F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	1

CONTRACT NO. 72837

1-21-10 LETTING ITEM 030

INDEX OF SHEETS

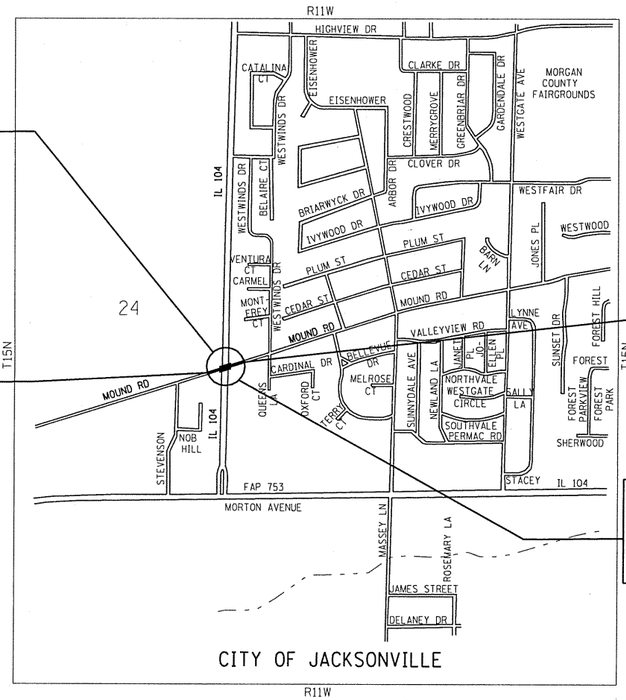
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
BRIDGE REPLACEMENT PLANS

FAU ROUTE 8173 (MOUND RD)
SECTION (69–HB)BR
PROJECT : M-8173(001)
MORGAN COUNTY
C–96–501–12

D–96–554–03

LOCATION OF SECTION INDICATED THUS: – ■ –



STATION 100+00.00, 19°00'00" SKEW
PROPOSED STRUCTURE NO. 069-0521
THREE SPAN STRUCTURE
146'-8" BK. TO BK.
REINFORCED CONCRETE DECK
39'-7" O. TO O. ON STEEL BEAMS
AND REINFORCED CONCRETE PIERS
AND SPILL-THRU ABUTMENTS

SECTION (69-HB)BR
BEGINS
STATION 95+00.00

SECTION (69-HB)BR
ENDS
STATION 104+40.00

EXISTING STRUCTURE NO 069-0031
THREE SPAN STRUCTURE
137'-9" BK. TO BK.
REINFORCED CONCRETE DECK
35'-8" O. TO O. ON STEEL BEAMS
AND REINFORCED CONCRETE PIERS
AND SPILL-THRU ABUTMENTS

0 100' 200' 300' — 1"= 100'
0 10' 20' 30' — 1"= 10'
0 50' 100' — 1"= 50'
0 5' 10' — 1"= 5'
0 50' 100' — 1"= 40'
0 50' 100' — 1"= 30'
0 5' 10' — 1"= 2'
0 50' 100' — 1"= 20'
0 500' 1000' — 1"= 200'

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

DESIGN DESIGNATION
FAU 8173 (MOUND ROAD)
MINOR ARTERIAL (URBAN)
ADT = 3300 (2027)
SU = 5%
MU = 6%

TOTAL LENGTH OF PROJECT = 940.00 LIN FT = 0.178 MILE
NET LENGTH OF PROJECT = 940.00 LIN FT = 0.178 MILE

ANTHONY W. MILLER
062-050804
REGISTERED PROFESSIONAL ENGINEER
10/20/10
STATE OF ILLINOIS
Exp 11/30/11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Oct 26 20 10
Roger Driskell
DEPUTY DIRECTOR OF HIGHWAYS /REGION FOUR ENGINEER
Dec 10 20 10
Scott E. Stitt P.E./BR
acting ENGINEER OF DESIGN AND ENVIRONMENT
Dec 10 20 10
Christine M. Reed/BR
DIRECTOR, DIVISION OF HIGHWAYS

Hutchison Engineering, Inc.
SINCE 1945
1801 West Laffayette
PO Box 820
Jacksonville, Illinois 62651
PHONE : (217)245-7164 FAX (217)243-0468

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

Rev.

PROJECT ENGINEER-JOHN C. NEGANGARD (217) 782-6890
SQUAD LEADER-VICTOR T. YOUNG (217) 557-3397

V/2280-2/2280-2C001

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	2
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

GENERAL NOTES

THE COST OF ADDITIONAL LABOR AND MATERIALS NOT ACCOUNTED FOR ON THE PLANS, WHICH MIGHT BE INVOLVED IN CONNECTING EXISTING DRAIN TILE OR STORM SEWERS TO PROPOSED DRAINAGE STRUCTURES, SHALL BE INCLUDED IN THE COST OF THE PROPOSED DRAINAGE STRUCTURES.

THE ENDS OF EXISTING DRAINAGE LINES WHICH ARE NOT TO BE INCORPORATED INTO THE PROPOSED IMPROVEMENT ARE TO BE SEALED. THE COST OF SUCH WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED DRAINAGE ITEM.

THE CONTRACTOR MAY BE REQUIRED TO CONDUCT SOME OF HIS GRADING AND STORM SEWER OPERATIONS AROUND TRANSMISSION POLES AND UNDER TRANSMISSION LINES. THE ADDED COST OF SO DOING SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

EXISTING PAVEMENT, SIDEWALK, DRIVEWAY PAVEMENT, CURB, CURB AND GUTTER, ETC. DAMAGED DUE TO THE CONTRACTOR'S OPERATIONS AND NOT OTHERWISE NECESSARY TO REPLACE SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

ALL EXISTING DRAINAGE STRUCTURES, NOT BEING REMOVED BY THE CONTRACTOR, THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

FOR INLETS AND MANHOLES CONSTRUCTED IN CONJUNCTION WITH THE CURB AND GUTTER, THE DISTANCE SHOWN ON THE PLANS IS FROM THE SURVEY BASELINE TO THE FACE OF CURB. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONSTRUCT EACH INLET OR MANHOLE, AT THE PROPOER LOCATION, SO THAT THE FRAME OR GRATE MATCHES THE CURB LINE.

FOR ALL MANHOLES OR INLETS NOT CONSTRUCTED IN CONJUNCTION WITH THE CURB AND GUTTER OR CURB, THE DISTANCE SHOWN ON THE PLANS IS TO THE CENTER OF THE MANHOLE OR INLET.

ALL LATERAL STORM SEWERS ARE TO BE PLACED ON A ONE PERCENT GRADE UNLESS OTHERWISE NOTED ON THE PLANS BY INVERT ELEVATIONS.

WHEN DURING CONSTRUCTION OPERATIONS ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTER OR DRAINAGE STRUCTURES SO THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SHALL BE FREE FROM ALL DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED DRAINAGE ITEMS.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS IMPROVEMENT.

EXISTING CONCRETE SIGN BASES AND OTHER MISCELLANEOUS CONCRETE NOT SPECIFICALLY SHOWN ON THE PLANS INTERFERING WITH PROPOSED CONSTRUCTION SHALL BE REMOVED. COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

TRAFFIC CONTROL SIGNS REMOVED MUST BE RESET AT THEIR PERMANENT LOCATIONS IN A WORKMANLIKE MANNER AND VISIBLE TO TRAFFIC ON THE ROADWAY. THESE SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS', LATEST EDITION. THE COST OF SUCH WORK SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THE PLANS REPRESENTS THE BEST KNOWLEDGE OF THE DEPARTMENT AND THE INDICATED ADJUSTMENTS OR RECONSTRUCTION ARE CONSIDERED TO BE REASONABLY ACCURATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY, AS DETAILED IN SECTION 563 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATIONS BEFORE STARTING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL INDEMNIFY THE DEPARTMENT, ITS OFFICERS, AND EMPLOYEES AGAINST ALL CLAIMS DUE TO DAMAGE TO CORPORATE OR PRIVATE PROPERTY RESULTING FROM THIS CONSTRUCTION OPERATIONS AS DESCRIBED IN ARTICLE 107.20 AND 107.26 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

CITY OF JACKSONVILLE (WATER & SEWER)
VERIZON (TELEPHONE)
MEDIACOM (CABLE TV)
AMEREN IP (ELECTRIC)
AMEREN IP (GAS)

THE THICKNESS OF HMA MIXTURES SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA MIXTURE IS PLACED.

THE ELEVATIONS AND EXACT SIZE OF ALL EXISTING WATER MAINS AND SANITARY SEWERS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION OF EACH RUN OF STORM SEWER TRUNK LINE OR LATERAL LINE WITHIN WHICH A CROSSING OF EITHER OR BOTH TYPES OF THESE EXISTING UTILITIES IS TO BE ENCOUNTERED. THE CONTRACTOR SHALL THEN DETERMINE WHICH OF THE ABOVE OPTIONS HE WILL USE TO RESOLVE THE CONFLICT BETWEEN THE PROPOSED STORM SEWER AND THE EXISTING UTILITY. THE APPROVAL OF THE RESIDENT ENGINEER SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO STARTING CONSTRUCTION OF THIS SEGMENT OF STORM SEWER.

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP 4 INCHES IN AREAS TO BE SEEDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS LIFTS OF HMA.

WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUB-SECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.

ALL ELEVATIONS REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB-NUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

THE REMOVAL OF ALL SIGNS, POLES, FENCES, LAWN ORNAMENTS, OR OTHER UNCLASSIFIED ITEMS NOT SPECIFICALLY PAID FOR SHALL BE CONSIDERED INCLUDED IN THE UNIT PRICE FOR EARTH EXCAVATION.

ASPHALT SIDEWALKS WHICH ARE TO BE REMOVED SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT AS SIDEWALK REMOVAL.

THE REMOVAL OF HMA SURFACING NOT ON A RIGID TYPE BASE REMOVED IN CONJUNCTION WITH THE BASE SHALL BE REMOVED AS EARTH EXCAVATION.

THE REMOVAL OF HMA SURFACING ON A RIGID TYPE BASE SHALL BE REMOVED WITH THE BASE AS PAVEMENT REMOVAL.

WHENEVER IT IS NECESSARY TO REMOVE EXISTING GRAVEL OR CRUSHED STONE BASE COURSE, IT SHALL BE REMOVED AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR EARTH EXCAVATION. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ADDITIONAL LABOR OR EQUIPMENT REQUIRED.

THE CONTRACTOR SHALL COMPLY WITH THE ENVIRONMENTAL PROTECTION AGENCY (E.P.A.) REGULATIONS WHICH APPLY TO STORM SEWER CONSTRUCTION REGARDING THE HORIZONTAL AND VERTICAL SEPARATION OF A STORM SEWER LINE FROM ANY EXISTING OR PROPOSED WATER MAIN. AT LOCATIONS WHERE THE SEPARATION IS INADEQUATE, THE CONTRACTOR SHALL ADJUST THE WATER MAIN TO PROVIDE THE REQUIRED SEPARATION OR CONSTRUCT THE STORM SEWER OF THE MATERIAL SPECIFIED IN THE E.P.A. REGULATIONS.

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

AGGREGATE SUBBASE	2.05 TON/CU YD
STONE DUMPED RIPRAP	1.75 TON/CU YD
HMA MATERIALS PRIME COAT	0.00038 TON/SQ YD (ON PAVEMENT)
HMA SURFACE/BINDER (112LBS)	0.056 TON/SQ YD*IN
NITROGEN FERTILIZER NUTRIENT (SEEDING)	90 LBS/ACRE
PHOSPHOROUS FERTILIZER NUTRIENT (SEEDING)	90 LBS/ACRE
POTASSIUM FERTILIZER NUTRIENT (SEEDING)	90 LBS/ACRE
AGRICULTURE GROUND LIMESTONE (SEEDING)	2 TON/ACRE
MULCH (SEEDING)	2 TON/ACRE
NITROGEN FERTILIZER NUTRIENT (SODDING)	0.0186 LBS/SQ YD
PHOSPHOROUS FERTILIZER NUTRIENT (SODDING)	0.0011 LBS/SQ YD
POTASSIUM FERTILZER NUTRIENT (SODDING)	0.0074 LBS/SQ YD
AGRICULTURE GROUND LIMESTONE (SODDING)	0.000046 TON/SQ YD
SUPPLEMENTAL WATERING (SODDING)	0.009 UNITS/SQ YD (3APPL. @ 3GAL/SQ YD)

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USE(S)	HMA SURF CSE	HMA BINDER CSE & PATCHING	HMA LEVELING BINDER	HMA SHOULDERS
AC/PG	PG 64-22	PG 64-22	PG 64-22	PG 58-22
DESIGN AIR VOIDS	4.0% @ N DESIGN=50	4.0% @ N DESIGN=50	4.0% @ N DESIGN=50	2.0% @ N DESIGN=30
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL-9.5 OR 12.5	IL-19.0	IL-9.5	BAM
FRICTION AGGREGATE	MIX "C"		N/A	N/A

COMMITMENTS

THE FIELD/RESIDENT ENGINEER SHALL CONTACT DISTRICT 6 STUDIES & PLANS AT 217-782-6990 CONCERNING ANY MAJOR PLAN CHANGES TO MAKE SURE NO PREVIOUS COMMITMENTS (NOT LISTED) WERE MADE AFFECTING THE DESIGN, AND TO ALLOW IMPROVEMENTS IN THE DESIGN FOR FUTURE PROJECTS.

LEGEND

BITUMINOUS SURFACE REMOVAL BUTT JOINT

II / 8 — PAVEMENT PATCHING, TYPE, SQ YD

PAVEMENT REMOVAL

PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH, SPECIAL

TBR — ITEM TO BE REMOVED

TB / 9 — TRENCH BACKFILL, CU YD

TC = 670.04 TOP OF CURB ELEVATION

L = 668.75 LID ELEVATION

G = 669.60 GRATE ELEVATION

LIST OF STANDARDS

000001-06
280001-05
420401-08
442201-03
515001-03
542301-03
542601-03
602301-03
602306-03
602401-03
602406-04
602601-02
602701-02
604001-03
604011-04
604036-02
606001-04
630001-09
630101-09
630301-05
631011-07
631031-09
635006-03
635011-02
701006-03
701011-02
701201-04
701301-04
701311-03
701801-04
701901-01
704001-06
780001-02
BLR 21-8
BLR 22-6
601101-01

DISTRICT SIX

EXAMINED October 19 20 10
Rick Wallen
OPERATIONS ENGINEER

EXAMINED October 22 20 10
Terry Fountain RVP
PROJECT IMPLEMENTATION ENGINEER

EXAMINED October 13 20 10
PROGRAM DEVELOPMENT ENGINEER

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, STANDARDS, INDEX OF SHEETS, COMMITMENTS, AND LEGEND

DRAWN BY JCW
CHECKED BY JRB
DATE 10/15/10

2280-2C001

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	169-HB)BR	MORGAN	63	3
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY (URBAN 80%FED./20%STATE)	CONSTRUCTION TYPE CODE	
				ROADWAY 0004	BRIDGE 0011
20200100	EARTH EXCAVATION	CU YD	40	40	
20400800	FURNISHED EXCAVATION	CU YD	291	291	
20800150	TRENCH BACKFILL	CU YD	36	36	
21400100	GRADING AND SHAPING DITCHES	FOOT	400	400	
25000200	SEEDING, CLASS 2	ACRE	0.5	0.5	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	50	50	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	50	50	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	50	50	
25000700	AGRICULTURAL GROUND LIMESTONE	TON	2	2	
25100115	MULCH, METHOD 2	ACRE	0.5	0.5	

REVISIONS NAME	DATE

SUMMARY OF QUANTITIES

DRAWN BY JCW

DATE 10/15/10 CHECKED BY JRB

2280-20001

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	69-HB)BR	MORGAN	63	4
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	URBAN 80% FED./20% STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
				ROADWAY 0004	BRIDGE 0011
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	1000	1000	
25200100	SODDING	SQ YD	385	385	
25200200	SUPPLEMENTAL WATERING	UNIT	5	5	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	56	56	
28000400	PERIMETER EROSION BARRIER	FOOT	1000	1000	
28000500	INLET AND PIPE PROTECTION	EACH	6	6	
28001000	AGGREGATE (EROSION CONTROL)	TON	35	35	
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	268	268	
35101400	AGGREGATE BASE COURSE, TYPE B	TON	13	13	
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	50	50	

REVISIONS NAME	DATE

SUMMARY OF QUANTITIES

DRAWN BY JCW

DATE 10/15/10 CHECKED BY JRB

2280-20001

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	69-HBIBR	MORGAN	63	5
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	URBAN 80% FED./20% STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
				ROADWAY 0004	BRIDGE 0011
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	1.1	1.1	
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	89	89	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	557	557	
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	508	508	
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	212	212	
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	40	40	
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	222	222	
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	1354	1354	
44000100	PAVEMENT REMOVAL	SQ YD	224	224	
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	168	168	

REVISIONS NAME	DATE

SUMMARY OF QUANTITIES

DRAWN BY JCW

DATE 10/15/10 CHECKED BY JRB

2280-2G001

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	169-HB1BR	MORGAN	63	6
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	URBAN 80%FED./20%STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
				ROADWAY 0004	BRIDGE 0011
44000500	COMBINATION CONCRETE CURB AND GUTTER REMOVAL	FOOT	745	745	
44000600	SIDEWALK REMOVAL	SQ FT	1234	1234	
44201789	CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	34	34	
48203023	HOT-MIX ASPHALT SHOULDERS, 6 1/2"	SQ YD	1116	1116	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50104400	CONCRETE HEADWALL REMOVAL	EACH	4	4	
50104650	SLOPE WALL REMOVAL	SQ YD	400		400
50105220	PIPE CULVERT REMOVAL	FOOT	247	247	
50157300	PROTECTIVE SHIELD	SQ YD	177		177

REVISIONS NAME	DATE

SUMMARY OF QUANTITIES

DRAWN BY JCW
CHECKED BY JRB
DATE 10/15/10

2280-20001

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	7
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	URBAN 80% FED./20% STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
				ROADWAY 0004	BRIDGE 0011
50200100	STRUCTURE EXCAVATION	CU YD	158		158
50300100	FLOOR DRAINS	EACH	6		6
50300225	CONCRETE STRUCTURES	CU YD	171.2		171.2
50300255	CONCRETE SUPERSTRUCTURE	CU YD	341.9		341.9
50300260	BRIDGE DECK GROOVING	SQ YD	688		688
50300280	CONCRETE ENCASEMENT	CU YD	9.0		9.0
50300300	PROTECTIVE COAT	SQ YD	1,465	477	988
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1
50500505	STUD SHEAR CONNECTORS	EACH	2,880		2,880
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	86,160		86,160

REVISIONS NAME	DATE

SUMMARY OF QUANTITIES

DRAWN BY JCW

DATE 10/15/10 CHECKED BY JRB

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	8
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	URBAN 80% FED/20% STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
				ROADWAY 0004	BRIDGE 0011
50800515	BAR SPLICERS	EACH	76		76
50900105	ALUMINUM RAILING, TYPE L	FOOT	139		139
51100100	SLOPE WALL 4 INCH	SQ YD	460		460
51201400	FURNISHING STEEL PILES HP10x42	FOOT	465		465
51201600	FURNISHING STEEL PILES HP12x53	FOOT	936		936
51202305	DRIVING PILES	FOOT	1,401		1,401
51203400	TEST PILE STEEL HP10x42	EACH	2		2
51203600	TEST PILE STEEL HP12x53	EACH	2		2
51500100	NAME PLATES	EACH	1		1
52100520	ANCHOR BOLTS, 1''	EACH	48		48

REVISIONS NAME	DATE

SUMMARY OF QUANTITIES

DRAWN BY JCW
CHECKED BY JRB
DATE 10/15/10

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	69-HB1BR	MORGAN	63	9
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	URBAN 80% FED./20% STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
				ROADWAY 0004	BRIDGE 0011
542A1069	PIPE CULVERTS, CLASS A, TYPE 2 24"	FOOT	170	170	
542D5470	PIPE CULVERTS, CLASS D, TYPE 1 EQUIVALENT ROUND-SIZE 15"	FOOT	68	68	
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	4	4	
54215979	REINFORCED CONCRETE PIPE ELBOW 24"	EACH	2	2	
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	114	114	
550A0410	STORM SEWERS, CLASS A, TYPE 2 24"	FOOT	64	64	
55100500	STORM SEWER REMOVAL 12"	FOOT	43	43	
55100900	STORM SEWER REMOVAL 18"	FOOT	96	96	
58700300	CONCRETE SEALER	SQ FT	3,080		3,080
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	59		59

REVISIONS NAME	DATE

SUMMARY OF QUANTITIES

DATE 10/15/10

DRAWN BY JCW

CHECKED BY JRB

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	10
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	URBAN 80% FED./20% STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
				ROADWAY 0004	BRIDGE 0011
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2	2	
60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	3	3	
60221700	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 8 GRATE	EACH	1	1	
60223800	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1	
60236200	INLETS, TYPE A, TYPE 8 GRATE	EACH	2	2	
60240301	INLETS, TYPE B, TYPE 8 GRATE	EACH	1	1	
60255500	MANHOLES TO BE ADJUSTED	EACH	1	1	
60260100	INLETS TO BE ADJUSTED	EACH	2	2	
60266600	VALVE BOX TO BE ADJUSTED	EACH	1	1	
60500040	REMOVING MANHOLES	EACH	1	1	
60500060	REMOVING INLETS	EACH	3	3	
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	674	674	

REVISIONS	
NAME	DATE

SUMMARY OF QUANTITIES

DRAWN BY JCW
CHECKED BY JRB
DATE 10/15/10

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	169-HB)BR	MORGAN	63	11
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	URBAN 80% FED./20% STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
					ROADWAY 0004	BRIDGE 0011
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	500	500	
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	3	3	
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
	63200310	GUARDRAIL REMOVAL	FOOT	340	340	
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	
	67100100	MOBILIZATION	L SUM	1	1	
	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	
	70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	1	
	70101835	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 22	L SUM	1	1	
	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1	
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1	
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	94	94	

* SPECIALTY ITEMS

REVISIONS	
NAME	DATE

SUMMARY OF QUANTITIES

DRAWN BY JCW

DATE 10/15/10

CHECKED BY JRB

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	169-HB)BR	MORGAN	63	12
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	URBAN 80% FED./20% STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
					ROADWAY 0004	BRIDGE 0011
	70300230	TEMPORARY PAVEMENT MARKING - LINE 5"	FOOT	1033	1033	
	70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	149	149	
	70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	46	46	
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	587	587	
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	410	410	
*	78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	1033	1033	
*	78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	149	149	
*	78001150	PAINT PAVEMENT MARKING - LINE 12"	FOOT	46	46	
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	12	12	
*	78200530	BARRIER WALL MARKERS, TYPE C	EACH	16	16	
*	78201000	TERMINAL MARKERS - DIRECT APPLIED	EACH	8	8	

* Specialty Items

REVISIONS NAME	DATE

SUMMARY OF QUANTITIES

DATE 10/15/10

DRAWN BY JCW

CHECKED BY JRB

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	13
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	URBAN 80%FED./20%STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
					ROADWAY 0004	BRIDGE 0011
	X2020110	GRADING AND SHAPING SHOULDERS	UNIT	8	8	
	X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	95		95
	X2810208	STONE RIPRAP, CLASS A4 (SPECIAL)	TON	10	10	
	X4230710	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH, SPECIAL	SQ YD	14	14	
	X6020075	INLETS, TYPE B, TYPE 3V FRAME AND GRATE	EACH	4	4	
*	X6300130	STEEL PLATE BEAM GUARDRAIL, TYPE A (SPECIAL)	FOOT	50	50	
*	X6310176	TRAFFIC BARRIER TERMINAL, TYPE 2 (SPECIAL)	EACH	3	3	
*	X6310218	TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL)	EACH	1	1	
	Z0013798	CONSTRUCTION LAYOUT	LSUM	1	1	
	Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY-REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4	4	
	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	138		138
	Z0056608	STORM SEWER (WATER MAIN REQUIREMENTS) 12 INCH	FOOT	28	28	
	Z0056612	STORM SEWER (WATER MAIN REQUIREMENTS) 18 INCH	FOOT	26	26	

* SPECIALTY ITEMS

*Specialty Items

REVISIONS NAME	DATE

SUMMARY OF QUANTITIES

DRAWN BY JCW

DATE 10/15/10 CHECKED BY JRB

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	14
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

GUARDRAIL SCHEDULE

STATION TO STATION		SIDE	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	STEEL PLATE BEAM GUARDRAIL, TYPE A (SPECIAL)	TRAFFIC BARRIER TERMINALS				TERMINAL MARKER - DIRECT APPLIED	GUARDRAIL MARKERS TYPE A
					TYPE 1, SPECIAL (TANGENT)	TYPE 2 (SPECIAL)	TYPE 6	TYPE 6 (SPECIAL)		
			FOOT		EACH					
FAU 8173 (MOUND ROAD)										
98+64.04	98+75.75	LT				1			1	
98+86.25	99+21.16	RT						1	1	1
98+75.75	99+18.90	LT					1			1
100+67.83	101+10.98	RT					1			1
100+95.56	101+38.71	LT					1			1
101+10.98	101+21.81	RT				1			1	
101+38.71	101+50.31	LT				1			1	
FA 92 (IL 104)										
109+16.66	109+66.66	RT			1				1	
109+66.66	111+16.66	RT	150.0							2
111+16.66	111+66.66	RT		50.0						1
111+66.66	112+41.66	RT	75.0							1
112+41.66	112+91.66	RT			1				1	
109+68.77	110+18.77	LT			1				1	
110+18.77	112+93.77	LT	275.0							4
112+93.77	113+43.77	LT			1				1	
TOTALS			500.0	50.0	4	3	3	1	8	12
USE			500.0	50.0	4	3	3	1	8	12

PAVEMENT MARKING

STATION TO STATION		SIDE	PAINT PAVEMENT MARKING			
			LINE 5"		LINE 6"	LINE 12"
			WHITE	YELLOW	WHITE	WHITE
			FOOT			
95+00.0	104+40.0	CL		240		
95+00.0	99+00.0	LT	400			
95+00.0	98+93.0	RT	393			
101+07.0	102+51.3	LT			148.1	45.5
TOTALS			793	240	148.1	46
USE			1033		149	46

SHOULDER SCHEDULE

STATION TO STATION		SIDE	HOT-MIX ASPHALT SHOULDERS, 6½"
			SQ YD
FAU 8173 (MOUND ROAD)			
95+00.0	98+95.4	LT	216.9
95+00.0	98+86.0	RT	139.4
FA 92 (104)			
109+69.0	113+44.0	LT	379.8
109+17.0	112+92.0	RT	379.8
TOTAL			1115.9
USE			1116

REMOVAL SCHEDULE

STATION TO STATION		SIDE	PAVEMENT REMOVAL	DRIVEWAY PAVEMENT REMOVAL	COMBINATION CONCRETE CURB & GUTTER REMOVAL	SIDEWALK REMOVAL
			SQ YD		FOOT	SQ FT
95+69.0		RT		33.3		
96+80.0		RT		28.9		
98+90.7	99+30.0	-	99.0			
100+62.7	104+40.0	RT			377.3	
100+68.0	101+09.3	-	124.2			
100+72.9	104+40.0	LT			367.1	
100+86.3	101+79.5	LT				368.0
101+89.0		LT		26.8		
101+97.2	102+22.1	LT				78.0
102+32.0		LT		28.0		
102+40.6	104+40.0	LT				787.6
102+60.0		RT		33.0		
103+80.0		RT		8.7		
104+11.0		RT		8.5		
TOTALS			223.2	167.2	744.4	1233.6
USE			224	168	745	1234

PIPE CULVERT SCHEDULE

STATION TO STATION		SIDE	PIPE CULVERTS, CLASS A, TYPE 2, 24"	PIPE CULVERTS, CLASS D, TYPE 1, EQUIVALENT ROUND-SIZE 15"	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"
			FOOT		EACH
FAU 8173 (MOUND ROAD)					
95+50.8	95+86.8	RT		36	
96+63.4	96+95.4	RT		32	
FA 92 (104)					
110+72.4	111+60.4	LT	90		2
111+05.0	111+86.2	RT	80		2
TOTALS			170	68	4
USE			170	68	4

GRADING AND SHAPING SHOULDER

STATION TO STATION		SIDE	UNIT
109+69.0	113+44.0	LT	3.8
109+17.0	112+92.0	RT	3.8
TOTAL			7.6
USE			8

CURB & GUTTER SCHEDULE

STATION TO STATION		SIDE	COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24	SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
			FOOT	SQ YD
101+08.8	104+40.0	LT	331.2	131.8
100+97.8	104+40.0	RT	342.2	136.1
TOTAL			673.4	267.9
USE			674	268

PAVING SCHEDULE

STATION TO STATION		BITUMINOUS MATERIALS (PRIME COAT)	LEVELING BINDER (MACHINE METHOD) N50	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50
		TON		SQ YD	TON	
95+00.0	98+96.7	0.6	37.8	183.3	371.8	92.7
101+03.3	104+40.0	0.5	50.5	373.3	135.5	119.3
TOTAL		1.1	88.3	556.6	507.3	212.0
USE		1.1	89	557	508	212

GUARDRAIL REMOVAL

STATION TO STATION		SIDE	GUARDRAIL REMOVAL
			FOOT
FA 92 (104)			
110+34.3	111+21.6	RT	87.3
110+41.8	111+07.4	LT	65.6
111+57.3	112+40.3	RT	83.0
111+42.8	112+46.8	LT	104.0
TOTAL			339.9
USE			340

LANDSCAPING SCHEDULE

STATION TO STATION		SEEDING, CLASS 2	SODDING	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASIUM FERTILIZER NUTRIENT	AGRICULTURAL GROUND LIMESTONE	MULCH, METHOD 2
		ACRE	SQ YD	POUND			TON	ACRE
95+00.00	100+74.12	0.45		41	41	41	0.9	0.45
100+74.12	104+40.00		385	5	5	5	0.2	
TOTALS		0.45	385	46	46	46	1.1	0.45
USE		0.5	385	50	50	50	2	0.5

ESTIMATED QUANTITIES

ITEMS	GRADING AND SHAPING DITCHES	AGGREGATE (EROSION CONTROL)	PERIMETER EROSION BARRIER	INLET AND PIPE PROTECTION	HEAVY DUTY EROSION CONTROL BLANKET	TEMPORARY EROSION CONTROL SEEDING	STONE RIPRAP, CLASS A4 (SPECIAL)	AGGREGATE SURFACE CSE, TYPE B
THE SHOWN ITEMS INCLUDE ESTIMATED QUANTITES FOR EROSION CONTROL AND AGGREGATE FOR TEMPORARY ACCESS								
	FOOT	TON	FOOT	EACH	SQ YD	POUND	TON	TON
TOTAL	400	35	1000	6	1000	56	10	50
USE	400	35	1000	6	1000	56	10	50

STORM SEWER SCHEDULE

STATION	SIDE	TYPE	STANDARD & DESIGN NUMBER	STORM SEWER (WATER MAIN REQUIREMENTS)		STORM SEWERS, CLASS A		INLETS			MANHOLES, TYPE A					REINFORCED CONCRETE PIPE ELBOW 24"	TRENCH BACKFILL
								TYPE A	TYPE B		4'	5' DIAMETER		6'			
				12"	18"	TYPE 1, 12"	TYPE 2, 24"	TYPE 8 GRATE	TYPE 8 GRATE	TYPE 3V FRAME & GRATE	TYPE 1 FRAME, CLOSED LID	TYPE 1 FRAME, CLOSED LID	TYPE 8 GRATE	TYPE 1 FRAME, CLOSED LID			
				FOOT				EACH									CU YD
FAU 8173 (MOUND ROAD)																	
100+26	RT	MANHOLE	602401, 602601, 604001											1			
		SS	542601				64									2	
100+90	RT	MANHOLE	602401, 602601, 604036										1				
		SS			26												
101+00	LT	INLET	602301, 604036					1									
		SS		22													6
101+20	LT	INLET	602306, 602601, 604011							1							
		SS				30											11
101+20	RT	INLET	602306, 602601, 604011							1							
		SS				6											3
101+20	RT	MANHOLE	602401, 602601, 604001								1						
102+46	LT	INLET	602301, 604036					1									
		SS				34											6
102+10	LT	INLET	602306, 602601, 604036						1								
		SS				10											2
102+10	LT	INLET	602306, 602601, 604011							1							
		SS				34											6
102+10	RT	INLET	602306, 602601, 604011							1							
		SS		6													2
102+10	RT	MANHOLE	602401, 602601, 604001								1						
FA 92 (IL 104)																	
110+80	LT	MANHOLE	602401, 602601, 604001									1					
111+06	RT	MANHOLE	602401, 602601, 604001									1					
111+80	RT	MANHOLE	602401, 602601, 604001									1					
TOTALS				28	26	114	64	2	1	4	2	3	1	1	2	36	
USE				28	26	114	64	2	1	4	2	3	1	1	2	36	

EARTHWORK SCHEDULE

STATION TO STATION		EXCAVATION	EXCAVATION ADJUSTED FOR SHRINKAGE*	EMBANKMENT	BALANCE WASTE OR SHORTAGE (-)
		CU. YD.			
95+00.0	99+26.3	35.5	26.6	225.6	-199.0
100+73.3	104+40.0	4.7	3.5	95.3	-91.8
TOTALS		40.2	30.1	320.9	-290.8
USE		40	30	321	-291

* SHRINKAGE FACTOR = 25%

PIPE CULVERT REMOVAL

STATION TO STATION		SIDE	SIZE/ TYPE	LENGTH
				FOOT
FAU 8173 (MOUND ROAD)				
95+57	95+81	RT	12" CMP	24
96+67	96+91	RT	12" CMP	25
FA 92 (104)				
110+59	111+57	LT	24" CMP	98
111+06	112+06	RT	24" CMP	100
TOTAL				247
USE				247

STORM SEWER REMOVAL

STATION TO STATION		SIDE	STORM SEWER REMOVAL 12"	STORM SEWER REMOVAL 18"
			FOOT	
100+90		-	43	
100+23	100+88	RT		70
100+92	101+18	RT		26
TOTALS			43	96
USE			43	96

SIDEWALK SCHEDULE

STATION TO STATION		SIDE	PORTLAND CEMENT CONCRETE SIDEWALK, 4 INCH
			SQ FT
98+96	99+02	LT	30.0
101+09	104+40	LT	1324.0
TOTAL			1354.0
USE			1354

PAVEMENT PATCHING SCHEDULE

STATION TO STATION		CLASS D PATCHES, TYPE 2,
		SQ YD
101+17.58	101+22.42	16.0
102+07.58	102+12.42	18.0
TOTAL		34.0
USE		34

REVISIONS	
NAME	DATE

SCHEDULE OF QUANTITIES

DRAWN BY JCW

DATE 10/15/10 CHECKED BY JRB

2280-20002

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	15
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

LEGEND

Ⓐ EXISTING COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24

Ⓑ EXISTING BASE COURSE WIDENING 8"

Ⓒ EXISTING PCC PAVEMENT 9-6-9

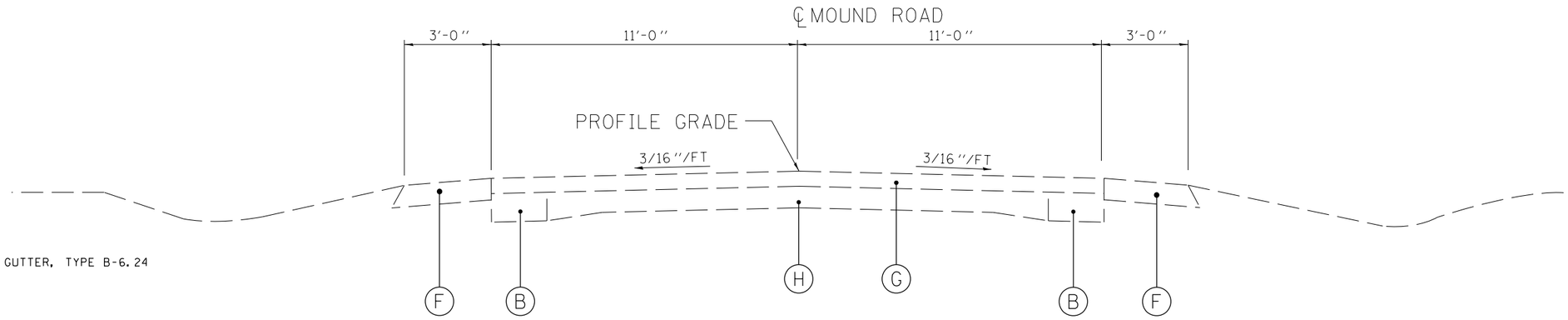
Ⓓ EXISTING HMA OVERLAY, VARIABLE THICKNESS

