

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PROPOSED
HIGHWAY PLANS**

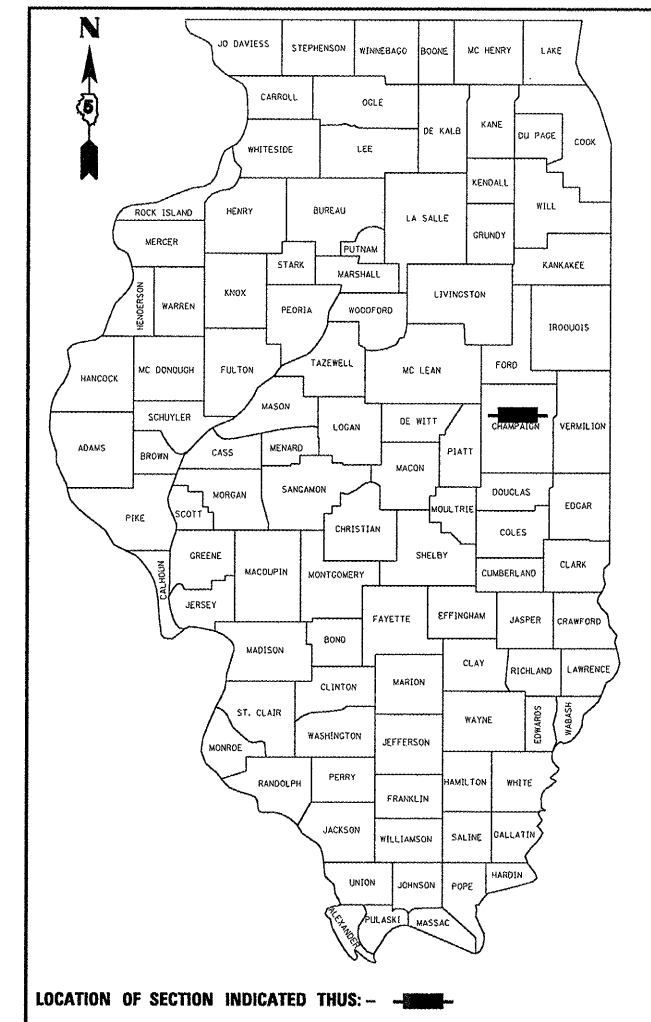
FAI ROUTE 74 (I-74)
SECTION (10-6)HBR-5
PROJECT IM-074-6(156)187
BRIDGE REPLACEMENT
CHAMPAIGN COUNTY

C-95-007-09
1.0 MILE N.W. OF MAYVIEW

FOR INDEX OF SHEETS
SEE SHEET NO. 2

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)HBR-5	CHAMPAIGN	63	1
ILLINOIS CONTRACT NO. 70750				

D-95-007-09

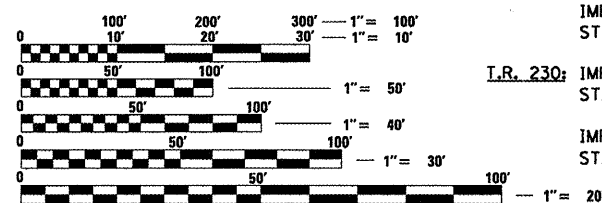


DESIGN DESIGNATION

T.R. 230 SPEED LIMIT: 55 MPH ADT = 175 (2009) PV = 97.0% SU = 2.0% MU = 1.0%	I-74 SPEED LIMIT: 65 MPH AD = 30,500 (2009) PV = 69.0% SU = 4.2% MU = 26.8%
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HIGHWAY CLASSIFICATION

RURAL LOCAL INTERSTATE



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
URBANA AND
ST. JOSEPH TOWNSHIP

PROJECT ENGINEER: JASON W. STULTS
PROJECT MANAGER: RUSTIN KEYS 217-465-4181

CONTRACT NO. 70750

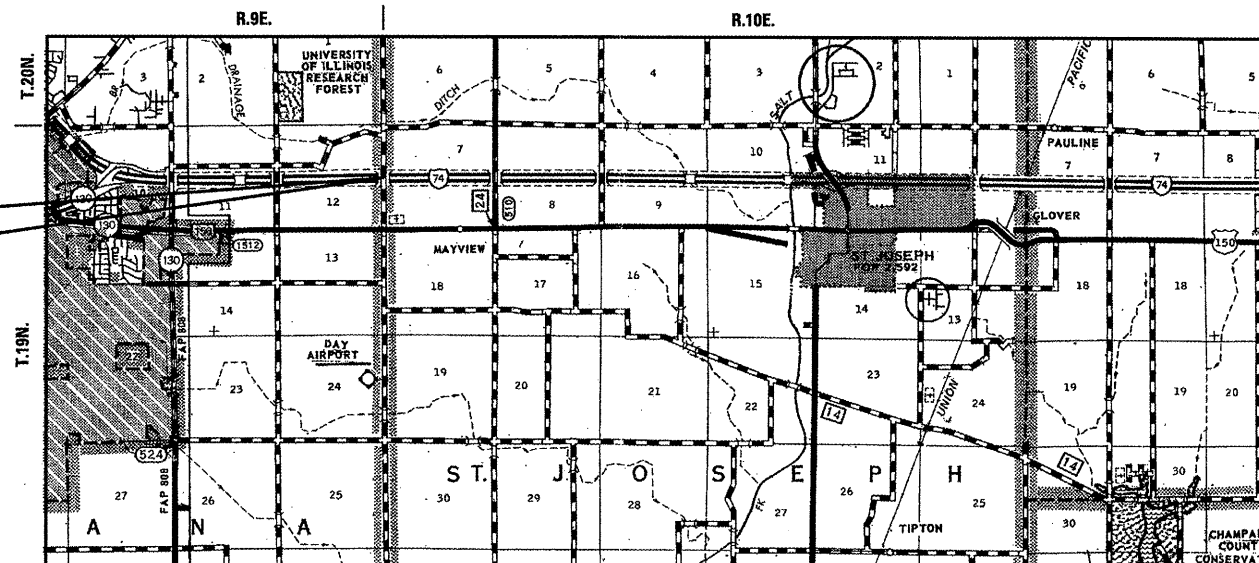
SECTION (10-6)HBR-5
PROPOSED S.N. 010-0288
STATION 536+96.70
BRIDGE REPLACEMENT
OVER I-74

I-74; IMPROVEMENT BEGINS
STA. 535+00.00

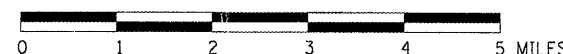
IMPROVEMENT ENDS
STA. 540+00.00

T.R. 230; IMPROVEMENT BEGINS
STA. 40+00.00

IMPROVEMENT ENDS
STA. 60+00.00



LOCATION MAP



GROSS LENGTH = 500.00 FT. = 0.095 MILE
NET LENGTH = 500.00 FT. = 0.095 MILE



1-28-10
MARK A. REITZ, P.E. #062-047531 DATE
EXPIRES: 11/30/2011
HURST-ROSCHÉ ENGINEERS, INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED 2/1 2010
Deputy Director of Highways, Region Three Engineer
March 19, 2010
Scott E. Slitt, P.E. / RD
Acting ENGINEER OF DESIGN AND ENVIRONMENT
March 19, 2010
Christine M. Reed / RD
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

HURST-ROSCHÉ ENGINEERS, INC.
HILLSBORO, ILLINOIS 62049
(217)532-3959 FAX (217)532-3212

HR
HURST-ROSCHÉ
ENGINEERS, INC.

HURST-ROSCHE ENGINEERS, INC.
HILLSBORO, ILLINOIS 62049
(217)532-3959 FAX (217)532-3212

HURST
HURST - ROSCHE
ENGINEERS, INC.

C.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.-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 SAYING BY THE ENGINEER SHALL BE PROTECTED DURING CLEARING AND SUBSEQUENT CONSTRUCTION OPERATIONS.

G.N.-250C (SPL.)
TEMPORARY EROSION CONTROL SEEDING IS INCLUDED IN THIS CONTRACT TO SEED
NEW EARTH SHOULDERS DURING TIME PERIODS WHEN PERMANENT SEEDING IS NOT ALLOWED.
SOME OR ALL OF THE SPECIAL TEMPORARY EROSION CONTROL SEEDING WILL BE DELETED
IF IT IS POSSIBLE TO PLACE PERMANENT SEEDING ON EARTH SHOULDERS AT THE TIME OF
THEIR COMPLETION.

TYPE OF CONSTRUCTION	BITUMINOUS MATERIAL	APPLICATION RATE	AGGREGATE	APPLICATION RATE
(*40300100) PRIME COAT (HARD SURFACE)		0.05 gal/yd2	FA-1 or FA-2	3lb/yd2
(*40300100) PRIME COAT (AGGREGATE SURFACE)		0.25 gal/yd2*	FA-1 or FA-2	4lb/yd2
A-3 (1ST COVER COAT)		0.32 gal/yd2	CA-14	25lb/yd2
A-3 (2ND COVER COAT)		0.45 gal/yd2	CA-14	25lb/yd2
A-3 (SEAL COAT)		0.35 gal/yd2	CA-16	19lb/yd2

*NOTE: DO NOT PUDDLE PRIME.

G.N.-406H

LOCATION(S):	I-74	I-74	I-74	I-74
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 SHOULDERS TOP LIFT L75"	HOT-MIX ASPHALT SHOULDERS BOTTOM LIFTS (4.75"
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

C.N.-406

G.N.-406.05b

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.-531

G.N.-703A

G.N. - 781

G.N.-1004.01

G.N.-20038

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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HURST-ROSCHÉ ENGINEERS, INC.
HILLSBORO, ILLINOIS 62049
(217)532-3959 FAX (217)532-3212



SUMMARY OF QUANTITIES				FAI RURAL 90% FEDERAL 10% STATE
CODE NO.	ITEM	UNIT	TOTAL	X271-2A
20100110	TREE REMOVAL 6 TO 15 UNITS DIAMETER	UNIT	15	15
20100210	TREE REMOVAL 10VER 15 UNITS DIAMETER	UNIT	20	20
20200100	EARTH EXCAVATION	CU YD	505	505
20400800	FURNISHED EXCAVATION	CU YD	10450	10450
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	111	111
25000210	* SEEDING, CLASS 2A	ACRE	3.0	3.0
25000400	* NITROGEN FERTILIZER NUTRIENT	POUND	270	270
25000500	* PHOSPHORUS FERTILIZER NUTRIENT	POUND	270	270
25000600	* POTASSIUM FERTILIZER NUTRIENT	POUND	270	270
25100115	* MULCH, METHOD 2	ACRE	0.5	0.5
25100630	* EROSION CONTROL BLANKET	SQ YD	12163	12163
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	300	300
28000305	TEMPORARY DITCH CHECKS	FOOT	48	48
28000400	PERIMETER EROSION BARRIER	FOOT	3600	3600
28000500	INLET AND PIPE PROTECTION	EACH	4	4
35100700	AGGREGATE BASE COURSE, TYPE A 8"	SQ YD	4200	4200
40300100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1050	1050
40300300	BITUMINOUS MATERIALS (COVER AND SEAL COATS)	GALLON	4704	4704
40300500	COVER COAT AGGREGATE	TON	105	105
40300600	SEAL COAT AGGREGATE	TON	40	40
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	578	578
40600300	AGGREGATE (PRIME COAT)	TON	13	13
40600990	TEMPORARY RAMP	SQ YD	356	356
40603245	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N105	TON	723	723
40603575	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N105	TON	263	263
44000198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	4444	4444
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	67	67
48203100	HOT-MIX ASPHALT SHOULDERS	TON	669	669
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1
50157300	PROTECTIVE SHIELD	SQ YD	404	404
50200100	STRUCTURE EXCAVATION	CU YD	226	226

-- SPECIALITY ITEM

SUMMARY OF QUANTITIES				FAI RURAL 90% FEDERAL 10% STATE
CODE NO.	ITEM	UNIT	TOTAL	X271-2A
50300225	CONCRETE STRUCTURES	CU YD	143.7	143.7
50300255	CONCRETE SUPERSTRUCTURE	CU YD	341.5	341.5
50300260	BRIDGE DECK GROOVING	SQ YD	815	815
50300280	CONCRETE ENCASEMENT	CU YD	19.4	19.4
50300300	PROTECTIVE COAT	SQ YD	1135	1135
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	1
50500505	STUD SHEAR CONNECTORS	EACH	1908	1908
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	98325	98325
50800515	BAR SPLICERS	EACH	62	62
51100100	SLOPE WALL 4 INCH	SQ YD	348	348
51201600	FURNISHING STEEL PILES HP12x53	FOOT	1328	1328
51201900	FURNISHING STEEL PILES HP14X89	FOOT	1656	1656
51202305	DRIVING PILES	FOOT	2984	2984
51203600	TEST PILE STEEL HP12x53	EACH	2	2
51203900	TEST PILE STEEL HP 14X89	EACH	1	1
51500100	NAME PLATES	EACH	1	1
52100520	ANCHOR BOLTS, 1"	EACH	36	36
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	38	38
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	131	131
61100500	EXPLORATION TRENCH 52" DEPTH	FOOT	400	400
63000001	* STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	1475	1475
63100085	* TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4
63100167	* TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4
63200310	GUARDRAIL REMOVAL	FOOT	2756	2756
63400105	* GUARD POSTS	EACH	8	8
63400205	GUARD POSTS REMOVAL	EACH	8	8
64200105	SHOULDER RUMBLE STRIP	FOOT	2000	2000
66502405	WOVEN WIRE FENCE REMOVAL AND REPLACEMENT	FOOT	255	255
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, STANDARD 701451	L SUM	1	1

-- SPECIALITY ITEM

FILE NAME : u:\190-6199-3-1-230-over-24\dwg\057750-shs-500.dgn	USER NAME : HURST-ROSCHÉ	DESIGNED - JJC	REVISED -
		DRAWN - TWC	REVISED -
		CHECKED - MAR	REVISED -
		DATE - 01-27-10	REVISED -
PLOT SCALE : 1/8"=20' / IN.			
PLOT DATE : 1/28/2010			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N/A SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	110-61HBR-5	CHAMPAIGN	63	3
CONTRACT NO. 70750				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

HURST-ROSCHKE ENGINEERS, INC.
HILLSBORO, ILLINOIS 62049
(217)532-3959 FAX (217)532-3212



SUMMARY OF QUANTITIES				FAT RURAL 90% FEDERAL 10% STATE
CODE NO.	ITEM	UNIT	TOTAL	X271-2A
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	180	180
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2250	2250
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	802	802
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1900	1900
78000200	* THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2000	2000
78003110	* PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 4"	FOOT	250	250
78100100	* RAISED REFLECTIVE PAVEMENT MARKER	EACH	28	28
78200100	* MONODIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH	4	4
78200410	* GUARDRAIL MARKERS, TYPE A	EACH	16	16
78201000	* TERMINAL MARKER - DIRECT APPLIED	EACH	4	4
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	24	24
X0320870	BRACED EXCAVATION	CU YD	132	132
X0323583	SPEED INDICATOR SIGN	CAL DA	360	360
X0323830	DRAINAGE SCUPPER, DS-11	EACH	4	4
X5080600	MECHANICAL SPLICERS	EACH	104	104
X7011005	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	LSUM	1	1
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	70	70
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

* - SPECIALITY ITEM

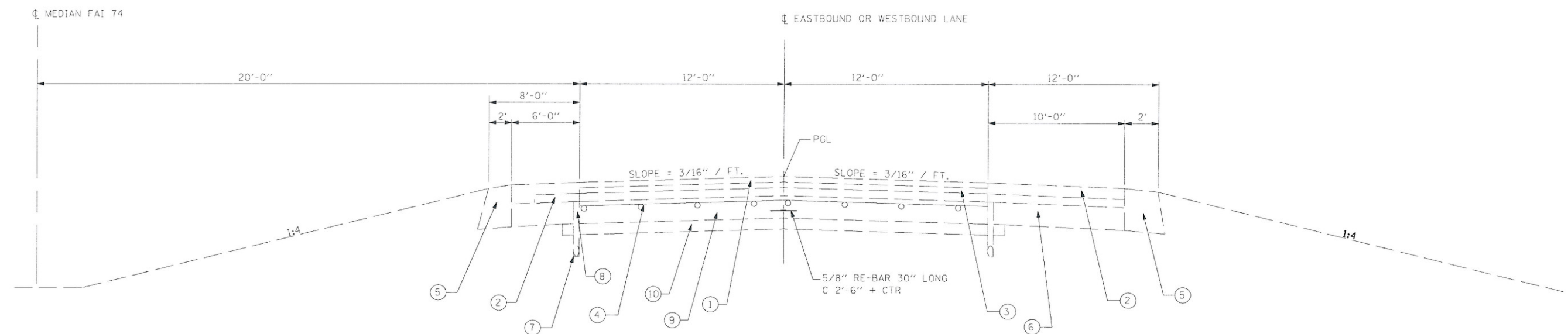
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c:\p\work\PI\DOT\KEYSRB\0164230\0570	50-shr-500.dgn	DRAWN - TWC	REVISED -
	PLOT SCALE = 10.0000' / IN.	CHECKED - MAR	REVISED -
	PLOT DATE = 2/1/2010	DATE - 01-27-10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

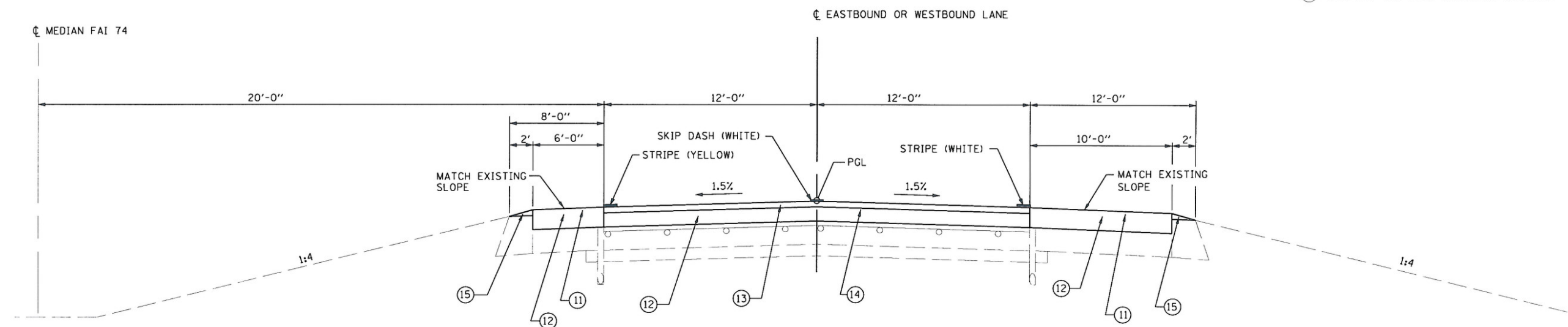
SCALE: N/A SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)HBR-5	CHAMPAIGN	63	4
CONTRACT NO. 70750				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				



I-74 EXISTING TYPICAL SECTION
STA 535+00.00 TO STA 540+00.00

- ① EXISTING HMA SURFACE COURSE MIX E, 1 3/4"
- ② EXISTING HMA SHOULDERS
- ③ EXISTING HMA 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"



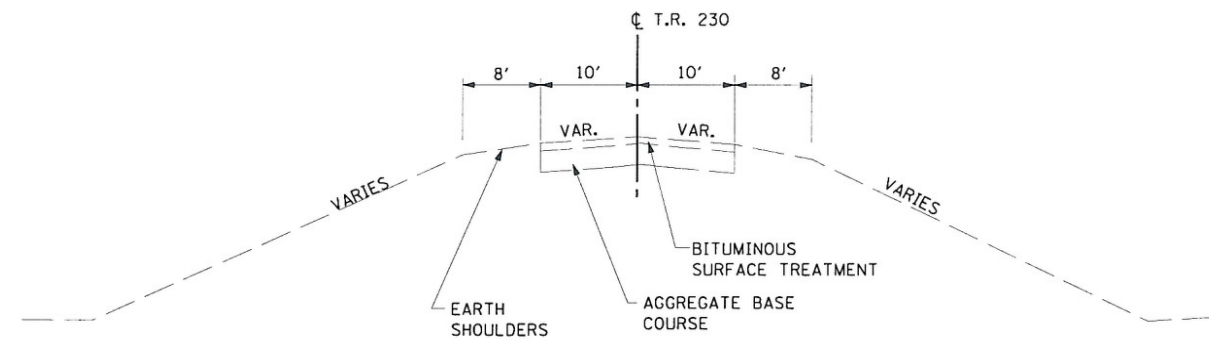
I-74 PROPOSED TYPICAL SECTION
STA 535+00.00 TO STA 540+00.00

- ⑪ PROPOSED HMA SHOULDERS, - 728 LB/SQ YD (OR VARIABLE)
- ⑫ PROPOSED HMA SURFACE REMOVAL, VARIABLE DEPTH
- ⑬ PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N105 - 196 LB/SQ YD
- ⑭ PROPOSED POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N105 - 532 LB/SQ YD (OR VARIABLE) (2-1/4" MIN. DEPTH)
- ⑮ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B

HURST-ROSCHKE ENGINEERS, INC.
HILLSBORO, ILLINOIS 62049
(217)532-3959 FAX (217)532-3212

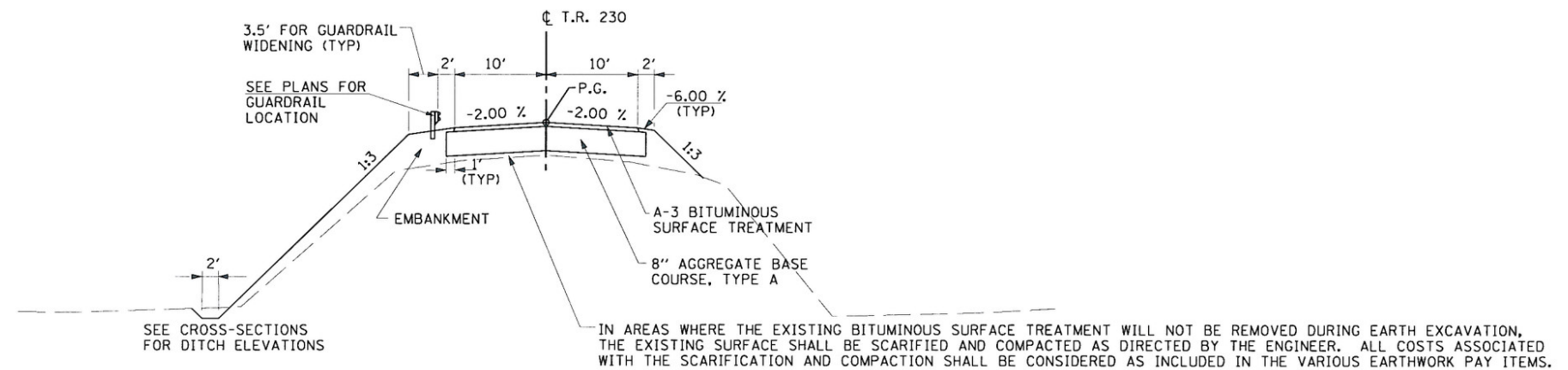
HR
HURST-ROSCHKE
ENGINEERS, INC.

FILE NAME =	USER NAME = HURST-ROSCHKE	DESIGNED JJC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ts\198-4199-wo*3.1-238-over-1-74\dgn\57752-sht-typical102.dgn		DRAWN TWC	REVISED -					74	(10-6)HBR-5	CHAMPAIGN	63	5
PLOT SCALE = 20.0001' / IN.		CHECKED MAR	REVISED -					CONTRACT NO. 70750				
PLOT DATE = 1/28/2010		DATE 01-27-10	REVISED -		SCALE: NONE	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			



TR 230 EXISTING TYPICAL SECTION

STA 40+00.00 TO STA 48+88.00
STA 51+12.00 TO STA 60+00.00



TR 230 PROPOSED TYPICAL SECTION

STA 40+00.00 TO STA 48+59.00
STA 51+41.00 TO STA 60+00.00

HURST-ROSCH ENGINEERS, INC.
HILLSBORO, ILLINOIS 62049
(217)532-3959 FAX (217)532-3212

HR
HURST-ROSCH
ENGINEERS, INC.

FILE NAME :	USER NAME :	DESIGNED :	REVISD :
u:\100-4199_wa*3_tr230_over_1-74\dgn\d57	HURST-ROSCH	JJC	-
		DRAWN :	REVISD :
		TWC	-
		CHECKED :	REVISD :
		MAR	-
		DATE :	REVISD :
		01-27-10	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: NONE SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)HBR-5	CHAMPAIGN	63	6
CONTRACT NO. 70750				
ILLINOIS FED. AID PROJECT				

SCHEDULES

TREE REMOVAL (6 TO 15 UNITS DIAMETER)				
TR 230				
Station	Side	Offset		UNIT
51+70.83	Rt	62'		15
Total				15

TREE REMOVAL (OVER 15 UNITS DIAMETER)				
TR 230				
Station	Side	Offset		UNIT
47+73.52	Rt	66'		20
Total				20

EARTHWORK SCHEDULE					
Location		Earth Excavation	Excavation to be used in Embankment*	Embankment	Earthwork Balance**
From	To	Cubic Yard	Cubic Yard	Cubic Yard	Cubic Yard
TR 230					
40+00	48+89	321.2	240.9	5570.4	-5329.5
51+11	60+00	185.2	138.9	5109.6	-4970.7
I-74 - Additional Median Embankment					
535+00	540+00			150.0	-150.0
	TOTAL	506.4	379.8	10830.0	-10450.2
	USE	505		USE	10450

* Adjusted for Shrinkage (25% Shrinkage Assumed)

** Waste (+) or Shortage (-)

SEEDING, CLASS 2A				
TR 230				
Station	Station	Side		ACRE
40+00	to 48+89	Lt		0.73
40+00	to 48+89	Rt		0.80
51+11	to 60+00	Lt		0.70
51+11	to 60+00	Rt		0.63
I-74				
536+17	to 536+82	Cl		0.04
537+11	to 537+82	Cl		0.04
Round to the nearest 0.25				
Total				3.0

MULCH, METHOD 2				
TR 230				
Station	Station	Side		ACRE
40+00	to 48+89	Lt		0.06
40+00	to 48+89	Rt		0.05
51+11	to 60+00	Lt		0.08
51+11	to 60+00	Rt		0.09
I-74				
536+17	to 536+82	Cl		0.04
537+11	to 537+82	Cl		0.04
536+29	to 536+82	Rt		0.03
536+33	to 536+82	Lt		0.02
537+11	to 537+72	Rt		0.03
537+11	to 537+76	Lt		0.03
Round to the nearest 0.25				
Total				0.5

EROSION CONTROL BLANKET				
TR 230				
Station	Station	Side		SQ YD
42+00.00	to 49+26.85	Rt		3521
42+00.00	to 49+30.25	LT		3178
50+73.06	to 58+00.00	Rt		2536
50+73.06	to 57+50.00	LT		2929
Total				12163

TEMPORARY DITCH CHECKS				
TR 230				
Station	Side	Offset		FOOT
44+50.00	Rt	50		12
45+25.00	LT	60		12
47+50.00	Rt	68		12
53+70.00	LT	67		12
Total				48

PERIMETER EROSION BARRIER				
TR 230				
Station	Station	Side		FOOT
40+00.00	to 49+00.00	Rt		900.0
40+00.00	to 49+00.00	LT		900.0
51+00.00	to 60+00.00	Rt		900.0
51+00.00	to 60+00.00	LT		900.0
Total				3600

INLET AND PIPE PROTECTION			
TR 230			
Station	Side		EACH
49+18.52	LT		1
49+18.92	Rt		1
50+77.98	LT		1
50+82.08	Rt		1
Total			4

AGGREGATE BASE COURSE, TYPE A 8"				
TR 230				
Station	Station	Width (ft)		SQ YD
40+00.00	to 48+59.00	22		2099.8
51+41.00	to 60+00.00	22		2099.8
Total				4200

BITUMINOUS MATERIALS (PRIME COAT)				
TR 230				
Station	Station	Width (ft)		0.25 gal/sq yd GALLON
40+00.00	to 48+59.00	22		524.9
51+41.00	to 60+00.00	22		524.9
Total				1050

BITUMINOUS MATERIALS (COVER AND SEAL COATS)						
TR 230						
Station	Station	Width (ft)	Cover 1st App 0.32 gal/sq yd	Cover 2nd App 0.45 gal/sq yd	Seal 3rd App 0.35 gal/sq yd	GALLON
40+00.00	to 48+59.00	22	671.9	944.9	734.9	2351.8
51+41.00	to 60+00.00	22	671.9	944.9	734.9	2351.8
Total						4704

COVER COAT AGGREGATE					
TR 230					
Station	Station	Width (ft)	1st App .0125 ton/sq yd	2nd App .0125 ton/sq yd	TON
40+00.00	to 48+59.00	22	26.2	26.2	52.5
51+41.00	to 60+00.00	22	26.2	26.2	52.5
Total					105

SEAL COAT AGGREGATE				
TR 230				
Station	Station	Width (ft)		19 lb/sq yd TON
40+00.00	to 48+59.00	22		19.9
51+41.00	to 60+00.00	22		19.9
Total				40

BITUMINOUS MATERIALS (PRIME COAT)				
FAI 74				
Station	Station	1st App 0.08 gal/sq yd	2nd App 0.05 gal/sq yd	GALLON
535+00.00	to 540+00.00	355.6	222.2	577.8
Total				578

AGGREGATE (PRIME COAT)				
FAI 74				
Station	Station	1st App 0.002 ton/sq yd	2nd App 0.001 ton/sq yd	TON
535+00.00	to 540+00.00	8.9	4.4	13.3
Total				13

TEMPORARY RAMP					
FAI 74					
Station	Station	width (ft)	Length (ft)	Each End	SQ YD
535+00.00	to 540+00.00	80	20	2	356
Total					356

POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N105					
FAI 74					
Station	Station	width (ft)	Length (ft)		532 lb/sq yd TON
535+00.00	to 540+00.00	48.92	500		723
Total					723

POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N105					
FAI 74					
Station	Station	width (ft)	Length (ft)		196 lb/sq yd TON
535+00.00	to 540+00.00	48.29	500		263
Total					263

HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH				
FAI 74				
Station	Station	Width (ft)		SQ YD
535+00.00	to 540+00.00	80		4444
Total				4444

AGGREGATE WEDGE SHOULDER, TYPE B				
FAI 74				
Station	Station			1.8 ton/cu yd TON
535+00.00	to 540+00.00			66.7
Total				67

HOT-MIX ASPHALT SHOULDERS					
FAI 74					
Station	Station	width (ft)	Length (ft)		728 lb/sq yd TON
535+00.00	to 540+00.00	33.08	500		669.0
Total					669

HURST-ROSCHIE ENGINEERS, INC.
HILLSBORO, ILLINOIS 62049
(217)532-3959 FAX (217)532-3212

HR
HURST-ROSCHIE
ENGINEERS, INC.

FILE NAME = \\192-4199-wa*3-tr230-over-1-74\ dgn\0572758-sht-SCHEDULE.dgn

USER NAME = HURST-ROSCHIE

DESIGNED = JJC

REVISED =

DRAWN = TWC

REVISED =

CHECKED = MAR

REVISED =

DATE = 01-27-10

REVISED =

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULES OF QUANTITIES

SCALE: N/A

SHEET NO. 1 OF 2

SHEETS

STA.

TO STA.

F.A.I
RTE.

74

SECTION

(10-6)HBR-5

COUNTY

CHAMPAIGN

TOTAL SHEETS

63

SHEET NO.

7

CONTRACT NO. 70750

FED. ROAD DIST. NO. 5 ILLINOIS/FED. AID PROJECT

SCHEDULES

STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS				
<i>TR 230</i>				
Station		Station	Side	FOOT
43+55.85	to	48+30.85	R+	475
44+68.35	to	48+30.85	L+	363
51+69.15	to	54+31.65	R+	263
51+69.15	to	55+44.15	L+	375
Total				1475

TRAFFIC BARRIER TERMINAL, TYPE 6				
<i>TR 230</i>				
Station		Station	Side	EACH
48+30.85	to	48+74.00	R+	1
48+30.85	to	48+74.00	L+	1
51+26.00	to	51+69.15	R+	1
51+26.00	to	51+69.15	L+	1
Total				4

TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT				
<i>TR 230</i>				
Station		Station	Side	EACH
43+05.85	to	43+55.85	R+	1
44+18.35	to	44+68.35	L+	1
54+31.65	to	54+81.65	R+	1
55+44.15	to	55+94.15	L+	1
Total				4

GUARDRAIL REMOVAL				
<i>TR 230</i>				
Station		Station	Side	FOOT
42+19.36	to	49+34.31	R+	715.0
42+68.67	to	49+34.24	L+	665.6
50+66.66	to	57+31.82	R+	665.2
50+72.07	to	57+81.97	L+	709.9
Total				2756

GUARD POSTS		
<i>FAI 74</i>		
Station	Side	EACH
536+17.90	CL	1
536+23.40	CL	1
536+28.78	CL	1
536+32.78	CL	1
537+59.26	CL	1
537+64.28	CL	1
537+69.17	CL	1
537+74.60	CL	1
Total		8

GUARD POSTS REMOVAL		
<i>FAI 74</i>		
Station	Side	EACH
536+17.90	CL	1
536+23.40	CL	1
536+28.78	CL	1
536+32.78	CL	1
537+59.26	CL	1
537+64.28	CL	1
537+69.17	CL	1
537+74.60	CL	1
Total		8

SHOULDER RUMBLE STRIP			
<i>FAI 74</i>			
Station		#	FOOT
535+00.00	to	540+00.00	4
Total			2000

WOVEN WIRE FENCE REMOVAL AND REPLACEMENT			
I-74			
Station		Station	Side
536+15.00	to	536+80.00	L+
536+25.00	to	536+80.00	R+
537+10.00	to	537+75.00	R+
537+10.00	to	537+80.00	L+
Total			255

SHORT-TERM PAVEMENT MARKING				
FAI 74		Edge	Center	
Station		Lines	Lines	FOOT
535+00.00	to	540+00.00	80	100
Total				180

TEMPORARY PAVEMENT MARKING - LINE 4"				
FAI 74				
Station		Station	CL	EDGE
535+00.00	to	540+00.00	250	2000
Total				2250

WORK ZONE PAVEMENT MARKING REMOVAL					
FAI 74					
Station		Station	Length	Width	SQ FT
535+00.00	to	540+00.00	180	0.33	59.4
535+00.00	to	540+00.00	<i>Short-Term</i> 2250	<i>Temporary</i> 0.33	742.5
Total					802

TEMPORARY CONCRETE BARRIER			
<i>FAI 74</i>			
Station		Station	Side
532+26.70	to	537+64.20	R+
533+46.70	to	537+59.20	R+
536+34.20	to	540+46.70	L+
536+29.20	to	541+66.70	L+
Total			1900

RAISED REFLECTIVE PAVEMENT MARKER					
FAI 74		Double	#		
Station		Markers	Applications	EACH	
535+00.00	to	540+00.00	14	2	28
Total					28

• Double Markers spaced @ 80' centers in accordance with Highway Standard 781001

THERMOPLASTIC PAVEMENT MARKING - LINE 4"				
FAI 74		2-White	2-Yellow	
Station		Edge Lines	Edge Lines	FOOT
535+00.00	to	540+00.00	1000	1000
Total				2000

PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 4"			
FAI 74		2-White	
Station		Center Lines	FOOT
535+00.00	to	540+00.00	250
Total			250

TERMINAL MARKER - DIRECT APPLIED		
<i>TR 230</i>		
Station	Side	EACH
43+05.85	R+	1
44+18.35	L+	1
54+81.65	R+	1
55+94.15	L+	1
Total		4

IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3		
FAI 74		EACH
Station	Side	
533+46.70	R+	1
540+46.70	L+	1
Total		2

IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3		
FAI 74		EACH
Station	Side	
532+26.70	R+	1
541+66.70	L+	1
Total		2

REMOVAL AND REINSTALLATION OF EXISTING IMPACT ATTENUATORS		
TR 230		EACH
Station	Side	
50+00.00	R+	1
50+00.00	L+	1
Total		2

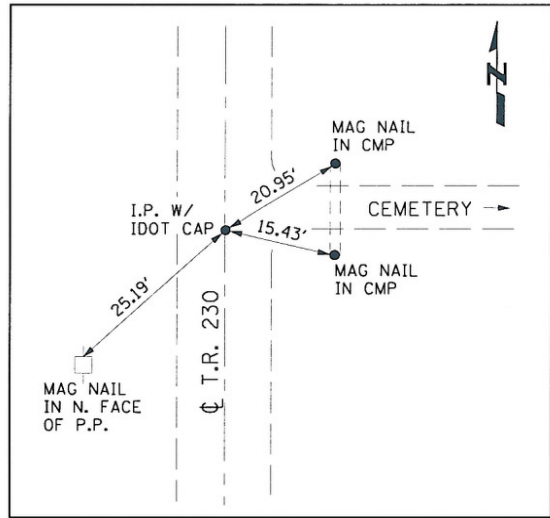
GUARDRAIL & BARRIER WALL MARKER SCHEDULE				
ROUTE	TR 230		TR 230	
LOCATION	SB RT SHOULDER		NB RT SHOULDER	
SPACING*	150'		150'	
NUMBER	STA	TYPE	STA	TYPE
1	43+05.85	GRS	55+94.15	GRS
2	43+85.85	GRS	55+14.15	GRS
3	44+65.85	GRS	54+34.15	GRS
4	45+45.85	GRS	53+54.15	GRS
5	46+25.85	GRS	52+74.15	GRS
6	47+75.85	GRS	51+24.15	BWS
7	49+25.85	BWS	49+74.15	BWS
8	50+75.85	BWS	48+24.15	GRS
9	52+25.85	GRS	46+74.15	GRS
10	53+75.85	GRS	45+24.15	GRS
TOTAL GR	8	S	8	S
TOTAL BW	2	S	2	S

• AFTER INITIAL 320' FROM STD 635001 & STD 635006

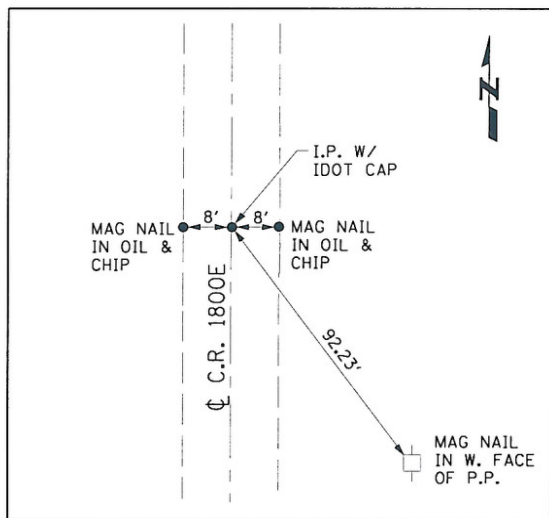
LEGEND
GR GUARDRAIL MARKER
BW BARRIER WALL MARKER
S SILVER COLOR

EXPLORATION TRENCH 52" DEPTH	
<i>TR 230</i>	FOOT
Quadrant	
Northeast	100
Northwest	100
Southeast	100
Southwest	100
Total	

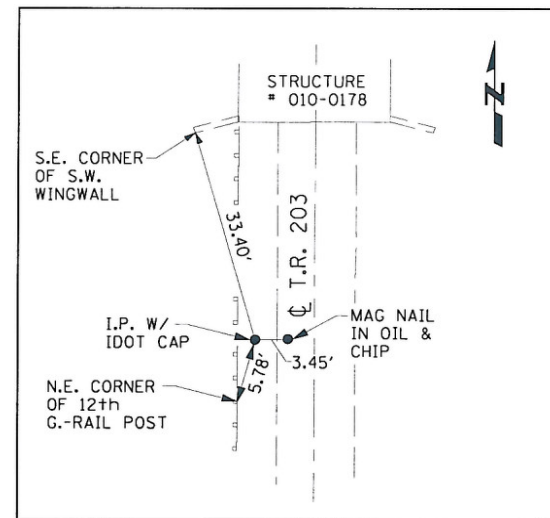
Note: Engineer to determine locations of exploration



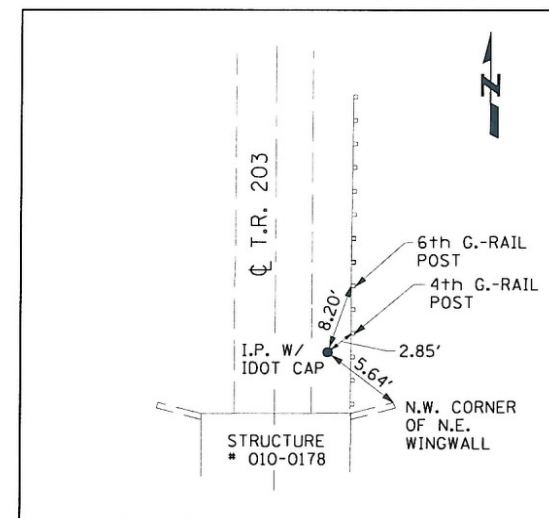
P.O.T. #3 STA. 68+27.86



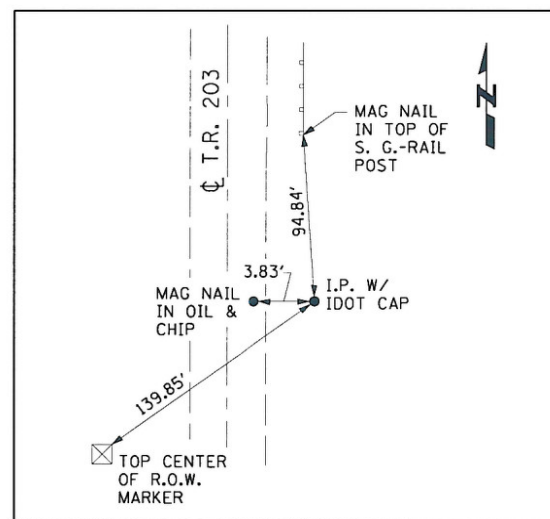
P.O.T. #4 STA. 31+92.90



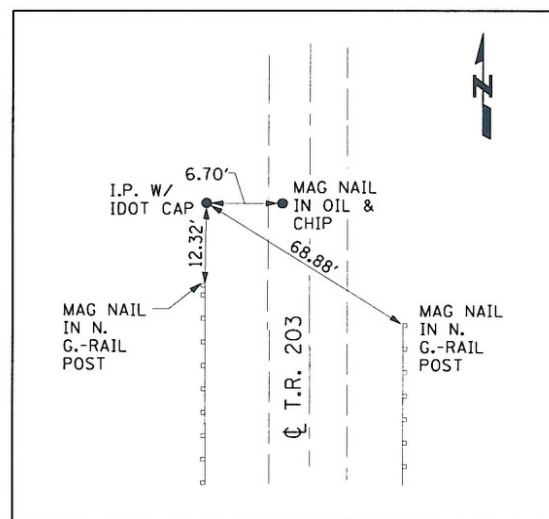
T.S. #400 STA. 51+32.26, 11.49' RT



T.S. #401 STA. 48+99.06, 12.18' LT



T.S. #402 STA. 58+75.17, 12.05' LT



T.S. #403 STA. 42+08.55, 14.22' RT

BM #4877-1
CHISELED SQUARE ON TOP OF THE WEST END
OF THE NORTH ABUTMENT OF STRUCTURE NO. 010-0178
STA 50+89.70 16.80' LT ELEVATION = 705.65

BM #4877-2
CHISELED SQUARE ON TOP OF THE EAST END
OF THE SOUTH ABUTMENT OF STRUCTURE NO. 010-0178
STA 49+09.60 17.20' RT ELEVATION = 705.65

HURST-ROSCHKE ENGINEERS, INC.
HILLSBORO, ILLINOIS 62049
(217)532-3959 FAX (217)532-3212

HR
HURST-ROSCHKE
ENGINEERS, INC.

