

SUMMARY OF QUANTITIES

FAP ROUTE	SECTION	COUNTY	TOTAL MILES	SHEET NO.
693	(1198-31)	TAZEWELL	34	3
STA.		TO STA.		
EXISTING CONDITIONS:				
CONTRACT NO. 68415				

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	X080-2A FED 80% STATE 20%	SFTY-3N		
20200500	EARTH EXCAVATION (WIDENING)	CU YD	50	50			
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	35	35			
35600400	BITUMINOUS CONCRETE BASE COURSE WIDENING, 9"	SQ YD	196	196			
40600300	AGGREGATE (PRIME COAT)	TON	1	1			
40600980	BITUMINOUS CONCRETE REMOVAL - BUTT JOINT	SO YD	160	160			
42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SO YD	164	164			
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SO YD	35	35			
44000100	PAVEMENT REMOVAL	SO YD	92	92			
44000700	APPROACH SLAB REMOVAL	SO YD	107	107			
48101200	AGGREGATE SHOULDERS, TYPE B	TON	3	3			
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1	1			
50102400	CONCRETE REMOVAL	CU YD	2.4	2.4			
50300225	CONCRETE STRUCTURES	CU YD	3.4	3.4			
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH=K5")	SQ FT	45.1	45.1			
X0325294	PREFORMED JOINT STRIP SEAL	FOOT	33	33			
X0324744	REMOVAL OF EXISTING PRECAST UNITS	SQ FT	299	299			
50400105	PRECAST CONCRETE BRIDGE SLAB	SO FT	299	299			
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SO FT	2,066	2,066			
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	450	450			
50901005	STEEL BRIDGE RAIL, TYPE SM	FOOT	207	207			
51500100	NAME PLATES	EACH	1	1			
58100200	WATERPROOFING MEMBRANE SYSTEM	SO YD	230	230			
58300100	PC MORTAR FAIRING COURSE	FOOT	626	626			
* 63000000	STEEL PLATE BRIDGE GUARD RAIL, TYPE A	FOOT	100	100			
* 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4			
* 63200305	STEEL PLATE BEAM GUARD RAIL REMOVAL	FOOT	125	125			
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4			
67100100	MOBILIZATION	L SUM	1	1			
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1			
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1			
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1			
70106700	TEMPORARY RUMBLE STRIP	EACH	12	12			
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	144	144			
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	3,107	3,107			
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	1,132	1,132			
70400100	TEMPORARY CONCRETE BARRIER	FOOT	329	329			
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	329	329			
* 78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	1,689	1,689			
* 78100100	RAISED REFLECTIVE PAVEMENT MARKERS	EACH	10	10			
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	4	4			
* 78200510	BARRIER WALL MARKERS, TYPE A	EACH	4	4			
78300100	PAVEMENT MARKING REMOVAL	SO FT	473	473			

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	X080-2A FED 80% STATE 20%	SFTY-3N FED 80% STATE 20%		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	10	10			
X4066424	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N50	TON	53	53			
X4066614	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N50	TON	21	21			
* X7200200	WIDE LOAD SIGNING	L SUM	1	1			
Z0002600	BAR SPLICERS	EACH	8	8			
Z0030255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2		2		
Z0030320	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 2	EACH	2		2		

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	X080-2A FED 80% STATE 20%			
20300100	CHANNEL EXCAVATION	CU YD	416	416			
25000300	SEEDING, CLASS 3	ACRES	0.03	0.03			
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	3	3			
25000500	PHOSPHOROUS FERTILIZER NUTRIENT	POUND	3	3			
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	3	3			
25100630	EROSION CONTROL BLANKET	SO YD	138	138			
28100209	STONE RIPRAP, CLASS A5	TON	1,342	1,342			
28200200	FILTER FABRIC	SO YD	712	712			
28400100	GABIONS	CU YD	167	167			
20401000	SLOPE MATRESS 12"	SO YD	307	307			
31101900	SUB-BASE GRANULAR MATERIAL TYPE C	TON	100	100			
63300205	REMOVE AND REINSTALL EXIST. STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	50	50			
X0301852	DEWATERING STRUCTURE NO. 1	EACH	1	1			
X0322587	CONSTRUCTION ACCESS	EACH	1	1			
X0323655	GABION ANCHOR STAKES	EACH	56	56			

* SPECIALTY ITEM
 ▲ REVISED 7/25/06

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
 F.A.P. RTE. 693
 SECTION (1198-31)
 TAZEWELL COUNTY

SCALE: NONE DRAWN BY: KBF
 DATE: 03/24/2006 CHECKED BY: AJE

B.M.: BRASS PLATE IN S.E. WINGWALL; ELEV. = 100.00'

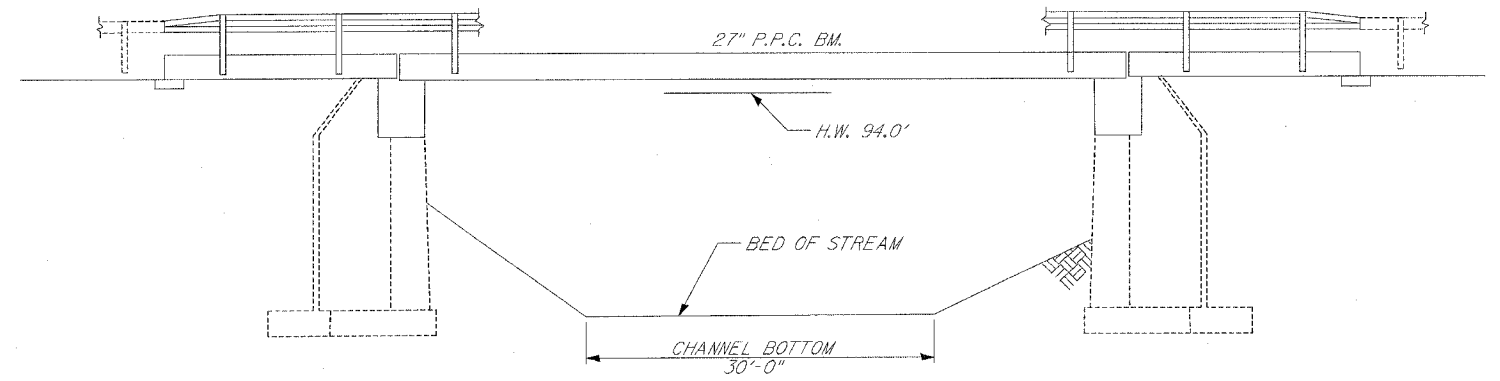
EXISTING STRUCTURE: SN 090-0061 IS A 33' WIDE x 63'-0" P.C.C. DECK BEAM SUPERSTRUCTURE WITH R.C. CLOSED ABUTMENTS.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 693	*	TAZEWELL	34	24
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	