Ⓔ EXISTING PCC SIDEWALK, 4"

Ⓕ EXISTING AGGREGATE SHOULDER, TYPE B

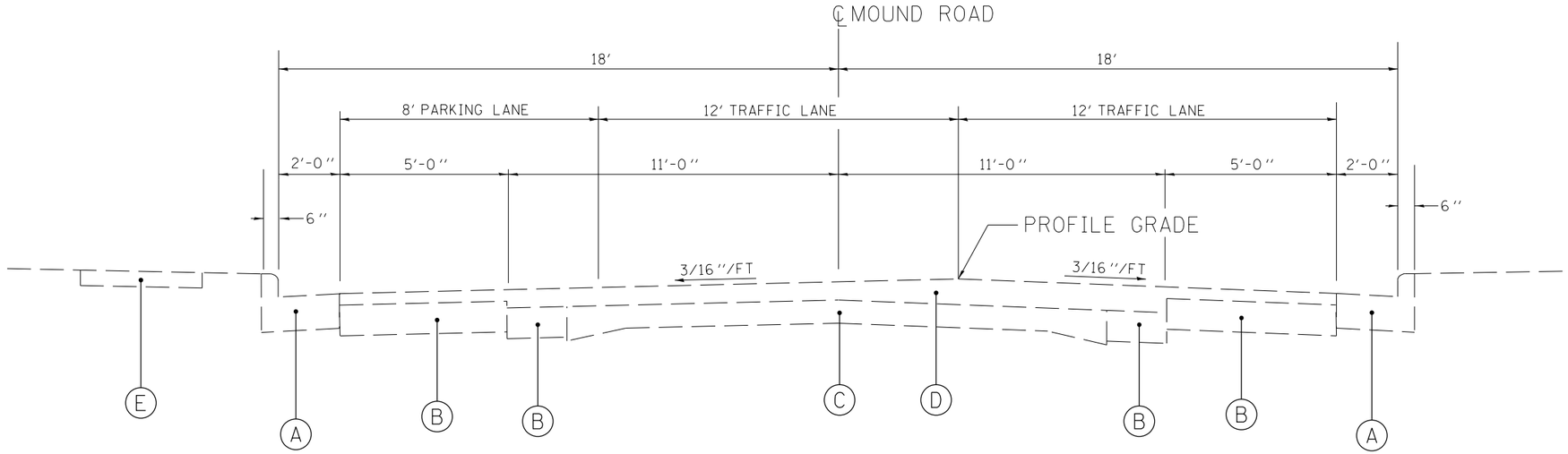
Ⓖ EXISTING HMA OVERLAY 5-1/4"

Ⓗ EXISTING PCC PAVEMENT 8-6-8



EXISTING TYPICAL SECTION

STA 95+00.00 TO STA 98+90.00
BRIDGE/APPROACH OMISSION STA 98+90.00 TO STA 101+05.00



EXISTING TYPICAL SECTION

STA 101+05.00 TO STA 103+00.00

NOTE: NOT TO SCALE

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING TYPICAL SECTIONS

DRAWN BY JCW
DATE 12/21/07 CHECKED BY JRB

2280-2/2280-2T001.DGN

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	16
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

LEGEND

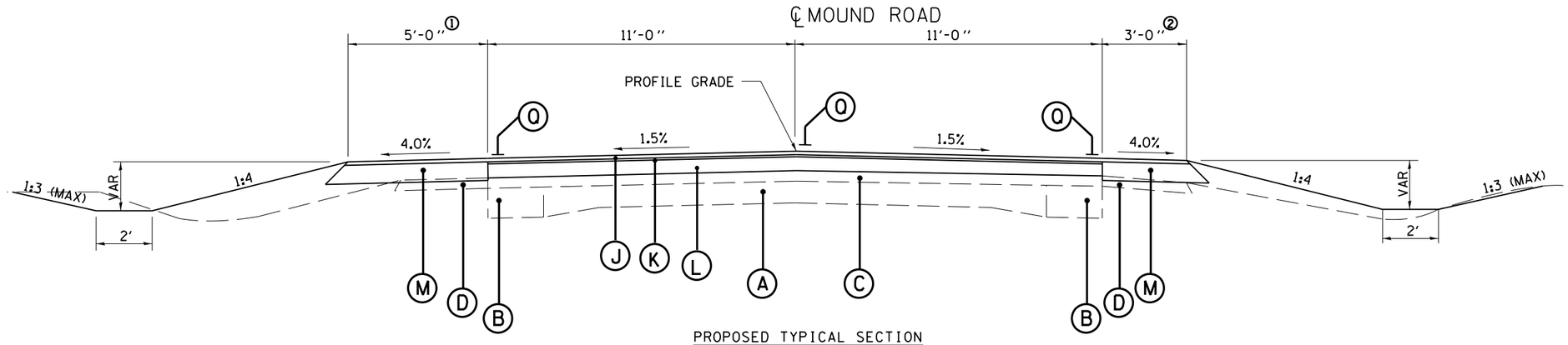
EXISTING:

- Ⓐ EXISTING PCC PAVEMENT, 8-6-8
- Ⓑ EXISTING PCC BASE COURSE WIDENING, 8"
- Ⓒ EXISTING HMA OVERLAY, 5 1/4"
- Ⓓ EXISTING AGGREGATE SHOULDER
- Ⓔ EXISTING PCC PAVEMENT, 9-6-9
- Ⓕ EXISTING BASE COURSE WIDENING, 8"
- Ⓖ EXISTING HMA OVERLAY, 6 3/4" MIN.
- Ⓗ EXISTING COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24 - TO BE REMOVED
- Ⓘ EXISTING PCC SIDEWALK - TO BE REMOVED

PROPOSED:

- Ⓙ PROPOSED HMA SURFACE COURSE, MIX "C", N50 (1 1/2")
- Ⓚ PROPOSED LEVELING BINDER (MACHINE METHOD), N50 (VARIES 3/4" MIN. TO 3" MAX.)•
- Ⓛ PROPOSED HMA BINDER COURSE, IL-19.0, N50 (3" MIN. & VARIES)•
- Ⓜ PROPOSED PROPOSED HMA SHOULDER, SUPERPAVE, 6 1/2"
- Ⓝ PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
- Ⓞ PROPOSED COMBINATION CONCRETE CURB & GUTTER, TYPE B- 6.24
- Ⓟ PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK, 4"
- Ⓠ PROPOSED PAVEMENT MARKING - LINE 5"

• WHEN LEVELING BINDER THICKNESS EXCEEDS 3", HMA CONCRETE BINDER COURSE SHALL BE USED TO BUILD UP RESURFACING THICKNESS TO THE BOTTOM OF THE 2¼" NOMINAL OVERLAY.



PROPOSED TYPICAL SECTION

STATION 95+00.00 TO STATION 98+90.67

① TRANSITION FROM 3' WIDTH AT LT STATION 95+00 TO 5' WIDTH AT LT STATION 95+25

② PROVIDE 5' WIDE HMA SHOULDER FROM RT STATION 98+50 TO RT STATION 98+86, TRANSITION FROM 3' WIDTH AT RT STA 98+25 TO 5' WIDTH AT RT STATION 98+50

BRIDGE STATIONS:

STATION 98+90.67 TO STATION 98+96.67 BRIDGE APPROACH PAVEMENT CONNECTOR

STATION 98+96.67 TO STATION 99+26.67 BRIDGE APPROACH PAVEMENT

STATION 99+26.67 TO STATION 100+73.33 BRIDGE

STATION 100+73.33 TO STATION 101+03.33 BRIDGE APPROACH PAVEMENT

STATION 101+03.33 TO STATION 101+09.33 BRIDGE APPROACH PAVEMENT CONNECTOR

NOTE: NOT TO SCALE

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTIONS

DRAWN BY JCW

DATE 10/20/10 CHECKED BY JRB

2280-2/2280-2T002.DGN

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	17
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

LEGEND

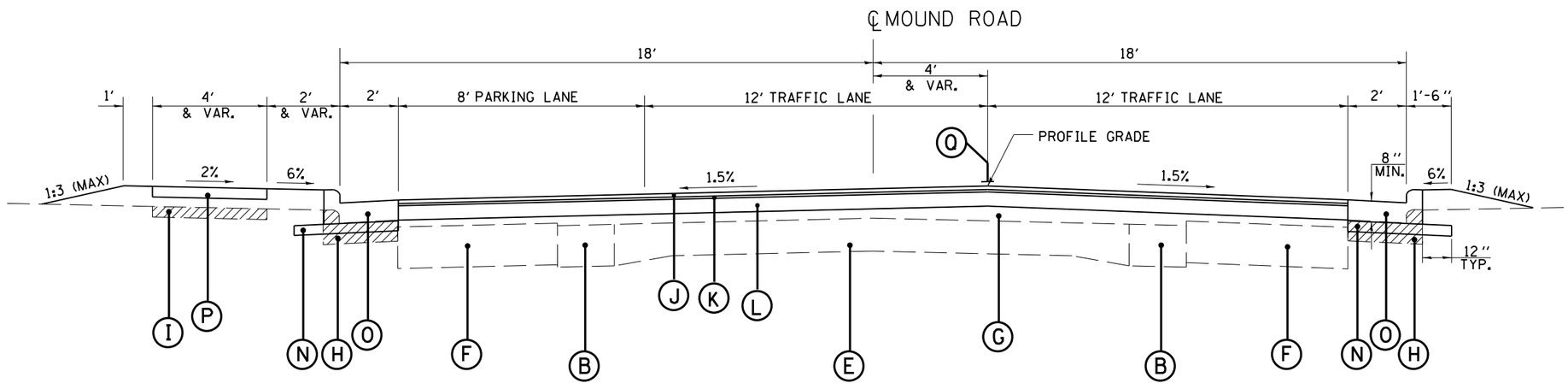
EXISTING:

- (A) EXISTING PCC PAVEMENT, 8-6-8
- (B) EXISTING PCC BASE COURSE WIDENING, 8"
- (C) EXISTING HMA OVERLAY, 5 1/4"
- (D) EXISTING AGGREGATE SHOULDER
- (E) EXISTING PCC PAVEMENT, 9-6-9
- (F) EXISTING BASE COURSE WIDENING, 8"
- (G) EXISTING HMA OVERLAY, 6 3/4" MIN.
- (H) EXISTING COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24 - TO BE REMOVED
- (I) EXISTING PCC SIDEWALK - TO BE REMOVED

PROPOSED:

- (J) PROPOSED HMA SURFACE COURSE, MIX "C", N50 (1 1/2")
- (K) PROPOSED LEVELING BINDER (MACHINE METHOD), N50 (VARIES 3/4" MIN. TO 3" MAX.)•
- (L) PROPOSED HMA BINDER COURSE, IL-19.0, N50 (3" MIN. & VARIES)•
- (M) PROPOSED PROPOSED HMA SHOULDER, SUPERPAVE, 6 1/2"
- (N) PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
- (O) PROPOSED COMBINATION CONCRETE CURB & GUTTER, TYPE B- 6.24
- (P) PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK, 4"
- (Q) PROPOSED PAVEMENT MARKING - LINE 5"

• WHEN LEVELING BINDER THICKNESS EXCEEDS 3", HMA CONCRETE BINDER COURSE SHALL BE USED TO BUILD UP RESURFACING THICKNESS TO THE BOTTOM OF THE 2¼" NOMINAL OVERLAY.



PROPOSED TYPICAL SECTION

STATION 102+22.28 TO STATION 104+40.00

PAVEMENT WIDTH TRANSITION:

TRANSITION 32' F-F WIDTH TO 36' F-F WIDTH
FROM STATION 101+03.33 TO STATION 102+22.28

TRANSITION 0' RIGHT TO 4' RIGHT PROFILE GRADE OFFSET
FROM STATION 101+03.33 TO STATION 102+43.33

NOTE: NOT TO SCALE

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTIONS

DRAWN BY JCW

DATE 10/20/10 CHECKED BY JRB

2280-2/2280-2T002.DGN

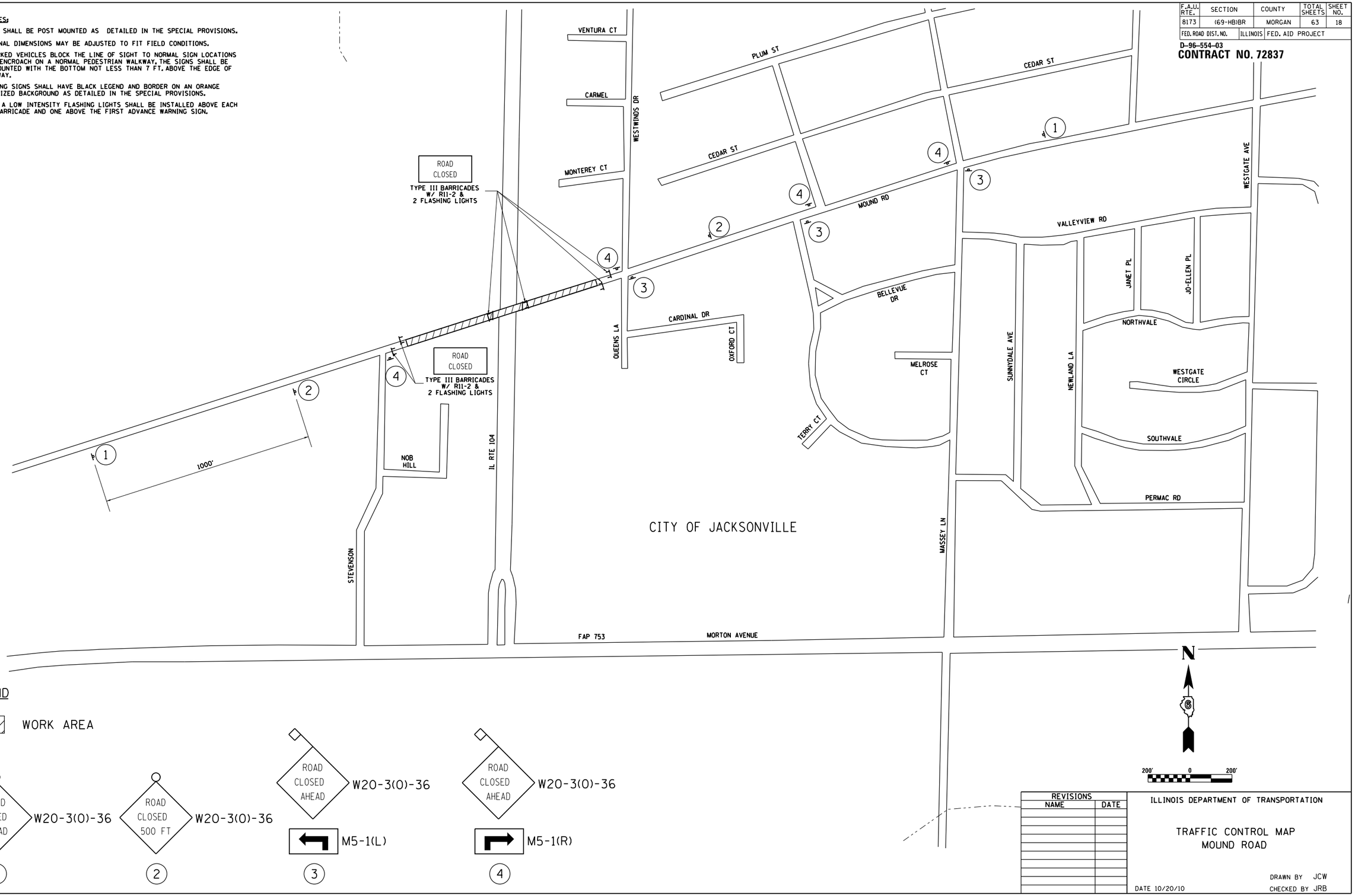
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	18
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

D-96-554-03

CONTRACT NO. 72837

GENERAL NOTES:

1. ALL SIGNS SHALL BE POST MOUNTED AS DETAILED IN THE SPECIAL PROVISIONS.
2. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
3. WHERE PARKED VEHICLES BLOCK THE LINE OF SIGHT TO NORMAL SIGN LOCATIONS OR SIGNS ENCROACH ON A NORMAL PEDESTRIAN WALKWAY, THE SIGNS SHALL BE POSTED MOUNTED WITH THE BOTTOM NOT LESS THAN 7 FT. ABOVE THE EDGE OF THE ROADWAY.
4. ALL WARNING SIGNS SHALL HAVE BLACK LEGEND AND BORDER ON AN ORANGE REFLECTORIZED BACKGROUND AS DETAILED IN THE SPECIAL PROVISIONS.
5. TWO TYPE A LOW INTENSITY FLASHING LIGHTS SHALL BE INSTALLED ABOVE EACH TYPE III BARRICADE AND ONE ABOVE THE FIRST ADVANCE WARNING SIGN.



LEGEND

WORK AREA

ROAD CLOSED AHEAD W20-3(0)-36 (1)

ROAD CLOSED 500 FT W20-3(0)-36 (2)

ROAD CLOSED AHEAD W20-3(0)-36
M5-1(L) (3)

ROAD CLOSED AHEAD W20-3(0)-36
M5-1(R) (4)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL MAP
MOUND ROAD

DRAWN BY JCW
CHECKED BY JRB
DATE 10/20/10

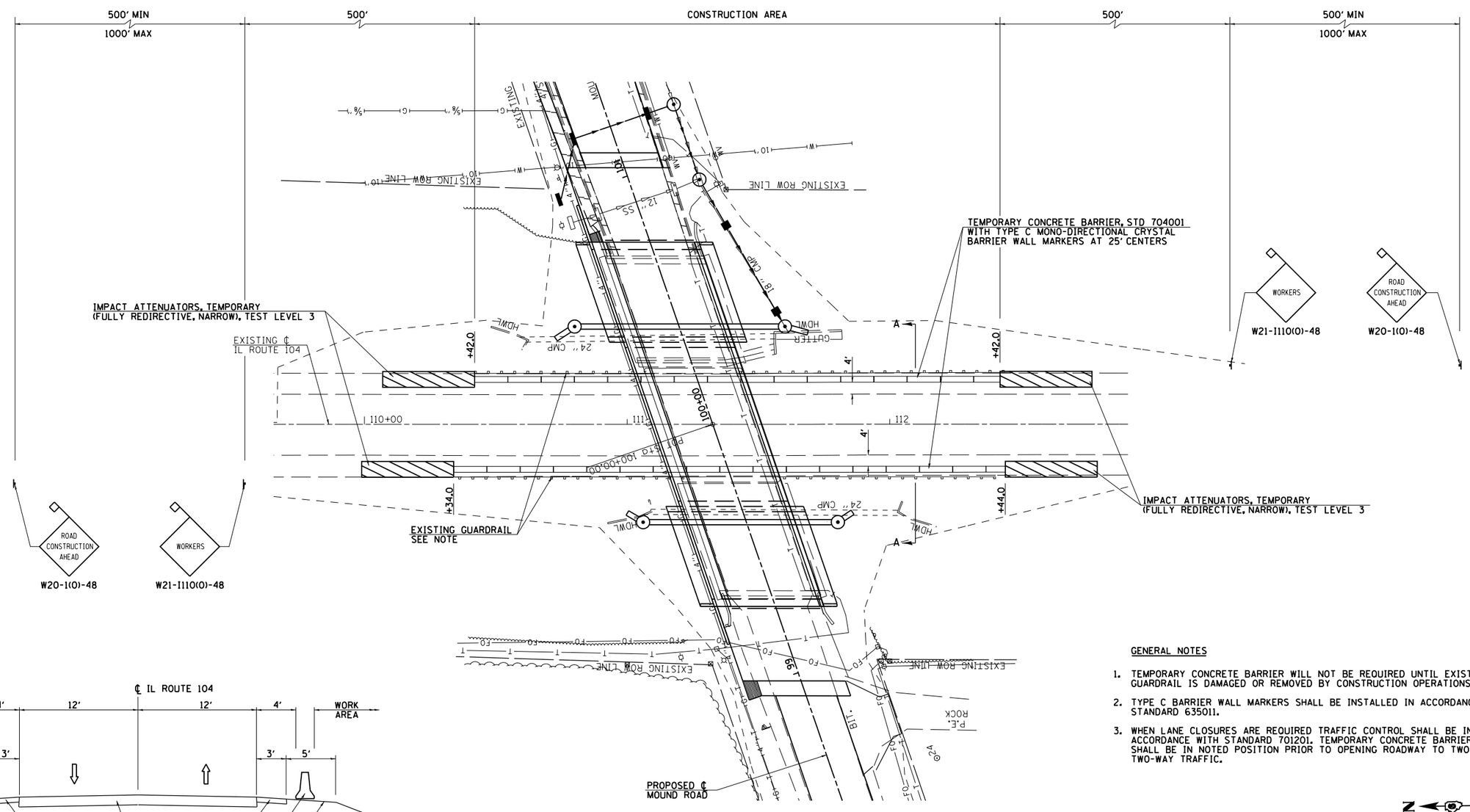
V/2280-2/2280-2U001

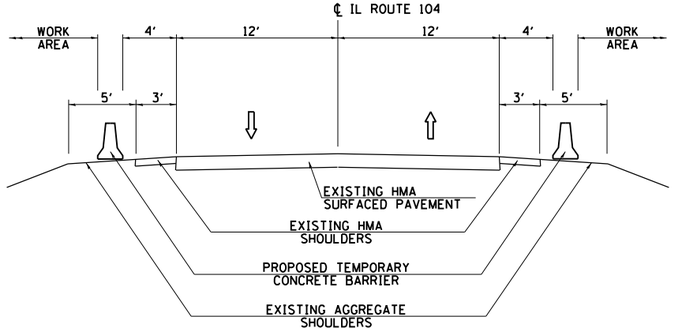
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	19
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

PLAN
SURVEYED BY
DRAWN BY
ALIGNMENT CHECKED
RT OF WAY CHECKED
PARALLEL LINE
NOTE BOOK
NO.

PROFILE
SURVEYED BY
DRAWN BY
GRADES CHECKED
BM NOTED
STRUCTURE NOTATNS CH'KD
NOTE BOOK
NO.





SECTION A-A

GENERAL NOTES

1. TEMPORARY CONCRETE BARRIER WILL NOT BE REQUIRED UNTIL EXISTING GUARDRAIL IS DAMAGED OR REMOVED BY CONSTRUCTION OPERATIONS.
2. TYPE C BARRIER WALL MARKERS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD 635011.
3. WHEN LANE CLOSURES ARE REQUIRED TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH STANDARD 701201, TEMPORARY CONCRETE BARRIER SHALL BE IN NOTED POSITION PRIOR TO OPENING ROADWAY TO TWO-LANE, TWO-WAY TRAFFIC.

20' 0' 20'
GRAPHIC SCALE IN FEET

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS
IL 104

DRAWN BY JCW
DATE 10/20/10 CHECKED BY JRB

2280-2U002

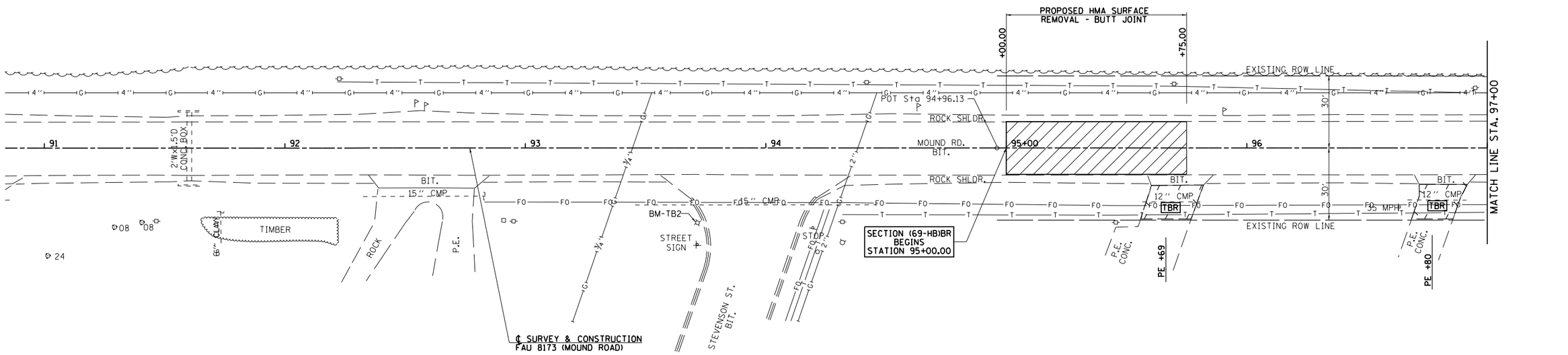
SEC 24, T15N, R11W, 3RD PM

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	20
STA. 91+00	TO STA. 97+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

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

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
R.M. NOTES
NO.
PLOT FILE NOTATNS CHKD
BY
DATE



SEC 25, T15N, R11W, 3RD PM

N

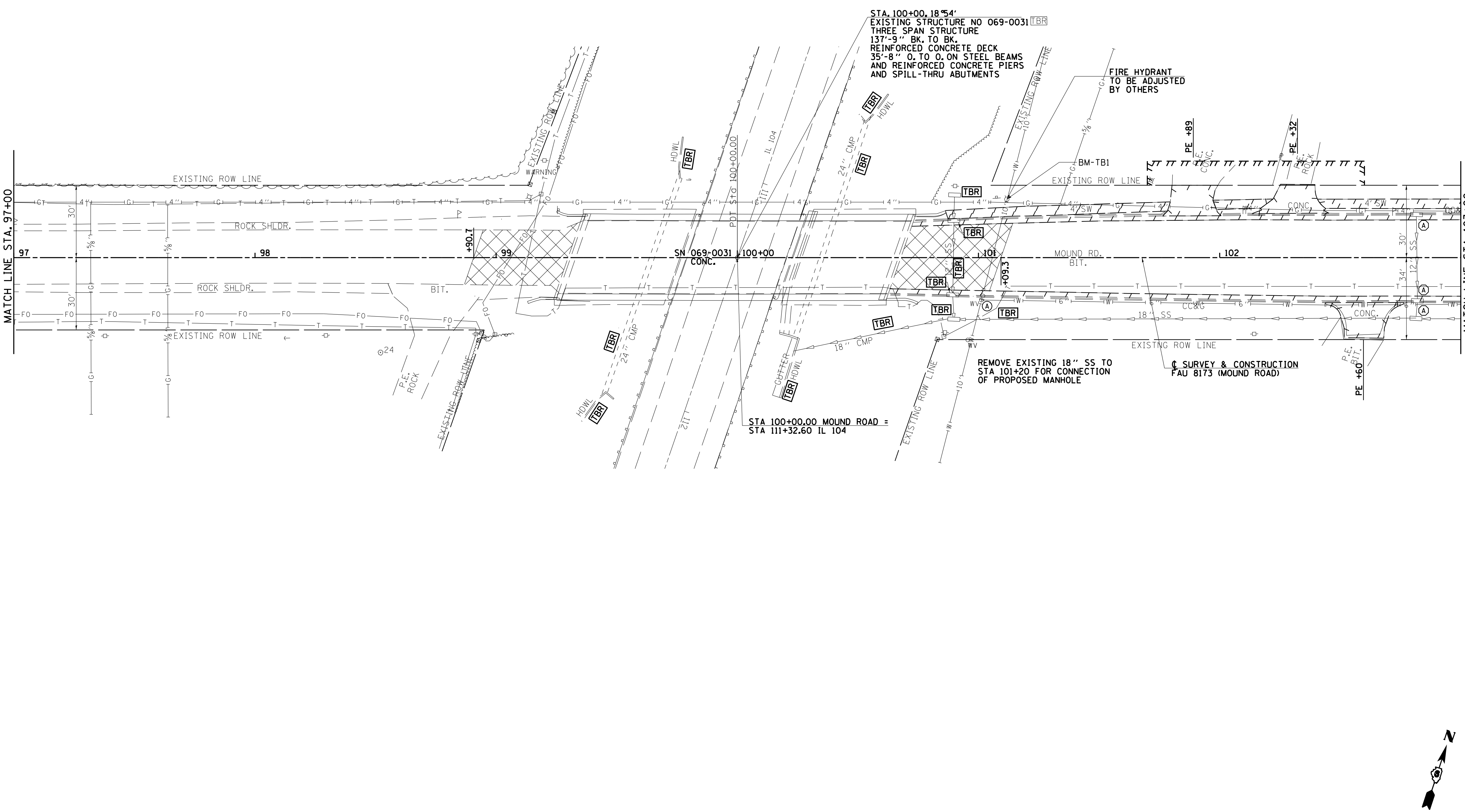
20' 0' 20'
GRAPHIC SCALE IN FEET

2280-2R001

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	21
STA. 97+00	TO STA. 103+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

SEC 24, T15N, R11W, 3RD PM



SEC 25, T15N, R11W, 3RD PM

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, CADD FILE NAME, NOTE BOOK NO.

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTAT'NS CHK'D, NOTE BOOK NO.

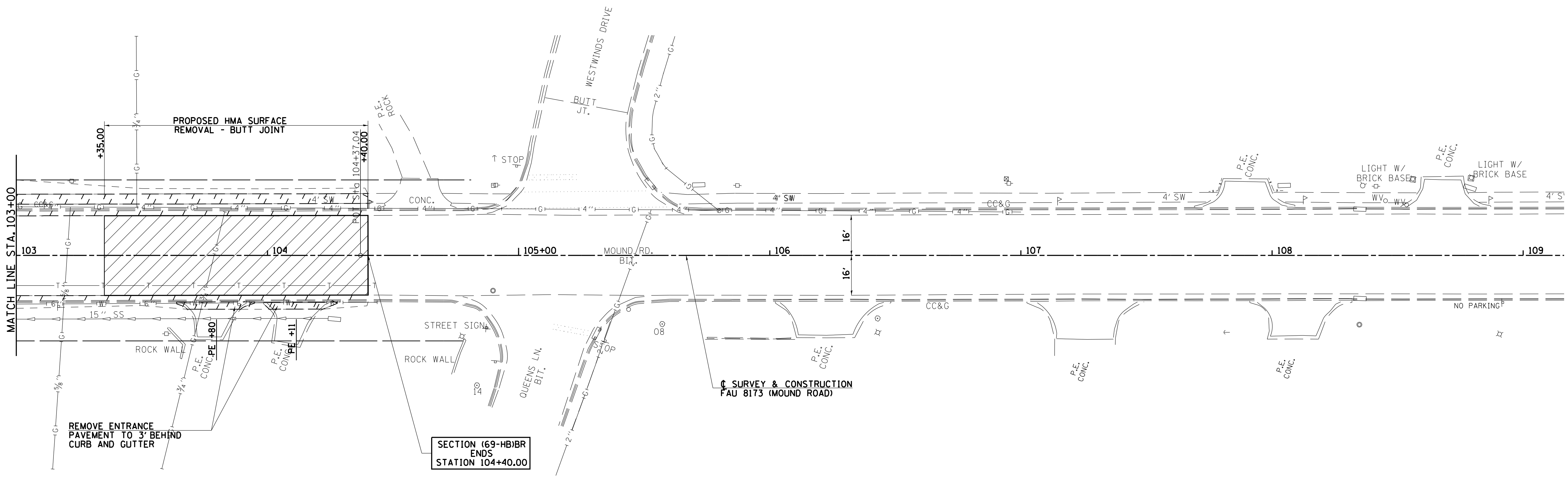
2280-2R002

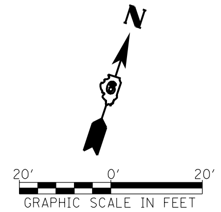
FAU 8173 (MOUND ROAD) REMOVAL PLAN, STA 97+00 TO STA 103+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	22
STA. 103+00	TO STA. 109+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

SEC 24, T15N, R11W, 3RD PM





SEC 25, T15N, R11W, 3RD PM

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

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

2280-2R003

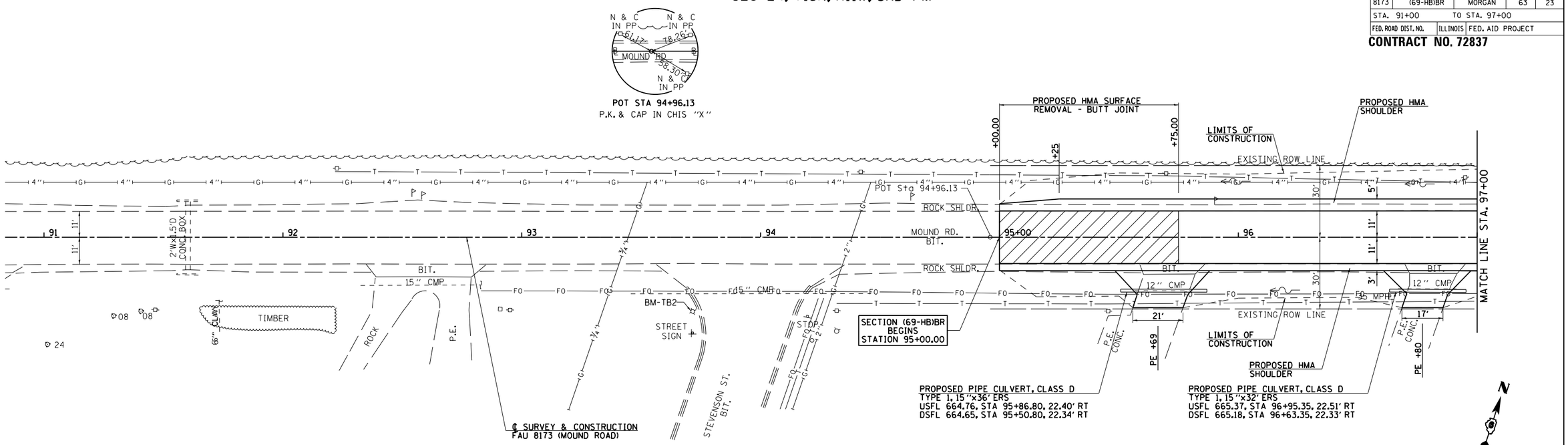
FAU 8173 (MOUND ROAD) REMOVAL PLAN, STA 103+00 TO STA 109+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	23
STA. 91+00		TO STA. 97+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

PLAN — SURVEYED / DRAWN / ALIGNMENT CHECKED / GRADES CHECKED / FINAL PLANS NAME / NOTE BOOK / NO. / BY / DATE

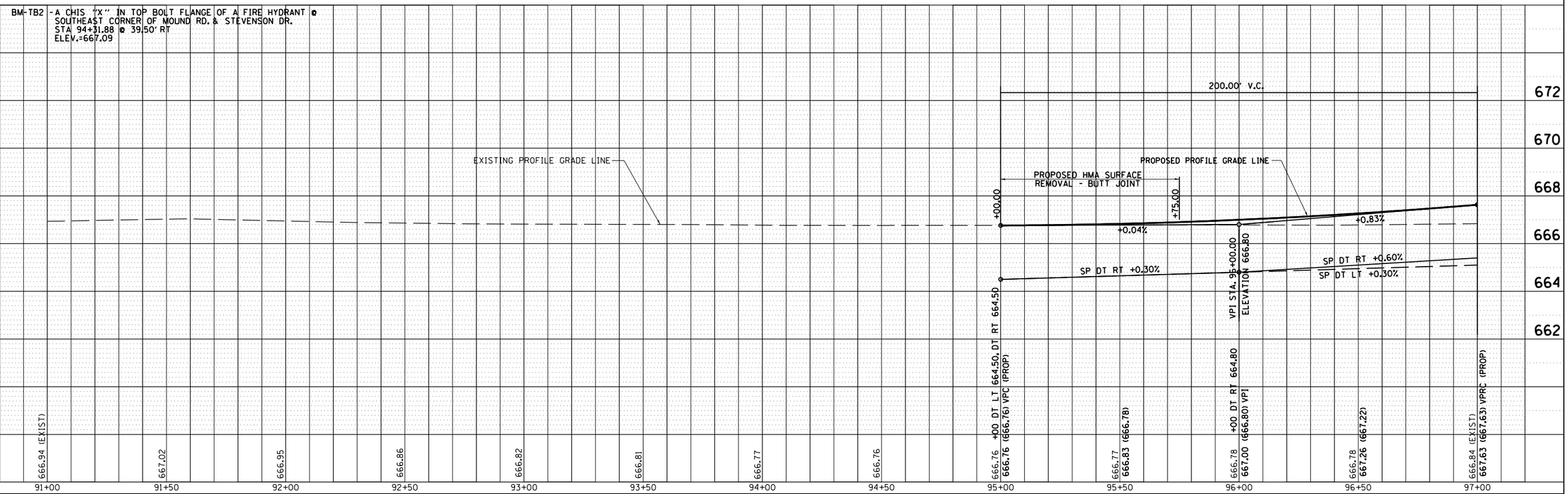
SEC 24, T15N, R11W, 3RD PM



SEC 25, T15N, R11W, 3RD PM

PROFILE — SURVEYED / DRAWN / GRADES CHECKED / FINAL NOTATNS CHK'D / NOTE BOOK / NO. / BY / DATE

BM-TB2 - A CHIS "X" IN TOP BOLT FLANGE OF A FIRE HYDRANT ⊕ SOUTHEAST CORNER OF MOUND RD. & STEVENSON DR. STA 94+31.88 ⊕ 39.50' RT ELEV.=667.09



