

SHEET NO.	INDEX OF SHEETS	TITLE
1.	COVER SHEET	
2.	SUMMARY OF QUANTITIES, GENERAL NOTES & TYPICAL SECTIONS	
3.	PLAN AND PROFILE	
4.	TRAFFIC CONTROL PLAN	
5.-16.	BRIDGE PLANS	
17.-22.	STATION CROSS SECTIONS	

**SEE PROPOSAL FOR STANDARDS:**

- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 515001-04 NAME PLATE FOR BRIDGES
- 701001-02 OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
- 701006-05 OFF-RD OPERATIONS, 2L, 2W, 15' TO 24' FROM PAVEMENT EDGE
- 701901-08 TRAFFIC CONTROL DEVICES
- 720011-01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
- 725001-01 OBJECT AND TERMINAL MARKERS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 729001-01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
- BLR 21-9 TRAFFIC APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

**UTILITIES**

- ELECTRIC - COM ED
- TELEPHONE - VERIZON
- GAS - NICOR

**SCALES**



**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**  
**PLANS FOR PROPOSED**  
**SURFACE TRANSPORTATION PROGRAM-BRIDGE**  
**RIDOTT ROAD DISTRICT**  
**SECTION 07-12130-00-BR**  
**STEPHENSON COUNTY**  
**PROJECT NO. SKNR(034)**  
**TR 316 (BOLEN ROAD)**  
**C-92-039-20**

CONTRACT NO. 85701



LOCATION OF SECTION INDICATED THUS: - -

**CLASSIFICATION: LOCAL ROAD (NON-URBAN)**  
**DESIGN VOLUME: UNDER 250 ADT**  
**CURRENT ADT: 100 (2020)**  
**DESIGN SPEED: 30 M.P.H.**

TOLL FREE JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (J.U.L.I.E.)  
 TELEPHONE NUMBER 1-800-892-0123



**LOCATION PLAN**

GROSS LENGTH OF SECTION = 750 FEET = 0.142 MILES  
 NET LENGTH OF SECTION = 750 FEET = 0.142 MILES



**FEHR GRAHAM**

ENGINEERING & ENVIRONMENTAL

ILLINOIS IOWA WISCONSIN

ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER: IB4003525

IMPROVEMENT ENDS  
 STA. 18 + 50

STA. 15 + 05 - SPECIAL BRIDGE DESIGN  
 PRECAST PRESTRESSED CONCRETE DECK  
 BEAM BRIDGE, THREE SPANS 42'-0",  
 42'-0", 42'-0"; 127'-9" BK.-BK. ABUTS;  
 24'-0" ROADWAY; 0° SKEW  
 EXISTING S.N. 089-3197  
 PROPOSED S.N. 089-3283

IMPROVEMENT BEGINS  
 STA. 11 + 00



*Mary Coombe Bloyd*  
 ILLINOIS PROFESSIONAL NO. 43208  
 EXPIRES 11-30-21 08/26/20

PASSED	<i>8/28/20</i>
<i>Don Beyer</i> ROAD DISTRICT COMMISSIONER	
APPROVED	<i>8/28/20</i>
<i>[Signature]</i> COUNTY ENGINEER	
PASSED	<i>9/1/20</i>
<i>[Signature]</i> DISTRICT TWO ENGINEER OF LOCAL ROADS & STREETS	
RELEASED FOR BID BASED ON LIMITED REVIEW	<i>9/1/20</i>
<i>[Signature]</i> DEPUTY DIRECTOR OF HIGHWAYS, REGION TWO ENGINEER	
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	

**SUMMARY OF QUANTITIES**  
**CONSTRUCTION TYPE CODE: 0010**

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
20200100	EARTH EXCAVATION	CU YD	917
20300100	CHANNEL EXCAVATION	CU YD	844
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	70
28000305	TEMPORARY DITCH CHECKS	FOOT	40
28000400	PERIMETER EROSION BARRIER	FOOT	1400
28000500	INLET AND PIPE PROTECTION	EACH	3
28100207	STONE RIPRAP, CLASS A4	TON	306
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	67
28200200	FILTER FABRIC	SQ YD	419
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	688
40604050	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	43
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	41.8
50300280	CONCRETE ENCASEMENT	CU YD	18.9
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	3024
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	5890
50900205	STEEL RAILING, TYPE S1	FOOT	253
51201800	FURNISHING STEEL PILES HP14X73	FOOT	952
51202305	DRIVING PILES	FOOT	952
51203800	TEST PILE STEEL HP14X73	EACH	2
51500100	NAME PLATES	EACH	1
54200229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	136
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	4
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	341
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	706
67100100	MOBILIZATION	L SUM	1
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
X2010400	STUMP REMOVAL ONLY	UNIT	156
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.55
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1
Z0013798	CONSTRUCTION LAYOUT	L SUM	1

•SEE SPECIAL PROVISIONS  
△ SPECIALTY ITEMS

**GENERAL NOTES**

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AND AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

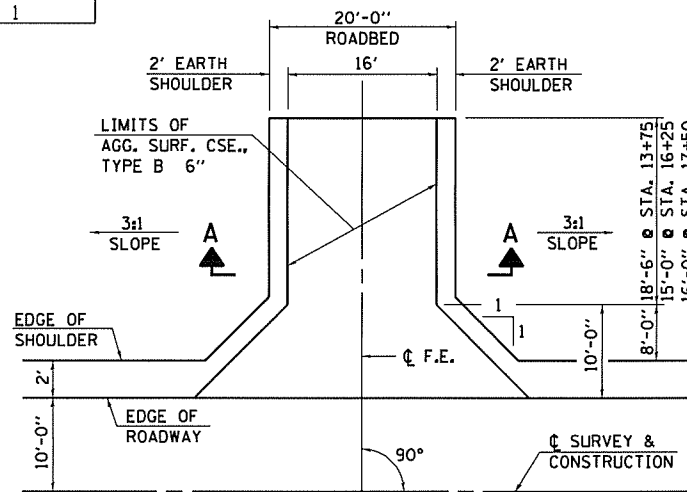
THE AREA TO BE SEEDDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY, AS DIRECTED BY THE ENGINEER.

SEEDING, CLASS 2 (SPECIAL) = 0.55 ACRE

**STUMP REMOVAL**

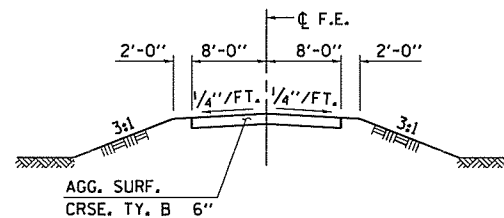
28' LT. STA. 12+96 = 30 UNIT  
28' LT. STA. 13+14 = 30 UNIT  
28' LT. STA. 13+89 = 24 UNIT  
28' LT. STA. 17+40 = 36 UNIT  
29' RT. STA. 17+97 = 18 UNIT  
30' RT. STA. 18+15 = 18 UNIT  
TOTAL = 156 UNIT

HMA MIX REQUIREMENTS	
LOCATION AND MIXTURE USE(S):	RESURFACING SURFACE
PG:	PG 64-22
DESIGN AIR VOIDS	4.0 2 N50
MIXTURE COMPOSITION (GRADATION MIXTUE)	IL 9.5
FRICTION AGGREGATE	C
20 YEAR ESAL	0.0
MIX UNIT WEIGHT	112 LBS/SY/IN
QUALITY MANAGEMENT	QC/QA
SUBLOT TONNAGE	NA

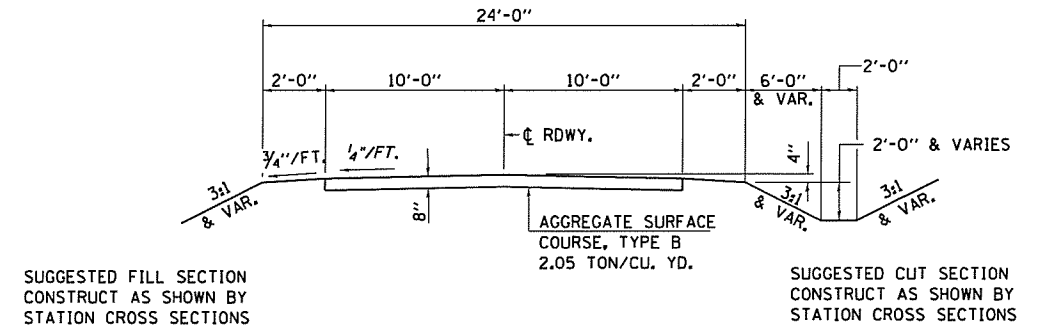


**FIELD ENTRANCE DETAIL**

F.E. LT. STA. 13+75  
F.E. LT. STA. 16+25  
F.E. RT. STA. 17+50



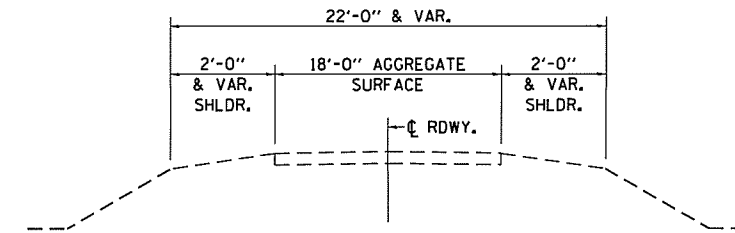
**SECTION A-A**



**TYPICAL PROPOSED CROSS SECTION**

STA. 11+50 TO STA. 18+00

TRANSITION FROM EXISTING ROADWAY WIDTH TO PROPOSED ROADWAY WIDTH TO BE CONSTRUCTED FROM STA. 11+00 TO STA. 11+50 AND FROM STA. 17+49.67 LT & STA. 17+79.74 RT TO STA. 18+50. (8" AGG. SURF. CSE. PLACED WITHIN AREA OF TRANSITION.)



**EXISTING TYPICAL CROSS SECTION**

**TEMPORARY EROSION CONTROL**

THE FOLLOWING QUANTITIES ARE ESTIMATE ONLY. ACTUAL QUANTITIES FOR EROSION CONTROL WILL BE DETERMINED BY THE ENGINEER IN THE FIELD AND THERE WILL BE NO ADJUSTMENT IN ANY PRICE DUE TO A CHANGE IN PLAN QUANTITY.

TEMPORARY EROSION CONTROL SEEDINGS = 70 POUND  
PERIMETER EROSION BARRIER = 1,400 FOOT  
TEMPORARY DITCH CHECKS = 4 EACH  
INLET AND PIPE PROTECTION = 3 EACH

**TEMPORARY DITCH CHECKS**

LT. & RT. STA. 14+50 = 20 FOOT  
LT. & RT. STA. 15+50 = 20 FOOT  
TOTAL = 40 FOOT

**INLET AND PIPE PROTECTION**

LT. STA. 13+54 = 1 EACH  
LT. STA. 16+50 = 1 EACH  
RT. STA. 17+72 = 1 EACH  
TOTAL = 3 EACH

**SUMMARY OF QUANTITIES, GENERAL NOTES AND TYPICAL CROSS SECTIONS**

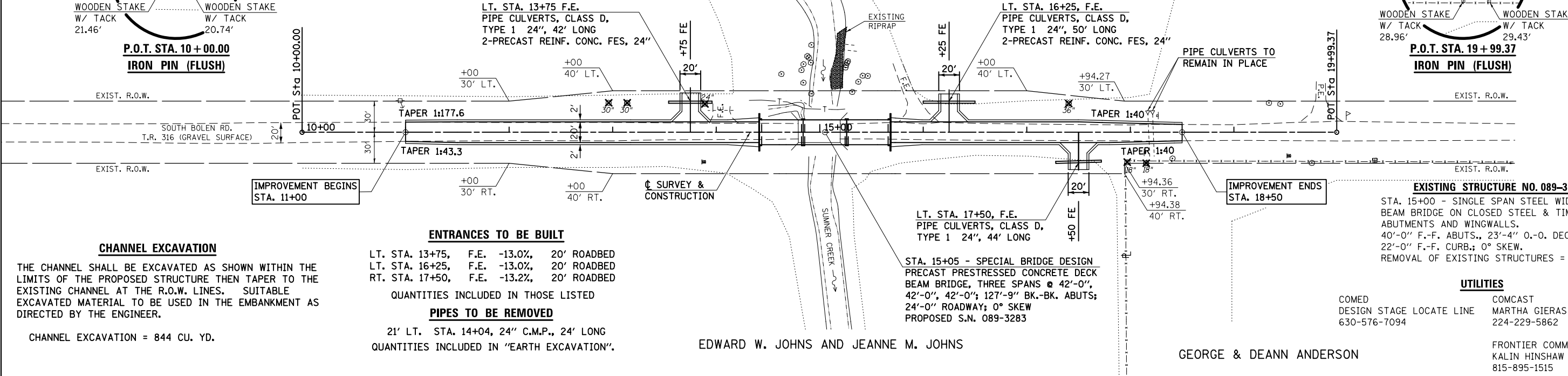
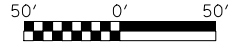
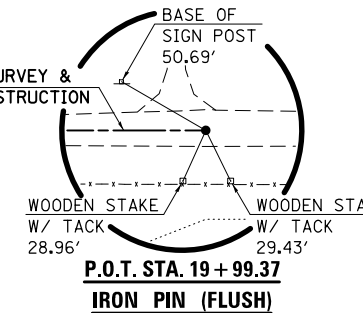
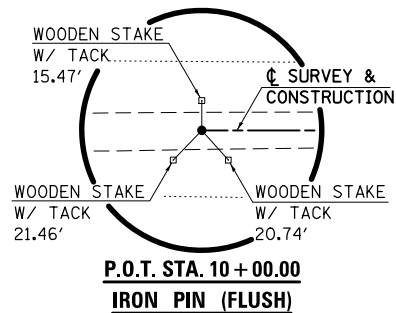
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR316	07-12130-00-BR	STEPHENSON	22	2
			CONTRACT NO. 85701	
ILLINOIS FED. AID PROJECT				

USER NAME = rmcjilton	DESIGNED - GJC	REVISED -
PLOT SCALE = 2,000' / in.	DRAWN - SAP/CFC	REVISED -
PLOT DATE = 9/15/2020	CHECKED - RJC/MCB	REVISED -
	DATE - 9/15/2020	REVISED -

WILLIAM. G. ELLIOTT REVOCABLE TRUST AND SANDRA E. ELLIOTT REVOCABLE TRUST

WILLIAM. G. ELLIOTT REVOCABLE TRUST AND SANDRA E. ELLIOTT REVOCABLE TRUST



CHANNEL EXCAVATION

THE CHANNEL SHALL BE EXCAVATED AS SHOWN WITHIN THE LIMITS OF THE PROPOSED STRUCTURE THEN TAPER TO THE EXISTING CHANNEL AT THE R.O.W. LINES. SUITABLE EXCAVATED MATERIAL TO BE USED IN THE EMBANKMENT AS DIRECTED BY THE ENGINEER.

CHANNEL EXCAVATION = 844 CU. YD.

ENTRANCES TO BE BUILT

LT. STA. 13+75, F.E. -13.0%, 20' ROADBED
LT. STA. 16+25, F.E. -13.0%, 20' ROADBED
RT. STA. 17+50, F.E. -13.2%, 20' ROADBED

QUANTITIES INCLUDED IN THOSE LISTED

PIPES TO BE REMOVED

21' LT. STA. 14+04, 24" C.M.P., 24' LONG
QUANTITIES INCLUDED IN "EARTH EXCAVATION".

STA. 15+05 - SPECIAL BRIDGE DESIGN PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE, THREE SPANS @ 42'-0", 42'-0", 42'-0"; 127'-9" BK.-BK. ABUTS; 24'-0" ROADWAY; 0° SKEW PROPOSED S.N. 089-3283

EXISTING STRUCTURE NO. 089-3197
STA. 15+00 - SINGLE SPAN STEEL WIDE FLANGE BEAM BRIDGE ON CLOSED STEEL & TIMBER ABUTMENTS AND WINGWALLS. 40'-0" F.-F. ABUTS., 23'-4" O.-O. DECK, 22'-0" F.-F. CURB.; 0° SKEW. REMOVAL OF EXISTING STRUCTURES = 1 EACH

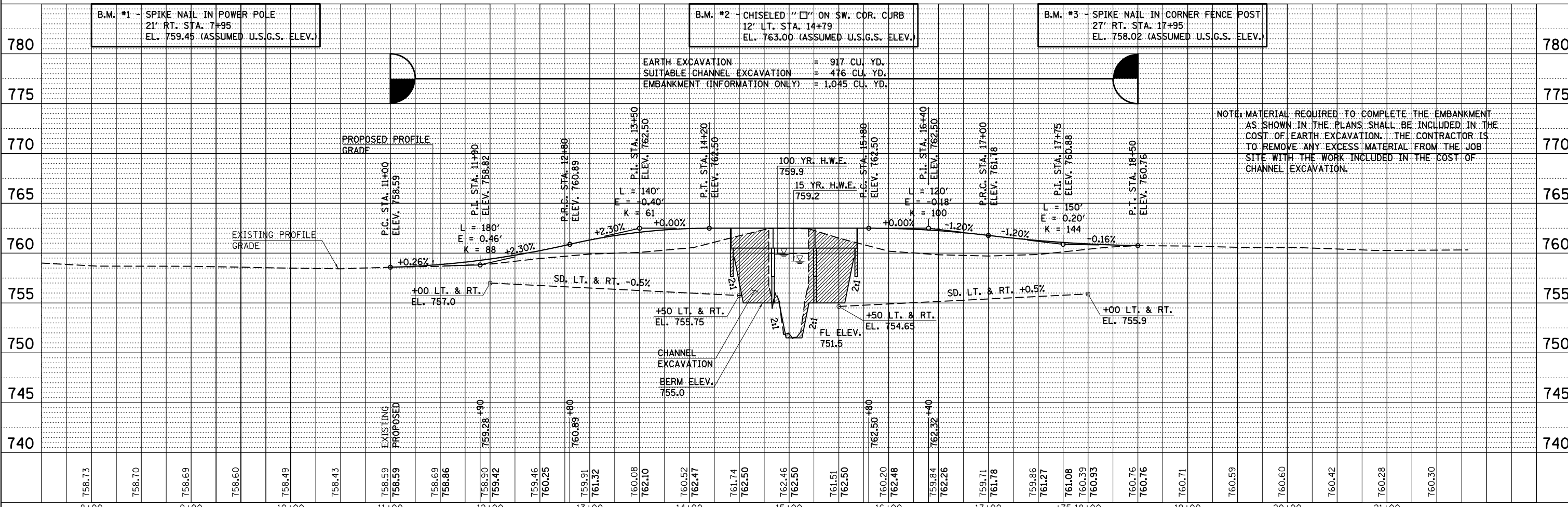
UTILITIES

COMED DESIGN STAGE LOCATE LINE 630-576-7094
COMCAST MARTHA GIERAS 224-229-5862

FRONTIER COMMUNICATIONS KALIN HINSHAW 815-895-1515

EDWARD W. JOHNS AND JEANNE M. JOHNS

GEORGE & DEANN ANDERSON



NOTE: MATERIAL REQUIRED TO COMPLETE THE EMBANKMENT AS SHOWN IN THE PLANS SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. THE CONTRACTOR IS TO REMOVE ANY EXCESS MATERIAL FROM THE JOB SITE WITH THE WORK INCLUDED IN THE COST OF CHANNEL EXCAVATION.

