

SHEET NO.	TITLE
1	COVER SHEET
2	SUMMARY OF QUANTITIES, GENERAL NOTES & TYPICAL SECTIONS
3	PLAN AND PROFILE
4	SHOULDER AND GUARDRAIL DETAIL
5-48	BRIDGE PLANS
49-52	ROADWAY CROSS SECTIONS

06-12-2020 LETTING ITEM 119

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

CONTRACT NO. 93746

PLANS FOR PROPOSED
SURFACE TRANSPORTATION PROGRAM-BRIDGE

SECTION 16-00130-00-BR
HANCOCK COUNTY
PROJECT NO. 2CCC(013)
C.H. 6 /FAS 434
C-96-067-20

STANDARDS

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
515001-04	NAME PLATE FOR BRIDGES
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-16	TRAFFIC BARRIER TERMINAL, TYPE 6
701901-08	TRAFFIC CONTROL DEVICES
725001-01	OBJECT AND TERMINAL MARKERS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

UTILITIES

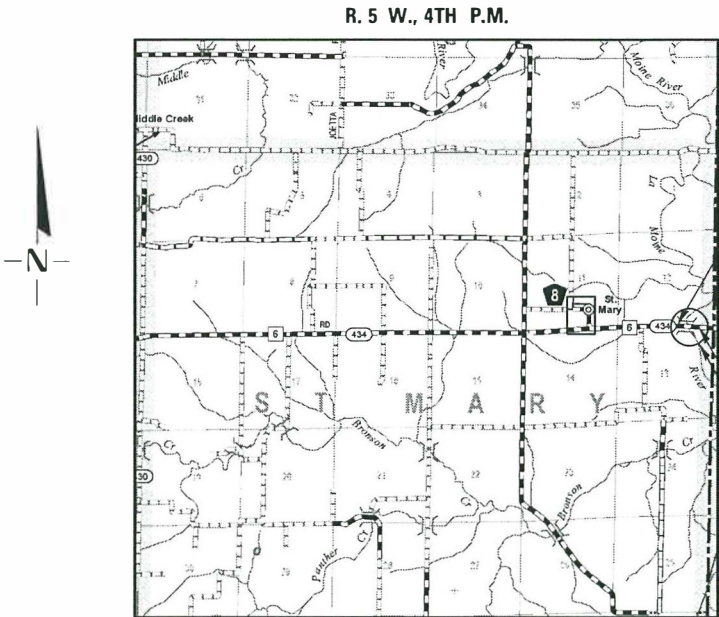
FRONTIER COMMUNICATIONS
MARK BURKS
217-854-2222

DALLAS RURAL WATER DIST.
DANA GNANN
217-337-3718

WESTERN ILLINOIS ELECTRIC COOP
TODD GROTTIS
217-357-3125

SCALES

PLAN	0' 50' 100'
PROFILE HORIZ.	0' 50' 100'
PROFILE VERT.	0' 5' 10'
CROSS SECTIONS	0' 5' 10'



LOCATION MAP

GROSS LENGTH OF SECTION = 791.00 FEET = 0.150 MILES
NET LENGTH OF SECTION = 791.00 FEET = 0.150 MILES



FEHR GRAHAM

ENGINEERING & ENVIRONMENTAL

ILLINOIS IOWA WISCONSIN

ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER: 184003525

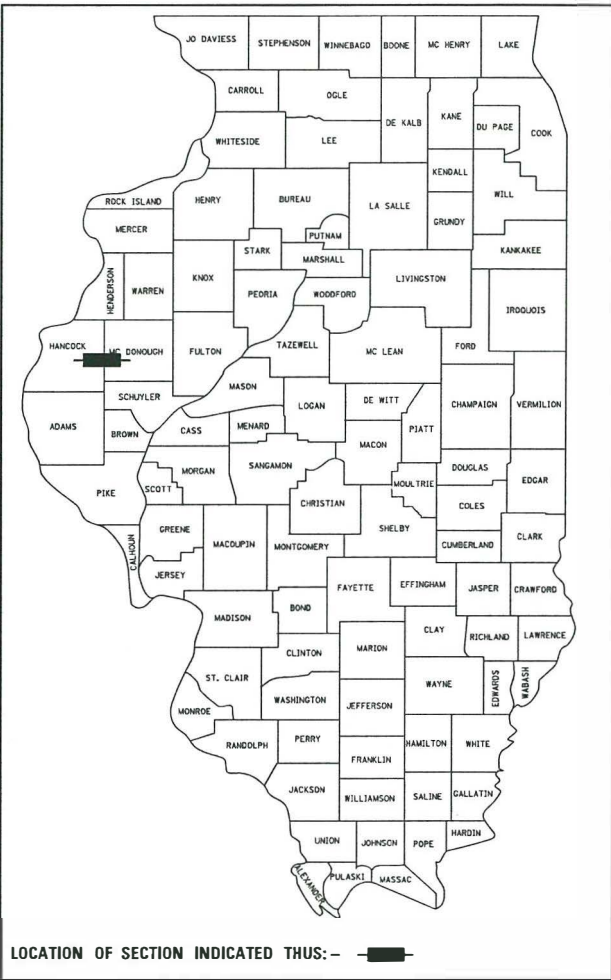
IMPROVEMENT BEGINS
STA. 10 + 09.00

IMPROVEMENT ENDS
STA. 18 + 00.00

STA. 12 + 83.00
DECK REPLACEMENT AND REHABILITATION
EXISTING SN 034-3060



Gary J. Cartwright 3/2/20
ILLINOIS PROFESSIONAL NO. 43408
EXPIRES 11-30-21



LOCATION OF SECTION INDICATED THUS: -

CLASSIFICATION: MAJOR COLLECTOR
DESIGN VOLUME: UNDER 250 ADT
CURRENT ADT: 175 (2020)
DESIGN SPEED: 40 MPH

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

APPROVED	2/28 2020
Elgin Berry COUNTY ENGINEER	
PASSED	April 14 2020
District Six Engineer of Local Roads & Streets	
RELEASED FOR BID BASED ON LIMITED REVIEW	April 14 2020
REGION FOUR ENGINEER	
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
20400800	FURNISHED EXCAVATION	CU YD	152
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	30
28000400	PERIMETER EROSION BARRIER	FOOT	540
35101400	AGGREGATE BASE COURSE, TYPE B	TON	357
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	1763
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	110
40604050	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	66
• 44000100	PAVEMENT REMOVAL	SQ YD	784
• 50102400	CONCRETE REMOVAL	CU YD	6
• 50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	1
50200100	STRUCTURE EXCAVATION	CU YD	28
50300225	CONCRETE STRUCTURES	CU YD	18.2
50300255	CONCRETE SUPERSTRUCTURE	CU YD	502.5
50300260	BRIDGE DECK GROOVING	SQ YD	1290
50300300	PROTECTIVE COAT	SQ YD	1828
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	3007
50500505	STUD SHEAR CONNECTORS	EACH	6375
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	139800
51500100	NAME PLATES	EACH	1
52000110	PREFORMED JOINT STRIP SEAL	FOOT	95
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	15
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	5
52100505	ANCHOR BOLTS, 5/8"	EACH	80
58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	22
58700300	CONCRETE SEALER	SQ FT	707
Δ 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4
Δ 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4
63200310	GUARDRAIL REMOVAL	FOOT	300
67100100	MOBILIZATION	L SUM	1
Δ 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
• X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.3
• X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1
• Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	20
• Z0001905	STRUCTURAL STEEL REPAIR	POUND	2104
• Z0007112	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	1
• Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1
• Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	141
• Z0013798	CONSTRUCTION LAYOUT	L SUM	1
• Z0018002	DRAINAGE SCUPPERS, DS-11	EACH	6
• Z0076600	TRAINEES	HOUR	500
• Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500

•SEE SPECIAL PROVISIONS

ΔSPECIALTY 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 SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY, AS DIRECTED BY THE ENGINEER.

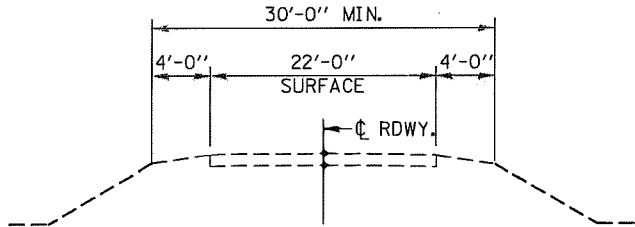
SEEDING, CLASS 2 (SPECIAL) = 0.3 ACRE

INSTREAM WORK WILL NOT BE ALLOWED UNTIL MUSSEL RELOCATION IS COMPLETED AND IDOT HAS APPROVED THE AREA FOR CONSTRUCTION.

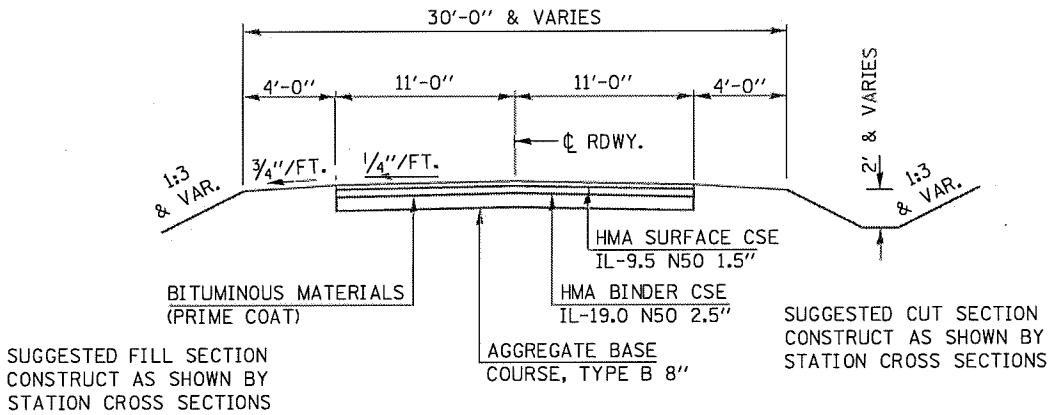
APPLICATION RATES USED IN QUANTITY CALCULATIONS

AGGREGATE BASE COURSE 2.05 TON/CU. YD.
BITUMINOUS MATERIALS (PRIME COAT) 0.25 LBS/SQ. FT.
HOT MIX ASPHALT 112 LBS/SQ. YD./IN.

THE ABOVE NOTED APPLICATION RATES FOR BITUMINOUS MATERIALS (PRIME COAT) ARE FOR QUANTITY CALCULATIONS ONLY. THE APPLICATION RATE TO BE APPLIED WILL BE DETERMINED BY THE ENGINEER AT THE TIME OF PLACEMENT.



TYPICAL EXISTING CROSS SECTION



TYPICAL PROPOSED CROSS SECTION

STA. 10+09 TO STA. 11+57
STA. 16+27.42 TO STA. 18+00

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE TO THIS PROJECT:

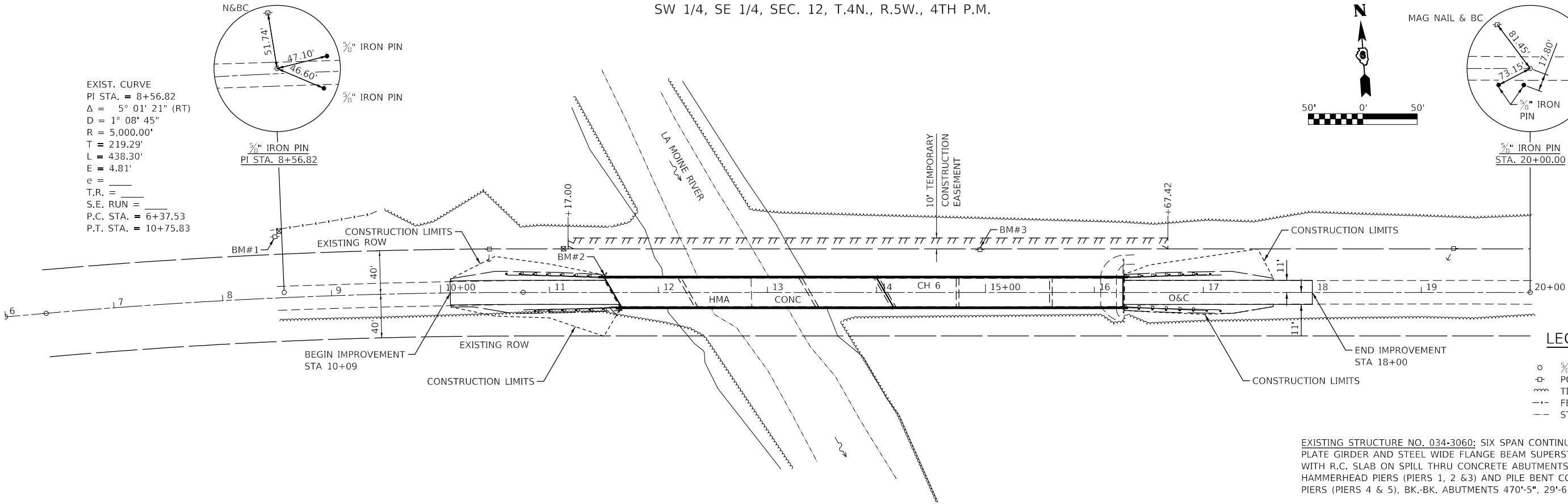
MIX USE:	2.5" BINDER COURSE	1.5" SURFACE COURSE
PG:	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	4.0% @ N50	4.0% @ N50
AGGREGATE GRADATION:	IL-19.0	IL-9.5
FRICTION AGGREGATE:	N/A	MIX C
QUALITY MANAGEMENT:	QC/QA	QC/QA

MODEL: D:\Default
FILE NAME: C:\Users\55618138-S00261402\SUM-TYP.dgn
FEHR GRAHAM PROJECT NUMBER: 18-600

FEHR GRAHAM ENGINEERING & ENVIRONMENTAL ILLINOIS DESIGN FIRM NO. 184-003525 FEHR GRAHAM PROJECT NUMBER: 18-600	USER NAME = cconnor	DESIGNED - GJC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES, GENERAL NOTES AND TYPICAL CROSS SECTIONS				F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - CFC	REVISED -						434	16-00130-00-BR	HANCOCK	52	2
	PLOT SCALE = 2,000' / in.	CHECKED - MCB	REVISED -						CONTRACT NO. 93746				
	PLOT DATE = 4/13/2020	DATE -	REVISED -										
					SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

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

EXIST. CURVE
PI STA. = 8+56.82
Δ = 5° 01' 21" (RT)
D = 1° 08' 45"
R = 5,000.00'
T = 219.29'
L = 438.30'
E = 4.81'
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 6+37.53
P.T. STA. = 10+75.83



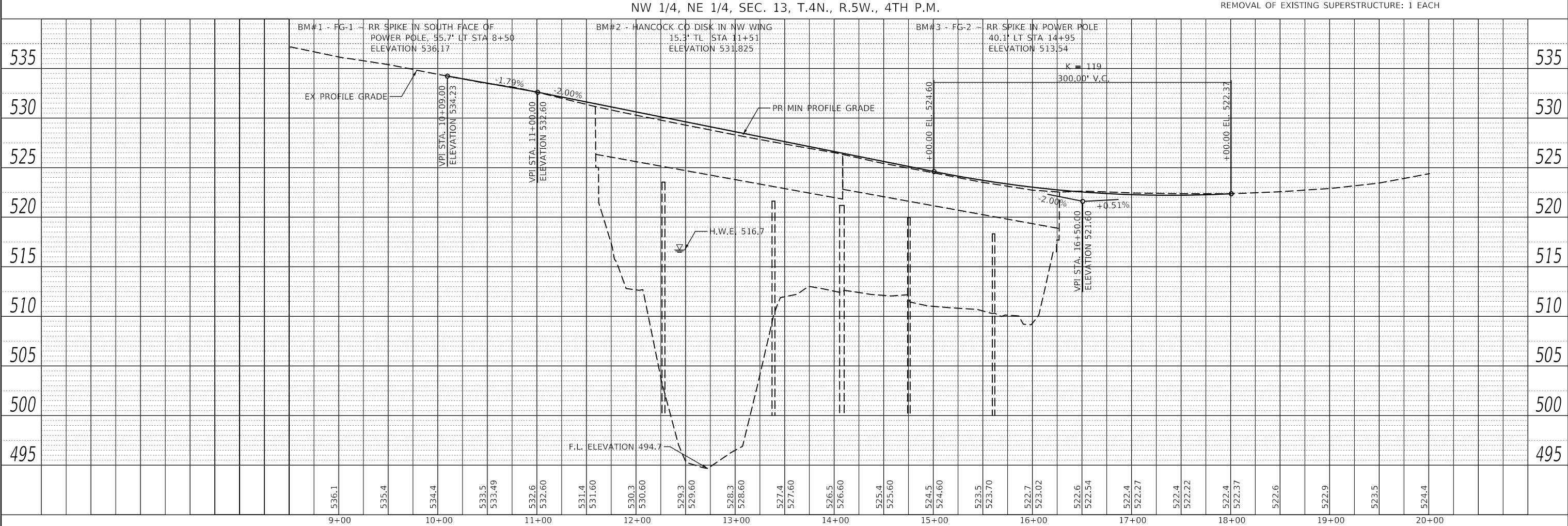
LEGEND

- 5/8" IRON PIN
- ⊕ POWER POLE
- ~ TIMBER EDGE
- - - FENCE
- - - STREAM

EXISTING STRUCTURE NO. 034-3060: SIX SPAN CONTINUOUS
PLATE GIRDER AND STEEL WIDE FLANGE BEAM SUPERSTRUCTURE
WITH R.C. SLAB ON SPILL THRU CONCRETE ABUTMENTS AND
HAMMERHEAD PIERS (PIERS 1, 2 & 3) AND PILE BENT CONCRETE
PIERS (PIERS 4 & 5), BK-BK. ABUTMENTS 470'-5", 29'-6" O.O. DECK.

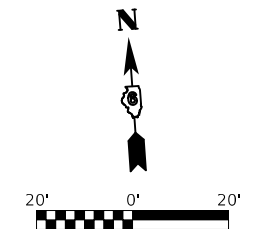
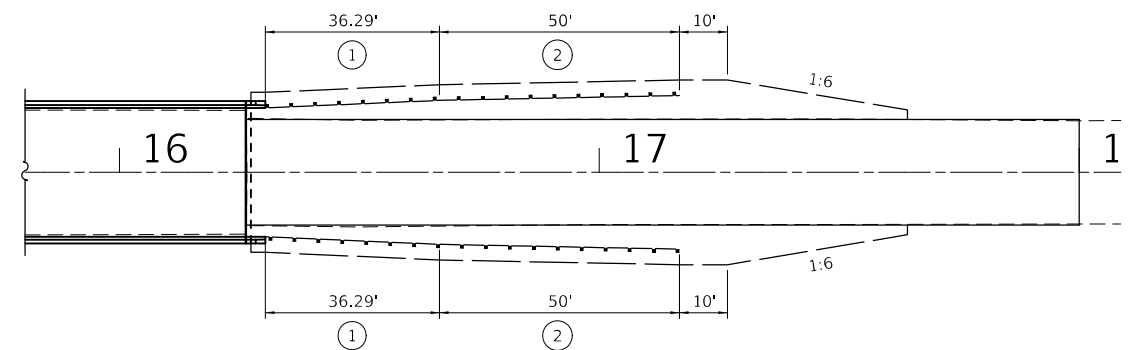
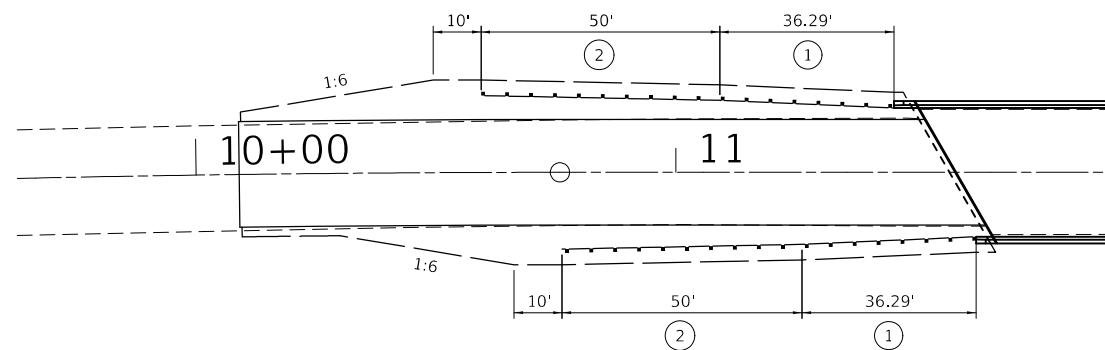
REMOVAL OF EXISTING SUPERSTRUCTURE: 1 EACH

PROFILE	SURVEYED PLOTTED GRADES CHECKED BY STRUCTURE NOTATION CHNG	BY	DATE
NOTE BOOK NO.			



FEHR GRAHAM ENGINEERING & ENVIRONMENTAL ILLINOIS DESIGN FIRM NO. 184-003525 FEHR GRAHAM PROJECT NUMBER: 18-600	USER NAME = cconnor	DESIGNED - GJC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND PROFILE SN 034-3060 OVER LA MOINE RIVER					F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - CFC	REVISED -							434	16-00130-00-BR	HANCOCK	52	3
	PLOT SCALE = 100,000000 ' / in.	CHECKED - MCB	REVISED -		CONTRACT NO. 93746									
	PLOT DATE = 3/2/2020	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.		ILLINOIS	FED. AID PROJECT

FEHR GRAHAM PROJECT NUMBER: 18-600



GUARDRAIL & SHOULDER DETAIL

TRAFFIC BARRIER TERMINAL, TYPE 6

15' RT. STA. 11+26.27 TO 13.42' RT. STA. 11+62.56
15' LT. STA. 11+09.14 TO 13.42' LT. STA. 11+45.44
13.42' RT. STA. 16+30.42 TO 15' RT. STA. 16+66.71
13.42' LT. STA. 16+30.42 TO 15' LT. STA. 16+66.71

TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT

16' RT. STA. 10+76.27 TO 15' RT. STA. 11+26.27
16' LT. STA. 10+59.14 TO 15' LT. STA. 11+09.14
15' RT. STA. 16+66.71 TO 16' RT. STA. 17+16.71
15' LT. STA. 16+66.71 TO 16' LT. STA. 17+16.71

LEGEND

- ① TRAFFIC BARRIER TERMINAL, TYPE 6
- ② TRAFFIC BARRIER TERMINAL, TYPE 1
(SPECIAL) TANGENT

Benchmark: BM#2 - Hancock County Disk in NW wing, 15.3' Left, Sta 11+51, Elev. 531.825.

Existing Structure: SN 034-3060, originally built in 1968 as F.A.S. 434, Section 41-B, F.A. Proj. S-434(101) at Sta. 12+83. The superstructure consists of three-span continuous non-composite 48" plate girders and three-span continuous non-composite steel 36x150 wide flange beams with a cast in place 7 inch thick reinforced concrete deck. The substructure consists of spill-through concrete stub abutments with hammerhead Pier 1 footing founded on rock, hammerhead Piers 2 & 3 on pile supported footings and Piers 4 & 5 are pile bent concrete piers. The structure is 470'-5" back to back abutments and has an out to out deck width of 29'-6". The west abutment, Piers 1 through 3 are built parallel to the main channel at 30° skew right forward and Piers 4, 5 and the east abutment are built at 0° skew normal to the roadway.

Traffic will be detoured.

SCOPE OF WORK

The existing concrete deck is to be removed.
The existing bearings at the abutments and Pier 3 shall be removed and replaced with elastomeric bearings extended with steel bolsters.
Structural Steel will be repaired as necessary.
Substructure units will be repaired as necessary.
Shear studs will be installed on the existing girders and beams and a new 8" concrete deck will be constructed.

DESIGN STRESSES

FIELD UNITS

EXISTING	PROPOSED
$f_c = 1,400$ psi	$f'_c = 4,000$ psi (Superstructure)
$f_s = 20,000$ psi (Reinforcement)	$f'_c = 3,500$ psi (Substructure)
$f_s = 20,000$ psi (Structural)	$f_y = 60,000$ psi (Reinforcement)
	$f_y = 36,000$ psi (Structural Steel)

DESIGN SPECIFICATIONS

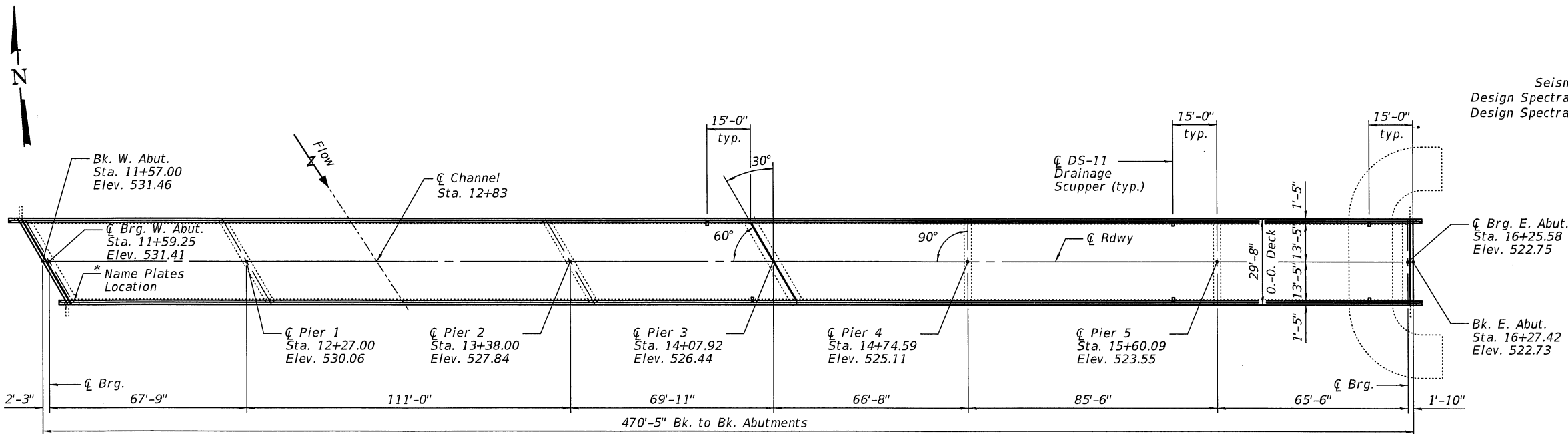
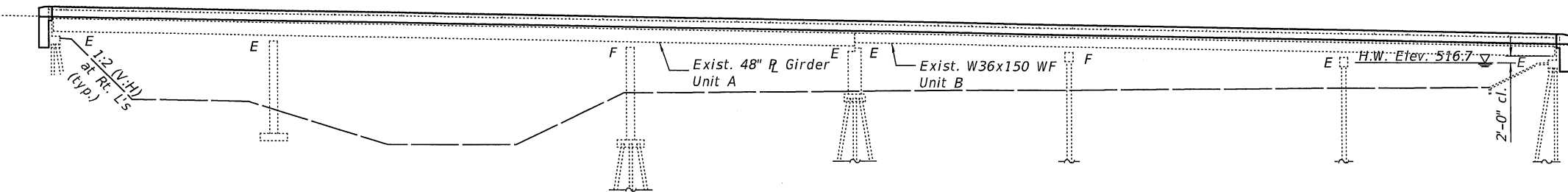
2002 AASHTO Standard Specifications
for Highway Bridges

LOADING HS 20-44

SEISMIC DATA

Seismic Performance Zone (SPZ) = A
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.047 g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.106 g
Soil Site Class = C

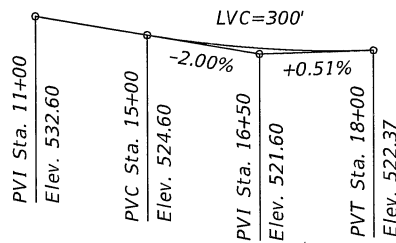
ELEVATION



*Existing Name Plate shall be cleaned and relocated next to the new Name Plate.
Cost included with Name Plates.

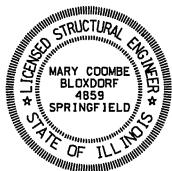
PLAN

PROFILE GRADE



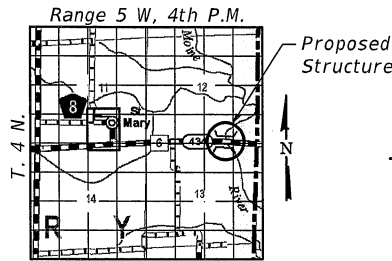
STATION 12+83
REBUILT 20 BY
HANCOCK COUNTY
F.A.S. RT. 434 SEC. 16-00130-00-BR
LOADING HS-20
STR. NO. 034-3060

NAME PLATE
See Std. 515001



"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 specified 'AASHTO Standard Specifications for Highway Bridges'."

Mary Louise Bleday
ILLINOIS STRUCTURAL NO. 4859
EXPIRES 11/30/20
DATE: 03/02/2020



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
CH 6 (ST. MARY'S ROAD) OVER LAMOINE RIVER
F.A.S. RTE. 434 SEC. 16-00130-00-BR
HANCOCK COUNTY
STATION 12+83.00
S.N. 034-3060

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 034-3060

SHEET 1 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	5
CONTRACT NO. 93746				

ILLINOIS FED. AID PROJECT

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

FEHR GRAHAM PROJECT NUMBER: 18-600

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 42:8.000000 " / in.	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts (in painted areas and ASTM A325 Type 3 in unpainted areas). Bolts ¾ in. Ø, holes ⅞ in. Ø, unless otherwise noted.

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

The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant (PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that cannot be removed by grinding ¼ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Concrete Sealer shall be applied to the designated areas of the abutment seats, back walls and pier 3.

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

The Stone Dumped Riprap quantity is estimated. Riprap shall be placed at the West Abutment as directed by the Engineer.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within 5 ft (measured along the beam) of either side of deck joints shall be cleaned per Near White Blast Cleaning – SSPC-SP10. The exterior surfaces and bottom of the bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning – SSPC-SP15.

The designated area cleaned per Near White Blast Cleaning and per Commercial Grade Power Tool Cleaning shall be painted according to the requirements of Paint System 1 – 0Z/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Gray, Munsell No. 5B 7/1.

All new structural steel shall be shop painted with an inorganic zinc-rich primer as per AASHTO M 300, Type 1.

SSPC QP1 and SSPC QP2 certifications are required for this contract.

INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
- 3.-5. Top of Slab Elevations – Unit A
- 6.-8. Top of Slab Elevations – Unit B
9. Superstructure – Unit A
10. Superstructure Details – Unit A
11. Superstructure – Unit B
12. Superstructure Details – Unit B
13. Diaphragm Details – Unit A & B
14. Preformed Joint Strip Seal
15. Drainage Scupper, DS-11
16. Concrete Parapet Slipforming Option
17. Framing Plan – Unit A
18. Framing Plan – Unit B
19. Structural Steel Repair
20. Bearing Details – Unit A – West Abutment
21. Bearing Details – Unit A – West Bearing – Pier 3
22. Bearing Details – Unit B
23. Concrete Removal Details
24. West Abutment
25. West Abutment Details
26. East Abutment
27. East Abutment Details
- 28.-30. Concrete Repair Details
- 31.-44. Existing Plan Information

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.		6.0	6.0
Removal of Existing Concrete Deck	Each	1		1
Structure Excavation	Cu. Yd.		28	28
Concrete Structures	Cu. Yd.		18.2	18.2
Concrete Superstructure	Cu. Yd.	502.5		502.5
Protective Coat	Sq. Yd.	1828		1828
Bridge Deck Grooving	Sq. Yd.	1290		1290
Stud Shear Connectors	Each	6375		6375
Reinforcement Bars, Epoxy Coated	Pound	136990	2810	139800
Name Plates	Each	1		1
Furnishing and Erecting Structural Steel	Pound	3007		3007
Preformed Joint Strip Seal	Foot	95		95
Elastomeric Bearing, Type I	Each	15		15
Elastomeric Bearing, Type II	Each	5		5
Anchor Bolts, ⅝"	Each	80		80
Concrete Sealer	Sq. Ft.		707	707
Jack and Remove Existing Bearings	Each	20		20
Drainage Scupper, DS-11	Each	6		6
Structural Steel Repair	Pound	2104		2104
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.		141	141
Cleaning and Painting Steel Bridge No. 1	L. Sum			1
Containment and Disposal of Lead Paint Cleaning Residues	L. Sum			1
Granular Backfill for Structures	Cu. Yd.		22	22

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 034-3060

SHEET 2 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	6
		CONTRACT NO. 93746		
		ILLINOIS	FED. AID PROJECT	

FEHR GRAHAM

ENGINEERING & ENVIRONMENTAL

ILLINOIS DESIGN FIRM NO. IB4-003525

USER NAME = cconnor

DESIGNED - MCB

CHECKED - RJM

PLOT SCALE = 0:2.0000 " = 1 in.

DRAWN - MMY/CFC

PLOT DATE = 4/21/2020

CHECKED - MCB/RJM

DESIGNED - MCB

CHECKED - RJM

DRAWN - MMY/CFC

CHECKED - MCB/RJM

REVIS

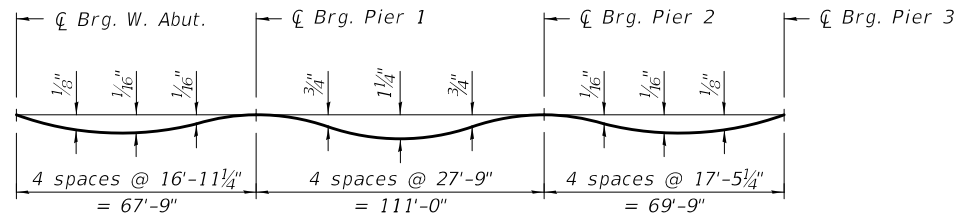
REVIS

REVIS

REVIS

FEHR GRAHAM PROJECT NUMBER: 18-600

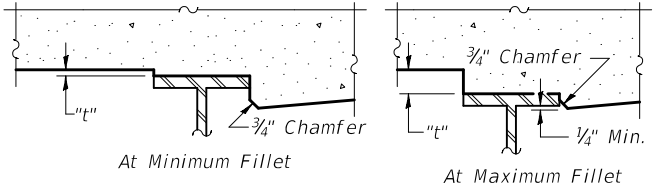
MODEL: Default
FILE NAME: G:\vbl_ssa\18\18-600\bridge\0343060-002-gen-data.dgn



DEAD LOAD DEFLECTION DIAGRAM

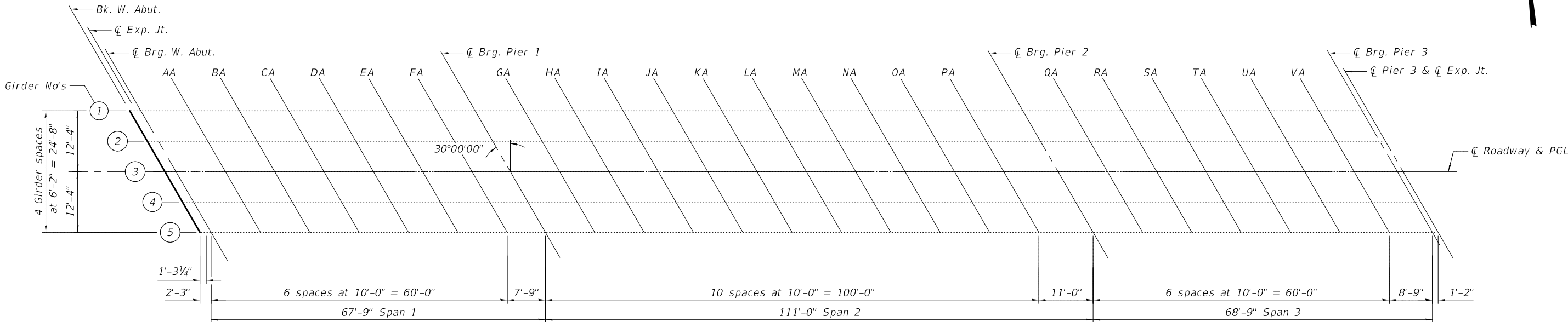
(Includes weight of concrete only.)

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 on Sheets 4 and 5 of 44.



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 sheet 4 and 5 of 44, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



PLAN

MODEL: Default
FILE NAME: g:\V8\18-600\bridge\0343060-003-top-plan-A.dgn

E-S 2-17-2017

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL
ILLINOIS DESIGN FIRM NO. IB4-003525

USER NAME = cconnor	DESIGNED - MCB	REVISED -
	CHECKED - RJM	REVISED -
PLOT SCALE = 21:4.0000 " = 1' in.	DRAWN - MMY/CFC	REVISED -
PLOT DATE = 3/2/2020	CHECKED - MCB/RJM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS - UNIT A
STRUCTURE NO. 034-3060

SHEET 3 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	7
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

FEHR GRAHAM PROJECT NUMBER: 18-600

MODEL: Default
FILE NAME: g:\vbl_ss4\1818-600\bridge\0343060-004-tos-elev-A.dgn

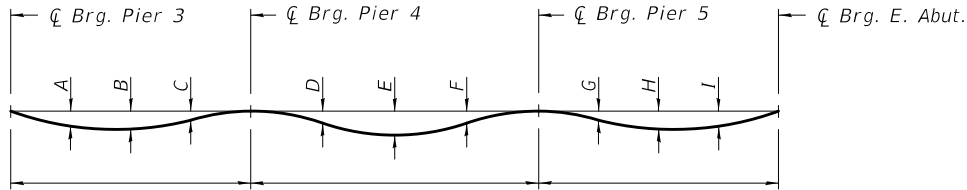
E-S

2-17-2017

MODEL: Default
FILE NAME: g:\v8\1818-600\bridge\0343060-005-tos-elev-A.dgn

E-S

2-17-2017



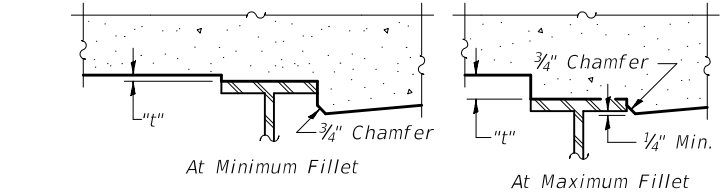
DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:

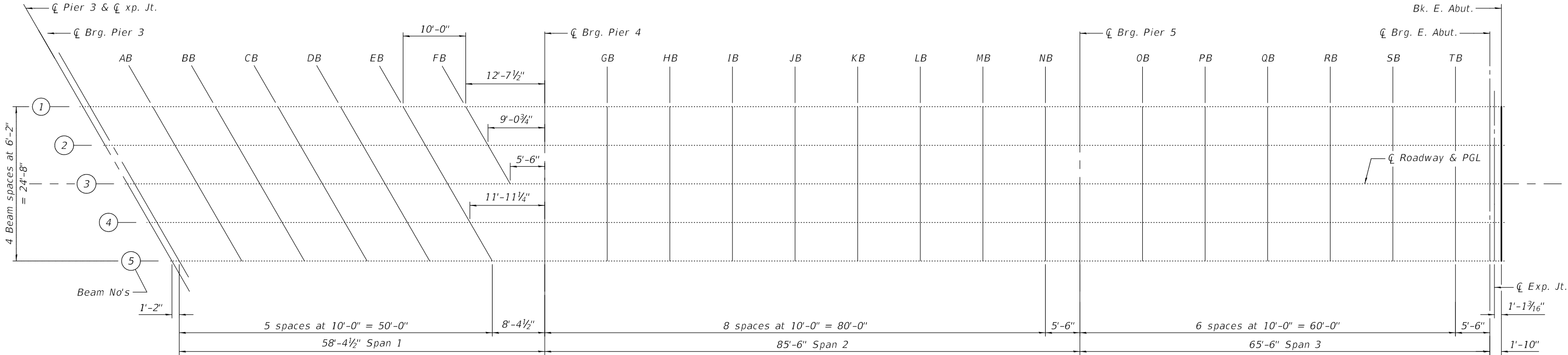
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets 7 and 8 of 44.