2280-2P001

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	24

STA. 97+00 TO STA. 103+00

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

CONTRACT NO. 72837

2280-2P002

FAU 8173 (MOUND ROAD) ROADWAY PLAN & PROFILE, STA 97+00 TO STA 103+00

PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, R.O.W. CHECKED, CADD FILE NAME, NOTE BOOK NO., BY, DATE

PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTATIONS CHK'D, NOTE BOOK NO., BY, DATE

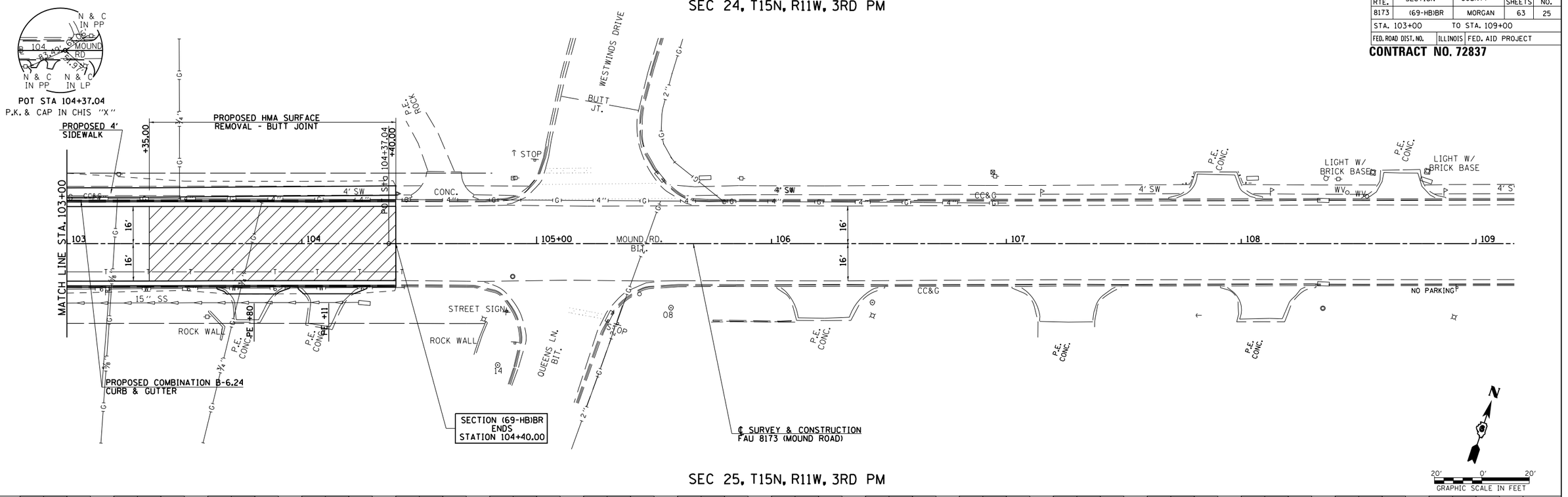
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	25
STA. 103+00	TO STA. 109+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

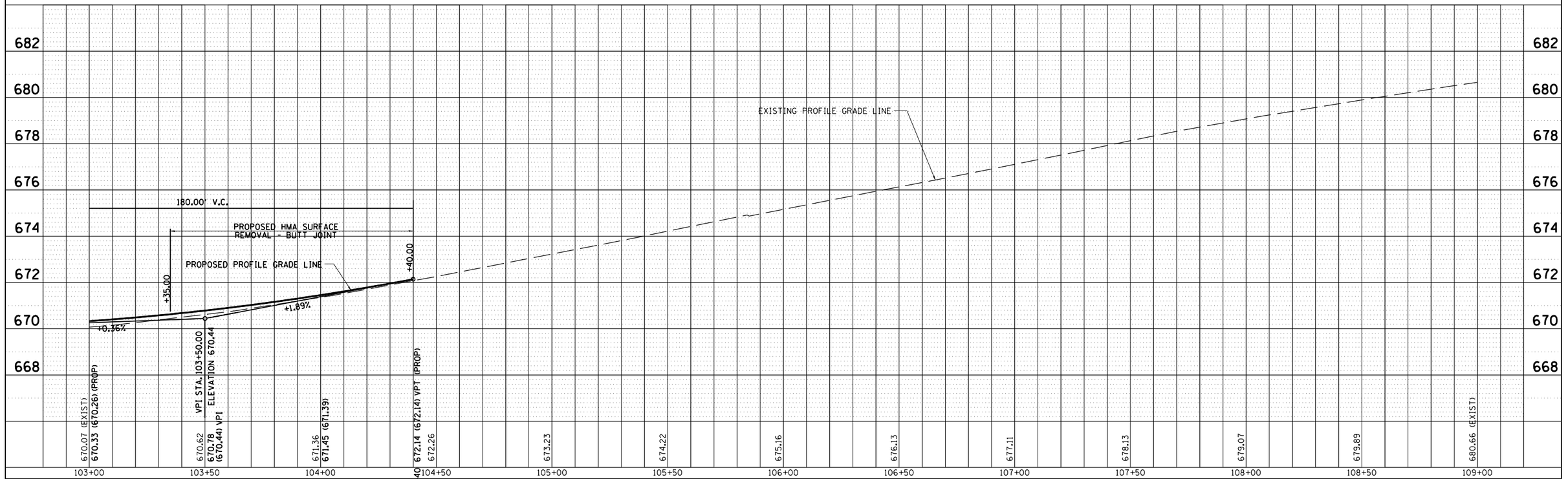
PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED / ROAD ILL. NAME / NOTE BOOK / NO. / DATE / BY

PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / BM. NOTED / STRUCTURE NOTATNS CHKD / NOTE BOOK / NO. / DATE / BY

SEC 24, T15N, R11W, 3RD PM



SEC 25, T15N, R11W, 3RD PM



2280-2P003

FAU 8173 (MOUND ROAD) ROADWAY PLAN & PROFILE, STA 103+00 TO STA 109+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	26
STA. 109+00	TO STA. 113+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837

PLAN
SURVEYED BY
DRAWN BY
ALIGNMENT CHECKED
RT. OF WAY CHECKED
LAND I.L. MARK
NOTE BOOK
NO.
DATE BY

PROFILE
SURVEYED BY
DRAWN BY
GRADES CHECKED
S.M. NOTED
STRUCTURE NOTATIONS CHKD
NOTE BOOK
NO.
DATE BY

PROPOSED STORM SEWER
SEE MOUND ROAD DRAINAGE PLAN SHEETS

STA. 100+00.19 00'00"
PROPOSED STRUCTURE NO 069-0521
THREE SPAN STRUCTURE
146'-8" BK. TO BK.
REINFORCED CONCRETE DECK
39'-7" O. TO O. ON STEEL BEAMS
AND REINFORCED CONCRETE PIERS
AND SPILL-THRU ABUTMENTS

STA 111+19.00, 37.25' LT
PROPOSED PIPE CULVERT, CLASS A, TYPE 2, 24" x 90'
2 MANHOLES W/ FST AND TY. 1 F & CL,
STD. 602401, 602406, 602601, 604001
2-24" PRC FLARED END SECTIONS, STD. 542301
USFL 646.45, STA 110+72.95, 32.46' LT
5' DIA. MH INV. 646.30, LID 651.0, STA 110+80.02, 37.25' LT
6' DIA. MH INV. 645.00, LID 651.0, STA 111+60.00, 37.25' LT
DSFL 644.90, STA 111+68.80, 34.92' LT

PROPOSED GUARDRAIL
(SEE SCHEDULE)

GRADE & SHAPE DITCH TO DRAIN

STA 100+00.00 MOUND ROAD =
STA 111+32.60 FA 92 (IL 104)

POT Sta 109+06.08

LIMIT OF WORK
STA 109+17.00

℄ SURVEY & CONSTRUCTION
FA 92 (104)

PROPOSED GUARDRAIL

PROPOSED HOT-MIX
ASPHALT SHOULDERS, 8"

LIMIT OF WORK
STA 109+17.00

STA 111+43.00, 37.25' RT
PROPOSED PIPE CULVERT, CLASS A, TYPE 2, 24" x 80'
2-5' DIA. MANHOLE W/ FST TYPE 1 F & CL,
STD. 602401, 602601, 604001
2-24" PRC FLARED END SECTIONS, STD. 542301
USFL 646.10, STA 111+00.00, 33.65' RT
MH INV. 645.99, LID 651.0, STA 111+06.08, 37.25' RT
MH INV. 644.84, LID 649.5, STA 111+80.23, 37.25' RT
DSFL 644.70, STA 111+85.89, 33.65' RT

20' 0' 20'
GRAPHIC SCALE IN FEET

℄ MOUND RD.

EXISTING PROFILE GRADE LINE

16'-0" (MIN)

652.43 (EXIST) 652.05 651.57 650.96 650.20 668.83 648.40 647.33 646.17 (EXIST)

109+00 109+50 110+00 110+50 111+00 111+50 112+00 112+50 113+00

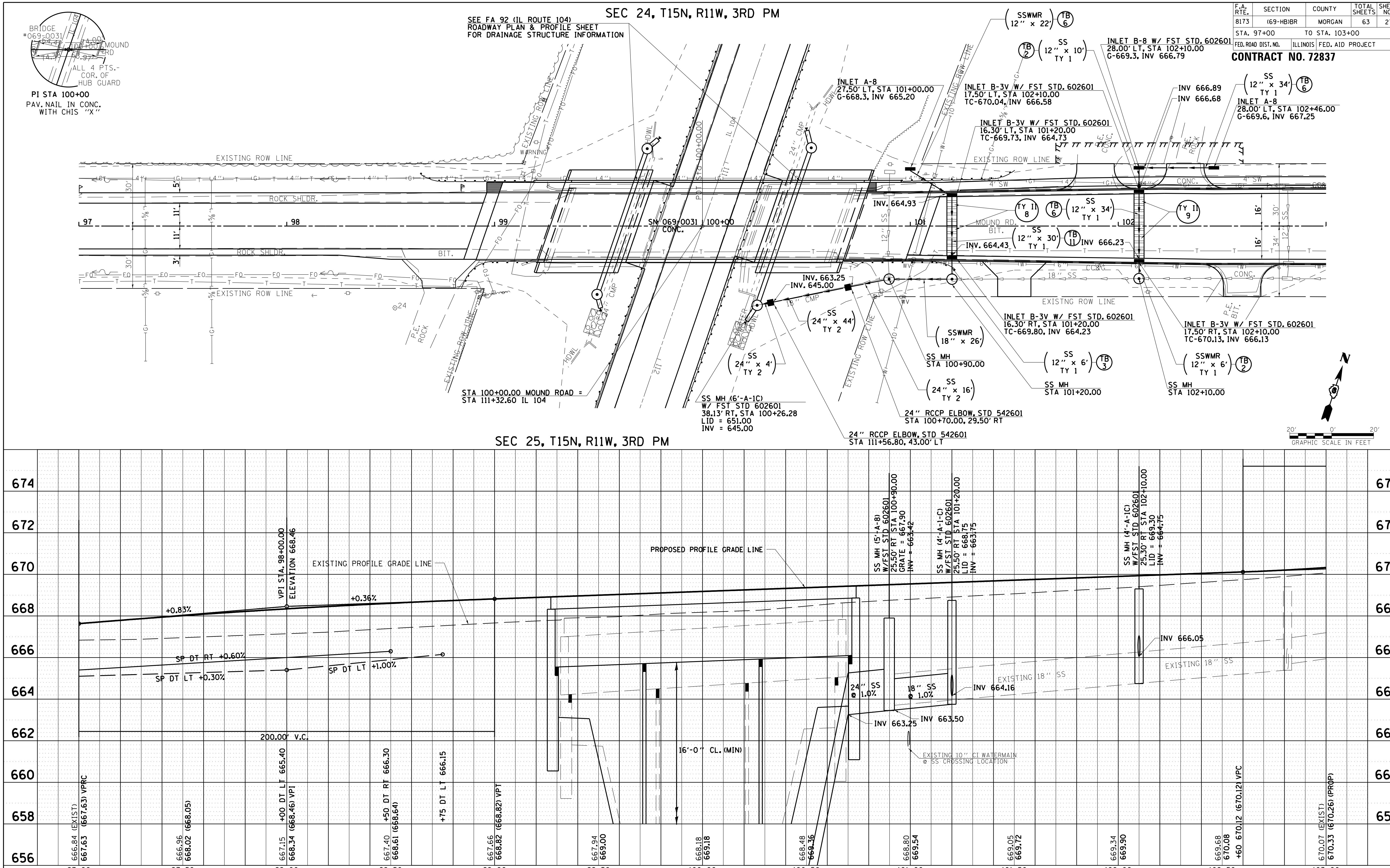
670 665 660 655 650 645 640 635

2280-2P004

FA 92 (IL ROUTE 104) ROADWAY PLAN & PROFILE, STA 109+00 TO STA 113+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	27
STA. 97+00	TO STA. 103+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837



SEC 24, T15N, R11W, 3RD PM
SEC 25, T15N, R11W, 3RD PM
BRIDGE 069-0031
MOUND RD
ALL 4 PTS.- COR. OF HUB GUARD
PI STA 100+00
PAV. NAIL IN CONC. WITH CHIS "X"
SEE FA 92 (IL ROUTE 104) ROADWAY PLAN & PROFILE SHEET FOR DRAINAGE STRUCTURE INFORMATION
EXISTING ROW LINE
ROCK SHLDR.
BIT.
SN 069-0031 100+00 CONC.
INLET A-8 27.50' LT, STA 101+00.00 G-668.3, INV 665.20
INLET B-3V W/ FST STD. 602601 17.50' LT, STA 102+10.00 TC-670.04, INV 666.58
INLET B-3V W/ FST STD. 602601 16.30' LT, STA 101+20.00 TC-669.73, INV 664.73
INLET B-8 W/ FST STD. 602601 28.00' LT, STA 102+10.00 G-669.3, INV 666.79
INV 666.89
INV 666.68
INLET A-8 28.00' LT, STA 102+46.00 G-669.6, INV 667.25
SSWMR 12" x 22' TB 6
SS 12" x 10' TY 1 TB 2
SS 12" x 34' TY 1 TB 6
INV. 664.93
INV. 664.43
INV 666.23
TY II 8
TY II 9
SS 12" x 34' TY 1 TB 6
SS 12" x 30' TY 1 TB 11
MOUND RD.
INV. 663.25
INV. 645.00
SS 24" x 44' TY 2
SS 24" x 4' TY 2
SSWMR 18" x 26'
SS MH STA 100+90.00
SS 24" x 16' TY 2
INLET B-3V W/ FST STD. 602601 16.30' RT, STA 101+20.00 TC-669.80, INV 664.23
SS 12" x 6' TY 1 TB 3
SS MH STA 101+20.00
INLET B-3V W/ FST STD. 602601 17.50' RT, STA 102+10.00 TC-670.13, INV 666.13
SSWMR 12" x 6' TY 1 TB 2
SS MH STA 102+10.00
EXISTNG ROW LINE
STA 100+00.00 MOUND ROAD = STA 111+32.60 IL 104
SS MH (6'-A-1C) W/ FST STD 602601 38.13' RT, STA 100+26.28 LID = 651.00 INV = 645.00
24" RCCP ELBOW, STD 542601 STA 100+70.00, 29.50' RT
24" RCCP ELBOW, STD 542601 STA 111+56.80, 43.00' LT
GRAPHIC SCALE IN FEET
EXISTING PROFILE GRADE LINE
PROPOSED PROFILE GRADE LINE
VPI STA. 98+00.00 ELEVATION 668.46
+0.83%
+0.36%
SP DT RT +0.60%
SP DT LT +0.30%
SP DT LT +1.00%
200.00' V.C.
16'-0" CL. (MIN)
SS MH (5'-A-8) W/FST STD 602601 25.50' RT STA 100+90.00 GRATE = 667.90 INV = 663.42
SS MH (4'-A-1-C) W/FST STD 602601 25.50' RT STA 101+20.00 LID = 668.75 INV = 663.75
SS MH (4'-A-1C) W/FST STD 602601 25.30' RT STA 102+10.00 LID = 669.30 INV = 664.75
INV 666.05
EXISTING 18" SS
24" SS @ 1.0%
18" SS @ 1.0%
INV 664.16
INV 663.25
INV 663.50
EXISTING 10" CI WATERMAIN @ SS CROSSING LOCATION
674
672
670
668
666
664
662
660
658
656
666.84 (EXIST) 667.63 (667.63) VPRC
666.96 668.02 (668.05)
667.15 668.34 (668.46) VPI
+00 DT LT 665.40
667.40 668.61 (668.64)
+50 DT RT 666.30
+75 DT LT 666.15
667.66 668.82 (668.82) VPT
667.94 669.00
668.18 669.18
668.48 669.36
668.80 669.54
669.05 669.72
669.34 669.90
669.68 670.08
+60 670.12 (670.12) VPC
670.07 (EXIST) 670.33 (670.26) (PROP)
97+00
97+50
98+00
98+50
99+00
99+50
100+00
100+50
101+00
101+50
102+00
102+50
103+00

2280-2DR001

FAU 8173 (MOUND ROAD) DRAINAGE PLAN & PROFILE, STA 97+00 TO STA 103+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	28
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

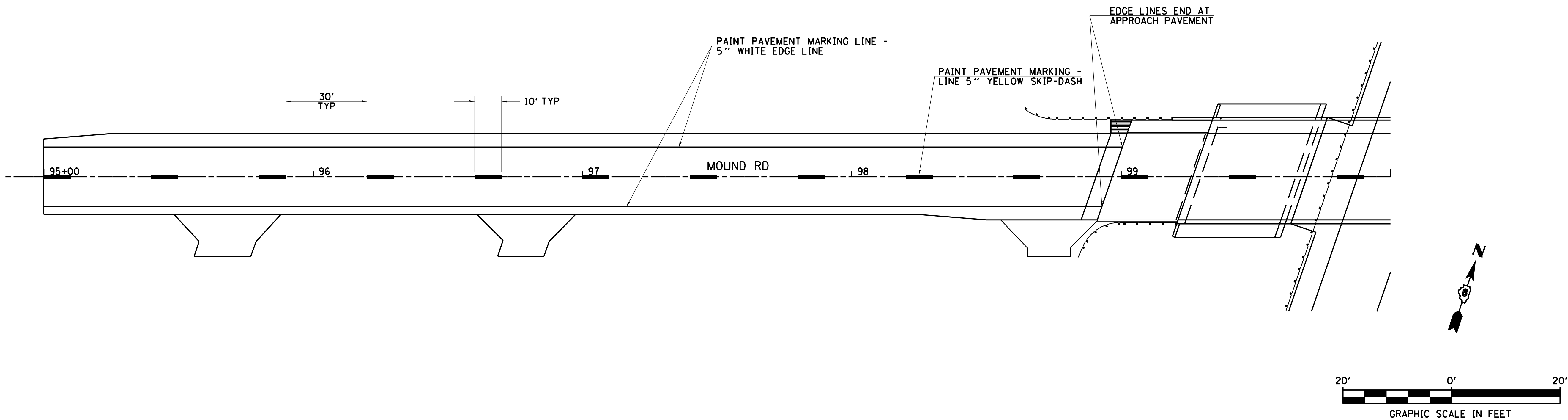
CONTRACT NO. 72837

PLAN

NOTE BOOK NO.

SURVEYED
PLOTTED
ALIGNMENT CHECKED
R.I. OF WAY CHECKED
CADD FILE NAME

BY DATE

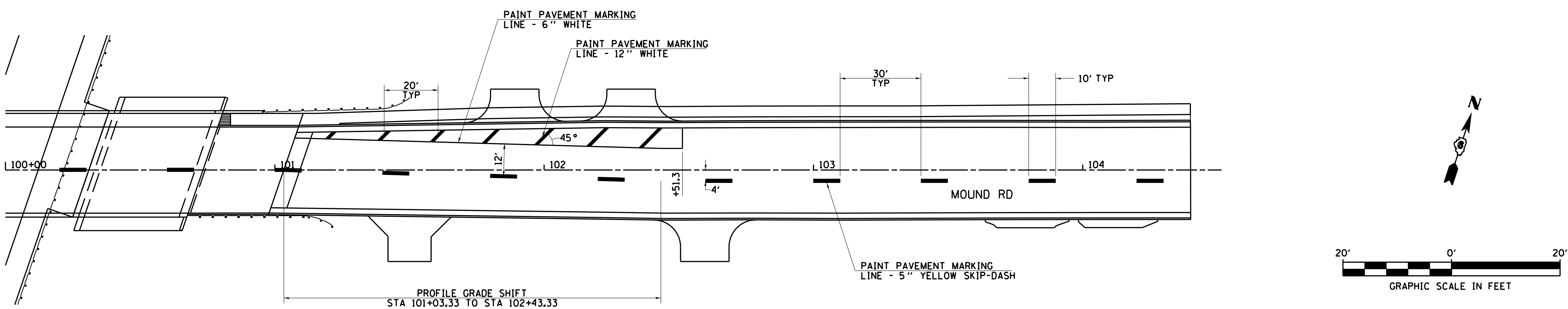


PROFILE

NOTE BOOK NO.

SURVEYED
PLOTTED
GRADES CHECKED
BM. NOTED
STRUCTURE NOTATNS CHKD

BY DATE



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING PLAN
MOUND RD

DRAWN BY JCW
CHECKED BY JRB
DATE 10/20/10

V/2280-2/2280-25001

BM: - Chiseled "X" in top bolt of flange of fire hyd. at S.E. cor. Mound Rd. and Stevenson Drive. Sta. 94+31.88, 39.50' Rt., Elev. 667.09

Existing Structure: - S.N. 069-0031 Built in 1960 as F.A. Route 92, Section 69HB at Station 111+26. Structure has 3 span WF beams on pile bent spill-thru abutments and Double Hammerhead piers on spread footings, 137'-9" Bk. to Bk. abutments, 35'-8" O. to O. deck, and on 18°-54' skew Lt. Structure to be removed and replaced. Mound Road will be closed to traffic during construction. Traffic on Route 104 will be maintained.

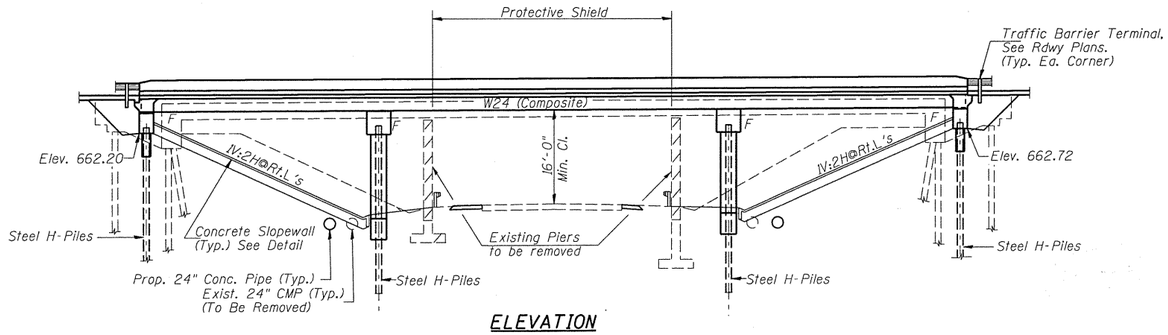
No Salvage

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	29
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

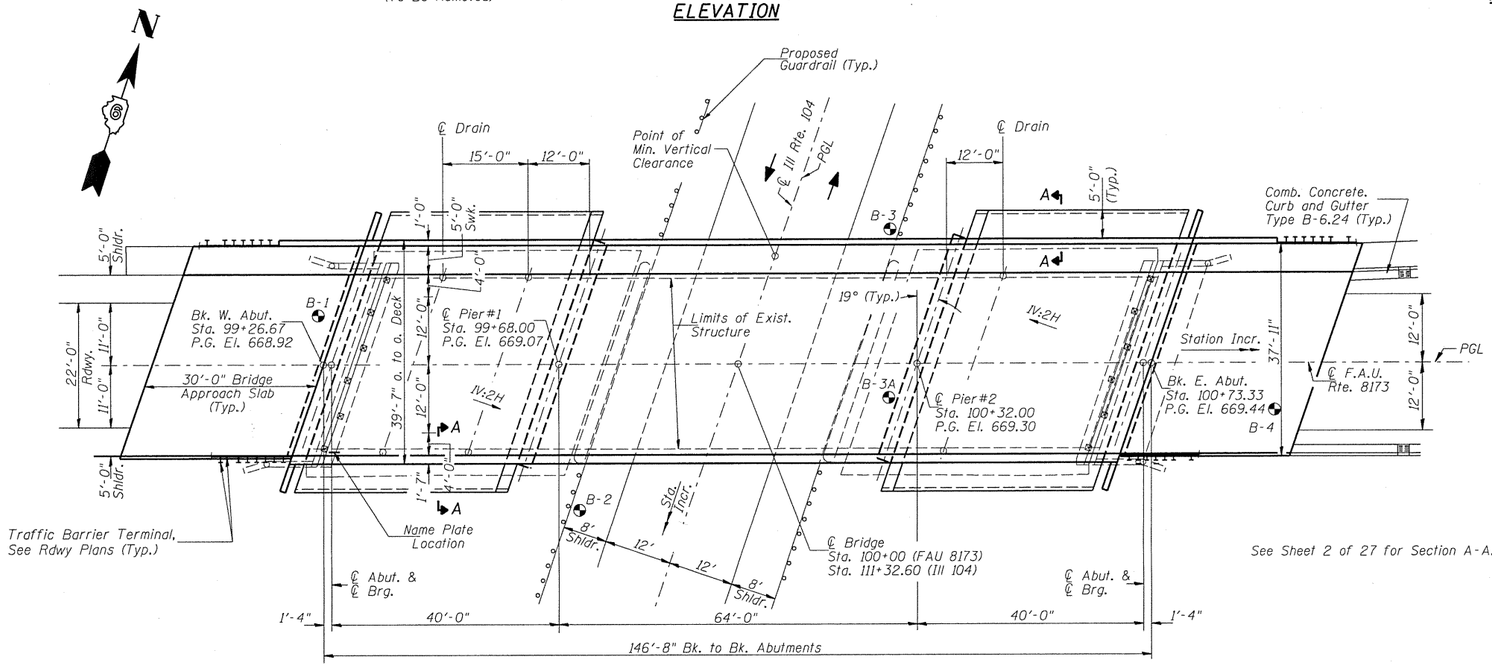
SHEET NO. 1 OF 27 SHEETS

* (69-HB)BR

CONTRACT NO. 72837



ELEVATION



PLAN

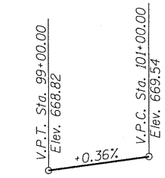
See Sheet 2 of 27 for Section A-A.

INDEX TO SHEETS

STATION 100+00.00
BUILT 20 BY
STATE OF ILLINOIS
F.A.U. RT. 8173 SEC. (69-HB)BR
LOADING HS20
STR. NO. 069-0521

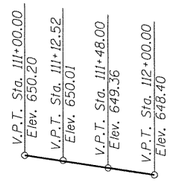
NAME PLATE

(See Std. 515001)



PROFILE GRADE

(Along ℄ of Mound Rd.)



PROFILE GRADE

(Along ℄ of Illinois 104)

APPROVED
For Structural Adequacy Only
Ralph E. Anderson (RED)
Engineer of Bridges & Structures

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

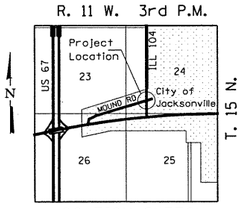
FIELD UNITS

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

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.05
Site Coefficient (S) = 1.0

BENJAMIN A. NEBEL
081-006527
LICENSED
PROFESSIONAL
ENGINEER
OF
ILLINOIS
10/20/2010
Lic. Exp. 11/30/2012



LOCATION SKETCH

DESIGNED	JOH
CHECKED	BAN
DRAWN	TC
CHECKED	BAN

2280-2B101

GENERAL PLAN
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HUTCHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 101810

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	30
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 2 OF 27 SHEETS

* (69-HB)BR

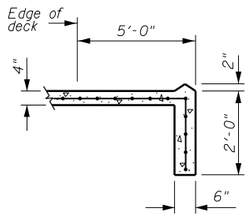
CONTRACT NO. 72837

GENERAL NOTES

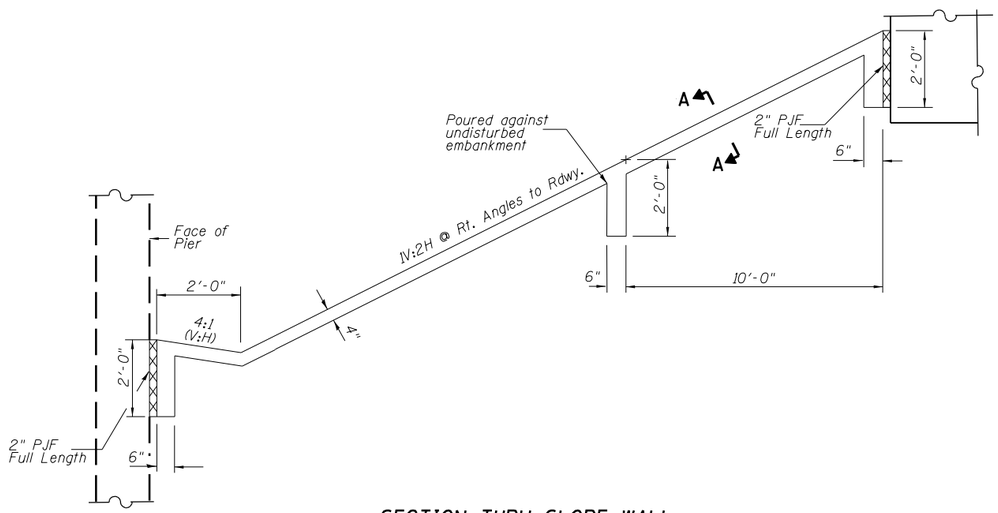
1. Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts 7/8" ϕ, open holes 15/16" ϕ, unless otherwise noted.
2. No field welding is permitted except as specified in the contract documents.
3. Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
4. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
5. Reinforcement bars designated (E) shall be epoxy coated.
6. The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO, M270 Grade 50.
7. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations, at substructures specified or approved by the Engineer before ordering the remainder of piles.
8. Calculated weight of structural steel = 5,900 lb (AASHTO M270 Grade 36)
   99,830 lb (AASHTO M270 Grade 50)
9. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft). Adjusting shall be made either by grinding the surface or by shimming the bearing.
10. Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
11. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
12. Slope wall shall be reinforced with welded wire fabric, 6 in. x 6 in.-W4.0 x W4.0, weighing 58 lbs. per 100 sq.ft.
13. Concrete Sealer shall be applied to the designated areas of the Piers.
14. 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 No. 7.5 G 4/8. See Special Provisions for "Cleaning and Painting New Metal Structures".
15. All cross frames or diaphragms between beams or girders shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
16. Earth excavation and shaping of end slopes shall be included with Slope Wall Removal.
17. Slipforming of the parapets is not allowed.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, (Special)	Cu. Yd.	-	95	95
Removal of Existing Structures	Each	-	-	1
Slope Wall Removal	Sq. Yd.	-	-	400
Structure Excavation	Cu. Yd.	-	158	158
Concrete Structures	Cu. Yd.	-	171.2	171.2
Concrete Superstructure	Cu. Yd.	341.9	-	341.9
Bridge Deck Grooving	Sq. Yd.	688	-	688
Protective Coat	Sq. Yd.	988	-	988
Furnishing and Erecting Structural Steel	L. Sum	1	-	1
Stud Shear Connectors	Each	2,880	-	2,880
Reinforcement Bars, Epoxy Coated	Pound	73,840	12,320	86,160
Slope Wall, 4 Inch	Sq. Yd.	-	-	460
Name Plates	Each	-	-	1
Protective Shield	Sq. Yd.	177	-	177
Bar Splicers	Each	76	-	76
Aluminum Railing, Type L	Foot	139	-	139
Floor Drains	Each	6	-	6
Furnishing Steel Piles HP10x42	Foot	-	465	465
Furnishing Steel Piles HP12x53	Foot		936	936
Driving Piles	Foot	-	1,401	1,401
Test Pile Steel HP10x42	Each	-	2	2
Test Pile Steel HP12x53	Each	-	2	2
Pipe Underdrains for Structures, 4 Inch	Foot	-	-	138
Geocomposite Wall Drain	Sq. Yd.	-	-	59
Anchor Bolts, 1"	Each	-	48	48
Concrete Encasement	Cu. Yd.	-	9.0	9.0
Concrete Sealer	Sq. Ft.	-	3,080	3,080

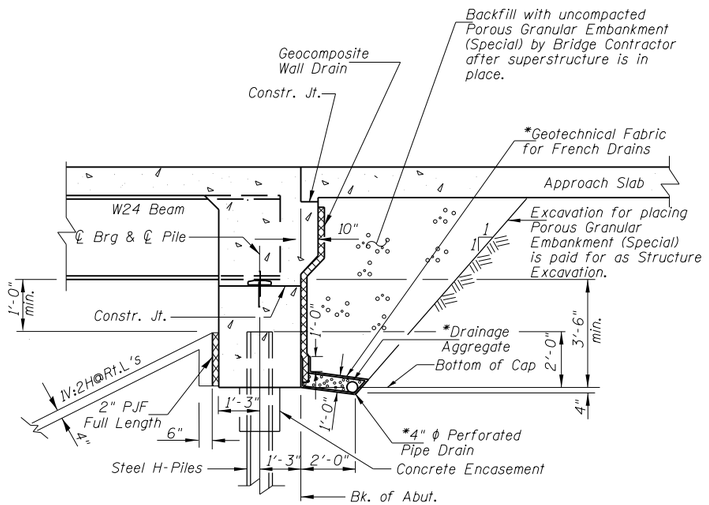


SECTION A-A



SECTION THRU SLOPE WALL

Note: All horizontal dimensions are at right angles to the roadway



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

SECTION THRU INTEGRAL ABUTMENT

(Horizontal Dimensions @ Right Angles)

DESIGNED	JOH
CHECKED	BAN
DRAWN	TC
CHECKED	BAN

GENERAL NOTES AND BILL OF MATERIALS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 10/18/10

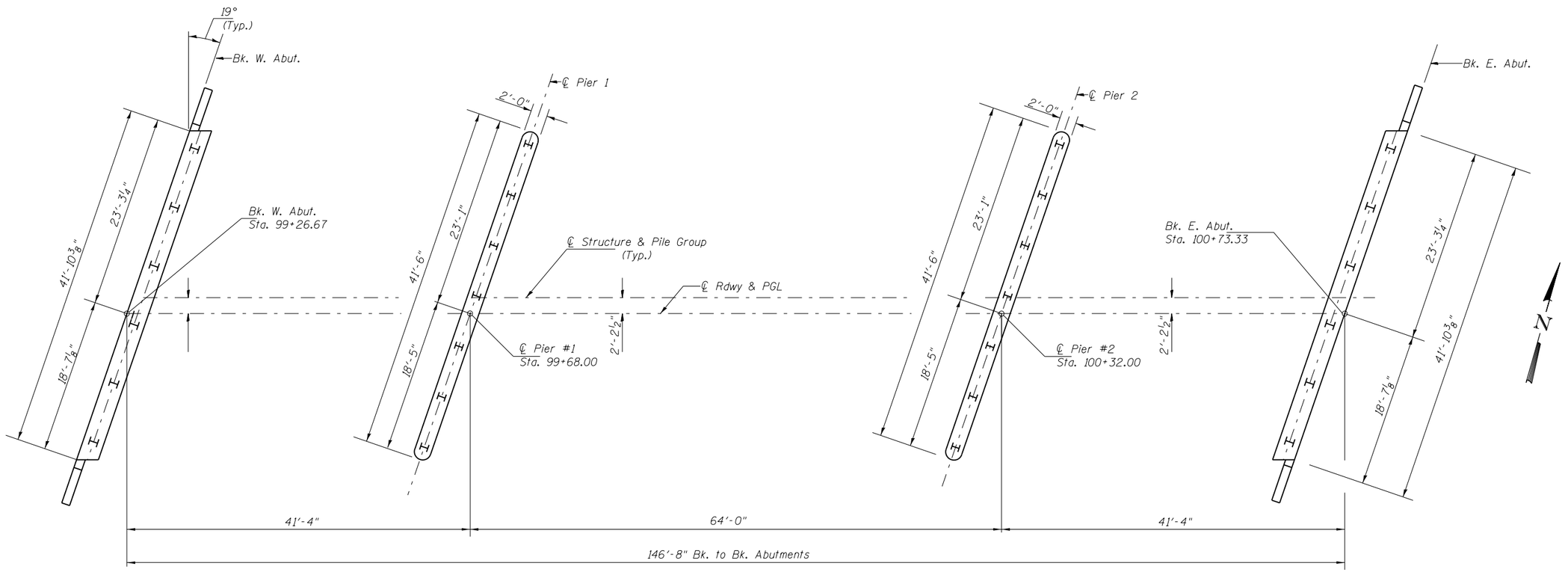
2280-2b102

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	31
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 3 OF 27 SHEETS

* (69-HB)BR

CONTRACT NO. 72837



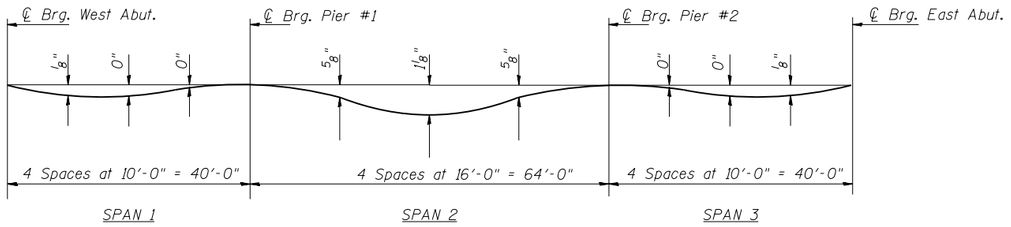
FOOTING & PILE LAYOUT

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

FOOTING LAYOUT PLAN
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 10/18/10

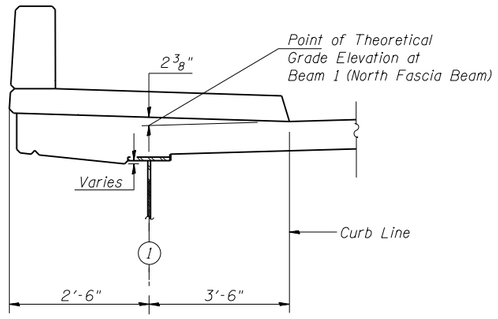
2280-2b103



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete deck, concrete parapets, and sidewalks)

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 in tables.



