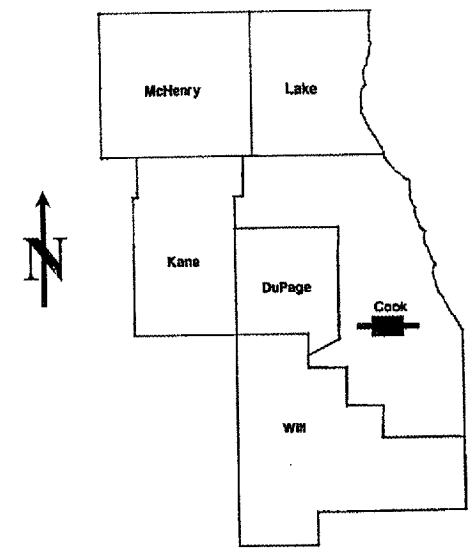


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 55	0507-635K-I	COOK	8	1

CONTRACT NO. 60C47

D-91-216-07



LOCATION OF IMPROVEMENT INDICATED THUS:

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT ONE
PROPOSED HIGHWAY PLANS**

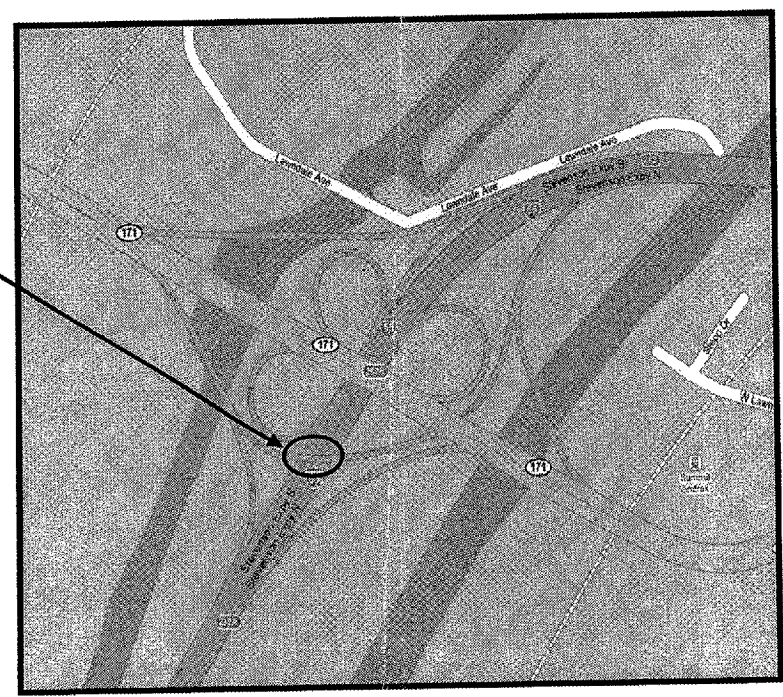
FAI 55: I-55 (STEVENSON EXPWY)
AT IL 171 SB RAMP TO I-55 NB
SECTION: 0507-635K-I
STEEL BEAM REPLACEMENT
STRUCTURE NUMBER: 016-0046
COOK COUNTY
C-91-216-07

R 12 E

FOR INDEX OF SHEETS SEE SHEET 2

**IMPROVEMENT IS LOCATED IN
THE VILLAGE OF SUMMIT**

**LOCATION
IMPROVEMENT**



LYONS TOWNSHIP

TRAFFIC DATA

LOC 1

I-55
SPEED LIMIT = 55 MPH
2007 ADT = 156000
IL 171
SPEED LIMIT = 40 MPH
2007 ADT = 49200

CONTRACT NO. 60C47

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

SUBMITTED: August 29 2007
Dione O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 12 2007
Cris E. Harm
ENGINEER OF DESIGN AND ENVIRONMENT

October 12 2007
Milton R. Sees, P.E.
DIRECTOR, DIVISION OF HIGHWAYS,

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

**J.U.L.I.E.: JOINT UTILITY LOCATION
INFORMATION FOR EXCAVATION
(800)892-0123**

DISTRICT ONE - DESIGN - PLAN PREPARATION ENGINEER:
KEN ENG / ROBERT BORO (847) 705-4178

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 55	0507-635K-I	COOK	8	2

CONTRACT NO. 60C47

INDEX OF SHEETS

- 1 TITLE SHEET
- 2 INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4-5 BRIDGE REPAIR PLANS (SN 016-0046)
- 6 TRAFFIC CONTROL PLANS
- 7 FREEWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS
- 8 TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES,
PARTIAL RAMP CLOSURES

STATE STANDARDS

- 701101-01 MULTI-LANE OFF-ROAD OPERATIONS
- 701400-02 APPROACH TO LANE CLOSURE FREEWAY/EXPRESSWAY
- 701401-01 LANE CLOSURE FREEWAY/EXPRESSWAY
- 701411-03 MULTI-LANE, TRAFFIC CONTROL AT ENTRANCE OR EXIT RAMPS
- 702001-06 TRAFFIC CONTROL DEVICES