Table with project details including USER NAME, DESIGNED, DRAWN, CHECKED, DATE, SCALE, and SHEET NO.

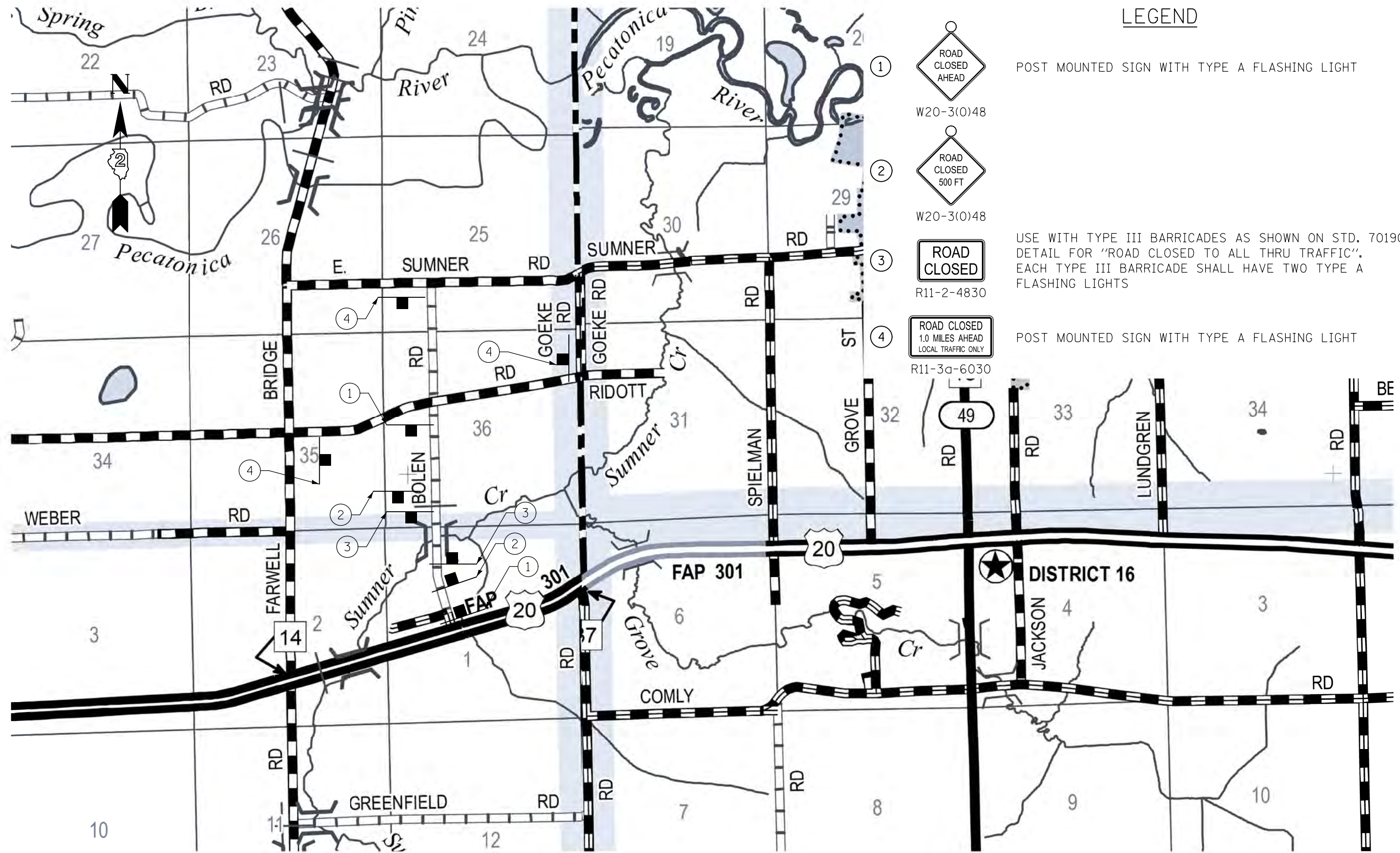
PLAN SURVEYED, PLOTTED, ALIGNED, CHECKED, NOTE BOOK, FILE NAME, NO.

PROFILE SURVEYED, PLOTTED, GRADES CHECKED, STRUCTURE NOTATIONS CHECKED, NOTE BOOK, FILE NAME, NO.

FEHR GRAHAM ENGINEERING & ENVIRONMENTAL ILLINOIS DESIGN FIRM NO. 184-003525

PLAN AND PROFILE T.R. 316 - SOUTH BOLEN RD. (PR. S.N. 089-3282) SCALE: SHEET OF SHEETS STA. TO STA.





**LEGEND**



POST MOUNTED SIGN WITH TYPE A FLASHING LIGHT

W20-3(0)48

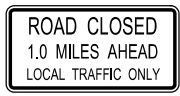


USE WITH TYPE III BARRICADES AS SHOWN ON STD. 701901 DETAIL FOR "ROAD CLOSED TO ALL THRU TRAFFIC". EACH TYPE III BARRICADE SHALL HAVE TWO TYPE A FLASHING LIGHTS

W20-3(0)48



R11-2-4830



POST MOUNTED SIGN WITH TYPE A FLASHING LIGHT

R11-3a-6030

MODEL: Default  
FILE: \\MAILS01\ROADWAY\TEXT\001-Traffic.dgn

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525

USER NAME = cconnor	DESIGNED - PE	REVISED -
	DRAWN - CFC	REVISED -
PLOT SCALE = 2,000,000' / in.	CHECKED - MCB	REVISED -
PLOT DATE = 8/26/2020	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

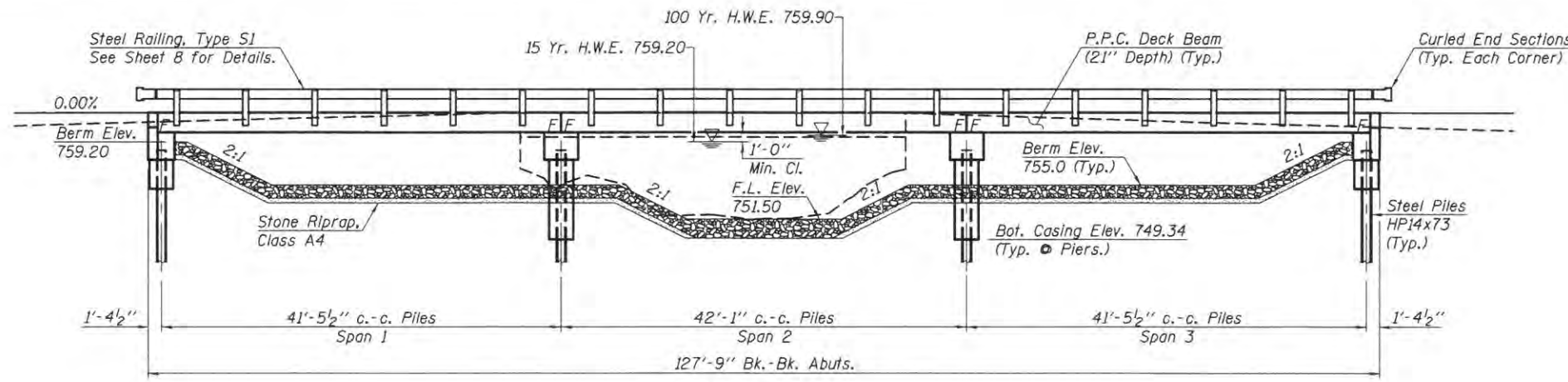
**TRAFFIC CONTROL PLAN**

SCALE: SHEET OF SHEETS STA. TO STA.

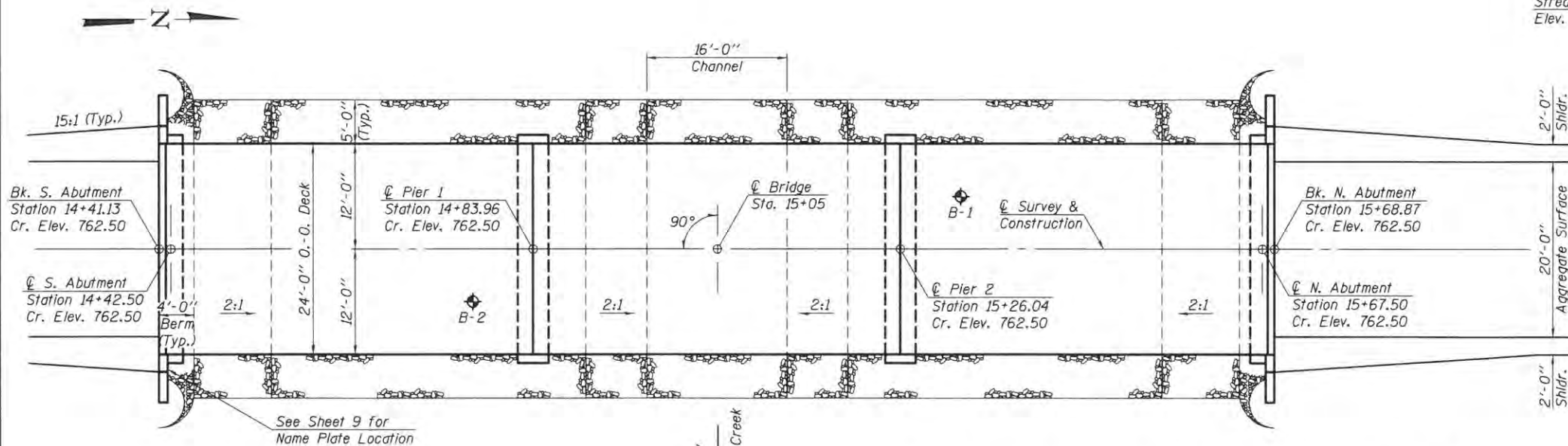
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR316	07-12130-00-BR	STEPHENSON	22	4
CONTRACT NO. 85701			ILLINOIS FED. AID PROJECT	

FEHR GRAHAM PROJECT NUMBER: 20-016





ELEVATION



PLAN

LOADING HL-93

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

DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

SUMNER CREEK  
BUILT 20\_\_ BY  
RIDOTT ROAD DISTRICT  
STEPHENSON COUNTY  
SEC. 07-12130-00-BR  
STR. NO. 089-3283  
LOADING HL-93

LETTERING FOR NAME PLATE

See Std. 515001

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1  
Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.077  
Design Spectral Acceleration at 0.2 sec. ( $S_{D5}$ ) = 0.124  
Soil Site Class = D

WATERWAY INFORMATION

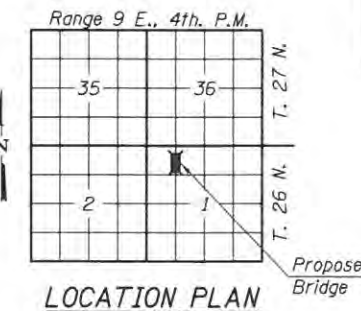
Drainage Area ..... 19.00 Sq. Mi.  
Existing Opening (15 Yr.) ..... 203 Sq. Ft.  
Required Opening (15 Yr.) ..... 529 Sq. Ft.  
Proposed Opening (15 Yr.) ..... 529 Sq. Ft.  
Design Discharge (15 Yr.) ..... 2,060 C.F.S.  
Created Head (15 Yr.) ..... 0.0 Ft.  
100 Year Discharge ..... 3,425 C.F.S.  
100 Yr. Created Head ..... 0.8 Ft.

DESIGN STRESSES

$f'_c$  = 6,000 p.s.i. (Prestressed Beams)  
 $f_{ct}$  = 5,000 p.s.i. (Prestressed Beams)  
 $f'_s$  = 270,000 p.s.i. (Prestressed Strands)  
 $f_{sd}$  = 201,960 p.s.i. (Prestressed Strands)  
 $f'_c$  = 3,500 p.s.i. (Concrete -- Field Units)  
 $f_y$  = 60,000 p.s.i. (Reinf. Bars -- Field Units)

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

Mary Coombe Blfberg 08/26/20  
ILLINOIS STRUCTURAL NO. 4859 (Expires 11/30/20)

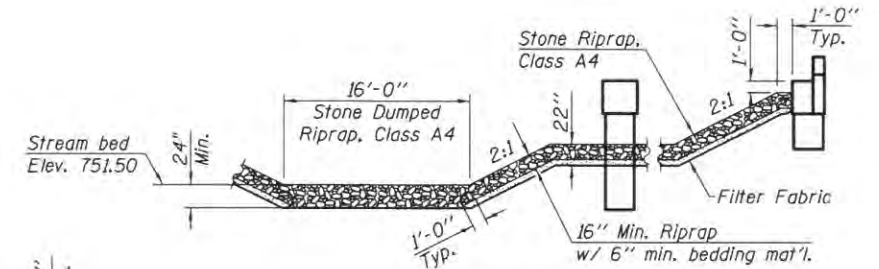


INDEX OF SHEETS

- 5 General Plan and Elevation
- 6 Superstructure
- 7-8 PPC Deck Beam Details
- 9 Steel Railing, Type S-1
- 10 Abutment Details
- 11 Pier Details
- 12 Steel Pile Details
- 13-16 Boring Logs

GENERAL NOTES

The Contractor shall drive one steel test pile in a permanent location at the south abutment and at pier #2, as directed by the Engineer, before ordering the remainder of piles.  
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.  
Structure Excavation will not be measured for payment but shall be included in the unit price bid for "Concrete Structures" or "Concrete Encasement."  
Reinforcement bars designated (E) shall be epoxy coated.



RIPRAP PLACEMENT DETAIL

Note: Excavation and aggregate bedding will not be paid for as separate items and shall be considered as included in Stone Riprap, Class A4.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	3,024		3,024
Concrete Structures	Cu. Yd.		41.8	41.8
Reinforcement Bars, Epoxy Coated	Pound		5,890	5,890
Steel Railing, Type S1	Foot	253		253
Name Plates	Each		1	1
Furnishing Steel Piles HP14x73	Foot		952	952
Driving Piles	Foot		952	952
Test Pile, Steel HP14x73	Each		2	2
Stone Riprap, Class A4	Ton		306	306
Stone Dumped Riprap, Class A4	Ton		67	67
Filter Fabric	Sq. Yd.		419	419
Concrete Encasement	Cu. Yd.		18.9	18.9
Portland Cement Mortar Fairing Course	Foot	706		706
HMA Surface Course, IL-9.5, Mix "C", N50	Ton	43		43
Waterproofing Membrane System	Sq. Yd.	341		341

GENERAL PLAN & ELEVATION  
SECTION 07-12130-00-BR  
RIDOTT ROAD DISTRICT  
STEPHENSON COUNTY  
STATION 15+05.00

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 04-003525

ILLINOIS  
IOWA  
WISCONSIN

OWNER/DEVELOPER:  
STEPHENSON COUNTY HIGHWAY DEPT.