SECTION THRU SIDEWALK

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	32
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

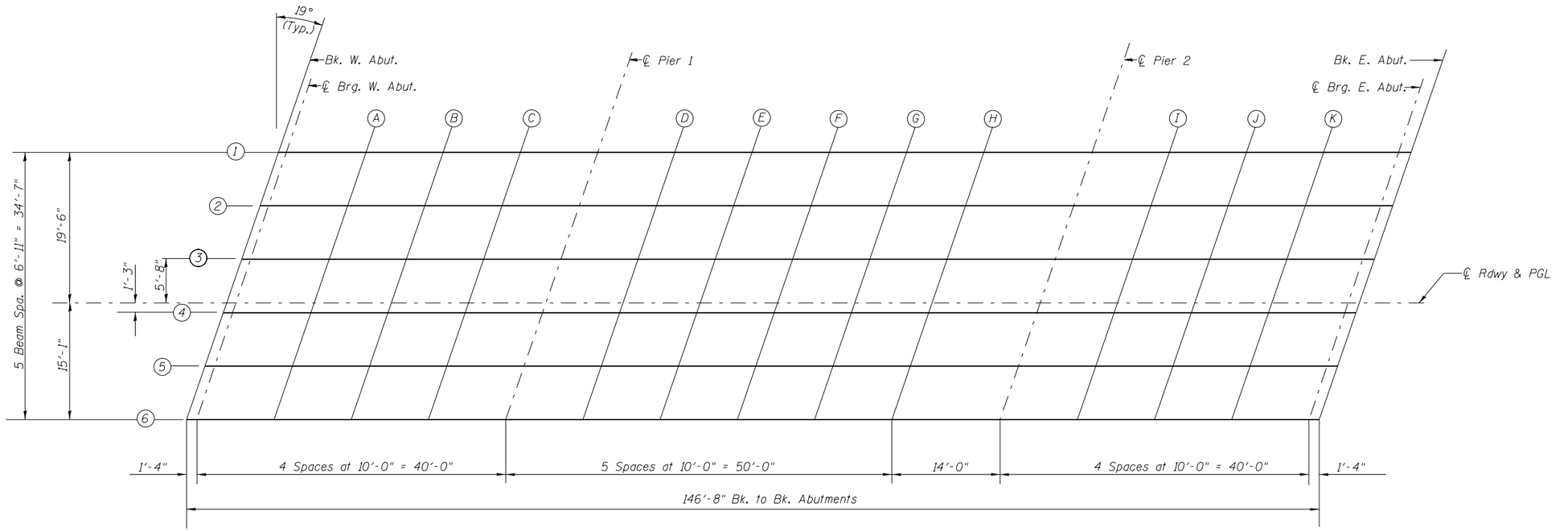
SHEET NO. 4 OF 27 SHEETS

* (69-HB)BR

CONTRACT NO. 72837

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 Deflections" shown on sheets 5-6 of 27, minus slab thickness, equals the fillet heights "t" above top flanges of beams.

FILLET HEIGHTS



PLAN

DESIGNED	BAN
CHECKED	JOH
DRAWN	TRD
CHECKED	BAN

TOP OF SLAB ELEVATIONS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS

Date: 10/8/10

2280-2b104

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	33
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 5 OF 27 SHEETS

* (69-HB)BR

CONTRACT NO. 72837

BEAM #1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abutment	9933.38	-19.50	668.60	668.60
CL Brg. W. Abut.	9934.71	-19.50	668.60	668.60
A	9944.71	-19.50	668.64	668.64
B	9954.71	-19.50	668.67	668.68
C	9964.71	-19.50	668.71	668.71
CL Brg. Pier 1	9974.71	-19.50	668.75	668.75
D	9984.71	-19.50	668.78	668.81
E	9994.71	-19.50	668.82	668.89
F	10004.71	-19.50	668.85	668.94
G	10014.71	-19.50	668.89	668.97
H	10024.71	-19.50	668.93	668.97
CL Brg. Pier 2	10038.71	-19.50	668.98	668.98
I	10048.71	-19.50	669.01	669.01
J	10058.71	-19.50	669.05	669.05
K	10068.71	-19.50	669.08	669.09
CL Brg. E. Abut.	10078.71	-19.50	669.12	669.12
Bk. E. Abutment	10080.04	-19.50	669.12	669.12

BEAM #2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abutment	9931.00	-12.58	668.73	668.73
CL Brg. W. Abut.	9932.33	-12.58	668.74	668.74
A	9942.33	-12.58	668.77	668.78
B	9952.33	-12.58	668.81	668.81
C	9962.33	-12.58	668.84	668.84
CL Brg. Pier 1	9972.33	-12.58	668.88	668.88
D	9982.33	-12.58	668.92	668.95
E	9992.33	-12.58	668.95	669.02
F	10002.33	-12.58	668.99	669.08
G	10012.33	-12.58	669.03	669.11
H	10022.33	-12.58	669.06	669.11
CL Brg. Pier 2	10036.33	-12.58	669.11	669.11
I	10046.33	-12.58	669.15	669.15
J	10056.33	-12.58	669.18	669.19
K	10066.33	-12.58	669.22	669.23
CL Brg. E. Abut.	10076.33	-12.58	669.26	669.26
Bk. E. Abutment	10077.66	-12.58	669.26	669.26

BEAM #3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abutment	9928.62	-5.67	668.83	668.83
CL Brg. W. Abut.	9929.95	-5.67	668.84	668.84
A	9939.95	-5.67	668.88	668.88
B	9949.95	-5.67	668.91	668.92
C	9959.95	-5.67	668.95	668.95
CL Brg. Pier 1	9969.95	-5.67	668.98	668.98
D	9979.95	-5.67	669.02	669.05
E	9989.95	-5.67	669.06	669.13
F	9999.95	-5.67	669.09	669.18
G	10009.95	-5.67	669.13	669.21
H	10019.95	-5.67	669.16	669.21
CL Brg. Pier 2	10033.95	-5.67	669.21	669.21
I	10043.95	-5.67	669.25	669.25
J	10053.95	-5.67	669.29	669.29
K	10063.95	-5.67	669.32	669.33
CL Brg. E. Abut.	10073.95	-5.67	669.36	669.36
Bk. E. Abutment	10075.28	-5.67	669.36	669.36

PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abutment	9926.67	0.00	668.92	668.92
CL Brg. W. Abut.	9928.00	0.00	668.92	668.92
A	9938.00	0.00	668.96	668.96
B	9948.00	0.00	668.99	669.00
C	9958.00	0.00	669.03	669.03
CL Brg. Pier 1	9968.00	0.00	669.07	669.07
D	9978.00	0.00	669.10	669.13
E	9988.00	0.00	669.14	669.21
F	9998.00	0.00	669.17	669.26
G	10008.00	0.00	669.21	669.29
H	10018.00	0.00	669.25	669.29
CL Brg. Pier 2	10032.00	0.00	669.30	669.30
I	10042.00	0.00	669.33	669.33
J	10052.00	0.00	669.37	669.37
K	10062.00	0.00	669.40	669.41
CL Brg. E. Abut.	10072.00	0.00	669.44	669.44
Bk. E. Abutment	10073.33	0.00	669.44	669.44

DESIGNED	BAN
CHECKED	JOH
DRAWN	TAC
CHECKED	BAN

2280-2b105

TOP OF SLAB ELEVATIONS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 10/18/10

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	34
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

* (69-HB)BR

SHEET NO. 6 OF 27 SHEETS

CONTRACT NO. 72837

BEAM #4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abutment	9926.24	1.25	668.90	668.90
CL Brg. W. Abut.	9927.57	1.25	668.90	668.90
A	9937.57	1.25	668.94	668.94
B	9947.57	1.25	668.97	668.98
C	9957.57	1.25	669.01	669.01
CL Brg. Pier 1	9967.57	1.25	669.04	669.04
D	9977.57	1.25	669.08	669.11
E	9987.57	1.25	669.12	669.19
F	9997.57	1.25	669.15	669.24
G	10007.57	1.25	669.19	669.27
H	10017.57	1.25	669.22	669.27
CL Brg. Pier 2	10031.57	1.25	669.27	669.27
I	10041.57	1.25	669.31	669.31
J	10051.57	1.25	669.35	669.35
K	10061.57	1.25	669.38	669.39
CL Brg. E. Abut.	10071.57	1.25	669.42	669.42
Bk. E. Abutment	10072.90	1.25	669.42	669.42

BEAM #5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abutment	9923.86	8.17	668.78	668.78
CL Brg. W. Abut.	9925.19	8.17	668.78	668.78
A	9935.19	8.17	668.82	668.83
B	9945.19	8.17	668.86	668.86
C	9955.19	8.17	668.89	668.89
CL Brg. Pier 1	9965.19	8.17	668.93	668.93
D	9975.19	8.17	668.96	669.00
E	9985.19	8.17	669.00	669.07
F	9995.19	8.17	669.04	669.13
G	10005.19	8.17	669.07	669.15
H	10015.19	8.17	669.11	669.16
CL Brg. Pier 2	10029.19	8.17	669.16	669.16
I	10039.19	8.17	669.19	669.19
J	10049.19	8.17	669.23	669.23
K	10059.19	8.17	669.27	669.27
CL Brg. E. Abut.	10069.19	8.17	669.30	669.30
Bk. E. Abutment	10070.52	8.17	669.31	669.31

BEAM #6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abutment	9921.48	15.08	668.65	668.65
CL Brg. W. Abut.	9922.81	15.08	668.65	668.65
A	9932.81	15.08	668.69	668.69
B	9942.81	15.08	668.72	668.73
C	9952.81	15.08	668.76	668.76
CL Brg. Pier 1	9962.81	15.08	668.79	668.79
D	9972.81	15.08	668.83	668.86
E	9982.81	15.08	668.87	668.94
F	9992.81	15.08	668.90	668.99
G	10002.81	15.08	668.94	669.02
H	10012.81	15.08	668.97	669.02
CL Brg. Pier 2	10026.81	15.08	669.03	669.03
I	10036.81	15.08	669.06	669.06
J	10046.81	15.08	669.10	669.10
K	10056.81	15.08	669.13	669.14
CL Brg. E. Abut.	10066.81	15.08	669.17	669.17
Bk. E. Abutment	10068.14	15.08	669.17	669.17

DESIGNED	BAN
CHECKED	JOH
DRAWN	TAC
CHECKED	BAN

2280-2b106

TOP OF SLAB ELEVATIONS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 10/18/10

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	35
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 7 OF 27 SHEETS

* (69-HB)BR

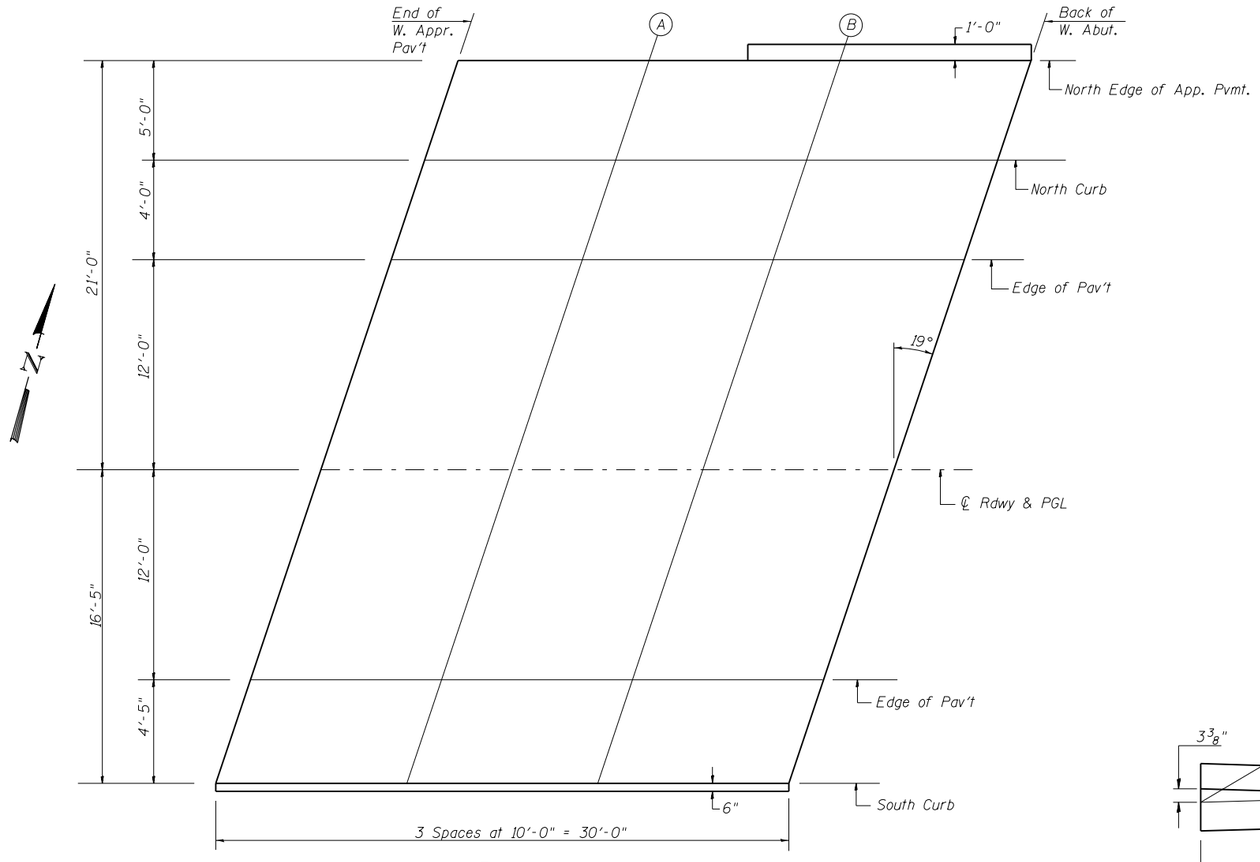
CONTRACT NO. 72837

NORTH EDGE OF APPROACH PAV'T

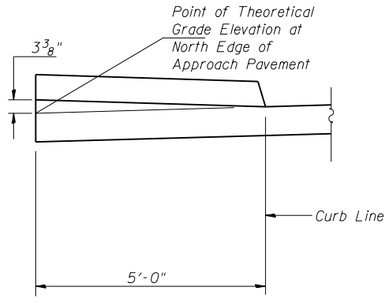
Location	Station	Offset	Theoretical Grade Elevations
End of Appr. Pav't	99+03.90	-21.00	668.46
A	99+13.90	-21.00	668.50
B	99+23.90	-21.00	668.53
Bk W. Abut.	99+33.90	-21.00	668.57

NORTH CURB

Location	Station	Offset	Theoretical Grade Elevations
End of Appr. Pav't	99+02.18	-16.00	668.56
A	99+12.18	-16.00	668.59
B	99+22.18	-16.00	668.63
Bk W. Abut.	99+32.18	-16.00	668.67



PLAN



SECTION THRU SIDEWALK

NORTH EDGE OF PAV'T

Location	Station	Offset	Theoretical Grade Elevations
End of Appr. Pav't	99+00.80	-12.00	668.64
A	99+10.80	-12.00	668.67
B	99+20.80	-12.00	668.71
Bk W. Abut.	99+30.80	-12.00	668.74

℄ ROADWAY & PGL

Location	Station	Offset	Theoretical Grade Elevations
End of Appr. Pav't	98+96.67	0.00	668.81
A	99+06.67	0.00	668.84
B	99+16.67	0.00	668.88
Bk W. Abut.	99+26.67	0.00	668.92

SOUTH EDGE OF PAV'T

Location	Station	Offset	Theoretical Grade Elevations
End of Appr. Pav't	98+92.54	+12.00	668.61
A	99+02.54	+12.00	668.64
B	99+12.54	+12.00	668.68
Bk W. Abut.	99+22.54	+12.00	668.71

SOUTH CURB

Location	Station	Offset	Theoretical Grade Elevations
End of Appr. Pav't	98+91.02	+16.42	668.51
A	99+01.02	+16.42	668.54
B	99+11.02	+16.42	668.58
Bk W. Abut.	99+21.02	+16.42	668.62

DESIGNED	JOH / BAN
CHECKED	BAN / JOH
DRAWN	TD
CHECKED	BAN

2280-2b107

WEST APPROACH SLAB ELEVATIONS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS

Date: 12/21/07

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	36
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 8 OF 27 SHEETS

* (69-HB)BR

CONTRACT NO. 72837

NORTH EDGE OF APPROACH PAV'T

Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	100+80.56	-21.00	669.10
A	100+90.56	-21.00	669.13
B	100+100.56	-21.00	669.17
End of Appr. Pav't	100+110.56	-21.00	669.20

NORTH CURB

Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	100+78.84	-16.00	669.19
A	100+88.84	-16.00	669.23
B	100+98.84	-16.00	669.26
End of Appr. Pav't	101+08.84	-16.00	669.30

NORTH EDGE OF PAV'T

Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	100+77.46	-12.00	669.27
A	100+87.46	-12.00	669.31
B	100+97.46	-12.00	669.34
End of Appr. Pav't	101+07.46	-12.00	669.38

℄ ROADWAY & PGL

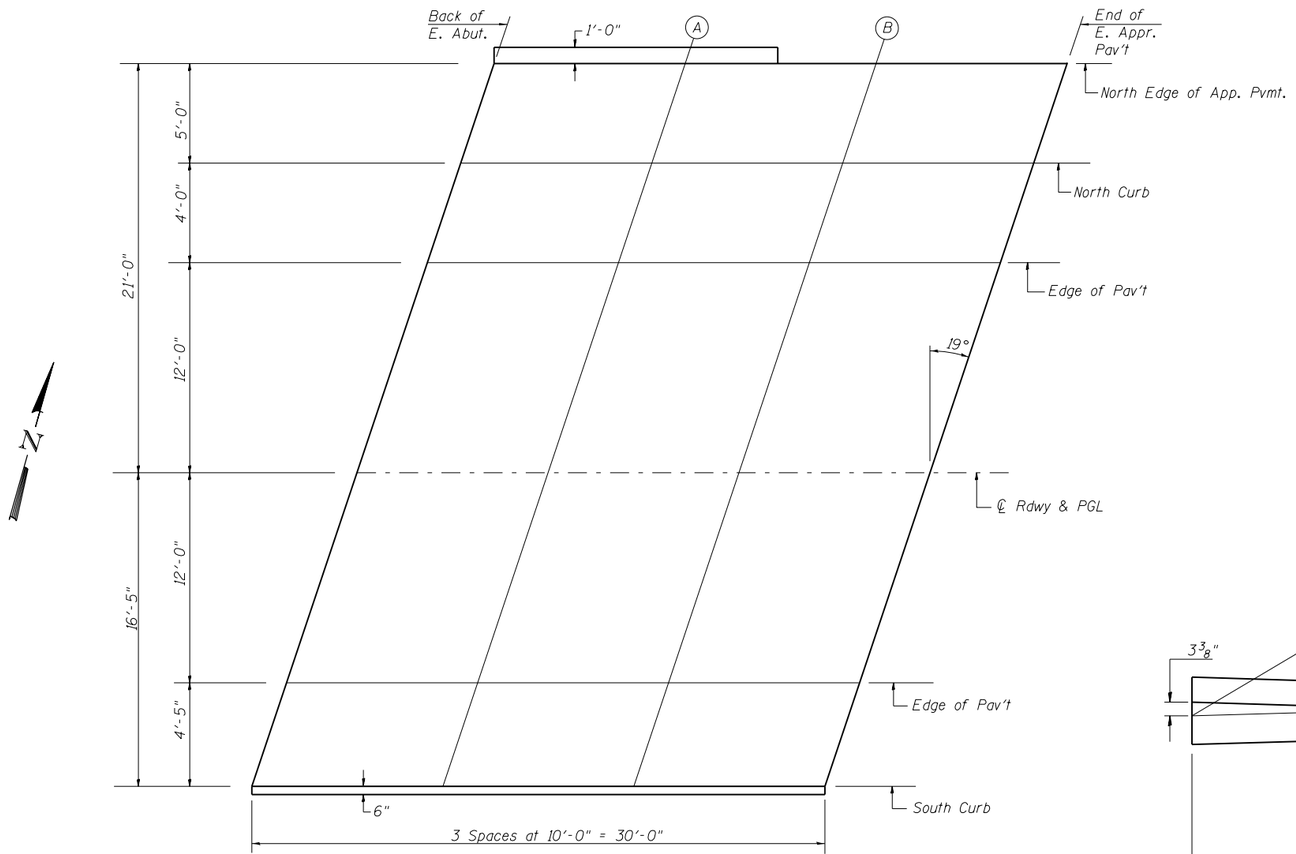
Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	100+73.33	0.00	669.44
A	100+83.33	0.00	669.48
B	100+93.33	0.00	669.52
End of Appr. Pav't	101+03.33	0.00	669.55

SOUTH EDGE OF PAV'T

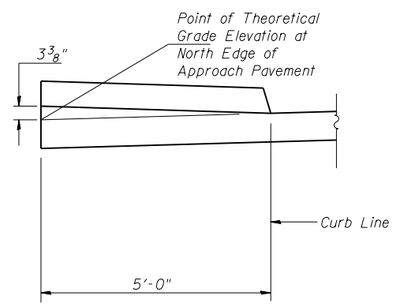
Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	100+69.20	+12.00	669.24
A	100+79.20	+12.00	669.28
B	100+89.20	+12.00	669.31
End of Appr. Pav't	100+99.20	+12.00	669.35

SOUTH CURB

Location	Station	Offset	Theoretical Grade Elevations
Bk. E. Abut.	100+67.68	+16.42	669.14
A	100+77.68	+16.42	669.18
B	100+87.68	+16.42	669.22
End of Appr. Pav't	100+97.68	+16.42	669.25



PLAN



SECTION THRU SIDEWALK

DESIGNED	JOH / BAN
CHECKED	BAN / JOH
DRAWN	TD
CHECKED	BAN

EAST APPROACH SLAB ELEVATIONS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS

Date: 12/21/07

2280-2b108

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	37
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

*69-HB)BR

SHEET NO. 9 OF 27 SHEETS

CONTRACT NO. 72837

5- #4 d_6(E) bars at 12'' cts. Outside Face, Each End
5- #6 d_5(E) bars at 12'' cts. Inside Face, Each End
139- #4 d_3(E) bars at 12'' cts. Outside Face
139- #6 d_2(E) bars at 12'' cts. Inside Face
4⅛"
7'-11" 7'-11"
¼"x¾" Formed Joint in Sidewalk
½" Preformed Self-Expanding Cork Joint Filler in Parapet
7'-11" 7'-11"
4⅛"
1 x 5- #5 b(E) bars Top & Bottom of Sidewalk
147- #5 c_1(E) bars at 12'' cts Top of Sidewalk
1'-0"
5'-0" Sidewalk
6x5- #5 b(E) bars @ 12" cts. Top of Sdwk.
1- #5 a_3(E) bar Top & Bottom Each End
147- #5 c(E) bars at 12'' cts.
201- #5 a(E) bars at 8" cts. Top
161- #5 a_1(E) bars at 10" cts. Bottom
10" (Typ.)
39'-7" o. to o. deck
32'-0"
19° Skew (Typ.)
Back of West Abut.
℄ Rdwy. & P.G
℄ Pier #1
37- #6 b_1(E) bars at ±12'' cts. Top of slab over pier
38 x 5- #5 b(E) bars equally spaced at ±12'' cts. Top of slab
36 x 6- #5 b_2(E) bars spaced as shown in cross section. Bottom of slab
37- #6 b_1(E) bars at ±12'' cts. Top of slab over pier
℄ Pier #2
Back of East Abut.
38- Bar Splicers(E) for #5 bars at 12" cts. Each End
38- #5 v(E) bars at 12'' cts. Each End
* 19- #5 a(E) bars at 8" cts. Top
* 15- #5 a_1(E) bars at 10" cts. Bottom
16'-6" 16'-2"
16'-2" 16'-6"
6"
2'-6" (Typ.)
1'-7"
5"
1'-2"
11" (Typ.)
2- #6 b_1(E) bars Top of slab over Pier, Typ.
6½"
3x5- #5 b(E) bars Top of slab
6½"
Alum. Sheeted Constr. Joints in Parapet, Typ. at each pier.
7'-11" 7'-11"
2'-0" (Typ.)
Bend 3- #5 d_1(E) bars to fit taper, typ.
110- #6 a_2(E) bars at 1'-4" cts. Top (Lap with alternate a(E) bars)
161- #5 d_1(E) bars at 11'' cts.
41'-4" Span 1
64'-0" Span 2
41'-4" Span 3
146'-8" end to end deck

N

PLAN

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

39'-7" o. to o. deck
1'-0" 5'-0" Sidewalk 32'-0" 1'-7"
2'' 10" 16'-0" 16'-0" 2½" 9½" 2''
Aluminum Rail Type "L"
4'-0" Shldr. 12'-0" Lane 12'-0" Lane 4'-0" Shldr.
Total Drop= 3¼" Total Drop= 3¼"
d_4(E) d_3(E) d_2(E) b(E) c_1(E) c(E) b(E) b_1(E) a(E) ¼" per ft. a(E) 3/16" per ft. ℄ Rdwy. P.G. 2¼" (±¼") cl. 8" Slab a(E) 3/16" per ft. b(E) ¼" per ft. a_2(E) 2'-10" d(E) 5" 2'-0" d_1(E)
1'-9" 7½" b(E) 10" 5" 2'' a_1(E) 1" cl. 3" 8½" 9½" b(E) b_2(E)
6" Min. (Typ.) W24x104 (Typ.) 6"ϕ Floor Drain (Typ.) Existing utilities (Verizon) to be removed & relocated 11½" 6x6- #5 b_2(E) bars at 12" cts. Typ. btwn. beams 11½" 2''
1 6
2'-6" 5 spaces at 6'-11" = 34'-7" 2'-6"
NEAR PIER NEAR MIDSPAN

CROSS SECTION

(Looking East)

Notes: See sheet #1 of 27 for Floor Drain spacing.
See sheet #10 of 27 for Superstructure Details and Bill of Material.
See sheet #11 of 27 for Parapet Reinforcement.
See sheet #12 of 27 for Section A-A at Abutments
See sheet #21 of 27 for Bar Splicer Details.
Bars indicated thus 20 x 3- #5 etc. indicates 20 lines of bars with 3 lengths per line.
See sheet #13 of 27 for Rail Details.

MIN. BAR LAP

#5 bar = 1'-8"

DESIGNED	BAN
CHECKED	JOH
DRAWN	TC
CHECKED	BAN

SUPERSTRUCTURE
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 12/21/07

2280-2b109

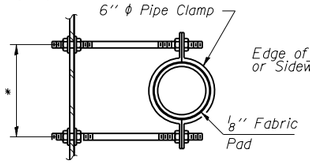
ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	38
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 10 OF 27 SHEETS

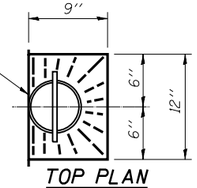
* (69-HB)BR

CONTRACT NO. 72837

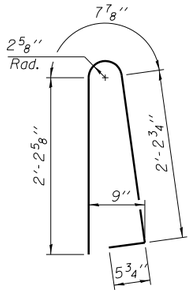
*Dimension as required by Pipe Clamp



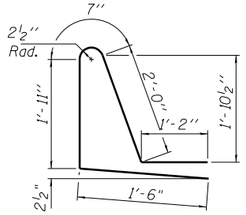
SECTION C-C



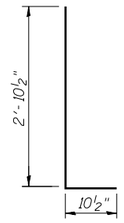
TOP PLAN



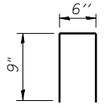
BAR d(E)



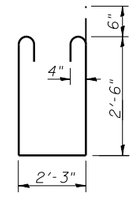
BAR d_1(E)



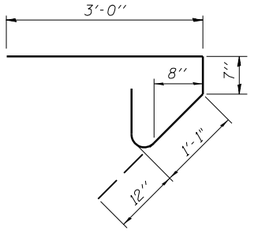
BAR d_2(E)



BAR d_4(E)

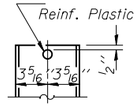


BAR s_1(E)

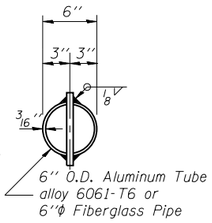


BAR s(E)

1/2"ϕ x 8" Fiberglass Reinf. Plastic Rebar



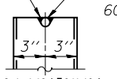
FIBERGLASS PIPE



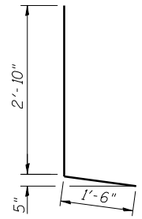
TOP PLAN
(Showing Aluminum Tube)

Fill slot with weld

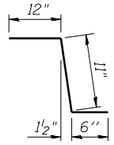
1/2"ϕ x 8" Alum. Bar ASTM: B 211 alloy 6061-T6



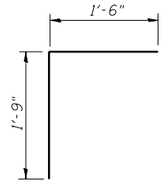
ALUMINUM TUBE



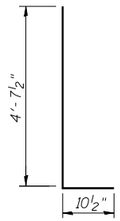
BAR d_3(E)



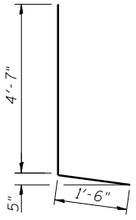
BAR c(E)



BAR v(E)



BAR d_5(E)



BAR d_6(E)

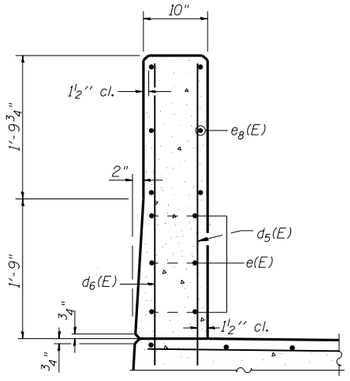
Note: The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting Metal Structures. The exterior surfaces of the drains shall be cleaned according to steel Structures Painting Council's Spec. SSPC-SP1 prior to painting.

Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

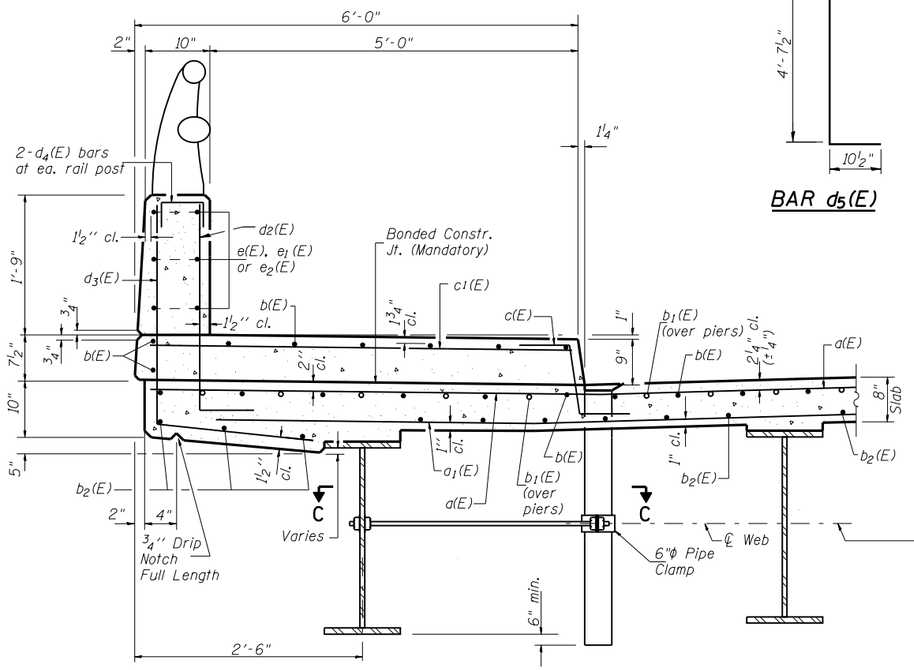
SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	220	#5	38'-0"	
a_1(E)	176	#5	37'-7"	
a_2(E)	110	#6	4'-6"	
a_3(E)	4	#5	41'-2"	
b(E)	245	#5	30'-8"	
b_1(E)	78	#6	32'-8"	
b_2(E)	216	#5	25'-10"	
c(E)	147	#5	2'-5"	
c_1(E)	147	#5	5'-6"	
d(E)	161	#5	5'-7"	
d_1(E)	161	#5	7'-2"	
d_2(E)	139	#6	3'-9"	
d_3(E)	139	#4	4'-4"	
d_4(E)	32	#4	2'-0"	
d_5(E)	10	#4	5'-6"	
d_6(E)	10	#6	6'-1"	
e(E)	52	#4	16'-5"	
e_1(E)	39	#4	15'-9"	
e_2(E)	56	#4	7'-8"	
e_3(E)	2	#8	33'-2"	
e_4(E)	2	#8	25'-8"	
e_5(E)	4	#8	7'-8"	
e_6(E)	2	#4	33'-2"	
e_7(E)	2	#4	24'-10"	
e_8(E)	12	#4	3'-9"	
m(E)	4	#6	39'-7"	
m_1(E)	6	#6	41'-7"	
m_2(E)	24	#6	9'-3"	
m_3(E)	10	#6	6'-9"	
m_4(E)	4	#6	2'-3"	
s(E)	82	#5	5'-8"	
s_1(E)	72	#4	8'-3"	
v(E)	76	#5	3'-3"	
Reinforcement Bars, Epoxy Coated		Pound	42,710	
Concrete Superstructure		Cu. Yd.	216.6	
Bar Splicers		Each	76	

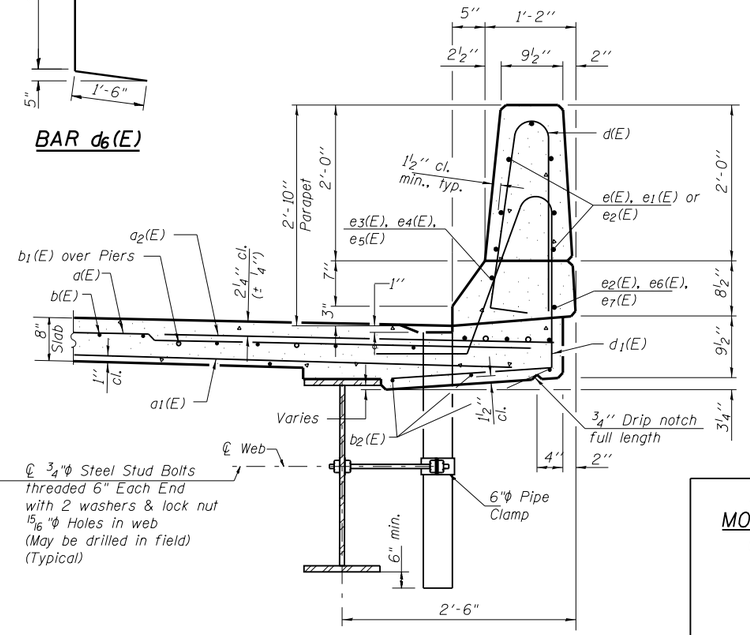
Bars indicated thus 1 x 2 - #5 etc. indicates 1 line of bars with 2 lengths per line.



