6-12-09 Letting, Item 015

D264428-sht-cover-01.dgn 3/24/2009 11:40:03 AM HAS

SQUAD LEADER: JENNIFER LUBBS (815)284-5958 PROJECT ENGINEER: BECKY MARRUFFO

INDEX OF SHEETS

0' 20' 40' 60' 80' 100' – 1" = 20'

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

MUNSON TOWNSHIP, SEC. 28, 29
CAMBRIDGE TOWNSHIP, SEC. 4, 5

CONTRACT NO. 64428

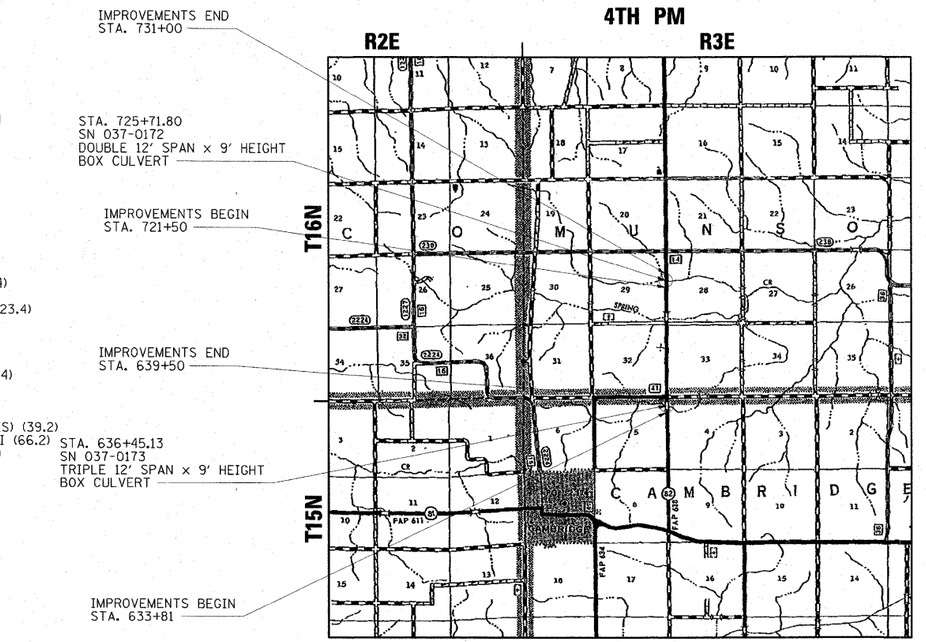
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAP ROUTE 638 (IL 82)
SECTION 136BR–1, 137–1BR
PROJECT ACF-0638(011)
HENRY COUNTY

C 92–060–09

STRUCTURE REPLACEMENTS
OVER NORTH AND SOUTH BRANCHES OF SPRING CREEK
4TH PM



LOCATION MAP

SCALE
0 1 2 3 4 5 6 MILES
0 5000 15000 25000 30000 FEET

136BR–1
GROSS LENGTH = 950 FT. = 0.18 MI.
NET LENGTH = 950 FT. = 0.18 MI.

137–1BR
GROSS LENGTH = 560 FT. = 0.11 MI.
NET LENGTH = 560 FT. = 0.11 MI.

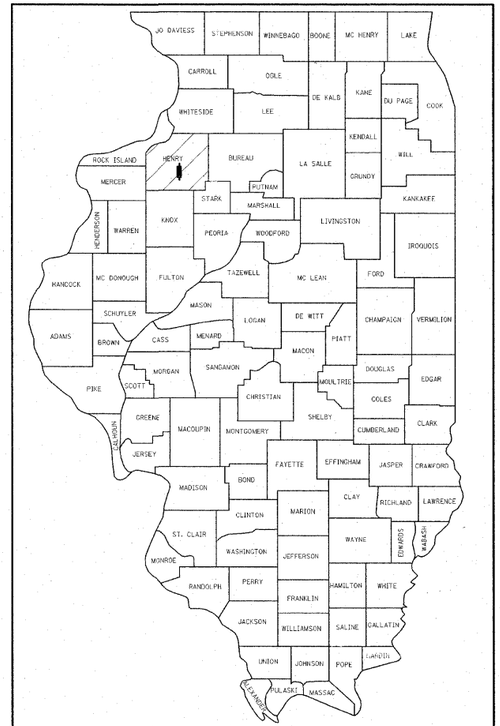
RICHARD D. PAYNE 37421 LICENSED PROFESSIONAL ENGINEER OF STATE OF ILLINOIS

ESCA
CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
URBANA, ILLINOIS
(217)384-0505
PROJECT ENGINEER: ERIC HENKEL

Richard D. Payne DATE: 03/2009
ILLINOIS PROFESSIONAL LICENSE NO. 37421
(EXPIRATION DATE: 11-30-09)

F.A.P. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1, 137-1BR		HENRY	67	1
FED. ROAD DIST. NO. _		ILLINOIS	CONTRACT NO. 64428		

D–92–061–99



LOCATION OF SECTION INDICATED THUS: –

FUNCTIONAL CLASSIFICATION:	**MINOR ARTERIAL (NON URBAN)**	
DESIGN SPEED:	**55 mph**	
POSTED SPEED:	**55 mph**	
SECTION:	**136BR–1**	**137–1BR**
ADT:	**2550**	**1500 (2008)**
PV:	**95.0%**	**92.8%**
SU:	**3.0%**	**4.1%**
MU:	**2.0%**	**3.1%**

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 25th 2009
George F. Ryan
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
May 8, 2009
Charles J. Ingersoll, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT
May 8, 2009
Christine M. Reed, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

1. SEE CROSS SECTIONS FOR SPECIAL DITCHES AND BACKSLOPES.

2. THE FINAL TOP 100 MM (FOUR INCHES) OF SOIL IN ANY RIGHT-OF-WAY AREA DISTURBED BY THE CONTRACTOR MUST BE CAPABLE OF SUPPORTING VEGETATION. THE SOIL MUST BE FROM THE A HORIZON (ZERO TO 2 FEET DEEP) OF SOIL PROFILES OF LOCAL SOILS.

3. ALL BORROW/WASTE/USE SITES MUST BE APPROVED BY THE DEPARTMENT PRIOR TO REMOVING ANY MATERIAL FROM THE PROJECT OR INITIATING ANY EARTHMOVING ACTIVITIES, INCLUDING TEMPORARY STOCKPILING OUTSIDE THE LIMITS OF CONSTRUCTION.

4. THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS. SEEDING CLASS 4 OR 2A SHALL BE USED, EXCEPT IN FRONT OF PROPERTIES WHERE THE GRASS WILL BE MOWED, THEN USE SEEDING, CLASS 1. CLASS 2A SHALL BE USED ON FRONT SLOPES AND DITCH BOTTOMS. CLASS 4 SHALL BE USED BEHIND TYPE A GUTTER, ON ALL BACKSLOPES AND AREAS BEHIND THE BACKSLOPE, AND BEYOND THE TOE OF FRONT SLOPE ON FILL SECTIONS WITHOUT DITCHES.

5. FERTILIZER NUTRIENTS SHALL BE APPLIED AT THE RATE SPECIFIED IN SECTIONS 250 AND 252 OF THE STANDARD SPECIFICATIONS. THIS SHALL BE INCLUDED IN THE COST OF THE SEEDING.

6. THE CONTRACTOR WILL BE REQUIRED TO FURNISH 140 MM (5½") HIGH BRASS STENCILS AS APPROVED BY THE ENGINEER AND INSTALL STATIONING AT 250' INTERVALS. STATIONING SHALL BE PLACED ON BOTH LANES OF 2-LANE HIGHWAYS AND ON THE OUTSIDE LANES IN BOTH DIRECTIONS ON 4-LANE HIGHWAYS. THE STATIONS SHALL BE PLACED 150 MM (6") INSIDE THE PAVEMENT MARKING EDGE SO THEY CAN BE READ FROM THE SHOULDER. THIS WORK WILL BE INCLUDED IN THE COST OF THE FINAL PAVEMENT SURFACE.

7. ONE 16D GALVANIZED NAIL SHALL BE USED TO TOE NAIL THE WOOD BLOCK OUT TO THE WOOD POST ON ALL TRAFFIC BARRIER TERMINAL TYPE I SPECIALS.

8. DELINEATORS SHALL BE INSTALLED AS SHOWN IN STANDARD 635001, EXCEPT THAT THE POST SHALL BE ROTATED 180 DEGREES AND ONLY METAL-BACKED DELINEATORS SHALL BE PERMITTED.

9. PAVEMENT MARKING SHALL BE DONE ACCORDING TO STANDARD 780001, EXCEPT AS FOLLOWS:

   1. ALL WORDS, SUCH AS ONLY, SHALL BE 2.4 M (8 FEET) HIGH.
   2. ALL NON-FREEWAY ARROWS SHALL BE THE LARGE SIZE.
   3. THE DISTANCE BETWEEN YELLOW NO-PASSING LINES SHALL BE 200 MM (8"), NOT 180 MM (7") AS SHOWN IN THE DETAIL OF TYPICAL LANE AND EDGE LINES.

10. ALL GUTTER OUTLETS SHALL BE EXTENDED TO DITCH FLOW AS DIRECTED BY THE ENGINEER.

11. RIGHT-OF-WAY MARKERS WILL BE ERECTED WITH THE BACK FACE OF THE MARKER ON THE RIGHT-OF-WAY LINE UNLESS THE NEW RIGHT-OF-WAY LINE HAS BEEN SURVEYED AND PINNED, IN WHICH INSTANCE THE RIGHT-OF-WAY MARKERS WILL BE ERECTED 300 MM (12 INCHES) INSIDE THE NEW RIGHT-OF-WAY LINE.

12. CADD DATA WILL BE AVAILABLE TO CONTRACTORS AND CONSULTANTS WORKING ON THIS PROJECT. THIS INFORMATION WILL BE PROVIDED UPON REQUEST AS MICROSTATION CADD FILES AND GEOPAK COORDINATE GEOMETRY FILES ONLY. IF DATA IS REQUIRED IN OTHER FORMATS IT WILL BE YOUR RESPONSIBILITY TO MAKE THESE CONVERSIONS. IF ANY DISCREPANCY OR INCONSISTENCY ARISES BETWEEN THE ELECTRONIC DATA AND THE INFORMATION ON THE HARD COPY, THE INFORMATION ON THE HARD COPY SHOULD BE USED. CONTACT THE DISTRICT'S PROJECT ENGINEER TO REQUEST THESE FILES.

13. IT IS ESTIMATED THAT 84 CUBIC METERS (110 CUBIC YARDS) OF EARTH WILL BE HAULED TO THE JOB AT SECTION 137-1BR FROM OUTSIDE THE PROJECT LIMITS. A SHRINKAGE FACTOR OF 25% HAS BEEN USED.

14. PREVIOUSLY PUGMILLED STOCKPILES OF "TYPE A" OLDER THAN 1 MONTH WILL NOT BE APPROVED FOR USE UNTIL A MOISTURE CHECK IS RUN TO VERIFY MOISTURE CONTENT. MATERIAL SHIPPED TO PROJECTS WITHOUT BEING TESTED WILL NOT BE ACCEPTED.

15. THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USES(S):	SURFACE COURSE	LEVELING BINDER	HMA SHOULDERS	BOTTOM SHOULDERS
PG:	PG 64-22	PG 64-22	PG 58-22	PG 58-22
DESIGN AIR VOIDS:	4.0% @ N50	4.0% @ N50	3.0% @ N50	2.0% @ N50
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL 9.5 OR 12.5	IL 9.5	IL 9.5 OR 12.5	BAM
FRICTION AGGREGATE	C	NA	C	NA
20 YEAR ESAL	0.474	0.474	NA	NA

16. TO HELP AVOID EXCESS DROP OFFS AT THE EDGE OF PAVEMENT, THE EXISTING AGGREGATE WEDGE OR SHOULDER IS TO BE PULLED UP AND ROLLED TO MATCH THE EDGE OF PAVEMENT BEFORE PLACING ANY BITUMINOUS MATERIAL. ALL COSTS ASSOCIATED WITH PULLING UP THE SHOULDERS SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE OF THE TYPE SPECIFIED.

17. BITUMINOUS AND AGGREGATE PRIME COAT SHALL BE PLACED IN ACCORDANCE WITH SECTION 406 OF THE STANDARD SPECIFICATIONS. THE COST OF THE PRIME COATS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER METRIC TON (TON) FOR LEVELING BINDER (MACHINE METHOD) OR HOT-MIX ASPHALT SURFACE COURSE OF THE TYPE SPECIFIED.

18. A NATIONWIDE 404 PERMIT HAS BEEN ISSUED FOR THIS PROJECT AND THE CONDITIONS OF THAT PERMIT MUST BE ADHERED TO.

19. THE NEW NUMBER FOR THE STRUCTURE AT STATION 636+45.13 WILL BE 037-0173
    THE NEW NUMBER FOR THE STRUCTURE AT STATION 725+71.80 WILL BE 037-0172

20. THE CONTRACTOR SHALL SUBMIT FOUR COPIES OF THE REQUIRED SHOP DRAWINGS FOR REVIEW AND APPROVAL TO THE BUREAU OF BRIDGES AND STRUCTURES, 2300 SOUTH DIRKSEN PARKWAY, SPRINGFIELD, IL 62764. AFTER APPROVAL OF INITIAL SUBMITTAL, THE CONTRACTOR SHALL SUBMIT ONE SET OF SHOP DRAWINGS TO DAVE LIPPERT, ENGINEER OF MATERIALS, 126 EAST ASH STREET, SPRINGFIELD, IL 62706, AND EIGHT (8) SETS OF SHOP DRAWINGS DISTRIBUTED TO:
    DISTRICT 2 DISTRICT ENGINEER (1)
    FABRICATOR (1)
    CONTRACTOR (2)
    RESIDENT ENGINEER (2)
    DISTRICT 2 BUREAU OF MATERIALS (2)

21. THE REVIEW AND APPROVAL OF THE TEMPORARY SOIL RETENTION SYSTEM WILL REQUIRE 4 TO 6 WEEKS. THE CONTRACTOR SHALL SCHEDULE HIS WORK ACCORDINGLY.

22. THE PROPOSED PIPES FOR ENTRANCES AND SIDE ROADS SHALL BE PLACED IN LINE WITH THE EXISTING OR PROPOSED DITCH LINE.

23. CONNECTING BANDS FOR CORRUGATED METAL PIPES SHALL BE METAL AND SHALL BE COATED WITH THE SAME MATERIAL AS THE PIPE SECTIONS. THE CONNECTING BANDS SHALL BE A MINIMUM OF 18" WIDE.

24. EMBANKMENT QUANTITIES FOR THE CONSTRUCTION OF THE TRAFFIC BARRIER TERMINALS AS SHOWN IN THE PLANS ARE INCLUDED IN QUANTITIES FOR EARTH EXCAVATION.

25. THE CONTRACTOR SHALL SUPPLY THE RESIDENT ENGINEER WITH THE MANUFACTURER'S INSTALLATION REQUIREMENTS FOR THE TYPE OF STEEL PLATE BEAM GUARDRAIL TERMINAL TYPE I SPECIAL (FLARED).

26. DELINEATORS SHALL BE PLACED AT THE ENDS OF APPROACH GUARDRAIL TERMINAL SECTIONS, AND AT EACH HEADWALL OR END SECTION OF AR CULVERTS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR DELINEATORS.

27. PERMANENT SURVEY MARKERS, TYPE II, SHALL BE SET AT INTERVALS OF 1.6 Km (1 MILE) OR AS DIRECTED BY THE ENGINEER. BRIDGE OR CULVERT PROJECTS SHALL HAVE ONE SURVEY MARKER PLACED NEAR THE STRUCTURE. ESTIMATED: 4 EACH.

28. PERMANENT SURVEY MARKERS, TYPE II SHALL BE CAST-IN-PLACE AS SHOWN ON DISTRICT STANDARD 66.2. THE BOTTOM OF THE MARKER SHALL BE 5'-0" BELOW THE GROUND SURFACE.

29. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A DESCRIPTION OF LOCATION, ELEVATION, AND COORDINATES FOR EACH PERMANENT SURVEY MARKER. THE ENGINEER SHALL SUBMIT THIS INFORMATION TO THE SURVEY CREW.

30. THE EXISTING FORESLOPES SHALL BE BENCHED AS SHOWN ON SHEET 59 PRIOR TO CONSTRUCTING THE PROPOSED FINISHED GRADE. THE ENGINEER WILL DETERMINE THE EXACT LOCATIONS AND APPLICATION OF THIS DETAIL. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF EARTH EXCAVATION.

31. THE TEMPORARY CONCRETE BARRIER SHALL BE ANCHORED TO THE PAVEMENT WITH 6 ANCHORS PER SECTION AT THE FOLLOWING LOCATIONS:

    STATION 725+41.80 TO 726+01.80

32. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE J.U.L.I.E. NUMBER IS 800-892-0123. THE FOLLOWING LISTED UTILITIES LOCATED WITHIN THE PROJECT LIMITS OR IMMEDIATELY ADJACENT TO THE PROJECT CONSTRUCTION LIMITS ARE MEMBERS OF J.U.L.I.E..

    CAMBRIDGE TELEPHONE
    CORN BELT ENERGY

LIST OF ILLINOIS DOT HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-04	TEMPORARY EROSION CONTROL SYSTEMS
420001-07	PAVEMENT JOINTS
442201-03	CLASS C AND D PATCHES
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
542401-01	METAL END SECTION FOR PIPE CULVERTS
606101-04	TYPE A GUTTER (INLET, OUTLET, & ENTRANCE)
630001-08	STEEL PLATE BEAM GUARDRAIL
630201-06	PCC/HMA STABILIZATION AT SPBGR
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
635001-01	DELINEATORS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
666001-01	RIGHT OF WAY MARKERS
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 4.5m (15') AWAY
701006-03	OFF-RD OPERATIONS, 2L, 2W, 4.5 m (15') TO 600mm (24") FROM PAVEMENT EDGE
701011-02	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-10	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-03	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH
701901-01	TRAFFIC CONTROL DEVICES
704001-05	TEMPORARY CONCRETE BARRIER
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
780001-02	TYPICAL PAVEMENT MARKINGS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

FILE NAME = D264428-sht-gennote01.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - JPC/cj	REVISED -
	PLOT SCALE = 0.1 '/ IN.	CHECKED - ELH	REVISED -
	PLOT DATE = 3/24/2009 9:05:44 AM	DATE - 3/13/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND STANDARDS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1, 137-1BR	HENRY	67	2
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
URBANA, ILLINOIS

SUMMARY OF QUANTITIES

80% FEDERAL 20% STATE

CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION TYPE CODE X028-2A SN 037-0172	CONSTRUCTION TYPE CODE X028-2A SN 037-0173
XX006929	REPLACE SECTION CORNER	EACH	1	1	-
20200100	EARTH EXCAVATION	CU YD	2780	2000	780
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	785	265	520
20400800	FURNISHED EXCAVATION	CU YD	110	-	110
* 25000210	SEEDING, CLASS 2A	ACRE	1.1	0.6	0.5
* 25000310	SEEDING, CLASS 4	ACRE	1.4	0.9	0.5
:) 25000750	MOWING	ACRE	2.5	1.5	1.0
* 25100115	MULCH, METHOD 2	ACRE	10.0	6.0	4.0
* 25100630	EROSION CONTROL BLANKET	SQ YD	8010	5480	2530
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	1000	600	400
28000300	TEMPORARY DITCH CHECKS	EACH	23	14	9
28000400	PERIMETER EROSION BARRIER	FOOT	1915	1615	300
28000500	INLET AND PIPE PROTECTION	EACH	2	-	2
28100107	STONE RIPRAP, CLASS A4	SQ YD	730	200	530
28200200	FILTER FABRIC	SQ YD	730	200	530
31100300	SUB-BASE GRANULAR MATERIAL, TYPE A 4"	SQ YD	459	197	262
35101400	AGGREGATE BASE COURSE, TYPE B	TON	208	128	80
35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	802	802	-
40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	140	140	-
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	318	224	94
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	333	173	160
40600990	TEMPORARY RAMP	SQ YD	89	46	43
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	566	318	248
44000400	GUTTER REMOVAL	FOOT	1197	1197	-
44004250	PAVED SHOULDER REMOVAL	SQ YD	206	206	-
44201335	CLASS C PATCHES, TYPE IV, 8 INCH	SQ YD	234	-	234
44201396	CLASS C PATCHES, TYPE IV, 13 INCH	SQ YD	178	178	-
48101200	AGGREGATE SHOULDERS, TYPE B	TON	180	180	-
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	51	-	51
48203019	HOT-MIX ASPHALT SHOULDERS, 5½"	SQ YD	1088	-	1088
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	704	704	-
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1	-	1
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1	1	-
50800105	REINFORCEMENT BARS	POUND	49990	-	49990
51500100	NAME PLATES	EACH	2	1	1
54001000	BOX CULVERT END SECTIONS	EACH	2	2	-
54003000	CONCRETE BOX CULVERTS	CU YD	254.9	-	254.9
54021209	PRECAST CONCRETE BOX CULVERT 12' X 9' **(M273)**	FOOT	120	120	-
54213459	END SECTIONS 24"	EACH	2	-	2
54213465	END SECTIONS 30"	EACH	2	-	2
542D0229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	90	-	90
542D0235	PIPE CULVERTS, CLASS D, TYPE 1 30"	FOOT	80	-	80

* SPECIALTY ITEM

:) NON-PARTICIPATING

SUMMARY OF QUANTITIES

80% FEDERAL 20% STATE

CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION TYPE CODE X028-2A SN 037-0172	CONSTRUCTION TYPE CODE X028-2A SN 037-0173
60406610	GRATING (SPECIAL)	EACH	4	4	-
60600095	CLASS SI CONCRETE (OUTLET)	CU YD	45.6	45.6	-
60602600	CONCRETE GUTTER, TYPE A (MODIFIED)	FOOT	300	300	-
* 6300000	STEEL PLATE BEAM GUARD RAIL, TYPE A, **6 FOOT POST**	FOOT	575	-	575
* 63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	4	-	4
63200310	GUARDRAIL REMOVAL	FOOT	1003	613	390
63500105	DELINEATORS	EACH	10	2	8
66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	24	19	5
66700305	PERMANENT SURVEY MARKERS, TYPE II	EACH	4	2	2
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	3	3
67100100	MOBILIZATION	L SUM	1	0.5	0.5
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	-
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	0.5	0.5
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1	-
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	2	2	-
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	-
70106700	TEMPORARY RUMBLE STRIP	EACH	6	6	-
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	656	420	236
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	4840	3070	1770
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1833	1164	669
70400100	TEMPORARY CONCRETE BARRIER	FOOT	625	625	-
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	387.5	387.5	-
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	9680	6140	3540
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	10	-	10
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	-	4
78300100	PAVEMENT MARKING REMOVAL	SQ FT	274	274	-
X0323988	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	430	430	-
X0325911	HOT-MIX ASPHALT SURFACE COURSE, SPECIAL	TON	225	-	225
X7013015	TRAFFIC CONTROL FOR ROAD CLOSURE	L SUM	1	-	1
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	20	20	-
Z0005400	BREAKER-RUN CRUSHED STONE	TON	1310	360	950
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.5	0.5
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	-
Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2	-
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	-

* SPECIALTY ITEM

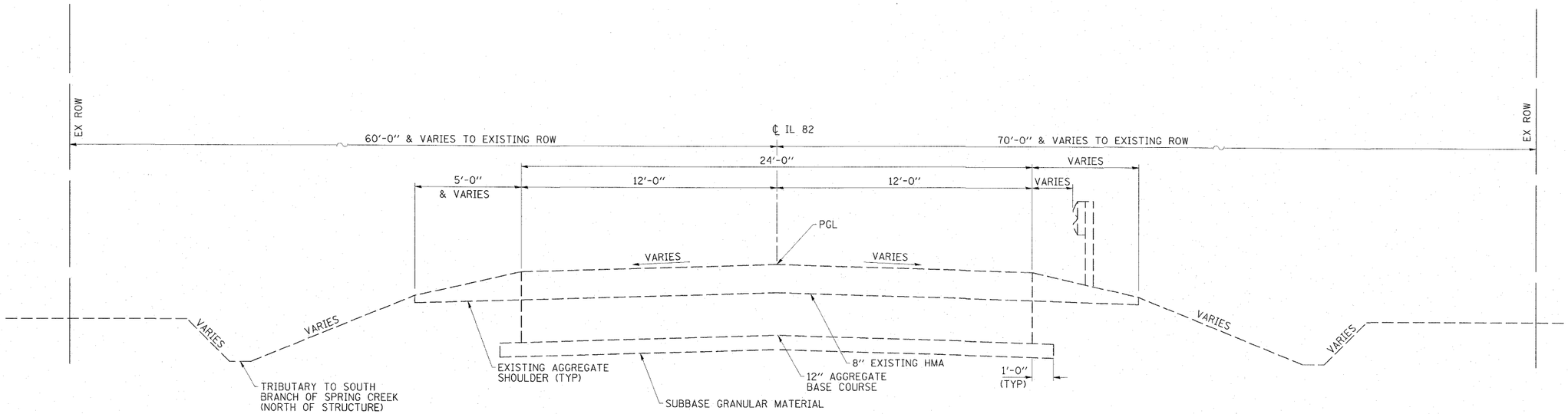
FILE NAME = D264428-sht-soq01.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - JPC	REVISED -
	PLOT SCALE = 0.0839 ' / IN.	CHECKED - ELH	REVISED -
	PLOT DATE = 3/24/2009 10:56:13 AM	DATE - 3/20/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

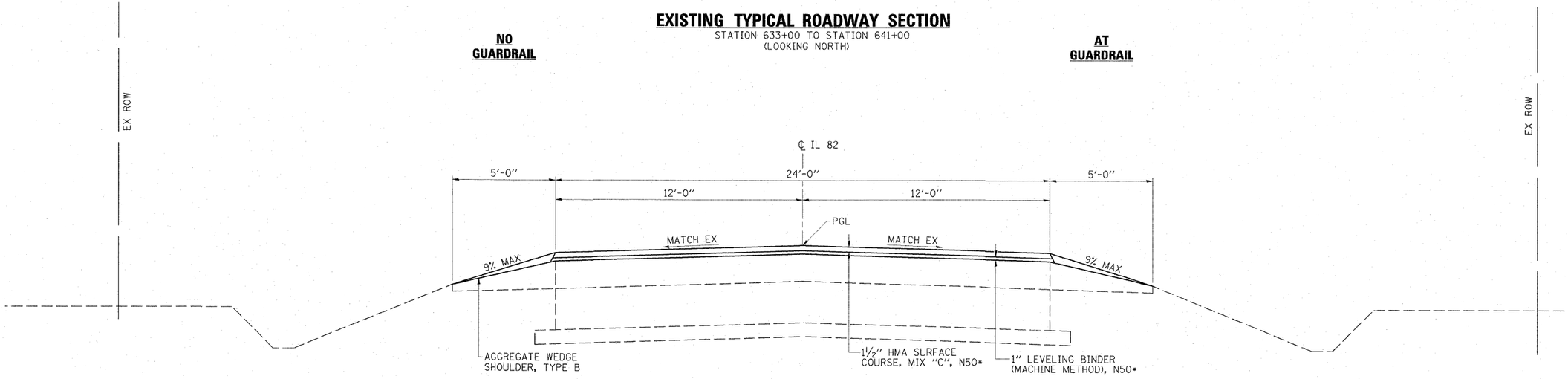
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1, 137-1BR	HENRY	67	3
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL ROADWAY SECTION

STATION 633+00 TO STATION 641+00
(LOOKING NORTH)

NO GUARDRAIL **AT GUARDRAIL**



PROPOSED TYPICAL ROADWAY SECTION

STATION 638+75 TO STATION 639+50
(LOOKING NORTH)

*RATE= 112 LB/SQ YD/IN

FILE NAME = D264428-sht-typical03.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - JPC	REVISED -
	PLOT SCALE = 0.0839 ' / IN.	CHECKED - ELH	REVISED -
	PLOT DATE = 3/23/2009 9:39:10 AM	DATE - 3/13/09	REVISED -

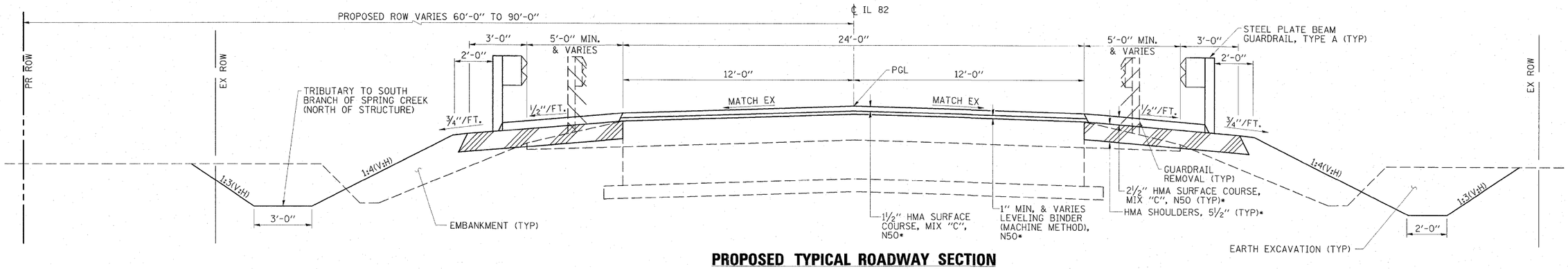
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

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

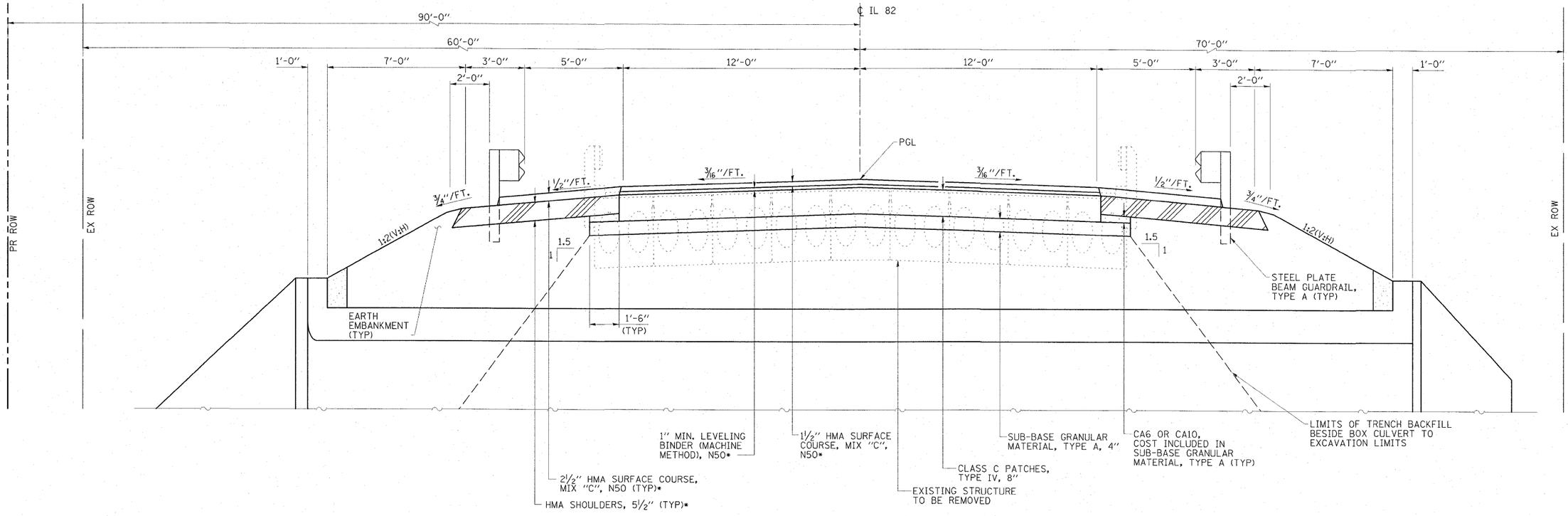
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	4
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
& LAND SURVEYORS



PROPOSED TYPICAL ROADWAY SECTION

STATION 634+50 TO STATION 638+75
(LOOKING NORTH)



PROPOSED SECTION THRU BOX CULVERT

(LOOKING NORTH)

*RATE= 112 LB/SQ YD/IN

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		DRAWN - JPC	REVISED -
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	PLOT DATE = 3/23/2009 9:39:22 AM	DATE - 3/13/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: 3/8"=1'-0" | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	5
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.

20200100 EARTH EXCAVATION

CU YD	LOCATION	REMARKS
40	RT Sta. 636+80 to 639+50	
110	RT Sta. 633+81 to 636+00	
470	LT Sta. 636+80 to 639+50	
160	LT Sta. 634+45 to 636+10	
780	TOTAL	

20201200 REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL

CU YD	LOCATION	REMARKS
520	SN 037-0173	
520	TOTAL	

20400800 FURNISHED EXCAVATION

CU YD	LOCATION	REMARKS
110	SN 037-0173	See Sht. 7 for table
110	TOTAL	

25000210 SEEDING, CLASS 2A

ACRE	LOCATION	REMARKS
0.1	RT Culvert to Sta. 639+50	
0.15	RT Sta. 633+81 to Culvert	
0.15	LT Culvert to Sta. 639+50	
0.1	LT Sta. 634+45 to Culvert	
0.5	TOTAL	

25000310 SEEDING, CLASS 4

ACRE	LOCATION	REMARKS
0.2	RT Culvert to Sta. 639+50	
0.1	RT Sta. 633+81 to Culvert	
0.1	LT Culvert to Sta. 639+50	
0.1	LT Sta. 634+45 to Culvert	
0.5	TOTAL	

25000750 MOWING

ACRE	LOCATION	REMARKS
0.3	RT Culvert to Sta. 639+50	
0.25	RT Sta. 633+81 to Culvert	
0.25	LT Culvert to Sta. 639+50	
0.2	LT Sta. 634+45 to Culvert	
1.0	TOTAL	

25100115 MULCH, METHOD 2

ACRE	LOCATION	REMARKS
1.2	RT Culvert to Sta. 639+50	4 applications assumed
1.0	RT Sta. 633+81 to Culvert	4 applications assumed
1.0	LT Culvert to Sta. 639+50	4 applications assumed
0.8	LT Sta. 634+45 to Culvert	4 applications assumed
4.0	TOTAL	

25100630 EROSION CONTROL BLANKET

SQ YD	LOCATION	REMARKS
515	LT Sta. 634+40 to Culvert	
705	RT Sta. 634+35 to Culvert	
810	LT Culvert to Sta. 639+50	
500	RT Culvert to Sta. 639+20	
2530	TOTAL	

28000250 TEMPORARY EROSION CONTROL SEEDING

POUND	LOCATION	REMARKS
120	RT Culvert to Sta. 639+50	4 applications assumed
100	RT Sta. 633+81 to Culvert	4 applications assumed
100	LT Culvert to Sta. 639+50	4 applications assumed
80	LT Sta. 634+45 to Culvert	4 applications assumed
400	TOTAL	

28000300 TEMPORARY DITCH CHECKS

EACH	LOCATION	REMARKS
2	LT & RT Sta. 635+00	
1	RT Sta. 635+90	
1	LT Sta. 636+00	
1	RT Sta. 636+80	
1	LT Sta. 637+00	
1	RT Sta. 637+40	
1	LT Sta. 637+50	
1	LT Sta. 638+00	
9	TOTAL	

28000400 PERIMETER EROSION BARRIER

FOOT	LOCATION	REMARKS
300	RT Sta. 636+50 to 639+50	
300	TOTAL	

28000500 INLET AND PIPE PROTECTION

EACH	LOCATION	REMARKS
1	RT Sta. 638+80	
1	LT Sta. 639+20	
2	TOTAL	

28100107 STONE RIPRAP, CLASS A4

SQ YD	LOCATION	REMARKS
530	LT & RT Sta. 636+00 to 636+90	
530	TOTAL	

28200200 FILTER FABRIC

SQ YD	LOCATION	REMARKS
530	LT & RT Sta. 636+00 to 636+90	
530	TOTAL	

31100300 SUB-BASE GRANULAR MATERIAL, TYPE A 4"

SQ YD	LOCATION	REMARKS
262	Sta. 636+02.13 to 636+88.13	
262	TOTAL	

35101400 AGGREGATE BASE COURSE, TYPE B

TON	LOCATION	REMARKS
27	RT FE Sta. 638+48	
53	LT FE Sta. 638+98	
80	TOTAL	

40600625 LEVELING BINDER (MACHINE METHOD), N50

TON	LOCATION	REMARKS
94	Sta. 635+00 to 639+00	
94	TOTAL	

40600982 HOT-MIX ASPHALT SURFACE REMOVAL – BUTT JOINT

SQ YD	LOCATION	REMARKS
80	Sta. 634+50	
80	Sta. 639+50	
160	TOTAL	

40600990 TEMPORARY RAMP

SQ YD	LOCATION	REMARKS
21.5	Sta. 634+50	
21.5	Sta. 639+50	
43	TOTAL	

40603310 HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50

TON	LOCATION	REMARKS
66	RT Sta. 633+81 to 638+47	
66	LT Sta. 634+45 to 639+00	
116	Sta. 634+50 to 639+50	
248	TOTAL	

44201335 CLASS C PATCHES, TYPE IV, 8"

SQ YD	LOCATION	REMARKS
234	Sta. 636+02.13 to 636+88.13	
234	TOTAL	

48102100 AGGREGATE WEDGE SHOULDERS, TYPE B

TON	LOCATION	REMARKS
0.8	Sta. 639+27.7 to 639+50	
2.2	Sta. 638+78.7 to 639+50	
48	SN 037-0173 Detour	Good Neighbor Policy
51	TOTAL	

48203019 HOT-MIX ASPHALT SHOULDERS, 5½"

SQ YD	LOCATION	REMARKS
543	LT Sta. 634+45 to 639+00	
545	RT Sta. 633+81 to 638+46	
1088	TOTAL	

50100300 REMOVAL OF EXISTING STRUCTURES NO. 1

EACH	LOCATION	REMARKS
1	SN 037-0106	
1	TOTAL	

50800105 REINFORCEMENT BARS

POUND	LOCATION	REMARKS
49,990	SN 037-0173	
49,990	TOTAL	

51500100 NAME PLATES

EACH	LOCATION	REMARKS
1	SN 037-0173	
1	TOTAL	

54003000 CONCRETE BOX CULVERTS

CU YD	LOCATION	REMARKS
254.9	SN 037-0173	
254.9	TOTAL	

54213459 END SECTIONS 24"

EACH	LOCATION	REMARKS
2	Sta. 638+35	
2	TOTAL	

54213465 END SECTIONS 30"

EACH	LOCATION	REMARKS
2	Sta. 639+88	
2	TOTAL	

542D0229 PIPE CULVERTS, CLASS D, TYPE I 24"

FOOT	LOCATION	
90	RT Sta. 638+35	
90	TOTAL	

542D0235 PIPE CULVERTS, CLASS D, TYPE I 30"

FOOT	LOCATION	REMARKS
80	LT Sta. 638+88	
80	TOTAL	

63000000 STEEL PLATE BEAM GUARD RAIL, TYPE A

FOOT	LOCATION	REMARKS
287.5	RT Sta. 634+77.5 to 637+65	
287.5	LT Sta. 635+30 to 638+17.5	
575	TOTAL	

63100169 TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED

EACH	LOCATION	REMARKS
1	RT Sta. 634+27	
1	LT Sta. 634+80	
1	RT Sta. 638+14.5	
1	LT Sta. 638+65	
4	TOTAL	

63200310 GUARDRAIL REMOVAL

FOOT	LOCATION	REMARKS
100	LT Sta. 634+82.5 to Bridge	
100	RT Sta. 635+22.5 to Bridge	
90	LT Bridge to Sta. 637+08	
100	RT Bridge to Sta. 637+60	
390	TOTAL	

63500105 DELINEATORS

EACH	LOCATION	REMARKS
1	RT Sta. 634+27	
1	LT Sta. 634+77.5	
1	RT Sta. 638+14.5	
2	RT Sta. 638+48	
1	LT Sta. 638+65	
2	LT Sta. 638+98	
8	TOTAL	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	6

CONTRACT NO. 64428

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

66600105 FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS

EACH	LOCATION	REMARKS
1	LT Sta. 635+50	
1	LT Sta. 636+00	
1	LT Sta. 637+25	
1	LT Sta. 637+75	
1	LT Sta. 640+00	
5	TOTAL	

66700305 PERMANENT SURVEY MARKERS, TYPE II

EACH	LOCATION	REMARKS
2	SN 037-0173	
2	TOTAL	

67000400 ENGINEER'S FIELD OFFICE, TYPE A

CAL MO	LOCATION	REMARKS
3	SN 037-0173	
3	TOTAL	

67100100 MOBILIZATION

L SUM	LOCATION	REMARKS
0.5	SN 037-0173	
0.5	TOTAL	

70100450 TRAFFIC CONTROL AND PROTECTION, STANDARD 701201

L SUM	LOCATION	REMARKS
0.5	SN 037-0173	
0.5	TOTAL	

70300100 SHORT-TERM PAVEMENT MARKING

FOOT	LOCATION	REMARKS
156	Sta. 634+50 to 639+50	3 applications of yellow centerline striping
80	Sta. 634+50 to 639+50	2 applications of white edge line striping
236	TOTAL	

70300220 TEMPORARY PAVEMENT MARKING - LINE 4"

FOOT	LOCATION	REMARKS
570	LT Sta. 633+80 to 639+50	White edgeline striping
570	RT Sta. 633+80 to 639+50	White edgeline striping
130	Sta. 634+50 to 639+50	Yellow skip-dash centerline striping SB
500	Sta. 634+50 to 639+50	Yellow no pass centerline striping NB
1770	TOTAL	

70301000 WORK ZONE PAVEMENT MARKING REMOVAL

SQ FT	LOCATION	REMARKS
263	Sta. 634+50 to 639+50	Centerline striping
203	LT Sta. 633+80 to 639+50	Edgeline striping
203	RT Sta. 633+80 to 639+50	Edgeline striping
669	TOTAL	

78001110 PAINT PAVEMENT MARKING - LINE 4"

FOOT	LOCATION	REMARKS
1140	LT Sta. 633+80 to 639+50	White edgeline striping, 2 applications
1140	RT Sta. 633+80 to 639+50	White edgeline striping, 2 applications
260	Sta. 634+50 to 639+50	Yellow skip-dash centerline striping SB, 2 applications
1000	Sta. 634+50 to 639+50	Yellow no pass centerline striping NB, 2 applications
3540	TOTAL	

78200410 GUARDRAIL MARKERS, TYPE A

EACH	LOCATION	REMARKS
5	West side	
5	East side	
10	TOTAL	

78201000 TERMINAL MARKER - DIRECT APPLIED

EACH	LOCATION	REMARKS
1	RT Sta. 634+27	
1	LT Sta. 634+77.5	
1	RT Sta. 638+14.5	
1	LT Sta. 638+65	
4	TOTAL	

Z0005400 BREAKER-RUN CRUSHED STONE

TON	LOCATION	REMARKS
950	SN 037-0173	57.5'x43'x54"
950	TOTAL	

Z0013798 CONSTRUCTION LAYOUT

L SUM	LOCATION	REMARKS
0.5	SN 037-0173	
0.5	TOTAL	

X0325911 HOT-MIX ASPHALT SURFACE COURSE, SPECIAL

TON	LOCATION	REMARKS
225	SN 037-0173 Detour	Good Neighbor Policy
225	TOTAL	

X7013015 TRAFFIC CONTROL FOR ROAD CLOSURE

L SUM	LOCATION	REMARKS
1	SN 037-0173	
1	TOTAL	

LOCATION	20200100 EARTH EXCAVATION (CU YD)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (CU YD)	EMBANKMENT (CU YD)	EARTHWORK BALANCE WASTE (+) SHORTAGE (-) (CU YD)
RT STA. 636+80 TO 639+50	40	30	245	-215
RT STA. 633+81 TO 636+00	110	82.5	40	+42.5
LT STA. 636+80 TO 639+50	470	352.5	305	+47.5
LT STA. 634+45 TO 636+10	160	120	180	-60
EXCAVATION FOR PR CULVERT	750*	562	480	+82
TOTALS	1530	1147	1250	-103

EXCAVATION USED AS EMBANKMENT = EARTH EXCAVATION * 0.75
* COST INCLUDED IN CONCRETE BOX CULVERTS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	7
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HORIZONTAL AND VERTICAL CONTROL

CHAIN IL82 DESCRIPTION

Chain IL82 contains:
310 CUR 200 210 CUR 220 230 CUR 240 250 CUR 260 CUR 270 280 CUR 290 10

Beginning chain IL82 description
==========

Point 310 N 1,686,670.0404 E 2,296,953.0212 Sta 544+36.8000

Course from 310 to PC 200 0° 11' 52.9395" Dist 3,573.5528

Curve Data

Curve 200
P.I. Station 585+53.9859 N 1,690,787.2018 E 2,296,967.2519
Delta = 0° 21' 44.7179" (LT)
Degree = 0° 02' 00.0002"
Tangent = 543.6332
Length = 1,087.2628
Radius = 171,886.9999
External = 0.8597
Long Chord = 1,087.2609
Mid. Ord. = 0.8597
P.C. Station 580+10.3528 N 1,690,243.5718 E 2,296,965.3729
P.T. Station 590+97.6155 N 1,691,330.8327 E 2,296,965.6922
C.C. N 1,690,837.6858 E 2,125,079.3997
Back = 0° 11' 52.9395"
Ahead = 359° 50' 08.2217"
Chord Bear = 0° 01' 00.5806"

Course from PT 200 to 210 359° 50' 08.2217" Dist 2,097.1956

Point 210 N 1,693,428.0197 E 2,296,959.6753 Sta 611+94.8111

Course from 210 to PC 220 359° 43' 49.7963" Dist 4,047.8477

Curve Data

Curve 220
P.I. Station 656+39.6999 N 1,697,872.8594 E 2,296,938.7680
Delta = 0° 37' 51.6843" (RT)
Degree = 0° 04' 46.0796"
Tangent = 397.0411
Length = 794.0743
Radius = 72,100.4990
External = 1.0932
Long Chord = 794.0703
Mid. Ord. = 1.0932
P.C. Station 652+42.6588 N 1,697,475.8226 E 2,296,940.6356
P.T. Station 660+36.7331 N 1,698,269.8926 E 2,296,941.2733
C.C. N 1,697,814.9591 E 2,369,040.3370
Back = 359° 43' 49.7963"
Ahead = 0° 21' 41.4806"
Chord Bear = 0° 02' 45.6385"

