

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

*DELETED SHEET 8 OF 9
8 TOTAL SHEETS

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D5 BRIDGE PAINTING 2018-3	CHAMPAIGN	9	1
		ILLINOIS	CONTRACT NO. 70D25	

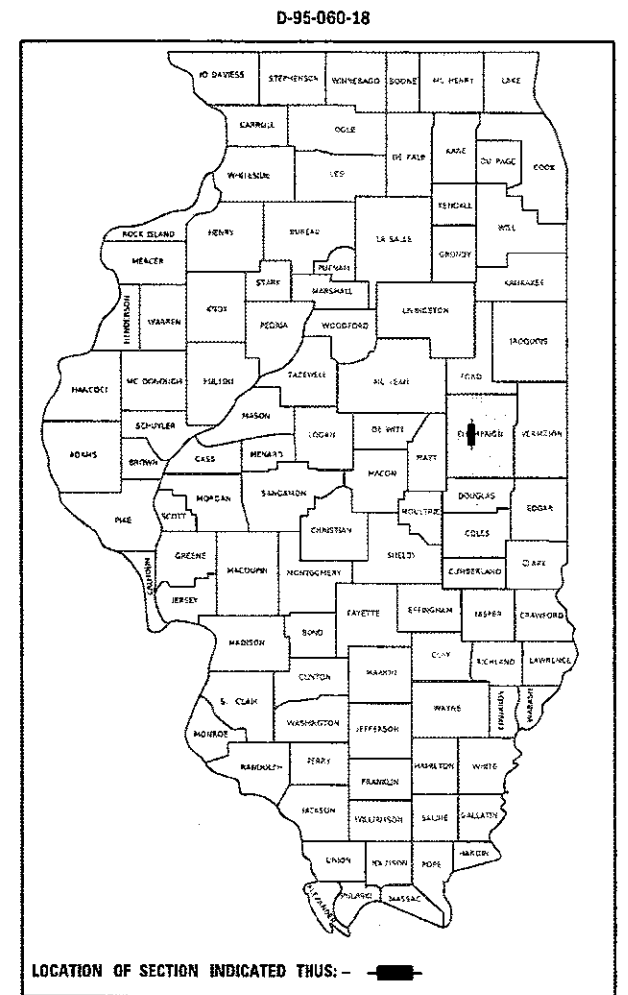
FOR INDEX OF SHEETS, SEE SHEET NO. 2.
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3.

PROPOSED HIGHWAY PLANS

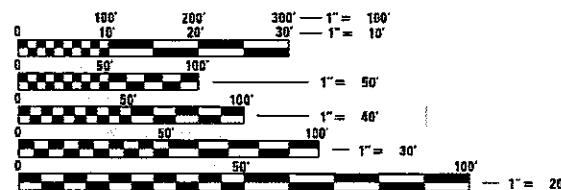
F.A.I. ROUTE 57 (I-57)
SECTION D5 BRIDGE PAINTING 2018-3
PROJECT STP-JS74(462)
BRIDGE PAINTING
CHAMPAIGN COUNTY

C-95-060-18

CURRENT ADT	
LOC. #1	
ADT (2015)	20,400
LOC. #1 = S.N. 010-0171 - F.A.I. 57 (I100E - PROSPECT AVE) OVER I-57 2 MILES NORTH OF CHAMPAIGN	



FOR LOCATION MAP, SEE SHEET 4.



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

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

PROJECT ENGINEER: NANCY FASIG
SQUAD LEADER: STEVE COOMBES
DESIGNER: JASON LEE
(217) 465-4181
CONTRACT NO. 70D25

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED January 25, 2018
Paul A. James
REGIONAL ENGINEER

Mar 23, 2018
Chris [Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

May 23, 2018
Paul P. [Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS

SUMMARY OF QUANTITIES

LOCATION OF WORK:

LOC. #1
 F.A.I. 57
 S.N. 010-0171
 CHAMPAIGN CO.
 RURAL
 80 % FED / 20% STATE
 0047

CONSTRUCTION TYPE CODE:

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	QUANTITY
67100100	MOBILIZATION	L SUM	1.0	1.0
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	4.0	4.0
70400100	TEMPORARY CONCRETE BARRIER	FOOT	550.0	550.0
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	550.0	550.0
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2.0	2.0
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2.0	2.0
X2700001	TEMPORARY RUMBLE STRIPS (SPECIAL)	EACH	16.0	16.0
X5067501	BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 1	L SUM	1.0	1.0
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	48.0	48.0
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1.0	1.0
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1.0	1.0

