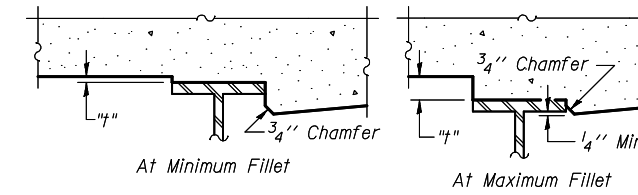
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



DEAD LOAD DEFLECTION DIAGRAM

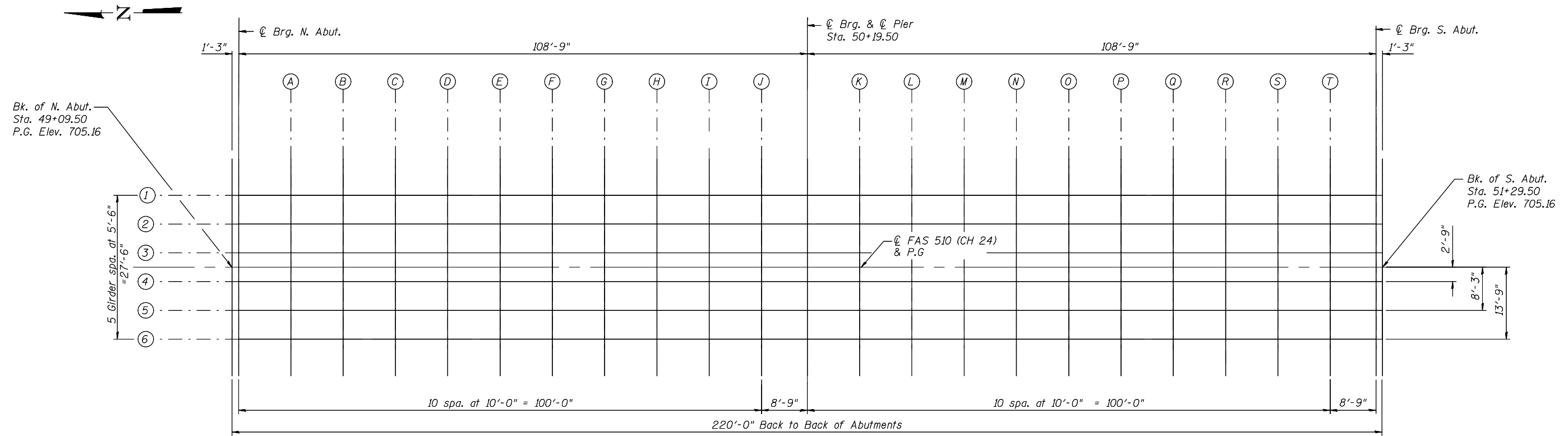
(Includes weight of concrete only.)

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 sheet 4 of 20.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheet 4 of 20, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



PLAN

**TOP OF SLAB ELEVATION PLAN
STRUCTURE NO. 010-0285**

DESIGNED	CJC / MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB



SHEET NO. 3 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6HB-5)BR	CHAMPAIGN	63	15
SN 010-0285			CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER #1 AND 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	49+09.50	13.75	704.94	704.94
☉ Brg. N. Abut.	49+10.75	13.75	704.96	704.96
A	49+20.75	13.75	705.08	705.13
B	49+30.75	13.75	705.19	705.29
C	49+40.75	13.75	705.29	705.43
D	49+50.75	13.75	705.38	705.53
E	49+60.75	13.75	705.45	705.60
F	49+70.75	13.75	705.52	705.66
G	49+80.75	13.75	705.57	705.68
H	49+90.75	13.75	705.61	705.68
I	50+00.75	13.75	705.64	705.69
J	50+10.75	13.75	705.65	705.67
☉ Brg. & ☉ Pier	50+19.50	13.75	705.66	705.66
K	50+29.50	13.75	705.65	705.67
L	50+39.50	13.75	705.63	705.68
M	50+49.50	13.75	705.60	705.68
N	50+59.50	13.75	705.56	705.67
O	50+69.50	13.75	705.51	705.65
P	50+79.50	13.75	705.44	705.59
Q	50+89.50	13.75	705.37	705.51
R	50+99.50	13.75	705.28	705.42
S	51+09.50	13.75	705.18	705.27
T	51+19.50	13.75	705.06	705.10
☉ Brg. S. Abut.	51+28.28	13.75	704.96	704.96
Bk. S. Abut.	51+29.50	13.75	704.94	704.94

GIRDER #2 AND 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	49+09.50	8.25	705.03	705.03
☉ Brg. N. Abut.	49+10.75	8.25	705.05	705.05
A	49+20.75	8.25	705.17	705.22
B	49+30.75	8.25	705.28	705.38
C	49+40.75	8.25	705.38	705.52
D	49+50.75	8.25	705.47	705.62
E	49+60.75	8.25	705.55	705.70
F	49+70.75	8.25	705.61	705.75
G	49+80.75	8.25	705.66	705.77
H	49+90.75	8.25	705.70	705.77
I	50+00.75	8.25	705.73	705.78
J	50+10.75	8.25	705.75	705.77
☉ Brg. & ☉ Pier	50+19.50	8.25	705.75	705.75
K	50+29.50	8.25	705.75	705.77
L	50+39.50	8.25	705.73	705.78
M	50+49.50	8.25	705.70	705.78
N	50+59.50	8.25	705.66	705.77
O	50+69.50	8.25	705.60	705.74
P	50+79.50	8.25	705.54	705.69
Q	50+89.50	8.25	705.46	705.60
R	50+99.50	8.25	705.37	705.51
S	51+09.50	8.25	705.27	705.36
T	51+19.50	8.25	705.16	705.20
☉ Brg. S. Abut.	51+28.28	8.25	705.05	705.05
Bk. S. Abut.	51+29.50	8.25	705.03	705.03

GIRDER #3 AND 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	49+09.50	2.75	705.12	705.12
☉ Brg. N. Abut.	49+10.75	2.75	705.14	705.14
A	49+20.75	2.75	705.26	705.31
B	49+30.75	2.75	705.37	705.47
C	49+40.75	2.75	705.47	705.61
D	49+50.75	2.75	705.56	705.71
E	49+60.75	2.75	705.63	705.78
F	49+70.75	2.75	705.70	705.84
G	49+80.75	2.75	705.75	705.86
H	49+90.75	2.75	705.79	705.86
I	50+00.75	2.75	705.82	705.87
J	50+10.75	2.75	705.83	705.85
☉ Brg. & ☉ Pier	50+19.50	2.75	705.84	705.84
K	50+29.50	2.75	705.83	705.85
L	50+39.50	2.75	705.81	705.86
M	50+49.50	2.75	705.78	705.86
N	50+59.50	2.75	705.74	705.85
O	50+69.50	2.75	705.69	705.83
P	50+79.50	2.75	705.62	705.77
Q	50+89.50	2.75	705.55	705.69
R	50+99.50	2.75	705.46	705.60
S	51+09.50	2.75	705.36	705.45
T	51+19.50	2.75	705.24	705.28
☉ Brg. S. Abut.	51+28.28	2.75	705.14	705.14
Bk. S. Abut.	51+29.50	2.75	705.12	705.12

☉ ROADWAY AND P.G.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	49+09.50	0.00	705.16	705.16
☉ Brg. N. Abut.	49+10.75	0.00	705.18	705.18
A	49+20.75	0.00	705.30	705.35
B	49+30.75	0.00	705.41	705.51
C	49+40.75	0.00	705.51	705.65
D	49+50.75	0.00	705.60	705.75
E	49+60.75	0.00	705.68	705.83
F	49+70.75	0.00	705.74	705.88
G	49+80.75	0.00	705.79	705.90
H	49+90.75	0.00	705.83	705.90
I	50+00.75	0.00	705.86	705.91
J	50+10.75	0.00	705.88	705.90
☉ Brg. & ☉ Pier	50+19.50	0.00	705.88	705.88
K	50+29.50	0.00	705.87	705.89
L	50+39.50	0.00	705.86	705.91
M	50+49.50	0.00	705.83	705.91
N	50+59.50	0.00	705.79	705.90
O	50+69.50	0.00	705.73	705.87
P	50+79.50	0.00	705.67	705.82
Q	50+89.50	0.00	705.59	705.73
R	50+99.50	0.00	705.50	705.64
S	51+09.50	0.00	705.40	705.49
T	51+19.50	0.00	705.29	705.33
☉ Brg. S. Abut.	51+28.28	0.00	705.18	705.18
Bk. S. Abut.	51+29.50	0.00	705.16	705.16

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 010-0285

DESIGNED	CJC / MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB



SHEET NO. 4 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6HB-5)BR	CHAMPAIGN	63	16
	SN 010-0285		CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST EDGE OF SHOULDER

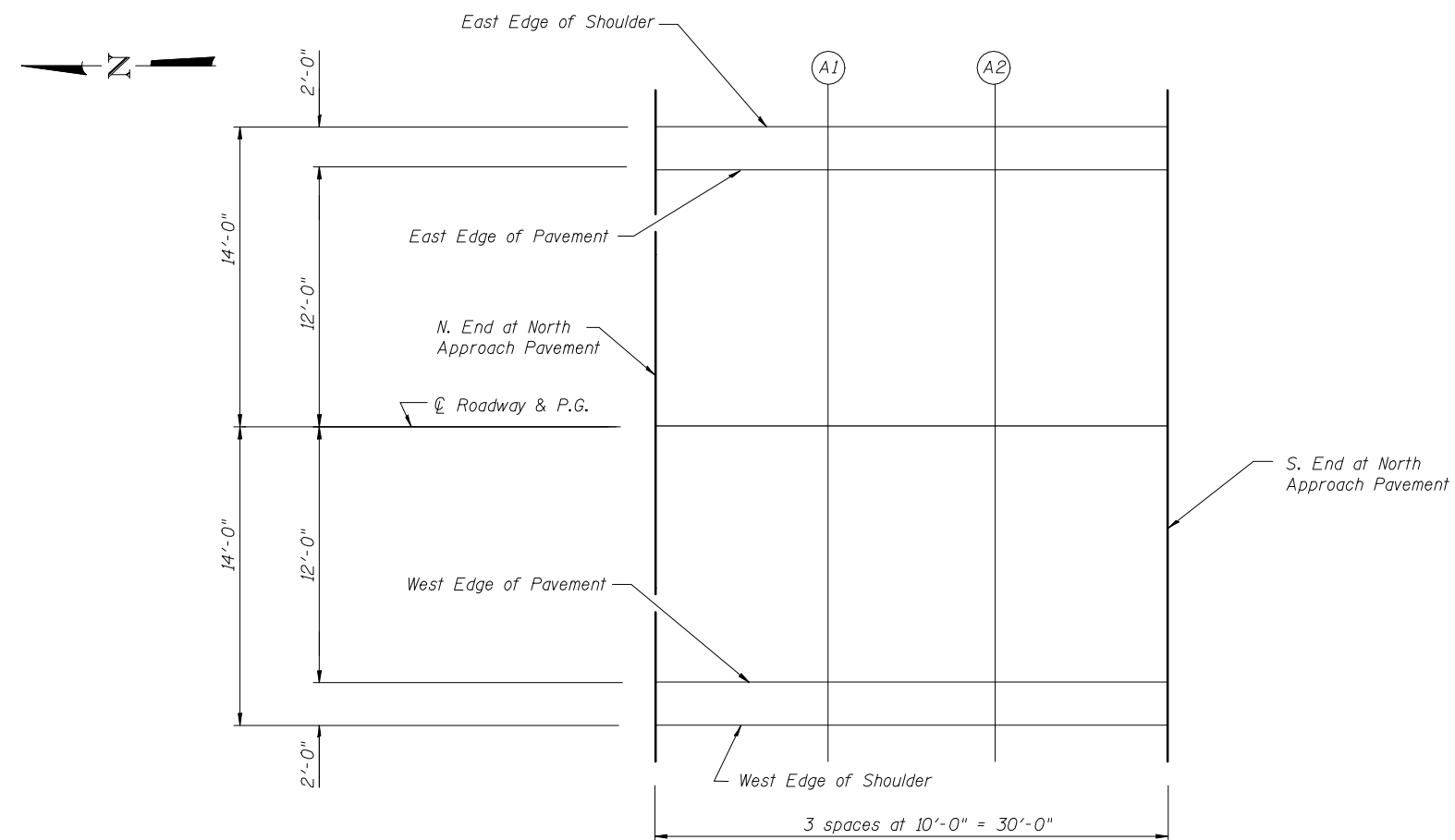
Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Pav't.	48+79.50	-14.00	704.49
A1	48+89.50	-14.00	704.65
A2	48+99.50	-14.00	704.80
S. End North Appr. Pav't.	49+09.50	-14.00	704.93

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Pav't.	48+79.50	-12.00	704.53
A1	48+89.50	-12.00	704.69
A2	48+99.50	-12.00	704.84
S. End North Appr. Pav't.	49+09.50	-12.00	704.98

☉ ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Pav't.	48+79.50	0.00	704.72
A1	48+89.50	0.00	704.88
A2	48+99.50	0.00	705.03
S. End North Appr. Pav't.	49+09.50	0.00	705.16



PLAN
North Approach

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Pav't.	48+79.50	12.00	704.53
A1	48+89.50	12.00	704.69
A2	48+99.50	12.00	704.84
S. End North Appr. Pav't.	49+09.50	12.00	704.98

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Pav't.	48+79.50	14.00	704.49
A1	48+89.50	14.00	704.65
A2	48+99.50	14.00	704.80
S. End North Appr. Pav't.	49+09.50	14.00	704.93

TOP OF NORTH APPROACH SLAB
ELEVATIONS
STRUCTURE NO. 010-0285

DESIGNED	CJC
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB



SHEET NO. 5	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6HB-5)BR	CHAMPAIGN	63	17
20 SHEETS	SN 010-0285		CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST EDGE OF SHOULDER

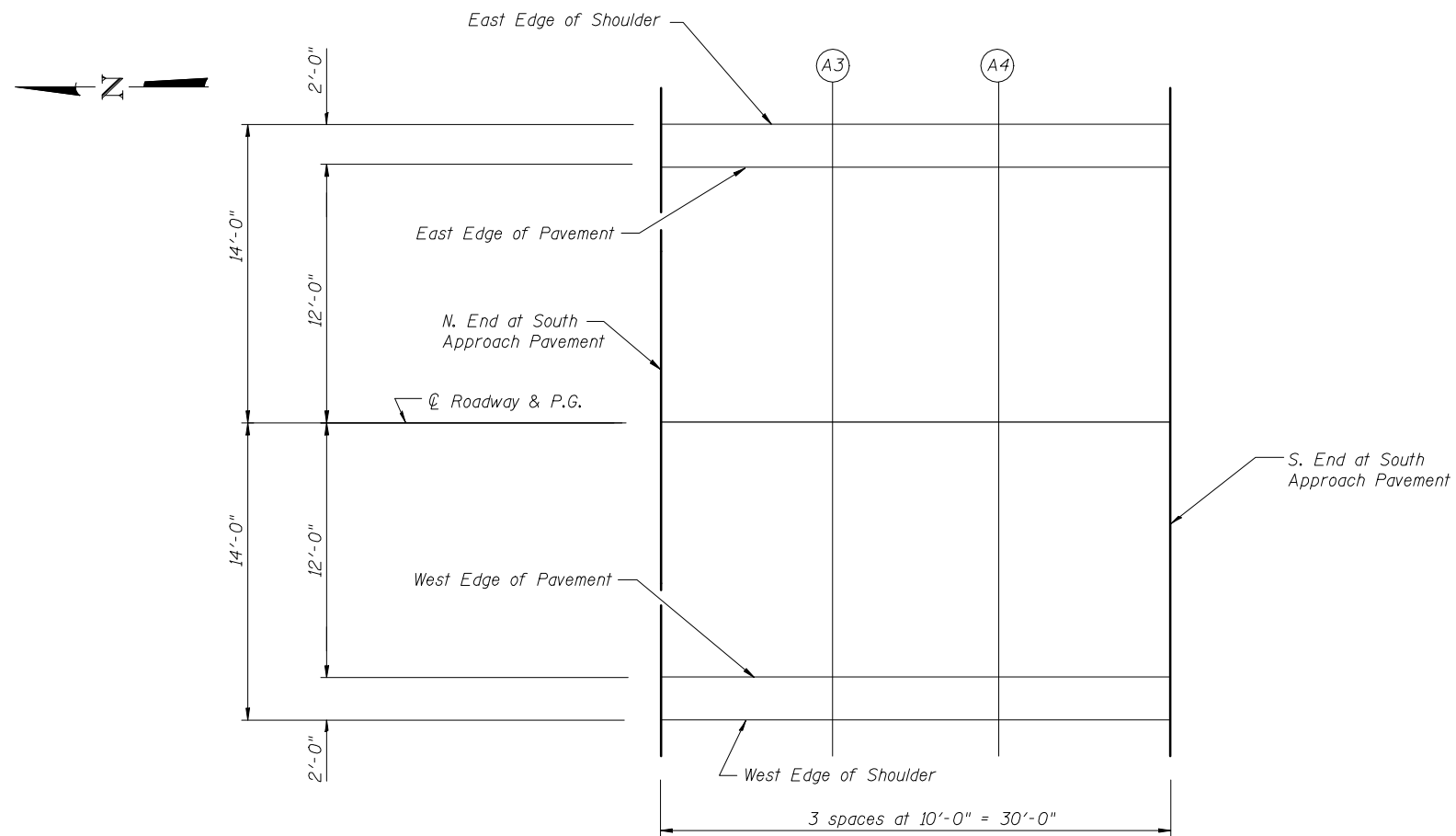
Location	Station	Offset	Theoretical Grade Elevations
N. End South Appr. Pav't.	51+29.50	-14.00	704.93
A3	51+39.50	-14.00	704.80
A4	51+49.50	-14.00	704.65
S. End South Appr. Pav't.	51+59.50	-14.00	704.49

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End South Appr. Pav't.	51+29.50	-12.00	704.98
A3	51+39.50	-12.00	704.84
A4	51+49.50	-12.00	704.69
S. End South Appr. Pav't.	51+59.50	-12.00	704.53

℄ ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations
N. End South Appr. Pav't.	51+29.50	0.00	705.16
A3	51+39.50	0.00	705.03
A4	51+49.50	0.00	704.88
S. End South Appr. Pav't.	51+59.50	0.00	704.72



PLAN
South Approach

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End South Appr. Pav't.	51+29.50	12.00	704.98
A3	51+39.50	12.00	704.84
A4	51+49.50	12.00	704.69
S. End South Appr. Pav't.	51+59.50	12.00	704.53

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
N. End South Appr. Pav't.	51+29.50	14.00	704.93
A3	51+39.50	14.00	704.80
A4	51+49.50	14.00	704.65
S. End South Appr. Pav't.	51+59.50	14.00	704.49

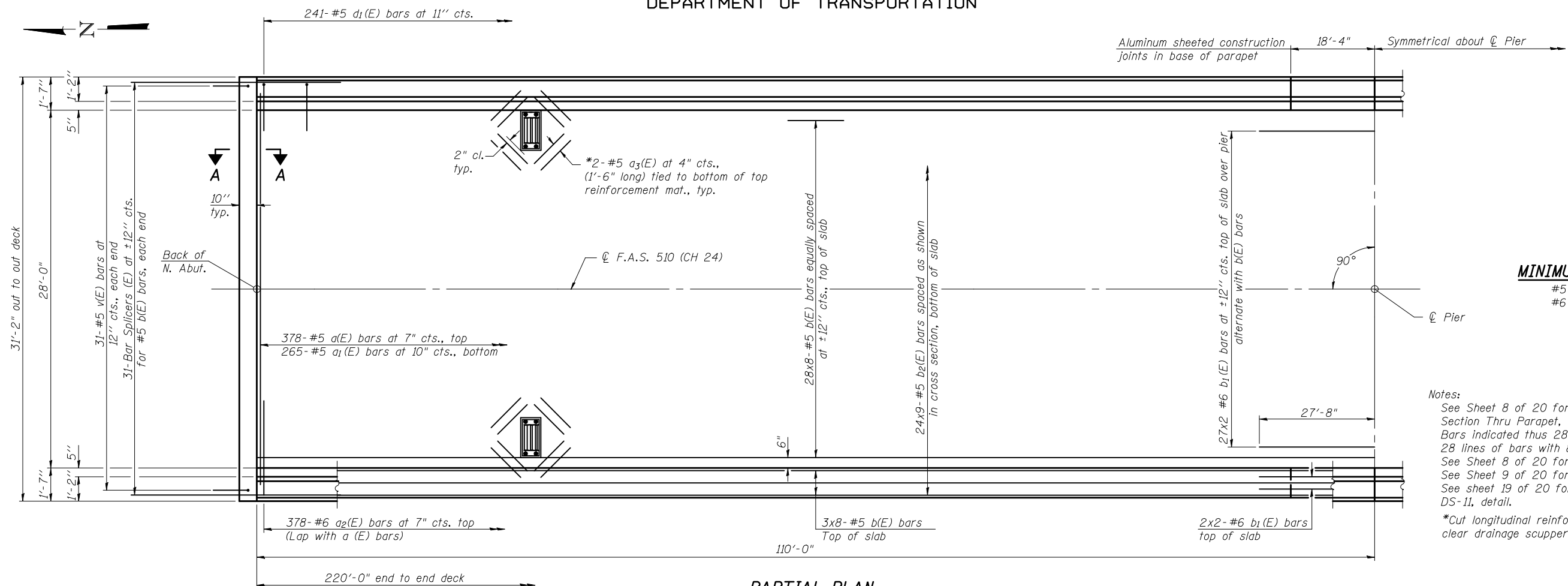
TOP OF SOUTH APPROACH SLAB
ELEVATIONS
STRUCTURE NO. 010-0285

DESIGNED	CJC
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB



SHEET NO. 6	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6HB-5)BR	CHAMPAIGN	63	18
20 SHEETS	SN 010-0285		CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



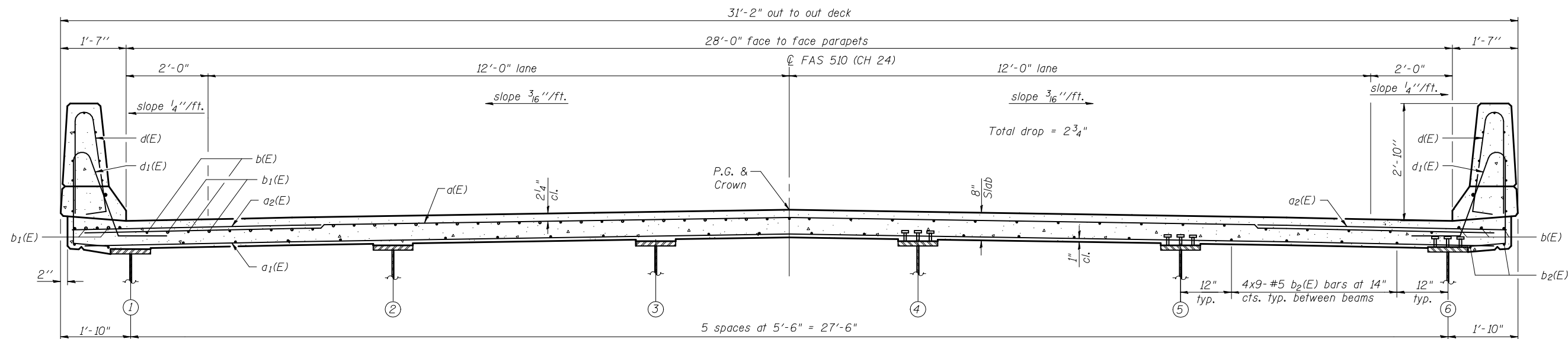
MINIMUM BAR LAP

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

Notes:
See Sheet 8 of 20 for superstructure details, Section Thru Parapet, and Bill of Material. Bars indicated thus 28 x 8- #5 etc. indicates 28 lines of bars with 8 lengths per line. See Sheet 8 of 20 for parapet reinforcement. See Sheet 9 of 20 for Section A-A. See sheet 19 of 20 for Drainage Scupper, DS-11, detail.

*Cut longitudinal reinforcement to clear drainage scuppers.

PARTIAL PLAN



NEAR PIER

CROSS SECTION
(Looking South)

NEAR MIDSPAN

SUPERSTRUCTURE PLAN
STRUCTURE NO. 010-0285

DESIGNED	CJC / MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB



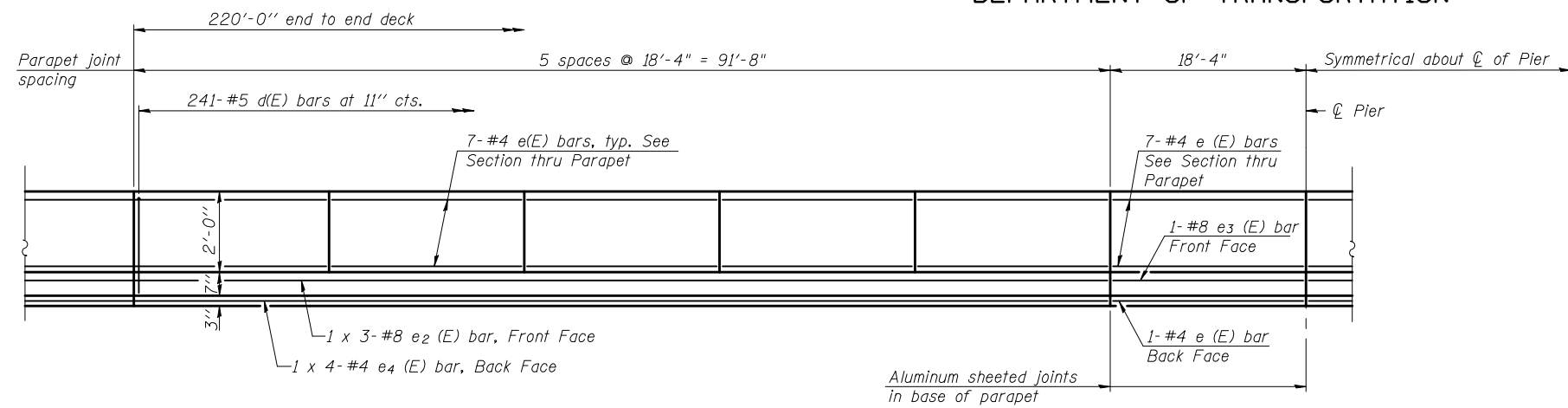
SHEET NO. 7 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6HB-5)BR	CHAMPAIGN	63	19
SN 010-0285			CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	378	#5	30'-4"	—
a ₁ (E)	265	#5	29'-8"	—
a ₂ (E)	756	#6	6'-0"	—
a ₃ (E)	32	#5	1'-6"	—
b(E)	272	#5	29'-5"	—
b ₁ (E)	62	#6	29'-0"	—
b ₂ (E)	216	#5	26'-4"	—
d(E)	482	#5	5'-7"	⌒
d ₁ (E)	482	#5	6'-6"	⌒
e(E)	172	#4	18'-0"	—
e ₂ (E)	12	#8	32'-9"	—
e ₃ (E)	4	#8	18'-0"	—
e ₄ (E)	16	#4	23'-10"	—
m(E)	10	#6	30'-10"	—
m ₁ (E)	24	#6	7'-5"	—
m ₂ (E)	10	#6	5'-2"	—
m ₃ (E)	4	#6	1'-6"	—
s(E)	72	#5	6'-7"	⌒
s ₁ (E)	58	#4	10'-6"	⌒
v(E)	62	#5	3'-4"	⌒
Reinforcement Bars, Epoxy Coated		Pound	55,575	
Concrete Superstructure		Cu. Yds.	251.0	

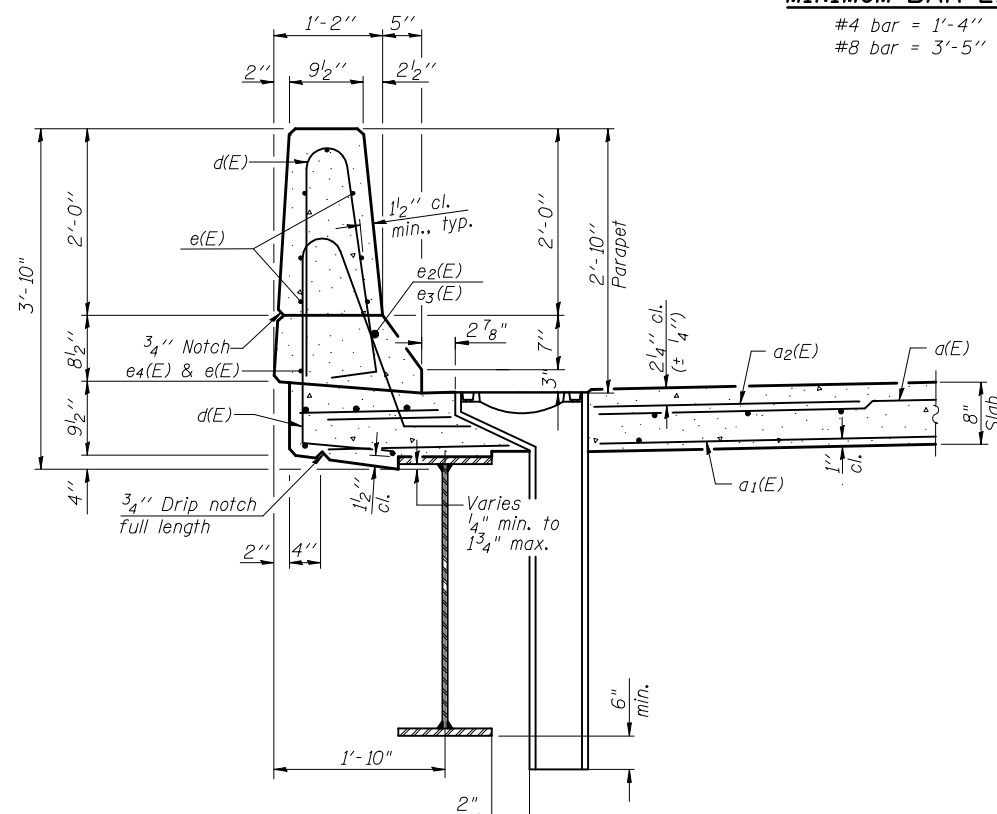
Bars indicated thus 1 x 4-#4 etc. indicates 1 line of bars with 4 lengths per line.



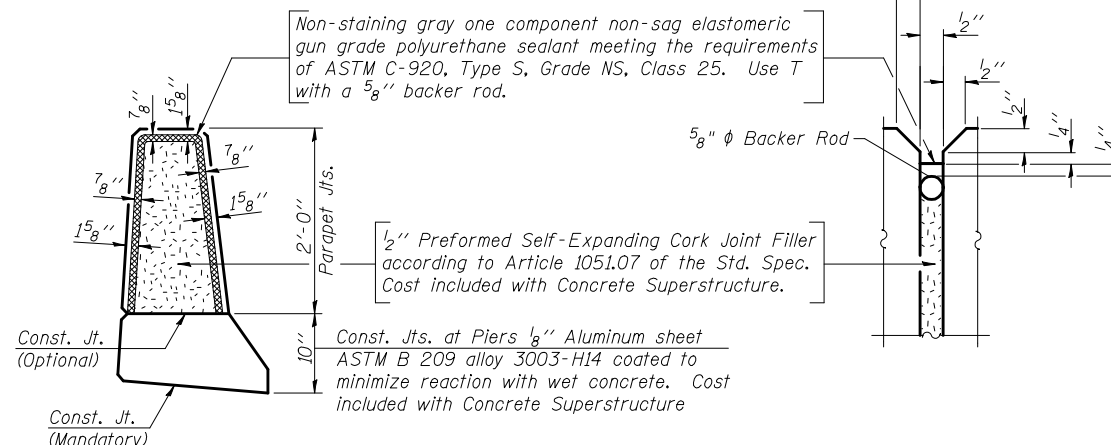
INSIDE ELEVATION OF PARAPET

MINIMUM BAR LAP

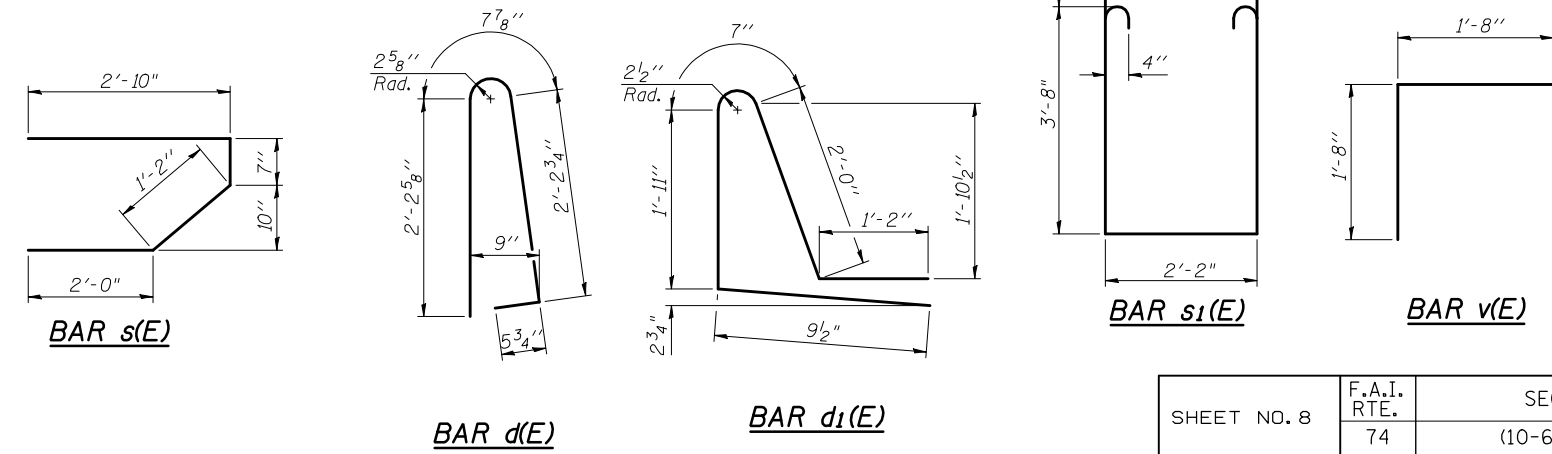
#4 bar = 1'-4"
#8 bar = 3'-5"



SECTION THRU PARAPET

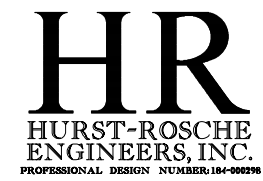


PARAPET JOINT DETAILS

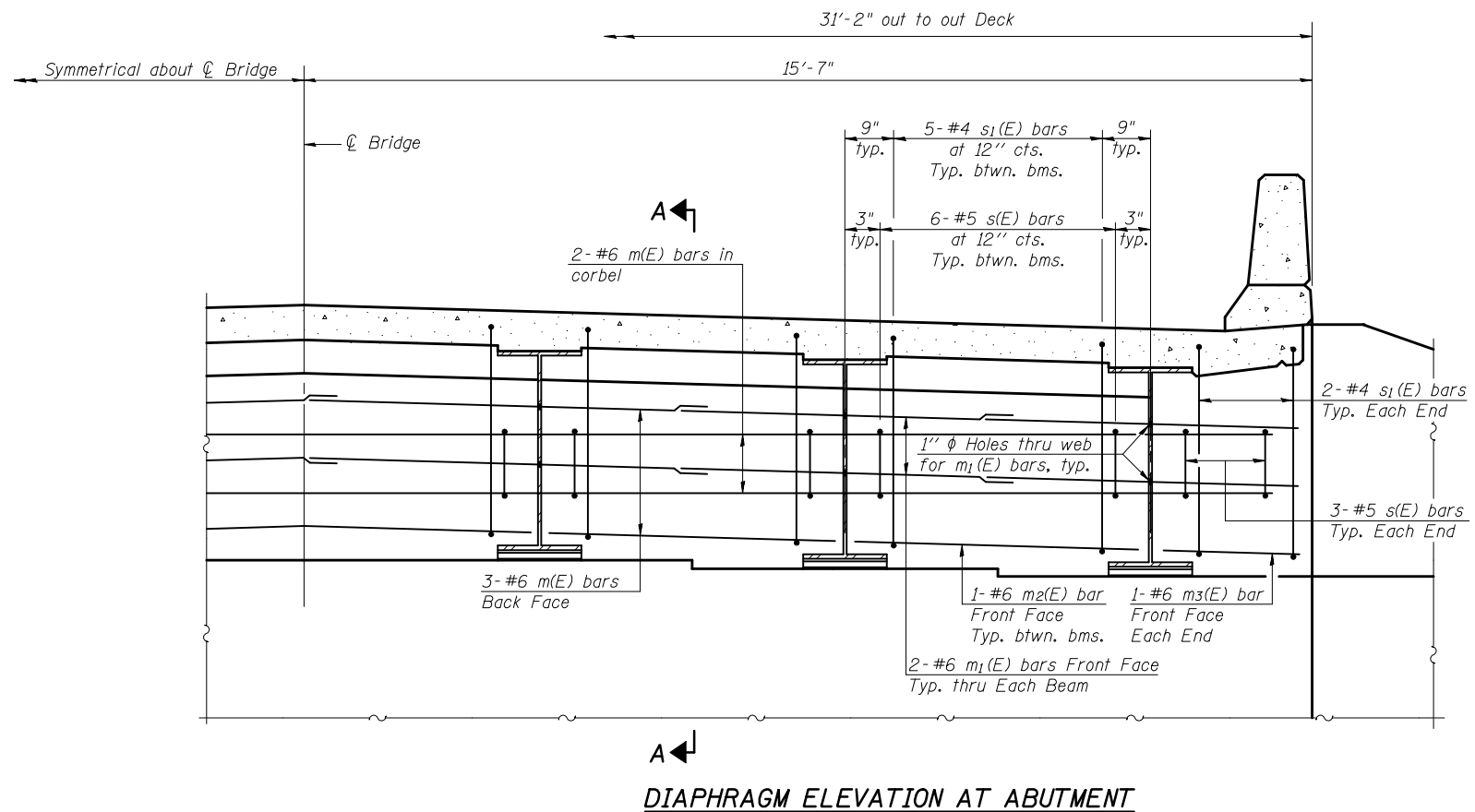


**SUPERSTRUCTURE DETAILS
STRUCTURE NO. 010-0285**

DESIGNED	CJC / MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB



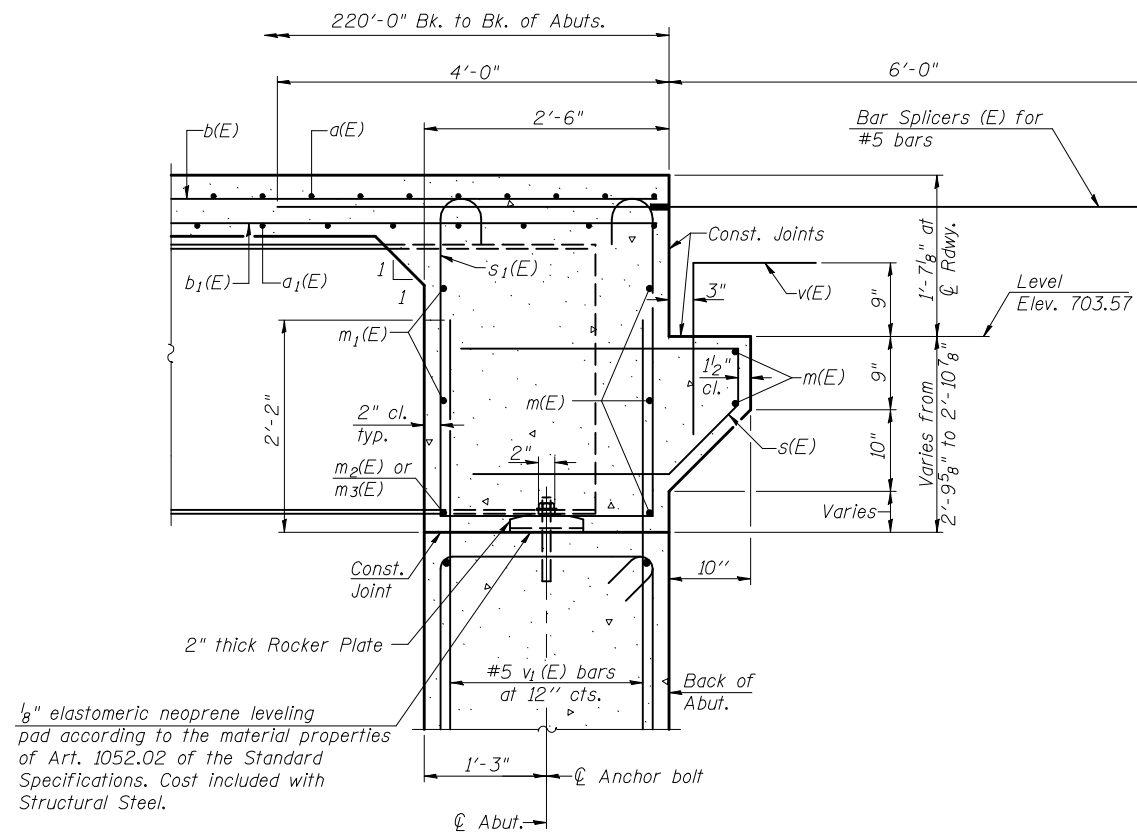
SHEET NO. 8 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6HB-5)BR	CHAMPAIGN	63	20
SN 010-0285			CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					



DIAPHRAGM ELEVATION AT ABUTMENT

Notes:
 Reinforcement bars in diaphragm are billed with superstructure on sheet 8 of 20.
 Concrete in diaphragm is included with Concrete Superstructure on sheet 8 of 20.
 For details of bars s(E) & s1(E) see sheet 8 of 20.
 The s(E) and s1(E) bars shall be placed parallel to the beams.

