

**HANCOCK COUNTY, ILLINOIS
HIGHWAY DEPARTMENT
BEAR CREEK TOWNSHIP**

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	Hancock	36	1
		ILLINOIS	CONTRACT NO. 93659	

Job No. C-96-216-15

INDEX OF SHEETS

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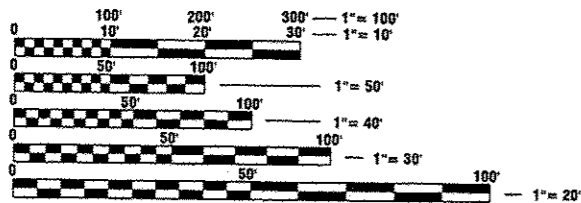
**FAS 428 (CH 11) OVER BEAR CREEK
BRIDGE REPLACEMENT**

**FAS ROUTE 428 (CH 11)
SECTION 11-00122-00-BR
JOB NO. C-96-216-15
PROJECT NO. BRS-0428 (107)
FEDERAL HIGHWAY BRIDGE PROGRAM FUNDING**

**FOR LIST OF HIGHWAY STANDARDS
SEE SHEET 2**

DESIGN DESIGNATION

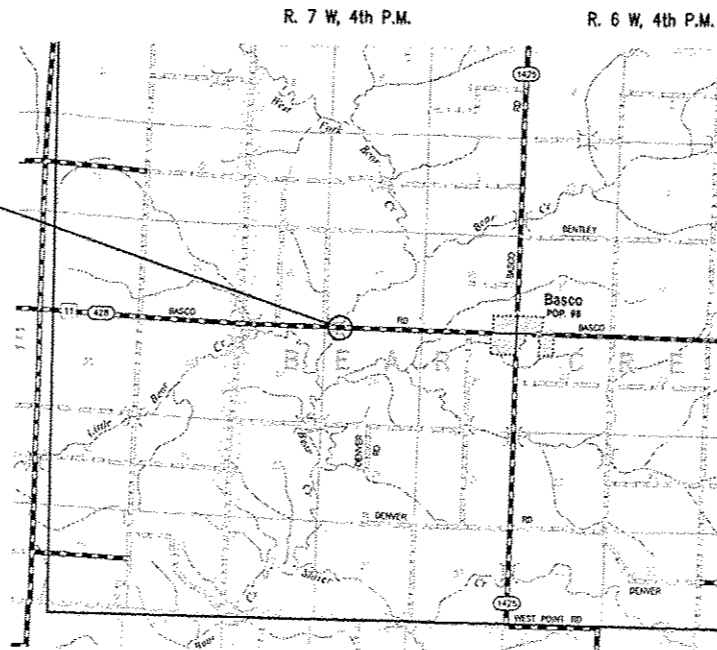
**FUNCTIONAL CLASSIFICATION = RURAL MAJOR COLLECTOR
DESIGN SPEED = 55 MPH
CURRENT ADT (2015) = 650
DESIGN YEAR ADT (2036) = 650**



**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**

PROJECT LOCATION
EX SN 034-3112/PR SN 034-3113
STA. 383+20.00 TO STA 389+15.00



LOCATION MAP

**GROSS LENGTH = 595.0 FT. = 0.113 MILE
NET LENGTH = 595.0 FT. = 0.113 MILE**



LOCATION OF SECTION INDICATED THIS: - [black rectangle]

AGENCY RESPONSIBLE FOR LETTING

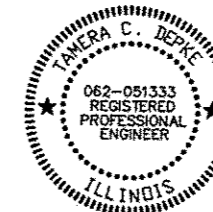
APPROVED 8/7 20 15
Elgin Berry
HANCOCK COUNTY HIGHWAY DEPARTMENT, COUNTY ENGINEER

PASSED Aug 28th 20 15
[Signature]
DISTRICT 6 ENGINEER OF LOCAL ROADS & STREETS

**RELEASING FOR BID
BASED ON LIMITED
REVIEW** Aug 28th 20 15
[Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION 4 ENGINEER

CONTRACT NO. 93659

PLANS PREPARED BY:
PSBA
POEPPING, STONE, BACH & ASSOCIATES, INC.
100 SOUTH 54TH STREET
PH.: (217) 223-4605
E-MAIL: PSBA@PSBA.COM
QUINCY, IL 62306
FAX: (217) 223-1546
WWW.PSBA.COM



Tamera C. Depke 07AUG15
TAMERA C. DEPKE DATE
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS NO. 062-051333
LICENSE EXPIRES NOVEMBER 30, 2015

HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420401-11	BRIDGE APPROACH PAVEMENT CONNECTOR
515001-03	NAME PLATE FOR BRIDGES
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
630001-10	STEEL PLATE BEAM GUARDRAIL
631032-08	TRAFFIC TERMINAL BARRIER, TYPE 6A
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
701901-04	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

GENERAL NOTES

- ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB NUMBER LISTED IN THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.
- IN ADDITION TO FIELD SURVEYS, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD. SUCH VARIATIONS SHALL NOT BE A CAUSE FOR ADDITIONAL COMPENSATION DUE TO A CHANGE IN THE SCOPE OF WORK; HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.
- ACCESS TO ALL ENTRANCES AND SIDE ROADS SHALL BE MAINTAINED AT ALL TIMES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE JULIE NUMBER IS 800-892-0123. A MINIMUM OF FORTY-EIGHT HOURS ADVANCE NOTICE IS REQUIRED. ANY DAMAGE TO THE UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE, INCLUDING TEMPORARY REPAIRS WHICH MAY BE REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS.
- THE LOCATIONS OF THOSE BURIED AND ABOVEGROUND UTILITIES SHOWN ARE APPROXIMATE, ARE SHOWN FOR CONTRACTOR INFORMATIONAL USE ONLY, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTIONS PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVEGROUND UTILITY LOCATION, IDENTIFICATION, AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS ASSOCIATED WITH BURIED AND ABOVE GROUND UTILITIES, REMAINS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- SEEDING IS NOT ANTICIPATED TO BE REQUIRED FOR THIS CONTRACT. ALL DISTURBED AREAS NOT COVERED BY SURFACING MATERIAL SHALL BE SEEDED TO THE SATISFACTION OF THE ENGINEER. SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED SHALL BE DETERMINED BY THE ENGINEER.
- CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE AND EROSION PROTECTION FOR THE DURATION OF THIS PROJECT.
- SURPLUS EXCAVATED MATERIAL SHALL BE PLACED AS DIRECTED BY THE ENGINEER WITHIN THE RIGHT-OF-WAY.
- THE THICKNESS OF BITUMINOUS 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 BITUMINOUS MIXTURE IS PLACED.
- ALL SAW CUTS, NECESSARY TO COMPLETE THE WORK DETAILED IN THESE PLANS, SHALL BE INCLUDED IN THE COST FOR THE VARIOUS PAY ITEMS INVOLVED. THE MINIMUM SAW CUT DEPTH IN THE PAVEMENT SHALL BE 1 1/2 " UNLESS OTHERWISE SPECIFIED IN A DETAIL SHOWN IN THE PLANS.
- UNLESS DIRECTED BY THE ENGINEER, PAVEMENT MARKING LINES SHALL NOT BE LAID DIRECTLY OVER A LONGITUDINAL CRACK OR JOINT NOR OVER A TAR OR ASPHALT PAINTED LINE. THE EDGE OF A CENTERLINE OR LANE LINE SHALL BE OFFSET A MINIMUM DISTANCE OF 2" FROM A LONGITUDINAL CRACK OR JOINT. EDGE LINES SHALL BE APPROXIMATELY 2" FROM THE EDGE LINE OF PAVEMENT. SEE SECTION 780 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.
- THE EXISTING ROAD SIGNS THAT INTERFERE WITH CONSTRUCTION WILL BE REMOVED OR RELOCATED AS DIRECTED BY THE ENGINEER. AFTER THE CONSTRUCTION IS COMPLETED, THE CONTRACTOR WILL REPLACE THE SIGNS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT, AND NO COMPENSATION WILL BE ALLOWED.
- WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.
- ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM THE NATIONAL GEODETIC VERTICAL DATUM OF 1988 (NGVD88).
- THE CONTRACTOR SHALL PROTECT TREES FROM DAMAGE DUE TO HIS OPERATIONS.

- ALL STATION REFERENCES ARE TO THE ROADWAY CENTERLINE OR BASELINE.
- ALL DETAILS IN THE PLANS SHALL GOVERN CONSTRUCTION OF THIS PROJECT, AND IN CASE OF CONFLICT WITH ANY STANDARD DRAWINGS INCLUDED, THE SAID DETAILS SHALL TAKE PRECEDENCE AND GOVERN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING THE REQUIREMENTS OF THE NPDES & STORM WATER PERMIT FOR CONSTRUCTION ACTIVITY FOR THIS PROJECT
- A NATIONWIDE 404 PERMIT HAS BEEN ISSUED FOR THIS PROJECT AND THE CONDITIONS OF THAT PERMIT MUST BE ADHERED TO.
- THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED TO CALCULATE THE PLAN QUANTITIES:

BITUMINOUS MATERIALS (PRIME COAT)	0.05 LBS/SQ FT (ON PAVEMENT)
BITUMINOUS MATERIALS (PRIME COAT)	0.25 LBS/SQ FT (ON AGGREGATE)
HOT-MIX ASPHALT CONCRETE	0.056 TON/SQ YD INCH
AGGREGATE SHOULDER & SURFACES	2.05 TON/CU YD
AGGREGATE BASE COURSE, TYPE B	2.05 TON/CU YD
RIPRAP	1.50 TON/CU YD
AGGREGATE DITCH CHECKS	1.75 TON/CU YD

COMMITMENTS

NONE

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT

LOCATION(S):	FAS 428 (CH 11)	FAS 428 (CH 11)	FAS 428 (CH 11)
MIXTURE USE(S)	HMA SURFACE COURSE, INCIDENTAL HMA	HMA BINDER COURSE	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)
AC/PG	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50	4.0% @ N50
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL-9.5	IL-19.0	IL-19.0 OR IL-19.0CB
FRICTION AGGREGATE	MIX "C"	N/A	N/A
QUALITY MANAGEMENT	QC/OA	QC/OA	QC/OA



USER NAME *	DESIGNED - ---	REVISED - ---
	CHECKED - ---	REVISED - ---
PLOT SCALE *	DRAWN - ---	REVISED - ---
PLOT DATE *	CHECKED - ---	REVISED - ---

HANCOCK COUNTY HIGHWAY DEPARTMENT
 101 S. FIRST ST. (P.O. BOX 379) CARTHAGE, IL 62321
 (217)357-3155

GENERAL NOTES
FAS 428 (C.H. 11)

SHEET NO. 1 OF 1 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	2
CONTRACT NO. 93659				
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES				CONSTR. CODE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE
				0011
				S.N. 034-3113
* 20300100	CHANNEL EXCAVATION	CU YD	318	318
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	253	253
28000315	AGGREGATE DITCH CHECKS	TON	143	143
28000400	PERIMETER EROSION BARRIER	FOOT	824	824
28000500	INLET AND PIPE PROTECTION	EACH	1	1
28100207	STONE RIPRAP, CLASS A4	TON	1819	1819
28200200	FILTER FABRIC	SQ YD	2727	2727
* 40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	662	662
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	147	147
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	213	213
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	68	68
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	40	40
44000100	PAVEMENT REMOVAL	SQ YD	217	217
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	42	42

Δ SPECIALTY ITEMS

SUMMARY OF QUANTITIES				CONSTR. CODE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE 0011 S.N. 034-3113
* 50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1	1
50200100	STRUCTURE EXCAVATION	CU YD	258	258
50200300	COFFERDAM EXCAVATION	CU YD	307	307
50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1	1
50201122	COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1	1
50300225	CONCRETE STRUCTURES	CU YD	311.8	311.8
50300255	CONCRETE SUPERSTRUCTURE	CU YD	292.6	292.6
50300260	BRIDGE DECK GROOVING	SQ YD	860	860
50300265	SEAL COAT CONCRETE	CU YD	72.8	72.8
50300300	PROTECTIVE COAT	SQ YD	894	894
* 50400905	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I-BEAMS, 42 IN.	FOOT	974.5	974.5
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	99,010	99,010
Δ 50901050	STEEL RAILING, TYPE SM	FOOT	456	456
51201600	FURNISHING STEEL PILES HP12X53	FOOT	1,374	1,374

Δ SPECIALTY ITEMS

SUMMARY OF QUANTITIES				CONSTR. CODE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE
				0011
				S.N. 034-3113
51202305	DRIVING PILES	FOOT	1,374	1,374
51203600	TEST PILE STEEL HP12X53	EACH	2	2
51500100	NAME PLATES	EACH	1	1
58700300	CONCRETE SEALER	SQ FT	4,812	4,812
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	78	78
Δ 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4
Δ 63200310	GUARDRAIL REMOVAL	FOOT	266	266
Δ 63301210	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	350	350
67100100	MOBILIZATION	LSUM	1	1
Δ 78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	149	149
* Δ 78200410	GUARDRAIL MARKERS, TYPE A	EACH	4	4
* X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	652	652
* X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	152	152
* X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	1
* Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	150	150
+ Z0076600	TRAINEES	HOURL	500	500
+ Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOURL	500	500

Δ SPECIALTY ITEMS + 0042 TRAINEES



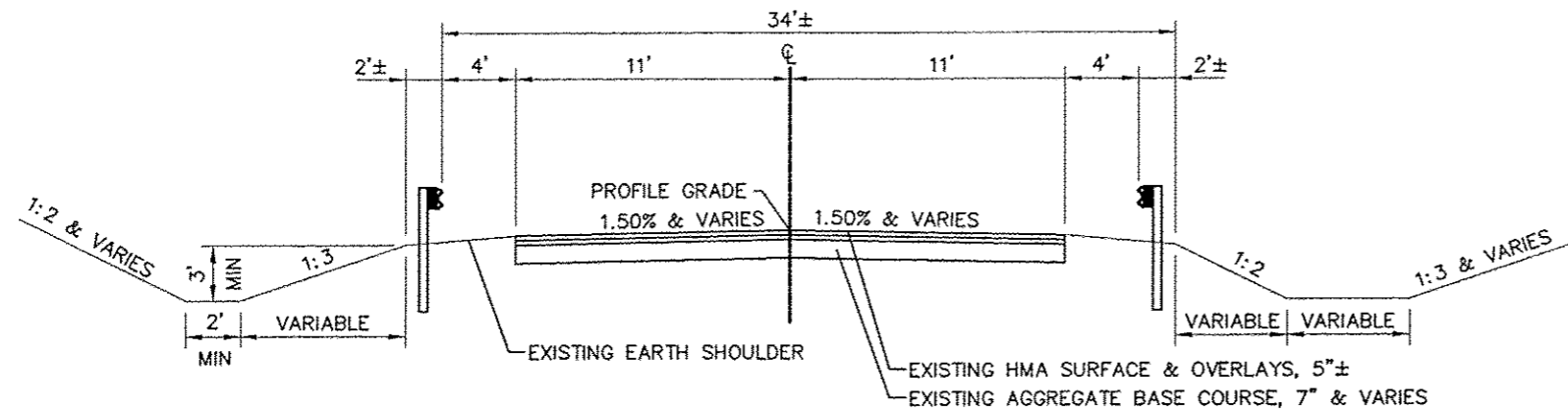
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PLOT SCALE *	CHECKED -	REVISD -
PLOT DATE *	DRAWN -	REVISD -
	CHECKED -	REVISD -

HANCOCK COUNTY HIGHWAY DEPARTMENT
101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
(217)357-3155

SUMMARY OF QUANTITIES

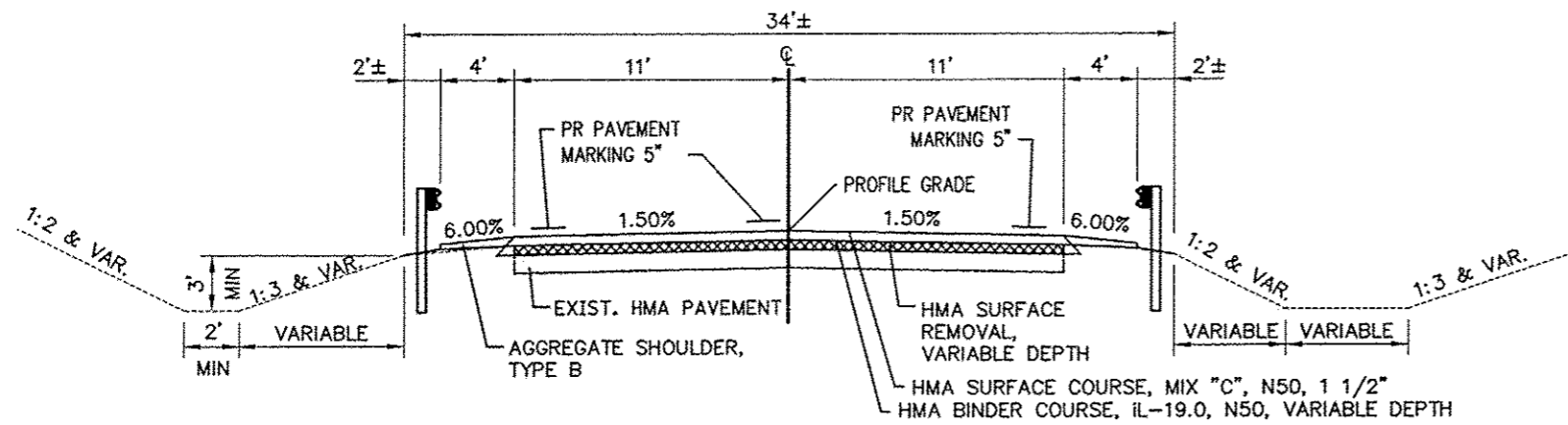
SHEET NO. 3 OF 3 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	5
ILLINOIS FED. AID PROJECT			CONTRACT NO. 93659	



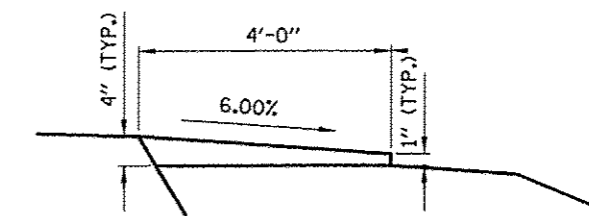
EXISTING TYPICAL SECTION

STA. 383+20.00 TO STA. 385+27.00
 BRIDGE OMISSION: STA. 385+27.00 TO STA. 387+09.00
 STA. 387+09.00 TO STA. 389+15.00



PROPOSED TYPICAL SECTION

STA. 383+20.00 TO STA. 384+83.12
 STA. 387+52.88 TO STA. 389+15.00



DETAIL - AGGREGATE WEDGE SHOULDER, TYPE B

NOT TO SCALE



USER NAME *	DESIGNED - ---	REVISED - ---
PLOT SCALE *	CHECKED - ---	REVISED - ---
PLOT DATE *	DRAWN - ---	REVISED - ---
	CHECKED - ---	REVISED - ---

HANCOCK COUNTY HIGHWAY DEPARTMENT
 101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
 (217)357-3155

TYPICAL SECTIONS

SHEET NO. 1 OF 1 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	6
CONTRACT NO. 93659			[ILLINOIS] FED. AID PROJECT	

CHANNEL EXCAVATION	
STATION TO STATION	CHANNEL EXCAVATION CU YD
STA 385+18.00 TO STA 387+18.00	318

INLET AND PIPE PROTECTION		
LOCATION	SIDE	EACH
STA 385+28	RT	1
TOTAL		1

PERIMETER EROSION BARRIER		
LOCATION	SIDE	FOOT
STA 383+20 TO STA 385+35	LT	230
STA 383+20 TO STA 385+00	RT	191
STA 386+96 TO STA 389+15	RT	234
STA 387+58 TO STA 389+15	LT	169
TOTAL		824

AGGREGATE DITCH CHECKS					
LOCATION	SIDE	FORE SLOPE	DITCH WIDTH (FOOT)	BACK SLOPE	AGGREGATE DITCH CHECKS (TON)
STA 385+70	RT	1:2	4	1:2	11.9
STA 385+87	LT	1:2	4	1:2	11.9
STA 386+07	LT	1:2	4	1:2	11.9
STA 386+22	LT	1:2	4	1:2	11.9
STA 386+50	RT	1:2	4	1:2	11.9
STA 386+65	RT	1:2	4	1:2	11.9
STA 386+91	LT	1:2	4	1:2	11.9
STA 386+96	RT	1:2	4	1:2	11.9
STA 387+05	LT	1:2	4	1:2	11.9
STA 387+19	LT	1:2	4	1:2	11.9
STA 387+33	LT	1:2	4	1:2	11.9
STA 387+58	LT	1:2	4	1:2	11.9
TOTAL					142.8
USE					143

PAVING SCHEDULE - MAINLINE										
LOCATION	LENGTH	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50					HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50			
		BITUMINOUS MATERIALS (PRIME COAT)	VARIABLE THICKNESS			BITUMINOUS MATERIALS (PRIME COAT)	(1.50" THICKNESS)			
			AVE DEPTH	AVG WIDTH	AREA		AVE DEPTH	AVG WIDTH	AREA	
FOOT	POUND	INCH	FOOT	SQ YD	TON	POUND	FOOT	SQ YD	TON	
STA 383+20.00 TO STA 383+50.00	30.00					33.19	22.13	73.75	6.2	
STA 383+50.00 TO STA 384+50.00	100.00	113.0	4.3	22.61	251.18	60.1	110.63	245.83	20.7	
STA 384+50.00 TO STA 384+83.12	33.12	38.2	10.1	23.09	84.99	48.2	36.64	81.42	6.8	
STA 387+52.88 TO STA 388+25.00	72.12	82.8	8.6	22.97	184.04	88.7	79.78	177.30	14.9	
STA 388+25.00 TO STA 388+85.00	60.00	67.2	1.8	22.40	149.35	15.3	66.38	147.50	12.4	
STA 388+85.00 TO STA 389+15.00	30.00					33.19	22.13	73.75	6.2	
TOTAL		301.3				212.2	359.80		67.2	
USE		302				213	360		68	

STONE RIPRAP							
STATION TO STATION	SIDE	AVG. LENGTH	AVG. WIDTH SLOPE MEAS.	DEPTH	AREA	FILTER FABRIC	STONE RIPRAP, CLASS A4
		FT	FT	FT	SQ FT	SQ YD	TON
DITCH							
STA 385+54 TO STA 385+94	RT	40	12.9	1.33	518	58	38
STA 385+87 TO STA 386+30	LT	50	12.9	1.33	647	72	48
STA 386+22 TO STA 386+96	RT	81	12.9	1.33	1048	116	78
STA 386+79 TO STA 387+58	LT	79	12.9	1.33	1022	114	76
DITCH - SUBTOTAL						360	240
FORESLOPE							
STA 384+40 TO STA 384+85	RT	45	31.4	1.33	1413	157	105
STA 384+40 TO STA 385+21	LT	81	39.2	1.33	3175	353	235
STA 387+15 TO STA 388+00	RT	85	32.5	1.33	2763	307	205
STA 387+54 TO STA 388+00	LT	46	39.2	1.33	1803	200	134
FORESLOPE - SUBTOTAL						1,017	679
TOTAL						1,377	919

GUARDRAIL REMOVAL		
LOCATION	SIDE	QUANTITY (FOOT)
STA 384+68.02 TO STA 385+33.11	LT	65
STA 387+02.89 TO STA 387+83.27	LT	80
STA 384+52.73 TO STA 385+20.67	RT	68
STA 387+15.11 TO STA 387+67.98	RT	53
TOTAL		266

REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, TYPE A			
LOCATION	SIDE	LENGTH (FOOT)	USE (FOOT)
STA 383+75.00 TO STA 384+68.02	LT	93	100.0
STA 387+83.27 TO STA 388+50.00	LT	67	75.0
STA 383+75.00 TO STA 384+52.73	RT	78	87.5
STA 387+67.98 TO STA 388+50.00	RT	82	87.5
TOTAL			350

NOTE: USE LENGTH ROUNDED UP TO NEAREST 12.5 FT SECTION

PAVEMENT REMOVAL				
STATION TO STATION	SIDE	AVERAGE LENGTH	AVERAGE WIDTH	AREA
		FOOT	FOOT	SQ YD
STA 384+83.12 TO STA 385+27.47	CL	44.4	22.0	108.4
STA 387+08.60 TO STA 387+52.88	CL	44.3	22.0	108.2
TOTAL				216.7
USE				217

HOT-MIX ASPHALT SURFACE REMOVAL, BUTT JOINT				
LOCATION	A	B	WIDTH	AREA
			FOOT	SQ YD
BEGINNING OF PROJECT	383+20.00	383+50.00	22.0	73.3
END OF PROJECT	388+85.00	389+15.00	22.0	73.3
TOTAL				146.7
USE				147

HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH			
LOCATION	LENGTH	WIDTH	HMA SURF REM (VARIABLE DEPTH)
	FOOT	FOOT	SQ YD
STA 383+50.00 TO STA 384+83.12	133.12	22.13	327.25
STA 387+52.88 TO STA 388+85.00	132.12	22.13	324.80
TOTAL			652.05
USE			652

AGGREGATE WEDGE SHOULDERS, TYPE B				
STATION TO STATION	SIDE	AVERAGE WIDTH	LENGTH	AGGREGATE SHOULDERS TYPE B
		FEET	FEET	TON
STA 383+20.00 TO STA 384+88.73	LT	4.0	168.73	10.7
STA 383+20.00 TO STA 384+77.52	RT	4.0	157.52	10.0
STA 387+58.48 TO STA 389+15.00	LT	4.0	156.52	9.9
STA 387+47.27 TO STA 389+15.00	RT	4.0	167.73	10.6
SUBTOTAL				41.2
USE				42

PAINT PAVEMENT MARKING - LINE 5"			
STATION TO STATION	SIDE	DESCRIPTION	YELLOW
			FOOT
STA 383+20 TO STA 389+15	CL	SKIP DASH - SOLID	149
SUBTOTAL			149
USE			149



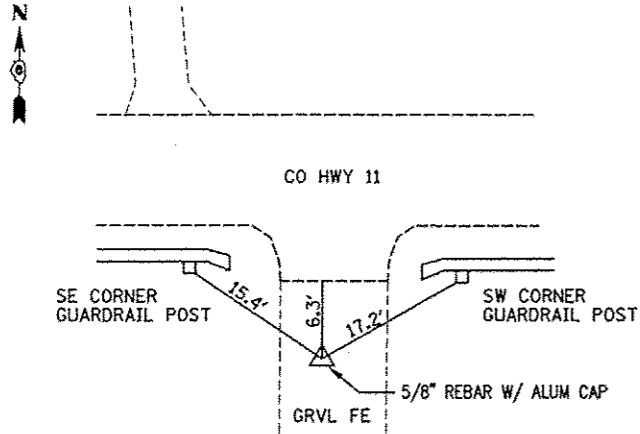
USER NAME =	DESIGNED - ---	REVISED - ---
PLOT SCALE =	CHECKED - ---	REVISED - ---
PLOT DATE =	DRAWN - ---	REVISED - ---
	CHECKED - ---	REVISED - ---

HANCOCK COUNTY HIGHWAY DEPARTMENT
101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
(217)357-3155

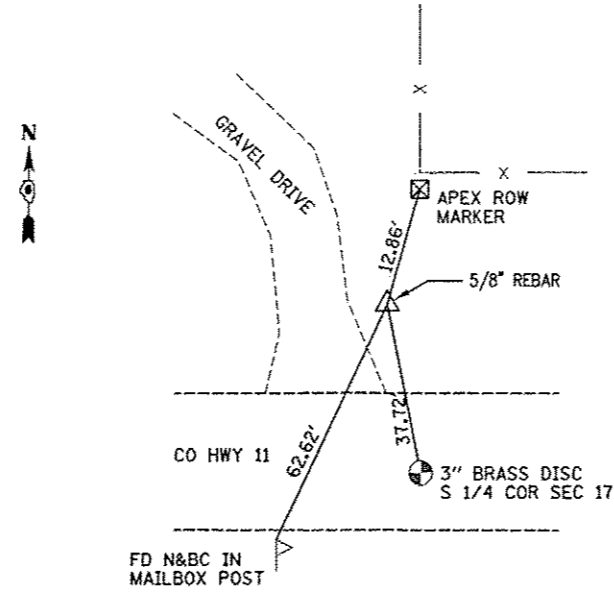
SCHEDULE OF QUANTITIES

SHEET NO. 1 OF 1 SHEETS

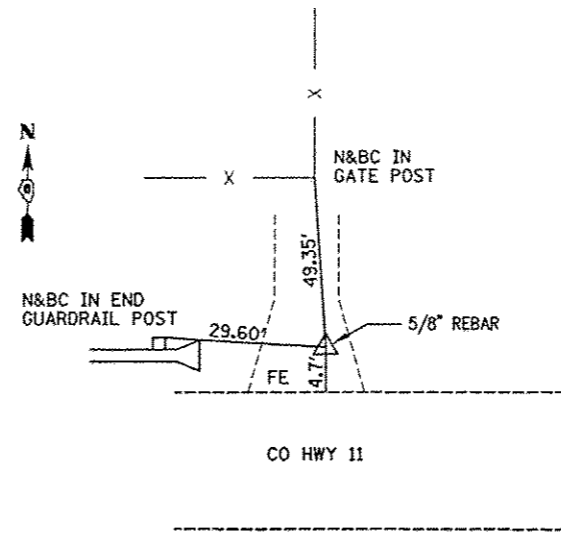
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	7
CONTRACT NO. 93659			ILLINOIS FED. AID PROJECT	



CP-1 5/8" REBAR W/ALUM CAP
 CONTROL POINT
 N 1335336.2436, E 1997916.7871
 ELEV. 585.981



CP-2 5/8" REBAR
 CONTROL POINT
 N 1335323.1535, E 2000509.8740
 ELEV. 601.701



CP-4 5/8" REBAR
 HORIZONTAL CONTROL POINT
 N 1335338.4861, E 1999326.2817

BEGIN PROJECT STA. 383+20.00
 N 1335345.3847, E 1998348.6598

END PROJECT STA. 389+15.00
 N 1335330.1828, E 1998943.4655

BENCHMARKS

BM A - ELEV = 585.933
 CHSLD "O" IN NORTHWEST WINGWALL
 OF EXISTING SN 034-3112
 BM B - STA. 384+43, ELEV = 577.401
 RR SPIKE IN POWER POLE, W. OF CREEK, S. OF ROAD



USER NAME =	DESIGNED - ---	REVISED - ---
PLOT SCALE =	CHECKED - ---	REVISED - ---
PLOT DATE =	DRAWN - ---	REVISED - ---
	CHECKED - ---	REVISED - ---

HANCOCK COUNTY HIGHWAY DEPARTMENT
 101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
 (217)357-3155