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4470 (FOR ARTERIALS) AND (847)705-4151 (FOR EXPRESSWAYS) A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE CONTRACTOR SHALL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREA.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION OF ALL EMERGENCY SERVICES, SCHOOL DISTRICTS, I.D.O.T.'S COMMUNICATIONS CENTER, SPRINGFIELD TRUCK PERMIT SECTION AND OTHER AGENCIES AFFECTED BY THE CLOSURE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR POSTING SIGNS THAT WILL INDICATE THE DATES THE CLOSURE WILL BE IN PLACE.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS

ILLINOIS DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS
STATE STANDARDS
GENERAL NOTES

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 55	0507-635K-I	COOK	8	3

SUMMARY OF QUANTITIES

MCHD CLAIM # 728875

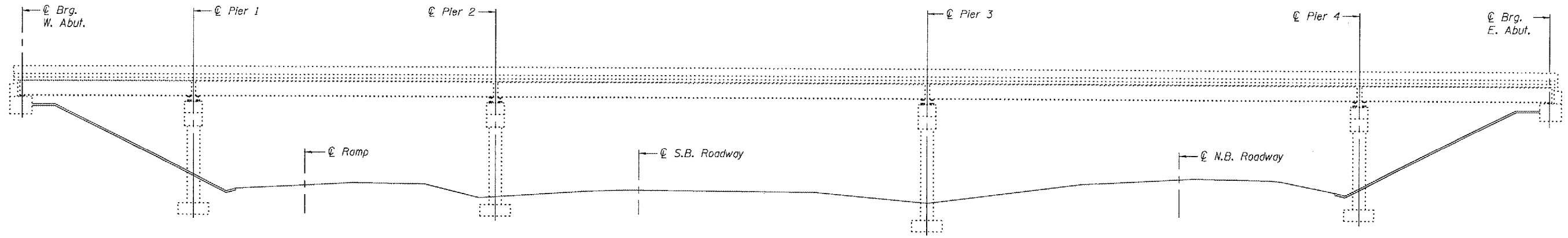
CONTRACT 60C47

CODE NUMBER	DESCRIPTION	UNIT	100% MCHD - CONSTRUCTION TYPE CODE	
			TOTAL QUANTITY	SFTY-2A
50501110	STRUCTURAL STEEL REMOVAL	POUND	8,350	8350
Z0073351	TEMPORARY SLAB SUPPORT SYSTEM	L SUM	1	1
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	8,350	8350
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	1	1
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1
67100100	MOBILIZATION	LSUM	1	1
Z0030140	IMPACT ATTENUATORS(NON-REDIRECTIVE), TEST LEVEL 2	EACH	1	1

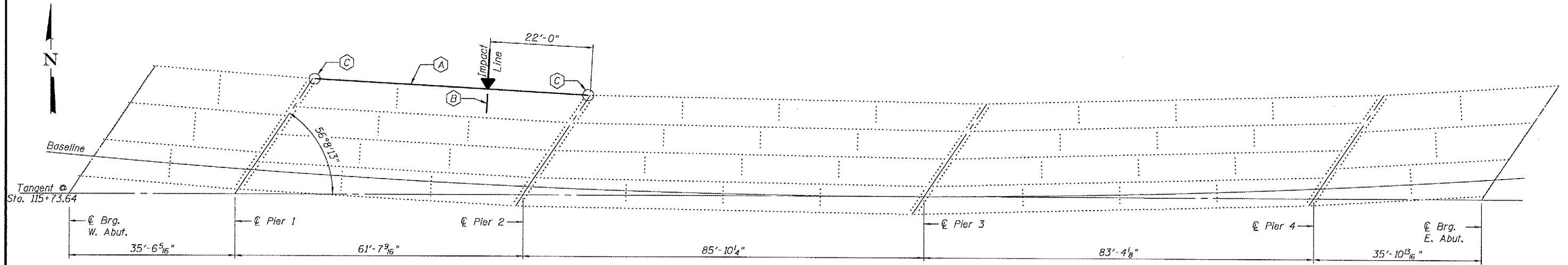
ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
		Cook	8	4	2 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	Contract Number: 60C47		



ELEVATION



PLAN

- (A) Remove and Replace Beam
- (B) Remove and Replace Diaphragm and Clip L's.
- (C) Remove and Replace Clip L's.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	8,350
Temporary Slab Support System	L.S.	1
Structural Steel Removal	Pound	8,350

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Diaphragm connection holes shall be 1⁵/₁₆" ϕ for 3/4" ϕ bolts. Two hardened washers shall be required at diaphragm connections.

The Contractor shall provide support and/or shoring systems for the slab and beam in the area of existing beam removal. See Special Provision Temporary Slab Support System.

After the new beam is in its final position and/or beam straightening operations have been completed, the Engineer in the field shall check to see that the top flange is tight against the slab. If not, the Contractor shall inject epoxy between the existing concrete deck and the top flange of the beam. See Special Provision "Epoxy Injection".

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

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Blue, Munsell No. 10B 3/6. See Special Provision "Cleaning and Painting New Metal Structures".