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



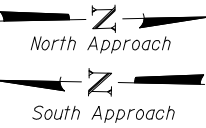
SECTION A-A

**INTEGRAL ABUTMENT
 DIAPHRAGM DETAILS
 STRUCTURE NO. 010-0285**

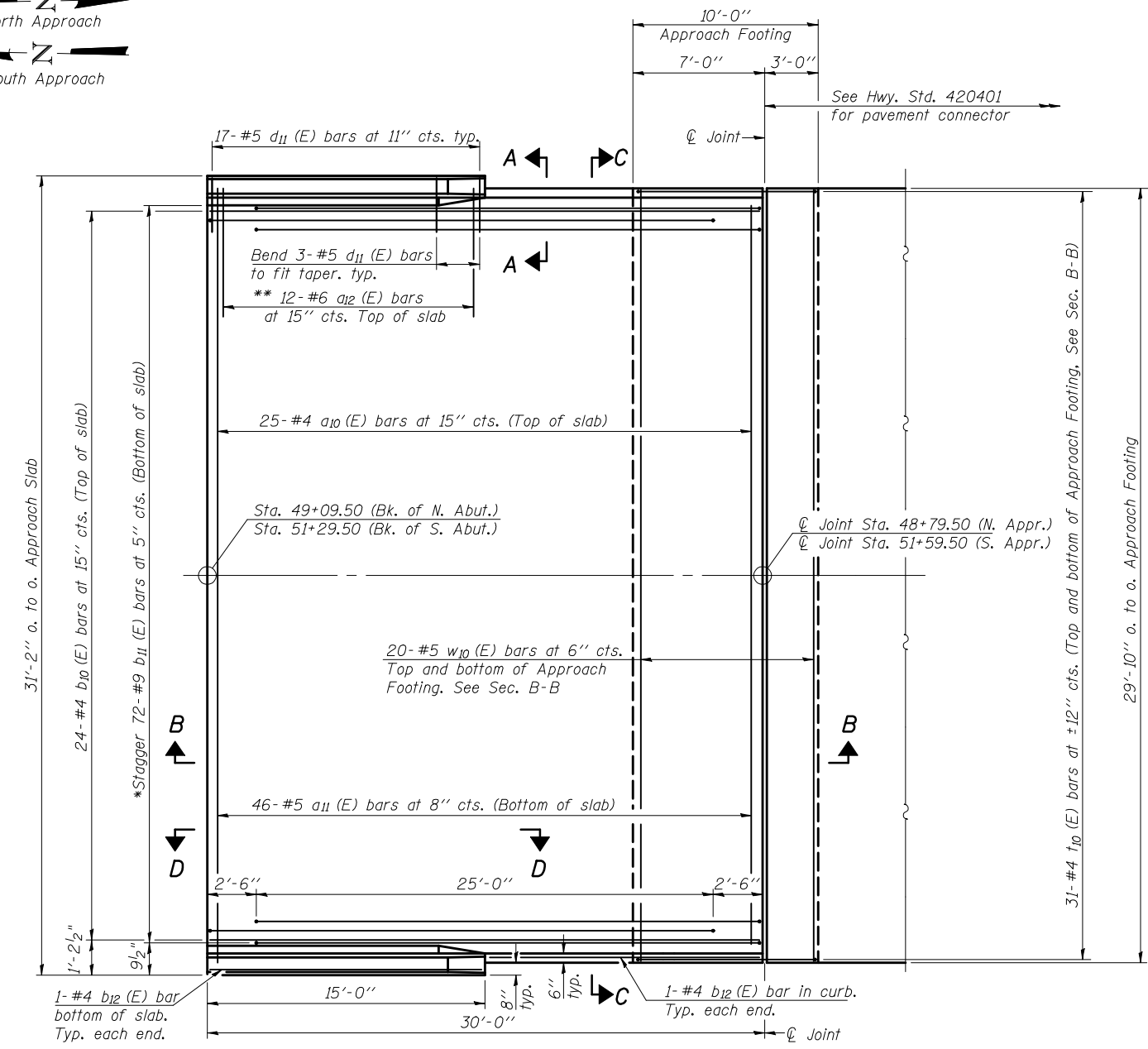
DESIGNED	CJC / MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB

HR
HURST-ROSCHÉ
ENGINEERS, INC.
 PROFESSIONAL DESIGN NUMBER: 184-00098

SHEET NO. 9 20 SHEETS	F.A.I. RTE. 74	SECTION (10-6HB-5)BR	COUNTY CHAMPAIGN	TOTAL SHEETS 63	SHEET NO. 21
	SN 010-0285		CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

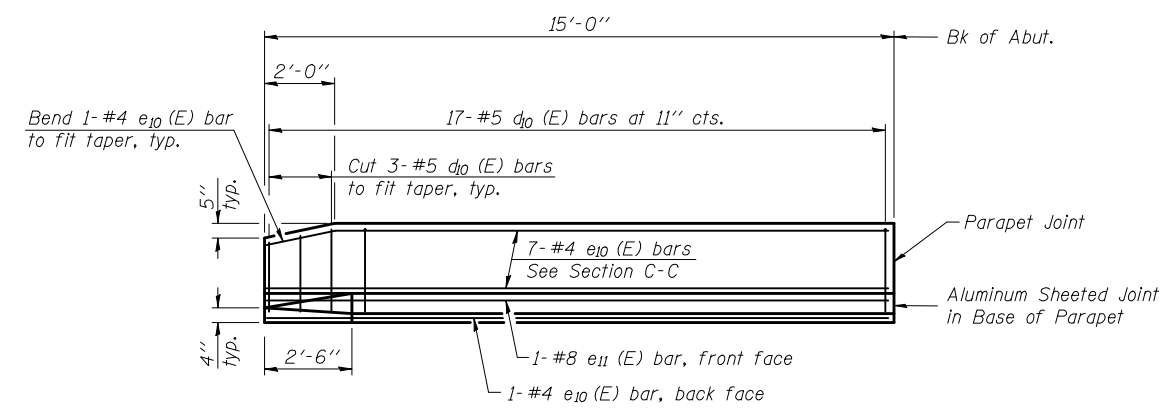


Notes:
See sheet 11 of 20 for Sections B-B & C-C.
 a_{10} (E), a_{11} (E), and w_{10} (E) bar spacings measured parallel to \varnothing Rdwy.

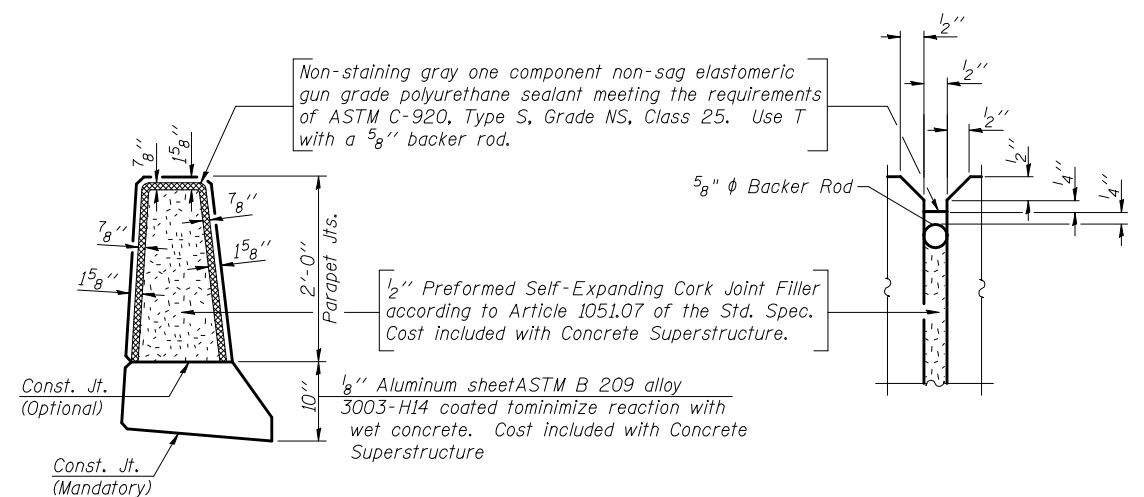


PLAN

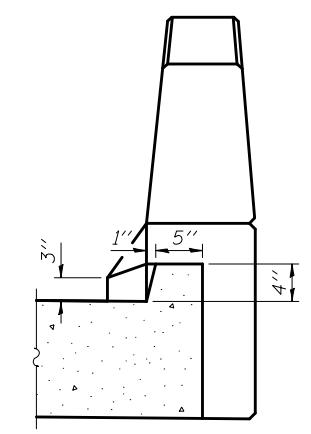
* Tilt #9 b_{11} (E) bars as required to maintain clearance.
** Alternate with a_{10} (E) bars, typ. ea. parapet.



VIEW D-D



PARAPET JOINT DETAILS



VIEW A-A

DESIGNED	CJC
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB

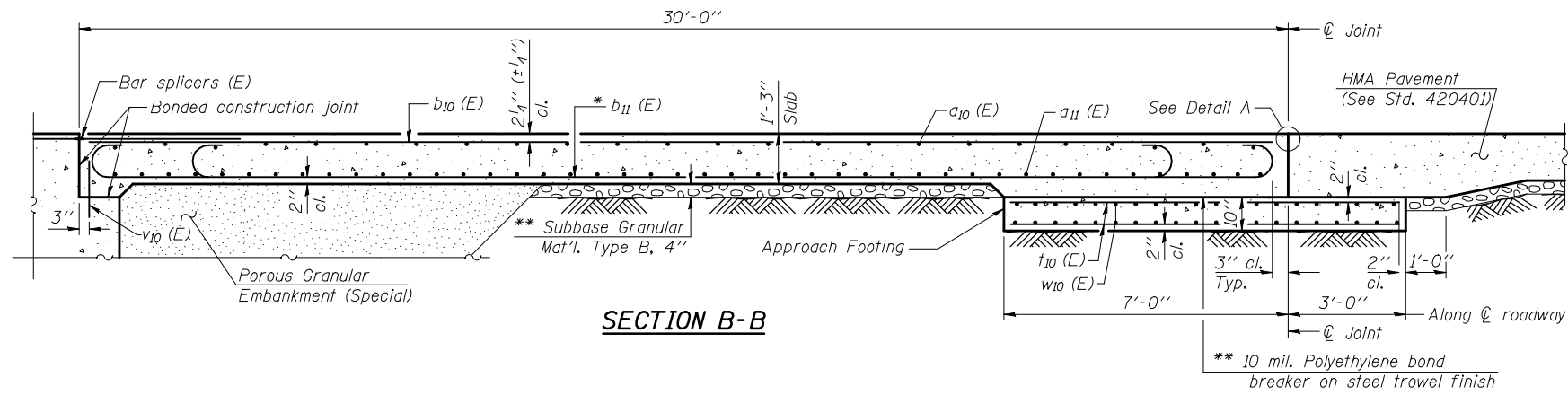
HR
HURST-ROSCHÉ
ENGINEERS, INC.
PROFESSIONAL DESIGN NUMBER: 184-00298

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 010-0285

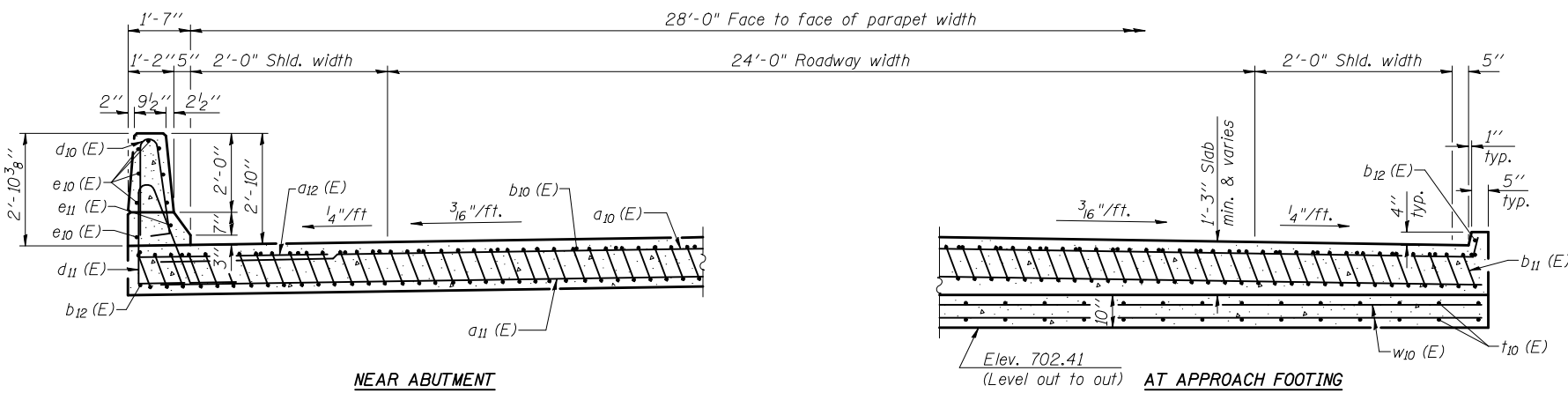
SHEET NO. 10 20 SHEETS	F.A.I. RTE. 74	SECTION (10-6HB-5)BR	COUNTY CHAMPAIGN	TOTAL SHEETS 63	SHEET NO. 22
	SN 010-0285		CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

Notes:

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_{10} (E) bar details, see sheet 8 of 20.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 For bar splicer details, see sheet 18 of 20.
 Cost of excavation for approach footing included with Concrete Structures.
 For Porous Granular Embankment, Special and drainage treatment details, see sheet 2 of 20.



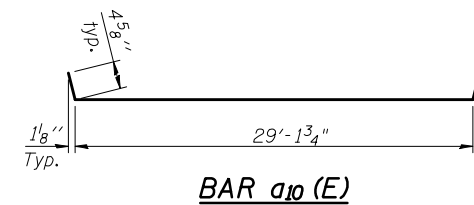
SECTION B-B



NEAR ABUTMENT

SECTION C-C

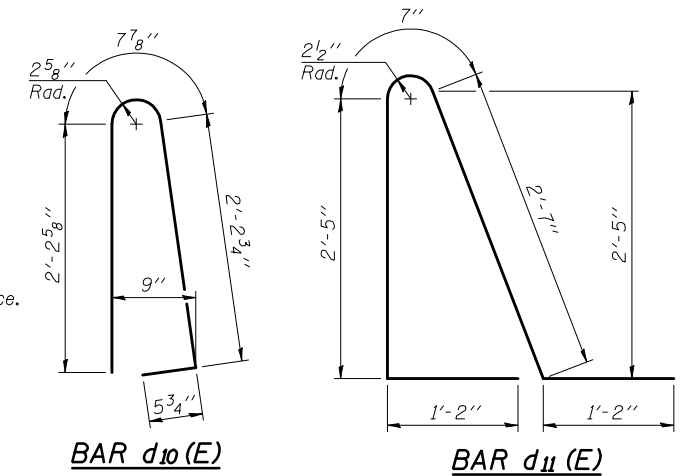
(See Plan for dimensions not shown)



BAR a10 (E)



BAR b10 (E)



BAR d10 (E)

BAR d11 (E)

**APPROACH SLABS
BILL OF MATERIAL**

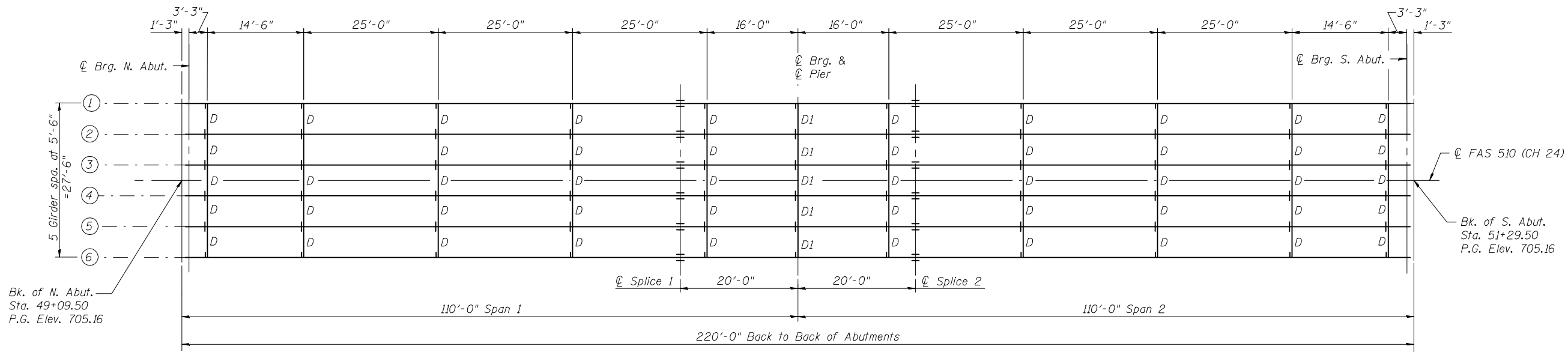
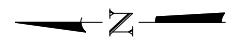
Bar	No.	Size	Length	Shape
a10 (E)	50	#4	29'-11"	—
a11 (E)	92	#5	29'-6"	—
a12 (E)	48	#6	6'-0"	—
b10 (E)	48	#4	29'-8"	—
b11 (E)	144	#9	29'-9"	—
b12 (E)	8	#4	14'-8"	—
d10 (E)	68	#5	5'-7"	U
d11 (E)	68	#5	7'-11"	U
e10 (E)	32	#4	14'-8"	—
e11 (E)	4	#8	14'-8"	—
t10 (E)	124	#4	9'-8"	—
w10 (E)	80	#5	29'-6"	—
Concrete Superstructure		Cu. Yd.	91.4	
Concrete Structures		Cu. Yd.	18.4	
Reinforcement Bars, Epoxy Coated		Pound	24,555	

**BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 010-0285**

DESIGNED	CJC
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB

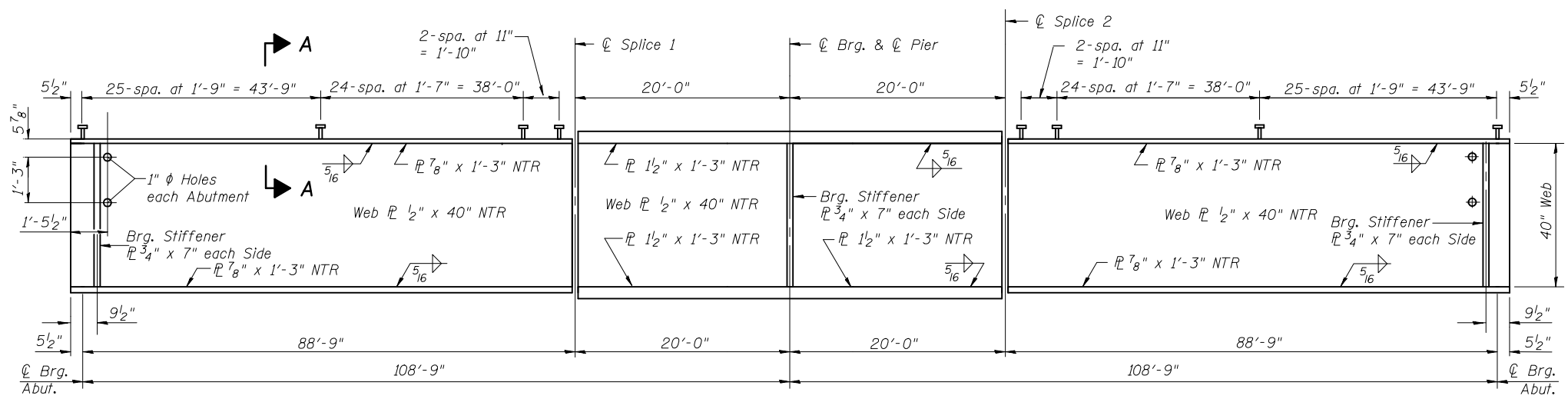
HR
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ENGINEERS, INC.
 PROFESSIONAL DESIGN NUMBER: 184-00296

SHEET NO. 11 20 SHEETS	F.A.I. RTE. 74	SECTION (10-6HB-5)BR	COUNTY CHAMPAIGN	TOTAL SHEETS 63	SHEET NO. 23
	SN 010-0285		CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					



FRAMING PLAN

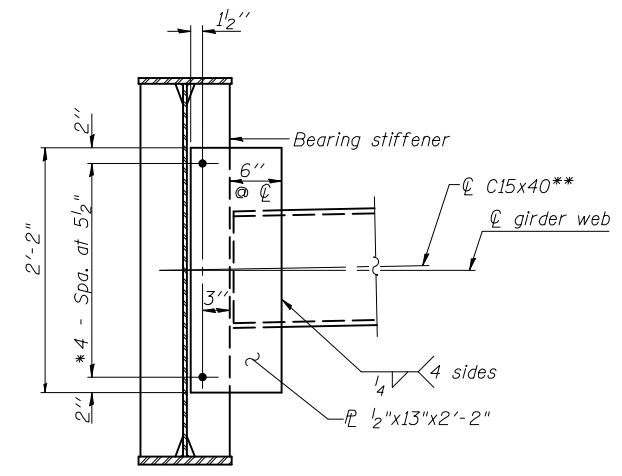
All girders and bearing stiffener plates shall be AASHTO M270 Grade 50.



GIRDER ELEVATION

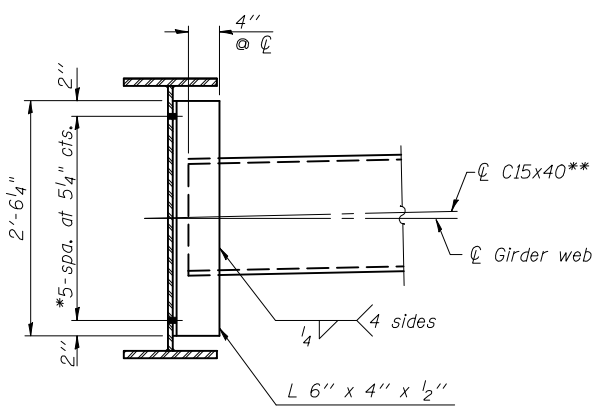
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

Notes:
All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.



INTERIOR DIAPHRAGM D1

Note:
Two hardened washers required for each set of oversized holes.
*3/4" φ HS bolts, 15/16" φ holes.
See sheet 13 of 20 for Section A-A, Section at Pier, and Section at Abutment.



INTERIOR DIAPHRAGM D

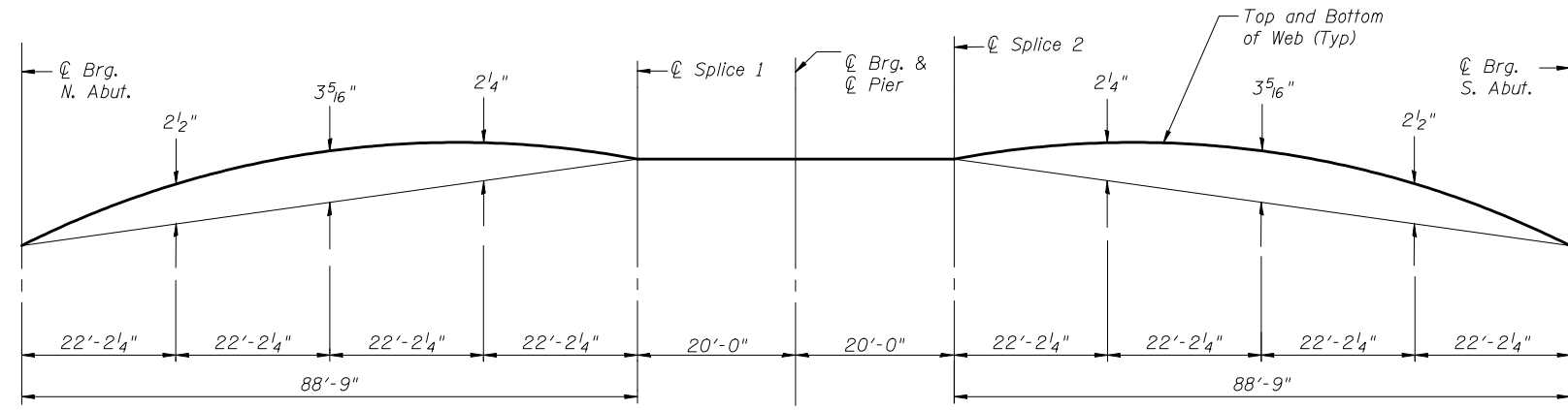
Note:
** C15x50 is permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Department.

DESIGNED	MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB

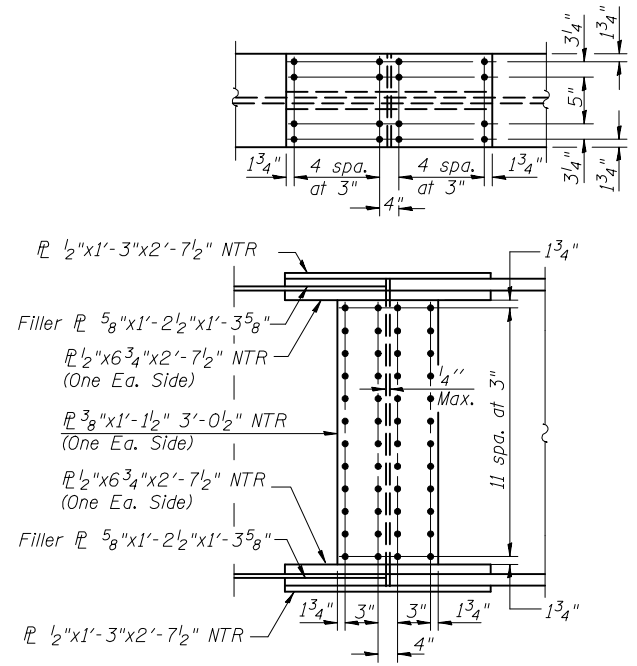


**FRAMING PLAN
STRUCTURE NO. 010-0285**

SHEET NO. 12 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6HB-5)BR	CHAMPAIGN	63	24
SN 010-0285			CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

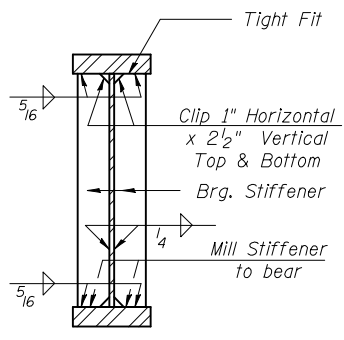


CAMBER DIAGRAM

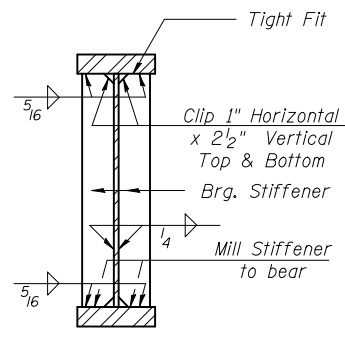


FIELD SPLICE DETAIL

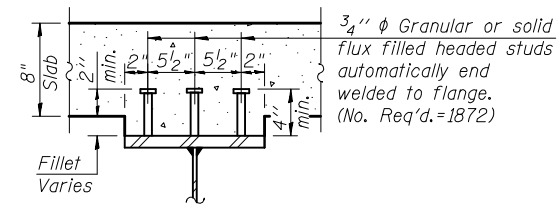
All Splice plates shall be AASHTO M270 Grade 50.



SECTION AT PIER
(Bearing Stiffener)



SECTION AT ABUT.
(Bearing Stiffener)



SECTION A-A

(See sheet 12 of 20 for location)

TOP OF WEB ELEVATIONS
(for Fabrication use only)

Girder Number	Location				
	℄ N. Abut.	℄ Splice 1	℄ Pier	℄ Splice 2	℄ S. Abut.
1	704.15	704.79	704.79	704.79	704.15
2	704.25	704.88	704.88	704.88	704.25
3	704.33	704.97	704.97	704.97	704.33
4	704.33	704.97	704.97	704.97	704.33
5	704.25	704.88	704.88	704.88	704.25
6	704.15	704.79	704.79	704.79	704.15

DESIGNED	MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB



Notes:
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

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).

Z: Plastic section modulus of the steel section in non-composite areas. Omit line in moment table if not used in design calculations (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_{℄ + IM}: Un-factored live load moment plus dynamic load allowance (Impact)(kip-ft.).

M_u (Strength I): Factored design moment 1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{℄ + IM} (kip-ft.).

φ_r M_n: Compact composite positive moment capacity computed according to article 6.10.7.1 (kip-ft.).

φ_r 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 M_{DC1} - M_{DC2} + M_{DW} + 1.3 M_{℄ + IM} (ksi).

V_r: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

INTERIOR GIRDER MOMENT TABLE		
	0.4 Sp. 1 0.6 Sp. 2	Pier
I_s	(in ⁴) 13633	22050
$I_c(n)$	(in ⁴) 30928	
$I_c(3n)$	(in ⁴) 22762	
S_s	(in ³) 653	1026
$S_c(n)$	(in ³) 879	
$S_c(3n)$	(in ³) 799	
Z	(in ³)	1134
DC1	(k/ft.) .74	.81
M _{DC1}	(k) 580	1248
DC2	(k/ft.) .15	.15
M _{DC2}	(k) 130	220
DW	(k/ft.) .275	.275
M _{DW}	(k/ft.) 238	403
M _{℄ + IM}	(k/ft.) 1193	1079
M _u (Strength I)	(k/ft.) 3166	4111
* φ _r M _n	(k/ft.) 4298	
f_s DC1	(ksi) 10.7	14.6
f_s DC2	(ksi) 2.0	2.6
f_s DW	(ksi) 3.6	4.7
f_s 1.3(℄+IM)	(ksi) 21.2	16.4
f_s (Service II)	(ksi) 37.3	38.3
** f_s (Total)(Strength I)	(ksi) 48.1	
V _r	(k) 26.3	

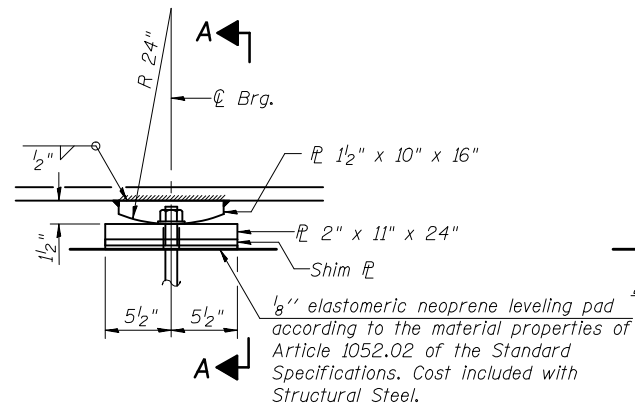
*Compact Sections

**Non-compact and slender sections

INTERIOR GIRDER REACTION TABLE		
	Abut.	Pier
R _{DC1}	(k) 30.2	106.2
R _{DC2}	(k) 6.3	20.5
R _{DW}	(k) 11.5	37.6
R _{℄ + IM}	(k) 74.4	135.1
R _{Total}	(k) 122.3	299.3

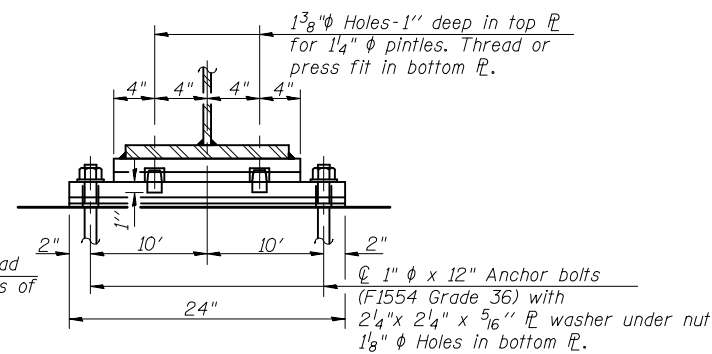
STRUCTURAL STEEL DETAILS
STRUCTURE NO. 010-0285

SHEET NO. 13 20 SHEETS	F.A.I. RTE. 74	SECTION (10-6HB-5)BR	COUNTY CHAMPAIGN	TOTAL SHEETS 63	SHEET NO. 25
	SN 010-0285		CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

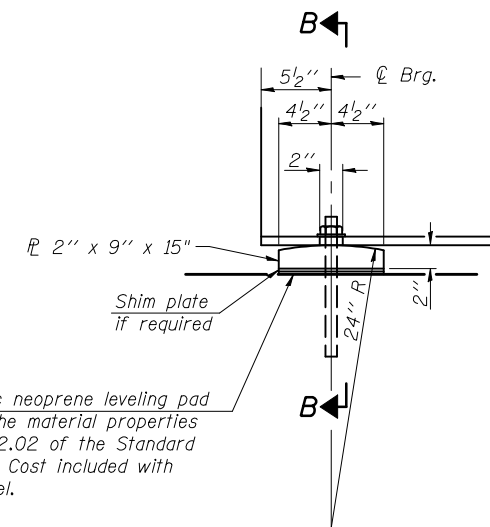


ELEVATION AT PIER

FIXED BEARING AT PIER



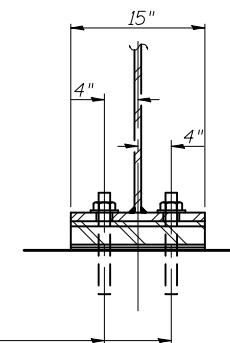
SECTION A-A



ELEVATION AT ABUTMENT

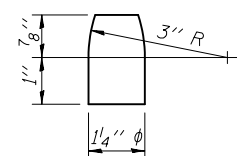
1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02 of the Standard Specifications. Cost included with Structural Steel.

