09-18-2020 LETTING ITEM 046

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		VARIOUS	34	1
	ILLINOIS	CONTRACT NO. 46454		

**FAI 57 & FAI 24 *D-9 OVD SIN STR REPL 18-16 **JEFFERSON JOHNSON

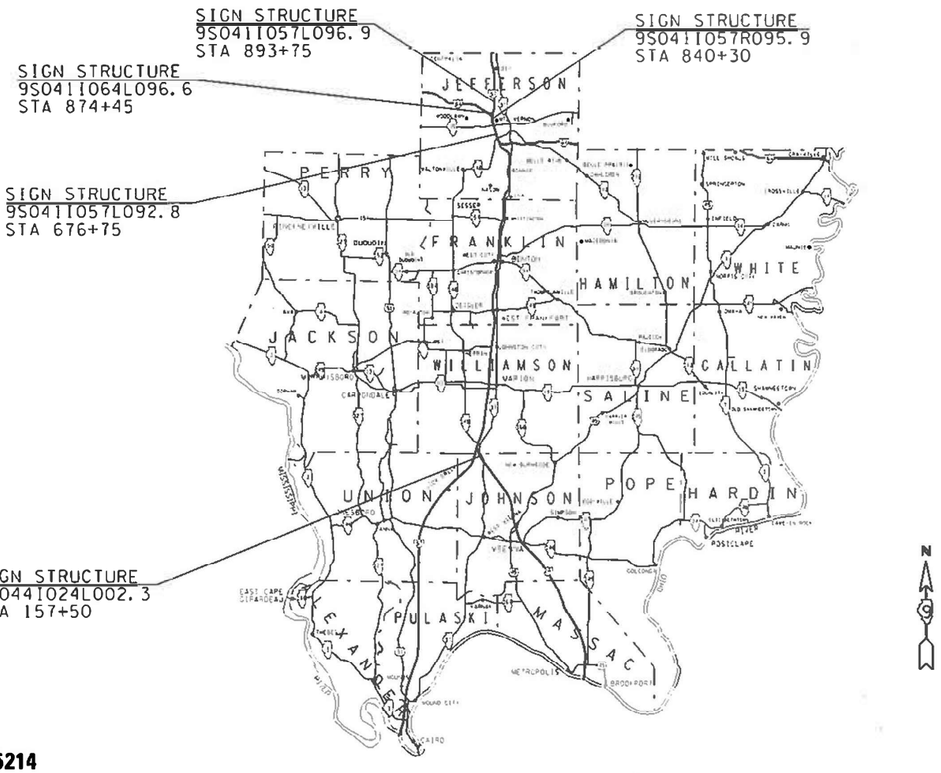
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

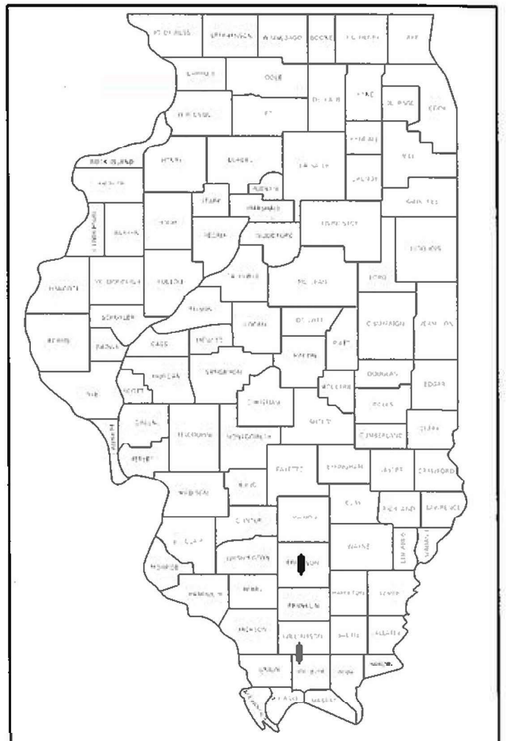
PROPOSED
HIGHWAY PLANS

FAI I–57 (I–57) & FAI I–24 (I–24)
SECTION D–9 OVD SIN STR REPL 18–16

SIGN STRUCTURE REPLACEMENT
JEFFERSON & JOHNSON COUNTIES

M–60–039–18





LOCATION OF SECTION INDICATED THUS: –

FOR INDEX OF SHEETS, SEE SHEET NO. 3

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 5

FOR STRUCTURAL PAVEMENT DESIGN INFORMATION, SEE SHEET NO. NA

TRAFFIC DATA
SEE SHEET NO 4

TOWNSHIPS
JEFFERSON COUNTY
SHILOH & McCLELLAN

JOHNSON COUNTY
GOREVILLE

DESIGN DESIGNATION : NA

COORDINATE SYSTEM : NA

POSTED SPEED : 70 MPH

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

PROJECT ENGINEER: VALERIE ROLLA 1–618–351–5214
PROJECT DESIGNER: DARRYL LEFTWICH ... 1–618–351–5291

CONTRACT NO. 46454

GROSS LENGTH = NA
NET LENGTH = NA

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 05-21-2020
REGION FIVE ENGINEER

August 14, 2020
ENGINEER OF DESIGN AND ENVIRONMENT

August 14, 2020
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV. - MS

Prepared By:
DISTRICT STUDIES & PLANS ENGINEER

Examined By:
DISTRICT LAND ACQUISITION ENGINEER

Examined By:
DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By:
DISTRICT OPERATIONS ENGINEER

Examined By:
DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By:
DISTRICT CONSTRUCTION ENGINEER

Examined By:
DISTRICT MATERIALS ENGINEER

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	*	VARIOUS***	34	2
		CONTRACT NO. 46454		
	ILLINOIS	FED. AID PROJECT		

**FAI 57 & FAI 24 *0-9 OVD SIN STR REPL 18-16

***JEFFERSON JOHNSON

INDEX OF SHEETS

HIGHWAY STANDARDS

000001-07 STANDARD SYMBOLS ABBREVIATIONS & PATTERNS
001001-02 AREAS OF REINFORCEMENT BARS
001006-00 DECIMAL OF INCH & FOOT
630001-12 STEEL PLATE BEAM GRDRAIL
630301-09 SHLD WIDENING FOR TYPE1 GUARDRAIL TERMS
631011-10 TRAFFIC BARRIER TERMINAL TYPE 2
701101-05 OFF RD OP-MULTI LN-LESS THAN 15 FT TO EOP
701106-02 OFF RD OP-MULTI LN - MORE THAN 15 FT AWAY
701400-09 APPRCH TO LN CLOSURE - FRWAY EXPWAY
701401-12 LN CLOSURE FRWAY EXPWAY
701406-12 LN CLOSURE FRWAY EX PWAY-DAY OP ONLY
701411-09 LN CLOSURE MULTI LN-ENTR OR EXIT RAMP 45 MPH OR MORE
701428-01 TRAFFIC CONTROL SETUP REMOVAL FREEWAY EXPRESSWAY
701446-10 TWO LN CLOSURE - FRWAY EXPWAY
701901-08 TRAF CNTRL DEVICES
720021-02 SIGN PANELS - EXTRUDED ALUM TYPE
725001-01 OBJECT AND TERMINAL MARKERS
782006-01 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

GENERAL NOTES

NONE

COMMITMENTS

NONE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS
HIGHWAY STANDARDS, GENERAL NOTES, COMMITMENTS

SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	_____ • _____	VARIOUS•••	34	3
		CONTRACT NO. 46454		
	ILLINOIS	FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

PROJECT OVERVIEW

#	STRUCTURE	EXIST TRUSS STA	LOCATION DETAIL	TREATMENT/REASON	SPAN TYPE	TRUSS SPAN
1	9S041I057L096.9	894+00.00	SB I-57, EXIT 96: ~0.4 MILES NORTH OF THE WB I-64 EXIT	FULL REPLACEMENT - AGE	I-A	88 FT
2	9S041I057L096.6	874+20.00	SB I-57, EXIT 96: JUST NORTH OF THE WB I-64 EXIT	FULL REPLACEMENT - AGE	II-A	106 FT
3	9S041I057R095.9	840+55.00	NB I-57/WB I-64, EXIT 96: JUST SOUTH OF THE WB I-64 EXIT	FULL REPLACEMENT - AGE	II-A	114 FT
4	9S041I057L092.8	677+00.00	SB I-57/EB I-64, EXIT 92: ~0.9 MILE NORTH OF THE EB I-64 EXIT	FULL REPLACEMENT - AGE	I-A	88 FT
5	9S044I024L002.3	157+23.00	WB I-24, EXIT 44 A-B: ~1.14 MILE SOUTHEAST OF THE I-57 EXITS	FULL REPLACEMENT - AGE	I-A	88 FT

TRAFFIC DATA

COUNTY :	041 JEFFERSON/ 044 JOHNSON	CITY:	RURAL
COUNT YR.	2018	CONST. YR.	2020
K-FACTOR:	0.09		

FOR SN 9S041I057L096.9 and SN 9S041I057L096.6 on SB I-57

LEG A: FAI 57 STA 15.30-22.78

NORTH TRILEVEL TO DIX AT MP 96.9 & 96.6

EX. FAC.: 1.50%

	2019	2020	2030	2040
		1.015	1.178	1.367
P.V.s	15,475	15,705	18,225	21,150
S.U.s	525	535	620	720
M.U.s	7,900	8,020	9,305	10,800
ADT	23,900	24,260	28,150	32,670
DHV	2,150	2,185	2,535	2,940

FOR SN 9S041I057R095.9 on NB I-57/WB I-64 and SN 9S041I057L092.8 on SB I-57/EB I-64

LEG C: FAI 57 STA 11.14-13.00

SOUTH TRI-LEVEL TO NORTH TRI-LEVEL AT MP 92.8 & 95.9

EX. FAC.: 2.00%

	2019	2020	2030	2040
		1.020	1.243	1.516
P.V.s	31,300	31,925	38,915	47,440
S.U.s	1,300	1,325	1,615	1,970
M.U.s	16,100	16,420	20,020	24,400
ADT	48,700	49,670	60,550	73,810
DHV	4,385	4,470	5,450	6,645

FOR SN 9S044I024L002.3 on WB I-24

LEG D: FAI 24 STA 0.00-5.63

WILLIAMSON/ JOHNSON CO LN TO FAS 927 TUNNEL HILL RD AT MP 2.3

EX. FAC.: 1.50%

	2019	2020	2030	2040
		1.015	1.178	1.367
P.V.s	12,225	12,410	14,400	16,710
S.U.s	675	685	795	925
M.U.s	6,500	6,595	7,655	8,885
ADT	19,400	19,690	22,850	26,520
DHV	1,745	1,770	2,055	2,385

SUMMARY OF QUANTITIES

	CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	JEFFERSON CO	JOHNSON CO
				COUNTY:	COUNTY:	COUNTY:
				ROUTE:	I-57	I-24
				FUNDING:	I00% STATE	I00% STATE
				LOCATION:	RURAL	RURAL
					ROADWAY	ROADWAY
					0021	0021
	50200400	ROCK EXCAVATION FOR STRUCTURES	CU YD	19.1	15.4	3.7
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	375.0	37.5	337.5
*	63301990	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 1	EACH	2	0	2
*	63302000	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 2	EACH	3	3	0
	67100100	MOBILIZATION	L SUM	1.0	0.8	0.2
	70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	5	4	1
	70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	2	2	0
	70100430	TRAFFIC CONTROL AND PROTECTION, STANDARD 701446	EACH	1	1	0
	70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1.0	0.5	0.5
	70200100	NIGHTTIME WORK ZONE LIGHTING	L SUM	1.0	0.8	0.2
	72000300	SIGN PANEL - TYPE 3	SQ FT	1,994	1,653	341

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
SHEET 1 OF 2
SCALE: _____ SHEET ___ OF ___ SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	9
		CONTRACT NO. 46454		
		ILLINOIS FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

SUMMARY OF QUANTITIES - CONT

	CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	COUNTY: JEFFERSON CO ROUTE: I-57 FUNDING: 100% STATE LOCATION: RURAL ROADWAY 0021	COUNTY: JOHNSON CO ROUTE: I-24 FUNDING: 100% STATE LOCATION: RURAL ROADWAY 0021
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	2	0	2
	73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	264	176	88
	73300200	OVERHEAD SIGN STRUCTURE - SPAN, TYPE II-A (4'-6" X 5'-3")	FOOT	220	220	0
*	73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	110.6	90.4	20.2
	73500005	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	5	4	1
	73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	12	8	4
*	78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	5	0	5
*	80300100	LOCATING UNDERGROUND CABLE	FOOT	80	80	
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1.0	0.8	0.2
*	X8040310	ELECTRICAL SERVICE DISCONNECT	EACH	2	2	
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1.0	0.8	0.2

* SPECIALTY ITEM

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Default	PLOT DATE = 5/18/2020	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
SHEET 2 OF 2

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	6
		CONTRACT NO. 46454		
	ILLINOIS	FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

SOQ BY STRUCTURE - PAGE 1

SN: 9S041I057L096.9 District: D9 County: Jefferson Route: SB I-57 MilePost: 96.9

CODE NUMBE	PAY ITEM DESCRIPTION	UNIT	ABBREVIATION	QUANTITY
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	TC-PROT SPL	0.2
Z0013798	CONSTRUCTION LAYOUT	LSUM	CONSTRUCTION LAYOUT	0.2
50200400	ROCK EXCAVATION FOR STRUCTURES	CU YD	ROCK EXC STRUCT	1.3
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	SPBGR TY A 6FT POSTS	25
63301990	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 1	EACH	REM RE-E T B TERM T1	
63302000	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 2	EACH	REM RE-E T B TERM T2	2
67100100	MOBILIZATION	LSUM	MOBILIZATION	0.2
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	TRAF CONT-PROT 701401	1
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	TRAF CONT-PROT 701411	
70100430	TRAFFIC CONTROL AND PROTECTION, STANDARD 701446	EACH	TRAF CONT-PROT 701446	
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	LSUM	TRAF CONT-PROT 701406	
70200100	NIGHTTIME WORK ZONE LIGHTING	LSUM	NIGHT WORK ZONE LIGHT	0.2
72000300	SIGN PANEL - TYPE 3	SQ FT	SIGN PANEL T3	418.8
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	TERMINAL MARKER - DA	
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	OVHD SIN STR-SPAN T1A	88
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	DRILL SHAFT CONC FDN	20.2
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	REMOV OH SIN STR-SPAN	1
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	REM CONC FDN-OVHD	2
78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	GRDRAIL REF TYPE B	

SN: 9S041I057L096.6 District: D9 County: Jefferson Route: SB I-57 MilePost: 96.6

CODE NUMBE	PAY ITEM DESCRIPTION	UNIT	ABBREVIATION	QUANTITY
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	TC-PROT SPL	0.2
X8040310	ELECTRICAL SERVICE DISCONNECT	EACH	ELECT SERV DISCONNECT	1
Z0013798	CONSTRUCTION LAYOUT	LSUM	CONSTRUCTION LAYOUT	0.2
50200400	ROCK EXCAVATION FOR STRUCTURES	CU YD	ROCK EXC STRUCT	14.1
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	SPBGR TY A 6FT POSTS	
63301990	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 1	EACH	REM RE-E T B TERM T1	
63302000	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 2	EACH	REM RE-E T B TERM T2	
67100100	MOBILIZATION	LSUM	MOBILIZATION	0.2
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	TRAF CONT-PROT 701401	1
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	TRAF CONT-PROT 701411	1
70100430	TRAFFIC CONTROL AND PROTECTION, STANDARD 701446	EACH	TRAF CONT-PROT 701446	
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	LSUM	TRAF CONT-PROT 701406	
70200100	NIGHTTIME WORK ZONE LIGHTING	LSUM	NIGHT WORK ZONE LIGHT	0.2
72000300	SIGN PANEL - TYPE 3	SQ FT	SIGN PANEL T3	386
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	TERMINAL MARKER - DA	
73300200	OVERHEAD SIGN STRUCTURE - SPAN, TYPE II-A (4'-6" X 5'-3")	FOOT	OVHD SIN STR-SPAN T2A	106
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	DRILL SHAFT CONC FDN	24.4
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	REMOV OH SIN STR-SPAN	1
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	REM CONC FDN-OVHD	2
78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	GRDRAIL REF TYPE B	
80300100	LOCATING UNDERGROUND CABLE	FOOT	LOCATE UNDERGR CABLE	40