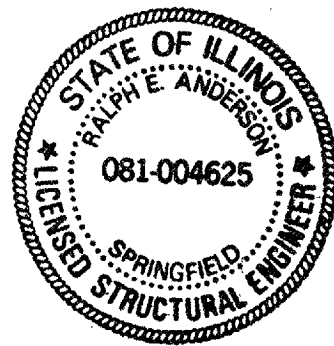
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

DESIGNED	Adrian J. Holloway
CHECKED	[Signature]
DRAWN	[Signature]
CHECKED	AJH ASB

EXAMINED	[Signature]	September 6, 2007
PASSED	Ralph E. Anderson	REPAIR PLANS UNIT CHIEF
	ENGINEER OF BRIDGES AND STRUCTURES	



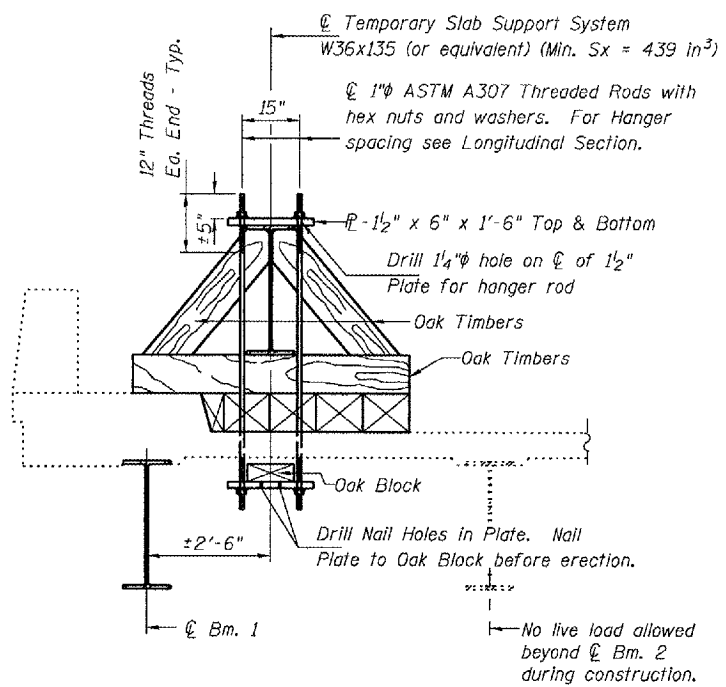
Expires: November 30, 2008

PLAN AND ELEVATION

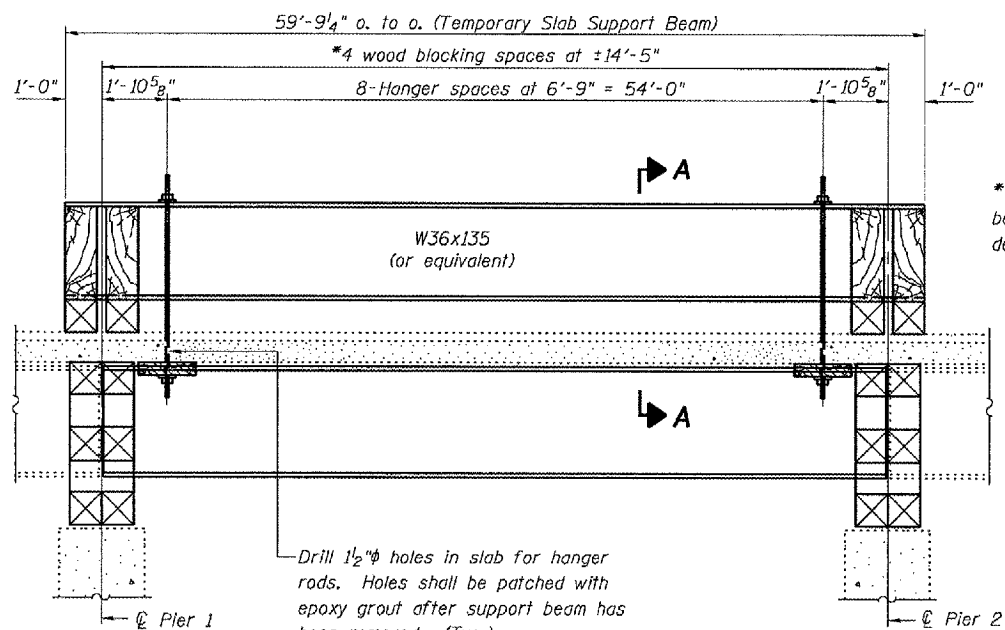
F.A.I. RT. 55
COOK COUNTY
SN 016-0046

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

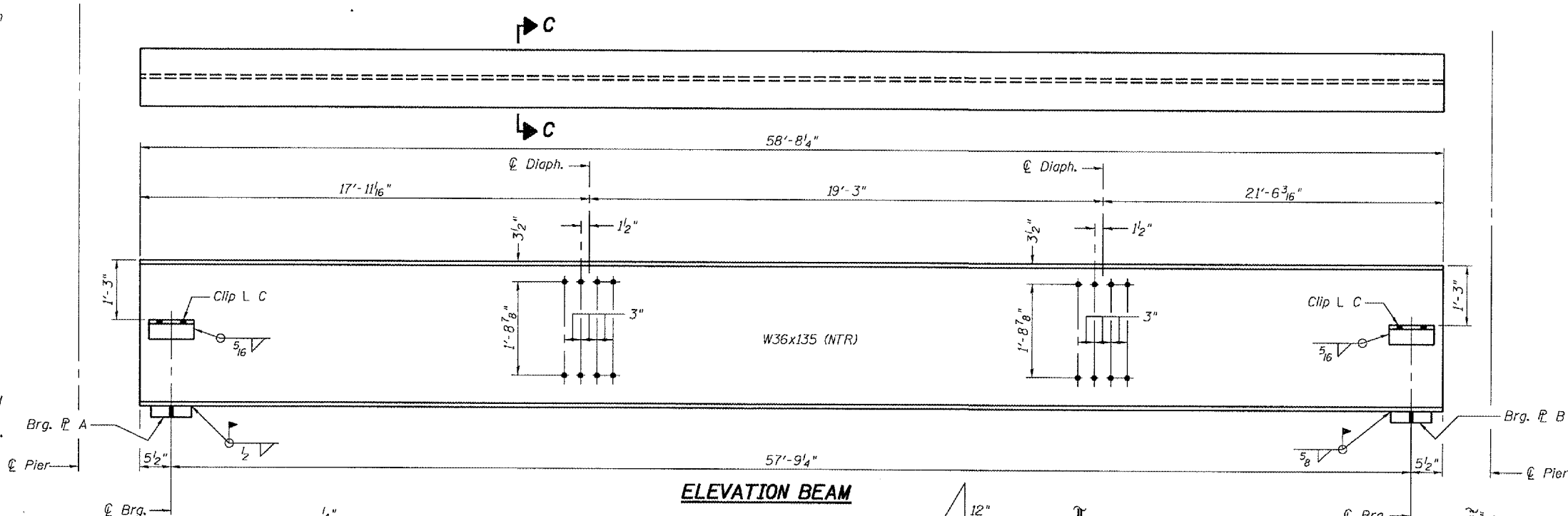
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2 2 SHEETS
