06-17-11 LETTING ITEM 012

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 56	09-05123 -01-BR	DOUGLAS	19	1
GARRETT ROAD DIST.	ILLINOIS			

CONTRACT NO. 91433

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
HIGHWAY BRIDGE PROGRAM

SECTION 09–05123–01–BR
DOUGLAS COUNTY
GARRETT ROAD DISTRICT
PROJECT NO. BROS–0041(098)
T.R. 56
C–95–323–10

LOCATION OF SECTION INDICATED THUS: –

CLASSIFICATION: LOCAL ROAD (NON–URBAN)
DESIGN VOLUME: UNDER 250 ADT
CURRENT ADT: 116 (2011)
DESIGN SPEED: 30 MPH

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

INDEX OF SHEETS

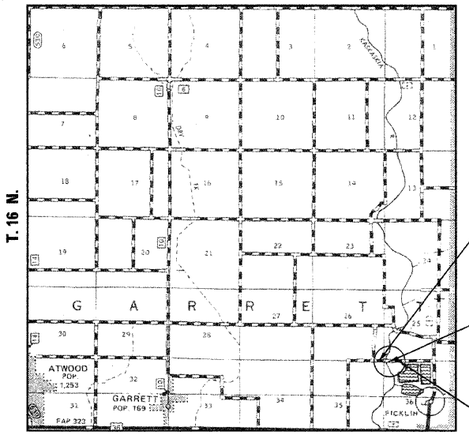
STANDARDS

000001–06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001–05	TEMPORARY EROSION CONTROL SYSTEMS
515001–03	NAME PLATE FOR BRIDGES
635006–03	RELECTOR AND TERMINAL MARKER PLACEMENT
701901–01	TRAFFIC CONTROL DEVICES
BLR 21–8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

SCALES

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

R.7.E. OF THE 3RD P.M.



IMPROVEMENT BEGINS
STA. 11+00

STA. 14+90.00 – PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE (21" DEPTH), THREE SPANS @ 50'–0", 58'–0", 50'–0"; 159'–6" BK. TO BK. ABUTS.; 27'–0" ROADWAY; NO SKEW
EXISTING S.N. 021–4012
PROPOSED S.N. 021–4307

IMPROVEMENT ENDS
STA. 18+50

LOCATION PLAN

GROSS LENGTH OF SECTION = 750.00 FEET = 0.142 MILES
NET LENGTH OF SECTION = 750.00 FEET = 0.142 MILES

0 1 2 3 4 5
SCALE IN MILES

GARY J. CARTWRIGHT 43408 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

Gary J. Cartwright 12-29-10
ILLINOIS PROFESSIONAL NO. 43408
EXPIRES 11-30-11

PASSED 1/5 20 11
ROAD DISTRICT COMMISSIONER

APPROVED 1/5 20 11
COUNTY ENGINEER

PASSED 2/3 20 11
DISTRICT FIVE ENGINEER OF LOCAL ROADS & STREETS

RELEASED FOR BID BASED ON LIMITED REVIEW February 3 20 11
DEPUTY DIRECTOR OF HIGHWAYS, REGION THREE ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

4440 ASH GROVE
SPRINGFIELD, IL. 62711
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FREEPORT, IL. ROCKFORD, IL. ROCHELLE, IL. MONMOUTH, WI SPRINGFIELD, IL.

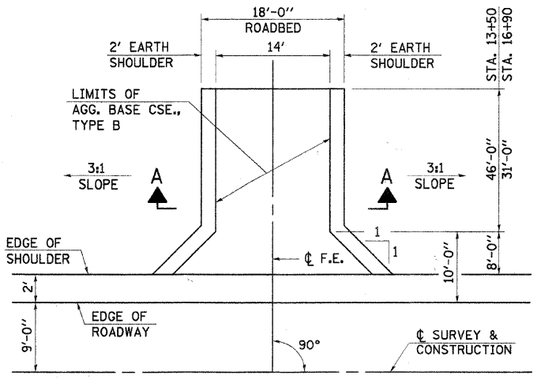
*09-455

SUMMARY OF QUANTITIES

	NUMBER	ITEM	UNIT	QUANTITY
	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	274
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	118
	20100500	TREE REMOVAL, ACRES	ACRE	0.25
	20200100	EARTH EXCAVATION	CU YD	697
	20300100	CHANNEL EXCAVATION	CU YD	696
	20400800	FURNISHED EXCAVATION	CU YD	2,346
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	98
•	28000305	TEMPORARY DITCH CHECKS	FOOT	60
	28000400	PERIMETER EROSION BARRIER	FOOT	1,522
	28000500	INLET AND PIPE PROTECTION	EACH	2
	35101400	AGGREGATE BASE COURSE, TYPE B	TON	722
•	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
	50300225	CONCRETE STRUCTURES	CU YD	42.4
	50300280	CONCRETE ENCASEMENT	CU YD	43.7
•	50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	4,266
	50800105	REINFORCEMENT BARS	POUND	5,560
△	50900205	STEEL RAILING, TYPE S1	FOOT	317
	51201600	FURNISHING STEEL PILES HP12X53	FOOT	699
	51202305	DRIVING PILES	FOOT	699
	51203600	TEST PILE STEEL HP12X53	EACH	3
	51500100	NAME PLATES	EACH	1
	542D0220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	44
	542D1063	PIPE CULVERTS, CLASS D, TYPE 2 18"	FOOT	66
	67100100	MOBILIZATION	L SUM	1
△ •	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
•	X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.7
•	X2810208	STONE RIPRAP, CLASS A4 (SPECIAL)	TON	377
•	X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1
•	X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1
•	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1

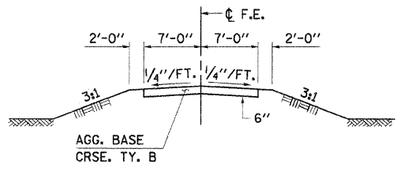
•SEE SPECIAL PROVISIONS

△ SPECIALTY ITEMS



FIELD ENTRANCE DETAIL

F.E. LT. STA. 13+50
F.E. LT. ST.A 16+90



SECTION A–A

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) = 0.7 ACRE

ALL TREES BETWEEN THE LIMITS SHOWN BELOW WHICH INTERFERE WITH THE CONSTRUCTION SHALL BE REMOVED ONLY AS DIRECTED BY THE ENGINEER.

TREE REMOVAL (6 TO 15 UNITS DIAMETER)

25' LT. STA. 11+47	=	10 UNIT
41' LT. STA. 11+51	=	12 UNIT
32' LT. STA. 11+86	=	8 UNIT
37' LT. STA. 11+86	=	8 UNIT
31' LT. STA. 11+94	=	14 UNIT
42' LT. STA. 12+12	=	8 UNIT
35' LT. STA. 12+33	=	12 UNIT
35' LT. STA. 12+58	=	12 UNIT
32' LT. STA. 12+59	=	10 UNIT
32' LT. STA. 12+71	=	8 UNIT
30' LT. STA. 12+77	=	10 UNIT
32' LT. STA. 12+81	=	6 UNIT
32' LT. STA. 12+81	=	10 UNIT
33' LT. STA. 12+86	=	14 UNIT
29' LT. STA. 13+04	=	8 UNIT
30' LT. STA. 13+20	=	14 UNIT
51' LT. STA. 14+28	=	12 UNIT
57' LT. STA. 14+30	=	10 UNIT
57' LT. STA. 14+30	=	10 UNIT
22' RT. STA. 12+17	=	8 UNIT
20' RT. STA. 12+53	=	14 UNIT
20' RT. STA. 12+53	=	14 UNIT
38' RT. STA. 14+18	=	8 UNIT
39' RT. STA. 14+20	=	12 UNIT
31' RT. STA. 14+42	=	6 UNIT
22' RT. STA. 14+50	=	6 UNIT
37' RT. STA. 14+56	=	10 UNIT
TOTAL	=	274 UNIT

TREE REMOVAL (OVER 15 UNITS DIAMETER)

32' LT. STA. 11+98	=	16 UNIT
32' LT. STA. 12+30	=	18 UNIT
31' LT. STA. 13+35	=	18 UNIT
21' RT. STA. 13+30	=	26 UNIT
35' RT. STA. 13+84	=	40 UNIT
TOTAL	=	118 UNIT

TREE REMOVAL, ACRE

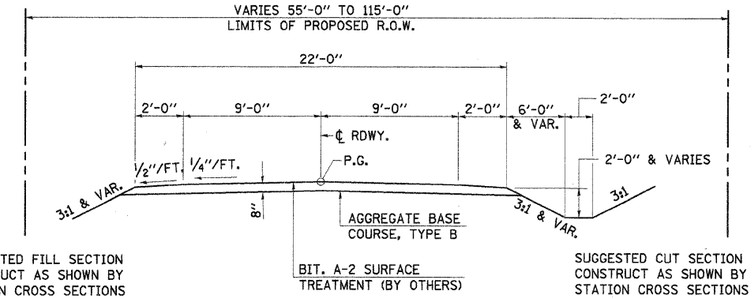
LT. STA. 15+19 TO LT. STA. 17+34
& RT. STA. 15+85 TO RT. STA. 18+50
TOTAL = 0.25 ACRE

TEMPORARY DITCH CHECKS

LT. STA. 14+50	=	20 FOOT
LT. STA. 15+50	=	20 FOOT
RT. STA. 15+50	=	20 FOOT
TOTAL	=	60 FOOT

INLET AND PIPE PROTECTION

LT. STA. 13+17	=	1 EACH
LT. STA. 17+12	=	1 EACH
TOTAL	=	2 EACH



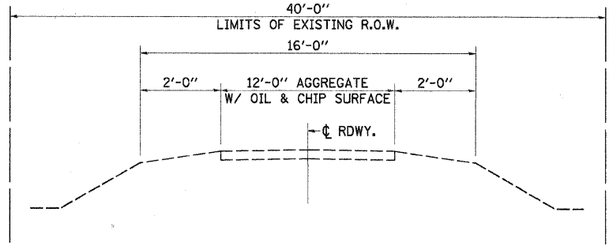
SUGGESTED FILL SECTION CONSTRUCT AS SHOWN BY STATION CROSS SECTIONS

SUGGESTED CUT SECTION CONSTRUCT AS SHOWN BY STATION CROSS SECTIONS

TYPICAL PROPOSED CROSS SECTION

STA. 11+50 TO STA. 18+00

TRANSITION FROM EXISTING ROADWAY TO PROPOSED ROADWAY TO BE CONSTRUCTED FROM STA. 11+00 TO STA. 11+50 AND FROM STA. 18+00 TO STA. 18+50.



EXISTING TYPICAL CROSS SECTION

APPLICATION RATES USED IN QUANTITY CALCULATIONS

AGGREGATE BASE, COURSE	2.05 TON/CU YD
STONE RIPRAP (SPECIAL)	1.65 TON/CU YD

TEMPORARY EROSION CONTROL

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

TEMPORARY EROSION CONTROL SEEDINGS	=	98 POUND
PERIMETER EROSION CONTROL BARRIER	=	1,522 FOOT
TEMPORARY DITCH CHECKS	=	60 FOOT
INLET AND PIPE PROTECTION	=	2 EACH

FILE NAME = 09-455_SUMTYP.DGN	DESIGNED - G.J.C.	REVISED -	
	DRAWN - S.A.P.	REVISED -	
	CHECKED - A.L.S.	REVISED -	
	DATE - 12/22/10	REVISED -	

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SUMMARY OF QUANTITIES, GENERAL NOTES AND TYPICAL CROSS SECTIONS

SCALE: N/A | PROPOSED STRUCTURE @ STA. 14+90.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	2
		CONTRACT NO. 91433		
	GARRETT ROAD DIST. ILLINOIS			

*09-455

SE. 1/4 SEC. 26, T. 16 N., R. 7 E., 3RD P..M.

SW. 1/4 SEC. 25, T. 16 N., R. 7 E., 3RD P..M.

INDICATES TREE TO BE REMOVED

H.E. ROMINE ESTATE

RUTH P. BENNER

TIMOTHY A. & JESSICA M. RAY

LOT 6 J. BENNER'S SUBDIVISION

LOT 5 J. BENNER'S SUBDIVISION

HOUSE

N/BC IN 10" TREES

37.89'

31.51'

℄ SURVEY & CONSTRUCTION

25.41'

BASE OF 4" STEEL POST

P.O.T. STA. 10+00
P.K. NAIL (FLUSH)

N. 1/4 CORNER, SECTION 35
T. 16 N., R. 7 E., 3RD P.M.
STONE (FOUND) (BURIED 12")

530 E.

1050 N.

POT Sta 10+00.00

50:3 TAPER

PROPOSED R.O.W. LINE

℄ SURVEY & CONSTRUCTION

TEMPORARY CONSTRUCTION EASEMENT

F.E. LT. STA. 13+50
PIPE CULVERTS, CLASS D, TYPE 2 18", 66' LONG

FLOW KASKASKIA RIVER

FIELD ENTRANCE TO BE REMOVED

F.E. LT. STA. 16+90
PIPE CULVERTS, CLASS D, TYPE 1 15", 44' LONG

+00 25' LT.
+00 20' LT.
+50 50' LT.
+00 70' LT.
+00 60' LT.
+00 70' LT.
+00 60' LT.
+00 60' LT.
+00 40' LT.
+50 20' LT.

18" CMP
12" CMP

10+00
15+00
20+00

179°23'36"

EXISTING R.O.W.
EXISTING R.O.W.

POT Sta 20+00.00

N/BC IN TOP OF FENCE POST 67.80'
℄ SURVEY & CONSTRUCTION
N/BC IN 18" TREE 44.51'
N/BC IN FENCE END POST 53.08'

P.O.T. STA. 20+00
P.K. NAIL (FLUSH)

N. 1/4 CORNER, SECTION 36
T. 16 N., R. 7 E., 3RD P.M.
I. PIPE (FOUND)

35 6 NR 7 E

36 6 NR 7 E

WETLAND SITE 2

IMPROVEMENT BEGINS STA. 11+00.00

IMPROVEMENT ENDS STA. 18+50

+60 20' RT.
+00 30' RT.
+00 40' RT.
+50 20' RT.
+50 35' RT.
+50 55' RT.
+35 40' RT.
+35 55' RT.