PROJECT AND LOCATION:  
SN 089-3283  
SECTION 07-1210-BR  
RIDOTT TOWNSHIP, ILLINOIS

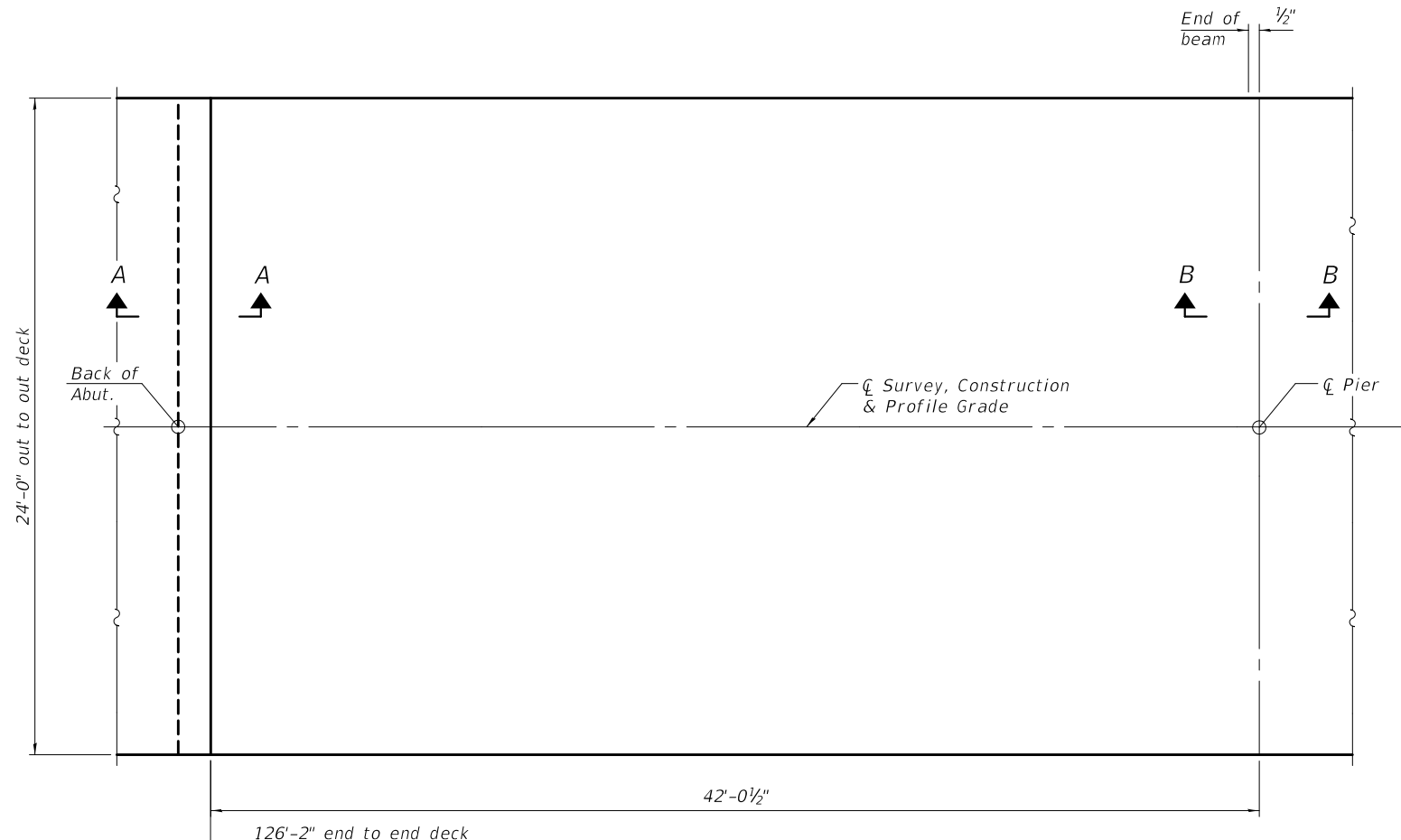
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APPROVED BY: JAM/RJM  
DATE:  
SCALE:

REVISIONS		
REV. NO.	DESCRIPTION	DATE

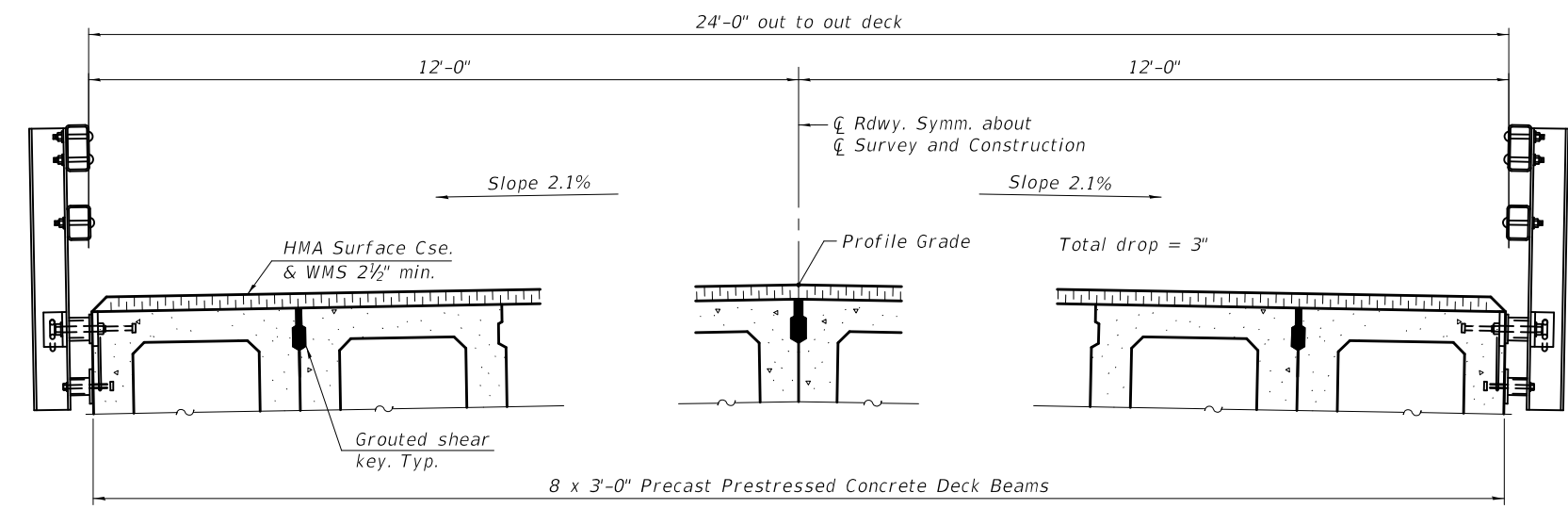
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GENERAL PLAN AND ELEVATION  
STRUCTURE NO. 089-3283  
CONTRACT NO. 85701  
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-10893283-e11-005-gpe.dgn

JOB NUMBER:  
20-016

SHEET NUMBER:  
5 of 22

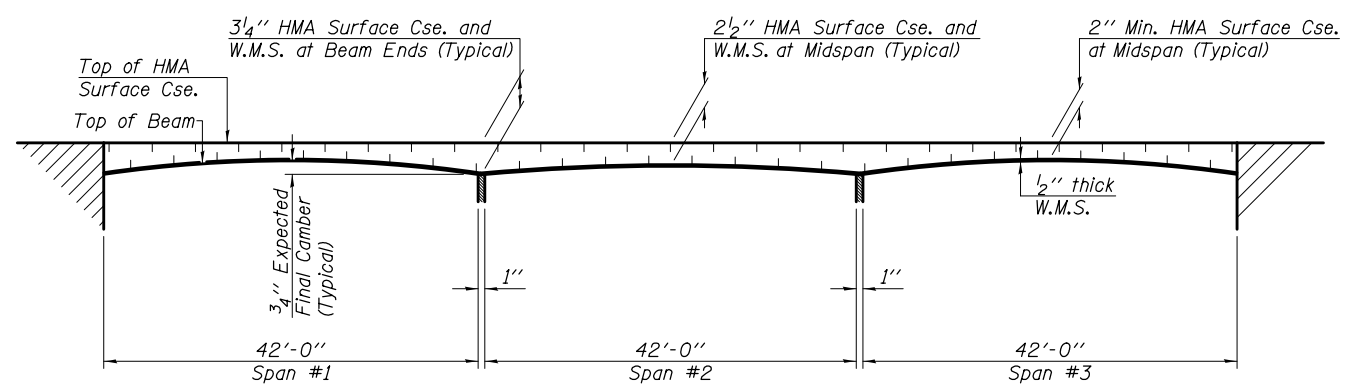


**PARTIAL PLAN**

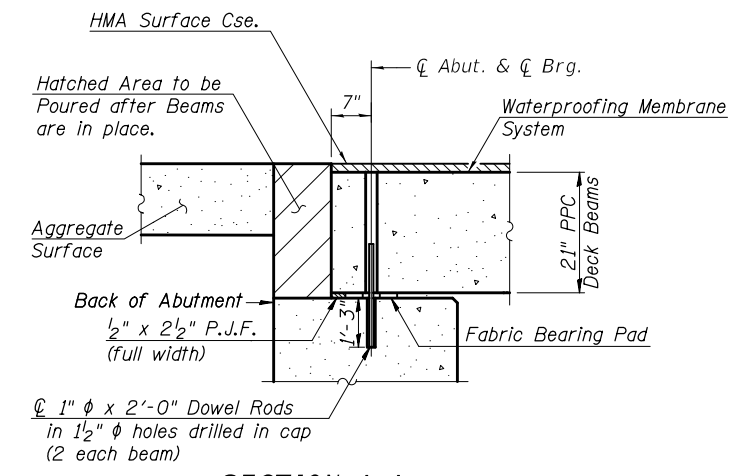


**CROSS SECTION**

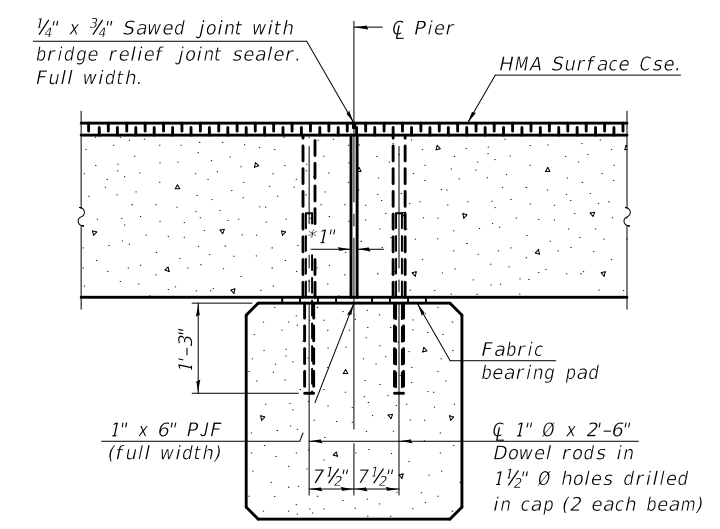
(Looking North, Looking South Similar)



**HOT-MIX ASPHALT SURFACE PROFILE**



**SECTION A-A**



**SECTION B-B**

\*1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.

Notes:  
See sheet 8 of 22 for fabric bearing pad details.  
See sheet 9 of 22 for rails post spacing.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
HMA Surface Cse. IL-9.5, Mix "C", N50	Tons	43

SF-DB1742-BWS-R34-2-0 1-1-2020

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS  
IOWA  
WISCONSIN

OWNER/DEVELOPER:  
STEPHENSON COUNTY HIGHWAY DEPT.

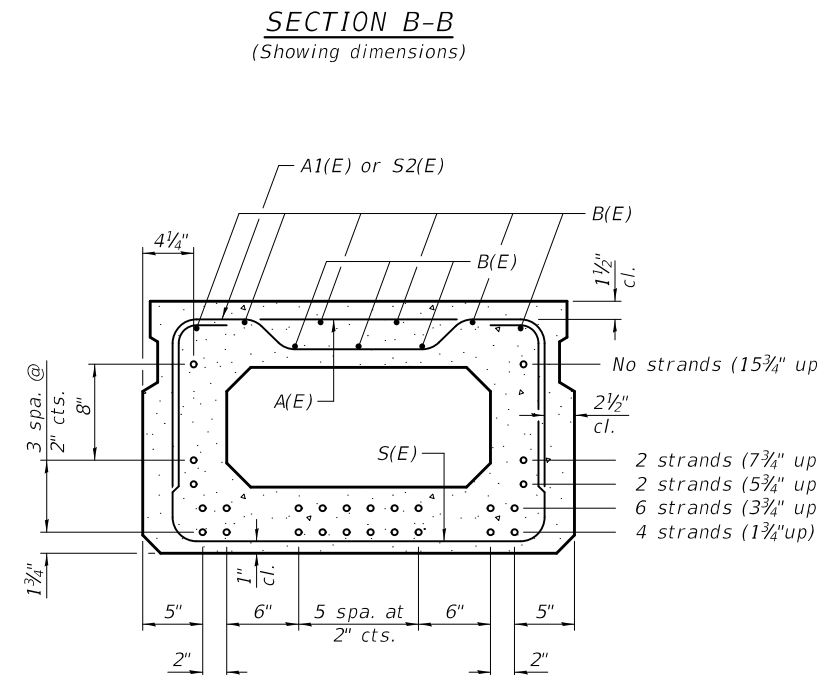
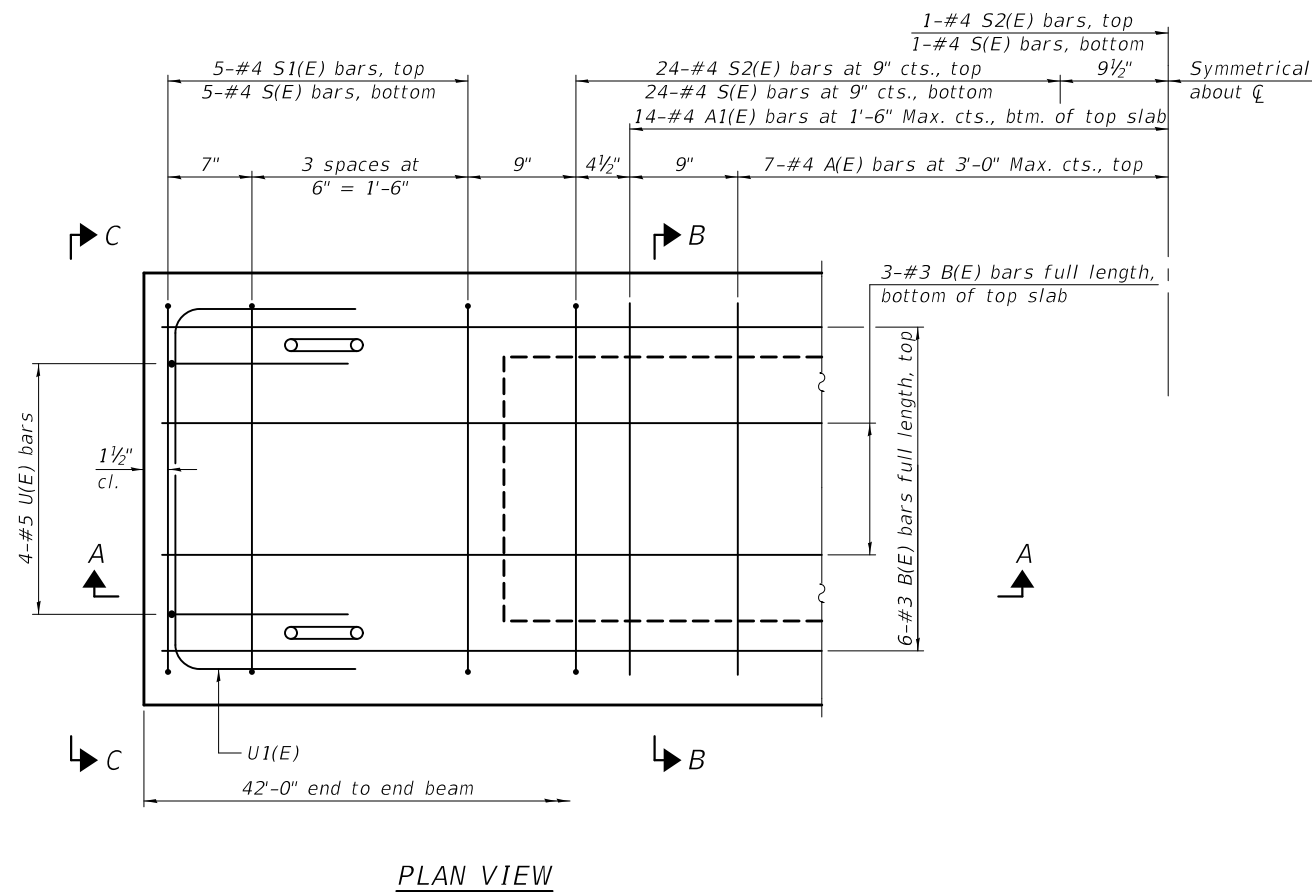
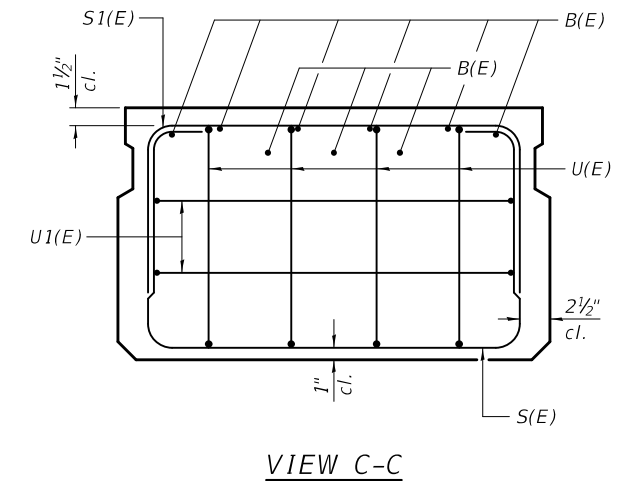
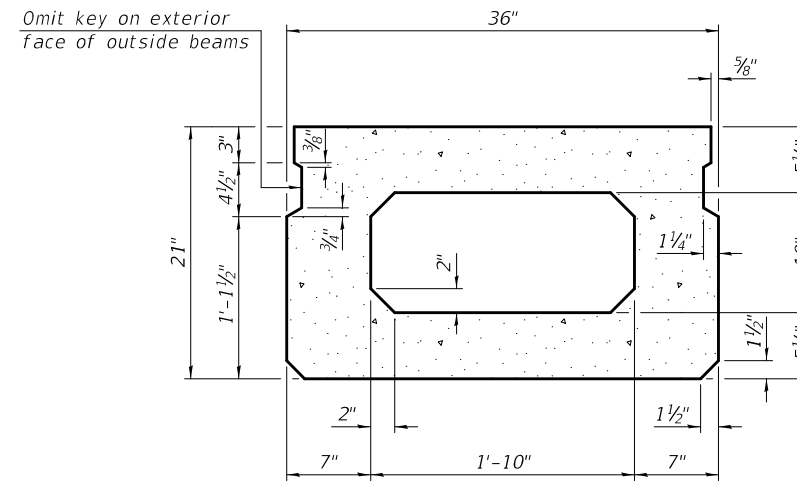
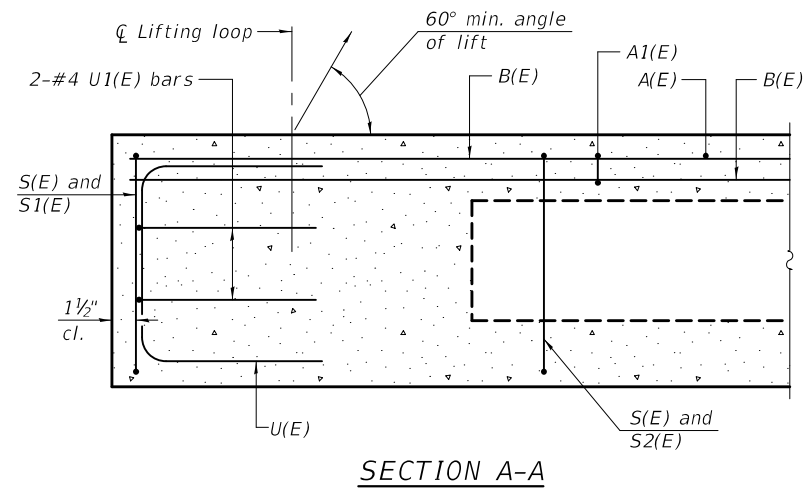
PROJECT AND LOCATION:  
SN 089-3283  
SECTION 07-1210-BR  
RIDOTT TOWNSHIP, ILLINOIS

DRAWN BY: ALS/CFC  
APPROVED BY: JAM/RJM  
DATE:  
SCALE:

REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:  
SUPERSTRUCTURE  
STRUCTURE NO. 089-3283  
CONTRACT NO. 85701  
SET TYPE:  
...0893283-sht-006-super.dgn

JOB NUMBER:  
20-016  
SHEET NUMBER:  
6 of 22



Use 14 1/2" Ø strands at the locations shown.

