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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR
PROPOSED LOCAL AGENCY IMPROVEMENT
FEDERAL AID BRRP PROJECT
HENRY COUNTY

COUNTY HIGHWAY DEPT. FAS RTE, 232
SECTION 06-00143-00-BR
PROJECT BRS-232(106) JOB NO C-92-115-08
CONTRACT 85440

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
232	06-00143-00-BR	HENRY	7	1
P.H.W.A. REG.		ILLINOIS	PROJECT	

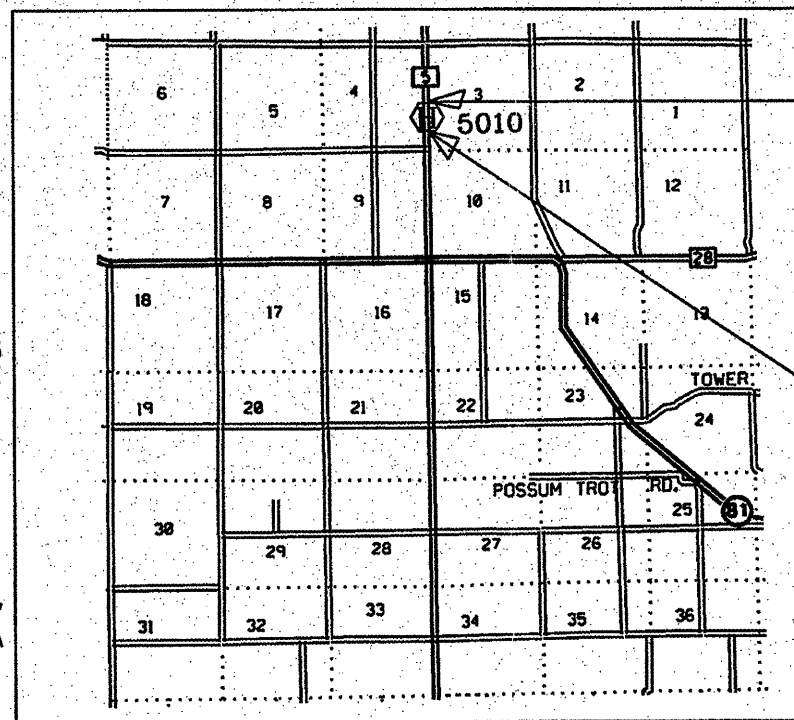
STANDARDS

280001-04	728001
720011	BLR 21-7
729001	BLR 22-5
701006-02	BLR 23-2
701301-02	BLR 26
701901	631011-04

SUMMARY OF QUANTITIES

QUANTITY	UNIT	DESCRIPTION
20200100	263 Cu.Yds.	Earth Excavation
20400800	703 Cu.Yds.	Furnished Excavation
25000330	0.73 Acre	Seeding, Class 6
25000400	66.0 Pound	Nitrogen Fertilizer Nutrient
25000500	66.0 Pound	Phosphorous Fertilizer Nutrient
25000600	66.0 Pound	Potassium Fertilizer Nutrient
25100120	1.46 Ton	Mulch, Method 2
28100707	70.0 Sq.Yds.	Stone Dumped Riprap, Class A4
35101400	400 Ton	Aggregate Base Course, Type B
50100100	1 Each	Removal of Existing Structures
54003000	259.8 Cu.Yds.	Concrete Box Culvert
50800105	35.860 Pound	Reinforcement Bars
50800205	1.260 Pound	Reinforcement Bars (Epoxy Coated)
51500100	1 Each	Name Plate
28000300	4 Each	Temporary Ditch Checks
54200229	30 Foot	Pipe Culvert, Class D, Type 1, 24"
* 63000000	250 Foot	Steel Plate Beam Guardrail, Type A
* 63200305	532 Foot	Steel Plate Beam Guardrail Removal
* 63100045	2 Each	Traffic Barrier Terminal, Type 2
* LR631020	2 Each	Traffic Barrier Terminal, Type 1
67100100	1 LS	Mobilization

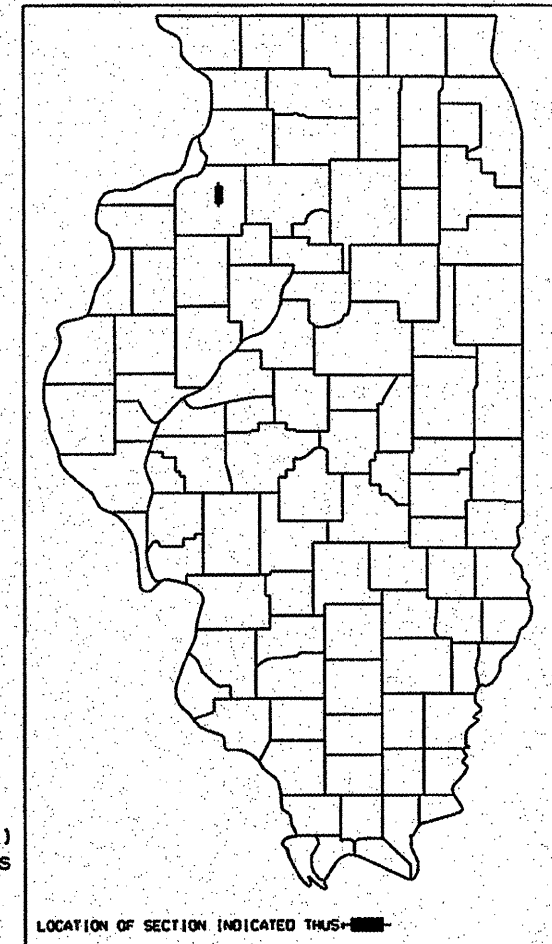
* Specialty Items



Section 06-00143-00-BR ends at Station 75+58.

Section includes the construction of a single cell (20' span x 10' high) concrete box culvert skewed 35 degrees Lt. ahead.

Section 06-00143-00-BR begins at Station 71+17.