50:3 TAPER

LIMITS OF WETLAND

PROPOSED R.O.W. LINE

PROPOSED S.N. 021-4307
STA. 14+90.00 - THREE SPAN P.P.C. DECK BEAM (21" DEPTH); SPANS @ 50'-0", 58'-0", 50'-0"; 159'-6" BK. TO BK. ABUTS.; 27'-0" ROADWAY; NO SKEW

WETLAND SITE 3

P.I. STA. 17+03.25
NW. CORNER, SECTION 36
T. 16 N., R. 7 E. 3RD P.M.
I. ROD WITH ALUM. CAP (FOUND)

FIELD ENTRANCES TO BE REMOVED (INCLUDING POSTS AND BARRIERS)

LYONDELL BASSELL INDUSTRIES

HARRY & MARILYN FOSTER

POND

℄ SURVEY & CONSTRUCTION
N/BC IN 10" TREE 34.29'
N/BC IN 8" TREE 37.81'
I. PIN W/ CAP (FOUND) 6.42'
I. PIN W/ CAP (FOUND) 20.10'

P.I. STA. 17+03.25
IRON PIN W/CAP (FLUSH) (FOUND)

ENTRANCES TO BE BUILT

LT. STA. 13+50, F.E. -15%, 18' ROADBED
LT. STA. 16+90, F.E. -15%, 18' ROADBED
QUANTITIES INCLUDED IN THOSE LISTED

CHANNEL EXCAVATION

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

CHANNEL EXCAVATION = 696 CU. YD.

PIPES TO BE REMOVED

LT. STA. 14+23, 18" CMP, 52' LONG
LT. STA. 15+92, 12" CMP, 20' LONG
COST INCLUDED IN "EARTH EXCAVATION".

WETLAND AREA IMPACTED

SITE 2 = 0.105 ACRES

EXISTING STRUCTURE NO. 021-4012

STA. 15+00.00 - SINGLE SPAN THRU-TRUSS BRIDGE WITH CONCRETE DECK ON CLOSED CONCRETE ABUTS. 103'-0" BK.-BK. ABUTS, 16'-1" O.-O. DECK, NO SKEW
REMOVAL OF EXISTING STRUCTURES = 1 EACH

UTILITIES

EASTERN ILLINI ELECTRIC COOP.
ALAN SCHWEIGHART 217-379-2131 EX. 173

FRONTIER COMMUNICATIONS
MARY RUTH WILLIS 309-454-1470

B.M. #1 - SPIKE NAIL IN POWER POLE
17' LT. STA. 8+88
EL. 667.01

B.M. #2 - SPIKE NAIL IN POWER POLE
19' LT. STA. 13+70
EL. 655.04

B.M. #3 - SPIKE NAIL IN POWER POLE
19' LT. STA. 18+50
EL. 654.43

EARTH EXCAVATION = 697 CU. YD.
SUITABLE CHANNEL EXCAVATION = 348 CU. YD.
FURNISHED EXCAVATION = 2,346 CU. YD.
EMBANKMENT (FOR INFORMATION ONLY) = 3,130 CU. YD.

PROPOSED PROFILE GRADE

EXISTING PROFILE GRADE

P.C. STA. 11+00.00 ELEV. 658.30
P.I. STA. 12+00.00 ELEV. 656.70
P.R.C. STA. 13+00.00 ELEV. 659.70
P.I. STA. 13+50.00 ELEV. 661.20
P.T. STA. 14+00.00 ELEV. 661.20
P.C. STA. 15+75.00 ELEV. 661.20
P.I. STA. 16+25.00 ELEV. 661.20
P.R.C. STA. 16+75.00 ELEV. 659.24
P.I. STA. 17+50.00 ELEV. 656.30
P.T. STA. 18+25.00 ELEV. 656.30
P.O.T. STA. 18+50.00 ELEV. 656.30

100 YR. H.W.E. 660.2
15 YR. H.W.E. 658.2

L = 200'
E = 1.15'
K = 43

L = 100'
E = 0.37'
K = 33

L = 100'
E = 0.49'
K = 25

L = 150'
E = 0.74'
K = 38

-1.60%
+3.00%
+0.00%
-3.99%
+0.00%

LOW BEAM ELEV. 659.20

STONE RIPRAP, CLASS A4 (SPECIAL) SEE SHEET 4 OF 19

CHANNEL EXCAVATION

+50 LT. EL. 649.0
S.D. LT. -0.4%
+40 LT. EL. 647.84
+50 RT. EL. 650.67
S.D. RT. +0.4%
+50 LT. EL. 650.00
S.D. LT. +0.4%
+00 RT. EL. 651.67
+00 LT. EL. 651.00
BERM ELEV. 648.0
FL. ELEV. 642.5

EXISTING
PROPOSED

667.05	667.39	667.09	666.74	664.27	661.35	659.36	658.30	658.30	657.50	657.79	656.80	657.85	656.18	658.49	656.05	659.70	656.01	660.83	656.52	661.20	656.94	661.20	656.78	661.20	656.91	661.20	661.20	656.42	661.08	660.71	656.50	660.10	659.24	656.36	658.34	656.43	657.04	656.37	656.38	656.30	656.30	656.30	656.32	656.59	657.01	657.36	657.82	658.00	658.18	659.39
8+00			9+00			10+00			11+00			12+00			13+00			14+00			15+00			+75 16+00	+25		+75 17+00			18+00	+25		19+00			20+00			21+00			22+00									

FILE NAME = 09-455_P&P.DGN	DESIGNED - G.J.C.	REVISED -	
PLOTTED BY = S.A.P.	DRAWN - S.A.P.	REVISED -	
CHECKED BY = G.J.C.	CHECKED - A.L.S.	REVISED -	
PLOT DATE = 01/20/10	DATE - 12/21/10	REVISED -	

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PLAN & PROFILE – T.R. 56 OVER KASKASKIA RIVER

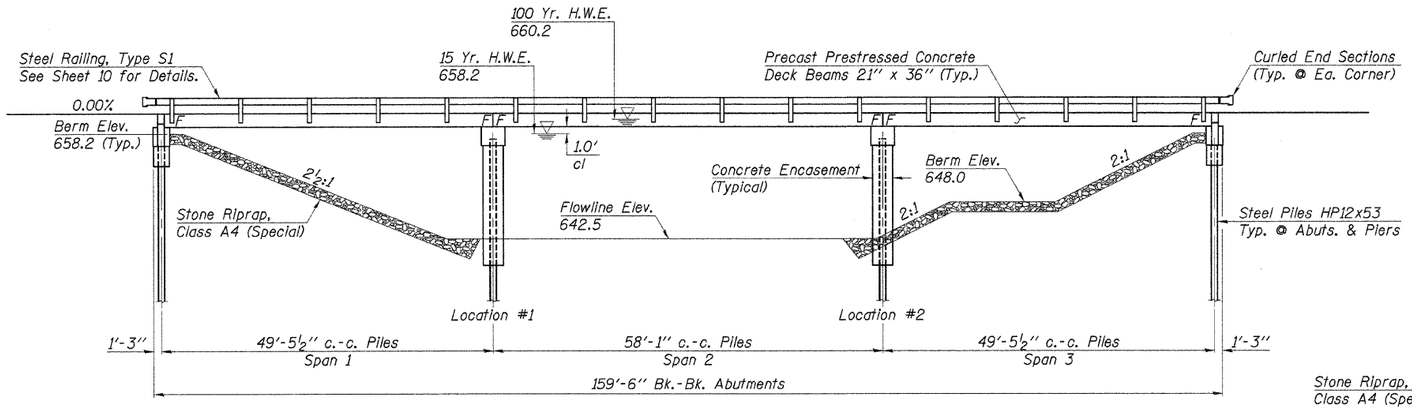
STA. 10+00.00 TO STA. 20+00.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	3
		CONTRACT NO. 91433		
GARRETT ROAD DIST.	ILLINOIS			

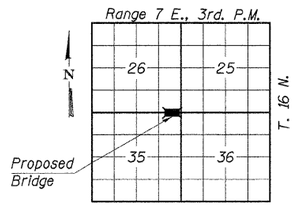
*09-455

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

PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, NOTE BOOK, NO., STRUCTURE NO.&PINS CHKD, BY, DATE



ELEVATION



LOCATION PLAN

GENERAL NOTES

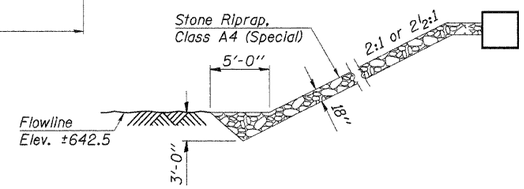
See Proposal Booklet for Boring data.

Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60.

The Contractor shall drive one steel HP12x53 test pile in a permanent location at the west abutment and one steel HP12x53 test pile in a permanent location at each pier as directed by the Engineer, before ordering the remainder of piles.

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

Structure Excavation will not be measured for payment but shall be included in the unit price bid for "Concrete Structues" or "Concrete Encasement."



SECTION A-A

Note: Excavation will not be paid for as a separate item and shall be considered as included in "Stone Riprap, Class A4 (Special)".

KASKASKIA RIVER
BUILT 20__ BY
GARRETT ROAD DISTRICT
DOUGLAS COUNTY
SEC. 09-05123-01-BR
STR. NO. 021-4307
LOADING HL-93

LETTERING FOR NAME PLATE

See Std. 515001

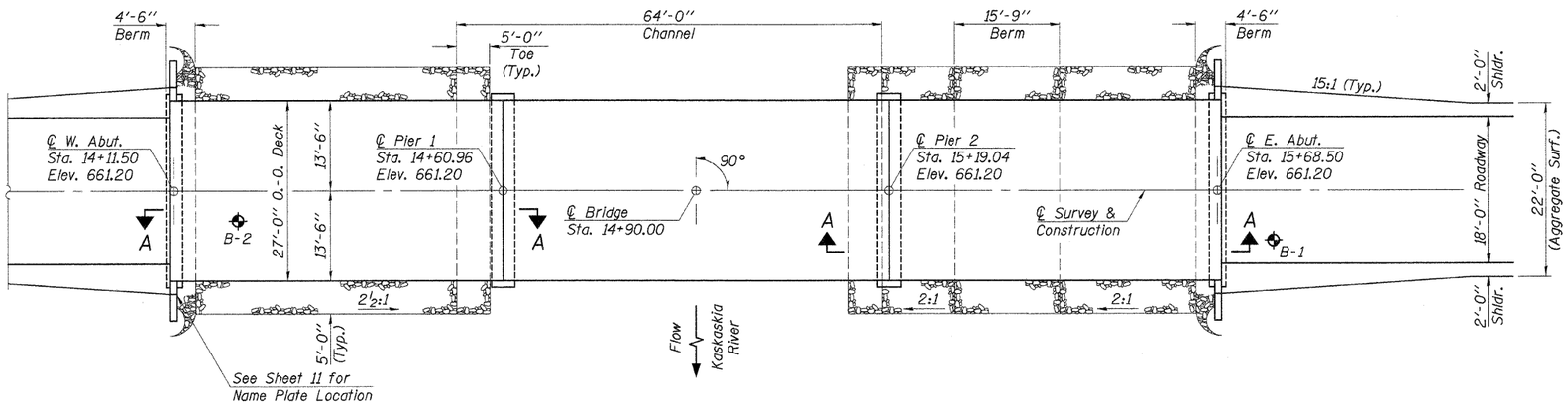
N

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
	653.3	634.0	634.0	653.3

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	4,266		4,266
Concrete Structures	Cu. Yd.		42.4	42.4
Reinforcement Bars	Pound		5,560	5,560
Steel Railing, Type S1	Foot	317		317
Name Plates	Each		1	1
Furnishing Steel Piles HP12x53	Foot		699	699
Driving Piles	Foot		699	699
Test Pile Steel HP12x53	Each		3	3
Stone Riprap, Class A4 (Special)	Ton		377	377
Concrete Encasement	Cu. Yd.		43.7	43.7
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1



PLAN

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.155
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.288
Soil Site Class = D

WATERWAY INFORMATION

Drainage Area	127 Sq. Mi.
Existing Opening (15 Yr.)	889 Sq. Ft.
Required Opening (15 Yr.)	2,223 Sq. Ft.
Proposed Bridge Opening (15 Yr.)	1,644 Sq. Ft.
Over-The-Road Flow (15 Yr.)	579 Sq. Ft.
Design Discharge (15 Yr.)	4,870 C.F.S.
Created Head (15 Yr.)	0.0 Ft.
Over-The-Road Flow (100 Yr.)	2,240 Sq. Ft.
100 Year Discharge	7,840 C.F.S.
100 Yr. Created Head	0.0 Ft.

DESIGN STRESSES

f'_c = 6,000 p.s.i. (Prestressed Beams)
f'_{ci} = 5,000 p.s.i. (Prestressed Beams)
f'_s = 270,000 p.s.i. (Prestressed Strands)
f_{si} = 201,960 p.s.i. (Prestressed Strands)
f'_c = 3,500 p.s.i. (Concrete -- Field Units)
f_y = 60,000 p.s.i. (Reinf. Bars)
LOADING HL-93
Design Specifications: 2010 AASHTO LRFD & Interims
50#/Sq. Ft. included in dead load for future wearing surface.

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

John A. Morris 12-29-10
ILLINOIS STRUCTURAL NO. 4277 (Expires 11/30/12)

LICENSED STRUCTURAL ENGINEER
JOHN A. MORRIS
NO. 81-4277
STATE OF ILLINOIS

DESIGNED -	A.L.S.
CHECKED -	A.R.K.
DRAWN -	S.A.P.
CHECKED -	A.L.S. & A.R.K.

