06-16-2017 LETTING ITEM 092

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	1
	ILLINOIS	CONTRACT NO. 76967		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

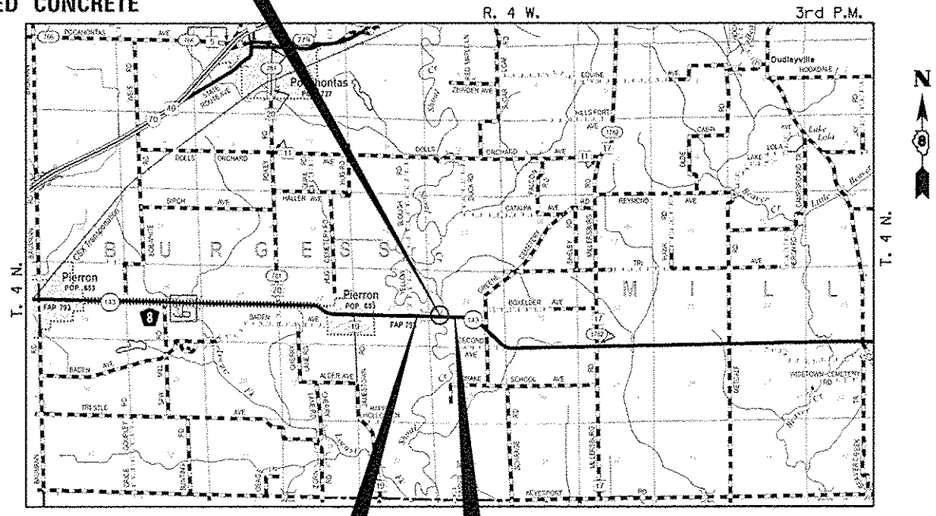
F.A.P. ROUTE 793 (IL 143)
SECTION (40, 112)BR-1
PROJECT STP-0793(023)
BRIDGE REPLACEMENT
IL 143 OVER SHOAL CREEK
BOND COUNTY

C-98-136-05

D-98-108-05

LOCATION OF SECTION INDICATED THUS: –

STATION 385 + 04.50, 0° SKEW
PROPOSED STRUCTURE NO. 003-0062
NINE SPAN STEEL GIRDER BRIDGE 1352'-0" BK. TO BK. ABUTMENTS
REINFORCED CONCRETE DECK 35'-2" O. TO O. ON STEEL
COMPOSITE WEB PLATE GIRDERS AND REINFORCED CONCRETE PIERS AND ABUTMENTS.
LATITUDE: 38.7758
LONGITUDE: –89.4994



BEGIN IMPROVEMENT
STA 372 + 00
LATITUDE: 38.7758
LONGITUDE: –89.50.55

END IMPROVEMENT
STA 398 + 00
LATITUDE: 38.7757
LONGITUDE: –89.4965

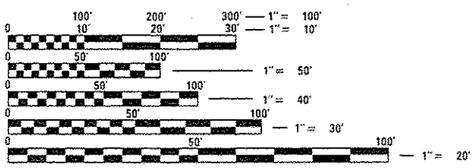
1 MI 0 1 MI
APPROXIMATE SCALE

GROSS LENGTH = 2,600.00 FT. = 0.492 MILE
NET LENGTH = 2,600.00 FT. = 0.492 MILE

DESIGN DESIGNATION:
ADT 1800 (17) MINOR ARTERIAL
3.16 (FD-20)

INDEX OF SHEETS

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: HERVE GELIN PHONE: (618)346-3179
SQUAD LEADER: CECIL DOWNING PHONE: (618)346-3186

CONTRACT NO. 76967

BRIAN M. BORGMAN
062-058271
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

SIGNED: _____ DATE: 11/13/2017
EXPIRES: 11/30/2017

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Jan 20 20 17
Jeffrey Z. Ka
REGIONAL ENGINEER
May 12 20 17
Kathleen M. Addis PE for
ENGINEER OF DESIGN AND ENVIRONMENT
May 12 20 17
DIRECTOR OF PROGRAM DEVELOPMENT

Hutchison Engineering, Inc.
SINCE 1945
1801 West Lafayette
PO Box 820
Jacksonville, Illinois 62651
PHONE : (217)245-7164 FAX (217)243-0468

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GENERAL NOTES

1. ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES WITHIN THE PROJECT AREA BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

   *AT&T ILLINOIS
   *CENTERPOINT ENERGY
   *FRONTIER NORTH, INC.
   *SOUTHWESTERN ELECTRIC COOPERATION, INC.

   MEMBERS OF J.U.L.I.E. CALL TOLL FREE (800) 892-0123 OR 811 AND ARE INDICATED BY *. NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.

2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.

3. THE REMOVAL OF THE BRIDGE APPROACH PAVEMENT, CONNECTOR, AND SLEEPER SLAB IS INCLUDED IN THE COST OF PAVEMENT REMOVAL.

4. IF THE CONTRACTOR, FOR HIS CONSTRUCTION ACTIVITY, REMOVES TREES WITHIN THE RIGHT-OF-WAY LIMITS WHICH ARE NOT DESIGNATED ON THE PLANS FOR REMOVAL, I.E. IN ORDER TO GAIN ACCESS TO THE PROJECT SITE; IT WILL BE HIS RESPONSIBILITY TO REPLACE THE TREES AT A 1:1 RATIO. THE TREES WILL BE REPLACED WITH A 1 GALLON NATIVE ILLINOIS TREE SPECIES AND SHALL BE APPROVED BY THE ENGINEER. THE TREE REMOVAL AND TREE REPLACEMENT WILL BE AT THE CONTRACTOR'S EXPENSE, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

5. ALL EXISTING AND PROPOSED RIGHT-OF-WAY LINES AND PROPERTY LINES SHOWN ON THE PLAN SHEETS ARE GRAPHICAL REPRESENTATIONS AND SHALL NOT BE USED AS A MEANS TO ESTABLISH OWNERSHIP. IN ALL MATTERS RELATING TO RIGHT-OF-WAY, THE PLAT OF HIGHWAYS SHALL BE THE CONTROLLING DOCUMENT.

6. ALL ELEVATIONS REFER TO THE USGS MEAN SEA LEVEL DATUM.

7. EXISTING STRUCTURE PLANS ARE AVAILABLE FOR REVIEW IN THE DISTRICT OFFICE. CONTACT HERVE GELIN AT (618)-346-3179.

8. THE CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS REQUIRED TO IMPRINT PAVEMENT STATION NUMBERS IN THE FINISHED SURFACE OF THE PAVEMENT AND/OR OVERLAY, THE NUMBERS SHALL BE APPROXIMATELY ¾ INCHES WIDE, 5 INCHES HEIGHT, AND ⅞ INCHES DEEP.

   THE PAVEMENT STATION NUMBERS SHALL BE INSTALLED AS SPECIFIED HEREIN:

   INTERVAL - 250 FEET

   BOTTOM OF NUMBERS - 6 INCHES FROM THE INSIDE EDGE OF THE PAVEMENT MARKING

   LOCATION:
   2-LANE PAVEMENT - RIGHT EDGE OF PAVEMENT IN DIRECTION OF INCREASING STATIONS

   POSITION - STATIONS SHALL BE PLACED SO THEY CAN BE READ FROM THE ADJACENT SHOULDER

   FORMAT - "XX+XX", WHERE X REPRESENTS THE PAVEMENT STATION

   THE STAMPED STATIONS SHALL BE FILLED WITH SAND IMMEDIATELY AFTER STAMPING AND PRIOR TO ADDITIONAL ROLLING.

   THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCLUDED IN THE COST OF THE ASSOCIATED PAVEMENT AND/OR OVERLAY PAY ITEMS.

9. ALL EROSION CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION CONTROL PLAN. PRIOR TO APPROVAL AND USE OF THE PRODUCT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATION BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE MANUFACTURER RECOMMENDED INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.

10. TEMPORARY SEEDING SHALL BE COMPLETED ON A WEEKLY BASIS ON EXPOSED GROUND AND SHALL BE PAID FOR AS "TEMPORARY EROSION CONTROL SEEDING" AND NO OTHER PAYMENT WILL BE PERMITTED. FOR CALCULATION PURPOSES, THREE APPLICATIONS OF TEMPORARY SEEDING WERE ASSUMED.

11. ALL AREAS DISTURBED FOR ANY REASON SHALL BE PERMANENTLY SEEDED AS DIRECTED BY THE ENGINEER. ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE SEEDED AT THE CONTRACTOR'S EXPENSE.

12. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT.

13. THE RIGHT OF WAY MARKERS SHALL BE INSTALLED SO THAT THE BACK OF THE POST IS TWELVE INCHES (12") INSIDE THE RIGHT OF WAY BOUNDARY. THE RIGHT OF WAY MARKER SHALL BE A WITNESS TO THE RIGHT OF WAY CORNER, WHICH IS THE PROPERTY PIN. THE RIGHT OF WAY CORNER OR PROPERTY PIN IS A ⅝" IRON ROD WITH IDOT ALUMINUM CAP THAT SHALL NOT BE REMOVED, DAMAGED, OR DISTURBED WHEN SETTING THE RIGHT OF WAY MARKER AT THE TWELVE INCHES (12") OFFSET.

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

ROUTE	FAP 793 (IL 143)
SECTION	(40,112)BR-1
COUNTY	BOND
CONTRACT	76967

ADT (CONSTRUCTION YR):	2000
MU%	7
SU%	9
20 YR. ESAL'S:	1.00

MIXTURE USE	SURFACE	BINDER
AC/PG	PG 64-22	PG 64-22
RAP % (MAX)	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION
DESIGN AIR VOIDS	4.0% @ Ndes=70	4.0% @ Ndes=70
MIX COMPOSITION: (GRADATION)	IL 9.5	IL 19.0
FRICTION AGG	MIXTURE "C"	MIXTURE "B"
QUALITY MGMT PROGRAM	QC/QA	QC/QA

MIXTURE USE	SHOULDERS ≥ 2.25"	SHOULDERS < 2.25"
AC/PG	PG 64-22	PG 64-22
RAP % (MAX)	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION
DESIGN AIR VOIDS	4.0% @ Ndes=30	4.0% @ Ndes=30
MIX COMPOSITION: (GRADATION)	IL 19.0L	IL 9.5L
FRICTION AGG		
QUALITY MGMT PROGRAM	QC/QA	QC/QA

15. FACTORS FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

HOT-MIX ASPHALT BINDER COURSE	112 LB/SQ YD/IN
HOT-MIX ASPHALT SURFACE COURSE	112 LB/SQ YD/IN
AGGREGATE (SURFACE, BASE, & BACKFILL)	2.05 TON/CU YD
BITUMINOUS MATERIALS:	
PRIME COAT FOR AGGREGATE BASES	0.25 LB/SF
TACK COAT FOR HMA LIFTS	0.025 LB/SF
RIP RAP	1.5 TON/CU YD
SEEDING, CLASS 2	200 LB/ACRE
TEMPORARY EROSION CONTROL SEEDING	100 LB/ACRE
NITROGEN FERTILIZER NUTRIENT	90 LB/ACRE
PHOSPHORUS FERTILIZER NUTRIENT	90 LB/ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LB/ACRE
MULCH	2 TON/ACRE

COMMITMENTS

1. TREE REMOVAL WILL NOT OCCUR FROM APRIL 1ST THROUGH SEPTEMBER 30TH DUE TO POTENTIAL NORTHERN LONG-EARED BAT HABITAT.

2. THERE IS A USGS GAGING STATION LOCATED ADJACENT TO THE EXISTING STRUCTURE THAT WILL BE IMPACTED BY THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL ABIDE BY ANY COORDINATION BETWEEN THE ENGINEER AND THE USGS REGARDING THE GAGING STATION. TRENT LEGG AT USGS (618-242-4495 OR 618-237-2939) SHALL BE CONTACTED A MINIMUM OF TWO WEEKS BEFORE CONSTRUCTION IS TO BEGIN.

3. NO WORK SHALL BE CONDUCTED ON THE BRIDGE FROM APRIL 1 THROUGH AUGUST 15 OF ANY CONSTRUCTION YEAR IN ORDER TO PROTECT NESTING BIRDS UNDER THE BRIDGE.

4. IF THE BRIDGE WORK CANNOT BE STARTED UNTIL AFTER APRIL 1, NETTING OR OTHER OBSTRUCTIONS SHOULD BE PLACED UNDER THE BRIDGE PRIOR TO APRIL 1 TO PREVENT BIRDS FROM NESTING UNDER THE BRIDGE. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT.

LIST OF IDOT STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420406	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
542401-02	METAL END SECTION FOR PIPE CULVERTS
630001-11	STEEL PLATE BEAM GUARDRAIL
630301-07	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-15	TRAFFIC BARRIER TERMINAL, TYPE 6
635001-02	DELINEATORS
666001-01	RIGHT OF WAY MARKERS
701901-06	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
725001-01	OBJECT AND TERMINAL MARKERS
728001-01	TELESCOPING STEEL SIGN SUPPORT
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
BLR 22-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

LEGEND

- PROPOSED DITCH
- EXISTING DITCH/SWALE
- SPECIAL DITCH LEFT
- SPECIAL DITCH RIGHT
- TBR — ITEM TO BE REMOVED
- 460.00 — EXISTING ELEVATION
- TBR — ITEM TO BE REMOVED
- TREE REMOVAL, ACRES
- PAVEMENT REMOVAL
- PROPOSED RIPRAP
- HEAVY DUTY EROSION CONTROL BLANKET

PROJECT COORDINATES

STATION	OFFSET	NAD 1983 STATE PLANE GRID COORDINATES NORTHING	NAD 1983 STATE PLANE GRID COORDINATES EASTING	TRUNCATED GROUND COORDINATES COMBINATION FACTOR: 0.99997873774 NORTHING	TRUNCATED GROUND COORDINATES COMBINATION FACTOR: 0.99997873774 EASTING	DESCRIPTION
		FEET				
368+16.40	14.98' RT	768707.5946	2484659.6002	768723.9394	484712.4308	5/8" REBAR WITH IDOT CAP
379+65.02	19.90' RT	768673.4345	2485807.7028	768689.7786	485860.5578	5/8" REBAR WITH IDOT CAP
391+47.16	17.94' RT	768645.3126	2488989.4854	768661.6561	489042.4081	5/8" REBAR WITH IDOT CAP
400+87.88	15.16' LT	768654.4536	2487930.7172	768670.7973	487983.6174	5/8" REBAR WITH IDOT CAP

NOTES:

1. AFTER THE APPLICATION OF THE COMBINATION FACTOR, THE EASTING FOR THE TRUNCATED GROUND COORDINATES HAS BEEN TRUNCATED TO DISTINGUISH THEM AS GROUND COORDINATES.
2. SEE PLAN SHEETS FOR PROJECT COORDINATE TIE POINTS.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
GENERAL NOTES, STANDARDS, LEGEND & PROJECT COORDINATES

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	2
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

80% FEDERAL
20% STATE

CODE NO.	ITEM	UNIT	RURAL TOTAL QUANTITY	CONSTR. CODE BRIDGE 0011 ✓ 003-0062
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	1, 076	1, 076
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	1, 434	1, 434
20100500	TREE REMOVAL, ACRES	ACRE	1. 00	1. 00
20200100	EARTH EXCAVATION	CU YD	7, 520	7, 520
20400800	FURNISHED EXCAVATION	CU YD	2, 790	2, 790
25000200	SEEDING, CLASS 2	ACRE	2. 75	2. 75
25000314	SEEDING, CLASS 4B	ACRE	3. 25	3. 25
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	530	530
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	530	530
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	530	530
25100115	MULCH, METHOD 2	ACRE	3. 00	3. 00
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	10, 532	10, 532
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	1, 764	1, 764
28000305	TEMPORARY DITCH CHECKS	FOOT	98	98

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
SUMMARY OF QUANTITIES

SCALE: NONE | SHEET 1 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	3
		CONTRACT NO. 76967		
		ILLINOIS FED. AID PROJECT		

80% FEDERAL
20% STATE

RURAL

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE BRIDGE 0011 003-0062
28000400	PERIMETER EROSION BARRIER	FOOT	5,339	5,339
28000500	INLET AND PIPE PROTECTION	EACH	3	3
28100107	STONE RIPRAP, CLASS A4	SQ YD	2,100	2,100
28200200	FILTER FABRIC	SQ YD	1,675	1,675
31100910	SUBBASE GRANULAR MATERIAL, TYPE A 12"	SQ YD	4,460	4,460
40200700	AGGREGATE SURFACE COURSE, TYPE A 8"	SQ YD	610	610
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	7,514	7,514
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	2,164	2,164
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	1,502	1,502
40603315	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	352	352
42000070	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	SQ YD	72	72
44000100	PAVEMENT REMOVAL	SQ YD	4,256	4,256
48100100	AGGREGATE SHOULDERS, TYPE A	TON	234	234
48203038	HOT-MIX ASPHALT SHOULDERS, 10 1/4"	SQ YD	1,040	1,040

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
SUMMARY OF QUANTITIES

SCALE: NONE | SHEET 2 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	4
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

80% FEDERAL
20% STATE

RURAL

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE BRIDGE 0011 003-0062
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1	1
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1	1
50105220	PIPE CULVERT REMOVAL	FOOT	73	73
50200100	STRUCTURE EXCAVATION	CU YD	1,660	1,660
50300100	FLOOR DRAINS	EACH	16	16
50300225	CONCRETE STRUCTURES	CU YD	853.7	853.7
50300255	CONCRETE SUPERSTRUCTURE	CU YD	1,542.7	1,542.7
50300260	BRIDGE DECK GROOVING	SQ YD	4,690	4,690
50300280	CONCRETE ENCASEMENT	CU YD	9.1	9.1
50300300	PROTECTIVE COAT	SQ YD	6,150	6,150
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	92.1	92.1
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	LSUM	1	1
50500505	STUD SHEAR CONNECTORS	EACH	15,714	15,714
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	528,770	528,770

14

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
SUMMARY OF QUANTITIES

SCALE: NONE | SHEET 3 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	140, 112IBR-1	BOND	95	5
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

80% FEDERAL
20% STATE

RURAL

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE BRIDGE 0011 003-0062
50800530	MECHANICAL SPLICERS	EACH	900	900
51201600	FURNISHING STEEL PILES HP12X53	FOOT	9,246	9,246
51201610	FURNISHING STEEL PILES HP12X63	FOOT	3,216	3,216
51202305	DRIVING PILES	FOOT	12,462	12,462
51203600	TEST PILE STEEL HP12X53	EACH	3	3
51203610	TEST PILE STEEL HP12X63	EACH	1	1
51500100	NAME PLATES	EACH	1	1
52000220	FINGER PLATE EXPANSION JOINT, 6"	FOOT	64	64
52000600	FABRIC REINFORCED ELASTOMERIC TROUGH	FOOT	77	77
52100030	ELASTOMERIC BEARING ASSEMBLY, TYPE III	EACH	12	12
52100520	ANCHOR BOLTS, 1"	EACH	24	24
52100530	ANCHOR BOLTS, 1 1/4"	EACH	192	192
54201069	PIPE CULVERTS, CLASS D, TYPE 2 24"	FOOT	124	124
54215559	METAL END SECTIONS 24"	EACH	4	4

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
SUMMARY OF QUANTITIES

SCALE: NONE | SHEET 4 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	140, 1121BR-1	BOND	95	6
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

80% FEDERAL
20% STATE

RURAL

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE BRIDGE 0011 003-0062
	58700300	CONCRETE SEALER	SQ FT	848	848
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	58	58
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	750.0	750.0
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4
	63200310	GUARDRAIL REMOVAL	FOOT	634	634
	66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	23	23
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	20	20
	67100100	MOBILIZATION	LSUM	1	1
	X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	240	240
*	72000100	SIGN PANEL - TYPE 1	SQ FT	6	6
*	72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	6	6
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4
*	72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	24	24

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
SUMMARY OF QUANTITIES

SCALE: NONE | SHEET 5 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	140, 112(BR-1	BOND	95	7
		CONTRACT NO. 76967		
		ILLINOIS FED. AID PROJECT		

80% FEDERAL
20% STATE

	CODE NO.	ITEM	UNIT	RURAL TOTAL QUANTITY	CONSTR. CODE BRIDGE 0011 003-0062
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2,668	2,668
*	78003110	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 4"	FOOT	3,182	3,182
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	16	16
*	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	7	7
*	78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	10	10
	X5210150	HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION, 400K	EACH	36	36
	X5210330	HIGH LOAD MULTI-ROTATIONAL BEARINGS, FIXED - 400K	EACH	12	12
	X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	120	120
	X6660445	RIGHT OF WAY AND PROPERTY CORNERS	EACH	3	3
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	1
	X7830070	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	3,182	3,182
	Z0013798	CONSTRUCTION LAYOUT	LSUM	1	1
	Z0018002	DRAINAGE SCUPPERS, DS-11	EACH	36	36
ø	Z0076600	TRAINEES	HOUR	2000	2000
	Z0033700	LONGITUDINAL JOINT SEALANT	FOOT	3,507	3,507
ø	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	2000	2000
	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	150	150

15

* SPECIALTY ITEM
ø 0042

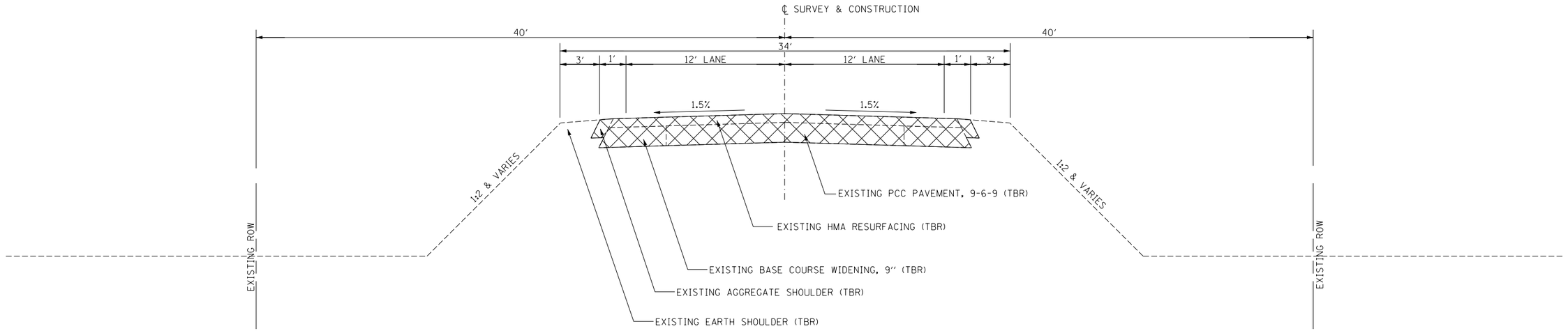
FILE NAME = V:\Transportation\3898\CADD SHEETS\D076967-sht-SOQ.dgn	USER NAME = bborgman	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.2000 ' / in.	CHECKED -	REVISED -
$MODELNAME$	PLOT DATE = 1/19/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
SUMMARY OF QUANTITIES

SCALE: NONE | SHEET 6 OF 6 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	8
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			



EXISTING TYPICAL SECTION

STA 372+00 TO STA 379+94
STA 379+94 TO STA 391+23 BRIDGE OMISSION
STA 391+23 TO STA 398+00

STRUCTURAL DESIGN INFORMATION

STRUCTURAL DESIGN TRAFFIC: YEAR 2027
PV=1,700 SU=95 MU=200

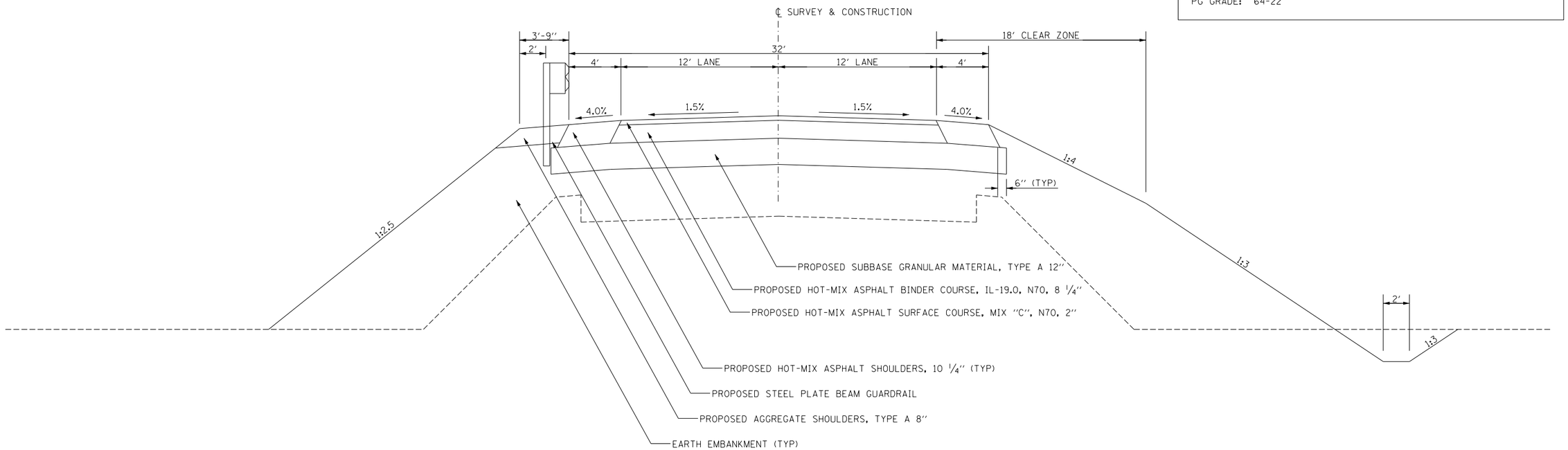
ROAD/STREET CLASSIFICATION: CLASS III

PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
P=50% S=50% M=50%

SUBGRADE SUPPORT RATING: FAIR

TRAFFIC FACTOR: ACTUAL TF=0.87
MIN TF=3.16

PG GRADE: 64-22



PROPOSED TYPICAL SECTION

STA 372+00 TO STA 375+96

FILE NAME =	USER NAME = bborgman	DESIGNED -	REVISED -
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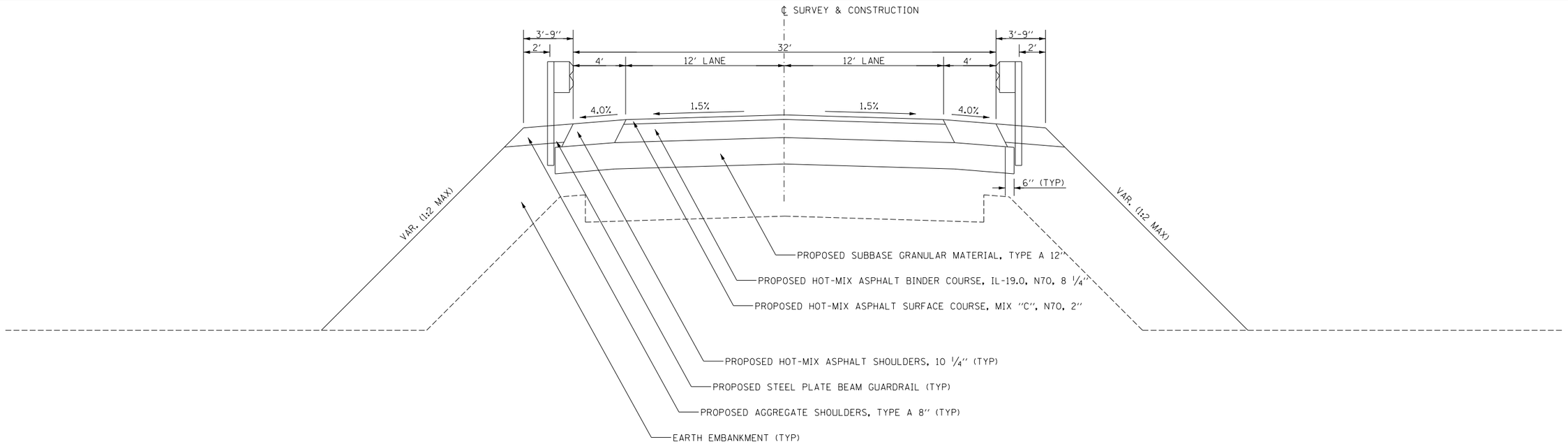
	PLOT SCALE = 20.0000 '/ in.	CHECKED -	REVISED -
$MODELNAME$	PLOT DATE = 1/11/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
ROADWAY TYPICAL SECTIONS

SCALE: N/A | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	9
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			



PROPOSED TYPICAL SECTION

STA 375+96 TO STA 377+99
STA 377+99 TO STA 392+10 BRIDGE AND BRIDGE APPROACH PAVEMENT OMISSION
STA 392+10 TO STA 394+12 LT
STA 392+10 TO STA 393+00 RT

STRUCTURAL DESIGN INFORMATION

STRUCTURAL DESIGN TRAFFIC: YEAR 2027
PV=1,700 SU=95 MU=200

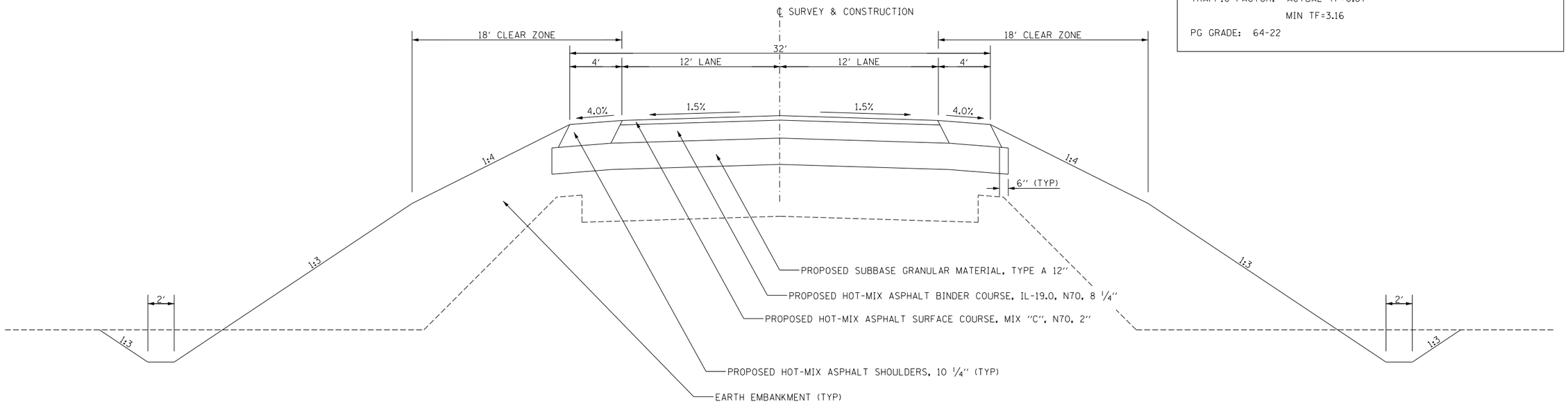
ROAD/STREET CLASSIFICATION: CLASS III

PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
P=50% S=50% M=50%

SUBGRADE SUPPORT RATING: FAIR

TRAFFIC FACTOR: ACTUAL TF=0.87
MIN TF=3.16

PG GRADE: 64-22



PROPOSED TYPICAL SECTION

STA 394+12 TO STA 398+00 LT
STA 393+00 TO STA 398+00 RT

FILE NAME = V:\Transportation\3890\CADD SHEETS\D876967-typical.dgn	USER NAME = bborgman	DESIGNED -	REVISED -
	PLOT SCALE = 20.0000 ' / in.	DRAWN -	REVISED -
$MODELNAME$	PLOT DATE = 1/11/2017	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
ROADWAY TYPICAL SECTIONS

SCALE: N/A | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	10
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

TREE REMOVAL

STATION	OFFSET	TREE REMOVAL	
		6 TO 15 UNITS	OVER 15 UNITS
		UNITS	
371+47.61	30.29' RT		16
372+35.88	27.90' RT		18
372+48.24	29.03' RT	14	
372+56.32	28.40' RT		24
372+91.43	25.82' RT		18
373+09.59	26.43' RT	10	
373+58.48	26.39' RT	14	
373+87.04	23.63' RT		20
374+91.57	24.92' RT		16
375+38.26	27.31' RT		16
375+61.42	26.97' RT		30
375+84.23	27.91' RT		22
376+49.29	30.18' RT		20
376+79.75	29.03' RT		20
377+19.45	26.07' RT	14	
378+16.90	32.05' RT		20
378+20.70	37.65' RT	8	
378+23.08	28.28' RT		16
378+29.19	56.87' RT		24
378+34.11	52.14' RT	14	
378+35.48	47.52' RT	6	
378+35.78	54.68' RT	14	
378+36.00	44.26' RT	8	
378+38.72	49.49' RT		24
378+39.07	51.59' RT		28
378+43.18	47.15' RT	12	
378+43.95	40.85' RT		20
378+93.48	34.81' RT		16
378+97.12	36.47' RT	14	
379+16.14	34.92' RT	10	
379+20.67	37.61' RT	8	
379+25.16	37.13' RT	8	
381+50.54	30.57' LT	10	
381+86.25	38.74' LT	10	
382+19.31	42.10' LT	10	
382+29.53	39.66' LT		30

STATION	OFFSET	TREE REMOVAL	
		6 TO 15 UNITS	OVER 15 UNITS
		UNITS	
382+36.08	49.44' LT		30
382+62.28	38.46' LT		20
382+74.01	37.86' LT	6	
382+79.13	47.88' LT	10	
382+82.53	44.34' LT	12	
382+83.89	39.65' LT	12	
383+53.92	40.94' LT		20
383+56.80	32.07' LT	10	
383+97.14	42.40' LT		30
384+35.88	38.76' LT	12	
384+38.88	33.54' LT	6	
384+52.25	45.64' LT	10	
384+53.08	33.97' LT	6	
384+84.42	40.67' LT		30
385+00.97	38.94' LT		18
385+12.81	41.10' LT	12	
385+13.02	47.32' LT		18
385+20.20	39.22' LT	6	
385+49.11	40.29' LT	12	
385+56.96	42.40' LT	6	
385+62.01	43.95' LT	12	
385+69.40	36.74' LT	12	
385+85.44	49.53' LT	12	
386+36.37	42.33' LT	10	
386+41.83	42.71' LT		30
386+43.88	48.98' LT		24
386+53.73	46.10' LT	8	
386+58.62	43.02' LT	8	
386+69.15	40.19' LT		40
386+80.73	42.71' LT		16
387+05.10	47.64' LT		18
387+29.22	40.02' LT		16
387+35.24	48.49' LT	12	
387+47.78	40.46' LT	12	
387+54.27	48.24' LT	6	
387+65.77	36.50' LT	8	

STATION	OFFSET	TREE REMOVAL	
		6 TO 15 UNITS	OVER 15 UNITS
		UNITS	
388+06.69	42.62' LT		16
388+15.24	38.00' LT	14	
388+33.08	25.73' LT		18
388+44.18	27.59' LT	14	
388+53.89	40.52' LT	8	
388+56.32	30.43' LT		18
388+57.94	33.03' LT	10	
388+90.16	48.67' RT	8	
389+09.42	44.31' LT	6	
389+12.52	43.89' LT		20
389+13.10	34.51' RT		16
389+14.64	40.51' RT		16
389+17.45	41.90' RT		24
389+19.33	45.56' LT		30
389+22.18	44.68' RT	8	
389+30.37	42.97' LT		48
389+34.94	46.18' LT	14	
390+11.38	49.31' LT	8	
390+12.39	51.24' LT	8	
390+16.69	48.32' LT	14	
390+24.85	51.62' LT	14	
390+29.52	41.06' LT	12	
390+31.58	28.34' LT		18
390+43.21	28.39' LT	6	
390+55.18	28.59' LT	8	
390+57.03	38.29' LT	8	
390+84.16	24.56' LT		20
390+99.04	25.86' LT		30
391+40.79	35.74' LT	12	
391+50.45	36.00' LT	6	
391+60.25	34.02' LT	14	
391+61.16	32.11' LT		20
391+90.40	41.33' LT	8	
392+02.71	29.66' LT	12	
392+19.51	29.96' LT	12	
392+25.55	34.63' LT		16

STATION	OFFSET	TREE REMOVAL	
		6 TO 15 UNITS	OVER 15 UNITS
		UNITS	
392+26.58	32.17' LT	6	
392+27.88	25.60' LT		30
392+34.02	31.99' LT	12	
392+36.66	34.97' LT		16
392+43.13	31.13' LT	12	
392+72.80	33.71' LT	10	
392+79.25	29.10' LT		26
392+87.16	29.73' LT	8	
392+88.79	32.58' LT	6	
392+98.04	34.49' LT	6	
392+98.21	24.57' LT		18
392+99.20	34.49' LT		18
393+16.15	24.27' LT	8	
393+19.65	36.09' LT	6	
393+24.27	23.83' LT	14	
393+32.97	29.70' LT		16
393+36.85	28.86' LT		20
393+44.46	27.94' LT		30
393+48.21	35.15' LT	6	
395+06.34	59.64' LT		30
395+08.67	45.11' LT	10	
395+08.91	48.52' LT		36
395+17.79	52.83' LT	6	
395+24.90	53.21' LT	6	
395+25.24	46.64' LT	8	
395+62.65	39.01' LT	10	
395+65.90	33.13' LT	10	
395+70.21	30.61' LT		24
395+74.66	30.11' LT	8	
395+80.69	31.48' LT		18
395+86.65	32.20' LT	10	
396+02.91	37.15' LT	6	
396+03.81	38.91' LT	6	
396+15.87	30.71' LT	14	
396+24.39	39.25' LT	8	
396+33.59	32.27' LT	10	

STATION	OFFSET	TREE REMOVAL	
		6 TO 15 UNITS	OVER 15 UNITS
		UNITS	
396+49.79	27.42' LT	8	
396+50.73	26.79' LT		20
396+56.88	38.44' LT	10	
396+70.12	39.97' LT	8	
396+72.09	41.39' LT	8	
396+97.30	40.86' LT	10	
397+07.08	36.37' LT		18
397+09.58	36.35' LT	12	
397+47.87	34.11' LT	6	
397+50.46	35.81' LT	10	
397+50.83	36.23' LT	10	
397+60.41	29.68' LT		20
397+68.90	37.63' LT	6	
397+70.04	26.44' LT	10	
397+72.15	27.05' LT	12	
397+78.67	32.88' LT	12	
397+86.67	33.26' LT		16
397+94.70	38.00' LT		24
397+97.38	23.66' LT	14	
397+97.90	37.01' LT	12	
398+00.10	30.20' LT	12	
398+03.22	27.68' LT		20
398+06.19	28.61' LT	10	
398+13.42	44.82' LT	6	
398+19.79	44.00' LT	6	
398+25.15	41.43' LT	6	
398+26.87	28.37' LT	14	
398+28.22	23.10' LT	14	
398+35.96	33.33' LT	10	
398+36.78	26.01' LT	8	
398+41.73	29.07' LT	8	
398+45.67	25.63' LT		16
TOTALS		1,076	1,434

TREE REMOVAL, ACRES

STATION TO STATION		SIDE	AREA
			ACRES
371+50	381+50	LT	0.77
TOTAL			0.77
USE			1.00

ENTRANCE SCHEDULE

STATION	SIDE	WIDTH	AGGREGATE SURFACE COURSE, TYPE A 8"
			SQ YD
375+36.55	RT	20'	233.7
394+99.29	LT	20'	180.9
395+03.57	RT	20'	194.6
TOTAL			609.2
USE			610

TEMPORARY DITCH CHECKS

STATION	SIDE	TEMPORARY DITCH CHECKS
		FOOT
373+75	RT	14
378+00	RT	14
380+50	RT	14
390+03	RT	14
390+03	LT	14
392+50	RT	14
392+50	LT	14
TOTAL		98

PAVEMENT REMOVAL

STATION TO STATION		PAVEMENT REMOVAL
		SQ YD
372+00.00	379+95.00	2,296.7
391+22.00	398+00.00	1,958.7
TOTALS		4,255.4
USE		4,256

PERIMETER EROSION BARRIER

STATION TO STATION		SIDE	PERIMETER EROSION
			FOOT
372+00	389+34	LT	1,790
372+00	375+27	RT	363
375+47	389+34	RT	1,444
390+12	394+82	LT	529
390+12	395+01	RT	553
395+02	398+50	LT	355
395+21	398+00	RT	305
TOTAL			5,339

INLET AND PIPE PROTECTION

STATION	SIDE	INLET AND PIPE PROTECTION
		EACH
375+05	RT	1
395+38	RT	1
398+50	LT	1
TOTAL		3

TEMPORARY EROSION CONTROL SEEDING

STATION TO STATION		SIDE	TEMPORARY EROSION CONTROL SEEDING (3 APPLICATIONS)
			POUND
372+00	378+18	RT	240
372+00	378+18	LT	150
378+18	389+34	RT	408
378+18	389+34	LT	393
390+12	391+91	RT	69
390+12	391+91	LT	75
391+91	398+00	RT	219
391+91	398+50	LT	210
TOTALS			1,764
USE			1,764

PAVEMENT SCHEDULE

STATION TO STATION		SUBBASE GRANULAR MATERIAL, TYPE A 12"	BITUMINOUS MATERIALS (PRIME COAT)	BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	LONGITUDINAL JOINT SEALANT
		SQ YD	POUND		TON		SQ YD	FOOT
372+00.00	377+89.00	2,246.9	3,785.6	1,090.1	756.5	177.1		1767.0
377+89.00	377+99.00						35.6	
392+10.00	392+20.00						35.6	
392+20.00	398+00.00	2,212.6	3,727.7	1,073.4	745.0	174.4		1740.0
TOTALS		4,459.5	7,513.3	2,163.5	1,501.5	351.5	71.2	3,507.0
USE		4,460	7,514	2,164	1,502	352	72	3,507

PIPE CULVERT SCHEDULE

STATION	SIDE	TYPE	STANDARD	PIPE CULVERTS, CLASS D, TYPE 2 24"	METAL END SECTIONS 24"
				FOOT	EACH
375+36.55	RT	PIPE CULVERT W/ END SECTIONS	542401	64	2
395+03.57	RT	PIPE CULVERT W/ END SECTIONS	542401	60	2
TOTALS				124	4

EARTHWORK

STATION TO STATION		EARTH EXCAVATION	EXCAVATION TO BE USED IN EMBANKMENT ADJUSTED FOR SHRINKAGE *	EMBANKMENT	BALANCE WASTE (+) OR SHORTAGE (-)
		CU YD			
BEGINNING OF PROJECT TO PROPOSED BACK OF ABUTMENT					
372+00.00	378+28.50	608.0	456.0	4,432.8	-3,976.8
PROPOSED BACK OF ABUTMENT TO LIMITS OF EXCAVATION					
378+28.50	380+10.00	4,303.9	3,227.9	80.0	+3,147.9
BRIDGE OMISSION					
LIMITS OF EXCAVATION TO PROPOSED BACK OF ABUTMENT					
390+10.00	391+80.50	1,526.9	1,145.2	90.6	+1,054.6
PROPOSED BACK OF ABUTMENT TO END OF PROJECT					
391+80.50	398+50.00	1,078.7	809.0	3,820.7	-3,011.7
TOTALS		7,517.5	5,638.1	8,424.1	-2,786.0
USE		7,520	5,630	8,430	-2,790

*SHRINKAGE FACTOR = 25%

SEEDING SCHEDULE

STATION TO STATION		SIDE	SEEDING, CLASS 2	SEEDING, CLASS 4B	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASIUM FERTILIZER NUTRIENT	MULCH, METHOD 2	HEAVY DUTY EROSION CONTROL BLANKET
			ACRE		POUND			ACRE	SQ YD
372+00	378+18	RT	0.80		72.0	72.0	72.0	0.12	2,288.2
372+00	378+18	LT	0.41	0.09	45.0	45.0	45.0		2,451.7
378+18	389+34	RT		1.36	122.4	122.4	122.4	1.14	643.8
378+18	389+34	LT		1.31	117.9	117.9	117.9	1.21	
390+12	391+91	RT		0.23	20.7	20.7	20.7	0.09	464.6
390+12	391+91	LT		0.25	22.5	22.5	22.5	0.14	428.6
391+91	398+00	RT	0.73		65.7	65.7	65.7	0.14	2,207.8
391+91	398+50	LT	0.70		63.0	63.0	63.0	0.12	2,047.0
TOTALS			2.64	3.24	529.2	529.2	529.2	2.96	10,531.7
USE			2.75	3.25	530	530	530	3.00	10,532

GUARDRAIL REMOVAL

STATION TO STATION		SIDE	GUARDRAIL
			FOOT
378+28	379+93	LT	165
378+78	379+93	RT	115
391+24	393+14	LT	190
391+24	392+88	RT	164
TOTAL			634

SIGNING SCHEDULE

STATION	OFFSET	SIDE	REMOVE SIGN PANEL - TYPE 1	SIGN PANEL - TYPE 1	TELESCOPING STEEL SIGN SUPPORT
			SQ FT		FOOT
378+07	19'	RT		3	11.8
379+88	19'	RT	3		
391+30	19'	LT	3		
392+02	19	LT		3	11.8
TOTALS			6	6	23.6
USE			6	6	24

SHOULDER SCHEDULE

STATION TO STATION		SIDE	AGGREGATE SHOULDERS, TYPE A	HOT-MIX ASPHALT SHOULDERS, 10 1/4"
				SQ YD
372+00.00	378+14.67	LT	115.2	261.8
372+00.00	375+64.66	RT		162.1
375+64.66	378+14.67	RT	46.5	99.7
391+94.33	393+33.89	RT	25.0	50.6
391+94.33	394+46.37	LT	46.5	100.6
393+33.89	398+00.00	RT		207.2
394+46.37	398+00.00	LT		157.2
TOTALS			233.2	1,039.2
USE			234	1,040

CULVERT REMOVAL

STATION	SIDE	SIZE & TYPE	PIPE CULVERT REMOVAL	REMOVAL OF EXISTING STRUCTURES NO. 2
			FOOT	EACH
378+30	RT & LT	24" BOX CULVERT*		1
384+91	RT	18" PIPE CULVERT	11	
384+98	LT	15" PIPE CULVERT	22	
395+01	RT	12" PIPE CULVERT	40	
TOTALS			73	1

* EXISTING 24" BOX CULVERT TO BE REMOVED IS 63' LONG

PAVEMENT MARKING SCHEDULE

STATION TO STATION		THERMOPLASTIC PAVEMENT MARKING - LINE 4"		PREFORMED PLASTIC PAVEMENT MARKING - TYPE B - 4"	
		YELLOW SKIP DASH 10' - 30'	WHITE SOLID	YELLOW SKIP DASH 10' - 30'	WHITE SOLID
		FOOT			
372+00	377+99	150	1198		
377+99	392+10			360	2822
392+10	398+00	140	1180		
TOTALS		290	2,378	360	2,822
USE		2,668		3,182	

RIGHT OF WAY MARKERS AND PROPERTY CORNERS

STATION	OFFSET	SIDE	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	RIGHT OF WAY AND PROPERTY CORNERS
			EACH	
371+50.00	39.48	RT	1	
371+50.00	40.52	LT	1	
372+50.00	64.49	RT	1	
372+50.00	55.51	LT	1	
376+00.00	79.54	RT	1	1
377+00.00	79.56	RT	1	
378+00.00	55.43	LT	1	
379+50.00	74.59	RT	1	
379+80.01	50.90	LT	1	
380+50.00	49.61	RT	1	
381+90.29	50.37	LT	1	
381+95.91	49.63	RT	1	
390+19.89	51.74	RT	1	
390+19.91	52.23	LT	1	
392+50.00	74.79	RT	1	
392+50.00	75.21	LT	1	
395+17.12	75.17	LT	1	1
395+25.49	74.83	RT	1	1
395+27.95	118.76	RT	1	
395+59.07	55.16	LT	1	
397+50.00	55.14	LT	1	
398+50.00	40.12	LT	1	
408+54.71	98.59	RT	1	
TOTALS			23	3

RAISED REFLECTIVE PAVEMENT MARKERS

STATION TO STATION		RAISED REFLECTIVE PAVEMENT MARKER	
		TWO-WAY AMBER MARKER	
		EACH	
372+00	377+99	8	
392+10	398+00	8	
TOTALS		16	

GUARDRAIL SCHEDULE

STATION TO STATION		SIDE	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 6	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT
			FOOT	EACH	
372+34.02	378+17.17	LT	487.5	1	1
375+96.62	378+17.17	RT	125.0	1	1
391+91.83	394+12.39	LT	125.0	1	1
391+91.83	392+99.89	RT	12.5	1	1
TOTALS			750.0	4	4

GUARDRAIL & BARRIER WALL REFLECTORS

STATION TO STATION		SIDE	GUARDRAIL REFLECTORS, TYPE A	BARRIER WALL REFLECTORS, TYPE C	TERMINAL MARKER, DIRECT APPLIED
			EACH		
372+34.02	394+12.39	LT	4	5	2
375+96.62	392+99.89	RT	3	5	2
TOTALS			7	10	4

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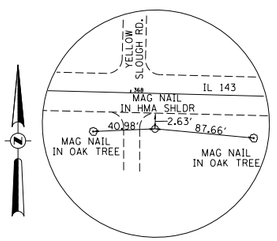
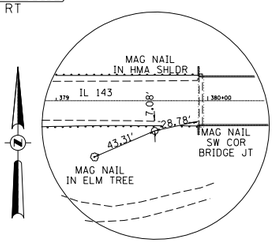
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
SCHEDULES OF QUANTITIES

SCALE: | SHEET 3 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	13
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		





SEC 23, T4N, R4W, 3RD PM

STA 375+36.55
PROPOSED PIPE CULVERT, CLASS D, TYPE 2, 24"x64'
W/ END SECTIONS 24", 2-EACH STD 542401
USFL INV 454.08, STA 375+04.97, 56.59' RT
DSFL INV 453.89, STA 375+68.89, 59.74' RT

SEC 23, T4N, R4W, 3RD PM

STA 368+16.40, 14.98' RT
I.P. WITH IDOT CAP
N 768,723.9394 E 484,712.4308

STA 379+65.02, 19.90' RT
I.P. WITH IDOT CAP
N 768,689.7786 E 485,860.5578

EXISTING BRIDGE: SN 003-0034 BUILT AS SBI 127A, SECTION 112B IN 1934. STRUCTURE WAS REBUILT AND WIDENED IN 1972 AS FAP 793, SECTION 112BR. THE EXISTING STRUCTURE CONSISTS OF 21 SPANS WITH 20 SIMPLE SPAN RC DECK ON STEEL W-BEAM UNITS (18 WEST, 2 EAST OF MAIN SPAN) AND A SINGLE SPAN STEEL THRU PLATE GIRDER WITH STEEL FLOOR BEAMS AND RC DECK SUPERSTRUCTURE. THE EXISTING SUBSTRUCTURE CONSISTS OF CONCRETE STUB ABUTMENTS ON CONCRETE PILES, CONCRETE PILE BENT PIERS ON CONCRETE PILES (19) AND TWO SOLID WALL CONCRETE PIERS ON CONCRETE PILE SUPPORTED FOOTINGS. THE STRUCTURE IS 1129'-9" BACK TO BACK OF ABUTMENTS AND 32'-6" OUT TO OUT OF DECK WITH 0° SKEW.

PROPOSED BRIDGE: PROPOSED SUPERSTRUCTURE IS A 9-SPAN REINFORCED CONCRETE DECK ON 54" WEB STEEL PLATE GIRDER (COMPOSITE). THE PROPOSED SUBSTRUCTURE UNITS ARE SOLID WALL PIERS WITH PILE SUPPORTED FOOTINGS AND PILE SUPPORTED STUB ABUTMENTS. THE PROPOSED BRIDGE LENGTH IS 1352'-0" BACK TO BACK OF ABUTMENTS AND 35'-2" OUT TO OUT OF DECK, WITH 0° SKEW.

370+00	465.37	
	465.42	
371+00	465.41	
	465.41	
372+00	465.43	465.43
	465.41	465.45
373+00	465.40	465.53
	465.36	465.68
374+00	465.36	465.90
	465.34	466.14
375+00	465.31	466.39
	465.27	466.64
376+00	465.25	466.89
	465.26	467.13
377+00	465.22	467.38
	465.16	467.63
378+00	465.14	467.88
	465.21	468.13
379+00	465.12	468.37
	465.19	468.62
380+00	460.13	468.87
	451.98	469.12
381+00	453.25	469.37
	453.07	469.61
382+00	452.37	469.86
	452.38	470.11
383+00	452.88	470.36
	453.48	470.60
384+00	453.20	470.79
	453.50	470.85
385+00	452.85	470.79

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

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
B.M. NOTED
STRUCTURE NOTAT'NS CHK'D
BY
DATE

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	PLOT DATE = 1/11/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

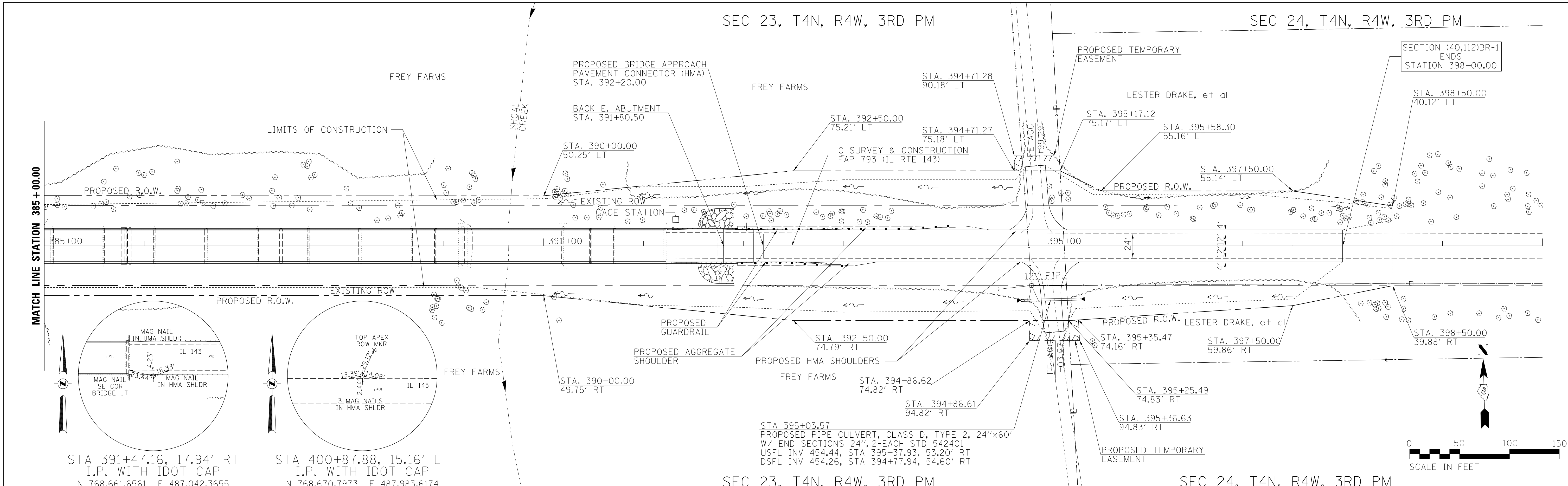
F.A.P. 793 (IL 143)
PLAN AND PROFILE

SCALE: 1"=50'-0" | SHEET 1 OF 2 SHEETS | STA. 372+00.00 TO STA.385+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	14

CONTRACT NO. 76967
ILLINOIS FED. AID PROJECT

PLAN	
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
R.O.W. CHECKED	
CADD FILE NAME	
NOTE BOOK	
NO.	
BY	DATE

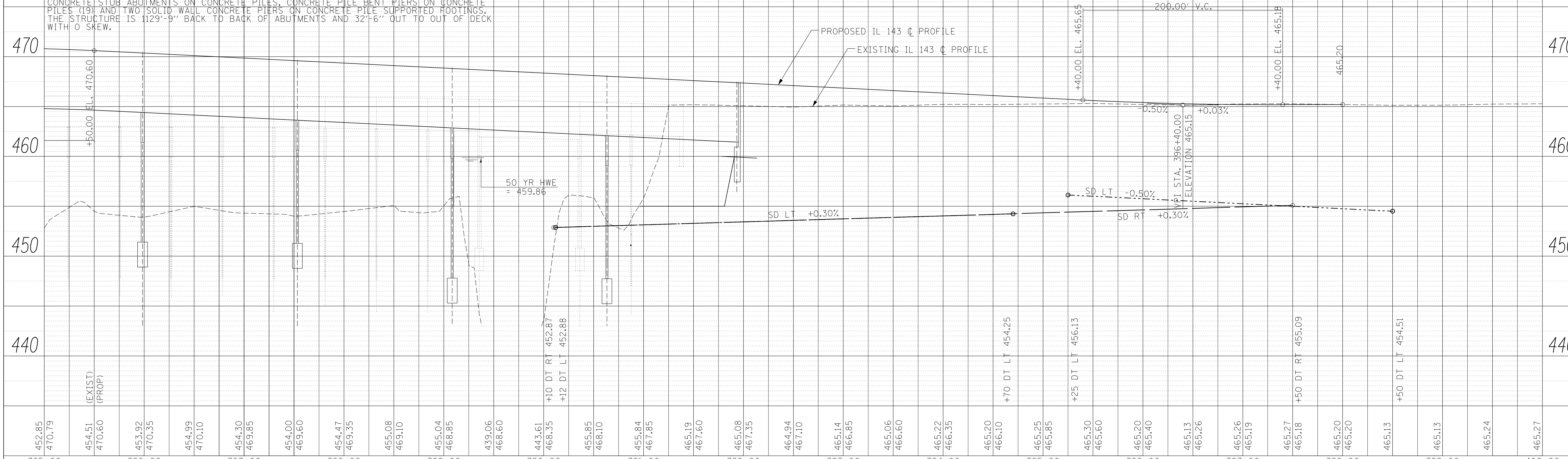


SEC 23, T4N, R4W, 3RD PM
SEC 24, T4N, R4W, 3RD PM
MATCH LINE STATION 385+00.00
FREY FARMS
LESTER DRAKE, et al
SHOAL CREEK
LIMITS OF CONSTRUCTION
PROPOSED R.O.W.
EXISTING ROW
GAGE STATION
PROPOSED BRIDGE APPROACH PAVEMENT CONNECTOR (HMA) STA. 392+20.00
BACK E. ABUTMENT STA. 391+80.50
STA. 390+00.00 50.25' LT
STA. 390+00.00 49.75' RT
STA. 392+50.00 75.21' LT
STA. 392+50.00 74.79' RT
℄ SURVEY & CONSTRUCTION FAP 793 (IL RTE 143)
STA. 394+71.28 90.18' LT
STA. 394+71.27 75.18' LT
PROPOSED TEMPORARY EASEMENT
STA. 395+17.12 75.17' LT
STA. 395+58.30 55.16' LT
STA. 397+50.00 55.14' LT
SECTION (40,112)BR-1 ENDS STATION 398+00.00
STA. 398+50.00 40.12' LT
STA. 398+50.00 39.88' RT
STA. 397+50.00 59.86' RT
STA. 395+35.47 74.16' RT
STA. 395+25.49 74.83' RT
STA. 395+36.63 94.83' RT
STA. 394+86.62 74.82' RT
STA. 394+86.61 94.82' RT
PROPOSED GUARDRAIL
PROPOSED AGGREGATE SHOULDER
PROPOSED HMA SHOULDERS
12" PIPE
385+00
390+00
395+00
24'
STA 395+03.57
PROPOSED PIPE CULVERT, CLASS D, TYPE 2, 24"x60'
W/ END SECTIONS 24", 2-EACH STD 542401
USFL INV 454.44, STA 395+37.93, 53.20' RT
DSFL INV 454.26, STA 394+77.94, 54.60' RT
MAG NAIL IN HMA SHLDR
MAG NAIL SE COR BRIDGE JT
MAG NAIL IN HMA SHLDR
IL 143
STA 391+47.16, 17.94' RT
I.P. WITH IDOT CAP
N 768,661.6561 E 487,042.3655
TOP APEX ROW MKR
3-MAG NAILS IN HMA SHLDR
STA 400+87.88, 15.16' LT
I.P. WITH IDOT CAP
N 768,670.7973 E 487,983.6174
SCALE IN FEET
0 50 100 150

EXISTING BRIDGE: SN 003-0034 BUILT AS SBI 127A, SECTION 112B IN 1934. STRUCTURE WAS REBUILT AND WIDENED IN 1972 AS FAP 793, SECTION 112BR. THE EXISTING STRUCTURE CONSISTS OF 21 SPANS WITH 20 SIMPLE SPAN RC DECK ON STEEL W-BEAM UNITS (18 WEST, 2 EAST OF MAIN SPAN) AND A SINGLE SPAN STEEL THRU PLATE GIRDER WITH STEEL FLOOR BEAMS AND RC DECK SUPERSTRUCTURE. THE EXISTING SUBSTRUCTURE CONSISTS OF CONCRETE STUB ABUTMENTS ON CONCRETE PILES, CONCRETE PILE BENT PIERS ON CONCRETE PILES (19) AND TWO SOLID WALL CONCRETE PIERS ON CONCRETE PILE SUPPORTED FOOTINGS. THE STRUCTURE IS 1129'-9" BACK TO BACK OF ABUTMENTS AND 32'-6" OUT TO OUT OF DECK WITH 0 SKEW.

PROPOSED BRIDGE: PROPOSED SUPERSTRUCTURE IS A 9-SPAN REINFORCED CONCRETE DECK ON 54" WEB STEEL PLATE GIRDER (COMPOSITE). THE PROPOSED SUBSTRUCTURE UNITS ARE SOLID WALL PIERS WITH PILE SUPPORTED FOOTINGS AND PILE SUPPORTED STUB ABUTMENTS. THE PROPOSED BRIDGE LENGTH IS 1352'-0" BACK TO BACK OF ABUTMENTS AND 35'-2" OUT TO OUT OF DECK, WITH 0° SKEW.