FILE NAME =	USER NAME = HURST-ROSCHKE	DESIGNED - JJC	REVISED -
t:\198-4199.WD\3.1R230.over.1-74\dgn\0572750-sht-ATB.dgn		DRAWN - UJ	REVISED -
		CHECKED - MAR	REVISED -
		DATE - 01-27-10	REVISED -

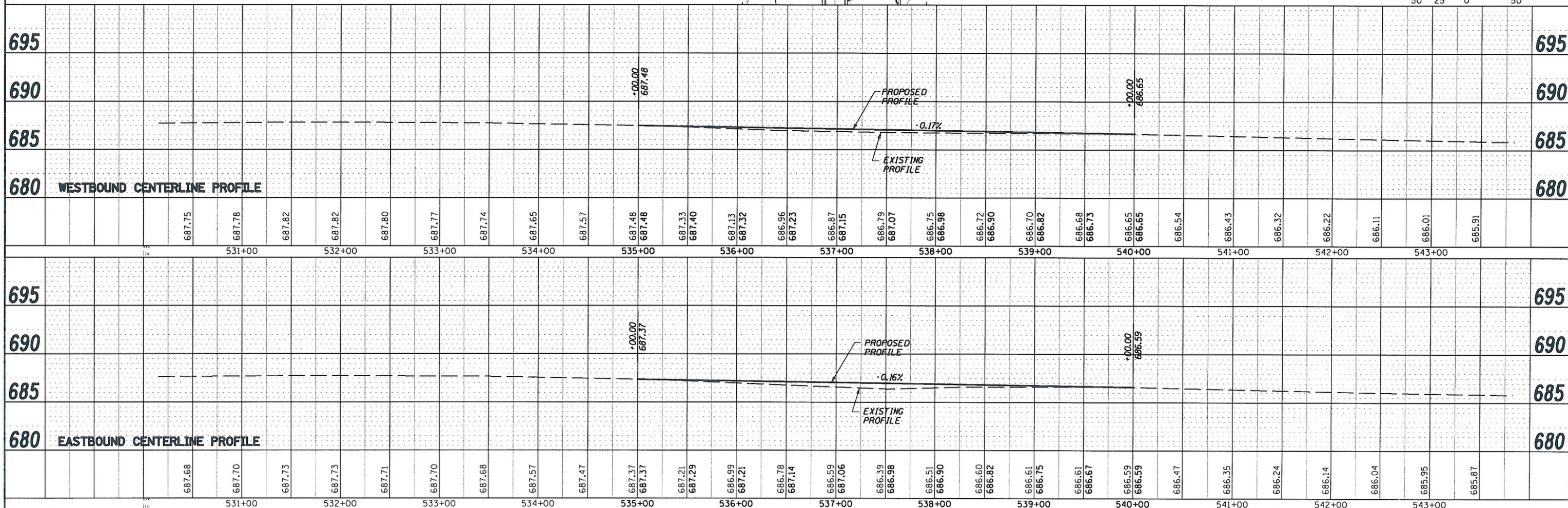
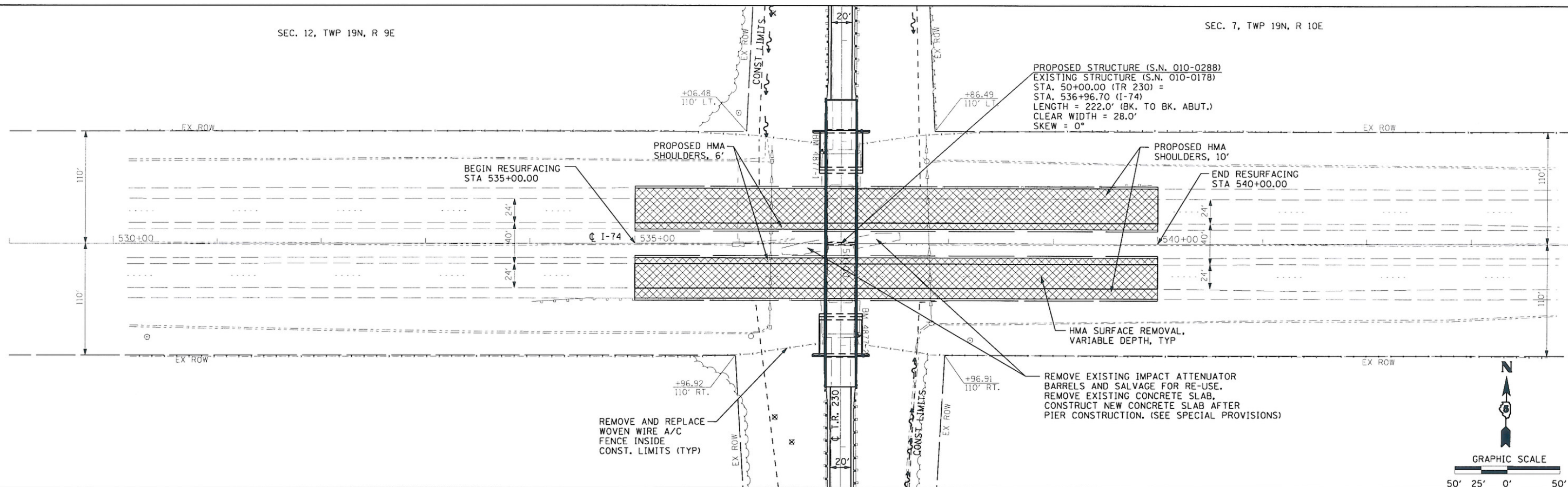
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES & BENCHMARKS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)HBR-5	CHAMPAIGN	63	9
CONTRACT NO. 70750				
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		
	CADD FILE NAME		



PROFILE	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	GRADES CHECKED		
	B.M. NOTED		
	STRUCTURE	NOTATNS	CHKD

HURST-ROSCH ENGINEERS, INC.
HILLSBORO, ILLINOIS 62049
(217)532-3959 FAX (217)532-3212



HURST-ROSCH
ENGINEERS, INC.

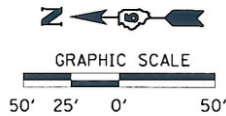
FILE NAME =	USER NAME = HURST-ROSCH	DESIGNED - JJC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION FAI 74 - PLAN AND PROFILE				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T:\190-4199_W0*3_TR230-over-1-74\ dgn\0570	50-shr-olnprf01.dgn	CHECKED - TWC	REVISED -					74	(10-6)HBR-5	CHAMPAIGN	63	10
	PLOT SCALE = 100.000' / IN.	DRAWN - MAR	REVISED -					CONTRACT NO. 70750				
	PLOT DATE = 1/28/2010	CHECKED - 01-27-10	REVISED -									
				SCALE: 1:50	SHEET NO. 1 OF 1 SHEETS	STA. 530+00	TO STA. 544+00					

PLAN	SURVEYED	BY	DATE
	NOTE BOOK		
	ALIGNED		
	RT. OF WAY CHECKED		
	NO.		
	PAID FILE NAME		

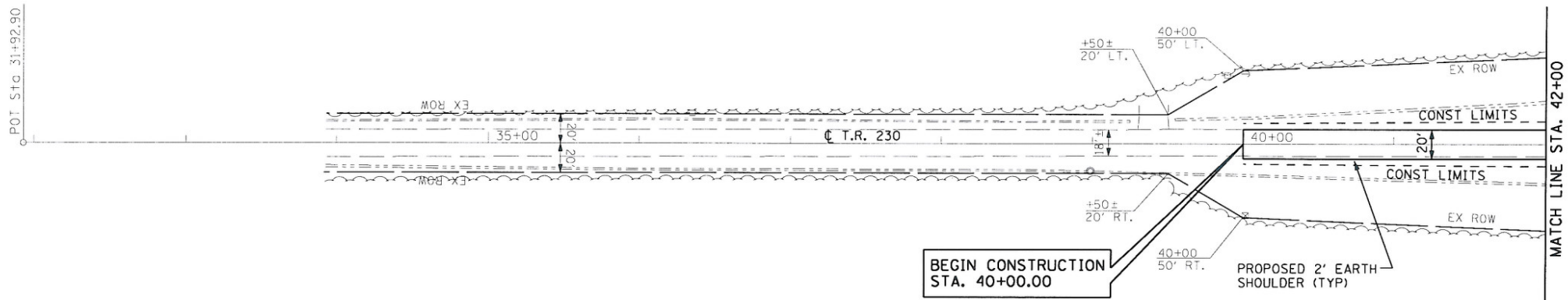
PROFILE	SURVEYED	BY	DATE
	NOTE BOOK		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NO.		

HURST-ROSCHE ENGINEERS, INC.
HILLSBORO, ILLINOIS 62049
(217)532-3959 FAX (217)532-3212

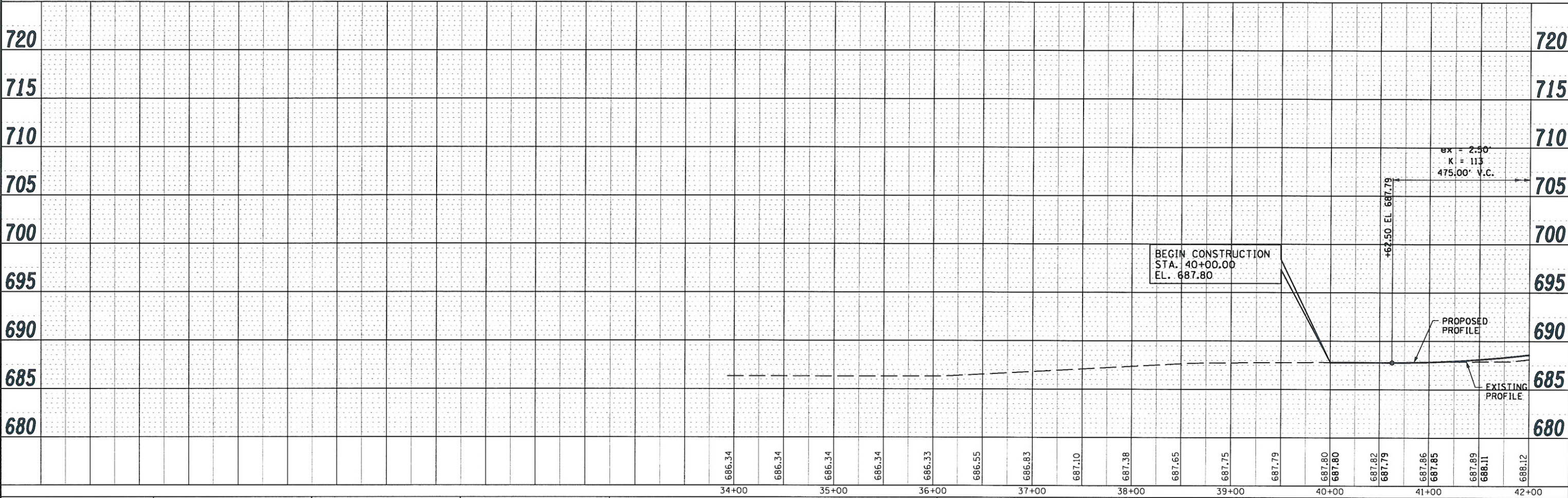
HR
HURST-ROSCHE
ENGINEERS, INC.



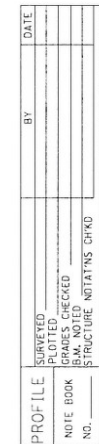
SEC. 7, TWP 19N, R 10E



SEC. 12, TWP 19N, R 9E



FILE NAME = T:\190-4199-WD*3-TR230-over-1-74\dgn\0570150-sht-plnprf02.dgn		USER NAME = HURST-ROSCHE		DESIGNED - JJC		REVISED -		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION						TR 230 - PLAN AND PROFILE						F.A.I. RTE. 74		SECTION (10-6)HBR-5		COUNTY CHAMPAIGN		TOTAL SHEETS 63		SHEET NO. 11		CONTRACT NO. 70750		ILLINOIS FED. AID PROJECT	
DRAWN - TWC		CHECKED - MAR		DATE - 01-27-10		REVISED -														SCALE: 1:50		SHEET NO. 1 OF 3 SHEETS		STA. 34+00 TO STA. 42+00									
PLOT SCALE = 1/8"=1'-0" / IN.		PLOT DATE = 1/28/2010																															



FILE NAME =	USER NAME = HURST-HOSCHE	DESIGNED - JJC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TR 230 – PLAN AND PROFILE						F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T:\190-4199-W0*3-TR230-over-1-74\dgn\0572	50-sht-plnpr-f03.dgn	DRAWN - TWC	REVISED -			74	(10-6)HBR-5	CHAMPAIGN	63	12					
PLOT SCALE = 100.0004 ' / IN.	CHECKED - MAR	REVISED -	CONTRACT NO. 70750												
PLOT DATE = 1/28/2012	DATE - 01-27-10	REVISED -													
				SCALE: 1:50	SHEET NO. 2 OF 3 SHEETS	STA. 42+00 TO STA. 57+00									

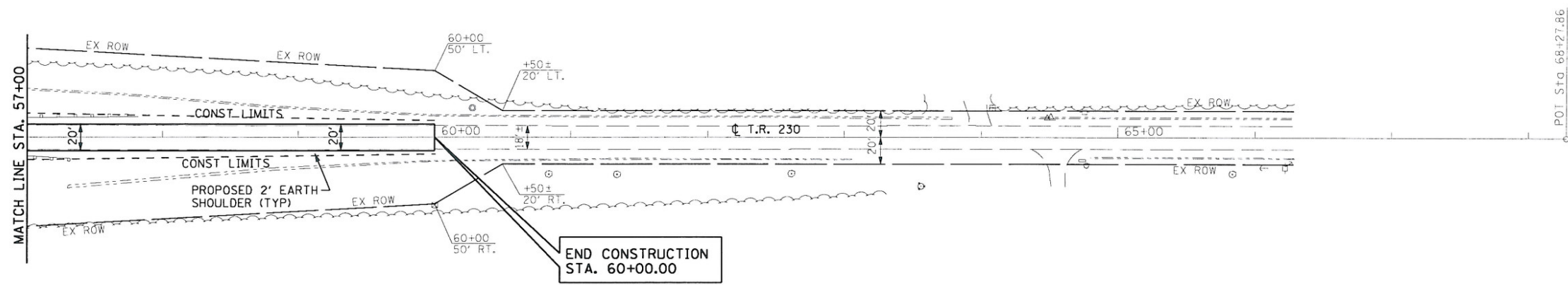
PLAN	DATE	BY
	DATE	BY
SURVEYED	DATE	BY
	DATE	BY
NOTE BOOK	DATE	BY
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PROFILE	DATE	BY
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NO.	DATE	BY
	DATE	BY

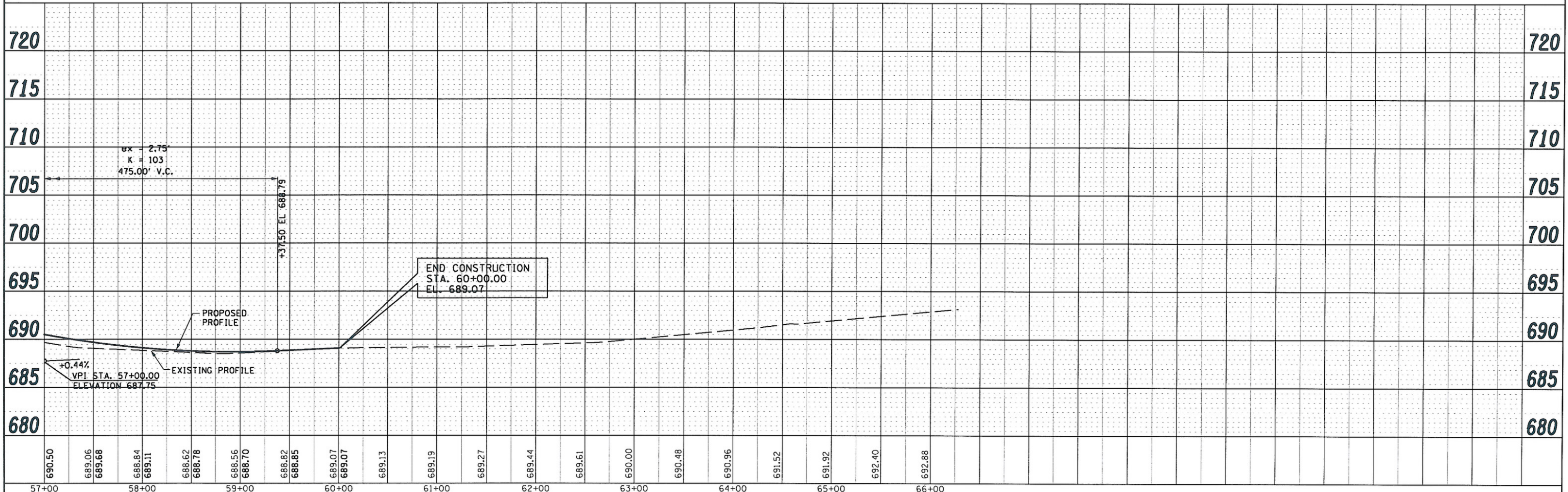
HURST-ROSCH ENGINEERS, INC.
HILLSBORO, ILLINOIS 62049
(217)532-3959 FAX (217)532-3212



SEC. 7, TWP 19N, R 10E



SEC. 12, TWP 19N, R 9E

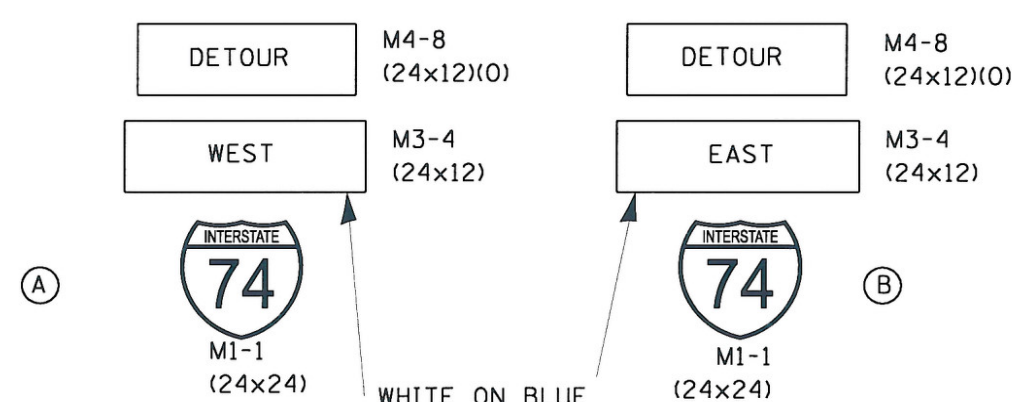
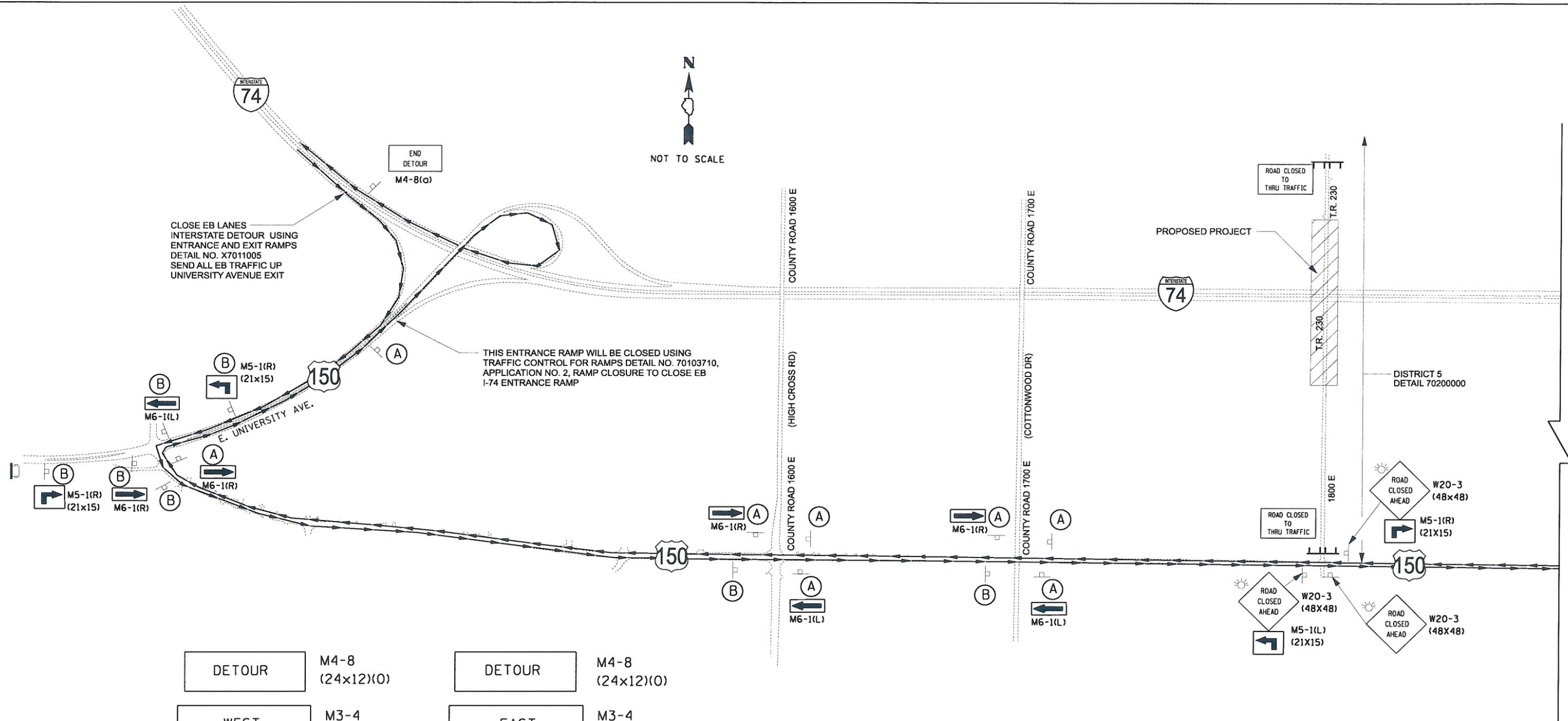


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T:\190-4199_W0*3_TR230_sht-plnprf04.dgn	HURST-ROSCH	JJC	JJC	74	(10-6)HBR-5	CHAMPAIGN	63	13
PLOT SCALE = 1/8" = 1' / IN.	PLOT DATE = 1/28/2010	DRAWN - TWC	REVISOR -	CONTRACT NO. 70750				
		CHECKED - MAR	REVISOR -	ILLINOIS FED. AID PROJECT				
		DATE - 01-27-10	REVISOR -					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TR 230 - PLAN AND PROFILE

SCALE: 1:50 SHEET NO. 3 OF 3 SHEETS STA. 57+00 TO STA. 60+00



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

GENERAL NOTES:

1. TR 230 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 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.
4. CHANGEABLE MESSAGE SIGNS SHALL BE PLACED AT POINTS LOCATED FIVE MILES AHEAD, OR AS APPROVED BY THE ENGINEER, OF PROPOSED ROAD CLOSURE AREA ALONG I-74 AND UNIVERSITY AVENUE.
5. CONTACT DISTRICT TRAFFIC AND OPERATION ENGINEER AT 217-465-4181 ONE WEEK PRIOR TO IMPLEMENTING THE DETOUR.

- TT TYPE III BARRICADE
- FLASHING AMBER LIGHT (TYPE A)
- CHANGEABLE MESSAGE SIGN

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION
(TEMPORARY DETOUR)

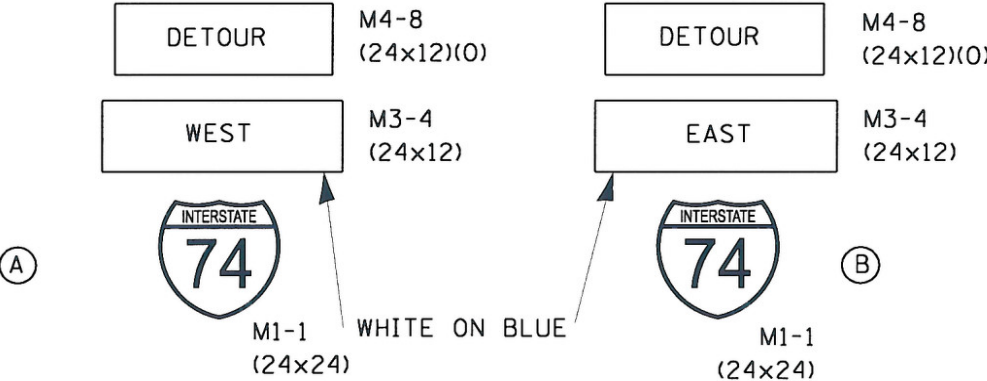
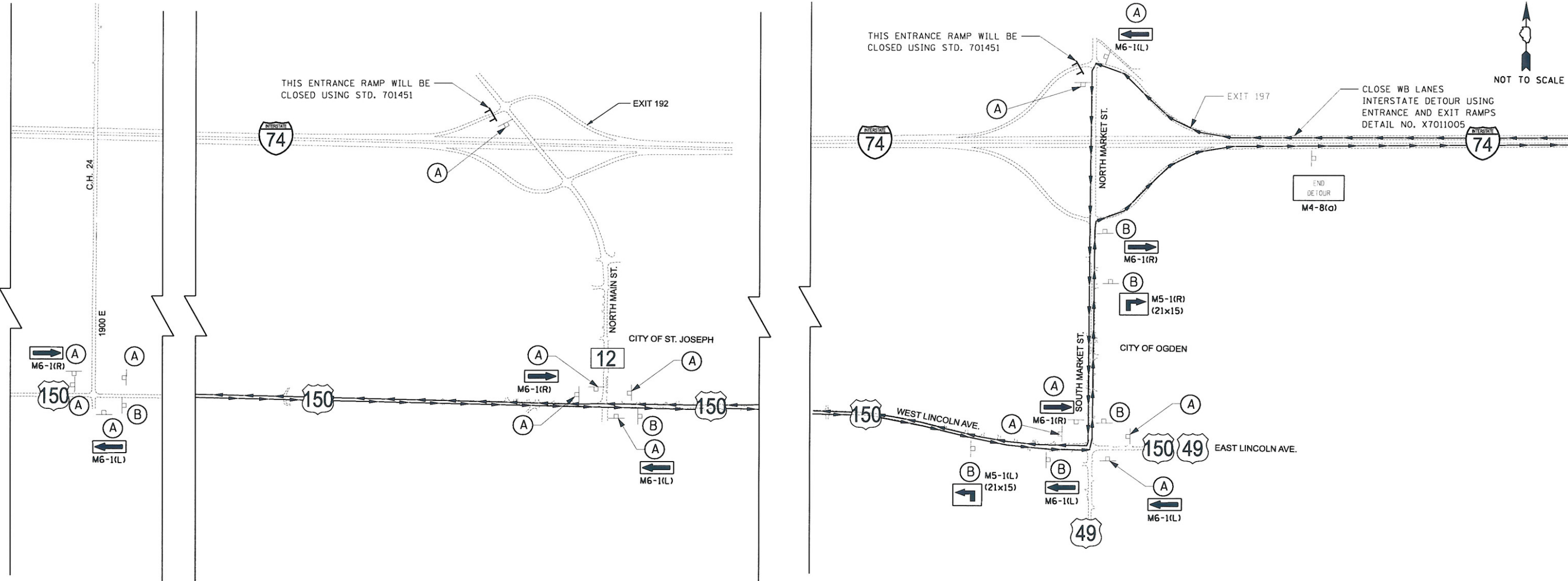
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)HBR-5	CHAMPAIGN	63	14
CONTRACT NO. 70750				
ILLINOIS FED. AID PROJECT				

FILE NAME =	USER NAME =	DESIGNED =	REVISED =
tt\190-4199-wo*3-tr230-over-i-74\dgn\0572750-sht-staging01.dgn	HURST-ROSCHKE	JJC	
		DRAWN =	REVISED =
		TWC	
		CHECKED =	REVISED =
		MAR	
		DATE =	REVISED =
		01-27-10	

SCALE: N.T.S. SHEET NO. 1 OF 3 SHEETS STA. TO STA.

HURST-ROSCHKE ENGINEERS, INC.
HILLSBORO, ILLINOIS 62049
(217)532-3959 FAX (217)532-3212

HR
HURST-ROSCHKE
ENGINEERS, INC.



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

GENERAL NOTES:

1. TR 230 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 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.
4. CHANGEABLE MESSAGE SIGNS SHALL BE PLACED AT POINTS LOCATED FIVE MILES AHEAD, OR AS APPROVED BY THE ENGINEER, OF PROPOSED ROAD CLOSURE AREA ALONG I-74 AND UNIVERSITY AVENUE.
5. CONTACT DISTRICT TRAFFIC AND OPERATION ENGINEER AT 217-465-4181 ONE WEEK PRIOR TO IMPLEMENTING THE DETOUR.

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

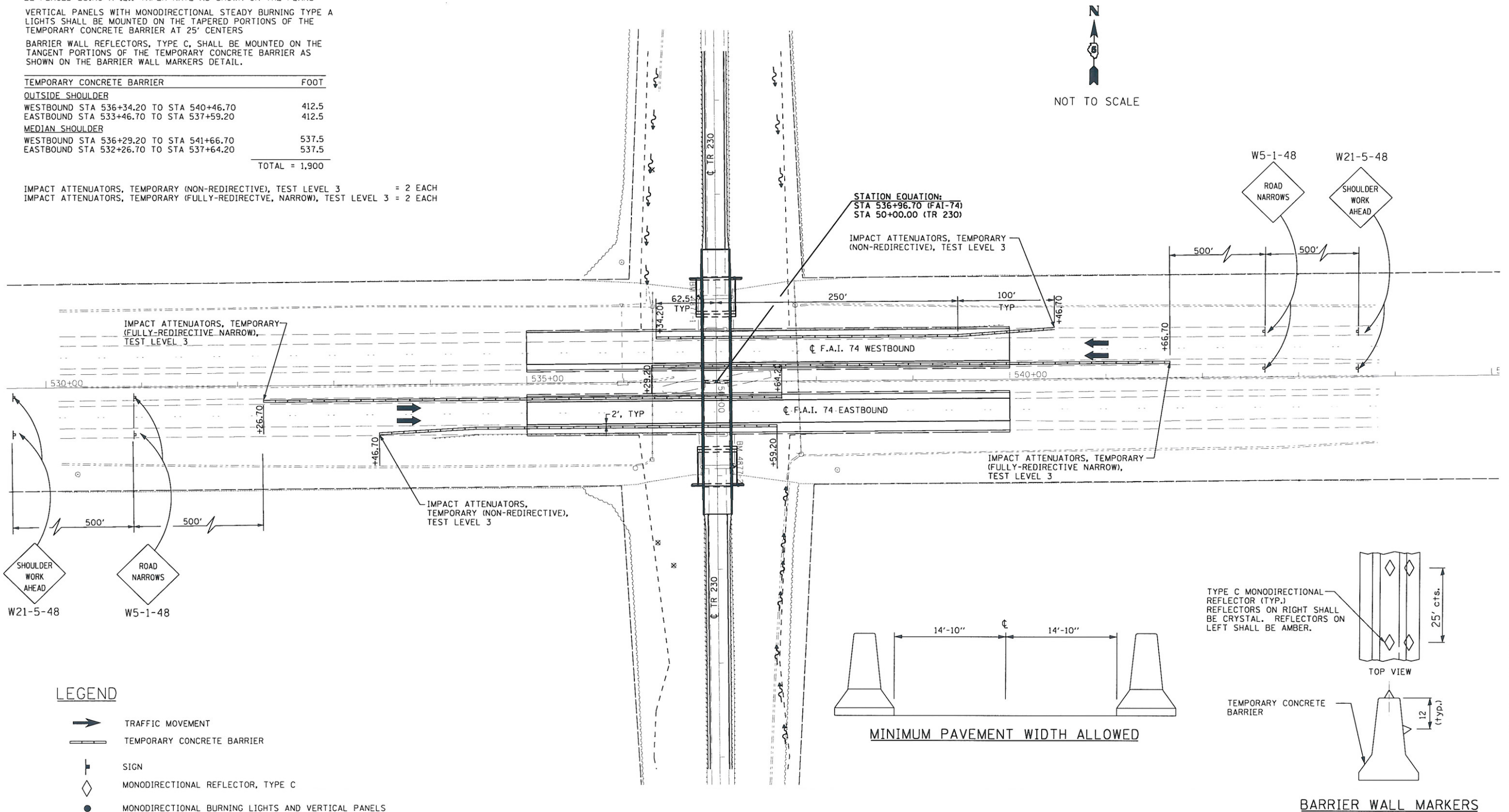
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		DRAWN = TWC	REVISED =					74	(10-6)HBR-5	CHAMPAIGN	63	15
	PLOT SCALE = 1000.0036' / IN.	CHECKED = MAR	REVISED =		CONTRACT NO. 70750							
	PLOT DATE = 1/28/2010	DATE = 01-27-10	REVISED =		ILLINOIS FED. AID PROJECT							
						SCALE: N/A	SHEET NO. 2 OF 3 SHEETS	STA. TO STA.				

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 MARKERS DETAIL.

TEMPORARY CONCRETE BARRIER	FOOT
OUTSIDE SHOULDER	
WESTBOUND STA 536+34.20 TO STA 540+46.70	412.5
EASTBOUND STA 533+46.70 TO STA 537+59.20	412.5
MEDIAN SHOULDER	
WESTBOUND STA 536+29.20 TO STA 541+66.70	537.5
EASTBOUND STA 532+26.70 TO STA 537+64.20	537.5
TOTAL	= 1,900

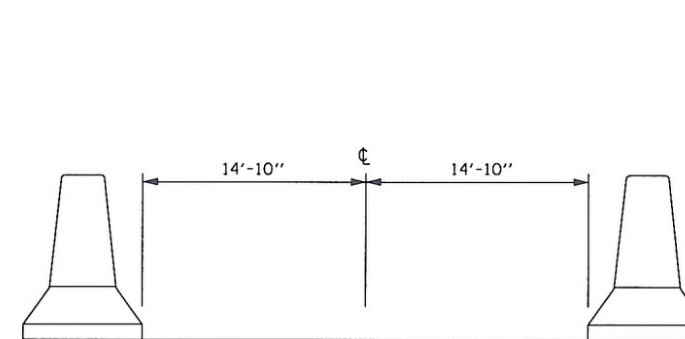
IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3 = 2 EACH
IMPACT ATTENUATORS, TEMPORARY (FULLY-REDIRECTIVE, NARROW), TEST LEVEL 3 = 2 EACH

TRAFFIC CONTROL AND PROTECTION (SPECIAL)

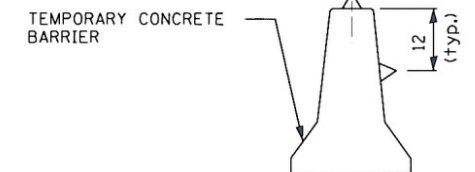
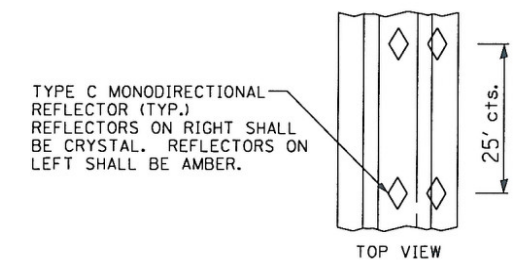


LEGEND

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



MINIMUM PAVEMENT WIDTH ALLOWED



BARRIER WALL MARKERS

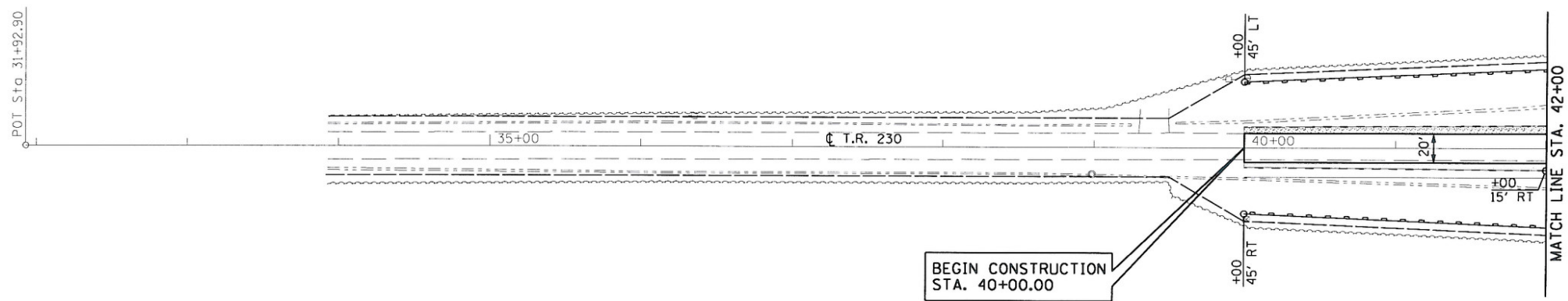
HURST-ROSCH ENGINEERS, INC.
HILLSBORO, ILLINOIS 62049
(217)532-3959 FAX (217)532-3312

HR
HURST-ROSCH
ENGINEERS, INC.