GENERAL PLAN & ELEVATION
SECTION 09-05123-01-BR
GARRETT ROAD DISTRICT
DOUGLAS COUNTY
STATION 14+90.00
S.N. 021-4307

FEHR-GRAHAM & ASSOCIATES, LLC
ENGINEERING AND SCIENCE CONSULTANTS
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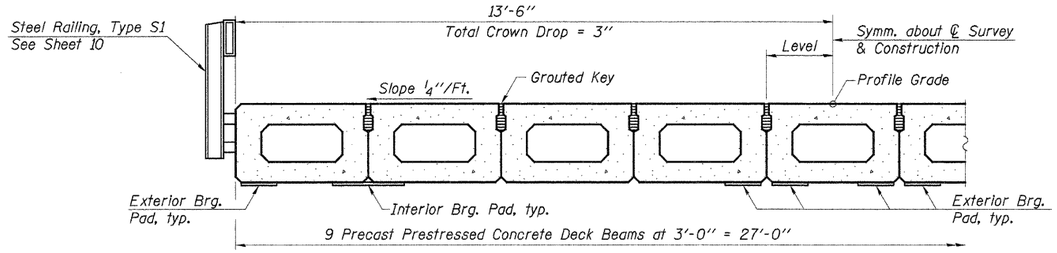
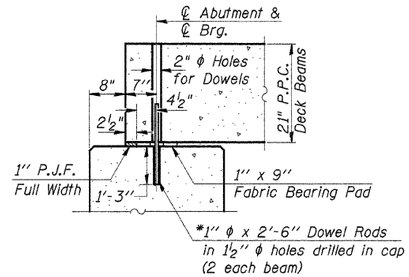
4440 ASH GROVE SPRINGFIELD, IL 62711 (217)-793-8600 www.fehr-graham.com

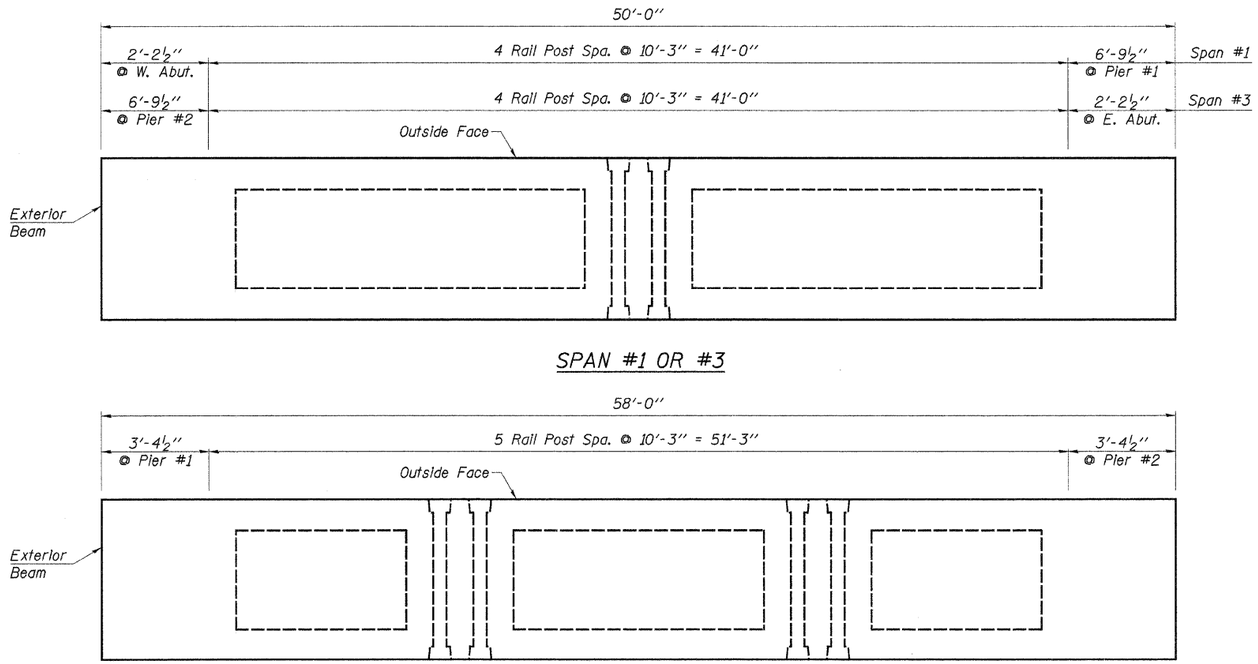
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	4
		CONTRACT NO. 91433		
GARRETT ROAD DIST.	ILLINOIS			



HALF CROSS SECTION



SEC. THRU ABUT.

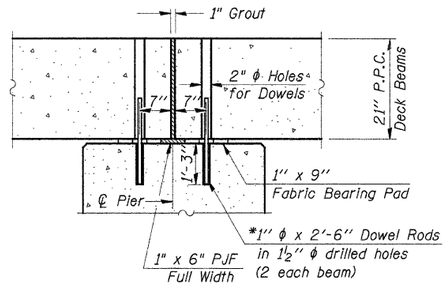


SPAN #1 OR #3

SPAN #2

RAIL POST SPACING PLAN

* Note: After beams are in place, 1 1/2" holes shall be drilled into the Substructure, and the dowel rods grouted in place and allowed to cure (Min. 24 Hrs.) prior to grouting shear key.



SEC. AT PIER

SUPERSTRUCTURE
S.N. 021-4307

DESIGNED -	A.L.S.
CHECKED -	A.R.K.
DRAWN -	S.A.P.
CHECKED -	A.L.S. & A.R.K.

PDB-2136-05 03-12-10

FILE: 09-455_SUPER.DGN DATE: 11/08/10

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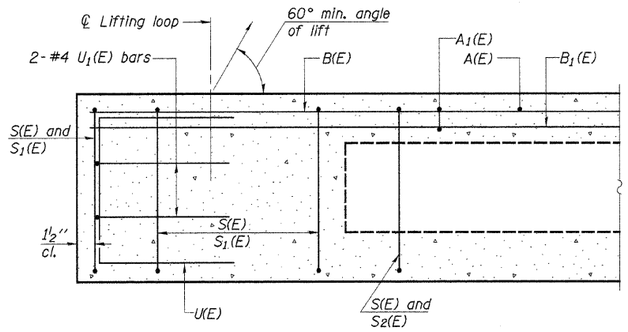
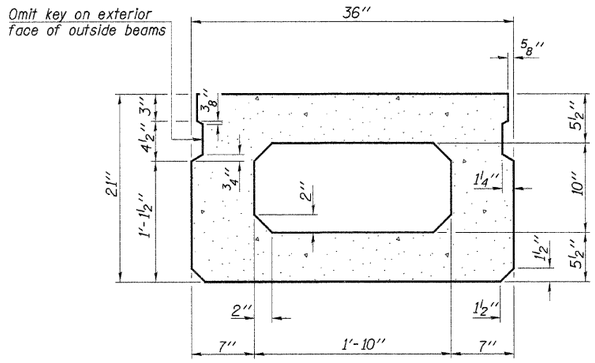
4440 ASH GROVE SPRINGFIELD, IL 62711 (217)-793-8600 www.fehr-graham.com

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	5
		CONTRACT NO. 91433		
	GARRETT ROAD DIST.	ILLINOIS		

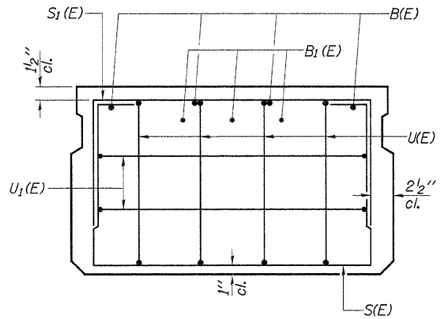
*09-455



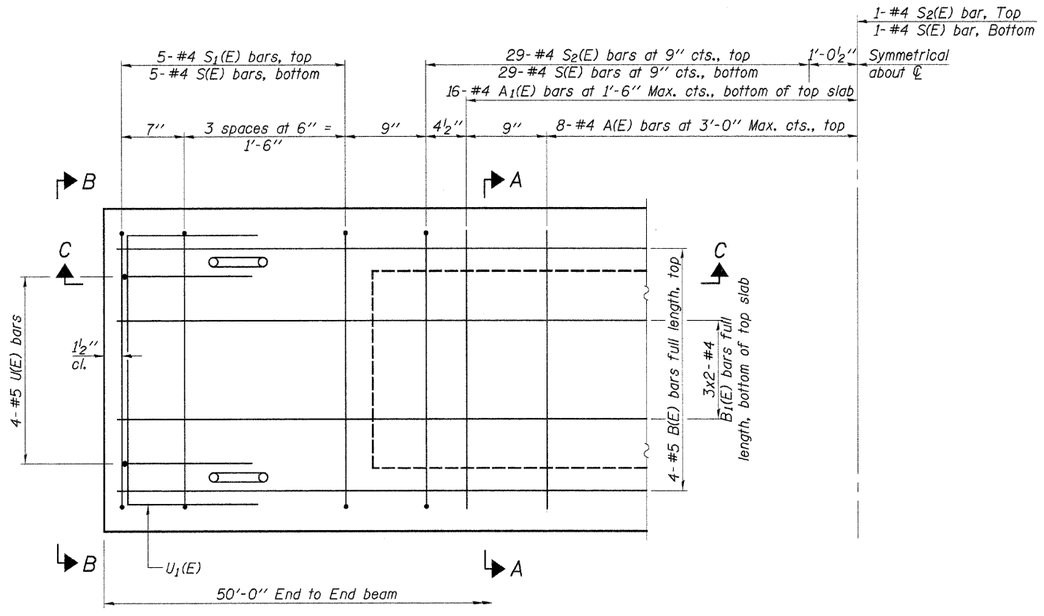
SECTION C-C



SECTION A-A
(Showing dimensions)



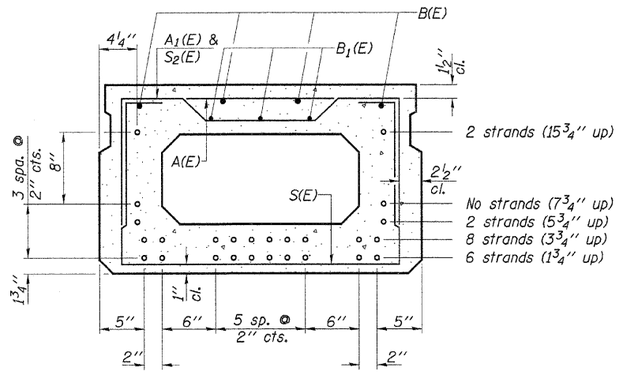
VIEW B-B



PLAN VIEW

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

Bars indicated thus, 3x2-#4 bars etc., indicates 3 lines of bars with 2 lengths per line.



Use 18-½" ϕ strands at the locations shown.

SECTION A-A
(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

MIN. BAR LAPS

#4	2'-0"
#5	2'-6"

BAR LIST
ONE BEAM ONLY - SPANS 1 & 3
(For information only)

Bar	No.	Size	Length	Shape
A(E)	15	#4	2'-7"	—
A1(E)	31	#4	2'-10"	~
B(E)	4	#5	49'-8"	—
B1(E)	6	#4	26'-0"	—
S(E)	69	#4	6'-5"	⊔
S1(E)	10	#4	4'-11"	⊓
S2(E)	59	#4	5'-2"	⊓
U(E)	8	#5	4'-0"	⊏
U1(E)	4	#4	5'-0"	⊓

Note: See sheet 7 for additional details and Bill of Material. Reinforcement bars designated (E) shall be epoxy coated.

21" X 36" PPC DECK BEAM - SPANS 1 & 3
S.N. 021-4307

DESIGNED -	A.L.S.
CHECKED -	A.R.K.
DRAWN -	S.A.P.
CHECKED -	A.L.S. & A.R.K.

PDB-2136-0 03-12-10

FILE: 09-455_SUPER.DGN DATE: 11/08/10

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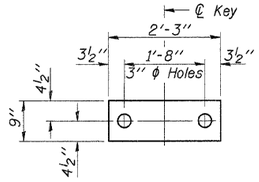
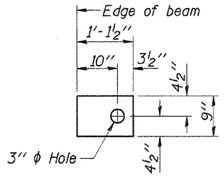
4440 ASH GROVE SPRINGFIELD, IL 62711 (217)-793-8600 www.fehr-graham.com

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	6
		CONTRACT NO. 91433		
GARRETT ROAD DIST.	ILLINOIS			

*09-455



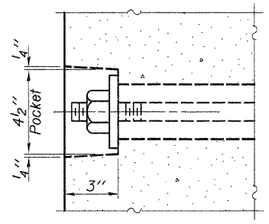
FABRIC BEARING PAD
(Interior)
(24 Required)



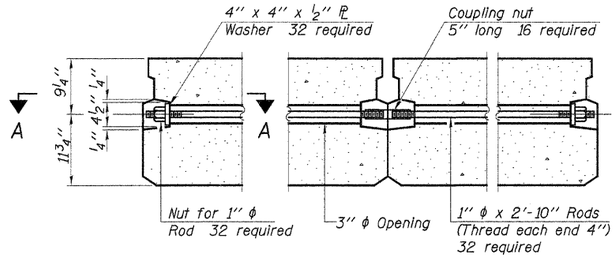
FABRIC BEARING PAD
(Exterior)
(24 Required)

FIXED

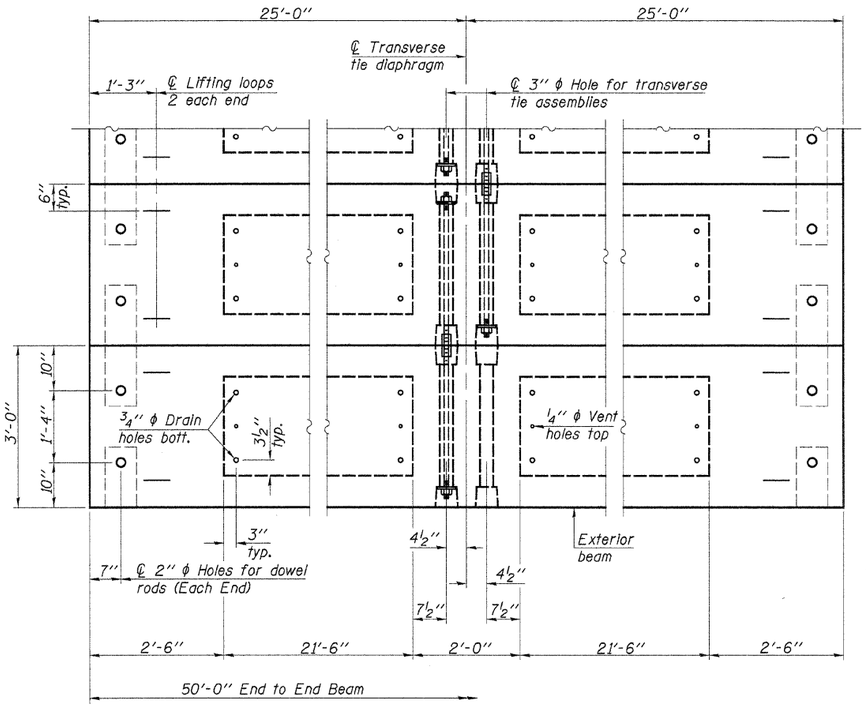
Note: All bearing pads shall be 1" thick.