CL 1" phi x 12" anchor bolts (F1554 Grade 36) with 2 1/4" x 2 1/4" x 5/16" PL washer under nut. 1 3/8" x 2" slotted hole in flange. 1/2" phi holes in bearing plate.



SECTION B-B

FIXED BEARING AT ABUTMENT



PINTLE

Notes:

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.

All bearing plates shall be AASHTO M270, Grade 50.

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

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Anchor Bolts, 1"	Each	--	36	36

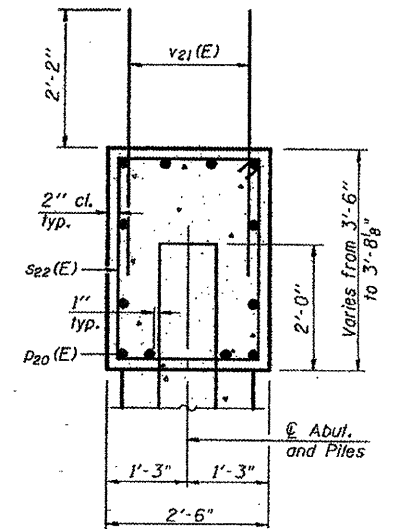
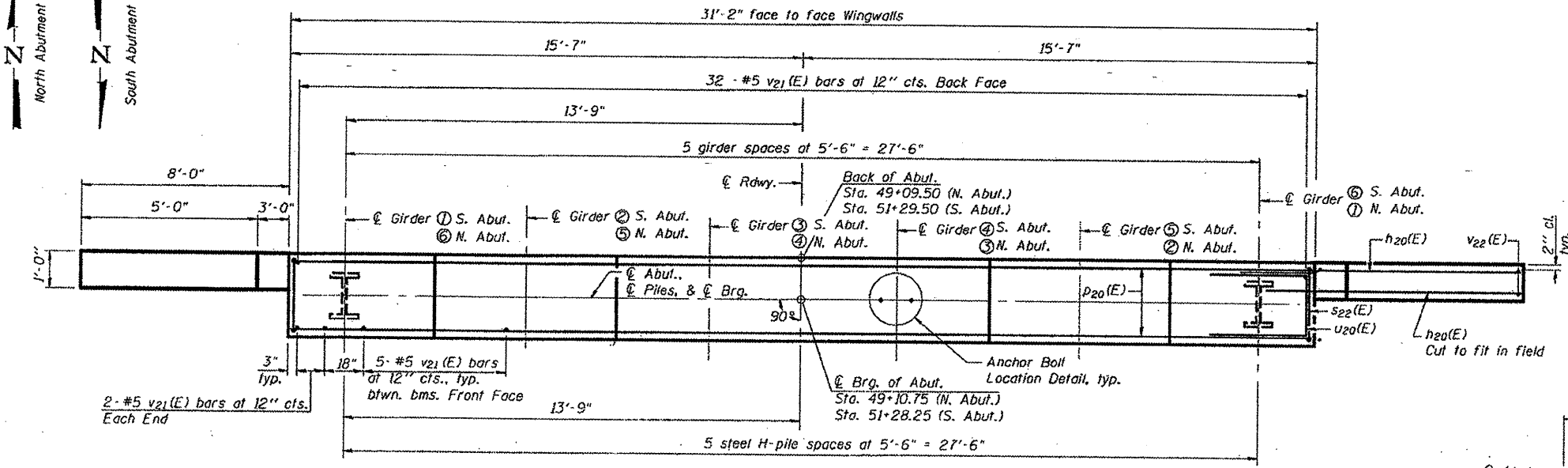
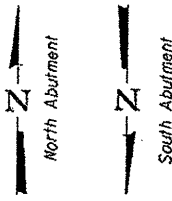
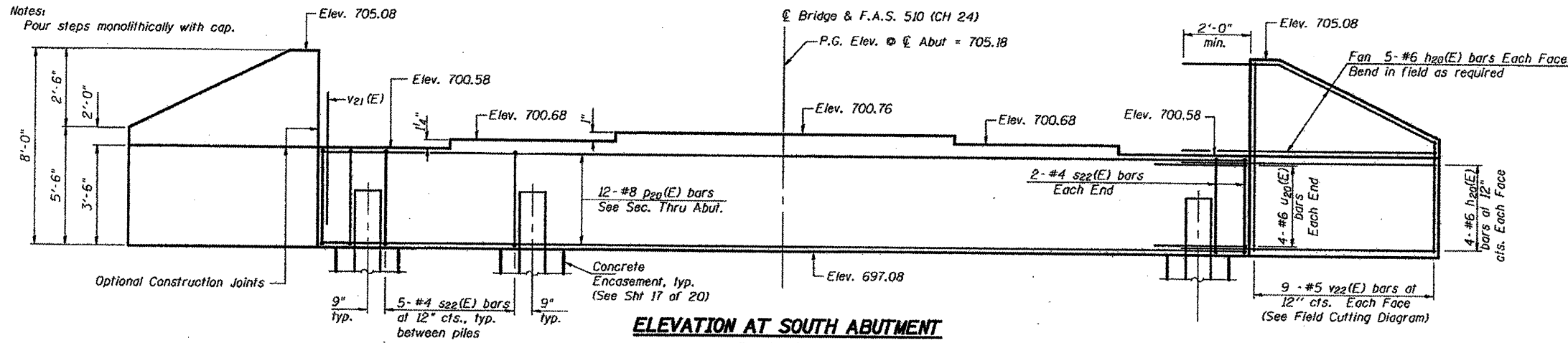
DESIGNED	JSP
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB



**BEARING DETAILS
STRUCTURE NO. 010-0285**

SHEET NO. 14 20 SHEETS	F.A.I. RTE. 74	SECTION (10-6HB-5)BR	COUNTY CHAMPAIGN	TOTAL SHEETS 63	SHEET NO. 26
	SN 010-0285		CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

Notes:
Pour steps monolithically with cap.



SEC. THRU ABUT.

BILL OF MATERIAL (TWO ABUTMENTS)

Bar	No.	Size	Length	Shape
h20(E)	72	#6	10'-7"	—
P20(E)	24	#8	30'-10"	—
S22(E)	58	#4	11'-5"	□
U20(E)	16	#6	8'-1"	—
V21(E)	122	#5	4'-4"	—
V22(E)	36	#5	12'-10"	—
Structure Excavation		Cu. Yd.	208.0	
Concrete Structures		Cu. Yd.	29.1	
Reinforcement Bars, Epoxy Coated		Pound	4,795	
Furnishing Steel Piles HP12x53		Foot	780	
Driving Piles		Foot	780	
Test Pile Steel HP12x53		Each	2	
Concrete Encasement		Cu. Yd.	4.2	

For details of Bar Splicers, see sheet 18 of 20.
For details of piles and Concrete Encasement, see sheet 17 of 20.
*Includes 122.0 Cu. Yd. Structure Excavation for Porous Granular Embankment, Special.

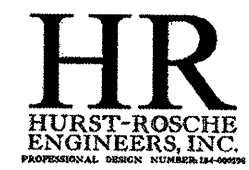
N. ABUT. PILE DATA

Type: HP 12x53
Nominal Required Bearing: 419 kips
Factored Resistance Available: 209 kips
Est. Length: 77'
No. Production Piles: 5
No. Test Piles: 1

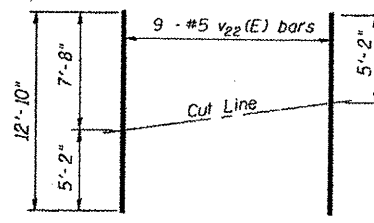
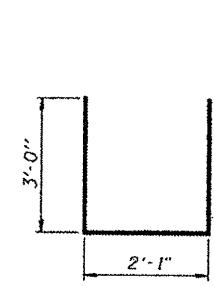
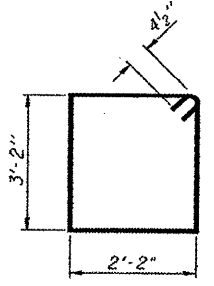
S. ABUT. PILE DATA

Type: HP 12x53
Nominal Required Bearing: 419 kips
Factored Resistance Available: 209 kips
Est. Length: 79'
No. Production Piles: 5
No. Test Piles: 1

DESIGNED	CJC
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB

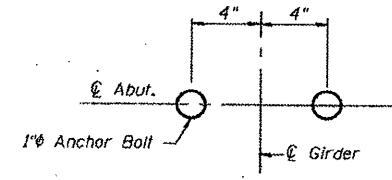


Notes:
Piles shall be driven through 2'-0" diameter precored holes extending to elevation 679.00 according to Article 512.09(c) of the Standard Specifications. Cost included in driving piles.



FIELD CUTTING DIAGRAM

Order V22(E) full length, Cut as shown and use remainder of bars in opposite face.



ANCHOR BOLT LOCATION DETAIL

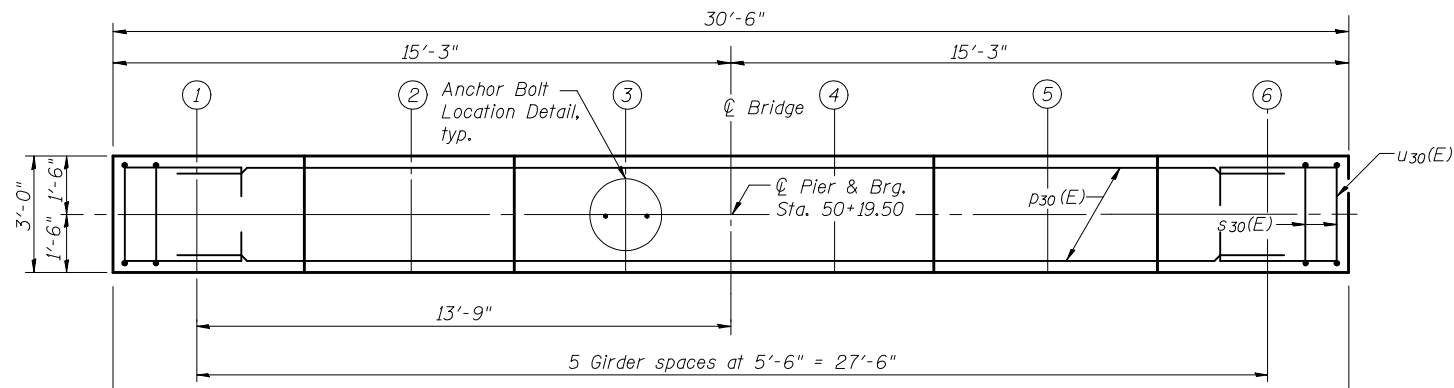
ABUTMENTS STRUCTURE NO. 010-0285

SHEET NO. 15 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6HB-5)BR	CHAMPAIGN	63	27
	SN 010-0285			CONTRACT NO. 90875	
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

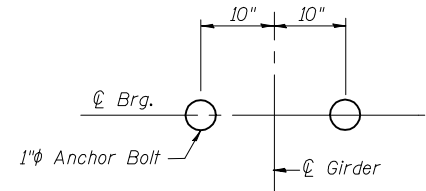
Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 For details of piles, see sheet 17 of 20.

PILE DATA

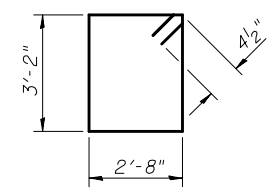
Type: HP 14x102
 Nominal Required Bearing: 810 kips
 Factored Resistance Available: 405 kips
 Est. Length: 82'
 No. Production Piles: 7
 No. Test Piles: 1



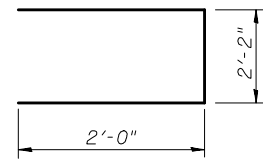
TOP PLAN



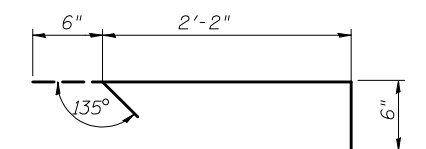
ANCHOR BOLT LOCATION DETAIL



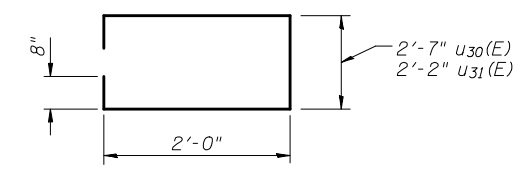
BAR s30(E)



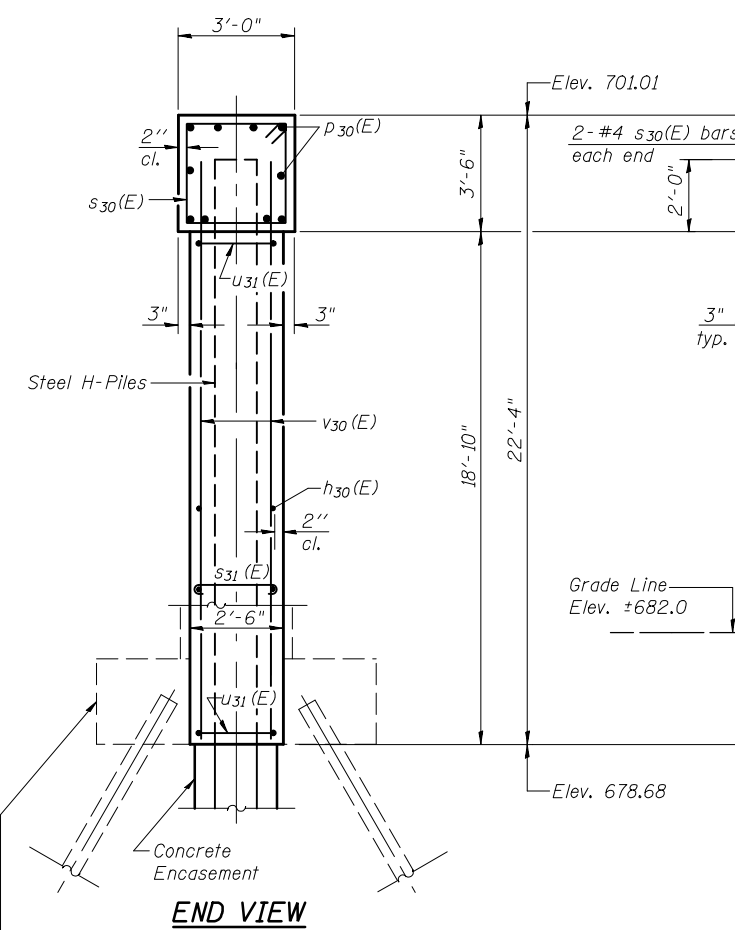
BARS u32(E)



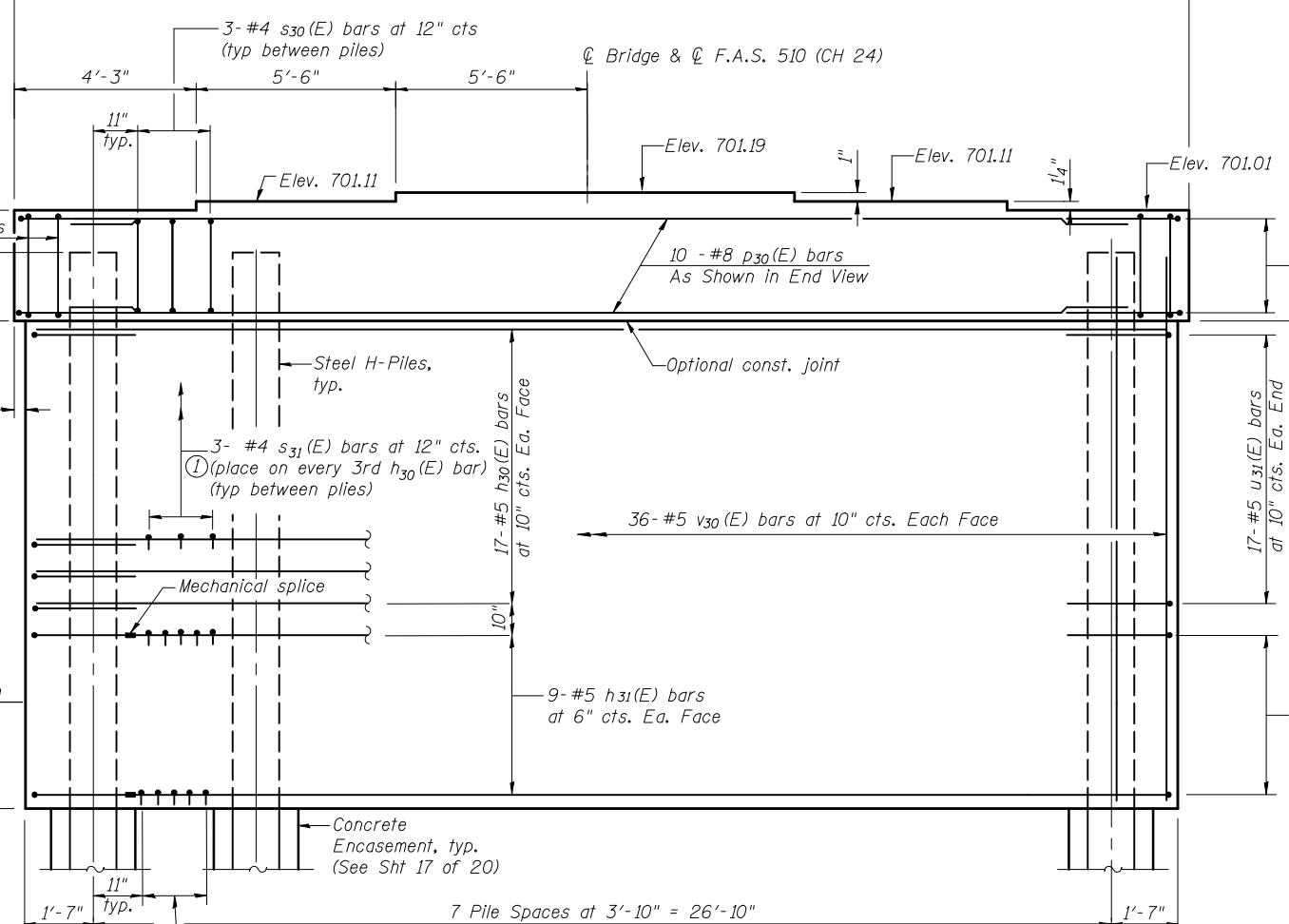
BARS s31(E)



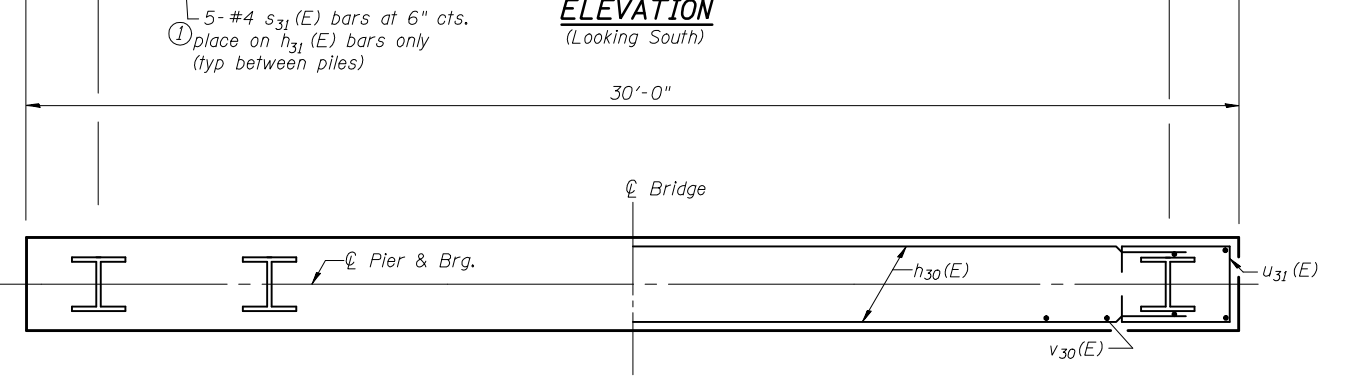
BARS u30(E) & u31(E)



END VIEW



ELEVATION
(Looking South)



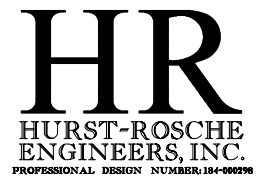
FOOTING PLAN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h30(E)	34	#5	29'-6"	—
h31(E)	18	#5	25'-8"	—
p30(E)	10	#8	30'-2"	—
s30(E)	25	#4	12'-5"	□
s31(E)	420	#4	3'-2"	┌
u30(E)	8	#6	7'-11"	□
u31(E)	34	#5	7'-6"	□
u32(E)	18	#5	6'-2"	┌
v30(E)	72	#5	24'-2"	—
Concrete Structures		Cu. Yd.	64.4	
Reinforcement Bars, Epoxy Coated		Pound	5,725	
Furnishing Steel Piles HP14x102		Foot	574	
Driving Piles		Foot	574	
Test Pile Steel HP14x102		Each	1	
Mechanical Splice		Each	36	
Concrete Encasement		Cu. Yd.	4.4	

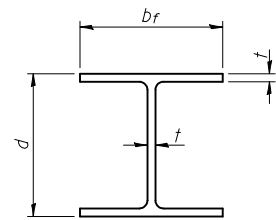
PIER STRUCTURE NO. 010-0285

DESIGNED	JSP
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB



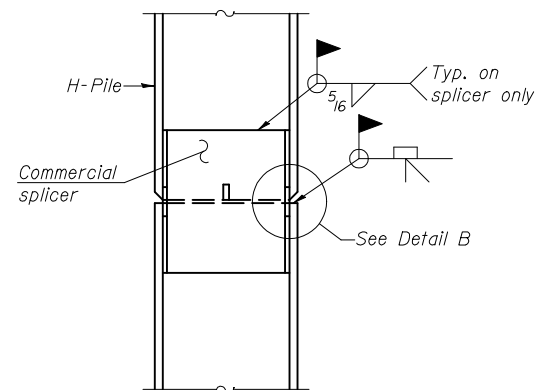
SHEET NO. 16 20 SHEETS	F.A.I. RTE. 74	SECTION (10-6HB-5)BR	COUNTY CHAMPAIGN	TOTAL SHEETS 63	SHEET NO. 28
	SN 010-0285		CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

① Alternate Direction of 90° Bend

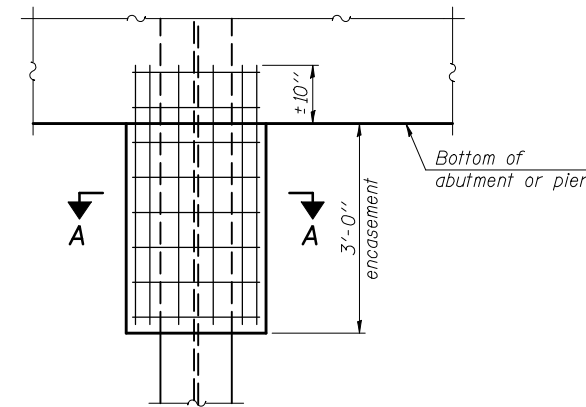


STEEL PILE TABLE

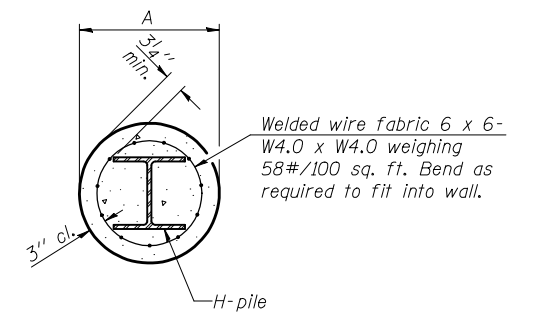
Designation	Depth d	Flange width b _f	Web and Flange thickness t	Encasement diameter A
HP 12x53	11 ³ / ₄ "	12"	7 ¹ / ₆ "	24"
HP 14x102	14"	14 ³ / ₄ "	1 ¹ / ₆ "	30"



ELEVATION

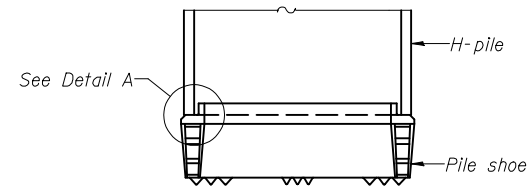


ELEVATION

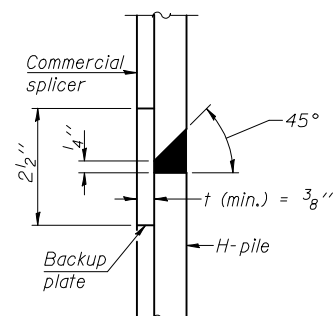


SECTION A-A

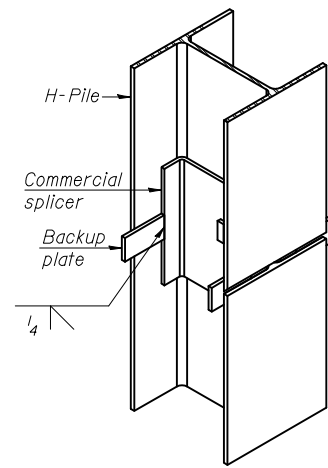
PILE ENCASEMENT



ELEVATION

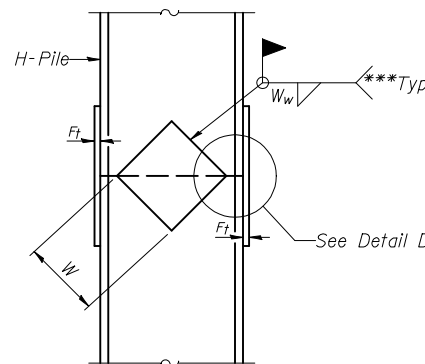


DETAIL B

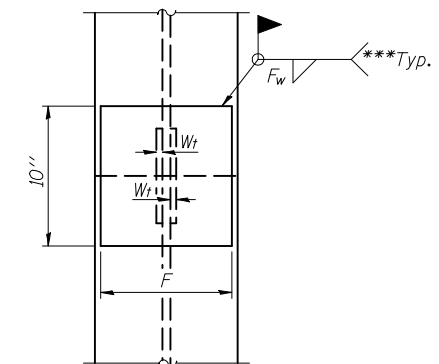


ISOMETRIC VIEW

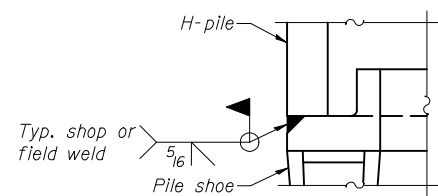
WELDED COMMERCIAL SPLICE



ELEVATION

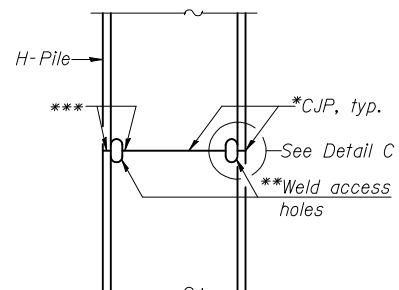


END VIEW

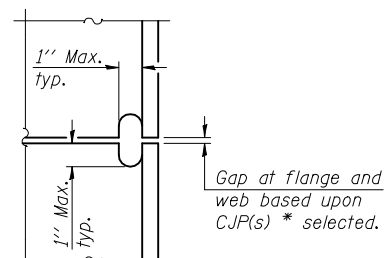


DETAIL A

H-PILE SHOE ATTACHMENT

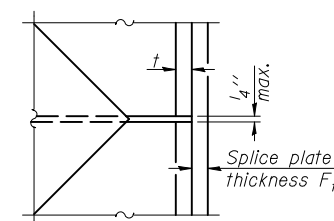


ELEVATION



DETAIL C

COMPLETE PENETRATION WELD SPLICE



DETAIL D

WELDED PLATE FIELD SPLICE

Designation	F	F _t	F _w	W	W _t	W _w
HP 12x53	10"	5 ⁵ / ₈ "	1/2"	6 ¹ / ₂ "	1/2"	3/8"
HP 14x102	12 ¹ / ₂ "	7 ⁷ / ₈ "	3/4"	7 ³ / ₄ "	5/8"	1/2"

DESIGNED	CJC
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB

HR
HURST-ROSCHÉ
ENGINEERS, INC.
PROFESSIONAL DESIGN NUMBER: 184-000298

- * Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.
- ** Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.
- *** Interrupt welds 1/4" from end of each pile.

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

HP PILE DETAILS
STRUCTURE NO. 010-0285

SHEET NO. 17	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6HB-5)BR	CHAMPAIGN	63	29
20 SHEETS	SN 010-0285		CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

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

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

ROLLED THREAD DOWEL BAR



**** ONE PIECE**

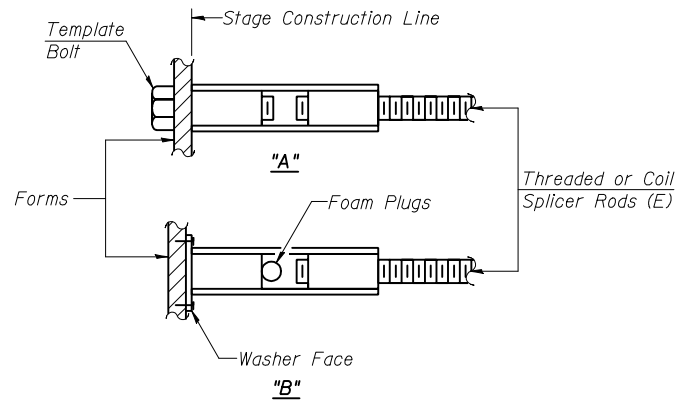
Wire Connector



WELDED SECTIONS

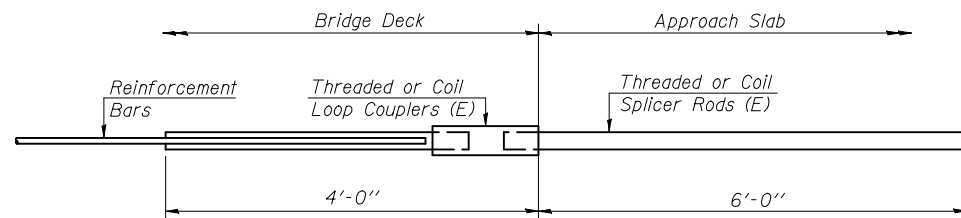
BAR SPLICER ASSEMBLY ALTERNATIVES

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



INSTALLATION AND SETTING METHODS

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



FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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