Beam	A	B	C	D	E	F	G	H	I
1	1/2"	5/8"	5/16"	5/16"	9/16"	5/16"	3/16"	3/8"	5/16"
2	7/16"	1/2"	1/4"	3/8"	5/8"	3/8"	3/16"	3/8"	5/16"
3	5/16"	3/8"	3/16"	3/8"	11/16"	3/8"	3/16"	3/8"	5/16"
4	1/4"	1/4"	1/16"	7/16"	3/16"	7/16"	3/16"	3/8"	5/16"
5	3/16"	3/16"	1/16"	7/16"	11/16"	3/8"	1/8"	5/16"	5/16"



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 sheet 7 and 8 of 44, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



PLAN

E-S

2-17-2017

MODEL: Default
FILE NAME: g:\wbl_ss4\1818-600\bridge\0343060-006-top-plan-B.dgn

FEHR GRAHAM ENGINEERING & ENVIRONMENTAL ILLINOIS DESIGN FIRM NO. 184-003525	USER NAME = cconnor	DESIGNED - MCB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TOP OF SLAB ELEVATIONS - UNIT B STRUCTURE NO. 034-3060	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - RJM	REVISED -			434	16-00130-00-BR	HANCOCK	52	10
	PLOT SCALE = 16:0.0000 'ft' / in.	DRAWN - MMY/CFC	REVISED -			CONTRACT NO. 93746				
	PLOT DATE = 3/2/2020	CHECKED - MCB/RJM	REVISED -			ILLINOIS FED. AID PROJECT				
	SHEET 6 OF 44 SHEETS									

FEHR GRAHAM PROJECT NUMBER: 18-600

MODEL: Default
FILE NAME: g:\vbl_ss4\1818-600\bridge\0343060-007-tos-elev-B.dgn

E-S

2-17-2017

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
└ Pier 3	1411.48	6.17	526.27	526.27
└ Brg. Pier 3	1412.65	6.17	526.25	526.25
AB	1422.65	6.17	526.05	526.06
BB	1432.65	6.17	525.85	525.87
CB	1442.65	6.17	525.65	525.67
DB	1452.65	6.17	525.45	525.46
EB	1462.65	6.17	525.25	525.25
└ Brg. Pier 4	1474.59	6.17	525.01	525.01
GB	1484.59	6.17	524.81	524.82
HB	1494.59	6.17	524.61	524.64
IB	1504.59	6.17	524.41	524.46
JB	1514.59	6.17	524.22	524.28
KB	1524.59	6.17	524.04	524.09
LB	1534.59	6.17	523.86	523.90
MB	1544.59	6.17	523.70	523.72
NB	1554.59	6.17	523.54	523.54
└ Brg. Pier 5	1560.09	6.17	523.45	523.45
OB	1570.09	6.17	523.31	523.31
PB	1580.09	6.17	523.17	523.19
QB	1590.09	6.17	523.04	523.07
RB	1600.09	6.17	522.92	522.95
SB	1610.09	6.17	522.81	522.83
TB	1620.09	6.17	522.71	522.71
└ Brg. E. Abut.	1625.59	6.17	522.65	522.65
Bk. E. Abut.	1627.42	6.17	522.63	522.63

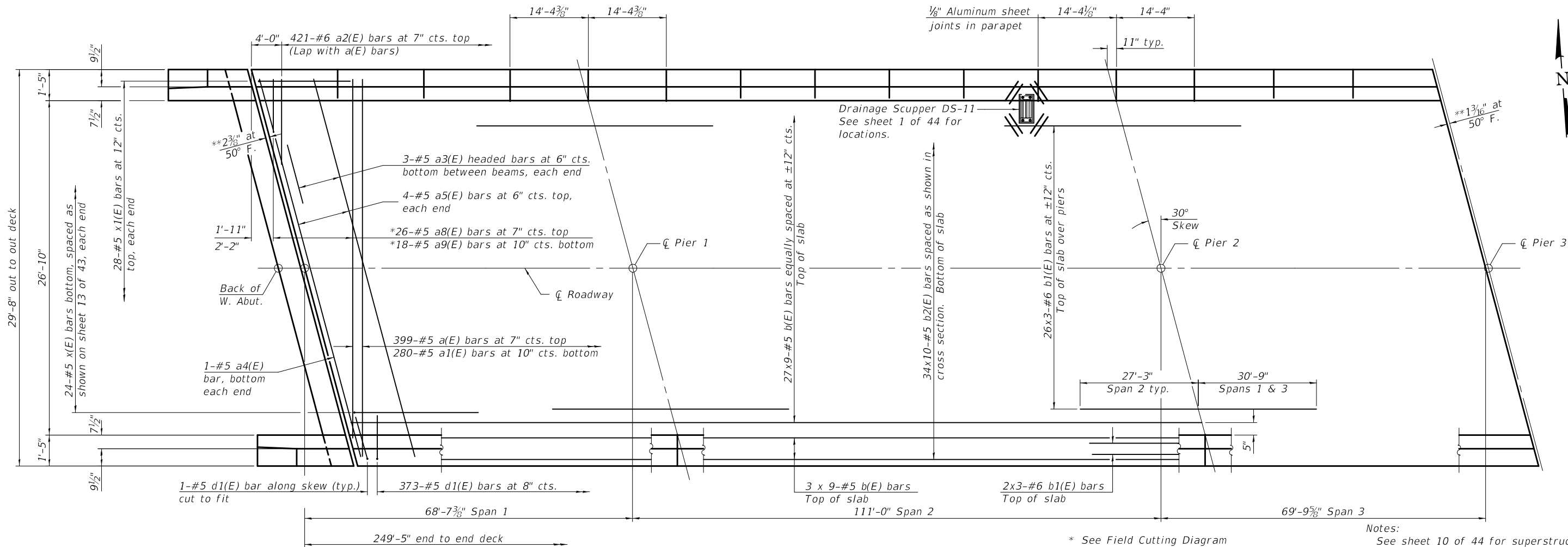
BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Q Pier 3	1415.04	12.33	526.10	526.10
Q Brg. Pier 3	1416.21	12.33	526.08	526.08
AB	1426.21	12.33	525.88	525.89
BB	1436.21	12.33	525.68	525.69
CB	1446.21	12.33	525.48	525.49
DB	1456.21	12.33	525.28	525.28
EB	1466.21	12.33	525.08	525.08
Q Brg. Pier 4	1474.59	12.33	524.91	524.91
GB	1484.59	12.33	524.71	524.72
HB	1494.59	12.33	524.51	524.54
IB	1504.59	12.33	524.31	524.36
JB	1514.59	12.33	524.12	524.17
KB	1524.59	12.33	523.93	523.99
LB	1534.59	12.33	523.76	523.80
MB	1544.59	12.33	523.59	523.61
NB	1554.59	12.33	523.43	523.44
Q Brg. Pier 5	1560.09	12.33	523.35	523.35
OB	1570.09	12.33	523.20	523.21
PB	1580.09	12.33	523.07	523.08
QB	1590.09	12.33	522.94	522.96
RB	1600.09	12.33	522.82	522.85
SB	1610.09	12.33	522.71	522.73
TB	1620.09	12.33	522.60	522.61
Q Brg. E. Abut.	1625.59	12.33	522.55	522.55
Bk. E. Abut.	1627.42	12.33	522.53	522.53

 $E-S$

2-17-2017

FEHR GRAHAM ENGINEERING & ENVIRONMENTAL ILLINOIS DESIGN FIRM NO. 184-003525 FEHR GRAHAM PROJECT NUMBER: 18-600	USER NAME = cconnor	DESIGNED - MCB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TOP OF SLAB ELEVATIONS - UNIT B STRUCTURE NO. 034-3060	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - RJM	REVISED -			434	16-00130-00-BR	HANCOCK	52	12
	PLOT SCALE = 0:2.0000 1/4" / in.	DRAWN - MMY/CFC	REVISED -			CONTRACT NO. 93746				
	PLOT DATE = 3/2/2020	CHECKED - MCB/RJM	REVISED -			SHEET 8 OF 44 SHEETS				
						ILLINOIS		FED. AID PROJECT		



MINIMUM BAR LAP

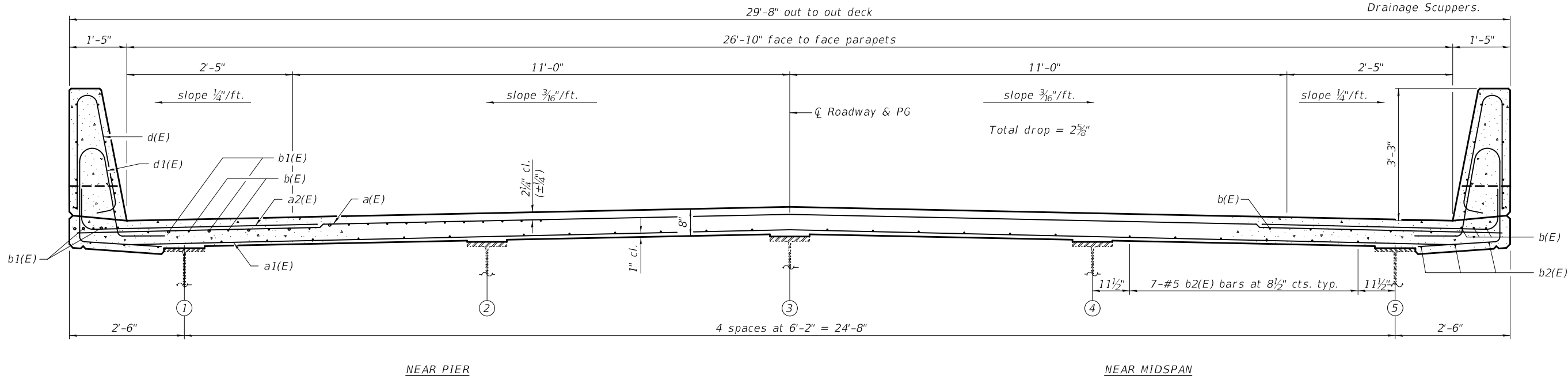
#5 bar = 3'-6"
#6 bar = 3'-7"

PARTIAL PLAN

* See Field Cutting Diagram Sheet 10 of 44.

** Dimension showing concrete opening. For joint opening see sheet 14 of 44.

Notes:
See sheet 10 of 44 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See sheet 13 of 44 for plan and section at Drainage Scuppers.



CROSS SECTION
(Looking East)

MODEL: Default
FILE NAME: g:\vbl_ss4\18118-600\bridge\0343060-009-superA.dgn

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

USER NAME = cconnor	DESIGNED - MCB	REVISED -
	CHECKED - RJM	REVISED -
PLOT SCALE = 0:2.0000 " = 1"	DRAWN - MMY/CFC	REVISED -
PLOT DATE = 3/2/2020	CHECKED - MCB/RJM	REVISED -

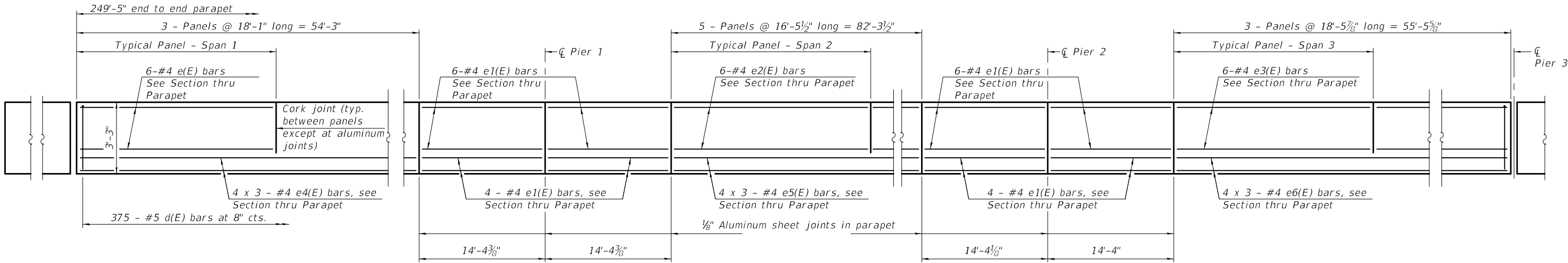
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE - UNIT A
STRUCTURE NO. 034-3060

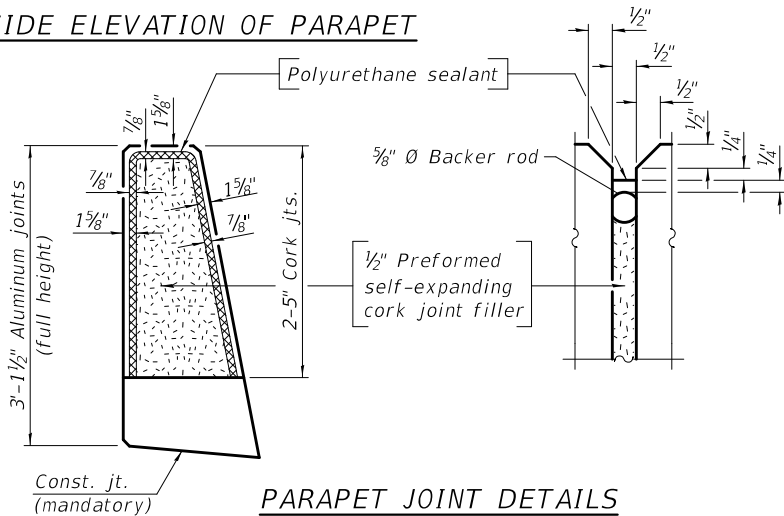
SHEET 9 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	13
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

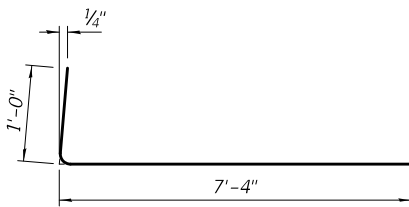
FEHR GRAHAM PROJECT NUMBER: 18-600



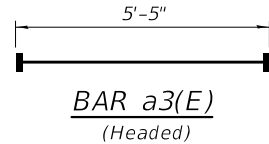
INSIDE ELEVATION OF PARAPET



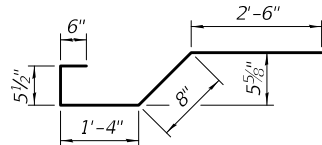
PARAPET JOINT DETAILS



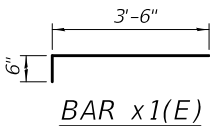
BAR a2(E)



BAR a3(E)
(Headed)



BAR x(E)

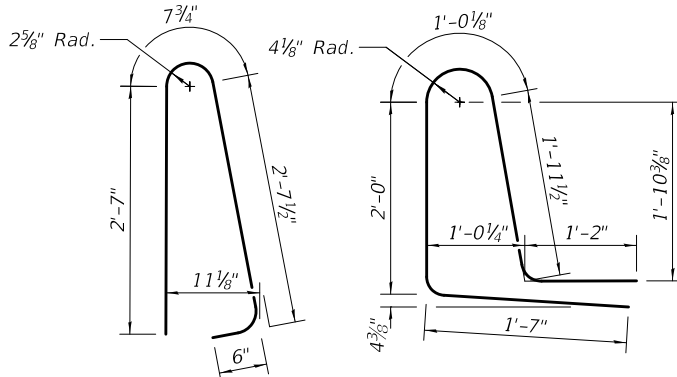


BAR x1(E)

SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	399	#5	29'-4"	
a1(E)	280	#5	28'-4"	
a2(E)	842	#6	8'-4"	
a3(E)	24	#5	5'-5"	
a4(E)	2	#5	32'-8"	
a5(E)	8	#5	33'-10"	
a6(E)	16	#5	1'-6"	
a8(E)	26	#5	31'-4"	
a9(E)	18	#5	29'-10"	
b(E)	297	#5	30'-10"	
b1(E)	180	#6	21'-9"	
b2(E)	340	#5	28'-2"	
d(E)	750	#5	6'-5"	
d1(E)	750	#5	7'-3"	
e(E)	36	#4	17'-9"	
e1(E)	80	#4	14'-0"	
e2(E)	60	#4	16'-1"	
e3(E)	36	#4	18'-1"	
e4(E)	24	#4	24'-5"	
e5(E)	24	#4	29'-6"	
e6(E)	24	#4	24'-9"	
x(E)	48	#5	5'-6"	
x1(E)	56	#5	4'-0"	
Reinforcement Bars, Epoxy Coated			Lbs.	73080
Concrete Superstructure			Cu. Yds.	268.4

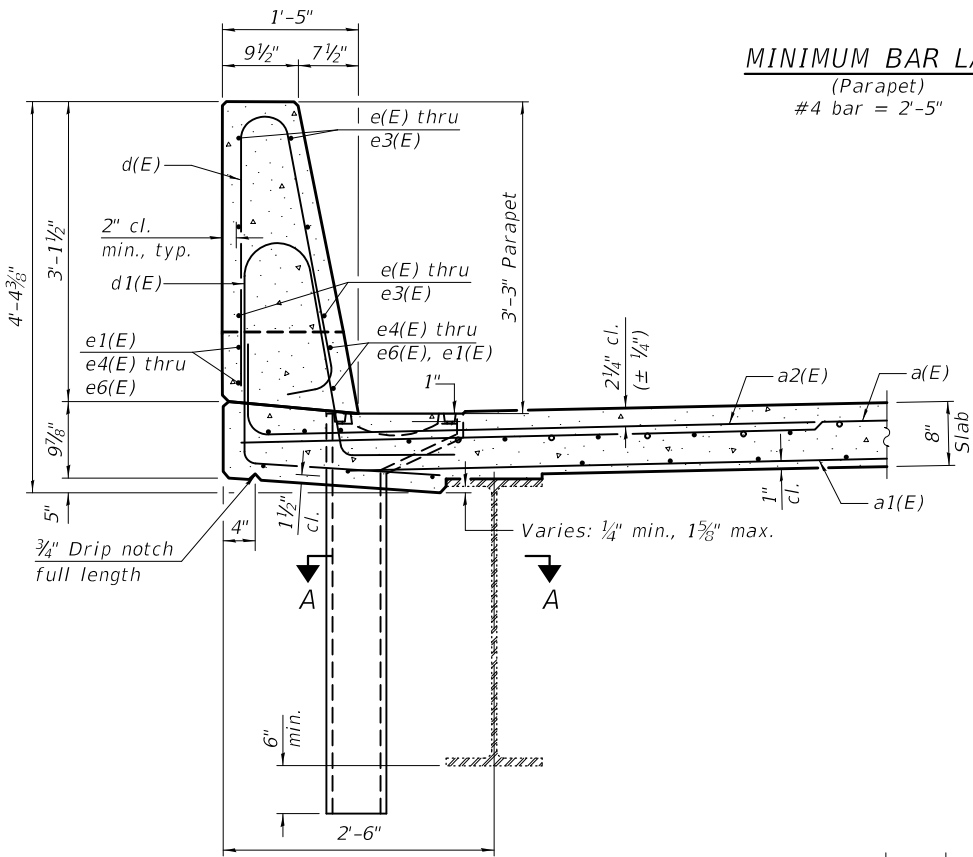
Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.



BAR d(E)

BAR d1(E)

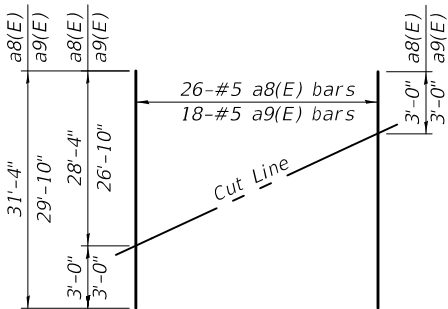
MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-5"



SECTION THRU PARAPET

Notes:

The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.



FIELD CUTTING DIAGRAM

Order a8(E) and a9(E) bars full length.
Cut as shown and use remainder of bars in opposite end of deck Unit A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS - UNIT A
STRUCTURE NO. 034-3060

SHEET 10 OF 44 SHEETS

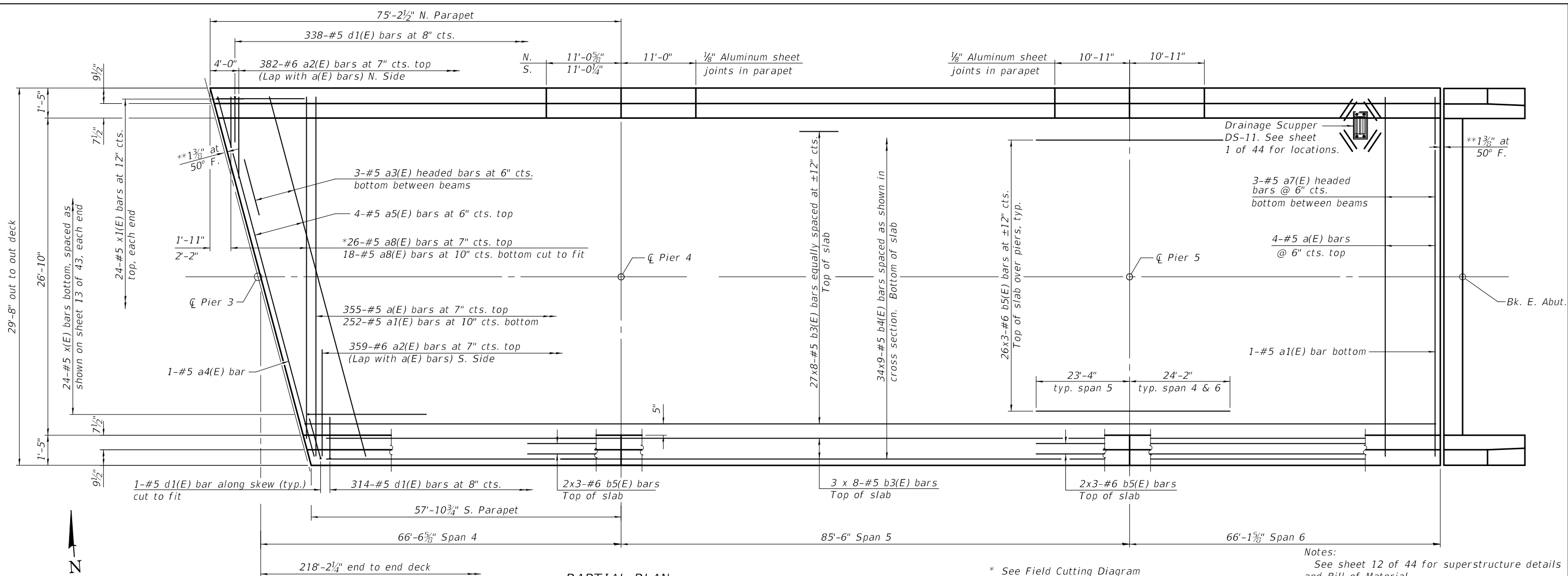
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	14
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

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

USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 0:2.0000 " = 1"	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

FEHR GRAHAM PROJECT NUMBER: 18-600

MODEL: Default
FILE NAME: g:\vbl_ss4\18118-600\bridge\0343060-010-superdet\Adgn



MINIMUM BAR LAP

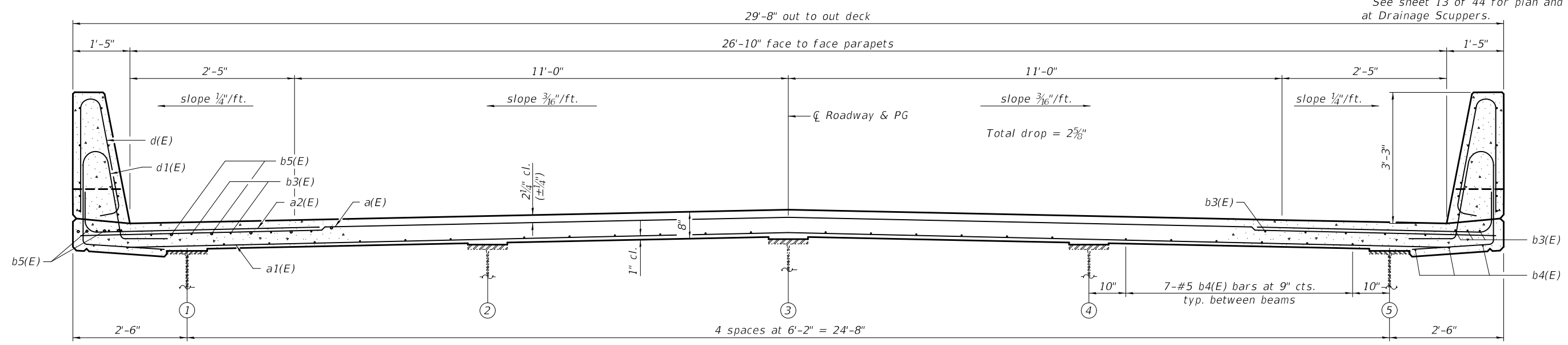
#5 bar = 3'-6"
#6 bar = 3'-7"

PARTIAL PLAN

* See Field Cutting Diagram Sheet 10 of 44. Use remaining a8(E) bars in bottom and cut to fit.

** Dimension showing concrete opening. For joint opening see sheet 14 of 44.

Notes:
See sheet 12 of 44 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
Cut longitudinal bars to clear drainage scuppers.
See sheet 13 of 44 for plan and section at Drainage Scuppers.



NEAR PIER

**CROSS SECTION
(Looking East)**

NEAR MIDSPAN

MODEL: Default
FILE NAME: g:\vbl_ss4\18118-600\bridge\0343060-011-superB.dgn

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

USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 0:2.0000 " = 1"	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

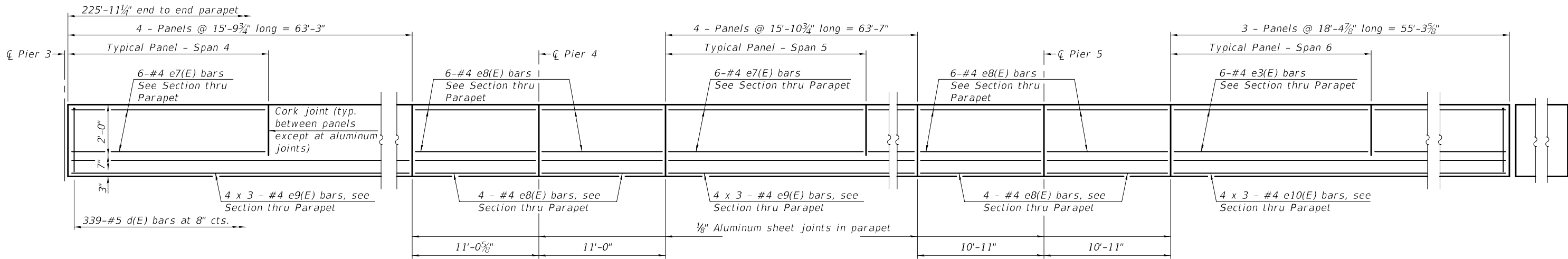
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE - UNIT B
STRUCTURE NO. 034-3060**

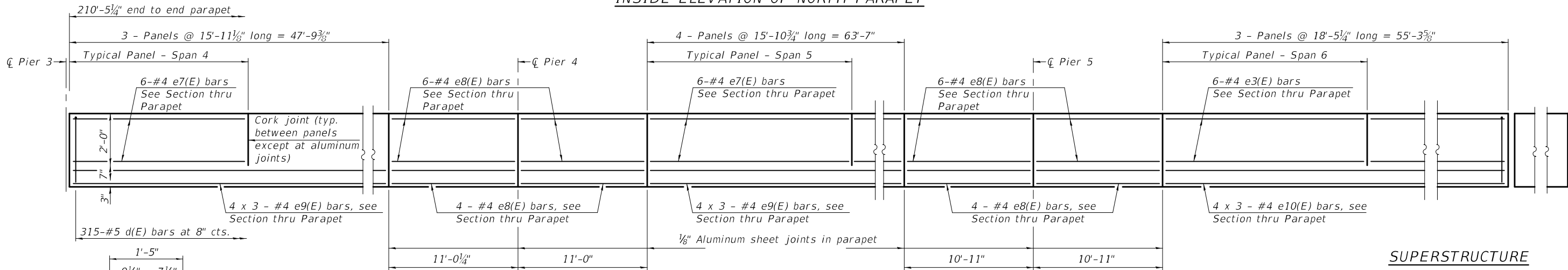
SHEET 11 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	15
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

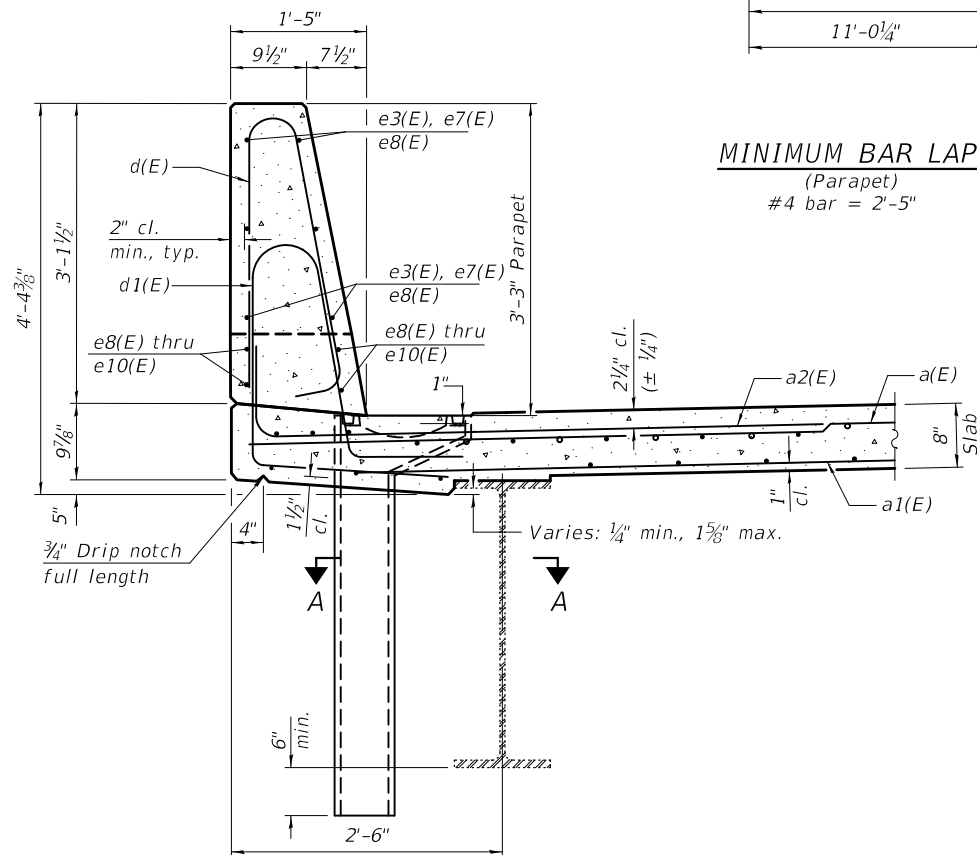
FEHR GRAHAM PROJECT NUMBER: 18-600



INSIDE ELEVATION OF NORTH PARAPET



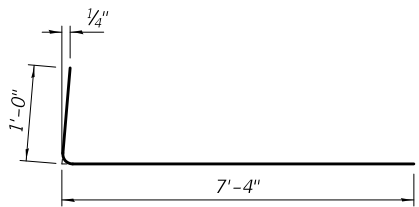
INSIDE ELEVATION OF SOUTH PARAPET



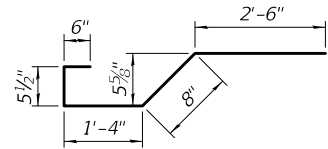
SECTION THRU PARAPET

MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-5"

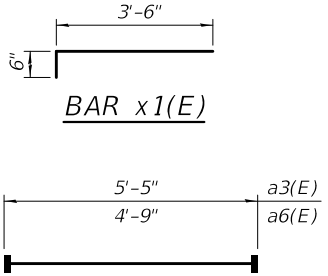
Notes:
Headed bars shall conform to ASTM A970 with threaded attachment;
Class HA; and reinforcement bars conforming to ASTM A706. Cost
included with Reinforcement Bars, Epoxy Coated.
See Sheet 10 of 44 for parapet joint details.



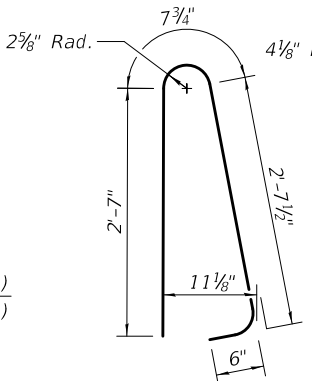
BAR a2(E)



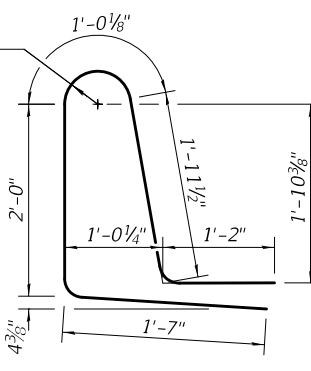
BAR x(E)



BAR a3(E) or a7(E)
(Headed)



BAR d(E)



BAR d1(E)

SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	359	#5	29'-4"	—
a1(E)	253	#5	28'-4"	—
a2(E)	741	#6	8'-4"	—
a3(E)	12	#5	5'-5"	—
a4(E)	1	#5	32'-8"	—
a5(E)	4	#5	33'-10"	—
a6(E)	32	#5	1'-6"	—
a7(E)	12	#5	4'-9"	—
a8(E)	26	#5	31'-4"	—
b3(E)	264	#5	30'-4"	—
b4(E)	306	#5	27'-4"	—
b5(E)	180	#6	18'-3"	—
d(E)	654	#5	6'-5"	—
d1(E)	654	#5	7'-3"	—
e3(E)	36	#4	18'-1"	—
e7(E)	90	#4	15'-6"	—
e8(E)	80	#4	10'-8"	—
e9(E)	48	#4	22'-9"	—
e10(E)	24	#4	28'-9"	—
x(E)	48	#5	5'-6"	—
x1(E)	56	#5	4'-0"	—
Reinforcement Bars, Epoxy Coated			Lbs.	63910
Concrete Superstructure			Cu. Yds.	234.1

Bars indicated thus 1 x 2-#8 etc. indicates
1 line of bars with 2 lengths per line.

MODEL: Default
FILE NAME: g:\v8\ss4\18118-600\bridge\0343060-012-superdetB.dgn

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

USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 0:2.0000 " = 1"	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

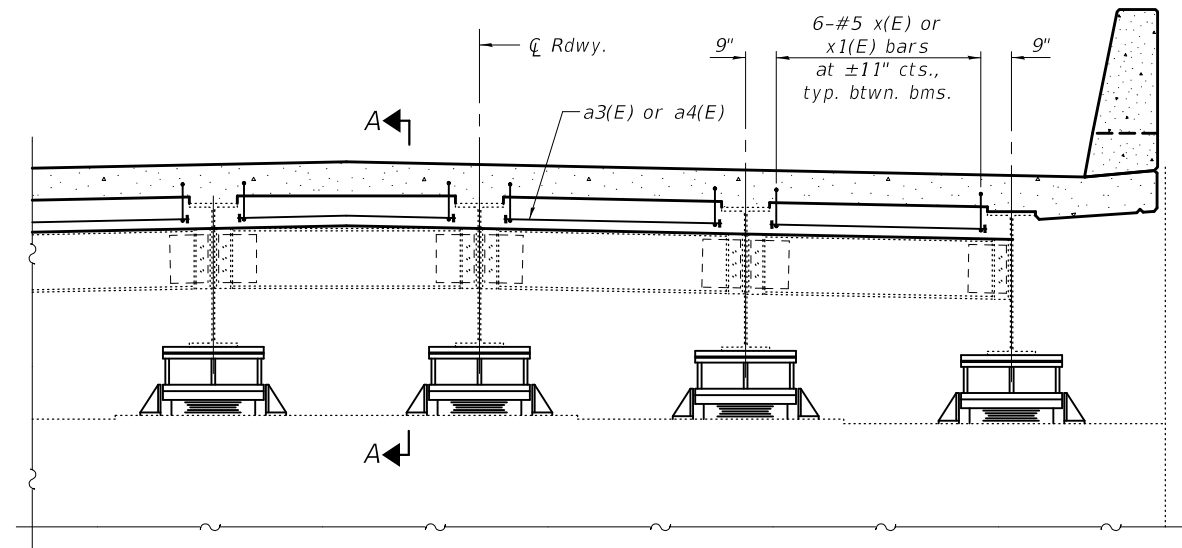
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS - UNIT B
STRUCTURE NO. 034-3060

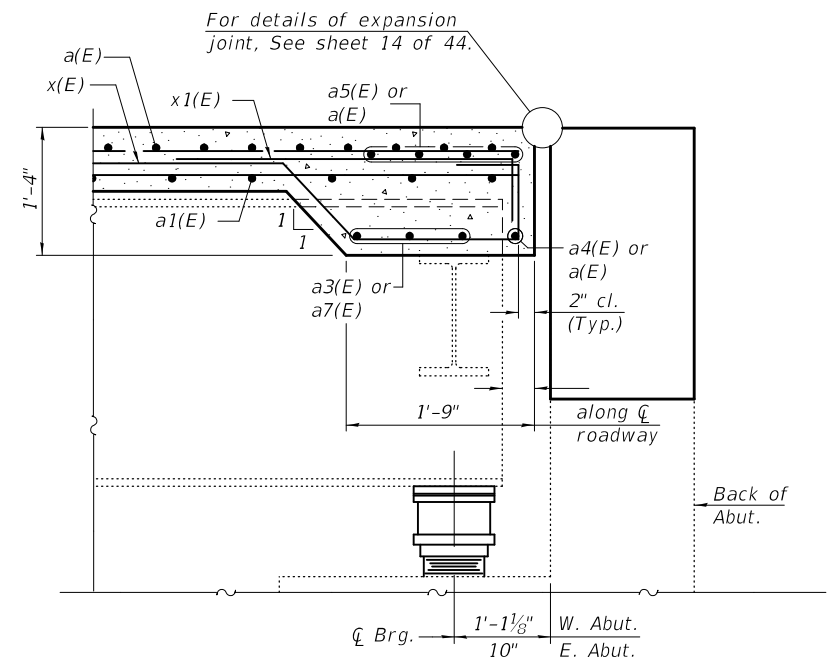
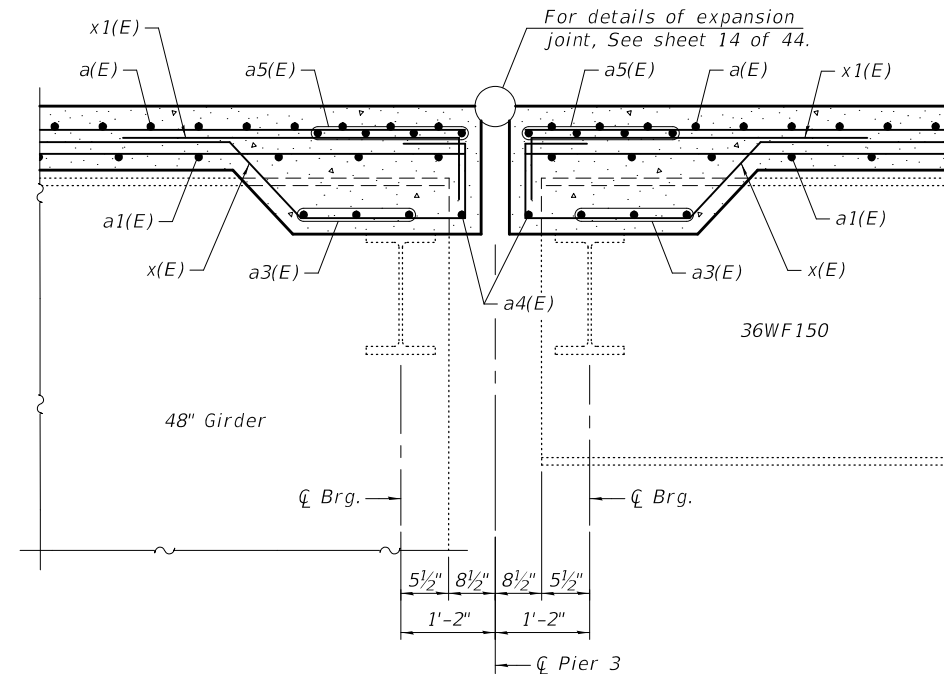
SHEET 12 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	16
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

FEHR GRAHAM PROJECT NUMBER: 18-600



DIAPHRAGM AT ABUTMENTS



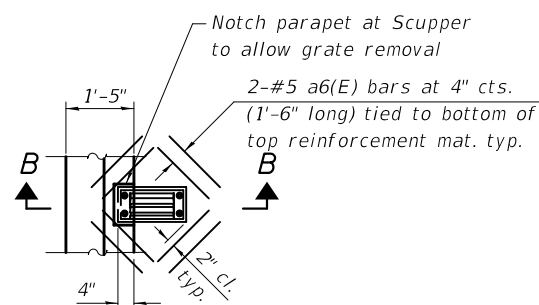
SECTION A-A

(Dimensions along ζ Rdwy)

Notes:
See sheet 10 and 12 of 44 for superstructure details and Bill of Material.
The x(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

SECTION AT PIER 3

(Dimensions along ζ Rdwy)
(Looking North)



PLAN AT SCUPPER

Note:
Cut longitudinal reinforcement to clear drainage scuppers.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS - UNIT A & B
STRUCTURE NO. 034-3060

SHEET 13 OF 44 SHEETS

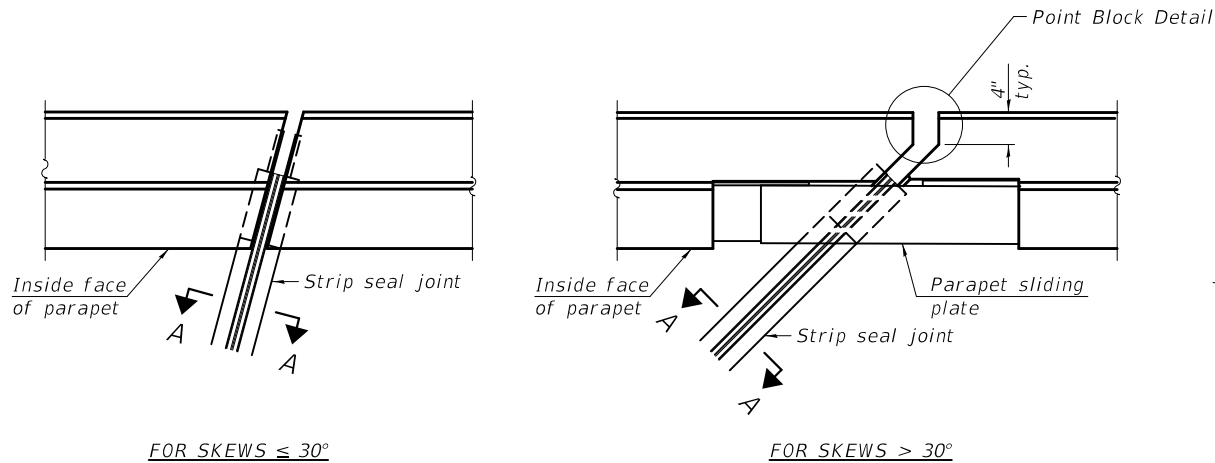
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	17
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

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

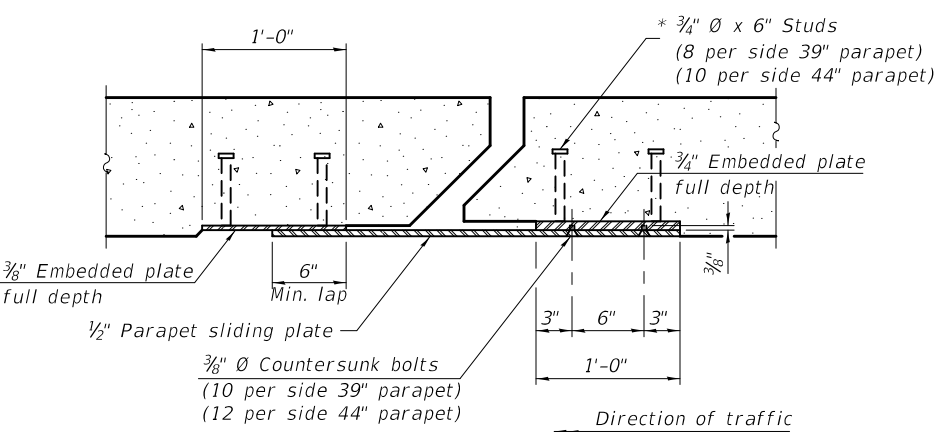
USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 0:2.0000 " = 1" / in.	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