PROFILE	
SURVEYED	
PLOTTED	
GRADES CHECKED	
BM. NOTED	
STRUCTURE NOTATNS CHKD	
NOTE BOOK	
NO.	
BY	DATE



470
460
450
440
PROPOSED IL 143 ℄ PROFILE
EXISTING IL 143 ℄ PROFILE
200.00' V.C.
+40.00 EL. 465.65
+40.00 EL. 465.18
465.20
-0.50%
+0.03%
VPI STA. 396+40.00 ELEVATION 465.15
+50.00 EL. 470.60
50 YR HWE = 459.86
SD LT +0.30%
SD LT -0.50%
SD RT +0.30%
+10 DT RT 452.87
+12 DT LT 452.88
+70 DT LT 454.25
+25 DT LT 456.13
+50 DT RT 455.09
+50 DT LT 454.51
(EXIST) (PROP)
452.85 470.79
454.51 470.60
453.92 470.35
454.99 470.10
454.30 469.85
454.00 469.60
454.47 469.35
455.08 469.10
455.04 468.85
439.06 468.60
443.61 468.35
455.85 468.10
455.84 467.85
465.19 467.60
465.08 467.35
464.94 467.10
465.14 466.85
465.06 466.60
465.22 466.35
465.20 466.10
465.25 465.85
465.30 465.60
465.20 465.40
465.13 465.26
465.26 465.19
465.27 465.18
465.20 465.20
465.13
465.13
465.24
465.27
385+00 386+00 387+00 388+00 389+00 390+00 391+00 392+00 393+00 394+00 395+00 396+00 397+00 398+00 399+00 400+00

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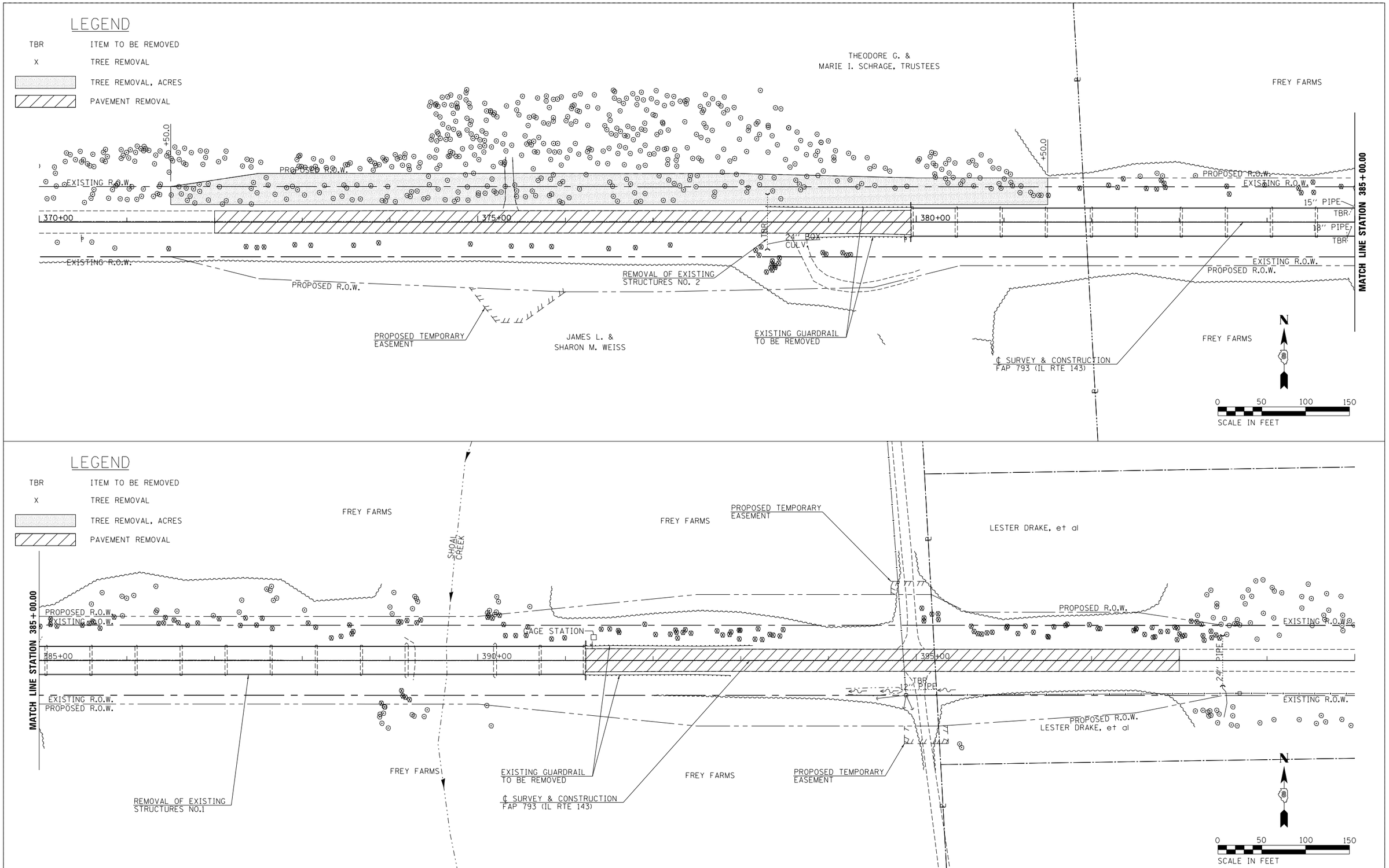
$MODELNAME$	PLOT DATE = 1/11/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
PLAN AND PROFILE

SCALE: 1"-50'-0" | SHEET 2 OF 2 SHEETS | STA. 385+00.00 TO STA. 398+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	15
		CONTRACT NO. 76967		
		ILLINOIS FED. AID PROJECT		



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	PLOT SCALE =	CHECKED -	REVISED -
	PLOT DATE =	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
REMOVAL PLANS

SCALE: 1"=50'-0" | SHEET NO. 1 OF 1 SHEETS | STA. 371+50.00 TO STA. 398+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	16
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

1-1
1-2
1-6

ROAD CLOSED
X MILES AHEAD
LOCAL TRAFFIC ONLY

R11-3a(0)
60"x30"
1-1 = 1 MILE
1-2 = 2 MILES
1-6 = 6 MILES

2

FLASHING WARNING LIGHT

ROAD CLOSED AHEAD

W20-3 36" x 36"

3

FLASHING WARNING LIGHT

DETOUR AHEAD

W20-2 36" x 36"

4

EAST

M3-2
24" x 12"
36" x 18" (I-70)

5

WEST

M3-4
24" x 12"
36" x 18" (I-70)

6

ILLINOIS 143

M1-1100
30" x 24"
45" x 36" (I-70)

7

DETOUR

M4-9
30" x 24"
48" x 36" (I-70)

8

DETOUR

M4-9L
30" x 24"
48" x 36" (I-70)

9

DETOUR

M4-9R
30" x 24"
48" x 36" (I-70)

10

DETOUR

M4-9L
30" x 24"
48" x 36" (I-70)

11

DETOUR

M4-9R
30" x 24"
48" x 36" (I-70)

12

DETOUR

M4-9
30" x 24"
48" x 36" (I-70)

13

DETOUR

M4-9
30" x 24"
48" x 36" (I-70)

14

FLASHING WARNING LIGHT

ROAD CLOSED 500 FT

W20-3 36" x 36"

15

END DETOUR

M4-8A 24" x 18"

16

ROAD CLOSED

R11-2 48" x 30"

17

ILLINOIS 143

6" BLACK LETTERING
ON ORANGE BACKGROUND
24" x 12"

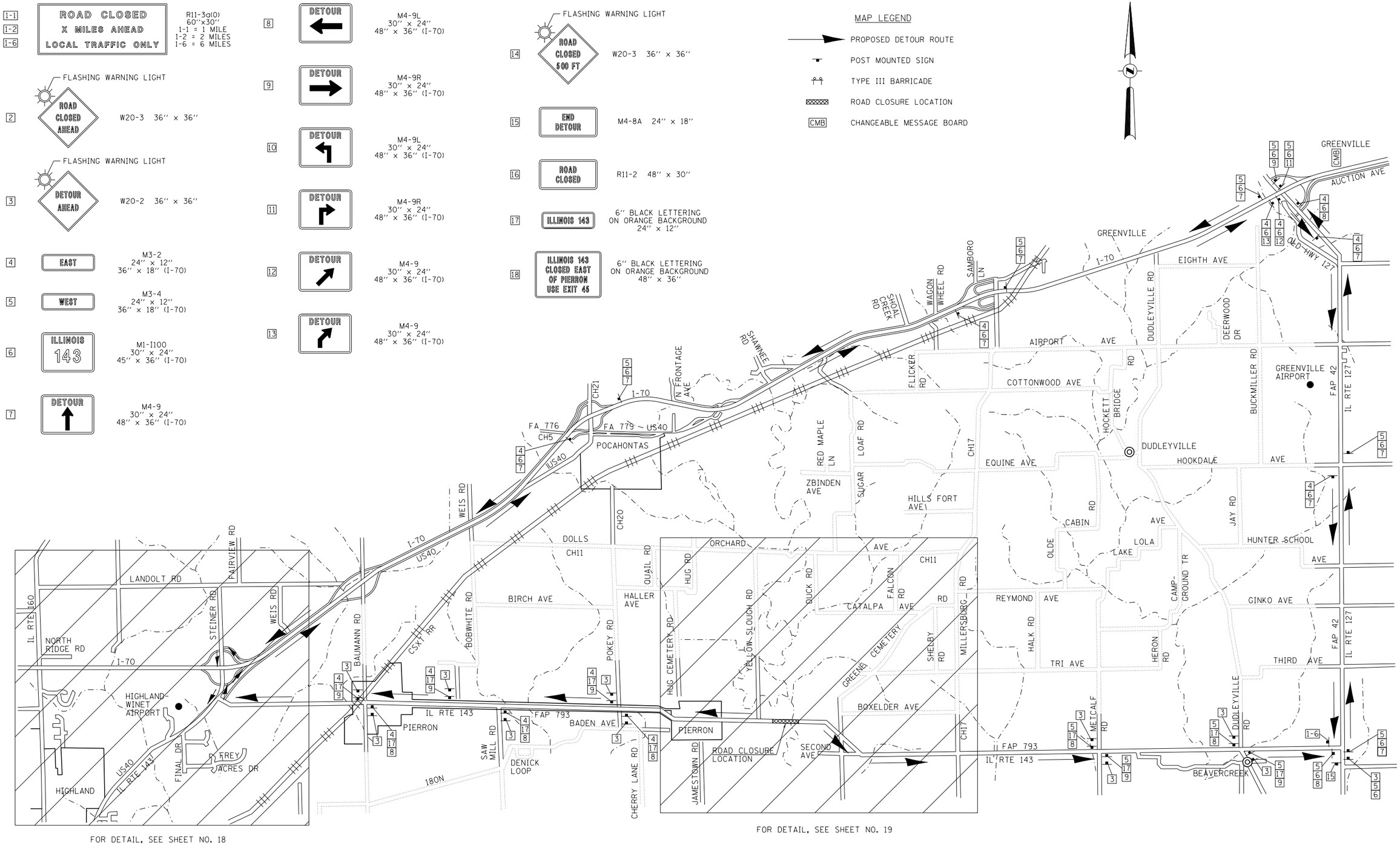
18

ILLINOIS 143
CLOSED EAST
OF PIERRON
USE EXIT 45

6" BLACK LETTERING
ON ORANGE BACKGROUND
48" x 36"

MAP LEGEND

- PROPOSED DETOUR ROUTE
- POST MOUNTED SIGN
- TYPE III BARRICADE
- ROAD CLOSURE LOCATION
- CMB CHANGEABLE MESSAGE BOARD



FOR DETAIL, SEE SHEET NO. 18

FOR DETAIL, SEE SHEET NO. 19

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	PLOT DATE = 1/11/2017	DATE - 3/31/16	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
DETOUR PLAN

SCALE: N/A | SHEET 1 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	17
		CONTRACT NO. 76967		
		ILLINOIS FED. AID PROJECT		

1-1 1-2 1-6 — ROAD CLOSED / X MILES AHEAD / LOCAL TRAFFIC ONLY — R11-3a(0) 60"×30" 1-1 = 1 MILE 1-2 = 2 MILES 1-6 = 6 MILES

2 — FLASHING WARNING LIGHT — ROAD CLOSED AHEAD — W20-3 36" x 36"

3 — FLASHING WARNING LIGHT — DETOUR AHEAD — W20-2 36" x 36"

4 — EAST — M3-2 24" x 12" 36" x 18" (I-70)

5 — WEST — M3-4 24" x 12" 36" x 18" (I-70)

6 — ILLINOIS 143 — M1-1100 30" x 24" 45" x 36" (I-70)

7 — DETOUR ↑ — M4-9 30" x 24" 48" x 36" (I-70)

8 — DETOUR ← — M4-9L 30" x 24" 48" x 36" (I-70)

9 — DETOUR → — M4-9R 30" x 24" 48" x 36" (I-70)

10 — DETOUR ↰ — M4-9L 30" x 24" 48" x 36" (I-70)

11 — DETOUR ↱ — M4-9R 30" x 24" 48" x 36" (I-70)

12 — DETOUR ↗ — M4-9 30" x 24" 48" x 36" (I-70)

13 — DETOUR ↖ — M4-9 30" x 24" 48" x 36" (I-70)

14 — FLASHING WARNING LIGHT — ROAD CLOSED 500 FT — W20-3 36" x 36"

15 — END DETOUR — M4-8A 24" x 18"

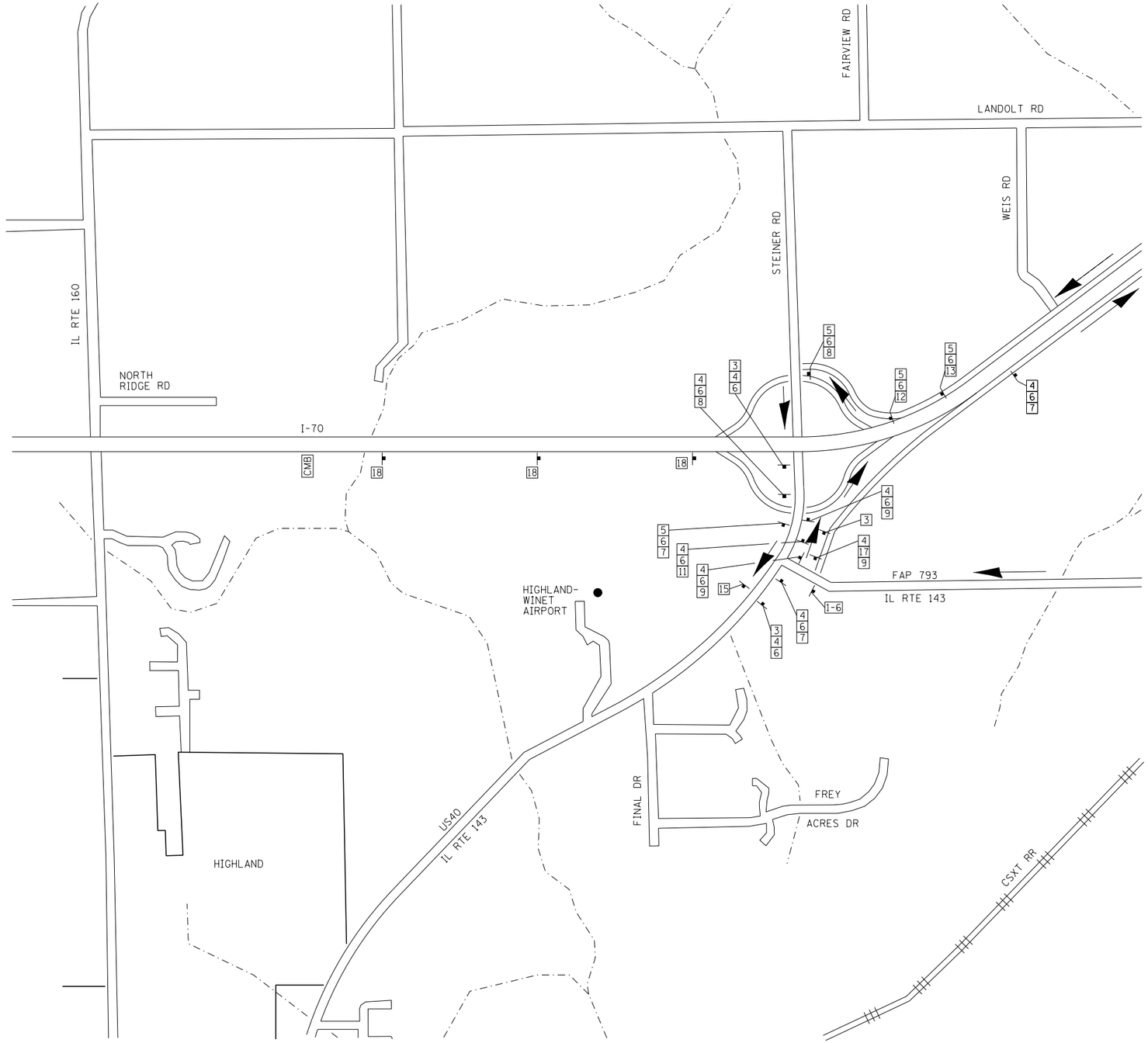
16 — ROAD CLOSED — R11-2 48" x 30"

17 — ILLINOIS 143 — 6" BLACK LETTERING ON ORANGE BACKGROUND 24" x 12"

18 — ILLINOIS 143 CLOSED EAST OF PIERRON USE EXIT 45 — 6" BLACK LETTERING ON ORANGE BACKGROUND 48" x 36"

MAP LEGEND

- PROPOSED DETOUR ROUTE
- POST MOUNTED SIGN
- TYPE III BARRICADE
- ROAD CLOSURE LOCATION
- CMB — CHANGEABLE MESSAGE BOARD



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	PLOT DATE = 1/11/2017	CHECKED - MVM	REVISED -
		DATE - 3/31/16	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
DETOUR PLAN

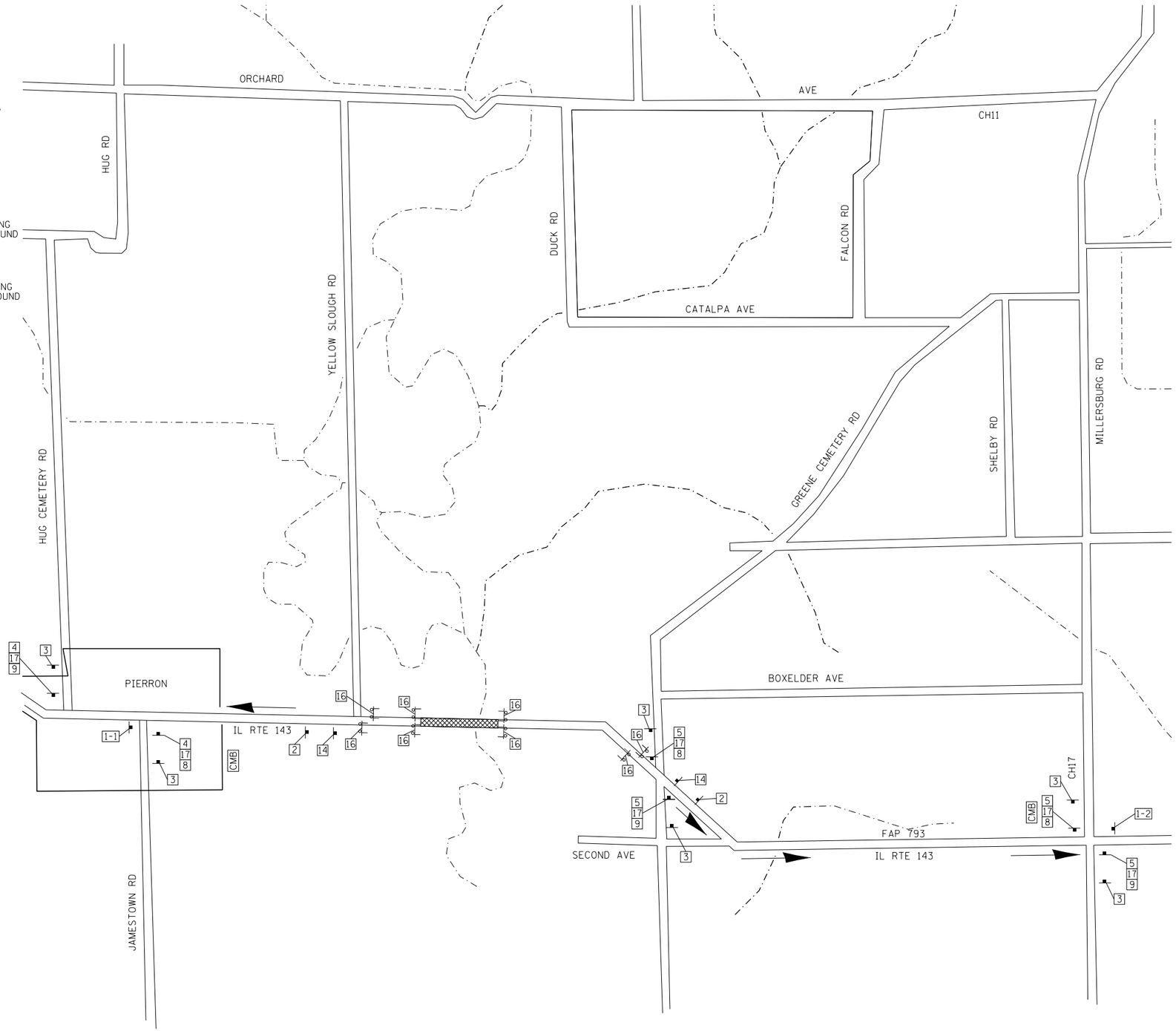
SCALE: N/A | SHEET 2 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	18
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

1-1 1-2 1-6	ROAD CLOSED X MILES AHEAD LOCAL TRAFFIC ONLY	R11-3a(0) 60"x30" 1-1 = 1 MILE 1-2 = 2 MILES 1-6 = 6 MILES
2	FLASHING WARNING LIGHT ROAD CLOSED AHEAD	W20-3 36" x 36"
3	FLASHING WARNING LIGHT DETOUR AHEAD	W20-2 36" x 36"
4	EAST	M3-2 24" x 12" 36" x 18" (I-70)
5	WEST	M3-4 24" x 12" 36" x 18" (I-70)
6	ILLINOIS 143	M1-1100 30" x 24" 45" x 36" (I-70)
7	DETOUR ↑	M4-9 30" x 24" 48" x 36" (I-70)
8	DETOUR ←	M4-9L 30" x 24" 48" x 36" (I-70)
9	DETOUR →	M4-9R 30" x 24" 48" x 36" (I-70)
10	DETOUR ↰	M4-9L 30" x 24" 48" x 36" (I-70)
11	DETOUR ↱	M4-9R 30" x 24" 48" x 36" (I-70)
12	DETOUR ↗	M4-9 30" x 24" 48" x 36" (I-70)
13	DETOUR ↗	M4-9 30" x 24" 48" x 36" (I-70)
14	FLASHING WARNING LIGHT ROAD CLOSED 500 FT	W20-3 36" x 36"
15	END DETOUR	M4-8A 24" x 18"
16	ROAD CLOSED	R11-2 48" x 30"
17	ILLINOIS 143	6" BLACK LETTERING ON ORANGE BACKGROUND 24" x 12"
18	ILLINOIS 143 CLOSED EAST OF PIERRON USE EXIT 45	6" BLACK LETTERING ON ORANGE BACKGROUND 48" x 36"

MAP LEGEND

- PROPOSED DETOUR ROUTE
- POST MOUNTED SIGN
- TYPE III BARRICADE
- ROAD CLOSURE LOCATION
- CMB — CHANGEABLE MESSAGE BOARD



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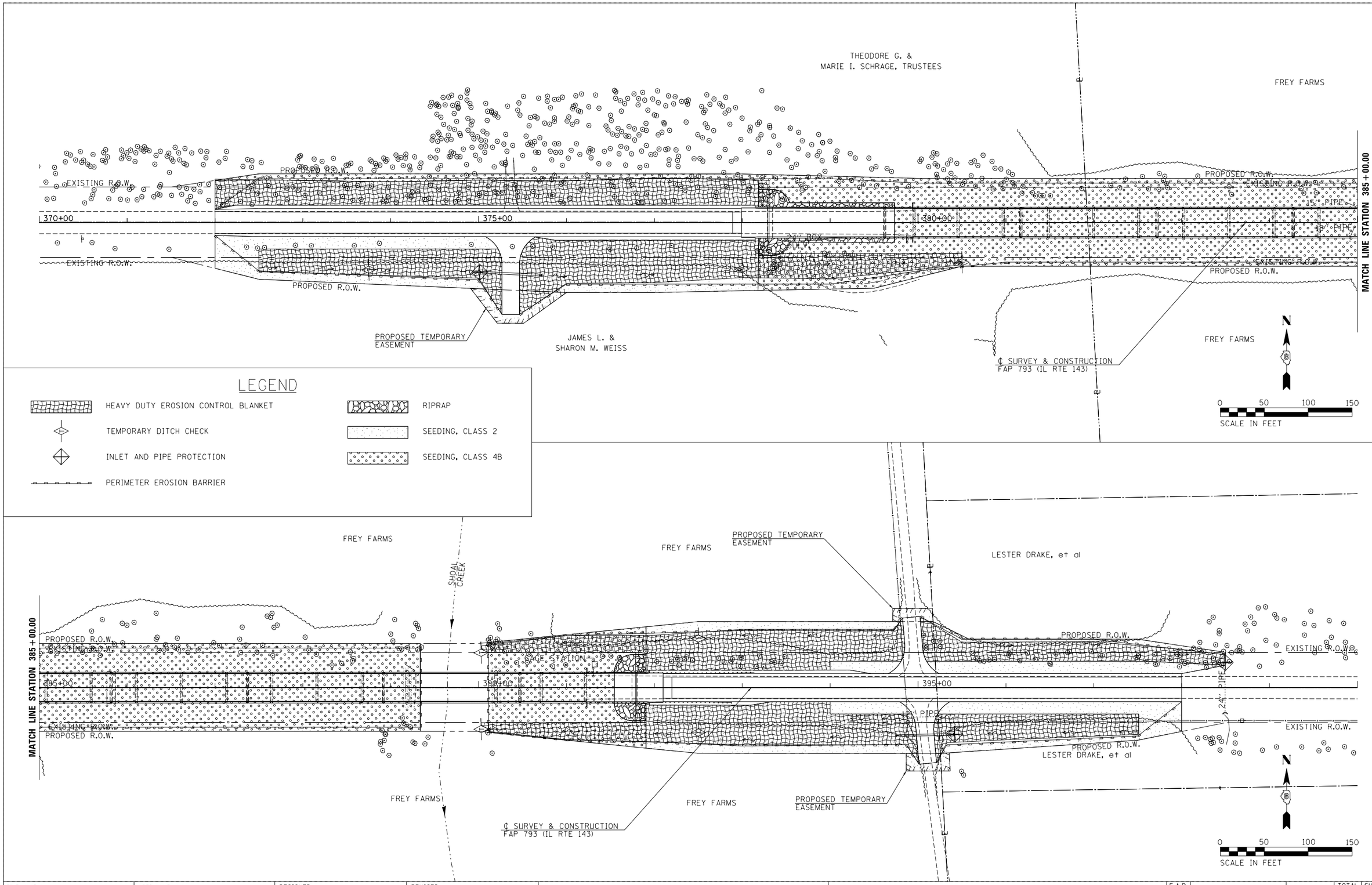
		DRAWN - JCW	REVISED -			793	(40, 112)BR-1	BOND	95	19
$MODELNAME$	PLOT SCALE = 2000.00 ' / in.	CHECKED - MVM	REVISED -					CONTRACT NO. 76967		
	PLOT DATE = 1/11/2017	DATE - 3/31/16	REVISED -		SCALE: N/A SHEET 3 OF 3 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		



FILE NAME = V:\Transportation\3890\CADD SHEETS\D876967-sht-eros.dgn	USER NAME = bborgman	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 1/11/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
EROSION CONTROL PLANS

SCALE: 1"=50'-0" | SHEET NO. 1 OF 1 SHEETS | STA. 372+00.00 TO STA. 398+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	20
		CONTRACT NO. 76967		
		ILLINOIS	FED. AID PROJECT	

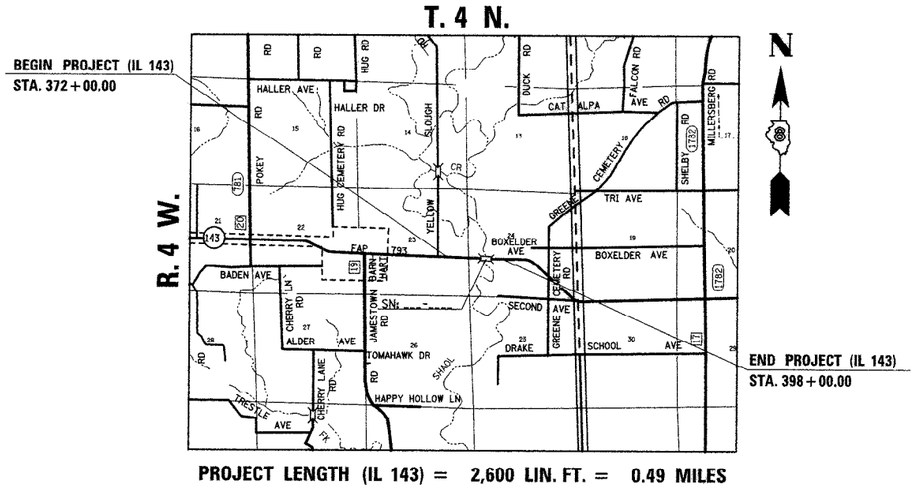
SHEET INDEX		
SHEET NO.	STATION to STATION	DESCRIPTION
1		COVER SHEET
2		GENERAL NOTES & LEGEND
3	368+78.98 TO 381+93.12	PARCELS 8109071 & 072
4	381+93.12 TO 395+21.31	PARCELS 8109073 & 074
5	395+21.31 TO 408+49.28	PARCELS 8109075 & 076
6		TOTAL HOLDING SHEET & SECTION DETAILS

SPACE RESERVED FOR RECORDING OFFICER

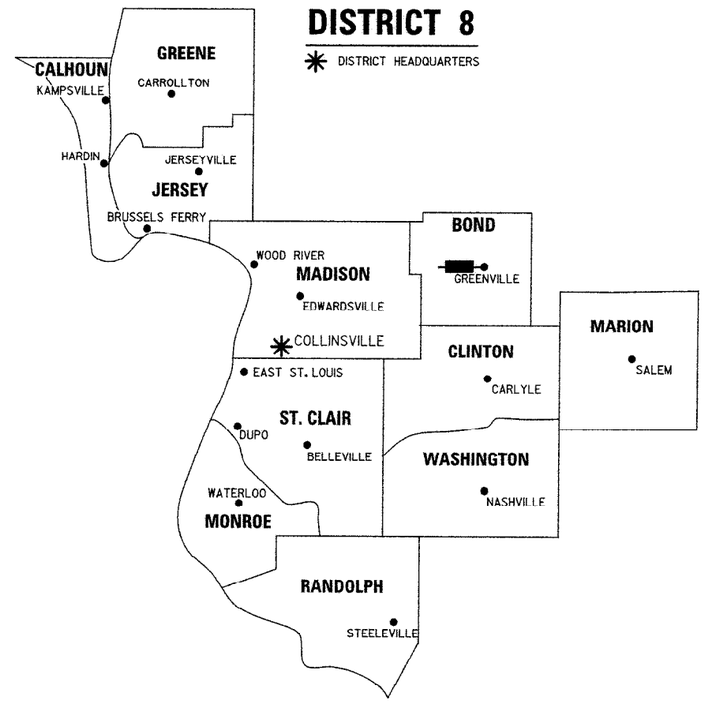
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLAT OF HIGHWAYS

FAP ROUTE 793 (IL 143)
SECTION (40,112) BR-1
BOND COUNTY
JOB NO.
R-98-009-11



PROJECT LENGTH (IL 143) = 2,600 LIN. FT. = 0.49 MILES



LOCATION OF SECTION INDICATED THUS:

PREPARED BY:

Hutson & Associates
3555 COLLEGE AVE.
ALTON, ILLINOIS 62002
PHONE : (618) 433-9229
DESIGN FIRM NUMBER: 184-004243

STATE OF ILLINOIS
AARON PHILLIP HUTSON, SR.
035-003456
BUNKER HILL ILLINOIS
REGISTERED PROFESSIONAL LAND SURVEYOR

Aaron P. Hutson Sr. 2/5/16
AARON P. HUTSON SR, PLS NO. 3456
LICENSE EXPIRATION DATE: 11/30/2016

SHEET 1 OF 6

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/REGION 5/DISTRICT 8
1102 EASTPORT PLAZA DRIVE
COLLINSVILLE, ILLINOIS 62234-6198

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112) BR-1	BOND	95	21
		CONTRACT NO. 76967		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ROUTE IL 143 CONSTRUCTION SECTION (40,112) BR-1 BOND COUNTY JOB # R-98-009-11

PART OF SEC. 23 & 24, T. 4 N., R. 4 W. OF THE 3RD P.M.

PART OF THE SE 1/4 OF SECTION 23 & PART OF THE SW 1/4 OF SECTION 24, T. 4 N., R. 4 W., OF THE 3RD P.M., BOND COUNTY, ILLINOIS

LEGEND FOR EXISTING TOPOGRAPHIC SYMBOLS

- TRAFFIC SIGNAL HANDHOLE
- TRAFFIC SIGNAL GULFBOX
- TRAFFIC SIGNAL HANDHOLE
- TRAFFIC SIGNAL SIGNAL POST
- TRAFFIC SIGNAL STEEL MAST ARM
- TRAFFIC SIGNAL COMBINED MAST ARM
- TRAFFIC SIGNAL PEDESTRIAN PUSH BUTTON
- TRAFFIC SIGNAL WOODEN POLE
- TRAFFIC SIGNAL VEHICLE DETECTION PRIORITY
- TRAFFIC SIGNAL VEHICLE DETECTION MAGNET
- TRAFFIC SIGNAL JUNCTION BOX
- TRAFFIC SIGNAL CONTROLLER
- TRAFFIC SIGNAL HEAVY DUTY HANDHOLE
- RAILROAD CANTILEVER MAST ARM
- RAILROAD CROSSBUCK
- RAILROAD TRACK PATTERN
- RAILROAD ABANDON PATTERN
- RAILROAD CROSSGATE
- RAILROAD CONTROL BOX
- RAILROAD FLASHING SIGNAL
- TELEPHONE SPLICE BOX ABOVE GROUND
- UTILITY POWER POLE
- TELEPHONE POLE
- UTILITY TRAFFIC SIGNAL
- UTILITY LIGHT POLE
- FIRE HYDRANT
- UTILITY MANHOLE
- UTILITY TELEPHONE POLE
- UTILITY GUY POLE
- PIPELINE WARNING SIGN
- UTILITY HANDHOLE
- UTILITY SPLICE ABOVE GROUND
- UTILITY JUNCTION BOX
- UTILITY HEAVY DUTY HANDHOLE
- UTILITY DOUBLE HANDHOLE
- UTILITY CONTROLLER
- UTILITY WATER METER
- DRAINAGE FLOW LINE
- RIP RAP
- HEADWALL
- CULVERT END SECTION
- DRAINAGE MANHOLE
- INLET
- ROADWAY DITCH FLOW
- VEGETATION LINE
- STUMP
- SHRUB
- EVERGREEN TREE
- DECIDUOUS TREE
- WOODS/BUSH PATTERN
- TRAFFIC SIGN
- GAURDRAIL POST
- GAURDRAIL PATTERN
- FIELD LINE
- LEVEE/NOISE BARRIER
- FENCE PATTERN
- MAIL BOX
- ADVERTISING SIGN
- MARSH
- LIGHTING HANDHOLE
- LIGHTING POWER POLE
- LIGHTING JUNCTION BOX
- LIGHTING HEAVYDUTY HANDHOLE
- LIGHTING CONTROLLER
- LIGHTING PULL POINT
- HIGHWAY LIGHTING ELECTRICAL GROUND
- HIGHWAY LIGHTING SINGLE UNIT
- HIGHWAY LIGHTING DOUBLE UNIT
- EXISTING CONCRETE BARRIER
- EXISTING CREEK OR DITCH
- EXISTING EDGE OF PAVEMENT

RIGHT OF WAY LEGEND

SECTION CORNERS — QUARTER SECTION CORNERS

- EXISTING CENTERLINE
- EXISTING RIGHT OF WAY LINE
- FORMER RIGHT OF WAY LINE
- EXISTING IDOT EASEMENT LINE
- EXISTING EASEMENT LINE
- BUILDING SETBACK LINE
- AC — EXISTING ACCESS CONTROL LINE
- AC — EXISTING RIGHT OF WAY & PROPOSED ACCESS CONTROL LINE
- AC — PROPOSED ACCESS CONTROL LINE
- PROPOSED CENTERLINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED TEMPORARY EASEMENT LINE
- PROPOSED PERMANENT EASEMENT LINE
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER QUARTER SECTION LINE
- PROPERTY LINE
- APL — APPARENT PROPERTY LINE
- 121.45' — MEASURED DIMENSION
- (121.45') — RECORDED DIMENSION
- FOUND STONE
- FOUND IRON PIPE OR IRON ROD AT CORNER UNLESS OTHERWISE NOTED
- SET 5/8 INCH IRON ROD WITH PLASTIC CAP IDENTIFIED BY SURVEYORS LICENSE NUMBER AT CORNER UNLESS OTHERWISE NOTED
- PERMANENT SURVEY MONUMENT, I.D.O.T. STD. 606101 (TO BE SET BY OTHERS)
- SET 5/8 INCH IRON ROD AS SURVEY CONTROL UNLESS OTHERWISE NOTED
- FOUND CUT CROSS
- SET CUT CROSS
- SAME OWNERSHIP
- EXISTING BUILDING

■ STAKING OF PROPOSED RIGHT OF WAY CORNERS. SET 5/8 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY ALUMINUM CAP TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS LICENSE NUMBER. (PROPOSED RIGHT OF WAY CORNERS SET IN CULTIVATED AREAS SHALL BE A MINIMUM OF 20 INCHES BELOW THE GROUND SURFACE).

LEGEND FOR ABBREVIATIONS

A/C	ACCESS CONTROL
AC	ACRE
AVE	AVENUE
BK	BOOK
BLVD	BOULEVARD
℄	CENTERLINE
CH	COUNTY HIGHWAY
Ch	CHAIN
DB	DEED BOOK
E	EAST
EX	EXISTING
FA	FEDERAL AID
FAI	FEDERAL AID INTERSTATE
FAP	FEDERAL AID PRIMARY
FAS	FEDERAL AID SECONDARY
FAUS	FEDERAL AID URBAN SECONDARY
FND	FOUND
ha	HECTARE
IP	IRON PIPE
IR	IRON ROD
LT	LEFT
m	METER
m^2	SQUARE METERS
N	NORTH
N & BC	NAIL AND BOTTLE CAP
N & C	NAIL AND CAP
N & W	NAIL AND WASHER
NE	NORTHEAST
NW	NORTHWEST
PB	PLAT BOOK
PG	PAGE
POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
POT	POINT OF TANGENT
ℙ	PROPERTY LINE
PR	PROPOSED
RD	ROAD
ROW	RIGHT OF WAY
RR	RAILROAD
RRS	RAILROAD SPIKE
RT	RIGHT
RTE	ROUTE
S	SOUTH
SBI	STATE BOND ISSUE
SE	SOUTHEAST
SQ FT	SQUARE FEET
SR	STATE ROUTE
ST	STREET
STA	STATION
SMK	SURVEY MARKER
SW	SOUTHWEST
TWP	TOWNSHIP
TR	TOWNSHIP ROAD
USGS	U.S. GEOLOGICAL SURVEY
W	WEST
PLA	PROPERTY LINE FOR APPRASIAL PURPOSES ONLY

SPACE RESERVED FOR RECORDING OFFICER

PROPOSED PARCEL NUMBER LEGEND

800100I	PROPOSED FEE SIMPLE ACQUISITION
800100IPE	PROPOSED PERMANENT EASEMENT
800100ITE	PROPOSED TEMPORARY EASEMENT
800100IDED	PROPOSED DEDICATION
800100IAC	PROPOSED ACCESS CONTROL LINE

CURVE ABBREVIATIONS

PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PRC	POINT OF REVERSE CURVE
PCC	POINT OF COMPOUND CURVE
CB	CHORD BEARING
R	RADIUS OF CURVE
L	CURVE LENGTH
CB	CHORD BEARING
C	CHORD LENGTH
D	DEGREE OF CURVE
e	EXTERNAL
△	CENTRAL ANGLE

TOTAL HOLDING AREA SOURCE TABLE

1	AREA ACCORDING TO THE SURVEY PERFORMED BY THE CONSULTANT.
2	AREA LISTED IN RECORDED DEED.
3	AREA ACCORDING TO A RECORDED SUBDIVISION PLAT.
4	AREA ACCORDING TO A PLAT OF SURVEY.
5	AREA CALCULATED FROM RECORDED DEEDS OR TITLE COMMITMENTS - NOT SURVEYED.
6	AREA ACCORDING TO COUNTY TAX MAPS AND COUNTY ASSESSMENT RECORDS.
7	AREA ACCORDING TO OTHER RECORDS, SEE NOTE ON THE PLAT OF HIGHWAYS.

TOPOGRAPHIC STATEMENT

THE TOPOGRAPHY SHOWN HEREON WAS PROVIDED TO THE SURVEYOR BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION. THE SURVEYOR VISUALLY FIELD VERIFIED THE EXISTENCE OF THE TOPOGRAPHY SHOWN HEREON.

BASIS OF COORDINATE & BEARING STATEMENT

COORDINATES AND BEARINGS SHOWN HEREON ARE BASED ON SURVEY CONTROL DATA AS PROVIDED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION . THE COORDINATES FOR THIS PROJECT ARE GROUND COORDINATES. THE TRUNCATED AND SCALED COORDINATES ARE BASED ON THE ILLIOINS STATE PLANE COORDINATE SYSTEM, WEST ZONE, NAD 83 (2007). THE COMBINATION GRID FACTOR UTILIZED FOR THIS PROJECT IS 0.999978738.

PREPARED BY:

Hutson & Associates
3555 COLLEGE AVE.
ALTON, ILLINOIS 62002
PHONE : (618) 433-9229
DESIGN FIRM NUMBER: 184-004243

STATE OF ILLINOIS — AARON PHILLIP HUTSON, SR. 035-003456 BUNKER HILL ILLINOIS — PROFESSIONAL LAND SURVEYOR

Aaron P. Hutson Sr. 6/3/16

AARON P. HUTSON SR. PLS NO. 3456
LICENSE EXPIRATION DATE: 11/30/2016

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAT OF HIGHWAYS
FAP ROUTE 793 (IL 143)
SECTION (40,112) BR-1
BOND COUNTY
JOB NO. R-98-009-11

50' 0 50' 100'
SCALE: 1" = 50'
SHEET 2 OF 6

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/REGION 5/DISTRICT 8
1102 EASTPORT PLAZA DRIVE
COLLINSVILLE, ILLINOIS 62234-6198

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112) BR-1	BOND	95	22
		CONTRACT NO. 76967		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ROUTE IL 143 CONSTRUCTION SECTION (40,112) BR-1 BOND COUNTY JOB # R-98-009-11

PART OF SEC. 23 & 24, T. 4 N., R. 4 W. OF THE 3RD P.M.

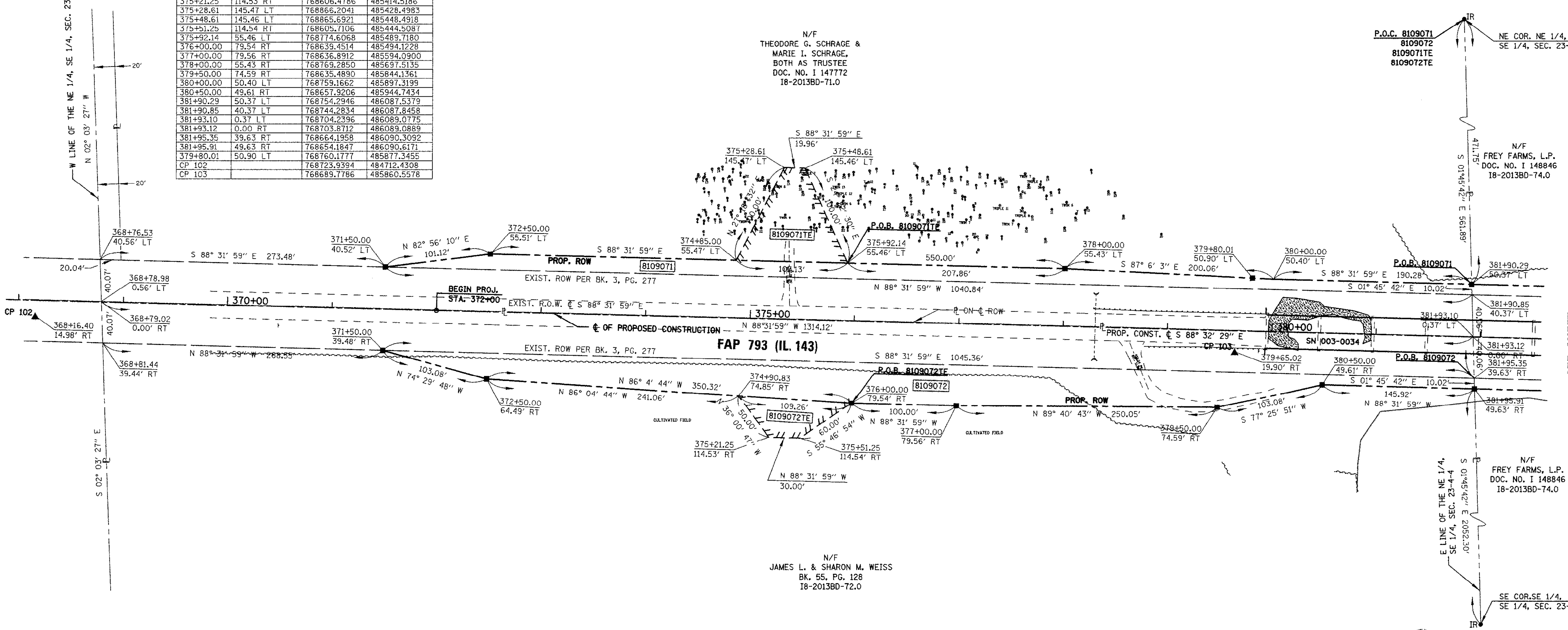
PART OF THE NE 1/4 OF THE SE 1/4 OF SECTION 23, T. 4 N., R. 4 W., OF THE 3RD P.M., BOND COUNTY, ILLINOIS

SEE LEGENDS, TOPOGRAPHIC STATEMENT, SURVEYORS NOTE(S) AND BASIS OF COORDINATES & BEARINGS STATEMENT ON SHEET 2

STATION	OFFSET	NORTH	EAST
368+76.53	40.56 LT	768777.9330	484773.9522
368+78.98	0.56 RT	768737.8839	484775.3911
368+79.02	0.00 RT	768737.3197	484775.4113
368+81.44	39.44 RT	768697.8348	484776.8299
371+50.00	39.48 RT	768690.9593	485045.2944
371+50.00	40.52 LT	768770.9313	485047.3425
372+50.00	64.49 RT	768663.4072	485144.6216
372+50.00	55.51 LT	768783.3662	485147.6931
374+85.00	55.47 LT	768777.3496	485382.6194
374+90.83	74.85 RT	768646.9228	485385.1201
375+21.25	114.53 RT	768606.4786	485414.5186
375+28.61	145.47 LT	768866.2041	485428.4983
375+48.61	145.46 LT	768865.6921	485448.4918
375+51.25	114.54 RT	768605.7106	485444.5087
375+92.14	55.46 LT	768774.6068	485489.7180
376+00.00	79.54 RT	768639.4514	485494.1228
377+00.00	79.56 RT	768636.8912	485594.0900
378+00.00	55.43 RT	768769.2850	485697.5135
379+50.00	74.59 RT	768635.4890	485844.1361
380+00.00	50.40 LT	768759.1662	485897.3199
380+50.00	49.61 RT	768657.9206	485944.7434
381+90.29	50.37 LT	768754.2946	486087.5379
381+90.85	40.37 LT	768744.2834	486087.8458
381+93.10	0.37 LT	768704.2396	486089.0775
381+93.12	0.00 RT	768703.8712	486089.0889
381+95.35	39.63 RT	768664.1958	486090.3092
381+95.91	49.63 RT	768654.1847	486090.6171
379+80.01	50.90 LT	768760.1777	485877.3455
CP 102		768723.9394	484712.4308
CP 103		768689.7786	485860.5578

N

SPACE RESERVED FOR RECORDING OFFICER



Hutson & Associates
3555 COLLEGE AVE.
ALTON, ILLINOIS 62002
PHONE : (618) 433-9229
DESIGN FIRM NUMBER: 184-004243

* SEE TOTAL HOLDING AREA SOURCE TABLE ON SHEET 2

PARCEL NO.	OWNER	TOTAL HOLDING	FEE SIMPLE ACQUISITION						REMAINDER	EASEMENTS			PERMANENT TAX NUMBER	PROPERTY ACQUIRED BY
			GROSS		PREVIOUSLY DEDICATED AND/OR USED		NET			PE = PERMANENT TE = TEMPORARY		EASEMENT PURPOSE		
		ACRES	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	ACRES	SQ. FT.			
8109071	THEODORE G. SCHRAGE , AS TRUSTEE UNDER THE PROVISIONS OF A TRUST AGREEMENT DATED APRIL 10, 2006, AND KNOWN AS THE TWIN OAKS FARM TRUST NO. 1, AS TO AN UNDIVIDED 1/2 INTEREST; AND MARIE I. SCHRAGE, AS TRUSTEE UNDER THE PROVISIONS OF A TRUST AGREEMENT DATED APRIL 10, 2006, AND KNOWN AS THE TWIN OAKS FARM TRUST NO. 2 I8-2013BD-71.0	15.6750 1	1.5145	65,973	1.2067	52,567	0.3078	13,406	14.1605	0.1313	5,719	GRADING & ENTRANCE CONSTRUCTION	07-12-23-403-001	
8109072	JAMES LEE WEISS & SHARON MARIE WEISS, HUSBAND & WIFE, AS JOINT TENANTS I8-2013BD-72.0	62.1648 1	1.8886	82,266	1.2066	52,560	0.6820	29,706	60.2762	0.0601	2,619	GRADING & ENTRANCE CONSTRUCTION	07-12-23-404-001	

STATE OF ILLINOIS)
) SS
COUNTY OF MACOUPIN)

I, AARON P. HUTSON SR., AN ILLINOIS PROFESSIONAL LAND SURVEYOR, STATE THAT I HAVE SURVEYED THE PLAT OF HIGHWAY SHOWN HEREON AND THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY OF THE EXISTING RIGHT OF WAY, SHOWN HEREON.

DATED 2/5/16

AARON P. HUTSON SR. , PLS NO. 3456
LICENSE EXPIRATION DATE: 11/30/2016

STATE OF ILLINOIS AARON PHILLIP HUTSON, SR. 035-003456 BUNKER HILL ILLINOIS PROFESSIONAL LAND SURVEYOR

COMPLETION DATE OF FIELD WORK PERFORMED	
LAND SURVEY: 1/20/15	ROW STAKING: 2/01/16

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAT OF HIGHWAYS
FAP ROUTE 793 (IL 143)
SECTION (40,112) BR-1
BOND COUNTY
JOB NO. R-98-009-11
STATION 368+78.98 TO STATION 381+93.12

50' 0 50' 100'
SCALE: 1" = 50'
SHEET 3 OF 6

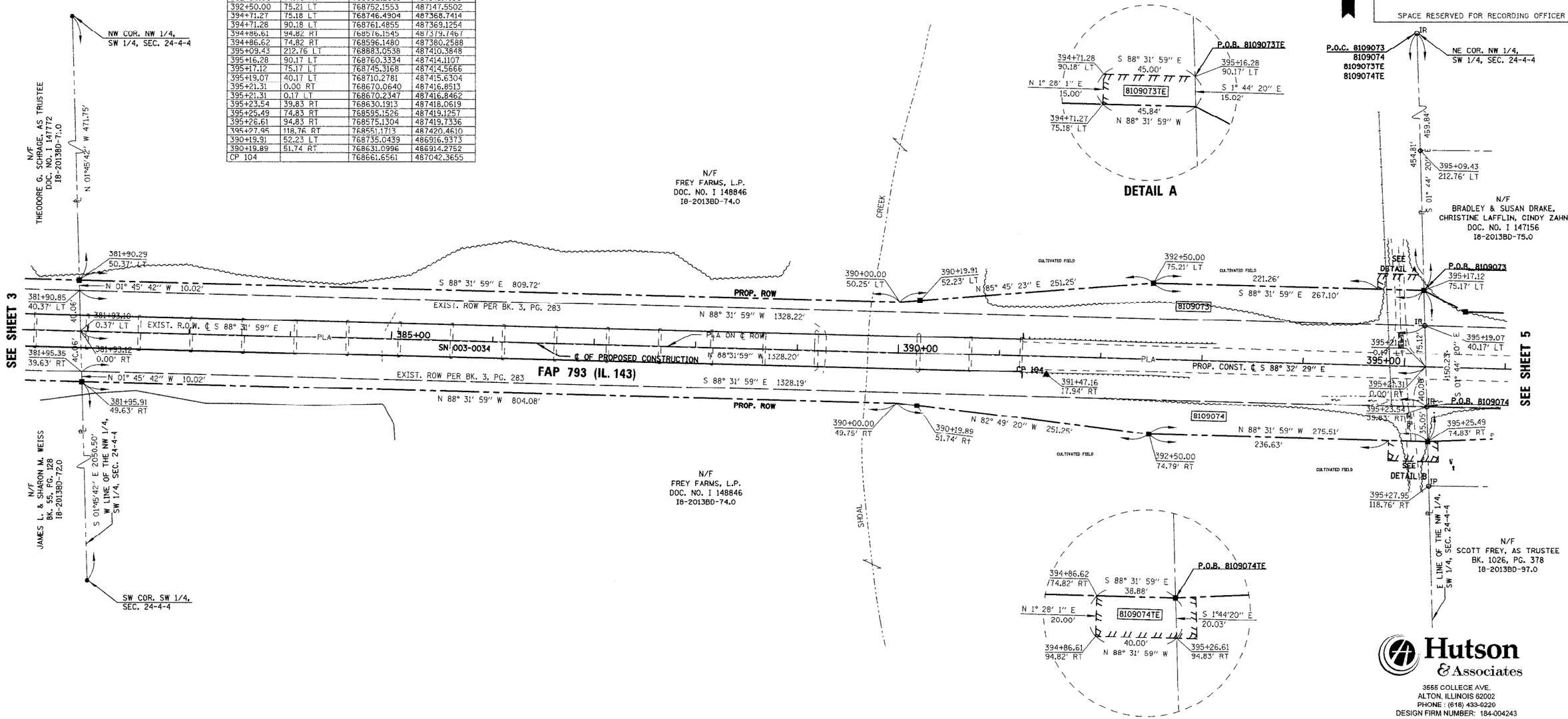
ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/REGION 5/DISTRICT 8
1102 EASTPORT PLAZA DRIVE
COLLINSVILLE, ILLINOIS 62234-6198

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112) BR-1	BOND	95	23
		CONTRACT NO. 76967		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

PART OF THE NW 1/4 OF THE SW 1/4 OF SECTION 24, T. 4 N., R. 4 W., OF THE 3RD P.M., BOND COUNTY, ILLINOIS

SEE LEGENDS, TOPOGRAPHIC STATEMENT, SURVEYORS NOTE(S) AND BASIS OF COORDINATES & BEARINGS STATEMENT ON SHEET 2

STATION	OFFSET	NORTH	EAST
381+90.29	50.37 LT	768754.2946	486087.5379
381+90.85	40.37 LT	768744.2834	486087.8458
381+93.10	0.37 LT	768704.2396	486089.0775
381+93.12	0.00 RT	768703.8712	486089.0889
381+95.35	39.63 RT	768664.1958	486090.3092
381+95.91	49.63 RT	768654.1847	486090.6171
390+00.00	49.75 RT	768633.5985	486894.4320
390+00.00	50.25 LT	768733.5640	486896.9921
392+50.00	74.79 RT	768602.2061	487143.7100
392+50.00	75.21 LT	768752.1553	487147.5502
394+71.27	75.18 LT	768746.4904	487368.7414
394+71.28	90.18 LT	768761.4855	487369.1254
394+86.61	94.82 RT	768576.1545	487379.7467
394+86.62	74.82 RT	768596.1480	487380.2588
395+09.43	212.76 LT	768883.0538	487410.3848
395+16.28	90.17 LT	768760.3334	487414.1107
395+17.12	75.17 LT	768745.3168	487414.5666
395+19.07	40.17 LT	768710.2781	487415.6304
395+21.31	0.00 RT	768670.0640	487416.8513
395+21.31	0.17 LT	768670.2347	487416.8462
395+23.54	39.83 RT	768630.1913	487418.0619
395+25.49	74.83 RT	768595.1526	487419.1257
395+26.61	94.83 RT	768575.1304	487419.7336
395+27.95	118.76 RT	768551.1713	487420.4610
390+19.91	52.23 LT	768735.0439	486916.9373
390+19.89	51.74 RT	768631.0996	486914.2752
CP 104		768661.6561	487042.3655



DETAIL A

DETAIL B

* SEE TOTAL HOLDING AREA SOURCE TABLE ON SHEET 2

PARCEL NO.	OWNER	TOTAL HOLDING	FEE SIMPLE ACQUISITION						REMAINDER	EASEMENTS			PERMANENT TAX NUMBER	PROPERTY ACQUIRED BY
			GROSS		PREVIOUSLY DEDICATED AND/OR USED		NET			PE = PERMANENT TE = TEMPORARY		EASEMENT PURPOSE		
		ACRES	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	ACRES	SQ. FT.			
8109073	FREY FARMS, L.P. 18-2013BD-74.0	16.2395 1	1.7500	76,230	1.2197	53,128	0.5303	23,102	14.4895	0.0156	681	GRADING & ENTRANCE CONSTRUCTION	07-12-24-309-001	
8109074	FREY FARMS, L.P. 18-2013BD-74.0	47.0152 5	1.7540	76,404	1.2196	53,127	0.5344	23,277	45.2612	0.0181	789	GRADING & ENTRANCE CONSTRUCTION	07-12-24-309-001	

Hutson & Associates
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ALTON, ILLINOIS 62002
PHONE : (618) 433-0229
DESIGN FIRM NUMBER: 184-004243

STATE OF ILLINOIS)
) SS
COUNTY OF MACOUPIN)

I, AARON P. HUTSON SR., AN ILLINOIS PROFESSIONAL LAND SURVEYOR, STATE THAT I HAVE SURVEYED THE PLAT OF HIGHWAY SHOWN HEREON AND THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY OF THE EXISTING RIGHT OF WAY, SHOWN HEREON.

DATED 2/5/16

AARON P. HUTSON SR. , PLS NO. 3456
LICENSE EXPIRATION DATE: 11/30/2016

STATE OF ILLINOIS AARON PHILLIP HUTSON, SR. 035-003456 BUNKER HILL ILLINOIS PROFESSIONAL LAND SURVEYOR

COMPLETION DATE OF FIELD WORK PERFORMED	
LAND SURVEY: 1/20/15	ROW STAKING: 2/01/16

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAT OF HIGHWAYS
FAP ROUTE 793 (IL 143)
SECTION (40,112) BR-1
BOND COUNTY
JOB NO. R-98-009-11
STATION 381+93.12 TO STATION 395+21.31

50' 0 50' 100'
SCALE: 1" = 50'
SHEET 4 OF 6

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/REGION 5/DISTRICT 8
1102 EASTPORT PLAZA DRIVE
COLLINSVILLE, ILLINOIS 62234-6198

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112) BR-1	BOND	95	24
		CONTRACT NO. 76967		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ROUTE IL 143 CONSTRUCTION SECTION (40,112) BR-1 BOND COUNTY JOB * R-98-009-11

PART OF THE SW 1/4 SEC. 24, T. 4 N., R. 4 W. OF THE 3RD P.M.

PART OF THE NE 1/4 OF THE SW 1/4 OF SECTION 24, T. 4 N., R. 4 W., OF THE 3RD P.M., BOND COUNTY, ILLINOIS

SEE LEGENDS, TOPOGRAPHIC STATEMENT, SURVEYORS NOTE(S) AND BASIS OF COORDINATES & BEARINGS STATEMENT ON SHEET 2

STATION	OFFSET	NORTH	EAST	STATION	OFFSET	NORTH	EAST
395+17.12	75.17 LT	768745.3168	487414.5666	405+94.53	60.01 LT	768702.7371	488491.2440
395+19.07	40.17 LT	768710.2781	487415.6304	408+47.08	39.97 LT	768676.2782	488743.2006
395+21.31	0.00 RT	768670.0640	487416.8513	408+49.28	0.00 RT	768636.2356	488744.3855
395+21.31	0.17 LT	768670.2347	487416.8462	408+49.28	0.03 RT	768636.2627	488744.3847
395+23.54	39.83 RT	768630.1913	487418.0619	408+51.48	40.03 RT	768596.1930	488745.5705
395+25.49	74.83 RT	768595.1526	487419.1257	408+52.59	60.03 RT	768576.1717	488746.1630
395+59.07	55.16 LT	768724.2491	487456.0013	408+54.71	98.59 RT	768537.5687	488747.3053
397+50.00	55.14 LT	768719.3607	487646.8743	398+40.19	41.84' RT	768620.1239	487734.5566
398+50.00	40.12 LT	768701.8054	487746.4575	395+27.95	118.76' RT	768551.1713	487420.4610
400+94.52	40.08 LT	768695.5452	487990.8959	CP 105		768670.7973	487983.6174
400+94.53	60.08 LT	768715.5382	487991.4079				
402+94.63	39.94 RT	768610.4496	488188.9014				
402+94.63	59.94 RT	768590.4566	488188.3894				
405+94.52	40.01 LT	768682.7441	488490.7320				

N

SPACE RESERVED FOR RECORDING OFFICER

P.O.C. 8109075
8109076
NW COR. NE 1/4, SW 1/4, SEC. 24-4-4

CENTER OF SEC. 24-4-4

N 1° 41' 42" W 333.39'

N 89° 28' 17" W 1327.12'

S 01° 44' 20" E 463.84'
332.04'
137.80'

N/F
FREY FARMS, L.P.
DOC. NO. I 148846
18-2013BD-74.0

N/F
LESTER, BRADLEY & SUSAN DRAKE,
CHRISTINE LAFFLIN, CINDY ZAHN
DOC. NO. I 147156
18-2013BD-75.0

N/F
SHANE & TERRI KELLER
BK. 607, PG. 310
18-2013BD-76.0

N 01° 41' 42" W 194.62'
S 01° 41' 42" E 333.39'

P.O.B. 8109075

CULTIVATED FIELD

63° 02' 55" 46.48'

395+59.07
55.16' LT

397+50.00
55.14' LT

S 80° 00' 8" E
101.12'

398+50.00
40.12' LT

395+17.12
75.17' LT

S 88° 31' 59" E 190.94'

N 01° 44' 20" W 38.05'

8109075

PROP. ROW

S 88° 31' 59" E 244.52'

400+94.53
60.08' LT

N 01° 28' 01" E 20.00'

EXIST. ROW PER BK. 3, PG. 282

S 88° 31' 59" E 500.00'

S 01° 28' 01" W 20.00'

405+94.53
60.01' LT

S 88° 31' 59" E 252.06'

N 88° 31' 59" W 330.94'

END OF PROJ.
STA. 398+00

400+94.52
40.08' LT

400+87.88
15.16' LT

CP 105

395+19.07
40.17' LT

194.23'
40.06'

395+21.31
0.12' LT

395+00

PLA

400+00

EXIST. R.O.W. ℄ S 88° 31' 59" E

405+00

405+94.52
40.01' LT

408+47.08
39.97' LT

408+49.28
0.00' RT

PC STA. 408+65.51

S 88° 31' 59" E 1327.97'

℄ OF PROPOSED CONSTRUCTION

FAP 793 (IL. 143)

PROP. CONST. ℄ S 88° 32' 29" E

408+49.28
0.03' RT

395+23.54
39.83' RT

N 01° 44' 20" W

40.06'

N 88° 31' 59" W 444.64'

402+94.63
39.94' RT

408+51.48
40.03' RT

395+25.49
74.83' RT

CULTIVATED FIELD

N 01° 28' 01" E 20.00'

EXIST. ROW PER BK. 3, PG. 282

408+52.59
60.03' RT

S 01° 41' 42" E 20.03'

N 88° 31' 59" W 557.96'

79.06'

8109076

395+27.95
118.76' RT

402+94.63
59.94' RT

S 01° 41' 42" E 38.62'

P.O.B. 8109076

N 89° 24' 45" W 1326.91'

PROP. ROW

PROP. ROW

408+54.71
98.59' RT

N/F
JOHN R. DRAKE
BK. 158, PG. 176
18-2013BD-83.0

N/F
FREY FARMS, L.P.
DOC. NO. I 148846
18-2013BD-74.0

W LINE OF THE NE 1/4, SW 1/4, SEC. 24-4-4

N/F
SCOTT FREY, AS TRUSTEE
BK. 1026, PG. 378
18-2013BD-97.0

N/F
JOHN R. & GLENNA F. DRAKE
BK. 1026, PG. 374
18-2013BD-96.0

S 01° 41' 42" E 666.77'

E LINE OF THE NE 1/4, SW 1/4, SEC. 24-4-4

FOUND CONC. MON.