		Cook	8	5	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:	Contract Number: 60C47		



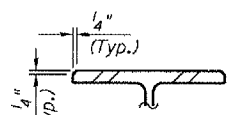
SECTION A-A



LONGITUDINAL SECTION
SUGGESTED TEMPORARY SLAB SUPPORT SYSTEM

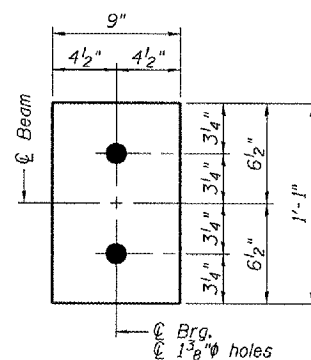


ELEVATION BEAM

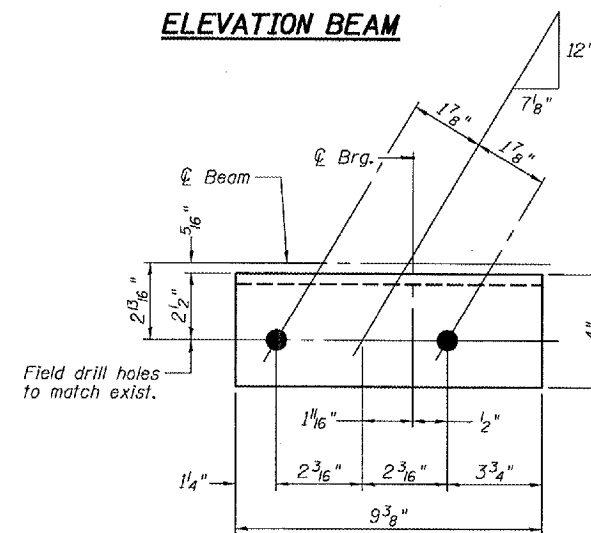


SECTION C-C

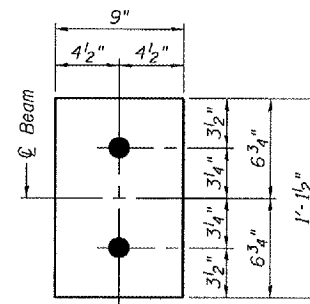
* Wood blocking between piers to be placed after support beam deflects under its own weight.



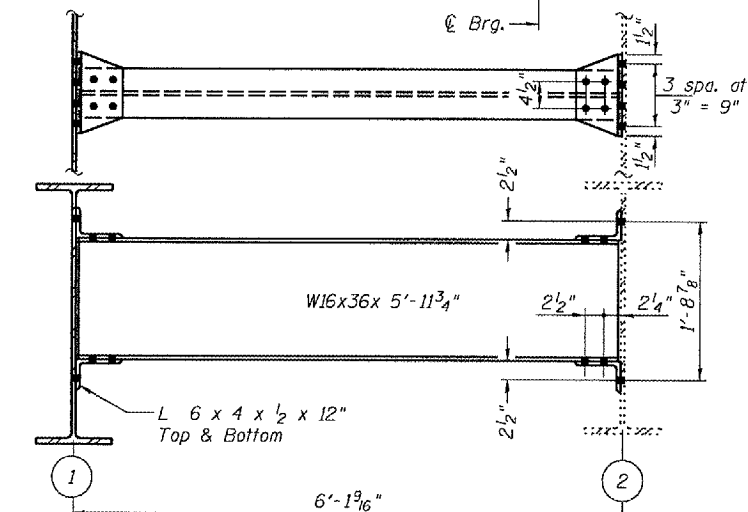
BRG. P A
(@ 1" X 9" X 1'-1")



CLIP L C
(1.6x1x3/4x9 3/8")



BRG. P B
(@ 1 3/8" X 9" X 1'-1 1/2")



DIAPHRAGM REPLACEMENT DETAIL

Notes: Natural camber of new beam shall be placed upward for fabrication.