SOQ BY STRUCTURE - PAGE 2

SN: 9S041I057R095.9 District: D9 County: Jefferson Route: NB I-57, WB I-64 MilePost: 95.9

CODE NUMBE	PAY ITEM DESCRIPTION	UNIT	ABBREVIATION	QUANTITY
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	TC-PROT SPL	0.2
X8040310	ELECTRICAL SERVICE DISCONNECT	EACH	ELECT SERV DISCONNECT	1
Z0013798	CONSTRUCTION LAYOUT	LSUM	CONSTRUCTION LAYOUT	0.2
50200400	ROCK EXCAVATION FOR STRUCTURES	CU YD	ROCK EXC STRUCT	
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	SPBGR TY A 6FT POSTS	
63301990	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 1	EACH	REM RE-E T B TERM T1	
63302000	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 2	EACH	REM RE-E T B TERM T2	
67100100	MOBILIZATION	LSUM	MOBILIZATION	0.2
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	TRAF CONT-PROT 701401	1
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	TRAF CONT-PROT 701411	1
70100430	TRAFFIC CONTROL AND PROTECTION, STANDARD 701446	EACH	TRAF CONT-PROT 701446	
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	LSUM	TRAF CONT-PROT 701406	
70200100	NIGHTTIME WORK ZONE LIGHTING	LSUM	NIGHT WORK ZONE LIGHT	0.2
72000300	SIGN PANEL - TYPE 3	SQ FT	SIGN PANEL T3	420.3
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	TERMINAL MARKER - DA	
73300200	OVERHEAD SIGN STRUCTURE - SPAN, TYPE II-A (4'-6" X 5'-3")	FOOT	OVHD SIN STR-SPAN T2A	114
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	DRILL SHAFT CONC FDN	25.8
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	REMOV OH SIN STR-SPAN	1
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	REM CONC FDN-OVHD	2
78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	GRDRAIL REF TYPE B	
80300100	LOCATING UNDERGROUND CABLE	FOOT	LOCATE UNDERGR CABLE	40

SN: 9S041I057L092.8 District: D9 County: Jefferson Route: SB I-57, EB I-64 MilePost: 92.8

CODE NUMBE	PAY ITEM DESCRIPTION	UNIT	ABBREVIATION	QUANTITY
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	TC-PROT SPL	0.2
Z0013798	CONSTRUCTION LAYOUT	LSUM	CONSTRUCTION LAYOUT	0.2
50200400	ROCK EXCAVATION FOR STRUCTURES	CU YD	ROCK EXC STRUCT	
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	SPBGR TY A 6FT POSTS	12.5
63301990	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 1	EACH	REM RE-E T B TERM T1	
63302000	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 2	EACH	REM RE-E T B TERM T2	1
67100100	MOBILIZATION	LSUM	MOBILIZATION	0.2
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	TRAF CONT-PROT 701401	1
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	TRAF CONT-PROT 701411	
70100430	TRAFFIC CONTROL AND PROTECTION, STANDARD 701446	EACH	TRAF CONT-PROT 701446	1
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	LSUM	TRAF CONT-PROT 701406	0.5
70200100	NIGHTTIME WORK ZONE LIGHTING	LSUM	NIGHT WORK ZONE LIGHT	0.2
72000300	SIGN PANEL - TYPE 3	SQ FT	SIGN PANEL T3	427.5
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	TERMINAL MARKER - DA	
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	OVHD SIN STR-SPAN T1A	88
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	DRILL SHAFT CONC FDN	20
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	REMOV OH SIN STR-SPAN	1
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	REM CONC FDN-OVHD	2
78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	GRDRAIL REF TYPE B	

SOQ BY STRUCTURE - PAGE 3

SN: 9S044I024L002.3 District: D9 County: Johnson Route: WB I-24 MilePost: 02.3

CODE NUMBE	PAY ITEM DESCRIPTION	UNIT	ABBREVIATION	QUANTITY
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	TC-PROT SPL	0.2
Z0013798	CONSTRUCTION LAYOUT	LSUM	CONSTRUCTION LAYOUT	0.2
50200400	ROCK EXCAVATION FOR STRUCTURES	CU YD	ROCK EXC STRUCT	3.7
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	SPBGR TY A 6FT POSTS	337.5
63301990	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 1	EACH	REM RE-E T B TERM T1	2
63302000	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 2	EACH	REM RE-E T B TERM T2	
67100100	MOBILIZATION	LSUM	MOBILIZATION	0.2
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	TRAF CONT-PROT 701401	1
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	TRAF CONT-PROT 701411	
70100430	TRAFFIC CONTROL AND PROTECTION, STANDARD 701446	EACH	TRAF CONT-PROT 701446	
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	LSUM	TRAF CONT-PROT 701406	0.5
70200100	NIGHTTIME WORK ZONE LIGHTING	LSUM	NIGHT WORK ZONE LIGHT	0.2
72000300	SIGN PANEL - TYPE 3	SQ FT	SIGN PANEL T3	341
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	TERMINAL MARKER - DA	2
73300100	OVERHEAD SIGN STRUCTURE - SPAN, TYPE I-A (4'-0" X 4'-6")	FOOT	OVHD SIN STR-SPAN T1A	88
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	DRILL SHAFT CONC FDN	20.2
73600100	REMOVE OVERHEAD SIGN STRUCTURE - SPAN	EACH	REMOV OH SIN STR-SPAN	1
73700300	REMOVE CONCRETE FOUNDATION - OVERHEAD	EACH	REM CONC FDN-OVHD	4
78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	GRDRAIL REF TYPE B	5

GUARDRAIL SCHEDULE

I-57 & I-24 JEFFERSON & WILLIAMSON COUNTIES						SPBGR TYPE A 6' POST	REM RE-E TR B TERM TYPE 1	REM RE-E TR B TERM TYPE 2	GR REFL TYPE B	TERMINAL MARKER DA	REMARKS
						F00T	EACH	EACH	EACH	EACH	
EXISTING GUARDRAIL LOCATIONS											
SB I-57	**SN9S041I057L096.9**			**N TRI-LEVEL**							
LOCATION	EX	894+00.00	**PROP**	**893+75.00**	AH						SHIFT GR WITH STRUCTURE
SB I-57	RT	893+75.00	TO	894+12.50		12.5		1			LEAVE APPROACH AS IS, EXTEND DEPARTURE 25 FT
SB I-57	LT	893+75.00	TO	894+12.50		12.5		1			LEAVE APPROACH AS IS, EXTEND DEPARTURE 25 FT
NB I-57	LT		TO								LEAVE AS IS
SB I-57	**SN9S041I057L096.6**			**N TRI-LEVEL**							
LOCATION	EX	874+20.00	**PROP**	**874+45.00**	BK						NO WORK REQUIRED
SB I-57	RT		TO								LEAVE APPROACH AS IS, LEAVE DEPARTURE AS IS
SB I-57	LT		TO								LEAVE APPROACH AS IS, LEAVE DEPARTURE AS IS
NB I-57	LT		NA								NO GR
NB I-57, WB I-64	**SN9S041I057R095.9**			**N TRI-LEVEL**							
LOCATION	EX	840+54.00	**PROP**	**840+29.00**	BK						NO WORK REQUIRED
NB I-57	RT		TO								LEAVE APPROACH AS IS, LEAVE DEPARTURE AS IS
NB I-57	LT		TO								LEAVE APPROACH AS IS, LEAVE DEPARTURE AS IS
SB I-57	LT		NA								NO GR
SB I-57, EB 1-64	**SN9S041I057L092.8**			**S TRI-LEVEL**							
LOCATION	EX	677+00.00	**PROP**	**676+75.00**	AH						SHIFT GR WITH STRUCTURE
SB I-57	RT	676+75.00	TO	677+00.00		12.5		1			LEAVE APPROACH AS IS, EXTEND DEPARTURE 25 FT
SB I-57	LT		TO								LEAVE APPROACH AS IS, LEAVE DEPARTURE AS IS
NB I-57	LT		NA								NO GR
WB I-24	**SN9S044I024L002.3**										
LOCATION	EX	157+25.00	**PROP**	**157+50.00**	AH						EXTEND THE APPROACH ENDS OF THE GUARDRAIL
WB I-24	RT	157+85.00	TO	159+72.50		137.5	1		2	1	EXTEND APPROACH, LEAVE DEPARTURE AS IS
WB I-24	LT	157+70.00	TO	160+20.00		200.0	1		3	1	EXTEND APPROACH, LEAVE DEPARTURE AS IS
EB I-24	LT		NA								NO GR
				TOTALS		**375.0**	**2**	**3**	**5**	**2**	

NOTES: LT & RT ARE GIVEN IN THE DIRECTION OF TRAVEL; STATIONING GIVEN IS THE APPROXIMATE LACATION OF THE EXISTING STRUCTURES AND GUARDRAIL

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		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE
GUARDRAIL

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	10
		CONTRACT NO. 46454		
	ILLINOIS	FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

SCHEDULE
REMOVE CONCRETE FOUNDATION - OVERHEAD

I-57 & I-24 JEFFERSON & WILLIAMSON COUNTIES						REMOVE CONCRETE FOUNDATION - OVERHEAD	
						SPREAD FOOTING	DRILLED SHAFT
						EACH	EACH
EXISTING GUARDRAIL LOCATIONS							
SB I-57	SN	9S041I057L096.9		N TRI-LEVEL			
LOCATION	EXIS	984+00.00	PROP	983+75.00	25 AH	2	
SB I-57	SN	9S041I057L096.6		N TRI-LEVEL			
LOCATION	EXIS	874+20.00	PROP	874+45.00	25 BK	2	
NB I-57 & WB I-64	SN	9S041I057R095.9		N TRI-LEVEL			
LOCATION	EXIS	840+54.00	PROP	840+29.00	25 BK	2	
SB I-57 & EB I-64	SN	9S041I057L092.8		S TRI-LEVEL			
LOCATION	EXIS	677+00.00	PROP	676+75.00	25 AH	2	
WB I-24	SN	9S044I024L002.3					
LOCATION	EXIS	157+25.00	PROP	157+50.00	25 BK		4
TOTALS						8	4
						12	

NOTES: BK & AH ARE GIVEN IN THE DIRECTION OF TRAVEL; STATIONING GIVEN IS APPROXIMATE

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	PLOT SCALE = 200.0000 ' / in.	CHECKED -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE
REMOVE CONCRETE FOUNDATION – OVERHEAD

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	11
		CONTRACT NO. 46454		
	ILLINOIS	FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

SCHEDULE
ROCK EXCAVATION FOR STRUCTURES

I-57 & I-24 JEFFERSON & WILLIAMSON COUNTIES		LEFT / MEDIAN FOUNDATION								RIGHT / OUTSIDE FOUNDATION								STR TOTALS
		GRADE ELEV	BOTTOM ELEV	SHAFT B	BORE SITE	AVE Qu *	ROCK ELEV	ROCK COLUMN	ROCK EX per SHAFT	GRADE ELEV	BOTTOM ELEV	SHAFT B	BORE SITE	AVE Qu *	ROCK ELEV	ROCK COLUMN	ROCK EX per SHAFT	ROCK EX FOR STRUCTURES
		FT	FT	FT	#		FT	FT	CU YD	FT	FT	FT	#		FT	FT	CU YD	CU YD
EXISTING GUARDRAIL LOCATIONS																		
SB I-57 **SN 9S041I057L096.9** **N TRI-LEVEL**																		
LOCATION EXIS 984+00.00 **PROP** **983+75.00**	25 AH	541.92	525.42	16.5	6-ST	2.6	523.80	-1.6		541.54	525.04	16.5	1-ST	3.0	527.50	2.5	0.64	1.3
SB I-57 **SN 9S041I057L096** **N TRI-LEVEL**																		
LOCATION EXIS 874+20.00 **PROP** **874+45.00**	25 BK	515.10	494.60	20.5	7-ST	3.4	504.60	10.0	2.62	513.32	492.82	20.5	2-ST	3.5	509.80	17.0	4.45	14.1
NB I-57 & WB I-64 **SN 9S041I057R095.9** **N TRI-LEVEL**																		
LOCATION EXIS 840+54.00 **PROP** **840+29.00**	25 BK	486.23	465.73	23.0	5-ST	2.1				485.45	464.95	20.5	3-ST	1.4				
SB I-57 & EB I-64 **SN 9S041I057L092.8** **S TRI-LEVEL**																		
LOCATION EXIS 677+00.00 **PROP** **676+75.00**	25 AH	495.48	478.98	16.5	8-ST	2.2				494.34	477.84	16.5	4-ST	2.7				
WB I-24 **SN 9S044I024L002.3**																		
LOCATION EXIS 157+25.00 **PROP** **157+50.00**	25 BK	593.95	577.45	16.5	10-ST	3.3	579.60	2.1	0.56	594.09	577.59	16.5	9-ST	2.4	582.40	4.8	1.26	3.7
TOTALS																		19.1

NOTES: BK & AH, LT & RT ARE GIVEN IN THE DIRECTION OF TRAVEL; STATIONING GIVEN IS APPROXIMATE
ALL DIMENTIONS AND QUANTITIES ARE ESTIMATES ONLY

* Ave Qu is based on strata shown in the boring logs where a Qu value is provided.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE
ROCK EXCAVATION FOR STRUCTURES

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	12
		CONTRACT NO. 46454		
	ILLINOIS	FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

SSN 9S041I057L096.9
MP 96.9

OVERHEAD SIGN STRUCTURE - SPAN,
TYPE I-A (4'-0'' X 4'-6'') - 88 FT
DRILLED SHAFT CONCRETE FOUNDATIONS

REM OH SIN STR SPAN
REM CONC FDN - OVHD

REM AND RE-E T B TERM T2
SPBGR TY A 6FT POSTS - 12.5 FT

6-ST

HMA

FAI 57

HMA

OVERHEAD
SIGN

HMA

SB FAI 57

PC Sta 897+88.30

6-ST

SOIL BORING #TYPICAL

895+00

HMA

AI 57

HMA

REM AND RE-E T B TERM T2
SPBGR TY A 6FT POSTS - 12.5 FT

HMA

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN: 9S041I057L096.9
PLAN SHEET – SHEET 1 OF 5

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	13
		CONTRACT NO. 46454		
	ILLINOIS FED. AID PROJECT			

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

SSN 9S041I057L096.6
MP 96.6

REM OH SIN STR SPAN
REM CONC FDN - OVHD

WARNING
EXIST OVERHEAD
POWER LINES

OVERHEAD SIGN STRUCTURE - SPAN,
TYPE II-A (4'-6" X 5'-3") - 106 FT
DRILLED SHAFT CONCRETE FOUNDATIONS

EXIST HIGHWAY LIGHTING
(UNDERGROUND CABLE IN THE AREA)

POT Sta 877+23.31

2-ST

874 | 875+00 | 876 | 877

TO WB FAI 64

SOIL BORING #TYPICAL

SB FAI 57 FAI 57

7-ST

PI Sta 873+45.98

PI Sta 874+99.54

PCC Sta 874+55.20

878

877

876

875+00

874

FAI 57

WARNING
EXIST OVERHEAD
POWER LINES

873

874

875+00

876

877

878

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN: 9S041I057L096.6
PLAN SHEET – SHEET 2 OF 5

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	14
		CONTRACT NO. 46454		
	ILLINOIS	FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