SE COR. NE 1/4, SW 1/4, SEC. 24-4-4

SEE SHEET 4

PROP. CURVE C1
PI STA. = 413+57.64
Δ = 42° 15' 15" (RT)
D = 4° 29' 55"
R = 1,273.60'
T = 492.13'
L = 939.25'
E = 91.78'
P.C. STA. = 408+65.51
P.T. STA. = 418+04.75

* SEE TOTAL HOLDING AREA SOURCE TABLE ON SHEET 2

PARCEL NO.	OWNER	TOTAL HOLDING	FEE SIMPLE ACQUISITION						REMAINDER	EASEMENTS			PERMANENT TAX NUMBER	PROPERTY ACQUIRED BY
			GROSS		PREVIOUSLY DEDICATED AND/OR USED		NET			PE = PERMANENT TE = TEMPORARY		EASEMENT PURPOSE		
		ACRES	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	ACRES	SQ. FT.			
8109075	LESTER DRAKE, BRADLEY DRAKE & SUSAN DRAKE, CHRISTINE LAFFLIN, & CINDY ZAHN, IN JOINT TENANCY 18-2013BD-75.0	6.8126 [1]	1.5553	67,747	1.4490	63,118	0.1063	4,629	5.2573	N/A	N/A	N/A	07-12-24-304-001	
8109076	LESTER DRAKE, BRADLEY DRAKE & SUSAN DRAKE, CHRISTINE LAFFLIN, & CINDY ZAHN, IN JOINT TENANCY 18-2013BD-75.0	3.3150 [1]	3.3150	144,403	1.4753	64,265	1.8397	80,138	0.0000	N/A	N/A	N/A	07-12-24-304-001	
		[1]												

STATE OF ILLINOIS)
) SS
COUNTY OF MACOUPIN)

I, AARON P. HUTSON SR., AN ILLINOIS PROFESSIONAL LAND SURVEYOR, STATE THAT I HAVE SURVEYED THE PLAT OF HIGHWAY SHOWN HEREON AND THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY OF THE EXISTING RIGHT OF WAY, SHOWN HEREON.

DATED 2/5/16

AARON P. HUTSON SR., PLS NO. 3456
LICENSE EXPIRATION DATE: 11/30/2016

STATE OF ILLINOIS
AARON PHILLIP HUTSON, SR.
035-003456
BUNKER HILL ILLINOIS
PROFESSIONAL LAND SURVEYOR

COMPLETION DATE OF FIELD WORK PERFORMED	
LAND SURVEY: 1/20/15	ROW STAKING: 2/01/16

Hutson & Associates
3555 COLLEGE AVE.
ALTON, ILLINOIS 62002
PHONE : (618) 433-9229
DESIGN FIRM NUMBER: 184-004243

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAT OF HIGHWAYS

FAP ROUTE 793 (IL 143)
SECTION (40,112) BR-1
BOND COUNTY
JOB NO. R-98-009-11

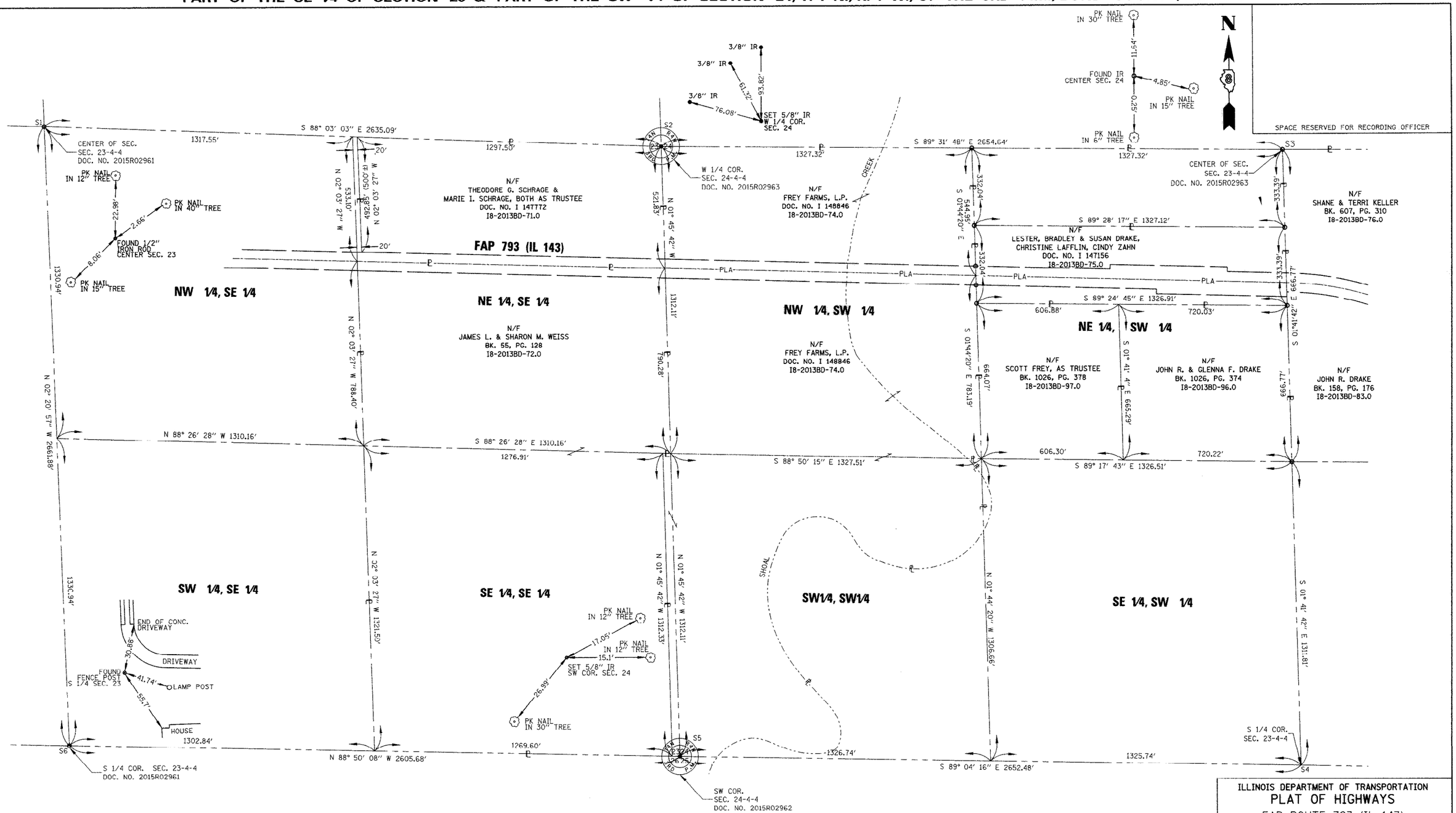
STATION 395+21.31 TO STATION 408+49.28

50' 0 50' 100'
SCALE: 1" = 50'

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/REGION 5/DISTRICT 8
1102 EASTPORT PLAZA DRIVE
COLLINSVILLE, ILLINOIS 62234-6198

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112) BR-1	BOND	95	25
		CONTRACT NO. 76967		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PART OF THE SE 1/4 OF SECTION 23 & PART OF THE SW 1/4 OF SECTION 24, T. 4 N., R. 4 W., OF THE 3RD P.M., BOND COUNTY, ILLINOIS



SEE LEGENDS, TOPOGRAPHIC STATEMENT, SURVEYORS NOTE(S) AND BASIS OF COORDINATES & BEARINGS STATEMENT ON SHEET 2

STATION	NORTH	EAST
S1	769315.4499	483439.4677
S2	769225.8249	486073.0344
S3	769204.0478	488727.5827
S4	766559.8500	488805.8303
S5	766602.8549	486153.7126
S6	766655.8087	483548.5757

STATE OF ILLINOIS)
) SS
COUNTY OF MACOUPIN)

I, AARON P. HUTSON SR., AN ILLINOIS PROFESSIONAL LAND SURVEYOR, STATE THAT I HAVE SURVEYED THE PLAT OF HIGHWAY SHOWN HEREON AND THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY OF THE EXISTING RIGHT OF WAY, SHOWN HEREON.

DATED 2/5/16

AARON P. HUTSON SR. , PLS NO. 3456
LICENSE EXPIRATION DATE: 11/30/2016

STATE OF ILLINOIS · AARON PHILLIP HUTSON, SR. · 035-003456 · BUNKER HILL ILLINOIS · PROFESSIONAL LAND SURVEYOR

Hutson & Associates
3555 COLLEGE AVE.
ALTON, ILLINOIS 62002
PHONE : (618) 433-9228
DESIGN FIRM NUMBER: 184-004243

COMPLETION DATE OF FIELD WORK PERFORMED	
LAND SURVEY: 1/20/15	ROW STAKING: 2/01/16

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAT OF HIGHWAYS
FAP ROUTE 793 (IL 143)
SECTION (40,112) BR-1
BOND COUNTY
JOB NO. R-98-009-11

TOTAL HOLDING & SECTION DETIALS

200' 0 200' 400'
SCALE: 1" = 200'

SHEET 6 OF 6

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/REGION 5/DISTRICT 8
1102 EASTPORT PLAZA DRIVE
COLLINSVILLE, ILLINOIS 62234-6198

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112) BR-1	BOND	95	26
		CONTRACT NO. 76967		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

ROUTE IL 143 CONSTRUCTION SECTION (40,112) BR-1 BOND COUNTY JOB # R-98-009-11

PART OF SEC. 23 & 24, T. 4 N., R. 4 W. OF THE 3RD P.M.

BENCH MARK

BM #22 - Chiseled "□" on north side of west abutment seat.
Sta. 379+96.4, 17.2' Lt., Elev. = 461.48

EXISTING STRUCTURES

SN 003-0034 Originally built as SBI 127A, Section 112B in 1934. It was rebuilt and widened in 1972 as FAP 793, Section 112BR. The existing structure consists of 21 spans with 20 simple span RC deck on steel W-beam units (18 west, 2 east of main span) and a single span steel thru plate girder with steel floor beams and RC deck superstructure. The existing substructure consists of concrete stub abutments on concrete piles, concrete pile bent piers on concrete piles (19) and two solid wall concrete piers on concrete pile supported footings. The structure is 1129'-9" bk. to bk. of abutments and 32'-6" out to out of deck with no skew. The existing structure is to be removed and replaced.

The roadway will be closed during construction. Traffic will be detoured during construction.

Salvage: None.

LICENSED STRUCTURAL ENGINEER
CHRIS LINNEMAN
081-006445
STATE OF ILLINOIS

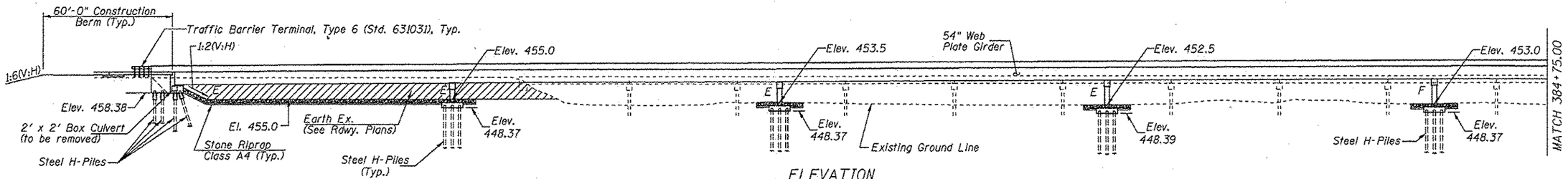
Signed:
Date: 1/10/2017
License Expires: 11/30/2018

Sheets 10, 15-16 & 27-31.

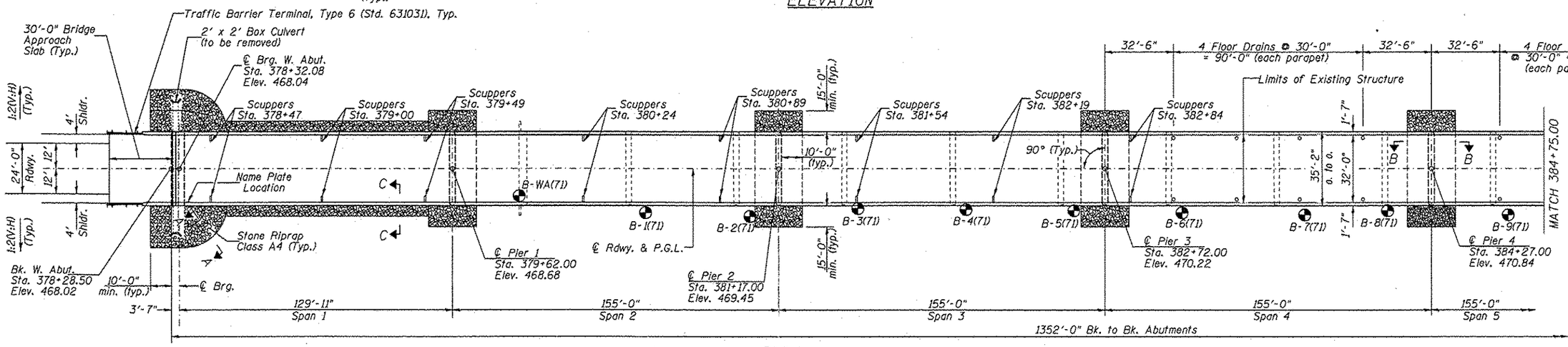
BENJAMIN A. NEIER
081-006527
LICENSED STRUCTURAL ENGINEER
OF ILLINOIS
1/10/18
Lic. exp. 11/30/18

Sheets 1-9, 11-14, 17-26 & 32-59.

Note:
See Sheet 3 of 59 for Index of Sheets and Sections A-A, B-B & C-C.



ELEVATION



PLAN

Boring Locations

WATERWAY INFORMATION

Drainage Area = 679 Sq. Miles Low Grade Elev. 465.00 @ Sta. 354+49.60

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	21,100	6,007	7,458	458.92	1.81	1.49	460.74	460.41
Design	50	30,500	7,369	8,911	459.86	2.20	1.80	462.06	461.66
Base	100	34,300	7,711	9,428	460.20	2.33	1.91	462.53	462.11
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	43,200	8,054	10,441	460.93	2.67	2.13	463.60	463.06

DESIGN SCOUR ELEVATION TABLE

	Design Scour Elevations (ft.)										Item 113
	W. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	Pier 6	Pier 7	Pier 8	S. Abut.	
0.100	458.0	447.5	443.5	442.5	443.0	446.7	446.8	445.0	449.0	457.4	5
0500	458.0	443.5	439.5	438.5	439.0	444.7	442.5	441.0	451.0	457.4	
Design	458.0	447.5	443.5	442.5	443.0	446.7	446.8	445.0	445.0	457.4	
Check	458.0	443.5	439.5	438.5	439.0	444.7	442.5	441.0	445.0	457.4	

LOADING HL-93

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.24g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.55g
Soil Site Class = D

DESIGN STRESSES

FIELD UNITS

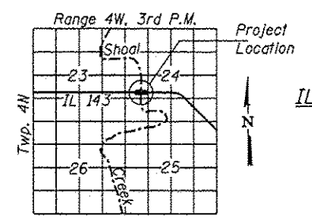
f'c = 3,500 psi
f'c = 4,000 psi (Superstructure Concrete)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)
fy = 36,000 psi (M270 Grade 36)

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 Interims

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

N



LOCATION SKETCH

GENERAL PLAN & ELEVATION
ILL. RTE. 143 OVER SHOAL CREEK
F.A.P. ROUTE 793
SECTION (40, 112) BR-1
BOND COUNTY
STATION 385+04.50
STR. NO. 003-0062

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 003-0062
SHEET NO. 1 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	27
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

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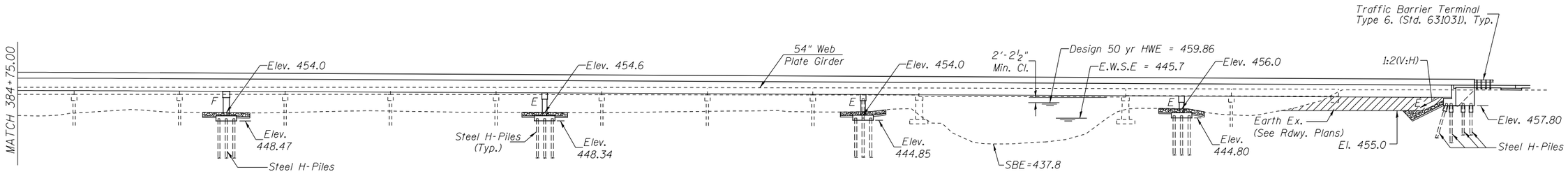
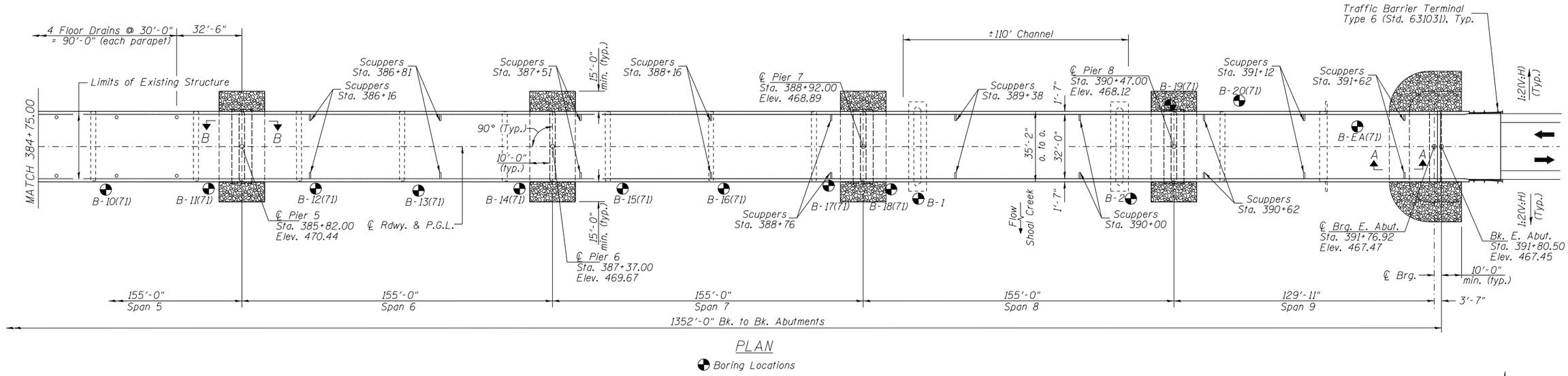
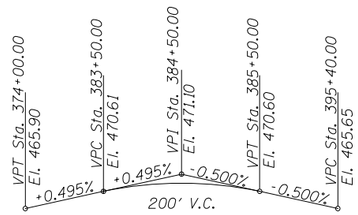


ELEVATION



PLAN

Boring Locations



PROFILE GRADE
(Along ℄ FAP 793)

GENERAL PLAN & ELEVATION 2
ILL. RTE. 143 OVER SHOAL CREEK
F.A.P. ROUTE 793
SECTION (40, 112) BR-1
BOND COUNTY
STATION 385+04.50
STR. NO. 003-0062

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 003-0062
SHEET NO. 2 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	28
		CONTRACT NO. 76967		
		ILLINOIS FED. AID PROJECT		

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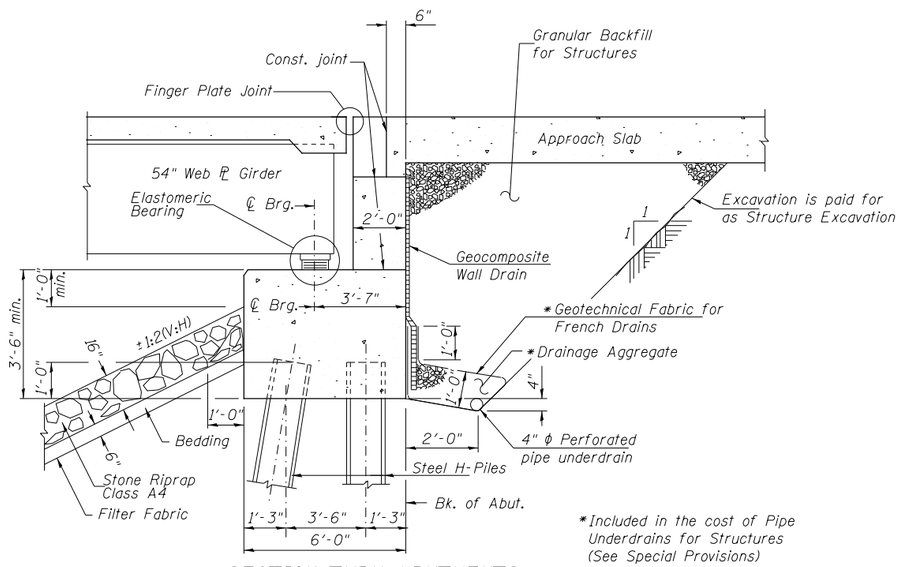


*Included in the cost of Pipe Underdrains for Structures (See Special Provisions)

SECTION THRU ABUTMENTS

Note:
All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls. The pipe shall extend under the wingwall until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq. Yd.	-	2,100	2,100
Filter Fabric	Sq. Yd.	-	1,675	1,675
Removal of Existing Structures No. 1	Each	-	-	1
Structure Excavation	Cu. Yd.	-	1,660	1,660
Floor Drains	Each	16	-	16
Concrete Structures	Cu. Yd.	-	853.7	853.7
Concrete Superstructure	Cu. Yd.	1,542.7	-	1,542.7
Bridge Deck Grooving	Sq. Yd.	4,690	-	4,690
Concrete Encasement	Cu. Yd.	-	9.1	9.1
Protective Coat	Sq. Yd.	6,150	-	6,150
Concrete Superstructure (Approach Slab)	Cu. Yd.	92.1	-	92.1
Furnishing and Erecting Structural Steel	L. Sum	1	-	1
Stud Shear Connectors	Each	15,714	-	15,714
Reinforcement Bars, Epoxy Coated	Pound	430,980	97,790	528,770
Mechanical Splicers	Each	-	900	900
Furnishing Steel Piles HP12x53	Foot	-	9,246	9,246
Furnishing Steel Piles HP12x63	Foot	-	3,216	3,216
Driving Piles	Foot	-	12,462	12,462
Test Pile Steel HP12x53	Each	-	3	3
Test Pile Steel HP12x63	Each	-	1	1
Name Plates	Each	1	-	1
Finger Plate Expansion Joint, 6"	Foot	64	-	64
Fabric Reinforced Elastomeric Trough	Foot	77	-	77
Elastomeric Bearing Assembly, Type III	Each	12	-	12
Anchor Bolts, 1"	Each	24	-	24
Anchor Bolts, 1¼"	Each	192	-	192
Concrete Sealer	Sq. Ft.	-	848	848
Geocomposite Wall Drain	Sq. Yd.	-	58	58
High Load Multi-Rotational Bearings, Guided Expansion, 400k	Each	36	-	36
High Load Multi-Rotational Bearings, Fixed - 400k	Each	12	-	12
Granular Backfill for Structures	Cu. Yd.	-	120	120
Drainage Scuppers, DS-11	Each	36	-	36
Pipe Underdrains for Structures 4"	Foot	-	150	150

GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts in $\frac{7}{8}$" ϕ. in holes $\frac{15}{16}$" ϕ. unless otherwise noted.

Calculated weight of Structural Steel = 1,924,030 lb (AASHTO M270 Gr. 50)
= 83,950 lb (AASHTO M270 Gr. 36)

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Concrete Sealer shall be applied to the designated areas of the abutments.

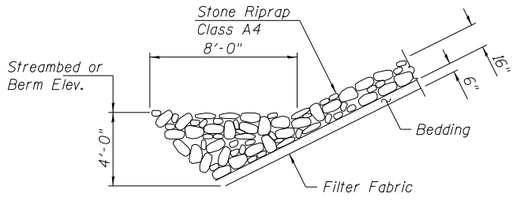
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all steel surfaces shall be Gray, Munsell No. 5B 7/1.

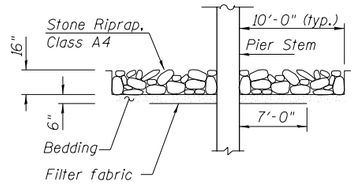
Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

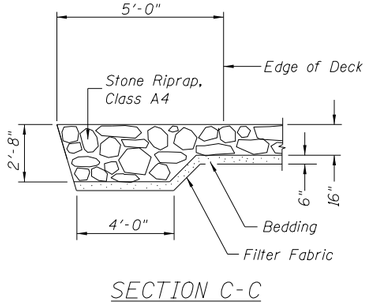
Finger plate expansion joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.



SECTION A-A



SECTION B-B



SECTION C-C

STATION 385+04.50
BUILT 201_ BY
STATE OF ILLINOIS
F.A.P. RT. 793 SEC. (40, 112)BR-1
LOADING HL-93
STR. NO. 003-0062

NAME PLATE
(See Std. 515001)

INDEX OF SHEETS

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

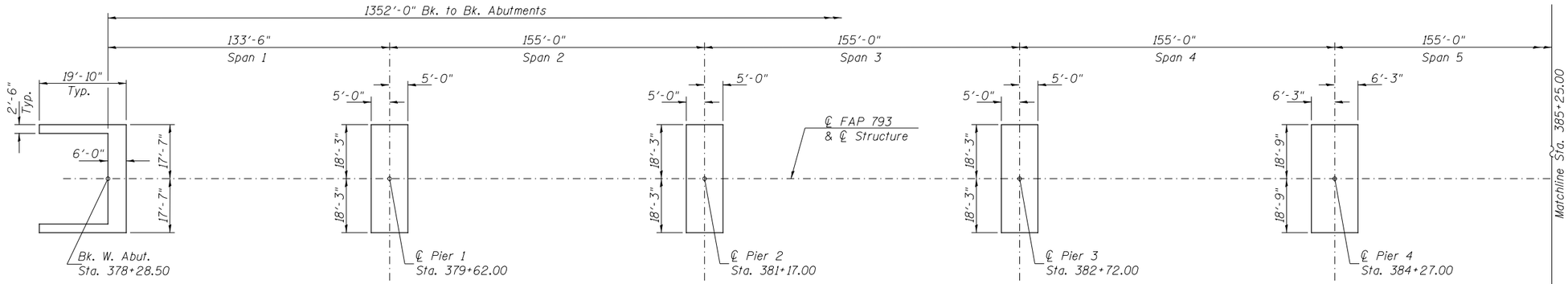
USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

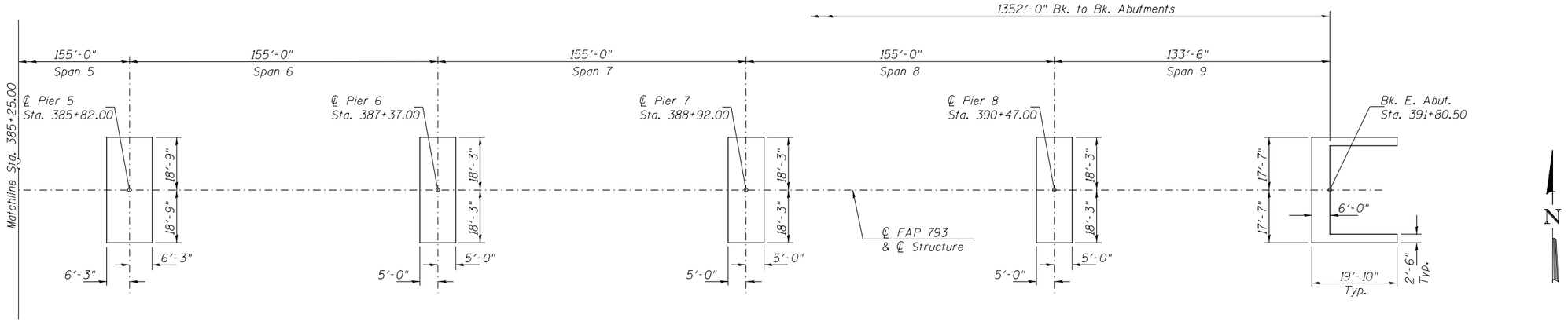
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 003-0062
SHEET NO. 3 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	29
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-003-GENERAL.dgn

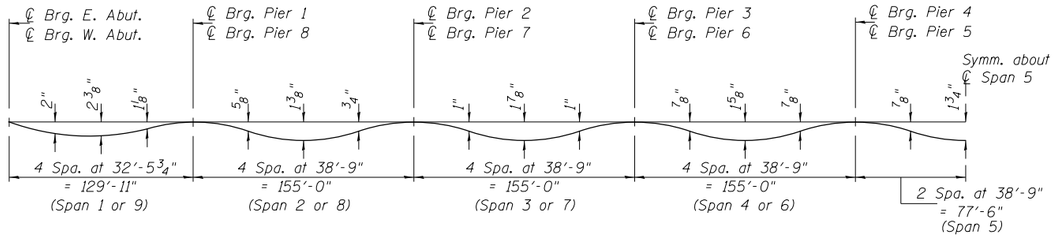




PLAN

Hutchison Engineering, Inc. Jacksonville, Peoria & Shorewood, Illinois	USER NAME =	DESIGNED - BAN	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FOOTING LAYOUT STRUCTURE NO. 003–0062	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = NONE	CHECKED - JOH	REVISED -			793	(40.112)BR-1	BOND	95	30
	PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -					CONTRACT NO. 76967		
		CHECKED - BAN	REVISED -		SHEET NO. 4 OF 59 SHEETS			ILLINOIS FED. AID PROJECT		

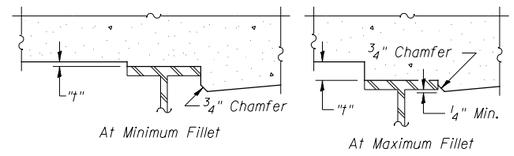
V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-004-FOOTING.dgn



DEAD LOAD DEFLECTION DIAGRAM

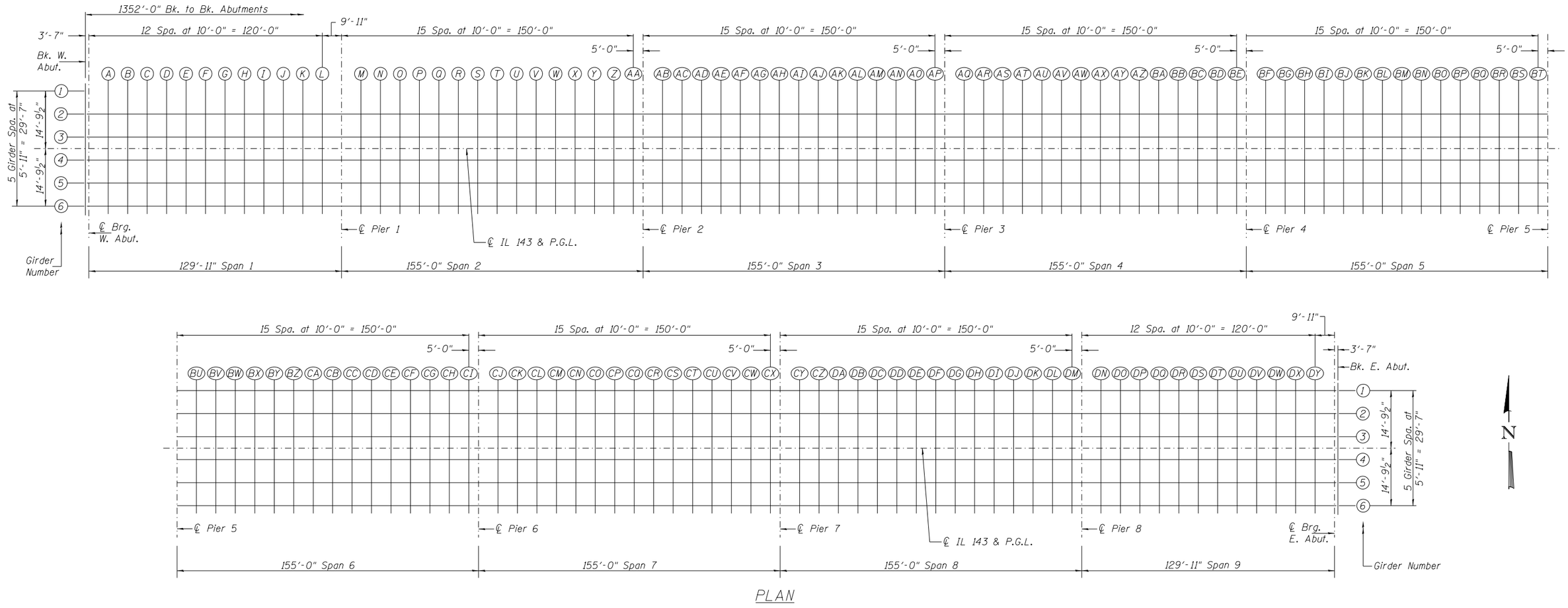
(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown in tables on sheets 6, 7, 8 & 9 of 59 sheets.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 6-9 of 59, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



PLAN

Hutchison Engineering, Inc. Jacksonville, Peoria & Shorewood, Illinois	USER NAME =	DESIGNED - BAN	REVISED -
	PLOT SCALE = NONE	CHECKED - JOH	REVISED -
	PLOT DATE = 3/8/2017	DRAWN - TAC	REVISED -
		CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 003-0062

SHEET NO. 5 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	31
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-005-TOP OF SLAB.dgn

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK OF W ABUT	37828.50	-14.79	467.78	467.78
CL BRG W ABUT	37832.08	-14.79	467.80	467.80
A	37842.08	-14.79	467.85	467.92
B	37852.08	-14.79	467.90	468.02
C	37862.08	-14.79	467.95	468.11
D	37872.08	-14.79	468.00	468.19
E	37882.08	-14.79	468.05	468.26
F	37892.08	-14.79	468.10	468.31
G	37902.08	-14.79	468.15	468.34
H	37912.08	-14.79	468.20	468.36
I	37922.08	-14.79	468.25	468.37
J	37932.08	-14.79	468.30	468.38
K	37942.08	-14.79	468.35	468.39
L	37952.08	-14.79	468.40	468.41
CL BRG PIER 1	37962.00	-14.79	468.45	468.45
M	37972.00	-14.79	468.50	468.49
N	37982.00	-14.79	468.55	468.55
O	37992.00	-14.79	468.60	468.62
P	38002.00	-14.79	468.65	468.70
Q	38012.00	-14.79	468.70	468.77
R	38022.00	-14.79	468.74	468.84
S	38032.00	-14.79	468.79	468.91
T	38042.00	-14.79	468.84	468.96
U	38052.00	-14.79	468.89	469.00
V	38062.00	-14.79	468.94	469.04
W	38072.00	-14.79	468.99	469.07
X	38082.00	-14.79	469.04	469.09
Y	38092.00	-14.79	469.09	469.12
Z	38102.00	-14.79	469.14	469.15
AA	38112.00	-14.79	469.19	469.19
CL BRG PIER 2	38117.00	-14.79	469.22	469.22
AB	38127.00	-14.79	469.26	469.27
AC	38137.00	-14.79	469.31	469.34
AD	38147.00	-14.79	469.36	469.42
AE	38157.00	-14.79	469.41	469.50
AF	38167.00	-14.79	469.46	469.58
AG	38177.00	-14.79	469.51	469.65
AH	38187.00	-14.79	469.56	469.71
AI	38197.00	-14.79	469.61	469.76
AJ	38207.00	-14.79	469.66	469.81
AK	38217.00	-14.79	469.71	469.84
AL	38227.00	-14.79	469.76	469.86
AM	38237.00	-14.79	469.81	469.88
AN	38247.00	-14.79	469.86	469.89
AO	38257.00	-14.79	469.91	469.92
AP	38267.00	-14.79	469.96	469.96
CL BRG PIER 3	38272.00	-14.79	469.98	469.98
AQ	38282.00	-14.79	470.03	470.03
AR	38292.00	-14.79	470.08	470.10
AS	38302.00	-14.79	470.13	470.18
AT	38312.00	-14.79	470.18	470.26
AU	38322.00	-14.79	470.23	470.33
AV	38332.00	-14.79	470.28	470.40
AW	38342.00	-14.79	470.33	470.47
AX	38352.00	-14.79	470.38	470.52
AY	38362.00	-14.79	470.42	470.56
AZ	38372.00	-14.79	470.47	470.58
BA	38382.00	-14.79	470.50	470.59
BB	38392.00	-14.79	470.53	470.59
BC	38402.00	-14.79	470.56	470.59
BD	38412.00	-14.79	470.58	470.59
BE	38422.00	-14.79	470.60	470.59
CL BRG PIER 4	38427.00	-14.79	470.60	470.60
BF	38437.00	-14.79	470.61	470.61
BG	38447.00	-14.79	470.62	470.64
BH	38457.00	-14.79	470.61	470.66
BI	38467.00	-14.79	470.61	470.69
BJ	38477.00	-14.79	470.60	470.70
BK	38487.00	-14.79	470.58	470.71
BL	38497.00	-14.79	470.56	470.70
BM	38507.00	-14.79	470.53	470.68
BN	38517.00	-14.79	470.50	470.64
BO	38527.00	-14.79	470.47	470.59
BP	38537.00	-14.79	470.42	470.52
BQ	38547.00	-14.79	470.38	470.44
BR	38557.00	-14.79	470.33	470.36
BS	38567.00	-14.79	470.28	470.29
BT	38577.00	-14.79	470.23	470.23

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL BRG PIER 5	38582.00	-14.79	470.20	470.20
BU	38592.00	-14.79	470.15	470.16
BV	38602.00	-14.79	470.10	470.12
BW	38612.00	-14.79	470.05	470.10
BX	38622.00	-14.79	470.00	470.08
BY	38632.00	-14.79	469.95	470.06
BZ	38642.00	-14.79	469.90	470.03
CA	38652.00	-14.79	469.85	469.99
CB	38662.00	-14.79	469.80	469.94
CC	38672.00	-14.79	469.75	469.89
CD	38682.00	-14.79	469.70	469.82
CE	38692.00	-14.79	469.65	469.74
CF	38702.00	-14.79	469.60	469.66
CG	38712.00	-14.79	469.55	469.58
CH	38722.00	-14.79	469.50	469.51
CI	38732.00	-14.79	469.45	469.45
CL BRG PIER 6	38737.00	-14.79	469.43	469.43
CJ	38747.00	-14.79	469.38	469.38
CK	38757.00	-14.79	469.33	469.35
CL	38767.00	-14.79	469.28	469.33
CM	38777.00	-14.79	469.23	469.31
CN	38787.00	-14.79	469.18	469.29
CO	38797.00	-14.79	469.13	469.27
CP	38807.00	-14.79	469.08	469.23
CQ	38817.00	-14.79	469.03	469.18
CR	38827.00	-14.79	468.98	469.13
CS	38837.00	-14.79	468.93	469.06
CT	38847.00	-14.79	468.88	468.98
CU	38857.00	-14.79	468.83	468.90
CV	38867.00	-14.79	468.78	468.82
CW	38877.00	-14.79	468.73	468.74
CX	38887.00	-14.79	468.68	468.68
CL BRG PIER 7	38892.00	-14.79	468.65	468.65
CY	38902.00	-14.79	468.60	468.60
CZ	38912.00	-14.79	468.55	468.57
DA	38922.00	-14.79	468.50	468.54
DB	38932.00	-14.79	468.45	468.52
DC	38942.00	-14.79	468.40	468.49
DD	38952.00	-14.79	468.35	468.46
DE	38962.00	-14.79	468.30	468.42
DF	38972.00	-14.79	468.25	468.37
DG	38982.00	-14.79	468.20	468.31
DH	38992.00	-14.79	468.15	468.24
DI	39002.00	-14.79	468.10	468.17
DJ	39012.00	-14.79	468.05	468.09
DK	39022.00	-14.79	468.00	468.02
DL	39032.00	-14.79	467.95	467.95
DM	39042.00	-14.79	467.90	467.90
CL BRG PIER 8	39047.00	-14.79	467.88	467.88
DN	39057.00	-14.79	467.83	467.84
DO	39067.00	-14.79	467.78	467.82
DP	39077.00	-14.79	467.73	467.81
DQ	39087.00	-14.79	467.68	467.80
DR	39097.00	-14.79	467.63	467.79
DS	39107.00	-14.79	467.58	467.77
DT	39117.00	-14.79	467.53	467.73
DU	39127.00	-14.79	467.48	467.69
DV	39137.00	-14.79	467.43	467.62
DW	39147.00	-14.79	467.38	467.54
DX	39157.00	-14.79	467.33	467.45
DY	39167.00	-14.79	467.28	467.34
CL BRG E ABUT	39176.92	-14.79	467.23	467.23
BK OF E ABUT	39180.50	-14.79	467.21	467.21

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK OF W ABUT	37828.50	-8.87	467.89	467.89
CL BRG W ABUT	37832.08	-8.87	467.91	467.91
A	37842.08	-8.87	467.96	468.02
B	37852.08	-8.87	468.01	468.12
C	37862.08	-8.87	468.06	468.22
D	37872.08	-8.87	468.11	468.30
E	37882.08	-8.87	468.15	468.36
F	37892.08	-8.87	468.20	468.41
G	37902.08	-8.87	468.25	468.44
H	37912.08	-8.87	468.30	468.46
I	37922.08	-8.87	468.35	468.47
J	37932.08	-8.87	468.40	468.48
K	37942.08	-8.87	468.45	468.49
L	37952.08	-8.87	468.50	468.51
CL BRG PIER 1	37962.00	-8.87	468.55	468.55
M	37972.00	-8.87	468.60	468.59
N	37982.00	-8.87	468.65	468.65
O	37992.00	-8.87	468.70	468.73
P	38002.00	-8.87	468.75	468.80
Q	38012.00	-8.87	468.80	468.88
R	38022.00	-8.87	468.85	468.95
S	38032.00	-8.87	468.90	469.01
T	38042.00	-8.87	468.95	469.06
U	38052.00	-8.87	469.00	469.11
V	38062.00	-8.87	469.05	469.14
W	38072.00	-8.87	469.10	469.17
X	38082.00	-8.87	469.14	469.19
Y	38092.00	-8.87	469.19	469.22
Z	38102.00	-8.87	469.24	469.25
AA	38112.00	-8.87	469.29	469.29
CL BRG PIER 2	38117.00	-8.87	469.32	469.32
AB	38127.00	-8.87	469.37	469.37
AC	38137.00	-8.87	469.42	469.44
AD	38147.00	-8.87	469.47	469.52
AE	38157.00	-8.87	469.52	469.60
AF	38167.00	-8.87	469.57	469.68
AG	38177.00	-8.87	469.61	469.75
AH	38187.00	-8.87	469.66	469.82
AI	38197.00	-8.87	469.71	469.87
AJ	38207.00	-8.87	469.76	469.91
AK	38217.00	-8.87	469.81	469.94
AL	38227.00	-8.87	469.86	469.96
AM	38237.00	-8.87	469.91	469.98
AN	38247.00	-8.87	469.96	470.00
AO	38257.00	-8.87	470.01	470.02
AP	38267.00	-8.87	470.06	470.06
CL BRG PIER 3	38272.00	-8.87	470.09	470.09
AQ	38282.00	-8.87	470.13	470.14
AR	38292.00	-8.87	470.18	470.20
AS	38302.00	-8.87	470.23	470.28
AT	38312.00	-8.87	470.28	470.36
AU	38322.00	-8.87	470.33	470.44
AV	38332.00	-8.87	470.38	470.51
AW	38342.00	-8.87	470.43	470.57
AX	38352.00	-8.87	470.48	470.62
AY	38362.00	-8.87	470.53	470.66
AZ	38372.00	-8.87	470.57	470.68
BA	38382.00	-8.87	470.60	470.69
BB	38392.00	-8.87	470.64	470.70
BC	38402.00	-8.87	470.66	470.69
BD	38412.00	-8.87	470.68	470.69
BE	38422.00	-8.87	470.70	470.70
CL BRG PIER 4	38427.00	-8.87	470.71	470.71
BF	38437.00	-8.87	470.71	470.72
BG	38447.00	-8.87	470.72	470.74
BH	38457.00	-8.87	470.72	470.77
BI	38467.00	-8.87	470.71	470.79
BJ	38477.00	-8.87	470.70	470.81
BK	38487.00	-8.87	470.68	470.81
BL	38497.00	-8.87	470.66	470.81
BM	38507.00	-8.87	470.64	470.78
BN	38517.00	-8.87	470.60	470.74
BO	38527.00	-8.87	470.57	470.69
BP	38537.00	-8.87	470.53	470.62
BQ	38547.00	-8.87	470.48	470.55
BR	38557.00	-8.87	470.43	470.47
BS	38567.00	-8.87	470.38	470.39
BT	38577.00	-8.87	470.33	470.33

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL BRG PIER 5	38582.00	-8.87	470.31	470.31
BU	38592.00	-8.87	470.26	470.26
BV	38602.00	-8.87	470.21	470.23
BW	38612.00	-8.87	470.16	470.20
BX	38622.00	-8.87	470.11	470.18
BY	38632.00	-8.87	470.06	470.16
BZ	38642.00	-8.87	470.01	470.13
CA	38652.00	-8.87	469.96	470.09
CB	38662.00	-8.87	469.91	470.05
CC	38672.00	-8.87	469.86	469.99
CD	38682.00	-8.87	469.81	469.92
CE	38692.00	-8.87	469.76	469.85
CF	38702.00	-8.87	469.71	469.77
CG	38712.00	-8.87	469.66	469.69
CH	38722.00	-8.87	469.61	469.61
CI	38732.00	-8.87	469.56	469.55
CL BRG PIER 6	38737.00	-8.87	469.53	469.53
CJ	38747.00	-8.87	469.48	469.48
CK	38757.00	-8.87	469.43	469.45
CL	38767.00	-8.87	469.38	469.43
CM	38777.00	-8.87	469.33	469.42
CN	38787.00	-8.87	469.28	469.39
CO	38797.00	-8.87	469.23	469.37
CP	38807.00	-8.87	469.18	469.33
CQ	38817.00	-8.87	469.13	469.29
CR	38827.00	-8.87	469.08	469.23
CS	38837.00	-8.87	469.03	469.16
CT	38847.00	-8.87	468.98	469.08
CU	38857.00	-8.87	468.93	469.00
CV	38867.00	-8.87	468.88	468.92
CW	38877.00	-8.87	468.83	468.85
CX	38887.00	-8.87	468.78	468.78
CL BRG PIER 7	38892.00	-8.87	468.76	468.76
CY	38902.00	-8.87	468.71	468.71
CZ	38912.00	-8.87	468.66	468.67
DA	38922.00	-8.87	468.61	468.64
DB	38932.00	-8.87	468.56	468.62
DC	38942.00	-8.87	468.51	468.59
DD	38952.00	-8.87	468.46	468.56
DE	38962.00	-8.87	468.41	468.52
DF	38972.00	-8.87	468.36	468.47
DG	38982.00	-8.87	468.31	468.41
DH	38992.00	-8.87	468.26	468.35
DI	39002.00	-8.87	468.21	468.27
DJ	39012.00	-8.87	468.16	468.20
DK	39022.00	-8.87	468.11	468.12
DL	39032.00	-8.87	468.06	468.05
DM	39042.00	-8.87	468.01	468.00
CL BRG PIER 8	39047.00	-8.87	467.98	467.98
DN	39057.00	-8.87	467.93	467.94
DO	39067.00	-8.87	467.88	467.92
DP	39077.00	-8.87	467.83	467.91
DQ	39087.00	-8.87	467.78	467.90
DR	39097.00	-8.87	467.73	467.89
DS	39107.00	-8.87	467.68	467.87
DT	39117.00	-8.87	467.63	467.84
DU	39127.00	-8.87	467.58	467.79
DV	39137.00	-8.87	467.53	467.72
DW	39147.00	-8.87	467.48	467.64
DX	39157.00	-8.87	467.43	467.55
DY	39167.00	-8.87	467.38	467.44
CL BRG E ABUT	39176.92	-8.87	467.33	467.33
BK OF E ABUT	39180.50	-8.87	467.31	467.31

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK OF W ABUT	37828.50	-2.96	467.98	467.98
CL BRG W ABUT	37832.08	-2.96	468.00	468.00
A	37842.08	-2.96	468.05	468.11
B	37852.08	-2.96	468.09	468.21
C	37862.08	-2.96	468.14	468.31
D	37872.08	-2.96	468.19	468.39
E	37882.08	-2.96	468.24	468.45
F	37892.08	-2.96	468.29	468.50
G	37902.08	-2.96	468.34	468.53
H	37912.08	-2.96	468.39	468.55
I	37922.08	-2.96	468.44	468.56
J	37932.08	-2.96	468.49	468.57
K	37942.08	-2.96	468.54	468.58
L	37952.08	-2.96	468.59	468.60
CL PIER 1	37962.00	-2.96	468.64	468.64
M	37972.00	-2.96	468.69	468.68
N	37982.00	-2.96	468.74	468.74
O	37992.00	-2.96	468.79	468.81
P	38002.00	-2.96	468.84	468.89
Q	38012.00	-2.96	468.89	468.97
R	38022.00	-2.96	468.94	469.04
S	38032.00	-2.96	468.99	469.10
T	38042.00	-2.96	469.04	469.15
U	38052.00	-2.96	469.08	469.20
V	38062.00	-2.96	469.13	469.23
W	38072.00	-2.96	469.18	469.26
X	38082.00	-2.96	469.23	469.28
Y	38092.00	-2.96	469.28	469.31
Z	38102.00	-2.96	469.33	469.34
AA	38112.00	-2.96	469.38	469.38
CL BRG PIER 2	38117.00	-2.96	469.41	469.41
AB	38127.00	-2.96	469.46	469.46
AC	38137.00	-2.96	469.51	469.53
AD	38147.00	-2.96	469.56	469.61
AE	38157.00	-2.96	469.60	469.69
AF	38167.00	-2.96	469.65	469.77
AG	38177.00	-2.96	469.70	469.84
AH	38187.00	-2.96	469.75	469.90
AI	38197.00	-2.96	469.80	469.96
AJ	38207.00	-2.96	469.85	470.00
AK	38217.00	-2.96	469.90	470.03
AL	38227.00	-2.96	469.95	470.05
AM	38237.00	-2.96	470.00	470.07
AN	38247.00	-2.96	470.05	470.09
AO	38257.00	-2.96	470.10	470.11
AP	38267.00	-2.96	470.15	470.15
CL BRG PIER 3	38272.00	-2.96	470.17	470.17
AQ	38282.00	-2.96	470.22	470.22
AR	38292.00	-2.96	470.27	470.29
AS	38302.00	-2.96	470.32	470.37
AT	38312.00	-2.96	470.37	470.45
AU	38322.00	-2.96	470.42	470.52
AV	38332.00	-2.96	470.47	470.60
AW	38342.00	-2.96	470.52	470.66
AX	38352.00	-2.96	470.57	470.71
AY	38362.00	-2.96	470.62	470.75
AZ	38372.00	-2.96	470.66	470.77
BA	38382.00	-2.96	470.69	470.78
BB	38392.00	-2.96	470.72	470.79
BC	38402.00	-2.96	470.75	470.78
BD	38412.00	-2.96	470.77	470.78
BE	38422.00	-2.96	470.79	470.79
CL BRG PIER 4	38427.00	-2.96	470.79	470.79
BF	38437.00	-2.96	470.80	470.80
BG	38447.00	-2.96	470.81	470.83
BH	38457.00	-2.96	470.81	470.85
BI	38467.00	-2.96	470.80	470.88
BJ	38477.00	-2.96	470.79	470.90
BK	38487.00	-2.96	470.77	470.90
BL	38497.00	-2.96	470.75	470.89
BM	38507.00	-2.96	470.72	470.87
BN	38517.00	-2.96	470.69	470.83
BO	38527.00	-2.96	470.66	470.78
BP	38537.00	-2.96	470.62	470.71
BQ	38547.00	-2.96	470.57	470.63
BR	38557.00	-2.96	470.52	470.55
BS	38567.00	-2.96	470.47	470.48
BT	38577.00	-2.96	470.42	470.42

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL BRG PIER 5	38582.00	-2.96	470.40	470.40
BU	38592.00	-2.96	470.35	470.35
BV	38602.00	-2.96	470.30	470.31
BW	38612.00	-2.96	470.25	470.29
BX	38622.00	-2.96	470.20	470.27
BY	38632.00	-2.96	470.15	470.25
BZ	38642.00	-2.96	470.10	470.22
CA	38652.00	-2.96	470.05	470.18
CB	38662.00	-2.96	470.00	470.14
CC	38672.00	-2.96	469.95	470.08
CD	38682.00	-2.96	469.90	470.01
CE	38692.00	-2.96	469.85	469.93
CF	38702.00	-2.96	469.80	469.86
CG	38712.00	-2.96	469.75	469.78
CH	38722.00	-2.96	469.70	469.70
CI	38732.00	-2.96	469.65	469.64
CL BRG PIER 6	38737.00	-2.96	469.62	469.62
CJ	38747.00	-2.96	469.57	469.57
CK	38757.00	-2.96	469.52	469.54
CL	38767.00	-2.96	469.47	469.52
CM	38777.00	-2.96	469.42	469.50
CN	38787.00	-2.96	469.37	469.48
CO	38797.00	-2.96	469.32	469.46
CP	38807.00	-2.96	469.27	469.42
CQ	38817.00	-2.96	469.22	469.37
CR	38827.00	-2.96	469.17	469.32
CS	38837.00	-2.96	469.12	469.25
CT	38847.00	-2.96	469.07	469.17
CU	38857.00	-2.96	469.02	469.09
CV	38867.00	-2.96	468.97	469.01
CW	38877.00	-2.96	468.92	468.93
CX	38887.00	-2.96	468.87	468.87
CL BRG PIER 7	38892.00	-2.96	468.85	468.85
CY	38902.00	-2.96	468.80	468.79
CZ	38912.00	-2.96	468.75	468.76
DA	38922.00	-2.96	468.70	468.73
DB	38932.00	-2.96	468.65	468.71
DC	38942.00	-2.96	468.60	468.68
DD	38952.00	-2.96	468.55	468.65
DE	38962.00	-2.96	468.50	468.61
DF	38972.00	-2.96	468.45	468.56
DG	38982.00	-2.96	468.40	468.50
DH	38992.00	-2.96	468.35	468.44
DI	39002.00	-2.96	468.30	468.36
DJ	39012.00	-2.96	468.25	468.29
DK	39022.00	-2.96	468.20	468.21
DL	39032.00	-2.96	468.15	468.14
DM	39042.00	-2.96	468.10	468.09
CL BRG PIER 8	39047.00	-2.96	468.07	468.07
DN	39057.00	-2.96	468.02	468.03
DO	39067.00	-2.96	467.97	468.01
DP	39077.00	-2.96	467.92	468.00
DQ	39087.00	-2.96	467.87	467.99
DR	39097.00	-2.96	467.82	467.98
DS	39107.00	-2.96	467.77	467.96
DT	39117.00	-2.96	467.72	467.93
DU	39127.00	-2.96	467.67	467.88
DV	39137.00	-2.96	467.62	467.81
DW	39147.00	-2.96	467.57	467.73
DX	39157.00	-2.96	467.52	467.64
DY	39167.00	-2.96	467.47	467.53
CL BRG E ABUT	39176.92	-2.96	467.42	467.42
BK OF E ABUT	39180.50	-2.96	467.40	467.40

℄ FAP 793 AND PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK OF W ABUT	37828.50	0.00	468.02	468.02
CL BRG W ABUT	37832.08	0.00	468.04	468.04
A	37842.08	0.00	468.09	468.15
B	37852.08	0.00	468.14	468.26
C	37862.08	0.00	468.19	468.35
D	37872.08	0.00	468.24	468.43
E	37882.08	0.00	468.29	468.49
F	37892.08	0.00	468.34	468.54
G	37902.08	0.00	468.39	468.58
H	37912.08	0.00	468.44	468.60
I	37922.08	0.00	468.49	468.61
J	37932.08	0.00	468.54	468.62
K	37942.08	0.00	468.58	468.63
L	37952.08	0.00	468.63	468.65
CL BRG PIER 1	37962.00	0.00	468.68	468.68
M	37972.00	0.00	468.73	468.73
N	37982.00	0.00	468.78	468.79
O	37992.00	0.00	468.83	468.86
P	38002.00	0.00	468.88	468.93
Q	38012.00	0.00	468.93	469.01
R	38022.00	0.00	468.98	469.08
S	38032.00	0.00	469.03	469.14
T	38042.00	0.00	469.08	469.20
U	38052.00	0.00	469.13	469.24
V	38062.00	0.00	469.18	469.27
W	38072.00	0.00	469.23	469.30
X	38082.00	0.00	469.28	469.33
Y	38092.00	0.00	469.33	469.35
Z	38102.00	0.00	469.38	469.38
AA	38112.00	0.00	469.43	469.42
CL BRG PIER 2	38117.00	0.00	469.45	469.45
AB	38127.00	0.00	469.50	469.51
AC	38137.00	0.00	469.55	469.58
AD	38147.00	0.00	469.60	469.65
AE	38157.00	0.00	469.65	469.74
AF	38167.00	0.00	469.70	469.81
AG	38177.00	0.00	469.75	469.89
AH	38187.00	0.00	469.80	469.95
AI	38197.00	0.00	469.85	470.00
AJ	38207.00	0.00	469.90	470.04
AK	38217.00	0.00	469.95	470.07
AL	38227.00	0.00	470.00	470.09
AM	38237.00	0.00	470.05	470.11
AN	38247.00	0.00	470.09	470.13
AO	38257.00	0.00	470.14	470.15
AP	38267.00	0.00	470.19	470.19
CL BRG PIER 3	38272.00	0.00	470.22	470.22
AQ	38282.00	0.00	470.27	470.27
AR	38292.00	0.00	470.32	470.34
AS	38302.00	0.00	470.37	470.41
AT	38312.00	0.00	470.42	470.49
AU	38322.00	0.00	470.47	470.57
AV	38332.00	0.00	470.52	470.64
AW	38342.00	0.00	470.57	470.70
AX	38352.00	0.00	470.61	470.75
AY	38362.00	0.00	470.66	470.79
AZ	38372.00	0.00	470.70	470.82
BA	38382.00	0.00	470.74	470.83
BB	38392.00	0.00	470.77	470.83
BC	38402.00	0.00	470.80	470.83
BD	38412.00	0.00	470.82	470.82
BE	38422.00	0.00	470.83	470.83
CL BRG PIER 4	38427.00	0.00	470.84	470.84
BF	38437.00	0.00	470.85	470.85
BG	38447.00	0.00	470.85	470.87
BH	38457.00	0.00	470.85	470.90
BI	38467.00	0.00	470.84	470.92
BJ	38477.00	0.00	470.83	470.94
BK	38487.00	0.00	470.82	470.95
BL	38497.00	0.00	470.80	470.94
BM	38507.00	0.00	470.77	470.92
BN	38517.00	0.00	470.74	470.88
BO	38527.00	0.00	470.70	470.82
BP	38537.00	0.00	470.66	470.76
BQ	38547.00	0.00	470.61	470.68
BR	38557.00	0.00	470.57	470.60
BS	38567.00	0.00	470.52	470.52
BT	38577.00	0.00	470.46	470.46

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL BRG PIER 5	38582.00	0.00	470.44	470.44
BU	38592.00	0.00	470.39	470.39
BV	38602.00	0.00	470.34	470.36
BW	38612.00	0.00	470.29	470.34
BX	38622.00	0.00	470.24	470.32
BY	38632.00	0.00	470.19	470.29
BZ	38642.00	0.00	470.14	470.26
CA	38652.00	0.00	470.09	470.23
CB	38662.00	0.00	470.04	470.18
CC	38672.00	0.00	469.99	470.12
CD	38682.00	0.00	469.94	470.05
CE	38692.00	0.00	469.89	469.98
CF	38702.00	0.00	469.84	469.90
CG	38712.00	0.00	469.79	469.82
CH	38722.00	0.00	469.74	469.75
CI	38732.00	0.00	469.69	469.69
CL BRG PIER 6	38737.00	0.00	469.67	469.67
CJ	38747.00	0.00	469.61	469.62
CK	38757.00	0.00	469.57	469.59
CL	38767.00	0.00	469.52	469.57
CM	38777.00	0.00	469.46	469.55
CN	38787.00	0.00	469.42	469.53
CO	38797.00	0.00	469.36	469.50
CP	38807.00	0.00	469.32	469.47
CQ	38817.00	0.00	469.27	469.42
CR	38827.00	0.00	469.21	469.36
CS	38837.00	0.00	469.17	469.29
CT	38847.00	0.00	469.11	469.22
CU	38857.00	0.00	469.07	469.14
CV	38867.00	0.00	469.02	469.05
CW	38877.00	0.00	468.96	468.98
CX	38887.00	0.00	468.92	468.91
CL BRG PIER 7	38892.00	0.00	468.89	468.89
CY	38902.00	0.00	468.84	468.84
CZ	38912.00	0.00	468.79	468.80
DA	38922.00	0.00	468.74	468.78
DB	38932.00	0.00	468.69	468.75
DC	38942.00	0.00	468.64	468.73
DD	38952.00	0.00	468.59	468.69
DE	38962.00	0.00	468.54	468.65
DF	38972.00	0.00	468.49	468.61
DG	38982.00	0.00	468.44	468.55
DH	38992.00	0.00	468.39	468.48
DI	39002.00	0.00	468.34	468.41
DJ	39012.00	0.00	468.29	468.33
DK	39022.00	0.00	468.24	468.26
DL	39032.00	0.00	468.19	468.19
DM	39042.00	0.00	468.14	468.13
CL BRG PIER 8	39047.00	0.00	468.12	468.12
DN	39057.00	0.00	468.07	468.08
DO	39067.00	0.00	468.02	468.06
DP	39077.00	0.00	467.96	468.05
DQ	39087.00	0.00	467.92	468.04
DR	39097.00	0.00	467.87	468.02
DS	39107.00	0.00	467.82	468.00
DT	39117.00	0.00	467.77	467.97
DU	39127.00	0.00	467.71	467.92
DV	39137.00	0.00	467.67	467.86
DW	39147.00	0.00	467.62	467.78
DX	39157.00	0.00	467.57	467.68
DY	39167.00	0.00	467.52	467.58
CL BRG E ABUT	39176.92	0.00	467.47	467.47
BK OF E ABUT	39180.50	0.00	467.45	467.45

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK OF W ABUT	37828.50	2.96	467.98	467.98
CL BRG W ABUT	37832.08	2.96	468.00	468.00
A	37842.08	2.96	468.05	468.11
B	37852.08	2.96	468.09	468.21
C	37862.08	2.96	468.14	468.31
D	37872.08	2.96	468.19	468.39
E	37882.08	2.96	468.24	468.45
F	37892.08	2.96	468.29	468.50
G	37902.08	2.96	468.34	468.53
H	37912.08	2.96	468.39	468.55
I	37922.08	2.96	468.44	468.56
J	37932.08	2.96	468.49	468.57
K	37942.08	2.96	468.54	468.58
L	37952.08	2.96	468.59	468.60
CL BRG PIER 1	37962.00	2.96	468.64	468.64
M	37972.00	2.96	468.69	468.68
N	37982.00	2.96	468.74	468.74
O	37992.00	2.96	468.79	468.81
P	38002.00	2.96	468.84	468.89
Q	38012.00	2.96	468.89	468.97
R	38022.00	2.96	468.94	469.04
S	38032.00	2.96	468.99	469.10
T	38042.00	2.96	469.04	469.15
U	38052.00	2.96	469.08	469.20
V	38062.00	2.96	469.13	469.23
W	38072.00	2.96	469.18	469.26
X	38082.00	2.96	469.23	469.28
Y	38092.00	2.96	469.28	469.31
Z	38102.00	2.96	469.33	469.34
AA	38112.00	2.96	469.38	469.38
CL BRG PIER 2	38117.00	2.96	469.41	469.41
AB	38127.00	2.96	469.46	469.46
AC	38137.00	2.96	469.51	469.53
AD	38147.00	2.96	469.56	469.61
AE	38157.00	2.96	469.60	469.69
AF	38167.00	2.96	469.65	469.77
AG	38177.00	2.96	469.70	469.84
AH	38187.00	2.96	469.75	469.90
AI	38197.00	2.96	469.80	469.96
AJ	38207.00	2.96	469.85	470.00
AK	38217.00	2.96	469.90	470.03
AL	38227.00	2.96	469.95	470.05
AM	38237.00	2.96	470.00	470.07
AN	38247.00	2.96	470.05	470.09
AO	38257.00	2.96	470.10	470.11
AP	38267.00	2.96	470.15	470.15
CL BRG PIER 3	38272.00	2.96	470.17	470.17
AQ	38282.00	2.96	470.22	470.22
AR	38292.00	2.96	470.27	470.29
AS	38302.00	2.96	470.32	470.37
AT	38312.00	2.96	470.37	470.45
AU	38322.00	2.96	470.42	470.52
AV	38332.00	2.96	470.47	470.60
AW	38342.00	2.96	470.52	470.66
AX	38352.00	2.96	470.57	470.71
AY	38362.00	2.96	470.62	470.75
AZ	38372.00	2.96	470.66	470.77
BA	38382.00	2.96	470.69	470.78
BB	38392.00	2.96	470.72	470.79
BC	38402.00	2.96	470.75	470.78
BD	38412.00	2.96	470.77	470.78
BE	38422.00	2.96	470.79	470.79
CL BRG PIER 4	38427.00	2.96	470.79	470.79
BF	38437.00	2.96	470.80	470.80
BG	38447.00	2.96	470.81	470.83
BH	38457.00	2.96	470.81	470.85
BI	38467.00	2.96	470.80	470.88
BJ	38477.00	2.96	470.79	470.90
BK	38487.00	2.96	470.77	470.90
BL	38497.00	2.96	470.75	470.89
BM	38507.00	2.96	470.72	470.87
BN	38517.00	2.96	470.69	470.83
BO	38527.00	2.96	470.66	470.78
BP	38537.00	2.96	470.62	470.71
BQ	38547.00	2.96	470.57	470.63
BR	38557.00	2.96	470.52	470.55
BS	38567.00	2.96	470.47	470.48
BT	38577.00	2.96	470.42	470.42