Course from PT 220 to 230 0° 21' 41.4806" Dist 4,946.9845

Point 230 N 1,703,216.7786 E 2,296,972.4873 Sta 709+83.7176

Course from 230 to PC 240 0° 29' 46.3397" Dist 5,047.5240

Curve Data

Curve 240
P.I. Station 765+31.2415 N 1,708,764.0946 E 2,297,020.5306
Delta = 0° 17' 37.1732" (LT)
Degree = 0° 01' 45.7175"
Tangent = 500.0000
Length = 999.9978
Radius = 195,109.3373
External = 0.6407
Long Chord = 999.9967
Mid. Ord. = 0.6407
P.C. Station 760+31.2415 N 1,708,264.1133 E 2,297,016.2004
P.T. Station 770+31.2393 N 1,709,264.0914 E 2,297,022.2981
C.C. N 1,709,953.8209 E 2,101,914.1800
Back = 0° 29' 46.3397"
Ahead = 0° 12' 09.1666"
Chord Bear = 0° 20' 57.7531"

Course from PT 240 to 250 0° 12' 09.1666" Dist 9,713.4707

Point 250 N 1,718,977.5015 E 2,297,056.6362 Sta 867+44.7101

Course from 250 to PC 260 0° 20' 15.9982" Dist 5,457.6237

Curve Data

Curve 260
P.I. Station 924+00.3603 N 1,724,633.0535 E 2,297,089.9779
Delta = 11° 59' 46.4759" (RT)
Degree = 3° 02' 24.2203"
Tangent = 198.0266
Length = 394.6053
Radius = 1,884.6917
External = 10.3749
Long Chord = 393.8849
Mid. Ord. = 10.3181
P.C. Station 922+02.3337 N 1,724,435.0303 E 2,297,088.8104
P.T. Station 925+96.9391 N 1,724,826.5094 E 2,297,132.2784
C.C. N 1,724,423.9195 E 2,298,973.4693
Back = 0° 20' 15.9982"
Ahead = 12° 20' 02.4741"
Chord Bear = 6° 20' 09.2362"

Course from PT 260 to PC 270 12° 20' 02.4741" Dist 3,040.8219

Curve Data

Curve 270
P.I. Station 958+89.5426 N 1,728,043.1161 E 2,297,835.6131
Delta = 0° 37' 37.5029" (LT)
Degree = 0° 07' 28.3102"
Tangent = 251.7816
Length = 503.5582
Radius = 46,009.3944
External = 0.6889
Long Chord = 503.5557
Mid. Ord. = 0.6889
P.C. Station 956+37.7610 N 1,727,797.1459 E 2,297,781.8299
P.T. Station 961+41.3192 N 1,728,289.6602 E 2,297,886.7010
C.C. N 1,737,625.2352 E 2,252,834.3824
Back = 12° 20' 02.4741"
Ahead = 11° 42' 24.9713"
Chord Bear = 12° 01' 13.7227"

Course from PT 270 to 280 11° 42' 24.9713" Dist 1,877.4576

Point 280 N 1,730,128.0634 E 2,298,267.6482 Sta 980+18.7768

Course from 280 to PC 290 11° 44' 24.7293" Dist 3,762.5977

Curve Data

Curve 290
P.I. Station 1020+46.4385 N 1,734,071.4676 E 2,299,087.1740
Delta = 15° 39' 04.6343" (LT)
Degree = 2° 58' 15.0800"
Tangent = 265.0641
Length = 526.8276
Radius = 1,928.5953
External = 18.1299
Long Chord = 525.1911
Mid. Ord. = 17.9610
P.C. Station 1017+81.3744 N 1,733,811.9485 E 2,299,033.2402
P.T. Station 1023+08.2020 N 1,734,335.9144 E 2,299,069.0944
C.C. N 1,734,204.3682 E 2,297,144.9906
Back = 11° 44' 24.7293"
Ahead = 356° 05' 20.0949"
Chord Bear = 3° 54' 52.4121"

Course from PT 290 to 10 356° 05' 20.0949" Dist 1,628.2647

Point 10 N 1,735,960.3870 E 2,298,958.0332 Sta 1039+36.4667

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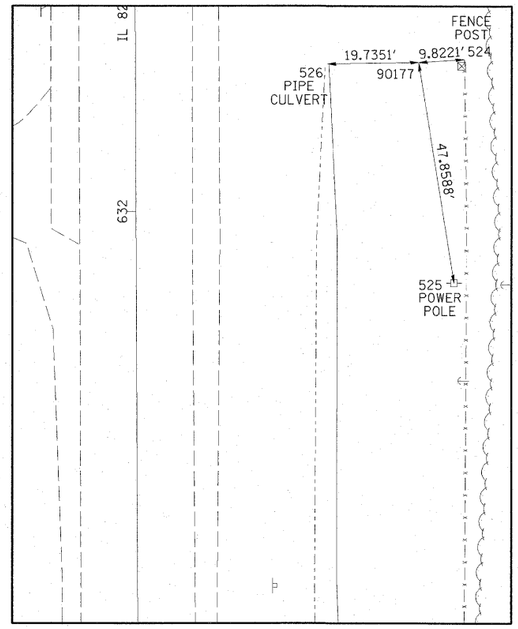
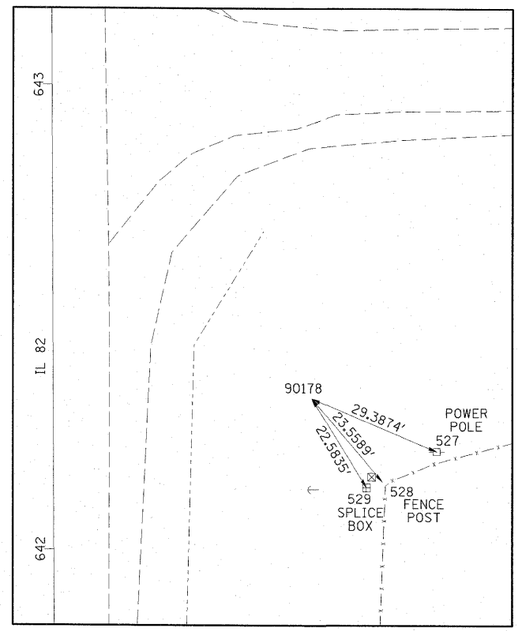
Ending chain IL82 description



HORIZONTAL CONTROL POINT NO. 90177



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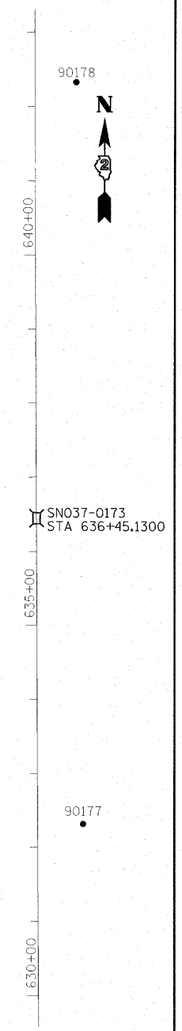

HORIZONTAL CONTROL POINTS

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
90177	1695465.1700	2297011.3910	699.4420	IL82	632+31.6956	61.2972 RT	PIN
90178	1696465.8300	2297001.2240	716.7390	IL82	642+32.3924	55.8371 RT	PIN

BENCH MARKS

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
477	1695464.4160	2297020.6370	701.2520	IL82	632+30.8981	70.5395 RT	RIGHT OF WAY MARKER
478	1696448.8960	2297014.2250	719.9430	IL82	642+15.3974	68.7583 RT	RIGHT OF WAY MARKER

REFERENCE TIES

POINT	CHAIN	STATION	OFFSET	DESCRIPTION
524	IL82	632+32.2775	71.1020	FENCE POST
525	IL82	631+84.4181	68.7339	PP
526	IL82	632+31.4394	41.5638	PIPE CULVERT
527	IL82	642+20.7423	82.8166	PP
528	IL82	642+14.3688	71.0085	FENCE POST
529	IL82	642+13.1188	67.6075	TELEPHONE SPLICE BOX

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORIZONTAL & VERTICAL CONTROL

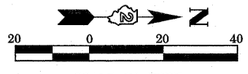
SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	8
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
CARMEL, ILLINOIS

PLAN	DATE
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
R.T. OF WAY CHECKED	
CADD FILE NAME	
NOTE BOOK	
NO.	

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



SCALE IN FEET

LEGEND

- PAVEMENT REMOVAL
- CONSTRUCTION LIMITS
- HMA SHOULDERS
- HMA SURFACE REMOVAL - BUTT JOINT

FILE NAME = D264428-sht-plnprf02.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - JPC	REVISED -
	PLOT SCALE = 20.1465 ' / IN.	CHECKED - ELH	REVISED -
SCALES: (HORIZ) 1"=20' (VERT) 1"=5'	PLOT DATE = 3/23/2009 2:06:55 PM	DATE - 03/13/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 638 (IL 82) PLAN AND PROFILE
STA 628+00 TO STA 634+00

SCALE: 1"=20'-0" | SHEET NO. 1 OF 2 SHEETS | STA. 628+00 TO STA. 634+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	9
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
SPRINGFIELD, ILLINOIS

PLAN	SURVEYED	DATE
	PLOTTED	
	CROSS CHECKED	BY
	R.W. NOTED	
NOTE BOOK	CADD FILE NAME	
NO.		

MATCH LINE STA. 634+00
SEE SHT. 9 FOR CONT.

SCALE IN FEET
20 0 20 40

SECTION 5, T15N, R3E, 4TH PM

GALE R. GRIFFITH

STA. 636+00.00
90.00' LT.

PR ROW

REMOVE EX TIMBER RETAINING WALL TO ONE FOOT BELOW PR GRADE; COST INCLUDED IN EARTH EXCAVATION

SOUTH BRANCH OF SPRING CREEK

STA. 637+25.00
90.00' LT.

PR ROW

STA. 637+90.44
EX FE (EARTH)

STA. 637+75.00
70.00' LT.

PARTIALLY REMOVE EXISTING FENCE AS NECESSARY FOR NEW ENTRANCE, COST INCLUDED IN EARTH EXCAVATION

CROPLINE (TYP.)

TRIBUTARY TO SOUTH BRANCH OF SPRING CREEK

STA 638+98
RELOCATED FE (AGG)

STA. 640+00.00
60.00' LT.

EX ROW

STA. 635+50.00
60.00' LT.

EX ROW

STA 634+50
RESURFACING BEGINS
BUTT JOINT

+77.5

5'-0"

EXISTING GUARDRAIL TO BE REMOVED

EXISTING RIPRAP TO BE REMOVED, COST INCLUDED IN EARTH EXCAVATION

EX 15" CMP TO BE REMOVED COST INCLUDED IN EARTH EXCAVATION

CLASS C PATCHES, TYPE IV, 8"

+27.5

+80

+65

30"

5'-0"

24'-0"

2'-0" (TYP)

+20

1:2

634

635+00

636

637

638

639

24'-0"±

20° SKEW

℄ FAP 638 (IL 82)

EXISTING GUARDRAIL TO BE REMOVED

EX 24" CMP TO BE REMOVED, COST INCLUDED IN EARTH EXCAVATION

WETLANDS

WEST SIDE GUARDRAIL SIMILAR

TBT TY 1 (SPECIAL) FLARED

37.5' SPBGR TY A FLARED 1:14

87.5' SPBGR TYA FLARED 1:26

636+02.13

62.5' SPBGR TYA TANGENT

636+86.13

87.5' SPBGR TYA FLARED 1:26

TBT TY1 (SPECIAL) FLARED

12.5' SPBGR TY A FLARED 1:14

+27

+02

+64.5

+14.5

STA 638+48
RELOCATED FE (AGG)

AGGREGATE BASE COURSE, TYPE B, 6" THICKNESS

STA 639+50
IMPROVEMENTS END AND RESURFACING ENDS
BUTT JOINT

EX ROW

BENCHMARK
CHISELED SQUARE ON NW CORNER OF BRIDGE OVER SOUTH BRANCH OF SPRING CREEK, SN 037-0106
STA 636+69.60, 14.12' LT
EL 701.96

DAVID J. DOBBELS AND DEBORAH A. DOBBELS

STA 636+45.13
CENTER PR SN 037-0173
TRIPLE 12' SPAN X 9' RISE BOX CULVERT
59'-7" (+) LENGTH
CENTER EX SN 037-0106
SINGLE SPAN BRIDGE
TO BE REMOVED

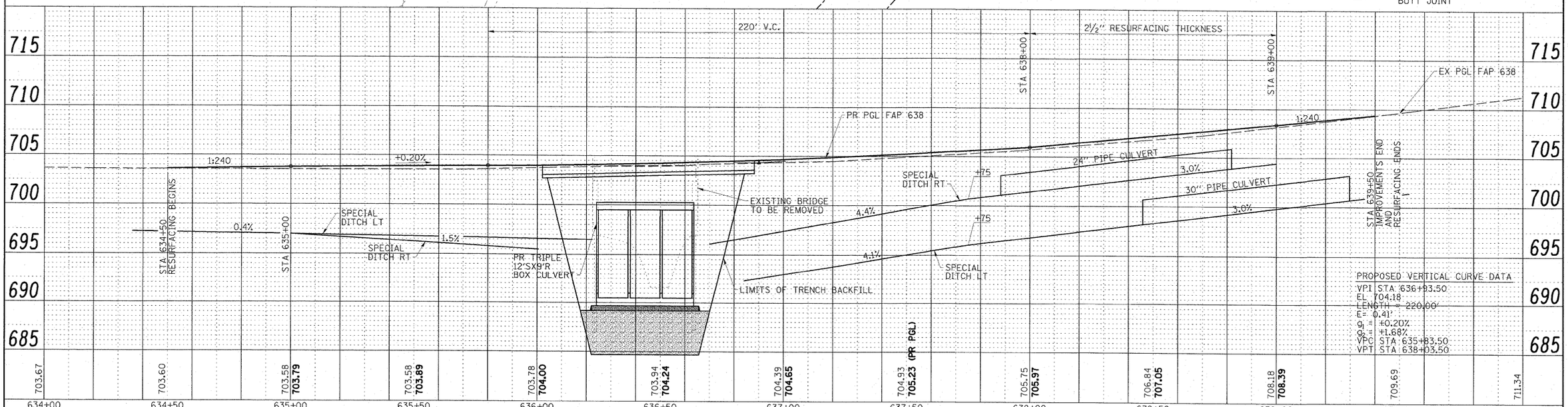
STA 637+90
EX FE (AGG)

WETLANDS

SECTION 4, T15N, R3E, 4TH PM

LEGEND
- PAVEMENT REMOVAL
- CONSTRUCTION LIMITS
- HMA SHOULDERS
- HMA SURFACE REMOVAL - BUTT JOINT

PROFILE	SURVEYED	DATE
	PLOTTED	
	CROSS CHECKED	BY
	R.W. NOTED	
NOTE BOOK	STRUCTURE NO'S/ELEVS CHKD	
NO.		



PROPOSED VERTICAL CURVE DATA
VPI STA 636+93.50
EL 704.18
LENGTH = 220.00'
E = 0.41'
g_1 = +0.20%
g_2 = +1.68%
VPC STA 635+83.50
VPT STA 638+03.50

FILE NAME = D264428-sht-plnprf02.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - JPC	REVISED -
	PLOT SCALE = 20.1465 ' / IN.	CHECKED - ELH	REVISED -
SCALES: (HORIZ) 1"=20' (VERT) 1"=5'	PLOT DATE = 3/23/2009 2:07:23 PM	DATE - 03/13/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 638 (IL 82) PLAN AND PROFILE
STA 634+00 TO STA 640+00

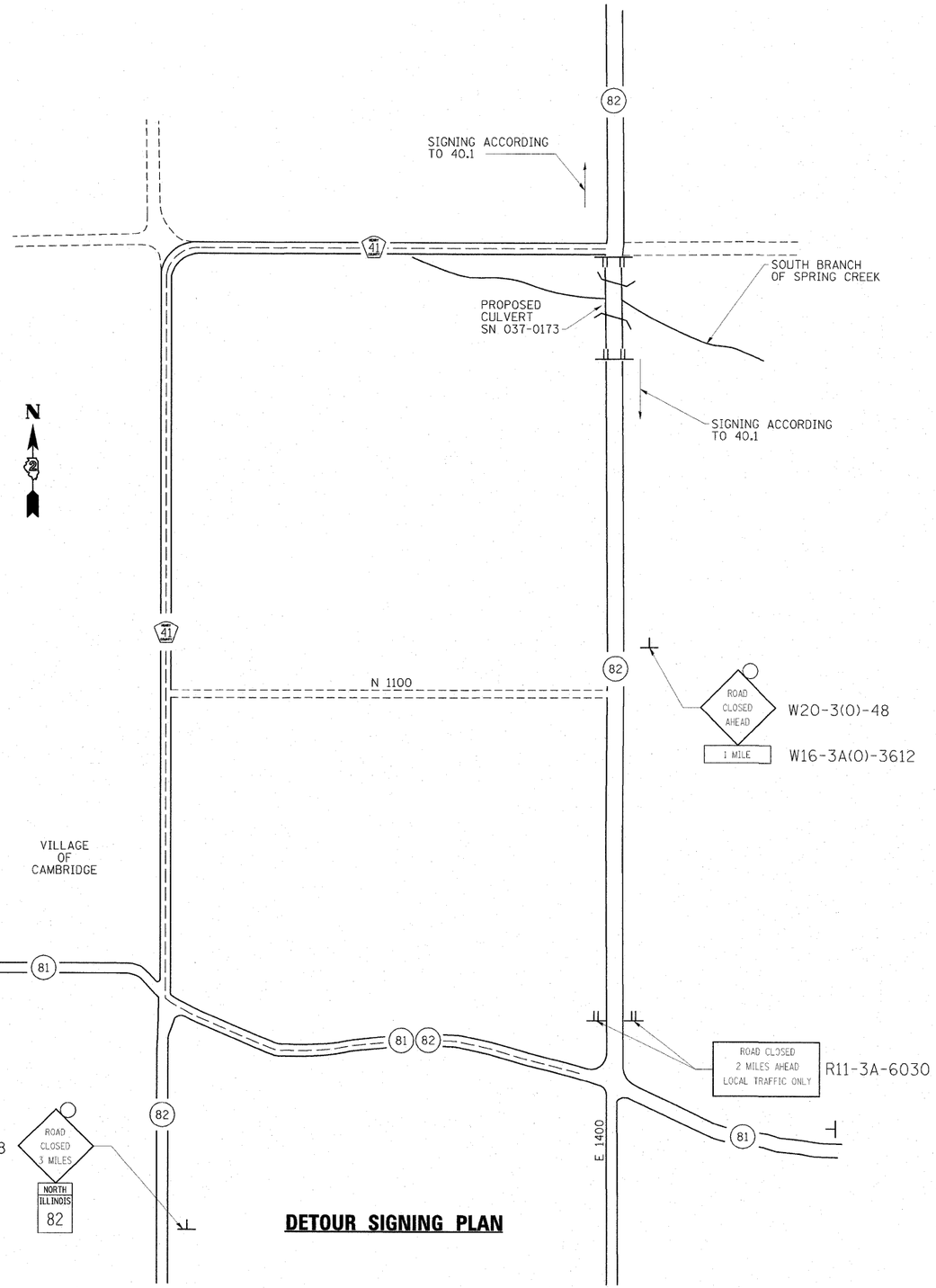
SCALE: 1"=20'-0" | SHEET NO. 2 OF 2 SHEETS | STA. 634+00 | TO STA. 640+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	10
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL, STRUCTURAL AND HIGHWAY ENGINEERS
SPRINGFIELD, ILLINOIS

LEGEND

- SIGN
- DETOUR ROUTE
- TYPE III BARRICADES WITH FLASHERS



DETOUR NOTES

1. THE CONTRACTOR SHALL FURNISH THE POSTS AND ERECT THE SIGNS AT THE LOCATIONS DIRECTED BY THE ENGINEER. ALL SIGNS SHALL BE POST MOUNTED.
2. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LUMP SUM FOR TRAFFIC CONTROL FOR ROAD CLOSURE.

DETOUR SIGNING PLAN

FILE NAME = 0264428-sht-sign01.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - JPC	REVISED -
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	PLOT DATE = 3/23/2009 12:59:59 PM	DATE - 3/13/09	REVISED -

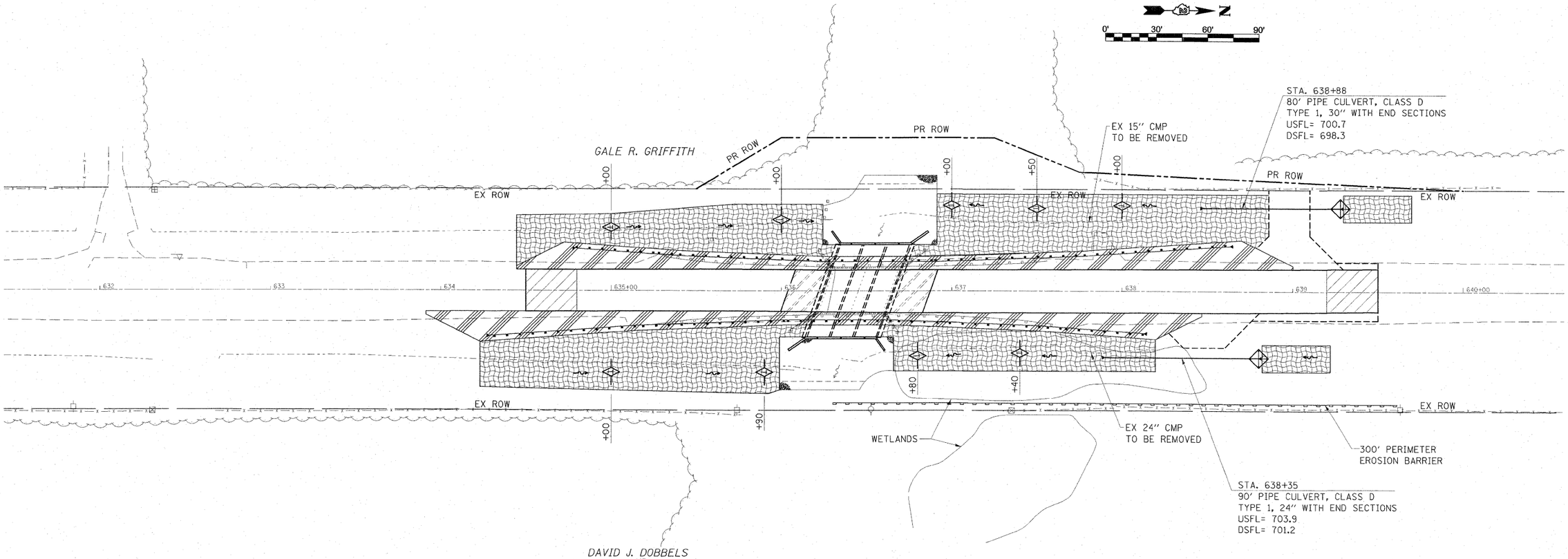
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETOUR DETAILS

SCALE: 1/16"=1'-0" | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	11
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
SPRINGFIELD, ILLINOIS



LEGEND

- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECK
- EROSION CONTROL BLANKET
- INLET AND PIPE PROTECTION

FILE NAME = D264428-sht-eros02.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - JPC/CJ	REVISED -
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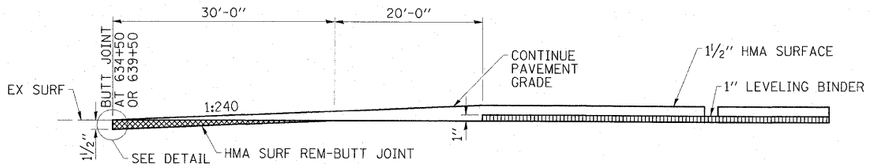
	PLOT DATE = 3/23/2009 1:20:14 PM	DATE - 03/13/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

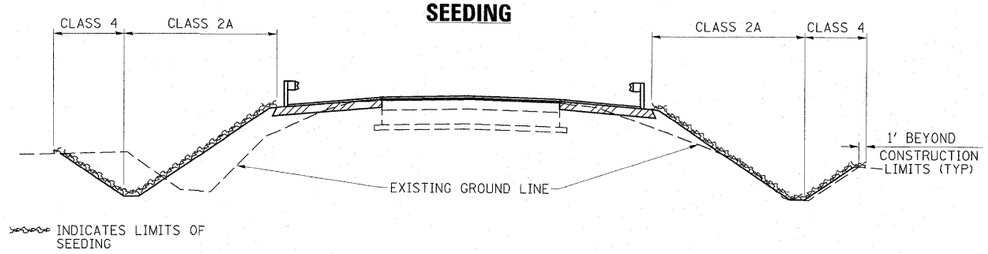
EROSION CONTROL AND DRAINAGE PLAN

SCALE: 1"=30'-0" | SHEET NO. 1 OF 1 SHEETS | STA. 632+00 TO STA. 640+00

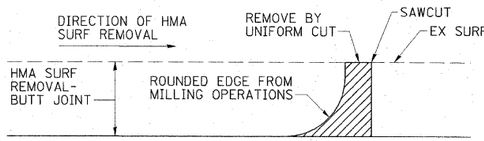
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	12
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



TYPICAL BUTT JOINT SECTION
SN 037-0173

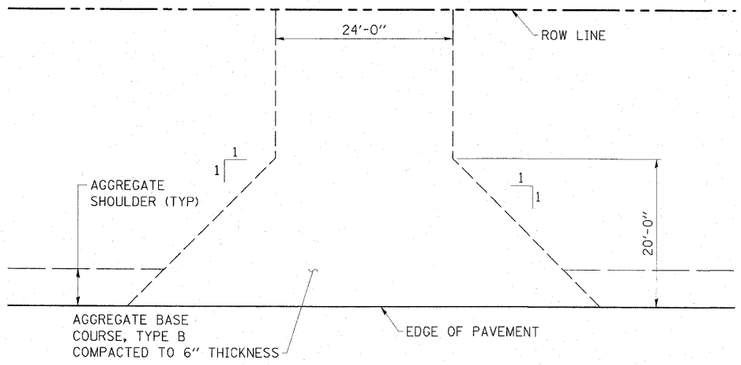


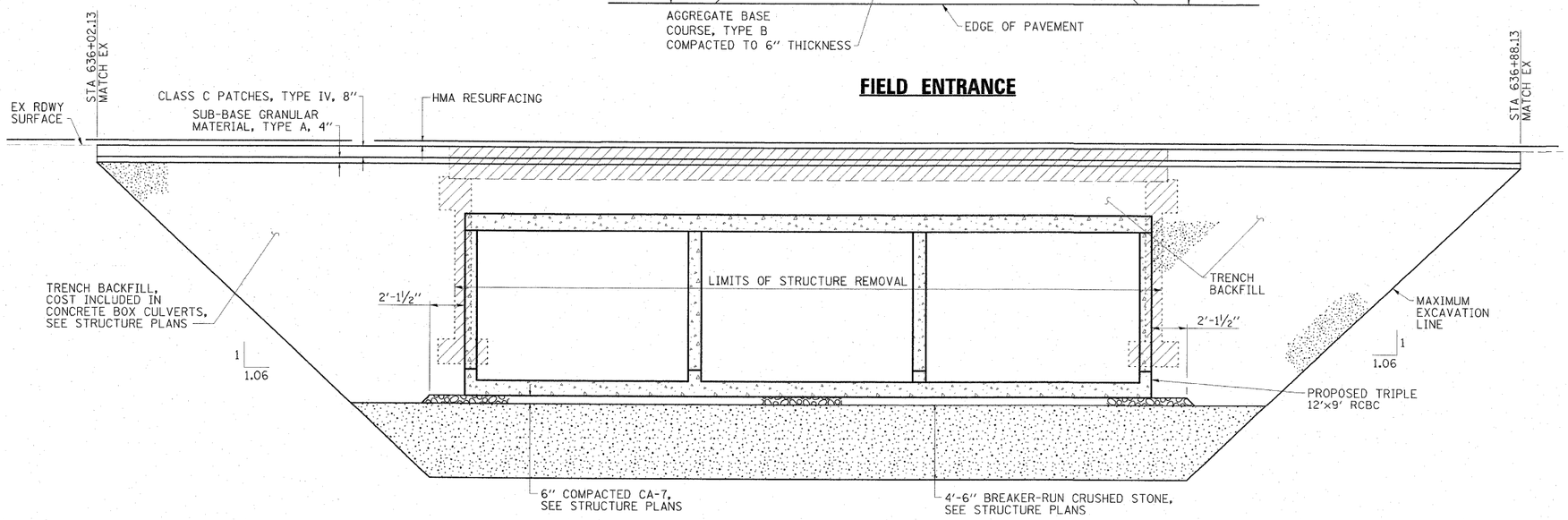
SEEDING



DETAIL AT BUTT JOINT

NOTE:
WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAWCUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE COST OF ALL WORK SHOWN IN THE DETAIL IS INCLUDED IN HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL.





FIELD ENTRANCE

SECTION THRU BOX CULVERT (PARALLEL TO ROADWAY)

FILE NAME = D264428-sht-details09.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - JPC	REVISED -
	PLOT SCALE = 0.0839 ' / IN.	CHECKED - ELH	REVISED -
	PLOT DATE = 3/23/2009 1:00:32 PM	DATE - 3/13/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS

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

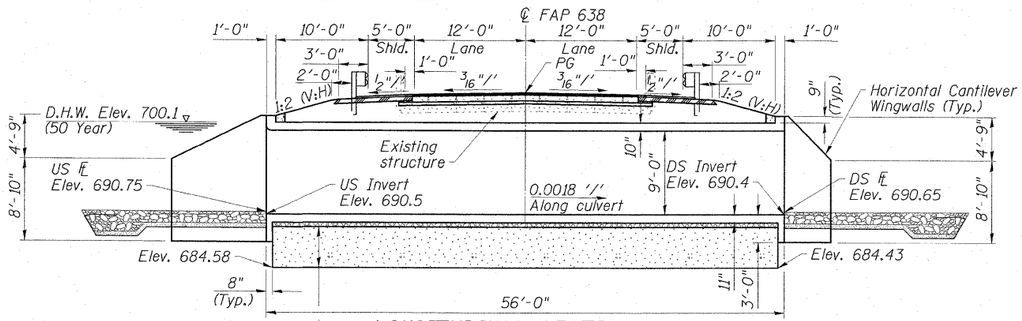
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	13
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BENCHMARK: Chiseled square on NW corner of bridge over South Branch of Spring Creek, SN 037-0106
Sta. 636+69.60, 14.12' Lt.
Elev. 701.96

EXISTING STRUCTURE:
SN 037-0106 was originally built in 1959 by Cambridge Township. The superstructure was replaced, and the substructure widened in 1961 as Section 137-1B. The structure consists of single span PPC deck beams on closed abutments founded on timber piles. One deck beam was replaced in November 1998 and two more were replaced in October of 2006. The bridge is 42'-9" back-to-back abutments and is 26'-0" wide face-to-face of curbs. The structure is skewed 20° left forward. Existing structure is to be removed and replaced during road closure while traffic utilizes a temporary detour route.

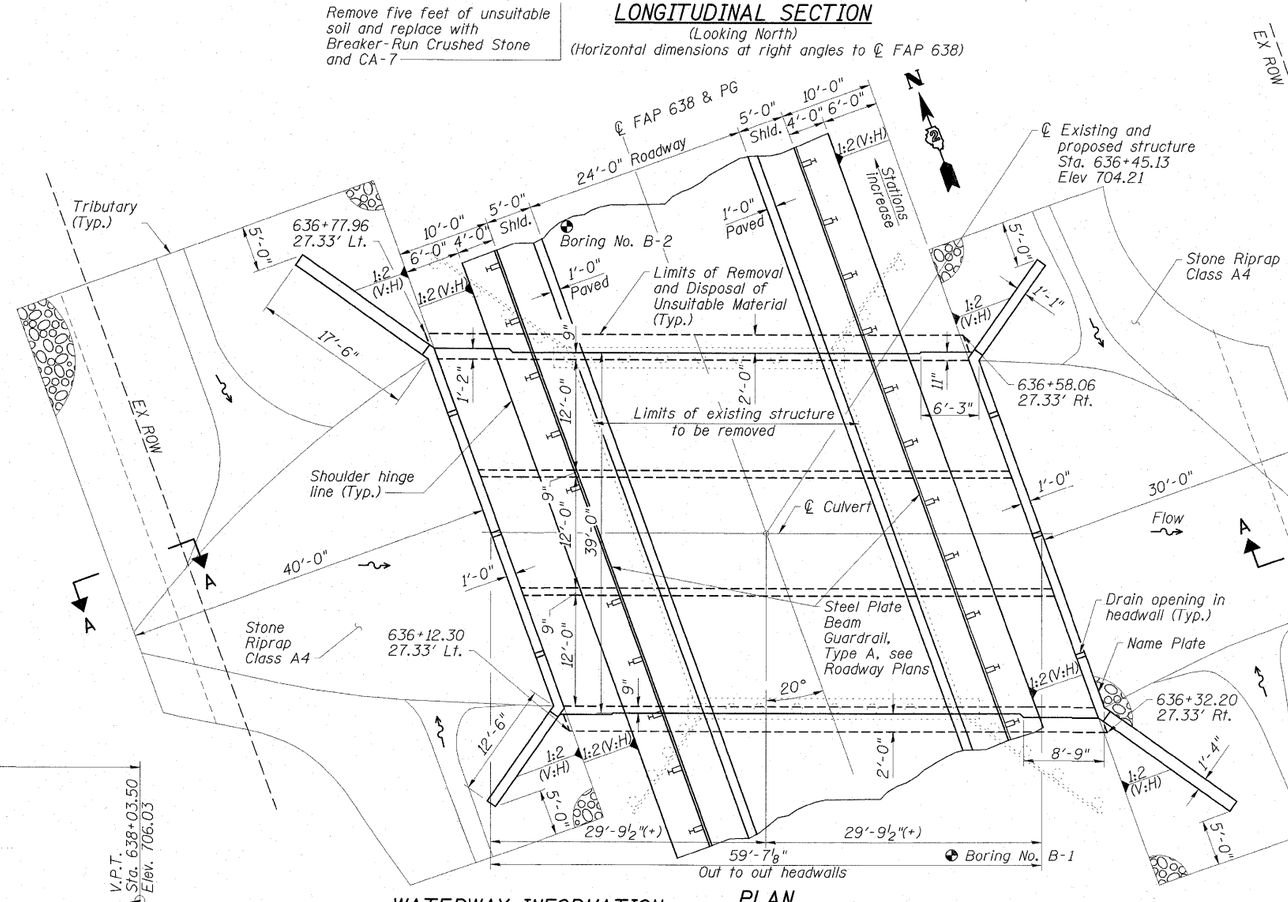
No salvage.



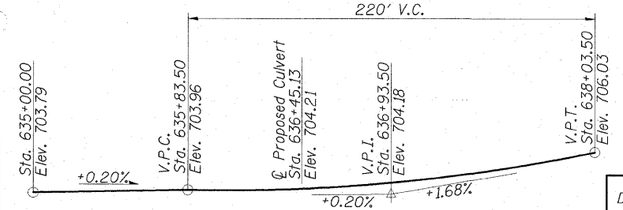
Remove five feet of unsuitable soil and replace with Breaker-Run Crushed Stone and CA-7

LONGITUDINAL SECTION

(Looking North)
(Horizontal dimensions at right angles to ℄ FAP 638)



PLAN



PROFILE GRADE

(Along ℄ Roadway)

WATERWAY INFORMATION

Drainage Area = 3.62 Sq. Mi.

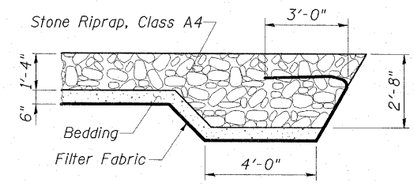
Exist. Low Grade Elev. = 703.58 Ft. @ Sta. 635+00
Prop. Low Grade Elev. = 703.60 Ft. @ Sta. 634+50

Flood	Frequency Year	Discharge (cfs)	Waterway Opening (Sq. Ft.)		Nat. H.W.E.	Head (Ft.)		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
	10	949	163	324	699.5	0.9	0.4	700.4	699.9
Design	50	1497	184	324	700.1	1.5	0.8	701.6	700.9
Base	100	1733	195	324	700.4	2.6	0.9	703.0	701.3
Overtopping	280	2006	202	-	700.6	2.9	-	703.5	-
Max Calc	500	2322	-	324	700.8	-	1.5	-	702.3

SCOUR INFORMATION

Design Scour Elevation (Ft.)	US	DS
	687.5	687.4

STRUCTURE INDEX OF SHEETS



SECTION A-A

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS RICHARD D. PAYNE No. 4647 LICENSED STRUCTURAL ENGINEER

EXPIRES 11-30-09

SIGNATURE

11-11-08
DATE

DESIGN SPECIFICATIONS

2002 AASHTO

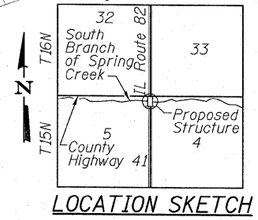
LOADING HS20-44

Allow 50 psf for future wearing surface.

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinf.)



LOCATION SKETCH

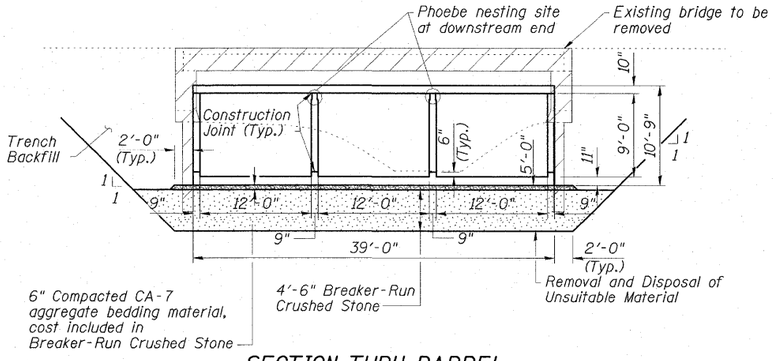
GENERAL PLAN
IL 82 OVER
SOUTH BRANCH OF SPRING CREEK
FAP ROUTE 638 - SECTION 137-1BR
HENRY COUNTY
STATION 636+45.13
STRUCTURE NO. 037-0173

SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5 SHEETS	638	137-1BR	HENRY	67	14
			CONTRACT NO. 64428		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.

DESIGNED BY:	JMS	11/08
DRAWN BY:	DWH/cj	11/08
CHECKED BY:	RDP	03/09
APPROVED BY:	RDP	03/09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION THRU BARREL

Dimensions shown at right angles to culvert

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Breaker-Run Crushed Stone	Ton	950
Removal and Disposal of Unsuitable Material	Cu. Yd.	520
Stone Riprap, Class A4	Sq. Yd.	530
Filter Fabric	Sq. Yd.	530
Removal of Existing Structures No. 1	Each	1
Concrete Box Culverts	Cu. Yds.	254.9
Reinforcement Bars	Pounds	49,990
Name Plates	Each	1

See Roadway Plans for quantities of Earth Excavation and Steel Plate Beam Guardrail, Type A.

STATION 636+45.13
BUILT 200_ BY
STATE OF ILLINOIS
FAP RT. 638 SEC. (137-1BR)
LOADING HS20-44
STR. NO. 037-0173

NAME PLATE

See Std. 515001

GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
2. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
3. The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal of the superstructure.
4. If the Contractor's procedure for existing deck beam removal involves placement of cranes or other heavy equipment on the existing deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Costs included in Removal of Existing Structures.
5. The limits and quantities of Removal and Disposal of Unsuitable Material shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field. Replace with Breaker-Run Crushed Stone. The Breaker-Run Crushed Stone shall be capped with 6 in. of CA-7 and satisfy the Standard Specifications unless otherwise indicated in the Special Provisions. The cost of the capping material shall be included in the pay item for Breaker-Run Crushed Stone.
6. At least 8'-9" of the barrel shall be poured monolithically with wingwalls.
7. Precast alternate is not allowed.
8. Culvert flows must be maintained throughout the project. Normal flow shall be allowed to pass at the rate it enters the jobsite. High flows shall be allowed to pass without causing damage to upstream properties.
9. Placement and compaction of the backfill for proposed across road culverts and existing across road culverts that are removed shall conform to section 502.10 of the Standard Specifications, except that the material shall conform to article 208.02 of the standard specifications, and shall be compacted to a minimum of 95% of the standard laboratory density. Any material conforming to the requirements of Article 1003.04 or 1004.05 which has been excavated from the trenches shall be used for backfilling the trenches. The excavation shall be backfilled with trench backfill material to the bottom of the proposed subgrade and as shown in the Roadway Plans. This trench backfill material will not be measured for payment, but shall be included in the contract unit price for Concrete Box Culverts.
10. The boring logs for this structure indicate that the groundwater levels may encroach on the construction limits of ths culvert. It shall be the responsibility of the Contractor to control the ground water and divert the stream flow during construction in order to keep the construction free of water. The method of controlling the water shall be subject to approval of the Engineer and the cost shall be included in the contract unit price for Concrete Box Culverts.

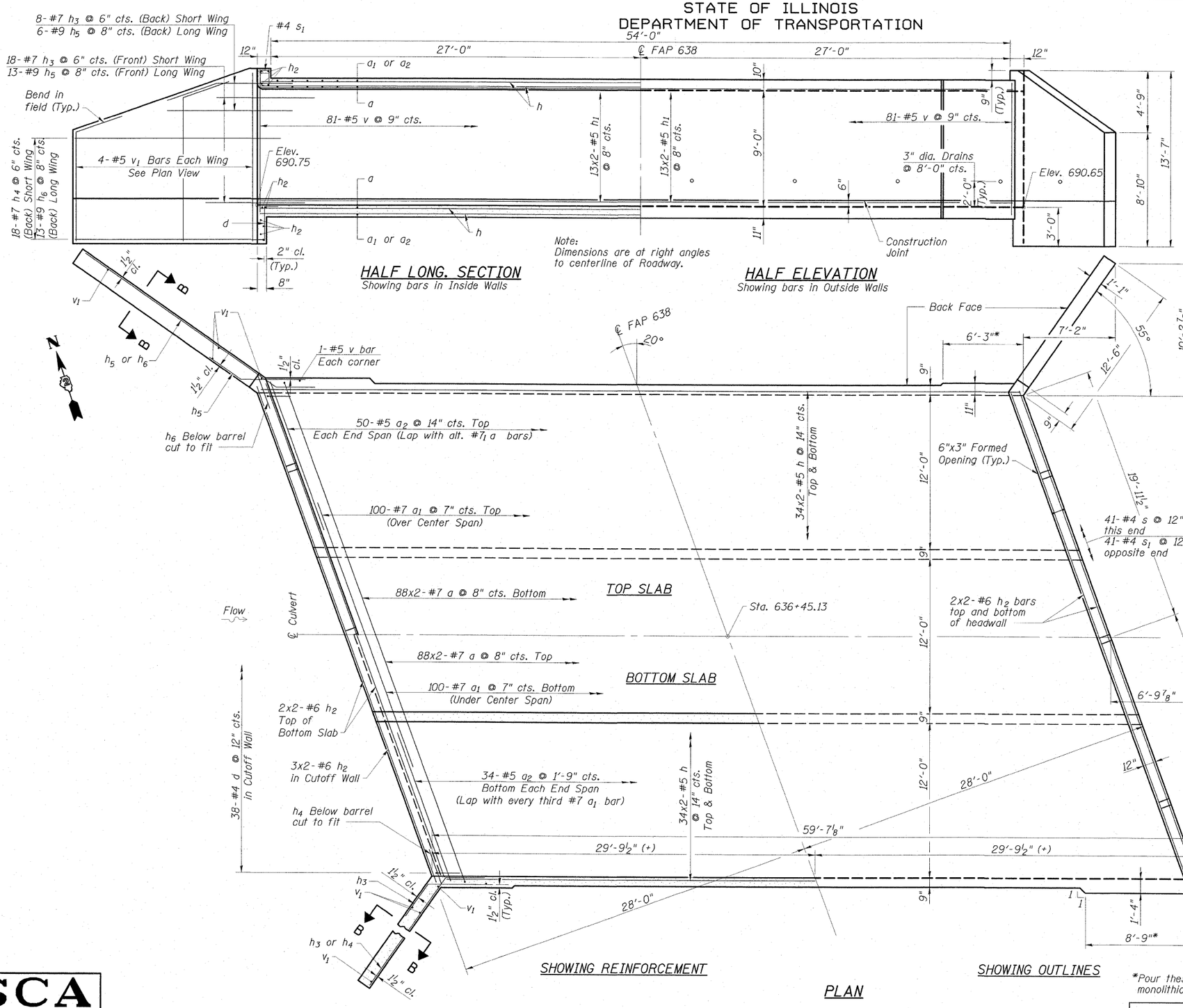
ESCA CONSULTANTS, INC.

DESIGNED BY:	JMS	11/08
DRAWN BY:	DWH/cj	11/08
CHECKED BY:	RDP	02/09
APPROVED BY:	RDP	02/09

GENERAL DATA
STRUCTURE NO. 037-0173

SHEET NO. 2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5 SHEETS	638	137-1BR	HENRY	67	15
			CONTRACT NO. 64428		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



*Pour these portions of walls monolithically with wings (Typ.)

