INDEX OF SHEETS 06-15-2018 LETTING ITEM 090 SHEET NO. DESCRIPTION **ROADWAY PLANS** COVER SHEET
GENERAL NOTES & STANDARDS
SUMMARY OF QUANTITIES
TYPICAL SECTIONS
SCHEDULE OF QUANTITIES
FAS ROUTE 2869 (IL 37) PLAN AND PROFILE
STAGE CONSTRUCTION PLAN AND DETAILS
EROSION CONTROL PLAN
SEEDING AND MELCHING DETAILS
STEP CONSTRUCTION ON EXISTING FILL DETAILS
BUTT JOINT DETAIL STRUCTURE PLANS GENERAL PLAN
GENERAL DATA
STAGE CONSTRUCTION DETAILS
TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
BOX CULVERT DETAILS
STEEL RAILING, TYPE 2399
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
BORING LOGS 20. 21. 22. 23. 24.-27. 28. 29. 30. **EXISTING STRUCTURE PLANS**

PROPOSED HIGHWAY PLANS

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

FAS ROUTE 2869 (IL 37) SECTION 2B-1 PROJECT STP-FRT 9(768) **BRIDGE REPLACEMENT OVER UNNAMED STREAM** JEFFERSON COUNTY

C-99-057-12

R3E, 3RD PM

TRAFFIC DATA

SN 041-0093

FAS ROUTE 2869 (IL 37) CROSS SECTIONS

CROSS SECTIONS

EXISTING STRUCTURE PLANS - FOR INFORMATION ONLY

FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL (NON-URBAN)

4150 (2018) 90.0% PV: TRUCKS:

DESIGN SPEED: POSTED SPEED: 10.0% 55 MPH 55 MPH

TOWNSHIPS

SPRING GARDEN

EXISTING STRUCTURE NO. 041-0093 STATION 494+87,40
PROPOSED STRUCTURE NO. 041-2020

STA 494+57

IMPROVEMENTS BEGIN

STATION 494+87.40 PROPOSED STRUCTURE IS A

DOUBLE 10'-0"S x 9'-0"R BOX CULVERT SKEWED 10° LEFT FORWARD

DESIGN DESIGNATION: N.A.

COORDINATE SYSTEM: NAD 1983 STATEPLANE ILLINOIS EAST FIPS 1201 FEET

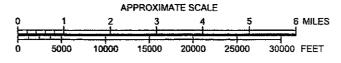
POSTED SPEED: 55 MPH

J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

PROJECT ENGINEER: DAVID PICHE PROJECT DESIGNER: ESCA CONSULTANTS, INC.

-UNNAMED STREAM IMPROVEMENTS END STA 495+18

LOCATION MAP

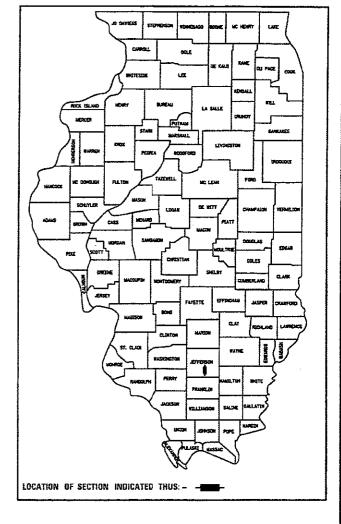


GROSS LENGTH = 61.00 FT. = 0.012 MILES NET LENGTH = 61.00 FT. = 0.012 MILES

ESCA JOB NO. 1259.03

SECTION JEFFERSON 39 1 CONTRACT NO. 78326

D-99-050-12



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

REGION FIVE ENGINEER

DIRECTOR OF HIGHWAY PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 78326

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LIST OF ILLINOIS DOT HIGHWAY STANDARDS

STANDARD NO.	<u>DESCRIPTION</u>
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-09	PAVEMENT JOINTS
420701-03	PAVEMENT WELDED WIRE REINFORCEMENTS
482011-03	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
515001-03	NAME PLATE FOR BRIDGES
630001-12	STEEL PLATE BEAM GUARDRAIL
630201-07	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-08	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631032-09	TRAFFIC BARRIER TERMINAL, TYPE 6A
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-17	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS 2 45 MPH
701901-07	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
725001-01	OBJECT AND TERMINAL MARKERS
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

GENERAL NOTES

- AFTER A LIFT OF HOT MIX ASPHALT HAS BEEN PLACED, THE LANE SHALL REMAIN CLOSED TO TRAFFIC UNTIL THE NEW MAT HAS COOLED TO 150 DEGREES FAHRENHEIT.
- 2. EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.
- 3. TRIM EDGES OF EXISTING HOT MIX ASPHALT SURFACE FLUSH WITH EXISTING PAVEMENT PRIOR TO CONSTRUCTING NEW BASE COURSE WIDENING.
- 4. THE THICKNESS OF HOT MIX ASPHALT MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO TRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HOT MIX ASPHALT MIXTURE IS PLACED.
- 5. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THIS SHEET OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.
- 6. FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES;

ALL HOT-MIX ASPHALT 2.016 TONS/CU YD 2.05 TONS/CU YD ALL AGGREGATE 1.50 TONS/CU YD RIPRAP **EARTH** 110 LBS/ CU FT

TREES SHALL BE PRESERVED THROUGHOUT THIS SECTION AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER, GENERALLY, TREES OUTSIDE THE CLEAR ZONE, OR CONSTRUCTION LIMITS, AND WHICH DO NOT INTERFERE WITH CONSTRUCTION, SHALL NOT BE DISTURBED. BE DISTURBED.

- 8. ALL ELEVATIONS REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.
- 9. AT ALL LOCATIONS WHERE THE PROPOSED HOT MIX ASPHALT OR CONCRETE PAVEMENT JOINS AN EXISTING HOT MIX ASPHALT OR CONCRETE PAVEMENT, A FULL DEPTH SAWED JOINT SHALL BE CONSTRUCTED. THE COST OF THIS JOINT WILL BE INCLUDED IN THE COST OF THE TYPE OF PAVEMENT BEING CONSTRUCTED.
- 10. PRIOR TO PLACEMENT OF THE FINAL PAVEMENT MARKINGS THE RESIDENT ENGINEER SHALL CONTACT THE BUREAU OF OPERATIONS AND ARRANGE FOR INSPECTION AND APPROVAL OF THE PAVEMENT MARKING LAYOUT.
- 11. IF THE CONTRACTOR ELECTS TO USE P.C.C. BASE COURSE WIDENING, SUCH WIDENING SHALL HAVE TACK COAT APPLIED ACCORDING TO SECTION 406, EXCEPT THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE WIDENING.
- 14. THERE ARE NO AVAILABLE WASTE SITES ON THE EXISTING RIGHT OF WAY WITHIN THE PROJECT LIMITS. DISPOSAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND WASTE MUST BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD
- 15. THE QUANTITY OF SHORT TERM PAVEMENT MARKING SHOWN IN THE PLANS IS BASED ON ONE APPLICATION EACH FOR THE HMA SURFACE REMOVAL AND SURFACE COURSE.
- 16. FOR BASE COURSE WIDENING WIDER THAN 6 FT. CONSTRUCTION SHALL FOLLOW ARTICLE 354 OR ARTICLE 356 OF THE STANDARD SPECIFICATIONS.

COMMITMENTS

- 1. REFER TO COMMITMENT FILE FOR ANY COMMITMENTS AFTER MARCH 23, 2018.
- WETLANDS ARE WITHIN THE RIGHT-OF-WAY BUT OUTSIDE OF THE CONSTRUCTION LIMITS AS SHOWN ON THE PLANS. THE WETLANDS SHALL BE DELINEATED DURING CONSTRUCTION AND SHALL NOT BE DISTURBED.
- TO PROTECT THE PRAIRIE, NO PARKING OF VEHICLES OR STORAGE OF EQUIPMENT OR MATERIALS SHOULD OCCUR ON THE EAST SIDE OF IL 37 BEYOND A NORTH TO SOUTH LINE DRAWN 13 FEET FROM THE EXISTING EDGE OF PAVEMENT.
- DISTURBED AREAS EAST OF IL 37 SHALL BE SEEDED WITH A NATIVE MIX (CLASS 4 & 5A) IN ACCORDANCE WITH SECTION 250 OF THE STANDARD SPECIFICATIONS.
- 5. CLEARING OF TREES SHALL BE PROHIBITED FROM APRIL 1 THROUGH SEPTEMBER 30.

HMA_MIXTURES_REQUIREMENTS

LOCATION(S):	HMA SURFACE COURSE	BASE COURSE WIDENING	HMA SHOULDERS
MIXTURE USE(S):	HMA SURFACE CSE, MIX C, N70	HMA BINDER CSE, N70, IL-19.0	HMA BINDER CSE, N30, IL-19.0L
AC/PG:	PG64-22	PG64-22	PG64-22
ABR % (MAX.): •••	SEE BDE SPECIAL PROVISIONS	SEE BOE SPECIAL PROVISIONS	SEE BDE SPECIAL PROVISIONS
DESIGN AIR VOIDS:	4.0%, 70 GYRATION DESIGN	4.0%. 70 GYRATION DESIGN	4.0%, 30 GYRATION DESIGN
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL-9.5	IL-19.0	IL-19.0
FRICTION AGGREGATE:	C SURFACE	NONE	NONE
MIXTURE WEIGHT:	112 LBS/SO YD/IN	112 LBS/SO YD/IN	112 LBS/SO YD/IN
OUALITY MANAGEMENT PROGRAM:	OCOA	OCOA	OCOA
SUBLOT SIZE:	NA	NA	NA

••• IF RAP OPTION IS SELECTED, THE ASPHALT CEMENT GRADE MAY NEED TO BE ADJUSTED AS DETERMINED BY THE ENGINEER.

PREPARED BY DISTRICT STUDIES & PLANS ENGINEER EXAMINED BY DISTRICT LAND ACQUISITION ENGINEER EXAMINED BY DISTRICT PROGRAM DEVELOPMENT ENGINEER EXAMINED BY DISTRICT OPERATIONS ENGINE EXAMINED BY: DISTRICT PROJECT IMPLEMENTATION ENGINEER EXAMINED BY: DISTRICT CONSTRUCTION ENGINEER
EXAMINED BY:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT MATERIALS ENGINEER

TO STA

ESCA

JSER NAME : halsteadte DESIGNED KJK REVISED ESCA PROJECT NO. 1259-83 DRAWN K.IK REVISED PLOT SCALE = 0.1667 '/ CHECKED REVISED DATE REVISED PLOT DATE = 8/17/2017 8:17:55 AN 08/17

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** **GENERAL NOTES & STANDARDS**

SHEET NO. 1 OF 1 SHEETS STA.

SCALE:

TOTAL SHEE SECTION COUNTY 2869 2B-1 JEFFERSON 39 2 CONTRACT NO. 78326 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

	SUMMARY OF QUANTITIES			CONSTRUCT	TION CODE
	80% FEDERAL				
				20% STATE	
CODE		Inglinator	TOTAL	ROADWAY	
	ITEM	TINU		0004	
и0.		:	QUANTITY	ROADWAY	
					a. Al Ibrido lover on some some some some some some
20100500	TREE REMOVAL, ACRES	ACRE	0. 25	0. 25	
20200100	EARTH EXCAVATION	CU YD	680	680	
	:				
20700220	POROUS GRANULAR EMBANKMENT	CU YD	400	400	
		The control of the co			
25000210	SEEDING, CLASS 2A	ACRE	0, 25	0. 25	
		remova-a-green			
25000310	SEEDING, CLASS 4	ACRE	0. 25	0, 25	
25000320	CONTROL OF ACC. SA	ACRE	0.25	0. 25	
25000322	SEEDING. CLASS 5A	AURE	0. 25	V. 23	
25000350	SEEDING, CLASS 7	ACRE	0.25	0. 25	
		- ## - ## - ## - ## - ## - ## - ## - #		· · · · · · · · · · · · · · · · · · ·	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	25	25	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	25	25	-
25000500	POTASSIUM FERTILIZER NUTRIENT	POUND	25	25	
2300000	FULKISTON) LATELIZEN NOTATENT	, l	. .	- Sa - P	
25000700	AGRICULTURAL GROUND LIMESTONE	TON	0.5	0.5	
25100115	ANU CHI METIOD 2	and a second	0.25	2.2	
23100115	MULCH, METHOD 2	ACRE	0, 25	0. 25	·
25100630	EROSION CONTROL BLANKET	SO YD	852	852	
				and the state of t	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	50	50	
D SPECIALT			**************************************		



DESIGNED - KJK
DRAWN KJK
CHECKED - JMS
DATE - 08/17 REVISED REVISED ESCA PROJECT NO. 1259.83 PLOT STALE = 2.156? / m. REVISED HHR45 AM DATE REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES SHEET NO. 1 OF 5 SHEETS STA. TO STA. | P.A.S. | SECTION | COUNTY | SHEETS | NO. |
| 2869 | 28-1 | JEFFERSON | 39 | 3 |
| CONTRACT NO. 78326 |
| FED. ROAD DIST, NO. | SILINOIS| FED. AID PROJECT

	SUMMARY OF QUANTITIES			CONSTRUCT 80% FEDERAL	TION CODE
	Soldikiwal of Cowistility			20% STATE	
CODE			TOTAL	ROADWAY	
	ITEM	UNIT	QUANTITY	0004	
NO.		Į	UUANIIII	ROADWAY	
		State of the state			**
28000400	PERIMETER EROSION BARRIER	FOOT	750	750	
28100109	STONE RIPRAP, CLASS AS	so yo	200	200	
28200200	FILTER FABRIC	SO YD	200	200	
					-
35650500	BASE COURSE WIDENING 10"	SO YO	410	410	:
40600200	BITUMINOUS MATERIALS (TACK COAT)	POUND	142	142	
10000230	DITORINGS WATERIALS TRACE COAT	1. 00/10	4.74		-
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	317	317	Till for the framework was to the find the first of the f
40603515	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	36	36	
42000060	WELDED WIRE REINFORCEMENT	SO YD	244	244	
	PORTLAND CEMENT CONCRETE PAVEMENT 10"	SO YD	244	244	
14000100	The state of the s		130		
44000100	PAVEMENT REMOVAL	SO YO	128	128	
48203029	HOT-MIX ASPHALT SHOULDERS. 8"	SO YD	168	168	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH		1	
~ ~ × ~ * * * * * * *		1	-		
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	c u yo	80	80	
5080 0205	REINFORCEMENT BARS. EPOXY COATED	POUND	30190	30190	
® SPECIALT	Y ITEM				



USER NAME = Lamporto	DESIGNED -	KJK	REVISED
ESCA PROJECT NO. 1259.83	DRAWN -	KJK	REVISEO -
PLOT SCALE : 8.1667 1/ m.	CHECKED	2NEL	REVISED -
PEDT CATE = 3/5/2016 11/41/34 AM	DATE -	08/17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	ŞĮ	IMM	ARY	OF QU	JANTIT	ES
SHEET	NO.	2 OF	5	SHEETS	STA.	TO STA.