DESIGNED	CJC
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB

HR
HURST-ROSCH
ENGINEERS, INC.
 PROFESSIONAL DESIGN NUMBER: 184-000298

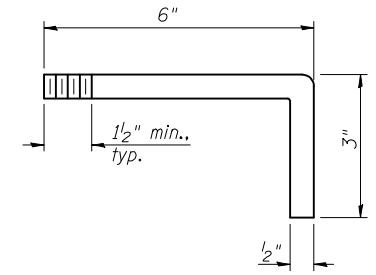
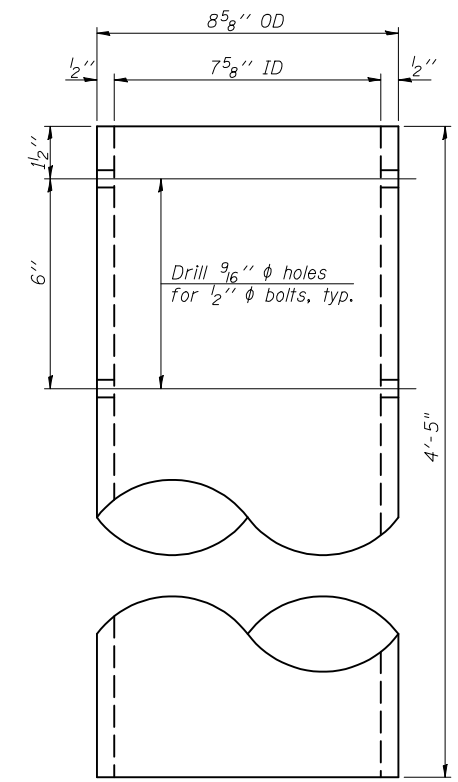
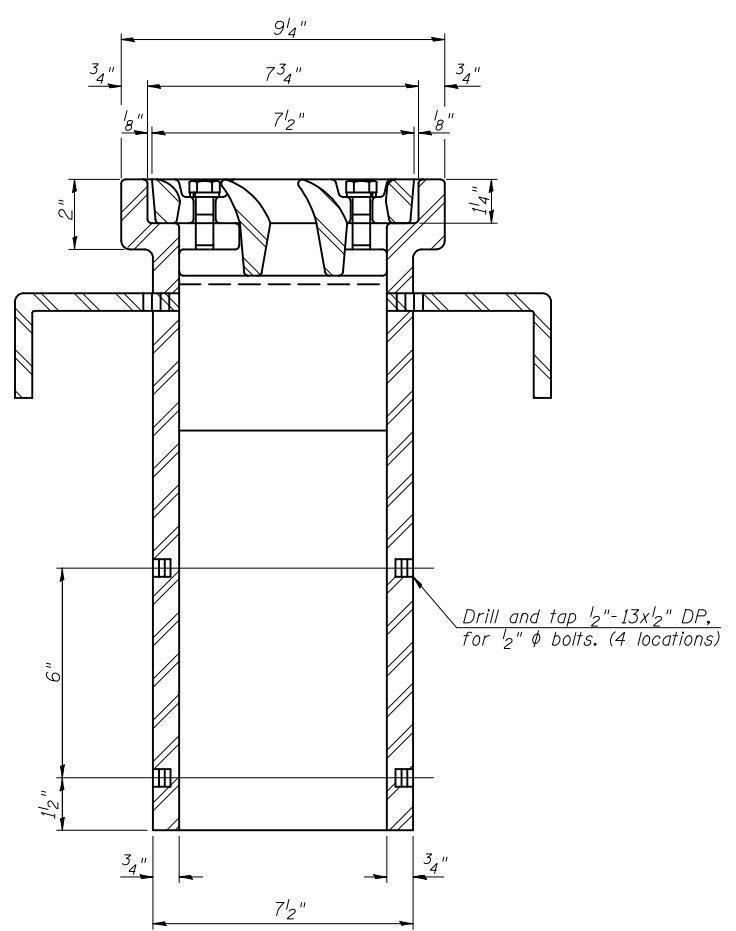
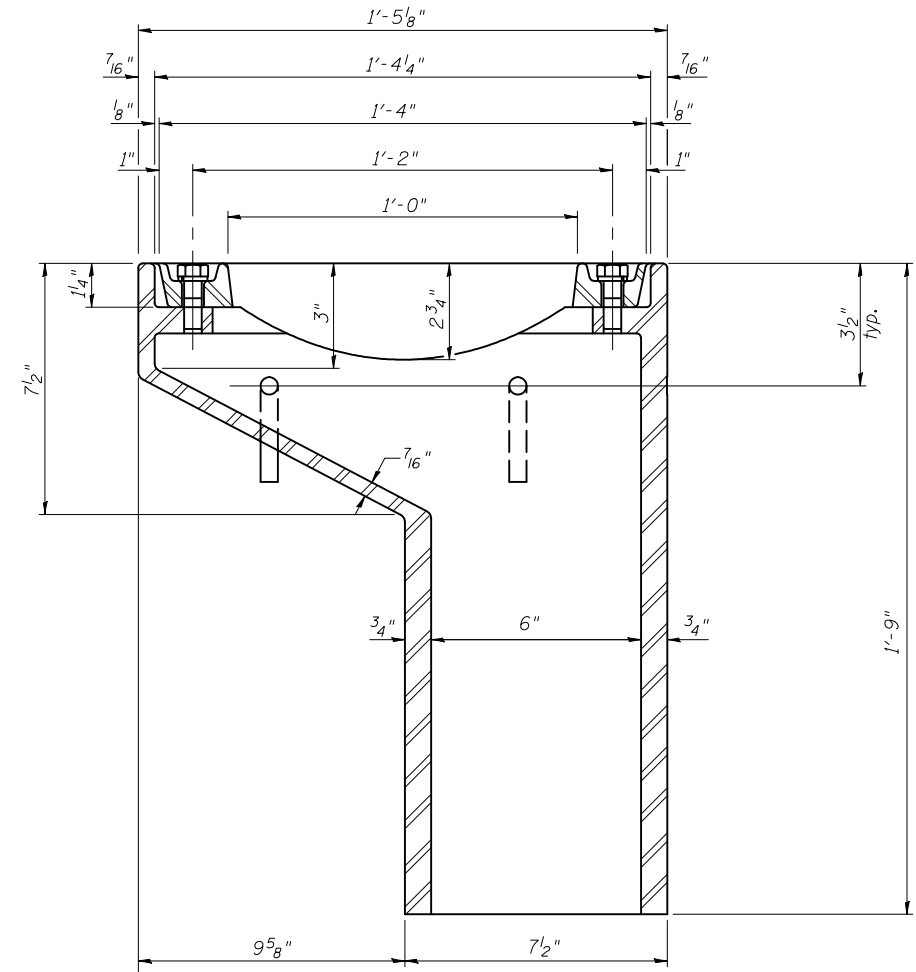
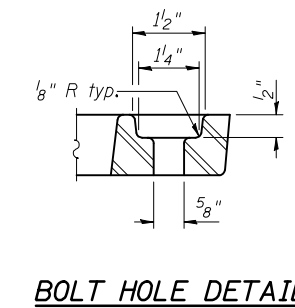
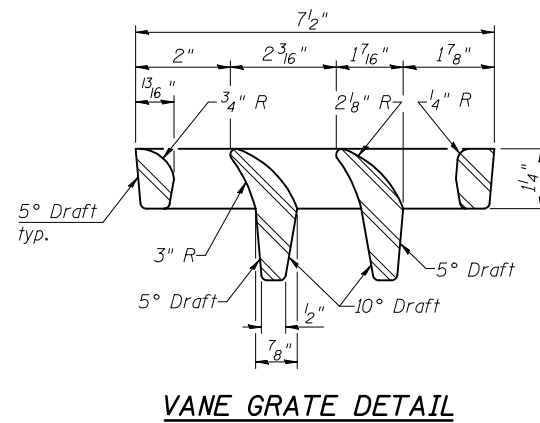
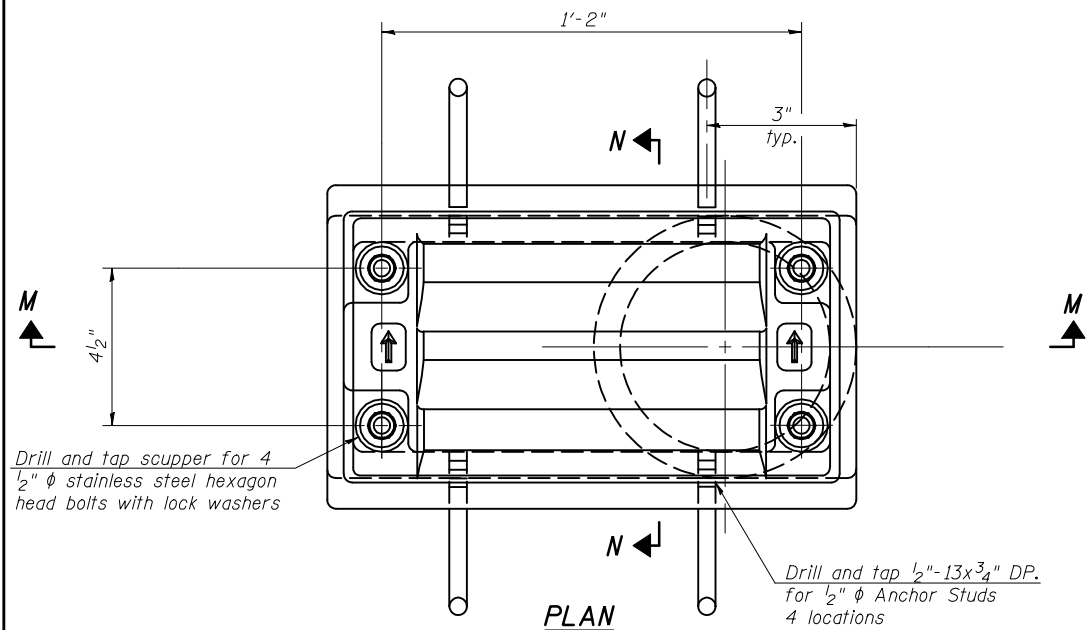
NOTES
 Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied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

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
 - ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

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

BAR SPLICER ASSEMBLY DETAILS
STRUCTURE NO. 010-0285

SHEET NO. 18	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6HB-5)BR	CHAMPAIGN	63	30
20 SHEETS	SN 010-0285		CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					



SECTION M-M
See sheet 9 of 20 for scupper location relative to parapet.

SECTION N-N

DOWNSPOUT

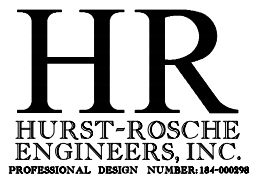
ANCHOR STUD DETAIL

BILL OF MATERIAL

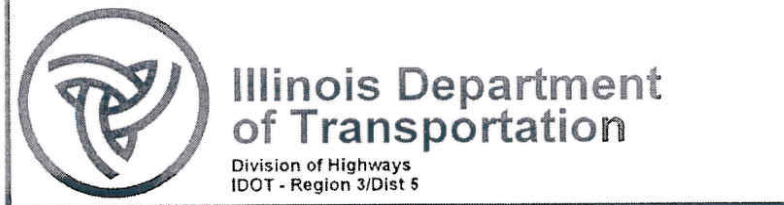
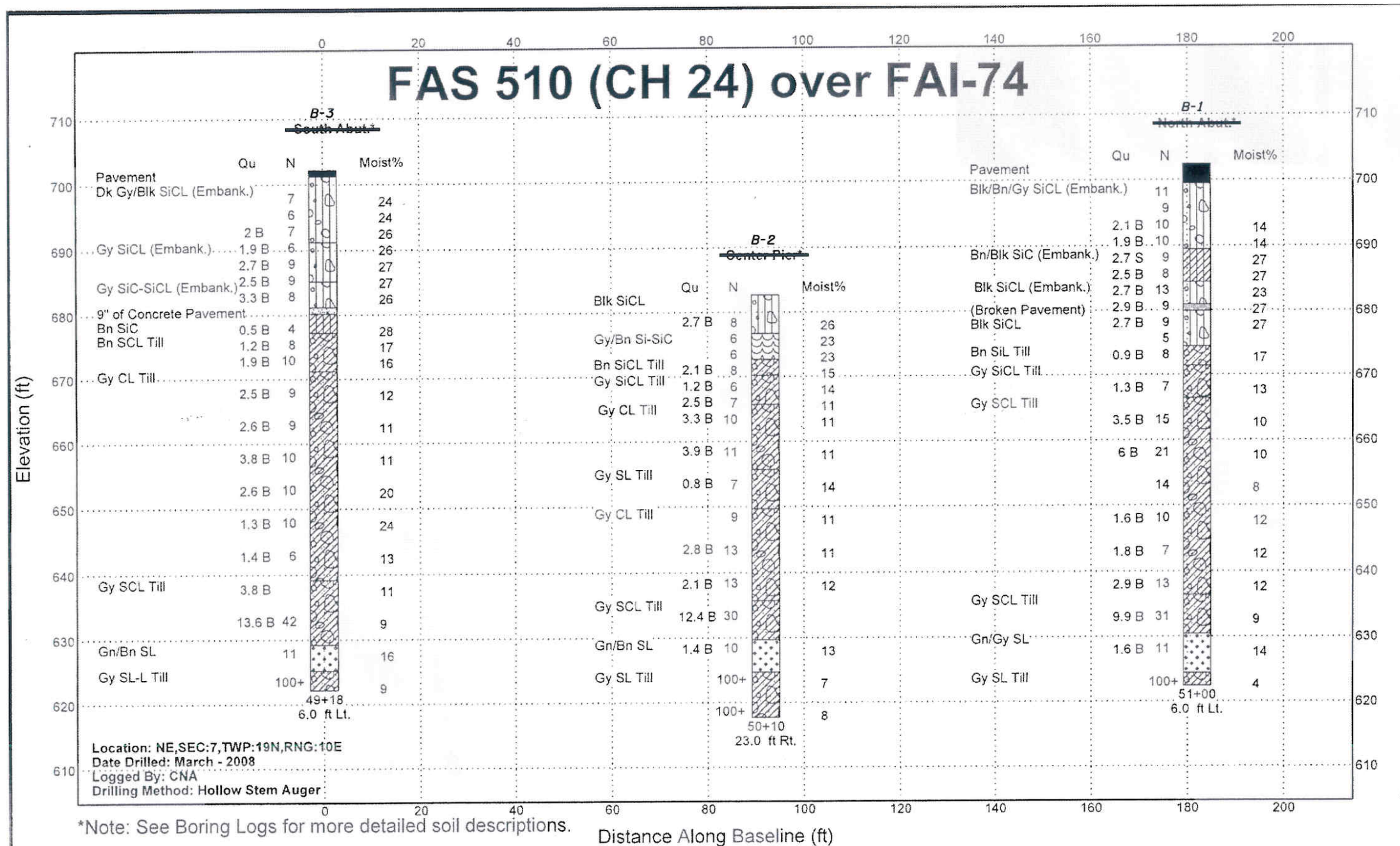
ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	4

**DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 010-0285**

DESIGNED	CJC
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB



SHEET NO. 19 20 SHEETS	F.A.I. RTE. 74	SECTION (10-6HB-5)BR	COUNTY CHAMPAIGN	TOTAL SHEETS 63	SHEET NO. 31
	SN 010-0285		CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					



SUBSURFACE FENCE DIAGRAM

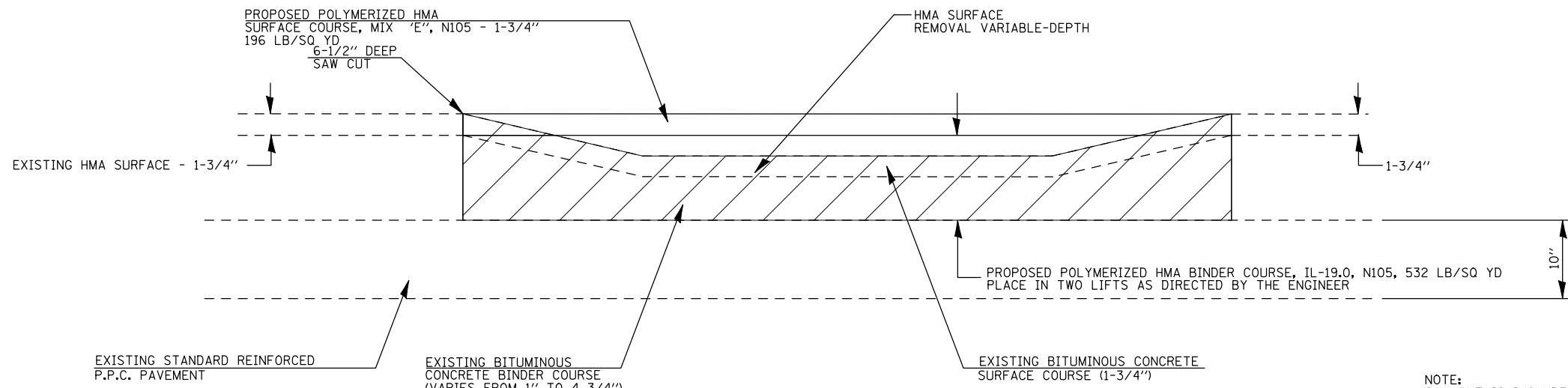
Route: FAI 74 Structure No: 010-0285 (Prop)
Section: 10(6HB(3,4,5)BR&7HB-BR)
County: Champaign

**SUBSURFACE DIAGRAM
STRUCTURE NO. 010-0285**

DESIGNED	CJC / MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB

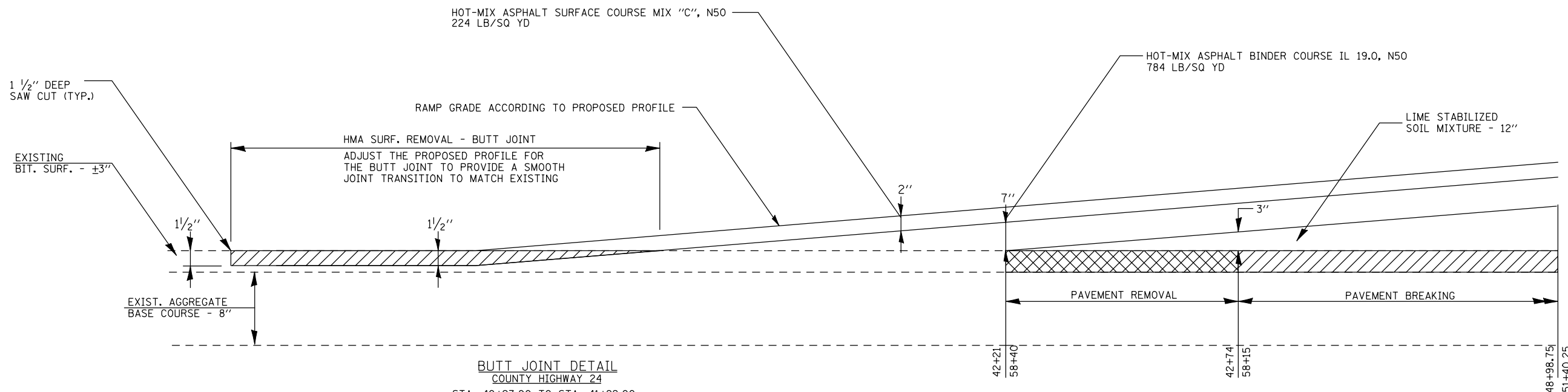


SHEET NO. 20	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6HB-5)BR	CHAMPAIGN	63	32
20 SHEETS	SN 010-0285		CONTRACT NO. 90875		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					



DETAIL OF RESURFACING BENEATH OVERHEAD STRUCTURE - I-74
STATION 590+47.0 TO STATION 594+67.0 (EB & WB)

NOTE:
SAW CUT IS INCLUDED IN THE COST OF
HMA SURFACE REMOVAL, VARIABLE-DEPTH.



BUTT JOINT DETAIL
COUNTY HIGHWAY 24
STA. 40+97.00 TO STA. 41+22.00
STA. 59+66.00 TO STA. 59+91.00

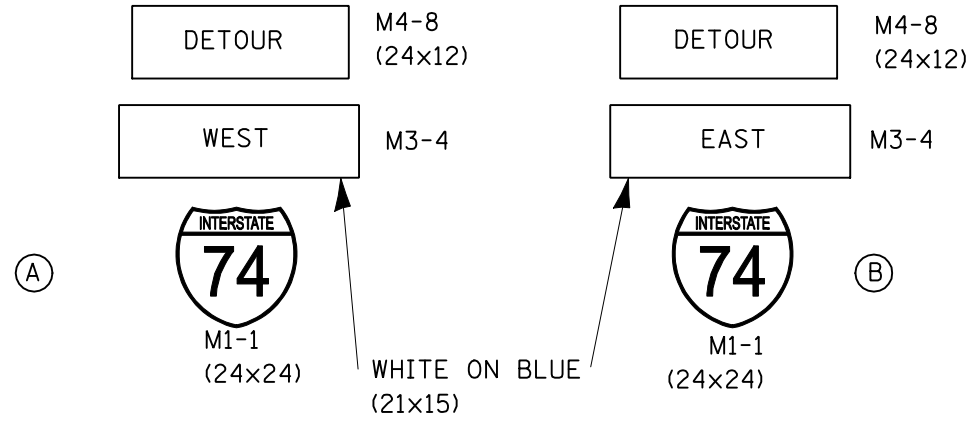
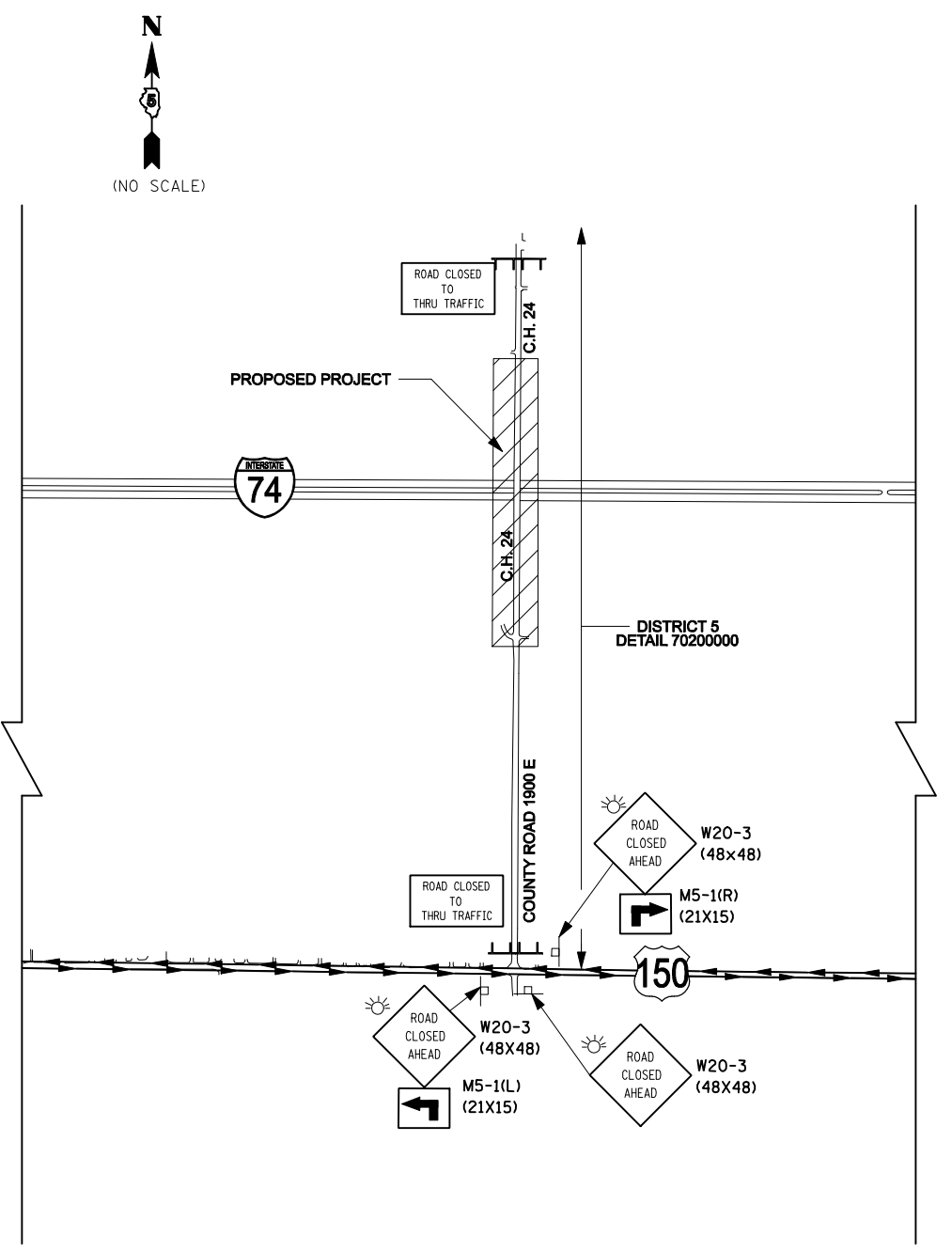
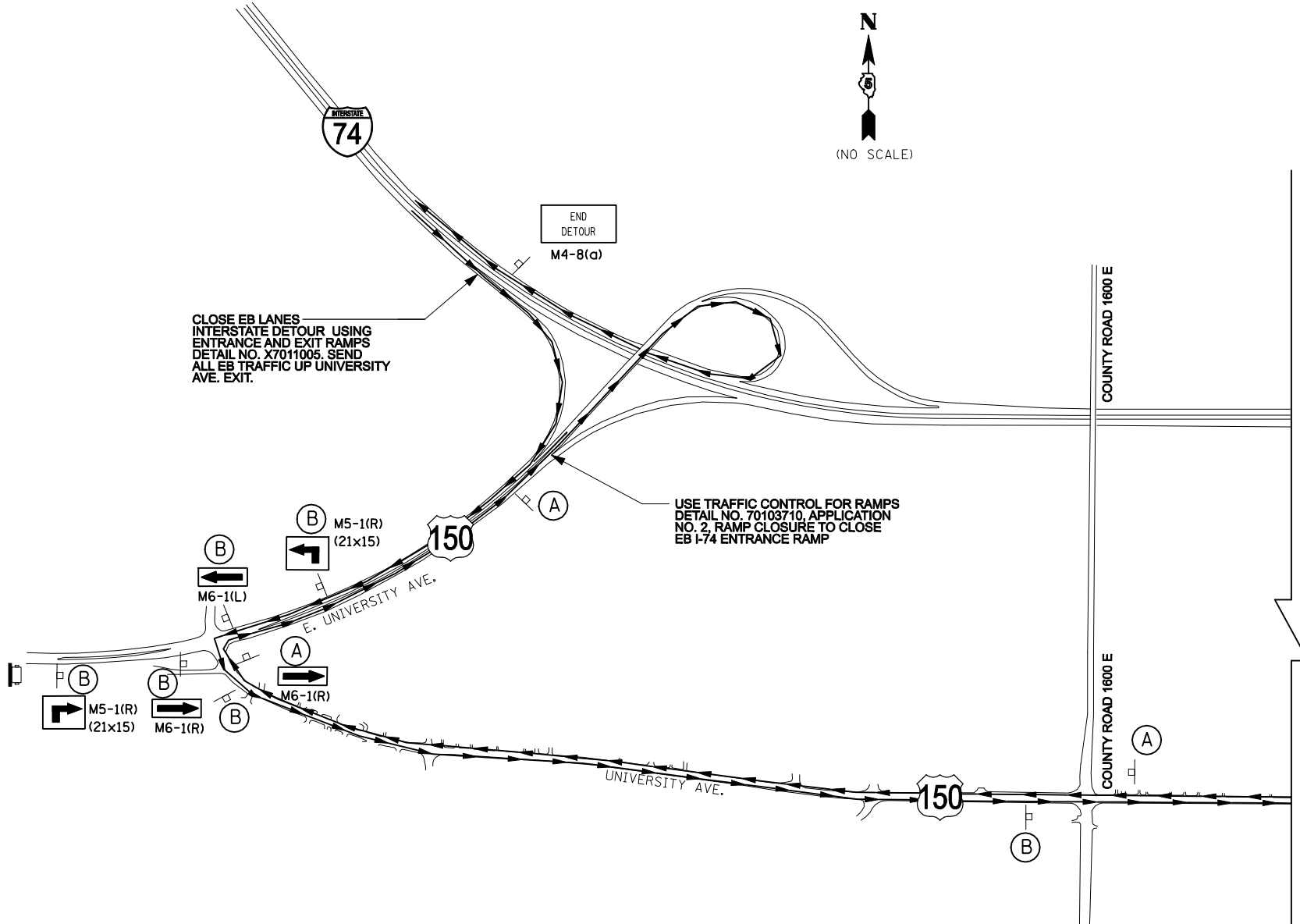
NOTE:
SAW CUT IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT.

FILE NAME =	USER NAME = dawsonkb	DESIGNED - MTM	REVISED -
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	PLOT DATE = 12/17/2009	DATE - JULY 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:		SHEET NO. 1 OF 1 SHEETS		STA. TO STA.	
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	33
FED. ROAD DIST. NO. 6 ILLINOIS FED. AID PROJECT			CONTRACT NO. 90875	



ALL ARROW SIGNS SHALL BE BLACK ON ORANGE (21x15)

GENERAL NOTES:

1. CH 24 WILL BE CLOSED DURING REMOVAL AND CONSTRUCTION OF THE NEW BRIDGE OVER I-74.
2. I-74 WILL REMAIN OPEN WITH AT LEAST ONE LANE EACH WAY DURING CONSTRUCTION, EXCEPT FOR THE REMOVAL AND SETTING OF BRIDGE BEAMS.
3. I-74 TRAFFIC WILL BE DETOURED TO US 150 DURING BEAM REMOVAL AND THE SETTING OF BRIDGE BEAMS. THE REMOVAL & SETTING OF BRIDGE BEAMS WILL BE DONE AT NIGHT AS DISCUSSED IN THE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR.
4. CHANGEABLE MESSAGE SIGNS SHALL BE PLACED AT POINTS LOCATED FIVE MILES OR AS APPROVED BY THE ENGINEER AHEAD OF PROPOSED ROAD CLOSURE AREA ALONG I-74, AND UNIVERSITY AVE.
5. ADJUSTMENTS TO THE SIGNAL TIMING MAY BE NECESSARY AT THE INTERSECTION OF UNIVERSITY AVE. AND US 150 FOR THE TEMPORARY DETOUR TRAFFIC FLOW. THE CONTRACTOR SHALL CONTACT DAVE BURKEYBILE AT THE DISTRICT 5 OFFICE FOR ASSISTANCE.

- ▬ TYPE III BARRICADE
- ⚡ FLASHING AMBER LIGHT (TYPE A)
- ◻ CHANGEABLE MESSAGE SIGN

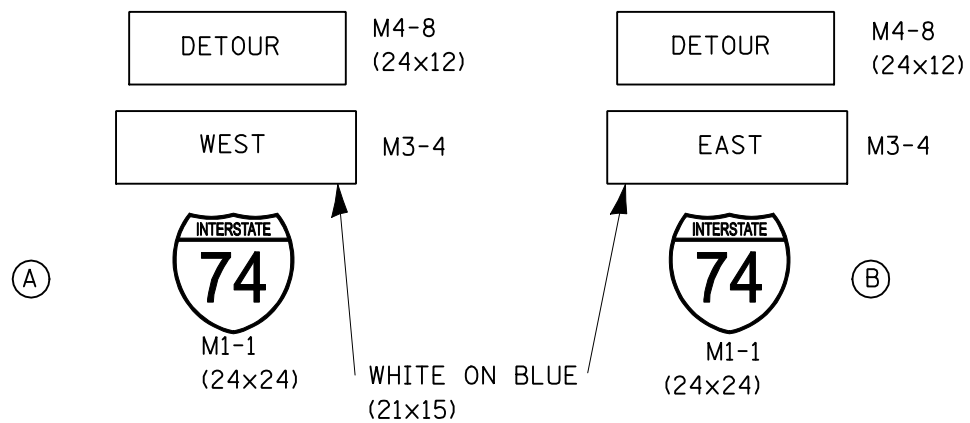
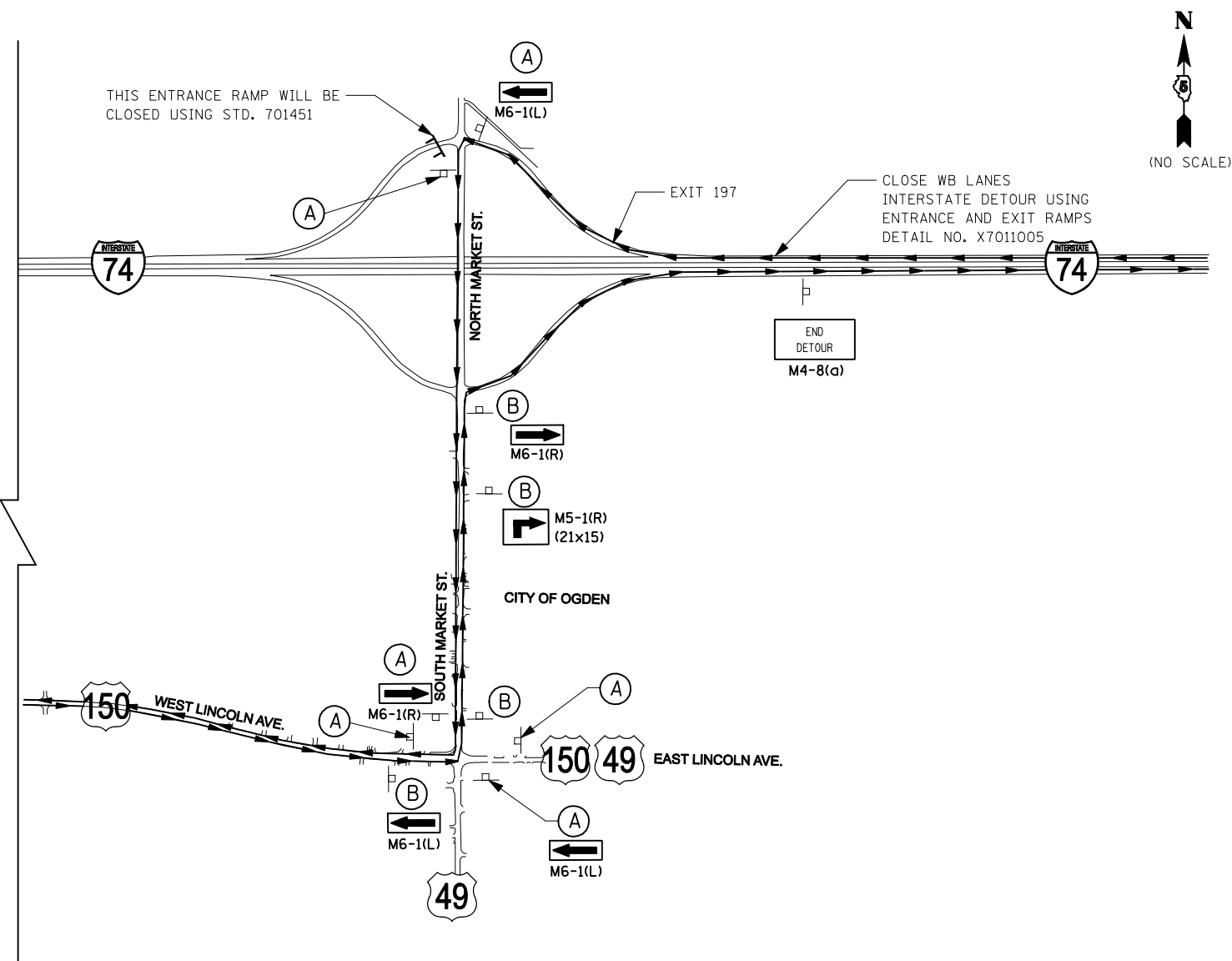
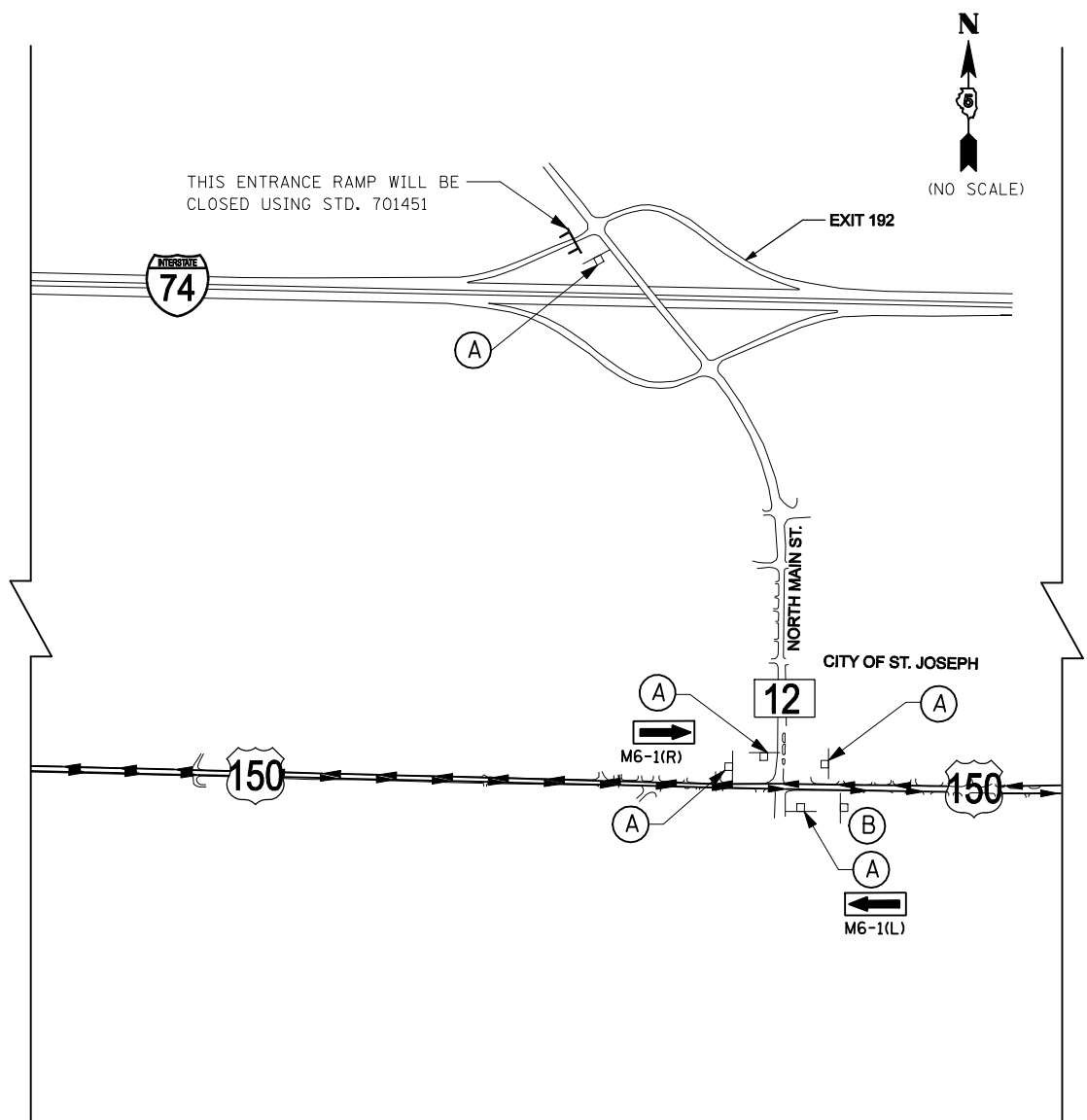
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PLOT DATE = 12/17/2009		DATE - JULY 2009	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC
TRAFFIC CONTROL & PROTECTION FOR TEMPORARY DETOUR**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	34
			CONTRACT NO. 90875	
ILLINOIS FED. AID PROJECT				

SCALE: N.T.S. SHEET NO. 1 OF 2 SHEETS STA. TO STA.