NOTES

1. See Sheet No. 4 of 5 for Section B-B.
2. Bars indicated thus 78x2-#7 etc. indicates 78 lines with 2 lengths per line.

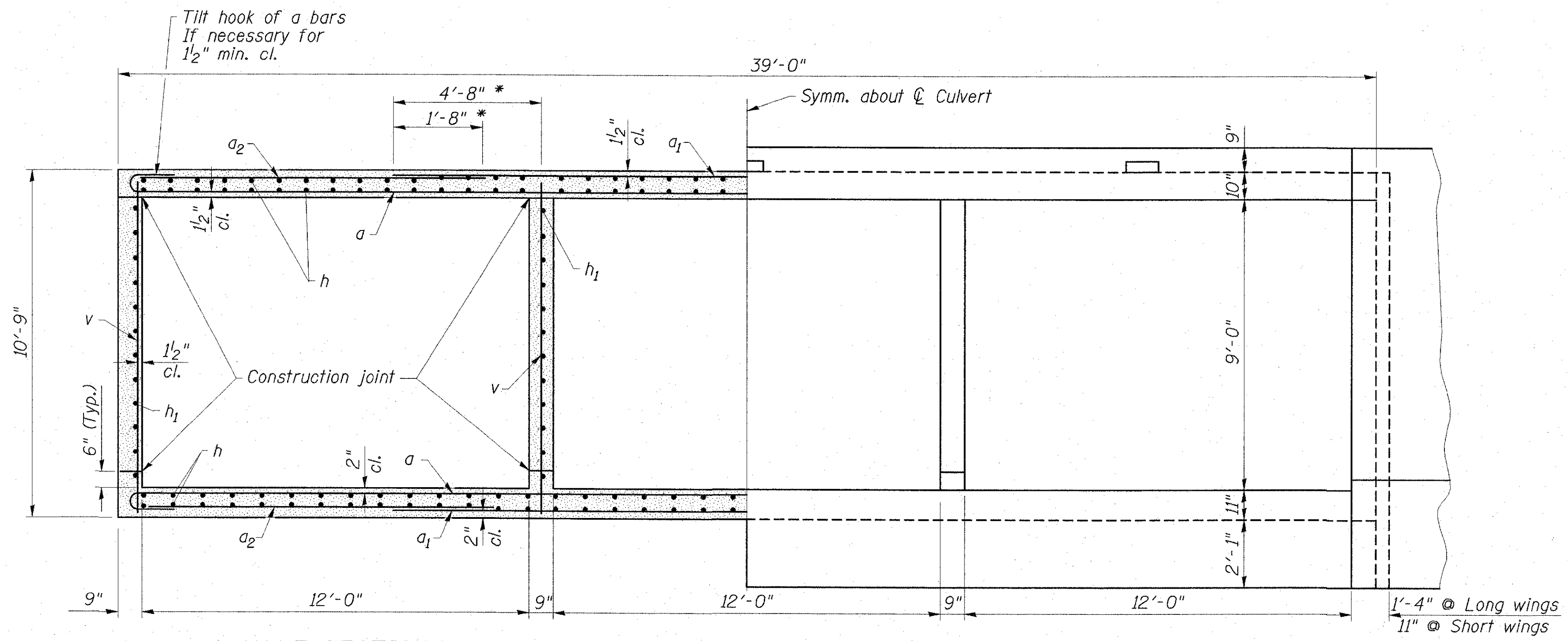
BOX CULVERT DETAILS
STRUCTURE NO. 037-0173

DESIGNED BY:	JMS	11/08
DRAWN BY:	DWH/cj	11/08
CHECKED BY:	RDP	02/09
APPROVED BY:	RDP	02/09

ESCA CONSULTANTS, INC.

SHEET NO. 3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5 SHEETS	638	137-1BR	HENRY	67	16
			CONTRACT NO. 64428		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



HALF SECTION THRU BARREL

HALF END ELEVATION

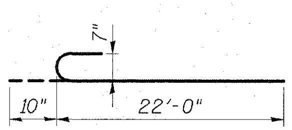
* Dimensions noted thus are parallel to ℄ Roadway

BILL OF MATERIAL

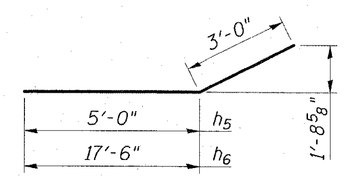
Bar	No.	Size	Length	Shape
a	352	#7	22'-10"	
a_1	200	#7	23'-1"	
a_2	168	#5	10'-9"	
d	76	#4	4'-6"	
h	272	#5	30'-6"	
h_1	104	#5	30'-7"	
h_2	36	#6	21'-8"	
h_3	52	#7	8'-0"	
h_4	36	#7	15'-6"	
h_5	38	#9	8'-0"	
h_6	26	#9	20'-6"	
s	41	#4	4'-10"	
s_1	41	#4	4'-8"	
v	328	#5	10'-5"	
v_1	16	#5	12'-7"	
Concrete Box Culverts			Cu. Yd.	254.9
Reinforcement Bars			Pound	49,990

MIN. BAR LAP

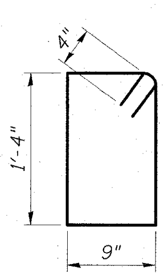
#5 ______ 1'-8"
#6 ______ 2'-0"
#7 ______ 2'-9"



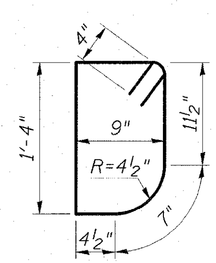
BAR a



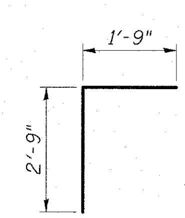
BARS h_5 & h_6



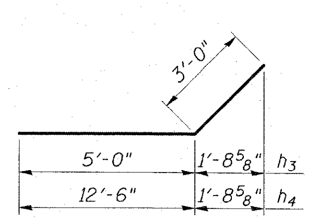
BAR s



BAR s_1

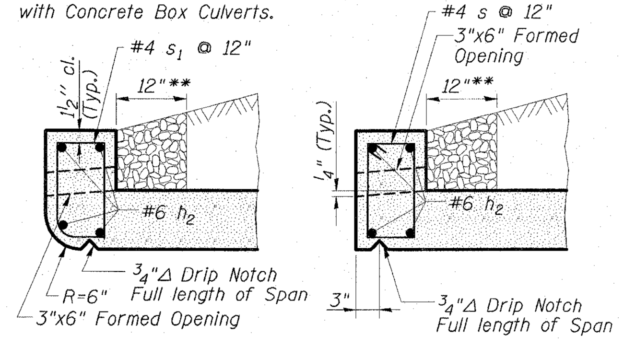


BAR d



BARS h_3 & h_4

** Coarse aggregate full length of both headwalls. To be placed by Grading Contractor. Cost included with Concrete Box Culverts.

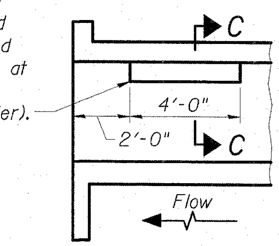


AT UPSTREAM END

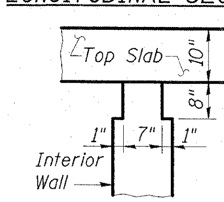
AT DOWNSTREAM END

DRAIN DETAILS

Notch formed by rough-finished board attached to and removed with formwork at interior wall. (Do not chamfer).

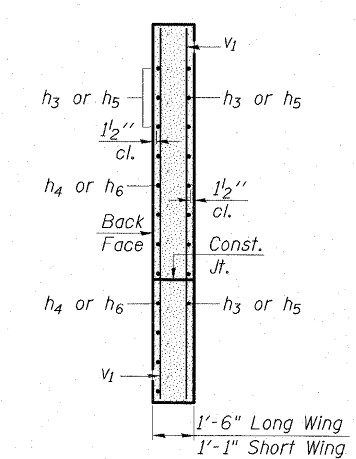


LONGITUDINAL SECTION



SECTION C-C
(Downstream End Only)

PHOEBE NESTING SITE DETAILS



SECTION B-B

BOX CULVERT DETAILS
STRUCTURE NO. 037-0173

ESCA CONSULTANTS, INC.		
DESIGNED BY:	JMS	11/08
DRAWN BY:	DWH/cj	11/08
CHECKED BY:	RDP	02/09
APPROVED BY:	RDP	02/09

SHEET NO. 4 / 5 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	638	137-1BR	HENRY	67	17
			CONTRACT NO. 64428		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS DEPARTMENT OF TRANSPORTATION — Bridge Foundation Boring Log
District Two Materials — Sh. 1 of 2
Cambridge Twp. NW 1/4 Sec. 4, NE 1/4 Sec. 5 -T15N, R5E
Crown Elev. @ Center of Bridge - 100.0

PROJECT _____ BRIDGE IL 82 over Branch Date 06/09/93
ROUTE FA 638 Spring Creek Bored By C. Jenkins
SEC. (136,137-1)BR-2 STA. 434+88.5 Checked By T. Bratt
COUNTY Henry

Boring No. B-1
Sta 435+28
O/S 7' Lt. C.L.

Surf Wat El. 692.4
Grndwater El. at Compl 676.1
At ____ Hrs ____

	El.	N	Qu t/sf	W %
Ground Surface 703.1	0			
Asphalt				
STIFF, brown SILTY CLAY.			1.5 P	19
STIFF, black SILTY CLAY.		9 12 18	1.6 B	25
Same as above.	-5	9 12 14	1.7 B	23
Same as above.		5 5 7	1.2 B	24
VERY SOFT, gray black SILTY LOAM.	-10	2 2 2	0.1 B	42
First Encounter V				
SOFT, gray black SILTY CLAY.		2 3 4	0.4 B	27
MEDIUM, gray SILTY CLAY.	-15	1 2 3	0.7 B	32
MEDIUM, gray SILTY CLAY.		1 2 3	0.7 B	34
MEDIUM, Same as above.	-20	1 2 4	0.5 B	29
Same as above.	-25			
MEDIUM, gray SILTY LOAM		5 6 7	0.5 B	23
LOOSE, dirty COARSE SAND.	-30	1 1 2		
MEDIUM, gray SILTY LOAM.		3 6 6	0.4 B	21
DENSE, gray black SHALE.	-35	7 13 20		
MEDIUM, gray/black SHALN.		28 14 15		
DENSE, gray/black SHALE w/a CLAY and COAL lense.	-40	4 7 24		
VERY DENSE, black SHALE.		23 29 43		
	-45			

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

ILLINOIS DEPARTMENT OF TRANSPORTATION — Bridge Foundation Boring Log
District Two Materials — Sh. 1 of 2
Cambridge Twp. NW 1/4 Sec. 4, NE 1/4 Sec. 5 -T15N, R5E
Crown Elev. @ Center of Bridge - 100.0

PROJECT _____ BRIDGE IL 82 over Branch Date 06/10/93
ROUTE FA 638 Spring Creek Bored By C. Jenkins
SEC. (136,137-1)BR-2 STA. 434+88.5 Checked By T. Bratt
COUNTY Henry

Boring No. B-2
Sta 434+50
O/S 9' Rt. C.L.

Surf Wat El. 692.4
Grndwater El. at Compl WASH
At ____ Hrs ____

	El.	W	Qu t/sf	W %
Ground Surface 703.8	0			
Asphalt				
STIFF, black SILTY CLAY.			1.1 P	23
MEDIUM, black SILTY LOAM.	-5	6 6 6	0.8 B	31
STIFF, black SILTY CLAY.		2 4 6	1.2 B	31
STIFF, gray SILTY CLAY.		3 4 5	1.2 B	24
SOFT, gray SILTY LOAM.	-10	2 3 3	0.5 B	27
SOFT, gray SILTY LOAM		2 2 4	0.4 B	35
STIFF, gray SILTY CLAY	-15	3 3 4	1.2 B	30
SOFT, gray SILTY CLAY		2 2 4	0.3 B	37
SOFT, gray SILTY CLAY w/SAND lense.	-20	2 3 5	0.3 B	30
SOFT, gray SILTY CLAY		2 3 5	0.3 B	27
First Encounter V				
MEDIUM, gray fine to medium SAND.		7 5 6		
Begin Wash	-30			
STIFF, gray CLAY with SAND lense.		5 3 7	1.7 B	23
STIFF, gray SANDY SILT w/GRAVEL.		7 8 10	1.0 B	19
MEDIUM, black SHALE.	-35	9 12 17		
VERY DENSE, black SHALE.		11 13 61		
DENSE, black SHALE	-40	17 28 24		
VERY DENSE, black SHALE.		100 9" PEN		
	-45			

N-Std Pentr Test: 2" OD Sampler,
140# Hammer, 30" Fall (Type Fail. B-Bulge S-Shear E-Estimated P-Penetrometer)

Project
Route FA 638
Sec. (136,137-1)BR-2
County Henry
Sh. 2 of 2

Boring No. B-1
Sta 435+28
O/S 7' Lt. C.L.

	El.	N	Qu t/sf	W %
VERY DENSE, black SHALE.	-45	100 5" PEN		
Same as above		100 3" PEN		
END OF BORING	-50			
	-55			
	-60			
	-65			
	-70			
	-75			
	-80			
	-85			
	-90			
	-95			

Project
Route FA 638
Sec. (136,137-1)BR-2
County Henry
Sh. 2 of 2

Boring No. B-2
Sta 434+50
O/S 9' Rt. C.L.

	El.	N	Qu t/sf	W %
VERY DENSE, black SHALE.	-45	100 5" PEN		
END OF BORING AUGER REFUSAL	-50			
	-55			
	-60			
	-65			
	-70			
	-75			
	-80			
	-85			
	-90			
	-95			

ESCA CONSULTANTS, INC.		
DESIGNED BY:	JMS	11/08
DRAWN BY:	DWH/CJG	11/08
CHECKED BY:	RDP	11/08
APPROVED BY:	RDP	11/08

SOIL BORING LOGS
STRUCTURE NO. 037-0173

SHEET NO. 5	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5 SHEETS	638	137-1BR	HENRY	67	18
			CONTRACT NO. 64428		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
SURVEYING ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

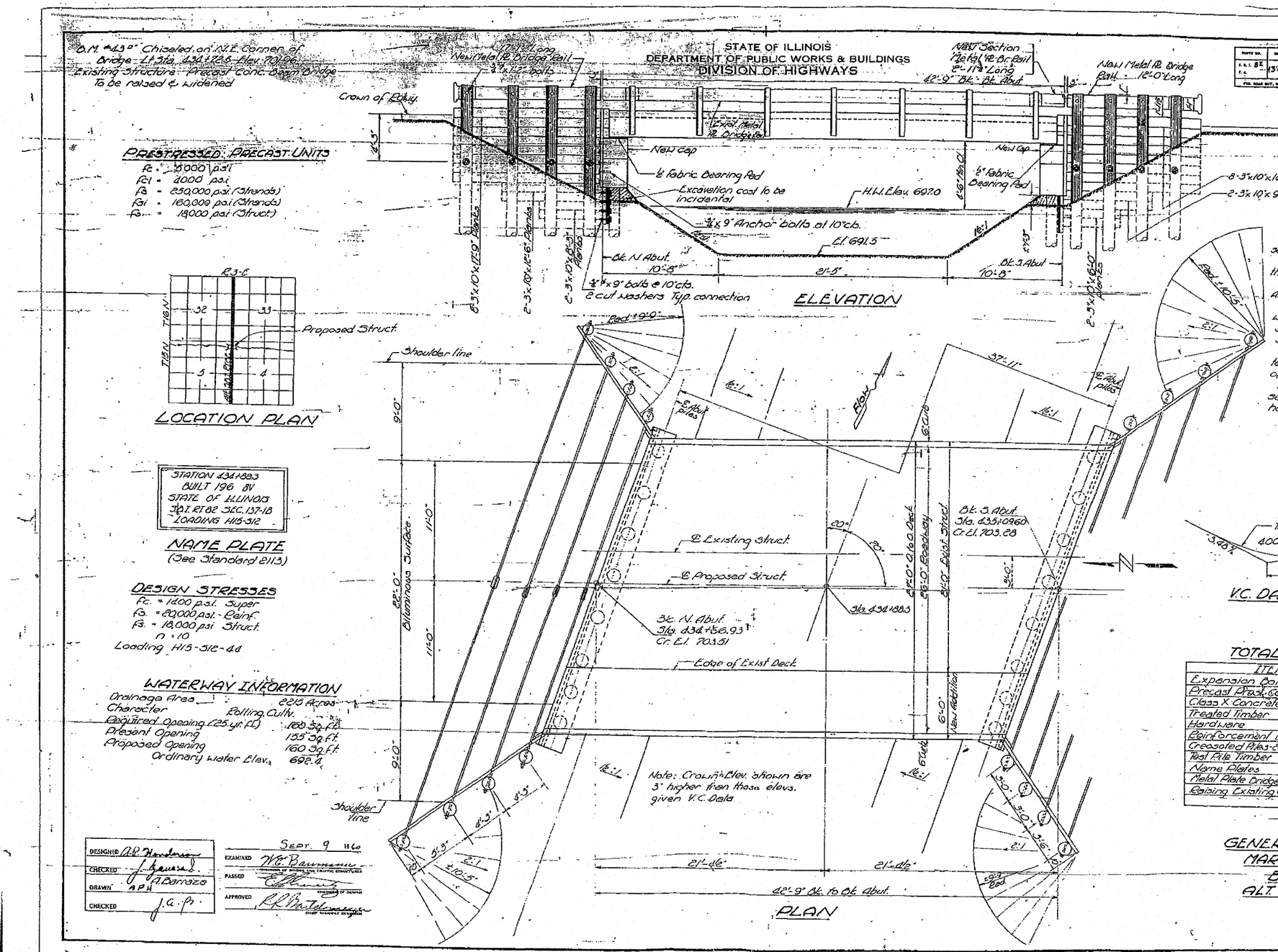
ROUTE SEC.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 82	137-1B	Henry	54	19
F.A.				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 1
3 SHEETS

B.M. "43.9" Chiseled on N.E. Corner of Bridge - Lt. Sta. 434+26.6 Elev. 701.96
Existing Structure: Precast Conc. Beam Bridge To be raised & widened

PRESTRESSED PRECAST UNITS

f'c = 5000 p.s.i.
f'ci = 4000 p.s.i.
fs = 250,000 p.s.i. (3 strands)
fsi = 160,000 p.s.i. (3 strands)
fs = 18000 p.s.i. (Struct.)



LOCATION PLAN

STATION 434+88.3
BUILT 196 BY
STATE OF ILLINOIS
FAI RT 82 SEC. 137-1B
LOADING H15-S12

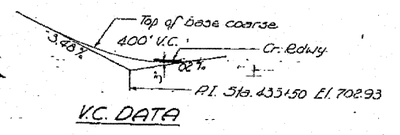
NAME PLATE
(See Standard 2113)

DESIGN STRESSES

f'c = 1400 p.s.i. Super
fs = 20,000 p.s.i. - Reinf.
fs = 18,000 psi Struct.
n = 10
Loading H15-S12-44

WATERWAY INFORMATION

Drainage Area	2213 Acres
Character	Rolling, Cult'n.
Required Opening (25 yr. fl.)	160 Sq. Ft.
Present Opening	155 Sq. Ft.
Proposed Opening	160 Sq. Ft.
Ordinary water Elev.	692.4



V.C. DATA

TOTAL BILL OF MATERIAL

ITEM		Super	Sub	Total
Expansion Bolts 3/4"	Ea.		32	32
Precast Prestr. Conc. Bridge DE 3'-6"	Ln.Ft.	257		257
Class X Concrete	Cu.Yds.		13.8	13.8
Treated Timber	F.B.M.		2450	2450
Hardware	Lb.		740	740
Reinforcement Bars	Lb.		1460	1460
Creosoted Piles 30 ft. to 38 ft.	Ln.Ft.		600	600
Test Pile Timber	Ea.		1	1
Name Plates	Ea.	1		1
Metal Plate Bridge Rail	Ln.Ft.	70		70
Raising Existing Superstruc.	Ea.	1		1

GENERAL NOTES

For Item "Precast Concrete Bridge Deck" see Special Provisions.
For Timber Structures, see Sec. 507 of the Standard Specifications.
Class X Concrete shall be used in Abutment caps.
All Hardware except cast iron O.G. washers and malleable iron washers shall be hot dipped galvanized, and shall be galvanized after fabrication.
The Contractor shall drive one test pile, before ordering remainder of piles, near South Abutment.
Expansion bolts shall consist of self drilling expansion shells & 3/4"x12" hook bolts.

DESIGNED	A.P. Henderson	EXAMINED	W.E. Barrmann
CHECKED	J. Bowers	PASSED	
DRAWN	A.P.H. A. Barraza	APPROVED	
CHECKED	J.G.P.		

SEPT. 9 1960

GENERAL PLAN & ELEVATION
MARY TAYLOR'S BRIDGE
BRANCH OF SPRING CREEK
ALT. 38 I. RTE. 82 - SEC. 137-1B
HENRY COUNTY
STA. 432+883

FILE NAME = D264428-sht-rem24.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS
		DRAWN - HAS	REVISED -		
	PLOT SCALE = 0.0839 ' / IN.	CHECKED - ELH	REVISED -		SCALE:
	PLOT DATE = 3/23/2009 9:56:2 AM	DATE - 12/19/08	REVISED -		SHEET NO. 1 OF 3 SHEETS STA. TO STA.

FOR REFERENCE ONLY

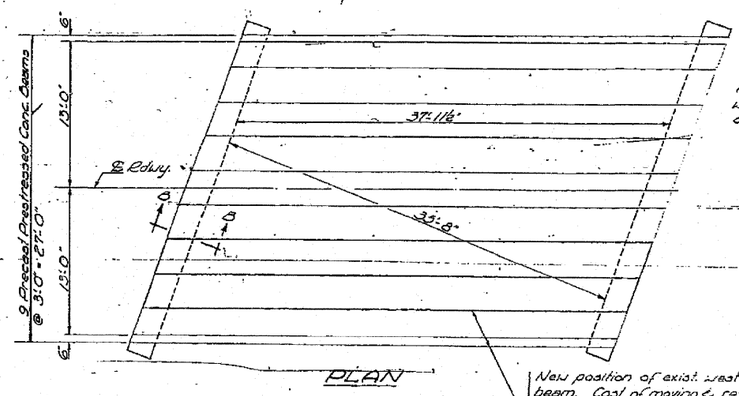
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	19
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
GENERAL CONSULTANTS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 82 F.A.	137-1B	Henry	54	20
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

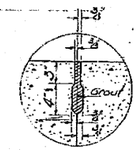
SHEET NO. 2
3 SHEETS



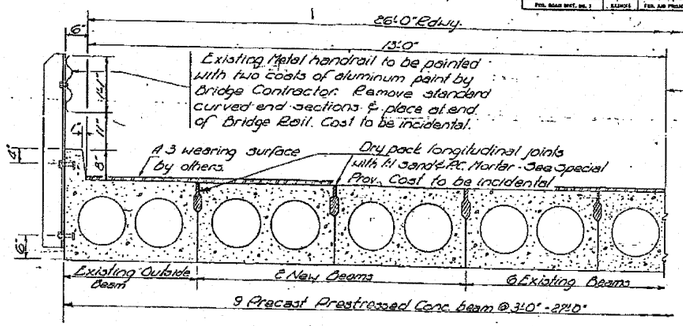
PLAN

Note: Remove existing West Beam with curb & handrail & re-use as outside beam.

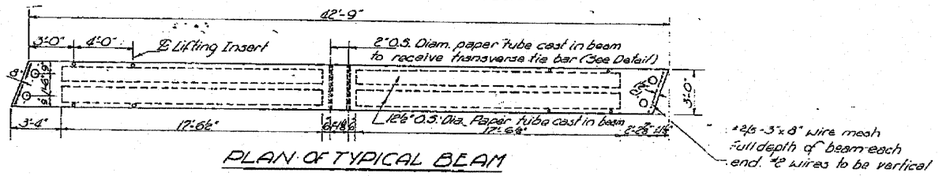
New position of exist. west curb beam. Cost of moving & resetting shall be included in unit price bid for Raising existing superstructure.



KEY DETAIL

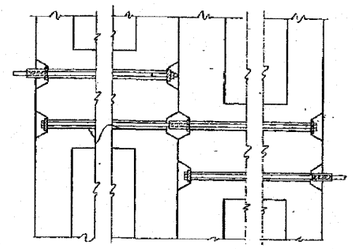


HALF CROSS SECTION

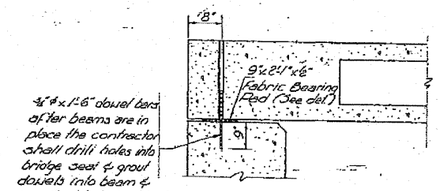


PLAN OF TYPICAL BEAM

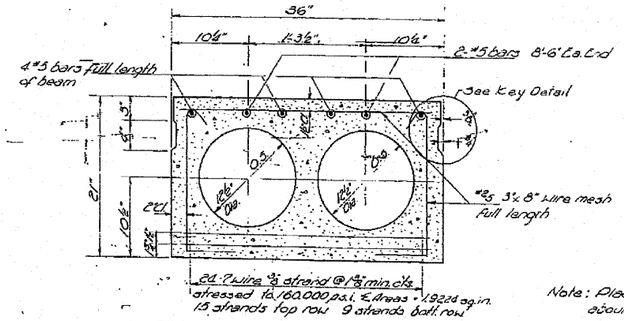
#4 #5 - 3'x 8' Wire mesh full depth of beam each end. #4 wires to be vertical



SECTION A-A

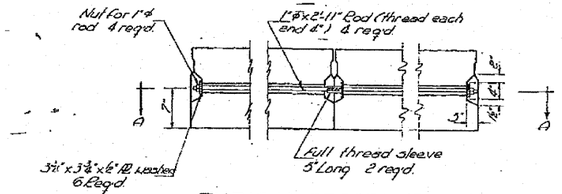


SECTION B-B



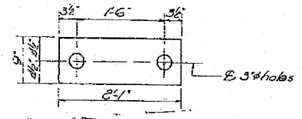
TYPICAL SECTION THRU BEAM

Note: Place strand symmetrically about ℄ Beam



TYPICAL TRANSVERSE TIE ASSEMBLY

The Cost of furnishing & assembling transverse ties to be included in the unit price bid for Precast Prestressd Conc. Bridge Deck



DETAIL OF BEARING PAD
(Cost to be incidental)

BILL OF MATERIAL

ITEM	Qu.
Precast Prestressed Conc. Bridge Deck Sq.ft.	257

DESIGNED	A.P. Henderson	
CHECKED	J. Barraza Jr.	
DRAWN	APH. A.Barraza	
CHECKED	J.A.P.	

SEPT. 9, 1960

EXAMINED W.E. Bauman — ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED K.K. Bastelberger — CHIEF HIGHWAY ENGINEER

SUPERSTRUCTURE
ALT. 3B1. RTE. 82 - SEC. 137-1B
HENRY COUNTY
STA. 434+88.3

FILE NAME =	USER NAME = HAS	DESIGNED - JMS	REVISED -
D264428-sht-rem25.dgn		DRAWN - HAS	REVISED -
	PLOT SCALE = 0.0839 ' / IN.	CHECKED - ELH	REVISED -
	PLOT DATE = 3/23/2009 9:56:19 AM	DATE - 12/19/08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

SCALE: | SHEET NO. 2 OF 3 SHEETS | STA. | TO STA.

FOR REFERENCE ONLY

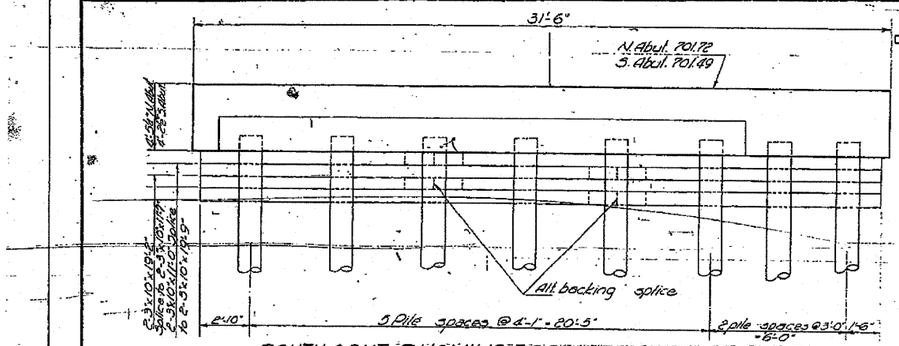
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	20
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
PEORIA, ILLINOIS

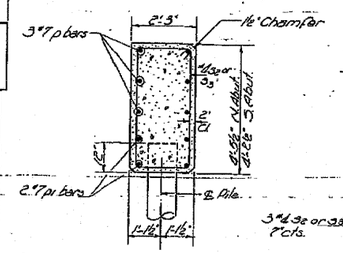
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 82	137-1B	Henry	54	21
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

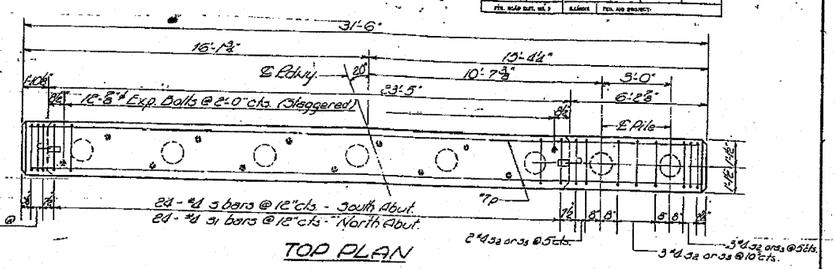
SHEET NO. 3 — 3 SHEETS



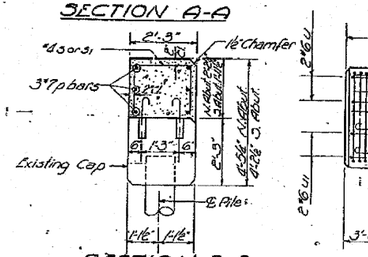
SOUTH ABUT. SHOWING BACKING LOOKING SOUTH
North Abut. Backing Similar Opposite Hand



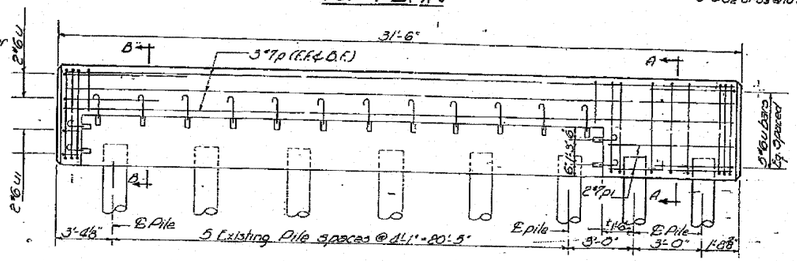
SECTION A-A



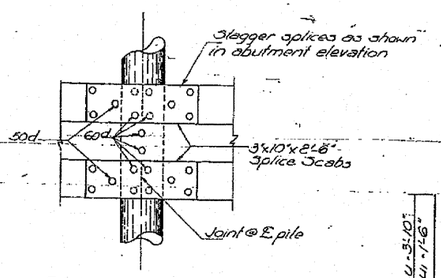
TOP PLAN



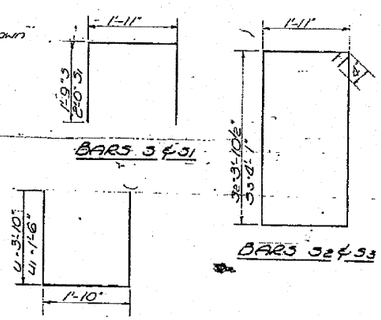
SECTION B-B

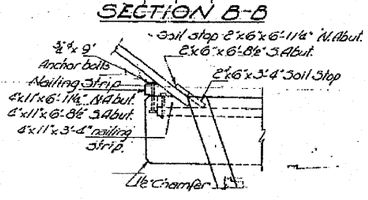


ELEVATION SOUTH ABUT. CAP
North Abut. similar opposite hand



BACKING SPLICE





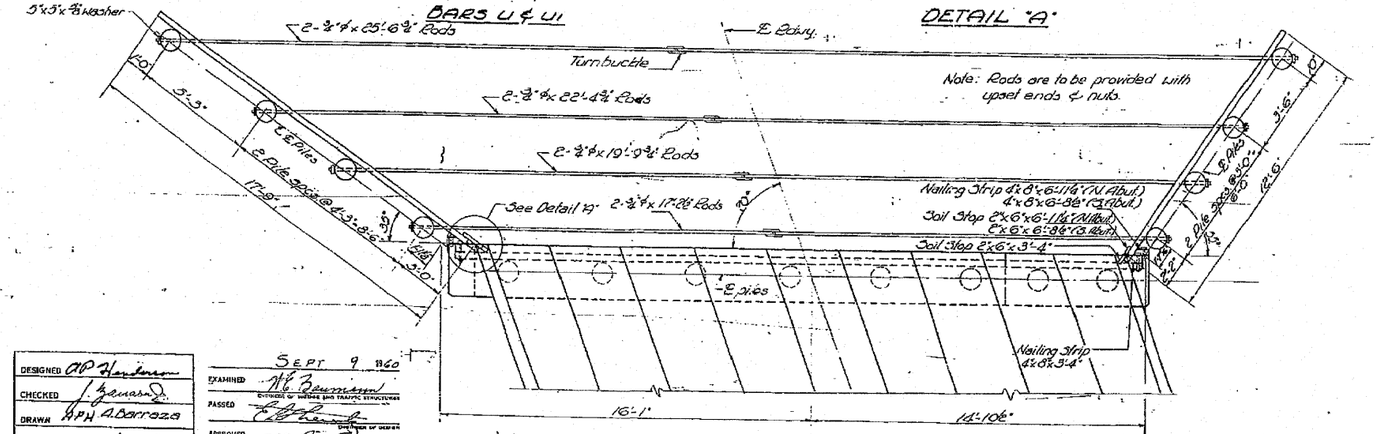
DETAIL "A"

DILE DATA

	Abutment Creosoted	Wingwalls Creosoted
Type		
Capacity	80 Tons.	10 Tons.
Est. Length	30 Ft.	30 Ft.
No. Req'd.	4	16

BAR LIST - 2 ABUTS.

Dsn.	No.	Size	Length	Shape
p	12	#7	31'2"	—
p₁	8	#7	6'-0"	—
3	24	#4	5'-5"	⊓
3₁	24	#4	3'-11"	⊓
3₂	11	#4	12'-3"	□
3₃	11	#4	12'-8"	□
u	14	#6	3'-6"	⊓
u₁	4	#6	2'-10"	⊓



Note: Rods are to be provided with upset ends & nuts.

PLAN

Note: Wingwalls symmetrical by Rot. thru 180° For detail & planking of Abutment Wings see General Plan & Elevation sheet.

BILL OF MATERIAL - 2 ABUTS.

ITEM	Qu.	ITEM	Qu.
Plant 3"x10"x 19'-2"	4	Soil Stop 2"x6"x 6'-8½"	2
" 3"x 10"x 11'-7"	4	" 2"x6"x 3'-4"	4
" 3"x 10"x 11'-0"	4	Rods ¾"ø x 25'-6¾"	4
" 3"x 10"x 19'-9"	4	" ¾"ø x 22'-4¾"	4
" 3"x 10"x 6'-0"	8	" ¾"ø x 19'-9¾"	4
" 3"x 10"x 12'-6"	80	" ¾"ø x 17'-8⅝"	4
" 3"x 10"x 9'-0"	4	Anchor Bolts ⅞"ø x 9"	36
" 3"x 10"x 12'-9"	16	" Bolts ⅞"ø x 12"	16
" 3"x 10"x 8'-3"	4	Washers 5"x 5"x ⅜"	16
Splice 3"x 10"x 2'-6"	8	Expansion Bolts ⅞"ø	32
Nailing Strip 4"x 8"x 6'-1¼"	1	Turnbuckles	8
" 4"x8"x6'-8½"	1	50d Nails	111
" 4"x8"x 3'-4"	2	60d Nails	376
" 4"x11"x 3'-4"	2	Class X Concrete C.Y.	139
" 6"x11"x 6'-8½"	1	Reinforcement Bars Lb.	11460
" 8"x11"x 6'-1¼"	1	Treated Timber F.B.M.	2450
Soil Stop 2"x6"x 6'-1¼"	2	Creosoted Piles Lin. Ft.	600

DESIGNED	A.P. Anderson	EXAMINED	SEPT. 9 1960
CHECKED	J. Bernard	PASSED	
DRAWN	A.P.H. A.Barraza	APPROVED	
CHECKED	J.A.B.		

ABUTMENTS
ALT. SBI. RT 82 - SEC. 137-1B
HENRY COUNTY
STA. 434+88.3

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	PLOT DATE = 3/23/2009 9:56:25 AM	DATE - 12/19/08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

SCALE: | SHEET NO. 3 OF 3 SHEETS | STA. | TO STA.

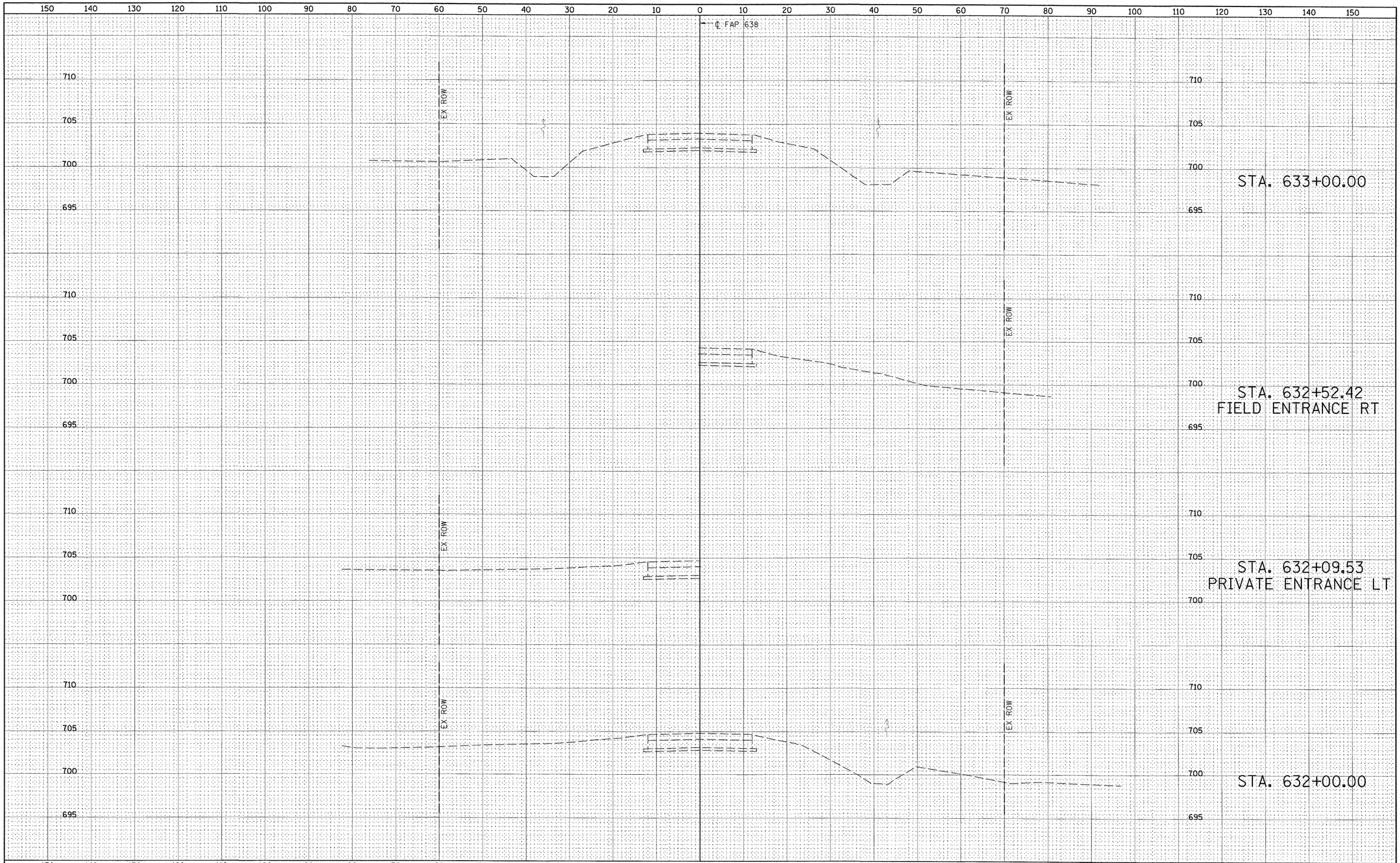
FOR REFERENCE ONLY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	21
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
URBANA, ILLINOIS

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

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



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	PLOT DATE = 3/23/2009 9:57:42 AM	DATE - 03/13/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 82 CROSS SECTIONS

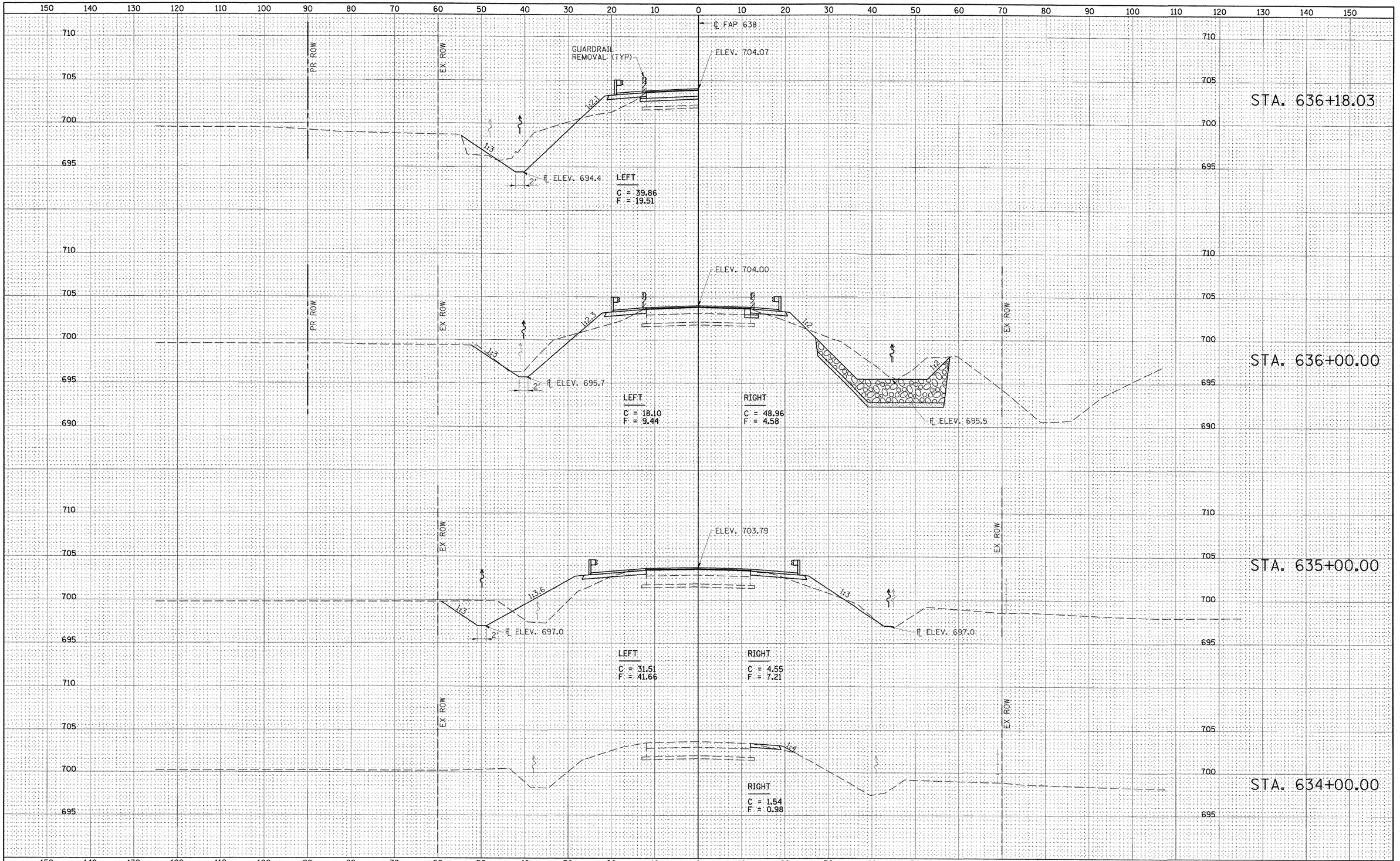
SCALE: 1"=10'-0" | SHEET NO. 1 OF 5 SHEETS | STA. 632+00 TO STA. 633+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	22
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
BRADLEY, ILLINOIS

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

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



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SCALES: (HORIZ) 1"=10' (VERT) 1"=5'	PLOT DATE = 3/23/2009 9:58:00 AM	DATE - 03/13/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 82 CROSS SECTIONS

SCALE: 1"=10'-0" | SHEET NO. 2 OF 5 SHEETS | STA. 634+00 TO STA. 636+18.03

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	23
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
URBANA, ILLINOIS

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

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

℄ FAP 638

PR ROW
EX ROW

PARTIALLY REMOVE EXISTING FENCE

ELEV. 705.97

1:2.8
1:3
EX 15" CMP TO BE REMOVED
℄ ELEV. 697.1
2'

LEFT
C = 88.58
F = 7.42

RIGHT
C = 2.72
F = 1.73

PR 24" CMP
EX 24" CMP TO BE REMOVED

STA. 638+00.00
EX FIELD ENTRANCE RT

ELEV. 705.81

1:3.1
1:3
EX 15" CMP TO BE REMOVED
℄ ELEV. 696.7

LEFT
C = 84.26
F = 8.62

STA. 637+90.44
EX FIELD ENTRANCE LT

ELEV. 704.65

1:2.6
1:3
1:3.2
1:3
2'
℄ ELEV. 693.0
℄ ELEV. 698.9

LEFT
C = 70.89
F = 33.39

RIGHT
C = 8.20
F = 23.06

STA. 637+00.00

ELEV. 704.41
GUARDRAIL REMOVAL (TYP)

1:3.0
1:3
2'
℄ ELEV. 697.7

RIGHT
C = 9.80
F = 24.60

STA. 636+72.92

FILE NAME = D264428-sht-xssht02.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - JPC	REVISED -
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SCALES: (HORIZ) 1"=10' (VERT) 1"=5'	PLOT DATE = 3/23/2009 9:58:19 AM	DATE - 03/13/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 82 CROSS SECTIONS