SCALE

| F.A.S. | SECTION | COUNTY | SMEETS | NO. |
| 2869 | 28-1 | JEFFERSON | 39 | 4 |
| CONTRACT NO. 78326 |
| FED. ROAD DIST. NO. | | ILLINOIS | FED. AID PROJECT |

	CHARRADI OF CHARTET				TION CODE
	SUMMARY OF QUANTITIES			80% FEDERAL	-
			r	20% STATE	
CODE	A	ļ	TOTAL	ROADWAY	
NO.	M3T1	UNIT	QUANTITY	0004	
140.			austral f	ROADWAY	мынараравили силиналиси силинения
50800515	BAR SPLICERS	EACH	122	122	
50900200	STEEL RAILING, TYPE 2399	FOOT	49	49	
51500100	NAME PLATES	EACH	1	1	:
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	280	280	
54003000	CONCRETE BOX CULVERTS	CU YD	156.1	156. 1	Constitution of the Consti
003000	September 2 Day Court Time	anni de		:	
63000003	STEEL PLATE BEAM GUARDRAIL. TYPE A. 9 FOOT POSTS	FOOT	37. 5	37.5	
		e contraction of the contraction			
53200310	GUARDRAIL REMOVAL	FOOT	113	113	
63301210	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL. TYPE A	FOOT	37.5	37. 5	
		***************************************			-
63301990	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 1	EACH	4	4	
53302710	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 6A	EACH	4	4	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	. 8	
		As a constant of the constant		: :	
67100100	MOBILIZATION	LSUM	4	. 1	
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	-	1	
			The state of the s		
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	LSUM	1	1	



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SHEET NO. 3 OF 5 SHEETS STA.

TO STA.

SCALE

| T.A.S. | SECTION | COUNTY | TOTAL SHEET | NO. | SHEETS | NO. | S

	SUMMARY OF QUANTITIES			CONSTRUC 80% FEDERAL 20% STATE	TION CODE
CARC			TOTAL	ROADWAY	
CODE	ITEM	TINU		0004	·
NO.		in the second	QUANTITY	ROADWAY	
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	LSUM	1	1	
		<u> </u>			
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	б	6	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6	
70300100	SHORT TERM PAVEMENT MARKING	FOOT	592	592	
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SO FT	197	197	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1980	1980	
.0300220	Tam Ottom Francisco Management Care				
70400100	TEMPORARY CONCRETE BARRIER	FOOT	312.5	312.5	
70400000	DEL BOATE TEMPOPADY CONCRETE DARBUED	FOOT	712 5	712 6	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	TUUI	312, 5	312. 5	-
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
-				·	
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1980	1980	
			TO THE PARTY OF TH		
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	2	2	
	Ý ÍTEM				



DESIGNED - KJK
DRAWN - KJK
CHECKED - JMS
11-12-37 644 OATE - 08/17 REVISED -ESCA PROJECT NO. 1259.03 FLOT SCALE + BJ857 '/ in. REVISED -REVISED PLG1 GATE = 3/5/2018

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES SHEET NO. 4 OF 5 SHEETS STA.

TO STA.

	SUMMARY OF QUANTITIES			CONSTRUCT 80% FEDERAL 20% STATE	TION CODE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY OOO4 ROADWAY	
78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	8	8	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	2	2	
86200300	UNINTERRUPTABLE POWER SUPPLY. EXTENDED	EACH	1	1	
x0900064	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SO YD	116	116	
x0327979	PAVEMENT MARKING REMOVAL - GRINDING	SO FT	520	520	
x7015005	CHANGEABLE MESSAGE SIGN	CAL DA	28	28	
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SO FT	661	661	
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	70 :	70	
Z0054517	ROCK FILL - FOUNDATION	TON	150	150	A sector la vice de la constante de la constan
			1.		
		and any of the second s			

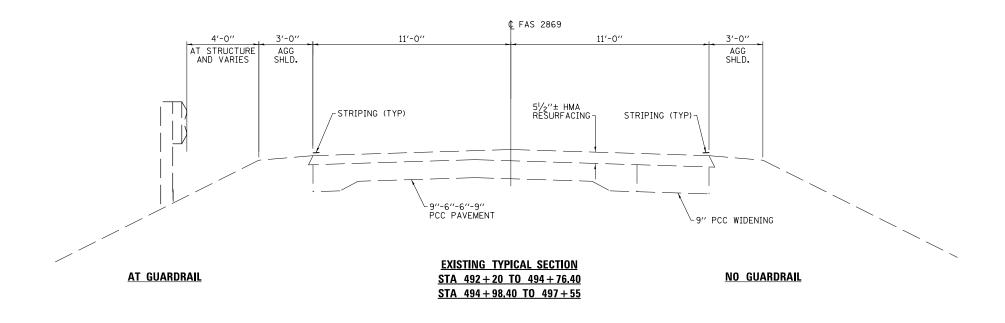
ESCA

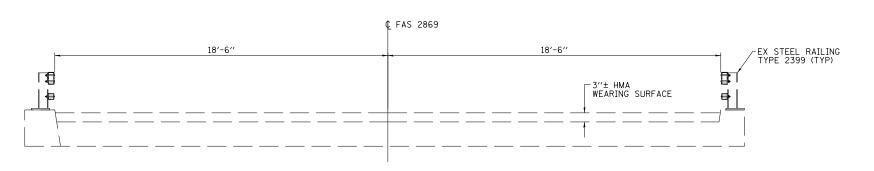
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SHEET NO. 5 OF 5 SHEETS STA.

TO STA.





EXISTING TYPICAL SECTION

STA 494+76.40 TO 494+98.40

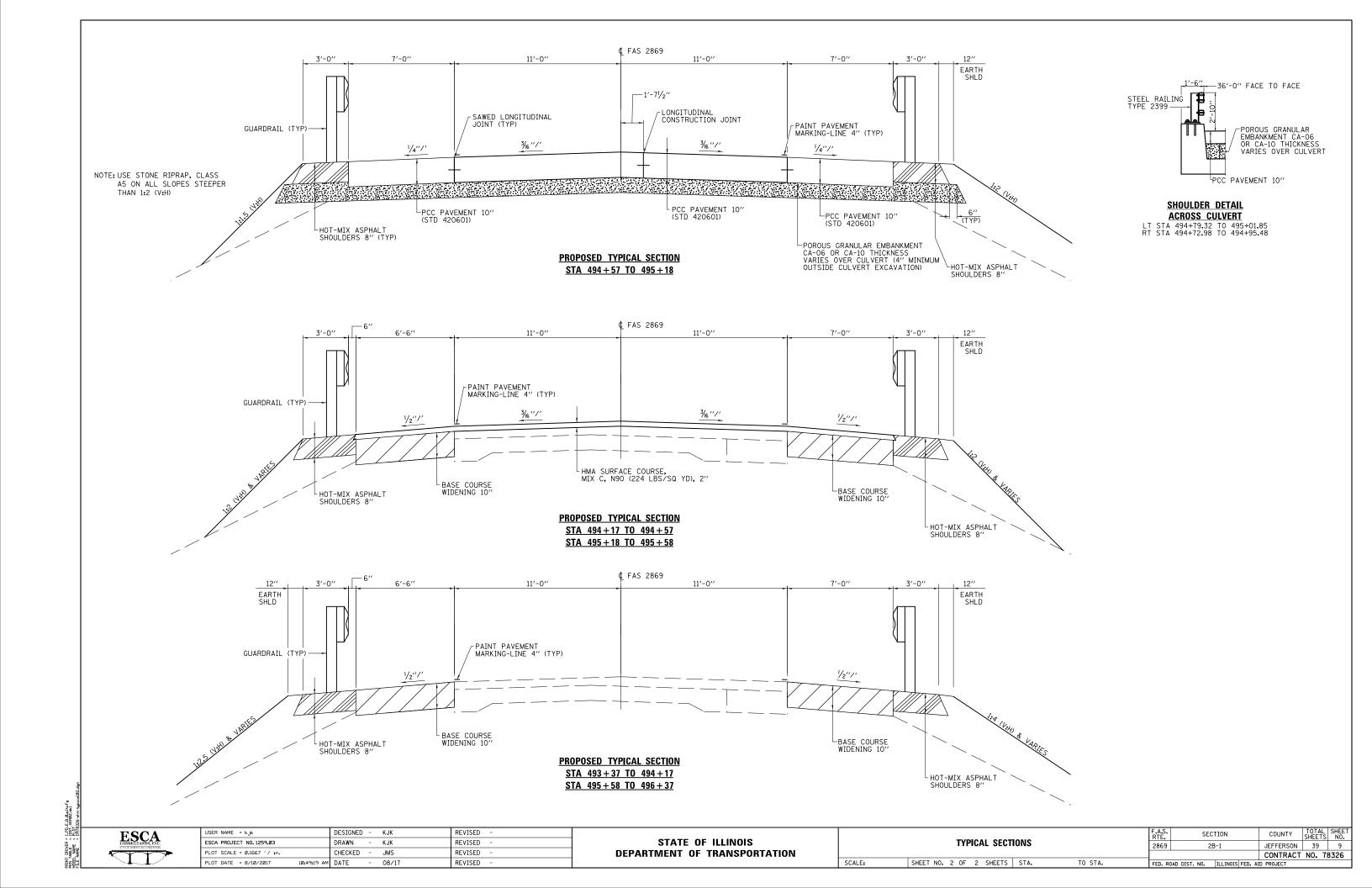
ESCA CONSULTANTS, INC.

USER NAME = kjk		DESIGNED	-	ELH/MJW	REVISED	-
ESCA PROJECT NO.1259.03		DRAWN	-	HAS	REVISED	-
PLOT SCALE = 0.1667 '/ in.		CHECKED	-	JMS	REVISED	-
PLOT DATE = 8/10/2017 10	:48:54 AM	DATE	-	04/17	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

							F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		IYP	ICA	AL SECT	IONS		2869	2B-1	JEFFERSON	39	8
									CONTRACT	NO. 7	8326
SHEET NO.	1	0F	2	SHEETS	STA.	TO STA.	FED. RO	AD DIST. NO. ILLINOIS FED. AI	D PROJECT		



EARTHWORK SCHEDULE													
LOCATION	EARTH EXCAVATION	SUITABLE EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	RIPRAP EXCAVATION MATERIAL	SUITABLE RIPRAP EXC. MATERIAL ADJUSTED FOR SHRINKAGE	EMBANKMENT (NOT A PAY ITEM)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)							
	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD							
LT STA 492+70 TO 494+70	24	18			27	-9							
RT STA 492+70 TO 494+70	17	13			127	-114							
STA 494+70 TO 495+05	568	426	123	SEE NOTE 4	87	+339							
LT STA 495+05 TO 496+70	18	14			20	-6							
RT STA 495+05 TO 496+70	53	40			50	-10							
TOTALS	680	511	123		311	+200							

TREE REMOVAL SCHEDULE					
LOCATION	TREE REMOVAL				
	ACRE				
RT STA 493+07 TO 494+50	0.06				
RT STA 495+50 TO 496+70	0.19				
TOTAL	0.25				

	PAVEMENT MARKING SCHEI	DULE		
LOCATION	DESCRIPTION	SHORT TERM PAVEMENT MARKING ①	PAINT PAVEMENT MARKING - LINE	TEMP PAVEMENT MARKING - LINE
			4′′	4''
		FOOT	FOOT	F00T
CL STA 491+60 TO 498+13	DOUBLE YELLOW	528	1310	1310
LT STA 493+20 TO 496+48	WHITE EDGE	32	330	330
RT STA 493+21 TO 496+60	WHITE EDGE	32	340	340
	TOTALS	592	1980	1980

① INCLUDES 2 APPLICATIONS

NOTES

- 1. EXCAVATION USED AS EMBANKMENT = (SUITABLE EXCAVATION)*0.75
- 2. RIPRAP EXCAVATION IS NOT A PAY ITEM AND IT IS INCLUDED IN THE COST OF STONE RIPRAP, CLASS A5.
- 3. THE EARTHWORK SCHEDULE DOES NOT REFLECT THE EARTHWORK AND EARTHWORK BALANCE FOR THE VARIOUS STAGES.
- 4. THE EARTHWORK SCHEDULE HAS ASSUMED THE RIPRAP EXCAVATION MAY NOT BE SUITABLE FOR USE AS EMBANKMENT.
- 5. EXCAVATION FOR CONSTRUCTION OF THE CONCRETE BOX CULVERT, INCLUDING THE EXCAVATION NECESSARY TO CONSTRUCT THE GRANULAR BACKFILL, WILL BE MEASURED AND PAID FOR AS EARTH EXCAVATION.

SEEDING SCHEDULE									
LOCATION	SEEDING, CLASS 2A	SEEDING, CLASS 4	SEEDING, CLASS 5A	SEEDING, CLASS 7	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	AGRICULTURAL GROUND LIMESTONE	MULCH, METHOD 2
	ACRE	ACRE	ACRE	ACRE	POUND	POUND	POUND	TON	ACRE
SE QUADRANT		0.10	0.10	0.05	3	3	3	0.1	0.03
NE QUADRANT		0.15	0.15	0.05	4	4	4	0.1	0.04
NW QUADRANT	0.10			0.10	7	7	7	0.2	0.07
SW QUADRANT	0.15			0.05	11	11	11	0.1	0.11
								•	
TOTALS	0,25	0.25	0.25	0.25	25	25	25	0.5	0.25

SHOULDERS SCHEDULE						
LOCATION	HMA SHOULDERS, 8″					
	SQ YD					
LT STA 493+77.00 TO 494+79.82	39					
LT STA 495+01.32 TO 496+37.00	51					
RT STA 493+37.00 TO 494+73.48	45					
RT STA 494+94.98 TO 495+96.00	33					
TOTAL	168					

WORK ZONE AND P	AVEMENT MAR	RKING REN	10VAL SCH	EDULE
LOCATION	PAVEMENT MARKING DESCRIPTION	TEMPORARY PAVEMENT MARKING REMOVAL	PAVEMENT MARKING REMOVAL - GRINDING②	SHORT TERM PAVEMENT MARKING REMOVAL
		SQ FT	SQ FT	SQ FT
CL STA 491+60 TO 498+13	DOUBLE YELLOW	437	340	
CL STA 491+60 TO 498+13	DOUBLE YELLOW			175
LT STA 493+20 TO 496+48	WHITE EDGE	110	110	
RT STA 493+21 TO 496+60	WHITE EDGE	114	70	
LT STA 493+20 TO 496+48	WHITE EDGE			11
RT STA 493+21 TO 496+60	WHITE EDGE			11
	TOTALS	661	520	197
	,			

② REMOVAL OF EXISTING PAVEMENT MARKINGS

EROSION CONTROL SCHEDULE							
LOCATION	TEMPORARY EROSION CONTROL SEEDING (2 APPLICATIONS)	PERIMETER EROSION BARRIER	EROSION CONTROL BLANKET				
	POUND	F00T	SQ YD				
SE QUADRANT		166	94				
NE QUADRANT		169	124				
NW QUADRANT		196	245				
SW QUADRANT		219	389				
JOBSITE	50						
TOTALS	50	750	852				

RAISED REFLECTIVE PAVEMENT	MARKER	SCHEDULE
LOCATION	RRPM	RRPM REMOVAL
	EACH	EACH
STA 494+17 TO 495+58	2	2
TOTALS	2	2

BASE COURSE WIDENING 10"	SCHEDULE
LOCATION	BASE COURSE WIDENING 10"
	SQ YD
LT STA 493+19 TO 494+76.4	103
LT STA 494+98.4 TO 496+49	107
RT STA 493+20 TO 494+57	103
RT STA 495+18 TO 496+61	97
TOTAL	410

PAVING	SCHEDULE	
LOCATION	HMA SURFACE COURSE, MIX "C", N90	BITUMINOUS MATERIALS (TACK COAT)
	TON	POUND
STA 494+17 TO 494+57	18	71
STA 495+18 TO 495+58	18	71
TOTALS	36	142

REMOVAL S		
LOCATION	PAVEMENT REMOVAL	HMA SURFACE REMOVAL - BUTT JOINT
	SQ YD	SQ YD
STA 494+57 TO 495+18	128	
STA 494+17 TO 494+57		158.5
STA 495+18 TO 495+58		158.5
TOTALS	128	317

(3) HMA SURFACE REMOVAL HAS BEEN INCLUDED TO PROVIDE A BUTT JOINT FOR THE HMA RESURFACING PLACED ON THE BASE COURSE WIDENING 10". REMOVAL OF EITHER PCC OR HMA WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQ YD FOR HMA SURFACE REMOVAL - BUTT JOINT.