CONTROL POINTS AND BENCHMARKS

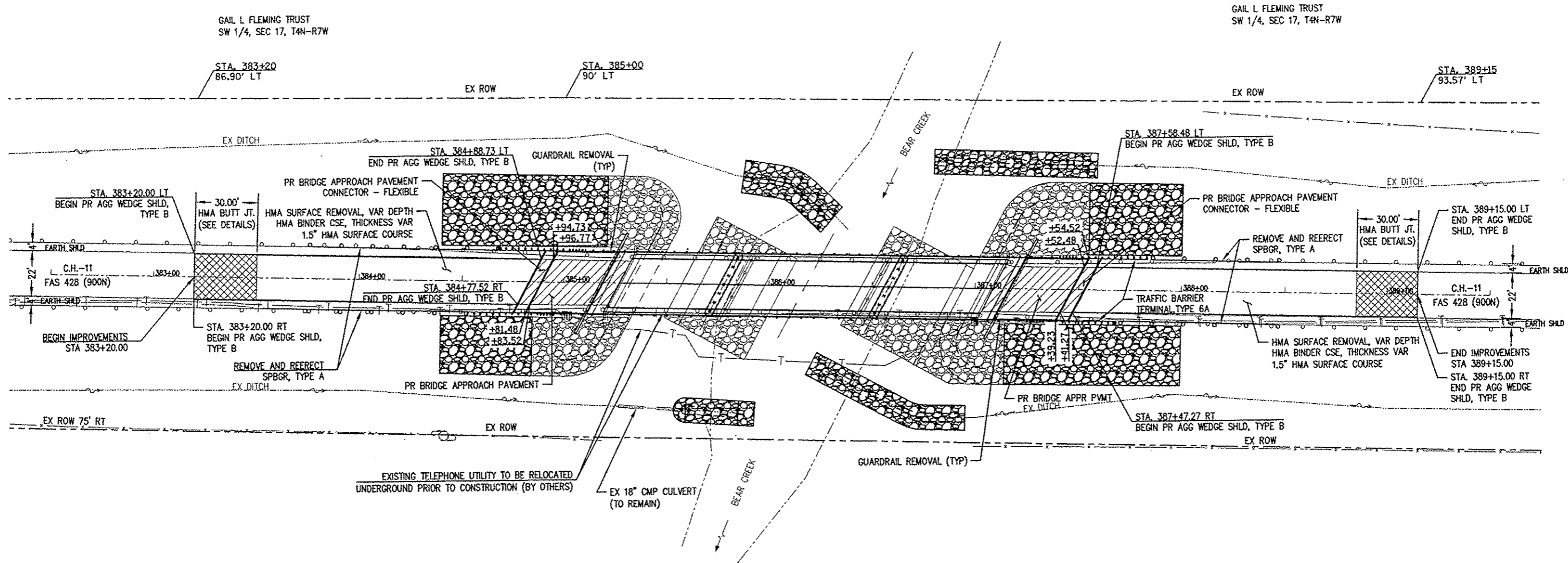
SHEET NO. 1 OF 1 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	8
CONTRACT NO. 93659			ILLINOIS FED. AID PROJECT	

BEGIN PROJECT STA. 383+20.00
 N 1335345.3847, E 1998348.6598
 END PROJECT STA. 389+15.00
 N 1335330.1828, E 1998943.4655

BENCHMARKS
 BM A - ELEV = 585.933
 CHSLD "□" IN NORTHWEST WINGWALL
 OF EXISTING SN 034-3112
 BM B - STA. 384+43, ELEV = 577.401
 RR SPIKE IN POWER POLE, W. OF CREEK, S. OF ROAD

EXISTING STRUCTURE SN 034-3112, STA. 386+18.00, 3 SPAN CONTINUOUS STEEL BRIDGE, 182.00' BK-BK ABUTMENTS WITH 24' WIDE CONCRETE DECK OPEN ABUTMENTS, SKEW 27' LA TO BE REMOVED AND REPLACED. NO SALVAGE.
 PROPOSED STRUCTURE SN 034-3113, STA. 386+18.00, 3 SPAN PRESTRESSED CONCRETE I-BEAM BRIDGE, 200.00' BK-BK ABUTMENTS WITH REINFORCED 30' WIDE CONCRETE DECK, OPEN INTEGRAL ABUTMENTS, SKEW 27' LA



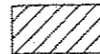


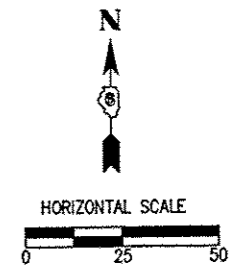
GAIL L. FLEMING TRUST
 SW 1/4, SEC 17, T4N-R7W

GAIL L. FLEMING TRUST
 SW 1/4, SEC 17, T4N-R7W

KREIG KOEHLER & TROY SCHAFFER
 NW 1/4, SEC 20, T4N-R7W

GAIL L. FLEMING TRUST
 NW 1/4, SEC 20, T4N-R7W

-  INDICATES LIMITS OF STONE RIPRAP, CLASS A4 (SPECIAL)
-  FOR RIPRAP DETAILS AND QUANTITIES, SEE STRUCTURE PLANS
-  PAVEMENT REMOVAL



USER NAME *	DESIGNED -	REVISD -
PLOT SCALE *	CHECKED -	REVISD -
PLOT DATE *	DRAWN -	REVISD -
	CHECKED -	REVISD -

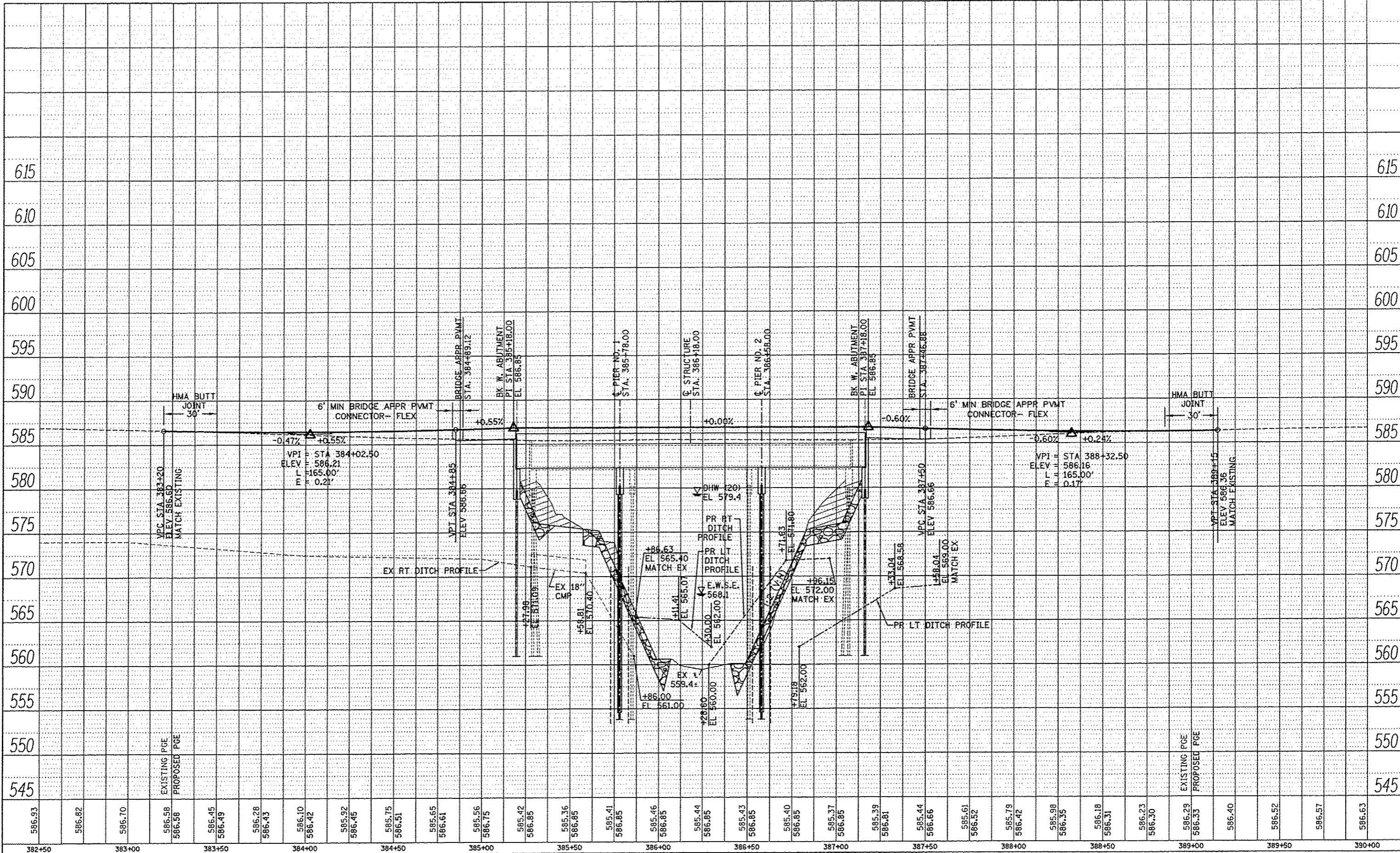
HANCOCK COUNTY HIGHWAY DEPARTMENT
 101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
 (217)357-3155

ROADWAY PLAN
STRUCTURE NO. 034-3113
 SHEET NO. 1 OF 1 SHEETS

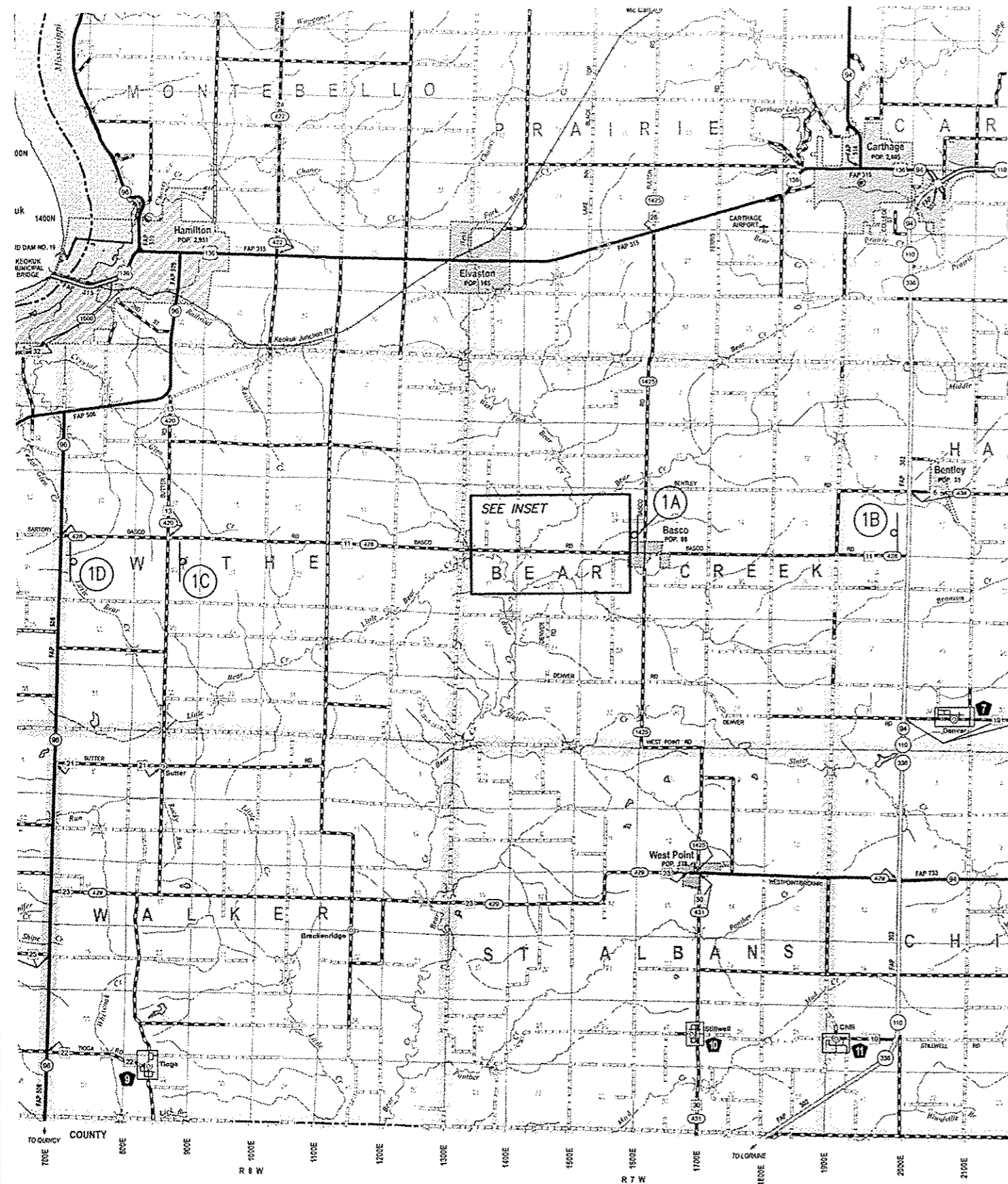
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	9
ILLINOIS FED. AID PROJECT			CONTRACT NO. 93659	

PLAN	DATE
BY	
REVIEWED	
IN CHARGE	
DATE CHECKED	
BY	
NOTE BOOK	
NO.	
FILE NAME	

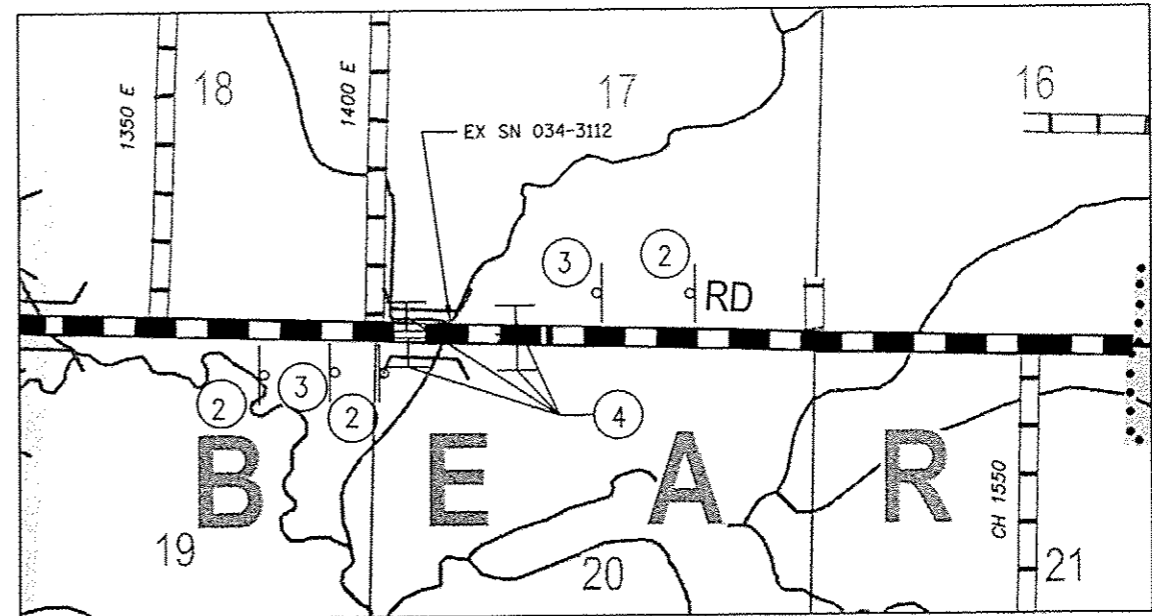
PROFILE	DATE
BY	
REVIEWED	
IN CHARGE	
DATE CHECKED	
BY	
NOTE BOOK	
NO.	
STRUCTURE NOTATION	



586.93	586.82	586.70	586.58	586.45	586.28	586.10	585.92	585.75	585.65	585.46	585.36	585.18	585.00	584.82	584.64	584.46	584.28	584.10	583.92	583.74	583.56	583.38	583.20	583.02	582.84	582.66	582.48	582.30	582.12	581.94	581.76	581.58	581.40	581.22	581.04	580.86	580.68	580.50	580.32	580.14	579.96	579.78	579.60	579.42	579.24	579.06	578.88	578.70	578.52	578.34	578.16	577.98	577.80	577.62	577.44	577.26	577.08	576.90	576.72	576.54	576.36	576.18	576.00	575.82	575.64	575.46	575.28	575.10	574.92	574.74	574.56	574.38	574.20	574.02	573.84	573.66	573.48	573.30	573.12	572.94	572.76	572.58	572.40	572.22	572.04	571.86	571.68	571.50	571.32	571.14	570.96	570.78	570.60	570.42	570.24	570.06	569.88	569.70	569.52	569.34	569.16	568.98	568.80	568.62	568.44	568.26	568.08	567.90	567.72	567.54	567.36	567.18	567.00	566.82	566.64	566.46	566.28	566.10	565.92	565.74	565.56	565.38	565.20	565.02	564.84	564.66	564.48	564.30	564.12	563.94	563.76	563.58	563.40	563.22	563.04	562.86	562.68	562.50	562.32	562.14	561.96	561.78	561.60	561.42	561.24	561.06	560.88	560.70	560.52	560.34	560.16	560.00	559.84	559.68	559.52	559.36	559.20	559.04	558.88	558.72	558.56	558.40	558.24	558.08	557.92	557.76	557.60	557.44	557.28	557.12	556.96	556.80	556.64	556.48	556.32	556.16	556.00	555.84	555.68	555.52	555.36	555.20	555.04	554.88	554.72	554.56	554.40	554.24	554.08	553.92	553.76	553.60	553.44	553.28	553.12	552.96	552.80	552.64	552.48	552.32	552.16	552.00	551.84	551.68	551.52	551.36	551.20	551.04	550.88	550.72	550.56	550.40	550.24	550.08	549.92	549.76	549.60	549.44	549.28	549.12	548.96	548.80	548.64	548.48	548.32	548.16	548.00	547.84	547.68	547.52	547.36	547.20	547.04	546.88	546.72	546.56	546.40	546.24	546.08	545.92	545.76	545.60	545.44	545.28	545.12	545.00	544.88	544.76	544.64	544.52	544.40	544.28	544.16	544.04	543.92	543.80	543.68	543.56	543.44	543.32	543.20	543.08	542.96	542.84	542.72	542.60	542.48	542.36	542.24	542.12	542.00	541.88	541.76	541.64	541.52	541.40	541.28	541.16	541.04	540.92	540.80	540.68	540.56	540.44	540.32	540.20	540.08	540.00	539.88	539.76	539.64	539.52	539.40	539.28	539.16	539.04	538.92	538.80	538.68	538.56	538.44	538.32	538.20	538.08	538.00	537.88	537.76	537.64	537.52	537.40	537.28	537.16	537.04	536.92	536.80	536.68	536.56	536.44	536.32	536.20	536.08	536.00	535.88	535.76	535.64	535.52	535.40	535.28	535.16	535.04	534.92	534.80	534.68	534.56	534.44	534.32	534.20	534.08	534.00	533.88	533.76	533.64	533.52	533.40	533.28	533.16	533.04	532.92	532.80	532.68	532.56	532.44	532.32	532.20	532.08	532.00	531.88	531.76	531.64	531.52	531.40	531.28	531.16	531.04	530.92	530.80	530.68	530.56	530.44	530.32	530.20	530.08	530.00	529.88	529.76	529.64	529.52	529.40	529.28	529.16	529.04	528.92	528.80	528.68	528.56	528.44	528.32	528.20	528.08	528.00	527.88	527.76	527.64	527.52	527.40	527.28	527.16	527.04	526.92	526.80	526.68	526.56	526.44	526.32	526.20	526.08	526.00	525.88	525.76	525.64	525.52	525.40	525.28	525.16	525.04	524.92	524.80	524.68	524.56	524.44	524.32	524.20	524.08	524.00	523.88	523.76	523.64	523.52	523.40	523.28	523.16	523.04	522.92	522.80	522.68	522.56	522.44	522.32	522.20	522.08	522.00	521.88	521.76	521.64	521.52	521.40	521.28	521.16	521.04	520.92	520.80	520.68	520.56	520.44	520.32	520.20	520.08	520.00	519.88	519.76	519.64	519.52	519.40	519.28	519.16	519.04	518.92	518.80	518.68	518.56	518.44	518.32	518.20	518.08	518.00	517.88	517.76	517.64	517.52	517.40	517.28	517.16	517.04	516.92	516.80	516.68	516.56	516.44	516.32	516.20	516.08	516.00	515.88	515.76	515.64	515.52	515.40	515.28	515.16	515.04	514.92	514.80	514.68	514.56	514.44	514.32	514.20	514.08	514.00	513.88	513.76	513.64	513.52	513.40	513.28	513.16	513.04	512.92	512.80	512.68	512.56	512.44	512.32	512.20	512.08	512.00	511.88	511.76	511.64	511.52	511.40	511.28	511.16	511.04	510.92	510.80	510.68	510.56	510.44	510.32	510.20	510.08	510.00	509.88	509.76	509.64	509.52	509.40	509.28	509.16	509.04	508.92	508.80	508.68	508.56	508.44	508.32	508.20	508.08	508.00	507.88	507.76	507.64	507.52	507.40	507.28	507.16	507.04	506.92	506.80	506.68	506.56	506.44	506.32	506.20	506.08	506.00	505.88	505.76	505.64	505.52	505.40	505.28	505.16	505.04	504.92	504.80	504.68	504.56	504.44	504.32	504.20	504.08	504.00	503.88	503.76	503.64	503.52	503.40	503.28	503.16	503.04	502.92	502.80	502.68	502.56	502.44	502.32	502.20	502.08	502.00	501.88	501.76	501.64	501.52	501.40	501.28	501.16	501.04	500.92	500.80	500.68	500.56	500.44	500.32	500.20	500.08	500.00	499.88	499.76	499.64	499.52	499.40	499.28	499.16	499.04	498.92	498.80	498.68	498.56	498.44	498.32	498.20	498.08	498.00	497.88	497.76	497.64	497.52	497.40	497.28	497.16	497.04	496.92	496.80	496.68	496.56	496.44	496.32	496.20	496.08	496.00	495.88	495.76	495.64	495.52	495.40	495.28	495.16	495.04	494.92	494.80	494.68	494.56	494.44	494.32	494.20	494.08	494.00	493.88	493.76	493.64	493.52	493.40	493.28	493.16	493.04	492.92	492.80	492.68	492.56	492.44	492.32	492.20	492.08	492.00	491.88	491.76	491.64	491.52	491.40	491.28	491.16	491.04	490.92	490.80	490.68	490.56	490.44	490.32	490.20	490.08	490.00	489.88	489.76	489.64	489.52	489.40	489.28	489.16	489.04	488.92	488.80	488.68	488.56	488.44	488.32	488.20	488.08	488.00	487.88	487.76	487.64	487.52	487.40	487.28	487.16	487.04	486.92	486.80	486.68	486.56	486.44	486.32	486.20	486.08	486.00	485.88	485.76	485.64	485.52	485.40	485.28	485.16	485.04	484.92	484.80	484.68	484.56	484.44	484.32	484.20	484.08	484.00	483.88	483.76	483.64	483.52	483.40	483.28	483.16	483.04	482.92	482.80	482.68	482.56	482.44	482.32	482.20	482.08	482.00	481.88	481.76	481.64	481.52	481.40	481.28	481.16	481.04	480.92	480.80	480.68	480.56	480.44	480.32	480.20	480.08	480.00	479.88	479.76	479.64	479.52	479.40	479.28	479.16	479.04	478.92	478.80	478.68	478.56	478.44	478.32	478.20	478.08	478.00	477.88	477.76	477.64	477.52	477.40	477.28	477.16	477.04	476.92	476.80	476.68	476.56	476.44	476.32	476.20	476.08	476.00	475.88	475.76	475.64	475.52	475.40	475.28	475.16	475.04	474.92	474.80	474.68	474.56	474.44	474.32	474.20	474.08	474.00	473.88	473.76	473.64	473.52	473.40	473.28	473.16	473.04	472.92	472.80	472.68	472.56	472.44	472.32	472.20	472.08	472.00	471.88	471.76	471.64	471.52	471.40	471.28	471.16	471.04	470.92	470.80	470.68	470.56	470.44	470.32	470.20	470.08	470.00	469.88	469.76	469.64	469.52	469.40	469.28	469.16	469.04	468.92	468.80	468.68	468.56	468.44	468.32	468.20	468.08	468.00	467.88	467.76	467.64	467.52	467.40	467.28	467.16	467.04	466.92	466.80	466.68	466.56	466.44	466.32	466.20	466.08	466.00	465.88	465.76	465.64	465.52	465.40	465.28	465.16	465.04	464.92	464.80	464.68	464.56	464.44	464.32	464.20	464.08	464.00	463.88	463.76	463.64	463.52	463.40	463.28	463.16	463.04	462.92	462.80	462.68	462.56	462.44	462.32	462.20	462.08	462.00	461.88	461.76	461.64	461.52	461.40	461.28	461.16	461.04	460.92	460.80	460.68	460.56	460.44	460.32	460.20	460.08	460.00	459.88	459.76	459.64	459.52	459.40	459.28	459.16	459.04	458.92	458.80	458.68	458.56	458.44	458.32	458.20	458.08	458.00	457.88	457.76	457.64	457.52	457.40	457.28	457.16	457.04	456.92	456.80	456.68	456.56	456.44	456.32	456.20	456.08	456.00	455.88	455.76	455.64	455.52	455.40	455.28	455.16	455.04	454.92	454.80	454.68	454.56	454.44	454.32	454.20	454.08	454.00	453.88	453.76	453.64	453.52	453.40	453.28	453.16	453.04	452.92	452.80	452.68	452.56	452.44	452.32	452.20	452.08	452.00	451.88	451.76	451.64	451.52	451.40	451.28	451.16	451.04	450.92	450.80	450.68	450.56	450.44	450.32	450.20	450.08	450.00	449.88	449.76	449.64	449.52	449.40	449.28	449.16	449.04
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LOCATION MAP



R. 7 W, 4th P.M.

TRAFFIC CONTROL PLAN

SEE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL)

TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE APPLICABLE GUIDELINES CONTAINED IN THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, THESE SPECIAL PROVISIONS, ANY SPECIAL DETAILS AND HIGHWAY STANDARDS CONTAINED HEREIN AND IN THE PLANS.

SPECIAL ATTENTION IS CALLED TO SECTION 701 AND ARTICLES 107.09 AND 107.14 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND AS AMENDED BY THE SUPPLEMENTAL SPECIFICATIONS, RECURRING SPECIAL PROVISIONS, THE SPECIAL PROVISIONS CONTAINED HEREIN, AND THE FOLLOWING HIGHWAY STANDARDS RELATING TO TRAFFIC CONTROL:
701901 BLR 21

LIMITATIONS OF CONSTRUCTION: THE CONTRACTOR SHALL COORDINATE THE ITEMS OF WORK IN ORDER TO KEEP HAZARDS AND TRAFFIC INCONVENIENCES TO A MINIMUM, AS SPECIFIED BELOW.

1. CH-11 SHALL REMAIN CLOSED AT THE VICINITY OF THE BRIDGE DURING CONSTRUCTION.
2. THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN ALL THE NECESSARY BARRICADES, CONES, DRUMS, AND LIGHTS FOR THE WARNING AND PROTECTION OF TRAFFIC, AS REQUIRED BY SECTIONS 107 AND 701 OF THE STANDARD SPECIFICATIONS, AND AS MODIFIED.
3. PRIOR TO ANY CONSTRUCTION ACTIVITIES, TYPE III BARRICADES WITH 'ROAD CLOSED' SIGNS (R11-2-4830) IN ACCORDANCE WITH BLR STANDARD 21 SHALL BE PLACED ON THE LIMITS OF IMPROVEMENT ON CH-11, WHEN TOTAL CLOSURE IS REQUIRED.
4. THE CONTRACTOR SHALL NOTIFY THE HANCOCK COUNTY ENGINEER TWO WEEKS PRIOR TO IMPLEMENTING ANY TRAFFIC CONTROL.
5. THE CONTRACTOR SHALL BE RESPONSIBLE DURING THE DURATION OF THIS PROJECT FOR NOTIFYING THE UNITED STATES POSTAL SERVICE, SCHOOL BUS ROUTE OPERATORS, AND EMERGENCY SERVICES OF PROPOSED CONSTRUCTION AND FOR ENSURING UNINTERRUPTED SERVICE.

ACCESS TO ADJACENT PROPERTIES

ACCESS TO ADJACENT COMMERCIAL, PRIVATE, AND FIELD ENTRANCES SHALL BE MAINTAINED AT ALL TIMES. ALL WEATHER ACCESS SHALL BE A MINIMUM TEN (10') FEET WIDE WHERE REQUIRED OR WHEN DIRECTED BY THE ENGINEER. THE CONTRACTOR MAY NOT DEVIATE FROM THIS PROVISION, EXCEPT WITH WRITTEN PERMISSION FROM THE OWNER/TENANT TO CUT OFF ACCESS TO THEIR PROPERTY FOR A SPECIFIC PERIOD OF TIME.

CONTRACTOR ACCESS

AT ROAD CLOSURE LOCATIONS WHERE TYPE III BARRICADES ARE INSTALLED IN A MANNER THAT WILL NOT ALLOW CONTRACTOR ACCESS TO THE PROJECT WITHOUT RELOCATION OF ONE OR MORE OF THE BARRICADES, THE ARRANGEMENT OF THE BARRICADES AT THE BEGINNING OF EACH WORK DAY MAY BE RELOCATED, WHEN APPROVED BY THE ENGINEER, IN THE MANNER SHOWN ON HIGHWAY STANDARD 701901 FOR ROAD CLOSED TO THROUGH TRAFFIC. 'ROAD CLOSED' SIGNS (R11-2), SUPPLEMENTED BY 'EXCEPT AUTHORIZED VEHICLES' SIGN (R3-1101), SHALL BE MOUNTED ON BOTH THE NEAR-RIGHT AND FAR-LEFT BARRICADE(S). AT THE END OF EACH WORK DAY THE BARRICADES SHALL BE RETURNED TO THEIR IN-LINE POSITIONS. THIS WORK WILL BE INCLUDED IN THE COST OF THE CONTRACT, AND NO EXTRA COMPENSATION WILL BE ALLOWED.

TRAFFIC CONTROL AND PROTECTION (SPECIAL) REQUIRED BY THIS TRAFFIC CONTROL PLAN WILL BE MEASURED ON A LUMP SUM BASIS. FOR SIGN SCHEDULE, SEE SHEET 12 OF 36.