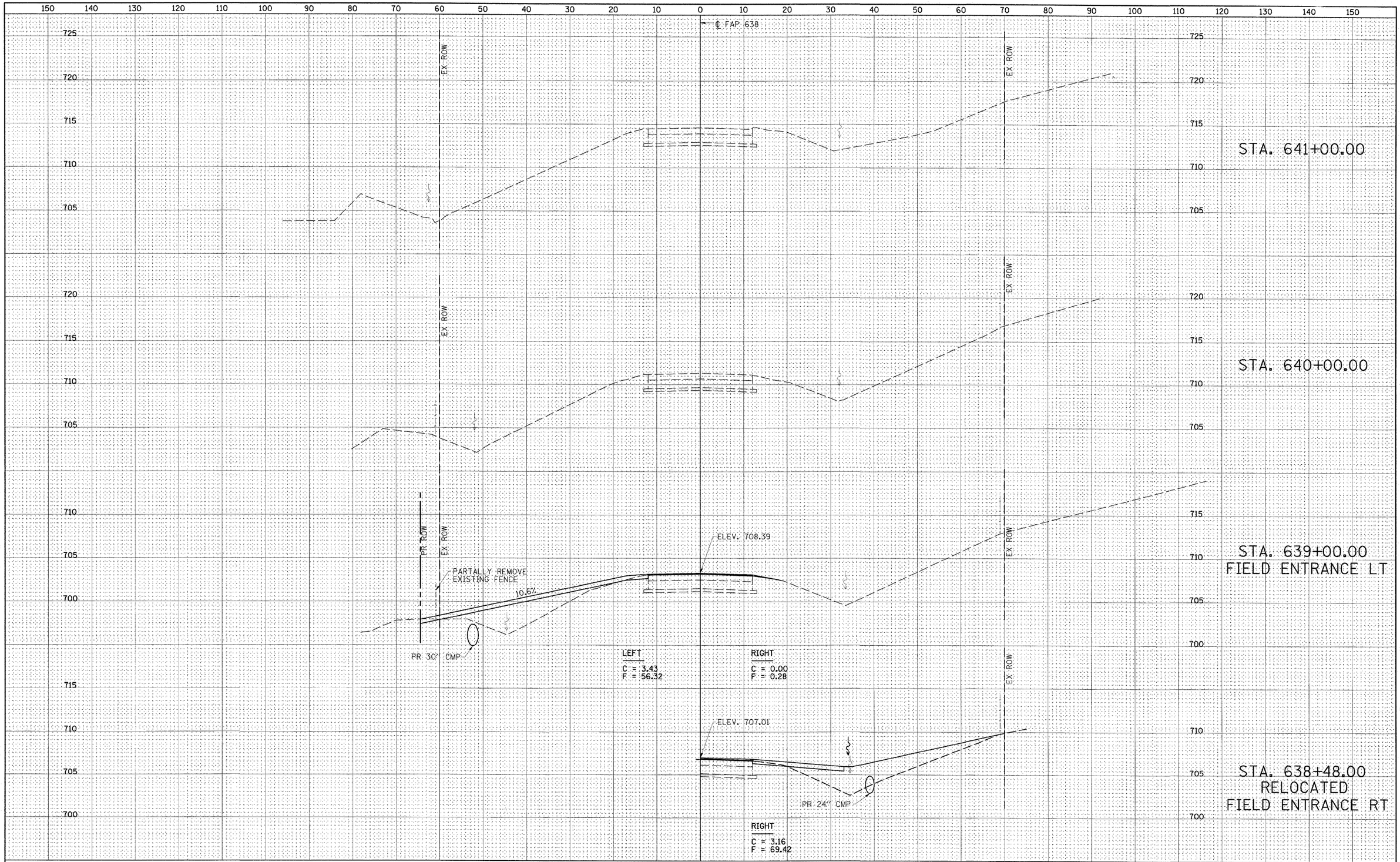
SCALE: 1"=10'-0" | SHEET NO. 3 OF 5 SHEETS | STA. 636+72.92 TO STA. 638+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	24
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
URBANA, ILLINOIS

FINAL SURVEY
NOTE BOOK
NOS.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NOS.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 82 CROSS SECTIONS

SCALE: 1"=10'-0" | SHEET NO. 4 OF 5 SHEETS | STA. 639+00 TO STA. 641+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	25
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
URBANA, ILLINOIS

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

FINAL SURVEY	BY	DATE
SURVEYED		
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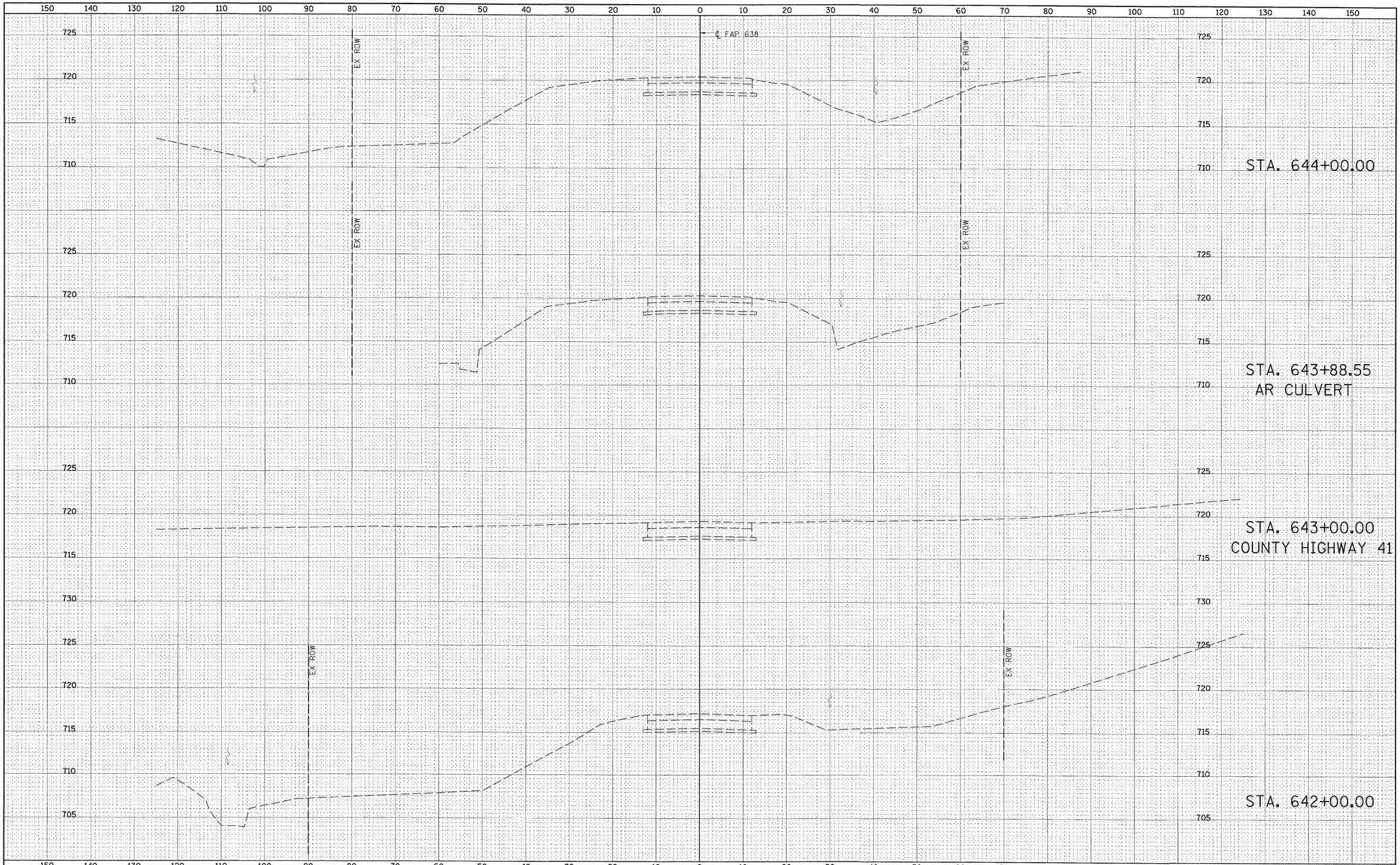

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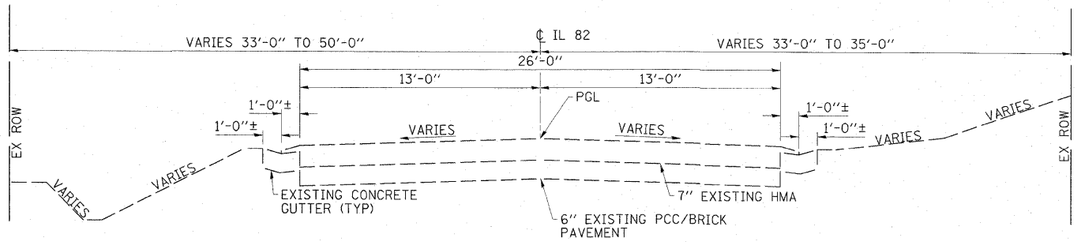
	PLOT DATE = 3/23/2009 9:59:01 AM	DATE - 03/13/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 82 CROSS SECTIONS

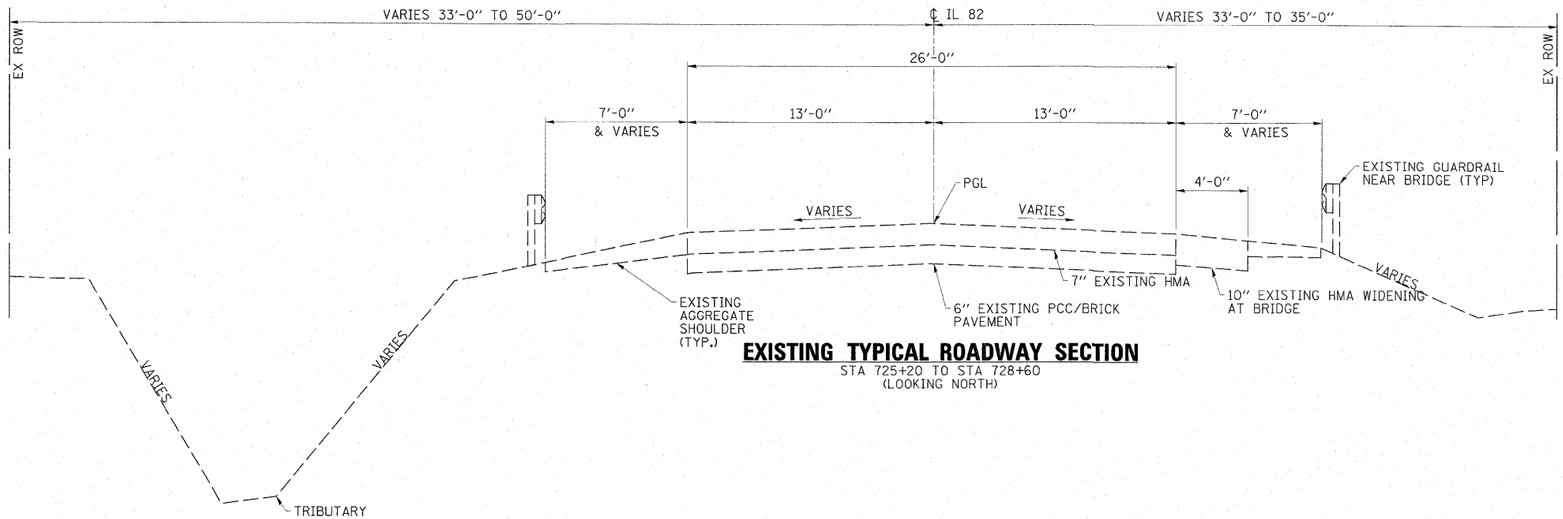
SCALE: 1"=10'-0" | SHEET NO. 5 OF 5 SHEETS | STA. 642+00 TO STA. 644+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	137-1BR	HENRY	67	26
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL ROADWAY SECTION

STA 712+00 TO STA 725+20
STA 728+60 TO STA 737+30
(LOOKING NORTH)



EXISTING TYPICAL ROADWAY SECTION

STA 725+20 TO STA 728+60
(LOOKING NORTH)

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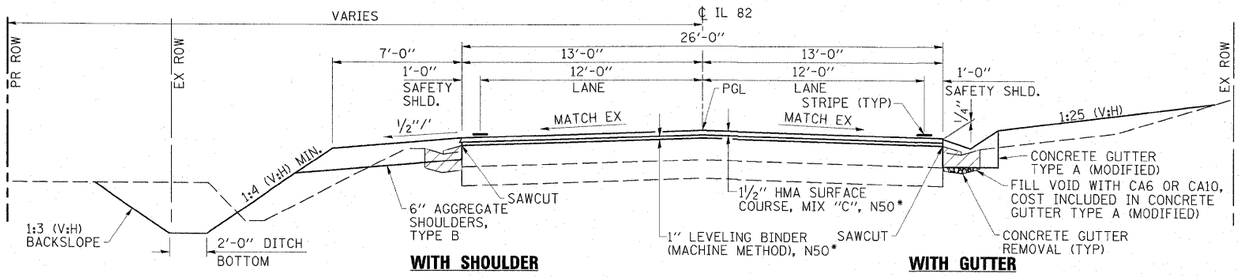
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: 1/4"=1'-0" | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

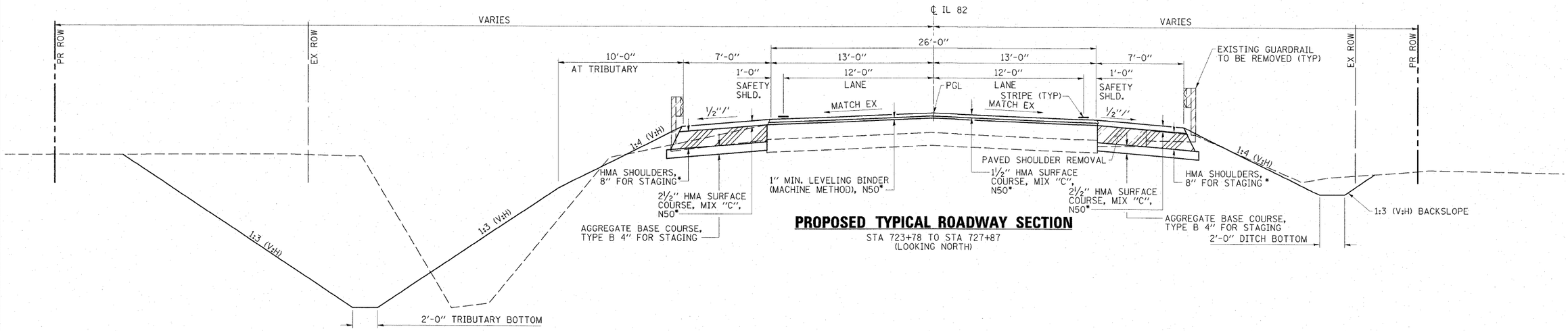
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	27
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
PEORIA, ILLINOIS



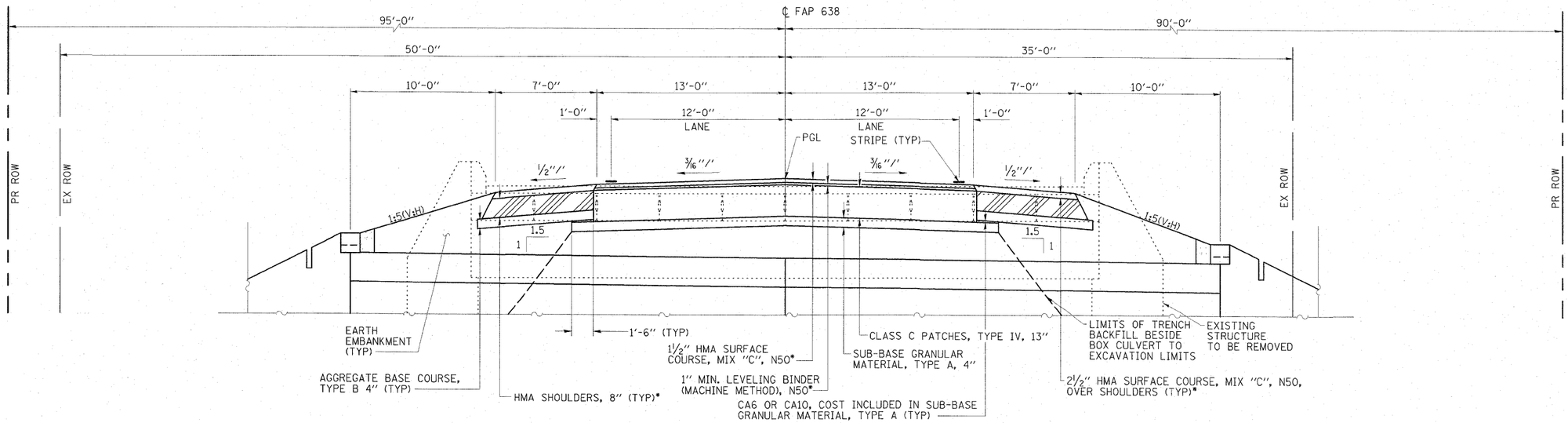
PROPOSED TYPICAL ROADWAY SECTION

STA 721+50 TO STA 723+96
STA 727+67 TO STA 731+00
(LOOKING NORTH)



PROPOSED TYPICAL ROADWAY SECTION

STA 723+78 TO STA 727+87
(LOOKING NORTH)



PROPOSED SECTION THRU BOX CULVERT

(LOOKING NORTH)

*RATE= 112 LB/SQ YD/IN

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: 1/4"=1'-0" | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	28
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS

#2001384 REPLACE SECTION CORNER

EACH	LOCATION	REMARKS
1	Sta. 722+17.79, 4.32' RT	
1	TOTAL	

20200100 EARTH EXCAVATION

CU YD	LOCATION	REMARKS
215	RT Sta. 726+01.80 to 731+00	
305	RT Sta. 721+50 to 725+41.80	
1230	LT Sta. 726+01.80 to 731+00	
250	LT Sta. 721+50 to 725+41.80	
2000	TOTAL	

20201200 REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL

CU YD	LOCATION	REMARKS
265	SN 037-0172	
265	TOTAL	

25000210 SEEDING, CLASS 2A

ACRE	LOCATION	REMARKS
0.15	RT Culvert to Sta. 731+00	
0.15	RT Sta. 721+50 to Culvert	
0.15	LT Culvert to Sta. 731+00	
0.15	LT Sta. 721+50 to Culvert	
0.6	TOTAL	

25000310 SEEDING, CLASS 4

ACRE	LOCATION	REMARKS
0.2	RT Culvert to Sta. 731+00	
0.2	RT Sta. 721+50 to Culvert	
0.3	LT Culvert to Sta. 731+00	
0.2	LT Sta. 721+50 to Culvert	
0.9	TOTAL	

25000750 MOWING

ACRE	LOCATION	REMARKS
0.35	RT Culvert to Sta. 731+00	
0.35	RT Sta. 721+50 to Culvert	
0.45	LT Culvert to Sta. 731+00	
0.35	LT Sta. 721+50 to Culvert	
1.5	TOTAL	

25100115 MULCH, METHOD 2

ACRE	LOCATION	REMARKS
1.4	RT Culvert to Sta. 731+00	4 applications assumed
1.4	RT Sta. 721+50 to Culvert	4 applications assumed
1.8	LT Culvert to Sta. 731+00	4 applications assumed
1.4	LT Sta. 721+50 to Culvert	4 applications assumed
6.0	TOTAL	

25100630 EROSION CONTROL BLANKET

SQ YD	LOCATION	REMARKS
800	LT Sta. 724+80 to Culvert	
2420	LT Culvert to Sta. 729+45	
890	RT Sta. 722+69 to Culvert	
1370	RT Culvert to Sta. 729+55	
5480	TOTAL	

28000250 TEMPORARY EROSION CONTROL SEEDING

POUND	LOCATION	REMARKS
140	RT Culvert to Sta. 731+00	4 applications assumed
140	RT Sta. 721+50 to Culvert	4 applications assumed
180	LT Culvert to Sta. 731+00	4 applications assumed
140	LT Sta. 721+50 to Culvert	4 applications assumed
600	TOTAL	

28000300 TEMPORARY DITCH CHECKS

EACH	LOCATION	REMARKS
1	LT Sta. 724+90	
1	LT Sta. 725+10	
1	LT Sta. 725+25	
1	LT Sta. 725+40	
1	LT Sta. 726+00	
1	RT Sta. 726+10	
1	RT Sta. 726+80	
1	LT Sta. 727+00	
1	RT Sta. 727+60	
1	LT Sta. 728+00	
1	RT Sta. 728+40	
1	LT Sta. 729+00	
1	RT Sta. 729+20	
1	RT Sta. 730+00	
14	TOTAL	

28000400 PERIMETER EROSION BARRIER

FOOT	LOCATION	REMARKS
120	LT Sta. 724+50 to 725+60	
455	LT Sta. 725+90 to 730+40	
80	LT Sta. 730+60 to 731+40	
380	RT Sta. 721+00 to 724+90	
50	RT Sta. 725+20 to 725+60	
530	RT Sta. 725+90 to 731+10	
1615	TOTAL	

28100107 STONE RIPRAP, CLASS A4

SQ YD	LOCATION	REMARKS
145	LT & RT Sta. 725+45 to 726+05	
5	RT Sta. 722+70	
40	LT Sta. 724+75	
10	LT & RT Sta. 729+55	
200	TOTAL	

28200200 FILTER FABRIC

SQ YD	LOCATION	REMARKS
145	LT & RT Sta. 725+45 to 726+05	
5	RT Sta. 722+70	
40	LT Sta. 724+75	
10	LT & RT Sta. 729+55	
200	TOTAL	

31100300 SUB-BASE GRANULAR MATERIAL, TYPE A 4"

SQ YD	LOCATION	REMARKS
197	Sta. 725+41.8 to 726+01.8	
197	TOTAL	

35101400 AGGREGATE BASE COURSE, TYPE B

TON	LOCATION	REMARKS
39	LT FE Sta. 723+70	
48	RT FE Sta. 724+98	
41	LT FE Sta. 730+50	
128	TOTAL	

35101600 AGGREGATE BASE COURSE, TYPE B 4"

SQ YD	LOCATION	REMARKS
391	LT Sta. 723+59 to 727+87	Pre-Stage I
356	RT Sta. 723+78 to 727+68	Stage I
55	LT Sta. 725+41.80 to 726+01.80	Stage II
802	TOTAL	

40201000 AGGREGATE FOR TEMPORARY ACCESS

TON	LOCATION	REMARKS
140	Sta. 722+97 to 724+86	Pre-Stage I
140	TOTAL	

40600625 LEVELING BINDER (MACHINE METHOD), N50

TON	LOCATION	REMARKS
224	Sta. 722+00 to 730+50	
224	TOTAL	

40600982 HOT-MIX ASPHALT SURFACE REMOVAL – BUTT JOINT

SQ YD	LOCATION	REMARKS
86.5	Sta. 721+50	
86.5	Sta. 731+00	
173	TOTAL	

40600990 TEMPORARY RAMP

SQ YD	LOCATION	REMARKS
23	Sta. 721+50	
23	Sta. 731+00	
46	TOTAL	

40603310 HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50

TON	LOCATION	REMARKS
235	Sta. 721+50 to 731+00	
44	RT Sta. 723+78 to 727+68	
39	LT Sta. 724+42 to 727+87	
318	TOTAL	

44000400 GUTTER REMOVAL

FOOT	LOCATION	REMARKS
332	RT Sta. 721+50 to 724+80	
352	LT Sta. 721+50 to 724+80	
260	RT Sta. 728+44 to 731+00	
253	LT Sta. 728+55 to 731+00	
1197	TOTAL	

44004250 PAVED SHOULDER REMOVAL

SQ YD	LOCATION	REMARKS
65	LT Sta. 723+59 to 724+55	Proposed shoulder for gutter
22	LT Sta. 724+80 to 725+47	
34	RT Sta. 724+80 to Bridge	
37	RT Bridge to Sta. 726+70	
48	LT Sta. 725+41.80 to 726+01.80	Stage II
206	TOTAL	

44201396 CLASS C PATCHES, TYPE IV, 13"

SQ YD	LOCATION	REMARKS
178	Sta. 725+41.8 to 726+01.8	
178	TOTAL	

48101200 AGGREGATE SHOULDERS, TYPE B

TON	LOCATION	REMARKS
46	RT Sta. 722+30 to 723+78	
64	RT Sta. 727+87 to 730+00	
70	LT Sta. 727+68 to 730+00	
180	TOTAL	

48203029 HOT-MIX ASPHALT SHOULDERS, 8"

SQ YD	LOCATION	REMARKS
343	LT Sta. 723+59 to 727+87	
313	RT Sta. 723+78 to 727+68	
48	LT Sta. 725+41.80 to 726+01.80	
704	TOTAL	

50100400 REMOVAL OF EXISTING STRUCTURES NO. 2

EACH	LOCATION	REMARKS
1	SN 037-0091	
1	TOTAL	

51500100 NAME PLATES

EACH	LOCATION	REMARKS
1	SN 037-0172	
1	TOTAL	

54001000 BOX CULVERT END SECTIONS

EACH	LOCATION	REMARKS
2	SN 037-0172	
2	TOTAL	

54011209 PRECAST CONCRETE BOX CULVERT 12' X 9'

FOOT	LOCATION	REMARKS
120	SN 037-0172	
120	TOTAL	

60406610 GRATING (SPECIAL)

EACH	LOCATION	REMARKS
4	SN 037-0172	
4	TOTAL	

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		DRAWN - RJT	REVISED -
	PLOT SCALE = 0.0839 ' / IN.	CHECKED - ELH	REVISED -
	PLOT DATE = 3/24/2009 10:56:34 AM	DATE - 3/20/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	29
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL · STRUCTURAL · TRANSPORTATION

60600095 CLASS SI CONCRETE (OUTLET)

CU YD	LOCATION	REMARKS
7.7	RT Sta. 721+80 to 722+70	
8.3	LT Sta. 724+03 to 724+73	
6.5	RT Sta. 729+58 to 730+30	
6.5	LT Sta. 729+56 to 730+20	
8.3	LT FE Sta. 723+70	
8.3	LT FE Sta. 730+50	
45.6	TOTAL	

60602600 CONCRETE GUTTER, TYPE A (MODIFIED)

FOOT	LOCATION	REMARKS
187	LT Sta. 721+50 to 723+37	
30	RT Sta. 721+50 to 721+80	
13	LT Sta. 730+87 to 731+00	
70	RT Sta. 730+30 to 731+00	
300	TOTAL	

63200310 GUARDRAIL REMOVAL

FOOT	LOCATION	REMARKS
88	LT Sta. 724+60 to 725+58.47	
50	RT Sta. 725+11 to 725+58.47	
375	LT Sta. 725+85.13 to 726+87	
100	RT Sta. 725+85.13 to 729+61	
613	TOTAL	

63500105 DELINEATORS

EACH	LOCATION	REMARKS
2	LT & RT Sta. 725+71.80	
2	TOTAL	

66600105 FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS

EACH	LOCATION	REMARKS
1	RT Sta. 721+00	
1	RT Sta. 722+00	
1	LT Sta. 723+00	
1	LT Sta. 724+50	
1	RT Sta. 724+75	
2	LT & RT Sta. 725+25	
1	RT Sta. 726+00	
1	LT Sta. 726+25	
1	RT Sta. 727+00	
2	LT & RT Sta. 728+00	
1	LT Sta. 729+75	
1	RT Sta. 730+00	
1	LT Sta. 731+00	
1	RT Sta. 731+29.32	
1	LT Sta. 733+00	
1	LT Sta. 737+00	
1	LT Sta. 738+00	
19	TOTAL	

66700305 PERMANENT SURVEY MARKERS, TYPE II

EACH	LOCATION	REMARKS
2	SN 037-0172	
2	TOTAL	

67000400 ENGINEER'S FIELD OFFICE, TYPE A

CAL MO	LOCATION	REMARKS
3	SN 037-0172	
3	TOTAL	

67100100 MOBILIZATION

L SUM	LOCATION	REMARKS
0.5	SN 037-0172	
0.5	TOTAL	

70100405 TRAFFIC CONTROL AND PROTECTION, STANDARD 701321

EACH	LOCATION	REMARKS
1	SN 037-0172	
1	TOTAL	

70100450 TRAFFIC CONTROL AND PROTECTION, STANDARD 701201

L SUM	LOCATION	REMARKS
0.5	SN 037-0172	
0.5	TOTAL	

70100500 TRAFFIC CONTROL AND PROTECTION, STANDARD 701326

L SUM	LOCATION	REMARKS
1	SN 037-0172	
1	TOTAL	

70103815 TRAFFIC CONTROL SURVEILLANCE

CAL DA	LOCATION	REMARKS
2	SN 037-0172	
2	TOTAL	

70106500 TEMPORARY BRIDGE TRAFFIC SIGNALS

EACH	LOCATION	REMARKS
1	SN 037-0172	
1	TOTAL	

70106700 TEMPORARY RUMBLE STRIP

EACH	LOCATION	REMARKS
1	Sta. 705+19	
1	Sta. 710+19	
1	Sta. 715+19	
1	Sta. 736+31	
1	Sta. 741+31	
1	Sta. 746+31	
6	TOTAL	

70300100 SHORT-TERM PAVEMENT MARKING

FOOT	LOCATION	REMARKS
68	Sta. 722+19 to 728+94	Yellow centerline striping
288	Sta. 721+50 to 731+00	3 applications of yellow centerline striping
64	Sta. 721+50 to 731+00	2 applications of white edge line striping
420	TOTAL	

70300220 TEMPORARY PAVEMENT MARKING - LINE 4"

FOOT	LOCATION	REMARKS
1900	LT & RT Sta. 721+50 to 731+00	White edgeline striping
40	Sta. 729+75 to 731+00	Yellow skip-dash centerline SB
85	Sta. 730+15 to 731+00	Yellow no pass centerline NB
220	Sta. 721+50 to 730+15	Yellow skip-dash centerline NB
825	Sta. 721+50 to 729+75	Yellow no pass centerline SB
3070	TOTAL	

70301000 WORK ZONE PAVEMENT MARKING REMOVAL

SQ FT	LOCATION	REMARKS
655	LT & RT Sta. 721+50 to 731+00	Edgeline striping
509	Sta. 721+50 to 731+00	Centerline striping
1164	TOTAL	

70400100 TEMPORARY CONCRETE BARRIER

FOOT	LOCATION	REMARKS
387.5	Sta. 723+79 to 727+67	Stage I
237.5	Sta. 724+17 to 727+29	Stage II
625	TOTAL	

70400200 RELOCATE TEMPORARY CONCRETE BARRIER

FOOT	LOCATION	REMARKS
387.5	Sta. 724+17 to 727+29	Stage II
387.5	TOTAL	

78001110 PAINT PAVEMENT MARKING - LINE 4"

FOOT	LOCATION	REMARKS
3800	LT & RT Sta. 721+50 to 731+00	White edgeline striping, 2 applications
80	Sta. 729+75 to 731+00	Yellow skip-dash centerline SB, 2 applications
170	Sta. 730+15 to 731+00	Yellow no pass centerline NB, 2 applications
440	Sta. 721+50 to 730+15	Yellow skip-dash centerline NB, 2 applications
1650	Sta. 721+50 to 729+75	Yellow no pass centerline SB, 2 applications
6140	TOTAL	

78300100 PAVEMENT MARKING REMOVAL

SQ FT	LOCATION	REMARKS
25	Sta. 722+19 to 725+16.8	Centerline striping, Stage I
26	Sta. 726+29.30 to 729+31	Centerline striping, Stage I
132	LT Sta. 723+74.80 to 727+71.30	Edgeline striping, Stage I
45	RT Sta. 724+06.80 to 725+41.80	Edgeline striping, Stage II
46	RT Sta. 726+01.80 to 727+39.30	Edgeline striping, Stage II
274	TOTAL	

Z0001900 ASBESTOS BEARING PAD REMOVAL

EACH	LOCATION	REMARKS
20	SN 037-0091	
20	TOTAL	

Z0005400 BREAKER-RUN CRUSHED STONE

TON	LOCATION	REMARKS
360	SN 037-0172	141'-4"x32'-3"x12"
360	TOTAL	

Z0013798 CONSTRUCTION LAYOUT

L SUM	LOCATION	REMARKS
0.5	SN 037-0172	
0.5	TOTAL	

Z0030250 IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3

EACH	LOCATION	REMARKS
1	Sta. 723+79	Stage I
1	Sta. 727+67	Stage I
2	TOTAL	

Z0030260 IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3

EACH	LOCATION	REMARKS
1	Sta. 724+17	Stage II
1	Sta. 727+29	Stage II
2	TOTAL	

Z0030350 IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3

EACH	LOCATION	REMARKS
1	Sta. 724+17	Stage II
1	Sta. 727+29	Stage II
2	TOTAL	

X0323988 TEMPORARY SOIL RETENTION SYSTEM

SQ FT	LOCATION	REMARKS
430	SN 037-0172	
430	TOTAL	

LOCATION	20200100 EARTH EXCAVATION (CU YD)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (CU YD)	EMBANKMENT (CU YD)	EARTHWORK BALANCE WASTE (+) SHORTAGE (-) (CU YD)
RT STA. 726+01.80 TO 731+00	215	161	85	+76
RT STA. 721+50 TO 725+41.80	305	229	200	+29
LT STA. 726+01.80 TO 731+00	1230	922	525	+397
LT STA. 721+50 TO 725+41.80	250	188	80	+108
EXCAVATION FOR PR CULVERT	580*	435	310	+125
TOTALS	2580	1935	1200	+735

EXCAVATION USED AS EMBANKMENT = EARTH EXCAVATION * 0.75
*COST INCLUDED IN PRECAST CONCRETE BOX CULVERT AND BOX CULVERT END SECTIONS

FILE NAME = D264428-sht-schedule04.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - RJT	REVISED -
	PLOT SCALE = 0.0839 '/ IN.	CHECKED - ELH	REVISED -
	PLOT DATE = 3/24/2009 10:56:40 AM	DATE - 3/20/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	30
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HORIZONTAL AND VERTICAL CONTROL

CHAIN IL82 DESCRIPTION

Chain IL82 contains:
310 CUR 200 210 CUR 220 230 CUR 240 250 CUR 260 CUR 270 280 CUR 290 10

Beginning chain IL82 description

Point 310 N 1,686,670.0404 E 2,296,953.0212 Sta 544+36.8000

Course from 310 to PC 200 0° 11' 52.9395" Dist 3,573.5528

Curve Data

Curve 200
P.I. Station 585+53.9859 N 1,690,787.2018 E 2,296,967.2519
Delta = 0° 21' 44.7179" (LT)
Degree = 0° 02' 00.0002"
Tangent = 543.6332
Length = 1,087.2628
Radius = 171,886.9999
External = 0.8597
Long Chord = 1,087.2609
Mid. Ord. = 0.8597
P.C. Station 580+10.3528 N 1,690,243.5718 E 2,296,965.3729
P.T. Station 590+97.6155 N 1,691,330.8327 E 2,296,965.6922
C.C. N 1,690,837.6858 E 2,125,079.3997
Back = 0° 11' 52.9395"
Ahead = 359° 50' 08.2217"
Chord Bear = 0° 01' 00.5806"

Course from PT 200 to 210 359° 50' 08.2217" Dist 2,097.1956

Point 210 N 1,693,428.0197 E 2,296,959.6753 Sta 611+94.8111

Course from 210 to PC 220 359° 43' 49.7963" Dist 4,047.8477

Curve Data

Curve 220
P.I. Station 656+39.6999 N 1,697,872.8594 E 2,296,938.7680
Delta = 0° 37' 51.6843" (RT)
Degree = 0° 04' 46.0796"
Tangent = 397.0411
Length = 794.0743
Radius = 72,100.4990
External = 1.0932
Long Chord = 794.0703
Mid. Ord. = 1.0932
P.C. Station 652+42.6588 N 1,697,475.8226 E 2,296,940.6356
P.T. Station 660+36.7331 N 1,698,269.8926 E 2,296,941.2733
C.C. N 1,697,814.9591 E 2,369,040.3370
Back = 359° 43' 49.7963"
Ahead = 0° 21' 41.4806"
Chord Bear = 0° 02' 45.6385"

Course from PT 220 to 230 0° 21' 41.4806" Dist 4,946.9845

Point 230 N 1,703,216.7786 E 2,296,972.4873 Sta 709+83.7176

Course from 230 to PC 240 0° 29' 46.3397" Dist 5,047.5240

Curve Data

Curve 240
P.I. Station 765+31.2415 N 1,708,764.0946 E 2,297,020.5306
Delta = 0° 17' 37.1732" (LT)
Degree = 0° 01' 45.7175"
Tangent = 500.0000
Length = 999.9978
Radius = 195,109.3373
External = 0.6407
Long Chord = 999.9967
Mid. Ord. = 0.6407
P.C. Station 760+31.2415 N 1,708,264.1133 E 2,297,016.2004
P.T. Station 770+31.2393 N 1,709,264.0914 E 2,297,022.2981
C.C. N 1,709,953.8209 E 2,101,914.1800
Back = 0° 29' 46.3397"
Ahead = 0° 12' 09.1666"
Chord Bear = 0° 20' 57.7531"

Course from PT 240 to 250 0° 12' 09.1666" Dist 9,713.4707

Point 250 N 1,718,977.5015 E 2,297,056.6362 Sta 867+44.7101

Course from 250 to PC 260 0° 20' 15.9982" Dist 5,457.6237

Curve Data

Curve 260
P.I. Station 924+00.3603 N 1,724,633.0535 E 2,297,089.9779
Delta = 11° 59' 46.4759" (RT)
Degree = 3° 02' 24.2203"
Tangent = 198.0266
Length = 394.6053
Radius = 1,884.6917
External = 10.3749
Long Chord = 393.8849
Mid. Ord. = 10.3181
P.C. Station 922+02.3337 N 1,724,435.0303 E 2,297,088.8104
P.T. Station 925+96.9391 N 1,724,826.5094 E 2,297,132.2784
C.C. N 1,724,423.9195 E 2,298,973.4693
Back = 0° 20' 15.9982"
Ahead = 12° 20' 02.4741"
Chord Bear = 6° 20' 09.2362"

Course from PT 260 to PC 270 12° 20' 02.4741" Dist 3,040.8219

Curve Data

Curve 270
P.I. Station 958+89.5426 N 1,728,043.1161 E 2,297,835.6131
Delta = 0° 37' 37.5029" (LT)
Degree = 0° 07' 28.3102"
Tangent = 251.7816
Length = 503.5582
Radius = 46,009.3944
External = 0.6889
Long Chord = 503.5557
Mid. Ord. = 0.6889
P.C. Station 956+37.7610 N 1,727,797.1459 E 2,297,781.8299
P.T. Station 961+41.3192 N 1,728,289.6602 E 2,297,886.7010
C.C. N 1,737,625.2352 E 2,252,834.3824
Back = 12° 20' 02.4741"
Ahead = 11° 42' 24.9713"
Chord Bear = 12° 01' 13.7227"

Course from PT 270 to 280 11° 42' 24.9713" Dist 1,877.4576

Point 280 N 1,730,128.0634 E 2,298,267.6482 Sta 980+18.7768

Course from 280 to PC 290 11° 44' 24.7293" Dist 3,762.5977

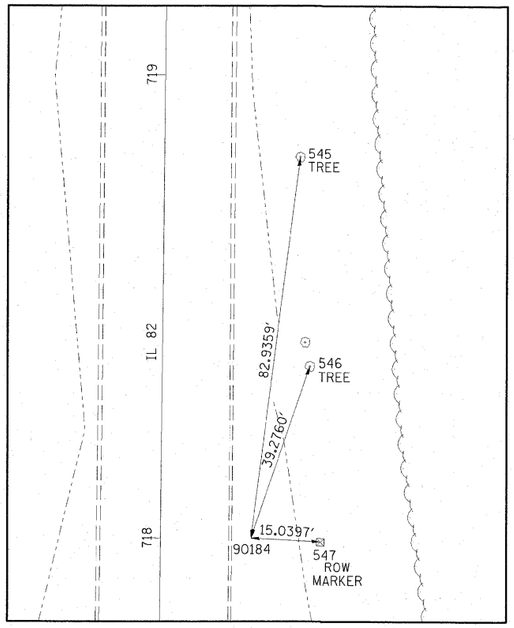
Curve Data

Curve 290
P.I. Station 1020+46.4385 N 1,734,071.4676 E 2,299,087.1740
Delta = 15° 39' 04.6343" (LT)
Degree = 2° 58' 15.0800"
Tangent = 265.0641
Length = 526.8276
Radius = 1,928.5953
External = 18.1299
Long Chord = 525.1911
Mid. Ord. = 17.9610
P.C. Station 1017+81.3744 N 1,733,811.9485 E 2,299,033.2402
P.T. Station 1023+08.2020 N 1,734,335.9144 E 2,299,069.0944
C.C. N 1,734,204.3682 E 2,297,144.9906
Back = 11° 44' 24.7293"
Ahead = 356° 05' 20.0949"
Chord Bear = 3° 54' 52.4121"

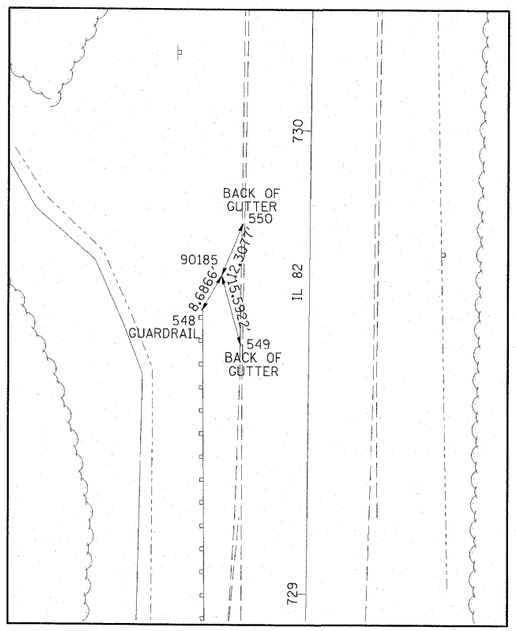
Course from PT 290 to 10 356° 05' 20.0949" Dist 1,628.2647

Point 10 N 1,735,960.3870 E 2,298,958.0332 Sta 1039+36.4667

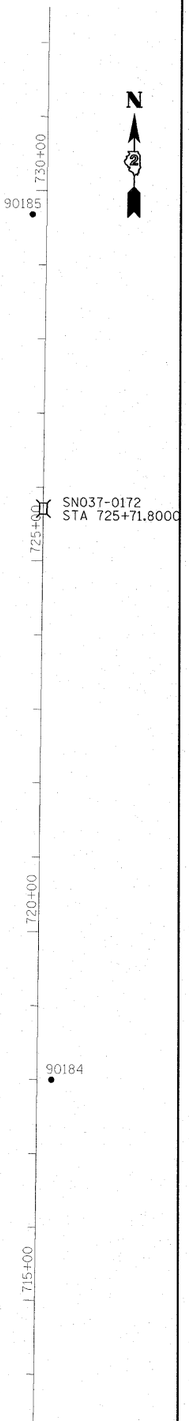
Ending chain IL82 description



HORIZONTAL CONTROL POINT NO. 90184



HORIZONTAL CONTROL POINT NO. 90185



HORIZONTAL CONTROL POINTS

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
90184	1704033.0300	2296999.1110	717.2680	IL82	718+00.1689	19.5537 RT	PIN
90185	1705201.6500	2296970.6550	685.7700	IL82	729+68.4986	19.0219 LT	PIN

BENCH MARKS

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
484	1704027.1150	2296938.3420	721.5690	IL82	717+93.7278	41.1618 LT	RIGHT OF WAY MARKER
485	1705247.8410	2296958.7030	684.3210	IL82	730+14.5844	31.3734 LT	FENCE POST

REFERENCE TIES

POINT	CHAIN	STATION	OFFSET	DESCRIPTION
545	IL82	718+82.5239	29.3528	DECIDUOUS TREE
546	IL82	718+37.4542	31.8993	DECIDUOUS TREE
547	IL82	717+99.4200	34.5747	RIGHT OF WAY MARKER
548	IL82	729+60.9029	-23.2362	STEEL PLATE BEAM GUARDRAIL
549	IL82	729+53.5185	-14.6960	BACK OF GUTTER
550	IL82	729+79.9315	-14.4647	BACK OF GUTTER

FILE NAME = D264428-sht-atb01.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - RJT	REVISED -
	PLOT SCALE = Ø.Ø839 ' / IN.	CHECKED - ELH	REVISED -
	PLOT DATE = 3/23/2009 12:00:38 PM	DATE - 03/13/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORIZONTAL & VERTICAL CONTROL

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	31
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
SPRINGFIELD, ILLINOIS

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

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

SECTION 29, T16N, R3E, 4TH PM

SCALE IN FEET
20 0 20 40

STA 721+50 IMPROVEMENTS BEGIN BUTT JOINT

TRANSITION GUTTER SECTION IN 30' TO MATCH EX

EX ROW

℄ FAP 638 (IL 82)

716 717 718 719 720+00 721

14'-0" 14'-0"

13'-0" 13'-0"

EX ROW

24" 18" 24"

EX 2' W x 3' T BOX CULVERT

STA. 721+00.00
34.60' RT.

CROPLINE (TYP)

STA. 722+00.00
45.00' RT.

MATCH LINE STA 722+00
SEE SHT. 33 FOR CONT.

LEGEND
- HMA SHOULDERS
- PAVEMENT REMOVAL
- CONSTRUCTION LIMITS
- HMA SURFACE REMOVAL - BUTT JOINT

ROBERT J. MARTIN AND MERLE E. MARTIN

SECTION 28, T16N, R3E, 4TH PM

730 725 720 715 710 705 700 695 690

EX PGL FAP 638

STA 721+50 IMPROVEMENTS BEGIN

STA 722+00

PR PGL FAP 638

1:240

721.40 720.18 719.24 718.56 718.17 717.53 716.66 715.35 713.75 711.91 709.49 706.84 703.99 704.20

716+00 716+50 717+00 717+50 718+00 718+50 719+00 719+50 720+00 720+50 721+00 721+50 722+00

FILE NAME = D264428-sht-plnprf01.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - JPC	REVISED -
	PLOT SCALE = 20.1465 ' / IN.	CHECKED - ELH	REVISED -
SCALES: (HORIZ) 1"=20' (VERT) 1"=5'	PLOT DATE = 3/23/2009 12:58:46 PM	DATE - 3/13/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 638 (IL 82) PLAN AND PROFILE
STA 716+00 TO STA 722+00

SCALE: 1"=20'-0" | SHEET NO. 1 OF 3 SHEETS | STA. 716+00 | TO STA. 722+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	32
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
SPRINGFIELD, ILLINOIS

SECTION 29, T16N, R3E, 4TH PM

SCALE IN FEET

MATCH LINE STA 722+00
SEE SHT. 32 FOR CONT.

MATCH LINE STA 728+00
SEE SHT. 34 FOR CONT.

PL

AGGREGATE BASE COURSE, TYPE B 6" THICKNESS

STA. 723+00.00
33.00' LT.

STA 723+70
NEW FE (AGG)

24'-0"

PAVED SHOULDER REMOVAL

EXISTING CONCRETE GUTTER TO BE REMOVED AND REPLACED WITH TYPE A (MODIFIED) CONCRETE GUTTER

STA. 724+50.00
50.00' LT.

PR ROW

EX ROW

CLASS SI CONCRETE (OUTLET)

WETLANDS

STONE RIPRAP, CLASS A4 4'x85'

NORTH BRANCH OF SPRING CREEK

STA. 725+25.00
95.00' LT.

STA. 726+25.00
95.00' LT.

STA 725+71.80
CENTER PR SN 037-0172
DOUBLE 12' SPAN x 9' RISE BOX CULVERT
142'-8" LENGTH
CENTER EX SN 037-0091
ONE SPAN BRIDGE TO BE REMOVED
26'-9" BACK TO BACK ABUTMENTS

STA. 728+00.00
75.00' LT.