PCC PAVEMENT SCHEDULE							
LOCATION	PCC PAVEMENT 10" (STD 420601)	WELDED WIRE REINFORCEMENT	POROUS GRANULAR EMBANKMENT				
	SQ YD	SQ YD	CU YD				
STA 494+57 TO 495+18	244	244	400				
TOTALS	244	244	400 ⑤				

(5) THE QUANTITY INCLUDES PLACEMENT OF PGE TO FILL THE VOID CREATED BY THE STRUCTURE AND THE PAVEMENT REMOVAL. A MINIMUM 4" THICKNESS BENEATH THE PCC PAVEMENT 10" OUTSIDE THE CULVERT EXCAVATION LIMITS SHALL ALSO BE PROVIDED.

		GUARDI	RAIL SC	HEDULI	E		
LOCATION	REMOVE & REERECT	SPBGR, TYPE A,	REMOVE & REERECT TRAFFIC BARRIER TERMINALS		GUARDRAIL REFLECTORS,	TERMINAL MARKER - DIRECT APPLIED	GUARDRAIL REMOVAL
LOCATION	SPBGR, 9 F00T TYPE A POSTS	TYPE 6A	TYPE 1	TYPE A			
	FOOT	F00T	EACH	EACH	EACH	EACH	FOOT
SE QUADRANT		37.5	1	1		1	75
NE QUADRANT			1	1		1	
NW QUADRANT	37 . 5		1	1		1	38
SW QUADRANT			1	1		1	
RT STA 493+44 TO 495+89					4		
LT STA 493+85 TO 496+32					4		
TOTALS	37 . 5	37 . 5	4	4	8	4	113
10.750							

NOTES:

SCALE

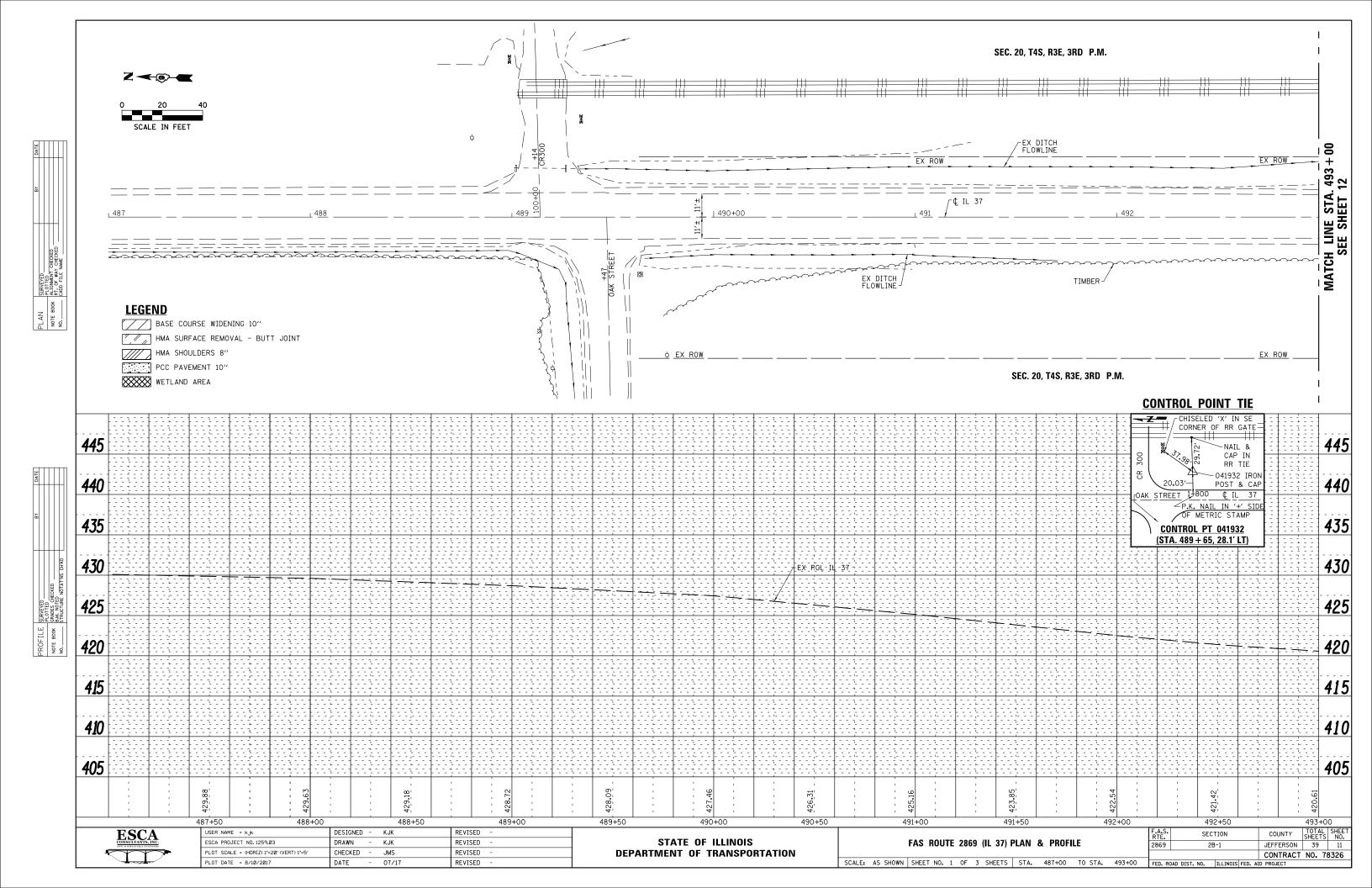
1. THE BRIDGE RAIL ON THE STRUCTURE WILL BE INCIDENTAL TO REMOVAL OF EXISTING STRUCTURES.

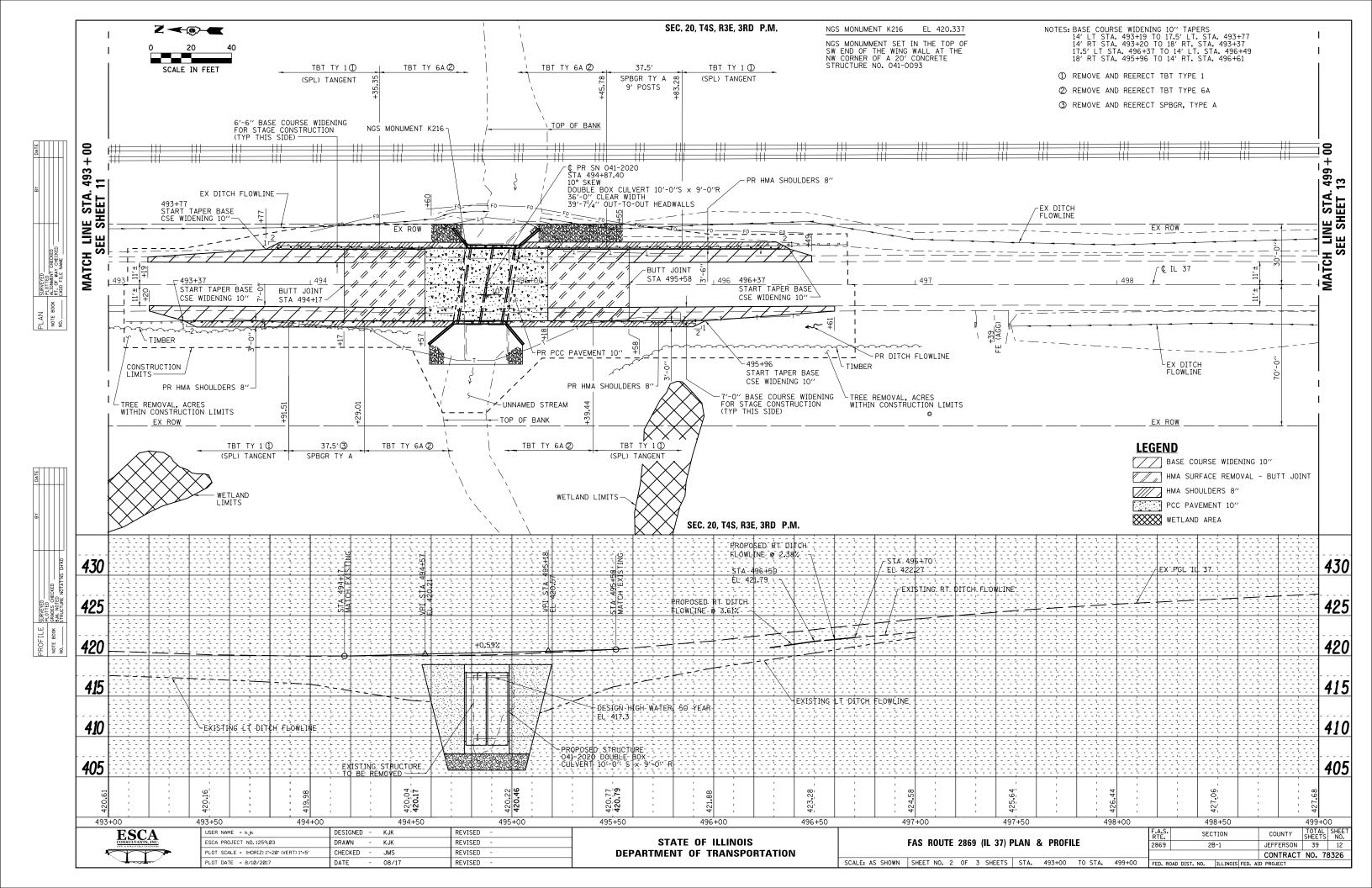


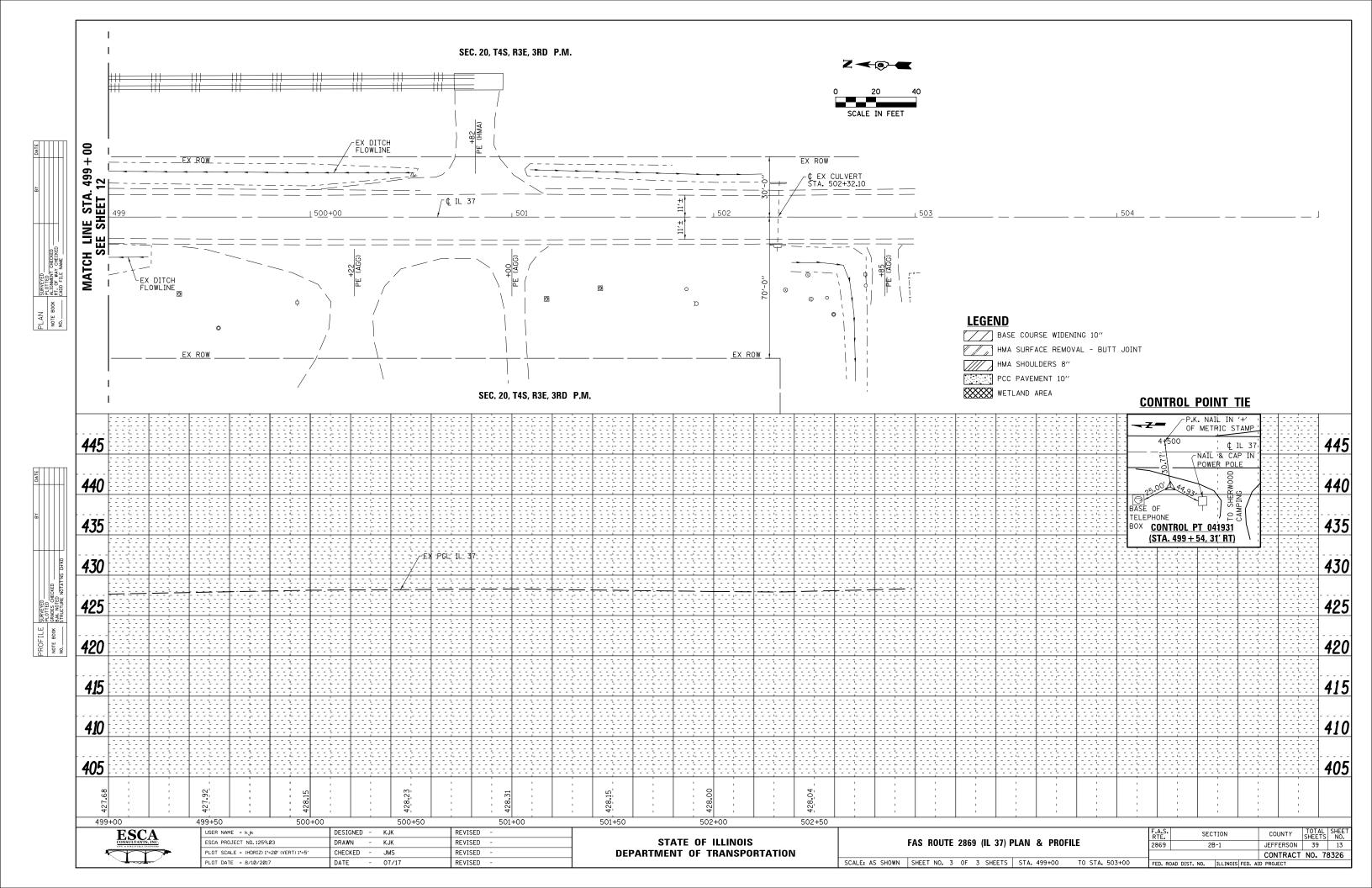
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ESCA PROJECT NO. 1259.03	DRAWN - KJK	REVISED -
PLOT SCALE = 0.1667 '/ in.	CHECKED - JMS	REVISED -
PLOT DATE = 8/10/2017 10:49:45 AM	DATE - 08/17	REVISED -