FEHR GRAHAM PROJECT NUMBER: 18-600

MODEL: Default
FILE NAME: g:\v81_ss4\1818-600\bridge\0343060-013-diaph-Adgn



PLAN AT PARAPET



SECTION B-B

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

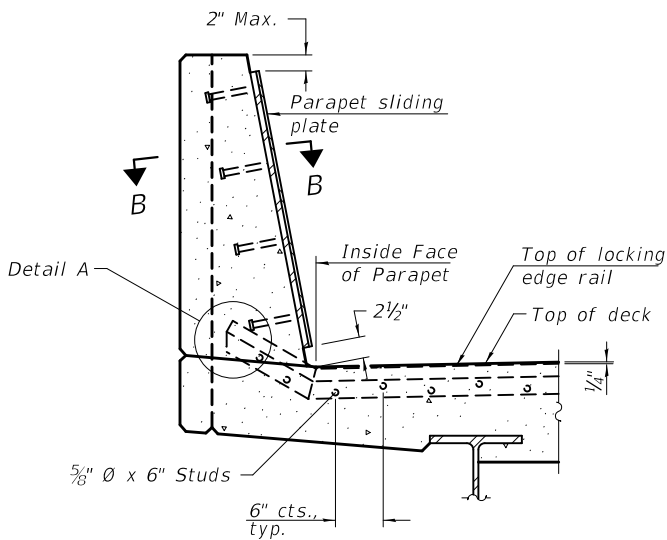
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

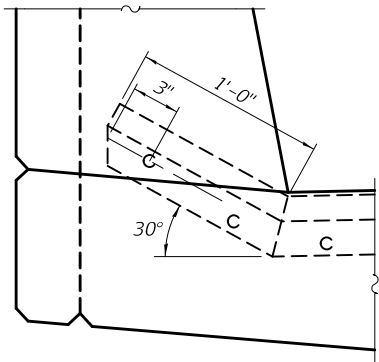
39" constant slope barrier shown, 44" constant slope barrier similar as noted.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

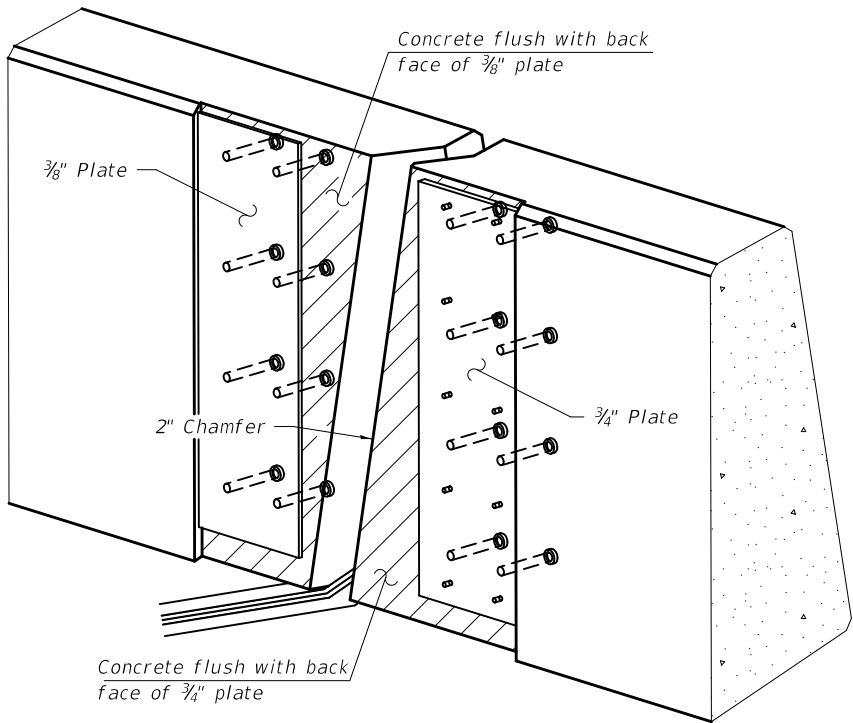


SECTION AT PARAPET

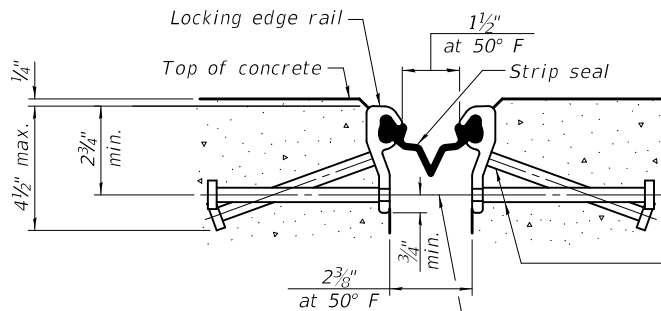
(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



DETAIL A



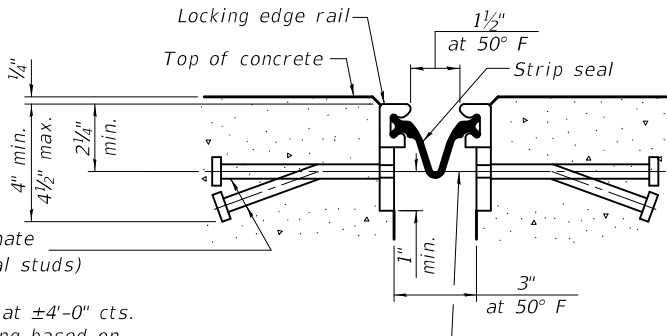
TRIMETRIC VIEW
(Showing embedded plates only)



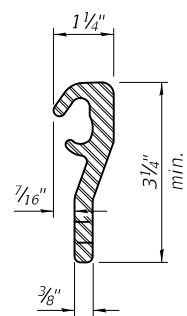
SHOWING ROLLED RAIL JOINT

* 5/8" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

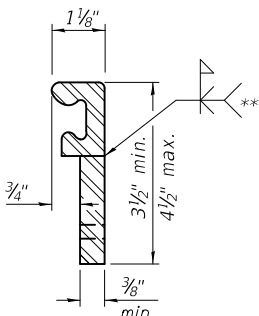
3/8" Ø threaded rods in 7/16" Ø holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.



SHOWING WELDED RAIL JOINT



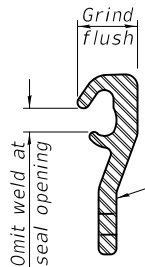
ROLLED
(EXTRUDED) RAIL



WELDED RAIL

LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	95

EJ-SS

1-1-2020

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

USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 0:2.0000 " = 1"	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

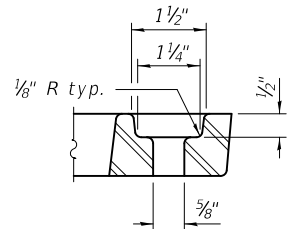
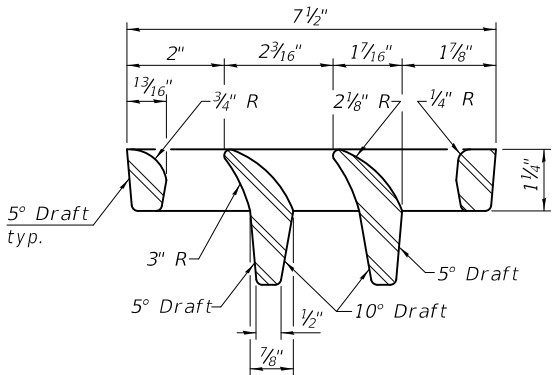
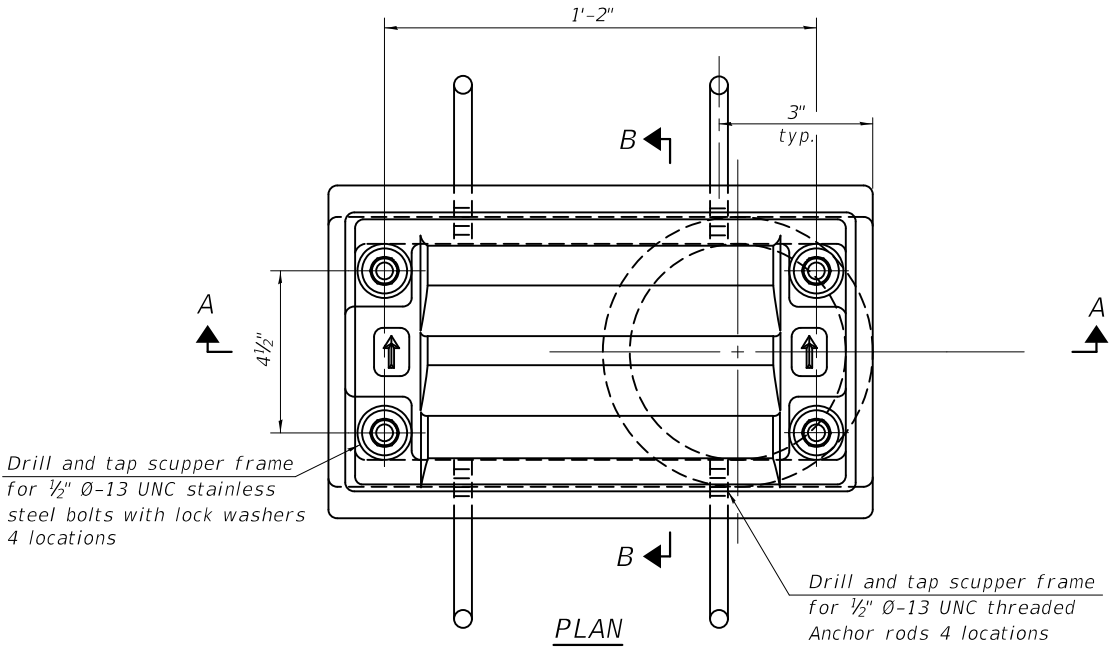
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 034-3060

SHEET 14 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	18
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

FEHR GRAHAM PROJECT NUMBER: 18-600



Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M105, Class 35B and AASHTO M306.

Bolts, anchor rods, nuts and washers shall be according to ASTM A307 and shall be galvanized according to AASHTO M232. As an alternate stainless steel may be used.

Stainless steel hardware shall be 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 frames and downspouts; however, the scupper grates shall remain cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.

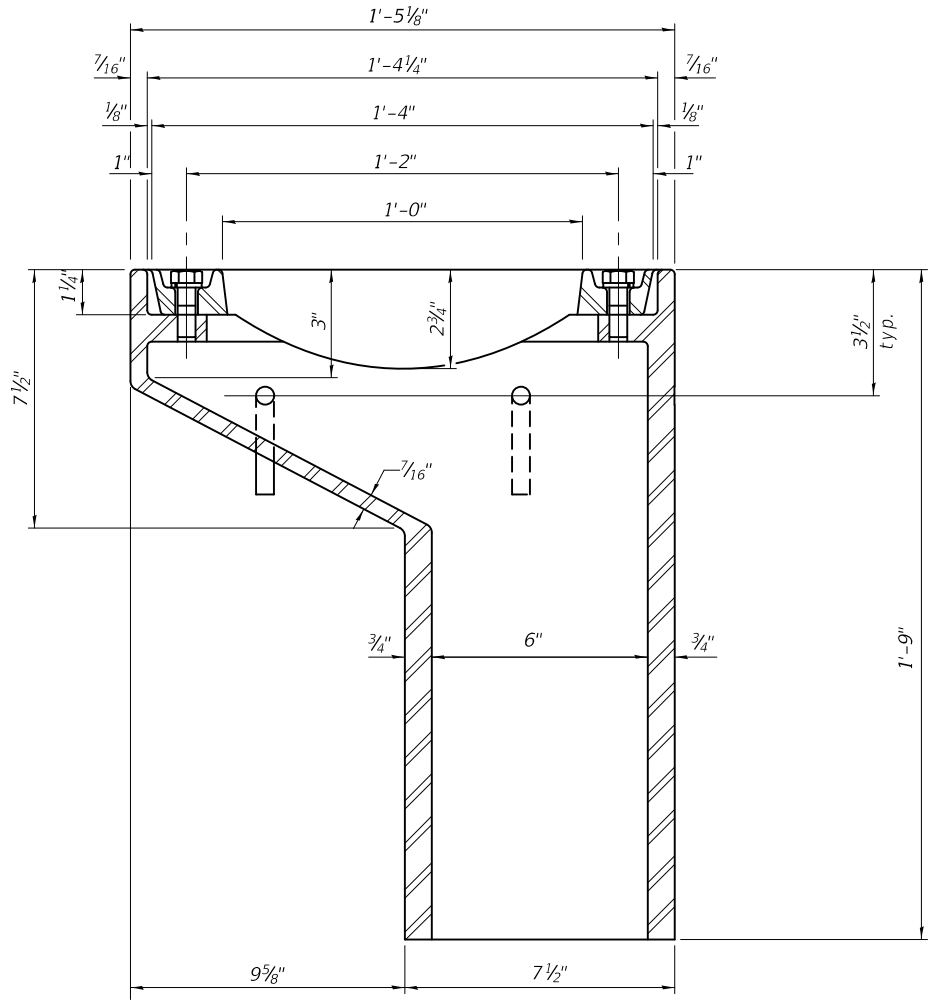
Structural steel scupper frames and downspouts, when utilized, shall be galvanized according to AASHTO M111.

As an alternate, fiberglass may be used for downspouts according to ASTM D2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. in lieu of the cast iron or structural steel.

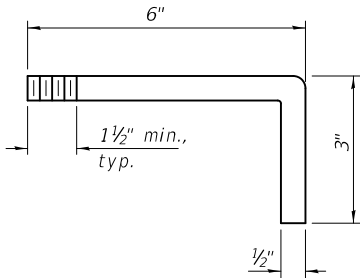
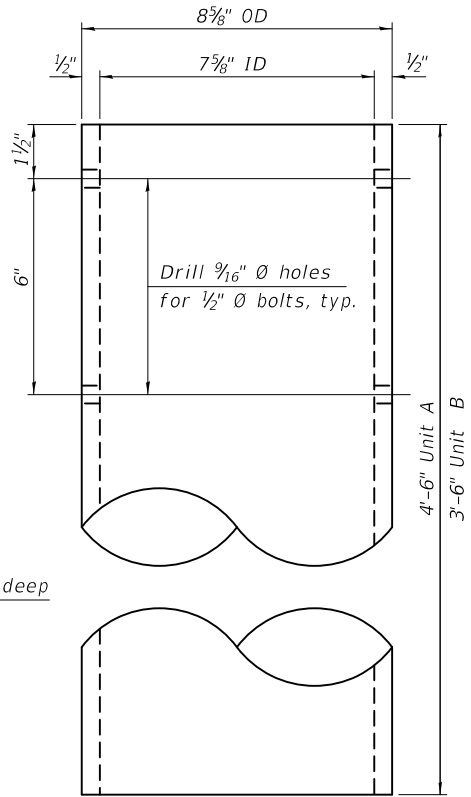
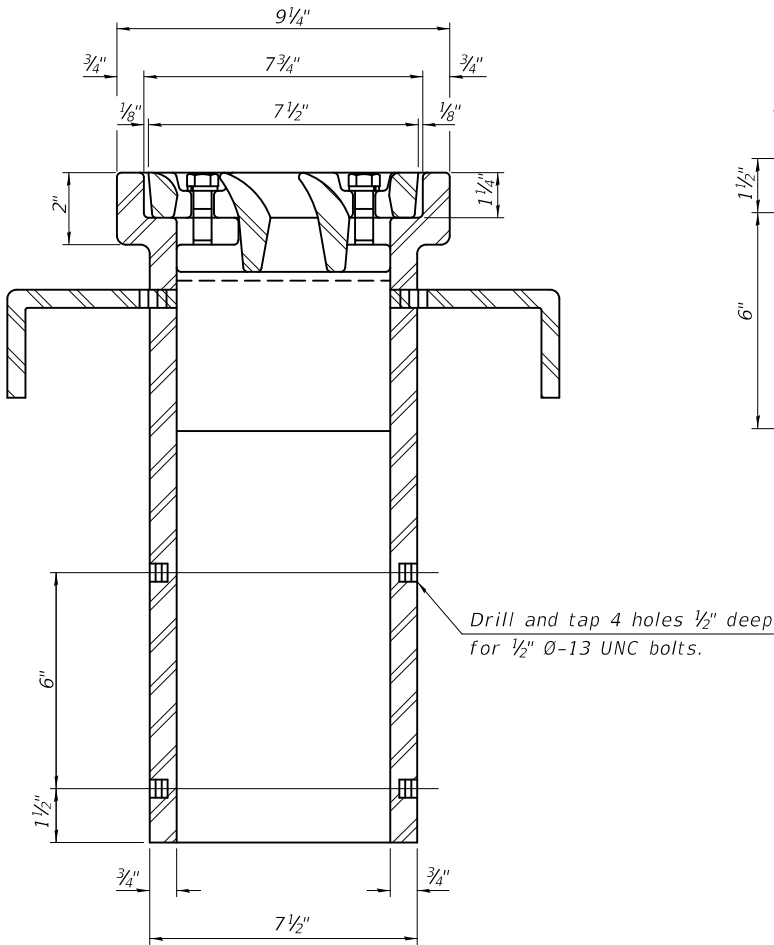
Exterior surfaces of downspouts and exterior exposed surfaces of the scupper frame below deck shall be treated as specified on sheet of .

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

Cost of the grate, frame, downspout, anchor rods, nuts and washers including complete installation of the scupper shall be paid for at the contract unit price for Drainage Scupper, DS-11.



See sheet 13 of 44 for scupper location relative to parapet.



ANCHOR ROD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	6

DS-11

1-1-2020

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

USER NAME =	cconnor	DESIGNED -	MCB	REVISED -	
		CHECKED -	RJM	REVISED -	
PLOT SCALE =	0:2.0000 " = 1"	DRAWN -	MMY/CFC	REVISED -	
PLOT DATE =	3/2/2020	CHECKED -	MCB/RJM	REVISED -	

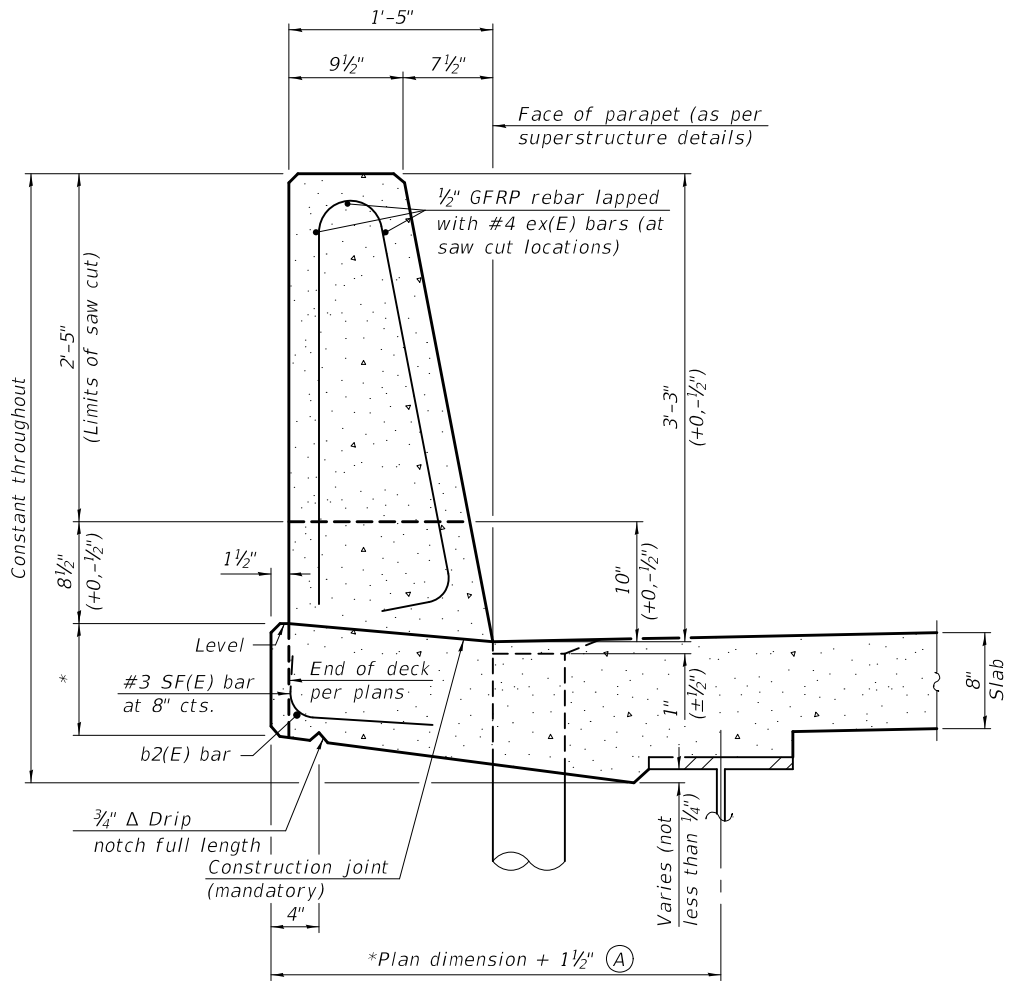
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 034-3060

SHEET 15 OF 44 SHEETS

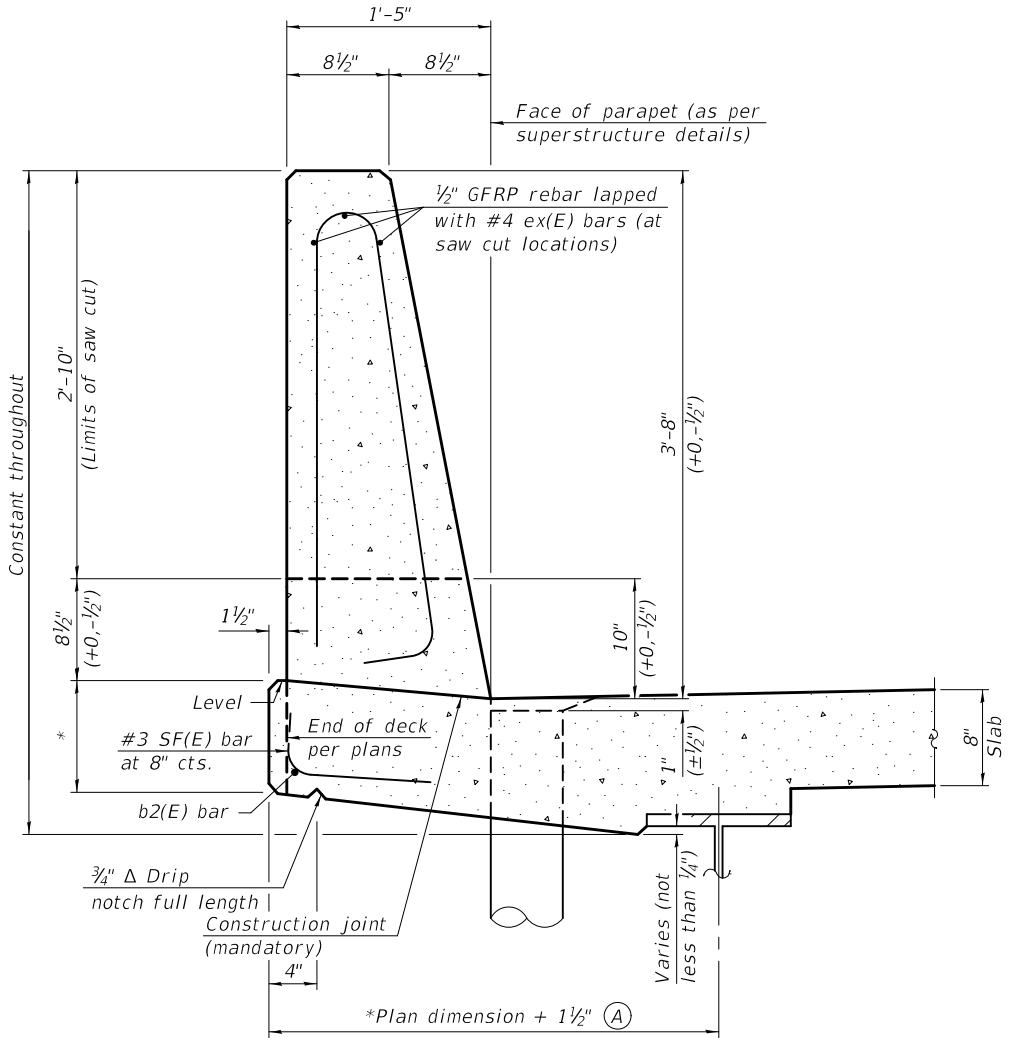
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	19
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

FEHR GRAHAM PROJECT NUMBER: 18-600



39" CONSTANT-SLOPE
PARAPET SECTION

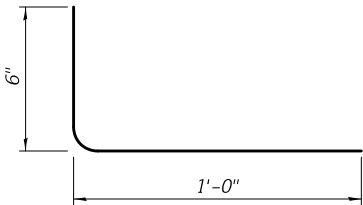
(Showing dimensions, d(E), and 1/2" Ø GFRP rebar)



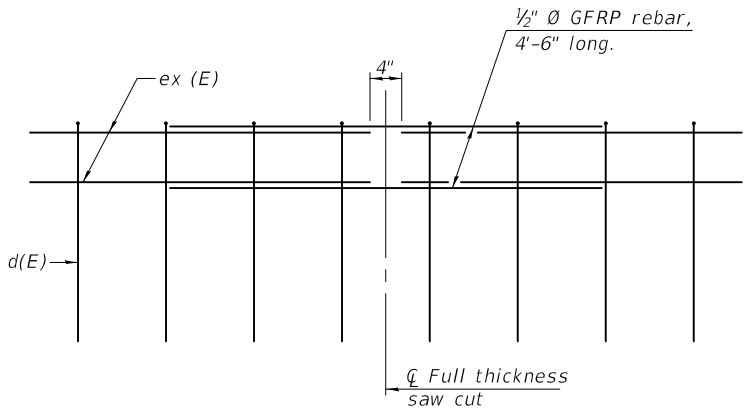
44" CONSTANT-SLOPE
PARAPET SECTION

(Showing dimensions, d(E), and 1/2" Ø GFRP rebar)

*See Superstructure Details.



#3 (E) BAR



GFRP REBAR STIFFENING DETAIL

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

Notes:
All dimensions shall remain the same as shown on superstructure details, except dimension A which is to be revised as shown. Additional concrete needed to revise dimension A = 0.00348 cu. yds./ft. for 39" and 44" parapets.
Place full depth aluminum sheets as shown on superstructure details.
Replace all cork joint filler locations with a full thickness saw cut.
Steel superstructure shown. Other superstructure types similar.

MODEL: Default
FILE NAME: g:\v8\18-600\bridge\0343060-016-parapet.dgn

SFP 39-44

1-1-2020

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

USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 0:2.000000 " = 1"	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

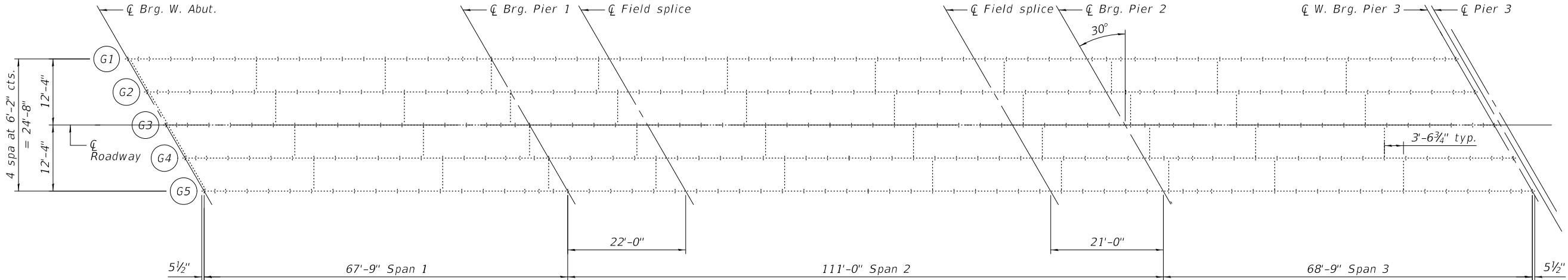
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE PARAPET SLIPFORMING OPTION
STRUCTURE NO. 034-3060

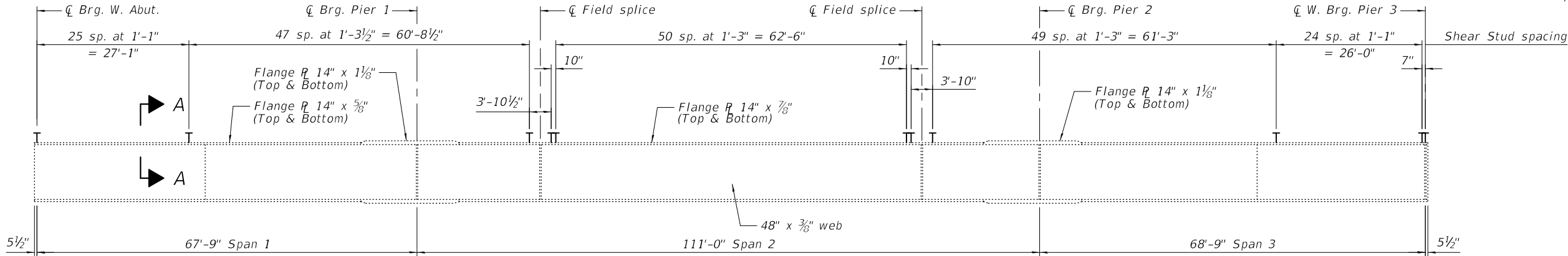
SHEET 16 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	20
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

FEHR GRAHAM PROJECT NUMBER: 18-600



FRAMING PLAN - UNIT A



GIRDER ELEVATION - UNIT A

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

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

$I_c(3n)$, $Sc(3n)$: 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 and Overload) due to long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).

$\bar{D}$: Un-factored non-composite dead load (kips/ft.).

$M\bar{D}$: Un-factored moment due to non-composite dead load (kip-ft.).

$s\bar{D}$: Un-factored long-term composite (superimposed) dead load (kips/ft.).

$M_s\bar{D}$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

M_L : Un-factored live load moment (kip-ft.).

M_I : Un-factored moment due to impact (kip-ft.).

M_a : Factored design moment (kip-ft.).

$1.3 [M\bar{D} + M_s\bar{D} + \frac{5}{3} (M_L + M_I)]$

M_u : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

f_s (Overload): Sum of stresses as computed from the moments below (ksi).

$M\bar{D} + M_s\bar{D} + \frac{5}{3} (M_L + M_I)$

f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).

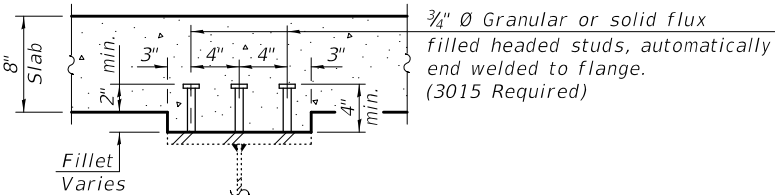
$1.3 [M\bar{D} + M_s\bar{D} + \frac{5}{3} (M_L + M_I)]$

VR: Maximum $\bar{L}$ + impact shear range within the composite portion of the span for stud shear connector design (kips).

INTERIOR GIRDER MOMENT TABLE						
		0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.6 Sp. 3
I_s	(in ⁴)	13,801	22,464	18,089	22,464	13,801
$I_c(n)$	(in ⁴)	33,853	48,018	40,992	48,018	33,853
$I_c(3n)$	(in ⁴)	25,858	36,560	31,234	36,560	25,858
S_s	(in ³)	560	894	727	894	560
$Sc(n)$	(in ³)	770	1128	949	1128	770
$Sc(3n)$	(in ³)	711	1050	880	1050	711
$\bar{D}$	(k/')	0.798	0.815	0.815	0.815	0.798
$M\bar{D}$	(k')	142	742	514	739	154
$s\bar{D}$	(k/')	0.176	0.176	0.176	0.176	0.176
$M_s\bar{D}$	(k')	33	160	111	160	36
M_L	(k')	428	528	586	526	436
MIM	(k')	111	124	124	124	113
$\bar{S}_3 [M_L + I]$	(k')	898	1087	1184	1082	914
M_a	(k')	1395	2585	2352	2576	1435
M_u	(k')	2289.0		2677.0		2282.0
$f_s \bar{D}$ non-comp	(ksi)	3.0	10.0	8.5	9.9	3.3
$f_s \bar{D}$ (comp)	(ksi)	0.6	1.8	1.5	1.8	0.6
$f_s \bar{S}_3 [M_L + M_I]$	(ksi)	14.0	11.6	15.0	11.5	14.2
f_s (Overload)	(ksi)	17.6	23.3	25.0	23.3	18.2
f_s (Total)	(ksi)		30.4		30.2	
VR	(k)	50.1	47.4	39.2	49.1	49.8

INTERIOR GIRDER REACTION TABLE				
	W. Abut.	Pier 1	Pier 2	Pier 3
R_D	(k)	19.7	101.3	20.2
R_L	(k)	33.6	54.4	32.5
R_I	(k)	8.7	12.8	8.4
R_{Total}	(k)	62.0	168.5	61.1

* Compact section
** Braced non-compact and partially braced section



SECTION A-A

MODEL: Default
FILE NAME: g:\SV81_ss4\18118-600\bridge\0343060-017-framA.dgn

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

USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 21:4.000000 " = 1"	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN - UNIT A
STRUCTURE NO. 034-3060

SHEET 17 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	21
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

FEHR GRAHAM PROJECT NUMBER: 18-600

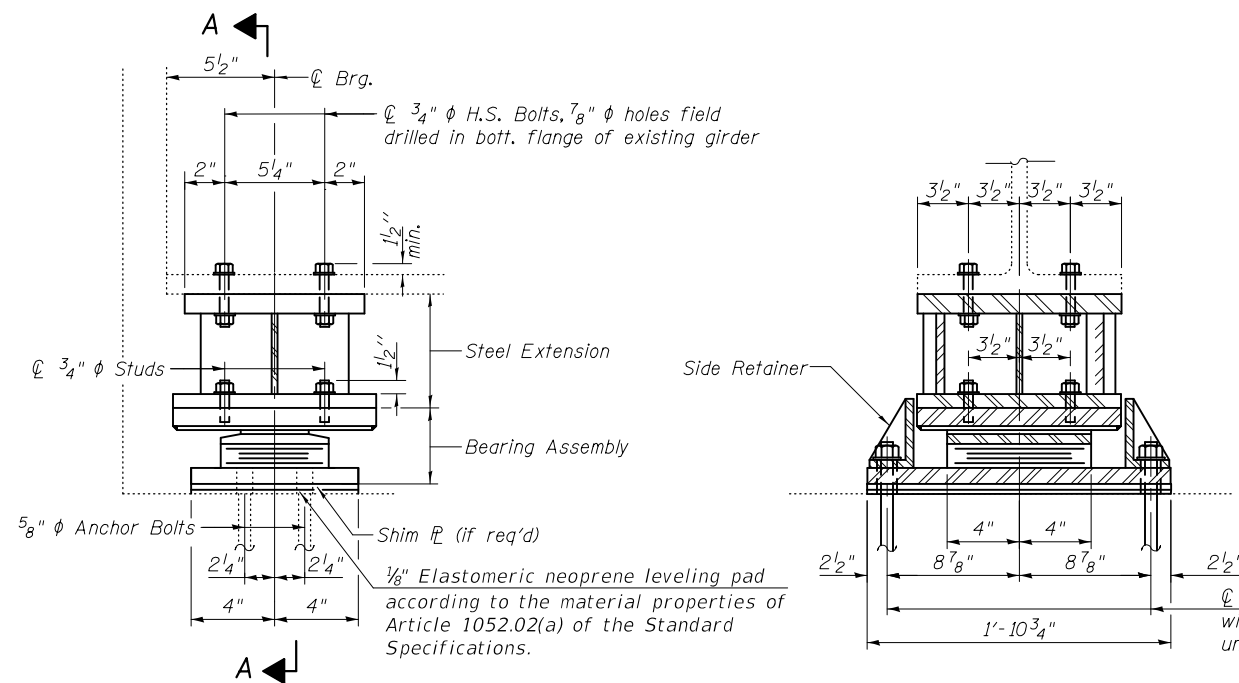


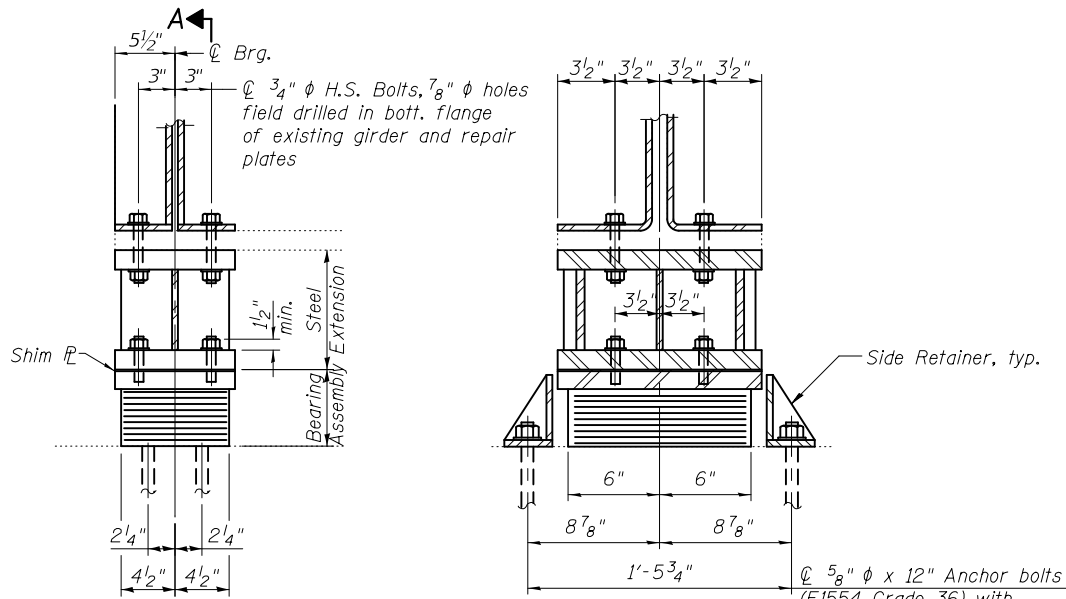
I_s , S_s : Non-composite moment of inertia and section modulus of the steel section used for computing $f_s(\text{Total and Overload})$ due to non-composite dead loads ($in.^4$ and $in.^3$).
 $I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, " n ", used for computing $f_s(\text{Total and Overload})$ 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 $f_s(\text{Total and Overload})$ due to long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).
 ρ : Un-factored non-composite dead load (kips/ft.).
 $M\rho$: Un-factored moment due to non-composite dead load (kip-ft.).
 $s\rho$: Un-factored long-term composite (superimposed) dead load (kips/ft.).
 $M_s\rho$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
 M_L : Un-factored live load moment (kip-ft.).
 M_I : Un-factored moment due to impact (kip-ft.).
 M_a : Factored design moment (kip-ft.).
 $1.3 [M\rho + M_s\rho + \frac{5}{3} (M_L + M_I)]$
 M_u : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
 $f_s(\text{Overload})$: Sum of stresses as computed from the moments below (ksi).
 $M\rho + M_s\rho + \frac{5}{3} (M_L + M_I)$
 $f_s(\text{Total})$: Sum of stresses as computed from the moments below on non-compact section (ksi).
 $1.3 [M\rho + M_s\rho + \frac{5}{3} (M_L + M_I)]$
 VR : Maximum ℓ + impact shear range within the composite portion of the span for stud shear connector design (kips).



* Compact section
** Braced non-compact and partially braced section

REACTION TABLE BEAM 1				
	Pier 3	Pier 4	Pier 5	E. Abut.
R_2 (k)	25.5	83.3	77.8	22.3
R_4 (k)	33.4	47.3	46.7	32.3
R_1 (k)	8.5	11.6	11.1	8.1
R_{Total} (k)	67.4	142.2	135.6	62.7

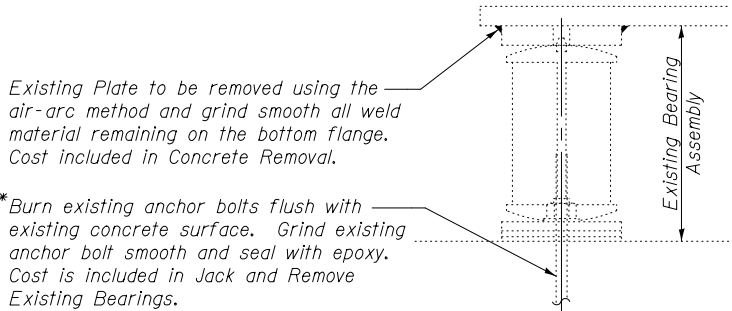




ELEVATION

SECTION A-A

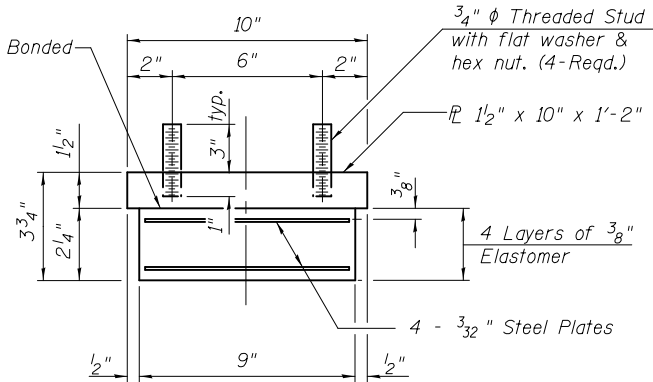
TYPE I ELASTOMERIC EXP. BRG.