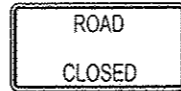
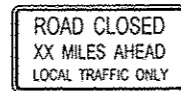


USER NAME *	DESIGNED - TCD	REVISED -
PLOT SCALE *	CHECKED -	REVISED -
PLOT DATE *	DRAWN - TCD	REVISED -
	CHECKED -	REVISED -

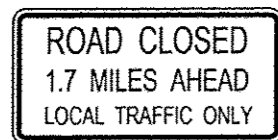
HANCOCK COUNTY HIGHWAY DEPARTMENT
101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
(217)357-3155

TRAFFIC CONTROL PLAN
SHEET NO. 1 OF 2 SHEETS

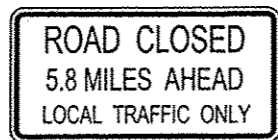
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	11
CONTRACT NO. 93659			ILLINOIS FED. AID PROJECT	



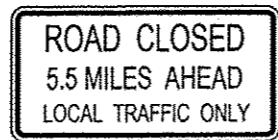
SIGN	LOCATION	R11-3a	W20-3(0)48	W20-3(0)48	R11-2-4830	TYPE III BARRICADE	SQ. FT.	WOOD SIGN SUPPORT	COMMENTS
		60" X 30"	48" X 48"	48" X 48"	48" X 30"			NO. PER SIGN	
1A	CH 11 AT CH 1600	1					12.50	2	1.7 MILES
1B	CH 11 AT IL 94	1					12.50	2	5.8 MILES
1C	CH 11 AT CH 13	1					12.50	2	5.5 MILES
1D	CH 11 AT IL 96	1					12.50	2	7.2 MILES
2	CH 11		3				48.00	1	LOCATION PER BLR-21
3	CH 11			2			32.00	1	LOCATION PER BLR-21
4	CH 11				4	4	40.00		LOCATION PER BLR-21. USE WITH TYPE III BARRICADES AS SHOWN ON STD 701901 DETAIL FOR "ROAD CLOSED TO ALL TRAFFIC". EACH TYPE III BARRICADE SHALL HAVE TWO TYPE A FLASHING LIGHTS
TOTALS		4	3	2	4	4	170.00		



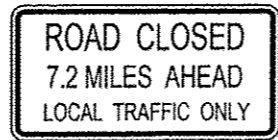
1A



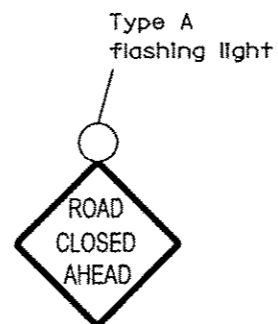
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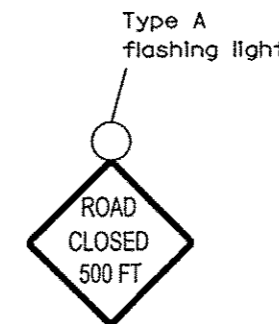
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1D



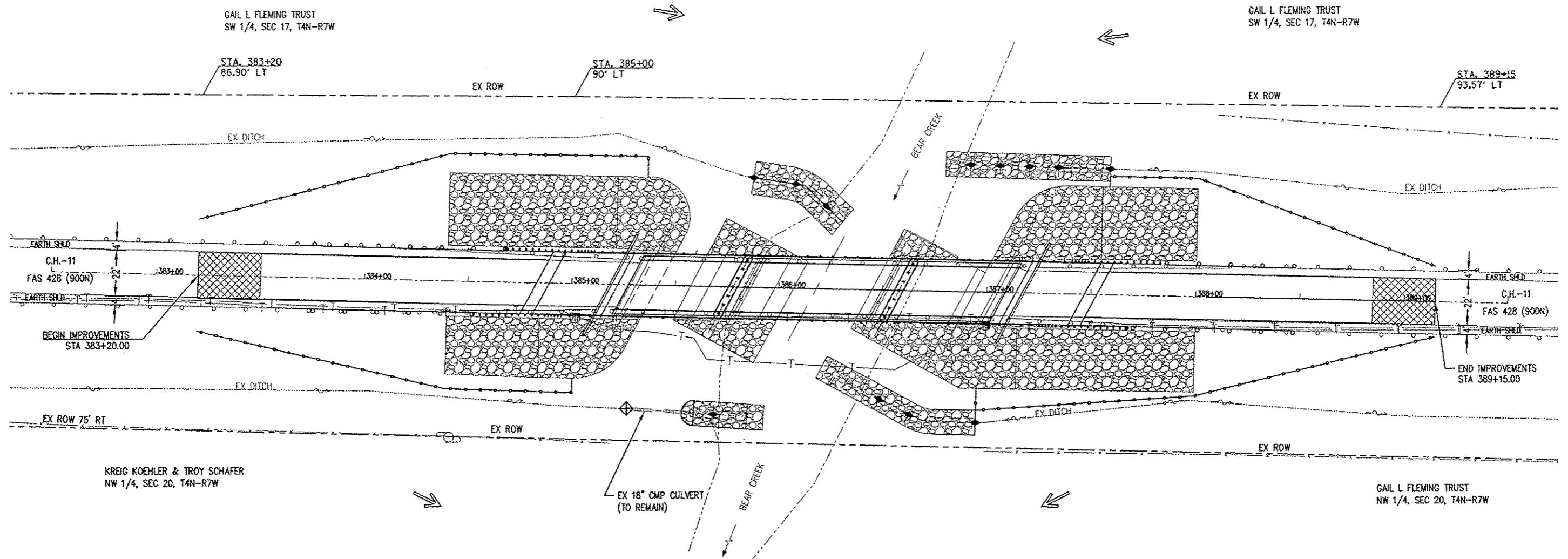
2



3



4

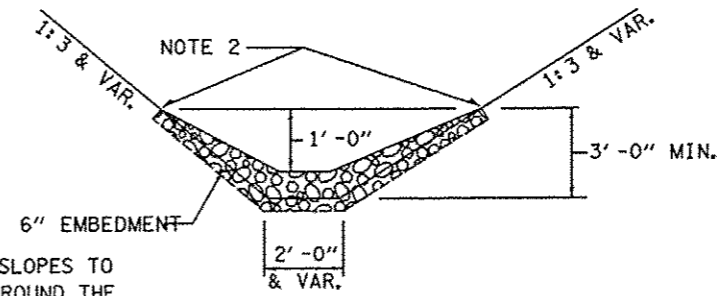
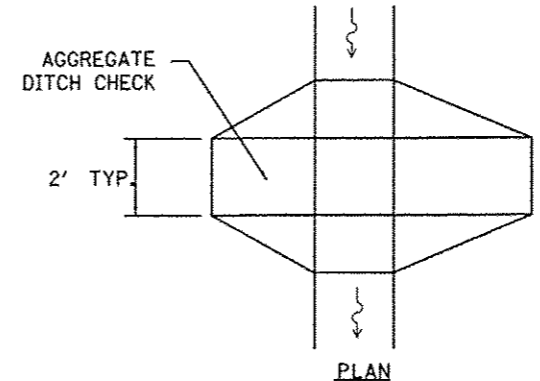


GENERAL NOTES - EROSION AND SEDIMENT CONTROL

1. TEMPORARY EROSION AND SEDIMENT CONTROL SYSTEMS SHALL BE CONSTRUCTED, MAINTAINED, REMOVED, AND DISPOSED OF IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS. THESE SYSTEMS SHALL BE MAINTAINED DURING THE CONSTRUCTION SEASON AS WELL AS THE WINTER MONTHS AND OTHER TIMES WHEN THE PROJECT IS CLOSED DOWN.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT SEDIMENT TRANSPORT OFF THE SITE IS REDUCED BY A COMBINATION OF MINIMIZATION OF EROSION AT THE SOURCE AND INSTALLATION OF SPECIFIC MEASURES TO CONTROL OR REDUCE THE TRANSPORT OF SEDIMENT.
3. DISTURBED AREAS ARE TO BE PROTECTED FOR EROSION IN A TIMELY MANNER. UPON COMPLETION OF GRADING OR CONSTRUCTION, THE AREA SHALL BE STABILIZED (USING PERMANENT MEASURES WHEN POSSIBLE).
4. CONDITIONS CREATED BY THE CONTRACTOR'S OPERATIONS OR THE FOR THE CONVENIENCE, WHICH ARE NOT COVERED BY THE PLANS, SHALL BE PROTECTED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST.
4. DITCH CHECK SPACING IS BASED ON 2' HIGH DITCH CHECKS. THE CONTRACTOR SHALL UTILIZE DITCH CHECKS AS DIRECTED BY ENGINEER.
5. PERIMETER EROSION BARRIER IS SHOWN ON THE PLANS FOR SCHEDULE QUANTITY. ACTUAL LOCATIONS OF PERIMETER EROSION BARRIER WILL BE DETERMINED DURING THE JOBSITE INSPECTION CONDUCTED BY THE CONTRACTOR AND DEPARTMENT PRIOR TO BEGINNING ANY WORK REQUIRING EROSION CONTROL.
6. PLACE TEMPORARY EROSION CONTROL SEEDING ON ALL ERODIBLE/EARTH AREAS EVERY 7 DAYS, REGARDLESS OF WEATHER OR WORK CONDITIONS. THE ENGINEER MAY REQUIRE THAT CRITICAL LOCATIONS BE SEEDED IMMEDIATELY AND THE CONTRACTOR SHALL SEED THESE AREAS WITHIN 48 HOURS OF SUCH A DIRECTIVE. SCHEDULE QUANTITY ASSUMES ENTIRE JOB IS SEEDED TWO (2) TIMES DURING THE GROWING SEASON (MARCH 1 - NOVEMBER 30).
7. SEE PLANS FOR RIPRAP INFORMATION.
8. RIPRAP DITCH LINING AS SHOWN ON THE PLANS SHALL BE INSTALLED UPON ESTABLISHMENT OF PROPOSED DITCH.
9. SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H)

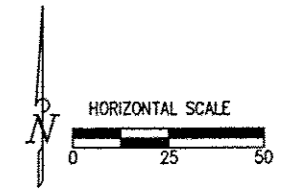
EROSION CONTROL LEGEND

- FOR RIPRAP DETAILS AND QUANTITIES, SEE STRUCTURE PLANS AND ROADWAY PLANS
- INLET AND PIPE PROTECTION
- AGGREGATE DITCH CHECK
- PERIMETER EROSION CONTROL
- DIRECTION OF DITCH FLOW
- DIRECTION OF OVERLAND FLOW



NOTE 1:
RIPRAP SHALL EXTEND FAR ENOUGH UP THE SLOPES TO ALLOW 1' OVERTOPPING TO AVOID ERODING AROUND THE EDGES OF THE RIPRAP.

NOTE 2: ENDS SHALL BE TIED INTO SLOPES.



USER NAME *	DESIGNED - ---	REVISED - ---
	CHECKED - ---	REVISED - ---
PLOT SCALE *	DRAWN - ---	REVISED - ---
PLOT DATE *	CHECKED - ---	REVISED - ---

HANCOCK COUNTY HIGHWAY DEPARTMENT
101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
(217)357-3155

EROSION CONTROL PLANS

SHEET NO. 1 OF 1 SHEETS

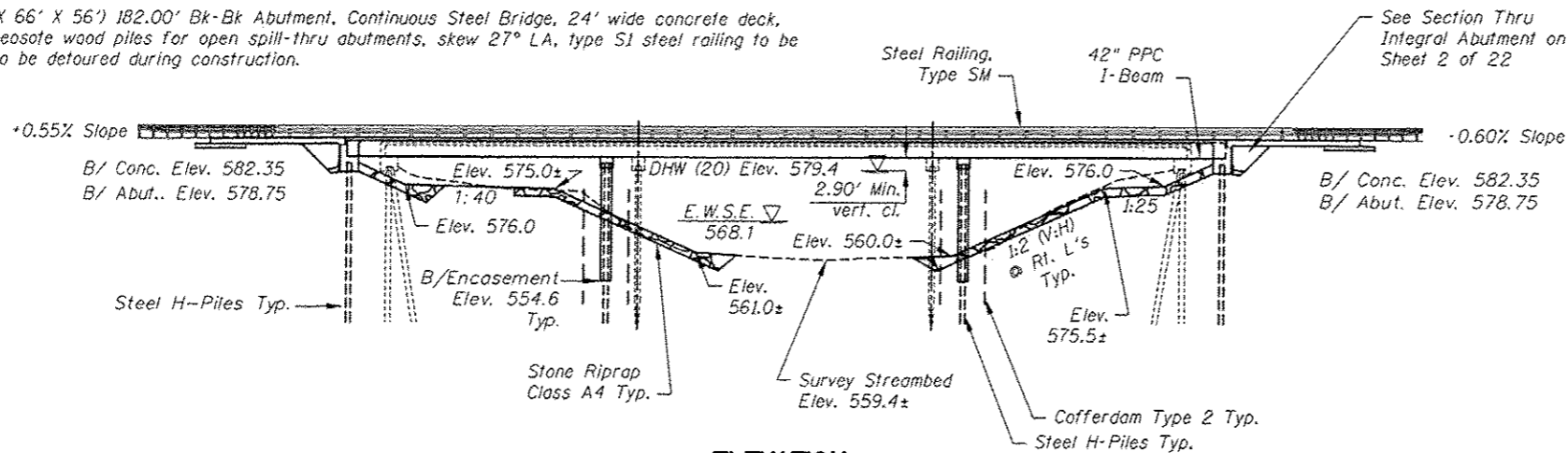
F.A.S. RTE. 428	SECTION 11-00122-00-BR	COUNTY HANCOCK	TOTAL SHEETS 36	SHEET NO. 13
			CONTRACT NO. 93659	
ILLINOIS FED. AID PROJECT				

Benchmark 'A'
Chiseled on NW wingwall SN 034-3112, Sta. 385+35, 15' Lt, Elev. 585.93

Benchmark 'B'
Railroad spike in power pole, W. of creek, S. of road, Sta. 384+43, 75' Rt, Elev. 577.40

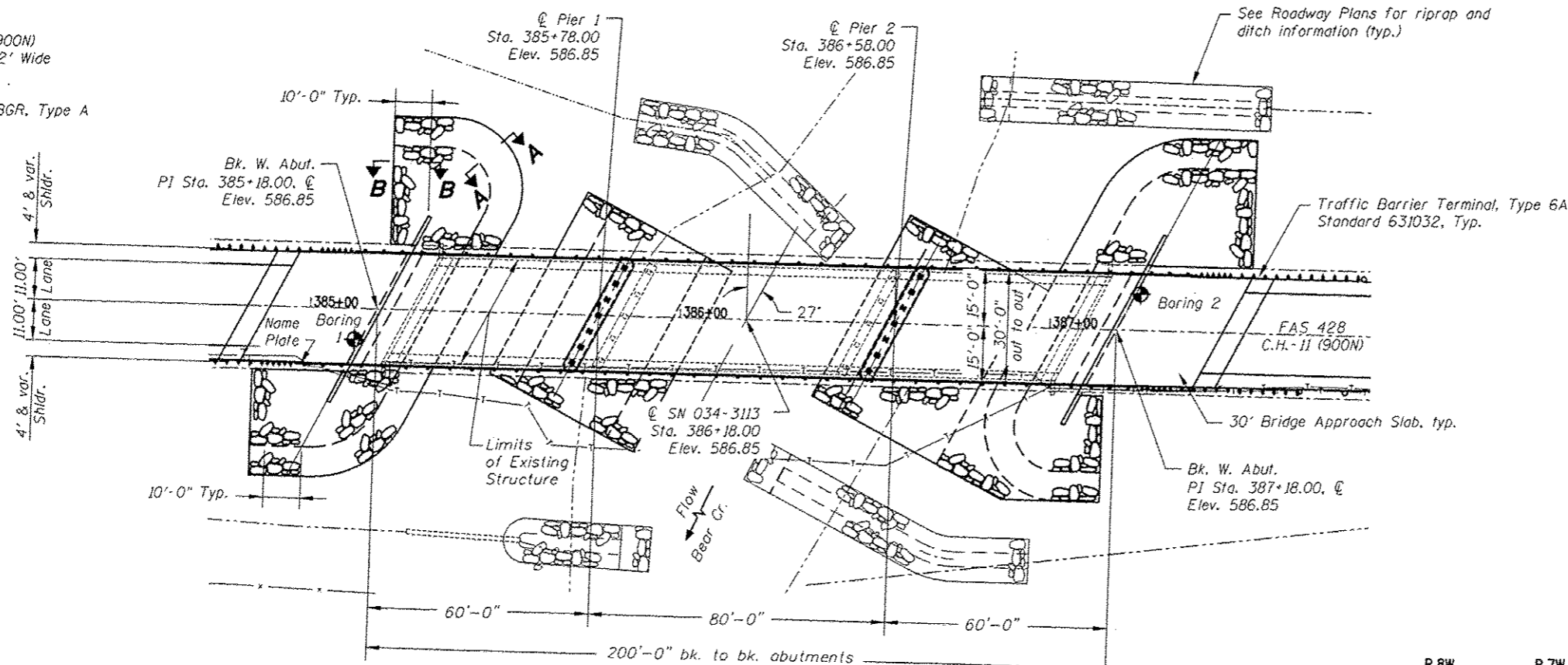
Existing Structure SN 034-3112
@ Sta. 386+18.00, 3 Span (56' X 66' X 56') 182.00' Bk-Bk Abutment, Continuous Steel Bridge, 24' wide concrete deck, concrete pile supported piers, creosote wood piles for open spill-thru abutments, skew 27° LA, type S1 steel railing to be removed and replaced. Traffic to be detoured during construction.

No salvage.



ELEVATION

C.H.-11, FAS 428 (900N)
Existing Roadway 22' Wide
HMA Pavement
4' Earth Shoulder
1:2 foreslope W/SPBGR, Type A



PLAN

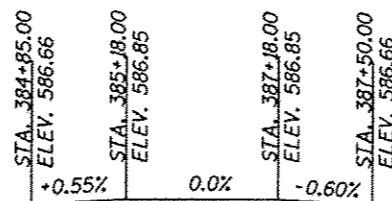
WATERWAY INFORMATION

Flood		Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Mat. H.W.E.		Head - Ft.		Headwater El.	
				Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	10	4590	1641	1781	1867	578.8	579.4	0.9	0.8	579.7	579.7
Base	100	8630	1923	2110	580.7	0.9	0.8	581.6	581.5	-	-
Overtopping	-	-	-	-	-	-	-	-	-	-	-
Max. Calc.	500	11700	2097	2305	581.9	0.6	0.5	582.5	582.4	-	-

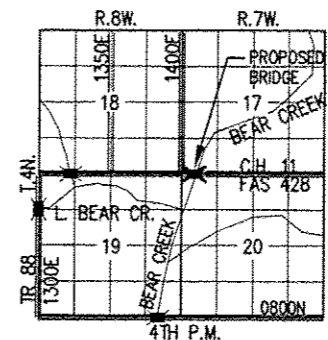
10 year velocity thru proposed bridge = 2.6 f.p.s.

DESIGN SCOUR ELEVATION TABLE

Event / Limit	Design Scour Elevations (ft.)				Item 113
	W. Abut.	Pier 1	Pier 2	E. Abut.	
State	575.4	562.5	566.1	572.0	5
0100	575.4	556.7	563.6	569.4	
0500	575.4	554.6	554.6	578.8	
Design	578.8	554.6	554.6	578.8	
Check	578.8	554.6	554.6	578.8	



PROFILE GRADE
ALONG C.L. OF FAS 428



LOCATION SKETCH

STATION 386+18.00
BUILT BY
STATE OF ILLINOIS
F.A.S. RT. 428
SEC. 11-00122-00-BR
LOADING HL-93
STRUCTURE NO. 034-3113

NAME PLATE
See Std. 515001

INDEX OF SHEETS

- 1 General Plan and Elevation
- 2 General Data
- 3-4 Top of Slab Elevations
- 5-6 Top of Approach Slab Elevations
- 7 Superstructure
- 8 Superstructure Details
- 9-10 Diaphragm Details
- 11-12 Bridge Approach Slab Details
- 13 Steel Railing, Type SM
- 14 Framing Plan & Details
- 15-17 PPC I Beam Details
- 18 Abutments
- 19 Piers
- 20 HP Pile Details
- 21-22 Soil Boring Logs

DESIGN STRESSES

FIELD UNITS

- $f'_c = 5,000$ psi
- $f_y = 60,000$ psi (Reinforcement)
- PRECAST PRESTRESSED UNITS**
- $f'_c = 6,000$ psi
- $f'_{ci} = 5,000$ psi
- $f'_s = 270,000$ psi ($1/2"$ low lax. strands)
- $f_{si} = 201,960$ psi ($1/2"$ low lax. strands)

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition with 2013 Interims

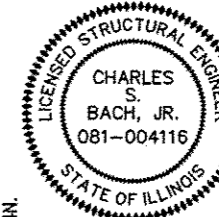
LOADING HL-93

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

SEISMIC DATA

- Seismic Performance Zone (SPZ) = 1
- Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.077g
- Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.120g
- Soil Site Class = C

I Certify That to the Best of my knowledge, information and belief, this bridge is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Standard Specifications for Highway Bridges.



Charles S. Bach, Jr. 8/7/2015
Date
Charles S. Bach, Jr.
Licensed Structural Engineer
State of Illinois No. 81-04116
expires 11/30/2016

GENERAL PLAN & ELEVATION

SN 034-3113
FAS 428 (CH 11) OVER BEAR CREEK
STA. 386+18.00
BEAR CREEK TOWNSHIP
HANCOCK COUNTY, IL



USER NAME *	DESIGNED - TCD	REVISED -
PLOT SCALE *	CHECKED - CSB	REVISED -
PLOT DATE *	DRAWN - TCD	REVISED -
	CHECKED - CSB	REVISED -

HANCOCK COUNTY HIGHWAY DEPARTMENT
101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
(217)357-3155

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 034-3113

SHEET NO. 1 OF 22 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	14
			CONTRACT NO. 93659	

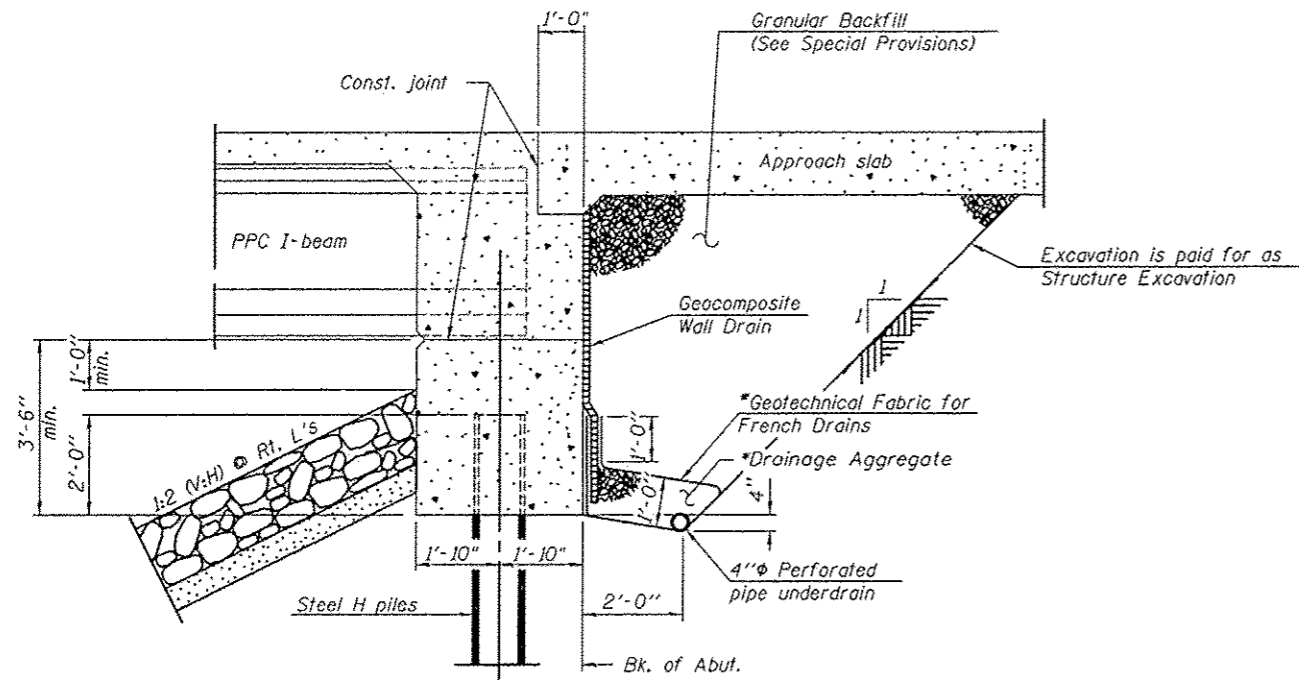
ILLINOIS FED. AID PROJECT

GENERAL NOTES

- See Structural Sheets 21 and 22 of 22 for Boring Data.
- Reinforcement bars designated (E) shall be epoxy coated.
- Concrete Sealer shall be applied to the designated areas of the abutments and piers.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- Layout of the slope protection may be varied to suit ground conditions in the field as directed by the Engineer.
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR 3704 Floodway Construction permit number allowing permanent construction as shown in the contract plans.
- Seal coat thickness design is based on the Estimated Water Surface Elevation (EWSE). Cofferddam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design.
- Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.
- The Contractor is advised that the existing structure contains members that are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the existing structure when developing construction procedure for removal.

TOTAL BILL OF MATERIAL
(SN 034-3113, Structural Sheets 1-22)

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Ton		900	900
Filter Fabric	Sq. Yd.		1,350	1,350
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		258	258
Cofferdam Excavation	Cu. Yd.		307	307
Cofferdam (Type 2) - Location 1	Each		1	1
Cofferdam (Type 2) - Location 2	Each		1	1
Concrete Structures	Cu. Yd.		311.8	311.8
Concrete Superstructure	Cu. Yd.	292.6		292.6
Bridge Deck Grooving	Sq. Yd.	860		860
Seal Coat Concrete	Cu. Yd.		72.8	72.8
Protective Coat	Sq. Yd.	894		894
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 42 In.	Foot	974.5		974.5
Reinforcement Bars, Epoxy Coated	Pound	74,570	24,440	99,010
Steel Railing, Type SM	Foot	456		456
Furnishing Steel Piles, HP12x53	Foot		1,374	1,374
Driving Piles	Foot		1,374	1,374
Test Pile Steel HP 12x53	Each		2	2
Name Plates	Each	1		1
Concrete Sealer	Sq. Ft.		4,812	4,812
Geocomposite Wall Drain	Sq. Yd.		78	78
Traffic Barrier Terminal, Type 6A	Each	4		4
Granular Backfill for Structures	Cu. Yd.		152	152
Pipe Underdrains for Structures 4"	Foot		150	150

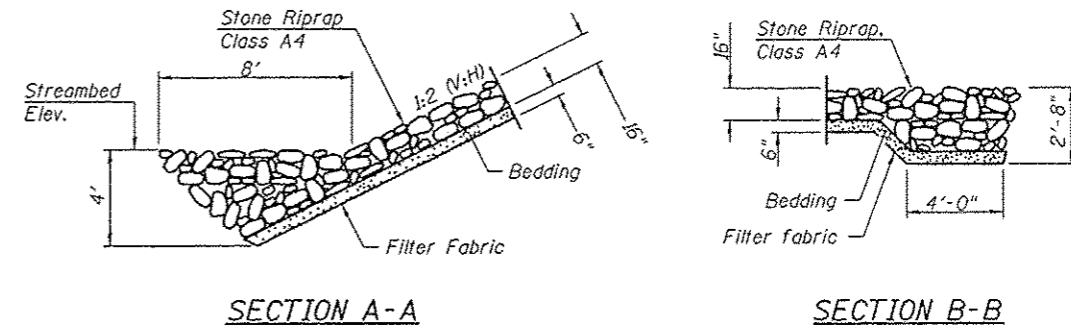


SECTION THRU INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)

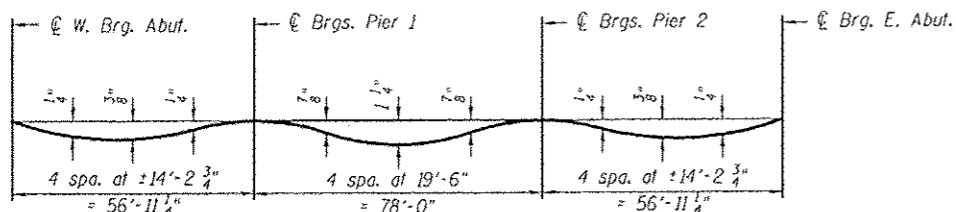
*Included in the cost of Pipe Underdrains for Structures.

Note:

All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 60110).



RIPRAP DETAILS

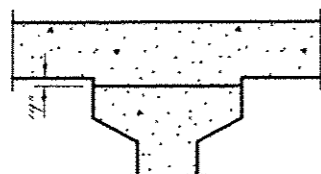


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below and on sheet 4 of 22.



To determine "f": After all precast prestressed beams have 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 here and on sheets _____ of _____ minus the _____ slab thickness, equals the fillet heights "f" above top flanges of beams.