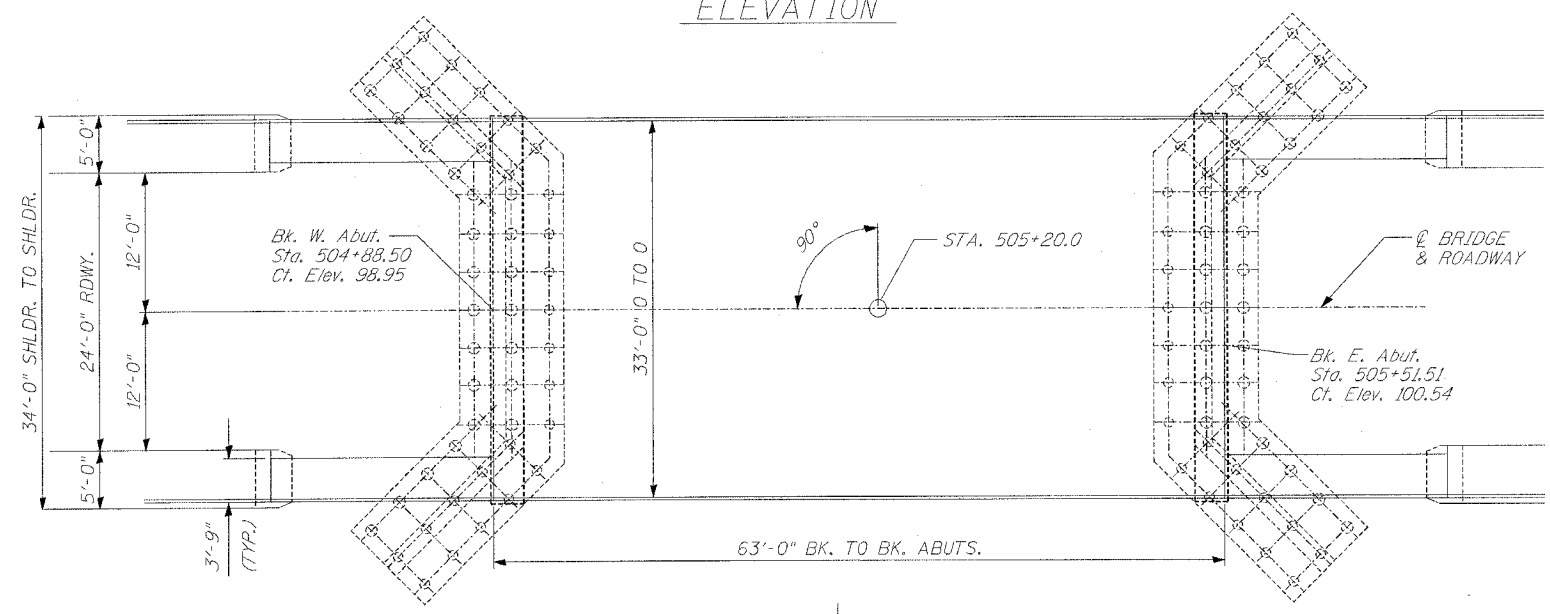
*(119B-3)I

INDEX OF SHEETS

SHEET NUMBER	DESCRIPTION
1	GENERAL PLAN AND ELEVATION, SUMMARY OF QUANTITIES, LOCATION MAP
2	R.O.W. PLAN
3	SITE GRADING PLAN
4	SITE DIMENSION PLAN
5	SITE PROFILE
6-8	CROSS SECTIONS



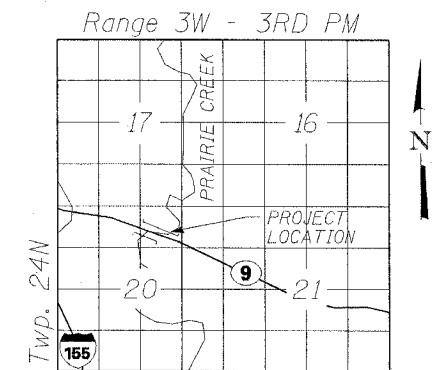
ELEVATION



PLAN
EXISTING BRIDGE

BILL OF MATERIALS

ITEM	UNIT	TOTAL
CHANNEL EXCAVATION	CU YD	416
STONE RIP-RAP, CLASS A5	TONS	1342
FILTER FABRIC FOR RIPRAP	SQ YD	712
GABIONS	CU YD	167
SUB-BASE GRANULAR MATERIAL, TYPE C	TONS	100
GABION ANCHOR STAKES	EACH	56
REM. AND REIN. STEEL PLATE BEAM GUARD RAIL, TY. A	FOOT	50
CONSTRUCTION ACCESS	L SUM	1
DEWATERING STRUCTURE NO. 1	EACH	1



LOCATION SKETCH

WATERWAY/SCOUR INFORMATION

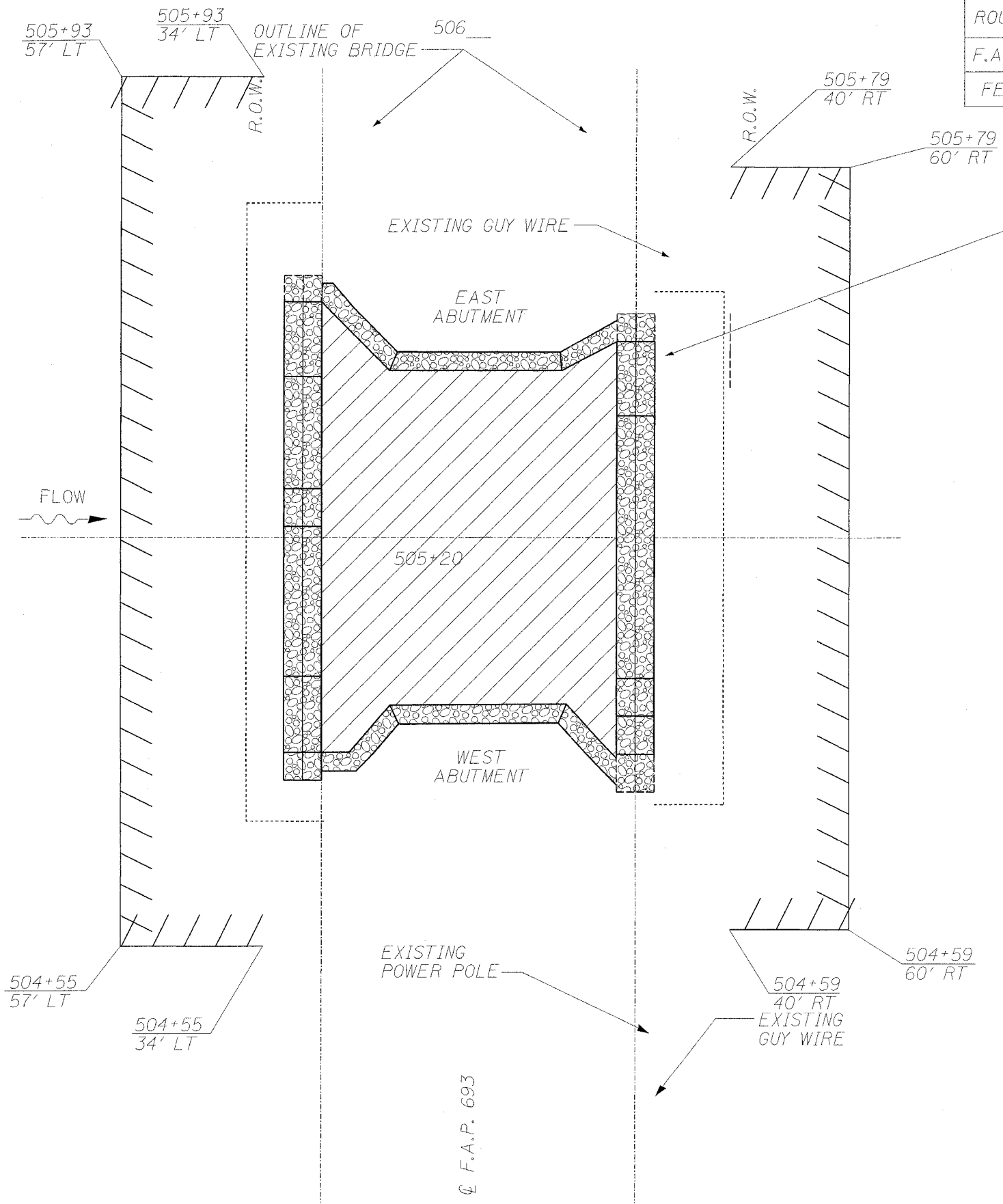
DESIGN FLOOD	100 YRS
DRAINAGE AREA	18.2 SQ MI
FLOW	3,426 CFS
FLOW DEPTH	8.0 FT
REQUIRED OPENING	555 SQ FT
PROVIDED OPENING	658 SQ FT
CONTRACTION SCOUR DEPTH	4 FT

REVISED
7-25-06
SHEET

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
S.N. 090-0061
F.A.P. 693 (IL 9)
OVER PRAIRIE CREEK
TAZEWELL COUNTY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 693	*	TAZEWELL	34	25
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	

* (119B-3)I



LEGEND

- R.O.W.
- TEMPORARY EASEMENT
- CONSTRUCTION LIMITS
- CONCRETE ABUTMENT
- STREAM CENTERLINE
- GABION
- RIPRAP, CLASS A5
- AERIAL ELECTRIC
- POWER POLE