MODEL: \$MODELNAME\$ FILE NAME: D:\ILLINOIS\BENTEC\Illinois\p\PWIDOT\Documents\DOT Office\District 3\Projects\0570D25\CAD\Drawings\0570D25-sht-SQ.dgn

LOCATION #1
DESCRIPTION

DESCRIPTION: F.A.I. 57 (1100E - Prospect Ave) OVER I-57 - 2 MI N. OF CHAMPAIGN
 COUNTY: CHAMPAIGN
 ROUTE: F.A.I. 57
 MARKED ROUTE: I-57
 SECTION: 10-34HB-4
 STRUCTURE NO.: 010-0171
 TYPE OF STRUCTURE: CONTINUOUS STEEL

CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES." ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL SHALL BE CLEANED PER NEAR WHITE BLASTING SSPC-SP10.

THE DESIGNATED AREAS CLEANED PER NEAR WHITE BLAST CLEANING SSPC-SP10 SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 OZ/E.U. THE COLOR OF THE FINAL FINISH COAT FOR ALL INTERIOR STEEL SURFACES SHALL BE GRAY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR ALL EXTERIOR AND BOTTOM FLANGE OF THE FASCIA BEAMS SHALL BE INTERSTATE GREEN (MUNSELL COLOR STANDARD 7.5G 4/8).

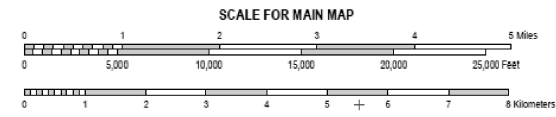
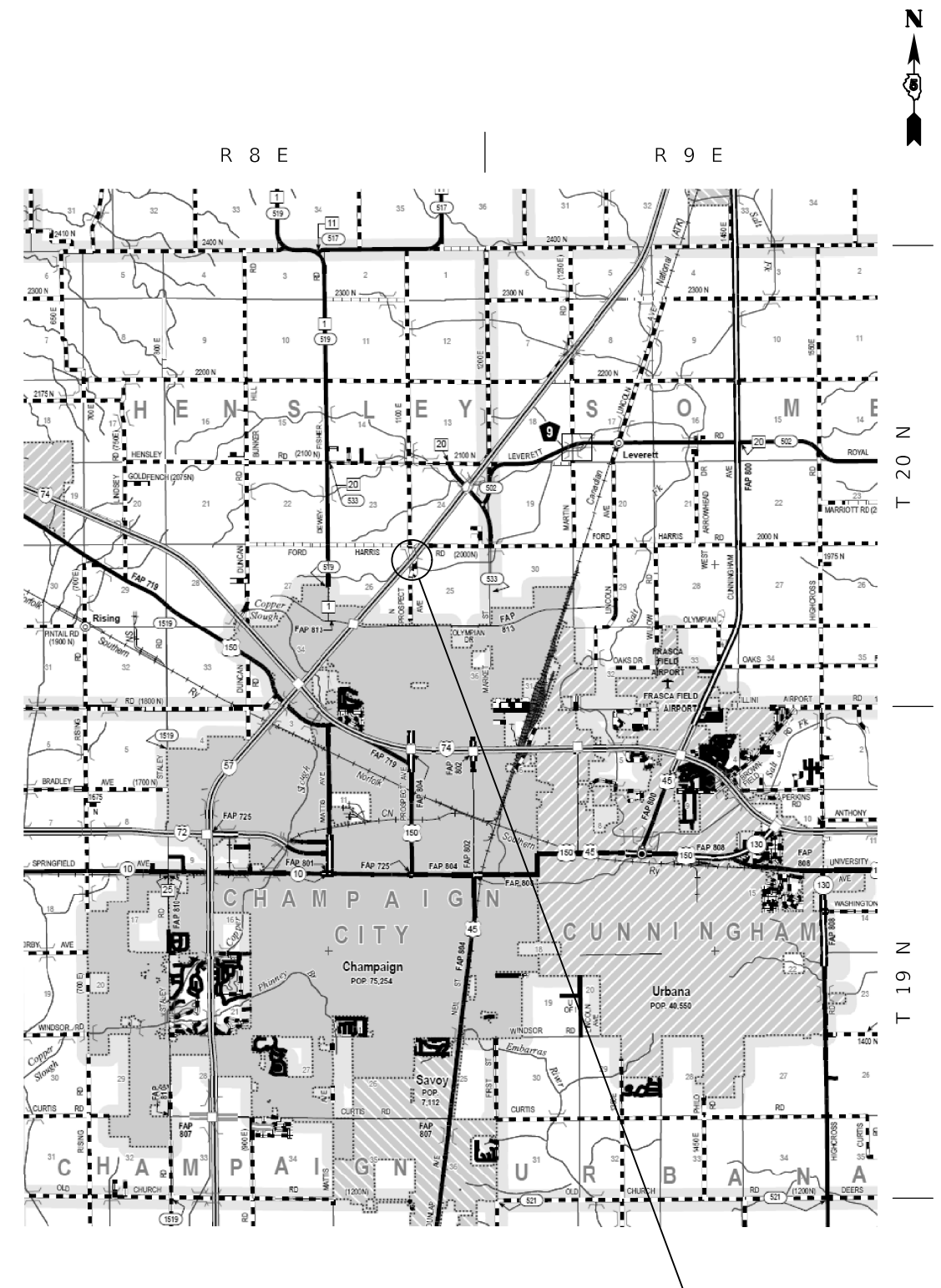
A MINIMUM OF FOUR (4) HIGH VOLUME AIR MONITORS WILL BE REQUIRED TO MONITOR AIR QUALITY DURING DUST PRODUCING OPERATIONS AT THIS SITE. SEE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES".

THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL FOLLOW THE GUIDE BRIDGE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES" TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

NOTE: DECK DRAINS TO BE PAINTED AT NO ADDITIONAL COST.

2 YEAR PAINT WARRANTY REQUIRED FOR THIS STRUCTURE.

LOCATION #1
CHAMPAIGN COUNTY



LOCATION 1
S.N. 010-0171

MODEL: 410021.MXD
FILE: 410021.DWG
PROJECT: 70D25
CADD: 410021.DWG
DATE: 1/22/2018

USER NAME = coombessf	DESIGNED -	REVISED -
PLOT SCALE = 40,0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 1/22/2018	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

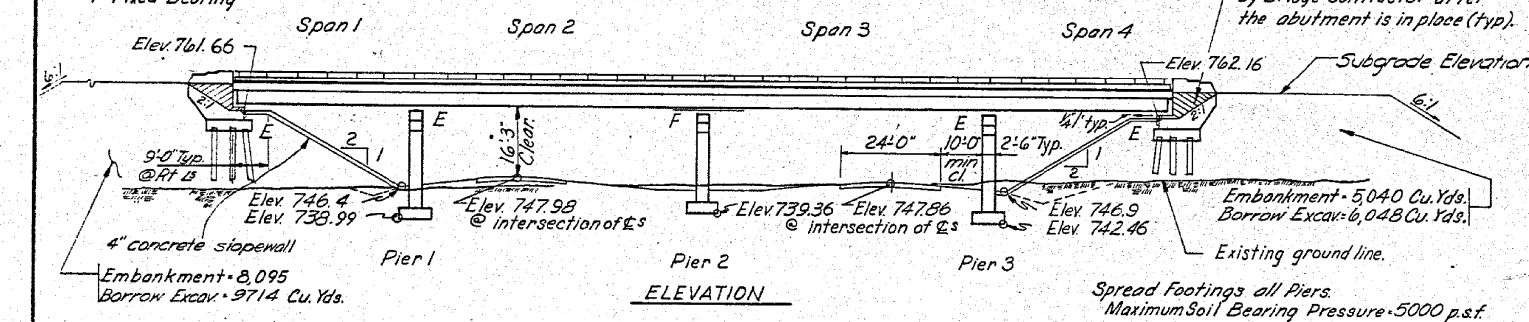
LOCATION #1 DESCRIPTION AND LOCATION MAP

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	*	CHAMPAIGN	9	4
* D5 BRIDGE PAINTING 2018-3			CONTRACT NO. 70D25	
ILLINOIS FED. AID PROJECT				

B.M. 171 Nail & Bottle Cap in Telephone Pole
187' Lt. & Sta. 709+48.05 Elev. 732.47
No existing structure.