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL BRG PIER 5	38582.00	2.96	470.40	470.40
BU	38592.00	2.96	470.35	470.35
BV	38602.00	2.96	470.30	470.31
BW	38612.00	2.96	470.25	470.29
BX	38622.00	2.96	470.20	470.27
BY	38632.00	2.96	470.15	470.25
BZ	38642.00	2.96	470.10	470.22
CA	38652.00	2.96	470.05	470.18
CB	38662.00	2.96	470.00	470.14
CC	38672.00	2.96	469.95	470.08
CD	38682.00	2.96	469.90	470.01
CE	38692.00	2.96	469.85	469.93
CF	38702.00	2.96	469.80	469.86
CG	38712.00	2.96	469.75	469.78
CH	38722.00	2.96	469.70	469.70
CI	38732.00	2.96	469.65	469.64
CL BRG PIER 6	38737.00	2.96	469.62	469.62
CJ	38747.00	2.96	469.57	469.57
CK	38757.00	2.96	469.52	469.54
CL	38767.00	2.96	469.47	469.52
CM	38777.00	2.96	469.42	469.50
CN	38787.00	2.96	469.37	469.48
CO	38797.00	2.96	469.32	469.46
CP	38807.00	2.96	469.27	469.42
CQ	38817.00	2.96	469.22	469.37
CR	38827.00	2.96	469.17	469.32
CS	38837.00	2.96	469.12	469.25
CT	38847.00	2.96	469.07	469.17
CU	38857.00	2.96	469.02	469.09
CV	38867.00	2.96	468.97	469.01
CW	38877.00	2.96	468.92	468.93
CX	38887.00	2.96	468.87	468.87
CL BRG PIER 7	38892.00	2.96	468.85	468.85
CY	38902.00	2.96	468.80	468.79
CZ	38912.00	2.96	468.75	468.76
DA	38922.00	2.96	468.70	468.73
DB	38932.00	2.96	468.65	468.71
DC	38942.00	2.96	468.60	468.68
DD	38952.00	2.96	468.55	468.65
DE	38962.00	2.96	468.50	468.61
DF	38972.00	2.96	468.45	468.56
DG	38982.00	2.96	468.40	468.50
DH	38992.00	2.96	468.35	468.44
DI	39002.00	2.96	468.30	468.36
DJ	39012.00	2.96	468.25	468.29
DK	39022.00	2.96	468.20	468.21
DL	39032.00	2.96	468.15	468.14
DM	39042.00	2.96	468.10	468.09
CL BRG PIER 8	39047.00	2.96	468.07	468.07
DN	39057.00	2.96	468.02	468.03
DO	39067.00	2.96	467.97	468.01
DP	39077.00	2.96	467.92	468.00
DQ	39087.00	2.96	467.87	467.99
DR	39097.00	2.96	467.82	467.98
DS	39107.00	2.96	467.77	467.96
DT	39117.00	2.96	467.72	467.93
DU	39127.00	2.96	467.67	467.88
DV	39137.00	2.96	467.62	467.81
DW	39147.00	2.96	467.57	467.73
DX	39157.00	2.96	467.52	467.64
DY	39167.00	2.96	467.47	467.53
CL BRG E ABUT	39176.92	2.96	467.42	467.42
BK OF E ABUT	39180.50	2.96	467.40	467.40

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK OF W ABUT	37828.50	8.87	467.89	467.89
CL BRG W ABUT	37832.08	8.87	467.91	467.91
A	37842.08	8.87	467.96	468.02
B	37852.08	8.87	468.01	468.12
C	37862.08	8.87	468.06	468.22
D	37872.08	8.87	468.11	468.30
E	37882.08	8.87	468.15	468.36
F	37892.08	8.87	468.20	468.41
G	37902.08	8.87	468.25	468.44
H	37912.08	8.87	468.30	468.46
I	37922.08	8.87	468.35	468.47
J	37932.08	8.87	468.40	468.48
K	37942.08	8.87	468.45	468.49
L	37952.08	8.87	468.50	468.51
CL BRG PIER 1	37962.00	8.87	468.55	468.55
M	37972.00	8.87	468.60	468.59
N	37982.00	8.87	468.65	468.65
O	37992.00	8.87	468.70	468.73
P	38002.00	8.87	468.75	468.80
Q	38012.00	8.87	468.80	468.88
R	38022.00	8.87	468.85	468.95
S	38032.00	8.87	468.90	469.01
T	38042.00	8.87	468.95	469.06
U	38052.00	8.87	469.00	469.11
V	38062.00	8.87	469.05	469.14
W	38072.00	8.87	469.10	469.17
X	38082.00	8.87	469.14	469.19
Y	38092.00	8.87	469.19	469.22
Z	38102.00	8.87	469.24	469.25
AA	38112.00	8.87	469.29	469.29
CL BRG PIER 2	38117.00	8.87	469.32	469.32
AB	38127.00	8.87	469.37	469.37
AC	38137.00	8.87	469.42	469.44
AD	38147.00	8.87	469.47	469.52
AE	38157.00	8.87	469.52	469.60
AF	38167.00	8.87	469.57	469.68
AG	38177.00	8.87	469.61	469.75
AH	38187.00	8.87	469.66	469.82
AI	38197.00	8.87	469.71	469.87
AJ	38207.00	8.87	469.76	469.91
AK	38217.00	8.87	469.81	469.94
AL	38227.00	8.87	469.86	469.96
AM	38237.00	8.87	469.91	469.98
AN	38247.00	8.87	469.96	470.00
AO	38257.00	8.87	470.01	470.02
AP	38267.00	8.87	470.06	470.06
CL BRG PIER 3	38272.00	8.87	470.09	470.09
AQ	38282.00	8.87	470.13	470.14
AR	38292.00	8.87	470.18	470.20
AS	38302.00	8.87	470.23	470.28
AT	38312.00	8.87	470.28	470.36
AU	38322.00	8.87	470.33	470.44
AV	38332.00	8.87	470.38	470.51
AW	38342.00	8.87	470.43	470.57
AX	38352.00	8.87	470.48	470.62
AY	38362.00	8.87	470.53	470.66
AZ	38372.00	8.87	470.57	470.68
BA	38382.00	8.87	470.60	470.69
BB	38392.00	8.87	470.64	470.70
BC	38402.00	8.87	470.66	470.69
BD	38412.00	8.87	470.68	470.69
BE	38422.00	8.87	470.70	470.70
CL BRG PIER 4	38427.00	8.87	470.71	470.71
BF	38437.00	8.87	470.71	470.72
BG	38447.00	8.87	470.72	470.74
BH	38457.00	8.87	470.72	470.77
BI	38467.00	8.87	470.71	470.79
BJ	38477.00	8.87	470.70	470.81
BK	38487.00	8.87	470.68	470.81
BL	38497.00	8.87	470.66	470.81
BM	38507.00	8.87	470.64	470.78
BN	38517.00	8.87	470.60	470.74
BO	38527.00	8.87	470.57	470.69
BP	38537.00	8.87	470.53	470.62
BQ	38547.00	8.87	470.48	470.55
BR	38557.00	8.87	470.43	470.47
BS	38567.00	8.87	470.38	470.39
BT	38577.00	8.87	470.33	470.33

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL BRG PIER 5	38582.00	8.87	470.31	470.31
BU	38592.00	8.87	470.26	470.26
BV	38602.00	8.87	470.21	470.23
BW	38612.00	8.87	470.16	470.20
BX	38622.00	8.87	470.11	470.18
BY	38632.00	8.87	470.06	470.16
BZ	38642.00	8.87	470.01	470.13
CA	38652.00	8.87	469.96	470.09
CB	38662.00	8.87	469.91	470.05
CC	38672.00	8.87	469.86	469.99
CD	38682.00	8.87	469.81	469.92
CE	38692.00	8.87	469.76	469.85
CF	38702.00	8.87	469.71	469.77
CG	38712.00	8.87	469.66	469.69
CH	38722.00	8.87	469.61	469.61
CI	38732.00	8.87	469.56	469.55
CL BRG PIER 6	38737.00	8.87	469.53	469.53
CJ	38747.00	8.87	469.48	469.48
CK	38757.00	8.87	469.43	469.45
CL	38767.00	8.87	469.38	469.43
CM	38777.00	8.87	469.33	469.42
CN	38787.00	8.87	469.28	469.39
CO	38797.00	8.87	469.23	469.37
CP	38807.00	8.87	469.18	469.33
CQ	38817.00	8.87	469.13	469.29
CR	38827.00	8.87	469.08	469.23
CS	38837.00	8.87	469.03	469.16
CT	38847.00	8.87	468.98	469.08
CU	38857.00	8.87	468.93	469.00
CV	38867.00	8.87	468.88	468.92
CW	38877.00	8.87	468.83	468.85
CX	38887.00	8.87	468.78	468.78
CL BRG PIER 7	38892.00	8.87	468.76	468.76
CY	38902.00	8.87	468.71	468.71
CZ	38912.00	8.87	468.66	468.67
DA	38922.00	8.87	468.61	468.64
DB	38932.00	8.87	468.56	468.62
DC	38942.00	8.87	468.51	468.59
DD	38952.00	8.87	468.46	468.56
DE	38962.00	8.87	468.41	468.52
DF	38972.00	8.87	468.36	468.47
DG	38982.00	8.87	468.31	468.41
DH	38992.00	8.87	468.26	468.35
DI	39002.00	8.87	468.21	468.27
DJ	39012.00	8.87	468.16	468.20
DK	39022.00	8.87	468.11	468.12
DL	39032.00	8.87	468.06	468.05
DM	39042.00	8.87	468.01	468.00
CL BRG PIER 8	39047.00	8.87	467.98	467.98
DN	39057.00	8.87	467.93	467.94
DO	39067.00	8.87	467.88	467.92
DP	39077.00	8.87	467.83	467.91
DQ	39087.00	8.87	467.78	467.90
DR	39097.00	8.87	467.73	467.89
DS	39107.00	8.87	467.68	467.87
DT	39117.00	8.87	467.63	467.84
DU	39127.00	8.87	467.58	467.79
DV	39137.00	8.87	467.53	467.72
DW	39147.00	8.87	467.48	467.64
DX	39157.00	8.87	467.43	467.55
DY	39167.00	8.87	467.38	467.44
CL BRG E ABUT	39176.92	8.87	467.33	467.33
BK OF E ABUT	39180.50	8.87	467.31	467.31

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK OF W ABUT	37828.50	14.79	467.78	467.78
CL BRG W ABUT	37832.08	14.79	467.80	467.80
A	37842.08	14.79	467.85	467.92
B	37852.08	14.79	467.90	468.02
C	37862.08	14.79	467.95	468.11
D	37872.08	14.79	468.00	468.19
E	37882.08	14.79	468.05	468.26
F	37892.08	14.79	468.10	468.31
G	37902.08	14.79	468.15	468.34
H	37912.08	14.79	468.20	468.36
I	37922.08	14.79	468.25	468.37
J	37932.08	14.79	468.30	468.38
K	37942.08	14.79	468.35	468.39
L	37952.08	14.79	468.40	468.41
CL BRG PIER 1	37962.00	14.79	468.45	468.45
M	37972.00	14.79	468.50	468.49
N	37982.00	14.79	468.55	468.55
O	37992.00	14.79	468.60	468.62
P	38002.00	14.79	468.65	468.70
Q	38012.00	14.79	468.70	468.77
R	38022.00	14.79	468.74	468.84
S	38032.00	14.79	468.79	468.91
T	38042.00	14.79	468.84	468.96
U	38052.00	14.79	468.89	469.00
V	38062.00	14.79	468.94	469.04
W	38072.00	14.79	468.99	469.07
X	38082.00	14.79	469.04	469.09
Y	38092.00	14.79	469.09	469.12
Z	38102.00	14.79	469.14	469.15
AA	38112.00	14.79	469.19	469.19
CL BRG PIER 2	38117.00	14.79	469.22	469.22
AB	38127.00	14.79	469.26	469.27
AC	38137.00	14.79	469.31	469.34
AD	38147.00	14.79	469.36	469.42
AE	38157.00	14.79	469.41	469.50
AF	38167.00	14.79	469.46	469.58
AG	38177.00	14.79	469.51	469.65
AH	38187.00	14.79	469.56	469.71
AI	38197.00	14.79	469.61	469.76
AJ	38207.00	14.79	469.66	469.81
AK	38217.00	14.79	469.71	469.84
AL	38227.00	14.79	469.76	469.86
AM	38237.00	14.79	469.81	469.88
AN	38247.00	14.79	469.86	469.89
AO	38257.00	14.79	469.91	469.92
AP	38267.00	14.79	469.96	469.96
CL BRG PIER 3	38272.00	14.79	469.98	469.98
AQ	38282.00	14.79	470.03	470.03
AR	38292.00	14.79	470.08	470.10
AS	38302.00	14.79	470.13	470.18
AT	38312.00	14.79	470.18	470.26
AU	38322.00	14.79	470.23	470.33
AV	38332.00	14.79	470.28	470.40
AW	38342.00	14.79	470.33	470.47
AX	38352.00	14.79	470.38	470.52
AY	38362.00	14.79	470.42	470.56
AZ	38372.00	14.79	470.47	470.58
BA	38382.00	14.79	470.50	470.59
BB	38392.00	14.79	470.53	470.59
BC	38402.00	14.79	470.56	470.59
BD	38412.00	14.79	470.58	470.59
BE	38422.00	14.79	470.60	470.59
CL BRG PIER 4	38427.00	14.79	470.60	470.60
BF	38437.00	14.79	470.61	470.61
BG	38447.00	14.79	470.62	470.64
BH	38457.00	14.79	470.61	470.66
BI	38467.00	14.79	470.61	470.69
BJ	38477.00	14.79	470.60	470.70
BK	38487.00	14.79	470.58	470.71
BL	38497.00	14.79	470.56	470.70
BM	38507.00	14.79	470.53	470.68
BN	38517.00	14.79	470.50	470.64
BO	38527.00	14.79	470.47	470.59
BP	38537.00	14.79	470.42	470.52
BQ	38547.00	14.79	470.38	470.44
BR	38557.00	14.79	470.33	470.36
BS	38567.00	14.79	470.28	470.29
BT	38577.00	14.79	470.23	470.23

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL BRG PIER 5	38582.00	14.79	470.20	470.20
BU	38592.00	14.79	470.15	470.16
BV	38602.00	14.79	470.10	470.12
BW	38612.00	14.79	470.05	470.10
BX	38622.00	14.79	470.00	470.08
BY	38632.00	14.79	469.95	470.06
BZ	38642.00	14.79	469.90	470.03
CA	38652.00	14.79	469.85	469.99
CB	38662.00	14.79	469.80	469.94
CC	38672.00	14.79	469.75	469.89
CD	38682.00	14.79	469.70	469.82
CE	38692.00	14.79	469.65	469.74
CF	38702.00	14.79	469.60	469.66
CG	38712.00	14.79	469.55	469.58
CH	38722.00	14.79	469.50	469.51
CI	38732.00	14.79	469.45	469.45
CL BRG PIER 6	38737.00	14.79	469.43	469.43
CJ	38747.00	14.79	469.38	469.38
CK	38757.00	14.79	469.33	469.35
CL	38767.00	14.79	469.28	469.33
CM	38777.00	14.79	469.23	469.31
CN	38787.00	14.79	469.18	469.29
CO	38797.00	14.79	469.13	469.27
CP	38807.00	14.79	469.08	469.23
CQ	38817.00	14.79	469.03	469.18
CR	38827.00	14.79	468.98	469.13
CS	38837.00	14.79	468.93	469.06
CT	38847.00	14.79	468.88	468.98
CU	38857.00	14.79	468.83	468.90
CV	38867.00	14.79	468.78	468.82
CW	38877.00	14.79	468.73	468.74
CX	38887.00	14.79	468.68	468.68
CL BRG PIER 7	38892.00	14.79	468.65	468.65
CY	38902.00	14.79	468.60	468.60
CZ	38912.00	14.79	468.55	468.57
DA	38922.00	14.79	468.50	468.54
DB	38932.00	14.79	468.45	468.52
DC	38942.00	14.79	468.40	468.49
DD	38952.00	14.79	468.35	468.46
DE	38962.00	14.79	468.30	468.42
DF	38972.00	14.79	468.25	468.37
DG	38982.00	14.79	468.20	468.31
DH	38992.00	14.79	468.15	468.24
DI	39002.00	14.79	468.10	468.17
DJ	39012.00	14.79	468.05	468.09
DK	39022.00	14.79	468.00	468.02
DL	39032.00	14.79	467.95	467.95
DM	39042.00	14.79	467.90	467.90
CL BRG PIER 8	39047.00	14.79	467.88	467.88
DN	39057.00	14.79	467.83	467.84
DO	39067.00	14.79	467.78	467.82
DP	39077.00	14.79	467.73	467.81
DQ	39087.00	14.79	467.68	467.80
DR	39097.00	14.79	467.63	467.79
DS	39107.00	14.79	467.58	467.77
DT	39117.00	14.79	467.53	467.73
DU	39127.00	14.79	467.48	467.69
DV	39137.00	14.79	467.43	467.62
DW	39147.00	14.79	467.38	467.54
DX	39157.00	14.79	467.33	467.45
DY	39167.00	14.79	467.28	467.34
CL BRG E ABUT	39176.92	14.79	467.23	467.23
BK OF E ABUT	39180.50	14.79	467.21	467.21

NORTH EDGE OF SHOULDER

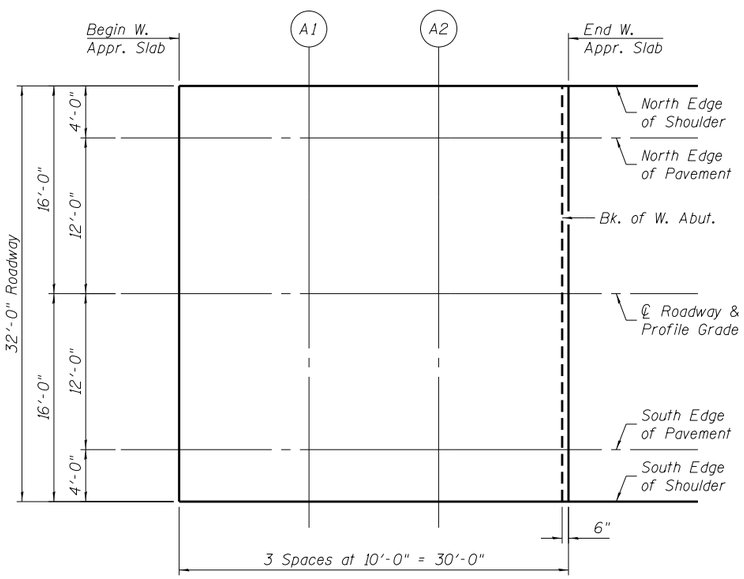
Location	Station	Offset	Theoretical Grade Elevations
Begin W. Appr. Slab	377+99.00	-16.00	467.61
A1	378+09.00	-16.00	467.66
A2	378+19.00	-16.00	467.71
End W. Appr. Slab	378+29.00	-16.00	467.76
Begin E. Appr. Slab	391+80.00	-16.00	467.19
A3	391+90.00	-16.00	467.14
A4	392+00.00	-16.00	467.09
End E. Appr. Slab	392+10.00	-16.00	467.04

NORTH EDGE OF PAVEMENT

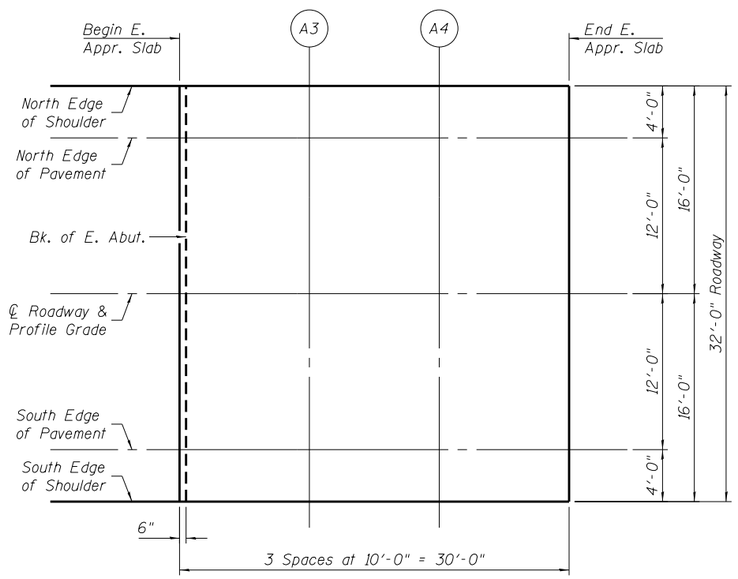
Location	Station	Offset	Theoretical Grade Elevations
Begin W. Appr. Slab	377+99.00	-12.00	467.69
A1	378+09.00	-12.00	467.74
A2	378+19.00	-12.00	467.79
End W. Appr. Slab	378+29.00	-12.00	467.84
Begin E. Appr. Slab	391+80.00	-12.00	467.27
A3	391+90.00	-12.00	467.22
A4	392+00.00	-12.00	467.17
End E. Appr. Slab	392+10.00	-12.00	467.12

℄ ROADWAY AND PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations
Begin W. Appr. Slab	377+99.00	0.00	467.87
A1	378+09.00	0.00	467.92
A2	378+19.00	0.00	467.97
End W. Appr. Slab	378+29.00	0.00	468.02
Begin E. Appr. Slab	391+80.00	0.00	467.45
A3	391+90.00	0.00	467.40
A4	392+00.00	0.00	467.35
End E. Appr. Slab	392+10.00	0.00	467.30



WEST APPROACH



EAST APPROACH

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Begin W. Appr. Slab	377+99.00	12.00	467.69
A1	378+09.00	12.00	467.74
A2	378+19.00	12.00	467.79
End W. Appr. Slab	378+29.00	12.00	467.84
Begin E. Appr. Slab	391+80.00	12.00	467.27
A3	391+90.00	12.00	467.22
A4	392+00.00	12.00	467.17
End E. Appr. Slab	392+10.00	12.00	467.12

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
Begin W. Appr. Slab	377+99.00	16.00	467.61
A1	378+09.00	16.00	467.66
A2	378+19.00	16.00	467.71
End W. Appr. Slab	378+29.00	16.00	467.76
Begin E. Appr. Slab	391+80.00	16.00	467.19
A3	391+90.00	16.00	467.14
A4	392+00.00	16.00	467.09
End E. Appr. Slab	392+10.00	16.00	467.04

PLAN

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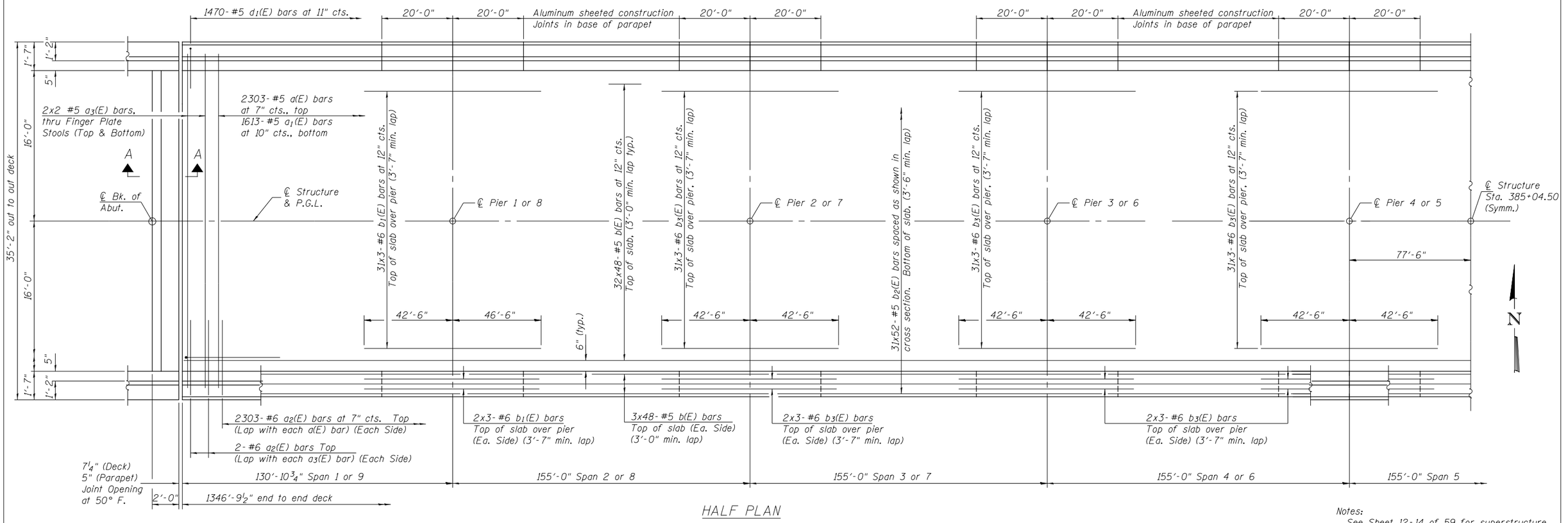
USER NAME = jsr	DESIGNED - CDL	REVISED -
	CHECKED - JSR	REVISED -
PLOT SCALE = 0.1667 ' / in.	DRAWN - JAA	REVISED -
PLOT DATE = 1/9/2017	DATE - 1/9/2017	REVISED -

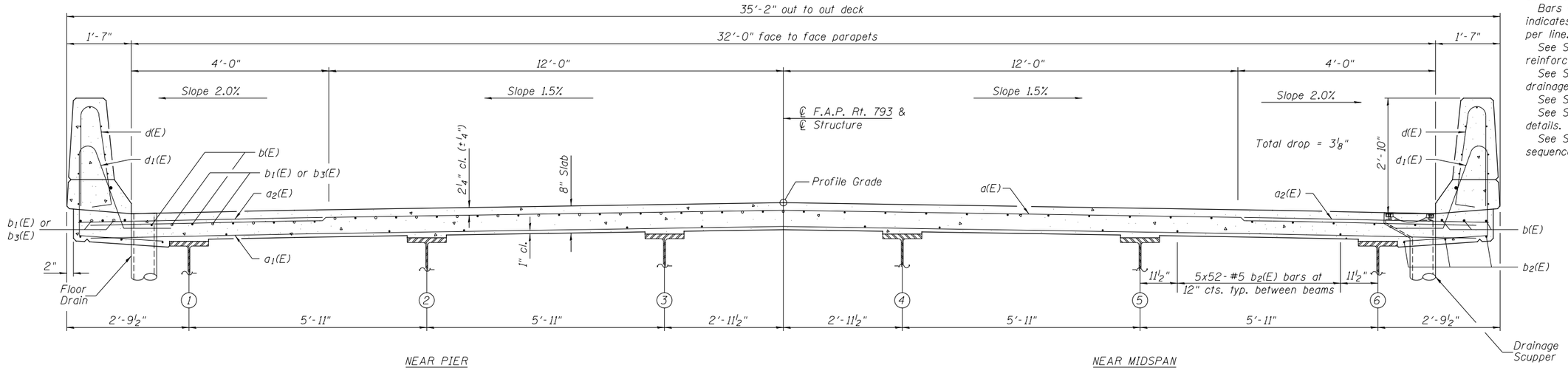
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB ELEVATIONS
STRUCTURE NO. 003-0062
SHEET NO. 10 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112) BR-1	BOND	95	36
		CONTRACT NO. 76967		
		ILLINOIS FED. AID PROJECT		



HALF PLAN



NEAR PIER

NEAR MIDSPAN

CROSS SECTION
(Looking Upstation)

Notes:
See Sheet 12-14 of 59 for superstructure details.
See Sheet 13 of 59 for Section A-A.
See Sheet 13 of 59 for Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet 12 of 59 for parapet reinforcement.
See Sheet 1 & 2 of 59 for floor drain and drainage scupper locations.
See Sheet 14 of 59 for floor drain details.
See Sheet 17 of 59 for drainage scupper details.
See Sheet 14 of 59 for deck pouring sequence.

MIN. BAR LAP
(Deck)
#5 bar (Top) = 3'-0"
#5 bar (Bott.) = 3'-6"
#6 bar (Top) = 3'-7"

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

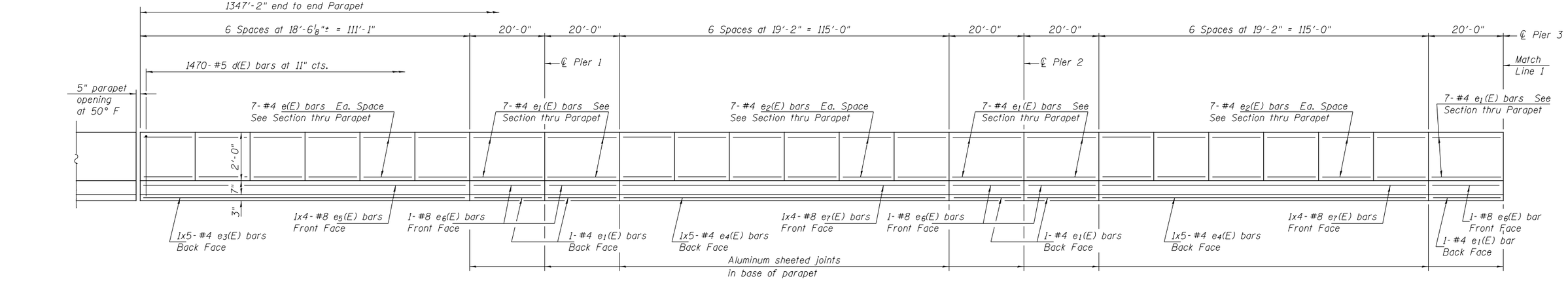
USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

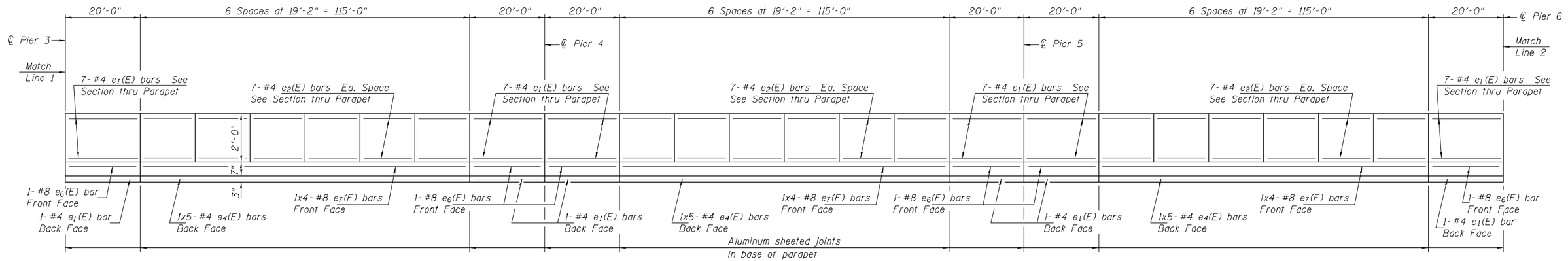
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

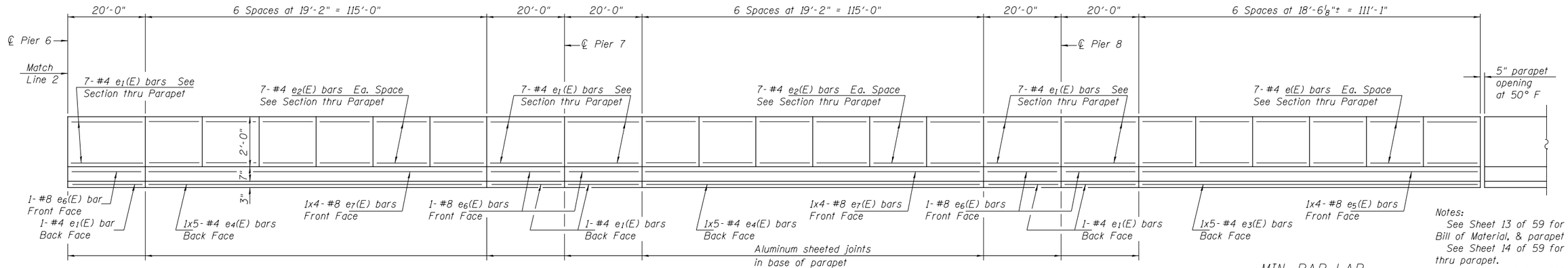
SUPERSTRUCTURE
STRUCTURE NO. 003-0062
SHEET NO. 11 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	37
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-011-SUPSTR.dgn







INSIDE ELEVATION OF PARAPET

MIN. BAR LAP
(Parapet)
#4 bar = 2'-8"
#8 bar = 5'-11"

Notes:
See Sheet 13 of 59 for bar details, Bill of Material, & parapet joint details.
See Sheet 14 of 59 for Section thru parapet.
Bars indicated thus 1X4-#4 etc., indicates 1 line of bars with 4 lengths per line.

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

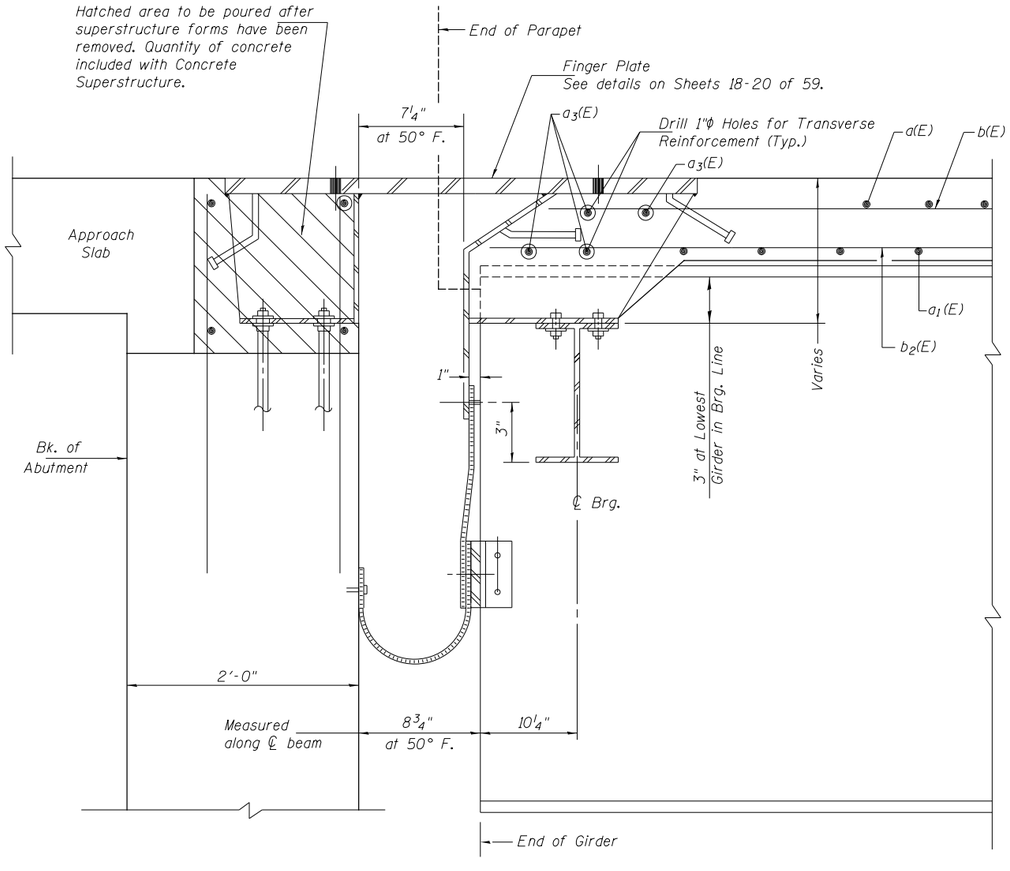
USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

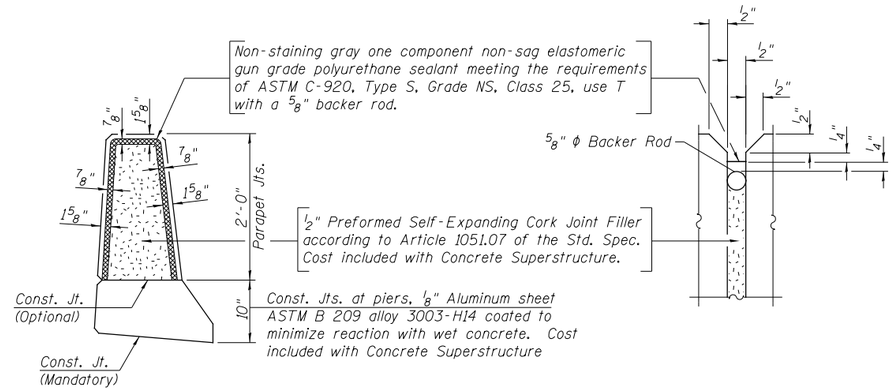
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 003-0062
SHEET NO. 12 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	38
		CONTRACT NO. 76967		
		ILLINOIS FED. AID PROJECT		

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-012-SUPSTR DET.dgn



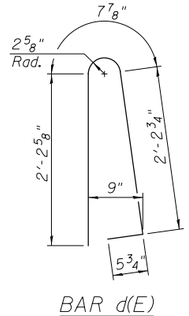
SECTION A-A



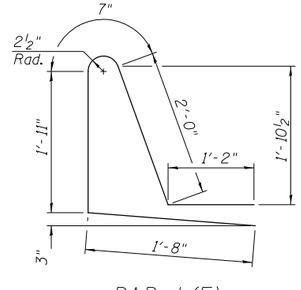
PARAPET JOINT DETAILS

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	2303	#5	34'-7"	———
a1(E)	1613	#5	33'-7"	———
a2(E)	4614	#6	6'-6"	———
a3(E)	16	#5	18'-10"	———
a4(E)	288	#5	1'-6"	———
b(E)	1824	#5	31'-0"	———
b1(E)	210	#6	32'-1"	———
b2(E)	1612	#5	29'-4"	———
b3(E)	630	#6	30'-9"	———
d(E)	2940	#5	5'-7"	
d1(E)	2940	#5	7'-4"	
e(E)	168	#4	18'-3"	———
e1(E)	256	#4	19'-9"	———
e2(E)	588	#4	18'-11"	———
e3(E)	20	#4	24'-4"	———
e4(E)	70	#4	25'-1"	———
e5(E)	16	#8	32'-2"	———
e6(E)	32	#8	19'-9"	———
e7(E)	56	#8	33'-2"	———
Reinforcement Bars, Epoxy Coated		Pound	394,880	
Concrete Superstructure		Cu. Yds.	1,542.7	



BAR d(E)



BAR d1(E)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

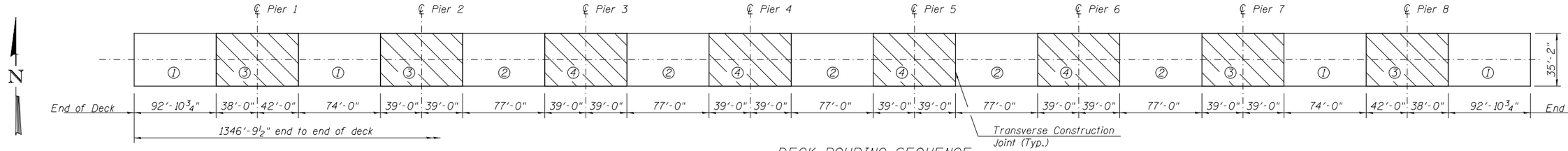
USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

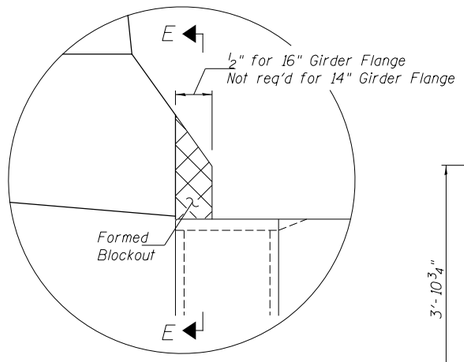
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 003-0062
SHEET NO. 13 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40.112)BR-1	BOND	95	39
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

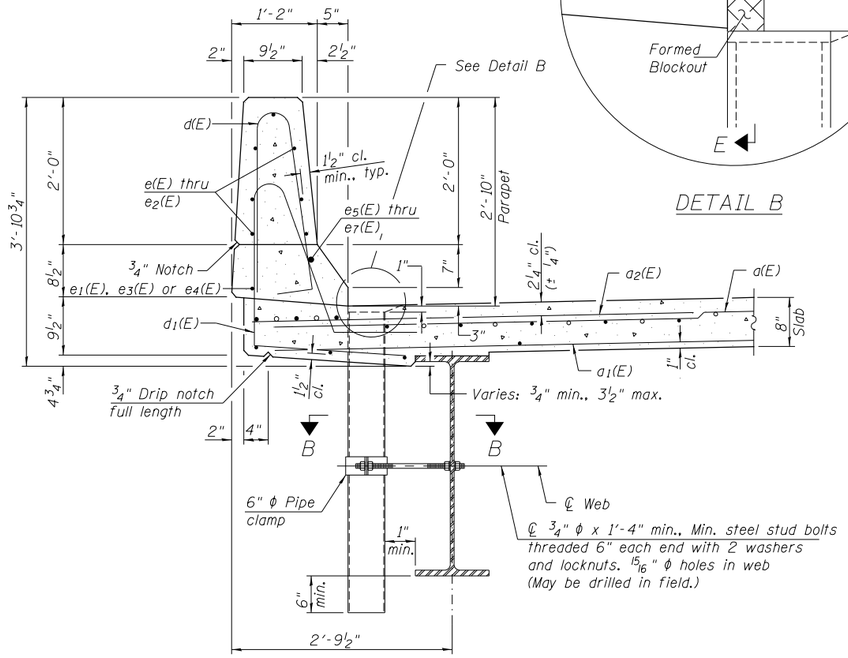
V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-013-SUPSTR DET.dgn



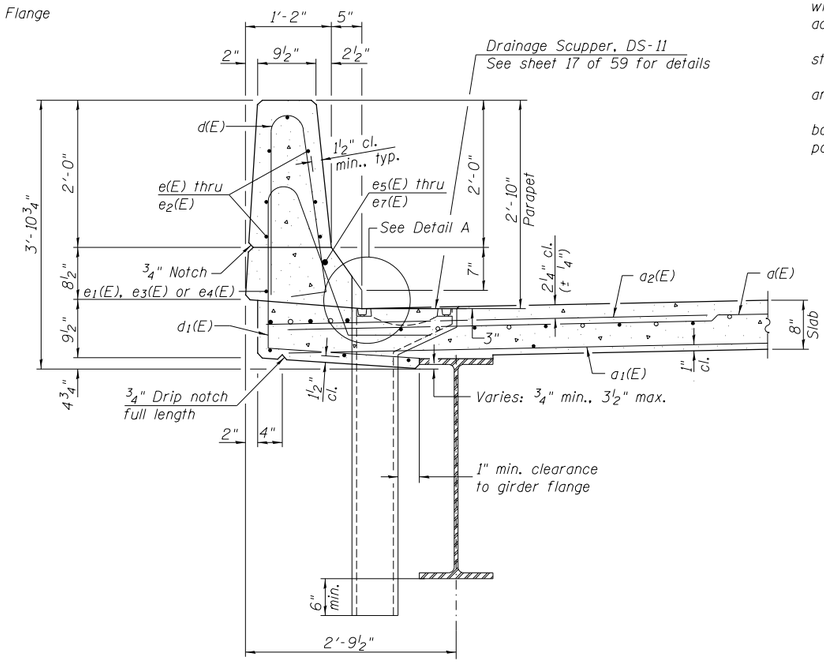
DECK POURING SEQUENCE



DETAIL B



SECTION THRU PARAPET



SECTION C-C THRU PARAPET SHOWING SCUPPER INSTALLATION

Notes:

Drains & Scuppers shall be located clear of all cross frames.

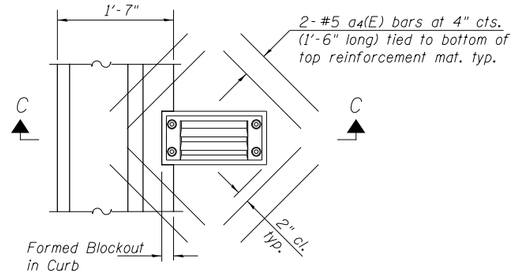
The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coating's Spec. SSPC-SP1 prior to painting.

Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

Galvanize clamping device according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.

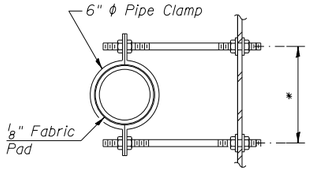
When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:

1) At least 72 hours shall have elapsed from the end of the previous pour.
2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.



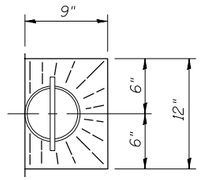
PLAN - REINFORCEMENT TREATMENT AT SCUPPERS

Note:
Cut longitudinal reinforcement to clear drainage scuppers.

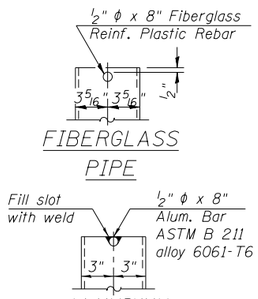


SECTION B-B

*Dimension as required by Pipe Clamp

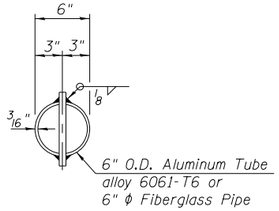


TOP PLAN

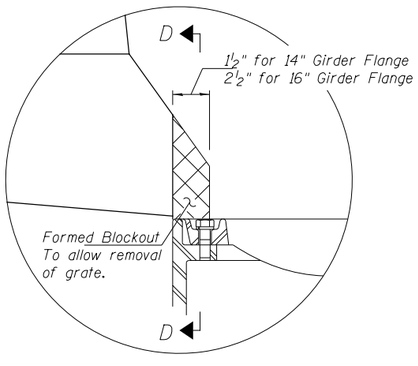


FIBERGLASS PIPE

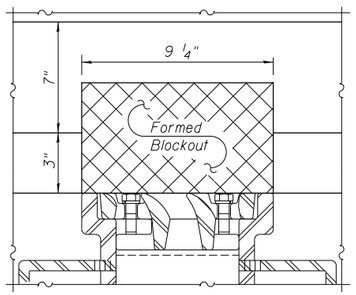
ALUMINUM TUBE



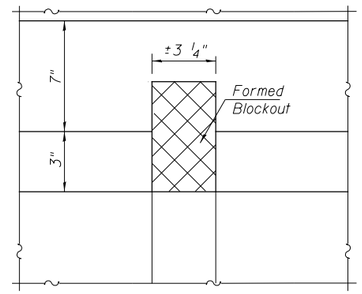
TOP PLAN (Showing Aluminum Tube)



DETAIL A



SECTION D-D



SECTION E-E

Hutchison Engineering, Inc. Jacksonville, Peoria & Shorewood, Illinois	USER NAME =	DESIGNED - BAN	REVISED -
	PLOT SCALE = NONE	CHECKED - JOH	REVISED -
	PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
		CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 003-0062

SHEET NO. 14 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	40
		CONTRACT NO. 76967		
		ILLINOIS FED. AID PROJECT		

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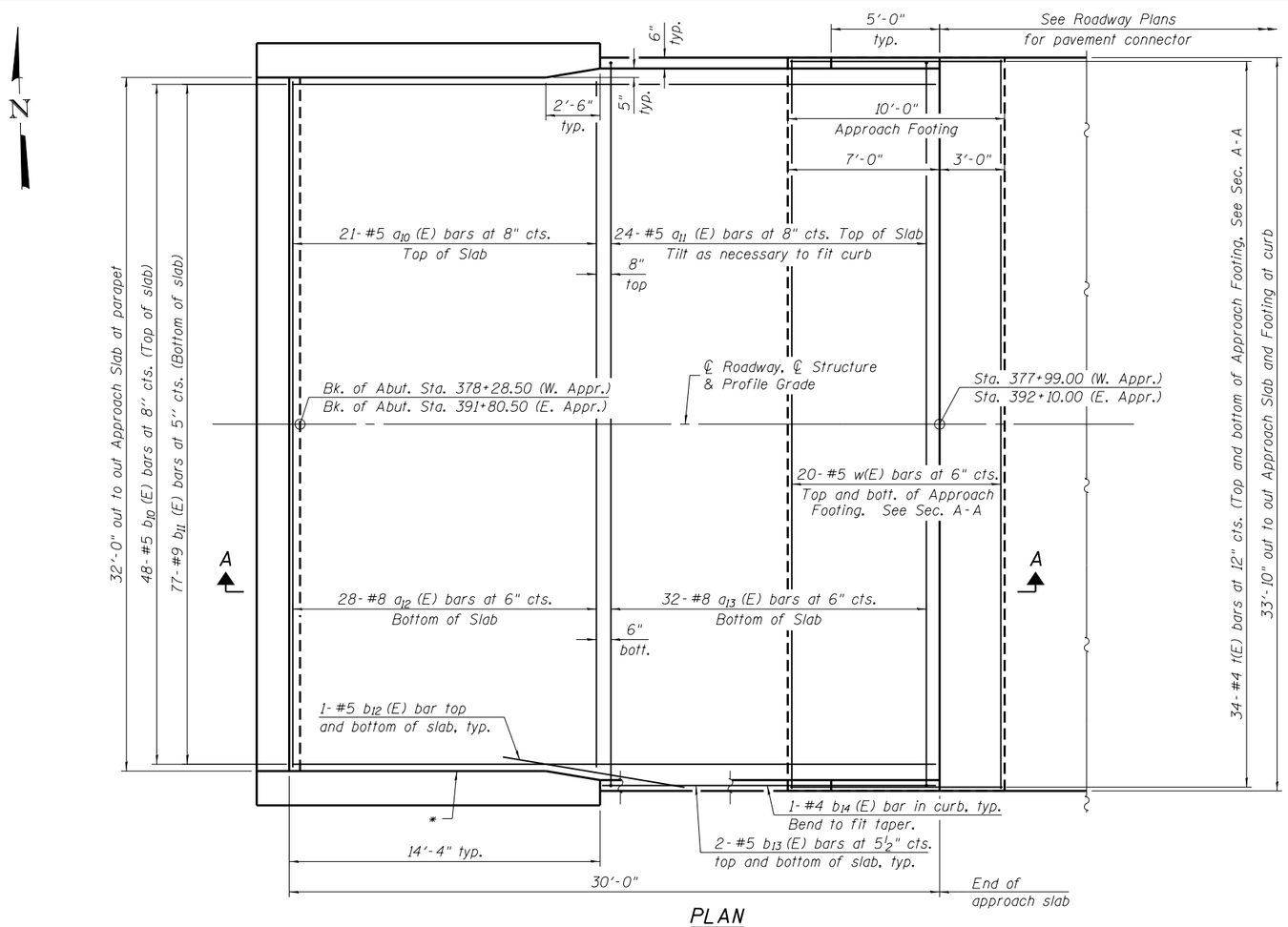
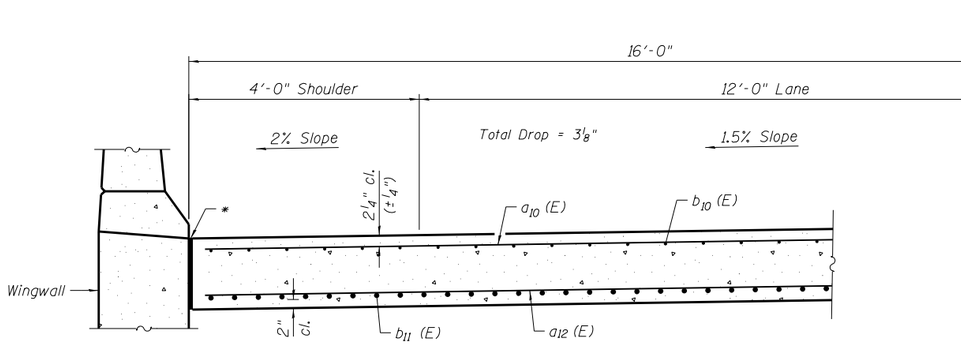


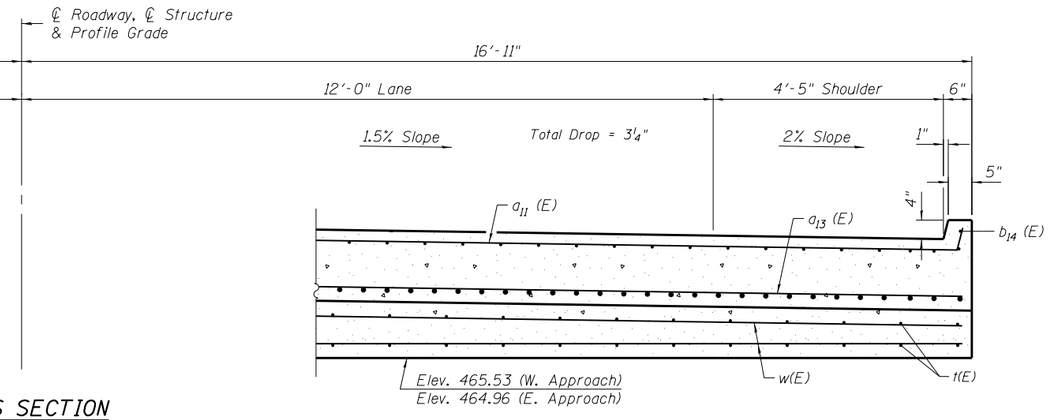
PLAN

(East approach shown, west approach similar)

* ½" Preformed Expansion Joint Filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet. Typ. each parapet.



NEAR ABUTMENT



CROSS SECTION

(Looking East)

AT APPROACH FOOTING

BASA-CIP-FS-0 07-22-16

(Sheet 1 of 2)

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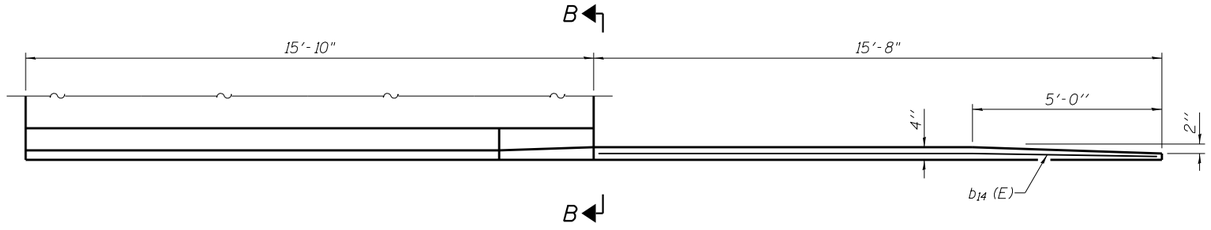
EFK•Moen, LLC
Civil Engineering Design
303 Fountains Parkway, Suite 240
Fairview Heights, IL 62208
Phone 618-206-4250

USER NAME = jsr	DESIGNED - CDL	REVISED -
	CHECKED - JSR	REVISED -
PLOT SCALE = 0.2 '/ in.	DRAWN - JAA	REVISED -
PLOT DATE = 1/9/2017	DATE - 1/9/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

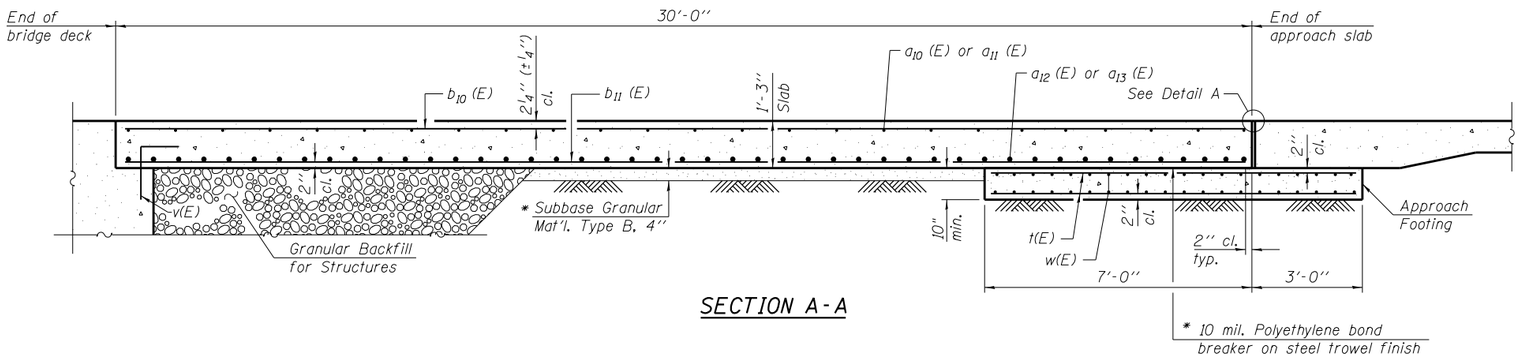
BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 003-0062
SHEET NO. 15 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112) BR-1	BOND	95	41
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

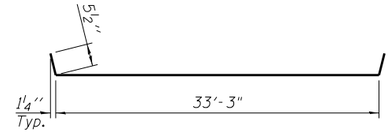


INSIDE ELEVATION OF PARAPET AND CURB

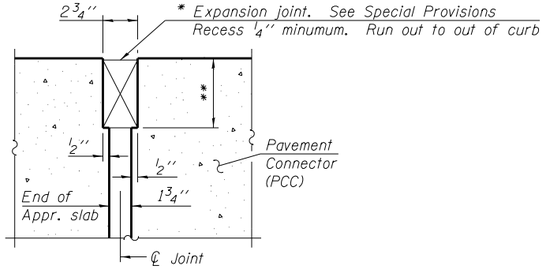
Notes:
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
Approach footing concrete shall be paid for as Concrete Structures.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For v(E) bar details, see sheet 30 of 59.
Cost of excavation for approach footing included with Concrete Structures.
For Granular Backfill for Structures and drainage treatment details, see sheet 3 of 59.



SECTION A-A

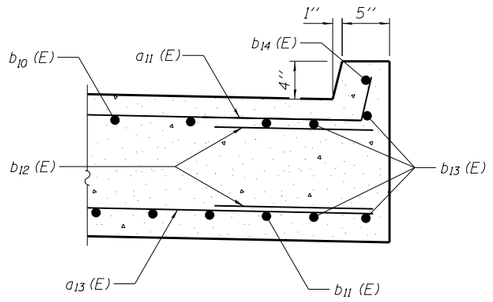


BAR a_{11} (E)



DETAIL A

(Detail A shown, applies to Highway Standard 420401 only. Detail A for pavement connector (HMA) may be found on Highway Standard 420406.)



SECTION B-B

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_{10} (E)	42	#5	31'-8"	
a_{11} (E)	48	#5	34'-2"	
a_{12} (E)	56	#8	31'-8"	
a_{13} (E)	64	#8	33'-6"	
b_{10} (E)	96	#5	29'-8"	
b_{11} (E)	154	#9	29'-8"	
b_{12} (E)	8	#5	8'-6"	
b_{13} (E)	16	#5	15'-4"	
b_{14} (E)	4	#4	15'-4"	
t(E)	136	#4	9'-8"	
w(E)	80	#5	33'-6"	
Concrete Structures		Cu. Yd.	24.2	
Concrete Superstructure (Approach Slab)		Cu. Yd.	92.1	
Reinforcement Bars, Epoxy Coated		Pound	36,100	

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

BASA-CIP-FS-0 07-22-16

(Sheet 2 of 2)

PRINT DATE: 1/9/2017 10:40:01 AM Y:\1602\00 IL 143 over Shoal Creek Phase II\DGN\Bridge\Final\Plotsheets\0030062-76967-019-Approach Slab Details.dgn

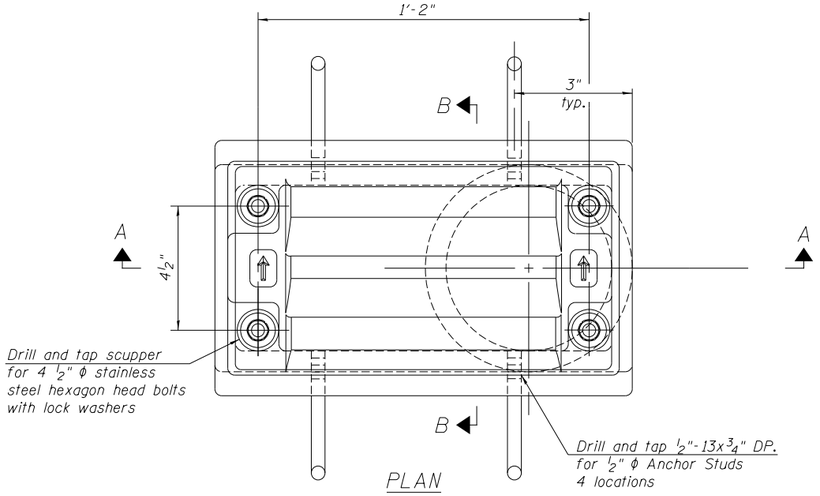
EFK•Moen, LLC
Civil Engineering Design
303 Fountains Parkway, Suite 240
Fairview Heights, IL 62208
Phone 618-206-4250

USER NAME = jsr	DESIGNED - CDL	REVISED -	
	CHECKED - JSR	REVISED -	
PLOT SCALE = 0.2 '/ in.	DRAWN - JAA	REVISED -	
PLOT DATE = 1/9/2017	DATE - 1/9/2017	REVISED -	

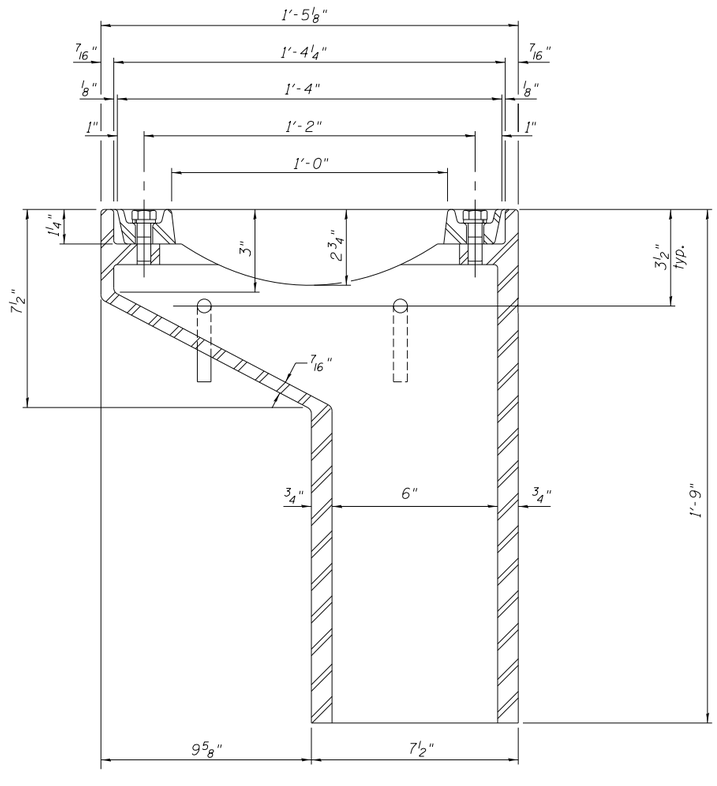
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 003-0062
SHEET NO. 16 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112) BR-1	BOND	95	42
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

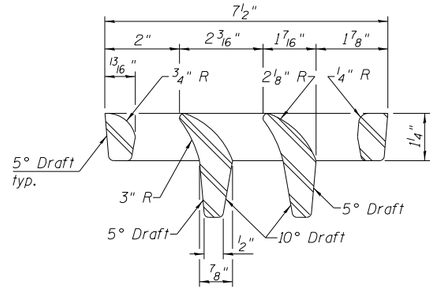


PLAN

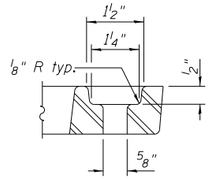


SECTION A-A

See sheet 14 of 59 for scupper location relative to parapet.