**SECTION B-B**  
(Showing reinforcement and permissible strand locations)  
Note:  
Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

**BAR LIST**  
**ONE BEAM ONLY**  
(For information only)

Bar	No.	Size	Length	Shape
A(E)	13	#4	2'-7"	—
A1(E)	27	#4	2'-10"	~
B(E)	9	#3	41'-8"	—
S(E)	59	#4	6'-5"	⌋
S1(E)	10	#4	4'-11"	⌋
S2(E)	49	#4	5'-2"	⌋
U(E)	8	#5	4'-0"	⌋
U1(E)	4	#4	5'-0"	⌋

Note:  
See sheet 8 of 22 for additional details and Bill of Material.

**MINIMUM BAR LAP**  
#3 bar = 1'-6"

Note:  
Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

PD-2136-0 1-1-2020

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS  
IOWA  
WISCONSIN

OWNER/DEVELOPER:  
STEPHENSON COUNTY HIGHWAY DEPT.

PROJECT AND LOCATION:  
SN 089-3283  
SECTION 07-1210-BR  
RIDOTT TOWNSHIP, ILLINOIS

DRAWN BY: ALS/CFC  
APPROVED BY: JAM/RJM  
DATE:  
SCALE:

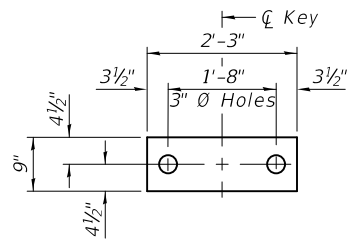
REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:  
21" x 36" PPC DECK BEAM  
STRUCTURE NO. 089-3283  
CONTRACT NO. 85701

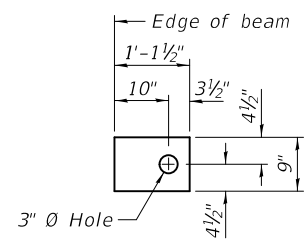
SET TYPE:  
...0893283-sh1-007-deck-bm-001.dgn

JOB NUMBER:  
20-016

SHEET NUMBER:  
7 of 22



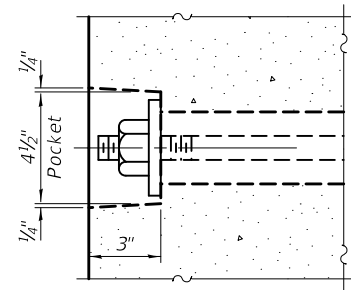
**FABRIC BEARING PAD**  
36 (Interior)



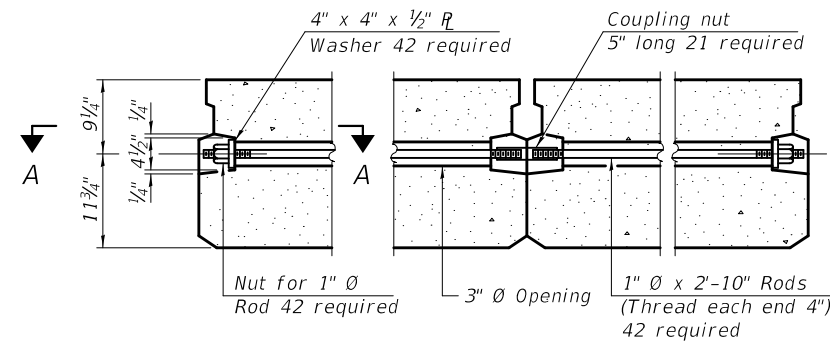
**FABRIC BEARING PAD**  
24 (Exterior)

**FIXED**

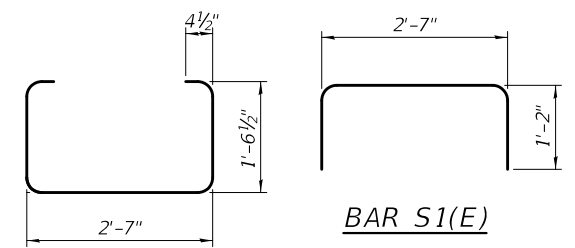
Notes:  
All bearing pads shall be 1" thick.  
Omit holes when using expansion bearings.  
Expansion bearing pads shall be bonded to the substructure.



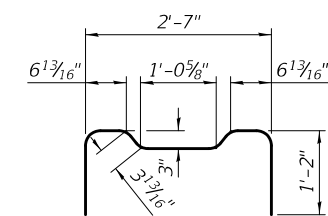
**SECTION A-A**



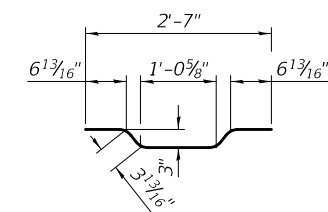
**TYPICAL TRANSVERSE TIE ASSEMBLY**



**BAR S(E)**

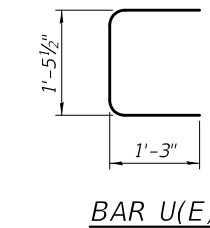


**BAR S2(E)**

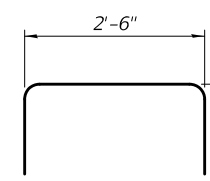


**BAR A1(E)**

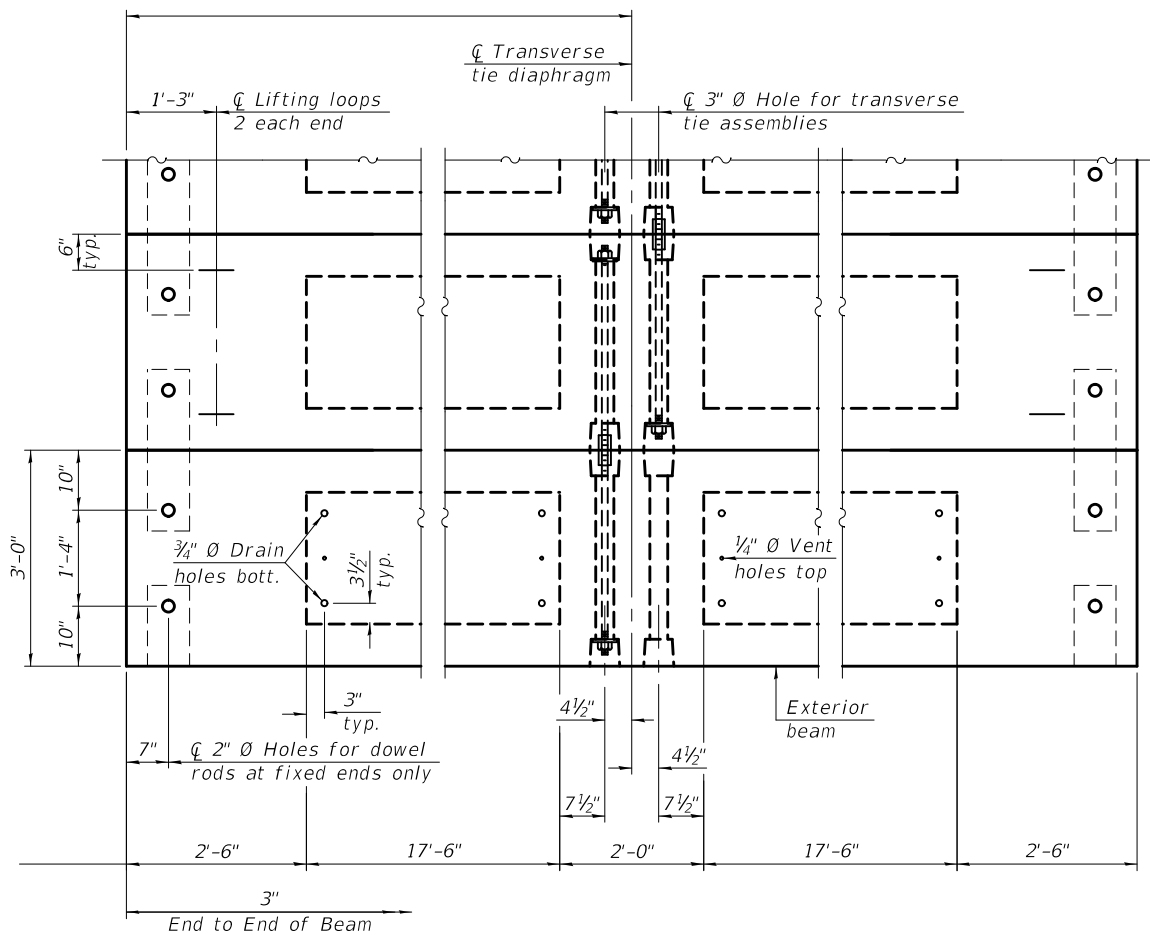
**BAR S1(E)**



**BAR U(E)**



**BAR U1(E)**

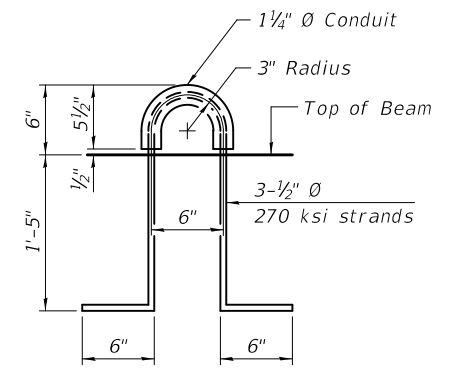


**PLAN VIEW**

Note:  
Connect beams in pairs with the transverse tie configuration shown.

**NOTES**

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place. Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling. Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Compressive strength of prestressed concrete, f'c, shall be 6000 psi. Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi. See special provisions for review and distribution of shop drawings.



**LIFTING LOOP DETAIL**

**BILL OF MATERIAL**

Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft.	3024
Estimated Total Weight (One Beam) = 25,800 lbs.		

PDD-2136-0 1-1-2020

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS  
IOWA  
WISCONSIN

OWNER/DEVELOPER:  
STEPHENSON COUNTY HIGHWAY DEPT.

PROJECT AND LOCATION:  
SN 089-3283  
SECTION 07-1210-BR  
RIDOTT TOWNSHIP, ILLINOIS

DRAWN BY: ALS/CFC  
APPROVED BY: JAM/RJM  
DATE:  
SCALE:

REVISIONS		
REV. NO.	DESCRIPTION	DATE

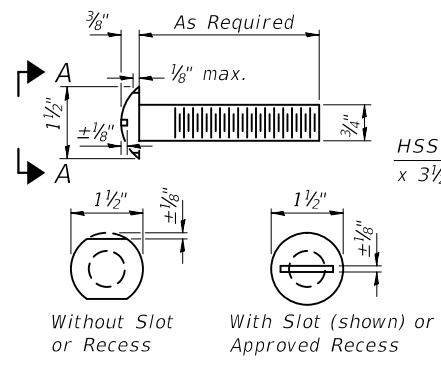
DRAWING:  
21" x 36" PPC DECK BEAM DETAILS  
STRUCTURE NO. 089-3283  
CONTRACT NO. 85701