E-Expansion Bearing
F-Fixed Bearing



7500 N Qu W

10	3.4	14.3
16	4.4	14.3
20	5.8	13.7
33	3.6	12.6
17	2.9	12.5
16	2.9	12.3
22	4.8	21.1
28	6.8	12.2
25	4.9	11.5

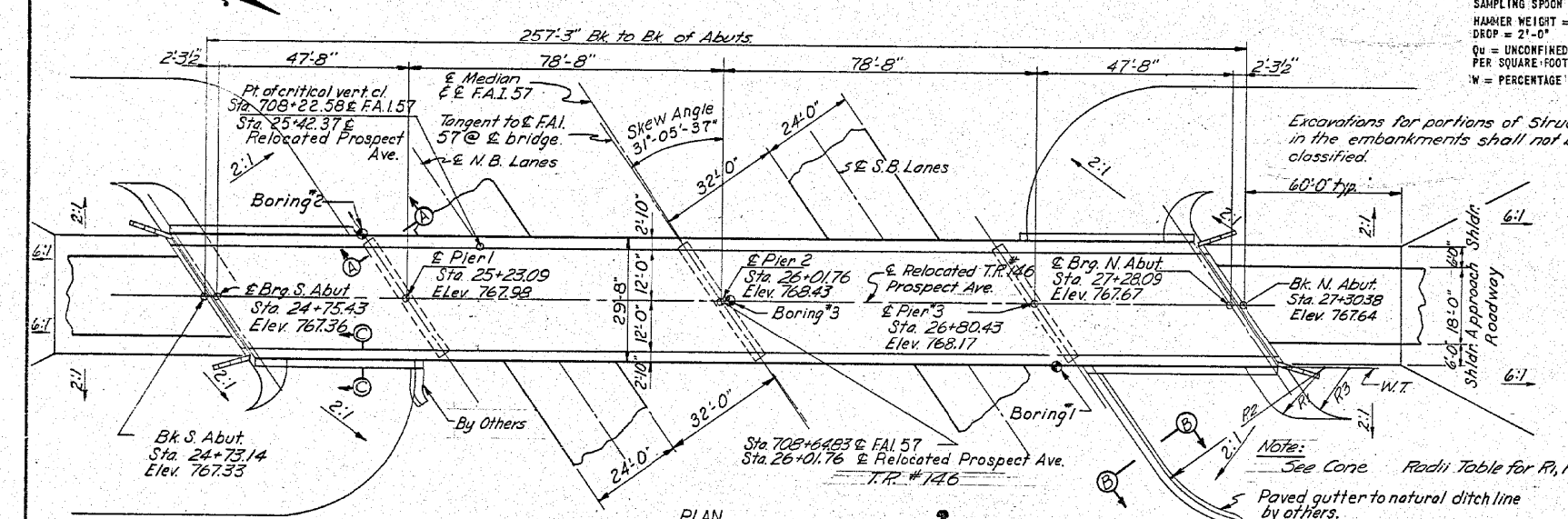
7470 N Qu W

5	1.7	13.2
7	3.9	11.3
13	5.1	10.5
28	2.0	10.5
18	6.5	8.8
16	6.5	10.4
16	5.3	9.7
14	2.0	9.9
15	2.6	11.0

7497 N Qu W

7	2.4	11.8
15	3.4	9.9
3	5.4	10.0
18	6.3	8.9
18	5.6	8.9
14	4.8	8.6
20	5.8	9.6
19	4.9	10.0
17	-	-