ALL ARROW SIGNS SHALL BE BLACK ON ORANGE (21x15)

GENERAL NOTES:

1. CH 24 WILL BE CLOSED DURING REMOVAL AND CONSTRUCTION OF THE NEW BRIDGE OVER I-74.
2. I-74 WILL REMAIN OPEN WITH AT LEAST ONE LANE EACH WAY DURING CONSTRUCTION, EXCEPT FOR THE REMOVAL AND SETTING OF BRIDGE BEAMS.
3. I-74 TRAFFIC WILL BE DETOURED TO US 150 DURING BEAM REMOVAL AND THE SETTING OF BRIDGE BEAMS. THE REMOVAL & SETTING OF BRIDGE BEAMS WILL BE DONE AT NIGHT AS DISCUSSED IN THE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR.
4. CHANGEABLE MESSAGE SIGNS SHALL BE PLACED AT POINTS LOCATED FIVE MILES OR AS APPROVED BY THE ENGINEER AHEAD OF PROPOSED ROAD CLOSURE AREA ALONG I-74, AND UNIVERSITY AVE.

- ▬ TYPE III BARRICADE
- ⚡ FLASHING AMBER LIGHT (TYPE A)
- ☐ CHANGEABLE MESSAGE SIGN

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PLOT DATE = 12/17/2009		DATE - JULY 2009	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC
TRAFFIC CONTROL & PROTECTION FOR TEMPORARY DETOUR**

SCALE: N.T.S. SHEET NO. 2 OF 2 SHEETS STA. TO STA.

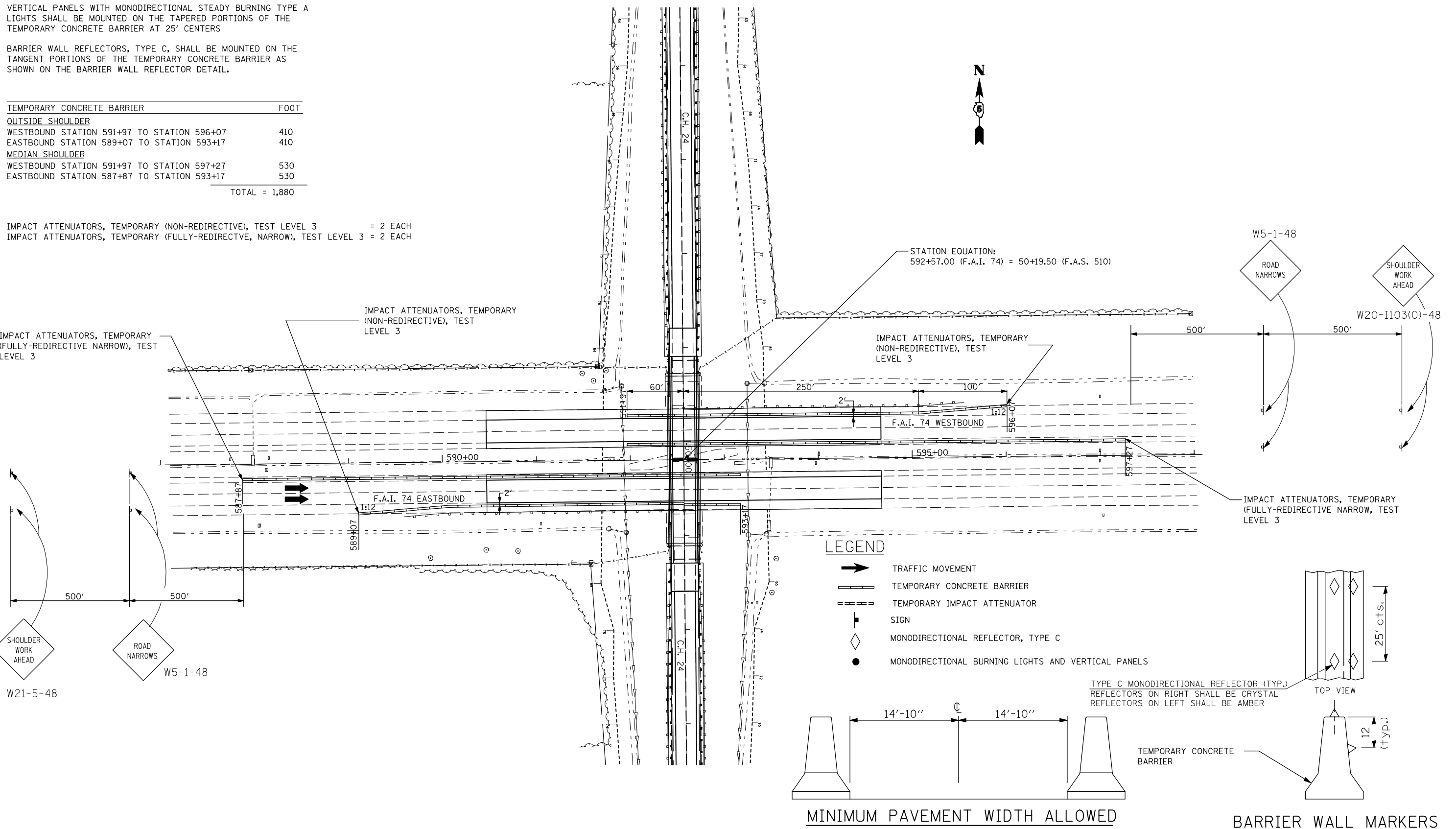
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	35
			CONTRACT NO. 90875	
ILLINOIS FED. AID PROJECT				

NOTES:
 UTILIZE TRAFFIC CONTROL STANDARD 701406 FOR PLACEMENT OF TEMPORARY CONCRETE BARRIER. (FLAGGER REQUIRED UNTIL BARRIER PLACEMENT COMPLETE).
 TAPERED PORTION OF THE TEMPORARY CONCRETE BARRIER SHALL BE PLACED USING A 12:1 TAPER RATE AS SHOWN ON THE PLANS
 VERTICAL PANELS WITH MONODIRECTIONAL STEADY BURNING TYPE A LIGHTS SHALL BE MOUNTED ON THE TAPERED PORTIONS OF THE TEMPORARY CONCRETE BARRIER AT 25' CENTERS
 BARRIER WALL REFLECTORS, TYPE C, SHALL BE MOUNTED ON THE TANGENT PORTIONS OF THE TEMPORARY CONCRETE BARRIER AS SHOWN ON THE BARRIER WALL REFLECTOR DETAIL.

TRAFFIC CONTROL AND PROTECTION (SPECIAL)

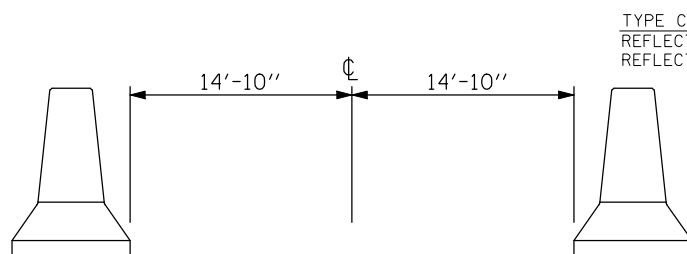
TEMPORARY CONCRETE BARRIER	FOOT
<u>OUTSIDE SHOULDER</u>	
WESTBOUND STATION 591+97 TO STATION 596+07	410
EASTBOUND STATION 589+07 TO STATION 593+17	410
<u>MEDIAN SHOULDER</u>	
WESTBOUND STATION 591+97 TO STATION 597+27	530
EASTBOUND STATION 587+87 TO STATION 593+17	530
TOTAL = 1,880	

IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3 = 2 EACH
 IMPACT ATTENUATORS, TEMPORARY (FULLY-REDIRECTIVE, NARROW), TEST LEVEL 3 = 2 EACH



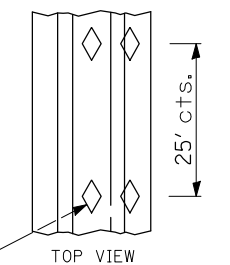
LEGEND

- TRAFFIC MOVEMENT
- TEMPORARY CONCRETE BARRIER
- TEMPORARY IMPACT ATTENUATOR
- SIGN
- MONODIRECTIONAL REFLECTOR, TYPE C
- MONODIRECTIONAL BURNING LIGHTS AND VERTICAL PANELS



MINIMUM PAVEMENT WIDTH ALLOWED

TYPE C MONODIRECTIONAL REFLECTOR (TYP.)
 REFLECTORS ON RIGHT SHALL BE CRYSTAL
 REFLECTORS ON LEFT SHALL BE AMBER



BARRIER WALL MARKERS

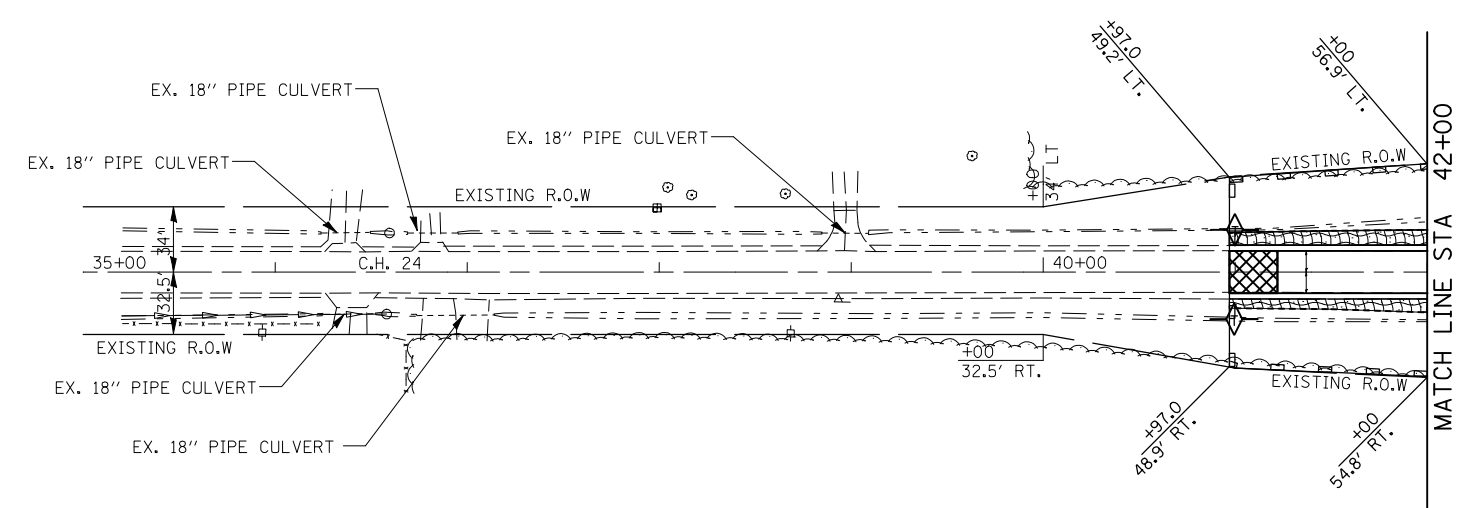
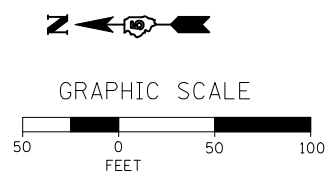
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

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC DURING BRIDGE RECONSTRUCTION
 TRAFFIC CONTROL & PROTECTION (SPECIAL)

SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPIGN	63	36
CONTRACT NO. 90875				
ILLINOIS FED. AID PROJECT				



- LEGEND**
-  EROSION CONTROL BARRIER
 -  EROSION CONTROL BLANKET
 -  SEEDING, CLASS 2
 -  TEMPORARY DITCH CHECK
 -  INLET AND PIPE PROTECTION

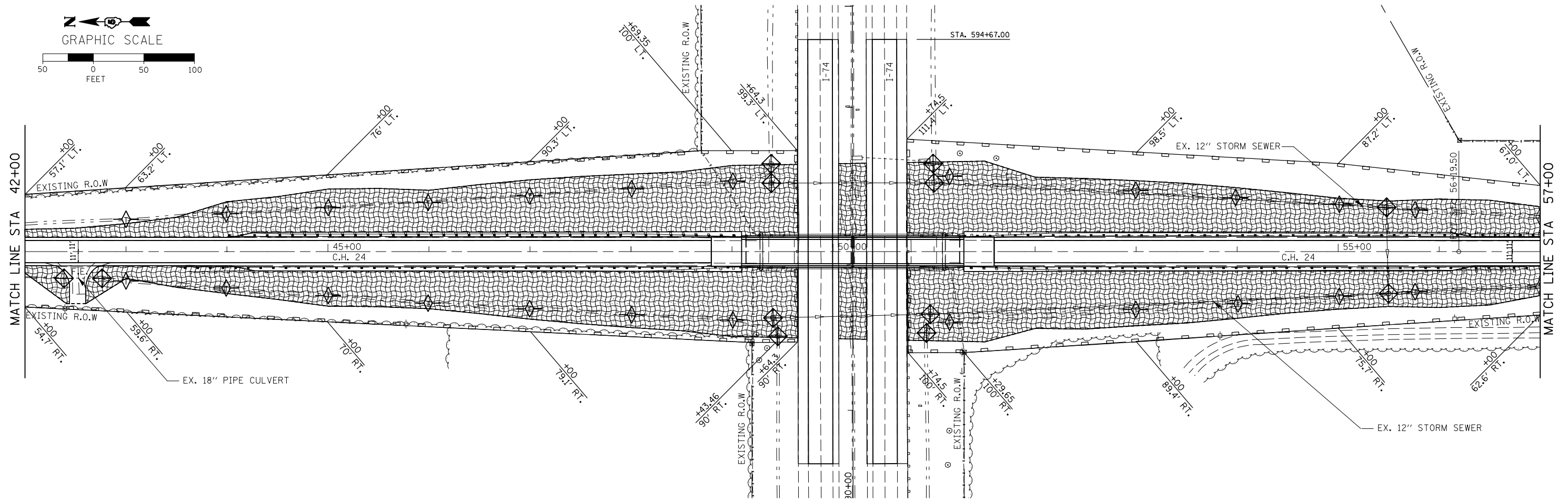
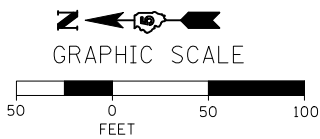
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




**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**C.H. 24
EROSION CONTROL PLAN**

SCALE: 1"=50' SHEET NO. 1 OF 3 SHEETS STA. 35+00 TO STA. 42+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	37
ILLINOIS FED. AID PROJECT			CONTRACT NO. 90875	



- LEGEND**
-  EROSION CONTROL BARRIER
 -  EROSION CONTROL BLANKET
 -  SEEDING, CLASS 2
 -  TEMPORARY DITCH CHECK
 -  INLET AND PIPE PROTECTION

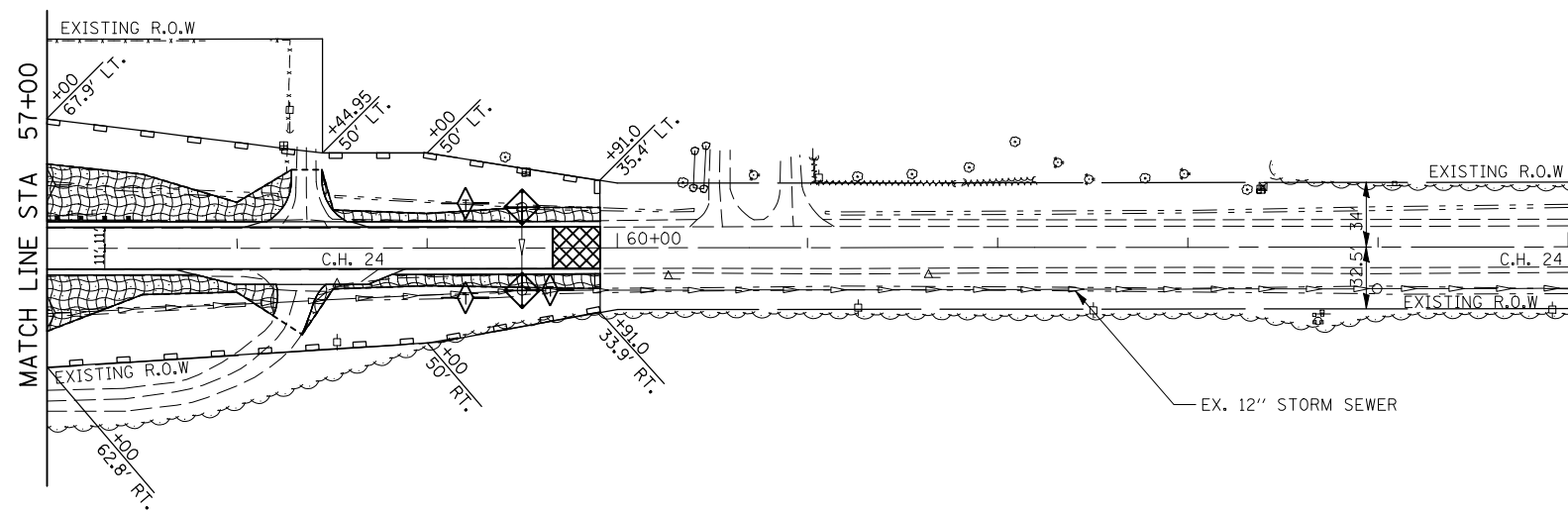
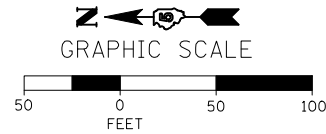
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PLOT DATE = 12/17/2009		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**






**C.H. 24
EROSION CONTROL PLAN**

SCALE: 1"=50' SHEET NO. 2 OF 3 SHEETS STA. 42+00 TO STA. 57+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	38
CONTRACT NO. 90875				
ILLINOIS FED. AID PROJECT				



LEGEND

-  EROSION CONTROL BARRIER
-  EROSION CONTROL BLANKET
-  SEEDING, CLASS 2
-  TEMPORARY DITCH CHECK
-  INLET AND PIPE PROTECTION

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**C.H. 24
EROSION CONTROL PLAN**

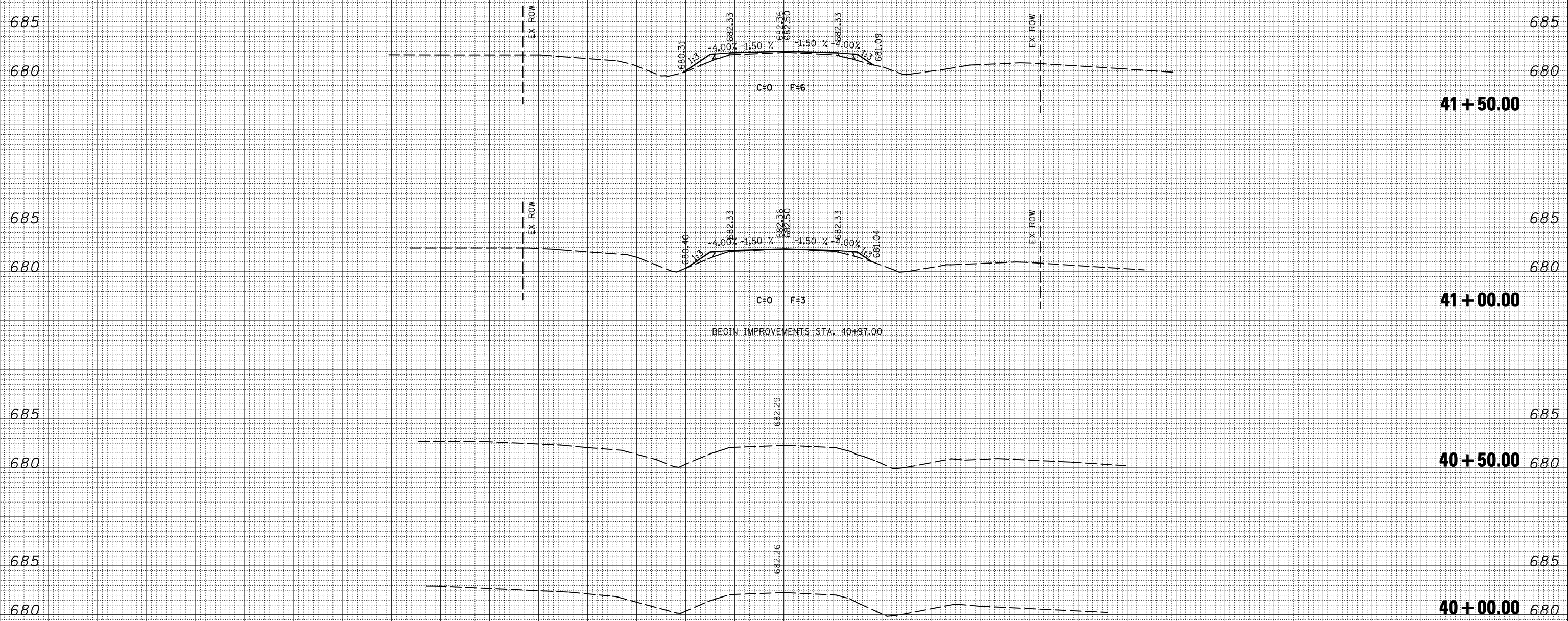
SCALE: 1"=50' SHEET NO. 3 OF 3 SHEETS STA. 57+00 TO STA. 65+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	39
ILLINOIS FED. AID PROJECT			CONTRACT NO. 90875	

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BY	DATE
FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED

BY	DATE
ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED



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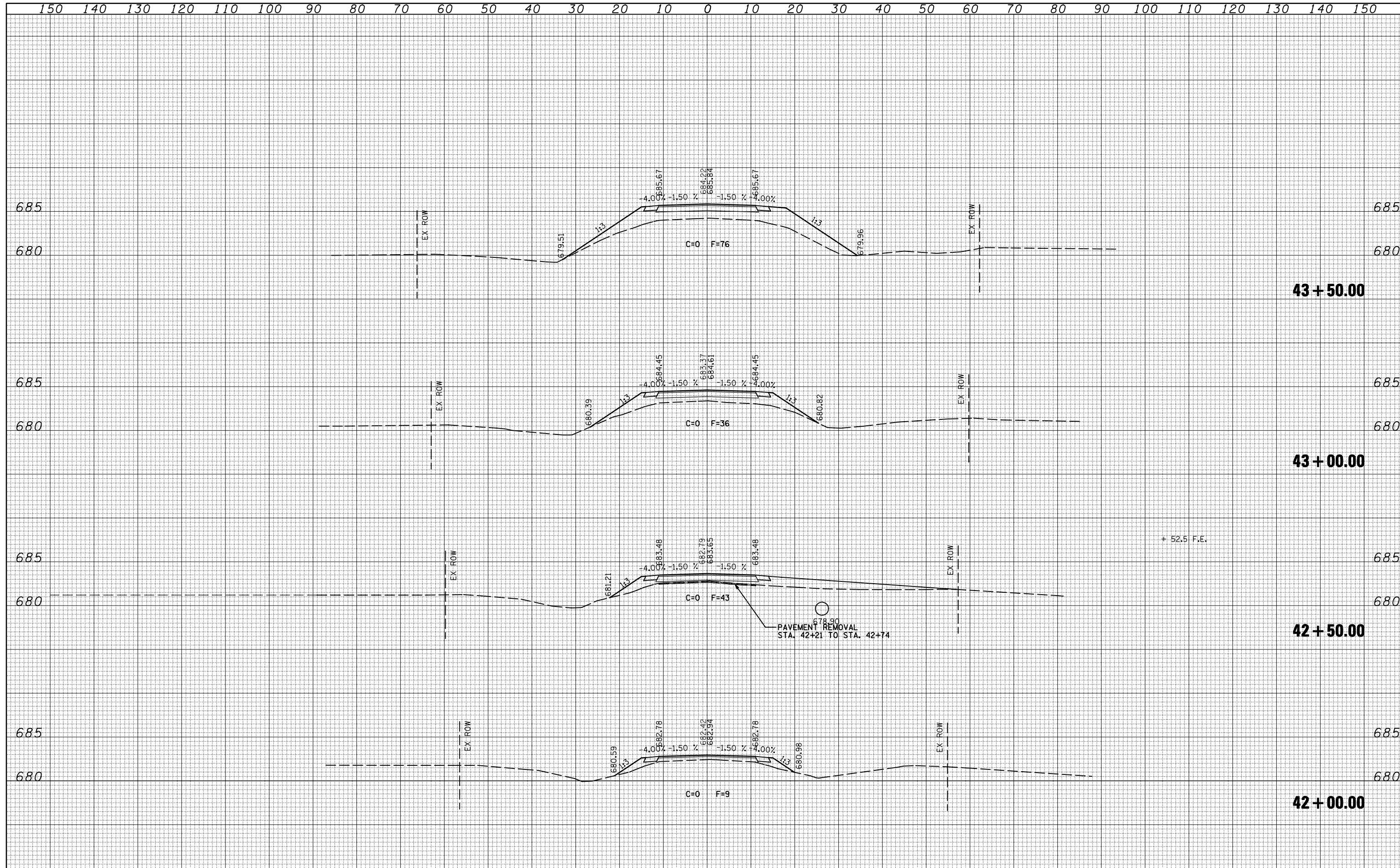
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CH. 24 CROSS SECTIONS

SCALE: SHEET NO. 1 OF 14 SHEETS STA. 40+00.00 TO STA. 41+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	40
			CONTRACT NO. 90875	

ILLINOIS FED. AID PROJECT



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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

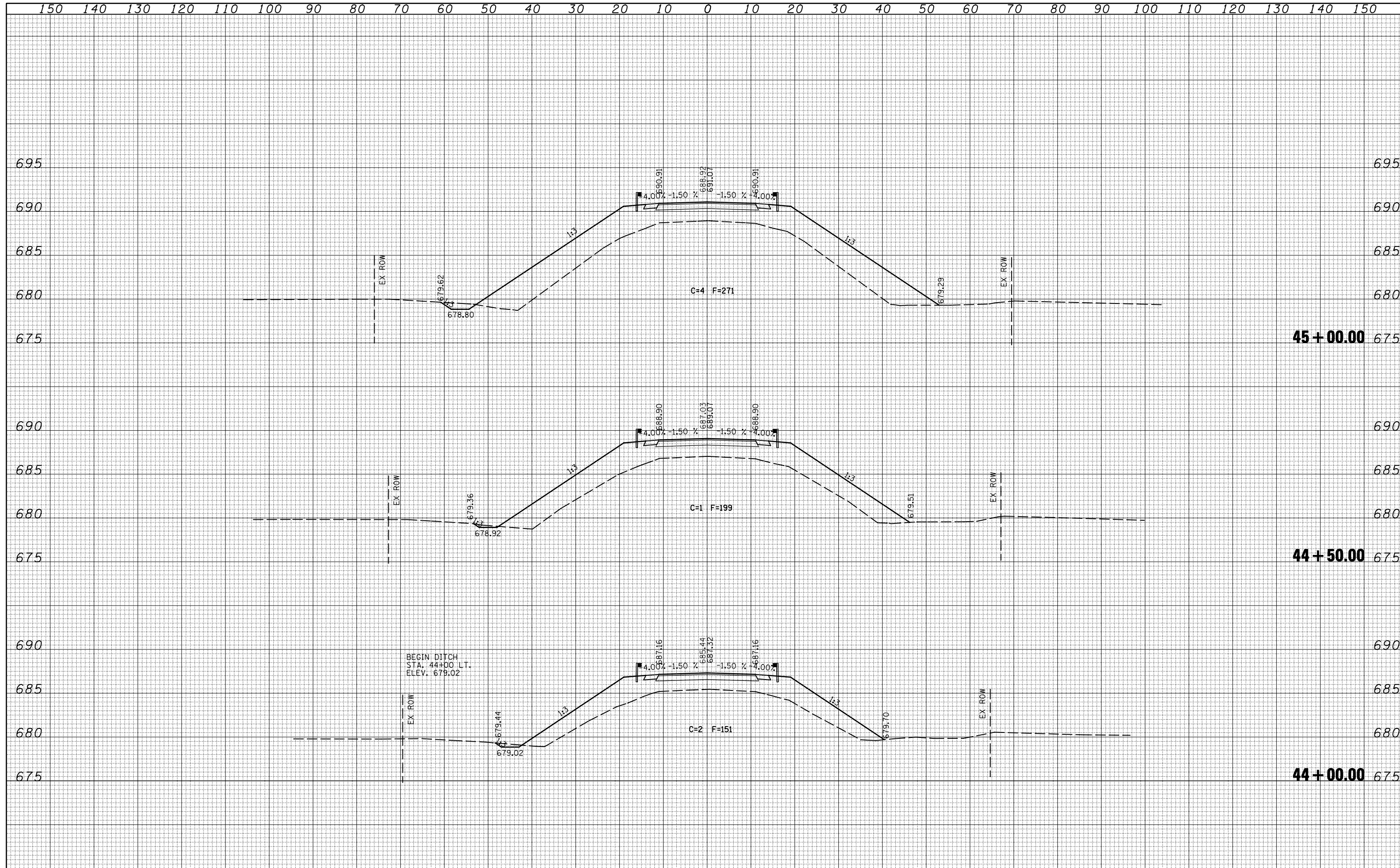
CH. 24 CROSS SECTIONS

SCALE: SHEET NO. 2 OF 14 SHEETS STA. 42+00.00 TO STA. 43+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	41
			CONTRACT NO. 90875	
ILLINOIS FED. AID PROJECT				

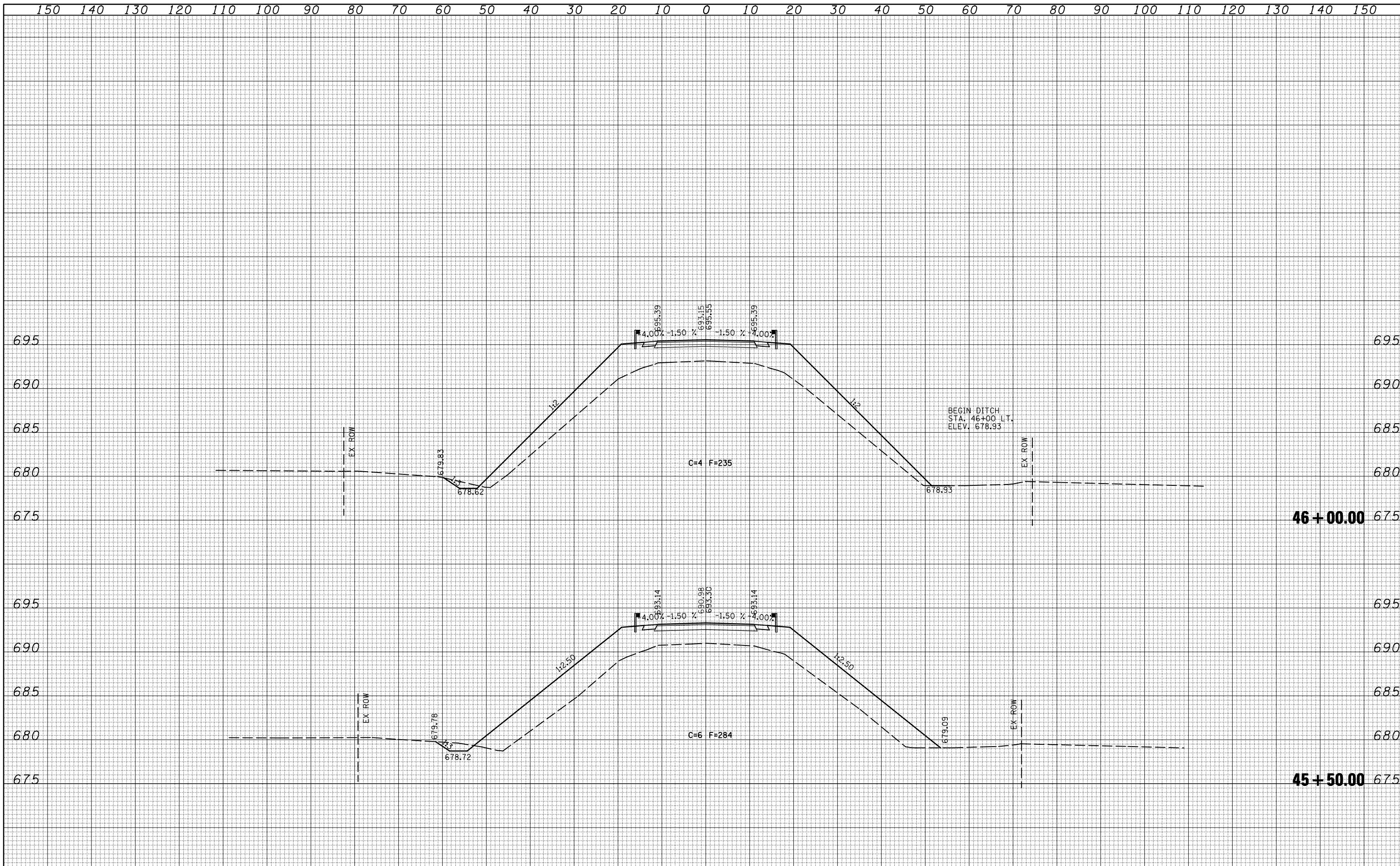
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

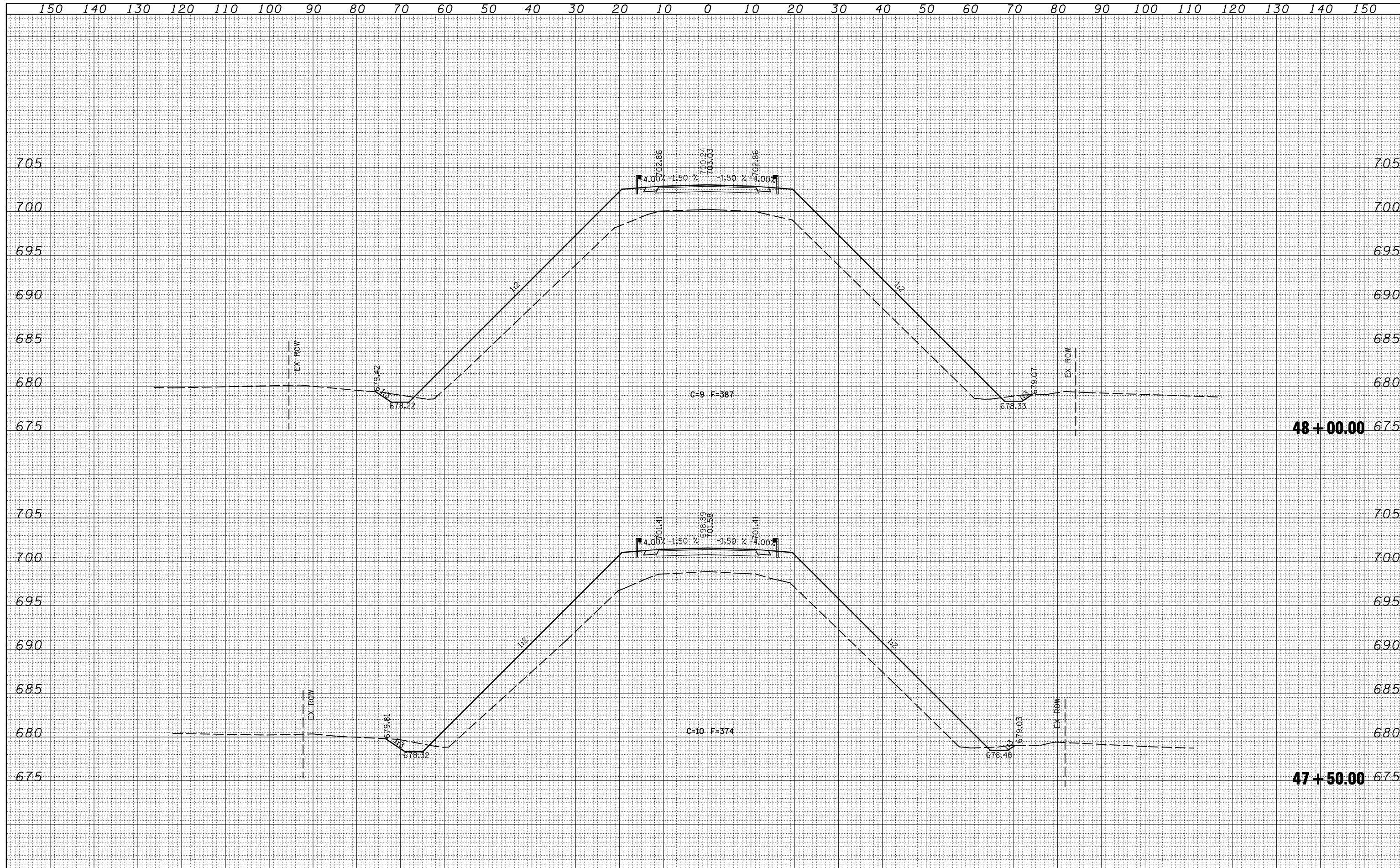
CH. 24 CROSS SECTIONS

SCALE: SHEET NO. 4 OF 14 SHEETS STA. 45+50.00 TO STA. 46+00.00

F.A.I. RTE. 74	SECTION (10-6HB-5)BR	COUNTY CHAMPAIGN	TOTAL SHEETS 63	SHEET NO. 43
			CONTRACT NO. 90875	
ILLINOIS FED. AID PROJECT				