SECTION THRU ENDS OF NORTH PARAPET



SECTION THRU SIDEWALK
(Looking East)



SECTION THRU PARAPET
(Looking East)

DESIGNED	BAN
CHECKED	JOH
DRAWN	TC
CHECKED	BAN

SUPERSTRUCTURE DETAILS
MOUND ROAD (FAU ROUTE 8173) OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS

Date: 12/21/07

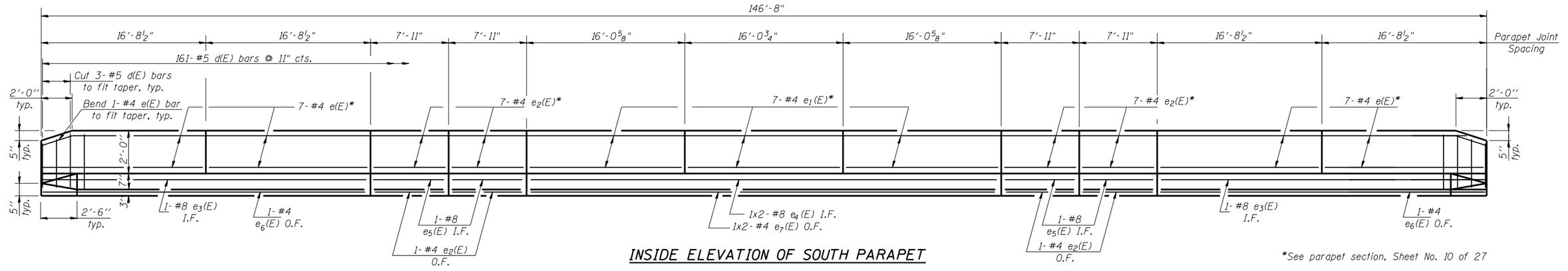
2280-2b110

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	39
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 11 OF 27 SHEETS

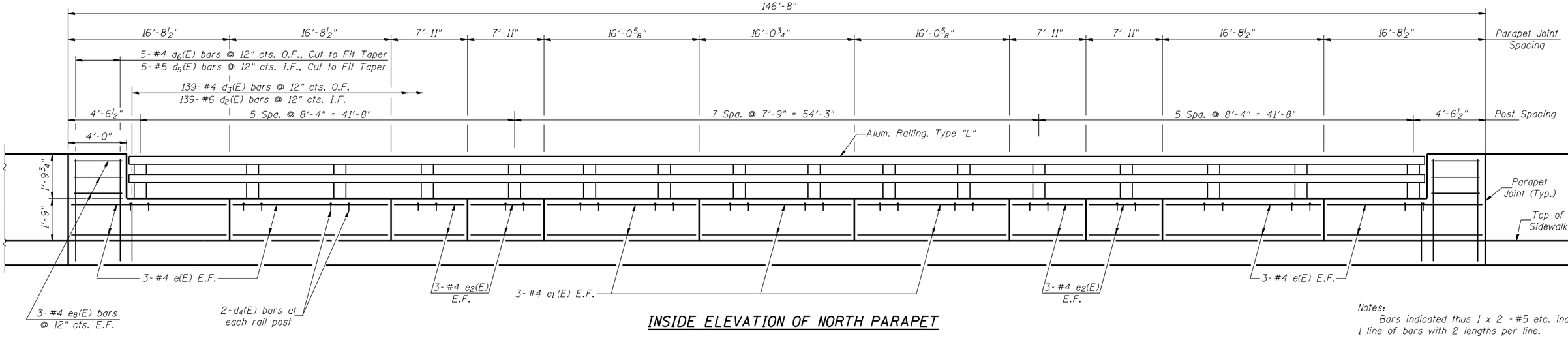
* (69-HB)BR

CONTRACT NO. 72837



INSIDE ELEVATION OF SOUTH PARAPET

*See parapet section, Sheet No. 10 of 27

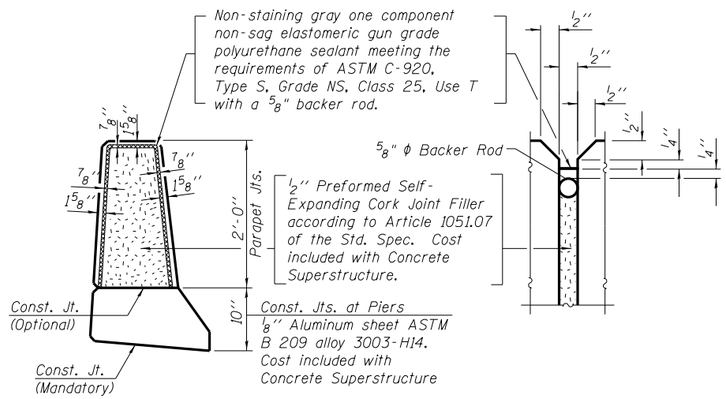


INSIDE ELEVATION OF NORTH PARAPET

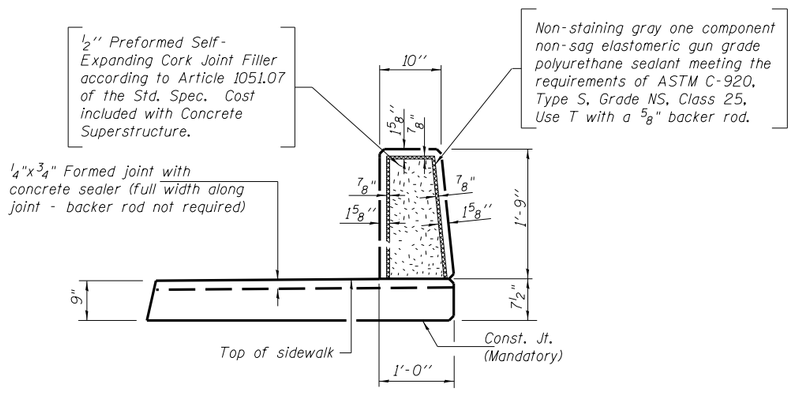
Notes:
Bars indicated thus 1 x 2 - #5 etc. indicates 1 line of bars with 2 lengths per line.
I.F. = Inside Face
O.F. = Outside Face
E.F. = Each Face

MIN. BAR LAP

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



(South Parapet)



(North Parapet)

PARAPET JOINT DETAILS

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

SUPERSTRUCTURE DETAILS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS

Date: 12/21/07

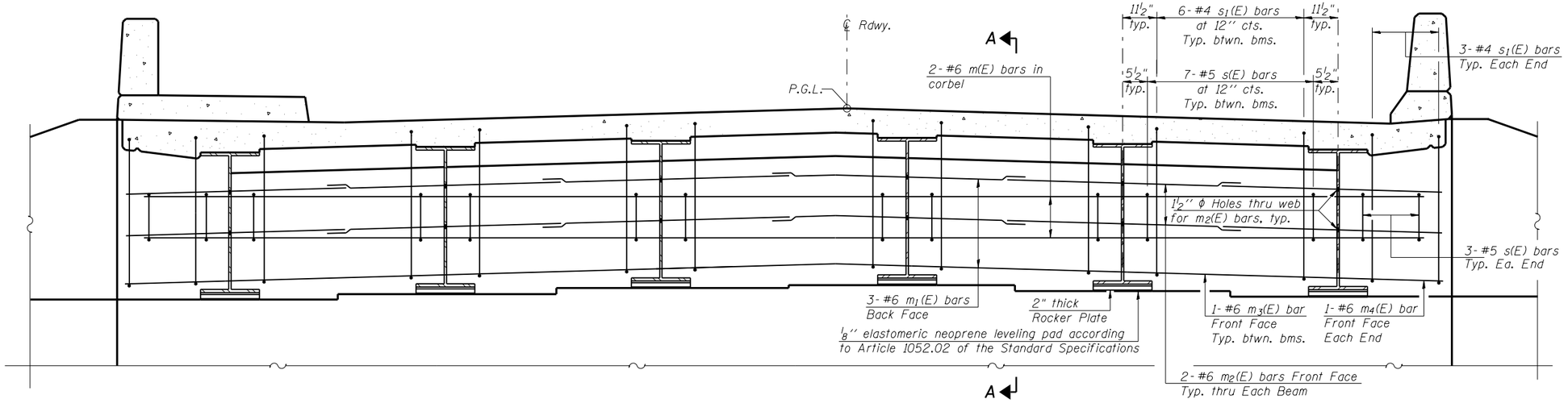
2280-2b111

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	40
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 12 OF 27 SHEETS

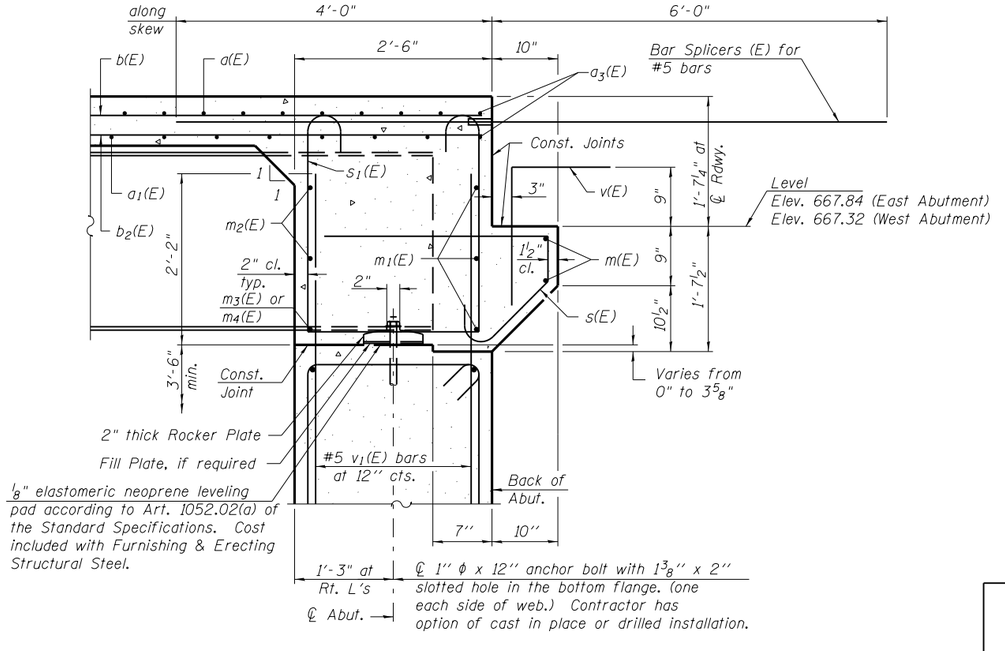
* (69-HB)BR

CONTRACT NO. 72837



DIAPHRAGM ELEVATION AT ABUTMENT

(East Abutment shown, West Abutment similar)



SECTION A-A

Dimensions at right angles to abutment, except as shown.

Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet 10 of 27.

Concrete in diaphragm is included with Concrete Superstructure on sh 10 of 27.

For details of bars s(E) & s_1(E) see sheet 10 of 27.

The s(E) and s_1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

MIN. BAR LAP

#6 bar = 2'-9"

DESIGNED	BAN
CHECKED	JOH
DRAWN	TAC
CHECKED	BAN

DIAPHRAGM DETAILS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS

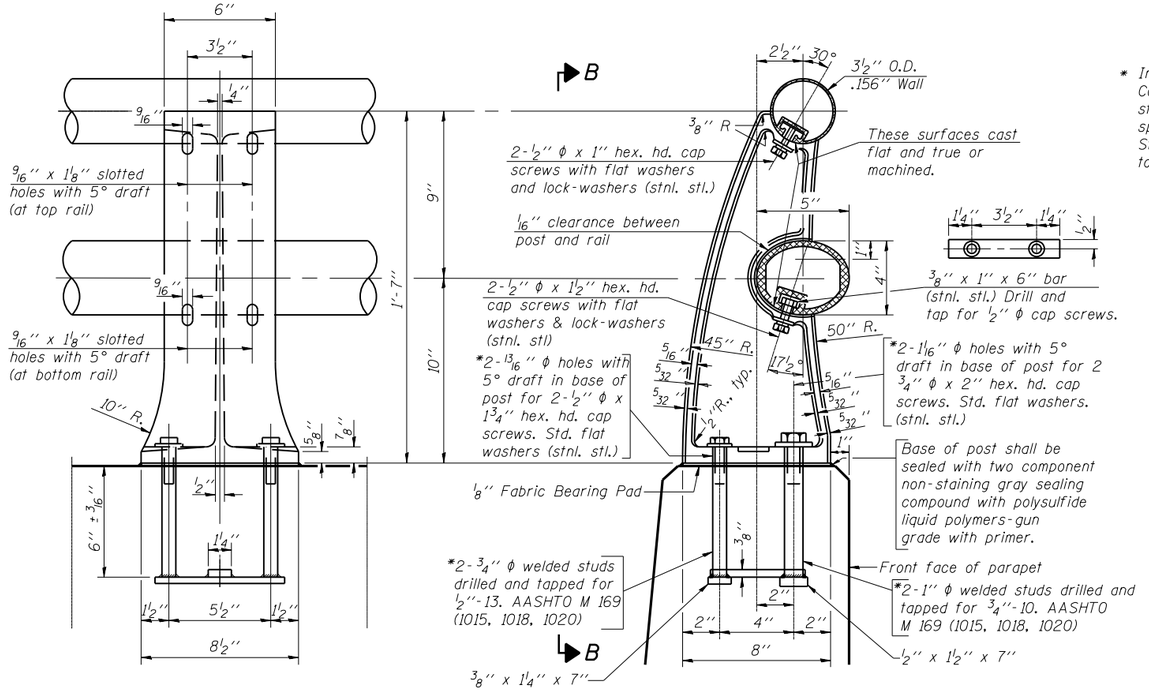
Date: 12/21/07

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	41
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 13 OF 27 SHEETS

* (69-HB)BR

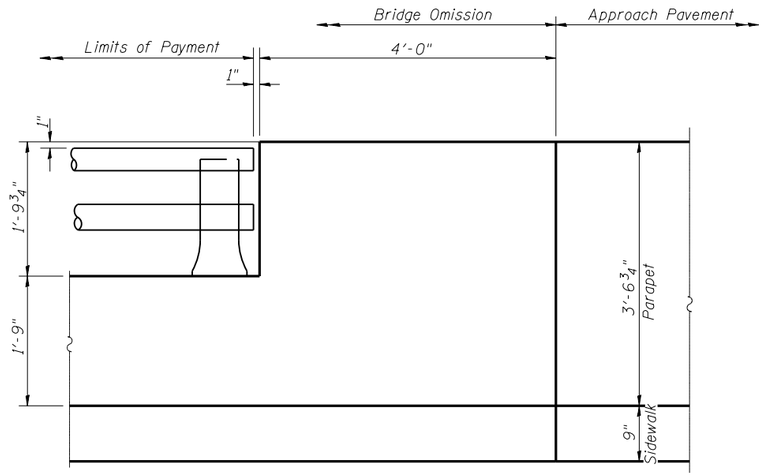
CONTRACT NO. 72837



VIEW B-B

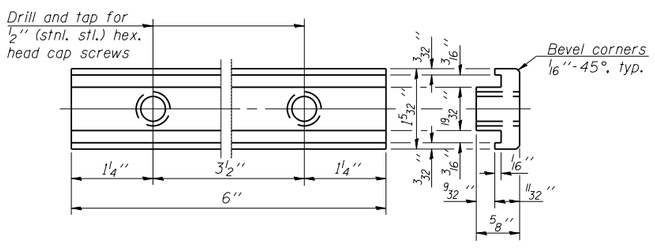
SECTION A-A

* In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting stainless steel anchor rods of the same diameter and grade as the specified cap screws according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



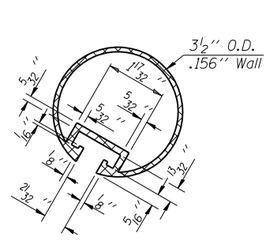
RAIL TERMINAL SECTION

RAIL POST DETAILS

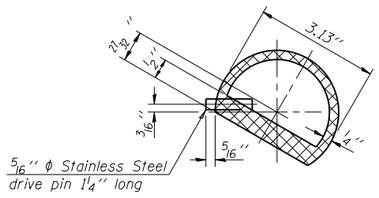


RAIL POST CLAMP BAR

For Top Rail

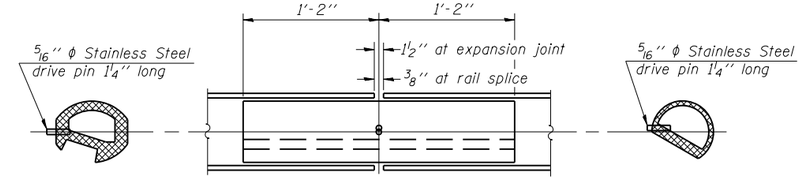


SECTION THRU TOP RAIL

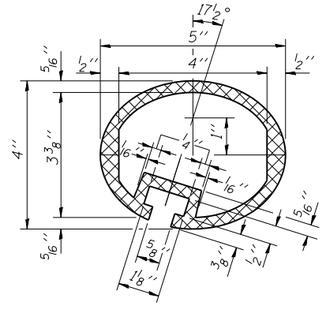


SECTION THRU SPLICE

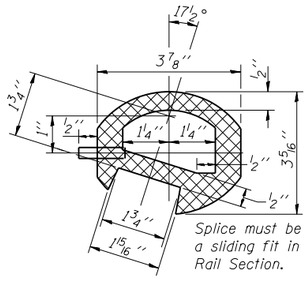
For Top Rail



RAIL SPLICE



SEC. THRU ELLIPTICAL RAIL SECTION



SEC. THRU SPLICE

Notes:
All Posts shall be normal to parapet.
All joints in rail shall be spliced per detail.
Provide 1-1/8'' and 2-1/16'' Aluminum Shims for 25% of the Posts. Rail elements shall be parallel to Grade-high spots will be ground and low spots shimmed.
See sheet of for rail post spacing.

BILL OF MATERIAL

Item	Unit	Quantity
Aluminum Railing, Type L	Foot	139

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

R-20

9-3-07 (7'-0'' to 10'-0'' Post spacing)

2280-2b113

ALUMINUM RAILING, TYPE L
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

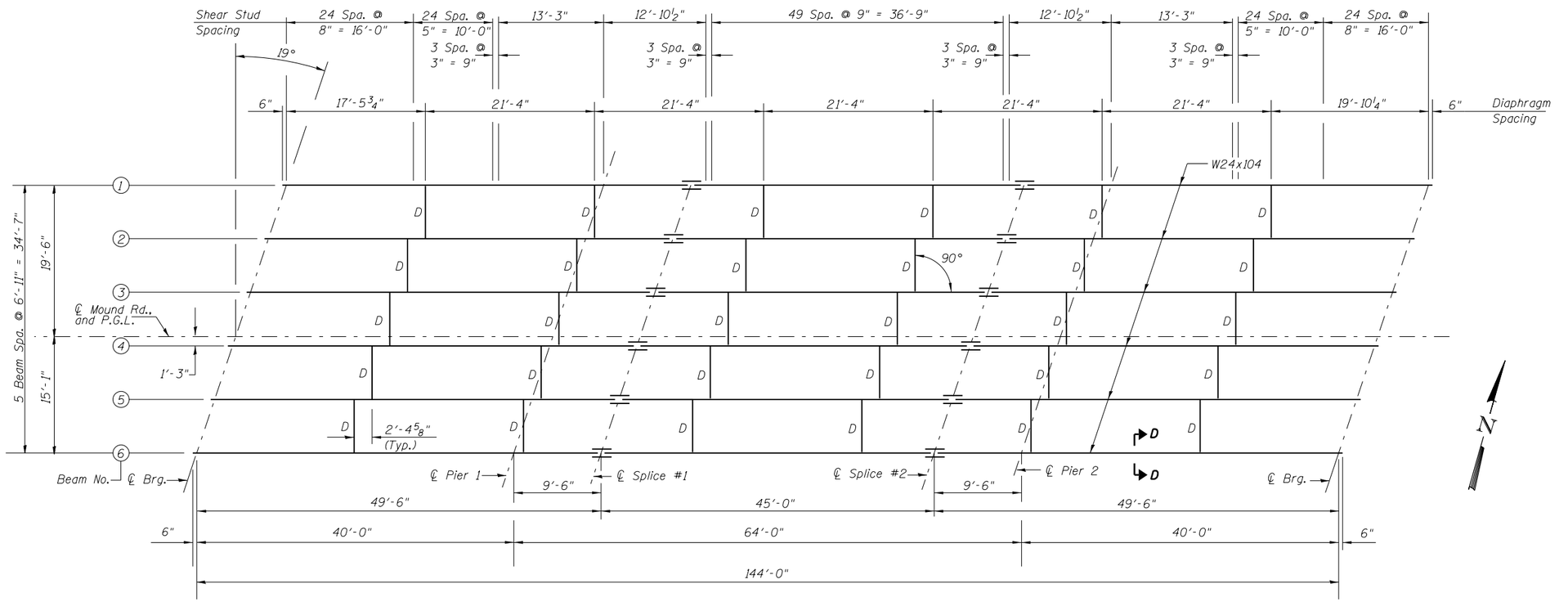
HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 12/21/07

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	42
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 14 OF 27 SHEETS

* (69-HB)BR

CONTRACT NO. 72837



FRAMING PLAN

Notes: All beams are W24x104 AASHTO M270, Grade 50 (NTR).
NTR denotes Notch Toughness Requirements.

INTERIOR GIRDER MOMENT TABLE

		0.4 Sp.1 & 0.6 Sp.3	Pier	0.5 Sp. 2
Is	(in^4)	3100	3100	3100
Ic (n)	(in^4)	9051	——	9051
Ic (3n)	(in^4)	6734	——	6734
Ss	(in^3)	258	258	258
Sc (n)	(in^3)	387	——	387
Sc (3n)	(in^3)	351	——	351
$\mathcal{D}$	(k/')	0.83	1.40	0.83
$M_{\mathcal{D}}$	('k)	61	416	179
$s_{\mathcal{D}}$	(k/')	0.57	——	0.57
$M_{s\mathcal{D}}$	('k)	42	——	123
$M_{\mathcal{L}}$	('k)	243	176	389
M (Imp)	('k)	73	50	103
$^5/_3$ [$M_{\mathcal{L}}$+M(Imp)]	('k)	527	377	820
Ma	('k)	819	1024	1463
* Mu	('k)	1589	——	1531
$f_s\mathcal{D}$ (non-comp)	(ksi)	2.8	19.4	8.3
$f_s\mathcal{D}$ (comp)	(ksi)	1.4	——	4.2
$f_s{}^5/_3$ ($\mathcal{L}$+Imp)	(ksi)	16.3	17.3	25.5
fs (Overload)	(ksi)	20.6	36.6	38.1
** fs (Total)	(ksi)	——	47.6	——
VR	(k)	48.5	——	41.6

* Compact, Braced Section
** Non-Compact Section

INTERIOR GIRDER REACTION TABLE

		Abut.	Pier 1 & 2
$R_{\mathcal{D}}$	(k)	17.6	83.3
$R_{\mathcal{L}}$	(k)	41.4	42.4
Imp.	(k)	12.4	12.0
R (Total)	(k)	71.4	137.7

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

Ic (n) and Sc (n) are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.

Ic (3n) and Sc (3n) are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads. (See AASHTO 10.38)

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

Ma (Applied Moment)=1.3[$M_{\mathcal{D}}$ + $M_{s\mathcal{D}}$ + $^5/_3$ ($M_{\mathcal{L}}$ + M(Imp.))]

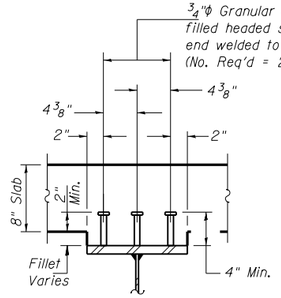
The Plastic Moment capacity (Mu) is computed according to AASHTO 10.48.1 and 10.50.1.1

fs (Overload) is the sum of the stresses due to $_{\mathcal{D}}M$ +$M_{s\mathcal{D}}$ +$^5/_3$($M_{\mathcal{L}}$ + M(Imp)).

fs (Total) (Non-compact section) is the sum of the stresses due to 1.3[$M_{\mathcal{D}}$ + $M_{s\mathcal{D}}$ +$^5/_3$ ($M_{\mathcal{L}}$ + M(Imp.))].

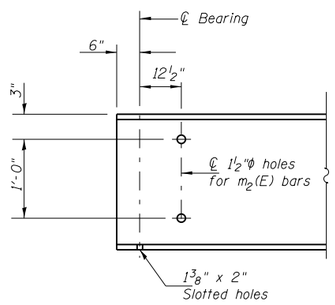
TOP OF BEAM ELEVATIONS (FOR FABRICATION ONLY)

	Beam #1	Beam #2	Beam #3	Beam #4	Beam #5	Beam #6
℄ Brg. W. Abut.	667.89	668.03	668.13	668.19	668.07	667.94
℄ Pier 1	667.99	668.12	668.23	668.29	668.17	668.04
℄ Splice 1	668.01	668.15	668.25	668.31	668.19	668.06
℄ Splice 2	668.17	668.31	668.41	668.47	668.36	668.22
℄ Pier 2	668.22	668.35	668.46	668.52	668.40	668.27
℄ Brg. E. Abut.	668.41	668.55	668.65	668.71	668.59	668.46

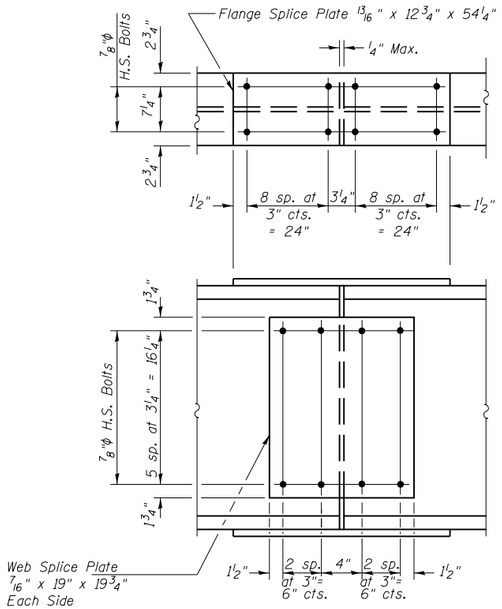


SECTION D-D

DESIGNED	JOH / BAN
CHECKED	BAN / JOH
DRAWN	TD
CHECKED	BAN



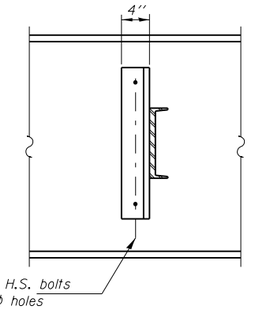
TYPICAL END OF BEAM DETAIL

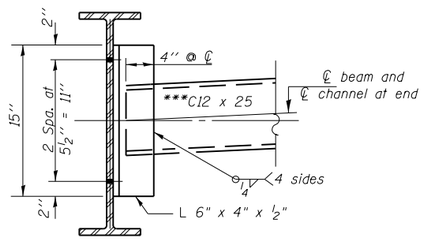


DETAIL OF SPLICE

12 req'd

All splice plates shall be AASHTO M270, Grade 50 (NTR)





*** A C12x30 channel is permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.

DIAPHRAGM D

30 Required
(M270 Grade 36)

Note: Two hardened washers shall be required over all oversized holes.

STRUCTURAL STEEL DETAILS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS

Date: 12/21/07

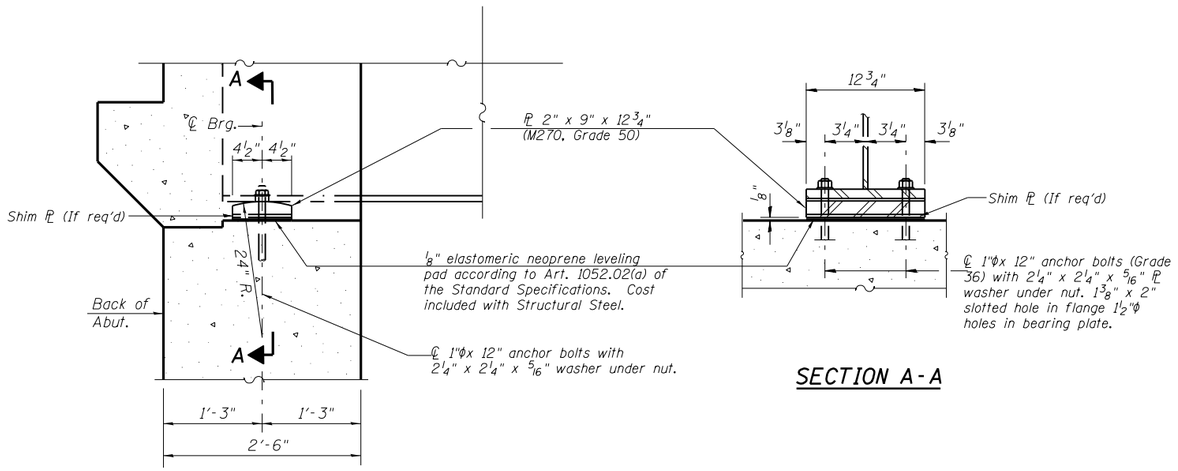
2280-2b114

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	43
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 15 OF 27 SHEETS

*(69-HB)BR

CONTRACT NO. 72837



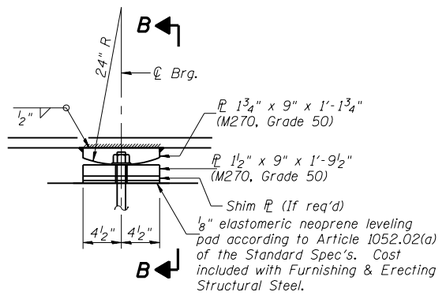
ELEVATION AT ABUTMENTS

(Dimensions at right angles to abutment)

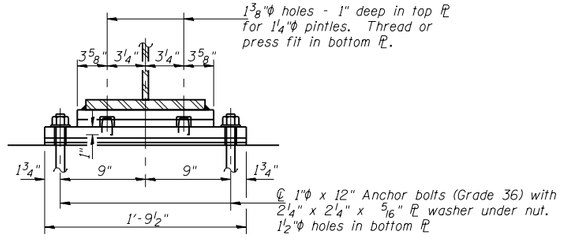
SECTION A-A

NOTES:

1. Anchor bolts at fixed bearings may be either cast-in-place or installed in holes drilled after the supported member is in place.
2. Anchors shall be set and grout cured for a minimum of 24 hours prior to forming the bridge deck.
3. 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=36 ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
4. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
5. Two ⅛" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

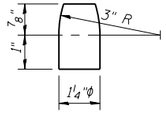


ELEVATION AT PIER



SECTION B-B

FIXED BEARING



PINTLE

(M270 Grade 50)

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1"	Each	48

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

2280-2b115

BEARING DETAILS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS

Date: 12/21/07

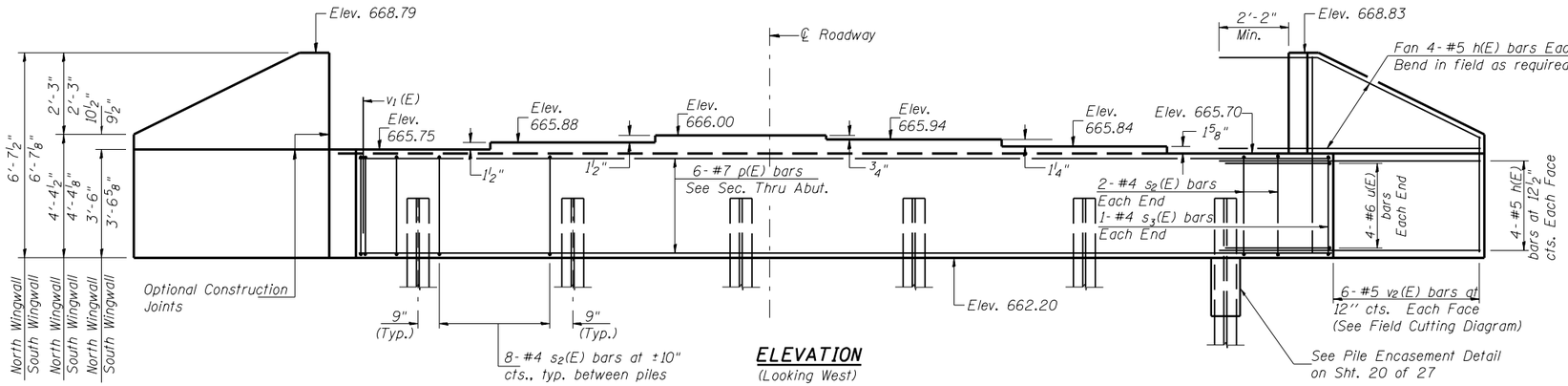
ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	44
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 16 OF 27 SHEETS

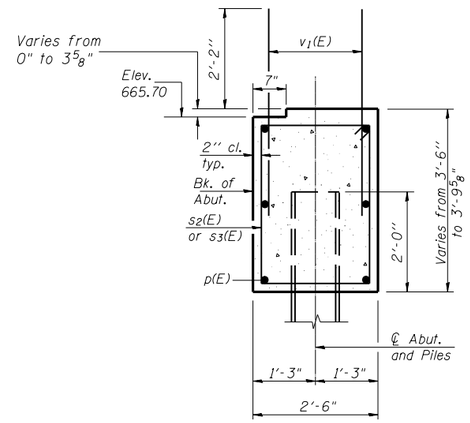
* (69-HB)BR

CONTRACT NO. 72837

Notes: Pour steps monolithically with cap.