ILLINOIS DEPARTMENT OF TRANSPORTATION
 R.O.W. PLAN
 S.N. 090-0061
 F.A.P. 693 (IL 9)
 OVER PRAIRIE CREEK
 TAZEWELL COUNTY
 SHEET 2 OF 8

REVISED
 7-25-06
 SHEET

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 693	*	TAZEWELL	34	26
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	

*(119B-3)I

TOE-WALL GABIONS
- SEE PROFILE
AND CROSS-SECTIONS

EXISTING POWER POLE
FORM SLOPE MATTRESS
AROUND POLE

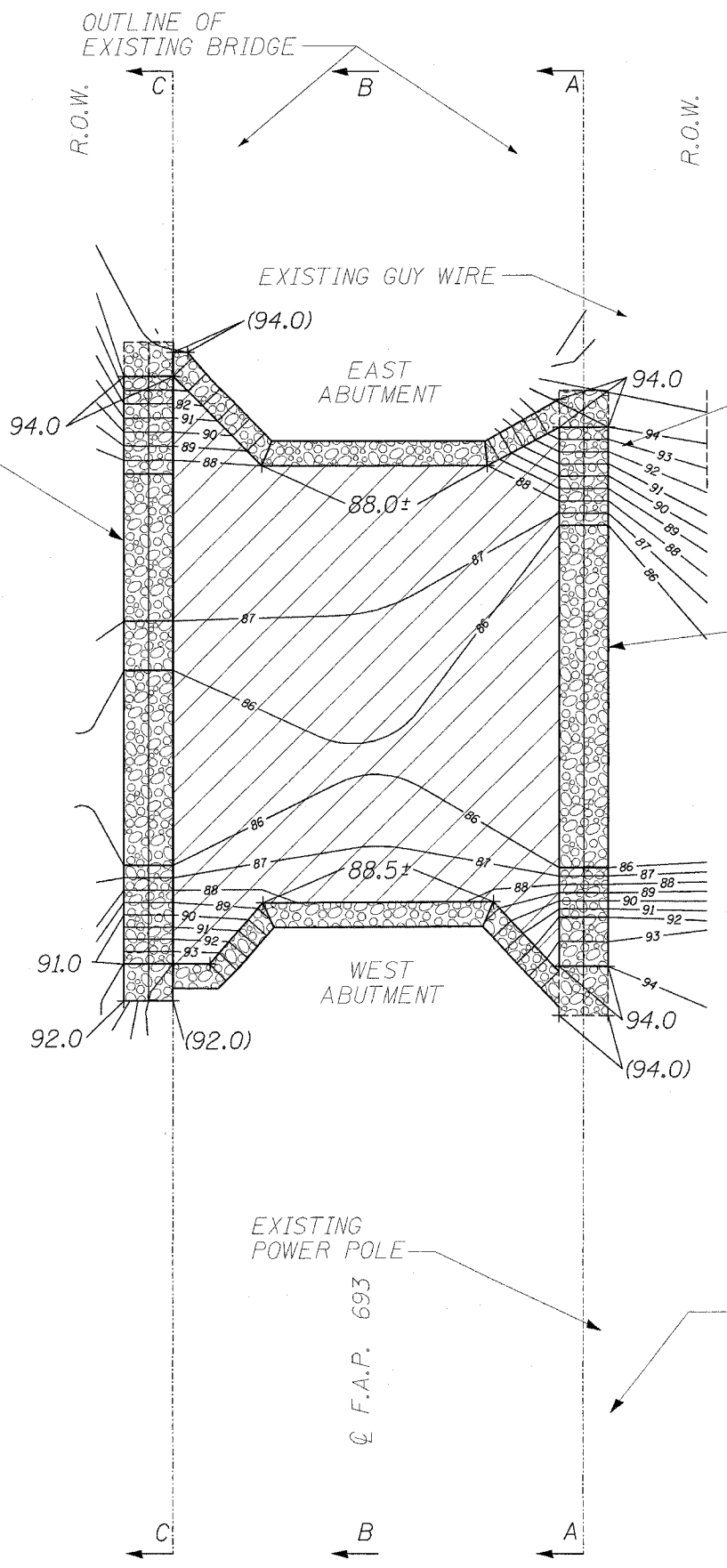
TOE-WALL GABIONS
- SEE PROFILE
AND CROSS-SECTIONS

FLOW

FLOW

LEGEND

- R.O.W. ————
- EXISTING CONTOUR - - - - 95 - - - -
- PROPOSED CONTOUR ———— 95 ————
- PROPOSED SPOT ELEVATION 95.0 +
- CONCRETE ABUTMENT // / / / /
- STREAM CENTERLINE - - - - -
- GABION [Pattern]
- STONE RIPRAP, CL. A5 [Pattern]
- AERIAL ELECTRIC ———— AE ————
- POWER POLE ○



EXISTING
POWER POLE

Q F.A.P. 693

EXISTING
GUY WIRE

NOTE: SPOT ELEVATIONS ENCLOSED BY PARENTHESES INDICATED TOP OF GABION BURIED BY EARTH BACKFILL



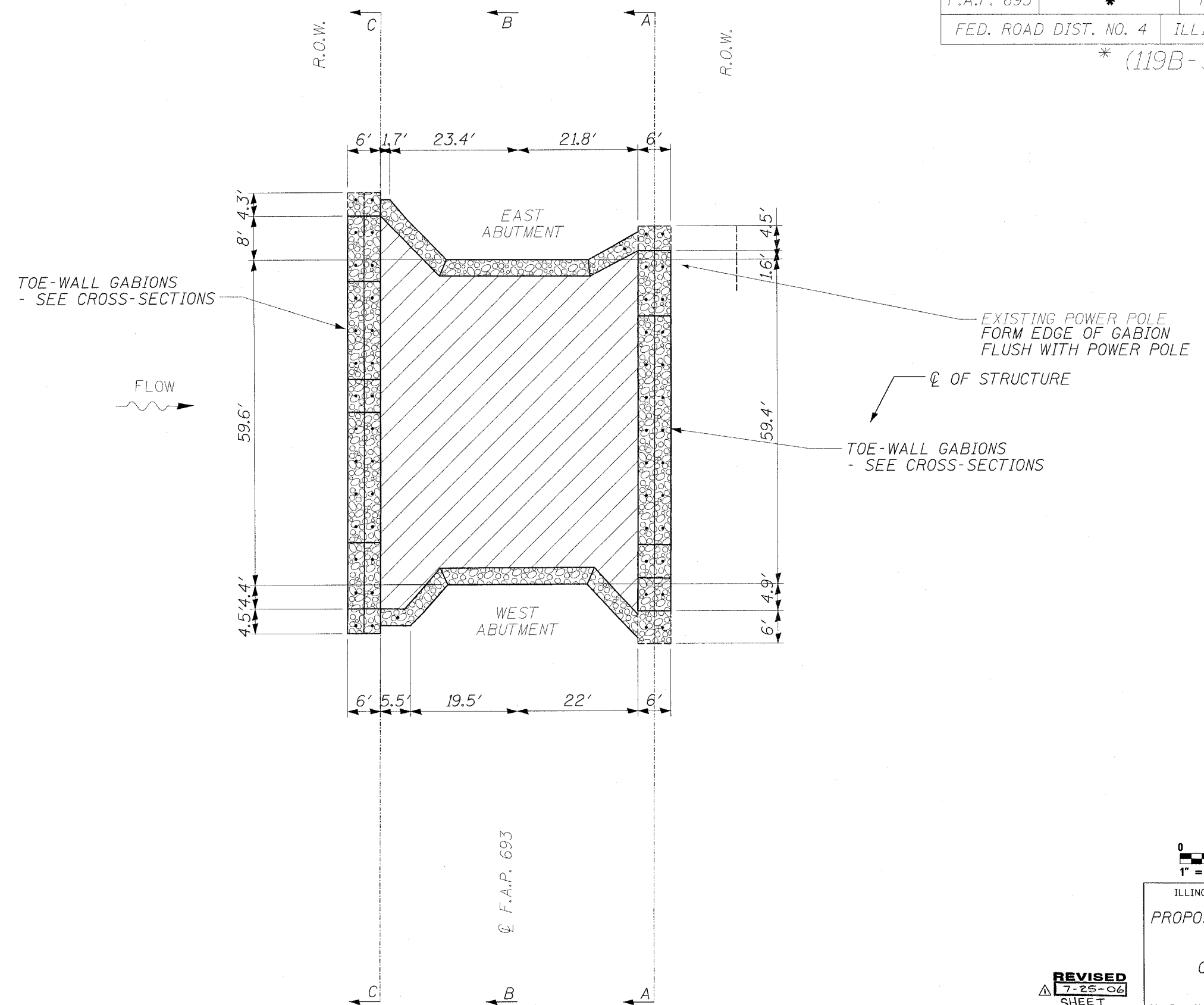
REVISED
7-25-06
SHEET

ILLINOIS DEPARTMENT OF TRANSPORTATION
PROPOSED SITE PLAN
S.N. 090-0061
F.A.P. 693 (IL 9)
OVER PRAIRIE CREEK
TAZEWELL COUNTY
SHEET 3 OF 8