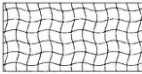
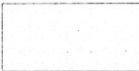
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tr\190-4199-wo*3-tr230-over-1-74\dgn\057750-sht-staging02.dgn		DRAWN UJ	REVISED -					74	(10-6)HR-5	CHAMPAIGN	63	16
PLOT SCALE = 1/8"=24' / IN.		CHECKED MAR	REVISED -		CONTRACT NO. 70750							
PLOT DATE = 1/28/2010		DATE 01-27-10	REVISED -		ILLINOIS FED. AID PROJECT							
					SCALE: NONE	SHEET NO. 3 OF 3 SHEETS	STA.	TO STA.				

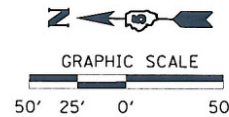
HURST-ROSCHKE ENGINEERS, INC.
HILLSBORO, ILLINOIS 62049
(217)532-3959 FAX (217)532-3212

HR
HURST-ROSCHKE
ENGINEERS, INC.



LEGEND

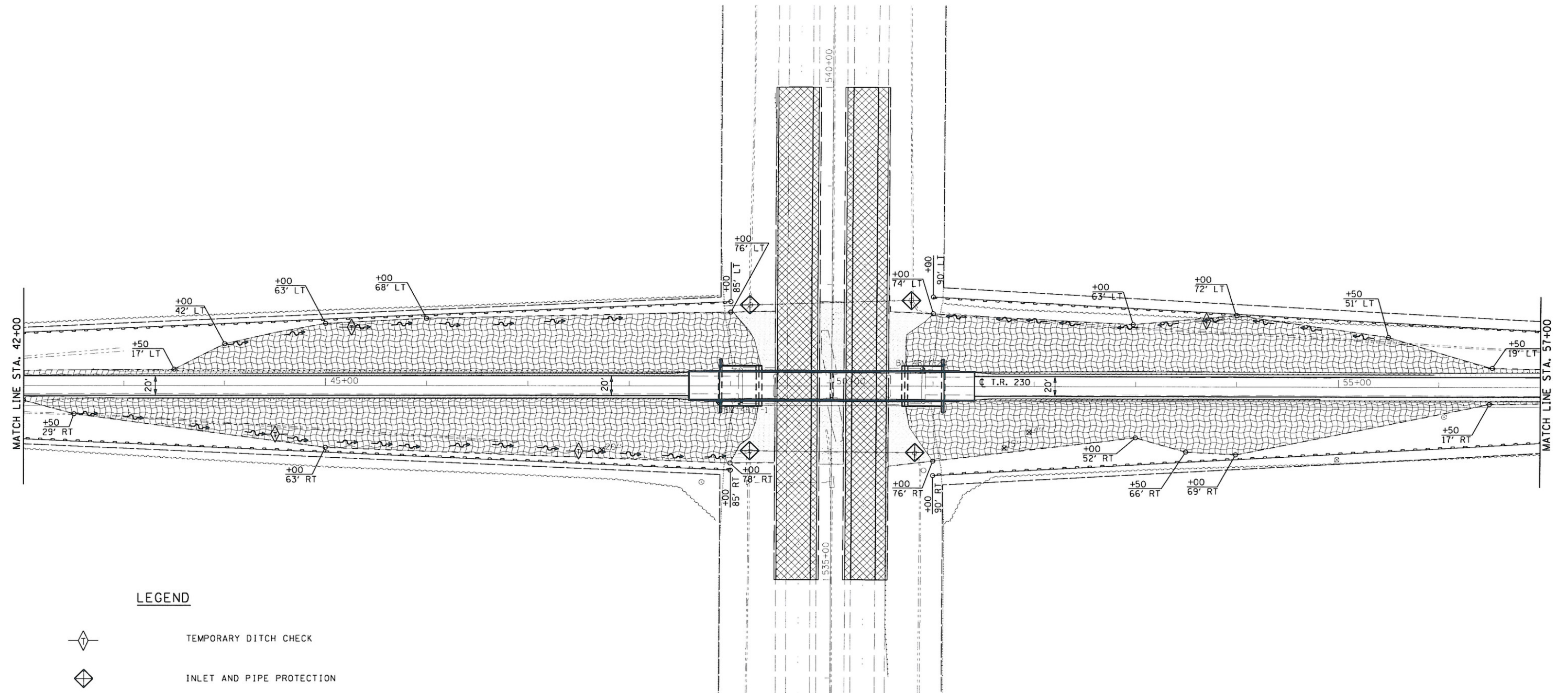
-  TEMPORARY DITCH CHECK
-  EROSION CONTROL BLANKET
-  PERIMETER EROSION BARRIER
-  MULCH, METHOD 2



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		DRAWN - UJ	REVISED -							
		CHECKED - MAR	REVISED -							
		DATE - 01-27-10	REVISED -							
	PLOT SCALE = 1/80=004 ' / IN.									
	PLOT DATE = 1/28/2010									
SCALE: 1"=50'					SHEET NO. 1 OF 3 SHEETS		STA. 40+00 TO STA. 42+00		ILLINOIS FED. AID PROJECT	
CONTRACT NO. 70750										

HURST-ROSCHKE ENGINEERS, INC.
HILLSBORO, ILLINOIS 62049
(217)532-3959 FAX (217)532-3212

HR
HURST-ROSCHKE
ENGINEERS, INC.

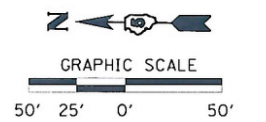


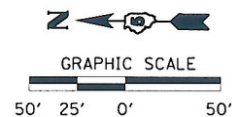
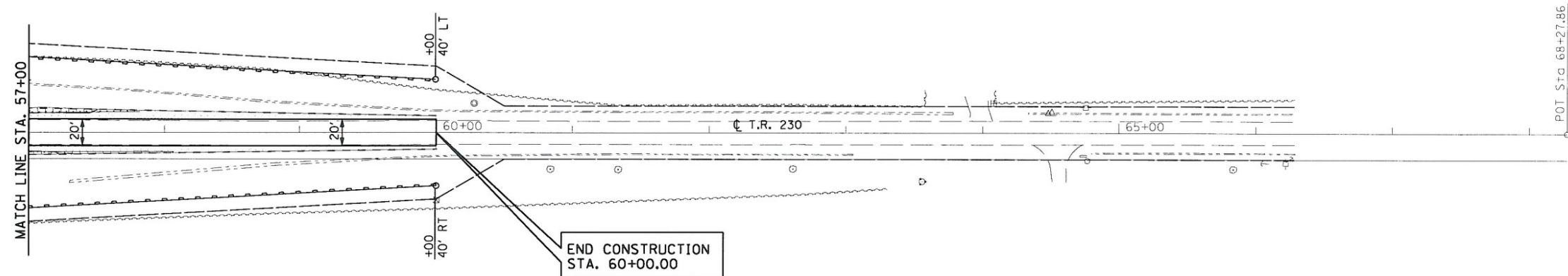
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

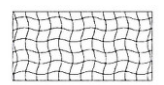
T.R. 230 EROSION CONTROL PLAN			
SCALE: 1"=50'	SHEET NO. 2 OF 3 SHEETS	STA. 42+00	TO STA. 57+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)HBR-5	CHAMPAIGN	63	18
CONTRACT NO. 70750				
ILLINOIS FED. AID PROJECT				





LEGEND

-  TEMPORARY DITCH CHECK
-  EROSION CONTROL BLANKET
-  PERIMETER EROSION BARRIER
-  MULCH, METHOD 2

FILE NAME =	USER NAME = HURST-ROSCHKE	DESIGNED - JJC	REVISED -
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	PLOT DATE = 1/28/2010	DATE - 01-27-10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

T.R. 230 EROSION CONTROL PLAN			
SCALE: 1"=50'	SHEET NO. 3	OF 3 SHEETS	STA. 57+00 TO STA. 60+00

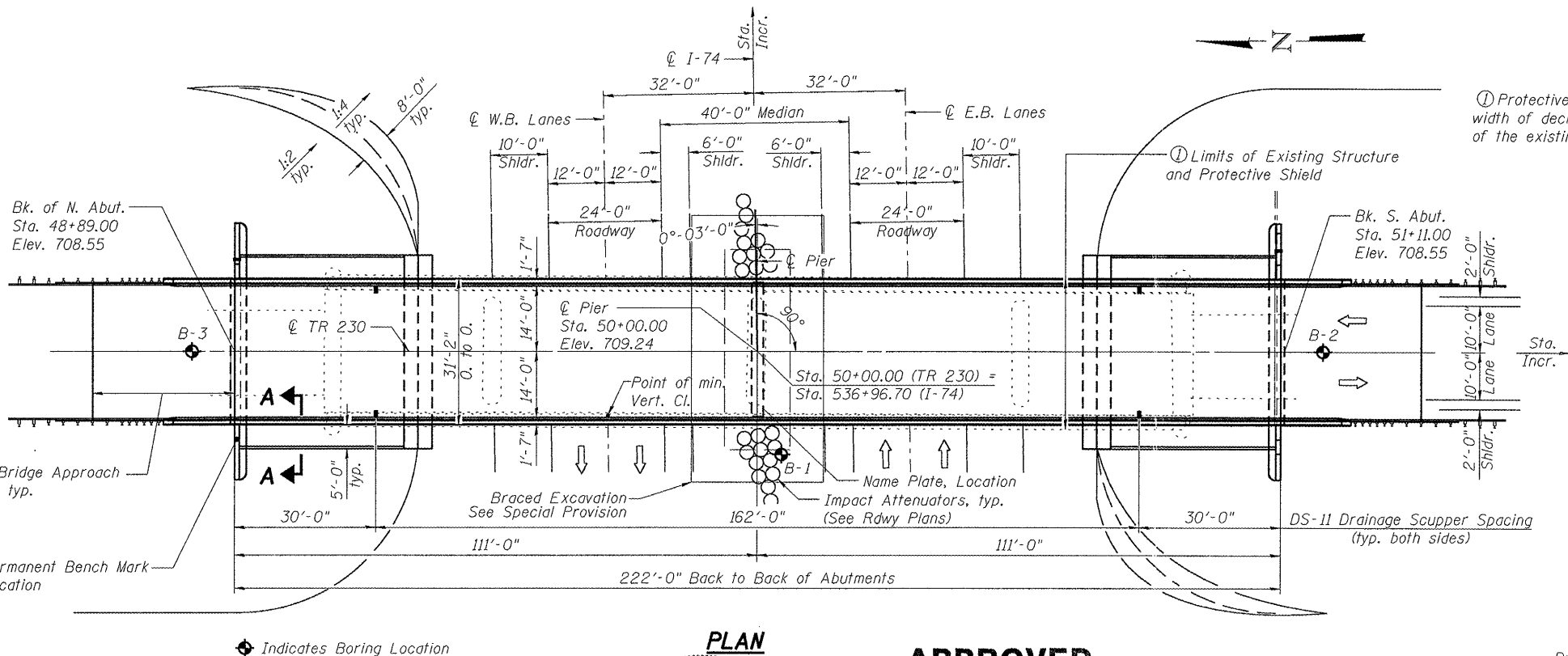
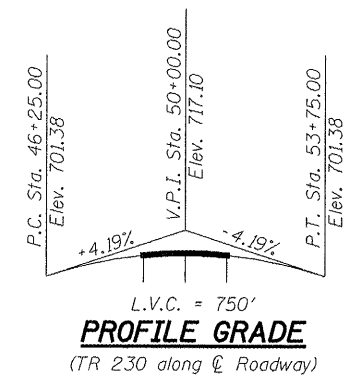
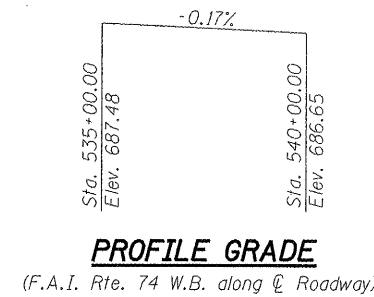
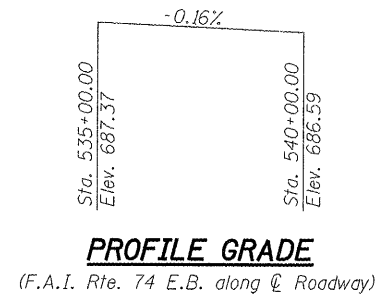
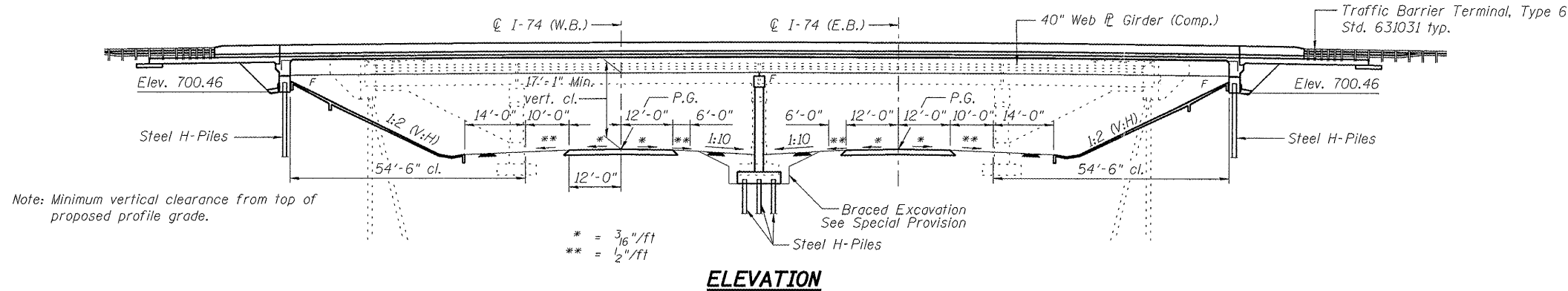
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)HBR-5	CHAMPAIGN	63	19
CONTRACT NO. 70750				
ILLINOIS FED. AID PROJECT				

Bench Mark: IDOT BM92 Iron Pin w/ cap, North Approach East Shoulder of Existing Structure.
Elevation 704.38

Existing Structure: S.N. 010-0178 was built in 1960 as FAI Route 74, Section 10-6HB-4. It was built as a 4 simple span P.P.C. "I" beam structure. The substructure consists of open stub abutments and multiple round columned piers. The abutments are founded on a single row of piles. The piers are supported by spread footings. The Back to Back dimension measures 184'-6" while the Out to Out width measures 32'-6". The existing structure has a 9" curb and a 2'-0" safety walk. The minimum vertical under clearance is 14'-9". The road will be closed and traffic detoured during construction. Road is currently closed.

Salvage: Two 58 foot steel W36x150 girders installed on the deck of the existing structure to support the damaged beams of the existing structure shall be salvaged. See Special Provisions.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



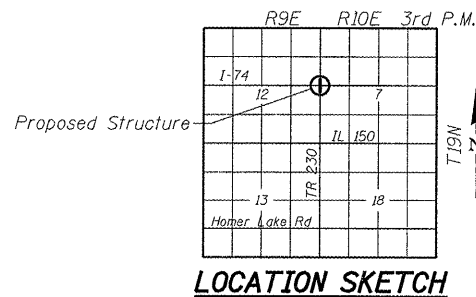
LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications
with 2008 and 2009 Interims

DESIGN STRESSES
FIELD UNITS

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

SEISMIC DATA
Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.19g
Design Spectral Acceleration at 0.2 sec. ($S_{D0.2}$) = 0.35g
Soil Site Class = E



GENERAL PLAN & ELEVATION
TR 230 OVER
F.A.I. RTE 74-SECTION (10-6)HBR-5
CHAMPAIGN COUNTY
STATION 50+00.00
STRUCTURE NO. 010-0288

DESIGNED	MEB
CHECKED	JSP
DRAWN	CJC
CHECKED	MEB

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

APPROVED
For Structural Adequacy Only
Ralph E. Anderson (P.E.)
Engineer of Bridges & Structures
JOHN S. PERADOTTI
81-005671
JACKSONVILLE
ILLINOIS STRUCTURAL NO. 5671
EXPIRES: NOVEMBER 30, 2010

2-5-10
DATE

STATION 50+00.00
BUILT 2011 BY
STATE OF ILLINOIS
TR 230 SEC. (10-6)HBR-5
LOADING HL-93
STRUCTURE NO. 010-0288
NAME PLATE
See Std. 515001

SHEET NO. 1	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
20 SHEETS	74	(10-6)HBR-5	CHAMPAIGN	63	20
SN 010-0288			CONTRACT NO. 70750		
FED. ROAD DIST. NO. 5			ILLINOIS FED. AID PROJECT		

GENERAL NOTES

1. Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 1/8 in. Ø, holes 15/16 in. Ø, unless otherwise noted.
2. Calculated weight of Grade 36 Structural Steel = 16,930 lbs
Calculated weight of Grade 50 Structural Steel = 239,460 lbs.
3. No field welding is permitted except as specified in the contract documents.
4. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
5. Reinforcement bars designated (E) shall be epoxy coated.
6. Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
7. The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be interstate green, Munsell color Standard 7.5G 4/8. See Special Provision for "Cleaning and Painting New Metal Structures".
8. Slopewall shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.
9. 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.
10. 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.
11. Slip forming of the parapets will not be allowed.
12. 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.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

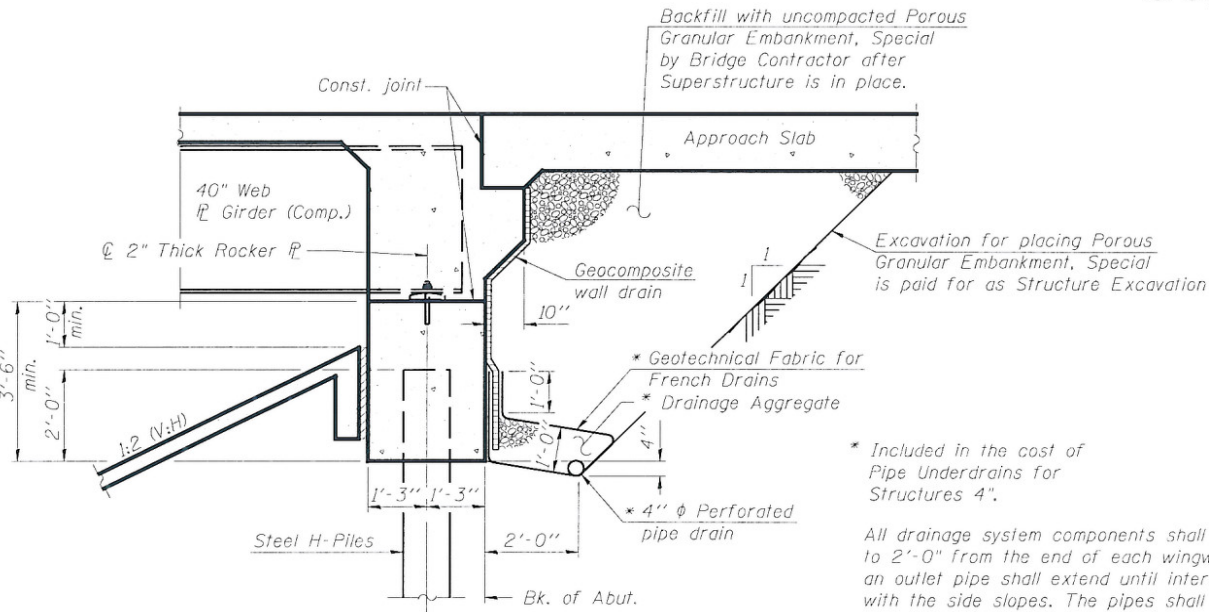
INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
3. Top of Slab Elevation Plan
4. Top of Slab Elevations
5. Top of North Approach Slab Elevations
6. Top of South Approach Slab Elevations
7. Superstructure Plan
8. Superstructure Details
9. Integral Abutment Diaphragm Details
10. Bridge Approach Slab Details
11. Bridge Approach Slab Details
12. Framing Plan
13. Structural Steel Details
14. Bearing Details
15. Abutments
16. Pier
17. HP Pile Details
18. Bar Splicer Assembly Details
19. Drainage Scupper, DS-II
20. Subsurface Diagram

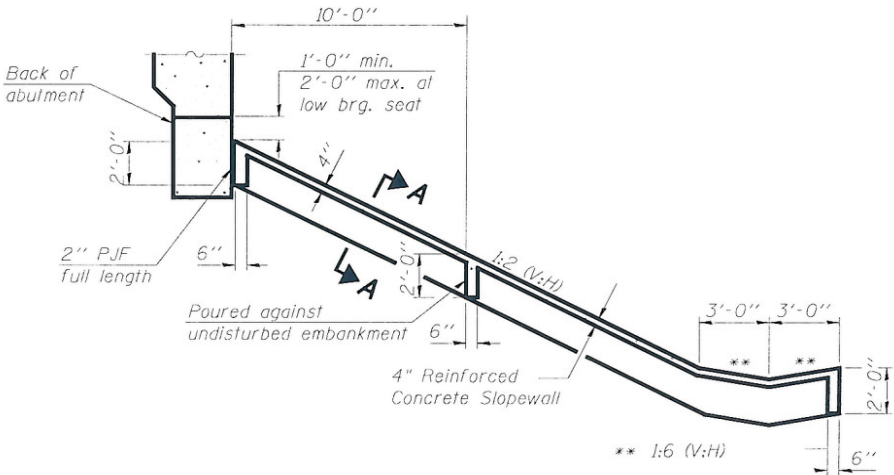
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
* Porous Granular Embankment, Special	Cu. Yd.	--	111	111
Removal of Existing Structures	Each	1	--	1
Protective Shield	Sq. Yd.	404	--	404
Structure Excavation	Cu. Yd.	--	226	226
# Concrete Structures	Cu. Yd.	--	143.7	143.7
# Concrete Superstructure	Cu. Yd.	341.5	--	341.5
# Bridge Deck Grooving	Sq. Yd.	815	--	815
Concrete Encasement	Cu. Yd.	--	19.4	19.4
# Protective Coat	Sq. Yd.	1135	--	1135
Furnishing & Erecting Structural Steel	L. Sum	1	--	1
Stud Shear Connectors	Each	1908	--	1908
# Reinforcement Bars, Epoxy Coated	Pounds	79,270	19,055	98,325
# Bar Splicers	Each	62	--	62
Slope Wall 4 Inch	Sq. Yd.	--	348	348
Furnishing Steel Piles HP12x53	Foot	--	1328	1328
Furnishing Steel Piles HP14x89	Foot	--	1656	1656
* Driving Piles	Foot	--	2984	2984
Test Pile Steel HP12x53	Each	--	2	2
Test Pile Steel HP14x89	Each	--	1	1
Name Plates	Each	--	1	1
Anchor Bolts, 1"	Each	--	36	36
Geocomposite Wall Drain	Sq. Yd.	--	38	38
* Pipe Underdrains for Structures 4"	Foot	--	131	131
* Braced Excavation	Cu. Yd.	--	132	132
* Mechanical Splicers	Each	--	104	104
* Drainage Scuppers, DS-II	Each	4	--	4
* Permanent Bench Marks	Each	1	--	1

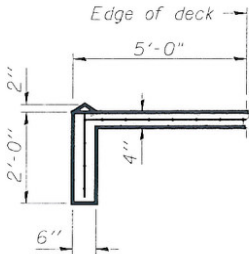
* See Special Provisions
Quantity Includes Approach Slabs



SECTION THRU INTEGRAL ABUTMENT



SECTION THRU
CONCRETE SLOPEWALL



SECTION A-A

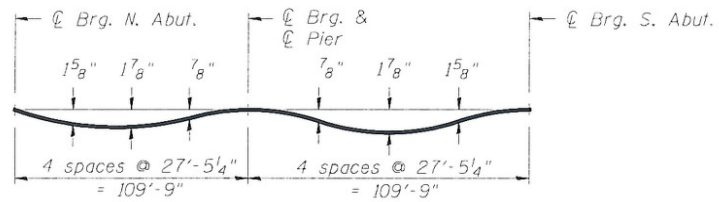
GENERAL DATA
STRUCTURE NO. 010-0288

DESIGNED	CJC / MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB

HR
HURST-ROSCH
ENGINEERS, INC.
PROFESSIONAL DESIGN NUMBER: 184-000214

SHEET NO. 2 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	21
	SN 010-0288		CONTRACT NO. 70750		
	FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				

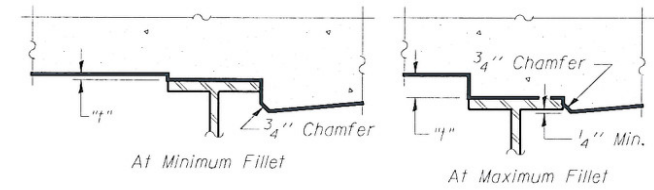
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



DEAD LOAD DEFLECTION DIAGRAM

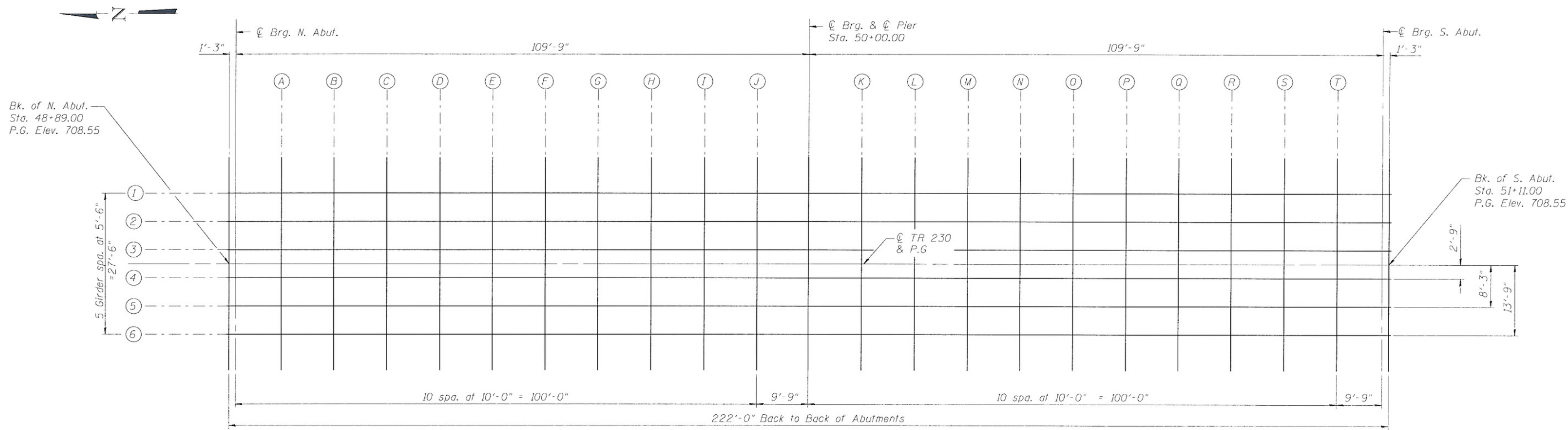
(Includes weight of concrete only.)

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. 010-0288**

DESIGNED	CJC / MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB

HR
HURST-ROSCHÉ
ENGINEERS, INC.
PROFESSIONAL DESIGN NUMBER: 164-000298

SHEET NO. 3 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	22
	SN 010-0288		CONTRACT NO. 70750		
	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.	48+89.00	13.75	708.33	708.33
☉ Brg. N. Abut.	48+90.25	13.75	708.35	708.35
A	49+00.25	13.75	708.47	708.52
B	49+10.25	13.75	708.57	708.66
C	49+20.25	13.75	708.67	708.80
D	49+30.25	13.75	708.75	708.89
E	49+40.25	13.75	708.82	708.97
F	49+50.25	13.75	708.88	709.02
G	49+60.25	13.75	708.93	709.04
H	49+70.25	13.75	708.97	709.04
I	49+80.25	13.75	709.00	709.05
J	49+90.25	13.75	709.02	709.04
☉ Brg. & ☉ Pier	50+00.00	13.75	709.02	709.02
K	50+10.00	13.75	709.02	709.04
L	50+20.00	13.75	709.00	709.05
M	50+30.00	13.75	708.97	709.05
N	50+40.00	13.75	708.93	709.04
O	50+50.00	13.75	708.88	709.02
P	50+60.00	13.75	708.82	708.97
Q	50+70.00	13.75	708.75	708.89
R	50+80.00	13.75	708.66	708.79
S	50+90.00	13.75	708.57	708.66
T	51+00.00	13.75	708.46	708.51
☉ Brg. S. Abut.	51+09.75	13.75	708.35	708.35
Bk. S. Abut.	51+11.00	13.75	708.33	708.33

GIRDER #2 AND 5

Location	Station	*Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	48+89.00	8.25	708.42	708.42
☉ Brg. N. Abut.	48+90.25	8.25	708.43	708.43
A	49+00.25	8.25	708.55	708.60
B	49+10.25	8.25	708.66	708.75
C	49+20.25	8.25	708.75	708.88
D	49+30.25	8.25	708.84	708.98
E	49+40.25	8.25	708.91	709.06
F	49+50.25	8.25	708.97	709.11
G	49+60.25	8.25	709.02	709.13
H	49+70.25	8.25	709.06	709.13
I	49+80.25	8.25	709.09	709.14
J	49+90.25	8.25	709.10	709.12
☉ Brg. & ☉ Pier	50+00.00	8.25	709.11	709.11
K	50+10.00	8.25	709.10	709.12
L	50+20.00	8.25	709.08	709.13
M	50+30.00	8.25	709.06	709.14
N	50+40.00	8.25	709.02	709.13
O	50+50.00	8.25	708.97	709.11
P	50+60.00	8.25	708.91	709.06
Q	50+70.00	8.25	708.83	708.97
R	50+80.00	8.25	708.75	708.88
S	50+90.00	8.25	708.65	708.74
T	51+00.00	8.25	708.55	708.60
☉ Brg. S. Abut.	51+09.75	8.25	708.43	708.43
Bk. S. Abut.	51+11.00	8.25	708.42	708.42

GIRDER #3 AND 4

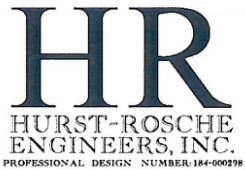
Location	Station	*Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	48+89.00	2.75	708.50	708.50
☉ Brg. N. Abut.	48+90.25	2.75	708.52	708.52
A	49+00.25	2.75	708.64	708.69
B	49+10.25	2.75	708.74	708.83
C	49+20.25	2.75	708.84	708.97
D	49+30.25	2.75	708.92	709.06
E	49+40.25	2.75	708.99	709.14
F	49+50.25	2.75	709.06	709.20
G	49+60.25	2.75	709.11	709.22
H	49+70.25	2.75	709.14	709.22
I	49+80.25	2.75	709.17	709.22
J	49+90.25	2.75	709.19	709.21
☉ Brg. & ☉ Pier	50+00.00	2.75	709.19	709.19
K	50+10.00	2.75	709.19	709.21
L	50+20.00	2.75	709.17	709.22
M	50+30.00	2.75	709.14	709.22
N	50+40.00	2.75	709.10	709.21
O	50+50.00	2.75	709.05	709.19
P	50+60.00	2.75	708.99	709.14
Q	50+70.00	2.75	708.92	709.06
R	50+80.00	2.75	708.84	708.97
S	50+90.00	2.75	708.74	708.83
T	51+00.00	2.75	708.63	708.68
☉ Brg. S. Abut.	51+09.75	2.75	708.52	708.52
Bk. S. Abut.	51+11.00	2.75	708.50	708.50

☉ ROADWAY AND P.G.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	48+89.00	0.00	708.55	708.55
☉ Brg. N. Abut.	48+90.25	0.00	708.56	708.56
A	49+00.25	0.00	708.68	708.73
B	49+10.25	0.00	708.79	708.88
C	49+20.25	0.00	708.88	709.01
D	49+30.25	0.00	708.96	709.10
E	49+40.25	0.00	709.04	709.19
F	49+50.25	0.00	709.10	709.24
G	49+60.25	0.00	709.15	709.26
H	49+70.25	0.00	709.19	709.26
I	49+80.25	0.00	709.21	709.26
J	49+90.25	0.00	709.23	709.25
☉ Brg. & ☉ Pier	50+00.00	0.00	709.24	709.24
K	50+10.00	0.00	709.23	709.25
L	50+20.00	0.00	709.21	709.26
M	50+30.00	0.00	709.19	709.27
N	50+40.00	0.00	709.15	709.26
O	50+50.00	0.00	709.10	709.24
P	50+60.00	0.00	709.04	709.19
Q	50+70.00	0.00	708.96	709.10
R	50+80.00	0.00	708.88	709.01
S	50+90.00	0.00	708.78	708.87
T	51+00.00	0.00	708.68	708.73
☉ Brg. S. Abut.	51+09.75	0.00	708.56	708.56
Bk. S. Abut.	51+11.00	0.00	708.55	708.55

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 010-0288

DESIGNED CJC / MEB
CHECKED JSP
DRAWN UJ
CHECKED MEB



*The offsets for Beams 1, 2, and 3 are negative.