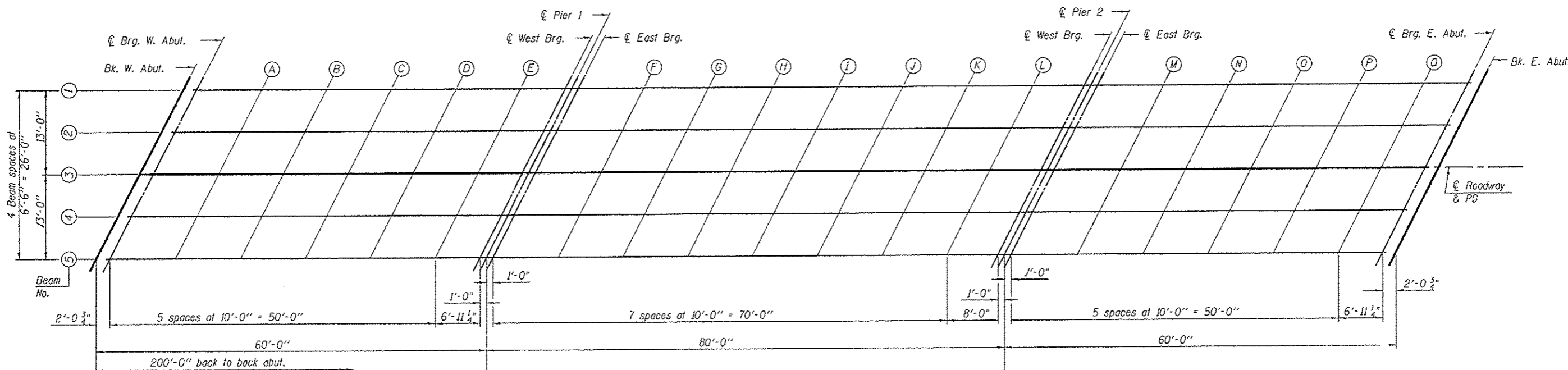
FILLET HEIGHTS

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	385+24.62	-13.00	586.66	586.66
☉ Brg. W. Abut.	385+26.68	-13.00	586.66	586.66
A	385+36.68	-13.00	586.66	586.67
B	385+46.68	-13.00	586.66	586.68
C	385+56.68	-13.00	586.66	586.69
D	385+66.68	-13.00	586.66	586.68
E	385+76.68	-13.00	586.66	586.67
☉ W. Brg. Pier 1	385+83.62	-13.00	586.66	586.66
☉ Pier 1	385+84.62	-13.00	586.66	586.66
☉ E. Brg. Pier 1	385+85.62	-13.00	586.66	586.66
F	385+95.62	-13.00	586.66	586.70
G	386+05.62	-13.00	586.66	586.73
H	386+15.62	-13.00	586.66	586.76
I	386+25.62	-13.00	586.66	586.76
J	386+35.62	-13.00	586.66	586.75
K	386+45.62	-13.00	586.66	586.73
L	386+55.62	-13.00	586.66	586.69
☉ W. Brg. Pier 2	386+63.62	-13.00	586.66	586.66
☉ Pier 2	386+64.62	-13.00	586.66	586.66
☉ E. Brg. Pier 2	386+65.62	-13.00	586.66	586.66
M	386+75.62	-13.00	586.66	586.67
N	386+85.62	-13.00	586.66	586.68
O	386+95.62	-13.00	586.66	586.69
P	387+05.62	-13.00	586.66	586.68
Q	387+15.62	-13.00	586.66	586.67
☉ E. Abut.	387+22.57	-13.00	586.63	586.63
Bk. E. Abut.	387+24.62	-13.00	586.62	586.62

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	385+21.31	-6.50	586.75	586.75
☉ Brg. W. Abut.	385+23.37	-6.50	586.75	586.75
A	385+33.37	-6.50	586.75	586.77
B	385+43.37	-6.50	586.75	586.78
C	385+53.37	-6.50	586.75	586.78
D	385+63.37	-6.50	586.75	586.78
E	385+73.37	-6.50	586.75	586.77
☉ W. Brg. Pier 1	385+80.31	-6.50	586.75	586.75
☉ Pier 1	385+81.31	-6.50	586.75	586.75
☉ E. Brg. Pier 1	385+82.31	-6.50	586.75	586.75
F	385+92.31	-6.50	586.75	586.80
G	386+02.31	-6.50	586.75	586.83
H	386+12.31	-6.50	586.75	586.85
I	386+22.31	-6.50	586.75	586.86
J	386+32.31	-6.50	586.75	586.85
K	386+42.31	-6.50	586.75	586.82
L	386+52.31	-6.50	586.75	586.79
☉ W. Brg. Pier 2	386+60.31	-6.50	586.75	586.75
☉ Pier 2	386+61.31	-6.50	586.75	586.75
☉ E. Brg. Pier 2	386+62.31	-6.50	586.75	586.75
M	386+72.31	-6.50	586.75	586.77
N	386+82.31	-6.50	586.75	586.78
O	386+92.31	-6.50	586.75	586.78
P	387+02.31	-6.50	586.75	586.78
Q	387+12.31	-6.50	586.75	586.77
☉ E. Abut.	387+19.25	-6.50	586.75	586.75
Bk. E. Abut.	387+21.31	-6.50	586.73	586.73



PLAN



USER NAME *	DESIGNED - TCD	REVISED -
PLOT SCALE *	CHECKED - CSB	REVISED -
PLOT DATE *	DRAWN - TCD	REVISED -
	CHECKED - CSB	REVISED -

HANCOCK COUNTY HIGHWAY DEPARTMENT
101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
(217)357-3155

TOP OF SLAB ELEVATIONS (1 OF 2)
STRUCTURE NO. 034-3113

SHEET NO. 3 OF 22 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	16
CONTRACT NO. 93659			ILLINOIS FED. AID PROJECT	

BEAM 3. F ROADWAY & PROFILE GRADE (PG)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	385+18.00	0.00	586.85	586.85
☉ Brg. W. Abut.	385+20.06	0.00	586.85	586.85
A	385+30.06	0.00	586.85	586.87
B	385+40.06	0.00	586.85	586.88
C	385+50.06	0.00	586.85	586.88
D	385+60.06	0.00	586.85	586.88
E	385+70.06	0.00	586.85	586.86
☉ W. Brg. Pier 1	385+76.00	0.00	586.85	586.85
☉ Pier 1	385+78.00	0.00	586.85	586.85
☉ E. Brg. Pier 1	385+79.00	0.00	586.85	586.85
F	385+89.00	0.00	586.85	586.89
G	385+99.00	0.00	586.85	586.93
H	386+09.00	0.00	586.85	586.95
I	386+19.00	0.00	586.85	586.96
J	386+29.00	0.00	586.85	586.95
K	386+39.00	0.00	586.85	586.92
L	386+49.00	0.00	586.85	586.88
☉ W. Brg. Pier 2	386+56.00	0.00	586.85	586.85
☉ Pier 2	386+58.00	0.00	586.85	586.85
☉ E. Brg. Pier 2	386+59.00	0.00	586.85	586.85
M	386+69.00	0.00	586.85	586.87
N	386+79.00	0.00	586.85	586.88
O	386+89.00	0.00	586.85	586.88
P	386+99.00	0.00	586.85	586.88
Q	387+09.00	0.00	586.85	586.86
☉ E. Abut.	387+15.94	0.00	586.85	586.85
Bk. E. Abut.	387+18.00	0.00	586.85	586.85

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	385+14.69	6.50	586.73	586.73
☉ Brg. W. Abut.	385+16.75	6.50	586.74	586.74
A	385+26.75	6.50	586.75	586.77
B	385+36.75	6.50	586.75	586.78
C	385+46.75	6.50	586.75	586.78
D	385+56.75	6.50	586.75	586.78
E	385+66.75	6.50	586.75	586.77
☉ W. Brg. Pier 1	385+73.69	6.50	586.75	586.75
☉ Pier 1	385+74.69	6.50	586.75	586.75
☉ E. Brg. Pier 1	385+75.69	6.50	586.75	586.75
F	385+85.69	6.50	586.75	586.80
G	385+95.69	6.50	586.75	586.83
H	386+05.69	6.50	586.75	586.85
I	386+15.69	6.50	586.75	586.86
J	386+25.69	6.50	586.75	586.85
K	386+35.69	6.50	586.75	586.82
L	386+45.69	6.50	586.75	586.79
☉ W. Brg. Pier 2	386+53.69	6.50	586.75	586.75
☉ Pier 2	386+54.69	6.50	586.75	586.75
☉ E. Brg. Pier 2	386+55.69	6.50	586.75	586.75
M	386+65.69	6.50	586.75	586.77
N	386+75.69	6.50	586.75	586.78
O	386+85.69	6.50	586.75	586.78
P	386+95.69	6.50	586.75	586.78
Q	387+05.69	6.50	586.75	586.77
☉ E. Abut.	387+12.63	6.50	586.75	586.75
Bk. E. Abut.	387+14.69	6.50	586.75	586.75

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	385+11.38	13.00	586.61	586.61
☉ Brg. W. Abut.	385+13.43	13.00	586.62	586.62
A	385+23.43	13.00	586.66	586.67
B	385+33.43	13.00	586.66	586.68
C	385+43.43	13.00	586.66	586.69
D	385+53.43	13.00	586.66	586.68
E	385+63.43	13.00	586.66	586.67
☉ W. Brg. Pier 1	385+70.38	13.00	586.66	586.66
☉ Pier 1	385+71.38	13.00	586.66	586.66
☉ E. Brg. Pier 1	385+72.38	13.00	586.66	586.66
F	385+82.38	13.00	586.66	586.70
G	385+92.38	13.00	586.66	586.73
H	386+02.38	13.00	586.66	586.76
I	386+12.38	13.00	586.66	586.76
J	386+22.38	13.00	586.66	586.75
K	386+32.38	13.00	586.66	586.73
L	386+42.38	13.00	586.66	586.69
☉ W. Brg. Pier 2	386+50.38	13.00	586.66	586.66
☉ Pier 2	386+51.38	13.00	586.66	586.66
☉ E. Brg. Pier 2	386+52.38	13.00	586.66	586.66
M	386+62.38	13.00	586.66	586.67
N	386+72.38	13.00	586.66	586.68
O	386+82.38	13.00	586.66	586.69
P	386+92.38	13.00	586.66	586.68
Q	387+02.38	13.00	586.66	586.67
☉ E. Abut.	387+09.32	13.00	586.66	586.66
Bk. E. Abut.	387+11.38	13.00	586.66	586.66

PI-E1 7-1-10



USER NAME *	DESIGNED - TCD	REVISED -
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PLLOT DATE *	DRAWN - TCD	REVISED -
	CHECKED - CSB	REVISED -

HANCOCK COUNTY HIGHWAY DEPARTMENT
101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
(217)357-3155

TOP OF SLAB ELEVATIONS (2 OF 2)
STRUCTURE NO. 034-3113

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	17
CONTRACT NO. 93659			ILLINOIS FED. AID PROJECT	

NORTH EDGE OF SHOULDER

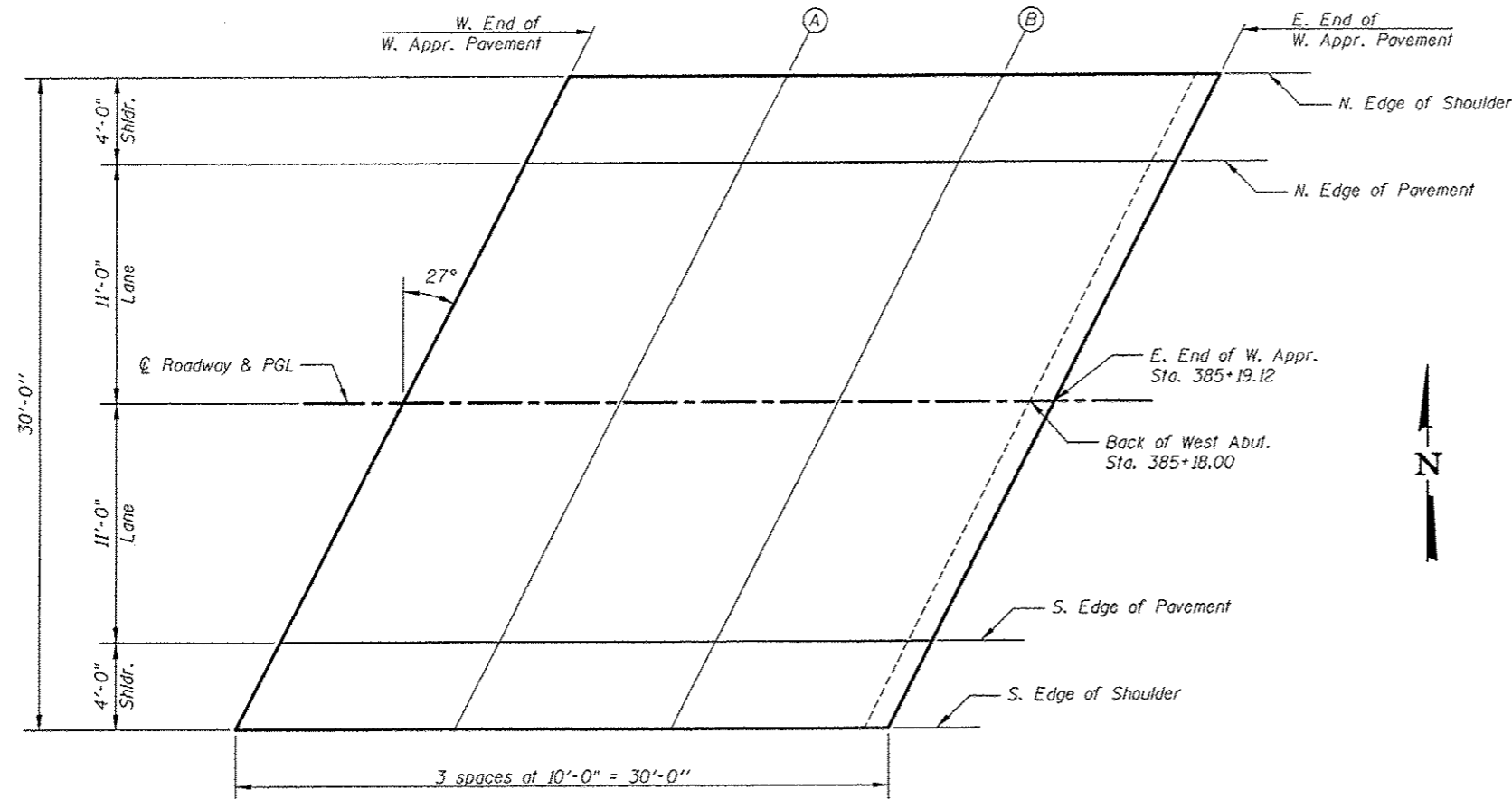
Location	Station	Offset	Theoretical Grade Elevations
W. End W. Approach	38496.77	-15.00	586.50
A	38506.77	-15.00	586.55
B	38516.77	-15.00	586.61
E. End W. Approach	38526.77	-15.00	586.63

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Approach	38494.73	-11.00	586.55
A	38504.73	-11.00	586.60
B	38514.73	-11.00	586.66
E. End W. Approach	38524.73	-11.00	586.69

☉ ROADWAY & PROFILE GRADE LINE (PGL)

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Approach	38489.12	0.00	586.68
A	38499.12	0.00	586.74
B	38509.12	0.00	586.79
E. End W. Approach	38519.12	0.00	586.85



PLAN

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End W. Approach	38483.52	11.00	586.49
A	38493.52	11.00	586.54
B	38503.52	11.00	586.60
E. End W. Approach	38513.52	11.00	586.65

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Approach	38481.48	15.00	586.42
A	38491.48	15.00	586.47
B	38501.48	15.00	586.53
E. End W. Approach	38511.48	15.00	586.58

E-ASI

7-1-10



USER NAME =	DESIGNED - TCD	REVISED -
PLOT SCALE =	CHECKED - CSB	REVISED -
PLOT DATE =	DRAWN - TCD	REVISED -
	CHECKED - CSB	REVISED -

HANCOCK COUNTY HIGHWAY DEPARTMENT
101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
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TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 034-3113

SHEET NO. 5 OF 22 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	18
			CONTRACT NO. 93659	
ILLINOIS FED. AID PROJECT				

NORTH EDGE OF SHOULDER

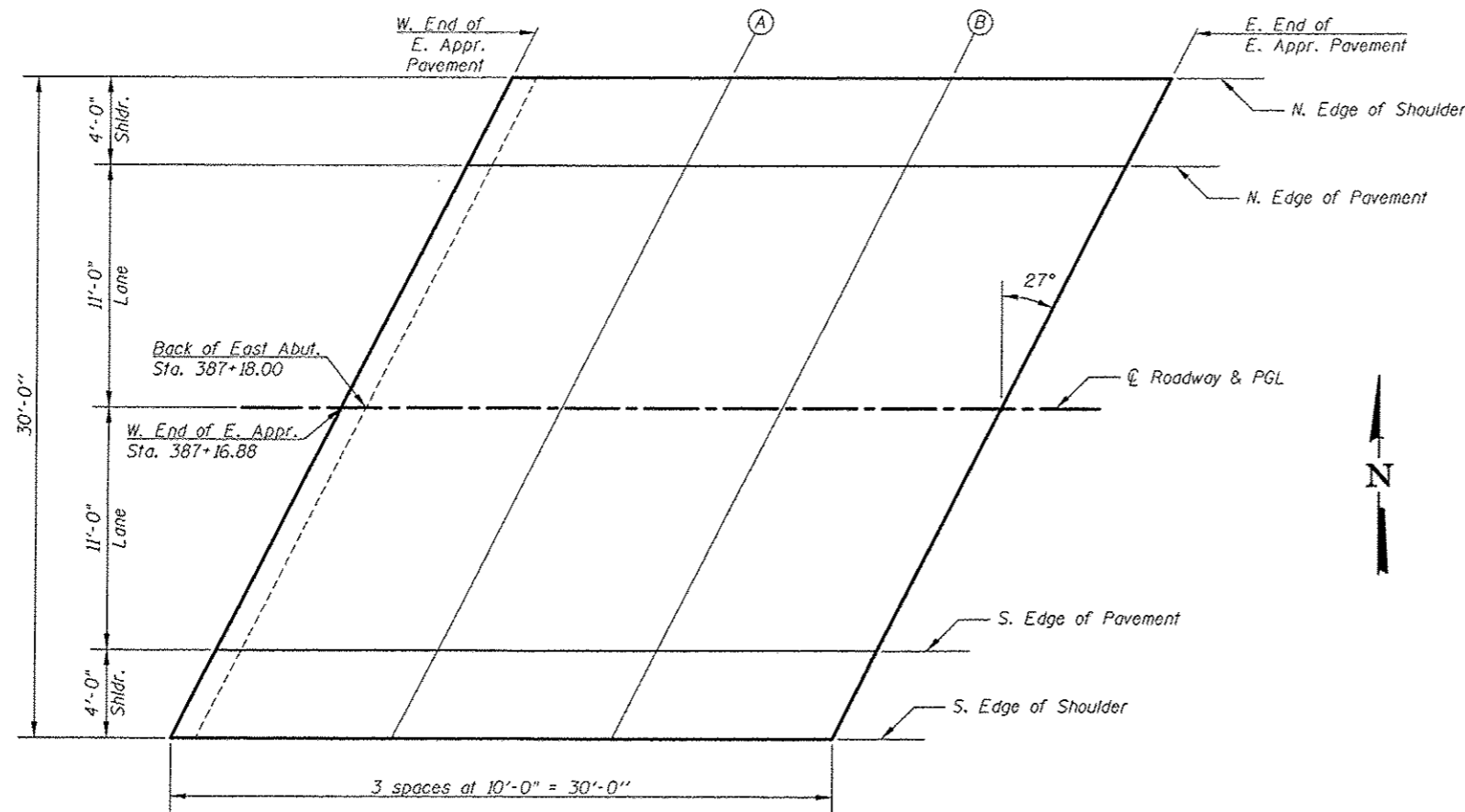
Location	Station	Offset	Theoretical Grade Elevations
W. End E. Approach	38724.52	-15.00	586.59
A	38734.52	-15.00	586.53
B	38744.52	-15.00	586.47
E. End E. Approach	38754.52	-15.00	586.40

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Approach	38722.48	-11.00	586.66
A	38732.48	-11.00	586.60
B	38742.48	-11.00	586.54
E. End E. Approach	38752.48	-11.00	586.48

☉ ROADWAY & PROFILE GRADE LINE (PGL)

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Approach	38716.88	0.00	586.85
A	38726.88	0.00	586.80
B	38736.88	0.00	586.74
E. End E. Approach	38746.88	0.00	586.68



PLAN

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Approach	38711.27	11.00	586.69
A	38721.27	11.00	586.67
B	38731.27	11.00	586.61
E. End E. Approach	38741.27	11.00	586.55

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Approach	38709.23	15.00	586.63
A	38719.23	15.00	586.62
B	38729.23	15.00	586.56
E. End E. Approach	38739.23	15.00	586.50

E-ASI 7-1-10



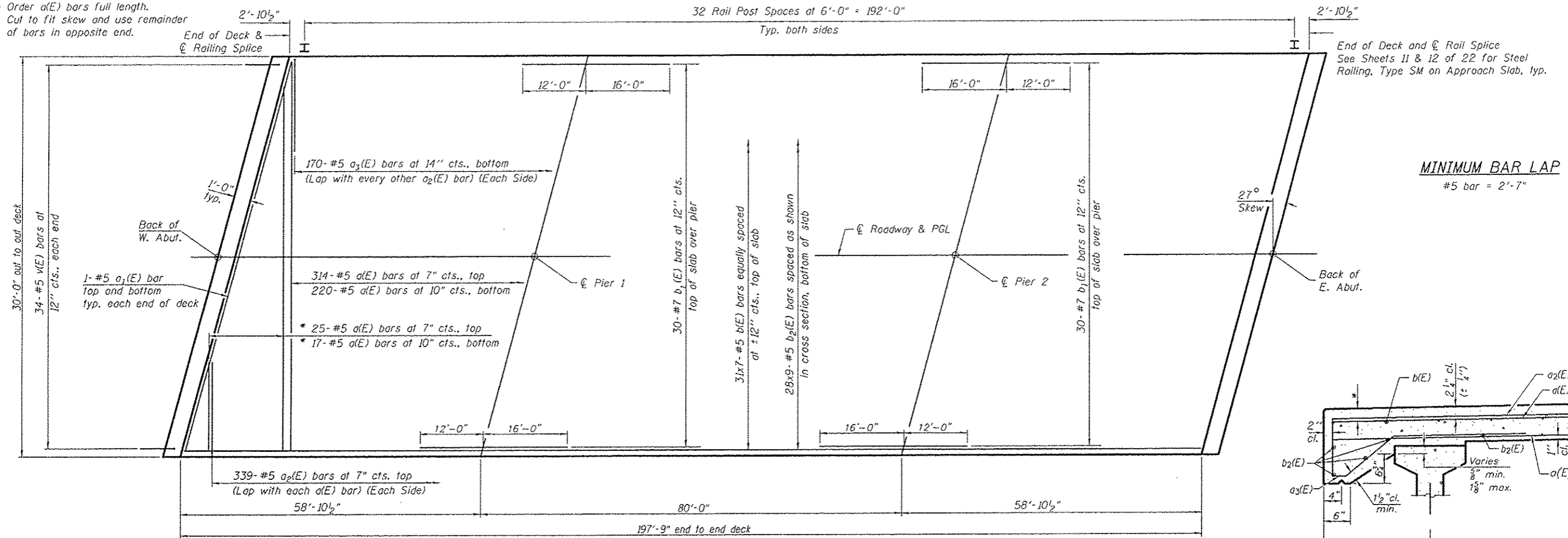
USER NAME *	DESIGNED - TCD	REVISED -
PLOT SCALE *	CHECKED - CSB	REVISED -
PLOT DATE *	DRAWN - TCD	REVISED -
	CHECKED - CSB	REVISED -

HANCOCK COUNTY HIGHWAY DEPARTMENT
101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
(217)357-3155

TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 034-3113

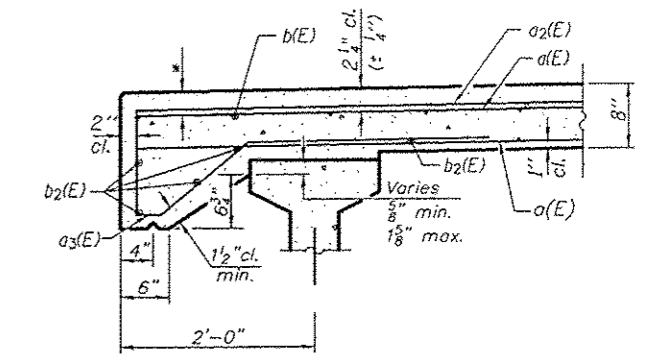
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	19
CONTRACT NO. 93659			ILLINOIS FED. AID PROJECT	

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



PARTIAL PLAN

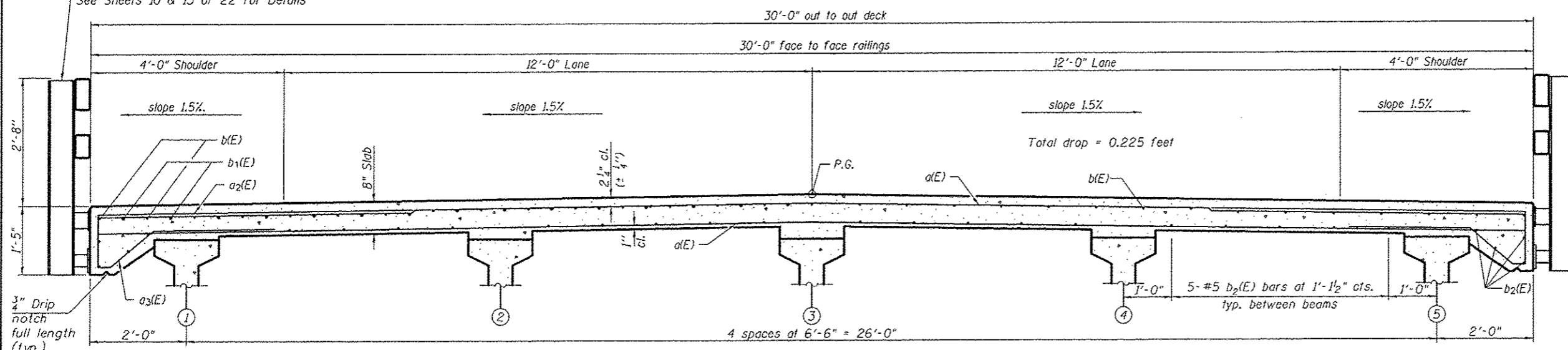
MINIMUM BAR LAP
#5 bar = 2'-7"



SECTION THRU EDGE OF DECK

* Reinforcement bars in the top deck may be placed with a 1/2 inch minimum clearance in the area of the rail post anchor devices. The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

Steel Railing, Type SM (typ.)
See Sheets 10 & 13 of 22 for Details



CROSS SECTION
(Looking East)

Notes:
See Sheets 9 & 10 of 22 for diaphragm details.
See Sheet 8 of 22 for bar details and Bill of Material.
See Sheet 13 of 22 for steel railing details.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

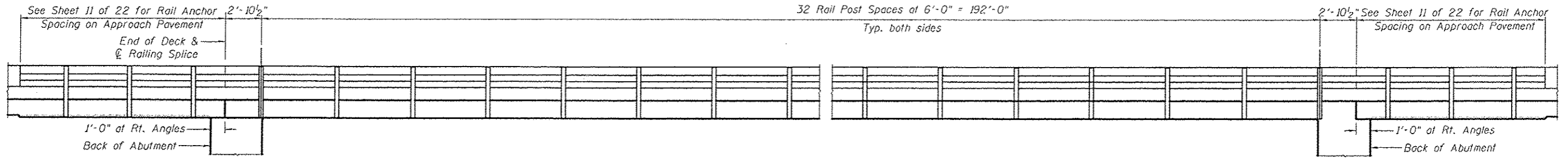


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PLOT SCALE =	CHECKED - CSB	REVISED -
PLOT DATE =	DRAWN - TCD	REVISED -
	CHECKED - CSB	REVISED -

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SUPERSTRUCTURE
STRUCTURE NO. 034-3113
SHEET NO. 7 OF 22 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	20
ILLINOIS FED. AID PROJECT			CONTRACT NO. 93659	

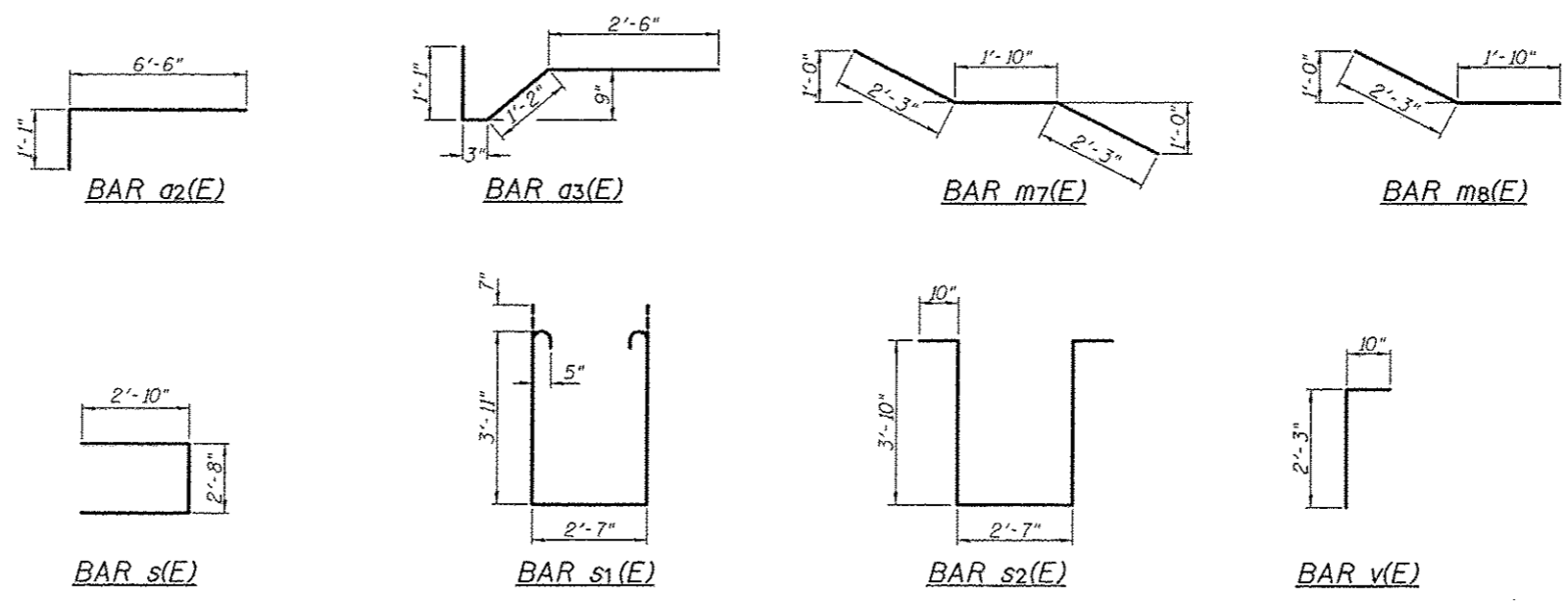


BRIDGE RAILING ELEVATION
(Looking toward bridge)