SCALE: 1" = 20'

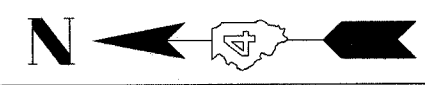
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 693	*	TAZEWELL	34	27
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	

* (119B-3)I



LEGEND

- R.O.W. ————
- CONCRETE ABUTMENT // // // //
- STREAM CENTERLINE - - - - -
- GABION [Pattern]
- STONE RIPRAP, CL. A5 [Pattern]
- GABION ANCHOR •
- AERIAL ELECTRIC — AE —
- POWER POLE —○—



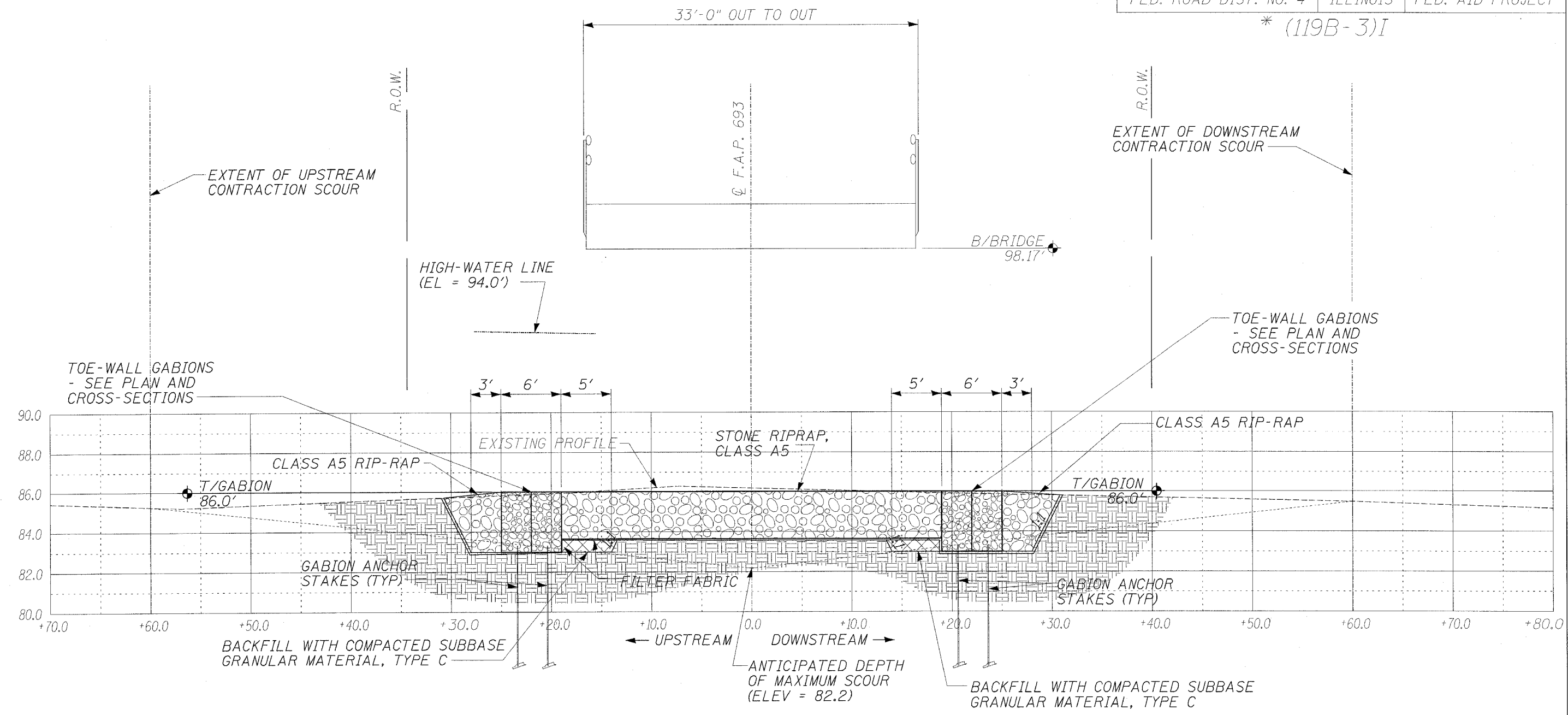
ILLINOIS DEPARTMENT OF TRANSPORTATION
 PROPOSED SITE DIMENSION PLAN
 S.N. 090-0061
 F.A.P. 693 (IL 9)
 OVER PRAIRIE CREEK
 TAZEWELL COUNTY
 SHEET 4 OF 8

REVISED
 7-25-06
 SHEET

SCALE: 1" = 20'

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 693	*	TAZEWELL	34	28
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	

* (119B-3)I



CALCULATED OPENING: 60 FT
 MAXIMUM SCOUR CALCULATION:
 CONTRACTION SCOUR = 4 FT

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SITE PROFILE
 S.N. 090-0061
 F.A.P. 693 (IL 9)
 OVER PRAIRIE CREEK
 TAZEWELL COUNTY
 SHEET 5 OF 8

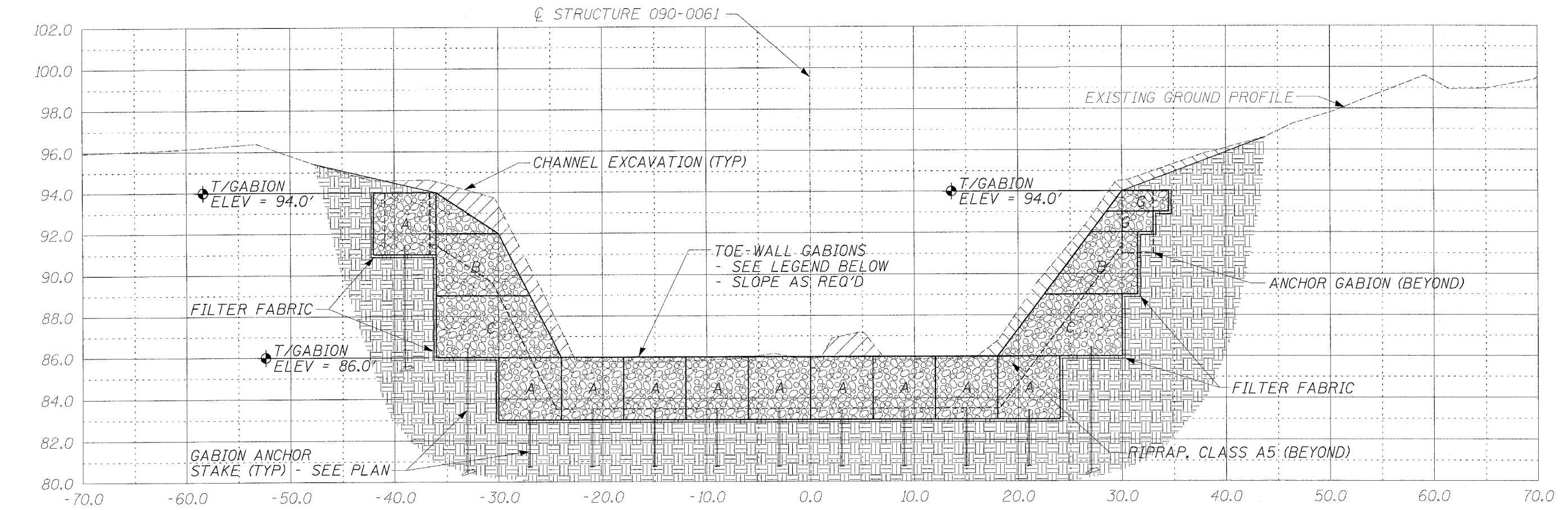
REVISED
 7-25-06
 SHEET

SCALE: VERT. 1" = 5' HORIZ. 1" = 10'