EXISTING BEARING REMOVAL DETAIL

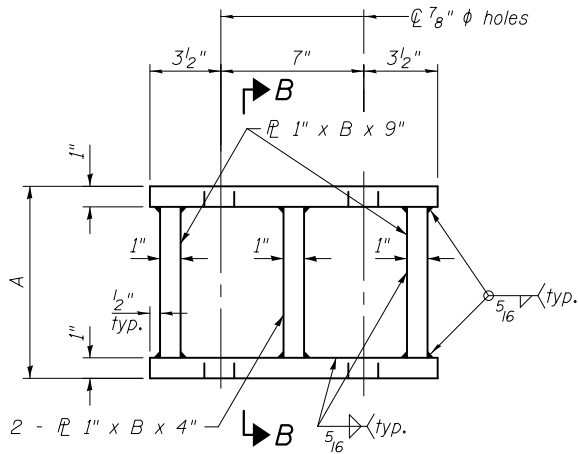
PROCEDURE FOR JACKING AND REMOVING EXISTING BEARINGS

- The Contractor shall submit, for approval by the Engineer, plans for jacking and removing the existing bearings of the abutments prior to commencing any work at abutment bearings.
- The minimum jack capacity is 20 tons per girder.

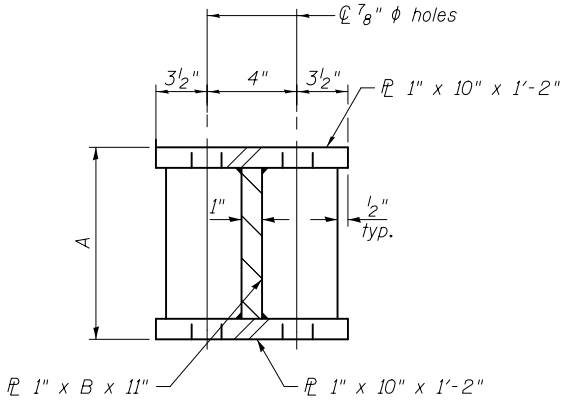


BEARING ASSEMBLY

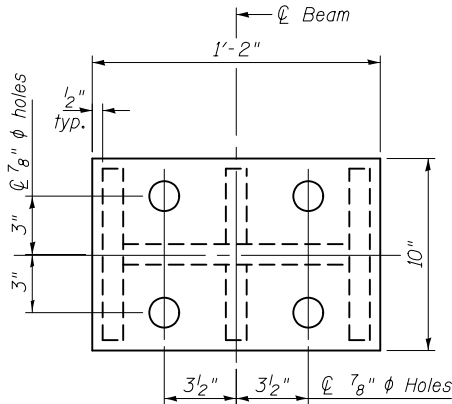
Note:
Shim plates shall not be placed under Bearing Assembly.



FABRICATED STEEL EXTENSION ELEVATION



SECTION B-B



FABRICATED STEEL EXTENSION PLAN

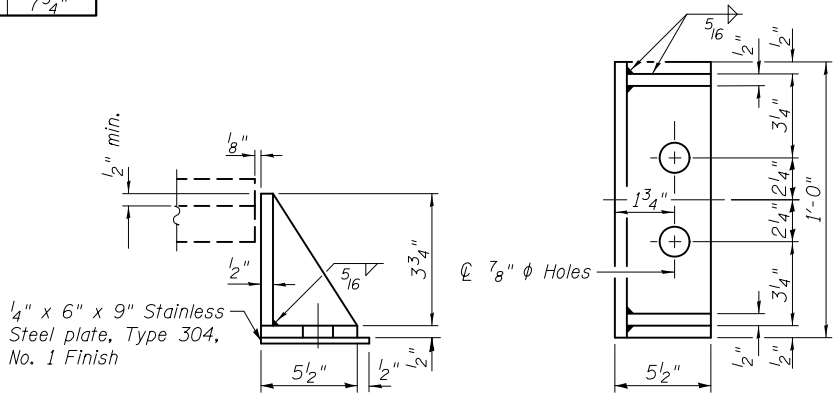
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	5
Anchor Bolts, 5/8"	Each	20
Furnishing and Erecting Structural Steel	Pound	869
Jack and Remove Existing Bearings	Each	5

*** Fabricated Steel Extensions, adjusting shims and bearing plates

BOLSTER DIMENSIONS

Girder	A	B
1	10"	8"
2	10 1/4"	8 1/4"
3 - 5	9 3/4"	7 3/4"



SIDE RETAINER

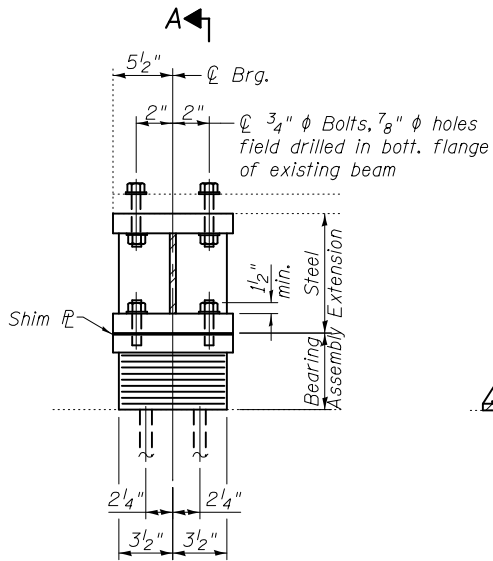
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Notes:
Anchor bolts for side retainers shall be installed in holes drilled in the concrete after members are in place. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Side retainers and stainless steel plates required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Cost included in Elastomeric Bearing Assembly Type I.
The cost of field drilling holes in bottom flange of existing beams is included in Furnishing and Erecting Structural Steel.
Two 1/8 in. adjusting shims shall be provided for each bearing in addition to allother plates or shims and placed as shown on bearing details.
Bearing seat surfaces shall be cleaned according to Article 505.08(h) of the Standard Specifications.

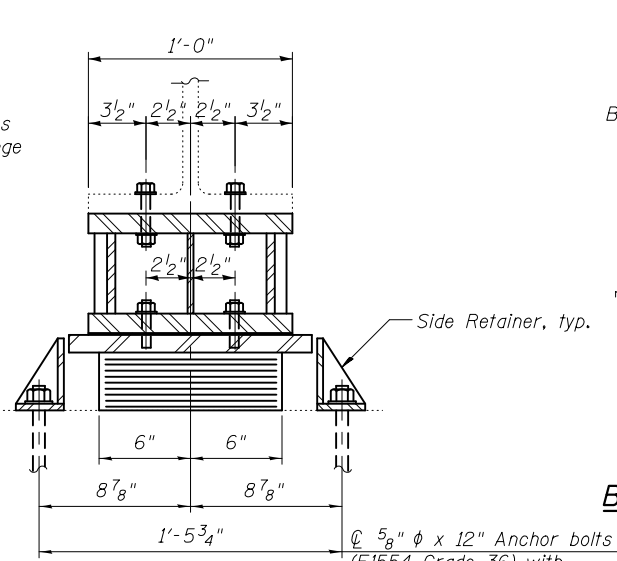
USER NAME = cconnor	DESIGNED - MCB	REVISED -
	CHECKED - RJM	REVISED -
PLOT SCALE = 0:2.0000 " = 1"	DRAWN - MMY/CFC	REVISED -
PLOT DATE = 3/2/2020	CHECKED - MCB/RJM	REVISED -

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	25
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

MODEL: Default
FILE NAME: g:\vbl_ssa\18118-600\bridge\0343060-022-brg-details-Pier 3.dgn

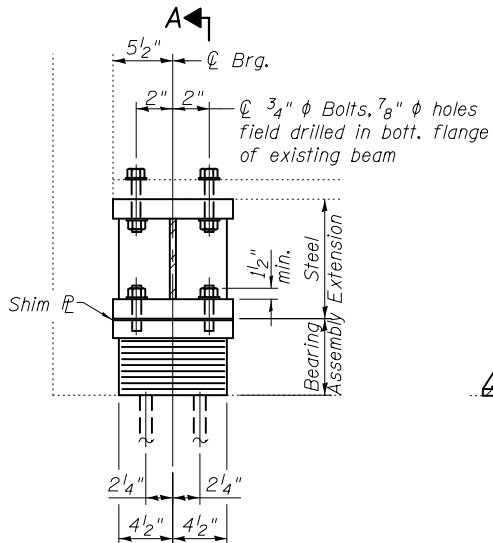


ELEVATION AT PIER 3 EAST

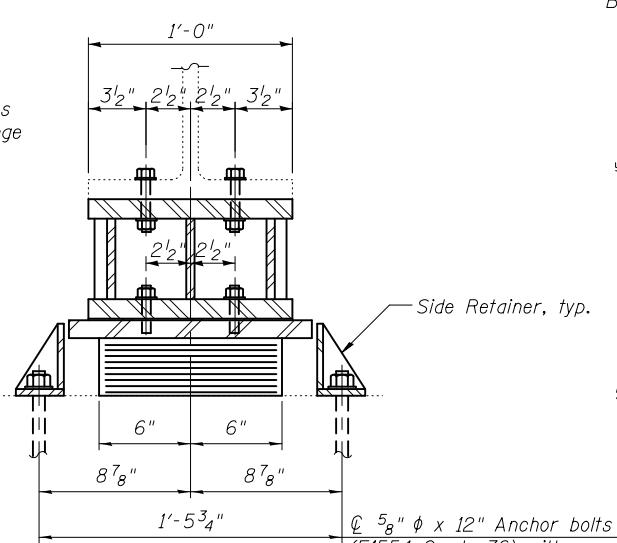


SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.



ELEVATION AT E. ABUT.



SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.

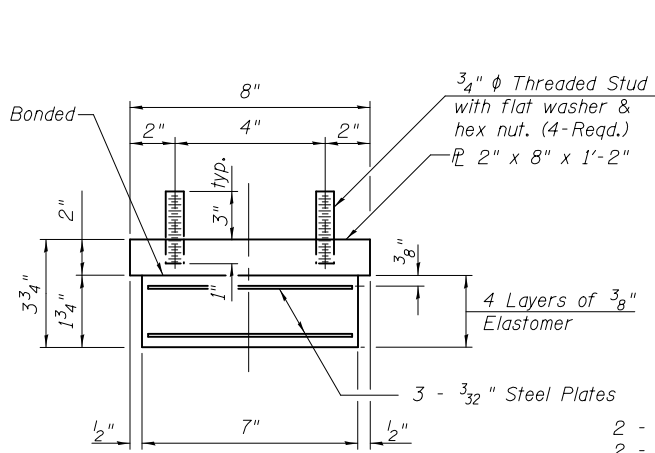
Existing Plate to be removed using the air-arc method and grind smooth all weld material remaining on the bottom flange. Cost included in Concrete Removal.

*Burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolt smooth and seal with epoxy. Cost is included in Jack and Remove Existing Bearings.

EXISTING BEARING REMOVAL DETAIL

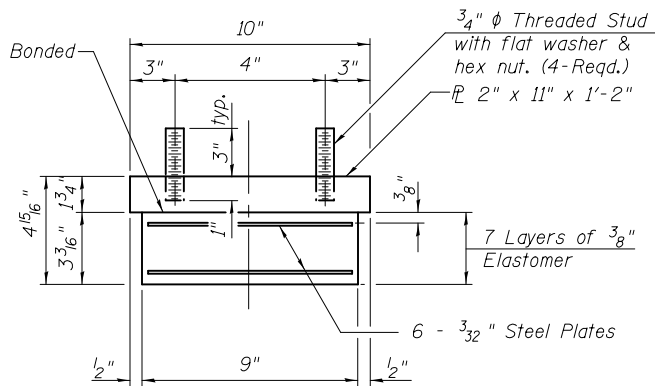
At abutments

* at abutments only



BEARING ASSEMBLY PIER 3 EAST

Note:
Shim plates shall not be placed under Bearing Assembly.

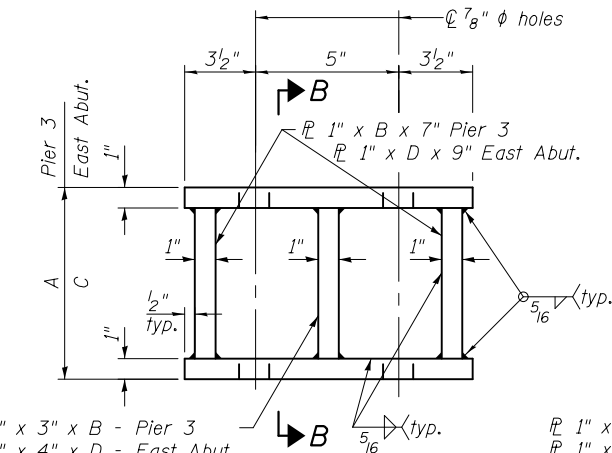


BEARING ASSEMBLY EAST ABUT.

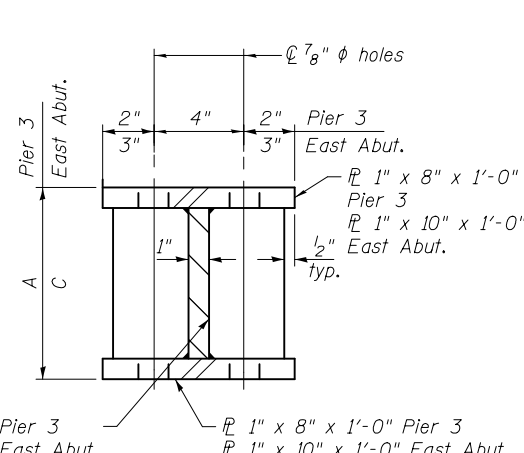
Note:
Shim plates shall not be placed under Bearing Assembly.

BOLSTER DIMENSIONS

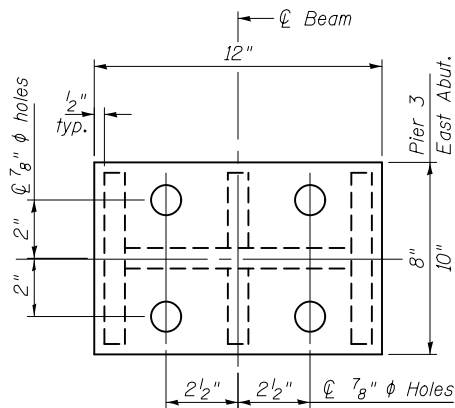
Beam	A	B	C	D
1	10 1/8"	8 1/8"	8 1/16"	6 1/16"
2	10 3/8"	8 3/8"	8 1/16"	6 1/16"
3	9 7/8"	7 7/8"	9 1/16"	7 1/16"
4	9 7/8"	7 7/8"	8 1/16"	6 1/16"
5	9 7/8"	7 7/8"	8 1/16"	6 1/16"



FABRICATED STEEL EXTENSION ELEVATION



SECTION B-B

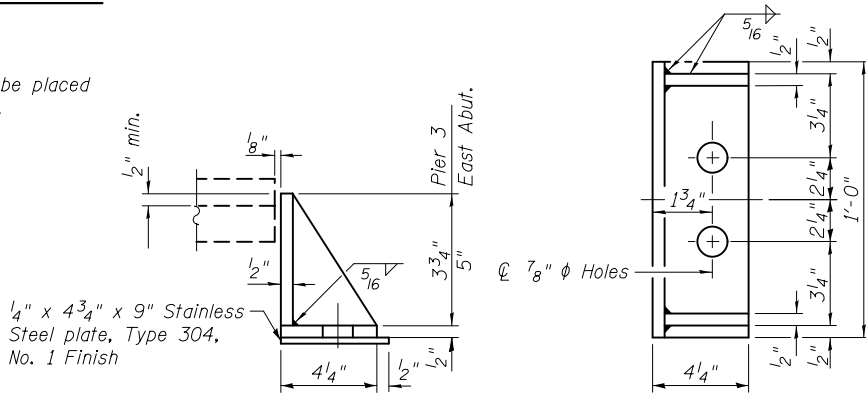


FABRICATED STEEL EXTENSION PLAN

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	10
Anchor Bolts, 5/8"	Each	40
Furnishing and Erecting Structural Steel	Pound	1401
Jack and Remove Existing Bearings	Each	10

***Fabricated Steel Extensions, Shim plates & brg. plates.

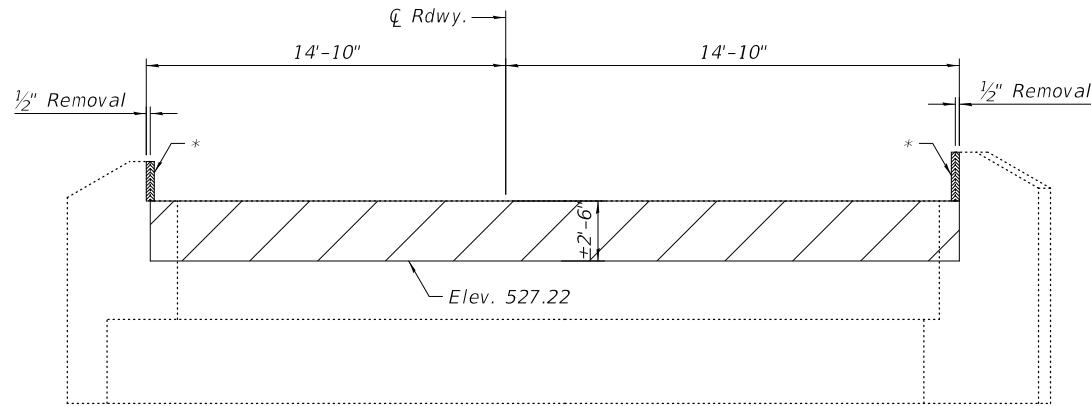


SIDE RETAINER

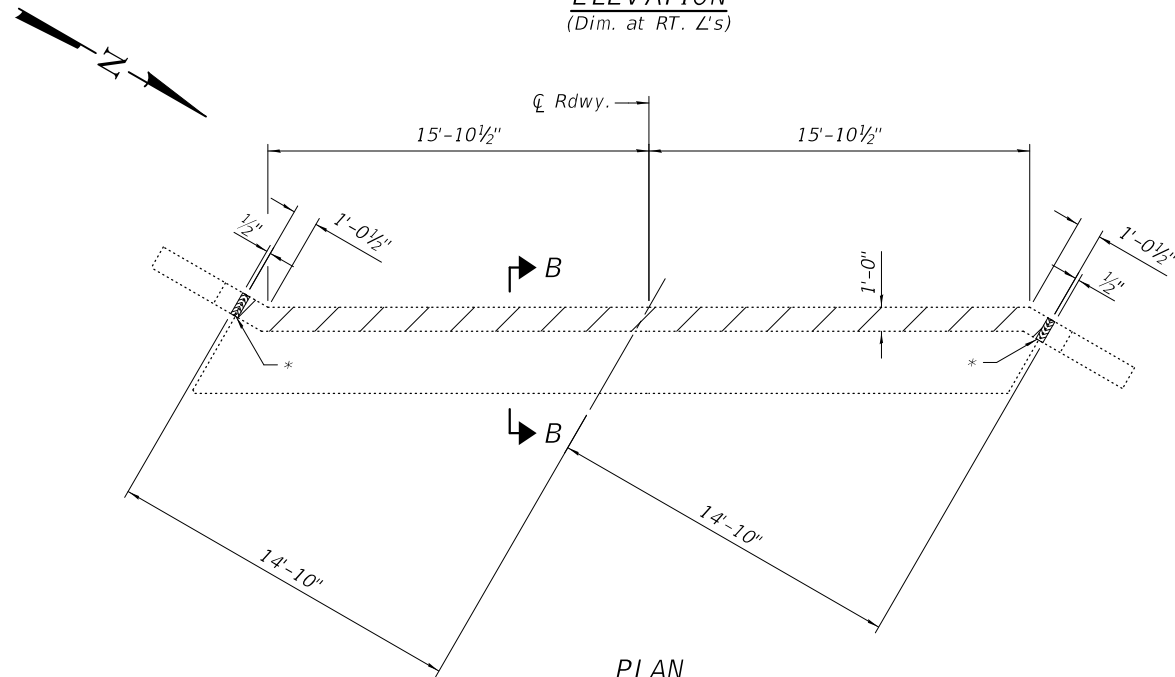
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

PROCEDURE FOR JACKING AND REMOVING EXISTING BEARINGS

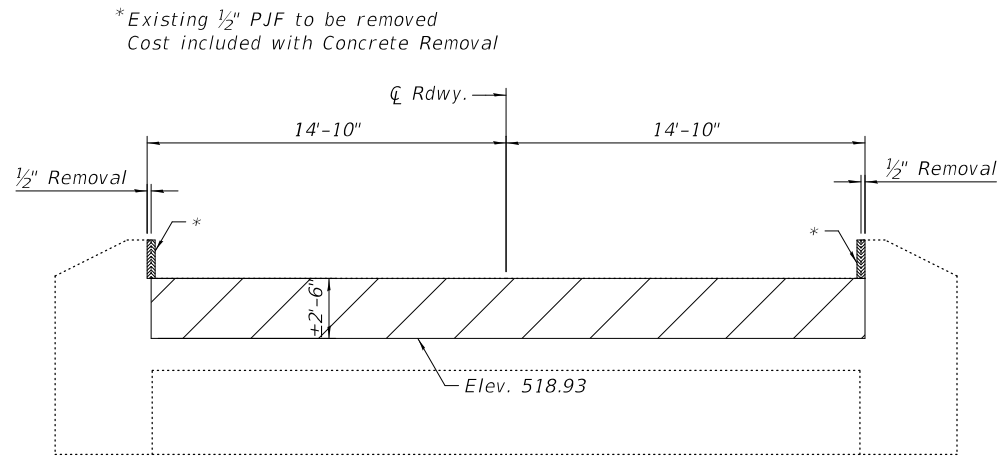
- The Contractor shall submit, for approval by the Engineer, plans for jacking and removing the existing bearings of the abutments prior to commencing any work at abutment bearings.
- The minimum jack capacity is 20 tons per beam.



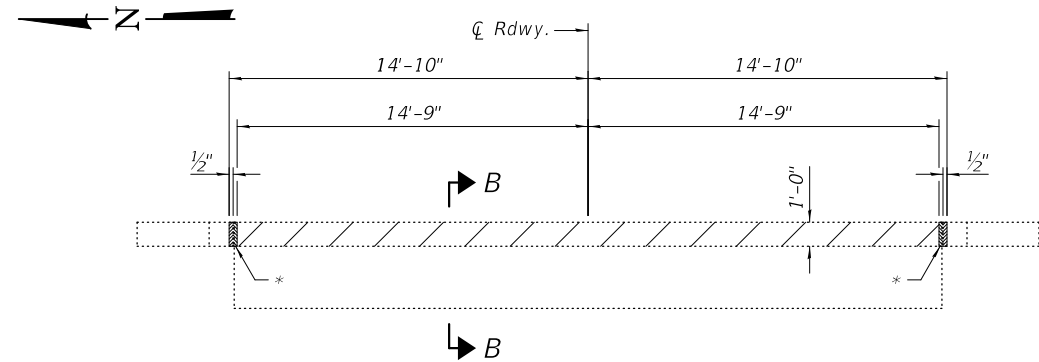
ELEVATION
(Dim. at RT. L's)



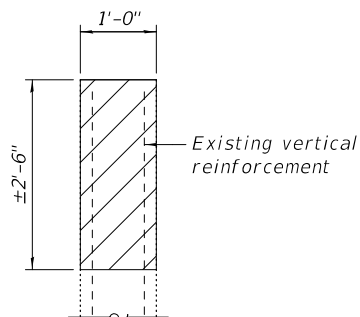
PLAN
WEST ABUTMENT



ELEVATION



PLAN
EAST ABUTMENT



SECTION B-B

Notes:
Hatched areas indicate Concrete Removal.
The existing vertical reinforcement extending into the removed area shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using the approved bar splicer or anchorage system. Cost incidental to "Concrete Removal"

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	6.0

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE REMOVAL DETAILS
STRUCTURE NO. 034-3060

SHEET 23 OF 44 SHEETS

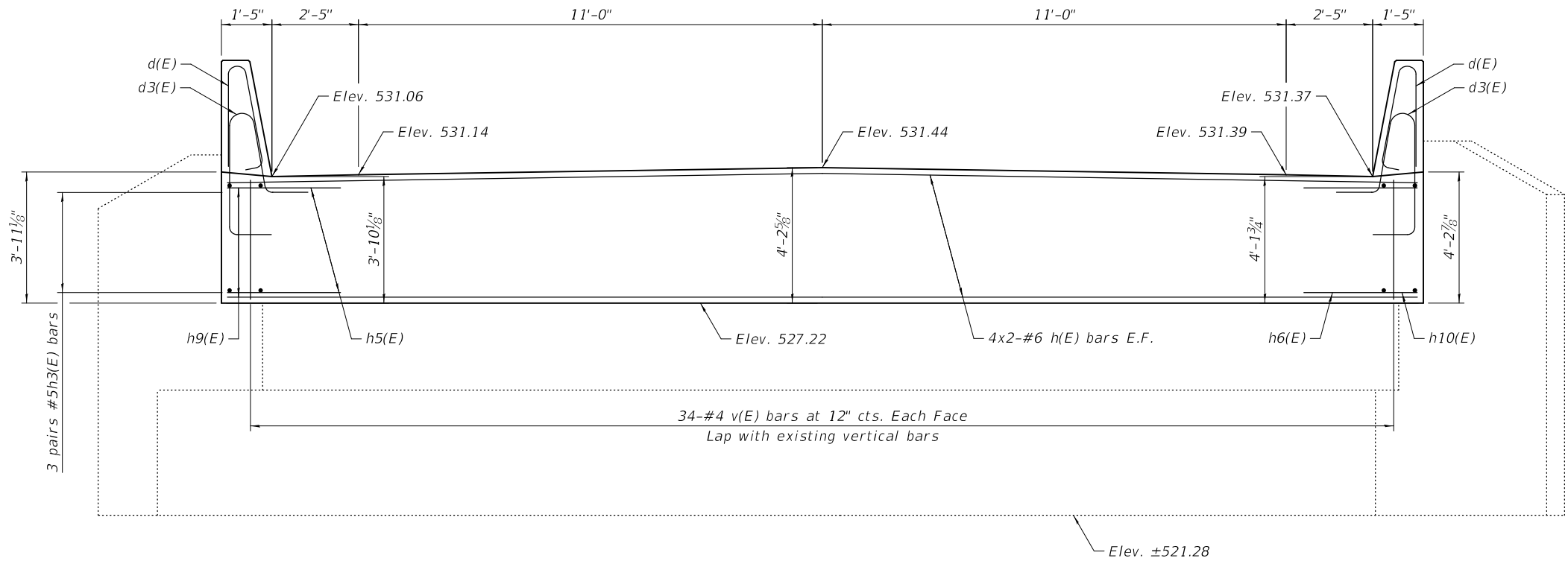
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	27
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

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

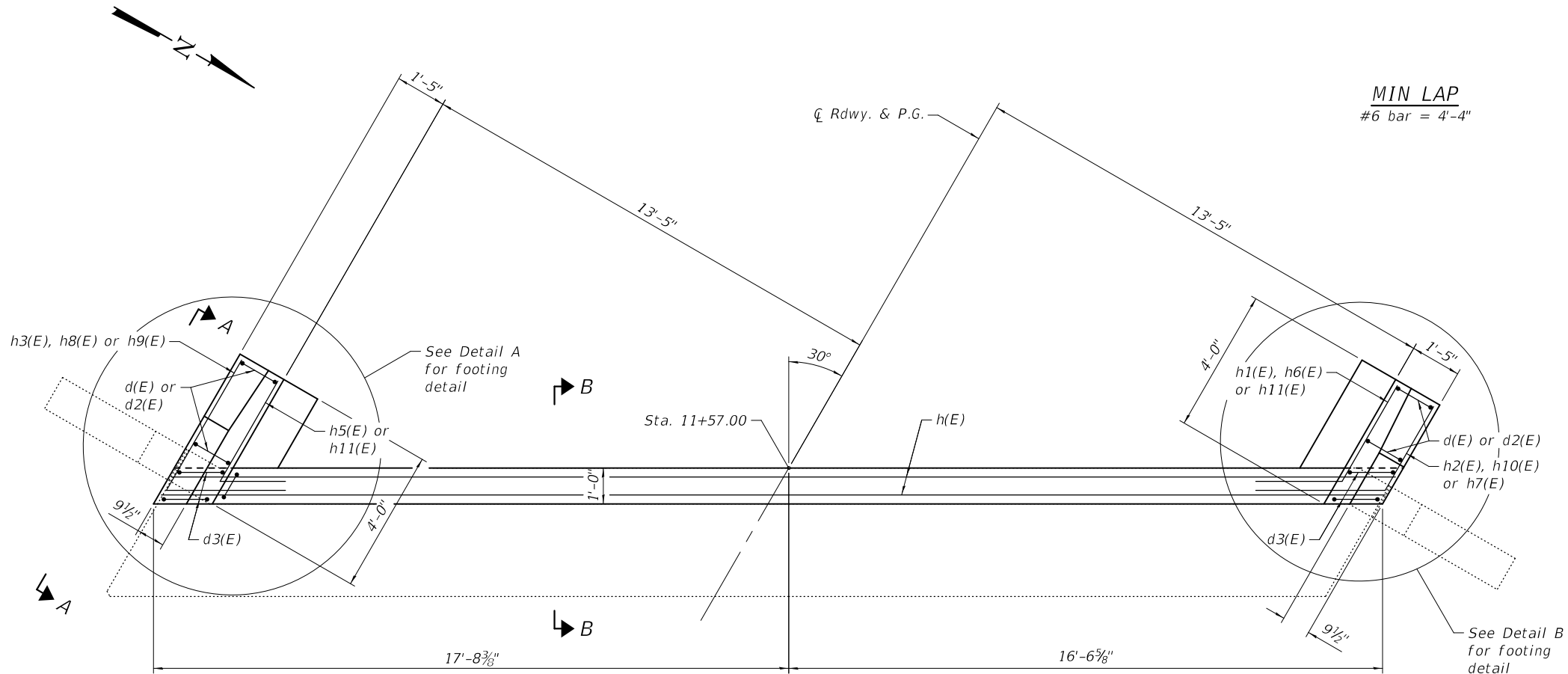
USER NAME =	cconnor	DESIGNED -	MCB	REVISED -	
CHECKED -	RJM	REVIS		REVISED -	
PLOT SCALE =	8:0.0000 " = 1' / in.	DRAWN -	MMY/CFC	REVISED -	
PLOT DATE =	3/2/2020	CHECKED -	MCB/RJM	REVISED -	

FEHR GRAHAM PROJECT NUMBER: 18-600

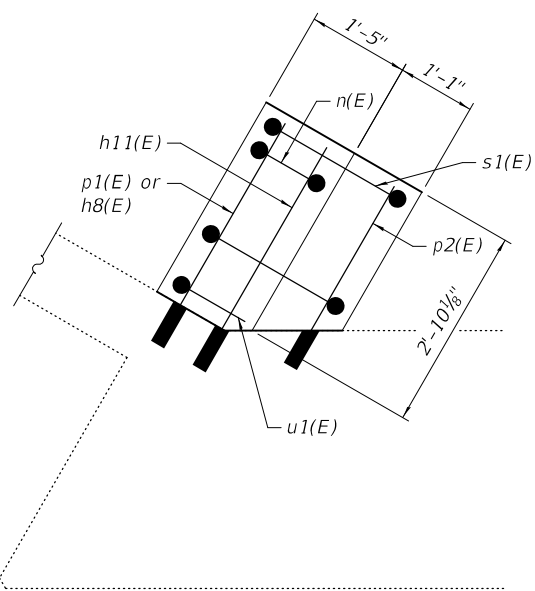
MODEL: Default
FILE NAME: g:\v8\18-600\bridge\0343060-023-conc-rem.dgn



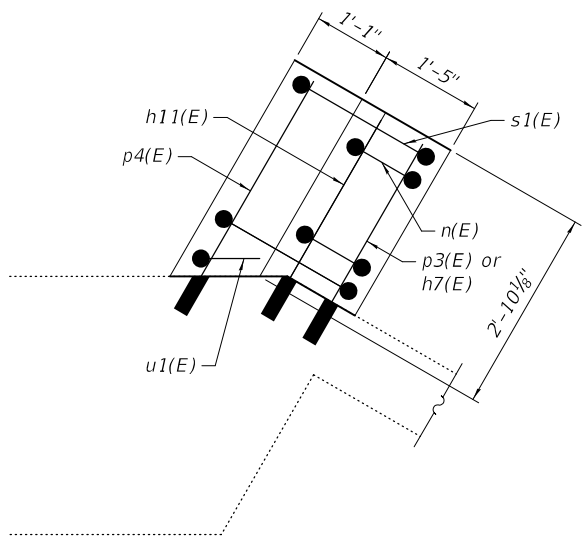
ELEVATION
(Dim. at Rt. Z's)



PLAN



DETAIL A



DETAIL B

Note:
Concrete sealer shall be applied to the front
face of the backwall and to the abutment seats.

See Sheet 25 of 44 for Sections A-A, B-B,
Bar Details and Bill of Material

MODEL: Default
FILE NAME: g:\v8\18-600\bridge\0343060-024-wabut.dgn

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

USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 4:0.000000 " = 1/4"	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

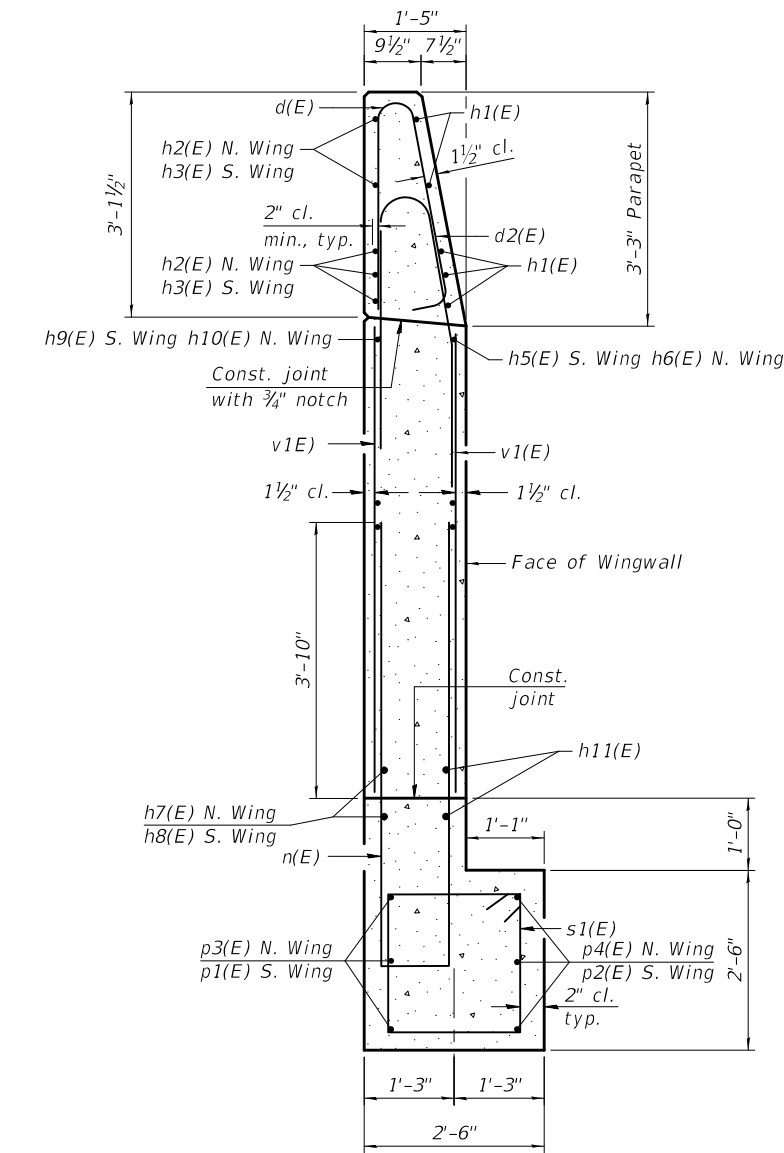
WEST ABUTMENT
STRUCTURE NO. 034-3060

SHEET 24 OF 44 SHEETS

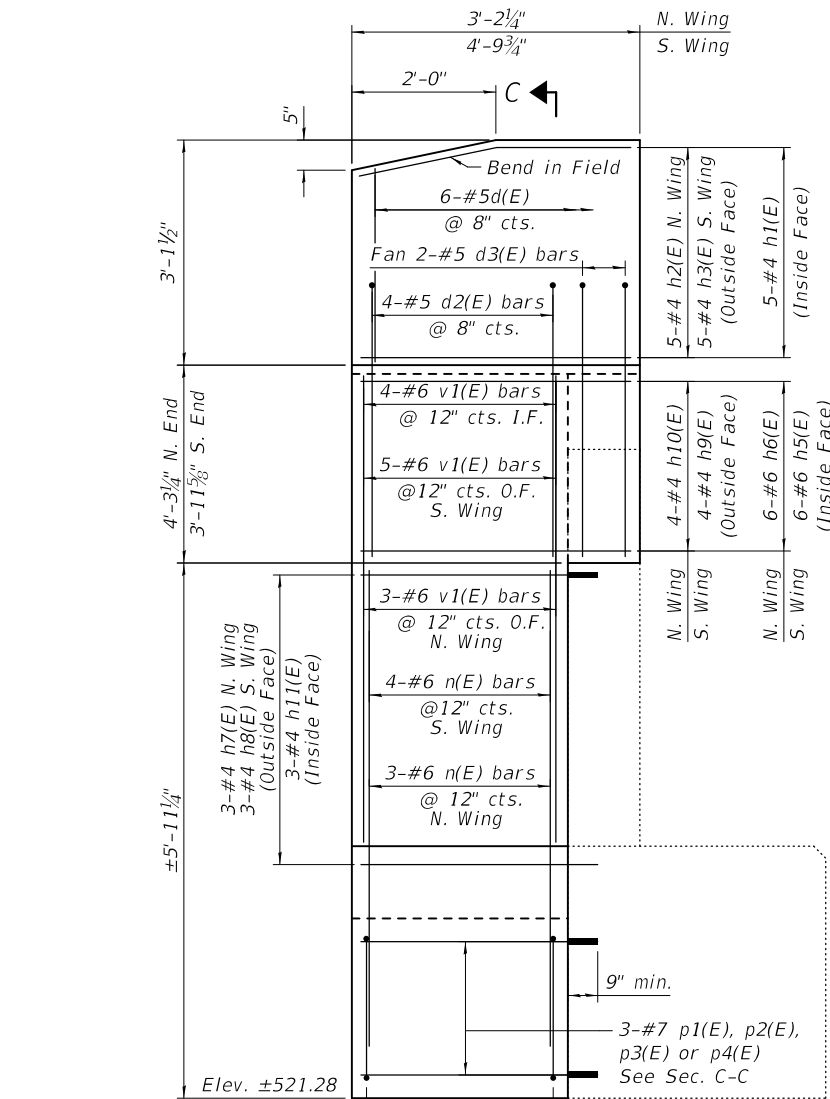
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	28
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

FEHR GRAHAM PROJECT NUMBER: 18-600

MODEL: Default
FILE NAME: g:\vbl_ssa\18118-600\bridge\0343060-025-wabut-det.dgn

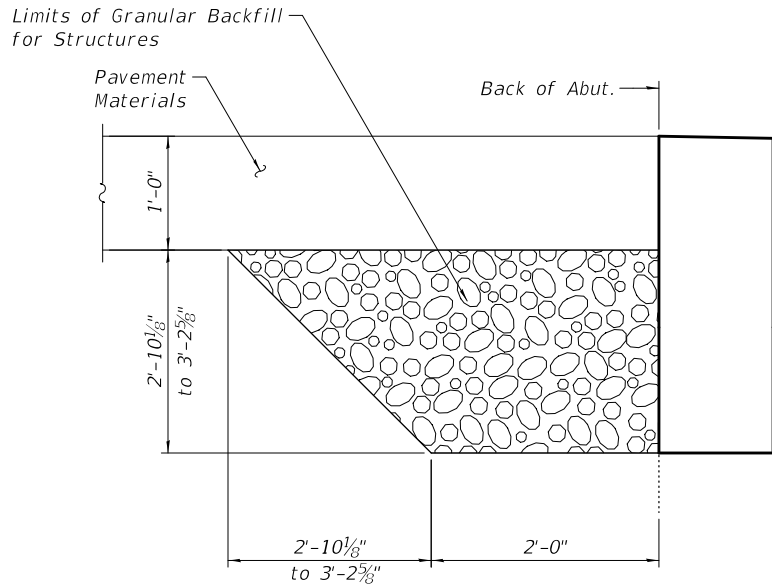


SECTION C-C

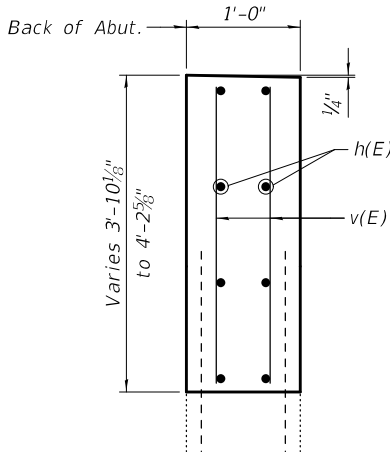


VIEW A-A

*Epoxy grout h7(E), h8(E), h11(E), p1(E), p2(E), p3(E) and p4(E) in 9" min. drilled holes according to Section 584 of the Standard Specifications.