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NOTE BOOK	
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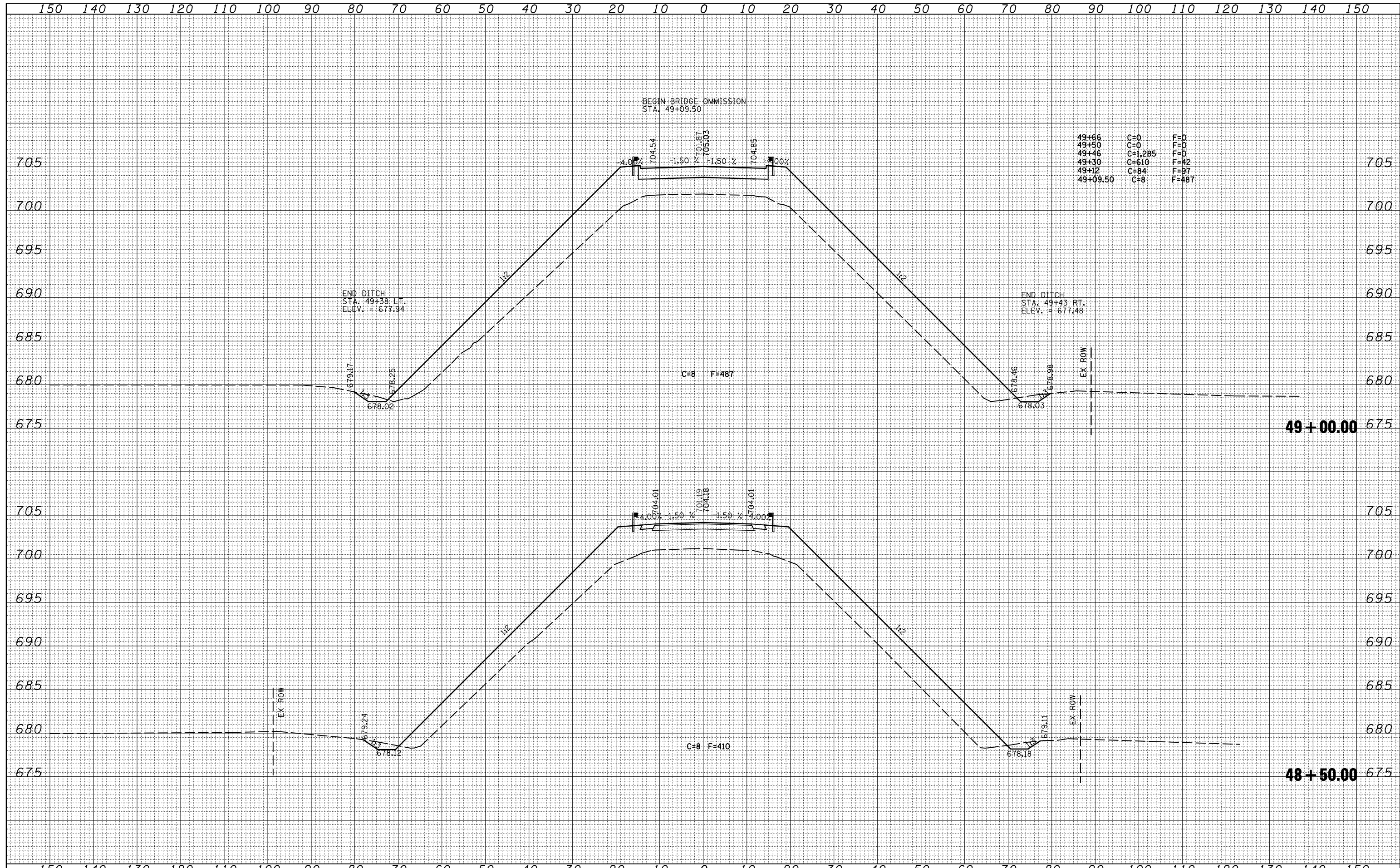
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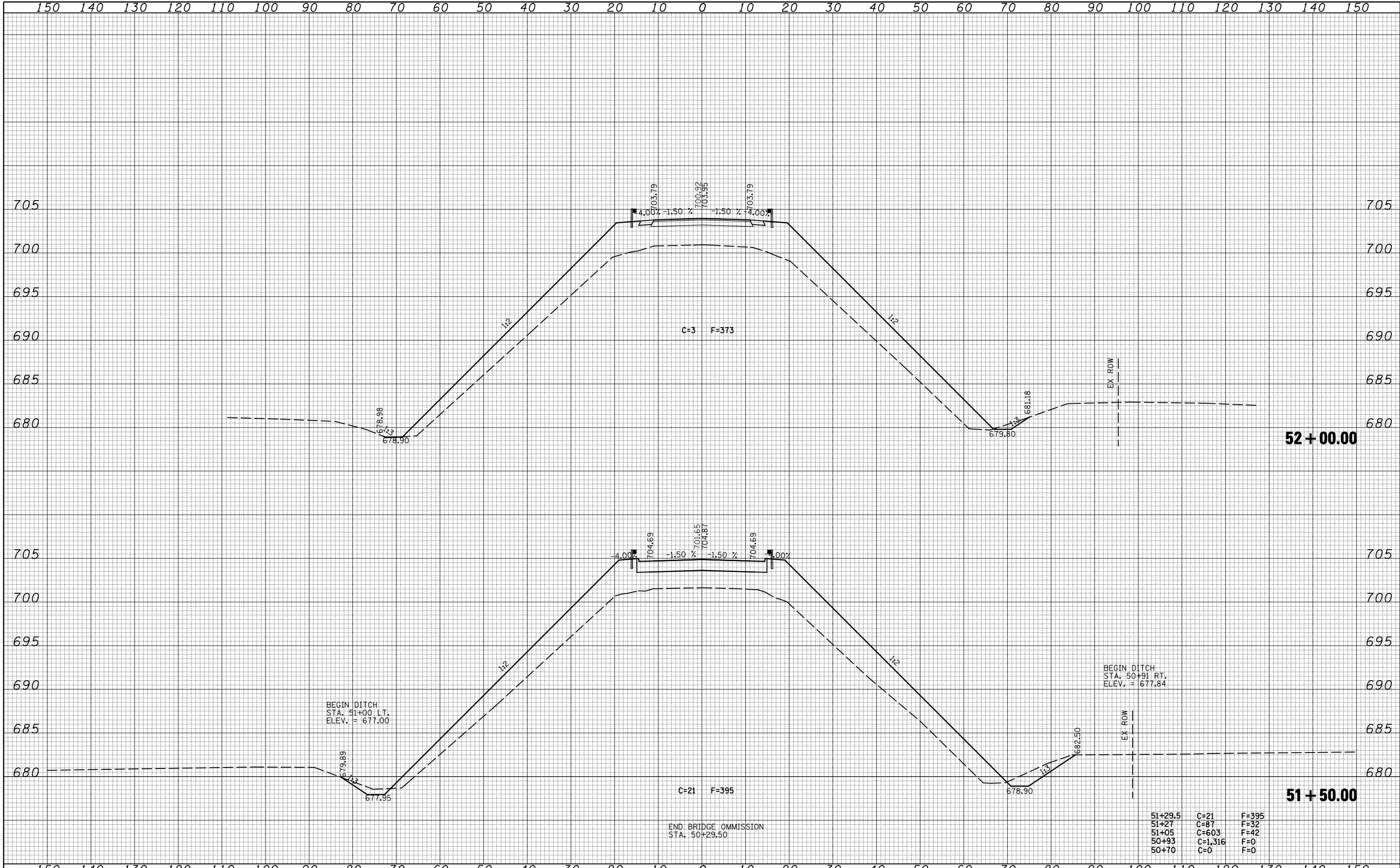


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PLOT DATE = 12/17/2009		DATE -	REVISÉ -		STA. 47+50.00 TO STA. 48+00.00						

DATE	
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FINAL SURVEY	
NOTE BOOK	
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ORIGINAL SURVEY	
NOTE BOOK	
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DATE	BY	SURVEYED	PLOTTED
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		AREAS	CHECKED

DATE	BY	ORIGINAL SURVEY	PLOTTED
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CH. 24 CROSS SECTIONS

SCALE: SHEET NO. 8 OF 14 SHEETS STA. 51+50.00 TO STA. 52+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	47
			CONTRACT NO. 90875	
ILLINOIS FED. AID PROJECT				

51+29.5	C=21	F=395
51+27	C=87	F=32
51+05	C=603	F=42
50+93	C=1,316	F=0
50+70	C=0	F=0

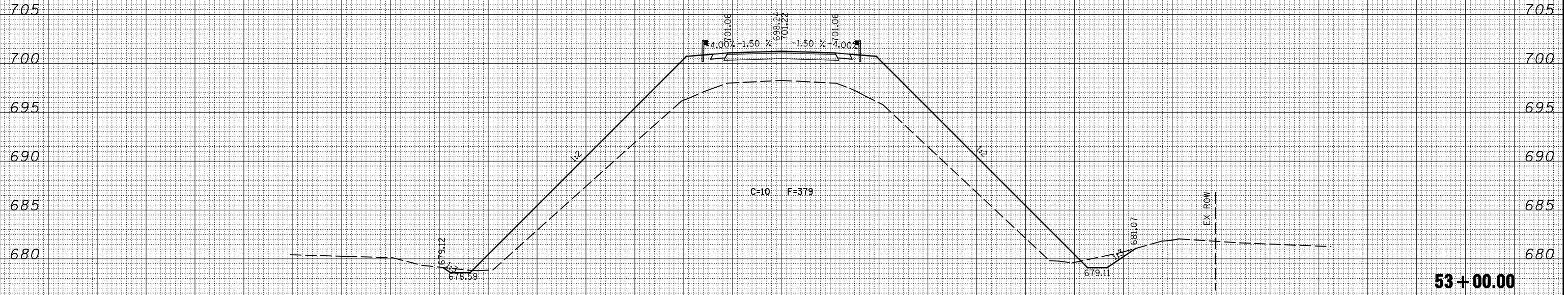
END BRIDGE OMISSION
 STA. 50+29.50

BEGIN DITCH
 STA. 51+00 LT.
 ELEV. = 677.00

BEGIN DITCH
 STA. 50+91 RT.
 ELEV. = 677.84

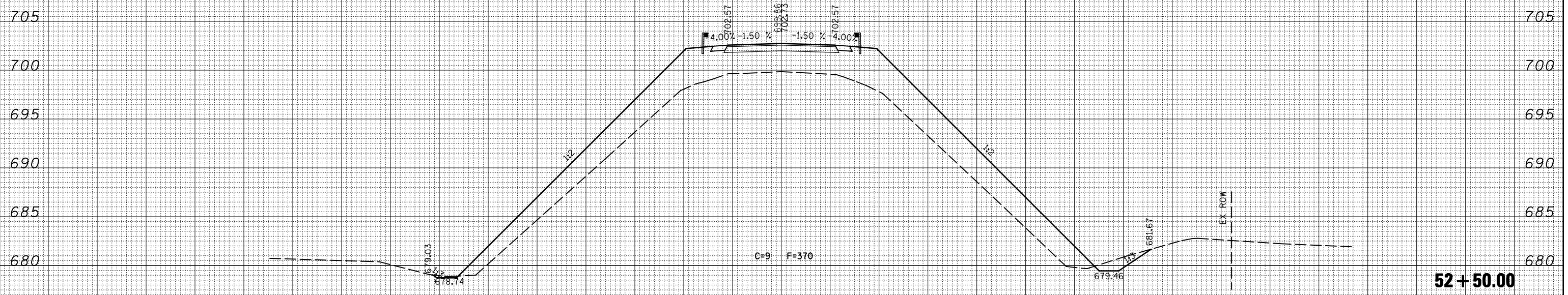
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53+00.00

BY	DATE
ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED



52+50.00

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CH. 24 CROSS SECTIONS

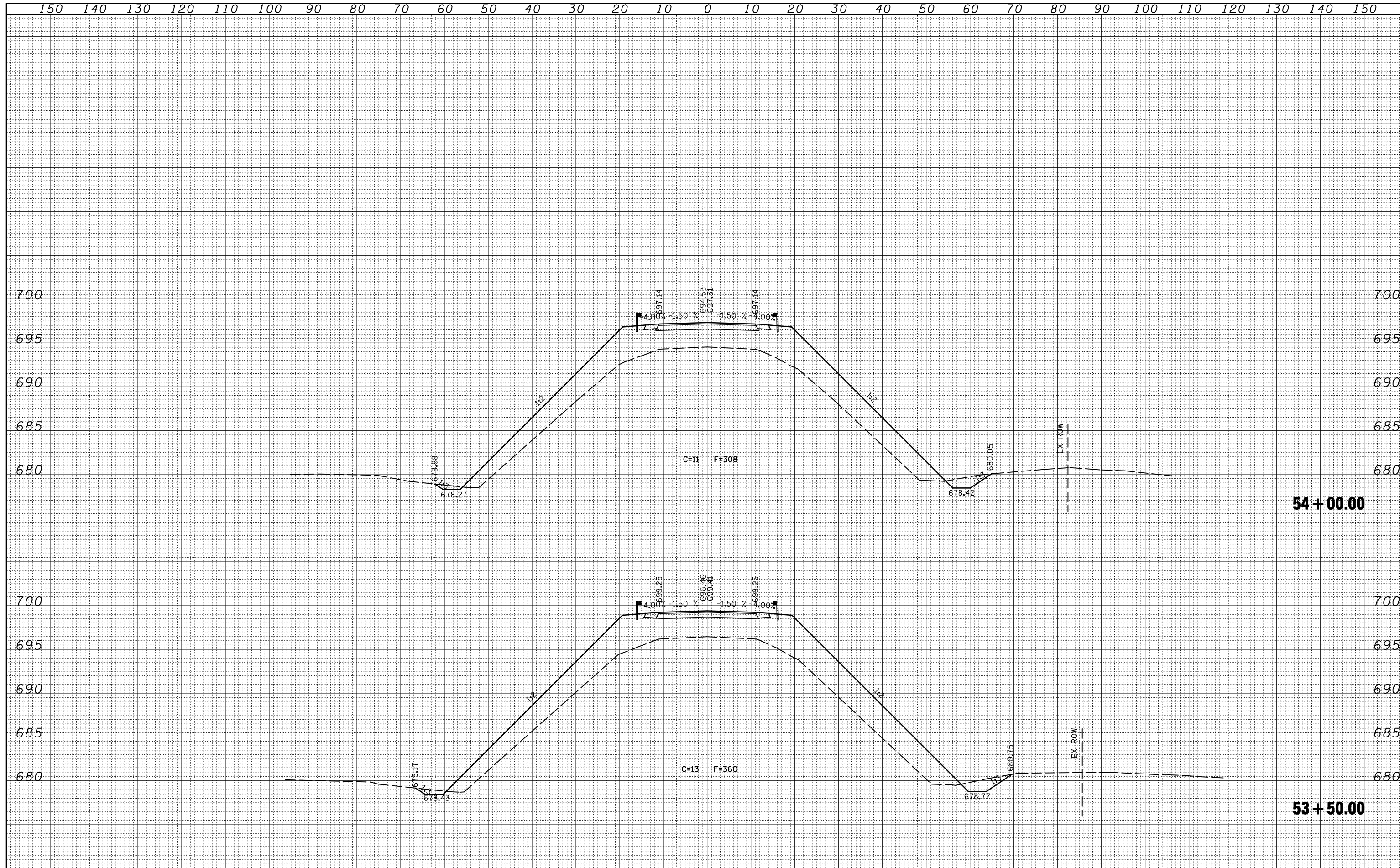
SCALE: SHEET NO. 9 OF 14 SHEETS STA. 52+50.00 TO STA. 53+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	48
CONTRACT NO. 90875				

ILLINOIS FED. AID PROJECT

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BY	
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PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
FINAL SURVEY	
NOTE BOOK	
NO.	

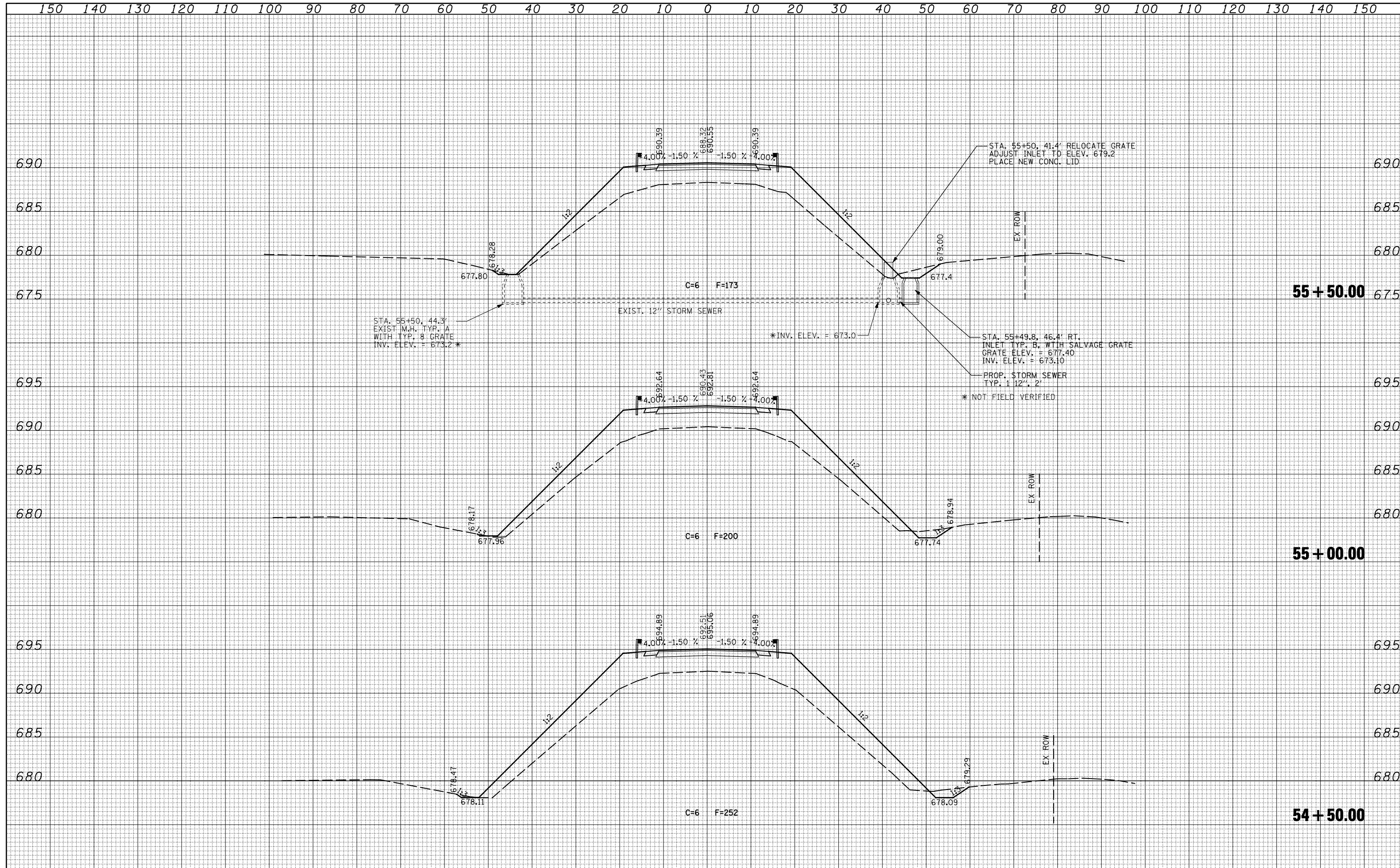
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NOTE BOOK	
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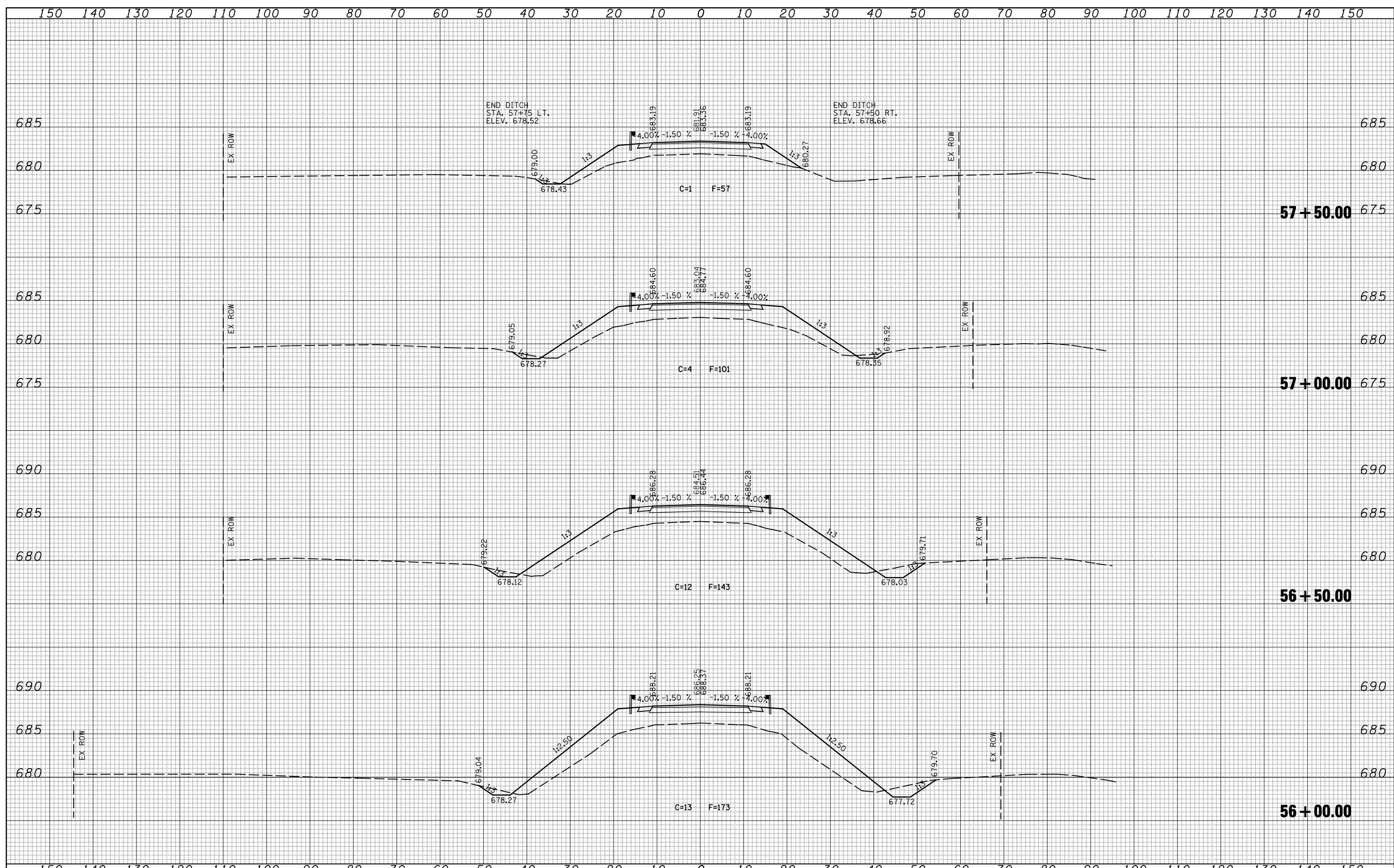


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CONTRACT NO. = 90875	PLOT SCALE = 20.0000' / IN.	CHECKED -	REVISED -		SCALE:	SHEET NO. 10 OF 14 SHEETS	STA. 53+50.00 TO STA. 54+00.00	ILLINOIS FED. AID PROJECT				
	PLOT DATE = 12/17/2009	DATE -	REVISED -									

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	





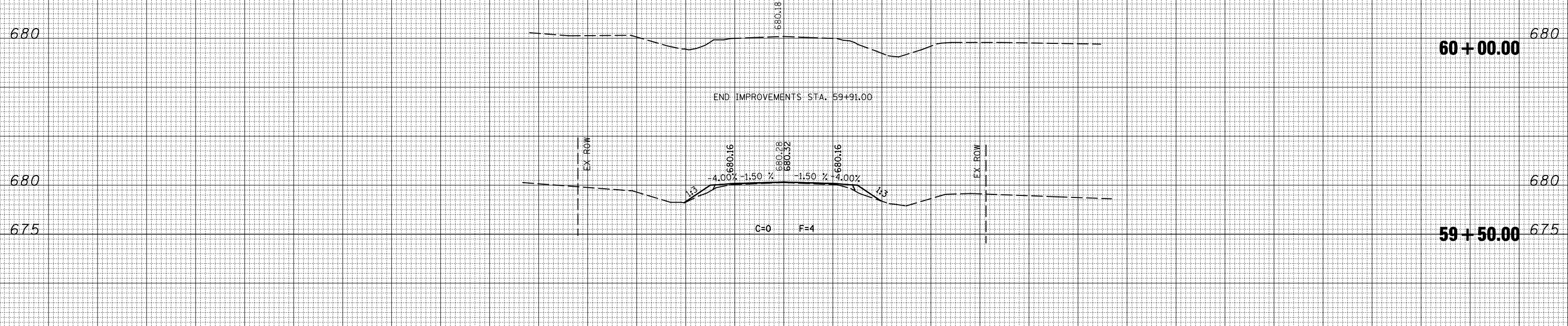
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BY	
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NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

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

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

FINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE



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USER NAME = dawsonkb
 PLOT SCALE = 20.0000' / IN.
 PLOT DATE = 12/17/2009

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

REVISED -
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 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CH. 24 CROSS SECTIONS

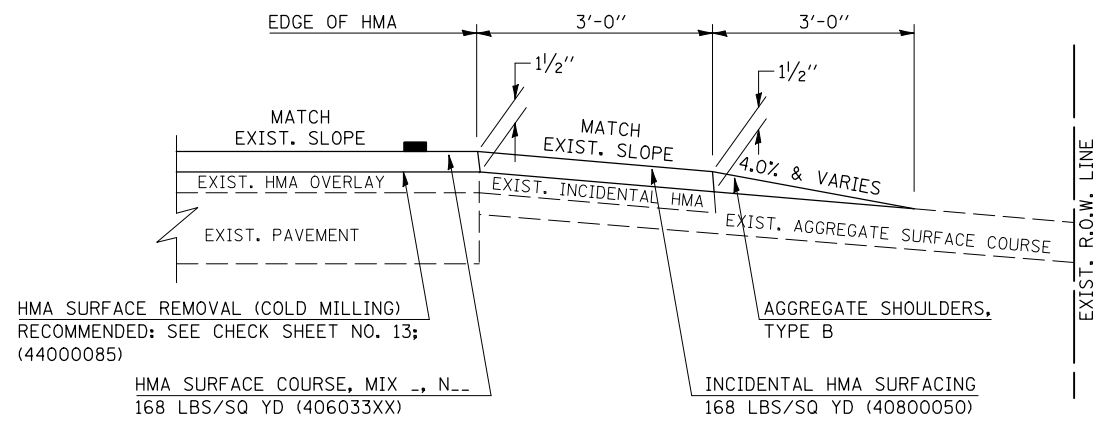
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	53
			CONTRACT NO. 90875	

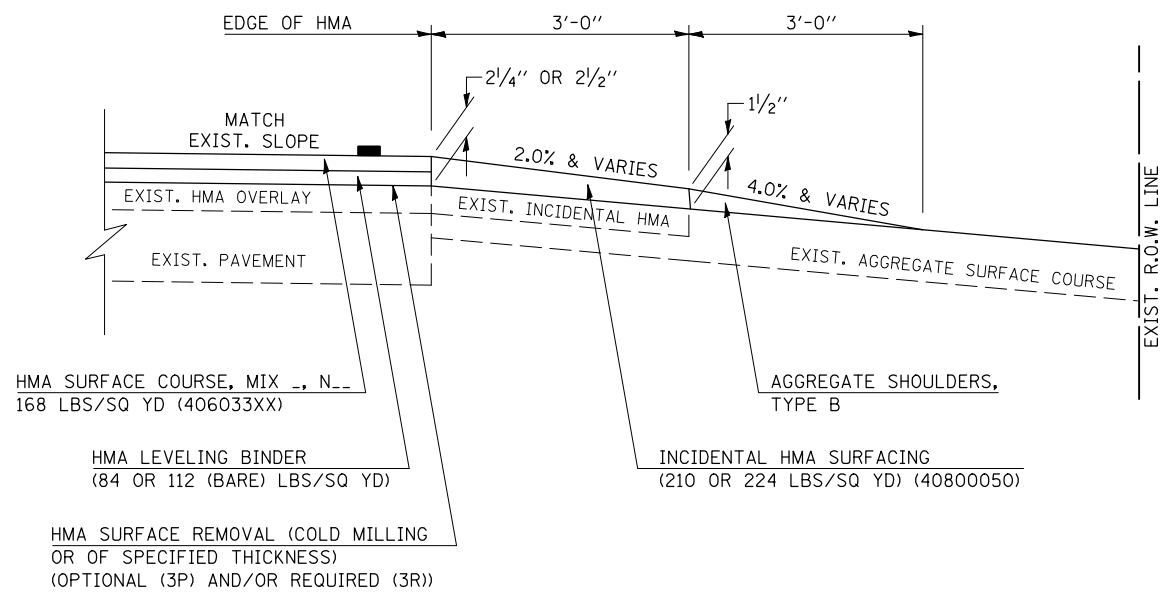
ILLINOIS FED. AID PROJECT

PROJECTS WITHOUT RECONSTRUCTION
 ("3R" WITHOUT RECONSTRUCTION, 3P, SMART AND CM)

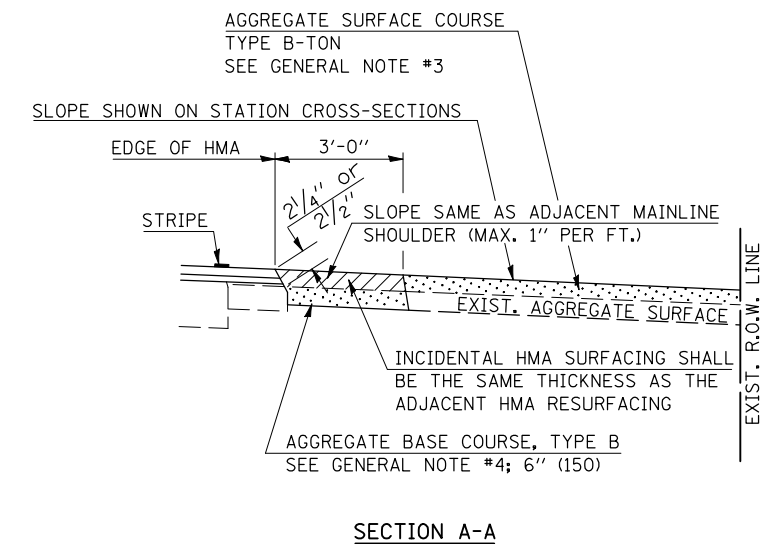
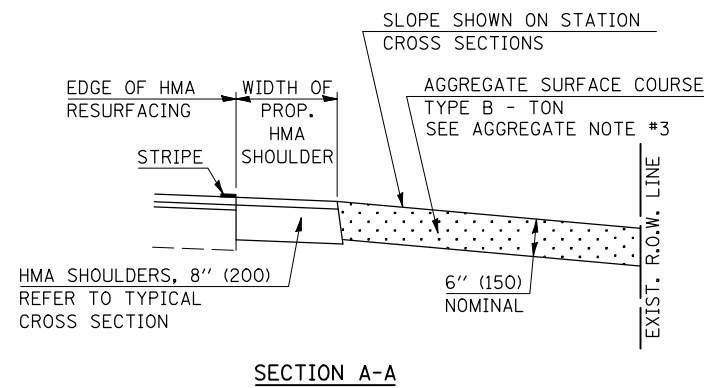
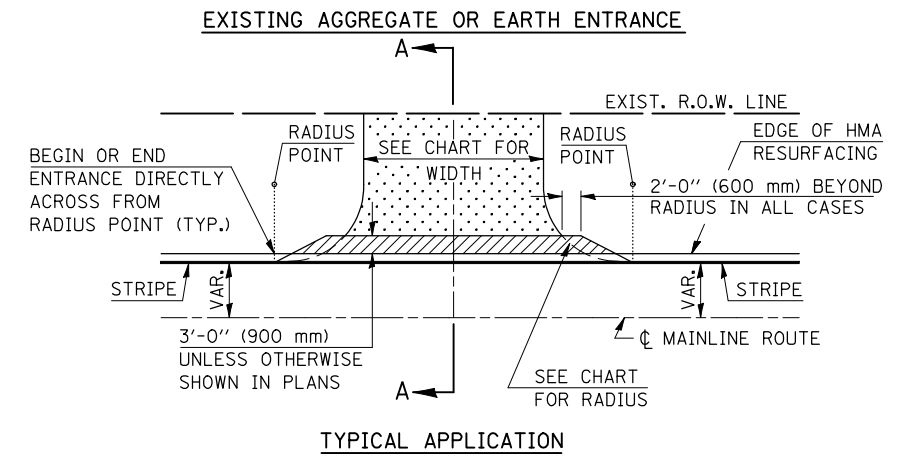
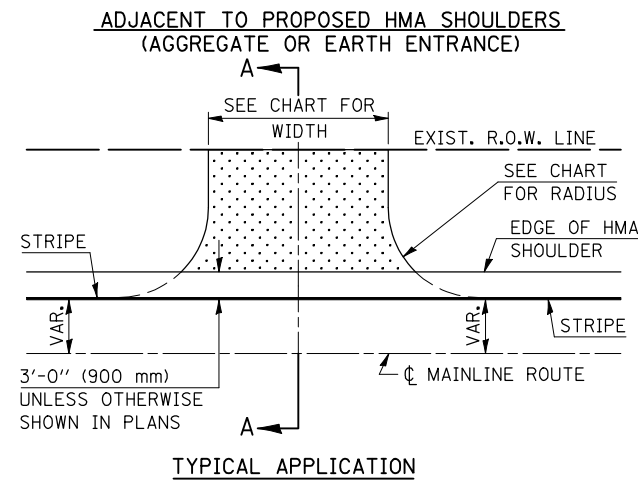
S.M.A.R.T. IMPROVEMENTS
 (POLICY RESURFACING; BDE 53-4.03; 1/2")



"3P" OR "3R" IMPROVEMENTS
 (POLICY RESURFACING; BDE 53-4.02; 2/4" OR 2/2" ON BARE CONCRETE)



PROJECTS WITH RECONSTRUCTION
 ("3R" IMPROVEMENTS AND SMART/3P "SPOT" LOCATIONS)



Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 5 DETAIL NO. 40800050A

FILE NAME =	USER NAME = dawsonkb	DESIGNED -	REVISED - 12/01/06 TJB
et:\pw\work\PWIDOT\DAWSONKB\d0176650\0590875-54-63-District5Standards.dgn		DRAWN -	REVISED - 09/21/07 KAG
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/17/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIELD ENTRANCES (NONCOMMERCIAL RURAL)

SCALE: NA SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	54
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 90875	

GENERAL NOTES

1. THE EXISTING SURFACE SHALL BE PREPARED IN ACCORDANCE WITH SECTION 408 OF THE STANDARD SPECIFICATIONS.
2. ANY NECESSARY WORK BEHIND THE HMA SHOULDER OR THE INCIDENTAL HMA SURFACING SHALL BE AS SHOWN IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.
3. EARTH EXCAVATION REQUIRED FOR THE CONSTRUCTION OF THE AGGREGATE SURFACE COURSE SHALL BE INCLUDED IN THE COST OF AGGREGATE SURFACE COURSE.
4. AGGREGATE BASE COURSE, TYPE B, 6" (150 mm) MIN. SHALL BE USED WHERE IN THE OPINION OF THE ENGINEER THERE IS NOT SUFFICIENT BASE MATERIAL FOR THE PROPOSED ENTRANCES. THIS MATERIAL SHALL GENERALLY BE USED TO WIDEN ANY EXISTING RETURN OR TO CONSTRUCT NEW ENTRANCES WHERE NONE NOW EXISTS.
5. THE AGGREGATE BASE COURSE SHALL BE CONSTRUCTED 12" (300 mm) WIDER THAN THE SURFACE DIMENSIONS AS SHOWN ABOVE.
6. EXISTING FIELD ENTRANCES OF AGGREGATE OR EARTH WITH NO HMA APRON SHALL NOT RECEIVE A NEW HMA APRON WITHOUT PROPER APPROVAL THROUGH THE BUREAU OF OPERATIONS "POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS".
7. TO ASSURE APPROPRIATE ACCESS POLICIES ARE FOLLOWED ALL NEW ACCESS SHALL BE APPLIED FOR THROUGH THE BUREAU OF OPERATIONS PERMIT APPLICATION PROCESS. PLAN PREPARATION MEMORANDUMS 40-09 AND 40-11 ALONG WITH DISTRICT CONSTRUCTION MEMORANDUM 03/14 DISCUSS THIS PROCEDURE.