SSN 9S041I057R095.9
MP 95.9

SOIL BORING #TYPICAL

REM OH SIN STR SPAN
REM CONC FDN - OVHD

OVERHEAD SIGN STRUCTURE - SPAN,
TYPE II-A (4'-6" X 5'-3") - 114 FT
DRILLED SHAFT CONCRETE FOUNDATIONS

5-ST

0 | 836 | 837 | 838 | 839 | 840+00 | 841

TO WB FAI 64

NB FAI 57 WB FAI 64

NB FAI 57

0 | 836 | 837 | 838 | 839 | 840+00 | 841

3-ST

EXIST HIGHWAY LIGHTING
(UNDERGROUND CABLE IN THE AREA)

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		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN: 9S041I057R095.9
PLAN SHEET – SHEET 3 OF 5

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	15
		CONTRACT NO. 46454		
		ILLINOIS FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

SSN 9S041I057L092.8
MP 92.8

REM OH SIN STR SPAN
REM CONC FDN - OVHD

REM AND RE-E T B TERM T2
SPBGR TY A 6FT POSTS - 12.5 FT

4-ST

SB FAI 57 EB FAI 64

FAI 57 & 64

680+00

8-ST

SOIL BORING #TYPICAL

OVERHEAD SIGN STRUCTURE - SPAN,
TYPE I-A (4'-0'' X 4'-6'') - 88 FT
DRILLED SHAFT CONCRETE FOUNDATIONS

FAI 57 & 64

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN: 9S041I057L092.8
PLAN SHEET – SHEET 4 OF 5

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	16
		CONTRACT NO. 46454		
	ILLINOIS	FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

SSN 9S044I024L002.3
MP 2.3

REM AND RE-E T B TERM T1
SPBGR TY A 6FT POSTS - 137.5 FT

REM OH SIN STR SPAN
REM CONC FDN - OVHD

9-ST

SIGN
OVERHEAD

10-ST

WB FAI 24

FAI 24

SOIL BORING #TYPICAL

155+00

160+00

OVERHEAD SIGN STRUCTURE - SPAN,
TYPE I-A (4'-0'' X 4'-6'') - 88 FT
DRILLED SHAFT CONCRETE FOUNDATIONS

REM AND RE-E T B TERM T1
SPBGR TY A 6FT POSTS - 200 FT

FAI 24

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Default	PLOT DATE = 5/18/2020	DATE -	REVISED -

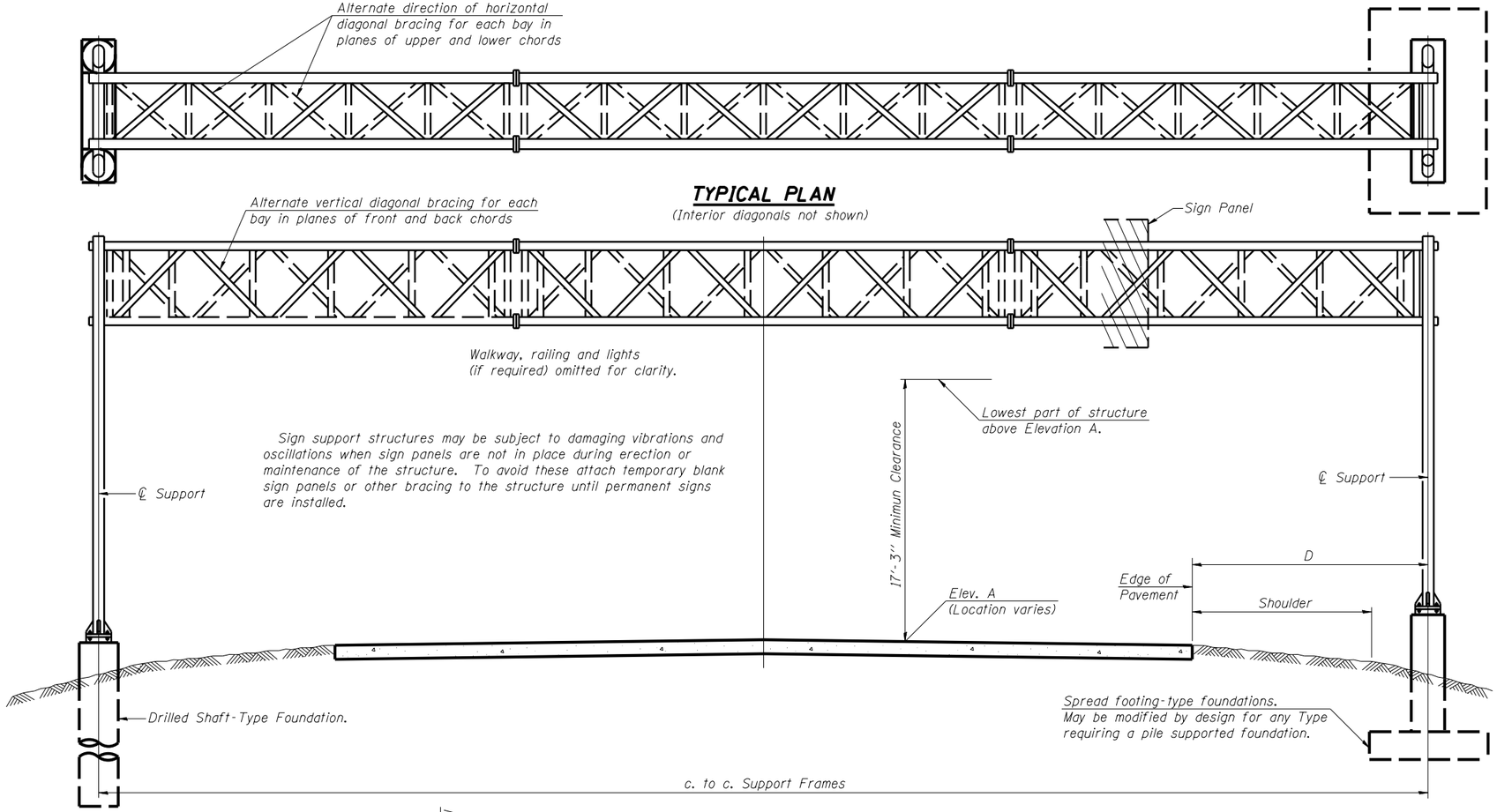
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN: 9S044I024L002.3
PLAN SHEET – SHEET 5 OF 5

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

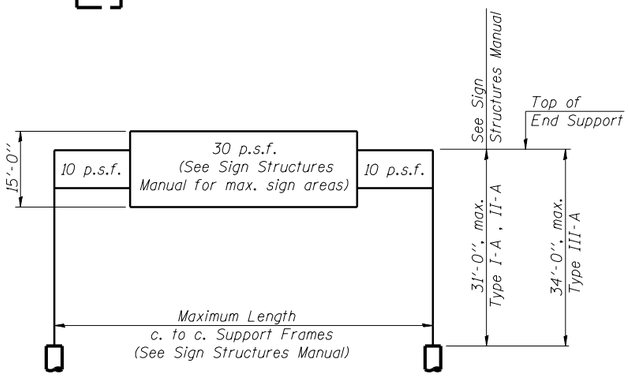
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	17
		CONTRACT NO. 46454		
		ILLINOIS FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON



TYPICAL PLAN

(Interior diagonals not shown)



DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards and Sign Manual Tables. Installations not within dimensional limits shown require special analysis for all components.

TYPICAL ELEVATION

(Looking at Face of Signs**)

Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

STRUCTURE NUMBER	STATION	DESIGN TRUSS TYPE	C to C Supports	ELEV A	DIM D	Height of Tallest Sign	TOTAL SIGN AREA
			FT	FT	FT	FT	SQ FT
9S041I057L096.9	893+75.00	I-A	88	545.89	32.00	13.0	418.8
9S041I057L096.6	874+45.00	II-A	106	517.20	33.00	12.0	386
9S041I057R095.9	840+54.00	II-A	114	490.24	32.00	14.5	420.3
9S041I057L092.8	677+00.00	I-A	88	498.39	26.00	18.0	427.5
9S044I024L002.3	157+50.00	I-A	88	597.96	32.00	14.5	341

**Looking upstation for structures with signs both sides.

* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:
Field Units
f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specificiations.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.
The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Concrete Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

FOUNDATIONS: The contract unit price for Concrete Foundations and Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE SPAN TYPE I-A	Foot	264
OVERHEAD SIGN STRUCTURE SPAN TYPE II-A	Foot	220
OVERHEAD SIGN STRUCTURE SPAN TYPE III-A	Foot	0
OVERHEAD SIGN STRUCTURE WALKWAY TYPE A	Foot	0
CONCRETE FOUNDATIONS	Cu Yds	0.0
DRILLED SHAFT CONCRETE FOUNDATION	Cu Yds	110.6

OS-A-1 8-21-13

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		DATE -	REVISED -

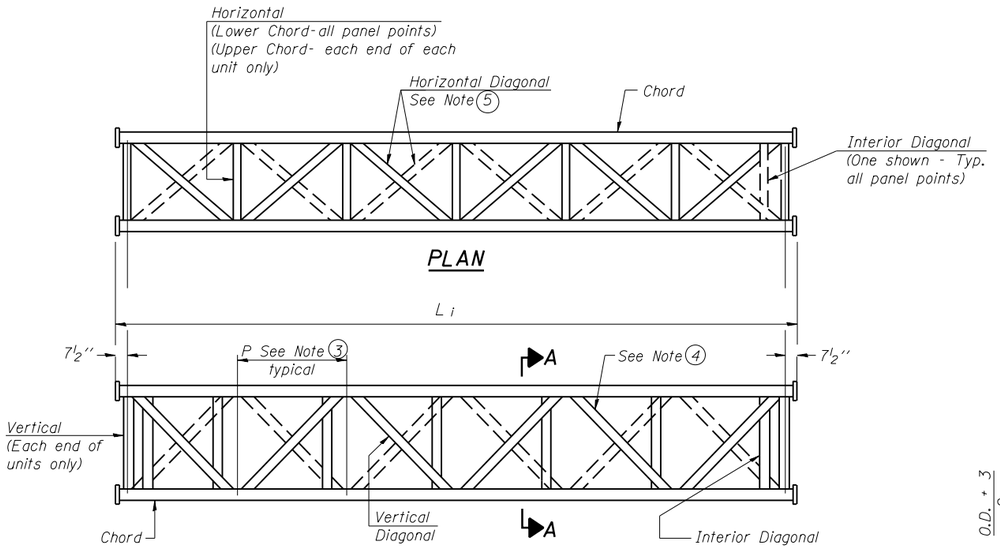
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES – GENERAL PLAN & ELEVATION – ALUMINUM TRUSS & STEEL SUPPORTS

SCALE: _____ SHEET ___ OF ___ SHEETS STA. _____ TO STA. _____

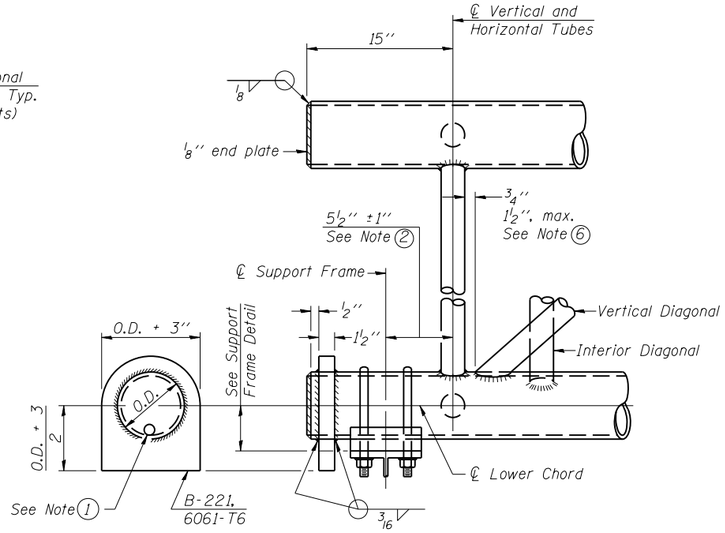
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	18
		CONTRACT NO. 46454		
		ILLINOIS FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

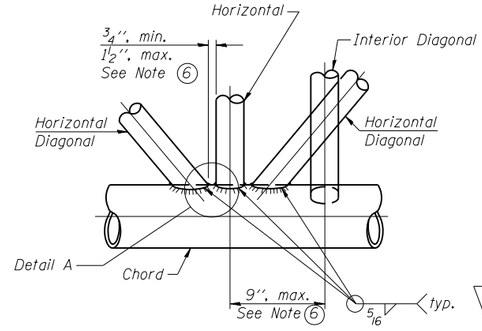


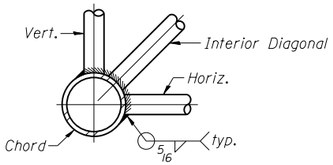
ELEVATION
TYPICAL INTERIOR UNIT

Even number of panels/interior unit required.

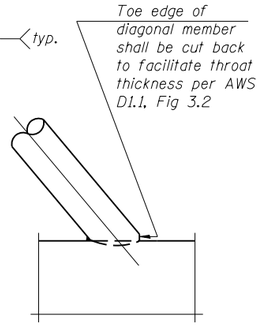


SUPPORT END DETAIL FOR EXTERIOR UNIT

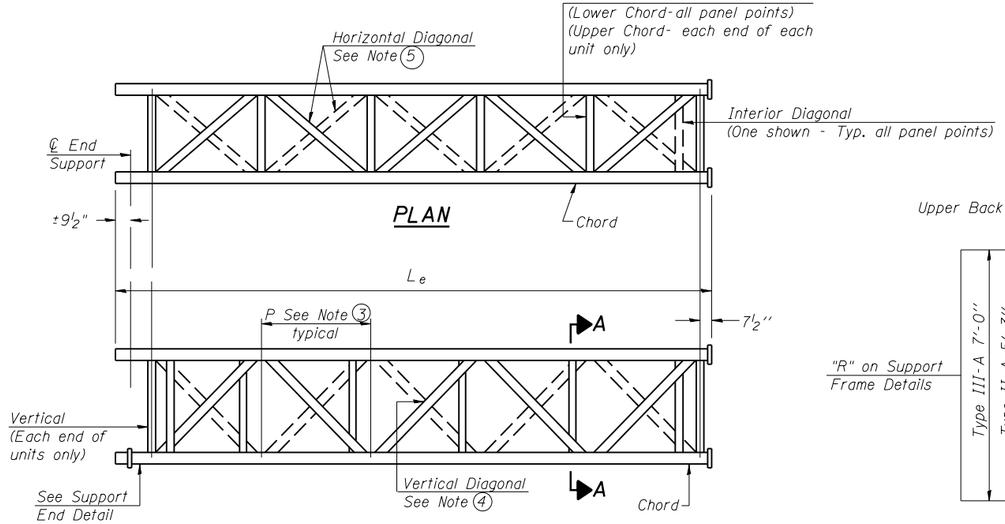




TYPICAL JOINT DETAILS

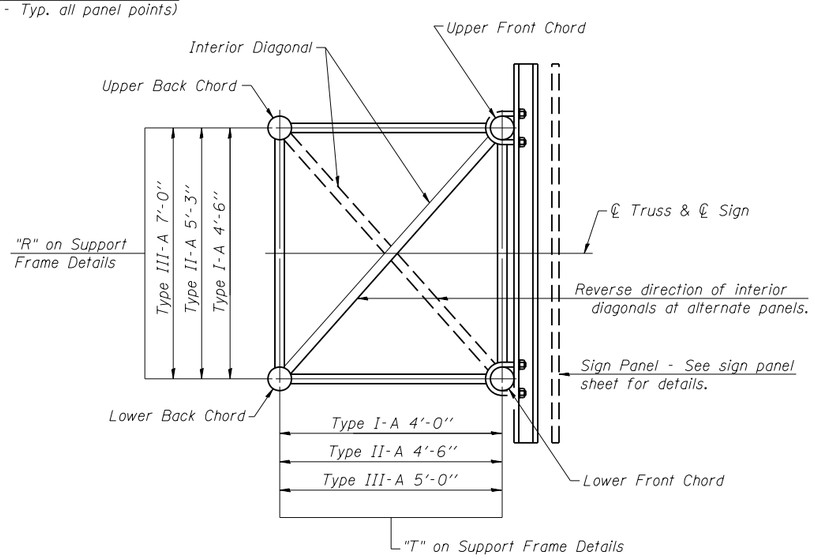


DETAIL A



ELEVATION
TYPICAL EXTERIOR UNIT

Even or odd number of panels/exterior units allowed.