SET TYPE:  
...0893283-sht-008-deck-bm-002.dgn

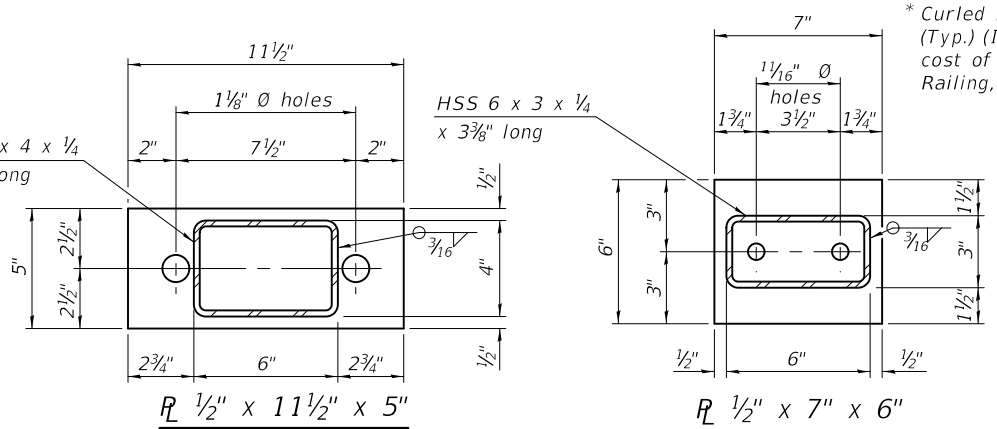
JOB NUMBER:  
20-016

SHEET NUMBER:  
8 of 22



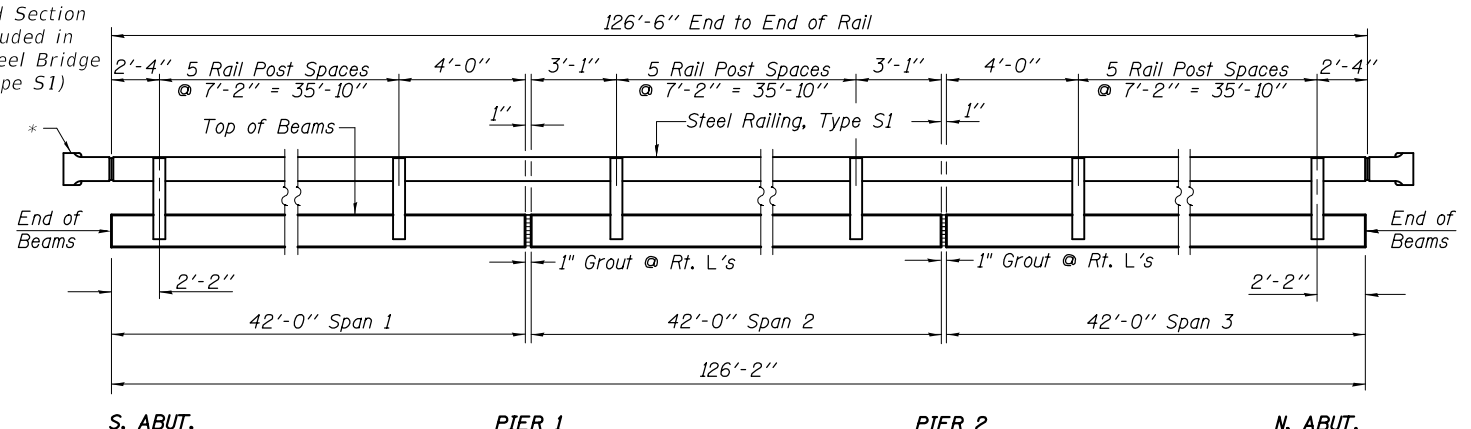


**VIEW A-A  
ROUND HEAD BOLT**

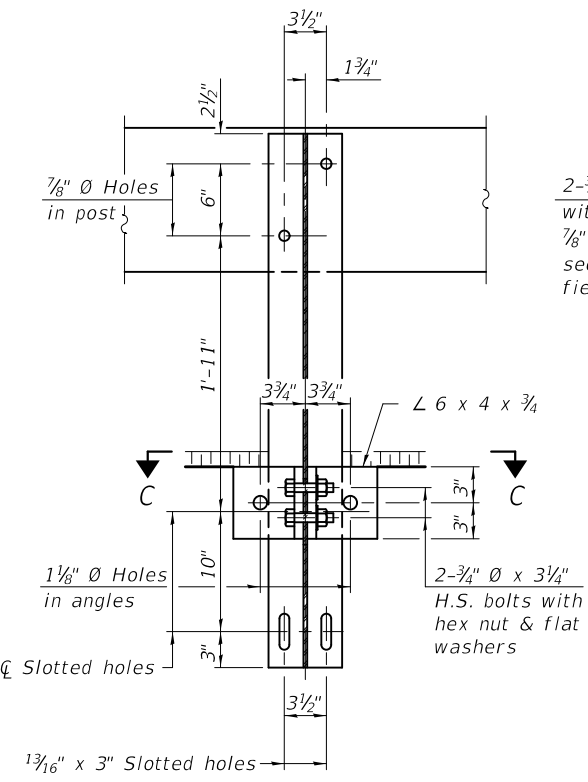


**R 1/2\"/>**

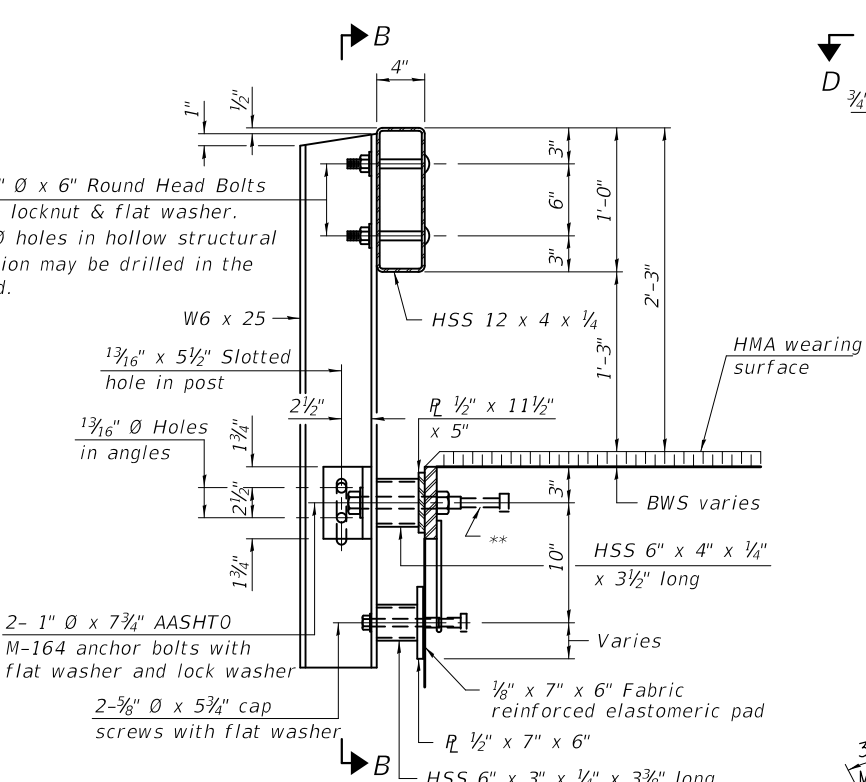
**R 1/2\"/>**



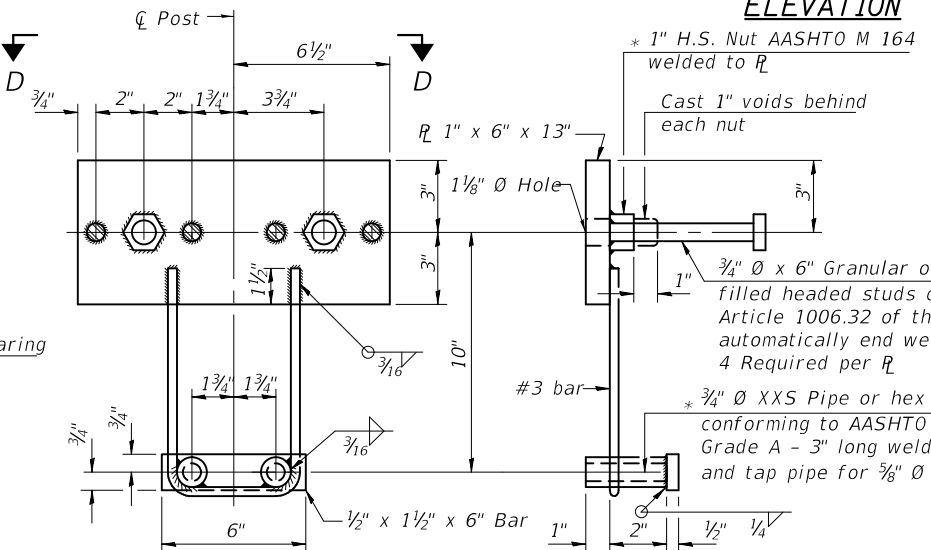
**ELEVATION**



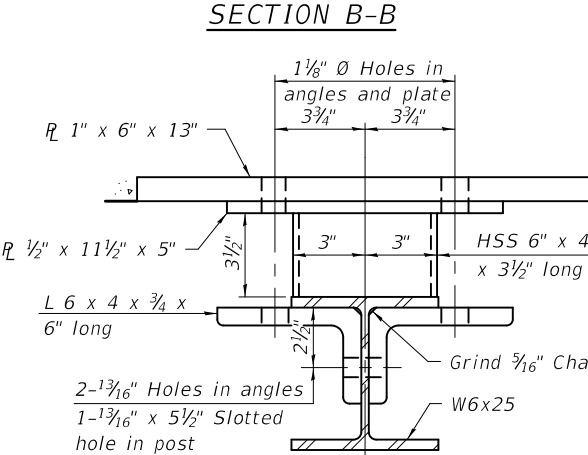
**SECTION B-B**



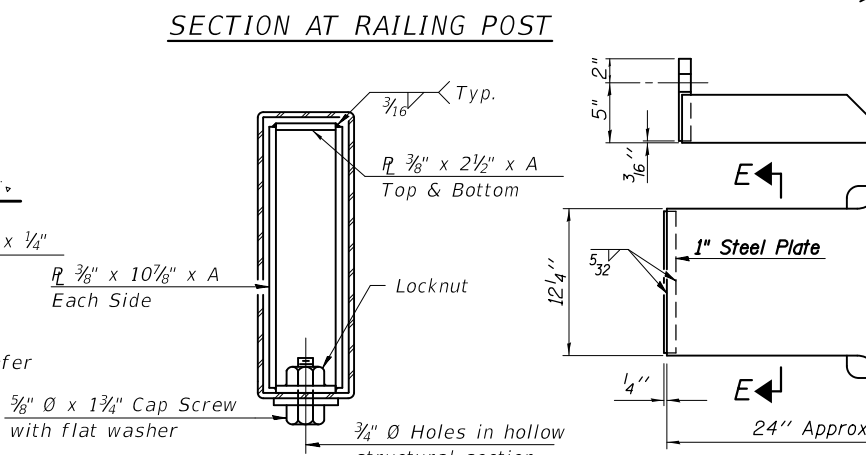
**SECTION AT RAILING POST**



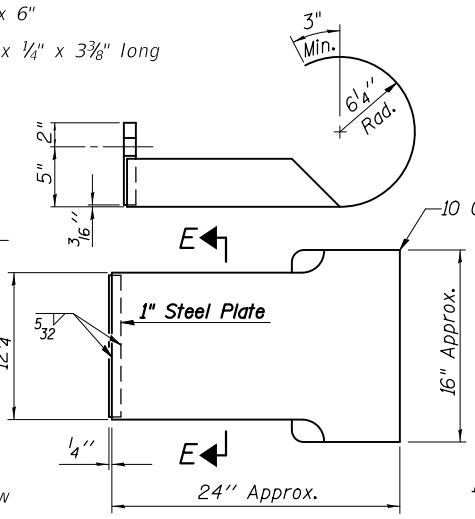
**ANCHOR DEVICE**



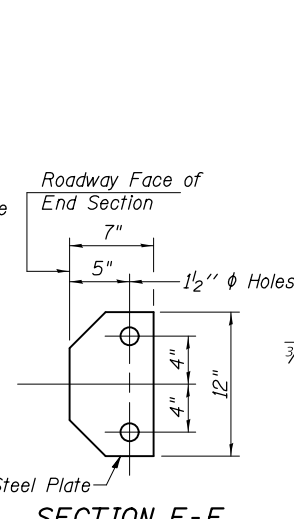
**SECTION C-C**



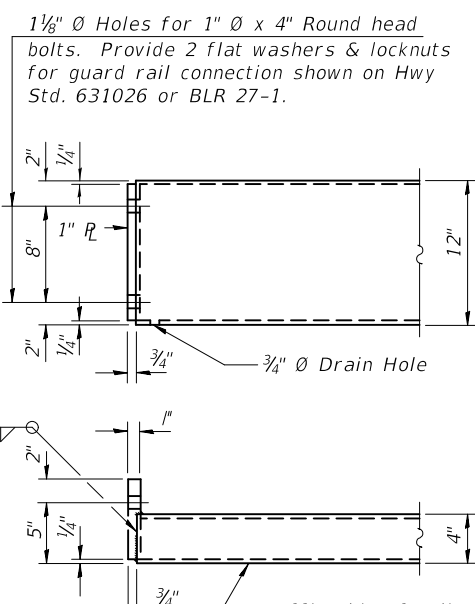
**SECTIONS AT RAIL SPLICE**



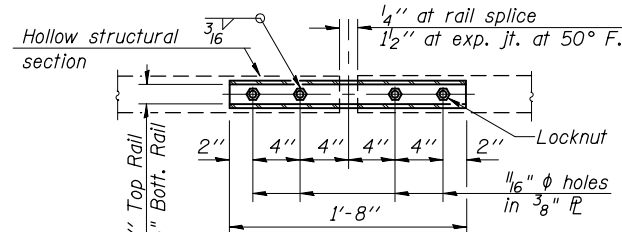
**CURLLED END SECTION DETAILS  
(4 Required)**



**SECTION E-E**



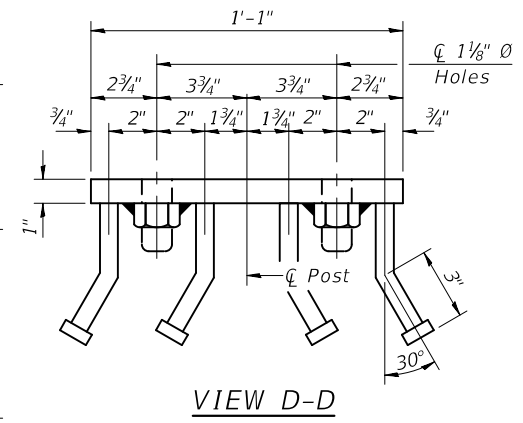
**END OF RAIL DETAILS**



**PLAN-BOTT. SPLICE R  
TYPICAL**

**Notes:**  
 For multi-span bridges, sufficient 1/4\"/>

\*\*The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device. The anchorage studs may be bent down 1/2\"/>



**VIEW D-D**

**BILL OF MATERIAL**

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	253

R-23A 2-17-2017 (10'-9\"/>

**FEHR GRAHAM**  
 ENGINEERING & ENVIRONMENTAL  
 ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS  
 IOWA  
 WISCONSIN

OWNER/DEVELOPER:  
 STEPHENSON COUNTY HIGHWAY DEPT.

PROJECT AND LOCATION:  
 SN 089-3283  
 SECTION 07-1210-BR  
 RIDOTT TOWNSHIP, ILLINOIS

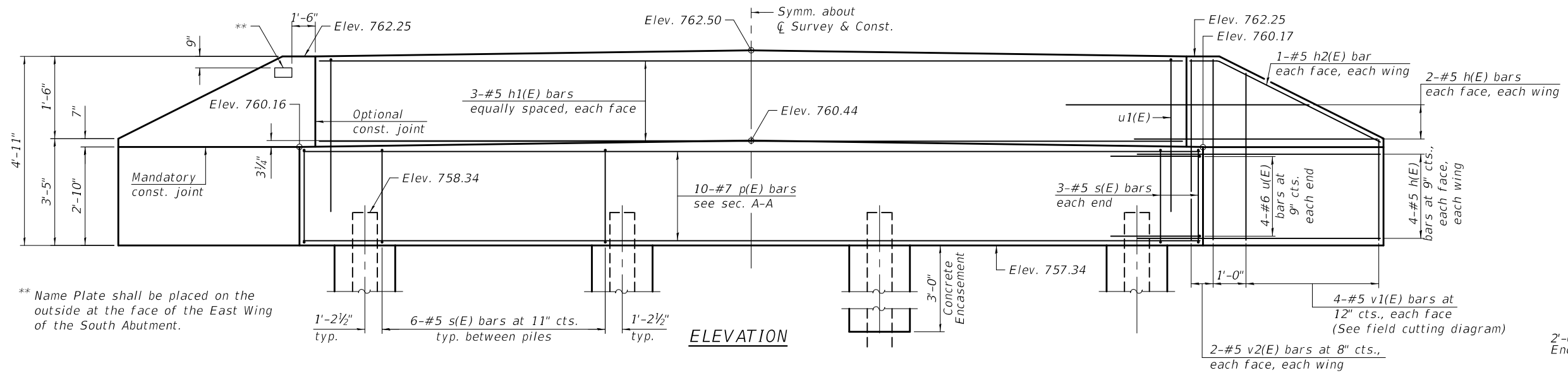
DRAWN BY: ALS/CFC  
 APPROVED BY: JAM/RJM  
 DATE:  
 SCALE:

REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:  
 STEEL RAILING, TYPE S-1  
 STRUCTURE NO. 089-3283  
 CONTRACT NO. 85701

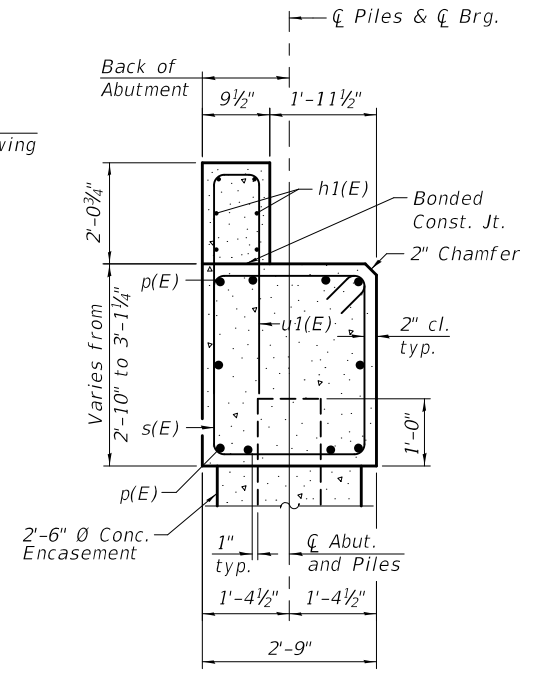
JOB NUMBER:  
 20-016

SHEET NUMBER:  
 9 of 22

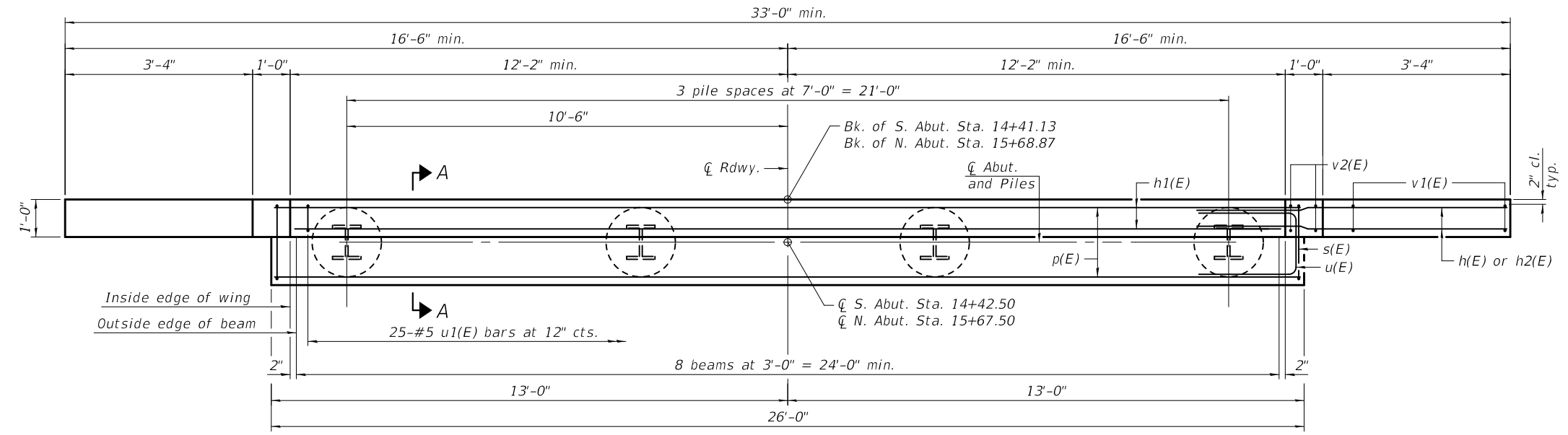


\*\* Name Plate shall be placed on the outside at the face of the East Wing of the South Abutment.

ELEVATION



SECTION A-A



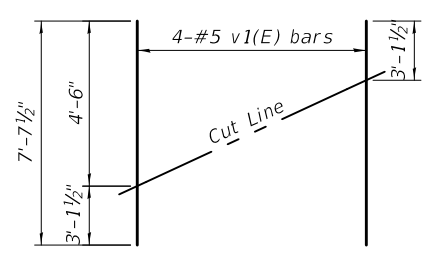
PLAN

TWO ABUTMENTS  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
h(E)	48	#5	7'-0"	—	
h1(E)	12	#5	27'-0"	—	
h2(E)	4	#5	4'-11"	—	
p(E)	20	#7	25'-8"	—	
s(E)	48	#5	10'-9"	□	
u(E)	8	#6	11'-0"	—	
u1(E)	50	#5	9'-4"	—	
v1(E)	16	#5	7'-8"	—	
v2(E)	16	#5	4'-7"	—	
Concrete Structures				Cu. Yd.	21.8
Reinforcement Bars, Epoxy Coated				Pound	3120
Furnishing Steel Piles, HP 14x73				Foot	385
Driving Piles				Foot	385
Test Pile, Steel HP 14x73				Each	1
Concrete Encasement				Cu. Yd.	4.4
Name Plates				Each	1

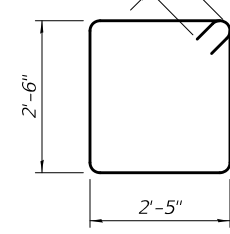
PILE DATA

Type: Steel HP14x73  
 Nominal Required Bearing: 300 kips  
 Factored Resistance Available: 150 kips  
 Est. Length: 55 ft. / Pile  
 No. Production Piles: 7  
 No. Test Piles: 1 at S. Abutment

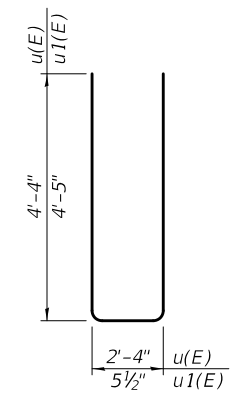


FIELD CUTTING DIAGRAM

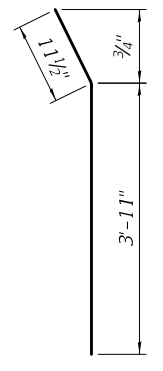
Order v1(E) bars full length. Cut as shown and use remainder of bars in opposite wing.