RURAL ENTRANCE DESIGN STANDARDS (PPM 40-09)																
DESIGN ELEMENT	NEW CONSTRUCTION & 3R with RECONSTRUCTION						3R w/out RECONSTRUCTION, 3P, SMART & CM									
	NONCOMMERCIAL			FIELD W/ FARM IMPLEMENTS			COMMERCIAL			NONCOMMERCIAL			COMMERCIAL			
	PRIVATE & FIELD			FIELD W/ FARM IMPLEMENTS			COMMERCIAL			PRIVATE & FIELD			COMMERCIAL			
	min.	des.	max.	min.	max.	min.	des.	max.	min.	des.	max.	min.	des.	max.		
SURFACE WIDTH (FT)	12	16	24	24	30	1 LANE, 1 WAY						1 LANE, 1 WAY				
						2 LANE, 2 WAY						2 LANE, 2 WAY				
						14	16	24								
RADIUS (FT)	15	25	40	30		20	30	50	resurface existing configuration; existing aggregate or earth entrances shall have the continuation of aggregate shoulders placed behind them							
SHOULDER WIDTH (FT)	2	2		2		1	3									
SHOULDER SLOPE (%)	2	4	6	4		2	4	6								
ENTRANCE GRADE (%)	0	2 to 5	10 or 12	2 to 5	10 or 12	0	2 to 5	8 or 10								
SIDE SLOPE (FT)	1:4	1:6	1:10	1:4	1:6	1:4	1:6	1:10								
SURFACE TYPE																
INCIDENTAL HMA SURFACING (INCH)		2		2		3 or 4			taper from hma resurfacing thickness (2 1/2", 2 1/4" or 1 1/2") to 1 1/2" to minimize aggregate shoulder							
AGGREGATE SURFACE COURSE, TYPE A (INCH)		6		6		8			if applicable use items: Preparation of Base & Aggregate Base Repair; see PPM 30-02							
PCC DRIVEWAY PAVEMENT (INCH)		6						6 or 8								

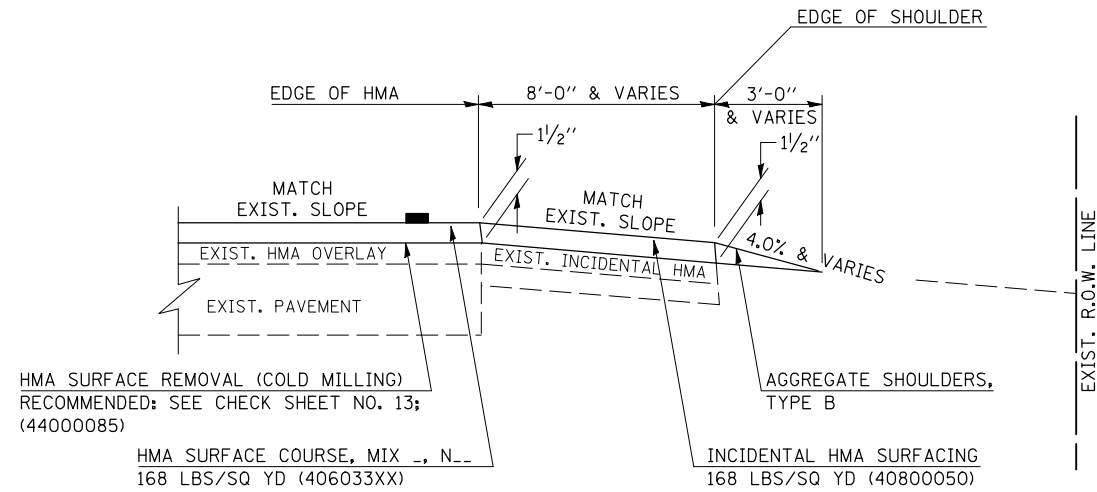
Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 5 DETAIL NO. 40800050A

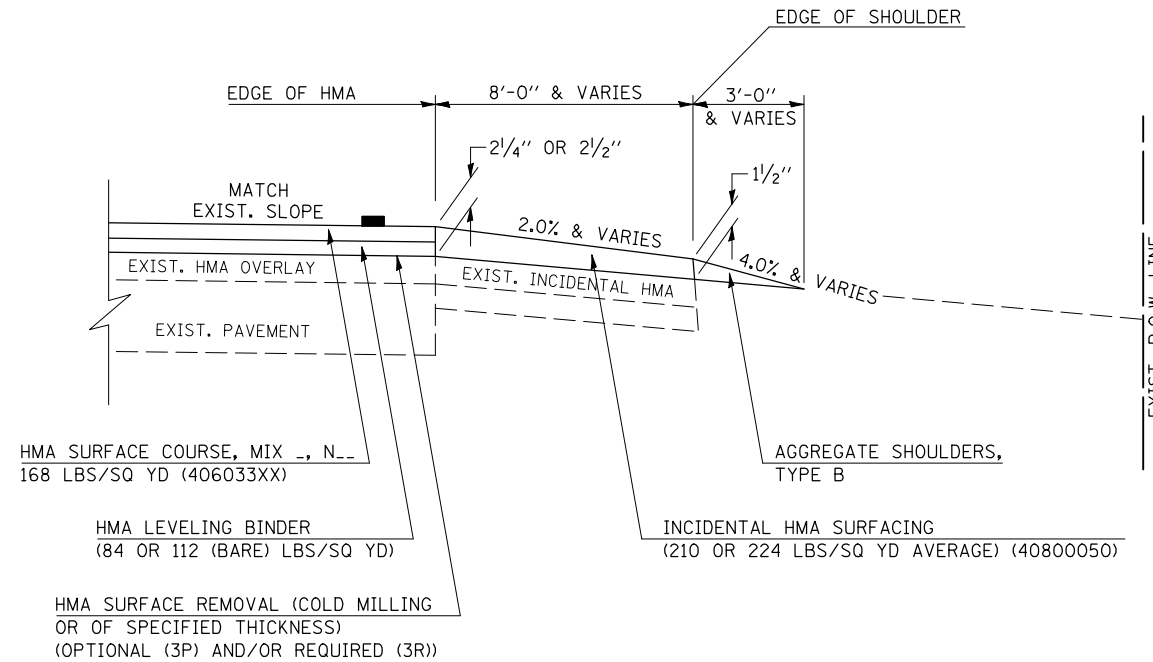
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et:\pwork\pwork\DAWSONKB\d0176650\05%0875-54-63-District5Standards.dgn	DRAWN -	REVISED - 09/21/07 KAG	74			(10-6HB-5)BR	CHAMPAIGN	63	55	
PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -	CONTRACT NO. 90875							
PLOT DATE = 12/17/2009	DATE -	REVISED -	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							
				SCALE: NA	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.			

PROJECTS WITHOUT RECONSTRUCTION

S.M.A.R.T. IMPROVEMENTS
(POLICY RESURFACING; BDE 53-4.03; 1 1/2")



"3P" OR "3R" IMPROVEMENTS
(POLICY RESURFACING; BDE 53-4.02; 2 1/4" OR 2 1/2" ON BARE CONCRETE)

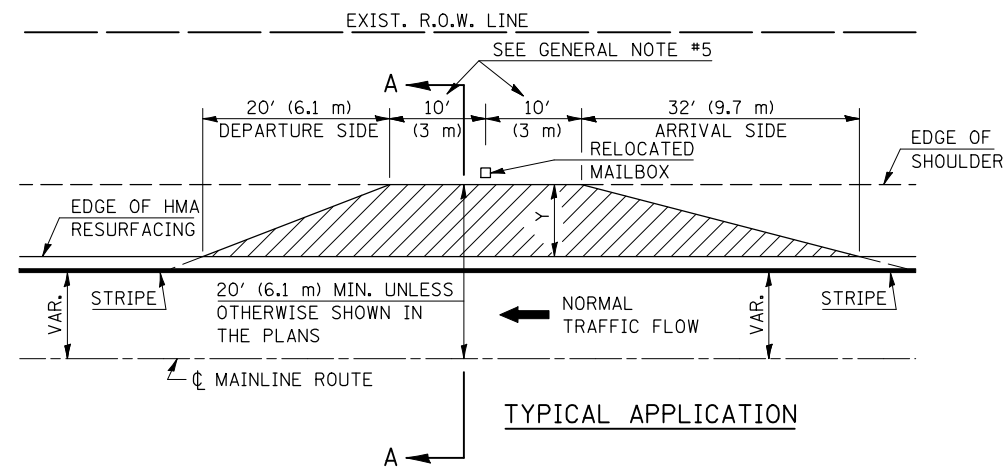


GENERAL NOTES

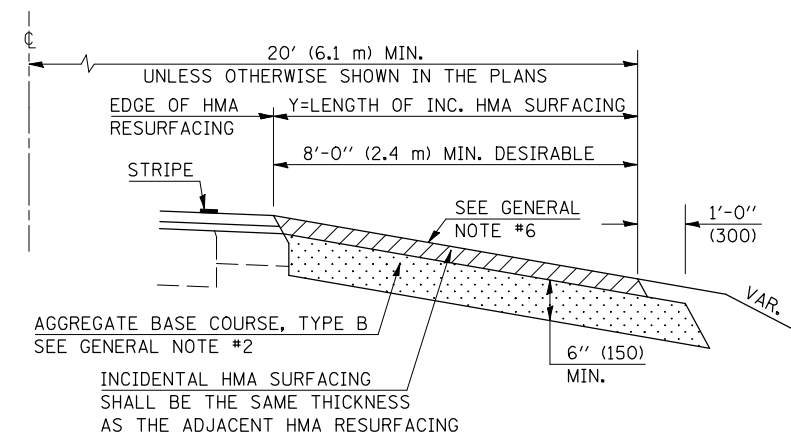
1. THE EXISTING SURFACE SHALL BE PREPARED IN ACCORDANCE WITH SECTION 408 OF THE STANDARD SPECIFICATIONS.
2. AGGREGATE BASE COURSE, TYPE B, 6" (150) MIN. SHALL BE USED WHERE IN THE OPINION OF THE ENGINEER THERE IS NOT SUFFICIENT BASE MATERIAL FOR THE PROPOSED MAILBOX TURNOUTS. THIS MATERIAL SHALL GENERALLY BE USED TO WIDEN ALL EXISTING MAILBOX TURNOUTS OR TO CONSTRUCT NEW MAILBOX TURNOUTS WHERE NONE NOW EXISTS.
3. ANY NECESSARY WORK BEHIND THE INCIDENTAL HMA SURFACING SHALL BE AS SHOWN IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.
4. THE TEMPORARY RELOCATION OF EXISTING MAILBOXES SHALL BE IN ACCORDANCE WITH ARTICLE 107.20 OF THE STANDARD SPECIFICATIONS.
5. WHEN MORE THAN ONE RELOCATED MAILBOX IS INCLUDED IN A PARTICULAR LOCATION THE TWO 10' (3 m) DIMENSIONS AS SHOWN ABOVE SHALL BE FROM THE END MAILBOX.
6. CROSS SLOPE SHALL BE AS SHOWN ON THE STATION CROSS SECTIONS AND/OR AS DIRECTED BY THE ENGINEER. MINIMUM 4% (1/2"/') DESIRABLE; MAXIMUM 8% (1"/').
7. WHEN MAILBOX TURNOUTS ARE CONSTRUCTED ADJACENT TO FIELD ENTRANCES, THE WIDTH OF THE INCIDENTAL HMA SURFACING CONSTRUCTED FOR THE FIELD ENTRANCE SHALL MATCH THE WIDTH OF THE PROPOSED MAILBOX TURNOUT SURFACING.
8. THE TOTAL SHOULDER WIDTH, 2.4 m (8') MINIMUM, SHALL BE PAVED BETWEEN SIDEROADS ENTRANCES AND/OR MAILBOX TURNOUTS AT LOCATIONS WHERE THE DISTANCE BETWEEN RADIUS OR TAPER CONTROL POINTS IS LESS THAN 15.0 m (50').
9. MAILBOXES SHALL BE MOUNTED SUCH THAT THE FACE OF THE MAILBOX IS 6" (150 mm) TO 12" (300 mm) AND THE POST A MINIMUM OF 24" (600 mm) FROM THE EDGE OF THE TURNOUT SURFACING.

PROJECTS WITH RECONSTRUCTION

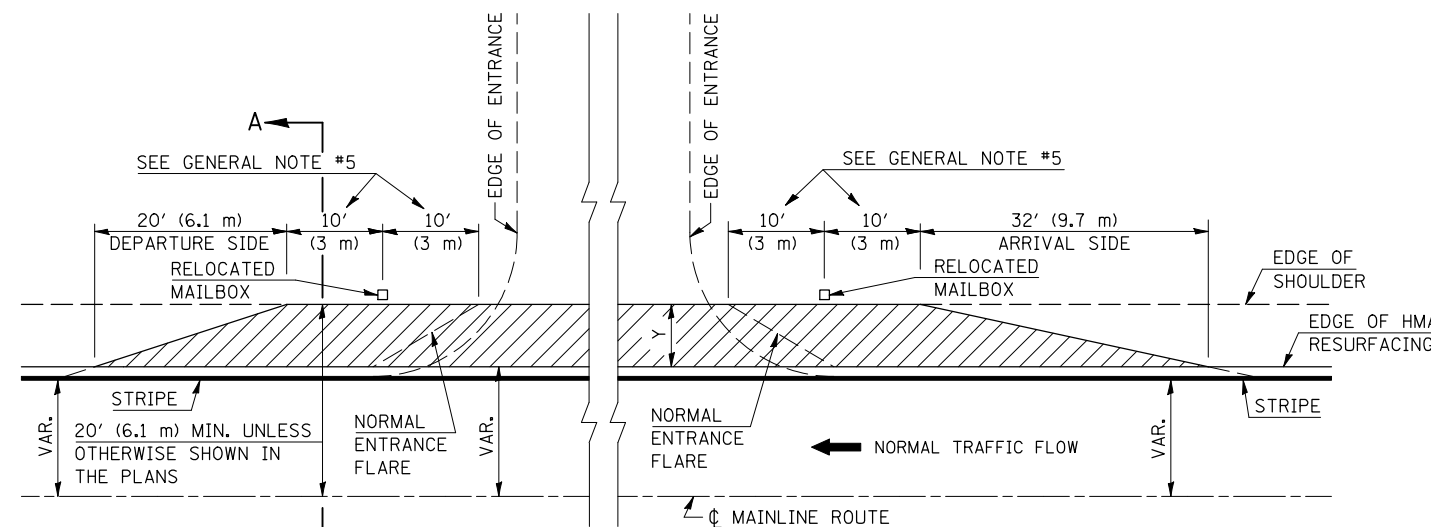
("3R" IMPROVEMENTS)



WIDTH OF SHOULDER	4'-0" - 8'-0" (1.2 m - 2.4 m)	10'-0" (3.0 m)
WIDTH OF TURNOUT "Y"	8'-0" (2.4 m)	8'-0" - 10'-0" (2.4 m - 3.0 m)



SECTION A-A



TYPICAL MAILBOX TURNOUT PLACEMENT ADJACENT TO ENTRANCE

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

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	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/17/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAILBOX TURNOUT (RURAL)

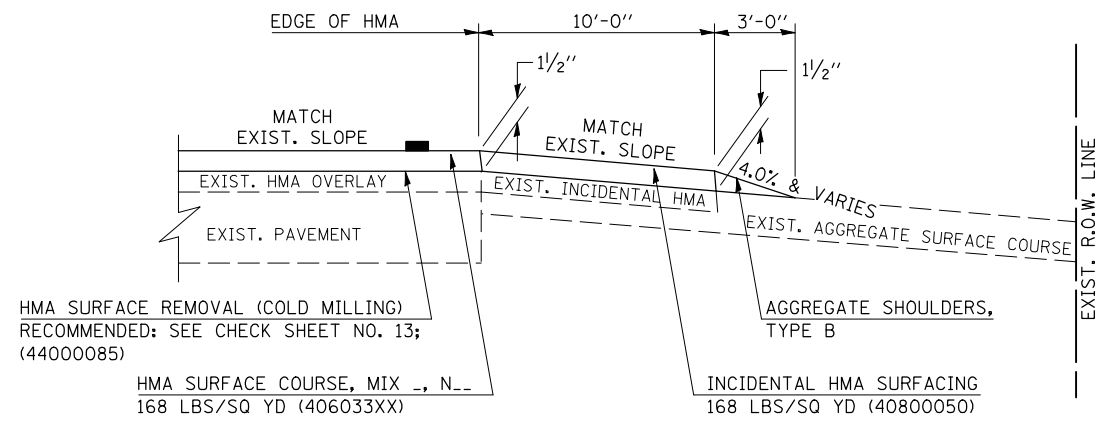
SCALE: NA SHEET NO. OF SHEETS STA. TO STA.

DISTRICT 5 DETAIL NO. 40800050B

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 90875	

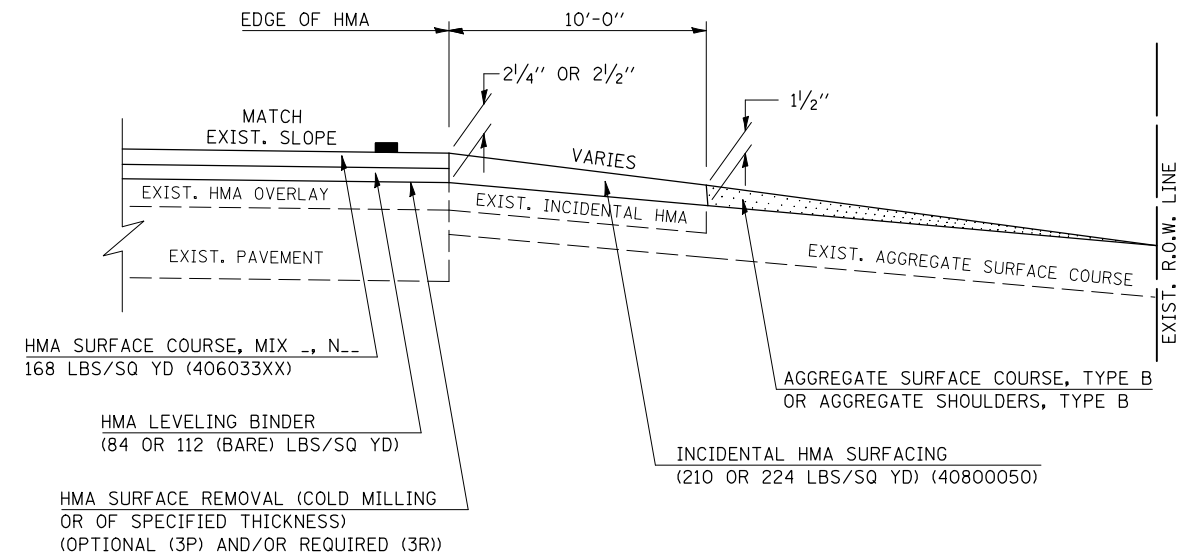
PROJECTS WITHOUT RECONSTRUCTION

S.M.A.R.T. IMPROVEMENTS (POLICY RESURFACING; BDE 53-4.03; 1/2")

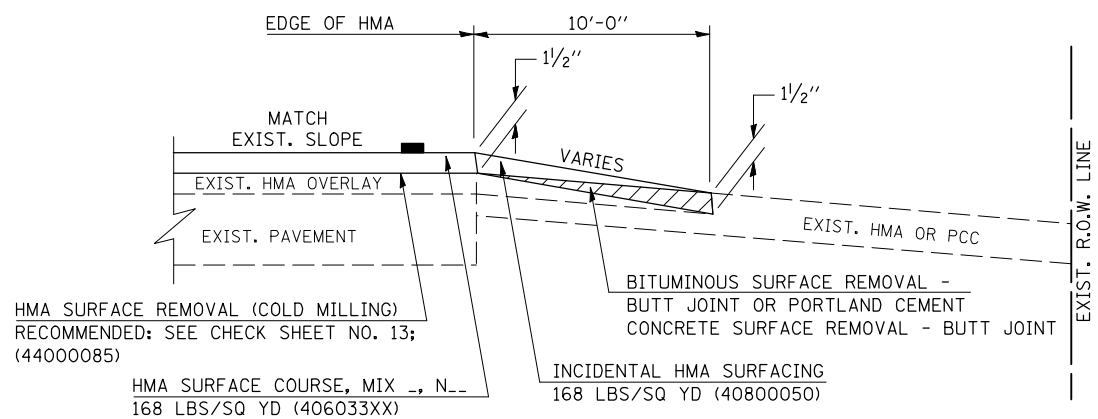


EXISTING AGGREGATE ENTRANCE

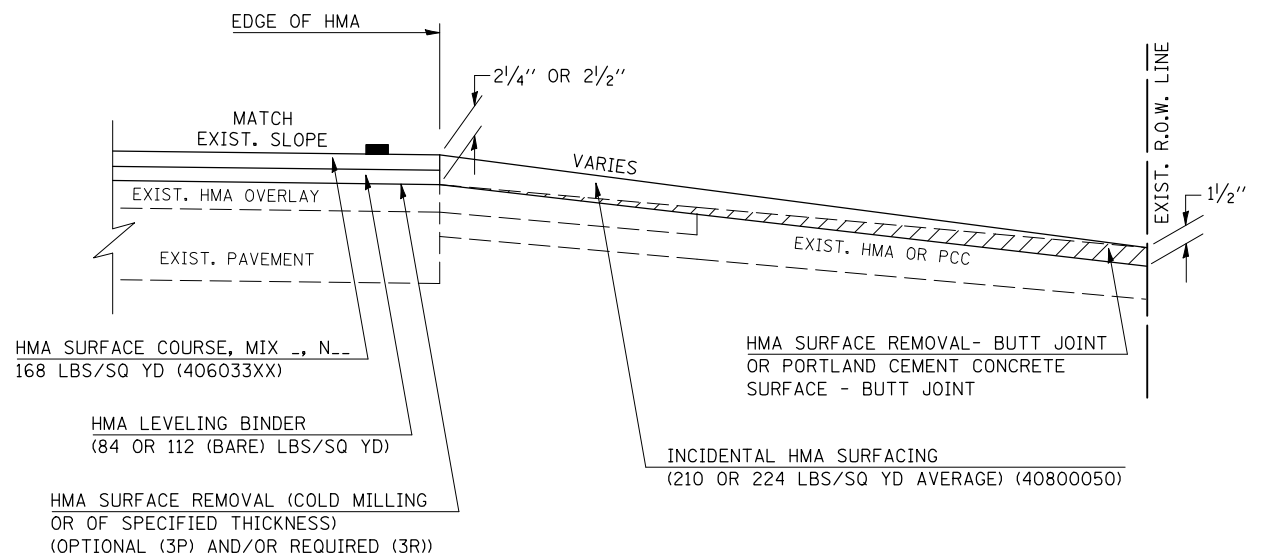
"3P" OR "3R" IMPROVEMENTS (POLICY RESURFACING; BDE 53-4.02; 2 1/4" OR 2 1/2" ON BARE CONCRETE)



EXISTING AGGREGATE ENTRANCE



EXISTING HMA OR PCC ENTRANCE



EXISTING HMA OR PCC ENTRANCE

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 5 DETAIL NO. 40800050C

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		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

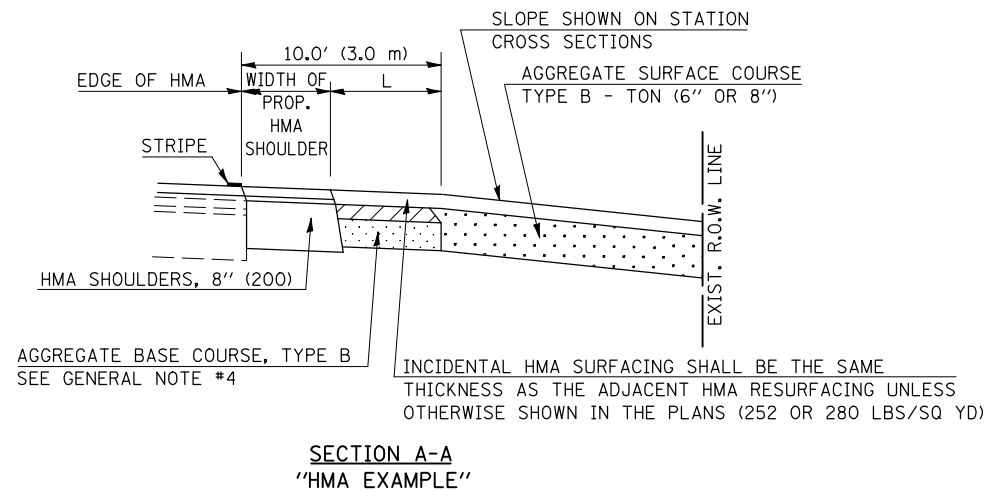
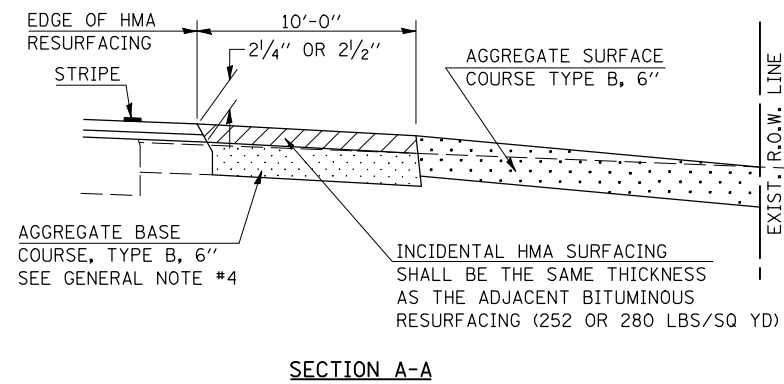
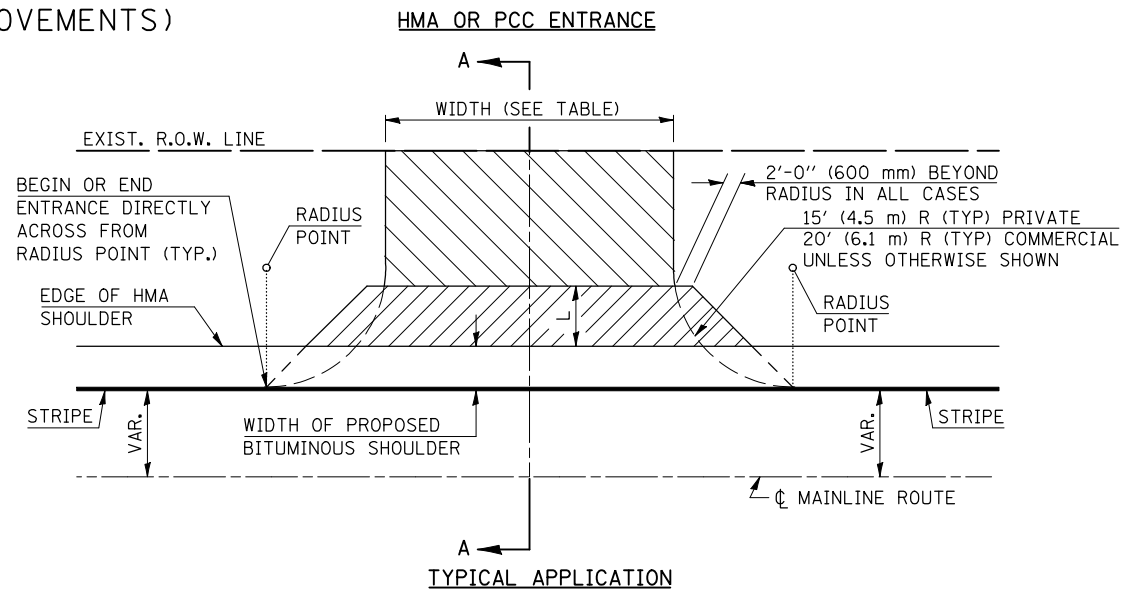
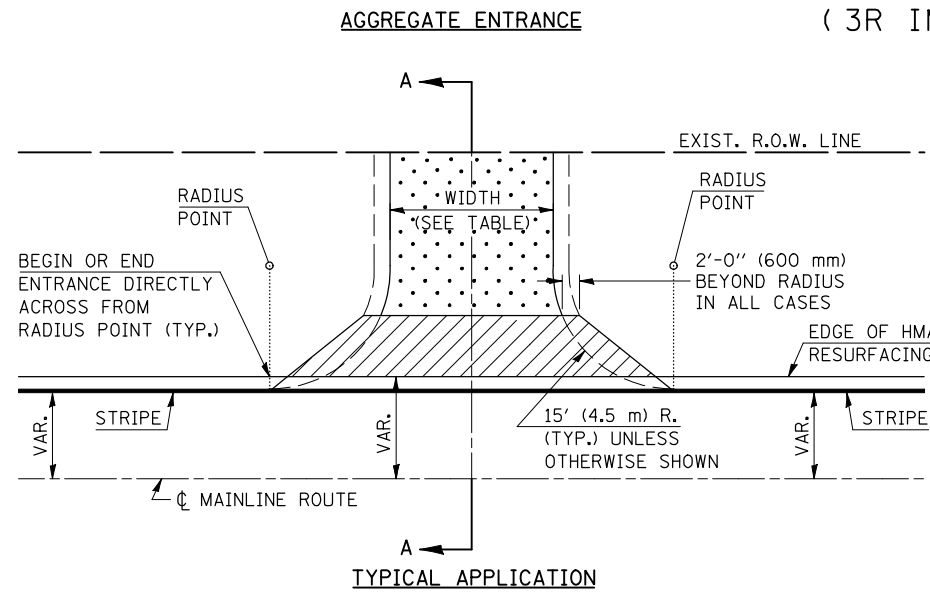
**PRIVATE AND COMMERCIAL ENTRANCES
(NONCOMMERCIAL AND COMMERCIAL RURAL)**

SCALE: NA SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	57
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 90875	

PROJECTS WITH RECONSTRUCTION

(3R IMPROVEMENTS)



GENERAL NOTES

1. THE EXISTING SURFACE SHALL BE PREPARED IN ACCORDANCE WITH SECTION 408 OF THE STANDARD SPECIFICATIONS.
2. ANY NECESSARY WORK BEHIND THE HMA SHOULDER OR THE INCIDENTAL HMA SURFACING SHALL BE AS SHOWN IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.
3. EARTH EXCAVATION REQUIRED FOR THE CONSTRUCTION OF THE AGGREGATE SURFACE COURSE SHALL BE INCLUDED IN THE COST OF AGGREGATE SURFACE COURSE.
4. AGGREGATE BASE COURSE, TYPE B, 6" (150 mm) MIN. SHALL BE USED WHERE IN THE OPINION OF THE ENGINEER THERE IS NOT SUFFICIENT BASE MATERIAL FOR THE PROPOSED ENTRANCES. THIS MATERIAL SHALL GENERALLY BE USED TO WIDEN ANY EXISTING RETURN OR TO CONSTRUCT NEW ENTRANCES WHERE NONE NOW EXISTS.
5. THE AGGREGATE BASE COURSE SHALL BE CONSTRUCTED 12" (300 mm) WIDER THAN THE SURFACE DIMENSIONS AS SHOWN ABOVE.
6. EXISTING FIELD ENTRANCES OF AGGREGATE OR EARTH WITH NO HMA APRON SHALL NOT RECEIVE A NEW HMA APRON WITHOUT PROPER APPROVAL THROUGH THE BUREAU OF OPERATIONS "POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS".
7. TO ASSURE APPROPRIATE ACCESS POLICIES ARE FOLLOWED ALL NEW ACCESS SHALL BE APPLIED FOR THROUGH THE BUREAU OF OPERATIONS PERMIT APPLICATION PROCESS. PLAN PREPARATION MEMORANDUMS 40-09 AND 40-11 ALONG WITH DISTRICT CONSTRUCTION MEMORANDUM 03/14 DISCUSS THIS PROCEDURE.

RURAL ENTRANCE DESIGN STANDARDS (PPM 40-09)														
DESIGN ELEMENT	NEW CONSTRUCTION & 3R with RECONSTRUCTION						3R w/out RECONSTRUCTION, 3P, SMART & CM							
	NONCOMMERCIAL						NONCOMMERCIAL							
	PRIVATE & FIELD			FIELD W/ FARM IMPLEMENTS			COMMERCIAL			PRIVATE & FIELD			COMMERCIAL	
	min.	des.	max.	min.	max.	min.	des.	max.	min.	des.	max.	min.	des.	max.
SURFACE WIDTH (FT)	12	16	24	24	30	1 LANE, 1 WAY			1 LANE, 1 WAY			1 LANE, 1 WAY		
						14	16	24						
RADIUS (FT)	15	25	40	30		2 LANE, 2 WAY			2 LANE, 2 WAY			2 LANE, 2 WAY		
						24	30	35						
SHOULDER WIDTH (FT)	2	2		2		1	3		resurface existing configuration; existing hma or pcc entrances shall have "butt joints" constructed; existing aggregate or earth entrances shall have the continuation of aggregate shoulders placed behind them					
SHOULDER SLOPE (%)	2	4	6	4		2	4	6						
ENTRANCE GRADE (%)	0	2 to 5	10 or 12	2 to 5	10 or 12	0	2 to 5	8 or 10						
SIDE SLOPE (FT)	1:10	1:6	1:4	1:6	1:4	1:10	1:6	1:4						
SURFACE TYPE														
INCIDENTAL HMA SURFACING (INCH)		2		2		3 or 4			taper from hma resurfacing thickness (2 1/2", 2 1/4" or 1 1/2") to 1 1/2" for "butt joints" and to minimize aggregate shoulder					
AGGREGATE SURFACE COURSE, TYPE B (INCH)		6		6		8			if applicable use items: Preparation of Base & Aggregate Base Repair; see PPM 30-02					
PCC DRIVEWAY PAVEMENT (INCH)		6							6 or 8					

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 5 DETAIL NO. 4080050C

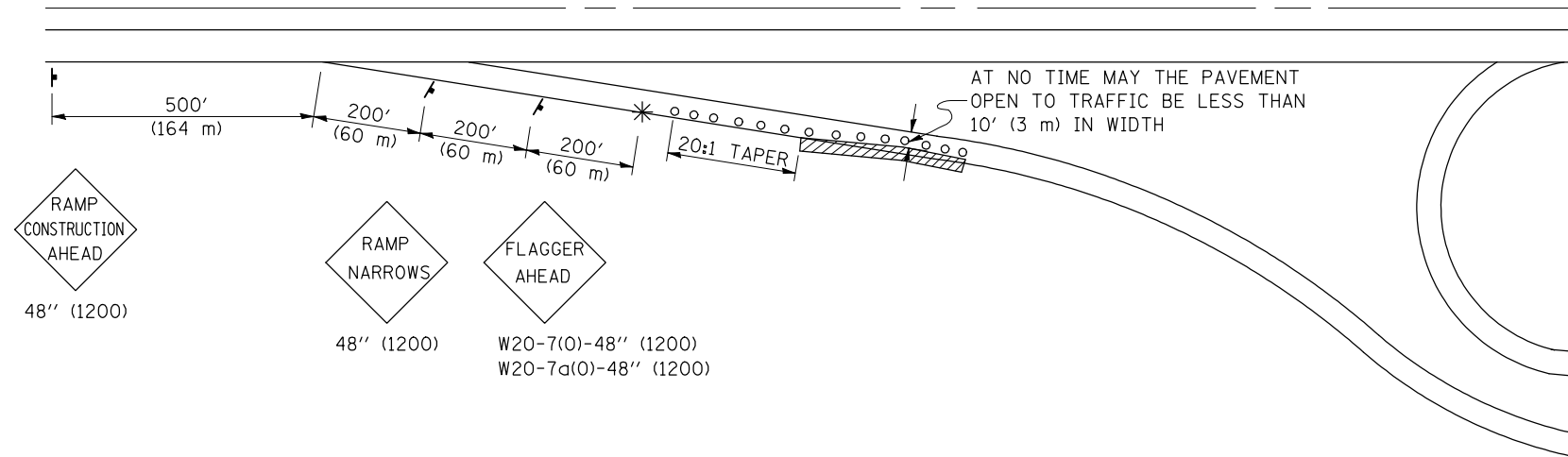
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	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED - 05/02/08 KJT
	PLOT DATE = 12/17/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRIVATE AND COMMERCIAL ENTRANCES (NONCOMMERCIAL AND COMMERCIAL RURAL)			
SCALE: NA	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	58
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		CONTRACT NO. 90875

**APPLICATION NO. 1
DAY OPERATION ONLY
PARTIAL RAMP CLOSURE**



GENERAL NOTES

CONSTRUCTION OPERATIONS SHALL BE CONFINED TO AN AREA NARROW ENOUGH THAT A MINIMUM OF 10' (3 m) OF PAVEMENT SHALL BE OPEN TO TRAFFIC AT ALL TIMES.