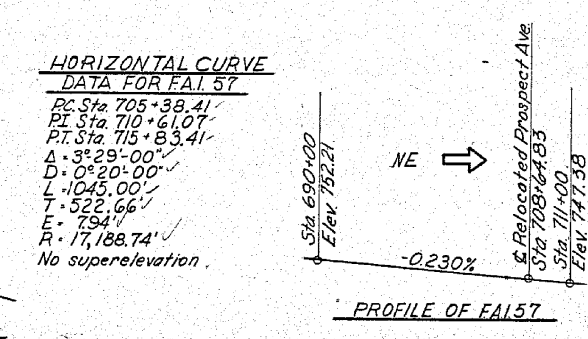
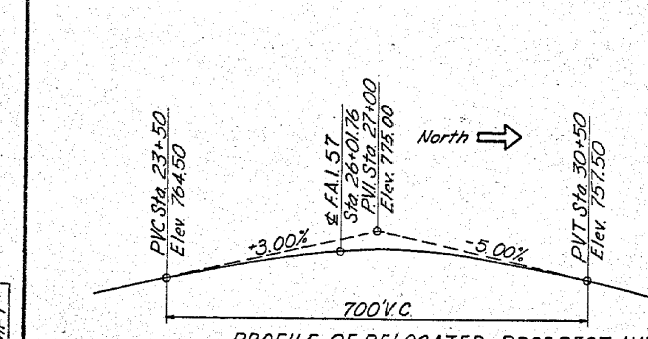
NOTE:
M = BLOWS PER FOOT OF PENETRATION OF SAMPLING SPON
HAWKER WEIGHT = 170 LBS.
DROP = 2'-0"
Qu = UNCONFINED COMPRESSIVE STRENGTH IN TONS PER SQUARE FOOT.
W = PERCENTAGE MOISTURE



BORING DATA

23	24
26	25

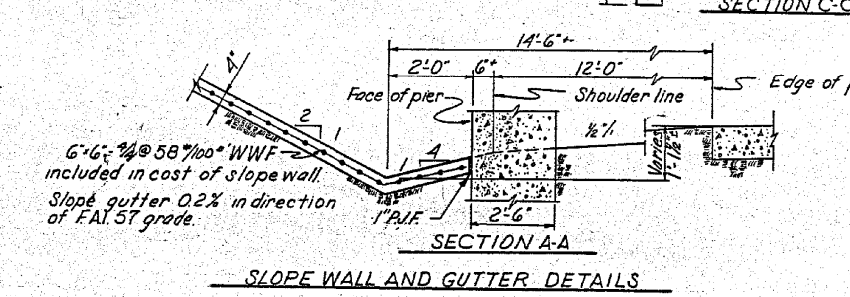
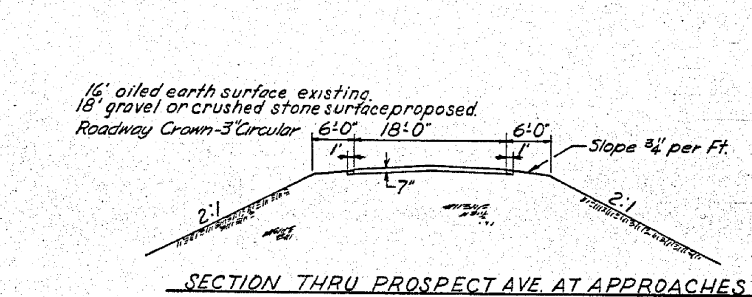
LOCATION SKETCH
Champaign County



Geometry Note:
Piers & Brg. Abutments are parallel to tangent to E.F.A.I. 57 at Sta. 708+64.83.
Functions of Skew Angle
Sin 31°-05'-37" = 0.51643785
Cos 31°-05'-37" = 0.85632468
Tan 31°-05'-37" = 0.60308649

CONE RADIUS TABLE

CORNER	STATION	R1	R2	R3
SW	24+64.43	10'-4"	40'-9"	-
SE	24+54.96	-	-	10'-4"
NW	27+20.81	9'-11"	33'-4"	-
NE	27+47.80	-	-	9'-11"



SHEET NO. 8 SHEETS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI. 57	10-34HB-4	CHAMPAIGN	17	6

FED. ROAD DIST. NO. 7 ILLINOIS PROJECT 3-57-5(1) 238

- GENERAL NOTES
- Slope Wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58# 10 sp. #1
 - CONCRETE: CLASS X CONCRETE SHALL BE USED THROUGHOUT. THE CONCRETE FLOOR SLAB SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 51.19 OF THE STANDARD SPECIFICATIONS. COARSE AGGREGATE WHICH IS TO BE USED IN END POSTS AND PARAPETS SHALL BE FREE OF CHERT, FLINT, LIMONITE, LIGNITE, AND SOFT SANDSTONE.
 - PILES: Except as otherwise provided all structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Sht. 5 of 5 for details of the 5' x 5' x 3/4" Piles. ALL PAINT SHALL BE FURNISHED AND APPLIED BY THE CONTRACTOR.
 - PRECASTING: HOLES SHALL BE PRECURED FOR THE ABUTMENT PILES IN ACCORDANCE WITH ARTICLE 60.9 (C) OF THE STANDARD SPECIFICATIONS.
 - TEST PILES: THE CONTRACTOR SHALL DRIVE ONE CONCRETE TEST PILE AT SOUTH END OF BRIDGE IN PERMANENT LOCATION IN ACCORDANCE WITH ARTICLE 60.16 OF THE STANDARD SPECIFICATIONS BEFORE ORDERING THE REMAINDER OF THE PILES.
All reinforcement bars shall be lapped 20 diameters unless otherwise shown.
Permanent forms will not be permitted in forming concrete floor.