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 693	*	TAZEWELL	34	29
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	

*(119B-3)I



SECTION A-A THROUGH SOUTH GABION TOE-WALL

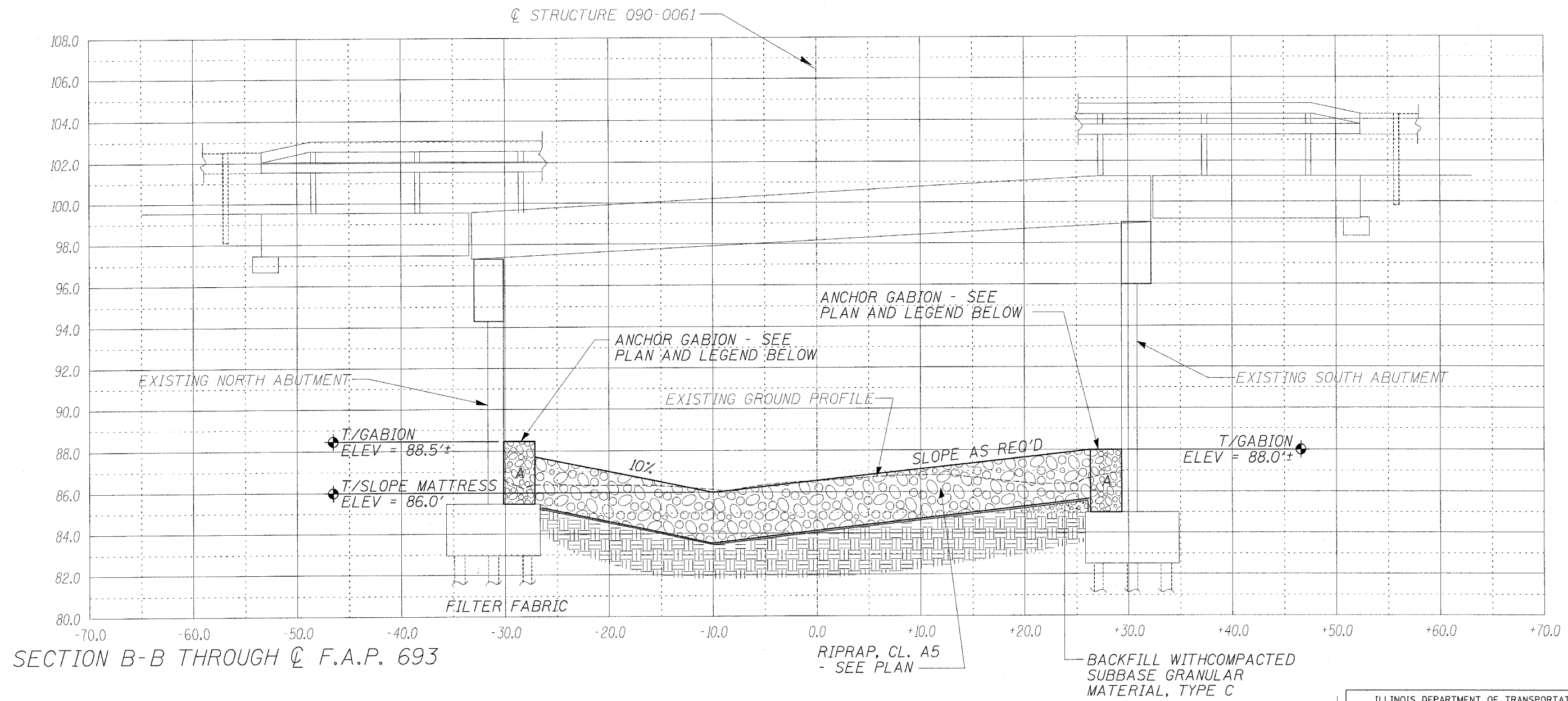
MARK	LENGTH	WIDTH	HEIGHT
A	6'	3'	3'
B	9'	3'	3'
C	12'	3'	3'
G	6'	3'	1'

REVISED
7-25-06
SHEET

ILLINOIS DEPARTMENT OF TRANSPORTATION
SITE CROSS SECTION
S.N. 090-0061
F.A.P. 693 (IL 9)
OVER PRAIRIE CREEK
TAZEWELL COUNTY
SHEET 6 OF 8
SCALE: VERT. 1" = 5' HORIZ. 1" = 10'

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 693	*	TAZEWELL	34	30
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	

* (119B-3)I



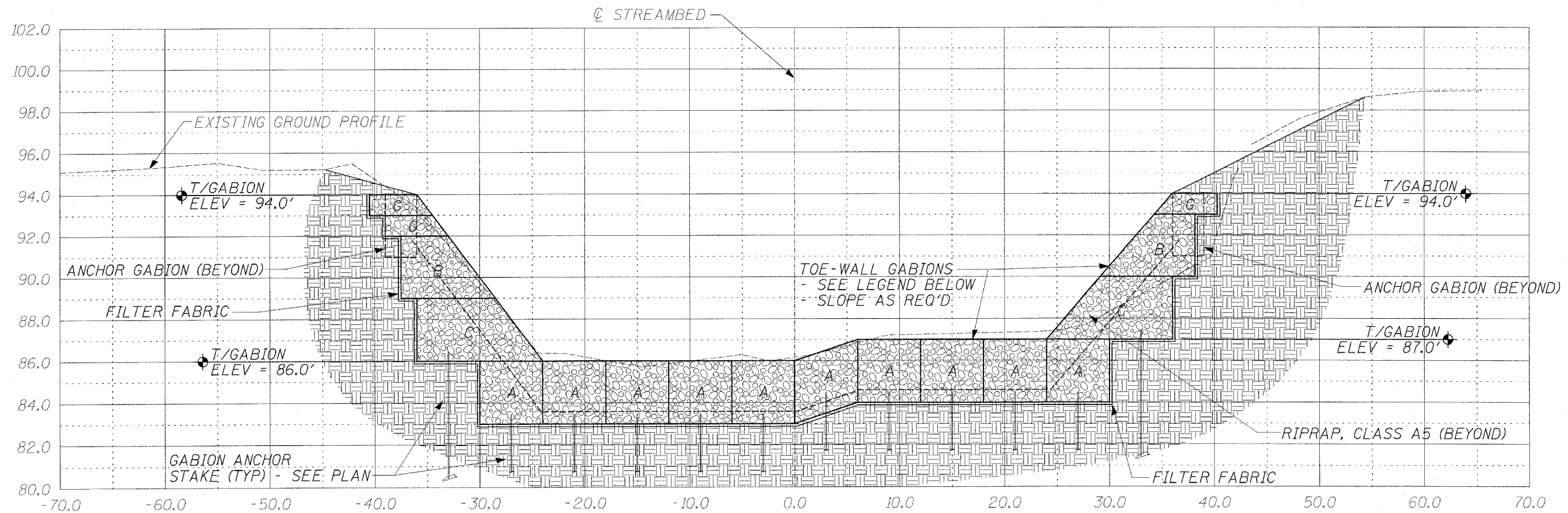
REVISED
7-25-06
SHEET

GABION LEGEND			
MARK	LENGTH	WIDTH	HEIGHT
A	6'	3'	3'

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SITE CROSS SECTION
 S.N. 090-0061
 F.A.P. 693 (IL 9)
 OVER PRAIRIE CREEK
 TAZEWELL COUNTY
 SHEET 7 OF 8
 SCALE: VERT. 1" = 5' HORIZ. 1" = 10'

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 693	*	TAZEWELL	34	31
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	

*(119B-3)I



SECTION C-C THROUGH NORTH GABION TOE-WALL

MARK	LENGTH	WIDTH	HEIGHT
A	6'	3'	3'
B	9'	3'	3'
C	12'	3'	3'
G	6'	3'	1'