SECTION B-B
(Showing Granular Backfill for Structures)



SECTION B-B
(Showing Reinforcement)

WEST ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	12	#5	6'-5"	
d2(E)	8	#5	10'-1"	
d3(E)	4	#5	8'-10"	
h(E)	16	#6	19'-1"	
h1(E)	10	#4	3'-7"	
h2(E)	5	#4	3'-0"	
h3(E)	5	#4	4'-4"	
h5(E)	6	#6	7'-2"	
h6(E)	6	#6	7'-2"	
h7(E)	3	#4	3'-2"	
h8(E)	3	#4	4'-2"	
h9(E)	4	#4	7'-3"	
h10(E)	4	#4	5'-11"	
h11(E)	6	#4	3'-3"	
n(E)	7	#6	13'-6"	
p1(E)	3	#7	3'-7"	
p2(E)	3	#7	2'-10"	
p3(E)	3	#7	3'-3"	
p4(E)	3	#7	4'-0"	
s1(E)	6	#4	9'-5"	
u1(E)	2	#6	6'-6"	
v(E)	68	#4	3'-6"	
v1(E)	16	#6	6'-1"	
Structure Excavation	Cu. Yd.	15		
Concrete Structures	Cu. Yd.	9.8		
Reinforcement Bars, Epoxy Coated	Pound	1480		
Concrete Sealer	Sq. Ft.	294		
Granular Backfill for Structures	Cu. Yd.	13		

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

USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 2:8.000000 " = 1"	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

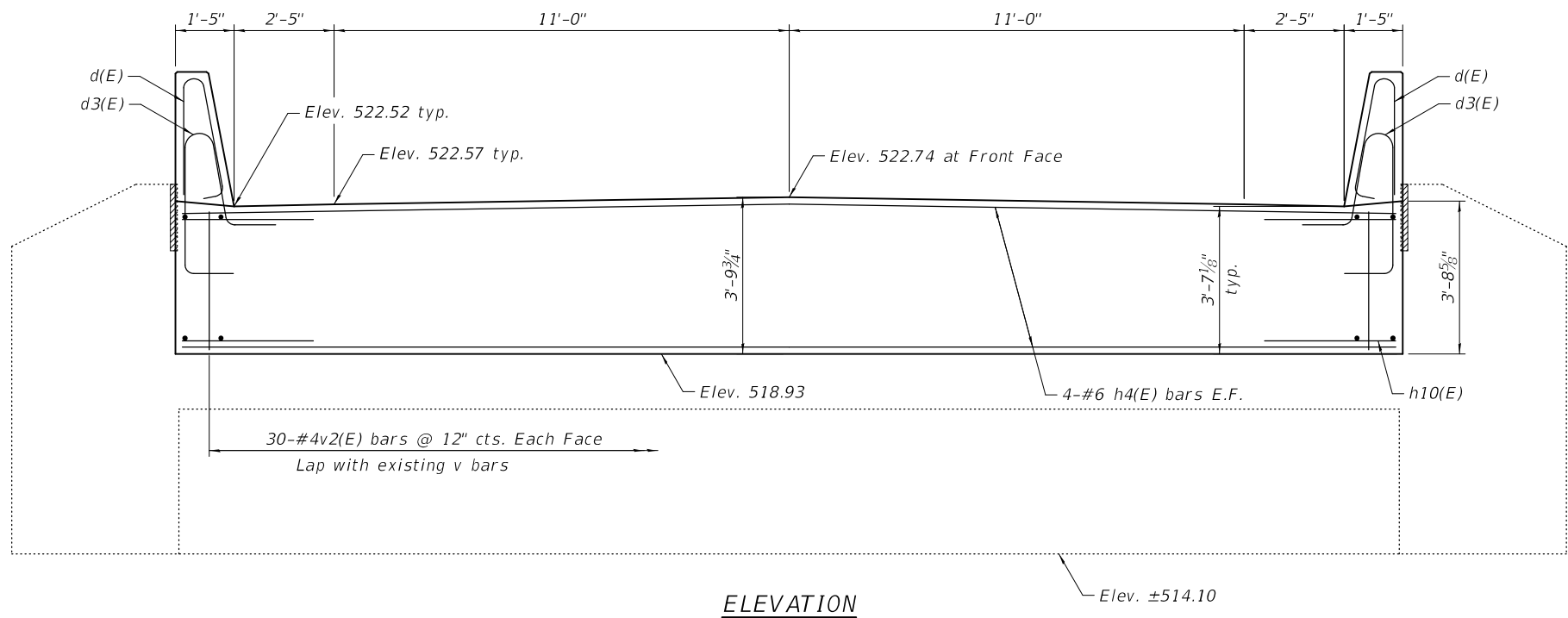
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DETAILS
STRUCTURE NO. 034-3060

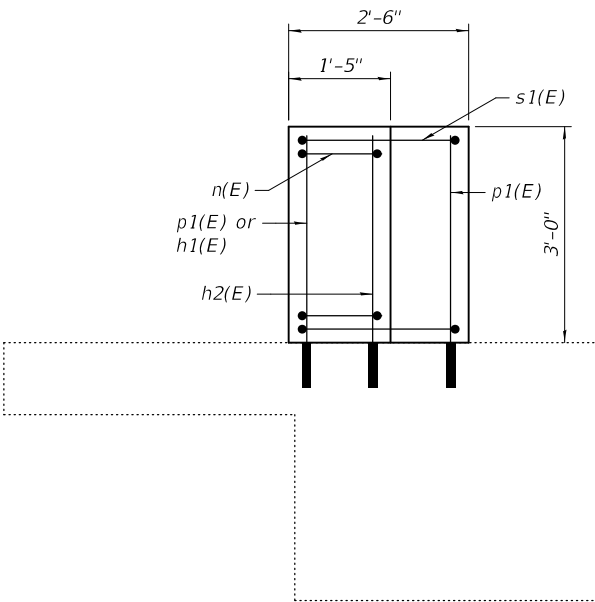
SHEET 25 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	29
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

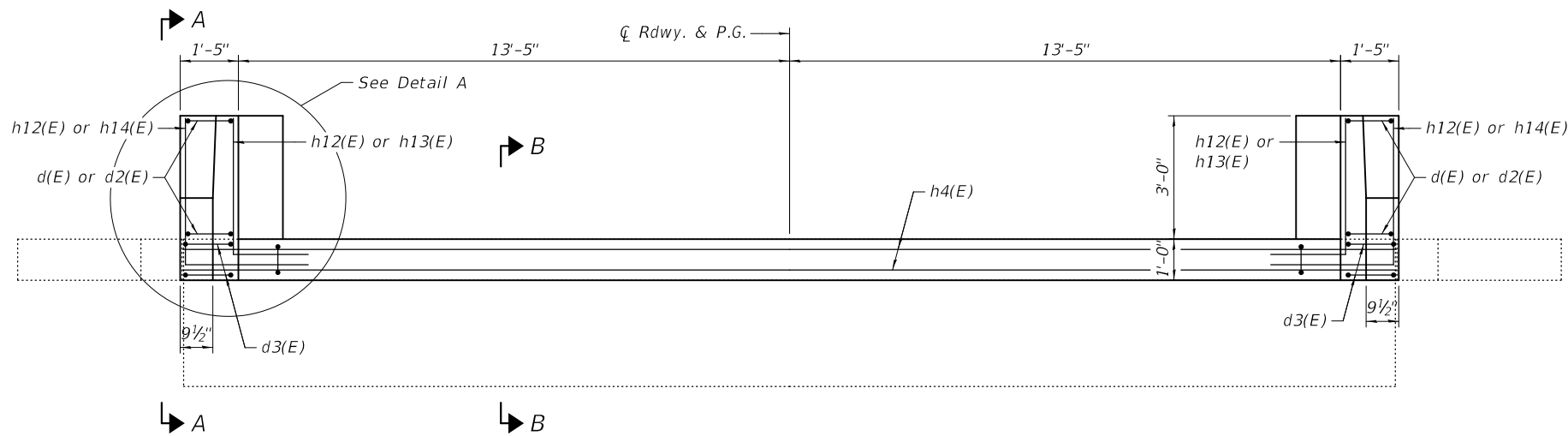
FEHR GRAHAM PROJECT NUMBER: 18-600



ELEVATION



DETAIL A



PLAN

Note:
Concrete sealer shall be applied to the abutment
seats and front face of the backwall.

See Sheet 27 of 44 for Sections A-A, B-B,
Bar Details and Bill of Material

MODEL: Default
FILE NAME: g:\vbl_ss4\1818-600\bridge\0343060-026-eabut.dgn

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

USER NAME = cconnor	DESIGNED - MCB	REVISED -
	CHECKED - RJM	REVISED -
PLOT SCALE = 4:0.000000 " = in.	DRAWN - MMY/CFC	REVISED -
PLOT DATE = 3/2/2020	CHECKED - MCB/RJM	REVISED -

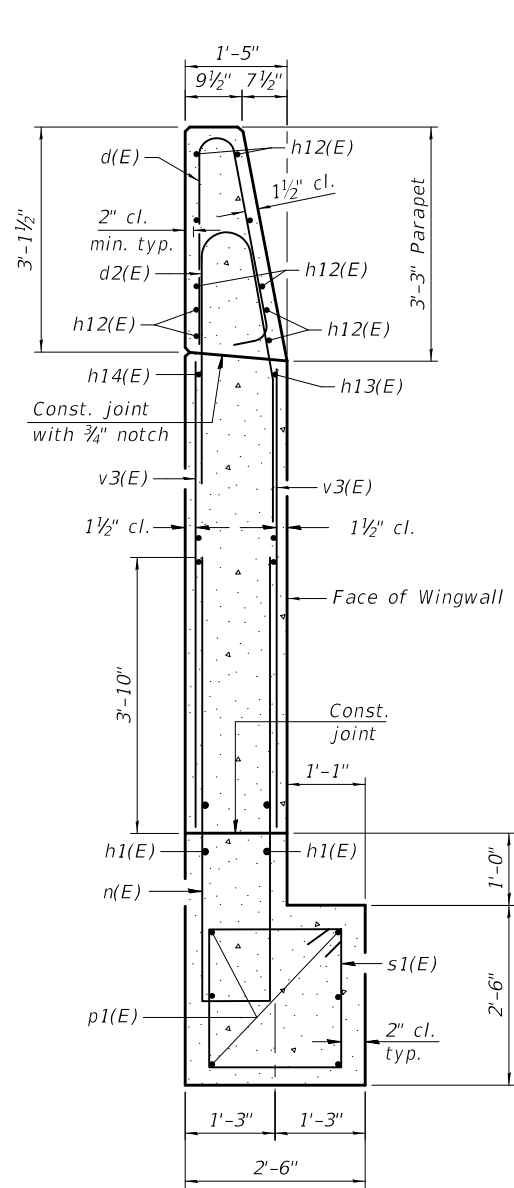
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT
STRUCTURE NO. 034-3060

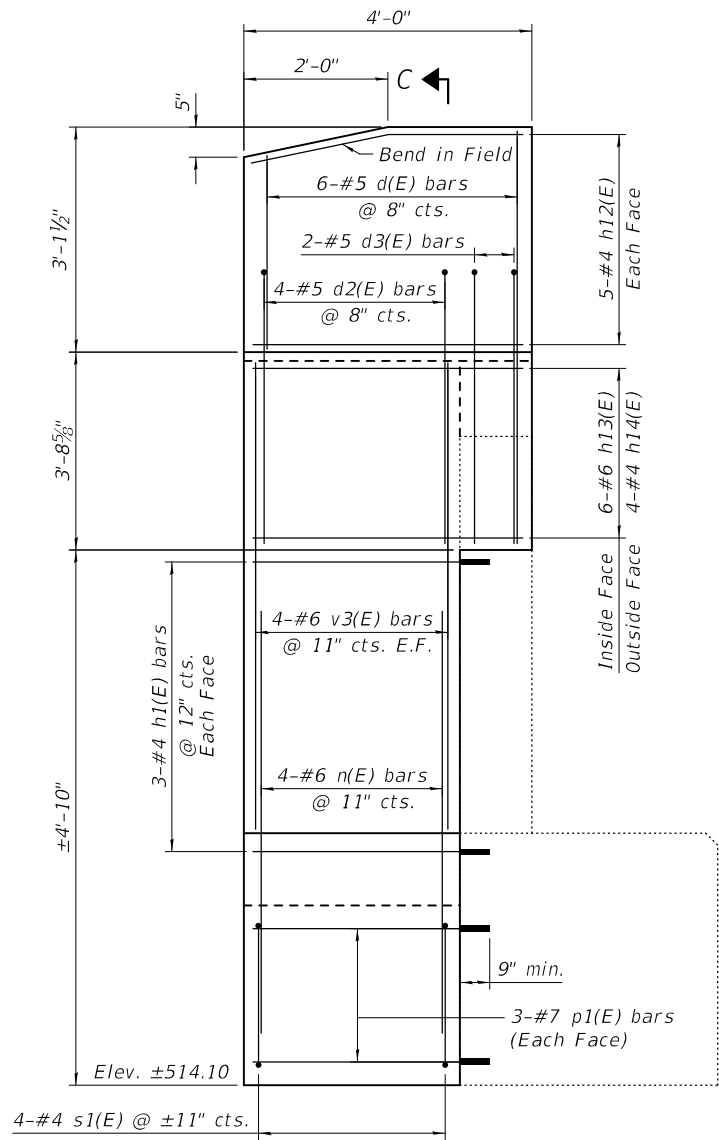
SHEET 26 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	30
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

FEHR GRAHAM PROJECT NUMBER: 18-600

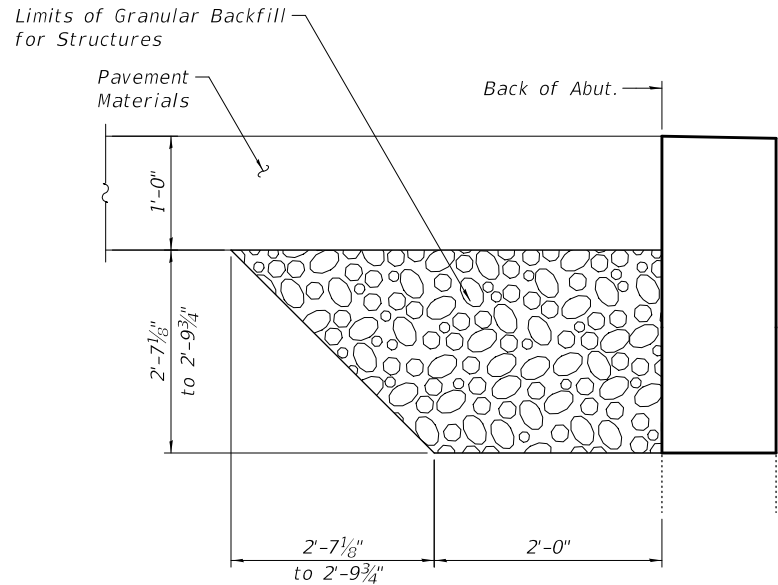


SECTION C-C



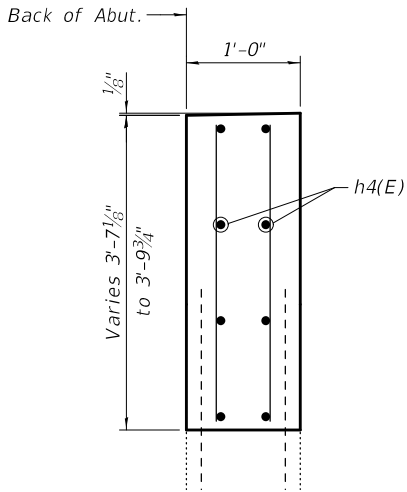
VIEW A-A

*Epoxy grout p1(E) and h1(E) in 9" min.
drilled holes according to Section 584
of the Standard Specifications.



SECTION B-B
(Showing Granular Backfill for Structures)

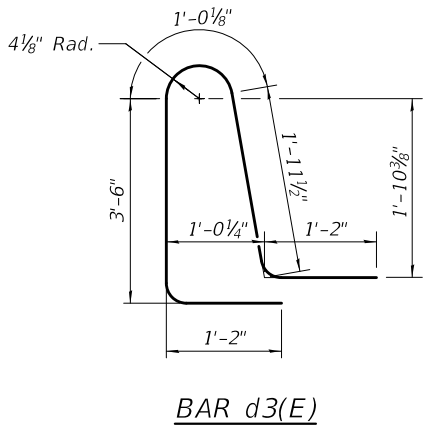
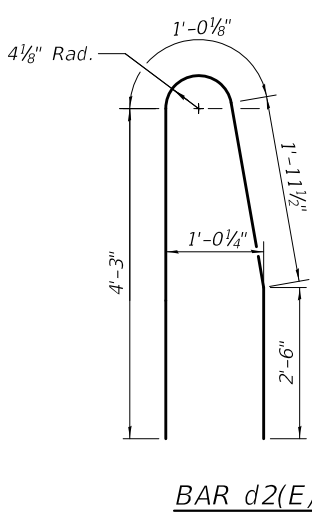
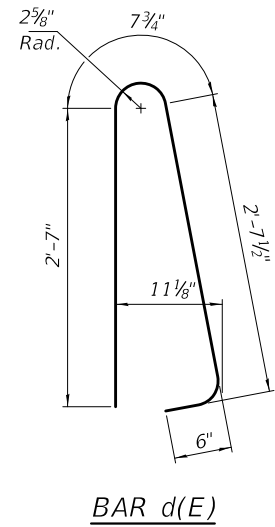
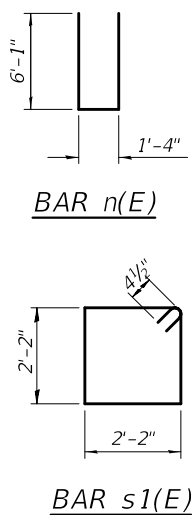
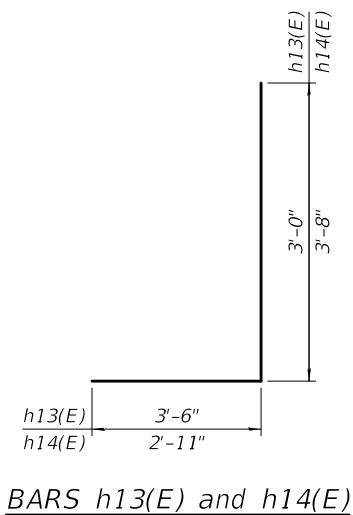
Note:
Granular Backfill for Structures
extends from face to face of
wingwalls behind abutment.



SECTION B-B
(Showing Reinforcement)

EAST ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	12	#5	6'-5"	
d2(E)	8	#5	9'-9"	
d3(E)	4	#5	8'-10"	
h1(E)	12	#4	3'-7"	
h4(E)	8	#6	29'-4"	
h12(E)	20	#4	3'-8"	
h13(E)	12	#6	6'-6"	
h14(E)	8	#4	6'-7"	
n(E)	8	#6	13'-6"	
p1(E)	12	#7	3'-7"	
s1(E)	8	#4	9'-5"	
v2(E)	60	#4	3'-4"	
v3(E)	16	#6	4'-9"	
Structure Excavation		Cu. Yd.	13	
Concrete Structures		Cu. Yd.	8.4	
Reinforcement Bars, Epoxy Coated		Pound	1330	
Concrete Sealer		Sq. Ft.	255	
Granular Backfill for Structures		Cu. Yd.	9	



USER NAME = cconnor	DESIGNED - MCB	REVISED -
	CHECKED - RJM	REVISED -
PLOT SCALE = 2:8.000000 " = 1"	DRAWN - MMY/CFC	REVISED -
PLOT DATE = 3/2/2020	CHECKED - MCB/RJM	REVISED -

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	31
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

MODEL: Default
FILE NAME: g:\v8\18-600\bridge\0343060-028-conc-repair-det.dgn

FEHR GRAHAM

ENGINEERING & ENVIRONMENTAL

ILLINOIS DESIGN FIRM NO. 184-003525

USER NAME = cconnor

PLOT SCALE = 0:2.0000 " = 1/8" / in.

PLOT DATE = 3/2/2020

DESIGNED - MCB

CHECKED - RJM

DRAWN - MMY/CFC

CHECKED - MCB/RJM

REVISED -

REVISED -

REVISED -

REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

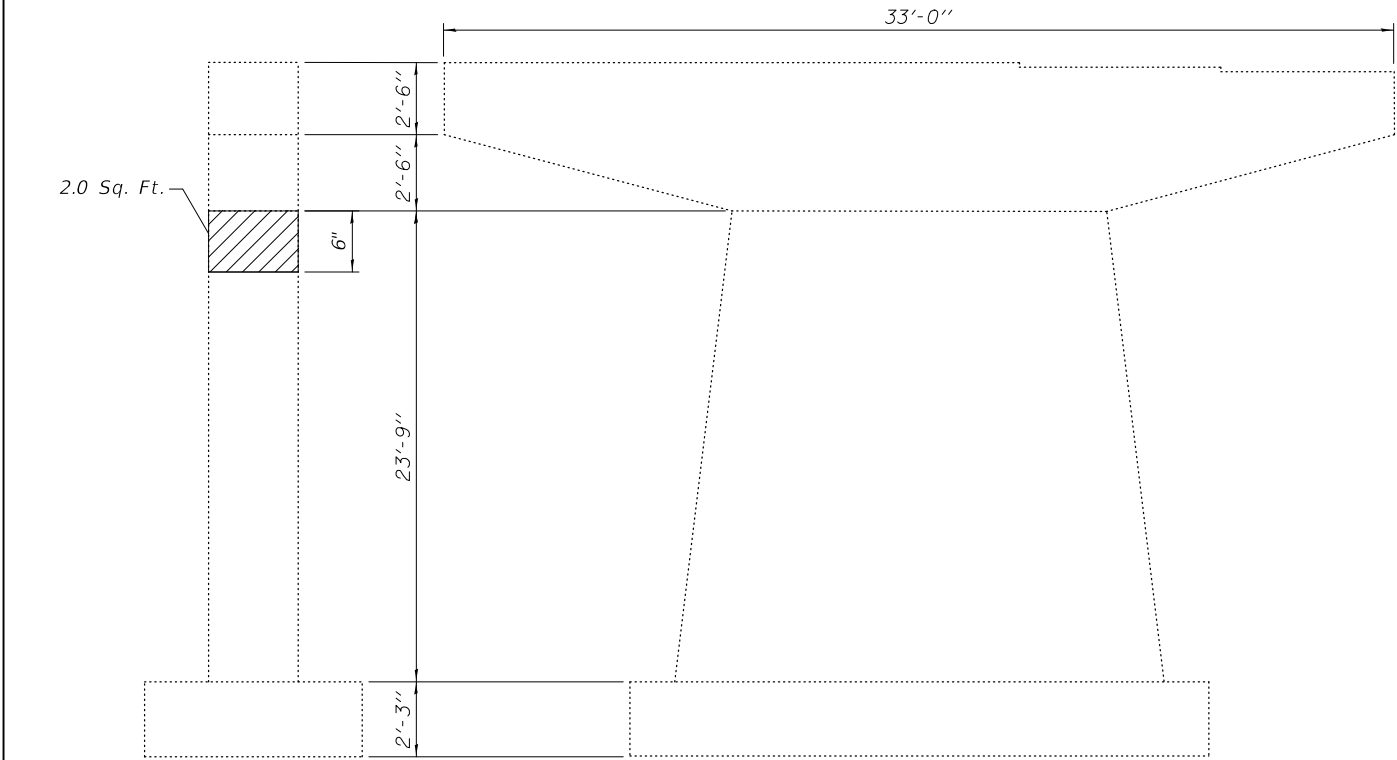
CONCRETE REPAIR DETAILS
STRUCTURE NO. 034-3060

SHEET 28 OF 44 SHEETS

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.	10.0

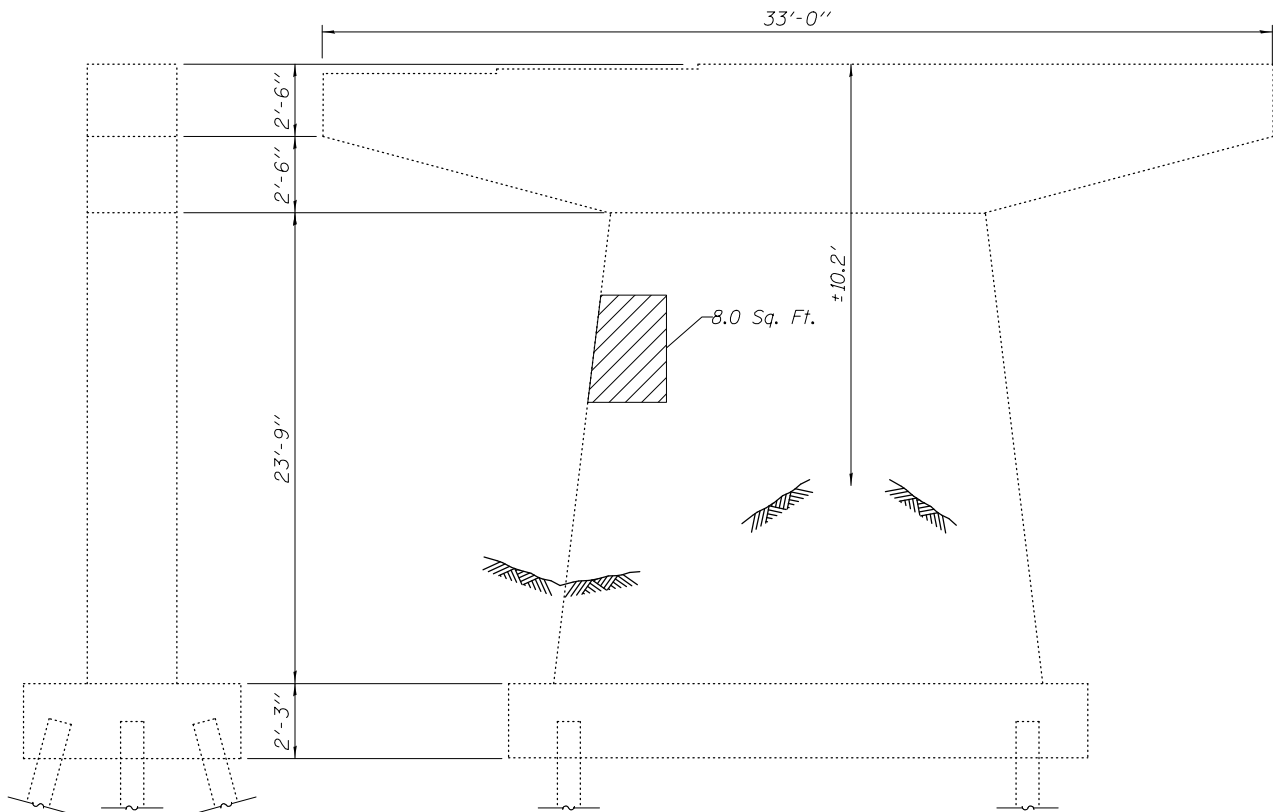
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	32
		CONTRACT NO. 93746		
		ILLINOIS FED. AID PROJECT		



SOUTH END

PIER 1 - WEST ELEVATION

(Looking E.)



PIER 2 - EAST ELEVATION

(Looking W.)

LEGEND

 Structural Repair of Concrete
(Depth Equal to or Less Than 5")

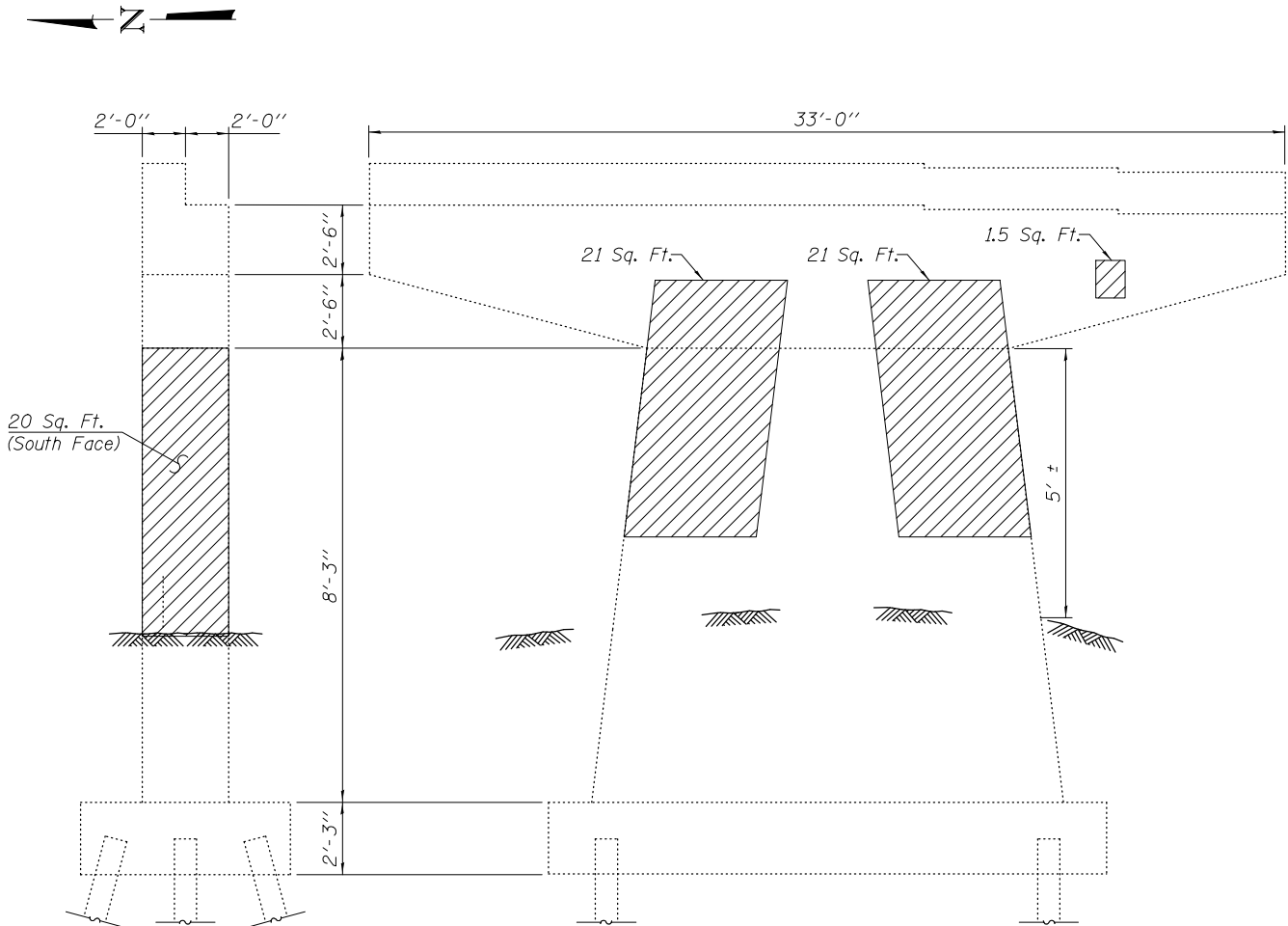
MODEL: Default
FILE NAME: g:\v8\18-600\bridge\0343060-029-conc-repair-det.dgn

USER NAME	=	cconnor
PLOT SCALE	=	0:2.0000 " = 1" / in.
PLOT DATE	=	3/2/2020

DESIGNED	-	MCB
CHECKED	-	RJM
DRAWN	-	MMY/CFC
CHECKED	-	MCB/RJM

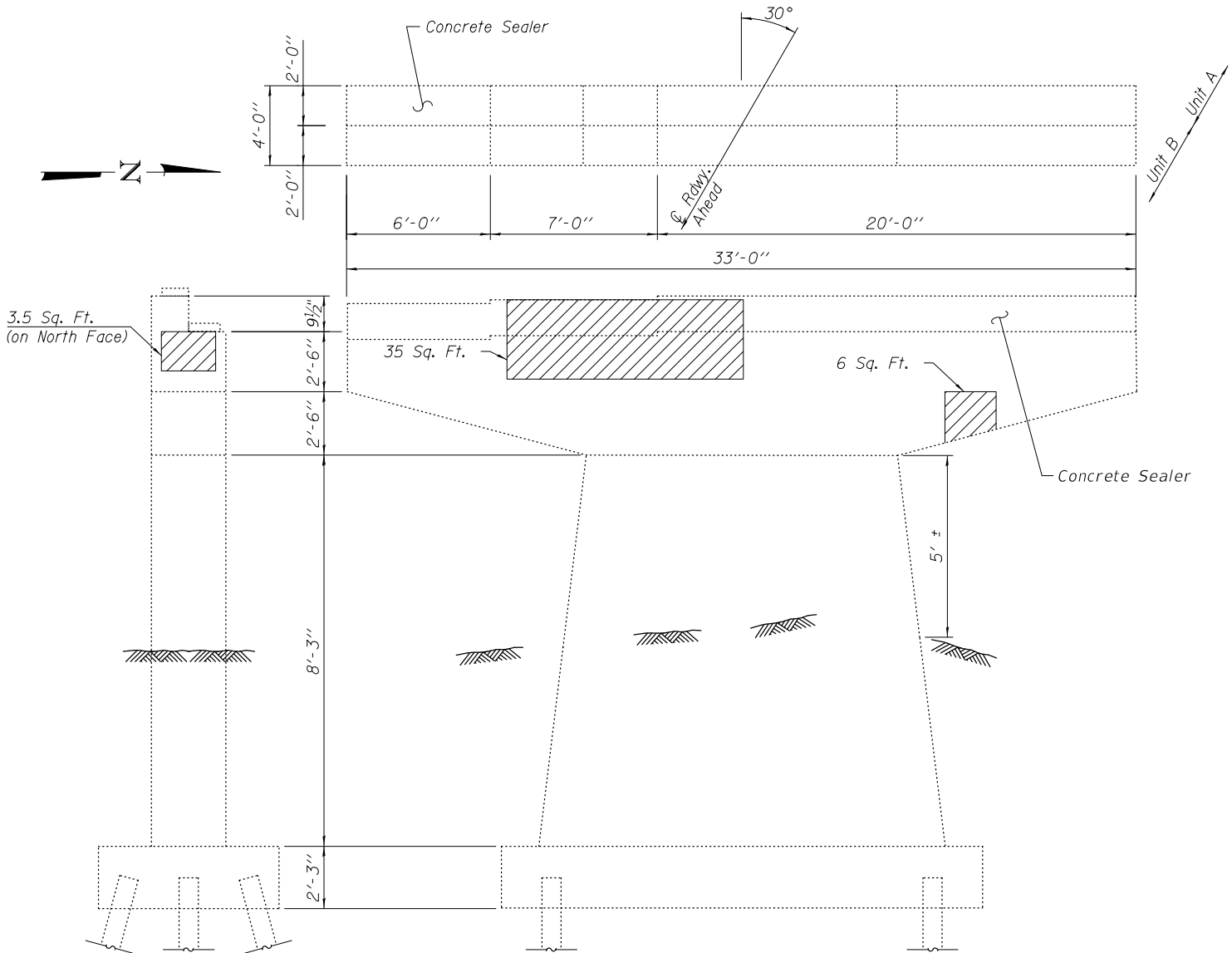
REVISED	-
REVISED	-
REVISED	-
REVISED	-

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	33
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				



PIER 3 - WEST ELEVATION

(Looking E.)



PIER 3 - EAST ELEVATION

(Looking W.)

LEGEND



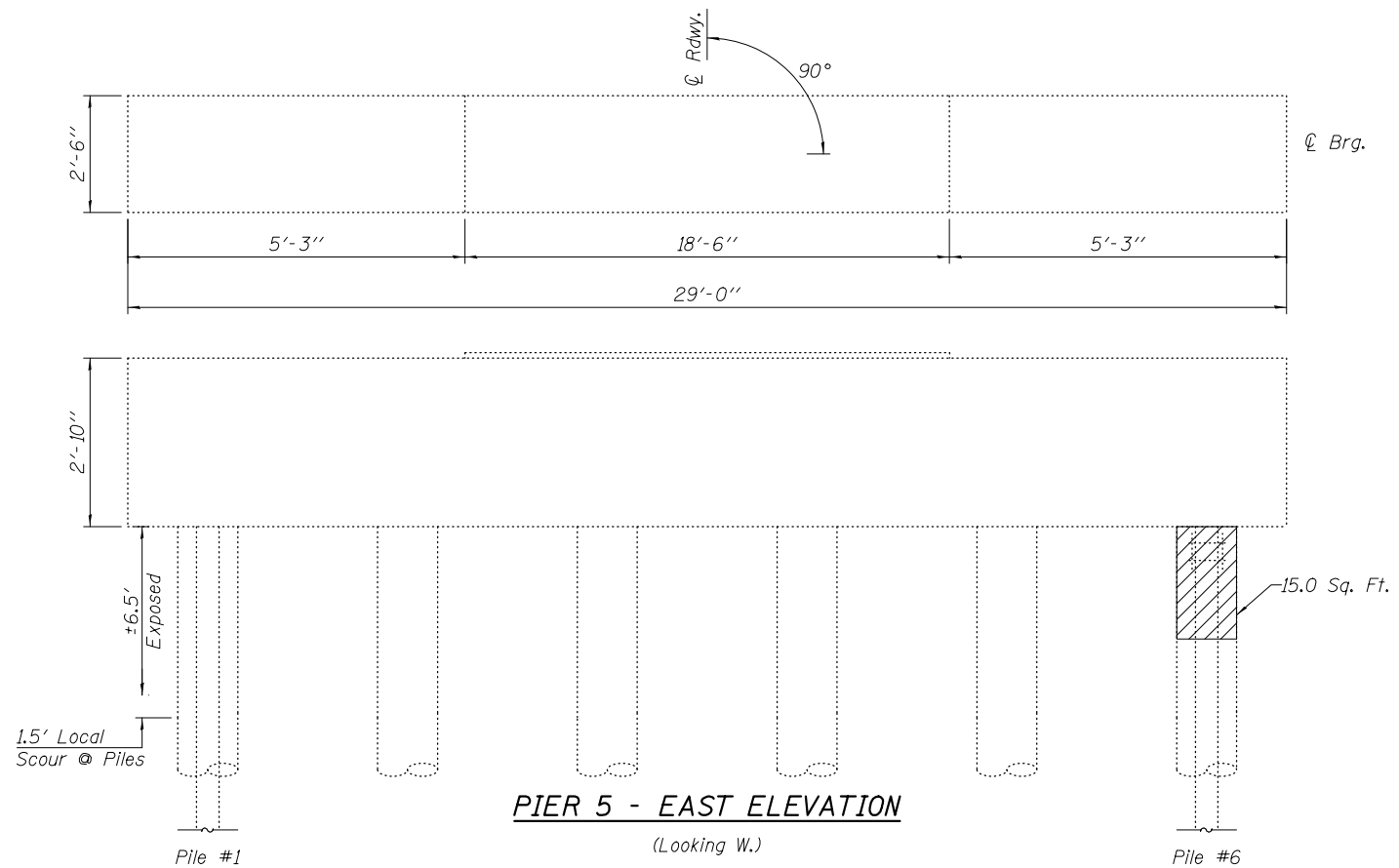
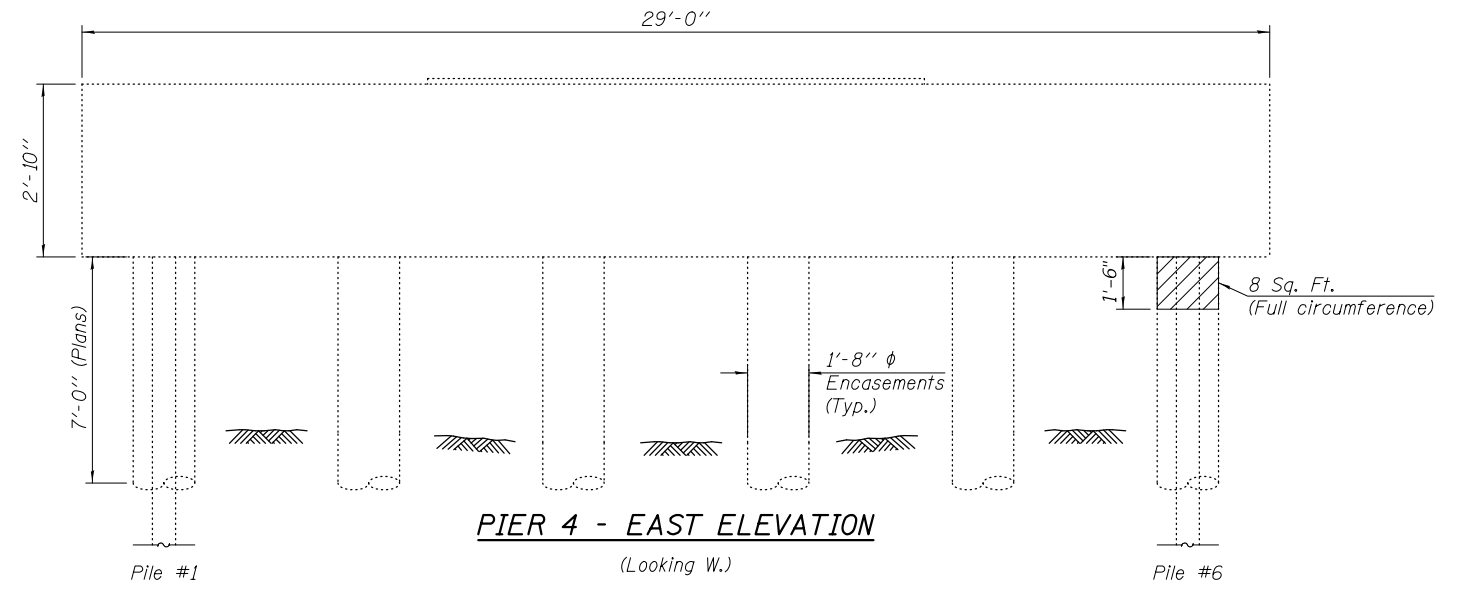
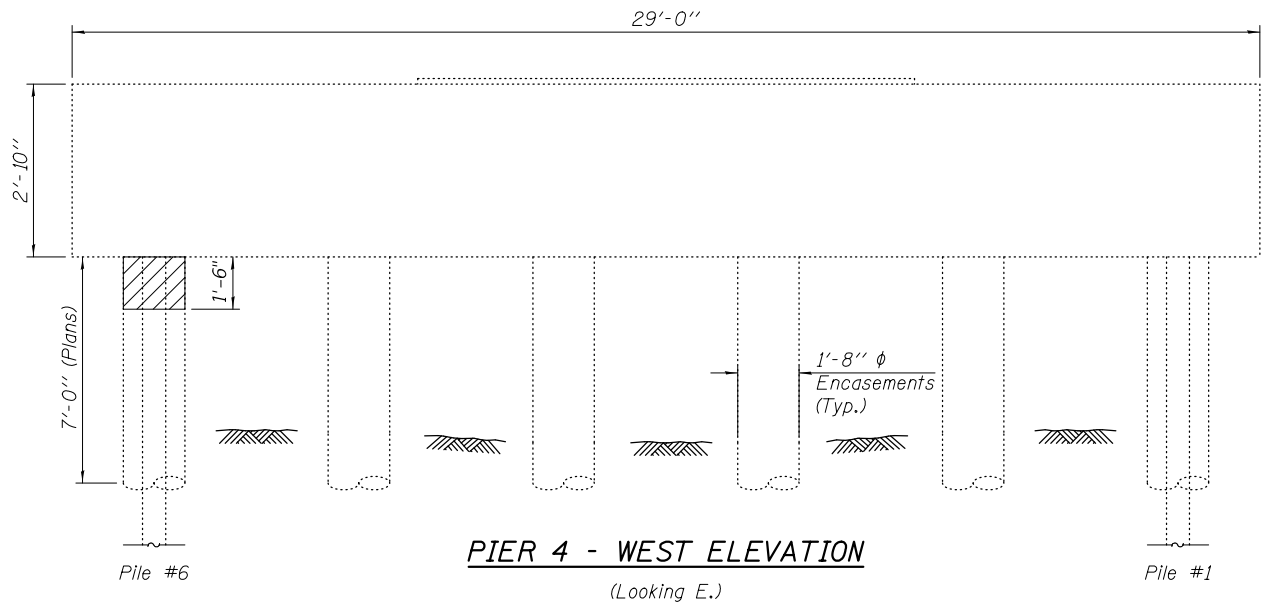
Structural Repair of Concrete
(Depth Equal to or Less Than 5")

Note;
Concrete Sealer shall be applied to
the top and step face of the pier cap.