EXISTING GUARDRAIL TO BE REMOVED

DWAYNE V. GRANT, ET AL

REALIGN TRIBUTARY TO FLATTEN SLOPES

℄ FAP 638 (IL 82)

722 | 723 | 724 | 725+00 | 726 | 727

+59 +28 +30 +87 +78 +68

13'-0" 13'-0"

PAVED SHOULDER REMOVAL

CLASS C PATCHES, TYPE IV, 13"

AGGREGATE SHOULDERS

STONE RIPRAP, CLASS A4 4'x10'

AGGREGATE SHOULDERS

EX ROW

PR ROW

EXISTING CONCRETE GUTTER TO BE REMOVED

CONSTRUCTION LIMITS (TYP)

CLASS SI CONCRETE (OUTLET)

STA. 722+17.58
45.00' RT.

REYNOLDS M. EVERETT, JR.

12'-0" 12'-0"

EXISTING CONCRETE GUTTER TO BE REMOVED

AGGREGATE BASE COURSE, TYPE B 6" THICKNESS

STA. 724+75.00
45.00' RT.

STA 724+98
FE (AGG)

725+41.80

726+01.80

WETLANDS

PAVED SHOULDER REMOVAL

EXISTING GUARDRAIL TO BE REMOVED

STA. 727+00.00
55.00' RT.

STA. 728+00.00
45.00' RT.

CONSTRUCTION LIMITS (TYP)

REYNOLDS M. EVERETT, JR.

STA. 725+25.00
90.00' RT.

STA. 726+00.00
90.00' RT.

DO NOT DISTURB WETLAND OUTSIDE OF PROPOSED ROW

BENCHMARK

CHISELED SQUARE ON SE HUBGUARD OF BRIDGE, SN 037-0091
STA 725+59.5, 21.1' RT.
ELEV. 685.95

LEGEND

- HMA SHOULDERS
- PAVEMENT REMOVAL
- CONSTRUCTION LIMITS
- HMA SURFACE REMOVAL - BUTT JOINT

SECTION 28, T16N, R3E, 4TH PM

PR PGL FAP 638

STA 722+00

2½" HMA RESURFACING

150' V.C.

STA 725+00

STA 726+50

2½" HMA RESURFACING

EXISTING STRUCTURE TO BE REMOVED

PR PGL FAP 638

EX PGL FAP 638

PROPOSED VERTICAL CURVE DATA
VPI STA 725+75
EL 685.21
LENGTH = 150.00'
E = 0.62'
g_1 = -4.08%
g_2 = -0.80%
VPC STA 725+00
VPI STA 726+50

10.0%

SPECIAL DITCH LT

PROPOSED DOUBLE BOX CULVERT 12' S x 9' R

2.0%

SPECIAL DITCH RT +00

1.0%

2.3%

SPECIAL DITCH LT

LIMITS OF TRENCH BACKFILL

700	695	690	685	680	675	670

703.99	704.20	700.95	701.16	697.98	698.19	695.07 (EX PGL)	695.28 (PR PGL)	692.40	692.61	690.09	690.30	688.06	688.27	686.04	686.50	684.93	685.28	684.40	684.61	683.86	684.07	683.78	683.99	684.07	684.28

722+00	722+50	723+00	723+50	724+00	724+50	725+00	725+50	726+00	726+50	727+00	727+50	728+00

FILE NAME = D264428-sht-plnprf01.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - JPC	REVISED -
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SCALES: (HORIZ) 1"=20' (VERT) 1"=5'	PLOT DATE = 3/23/2009 12:59:15 PM	DATE - 3/13/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 638 (IL 82) PLAN AND PROFILE
STA 722+00 TO STA 728+00

SCALE: 1"=20'-0" | SHEET NO. 2 OF 3 SHEETS | STA. 722+00 | TO STA. 728+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	33
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

PROFILE
SURVEYED
PLOTTED
CADD CHECKED
E.M. NOTED
STRUCTURE (NOTATING CRFH)
NOTE BOOK
NO.
BY
DATE

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
OSWEGO, ILLINOIS

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

MATCH LINE STA 728+00
SEE SHT. 33 FOR CONT.

SECTION 29, T16N, R3E, 4TH PM

N S E W

20 0 20 40
SCALE IN FEET

DWAYNE V. GRANT, ET AL

REALIGN TRIBUTARY TO FLATTEN SLOPES

STA. 729+75.00
75.00' LT.

PR ROW

CLASS SI CONCRETE (OUTLET)

AGGREGATE BASE COURSE, TYPE B 6" THICKNESS

STA 730+50 NEW FE (AGG)

EXISTING CONCRETE GUTTER TO BE REMOVED AND REPLACE WITH TYPE A (MODIFIED) CONCRETE GUTTER

STA. 731+00.00
45.00' LT.

STA. 733+00.00
40.00' LT.

EXISTING CONCRETE GUTTER TO BE REMOVED

EXISTING GUARDRAIL TO BE REMOVED

EX ROW

24'-0"

STONE RIPRAP, CLASS A4 4'x10'

AGGREGATE SHOULDERS

728 | 729 | 730+00 | 731 | 732 | 733

13'-0" 13'-0" +00

℄ FAP 638 (IL 82)

EX ROW

PR ROW

PR ROW

EXISTING CONCRETE GUTTER TO BE REMOVED

CROPLINE (TYP)

STONE RIPRAP, CLASS A4 4'x10'

CLASS SI CONCRETE (OUTLET)

STA. 730+00.00
45.00' RT.

TRANSITION GUTTER SECTION IN 30' TO MATCH EX

CONSTRUCTION LIMITS

STA. 731+29.32
32.00' RT.

CROPLINE (TYP)

LEGEND

- HMA SHOULDERS
- PAVEMENT REMOVAL
- CONSTRUCTION LIMITS
- HMA SURFACE REMOVAL - BUTT JOINT

REYNOLDS M. EVERETT, JR.

SECTION 28, T16N, R3E, 4TH PM

STA 731+00 IMPROVEMENTS END BUTT JOINT

PROFILE	DATE
SURVEYED	BY
PLOTTED	
CROSS CHECKED	
BLM. NOTED	
STRUCTURE NOTATNS CHKD	
NOTE BOOK	
NO.	

710 705 700 695 690 685 680 675 670

2½" HMA RESURFACING

STA 731+00 IMPROVEMENTS END

EX PGL FAP 638

PR PGL FAP 638

1:240

2.0% SPECIAL DITCH RT

1.0% SPECIAL DITCH LT

684.07 | 684.71 **684.92** | 685.53 **685.74** | 686.52 **686.73** | 687.90 (EX PGL) **688.11 (PR PGL)** | 689.38 **689.59** | 691.02 **691.02** | 693.05 | 695.17 | 697.37 | 699.81 | 702.23 | 704.64

728+00 | 728+50 | 729+00 | 729+50 | 730+00 | 730+50 | 731+00 | 731+50 | 732+00 | 732+50 | 733+00 | 733+50 | 734+00

FILE NAME = 0264428-sht-plnprf01.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - JPC	REVISED -
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SCALES: (HORIZ) 1"=20' (VERT) 1"=5'	PLOT DATE = 3/23/2009 12:59:27 PM	DATE - 3/13/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 638 (IL 82) PLAN AND PROFILE
STA 728+00 TO STA 734+00

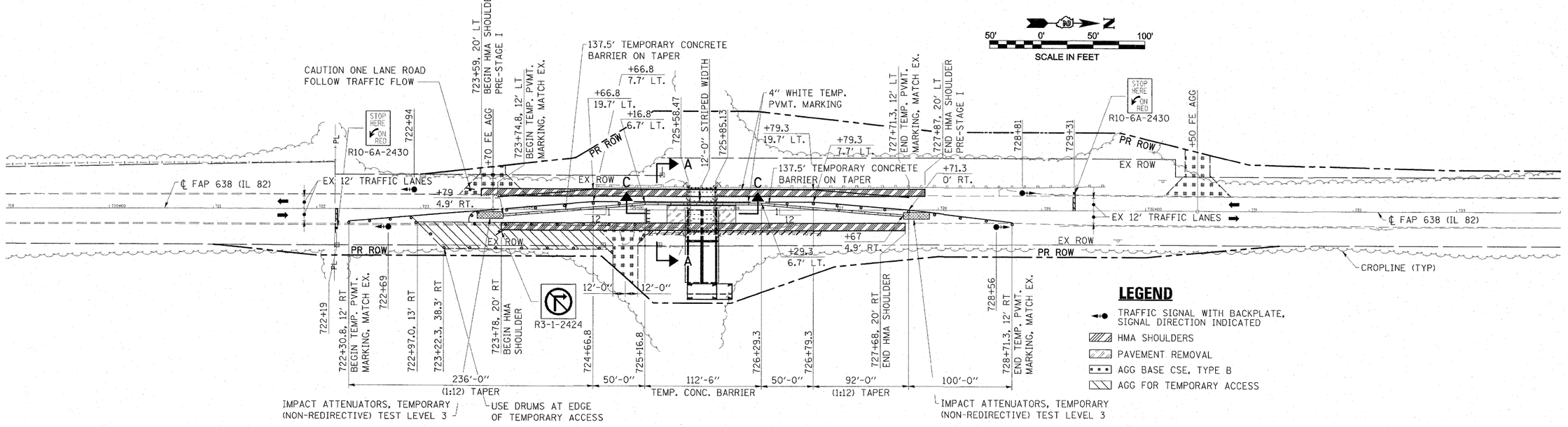
SCALE: 1"=20'-0" | SHEET NO. 3 OF 3 SHEETS | STA. 728+00 | TO STA. 734+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	34
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
SPRINGFIELD, ILLINOIS

GENERAL NOTES

1. TRAFFIC CONTROL SHALL BE ERECTED AS SHOWN AND ACCORDING TO "TRAFFIC CONTROL AND PROTECTION, STANDARD 701321."
2. SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.
3. COORDINATE LOCATION OF SIGNALS WITH FINAL WORK AS DIRECTED BY THE ENGINEER.
4. CONSTRUCT TEMPORARY RUMBLE STRIPS AT LOCATIONS SHOWN ON STANDARD 701321.
5. ADDITIONAL SIGNAGE AND BARRICADES SHOWN FOR SIDE-ROADS AND ENTRANCES SHALL BE INCLUDED IN THE COST OF STANDARD 701321.



LEGEND

- TRAFFIC SIGNAL WITH BACKPLATE, SIGNAL DIRECTION INDICATED
- HMA SHOULDERS
- PAVEMENT REMOVAL
- AGG BASE CSE, TYPE B
- AGG FOR TEMPORARY ACCESS

FILE NAME = D264428-sht-staging01.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - JPC	REVISED -
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	PLOT DATE = 3/24/2009 6:17:14 AM	DATE - 3/20/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE I CONSTRUCTION

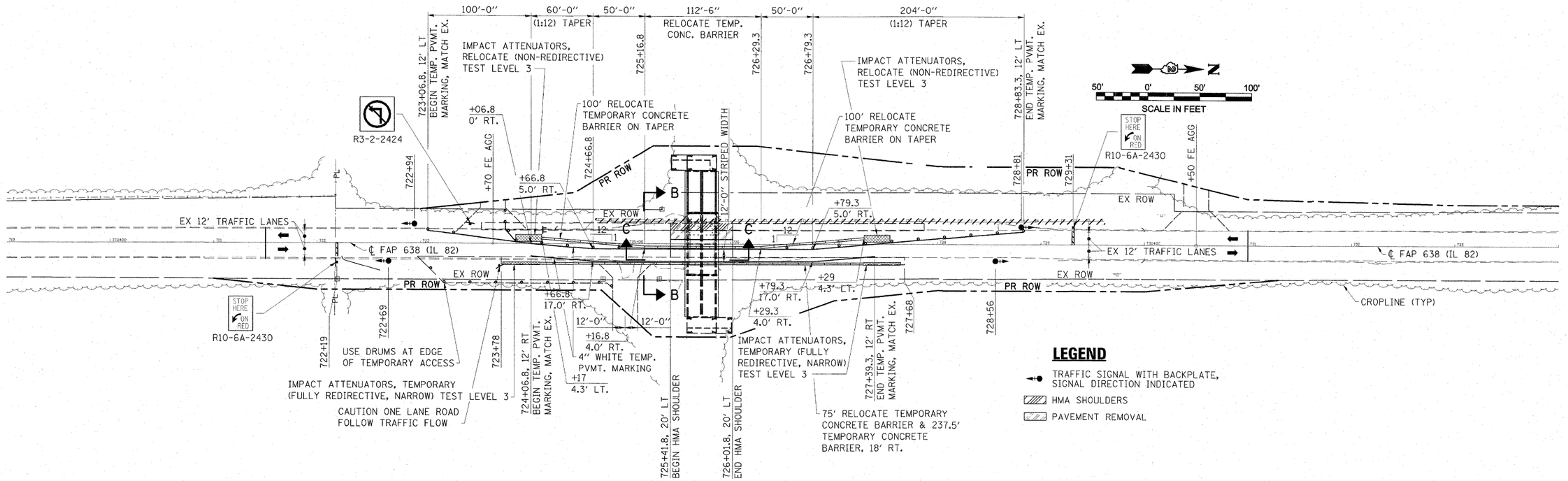
SCALE: 1"=50'-0" | SHEET NO. 1 OF 1 SHEETS | STA. 719+00 TO STA. 734+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	35
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
GEOTECHNICAL ENGINEERS

GENERAL NOTES

1. TRAFFIC CONTROL SHALL BE ERECTED AS SHOWN AND ACCORDING TO "TRAFFIC CONTROL AND PROTECTION, STANDARD 701321."
2. SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.
3. COORDINATE LOCATION OF SIGNALS WITH FINAL WORK AS DIRECTED BY THE ENGINEER.
4. CONSTRUCT TEMPORARY RUMBLE STRIPS AT LOCATIONS SHOWN ON STANDARD 701321.
5. ADDITIONAL SIGNAGE AND BARRICADES SHOWN FOR SIDE-ROADS AND ENTRANCES SHALL BE INCLUDED IN THE COST OF STANDARD 701321.



LEGEND

- TRAFFIC SIGNAL WITH BACKPLATE, SIGNAL DIRECTION INDICATED
- HMA SHOULDERS
- PAVEMENT REMOVAL

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	PLOT DATE = 3/24/2009 6:17:20 AM	DATE - 3/20/09	REVISED -

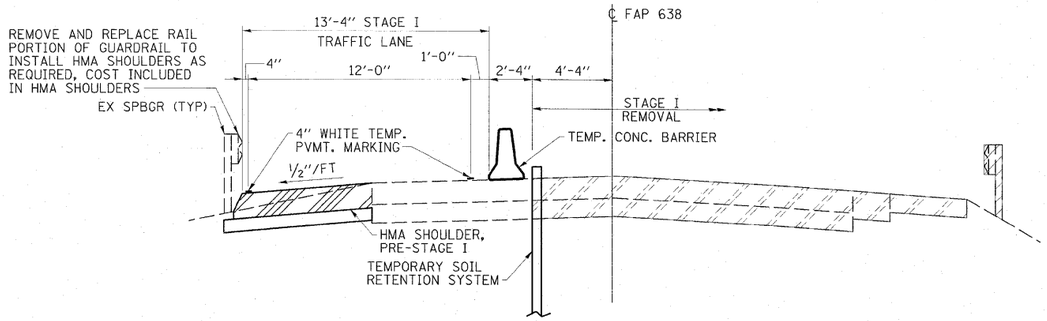
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

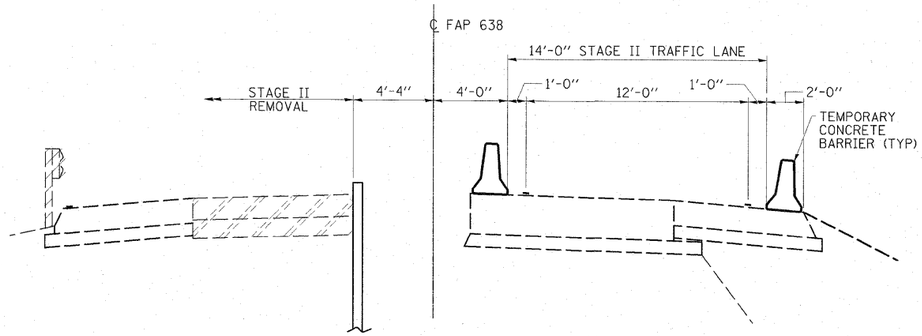
STAGE II CONSTRUCTION

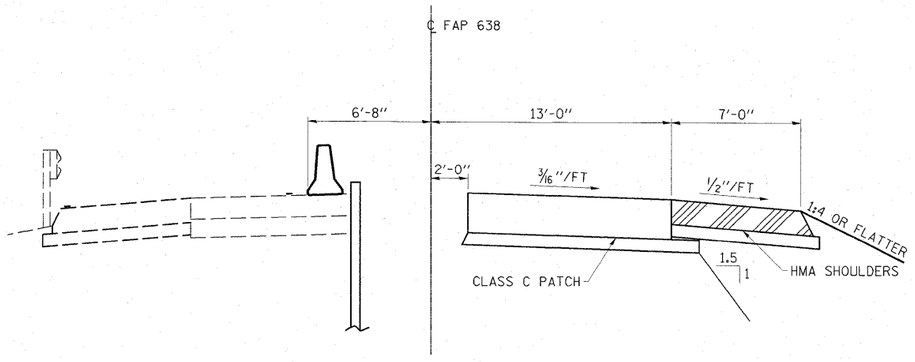
SCALE: 1"=50'-0" | SHEET NO. 1 OF 1 SHEETS | STA. 719+00 | TO STA. 734+00

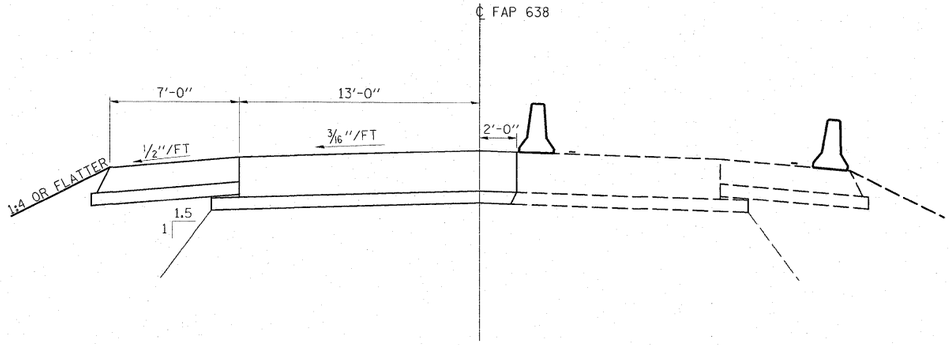
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	36
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
& LAND SURVEYORS



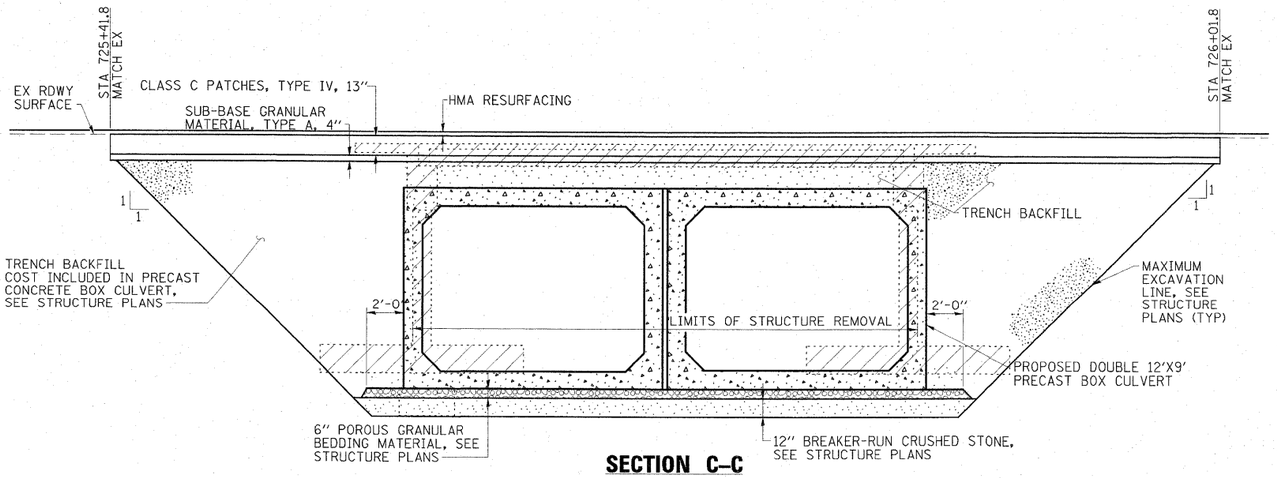






SECTION A–A (STAGE I)

SECTION B–B (STAGE II)



SECTION C–C

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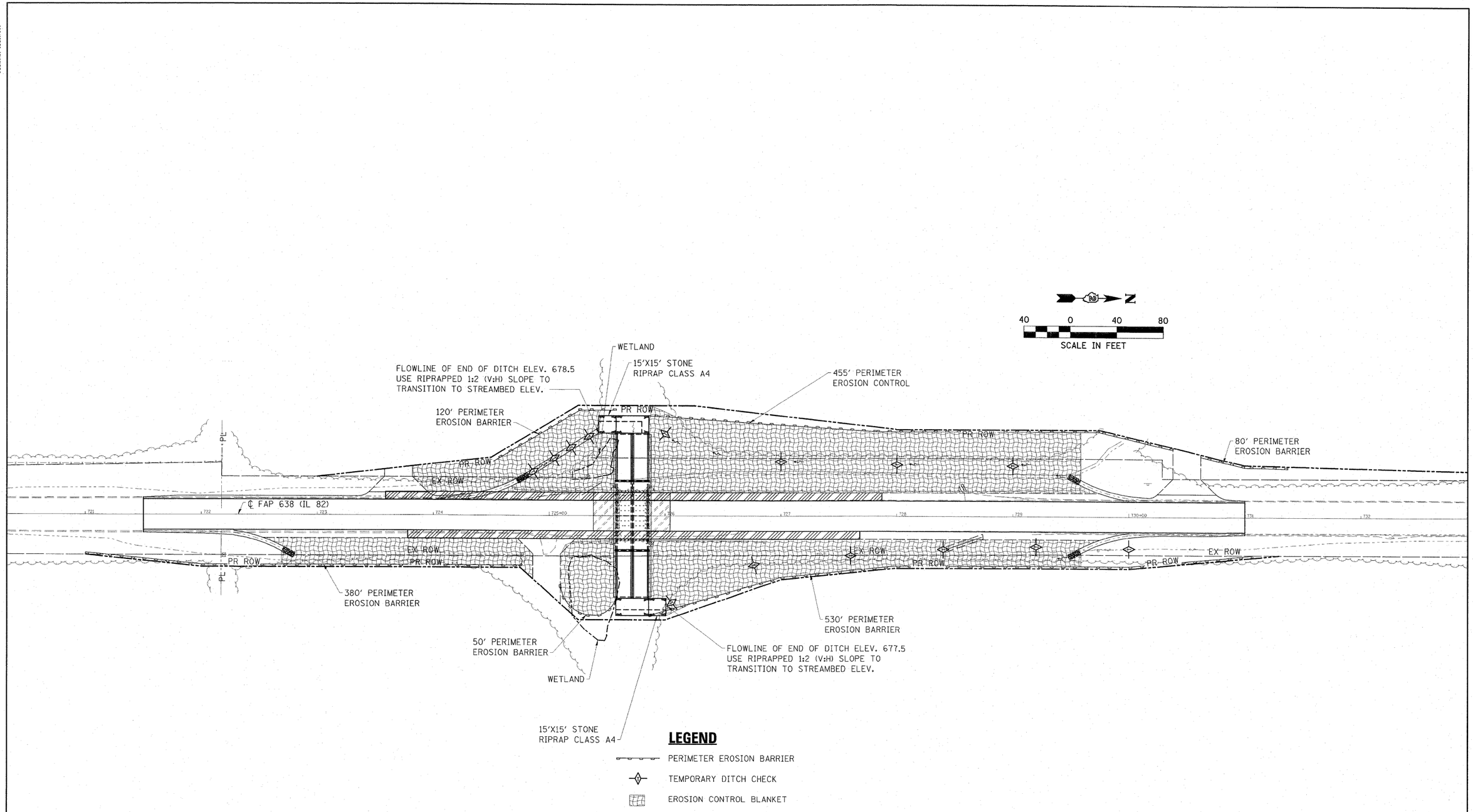
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS

SCALE: 1/4"=1'-0" | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	37
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
GENEVA, ILLINOIS



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PLOT DATE = 3/23/2009 1:05:00 PM	DATE - 3/13/09	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

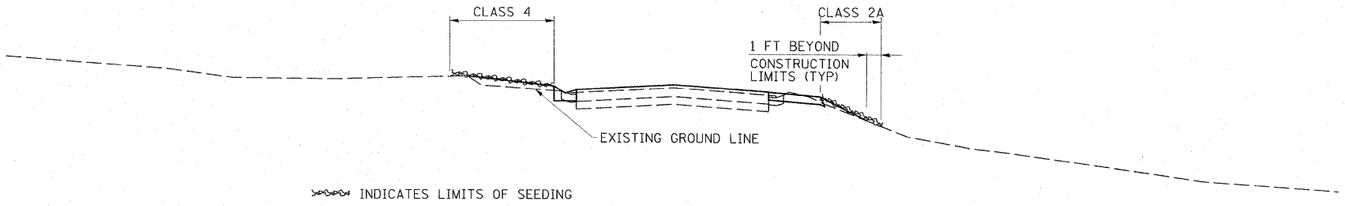
EROSION CONTROL AND DRAINAGE PLAN

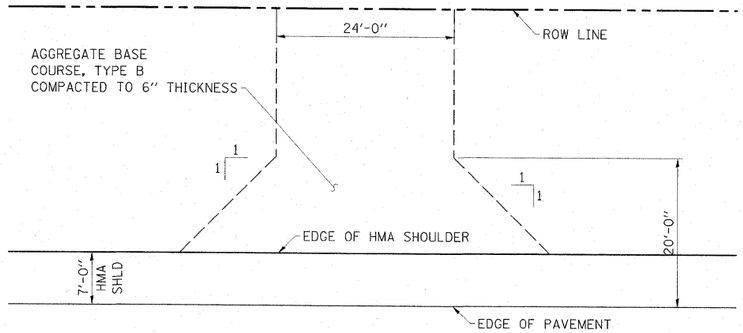
SCALE: 1"=40'-0" | SHEET NO. 1 OF 1 SHEETS | STA. 720+00 TO STA. 733+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	38
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

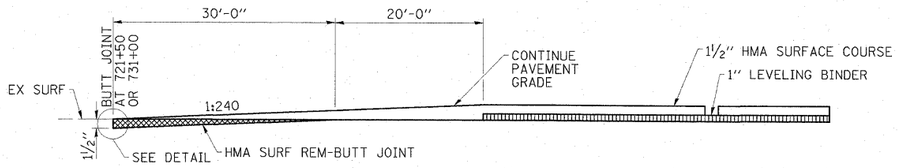
ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
SPRINGFIELD, ILLINOIS

SEEDING

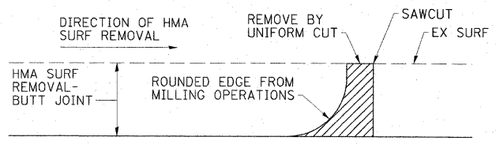




FIELD ENTRANCE AT HMA SHOULDER

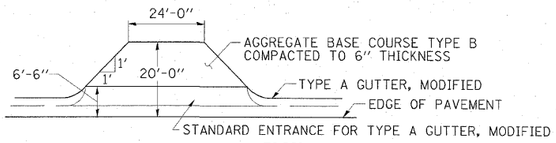


TYPICAL BUTT JOINT SECTION
SN 037-0172



DETAIL AT BUTT JOINT

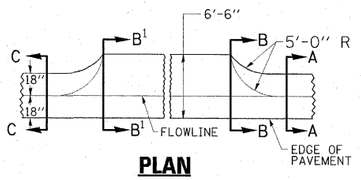
NOTE:
WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAWCUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE COST OF ALL WORK SHOWN IN THE DETAIL IS INCLUDED IN HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL.



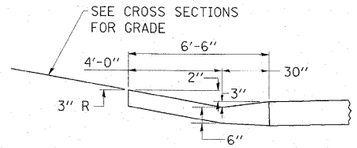
PLAN

FIELD ENTRANCE AT GUTTER

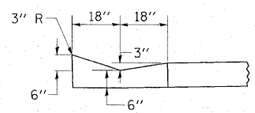
NOTE:
THE GUTTER ENTRANCE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR CLASS SI CONCRETE (OUTLET)



PLAN



SECTION B-B & B^1 - B^1



SECTION A-A & C-C

QUANTITIES

SECTION B-B TO B^1-B^1 = 0.13 CU. YD. PER LINEAL FOOT
SECTION C-C TO B^1-B^1 + B-B TO A-A = 0.85 CU. YD.

FILE NAME = D264428-sht-details10.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	39
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

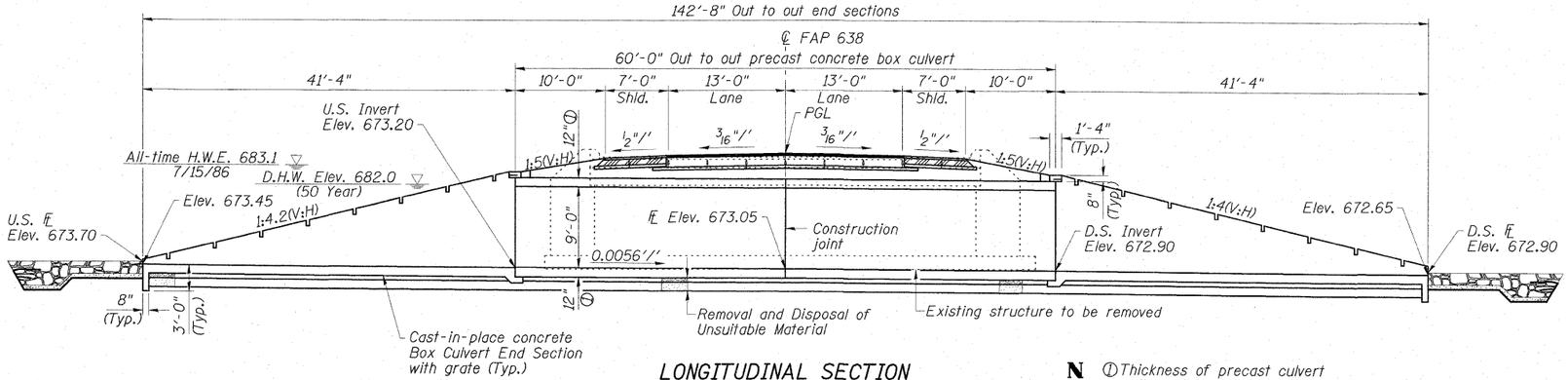
BENCHMARK: Chiseled square on SE hubguard of bridge, SN 037-0091
Sta. 725+59.5, 21.1' Rt.
Elev. 685.95

EXISTING STRUCTURE:
SN 037-0091 was originally built in 1927 as Section 136. The superstructure originally consisted of a concrete slab superstructure on closed abutments. The superstructure was replaced with ten, 4'-4" wide, 11" thick PPC deck beams in 1974 as Section 136BR. The deck width is 43'-4", and the length is 26'-9" back to back of abutments. The existing structure is to be removed and replaced. One lane of traffic will be maintained utilizing stage construction.

No salvage.

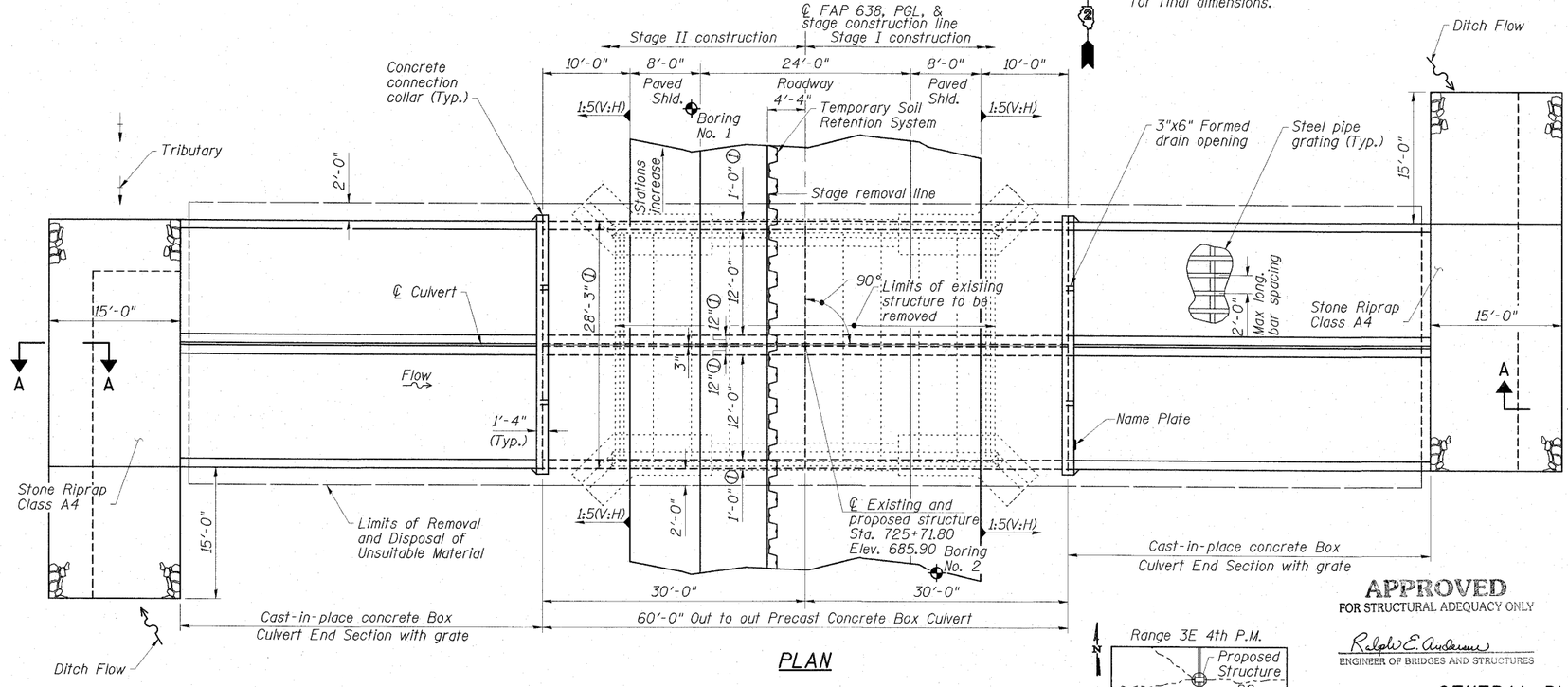
STRUCTURE INDEX OF SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

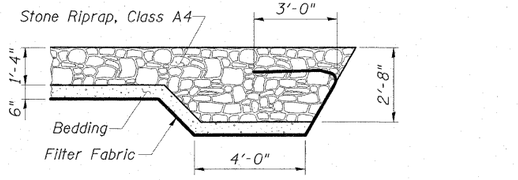


LONGITUDINAL SECTION
(Looking North)

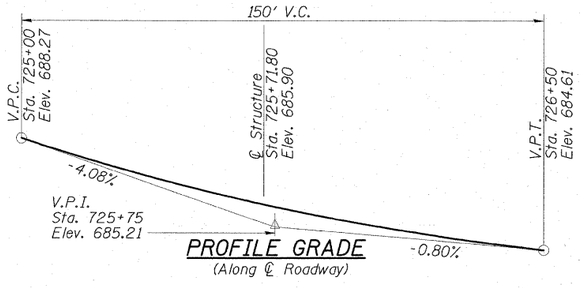
① Thickness of precast culvert walls and slabs shall be verified on shop drawings and coordinated for final dimensions.



PLAN



SECTION A-A



PROFILE GRADE
(Along ℄ Roadway)

WATERWAY INFORMATION

Drainage Area = 2.65 Sq. Mi.
Exist. Low Grade Elev. = 683.76 Ft. @ Sta. 727+70
Prop. Low Grade Elev. = 683.97 Ft. @ Sta. 727+70

Flood	Frequency Year	Discharge (cfs)	Waterway Opening (Sq. Ft.)		Nat. H.W.E.	Head (Ft.)		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
	10	602	154	194	681.3	0.1	0.0	681.4	681.3
Design	50	967	171	211	682.0	0.4	0.1	682.4	682.1
Base	100	1127	176	216	682.2	0.5	0.3	682.7	682.5
Overtopping	340	1447	186	-	682.6	0.9	-	683.5	-
Max Calc.	500	1515	-	216	682.6	-	0.8	-	683.4

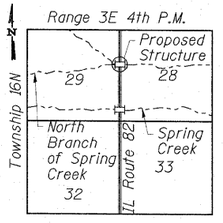
SCOUR INFORMATION

Design Scour Elevation (Ft.)	Upstream	Downstream
	670.4	669.7

DESIGN SPECIFICATIONS
2002 AASHTO

LOADING HS20-44
Allow 50 psf for future wearing surface.

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)
PRECAST UNITS
f'c = 5,000 psi
fy = 65,000 psi (WWF)



LOCATION SKETCH

STATE OF ILLINOIS
RICHARD D. PAYNE
No. 4647
LICENSED STRUCTURAL ENGINEER
EXPIRES 11-30-09

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

Richard D. Payne
SIGNATURE

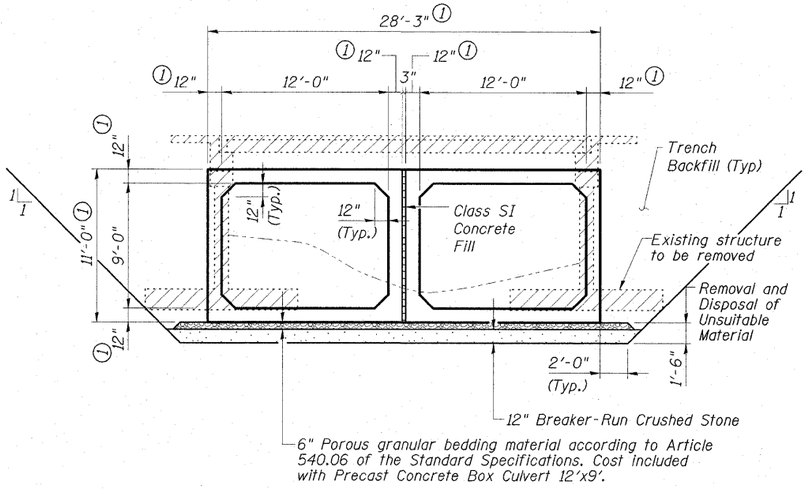
11-21-08
DATE

GENERAL PLAN
IL 82 OVER
NORTH BRANCH OF SPRING CREEK
FAP ROUTE 638 - SECTION 136BR-1
HENRY COUNTY
STATION 725+71.80
STRUCTURE NO. 037-0172

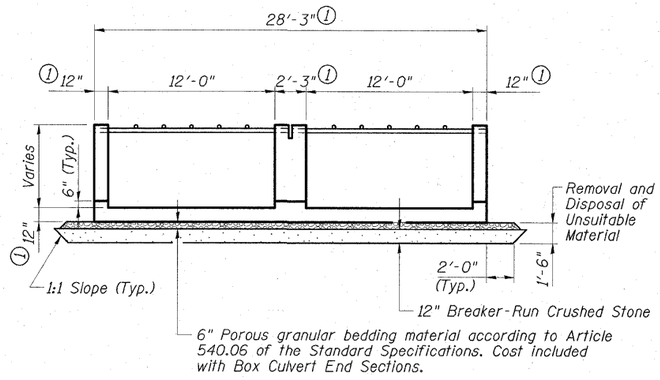
SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7 SHEETS	638	136BR-1	HENRY	67	40
			CONTRACT NO. 64428		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.		
DESIGNED BY:	DAJ	11/08
DRAWN BY:	cj	11/08
CHECKED BY:	ELH	03/09
APPROVED BY:	RDP	03/09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION THRU BARREL



SECTION THRU END SECTION

(1) Thickness of precast culvert walls and slabs shall be verified on shop drawings and coordinated for final dimensions.

GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
2. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
3. The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal of the superstructure.
4. If the Contractor's procedure for existing deck beam removal involves placement of cranes or other heavy equipment on the existing deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Costs included in Removal of Existing Structures.
5. Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
6. The boring logs for this structure indicate that groundwater levels may encroach on the construction limits of this culvert. It shall be the responsibility of the Contractor to control the ground water and divert the stream flow during construction in order to keep the construction area free of water. The method of controlling the water shall be subject to approval of the Engineer and the cost shall be included in the contract unit price for Precast Concrete Box Culvert 12'x9'.
7. Placement and compaction of the backfill for proposed across road culverts and existing across road culverts that are removed shall conform to section 502.10 of the Standard Specifications, except that the material shall conform to Article 208.02 of the Standard Specifications, and shall be compacted to a minimum of 95% of the standard laboratory density. Any material conforming to the requirements of Article 1003.04 or 1004.05 which has been excavated from the trenches shall be used for backfilling the trenches. The excavation shall be backfilled with trench backfill material to the bottom of the proposed subgrade and as shown in the Roadway Plans. This trench backfill material will not be measured for payment, but shall be included in the contract unit price for Precast Concrete Box Culverts.
8. Precast concrete box culvert slab and wall thickness are to be taken from AASHTO material specifications. If the Fabricator chooses to alter dimensions, it must be approved by the Engineer, and the calculations shall be prepared and sealed by an Illinois Licensed Structural Engineer.
9. All labor and material required for the construction of the connection collar shall be included in Box Culvert End Sections.
10. Box culvert end sections are to be cast-in-place. Contractor has the option of using precast end sections, but the design of the reinforcement is the Contractor's responsibility and shall be approved by the Engineer. If the Contractor elects to use precast end sections, no adjustments in costs of the end sections will be allowed.
11. The precast concrete box culvert and end sections shall conform to the requirements of AASHTO M273 (design fill height < 2'-0").
12. Culvert flows must be maintained throughout the project. Normal flow shall be allowed to pass at the rate it enters the jobsite. High flows shall be allowed to pass without causing damage to upstream properties.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Stone Riprap, Class A4	Sq. Yd.	145
Filter Fabric	Sq. Yd.	145
Removal of Existing Structures No. 2	Each	1
Box Culvert End Sections	Each	2
Precast Concrete Box Culvert 12'x9' (M273)	Foot	120
Grating (Special)	Each	4
Removal and Disposal of Unsuitable Material	Cu. Yds.	265
Breaker-Run Crushed Stone	Ton	360
Name Plates	Each	1
Temporary Soil Retention System	Sq. Ft.	430
Asbestos Bearing Pad Removal	Each	20

See Roadway Plans for quantities of Temporary Concrete Barrier and Excavation.

STATION 725+71.80
BUILT 200_ BY
STATE OF ILLINOIS
F.A. RT. 638 SEC. 136BR-1
LOADING HS20-44
STR. NO. 037-0172

NAME PLATE

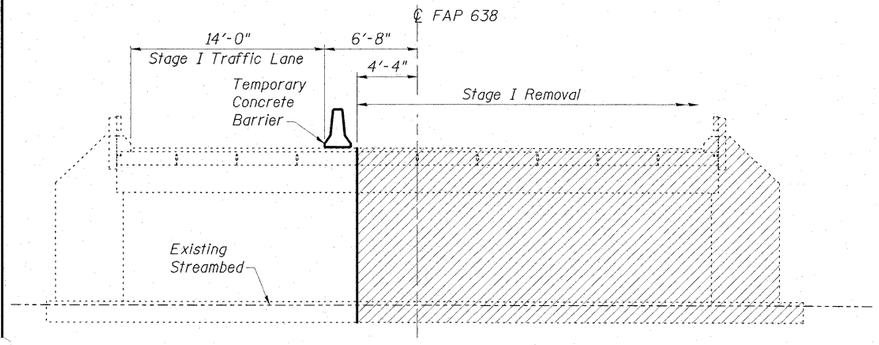
See Std. 515001

ESCA CONSULTANTS, INC.		
DESIGNED BY:	DAJ	11/08
DRAWN BY:	cj	11/08
CHECKED BY:	ELH	12/08
APPROVED BY:	RDP	12/08

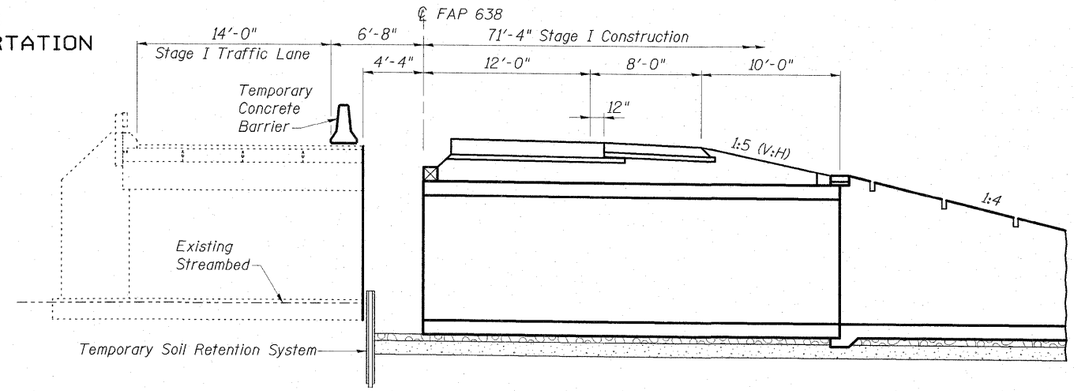
GENERAL DATA
STRUCTURE NO. 037-0172

SHEET NO. 2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7 SHEETS	638	136BR-1	HENRY	67	41
			CONTRACT NO. 64428		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



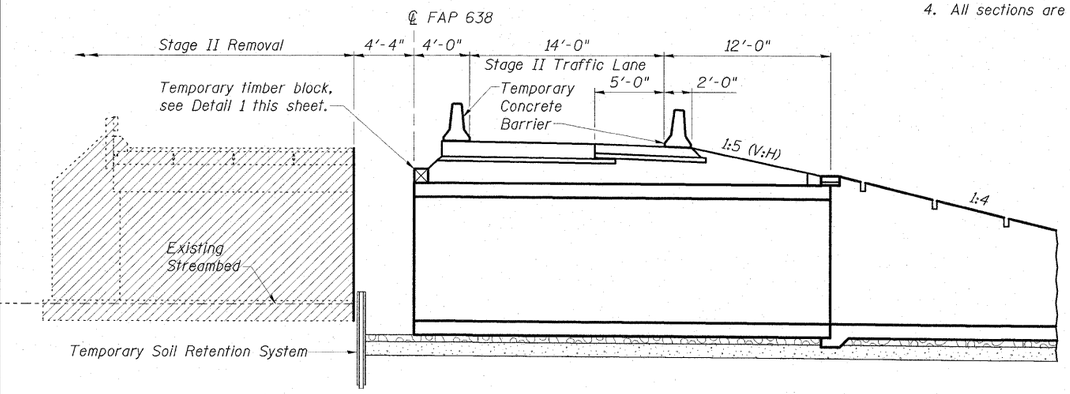
STAGE I REMOVAL

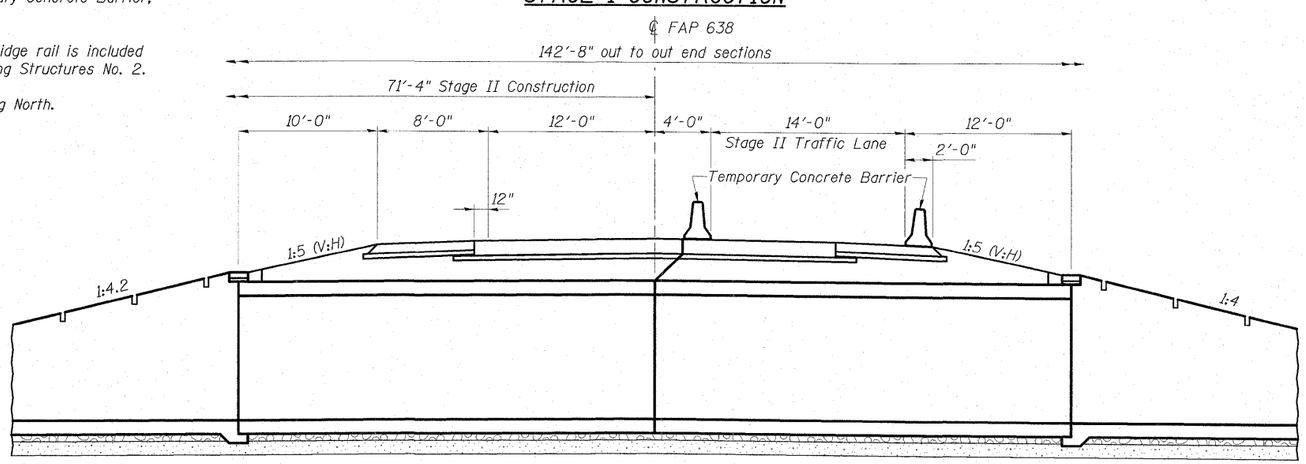


STAGE I CONSTRUCTION

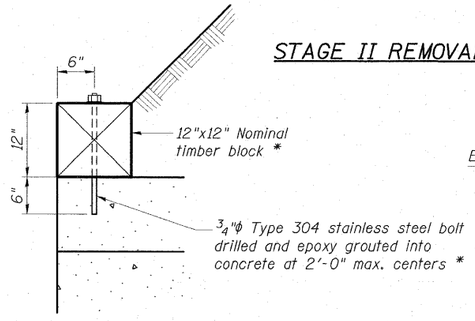
STAGE CONSTRUCTION NOTES

1. Hatched areas indicate Removal of Existing Structures.
2. For details of Temporary Concrete Barrier, see Sheet. No. 7 of 7.
3. Removal of existing bridge rail is included wth Removal of Existing Structures No. 2.
4. All sections are looking North.