SHEET NO. 4 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	23
	SN 010-0288		CONTRACT NO. 70750		
	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+59.00	-14.00	707.91
A1	48+69.00	-14.00	708.06
A2	48+79.00	-14.00	708.20
S. End North Appr. Pav't.	49+89.00	-14.00	708.33

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Pav't.	48+59.00	-12.00	707.94
A1	48+69.00	-12.00	708.09
A2	48+79.00	-12.00	708.23
S. End North Appr. Pav't.	49+89.00	-12.00	708.36

CL ROADWAY & PROFILE GRADE

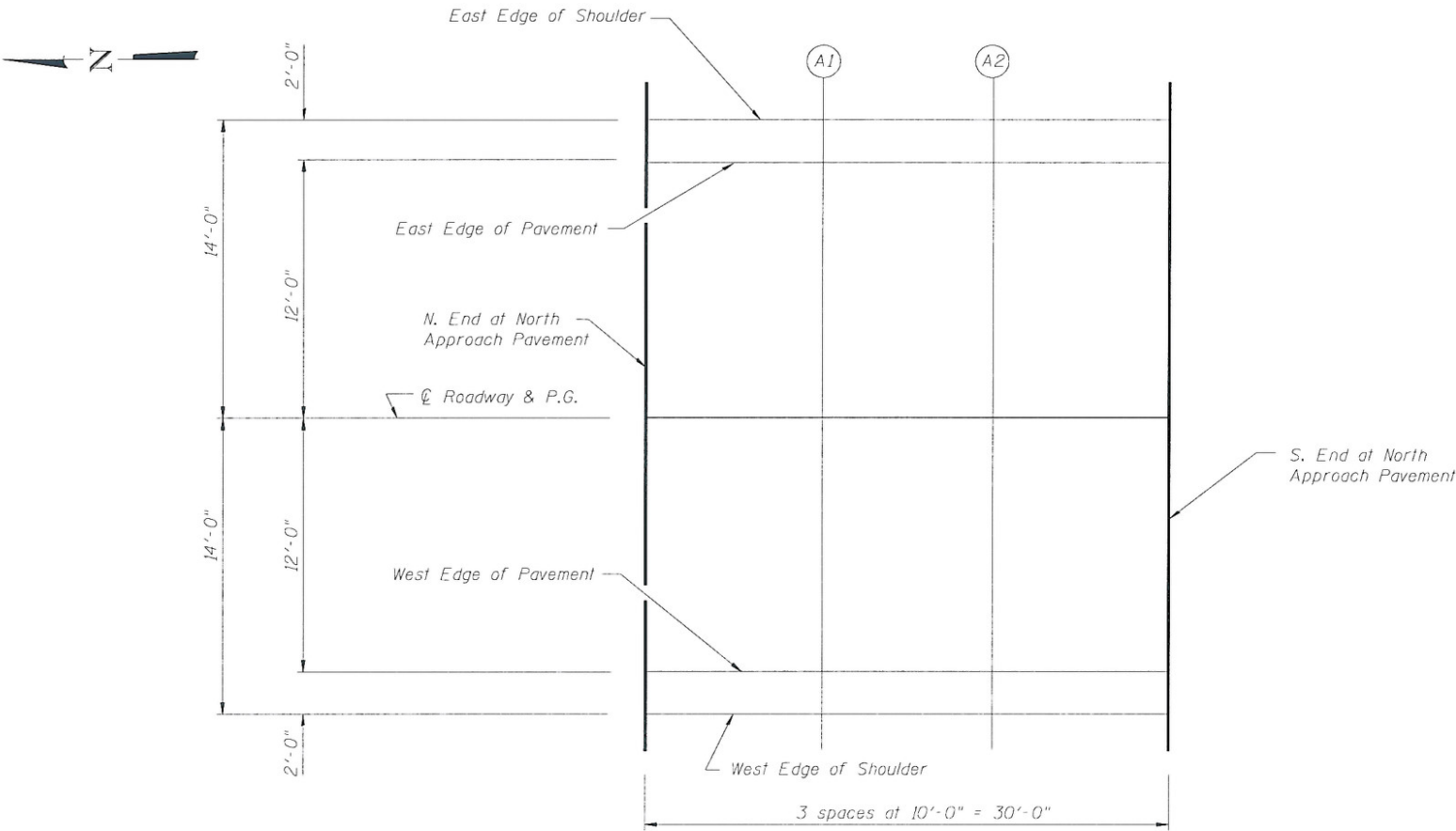
Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Pav't.	48+59.00	0.00	708.13
A1	48+69.00	0.00	708.28
A2	48+79.00	0.00	708.42
S. End North Appr. Pav't.	49+89.00	0.00	708.55

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Pav't.	48+59.00	12.00	707.94
A1	48+69.00	12.00	708.09
A2	48+79.00	12.00	708.23
S. End North Appr. Pav't.	49+89.00	12.00	708.36

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Pav't.	48+59.00	14.00	707.91
A1	48+69.00	14.00	708.06
A2	48+79.00	14.00	708.20
S. End North Appr. Pav't.	49+89.00	14.00	708.33



PLAN

North Approach

DESIGNED	CJC
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB

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

TOP OF NORTH APPROACH SLAB
ELEVATIONS
STRUCTURE NO. 010-0288

SHEET NO. 5 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	24
	SN 010-0288		CONTRACT NO. 70750		
	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. A3	51+11.00	-14.00	708.33
	51+21.00	-14.00	708.20
	51+31.00	-14.00	708.06
S. End South Appr. Pav't.	51+41.00	-14.00	707.91

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End South Appr. Pav't. A3	51+11.00	-12.00	708.36
	51+21.00	-12.00	708.23
	51+31.00	-12.00	708.09
S. End South Appr. Pav't.	51+41.00	-12.00	707.94

CL ROADWAY & PROFILE GRADE

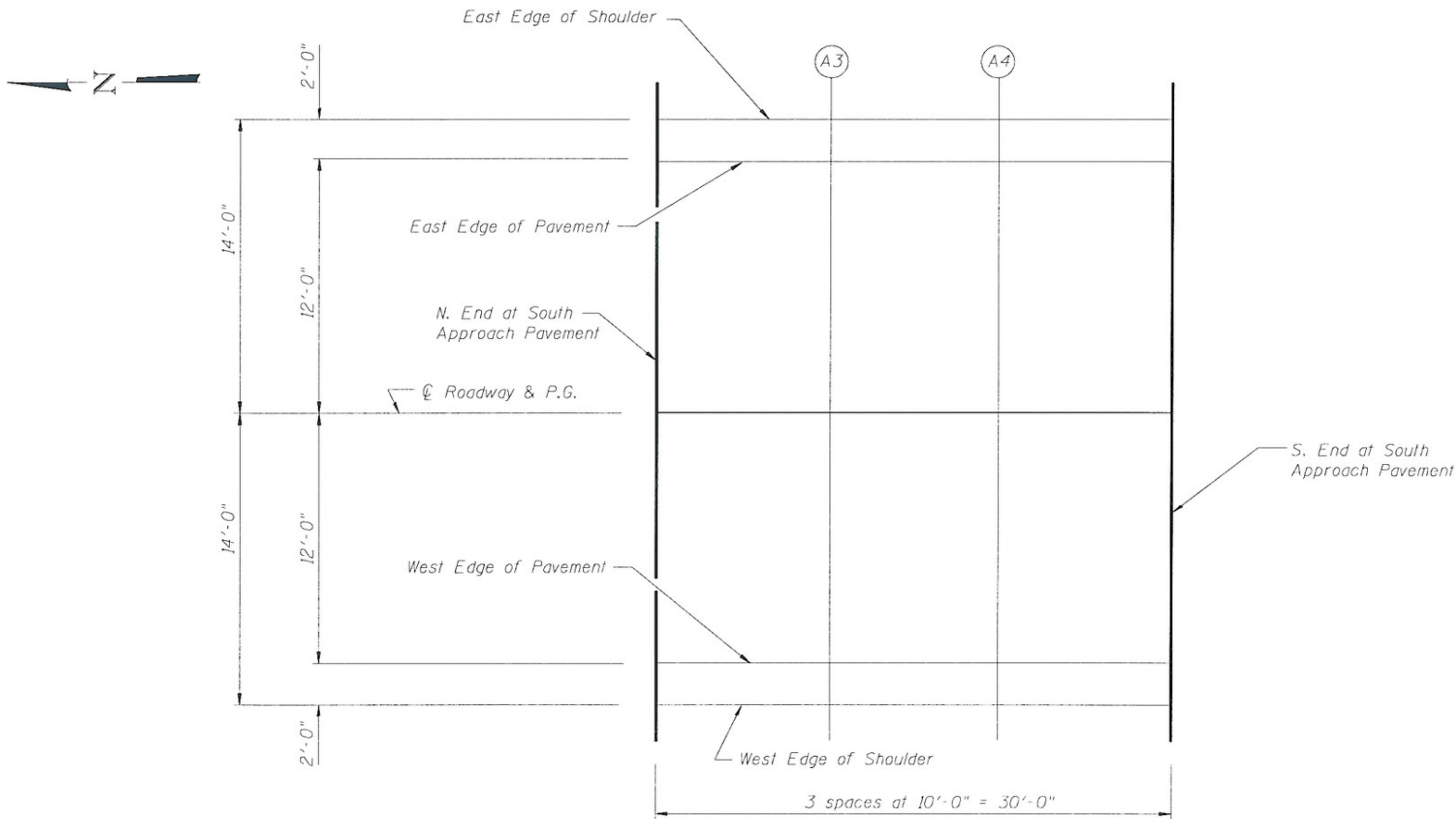
Location	Station	Offset	Theoretical Grade Elevations
N. End South Appr. Pav't. A3	51+11.00	0.00	708.55
	51+21.00	0.00	708.42
	51+31.00	0.00	708.28
S. End South Appr. Pav't.	51+41.00	0.00	708.13

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End South Appr. Pav't. A3	51+11.00	12.00	708.36
	51+21.00	12.00	708.23
	51+31.00	12.00	708.09
S. End South Appr. Pav't.	51+41.00	12.00	707.94

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
N. End South Appr. Pav't. A3	51+11.00	14.00	708.33
	51+21.00	14.00	708.20
	51+31.00	14.00	708.06
S. End South Appr. Pav't.	51+41.00	14.00	707.91



PLAN

South Approach

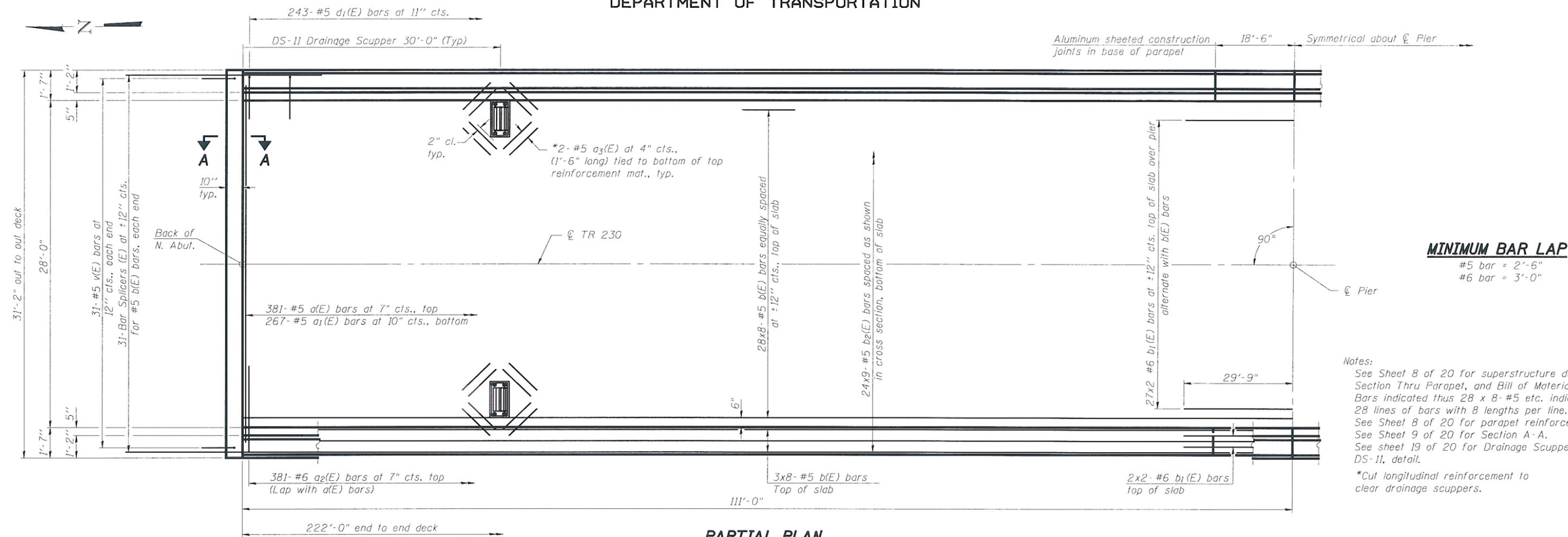
DESIGNED	CJC
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB

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

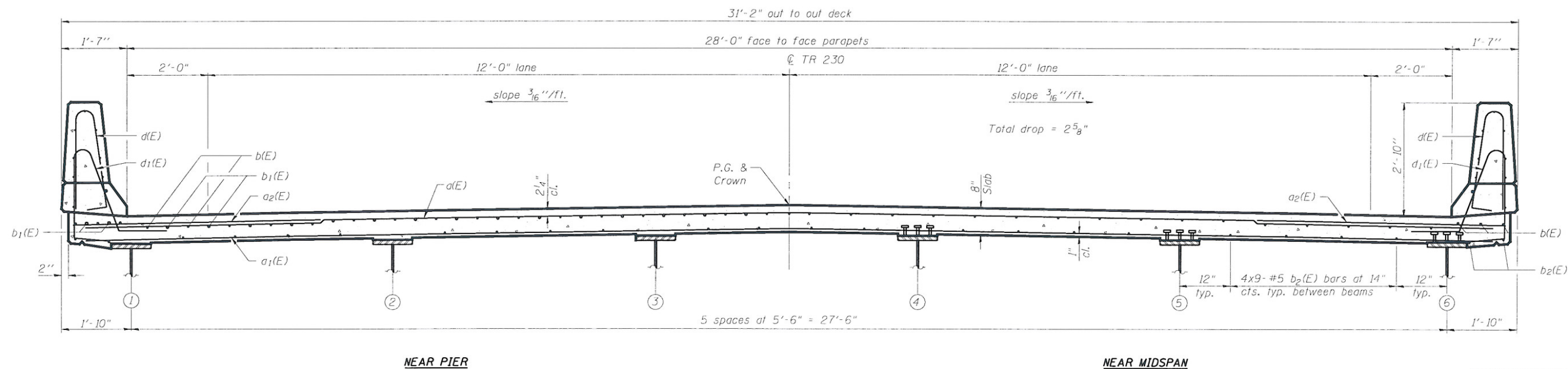
TOP OF SOUTH APPROACH SLAB
ELEVATIONS
STRUCTURE NO. 010-0288

SHEET NO. 6 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	25
	SN 010-0288		CONTRACT NO. 70750		
	FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PARTIAL PLAN



CROSS SECTION
(Looking South)

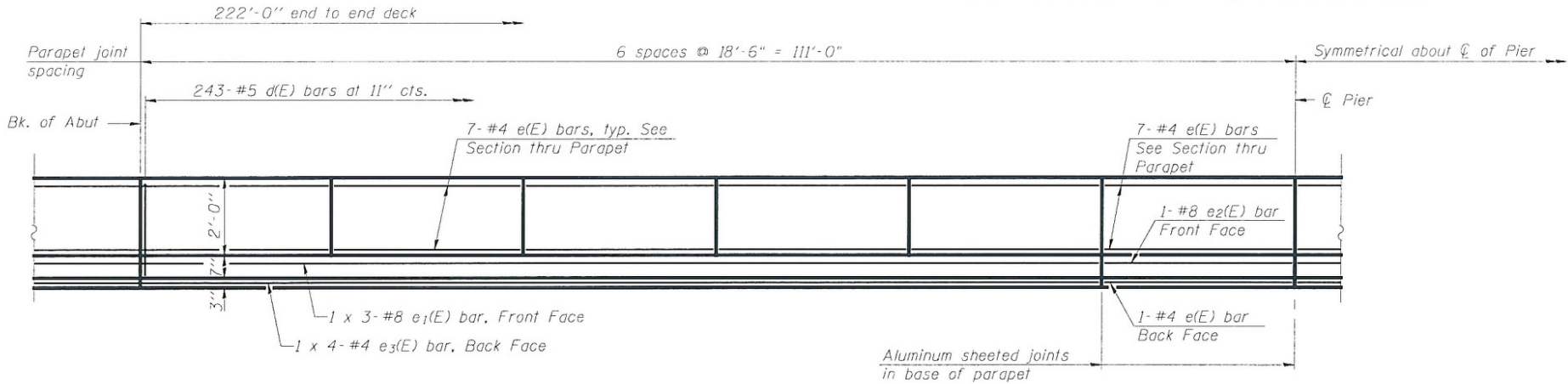
SUPERSTRUCTURE PLAN
STRUCTURE NO. 010-0288

DESIGNED	CJC / MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB

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

SHEET NO. 7 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	26
	SN 010-0288		CONTRACT NO. 70750		
	FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				

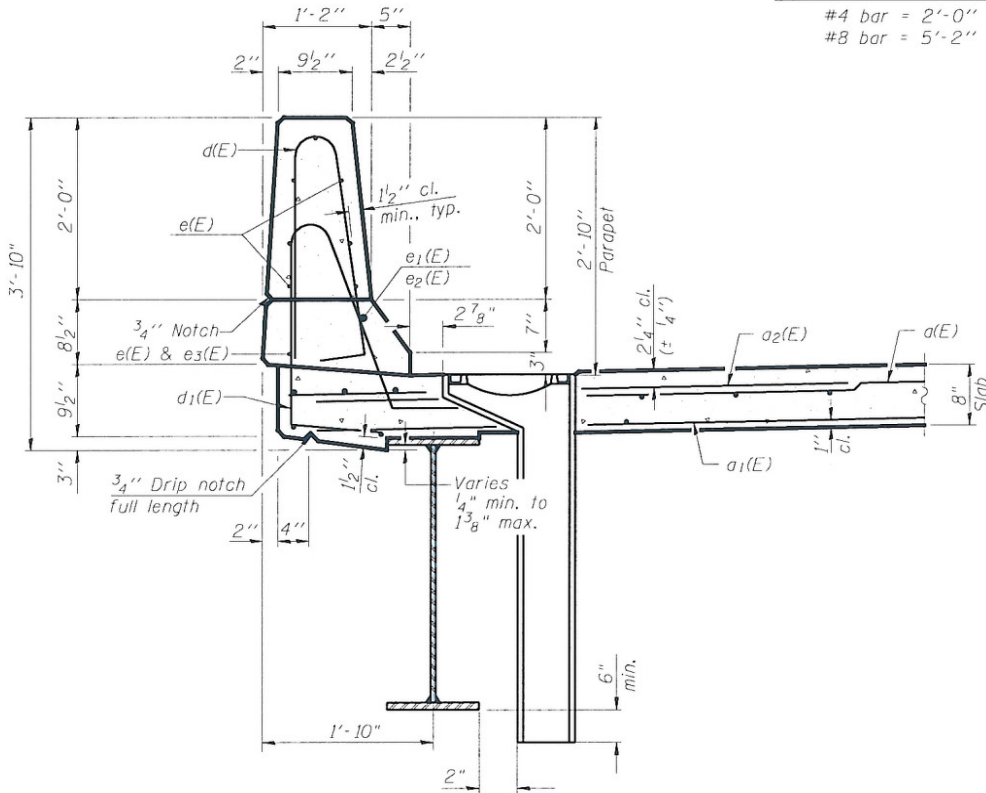
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



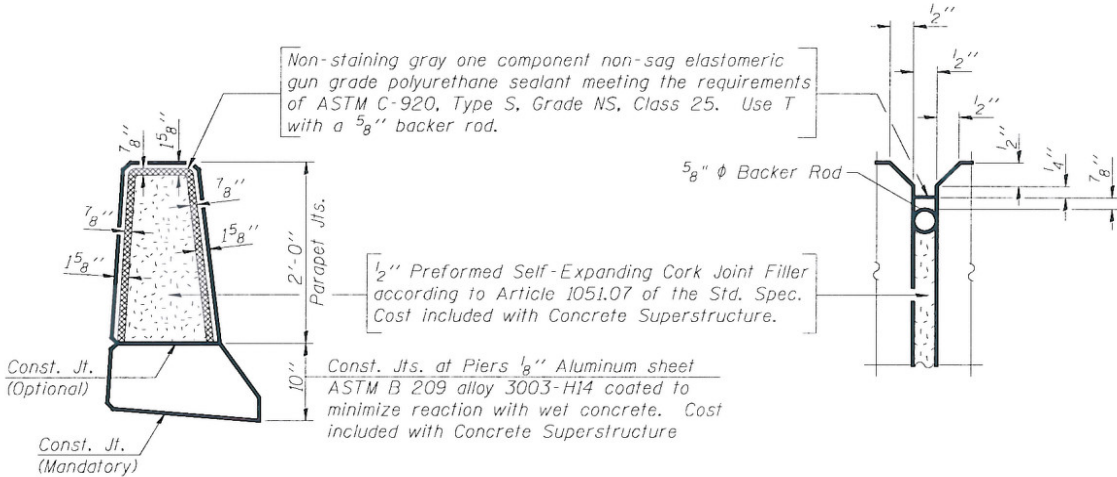
INSIDE ELEVATION OF PARAPET

MINIMUM BAR LAP

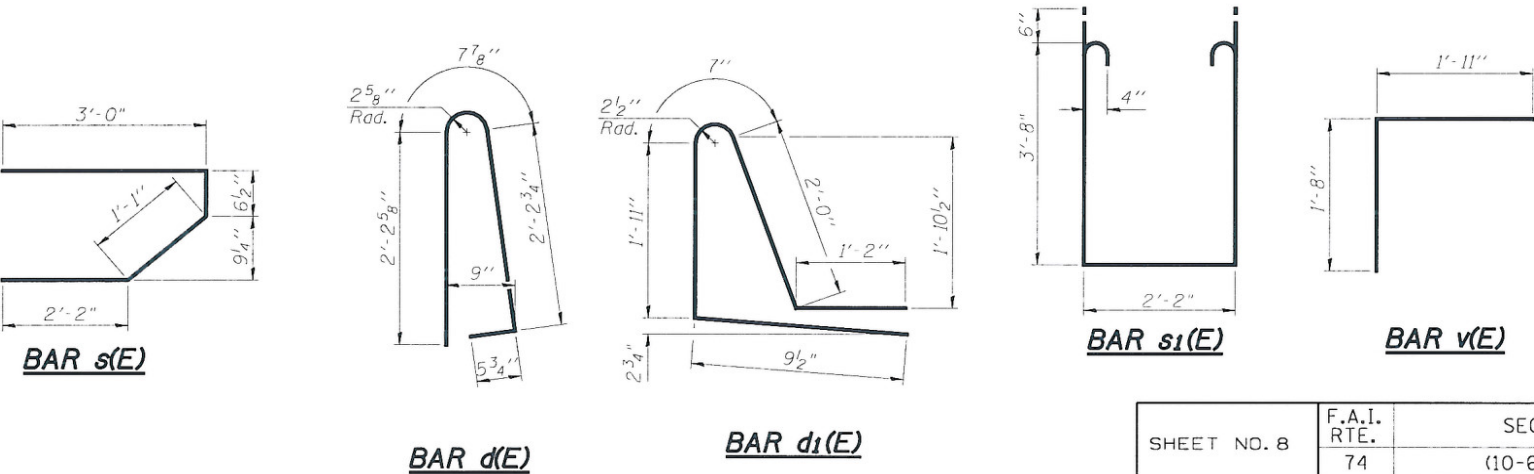
#4 bar = 2'-0"
#8 bar = 5'-2"



SECTION THRU PARAPET



PARAPET JOINT DETAILS



SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	381	#5	30'-4"	—
a1(E)	267	#5	29'-8"	—
a2(E)	762	#6	6'-6"	—
a3(E)	32	#5	1'-6"	—
b(E)	272	#5	29'-11"	—
b1(E)	62	#6	31'-3"	—
b2(E)	216	#5	26'-11"	—
d(E)	486	#5	5'-7"	U
d1(E)	486	#5	6'-6"	U
e(E)	172	#4	18'-2"	—
e1(E)	12	#8	34'-3"	—
e2(E)	4	#8	18'-2"	—
e3(E)	16	#4	24'-8"	—
m(E)	10	#6	30'-10"	—
m1(E)	24	#6	8'-6"	—
m2(E)	10	#6	5'-2"	—
m3(E)	4	#6	1'-6"	—
s(E)	72	#5	6'-10"	U
s1(E)	58	#4	10'-6"	U
v(E)	62	#5	3'-7"	T
Reinforcement Bars, Epoxy Coated		Pound	57,020	
Concrete Superstructure		Cu. Yds.	250.1	

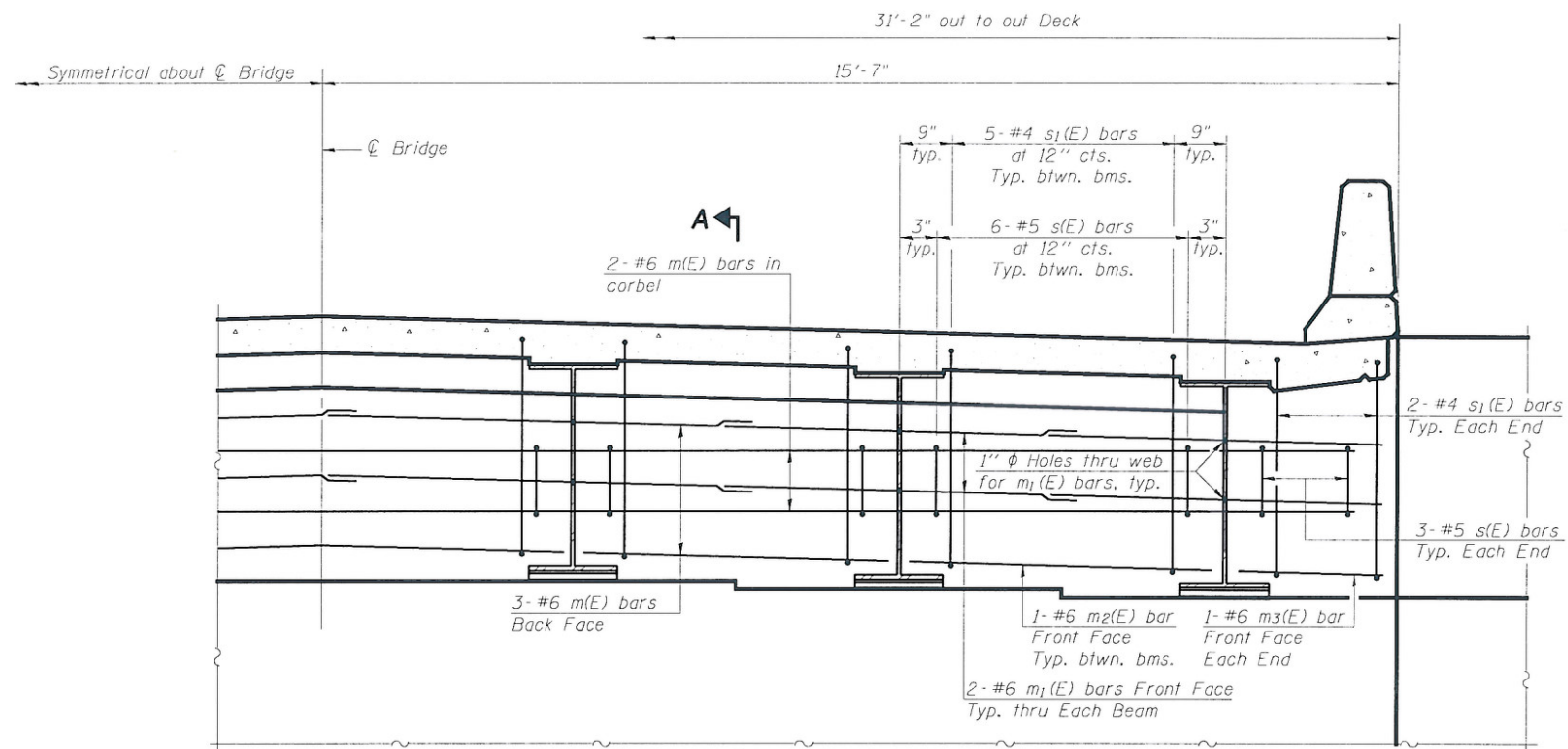
Bars indicated thus 1 x 4-#4 etc. indicates 1 line of bars with 4 lengths per line.

DESIGNED CJC / MEB
CHECKED JSP
DRAWN UJ
CHECKED MEB

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PROFESSIONAL DESIGN NUMBER 184-108218

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 010-0288

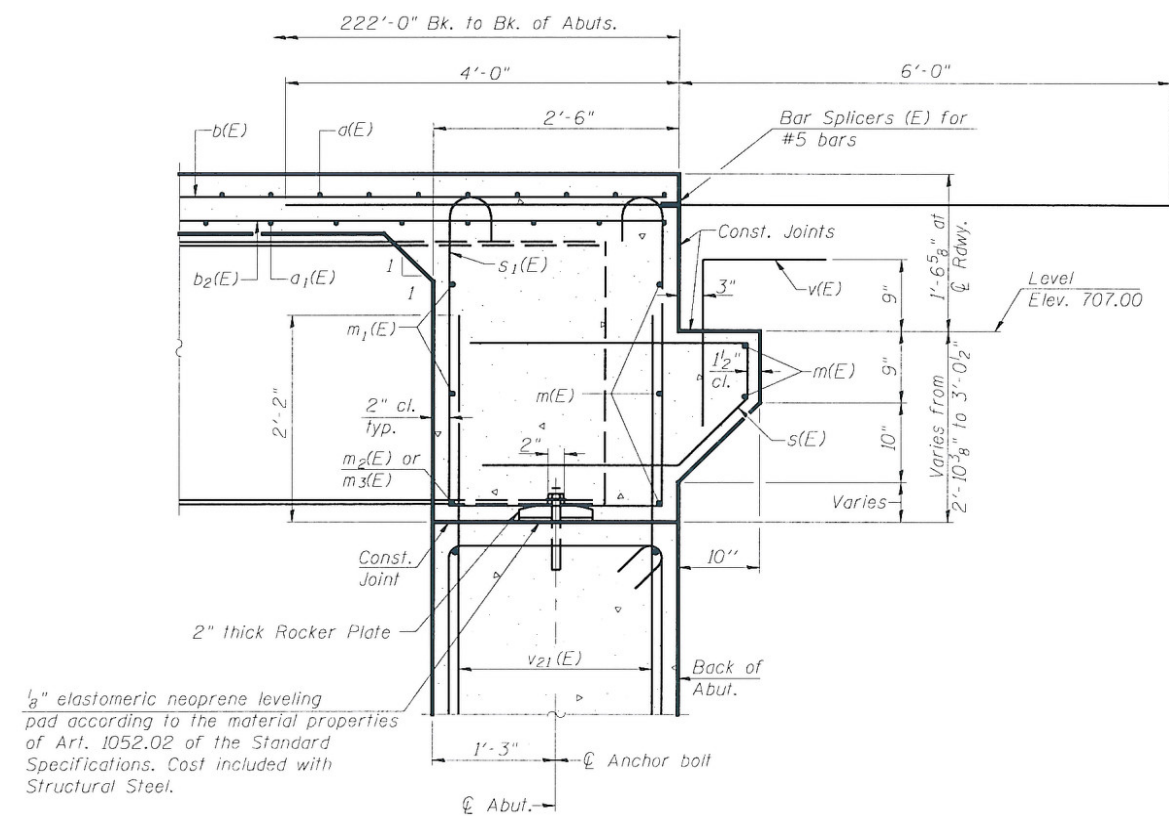
SHEET NO. 8	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	27
	SN 010-0288		CONTRACT	NO. 70750	
	FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				



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), & v(E) see sheet 8 of 20.
The s(E) and s1(E) bars shall be placed parallel to the beams.
v21(E) bars are billed with abutments on sheet 15 of 20.

MIN. BAR LAP
#6 bar = 3'-4"



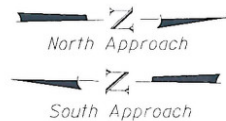
SECTION A-A

**INTEGRAL ABUTMENT
DIAPHRAGM DETAILS
STRUCTURE NO. 010-0288**

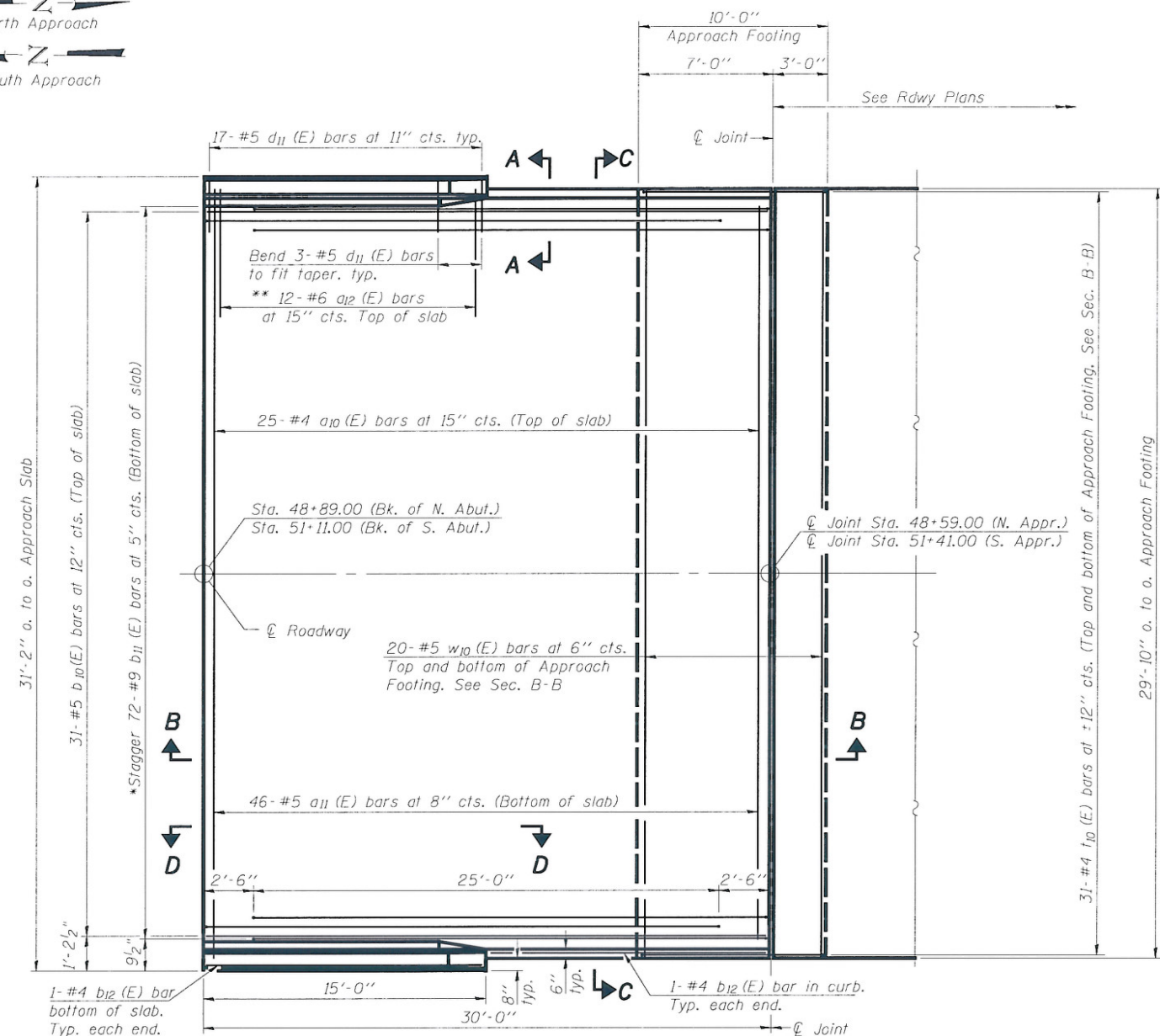
DESIGNED	CJC / MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB

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ENGINEERS, INC.
PROFESSIONAL DESIGN NUMBER: 164-000288

SHEET NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9	74	(10-6)HBR-5	CHAMPAIGN	63	28
20 SHEETS		SN 010-0288	CONTRACT NO. 70750		
		FED. ROAD DIST. NO. 5	ILLINOIS FED. AID PROJECT		

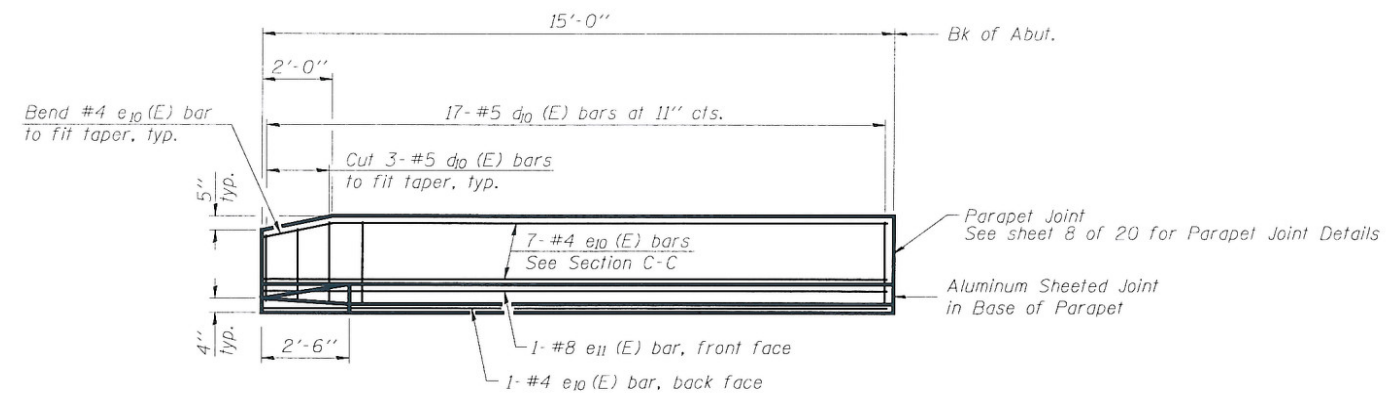


Notes:
See sheet 11 of 20 for Sections B-B & C-C.
 a_{10} (E), a_{11} (E), and w_{10} (E) bar spacings measured parallel to C Rdwy.

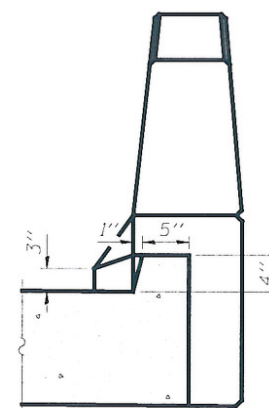


PLAN

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



VIEW D-D



VIEW A-A

DESIGNED	CJC
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB

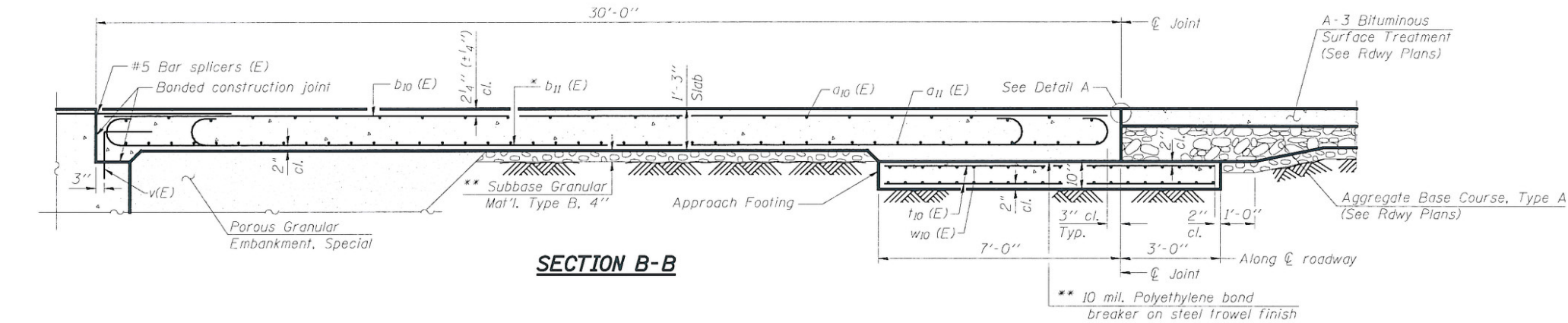
HR
HURST-ROSCHÉ
ENGINEERS, INC.
PROFESSIONAL DESIGN NUMBER 184-000298

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 010-0288

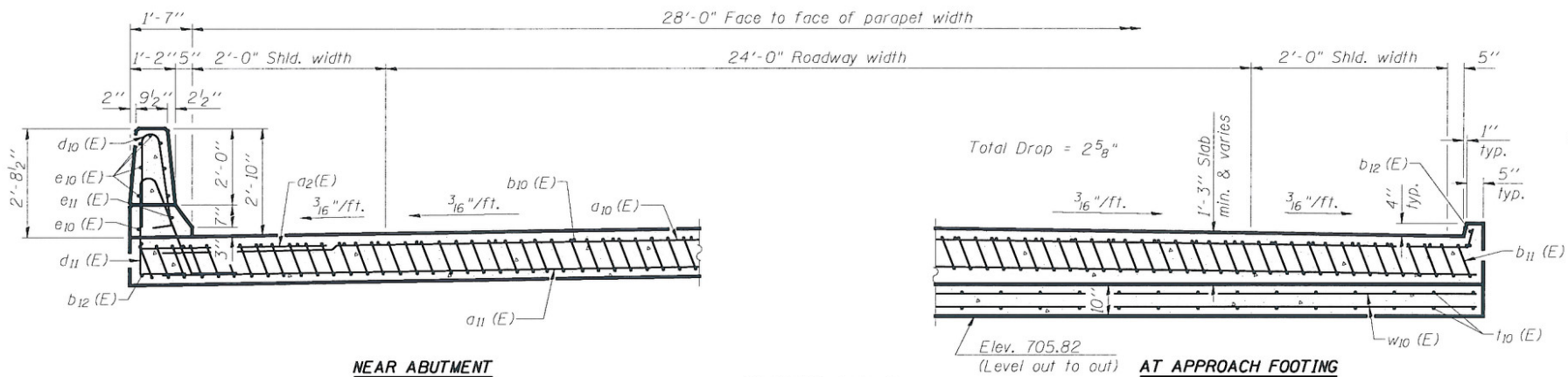
SHEET NO. 10 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	29
	SN 010-0288		CONTRACT NO. 70750		
	FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				

D-95-007-09

Notes:
Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
For v(E) bar details, see sheet 8 of 20.
The approach footing maximum applied service bearing pressure (Qmax) = 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.
For additional parapet details, see sheet 10 of 20.