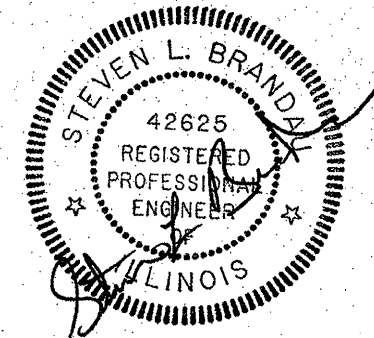
LOCATION OF SECTION INDICATED THUS+■-

LOCATION MAP

NET LENGTH OF SECTION = 441 FEET = 0.084 MILES

SCALES

PLAN	1" = 50'
PROFILE HORI.	1" = 50'
PROFILE VERT.	1" = 5'
CROSS SECTION	1" = 5'



THESE PLANS WERE PREPARED BY ME OR BY THE FULL TIME MEMBERS OF MY STAFF.

Steven L. Brandau

STEVEN L. BRANDAU
P.E. 42625

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
APPROVED	<i>Steven L. Brandau</i> 9/5 2008 COUNTY ENGINEER
PASSED	<i>[Signature]</i> 8/8 2008 DISTRICT ENGINEER OF LOCAL ROADS & STREETS
RELEASING FOR BID BASED ON LIMITED REVIEW SEP 8 2008 DEPUTY DIRECTOR OF HIGHWAYS REGION 2 ENGINEER	

CALL J.U.L.I.E.
BEFORE YOU DIG
800-892-0123

ADT = 1250 (2008); 10% TRUCKS
MAJOR COLLECTOR
3R GUIDELINES

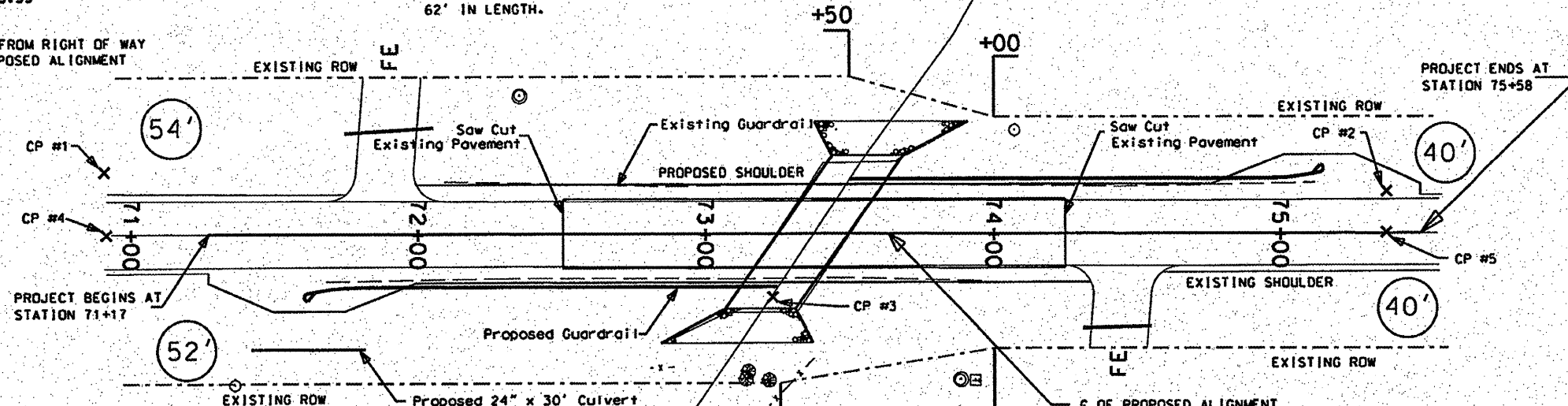
BM-1 - 60 P Nail in Power Pole
47.5' Lt @ Sta. 72+35
Elev. 189.02

BM-2 - 60P Nail in Power Pole
51' Rt @ Sta. 73+89
Elev. 183.33

PROPOSED STRUCTURE: IS A 63'-9 3/8" CAST IN PLACE CONCRETE 20'x10' SINGLE BOX CULVERT SKEWED 35 DEGREES LT. AHEAD.

EXISTING STRUCTURE: IS A CAST IN PLACE 23'x8' DOUBLE CONCRETE BOX CULVERT SKEWED 35 DEGREES LT. AHEAD 62' IN LENGTH.

54' - DIST. FROM RIGHT OF WAY TO PROPOSED ALIGNMENT



COORDINATES	NORTHINGS	EASTINGS
Control Point #1	10000.00	10000.00
Control Point #2	10446.29	10000.00
Control Point #3	10233.62	10039.95
Control Point #4	10001.20	10021.64
Control Point #5	10446.44	10014.28
Sta. 71+17	10026.79	10021.06
Sta. 75+58	10467.73	10014.26