SECTION A-A

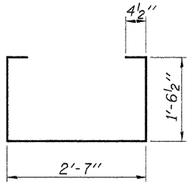


TYPICAL TRANSVERSE TIE ASSEMBLY

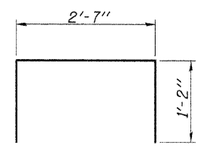


PLAN VIEW

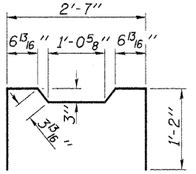
Note: Connect beams in pairs with the transverse tie configuration shown.



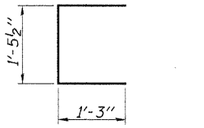
BAR S(E)



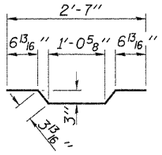
BAR S1(E)



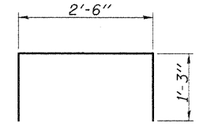
BAR S2(E)



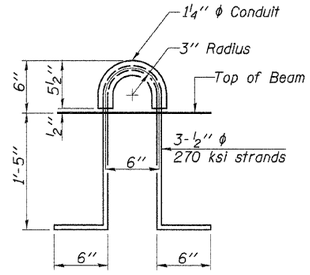
BAR U(E)



BAR A1(E)



BAR U1(E)



LIFTING LOOP DETAIL

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to ASTM A 706, Grade 60.

Two ⅛" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. (96 Required)

A minimum 2½" ϕ lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

Rail post inserts, specified elsewhere, shall be cast into the exterior face of the outside beams.

See Special Provisions for review and distribution of shop drawings.

BILL OF MATERIAL - SPANS 1 & 3

Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft.	2,700

Estimated Total Weight (One Beam) = 30,500 Pounds

21" X 36" PPC DECK BEAM DETAILS
SPANS 1 & 3
S.N. 021-4307

DESIGNED -	A.L.S.
CHECKED -	A.R.K.
DRAWN -	S.A.P.
CHECKED -	A.L.S. & A.R.K.

PDB-2136-0D 03-12-10

FILE: 09-455_SUPER.DGN DATE: 11/08/10

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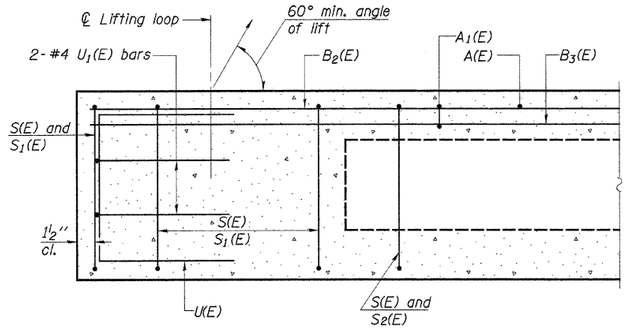
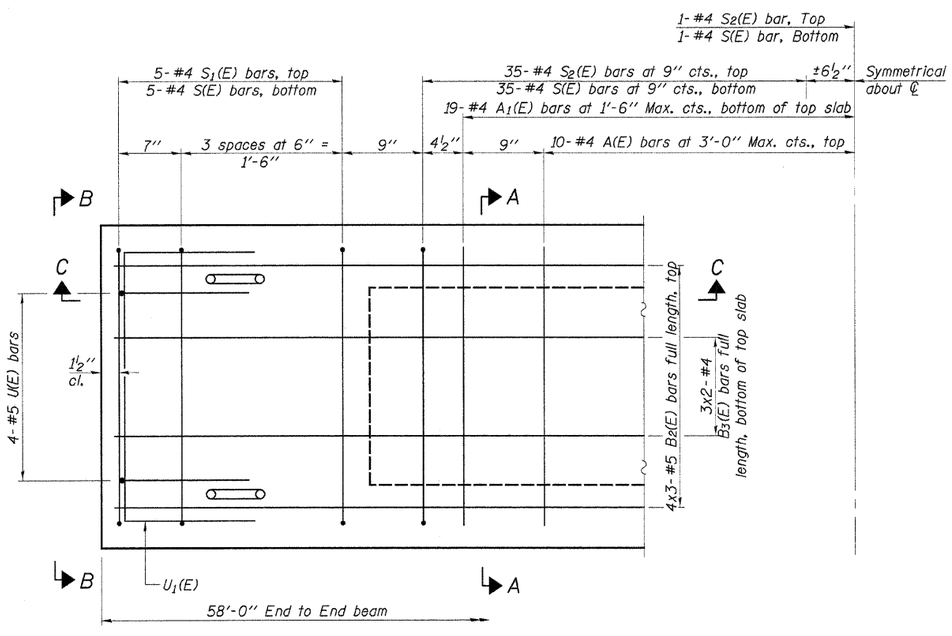
4440 ASH GROVE SPRINGFIELD, IL 62711 (217)-793-8600 www.fehr-graham.com

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	7
		CONTRACT NO. 91433		
GARRETT ROAD DIST.	ILLINOIS			

*09-455



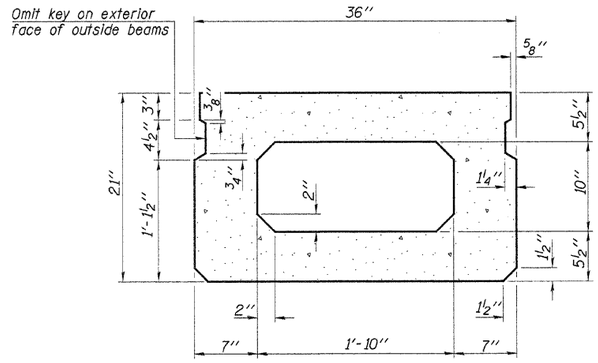
SECTION C-C



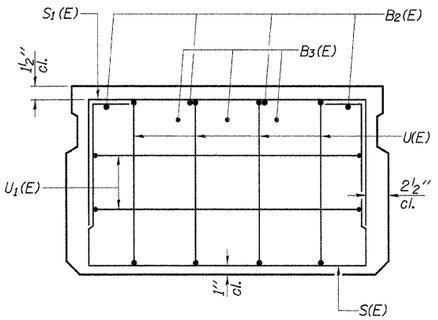
PLAN VIEW

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

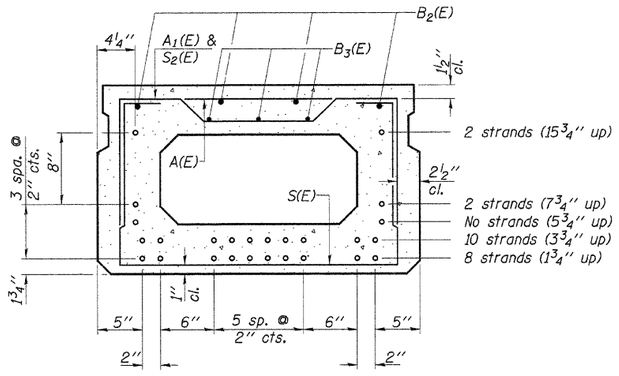
Bars indicated thus, 4x3-#5 bars etc., indicates 4 lines of bars with 3 lengths per line.



SECTION A-A
(Showing dimensions)



VIEW B-B



Use 22-½" ϕ strands at the locations shown.

SECTION A-A
(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

MIN. BAR LAPS

#4 ..... 2'-0"
#5 ..... 2'-6"

BAR LIST
ONE BEAM ONLY - SPAN 2
(For information only)

Bar	No.	Size	Length	Shape
A(E)	19	#4	2'-7"	—
A1(E)	37	#4	2'-10"	~
B2(E)	12	#5	20'-11"	—
B3(E)	6	#4	30'-0"	—
S(E)	81	#4	6'-5"	⌊⌋
S1(E)	10	#4	4'-11"	⌐¬
S2(E)	71	#4	5'-2"	⌐¬
U(E)	8	#5	4'-0"	⊏
U1(E)	4	#4	5'-0"	⌐¬

Note: See sheet 9 for additional details and Bill of Material. Reinforcement bars designated (E) shall be epoxy coated.

21" X 36" PPC DECK BEAM - SPAN 2
S.N. 021-4307

DESIGNED -	A.L.S.
CHECKED -	A.R.K.
DRAWN -	S.A.P.
CHECKED -	A.L.S. & A.R.K.

PDB-2136-0 03-12-10

FILE: 09-455_SUPER.DGN DATE: 11/08/10

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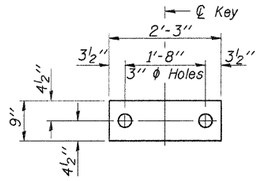
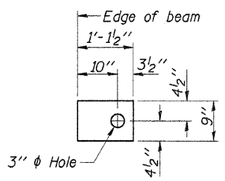
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	8
		CONTRACT NO. 91433		
GARRETT ROAD DIST.	ILLINOIS			

#09-455



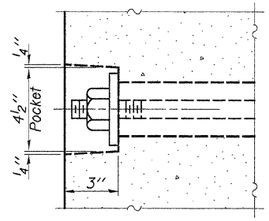
FABRIC BEARING PAD
(Interior)
(12 Required)



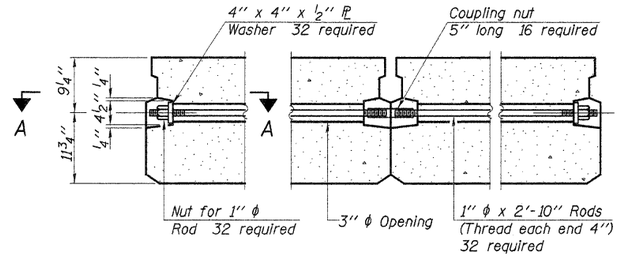
FABRIC BEARING PAD
(Exterior)
(12 Required)

FIXED

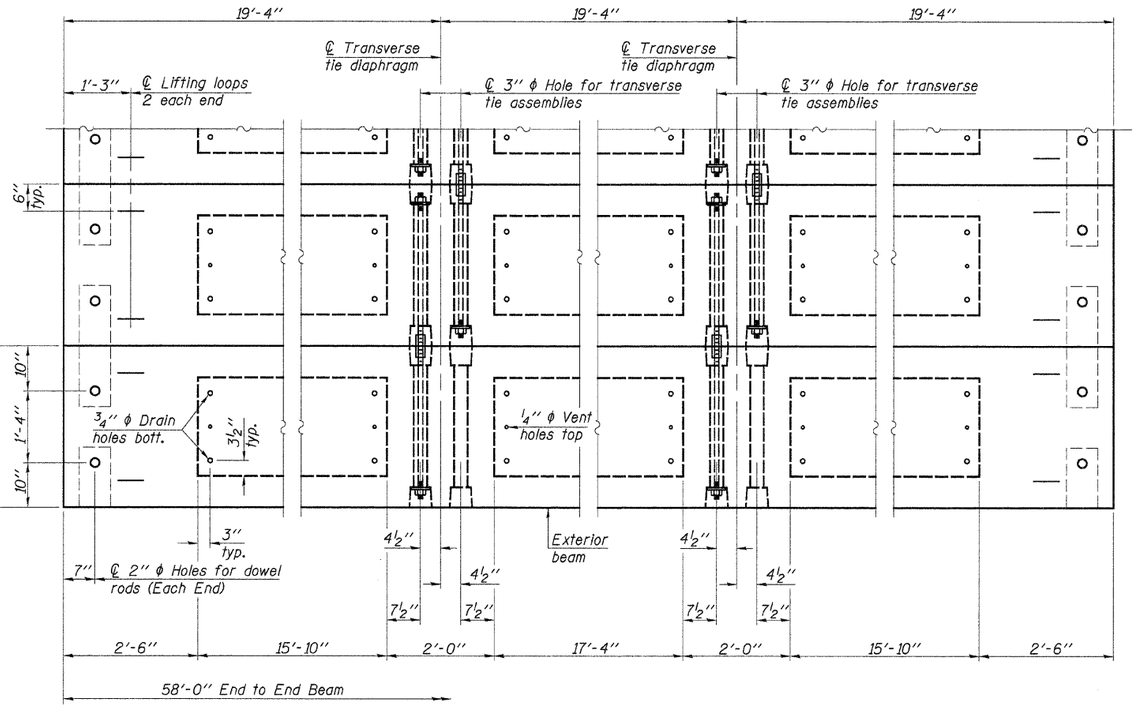
Note: All bearing pads shall be 1" thick.



SECTION A-A

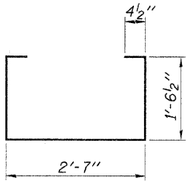


TYPICAL TRANSVERSE TIE ASSEMBLY

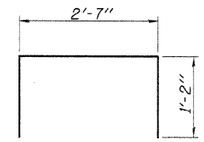


PLAN VIEW

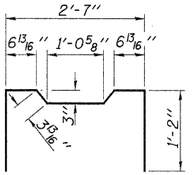
Note: Connect beams in pairs with the transverse tie configuration shown.