SECTION B-B

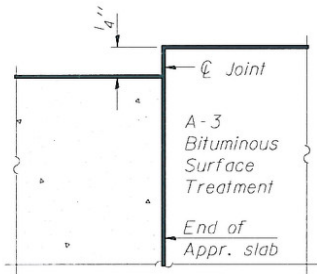


SECTION C-C

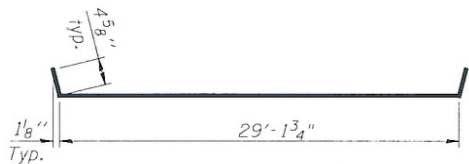
(See Plan for dimensions not shown)

NEAR ABUTMENT

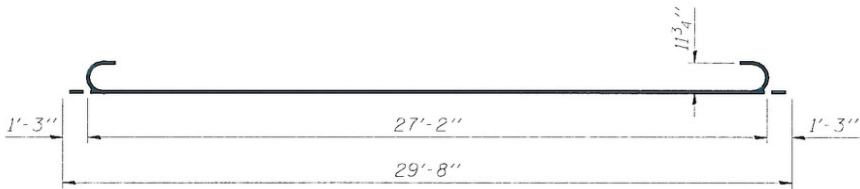
AT APPROACH FOOTING



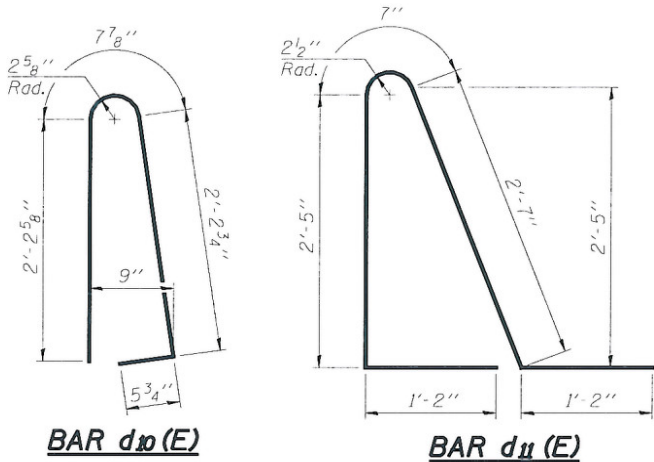
FLEXIBLE PAVEMENT
DETAIL A



BAR a10 (E)



BAR b11 (E)



APPROACH SLABS
BILL OF MATERIAL

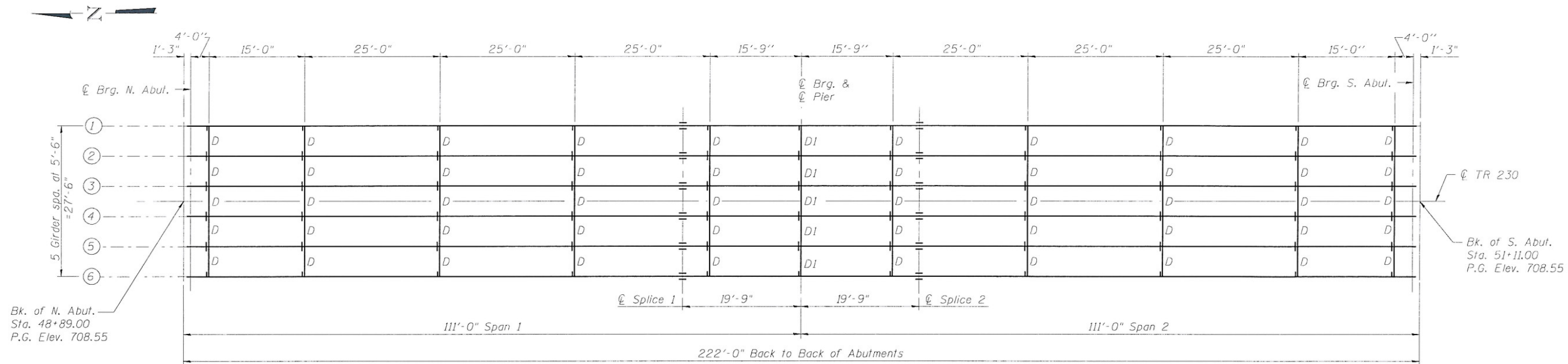
Bar	No.	Size	Length	Shape
a10 (E)	50	#4	29'-11"	
a11 (E)	92	#5	29'-6"	
a2 (E)	48	#6	6'-6"	
b10 (E)	62	#5	29'-8"	
b11 (E)	144	#9	29'-8"	
b12 (E)	8	#4	14'-8"	
d10 (E)	68	#5	5'-7"	
d11 (E)	68	#5	7'-11"	
e10 (E)	32	#4	14'-8"	
e11 (E)	4	#8	14'-8"	
t10 (E)	124	#4	9'-8"	
w10 (E)	80	#5	29'-6"	
Concrete Superstructure			Cu. Yd.	91.4
Concrete Structures			Cu. Yd.	18.4
Reinforcement Bars, Epoxy Coated			Pound	25,515

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 010-0288

DESIGNED	CJC
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB

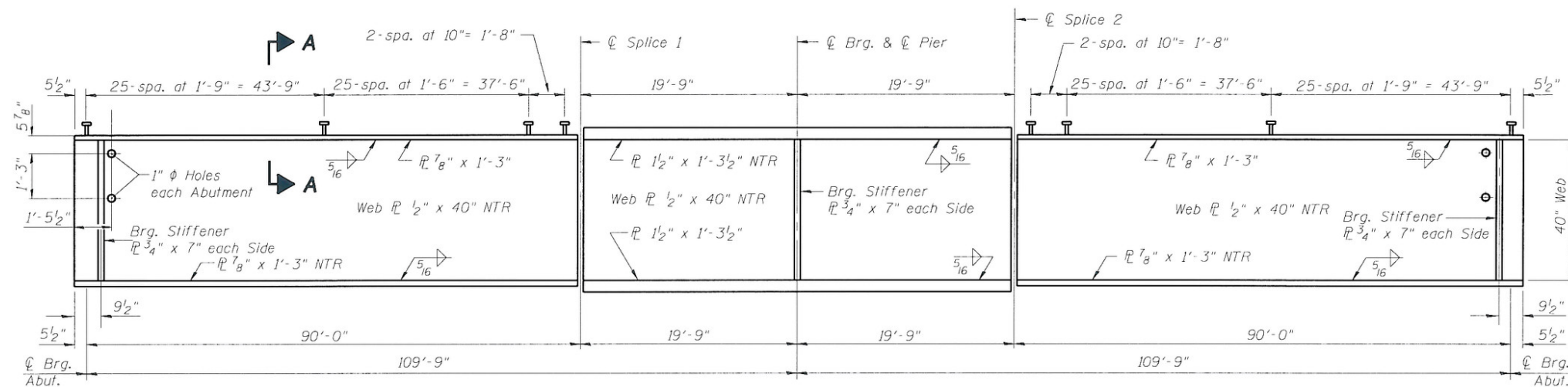
HR
HURST-ROSCH
ENGINEERS, INC.
PROFESSIONAL DESIGN NUMBER: 184-000298

SHEET NO. 11 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	30
	SN 010-0288		CONTRACT NO. 70750		
	FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				



FRAMING PLAN

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



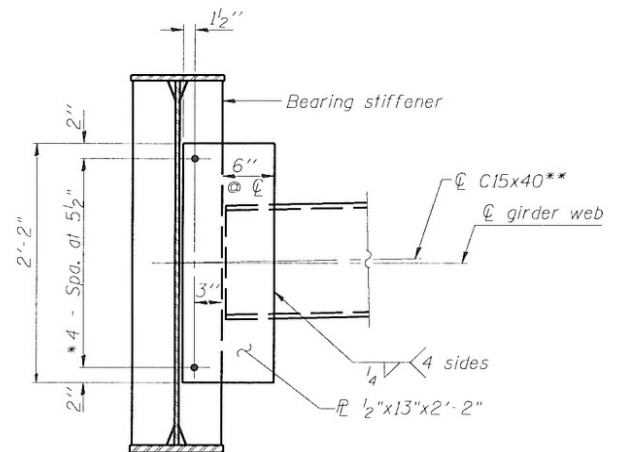
GIRDER ELEVATION

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

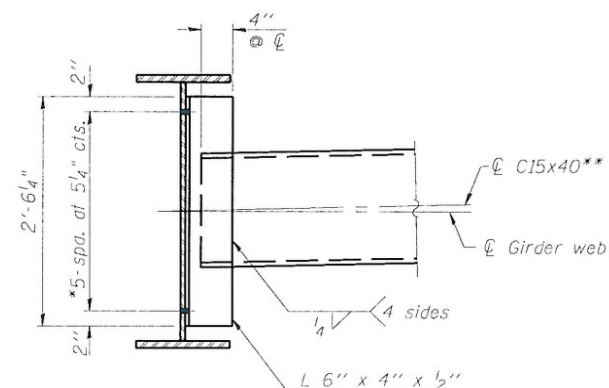
Notes:

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

See sheet 13 of 20 for Section A-A, Section at Pier, and Section at Abutment.



INTERIOR DIAPHRAGM D1



INTERIOR DIAPHRAGM D

Notes:

Two hardened washers required for each set of oversized holes.

* 3/4" φ HS bolts, 1 5/16" φ holes.

** C15x50 is permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.

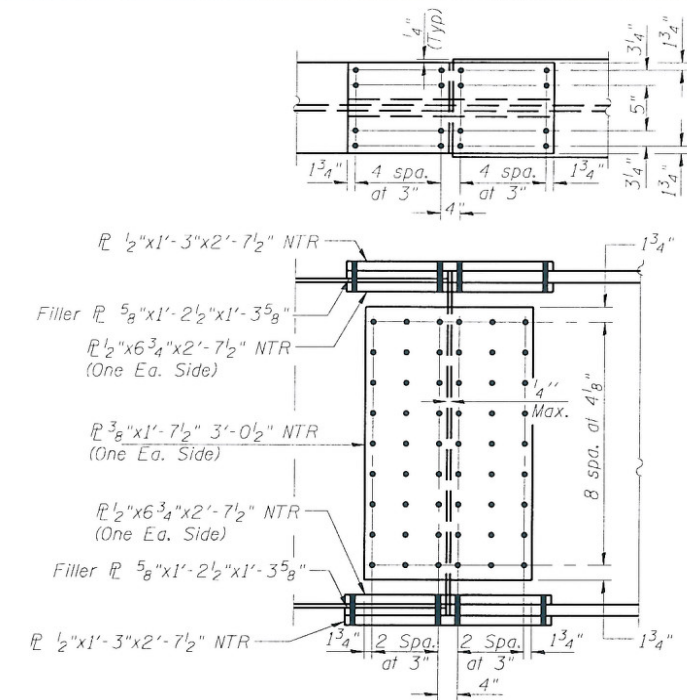
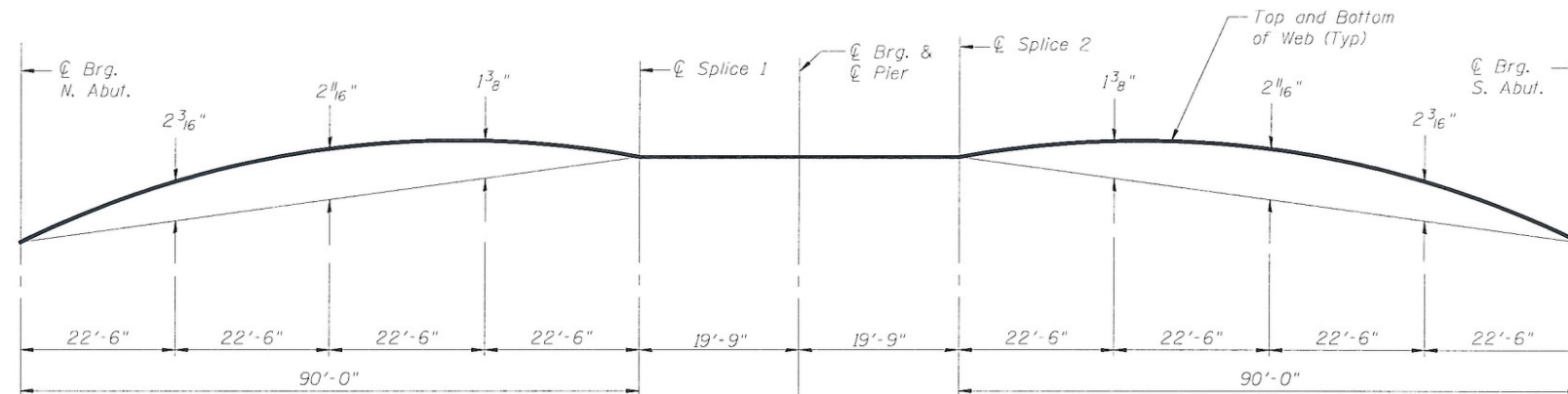
The alternate, if utilized, shall be provided at no additional cost to the Department.

FRAMING PLAN STRUCTURE NO. 010-0288

DESIGNED	MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB

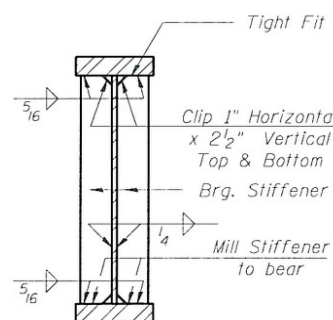
HR
HURST-ROSCHKE
ENGINEERS, INC.
PROFESSIONAL DESIGN NUMBER: 010-0288

SHEET NO. 12 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	31
	SN 010-0288		CONTRACT NO. 70750		
	FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				

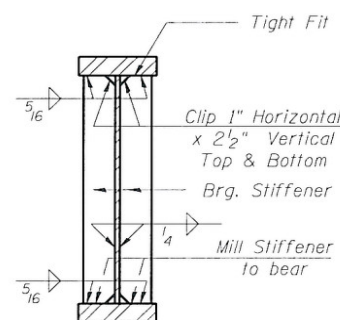


FIELD SPLICE DETAIL

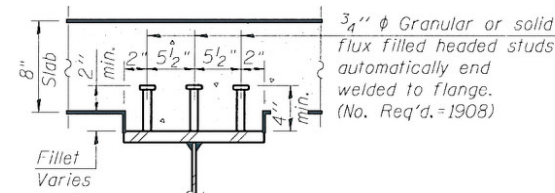
All Splice plates shall be AASHTO M270 Grade 50.



SECTION AT PIER
(Bearing Stiffener)



SECTION AT ABUT.
(Bearing Stiffener)



SECTION A-A

(See sheet 12 of 20 for location)

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 (Short-Strength I, and Service II) due to short-term composite live loads (in_4 and in_3).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in.^4 and in.^3).

DC1: Un-factored non-composite dead load (kips/ft.).

M_{DC1} : Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding

future wearing surface) dead load (kips/ft.).

MDC2: 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} : Unfactored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

$M_L + I_M$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).

$$1.25 (M_{pc1} + M_{pc2}) + 1.5 M_{pw} + 1.75 M_4 + I_M$$

$\phi_r M_{Nn}$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).

$\phi_r M_{nc}$: 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 the moments below (ksi).

Sum of stresses as computed from

f_s (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).

$$1.25 (M_{\text{pc}1} + M_{\text{pc}2}) + 1.5 M_{\text{pw}} + 1.75 M_4 + 1M$$

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

		0.4 Sp. 1 0.6 Sp. 2	Pier
I_s	(in ⁴)	13633	22697
$I_c(n)$	(in ⁴)	30928	
$I_c(3n)$	(in ⁴)	22762	
S_s	(in ³)	653	1056
$S_c(n)$	(in ³)	879	
$S_c(3n)$	(in ³)	799	
$DC1$	(k'')	.74	.81
M_{DC1}	('k)	569	1265
$DC2$	(k'')	.15	.15
M_{DC2}	('k)	128	223
DW	(k'')	.275	.275
M_{DW}	('k)	234	409
$M_k + IM$	('k)	1185	1097
$M_u(\text{Strength I})$	('k)	3296	4394
* $\Phi_r Mn$	('k)	4360	
$f_s DC1$	(ksi)	10.5	14.4
$f_s DC2$	(ksi)	1.9	2.5
$f_s DW$	(ksi)	3.5	4.6
$f_s 1.3(\Phi_r + IM)$	(ksi)	21.0	16.2
$f_s (\text{Service II})$	(ksi)	36.9	37.8
* $f_s (\text{Total})(\text{Strength I})(\text{ksi})$			49.9
V_r	(k)	23.2	

*Compact Sections

****Non-compact and slender sections**

		Abut.	Pier
R_{DC1}	(k)	29.9	106.5
R_{DC2}	(k)	6.2	20.5
R_{DW}	(k)	11.4	37.6
$R_4 \cdot 1M$	(k)	74.2	135.4
R_{Total}	(k)	121.7	300.0

STRUCTURAL STEEL DETAILS
STRUCTURE NO. 010-0288

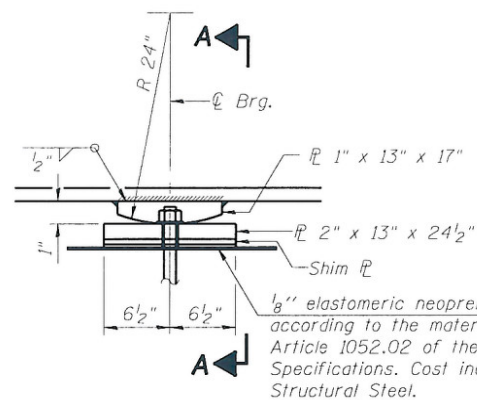
SHEET NO. 13 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	32
	SN 010-0288		CONTRACT NO. 70750		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

DESIGNED	MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB

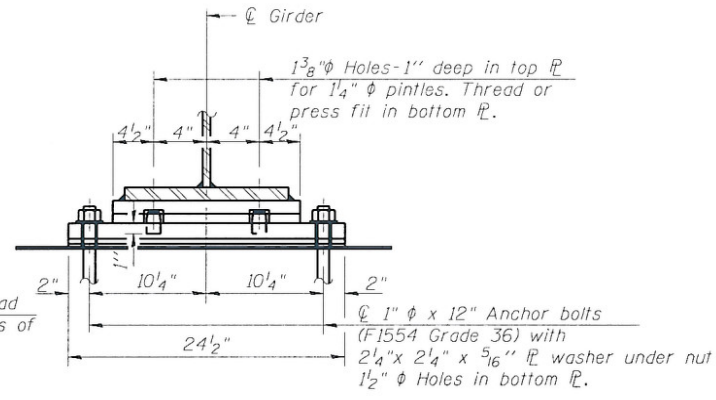
HR
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ENGINEERS, INC.

Notes:

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

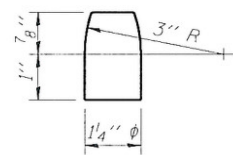


ELEVATION AT PIER

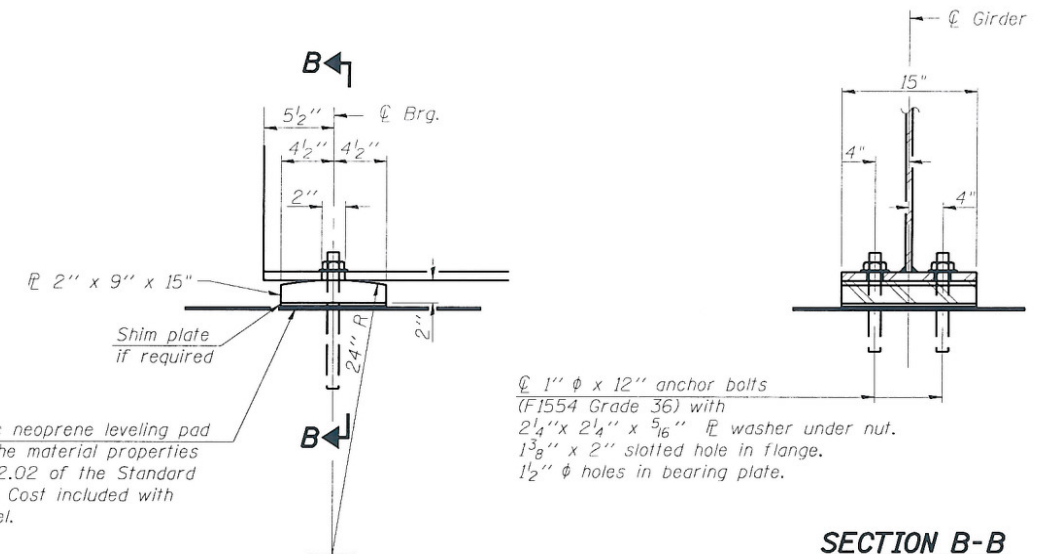


SECTION A-A

FIXED BEARING AT PIER



PINTLE



ELEVATION AT ABUTMENT

SECTION B-B

FIXED BEARING AT ABUTMENT

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

TOTAL BILL OF MATERIAL

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

**BEARING DETAILS
STRUCTURE NO. 010-0288**

DESIGNED	MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB

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PROFESSIONAL DESIGN NUMBER 18-000000

SHEET NO. 14 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	33
	SN 010-0288		CONTRACT NO. 70750		
	FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				

Notes:
Pour steps monolithically with cap.

Optional Construction Joints

9" typ.

3-#4 s22(E) bars at 12" cts., typ. between piles

9" typ.

Concrete Encasement, typ. (See Sht 17 of 20)

Elev. 708.46

4'-7"

5'-6"

5'-6"

5'-6"

5'-6"

5'-6"

4'-7"

2'-0" min.

Elev. 708.46

Fan 5-#6 h20(E) bars Each Face Bend in field as required

2-#5 v23(E) bars at 12" cts. Each Face

Elev. 703.96

2-#4 s22(E) bars Each End

4-#6 u20(E) bars Each End

4-#6 h20(E) bars at 12" cts. Each Face

7-#5 v22(E) bars at 12" cts. Each Face (See Field Cutting Diagram)

Elev. 704.13

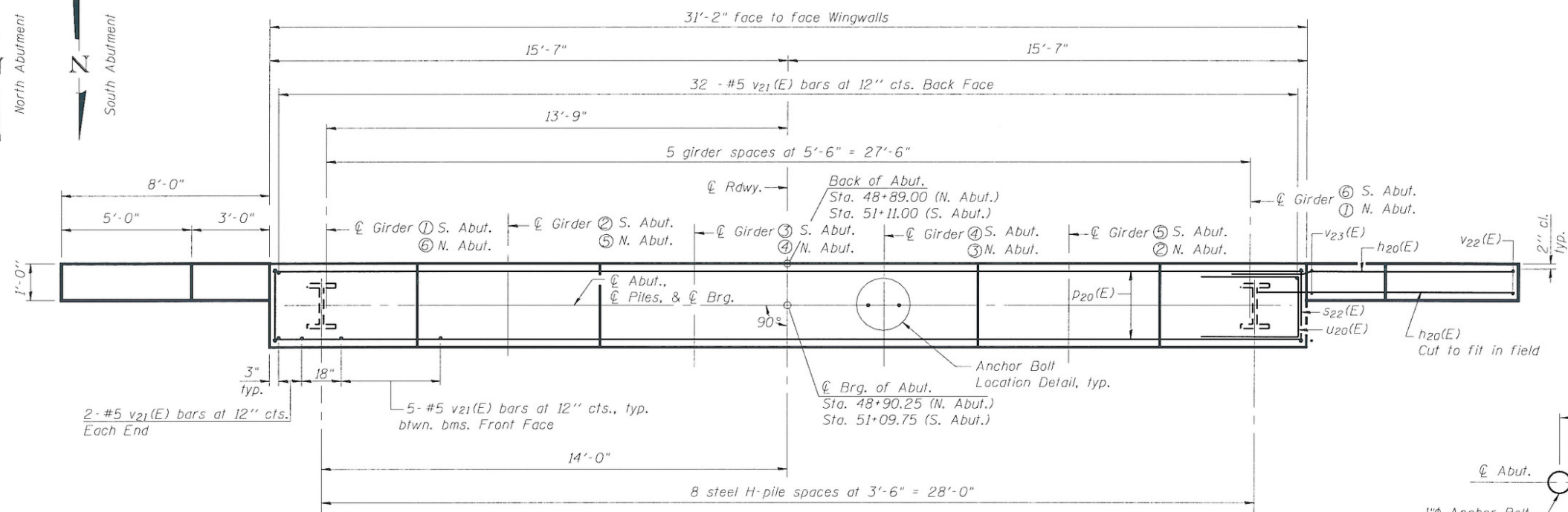
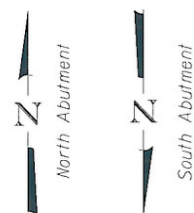
Elev. 704.04

Elev. 703.96

Elev. 700.46

12-#8 p20(E) bars See Sec. Thru Abut.

ELEVATION AT ABUTMENT
(Looking South)
(North Abutment similar, except as noted)



A diagram of a square with a side length of 2'-2". The top-right corner is cut off at a 45-degree angle. The cutout is defined by a circular arc with a radius of 4 1/2".

A diagram showing a rectangular area. The vertical dimension is labeled $3'-0''$ and the horizontal dimension is labeled $2'-1''$.

12'-10"

7'-8"

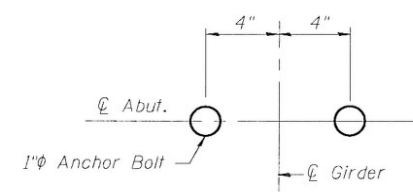
5'-2"

7 - #5 $f_y = 60$ ksi bars

@ 12" c/c's.

Cut Line

Order $v_{22}(E)$ full length. Cut as shown and use remainder of bars in opposite face.

[illegible]

BILL OF MATERIAL
(TWO ABUTMENTS)

Bar	No.	Size	Length	Shape
$h_{20}(E)$	72	#6	10'-7"	—
$p_{20}(E)$	24	#8	30'-10"	—
$s_{22}(E)$	56	#4	11'-5"	□
$u_{20}(E)$	16	#6	8'-1"	—
$v_{21}(E)$	122	#5	4'-4"	—
$v_{22}(E)$	56	#5	12'-10"	—
$v_{23}(E)$	16	#5	7'-8"	—
* Structure Excavation			Cu. Yd.	226
Concrete Structures			Cu. Yd.	29.1
Reinforcement Bars, Epoxy Coated			Pound	5,175
Furnishing Steel Piles HP12x53			Foot	1,320
Driving Piles			Foot	1,320
Test Pile Steel HP12x53			Each	2
Concrete Encasement			Cu. Yd.	6.3

*Includes 111.0 Cu. Yd. Structure Excavation for Porous Granular Embankment, Special.

SHEET NO. 15 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	34
	SN 010-0288		CONTRACT NO. 70750		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

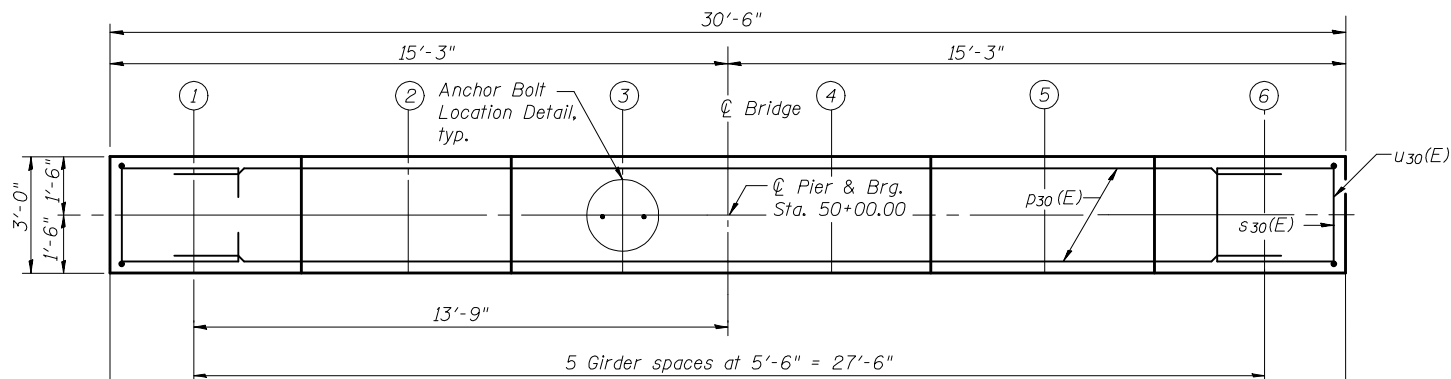
DESIGNED	MEB
CHECKED	JSP
DRAWN	UJ
CHECKED	MEB

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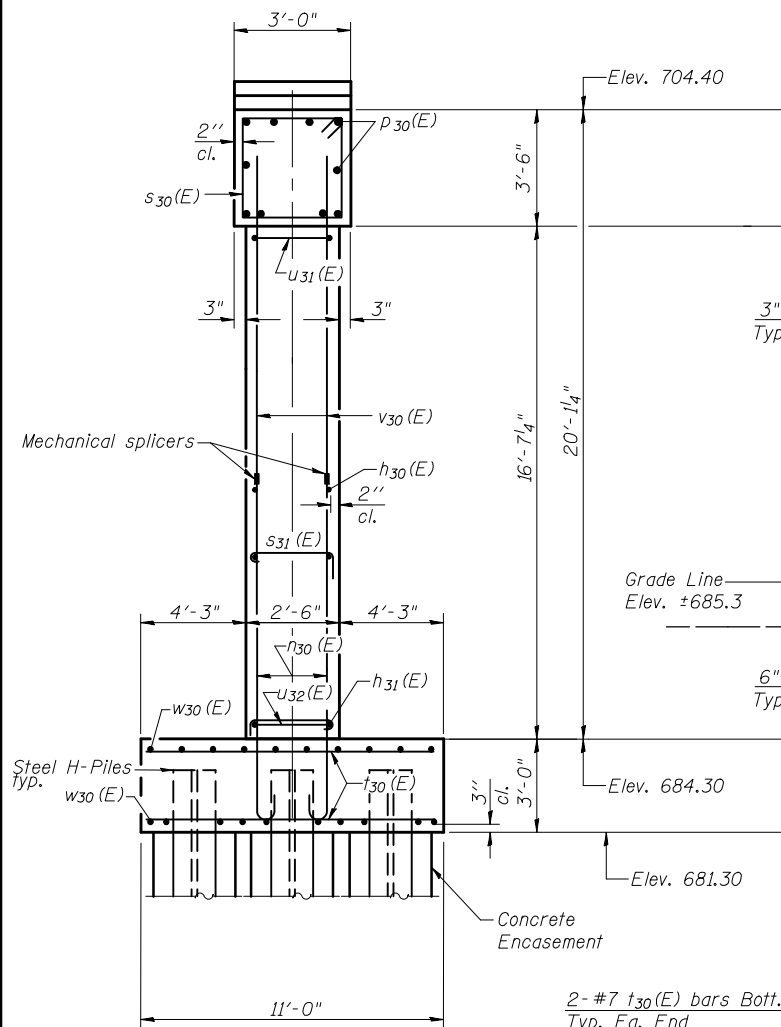
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of piles and concrete encasement, see sheet 17 of 20.

PILE DATA

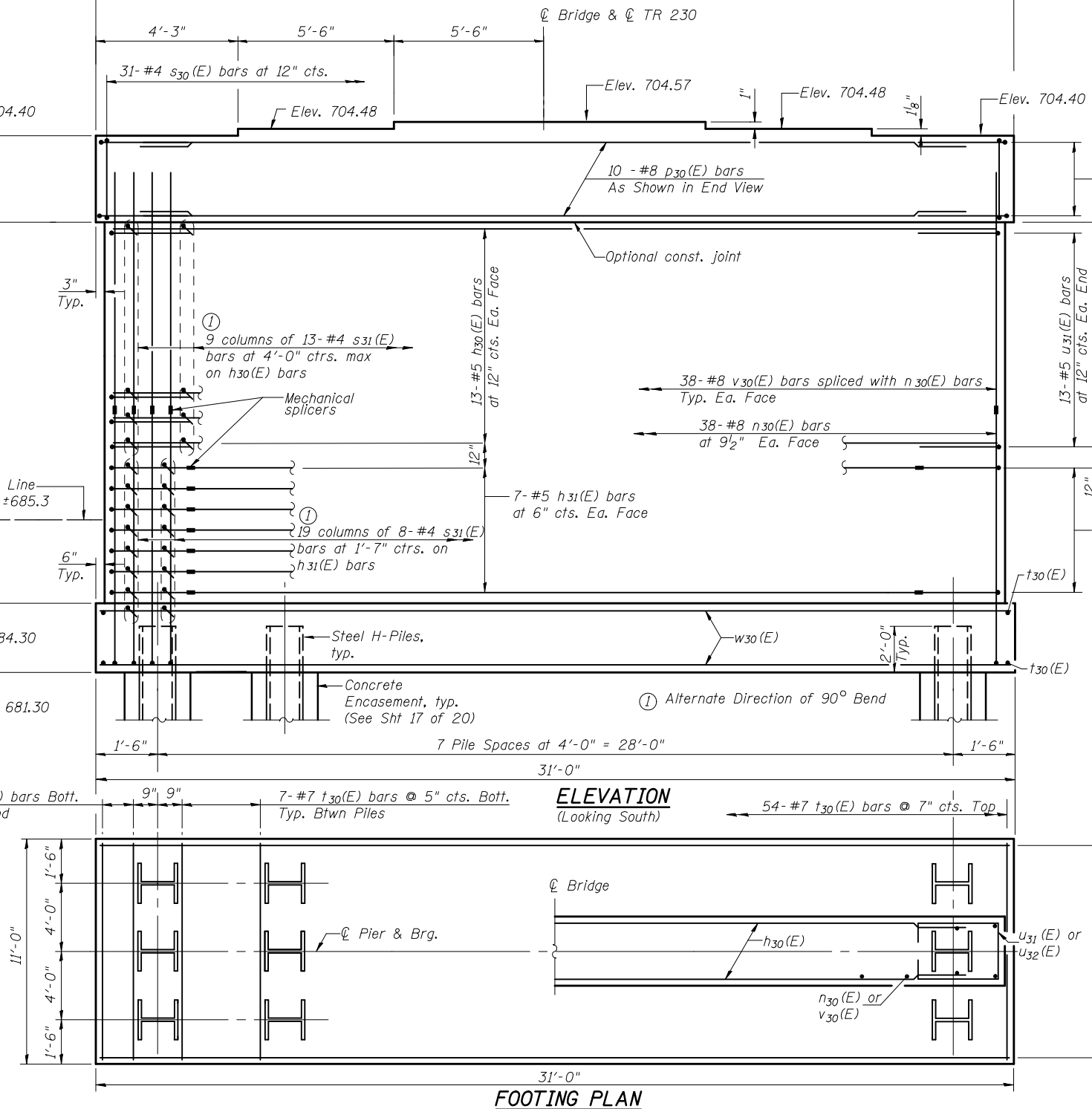
Type: HP 14x89
Nominal Required Bearing: 364 kips
Factored Resistance Available: 181 kips
Est. Length: 72'
No. Production Piles: 23
No. Test Piles: 1



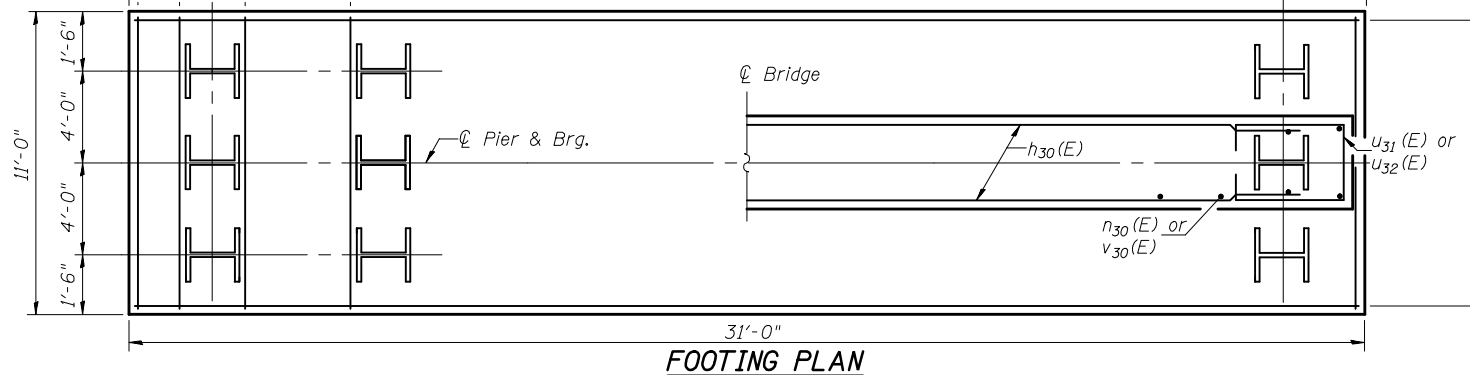
TOP PLAN



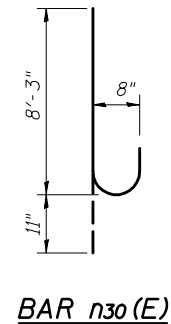
END VIEW



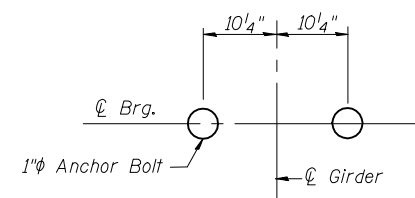
ELEVATION
(Looking South)



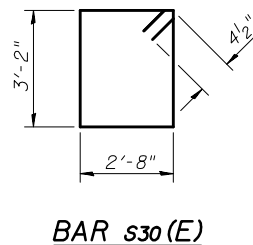
FOOTING PLAN



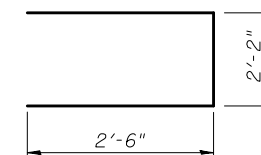
BAR n30(E)



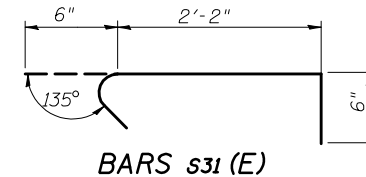
ANCHOR BOLT
LOCATION DETAIL



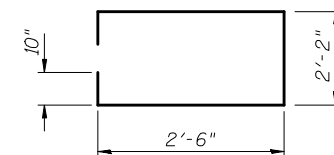
BAR s30(E)



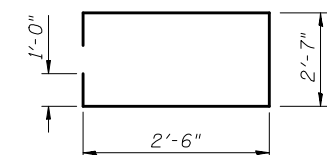
BARS u32(E)



BARS s31(E)



BARS u31(E)



BARS u30(E)

BILL OF MATERIAL

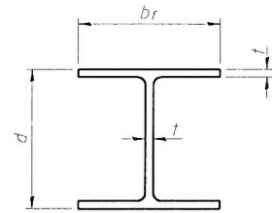
Bar	No.	Size	Length	Shape
h30(E)	26	#5	29'-6"	—
h31(E)	14	#5	24'-6"	—
n30(E)	76	#8	9'-2"	⌋
p30(E)	10	#8	30'-2"	—
s30(E)	31	#4	12'-5"	□
s31(E)	269	#4	3'-2"	⌋
t30(E)	107	#7	10'-6"	—
u30(E)	8	#6	9'-7"	□
u31(E)	26	#5	8'-10"	□
u32(E)	14	#5	7'-2"	□
v30(E)	76	#8	13'-2"	—
w30(E)	20	#5	30'-6"	—
Concrete Structures			Cu. Yd.	96.2
Reinforcement Bars, Epoxy Coated			Pound	10,615
Furnishing Steel Piles HP14x89			Foot	1656
Driving Piles			Foot	1656
Test Pile Steel HP14x89			Each	1
Mechanical Splicers			Each	104
Concrete Encasement			Cu. Yd.	13.1
Braced Excavation			Cu. Yd.	132

PIER STRUCTURE NO. 010-0288

DESIGNED	MEB
CHECKED	JSP
DRAWN	CJC
CHECKED	MEB

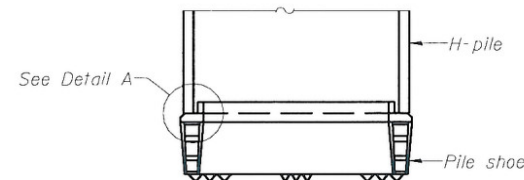
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ENGINEERS, INC.
PROFESSIONAL DESIGN NUMBER: 184-000296

SHEET NO. 16 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	35
	SN 010-0288		CONTRACT NO. 70750		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					

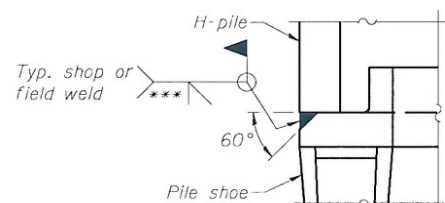


STEEL PILE TABLE

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

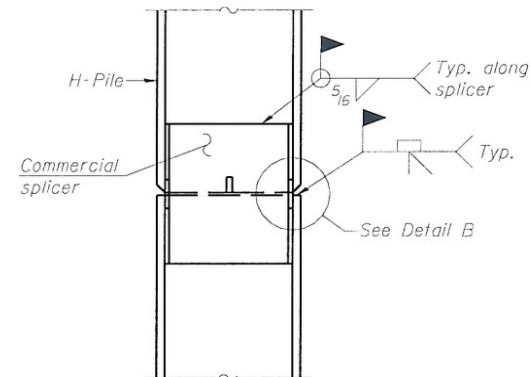


ELEVATION

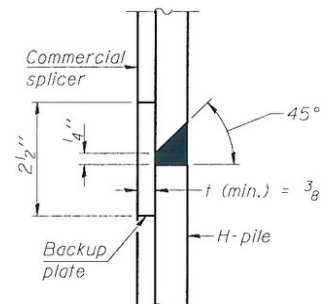


DETAIL A

H-PILE SHOE ATTACHMENT

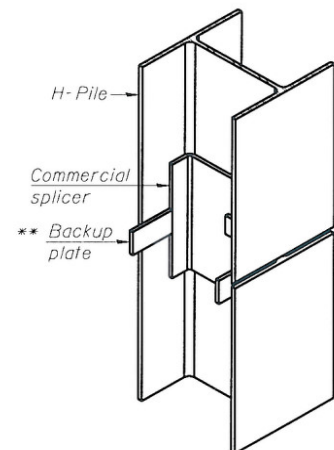


ELEVATION

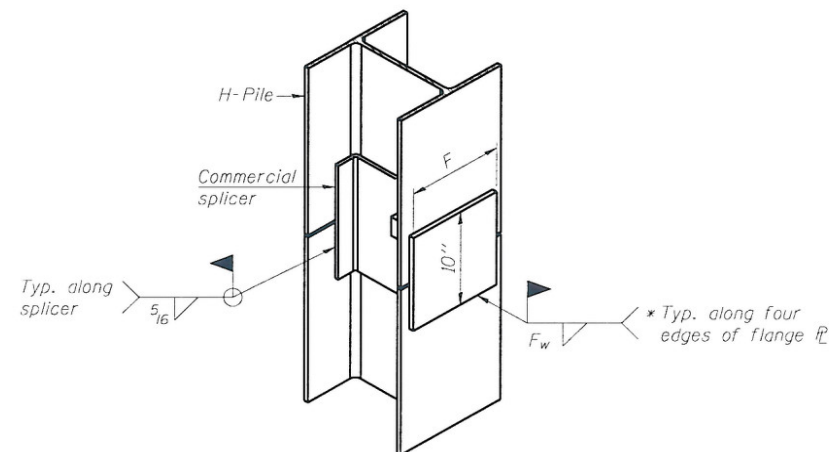


DETAIL "B"

WELDED COMMERCIAL SPLICE



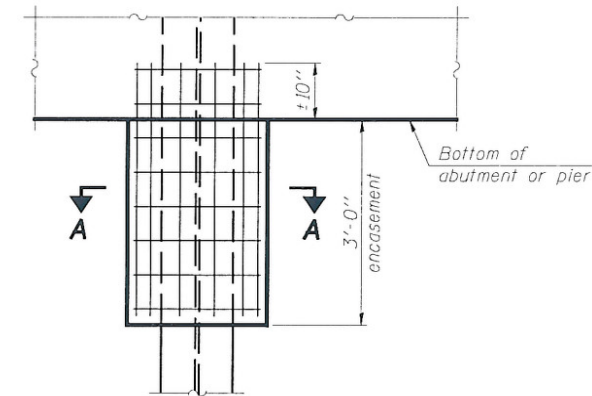
ISOMETRIC VIEW



ISOMETRIC VIEW

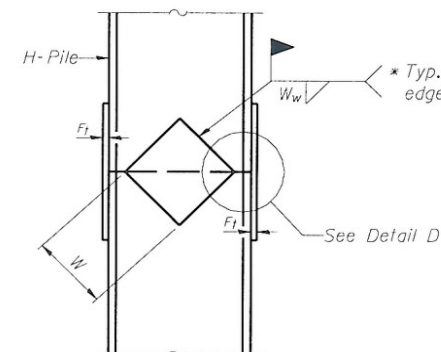
WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).