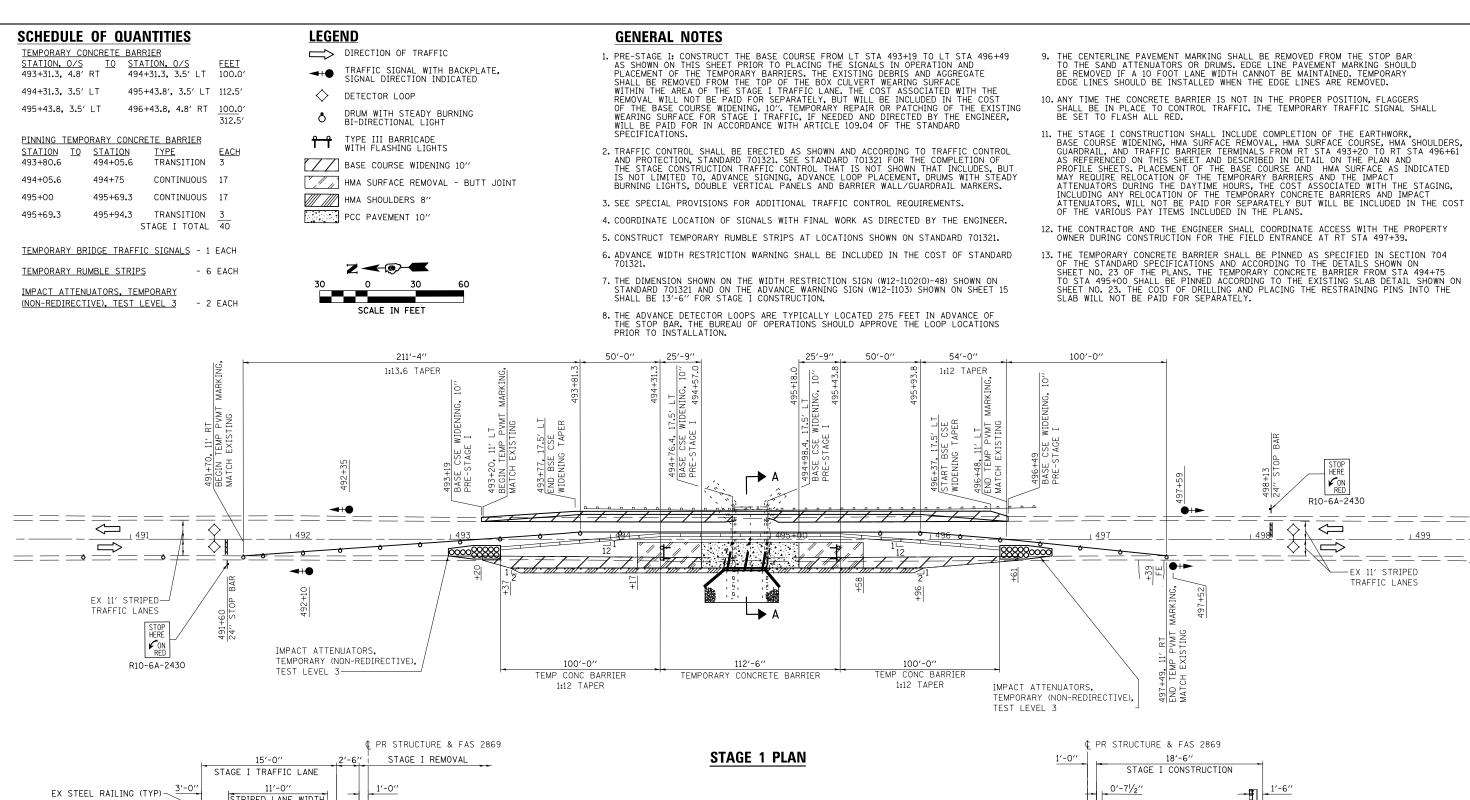
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	SCHEDULE OF QUANTITIES								F.A.S. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
								2869	2B-1	JEFFERSON	39	10	
											CONTRACT	NO. 7	8326
	SHEET I	NO.	1	0F	1	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				













DESIGNED - KJK REVISED USER NAME = k,jk ESCA PROJECT NO.1259.03 RAWN KJK REVISED CHECKED JMS REVISED PLOT DATE = 8/10/2017 10:53:50 AM DATE 07/17 REVISED

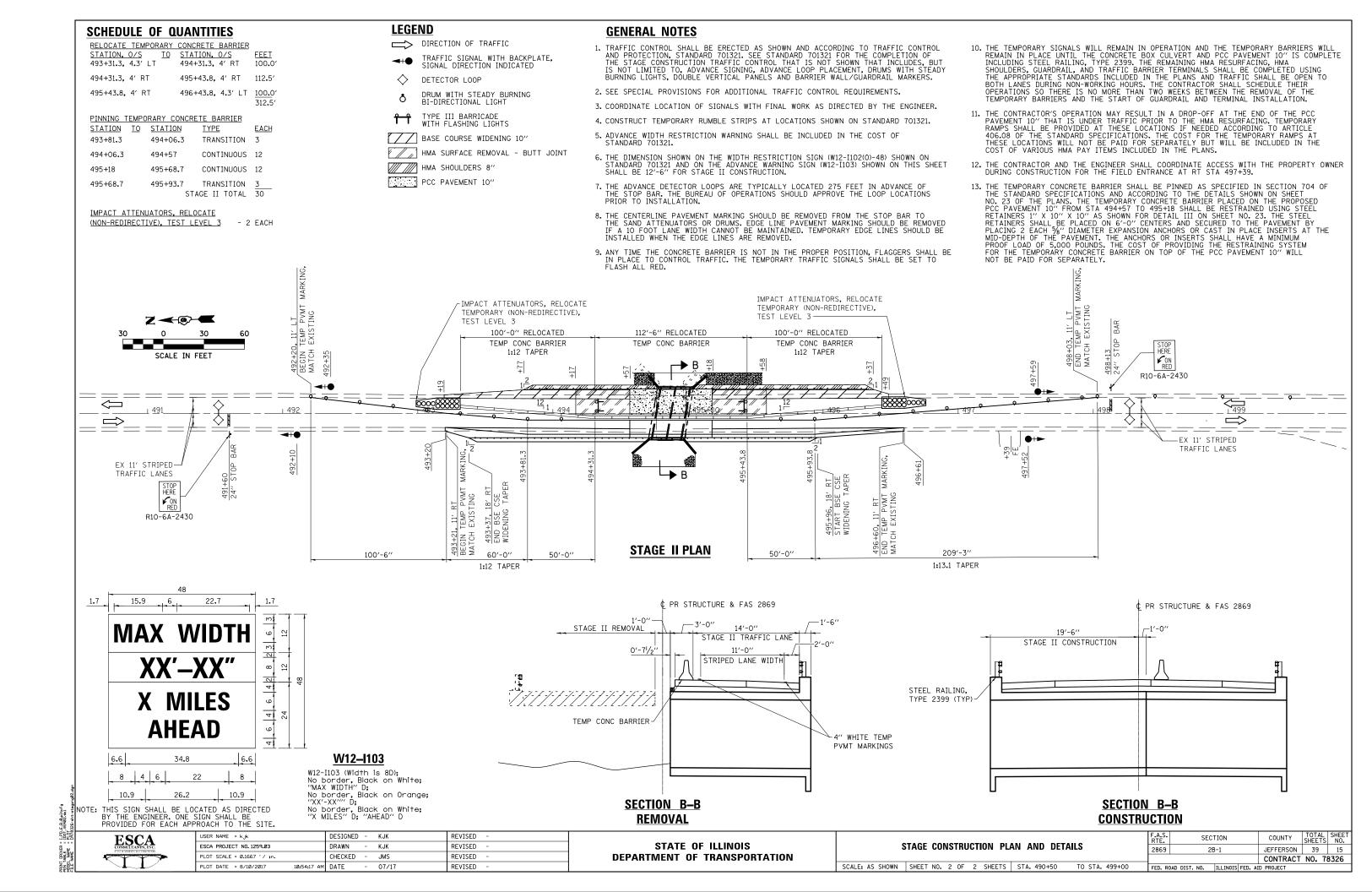
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION COUNTY STAGE CONSTRUCTION PLAN AND DETAILS 2869 JEFFERSON 39 14 CONTRACT NO. 78326 SCALE: AS SHOWN SHEET NO. 1 OF 2 SHEETS STA. 490+50 TO STA. 499+00 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

R10-6A-2430

 \bigcirc

-EX 11' STRIPED TRAFFIC LANES



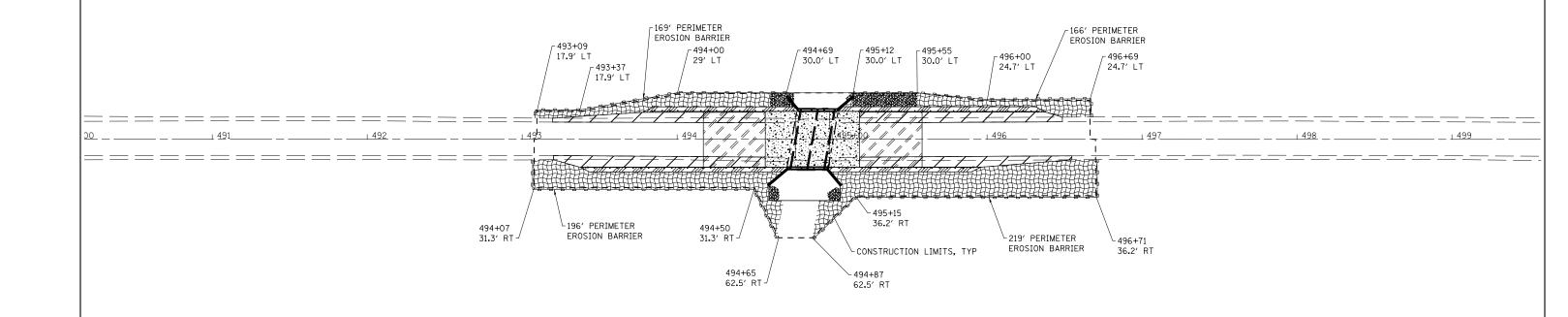
LEGEND

- SEEDING CLASS 2A AND EROSION CONTROL BLANKET (WEST OF IL 37)
 SEEDING CLASS 4, CLASS 5A, AND EROSION CONTROL BLANKET (EAST OF IL 37)
- -- PERIMETER EROSION BARRIER
- STONE RIPRAP, CLASS A5

STATIONS AND OFFSETS SHOWN ARE TO THE CONSTRUCTION LIMITS. THE PERIMETER EROSION BARRIER WILL BE PLACED 1'-O" OUTSIDE THE CONSTRUCTION LIMITS. THE SEEDING AND EROSION CONTROL BLANKET WILL BE PLACED TO THE LIMITS OF THE PERIMETER EROSION BARRIER.







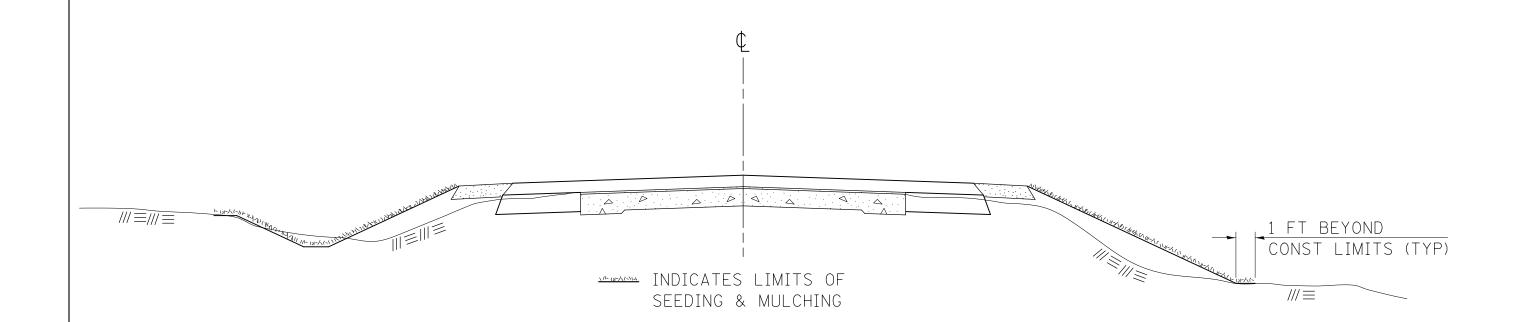
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USER NAME = kjk		DESIGNED	-	KJK	REVISED	-
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PLOT DATE = 8/10/2017	10:54:44 AM	DATE	-	07/17	REVISED	-

STATE OF I	LLINOIS
DEPARTMENT OF TR	RANSPORTATION

			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
I		EROSION CONTR	2869	2B-1	JEFFERSON	39	16		
I							CONTRACT	NO. 78	8326
1	SCALE AS SHOWN	SHEET NO. 1 OF 1 SHEETS	STA. 490+00	TO STA. 499+50	FED. RO	AD DIST. NO. ILLINOIS FED. A	D PROJECT		

SEEDING & MULCHING



GENERAL NOTES

IN GENERAL, ALL EARTH SURFACES DISTURBED DURING CON-STRUCTION OPERATIONS SHALL BE SEEDED AND MULCHED UPON COMPLETION OF ALL GRADING OPERATIONS.

FERTILIZER NUTRIENTS AND LIMESTONE SHALL BE APPLIED TO ALL SEEDED AREAS.

SECTIONS 250 AND 251 OF THE STANDARD SPECIFICATIONS SHALL GOVERN THIS WORK EXCEPT AS SPECIFIED HEREIN OR AS NOTED IN THE SPECIAL PROVISIONS.

REVISIONS

REDRAWN <u>2-15-89</u>
REVISED <u>8-15-94</u>
REVISED <u>6-3-99</u>
REVISED <u>3-27-08</u>

STD. <u>9-12</u>

TO STA.



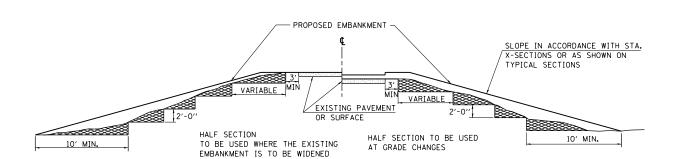
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PLOT SCALE = 0.1667 ' / in.	CHECKED - JMS	REVISED -
PLOT DATE = 8/10/2017	DATE - 12/16	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SE	EDI	NG	Al	ND	MULCH	ING	DETAILS
SHEET	NO.	1	OF	1	SHEETS	STA	

RTE.		SECT	LION			COUNTY	SHEETS	NO.
2869		2B	-1		T	JEFFERSON 39		17
						CONTRACT	NO. 7	8326
ED. RO	AD DIST.	NO.	ILLINOIS	FED.	AID	PROJECT		

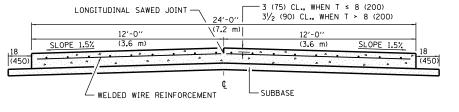
TYPICAL CROSS SECTION SHOWING STEP CONSTRUCTION ON EXISTING FILL



MATERIAL TO BE REMOVED AND REPLACED IN THE EMBANKMENT IN ACCORDANCE WITH ART. 205.04 OF THE STANDARD SPECIFICATION. COST TO BE INCLUDED IN THE VARIOUS ITEMS OF EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED BECAUSE OF THIS WORK.

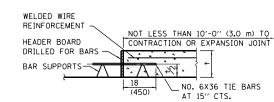
REVISIONS
REDRAWN 2-15-89
REVISED 8-15-94
CHECKED 6-3-99
STD. 9-16 RESIZED 5-7-08

24' (7.2 m) PCC PAVEMENT **OVER BOX CULVERT**

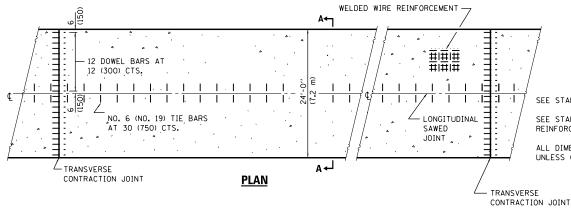


SECTION A-A

(TYPICAL 2-LANE WITH SHOULDERS)



TRANSVERSE CONSTRUCTION JOINT



GENERAL NOTES

SEE STANDARD 420001 FOR DETAILS NOT SHOWN.

SEE STANDARD 420701 FOR WELDED WIRE REINFORCEMENT DETAILS.