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.	108
Concrete Sealer	Sq. Ft.	158

MODEL: Default
FILE NAME: g:\vbl_ss4\1818-600\bridge\0343060-030-conc-repair-det.dgn



LEGEND

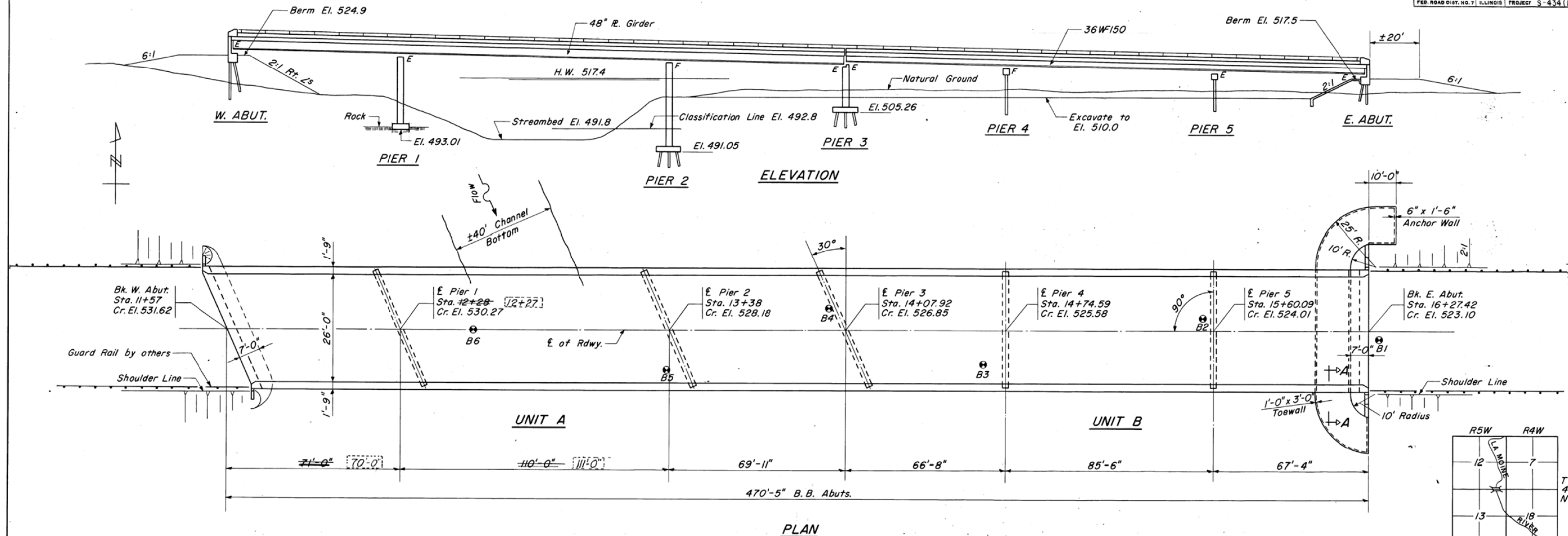
 Structural Repair of Concrete
(Depth Equal to or Less Than 5")

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.	23

B.M. - NW Corner of W. Abutment of existing bridge El. 523.11

F.A.S. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
434	41-B	HANCOCK	23	7
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT S-434 (101)				



NOTES

Class X Concrete shall be used throughout.
Coarse aggregate to be used in parapet handrails and end post must be free of chert, flint, limonite, lignite and soft sandstone.
The concrete floor slab shall be finished in accordance with Art. 51.19 of the Standard Specifications.
Slope Wall shall be reinforced with welded wire fabric 6" x 6" mesh, weighing 58 lbs. per 100 Sq. Ft.
Layout of slope walls may be varied to suit ground conditions in the field as directed by the Engineer.
All reinforcement bars shall be lapped 20 diameters unless otherwise shown.
All Structural Steel shall conform to ASTM Designation A-36.
All welding shall conform to the current specifications for welded Highway and Railway Bridges of the American Welding Society.
Rivets 3/4", open holes 13/16" unless otherwise noted.
Anchor bolts shall be set before riveting cross frames and diaphragms over supports.
All structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Art. 56.1 to 56.5 inclusive of the Standard Specifications.
Shop inspection of structural steel by Illinois Division of Highways before painting.
The Contractor shall drive three steel test piles. One at each Abutment and one at Pier 2 in permanent locations as directed by the Engineer before ordering the remainder of the piles.
All piles shall be driven to refusal.
The Contractor shall construct the embankment at abutments to the lines shown before driving piles.
Existing bridge to be removed by County.
Permanent forms will not be permitted in forming the concrete deck.
Excavation for portions of structure in the embankments shall not be classified.
FIELD WELDING OF CONSTRUCTION ACCESSORIES TO THE BOTTOM FLANGES OR FOR A DISTANCE OF 1/2 OF THE SPAN EACH WAY FROM PIER SUPPORTS ON THE TOP FLANGES OF BEAMS OR GIRDERS WILL NOT BE PERMITTED. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

WATERWAY INFORMATION

Drainage Area 383,360 Acres
Character Rolling, Wooded & Cultivated
Required Opening (20 Yr.) 4000 S.F.
Opening Provided 4000 S.F.

TOTAL BILL OF MATERIAL

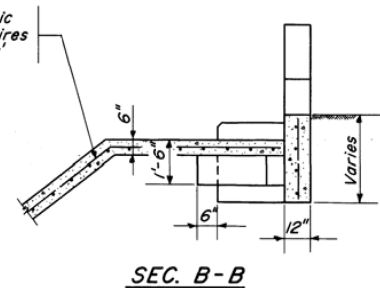
Item	Super.	Sub.	Total
* Class A Excavation for Structures	C.Y.	330.0	330.0
Class B Excavation for Structures	C.Y.	30.0	30.0
Class X Concrete	C.Y.	406.3	254.5
Structural Steel	Lbs.	437,360	437,360
Aluminum Handrail	L.F.	925	925
Reinforcement Bars	Lbs.	91,500	20,490
Steel Piles (8BP36)	L.F.	990	990
Test Piles Steel (8BP36)	Each	3	3
Steel Piles (10BP57)	L.F.	540	540
Slope Walls 6"	S.Y.		260
Protective Coat	S.Y.	1770	1770
Class X Concrete Encasement	C.Y.	11.8	11.8
Rock Excavation for Structures	C.Y.	4	4
Preformed Joint Sealer	L.F.	34	34
Name Plates	Each		1

* Includes Excavation for Slope Walls

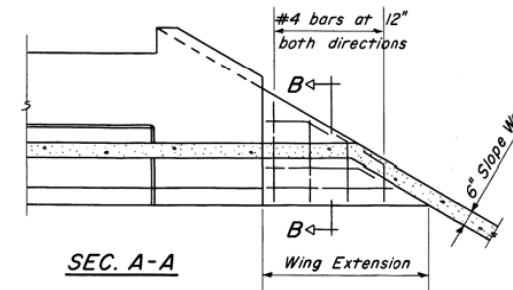
DESIGN STRESSES

$f_c = 1,400$ psi.
 $f_s = 20,000$ psi. (Reinf.)
 $f_s = 20,000$ psi. (Struct.)
 $v = 75$ psi. (Frgs.)
 $n = 10$
Allowable $\frac{1}{4}$ deflection $L/1000$

Welded wire fabric
6" x 6" Mesh #4 wires
Weight 58#/100a'



SEC. B-B



SEC. A-A

LA MOINE RIVER
BUILT 1966
F.A.S. RT. 434 SEC. 41-B
F.A. PROJ. S-434(101)
LOADING HS-15

NAME PLATE

See Standard 2113-1

LOADING HS15-44

FOR INFORMATION ONLY

GENERAL PLAN & ELEVATION
F.A. PROJ. S-434(101)
LA MOINE RIVER BRIDGE
F.A.S. RT. 434 SEC. 41-B
HANCOCK COUNTY
STA. 12+83

□ Indicates as revised due to a 1/8" error in constr. of pier #1.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 034-3060

SHEET 31 OF 44 SHEETS

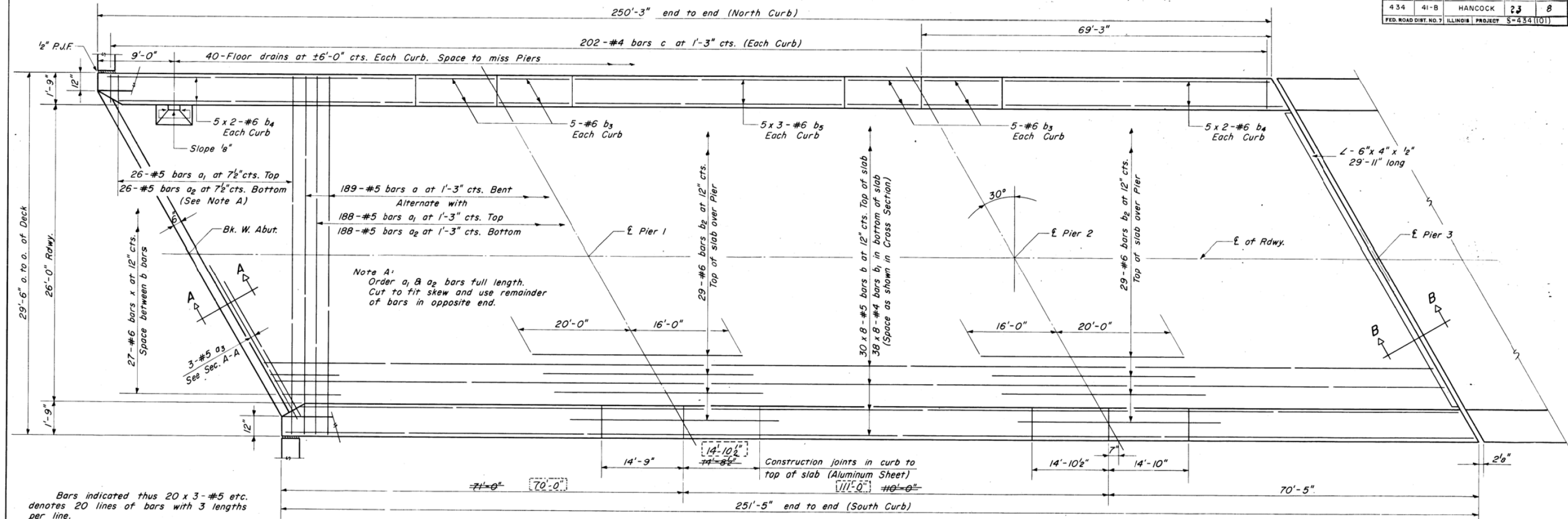
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	35
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

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

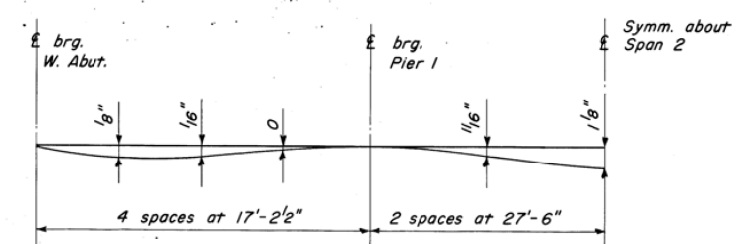
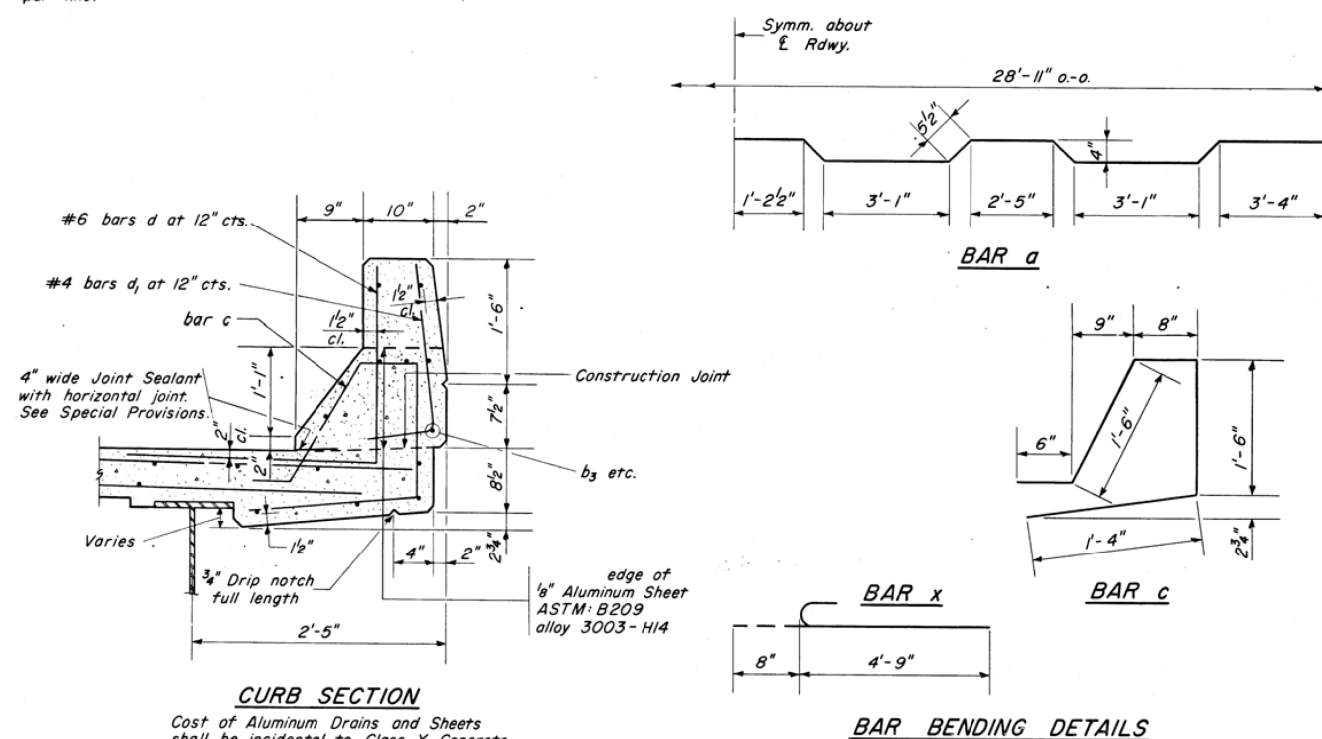
USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 0:2.000000 " = 1"	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

FEHR GRAHAM PROJECT NUMBER: 18-600

F.A.S. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
434	41-B	HANCOCK	23	8
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT S-434 (101)				



PLAN



DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only)

NOTES

The lengths and quantities of longitudinal reinforcement and Class X Concrete in parapets are not included in superstructure quantities. See sheet No. 14.
Typical Cross Section and Floor Drain Details, see Sheet No. 9.
For Section A-A, B-B and fillet details, see Sheet No. 10.
All dimensions on bar bending details are out to out.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	189	#5	29'-11"	~
a ₁	214	5	28'-9"	—
a ₂	214	5	27'-6"	—
a ₃	3	5	29'-9"	—
b	240	5	32'-6"	—
b ₁	304	4	32'-6"	—
b ₂	58	6	36'-0"	—
b ₃	40	6	14'-6"	—
b ₄	40	6	28'-6"	—
b ₅	30	6	27'-6"	—
c	404	4	5'-6"	~
x	27	6	5'-5"	~
Reinforcement Bars			Lbs	41,980
Structural Steel			Lbs	236,130
Class X Concrete			C.Y.	190.6

FOR INFORMATION ONLY

SLAB - UNIT A
F.A.S. RT. 434 SEC. 41-B
HANCOCK COUNTY
STA. 12+83

MODEL: Default
FILE NAME: g:\vbl_ssa\18118-600\bridge\0343060-031-044-ex-plan-info.dgn

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

USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 0:2.000000 " = 1"	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 034-3060

SHEET 32 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	36
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

FEHR GRAHAM PROJECT NUMBER: 18-600

MODEL: Default
FILE NAME: g:\vbl_ssa\1818-600\bridge\0343060-031-044-ex-plan-info.dgn

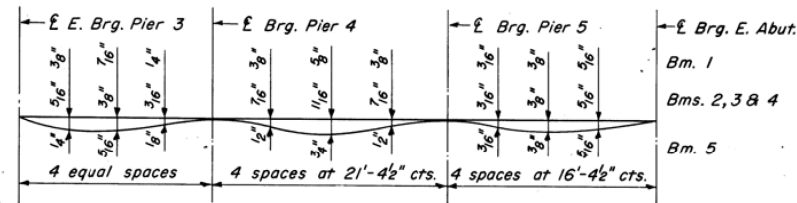
USER NAME =	cconnor	DESIGNED -	MCB	REVISED -	
PLOT SCALE =	0:2.000000 " = 1' / in.	CHECKED -	RJM	REVISED -	
PLOT DATE =	3/2/2020	DRAWN -	MMY/CFC	REVISED -	
		CHECKED -	MCB/RJM	REVISED -	

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	37
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

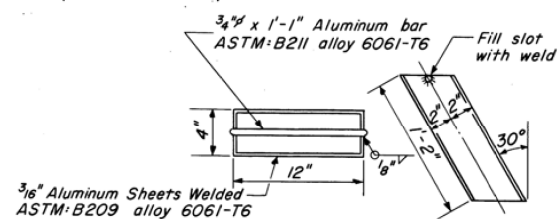
SLAB - UNIT B
F.A.S. RT. 434 SEC. 41-B
HANCOCK COUNTY
STA. 12+83

BILL OF MATERIAL				
Bar	No.	Size	Length	Shape
a	170	#5	29'-11"	
a ₁	169	5	28'-9"	
a ₂	169	5	27'-6"	
a ₄	28	5	30'-6"	
a ₅	3	5	25'-9"	
b ₆	210	5	33'-6"	
b ₇	266	4	33'-6"	
b ₈	58	6	26'-3"	
b ₉	30	6	32'-9"	
b ₁₀	10	6	24'-6"	
b ₁₁	40	6	10'-3"	
b ₁₂	20	6	28'-9"	
c	354	4	5'-6"	
x	27	6	5'-5"	
Reinforcement Bars			Lbs.	36,640
Structural Steel			Lbs.	201,030
Class X Concrete			C.Y.	167.1

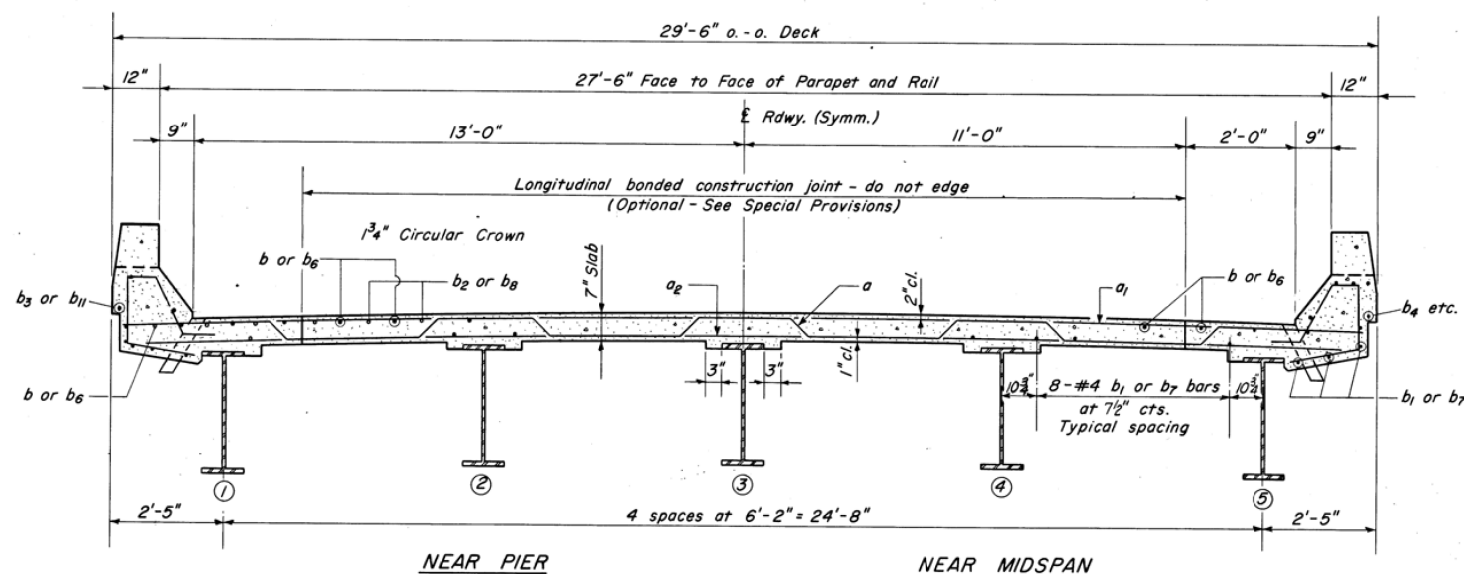
FOR INFORMATION ONLY



DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only)

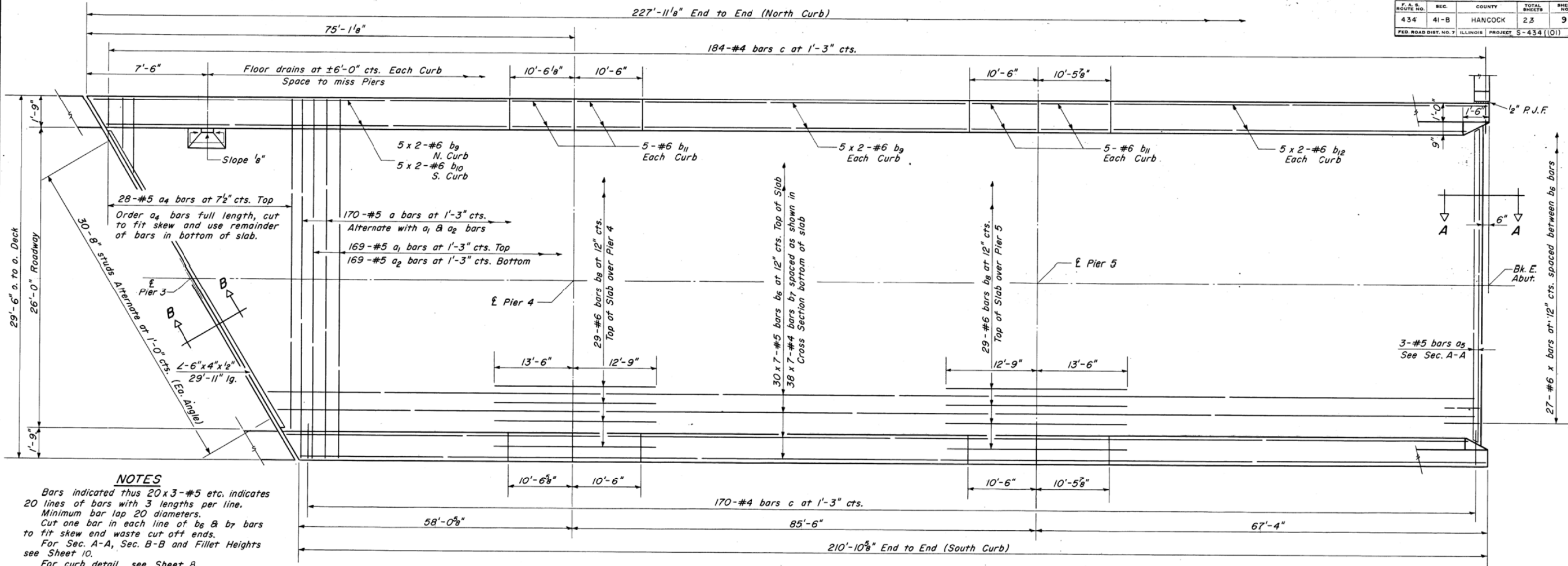


FLOOR DRAIN



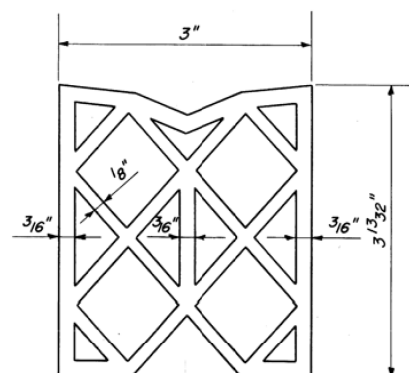
CROSS SECTION
Looking East

PLAN



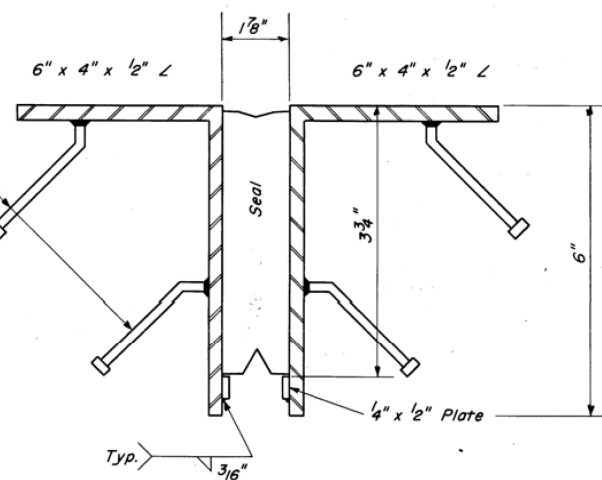
NOTES
Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line. Minimum bar lap 20 diameters. Cut one bar in each line of b₆ & b₇ bars to fit skew end waste cut off ends. For Sec. A-A, Sec. B-B and Fillet Heights see Sheet 10. For curb detail see Sheet 8.

F.A.S. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
434	41-B	HANCOCK	23	10
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	S-434 (101)	

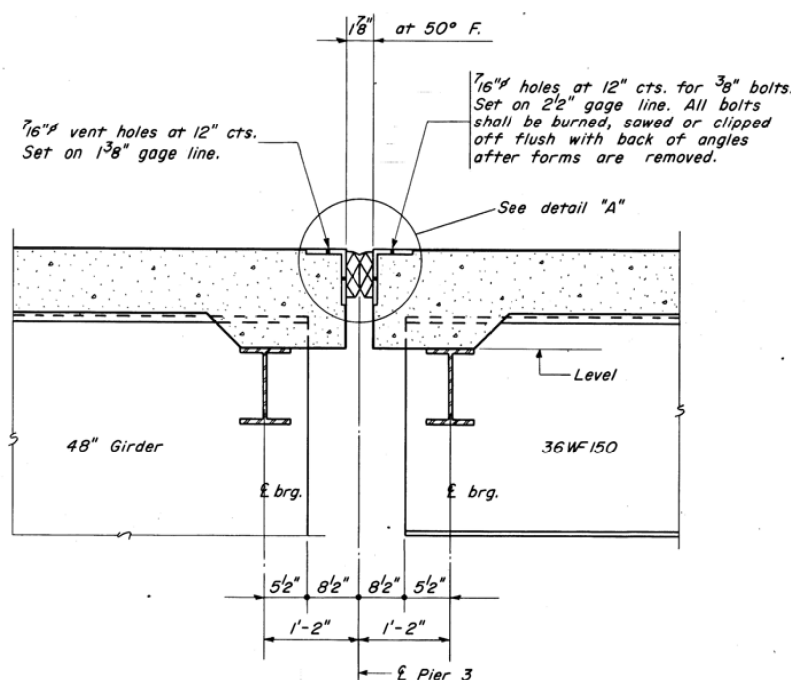


DETAIL PREFORMED ELASTIC JOINT SEALER

3/4" x 8" CR1120 STL granular or solid flux filled headed studs automatically end welded. Alternate at 12" cts.

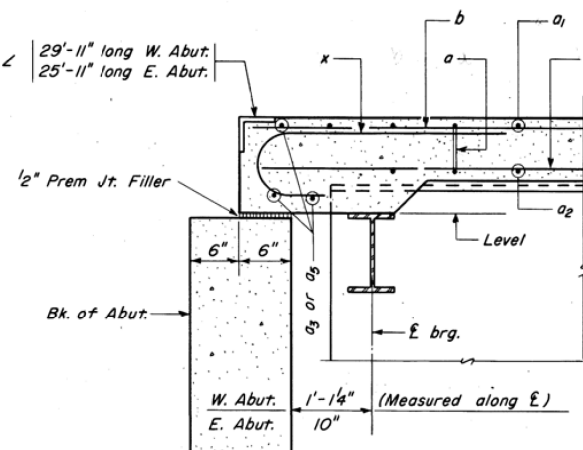


DETAIL "A"



SEC. B-B
(Reinforcement bars in slab not shown)

4" x 4" x 1/2" L 29'-11" long W. Abut. 25'-11" long E. Abut.



SEC. A-A

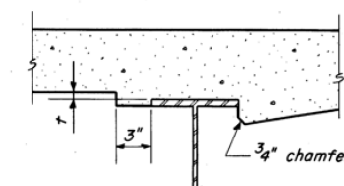
Details for holes, bolts and studs in end angle similar to Sec. B-B.

UNIT A
TABLE OF MOMENTS & REACTIONS
INTERIOR GIRDERS

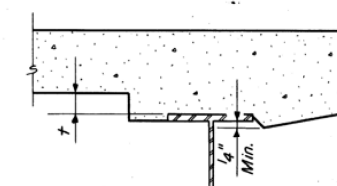
	MOMENT IN Ft.-kips			REACTIONS in kips	
	0.4 L ₁	Piers	0.5 L ₂	Abuts.	Piers
D. L.	205	921	594	21.2	102.6
L. L.	320	407	437	25.3	36.8
Imp.	83	98	92	6.6	8.8
Total	608	1426	1123	53.1	148.2

UNIT B
TABLE OF MOMENTS & REACTIONS
FOR BEAM 3

	MOMENT IN Ft.-kips			REACTIONS in kips	
	0.4 L ₁	Piers	0.5 L ₂	Abuts.	Piers
D. L.	271	605	312	24.0	84.4
L. L.	300	301	315	25.2	32.9
Imp.	78	75	87	6.3	8.2
Total	649	981	714	55.5	125.5



At Minimum Fillet



At Maximum Fillet

FILLET DETAILS

To determine "t", after all structural steel has been erected, elevations of top flanges of the beams and girders shall be taken at intervals not to exceed 10 ft. These elevations subtracted from the "Theoretical Grade Elevations adjusted for Dead Load Deflection", minus slab thickness, equals the fillet heights "t" above top of flange.

FOR INFORMATION ONLY

F.A.S. RT. 434 SEC. 41-B
HANCOCK COUNTY
STA. 12+83

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 034-3060

SHEET 34 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	38
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

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

USER NAME = cconnor	DESIGNED - MCB	REVISED -
CHECKED - RJM	REVISED -	
PLOT SCALE = 0:2.000000 " = 1"	DRAWN - MMY/CFC	REVISED -
PLOT DATE = 3/2/2020	CHECKED - MCB/RJM	REVISED -

FEHR GRAHAM PROJECT NUMBER: 18-600

MODEL: Default
FILE NAME: g:\vbl_ssa\1818-600\bridge\0343060-031-044-ex-plan-info.dgn

MODEL: Default
FILE NAME: g:\vbl_ssa\18118-600\bridge\0343060-031-044-ex-plan-info.dgn

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

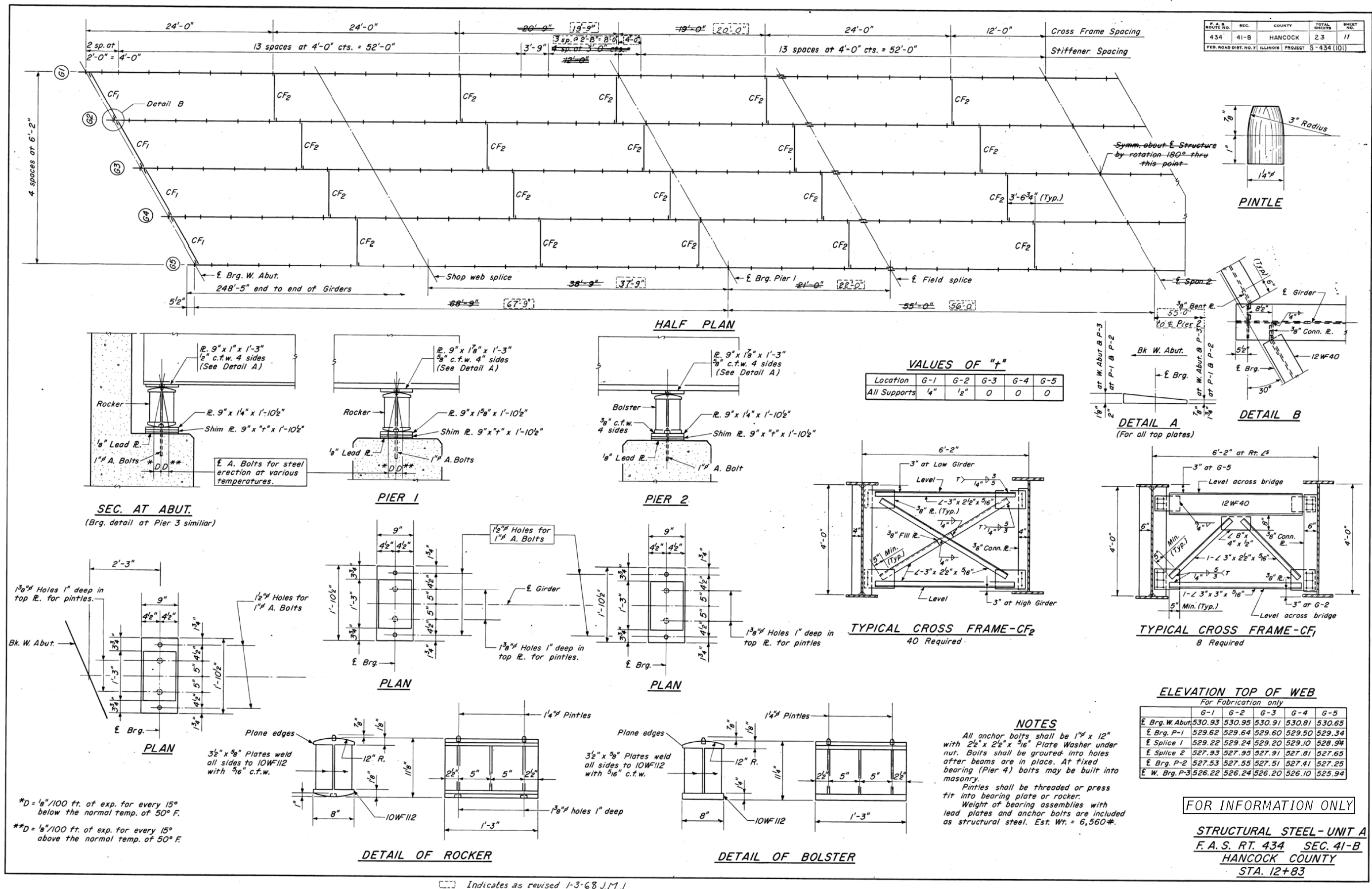
USER NAME =	cconnor	DESIGNED -	MCB	REVISED -	
PLOT SCALE =	0:2.000000 " = 1' / in.	CHECKED -	RJM	REVISED -	
PLOT DATE =	3/2/2020	DRAWN -	MMY/CFC	REVISED -	
		CHECKED -	MCB/RJM	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 034-3060

SHEET 35 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	39
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				



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

USER NAME =	cconnor	DESIGNED -	MCB	REVISED -	
PLOT SCALE =	0:2.000000 " = 1' / in.	CHECKED -	RJM	REVISED -	
PLOT DATE =	3/2/2020	DRAWN -	MMY/CFC	REVISED -	
		CHECKED -	MCB/RJM	REVISED -	

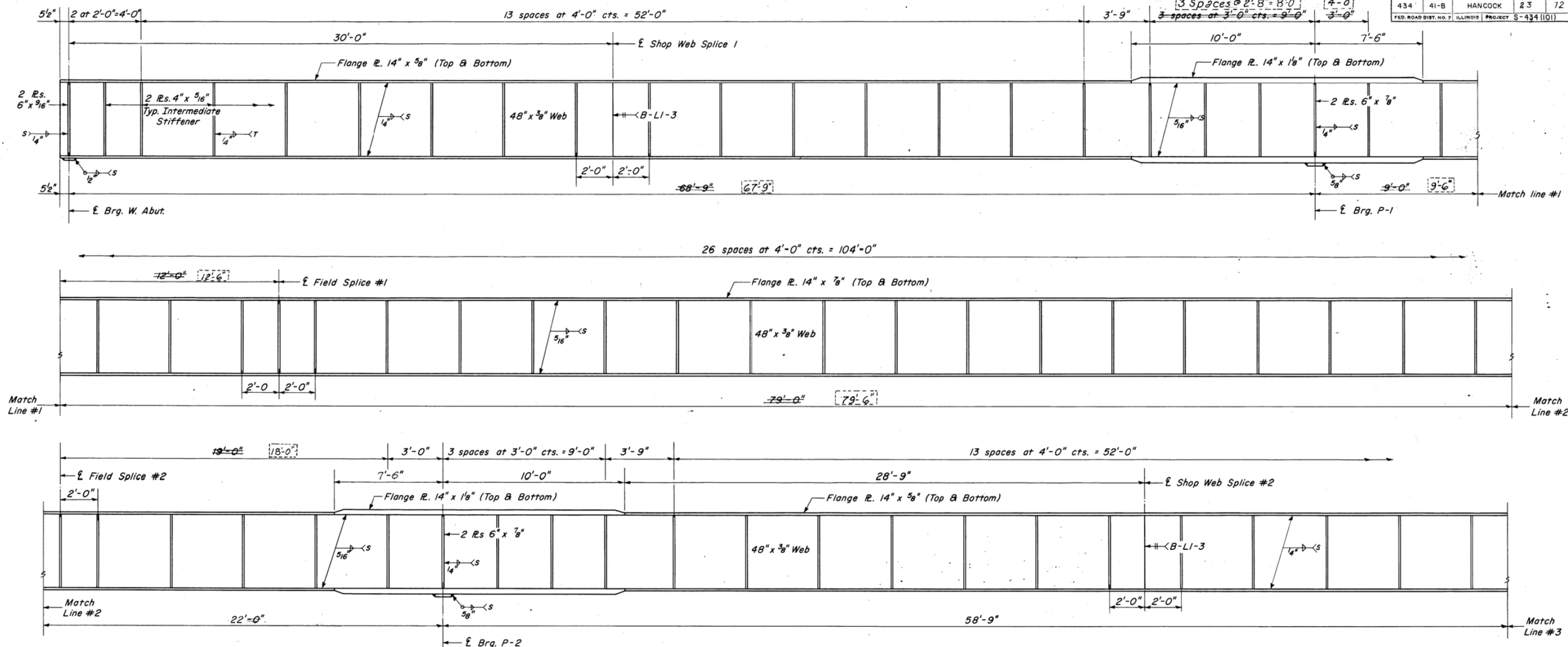
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 034-3060

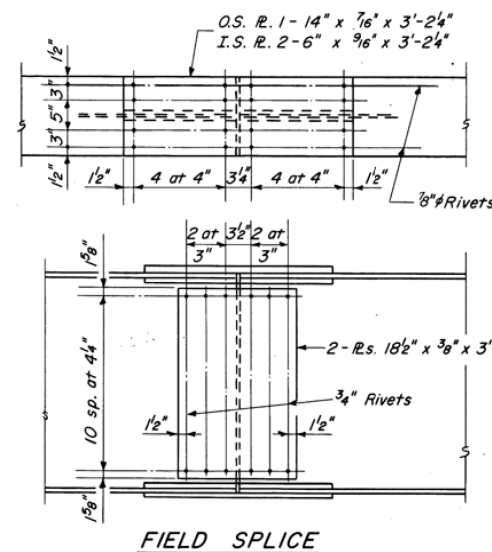
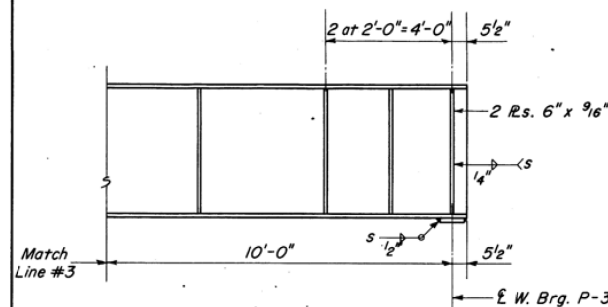
SHEET 35 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	39
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

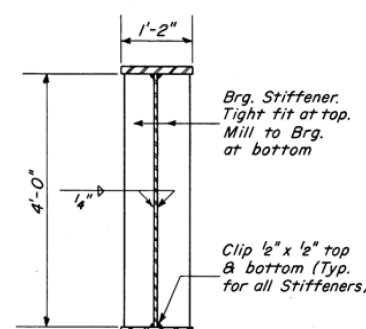
F.A.S. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
434	41-B	HANCOCK	23	72
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	S-434 (101)	



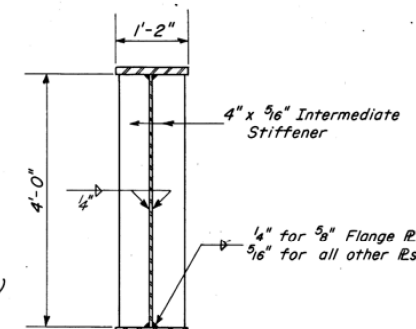
ELEVATION



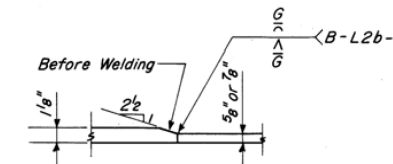
FIELD SPLICE



SEC. AT BRGS.