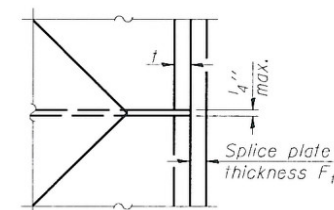


ELEVATION

PILE ENCASEMENT

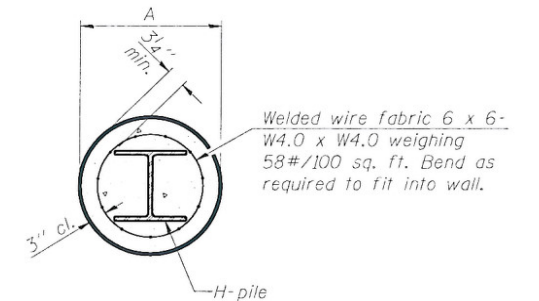


ELEVATION



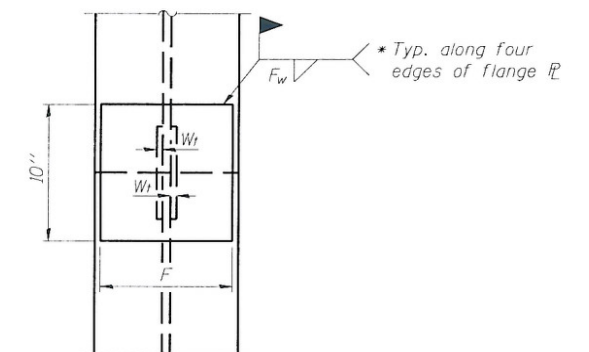
DETAIL D

WELDED PLATE FIELD SPLICE



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

SECTION A-A



END VIEW

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

**HP PILE DETAILS
STRUCTURE NO. 010-0288**

DESIGNED	CJC
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB

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PROFESSIONAL DESIGN NUMBER: 164-000298

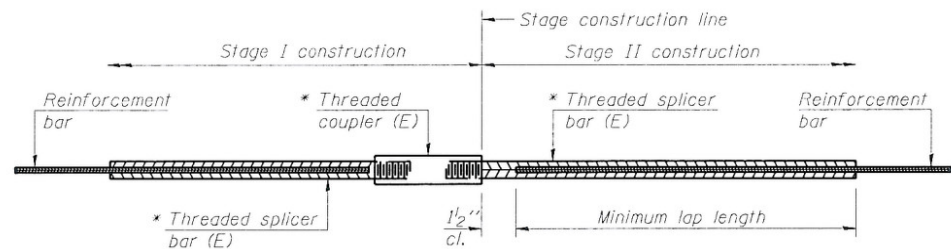
11-1-09

F-HP

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

SHEET NO. 17 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	36
	SN 010-0288		CONTRACT NO. 70750		
	FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				

D-95-007-09



STANDARD BAR SPLICER ASSEMBLY

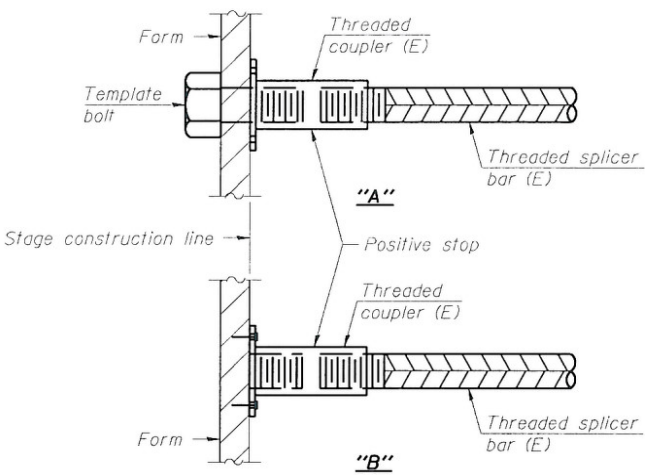
Minimum Lap Lengths				
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

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

Threaded splicer bar length = min. lap length + 1 1/2' + thread length

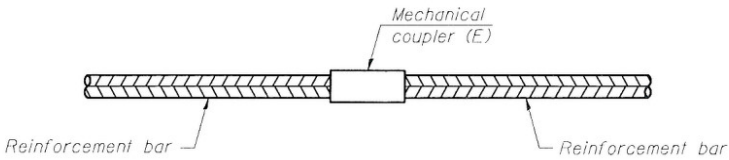
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

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



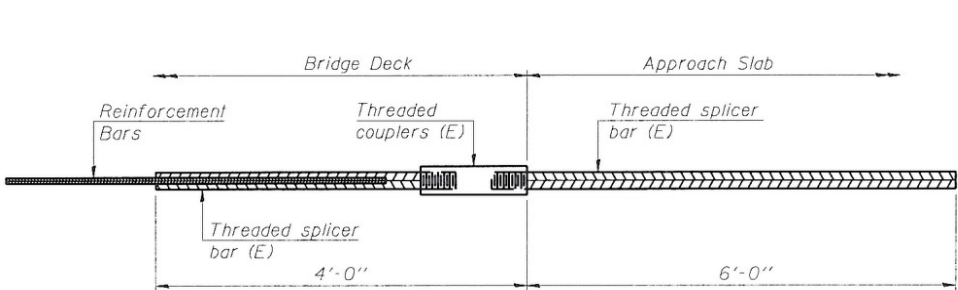
INSTALLATION AND SETTING METHODS

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



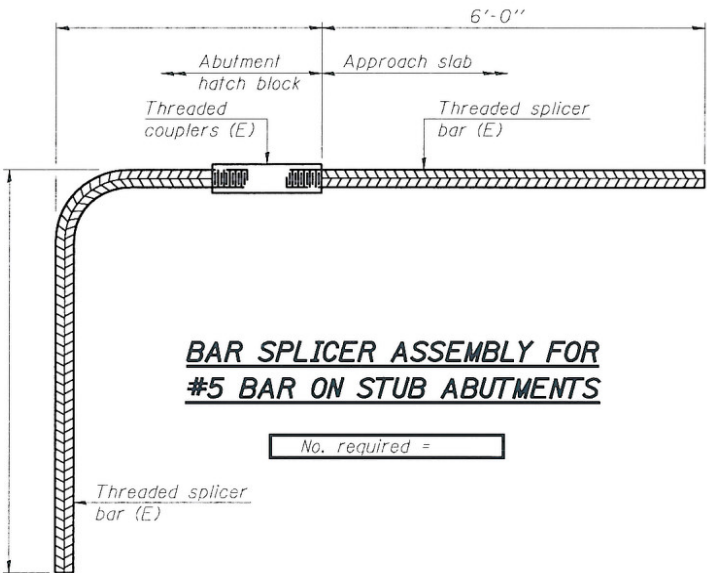
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
Pier	#5	28
Pier	#8	76



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

No. required = 62



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
See special provision for Mechanical Splicers.
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 010-0288

DESIGNED	CJC
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB

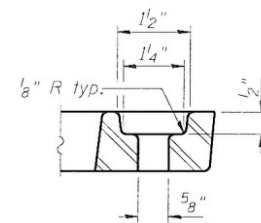
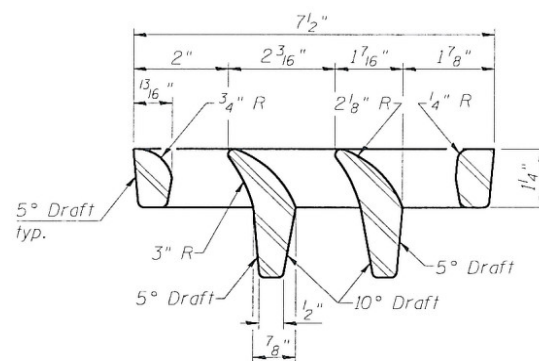
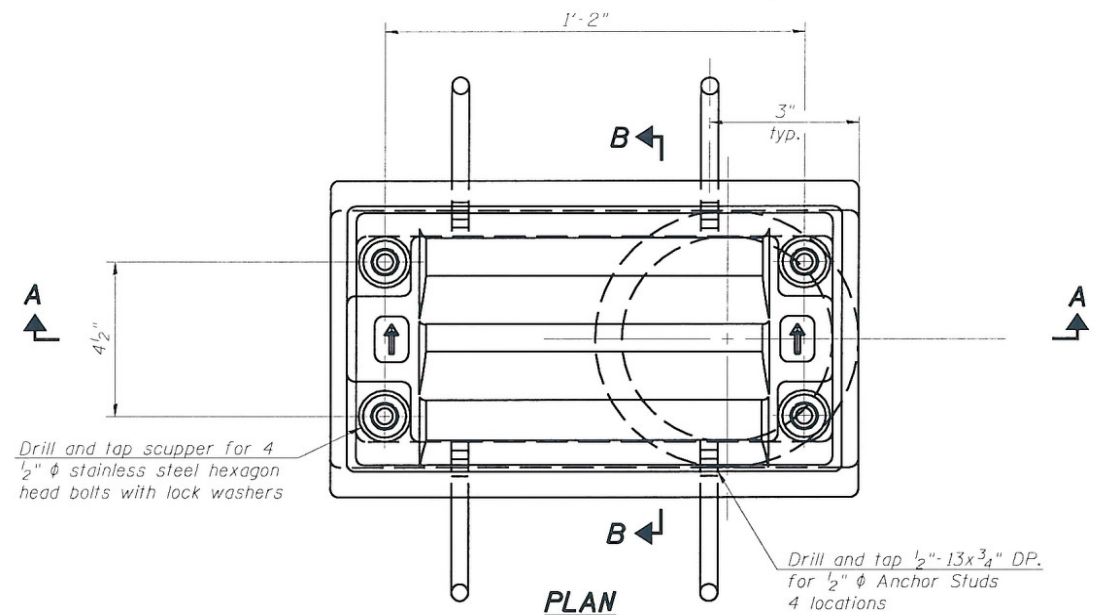
BSD-1

HR
HURST-ROSCHKE
ENGINEERS, INC.
PROFESSIONAL DESIGN NUMBER: 184-005796

11-1-09

SHEET NO. 18 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	37
	SN 010-0288		CONTRACT NO. 70750		
	FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				

D-95-007-09



Notes:

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

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

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

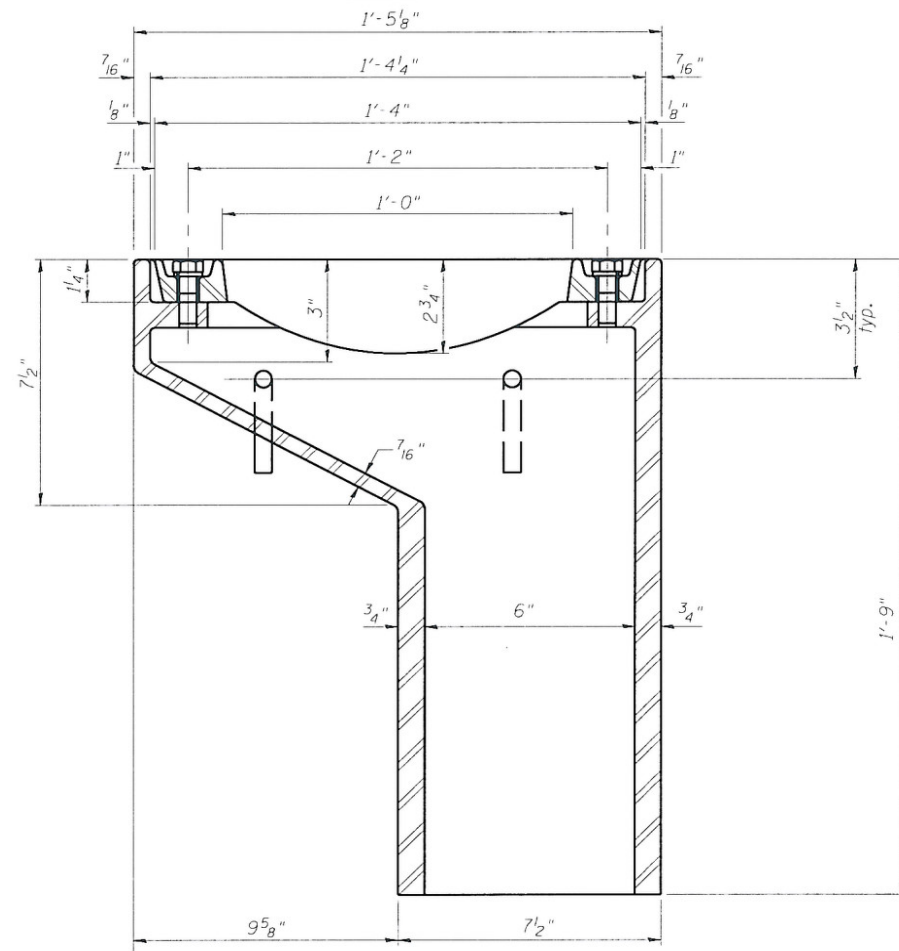
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

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

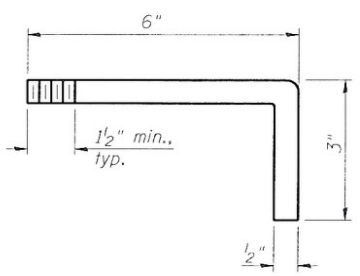
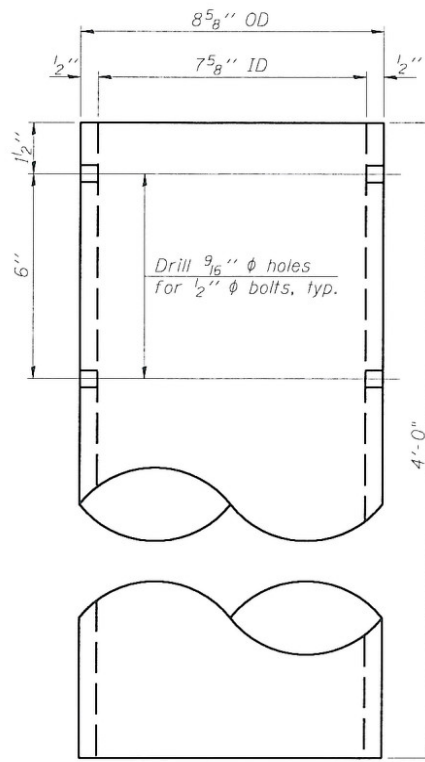
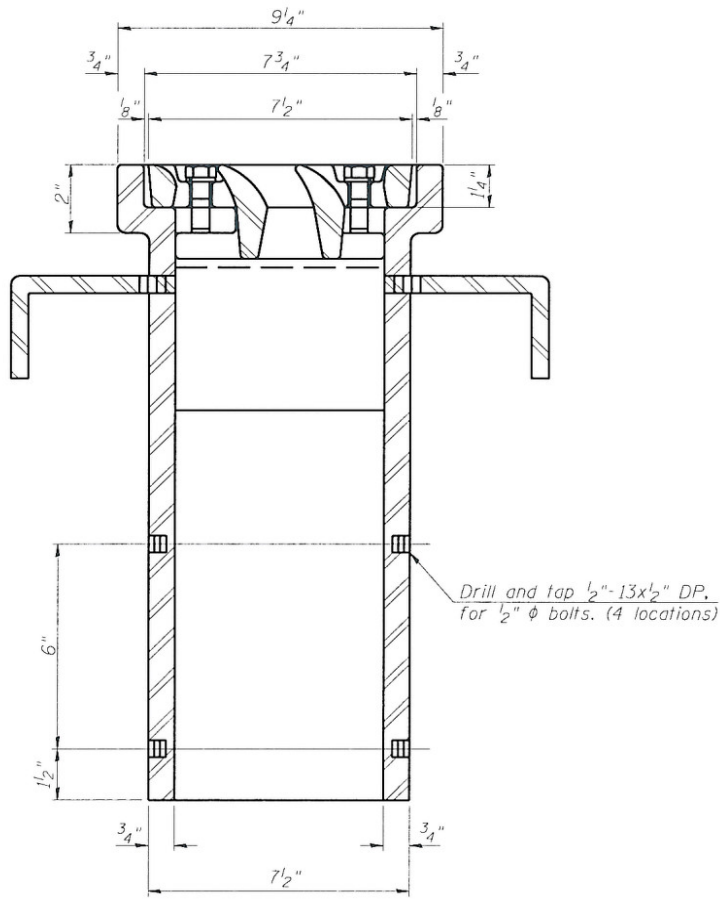
The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.

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



See sheet 7 of 20 for scupper location relative to parapet.



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	4

DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 010-0288

DESIGNED	CJC
CHECKED	MEB
DRAWN	UJ
CHECKED	MEB

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

DS-11 11-1-09

SHEET NO. 19 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	(10-6)HBR-5	CHAMPAIGN	63	38
	SN 010-0288		CONTRACT NO. 70750		
	FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				

BORING NO. 3
STA. 536+96.7 120.0 FT. LT.
ELEV. 705.3 FT.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING NO. 2
STA. 536+96.70 120.0 FT. RT.
ELEV. 705.1 FT.

LEGEND

N = SPT N-VALUE (AASHTO T206)

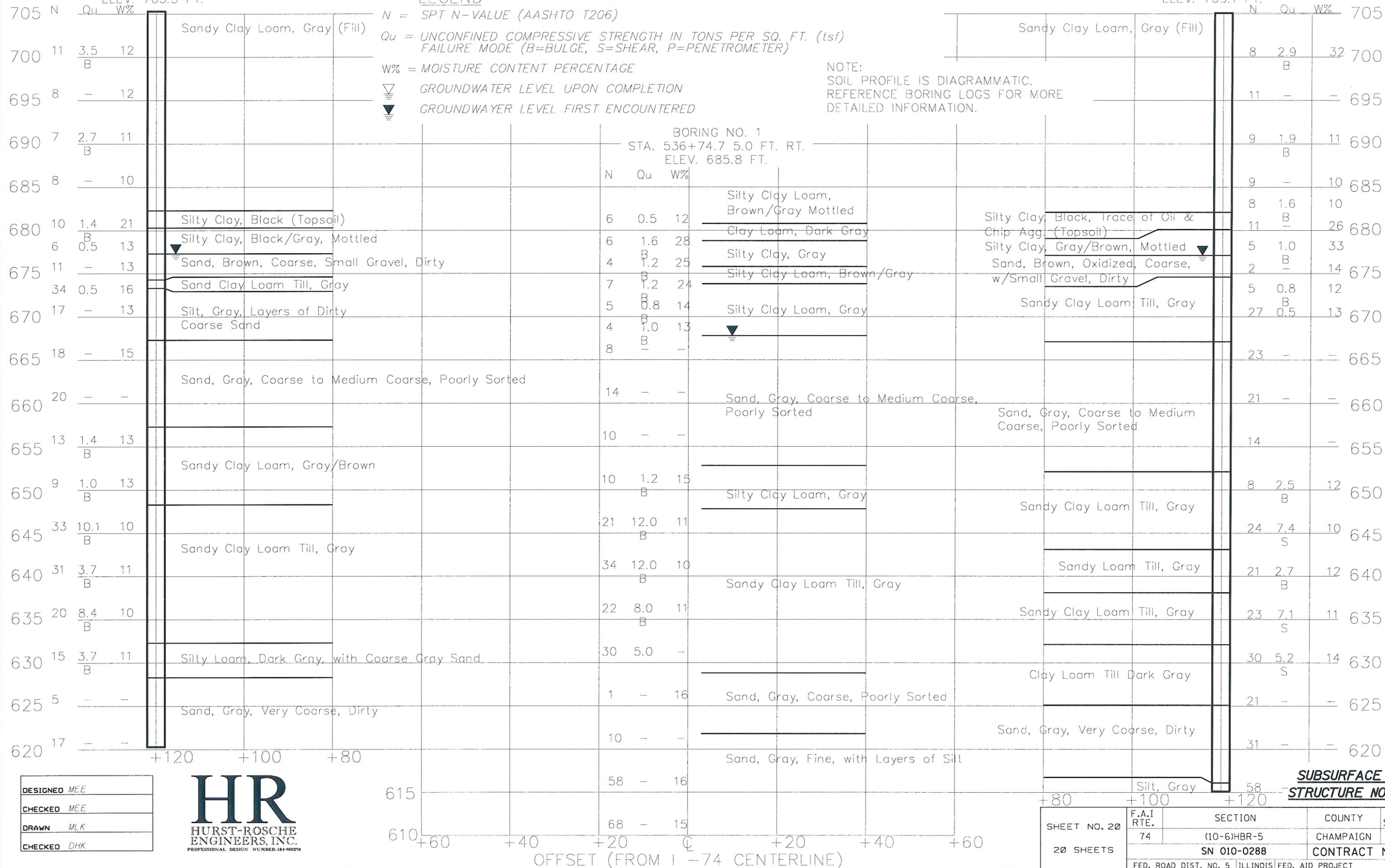
Qu = UNCONFINED COMPRESSIVE STRENGTH IN TONS PER SQ. FT. (tsf)
FAILURE MODE (B=BULGE, S=SHEAR, P=PENETROMETER)

W% = MOISTURE CONTENT PERCENTAGE

▽ GROUNDWATER LEVEL UPON COMPLETION

▼ GROUNDWATER LEVEL FIRST ENCOUNTERED

NOTE:
SOIL PROFILE IS DIAGRAMMATIC.
REFERENCE BORING LOGS FOR MORE
DETAILED INFORMATION.

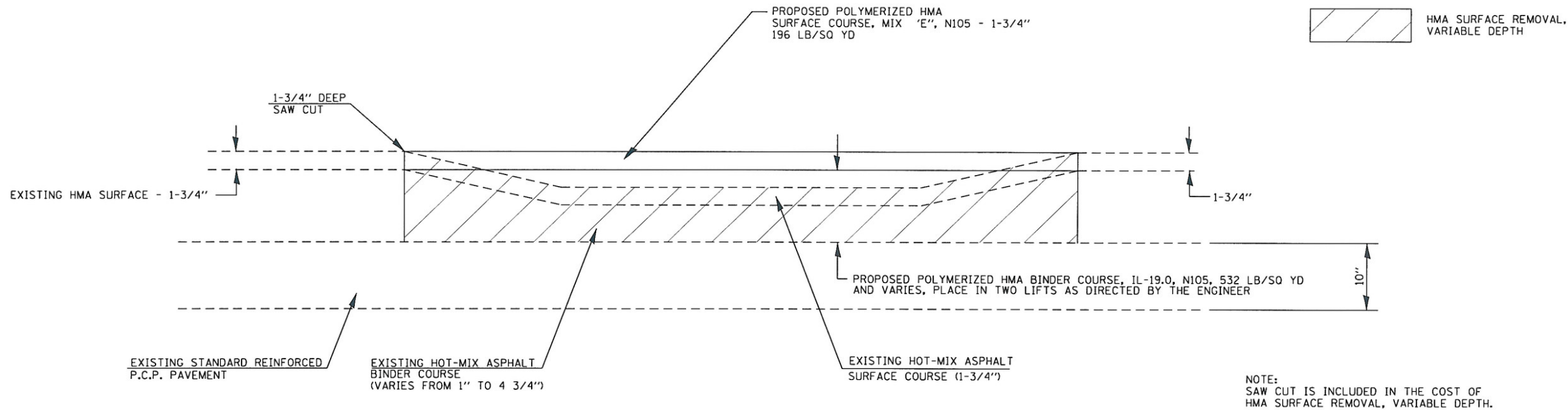


DESIGNED	MEE
CHECKED	MEE
DRAWN	MLK
CHECKED	DHK

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

SUBSURFACE DIAGRAM
STRUCTURE NO. 010-0288

SHEET NO. 20	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
20 SHEETS	74	(10-6)HBR-5 SN 010-0288	CHAMPAIGN	63	39
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT					



DETAIL OF RESURFACING BENEATH OVERHEAD STRUCTURE - I-74
STATION 535+00.00 TO STATION 540+00.00 (EB & WB)

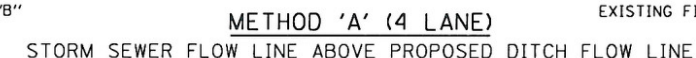
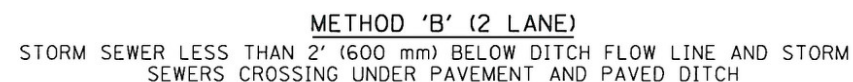
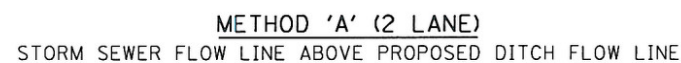
FILE NAME =	USER NAME = HURST-ROSCHKE	DESIGNED - JJC	REVISED -
u:\198-4\99_wa*3_v230_over_1-74\dgn\0572750-sht-detail.dgn		DRAWN - TWC	REVISED -
		CHECKED - MAR	REVISED -
		DATE - 01-27-10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS

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

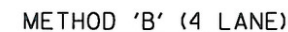
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)HBR-5	CHAMPAIGN	63	40
CONTRACT NO. 70750				
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				



FOR PLASTIC PIPE, THE RISER MAY BE OF THE SAME SIZE AS THE PIPE, BUT SHALL NOT BE SMALLER THAN 4" (100 mm) DIAMETER.



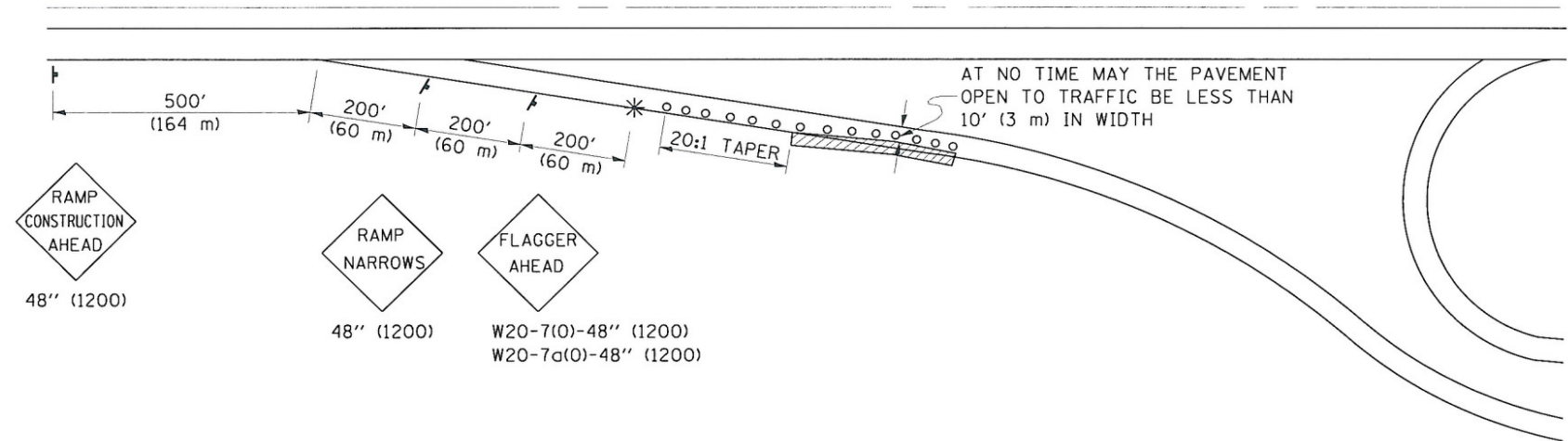
1. EXISTING FIELD TILE ENCOUNTERED BY EXPLORATION TRENCH SHALL BE INSPECTED BY THE ENGINEER FOR UNOBSTRUCTED FLOW WITHIN THE LIMITS OF THE RIGHT-OF-WAY.
2. ONLY FIELD TILE THAT DOES NOT HAVE SATISFACTORY FLOW AND OR HAS VISIBLE SIGNS OF DETERIORATION (SINK HOLES, ETC.) SHALL BE REPLACED WITHIN THE LIMITS OF THE RIGHT-OF-WAY IN ACCORDANCE WITH METHOD "B".
3. INSPECTION WELLS SHALL BE CONSTRUCTED APPROXIMATELY 6" (150 mm) INSIDE OF BOTH RIGHT-OF-WAY LINES AT ALL FIELD TILE LOCATIONS.
4. EXISTING FIELD TILE ABANDONED UNDER EXISTING PAVEMENTS OR PAVED SHOULDERS SHALL BE FILLED WITH FLOWABLE GROUT AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR ACCORDING TO ARTICLE 109.04.
5. NON-CIRCULAR FIELD TILE SHALL BE REPLACED WITH STORM SEWER, SPECIAL OF AT LEAST THE SAME CROSS SECTIONAL AREA. ALL EXISTING FIELD TILE SHALL BE REPLACED WITH STORM SEWER OF THE TYPE REQUIRED FOR THE MINIMUM DEPTH OF COVER.
6. THE 6" (150 mm) CONCRETE SLAB OR DITCH LINING SHALL BE POURED THE LENGTH OF THE TRENCH AT ALL DITCH FLOW LINE LOCATIONS WITHIN THE RIGHT-OF-WAY WITH LESS THAN 2' (600 mm) OF EARTH COVER. MISCELLANEOUS CONCRETE SHALL BE USED ACCORDING TO SECTION 611.
7. ALL MISCELLANEOUS SLABS, APRONS AND DITCH LININGS SHALL BE REINFORCED WITH WELDED WIRE FABRIC AS SHOWN FOR PAVED DITCH IN STANDARD 606401.
8. HEADWALL FOR BACKSLOPE OUTLET MAY BE USED FOR PIPE DRAIN DIAMETERS UP TO 10" (250 mm). SPECIAL DESIGNS WILL BE REQUIRED FOR LARGER SIZES.
9. THE INSPECTION WELL LID FOR P.C.C. PIPE SHALL BE CONSTRUCTED OF 3/8" (10 mm) CAST IRON AND PROVIDED WITH A 1" (25 mm) DIAMETER HOLE IN CENTER. THE LID FOR THE OTHER PIPE MATERIALS SHALL BE A GRATE ASSEMBLY PREFABRICATED FOR AND COMPATIBLE WITH THE PIPE SYSTEM.



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

FILE NAME =	USER NAME = HURST-ROSCHKE	DESIGNED -	REVISED - 11/06	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FIELD TILE SYSTEMS (TREATMENT OF EXISTING)				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHE NO.
t:\198-4199\wa*3.1-230.over.1-74\dgn\057750-DistrictStandard.dgn	DRAWN -	REVISED -							74	(10-6)HBR-5	CHAMPAIGN	63	41
PLOT SCALE = 40.0001' / IN.	CHECKED -	REVISED -			CONTRACT NO. 7075								
PLOT DATE = 1/28/2010	DATE -	REVISED -											
				SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	

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

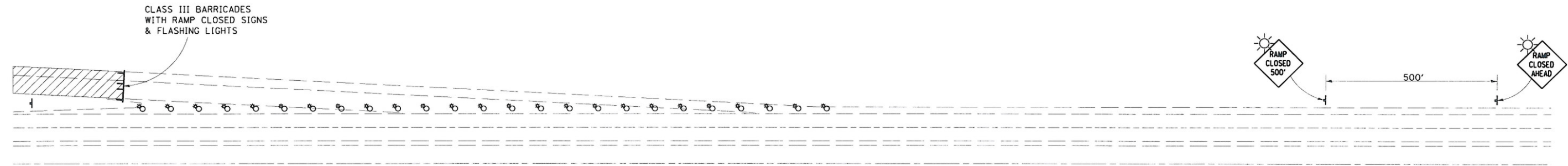
- (APPLICATION NO. 1) TYPE I OR II BARRICADES OR DRUMS @ 50' (15 m) CTS.
- ⦿ (APPLICATION NO. 2) TYPE I OR II BARRICADES OR DRUMS @ 25' (7.5 m) CTS. W/STEADY BURNING LIGHTS
- * (APPLICATION NO. 1) FLAGGER PLACED AS DIRECTED BY THE ENGINEER
- ┆ SIGN ON PORTABLE OR PERMANENT SUPPORT
- ▨ WORK AREA

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 prices for Traffic Control and Protection, Standard 701401 and Traffic Control and Protection, Standard 701406.

APPLICATION NO. 2
RAMP CLOSURE



GENERAL NOTES

STEADY BURN LIGHTS ARE NOT REQUIRED FOR DAYTIME OPERATIONS.

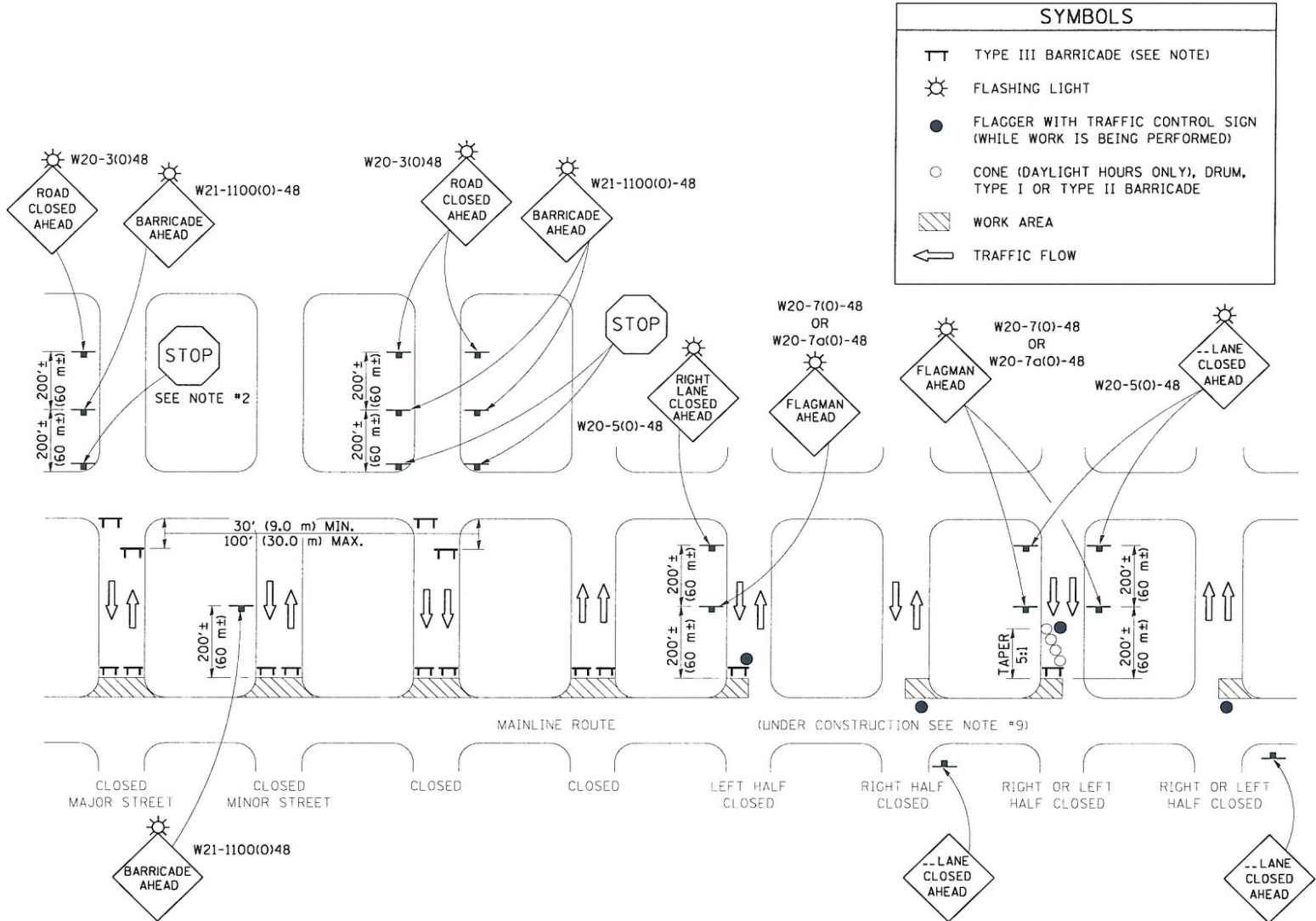
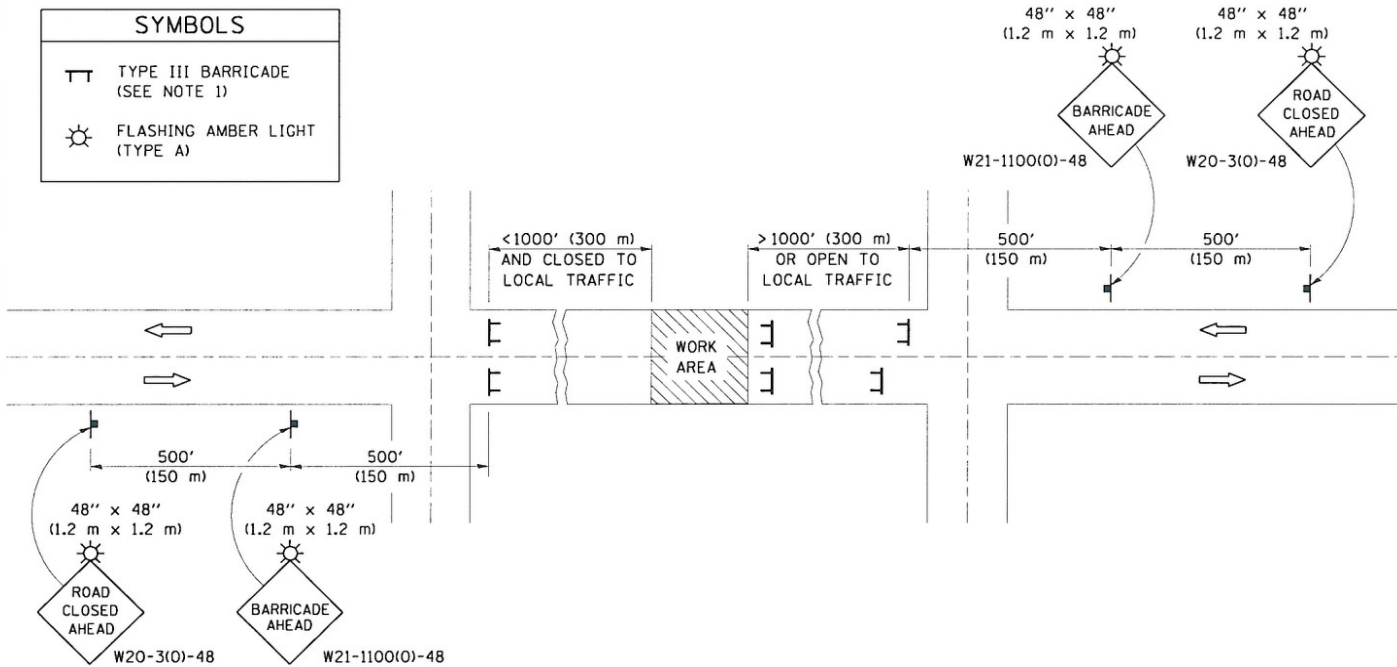
CONTACT THE DISTRICT TRAFFIC OPERATIONS ENGINEER AT 217-465-4181, ONE WEEK PRIOR TO CLOSING THE RAMP.