FULL WIDTH PAVEMENT ON THE RAMPS SHALL BE OPEN TO TRAFFIC AT NIGHT.

WHEN NO WORK IS BEING PERFORMED, THE FLAGGER WILL NOT BE REQUIRED. IF THE FLAGGER IS NOT PRESENT, THE FLAGGER SIGNS SHALL BE REMOVED OR COVERED.

ALL SIGNS SHALL BE POST MOUNTED IF WORK IN THE AREA EXCEEDS FOUR DAYS OF DAYTIME OPERATIONS.

LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.

ALL VEHICLES, EQUIPMENT, WORKERS (EXCEPT FLAGGER) AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE DISTRICT ENGINEER.

SYMBOLS

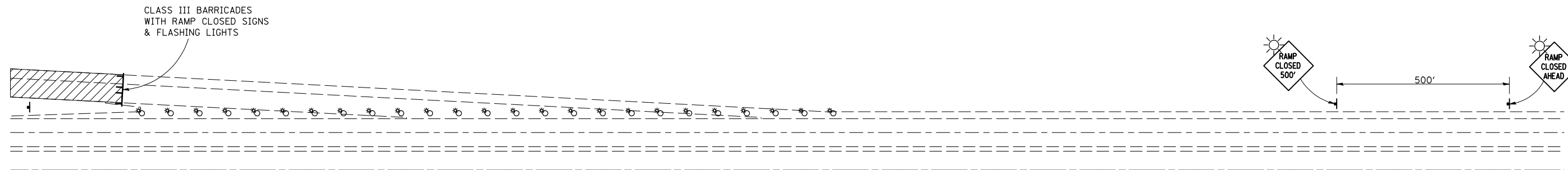
- (APPLICATION NO. 1) TYPE I OR II BARRICADES OR DRUMS @ 50' (15 m) CTS.
- ⊗ (APPLICATION NO. 2) TYPE I OR II BARRICADES OR DRUMS @ 25' (7.5 m) CTS. W/STEADY BURNING LIGHTS
- * (APPLICATION NO. 1) FLAGGER PLACED AS DIRECTED BY THE ENGINEER
- † SIGN ON PORTABLE OR PERMANENT SUPPORT
- ▨ WORK AREA

TYPICAL APPLICATIONS

- PAVEMENT PATCHING
- PIPE UNDERDRAINS
- HMA RESURFACING

Traffic Control for all ramps shall be in accordance with the appropriate application of plan detail TRAFFIC CONTROL FOR RAMPS and will not be paid for separately, but shall be included in the contract lump sum price for Traffic Control and Protection For Temporary Detour.

**APPLICATION NO. 2
RAMP CLOSURE**



GENERAL NOTES

STEADY BURN LIGHTS ARE NOT REQUIRED FOR DAYTIME OPERATIONS.

CONTACT THE DISTRICT TRAFFIC OPERATIONS ENGINEER AT 217-465-4181, ONE WEEK PRIOR TO CLOSING THE RAMP.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = dawsonkb	DESIGNED -	REVISED - 11/06
ct:\pw\work\PWIDOT\DAWSONKB\d0176650\0590875-54-63-District5Standards.dgn		DRAWN -	REVISED -
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/17/2009	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL FOR RAMPS

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

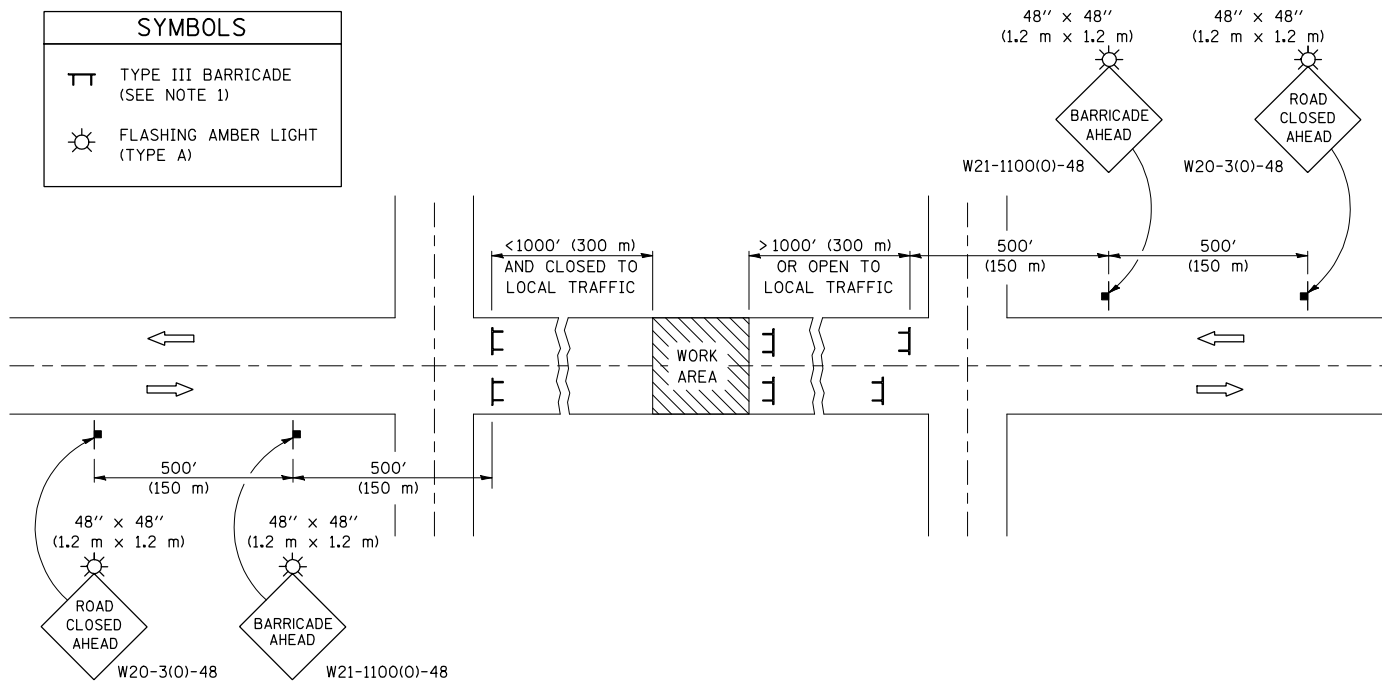
DISTRICT 5 DETAIL NO. 70103710

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	59
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 90875	

ROAD CLOSURE

SIDEROAD / STREET CLOSURE

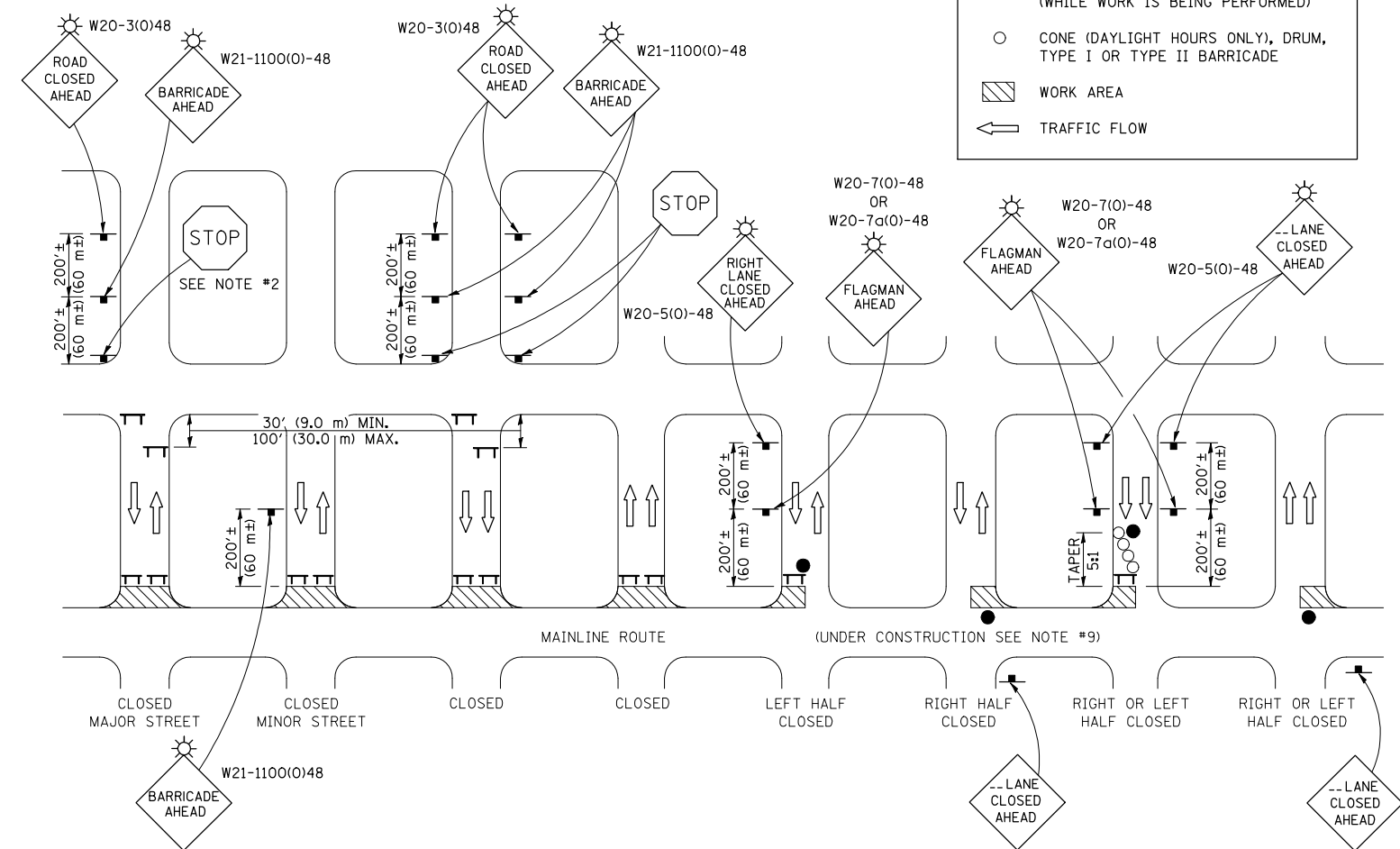
SYMBOLS	
	TYPE III BARRICADE (SEE NOTE 1)
	FLASHING AMBER LIGHT (TYPE A)



GENERAL NOTES

- TYPE III BARRICADES SHALL BE AS SHOWN ON STANDARD 701901 "TYPICAL APPLICATIONS OF TYPE III BARRICADES CLOSING A ROAD". EACH TYPE III BARRICADE SHALL HAVE TWO FLASHING AMBER LIGHTS MOUNTED ABOVE IT.
- IF THE ROAD IS OPEN TO LOCAL TRAFFIC OR EXCEEDS 1000' (300 m), ANOTHER SET OF TYPE III BARRICADES, EQUIPPED AS IN NOTE 1 ABOVE, SHALL BE PLACED AT EACH END OF THE WORK AREA.
- WHEN A STOP CONDITION EXISTS, NO SIGNS ARE REQUIRED IN ADVANCE OF THE "STOP" SIGN WHEN THE ROAD IS CLOSED WITHIN 100' (30 m) OF THE INTERSECTION.
- STANDARD 701901 SHALL APPLY FOR THE PLACEMENT & DESIGN OF TYPE III BARRICADES.
- IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON AN NCHRP 350 TEMPORARY SIGN SUPPORT DIRECTLY IN FRONT OF THE BARRICADE.
- REFLECTORIZED STRIPING SHALL APPEAR ON BOTH SIDES OF THE TYPE III BARRICADES IF ROAD IS OPEN TO LOCAL TRAFFIC.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- A MINIMUM OF TWO FLASHING LIGHTS SHALL BE USED AT NIGHT ON EACH APPROACH IN ADVANCE OF THE WORK AREA. FLASHING LIGHTS SHALL BE INSTALLED ABOVE THE FIRST TWO SIGNS IN THE SERIES.
- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.
- FORMS BT. 725 AND BT. 726 ARE REQUIRED.
- WHEN A SIDEROAD INTERSECTS THE HIGHWAY ON WHICH WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC DEVICES SHALL BE ERECTED AND PROVIDED AS DIRECTED BY THE ENGINEER.
- AN ADDITIONAL SIGN MAY BE REQUIRED AT A MAJOR INTERSECTING ROAD IN ADVANCE OF THE CLOSURE. THE ADDITIONAL SIGN SHALL GIVE THE DISTANCE TO THE BARRICADE IN MILES OR FRACTIONS OF A MILE.

SYMBOLS	
	TYPE III BARRICADE (SEE NOTE)
	FLASHING LIGHT
	FLAGGER WITH TRAFFIC CONTROL SIGN (WHILE WORK IS BEING PERFORMED)
	CONE (DAYLIGHT HOURS ONLY), DRUM, TYPE I OR TYPE II BARRICADE
	WORK AREA
	TRAFFIC FLOW



GENERAL NOTES

- TYPE III BARRICADES SHALL BE AS SHOWN ON "TYPICAL APPLICATIONS OF TYPE III BARRICADES CLOSING A ROAD". EACH TYPE III BARRICADE SHALL HAVE TWO FLASHING AMBER LIGHTS MOUNTED ABOVE IT.
- WHERE A STOP CONDITION EXISTS, AS SHOWN ABOVE, WARNING SIGNS MAY BE OMITTED IN ADVANCE OF THE "STOP" SIGN.
- STANDARD 701901 SHALL APPLY FOR THE PLACEMENT & MANUFACTURE OF TYPE III BARRICADES.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- ONE FLASHING LIGHT IS REQUIRED ABOVE EACH ADVANCE WARNING SIGN DURING HOURS OF DARKNESS.
- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.
- FORMS BT 725 AND BT 726 ARE REQUIRED.
- THE MAINLINE ROUTE TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE PLANS, SPECIAL PROVISIONS AND STANDARD SPECIFICATIONS.
- THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE VARIOUS PAY ITEMS INVOLVING THE RECONSTRUCTION OF ALL APPLICABLE SIDE STREETS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = dawsonkb	DESIGNED -	REVISED - 11/06
et:\pw\work\PWIDOT\DAWSONKB\d0176650\d01875-54-63-District5Standards.dgn		DRAWN -	REVISED - 12/07
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/17/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

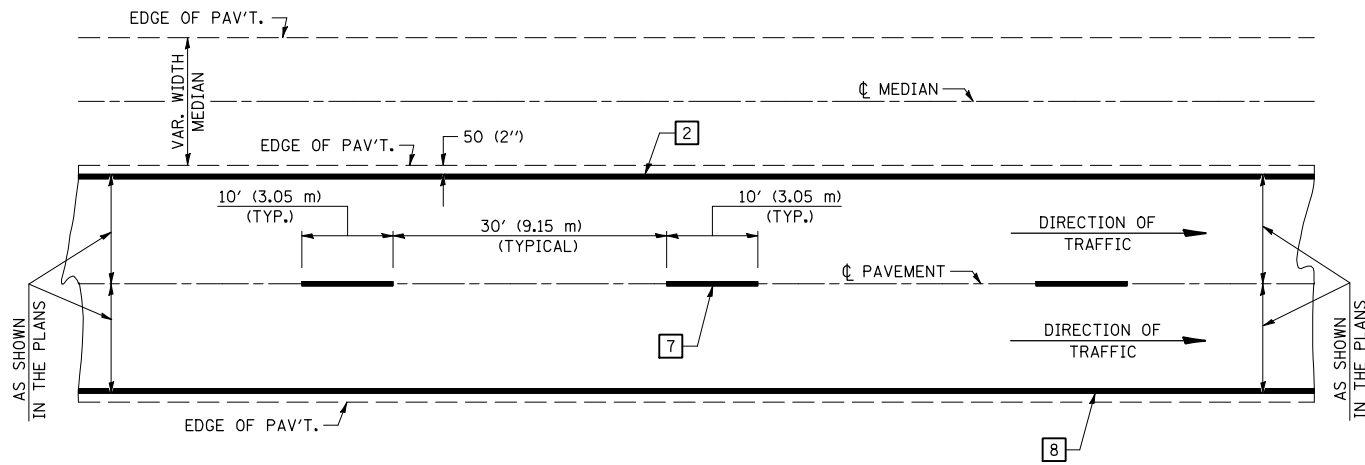
TRAFFIC CONTROL & PROTECTION DEVICES
(ROAD & SIDEROAD/STREET CLOSURES)

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

DISTRICT 5 DETAIL NO. 7020000

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	60
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 90875	

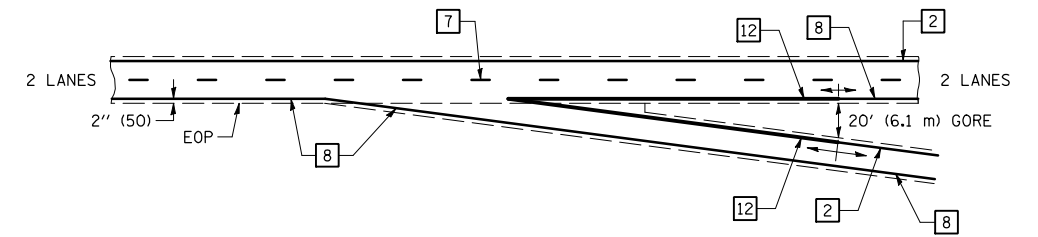
CENTERLINE INTERSTATE OR MULTI-LANE TWO WAY DIVIDED HIGHWAY



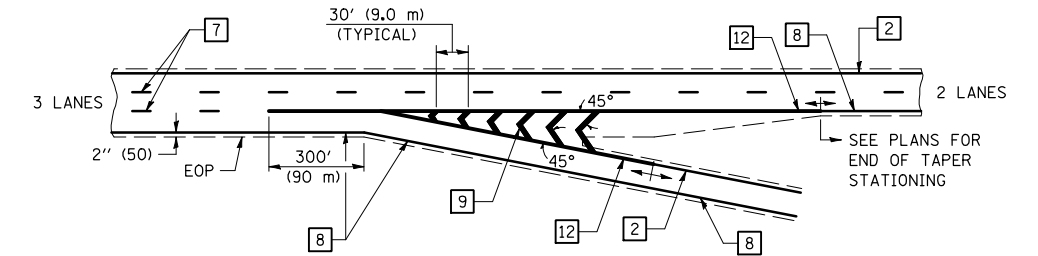
NOTE: PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.

NOTE: SEE ARTICLES 780.04 & 781.03 FOR LOCATION OF STRIPES AND MARKERS RELATIVE TO EDGES OR JOINTS.
FOR RAISED REFLECTIVE PAVEMENT MARKERS, REFER TO STANDARD 781001.

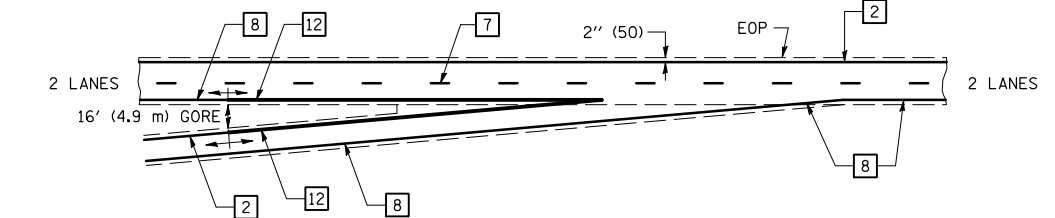
TYPICAL EXIT RAMP TERMINAL



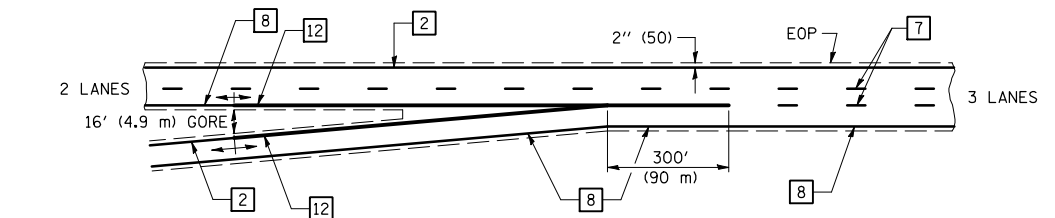
EXIT RAMP TERMINAL with EXCLUSIVE (auxiliary) LANE



TYPICAL ENTRANCE RAMP TERMINAL

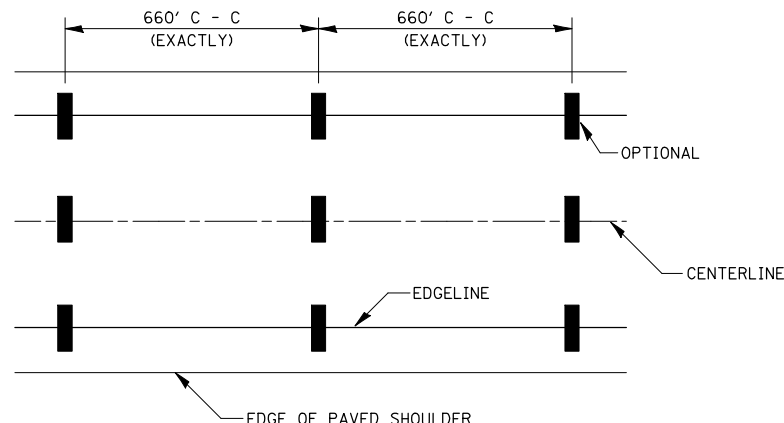


ENTRANCE RAMP TERMINAL with EXCLUSIVE LANE

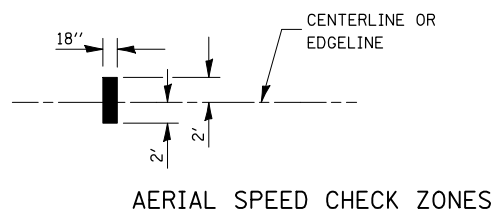


TYPICAL PAVEMENT MARKING LEGEND

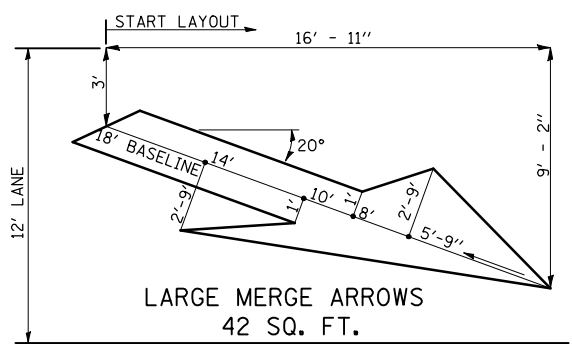
- 1 4" (100) SKIP-DASH (YELLOW)
 - 2 4" (100) SOLID (YELLOW)
 - 3 12" (300) DIAGONAL (YELLOW)
 - 4 4" (100) DOUBLE YELLOW (NARROW)
 - 5 RESERVED
 - 6 RESERVED
 - 7 4" (100) SKIP-DASH (WHITE)
 - 8 4" (100) SOLID (WHITE)
 - 9 12" (300) DIAGONAL (WHITE)
 - 10 6" (150) SOLID (WHITE)
 - 11 24" (600) STOP BAR (WHITE)
 - 12 8" (200) SOLID (WHITE)
 - 13 4" (100) LANE LINE EXTENSIONS (WHITE)
-
-



IT WILL BE NECESSARY TO HAVE A REPRESENTATIVE OF THE STATE POLICE PRESENT SO THAT THE ACCURACY OF MEASUREMENT CAN BE ATTESTED TO IN COURT.



AERIAL SPEED CHECK ZONES



Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 5 DETAIL NO. 7800BBBB

FILE NAME =	USER NAME = dawsonkb	DESIGNED -	REVISED - 12/06
ct:\pw\work\PWID01\DAWSONKB\d0176650\0875-54-63-District5Standards.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING (INTERSTATE & MULTI-LANE APPLICATIONS)

SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	61
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 90875	

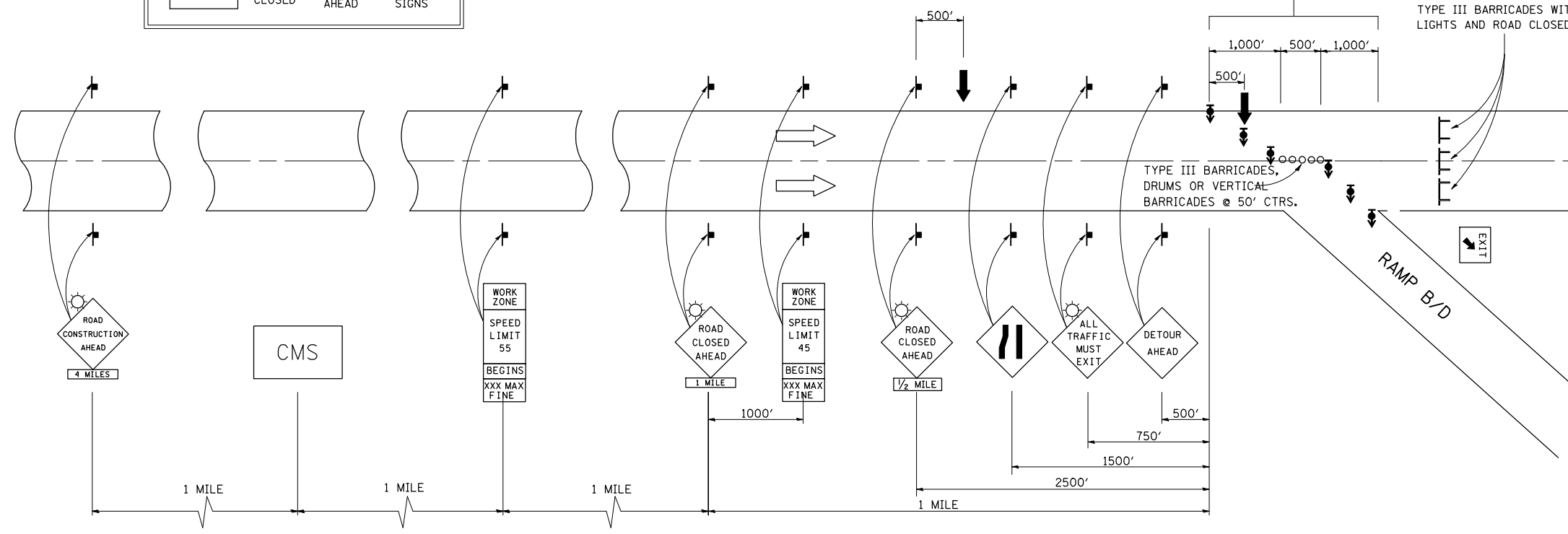
INTERSTATE DETOUR USING ENTRANCE AND EXIT RAMP

A CHANGEABLE MESSAGE SIGN SHALL BE USED IN ADVANCE OF SIGNING TO WARN OF CLOSURE

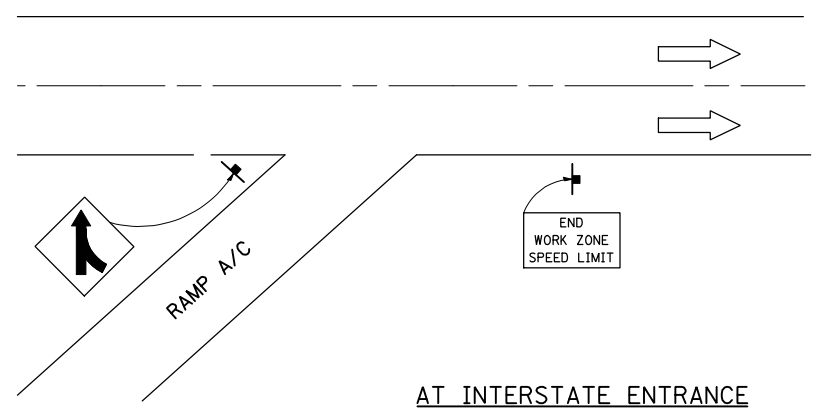
CMS ROAD CLOSED 3 MILES AHEAD FOLLOW DETOUR SIGNS

DIRECTIONAL BARRICADES WITH STEADY BURNING LIGHTS AT 50' (15 m) CTS. IN TAPER. DRUMS WITH STEADY BURNING LIGHTS IN TANGENT (BETWEEN TAPERS) AT 100' (30 m) CTS.

FOR OFF PEAK CLOSURES LESS THAN 24 HOURS, THE TANGENT SECTION MAY BE OMITTED BY APPROVAL OF THE ENGINEER.



SYMBOLS	
	ARROW BOARD
	SIGN
	DRUM W/STEADY BURNING LIGHT
	TYPE III BARRICADE
	DIRECTIONAL BARRICADE W/STEADY BURNING LIGHT
	LIGHTED FLAGGER STATIONS



Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 5 DETAIL NO. X7011005

FILE NAME =	USER NAME = dawsonkb	DESIGNED -	REVISED - 12/06
ct:\pw\work\PWIDOT\DAWSONKB\d0176650\0590875-54-63-District5Standards.dgn		DRAWN -	REVISED -
	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/17/2009	DATE -	REVISED -

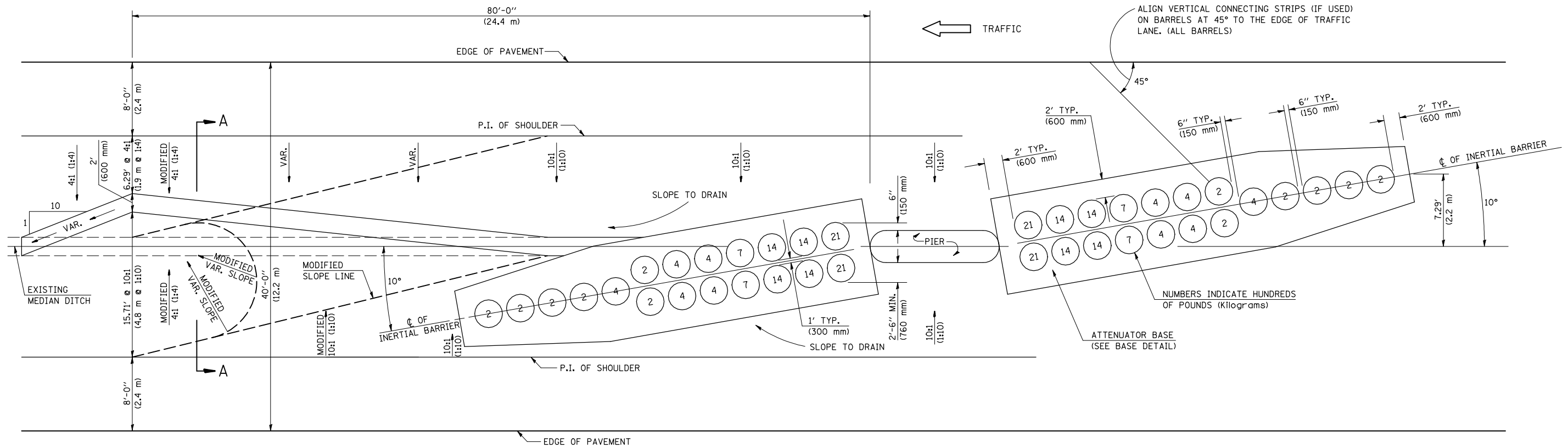
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERSTATE DETOUR USING ENTRANCE AND EXIT RAMP

SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	62
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
CONTRACT NO. 90875				

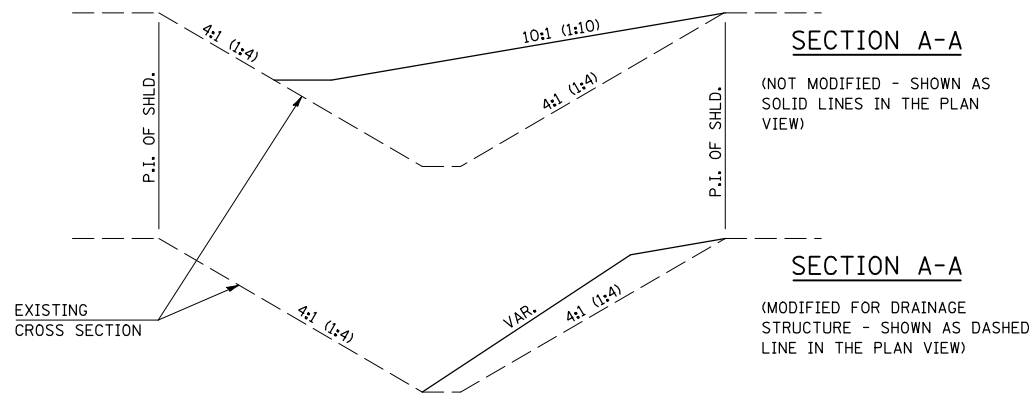
70 MPH (110 km/h) DESIGN - 40' (12 m) MEDIAN



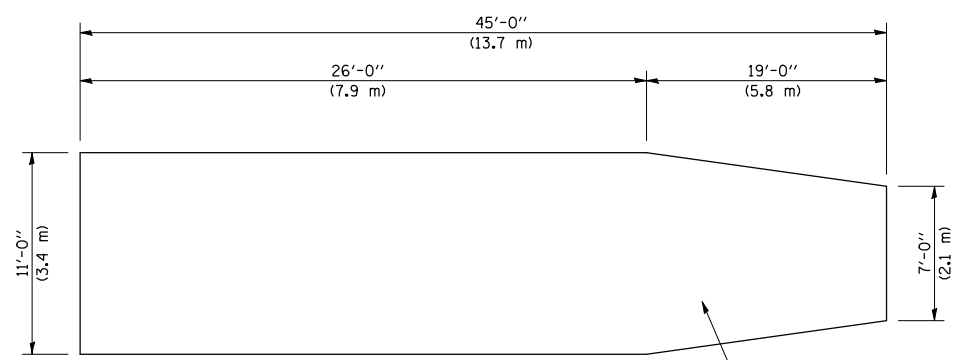
ALIGN VERTICAL CONNECTING STRIPS (IF USED) ON BARRELS AT 45° TO THE EDGE OF TRAFFIC LANE. (ALL BARRELS)

NUMBERS INDICATE HUNDREDS OF POUNDS (Kilograms)

ATTENUATOR BASE (SEE BASE DETAIL)



GRADING AND SHAPING DETAIL



BASE DETAIL

GENERAL NOTES

1. ALL 10:1 (1:10) SLOPES SHOWN ON THIS DETAIL SHALL BE CONSTRUCTED 10:1 (1:10) OR FLATTER.
2. ANY EXISTING DRAINAGE STRUCTURES LOCATED WITHIN THE 80' (24.4 m) WORKING AREA SHALL BE MODIFIED OR LEFT IN PLACE AS SHOWN ON THE PLANS. WHERE THE EXISTING DRAINAGE STRUCTURES ARE TO REMAIN IN PLACE, THE SLOPES ARE TO BE CONSTRUCTED AS SHOWN AS MODIFIED SLOPES ON THIS DETAIL AND AS DIRECTED BY THE ENGINEER.
3. THE SLOPES AS SHOWN ON THIS DETAIL SHALL APPLY TO BOTH ENDS OF THE BRIDGE PIERS.
4. THE LENGTH X WIDTH OF MODULE LAYOUT IS 41.0' x 7.0' : 19 MODULES - 14,400 LBS. (12.5 m x 2.1 m : 19 MODULES - 6532 kg).
5. IN AREAS OF 10:1 (1:10) SLOPES PRECEDING THE ATTENUATOR IN THE MEDIAN INSTALLATION, FOUR WOOD POSTS SHALL BE PLACED AT 5' (1.5 m) INTERVALS IN THE MEDIAN ϕ . SEE SPECIAL PROVISIONS.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 5 DETAIL NO. Z0030150B

FILE NAME =	USER NAME = dawsonkb	DESIGNED -	REVISED - 11/06
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	PLOT SCALE = 40.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/17/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IMPACT ATTENUATORS (NON-REDIRECTIVE) TEST LEVEL 3

SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6HB-5)BR	CHAMPAIGN	63	63
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
CONTRACT NO. 90875				