Station 708+64.83
Built 196 By
State of Illinois
FAI. Rte. 57 Sec. 10-34HB-4
FA. Project I-57-5(1g)
Loading HS15

NAME PLATE DATA
See Standard 2113-1
Locate as shown on Sht. 4 of 8

TOTAL BILL OF MATERIAL

Item	Unit	Super.	Substr.	Total
Borrow Excavation	Cu. Yds.	-	15,762	15,762
Class A Excav. for Structs	Cu. Yds.	-	285	285
Structural Steel	Lbs.	205,356	-	205,356
Class X Concrete	Cu. Yds.	239.7	221.5	461.2
Aluminum Handrail	Ln. Ft.	510	-	510
Reinforcement Bars	Lbs.	46,530	23,630	70,160
Concrete Piles	Ln. Ft.	-	425	425
Test Piles (Concrete)	Each	-	1	1
Name Plates	Each	-	2	2
Slope Wall 4"	Sq. Yds.	-	548	548
Protective Coat	Sq. Yds.	-	1014	1014

DESIGN STRESSES

f_c = 1400 psi
f_s = 20,000 psi (reinf)
f_s = 20,000 psi (Struct A-36)
n = 10
V = 75 psi (footings)
Δ = 1/1000 (non. comp.)

LOADING
HS15-44

GENERAL PLAN AND ELEVATION

SECTION 10-34HB-4 STATION 708+64.83
FAI. RTE. 57 PROJECT 3-57-5(1) 238
CHAMPAIGN COUNTY

CLARK, DIETZ, PAINTER & ASSOCIATES
CONSULTING ENGINEERS
URBANA, ILLINOIS

NO.	REVISION	BY	DATE

DESIGNED C.B.P. SCALE AS NOTED SHEET 1
DRAWN T.K.C. DATE 10-21-1961 OF 8
CHECKED C.B.P.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION #1 STRUCTURE DETAILS