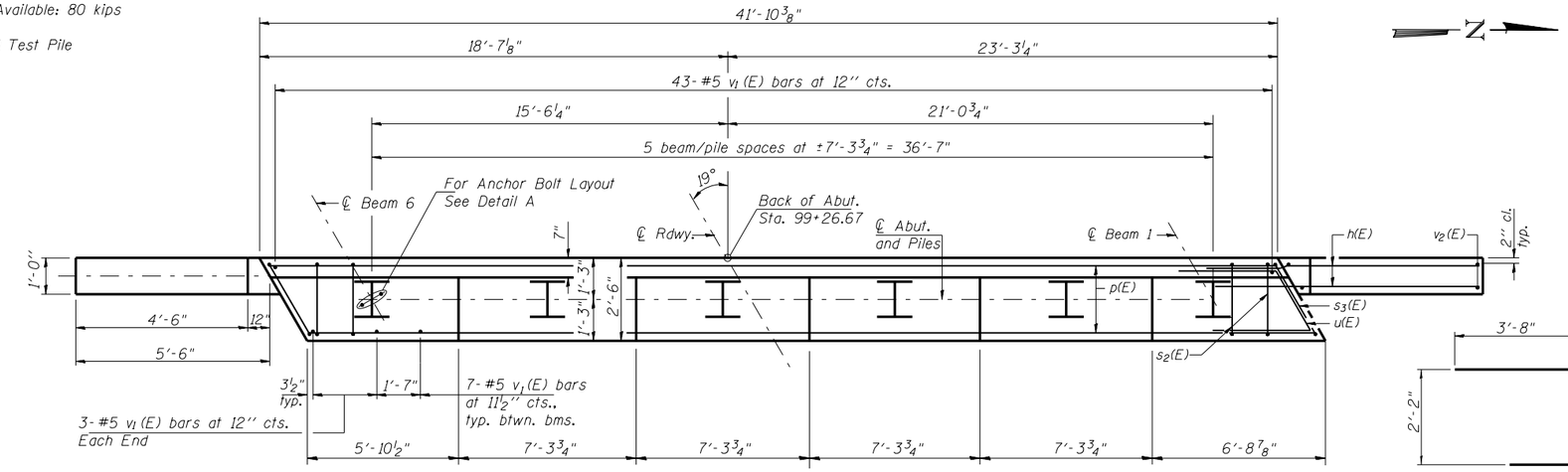
ELEVATION
(Looking West)



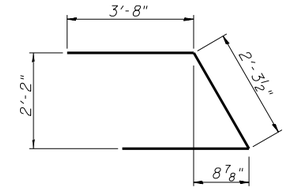
SEC. THRU ABUT.
(℄ Rt L's)

PILE DATA

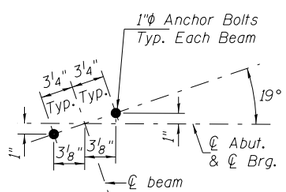
Type & Size: Steel HP10x42
Nominal Req'd. Bearing: 240 kips
Allowable Resistance Available: 80 kips
Est. Length: 52 ft.
No. Required: 5 plus 1 Test Pile



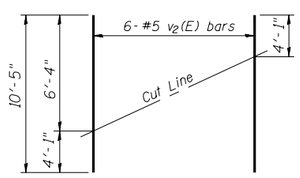
PLAN



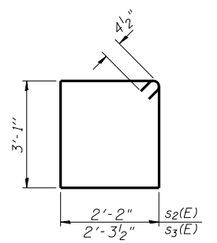
BAR u(E)



DETAIL A



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



BARS s2(E) & s3(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	32	#5	8'-8"	——
p(E)	6	#7	41'-6"	——
s2(E)	44	#4	11'-3"	□
s3(E)	2	#4	11'-6"	□
u(E)	8	#6	9'-8"	⌐
v1(E)	84	#5	4'-4"	——
v2(E)	12	#5	10'-5"	——
Concrete Structures			Cu. Yd.	16.4
Concrete Encasement			Cu. Yd.	2.1
Reinforcement Bars, Epoxy Coated			Pound	1,770
Structure Excavation			Cu. Yd.	65
Furnishing Steel Pile HP10x42			Foot	260
Driving Piles			Foot	260
Test Pile Steel HP10x42			Each	1

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD & TC
CHECKED	BAN

WEST ABUTMENT
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 12/21/07

2280-2b116

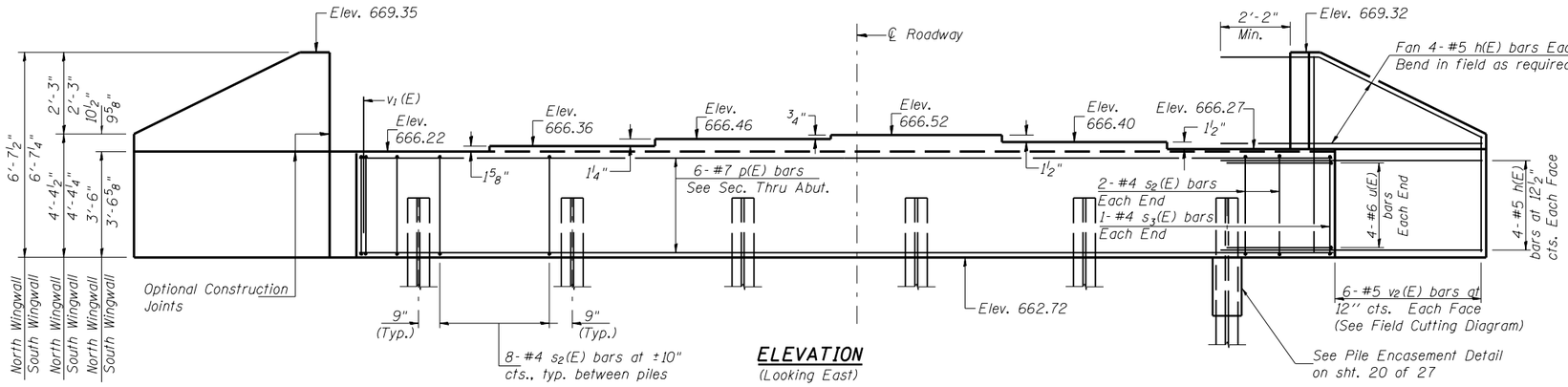
ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	45
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 17 OF 27 SHEETS

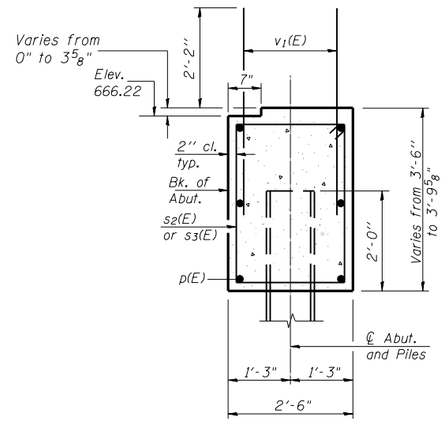
* (69-HB)BR

CONTRACT NO. 72837

Notes: Pour steps monolithically with cap.



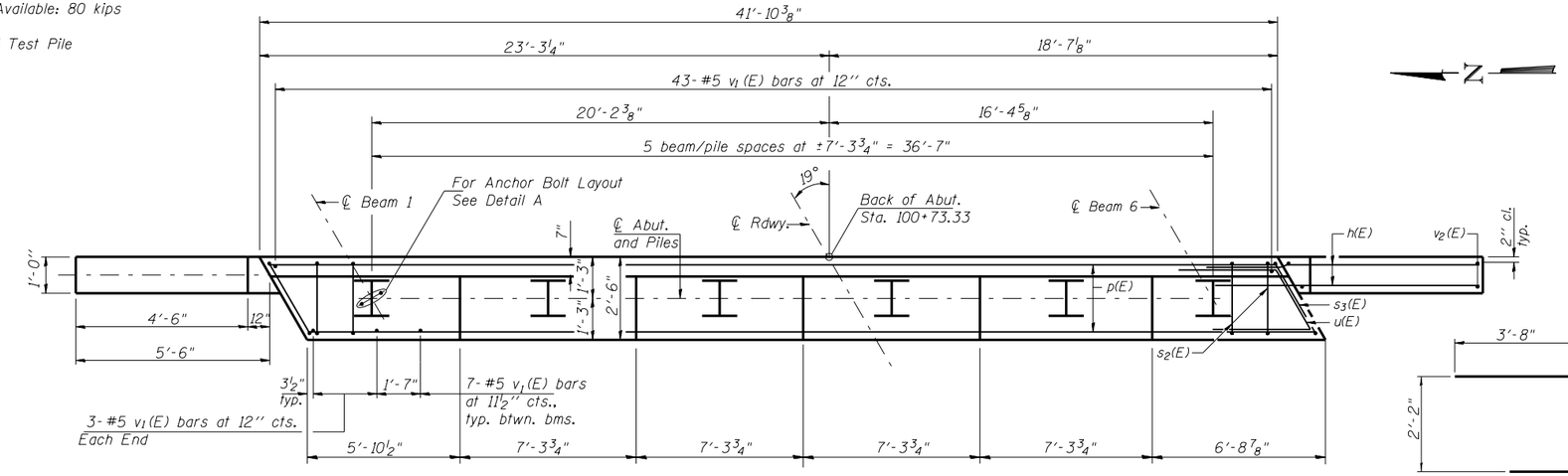
ELEVATION
(Looking East)



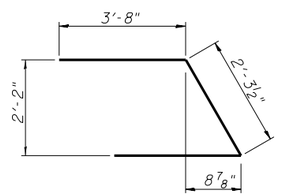
SEC. THRU ABUT.
(℄ Rt L's)

PILE DATA

Type & Size: Steel HP10x42
Nominal Req'd. Bearing: 240 kips
Allowable Resistance Available: 80 kips
Est. Length: 41 ft.
No. Required: 5 plus 1 Test Pile



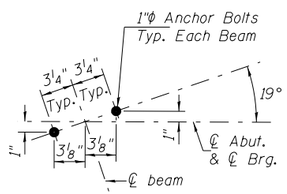
PLAN



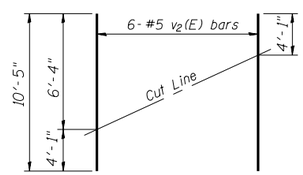
BAR u(E)

BILL OF MATERIAL

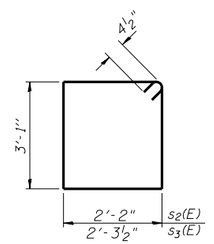
Bar	No.	Size	Length	Shape
h(E)	32	#5	8'-8"	
p(E)	6	#7	41'-6"	
s2(E)	44	#4	11'-3"	
s3(E)	2	#4	11'-6"	
u(E)	8	#6	9'-8"	
v1(E)	84	#5	4'-4"	
v2(E)	12	#5	10'-5"	
Concrete Structures			Cu. Yd.	16.4
Concrete Encasement			Cu. Yd.	2.1
Reinforcement Bars, Epoxy Coated			Pound	1,770
Structure Excavation			Cu. Yd.	65
Furnishing Steel Pile HP10x42			Foot	205
Driving Piles			Foot	205
Test Pile Steel HP10x42			Each	1



DETAIL A



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



BARS s2(E) & s3(E)

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD & TC
CHECKED	BAN

EAST ABUTMENT
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 12/21/07

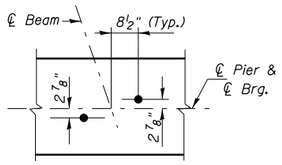
NOTES:

All edges shall have standard $\frac{3}{4}$" chamfer.

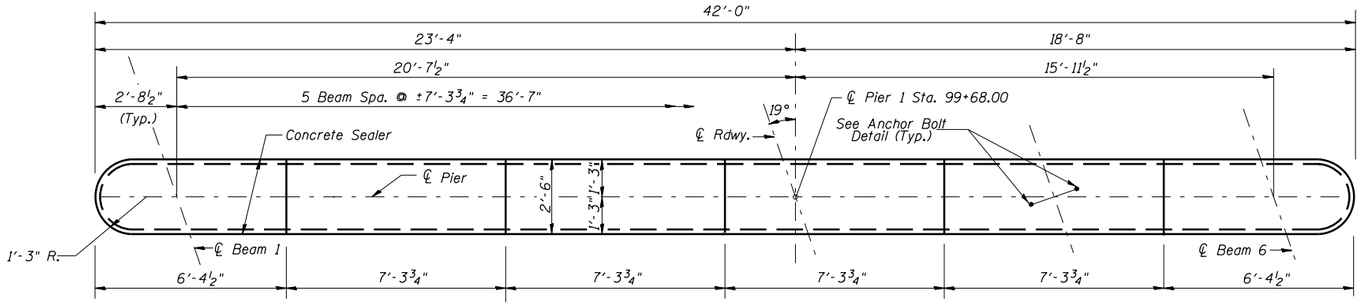
Concrete Sealer shall be applied to the exposed vertical face and top of the pier.

Pour steps monolithically with cap.

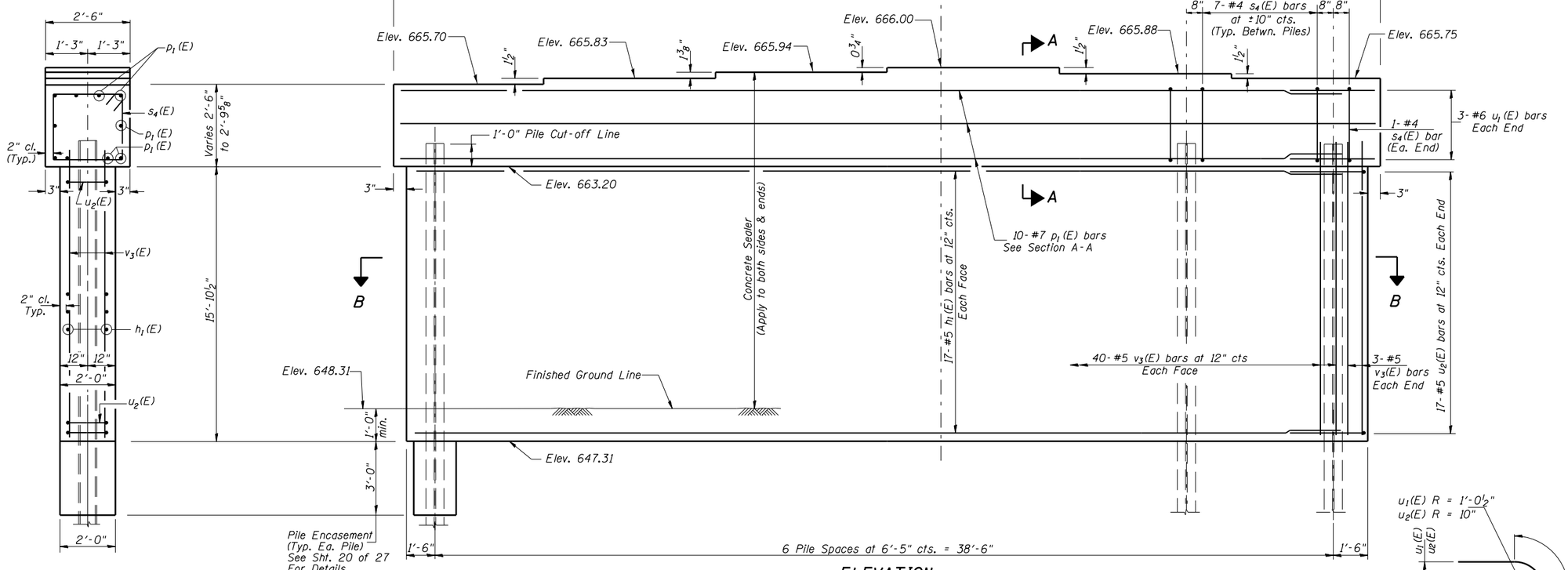
Space reinforcement in cap to miss anchor bolts.



ANCHOR BOLT LOCATION DETAIL



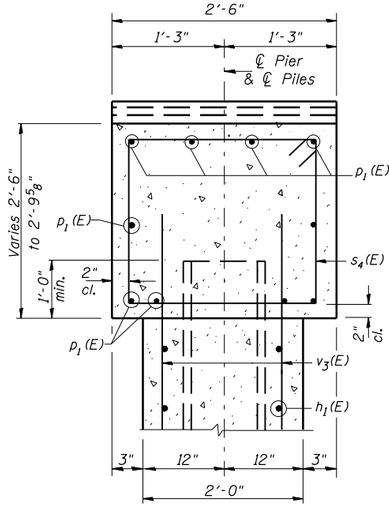
TOP PLAN



ELEVATION

(Looking East)

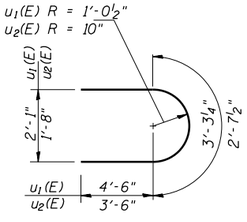
END VIEW



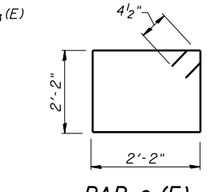
SECTION A-A

BILL OF MATERIAL

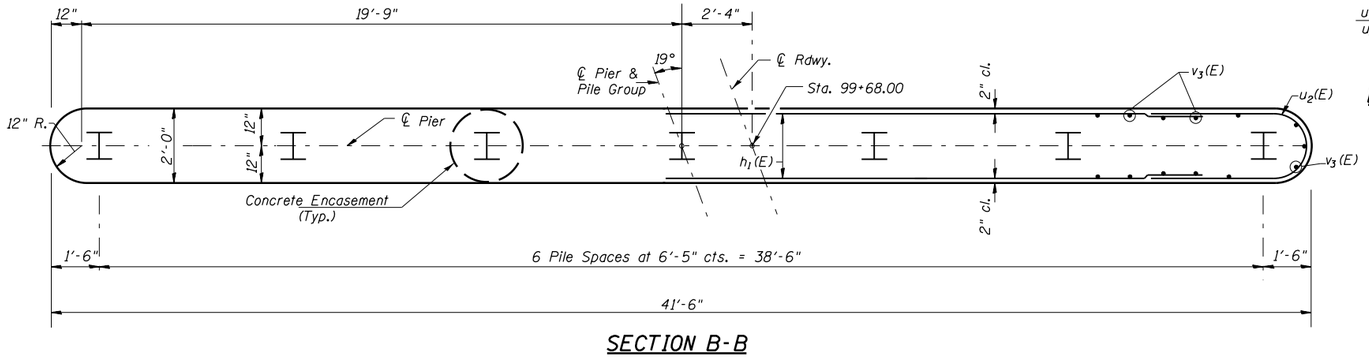
BAR	NO.	SIZE	LENGTH	SHAPE
$h_1(E)$	34	#5	39'-6"	——
$p_1(E)$	10	#7	39'-6"	——
$s_4(E)$	44	#4	9'-5"	□
$u_1(E)$	6	#6	12'-3"	⊂
$u_2(E)$	34	#5	9'-8"	⊂
$v_3(E)$	86	#5	17'-4"	——
Concrete Structures			Cu. Yd.	58.5
Reinforcement Bars, Epoxy Coated			Pound	4,490
Structure Excavation			Cu. Yd.	14
Furnishing Steel Piles HP12x53			Foot	384
Driving Piles			Foot	384
Test Pile Steel HP12x53			Each	1
Concrete Encasement			Cu. Yd.	2.4
Concrete Sealer			Sq. Ft.	1,590



BAR $u_1(E)$ & $u_2(E)$



BAR $s_4(E)$



SECTION B-B

PILE DATA

Type & Size: HP12x53 Steel Pile
Nominal Required Bearing: 405 kips
Allowable Resistance Available: 135 kips
Est. Length: 64'
No. Req'd.: 6 Plus 1 Test Pile

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD & TC
CHECKED	BAN

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	46
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 18 OF 27 SHEETS

* (69-HB)BR

CONTRACT NO. 72837

PIER #1
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 12/21/07

2280-2b118

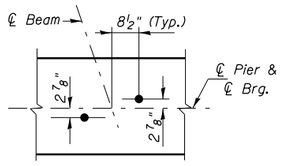
NOTES:

All edges shall have standard $^3/_4$" chamfer.

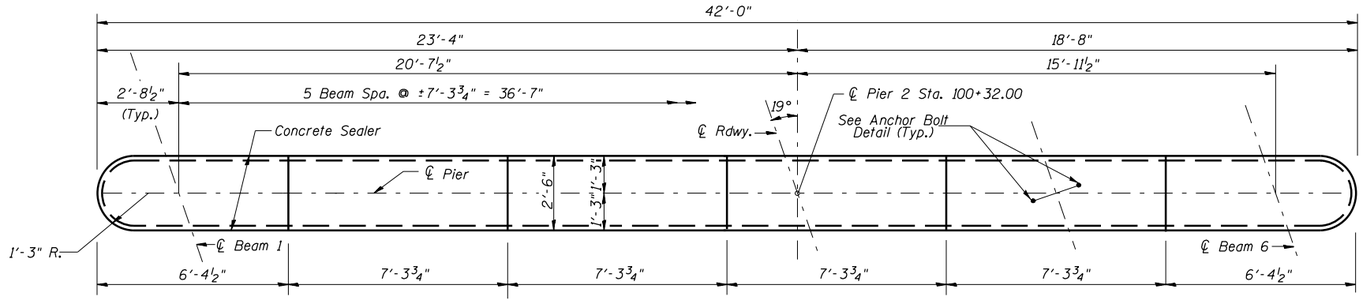
Concrete Sealer shall be applied to the exposed vertical face and top of the pier.

Pour steps monolithically with cap.

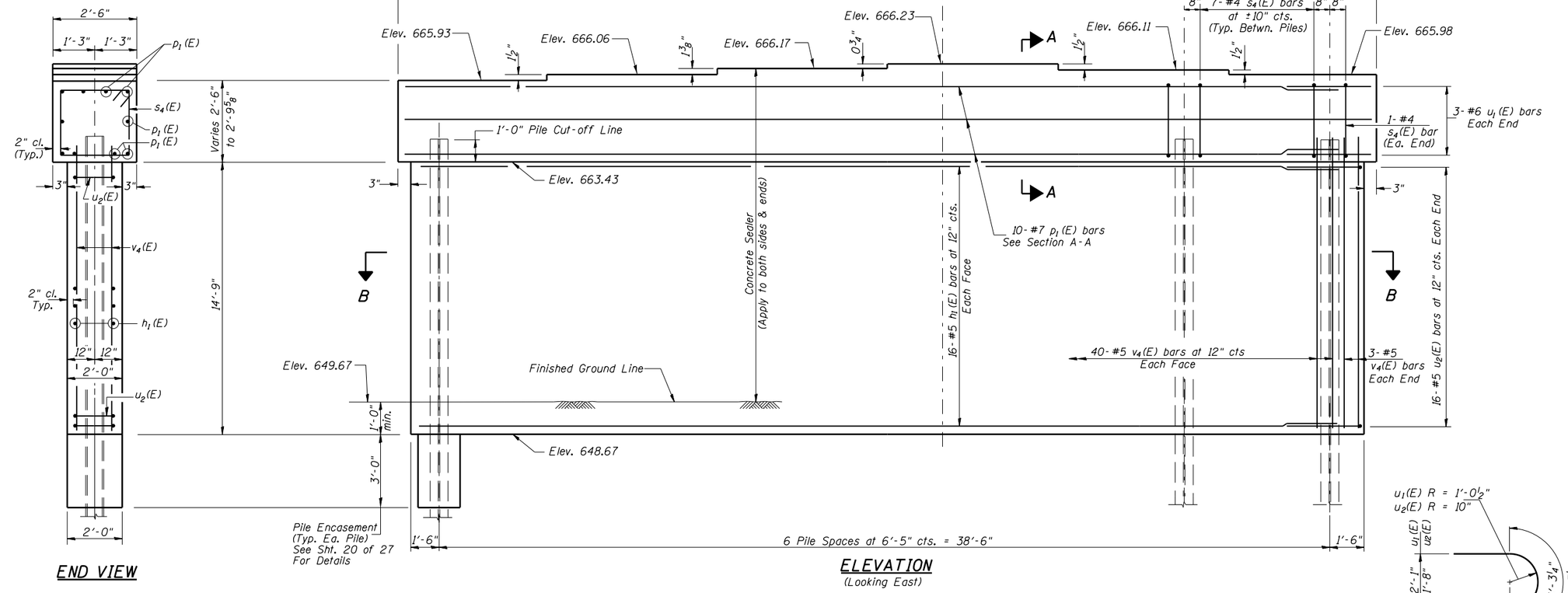
Space reinforcement in cap to miss anchor bolts.



ANCHOR BOLT LOCATION DETAIL

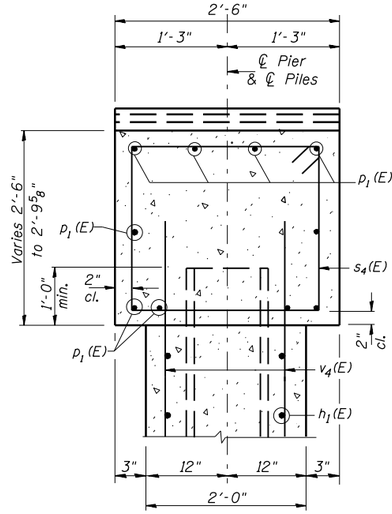


TOP PLAN



ELEVATION
(Looking East)

END VIEW

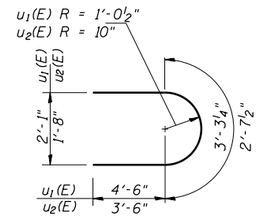


SECTION A-A

BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h_1(E)	32	#5	39'-6"	——
p_1(E)	10	#7	39'-6"	——
s_4(E)	44	#4	9'-5"	☐
u_1(E)	6	#6	12'-3"	⊂
u_2(E)	32	#5	9'-8"	⊂
v_4(E)	86	#5	16'-3"	——

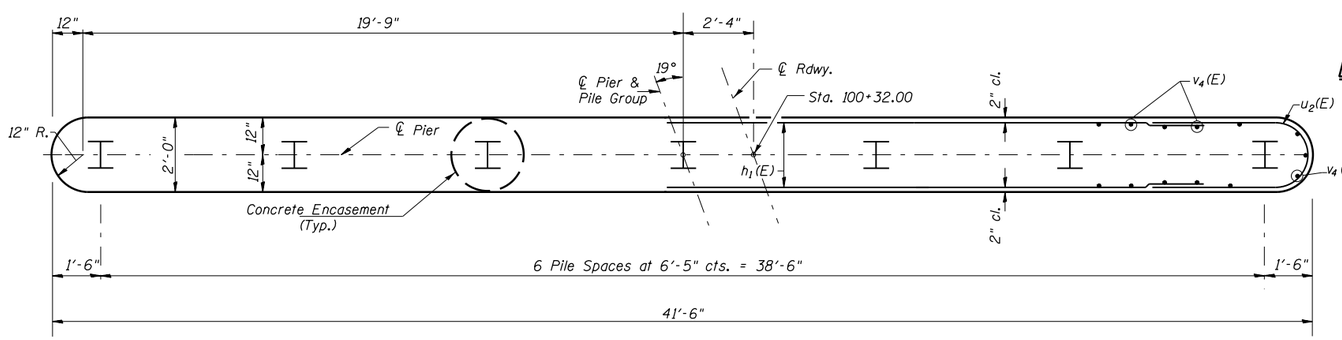
Concrete Structures	Cu. Yd.	55.1
Reinforcement Bars, Epoxy Coated	Pound	4.290
Structure Excavation	Cu. Yd.	14
Furnishing Steel Piles HP12x53	Foot	552
Driving Piles	Foot	552
Test Pile Steel HP12x53	Each	1
Concrete Encasement	Cu. Yd.	2.4
Concrete Sealer	Sq. Ft.	1.490



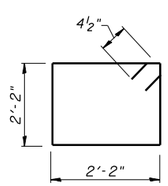
BAR u_1(E) & u_2(E)

PILE DATA

Type & Size: HP12x53 Steel Pile
Nominal Required Bearing: 405 kips
Allowable Resistance Available: 135 kips
Est. Length: 92'
No. Req'd.: 6 Plus 1 Test Pile



SECTION B-B



BAR s_4(E)

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD & TC
CHECKED	BAN

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	47
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 19 OF 27 SHEETS

* (69-HB)BR

CONTRACT NO. 72837

PIER #2
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 12/2/07

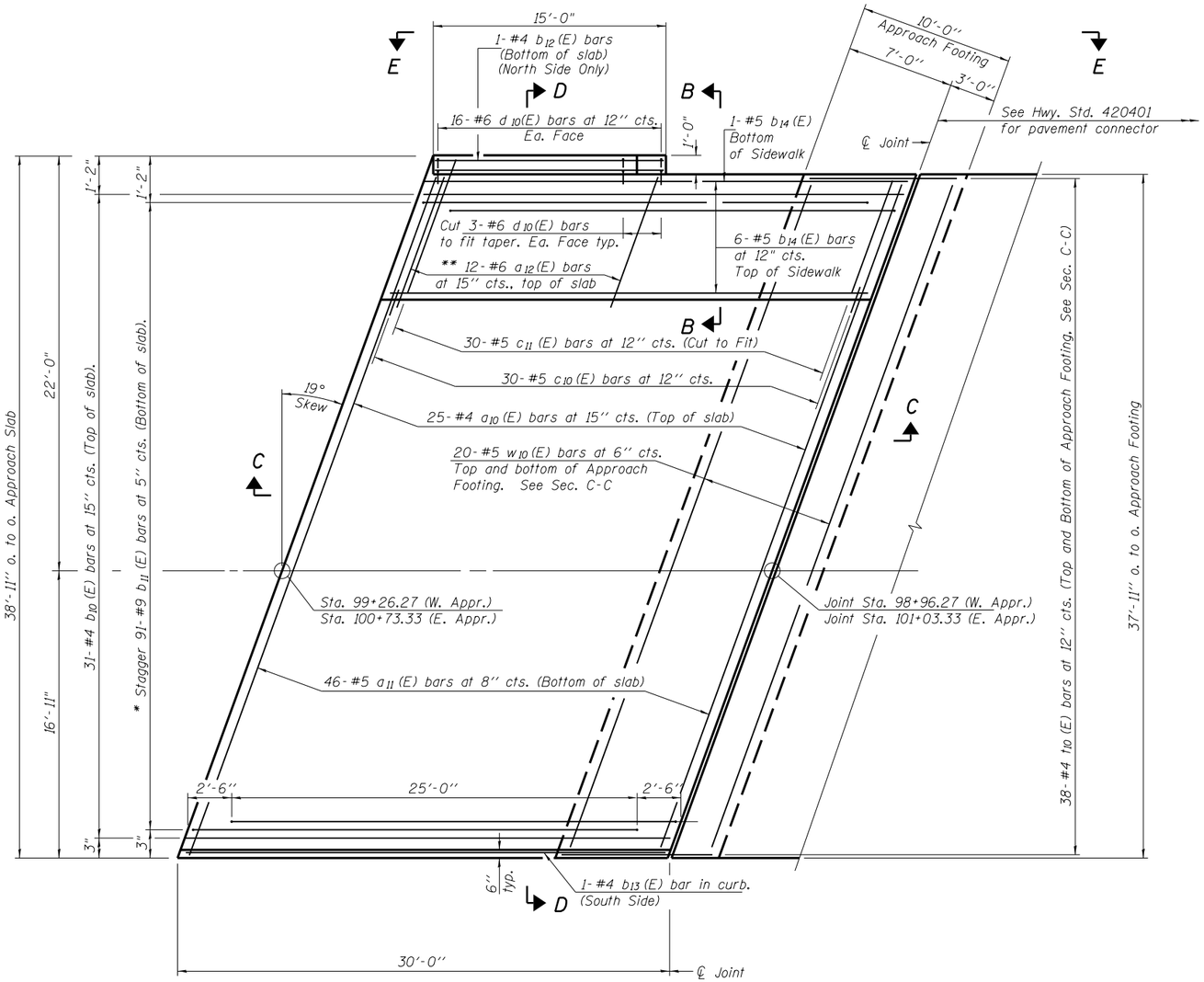
ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	47A
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 19A OF 27 SHEETS

* (69-HB)BR

CONTRACT NO. 72837

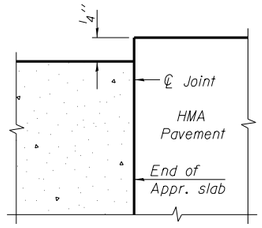
Notes:
See sheet 19B of 27 for Sections C-C & D-D and View E-E.
$a_{10}(E)$, $a_{11}(e)$, $c_{10}(e)$ and $c_{11}(E)$ bar spacings measured along ℄ Rdwy.



PLAN

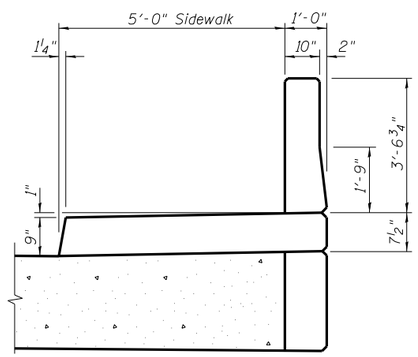
(East Approach shown, West Approach Similar)

* Tilt #9 b_{11}(E) bars as required to maintain clearance.
** Space between a_{10}(E) bars at parapet.



FLEXIBLE PAVEMENT

DETAIL A



VIEW B-B

DESIGNED	BAN
CHECKED	JOH
DRAWN	TAC
CHECKED	BAN

2280-2b119A

(Sheet 1 of 2)

BRIDGE APPROACH SLAB DETAILS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

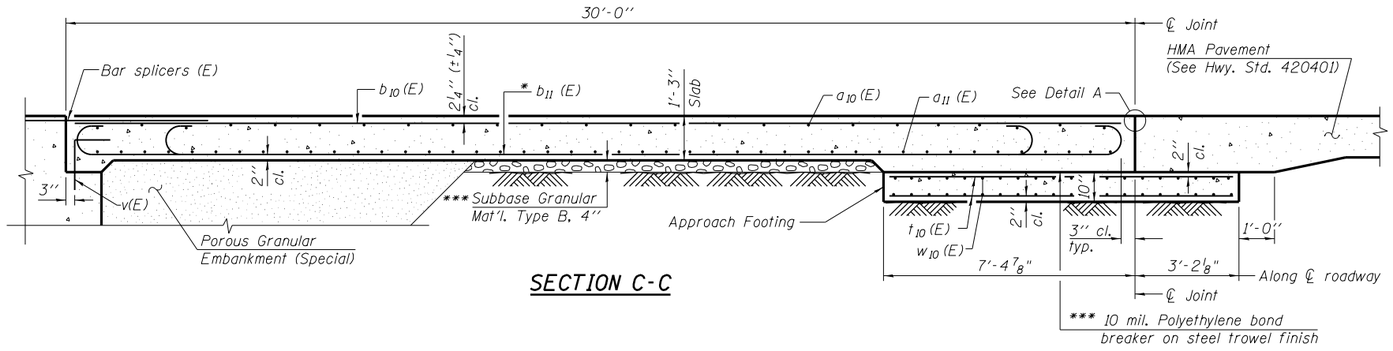
HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 12/21/07

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	47B
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

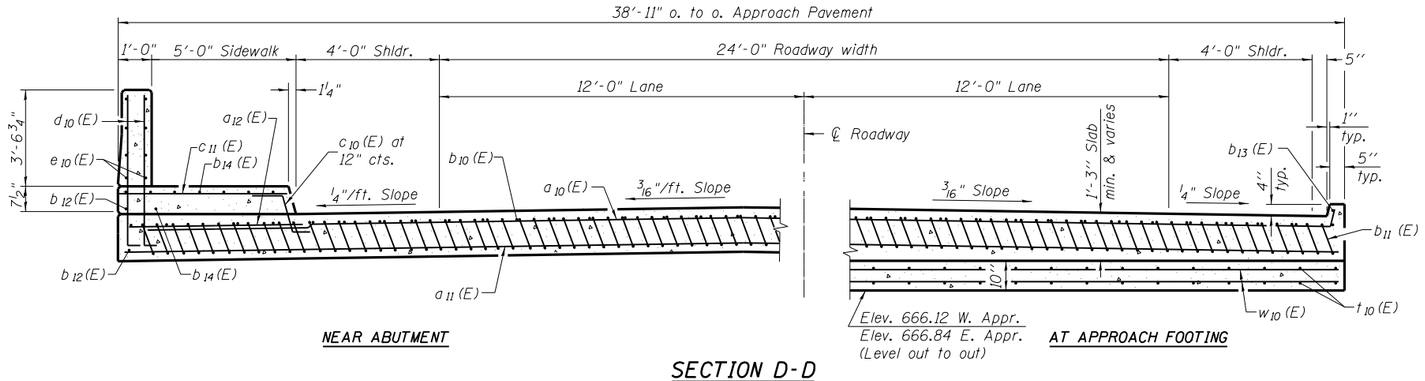
SHEET NO. 19B OF 27 SHEETS

* (69-HB)BR

CONTRACT NO. 72837



SECTION C-C

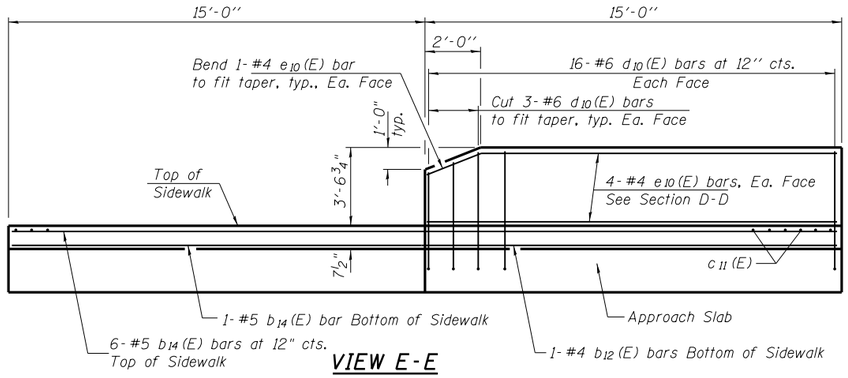


NEAR ABUTMENT

AT APPROACH FOOTING

SECTION D-D

(See Plan for dimensions not shown)



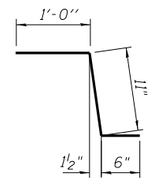
VIEW E-E

* Tilt #9 b_{11} (E) bars as required to maintain clearance.

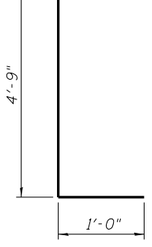
*** Cost included with Concrete Superstructure.

TWO APPROACHES
BILL OF MATERIAL

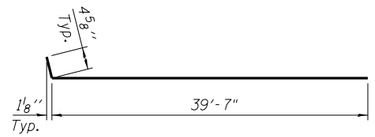
Bar	No.	Size	Length	Shape
a_{10} (E)	50	#4	40'-0"	
a_{11} (E)	92	#5	39'-9"	
a_{12} (E)	24	#6	8'-0"	
b_{10} (E)	62	#4	29'-8"	
b_{11} (E)	182	#9	29'-9"	
b_{12} (E)	2	#4	14'-8"	
b_{13} (E)	2	#4	29'-8"	
b_{14} (E)	14	#5	29'-8"	
c_{10} (E)	60	#5	2'-5"	
c_{11} (E)	60	#5	5'-6"	
d_{10} (E)	64	#6	5'-9"	
e_{10} (E)	16	#4	14'-8"	
t_{10} (E)	152	#4	10'-3"	
w_{10} (E)	80	#5	39'-9"	
Concrete Superstructure		Cu. Yd.	125.3	
Concrete Structures		Cu. Yd.	24.8	
Reinforcement Bars, Epoxy Coated		Pound	31.130	



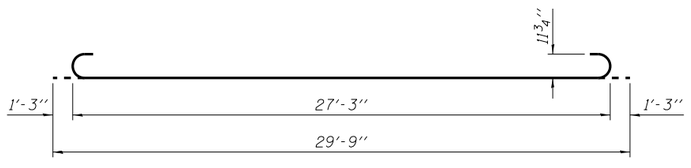
BAR c_{10} (E)



BAR d_{10} (E)



BAR a_{10} (E)



BAR b_{11} (E)

Notes:
- See sheet 19A of 27 for Detail A and View B-B.
- Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
- Approach footing concrete shall be paid for as Concrete Structures.
- Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
- For v(E) bar details, see sheet 12 of 27.
- The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
- For bar splicer details, see sheet 21 of 27.
- Cost of excavation for approach footing included with Concrete Structures.
- For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 27.
- For additional parapet details, see sheet 19A of 27.