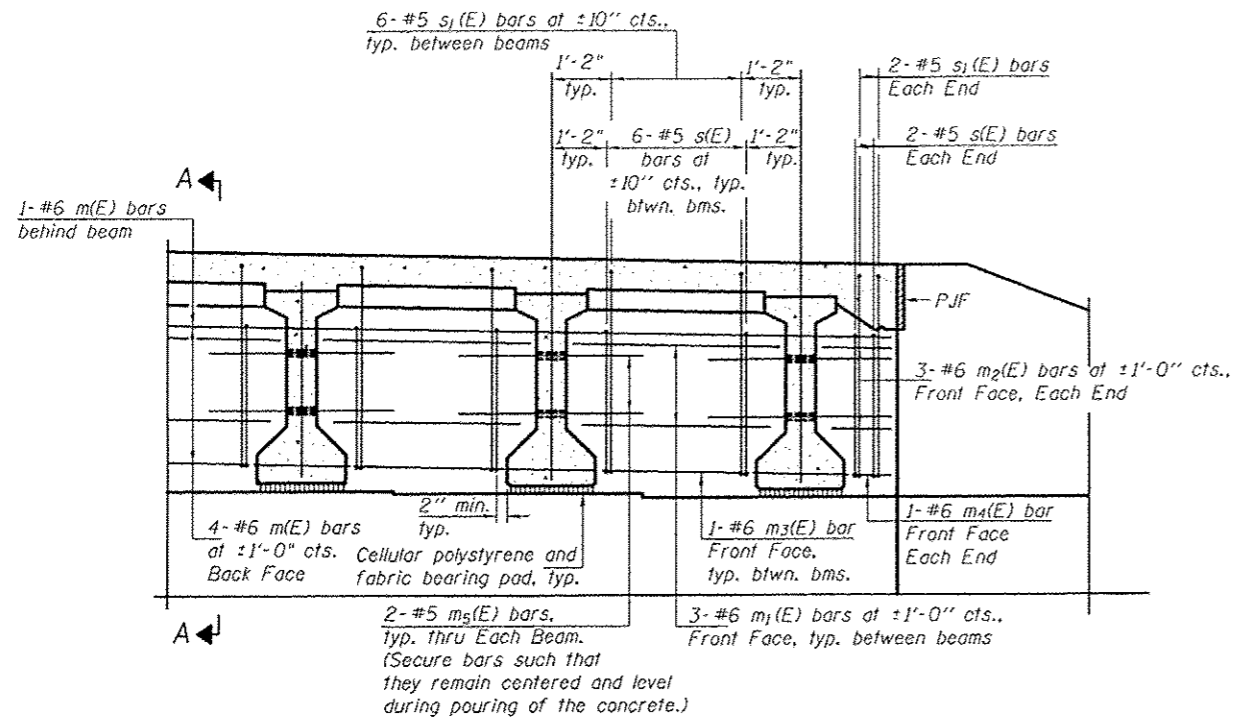
MINIMUM BAR LAP
#5 bar = 2'-7"

**SUPERSTRUCTURE
BILL OF MATERIAL**

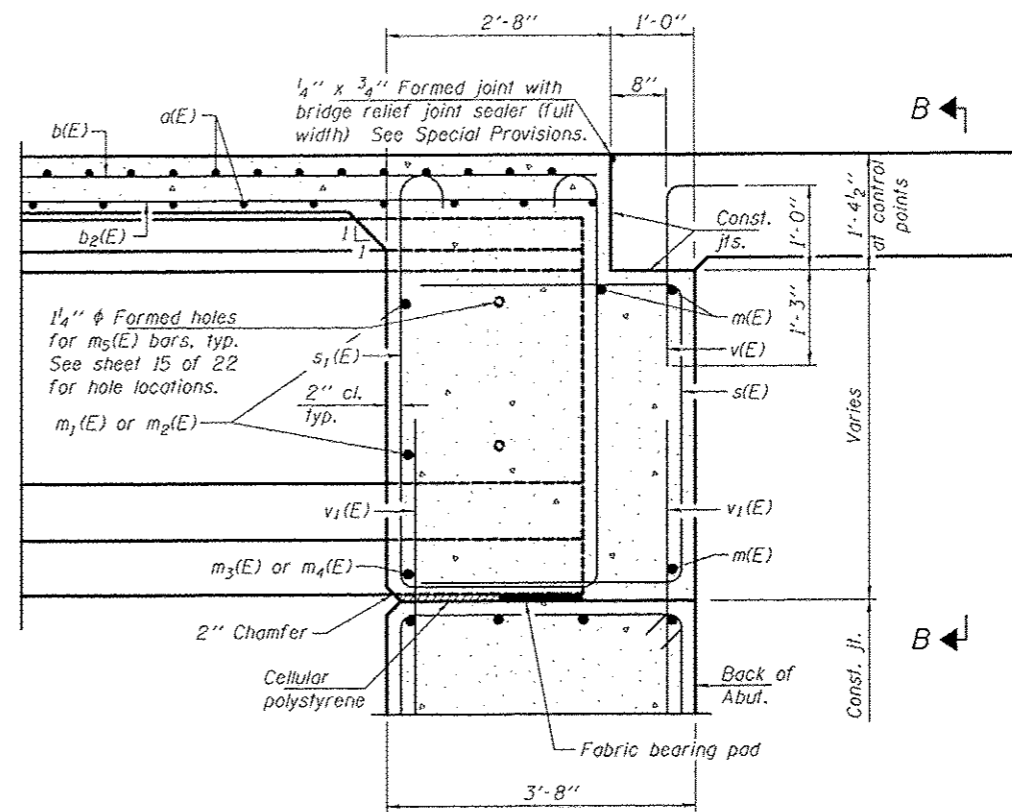
Bar	No.	Size	Length	Shape
a(E)	576	#5	29'-8"	—
a ₁ (E)	4	#5	33'-3"	—
a ₂ (E)	678	#6	7'-7"	—
a ₃ (E)	340	#6	5'-0"	—
b(E)	217	#5	30'-6"	—
b ₁ (E)	60	#7	28'-0"	—
b ₂ (E)	252	#5	24'-4"	—
m(E)	10	#6	33'-4"	—
m ₁ (E)	24	#6	6'-5"	—
m ₂ (E)	12	#6	1'-7"	—
m ₃ (E)	24	#6	4'-11"	—
m ₄ (E)	4	#6	0'-10"	—
m ₅ (E)	20	#5	4'-0"	—
m ₆ (E)	32	#4	6'-5"	—
m ₇ (E)	6	#8	6'-4"	—
m ₈ (E)	4	#8	4'-1"	—
s(E)	56	#5	8'-4"	—
s ₁ (E)	56	#5	11'-7"	—
s ₂ (E)	48	#4	11'-11"	—
v(E)	68	#5	3'-1"	—
Reinforcement Bars, Epoxy Coated			Lbs.	48,050
Concrete Superstructure			Cu. Yds.	208.0
Bridge Deck Grooving			Sq. Yds.	660
Protective Coat			Sq. Yds.	660



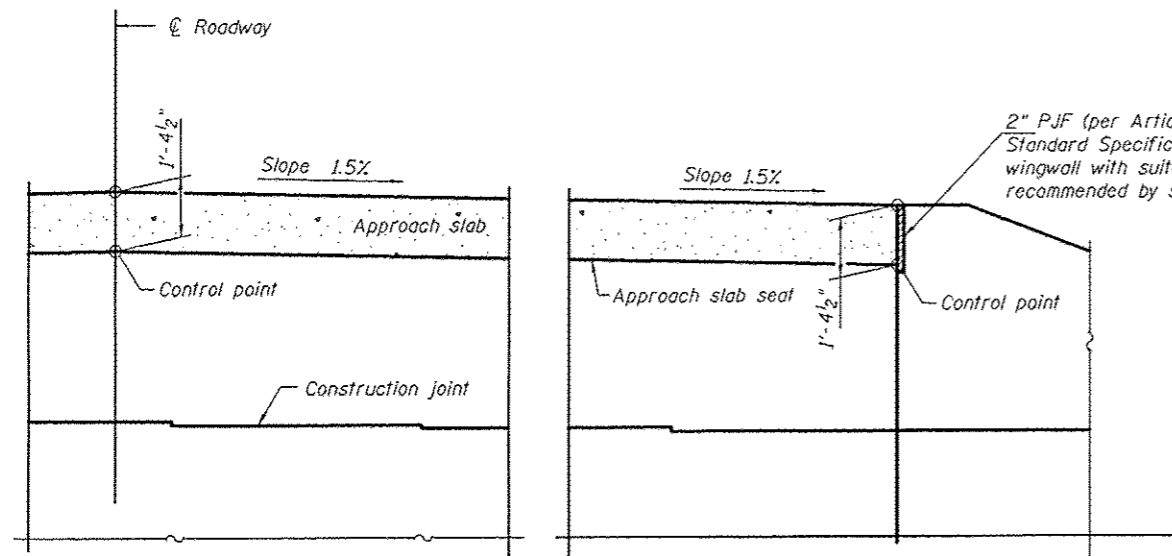
Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.



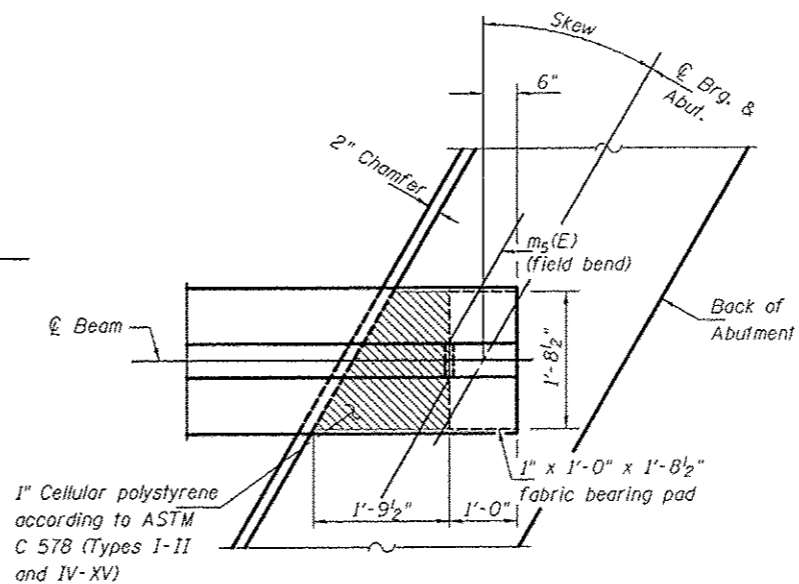
DIAPHRAGM ELEVATION AT ABUTMENT



SECTION A-A
(at Rt. L's)



SECTION B-B



PARTIAL PLAN AT ABUTMENT
(Showing bottom flange of beam)

Notes:
 Reinforcement bars in diaphragm are billed with superstructure on sheet 8 of 22.
 Concrete in diaphragm is included with Concrete Superstructure on sheet 8 of 22.
 For details of bars s(E), s1(E) and v(E) see sheet 8 of 22.
 For bar v1(E) see sheet 18 of 22.
 The s(E) and s1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
 The approach slab seat shall have a constant slope determined from the control points shown.
 Cost of cellular polystyrene is included with Concrete Superstructure.



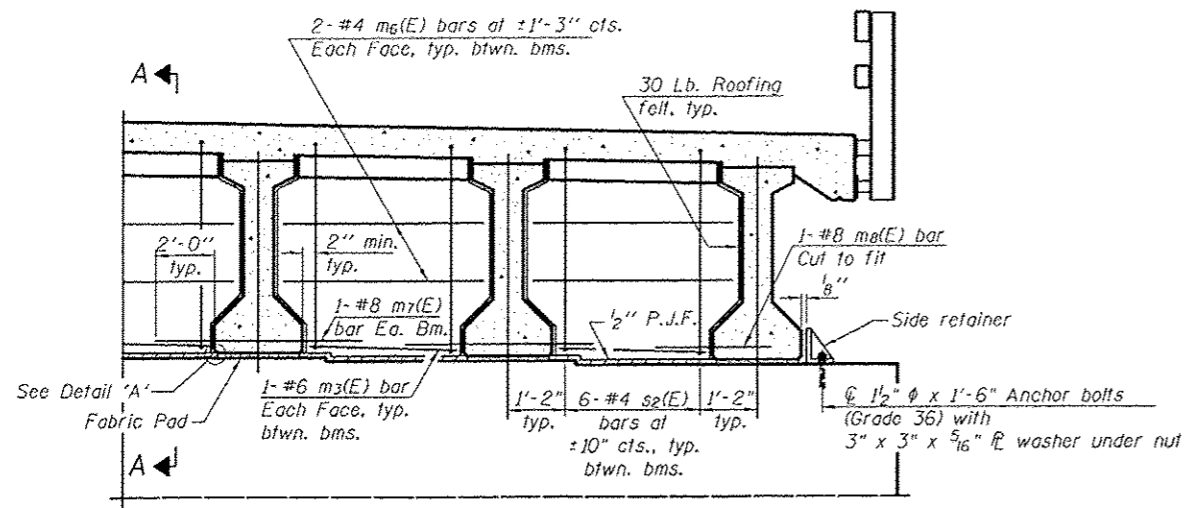
USER NAME *	DESIGNED - TCD	REVISED -
PLOT SCALE *	CHECKED - CSB	REVISED -
PLOT DATE *	DRAWN - TCD	REVISED -
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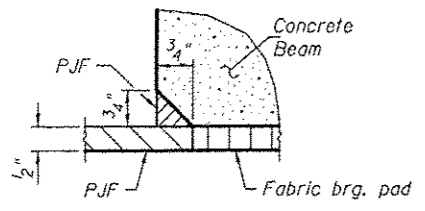
ABUTMENT DIAPHRAGM DETAILS
 STRUCTURE NO. 034-3113

SHEET NO. 9 OF 22 SHEETS

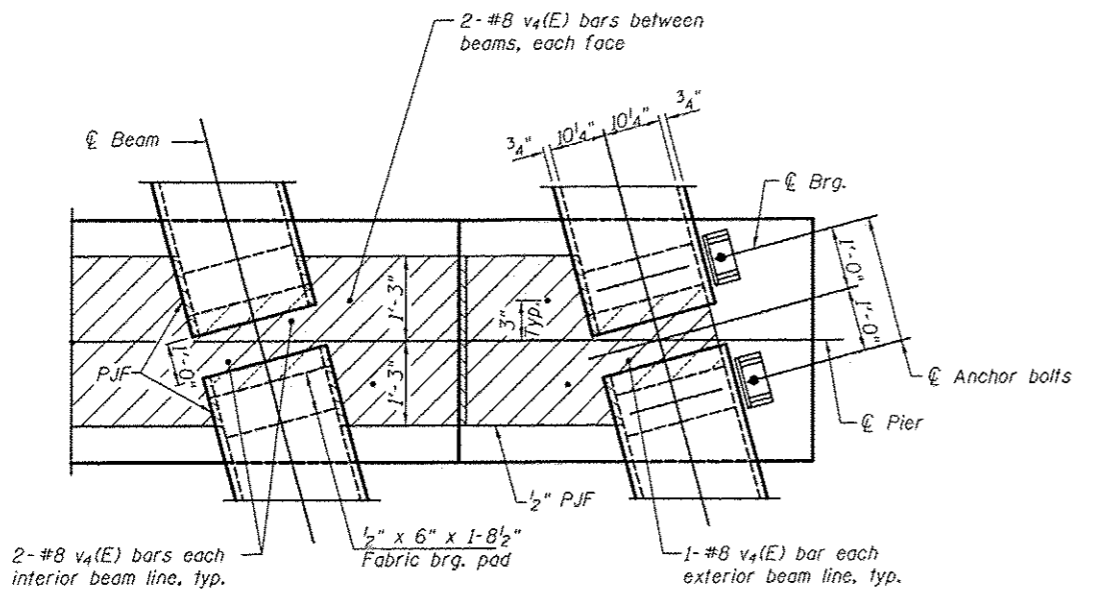
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	22
CONTRACT NO. 93659			ILLINOIS FED. AID PROJECT	



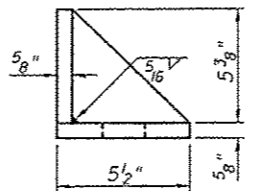
DIAPHRAGM AT PIER



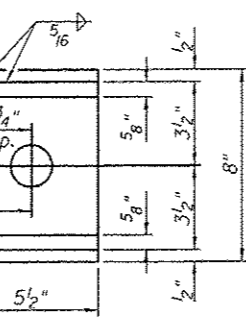
DETAIL 'A'



PLAN AT PIER
(Showing bearing pads and P.J.F. details)



SIDE RETAINER
(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



SECTION A-A

Dimensions along \bar{C} of beam, except as shown.

Roofing felt (30 Lbs.) shall be bonded to side of beam embedded into diaphragm.

* Tightly fasten the #8 bars together with No. 9 wire ties.

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 8 of 22.
Concrete in diaphragm is included with Concrete Superstructure on sheet 8 of 22.
For details of bars $s_2(E)$, $m_7(E)$ and $m_8(E)$ see sheet 8 of 22.
For $v_4(E)$ bars see sheet 19 of 22.
The $s_2(E)$ bars shall be placed parallel to the beams.
Spacing for these bars shall be at right angles to the beams.
Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
The side retainer shall be galvanized after shop fabrication according to AASHTO M 111. Cost of side retainer and anchor bolts shall be included with Concrete Structures.
Anchor bolt assemblies shall be galvanized according to Article 1006.09 of the Standard Specifications.
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.



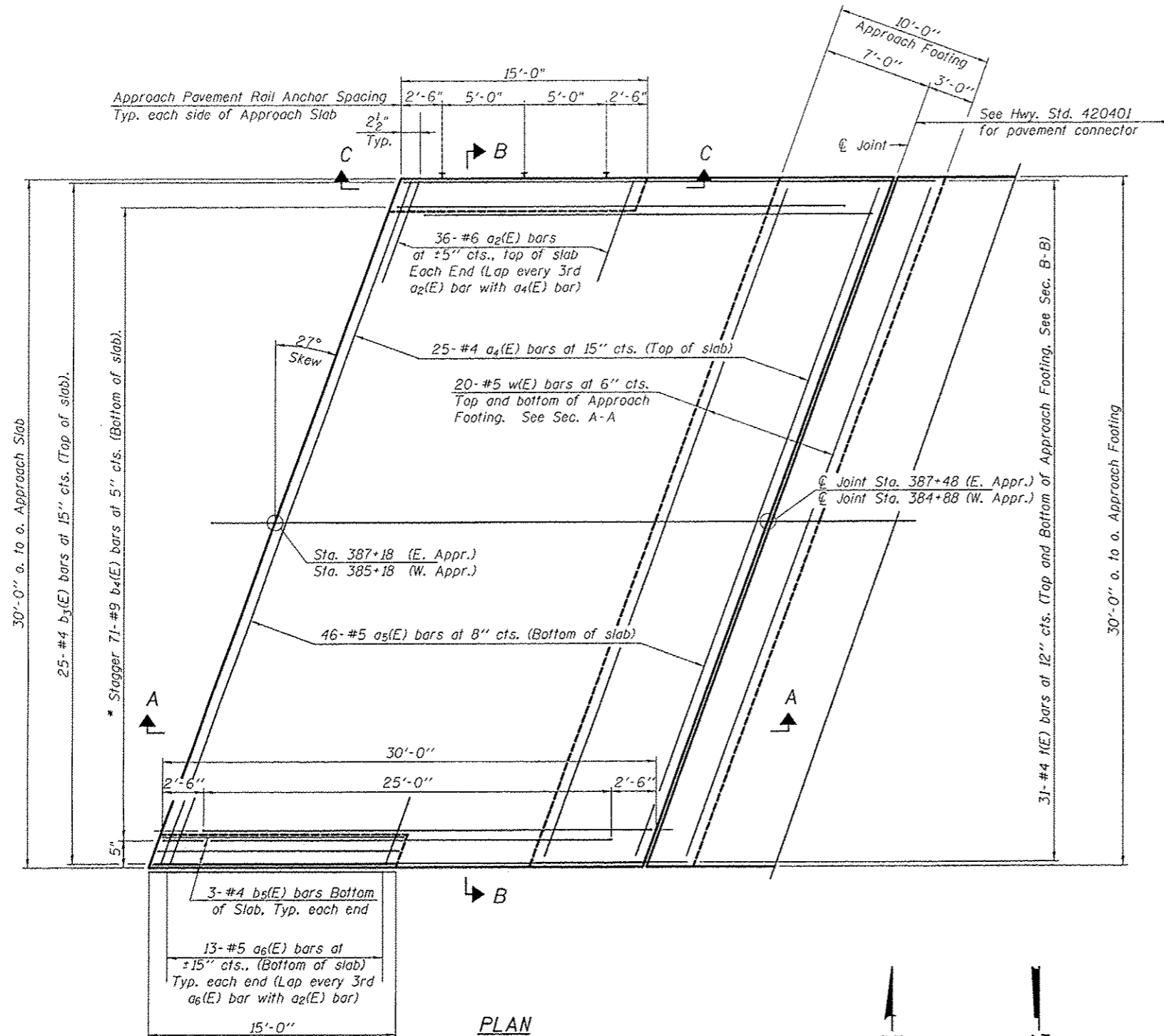
USER NAME *	DESIGNED - TCD	REVISED -
PLLOT SCALE *	CHECKED - CSB	REVISED -
PLLOT DATE *	DRAWN - TCD	REVISED -
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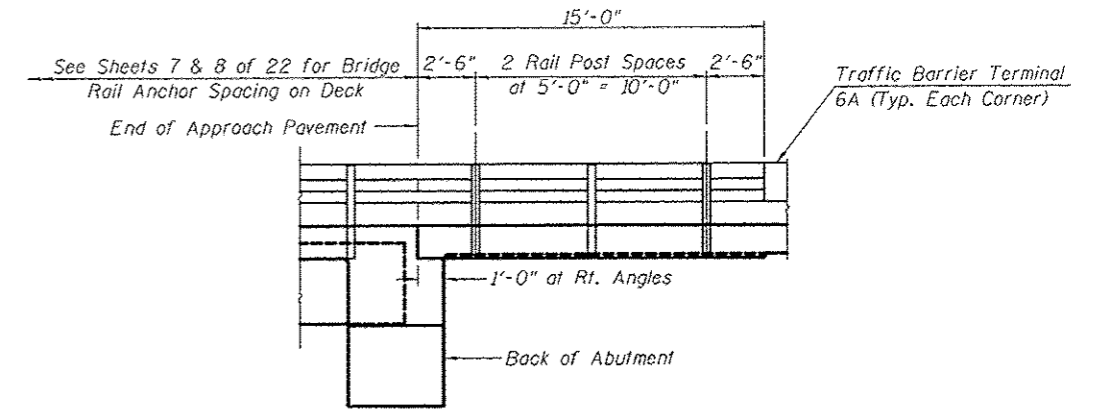
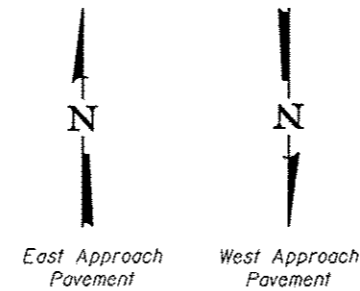
PIER DIAPHRAGM DETAILS
STRUCTURE NO. 034-3113
SHEET NO. 10 OF 22 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	23
CONTRACT NO. 93659			ILLINOIS FED. AID PROJECT	

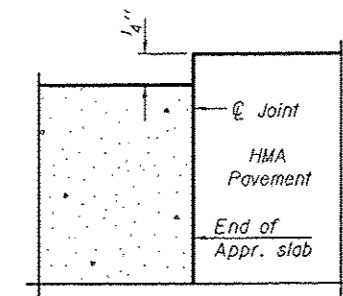
Notes:
 For Sections A-A, B-B, and C-C, see sheet 12 of 22.
 a₄(E) and a₅(E) bar spacings measured along $\text{\textcircled{C}}$ Rdwy.
 For additional railing details, see sheet 13 of 22.



* Tilt #9 b₄(E) bars as required to maintain clearance.



RAIL POST ANCHOR SPACING



FLEXIBLE PAVEMENT
 DETAIL A

(Sheet 1 of 2)



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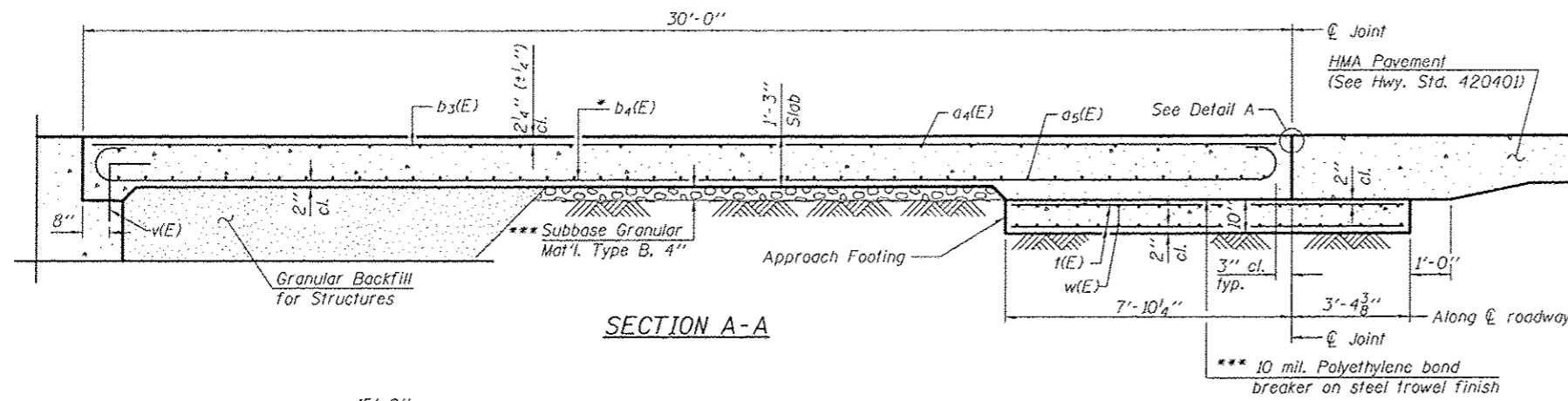
BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 034-3113

SHEET NO. 11 OF 22 SHEETS

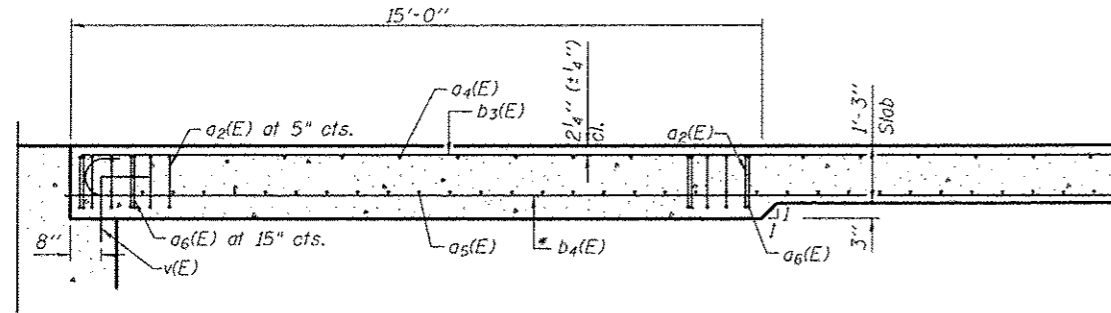
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	24
CONTRACT NO. 93659			ILLINOIS FED. AID PROJECT	

Notes:

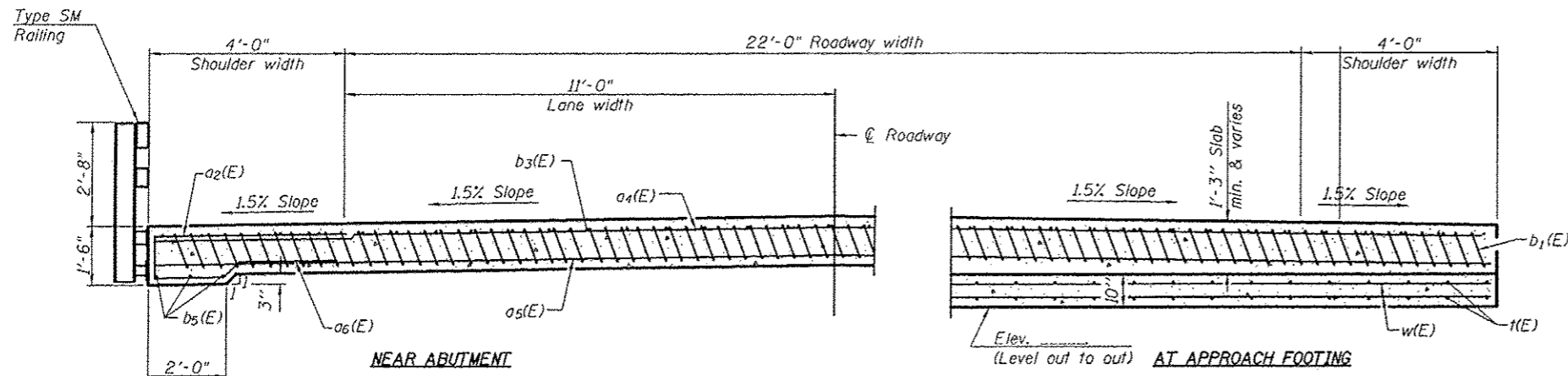
See sheet 11 of 22 for Detail A.
 Approach slab shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 For v(E) bar details, see sheets 8 & 9 of 22.
 The approach footing maximum applied service bearing pressure (Omax) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 22.
 For additional railing details, see sheets 11 & 13 of 22.



SECTION A-A



SECTION C-C



SECTION B-B

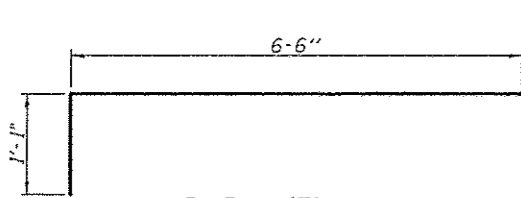
(See Plan for dimensions not shown)

* Till #9 b4(E) bars as required to maintain clearance.

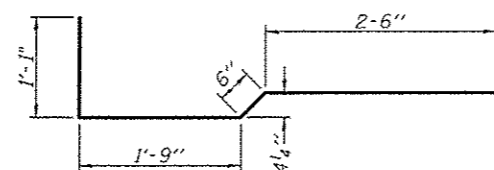
*** Cost included with Concrete Superstructure.