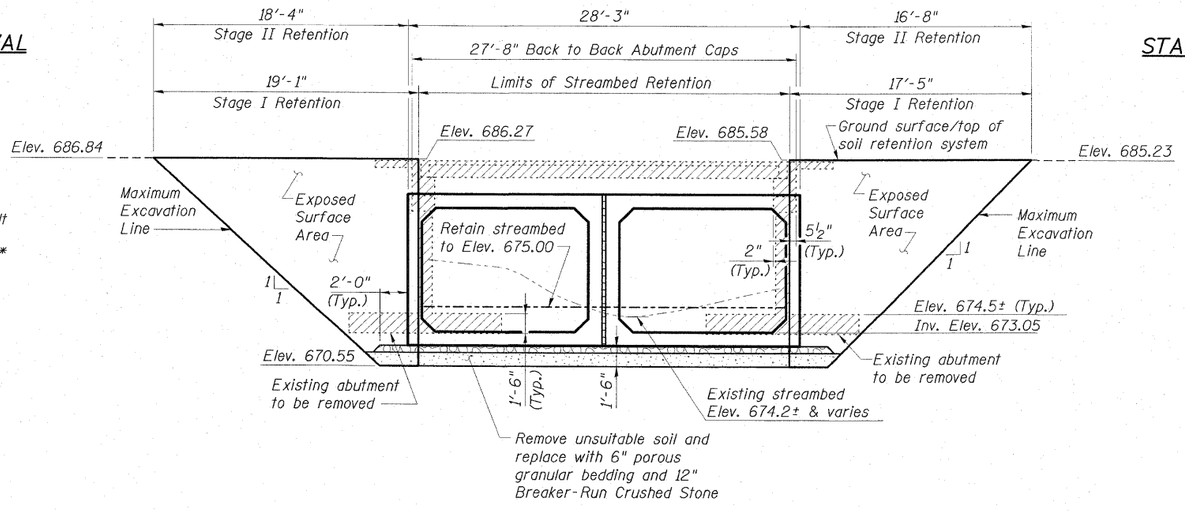
STAGE II REMOVAL



* Cost of installation and removal included in Precast Concrete Box Culverts.

DETAIL 1

STAGE II CONSTRUCTION



TEMPORARY SOIL RETENTION SYSTEM LIMITS

(Looking West)

Note: Dimensions along ℄ of FAP 638

TEMPORARY SOIL RETENTION SYSTEM NOTES

1. Existing structure details are based on the best available information from existing bridge plans.
2. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a Temporary Soil Retention System design including plan details and calculations for review and acceptance by the Engineer.
3. Adjust retention lengths as necessary for actual precast box culvert dimensions.

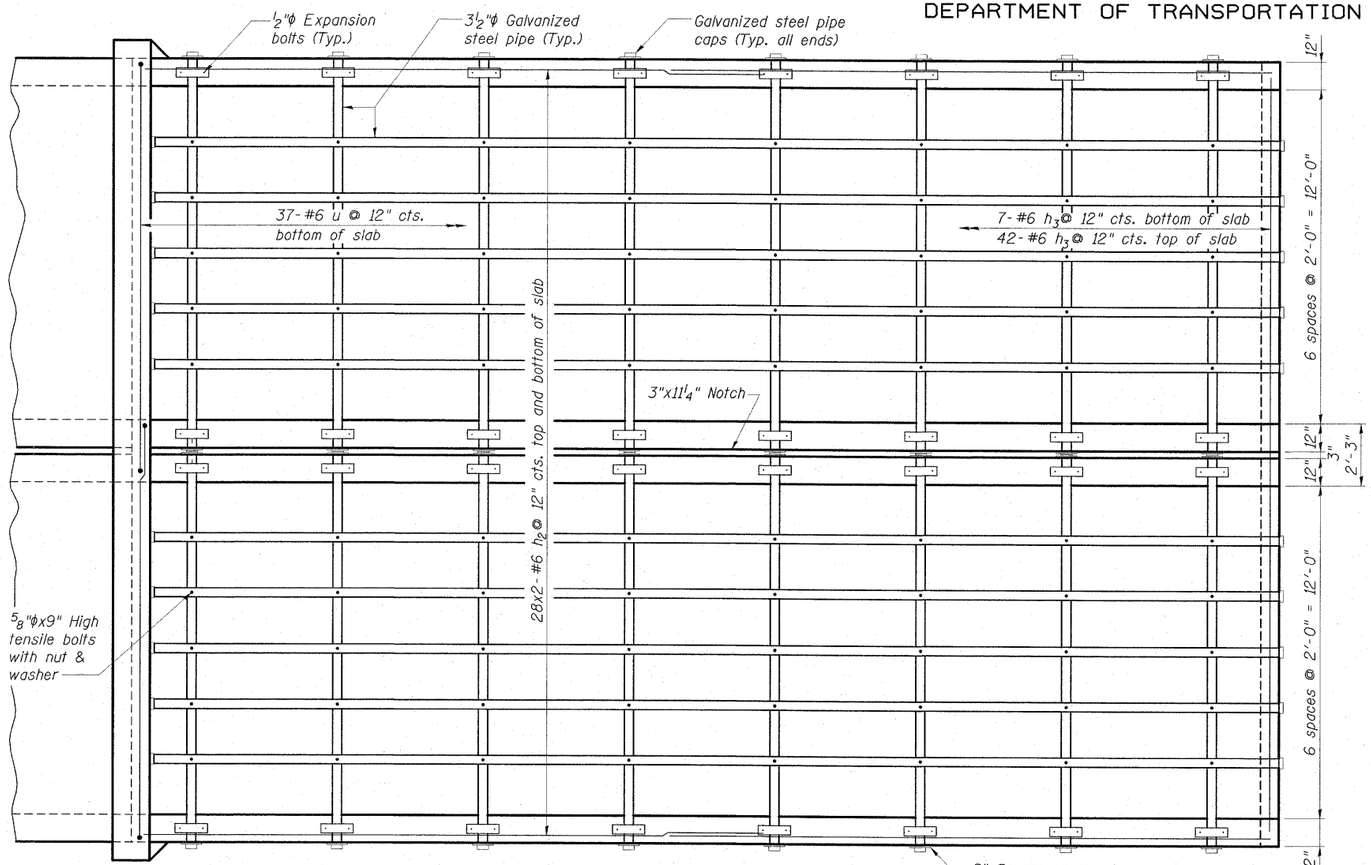
STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 037-0172

DESIGNED BY:	DAJ	11/08
DRAWN BY:	cj	11/08
CHECKED BY:	ELH	03/09
APPROVED BY:	RDP	03/09

ESCA CONSULTANTS, INC.

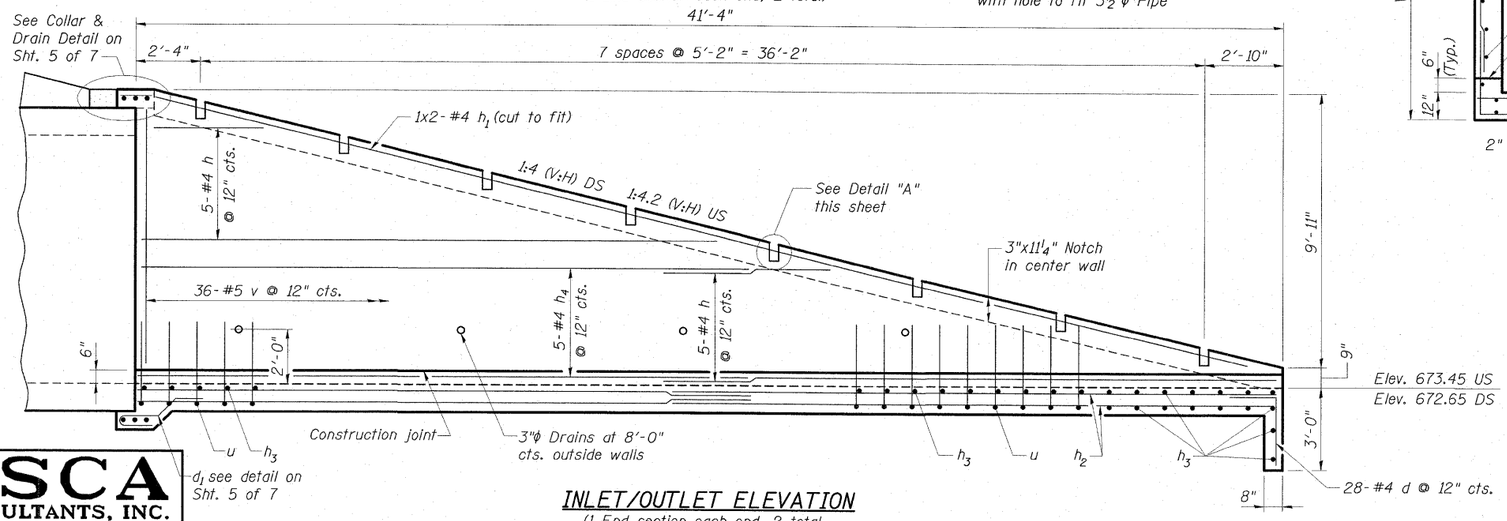
SHEET NO. 3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7 SHEETS	638	136BR-1	HENRY	67	42
			CONTRACT NO. 64428		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



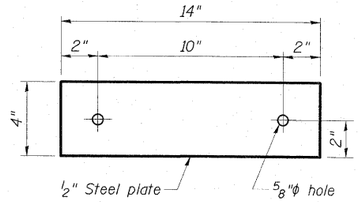
INLET/OUTLET PLAN

(1 End section each end, 2 total)



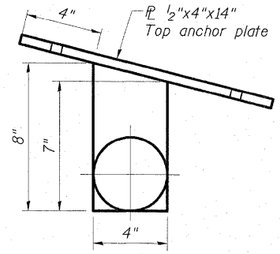
INLET/OUTLET ELEVATION

(1 End section each end, 2 total; Reinforcement shown for end walls and each face of center wall)



TOP ANCHOR PLATE

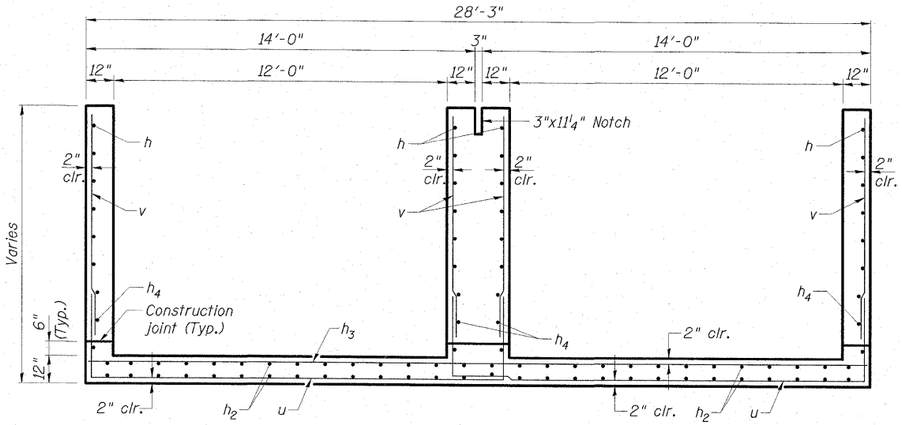
(16 Each section)
(64 Total)



DETAIL "A"

GENERAL NOTES

1. Steel pipes shall conform to ASTM A-53 (type E or S) grade B, schedule 40, & shall be galvanized conforming to ASTM A-120.
2. Steel plates shall conform to AASHTO M-183 & shall be galvanized conforming to AASHTO M-111.
3. Bolts, nuts and washers shall be in accordance with article 1006.08 of the standard specifications and shall be galvanized.
4. The contract unit price "each" for Box Culvert End Section shall include the reinforcement bars and class SI concrete. The contract unit price "each" for Grating (Special) shall include the galvanized pipes, bolts, nuts, washers, and steel plates.
5. Provide 2" clearance for all bars unless noted otherwise.
6. Make adjustments as necessary to match the dimensions of the precast concrete box culverts.
7. Order v and h bars full length, field cut to fit as shown, use remainder of v bars in another wall, and use remainder of h bars in same wall.



SECTION THRU INLET/OUTLET

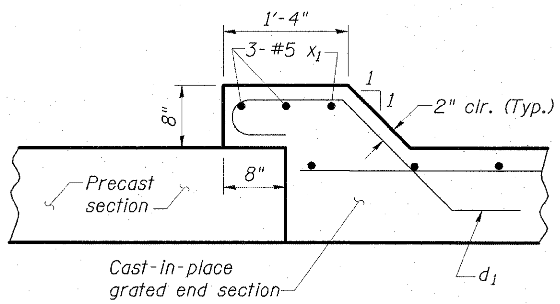
BOX CULVERT DETAILS
STRUCTURE NO. 037-0172

DESIGNED BY:	DAJ	11/08
DRAWN BY:	cj	11/08
CHECKED BY:	ELH	03/09
APPROVED BY:	RDP	03/09

ESCA CONSULTANTS, INC.

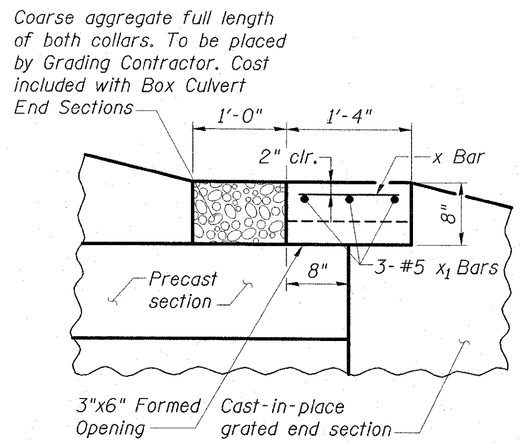
SHEET NO. 4	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7 SHEETS	638	136BR-1	HENRY	67	43
			CONTRACT NO. 64428		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

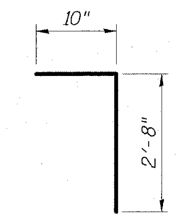


PRECAST BOX CULVERT TO CAST-IN-PLACE END SECTION CONNECTION COLLAR

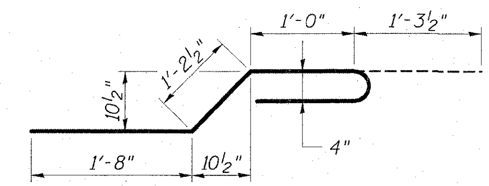
(Use on bottom and each side)



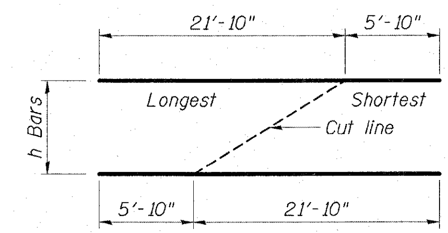
COLLAR & DRAIN DETAIL



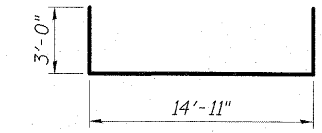
BAR d



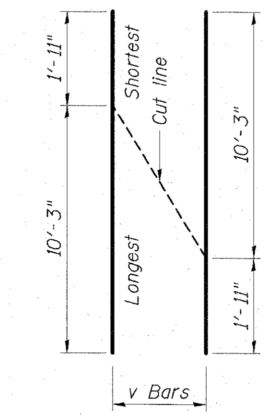
BAR d_1



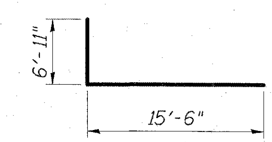
BAR h CUT DIAGRAM



BAR u



BAR v CUT DIAGRAM



BAR x_1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d	56	#4	4'-6"	┐
d_1	104	#4	5'-2"	
h	40	#4	27'-8"	——
h_1	16	#4	19'-8"	——
h_2	224	#6	21'-4"	——
h_3	102	#6	27'-9"	——
h_4	40	#4	21'-10"	——
u	148	#6	20'-11"	└─┘
v	144	#5	12'-2"	——
x	60	#5	1'-0"	——
x_1	24	#5	22'-5"	└─

Item	Unit	Quantity
3½"ϕ Galvanized Steel Pipe	Each	20 @ 41'-11" 32 @ 14'-2"
½"x4"x14" Galvanized Anchor Plate	Each	64
⅝"ϕx9" Galvanized Bolts	Each	160
½"ϕ Galvanized Expansion Bolts	Each	128
9" Square or Round ¼" Galvanized Plate	Each	64
Galvanized Steel Pipe Caps	Each	104
Concrete Structures	Cu. Yd.	170
Reinforcement Bars	Pound	20600

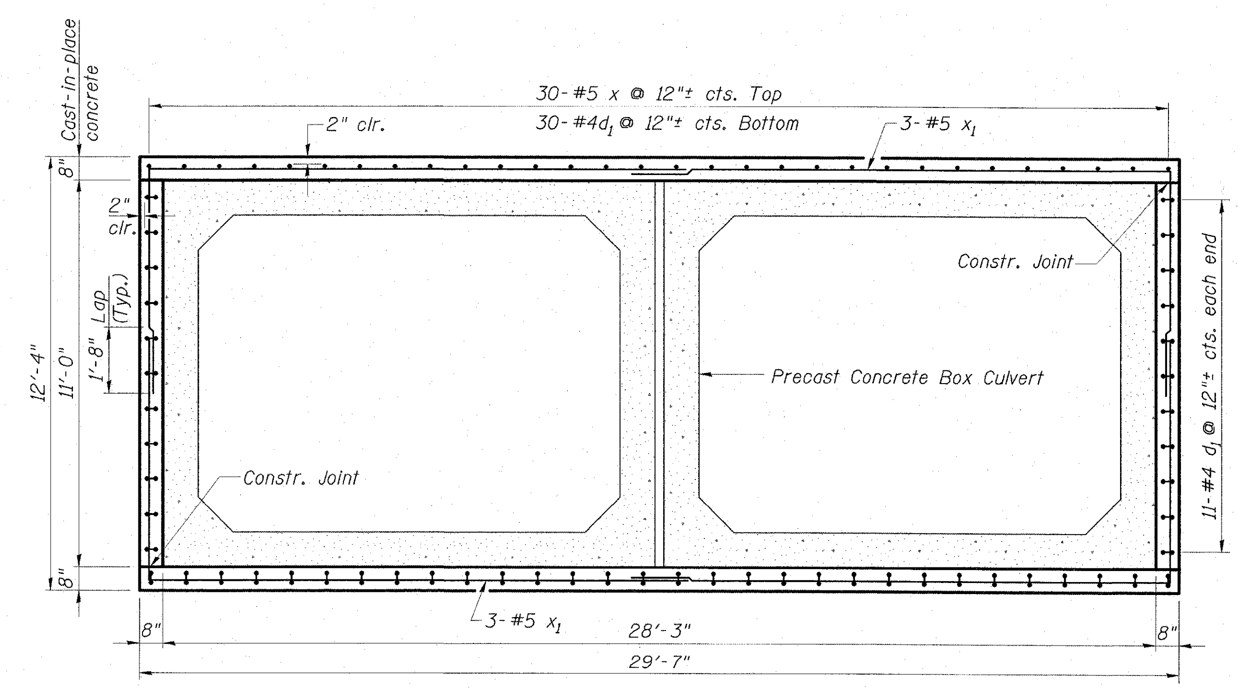
Bill of Material includes totals for both end sections. Cost to be included in Box Culvert End Sections. This bill is provided for information only and may change depending on the final dimensions of the precast box culvert walls and slabs.

MIN. BAR LAP

#4..................1'-4"

#5..................1'-8"

#6..................2'-0"



CONCRETE COLLAR SECTION

ESCA CONSULTANTS, INC.		
DESIGNED BY:	DAJ	11/08
DRAWN BY:	cj	11/08
CHECKED BY:	ELH	11/08
APPROVED BY:	RDP	11/08

BOX CULVERT DETAILS
STRUCTURE NO. 037-0172

SHEET NO. 5 / 7 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	638	136BR-1	HENRY	67	44
			CONTRACT NO. 64428		
	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Two Materials
Munson Twp. W 1/2 Sec. 28, E 1/2 Sec. 29 -T16N, R3E
Crown Elev. @ Center of Bridge - 100.0

Bridge Foundation Boring Log

PROJECT – BRIDGE IL 52 over Branch Date 06/13/93 Sh. 1 of 1

ROUTE FA 638 Spring Creek Bored By C. Jenkins

SEC. (136.137-1)RS-2 STA. 344+57 Checked By T. Bratt

COUNTY Henry

Boring No. B-1
Sta 344+30
O/S 13' Lt. C.L.

Surf Wat El. 90.0
Grndwater El.
at Compl 84.0
At ____ Hrs ____

Description	El.	N	Qu t/sf	W %
Ground Surface 99.8	0			
MEDIUM, brown SILTY CLAY.			0.8 P	16
Same as above		5 5 6	0.6 B	23
STIFF, black SILTY CLAY.	-5	1 4 6	1.2 B	29
MEDIUM, gray SILTY CLAY.		1 5 3	0.6 B	30
First Encounter V VERY SOFT, gray SILTY CLAY w/a SAND lense.	-10	1 2 3	0.2 B	29
SOFT, gray SILTY CLAY.		2 2 3	0.3 B	27
VERY STIFF, gray/brown SHALEY CLAY	-15	6 10 12	2.9 B	24
STIFF, black/gray SILTY CLAY.		3 5 8	1.4 B	32
HARD, black SHALEY CLAY.	-20	6 12 24	4.1 S	20
		30		
N-Std Pentr Test: 2" OD Sampler, 140# Hammer, 30" Fall (Three Rolls)	-45			

Description	El.	N	Qu t/sf	W %
VERY DENSE, black SHALE.		100 11" PEN		
Same as above	-25	30 32 40		
VERY DENSE, black SHALE w/a COAL lense.		33 31 30		
VERY DENSE, gray SHALE w/a COAL lense.	-30	18 26 35		
VERY DENSE, gray SHALE.		22 100 6" PEN		
END OF BORING	-35			
	-40			
	-45			

ILLINOIS DEPARTMENT OF TRANSPORTATION
District Two Materials
Munson Twp. W 1/2 Sec. 28, E 1/2 Sec. 29 -T16N, R3E
Crown Elev. @ Center of Bridge - 100.0

Bridge Foundation Boring Log

PROJECT – BRIDGE IL 52 over Branch Date 06/15/93 Sh. 1 of 1

ROUTE FA 638 Spring Creek Bored By C. Jenkins

SEC. (136.137-1)RS-2 STA. 344+57 Checked By T. Bratt

COUNTY Henry

Boring No. B-2
Sta 344+83
O/S 15' Rt. C.L.

Surf Wat El. 90.0
Grndwater El.
at Compl 95.7
At ____ Hrs ____

Description	El.	N	Qu t/sf	W %
Ground Surface 100.2	0			
MEDIUM, brown SILTY CLAY.			0.6 P	15
MEDIUM. Same as above		2 4 5	0.5 B	23
MEDIUM, black SILTY CLAY.	-5	3 3 6	0.6 B	28
MEDIUM, brown SILTY CLAY.		3 3 4	0.7 P	21
VERY SOFT, brown SILTY CLAY.	-10	3 3 3	0.2 B	29
STIFF, black SILTY CLAY.		4 7 10	1.8 B	27
First Encounter V Medium, brown SILTY CLAY w/LIMESTONE fragments.	-15	19 11 14	0.6 B	30
VERY STIFF, black/ brown SHALEY CLAY.		16 24 28	2.7 B	23
VERY DENSE, black SHALE.	-20	19 29 40		
N-Std Pentr Test: 2" OD Sampler, 140# Hammer, 30" Fall (Three Rolls)	-45			

Description	El.	N	Qu t/sf	W %
VERY DENSE, black SHALE w/COAL lense.		29 100 11" PEN		
	-25			
VERY DENSE, gray SHALE.		14 16 18		
VERY DENSE, gray SHALE w/COAL lense.		10 12 14		
VERY DENSE, gray SHALE.	-30	28 100 10" PEN		
VERY DENSE, gray SHALE.		100 11" PEN		
Auger refusal END OF BORING	-35			
	-40			
	-45			

ESCA CONSULTANTS, INC.

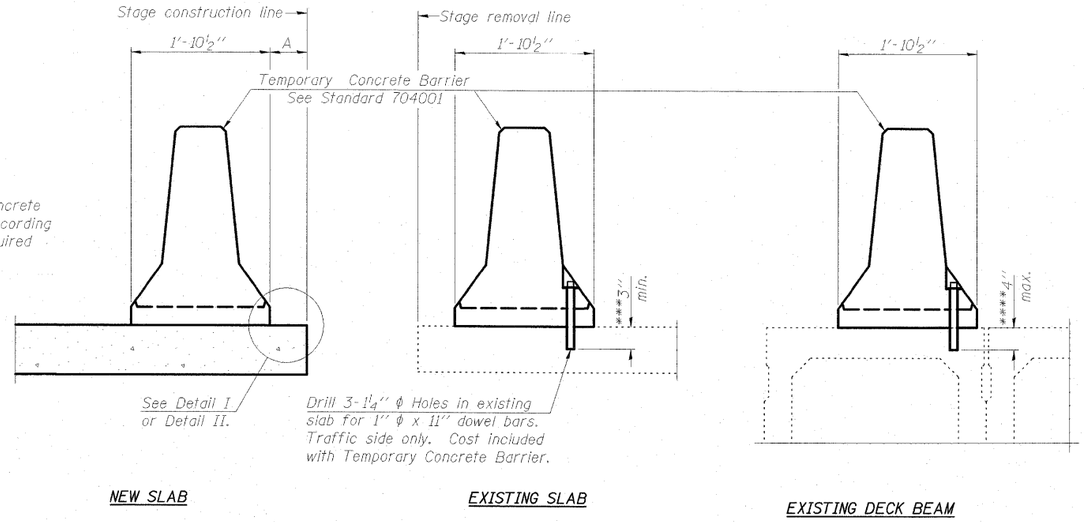
DESIGNED BY:	DAJ	11/08
DRAWN BY:	cj	11/08
CHECKED BY:	ELH	11/08
APPROVED BY:	RDP	11/08

SOIL BORING LOGS
STRUCTURE NO. 037-0172

SHEET NO. 6	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7 SHEETS	638	136BR-1	HENRY	67	45
			CONTRACT NO. 64428		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



NEW SLAB | EXISTING SLAB | EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel ℄ to the top layer of couplers with 2-⅝" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

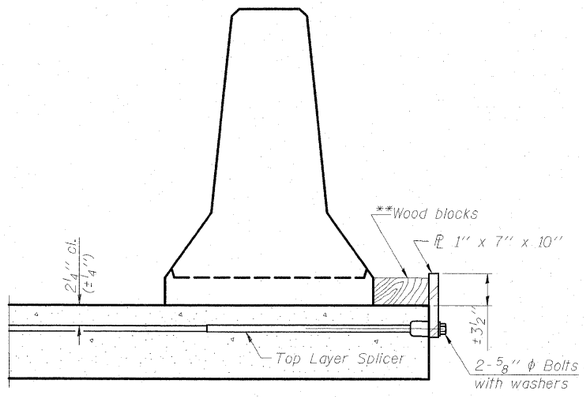
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x 10" steel ℄ to the concrete slab or concrete wearing surface with 2-⅝" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.

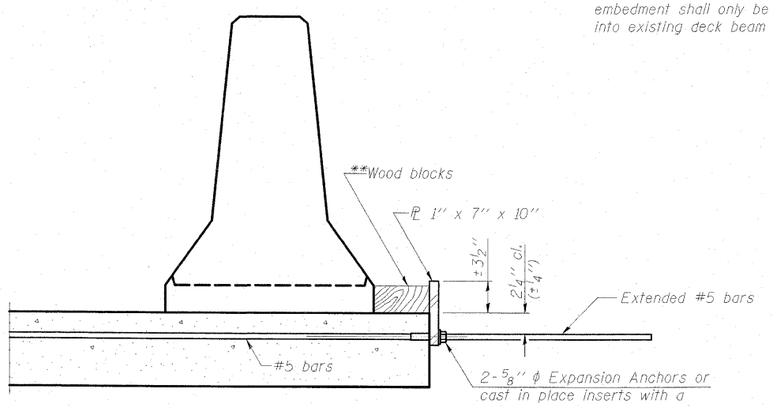
The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

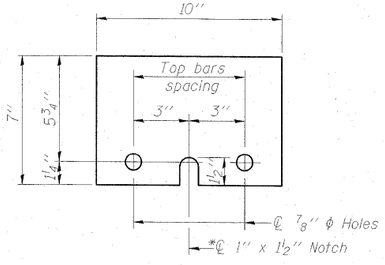
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER ℄ 1" x 7" x 10"

* Required only with Detail II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

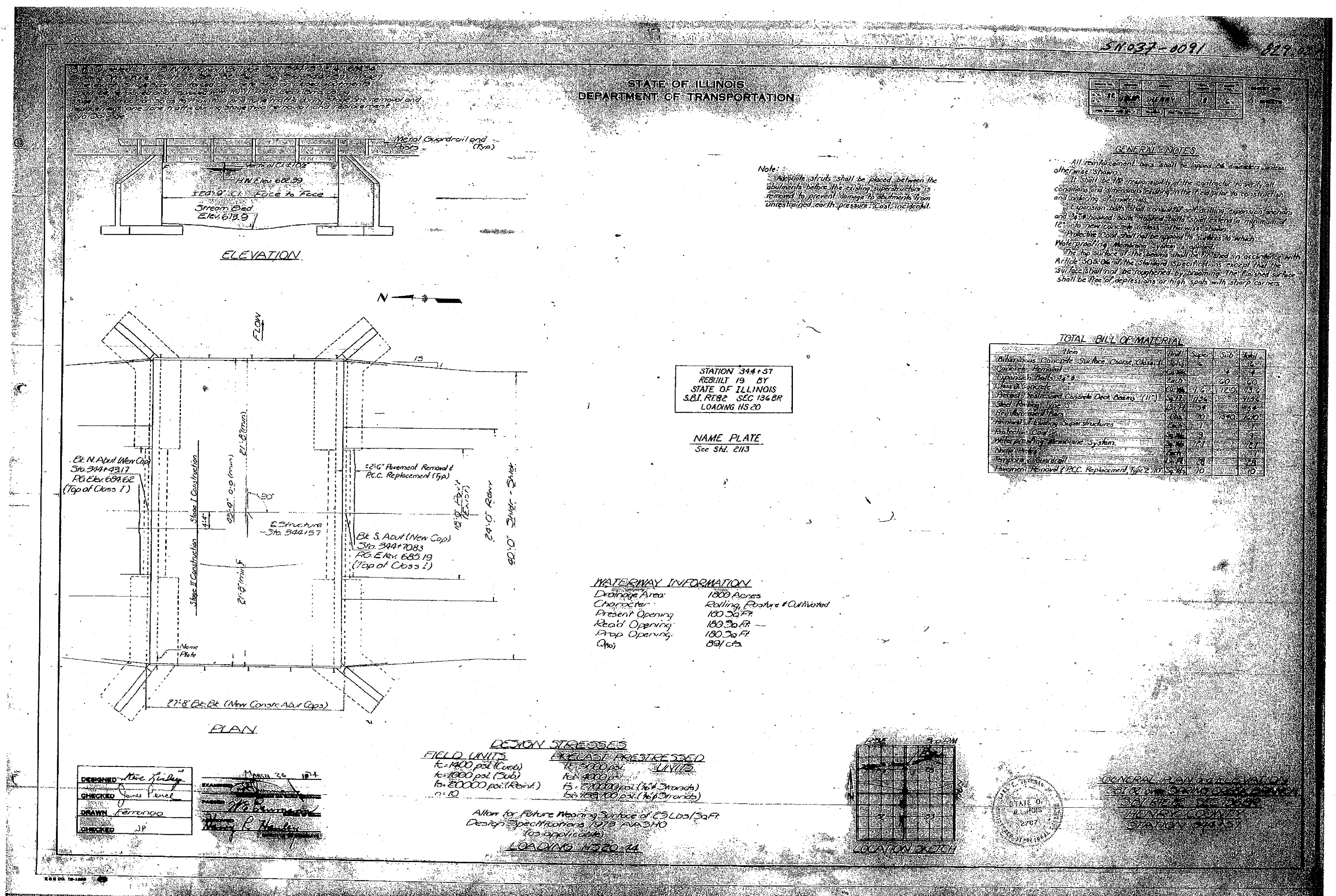
ESCA CONSULTANTS, INC.		
DESIGNED BY:	DAJ	11/08
DRAWN BY:	cj	11/08
CHECKED BY:	ELH	11/08
APPROVED BY:	RDP	11/08

R-27 10-1-08

TEMPORARY CONCRETE BARRIER
STRUCTURE NO. 037-0172

SHEET NO. 7	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7 SHEETS	638	136BR-1	HENRY	67	46
			CONTRACT NO. 64428		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS



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	PLOT DATE = 3/23/2009 1:07:02 PM	DATE - 12/19/08	REVISED -		SCALE: SHEET NO. 1 OF 5 SHEETS STA. TO STA.

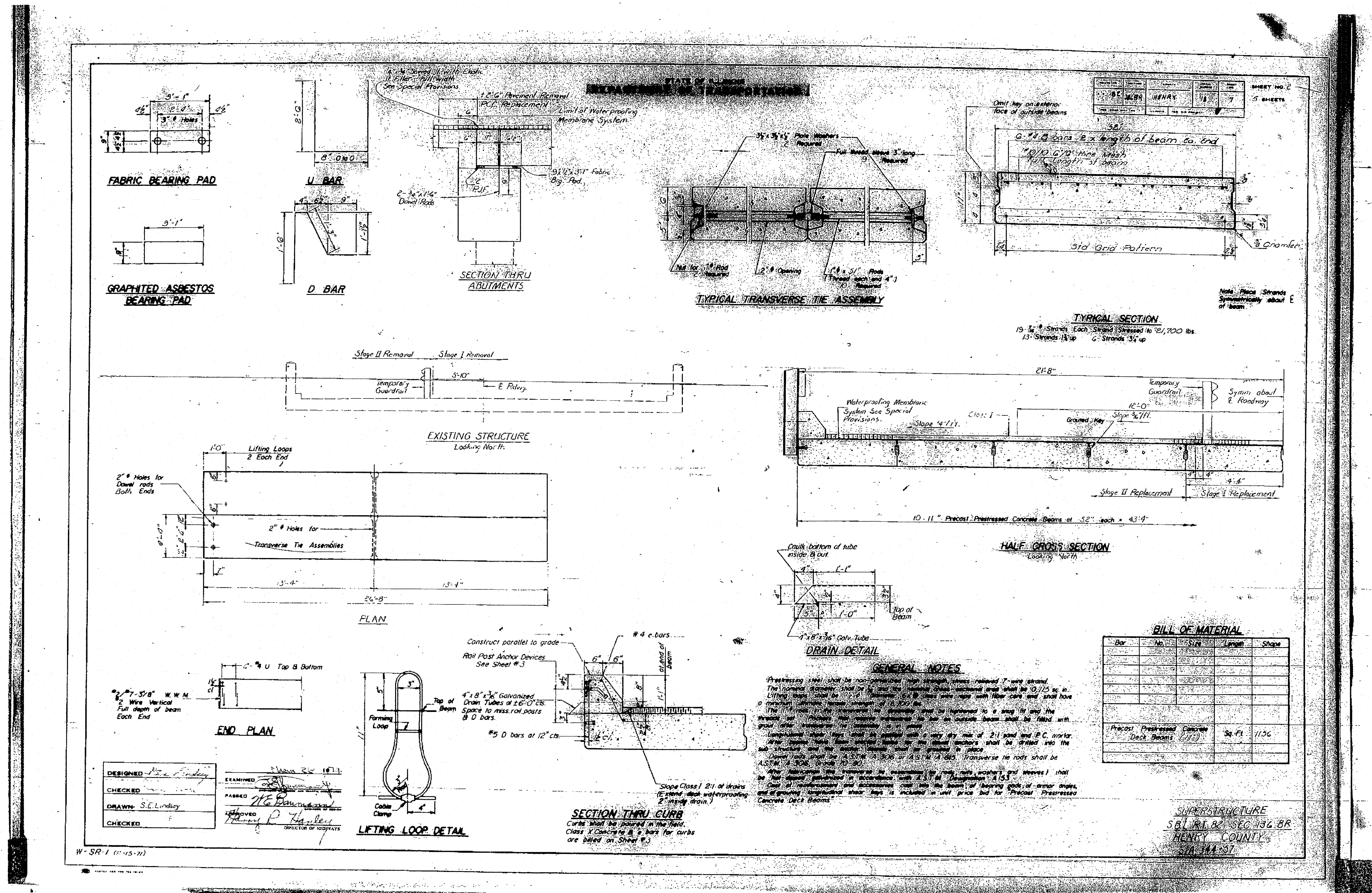
FOR REFERENCE ONLY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	47

CONTRACT NO. 64428

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

ESCA CONSULTANTS, INC.



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
FABRIC BEARING PAD
U BAR
SECTION THRU ABUTMENTS
TYPICAL TRANSVERSE TIE ASSEMBLY
GRAPHITED ASBESTOS BEARING PAD
D BAR
TYPICAL SECTION
Omit key on exterior face of outside beams
3'd Grid Pattern
Stage II Removal
Stage I Removal
EXISTING STRUCTURE
Looking North
Temporary Guardrail
Symm. about ℄ Roadway
Waterproofing Membrane System See Special Provisions
Stage II Replacement
Stage I Replacement
HALF CROSS SECTION
Looking North
Lifting Loops 2 Each End
2" ⌀ Holes for Dowel rods Both Ends
2" ⌀ Holes for Transverse Tie Assemblies
PLAN
Caulk bottom of tube inside & out.
Top of Beam
DRAIN DETAIL
BILL OF MATERIAL
Bar
No.
Size
Length
Shape
Precast Prestressed Concrete Deck Beams
Sq. Ft.
1156
END PLAN
LIFTING LOOP DETAIL
Construct parallel to grade
Rail Post Anchor Devices See Sheet #3
#4 e-bars
#5 D bars at 12" cts.
SECTION THRU CURB
Curbs shall be poured in the field. Class X Concrete & e bars for curbs are billed on Sheet #3
GENERAL NOTES
DESIGNED
CHECKED
DRAWN S.E. Lindsey
CHECKED
EXAMINED
PASSED
APPROVED
DIRECTOR OF HIGHWAYS
SUPERSTRUCTURE
S.B.I. RT. 82 SEC. 136 BR
HENRY COUNTY
STA. 344+87
W-SR-1

FILE NAME =	USER NAME = HAS	DESIGNED - JMS	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

SCALE: | SHEET NO. 2 OF 5 SHEETS | STA. | TO STA.

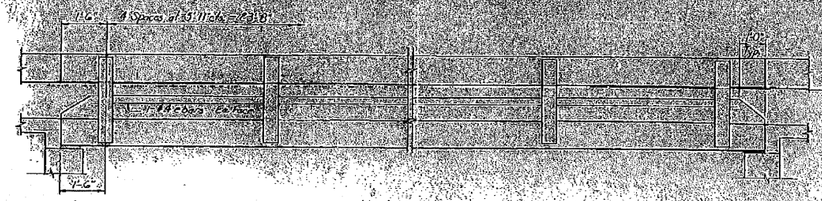
FOR REFERENCE ONLY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	48
		CONTRACT NO. 64428		

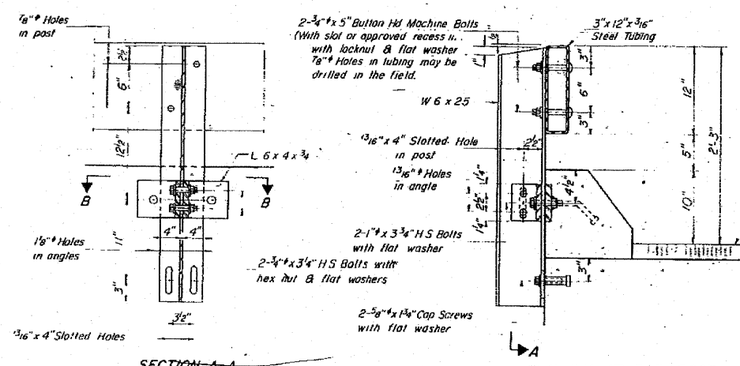
FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
SPRINGFIELD, ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

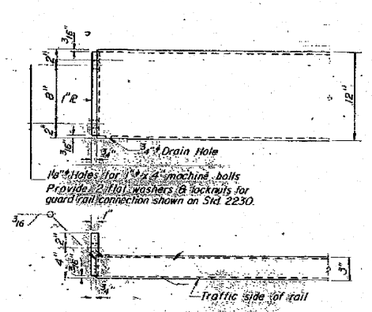


ELEVATION



SECTION A-A

SECTION AT RAIL POST



END OF RAIL DETAILS

NOTES

Hollow structural steel tubing shall conform to the requirements of ASTM designation A-500 Grade B or A-501 Structural Steel Tubing.

All other steel shapes and plates shall conform to the requirements of ASTM designation A-36 except posts shall conform to ASTM A-441.

Bolts, cap screws, and nuts shall conform to the requirement of ASTM designation A-307 except for high strength bolts, nuts and washers noted which shall conform to ASTM designation A-325.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized in accordance with ASTM designation A-153.

All posts, railing, rail splices, anchor devices and angles shall be galvanized after fabrication in accordance with ASTM designation A-123 and A-385. Galvanized rail shall not be painted.

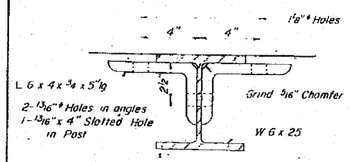
Railing shall be in accordance with Section 508 of the Standard Specifications, except as noted, and shall be paid for at the contract unit price per lineal foot for STEEL RAILING, TYPE T.

All field drilled holes shall be coated with an approved zinc-rich paint before erection.

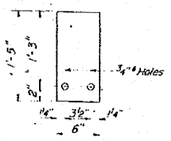
The lower portion of the post flange in contact with concrete shall receive two coats of asphalt paint conforming to Section 174108 Type B or place ⅛" fabric bearing pad between the post and concrete.

The ¾" ø high strength bolts used to connect the 6 x 4 x ¾ angles to the post shall be tightened in accordance with Article 15.2.7.2.8.(g)(3) of the Standard Specifications. The 1" ø high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional ⅓ turn.

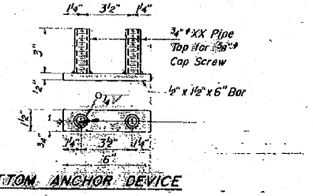
For multi-span bridges, sufficient ¼" x 6" x 1'-0" galvanized steel shims shall be provided to align rail between adjacent spans. Cost incidental to Steel Railing.