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

DISTRICT 5 DETAIL NO. 70103710				STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				TRAFFIC CONTROL FOR RAMPS				F.A.I. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.			
FILE NAME =	USER NAME = HURST-ROSCHKE	DESIGNED =	REVISED = 11/06									74	(10-6)HBR-5	CHAMPAIGN	63 42
ts\198-4199-wo*3-tr238-over-1-74\dgn\057758-District5Standards.dgn		DRAWN =	REVISED =									CONTRACT NO. 70750			
PLOT SCALE = 42.0001" / IN.		CHECKED =	REVISED =									FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			
PLOT DATE = 1/28/2010		DATE =	REVISED =												

ROAD CLOSURE

SIDEROAD / STREET CLOSURE



GENERAL NOTES

1. 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.
2. 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.
3. 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.
4. STANDARD 701901 SHALL APPLY FOR THE PLACEMENT & DESIGN OF TYPE III BARRICADES.
5. 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.
6. REFLECTORIZED STRIPING SHALL APPEAR ON BOTH SIDES OF THE TYPE III BARRICADES IF ROAD IS OPEN TO LOCAL TRAFFIC.
7. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
8. 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.
9. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.
10. FORMS BT. 725 AND BT. 726 ARE REQUIRED.
11. 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.
12. 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.

GENERAL NOTES

1. 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.
2. WHERE A STOP CONDITION EXISTS, AS SHOWN ABOVE, WARNING SIGNS MAY BE OMITTED IN ADVANCE OF THE "STOP" SIGN.
3. STANDARD 701901 SHALL APPLY FOR THE PLACEMENT & MANUFACTURE OF TYPE III BARRICADES.
4. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
5. ONE FLASHING LIGHT IS REQUIRED ABOVE EACH ADVANCE WARNING SIGN DURING HOURS OF DARKNESS.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.
7. FORMS BT 725 AND BT 726 ARE REQUIRED.
8. THE MAINLINE ROUTE TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE PLANS, SPECIAL PROVISIONS AND STANDARD SPECIFICATIONS.
9. 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 = HURST-ROSCHKE	DESIGNED =	REVISED = 11/06
\\190-4199-wo*3-tr230-over-1-74\dgn\057750-District5Standards.dgn		DRAWN =	REVISED = 12/07
		CHECKED =	REVISED =
		DATE = 1/28/2010	REVISED =

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

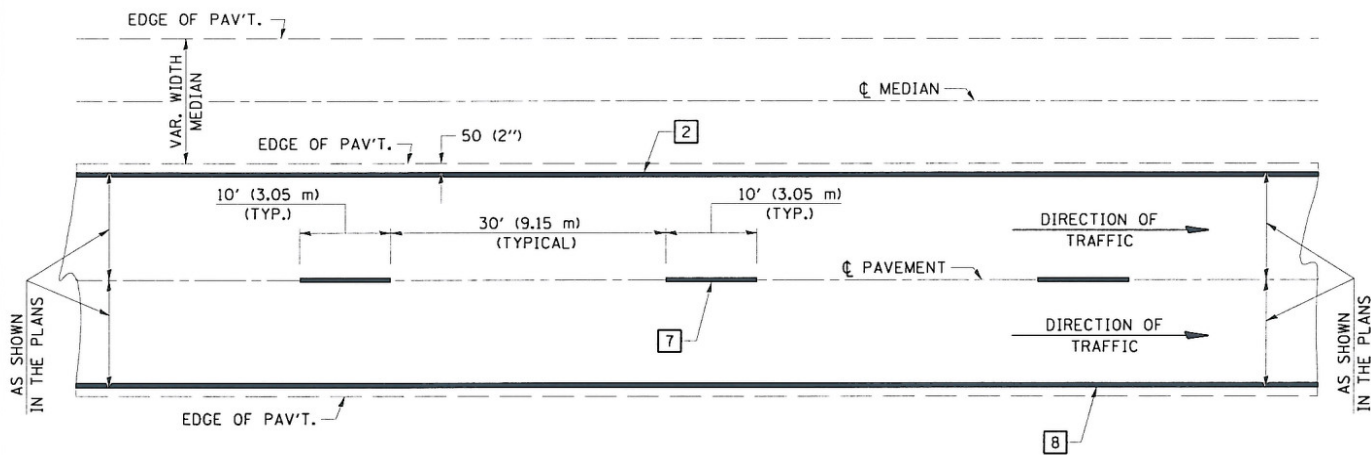
TRAFFIC CONTROL & PROTECTION DEVICES
(ROAD & SIDEROAD/STREET CLOSURES)

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

DISTRICT 5 DETAIL NO. 70200000

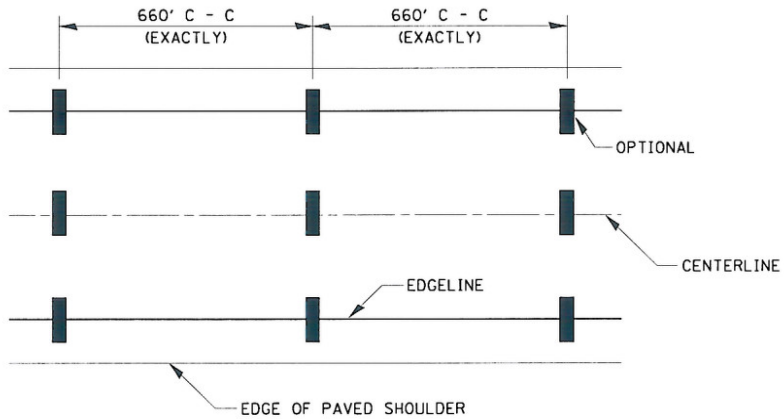
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)HBR-5	CHAMPAIGN	63	43
CONTRACT NO. 70750				
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				

CENTERLINE INTERSTATE OR MULTI-LANE TWO WAY DIVIDED HIGHWAY

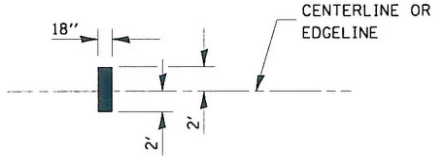


NOTE: PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.

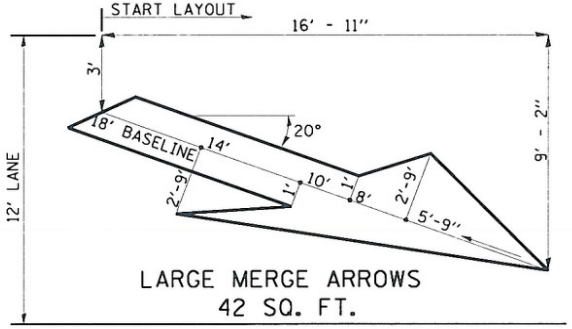
NOTE: SEE ARTICLES 780.04 & 781.03 FOR LOCATION OF STRIPES AND MARKERS RELATIVE TO EDGES OR JOINTS.
FOR RAISED REFLECTIVE PAVEMENT MARKERS, REFER TO STANDARD 781001.



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.

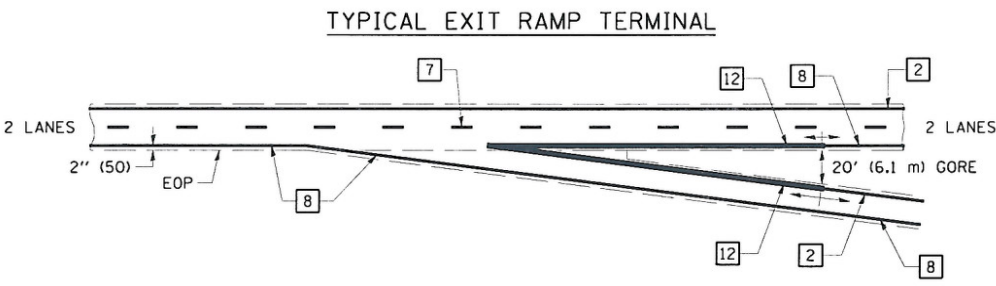


AERIAL SPEED CHECK ZONES

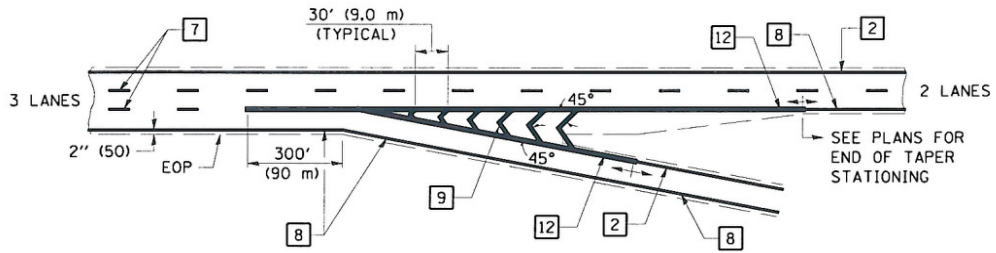


TYPICAL PAVEMENT MARKING LEGEND

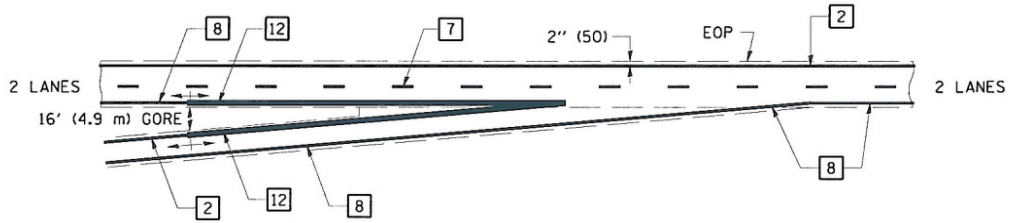
- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW)
- 3 12" (300) DIAGONAL (YELLOW)
- 4 4" (100) DOUBLE YELLOW (NARROW)
- 5 RESERVED
- 6 RESERVED
- 7 4" (100) SKIP-DASH (WHITE)
- 8 4" (100) SOLID (WHITE)
- 9 12" (300) DIAGONAL (WHITE)
- 10 6" (150) SOLID (WHITE)
- 11 24" (600) STOP BAR (WHITE)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



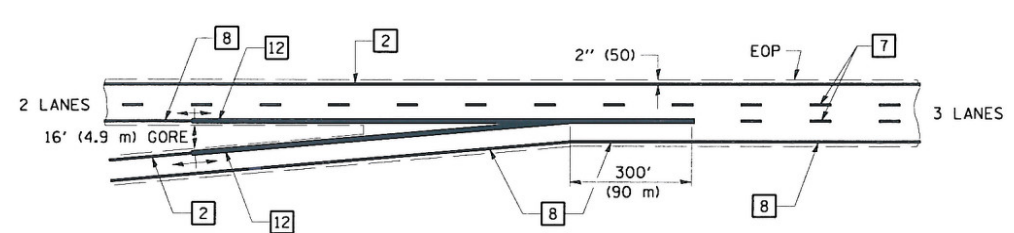
EXIT RAMP TERMINAL with EXCLUSIVE (auxiliary) LANE



TYPICAL ENTRANCE RAMP TERMINAL



ENTRANCE RAMP TERMINAL with EXCLUSIVE LANE



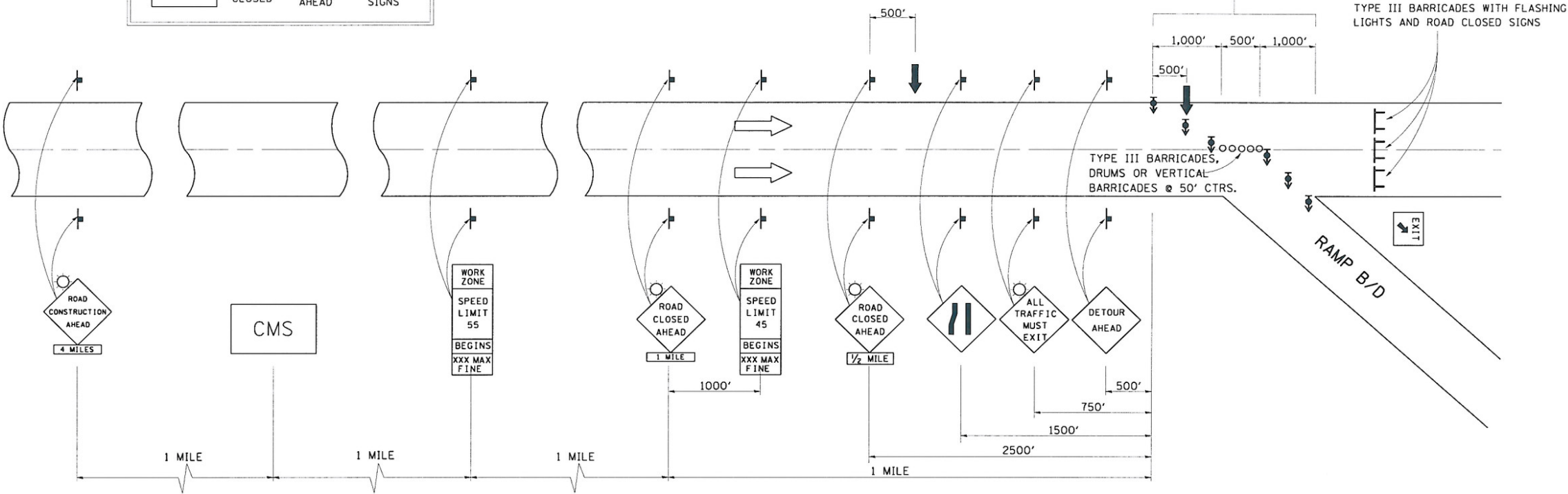
Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 5 DETAIL NO. 7800BBBB

FILE NAME =	USER NAME = HURST-ROSCHE	DESIGNED -	REVISED - 11/06	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING (INTERSTATE & MULTI-LANE APPLICATIONS)	SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.								
u:\192-4199-wo*3. u-238. over-1-74\dn\057758-District5Standards.dgn		DRAWN -	REVISED -									74	(10-6)HBR-5	CHAMPAIGN	63	44								
		CHECKED -	REVISED -																					
		DATE -	REVISED -																					
												CONTRACT NO. 70750												
												FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT												

INTERSTATE DETOUR USING
ENTRANCE AND EXIT RAMP

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.



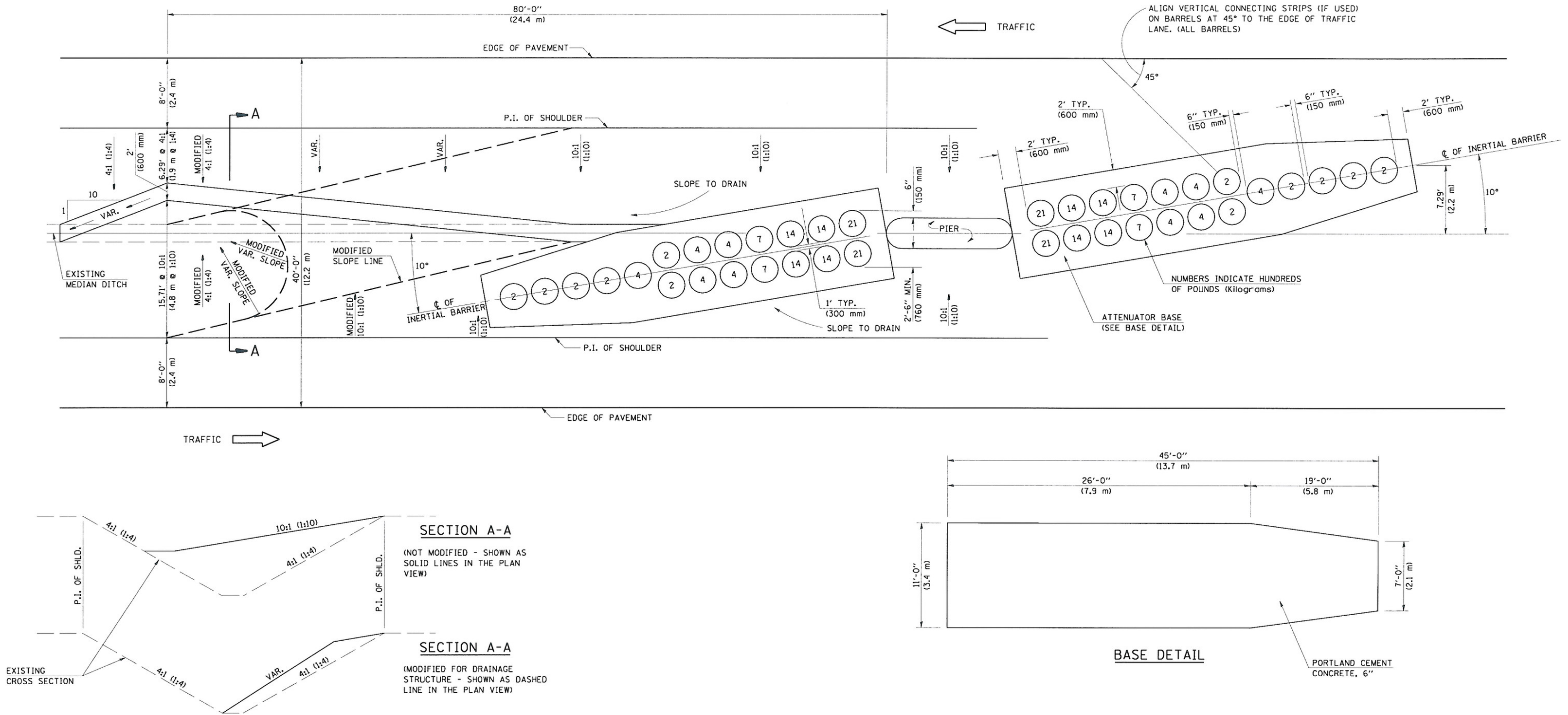
SYMBOLS	
	ARROW BOARD
	SIGN
	DRUM W/STEADY BURNING LIGHT
	TYPE III BARRICADE
	DIRECTIONAL BARRICADE W/STEADY BURNING LIGHT
	LIGHTED FLAGGER STATIONS

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

DISTRICT 5 DETAIL NO. X7011005

FILE NAME : tr\192-4199.wa*3.tr230.oven.i-74\dgn\05750-District5Standards.dgn	USER NAME : HURST-ROSCHE	DESIGNED : -	REVISED : 12/06	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERSTATE DETOUR USING ENTRANCE AND EXIT RAMPS				F.A.I. RTE. 74	SECTION (10-6)HBR-5	COUNTY CHAMPAIGN	TOTAL SHEETS 63	SHEET NO. 45
		DRAWN : -	REVISED : -						CONTRACT NO. 70750				
		CHECKED : -	REVISED : -						FED. ROAD DIST. NO. 5 ILLINOIS/FED. AID PROJECT				
		DATE : 1/28/2010	REVISED : -										

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



GRADING AND SHAPING 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.

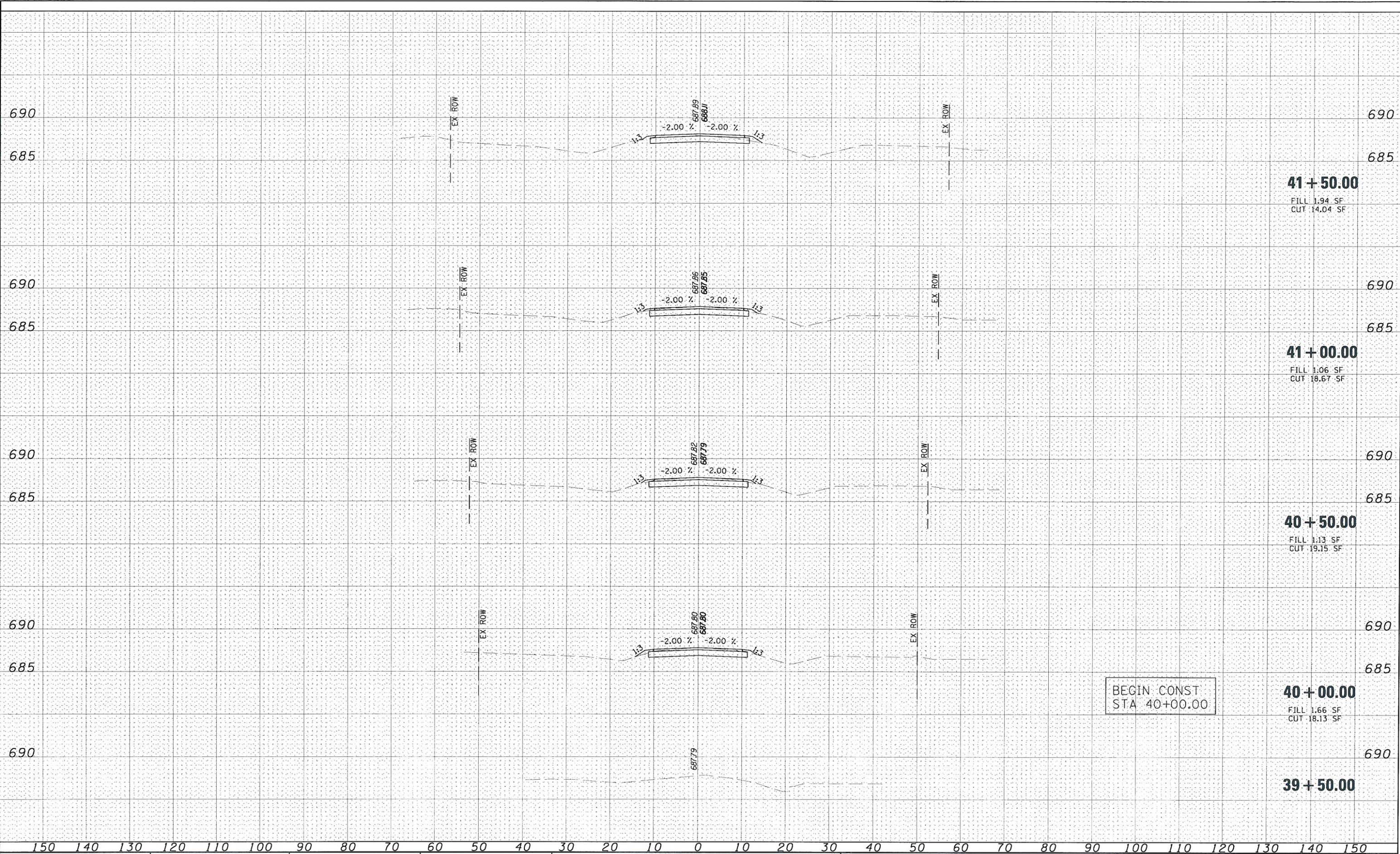
DISTRICT 5 DETAIL NO. Z0030150B

FILE NAME =	USER NAME = HURST-ROSCHE	DESIGNED -	REVISED - 11/06	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IMPACT ATTENUATORS (NON-REDIRECTIVE) TEST LEVEL 3	SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
tr\198-4\99_wa*3.2-238_over.1-74\dgn\057752-District5Standards.dgn		DRAWN -	REVISED - 12/08									74	(10-6)HBR-5	CHAMPAIGN	63	46
		CHECKED -	REVISED -													
		DATE -	REVISED -													

FED. ROAD DIST. NO. 5 ILLINOIS/FED. AID PROJECT

FINAL	SURVEY	NO.
SURVEYED	PLANNED	DATE
NOTED	DATE	NO.
NO.	NO.	NO.

ORIGINAL	SURVEY	NO.
SURVEYED	PLANNED	DATE
NOTED	DATE	NO.
NO.	NO.	NO.



FILE NAME = T:\198-4199.WC*3_TR230_over_1-74\dgn\0570750-sht-xssht-230.dgn	USER NAME = HURST-ROSCHE	DESIGNED - JJC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TR 230 CROSS SECTIONS	SCALE: SHEET NO. 1 OF 17 SHEETS STA. 39+50.00 TO STA. 41+50.00	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 20.0001' / IN.	DRAWN - UJJ	REVISED -				74	(10-6)HBR-5	CHAMPAIGN	63	47
	PLOT DATE = 1/28/2010	CHECKED - MAR	REVISED -				CONTRACT NO. 70750				
		DATE - 01-27-10	REVISED -				ILLINOIS FED. AID PROJECT				

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



ORIGINAL							DIST.
SURVEYED	PLOTTED						
NOTE BOOK	TEMPLATE						
AREAS	AREAS CHECKED						
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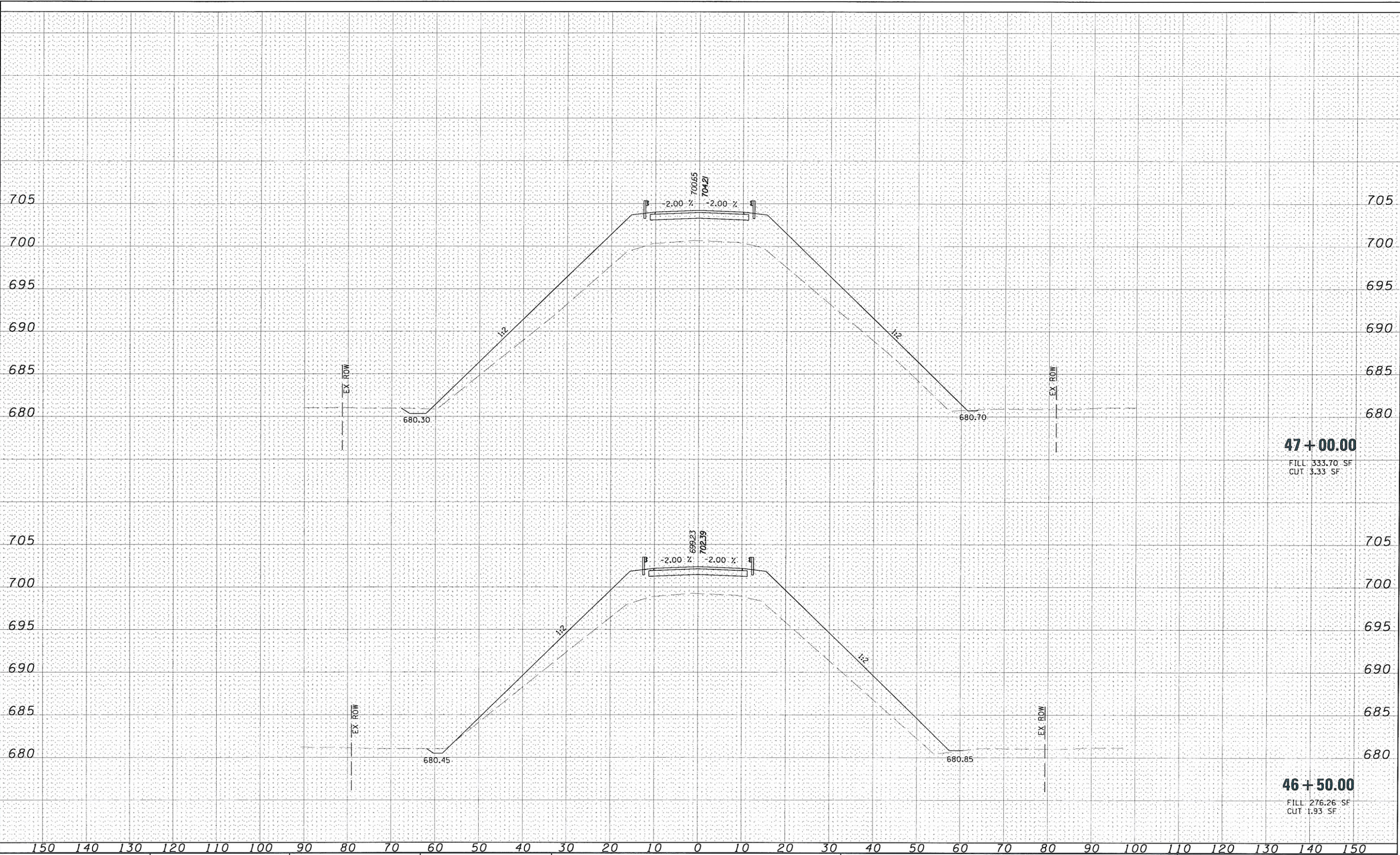


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SURVEY	SURVEYED					
NOTE BOOK	PLOTTED					
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NO.	AREAS CHECKED					



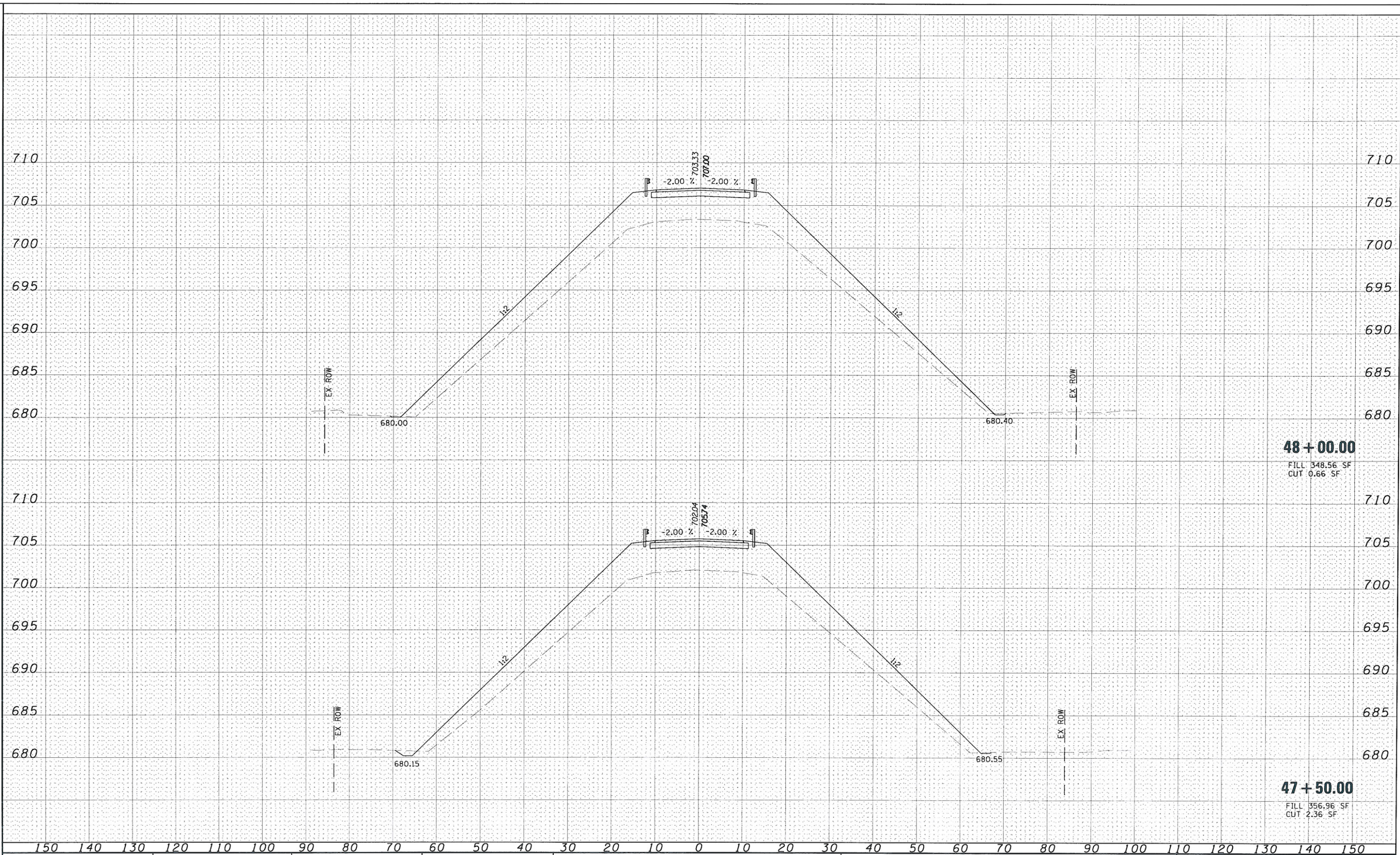
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		DRAWN - UJJ	REVISED -													
		CHECKED - MAR	REVISED -													
		DATE - 01-27-10	REVISED -													
CONTRACT NO. 70750				ILLINOIS FED. AID PROJECT				SCALE: SHEET NO. 5 OF 17 SHEETS STA. 46+50.00 TO STA. 47+00.00								

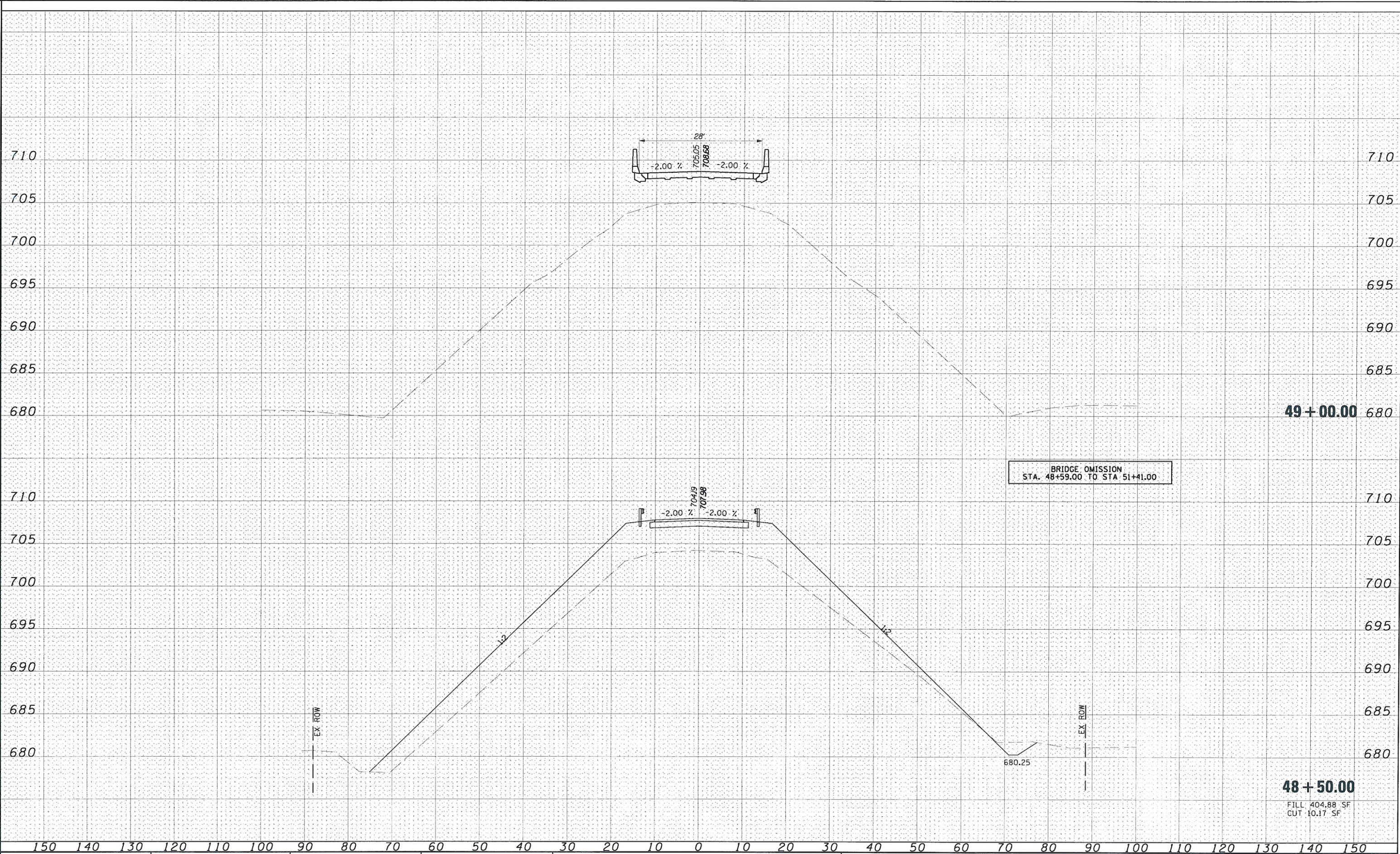
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SURVEY	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



FILE NAME =		USER NAME = HURST-ROSCHE	DESIGNED - JJC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION					TR 230 CROSS SECTIONS				F.A.I. RTE.		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I:\92-4199.WD*3.TR230.cover.I-74\dgn\0570750-sh		t-xssht-230.dgn	DRAWN - UJ	REVISED -						74	(10-6)HBR-5	CHAMPAIGN	63	52					
PLOT SCALE = 28.000' / IN.		CHECKED - MAR	REVISED -	CONTRACT NO. 70750 ILLINOIS FED. AID PROJECT															
PLOT DATE = 1/28/2010		DATE = 01-27-10	REVISED -																
					SCALE:	SHEET NO. 6	OF 17	SHEETS	STA. 47+50.00	TO STA. 48+00.00									

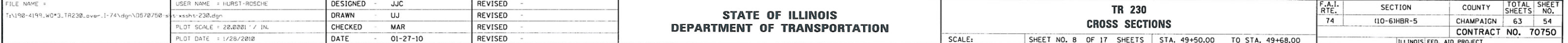
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	PLOTTED	NO.
	NOTE BOOK	NO.
	AREAS CHECKED	NO.