TWO APPROACHES
 BILL OF MATERIAL

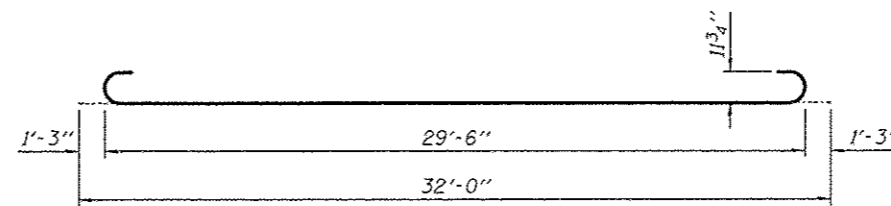
Bar	No.	Size	Length	Shape
a2(E)	144	#6	7'-7"	┌───┐
a4(E)	50	#4	33'-4"	┌───┐
a5(E)	92	#5	33'-4"	┌───┐
a6(E)	52	#5	5'-10"	┌───┐
b3(E)	50	#4	29'-8"	┌───┐
b4(E)	142	#9	32'-0"	┌───┐
b5(E)	12	#4	14'-8"	┌───┐
t(E)	124	#4	10'-11"	┌───┐
w(E)	80	#5	33'-4"	┌───┐
Concrete Superstructure			Cu. Yd.	84.6
Concrete Structures			Cu. Yd.	18.6
Reinforcement Bars, Epoxy Coated			Pound	26,520
Bridge Deck Grooving			Sq. Yd.	200
Protective Coat			Sq. Yd.	200
Traffic Barrier Terminal, Type 6A			Each	4



BAR a2(E)



BAR a6(E)



BAR b4(E)

(Sheet 2 of 2)



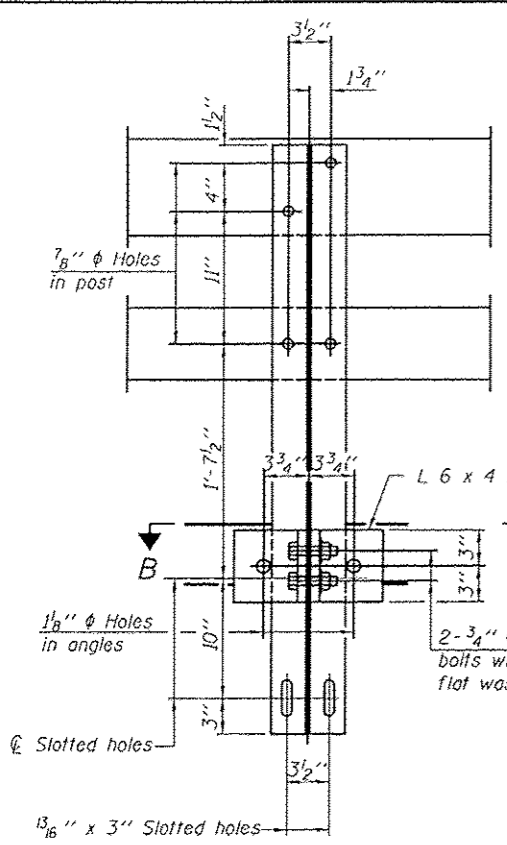
USER NAME *	DESIGNED - TCD	REVISED -
PLOT SCALE *	CHECKED - CSB	REVISED -
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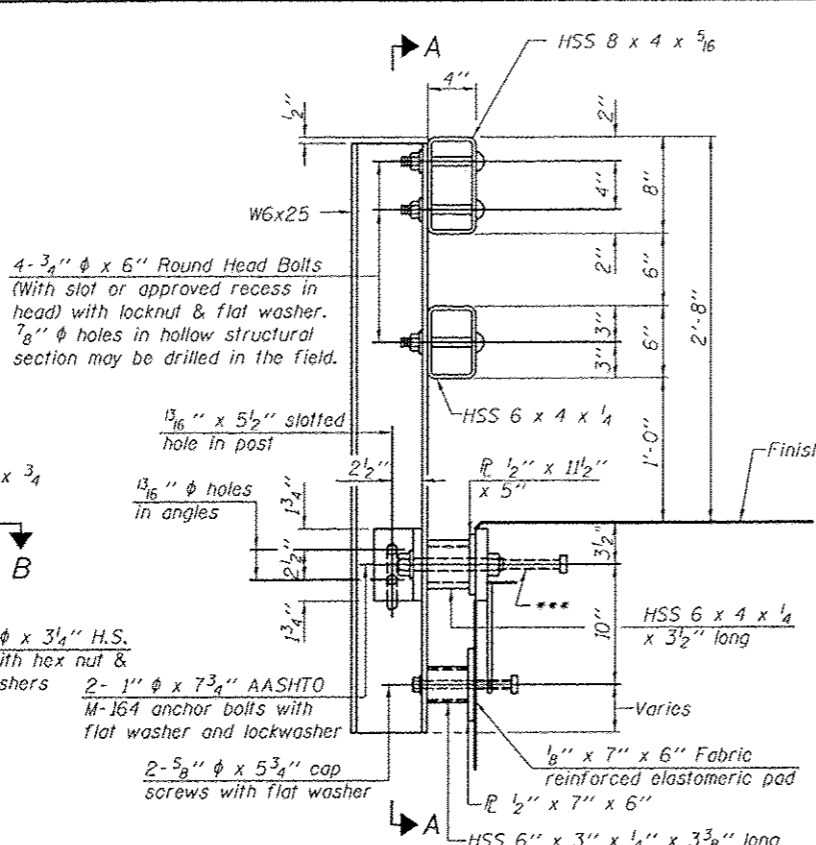
BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 034-3113

SHEET NO. 12 OF 22 SHEETS

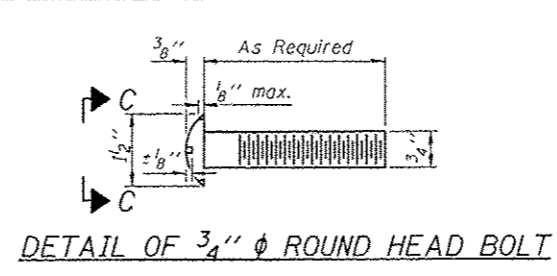
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	25
			CONTRACT NO. 93659	
ILLINOIS FED. AID PROJECT				



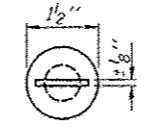
SECTION A-A



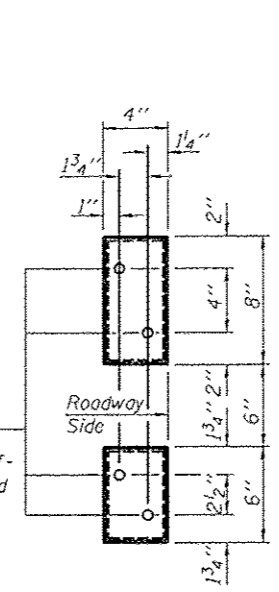
SECTION AT RAIL POST



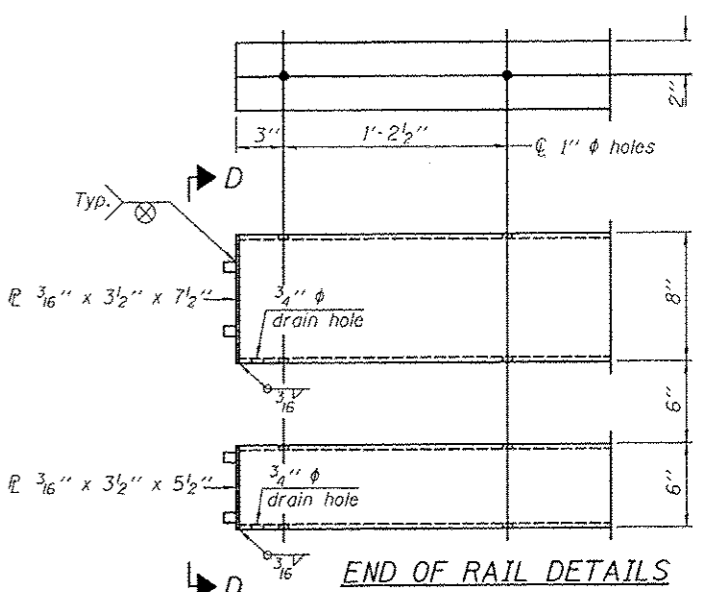
DETAIL OF 3/4" ϕ ROUND HEAD BOLT



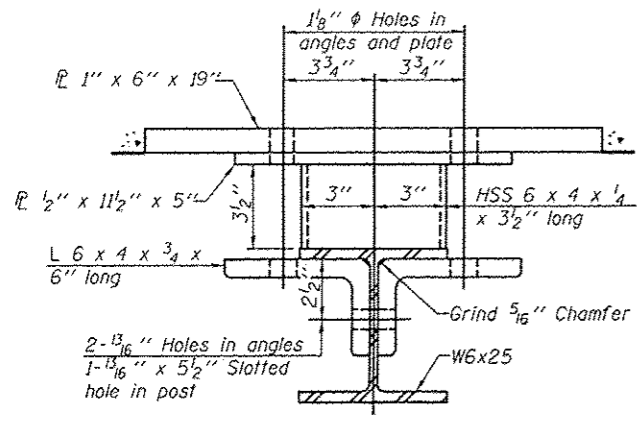
VIEW C-C



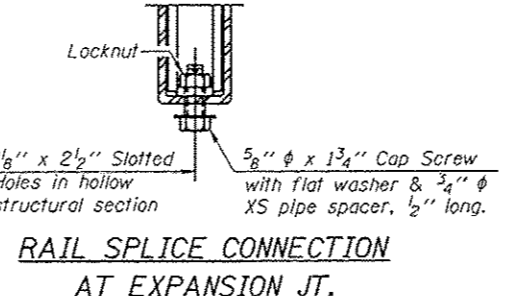
VIEW D-D



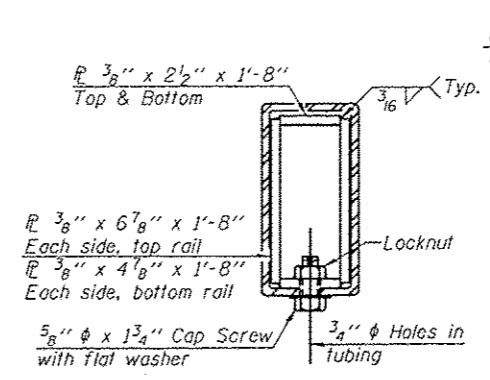
END OF RAIL DETAILS



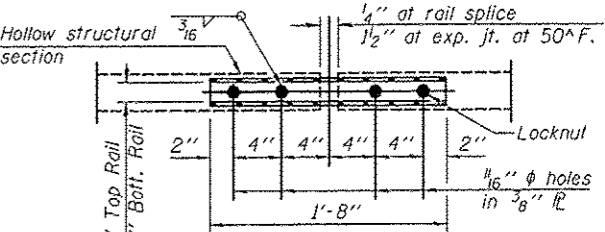
SECTION B-B



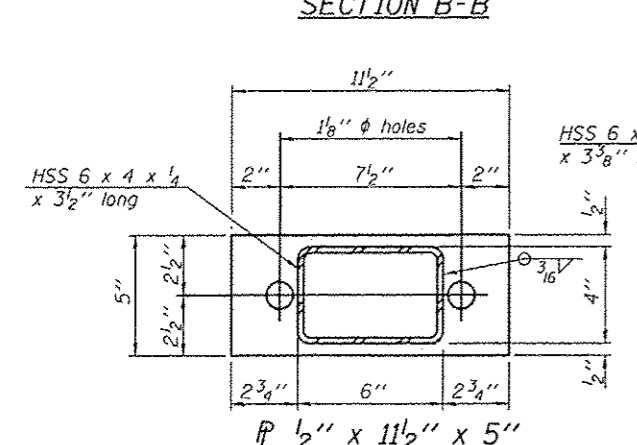
RAIL SPLICE CONNECTION AT EXPANSION JT.



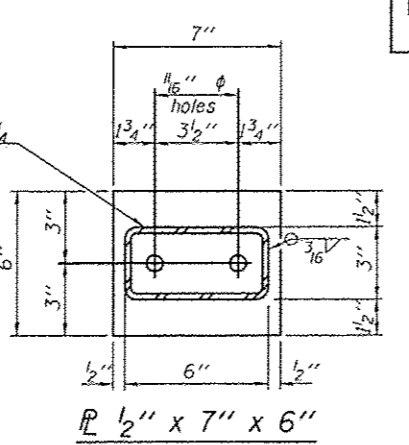
SECTION AT RAIL SPLICE



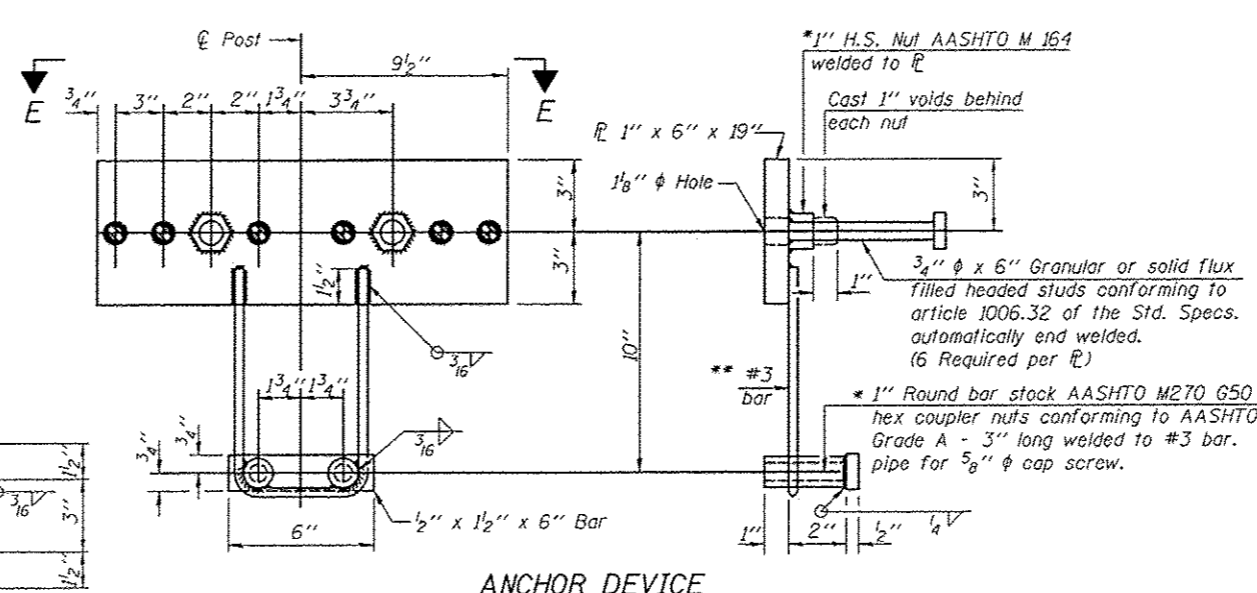
PLAN-BOTT. SPLICE P TYPICAL



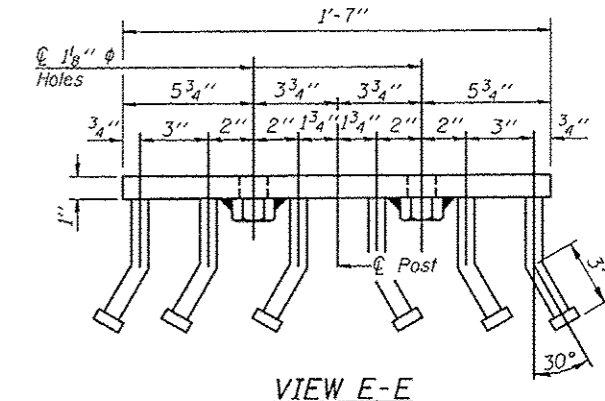
SECTION B-B



SECTION AT RAIL SPLICE



ANCHOR DEVICE



VIEW E-E

- * Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.
- ** Whenever the lower insert assemblies interfere with reinforcement locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering the lower inserts. Maximum adjustment not to exceed 1/2 inch.

- Notes:
- All field drilled holes shall be coated with an approved zinc rich paint before erection.
 - For multi-span bridges, sufficient 1/4 inch x 6 inch x 1'-2 inch galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.
 - Steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 - *** The studs of the anchor device shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	456

(6'-3" Maximum Post Spacing)

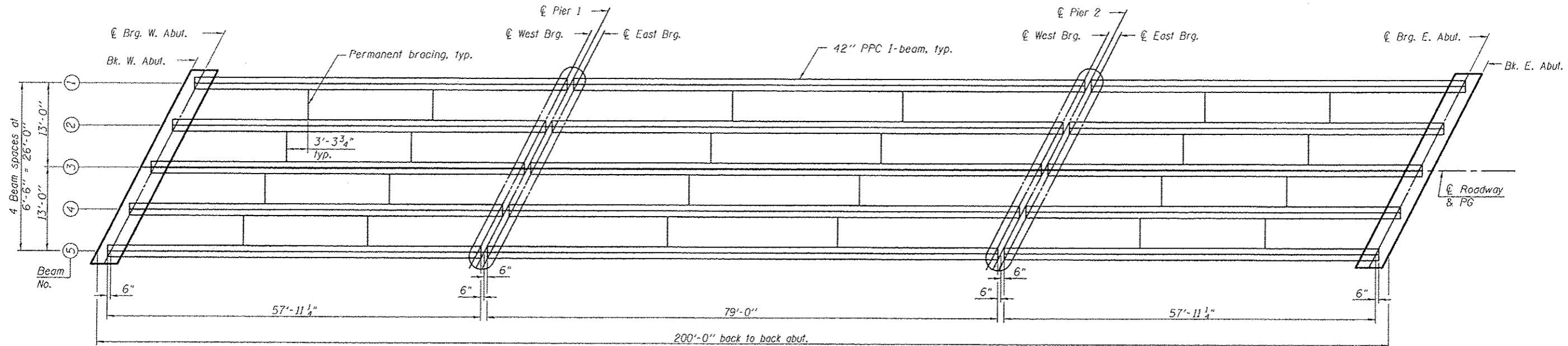


USER NAME *	DESIGNED - TCD	REVISIONS
CHECKED - CSB	REVISIONS	
DRAWN - TCD	REVISIONS	
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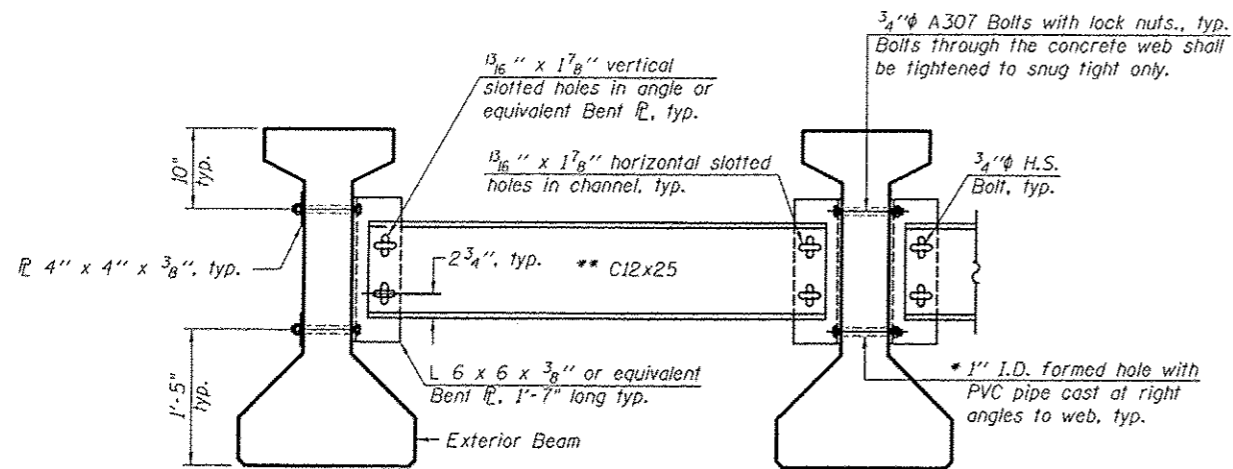
HANCOCK COUNTY HIGHWAY DEPARTMENT
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STEEL RAILING, TYPE SM DETAILS
STRUCTURE NO. 034-3113
SHEET NO. 13 OF 22 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	26
				CONTRACT NO. 93659
ILLINOIS FED. AID PROJECT				



PLAN



Notes:

All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted. Two hardened washers are required for each set of oversized holes. All holes shall be 1/16 inch unless otherwise noted. 5/16 inch x 3 inch x 3 inch plate washers are required over all slotted holes. All bolts shall be galvanized according to AASHTO M232. Bracing shall be installed as beams are erected and tightened as soon as possible during erection. Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete I-Beams.

* Fabricator shall locate to miss strands within permissible tolerances.

** Alternate C12x30 channels are permitted to facilitate material acquisition.

PERMANENT BRACING DETAILS

INTERIOR BEAM MOMENT TABLE			
	0.4 Sp. 1 0.6 Sp. 3	Pier 1 or 2	0.5 Sp. 2
I	(in ⁴) 90,956	-	90,956
I'	(in ⁴) 311,480	-	311,480
S _b	(in ³) 5,153	-	5,153
S _b '	(in ³) 9,224	-	9,224
S _t	(in ³) 3,735	-	3,735
S _t '	(in ³) 18,344	-	18,344
DC1	(k/ft) 1,146.4	1,146.4	1,146.4
M _{DC1}	(k) 458.2	-	878.2
DC2	(k/ft) 0.025	0.025	0.025
M _{DC2}	(k) 2.3	-9	2.9
DW	(k/ft) 0.325	0.325	0.325
M _{DW}	(k) 68.9	-270.9	88.3
M _{L + IM}	(k) 673.7	-844.6	695.4

INTERIOR BEAM REACTION TABLE			
	Abut.	Pier 1 Span 1 Pier 2 Span 3	Pier 1 Span 2 Pier 2 Span 2
R _{DC1}	(k) 33.1	33.1	45.1
* R _{DC2}	(k) 0.2	0.8	0.8
* R _{DW}	(k) 65	23.5	23.5
* R _{L + IM}	(k) 39.5	63.9	63.9
R _{Total}	(k) 79.3	121.3	133.3

* At continuous piers, reactions from composite loads are assumed to be equally distributed to each bearing line.

I: Non-composite moment of inertia of beam section (in⁴).
 I': Composite moment of inertia of beam section (in⁴).
 S_b: Non-composite section modulus for the bottom fiber of the prestressed beam (in³).
 S_b': Composite section modulus for the bottom fiber of the prestressed beam (in³).
 S_t: Non-composite section modulus for the top fiber of the prestressed beam (in³).
 S_t': Composite section modulus for the top fiber of the prestressed beam (in³).
 DC1: Un-factored non-composite dead load (kips/ft.).
 M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
 DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
 M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
 DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
 M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
 M_{L + IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).



USER NAME =	DESIGNED -	REVISIONS -
PLOT SCALE =	CHECKED -	REVISIONS -
PLOT DATE =	DRAWN -	REVISIONS -
	CHECKED -	REVISIONS -

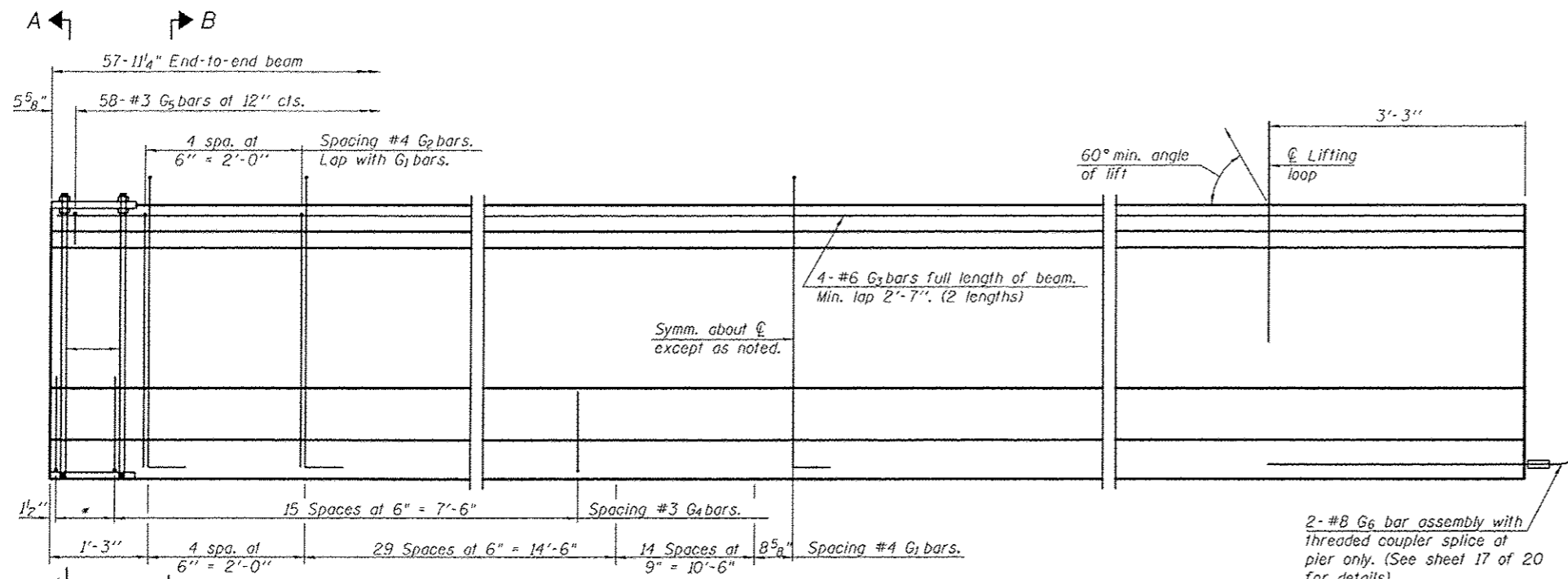
HANCOCK COUNTY HIGHWAY DEPARTMENT
 101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
 (217)357-3155

FRAMING PLAN & DETAILS
 STRUCTURE NO. 034-3113

SHEET NO. 14 OF 22 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	27
CONTRACT NO. 93659				

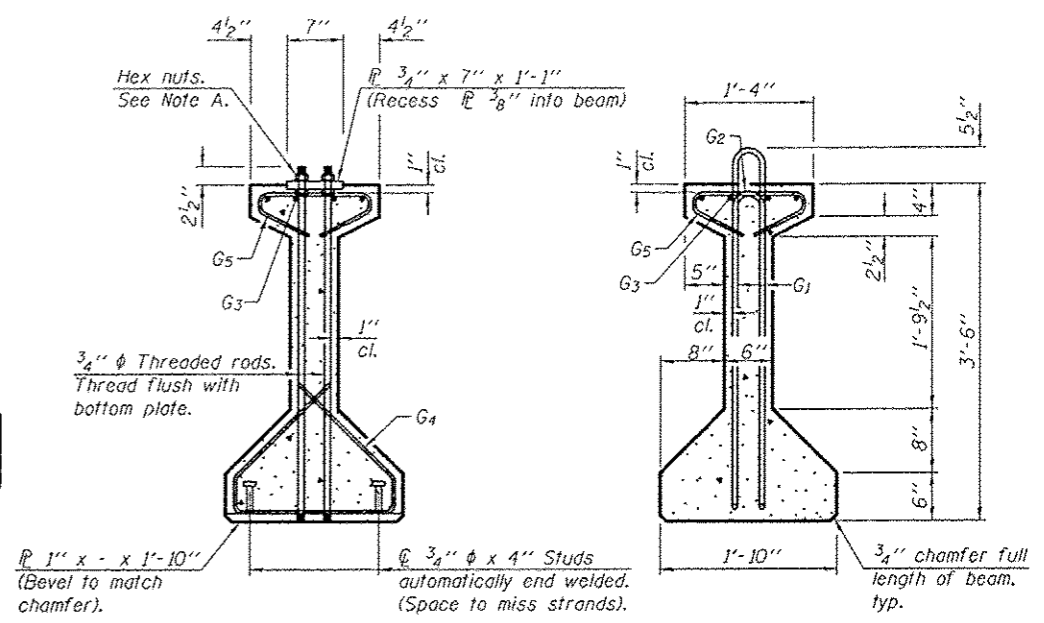
ILLINOIS FED. AID PROJECT



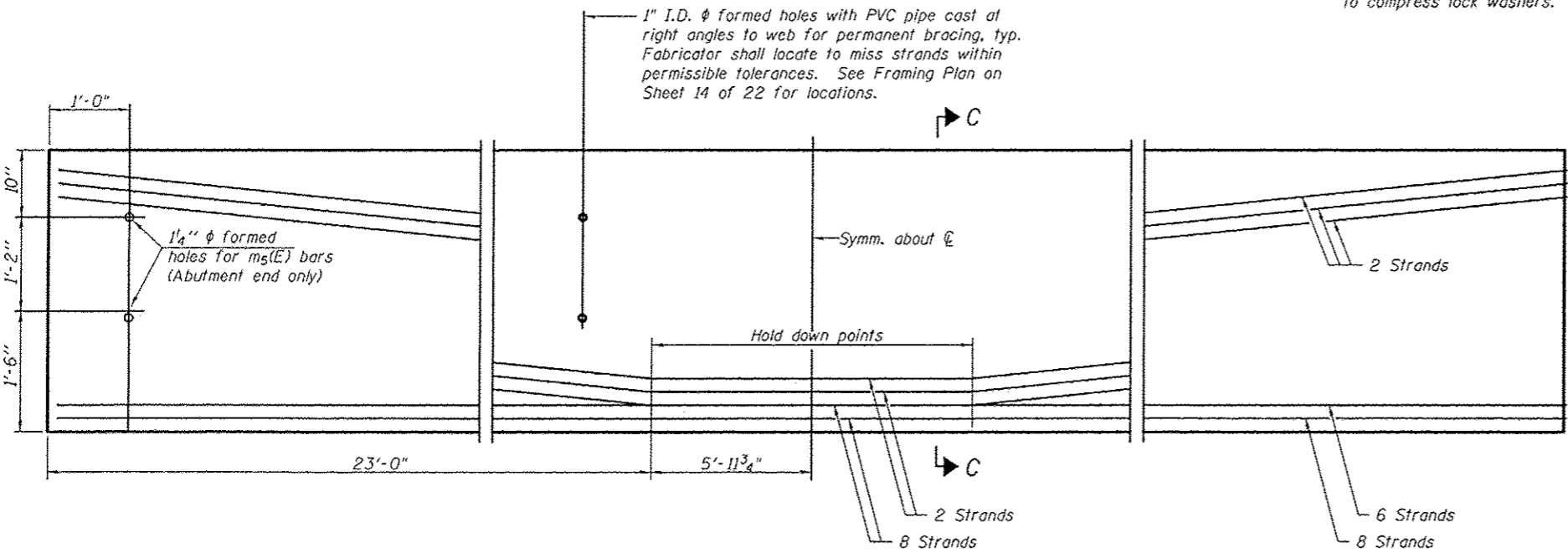
ELEVATION OF BEAM
(Showing reinforcement & dimensions)

*3 spaces at 3" = 9".
**4-3/4" threaded dowel rods at 3" cts., Each Face.

2-#8 G6 bar assembly with threaded coupler splice of pier only. (See sheet 17 of 20 for details).
Note A:
Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.



SECTION A-A **SECTION B-B**

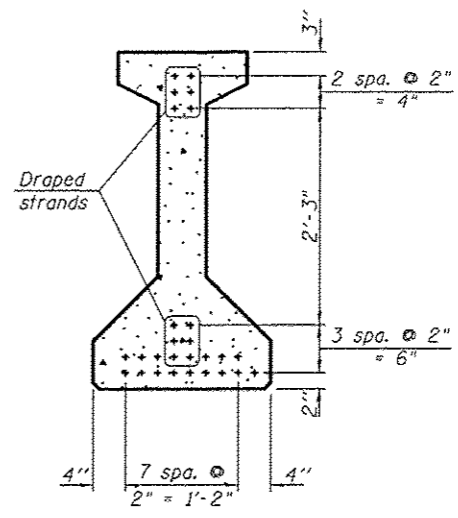


ELEVATION OF BEAM
(Showing prestressing steel)

*****BAR LIST
ONE BEAM ONLY**

Bar	No.	Size	Length	Shape
G ₁	97	#4	8'-7"	⌈⌋
G ₂	10	#4	6'-8"	⌈⌋
G ₃	8	#6	30'-2"	—
G ₄	38	#3	4'-11"	⌈⌋
G ₅	58	#3	2'-6"	⌈⌋
G ₆	2	#8	6'-6"	⌈⌋

***For information only
Notes:
See sheet 17 of 22 for additional details and Bill of Material.
Required release strength, f'ci, shall be 5,000 psi.