BAR s(E)



BARS u(E) & u1(E)



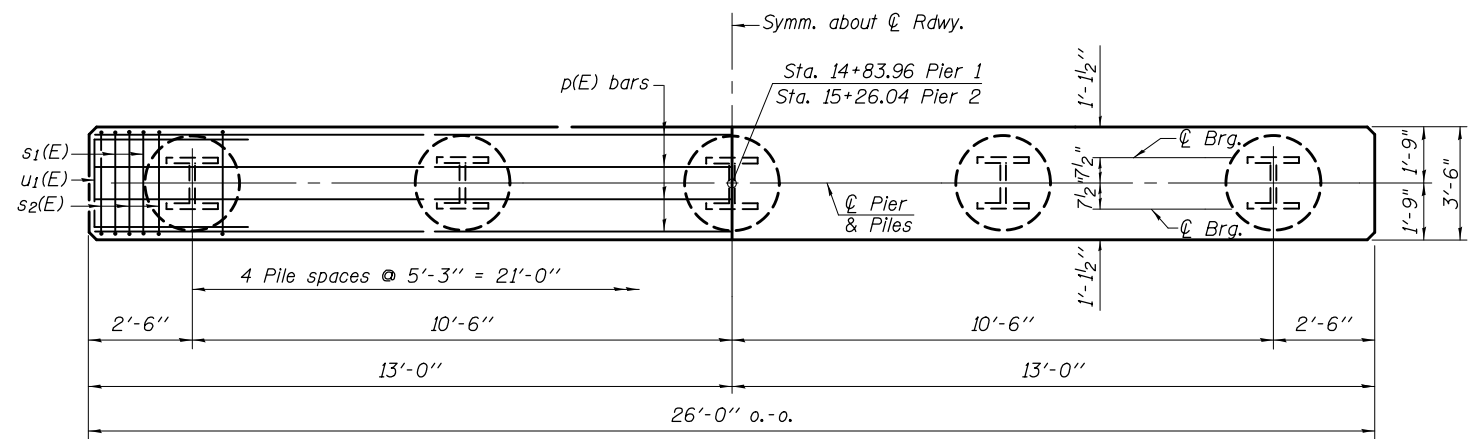
BAR h2(E)

Notes:  
 For details of piles and Concrete Encasement, see sheet 12 of 22.  
 Cast backwall and tops of wingwalls after beams have been erected.

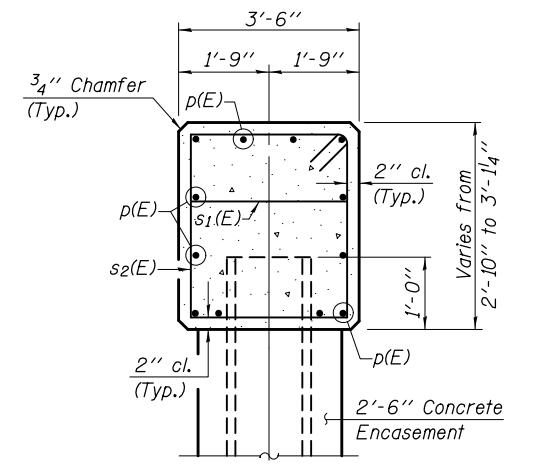
AD-SB-0 6-15-2019

	ILLINOIS	OWNER/DEVELOPER:	PROJECT AND LOCATION:	DRAWN BY: ALS/CFC APPROVED BY: JAM/RJM DATE: SCALE:	<table border="1"> <thead> <tr> <th colspan="3">REVISIONS</th> </tr> <tr> <th>REV. NO.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS			REV. NO.	DESCRIPTION	DATE			
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REV. NO.	DESCRIPTION	DATE												
IOWA	STEPHENSON COUNTY HIGHWAY DEPT.	SN 089-3283 SECTION 07-1210-BR RIDOTT TOWNSHIP, ILLINOIS	DRAWING:	ABUTMENTS STRUCTURE NO. 089-3283 CONTRACT NO. 85701										
WISCONSIN			SET TYPE:											

JOB NUMBER:  
20-016  
SHEET NUMBER:  
10 of 22

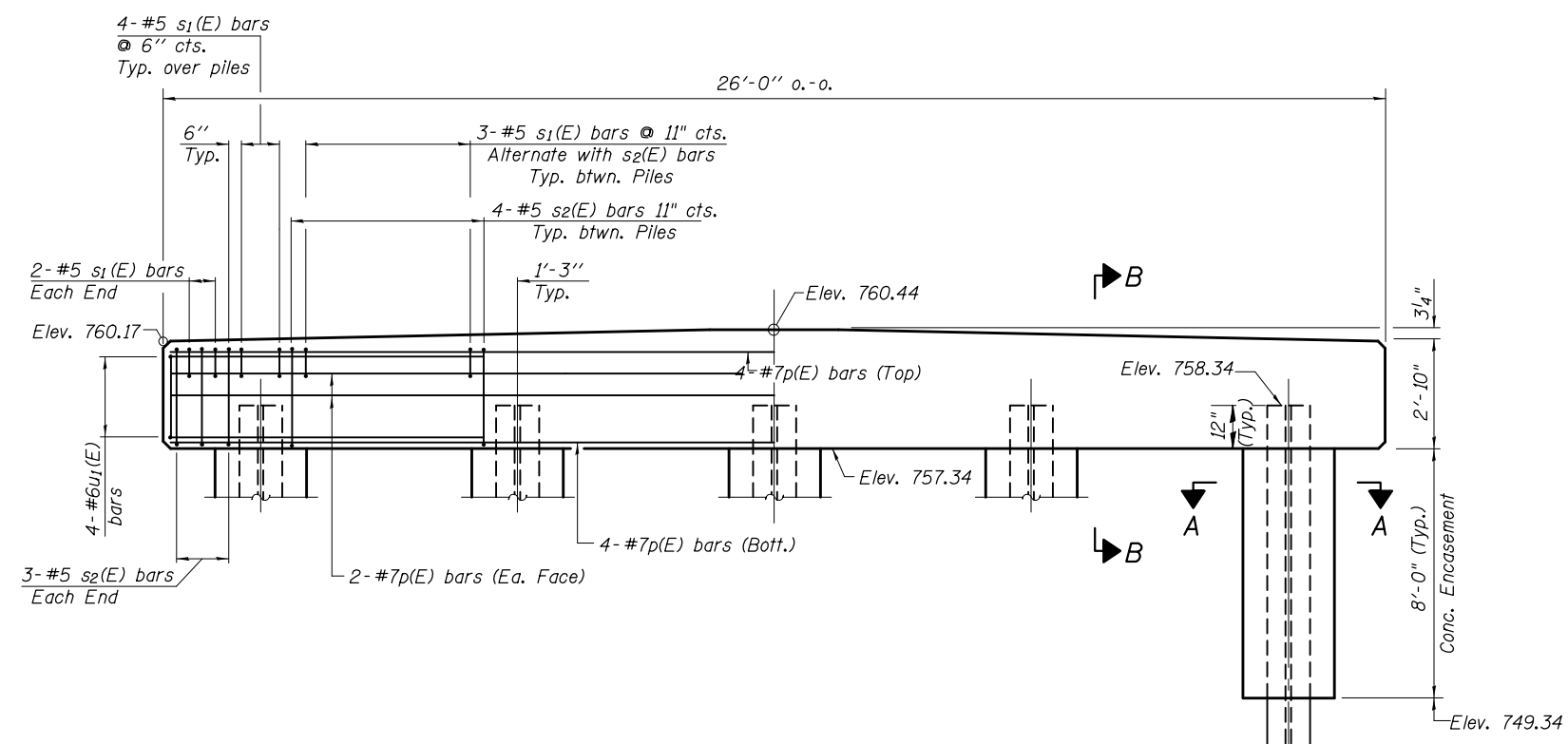


**PLAN**



**SECTION B-B**

Note:  
If a portion of the concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.



**ELEVATION**

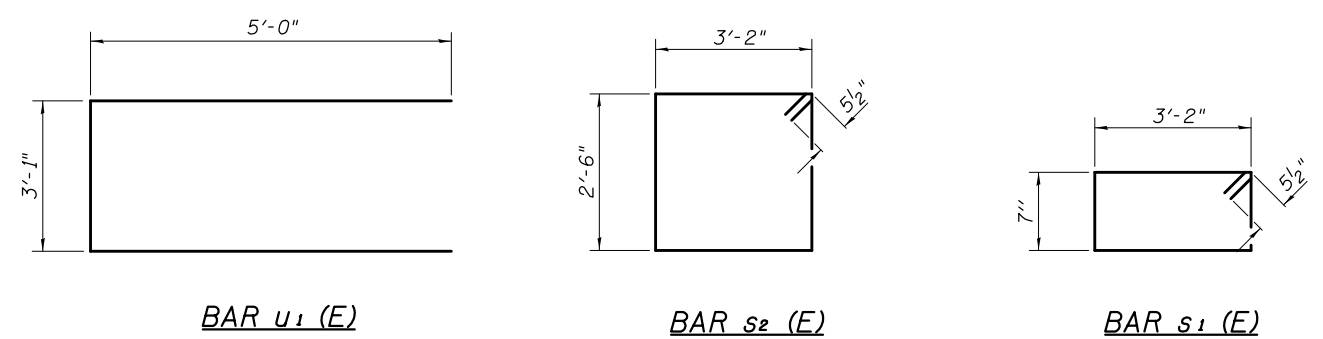
**PILE DATA**

Type & Size.....Steel HP14x73  
 No. Production Piles.....9  
 No. Test Piles.....1 at Pier 2  
 Nominal Required Bearing.....380 kips  
 Factored Resistance Available.....189 kips  
 Estimated Length.....63 ft.

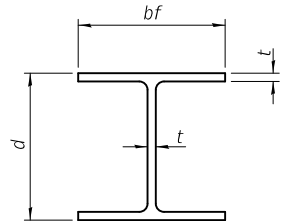
**BILL OF MATERIAL - 2 PIERS**

BAR	NO.	SIZE	LENGTH	SHAPE
p(E)	24	#7	25'-8"	—
s1(E)	72	#5	8'-5"	□
s2(E)	44	#5	12'-3"	□
u1(E)	16	#6	13'-1"	□
Concrete Structures			Cu. Yd.	20.0
Reinforcement Bars			Pound	2,770
Epoxy Coated				
Furnishing Steel Piles HP14x73			Foot	567
Driving Piles			Foot	567
Test Pile, Steel HP14x73			Each	1
Concrete Encasement			Cu. Yd.	14.5

See Sheet 12 of 22 for Pile and Concrete Encasement Details.

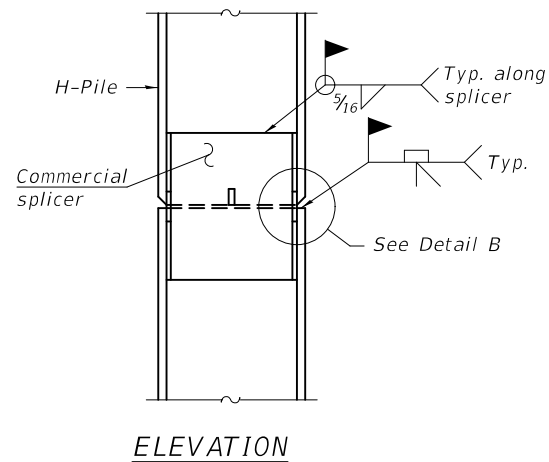




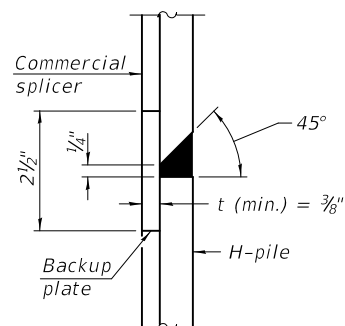


**STEEL PILE TABLE**

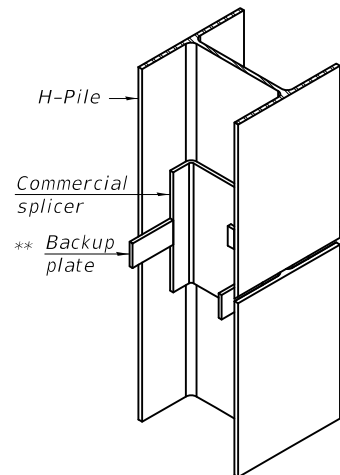
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
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**

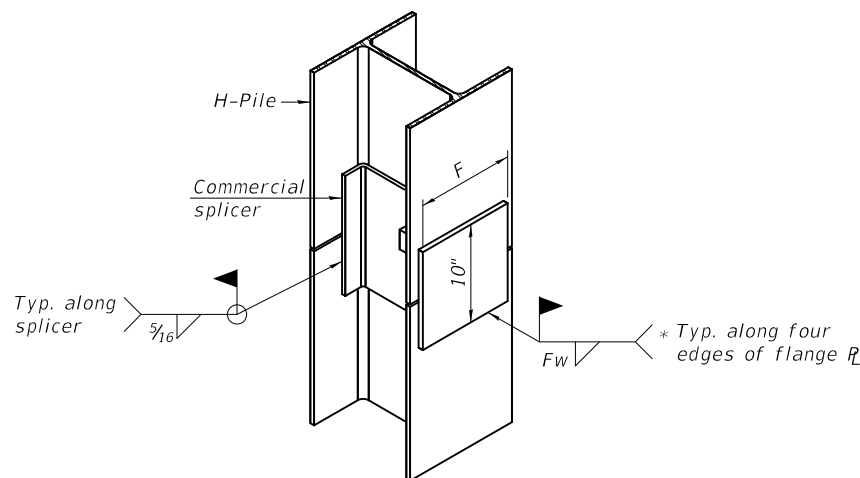


**DETAIL "B"**



**ISOMETRIC VIEW**

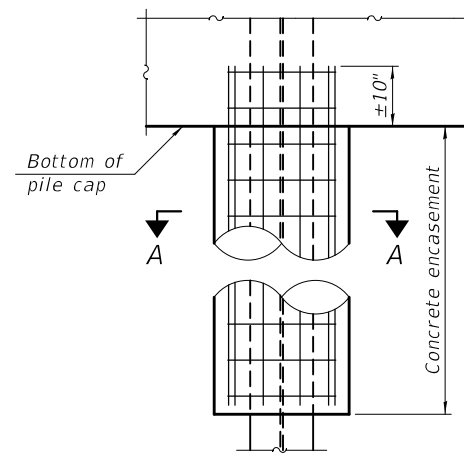
**WELDED COMMERCIAL SPLICE**



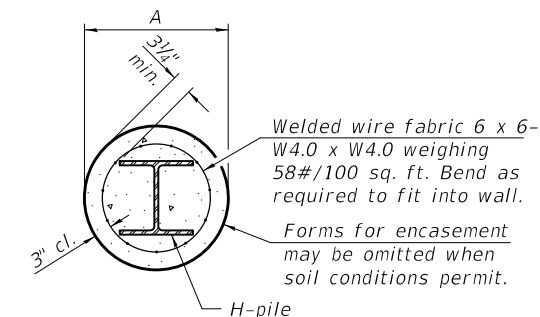
**ISOMETRIC VIEW**

**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.).

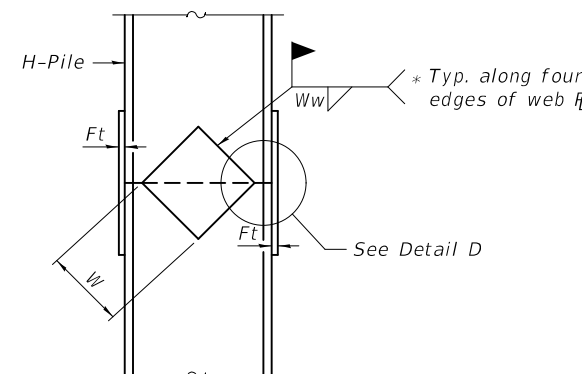


**ELEVATION**

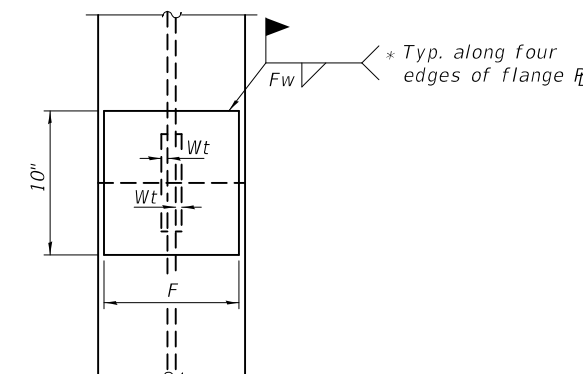


**SECTION A-A**

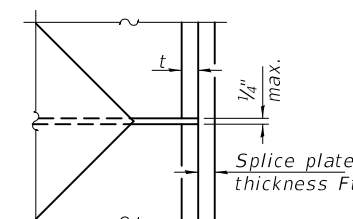
**INDIVIDUAL PILE CONCRETE ENCASEMENT**  
(when specified)



**ELEVATION**



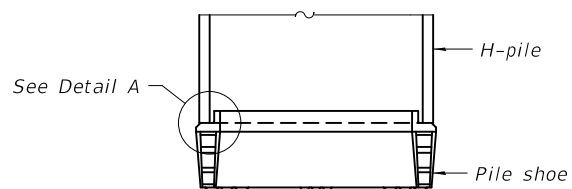
**END VIEW**



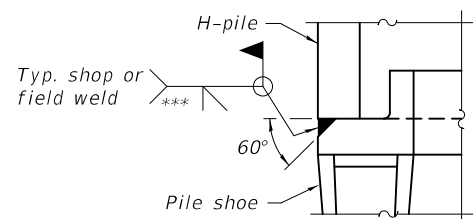
**DETAIL D**

**WELDED PLATE FIELD SPLICE**

Designation	F	Ft	Fw	W	Wt	Ww
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"	1 1/16"	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"	1 1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1 1/16"	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"



**ELEVATION**



**DETAIL A**

**SHOE ATTACHMENT**

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

F-HP

1-1-2020

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS  
IOWA  
WISCONSIN

OWNER/DEVELOPER:  
STEPHENSON COUNTY HIGHWAY DEPT.