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

REVISIONS DRAWN 11-9-17

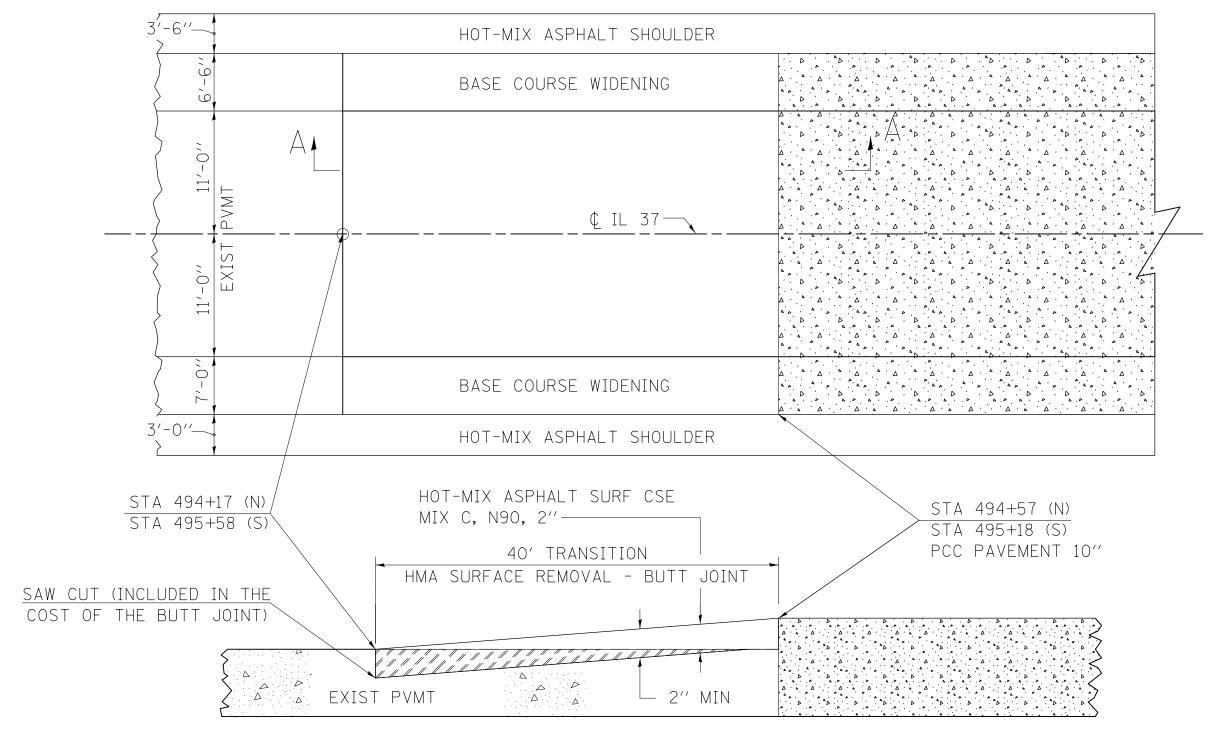
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PLOT SCALE = 0.1667 ' / in.	CHECKED - JMS	REVISED -
PLOT DATE = 4/25/2018	DATE - 12/16	REVISED -

SCALE:

				EXISTING BOX CULV	
SHEET N	0. 1	OF	I SHEETS	STA.	TO STA.

F. R	A.S. TE.		SEC	CTION			COUNTY	TOTAL SHEETS	SHEET NO.
2	869		2	B-1			JEFFERSON	39	18
							CONTRACT	NO. 7	8326
	n po	AD DIST	NΩ	TI I TNOTS	FED	ΑI	D DDO IECT		

BUTT JOINT



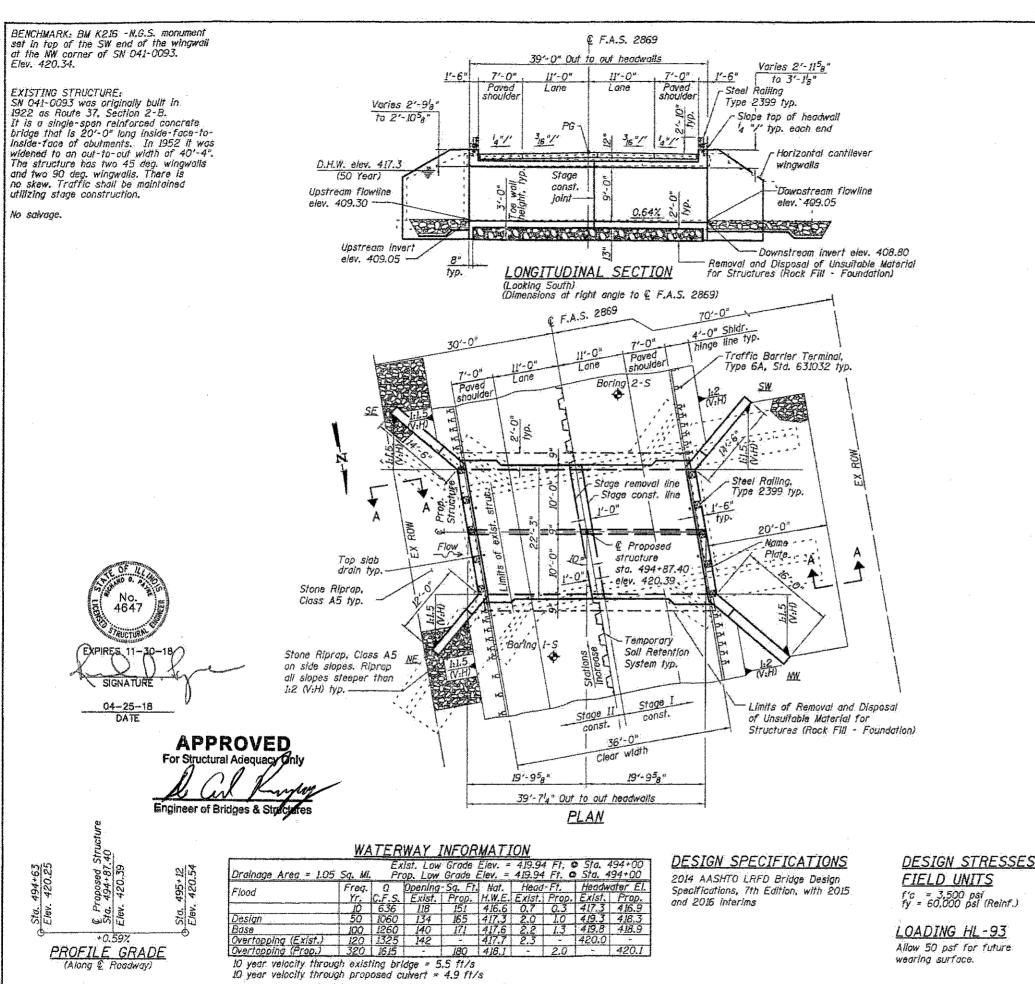
SECTION A-A



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ESCA PROJECT NO.1259.03		DRAWN	-	KJK	REVISED -	
PLOT SCALE = 0.1667 '/ in.		CHECKED	-	JMS	REVISED -	
PLOT DATE = 8/10/2017	10:56:09 AM	DATE	-	07/17	REVISED -	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

		F.A.S. RTE.			COUNTY	TOTAL	SHEE NO
ı	BUTT JOINT DETAIL	2869	2B	-1	JEFFERSON	39	19
ı					CONTRACT	NO. 7	78326
	SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. RO	OAD DIST. NO.	ILLINOIS FED. A	D PROJECT		



STRUCTURE INDEX OF SHEETS

General Plan
General Data
Sheet No. 2 of 11
Stage Construction Details
Temporary Concrete Barrier for Stage Construction
Box Culvert Details
Sheet No. 3 of 11
Sheet No. 4 of 11
Sheet No. 4 of 11
Sheet No. 5-8 of 11
Sheet No. 9 of 11
Bor Splicer Assembly and Mechanical Splicer Details
Boring Logs
Sheet No. 10 of 11

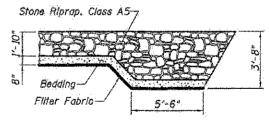
GENERAL NOTES

- I. Reinforcement bars designated (E) shall be epoxy coated.
- 2. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- 3. Modify existing channel to match culvert at each end as directed by the Engineer, cost included in the pay item for Stone Riprap, Class A5.
- 4. 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.
- 5. Precast alternative is not allowed.

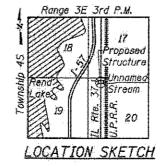
TOTAL BILL OF MATERIAL

ITEM.	UNIT	QUANTITY
Stone Riprap, Class A5	Sq. Yd.	200
Filter Fabric	Sq. Yd.	200
Removal of Existing Structures	Each	4
Removal and Disposal of Unsuitable Material For Structures	Cu. Yd.	80
Reinforcement Bars, Epoxy Coated	Pound	30190
Bar Splicers	Each	122
Steel Railing, Type 2399	Foot	49
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	156.1
Porous Granular Embankment	Cu, Yd.	400
Rock Fill - Foundation	Ton	150
Temporary Soll Retention System	Sq. Ft.	280.
Membrane Waterproofing System for Buried Structures	Sq. Yd.	116

See Roadway Plans for quantities of Temporary Concrete Barrier, Earth Excavation, and Pavement Removal



SECTION A-A



GENERAL PLAN

IL 37 OVER UNNAMED STREAM

FAS ROUTE 2869 - SECTION 28-1

JEFFERSON COUNTY

STATION 494+87.40

STRUCTURE NO. 041-2020

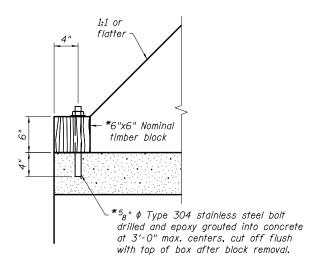
ESCA

	USER NAME 4 KJA	DESIGNED		KJA	10/16	REVISED	±	
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	PLOT SCALE = 0/2 "/ in.	DRAWN	-	KJA	11/16	REVISED	-	
-	PLOT DATE + 4/25/2018 4.42:00 AM	CHECKED	'ar	ELH	04/18:	REVISED	•	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION STRUCTURE NO. 041-2020 SHEET NO. 1 OF 11 SHEETS

	· · · · · · · · · · · · · · · · · · ·								
.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.					
2863	28-1	JEFFERSON	39	20					
CONTRACT NO. 78325									
	ILLINOIS PED. AID PROJECT								

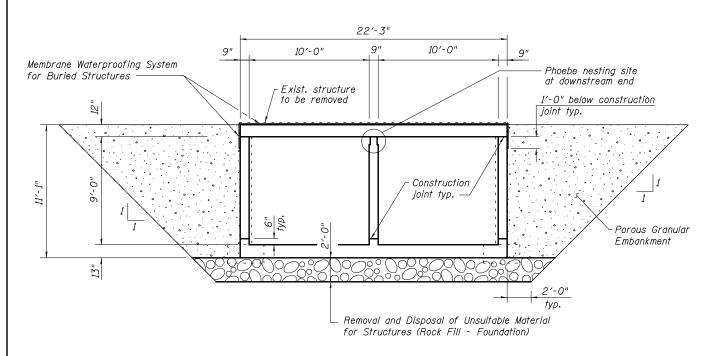


* Cost of installation and removal included in Concrete Box Culverts

<u>DETAIL 1</u>

STATION 494+87.40
BUILT 201_ BY
STATE OF ILLINOIS
F.A.S. RTE. 2869 SEC. 2B-1
LOADING HL-93
STR. NO. 041-2020

NAME PLATE
(See Std. 515001)



<u>SECTION THROUGH BARREL</u> (Dimensions at rt. angle to barrel)

of romoval and ronlanoment chown are

- 1. The limits and quantities of removal and replacement 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.
- Excavation for construction of the box culvert, including the excavation necessary to construct the granular backfill, is included in Earth Excavation, see roadway plans.

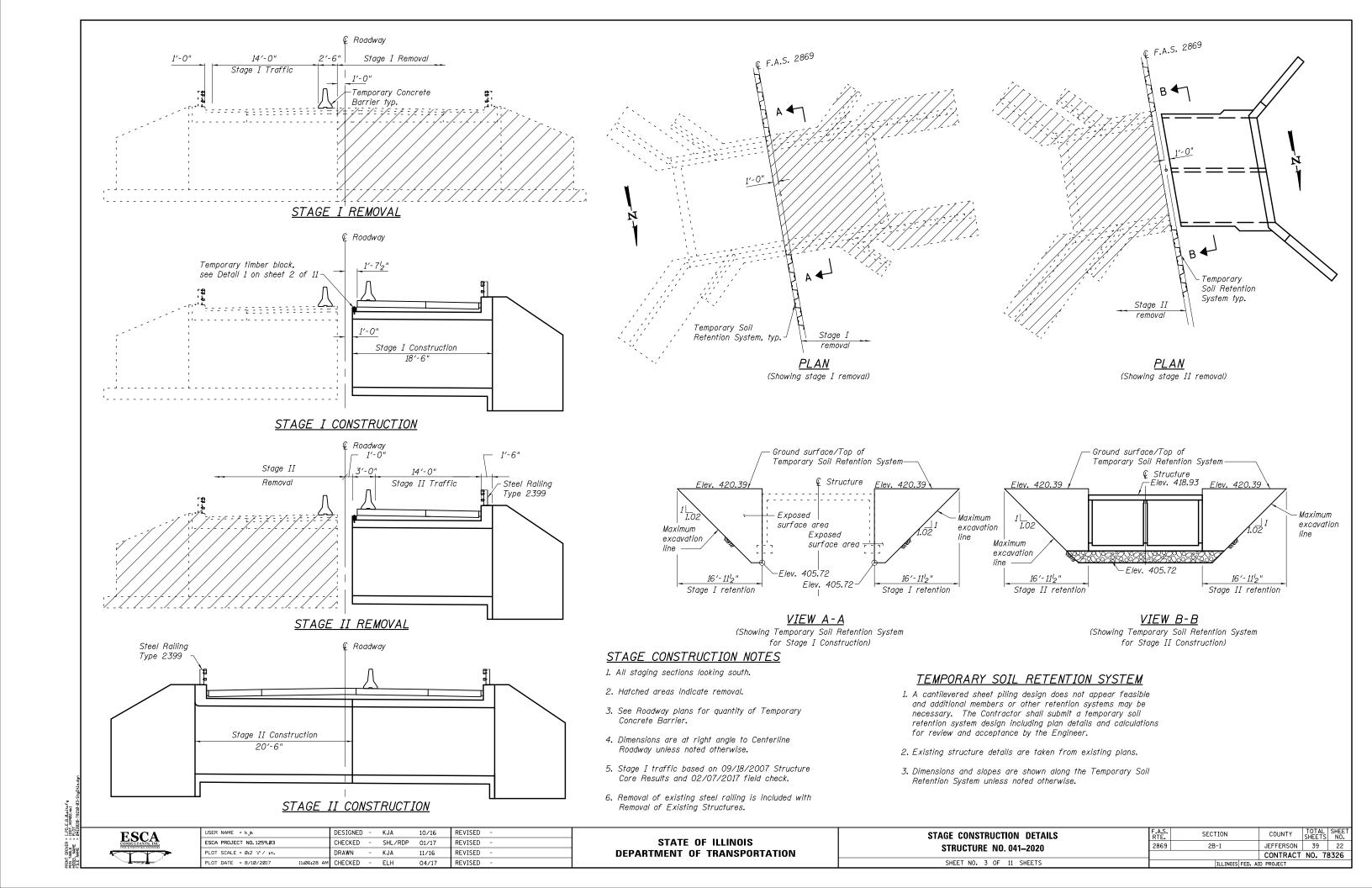
ESCA CONSULTANTS, INC. CIVIL R STRUCTURAL ENGINEERS	

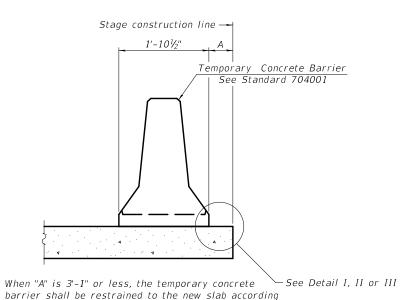
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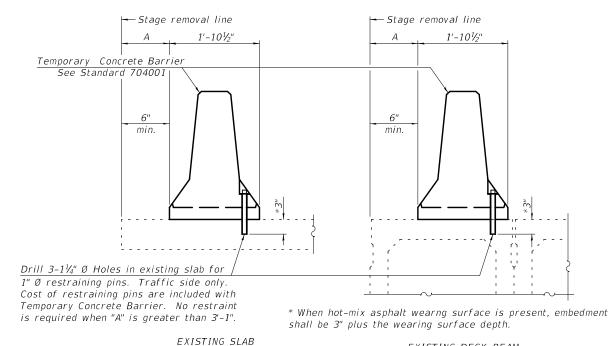
GENERAL DATA								
STRUCTUR	Ε	NO). (041–2020				
CUEET NO	_	OΕ	11	CHEETS				

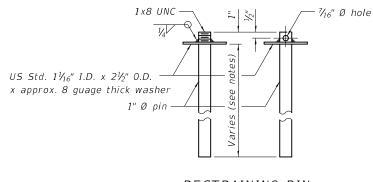
I	F.A.S. RTE.	SECT	ION	COUNTY	TOTAL SHEETS	SHEE		
I	2869	2B	-1			JEFFERSON	39	21
4					CONTRACT	NO. 7	8326	
			ILLINOIS	FED.	ΑII) PROJECT		

IVER = 1.PU.E.B.B.pitcfg E = 100T_VER82;4b1 HKE = PLOT E = 8412828-78218-82-GenData.dan









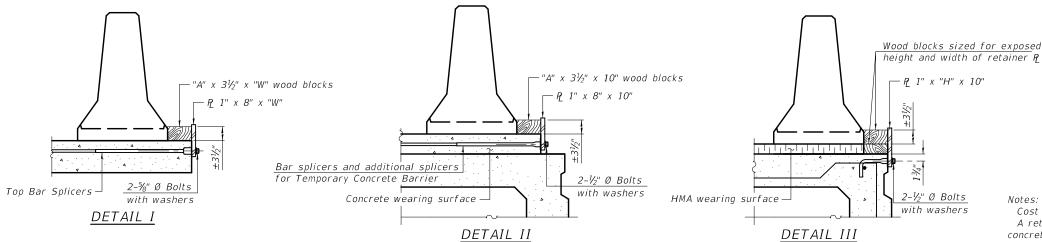
RESTRAINING PIN

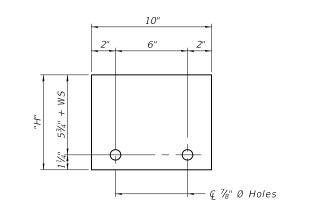
NEW SLAB OR NEW DECK BEAM

to Detail I, II or III. No restraint is required

when "A" is greater than 3'-1".