VANE GRATE DETAIL



BOLT HOLE DETAIL

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

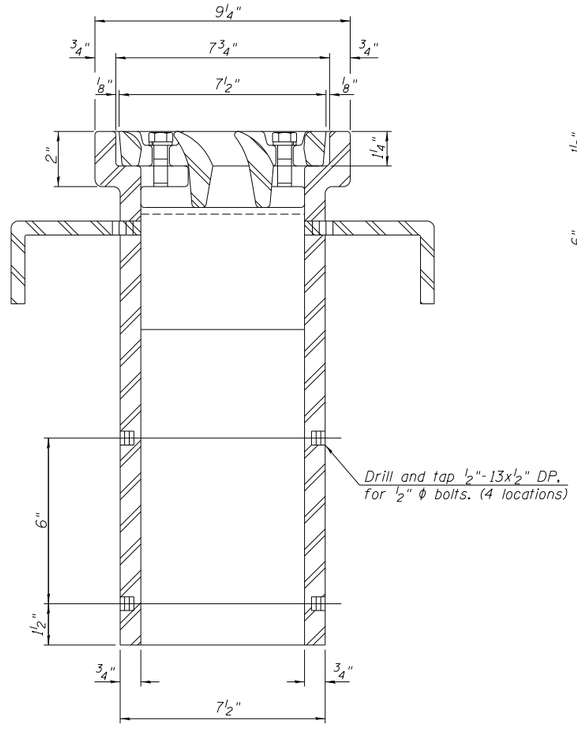
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

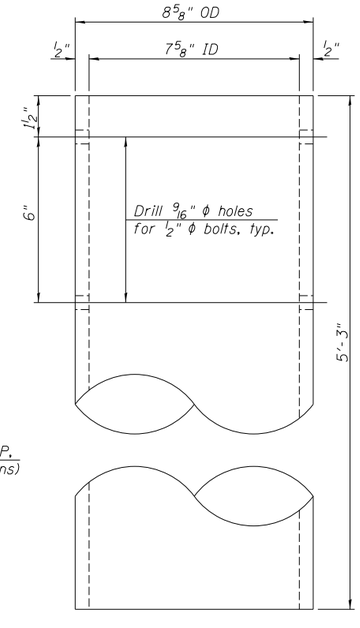
The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.

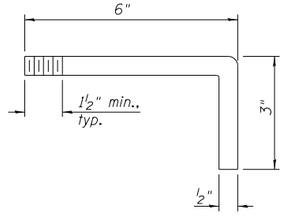
Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.



SECTION B-B



DOWNSPOUT



ANCHOR STUD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scuppers, DS-11	Each	36

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 003-0062

SHEET NO. 17 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	43
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

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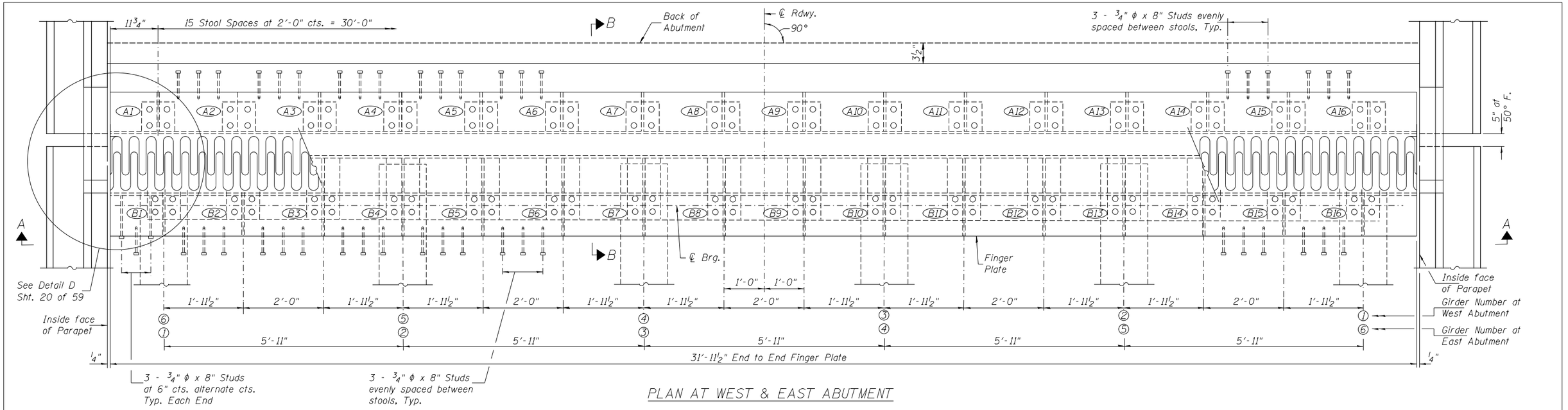
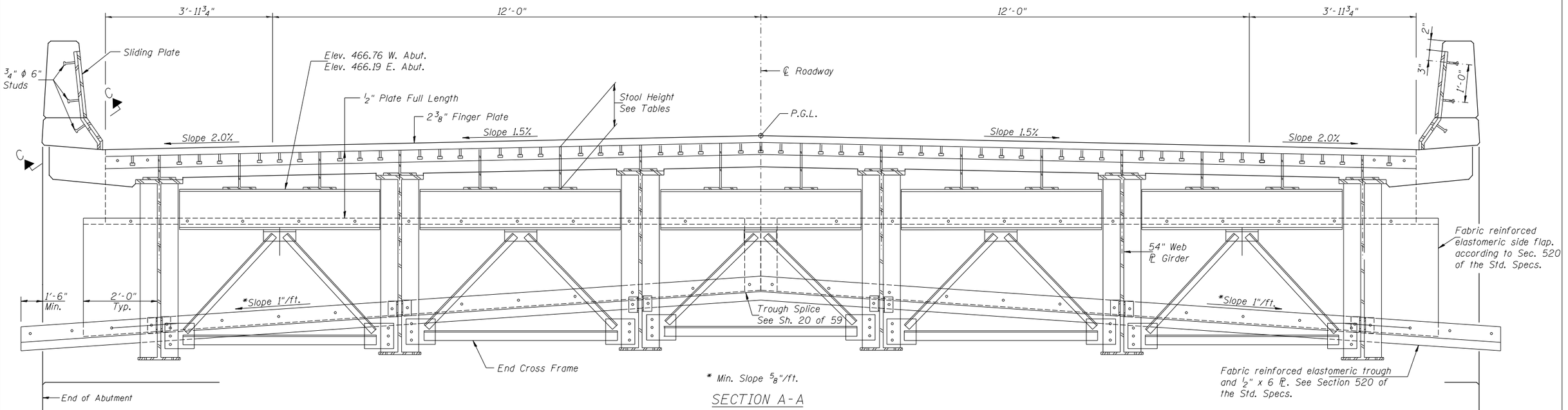


PLAN AT WEST & EAST ABUTMENT



* Min. Slope ⅝"/ft.

SECTION A-A

** STOOL HEIGHTS AT WEST ABUTMENT

Stool Mark	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16
Stool Height	9½"	10"	10⅜"	10⅞"	11⅛"	11½"	11⅞"	12⅛"	12⅛"	11⅞"	11½"	11⅛"	10⅞"	10⅜"	10"	9½"
Stool Mark	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16
Stool Height	6⅛"	10⅜"	10¾"	6⅛"	11½"	11⅞"	6⅛"	12½"	12½"	6⅛"	11⅞"	11½"	6⅛"	10¾"	10⅜"	6⅛"

** STOOL HEIGHTS AT EAST ABUTMENT

Stool Mark	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16
Stool Height	9½"	10"	10⅜"	10⅞"	11⅛"	11½"	11⅞"	12⅛"	12⅛"	11⅞"	11½"	11⅛"	10⅞"	10⅜"	10"	9½"
Stool Mark	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16
Stool Height	6⅛"	10⅜"	10¾"	6⅛"	11½"	11⅞"	6⅛"	12½"	12½"	6⅛"	11⅞"	11½"	6⅛"	10¾"	10⅜"	6⅛"

** Stool heights are figured at ℄ bearing and at front face of backwall.

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

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	CHECKED - BAN	REVISED -

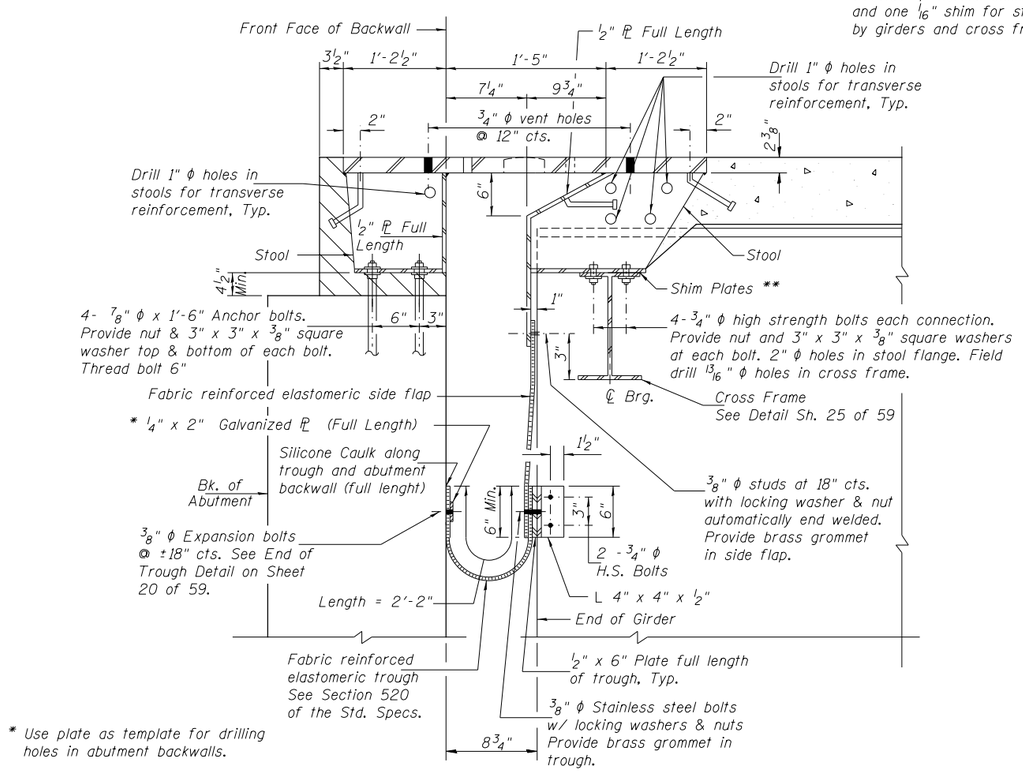
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FINGER PLATE EXPANSION JOINT DETAILS
STRUCTURE NO. 003-0062

SHEET NO. 18 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	44
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-018-FINGER PL 1.dgn

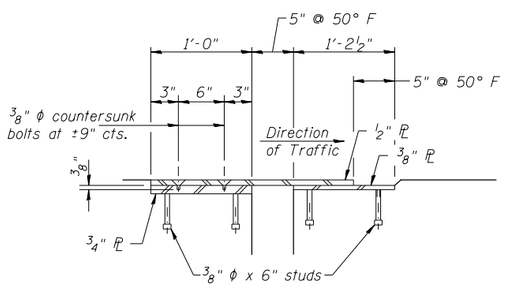


** Provide 1/4" normal shim plus one 1/8" and one 1/16" shim for stools supported by girders and cross frames.

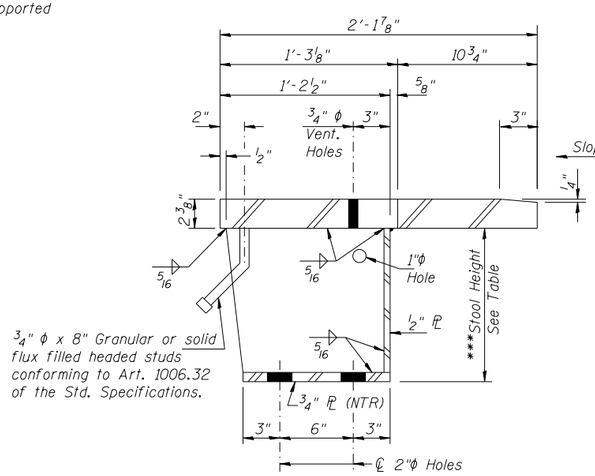
* Use plate as template for drilling holes in abutment backwalls.

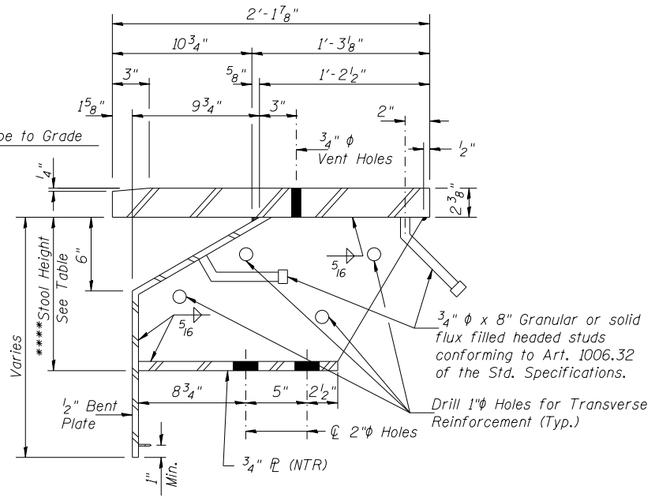
SECTION B-B

(Horizontal Dimensions @ 50° F)



SECTION C-C

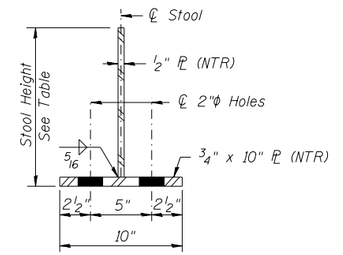




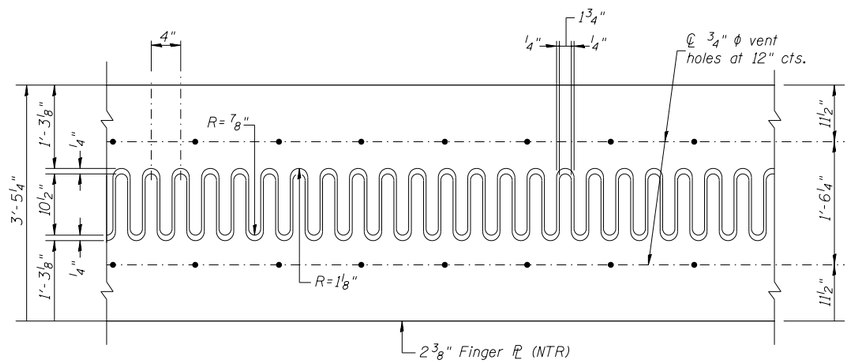
STOOL DETAILS

*** Stool Height in tables is taken at front face of Backwall

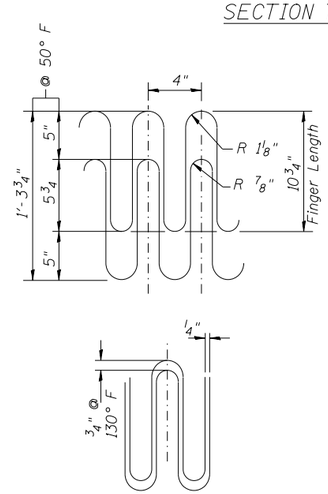
**** Stool Height in tables is taken at ℄ Bearing



SECTION THRU STOOL



FLAME CUTTING DIAGRAM



JOINT OPENING AND GEOMETRY DETAIL

Hutchison Engineering, Inc. Jacksonville, Peoria & Shorewood, Illinois	USER NAME =	DESIGNED - BAN	REVISED -
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	PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
		CHECKED - BAN	REVISED -

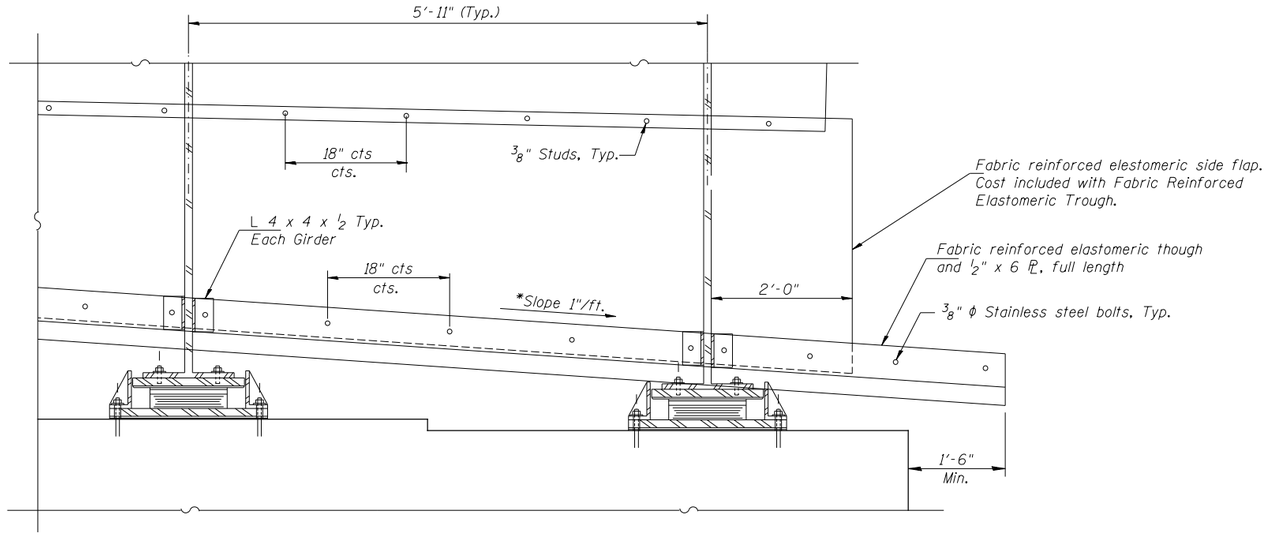
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FINGER PLATE EXPANSION JOINT DETAILS
STRUCTURE NO. 003-0062

SHEET NO. 19 OF 59 SHEETS

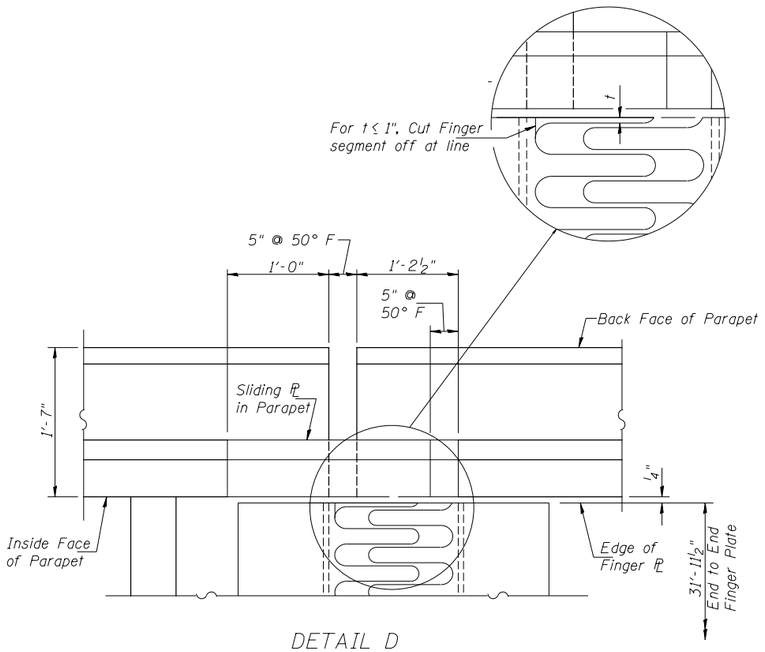
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	45
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-019-FINGER PT 2.dgn



ELASTOMERIC TROUGH DETAIL

* Minimum Slope 5/8"/ft.



DETAIL D

NOTES

Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

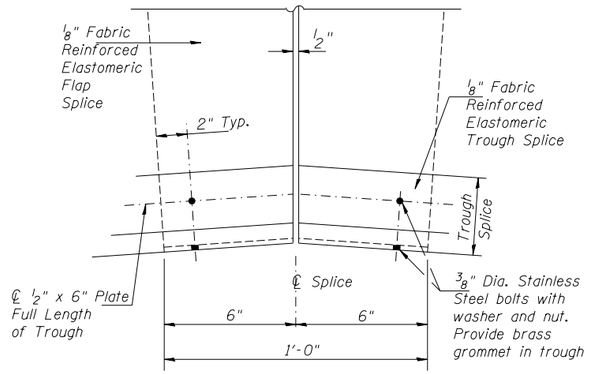
Finger plate expansion joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.

Finger plates and attachments shall conform to the requirements of AASHTO M270, Grade 50.

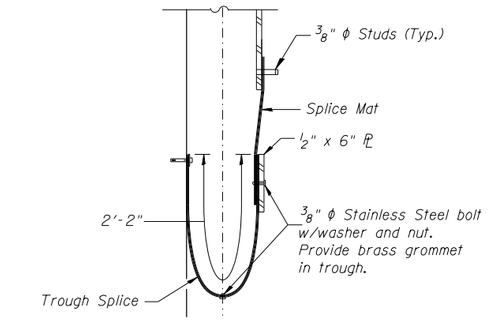
All steel components of the expansion joint including hardware associated with the trough system and sliding plates shall be galvanized after fabricating according to Section 520.03 of the Standard Specifications.

BILL OF MATERIAL

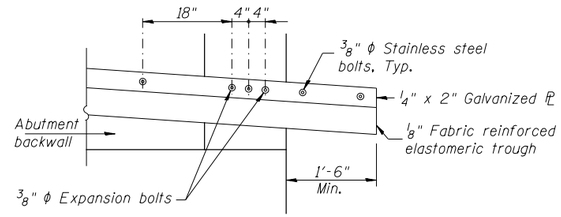
ITEM	UNIT	TOTAL
Finger Plate Expansion Joint, 6"	Foot	64
Fabric Reinforced Elastomeric Trough	Foot	77



TROUGH SPLICE DETAIL



SECTION THRU TROUGH SPLICE



END OF TROUGH DETAIL

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

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	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FINGER PLATE EXPANSION JOINT DETAILS
STRUCTURE NO. 003-0062

SHEET NO. 20 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	46
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

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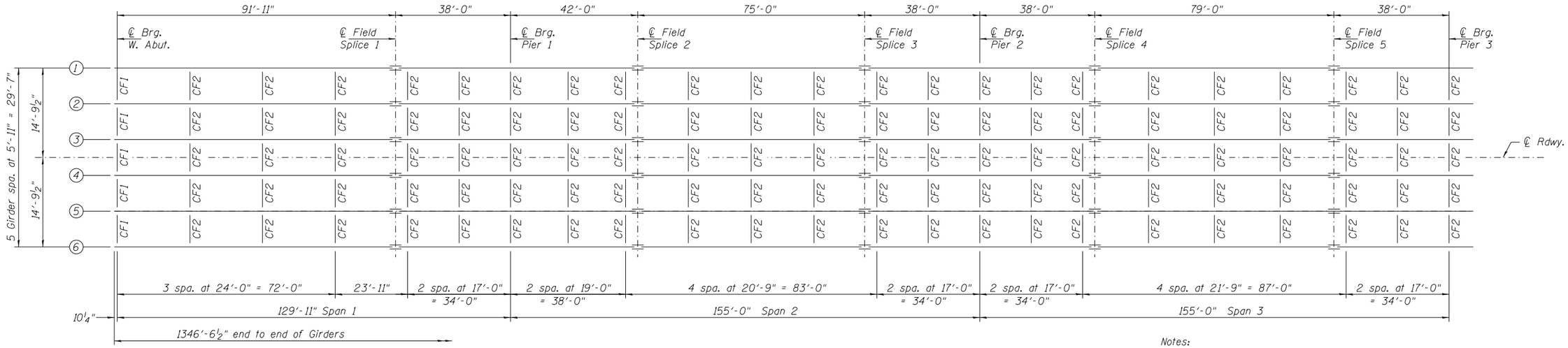
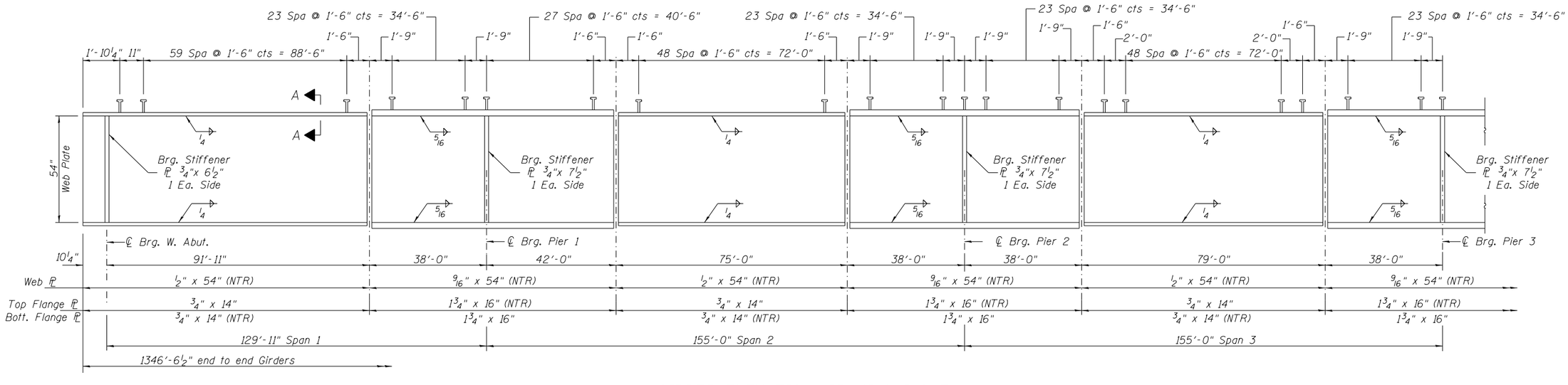


FRAMING PLAN SPANS 1, 2 & 3

Notes:
Structural steel shall be AASHTO M270 Grade 50 for the girders, cross frame connection plates, bearing stiffeners and all splice plate material.
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
See Sheet 24 of 59 for Section A-A.



GIRDER ELEVATION SPANS 1, 2 & 3

Hutchison Engineering, Inc. Jacksonville, Peoria & Shorewood, Illinois	USER NAME =	DESIGNED - BAN	REVISED -
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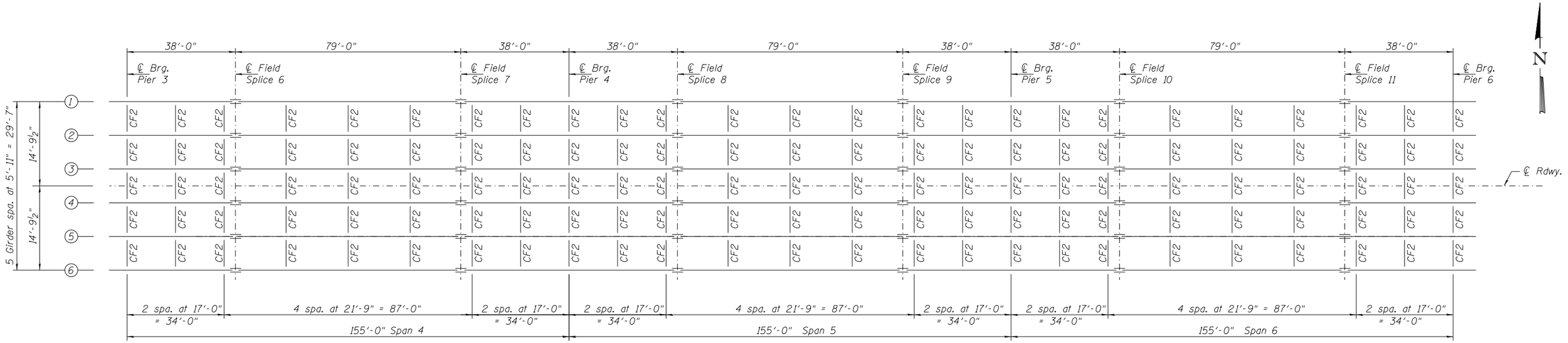
	PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
		CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN – SPANS 1, 2 & 3
STRUCTURE NO. 003–0062
SHEET NO. 21 OF 59 SHEETS

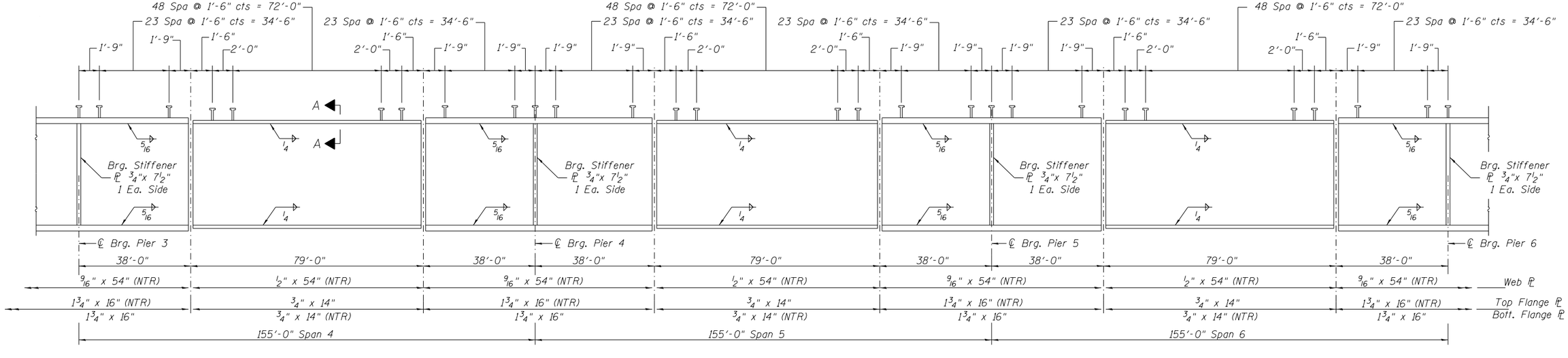
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	47
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-021-FRAMING 1-3.dgn



FRAMING PLAN SPANS 4, 5 & 6

Notes:
Structural steel shall be AASHTO M270 Grade 50 for the girders, cross frame connection plates, bearing stiffeners and all splice plate material.
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
See Sheet 24 of 59 for Section A-A.



GIRDER ELEVATION SPANS 4, 5 & 6

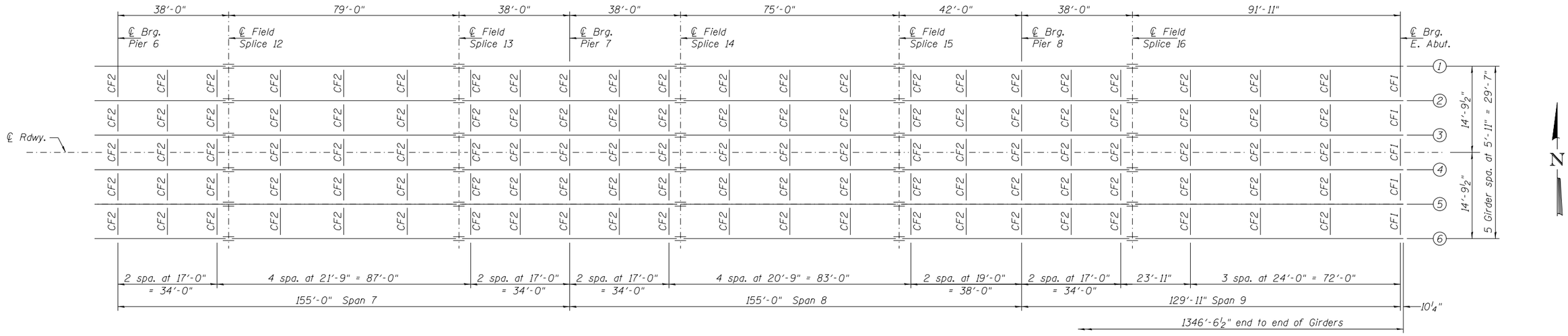
Hutchison Engineering, Inc. Jacksonville, Peoria & Shorewood, Illinois	USER NAME =	DESIGNED - BAN	REVISED -
	PLOT SCALE = NONE	CHECKED - JOH	REVISED -
	PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
		CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN – SPANS 4, 5 & 6
STRUCTURE NO. 003–0062
SHEET NO. 22 OF 59 SHEETS

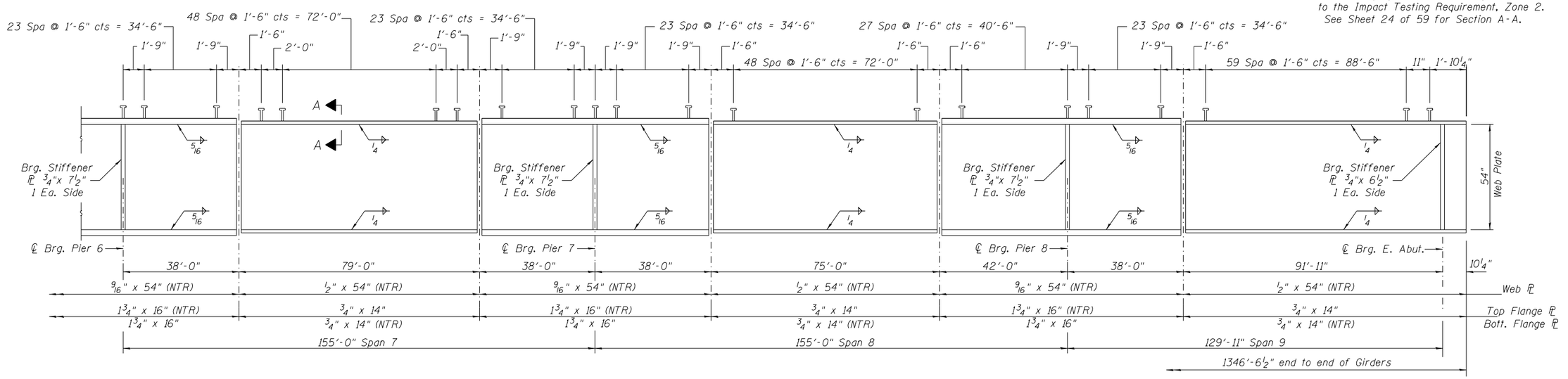
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	48
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-022-FRAMING 4-6.dgn



FRAMING PLAN SPANS 7, 8 & 9

Notes:
Structural steel shall be AASHTO M270 Grade 50 for the girders, cross frame connection plates, bearing stiffeners and all splice plate material.
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
See Sheet 24 of 59 for Section A-A.



GIRDER ELEVATION SPANS 7, 8 & 9

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

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	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN – SPANS 7, 8 & 9
STRUCTURE NO. 003–0062
SHEET NO. 23 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	49
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

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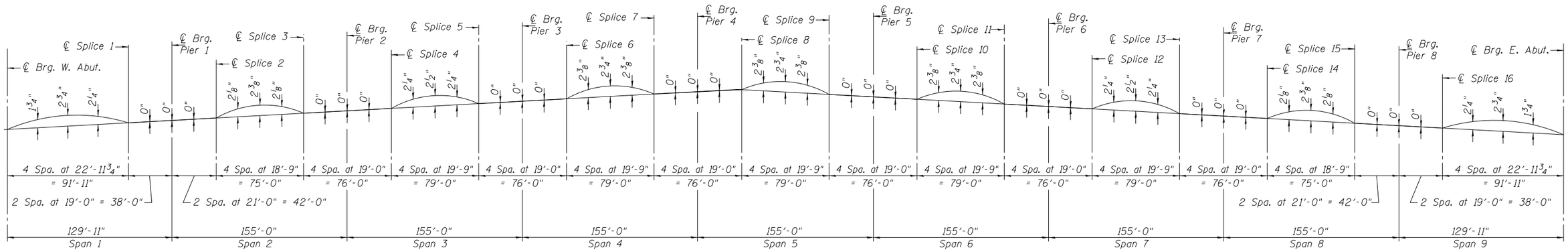
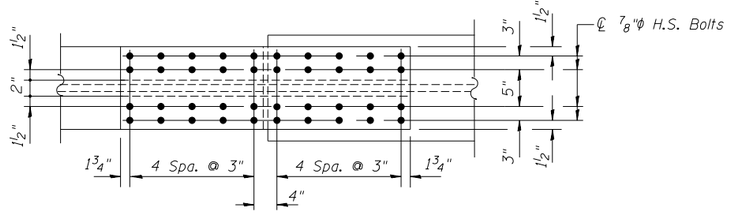
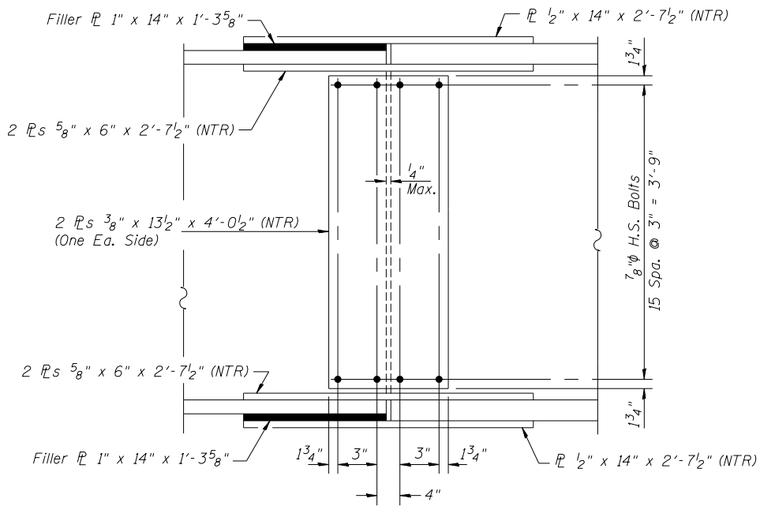


CAMBER DIAGRAM



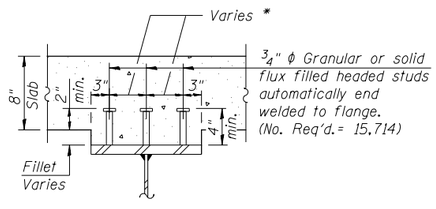
TOP AND BOTTOM FLANGE SPLICE



WEB SPLICE

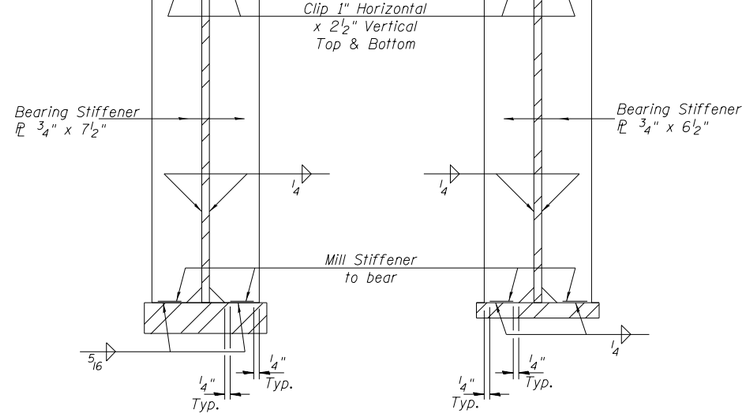
FIELD SPLICE NO. 1 THRU NO. 16

(96 Required)



SECTION A-A

* 4" for 14" wide top flange
5" for 16" wide top flange



SECTION AT PIERS 1 THRU 8

SECTION AT W. ABUTMENT & E. ABUTMENT

BEARING STIFFENER DETAILS

Note:
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

Hutchison Engineering, Inc. Jacksonville, Peoria & Shorewood, Illinois	USER NAME =	DESIGNED - BAN	REVISED -
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		CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS
STRUCTURE NO. 003-0062

SHEET NO. 24 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	50
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

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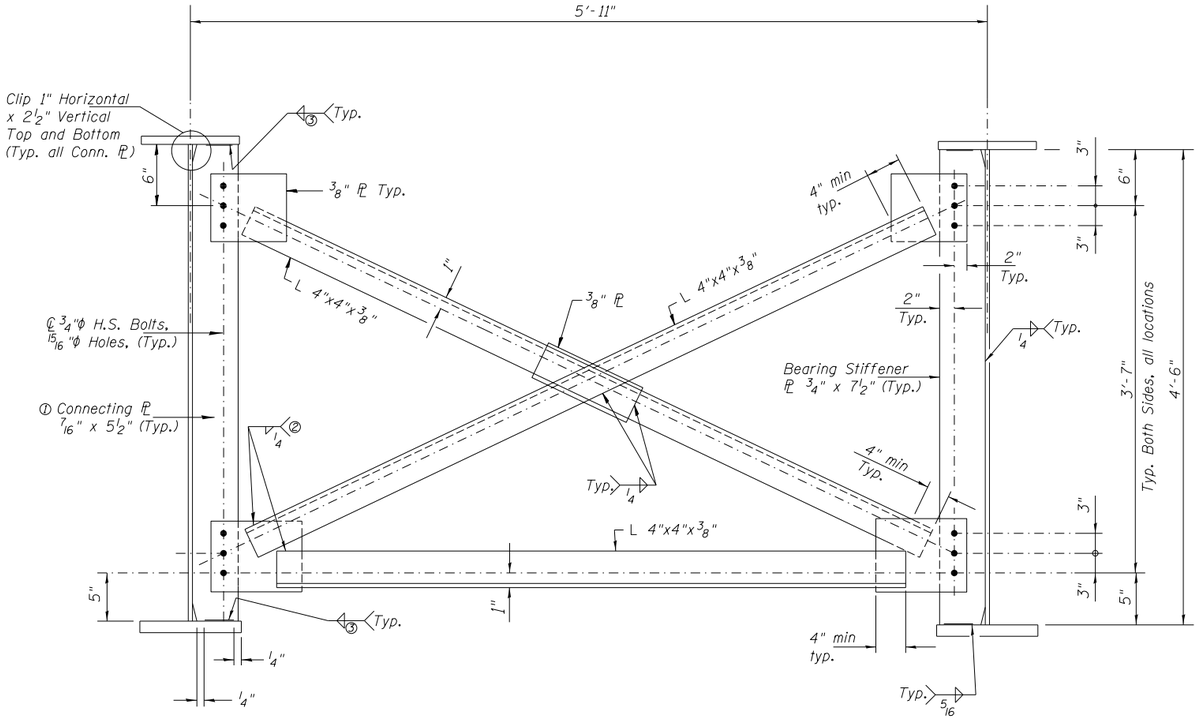


AT CONNECTION PLATE

AT BEARING STIFFENER

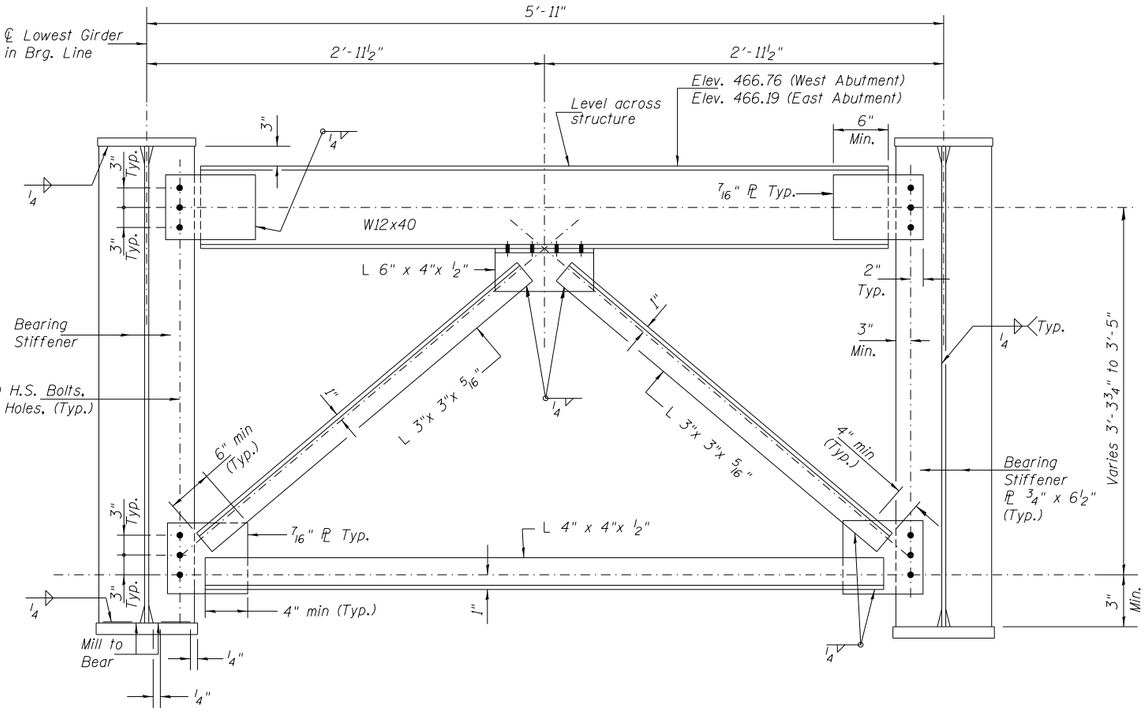
INTERIOR CROSS FRAME CF2

(No. Required = 335)

① Connecting plate not required on outside of exterior girder.

② Fillet weld angles along 3 sides on one face of gusset plate.

③ ¼" @ ¾" flanges
5/16" @ 1¾" flanges



END CROSS FRAME CF1

(No. Required = 10)

Notes:
All bolts for cross frames shall be ¾"ϕ A325 H.S. bolts with 15/16"ϕ holes.
Two hardened washers required for each set of oversized holes.
All cross frames shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames at supports may be temporarily disconnected to install bearing anchor rods.

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

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	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS
STRUCTURE NO. 003-0062

SHEET NO. 25 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	51
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

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INTERIOR GIRDER MOMENT TABLE

		0.4 Sp. 1 or 0.6 Sp. 9	Pier 1 or 8	0.5 Sp. 2 or 8	Pier 2 or 7	0.5 Sp. 3 or 7	Pier 3 or 6	0.5 Sp. 4 or 6	Pier 4 or 5	0.5 Sp. 5
I_s	(in^4)	22,299	50,902	22,299	50,902	22,299	50,902	22,299	50,902	22,299
$I_c(n)$	(in^4)	51,433	-	51,433	-	51,433	-	51,433	-	51,433
$I_c(3n)$	(in^4)	37,861	-	37,861	-	37,861	-	37,861	-	37,861
$I_c(cr)$	(in^4)	-	56,484	-	56,484	-	56,484	-	56,484	-
S_s	(in^3)	804	1,770	804	1,770	804	1,770	804	1,770	804
$S_c(n)$	(in^3)	1,113	-	1,113	-	1,113	-	1,113	-	1,113
$S_c(3n)$	(in^3)	1,006	-	1,006	-	1,006	-	1,006	-	1,006
$S_c(cr)$	(in^3)	-	1,841	-	1,841	-	1,841	-	1,841	-
DC1	(k/')	0.80	0.93	0.80	0.93	0.80	0.93	0.80	0.93	0.80
M_{DC1}	('k)	815	2,050	529	1,870	587	1,934	565	1,914	575
DC2	(k/')	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
M_{DC2}	('k)	161	356	107	327	117	337	114	334	115
DW	(k/')	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
M_{DW}	('k)	318	706	213	647	232	667	225	661	228
$M_{L} \cdot _{IM}$	('k)	1,574	2,067	1,462	2,096	1,494	2,129	1,428	2,134	1,420
M_u (Strength I)	('k)	4,452	7,684	3,673	7,385	3,842	7,565	3,685	7,536	3,690
$\phi_f M_n$	('k)	5,414	8,330	5,633	8,328	5,591	8,328	5,607	8,328	5,599
f_s DC1	(ksi)	12.2	13.9	7.9	12.7	8.8	13.1	8.4	13.0	8.6
f_s DC2	(ksi)	1.9	2.3	1.3	2.1	1.4	2.2	1.4	2.2	1.4
f_s DW	(ksi)	3.8	4.6	2.5	4.2	2.8	4.3	2.7	4.3	2.7
f_s (ℓ+IM)	(ksi)	17.0	13.5	15.8	13.7	16.1	13.9	15.4	13.9	15.3
f_s (Service II)	(ksi)	40.0	38.4	32.2	36.8	33.9	37.7	32.5	37.6	32.6
$0.95R_hF_{yf}$	(ksi)	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
f_s (Total)(Strength I)	(ksi)	-	-	-	-	-	-	-	-	-
$\phi_f F_n$	(ksi)	-	-	-	-	-	-	-	-	-
V_f	(k)	28.7	31.7	24.1	31.6	24.2	31.7	24.8	32.8	24.2

GIRDER REACTION TABLE

		E. & W. Abutment		Pier 1 or 8		Pier 2 or 7		Pier 3 or 6		Pier 4 or 5	
		Interior	Exterior	Interior	Exterior	Interior	Exterior	Interior	Exterior	Interior	Exterior
LLDF		0.665	0.479	0.665	0.479	0.665	0.479	0.665	0.479	0.665	0.479
R_{DC1}	(k)	37.0	38.5	139.8	145.4	132.7	138.0	134.8	140.2	134.1	139.5
R_{DC2}	(k)	7.0	7.0	24.2	24.2	22.9	22.9	23.2	23.2	23.2	23.2
R_{DW}	(k)	13.8	9.7	48.0	33.8	45.4	32.0	46.1	32.5	45.8	32.3
R_{LL}	(k)	68.5	49.3	145.4	104.7	146.6	105.6	148.2	106.7	148.5	106.9
R_{IM}	(k)	14.3	10.3	25.3	18.2	24.8	17.9	24.9	17.9	24.8	17.9
R_{Total}	(k)	140.6	114.8	382.7	326.3	372.4	316.4	377.2	320.5	376.4	319.8

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in^4 and in^3).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in^4 and in^3).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to long-term composite (superimposed) dead loads (in^4 and in^3).

$I_c(cr)$, $S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total -Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in^4 and in^3).

DC1: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

$M_{L} \cdot _{IM}$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{L} \cdot _{IM}$

$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft).

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
M_{DC1} / S_{nc}

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
$M_{DC2} / S_c(3n)$ or $M_{DC2} / S_c(cr)$ as applicable.

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
$M_{DW} / S_c(3n)$ or $M_{DW} / S_c(cr)$ as applicable.

f_s (ℓ+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).
$M_{L} \cdot _{IM} / S_c(n)$ or $M_{L} \cdot _{IM} / S_c(cr)$ as applicable.

f_s (Service II): Sum of stresses as computed below (ksi).
$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3\ f_s\ (L \cdot _{IM})$

$0.95R_hF_yf$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_s\ (L \cdot _{IM})$

$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

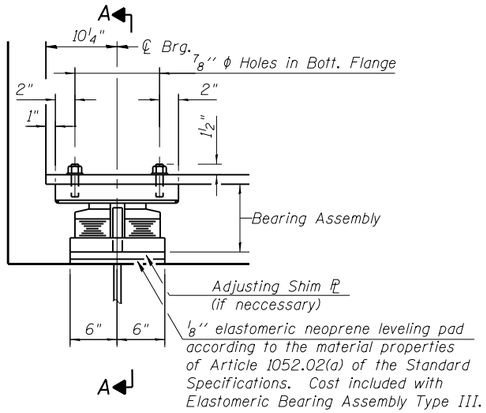
V_r: Maximum factored shear range in span computed according to Article 6.10.10.

LLDF: Live Load Distribution Factor

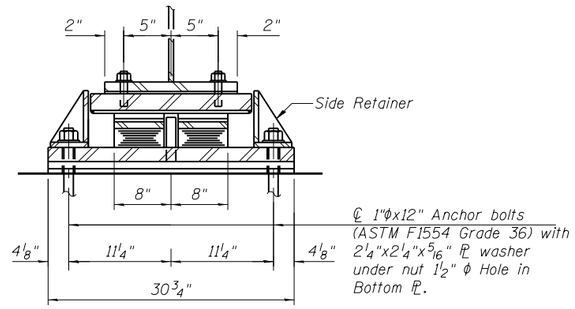
* TOP OF WEB ELEVATIONS

Girder No.	℄ Brg. W. Abut.	℄ Field Splice 1	℄ Brg. Pier1	℄ Field Splice 2	℄ Field Splice 3	℄ Brg. Pier 2	℄ Field Splice 4	℄ Field Splice 5	℄ Brg. Pier 3	℄ Field Splice 6	℄ Field Splice 7	℄ Brg. Pier 4	℄ Field Splice 8	℄ Field Splice 9	℄ Brg. Pier 5	℄ Field Splice 10	℄ Field Splice 11	℄ Brg. Pier 6	℄ Field Splice 12	℄ Field Splice 13	℄ Brg. Pier 7	℄ Field Splice 14	℄ Field Splice 15	℄ Brg. Pier 8	℄ Field Splice 16	℄ Brg. E. Abut.
1	467.01	467.39	467.55	467.73	468.10	468.30	468.50	468.88	469.07	469.25	469.65	469.69	469.74	469.48	469.29	469.10	468.70	468.52	468.33	467.98	467.78	467.58	467.16	466.98	466.81	466.43
2	467.11	467.49	467.65	467.83	468.20	468.40	468.60	468.98	469.17	469.35	469.75	469.79	469.84	469.58	469.39	469.20	468.80	468.62	468.43	468.08	467.88	467.68	467.26	467.08	466.91	466.53
3	467.20	467.58	467.74	467.92	468.29	468.49	468.69	469.07	469.26	469.44	469.84	469.88	469.93	469.67	469.48	469.29	468.89	468.71	468.52	468.17	467.97	467.77	467.35	467.17	467.00	466.62
4	467.20	467.58	467.74	467.92	468.29	468.49	468.69	469.07	469.26	469.44	469.84	469.88	469.93	469.67	469.48	469.29	468.89	468.71	468.52	468.17	467.97	467.77	467.35	467.17	467.00	466.62
5	467.11	467.49	467.65	467.83	468.20	468.40	468.60	468.98	469.17	469.35	469.75	469.79	469.84	469.58	469.39	469.20	468.80	468.62	468.43	468.08	467.88	467.68	467.26	467.08	466.91	466.53
6	467.01	467.39	467.55	467.73	468.10	468.30	468.50	468.88	469.07	469.25	469.65	469.69	469.74	469.48	469.29	469.10	468.70	468.52	468.33	467.98	467.78	467.58	467.16	466.98	466.81	466.43

*For fabrication only



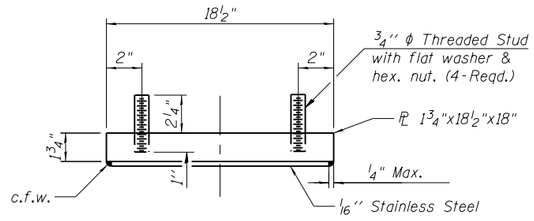
ELEVATION AT ABUT.



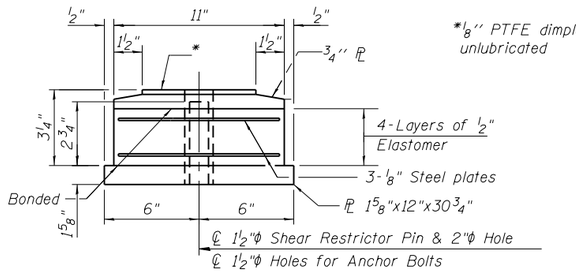
SECTION A-A

TYPE III ELASTOMERIC EXP. BRG.

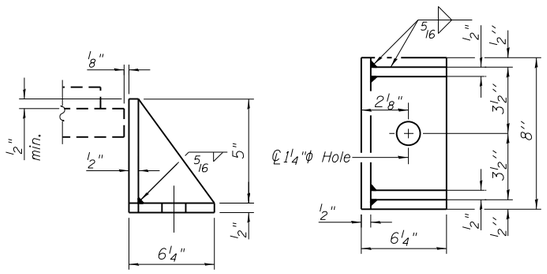
(East and West Abutments)



TOP BEARING ASSEMBLY

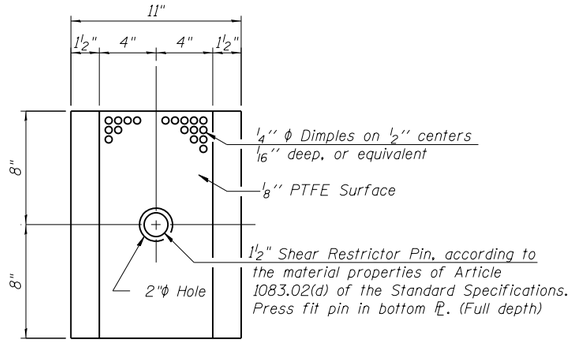


BOTTOM BEARING ASSEMBLY

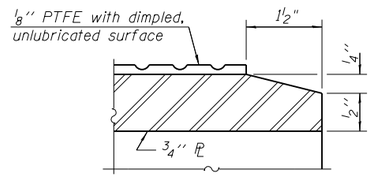


SIDE RETAINER

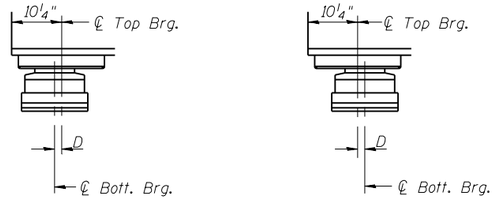
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PLAN-PTFE ELASTOMERIC BRG.



SECTION THRU PTFE



D=⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50° F.

EXPANSION BEARING ORIENTATION

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type III.

The ⅛" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

The structural steel for elastomeric Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 36.

Beams shall be braced for stability during erection and remain braced until deck is poured and cured.

Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type III	Each	12
Anchor Bolts, 1"	Each	24

I-2E-3 12-2-15

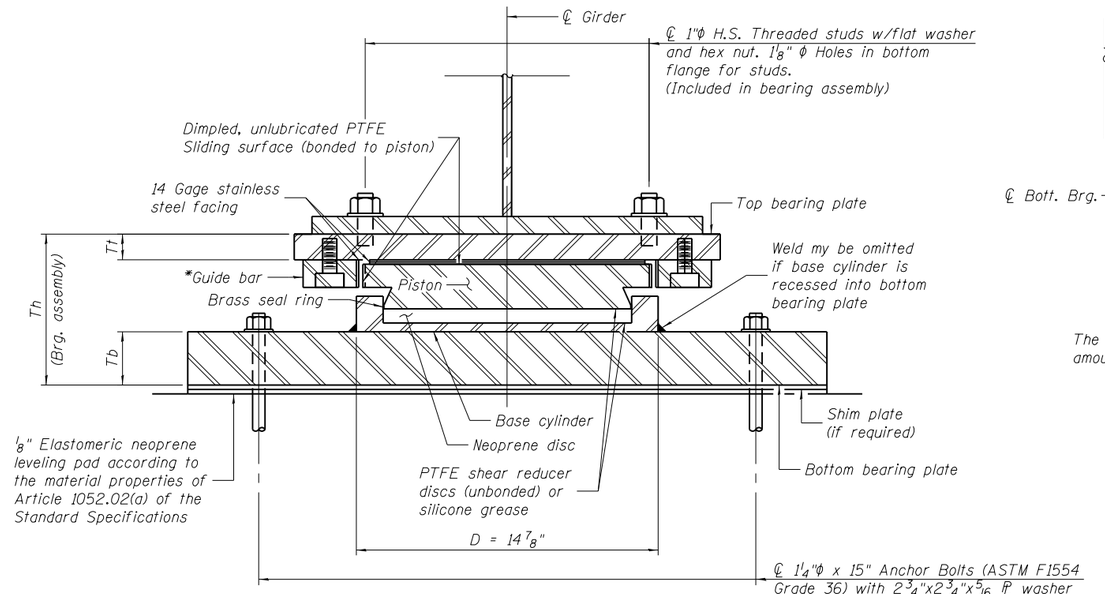
EFK•Moen, LLC
Civil Engineering Design
303 Fountains Parkway, Suite 240
Fairview Heights, IL 62208
Phone 618-206-4250

USER NAME = jsr	DESIGNED - CDL	REVISED -	
	CHECKED - JSR	REVISED -	
PLOT SCALE = 0.1667 ' / in.	DRAWN - JAA	REVISED -	
PLOT DATE = 1/9/2017	DATE - 1/9/2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS – ABUTMENTS
STRUCTURE NO. 003–0062
SHEET NO. 27 OF 59 SHEETS

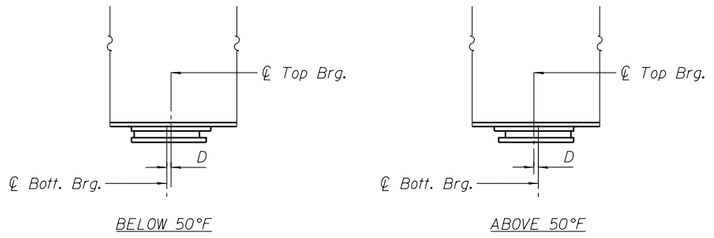
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112) BR-1	BOND	95	53
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		



*As alternates to the bolted connection shown, the guide bars may be connected to the top plate by groove welds or the guide bars and top plate may be fabricated as a single piece.

GUIDED EXPANSION POT BEARING

(Piers 1-3 and 6-8)



D = 1/8" per each 100' of expansion for every 15° temp change from the normal temp. of 50 °F.

EXPANSION BEARING ORIENTATION

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.

Notes:

All structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 36.

If base cylinder is recessed into the bottom bearing plate, the thickness of the bottom plate shall be Tb plus the depth of the recess.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternative material) of the grade and diameter specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

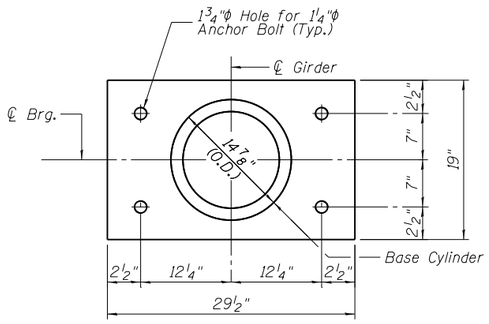
Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

H.S. bolts in bearing assembly shall be galvanized according to AASHTO M298 Class 50.

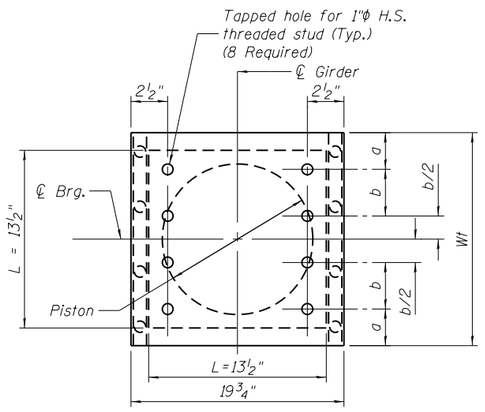
Bearing dimensions and details shown are for a pot type HLMR bearing. Disc-type HLMR bearing dimensions and details will vary.

All structural steel and exposed surfaces of bearings shall be painted as specified in Section 506 of the Standard Specifications

The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.