TYPICAL SEC.



SHOP FLANGE SPLICE

FOR INFORMATION ONLY

For welding Designations & Details see AWS Spec's. D2.0-66
Contact surface of splice material shall be free of all oil & paint.
Work this sheet with Sheet #7.
Intermediate stiffeners within 18'-0" either side of Brg. at Piers if 2 shall be tight fit at bottom & 3/8" undercut at top. All other intermediate stiffeners shall be tight fit at top & 5/8" undercut at Bottom.

GIRDER DETAILS
F.A.S. RT. 434 SEC. 41-B
HANCOCK COUNTY
STA. 12+83

Indicates as revised 1-3-68 J.M.J.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 034-3060

SHEET 36 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	40
		CONTRACT NO. 93746		
		ILLINOIS FED. AID PROJECT		

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

USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 0:2.000000 " = 1"	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

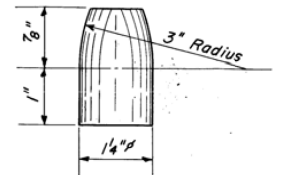
FEHR GRAHAM PROJECT NUMBER: 18-600

MODEL: Default
FILE NAME: g:\v8\18-600\bridge\0343060-031-044-ex-plan-info.dgn

F. A. S. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
434	41-B	HANCOCK	23	13
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT S-434(10)		

TABLE OF BEAM LENGTH

Bm. 1	Bm. 2	Bm. 3	Bm. 4	Bm. 5
224'-62"	220'-11 1/4"	217'-5"	213'-10 1/4"	210'-3 1/2"



PINTLE

NOTES

All Anchor Bolts shall be 1" x 12" with 2 1/2" x 2 1/2" x 3/16" Plate Washer under nut. Bolts shall be grouted into drilled holes after beams are in place. At fixed bearing (Pier 4) bolts may be built into masonry.
Pintles shall be threaded or press fit into bearing plate or rocker.
Weight of bearing assemblies with lead plates and anchor bolts are included as structural steel.
Est. Wt. = 5,830 lbs.

ELEVATION TOP OF WF

(For Fabrication only)

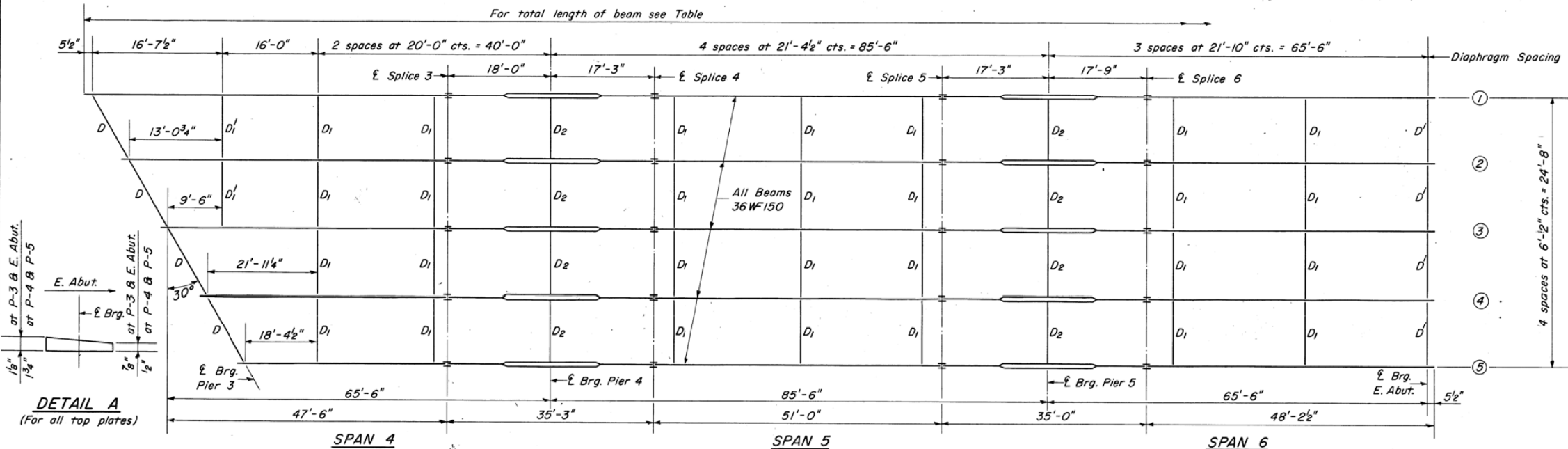
	Bm. 1	Bm. 2	Bm. 3	Bm. 4	Bm. 5
E. Brg. P-3	526.20	526.22	526.18	526.08	525.93
E. Splice 3	525.16	525.25	525.28	525.25	525.16
E. Brg. P-4	524.82	524.91	524.94	524.91	524.82
E. Splice 4	524.49	524.58	524.61	524.58	524.49
E. Splice 5	523.52	523.61	523.64	523.61	523.52
E. Brg. P-5	523.25	523.34	523.37	523.34	523.25
E. Splice 6	522.98	523.07	523.10	523.07	522.98
E. Brg. E. Abut.	522.42	522.51	522.54	522.51	522.42

VALUE OF "t"

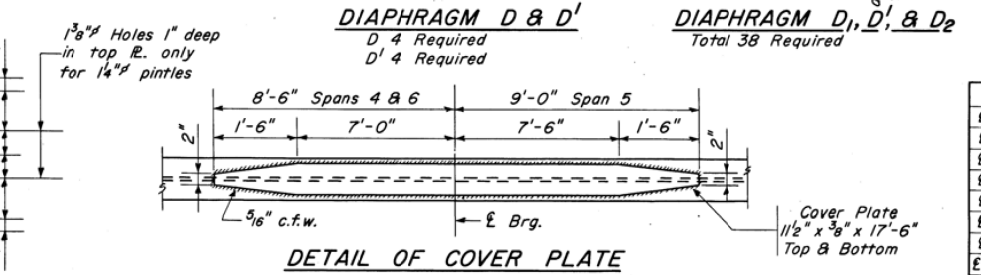
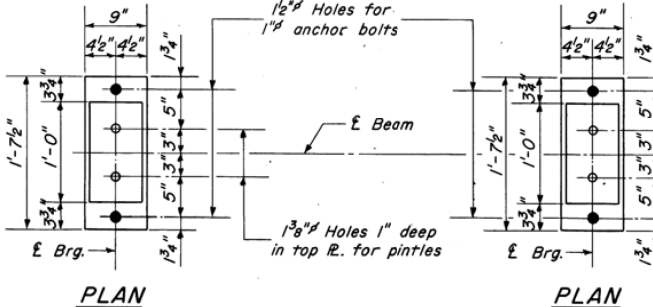
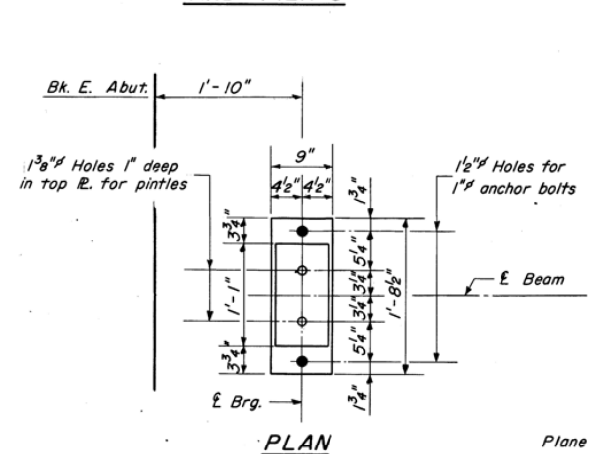
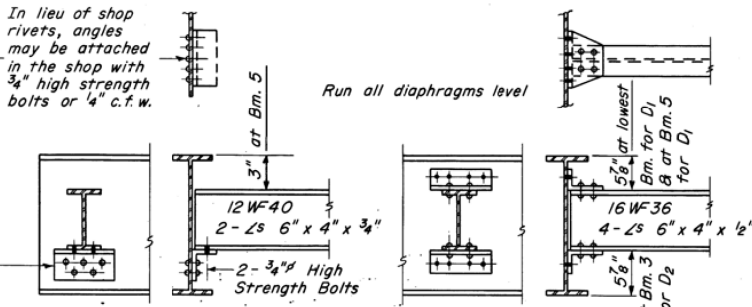
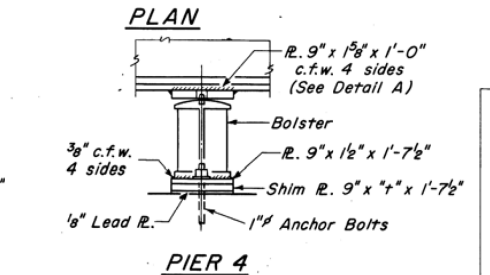
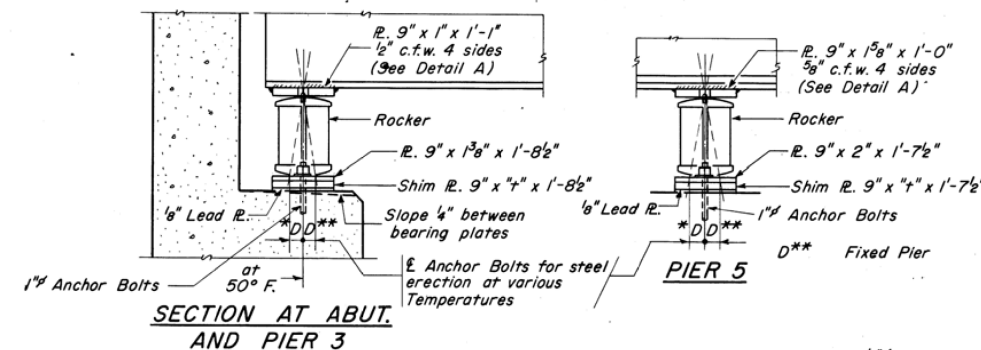
	Bm. 1	Bm. 2	Bm. 3	Bm. 4	Bm. 5
E. Brg. P-3	1/4"	1/2"	0	0	0
All other support	0	0	3/8"	0	0

FOR INFORMATION ONLY

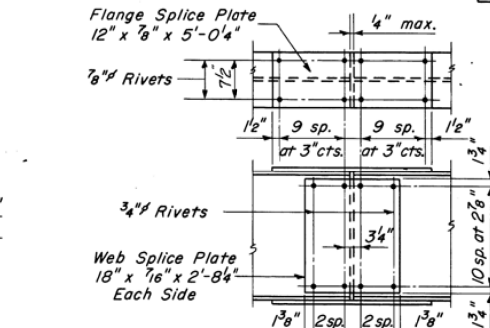
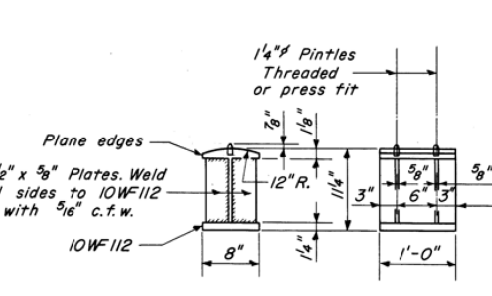
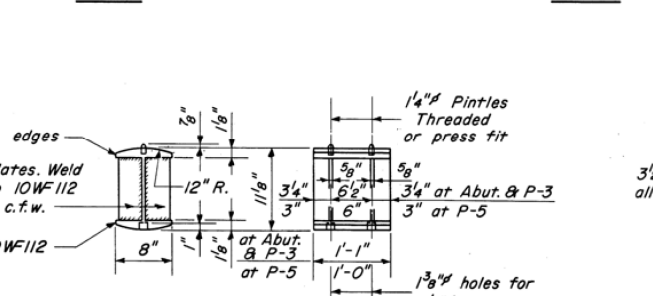
STRUCTURAL STEEL-UNIT B
F.A.S. RT. 434 SEC. 41-B
HANCOCK COUNTY
STA. 12+83



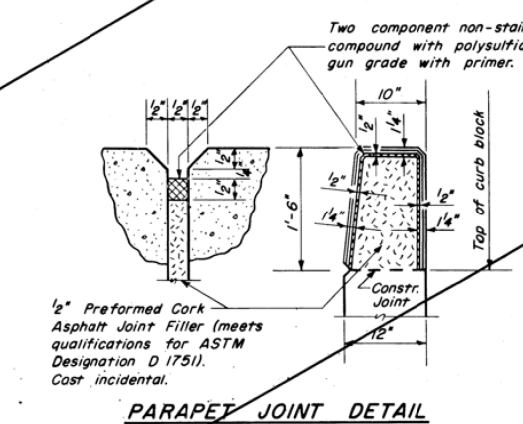
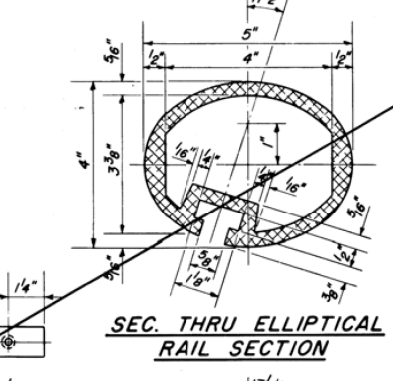
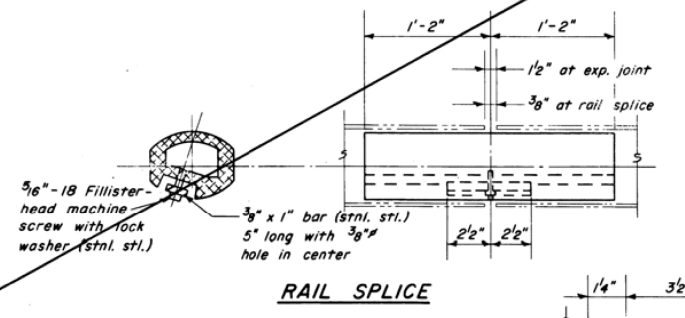
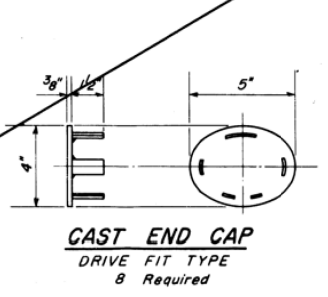
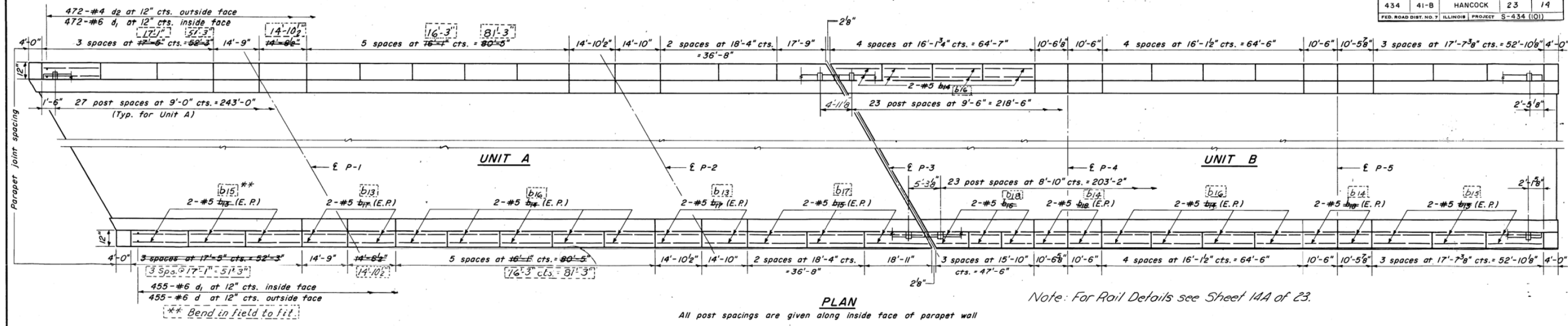
DETAIL A
(For all top plates)



*D = 1/8" / 100 ft. of exp. for every 15° below the normal temp. of 50°.
**D = 1/8" / 100 ft. of exp. for every 15° above the normal temp. of 50°.



F.A.S. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
434	41-B	HANCOCK	23	14
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT S-434 (101)				

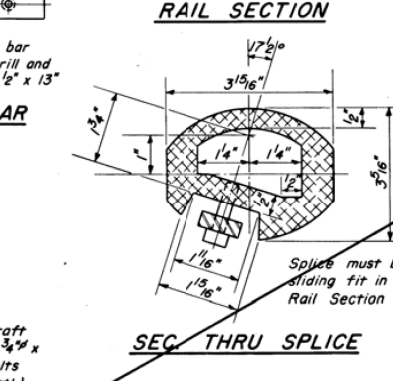
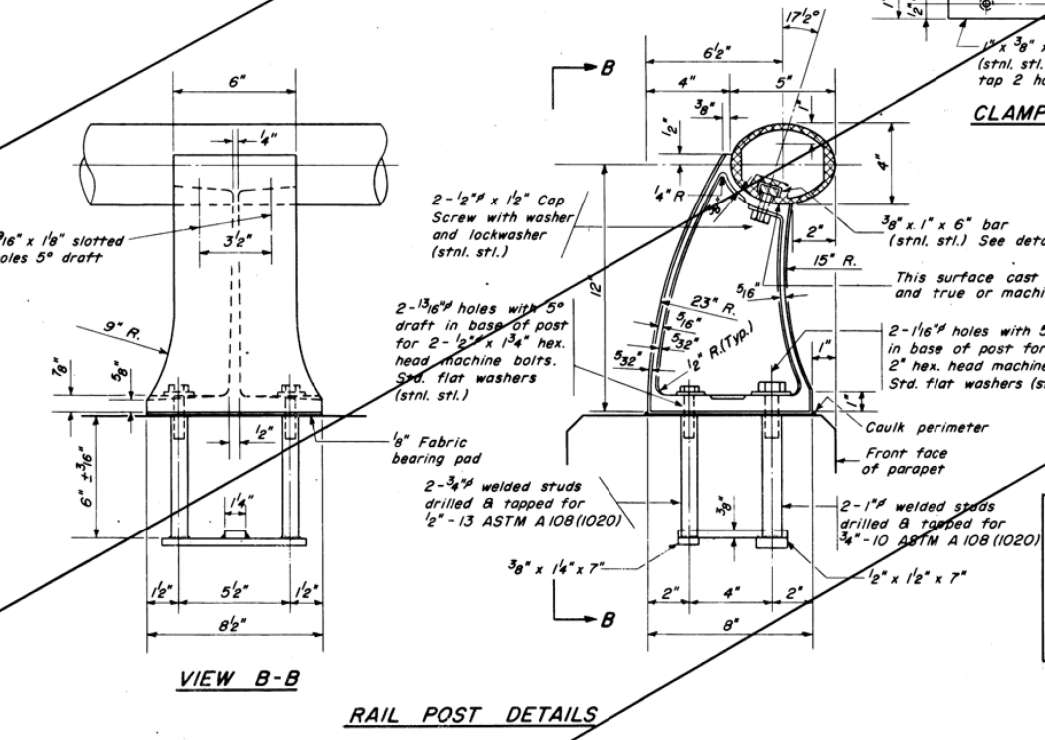


NOTES

All Posts shall be normal to parapet.

All Aluminum Alloy Extruded Rail shall conform to ASTM Specification B-221 alloy 6061-T6, and shall extend a minimum of 2 panel lengths (attached to minimum of 3 posts) except at ends or at open joints where a minimum of 1 panel length is required. All joints in railing must be spliced per detail.

See Special Provisions for following Material Specifications:
Cast Aluminum Alloy Bridge Post - Alloy 344-T4.
Stainless Steel Bars, Cap Screws, Washers, Lockwashers and Fabric Bearing Pads.



HANDRAIL BILL OF MATERIAL

Bar	No.	Size	Length
b13	32	#5	14'-6"
b14	32	5	10'-3"
b15	48	5	17'-2"
b16	88	5	15'-9"
b17	24	5	18'-0"
b18	12	5	15'-7"
d1	927	6	5'-2"
d2	927	4	2'-9"
e1	16	5	3'-1"
e2	16	5	3'-5"
e3	24	5	3'-9"
Class X Concrete			C.Y. 48.6
Reinforcement Bars			Lbs. 12,880
Aluminum Handrail			L.F. 925

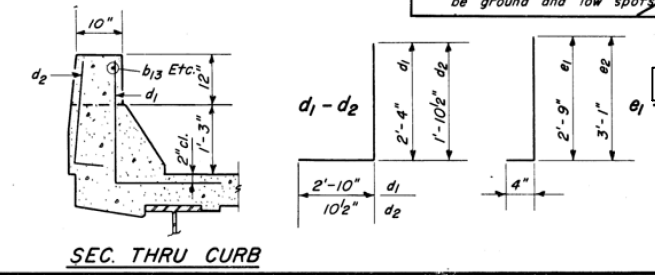
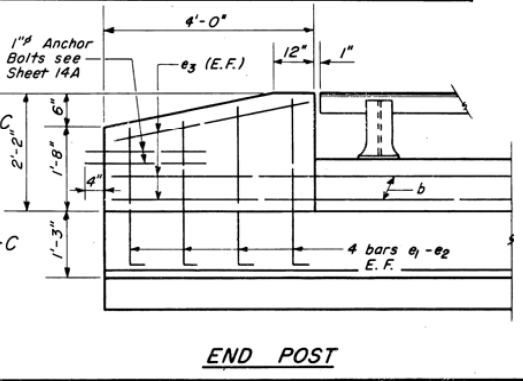
METHOD of MEASUREMENT Aluminum handrail shall be measured in lineal feet. The length paid for shall be the over all length along the top longitudinal railing member thru all posts and gaps.

BASIS of PAYMENT Aluminum handrail shall be paid for at the contract unit price per lineal foot for ALUMINUM HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation, and erection.

Cost of rail splice, and caps, and hardware to be incidental to item ALUMINUM HANDRAIL.

Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers gun grade with primer.

Provide 1-1/8" and 2-1/8" Aluminum shims for 25% of the Posts. Rail element shall be parallel to grade - high spots shall be ground and low spots shimmed.



FOR INFORMATION ONLY

ALUMINUM HANDRAIL
F.A.S. RT. 434 SEC. 41-B
HANCOCK COUNTY
STA. 12+83

Indicates as revised 1-3-68

MODEL: Default
FILE NAME: g:\vbl_ssa\18118-600\bridge\0343060-031-044-ex-plan-info.dgn
FEHR GRAHAM PROJECT NUMBER: 18-600

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

USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 0:2.000000 " = 1' / in.	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

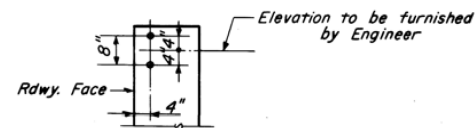
EXISTING PLANS
STRUCTURE NO. 034-3060
SHEET 38 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	42
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R. & L. P. 1-S. 434	41-B	Hancock	23	14A
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

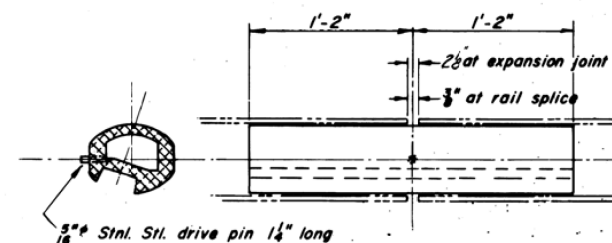
SHEET NO.

SHEETS



VIEW C-C

Note: For Rail Post Spacing see Sheet 14 of 23.



RAIL SPLICE



INSIDE VIEW AT ABUT

All Posts shall be normal to parapet.

All Aluminum Alloy Extruded Rail shall conform to ASTM specification B-221 alloy 6061-T6 and shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.

*All joints in rail shall be spliced per detail.
See Special Provisions for following Material Specifications:*

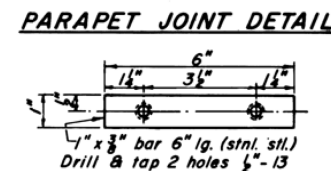
Cast Aluminum Alloy Bridge Post—Alloy A344-T4.
Stainless Steel Bars, Cap Screws, Washers and Lockwashers.
Fabric Bearing Pad.

METHOD of MEASUREMENT: Aluminum handrail shall be measured in lineal feet. The length paid for shall be the over all length along the top longitudinal railing member thru all posts and gaps.

BASIS of PAYMENT: Aluminum handrail shall be paid for at the contract unit price per lineal foot for ALUMINUM HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation, and erection.

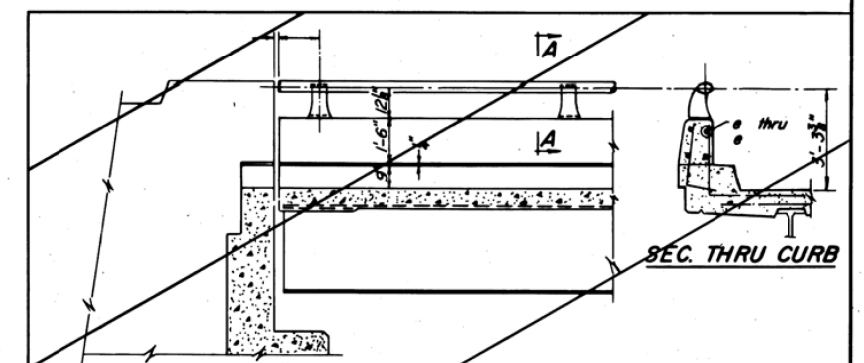
Cost of rail splice, end caps, and hardware to be incidental to item ALUMINUM HANDRAIL.

Provide 1- $\frac{1}{8}$ " and 2- $\frac{1}{16}$ " Aluminum Shims for 25 % of the Posts.
Rail element shall be parallel to Grade—high spots shall be ground, and low spots shimmed.



PARAPET JOINT DETAIL

CLAMP BAR



SEC. THRU CURB

INSIDE VIEW AT ABUTMENT

PARAPETS & RAILS
BILL OF MATERIAL

[illegible]

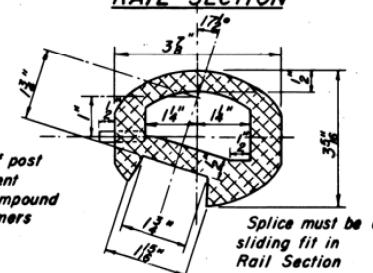
ALUMINUM HANDRAIL

F.A.S. RT. 434 SEC. 41-B
HANCOCK COUNTY
STA. 12+83

FOR INFORMATION ONLY

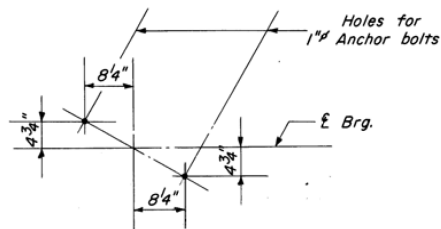
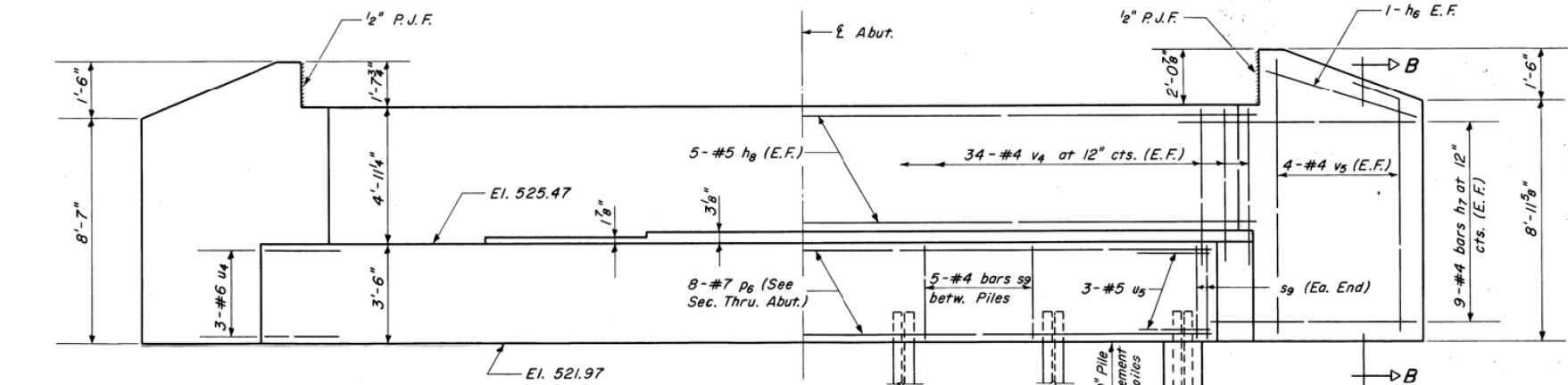
DESIGNED	19 EXAMINED PASSED APPROVED ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES ENGINEER OF ROAD
CHECKED	
DRAWN <i>Wm. M. Best</i>	
CHECKED	

Note:
Seal perimeter of base of post
to parapet with two component
non-staining gray sealing compound
with polysulfide liquid polymers
—gun grade with primer.



SEC THRU SPLICE

F.A.S. ROUTE NO.	REC.	COUNTY	TOTAL SHEETS	SHEET NO.
434	41-B	HANCOCK	23	15
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT S-434 (101)				



DIMENSIONS

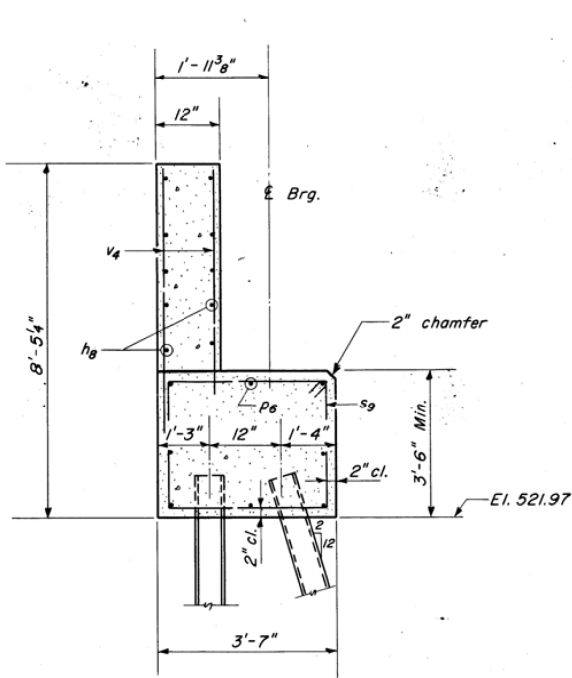
REINFORCEMENT

ELEVATION
Looking West

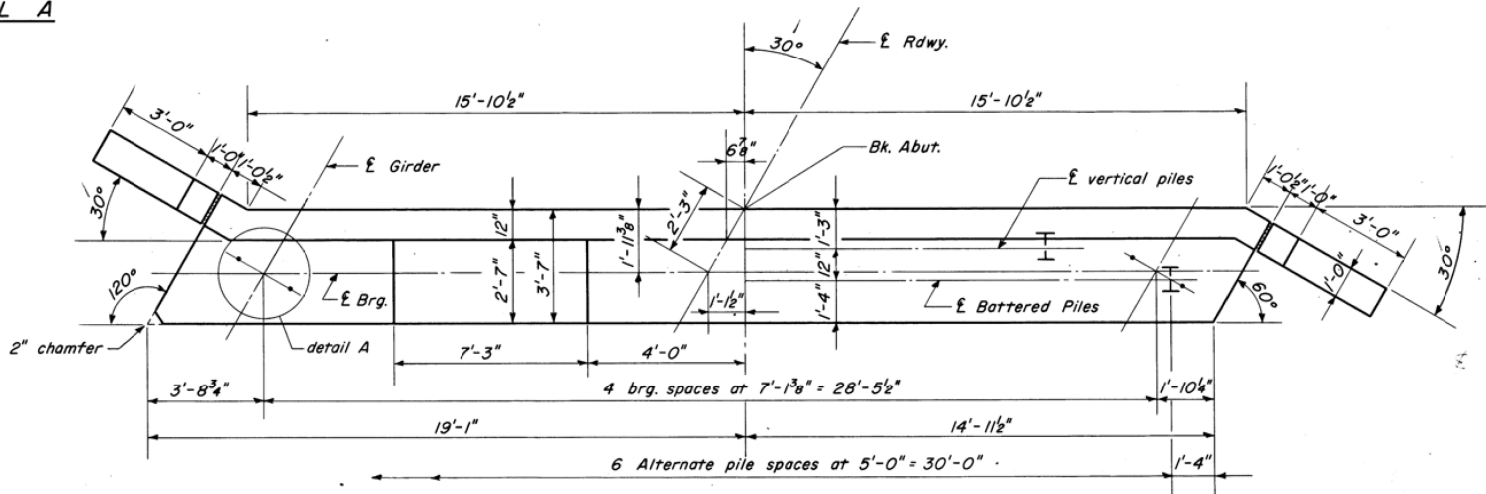
SEC. B-B

PILE DATA

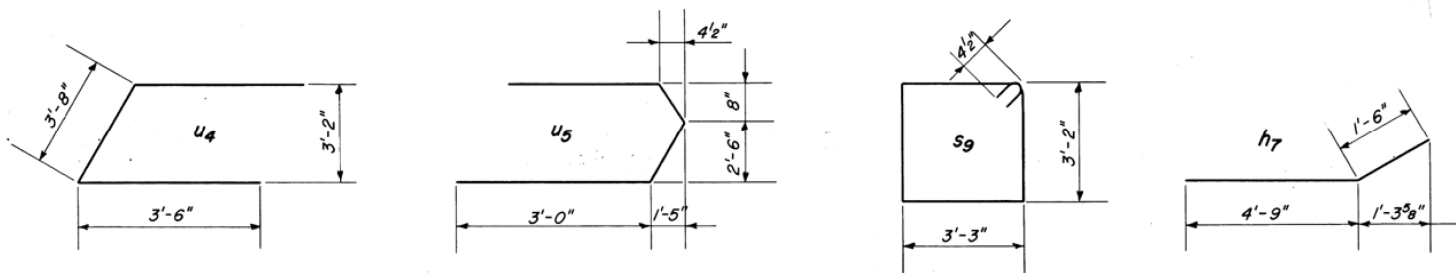
Type Steel 8BP36
Capacity Refusal
Est. Length 25 Ft.
No. Reqd. 7
includes 1 Test Pile



SEC. THRU ABUT.



PLAN



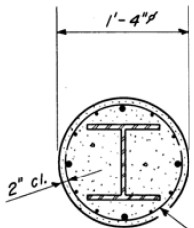
BAR BENDING DETAILS

NOTES

Minimum concrete cover on reinforcement bars 1/2" except as noted.
All dimensions on bar bending details are out-to-out.
Wire mesh reinforcement shall be incidental to cost of Class X Concrete Encasement.
Encase all piles as shown in Sec. B-B.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h6	4	#4	4'-0"	
h7	36	4	6'-3"	
h8	10	5	32'-6"	
p6	8	7	33'-9"	
s9	34	4	13'-7"	
u4	3	6	10'-8"	
u5	3	6	9'-9"	
v4	68	4	6'-9"	
v5	16	4	9'-9"	
Class X Concrete				C.Y. 25.5
Reinforcement Bars				Lbs. 1860
Steel Piles (8BP36)				L.F. 150
Test Piles Steel (8BP36)				Ea. 1
Class X Conc. Encasement				C.Y. 1.1



6" x 6" welded wire mesh, #4 Wires
Wt. 58 lbs. per 100 square feet plus 4-#4 tie bars.

FOR INFORMATION ONLY

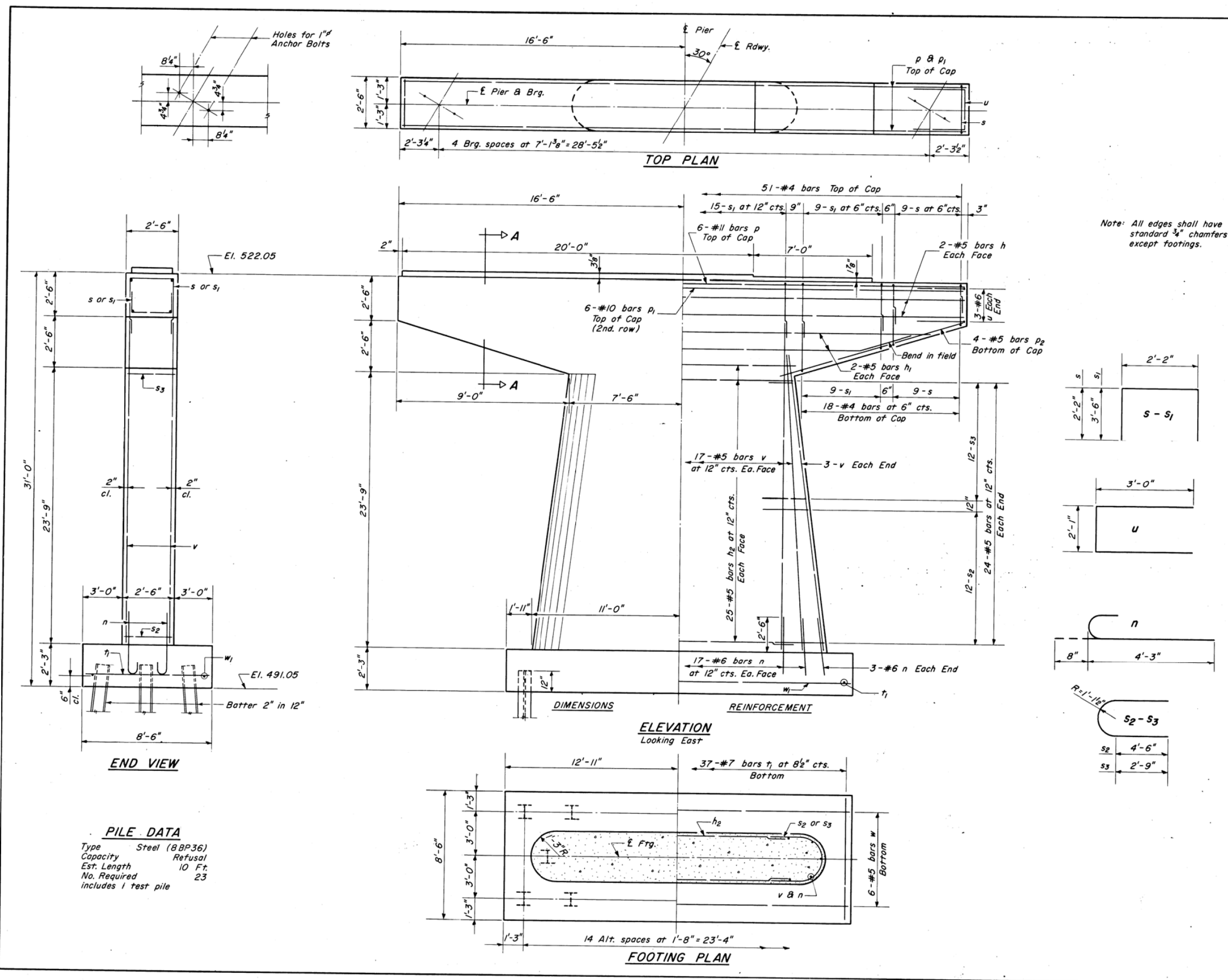
DETAIL OF PILE
ENCASEMENT

WEST ABUTMENT
F.A.S. RT. 434 SEC. 41-B
HANCOCK COUNTY
STA. 12+83

USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 0:2.000000 " = 1' / in.	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	44
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

F.A.S. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
434	41-B	HANCOCK	23	17
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT S-434 (101)				



BILL OF MATERIAL				
Bar	No.	Size	Length	Shape
h	4	#5	32'-9"	—
h ₁	4	5	27'-0"	—
h ₂	50	5	12'-6"	—
n	40	6	4'-11"	⌋
p	6	11	32'-9"	—
p ₁	6	10	32'-9"	—
p ₂	8	5	10'-0"	—
s	36	4	6'-6"	⌋
s ₁	51	4	9'-2"	⌋
s ₂	24	5	12'-6"	⌋
s ₃	24	5	9'-0"	⌋
t ₁	37	7	8'-3"	—
u	6	6	8'-1"	⌋
v	40	5	26'-6"	—
w	6	5	25'-6"	—
Class X Concrete C.Y.			71.5	
Reinforcement Bars Lbs.			6140	
Steel Piles (8BP36) L.F.			220	
Test Pile, Steel (8BP36) Ea.			1	

FOR INFORMATION ONLY

PIER 2
F.A.S. RT. 434 SEC. 41-B
HANCOCK COUNTY
STA. 12+83

MODEL: Default
FILE NAME: g:\vbl_ssa\1818-600\bridge\0343060-031-044-ex-plan-info.dgn

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL
ILLINOIS DESIGN FIRM NO. 184-003525
FEHR GRAHAM PROJECT NUMBER: 18-600

USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 0:2.000000 " = 1"	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 034-3060
SHEET 41 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	45
				CONTRACT NO. 93746
ILLINOIS FED. AID PROJECT				

MODEL: Default
FILE NAME: g:\vbl_ss4\1818-600\bridge\0343060-031-044-ex-plan-info.dgn

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

USER NAME = cconnor
DESIGNED - MCB
CHECKED - RJM
PLOT SCALE = 0:2.000000 " = 1" / in.
DRAWN - MMY/CFC
PLOT DATE = 3/2/2020
CHECKED - MCB/RJM
REVISED -

DESIGNED - MCB
CHECKED - RJM
DRAWN - MMY/CFC
CHECKED - MCB/RJM
REVISED -

DESIGNED - MCB
CHECKED - RJM
DRAWN - MMY/CFC
CHECKED - MCB/RJM
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 034-3060

SHEET 42 OF 44 SHEETS

F.A.S. SECTION COUNTY TOTAL SHEETS SHEET NO.
434 16-00130-00-BR HANCOCK 52 46
CONTRACT NO. 93746
ILLINOIS FED. AID PROJECT

FOR INFORMATION ONLY

PIER 3
F.A.S. RT. 434 SEC. 41-B
HANCOCK COUNTY
STA. 12+83

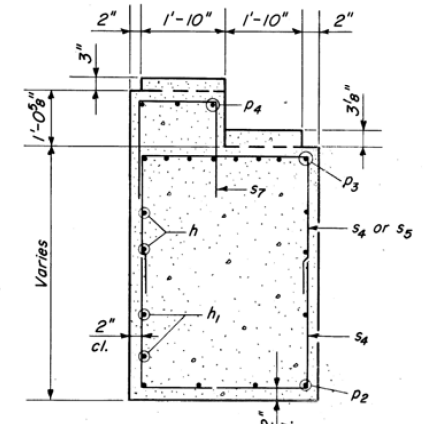
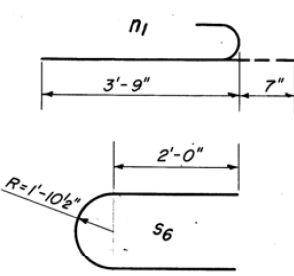
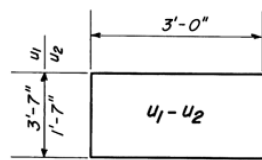
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	4	#5	32'-9"	
h ₁	4	5	27'-0"	
h ₃	20	5	11'-0"	
n ₁	40	5	4'-3"	
p ₂	10	5	10'-0"	
p ₃	8	9	32'-9"	
p ₄	3	10	32'-9"	
s ₄	28	4	8'-0"	
s ₅	23	4	10'-8"	
s ₆	18	4	9'-9"	
s ₇	33	4	6'-2"	
t ₂	19	5	6'-3"	
u ₁	6	6	9'-7"	
u ₂	2	6	7'-7"	
v ₁	40	5	10'-9"	
w ₂	5	5	18'-3"	
Class X Concrete C.Y.			53.0	
Reinforcement Bars Lbs.			3420	
Steel Pile (8BP36) Lin.Ft.			350	

All edges shall have standard 3/8" chamfers except footings.