SECTION A-A

1. Contractor may alternatively use standard aluminum drive-fit cap to close end. ½" ϕ drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)
2. 5½" end dimension may vary by ±1" to provide uniform panel spacing (P).
3. Panel spacing (P) shall be uniform for entire truss and between 4'-0" and 5'-0" for Type I-A or 4'-0" and 5'-6" for Types II-A and III-A.
4. Vertical Diagonals in front and back face shall alternate.
5. Hidden lines show wind bracing alternates direction between planes of top and bottom chords.
6. All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a ¾" minimum to 1½" maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

OS-A-2 6-1-12

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES – ALUMINUM TRUSS
DETAILS FOR TRUSS TYPES I-A, II-A AND III-A

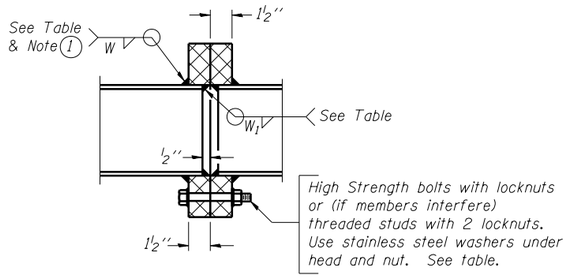
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	19
		CONTRACT NO. 46454		
	ILLINOIS FED. AID PROJECT			

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

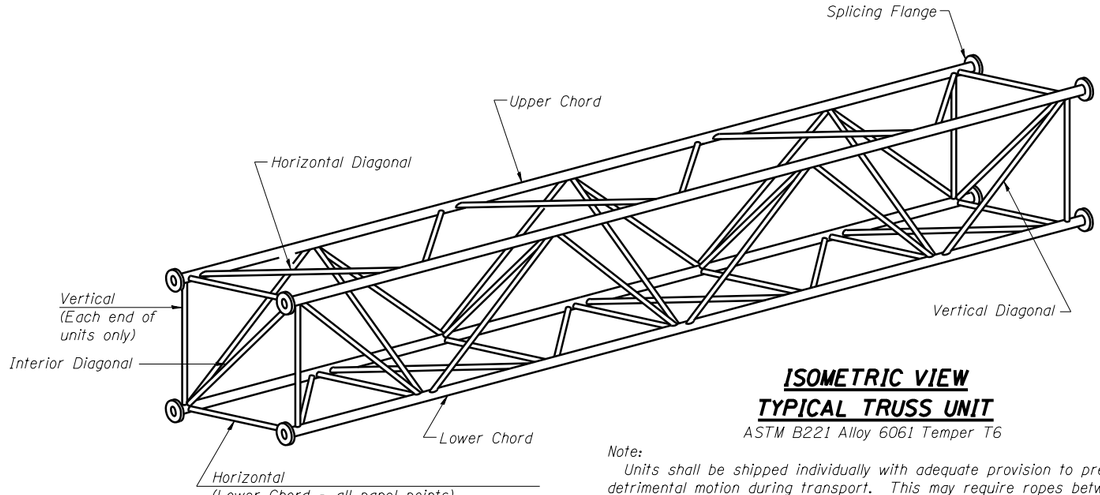
TRUSS UNIT TABLE

STRUCTURE NUMBER	STATION	DESIGN TRUSS TYPE	Exterior Units (2)			Interior Units				Upper & Lower Chord	Verticals; Horizontals; Vertical, Horizontal, and Interrior Diagonals	Camber at Midspan	Splicing Flange					
			No Panels per Unit	Unit Length (Le)	Panel Length (P)	No Units Req'd	No Panels per Unit	Unit Length (Le)	Panel Length (P)				Bolts		Weld Sizes		A	B
													per Splice	Dia	W	W1		
			#	FT-IN	FT-IN	#	#	FT-IN	FT-IN	OD X Wall IN X IN	OD X Wall IN X IN	IN	#	IN	IN	IN	IN	IN
9S041I057L096.9	893+75.00	I-A	6	30' - 1½"	4' - 8½"	1	6	29' - 6"	4' - 8½"	5½" X 5/16"	2½" X 5/16"	2 11/16"	6	7/8"	3/8"	1/4"	9¼"	12¼"
9S041I057L096.6	874+45.00	II-A	7	37' - 9"	5' - 1½"	1	6	32' - 0"	5' - 1½"	6½" X 5/16"	3" X 5/16"	3 7/16"	6	1"	3/8"	1/4"	11"	14½"
9S041I057R095.9	840+54.00	II-A	8	38' - 8½"	4' - 7¼"	1	8	38' - 1"	4' - 7¼"	7" X 5/16"	3" X 5/16"	3 7/16"	6	1"	3/8"	1/4"	11½"	15"
9S041I057L092.8	677+00.00	I-A	6	30' - 1½"	4' - 8½"	1	6	29' - 6"	4' - 8½"	5½" X 5/16"	2½" X 5/16"	2 11/16"	6	7/8"	3/8"	1/4"	9¼"	12¼"
9S044I024L002.3	157+50.00	I-A	6	30' - 1½"	4' - 8½"	1	6	29' - 6"	4' - 8½"	5½" X 5/16"	2½" X 5/16"	2 11/16"	6	7/8"	3/8"	1/4"	9¼"	12¼"



SECTION B-B

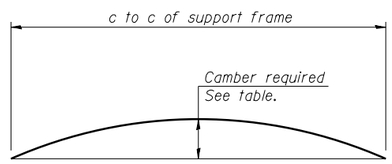
(1) Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.



ISOMETRIC VIEW TYPICAL TRUSS UNIT

ASTM B221 Alloy 6061 Temper T6

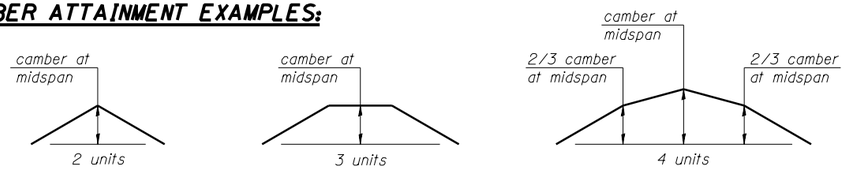
Note:
Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection of the units.



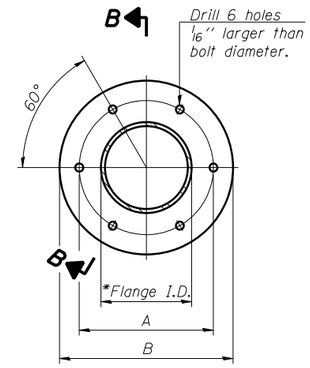
CAMBER DIAGRAM

Camber curve shown is theoretical. Actual camber attained by slope changes at splices between units.

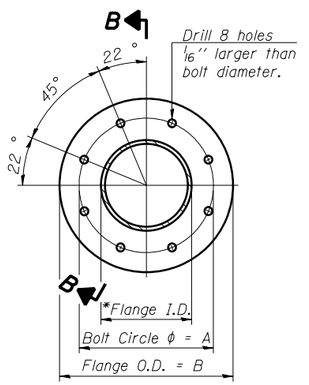
CAMBER ATTAINMENT EXAMPLES:



Camber shown is for fabrication only, measured with truss fully supported. (No-load condition)



TRUSS TYPES I-A, II-A, & III-A



TRUSS TYPES II-A & III-A

SPLICING FLANGES

ASTM B221, Alloy 6061-T6
or ASTM B209, Alloy 6061-T651
*To fit O.D. of Chord with maximum gap of 1/16".

OS4-A-2 6-1-12

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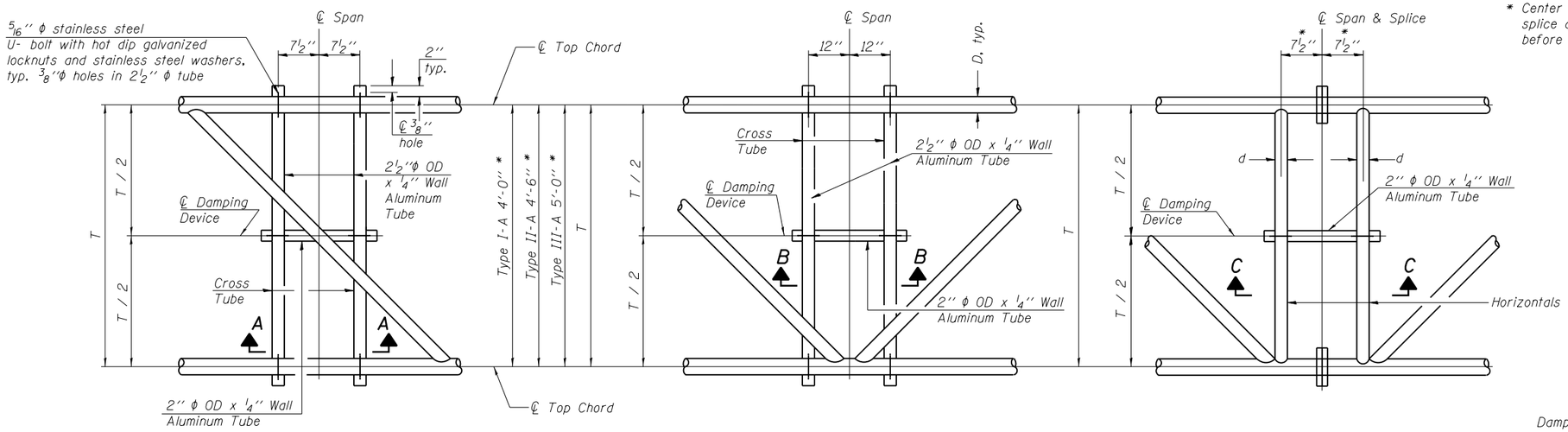
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES – ALUMINUM TRUSS DETAILS FOR TRUSS TYPES I-A, II-A AND III-A

SCALE: _____ SHEET ___ OF ___ SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	_____ •	VARIOUS•••	34	20
		CONTRACT NO. 46454		
	ILLINOIS	FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON



* Center of horizontal to center of splice dimension may vary. Verify before drilling holes in mounting tube.

PLAN DETAIL "A"
℄ Span between Panel Points

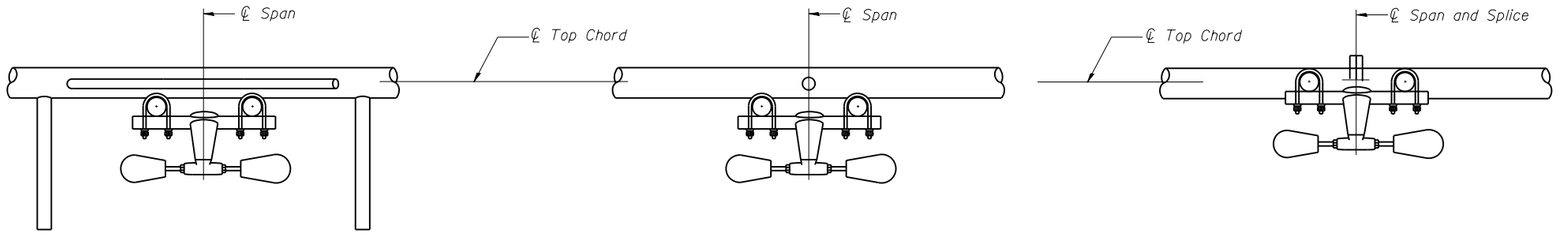
PLAN DETAIL "B"
℄ Span at Panel Point

PLAN DETAIL "C"
℄ Span at ℄ Chord Splice

NOTES

Damper: One damper per truss. (31 lbs. minimum Stockbridge-Type Aluminum - 29'' minimum between ends of weights) Cost included in Overhead Sign Structure...

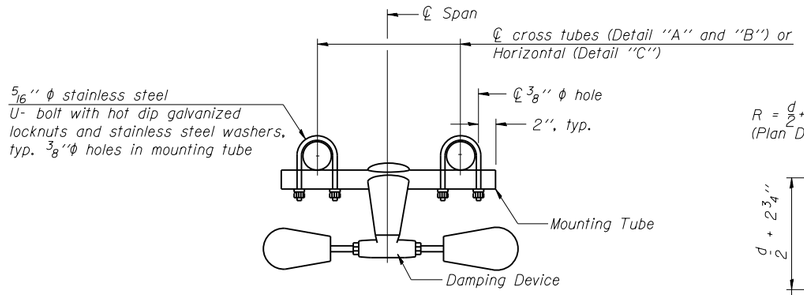
Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...



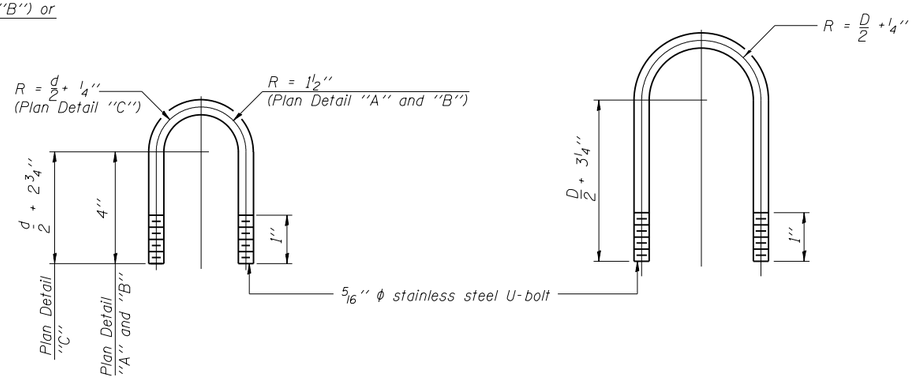
SECTION A-A

SECTION B-B

SECTION C-C

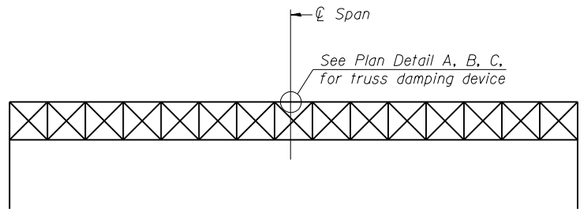


TRUSS DAMPING DEVICE CONNECTION DETAIL
(Typical)



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL
(Typical)

TOP CHORD TO CROSS TUBE U-BOLT DETAIL
(Typical - Detail ''A'' and ''B'')



ELEVATION
Aluminum Overhead Sign Truss

OS-A-D 6-1-12

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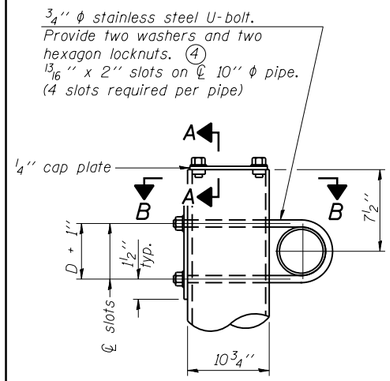
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURE
DAMPING DEVICE

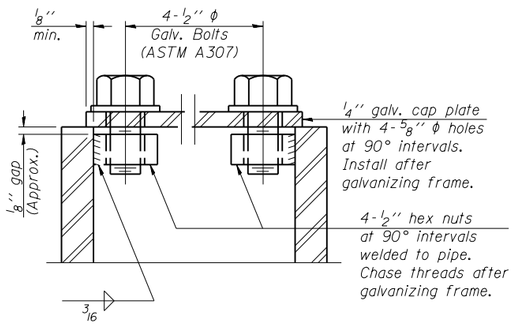
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	21
		CONTRACT NO. 46454		
	ILLINOIS FED. AID PROJECT			