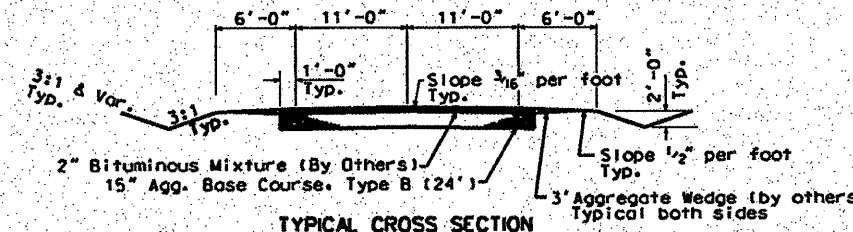
SCALES:
1" = 25' HOR
1" = 5' VER

Contract 85440

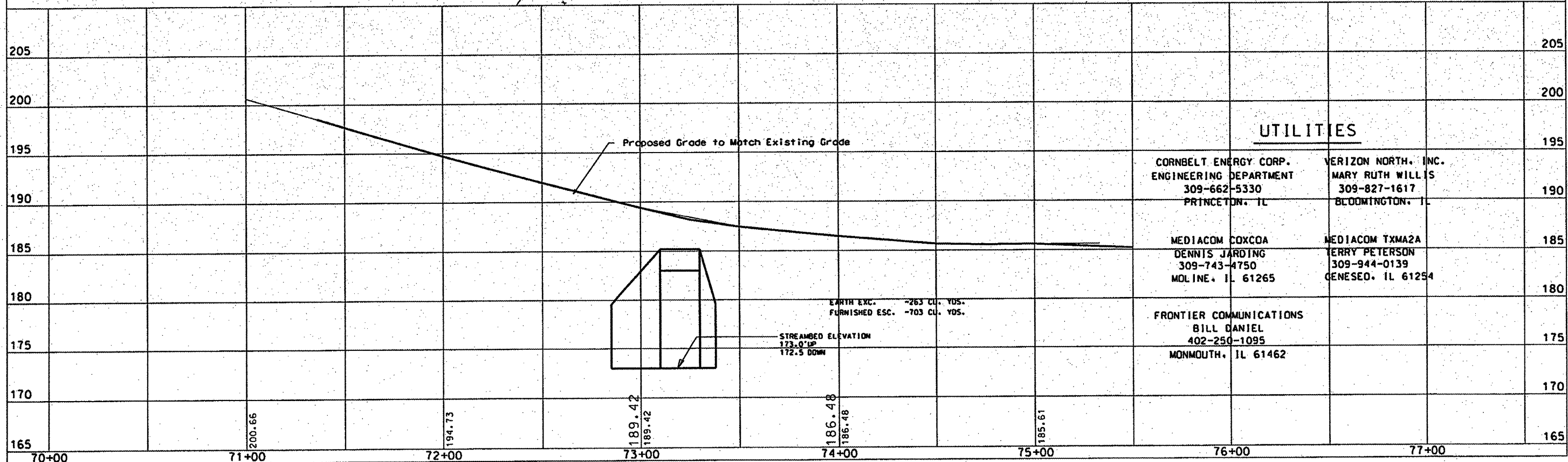
FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
232	06-00143-00-BR	HENRY	7	2

F.I.L.A. REG. ILLINOIS PROJECT

- AGGREGATE BASE COURSE TYPE B**
STA. 72+50 TO 74+25 400 TONS
- TRAFFIC BARRIER TERMINAL, TYPE 1**
STA. 71+87 1 EACH
STA. 74+87 1 EACH
- STEEL PLATE BEAM GUARDRAIL, TYPE A**
STA. 71+87 to 73+12 125 FEET
STA. 73+62 to 74+87 125 FEET
TOTAL 250 FEET
- TRAFFIC BARRIER TERMINAL, TYPE 2**
STA. 73+12 1 EACH
STA. 73+62 1 EACH
- GUARDRAIL REMOVAL**
RT. STA. 71+67 to 73+96 229 FEET
LT. STA. 72+09 to 75+12 303 FEET
TOTAL 532 FEET