(Sheet 2 of 2)

BRIDGE APPROACH SLAB DETAILS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

DESIGNED	BAN
CHECKED	JOH
DRAWN	TAC
CHECKED	BAN

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 10/8/10

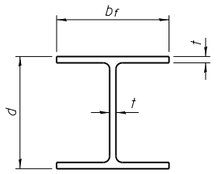
2280-2b119B

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	48
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 20 OF 27 SHEETS

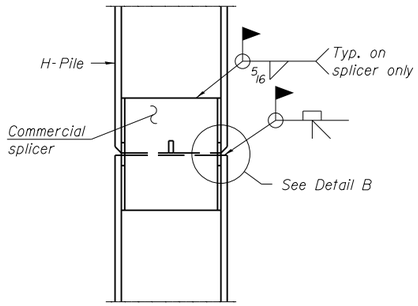
* (69-HB)BR

CONTRACT NO. 72837

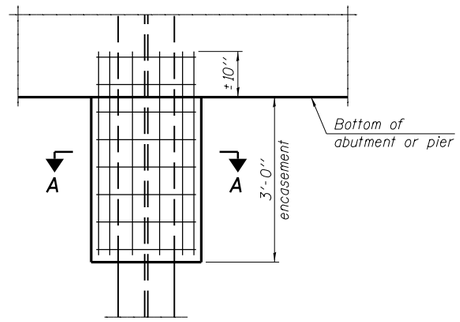


STEEL PILE TABLE

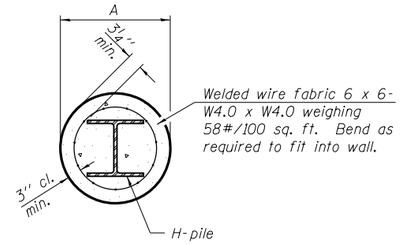
Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4''	14 7/8''	13/16''	30''
x102	14''	14 3/4''	11/16''	30''
x89	13 7/8''	14 3/4''	5/8''	30''
x73	13 5/8''	14 5/8''	1/2''	30''
HP 12x84	12 1/4''	12 1/4''	11/16''	24''
x74	12 1/8''	12 1/4''	5/8''	24''
x63	12''	12 1/8''	1/2''	24''
x53	11 3/4''	12''	7/16''	24''
HP 10x57	10''	10 1/4''	9/16''	24''
x42	9 3/4''	10 1/8''	7/16''	24''
HP 8x36	8''	8 1/8''	7/16''	18''



ELEVATION



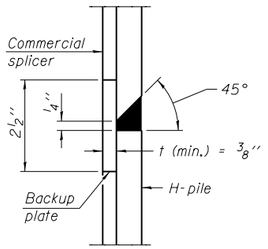
ELEVATION



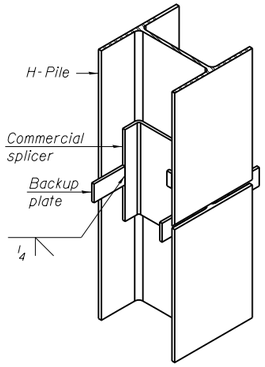
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

PILE ENCASEMENT

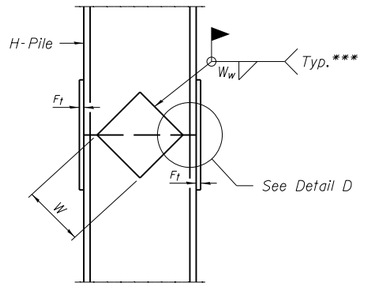


DETAIL "B"

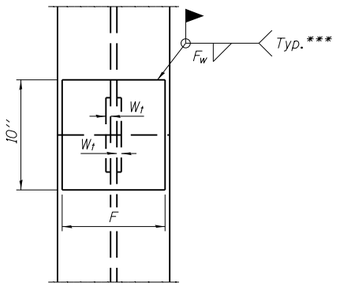


ISOMETRIC VIEW

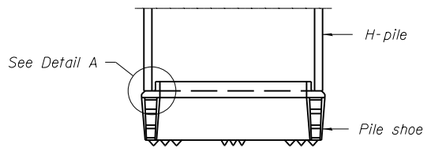
WELDED COMMERCIAL SPLICE



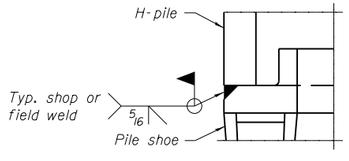
ELEVATION



END VIEW

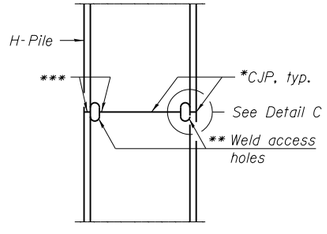


ELEVATION

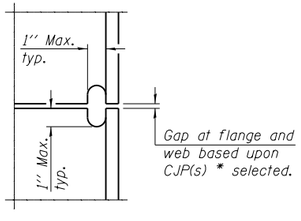


DETAIL A

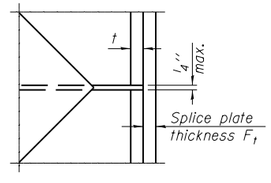
H-PILE SHOE ATTACHMENT



ELEVATION



DETAIL C



DETAIL D

COMPLETE PENETRATION WELD SPLICE

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

* Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.

** Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.

*** Interrupt welds 1/4'' from end of each pile.

WELDED PLATE FIELD SPLICE

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

STEEL H-PILE DETAILS
MOUND ROAD (FAU ROUTE 8173) OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

F-HP 11-1-06

2280-2b120

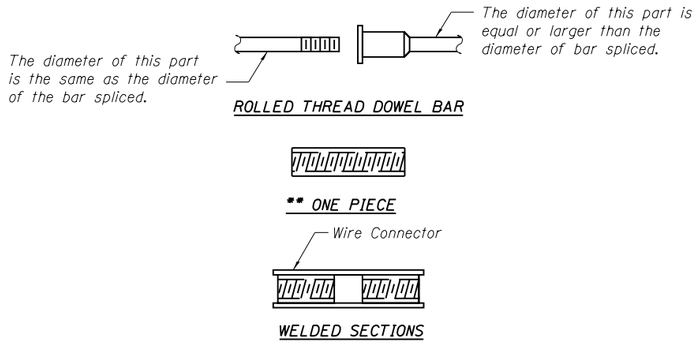
HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 101810

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	49
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 21 OF 27 SHEETS

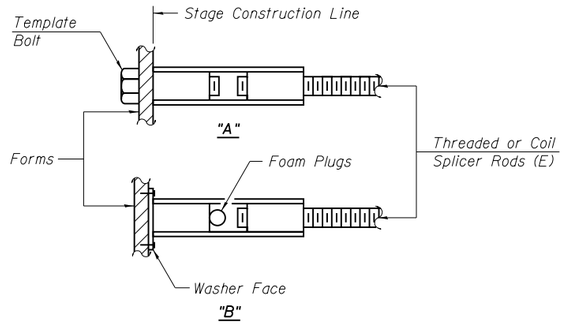
* (69-HB)BR

CONTRACT NO. 72837



BAR SPLICER ASSEMBLY ALTERNATIVES

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



INSTALLATION AND SETTING METHODS

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

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

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

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

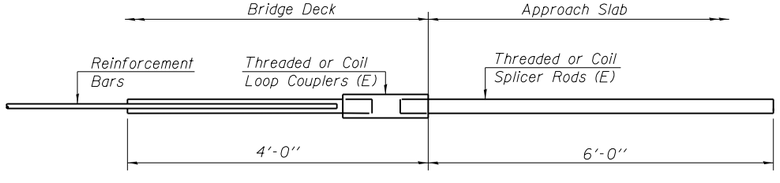
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

① Minimum Capacity (Tension in kips) = $1.25 \times fy \times A_t$

② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times fy \times A_t$

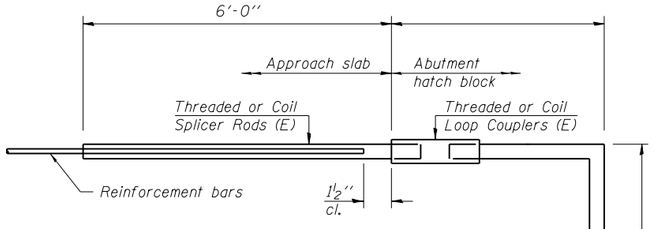
Where fy = Yield strength of lapped reinforcement bars in ksi.
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

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



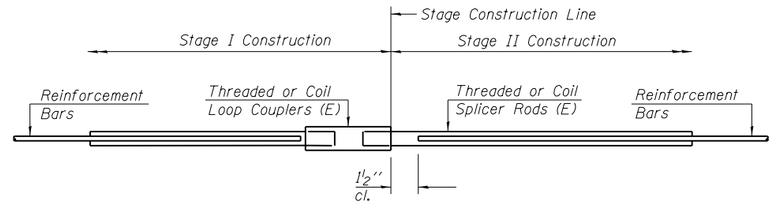
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 76



FOR STUB ABUTMENTS

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



STANDARD

Bar Size	No. Assemblies Required	Location

DESIGNED	BAN
CHECKED	JOH
DRAWN	TAC
CHECKED	BAN

BSD-1

11-1-06

2280-2b121

BAR SPLICER ASSEMBLY DETAILS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS

Date: 10/18/10

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	50
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 22 OF 27 SHEETS

* (69-HB)BR

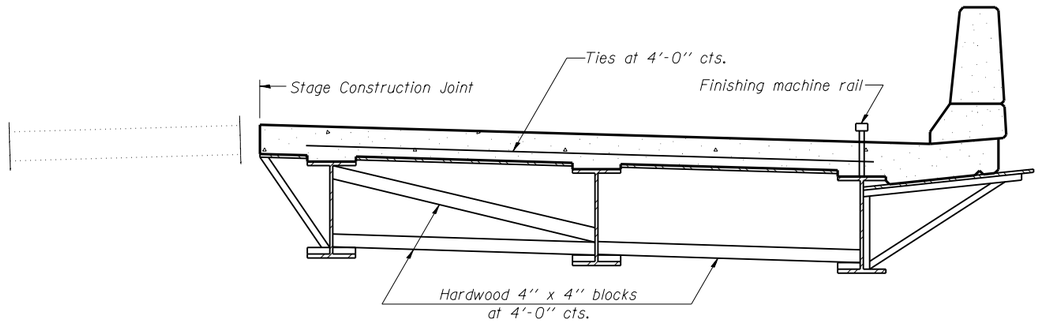
CONTRACT 72837

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

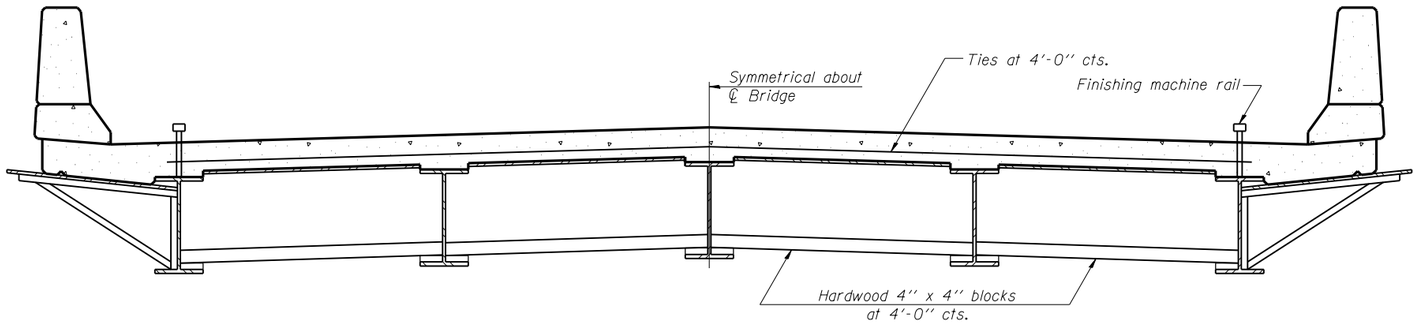
The finishing machine rails shall be placed on the top flange of the exterior beams.

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

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



FORM BRACES FOR
STAGE CONSTRUCTION



FORM BRACES FOR
STANDARD CONSTRUCTION

DESIGNED	BAN
CHECKED	JOH
DRAWN	TD
CHECKED	BAN

SB-1

11-1-06

2280-2b122

CANTILEVER FORMING BRACKETS
FOR SUPERSTRUCTURES WITH
W27 BEAMS AND SMALLER
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 101810

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	51
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 23 OF 27 SHEETS

*(69-HB)BR

CONTRACT NO. 72837

Illinois Department of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Page 1 of 2

Date 5/27/05

ROUTE FAU 8173 DESCRIPTION Mound Road over IL 104 LOGGED BY M. Tappan

SECTION (69-HB)BR LOCATION SW 1/4, SEC. 24, TWP. 15 N, RNG. 10 W, 3 PM

COUNTY Morgan DRILLING METHOD HSA HAMMER TYPE 140 # Auto

STRUCT. NO. 069-0031 Ex 069-0521 Pr
Station 100+00

BORING NO. 1 W. Abut
Station 99+24
Offset 7.0ft Lt
Ground Surface Elev. 667.7 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
▽ First Encounter 643.7 ft
▽ Upon Completion Washed ft
▼ After ___ Hrs. Plugged ft

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
Brown Moist SILTY CLAY			
	1		
-5	2 2	0.7 B	28
662.20			
Light Greyish Brown Moist SILTY CLAY LOAM			
	0		
	1 1	0.6 B	27
659.70			
Light Greyish Brown V. Moist SILT LOAM			
	0		
	1 1	0.4 B	27
-10			
	0		
Moist	1 2	0.8 B	25
654.70			
Light Greyish Brown Moist SILTY CLAY LOAM			
	1		
	3 4	1.5 B	20
-15			
651.20	1		
Grey and Brown Moist SILTY CLAY	2 5	1.7 B	21
649.70			
Grey and Brown Moist SANDY CLAY LOAM			
	1		
-20	2 3	1.0 B	19
Grey and Brown Moist SANDY CLAY LOAM (continued)			
	1		
	4 6	1.6 B	21
644.70			
Brown Medium Grained Dirty SAND			
Free Water ▽	1		
	2		
-25	4		
	0		
	1		
Grey Medium to Coarse Grained SAND	1		
639.70			
CLAY LOAM (Till)			
	1		
	11 15	5.2 S-12	10
-30			
Brown and Grey Moist CLAY LOAM (Till)			
	3		
Grey Moist CLAY LOAM (Till)	13 21	5.7 S-12	8
-35			
	2		
	10 16	5.2 B	13
-40			

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

File Name S:\SOILS\JOINT FILES\MORGAN\069-0521 PR MOUND ROAD OVER IL 104.GPJ Data Template DOTEMPLT.GDT Date Printed 8/16/06
Latitude 39 Deg 43.609 N Longitude 90 Deg 16.439 W Datum NAD83 Job Number D86-554-03

Illinois Department of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Page 2 of 2

Date 5/27/05

ROUTE FAU 8173 DESCRIPTION Mound Road over IL 104 LOGGED BY M. Tappan

SECTION (69-HB)BR LOCATION SW 1/4, SEC. 24, TWP. 15 N, RNG. 10 W, 3 PM

COUNTY Morgan DRILLING METHOD HSA HAMMER TYPE 140 # Auto

STRUCT. NO. 069-0031 Ex 069-0521 Pr
Station 100+00

BORING NO. 1 W. Abut
Station 99+24
Offset 7.0ft Lt
Ground Surface Elev. 667.7 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
▽ First Encounter 643.7 ft
▽ Upon Completion Washed ft
▼ After ___ Hrs. Plugged ft

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
CLAY LOAM (Till) (continued)			
	1		
Grey Moist CLAY LOAM (Till)	12 19	6.1 S-12	11
-45			
	5		
w/ 8" Coarse Grained SAND Seam	25 12	5.9 B	10
-50			
	5		
Grey Moist CLAY LOAM (Till) w/ Sandy Clay Loam (Till) Seams	26 70	10.0 E	12
-55			
	2		
w/ SILT Seams	15 17	5.3 S-12	18
-60			
CLAY LOAM (Till) (continued)			
	1		
	4		
w/ SILT Seams	16 23	6.7 B	13
-65			
	4		
Grey Moist CLAY LOAM (Till)	8 14	3.8 B	14
-70			
	5		
Olive Brown and Grey Moist CLAY LOAM (Till)	17 24	6.2 B	12
592.70 -75			
Boring Completed			
-80			

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

File Name S:\SOILS\JOINT FILES\MORGAN\069-0521 PR MOUND ROAD OVER IL 104.GPJ Data Template DOTEMPLT.GDT Date Printed 8/16/06
Latitude 39 Deg 43.609 N Longitude 90 Deg 16.439 W Datum NAD83 Job Number D86-554-03

DESIGNED	BAN
CHECKED	JOH
DRAWN	TAC
CHECKED	BAN

SOIL BORINGS LOGS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 10/8/10

2280-2b123

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	52
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 24 OF 27 SHEETS

* (69-HB)BR

CONTRACT NO. 72837

Illinois Department of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Page 1 of 3

Date 5/26/05

ROUTE FAU 8173 DESCRIPTION Mound Road over IL 104 LOGGED BY M. Tappan

SECTION (69-HB)BR LOCATION SW 1/4, SEC. 24, TWP. 15 N, RNG. 10 W, 3 PM

COUNTY Morgan DRILLING METHOD HSA HAMMER TYPE 140 # Auto

STRUCT. NO. 069-0031 Ex 069-0521 Pr
Station 100+00

BORING NO. 2 W. Pier
Station 99+80
Offset 24.0ft Rt
Ground Surface Elev. 649.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
▽ First Encounter No Encounter ft
▽ Upon Completion Dry ft
▼ After ____ Hrs. Plugged ft

DEPTH (ft)	BLOWS /6"	UCS Qu	MOIST (%)
Crushed Stone (Fill)			
647.50			
CLAY LOAM (Till)			
	1		
Greyish Brown Moist CLAY LOAM (Till)	6	4.1	16
-5	7	B	
	3		
	8	5.0	15
	12	B	
	3		
Grey Moist CLAY LOAM (Till)	7	5.7	12
-10	11	B	
	3		
	8	6.0	12
	10	B	
	3		
	7	6.2	12
-15	11	B	
	2		
	8	6.9	11
	13	B	
	2		
Grey Moist CLAY LOAM (Till)	7	3.3	13
-20	12	S-11	

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
CLAY LOAM (Till) (continued)			
	3		
Grey Moist CLAY LOAM (Till)	16	7.0	10
	24	S-10	
	7		
w/ Sandy Clay Loam Seams	21	8.0	11
Broken Sample	27	E	
-25			
	2		
Grey Moist CLAY LOAM (Till)	14	4.5	11
-30	16	B	
	1		
	5	4.5	15
-35	9	B	
	2		
	7	4.5	14
-40	10	B	

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

File Name S:\SOILS\GINT_FILES\MORGAN\069-0521_PR_MOUND_ROAD_OVER_IL_104.GPJ Data Template DOTEMPLT.GDT Date Printed 8/16/06
Latitude 39 Deg 43.611' N Longitude 90 Deg 16.413' W Datum NAD83 Job Number 0596-554-03

Illinois Department of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Page 2 of 3

Date 5/26/05

ROUTE FAU 8173 DESCRIPTION Mound Road over IL 104 LOGGED BY M. Tappan

SECTION (69-HB)BR LOCATION SW 1/4, SEC. 24, TWP. 15 N, RNG. 10 W, 3 PM

COUNTY Morgan DRILLING METHOD HSA HAMMER TYPE 140 # Auto

STRUCT. NO. 069-0031 Ex 069-0521 Pr
Station 100+00

BORING NO. 2 W. Pier
Station 99+80
Offset 24.0ft Rt
Ground Surface Elev. 649.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
▽ First Encounter No Encounter ft
▽ Upon Completion Dry ft
▼ After ____ Hrs. Plugged ft

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
CLAY LOAM (Till) (continued)			
	1		
Grey Moist CLAY LOAM (Till)	6	4.3	14
-45	9	B	
	2		
Olive Grey Moist CLAY LOAM (Till)	8	3.8	16
-50	9	B	
	1		
Grey Moist CLAY LOAM (Till)	5	4.7	16
-55	7	B	
	1		
	3	2.6	16
-60	5	B	

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
CLAY LOAM (Till) (continued)			
-65			
	2		
Grey Moist CLAY LOAM (Till)	4	4.1	20
-70	8	B	
-75			
	1		
Grey Moist CLAY LOAM (Till)	5	2.8	19
-80	7	B	

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

File Name S:\SOILS\GINT_FILES\MORGAN\069-0521_PR_MOUND_ROAD_OVER_IL_104.GPJ Data Template DOTEMPLT.GDT Date Printed 8/16/06
Latitude 39 Deg 43.611' N Longitude 90 Deg 16.413' W Datum NAD83 Job Number 0596-554-03

DESIGNED	BAN
CHECKED	JOH
DRAWN	TAC
CHECKED	BAN

SOIL BORINGS LOGS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 10/8/10

2280-2b124

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	53
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 25 OF 27 SHEETS

* (69-HB)BR

CONTRACT NO. 72837

Illinois Department of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Page 3 of 3

Date 5/26/05

ROUTE FAU 8173 DESCRIPTION Mound Road over IL 104 LOGGED BY M. Tappan

SECTION (69-HB)BR LOCATION SW 1/4, SEC. 24, TWP. 15 N, RNG. 10 W, 3 PM

COUNTY Morgan DRILLING METHOD HSA HAMMER TYPE 140 # Auto

STRUCT. NO. 069-0031 Ex 069-0521 Pr
Station 100+00

BORING NO. 2 W. Pier
Station 99+80
Offset 24.0ft Rt
Ground Surface Elev. 649.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
▽ First Encounter No Encounter ft
▽ Upon Completion Dry ft
▼ After Hrs. Plugged ft

	DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
CLAY LOAM (Till) (continued)				
	564.00 -85			
CLAY (Till)				
		1		
Greyish Brown Moist CLAY (Till) w/ Slickensides		2	2.4	28
	-90	5	B	
	-95			
		1		
Light Blue Grey and Olive Brown Moist CLAY (Till) w/ Slickensides		3	2.7	26
	549.00 -100	7	B	

	DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
Boring Completed				
	-105			
	-110			
	-115			
	-120			

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

File Name S:\SOILS\GINT FILES\MORGAN\069-0521 PR MOUND ROAD OVER IL 104.GPJ Data Template DSTEMPLT.GDT Date Printed 8/16/06
Latitude 39 Deg 43.611 N Longitude 90 Deg 16.415 W Datum NAD83 Job Number 096-534-03

Illinois Department of Transportation
Division of Highways
District 6

SOIL BORING LOG

Page 1 of 1

Date 1/26/07

ROUTE FAU 8173 DESCRIPTION Mound Road over IL 104 LOGGED BY M. Tappan

SECTION (69-HB)BR LOCATION SW 1/4, SEC. 24, TWP. 15 N, RNG. 10 W, 3 PM

COUNTY Morgan DRILLING METHOD HSA HAMMER TYPE 140 # Auto

STRUCT. NO. 069-0031 Ex 069-0521 Pr
Station 100+00

BORING NO. 3A E. Pier
Station 100+27
Offset 6.0ft Rt
Ground Surface Elev. 650.7 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
▽ First Encounter 644.2 ft
▽ Upon Completion Plugged ft
▼ After Hrs. ft

	DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
Brown Moist SILTY CLAY LOAM Disturbed Sample		0		
		1	0.5	22
		1	B	
	647.20			
Grey and Brown Moist V. Weatehred SILTY CLAY (Till) Disturbed Sample		2		
		3	1.0	19
	-5	3	B	
	644.70			
Light Blue Grey Fine Grained V. ▽ Dirty SAND Free Water		1		
		2		
		2		
		0		
Brown Medium Grained Dirty SAND		1		
	-10	2		
Grey		0		
	638.70	1	3.5	14
Brown and Grey Moist CLAY LOAM (Till)		4	P	
		4		
Grey		8	6.4	14
	-15	11	B	
		2		
		6	5.6	13
		9	B	
		2		
		5	4.9	16
	630.70 -20	7	B	

	DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
Boring Completed Bored through deck of existing structure to obtain samples at proposed spread footing elevation. Refer STA, Elevation to cL of Existing Structure 069-0031				
	-25			
	-30			
	-35			
	-40			

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

File Name S:\SOILS\GINT FILES\MORGAN\069-0521 PR MOUND ROAD OVER IL 104.GPJ Data Template DSTEMPLT.GDT Date Printed 10/15/10
Latitude 39 Deg 43.623 N Longitude 90 Deg 16.422 W Datum NAD83 Job Number 096-534-03

DESIGNED	BAN
CHECKED	JOH
DRAWN	TAC
CHECKED	BAN

SOIL BORINGS LOGS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 10/1810

2280-2b125

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	54
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 26 OF 27 SHEETS

* (69-HB)BR

CONTRACT NO. 72837

Illinois Department of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Date 5/24/05

ROUTE FAU 8173 DESCRIPTION Mound Road over IL 104 LOGGED BY M. Tappan

SECTION (69-HB)BR LOCATION SW 1/4, SEC. 24, TWP. 15 N, RNG. 10 W, 3 PM

COUNTY Morgan DRILLING METHOD HSA HAMMER TYPE 140 # Auto

STRUCT. NO. 069-0031 Ex 069-0521 Pr
Station 100+00

BORING NO. 3 E. Pier
Station 100+20
Offset 34.0ft Lt
Ground Surface Elev. 650.4 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
▽ First Encounter 611.4 ft
▽ Upon Completion Washed ft
▼ After ____ Hrs. Plugged ft

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	Material
				Crushed Stone to Reddish Brown Moist SANDY CLAY LOAM (Fill)
	1			
	8	0.7	21	
	4	B		
647.40				
				CLAY LOAM (Till)
	1			
	4	2.7	17	Olive Brown and Blue Grey Moist CLAY LOAM (Till)
-5	8	B		
	2			
	7	3.8	16	
	9	B		
	2			
	7	4.2	14	Grey Moist CLAY LOAM (Till)
-10	10	B		
	2			
	6	4.2	13	
	10	B		
	3			
	6	4.9	13	
-15	10	B		
	2			
	6	4.0	13	
	9	B		
	3			
	6	4.3	13	
-20	10	B		

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	Material
				CLAY LOAM (Till) (continued)
	2			
	6	4.1	8	Grey Moist CLAY LOAM (Till)
	9	S-14		
	3			
	6	4.0	10	
-25	10	S-12		
	3			
	6	4.5	12	Grey Moist CLAY LOAM (Till)
-30	18	S-10		
	3			
	6	3.5	10	
615.40 -35	10	S-10		
				SAND
				Grey V. Fine Grained SAND
				Interbedded with Grey Varved
				SILT Seams
				Free Water
	2			
	14			
-40	21			

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

File Name S:\SOILS\GINT FILES\MORGAN\069-0521 PR MOUND ROAD OVER IL 104.GPJ Data Template DOTEMPLT.GDT Date Printed 8/16/06
Latitude 39 Deg 43.835 N Longitude 90 Deg 16.426 W Datum NAD83 Job Number 096-554-03

Illinois Department of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Date 5/24/05

ROUTE FAU 8173 DESCRIPTION Mound Road over IL 104 LOGGED BY M. Tappan

SECTION (69-HB)BR LOCATION SW 1/4, SEC. 24, TWP. 15 N, RNG. 10 W, 3 PM

COUNTY Morgan DRILLING METHOD HSA HAMMER TYPE 140 # Auto

STRUCT. NO. 069-0031 Ex 069-0521 Pr
Station 100+00

BORING NO. 3 E. Pier
Station 100+20
Offset 34.0ft Lt
Ground Surface Elev. 650.4 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
▽ First Encounter 611.4 ft
▽ Upon Completion Washed ft
▼ After ____ Hrs. Plugged ft

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	Material
				SAND (continued)
609.40				
				Grey Moist CLAY LOAM (Till)
				Washed
	5			
	14	7.7	12	
-45	23	S-10		
	5			
	9	5.7	14	
-50	15	B		
	2			
	8	5.4	15	
-55	12	B		
	3			
	7	3.2	16	Grey Moist CLAY LOAM (Till)
590.40 -60	12	B		

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	Material
				Boring Completed
-65				
-70				
-75				
-80				

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

File Name S:\SOILS\GINT FILES\MORGAN\069-0521 PR MOUND ROAD OVER IL 104.GPJ Data Template DOTEMPLT.GDT Date Printed 8/16/06
Latitude 39 Deg 43.835 N Longitude 90 Deg 16.426 W Datum NAD83 Job Number 096-554-03

DESIGNED	BAN
CHECKED	JOH
DRAWN	TAC
CHECKED	BAN

SOIL BORINGS LOGS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 101810

2280-2b126

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 8173	*	MORGAN	63	55
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SHEET NO. 27 OF 27 SHEETS

* (69-HB)BR

CONTRACT NO. 72837

Illinois Department of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Date 5/31/05

ROUTE FAU 8173 DESCRIPTION Mound Road over IL 104 LOGGED BY M. Tappan

SECTION (69-HB)BR LOCATION SW 1/4, SEC. 24, TWP. 15 N, RNG. 10 W, 3 PM

COUNTY Morgan DRILLING METHOD HSA HAMMER TYPE 140 # Auto

STRUCT. NO. 069-0031 Ex 069-0521 Pr
Station 100+00

BORING NO. 4 E. Abut
Station 101+09
Offset 7.0ft Rt
Ground Surface Elev. 668.7 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
▽ First Encounter No Encounter ft
▽ Upon Completion Dry ft
▼ After ___ Hrs. Plugged ft

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
Asphalt and Concrete			
667.20			
Brown Moist SILTY CLAY			
	1		
-5	2 2	0.7 B	28
663.20			
Grey and Light Brown V. Moist SILT LOAM			
	0		
	1 1	0.4 B	27
	0		
Moist	1	0.4	25
-10	2	B	
658.20			
Brown Moist SILTY CLAY LOAM			
	0		
	2 3	1.5 B	22
655.70			
Grey and Brown Moist SILTY CLAY			
	1		
-15	2 3	1.4 B	17
653.20			
Grey and Brown Moist SANDY CLAY LOAM			
	1		
	2 4	1.6 B	18
650.70			
CLAY LOAM (Till)			
	1		
Grey and Brown Moist Weathered CLAY LOAM (Till)	2	1.7	20
-20	5	B	

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
CLAY LOAM (Till) (continued)			
	2		
Brown and Grey to Grey Moist CLAY LOAM (Till)	4 10	3.1 B	14
	3		
Grey	7 9	5.2 B	11
-25			
	2		
Grey Moist CLAY LOAM (Till)	7 8	5.0 S-14	13
-30			
	3		
	7 9	4.2 B	13
-35			
	3		
	7 10	4.4 B	12
-40			

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

File Name S:\SOILS\CONT FILES\MORGAN\069-0521 PR MOUND ROAD OVER IL 104.GPJ Data Template DBTEMPLT.GDT Date Printed 8/16/06
Latitude 39 Deg 43.626 N Longitude 90 Deg 16.398 W Datum NAD83 Job Number 096-554-03

Illinois Department of Transportation
Division of Highways
IDOT District 6

SOIL BORING LOG

Date 5/31/05

ROUTE FAU 8173 DESCRIPTION Mound Road over IL 104 LOGGED BY M. Tappan

SECTION (69-HB)BR LOCATION SW 1/4, SEC. 24, TWP. 15 N, RNG. 10 W, 3 PM

COUNTY Morgan DRILLING METHOD HSA HAMMER TYPE 140 # Auto

STRUCT. NO. 069-0031 Ex 069-0521 Pr
Station 100+00

BORING NO. 4 E. Abut
Station 101+09
Offset 7.0ft Rt
Ground Surface Elev. 668.7 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
▽ First Encounter No Encounter ft
▽ Upon Completion Dry ft
▼ After ___ Hrs. Plugged ft

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
CLAY LOAM (Till) (continued)			
	4		
Grey Moist CLAY LOAM (Till)	8	5.1	12
-45	10	B	
	3		
	7	5.3	15
-50	12	B	
	2		
	7	4.4	15
-55	8	B	
	3		
Grey Moist CLAY LOAM (Till)	5	3.9	15
-60	8	B	

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
CLAY LOAM (Till) (continued)			
	2		
Grey Moist CLAY LOAM (Till)	4	3.5	16
-65	7	B	
	2		
	3	2.7	16
-70	5	B	
	3		
Olive Grey and Brown Moist CLAY LOAM (Till)	7	5.3	14
593.70 -75	13	B	
Boring Completed			
Refer STA to cL of Existing Structure, SN 069-0031 cL = 100+00, Increase to East			
Refer Elevation to BM Chisled Square on Fire Hydrant = 670.3'			
-80			

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

File Name S:\SOILS\CONT FILES\MORGAN\069-0521 PR MOUND ROAD OVER IL 104.GPJ Data Template DBTEMPLT.GDT Date Printed 8/16/06
Latitude 39 Deg 43.626 N Longitude 90 Deg 16.398 W Datum NAD83 Job Number 096-554-03

DESIGNED	BAN
CHECKED	JOH
DRAWN	TAC
CHECKED	BAN

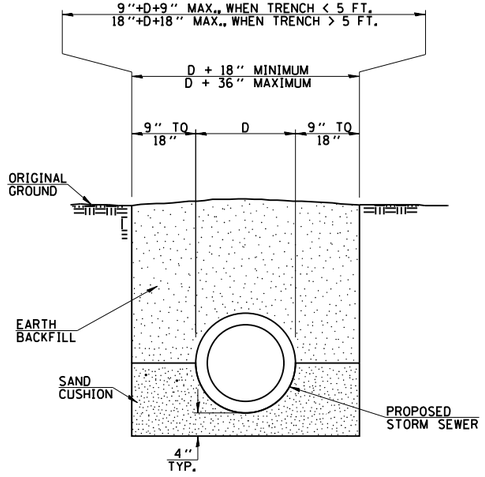
SOIL BORINGS LOGS
MOUND ROAD (FAU ROUTE 8173)
OVER ILLINOIS ROUTE 104
SECTION (69-HB)BR
MORGAN COUNTY
STATION 100+00.00
STRUCTURE NO. 069-0521

HU CHISON ENGINEERING, INC.
JACKSONVILLE, ILLINOIS
Date: 10/18/10

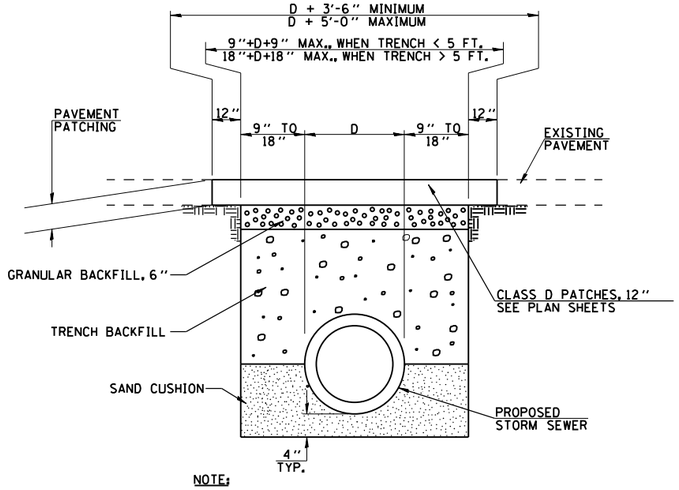
2280-2b127

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	56
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 72837



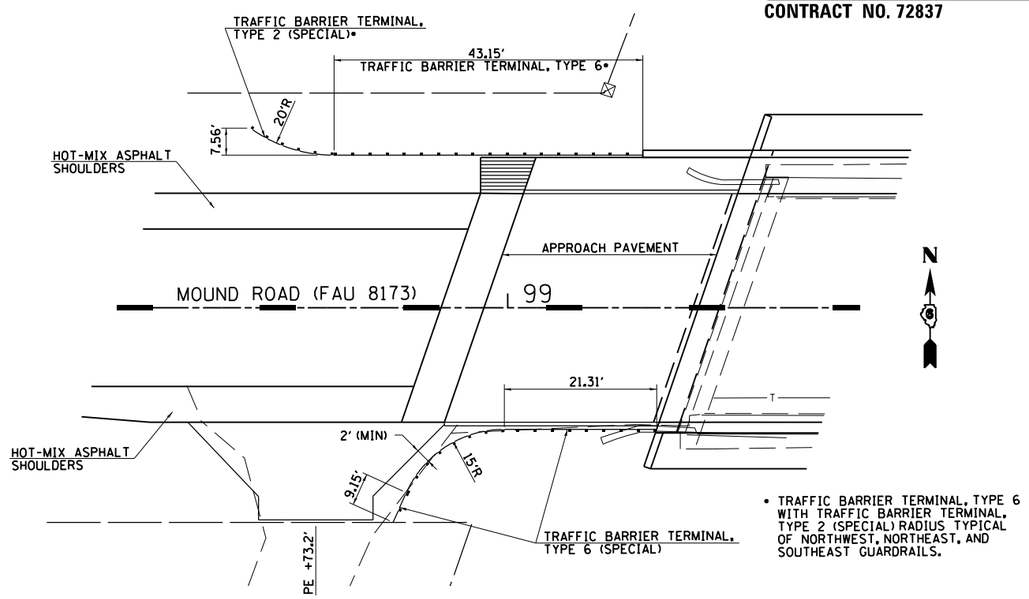
DETAIL OF TRENCH EXCAVATION AND BACKFILL UNDER TURF



NOTE:

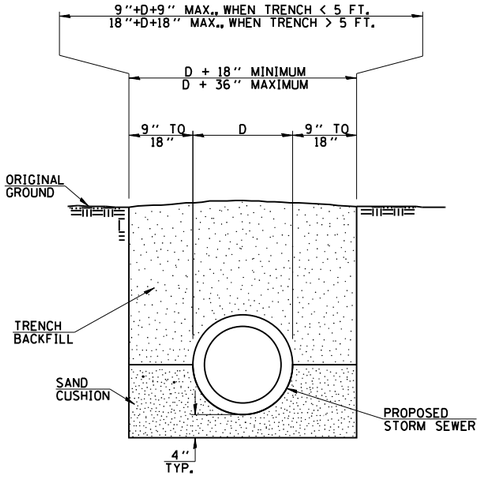
THE TRENCH BACKFILL QUANTITIES SHOWN ON THE PLANS INCLUDE THE VOLUME OF GRANULAR BACKFILL. GRANULAR BACKFILL WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CU. YD. FOR TRENCH BACKFILL.