REVISED
7-25-06
SHEET

ILLINOIS DEPARTMENT OF TRANSPORTATION
SITE CROSS SECTION
S.N. 090-0061
F.A.P. 693 (IL 9)
OVER PRAIRIE CREEK
TAZEWELL COUNTY
SHEET 8 OF 8
SCALE: VERT. 1" = 5' HORIZ. 1" = 30'

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 693	*	TAZEWELL	34	32
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	

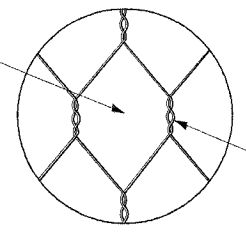
*(119B-3)I

SUGGESTED INSTALLATION SEQUENCE

(SEE ALSO SECTION 284 OF THE STANDARD SPECIFICATIONS)

- INDIVIDUALLY ASSEMBLE THE EMPTY GABION BASKET UNITS.
- POSITION THE INITIAL LINE OF EMPTY GABION BASKET UNITS ON THE PREPARED SURFACE IN A DIRECTION PERPENDICULAR TO STREAM FLOW. SECURE ADJOINING BASKETS AND PARTIALLY FILL TO PROVIDE ANCHORAGE AGAINST DEFORMATION AND DISPLACEMENT DURING FILLING OPERATIONS.
- POSITION AND SECURE THE REMAINING EMPTY GABION BASKET UNITS ON THE PREPARED SURFACE AS SHOWN ON THE PLANS.
- PLACE THE BASKETS IN TENSION AND STRETCH TO REMOVE ANY KINKS FROM THE FABRIC. STRETCH THE EMPTY GABION BASKET UNITS IN A MANNER THAT WILL PREVENT UNRAVELING.
- FILL THE BASKET UNITS IN STAGES TO PREVENT LOCALIZED DEFORMATION. INTERNAL CONNECTING WIRES SHALL BE INSTALLED BETWEEN STONE LAYERS TO CONNECT THE FRONT FACE OF THE BASKET UNIT TO THE BACK FACE. AT NO TIME SHALL ANY CELL BE FILLED TO A DEPTH EXCEEDING 12 INCHES MORE THAN THE ADJOINING CELL. THE MAXIMUM HEIGHT FROM WHICH THE STONE MAY BE DROPPED INTO THE BASKET SHALL BE 3 FT.
- TIGHTLY STRETCH THE LID OVER THE STONE FILL USING A LID CLOSING TOOL APPROVED BY THE MANUFACTURER. USING CROWBARS OR OTHER SINGLE POINT LEVERAGE BARS FOR LID CLOSING SHALL BE PROHIBITED. TIGHTLY SECURE THE LID TO THE FILLED BASKET ALONG ALL EDGES, ENDS AND INTERNAL CELL DIAPHRAMS.
- IN LIEU OF FILLING BASKETS IN PLACE, THE BASKETS MAY BE PREFILLED ON A LEVEL SURFACE AS INDICATED IN STEPS 5 AND 6. THE BASKETS CAN THEN BE LIFTED AND PLACED ON THE PREPARED SURFACE USING A MANUFACTURER'S APPROVED LIFTING TECHNIQUE. CARE SHALL BE TAKEN NOT TO ABRASE THE ZINC OR VINYL COATING OR PERMANENTLY DISTORT THE SHAPE OF THE BASKET IN TRANSPORTATION. ANY DAMAGE TO THE BASKETS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER. BASKETS SHALL BE PLACED TIGHTLY AGAINST AND SECURED TO BASKETS ALREADY IN PLACE.
- WHERE A COMPLETE GABION UNIT CANNOT BE INSTALLED AS SHOWN ON THE PLANS BECAUSE OF SPACE LIMITATIONS, THE BASKET UNIT SHALL BE CUT, FOLDED AND WIRED TOGETHER TO SUIT EXISTING SITE CONDITIONS.

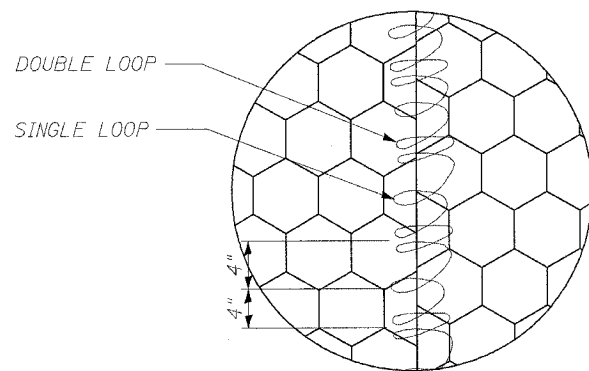
FABRIC OPENING NOMINAL DIMENSIONS
3 1/4" x 4 1/2"



HEXAGONAL MESH FABRIC WITH AT LEAST THREE HALF TWISTS

- NOTES:
- GABION BASKETS SHALL BE CONSTRUCTED OF A GALVANIZED, ALUMINIZED, OR PVC-COATED GALVANIZED OR ALUMINIZED STEEL WIRE.
 - STEEL WIRE SHALL CONFORM TO SECTION 1006.35 OF THE STANDARD SPECIFICATIONS

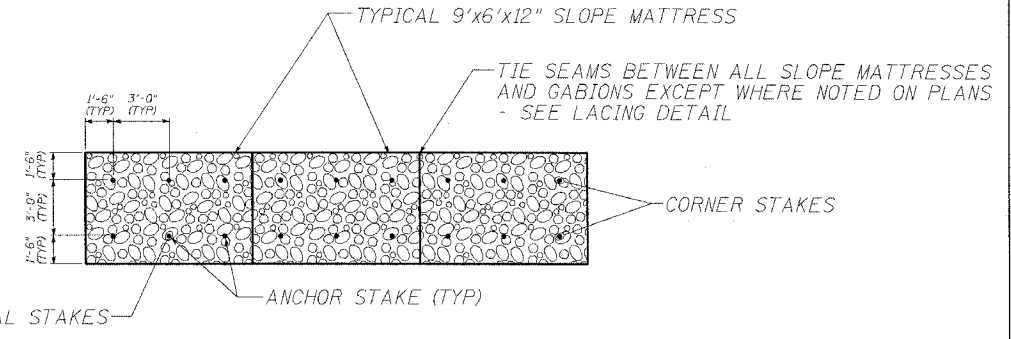
GABION FABRIC DETAIL



LACING DETAIL

GABION BASKET NOTES:

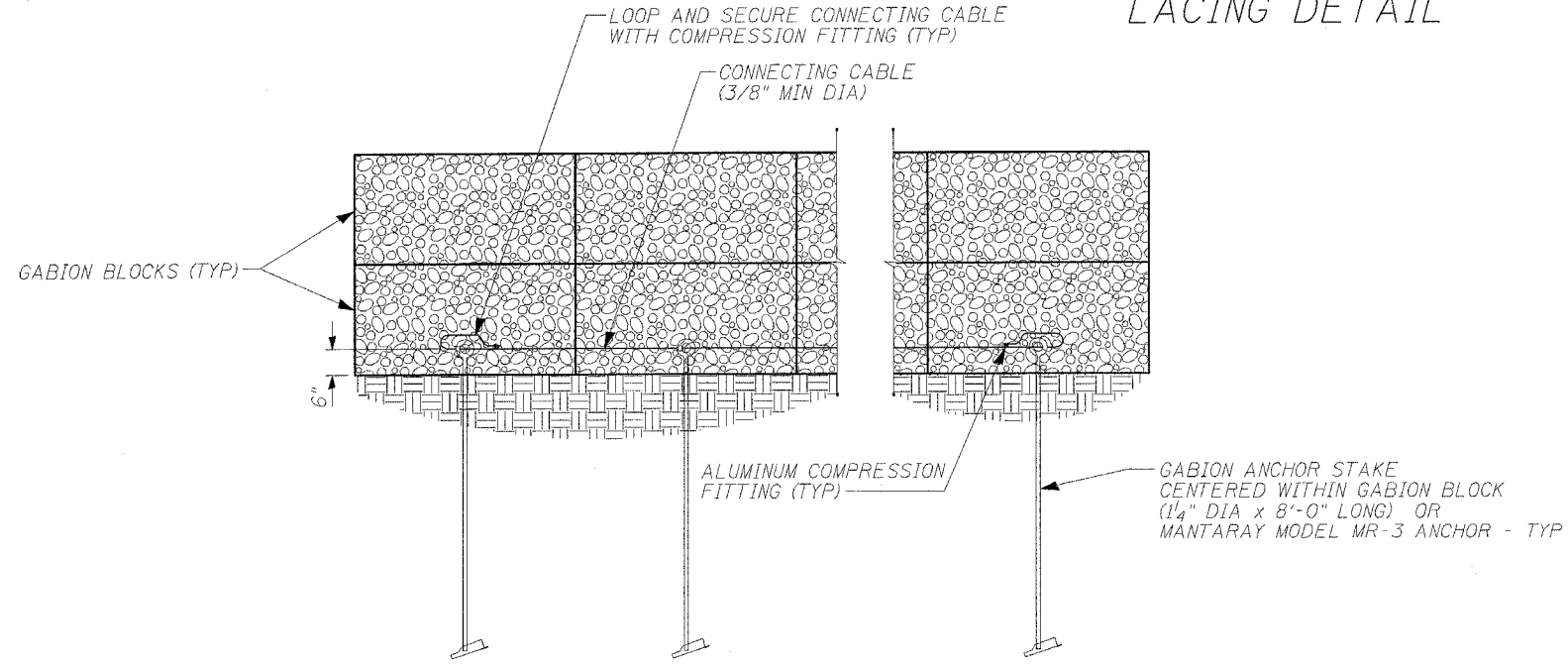
- BASKETS SHALL BE OF SINGLE UNIT CONSTRUCTION. THE BASE, LID, ENDS AND SIDES SHALL BE EITHER WOVEN INTO A SINGLE UNIT OR ONE EDGE OF THESE MEMBERS CONNECTED TO THE BASE SECTION OF THE BASKETS. FOR PROPER ASSEMBLY, SEE LACING DETAIL.
- DIAPHRAMS SHALL EQUALLY DIVIDE BASKETS WHERE THE LENGTH OF THE BASKET EXCEEDS 1 1/2 IT'S HORIZONTAL LENGTH.
- GABION BASKET ASSEMBLY, INSTALLATION, FILLING AND LID-CLOSING SHALL BE IN ACCORDANCE WITH SECTION 284 OF THE STANDARD SPECIFICATIONS.



NOTES:

- ANCHOR STAKES SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 284 OF THE STANDARD SPECIFICATIONS.
- ANCHOR STAKES ARE TO BE PLACED ON THREE-FOOT CENTERS, WITH AN ARRANGEMENT AS SHOWN ABOVE, FOR ALL SLOPE MATTRESSES LAID ON A SLOPE OF 2:1 OR GREATER.
- ANCHOR STAKES FOR SLOPE MATTRESSES LAID ON SLOPE LESS THAN 2:1 AND GREATER THAN 10% SHALL OMIT THE CENTRAL STAKES SHOWN ABOVE - 4 STAKES PER 6'x9' MATTRESS.
- ALL SLOPE MATTRESSES LAID ON SLOPES LESS THAN 10% SHALL NOT HAVE ANCHOR STAKES.

TYPICAL ANCHOR STAKE LAYOUT DETAIL



GABION ANCHOR STAKE SECURING DETAIL

GABION LEGEND			
MARK	LENGTH	WIDTH	HEIGHT
A	6'	3'	3'
B	9'	3'	3'
C	12'	3'	3'
D	6'	3'	1 1/2'
G	6'	3'	1'
H	9'	3'	1'

REVISED
7-25-06
SHEET

ILLINOIS DEPARTMENT OF TRANSPORTATION

GABION DETAILS
S.N. 090-0061
IL 9 OVER PRAIRIE CREEK

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 693	*	TAZEWELL	34	33
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	