CALL J.U.L.I.E.
BEFORE YOU DIG
1-800-892-0123

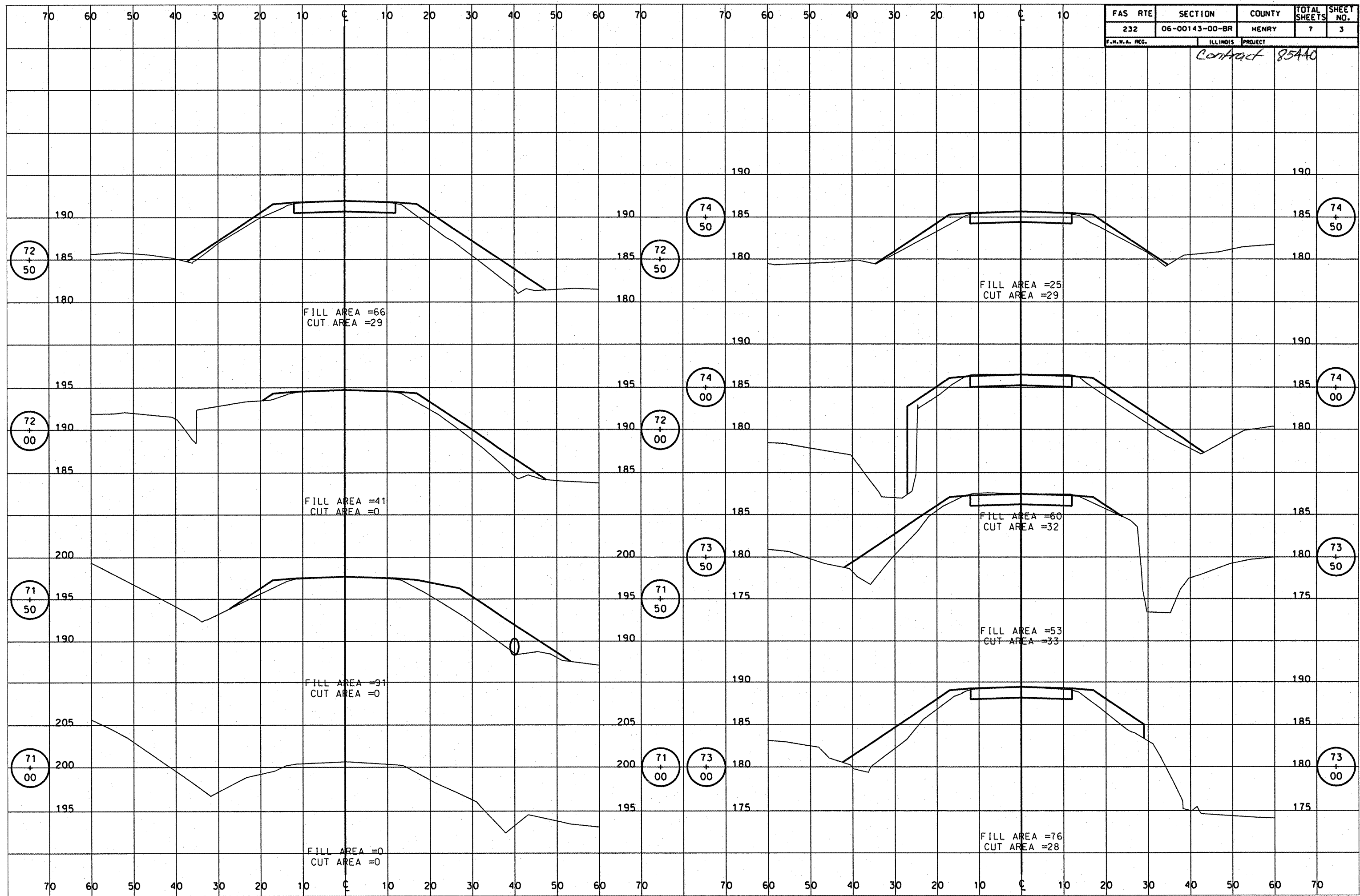


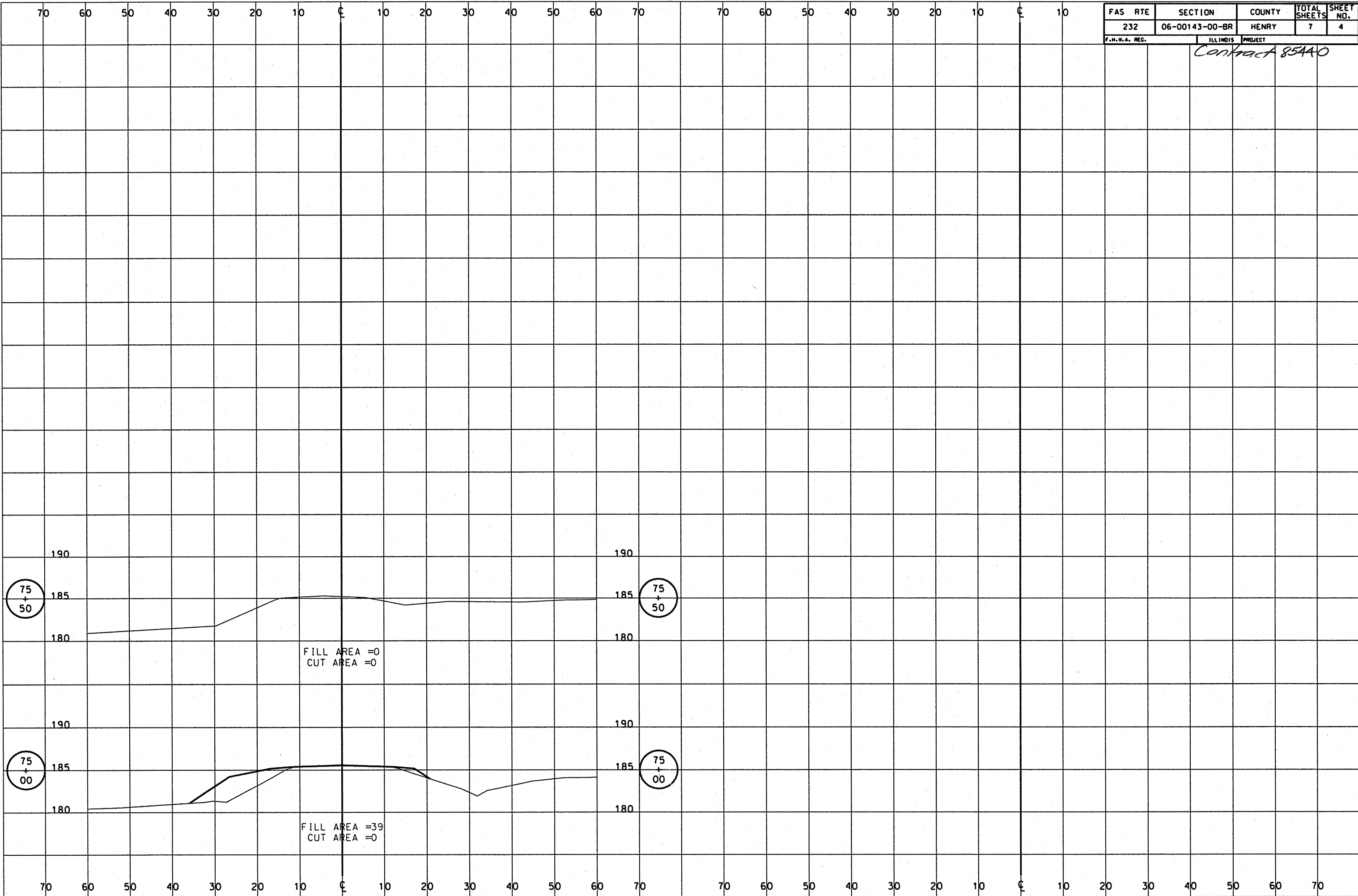
UTILITIES

- | | |
|--|--|
| CORNBELT ENERGY CORP.
ENGINEERING DEPARTMENT
309-662-5330
PRINCETON, IL | VERIZON NORTH, INC.
MARY RUTH WILLIS
309-827-1617
BLOOMINGTON, IL |
| MEDIACOM COXCOA
DENNIS JARDING
309-743-4750
MOLINE, IL 61265 | MEDIACOM TXMA2A
ERRY PETERSON
309-944-0139
GENESEO, IL 61254 |
| FRONTIER COMMUNICATIONS
BILL DANIEL
402-250-1095
MONMOUTH, IL 61462 | |

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
232	06-00143-00-BR	HENRY	7	3
F.H.W.A. REG.		ILLINOIS PROJECT		

Contract 85440





STATE OF ILLINOIS
HENRY COUNTY HIGHWAY

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
232	06-00143-00-BR	HENRY	7	5
F.H.W.A. REG.		ILLINOIS PROJECT		