DETAIL OF TRENCH EXCAVATION, PAVEMENT REMOVAL, PAVEMENT REPLACEMENT AND BACKFILL UNDER EXISTING PAVEMENT

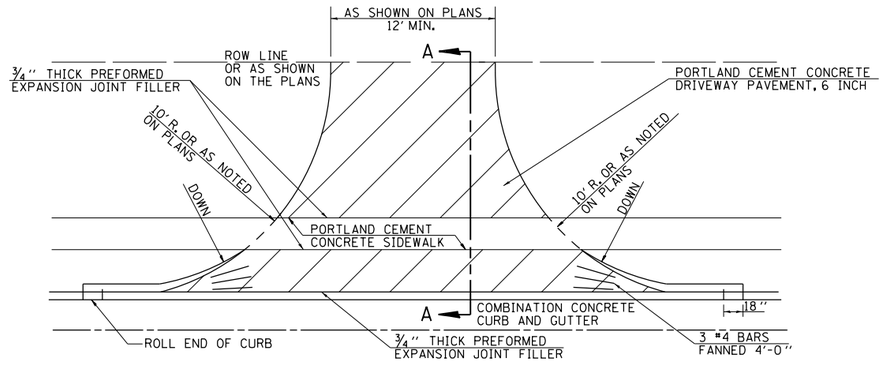


• TRAFFIC BARRIER TERMINAL, TYPE 6 WITH TRAFFIC BARRIER TERMINAL, TYPE 2 (SPECIAL) RADIUS TYPICAL OF NORTHWEST, NORTHEAST, AND SOUTHEAST GUARDRAILS.

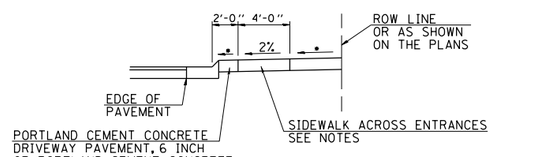
DETAIL FOR TRAFFIC BARRIER TERMINALS (SPECIAL)



DETAIL OF TRENCH EXCAVATION AND BACKFILL UNDER PROPOSED ROADWAY PAVEMENT AND ENTRANCES



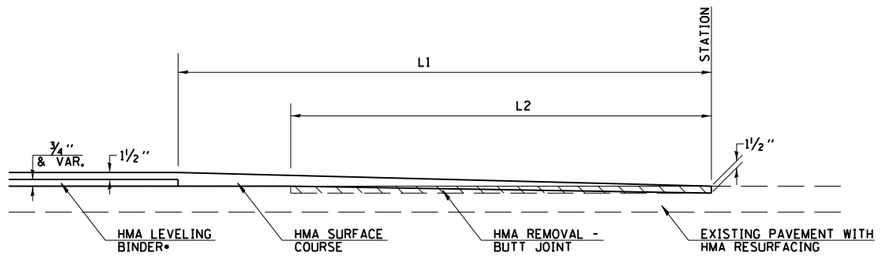
PLAN



• AS SHOWN ON CROSS SECTIONS

SECTION A-A

ENTRANCE DETAIL



• WHEN LEVELING BINDER THICKNESS EXCEEDS 3", HMA CONCRETE BINDER COURSE SHALL BE USED TO BUILD UP RESURFACING THICKNESS TO THE BOTTOM OF THE 2¼" NOMINAL OVERLAY.

HOT-MIX ASPHALT TAPERS

STATION	L1, FT	L2, FT.
95+00	90	75
104+40	140	105

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SPECIAL DETAILS

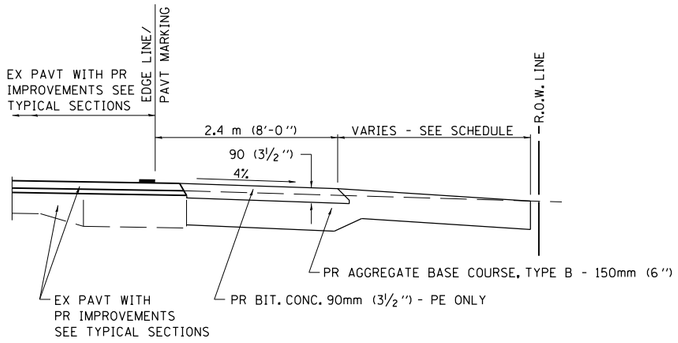
DRAWN BY JCW

DATE 10/20/10 CHECKED BY JRB

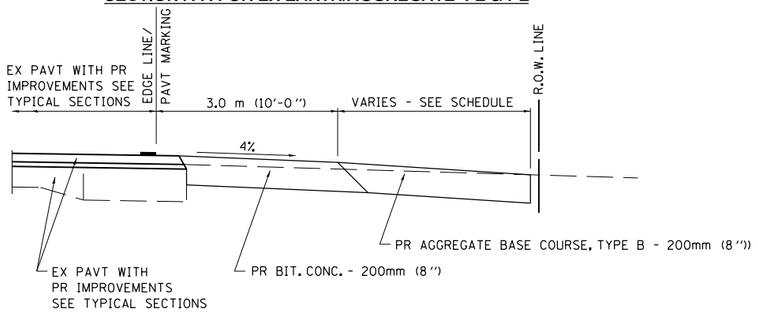
2280-2D001

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	57
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

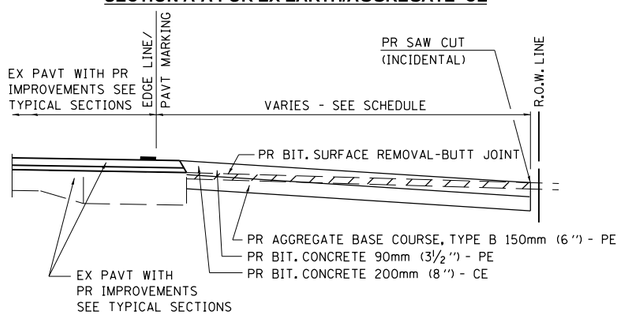
CONTRACT NO. 72837



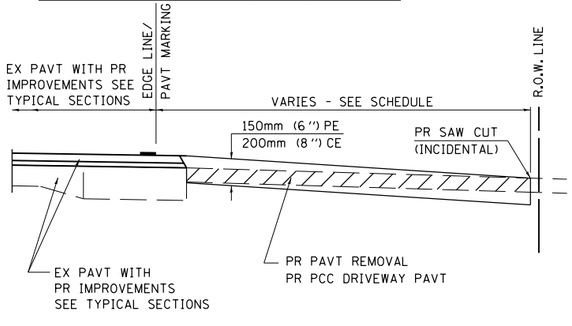
SECTION A-A FOR EX EARTH/AGGREGATE FE & PE



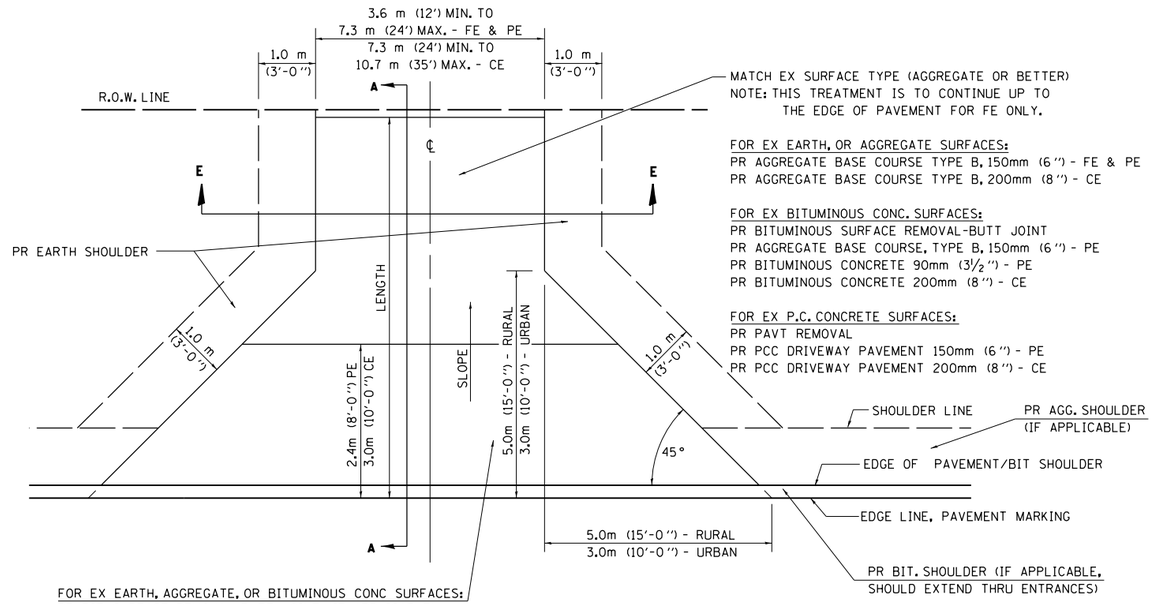
SECTION A-A FOR EX EARTH/AGGREGATE CE



SECTION A-A FOR EX BITUMINOUS PE & CE



SECTION A-A FOR EX P.C. CONC. PE & CE



MATCH EX SURFACE TYPE (AGGREGATE OR BETTER)
NOTE: THIS TREATMENT IS TO CONTINUE UP TO THE EDGE OF PAVEMENT FOR FE ONLY.

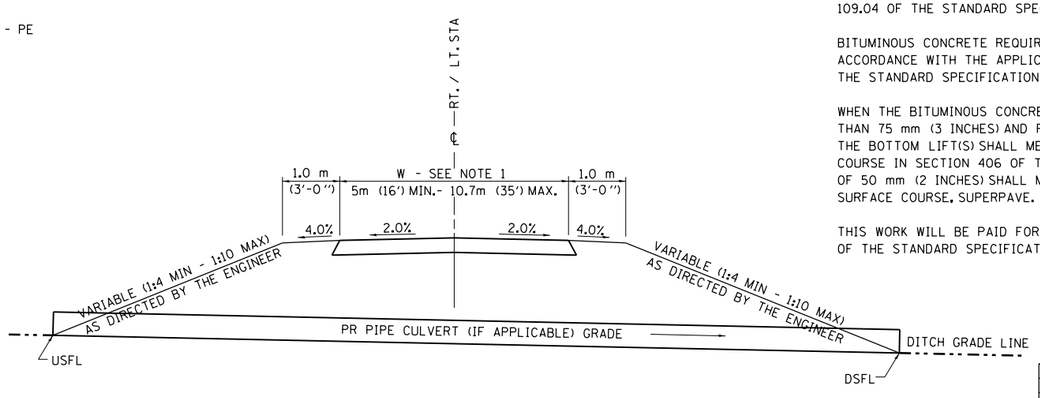
FOR EX EARTH, OR AGGREGATE SURFACES:
PR AGGREGATE BASE COURSE TYPE B, 150mm (6") - FE & PE
PR AGGREGATE BASE COURSE TYPE B, 200mm (8") - CE

FOR EX BITUMINOUS CONC. SURFACES:
PR BITUMINOUS SURFACE REMOVAL-BUTT JOINT
PR AGGREGATE BASE COURSE, TYPE B, 150mm (6") - PE
PR BITUMINOUS CONCRETE 90mm (3½") - PE
PR BITUMINOUS CONCRETE 200mm (8") - CE

FOR EX P.C. CONCRETE SURFACES:
PR PAVT REMOVAL
PR PCC DRIVEWAY PAVEMENT 150mm (6") - PE
PR PCC DRIVEWAY PAVEMENT 200mm (8") - CE

FOR EX EARTH, AGGREGATE, OR BITUMINOUS CONC SURFACES:
PR BIT SURFACE REMOVAL-BUTT JOINT (IF APPLICABLE)
PR AGGREGATE BASE COURSE TYPE B 150mm (6") - FE
PR AGGREGATE BASE COURSE TYPE B, 150mm (6") &
PR BITUMINOUS CONCRETE 90mm (3½") - PE
PR BITUMINOUS CONCRETE 200mm (8") - CE

FOR P.C. CONCRETE SURFACES:
PR PAVT REMOVAL
PR PCC DRIVEWAY PAVT 150mm (6") - PE
PR PCC DRIVEWAY PAVT 200mm (8") - CE



SECTION E - E ENTRANCE TYPICAL SECTION

NOTE 1: WIDTH OF ENTRANCE MAY BE INCREASED AT THE PIPE CULVERT DUE TO THE DITCHLINE BEING LOCATED IN THE ENTRANCE FLARE AREA.

GENERAL NOTES:

THE RESIDENT ENGINEER WILL DETERMINE THE EXACT TYPE OF IMPROVEMENT TO BE COMPLETED FOR ALL ENTRANCES, SIDEROADS AND MAILBOX TURNOUTS ON THIS PROJECT.

THE PLAN DETAILS AND SCHEDULES SHOULD BE USED AS A GUIDE FOR THE ENGINEER TO IMPLEMENT THE FINAL DESIGN. THE ENGINEER MAY DECIDE TO SALVAGE PORTIONS OF THE EXISTING ENTRANCE PAVEMENT STRUCTURE; THEREFORE, REDUCING PAY ITEM QUANTITIES. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR THIS REDUCTION IN QUANTITIES.

ANY WORK THE ENGINEER REQUIRES WHICH IS NOT COVERED BY A PAY ITEM CONTAINED IN THE PLANS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

BITUMINOUS CONCRETE REQUIRED TO CONSTRUCT THE ENTRANCES SHALL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 406 AND 408 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

WHEN THE BITUMINOUS CONCRETE PROPOSED FOR THE IMPROVEMENT IS THICKER THAN 75 mm (3 INCHES) AND REQUIRE PLACEMENT IN MORE THAN ONE LIFT. THE BOTTOM LIFT(S) SHALL MEET THE REQUIREMENTS OF BITUMINOUS BASE COURSE IN SECTION 406 OF THE STANDARD SPECIFICATIONS AND THE TOP LIFT OF 50 mm (2 INCHES) SHALL MEET THE REQUIREMENTS OF BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE.

THIS WORK WILL BE PAID FOR IN ACCORDANCE WITH SECTIONS 351, 358, 408, 423 AND 440 OF THE STANDARD SPECIFICATIONS.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT SIX
DETAILS FOR RURAL / URBAN ENTRANCE & MAILBOX TURNOUT W / O CONCRETE GUTTER (3R - PROJECTS)

DRAWN BY JCW

DATE 10/20/10 CHECKED BY JRB

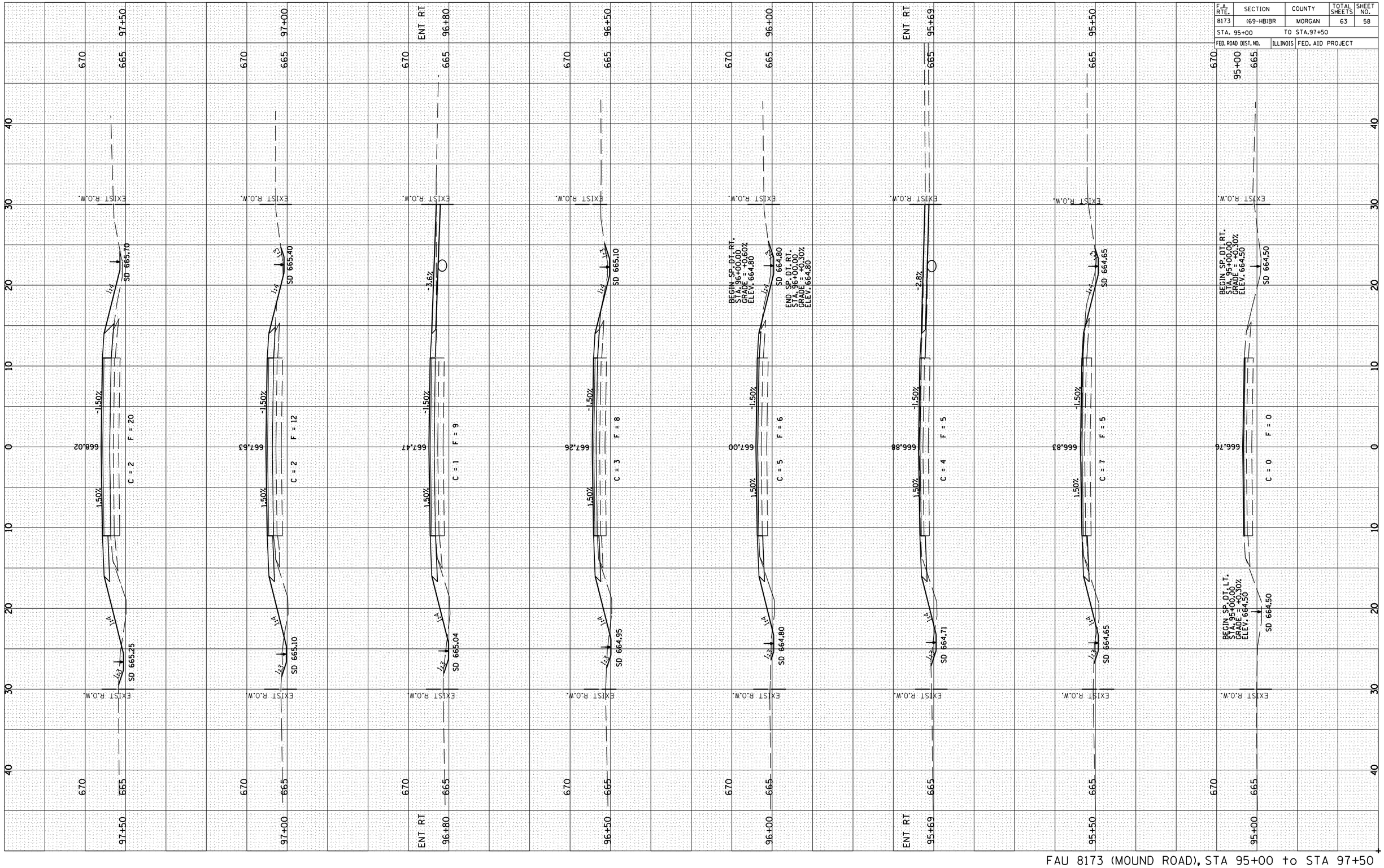
2280-2D004

CONTRACT NO. 72837

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	58
STA. 95+00		TO STA. 97+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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



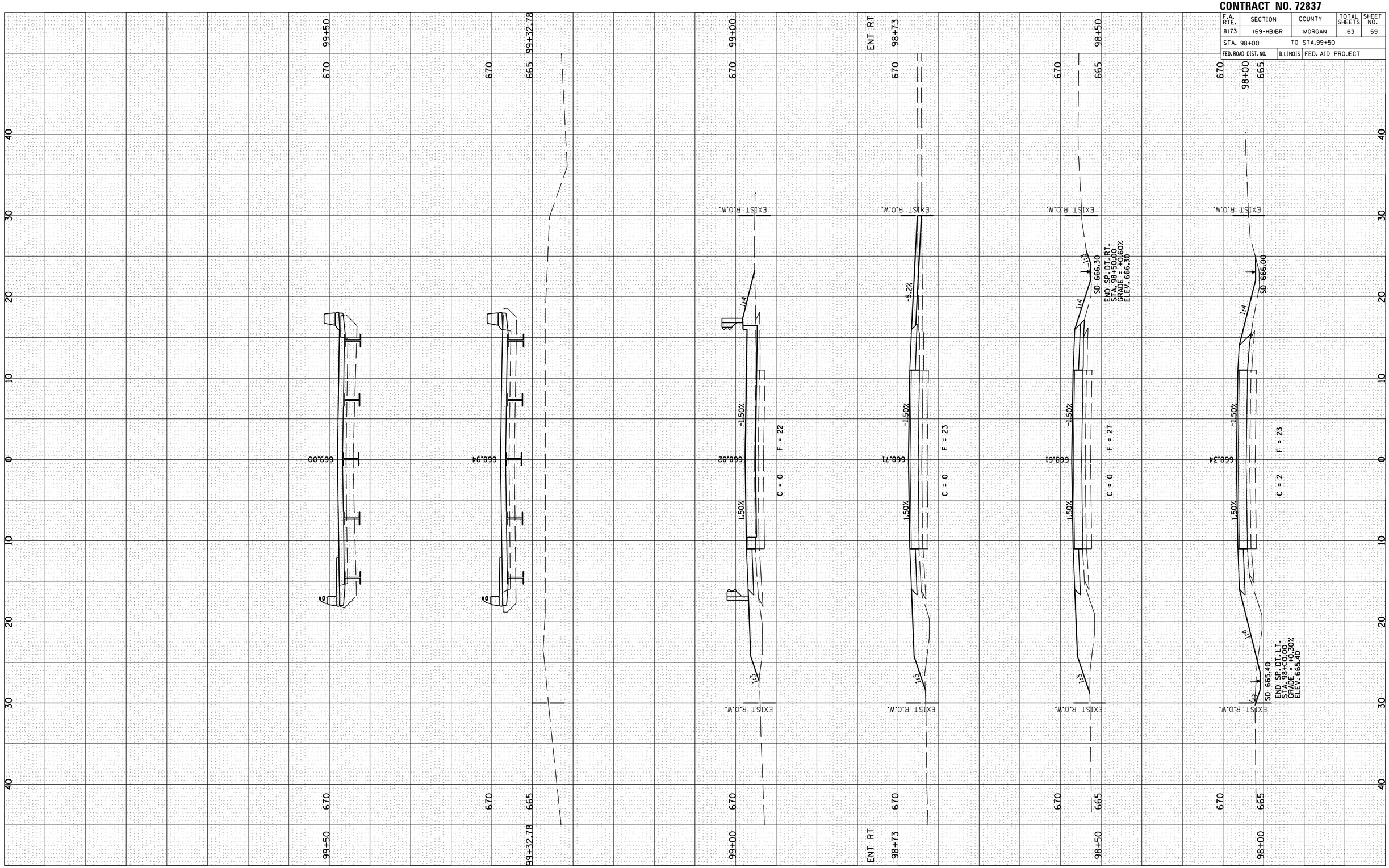
FAU 8173 (MOUND ROAD), STA 95+00 to STA 97+50

CONTRACT NO. 72837

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	59
STA. 98+00		TO STA. 99+50		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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



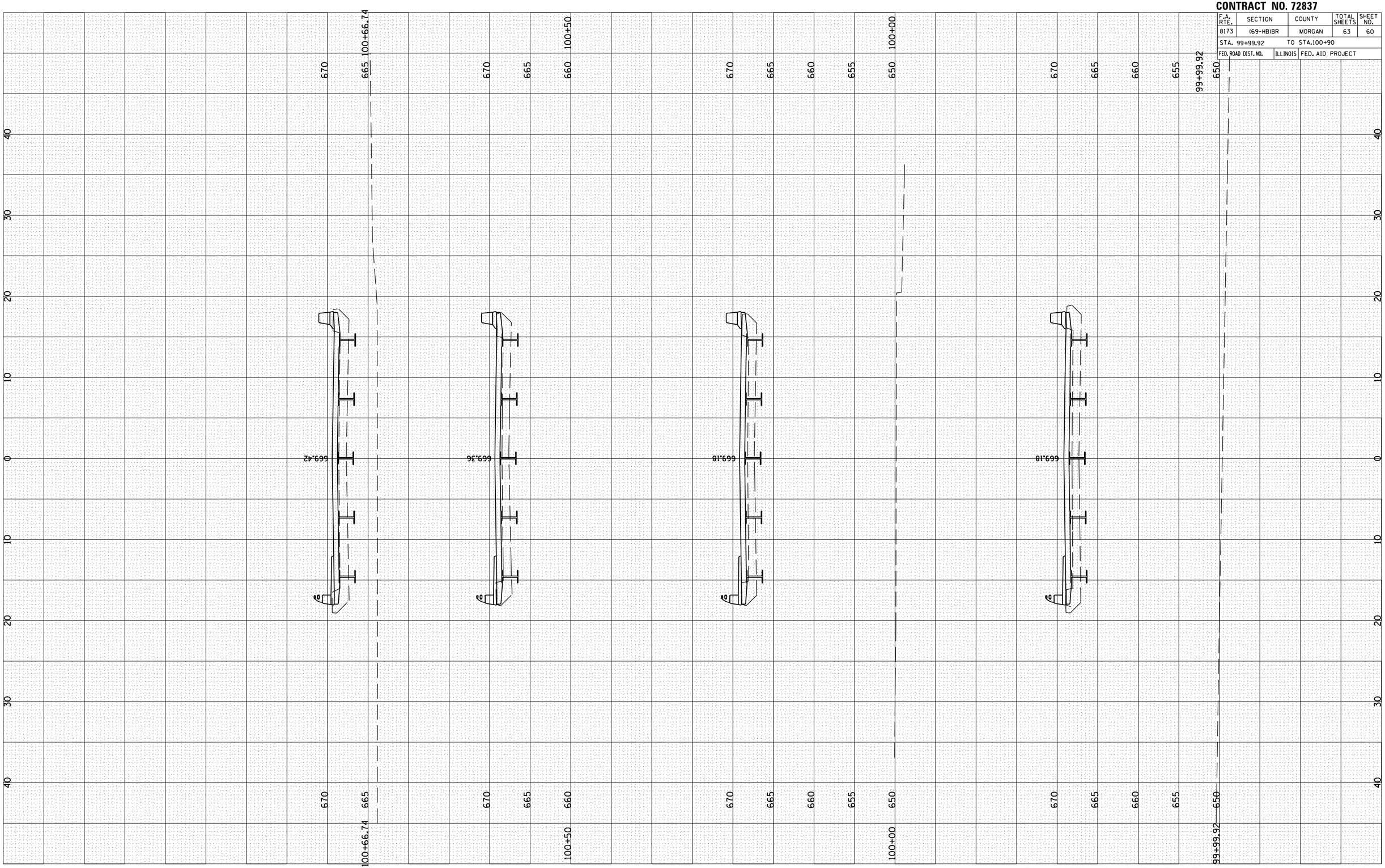
FAU 8173 (MOUND ROAD), STA 98+00 to STA 99+50

CONTRACT NO. 72837

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	60
STA. 99+99.92		TO STA.100+90		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

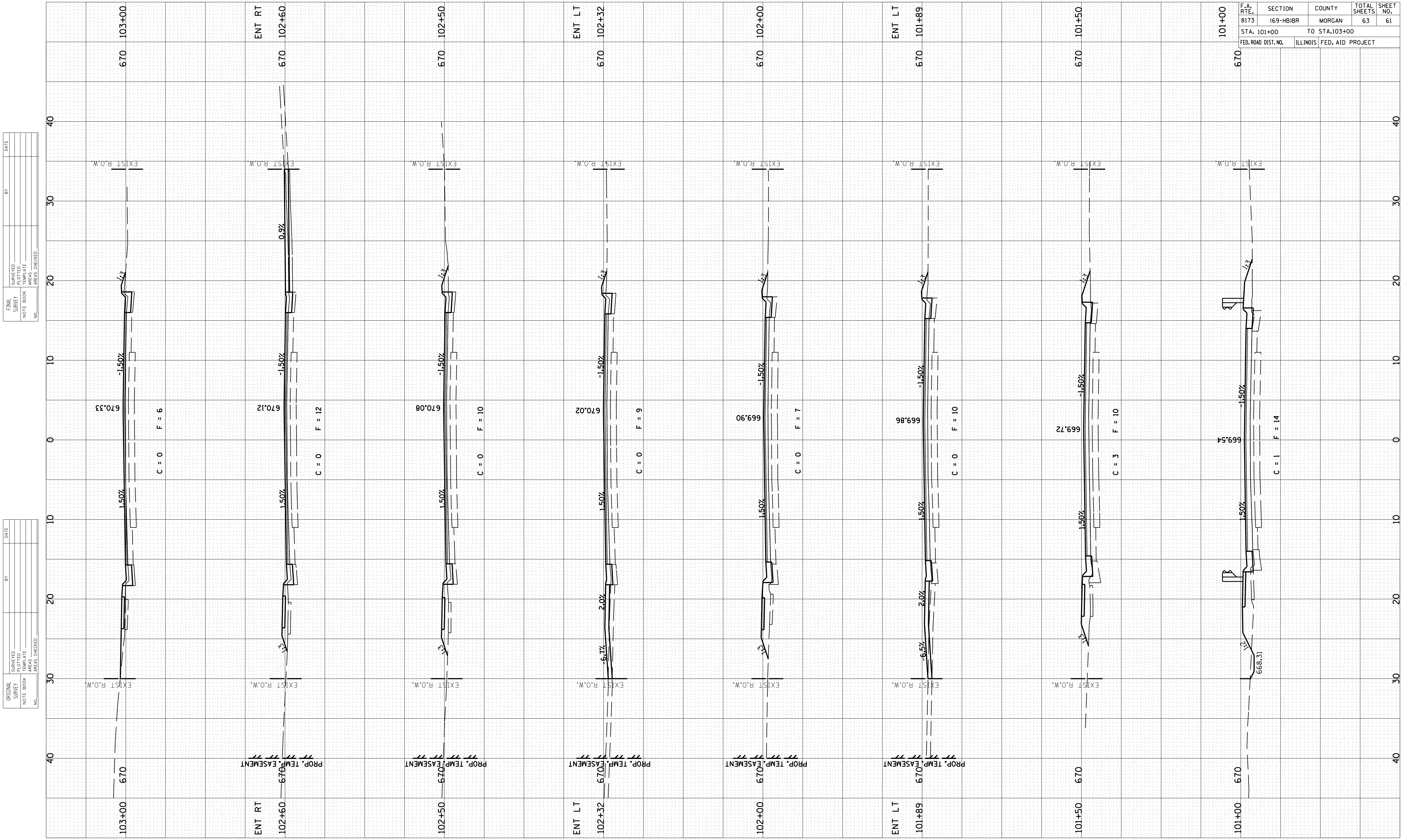
ORIGINAL SURVEY	NOTE BOOK	NO.
	SURVEYED	BY
	PLOTTED	DATE
	TRANSFER	
	AREAS	
	AREAS CHECKED	



FAU 8173 (MOUND ROAD), STA 99+99.92 to STA 100+90

CONTRACT NO. 72837

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	61
STA. 101+00	TO STA.103+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



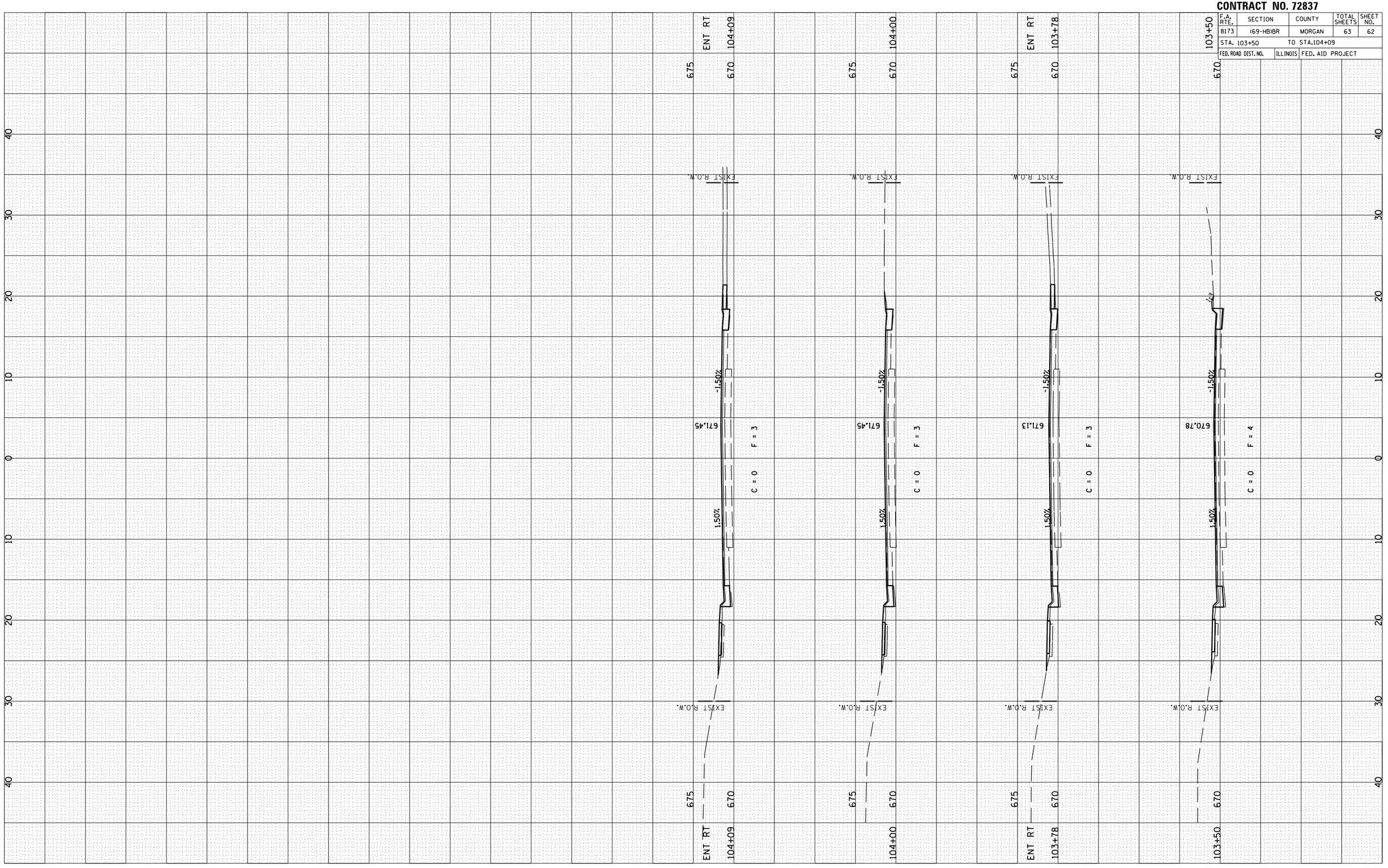
FAU 8173 (MOUND ROAD), STA 101+00 to STA 103+00

CONTRACT NO. 72837

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	62
STA. 103+50		TO STA.104+09		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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



CONTRACT NO. 72837

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8173	(69-HB)BR	MORGAN	63	63
STA. 110+00		TO STA.113+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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