BOTTOM BEARING ℄ AND BASE CYLINDER PLAN



TOP BEARING ℄ - PISTON PLAN

GUIDED EXPANSION BEARING TABLE

Location	No Req'd	Vertical Load Capacity	Vertical Design Load	Lateral Design Loads		Total Required Movement	Top Plate			Tt	Tb	Th
				Hu	θu		Wt	a	b			
Piers 1 and 8	12	400 K	357 K	80 K	0.016 rad	3 1/2"	19"	2 3/4"	4 1/2"	2 3/8"	2 1/8"	9 1/4"
Piers 2 and 7	12	400 K	350 K	80 K	0.016 rad	2 1/2"	18"	2 1/4"	4 1/2"	2 3/8"	2 1/8"	9 1/4"
Piers 3 and 6	12	400 K	352 K	80 K	0.016 rad	1 1/2"	17"	2 1/2"	4"	2 1/2"	2 1/8"	9 1/4"

Vertical Design Load: Total service axial DL+LL without impact
Hu: The larger of the Factored Ultimate (Strength) Design Lateral Load or 20% of the vertical service design load
θu: Maximum Factored Ultimate (Strength) Design Rotation

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1 1/4"	Each	144
High Load Multi-Rotational Bearings, Guided Expansion 400K	Each	36

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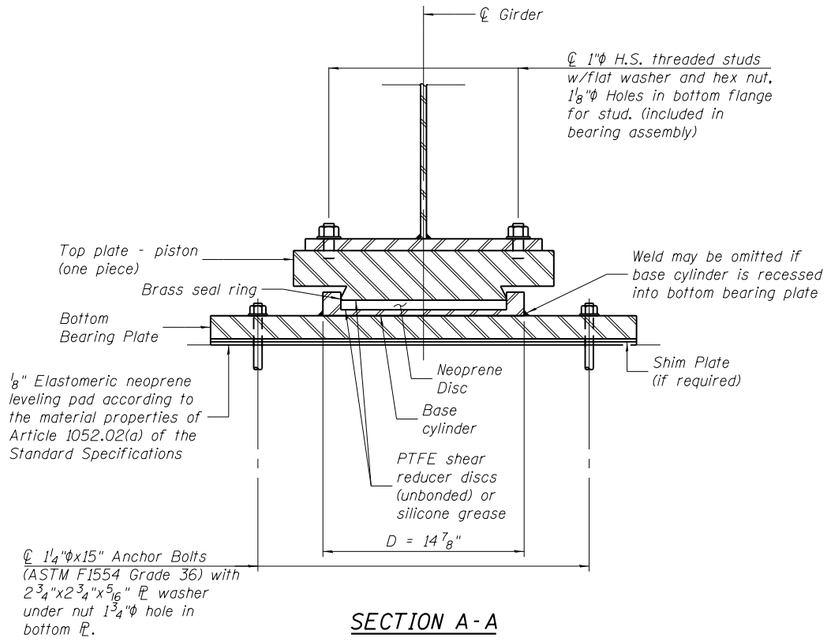
USER NAME = jsr	DESIGNED - CDL	REVISED -
	CHECKED - JSR	REVISED -
PLOT SCALE = 0.1667 ' / in.	DRAWN - JAA	REVISED -
PLOT DATE = 1/9/2017	DATE - 1/9/2017	REVISED -

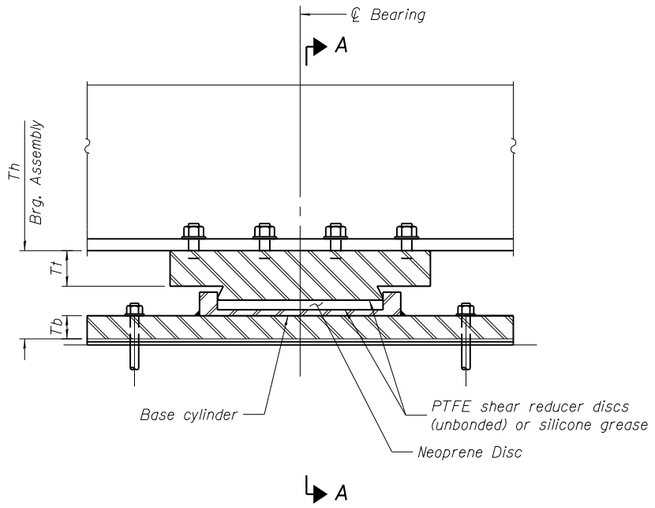
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS – PIERS 1, 2, 3, 6, 7 & 8
STRUCTURE NO. 003-0062
SHEET NO. 28 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112) BR-1	BOND	95	54
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			



SECTION A-A



ELEVATION AT PIER

FIXED POT BEARING

(Piers 4 and 5)

Notes:

All structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 36.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

All structural steel and exposed surfaces of bearings shall be painted as specified in section 506 of the Standard Specifications.

If base cylinder is recessed into the bottom bearing plate, the thickness of the bottom plate shall be Tb plus the depth of the recess.

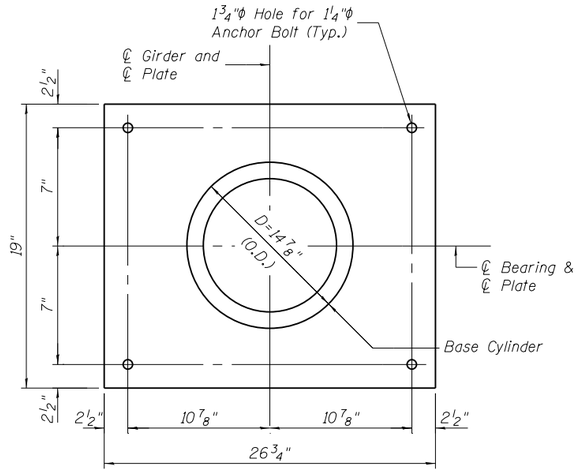
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

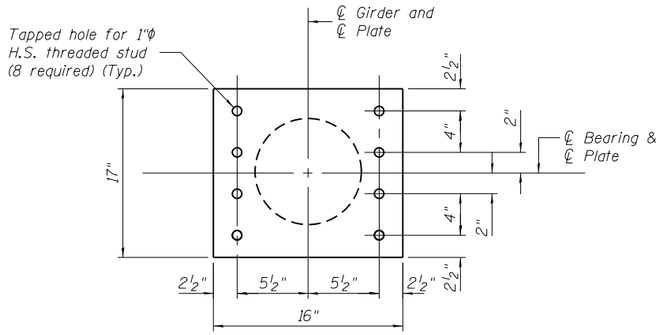
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.

H.S. bolts in bearing assembly shall be galvanized according to AASHTO M298 Class 50.



BOTTOM BEARING ℄ AND BASE CYLINDER PLAN



TOP BEARING ℄ AND PISTON PLAN

FIXED BEARING TABLE

Location	No Req'd	Vertical Load Capacity	Design Vertical Load	Lateral Design Loads		Tt	Tb	Th
				Hu	θu			
Piers 4 and 5	12	400 K	352 K	80 K	0.016 rad	2 3/4"	1 3/4"	8"

Vertical Design Load: Total service axial DL+LL without impact
Hu: The larger of the Factored Ultimate (Strength) Design Lateral Load or 20% of the vertical service design load
θu: Maximum Factored Ultimate (Strength) Design Rotation

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1 1/4"	Each	48
High Load Multi-Rotational Bearings, Fixed 400K	Each	12

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EFK•Moen, LLC
Civil Engineering Design
303 Fountains Parkway, Suite 240
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	CHECKED - JSR	REVISED -
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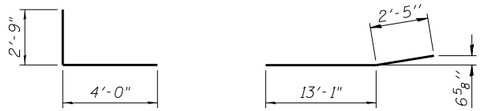
PLOT DATE = 1/9/2017	DATE - 1/9/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

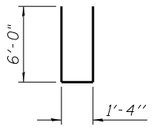
BEARING DETAILS – PIERS 4 & 5
STRUCTURE NO. 003-0062
SHEET NO. 29 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112) BR-1	BOND	95	55
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

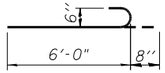


BAR $h_2(E)$

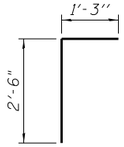
BAR $h_4(E)$



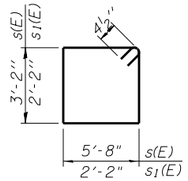
BAR $n(E)$



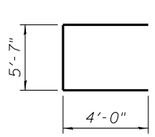
BAR $n_1(E)$



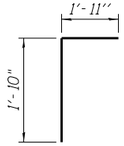
BAR $v_7(E)$



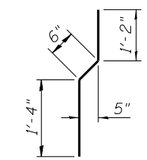
BARS $s(E)$ & $s_1(E)$



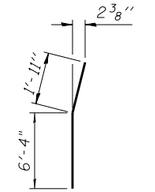
BAR $u(E)$



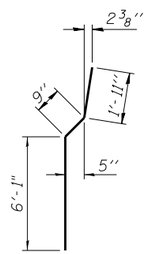
BAR $v(E)$



BAR $v_1(E)$



BAR $v_3(E)$



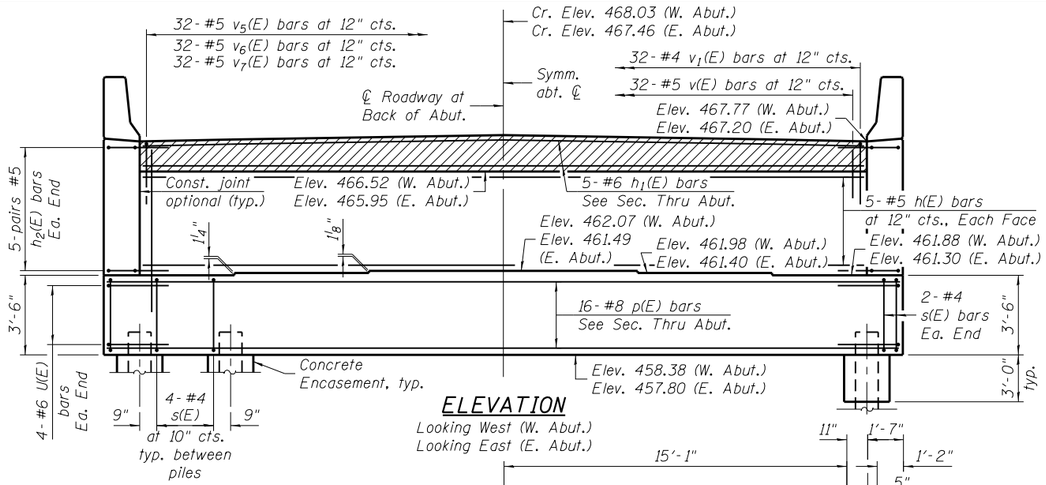
BAR $v_4(E)$

W. ABUT. PILE DATA

Type: HP 12x53
Nominal Required Bearing: 419 kips
Factored Resistance Available: 230 kips
Est. Length: 55'
No. Production Piles: 11
No. Test Piles: 0

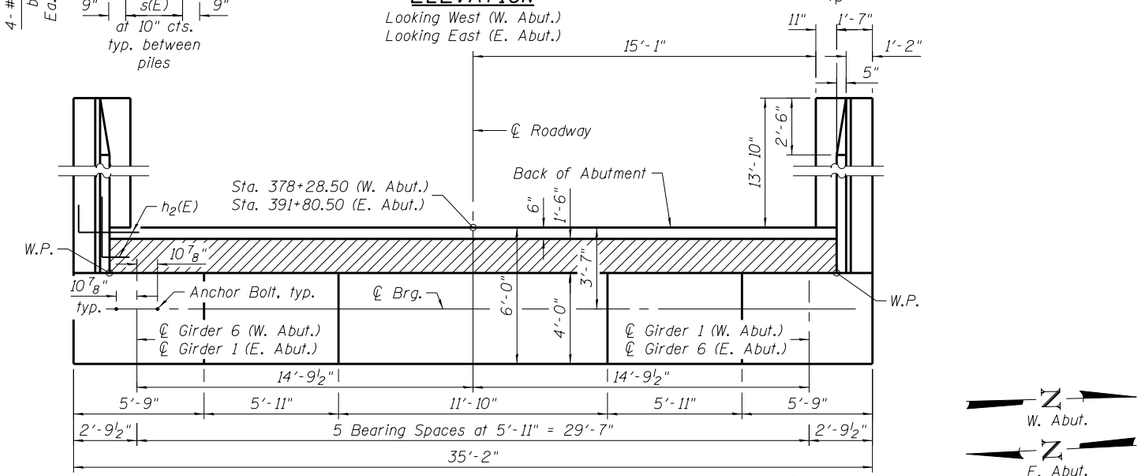
E. ABUT. PILE DATA

Type: HP 12x53
Nominal Required Bearing: 419 kips
Factored Resistance Available: 230 kips
Est. Length: 59'
No. Production Piles: 10
No. Test Piles: 1

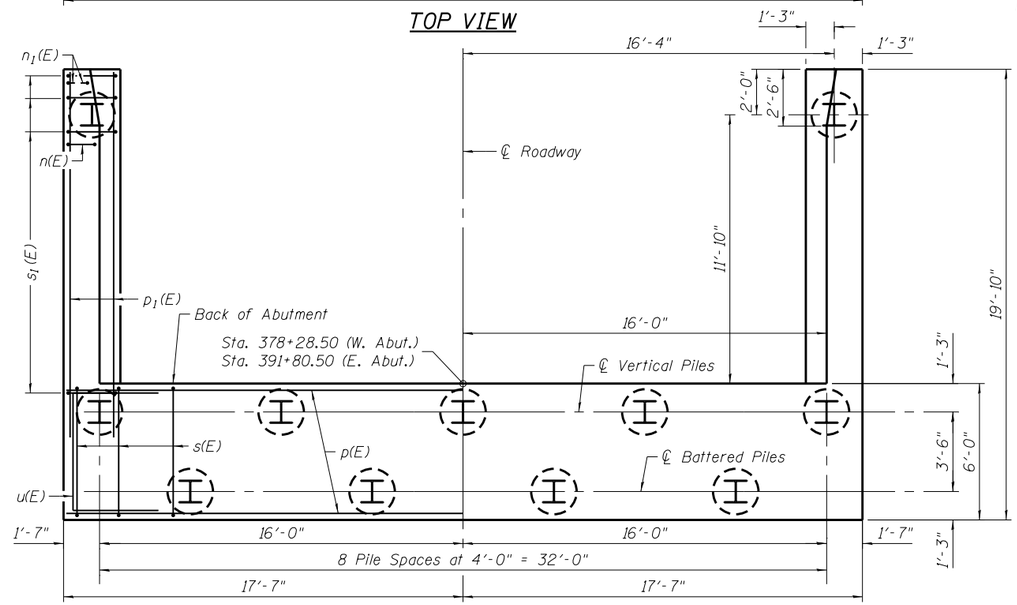


ELEVATION

Looking West (W. Abut.)
Looking East (E. Abut.)



TOP VIEW



PLAN-PILE CAP

TWO ABUTMENTS BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	20	#5	31'-8"	
$h_1(E)$	10	#6	31'-8"	
$h_2(E)$	40	#5	6'-9"	
$h_3(E)$	48	#4	15'-6"	
$h_4(E)$	32	#4	15'-6"	
n(E)	56	#6	13'-4"	
$n_1(E)$	24	#6	6'-8"	
p(E)	32	#8	34'-10"	
$p_1(E)$	24	#7	19'-5"	
s(E)	72	#4	18'-5"	
$s_1(E)$	60	#4	9'-5"	
u(E)	16	#6	13'-7"	
v(E)	64	#5	3'-9"	
$v_1(E)$	64	#4	3'-0"	
$v_2(E)$	64	#6	8'-4"	
$v_3(E)$	12	#6	8'-3"	
$v_4(E)$	56	#6	8'-9"	
$v_5(E)$	64	#5	6'-8"	
$v_6(E)$	64	#5	8'-3"	
$v_7(E)$	64	#5	3'-9"	
Structure Excavation		Cu. Yd.	505	
Concrete Structures		Cu. Yd.	115.8	
Concrete Encasement		Cu. Yd.	9.1	
Reinforcement Bars, Epoxy Coated		Pound	12,440	
Furnishing Steel Piles HP12x53		Foot	1,195	
Driving Piles		Foot	1,195	
Test Pile Steel HP12x53		Each	1	
Concrete Sealer		Sq. Ft.	848	

For details of piles and Concrete Encasement, see sheet 40 of 59.

A-1

7-1-10

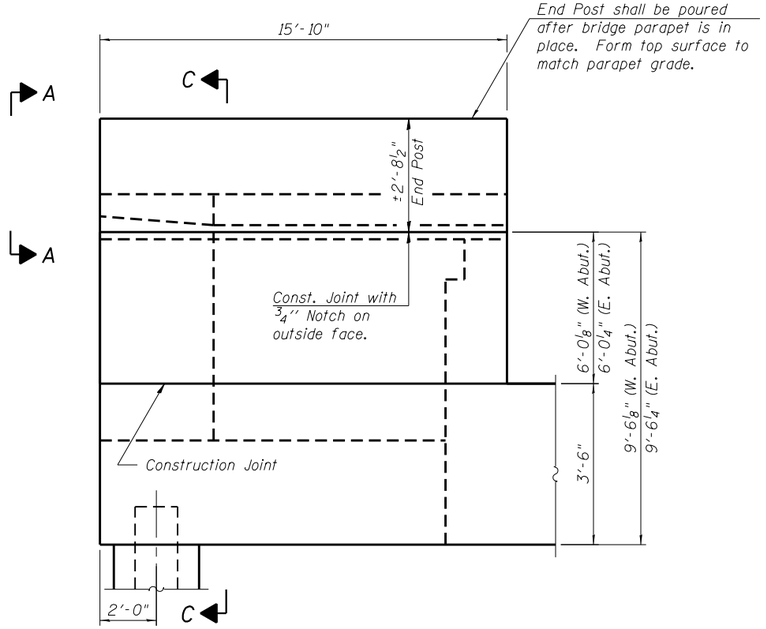
EFK•Moen, LLC
Civil Engineering Design
303 Fountains Parkway, Suite 240
Fairview Heights, IL 62208
Phone 618-206-4250

USER NAME = jsr	DESIGNED - CDL	REVISED -
	CHECKED - JSR	REVISED -
PLOT SCALE = 0.2 '/ in.	DRAWN - JAA	REVISED -
PLOT DATE = 1/9/2017	DATE - 1/9/2017	REVISED -

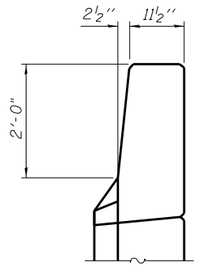
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENTS
STRUCTURE NO. 003-0062
SHEET NO. 30 OF 59 SHEETS

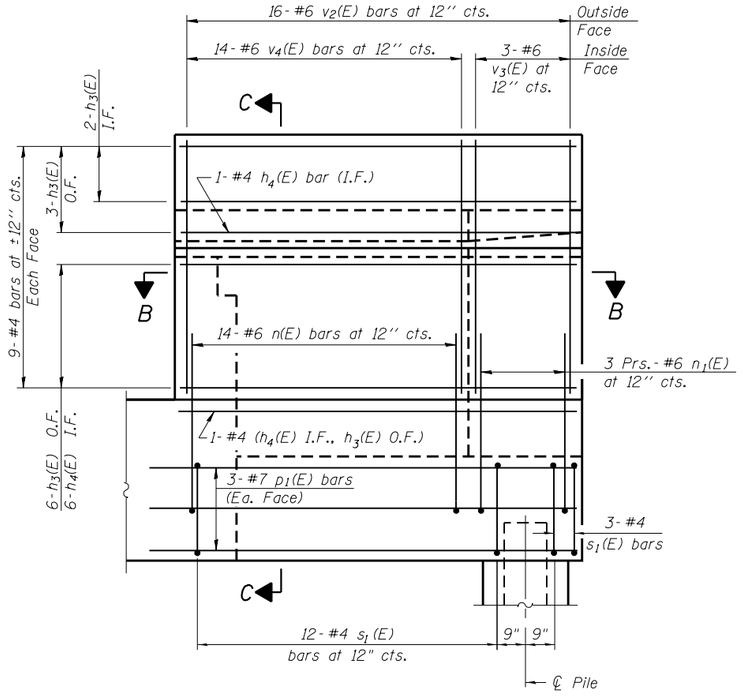
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112) BR-1	BOND	95	56
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			



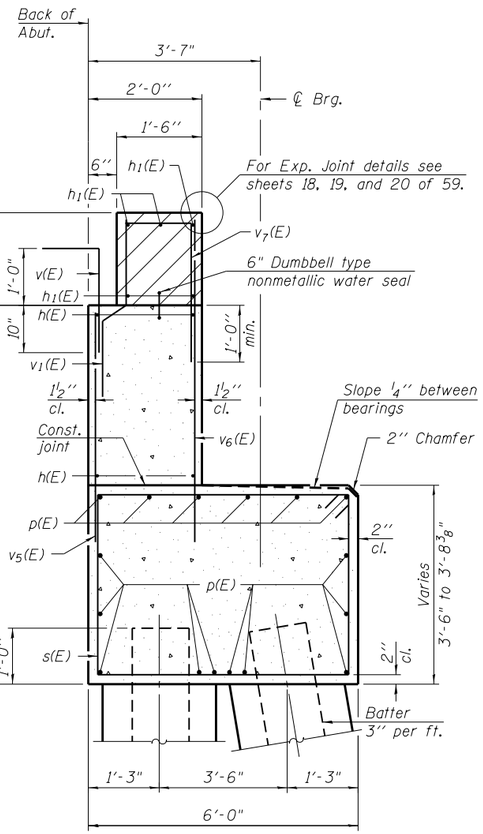
WING WALL ELEVATION
Showing Dimensions



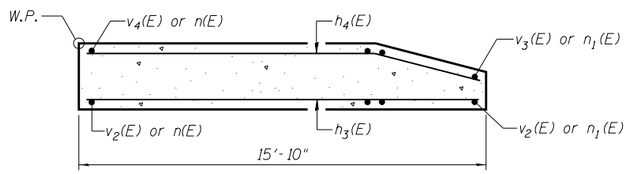
VIEW A-A



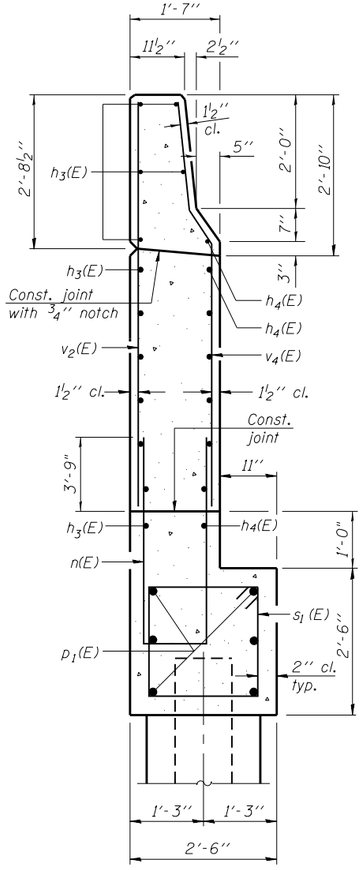
WING WALL ELEVATION
Showing Reinforcement



SEC. THRU ABUT.



SECTION B-B



SECTION C-C

Notes:
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
Quantity of concrete in end post included with Concrete Superstructure on sheet 13 of 59.
For Concrete Encasement details, see sheet 40 of 59.
The abutments shall have all exposed surfaces of backwalls, bridge seats and front faces of pile caps treated with Concrete Sealer.

A-1-D 1-27-12

EFK • Moen, LLC
Civil Engineering Design
303 Fountains Parkway, Suite 240
Fairview Heights, IL 62208
Phone 618-206-4250

USER NAME = jsr	DESIGNED - CDL	REVISED -
	CHECKED - JSR	REVISED -
PLOT SCALE = 0.2 '/ in.	DRAWN - JAA	REVISED -
PLOT DATE = 1/9/2017	DATE - 1/9/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

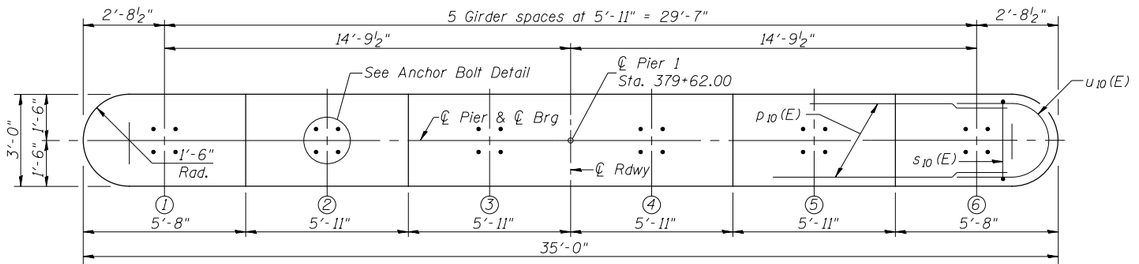
ABUTMENT DETAILS
STRUCTURE NO. 003-0062
SHEET NO. 31 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112) BR-1	BOND	95	57
		CONTRACT NO. 76967		
		ILLINOIS FED. AID PROJECT		

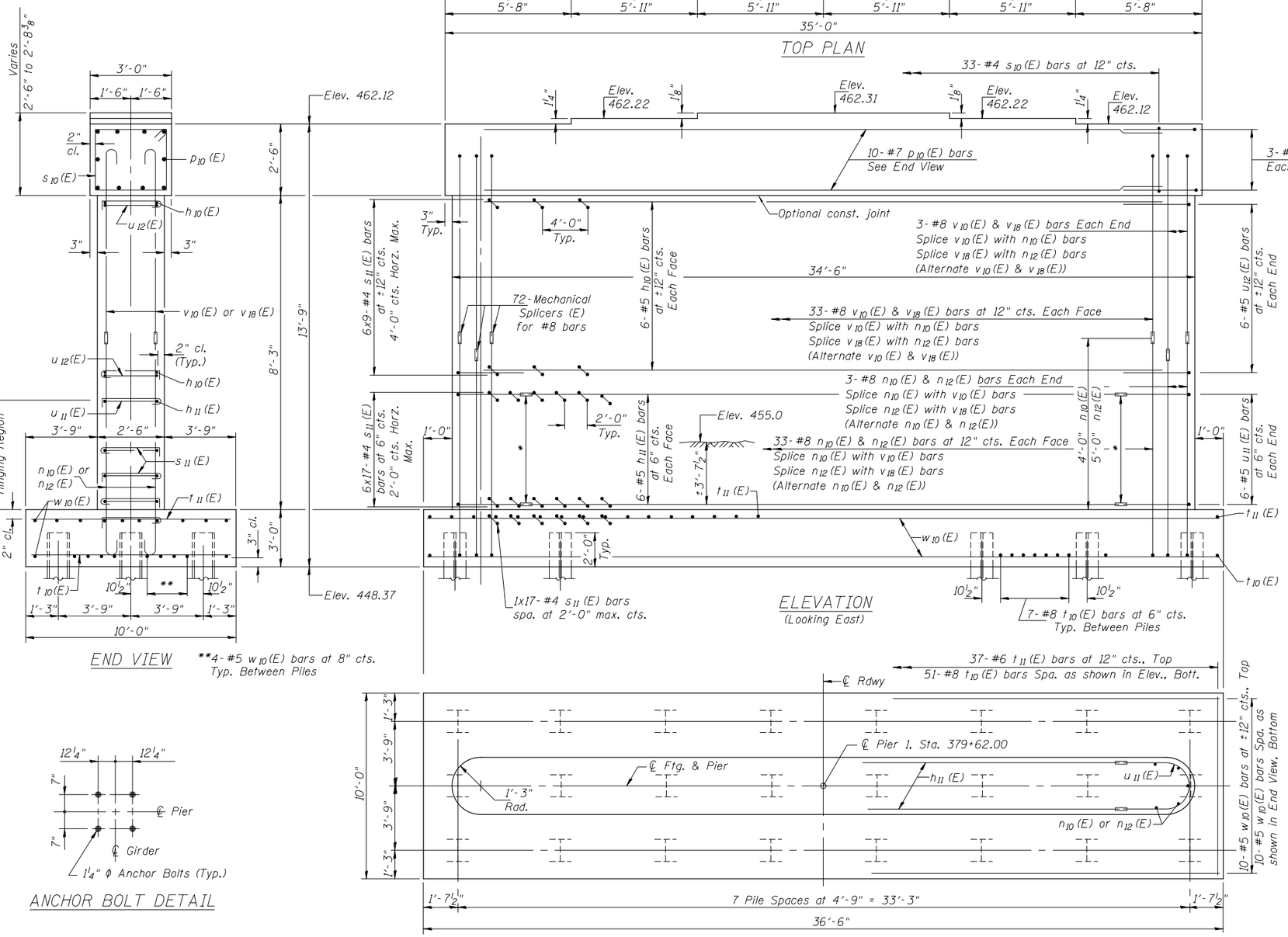
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of piles, see sheet 40 of 59.

PILE DATA

Type: Steel HP12x53
Nominal Required Bearing: 419 kips
Factored Resistance Available: 230 kips
Est. Length: 54 Ft.
No. Production Piles: 24



TOP PLAN



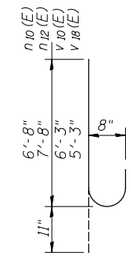
ELEVATION
(Looking East)

END VIEW

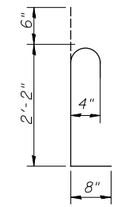
**4- #5 w 10 (E) bars at 8" cts. Typ. Between Piles

ANCHOR BOLT DETAIL

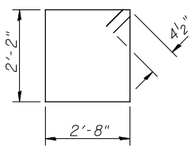
FOOTING PLAN



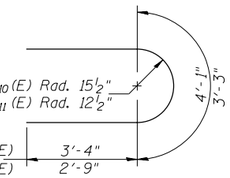
BARS n 10 (E), n 12 (E)
v 10 (E), & v 18 (E)



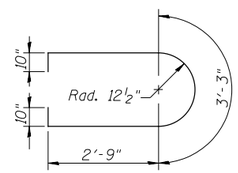
BAR s 11 (E)



BAR s 10 (E)



BARS u 10 (E) & u 11 (E)



BARS u 12 (E)

PIER 1
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h 10 (E)	12	#5	32'-0"	——
h 11 (E)	12	#5	26'-6"	——
n 10 (E)	36	#8	7'-7"	⊃
n 12 (E)	36	#8	8'-7"	⊃
p 10 (E)	10	#7	32'-0"	——
s 10 (E)	33	#4	10'-5"	□
s 11 (E)	173	#4	3'-4"	⊂
t 10 (E)	51	#8	9'-9"	——
t 11 (E)	37	#6	9'-9"	——
u 10 (E)	6	#6	10'-9"	⊃
u 11 (E)	12	#5	8'-9"	⊃
u 12 (E)	12	#5	10'-5"	⊃
v 10 (E)	36	#8	7'-2"	⊃
v 18 (E)	36	#8	6'-2"	⊃
w 10 (E)	20	#5	36'-3"	——
Structure Excavation		Cu. Yd.	140	
Concrete Structures		Cu. Yd.	76.4	
Reinforcement Bars, Epoxy Coated		Pound	7,800	
Furnishing Steel Piles HP12x53		Foot	1,296	
Driving Piles		Foot	1,296	
Mechanical Splicers		Each	96	

* 6-Mechanical Splicers or shop welded splicer per AWS D1.4 on horizontal bars. (Each Face, Each End)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1
STRUCTURE NO. 003-0062
SHEET NO. 32 OF 59 SHEETS

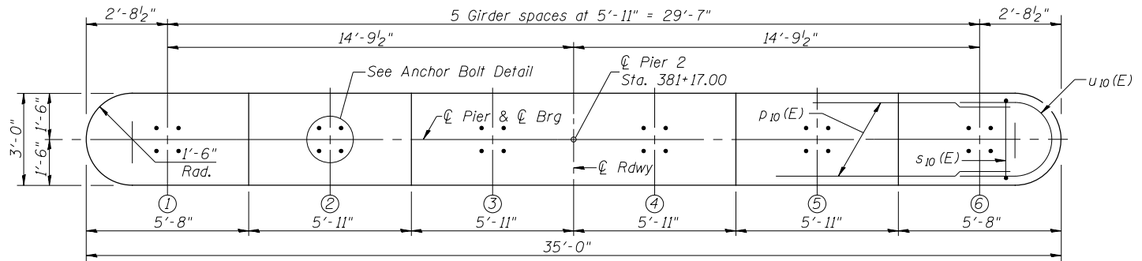
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	58
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-032-PIER 1.dgn

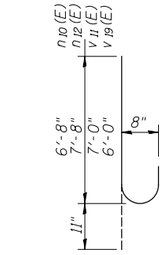
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of piles, see sheet 40 of 59.

PILE DATA

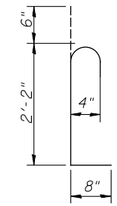
Type: Steel HP12x53
Nominal Required Bearing: 419 kips
Factored Resistance Available: 230 kips
Est. Length: 57 Ft.
No. Production Piles: 24



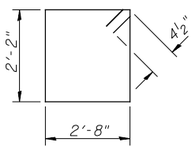
TOP PLAN



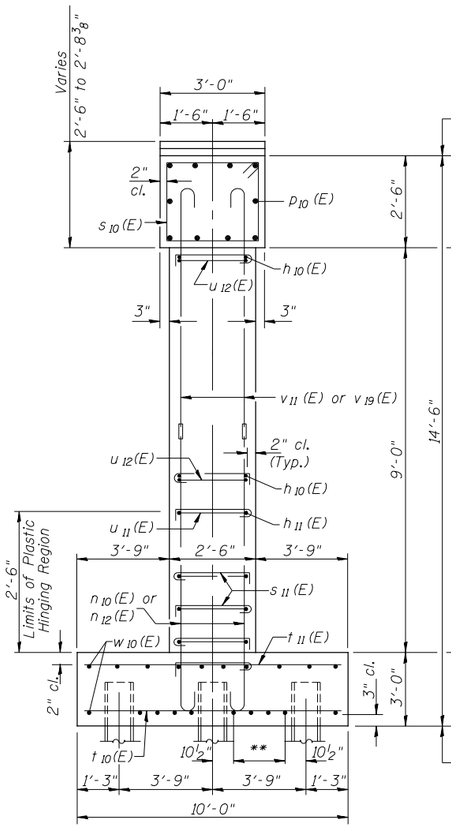
BARS n 10 (E), n 12 (E)
v 11 (E), & v 19 (E)



BAR s 11 (E)

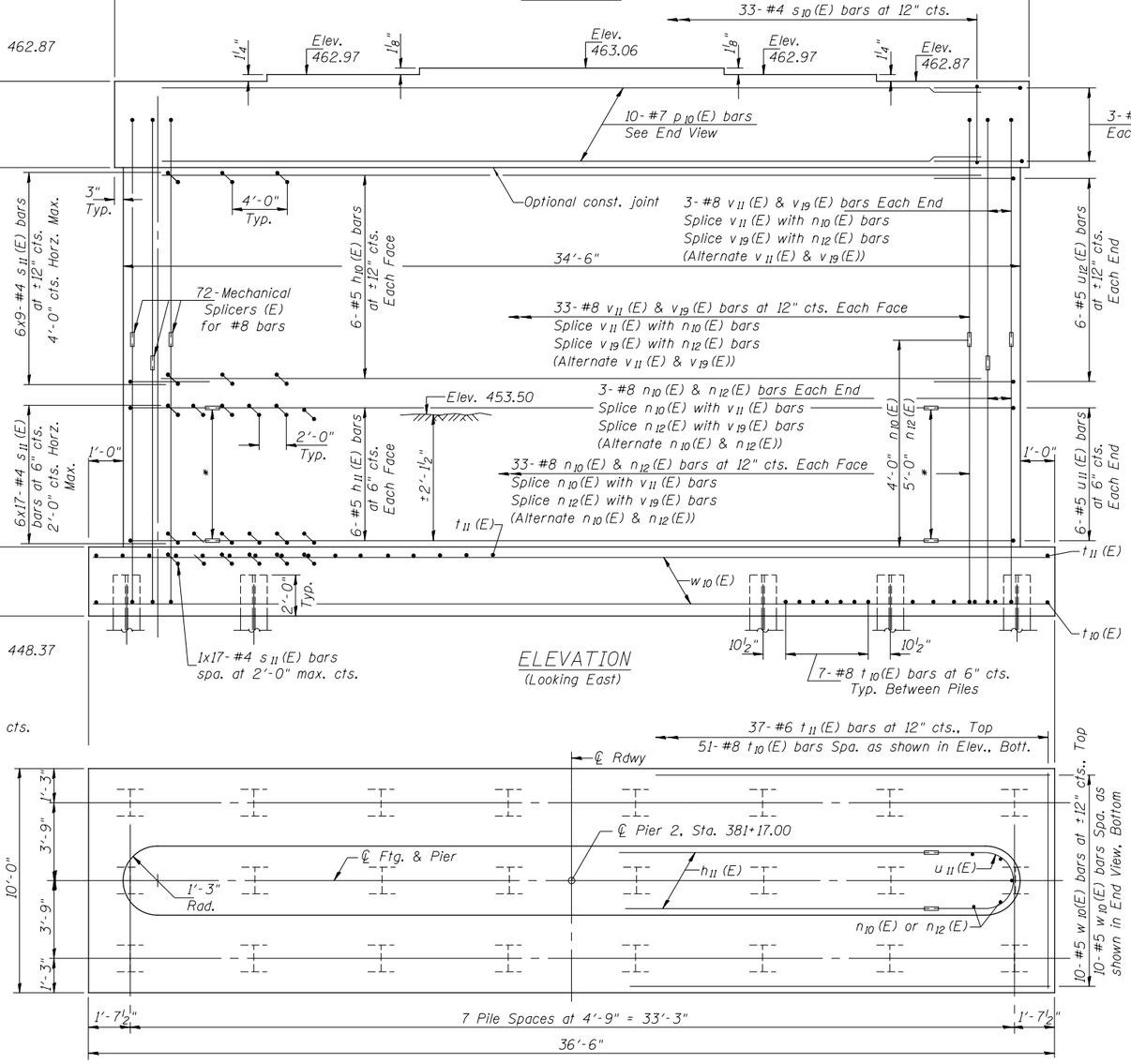


BAR s 10 (E)

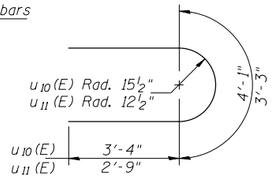


END VIEW

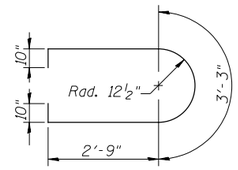
**4-#5 w 10 (E) bars at 8" cts. Typ. Between Piles



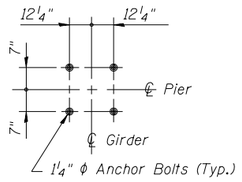
ELEVATION
(Looking East)



BARS u 10 (E) & u 11 (E)



BARS u 12 (E)



ANCHOR BOLT DETAIL

FOOTING PLAN

PIER 2
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h 10 (E)	12	#5	32'-0"	——
h 11 (E)	12	#5	26'-6"	——
n 10 (E)	36	#8	7'-7"	⊃
n 12 (E)	36	#8	8'-7"	⊃
p 10 (E)	10	#7	32'-0"	——
s 10 (E)	33	#4	10'-5"	□
s 11 (E)	173	#4	3'-4"	⊂
t 10 (E)	51	#8	9'-9"	——
t 11 (E)	37	#6	9'-9"	——
u 10 (E)	6	#6	10'-9"	⊃
u 11 (E)	12	#5	8'-9"	⊃
u 12 (E)	12	#5	10'-5"	⊃
v 11 (E)	36	#8	7'-11"	⊃
v 19 (E)	36	#8	6'-11"	⊃
w 10 (E)	20	#5	36'-3"	——
Structure Excavation		Cu. Yd.	110	
Concrete Structures		Cu. Yd.	78.8	
Reinforcement Bars, Epoxy Coated		Pound	7,940	
Furnishing Steel Piles HP12x53		Foot	1,368	
Driving Piles		Foot	1,368	
Mechanical Splicers		Each	96	

* 6-Mechanical Splicers or shop welded splicer per AWS D1.4 on horizontal bars. (Each Face, Each End)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2
STRUCTURE NO. 003-0062
SHEET NO. 33 OF 59 SHEETS

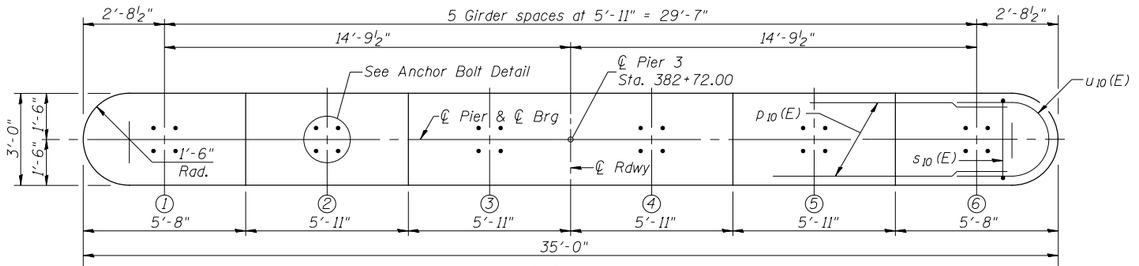
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	59
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-033-PIER 2.dgn

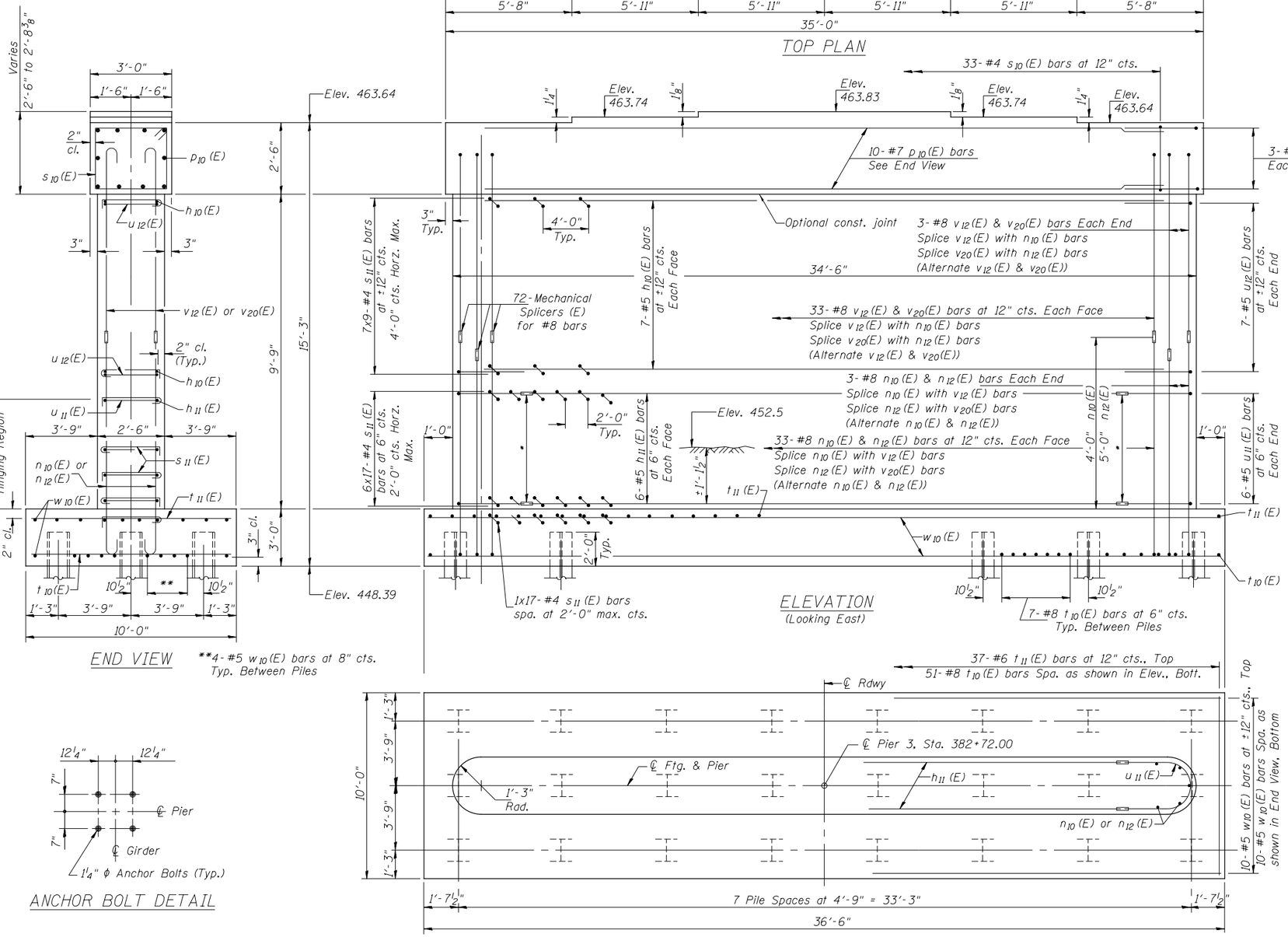
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of piles, see sheet 40 of 59.

PILE DATA

Type: Steel HP12x53
Nominal Required Bearing: 419 kips
Factored Resistance Available: 230 kips
Est. Length: 57 Ft.
No. Production Piles: 23
No. Test Piles: 1



TOP PLAN

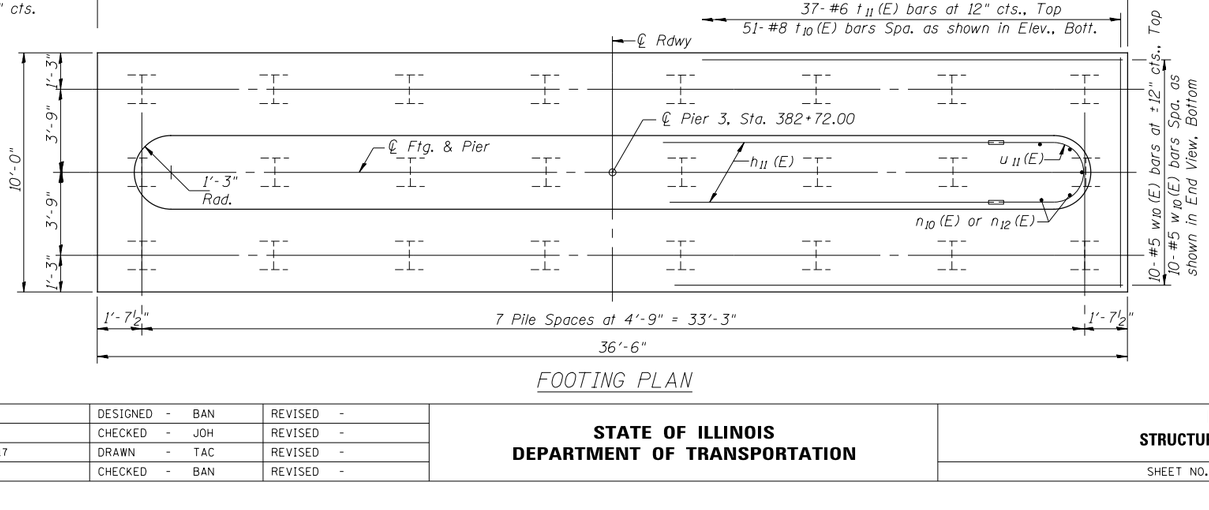


ELEVATION
(Looking East)

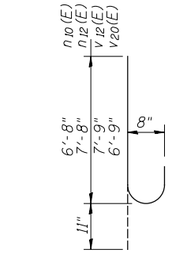
ANCHOR BOLT DETAIL

END VIEW

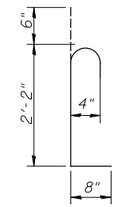
**4-#5 w 10 (E) bars at 8" cts. Typ. Between Piles



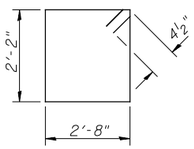
FOOTING PLAN



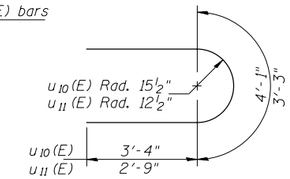
BARS n 10 (E), n 12 (E)
v 12 (E), & v 20 (E)



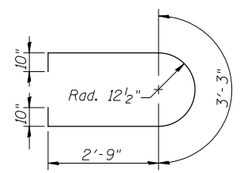
BAR s 11 (E)



BAR s 10 (E)



BARS u 10 (E) & u 11 (E)



BARS u 12 (E)

PIER 3
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h 10 (E)	14	#5	32'-0"	
h 11 (E)	12	#5	26'-6"	
n 10 (E)	36	#8	7'-7"	
n 12 (E)	36	#8	8'-7"	
p 10 (E)	10	#7	32'-0"	
s 10 (E)	33	#4	10'-5"	
s 11 (E)	182	#4	3'-4"	
t 10 (E)	51	#8	9'-9"	
t 11 (E)	37	#6	9'-9"	
u 10 (E)	6	#6	10'-9"	
u 11 (E)	12	#5	8'-9"	
u 12 (E)	14	#5	10'-5"	
v 12 (E)	36	#8	8'-8"	
v 20 (E)	36	#8	7'-8"	
w 10 (E)	20	#5	36'-3"	
Structure Excavation		Cu. Yd.	85	
Concrete Structures		Cu. Yd.	81.2	
Reinforcement Bars, Epoxy Coated		Pound	8,200	
Furnishing Steel Piles HP12x53		Foot	1,311	
Driving Piles		Foot	1,311	
Test Piles Steel HP12x53		Each	1	
Mechanical Splicers		Each	96	

* 6-Mechanical Splicers or shop welded splicer per AWS D1.4 on horizontal bars. (Each Face, Each End)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3
STRUCTURE NO. 003-0062
SHEET NO. 34 OF 59 SHEETS

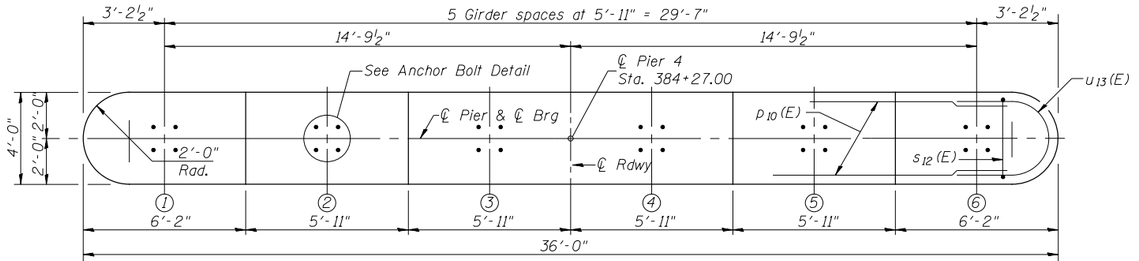
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	60
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-034-PIER 3.dgn

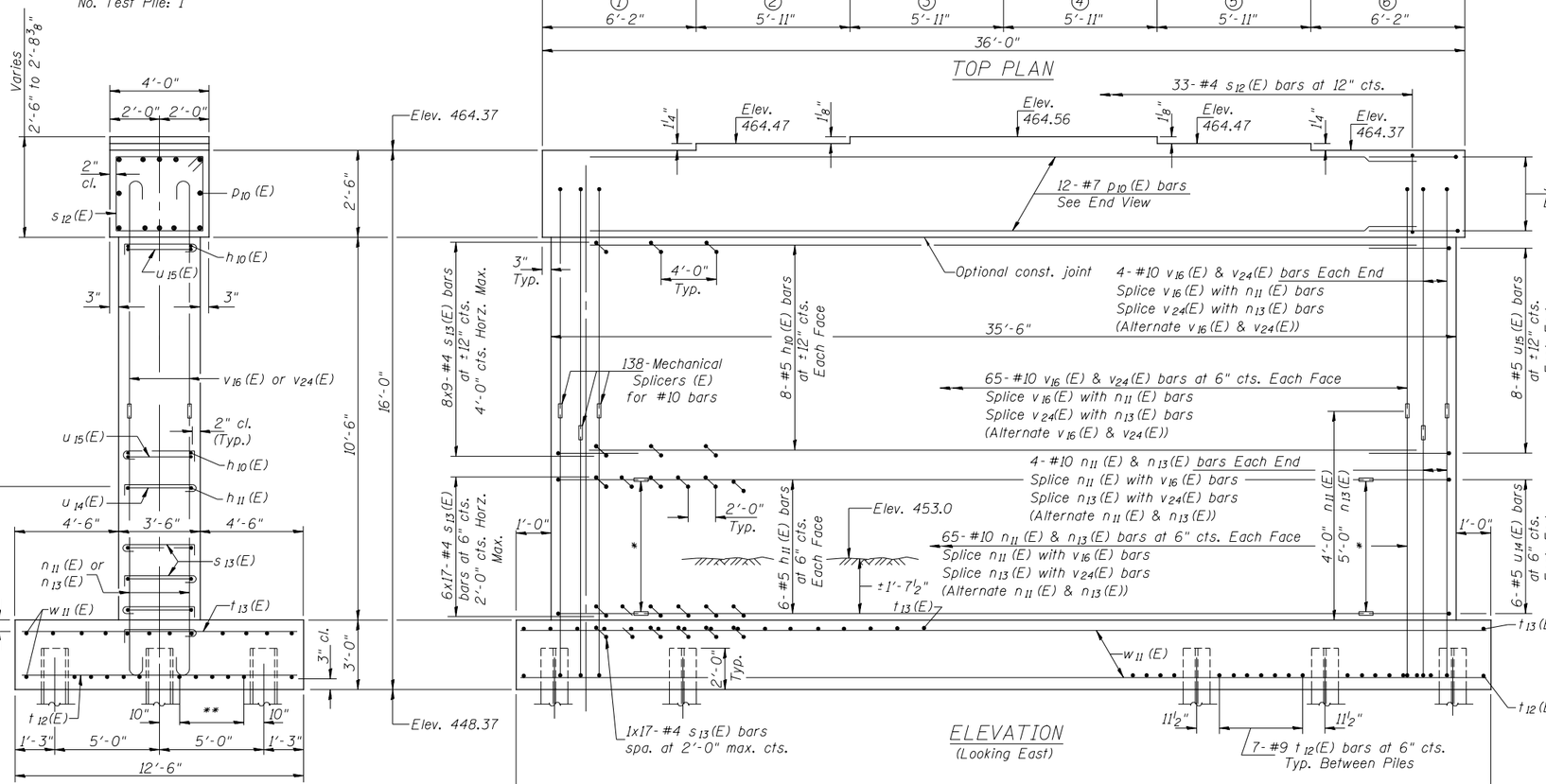
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of piles, see sheet 40 of 59.

PILE DATA

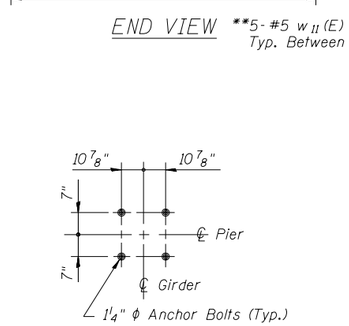
Type: Steel HP12x63
Nominal Required Bearing: 497 kips
Factored Resistance Available: 273 kips
Est. Length: 72 Ft.
No. Production Piles: 23
No. Test Pile: 1



TOP PLAN

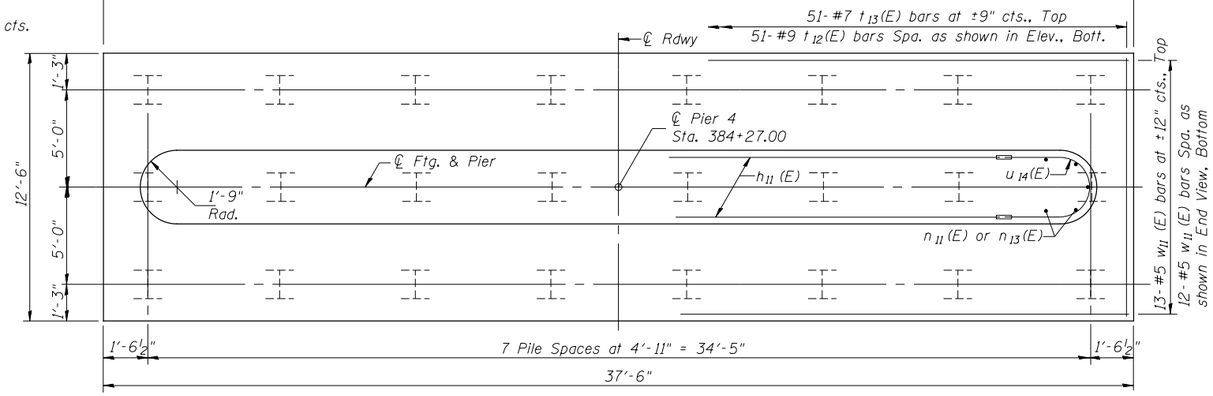


ELEVATION
(Looking East)

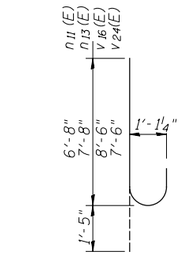


ANCHOR BOLT DETAIL

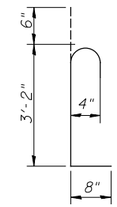
END VIEW **5-#5 w 11 (E) bars at 10" cts. Typ. Between Piles



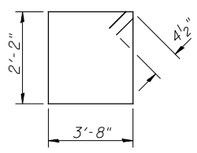
FOOTING PLAN



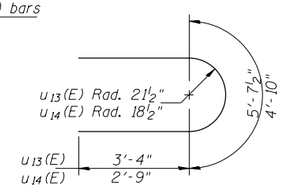
BARS n 11 (E), n 13 (E) v 16 (E), & v 24 (E)



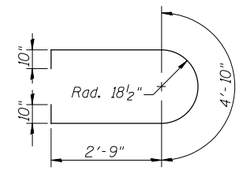
BAR s 13 (E)



BAR s 12 (E)



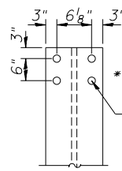
BARS u 13 (E) & u 14 (E)



BARS u 15 (E)

PIER 4
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h 10 (E)	16	#5	32'-0"	——
h 11 (E)	12	#5	26'-6"	——
n 11 (E)	69	#10	8'-1"	⊃
n 13 (E)	69	#10	9'-1"	⊃
p 10 (E)	12	#7	32'-0"	——
s 12 (E)	33	#4	12'-5"	□
s 13 (E)	191	#4	4'-4"	⊂⊃
t 12 (E)	51	#9	12'-3"	——
t 13 (E)	51	#7	12'-3"	——
u 13 (E)	6	#6	12'-4"	⊃⊂
u 14 (E)	12	#5	10'-4"	⊃⊂
u 15 (E)	16	#5	12'-0"	⊃⊂
v 16 (E)	69	#10	9'-11"	⊃
v 24 (E)	69	#10	8'-11"	⊃
w 11 (E)	25	#5	37'-3"	——
Structure Excavation		Cu. Yd.	120	
Concrete Structures		Cu. Yd.	112.9	
Reinforcement Bars, Epoxy Coated		Pound	17,980	
Furnishing Steel Piles HP12x63		Foot	1,656	
Driving Piles		Foot	1,656	
Test Pile Steel HP12x63		Each	1	
Mechanical Splicers		Each	162	



***4-¾" ϕx4" Granular or solid flux filled headed studs automatically end welded (Typ. each flange, each pile)

END OF PILE DETAIL

***Typical each flange, each pile. Cost included with Furnishing Piles.

* 6-Mechanical Splicers or shop welded splicer per AWS D1.4 on horizontal bars. (Each Face, Each End)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 4
STRUCTURE NO. 003-0062
SHEET NO. 35 OF 59 SHEETS

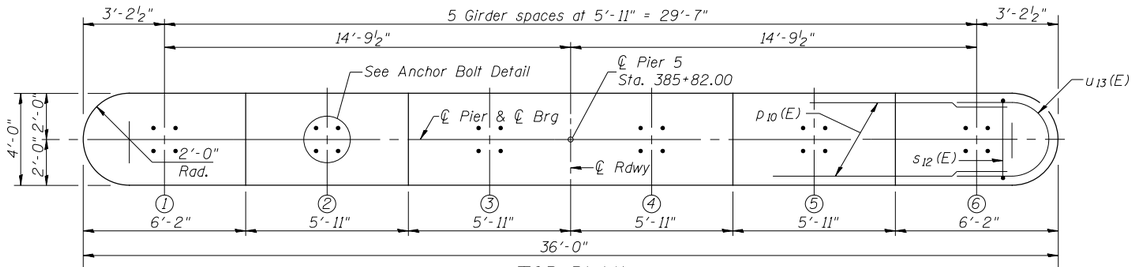
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	61
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-035-PIER 4.dgn

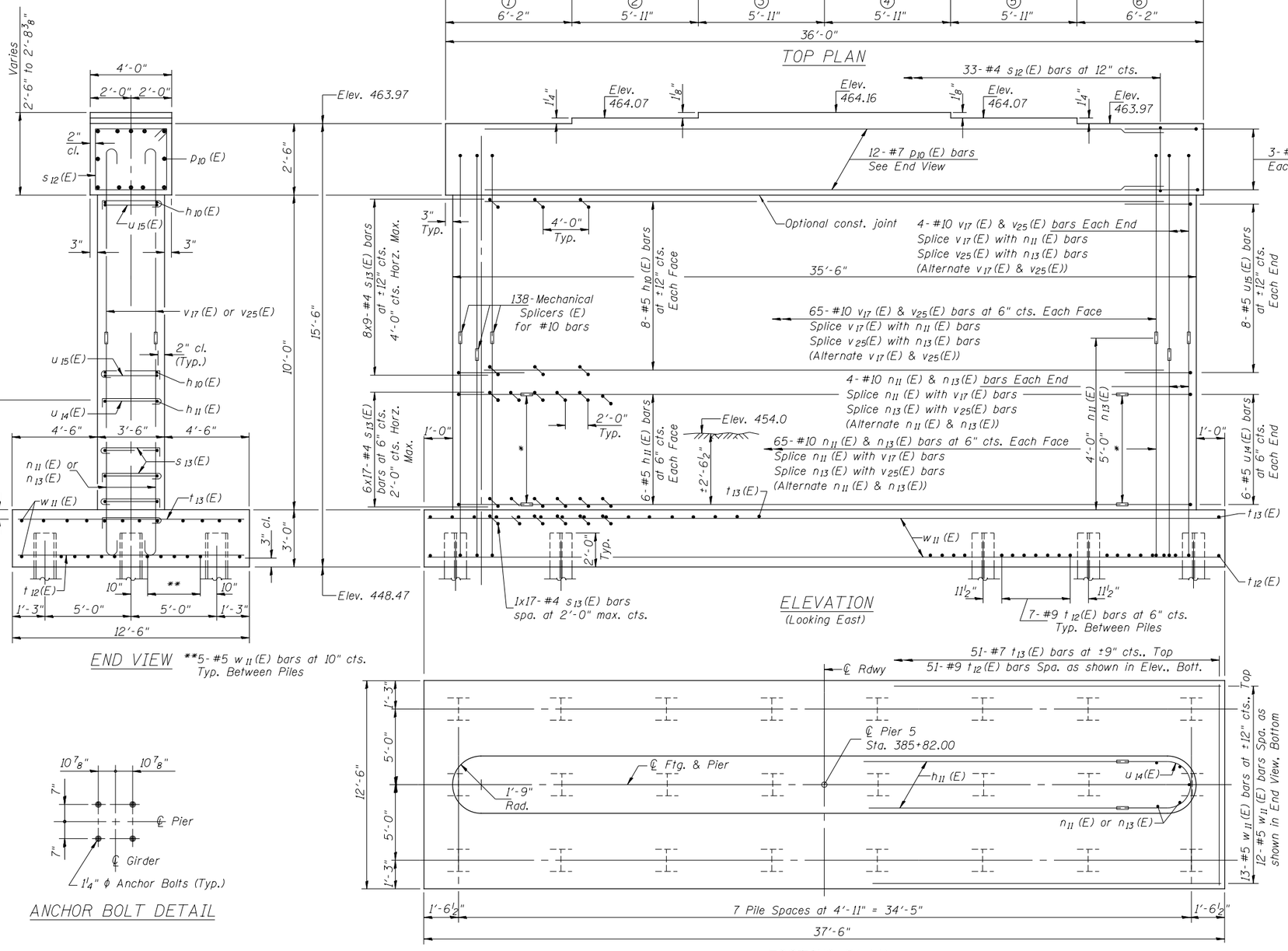
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of piles, see sheet 40 of 59.