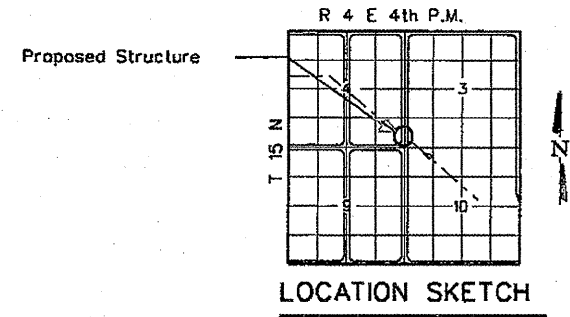
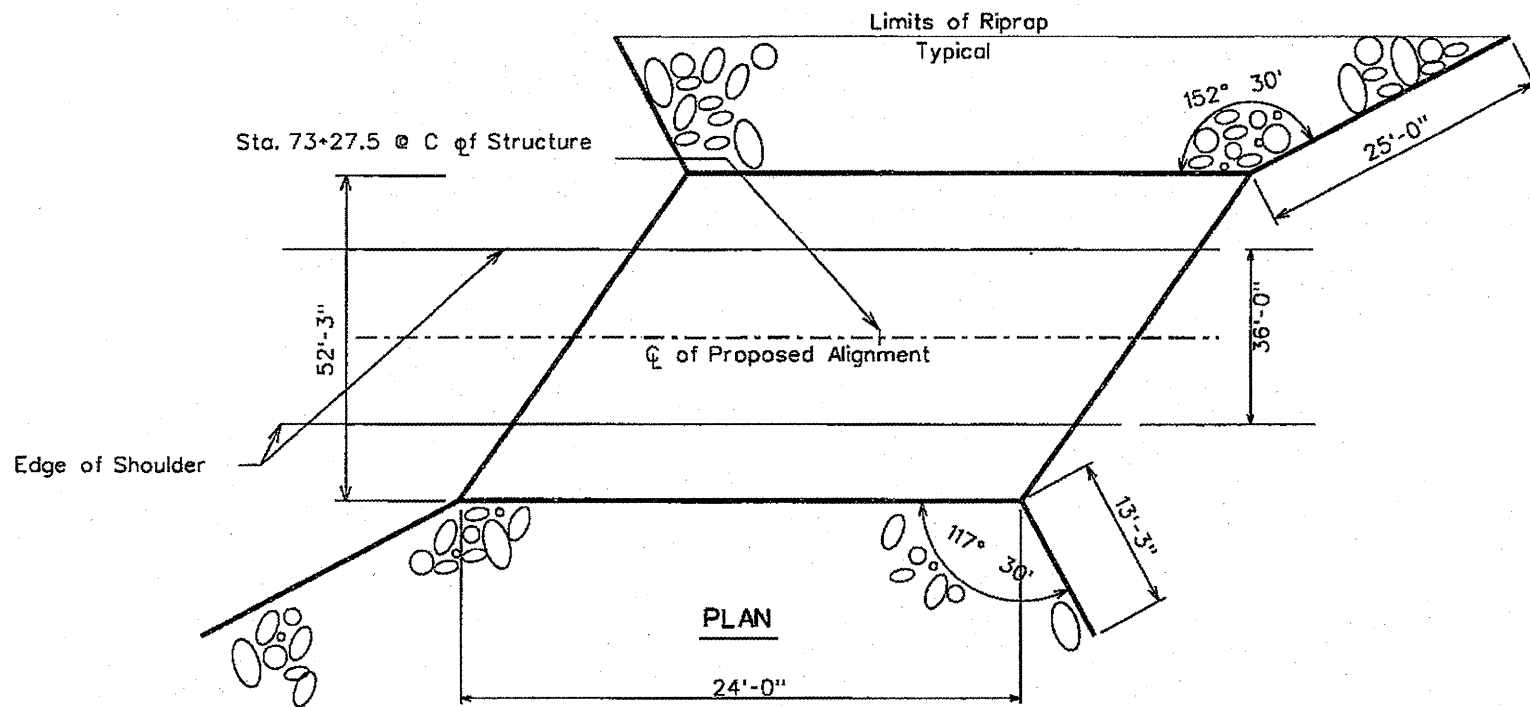
Contract 85440

GENERAL NOTES

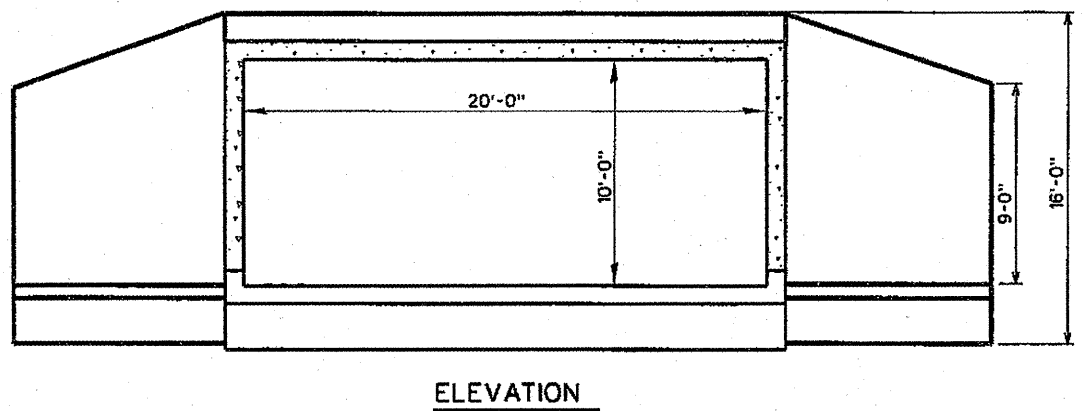
- The loading for structure shall be HS20-44
- Reinforcement bars shall conform to AASHTO M-31, M-42, or M-53 Grade 60

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structure	Each		1	
Concrete Box Culverts	Cu.Yd		259.8	259.8
Reinforcement Bars	Pound		35,860	35,860
Reinforcement Bars (Ep. Coated)	Pound		1,260	1,260
Stone Dumped Rip Rap Class A4	Sq.Yd.		70.0	70.0



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



STATION 73+27.5
SEC. 06-00143-00-BR BUILT 2008
HENRY COUNTY
LOADING HS20-44
STR. NO. 037-5011



Keith E. Brandau 08/14/08
Keith E. Brandau Date
Illinois Structural No. 4905
License Expires 11/30/2008