SECTIONS THRU SLAB OR DECK BEAM





EXISTING DECK BEAM

STEEL RETAINER P 1" x "H" x 10" (Detail III)

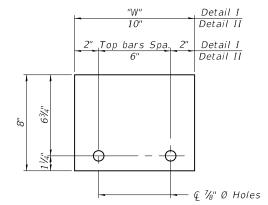
Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate ${\mathfrak C}$ of each temporary concrete barrier.

BAR SPLICER FOR #4 BAR - DETAIL III

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than $1\frac{1}{2}$ ", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

- Detail I Installation for a new bridge deck or bridge slab.
- Detail II Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
- Detail III Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.



STEEL RETAINER P 1" x 8" x "W"

(Detail I and II)

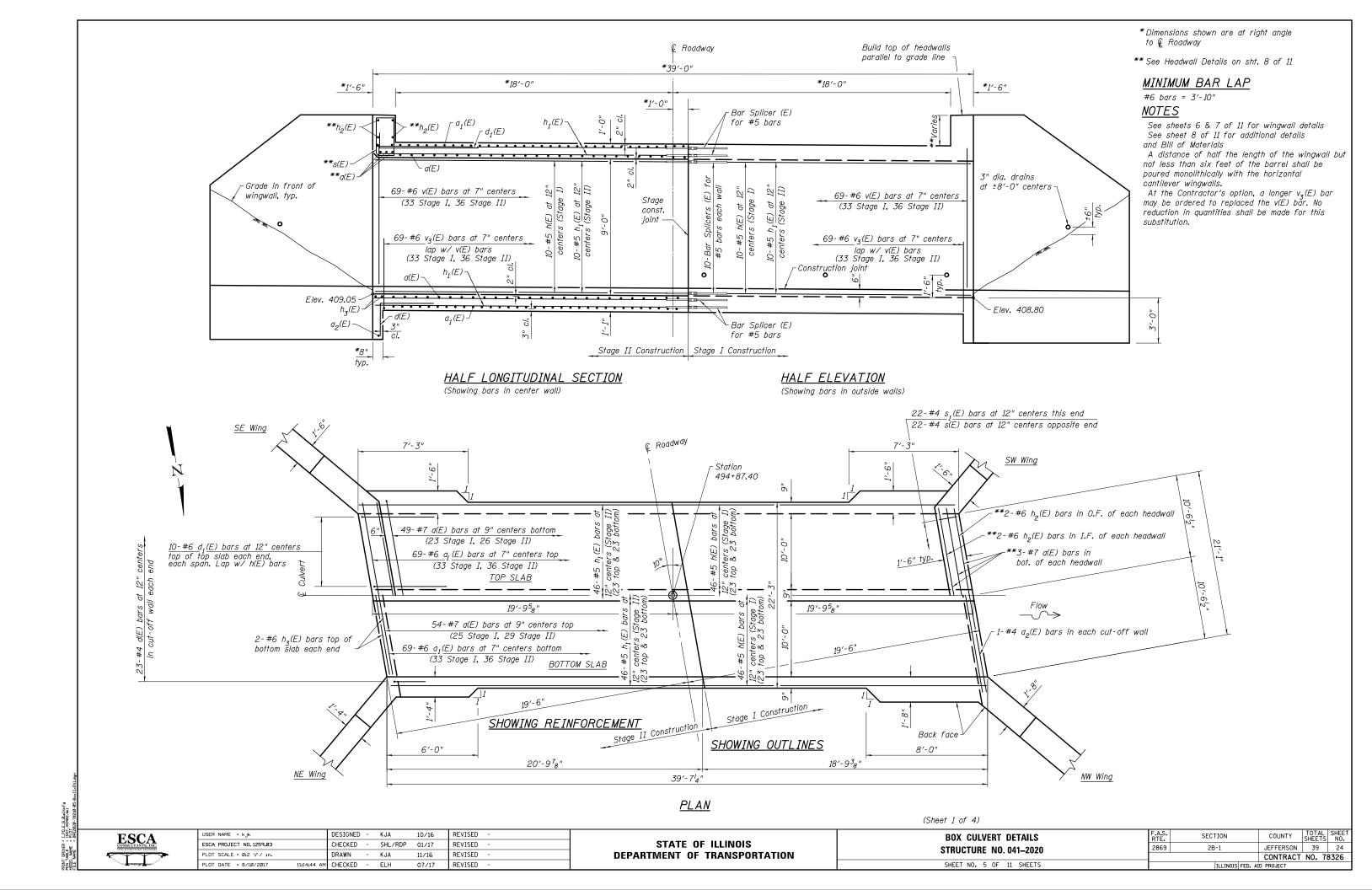
2-17-2017							
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PLOT SCALE = 0:2 ':" / in.		DRAWN	-	KJA	11/16	REVISED	-
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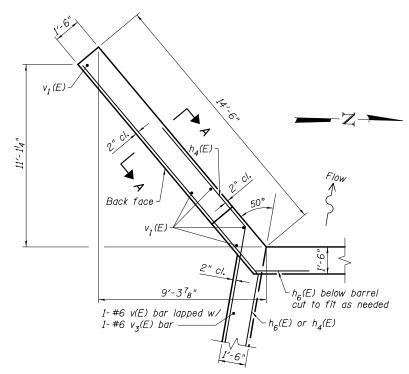
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION		1						
STRUCTURE NO. 041–2020								
SHOULIUME INU. U41-2020								

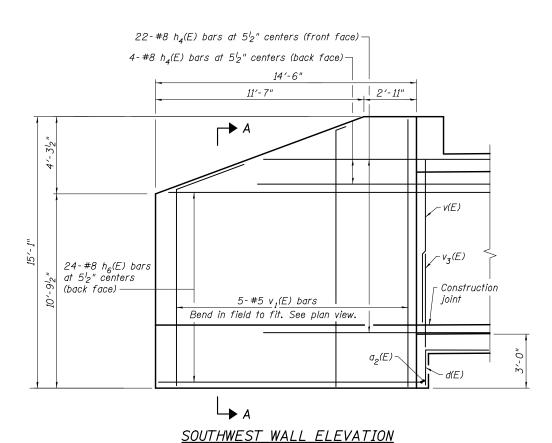
SECTION COUNTY 2869 2B-1 JEFFERSON 39 23 CONTRACT NO. 78326

R - 27



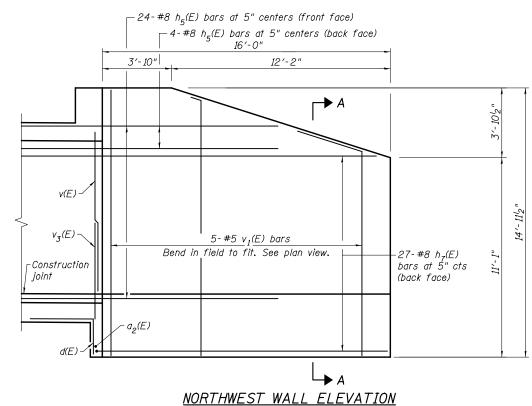


SOUTHWEST WALL PLAN



 $h_{5}(E)$ $h_{5}(E)$ $h_{5}(E)$ $h_{5}(E)$ $h_{5}(E)$ $h_{7}(E) \text{ below barrel out to fit as needed}$ $h_{7}(E) \text{ or } h_{5}(E)$ 1-#6 v(E) bar lapped w/ $1-\#6 \text{ } v_{3}(E) \text{ bar}$

NORTHWEST WALL PLAN



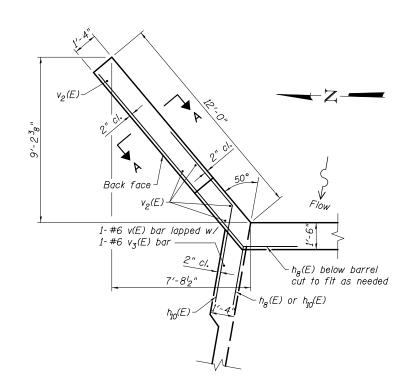
 $\frac{2"\ cl.}{2"\ cl.}$ $\frac{2"\ cl.}{2"\ cl.}$ $\frac{h_5(E)\ NW\ wingwall}{h_4(E)\ SW\ wingwall}$ $\frac{h_7(E)\ or\ h_5(E)\ NW\ wingwall}{h_6(E)\ or\ h_4(E)\ SW\ wingwall}$ $-V_I(E)$ $-Back\ face$ $-Construction\ joint$

SECTION A-A

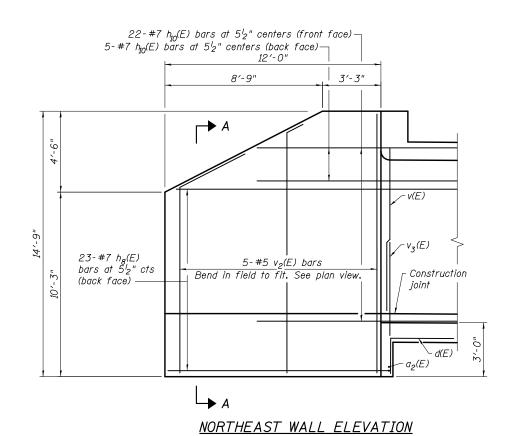
(Sheet 2 of 4)

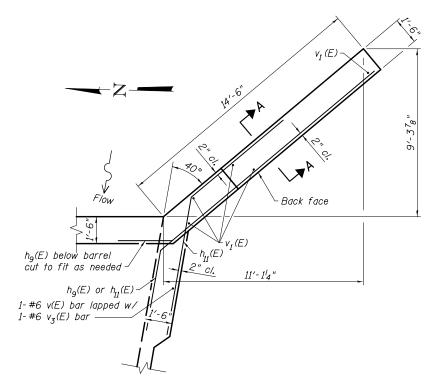
ESCA CONSULTANTS, INC. CIVIL 8 STRECTUAL ENGINEES

USER NAME = kjk		DESIGNED	-	KJA	10/16	REVISED	-
ESCA PROJECT NO. 1259.03		CHECKED	-	SHL/RDP	01/17	REVISED	-
PLOT SCALE = Ø:2 ':" / in.		DRAWN	-	KJA	11/16	REVISED	-
PLOT DATE = 8/10/2017	11:15:44 AM	CHECKED	-	ELH	07/17	REVISED	-

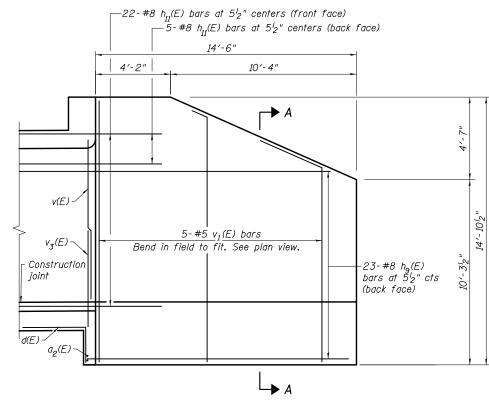


NORTHEAST WALL PLAN

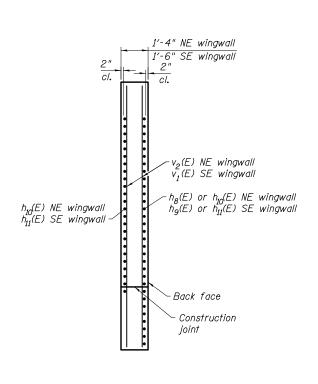




SOUTHEAST WALL PLAN







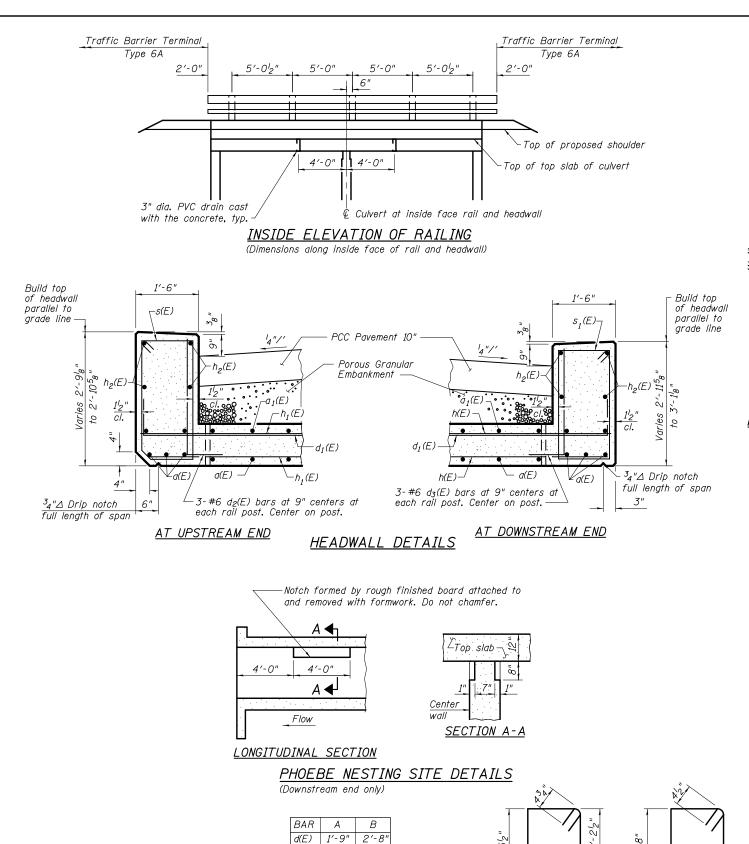
SECTION A-A

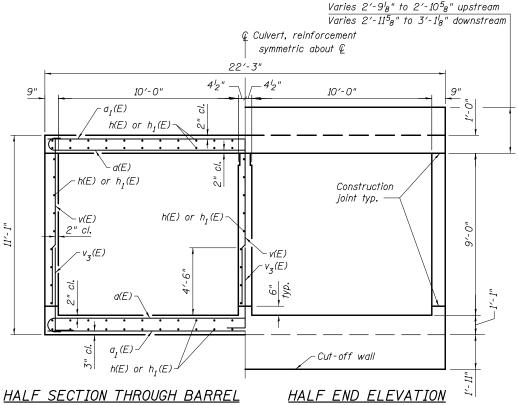
(Sheet 3 of 4)

ESCA CONSULTANTS, INC. CIVIL A STRUCTURAL ENGINEES

USER NAME = kjk		DESIGNED	-	KJA	10/16	REVISED	-
ESCA PROJECT NO. 1259.03		CHECKED	-	SHL/RDP	01/17	REVISED	-
PLOT SCALE = 0:2 ':" / in.		DRAWN	-	KJA	11/16	REVISED	-
PLOT DATE = 8/10/2017	11:16:13 AM	CHECKED	-	ELH	07/17	REVISED	-

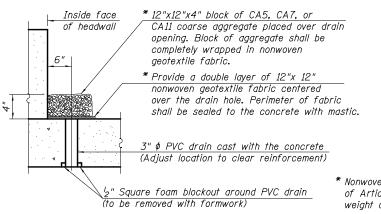
BOX CULVERT DETAILS STRUCTURE NO. 041–2020		F.A.S. SECTION		TOTAL SHEETS	SHEET NO.
		2B-1	JEFFERSON	39	26
	l		CONTRACT	NO. 7	8326
SHEET NO. 7 OF 11 SHEETS		ILLINOIS FED. A	ID PROJECT		





SECTION THROUGH BARREL

(Dimensions at rt. angle to barrel)



* Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.