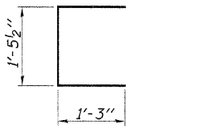
BAR S(E)



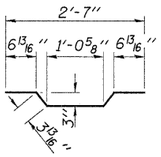
BAR S1(E)



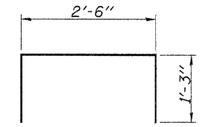
BAR S2(E)



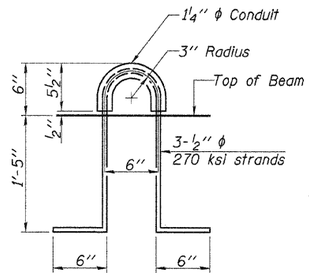
BAR U(E)



BAR A1(E)



BAR U1(E)



LIFTING LOOP DETAIL

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to ASTM A 706, Grade 60.

Two ⅛" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. (48 Required)

A minimum 2½" ϕ lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

Rail post inserts, specified elsewhere, shall be cast into the exterior face of the outside beams. See Special Provisions for review and distribution of shop drawings.

BILL OF MATERIAL - SPAN 2

Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft.	1,566

Estimated Total Weight (One Beam) = 35,600 Pounds

21" X 36" PPC DECK BEAM DETAILS
SPAN 2
S.N. 021-4307

DESIGNED -	A.L.S.
CHECKED -	A.R.K.
DRAWN -	S.A.P.
CHECKED -	A.L.S. & A.R.K.

PDB-2136-0D 03-12-10

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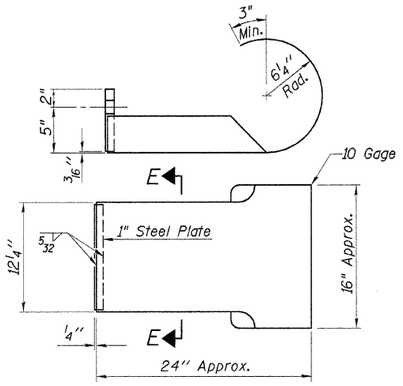
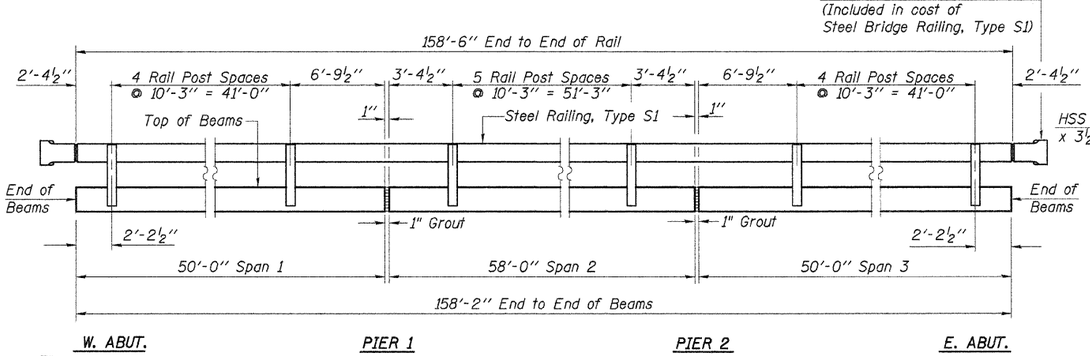
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	9
		CONTRACT NO. 91433		
	GARRETT ROAD DIST.	ILLINOIS		

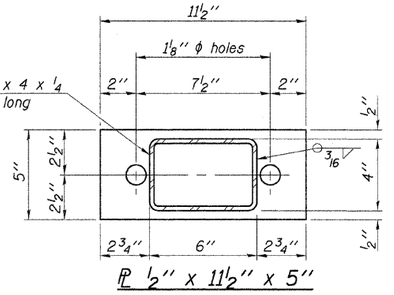


CURLED END SECTION DETAILS

(4 Required)



ELEVATION



℄ ½" x 11½" x 5"

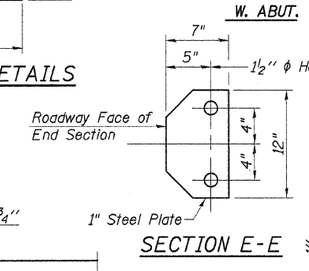
Notes:

All field drilled holes shall be coated with an approved zinc rich paint before erection.

For multi-span bridges, sufficient ¼" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.

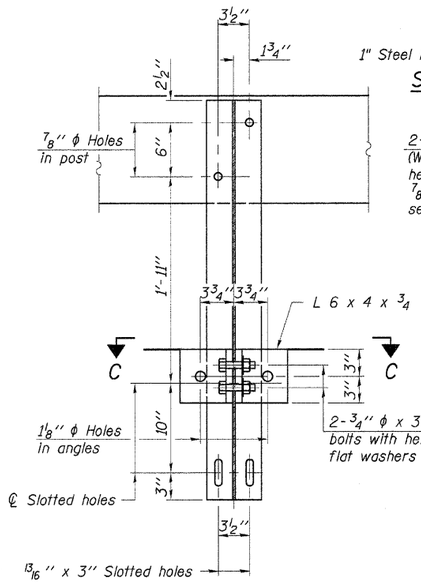
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

*** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

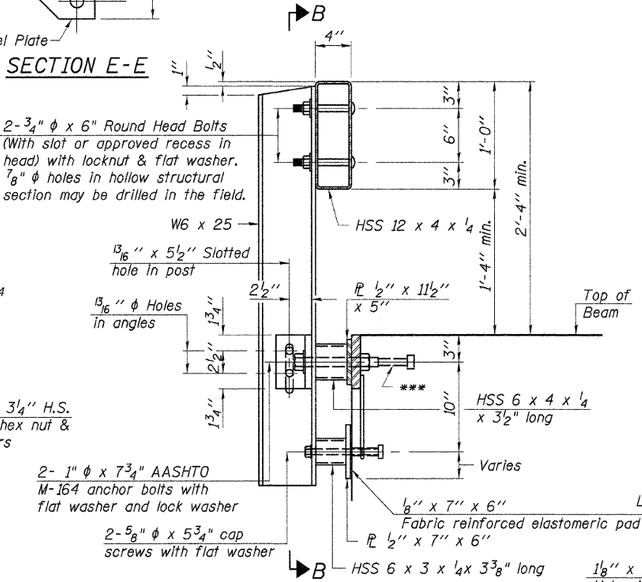


SECTION E-E

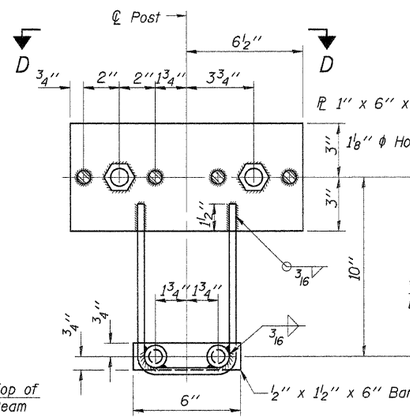
** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed ½".



SECTION B-B

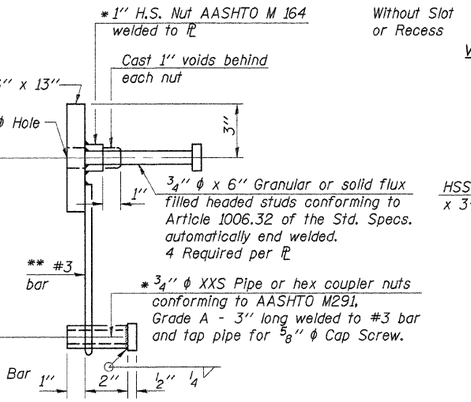


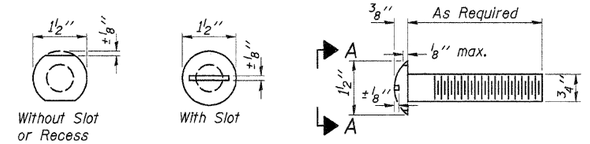
SECTION AT RAILING POST



ANCHOR DEVICE

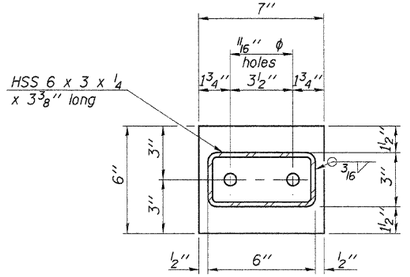
* Threaded areas shall be plugged or blocked off during casting of beam.



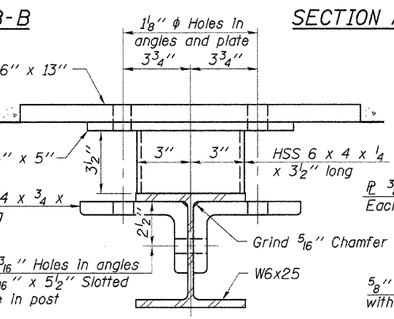


VIEW A-A

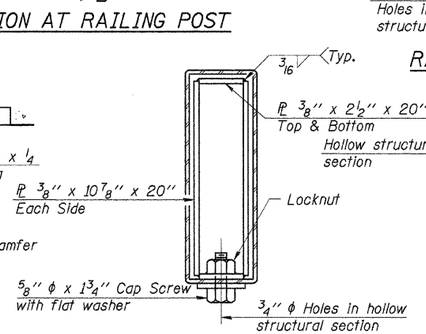
ROUND HEAD BOLT



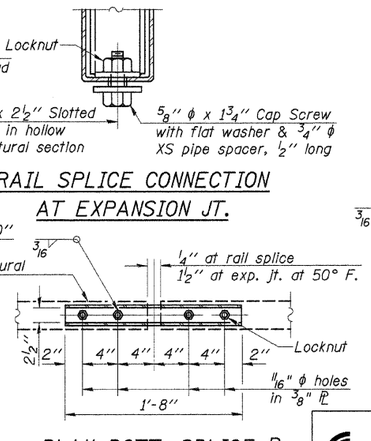
℄ ½" x 7" x 6"



SECTION C-C

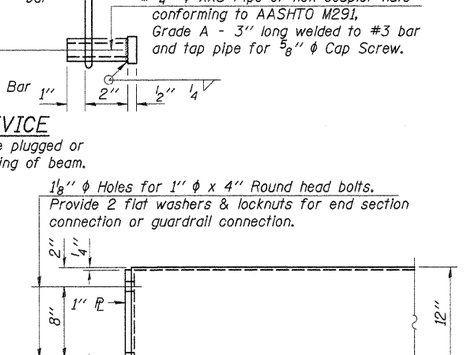


SECTIONS AT RAIL SPLICE

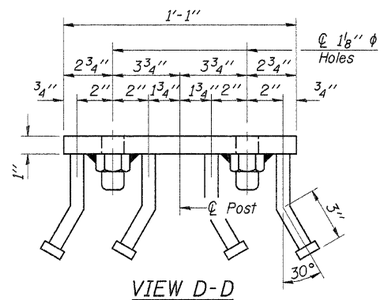


RAIL SPLICE CONNECTION AT EXPANSION JT.

PLAN-BOTT. SPLICE ℄ TYPICAL



END OF RAIL DETAILS



VIEW D-D

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	317

STEEL RAILING, TYPE S-1
S.N. 021-4307

DESIGNED -	A.L.S.
CHECKED -	A.R.K.
DRAWN -	S.A.P.
CHECKED -	A.L.S. & A.R.K.

R-S-1 (3) 03-12-10 (10'-9" Maximum Post Spacing)

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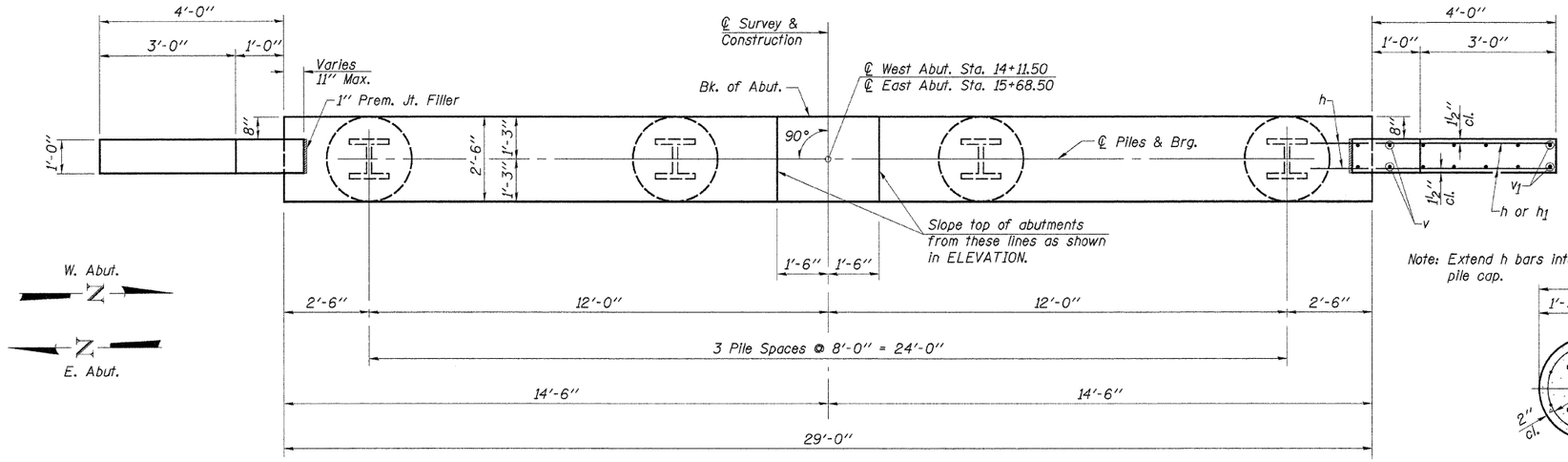
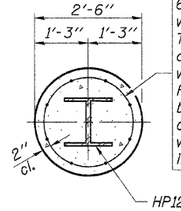
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	10
		CONTRACT NO. 91433		
GARRETT ROAD DIST.	ILLINOIS			



PLAN

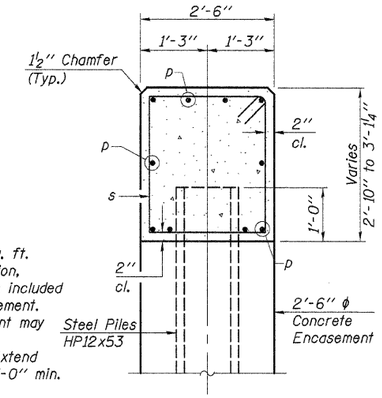
Note: Extend h bars into pile cap.