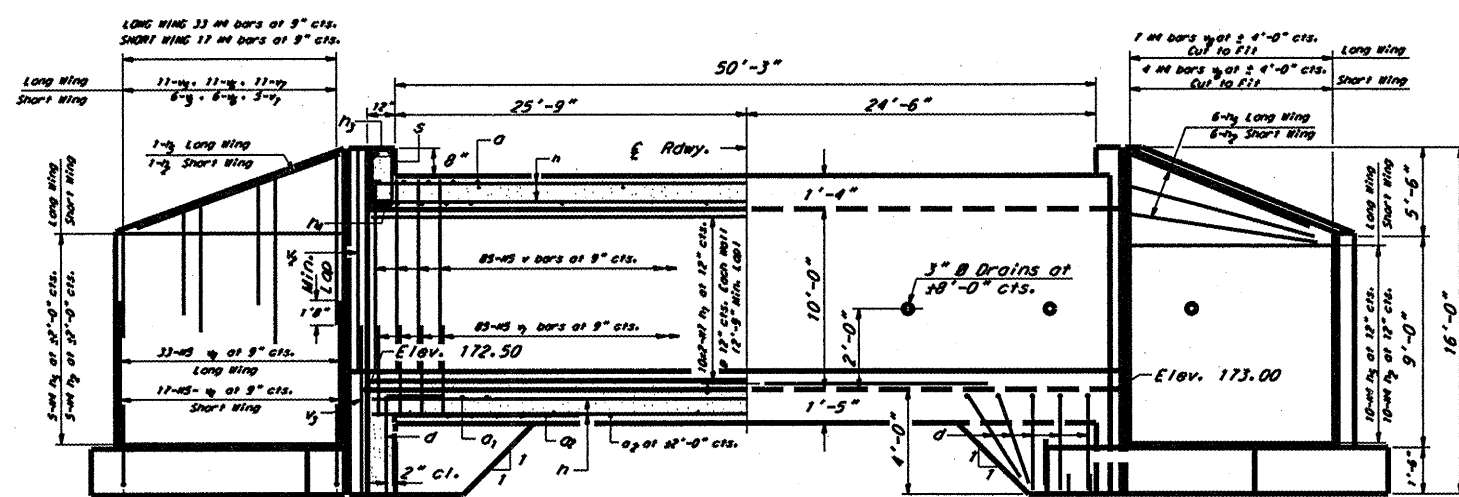
WATERWAY INFORMATION

Drainage Area - 3.25 Sq. Miles		Low Grade Elev. 188.05 @ Sta. 73+27.5			
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural H.W.E.
			Exist.	Prop.	
Design	20	1020	160	167	181.33
Base	100	1557	160	186	182.31

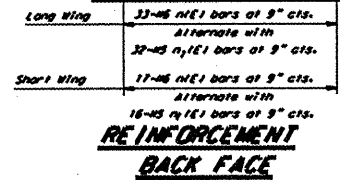
LETTERING FOR NAME PLATE
SEE STD. CN

GENERAL PLAN & ELEVATION
CH 5 SECTION 06-00143-00-BR
HENRY COUNTY

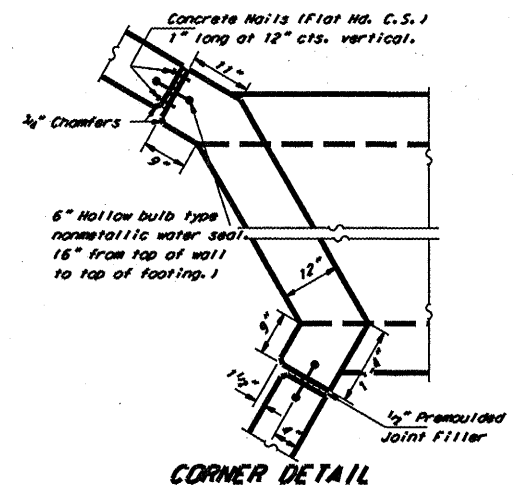
FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
232	06-00143-00-BR	HENRY	7	6
ILLINOIS PROJECT		Contract 85440		



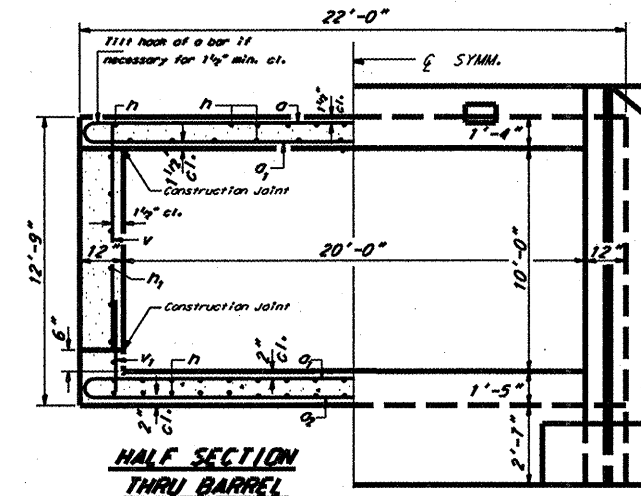
HALF LONG SECTION HALF ELEVATION
Showing Reinforcement Showing Dimensions
Dimensions are at Right Angles to C Roadway