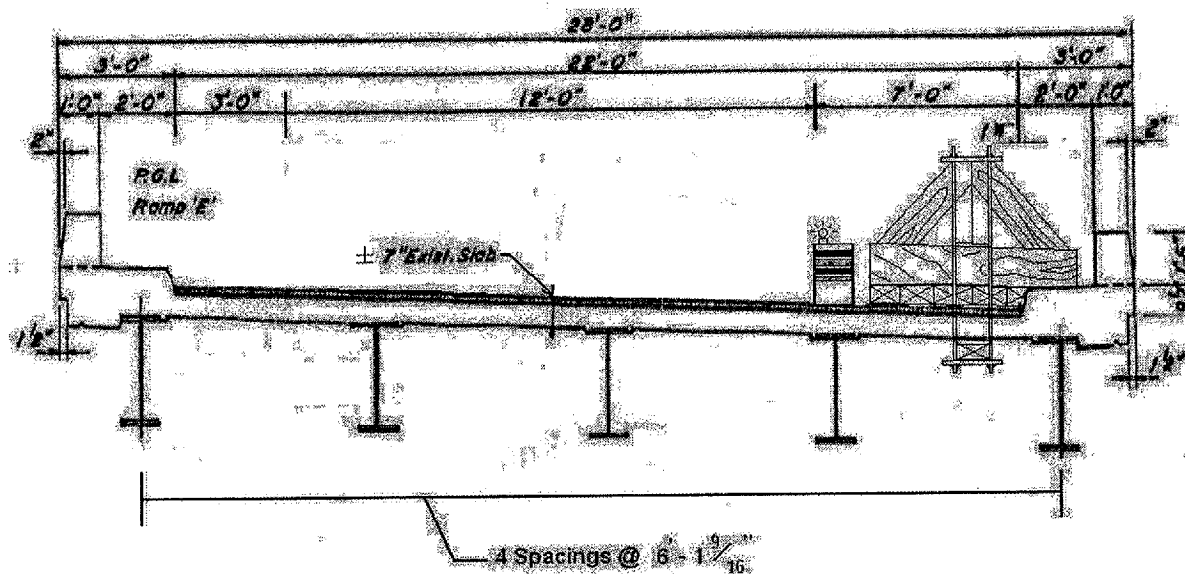
DESIGNED	A.T.H.
CHECKED	A.J.B.
DRAWN	Drew Christopher
CHECKED	A.T.H. A.J.B.

September 6, 2007	
EXAMINED	<i>Carl P...</i>
PASSED	<i>Ralph E. Anderson</i> REPAIR PLANS UNIT CHIEF ENGINEER OF BRIDGES AND STRUCTURES

REP-2 1-27-2000

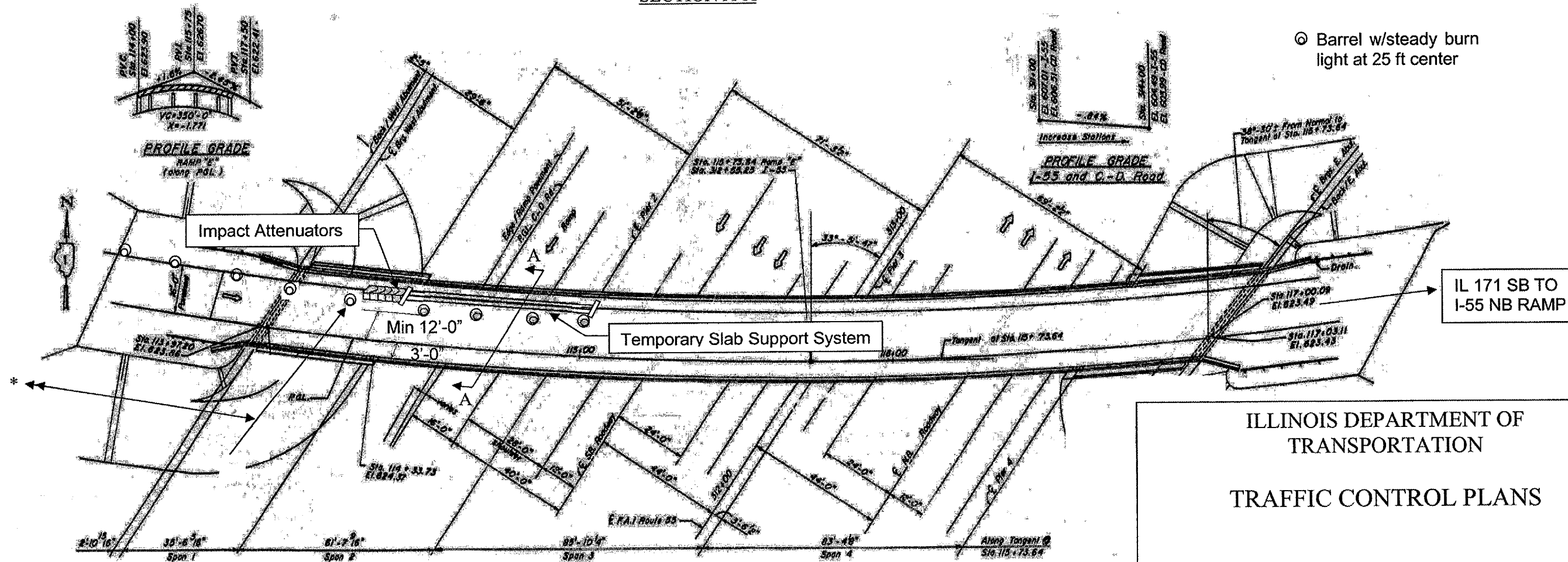
BEAM REPLACEMENT DETAILS
F.A.I. RT. 55
COOK COUNTY
SN 016-0046