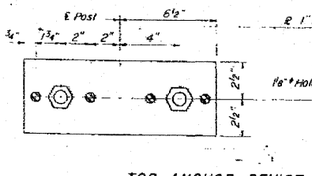
SECTION B-B



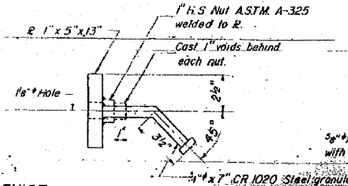
¼" SHIM PLATE

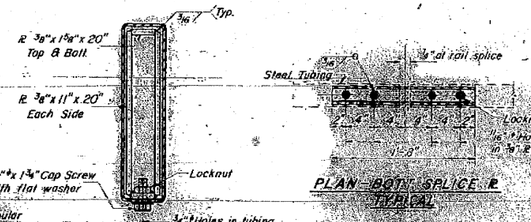


BOTTOM ANCHOR DEVICE



TOP ANCHOR DEVICE





PLAN-BOTT. SPLICE & TYPICAL

SECTIONS AT RAIL SPLICE

CURB & RAIL BILL OF MATERIAL

Bar	No.	Size	Length	Shape
c	4	#4	24'-6"	
Reinforcement Bars			Lbs.	KG
Class X Concrete			Cu.Yds.	¼
Steel Railing Type T			Lin.Ft.	54

TYPE T STEEL RAILING
SBI RTE. 136 SEC. 136BR
HENRY COUNTY
STA. 54+57

DESIGNED	Steve Lindley
CHECKED	James Hauser
DRAWN	S.E.Lindsey
CHECKED	

EXAMINED — MARCH 26 1974
PASSED — H.G. Baumann
APPROVED — Harry R. Hanley, DIRECTOR OF HIGHWAYS

R-24 12-10-71 (4'-3" Maximum Post Spacing)

A°	Bars	Height	B	C	Sheet No.

FOR REFERENCE ONLY

FILE NAME = D264428-sht-rem59.dgn	USER NAME = HAS		DESIGNED - JMS	REVISED -
			DRAWN - HAS	REVISED -
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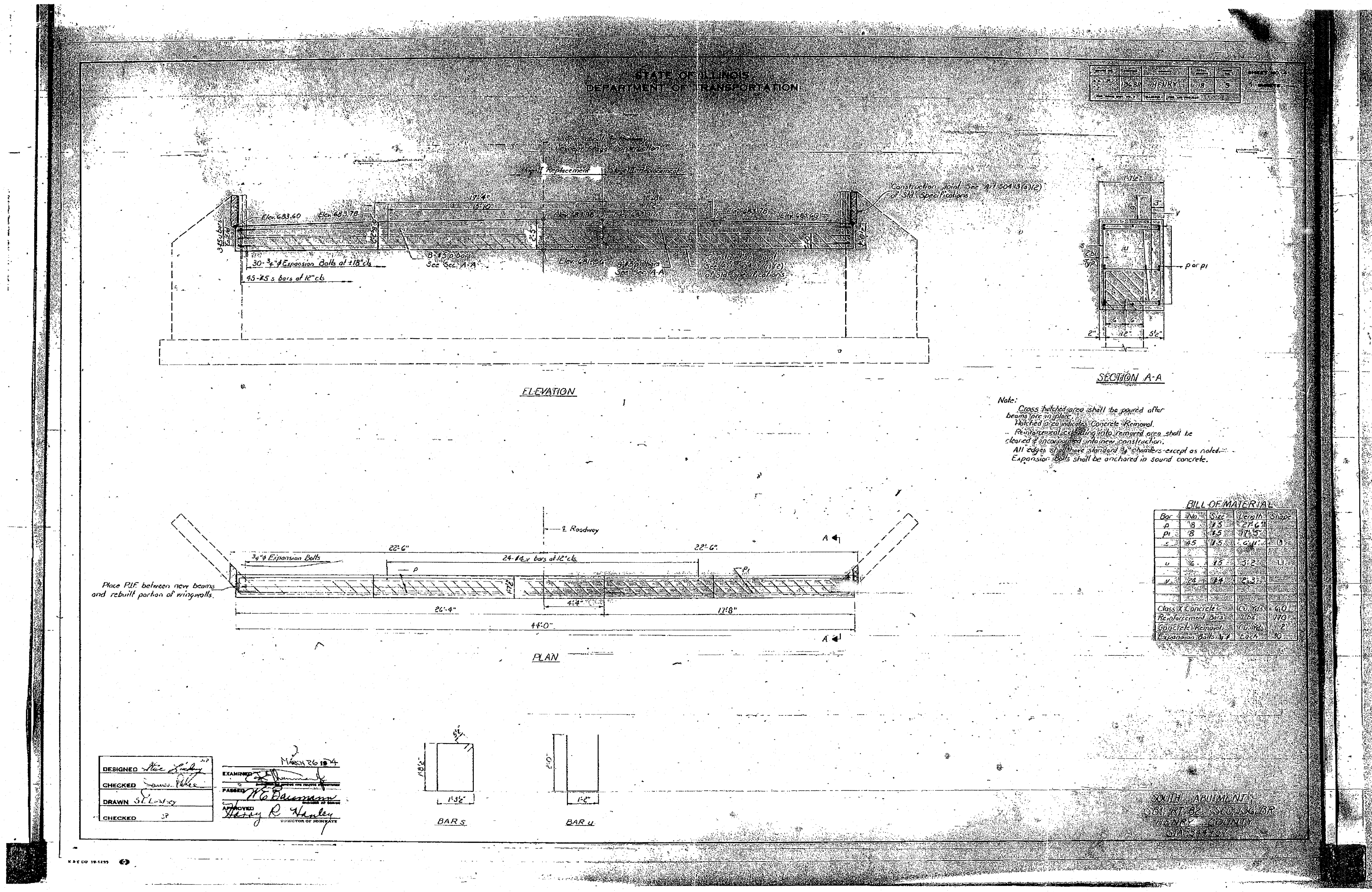
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

SCALE: | SHEET NO. 3 OF 5 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	49
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



Note:
Cross hatched area shall be poured after beams are in place.
Hatched area indicates Concrete Removal.
Reinforcement extending into removed area shall be cleaned & incorporated into new construction.
All edges shall have standard ¾" chamfers except as noted.
Expansion Bolts shall be anchored in sound concrete.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
p	8	#5	27'-6"	
p1	8	#5	17'-5"	
s	45	#5	6'-11"	
u	6	#5	5'-2"	
v	24	#4	2'-3"	
Class X Concrete			Cu. Yds.	6.0
Reinforcement Bars			Lbs.	770
Concrete Removal			Cu. Yds.	2
Expansion Bolts ¾" ∅			Each	30

FOR REFERENCE ONLY

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

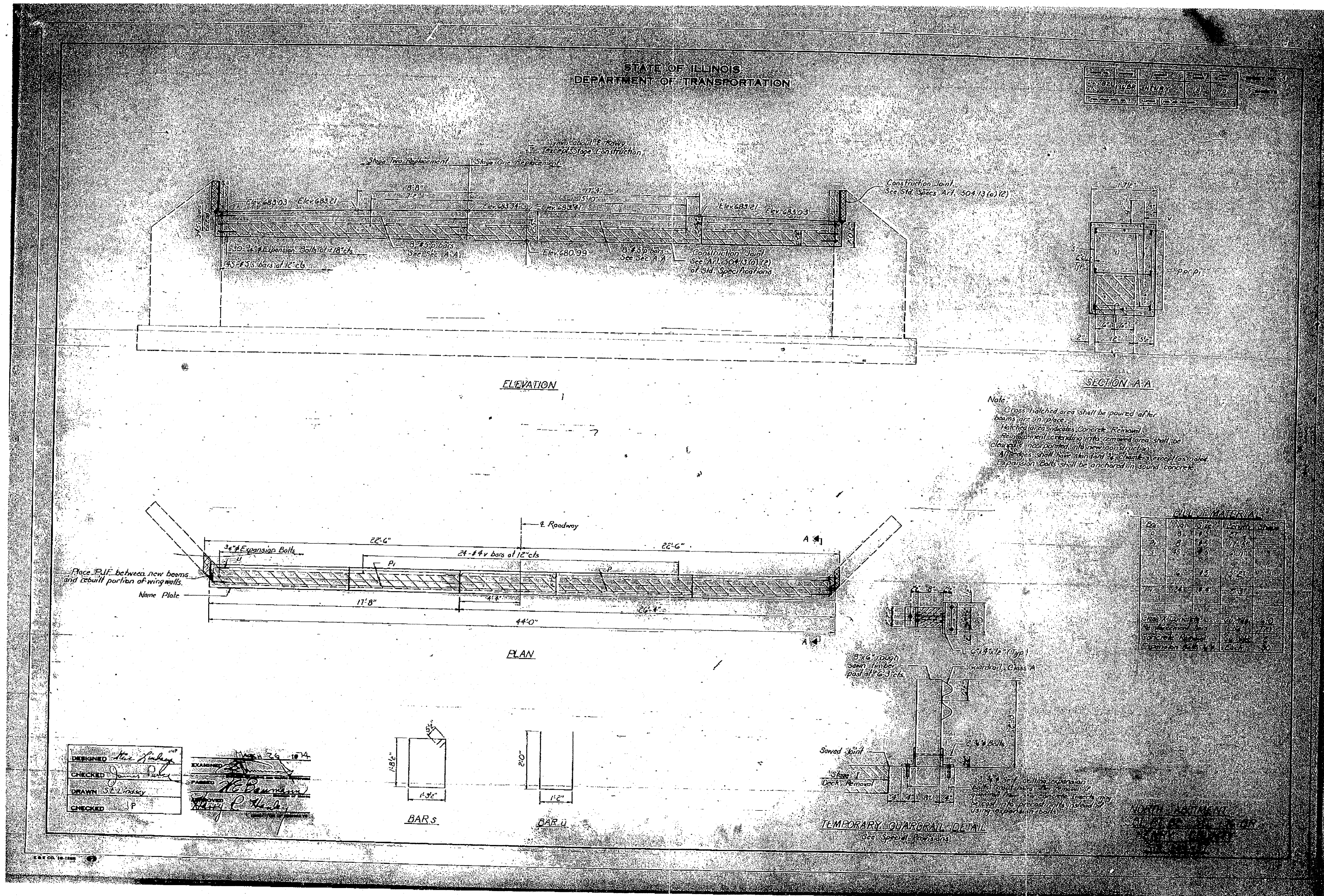
SCALE: | SHEET NO. 4 OF 5 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	50

CONTRACT NO. 64428

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

ESCA CONSULTANTS, INC.
CIVIL & ARCHITECTURAL ENGINEERS
URBANA, ILLINOIS



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS

SCALE: | SHEET NO. 5 OF 5 SHEETS | STA. | TO STA.

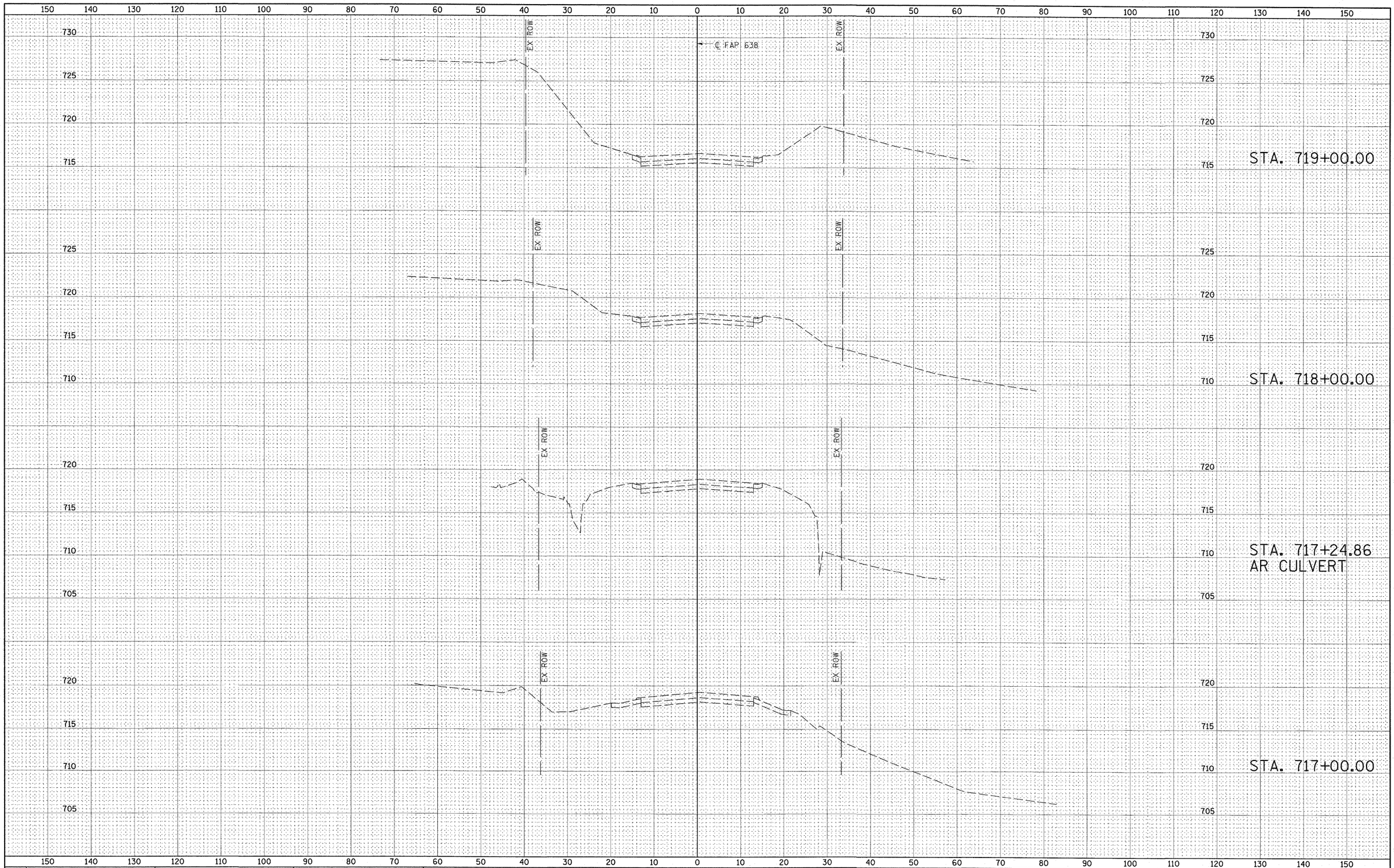
FOR REFERENCE ONLY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	51

CONTRACT NO. 64428

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

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
SPRINGFIELD, ILLINOIS



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SURVEYED		
PLOTTED		
CHECKED		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	

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

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PLOT DATE = 3/23/2009 1:08:02 PM	DATE - 12/19/08	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 82 CROSS SECTION

SCALE: 1"=10'-0" | SHEET NO. 1 OF 6 SHEETS | STA. 717+00 TO STA. 719+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	52
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
SPRINGFIELD, ILLINOIS

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

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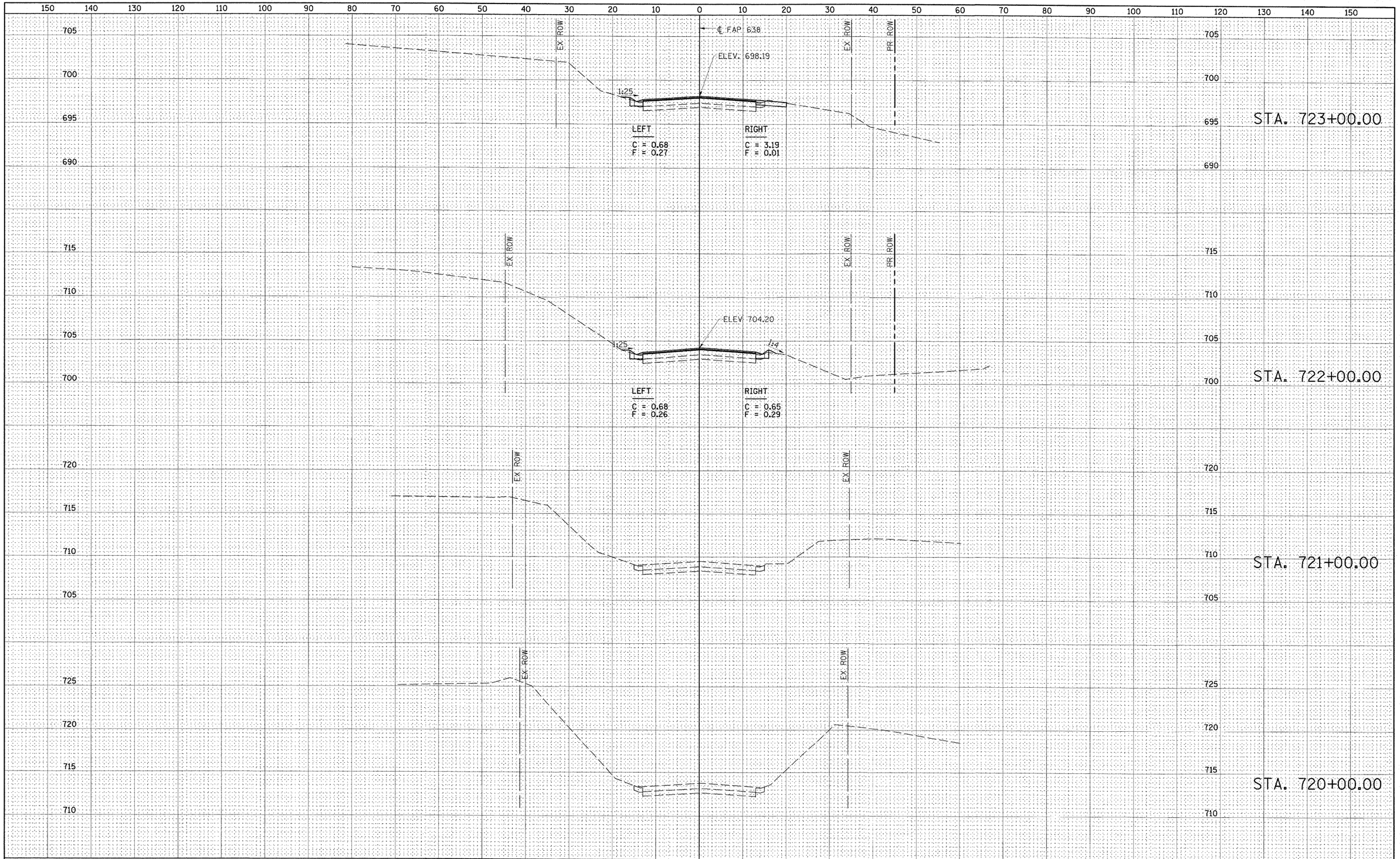
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



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		DATE - 12/19/08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 82 CROSS SECTIONS

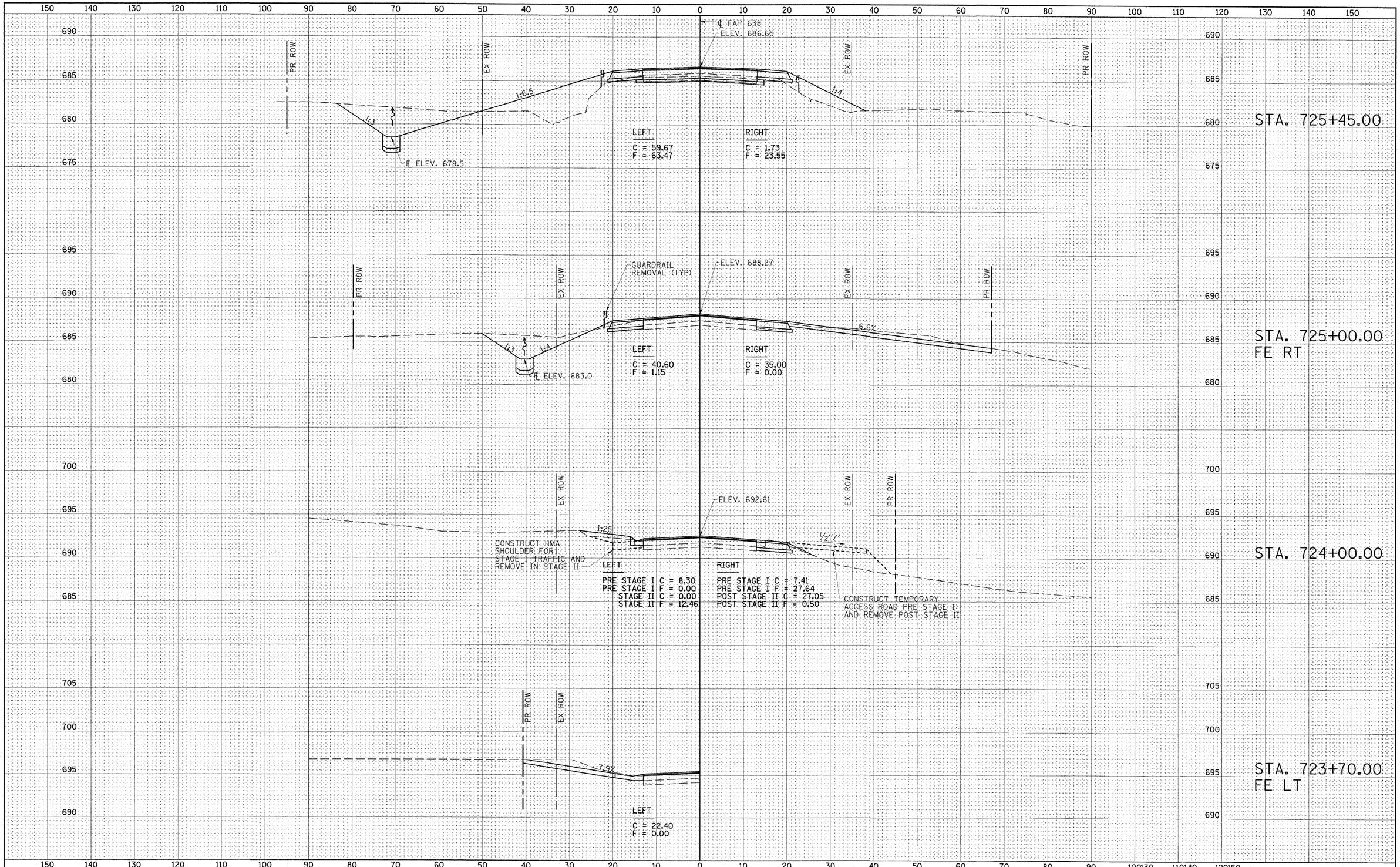
SCALE: 1"=10'-0" | SHEET NO. 2 OF 6 SHEETS | STA. 720+00 TO STA. 723+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	53
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
& LAND SURVEYORS

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

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



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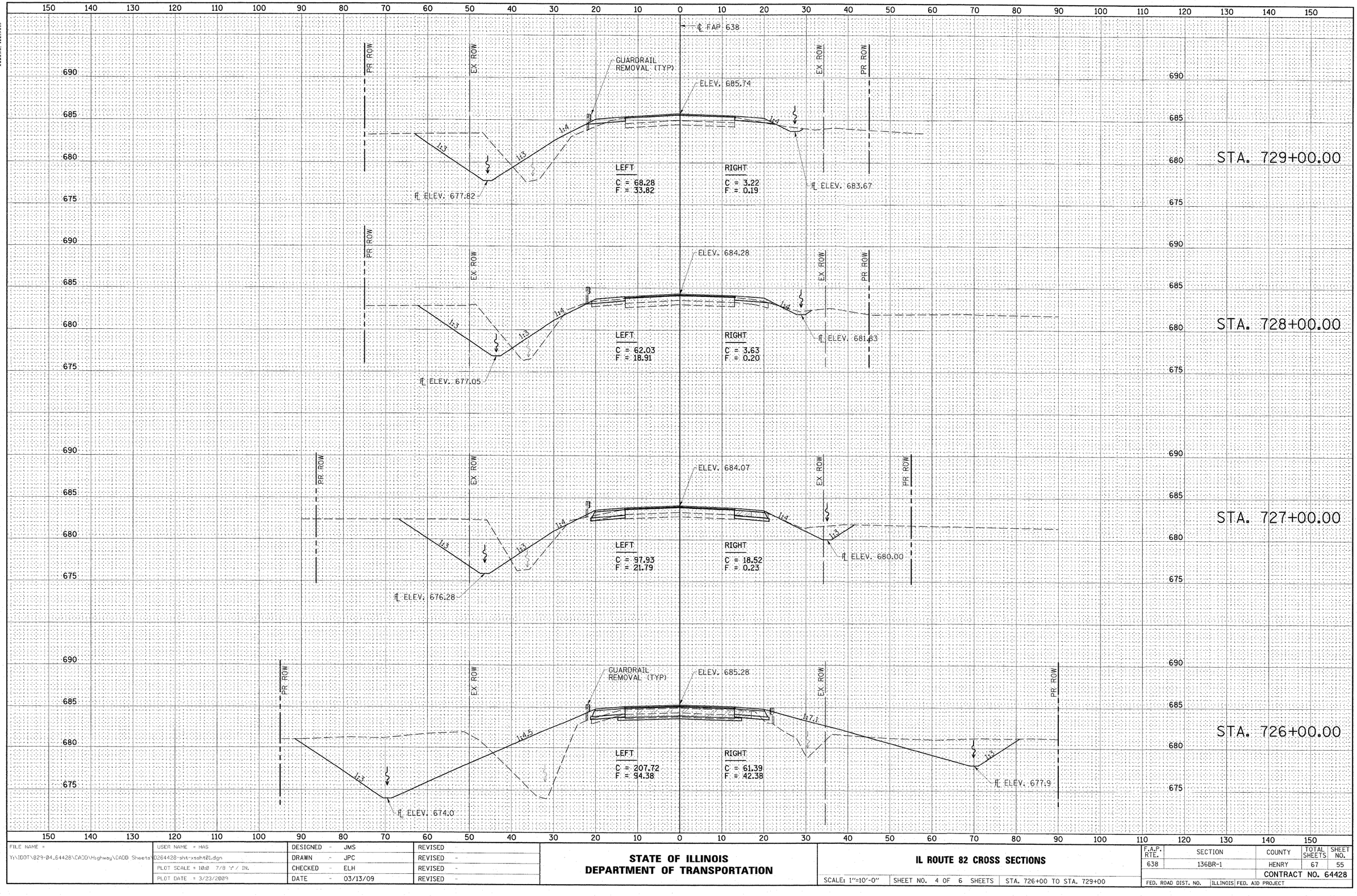
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 82 CROSS SECTIONS

SCALE: 1"=10'-0" | SHEET NO. 3 OF 6 SHEETS | STA. 723+70 TO STA. 725+45

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	54
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
& SURVEYORS



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SURVEYED		DATE
PLOTTED		BY
TEMPLATE		
AREAS		
AREAS CHECKED		

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

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	PLOT DATE = 3/23/2009	DATE - 03/13/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 82 CROSS SECTIONS

SCALE: 1"=10'-0" | SHEET NO. 4 OF 6 SHEETS | STA. 726+00 TO STA. 729+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	55
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL, STRUCTURAL & ENVIRONMENTAL ENGINEERS
SPRINGFIELD, ILLINOIS

FINAL SURVEY	NOTE BOOK	NO.	BY	DATE
SURVEYED				
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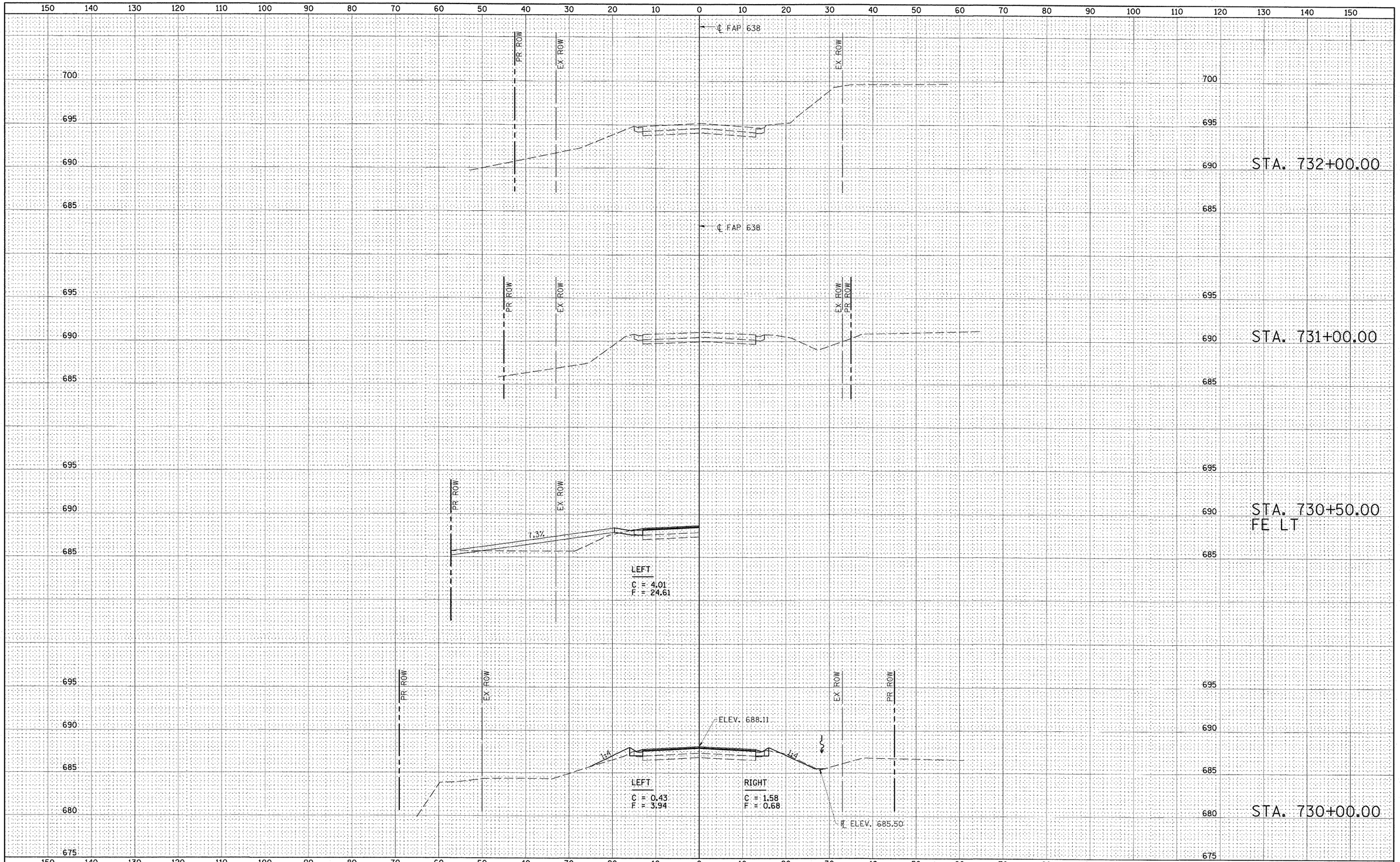

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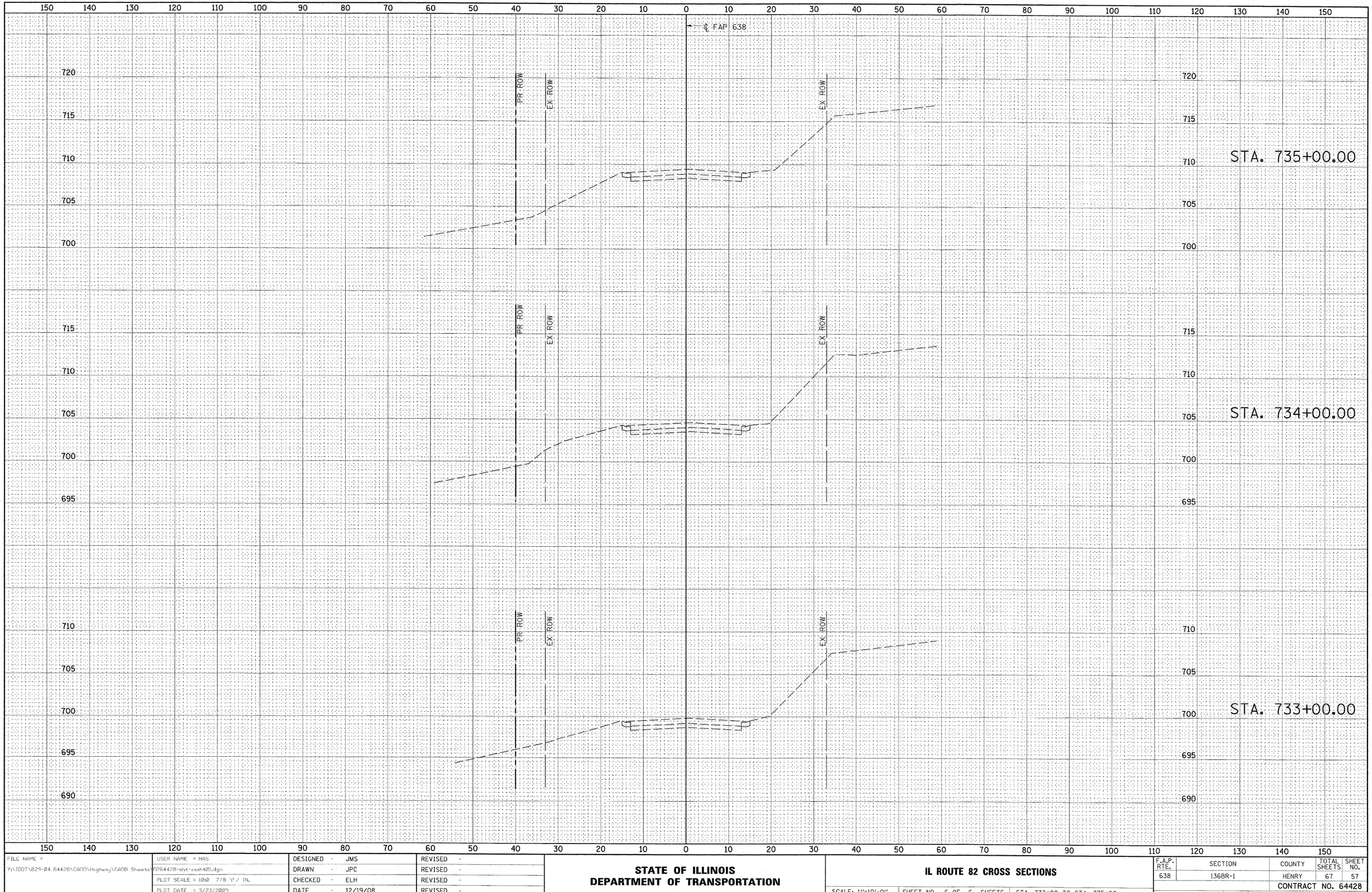
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 82 CROSS SECTIONS

SCALE: 1"=10'-0" | SHEET NO. 5 OF 6 SHEETS | STA. 730+00 TO STA. 732+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	56
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
BOLINGBROOK, ILLINOIS

FINAL SURVEY		BY	DATE
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NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
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	PLOT DATE = 3/23/2009	DATE - 12/19/08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 82 CROSS SECTIONS

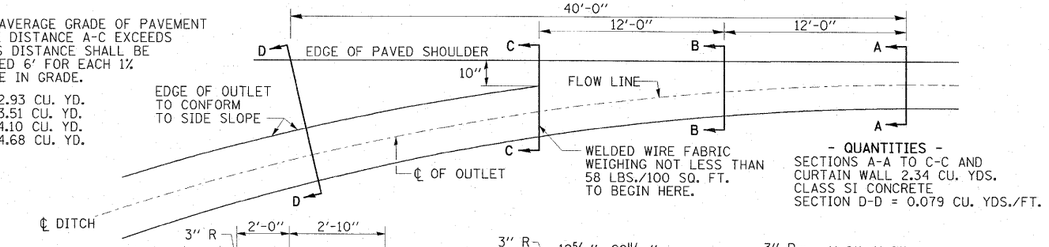
SCALE: 1"=10'-0" | SHEET NO. 6 OF 6 SHEETS | STA. 733+00 TO STA. 735+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1	HENRY	67	57
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

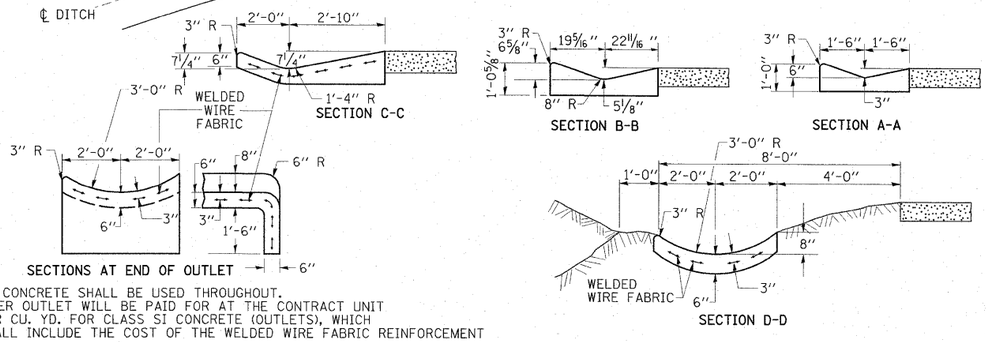
GUTTER OUTLET ADJACENT TO STABILIZED SHOULDER

NOTE:
IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE A-C EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6' FOR EACH 1% INCREASE IN GRADE.

3% 30' 2.93 CU. YD.
4% 36' 3.51 CU. YD.
5% 42' 4.10 CU. YD.
6% 48' 4.68 CU. YD.



- QUANTITIES -
SECTIONS A-A TO C-C AND CURTAIN WALL 2.34 CU. YDS.
CLASS SI CONCRETE
SECTION D-D = 0.079 CU. YDS./FT.

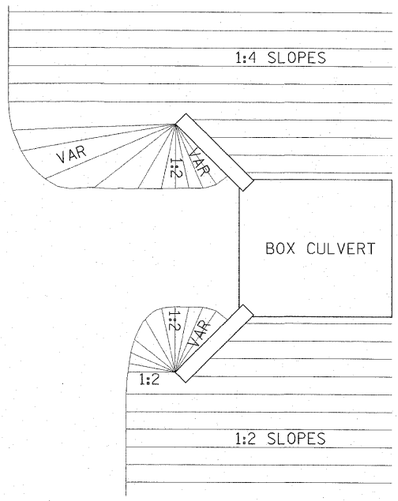


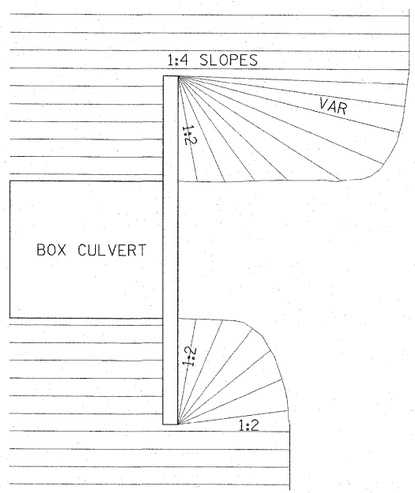
NOTES:
CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
THE GUTTER OUTLET WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CU. YD. FOR CLASS SI CONCRETE (OUTLETS), WHICH PRICE SHALL INCLUDE THE COST OF THE WELDED WIRE FABRIC REINFORCEMENT

REVISED - 5-4-94

GUTTER OUTLET ADJACENT TO STABILIZED SHOULDER 15.4

GRADING AROUND WINGWALLS

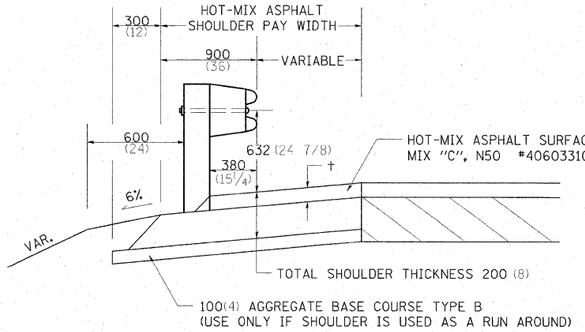




REVISED - 10-21-08

GRADING AROUND WINGWALLS 20.4

DETAIL OF HOT-MIX ASPHALT SHOULDER AT GUARD RAIL



† = SEE TYPICAL SECTIONS FOR THICKNESS

GENERAL NOTES

THE TOP LIFT SHALL NOT BE PLACED BEHIND THE GUARDRAIL POSTS. WHEN PLACING THE TOP LIFT THE RAIL MUST BE REMOVED FROM THE POSTS. THE POST SHALL NOT BE REMOVED.

THE HEIGHT OF THE GUARD RAIL SHALL BE SET **632** (24⅞) FROM THE FINISHED SURFACE.

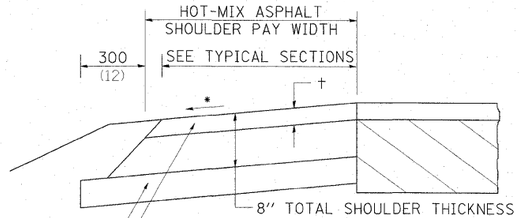
THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIXTURE "C", N50 AND SQUARE METER (SQUARE YARD) FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED. THE REMOVAL & REINSTALLATION OF THE GUARDRAIL WILL BE INCLUDED IN THE COST OF THE HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50.

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

REVISED - 11-01-07

DETAIL OF HOT-MIX ASPHALT SHOULDER AT GUARD RAIL 23.4

HOT-MIX ASPHALT SHOULDER



† = SEE TYPICAL SECTIONS FOR THICKNESS

GENERAL NOTES

THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310 AND SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED.

USE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310. WHEN RESURFACING EXISTING HOT-MIX ASPHALT SHOULDERS. THE THICKNESS IS SHOWN ON THE TYPICAL SECTIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310.

REMOVAL OF MATERIAL FOR PLACEMENT OF THE HOT-MIX ASPHALT SHOULDER TO BE PAID FOR IN UNITS FOR EXCAVATING AND GRADING EXISTING SHOULDERS OR IN CUBIC YARDS FOR EARTH EXCAVATION OR EARTH EXCAVATION WIDENING.

* 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATION SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

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

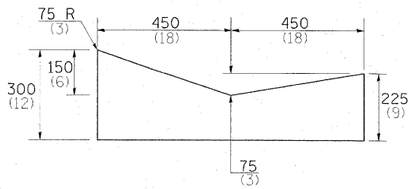
REVISED - 11-01-07

HOT-MIX ASPHALT SHOULDER 23.4a

FILE NAME = D264428-sht-details04.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 2 STANDARDS
		DRAWN - JPC	REVISED -		
	PLOT SCALE = 0.0839 '/ IN.	CHECKED - ELH	REVISED -		SCALE: NO SCALE | SHEET NO. 1 OF 10 SHEETS | STA. | TO STA.
	PLOT DATE = 3/23/2009 1:10:00 PM	DATE - 3/13/09	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1, 137-1BR	HENRY	67	58
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONCRETE GUTTER, TYPE A (MODIFIED)



NOTES:

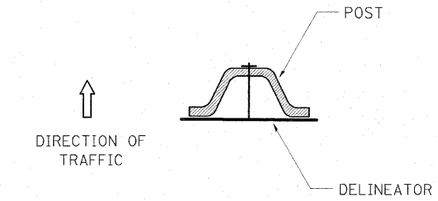
THIS WORK SHALL BE DONE IN ACCORDANCE WITH THIS DETAIL AND STANDARD 606101
THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER METER (FOOT) FOR CONCRETE GUTTER, TYPE A (MODIFIED).

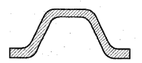
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 5-4-94

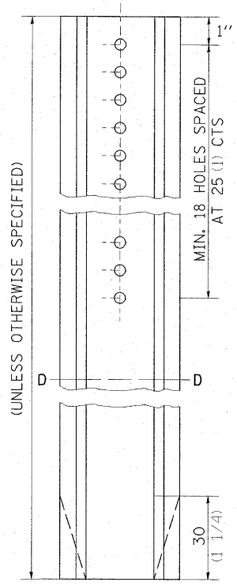
CONCRETE GUTTER, TYPE A (MODIFIED) 36.4

DELINEATOR AND POST ORIENTATION





SECTION D-D



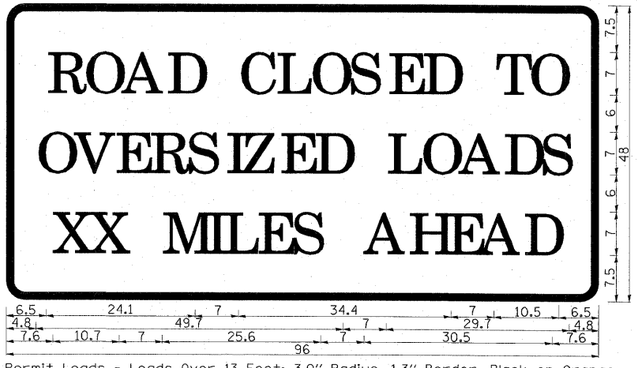
DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180° . THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE DELINEATOR ATTACHECD AS SHOWN ABOVE.

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

REVISED - 11-01-07

DELINEATOR AND POST ORIENTATION 37.4

ROAD CLOSED TO OVERSIZED LOADS



Permit Loads - Loads Over 13 Feet; 3.0" Radius, 1.3" Border, Black on Orange; [ROAD CLOSED TO] D; [OVERSIZED LOADS] D; [XX MILES AHEAD] D;
Table of letter and object lefts.

R 6.5	O 12.5	A 18.7	D 25.9	C 37.6	L 43.6	O 49.2	S 55.4	E 61.8	D 67.3	T 79.0	O 84.6			
O 4.8	V 11.0	E 17.6	R 23.1	S 29.2	I 35.5	Z 38.2	E 44.3	D 49.8	L 61.6	O 67.1	A 78.3	D 80.5	S 86.5	
X 7.6	X 13.6	M 25.3	I 32.3	L 35.1	E 40.6	S 46.2	A 57.9	H 65.1	E 71.4	A 76.6	D 83.7			

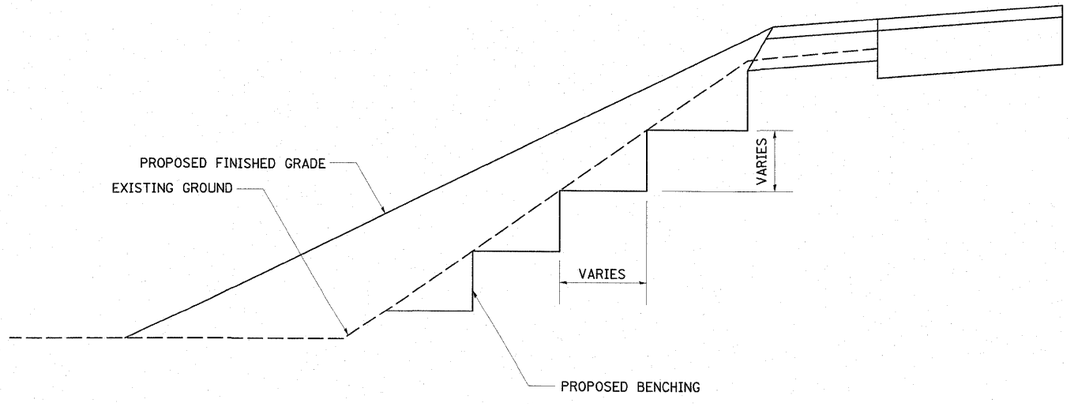
All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 1-9-08

ROAD CLOSED TO OVERSIZED LOADS 40.4

TYPICAL BENCHING ON EXISTING EMBANKMENT



REVISED - 2-22-06

TYPICAL BENCHING ON EXISTING EMBANKMENT 50.4

FILE NAME = D264428-sht-details05.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -	
		DRAWN - JPC	REVISED -	
	PLOT SCALE = 0.0839 ' / IN.	CHECKED - ELH	REVISED -	
	PLOT DATE = 3/23/2009 11:10:31 PM	DATE - 3/13/09	REVISED -	

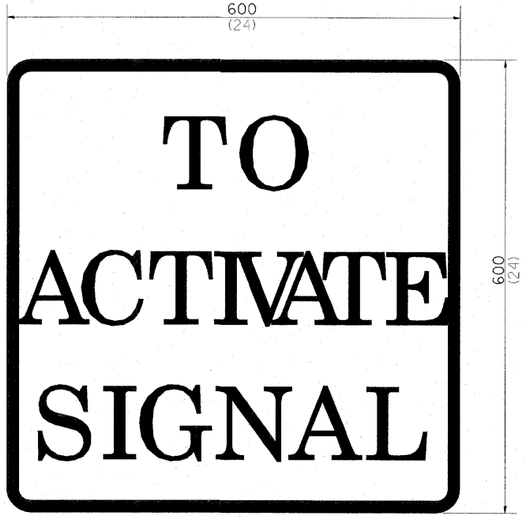
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 2 STANDARDS

SCALE: NO SCALE | SHEET NO. 2 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1, 137-1BR	HENRY	67	59
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STOP LINE SIGN FOR TEMPORARY SIGNALS



SIZE: 600(24) x 600(24)

100(4) CAPITAL LETTERS - BLACK

13(1/2) BORDER - BLACK

WHITE REFLECTIVE - TYPE AP
HIGH INTENSITY PRISMATIC SHEETING

GENERAL NOTE:

THIS SIGN SHALL BE INSTALLED AT THE STOP LINE AS DIRECTED BY ENGINEER.