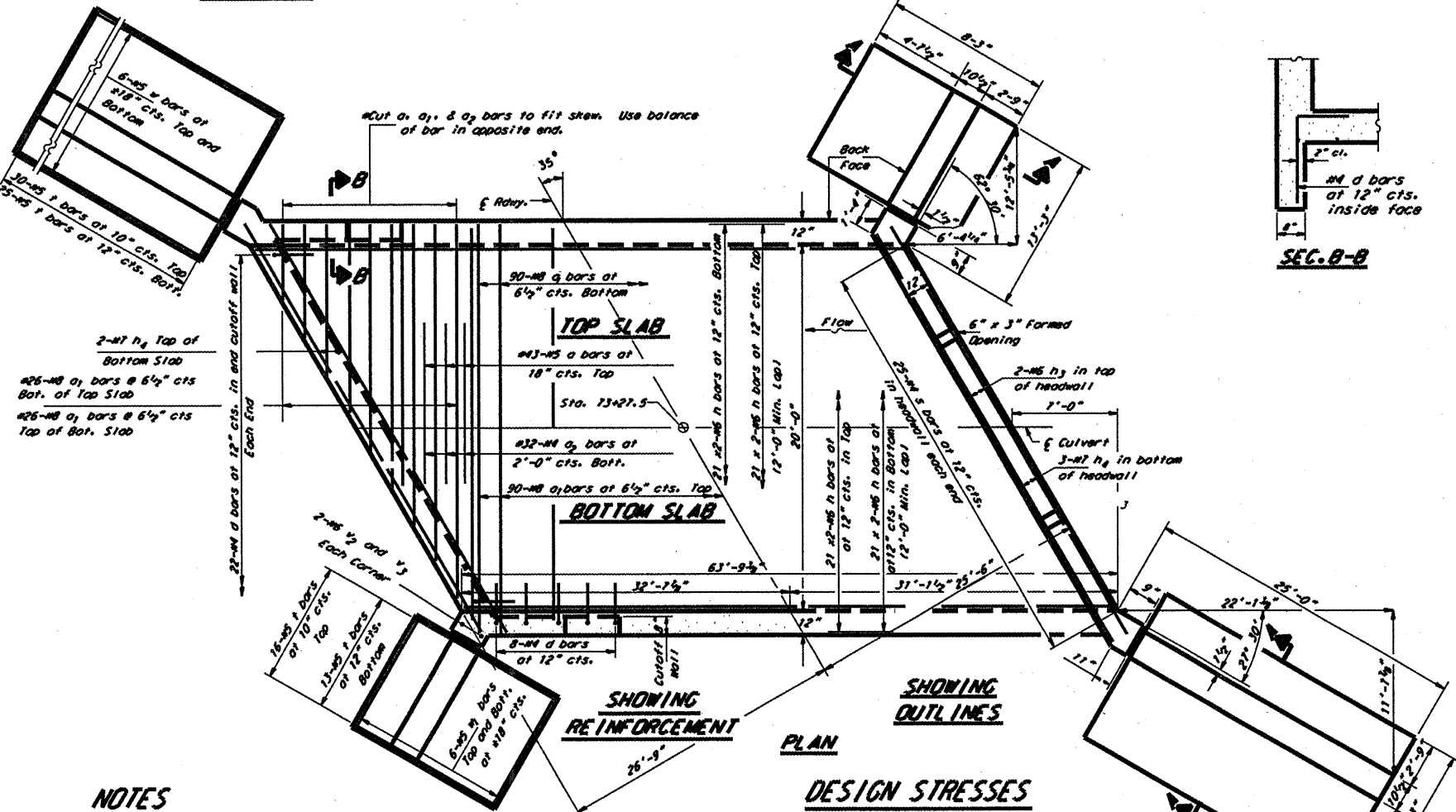
REINFORCEMENT BACK FACE



CORNER DETAIL



HALF SECTION THRU BARREL
HALF END ELEVATION



SHOWING REINFORCEMENT PLAN

SHOWING OUTLINES

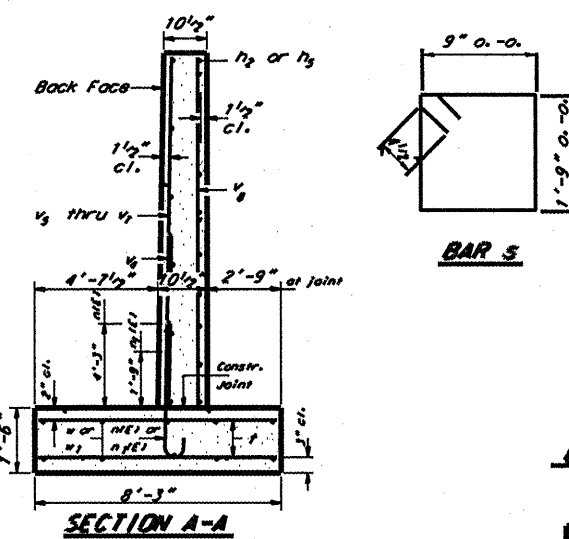
DESIGN STRESSES

$f_y = 60,000$ psi
 $f'_c = 3,500$ psi
Max. Soil Pressure = 2987 PSF

NOTES

Reinforcement bars designated (E) shall be epoxy coated.
Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.
Bars indicated thus 12 x 4 - #5 etc. indicates 12 lines of bars with 4 lengths per line
All construction joints shall be bonded.

LOADING HS 20-44 & ALT.



SECTION A-A

BAR 5

BAR O1

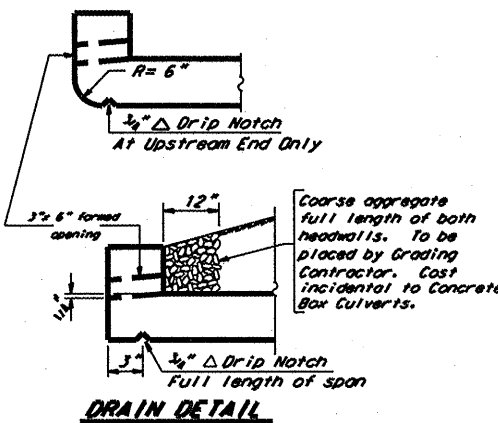
BAR n1E1 and m1E1

BAR d

BILL OF MATERIAL

Bar No.	Size	Length	Shape	Bar No.	Size	Length	Shape
O	#3	20'-6"	□	S	#5	5'-9"	□
O1	#8	23'-6"	□				
O2	#4	20'-6"	□	T	#5	1'-11"	□
d	#4	5'-6"	□	V	#5	10'-6"	□
n	#5	32'-9"	□	V1	#5	4'-0"	□
n1	#7	33'-2"	□	V2	#8	11'-2"	□
n2	#4	12'-2"	□	V3	#5	6'-5"	□
n3	#5	26'-4"	□	V4	#5	6'-3"	□
n4	#7	26'-4"	□	V5	#4	10'-3"	□
n5	#4	23'-11"	□	V6	#4	8'-6"	□
n1E1	#5	6'-1"	□	V7	#4	6'-9"	□
m1E1	#5	3'-6"	□	V8	#4	14'-2"	□
				W	#5	24'-0"	□
				W1	#5	12'-3"	□