PILE DATA

Type: Steel HP12x63
Nominal Required Bearing: 497 kips
Factored Resistance Available: 273 kips
Est. Length: 65 Ft.
No. Production Piles: 24



TOP PLAN

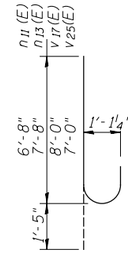


ELEVATION
(Looking East)

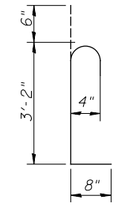
END VIEW **5- #5 w 11 (E) bars at 10" cts. Typ. Between Piles

ANCHOR BOLT DETAIL

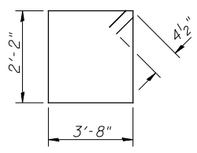
FOOTING PLAN



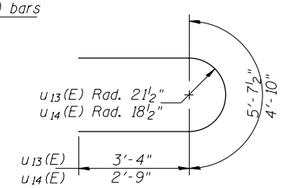
BARS n 11 (E), n 13 (E)
v 17 (E), & v 25 (E)



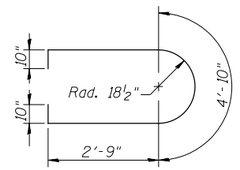
BAR s 13 (E)



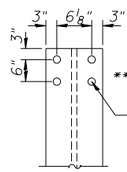
BAR s 12 (E)



BARS u 13 (E) & u 14 (E)



BARS u 15 (E)



***4- ¾" ϕx4" Granular or solid flux filled headed studs automatically end welded (Typ. each flange, each pile)

END OF PILE DETAIL

***Typical each flange, each pile. Cost included with Furnishing Piles.

PIER 5
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h 10 (E)	16	#5	32'-0"	——
h 11 (E)	12	#5	26'-6"	——
n 11 (E)	69	#10	8'-1"	⊃
n 13 (E)	69	#10	9'-1"	⊃
p 10 (E)	12	#7	32'-0"	——
s 12 (E)	33	#4	12'-5"	□
s 13 (E)	191	#4	4'-4"	⊏
t 12 (E)	51	#9	12'-3"	——
t 13 (E)	51	#7	12'-3"	——
u 13 (E)	6	#6	12'-4"	⊃⊂
u 14 (E)	12	#5	10'-4"	⊃⊂
u 15 (E)	16	#5	12'-0"	⊃⊂
v 17 (E)	69	#10	9'-5"	⊃
v 25 (E)	69	#10	8'-5"	⊃
w 11 (E)	25	#5	37'-3"	——
Structure Excavation		Cu. Yd.	140	
Concrete Structures		Cu. Yd.	110.7	
Reinforcement Bars, Epoxy Coated		Pound	17,680	
Furnishing Steel Piles HP12x63		Foot	1,560	
Driving Piles		Foot	1,560	
Mechanical Splicers		Each	162	

* 6-Mechanical Splicers or shop welded splicer per AWS D1.4 on horizontal bars. (Each Face, Each End)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 5
STRUCTURE NO. 003-0062
SHEET NO. 36 OF 59 SHEETS

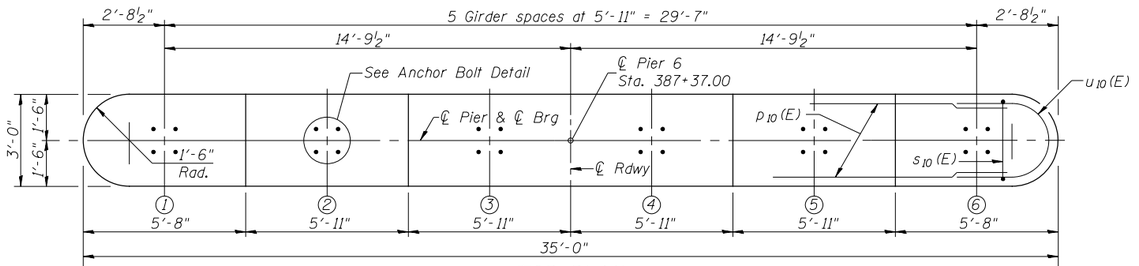
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	62
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-036-PIER 5.dgn

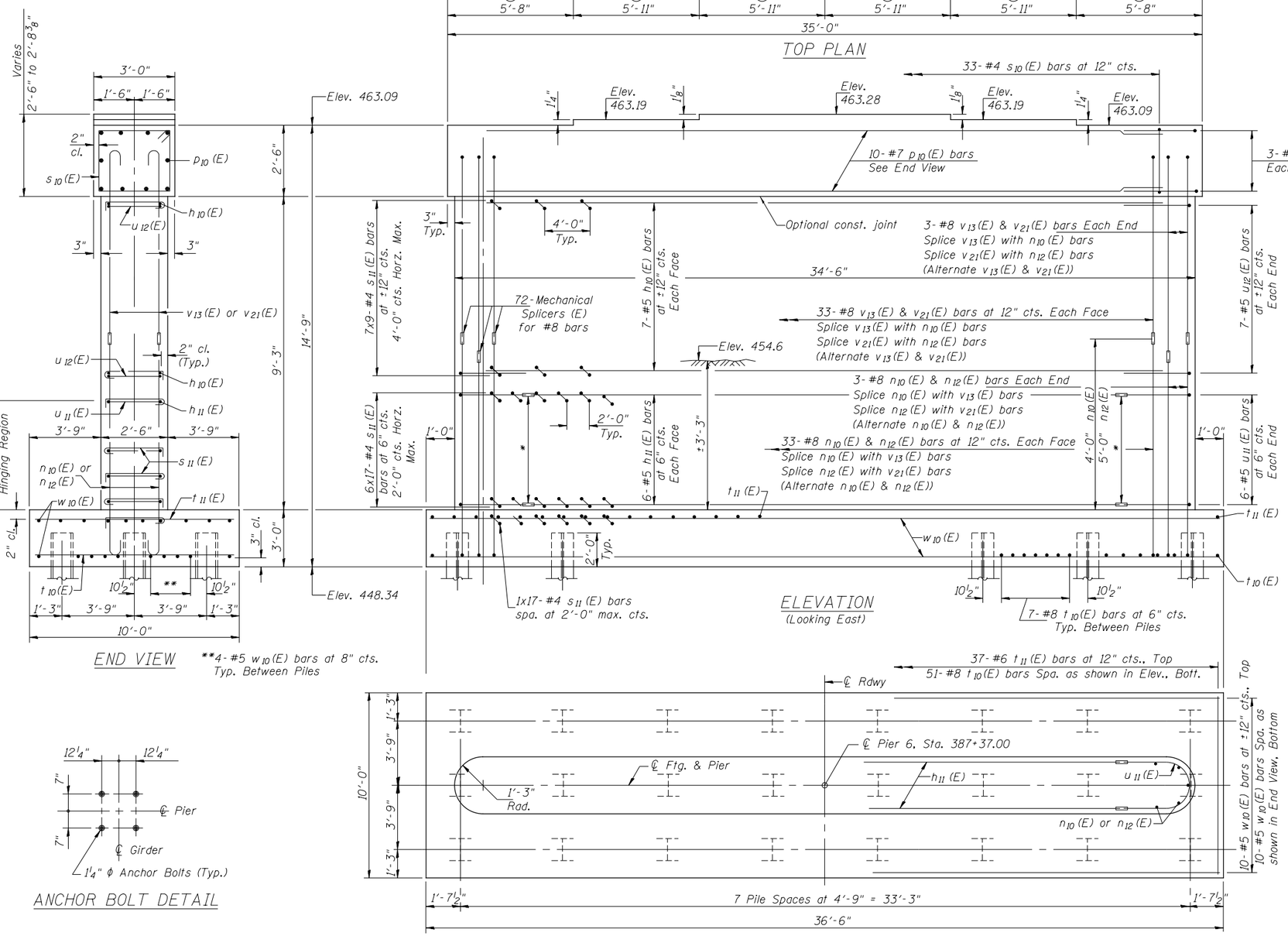
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of piles, see sheet 40 of 59.

PILE DATA

Type: Steel HP12x53
Nominal Required Bearing: 419 kips
Factored Resistance Available: 230 kips
Est. Length: 66 Ft.
No. Production Piles: 24



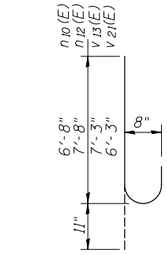
TOP PLAN



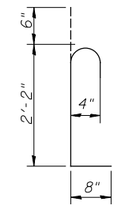
END VIEW

**4-#5 w 10 (E) bars at 8" cts. Typ. Between Piles

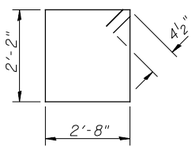
ELEVATION
(Looking East)



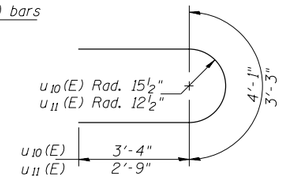
BARS n 10 (E), n 12 (E)
v 13 (E), & v 21 (E)



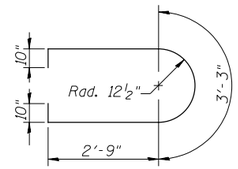
BAR s 11 (E)



BAR s 10 (E)



BARS u 10 (E) & u 11 (E)



BARS u 12 (E)

ANCHOR BOLT DETAIL

FOOTING PLAN

PIER 6
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h 10 (E)	14	#5	32'-0"	——
h 11 (E)	12	#5	26'-6"	——
n 10 (E)	36	#8	7'-7"	⊃
n 12 (E)	36	#8	8'-7"	⊃
p 10 (E)	10	#7	32'-0"	——
s 10 (E)	33	#4	10'-5"	□
s 11 (E)	182	#4	3'-4"	⊂⊃
t 10 (E)	51	#8	9'-9"	——
t 11 (E)	37	#6	9'-9"	——
u 10 (E)	6	#6	10'-9"	⊃⊃
u 11 (E)	12	#5	8'-9"	⊃⊃
u 12 (E)	14	#5	10'-5"	⊃⊃
v 13 (E)	36	#8	8'-2"	⊃
v 21 (E)	36	#8	7'-2"	⊃
w 10 (E)	20	#5	36'-3"	——
Structure Excavation		Cu. Yd.	130	
Concrete Structures		Cu. Yd.	79.6	
Reinforcement Bars, Epoxy Coated		Pound	8,100	
Furnishing Steel Piles HP12x53		Foot	1,584	
Driving Piles		Foot	1,584	
Mechanical Splicers		Each	96	

* 6-Mechanical Splicers or shop welded splicer per AWS D1.4 on horizontal bars. (Each Face, Each End)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 6
STRUCTURE NO. 003-0062
SHEET NO. 37 OF 59 SHEETS

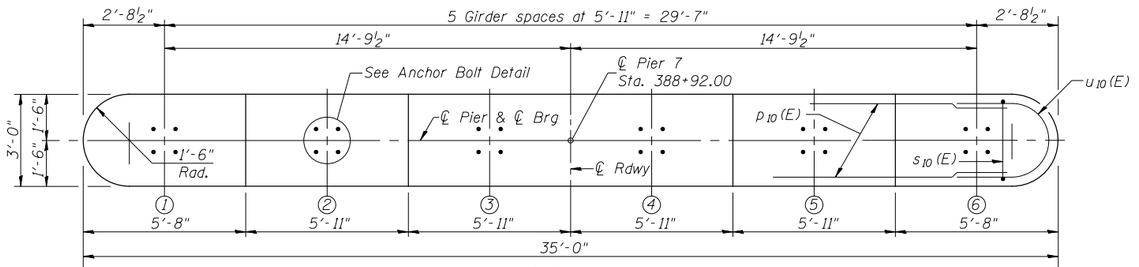
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	63
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-037-PIER 6.dgn

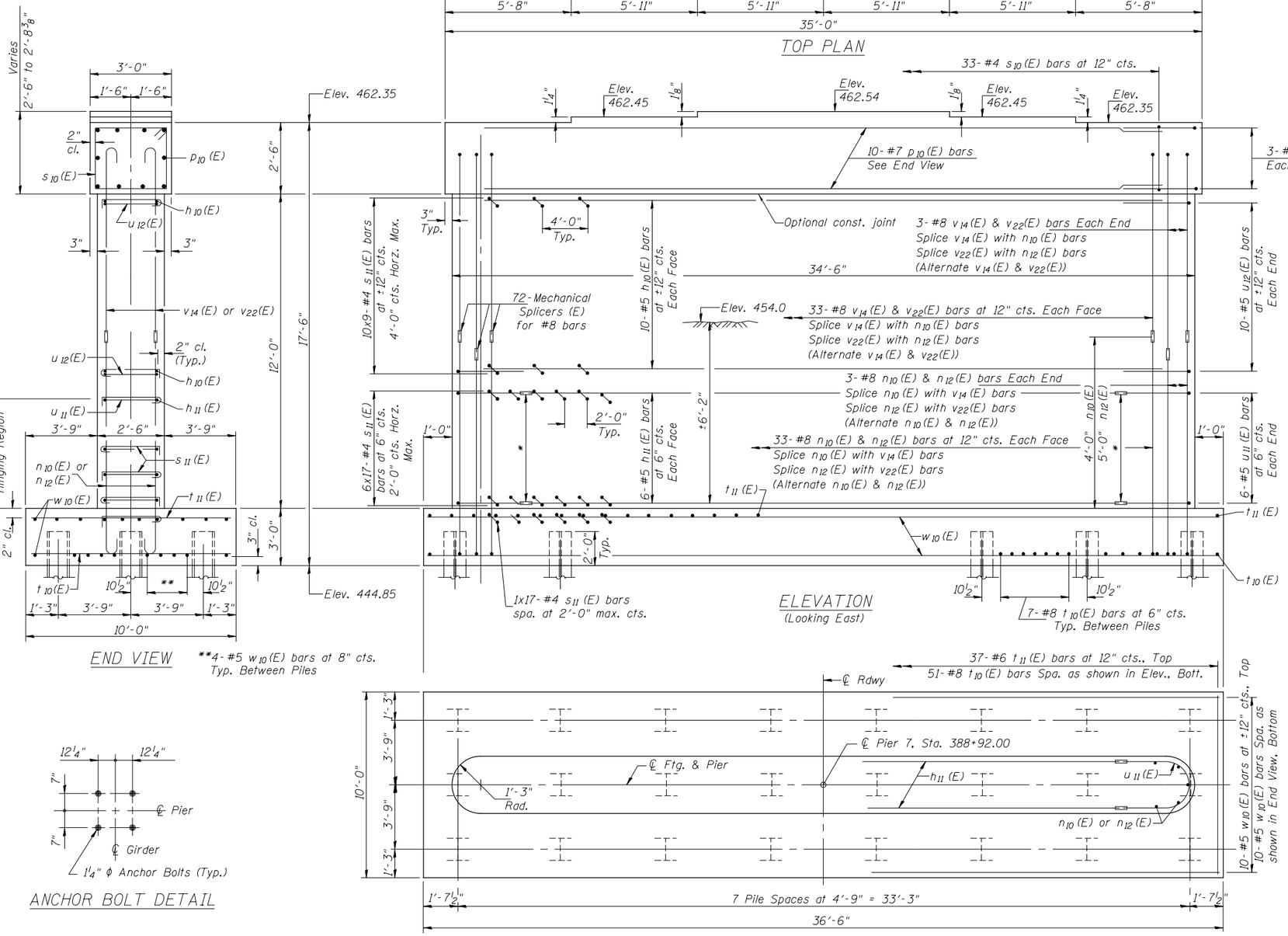
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of piles, see sheet 40 of 59.

PILE DATA

Type: Steel HP12x53
Nominal Required Bearing: 419 kips
Factored Resistance Available: 230 kips
Est. Length: 52 Ft.
No. Production Piles: 23
No. Test Piles: 1

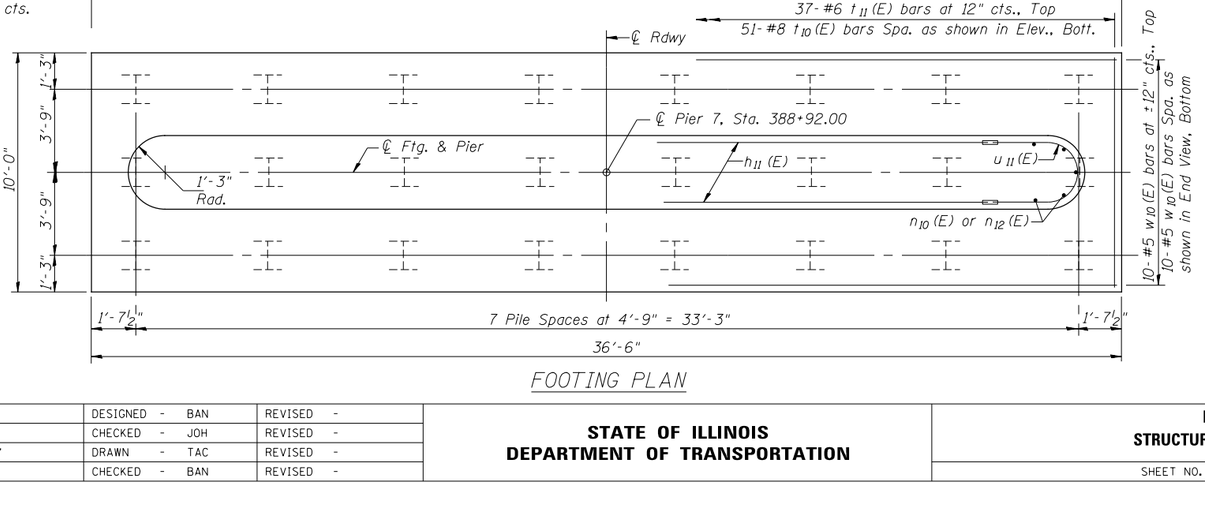


TOP PLAN

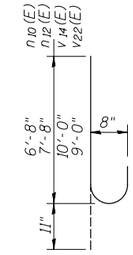


ELEVATION
(Looking East)

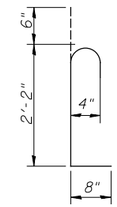
ANCHOR BOLT DETAIL



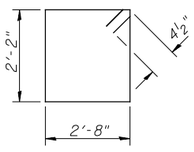
FOOTING PLAN



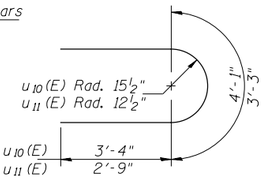
BARS n 10 (E), n 12 (E)
v 14 (E), & v 22 (E)



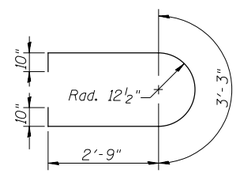
BAR s 11 (E)



BAR s 10 (E)



BARS u 10 (E) & u 11 (E)



BARS u 12 (E)

PIER 7
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h 10 (E)	20	#5	32'-0"	
h 11 (E)	12	#5	26'-6"	
n 10 (E)	36	#8	7'-7"	
n 12 (E)	36	#8	8'-7"	
p 10 (E)	10	#7	32'-0"	
s 10 (E)	33	#4	10'-5"	
s 11 (E)	209	#4	3'-4"	
t 10 (E)	51	#8	9'-9"	
t 11 (E)	37	#6	9'-9"	
u 10 (E)	6	#6	10'-9"	
u 11 (E)	12	#5	8'-9"	
u 12 (E)	20	#5	10'-5"	
v 14 (E)	36	#8	10'-11"	
v 22 (E)	36	#8	9'-11"	
w 10 (E)	20	#5	36'-3"	
Structure Excavation		Cu. Yd.	195	
Concrete Structures		Cu. Yd.	88.2	
Reinforcement Bars, Epoxy Coated		Pound	8,950	
Furnishing Steel Piles HP12x53		Foot	1,196	
Driving Piles		Foot	1,196	
Test Pile Steel, HP12x53		Each	1	
Mechanical Splicers		Each	96	

* 6-Mechanical Splicers or shop welded splicer per AWS D1.4 on horizontal bars. (Each Face, Each End)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

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	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 7
STRUCTURE NO. 003-0062
SHEET NO. 38 OF 59 SHEETS

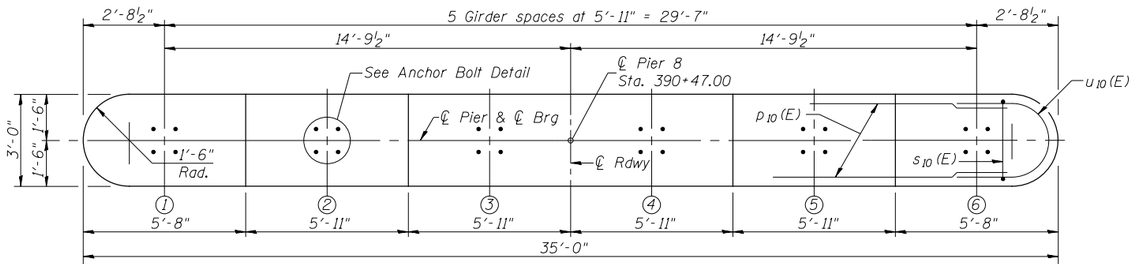
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40.112)BR-1	BOND	95	64
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-038-PIER 7.dgn

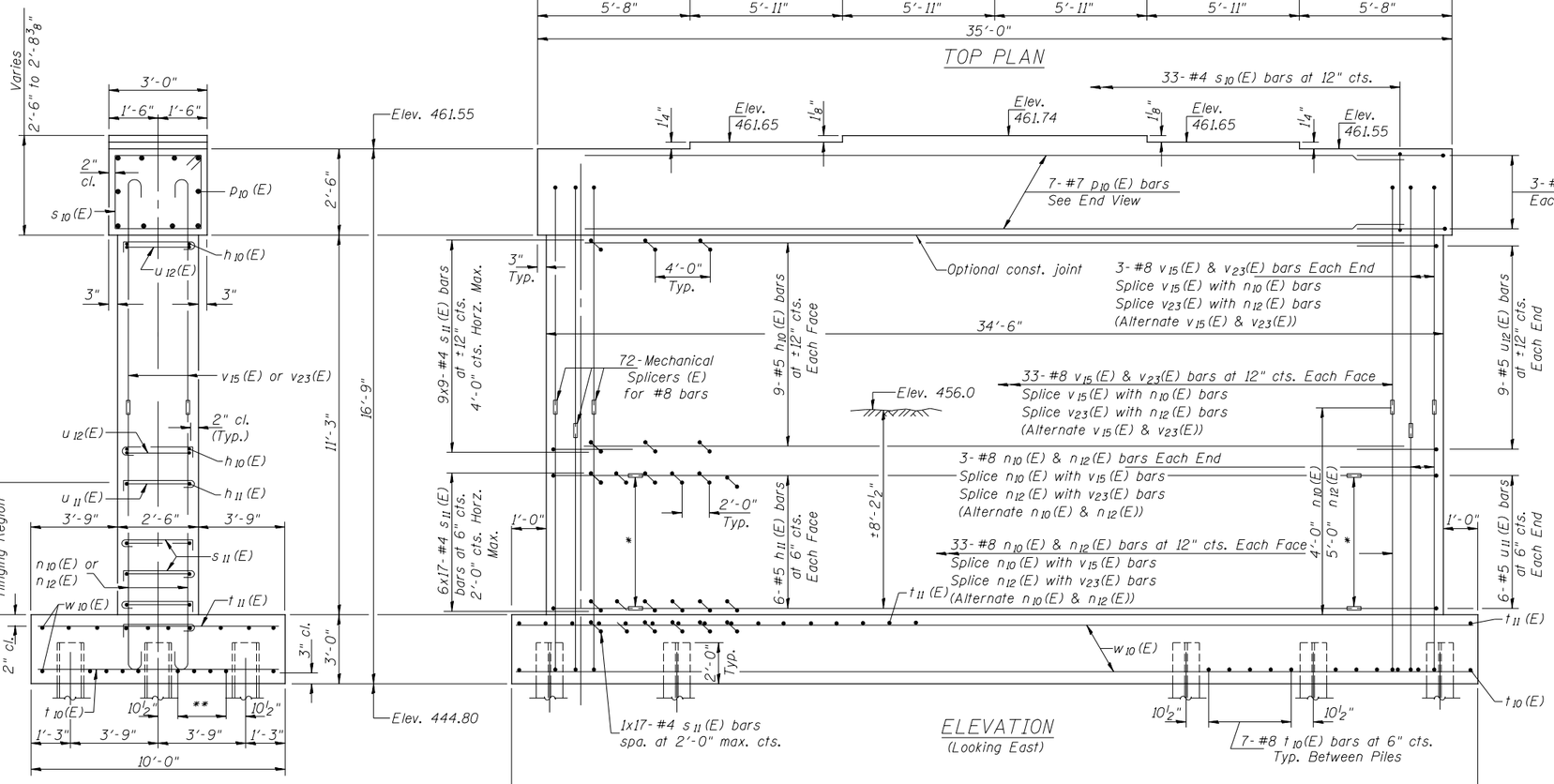
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of piles, see sheet 40 of 59.

PILE DATA

Type: Steel HP12x53
Nominal Required Bearing: 419 kips
Factored Resistance Available: 230 kips
Est. Length: 54 Ft.
No. Production Piles: 24



TOP PLAN

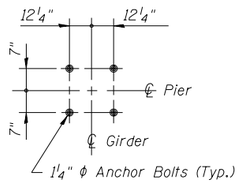


END VIEW

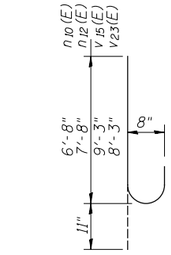
**4-#5 w 10 (E) bars at 8" cts. Typ. Between Piles

ELEVATION
(Looking East)

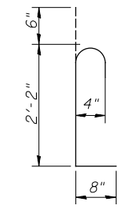
FOOTING PLAN



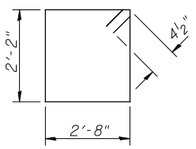
ANCHOR BOLT DETAIL



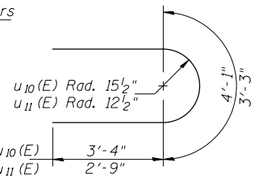
BARS n 10 (E), n 12 (E) v 15 (E), & v 23 (E)



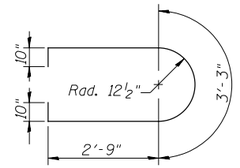
BAR s 11 (E)



BAR s 10 (E)



BARS u 10 (E) & u 11 (E)



BARS u 12 (E)

PIER 8
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h 10 (E)	18	#5	32'-0"	
h 11 (E)	12	#5	26'-6"	
n 10 (E)	36	#8	7'-7"	
n 12 (E)	36	#8	8'-7"	
p 10 (E)	10	#7	32'-0"	
s 10 (E)	33	#4	10'-5"	
s 11 (E)	200	#4	3'-4"	
t 10 (E)	51	#8	9'-9"	
t 11 (E)	37	#6	9'-9"	
u 10 (E)	6	#6	10'-9"	
u 11 (E)	12	#5	8'-9"	
u 12 (E)	18	#5	10'-5"	
v 15 (E)	36	#8	10'-2"	
v 23 (E)	36	#8	9'-2"	
w 10 (E)	20	#5	36'-3"	
Structure Excavation		Cu. Yd.	235	
Concrete Structures		Cu. Yd.	85.9	
Reinforcement Bars, Epoxy Coated		Pound	8,700	
Furnishing Steel Piles HP12x53		Foot	1,296	
Driving Piles		Foot	1,296	
Mechanical Splicers		Each	96	

* 6-Mechanical Splicers or shop welded splicer per AWS D1.4 on horizontal bars. (Each Face, Each End)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

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	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 8
STRUCTURE NO. 003-0062
SHEET NO. 39 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	65
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

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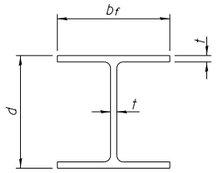
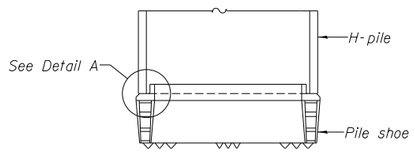
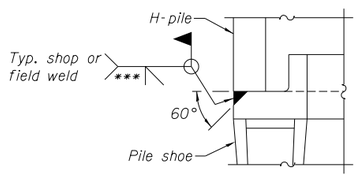


STEEL PILE TABLE

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

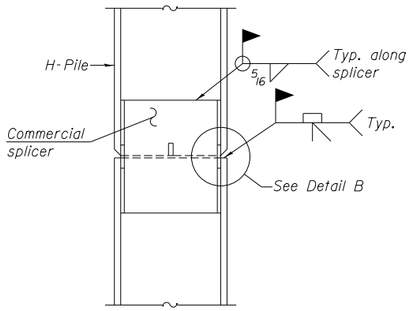


ELEVATION

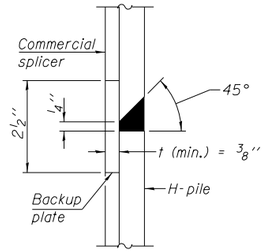


DETAIL A

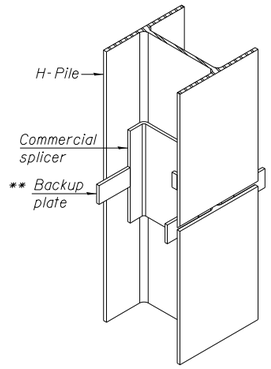
H-PILE SHOE ATTACHMENT



ELEVATION

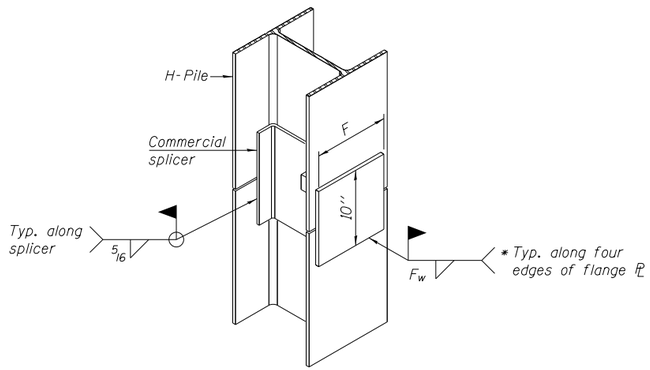


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



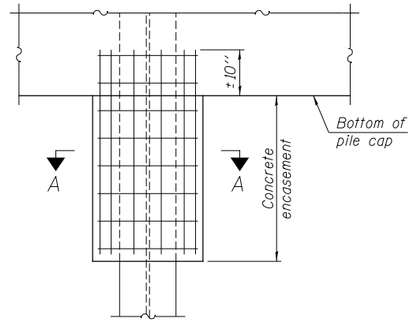
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

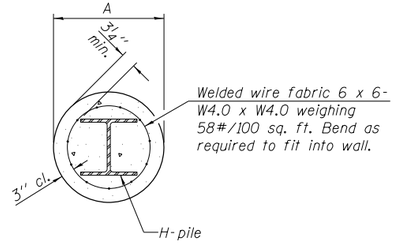
* Interrupt welds 1/4" from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer (5/16" min.).



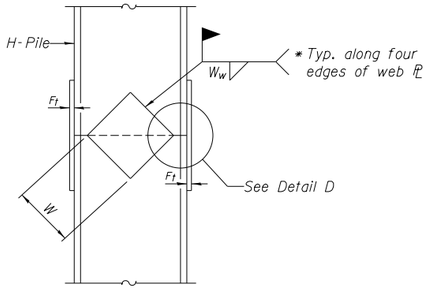
ELEVATION



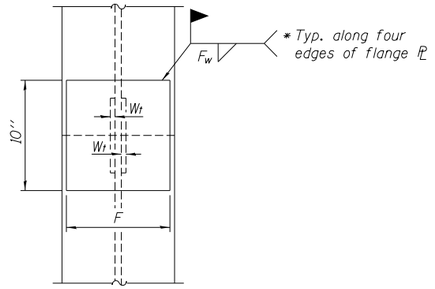
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

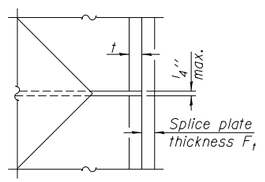
PILE ENCASEMENT



ELEVATION



END VIEW



DETAIL D

Designation	F	F_t	F_w	W	W_t	W_w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

WELDED PLATE FIELD SPLICE

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

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

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	CHECKED - BAN	REVISED -

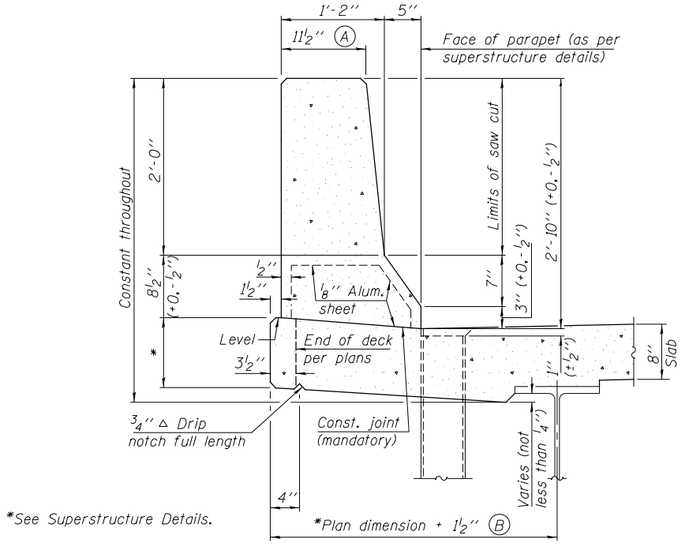
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 003-0062

SHEET NO. 40 OF 59 SHEETS

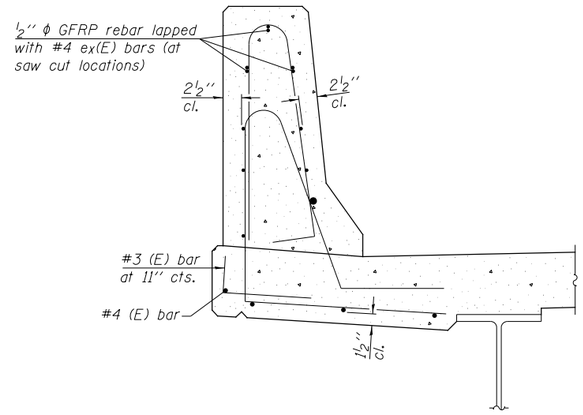
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	66
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-040-HP PILE.dgn



34" F SHAPE PARAPET SECTION

(Showing dimensions)



SECTION

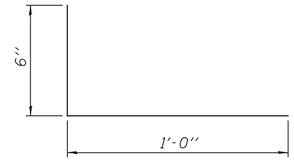
(34" parapet shown - 42" parapet similar)
(Showing reinforcement clearances for slip forming and additional reinforcement bars)

GENERAL NOTES

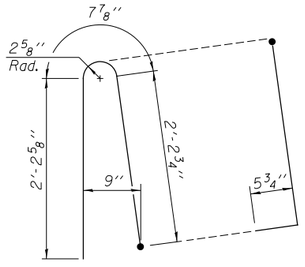
All dimensions shall remain the same as shown on superstructure details, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B = 0.0165 cu. yds./ft. for 34" parapet or = 0.0223 cu. yds./ft. for 42" parapet.

Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler.

Steel superstructure shown. Other superstructure types similar.

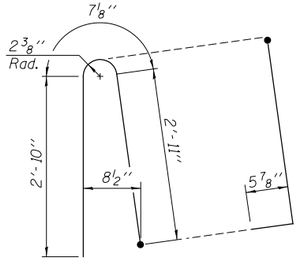


#3 (E) BAR



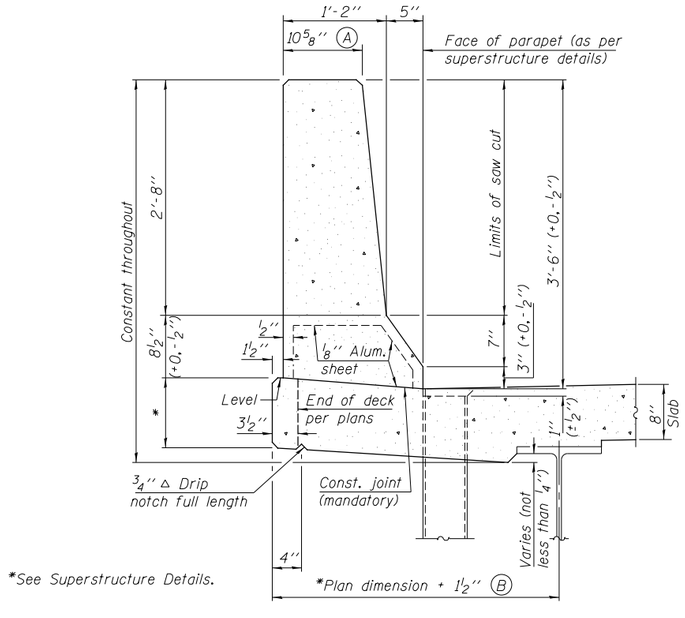
ALTERNATE BAR d(E)

(For 34" parapet when conduit is present)



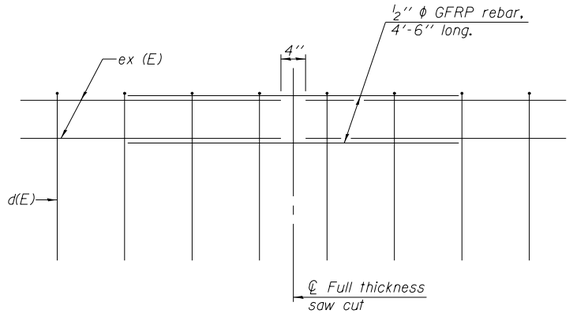
ALTERNATE BAR d(E)

(For 42" parapet when conduit is present)



42" F SHAPE PARAPET SECTION

(Showing dimensions)



GFRP REBAR STIFFENING DETAIL

(Place as shown in parapet section at each parapet joint location.)

Hutchison Engineering, Inc. Jacksonville, Peoria & Shorewood, Illinois	USER NAME =	DESIGNED - BAN	REVISED -
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	PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
		CHECKED - BAN	REVISED -

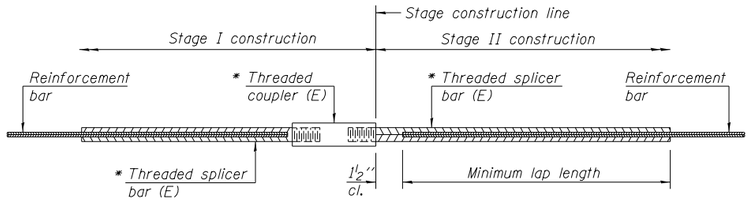
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE PARAPET SLIPFORMING OPTION
STRUCTURE NO. 003-0062

SHEET NO. 41 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40.112)BR-1	BOND	95	67
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-041-SLIP FORM.dgn



STANDARD BAR SPLICER ASSEMBLY

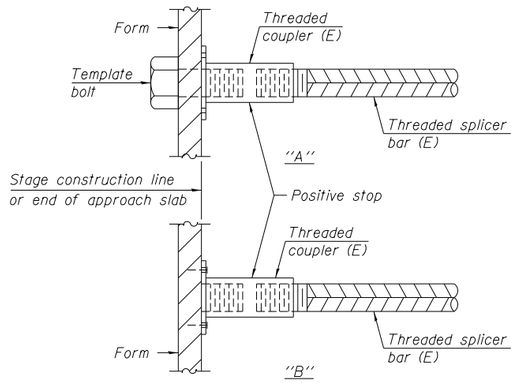
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Class C
Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1½" + thread length

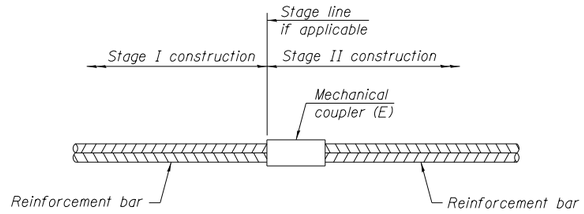
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



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
Pier 1	5	24
Pier 1	8	72
Pier 2	5	24
Pier 2	8	72
Pier 3	5	24
Pier 3	8	72
Pier 4	5	24
Pier 4	10	138
Pier 5	5	24
Pier 5	10	138
Pier 6	5	24
Pier 6	8	72
Pier 7	5	24
Pier 7	8	72
Pier 8	5	24
Pier 8	8	72

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.

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 3/5/71

ROUTE FAP 793 (FA 149) **DESCRIPTION** IL 143 over Shoal Creek **LOGGED BY** C. Hoffman

SECTION 112BR **LOCATION** NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. W. Abut
Station 379+88.2
Offset 13.00ft Right
Ground Surface Elev. 465.2 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 449.0 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown Silty CLAY			
	10	1.11 B	23
-5			
	23	2.77 E	17
	15	2.77 S	16
-10			
	21	3.00 S	28
453.5			
Brown and Gray Slightly Silty CLAY			
	15	2.35 S	25
451.0			
Gray Slightly Silty CLAY			
-15			
449.0 ▼	7	1.11 B	25
Gray and Brown Slightly Silty CLAY			
	8	1.46 B	25
446.0			
Gray and Brown Silty Slightly Sandy CLAY			
-20			
Gray and Brown Silty Slightly Sandy CLAY *(continued)*			
	5	0.49 B	23
	9	0.49 B	23
-25			
	9	1.04 B	27
438.5			
Gray Slightly Silty CLAY			
	7	0.20 B	27
436.0			
Gray Medium SAND			
-30			
	8	NC	
	30	NC	
-35			
	32	NC	
	40	NC	
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 3/5/71

ROUTE FAP 793 (FA 149) **DESCRIPTION** IL 143 over Shoal Creek **LOGGED BY** C. Hoffman

SECTION 112BR **LOCATION** NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. W. Abut
Station 379+88.2
Offset 13.00ft Right
Ground Surface Elev. 465.2 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 449.0 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Medium SAND *(continued)*			
	30	NC	
	60	NC	
-45			
419.0	27	NC	
Gray Clayey SILT			
	24	2.06 B	21
-50			
	32	2.68 B	19
413.7			
Gray-Green Silty CLAY			
	36	2.71 B	19
-55			
	30	3.36 B	23
408.5			
Gray Silt Sand TILL			
	20	2.77 S	16
406.2			
Gray Coarse SAND			
-60			
Gray Coarse SAND *(continued)*			
404.4	100		
Gray Weathered SHALE		NC	
403.9			
End of Boring			
Ground Elevation with Reference to assumed BM of 122.9', RR spike in 24" oak 383' right, Station 374+00			
-65			
-70			
-75			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 4/19/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 1 Bent #2
Station 380+48.1
Offset 21.00ft Right
Ground Surface Elev. 454.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 449.6 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray CLAY			
	7	1.37 B	27
449.6 ▼			
-5			
Gray Silty CLAY			
	2	0.36 B	33
	4	0.52 B	28
-10			
	6	1.01 B	25
442.0			
Gray and Brown Silty CLAY			
	9	1.33 B	26
-15			
	6	1.04 B	26
436.1			
Gray Medium SAND	6	NC	
-20			
Gray Medium SAND *(continued)*			
	1	NC	
-25			
	34	NC	
	32	NC	
427.0			
Gray Coarse SAND			
	30	NC	
424.5			
-30			
Gray Fine SAND with Coarse Gravel			
	44	NC	
422.0			
Gray SILT			
	34	2.22 S	21
-35			
	40	2.22 E	
	60	1.04 S	23
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 2

Date 4/19/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 1 Bent #2
Station 380+48.1
Offset 21.00ft Right
Ground Surface Elev. 454.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 449.6 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray SILT *(continued)* (Thixotropic)			
	48	3.45 S	22
409.5			
-45			
Gray Clayey SILT			
	24	2.80 S	21
	20	3.17 S	19
407.0			
Blue Gray Silty CLAY			
	13	2.75 S	19
-50			
	17	2.35 S	19
402.0			
Gray Weathered SHALE			
	80		14
-55			
	72		
	100+		
-60			
Gray Weathered SHALE *(continued)*			
392.6	100+		
End of Boring			
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00			
-65			
-70			
-75			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 4/26/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 2 Bent #3
Station 380+97.72
Offset 22.70ft Right
Ground Surface Elev. 454.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 449.6 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown and Gray Slightly Silty CLAY			
	3	0.49 E	27
▼			
-5			
	3	0.49 B	26
	5	0.65 B	26
-10			
	4	0.33 B	28
	10	0.55 B	28
-15			
	7	0.75 B	31
437.1			
Gray Silty CLAY			
	4	0.55 B	34
434.5			
Gray Fine SAND			
-20			
Gray Fine SAND *(continued)*			
	1	NC	
-25			
	30	NC	
	26	NC	
427.1			
Gray Fine SAND and GRAVEL			
	38	NC	
-30			
	30	NC	
	24	NC	
-35			
	26	NC	
417.1			
Gray SILT			
	30	2.54 S	24
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 003-0062
SHEET NO. 44 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	70
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

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Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 4/26/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 2 Bent #3
Station 380+97.72
Offset 22.70ft Right
Ground Surface Elev. 454.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 449.6 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray SILT *(continued)* (Thixotropic)		30	2.44 S	21
412.1				
Gray-Green Silty CLAY		28	3.91 S	18
	-45			
		10	2.27 B	20
407.1				
Gray Green Silty Sandy CLAY		12	1.20 B	18
	-50			
		24	2.11 S	14
402.1				
Gray Weathered SHALE		100+	5.06 S	17
	-55			
		40	2.52 S	17
		60	4.57 S	
	-60			
Gray Weathered SHALE *(continued)*		100+		
392.6				
End of Boring				
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00				
	-65			
	-70			
	-75			
	-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 4/28/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 3 Bent #4
Station 381+49.12
Offset 19.00ft Right
Ground Surface Elev. 454.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 447.2 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Slightly Silty CLAY		7	0.59 E	25
449.5				
Brown and Gray Silty CLAY		5	0.59 B	27
		4	0.39 B	28
	-10			
		6	1.04 B	28
		8	1.46 B	27
	-15			
		8	0.97 S	30
437.0				
Gray Silty CLAY		2	0.62 B	35
434.5	-20			
Gray Sandy Gravelly CLAY				
Gray Sandy Gravelly CLAY *(continued)*		4	0.33 B	25
432.0				
Gray Coarse SAND and GRAVEL		9	NC	
	-25			
		22	NC	
		48	NC	
424.5	-30			
Gray SILT		40	3.60 E	25
(Thixotropic)		30	3.60 S	21
420.0	-35			
Gray Silty CLAY		16	2.17 B	22
		14	2.17 B	20
	-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 4/28/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 3 Bent #4
Station 381+49.12
Offset 19.00ft Right
Ground Surface Elev. 454.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 447.2 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Silty CLAY *(continued)*		15	2.44 B	18
412.0				
Gray Silty Slightly Sandy CLAY		10	1.27 B	18
	-45			
		13	0.72 B	21
407.0				
Gray Medium SAND		40	NC	
	-50			
403.0		28	NC	17
Gray Weathered SHALE				
402.0				
Dark Gray Weathered SHALE		100+		
399.5	-55			
Gray Weathered SHALE		100+		
		100+		
	-60			
Gray Weathered SHALE *(continued)*		100+		
392.7				
End of Boring				
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00				
	-65			
	-70			
	-75			
	-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 003-0062
SHEET NO. 45 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	71
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

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Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 5/3/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 4 Bent #5
Station 382+00.49
Offset 19.50ft Right
Ground Surface Elev. 454.4 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 447.7 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown and Tan SILT			
	9	0.91 B	26
-5			
	11	1.14 B	25
447.7			
Brown Slightly Silty CLAY			
	6	0.85 B	28
-10			
	5	0.49 B	29
442.7			
Brown and Gray Silty Slightly Sandy CLAY			
	4	0.55 B	28
-15			
	6	0.85 B	30
437.7			
Gray CLAY			
	2	0.52 B	35
435.2			
Gray Coarse SAND			
-20			
Gray Coarse SAND *(continued)*	3	NC	
430.2			
Gray Coarse SAND and GRAVEL			
-25			
	20	NC	
	84	NC	
-30			
	50	NC	
422.7			
Gray SILT			
(Thixotropic)	60	0.87 S	23
-35			
(Thixotropic)	60	2.35 S	23
	22	3.00 S	25
415.2			
Gray Silty CLAY			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 5/3/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 4 Bent #5
Station 382+00.49
Offset 19.50ft Right
Ground Surface Elev. 454.4 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 447.7 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Silty CLAY *(continued)*	12	2.16 B	20
	13	2.17 B	20
-45			
	13	2.24 B	17
407.7			
Gray Sandy SILT			
	32	0.46 B	16
405.2			
Gray Coarse SAND and GRAVEL			
-50	26	NC	17
402.7			
Dark Gray and Black Weathered SHALE			
	80	5.50 S	13
400.2			
Gray Coarse SAND			
399.2	100+		
Gray Weathered SHALE			
-60	100+		
Gray Weathered SHALE *(continued)*	100+		
363.2			
End of Boring			
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00			
-65			
-70			
-75			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 5/4/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 5 Bent #6
Station 382+51.69
Offset 20.00ft Right
Ground Surface Elev. 454.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 445.5 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown and Tan Clayey SILT			
	5	0.52 B	25
-5			
	7	0.98 B	25
	6	0.52 B	27
-10			
	4	0.33 B	28
443.0			
Brown and Gray Silty Slightly Sandy CLAY			
	5	0.46 B	29
-15			
	6	0.81 B	28
438.0			
Gray Silty CLAY			
	3	0.75 B	32
435.5			
Gray Coarse SAND and GRAVEL			
-20			
Gray Coarse SAND and GRAVEL *(continued)*	6	NC	
433.0			
Gray Sandy Silty CLAY			
	20	0.36 B	28
430.5			
Gray Coarse SAND and GRAVEL			
-25			
	30	NC	
	30	NC	
-30			
	28	NC	
	24	NC	
420.5			
Gray Clayey SILT			
-35			
	17	1.70 B	25
	14	1.79 S	27
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 2

Date 5/4/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 5 Bent #6
Station 382+51.69
Offset 20.00ft Right
Ground Surface Elev. 454.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 445.5 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Clayey SILT *(continued)*	14	2.20 B	28
	14	1.25 B	28
410.5			
-45 Dark Brown SILT (with Organics)	24	1.70 S	59
	20	1.43 S	76
405.5			
-50 Gray Silty Sandy CLAY	17	2.24 B	15
403.0			
Gray Weathered SHALE	100+		16
-55	100+		
	100+		
-60			
Gray Weathered SHALE *(continued)*			100+
393.5			
End of Boring			
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00			
-65			
-70			
-75			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 4/5/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 6 Bent #7
Station 383+03.07
Offset 21.00ft Right
Ground Surface Elev. 455.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 445.9 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown and Tan Clayey SILT	6	0.72 B	26
-5	10	0.98 B	25
	7	0.68 B	26
-10	3	0.46 B	29
	4	0.33 B	30
-15	5	0.49 B	30
437.4			
Gray Silty CLAY	6	0.72 B	30
-20			
Gray Silty CLAY *(continued)*	3	0.55 B	33
433.4			
Gray Coarse SAND and GRAVEL	15	NC	
-25	4	NC	
	30	NC	
-30	22	NC	
422.4			
Gray SILT (Thixotropic)	20	1.39 S	22
-35	28	1.86 S	21
	16	2.20 B	26
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 2

Date 4/5/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 6 Bent #7
Station 383+03.07
Offset 21.00ft Right
Ground Surface Elev. 455.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 445.9 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray SILT *(continued)*	16	1.99 B	26
413.4			
Gray Slightly Clayey SILT	20	1.86 B	28
-45	12	1.70 B	27
408.4			
Gray Silty CLAY	16	2.28 B	33
405.9			
-50 Dark Brown SILT (with much Organic matter)	36	3.23 S	58
403.4			
Dark Gray Slightly Clayey SILT	14	2.20 B	30
-55	13	2.35 B	30
	20	2.51 B	19
-60			
Dark Gray Slightly Clayey SILT *(continued)*	20	1.50 B	25
393.4			
Gray Weathered SHALE	100+		
391.4			
End of Boring			
-65 Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00			
-70			
-75			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -	
PLOT SCALE = NONE	CHECKED - JOH	REVISED -	
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -	
	CHECKED - BAN	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 003–0062

SHEET NO. 47 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	73
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

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Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 5/17/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 7 Bent #8
Station 383+61.37
Offset 22.00ft Right
Ground Surface Elev. 454.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 445.3 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown and Tan SILT			
	6	0.59 B	23
-5			
	6	0.59 B	25
	6	1.07 B	26
-10			
	5	0.85 B	27
	4	0.72 B	28
440.2			
-15			
Brown and Tan Clayey SILT			
	8	1.04 B	27
437.7			
Gray Slightly Silty CLAY			
	4	0.52 B	30
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Slightly Silty CLAY *(continued)*			
	2	0.33 B	36
432.7			
Gray Coarse SAND			
	3	NC	
-25			
	28	NC	
	20	NC	
-30			
	20	NC	
	15	NC	
420.2			
-35			
Gray Clayey SILT			
	15	1.11 B	20
	16	2.20 B	24
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 5/17/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 7 Bent #8
Station 383+61.37
Offset 22.00ft Right
Ground Surface Elev. 454.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 445.3 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Clayey SILT *(continued)*			
	20	2.28 S	25
	16	1.82 S	27
-45			
	14	2.28 B	26
	27	0.39 B	31
-50			
	13	2.38 S	32
403.3			
Dark Brown SILT (Highly Organic with much Plant Material)			
	35		74
400.2			
-55			
Dark Brown SILT			
	10	2.17 B	43
397.7			
Dark Gray SILT			
	8	1.82 B	37
-60			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Dark Gray SILT *(continued)*			
	7	1.56 B	34
	8	1.30 B	22
390.2			
-65			
Gray Sandy SILT			
	10	1.07 B	21
387.7			
Gray Weathered SHALE			
	100+		14
385.8			
End of Boring			
-70			
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00			
-75			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 5/18/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 8 Bent #9
Station 384+00.73
Offset 20.00ft Right
Ground Surface Elev. 454.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 446.9 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Dark Brown and Gray Silty CLAY			
	8	0.59 B	30
-5			
	4	0.52 B	32
	3	0.33 B	30
-10			
	4	0.26 B	32
442.0			
Brown and Gray Clayey SILT			
	10	2.06 B	24
-15			
	7	1.63 B	24
437.0			
Brown and Gray SILT			
	6	1.04 B	22
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown and Gray SILT *(continued)*			
433.4			
Gray Medium SAND			
	10	NC	
	28	NC	
429.5			
-25			
Gray Coarse SAND and GRAVEL			
	25	NC	
	32	NC	
-30			
	60	NC	
422.0			
Gray SILT (Thixotropic)			
	30	3.46 S	21
-35			
(Thixotropic)	26	2.27 S	23
416.5			
Gray Clayey SILT			
	20	1.11 S	26
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 003-0062

SHEET NO. 48 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	74
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

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Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 5/18/71

ROUTE FAP 793 (FA 149) **DESCRIPTION** IL 143 over Shoal Creek **LOGGED BY** C. Hoffman

SECTION 112BR **LOCATION** NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 8 Bent #9
Station 384+00.73
Offset 20.00ft Right
Ground Surface Elev. 454.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 446.9 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Clayey SILT *(continued)*			
	18	2.44 B	26
	15	2.45 S	26
-45			
	17	2.87 B	26
	16	1.89 B	30
404.9			
Dark Brown SILT (Highly Organic, much Plant Material)			
-50			
	52	2.42 S	74
401.5			
Dark Brown Clayey SILT			
	15	2.35 B	34
-55			
	10	2.06 B	35
	11	2.77 B	40
-60			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Dark Brown Clayey SILT *(continued)*			
392.4	10	1.82 B	23
End of Boring			
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00			
-65			
-70			
-75			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 5/17/71

ROUTE FAP 793 (FA 149) **DESCRIPTION** IL 143 over Shoal Creek **LOGGED BY** C. Hoffman

SECTION 112BR **LOCATION** NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 9 Bent #10
Station 384+58
Offset 22.00ft Right
Ground Surface Elev. 454.9 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 447.6 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown Clayey SILT			
	10	0.81 S	25
-5			
	5	0.33 S	28
447.9			
Brown and Gray Silty CLAY			
	3	0.23 B	27
-10			
	6	0.81 B	26
442.9			
Brown and Gray Clay TILL			
	12	2.28 B	23
-15			
	17	2.25 S	22
	12	0.81 S	24
435.4			
Gray Silty SAND			
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Silty SAND *(continued)*			
	14	NC	
	5	NC	
430.4			
Gray Medium to Coarse SAND (with Gravel)			
-25			
	17	NC	
427.9			
Gray Clay TILL			
	23	2.25 S	29
-30			
	20	2.42 S	26
422.9			
Gray Clayey SILT (Large Gravel)			
	100+	NS	
-35			
	26	2.42 S	21
417.9			
Gray Silty CLAY			
	14	1.96 B	26
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 5/17/71

ROUTE FAP 793 (FA 149) **DESCRIPTION** IL 143 over Shoal Creek **LOGGED BY** C. Hoffman

SECTION 112BR **LOCATION** NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 9 Bent #10
Station 384+58
Offset 22.00ft Right
Ground Surface Elev. 454.9 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 447.6 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Silty CLAY *(continued)*			
	15	2.28 B	28
	14	1.63 S	29
-45			
	12	1.96 S	28
407.9			
Gray SILT			
	14	1.63 S	25
-50			
	25	2.17 S	41
402.9			
Brown SILT (Organic)			
	26	1.83 S	55
400.4			
Brown and Gray CLAY			
-55			
	12	1.96 B	34
397.9			
Gray Silty CLAY			
	12	1.96 B	20
-60			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Silty CLAY *(continued)*			
393.6	12	1.63 B	23
End of Boring			
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00			
-65			
-70			
-75			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 003-0062

SHEET NO. 49 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	75
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

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Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 5/19/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 10 Bent #11
Station 385+08.63
Offset 21.50ft Right
Ground Surface Elev. 454.7 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 440.4 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	6	0.75 B	21
-5			
	13	1.52 S	20
447.7			
Brown and Tan CLAY	9	2.68 S	23
-10			
	17	3.10 S	24
	15	2.20 S	25
440.4 ▼			
-15			
Gray Tan Silty CLAY	9	1.96 B	25
437.7			
Gray and Brown Sandy SILT	8	1.59 S	22
435.2			
-20 Gray Clayey Medium SAND			
Gray Clayey Medium SAND *(continued)*	7	1.04 B	21
432.7			
Gray Coarse SAND	5	NC	
-25			
	26	NC	
427.7			
Gray Coarse SAND and GRAVEL	22	NC	
-30			
422.7	16	NC	
Gray Sandy SILT			
420.2	30	1.43 S	18
-35			
Gray Coarse SAND	34	NC	
417.7			
Gray SILT	36	2.93 S	21
415.2			
-40 Gray Clayey SILT			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 2

Date 5/19/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 10 Bent #11
Station 385+08.63
Offset 21.50ft Right
Ground Surface Elev. 454.7 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 440.4 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Clayey SILT *(continued)*	18	2.90 B	25
412.7			
Gray CLAY	19	1.17 B	28
-45			
	14	1.50 B	27
407.7			
Gray Clayey SILT	10	1.73 B	30
405.2			
-50 Dark Brown SILT (Highly Organic with much Plant Material)	38	3.66 S	71
402.7			
Gray Clayey SILT	20	3.26 B	35
-55			
	10	2.03 B	32
-60	14	1.96 B	23
Gray Clayey SILT *(continued)*	7	1.66 B	22
393.4			
End of Boring			
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00			
-65			
-70			
-75			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 5/20/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 11 Bent #12
Station 385+59.91
Offset 21.00ft Right
Ground Surface Elev. 455.2 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 433.5 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown and Tan SILT			
	9	0.91 S	22
-5			
	12	1.56 S	20
448.2			
Brown Silty CLAY	14	2.27 B	24
-10			
	15	2.51 S	23
443.2			
Brown and Gray Silty CLAY	13	2.41 S	25
-15			
	13	1.86 S	23
438.2			
Brown and Gray Silty CLAY (with abundant pellets of Limonite)	8	1.04 S	25
-20			
Brown and Gray Silty CLAY (with abundant pellets of Limonite) *(continued)*	5	1.04 S	22
433.5 ▼			
Gray Medium SAND	1	NC	
430.7			
-25 Gray Coarse SAND and Fine GRAVEL	9	NC	
-30	26	NC	
425.7			
Gray Coarse SAND and Coarse GRAVEL	34	NC	
423.2			
Gray SILT (Thixotropic)	34	2.63 S	22
420.7			
-35 Gray Slightly Clayey SILT	12	1.50 B	18
418.2			
Gray SILT (Thixotropic)	24	2.77 S	23
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 2

Date 5/20/71

ROUTE FAP 793 (FA 149) **DESCRIPTION** IL 143 over Shoal Creek **LOGGED BY** C. Hoffman

SECTION 112BR **LOCATION** NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 11 Bent #12
Station 385+59.91
Offset 21.00ft Right
Ground Surface Elev. 455.2 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 433.5 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray SILT *(continued)* (Thixotropic)		20	2.64 S	22
413.2				
Gray Clayey SILT		14	1.82 S	28
	-45			
		12	2.51 B	28
408.2				
Gray Silty CLAY		12	0.39 B	32
	-50			
		10	1.99 B	33
403.2				
Dark Brown SILT (Highly Organic with much Plant Material)		30		70
400.7	-55			
Dark Gray Slightly Clayey SILT		13	2.51 S	47
398.2				
Gray Slightly Clayey SILT		11	2.44 B	23
395.7				
Gray Slightly Clayey Sandy SILT	-60			

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Slightly Clayey Sandy SILT *(continued)*		10	1.50 B	21
394.0				
End of Boring				
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00	-65			
	-70			
	-75			
	-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 5/21/71

ROUTE FAP 793 (FA 149) **DESCRIPTION** IL 143 over Shoal Creek **LOGGED BY** C. Hoffman

SECTION 112BR **LOCATION** NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 12 Bent #13
Station 386+13.35
Offset 21.30ft Right
Ground Surface Elev. 455.7 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 443.8 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown Silty CLAY				
451.2	-5			
Brown and Tan Clayey SILT		6	0.62 E	24
		6	0.62 B	24
		5	0.39 B	26
	-10			
		3	0.26 B	25
		3	0.33 B	26
441.2	-15			
Brown Very Sandy CLAY		3		27
438.7				
Brown and Gray Sandy Clayey SILT		5	0.95 B	24
436.2	-20			
Gray CLAY				

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray CLAY *(continued)*		4	1.27 B	26
433.7				
Gray Slightly Clayey SILT		11	1.35 S	18
431.2	-25			
Gray Coarse SAND and Fine GRAVEL		18	NC	
		40	NC	
	-30			
		50	NC	
422.8				
Gray SILT		23	3.29 S	21
421.2	-35			
Gray Silty CLAY (Till) (with small Pebbles)		9	1.27 B	19
418.7				
Gray SILT (Thixotropic)		27	3.17 S	25
416.2	-40			
Gray CLAY				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 2

Date 5/21/71

ROUTE FAP 793 (FA 149) **DESCRIPTION** IL 143 over Shoal Creek **LOGGED BY** C. Hoffman

SECTION 112BR **LOCATION** NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 12 Bent #13
Station 386+13.35
Offset 21.30ft Right
Ground Surface Elev. 455.7 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 443.8 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray CLAY *(continued)* (with small Pebbles)		14	0.98 B	19
411.2				
Gray Silty CLAY		19	1.43 B	25
408.7	-45			
Gray Clayey SILT		17	1.50 B	28
406.2				
Dark Brown SILT (Highly Organic, much Plant Material)	-50	12	1.30 S	31
		30	2.22 S	72
401.2				
Gray Clayey SILT	-55	40	2.94 S	76
		16	2.87 B	19
		11	1.24 B	20
	-60			