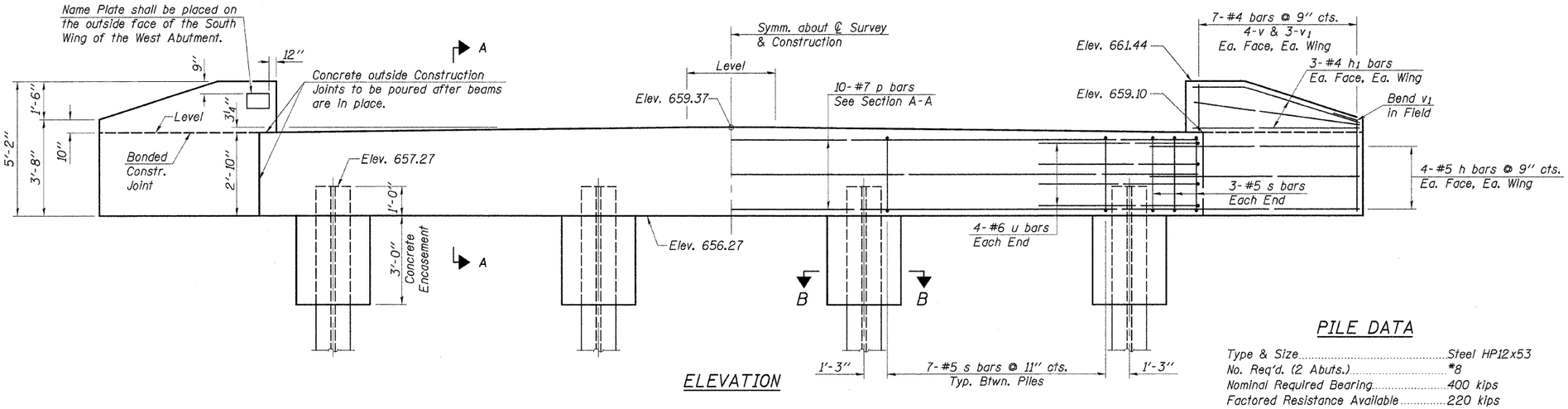
Welded wire fabric 6 x 6-W4.0 x W4.0 weighing 58#/100 sq. ft. The cost of Excavation, and Reinforcement is included with Concrete Encasement. Forms for Encasement may be omitted when soil conditions permit. Extend welded wire fabric 1'-0" min. into Abutment Cap.

SECTION B-B

PILE ENCASEMENT DETAIL



SECTION A-A



ELEVATION

PILE DATA

Type & Size	Steel HP12x53
No. Req'd. (2 Abuts.)	*8
Nominal Required Bearing	400 kips
Factored Resistance Available	220 kips
Estimated Length	37 ft./pile

*Includes 1 Test Pile to be driven in a permanent location at the west abutment.

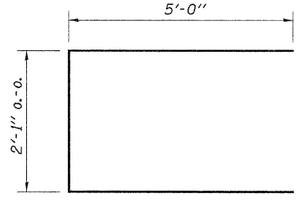
The test piles shall be driven to 110 percent of the Nominal Required Bearing indicated above.

Steel Piles shall be according to AASHTO M270 Grade 50.

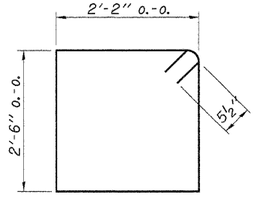
2 ABUTMENTS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	32	#5	6'-9"	——
h1	24	#4	4'-8"	——
p	20	#7	28'-8"	——
s	54	#5	10'-3"	□
u	16	#6	12'-1"	▭
v	32	#4	4'-10"	——
v1	24	#4	4'-3"	——
Concrete Structures			Cu. Yd.	18.7
Reinforcement Bars			Pound	2,510
Name Plates			Each	1
Test Pile Steel HP12x53			Each	1
Steel Piles HP12x53			Foot	259
Driving Piles			Foot	259
Concrete Encasement			Cu. Yd.	4.4

See Sheet 13 for Pile Details.



BAR u



BAR s

DESIGNED -	A.L.S.
CHECKED -	A.R.K.
DRAWN -	S.A.P.
CHECKED -	A.L.S. & A.R.K.

ABUTMENTS
S.N. 021-4307

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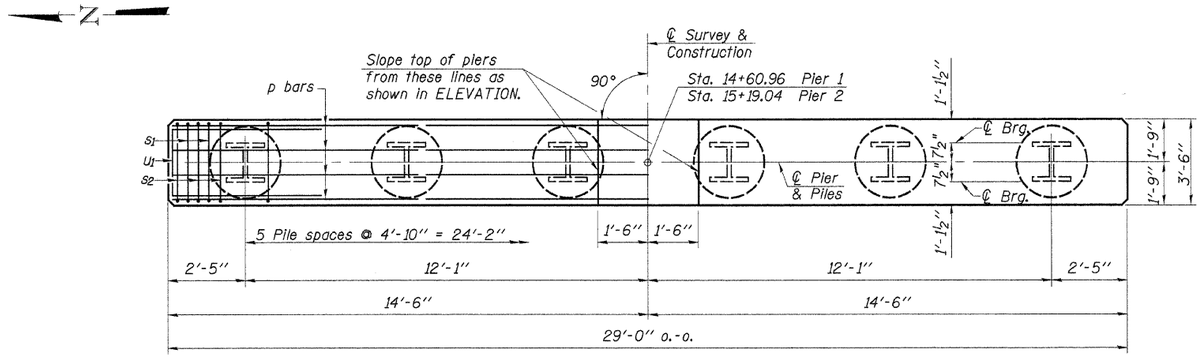
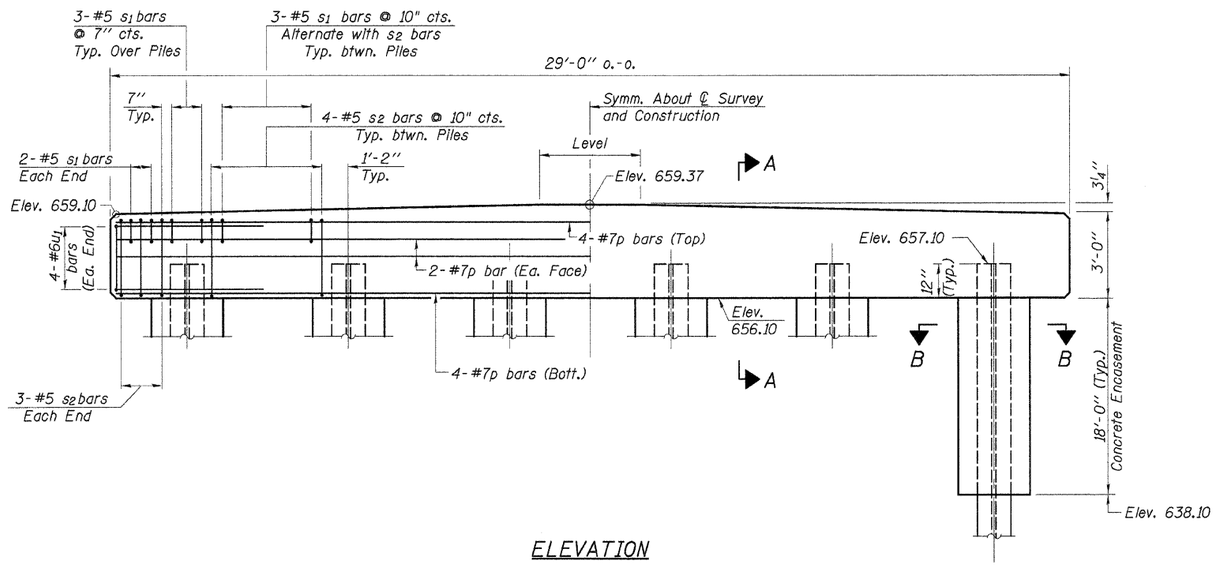
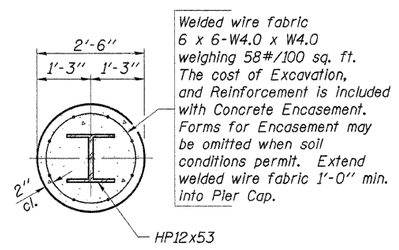
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	11
		CONTRACT NO. 91433		
GARRETT ROAD DIST.	ILLINOIS			



PLAN

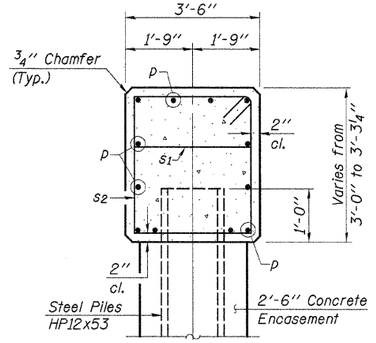


ELEVATION



Welded wire fabric 6 x 6-W4.0 x W4.0 weighing 58#/100 sq. ft. The cost of Excavation, and Reinforcement is included with Concrete Encasement. Forms for Encasement may be omitted when soil conditions permit. Extend welded wire fabric 1'-0" min. into Pier Cap.

SECTION B-B
PILE ENCASEMENT DETAIL



SECTION A-A

PILE DATA

Type & Size.....Steel HP12x53
No. Req'd.....*12
Nominal Required Bearing.....400 kips
Factored Resistance Available.....184 kips
Estimated Length.....49 ft./pile - Pier 1
39 ft./pile - Pier 2

*Includes 1 Test Pile to be driven in a permanent location at each pier.

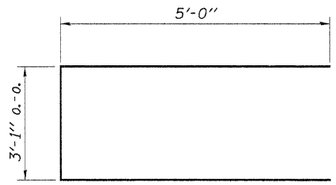
The test piles shall be driven to 110 percent of the Nominal Required Bearing indicated above.

Steel Piles shall be according to AASHTO M270 Grade 50.

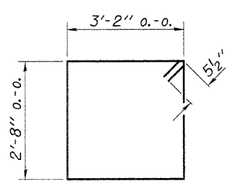
BILL OF MATERIAL - 2 PIERS

BAR	NO.	SIZE	LENGTH	SHAPE
p	24	#7	28'-8"	
s_1	74	#5	8'-5"	
s_2	52	#5	12'-7"	
u_1	16	#6	13'-1"	
Concrete Structures			Cu. Yd.	23.7
Reinforcement Bars			Pound	3,050
Steel Piles HP12x53			Foot	440
Driving Piles			Foot	440
Test Pile Steel HP12x53			Each	2
Concrete Encasement			Cu. Yd.	39.3

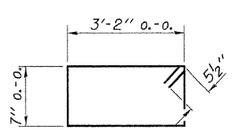
See Sheet 13 for Pile Details.



BAR u_1



BAR s_2



BAR s_1

DESIGNED -	A.L.S.
CHECKED -	A.R.K.
DRAWN -	S.A.P.
CHECKED -	A.L.S. & A.R.K.

PIERS
S.N. 021-4307

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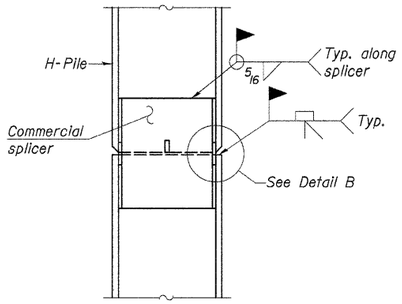
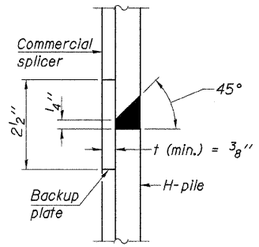
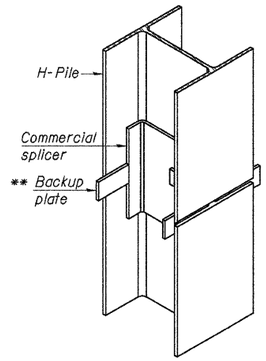
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	12
		CONTRACT NO. 91433		
	GARRETT ROAD DIST. ILLINOIS			



ELEVATION

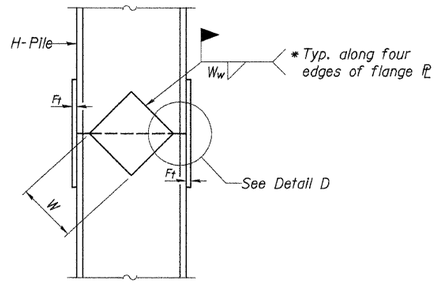


DETAIL "B"

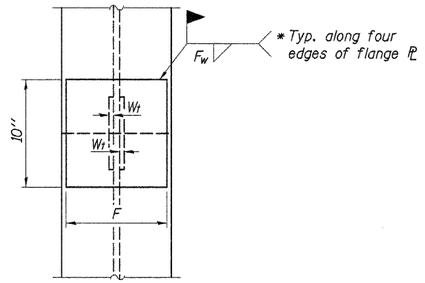


ISOMETRIC VIEW

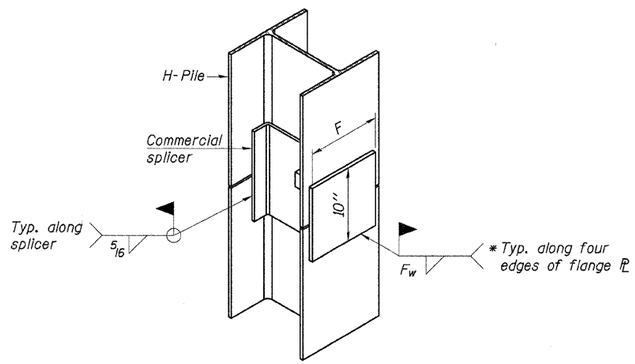
WELDED COMMERCIAL SPLICE



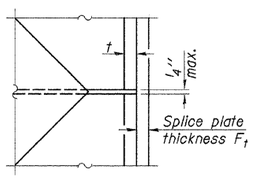
ELEVATION



END VIEW



ISOMETRIC VIEW



DETAIL D

Designation	F	Ft	Fw	W	Wf	Ww
HP 14x117	12½"	1"	⅞"	7¾"	⅝"	½"
x102	12½"	⅞"	¾"	7¾"	⅝"	½"
x89	12½"	¾"	11/16"	7¾"	⅝"	½"
x73	12½"	⅝"	9/16"	7¾"	⅝"	½"
HP 12x84	10"	⅞"	11/16"	6½"	⅝"	½"
x74	10"	⅞"	11/16"	6½"	⅝"	½"
x63	10"	⅝"	½"	6½"	½"	⅜"
x53	10"	⅝"	½"	6½"	½"	⅜"
HP 10x57	8"	¾"	9/16"	5¼"	½"	⅜"
x42	8"	⅝"	9/16"	5¼"	½"	⅜"
HP 8x36	7"	⅝"	7/16"	4¼"	½"	⅜"

WELDED PLATE FIELD SPLICE

WELDED COMMERCIAL SPLICE ALTERNATE

* Interrupt welds ¼" from end of web and/or each flange.