BILL OF MATERIAL

Bar No. Size Length Shape

#4 22'-3"

8′-6"

18'-6'

20'-6"

21'-8"

16'-0"

19'-8"

20'-10

19'-2"

8'-1"

14'-8"

6'-4"

Pound

156.1

30190

21'-6"

109 #7

46

d₁(E) | 40 | #6

122

122

8

26

h₅(E) 28

h₉(E) 23

h₁₀(E) 27

s(E) | 22 |

v(E) 211

v₃(E) 211 #6

Reinforcement Bars,

v₁(E) 15 v₂(E) 5

Epoxy Coated

 $s_1(E)$ 22

h₆(E) 24

h(E)

a₁(E) 138 #6 22'-3"

#4

#6

#5

#5

#6

#6

#8

#8

#8

#8

#8

#7

#4

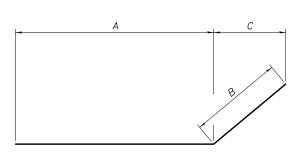
#4

#5

Concrete Box Culverts Cu. Yd.

DRAIN DETAIL

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)



BAR	A	В	C
h ₄ (E)	7′-2"	7′-4"	4'-812"
h ₅ (E)	7′-6"	8′-6"	6'-6 ₈ "
$h_6(E)$	14'-10"	4'-10"	3'-14"
$h_7(E)$	16'-0"	4'-10"	3'-8 ³ 8"
$h_8(E)$	12′-6"	4'-0"	2'-6 ⁷ 8"
h ₉ (E)	14'-8"	4'-6"	3'-5 ³ 8"
$h_{10}(E)$	5′-4"	6'-2"	3'-11 ¹ 2"
$h_{II}(E)$	6′-8"	7′-9"	5'-11 ¹ 4"

BARS $h_4(E)$, $h_5(E)$, $h_6(E)$, $h_7(E)$, $h_8(E)$, $h_9(E)$, $h_{10}(E)$, $h_{11}(E)$



BAR a(E)

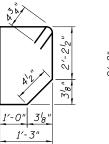
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ESCA PROJECT NO.1259.03		CHECKED	-	SHL/RDP	01/17	REVISED	-
PLOT SCALE = 0:2 ':" / in.		DRAWN	-	KJA	11/16	REVISED	-
PLOT DATE = 8/10/2017	11:16:57 AM	CHECKED	-	ELH	07/17	REVISED	-

BARS d(E), $d_1(E)$, $d_2(E)$, $d_3(E)$, $v_3(E)$

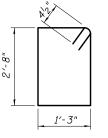
d1(E) 2'-0" 6'-6" d₂(E) 1'-0" 2'-6" d3(E) 1'-0" 2'-9" V3(E) 1'-0" 5'-4"

> STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

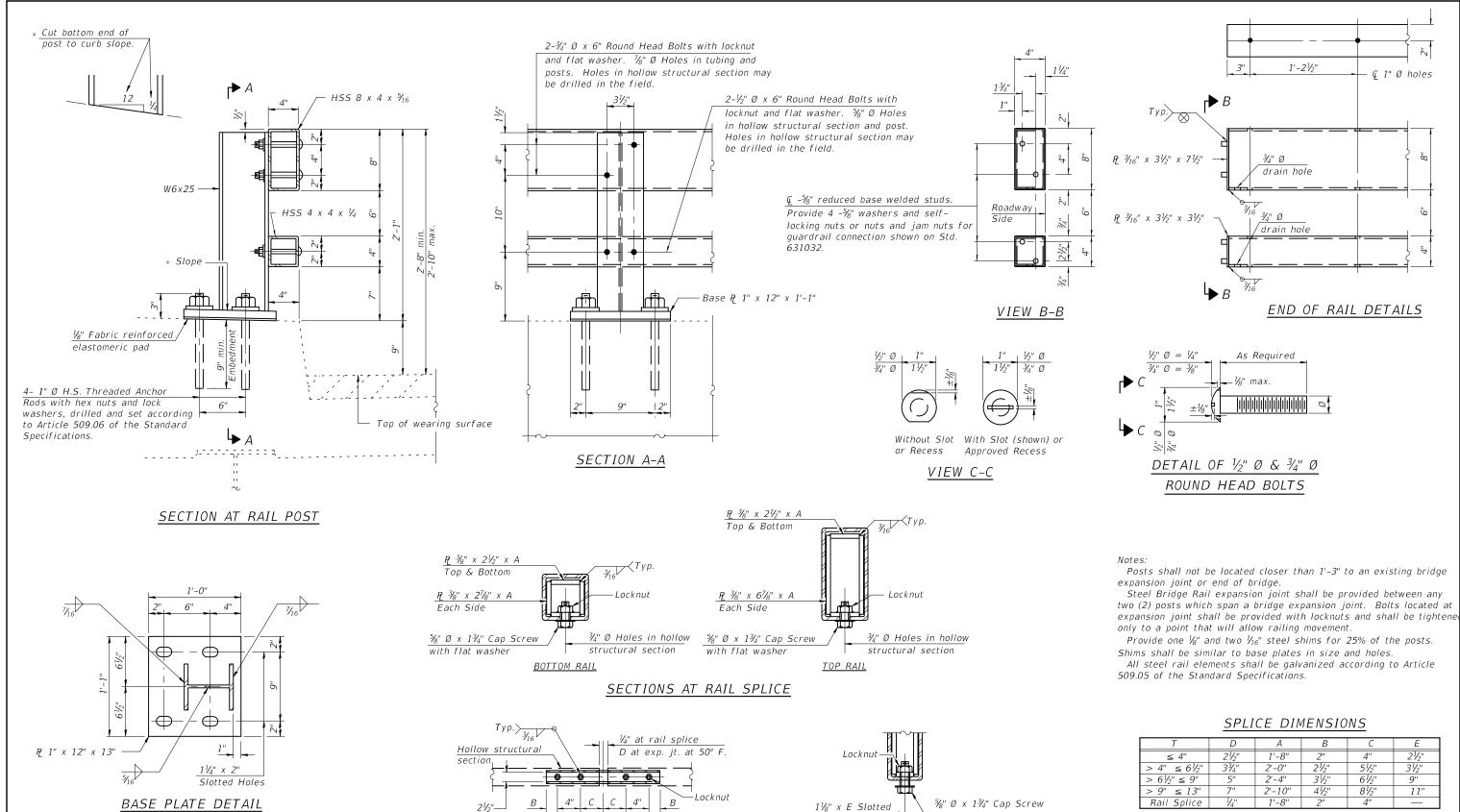
(Sheet 4 of 4)					
BOX CULVERT DETAILS STRUCTURE NO. 041–2020		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		2B-1	JEFFERSON	39	27
Omorrone north Edea			CONTRACT	NO. 7	8326
SHEET NO. 8 OF 11 SHEETS		ILLINOIS FED. A	ID PROJECT		



BAR s(E)



BAR $s_1(E)$



T	D	Α	В	С	Ε
≤ 4"	21/2"	1'-8"	2"	4"	21/2"
$> 4'' \le 6\frac{1}{2}''$	33/4"	2'-0"	21/2"	5½"	31/2"
$> 6\frac{1}{2}$ " ≤ 9 "	5"	2'-4"	31/2"	6½"	9"
> 9" ≤ 13"	7"	2'-10"	41/2"	8½"	11"
Rail Splice	1/4"	1'-8"	2"	4"	_

T = Total movement at expansion joint as shown on the design plan

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	49

R-31

ESCA

2-17-2017

(6'-3" Maximum Post Spacing)

DESIGNED - KJA REVISED USER NAME = kjk 10/16 ESCA PROJECT NO. 1259.03 CHECKED -SHL 10/16 REVISED LOT SCALE = 0:2 ':" / 1n. DRAWN KJA 11/16 REVISED PLOT DATE = 8/10/2017 11:18:00 AM CHECKED - RDP 01/17 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

¹½₁₆" Ø holes

in ¾" ₽_

PLAN-BOTT. SPLICE R

TYPICAL

STEEL RAILING, TYPE 2399 STRUCTURE NO. 041-2020 SHEET NO. 9 OF 11 SHEETS

with flat washer & ¾" Ø

XS pipe spacer, ½" long.

Holes in hollow

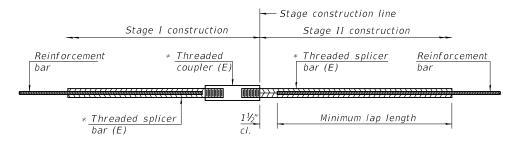
structural section

RAIL SPLICE CONNECTION

AT EXPANSION JT.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
2869	2B-1	JEFFERSON	39	28
		CONTRACT	NO. 78	3326
	ILLINOIS FED.	AID PROJECT		

Ç 1" Ø holes

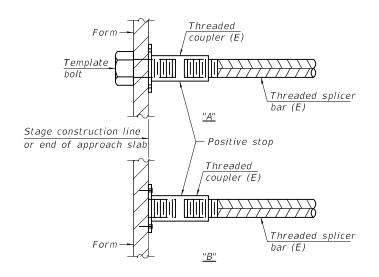


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + $1\frac{1}{2}$ " + thread length

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

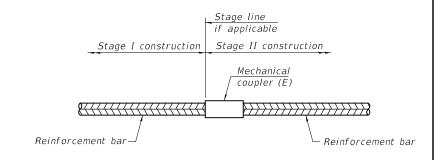
	Bar	No. assemblies	Minimum
Location	size	required	lap length
Top of top slab	#5	23	3'-2"
Bot. of top slab	#5	23	3'-2"
Top of bot. slab	#5	23	3'-2"
Bot. of bot. slab	#5	23	3'-2"
Walls	#5	30	3'-7"



INSTALLATION AND SETTING METHODS

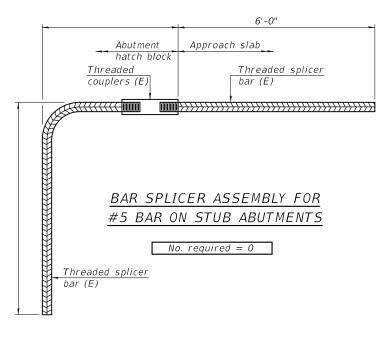
"A" : Set bar splicer assembly by means of a template bolt. "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E): Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



NOTES
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications. See approved list of bar splicer assemblies and mechanical splicers for

alternatives.

BSD-1

2-17-2017



USER NAME = kjk		DESIGNED	-	KJA	10/16	REVISED	-
ESCA PROJECT NO. 1259.03		CHECKED	-	SHL	10/16	REVISED	-
PLOT SCALE = 0:2 ':" / in.		DRAWN	-	KJA	11/16	REVISED	-
PLOT DATE = 8/10/2017	11:19:00 AM	CHECKED	-	RDP	07/17	REVISED	-

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

BAR	SPLICER	ASSEMBLY	AND	ME	CHANICAL	SPLICER	DETAILS		
STRUCTURE NO. 041-2020									
		SHEET NO.	10 OF	11	SHEETS				

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
2869	2B-1	JEFFERSON	39	29
		CONTRACT	NO. 7	3326
	TILINOIS FED AT	D PROJECT		

FAS 2869 (IL 37) Over stream								of 1	
Route: FAS 2869 (IL 37 Str	ructur	e Numbe	r: 041-	-0093		Date		5/31/20	11
Section 2B, 2BY	_					red By:			
County: Jefferson	Loca	tion: No	orth I	na	Chec	ced By:	R Grae	eff	
	D	В			Surf Wat Elev: 410.3	_ D	В		
Boring No 1-S	E	Ľ			Ground Water Elevation	E	Ľ		
Station 494+68	P	ō			when Drilling 405.6	_ P	ō		
Offset 9' Lt CL	- T	w	Qu	14/0/	At Completion	_ T	W	Qu	
Ground Surface 420.1Ft	Н	S	tsf	W%	At: Hrs:	Н	S	tsf	W%
7" Asphalt over 10.5" concrete		Cored							
					Hard, dry, grey, Clay Shale				
418.6		Augurad	7	-	Cored 24.8 to 29.8 feet 80% Recovery; 11% RQD	_			
Very soft, very moist, brown		Augered WH			80% Recovery; 11% RQD				
nottled grey, Silty Clay Loam A-6	-	WH	0.2B	27	Test - 90 psi	-			
_		WH	0.20	21	Test - 50 psi				
	_	****			No.				
415.6									
Soft, very moist, brown mottled	5.0	WH			390.1	30.0			
grey, Silty Clay Loam A-6		WH	0.4B	25					
_		1			Hard, dry, grey, Clay Shale				
					Cored 29.8 to 34.8 feet	-	ļ		
413.1					100% Recovery; 67% RQD		-		
Very soft, very moist, grey, Silty	-	WH	0.00	00	100%	-			
Clay A-6		WH	0.2B	29	100% Recovery; 67% RQD				
	. —	WH			Test - 97 psi		ł		
410.6					Test - 127 psi		1		
Medium, very moist, grey, Silty	10.0	1			Test - 373 psi 385.1	35.0	1		
Clay A-6	10.0	1	0.7B	23	1000 010 001	00.0	ĺ		
		2		11200	Hard, dry, grey, Clay Shale		1		
_					Cored 34.8 to 39.8 feet]		
408.1					57% Recovery; 32% RQD]		
Medium, very moist, brown	5	1					ļ		
mottled grey, Silty Clay A-6		2	0.88	21	Test - 105 psi		1		
		2			4		-		
_							-		
	15.0	1			380.1	40.0	1		
	15.0	1 1	0.6B	24	300.1	40.0	i		
		1 1	U.UD	24	Bottom of hole = 39.8 Feet		1		
					1		1		
403.1		İ			Free water observed at 14.5 Ft]		
Soft, very moist, brown mottled		1			_		1		
grey, Clay to Silty Clay A7-6		2	0.3B	22	Elevation referenced to BM at NE		4		
100		1			corner of structure; Elev= 420.3 ft		4		
		ł					4		
400.6		-			Borehole advanced with hollow	45 /	4		
Stiff, moist, grey mottled brown,	20.0		1.00	22	stem auger (8" O.D, 3.25" l.D.)	45.0	4		
Clay A7-6 to Weathered Clay		5	1.9B	22	To convert "N" values to "N60"		1		
Shale 398.6		0			multiply by 1.25		1		
Hard, dry to damp, grey,		1			Triangly by 1.25	_	1		
Weathered Clay Shale		11					1		
tradition of one, office		32		-	1	-	1		
_		41							
]		
395.6					_		ل		
Hard dry grey Clay Shale 395.1	25.0	100/3"			II .	50	ol		