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

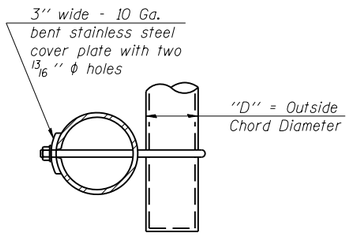


DETAIL A

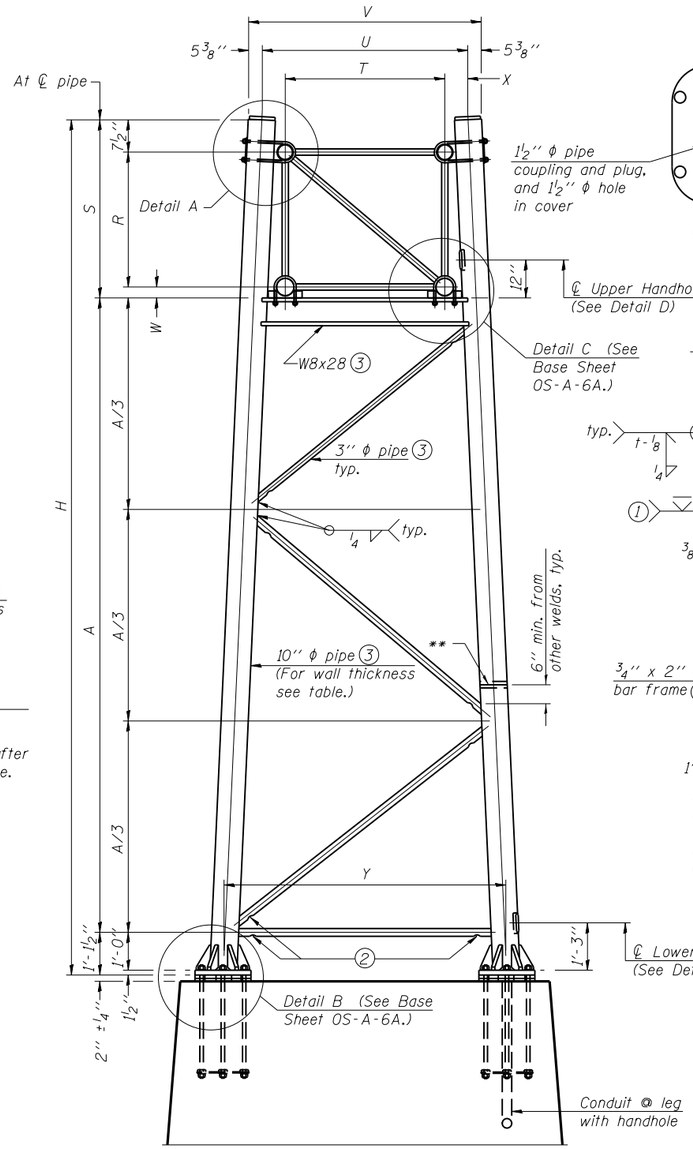


SECTION A-A

As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.

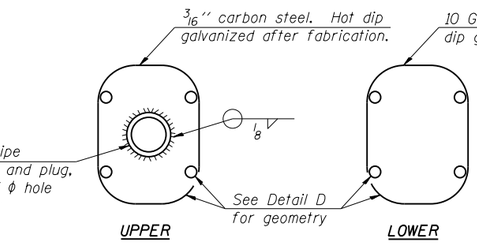


SECTION B-B

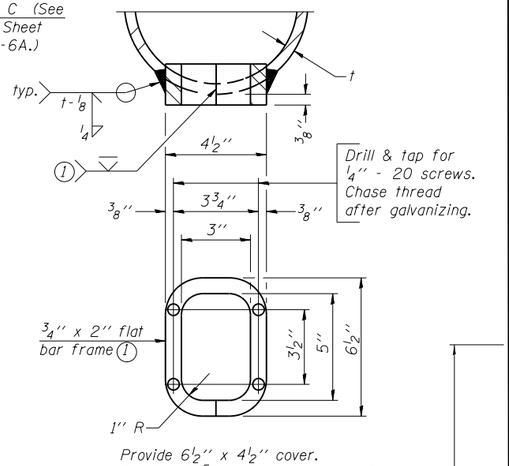


For Foundation Details, see base sheet OS-F3 (Spread Footing) or OS4-F3 (Drilled Shaft).

SIDE ELEVATION

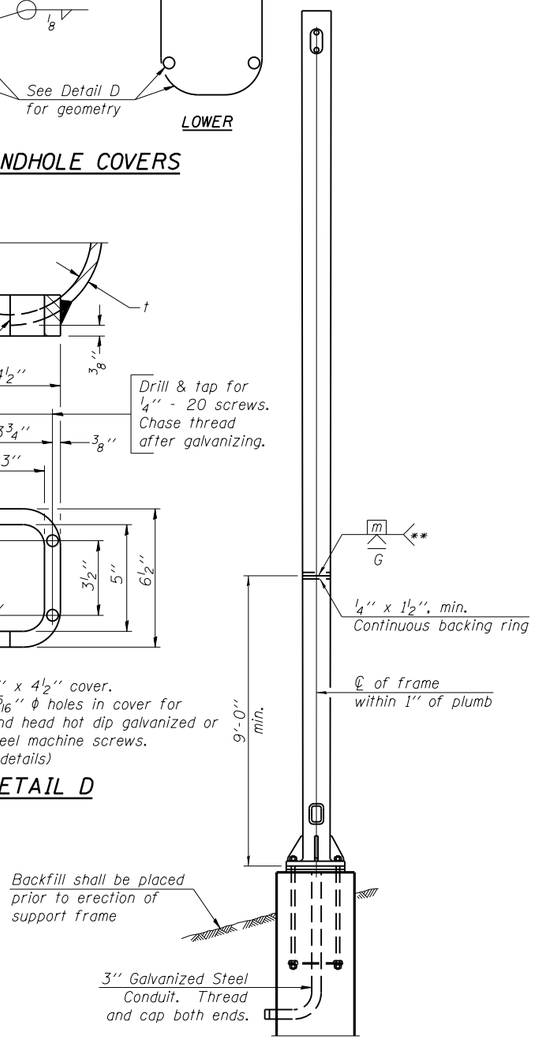


HANDHOLE COVERS



Provide 6 1/2'' x 4 1/2'' cover.
Provide 4-5/16'' ϕ holes in cover for 1/4''-20 round head hot dip galvanized or stainless steel machine screws.
(See cover details)

DETAIL D



END ELEVATION

Support Design Loads: See Base Sheet OS-A-1 for design and loading criteria.
Load combinations checked include deadload plus:
a) 100% wind normal to sign, 20% parallel to sign
b) 60% wind normal to sign, 30% parallel to sign

(1) In lieu of fabricated handhole frame as shown, may cut from 2'' plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 μin or less.

(2) Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred, typ.

(3) Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet OS-A-1.

(4) See General Notes for fasteners.

(5) Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.

(6) "H" based on 15'-0'' or actual sign height, whichever is greater.

Truss Type	Dimensions							
	R	S	T	U	V	W	X	Y
I-A	4'-6''	5'-5 1/2''	4'-0''	5'-6''	6'-4 3/4''	4''	9''	8'-3''
II-A (5)	5'-3''	6'-3 1/4''	4'-6''	6'-1''	6'-11 3/4''	4 3/4''	9 1/2''	8'-3''

10'' ϕ PIPE TRUSS SUPPORT FRAME

** One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

STRUCTURE NUMBER	STATION	Support		Truss Type	Pipe Wall Thickness	○ H	A
		LT	RT		IN	FT-IN	FT-IN
9S041I057L096.9	893+75.00	X		I-A	0.279	30' - 4 3/16"	23' - 9 3/16"
9S041I057L096.9	893+75.00		X	I-A	0.279	30' - 4 3/16"	23' - 9 3/16"
9S041I057L096.6	874+45.00	X		II-A	0.365	29' - 0 3/16"	21' - 7 5/16"
9S041I057L096.6	874+45.00		X	II-A	0.365	30' - 0 3/16"	22' - 7 5/16"
9S041I057R095.9	840+54.00	X		II-A	0.500	30' - 10 7/16"	23' - 5 11/16"
9S041I057R095.9	840+54.00		X	II-A	0.500	30' - 10 7/16"	23' - 5 11/16"
9S041I057L092.8	677+00.00	X		I-A	0.365	30' - 10 3/16"	24' - 3 3/16"
9S041I057L092.8	677+00.00		X	I-A	0.365	31' - 10 3/16"	25' - 3 3/16"
9S044I024L002.3	157+50.00	X		I-A	0.279	30' - 1 7/16"	23' - 6 7/16"
9S044I024L002.3	157+50.00		X	I-A	0.279	30' - 1 7/16"	23' - 6 7/16"

OS-A-6 6-1-12

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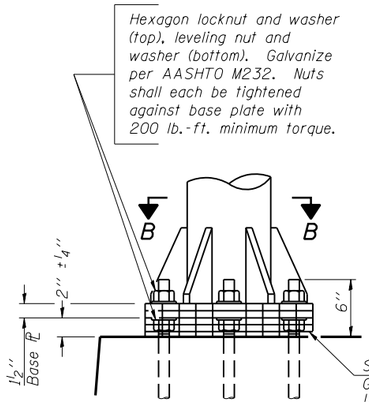
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME FOR ALUMINUM TRUSS

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

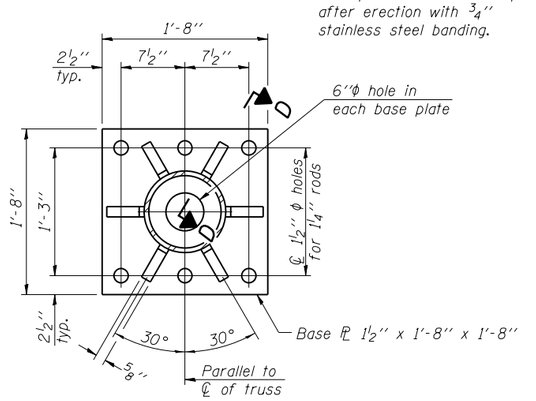
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	22
		CONTRACT NO. 46454		
	ILLINOIS FED. AID PROJECT			

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

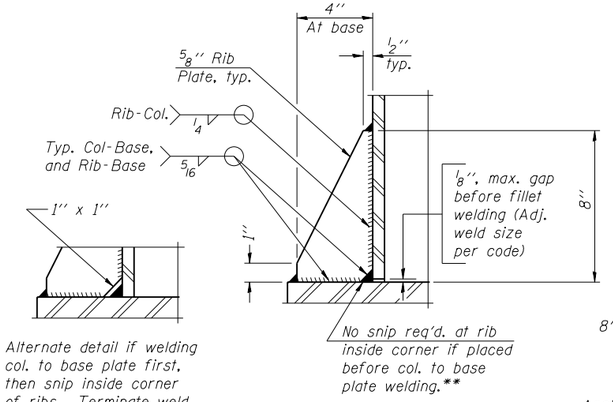


DETAIL B

Ribs shall be cut to fit slope of pipe.

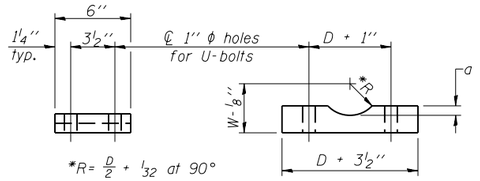


SECTION B-B



** Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib 1/4'' from snip.

SECTION D-D



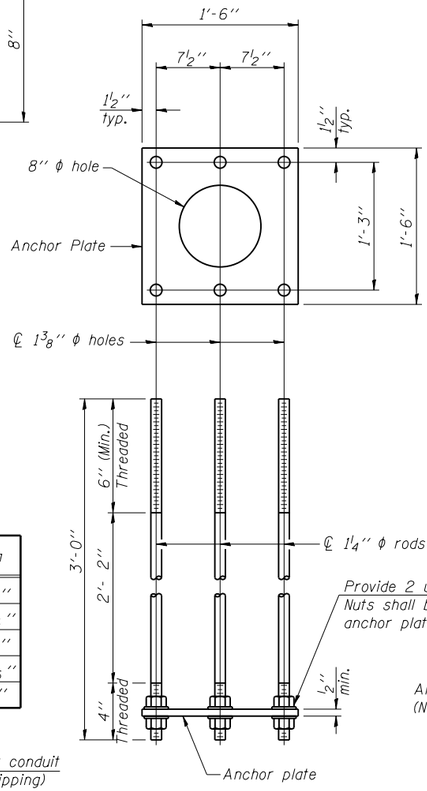
*R = D/2 + 1/32 at 90°

D = Outside Diameter of Chord.
For W, see Base Sheet OS-A-6.

SADDLE SHIM DETAIL

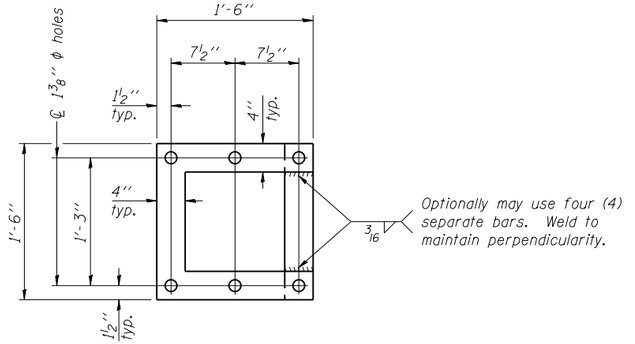
ASTM B26 Alloy 356-F
or
ASTM B209 Alloy 6061-T651
(4 required per sign truss)

Truss Chord Nominal Dia.	a
5''	3/4''
5 1/2''	13/16''
6''	7/8''
6 1/2''	15/16''
7''	1''

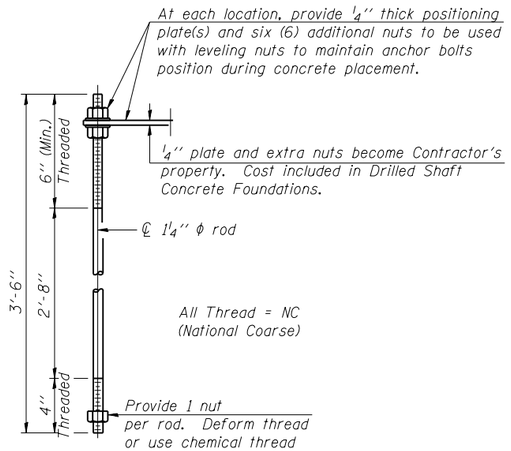


ANCHOR ROD DETAIL

Spread Footing Foundation



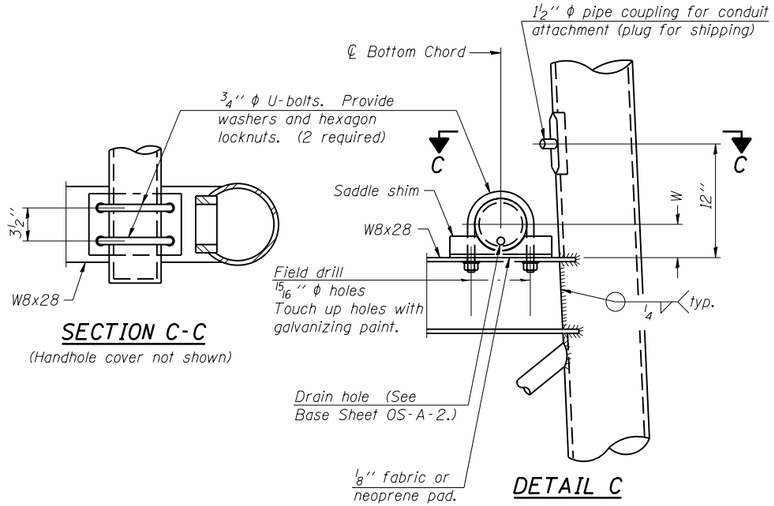
POSITIONING PLATE(S)



ANCHOR ROD DETAIL

Drilled Shaft Foundation

Anchor rods shall conform to ASTM F1554 Grade 105. Galvanize upper 12'' minimum per AASHTO M232. No welding shall be permitted on rods.