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

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

DESIGNED	A.L.S.
CHECKED	A.R.K.
DRAWN	S.A.P.
CHECKED	A.L.S. & A.R.K.

F-HP 11-1-09

FILE: 09-455_PILES.DGN DATE: 11/08/10

STEEL PILE SPLICING DETAILS
S.N. 021-4307

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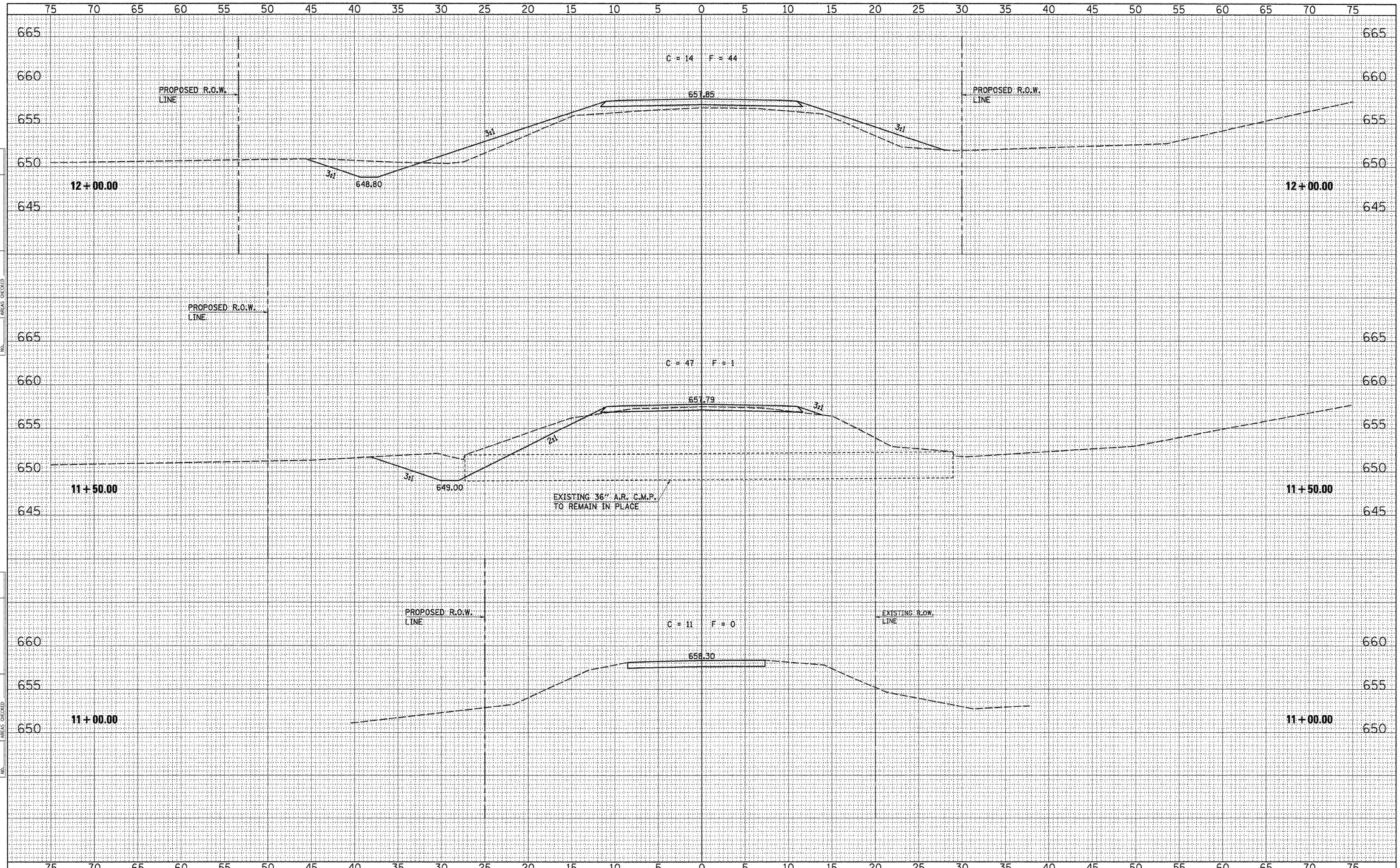
4440 ASH GROVE SPRINGFIELD, IL 62711 (217)-793-8600 www.fehr-graham.com

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	13
		CONTRACT NO. 91433		
	GARRETT ROAD DIST.	ILLINOIS		

*09-455



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

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

FILE NAME = 09-455_XS-SHEETS.DGN	DESIGNED - G.J.C.	REVISED -
PLOTTED BY = S.A.P.	DRAWN - S.A.P.	REVISED -
CHECKED BY = G.J.C.	CHECKED - A.L.S.	REVISED -
PLOT DATE = 12/28/09	DATE - 11/22/10	REVISED -

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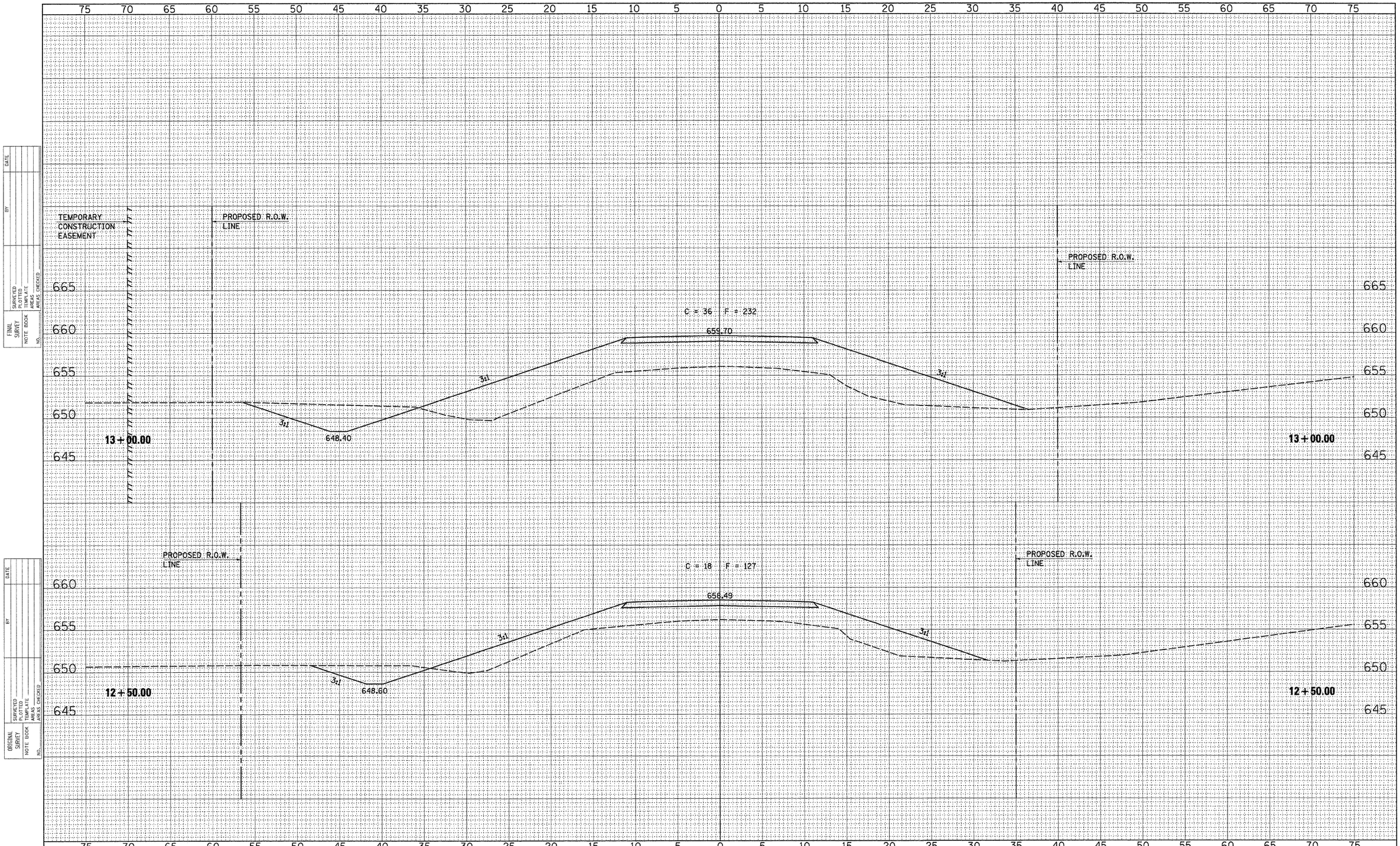
ROADWAY CROSS SECTIONS – T.R. 56

STA. 11+00.00 TO STA. 12+00.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	14
		CONTRACT NO. 91433		

GARRETT ROAD DIST. ILLINOIS

*09-455



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CHECKED BY = G.J.C.	CHECKED - A.L.S.	REVISED -
PLOT DATE = 12/28/09	DATE - 11/22/10	REVISED -

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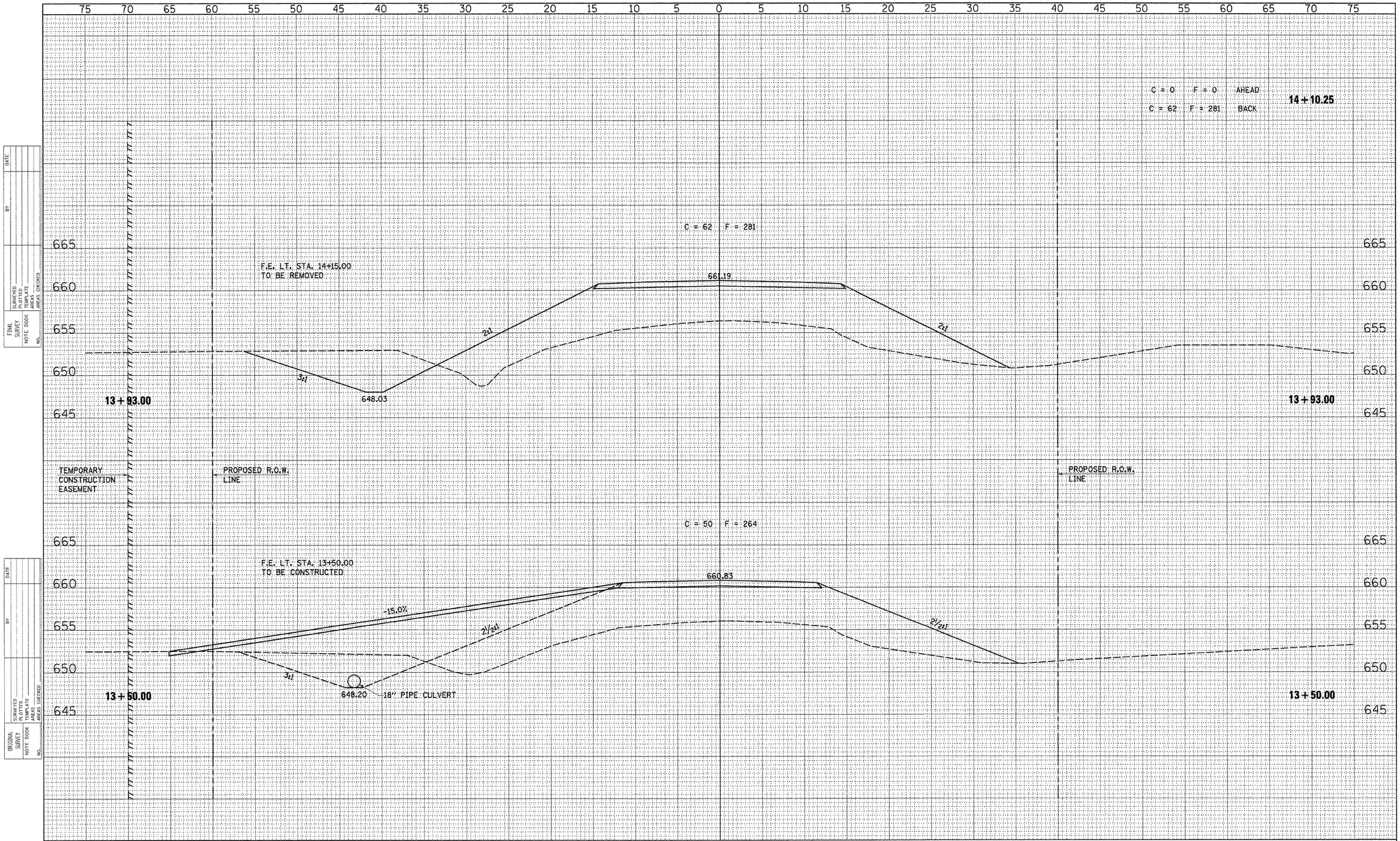
ROADWAY CROSS SECTIONS – T.R. 56