Hard, dry, grey, Clay Shale 395.1	25.0 100/3"	50.0
		ail. B-Bulge S-Shear E-Estimated P-Penetrometer)

ESCA CONSULTANTS, INC. GIVIL & STRUCTURAL ENGINEERS

USER NAME = kjk	DESIGNED	-	KJA	10/16	REVISED	-
ESCA PROJECT NO. 1259.03	CHECKED	-	SHL	10/16	REVISED	-
PLOT SCALE = 0:2 ':" / in.	DRAWN	-	KJA	11/16	REVISED	-
PLOT DATE = 8/10/2017 11:19:40 AM	CHECKED	-	RDP	01/17	REVISED	-

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

BORING LOGS Structure No. 041–2020		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		2B-1	JEFFERSON	39	30
			CONTRACT	NO. 7	8326
SHEET NO. 11 OF 11 SHEETS		ILLINOIS FED. A	D PROJECT		

Bridge Foundation Boring Log ILLINOIS DEPARTMENT OF TRANSPORTATION District Nine Materials

ree water observed at 14.5 Ft

To convert "N" values to "N60"

Sheet 1 of 1

FAS 2869 (IL 37) Over stream 6/1/2011 Route: FAS 2869 (IL 37 Structure Number: 041-0093 Date: Section 2B, 2BY Bored By: R Moberly

Checked By: R Graeff County: Jefferson Location: North Ina Surf Wat Elev:

D E P Boring No 2-S Ground Water Elevation E Station 495+09 Offset 9' Rt CL when Drilling __ o W s Qu At Completion 420.2Ft tsf

Qu tsf Ground Surface 8" Asphalt over 10" concrete Cored Hard, dry, grey, Clay Shale 418.7

30.0 100/5" 5.0 WH

0.4B Bottom of hole = 29.9 Feet

WH Elevation referenced to BM at NE corner of structure; Elev.=420.3 ft 410.7 Stiff, moist, grey, Clay to Silty Clay A7-6 (13-14) Borehole advanced with hollow 25 stem auger (8" O.D, 3.25" l.D.) 1.1B

WH 0.1B

408.2 multiply by 1.25 Medium, very moist, brown mottled grey, Silty Clay A-6 (10) 0.6B

Augered

WH

WH

Soft, very moist, brown mottled

grey, Silty Clay Loam A-6 (9)

Very soft, wet, grey, Silty Clay

Loam A-6 (9)

with pea gravel

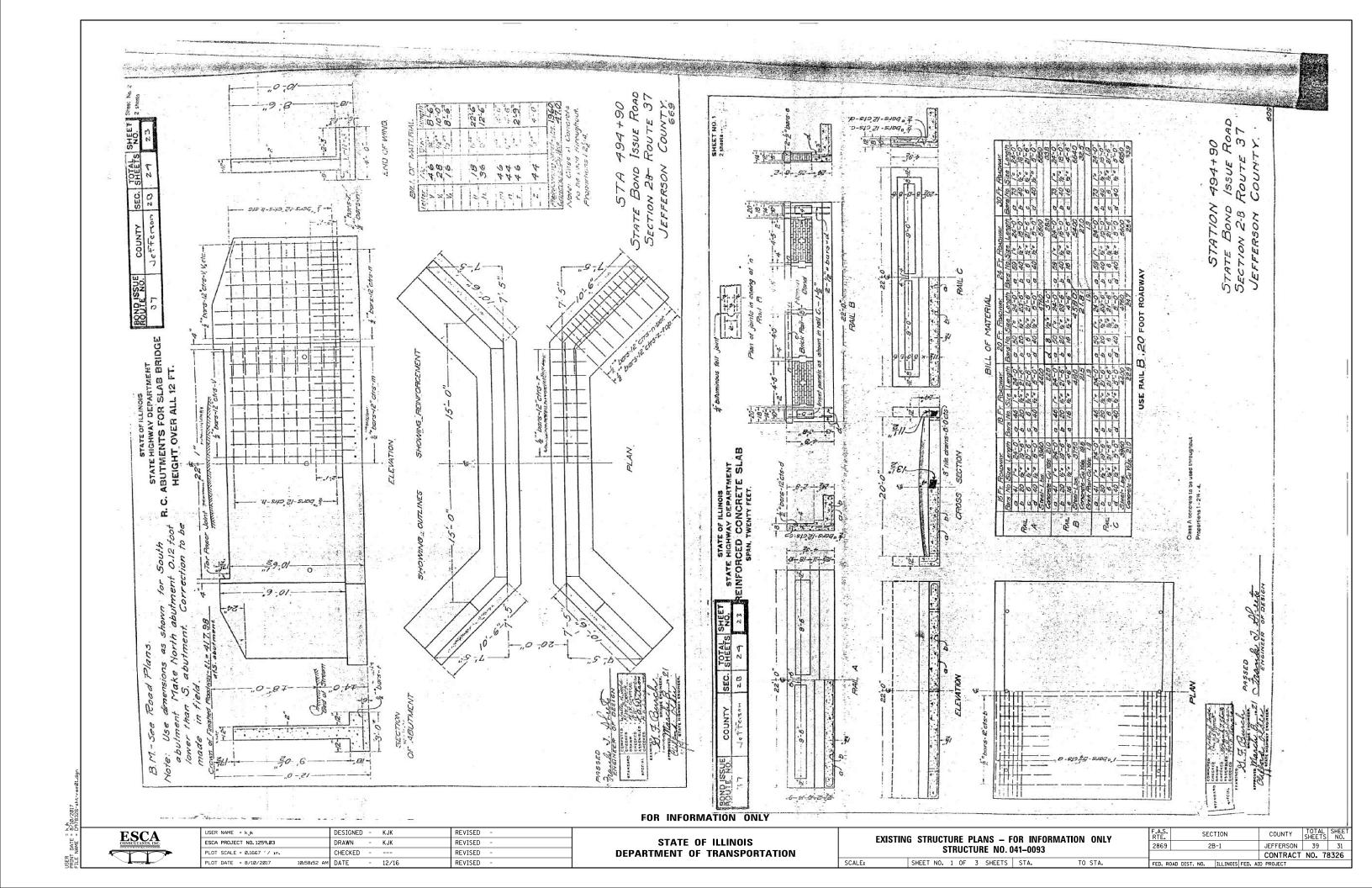
0.8B 403.2 Soft, very moist, brown mottled 0.4B grey, Silty Clay Loam A-6 (9)

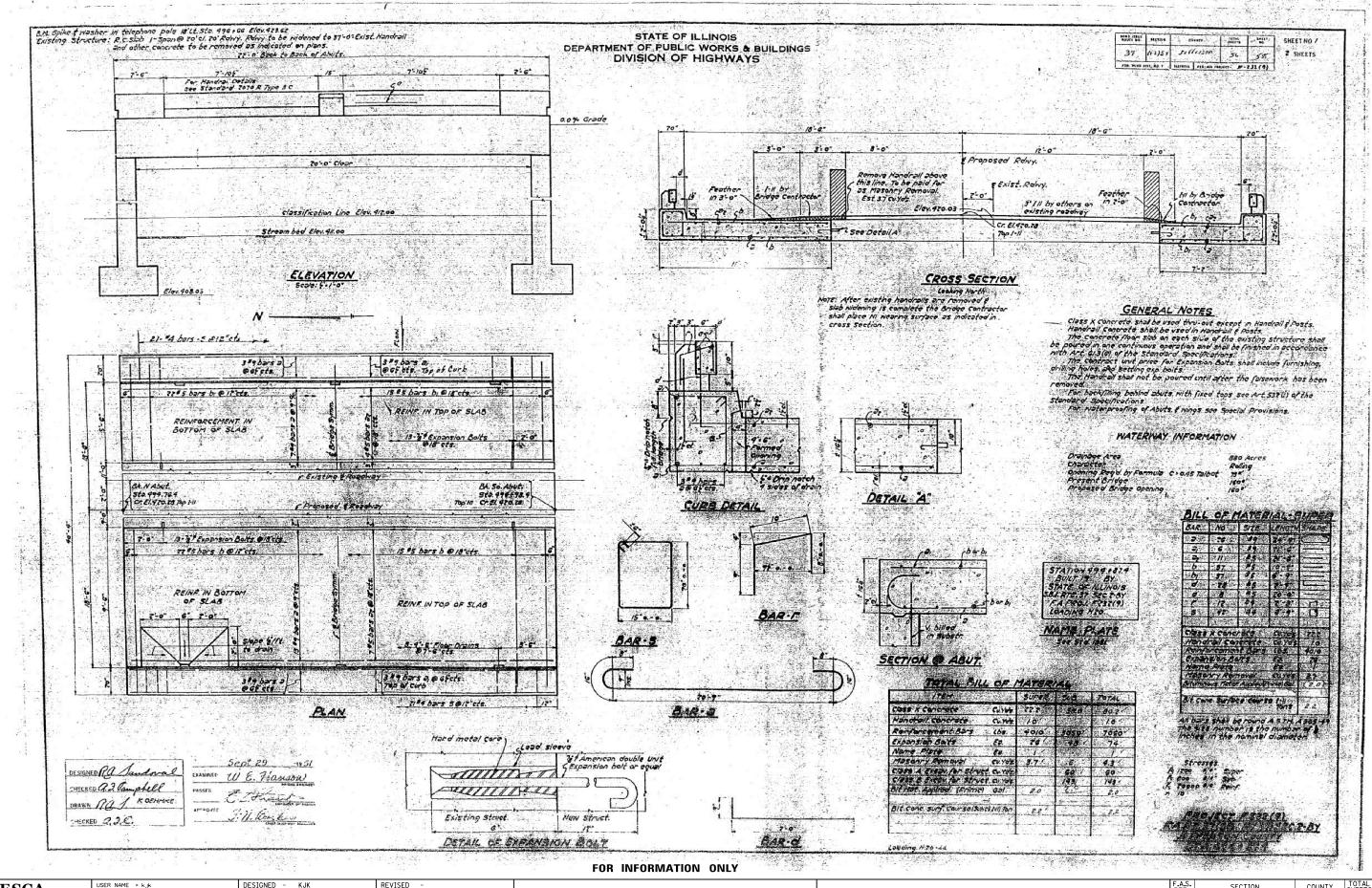
400.7 Very stiff, damp, grey and brown, Clay A7-6 to Weathered Clay 13 2.78

11 100/10" Hard, dry, grey, Clay Shale

25.0 100/3"

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





ESCA CONSULTANTS, INC.

| DESTANDE | F. K. | DESTANDE | - KJK | REVISED
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS — FOR INFORMATION ONLY STRUCTURE NO. 041—0093

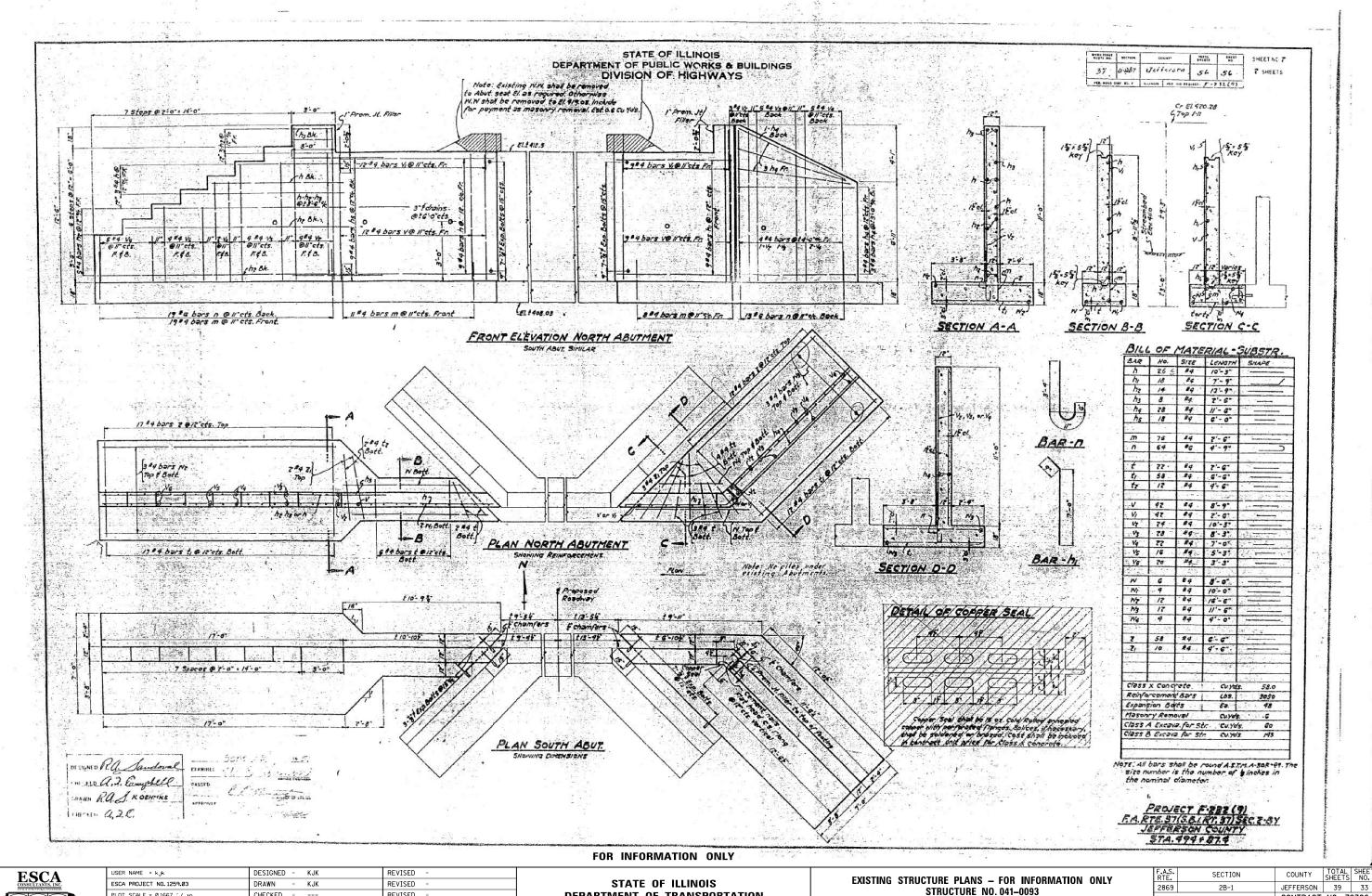
SHEET NO. 2 OF 3 SHEETS STA. TO STA.

 F.A.S. RTE.
 SECTION
 COUNTY SHEETS NO.
 TOTAL SHEETS NO.
 SHEETS NO.

 2869
 2B-1
 JEFFERSON
 39
 32

 CONTRACT
 NO.
 78326

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



DEPARTMENT OF TRANSPORTATION

SHEET NO. 3 OF 3 SHEETS STA.

CONTRACT NO. 78326

CHECKED

11:00:16 AM DATE

REVISED

REVISED