SECTION C-C

(Handhole cover not shown)

DETAIL C

10'' ϕ PIPE SUPPORT FRAME DETAILS

OS-A-6A 6-1-12

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		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 '/ in.	CHECKED -	REVISED -
Default	PLOT DATE = 5/18/2020	DATE -	REVISED -

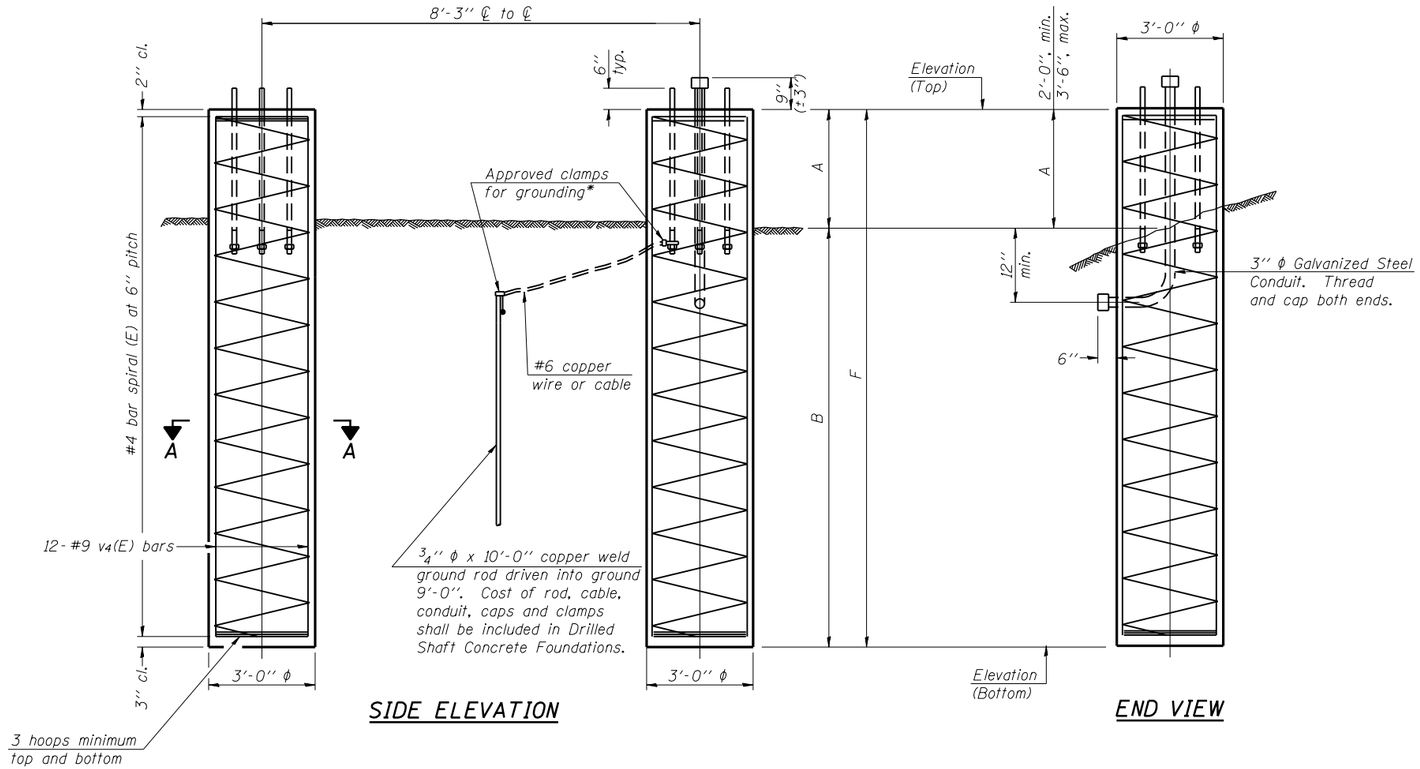
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME DETAILS – ALUMINUM TRUSS

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

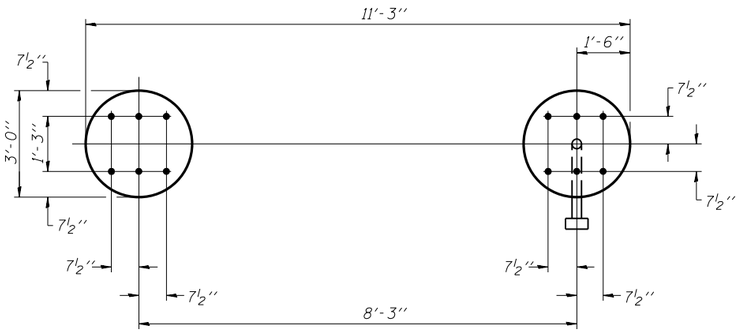
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	23
		CONTRACT NO. 46454		
	ILLINOIS	FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON



SIDE ELEVATION

END VIEW



PLAN

For anchor rod size and placement, see Support Frame Detail Sheet.

* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
v4(E)	24	#9	F less 5"	——
#4 bar spiral (E) - see Side Elevation				

NOTES:

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

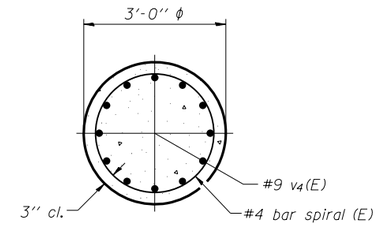
No sonotubes or decomposable forms shall be used below the lower conduit entrance.

Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



SECTION A-A

DETAILS FOR 10" ϕ SUPPORT FRAME TYPE I-A or II-A TRUSS

STRUCTURE NUMBER	STATION	Left Foundation					Right Foundation					Class SI Concrete
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top	Elevation Bottom	A	B	F	
		FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	Cu Yds
9S041I057L096.9	893+75.00	544.50	525.42	2.58	16.50	19.08	544.50	525.04	2.96	16.50	19.46	20.2
9S041I057L096.6	874+45.00	517.50	494.60	2.40	20.50	22.90	516.50	492.82	3.18	20.50	23.68	24.4
9S041I057R095.9	840+54.00	488.70	463.23	2.47	23.00	25.47	488.70	464.95	3.25	20.50	23.75	25.8
9S041I057L092.8	677+00.00	498.00	478.98	2.52	16.50	19.02	497.00	477.84	2.66	16.50	19.16	20.0
9S044I024L002.3	157+50.00	596.80	577.45	2.85	16.50	19.35	596.80	577.59	2.71	16.50	19.21	20.2

OS4-F3

8-21-13

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		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 5/18/2020	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
DRILLED SHAFT DETAILS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	24
		CONTRACT NO. 46454		
		ILLINOIS FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

12.0" Radius, 2.0" Border, White on Green;
"SOUTH" E 2K; "EAST" E 2K; "Louisville" E Mod 2K; "Memphis" E Mod 2K; Rectangle Yellow;
Table of distances between letter and object lefts.

14.4	48.0	S 14.5	O 12.8	U 11.8	T 11.0	H 24.7	48.0	E 12.8	A 13.5	S 11.1	T 9.0	14.4
61.4	L 13.9	o 15.9	u 16.9	i 7.9	s 13.7	v 17.0	i 9.6	l 9.6	l 8.1	e 10.6	61.4	
68.4	M 18.8	e 15.6	m 24.0	p 15.5	h 16.9	i 7.9	s 10.5	68.4				
62.2	▭ 121.6	62.2										

12.0" Radius, 2.0" Border, White on Green;
"EXIT" E Mod 2K 120% spacing; " 96" E Mod 2K;
12.0" Radius, 2.0" Border, White on Green;
"WEST" E 2K; "St Louis" E Mod 2K; Rectangle Yellow;
Table of distances between letter and object lefts.

60.8	E 9.1	X 11.2	I 4.2	T 22.4	9 15.2	6 12.1	15.0	
26.5	48.0	W 18.2	E 10.7	S 11.1	T 9.0	26.5		
22.2	S 16.2	t 24.3	L 13.9	o 15.8	u 17.0	i 7.8	s 10.6	22.2
13.5	▭ 123.0	13.5						

TO BE USED WITH SN 9S041I057L096.9

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Default	PLOT DATE = 5/18/2020	DATE -	REVISED -

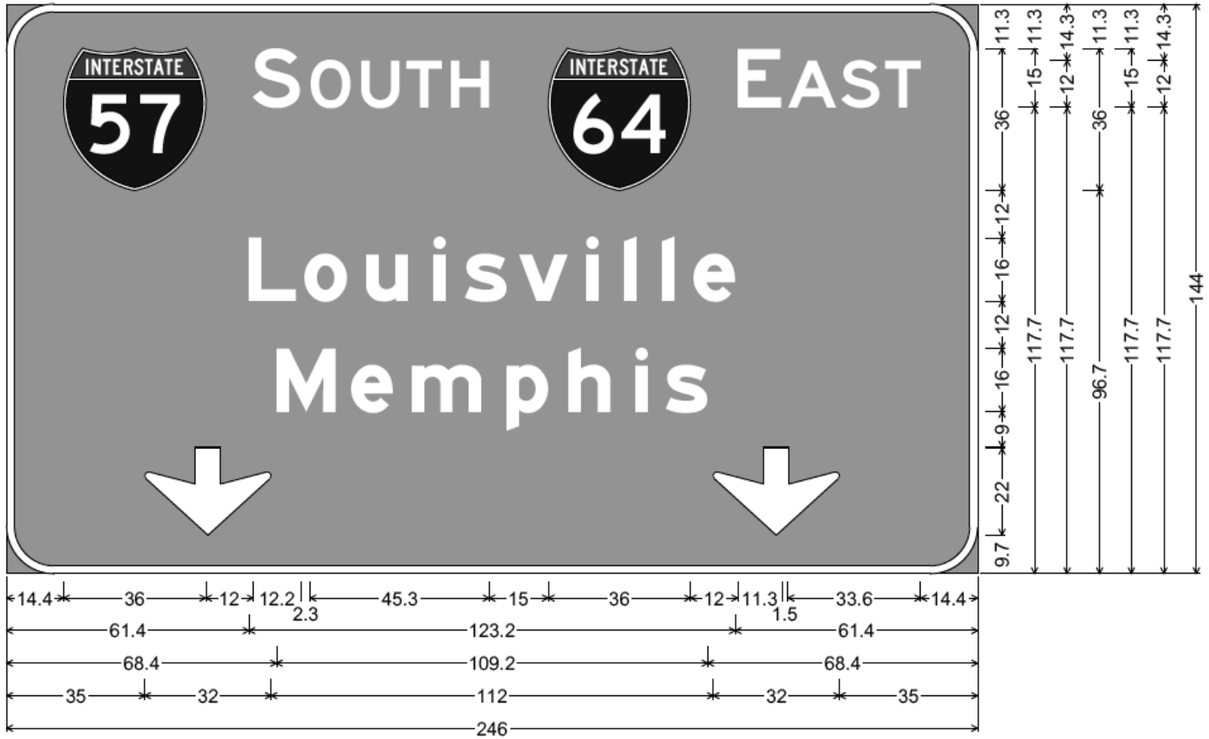
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN: 9S041I057L096.9
SIGN PANEL DETAILS – SHEET 1 OF 5

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	25
		CONTRACT NO. 46454		
	ILLINOIS FED. AID PROJECT			

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON



12.0" Radius, 2.0" Border, White on Green;
"SOUTH" E 2K; "EAST" E 2K; "Louisville" E Mod 2K; "Memphis" E Mod 2K; Down Arrow 22.0" 270°;
Down Arrow 22.0" 270°;
Table of distances between letter and object lefts.

14.4	48.0	S 14.5	O 12.8	U 11.8	T 11.0	H 24.7	48.0	E 12.8	A 13.5	S 11.1	T 9.0	14.4
61.4	L 13.9	o 15.9	u 16.9	i 7.9	s 13.7	v 17.0	i 9.6	l 9.6	l 8.1	e 10.6	61.4	
68.4	M 18.8	e 15.6	m 24.0	p 15.5	h 16.9	i 7.9	s 10.5	68.4				
35.0	144.0	32.0	35.0									

12.0" Radius, 2.0" Border, White on Green;
"EXIT" E Mod 2K 120% spacing; " 96" E Mod 2K;
12.0" Radius, 2.0" Border, White on Green;
"WEST" E 2K; "St Louis" E Mod 2K; Arrow 160 - 35.0" 40°;
Table of distances between letter and object lefts.

78.8	E 9.1	X 11.2	I 4.2	T 22.4	9 15.2	6 12.1	15.0
21.1	48.0	W 18.2	E 10.6	S 11.1	T 21.0	29.3	8.7
16.7	S 16.2	t 24.3	L 13.9	o 15.9	u 16.9	i 7.9	s 10.5	45.7

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Default	PLOT DATE = 5/18/2020	DATE -	REVISED -

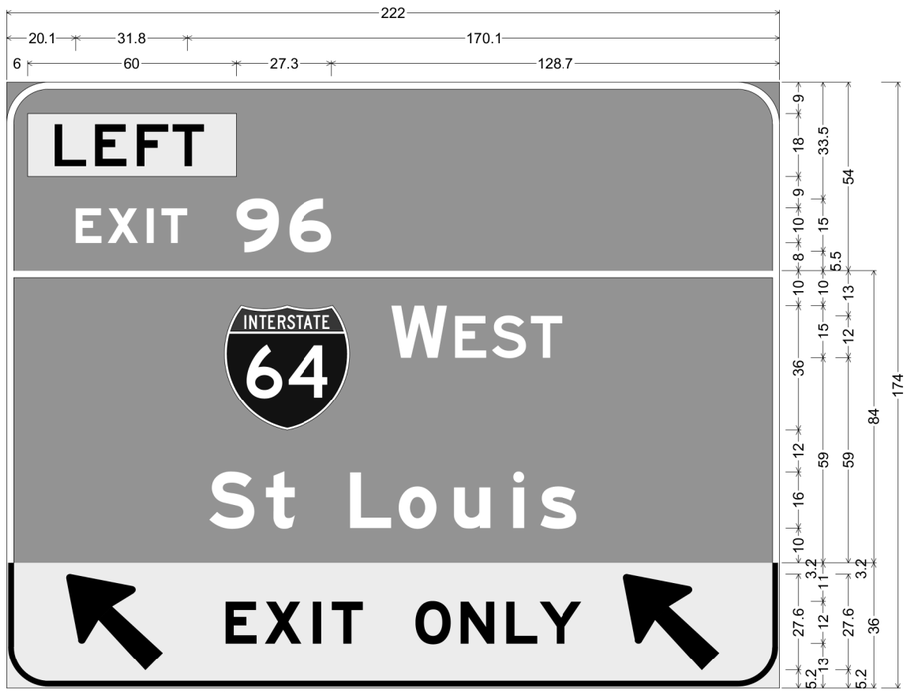
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN: 9S041I057L096.6
SIGN PANEL DETAILS – SHEET 2 OF 5

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	26
		CONTRACT NO. 46454		
	ILLINOIS FED. AID PROJECT			

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON



12.0" Radius, 2.0" Border, White on Green;
Rectangle Yellow;
"EXIT" E Mod 2K 120% spacing; "96" E Mod 2K;
12.0" Radius, 2.0" Border, White on Green;
"WEST" E 2K; "St Louis" E Mod 2K;
12.0" Radius, 1.5" Border, 0.5" Indent, Black on Yellow;
Arrow 160 - 35.0" 135°; "EXIT" E Mod 2K 140% spacing; "ONLY" E Mod 2K; Arrow 160 - 35.0" 135°;
Table of distances between letter and object lefts.