SECTION C-C



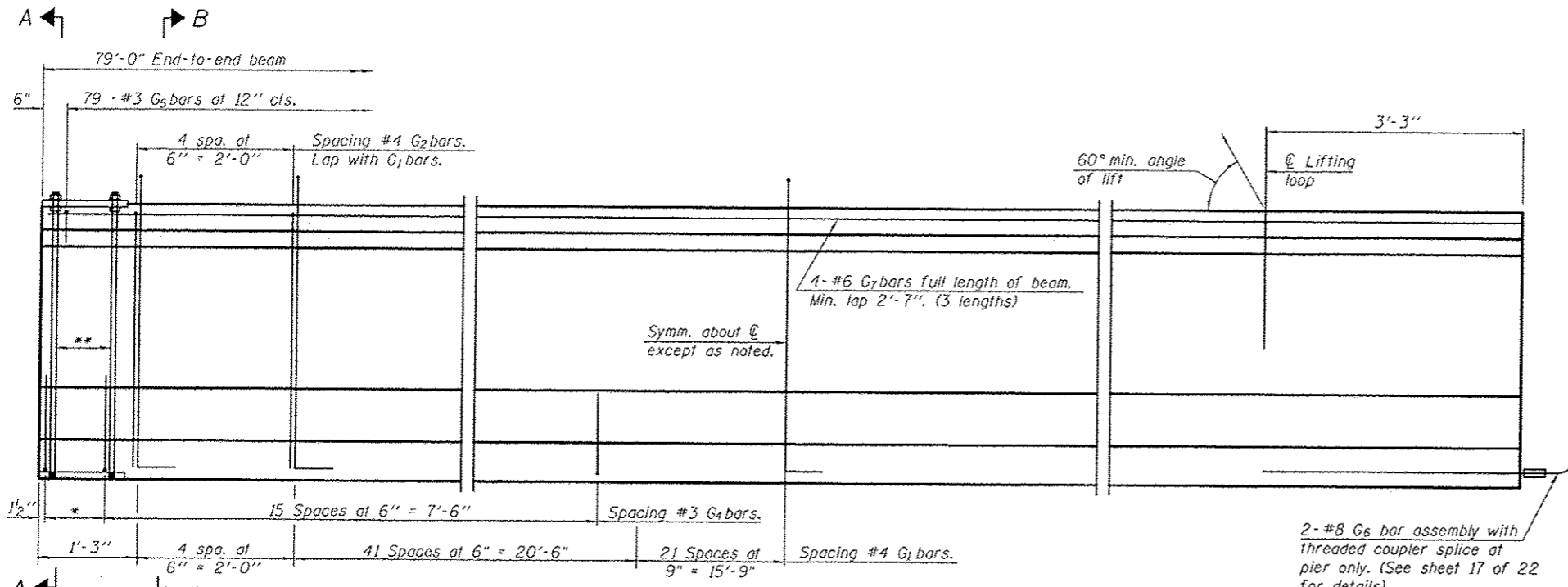
USER NAME #	DESIGNED - TCD	REVISED -
PLOT SCALE #	CHECKED - CSB	REVISED -
PLOT DATE #	DRAWN - TCD	REVISED -
	CHECKED - CSB	REVISED -

HANCOCK COUNTY HIGHWAY DEPARTMENT
101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
(217)357-3155

42" PPC I-BEAM (SPANS 1 AND 3)
STRUCTURE NO. 034-3113

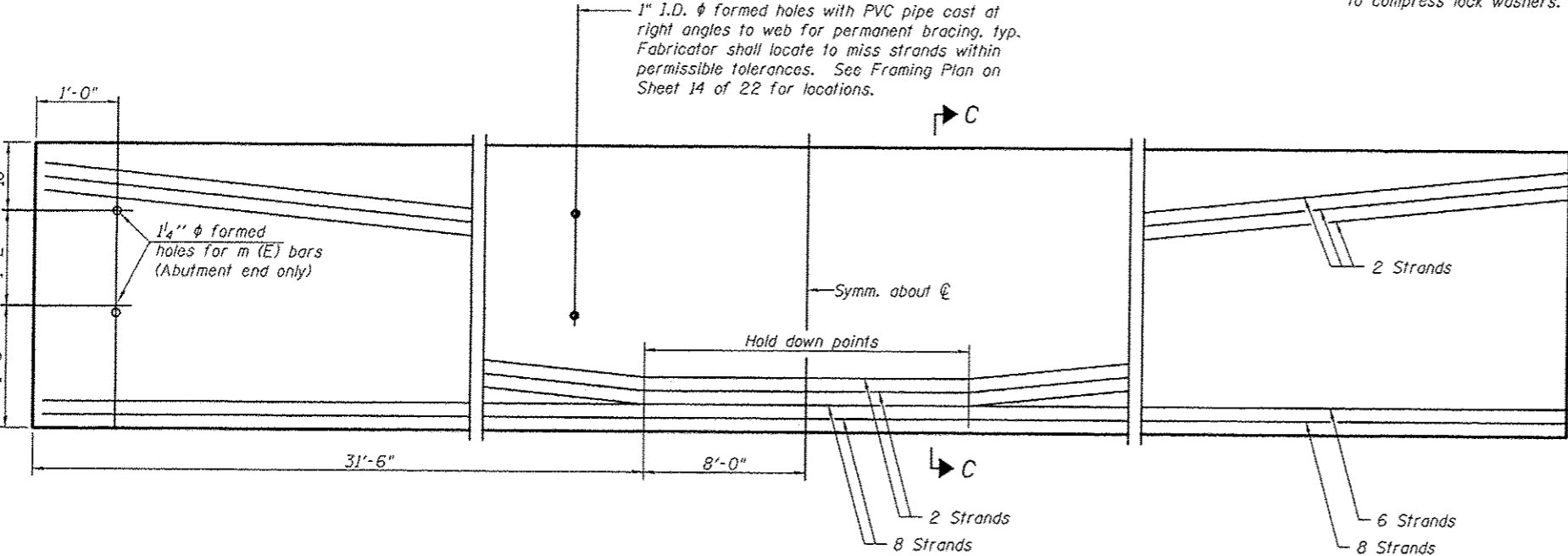
SHEET NO. 15 OF 22 SHEETS

F.A.S. RATE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	28
			CONTRACT NO. 93659	
ILLINOIS FED. AID PROJECT				

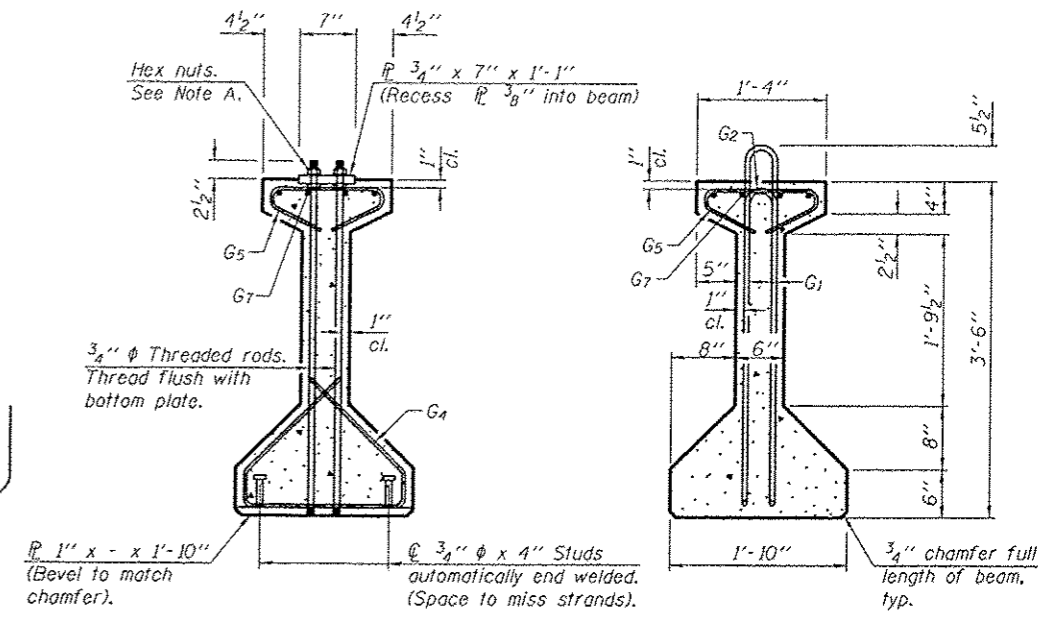


ELEVATION OF BEAM
(Showing reinforcement & dimensions)

*3 spaces at 3" = 9"
 **4-3/4" threaded dowel rods at 3" cts., Each Face.



ELEVATION OF BEAM
(Showing prestressing steel)



SECTION A-A

SECTION B-B

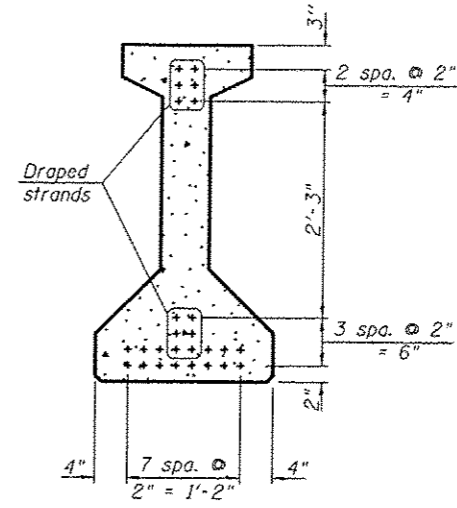
2-#8 G6 bar assembly with threaded coupler splice at pier only. (See sheet 17 of 22 for details).
 Note A:
 Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.

*****BAR LIST
ONE BEAM ONLY**

Bar	No.	Size	Length	Shape
G1	133	#4	8'-7"	⊔
G2	10	#4	6'-8"	⊔
G4	38	#3	4'-11"	⊔
G5	79	#3	2'-6"	⊔
G6	4	#8	6'-6"	⊔
G7	12	#6	28'-0"	⊔

***For information only

Notes:
 See sheet 17 of 22 for additional details and Bill of Material.
 Required release strength, f'ci, shall be 5,000 psi.



SECTION C-C

NOTES

Inserts for $\frac{3}{4}$ " ϕ threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be $\frac{1}{2}$ " and the nominal cross-sectional area shall be 0.153 sq. in.

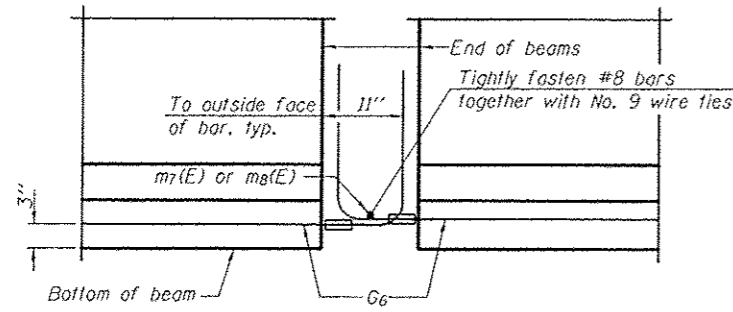
Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions). A minimum $2\frac{1}{2}$ " ϕ lifting pin shall be used to engage the lifting loops during handling. Tilt G_6 bars when necessary to maintain $1\frac{1}{2}$ " clearance. The top and bottom plates shall be AASHTO M270 Grade 50.

The bottom plates and studs shall be galvanized according to AASHTO M111. Top plates and threaded rods need not be galvanized.

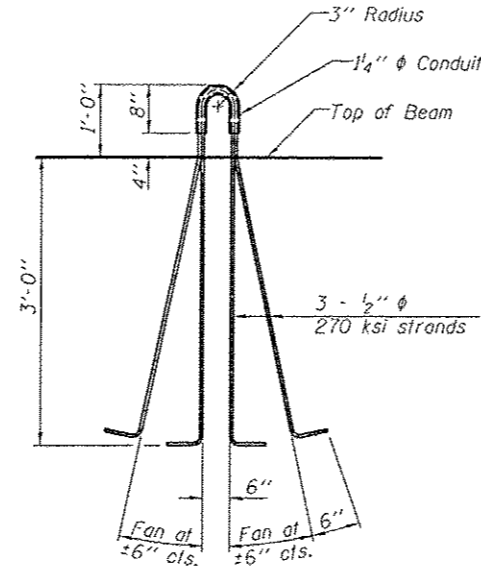
Threaded rods shall be ASTM F 1554 Grade 55.

The G_6 bar assembly shall be capable of developing 125 percent of the yield strength of the grade 60 reinforcement bar components. The assembly shall allow completion of the splice without turning of the hook bar. The hook bar shall be threaded such that the entire coupler can be threaded onto the hook bar.

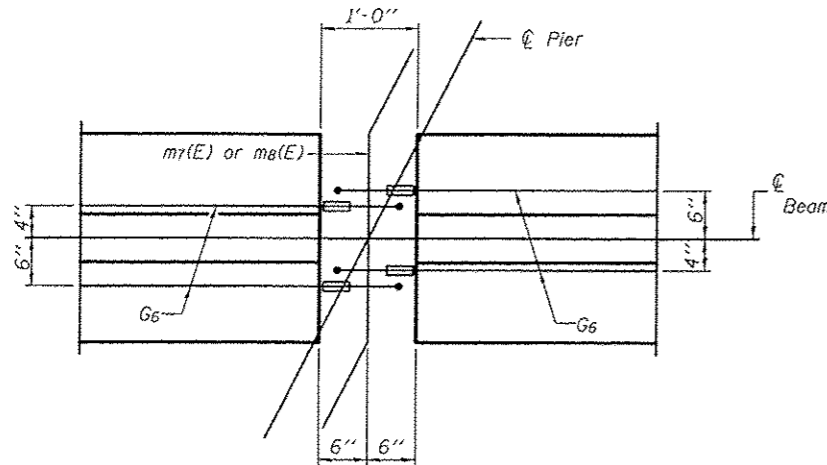
Beams requiring G_6 bar assemblies shall not be released from the fabricator until they have attained 45 days of age or older.



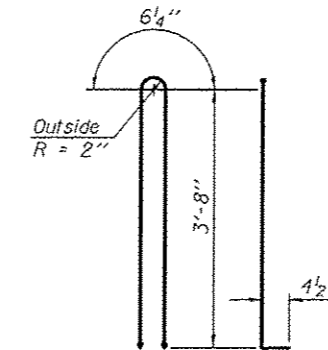
ELEVATION OF BEAM AT PIER



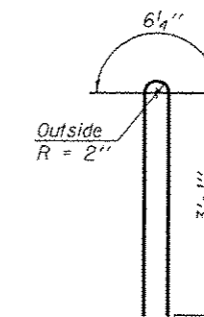
LIFTING LOOP DETAIL



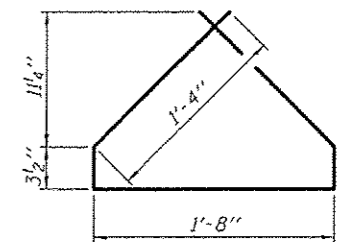
PLAN OF BEAM AT PIER



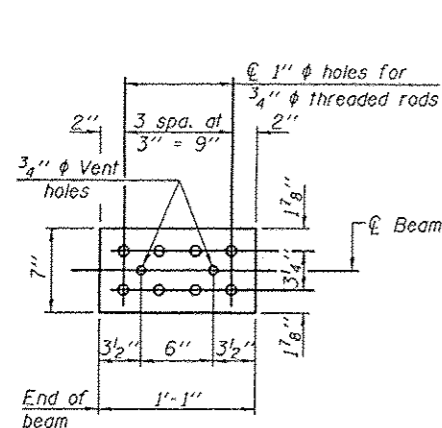
BAR G1



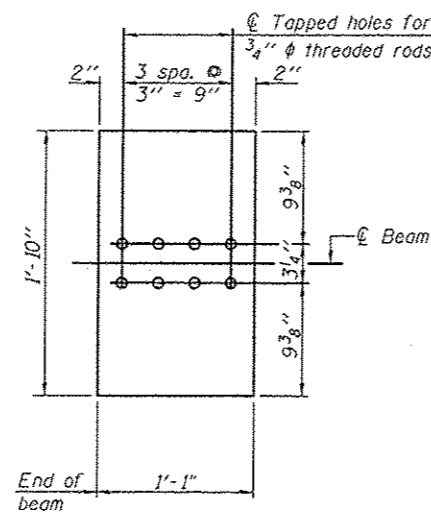
BAR G2



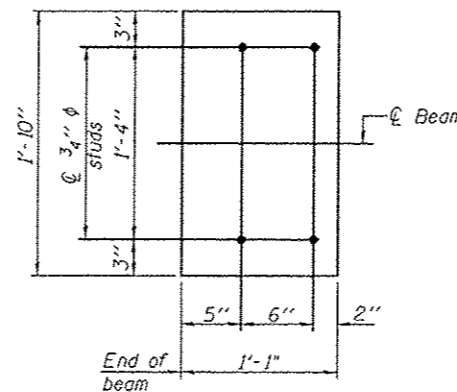
BAR G4



TOP PLATE

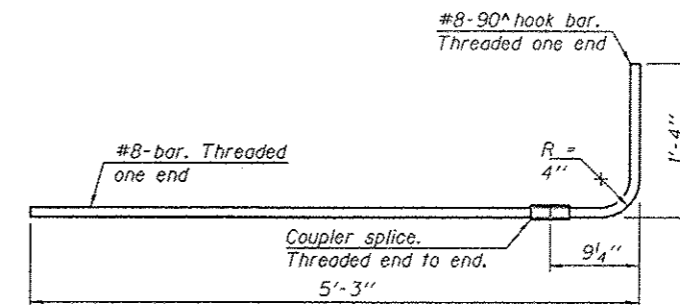


BOTTOM PLATE (Showing threaded rods)

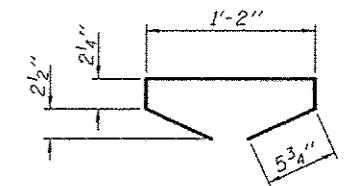


BOTTOM PLATE (Showing studs)

See bearing details for pintle hole locations when required.



G6 BAR ASSEMBLY



BAR G5

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete 1-Beams, 42"	Fl.	974.5



USER NAME *	DESIGNED - TCD	REVISED -
PLDT SCALE *	CHECKED - CSB	REVISED -
PLDT DATE *	DRAWN - TCD	REVISED -
	CHECKED - CSB	REVISED -

HANCOCK COUNTY HIGHWAY DEPARTMENT
101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
(217)357-3155

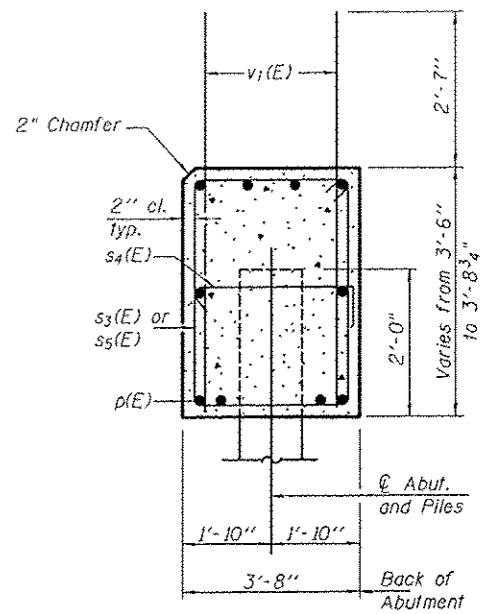
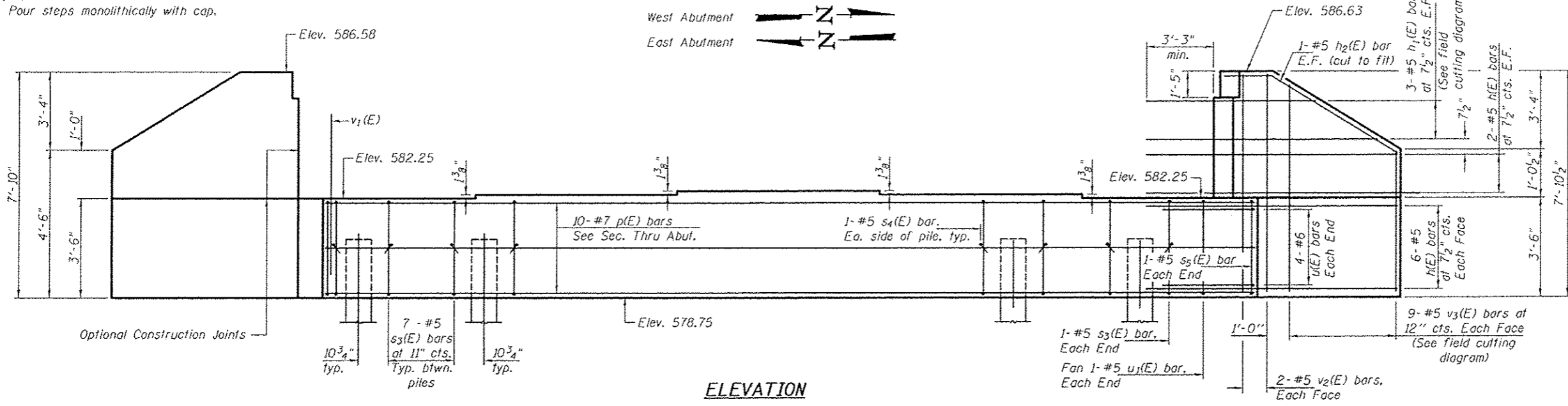
42" PPC I-BEAM DETAILS
STRUCTURE NO. 034-3113

SHEET NO. 17 OF 22 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	30
			CONTRACT NO. 93659	

ILLINOIS FED. AID PROJECT

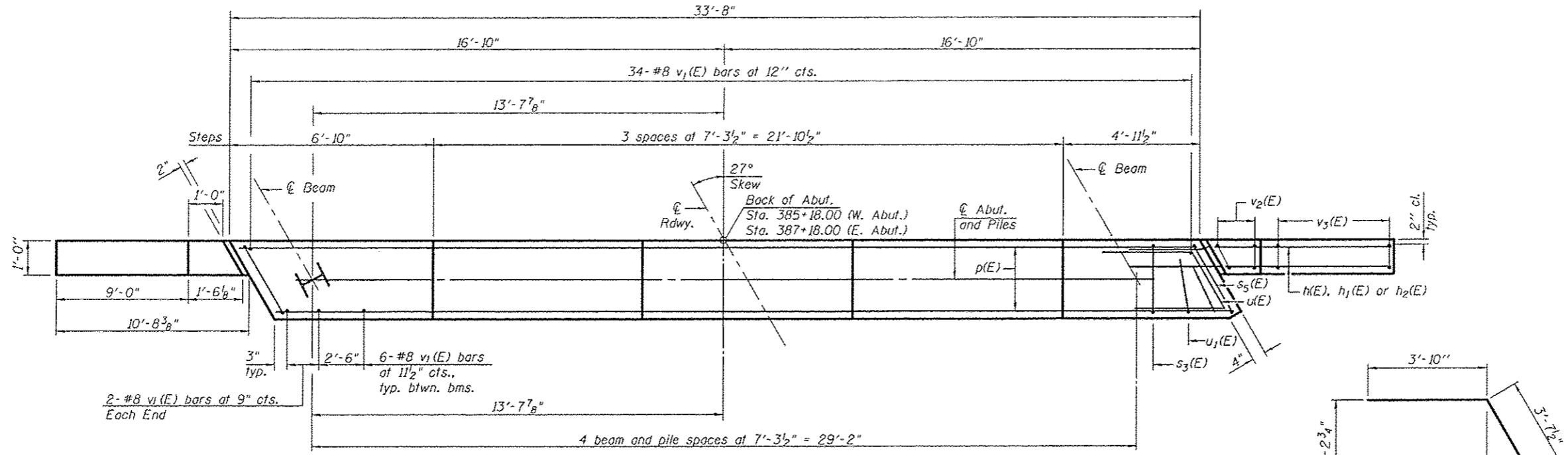
Notes:
Pour steps monolithically with cap.



ELEVATION

SEC. THRU ABUT.

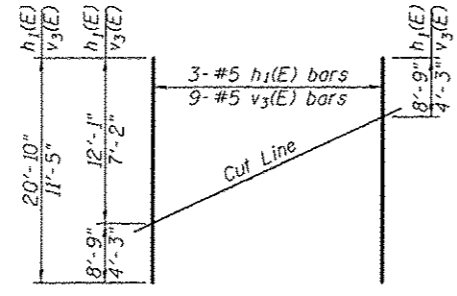
Dimensions at right angles to abutment.



PLAN

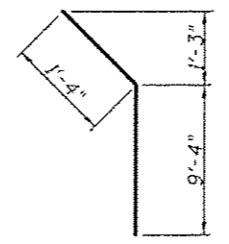
PILE DATA

Type: HP 12x53
Nominal Required Bearing: 229 kips
Factored Resistance Available: 126 kips
Est. Length: 52 ft. (East Abutment)
57 ft. (West Abutment)
No. Production Piles: 4
No. Test Piles: 1

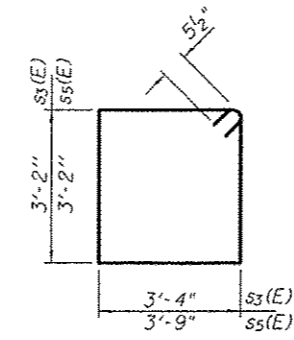


FIELD CUTTING DIAGRAM

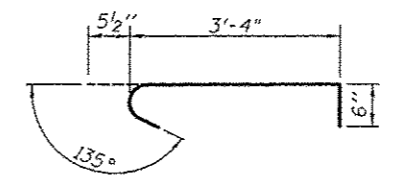
Order h1(E) and v3(E) full length. Cut as shown and use remainder of bars in opposite face.



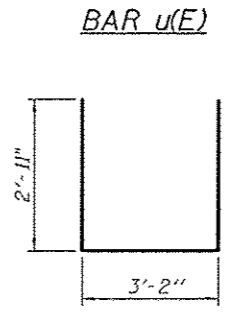
BAR h2(E)



BAR s3(E) & s5(E)



BAR s4(E)



BAR u1(E)

BILL OF MATERIAL FOR ONE ABUTMENT

Bar	No.	Size	Length	Shape
h(E)	32	#5	13'-9"	—
h1(E)	6	#5	20'-10"	—
h2(E)	4	#5	10'-8"	—
p(E)	10	#7	33'-4"	—
s3(E)	30	#5	13'-11"	□
s4(E)	10	#5	4'-4"	—
s5(E)	2	#5	14'-9"	□
u(E)	8	#6	11'-4"	—
u1(E)	2	#5	9'-0"	—
v1(E)	62	#8	5'-11"	—
v2(E)	8	#5	7'-6"	—
v3(E)	18	#5	11'-5"	—
Structure Excavation			Cu. Yd.	129
Concrete Structures			Cu. Yd.	215
Protective Coat			Sq. Yd.	17
Reinforcement Bars, Epoxy Coated			Pound	3,250
Furnishing Steel Piles, HP12x53 (E. Abut.)			Foot	208
Furnishing Steel Piles, HP12x53 (W. Abut.)			Foot	228
Driving Piles (E. Abut.)			Foot	208
Driving Piles (W. Abut.)			Foot	228
Test Pile, Steel HP12x53			Each	1
Concrete Sealer			Sq. Ft.	248
Granular Backfill for Structures			Cu. Yd.	76

For details of piles see sheet 20 of 22. Protective coat shall be applied to the top surface and inside vertical face of wings. Concrete sealer shall be applied to all exposed surfaces of abutment.