PROJECT AND LOCATION:  
SN 089-3283  
SECTION 07-1210-BR  
RIDOTT TOWNSHIP, ILLINOIS

DRAWN BY: ALS/CFC  
APPROVED BY: JAM/RJM  
DATE:  
SCALE:

REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:  
STEEL PILE DETAILS  
STRUCTURE NO. 089-3283  
CONTRACT NO. 85701

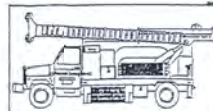
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JOB NUMBER:  
20-016

SHEET NUMBER:  
12 of 22







Midwest Test Services, Inc.  
3705 Progress Blvd.  
Peru, IL 61354

**BORING LOG**

Sheet 3 of 4

Phone: 815-223-6696  
Fax: 815-223-6659  
E-Mail: Midwest@TheRamp.net

Client: Stephenson County Highway Department  
Project Name: Ridott Road District Section 07-12130-00-BR  
Project Site: Stephenson County, Illinois

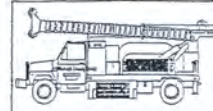
Boring No. B-1  
Surface Elev. 100.00  
Auger Depth 71' Rotary Depth NA  
Start Date 05/14/07 Finish Date 05/14/07

Location: 6' west of centerline of road and 28' north of center of bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		
58.00	[720.46]									Randy Safranski Diedrich D-120	
57.00			43								
56.00			44								
55.00			45								
54.00			46	17	SS	--	52	--	--		
53.00			47								
52.00			48								
51.00	Very Dense Gray Silty Sand Seams		49								
50.00			50								
49.00			51	18	SS	--	81	--	--		
48.00			52								
47.00			53								
46.00			54								
45.00			55								
44.00			56	19	SS	--	57	--	--		
43.00			57								
42.00			58								
41.00	Dense Gray Fine Sand		59								
40.00			60								
39.00			61	20	SS	--	48	--	--		
38.00			62								

Groundwater Data: Static water level after auger removal - elevation 90.5.  
Comments: Assumed center of existing structure as 100.0 = [ELEV 762.46 Project Datum]

Sheet 3 of 8



Midwest Test Services, Inc.  
3705 Progress Blvd.  
Peru, IL 61354

**BORING LOG**

Sheet 4 of 4

Phone: 815-223-6696  
Fax: 815-223-6659  
E-Mail: Midwest@TheRamp.net

Client: Stephenson County Highway Department  
Project Name: Ridott Road District Section 07-12130-00-BR  
Project Site: Stephenson County, Illinois

Boring No. B-1  
Surface Elev. 100.00  
Auger Depth 71' Rotary Depth NA  
Start Date 05/14/07 Finish Date 05/14/07

Location: 6' west of centerline of road and 28' north of center of bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		
37.00	[699.46]									Randy Safranski Diedrich D-120	
36.00			64								
35.00			65								
34.00	Very Dense To Dense Gray Fine Silty Loam		66	21	SS	--	55	--	--		
33.00			67								
32.00			68								
31.00			69								
30.00			70								
29.00			71	22	SS	--	45	--	--		
28.00	Bottom of Boring (Not Refusal)		72								
27.00			73								
26.00			74								
25.00			75								
24.00			76								
23.00			77								
22.00			78								
21.00			79								
20.00			80								
19.00			81								
18.00			82								
17.00			83								

Groundwater Data: Static water level after auger removal - elevation 90.5.  
Comments: Assumed center of existing structure as 100.0 = [ELEV 762.46 Project Datum]

Sheet 4 of 8

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS  
IOWA  
WISCONSIN

OWNER/DEVELOPER:  
STEPHENSON COUNTY HIGHWAY DEPT.

PROJECT AND LOCATION:  
SN 089-3283  
SECTION 07-1210-BR  
RIDOTT TOWNSHIP, ILLINOIS

DRAWN BY: ALS/CFC  
APPROVED BY: JAM/RJM  
DATE:  
SCALE:

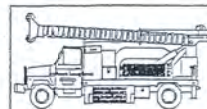
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REV. NO.	DESCRIPTION	DATE

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CONTRACT NO. 85701  
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JOB NUMBER:  
20-016

SHEET NUMBER:  
14 of 22





Midwest Test Services, Inc.  
3705 Progress Blvd.  
Peru, IL 61354

**BORING LOG**

Sheet 1 of 4

Phone: 815-223-6696  
Fax: 815-223-6659  
E-Mail: Midwest@TheRamp.net

Client: Stephenson County Highway Department  
Project Name: Ridott Road District Section 07-12130-00-BR  
Project Site: Stephenson County, Illinois

Boring No. B-2  
Surface Elev. 99.90  
Auger Depth 71' Rotary Depth NA  
Start Date 06/16/07 Finish Date 06/16/07

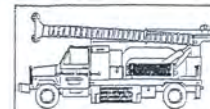
Location: 6' east of centerline of road and 28' south of center of bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		
99.90	[762.36]									Randy Safranski Diedrich D-120	
98.90	Medium Brown And Gray Clay With Gravel (Fill)		1	SS	---	22	---	10			
97.90			2								
96.90			3	1	SS	---	22	---	10		
95.90			4								
94.90	Stiff Black Silty Clay		5								
93.90			6	2	SS	---	13	---	12		
92.90	[754.86]		7								
91.90	Stiff Black Silty Clay		8	3	SS	1.2	6	B	23		
90.90			9								
89.90	Stiff Brownish Gray Silty Clay		10	4	SS	1.4	7	B	22		
88.90			11								
87.90	[749.86]		12								
86.90	Stiff Brownish Gray Silty Clay		13	5	SS	1.2	7	B	24		
85.90			14								
84.90	Stiff Brownish Gray Silty Clay		15	6	SS	1.4	8	B	21		
83.90			16								
82.90	Stiff Brownish Gray Silty Clay		17								
81.90			18	7	SS	1.7	9	B	21		
80.90	[743.36]		19								
79.90	Medium Gray Clayey Sand		20	8	SS	---	24	---	---		
	[741.36]										

Groundwater Data: Static water level after auger removal - elevation 90.5.

Comments: Assumed center of existing structure as 100.0 = [ELEV 762.46 Project Datum]

Sheet 5 of 8



Midwest Test Services, Inc.  
3705 Progress Blvd.  
Peru, IL 61354

**BORING LOG**

Sheet 2 of 4

Phone: 815-223-6696  
Fax: 815-223-6659  
E-Mail: Midwest@TheRamp.net

Client: Stephenson County Highway Department  
Project Name: Ridott Road District Section 07-12130-00-BR  
Project Site: Stephenson County, Illinois

Boring No. B-2  
Surface Elev. 99.90  
Auger Depth 71' Rotary Depth NA  
Start Date 06/16/07 Finish Date 06/16/07

Location: 6' east of centerline of road and 28' south of center of bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		
78.90	[741.36]									Randy Safranski Diedrich D-120	
77.90	Medium Gray Clayey Sand		22								
76.90			23	9	SS	---	22	---	---		
75.90	Medium Gray Clayey Sand		24								
74.90			25	10	SS	---	27	---	---		
73.90	Medium Gray Clayey Sand		26								
72.90			27								
71.90	Medium Gray Clayey Sand		28	11	SS	---	25	---	---		
70.90			29								
69.90	Medium Gray Clayey Sand		30	12	SS	---	23	---	---		
68.90			31								
67.90	Medium Gray Clayey Sand		32								
66.90			33	13	SS	---	21	---	---		
65.90	Medium Gray Clayey Sand		34								
64.90			35								
63.90	Medium Gray Clayey Sand		36	14	SS	---	23	---	---		
62.90			37								
61.90	Medium Gray Clayey Sand		38	15	SS	2.4	17	B	18		
60.90			39								
59.90	Very Stiff Gray Silty Clay Till		40	16	SS	2.2	14	B	18		
58.90			41								
	[725.86]										
	[720.36]										

Groundwater Data: Static water level after auger removal - elevation 90.5.

Comments: Assumed center of existing structure as 100.0 = [ELEV 762.46 Project Datum]

Sheet 6 of 8

**FEHR GRAHAM**

ENGINEERING & ENVIRONMENTAL

ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS  
IOWA  
WISCONSIN

OWNER/DEVELOPER:  
STEPHENSON COUNTY HIGHWAY DEPT.

PROJECT AND LOCATION:  
SN 089-3283  
SECTION 07-1210-BR  
RIDOTT TOWNSHIP, ILLINOIS

DRAWN BY: ALS/CFC  
APPROVED BY: JAM/RJM  
DATE:  
SCALE:

REVISIONS		
REV. NO.	DESCRIPTION	DATE

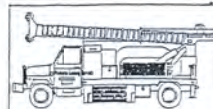
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STRUCTURE NO. 089-3283  
CONTRACT NO. 85701

SET TYPE:  
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JOB NUMBER:  
20-016

SHEET NUMBER:  
15 of 22





Midwest Testing Services, Inc.  
3705 Progress Blvd.  
Peru, IL 61354

**BORING LOG**

Sheet 3 of 4

Phone: 815-223-6696  
Fax: 815-223-6659  
E-Mail: Midwest@TheRamp.net

Client: Stephenson County Highway Department  
Project Name: Ridott Road District Section 07-12130-00-BR  
Project Site: Stephenson County, Illinois

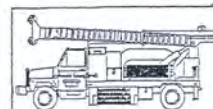
Boring No. B-2  
Surface Elev. 99.90  
Auger Depth 71' Rotary Depth NA  
Start Date 06/16/07 Finish Date 06/16/07

Location: 6' east of centerline of road and 28' south of center of bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		
57.90	[720.36]									Randy Safranski Diedrich D-120	
56.90	Dense Gray Silty Loam Till		43								
55.90			44								
54.90			45	17	SS	--	46	--	--		
53.90	[715.36]		46								
52.90			47								
51.90			48								
50.90			49								
49.90	Very Dense Gray Silt And Sand Seams		50								
48.90			51	18	SS	--	71	--	--		
47.90			52								
46.90			53								
45.90			54								
44.90		55	19	SS	--	57	--	--			
43.90		56									
42.90		57									
41.90		58									
40.90		59									
39.90		60									
38.90		61	20	SS	--	64	--	--			
37.90		62									

Groundwater Data: Static water level after auger removal - elevation 90.5.  
Comments: Assumed center of existing structure as 100.0 = [ELEV 762.46 Project Datum]

Sheet 7 of 8



Midwest Testing Services, Inc.  
3705 Progress Blvd.  
Peru, IL 61354

**BORING LOG**

Sheet 4 of 4

Phone: 815-223-6696  
Fax: 815-223-6659  
E-Mail: Midwest@TheRamp.net

Client: Stephenson County Highway Department  
Project Name: Ridott Road District Section 07-12130-00-BR  
Project Site: Stephenson County, Illinois

Boring No. B-2  
Surface Elev. 99.90  
Auger Depth 71' Rotary Depth NA  
Start Date 06/16/07 Finish Date 06/16/07

Location: 6' east of centerline of road and 28' south of center of bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		
36.90	[699.36]									Randy Safranski Diedrich D-120	
35.90	Very Dense Gray Fine Silty Loam		64								
34.90			65	21	SS	--	60	--	--		
33.90			66								
32.90	[691.36]		67								
31.90			68								
30.90			69								
29.90			70	22	SS	--	69	--	--		
28.90	Bottom of Boring (Not Refusal)		71								
27.90			72								
26.90			73								
25.90			74								
24.90			75								
23.90			76								
22.90			77								
21.90			78								
20.90			79								
19.90			80								
18.90			81								
17.90			82								
16.90			83								

Groundwater Data: Static water level after auger removal - elevation 90.5.  
Comments: Assumed center of existing structure as 100.0 = [ELEV 762.46 PROJECT DATUM]

Sheet 8 of 8

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525

ILLINOIS  
IOWA  
WISCONSIN

OWNER/DEVELOPER:  
STEPHENSON COUNTY HIGHWAY DEPT.

PROJECT AND LOCATION:  
SN 089-3283  
SECTION 07-1210-BR  
RIDOTT TOWNSHIP, ILLINOIS

DRAWN BY: ALS/CFC  
APPROVED BY: JAM/RJM  
DATE:  
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REV. NO.	DESCRIPTION	DATE

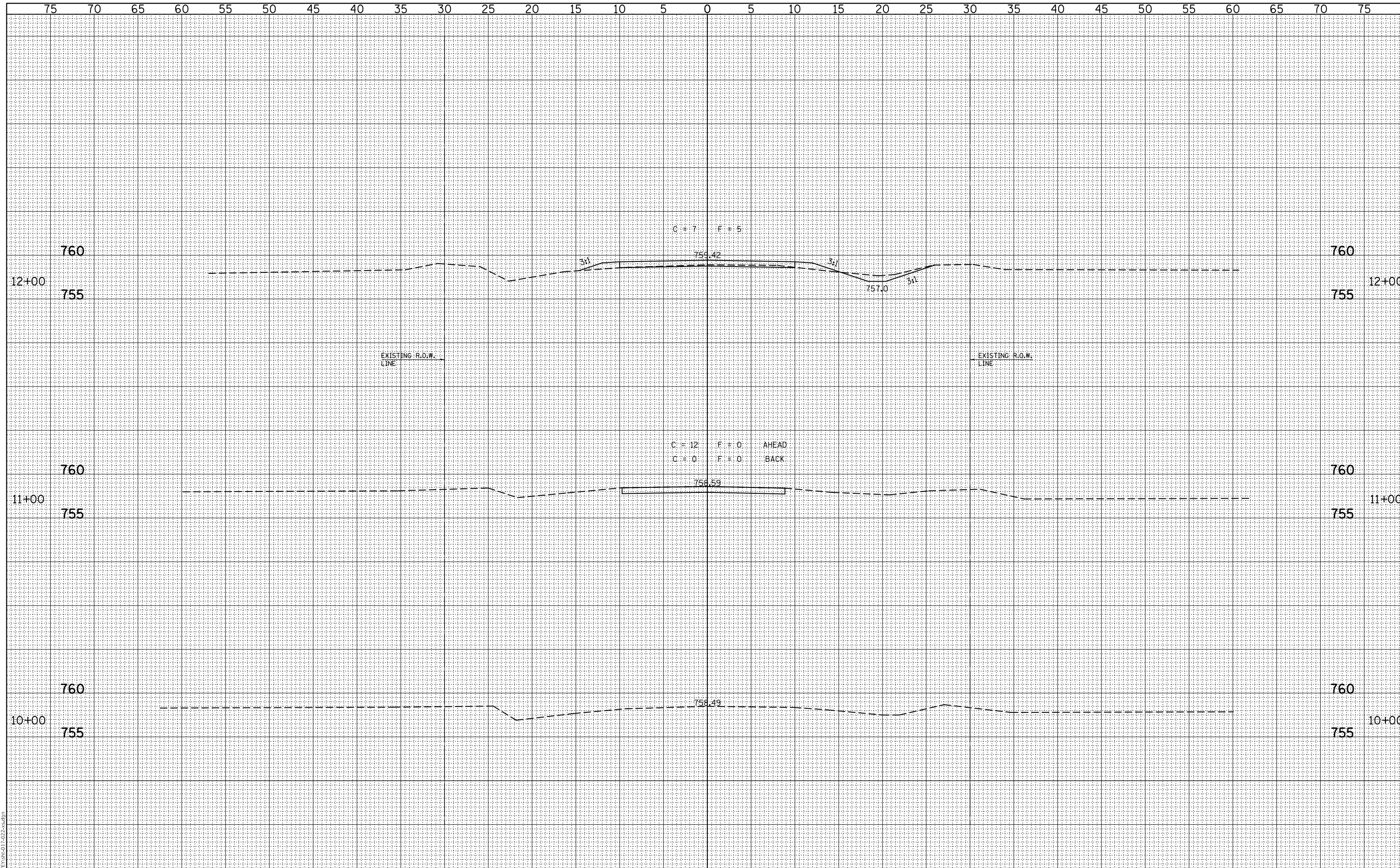
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CONTRACT NO. 85701  
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JOB NUMBER:  
20-016

SHEET NUMBER:  
16 of 22

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NOTE BOOK	PLOTTED	
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	AREAS CHECKED	



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**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525  
FEHR GRAHAM PROJECT NUMBER: 20-016

USER NAME = cconnor	DESIGNED - GJC	REVISED -
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PLOT SCALE = 10.0000 ' / in.	CHECKED - RJC/MCB	REVISED -
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ROADWAY CROSS SECTIONS**

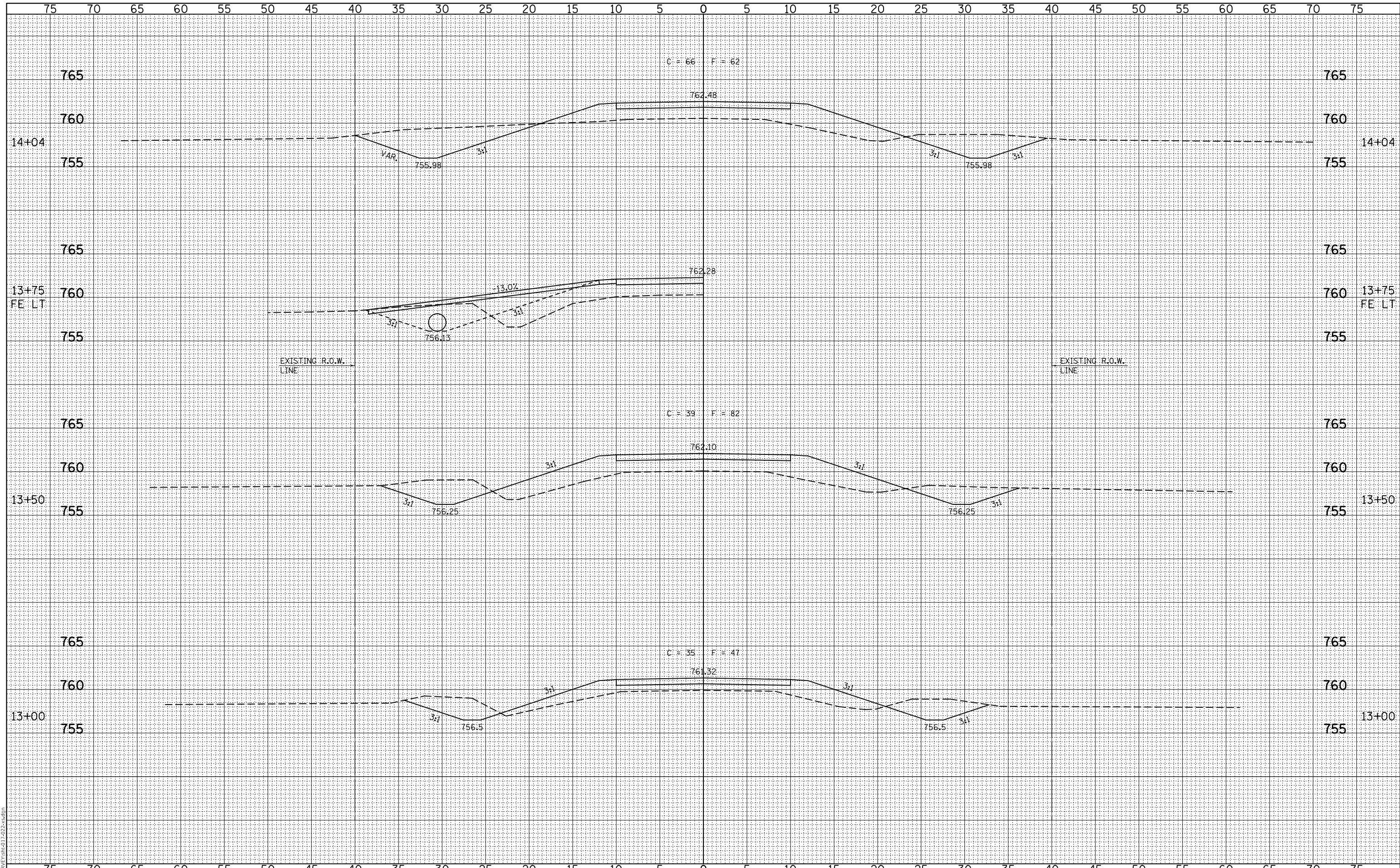
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CONTRACT NO. 85701				
ILLINOIS		FED. AID PROJECT		