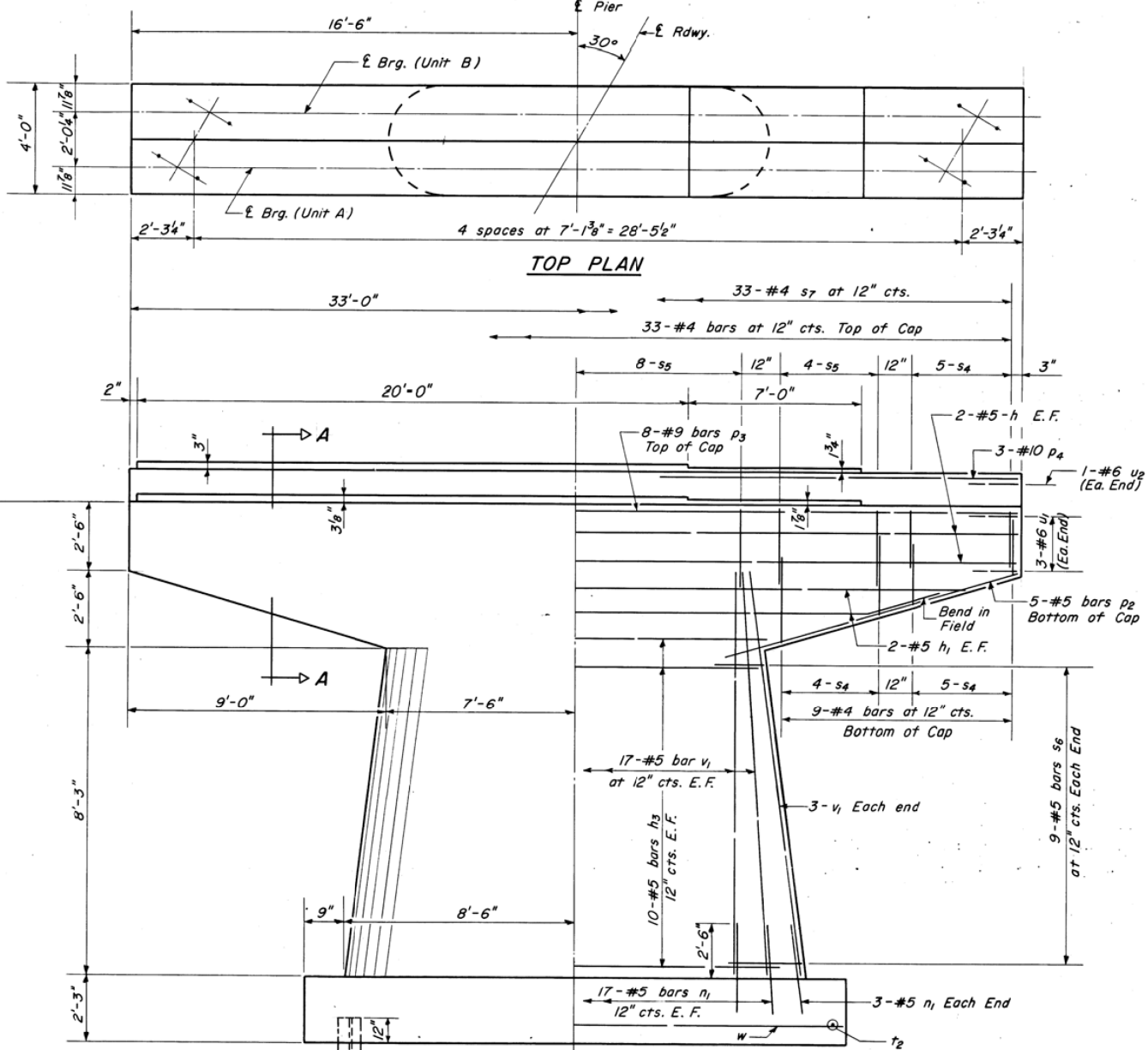
A & B DIMENSIONS

Bar	A	B
s ₄	3'-8"	2'-2"
s ₅	3'-8"	3'-6"
s ₇	1'-8"	2'-3"



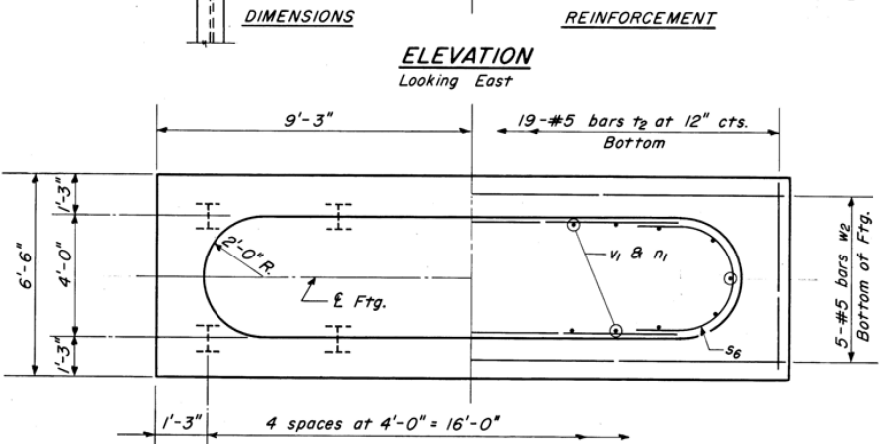
SECTION A-A

TOP PLAN

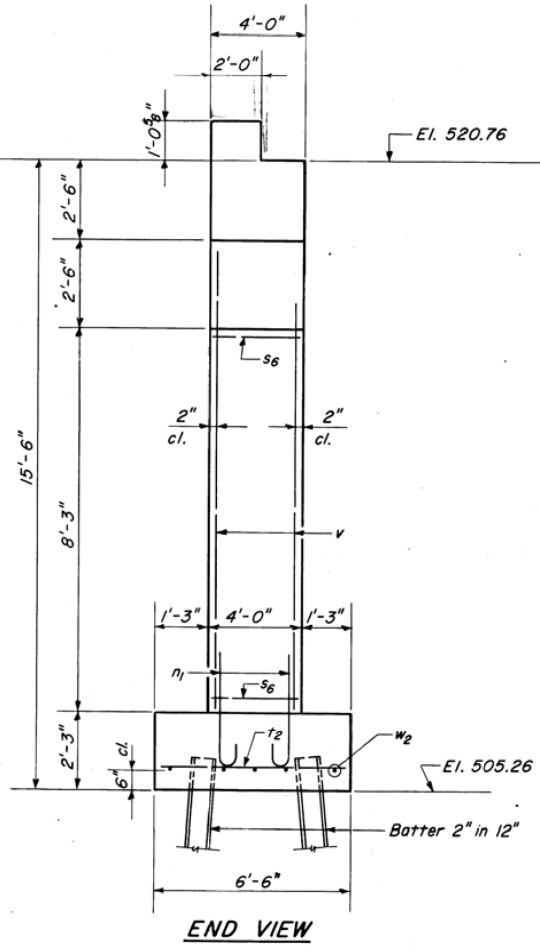


ELEVATION

Looking East



FOOTING PLAN

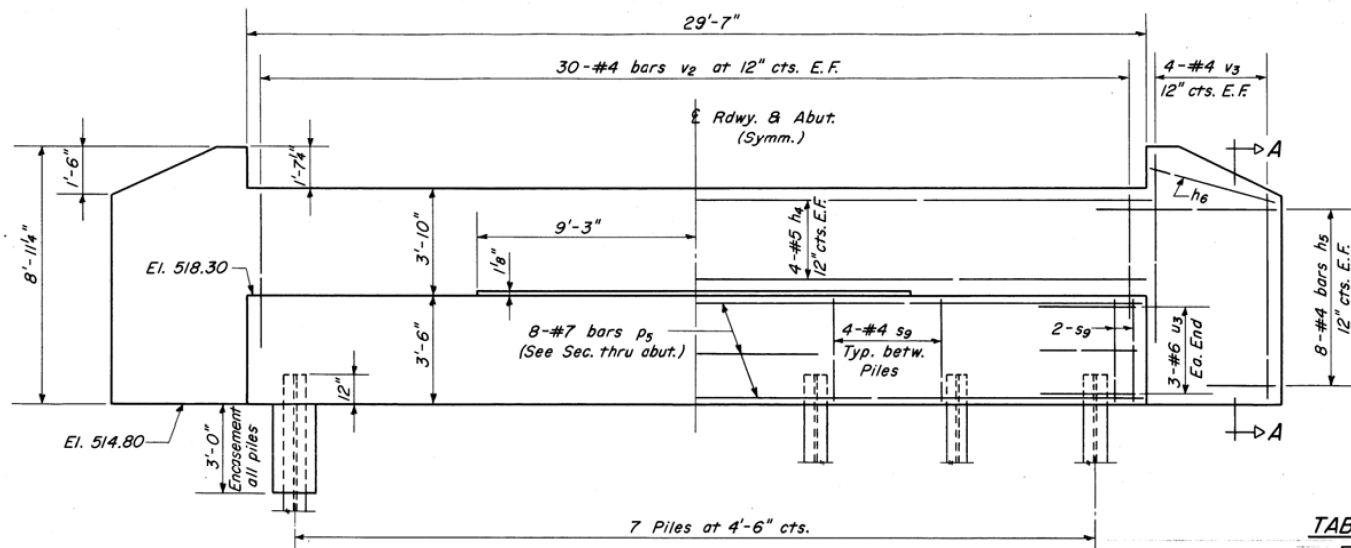


END VIEW

PILE DATA

Type Steel (8BP36)
Capacity Refusal
Est. Length 35 Ft.
No. Required 10

F. A. S. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
434	41-B	HANCOCK	23	19
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	5-434 (101)	

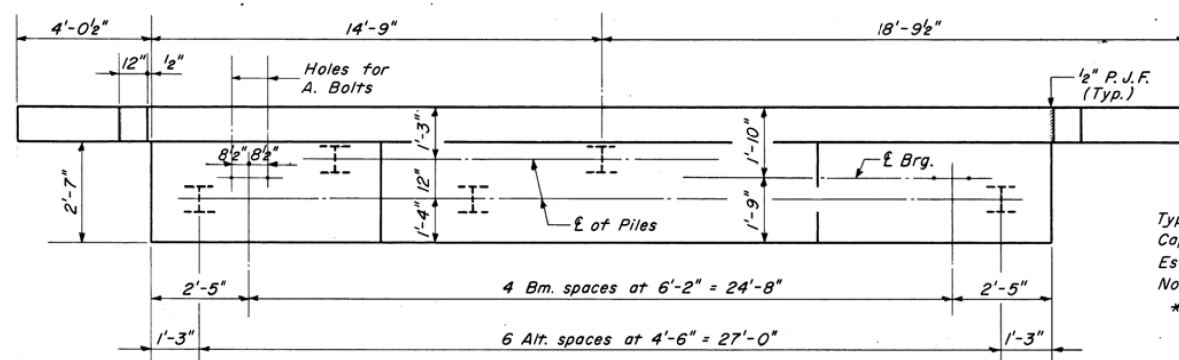


ELEVATION
Looking East

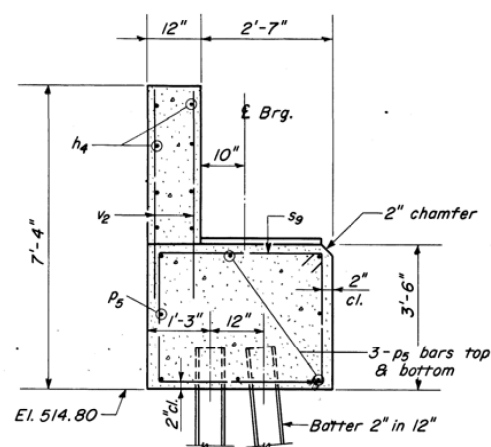
SEC. A-A

TABLE OF ELEVATIONS

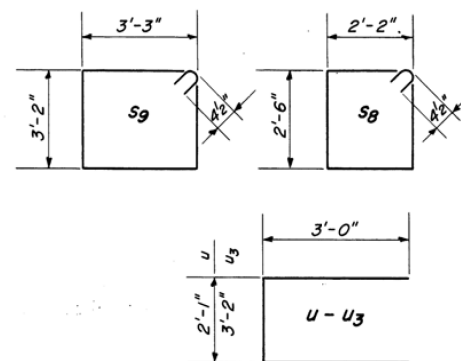
ELEV.	PIER
4	5
A	517.76 516.16



PLAN



SECTION THRU ABUT.

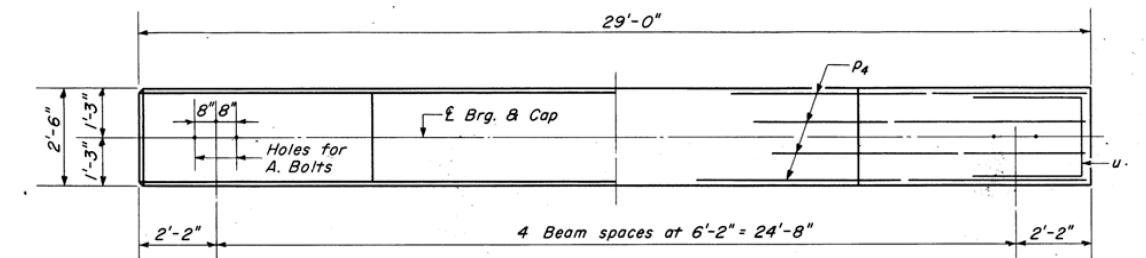


BAR BENDING DETAILS

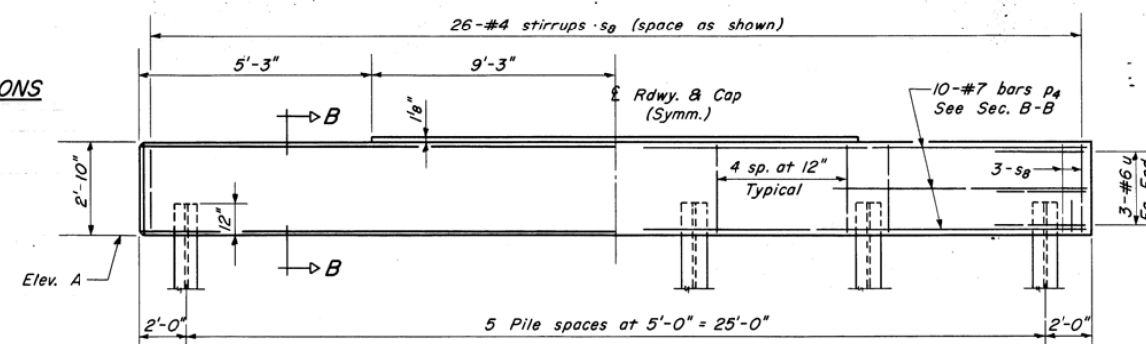
BILL OF MATERIAL
ONE ABUT. - TWO PIER BENTS

Bar	No.	Size	Length	Shape
h4	8	#5	29'-3"	
h5	32	4	5'-6"	
h6	4	4	4'-0"	
p4	20	7	28'-9"	
p5	8	7	29'-3"	
s8	52	4	10'-1"	
s9	28	4	13'-7"	
u	12	6	8'-1"	
u3	6	6	9'-2"	
v2	60	4	5'-3"	
v3	16	4	8'-6"	

Class X Concrete	C.Y.	36.1
Reinforcement Bars	Lbs.	3160
Steel Piles (10BP57)	L.F.	540
Steel Piles (8BP36)	L.F.	270
Test Piles, Steel (8BP36)	Ea.	1
Class X Conc. Encasement	C.Y.	10.7



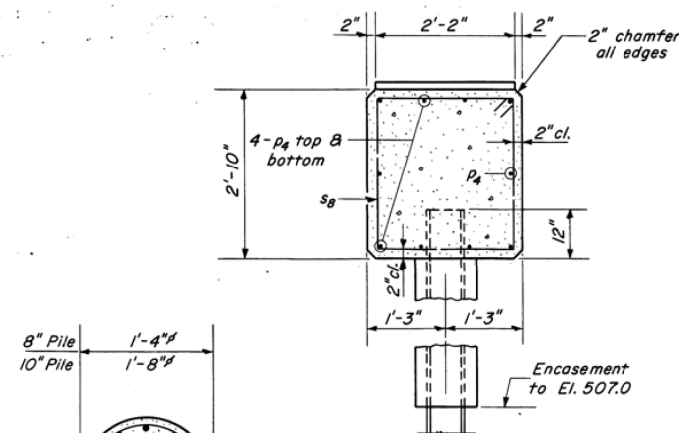
PLAN
(Piles not shown)



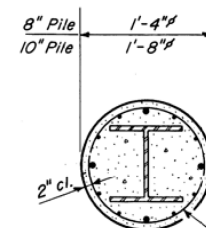
ELEVATION PIERS 4 & 5

PILE DATA

Type	Steel 10BP57
Capacity	Refusal
Est. Length	45 Ft.
No. Reqd. (2 Piers)	12



SECTION B-B



DETAIL OF PILE
ENCASEMENT

NOTES

Minimum concrete cover on reinforcement bars 1/2" except as noted.
All dimensions on bar bending details are out-to-out.
Wire mesh reinforcement shall be incidental to cost of Class X Concrete Encasement.
Encase all piles as shown in Sec. B-B.

FOR INFORMATION ONLY

EAST ABUT. & PIER 4 & 5
F.A.S. RT. 434 SEC. 41-B
HANCOCK COUNTY
STA. 12+83

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 034-3060

SHEET 43 OF 44 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	47
				CONTRACT NO. 93746

ILLINOIS FED. AID PROJECT

FEHR GRAHAM

ENGINEERING & ENVIRONMENTAL

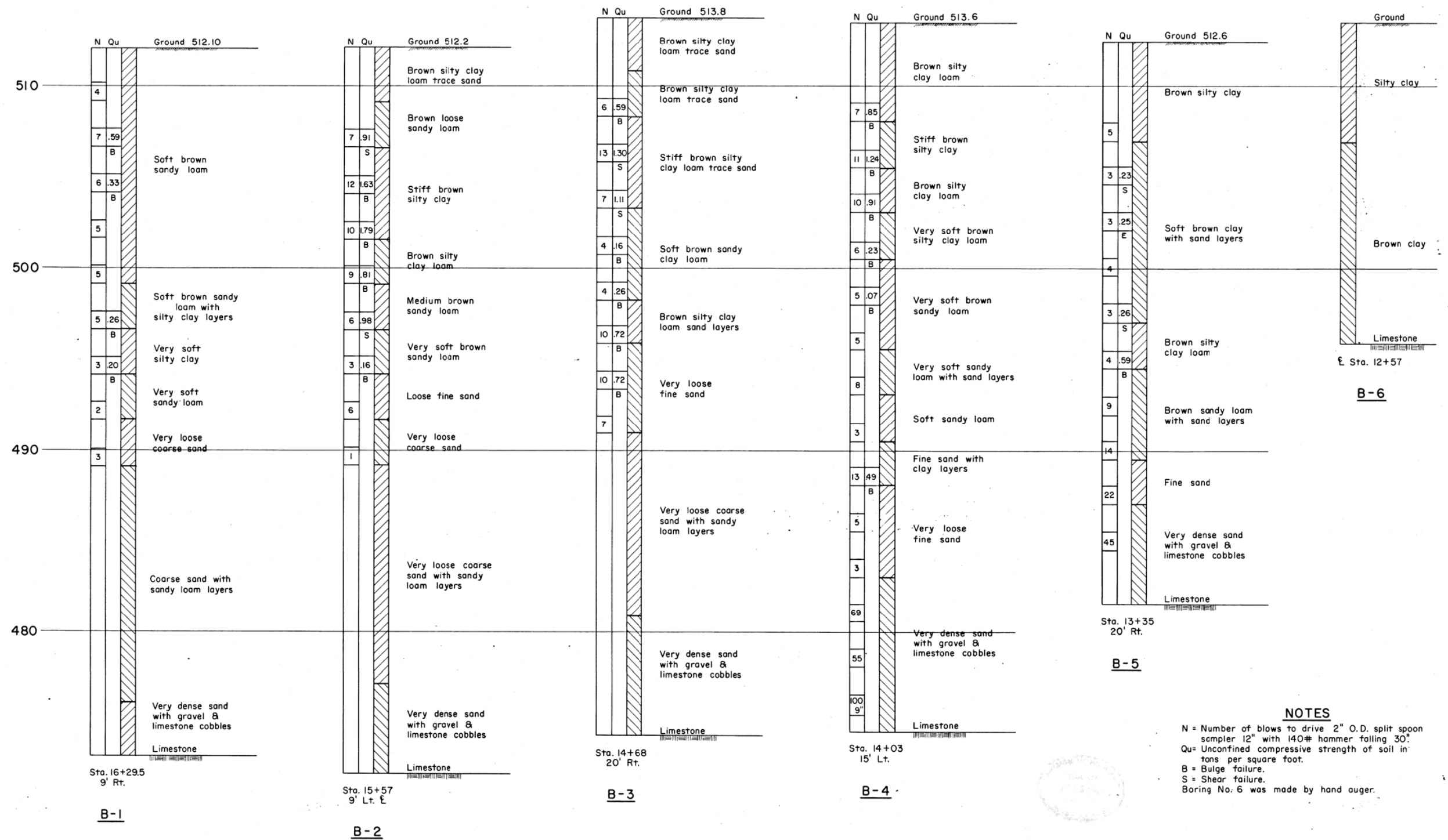
ILLINOIS DESIGN FIRM NO. 184-003525

USER NAME = cconnor	DESIGNED - MCB	REVISED -
PLOT SCALE = 0:2.000000 " = 1"	CHECKED - RJM	REVISED -
PLOT DATE = 3/2/2020	DRAWN - MMY/CFC	REVISED -
	CHECKED - MCB/RJM	REVISED -

FEHR GRAHAM PROJECT NUMBER: 18-600

MODEL: Default
FILE NAME: g:\vbl_ssa\1818-600\bridge\0343060-031-044-ex-plan-info.dgn

F.A.S. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
434	41-B	HANCOCK	23	20
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT S-434 (10)				



FOR INFORMATION ONLY

BORINGS
F.A.S. RT. 434 SEC. 41-B
HANCOCK COUNTY
STA. 12+83

MODEL: Default
FILE NAME: g:\vbl_ssa\1818-600\bridge\0343060-031-044-ex-plan-info.dgn

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

USER NAME = cconnor	DESIGNED - MCB	REVISED -
CHECKED - RJM	REVISED -	
PLOT SCALE = 0:2.000000 " = 1"	DRAWN - MMY/CFC	REVISED -
PLOT DATE = 3/2/2020	CHECKED - MCB/RJM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 034-3060

SHEET 44 OF 44 SHEETS

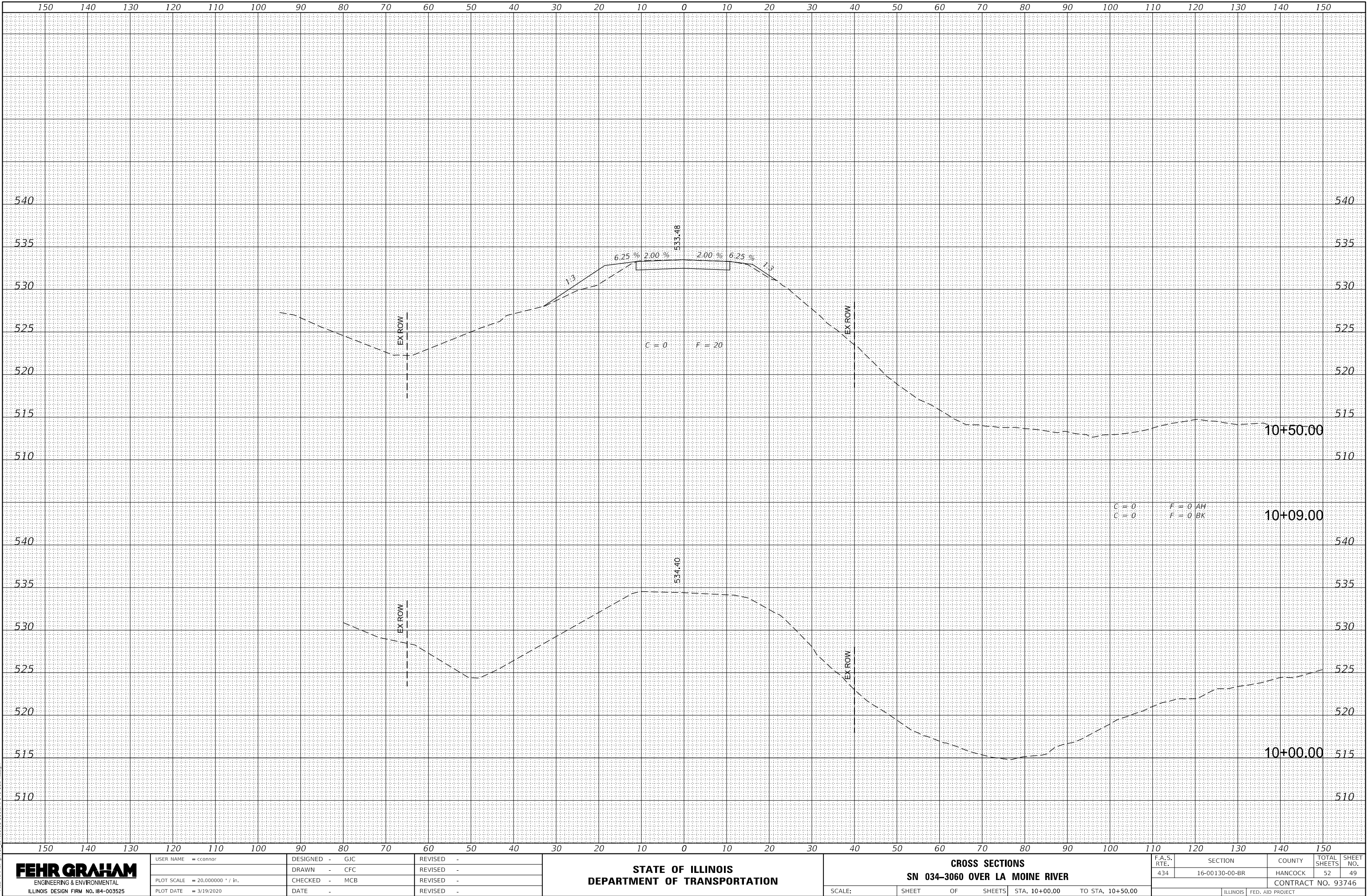
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	48
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

FEHR GRAHAM PROJECT NUMBER: 18-600

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

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

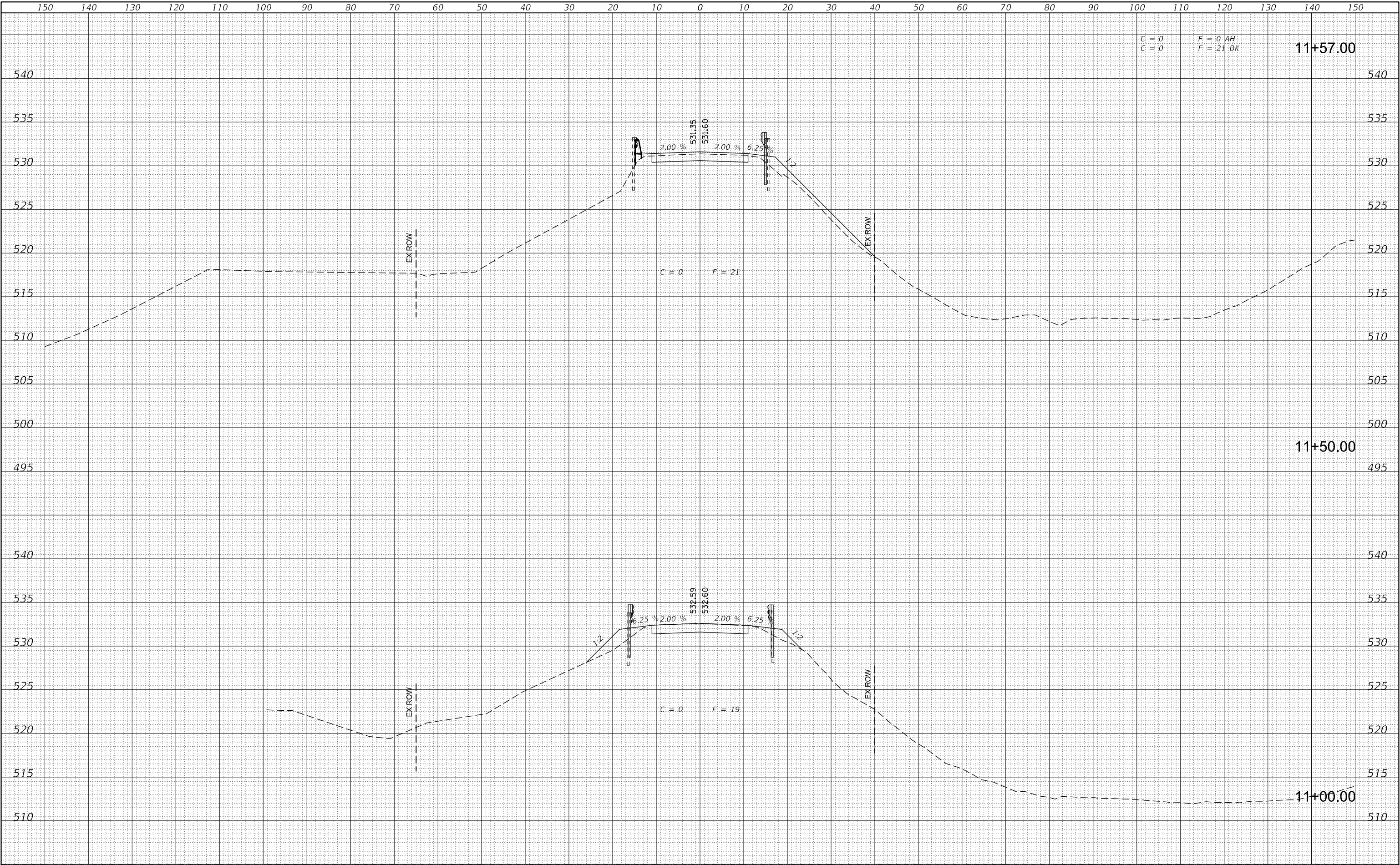
MODEL: Default
FILE NAME: g:\18-600\18-600\18-600\18-600-052.dgn



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

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

MODEL: Default
FILE NAME: g:\18-600\18-600\18-600-034-052.dgn



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

USER NAME = cconnor
DESIGNED - GJC
DRAWN - CFC
PLOT SCALE = 20.000000 ' / in.
CHECKED - MCB
PLOT DATE = 3/19/2020

DESIGNED - GJC
DRAWN - CFC
CHECKED - MCB
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
SN 034-3060 OVER LA MOINE RIVER

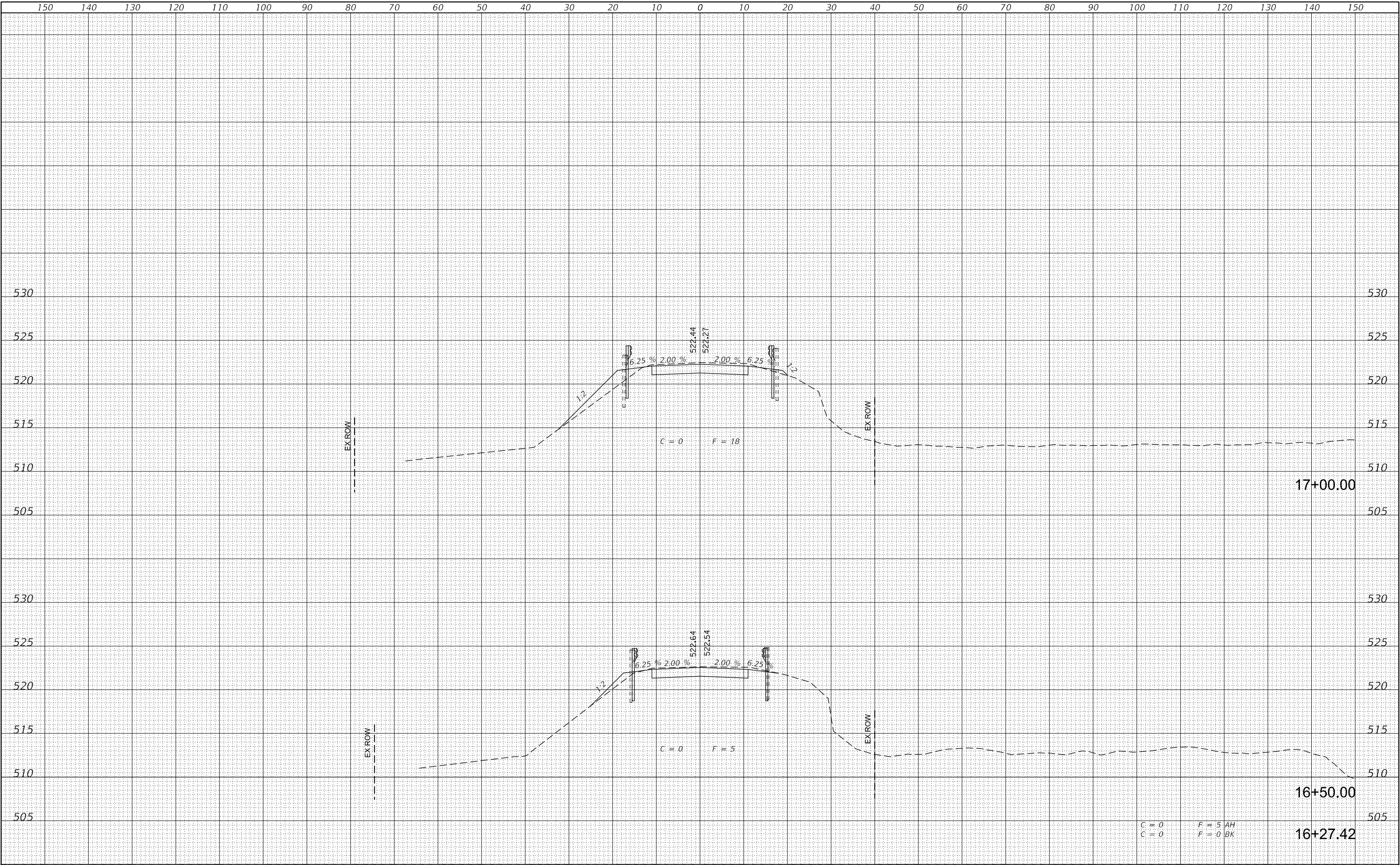
SCALE: SHEET OF SHEETS STA. 11+00.00 TO STA. 11+50.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	50
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

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

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

MODEL: Default
FILE NAME: g:\1601\1641\18-600\18-600-019-052-2.dgn



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

USER NAME = cconnor
DESIGNED - GJC
DRAWN - CFC
PLOT SCALE = 20.000000 ' / in.
CHECKED - MCB
PLOT DATE = 3/19/2020
DATE -

DESIGNED - GJC
DRAWN - CFC
CHECKED - MCB
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
SN 034-3060 OVER LA MOINE RIVER

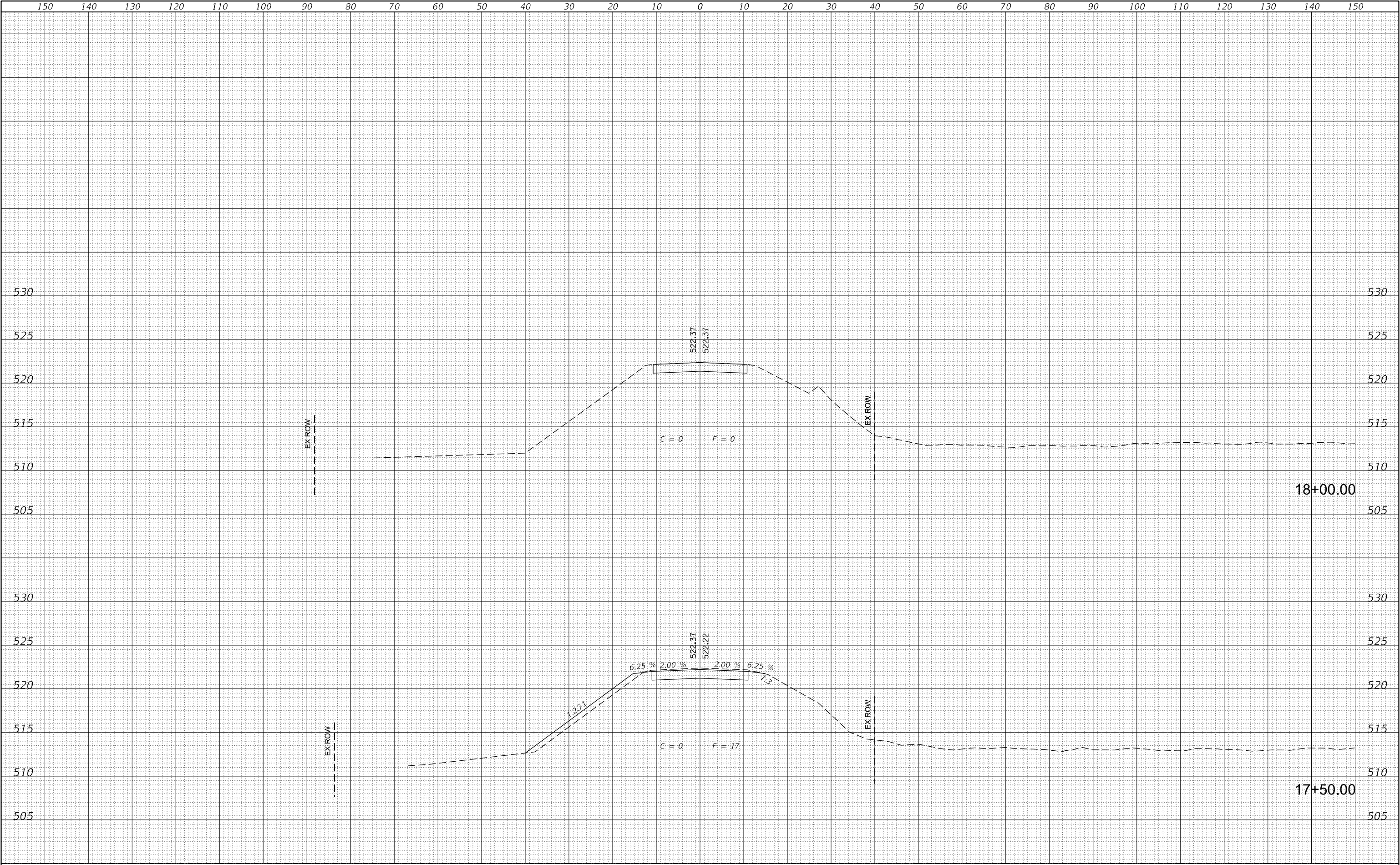
SCALE: SHEET OF SHEETS STA. 16+50.00 TO STA. 17+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	51
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				

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

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

MODEL: Default
FILE NAME: g:\1601\1641\18-600\18-600-019-052.dgn



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

USER NAME = cconnor	DESIGNED - GJC	REVISED -
	DRAWN - CFC	REVISED -
PLOT SCALE = 20.000000 ' / in.	CHECKED - MCB	REVISED -
PLOT DATE = 3/19/2020	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
SN 034-3060 OVER LA MOINE RIVER

SCALE: SHEET OF SHEETS STA. 17+50.00 TO STA. 18+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
434	16-00130-00-BR	HANCOCK	52	52
CONTRACT NO. 93746				
ILLINOIS FED. AID PROJECT				