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 55	0507-635K-I	COOK	8	6



SECTION A-A

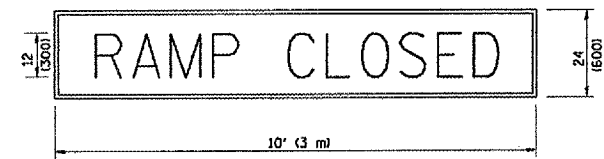
*Reduce Lane width per TC-17 Traffic Control Details For Freeway Shoulder Closures, Partial Ramp Closure



ILLINOIS DEPARTMENT OF
TRANSPORTATION
TRAFFIC CONTROL PLANS

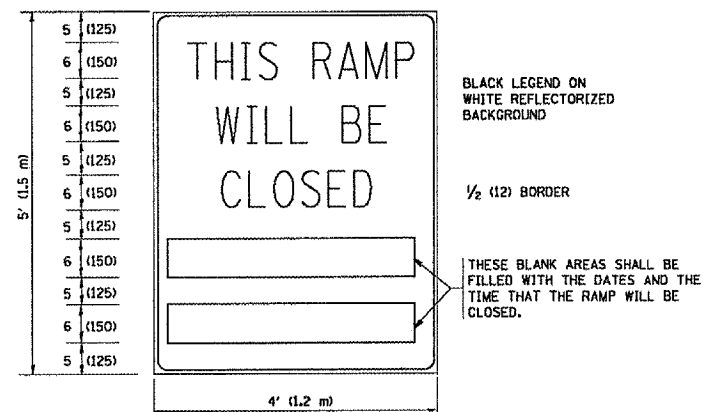
F.A.T. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	0507-6354	Cook	8	7
STA.	TO STA.			
	ILLINOIS FED. AID PROJECT			

RAMP CLOSURE ADVANCE WARNING SIGN



BLACK LEGEND ON ORANGE REFLECTORIZED BACKGROUND
1 (25) BORDER
THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR THE CLOSED EXIT RAMPS.

RAMP CLOSURE ADVANCE INFORMATION SIGN



THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

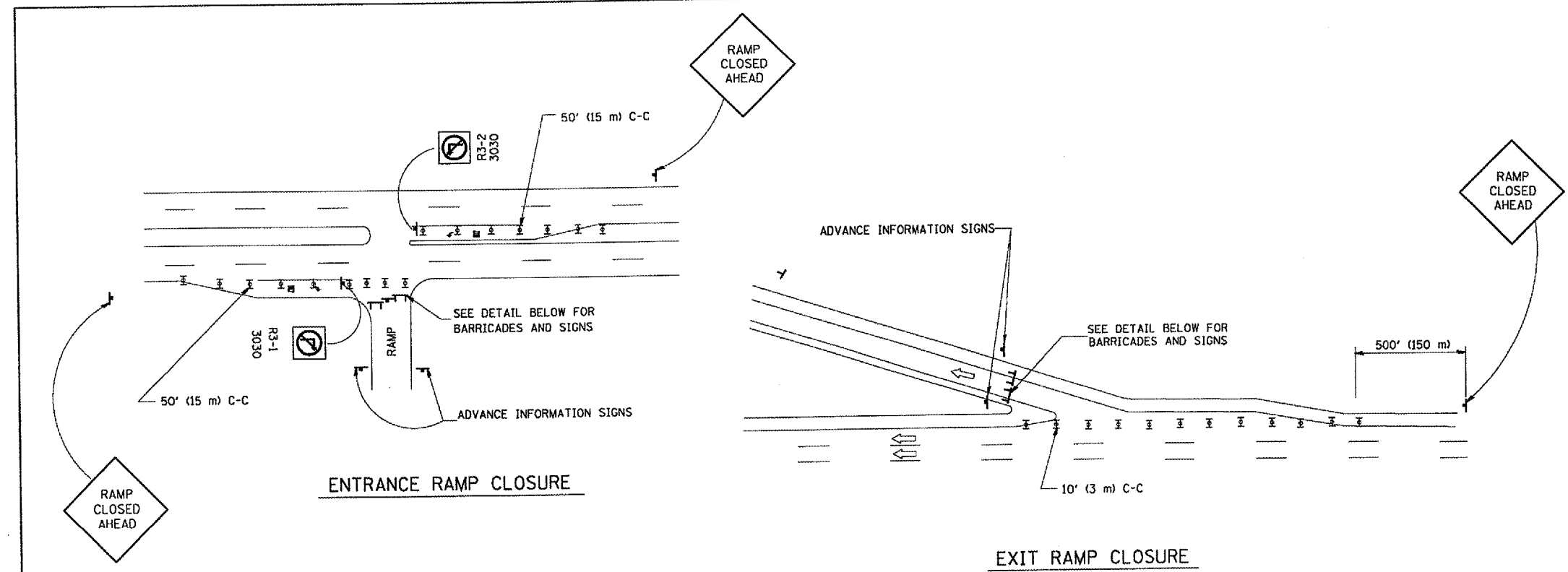
GENERAL NOTES:

- CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
- A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
- ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
- THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
- AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY FOUR (24) HOURS IN LENGTH.

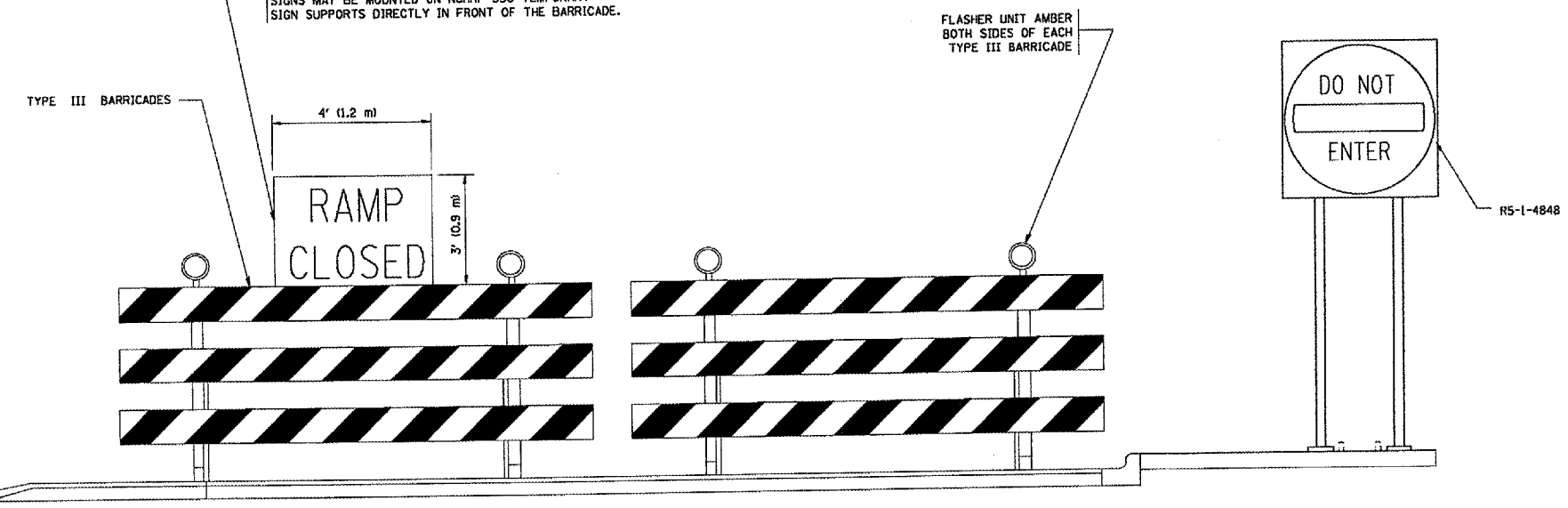
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
DWS	2-83
DWS	1/90
DWS	3/94
DWS	12/94
DWS/JAF	12/02
JAF	2/06
SPB	1/07
Revise devices to meet NCHRP 350	4/03

ILLINOIS DEPARTMENT OF TRANSPORTATION
FREWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS
SCALE: NONE
DRAWN BY
CHECKED BY
TC-8



THE "RAMP CLOSED" SIGN SHALL BE B/W WITH 8 (200) CAPS. IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS DIRECTLY IN FRONT OF THE BARRICADE.



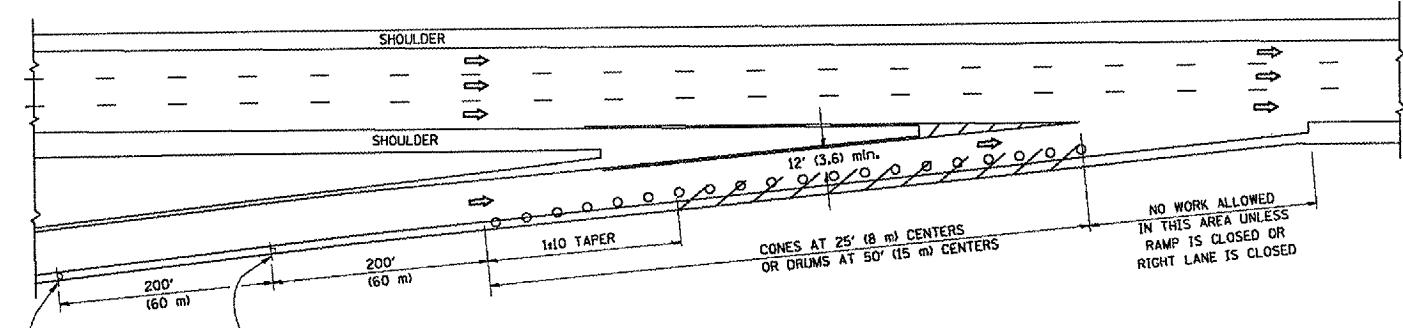
- SYMBOLS**
- ▬ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
 - ▬ TYPE III BARRICADE WITH FLASHING LIGHT