ORIGINAL	SURVEYED	NO.
	PLOTTED	NO.
	NOTE BOOK	NO.
	AREAS CHECKED	NO.



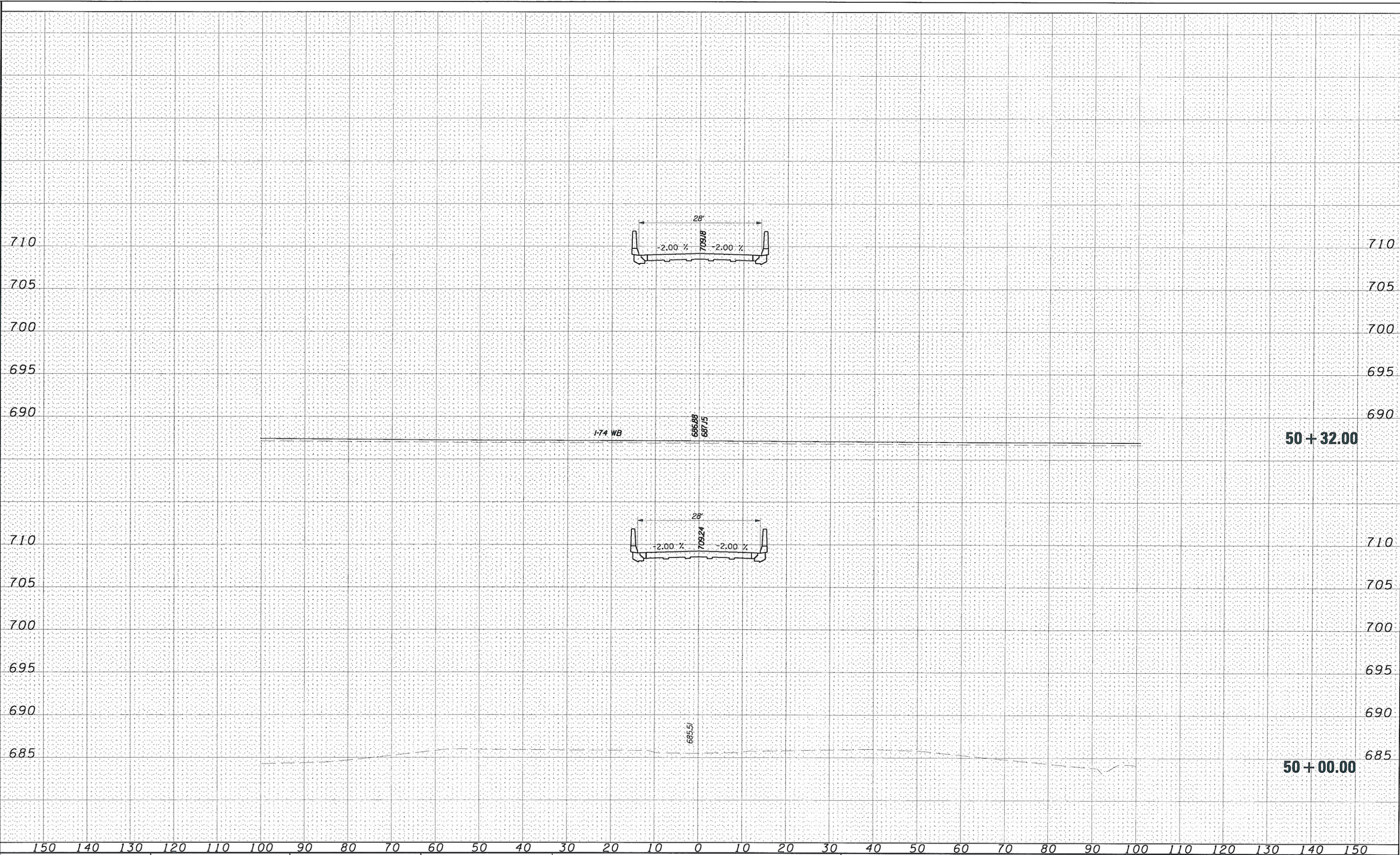
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	t-xssht-230.dgn	DRAWN - UJ	REVISED -		74	(10-6)HBR-5	CHAMPAIGN	63	53				
	PLOT SCALE = 20.0001' / IN.	CHECKED - MAR	REVISED -		CONTRACT NO. 70750								
	PLOT DATE = 1/28/2010	DATE - 01-27-10	REVISED -		SCALE:	SHEET NO. 7 OF 17 SHEETS	STA. 48+50.00 TO STA. 49+00.00	ILLINOIS FED. AID PROJECT					

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



FINAL	SURVEYED	_____
	NOTED	_____
	PLOTTED	_____
	DATE	_____
NO.	NOTE BOOK	_____
	AREAS CHECKED	_____

ORIGINAL	SURVEYED	_____
	NOTED	_____
	PLOTTED	_____
	DATE	_____
NO.	NOTE BOOK	_____
	AREAS CHECKED	_____



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				DRAWN - UJ		REVISED -												74	(10-6)HBR-5	CHAMPAIGN	63	55										
				CHECKED - MAR		REVISED -																										
				DATE - 01-27-10		REVISED -																										
PLOT SCALE = 20,000' / IN.																		CONTRACT NO. 70750					ILLINOIS FED. AID PROJECT									
PLOT DATE = 1/26/2010																																
SCALE: SHEET NO. 9 OF 17 SHEETS STA. 50+00.00 TO STA. 50+32.00																																

FINAL

SURVEYED

PLOTTED

REPLATE

AREAS CHECKED

NO.

NOTE BOOK

OPTIONAL

SURVEY

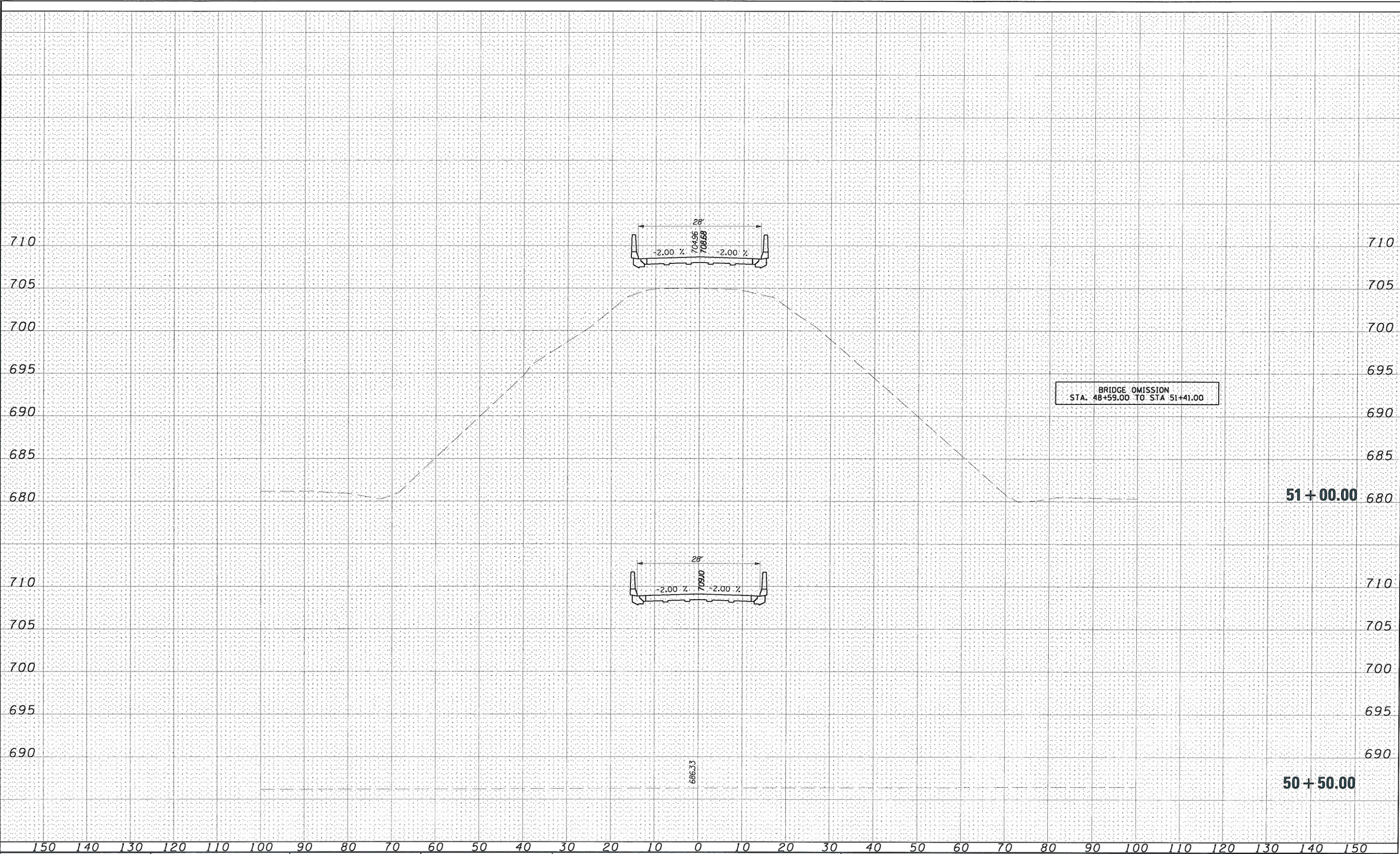
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REPLATE

AREAS CHECKED

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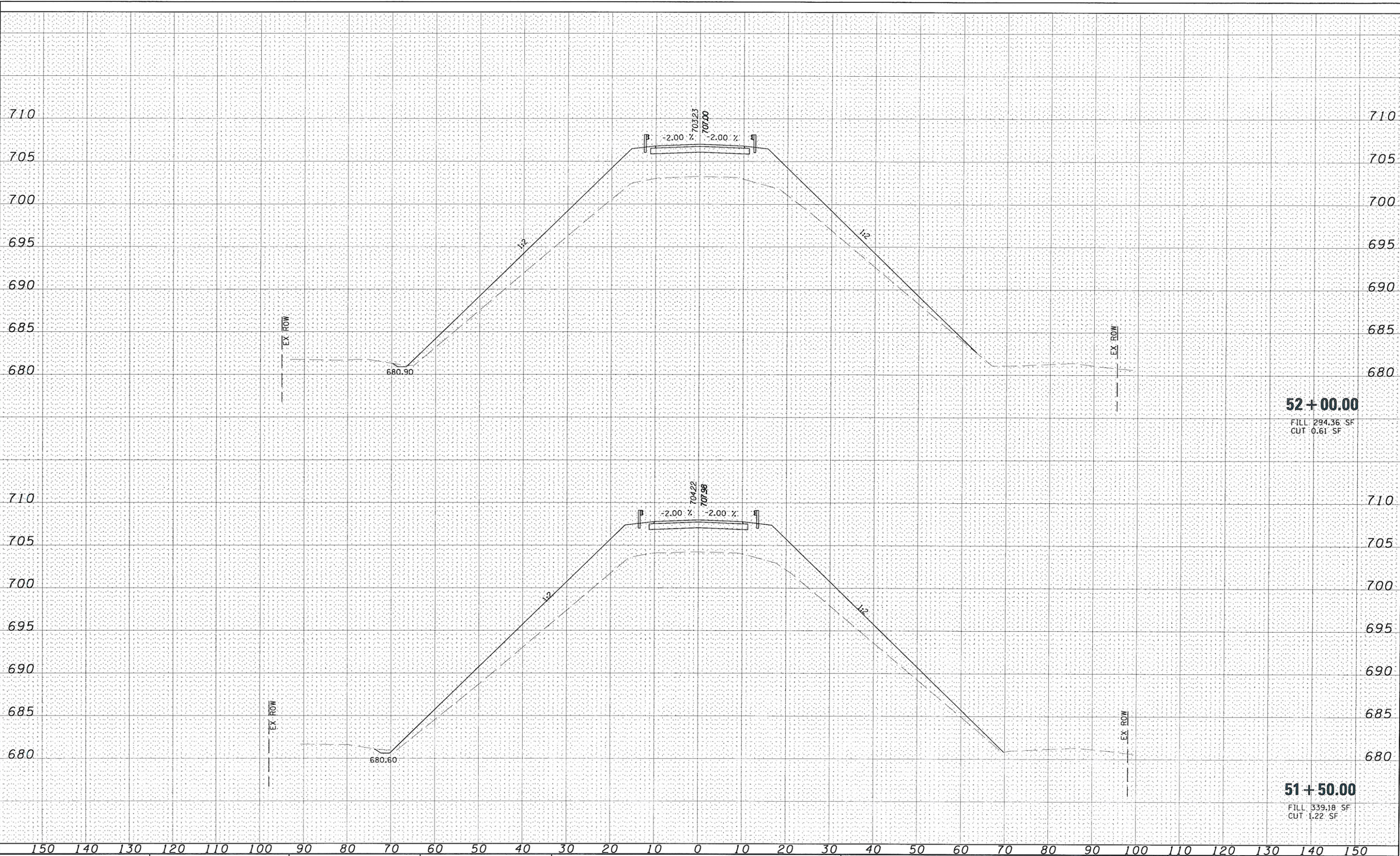
NOTE BOOK



FILE NAME =	USER NAME = HURST-ROSCHE	DESIGNED - JJC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				TR 230 CROSS SECTIONS				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T:\198-4199.W0*3.TR230_over_1-74\ dgn\0570750-s	t-xssht-230.dgn	DRAWN - UJJ	REVISED -									74	(10-6)HBR-5	CHAMPAIGN	63	56
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	PLT DATE = 1/28/2010	DATE - 01-27-10	REVISED -													
				SCALE:				SHEET NO. 10 OF 17 SHEETS				STA. 50+50.00 TO STA. 51+00.00				ILLINOIS FED. AID PROJECT

FINAL	SURVEYED	PLOTTED	DATE
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NO.	NO.	NO.	NO.

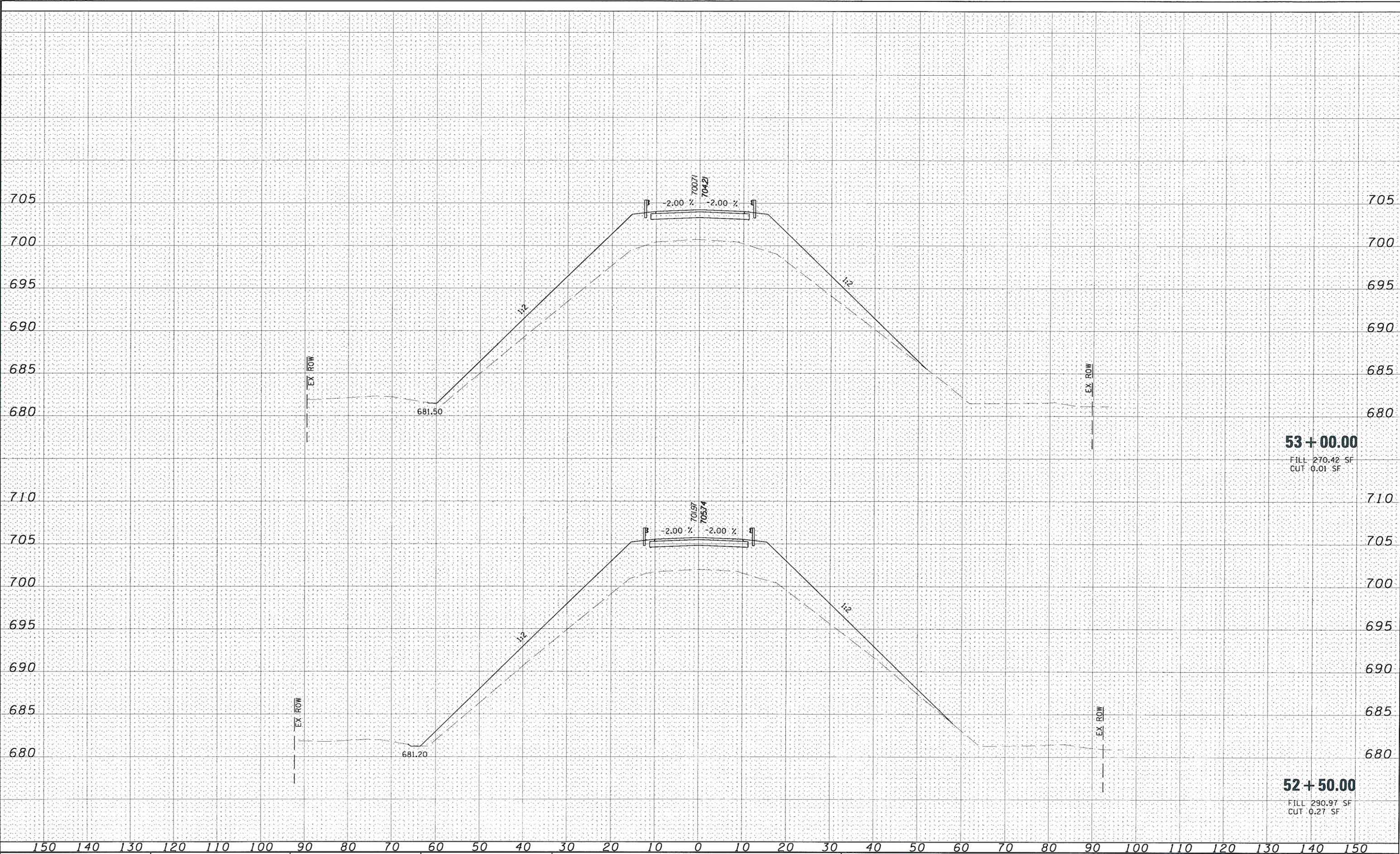
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NO.	NO.	NO.	NO.



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T:\198-4199-W0*3-TR230-over-1-74\dgn\0570750-sht-xssht-230.dgn		DRAWN -	REVISED -					74	(10-6)HBR-5	CHAMPAIGN	SHEETS	NO.
		CHECKED -	REVISED -								63	57
		DATE -	REVISED -							CONTRACT NO.	70750	
PLOT SCALE = 20.0001' / IN.				SCALE:		SHEET NO. 11 OF 17 SHEETS		STA. 51+50.00 TO STA. 52+00.00		ILLINOIS FED. AID PROJECT		

FINAL	SURVEYED	PLOTTED	DATE	AREAS CHECKED
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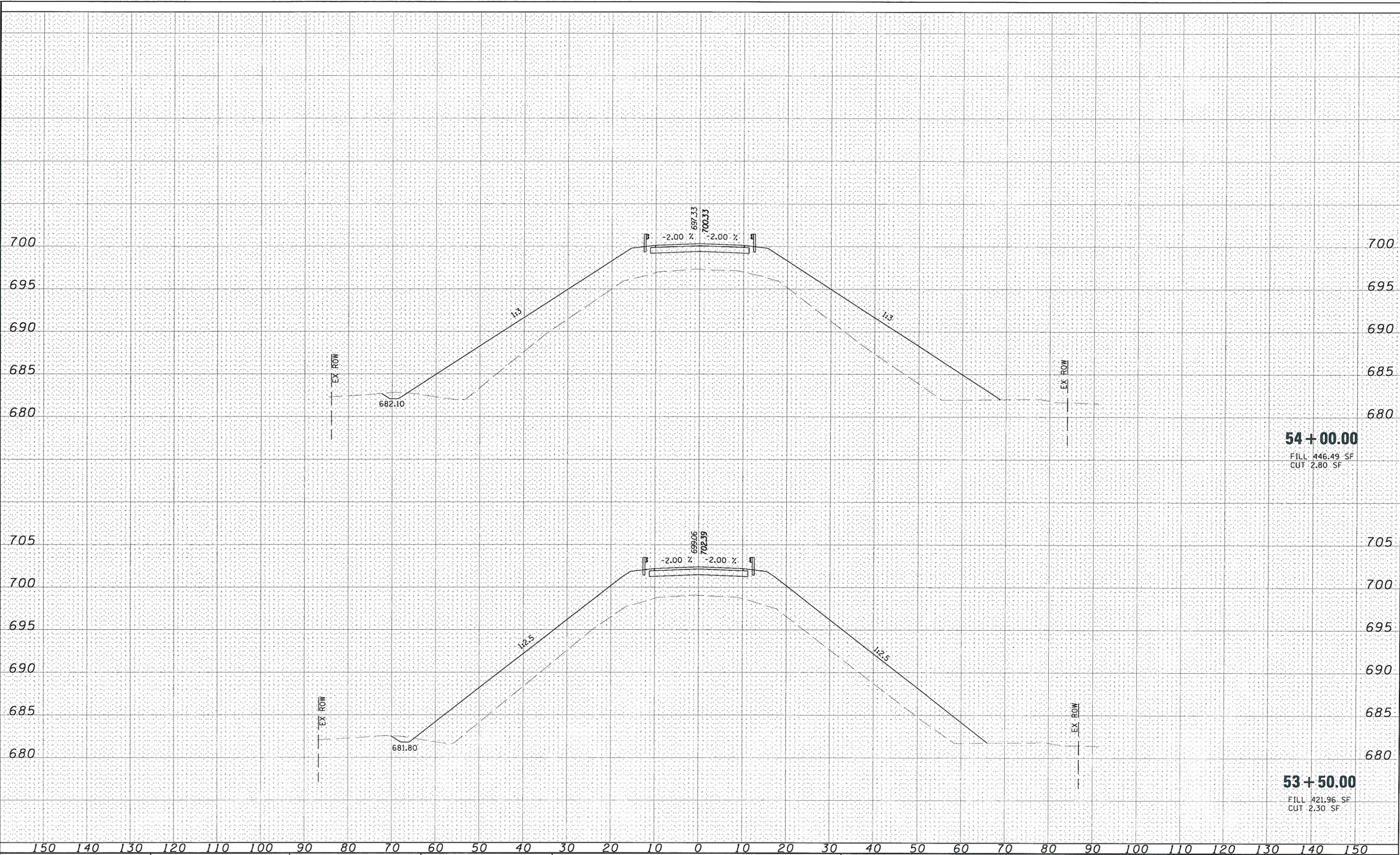
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T:\192-4199_W0*3_TR230_over_1-74\dgn\0570750-sht-xssht-230.dgn		DRAWN =	REVISED =									74	(10-6)HBR-5	CHAMPAIGN	63	58
		CHECKED =	REVISED =													
		DATE =	REVISED =											CONTRACT NO.		70750

FINAL	SURVEYED	.....
	NOTED	.....
	PLOTTED	.....
	DATE	.....
NO.	NO.	.....
	NO.	.....
	NO.	.....
	NO.	.....

ORIGINAL	SURVEYED	.....
	NOTED	.....
	PLOTTED	.....
	DATE	.....
NO.	NO.	
	NO.	
	NO.	
	NO.	



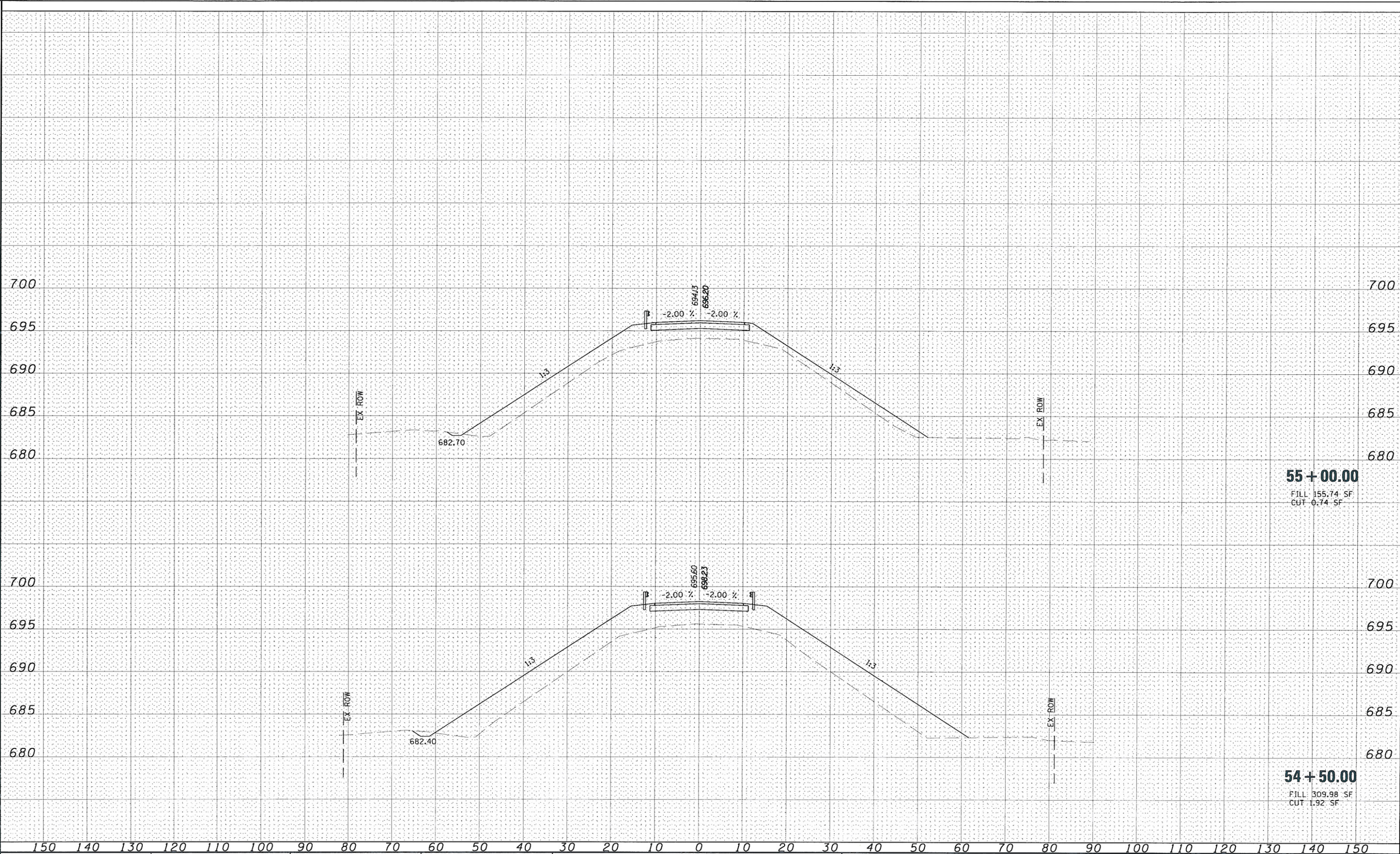
54 + 00.00
FILL 446.49 SF
CUT 2.80 SF

53 + 50.00
FILL 421.96 SF
CUT 2.30 SF

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PLOT SCALE = 20.0001' / IN.		DRAWN - UJ		CHECKED - MAR		REVISED -						SCALE:				SHEET NO. 13 OF 17 SHEETS		STA. 53+50.00 TO STA. 54+00.00		CONTRACT NO. 70750			
PLOT DATE = 1/28/2010		DATE = 01-27-10		REVISED -		REVISED -												ILLINOIS FED. AID PROJECT					

FINAL	SURVEYED	PLOTTED	DATE
	SURVEY	NOTE BOOK	NO.
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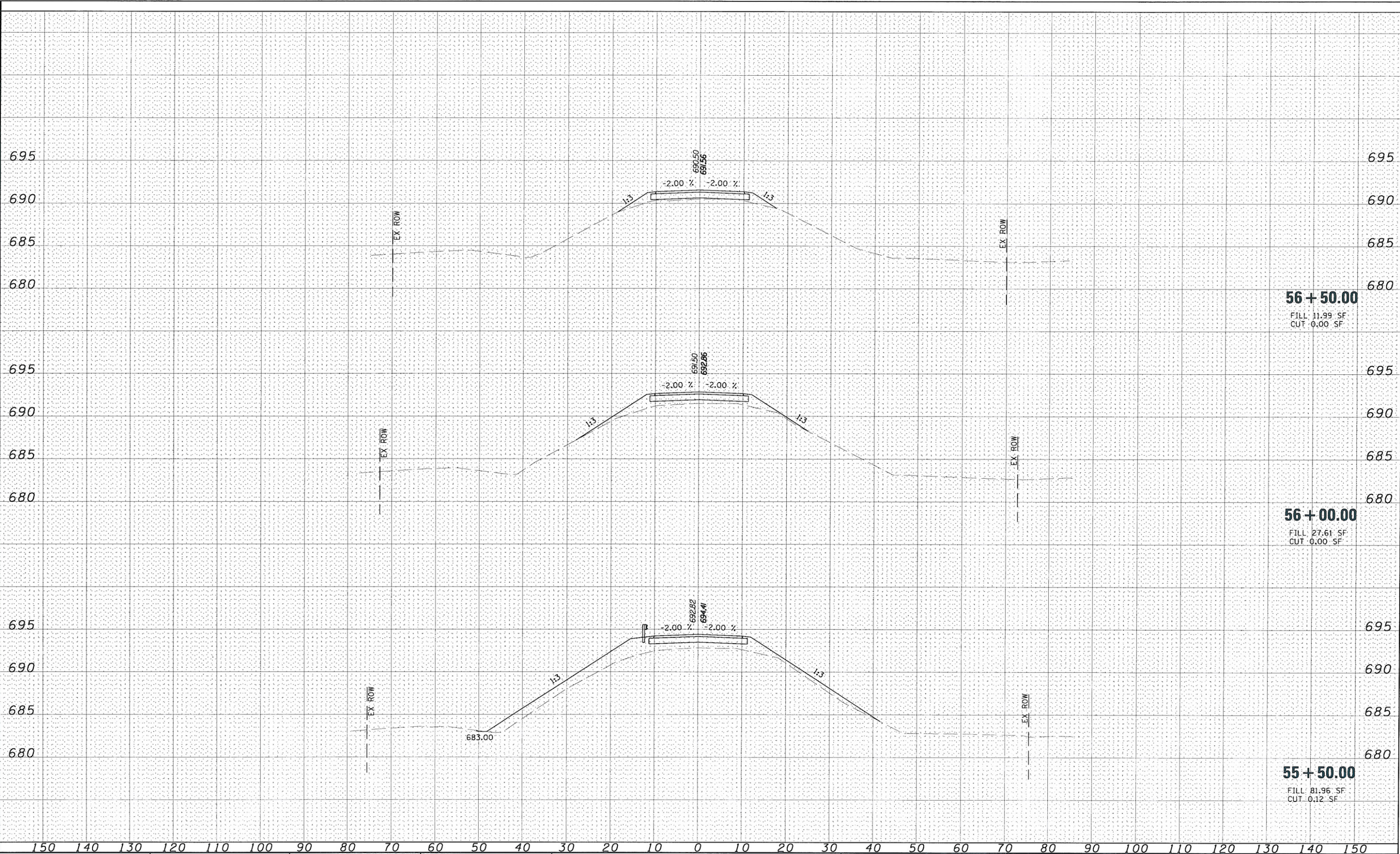
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	SURVEY	NOTE BOOK	NO.
	NO.		



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		DRAWN = UJ	REVISED =																
		CHECKED = MAR	REVISED =																
		PLOT DATE = 1/28/2010	DATE = 01-27-10		REVISED =														
PLOT SCALE = 20.0001' / IN.				SCALE:				SHEET NO. 14 OF 17 SHEETS				STA. 54+50.00 TO STA. 55+00.00				ILLINOIS FED. AID PROJECT			

FINAL	SURVEYED	
	NOTED	
	DATE	
	AREAS	CHECKED
NO.	NOTE BOOK	

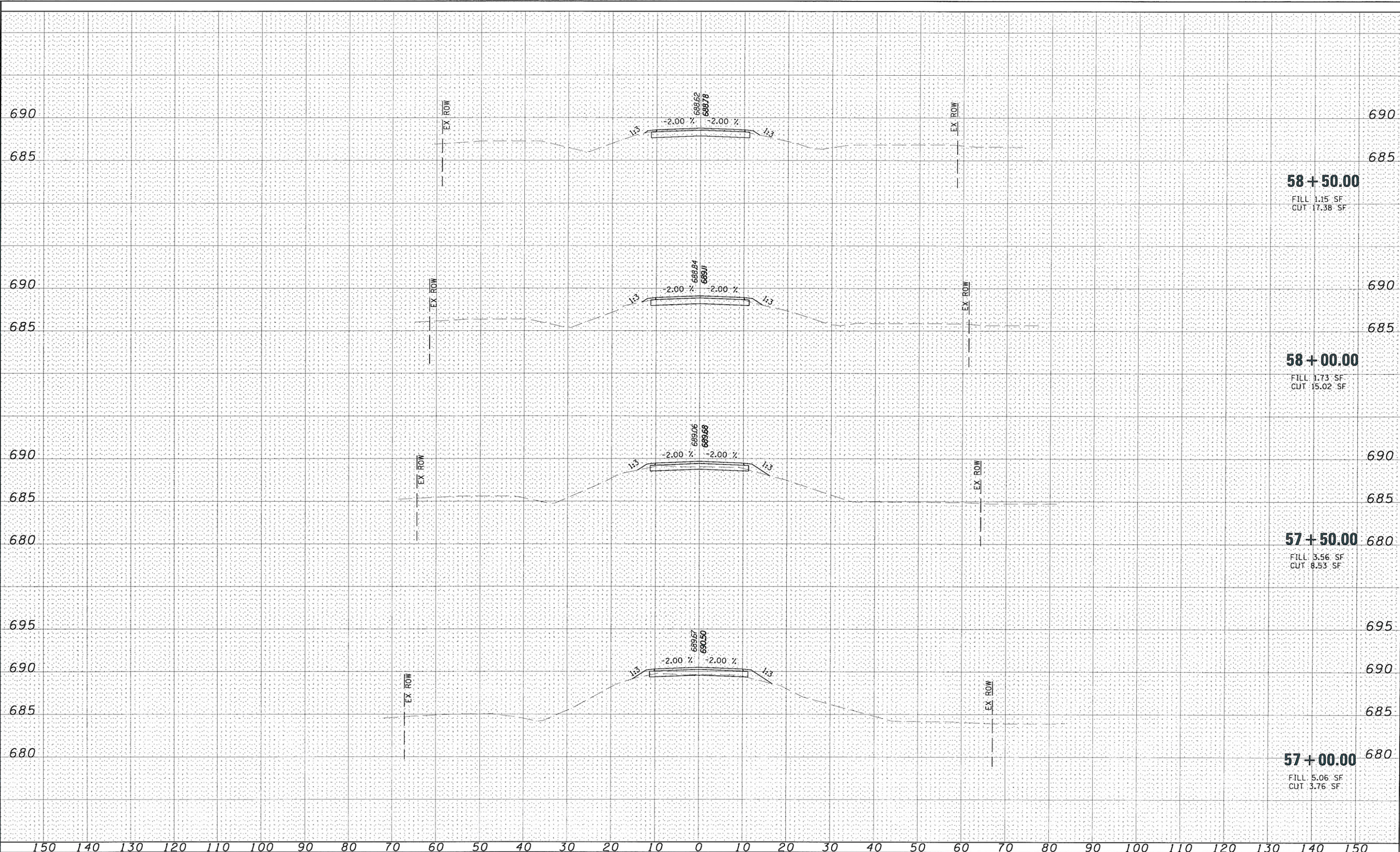
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	NOTED	
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	AREAS	CHECKED
NO.	NOTE BOOK	



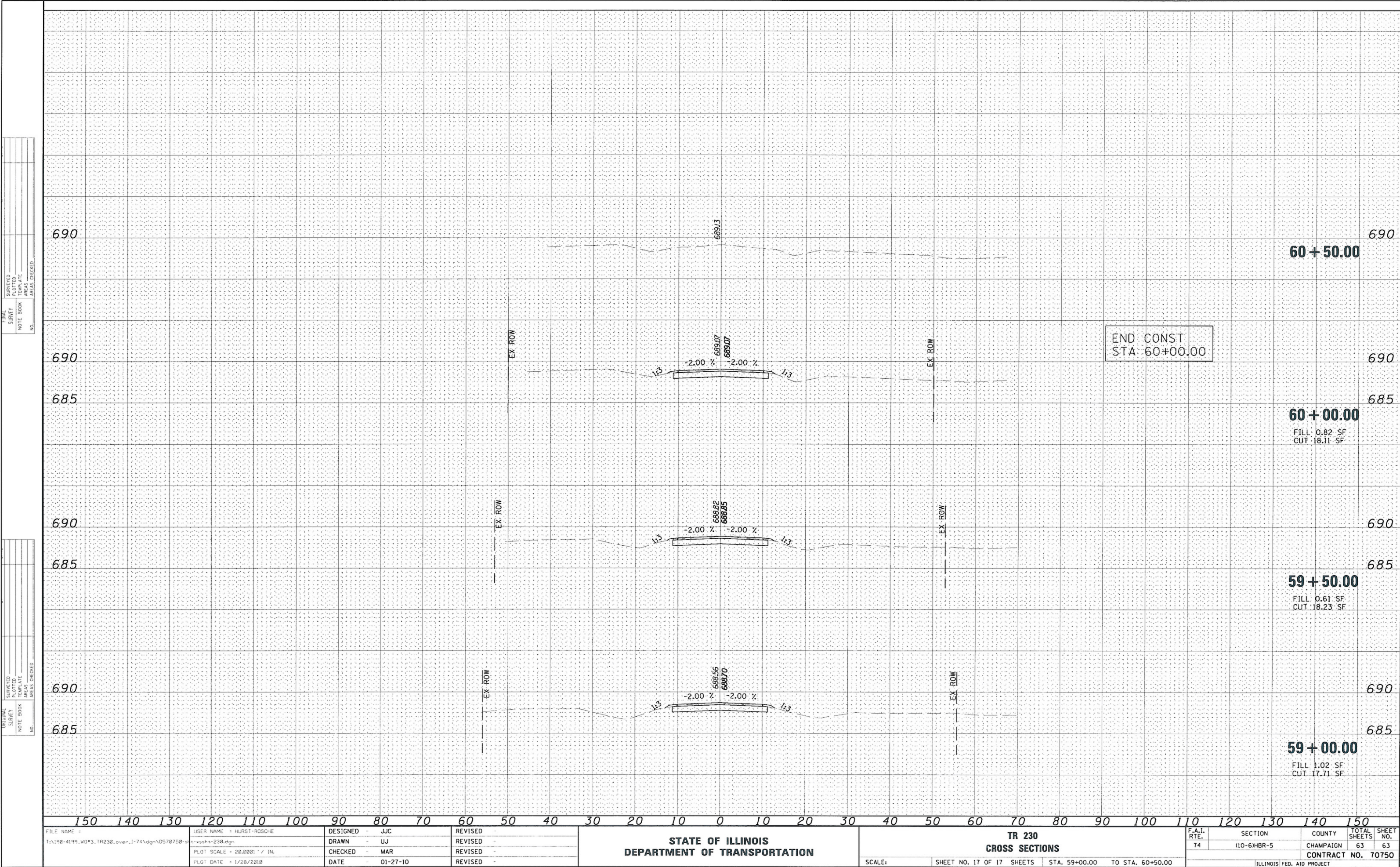
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PLOT SCALE = 20.0001' / IN.		CHECKED - MAR	DRAWN - UJ	REVISED -		SCALE:		SHEET NO. 15 OF 17 SHEETS		CONTRACT NO. 70750		ILLINOIS FED. AID PROJECT
PLOT DATE = 1/28/2010		DATE - 01-27-10		REVISED -		STA. 55+50.00 TO STA. 56+50.00						

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

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



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DRAWN = UJ		PLOT SCALE = 20.0001' / IN.		CHECKED = MAR	REVISED =					SCALE:				SHEET NO. 16 OF 17 SHEETS				STA. 57+00.00 TO STA. 58+50.00			
PLOT DATE = 1/28/2010		DATE = 01-27-10		REVISED =																	
																ILLINOIS FED. AID PROJECT					



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