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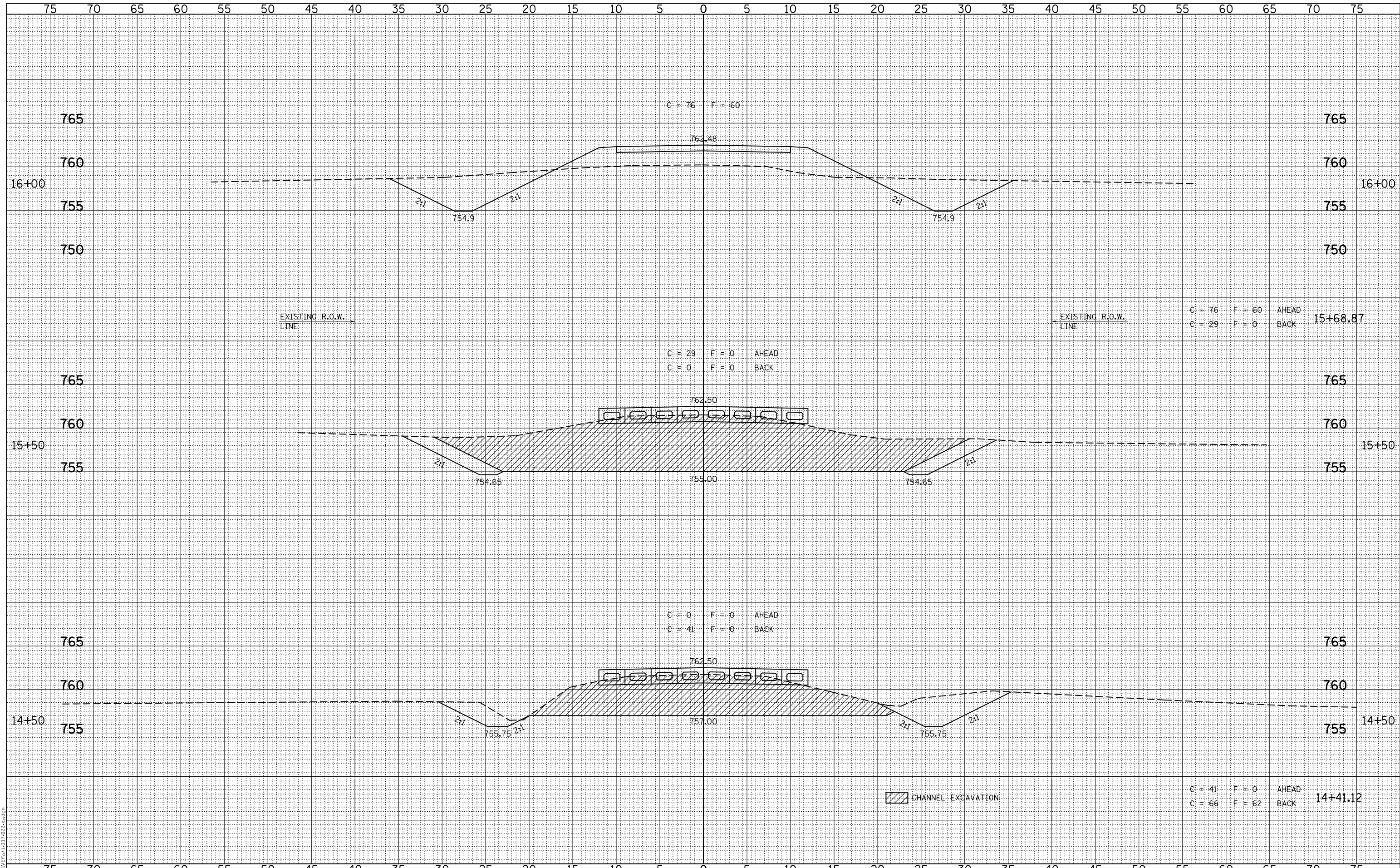


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DATE	
BY	
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NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
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DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
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	AREAS
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**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525

USER NAME = cconnor	DESIGNED - GJC	REVISED -
	DRAWN - SAP/CFC	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED - RJC/MCB	REVISED -
PLOT DATE = 8/26/2020	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ROADWAY CROSS SECTIONS**

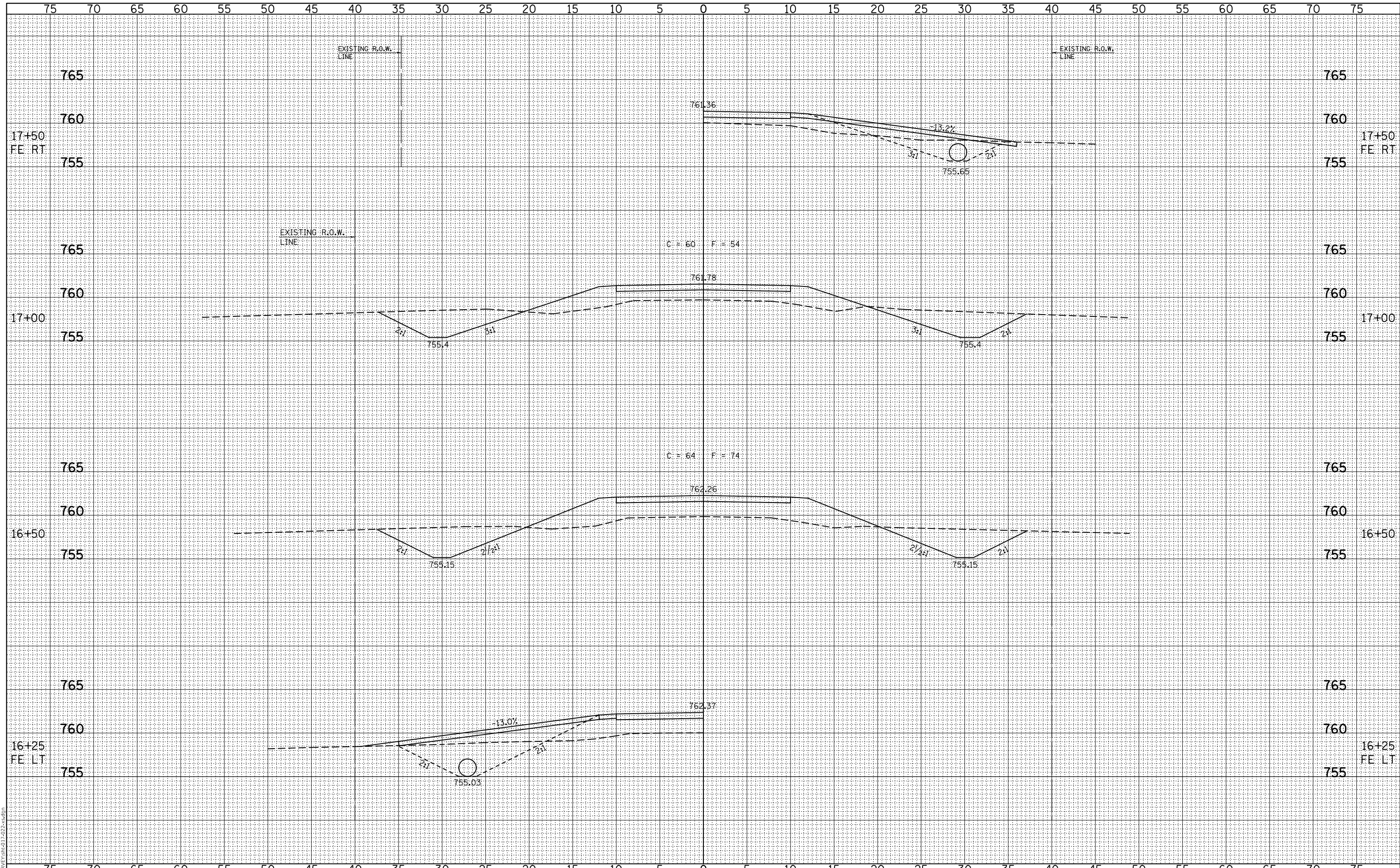
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		ILLINOIS	FED. AID PROJECT	

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
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	AREAS
	CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
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	AREAS
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**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525  
FEHR GRAHAM PROJECT NUMBER: 20-016

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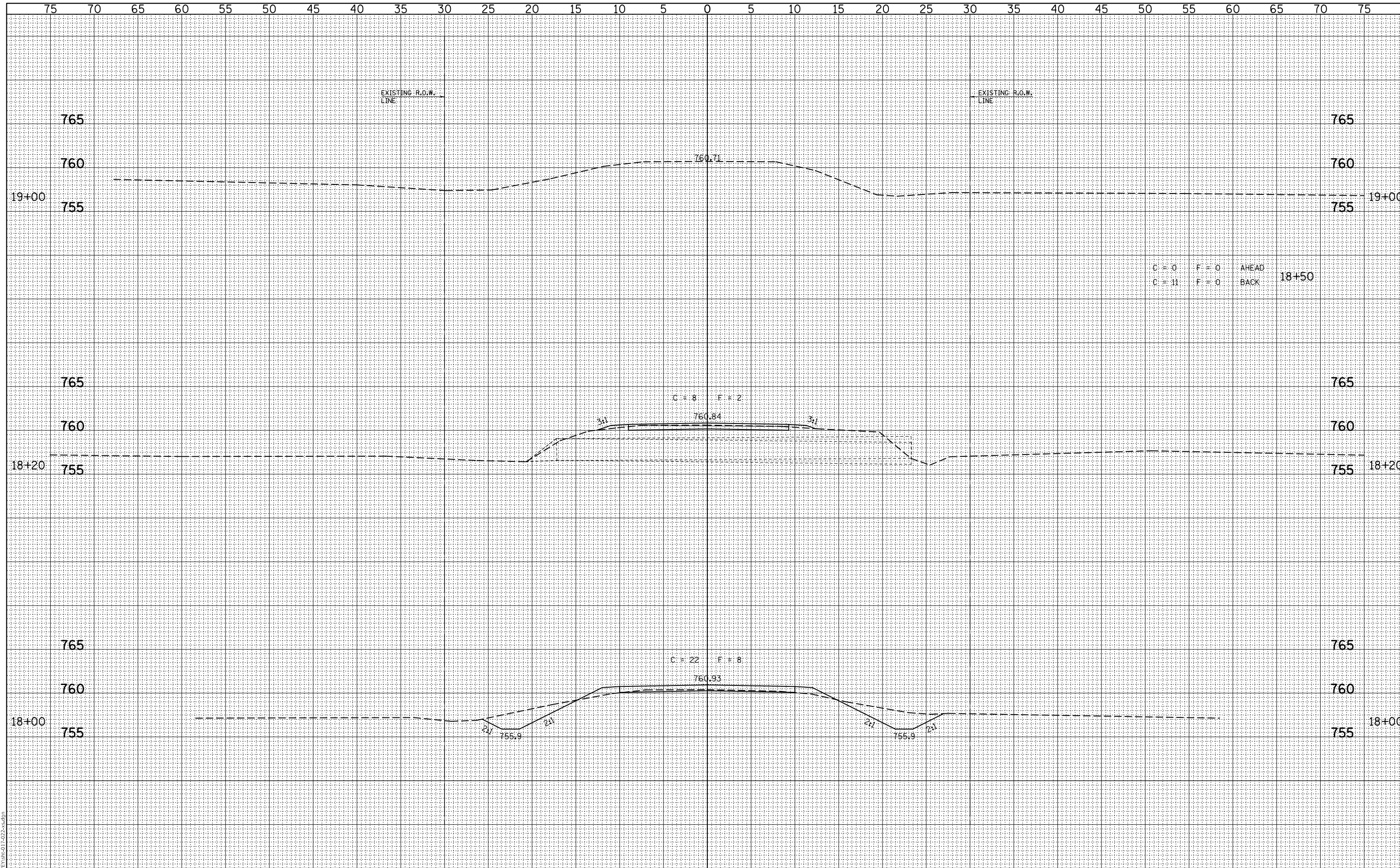
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

ROADWAY CROSS SECTIONS			
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TR316	07-12130-00-BR	STEPHENSON	22	20
CONTRACT NO. 85701			ILLINOIS FED. AID PROJECT	

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

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



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PLOT DATE = 8/26/2020	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROADWAY CROSS SECTIONS

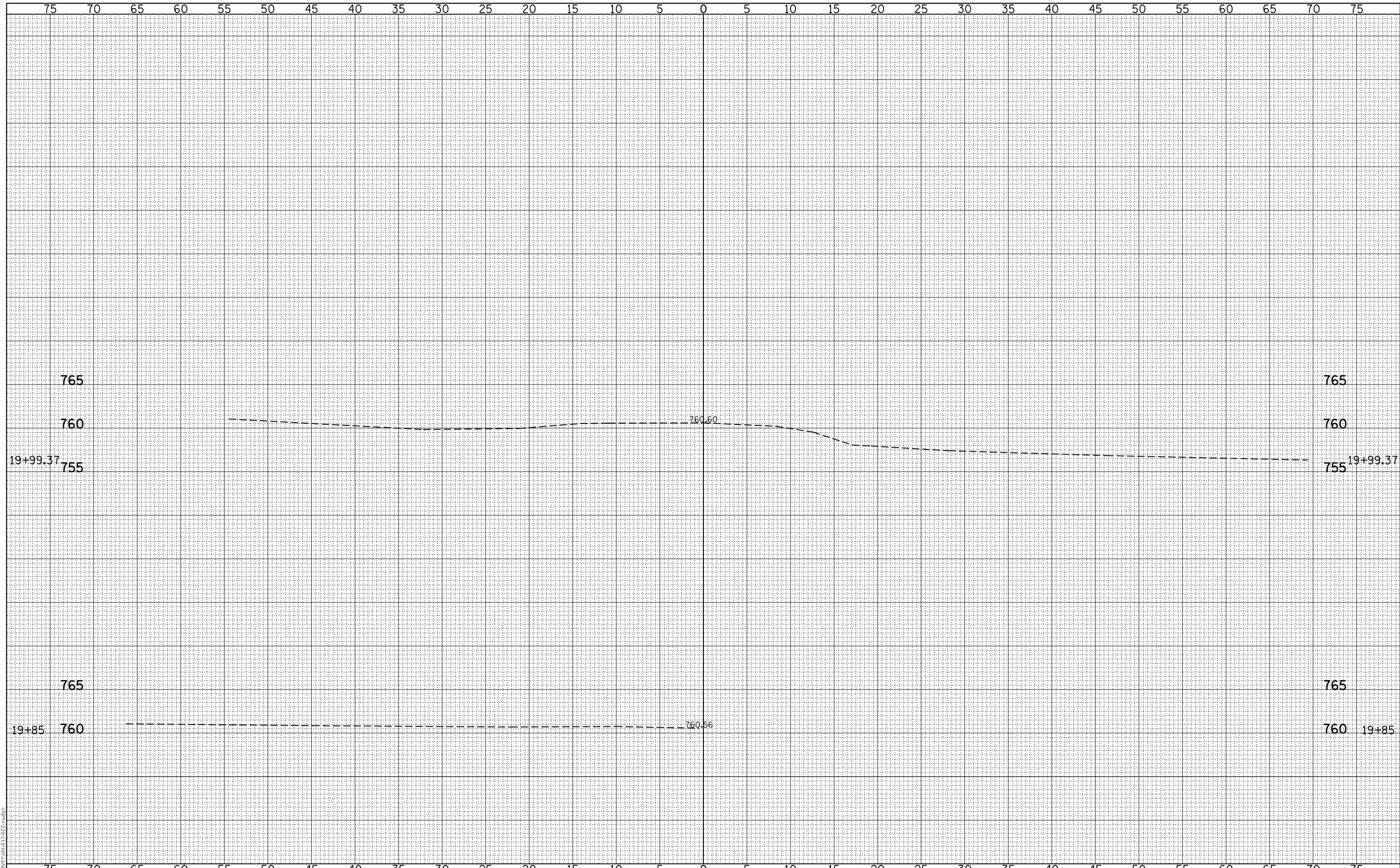
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CONTRACT NO. 85701				
ILLINOIS FED. AID PROJECT				



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NOTE BOOK NO.	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	

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



MODEL: Default  
FILE NAME: ...SURVEY\816-07-222-ss.dgn

**FEHR GRAHAM**  
ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525  
FEHR GRAHAM PROJECT NUMBER: 20-016

USER NAME = cconnor	DESIGNED - GJC	REVISED -
	DRAWN - SAP/CFC	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED - RJC/MCB	REVISED -
PLOT DATE = 8/26/2020	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ROADWAY CROSS SECTIONS**

SCALE: SHEET OF SHEETS STA. 19+85.00 TO STA. 19+99.37

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR316	07-12130-00-BR	STEPHENSON	22	22
CONTRACT NO. 85701				
ILLINOIS FED. AID PROJECT				