* (119B-3)I

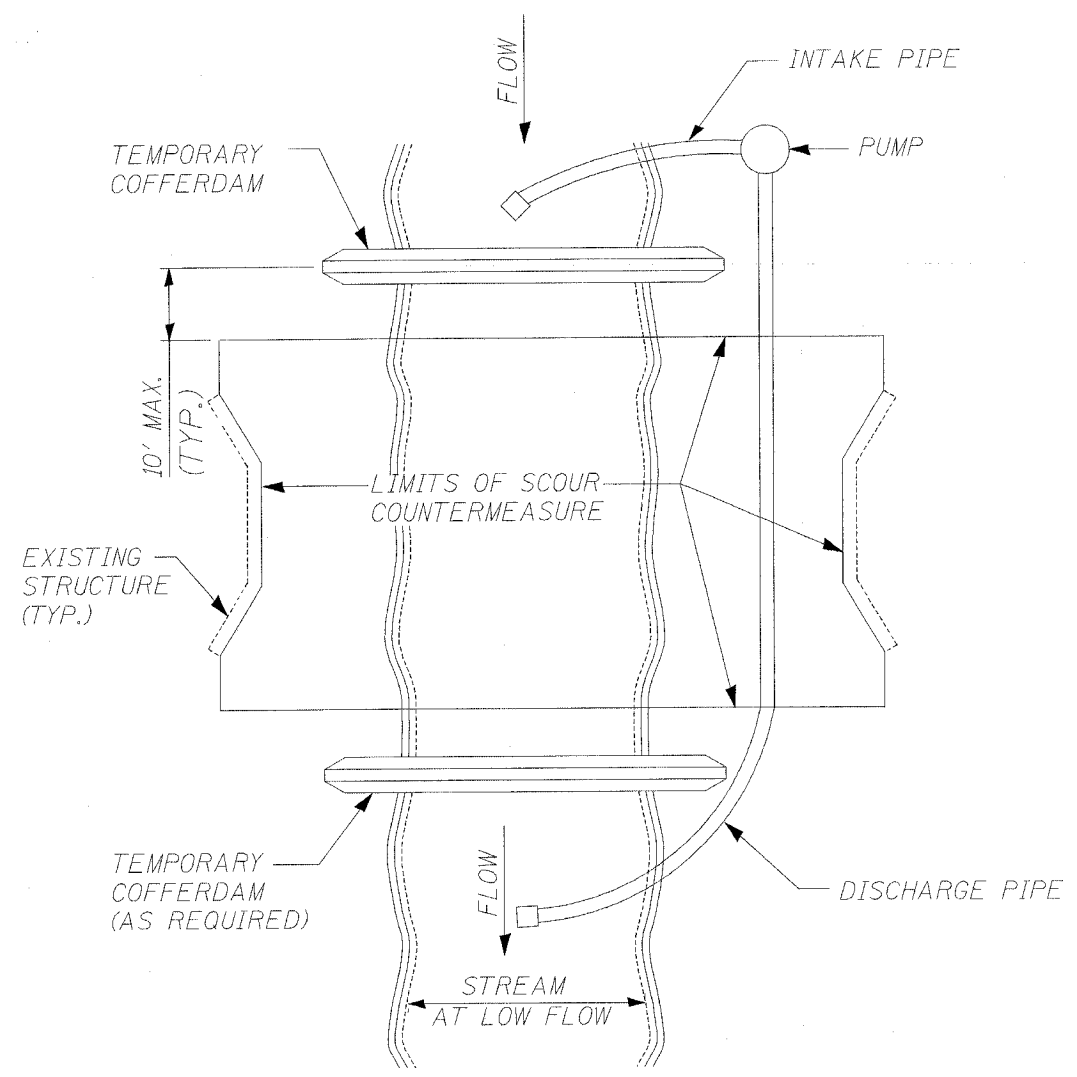


FIGURE D1. TEMPORARY COFFERDAM WITH PUMP BYPASS

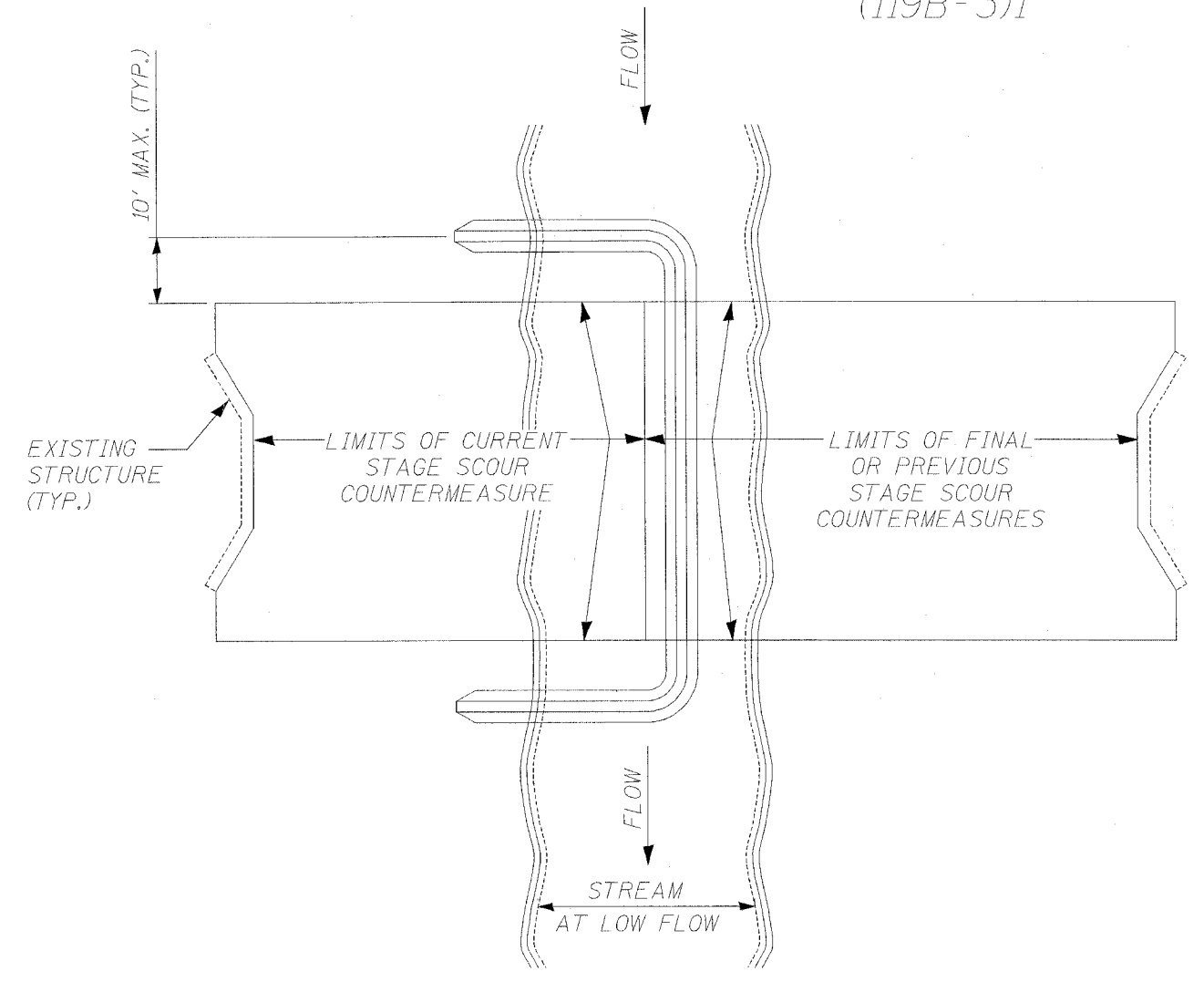


FIGURE D2. STAGED IN-STREAM COFFERDAM DIVISION

NOTE: DEWATERING SYSTEM DETAILS SHALL BE USED IN CONJUNCTION WITH THE PROJECT SPECIAL PROVISIONS.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DEWATERING SYSTEM DETAILS
 S.N. 090-0061
 IL 9 OVER PRAIRIE CREEK

REVISED
 7-25-06
 SHEET

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 693	*	TAZEWELL	34	34
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	

* (119B-3)I

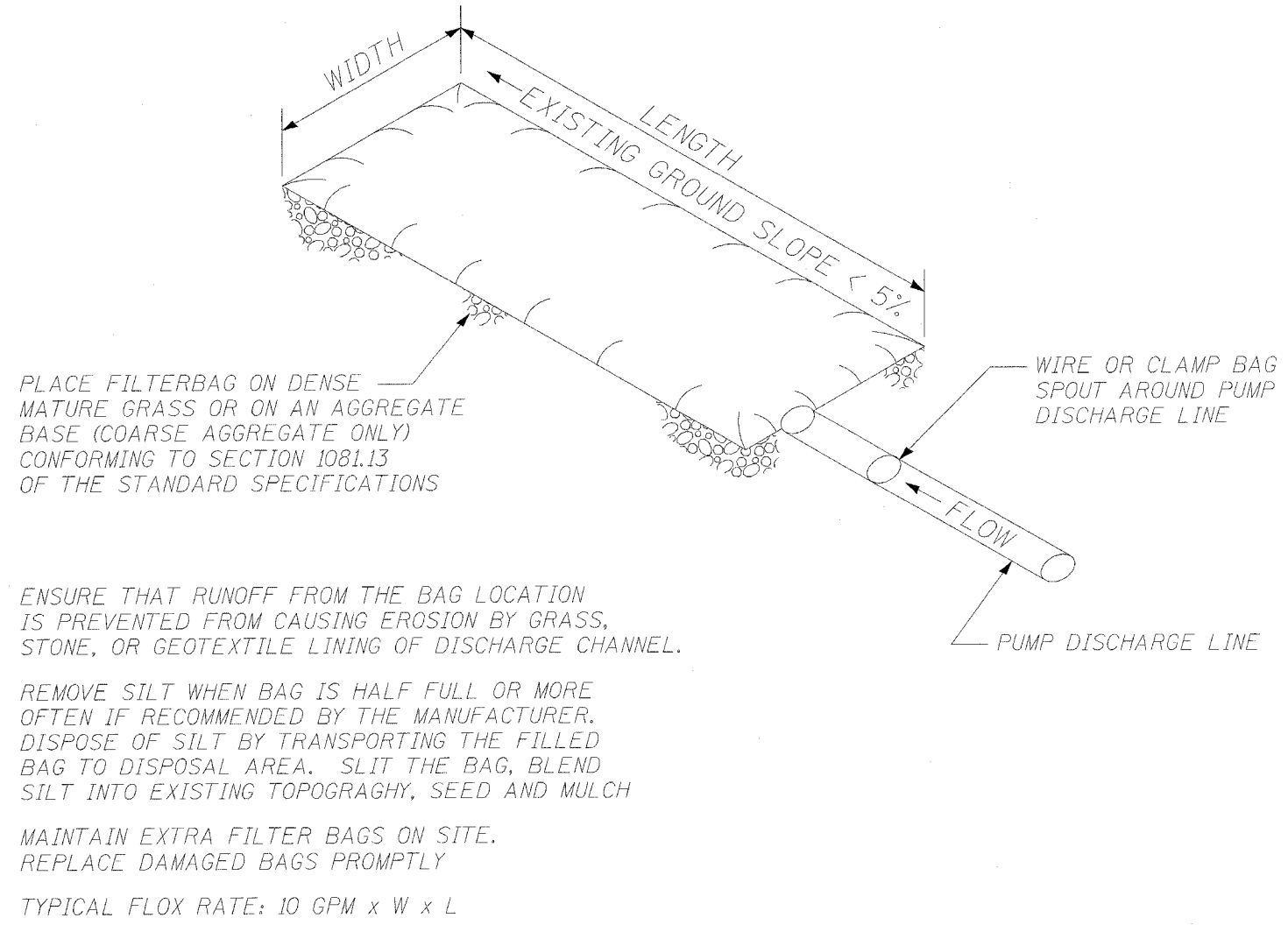


FIGURE S1. SEDIMENT FILTER BAG

NOTE: DEWATERING SYSTEM DETAILS SHALL BE USED IN CONJUNCTION WITH THE PROJECT SPECIAL PROVISIONS.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DEWATERING SYSTEM DETAILS
 S.N. 090-0061
 IL 9 OVER PRAIRIE CREEK

REVISED
 7-25-06
 SHEET