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Clayey SILT *(continued)*		9	1.79 B	19
394.3				
End of Boring				
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00	-65			
	-70			
	-75			
	-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 6/7/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 13 Bent #14
Station 386+64.63
Offset 22.00ft Right
Ground Surface Elev. 456.1 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 444.2 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown SILT			
	10	0.65 E	24
-5			
450.1	10	0.65 S	23
Brown Silty Sandy CLAY			
	7	0.49 S	26
-10			
	3	0.29 B	30
	2	0.33 B	29
-15			
	2	0.07 B	29
	4	0.16 B	24
436.6			
Gray Clayey SAND			
-20			
Gray Clayey SAND *(continued)*	3	0.16 S	25
434.1			
Gray Medium SAND	2	NC	
431.6			
-25			
Gray Coarse SAND	5	NC	
	7	NC	
426.6			
-30			
Gray Coarse SAND and Fine GRAVEL	17	NC	
424.1			
Gray Coarse SAND and Coarse GRAVEL	26	NC	
421.6			
-35			
Gray SILT (Thixotropic)	19	3.39 S	24
419.1			
Gray Silty CLAY (with Pebbles) (Till)	15	1.17 B	20
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 6/7/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 13 Bent #14
Station 386+64.63
Offset 22.00ft Right
Ground Surface Elev. 456.1 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 444.2 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Silty CLAY (with Pebbles) (Till) *(continued)*	14	1.89 B	27
	14	1.79 B	28
-45			
409.1	16	1.63 B	28
Gray Clayey SILT			
406.6	30	0.62 B	28
-50			
Dark Brown SILT (Highly Organic) (Wood Stems)	26	1.63 S	68
401.6	28		63
-55			
Gray CLAY	14	2.17 B	22
399.1			
Gray Silty CLAY	14	1.82 S	21
396.6			
Gray Silty Sandy CLAY			
-60			
Gray Silty Sandy CLAY *(continued)*	9	1.24 B	22
	10	1.82 B	21
391.6			
-65			
Gray Coarse SAND and Coarse GRAVEL	25	NC	
389.1			
Gray Weathered SHALE	100+		16
387.2			
End of Boring			
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00			
-70			
-75			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 6/8/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 14 Bent #15
Station 387+15.01
Offset 21.00ft Right
Ground Surface Elev. 455.2 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 443.4 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown Clayey SILT			
	7	0.98 B	23
-5			
	11	0.91 B	24
	5	0.59 B	26
445.7			
-10			
Brown and Tan Silty CLAY	4	0.29 B	29
	4	0.39 B	29
440.7			
-15			
Brown and Gray Silty CLAY	6	0.81 B	27
	8	0.81 B	29
435.7			
Gray Clayey Medium SAND			
-20			
Gray Clayey Medium SAND *(continued)*	3	0.55 B	27
433.2			
Gray Sandy CLAY	2	0.68 B	32
430.7			
-25			
Gray Clayey Medium SAND	2	0.29 B	29
428.2			
Gray Silty Sandy CLAY	2	0.33 B	26
424.9			
-30			
Gray Coarse SAND and Coarse GRAVEL	16	NC	
423.2			
Gray and Brown Medium GRAVEL	30	NC	
420.7			
-35			
Gray SILT (Thixotropic)	39	1.43 S	24
417.4			
Gray Slightly Silty CLAY (Till) (with small Pebbles)	15	1.82 B	20
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 2

Date 6/8/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 14 Bent #15
Station 387+15.01
Offset 21.00ft Right
Ground Surface Elev. 455.2 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 443.4 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Slightly Silty CLAY (Till) (with small Pebbles) *(continued)*			
	20	1.50 S	27
413.2			
Gray Slightly Silty CLAY			
	16	1.50 S	29
-45			
	14	1.24 B	28
	13	1.79 B	31
405.7			
Dark Brown SILT (Highly Organic wth Plant Stems)	-50		
	40	2.94 S	75
403.2			
Gray Slightly Silty CLAY			
	20	2.06 B	22
400.7			
Gray Silty CLAY	-55		
	12	1.63 B	23
398.2			
Gray Sandy Silty CLAY			
	7	0.85 B	20
	-60		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Sandy Silty CLAY *(continued)*			
	11	0.81 B	21
392.7			
Gray Coarse SAND and GRAVEL			
	43	NC	
390.7	-65		
Gray Weathered SHALE			
	100+		
388.9			
End of Boring			
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00	-70		
	-75		
	-80		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 6/10/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389-70

BORING NO. 15 Bent #16
Station 387+66.46
Offset 21.00ft Right
Ground Surface Elev. 455.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 429.0 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Dark Brown CLAY			
	11	1.01 S	26
-5			
	6	0.52 E	30
448.7			
Gray and Brown Slightly Silty CLAY			
	5	0.88 B	29
-10			
	5	0.29 B	28
	3	0.33 B	28
438.7			
Gray Silty CLAY	-15		
	4	0.52 B	26
436.2			
Gray Silty Sandy CLAY			
	3	0.39 B	26
	-20		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Silty Sandy CLAY *(continued)*			
	2	0.43 B	32
	2	0.43 B	31
431.2	-25		
Gray Clayey Sandy SILT			
	2	0.29 B	27
428.0			
Gray Sandy CLAY			
	1	0.36 B	33
426.2	-30		
Gray Coarse SAND and Coarse GRAVEL			
	14	NC	
	55	NC	
421.2	-35		
Gray SILT			
	25	1.56 B	20
418.7			
Gray Slightly Silty CLAY			
	16	1.59 B	25
	-40		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 2

Date 6/10/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389-70

BORING NO. 15 Bent #16
Station 387+66.46
Offset 21.00ft Right
Ground Surface Elev. 455.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 429.0 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Slightly Silty CLAY *(continued)*			
	16	1.66 S	25
413.7			
Gray SILT			
	72	1.46 S	25
410.5	-45		
Gray CLAY			
	16	1.43 B	28
	13	2.03 B	31
406.2			
Dark Brown SILT (Highly Organic with Plant Stems)	-50		
	50	2.79 S	64
403.7			
Gray Slightly Silty CLAY			
	15	2.27 B	21
	-55		
	15	2.28 B	21
	13	1.73 B	23
396.2			
Gray Silty Sandy CLAY	-60		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Silty Sandy CLAY *(continued)*			
	9	1.17 B	21
394.5			
End of Boring			
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00	-70		
	-75		
	-80		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 003-0062
SHEET NO. 53 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	79
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

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Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 6/11/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 16 Bent #17
Station 388+16.89
Offset 21.00ft Right
Ground Surface Elev. 456.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 442.4 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown Clayey SILT				Gray Sandy Silty CLAY *(continued)*	3	0.49 B	28
				434.6			
	12	1.82 S	22	Gray Medium SAND	5	NC	
-5				432.1 -25			
	9	0.90 S	23	Gray Coarse SAND and Coarse GRAVEL	8	NC	
449.6							
Brown Silty CLAY	5	0.46 B	25		23	NC	
-10							
	4	0.52 B	26		50	NC	
(Thixotropic)							
	3	0.16 B	28		24	NC	
442.4 -15				422.1 -35			
Brown and Tan Sandy Silty CLAY	3	0.26 B	27	Gray SILT (Thixotropic)	46	1.43 S	22
(Thixotropic)				419.6			
438.9	3	0.43 B	36	Gray CLAY (Till) (with small Pebbles)	20	0.39 B	18
Gray Sandy Silty CLAY (Thixotropic)				417.1 -40			
-20							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 2

Date 6/11/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 16 Bent #17
Station 388+16.89
Offset 21.00ft Right
Ground Surface Elev. 456.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 442.4 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Slightly Silty CLAY *(continued)*	14	1.37 B	29	Gray Silty CLAY *(continued)*	11	0.98 B	23
				395.4			
	20	0.98 S	29	End of Boring			
-45				Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00			
	16	1.11 B	30	-65			
	13	0.88 B	31				
406.4 -50							
Dark Brown SILT (Highly Organic with Plant Stems)	20	1.66 S	66				
	28		74				
402.1 -55							
Gray Slightly Silty CLAY	11	1.82 B	22				
	10	0.72 B	26				
397.1 -60							
Gray Silty CLAY							
-70							
-75							
-80							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 6/21/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 17 Bent #18
Station 388+69.23
Offset 19.50ft Right
Ground Surface Elev. 456.9 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 444.9 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown Silty CLAY				Gray Clayey SAND *(continued)*	4	0.43 B	25
				434.9			
	7	1.70 S	24	Gray Medium SAND and Coarse GRAVEL	4	NC	
452.4 -5				432.4 -25			
Brown Clayey SILT	9	1.11 S	24	Gray Coarse SAND and Coarse GRAVEL	3	NC	
	4	0.59 B	24		40	NC	
-10							
	3	0.33 B	26		40	NC	
444.9				424.9			
Brown Silty Sandy CLAY (Thixotropic)	3	0.33 B	27	Gray SILT	22	0.81 B	21
442.4 -15				422.4 -35			
Brown Silty CLAY (Thixotropic)	4	0.68 B	28	Gray Slightly Silty CLAY (Till) (with small Pebbles)	12	0.75 B	20
439.2							
Gray Silty Sandy CLAY (Thixotropic)	5	0.33 B	24		10	1.11 B	20
437.4 -20							
Gray Clayey SAND				-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 6/21/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 17 Bent #18
Station 388+69.23
Offset 19.50ft Right
Ground Surface Elev. 456.9 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 444.9 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Slightly Silty CLAY (Till) (with small Pebbles) *(continued)*		16	1.37 S	26
		25	1.50 B	28
412.4	-45			
Gray Silty CLAY		18	2.27 B	30
		16	0.75 B	29
407.4	-50			
Dark Brown SILT (Highly Organic with Plant Stems)		32	2.93 S	59
		38		71
402.4	-55			
Gray CLAY		16	2.06 B	22
		14	2.17 B	24
397.4	-60			
Gray Silty Sandy CLAY				

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Silty Sandy CLAY *(continued)*		15	1.07 B	21
395.7	-65			
End of Boring				
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00				
	-70			
	-75			
	-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 6/22/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 18 Pier #1
Station 389+00.4
Offset 21.30ft Right
Ground Surface Elev. 457.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 446.6 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown Silty CLAY		9	1.18 E	22
453.1	-5			
Brown SILT		9	1.18 S	21
		6	0.46 B	22
448.1	-10			
Brown Silty CLAY		3	0.13 B	25
(Thixotropic)		2	0.07 B	27
443.1	-15			
Brown Sandy Silty CLAY (Thixotropic)		2	0.16 B	26
440.6				
Gray Sandy Silty CLAY (some Organics)		3	0.33 B	27
	-20			

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Sandy Silty CLAY (some Organics) *(continued)*		3	0.43 B	32
435.6	-25			
Gray Clayey SAND		4	0.26 B	33
432.4				
Gray CLAY (with some Organics)		4	1.17 B	34
430.6				
Gray Coarse SAND		24	NC	
428.1	-30			
Gray Coarse SAND and Coarse GRAVEL		40	NC	
	-35	38	NC	
		56	NC	
		52	NC	
418.1	-40			
Gray SILT				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 6/22/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 18 Pier #1
Station 389+00.4
Offset 21.30ft Right
Ground Surface Elev. 457.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 446.6 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray SILT *(continued)*		40	1.90 S	23
(Thixotropic)				
		16		
	-45			
(Thixotropic)		30	1.32 S	21
410.6				
Gray Clayey SILT		20	2.28 B	27
	-50			
		14	1.53 B	37
405.6				
Dark Brown SILT (Highly Organic with Wood Stems)		21	2.42 S	56
403.1	-55			
Gray Silty CLAY		10	1.70 B	35
400.6				
Gray Silty Sandy CLAY		10	1.73 B	23
	-60			

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Silty Sandy CLAY *(continued)*		6	1.50 B	22
396.4	-65			
End of Boring				
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00				
	-70			
	-75			
	-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 6/23/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 19 Pier #2
Station 390+39.66
Offset 20.70ft Left
Ground Surface Elev. 456.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 442.4 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown Silty CLAY				
		5	0.39 B	24
452.1	-5			
Brown Sandy SILT		4	0.26 S	17
448.9				
Brown Medium SAND		6	NC	
447.1	-10			
Brown Sandy CLAY		5	0.29 B	22
		2	0.10 B	27
442.4 ▼	-15			
Brown and Gray Sandy CLAY		2	0.07 B	28
439.6				
Brown Coarse SAND		15	NC	
	-20			
Brown Coarse SAND *(continued)*		9	NC	
		12	NC	
432.1	-25			
Brown Coarse SAND and Fine GRAVEL		2	NC	
429.6				
Gray Sandy Silty CLAY		22	0.03 B	26
428.4	-30			
Gray Coarse SAND and Fine to Medium GRAVEL		27	NC	
424.6				
Gray Very Sandy SILT		45	0.69 S	19
422.1	-35			
Gray Sandy SILT (with Coarse Gravel embedded) (Thixotropic)		60	1.83 S	14
419.6				
Gray SILT (Thixotropic)		60	2.42 S	22
417.1	-40			
Gray Silty CLAY				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 2

Date 6/23/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 19 Pier #2
Station 390+39.66
Offset 20.70ft Left
Ground Surface Elev. 456.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 442.4 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Silty CLAY *(continued)* (with Pebbles) (Organic) (Till)		11	1.24 B	18
		14	1.17 B	18
409.6	-45			
Gray Clayey SILT		20	2.31 B	22
407.1				
Dark Brown SILT (Highly Organic with Plant Stems)		18	1.50 B	35
404.6	-50			
Gray Silty CLAY		30	2.22 S	71
402.1				
Gray Slightly Silty CLAY		7	1.37 B	34
	-55			
		11	1.76 B	22
397.1				
Gray Silty Sandy CLAY	-60			
Gray Silty Sandy CLAY *(continued)*		8	0.68 B	21
395.4				
End of Boring				
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00	-65			
	-70			
	-75			
	-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 6/24/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 20 Bent #19
Station 390+74.09
Offset 22.90ft Left
Ground Surface Elev. 455.1 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 438.3 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown SILT				
		5	0.46 B	24
450.6	-5			
Brown Clayey SILT		6	0.59 B	20
448.1				
Brown Sandy CLAY		3	0.16 B	25
445.6	-10			
Brown Silty Slightly Sandy CLAY (Thixotropic)		2	0.13 B	31
		2	0.20 B	30
440.6	-15			
Brown Sandy CLAY (Thixotropic)		1	0.16 B	28
438.3 ▼				
Brown Medium SAND		8	NC	
	-20			
Brown Medium SAND *(continued)*		9	NC	
		13	NC	
430.6	-25			
Gray Fine SAND and Medium GRAVEL		25	NC	
		31	NC	
425.6	-30			
Gray Medium SAND and Medium GRAVEL		40	NC	
423.1				
Gray Slightly Silty CLAY (Till) (with Pebbles)		16	0.98 B	17
420.6	-35			
Gray Coarse SAND and Fine GRAVEL		13	NC	
418.1				
Gray Slightly Silty CLAY (Till) (with Pebbles)		10	0.65 B	21
	-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 003-0062

SHEET NO. 56 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	82
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

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Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 6/24/71

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY C. Hoffman

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. 20 Bent #19
Station 390+74.09
Offset 22.90ft Left
Ground Surface Elev. 455.1 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 438.3 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Slightly Silty CLAY (Till) (with Pebbles) *(continued)*		11	0.85 B	19
413.1				
		20	2.38 B	26
	-45			
		26	4.24 B	23
		25	1.99 B	34
405.6				
Dark Brown SILT (Highly Organic with Plant Stems)	-50	34	2.35 S	67
403.1				
Gray Silty CLAY		15	1.46 B	26
	-55			
		13	1.40 B	25
		13	0.91 B	24
	-60			

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray Silty CLAY *(continued)*		15	1.46 B	22
391.6				
Gray Weathered SHALE	391.3	35		12
End of Boring				
Ground Elevation with Reference to assumed BM of 130.25', average of shots along centerline on 0 degree grade, Station 374+00	-65			
	-70			
	-75			
	-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 10/6/14

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY JAS (TSi)

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. B-1
Station 389+14
Offset 26.00ft Right
Ground Surface Elev. 455.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 437.0 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown (Moist, Medium Stiff) Silty CLAY with Trace Gravel		4		
454.0				
Brown (Moist, Loose) Fine Sandy LOAM		3	NC	14
See Gradation @ 2 ft		4		
452.0				
Brown (Moist, Medium Stiff) LOAM		2		
A-4(3)		3	--	21
See Class @ 5 ft	-5	2		
Limestone Pieces		4		
		4	--	11
		4		
Soft		2		
	-10	2	0.57 B	23
Very Soft		WH		
		WH	0.16 B	29
		1		
Gray		WH		
	-15	WH	--	26
		1		
		WH		
438.0		1	--	27
Gray (Moist, Very Loose) SAND See Gradation @ 20 ft Gray & Brown, Loose		1		
	-20	2	NC	23
		3		

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray (Moist, Very Loose) SAND *(continued)*		2		
		2	NC	22
		3		
		3		
		3	NC	25
429.5	-25	2		
Gray (Moist, Loose) Sandy LOAM		2		
428.0		3	NC	20
Gray (Moist, Medium Dense) SAND with Trace Wood Pieces See Gradation @ 30 ft Trace Gravel		4		
		3		
	-30	5	NC	16
		5		
423.0				
Gray (Moist, Stiff) Silty Clay LOAM with Trace Limestone Pieces and Gravel		5		
		4	1.23 B	18
	-35	4		
		2		
	-40	4	1.02 S	18
		4		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 10/6/14

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY JAS (TSi)

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. B-1
Station 389+14
Offset 26.00ft Right
Ground Surface Elev. 455.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 437.0 ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray (Moist, Stiff) Silty Clay LOAM with Trace Limestone Pieces and Gravel *(continued)*		2		
410.5		3	NC	23
	-45	5	2.00 S	
Gray (Moist, Stiff) Silty CLAY				
408.0		7		
Gray to Brown (Moist, Very Stiff) Silty Clay LOAM with Organics A-7-5(21) See Class @ 50 ft		9	2.00 S	67
	-50	14		
403.0				
Gray (Moist, Medium Stiff) Silty CLAY		4		
		3	1.84 S	22
	-55	4		
398.0				
Gray (Moist, Stiff) Clay LOAM with Trace Gravel		4		
	-60	4	0.69 B	16
		5		

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
394.5				
Gray Weathered SHALE		50/5"	--	15
390.5				
Borehole continued with rock coring.	-65			
	-70			
	-75			
	-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE = 1/10/2017	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 003-0062

SHEET NO. 57 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	83
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

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Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

ROCK CORE LOG

Date 10/6/14

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY JAS (TSi)

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond CORING METHOD

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

CORING BARREL TYPE & SIZE

BORING NO. B-1
Station 389+14
Offset 26.00ft Right
Ground Surface Elev. 455.0 ft

Core Diameter 2 in
Top of Rock Elev. 390.50 ft
Begin Core Elev. 390.50 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
390.50					
-65	1	100	92	1	
	1	100	92	1	
	1	100	92	1	
	1	100	92	1	
	1	100	92	1	
-70	2	100	85	1	
	2	100	85	1	
	2	100	85	1	
	2	100	85	1	
380.50	2	100	85	1	
-75					
-80					

Gray, Soft to Moderately Hard, Slightly Weathered, Thin to Thick Bedded, Finely Grained SHALE

END OF BORING AND ROCK CORE

Color pictures of the cores
Cores will be stored for examination until Yes
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 10/7/14

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY JP (TSi)

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. B-2
Station 390+20
Offset 26.00ft Right
Ground Surface Elev. 456.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 437.5 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	4		
	4	--	17
	5		
453.0			
	3		
	3	1.19	27
-5	3		
	2		
	2	NR	
	1		
	WH		
	WH	0.12	28
-10	WH		
	WH		
	WH	0.16	28
	WH		
443.0			
	WH		
	1	--	25
-15	2		
440.5			
	WH		
	WH	0.57	31
	WH		
	WH		
	1	0.41	35
-20	3		

Brown Clay LOAM with Trace Weathered Limestone Pieces
A-6(6)
See Class @ 1.5 ft

Brown Silty Clay LOAM
A-4(6)
See Class @ 5 ft

Brown LOAM
A-4(1)
See Class @ 15 ft

Gray Silty CLAY

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
435.5			
Gray Silty CLAY *(continued)*			
Gray SAND	WH		
See Gradation @ 25 ft	1	NC	22
	3		
Rotary Wash			
	2		
Trace Fine Gravel	3	NC	22
-25	4		
	3		
Gray Silty Clay Parting	3	NC	18
	8		
428.0			
Gray Fine to Coarse SAND with Fine to Medium Gravel	8		
See Gradation @ 30 ft	13	NC	15
-30	16		
424.5			
Gray SILT			
	10		
	15	3.92	22
-35	16		
	14		
	17	1.83	22
-40	12		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 10/7/14

ROUTE FAP 793 (FA 149) DESCRIPTION IL 143 over Shoal Creek LOGGED BY JP (TSi)

SECTION 112BR LOCATION NW 1/4, SW 1/4, SEC. 24, TWP. 4N, RNG. 4W, 3 PM

COUNTY Bond DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. B-2
Station 390+20
Offset 26.00ft Right
Ground Surface Elev. 456.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 437.5 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
414.5			
Gray SILT *(continued)*			
Gray Silty CLAY			
	3		
	3	1.76	29
	3		
-45			
Brown	7		
	10	2.17	84
	14		
-50			
	4		
	6	2.58	24
	7		
-55			
	5		
	5	1.76	22
	5		
-60			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
394.5			
Gray Silty CLAY *(continued)*			
Gray Fine SAND with Trace Gravel	8		
	8	NC	
	21		19
391.5			
Gray Weathered SHALE	50/0"		
391.0 -65			
Borehole continued with rock coring.			
-70			
-75			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Hutchison Engineering, Inc.
Jacksonville, Peoria & Shorewood, Illinois

USER NAME =	DESIGNED - BAN	REVISED -
PLOT SCALE = NONE	CHECKED - JOH	REVISED -
PLOT DATE =	DRAWN - TAC	REVISED -
	CHECKED - BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 003-0062
SHEET NO. 58 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40,112)BR-1	BOND	95	84
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

V:\Bridge\3890-Bond\SHOAL CR\0030062-76967-058-BORING.dgn

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

ROCK CORE LOG

Date 10/7/14

ROUTE FAP 793 (FA 149) **DESCRIPTION** IL 143 over Shoal Creek **LOGGED BY** JP (TSi)

SECTION 112BR **LOCATION** NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond **CORING METHOD**

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. B-2
Station 390+20
Offset 26.00ft Right
Ground Surface Elev. 456.0 ft

CORING BARREL TYPE & SIZE
Core Diameter 2 in
Top of Rock Elev. 391.00 ft
Begin Core Elev. 391.00 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
391.00 Gray, Soft to Slightly Hard, Moderately Weathered, Thin Bedded SHALE		1	100	12	7	
387.50 Gray, Slightly Hard, Moderately to Highly Weathered, Thin to Thick Bedded SHALE	-70	2	100	66	15	
382.50 Gray, Slightly Hard, Slightly to Highly Weathered, Banded to Thick Bedded SHALE	382.00	3	100	58	3	
Gray, Moderately Hard to Hard, LIMESTONE	381.00 -75					
END OF BORING AND ROCK CORE	-80					
	-85					

Color pictures of the cores _____
Cores will be stored for examination until Yes
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 2/26/71

ROUTE FAP 793 (FA 149) **DESCRIPTION** IL 143 over Shoal Creek **LOGGED BY** J. King

SECTION 112BR **LOCATION** NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. E. Abut
Station 391+33
Offset 10.00ft Left
Ground Surface Elev. 465.9 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 449.2 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown Sandy SILT (Fill) (with Fine Gravel)			
	7	0.81 S	13
-5			
459.2 Brown and Gray CLAY	3	0.39 S	15
	8	1.96 B	25
456.7 Brown SILT -10			
	4	0.39 S	21
454.2 Brown Sandy SILT			
	2		21
-15			
▼	3		23
	2		23
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown Sandy SILT *(continued)*	1		23
441.7 Brown Fine Silty SAND -25	1		26
	4	NC	
	3	NC	
436.6 Brown and Gray Medium SAND (with Gravel) -30	11	NC	
434.2 Gray Sandy CLAY	9	0.20 B	23
431.6 SAND and GRAVEL -35	40	NC	
	43	NC	
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 2/26/71

ROUTE FAP 793 (FA 149) **DESCRIPTION** IL 143 over Shoal Creek **LOGGED BY** J. King

SECTION 112BR **LOCATION** NW 1/4, SW 1/4, **SEC.** 24, **TWP.** 4N, **RNG.** 4W, 3 **PM**

COUNTY Bond **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** 140# Automatic

STRUCT. NO. 003-0034 (E) / 003-0062 (P)
Station 389+70

BORING NO. E. Abut
Station 391+33
Offset 10.00ft Left
Ground Surface Elev. 465.9 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 449.2 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND and GRAVEL *(continued)*	32	NC	
422.2 Gray Silty CLAY -45	35	NC	
	32	1.94 S	23
419.2 Gray Sandy Silty CLAY	50	2.32 S	16
416.6 Gray Silty CLAY -50	45	1.55 S	23
	25	2.71 S	39
-55			
	26	2.20 S	26
	27	2.24 S	23
406.7 Brown Clayey SILT -60			

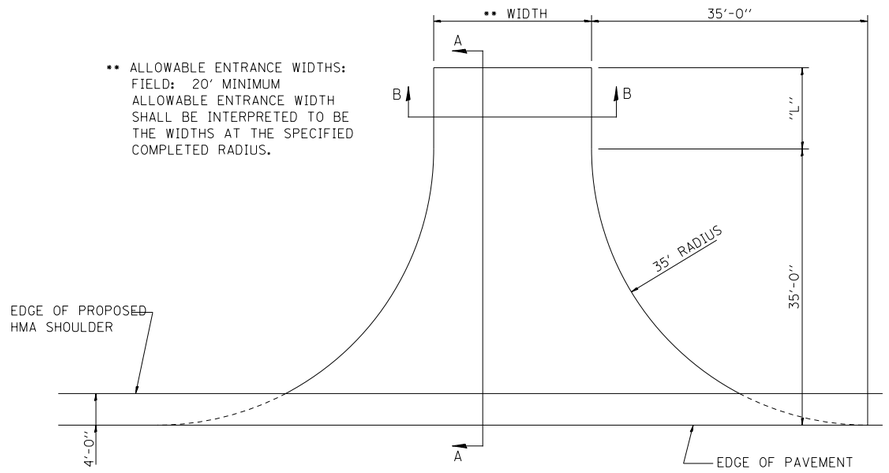
DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown Clayey SILT *(continued)* (with Wood)	31	2.57 d	61
404.7 End of Boring			
Ground Elevation with Reference to assumed BM of 122.9', RR spike in 24" oak 383' right, Station 374+00 -65			
-70			
-75			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

DETAIL OF FIELD ENTRANCES

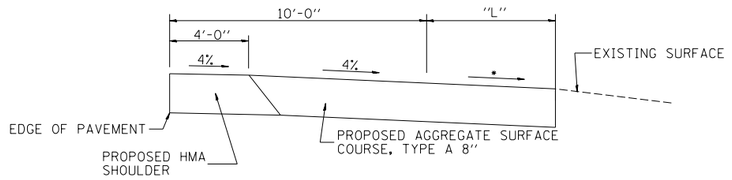
W/ HOT-MIX ASPHALT SHOULDERS



•• ALLOWABLE ENTRANCE WIDTHS:
FIELD: 20' MINIMUM
ALLOWABLE ENTRANCE WIDTH SHALL BE INTERPRETED TO BE THE WIDTHS AT THE SPECIFIED COMPLETED RADIUS.

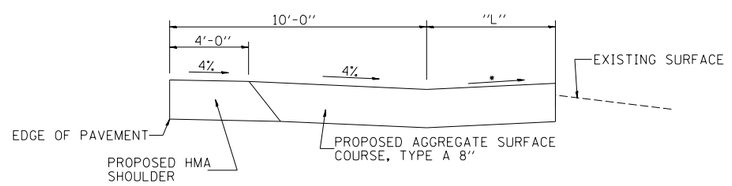
PLAN

STATION	SIDE	WIDTH
375+36.55	RT	20'
394+99.29	LT	20'
395+03.57	RT	20'



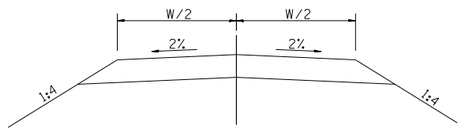
SECTION A-A WITH NEGATIVE GRADE

• SEE CROSS SECTIONS FOR SLOPES



SECTION A-A WITH POSITIVE GRADE

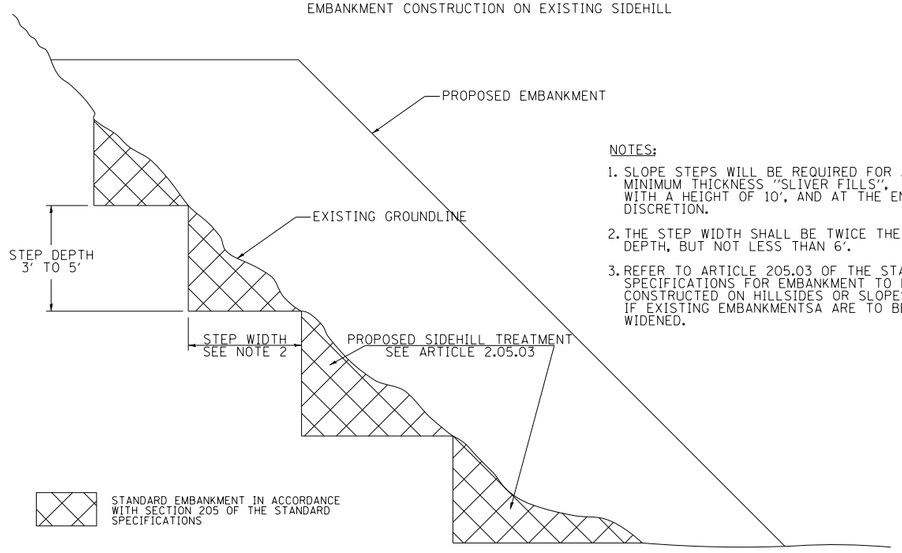
• SEE CROSS SECTIONS FOR SLOPES



SECTION B-B

SLOPE BENCHING DETAIL

EMBANKMENT CONSTRUCTION ON EXISTING SIDEHILL



NOTES;

1. SLOPE STEPS WILL BE REQUIRED FOR ALL 12" MINIMUM THICKNESS "SLIVER FILLS", ON FILLS WITH A HEIGHT OF 10', AND AT THE ENGINEER'S DISCRETION.
2. THE STEP WIDTH SHALL BE TWICE THE STEP DEPTH, BUT NOT LESS THAN 6'.
3. REFER TO ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS FOR EMBANKMENT TO BE CONSTRUCTED ON HILLSIDES OR SLOPES, OR IF EXISTING EMBANKMENTSA ARE TO BE WIDENED.

SIGN DETAIL

SIGN DESIGNATION: I-3

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		DRAWN -	REVISED -
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	PLOT DATE = 1/11/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

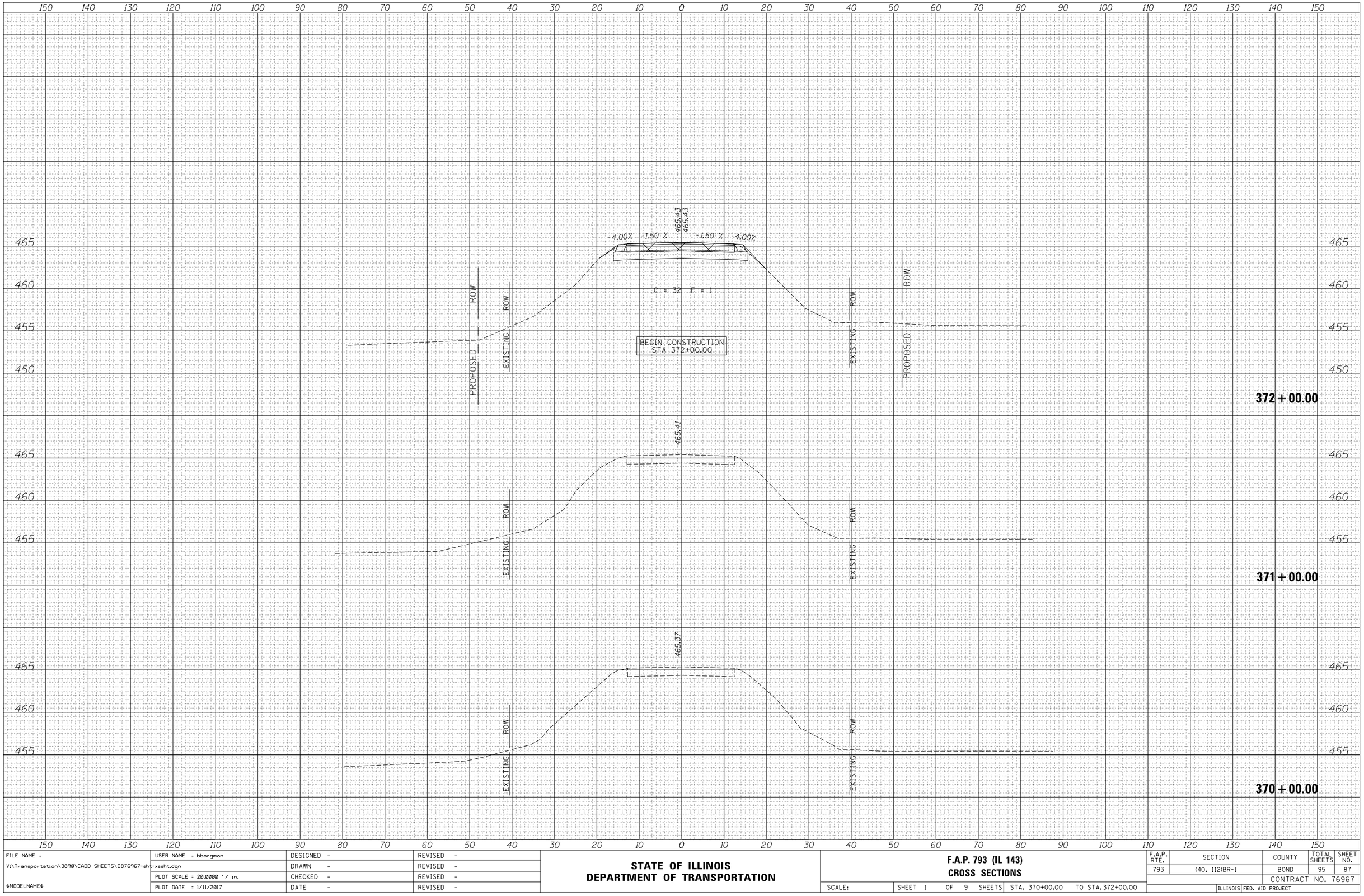
F.A.P. 793 (IL 143)
DETAILS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	86
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

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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$MODELNAME$	PLOT DATE = 1/11/2017	DATE -

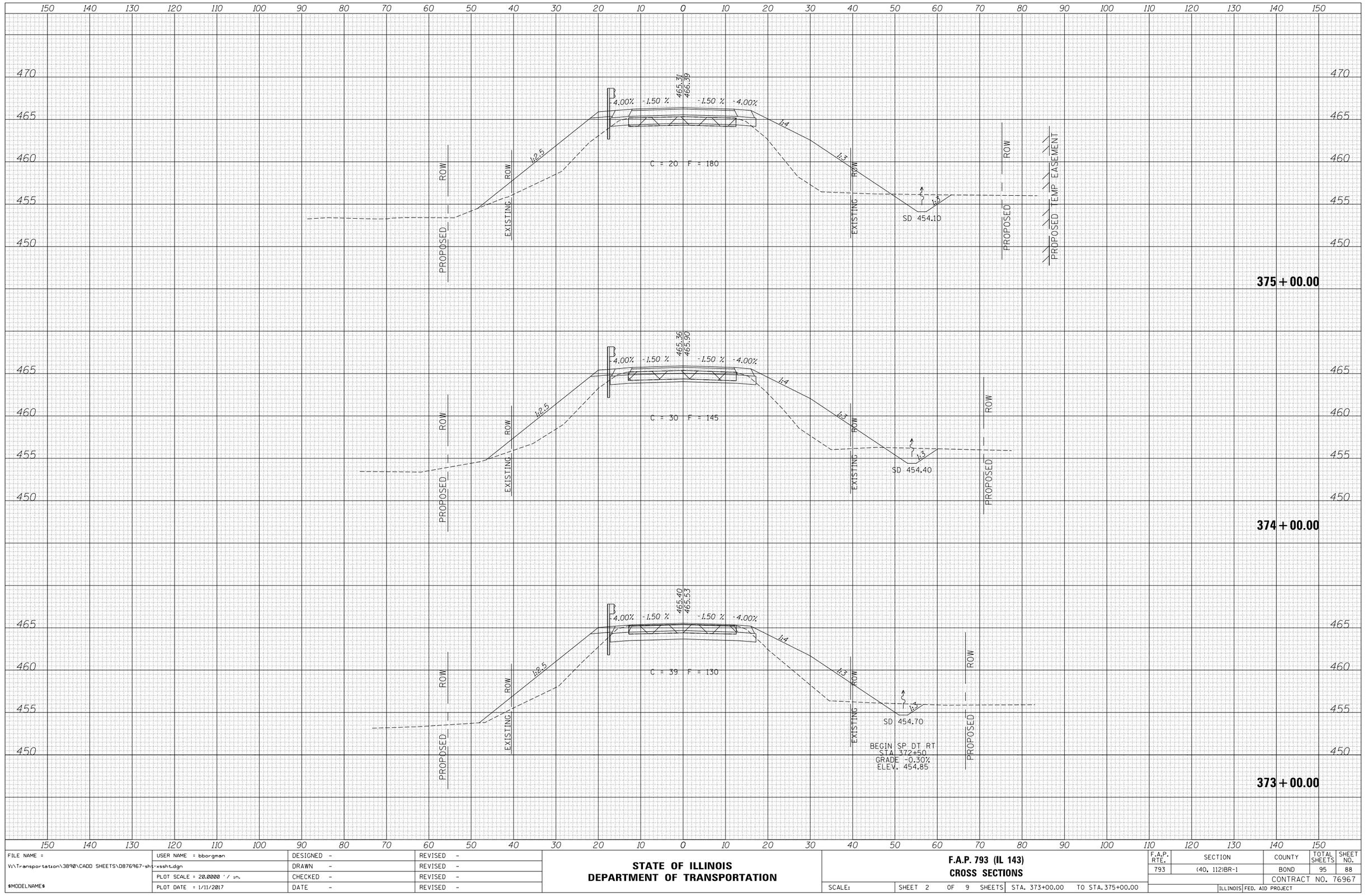
REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
CROSS SECTIONS

SCALE: | SHEET 1 OF 9 SHEETS | STA. 370+00.00 | TO STA. 372+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	87
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY

NO.	NOTE BOOK	BY	DATE

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

ORIGINAL SURVEY

NO.	NOTE BOOK	BY	DATE

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

FILE NAME = V:\Transportation\3890\CADD SHEETS\D876967-sht-xssht.dgn	USER NAME = bborgman	DESIGNED -	REVISED -
		DRAWN -	REVISED -
$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 1/11/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

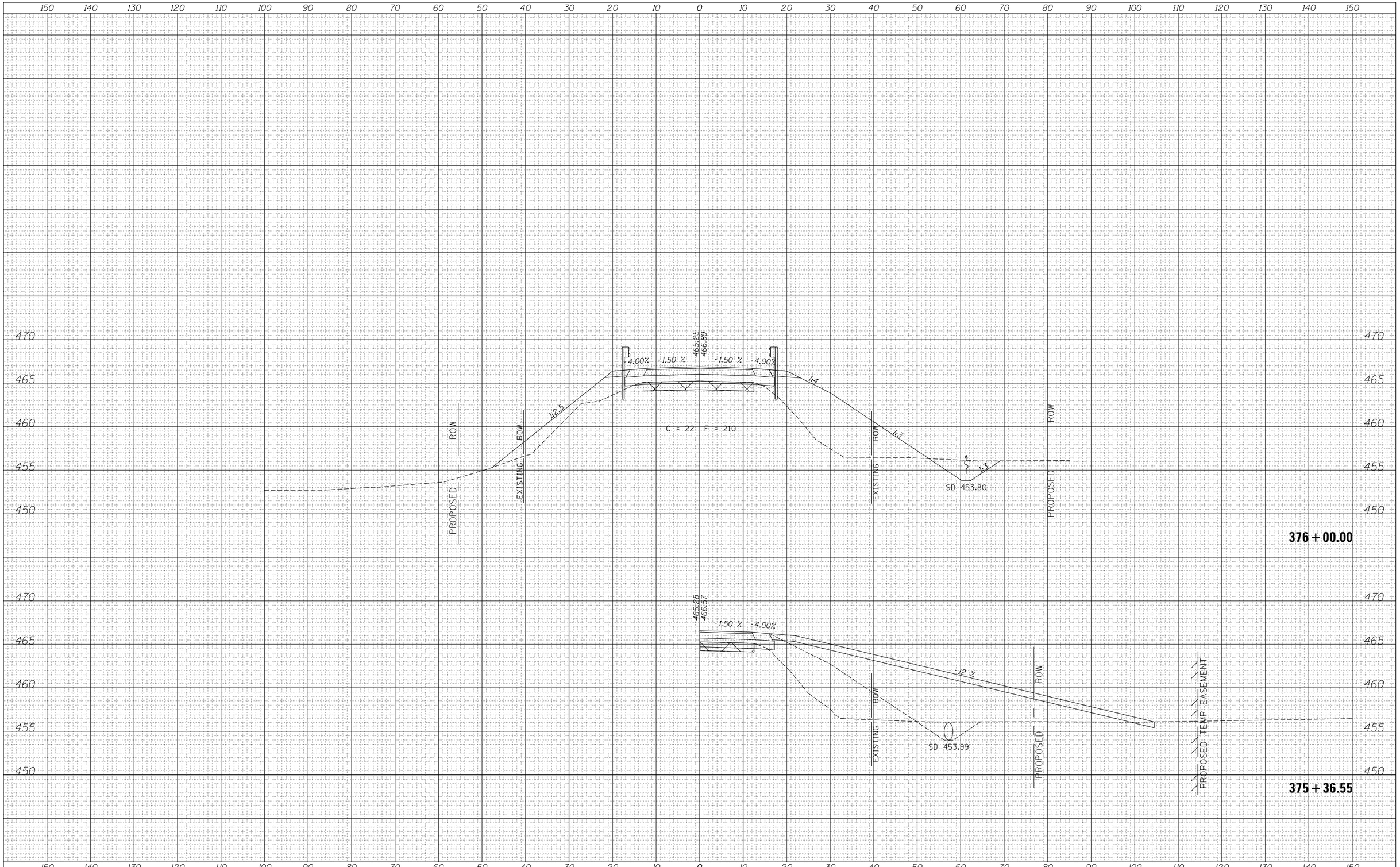
F.A.P. 793 (IL 143)
CROSS SECTIONS

SCALE: | SHEET 2 OF 9 SHEETS | STA. 373+00.00 | TO STA. 375+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	88
		CONTRACT NO. 76967		
	ILLINOIS FED. AID PROJECT			

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

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



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V:\Transportation\3890\CADD SHEETS\D876967-sht-xssht.dgn		DRAWN -	REVISED -
	PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
$MODELNAME$	PLOT DATE = 1/11/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

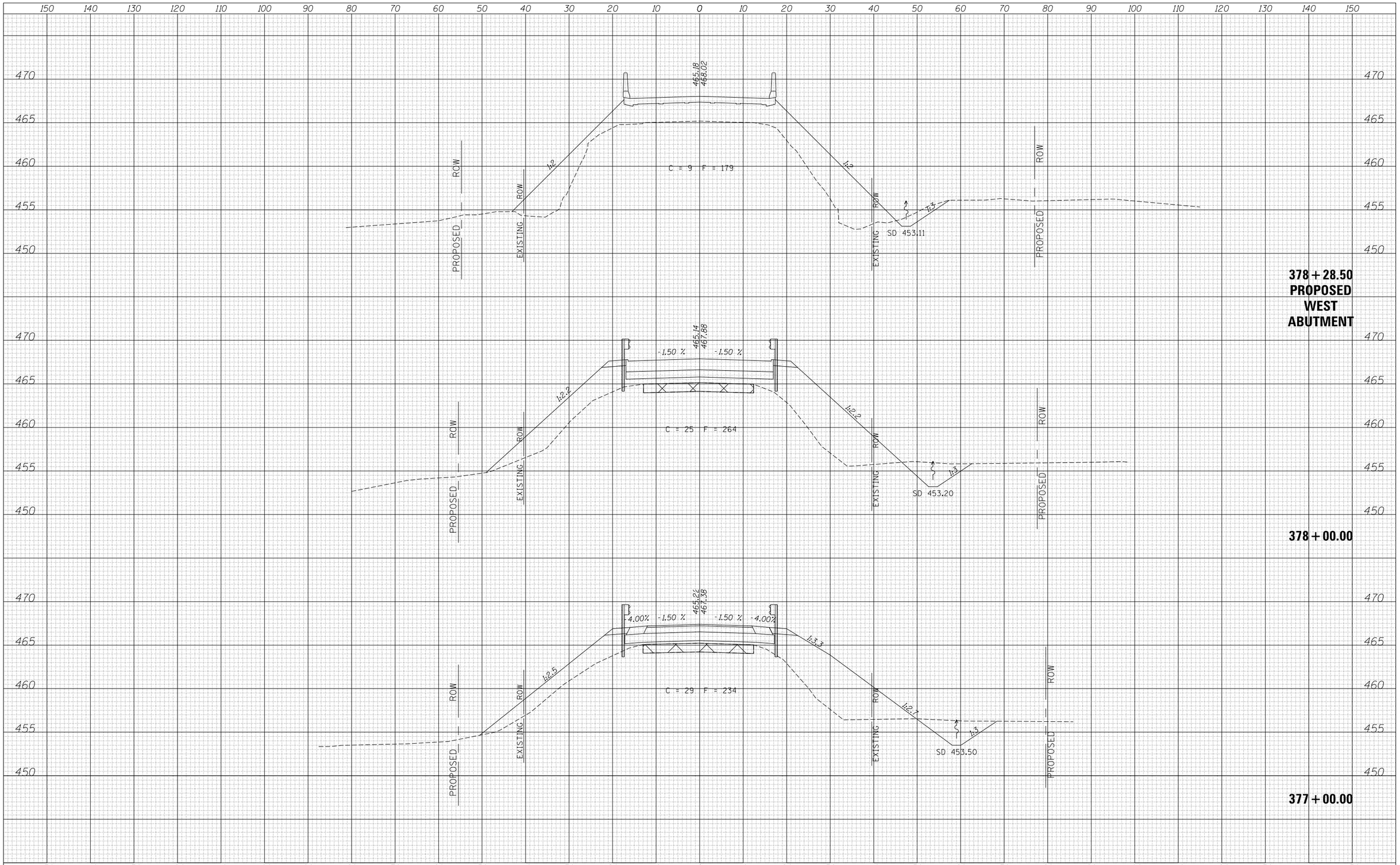
F.A.P. 793 (IL 143)
CROSS SECTIONS

SCALE: | SHEET 3 OF 9 SHEETS | STA. 375+36.55 TO STA. 376+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	89
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

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

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



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		DRAWN -	REVISED -		
$MODELNAME$	PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -		
	PLOT DATE = 1/11/2017	DATE -	REVISED -		SCALE:

SHEET 4 OF 9 SHEETS | STA. 377+00.00 | TO STA. 378+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	90
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

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

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

470 465 460 455 450 445

BRIDGE OMISSION
STA. 377+99.00 TO STA. 392+00.00

468.87

PROPOSED ROW
EXISTING ROW

C = 304 F = 0

END SP DT RT
STA 380+10
GRADE -0.30%
ELEV. 452.57

EXISTING ROW
PROPOSED ROW

1:3 1:3
SD 452.60

380+00.00

465.12
468.37

PROPOSED ROW
EXISTING ROW

C = 736 F = 0

EXISTING ROW
PROPOSED ROW

1:3 1:3
SD 452.90

379+00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FILE NAME = V:\Transportation\3890\CADD SHEETS\D876967-sht-xssht.dgn	USER NAME = bborgman	DESIGNED -	REVISED -
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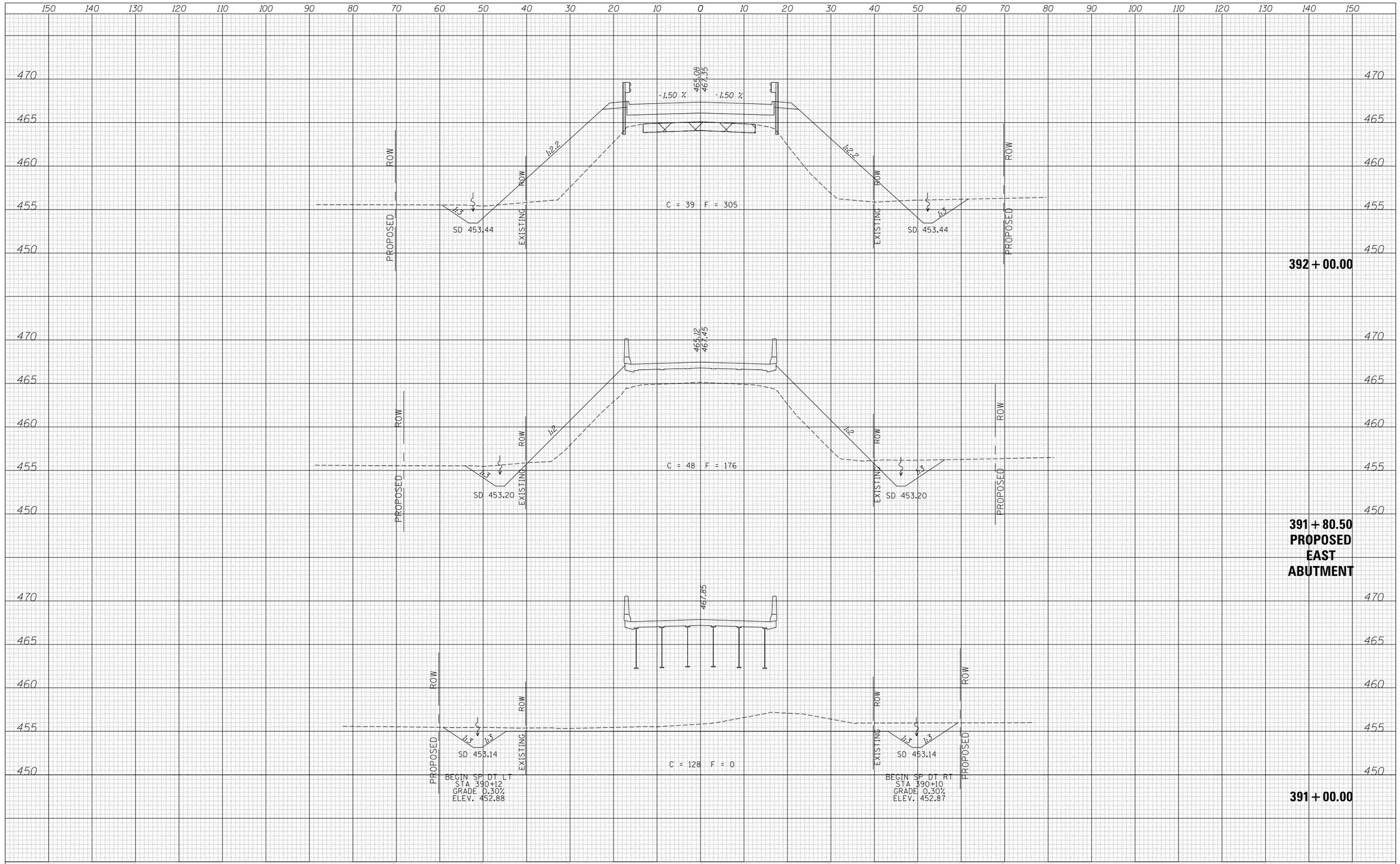
$MODELNAME$	PLOT DATE = 1/11/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
CROSS SECTIONS

SCALE: | SHEET 5 OF 9 SHEETS | STA. 379+00.00 TO STA. 380+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	91
		CONTRACT NO. 76967		
		ILLINOIS	FED. AID PROJECT	



FINAL SURVEY	
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS	
AREAS CHECKED	

NO.	BY	DATE

ORIGINAL SURVEY	
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS	
AREAS CHECKED	

NO.	BY	DATE

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$MODELNAME$	PLOT DATE = 1/11/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
CROSS SECTIONS

SCALE: | SHEET 6 OF 9 SHEETS | STA. 390+00.00 | TO STA. 392+00.00

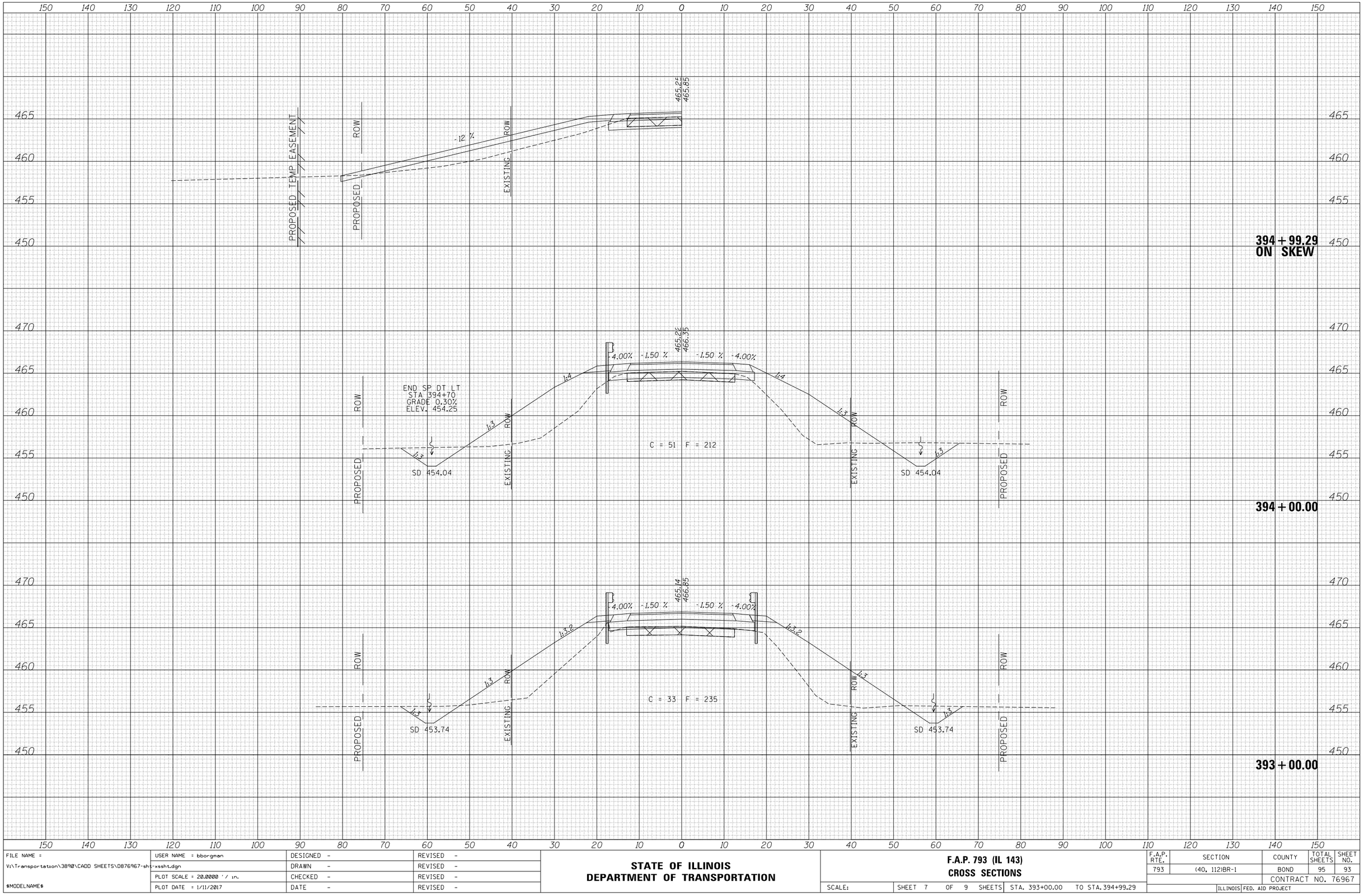
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	92
		CONTRACT NO. 76967		
		ILLINOIS FED. AID PROJECT		

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

BY	DATE

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

BY	DATE



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	PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
$MODELNAME$	PLOT DATE = 1/11/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

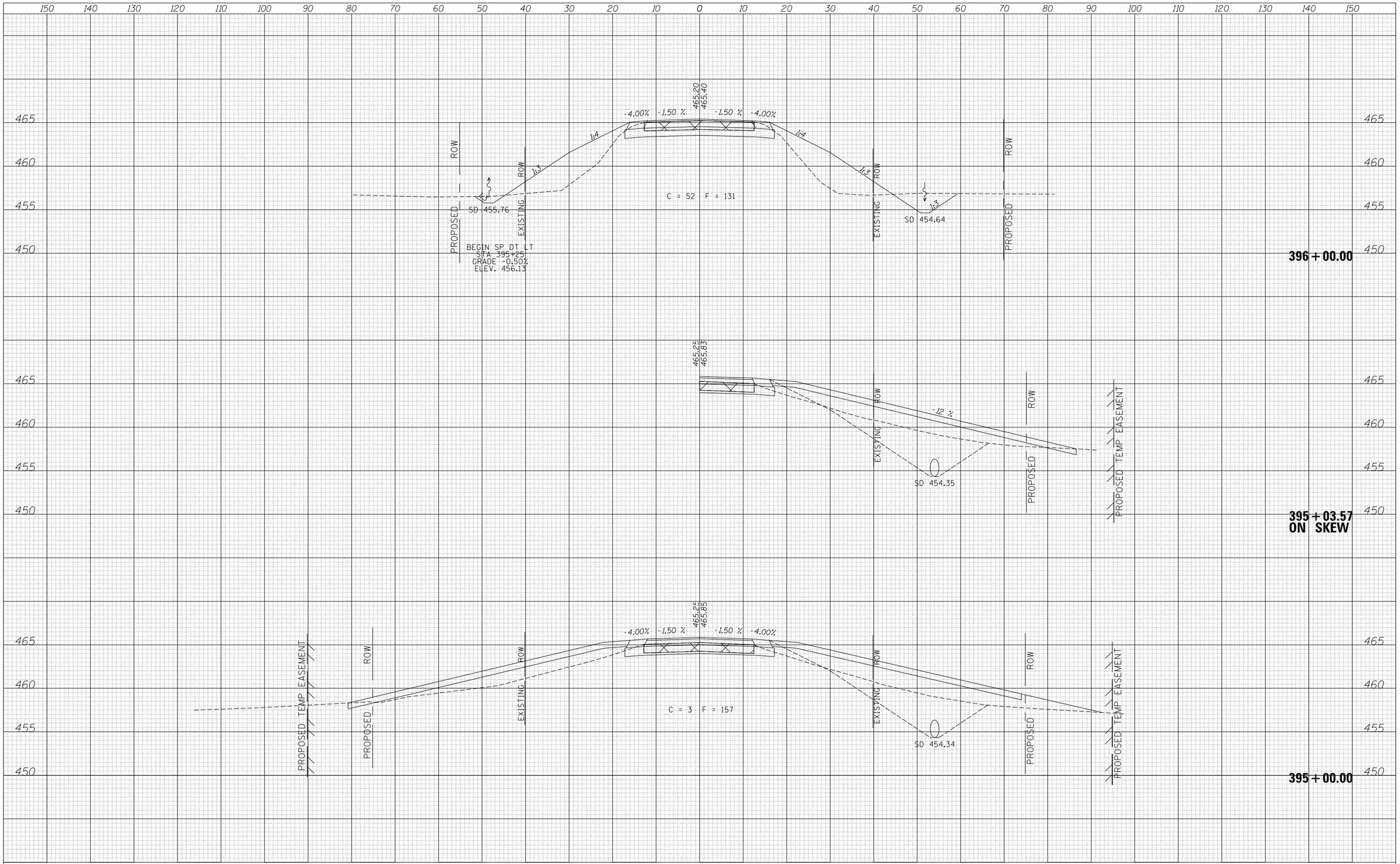
F.A.P. 793 (IL 143)
CROSS SECTIONS

SCALE: | SHEET 7 OF 9 SHEETS | STA. 393+00.00 | TO STA. 394+99.29

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	93
		CONTRACT NO. 76967		
		ILLINOIS FED. AID PROJECT		

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

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



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	PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
$MODELNAME$	PLOT DATE = 1/11/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
CROSS SECTIONS

SCALE: | SHEET 8 OF 9 SHEETS | STA. 395+00.00 TO STA. 396+00.00

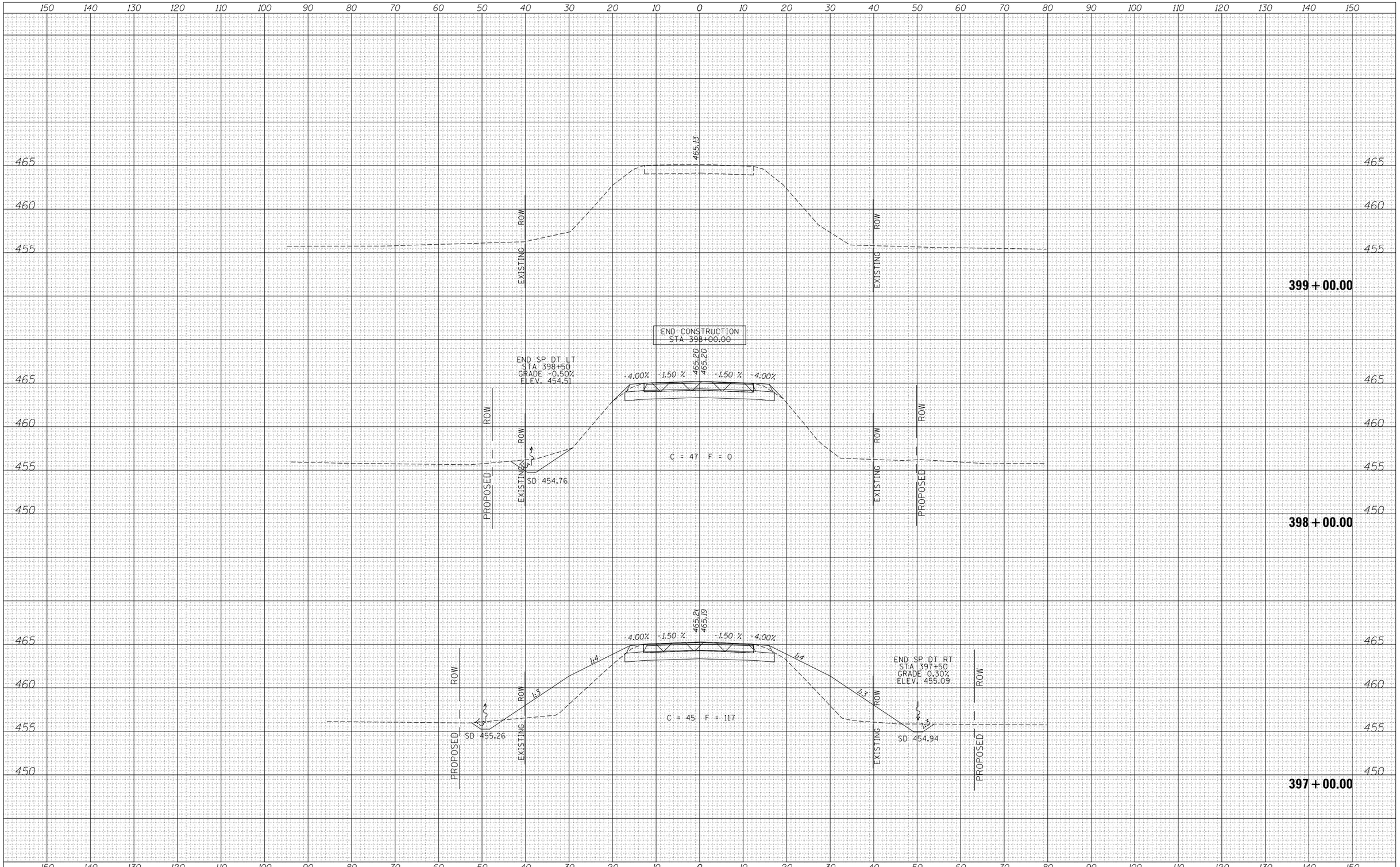
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	94
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		

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



FILE NAME =	USER NAME = bborgman	DESIGNED -	REVISED -
V:\Transportation\3890\CADD SHEETS\D876967-sht-xssht.dgn		DRAWN -	REVISED -
	PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
$MODELNAME$	PLOT DATE = 1/11/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. 793 (IL 143)
CROSS SECTIONS

SCALE: | SHEET 9 OF 9 SHEETS | STA. 397+00.00 TO STA. 399+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
793	(40, 112)BR-1	BOND	95	95
		CONTRACT NO. 76967		
	ILLINOIS	FED. AID PROJECT		