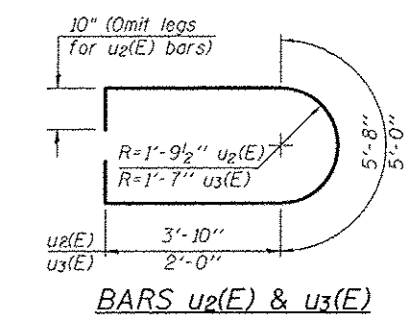
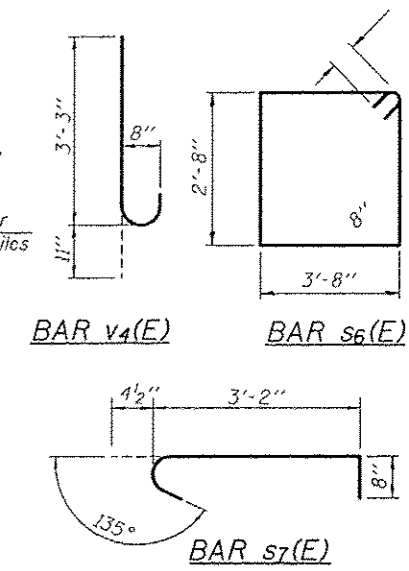
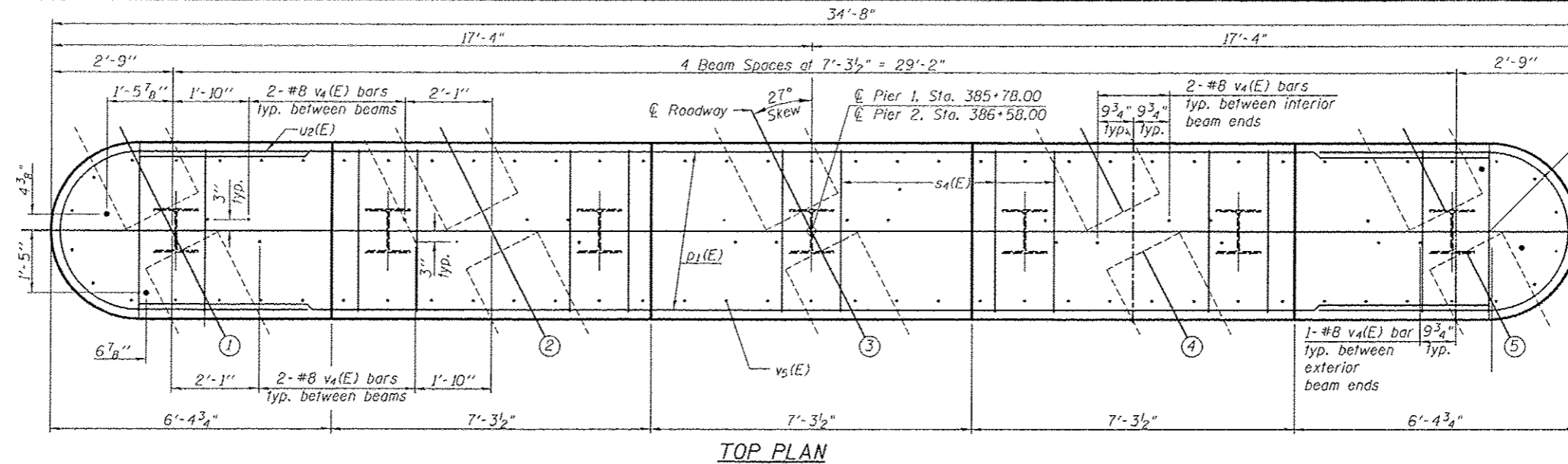
USER NAME =	DESIGNED - TCD	REVISIONS -
PLOT SCALE =	CHECKED - CSB	REVISIONS -
PLOT DATE =	DRAWN - TCD	REVISIONS -
	CHECKED - CSB	REVISIONS -

HANCOCK COUNTY HIGHWAY DEPARTMENT
101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
(217)357-3155

ABUTMENTS
STRUCTURE NO. 034-3113
SHEET NO. 18 OF 22 SHEETS

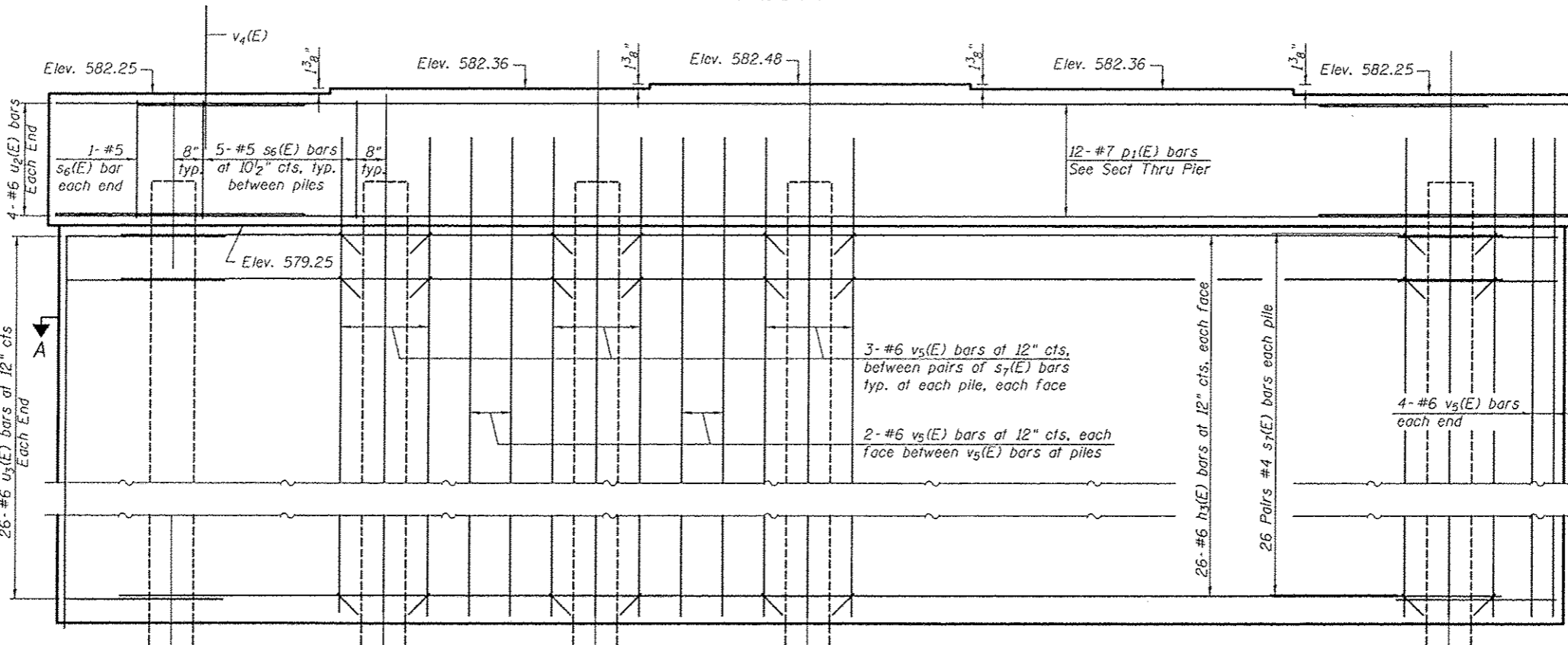
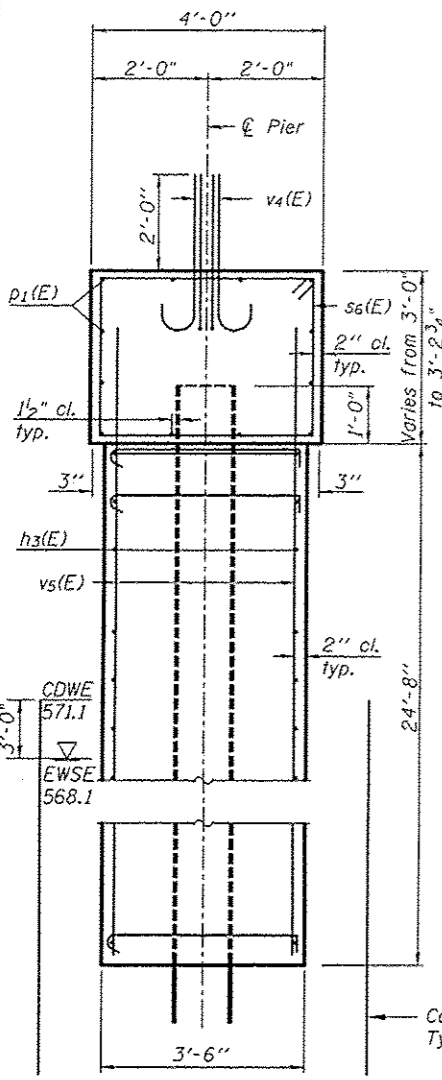
F.A.S. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
428	11-00122-00-BR	HANCOCK	36	31
CONTRACT NO. 93659			ILLINOIS FED. AID PROJECT	

Notes:
 Pour steps monolithically with cap.
 Space reinforcement in cap to miss anchor bolts.
 For details of piles, see sheet 20 of 22.
 Concrete sealer shall be applied to all exposed surfaces of pier.

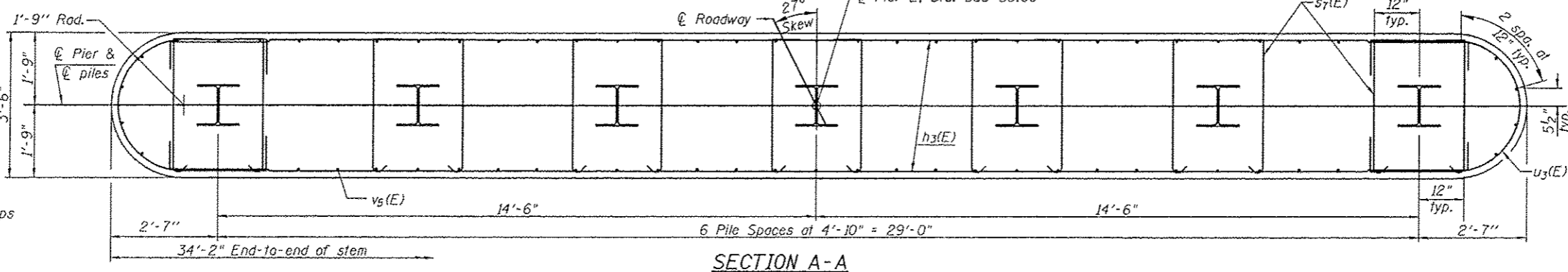


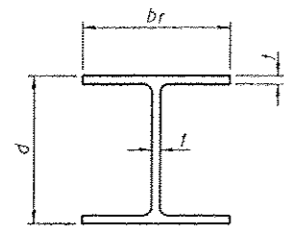
BILL OF MATERIAL FOR ONE PIER

Bar	No.	Size	Length	Shape	
h3(E)	52	#6	31'-10"	—	
p1(E)	12	#7	30'-8"	—	
s6(E)	32	#5	14'-0"	□	
s7(E)	364	#4	4'-3"	⌋	
u2(E)	8	#6	13'-4"	⌋	
u3(E)	52	#6	10'-8"	⌋	
v4(E)	24	#8	4'-2"	⌋	
v5(E)	74	#6	26'-8"	—	
Cofferdam Excavation (Pier 1)				Cu. Yd.	203
Cofferdam Excavation (Pier 2)				Cu. Yd.	104
Cofferdam (Type 2) (Location 1) (Pier 1)				Each	1
Cofferdam (Type 2) (Location 2) (Pier 2)				Each	1
Concrete Structures				Cu. Yd.	125.1
Seal Coat Concrete				Cu. Yd.	36.4
Reinforcement Bars, Epoxy Coated				Pound	8,970
Furnishing Steel Piles, HP 12x53				Foot	469
Driving Piles				Foot	469
Concrete Sealer				Sq. Ft.	2,158



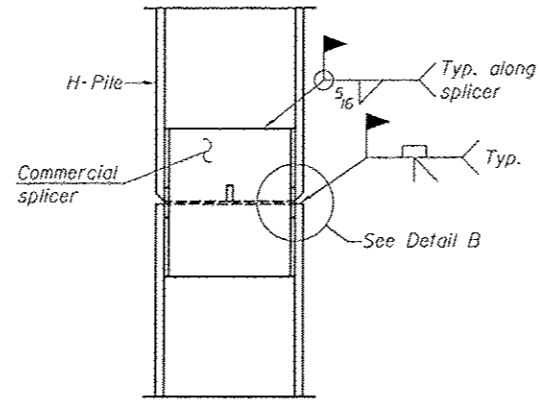
PILE DATA
 Type: HP 12x53
 Nominal Required Bearing: 328 kips
 Factored Resistance Available: 180 kips
 Est. Length: 67 ft.
 No. Production Piles: 7
 No. Test Piles: 0



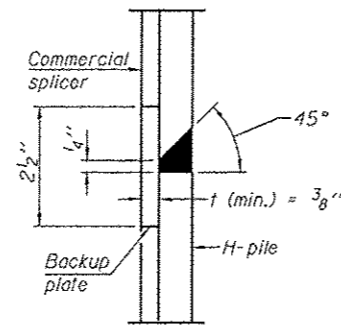


STEEL PILE TABLE

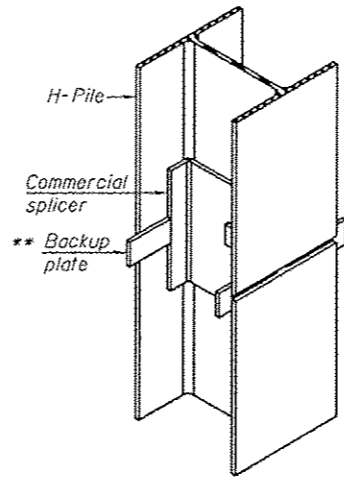
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 5/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"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



ELEVATION

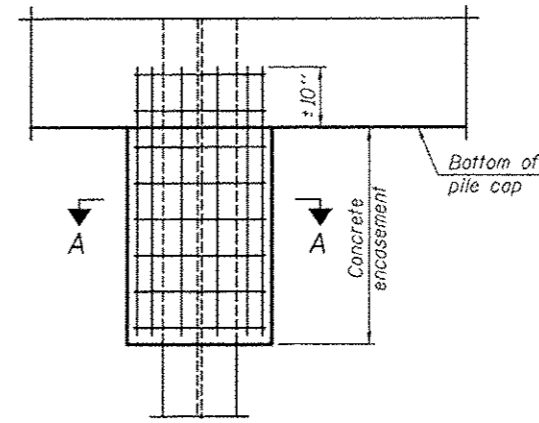


DETAIL "B"



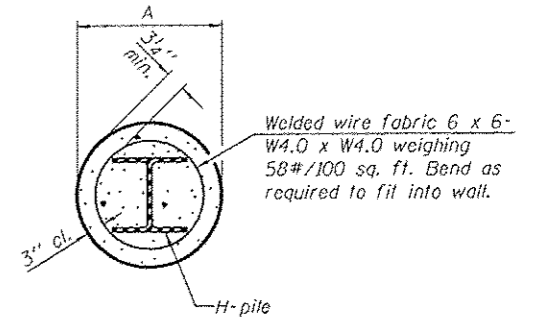
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



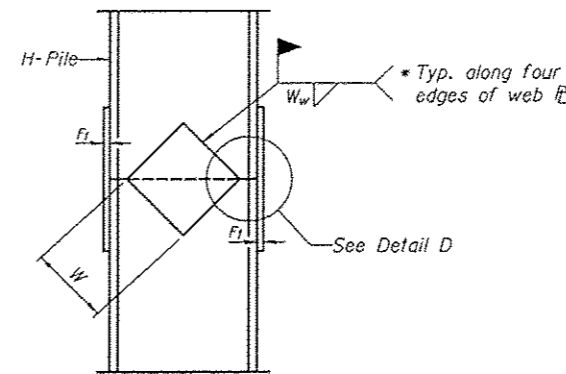
ELEVATION

PILE ENCASEMENT



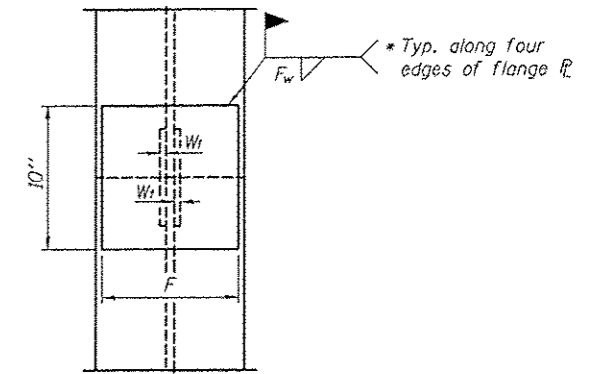
SECTION A-A

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



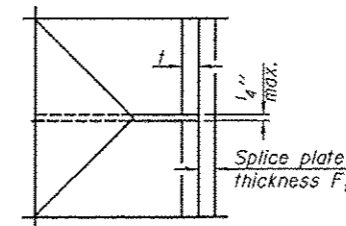
ELEVATION

WELDED PLATE FIELD SPLICE

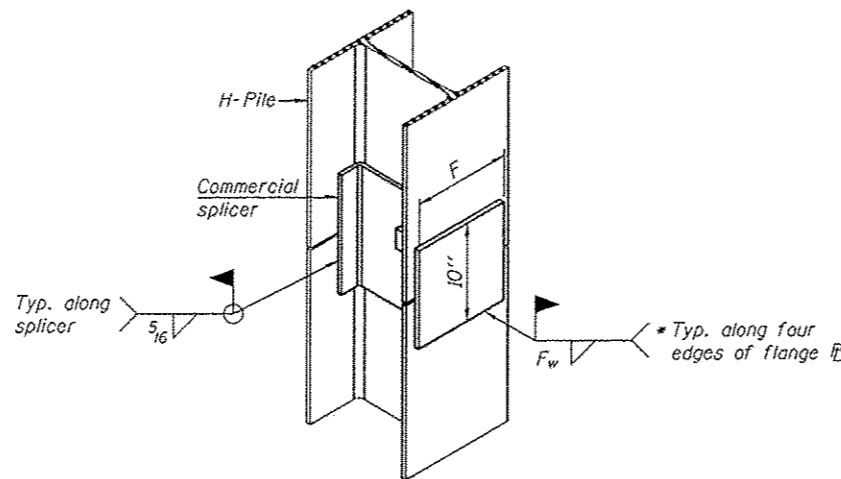


END VIEW

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



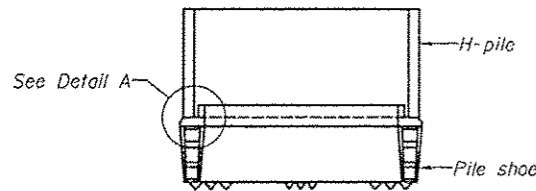
DETAIL D



WELDED COMMERCIAL SPLICE ALTERNATE

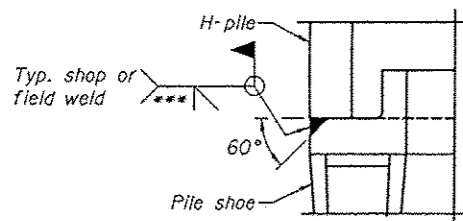
- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).

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



ELEVATION

H-PILE SHOE ATTACHMENT



DETAIL A

F-HP 1-27-12

BORING LOG NO. 1

Page 1 of 2

PROJECT: County Highway 11 Replacement Bridge
 SITE: County Highway 11 Hancock County, Illinois

CLIENT: Poepping, Stone, Bach & Associates
 ENGINEER: Poepping, Stone, Bach & Associates

DEPTH (FT.)	LOCATION	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (%)	FIELD TEST RESULTS	SAMPLE NUMBER	RIMAC READING (psi)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	COMPRESSIVE STRENGTH
0.7	ASPHALTIC CEMENT CONCRETE, approx. 3"									
0.7 - 13.0	FILL, LEAN CLAY, TRACE SAND, CRUSHED LIMESTONE, brown									
5			X	0	3-5-6 N=11	1	0			
10			X	8	5-8-8 N=16	2	4800	18		
15	LEAN CLAY (CL), brown, dark brown, stiff, alluvium		X	12	3-4-6 N=10	3	2700	24		
20	FAT CLAY TRACE SAND (CH), gray, stiff, alluvium		X	12	3-4-5 N=9	4	6100	22		
25	FINE SAND WITH CLAY (SP/SC), gray, very loose, alluvium		X	10	0-1-2 N=3	5	NA	25		
30	Loose at Sample 6		X	10	2-2-2 N=4	6	NA	27		
35	LEAN TO FAT CLAY, TRACE SAND (CL/CH), dark gray, soft, alluvium		X	8	0-1-1 N=2	7	0	34		

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic
 *Calibrated Hand Penetrometer

Advancement Method:
 Hollow Stem Auger to 15' Wash bore below 15'

See Exhibit EXHIBIT A-1 for description of field procedures
 See Appendix B for description of laboratory procedures and additional data (if any).

Notes:

Abandonment Method:
 Auger Cuttings

See Appendix C for explanation of symbols and abbreviations.

WATER LEVEL OBSERVATIONS



Boring Started: 2/27/2013 Boring Completed: 2/27/2013
 Drill Rig: 3SE Driller: RP
 Project No.: 07135013 Exhibit: A-2

BORING LOG NO. 1

Page 2 of 2

PROJECT: County Highway 11 Replacement Bridge
 SITE: County Highway 11 Hancock County, Illinois

CLIENT: Poepping, Stone, Bach & Associates
 ENGINEER: Poepping, Stone, Bach & Associates

DEPTH (FT.)	LOCATION	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (%)	FIELD TEST RESULTS	SAMPLE NUMBER	RIMAC READING (psi)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	COMPRESSIVE STRENGTH
40	LEAN TO FAT CLAY, TRACE SAND (CL/CH), dark gray, soft, alluvium (continued)		X	8	0-0-3 N=3	8	0	42		
45	FINE TO MEDIUM SAND WITH CLAY (SP/SC), gray, medium dense, alluvium		X	7	3-5-7 N=12	9	NA	32		
50	FINE TO MEDIUM GRAVEL WITH SAND (GP), gray, medium dense, alluvium		X	6	7-11-15 N=26	10	NA	18		
55	FINE TO MEDIUM SAND (SP), gray, very dense, alluvium		X	8	17-25-36 N=61	11	NA	15		
60	FINE GRAVEL (GP), gray, dense, alluvium		X	4	13-20-23 N=43	12	NA	9		
65	SANDY FAT CLAY (CH), dark gray, hard, glacial till		X	14	15-20-21 N=41	13		26		
70	Boring Terminated at 70 Feet		X	16	7-13-17 N=30	14	11,600	18		

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic
 *Calibrated Hand Penetrometer

Advancement Method:
 Hollow Stem Auger to 15' Wash bore below 15'

See Exhibit EXHIBIT A-1 for description of field procedures
 See Appendix B for description of laboratory procedures and additional data (if any).

Notes:

Abandonment Method:
 Auger Cuttings

See Appendix C for explanation of symbols and abbreviations.

WATER LEVEL OBSERVATIONS



Boring Started: 2/27/2013 Boring Completed: 2/27/2013
 Drill Rig: 3SE Driller: RP
 Project No.: 07135013 Exhibit: A-2



USER NAME =	DESIGNED -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE =	DRAWN -	REVISED -
	CHECKED -	REVISED -

HANCOCK COUNTY HIGHWAY DEPARTMENT
 101 S. FIRST ST. (PO BOX 379) CARTHAGE, IL 62321
 (217)357-3155

SOIL BORING LOG NO. 1
 STRUCTURE NO. 034-3113

SHEET NO. 21 OF 22 SHEETS

F.A.S. RTE. 428	SECTION 11-00122-00-BR	COUNTY HANCOCK	TOTAL SHEETS 36	SHEET NO. 34
CONTRACT NO. 93659			ILLINOIS FED. AID PROJECT	

BORING LOG NO. 2 Page 1 of 2

PROJECT: County Highway 11 Replacement Bridge CLIENT: Poepping, Stone, Bach & Associates
 SITE: County Highway 11 Hancock County, Illinois ENGINEER: Poepping, Stone, Bach & Associates

DEPTH (FL)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (%)	FIELD TEST RESULTS	SAMPLE NUMBER	RIMAC READING (psf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	COMPRESSIVE STRENGTH
0.7		ASPHALTIC CEMENT CONCRETE, approx 8"							
1.0		FILL, LEAN CLAY WITH SAND AND CRUSHED LIMESTONE, brown							
5.0			8	3-5-7 N=12	1	8900	22		
10.0			5	10-7-8 N=15	2	12,600	24		
13.0		LEAN CLAY (CL), dark gray, soft to medium stiff, alluvium							
15.0			6	1-2-2 N=4	3		24		
18.0		FINE TO MEDIUM SAND WITH CLAY (SP/SC), gray-brown, loose, alluvium							
20.0			8	1-2-3 N=5	4	NA	25		
25.0			6	2-2-2 N=4	5	NA	22		
28.0		FAT CLAY (CH), brown and gray, soft to medium stiff, alluvium							
30.0			3	1-2-2 N=4	6	0	35		
33.0		LEAN TO FAT CLAY (CL/CH), gray, soft to medium stiff, alluvium							
35.0			15	2-2-2 N=4	7	0	31		

Stratification lines are approximate, in-situ, the transition may be gradual. Hammer Type: Automatic
 *Calibrated Hand Penetrometer

Advancement Method: Hollow Stem Auger to 15' Wash bore below 15' See Exhibit EXHIBIT A-1 for description of field procedures
 See Appendix B for description of laboratory procedures and additional data (if any).
 Abandonment Method: Auger Cuttings See Appendix C for explanation of symbols and abbreviations.

Notes:

Boring Started: 2/27/2013 Boring Completed: 2/27/2013
 Drill Rig: 35E Driller: RP
 Project No.: 07135013 Exhibit: A-3

Terracon

BORING LOG NO. 2 Page 2 of 2

PROJECT: County Highway 11 Replacement Bridge CLIENT: Poepping, Stone, Bach & Associates
 SITE: County Highway 11 Hancock County, Illinois ENGINEER: Poepping, Stone, Bach & Associates

DEPTH (FL)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (%)	FIELD TEST RESULTS	SAMPLE NUMBER	RIMAC READING (psf)	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	COMPRESSIVE STRENGTH
40.0		LEAN TO FAT CLAY (CL/CH), gray, soft to medium stiff, alluvium (continued)	10	1-1-2 N=3	8	0	31		
45.0		Stiff, with sand at Sample 9	12	4-5-5 N=10	9	1360	30		
50.0		FINE TO MEDIUM SAND (SP), gray, medium dense, alluvium	8	8-10-13 N=23	10	NA	21		
55.0		SANDY FAT CLAY (CH), dark gray, hard, glacial till	12	8-13-30 N=43	11	14,700	15		
60.0			7	13-22-17 N=39	12	15,600	17		
65.0			8	17-21-23 N=44	13	15,300	18		
70.0			14	15-20-24 N=44	14	15,600			

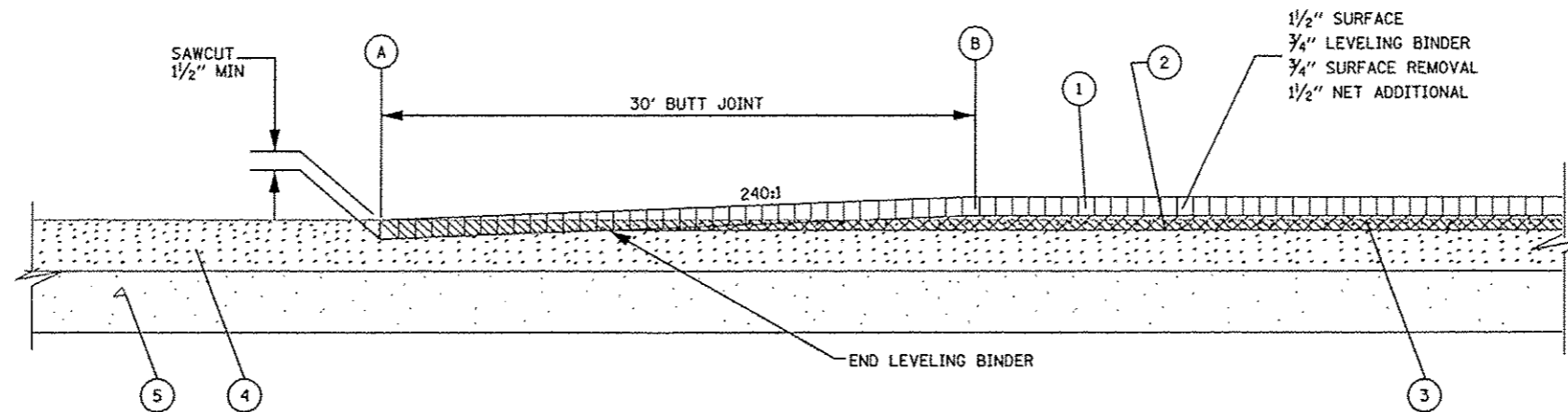
Stratification lines are approximate, in-situ, the transition may be gradual. Hammer Type: Automatic
 *Calibrated Hand Penetrometer

Advancement Method: Hollow Stem Auger to 15' Wash bore below 15' See Exhibit EXHIBIT A-1 for description of field procedures
 See Appendix B for description of laboratory procedures and additional data (if any).
 Abandonment Method: Auger Cuttings See Appendix C for explanation of symbols and abbreviations.

Notes:

Boring Started: 2/27/2013 Boring Completed: 2/27/2013
 Drill Rig: 35E Driller: RP
 Project No.: 07135013 Exhibit: A-3

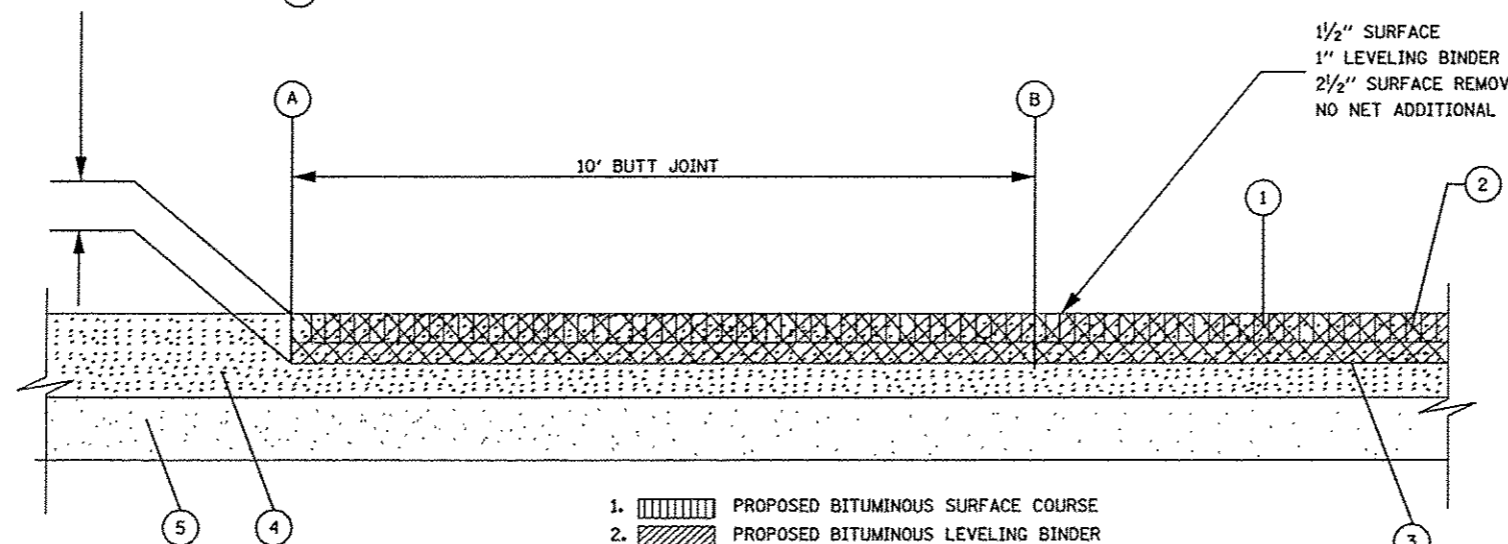
Terracon



- 1. [Pattern] PROPOSED BITUMINOUS SURFACE COURSE
- 2. [Pattern] PROPOSED BITUMINOUS LEVELING BINDER
- 3. [Pattern] PROPOSED BITUMINOUS SURFACE REMOVAL (VARIABLE DEPTH) - 3/4" AVE
- 4. [Pattern] EXISTING BITUMINOUS CONCRETE OVERLAY
- 5. [Pattern] EXISTING AGGREGATE BASE COURSE, 7" AND VARIES

LOCATION	A	B	WIDTH FOOT	AREA SQ YD
SEE SCHEDULE OF QUANTITIES				
HOT-MIX ASPHALT SURFACE REMOVAL, BUTT JOINT				
TOTALS				
USE				

SAWCUT 2 1/2" - MATCH
EXTEND 3/4" LEV BINDER TO (A)



- 1. [Pattern] PROPOSED BITUMINOUS SURFACE COURSE
- 2. [Pattern] PROPOSED BITUMINOUS LEVELING BINDER
- 3. [Pattern] PROPOSED BITUMINOUS SURFACE REMOVAL (VARIABLE DEPTH)
- 4. [Pattern] EXISTING BITUMINOUS CONCRETE OVERLAY
- 5. [Pattern] EXISTING AGGREGATE BASE COURSE, 7" AND VARIES

LOCATION	A	B	WIDTH FOOT	AREA SQ YD
TOTALS				
USE				