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	*	CHAMPAIGN	9	5

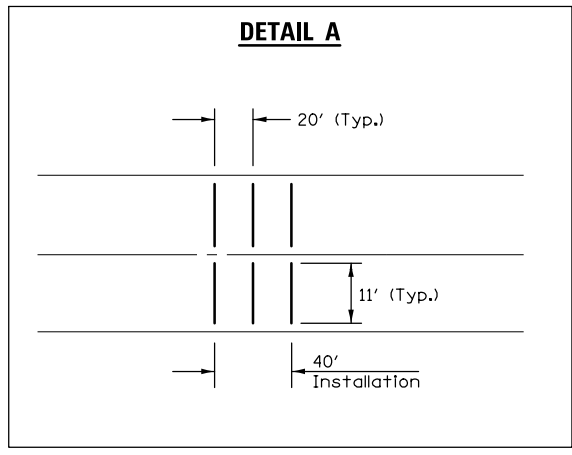
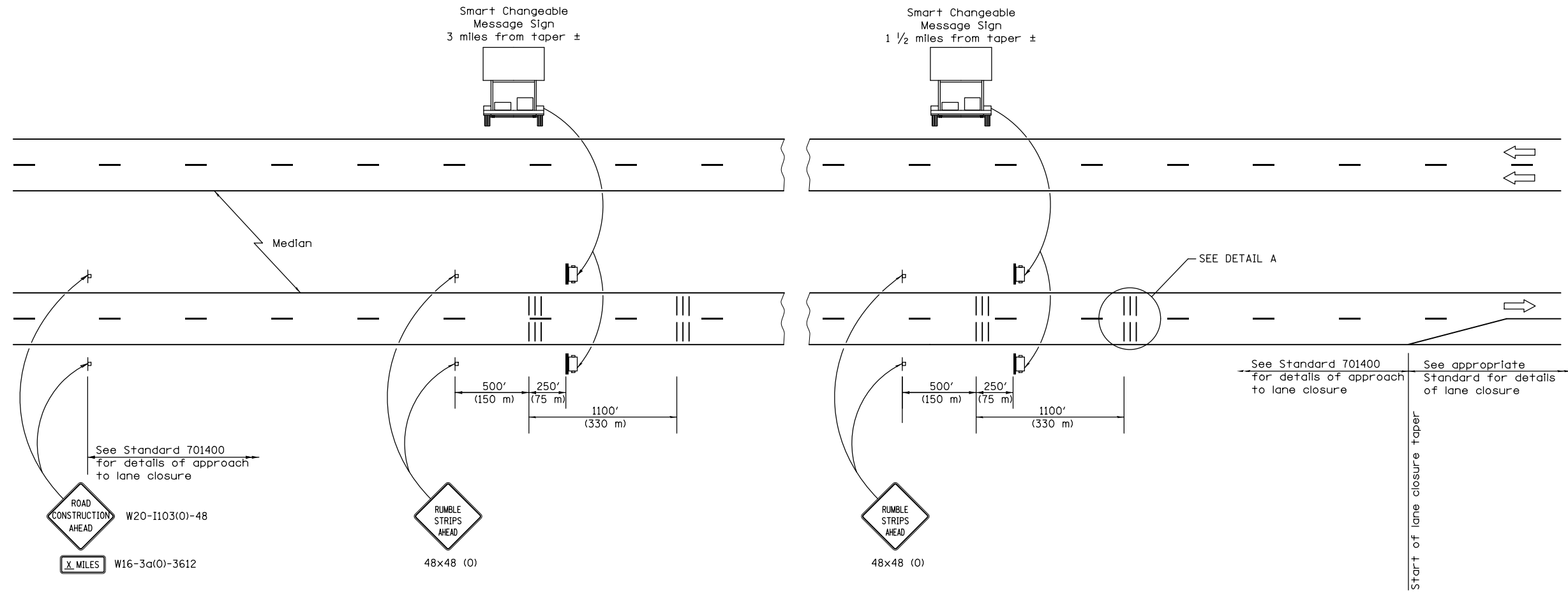
* D5 BRIDGE PAINTING 2018-3 CONTRACT NO. 70D25
ILLINOIS FED. AID PROJECT

DESIGNED BY DATE CHECKED BY DATE IN CHARGE
C.B.P. T.K.C. 10-21-1961 M.F.T.

MODEL: ST0601.MXD
FILE: I:\WORK\PROJECTS\7025\CADD\DATA\CAD\CHAMPAIGN\7025-SHC-CR01.dwg

REV 12-12-65 QUANTITIES FOR CONC. PILES FROM 400 TO 425 LIN. FT. NUMBER OF TEST PILES REDUCED FROM 2 TO 1. REV. 4-7-65: Original Quantities - Class X Concrete Super. 219.4 Cu. Yds. Total 434.9 Reinf. Bar - 46,530 Lbs. Total 70,160 Lbs. Total 434.9 Reinf. Bar - 46,530 Lbs. Total 70,160 Lbs.

DETAIL FOR TEMPORARY RUMBLE STRIPS (SPECIAL)



SYMBOLS

- ⊥ Sign
- ||| Temporary Rumble Strips (Special)
- ☐ Trailer Mounted Sign

GENERAL NOTES

Remove the Temporary Rumble Strips (Special) prior to the removal of the advanced warning signs.

All dimensions are in inches (millimeters) unless otherwise shown.

MODEL: \\MODELNAME
 FILE NAME: \\FILENAME
 PROJECT: \\PROJECT
 DRAWING: \\DRAWING

USER NAME = coombessf	DESIGNED -	REVISED -
PLOT SCALE = 40,0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 1/22/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETAIL FOR TEMPORARY RUMBLE STRIPS (SPECIAL)			
SCALE:	SHEET 3	OF 3	SHEETS STA. TO STA.

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	*	CHAMPAIGN	9	9
* D5 BRIDGE PAINTING 2018-3		CONTRACT NO. 70D25		
ILLINOIS FED. AID PROJECT				