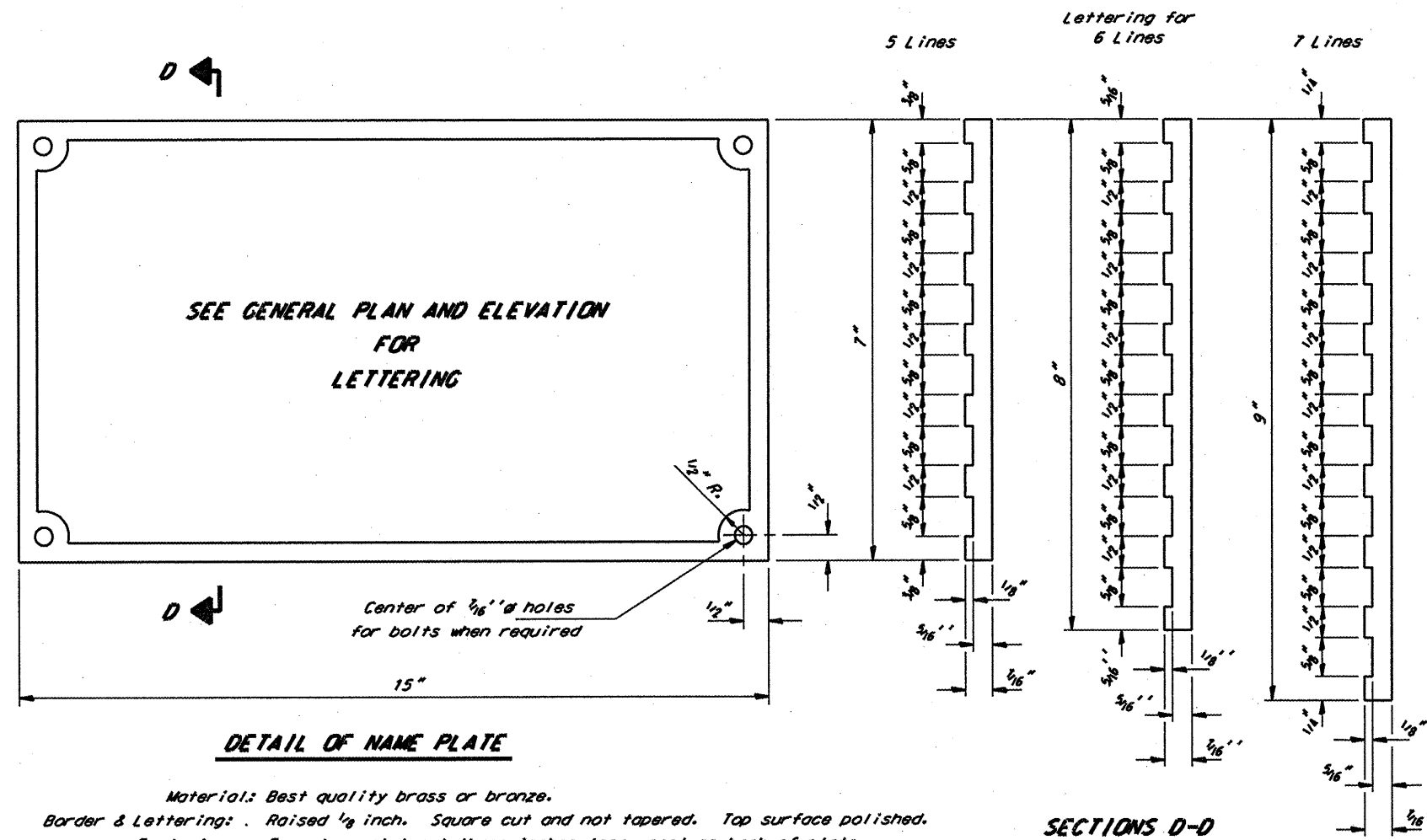
Concrete Box Culverts Cu. Yds. 259.8
Reinforcement Bars, Epoxy Coated Pound 1260
Reinforcement Bars Pound 35,860



DRAIN DETAIL

FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
232	06-00143-00-BR	HENRY	7	7
ILLINOIS PROJECT				

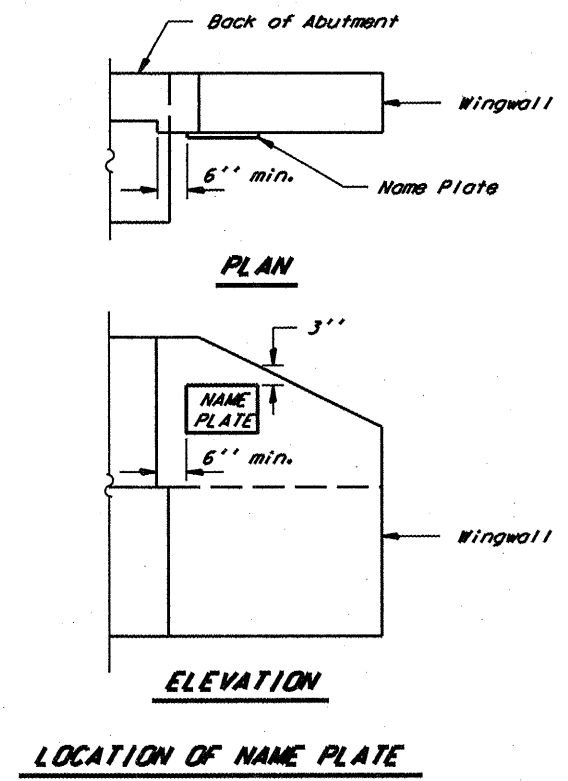
Contract 85AA0



DETAIL OF NAME PLATE

Material: Best quality brass or bronze.
 Border & Lettering: . Raised 1/8 inch. Square cut and not tapered. Top surface polished.
 Fastenings: Four lugs at least three inches long, cast on back of plate.

SECTIONS D-D



LOCATION OF NAME PLATE

Illinois Department of Transportation
 PASSED November 1, 1995
Dennis D. Keppner
 Engineer of Bridge Design
 APPROVED November 1, 1995
Ralph E. Anderson
 Engineer of Bridges and Structures

NAME PLATE
STANDARD CN