STA. 12+50.00 TO STA. 13+00.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	15
		CONTRACT NO. 91433		
GARRETT ROAD DIST.	ILLINOIS			

*09-455



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

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

FILE NAME = 09-455_XS-SHEETS.DGN	DESIGNED - G.J.C.	REVISED -	
PLOTTED BY = S.A.P.	DRAWN - S.A.P.	REVISED -	
CHECKED BY = G.J.C.	CHECKED - A.L.S.	REVISED -	
PLOT DATE = 12/28/09	DATE - 11/22/10	REVISED -	

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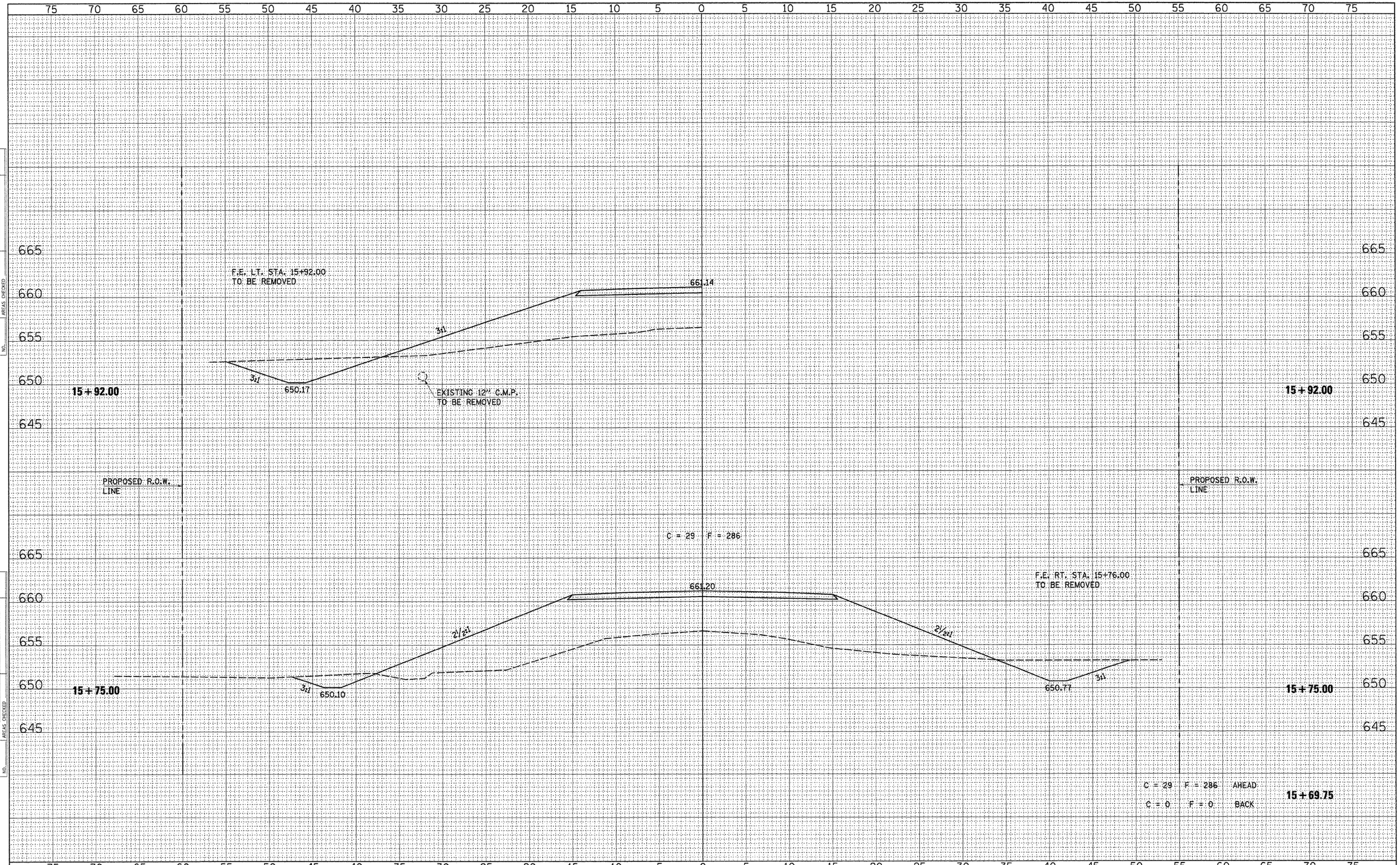
ROADWAY CROSS SECTIONS – T.R. 56

STA. 13+50.00 TO STA. 14+10.25

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	16
		CONTRACT NO. 91433		
GARRETT ROAD DIST.	ILLINOIS			

*09-455

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



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

FILE NAME = 09-455_XS-SHEETS.DGN	DESIGNED - G.J.C.	REVISED -
PLOTTED BY = S.A.P.	DRAWN - S.A.P.	REVISED -
CHECKED BY = G.J.C.	CHECKED - A.L.S.	REVISED -
PLOT DATE = 12/28/09	DATE - 11/22/10	REVISED -

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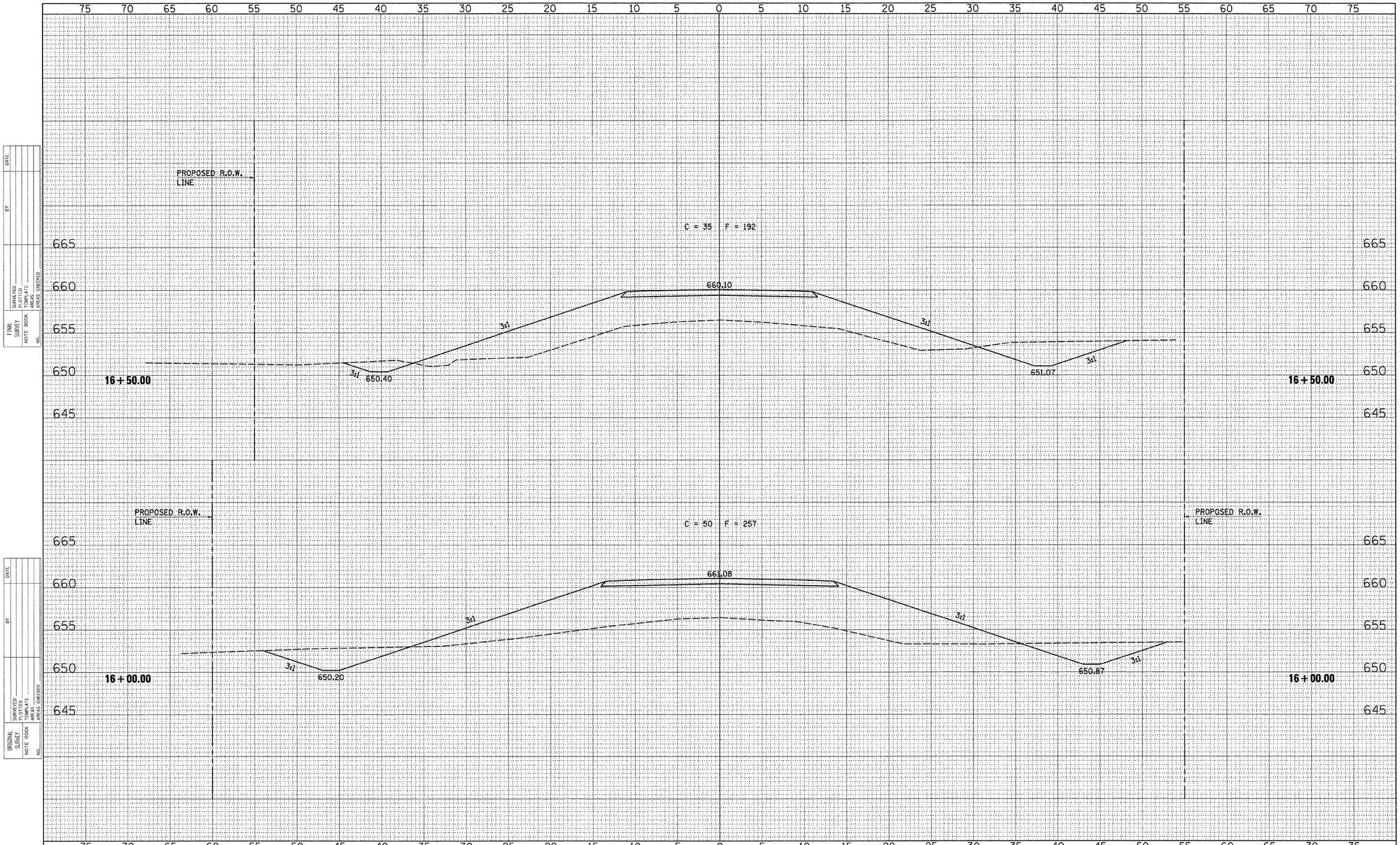
ROADWAY CROSS SECTIONS – T.R. 56

STA. 15+69.75 TO STA. 15+92.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	17
		CONTRACT NO. 91433		
GARRETT ROAD DIST.	ILLINOIS			

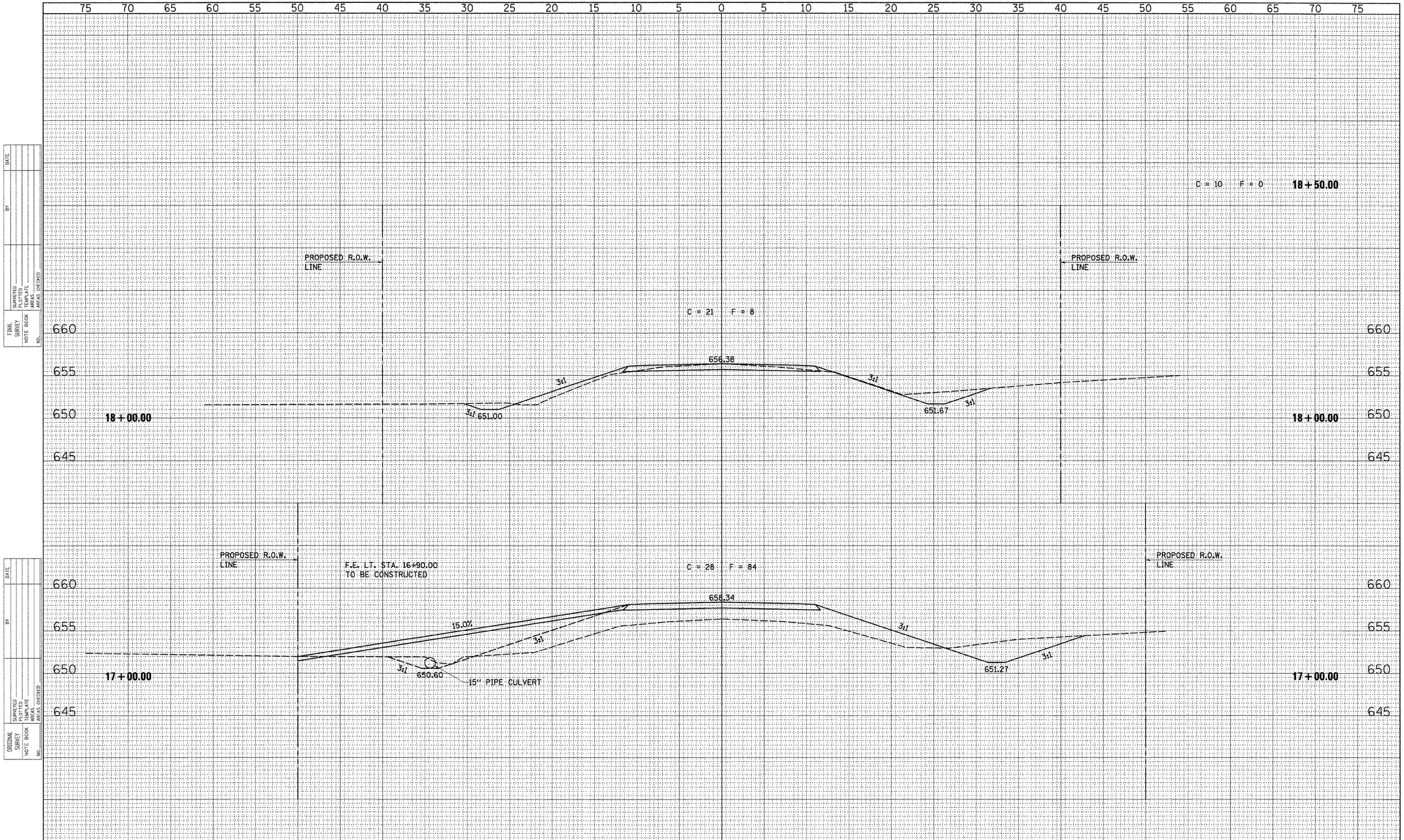
*09-455



FILE NAME = 09-455_XS-SHEETS.DGN	DESIGNED - G.J.C.	REVISED -	4440 ASH GROVE SPRINGFIELD, IL. 62711 (217) 793-8600 www.fehr-graham.com	**FEHR-GRAHAM & ASSOCIATES, LLC** **ENGINEERING AND SCIENCE CONSULTANTS** FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL	**ROADWAY CROSS SECTIONS – T.R. 56**
PLOTTED BY = S.A.P.	DRAWN - S.A.P.	REVISED -			STA. 16+00.00 TO STA. 16+50.00
CHECKED BY = G.J.C.	CHECKED - A.L.S.	REVISED -			GARRETT ROAD DIST. ILLINOIS
PLOT DATE = 12/28/09	DATE - 11/22/10	REVISED -			

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	18
		CONTRACT NO. 91433		

*09-455



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

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

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ROADWAY CROSS SECTIONS – T.R. 56

STA. 17+00.00 TO STA. 18+50.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
56	09-05123-01-BR	DOUGLAS	19	19
		CONTRACT NO. 91433		

GARRETT ROAD DIST. ILLINOIS

*09-455