	▭	9	6	
6.0	60.0	15.1	12.2	128.7

	E	X	I	T	
20.1	9.0	11.3	4.1	7.4	170.1

	64	W	E	S	T	
62.5	48.0	18.2	10.7	11.1	9.0	62.5

	S	t	L	o	u	i	s	
58.2	16.2	24.3	13.9	15.8	17.0	7.8	10.6	58.2

	↖	E	X	I	T	O	N	L	Y	↖	
17.4	45.5	11.2	14.0	5.4	23.9	12.9	13.1	9.6	24.1	27.5	17.4

12.0" Radius, 2.0" Border, White on Green;
"NORTH" E 2K; "Chicago" E Mod 2K; Down Arrow 22.0" 270°; Down Arrow 22.0" 270°;
Table of distances between letter and object lefts.

	57	N	O	R	T	H	
44.1	48.0	15.2	12.8	11.1	11.0	9.7	40.1

	C	h	i	c	a	g	o	
48.7	17.5	16.9	8.2	14.1	15.5	15.5	10.9	44.7

	⇩	⇩	
10.0	144.0	32.0	6.0

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CHECKED - ________
DATE - ________

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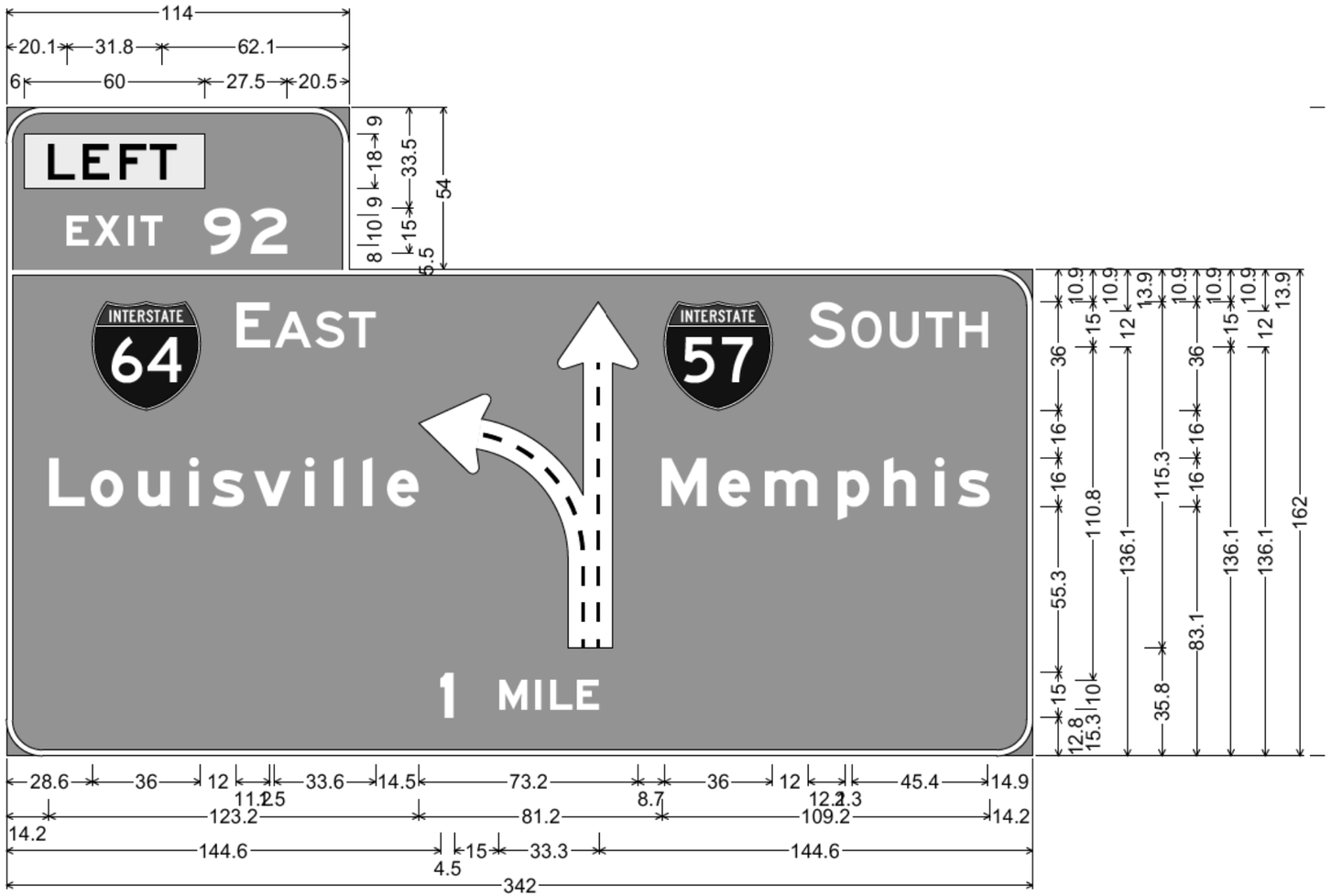
REVISED - ________

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN: 9S041I057R095.9
SIGN PANEL DETAILS – SHEET 3 OF 5
SCALE: ________ SHEET ___ OF ___ SHEETS STA. ________ TO STA. ________

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	27
		CONTRACT NO. 46454		
	ILLINOIS	FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON



12.0" Radius, 2.0" Border, White on Green;
Rectangle Yellow;
“EXIT” E Mod 2K 120% spacing; “92” E Mod 2K;
12.0" Radius, 2.0" Border, White on Green;
“EAST” E 2K; “Louisville” E Mod 2K; Diagrammatic Arrow lane lines Black; “SOUTH” E 2K;
“Memphis” E Mod 2K; “1 MILE” E Mod 2K;
Table of distances between letter and object lefts.

	▭	9	2	
6.0	60.0	15.3	12.1	248.6

	E	X	I	T	
20.1	9.0	11.3	4.1	7.4	290.1

	64	E	A	S	T	↰	57	S	O	U	T	H	
28.6	48.0	12.7	13.6	11.0	23.5	81.9	48.0	14.4	12.9	11.7	11.1	9.7	14.9

	L	o	u	i	s	v	i	l	l	e	M	e	m	p	h	i	s	
14.2	13.9	15.8	17.0	7.8	13.8	16.9	9.6	9.6	8.2	91.8	18.8	15.6	24.0	15.5	16.9	7.9	10.5	14.2

	1	M	I	L	E	
144.6	19.5	12.1	4.8	9.0	7.4	144.6

TO BE USED WITH
SN 9S041I057L092.8

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PLOT DATE = 5/18/2020

DESIGNED -
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CHECKED -
DATE -

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REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN: 9S041I057L092.8
SIGN PANEL DETAILS – SHEET 4 OF 5

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
**	*	VARIOUS***	34	28

CONTRACT NO. 46454
ILLINOIS FED. AID PROJECT

**FAI 57 & FAI 24 *D-9 OVD SIN STR REPL 18-16 ***JEFFERSON JOHNSON

12.0" Radius, 2.0" Border, White on Green;
"EXITS" E Mod 2K 120% spacing; " 44 A - B" E Mod 2K;
12.0" Radius, 2.0" Border, White on Green;
"Memphis" E Mod 2K; "Chicago" E Mod 2K; "1 MILE" E Mod 2K;
Table of letter and object lefts.

E	X	I	T	S	4	4	A	-	B	
9.2	18.3	29.5	33.7	42.9	66.0	82.5	104.5	127.6	140.9	
M	e	m	p	h	i	s				
29.4	48.2	63.8	87.8	103.3	120.2	128.1				
C	h	i	c	a	g	o				
34.7	52.2	69.1	77.3	91.4	106.9	122.4				
1	M	I	L	E						
57.6	77.1	89.2	94.0	103.0						

12.0" Radius, 2.0" Border, White on Green;
"TO " E 2K "St Louis" E Mod 2K; "USE" E 2K; "NORTH" E 2K; "EXIT 44 B" E 2K;
Table of letter and object lefts.

T	O	S	t	L	o	u	i	s	
11.6	22.3	44.4	57.8	78.1	89.7	102.9	117.0	123.6	
U	S	E							
55.4	67.5	79.6							
N	O	R	T	H					
18.1	66.1	81.3	94.1	105.2	116.2				
E	X	I	T	4	4	B			
24.0	32.9	43.6	47.1	69.6	85.8	107.9			

TO BE USED WITH
SN 9S044I024L002.3

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		DRAWN -	REVISED -
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Default	PLOT DATE = 5/18/2020	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN: 9S044I024L002.3
SIGN PANEL DETAILS – SHEET 5 OF 5

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	29
		CONTRACT NO. 46454		
	ILLINOIS	FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

Illinois Department of Transportation
Division of Highways
District 9

SOIL BORING LOG

Date 11/15/19

ROUTE I-57 DESCRIPTION Sign Truss Foundation, SB Exit 98 (Inventory #: 9S041I057L096.9) LOGGED BY L. Estel

SECTION _____ LOCATION SB MP 96.9, Median Slope, SEC. 14, TWP. 2S, RNG. 2E, 3 PM

COUNTY Jefferson DRILLING METHOD Hollow stem auger (8" O.D., 3.25" I.D.) HAMMER TYPE Auto SPT 140 lb

STRUCT. NO. _____
Station _____

BORING NO. 6-ST
Station 893+66
Offset 34.0ft E of CL
Ground Surface Elev. 543.3 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
▽ First Encounter _____ ft
▽ Upon Completion _____ ft
▼ After ____ Hrs. _____ ft

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)	Description
				Hard Brown and Grey, Dry WEATHERED CLAY SHALE *(continued)*
	33 68	4.2 P	9	
522.30				
				V. Stiff Brown, Moist CLAY
	1			
	4 6	3.1 B	19	
538.80				
-5	1			V. Stiff Brown with mottled Grey, Moist CLAY
	3 6	2.3 B	19	
	1			Stiff
	3 4	1.6 B	25	
533.80				
-10	3			V. Stiff Brown, Dry CLAY LOAM
	7 11	2.9 S	14	
	5			
	12 17	2.4 S	15	
-15	5			Brown with specks Black and Grey
	15 26	2.9 S	14	
526.30				
	6			V. Stiff Brown with specks of Black and Grey, Dry CLAY
	22 38	3.4 S	13	
523.80				
-20	3			
-25				Bottom of hole @ 21.0 ft
				Elevation referenced to BM 98; Cut Square on existing sign truss foundation, EL. 543.87
				To convert "N" values to "N60", multiply by 1.5
				No groundwater encountered
-30				
-35				
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

File Name S:\MATERIALS GEOTECHNICAL UNIT\BORING LOGS USING GINT\STATE STRUCTURES\JEFFERSON\I57 SIGN TRUSS FOUNDATIONS MT VERNON 2019.GPJ Data Template D6TEMPLT.GDT Date Printed 12/13/19
Latitude 38 20 43.91 Longitude -88 57 09.04 Datum NAD83 Job Number

Illinois Department of Transportation
Division of Highways
District 9

SOIL BORING LOG

Date 11/8/19

ROUTE I-57 DESCRIPTION Sign Truss Foundation, SB Exit 98 (Inventory #: 9S041I057L096.9) LOGGED BY L. Estel

SECTION _____ LOCATION SB MP 96.9, Outside Slope, SEC. 14, TWP. 2S, RNG. 2E, 3 PM

COUNTY Jefferson DRILLING METHOD Hollow stem auger (8" O.D., 3.25" I.D.) HAMMER TYPE Auto SPT 140 lb

STRUCT. NO. _____
Station _____

BORING NO. 1-ST
Station 893+63
Offset 44.0ft W of CL
Ground Surface Elev. 544.5 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
▽ First Encounter _____ ft
▽ Upon Completion _____ ft
▼ After ____ Hrs. _____ ft

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)	Description
				V. Stiff Brown with specks of Grey and Black, Moist SILTY CLAY LOAM
	1			
	5 7	2.9 B	15	
540.00				
-5	1			V. Stiff Brown with specks of Grey and Red, Moist SILTY CLAY LOAM
	6 6	3.5 B	20	
537.50				
	1			Stiff Brownish Grey, Moist SILTY CLAY LOAM
	4 5	1.8 B	20	
535.00				
-10	1			M. Stiff Greenish Grey and mottled Brown, Moist SILTY CLAY LOAM
	2 2	0.6 B	24	
532.50				
	8			Hard Grey and Brown, Dry CLAY
	20 25	5.0 P	12	
-15	6			
	15 20	4.1 S	16	
527.50				
	6			Hard Grey and Brown, Dry WEATHERED CLAY SHALE
	24 31	4.6 S	14	
-20	10			
521.00				Hard Grey and Brown, Dry WEATHERED CLAY SHALE *(continued)*
	33 42	5.0 S	14	
	10			
	22 38	5.0 S	13	
-25				
-30				Bottom of hole @ 23.5 ft
				Elevation referenced to BM 98, Cut Square on existing west sign truss foundation; EL. 543.87
				To convert "N" values to "N60", multiply by 1.5
				No groundwater encountered
-35				
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

File Name S:\MATERIALS GEOTECHNICAL UNIT\BORING LOGS USING GINT\STATE STRUCTURES\JEFFERSON\I57 SIGN TRUSS FOUNDATIONS MT VERNON 2019.GPJ Data Template D6TEMPLT.GDT Date Printed 12/13/19
Latitude 38 20 44.07 Longitude -88 57 09.98 Datum NAD83 Job Number

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		DRAWN -	REVISED -
	PLOT SCALE = 200.0000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 5/18/2020	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN: 9S041I057L096.9
SOIL BORING LOGS – SHEET 1 OF 5

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	30
		CONTRACT NO. 46454		
	ILLINOIS FED. AID PROJECT			

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

Illinois Department of Transportation
Division of Highways
District 9

SOIL BORING LOG

Date 11/9/19

ROUTE I-57 **DESCRIPTION** Sign Truss Foundation, SB Exit 97 (Inventory #: 9S041I057L096.6) **LOGGED BY** L. Estel

SECTION _____ **LOCATION** SB MP 96.6, Median Slope, **SEC.** 23, **TWP.** 2S, **RNG.** 2E, 3 **PM**

COUNTY Jefferson **DRILLING METHOD** Hollow stem auger (8" O.D., 3.25" I.D.) **HAMMER TYPE** Auto SPT 140 lb

STRUCT. NO. _____
Station _____

BORING NO. 7-ST
Station 874+36
Offset 34.0ft E of CL
Ground Surface Elev. 514.6 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
▽ **First Encounter** _____ ft
▽ **Upon Completion** _____ ft
▼ **After** _____ Hrs. _____ ft

	DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Stiff Brown and Grey with specks of Black, Moist CLAY LOAM		1		
		10 14	1.5 S	17
510.10				
Hard Brown, Dry CLAY LOAM with SANDSTONE seams	-5	5		
		20 12	5.0 P	11
507.60				
Hard Brown, Dry CLAY with SANDSTONE seams		5		
		11 13	5.0 P	12
504.60	-10	6		
Hard Grey, Dry CLAY SHALE		100/3"		
499.35	-15	100/3"		
	-20			

	DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Bottom of hole @ 15.25 ft				
Elevation referenced to BM 97; Cut Square on existing west sign truss foundation, EL. 515.45				
To convert "N" values to "N60", multiply by 1.5				
No groundwater encountered	-25			
	-30			
	-35			
	-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
District 9

SOIL BORING LOG

Date 11/8/19

ROUTE I-57 **DESCRIPTION** Sign Truss Foundation, SB Exit 97 (Inventory #: 9S041I057L096.6) **LOGGED BY** L. Estel

SECTION _____ **LOCATION** SB MP 96.6, Outside Slope, **SEC.** 23, **TWP.** 2S, **RNG.** 2E, 3 **PM**

COUNTY Jefferson **DRILLING METHOD** Hollow stem auger (8" O.D., 3.25" I.D.) **HAMMER TYPE** Auto SPT 140 lb

STRUCT. NO. _____
Station _____

BORING NO. 2-ST
Station 874+36
Offset 44.0ft W of CL
Ground Surface Elev. 514.3 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
▽ **First Encounter** _____ ft
▽ **Upon Completion** _____ ft
▼ **After** _____ Hrs. _____ ft

	DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Stiff Brown and Grey with specks of Black, Moist SILTY CLAY		1		
		3 4	1.6 B	19
509.80				
Hard Brownish Grey with specks of Black, Dry WEATHERED CLAY SHALE	-5	10		
		44 100	5.0 P	10
Grey		9		
		32 50	5.0 P	11
504.30	-10	16		
Hard Grey, Dry CLAY SHALE		100/3"		6
499.05	-15	100/3"		6
	-20			

	DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Bottom of hole @ 15.25 ft				
Elevation referenced to BM 97; Cut Square on west foundation of existing sign truss, EL. 515.45				
To convert "N" values to "N60", multiply by 1.5				
No groundwater encountered	-25			
	-30			
	-35			
	-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

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		DRAWN -	REVISED -
	PLOT SCALE = 200.0000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 5/18/2020	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN: 9S041I057L096.6
SOIL BORING LOGS – SHEET 2 OF 5

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	31
		CONTRACT NO. 46454		
	ILLINOIS FED. AID PROJECT			

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

Illinois Department of Transportation
Division of Highways
District 9

SOIL BORING LOG

Page 1 of 1

Date 11/15/19

ROUTE I-57 DESCRIPTION Sign Truss Foundation, NB Exit 96 (Inventory #: 9S041I057R095.9) LOGGED BY L. Estel

SECTION LOCATION NB MP 95.9, Median Slope, **SEC.** 23, **TWP.** 2S, **RNG.** 2E, 3 **PM**

COUNTY Jefferson DRILLING METHOD Hollow stem auger (8" O.D., 3.25" I.D.) HAMMER TYPE Auto SPT 140 lb

STRUCT. NO.
Station

BORING NO. 5-ST
Station 840+77
Offset 55.0ft W of CL of I-57
Ground Surface Elev. 487.3 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
▽ First Encounter ft
▽ Upon Completion ft
▼ After Hrs. ft

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)	
				V. Stiff Brown, Moist SILTY CLAY
	2			
	3	3.3	14	
	4	B		
482.80				
-5	2			V. Stiff Grey, Moist SILTY CLAY
	4	3.3	18	
	6	B		
480.30				
	1			Stiff Brown, Moist CLAY
	4	2.7	22	
	6	B		
477.80				
-10	1			V. Stiff Brown and mottled Grey, Moist CLAY
	3	3.1	23	
	6	B		
475.30				
	1			Stiff Greenish Grey and Brown, Moist CLAY
	2	1.5	30	
	4	B		
472.80				
-15	1			M. Stiff Grey, Very Moist SILTY CLAY
	2	0.6	22	
	2	B		
470.30				
	WOH			M. Stiff Brown and mottled dark Brown SILTY CLAY LOAM with SANDSTONE pebbles
	1	0.8	19	
	3	B		
467.80				
-20	1			

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)	
	2	0.2	18	V. Soft Brown, Wet SILTY CLAY LOAM with SANDSTONE pebbles *(continued)*
	5	B		
465.30				
	1			V. Stiff Brown and mottled Grey, Moist CLAY
	3	2.0	34	
	5	B		
462.80				
-25	5			Hard Brown, Dry CLAY
	15	4.6	18	
	16	B		
-30				Bottom of hole @ 26.0 ft
				Elevation referenced to BM 96; Cut Square on existing sign truss foundation, EL. 487.33
				To convert "N" values to "N60", multiply by 1.5
				No groundwater encountered
-35				
-40				

File Name S:\MATERIALS GEOTECHNICAL UNIT\BORING LOGS USING GINT\STATE STRUCTURES\JEFFERSON\I57 SIGN TRUSS FOUNDATIONS MT VERNON 2019.GPJ Data Template D6TEMPLT.GDT Date Printed 12/13/19
Latitude 38 19 52.58 Longitude -88 57 18.65 Datum NAD83 Job Number

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
District 9

SOIL BORING LOG

Page 1 of 1

Date 11/8/19

ROUTE I-57 DESCRIPTION Sign Truss Foundation, NB Exit 96 (Inventory #: 9S041I057R095.9) LOGGED BY L. Estel

SECTION LOCATION NB MP 95.9, Outside Slope, **SEC.** 23, **TWP.** 2S, **RNG.** 2E, 3 **PM**

COUNTY Jefferson DRILLING METHOD Hollow stem auger (8" O.D., 3.25" I.D.) HAMMER TYPE Auto SPT 140 lb

STRUCT. NO.
Station

BORING NO. 3-ST
Station 840+72
Offset 27.0ft E of CL of I-57
Ground Surface Elev. 488.2 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
▽ First Encounter ft
▽ Upon Completion ft
▼ After Hrs. ft

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)	
				M. Stiff Brown and Grey, Moist CLAY
	1			
	3	0.8	22	
	3	B		
483.70				
-5	1			V. Stiff Brown and Grey, Moist SILTY CLAY
	5	2.9	15	
	6	B		
481.20				
	1			Stiff Brown and Grey, Moist SILTY CLAY
	4	1.2	27	
	6	B		
-10	1			
	3	1.4	22	
	4	B		
	1			
	2	1.0	20	
	3	B		
473.70				
-15	1			Stiff Grey, Moist SILTY CLAY
	3	1.2	21	
	4	B		
471.20				
	1			M. Stiff Grey, Moist SILTY CLAY LOAM
	2	0.7	25	
	3	B		
468.70				
-20	1			

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)	
	5	2.4	36	V. Stiff Brown with specks of Black, Moist SILTY CLAY LOAM *(continued)*
	6	B		
466.20				
	5			Hard Grey, Dry SILTY CLAY LOAM
	13	4.1	18	
	20	B		
-25				
-30				Bottom of hole @ 23.5 ft
				Elevation referenced to BM 96; Cut Square on existing sign truss foundation, EL. 487.33
				To convert "N" to "N60", multiply by 1.5
				No groundwater encountered
-35				
-40				

File Name S:\MATERIALS GEOTECHNICAL UNIT\BORING LOGS USING GINT\STATE STRUCTURES\JEFFERSON\I57 SIGN TRUSS FOUNDATIONS MT VERNON 2019.GPJ Data Template D6TEMPLT.GDT Date Printed 12/13/19
Latitude 38 19 52.43 Longitude -88 57 17.61 Datum NAD83 Job Number

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

FILE NAME = pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 9\Projects\sign structures\CADData\FY20 Sign Truss Replacements\CADData\CADsheets\D946454-Sheets.dgn	USER NAME = fowlera	DESIGNED -	REVISED -
	PLOT SCALE = 200.0000 ' / in.	DRAWN -	REVISED -
Default	PLOT DATE = 5/18/2020	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN: 9S041I057R095.9
SOIL BORING LOGS – SHEET 3 OF 5

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	32
		CONTRACT NO. 46454		
	ILLINOIS	FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON

Illinois Department of Transportation
Division of Highways
District 9

SOIL BORING LOG

Date 11/15/19

ROUTE I-57 **DESCRIPTION** Sign Truss Foundation, SB Exit 93 (Inventory #: 9S041I057L092.8) **LOGGED BY** L. Estel

SECTION _____ **LOCATION** SB MP 92.8, Median Slope, **SEC.** 1, **TWP.** 3S, **RNG.** 2E, 3 **PM**

COUNTY Jefferson **DRILLING METHOD** Hollow stem auger (8" O.D., 3.25" I.D.) **HAMMER TYPE** Auto SPT 140 lb

STRUCT. NO. _____
Station _____

BORING NO. 8-ST
Station 677+00
Offset 75.0ft E of CL
Ground Surface Elev. 496.5 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
▽ **First Encounter** _____ ft
▽ **Upon Completion** _____ ft
▼ **After** _____ Hrs. _____ ft

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)	Description
	2			V. Stiff Grey, Moist CLAY
	4 5	2.2 B	19	
492.00				
-5	2			V. Stiff Brown and mottled Grey, Moist CLAY
	4 5	2.7 B	17	
489.50				
	1			Stiff Brown and mottled Grey, Moist CLAY
	4 7	1.7 S	17	
-10	1			
	4 6	1.9 B	21	Bottom of hole @ 26.0 ft
484.50				Elevation referenced to BM 93, Cut Square on existing Sign Truss Foundation; EL. 495.57
	1			V. Stiff Brown, Moist CLAY
	4 8	3.1 B	21	To convert "N" values to "N60", multiply by 1.5
482.00				
-15	1			Stiff Brown, Moist CLAY
	4 6	1.7 B	14	No groundwater encountered
479.50				
	1			V. Stiff Brown and mottled Grey, Moist CLAY
	3 6	2.7 B	21	
-20	1			

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)	Description
	5 7	3.9 B	20	V. Stiff Brown and mottled Grey, Moist CLAY *(continued)*
	1			
	5 6	3.5 B	21	
-25	1			
	4 5	2.9 B	25	
470.50				
-30				
-35				
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
District 9

SOIL BORING LOG

Date 11/8/19

ROUTE I-57 **DESCRIPTION** Sign Truss Foundation, SB Exit 93 (Inventory #: 9S041I057L092.8) **LOGGED BY** L. Estel

SECTION _____ **LOCATION** SB MP 92.8, Outside Slope, **SEC.** 1, **TWP.** 3S, **RNG.** 2E, 3 **PM**

COUNTY Jefferson **DRILLING METHOD** Hollow stem auger (8" O.D., 3.25" I.D.) **HAMMER TYPE** Auto SPT 140 lb

STRUCT. NO. _____
Station _____

BORING NO. 4-ST
Station 676+93
Offset 32.0ft W of CL
Ground Surface Elev. 497.0 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
▽ **First Encounter** _____ ft
▽ **Upon Completion** _____ ft
▼ **After** _____ Hrs. _____ ft

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)	Description
				V. Stiff Brown with specks of Red, Moist SILTY CLAY
	1			
	3 6	3.5 B	18	
472.50				
-5	1			Grey
	6 7	3.3 B	17	
	3			Grey with specks of Brown
	9 9	2.7 S	10	
-10	2			Brown
	5 7	2.7 B	17	Bottom of hole @ 26.0 ft
	2			Brown and mottled Grey
	6 8	2.9 B	19	
-15	1			
	4 6	2.2 B	28	
	2			Brown and mottled Grey with specks of Black
	6 8	3.9 B	21	
-20	1			

DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)	Description
	4 6	2.1 B	25	Brown and mottled Grey with specks of Black *(continued)*
	1			
	4 6	2.9 B	21	
-25	2			V. Stiff, Brown with specks of Red, Moist SILTY CLAY with Pebbles
	7 10	2.9 B	20	
-30				
-35				
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
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Illinois Department of Transportation
Division of Highways
District 9

SOIL BORING LOG

Date 12/4/19

ROUTE I-24 DESCRIPTION Sign Truss Foundation, WB Exit 44 (Inventory #: 9S044I024L002.3) LOGGED BY L. Estel

SECTION _____ LOCATION WB MP 2.3, Inside Shoulder, **SEC.** 3, **TWP.** 11S, **RNG.** 2E, 3 **PM**

COUNTY Johnson DRILLING METHOD Hollow stem auger (8" O.D., 3.25" I.D.) HAMMER TYPE Auto SPT 140 lb

STRUCT. NO. _____
Station _____

BORING NO. 10-ST
Station 157+36
Offset 10.0ft Lt of CL
Ground Surface Elev. 597.6 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
▽ **First Encounter** _____ ft
▽ **Upon Completion** _____ ft
▼ **After** _____ **Hrs.** _____ ft

	DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Cored Pavement, 3.5" HMA over 8.5" CONCRETE and 6" GRAVEL				
596.10				
V. Stiff Brown, Moist CLAY with Brown SANDSTONE Pebbles	-5	2		
		6 9	3.3 S	15
		1		
		6 6	3.7 B	18
588.10				
Hard Dark Grey, Moist CLAY with Brown and Tan SANDSTONE Pebbles	-10	1		
		3 6	4.1 B	17
585.60				
V. Stiff Brown, Moist CLAY with Brown and Tan SANDSTONE Pebbles		1		
		5 7	2.4 B	15
583.10				
V. Stiff Brown, Moist SILTY CLAY with Brown and Tan SANDSTONE Pockets and Pebbles	-15	6		
		8 11	2.9 B	14
		11		
579.60		30		
Hard Brown and Tan, Dry SANDSTONE		70/2"		
	-20			

	DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Bottom of hole @ 18.2 ft				
Elevation referenced to BM 44, Cut Square on existing NE sign truss foundation; EL. 594.88				
To convert "N" values to "N60", multiply by 1.5				
No groundwater encountered	-25			
	-30			
	-35			
	-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
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File Name S:\MATERIALS GEOTECHNICAL UNIT\BORING LOGS USING GINT\STATE STRUCTURES\JOHNSON\I 24 WB MP 2 JOHNSON SIGN TRUSS FDN 2019.GPJ Data Template D6TEMPLT.GDT Date Printed 12/13/19
Latitude 37 35 32.38 Longitude 88 58 55.20 Datum NAD83 Job Number

Illinois Department of Transportation
Division of Highways
District 9

SOIL BORING LOG

Date 12/4/19

ROUTE I-24 DESCRIPTION Sign Truss Foundation, WB Exit 44 (Inventory #: 9S044I024L002.3) LOGGED BY L. Estel

SECTION _____ LOCATION WB MP 2.3, Outside Shoulder, **SEC.** 3, **TWP.** 11S, **RNG.** 2E, 3 **PM**

COUNTY Johnson DRILLING METHOD Hollow stem auger (8" O.D., 3.25" I.D.) HAMMER TYPE Auto SPT 140 lb

STRUCT. NO. _____
Station _____

BORING NO. 9-ST
Station 157+36
Offset 16.0ft Rt of CL
Ground Surface Elev. 597.4 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
▽ **First Encounter** _____ ft
▽ **Upon Completion** _____ ft
▼ **After** _____ **Hrs.** _____ ft

	DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Cored Shoulder, 14" of HMA over 6" of GRAVEL				
595.75				
V. Stiff Brown, Moist CLAY	-5	WOH		
		3 5	2.9 B	17
		1		
		5 6	1.9 B	19
587.90				
M. Stiff Brown and Grey, Moist CLAY with Brown SANDSTONE Pebbles	-10	1		
		2 5	0.8 B	17
585.40				
V. Stiff Brown and Grey, Moist SILTY CLAY with Brown SANDSTONE Pebbles		6		
		14 16	3.5 S	16
582.40	-15	6		
Hard Brown and Tan, Dry SANDSTONE		100/4"		9
580.15		100 in 1/4"		
	-20			

	DEPTH (ft)	BLOWS	UCS Qu (tsf)	MOIST (%)
Bottom of hole @ 17.25 ft				
Elevation referenced to BM 44, Cut Square on existing NE sign truss foundation; EL. 594.88				
To convert "N" values to "N60", multiply by 1.5				
No groundwater encountered	-25			
	-30			
	-35			
	-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
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File Name S:\MATERIALS GEOTECHNICAL UNIT\BORING LOGS USING GINT\STATE STRUCTURES\JOHNSON\I 24 WB MP 2 JOHNSON SIGN TRUSS FDN 2019.GPJ Data Template D6TEMPLT.GDT Date Printed 12/13/19
Latitude 37 35 32.64 Longitude 88 58 54.95 Datum NAD83 Job Number

FILE NAME = pw:\\planroom.dot.illinois.gov:PWIDOT\Documents\IDOT Offices\District 9\Projects\sign structures\CADData\FY20 Sign Truss Replacements\CADData\CADsheets\D946454-Sheets.dgn	USER NAME = fowlera	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 200.0000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 5/18/2020	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN: 9S044I024L002.3
SOIL BORING LOGS – SHEET 5 OF 5

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
••	•	VARIOUS•••	34	34
		CONTRACT NO. 46454		
		ILLINOIS FED. AID PROJECT		

••FAI 57 & FAI 24 •D-9 OVD SIN STR REPL 18-16 •••JEFFERSON JOHNSON