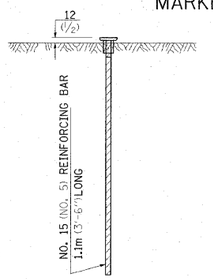
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 1-22-07

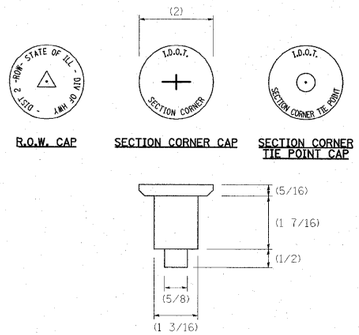
STOP LINE SIGN FOR TEMPORARY SIGNALS 99.4

LAND SECTION & REFERENCE MARKERS

REFERENCE MARKER & LAND SECTION MARKER

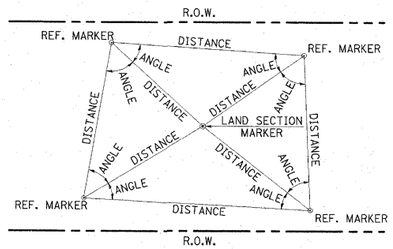


SECTION



CAP DETAIL

METHOD OF REFERENCING MARKERS



. USE INSTRUMENT TIES TO NEARBY LAND-MARKS (STEEPLES, TOWERS, SILOS, ETC...)
. IN CULTIVATED FIELDS, SET 600(2') OR MORE BELOW GROUND SURFACE.
. IN FENCE LINE OR PROTECTED AREA SET TOP AT GROUND LEVEL.

METHOD OF REFERENCING POINTS

REFERENCE MARKERS SHALL BE USED TO TIE IN PERMANENT LAND SECTION AND 1/4 SECTION CORNERS. WHERE LAND SECTION MARKERS FALL IN THE SHOULDERS OR GRAVEL SURFACES, THE TOP OF THE BAR SHALL BE KEPT 75(3) BELOW THE SURFACE. LAND SECTION MARKERS LOCATED IN TRAFFIC LANES SHALL NOT BE REPLACED.

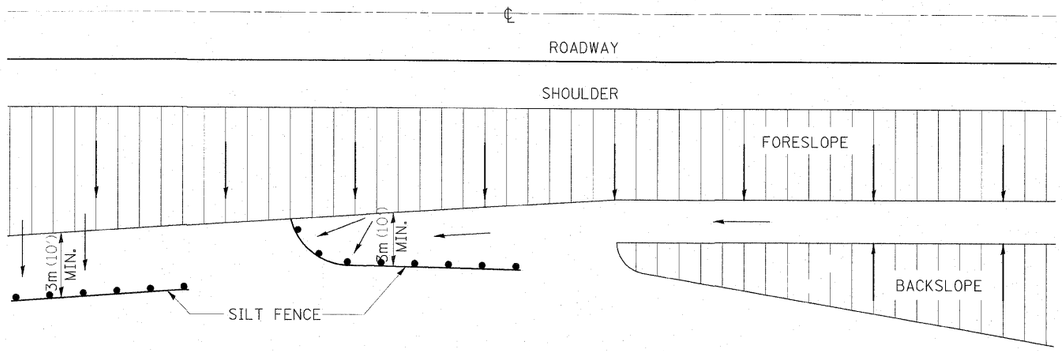
METAL CAPS SHALL BE PLACED ON TOP OF THE REINFORCEMENT BAR. THERE ARE 3 TYPES OF CAPS, ONE FOR THE RIGHT-OF-WAY CORNERS, ONE FOR THE SECTION CORNERS AND ONE FOR THE SECTION CORNER TIE POINTS. THE CAPS WILL BE SUPPLIED BY IDOT, CALL CHIP CORDELL (815) 284-5370 A MINIMUM OF ONE WEEK BEFORE THE CAPS ARE NEEDED

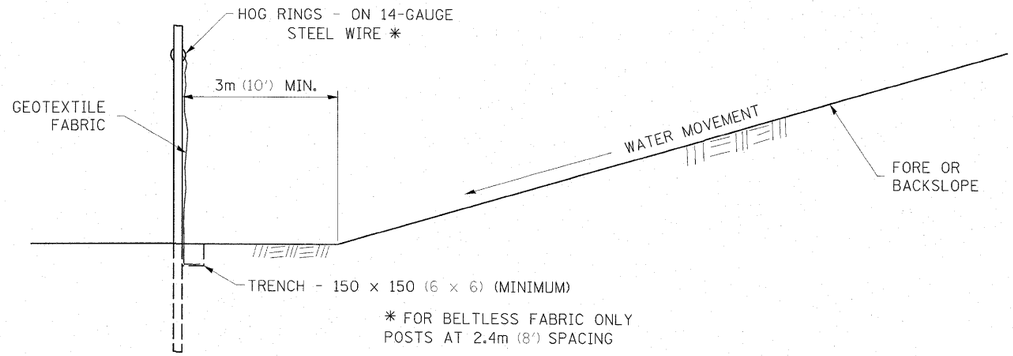
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 4-22-05

LAND SECTION & REFERENCE MARKERS 63.4

EROSION CONTROL DETAILS FOR SILT FENCE





* FOR BELTLESS FABRIC ONLY
POSTS AT 2.4m (8') SPACING

DETAILS OF SILT FENCE

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

REVISED - 10-22-01

EROSION CONTROL DETAILS FOR SILT FENCE 29.2

FILE NAME = D264428-sht-details08.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - JPC	REVISED -
	PLOT SCALE = 0.0839 ' / IN.	CHECKED - ELH	REVISED -
	PLOT DATE = 3/24/2009 6:17:43 AM	DATE - 3/13/09	REVISED -

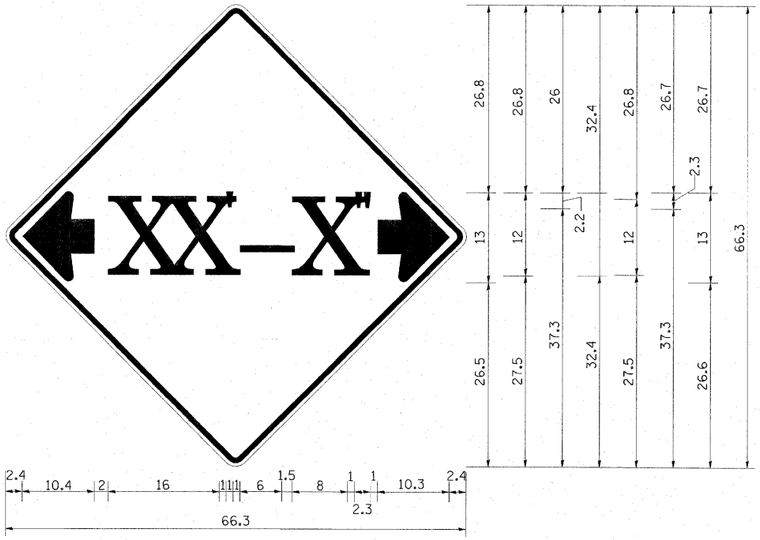
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 2 STANDARDS

SCALE: NO SCALE | SHEET NO. 3 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1, 137-1BR	HENRY	67	60
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES)



NOTES

W12-2 - Horizontal Clearance Sign 48.0" across sides, 1.9" Radius, 0.8" Border, 0.5" Indent, Black on Orange; Standard Arrow Custom 10.4" X 8.1" 180° Black 11 Inch D Series Lettering; Standard Arrow Custom 10.4" X 8.1" 0°

W12-I103 (Width is 8D);
No border, Black on White;
[MAX WIDTH] D;

No border, Black on Orange;
[XX'-XX"] D;

No border, Black on White;
[X MILES] D; [AHEAD] D;

All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 1-9-08 **INFORMATIONAL WARNING SIGNS (FOR NARROW TRAVEL LANES) 39.2**

FILE NAME = D264428-sht-details13.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -
		DRAWN - JPC	REVISED -
	PLOT SCALE = Ø.Ø839 ' / IN.	CHECKED - ELH	REVISED -
	PLOT DATE = 3/23/2009 1:10:54 PM	DATE - 3/13/09	REVISED -

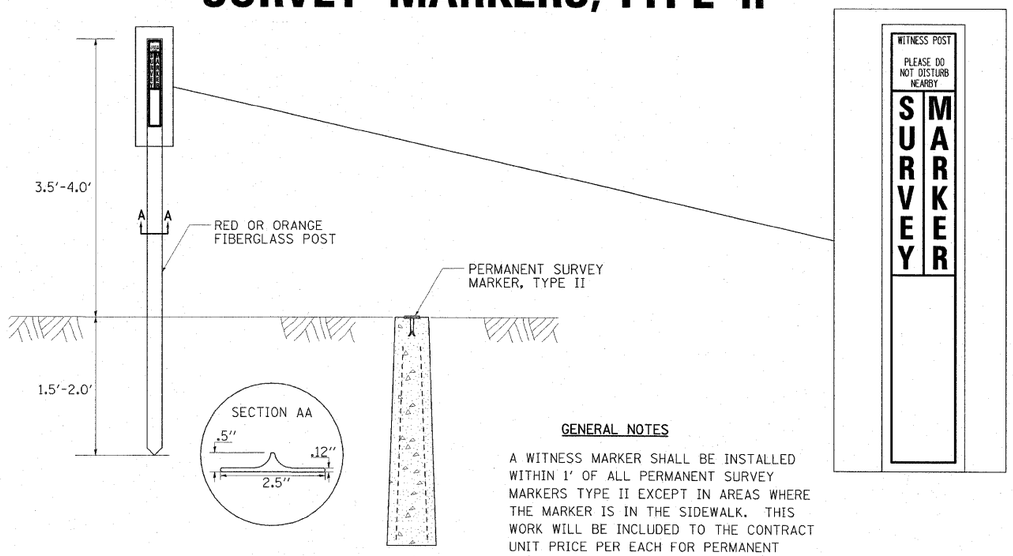
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 2 STANDARDS

SCALE: NO SCALE | SHEET NO. 4 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1, 137-1BR	HENRY	67	61
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

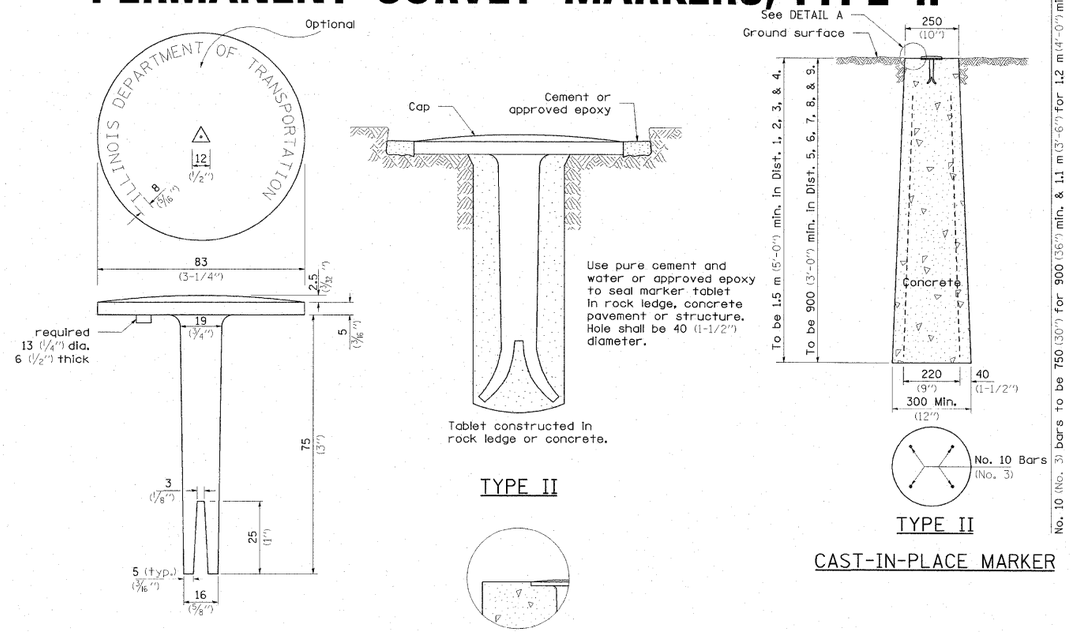
WITNESS MARKER FOR PERMANENT SURVEY MARKERS, TYPE II



GENERAL NOTES

A WITNESS MARKER SHALL BE INSTALLED WITHIN 1' OF ALL PERMANENT SURVEY MARKERS TYPE II EXCEPT IN AREAS WHERE THE MARKER IS IN THE SIDEWALK. THIS WORK WILL BE INCLUDED TO THE CONTRACT UNIT PRICE PER EACH FOR PERMANENT SURVEY MARKERS, TYPE II.

PERMANENT SURVEY MARKERS, TYPE II



BRASS OR ALUMINUM TABLET

TYPE II

DETAIL A

TYPE II

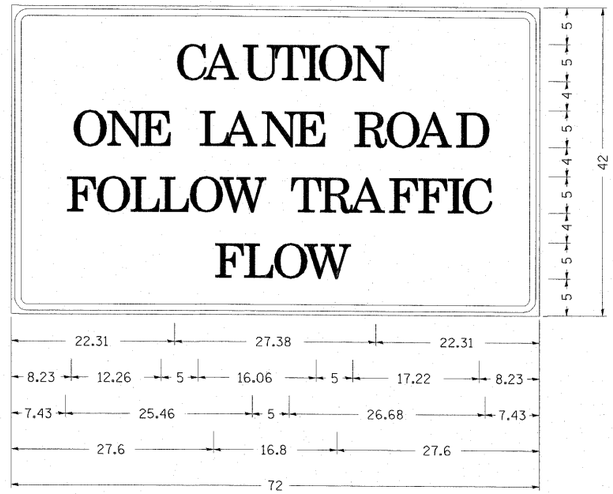
CAST-IN-PLACE MARKER

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

REVISED - 10-21-08

WITNESS MARKER & PERMANENT SURVEY MARKERS, TYPE II 66.2

ENTRANCE SIGN FOR USE WITH TEMPORARY SIGNALS



Type AA Fluorescent Orange Sheeting ;
2.25" Radius, 0.88" Border, 0.50" Indent, Black on Orange;
[CAUTION] D; [ONE LANE ROAD] D;
[FOLLOW TRAFFIC] D; [FLOW] D

TABLE OF WIDTHS AND SPACES

	C		A		U		T		I		O		N			
22.31	3.36	0.62	4.18	0.94	3.36	0.94	3.04	0.94	0.78	1.17	3.52	1.17	3.36	22.31		
	O		N		E											
8.23	3.51	1.17	3.36	1.18	3.04											
		L		A		N		E								
5.00		3.05	0.31	4.18	0.94	3.36	1.17	3.05								
		R		O		A		D								
5.00		3.36	0.93	3.52	0.94	4.18	0.93	3.36	8.23							
	F		O		L		L		O		W					
7.43	3.04	0.94	3.52	1.17	3.04	0.94	3.05	0.94	3.51	0.94	4.37					
		T		R		A		F		F		I		C		
5.00		3.05	0.94	3.36	0.94	4.18	0.93	3.05	0.94	3.04	0.94	0.78	1.18	3.35	7.43	
	F		L		O		W									
27.60	3.05	0.94	3.04	0.94	3.52	0.93	4.38	27.60								

GENERAL NOTES

THIS SIGN SHALL BE INSTALLED AT ENTRANCES LOCATED BETWEEN THE TEMPORARY SIGNALS AS DIRECTED BY THE ENGINEER.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

THE COST TO FURNISH, INSTALL AND REMOVE THIS SIGN AT THE REQUIRED LOCATIONS SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

REVISED - 10-28-05

ENTRANCE SIGN FOR USE WITH TEMPORARY SIGNALS 75.2

FILE NAME = D264428-sht-details02.dgn	USER NAME = HAS	DESIGNED - JMS	REVISED -	
		DRAWN - JPC	REVISED -	
	PLOT SCALE = 0.0839 '/ IN.	CHECKED - ELH	REVISED -	
	PLOT DATE = 3/23/2009 11:11:05 PM	DATE - 3/13/09	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 2 STANDARDS

SCALE: NO SCALE | SHEET NO. 5 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1, 137-1BR	HENRY	67	62
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STORM WATER POLLUTION PREVENTION PLAN
EROSION CONTROL PLAN

THE FOLLOWING PLAN WAS ESTABLISHED AND INCLUDED IN THESE PLANS TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION CONTROL SYSTEMS AND TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE UNDER NPDES.

THE PURPOSE OF THIS PLAN IS TO MINIMIZE SILTATION WITHIN THE CONSTRUCTION ZONE AND TO ELIMINATE SEDIMENTS FROM ENTERING AND LEAVING THE CONSTRUCTION ZONE BY UTILIZING PROPER TEMPORARY EROSION CONTROL SYSTEMS AND PROVIDING GROUND COVER WITHIN A REASONABLE AMOUNT OF TIME.

CERTAIN ITEMS, AS SHOWN IN THIS PLAN AND REFERENCED BY THE LEGEND, SHALL BE PLACED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION. OTHER ITEMS SHALL BE PLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER ON A CASE BY CASE SITUATION RESULTING FROM THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, TIME OF YEAR, AND EXPECTED WEATHER CONDITIONS.

THE CONTRACTOR SHALL PLACE PERMANENT EROSION CONTROL SYSTEMS AND SEEDING WITHIN A REASONABLE AMOUNT OF TIME: THEREFORE, REDUCING THE AMOUNT OF AREA BEING OPEN TO THE POSSIBILITY OF EROSION AND REDUCING THE AMOUNT OF TEMPORARY SEEDING. THE RESIDENT ENGINEER WILL DETERMINE IF TEMPORARY EROSION CONTROL SYSTEMS SHOWN IN THE PLAN CAN BE DELETED, THE SIZE OF THE PROPOSED DITCH CHECKS, THE PROPER METHOD OF INSTALLATION, AND IF ANY ADDITIONAL TEMPORARY EROSION CONTROL SYSTEMS SHALL BE ADDED WHICH ARE NOT INCLUDED IN THE PLANS. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN IN STANDARD 280001 OF THE PLANS.

SITE DESCRIPTION
DESCRIPTION OF CONSTRUCTION ACTIVITY:

THIS PROJECT CONSISTS OF REMOVAL OF TWO BRIDGES AND REPLACING THEM WITH BOX CULVERTS

DESCRIPTION OF INTENDED SEQUENCE OF ACTIVITIES:
THE SEQUENCE OF EVENTS ARE AS FOLLOW: CLEARING, EMBANKMENT, EXCAVATION, GRADING AND PAVING. THIS PROJECT WILL BE CONSTRUCTED IN SEGMENTS AS SHOWN IN THE "STAGING PLANS".

TOTAL CONSTRUCTION SITE (CONSTRUCTION LIMIT TO CONSTRUCTION LIMIT) 3.8 ACRES
PROPOSED R.O.W (TOTAL PARCEL AREA) 4.4 ACRES
DISTURBED BY EXCAVATION (E.O.P TO CONSTRUCTION LIMIT) 2.8 ACRES

SUPPORTING REPORTS AND PLANS
THE FOLLOWING ASSISTED IN DEVELOPING THE EROSION CONTROL PLAN AS REFERENCED DOCUMENTS:

SOIL PROFILE SHEETS, SOILS REPORTS, BORING LOGS
USGS DRAINAGE MAPS, PROJECT PLAN DOCUMENTS

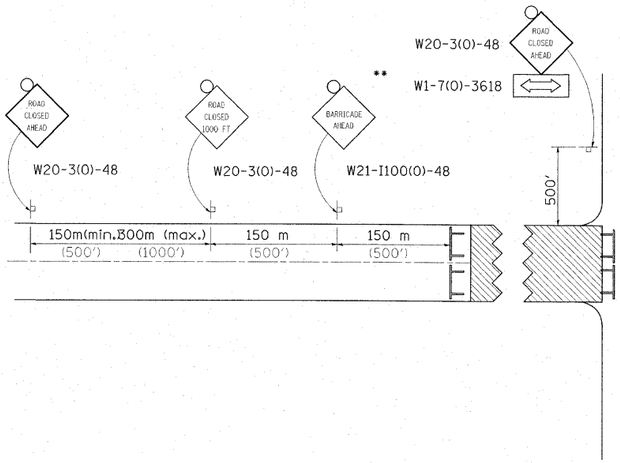
DRAINAGE TRIBUTARIES RECEIVING WATER FROM CONSTRUCTION SITE
NORTH BRANCH OF SPRING CREEK
SOUTH BRANCH OF SPRING CREEK

EROSION CONTROLS AND SEDIMENT CONTROL PROCEDURES
STABILIZATION PRACTICES AT THE BEGINNING OF CONSTRUCTION:
PERIMETER EROSION CONTROL SHALL BE PLACED PRIOR TO BEGINNING EARTHWORK.

STABILIZATION PRACTICES DURING CONSTRUCTION:
AS EARTH EXCAVATION AND EMBANKMENT ARE BEING COMPLETED THE CONTRACTOR SHALL PLACE DITCH CHECKS, INLET AND PIPE PROTECTION, EROSION CONTROL BLANKET, AND SEEDING AS STAGES OF THE PROJECT ARE COMPLETED. PERIMETER EROSION BARRIER WILL BE INSTALLED AT ADDITIONAL LOCATIONS AS THE PROJECT PROGRESSES. SEEDING SHALL BE COMPLETED AS SPECIFIED IN THE EROSION CONTROL/SEEDING MOBILIZATION AND TEMPORARY SEEDING SPECIAL PROVISION.

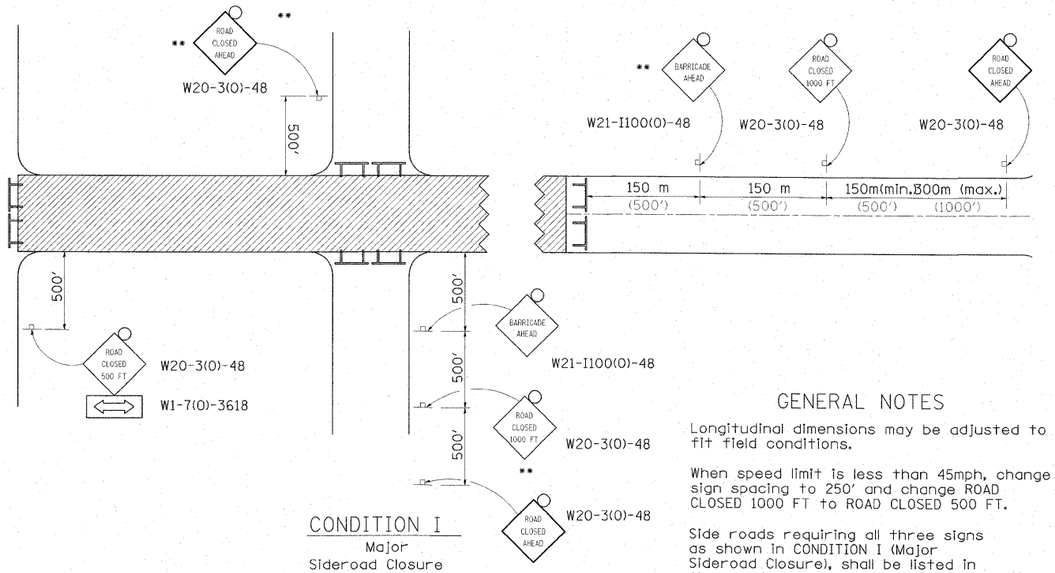
MAINTENANCE AFTER FINAL GRADING
TEMPORARY EROSION CONTROL SYSTEMS SHALL BE LEFT IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY AND ALL PROPOSED TURF AREAS SEEDED AND ESTABLISHED WITH THE PROPER STAND. ONCE PERMANENT EROSION CONTROL SYSTEMS AS PROPOSED IN THE PLANS ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED, CLEANED UP AND DISTURBED TURF RESEEDED.

TRAFFIC CONTROL FOR ROAD CLOSURE



CONDITION II

Minor
Sideroad Closure



CONDITION I

Major
Sideroad Closure

GENERAL NOTES

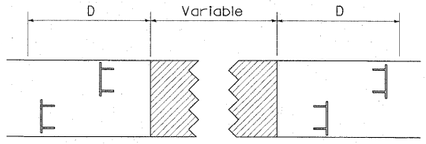
Longitudinal dimensions may be adjusted to fit field conditions.

When speed limit is less than 45mph, change sign spacing to 250' and change ROAD CLOSED 1000 FT to ROAD CLOSED 500 FT.

Side roads requiring all three signs as shown in CONDITION I (Major Sideroad Closure), shall be listed in the special provision.

** Where local access is to be maintained, barricades are to be set up as shown in Road Closed to thru traffic. Type III Barricades and R11-2-4830 signs shall be as shown in "Road Closed To All Traffic" detail on Highway Standard 701901.

ROAD CLOSED TO THRU TRAFFIC BARRICADE SET UP



Type III Barricades and R11-4-4830 signs shall be as shown in "Road Closed To All Thru Traffic" detail on Highway Standard 701901. If the distance "D" exceeds 600 m (2000') an additional set of barricades and R11-4-4830 shall be placed at each end of the work area.

REVISED - 1-11-08

SYMBOLS

Work area

Type III Barricade with Flashers

Sign with flashing light

All dimensions are in millimeters (inches) unless otherwise shown.

TRAFFIC CONTROL FOR ROAD CLOSURE **40.1**

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

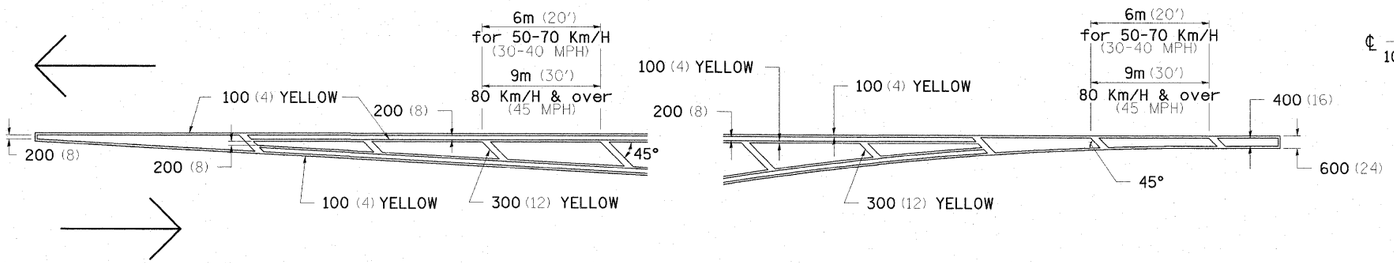
DISTRICT 2 STANDARDS

SCALE: NO SCALE | SHEET NO. 7 OF 10 SHEETS | STA. | TO STA.

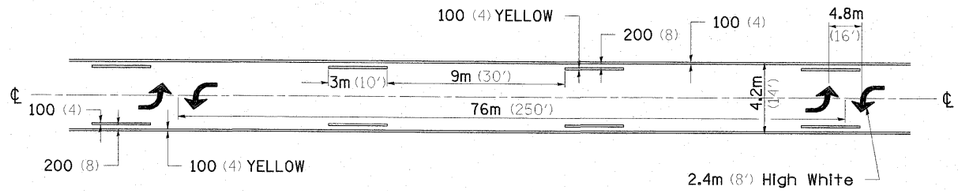
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1, 137-1BR	HENRY	67	64
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL PAVEMENT MARKINGS

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

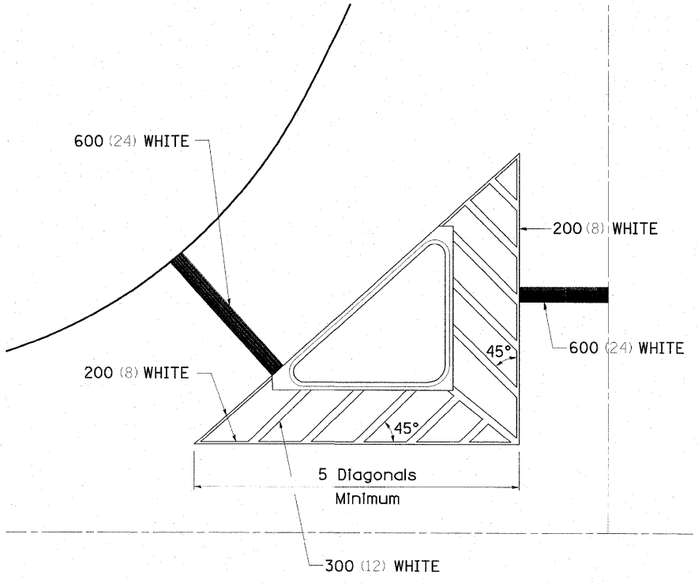


MEDIAN PAVEMENT MARKING

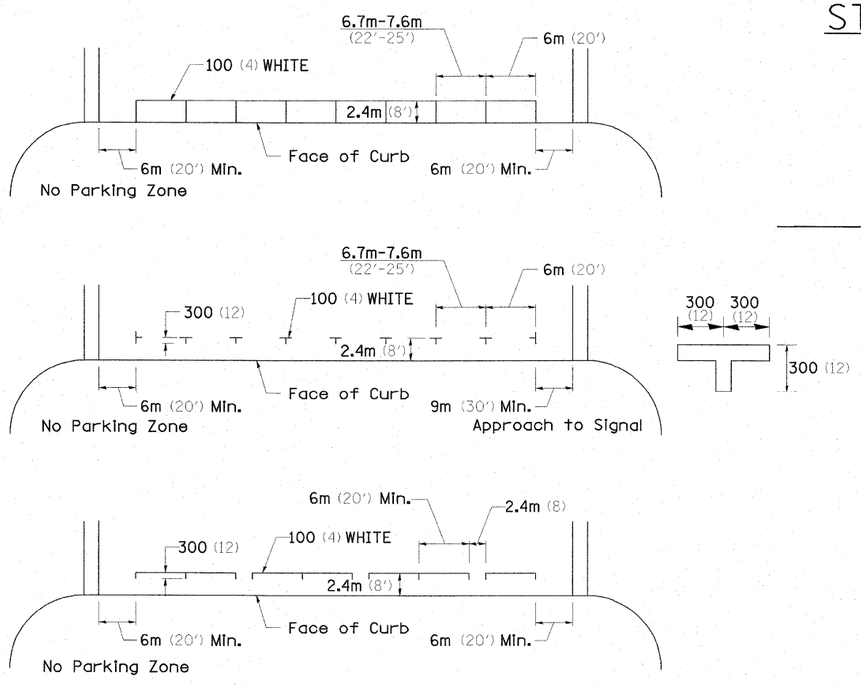


** ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

TYPICAL ISLAND OFFSET SHOULDER WIDTH

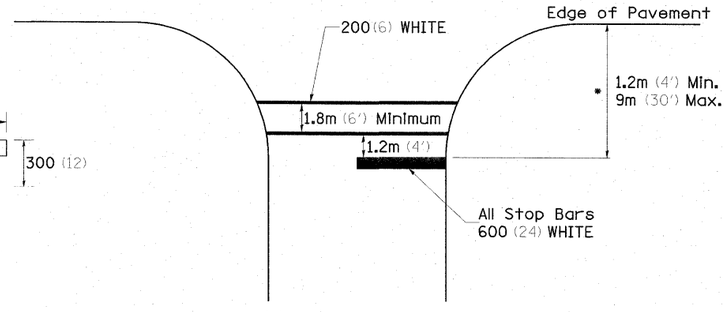


TYPICAL PARKING SPACING



STANDARD CROSSWALK MARKING

See Schedules for Locations



* Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

REVISED - 10-21-08

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

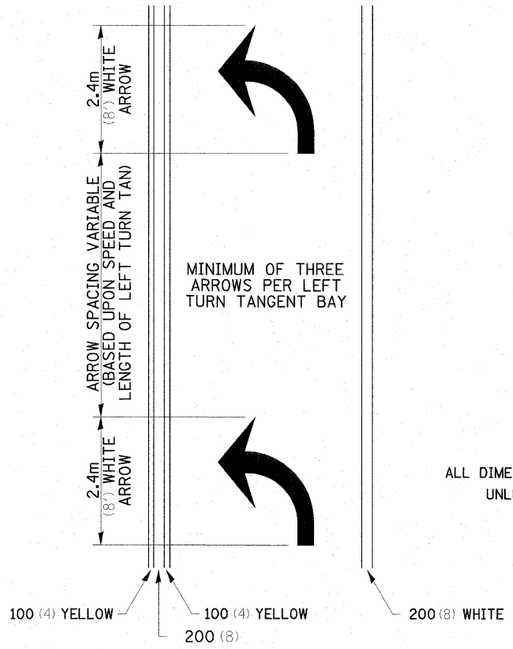
DISTRICT 2 STANDARDS

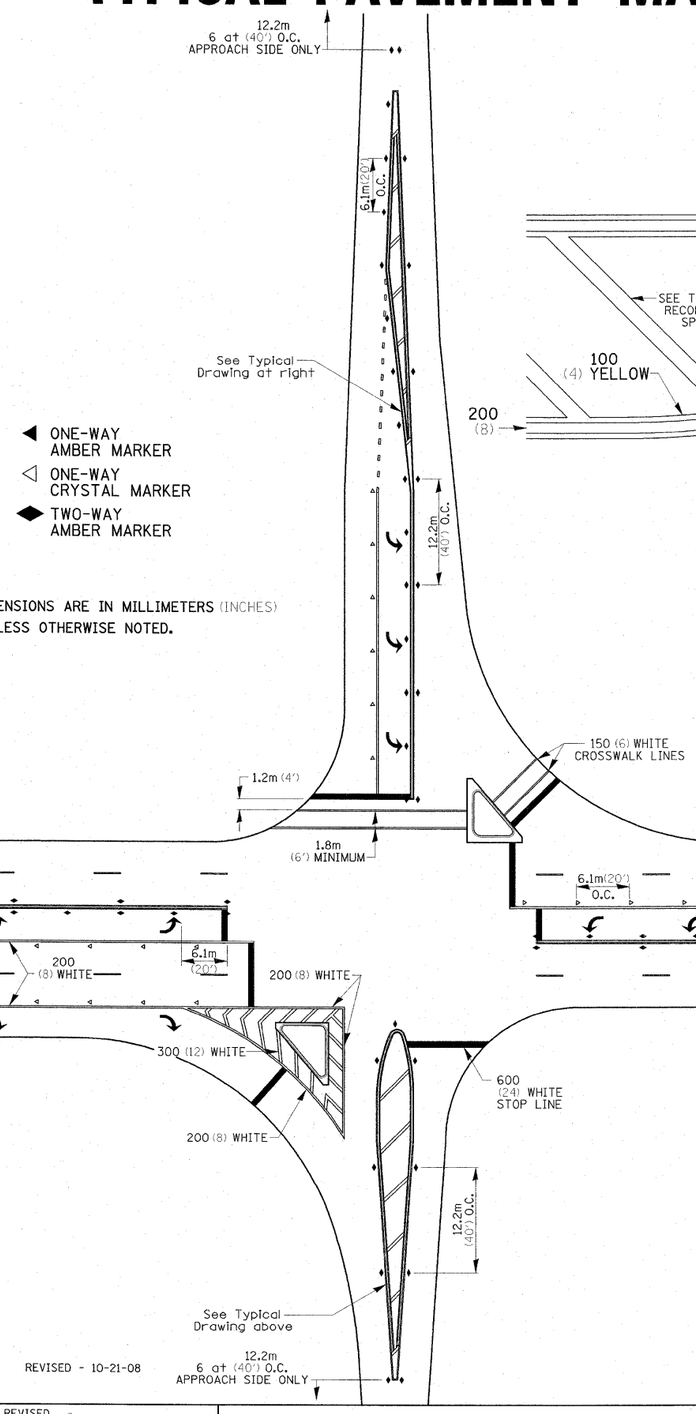
SCALE: NO SCALE | SHEET NO. 8 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1, 137-1BR	HENRY	67	65
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

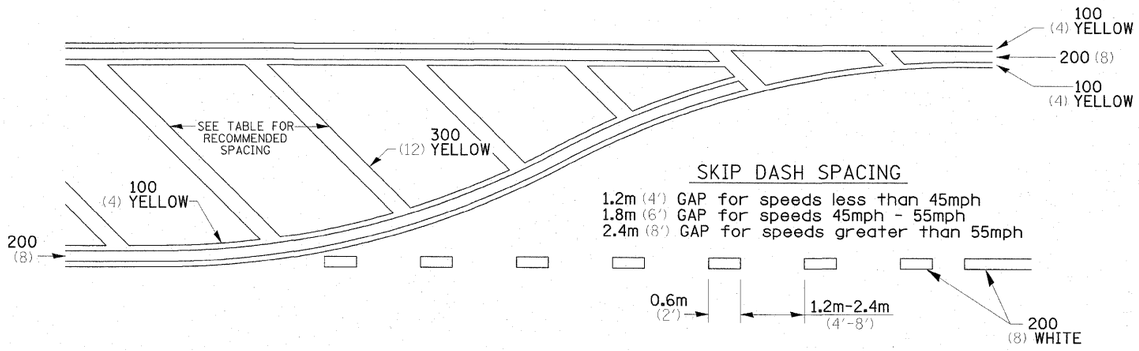
TYPICAL PAVEMENT MARKINGS

ARROW LAYOUT





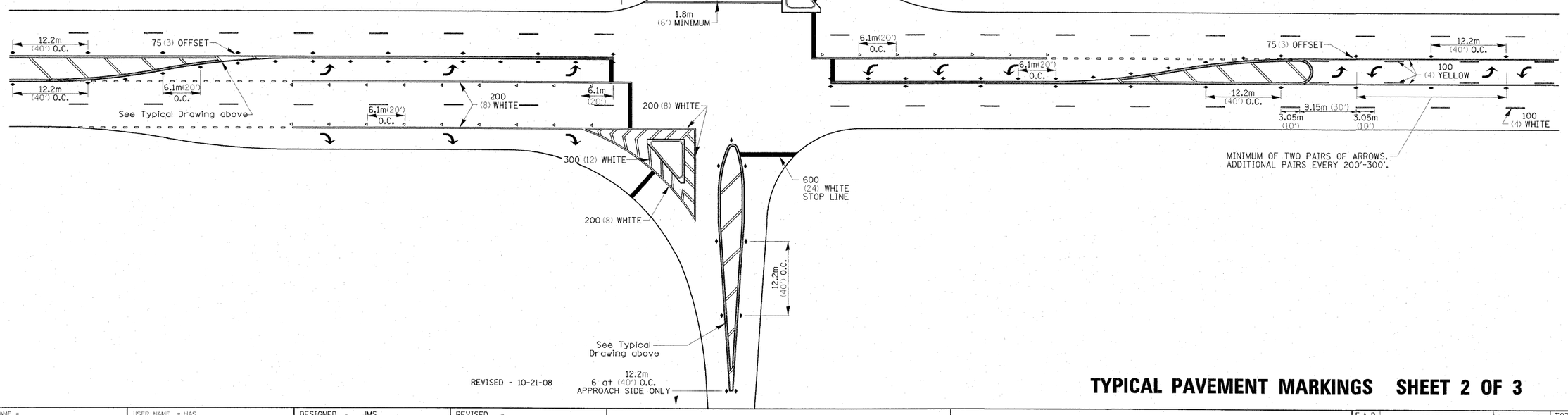
TYPICAL PAVEMENT MARKING FOR FLUSH MEDIUM



RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 50Km/H (30MPH)	15.3m (50')	4.53m (15')	3.05m (10')
50-60Km/H (30-40MPH)	22.9m (75')	6.1m (20')	4.53m (15')
70Km/H (45MPH) & over	22.9m (75')	9.05m (30')	6.1m (20')

NOTE: If the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



REVISED - 10-21-08

TYPICAL PAVEMENT MARKINGS SHEET 2 OF 3 41.1

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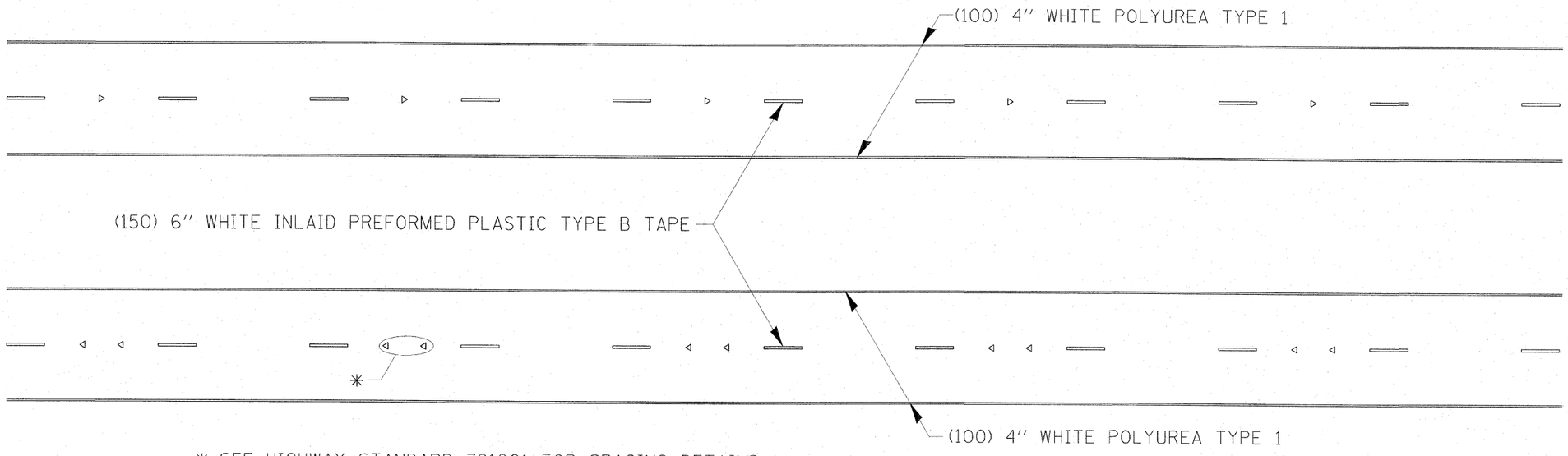
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 2 STANDARDS

SCALE: NO SCALE | SHEET NO. 9 OF 10 SHEETS | STA. | TO STA.

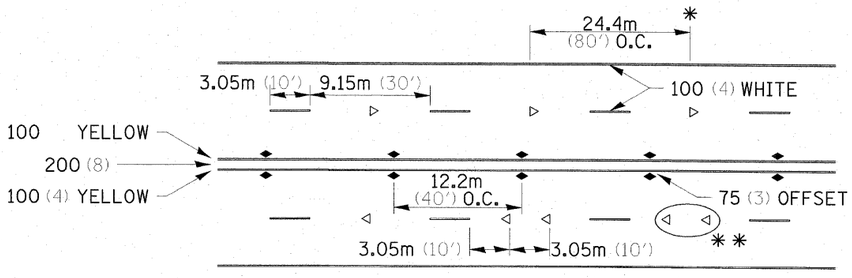
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1, 137-1BR	HENRY	67	66
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL PAVEMENT MARKINGS



* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.
USE DOUBLE MARKERS WHEN ADT ≥ 25,000.

MULTI–LANE / DIVIDED



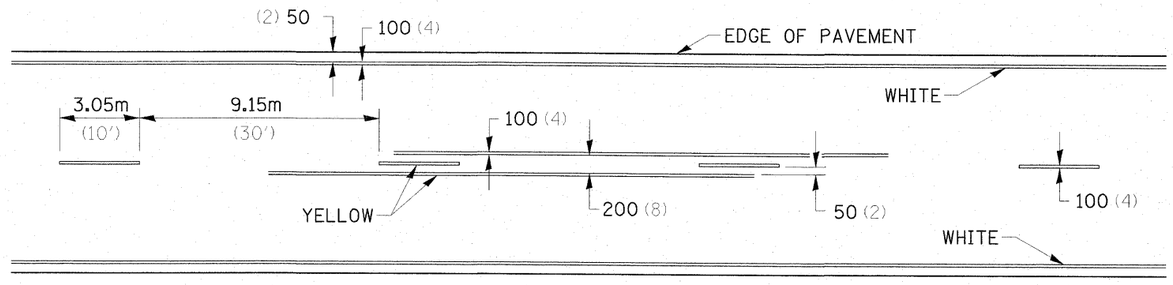
SYMBOLS

* REDUCE TO 12.2m (40') O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 15Km/H (10MPH) LOWER THAN POSTED SPEEDS.

** USE DOUBLE MARKERS WHEN ADT ≥ 25,000

MULTI–LANE / UNDIVIDED

TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION – NO PASSING ZONES



REVISED - 10-21-08

TYPICAL PAVEMENT MARKINGS SHEET 3 OF 3 41.1

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 2 STANDARDS

SCALE: NO SCALE | SHEET NO. 10 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
638	136BR-1, 137-1BR	HENRY	67	67
		CONTRACT NO. 64428		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		