PLOT DATE: 3/6/2007
FILE NAME: R010101.dwg
USER: NAME
PLOTTER: HP DesignJet 720

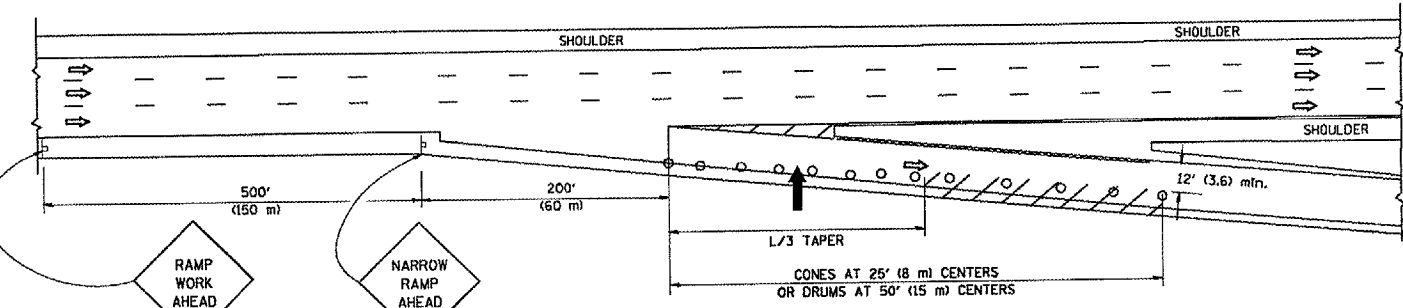
F.A.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	0907-635 R-I	COOK	8	8
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

PARTIAL RAMP CLOSURE DETAILS

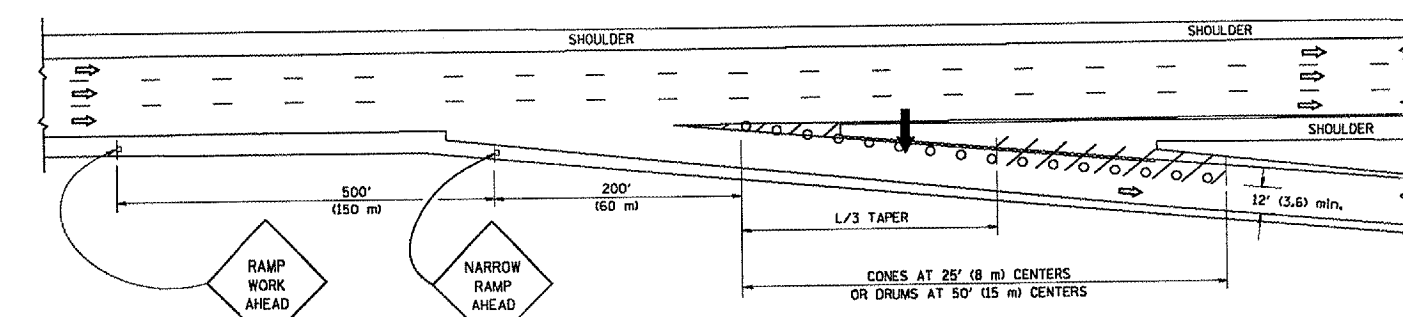
SHOULDER CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

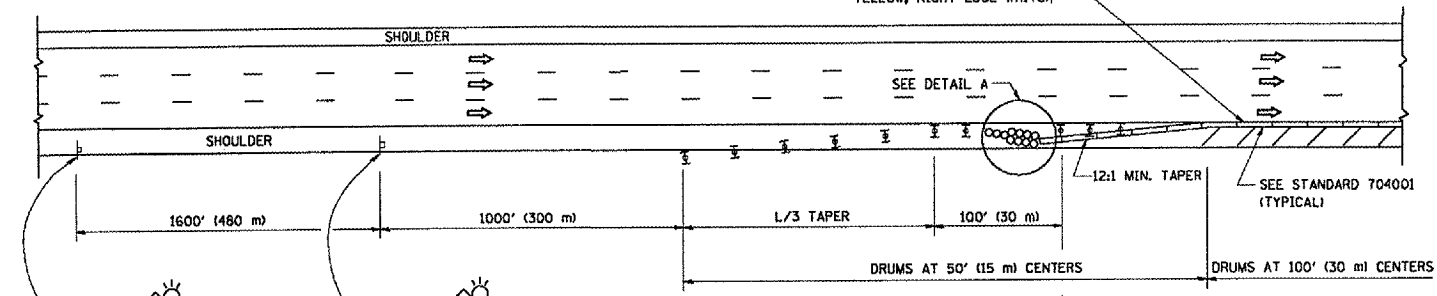
SYMBOLS

- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

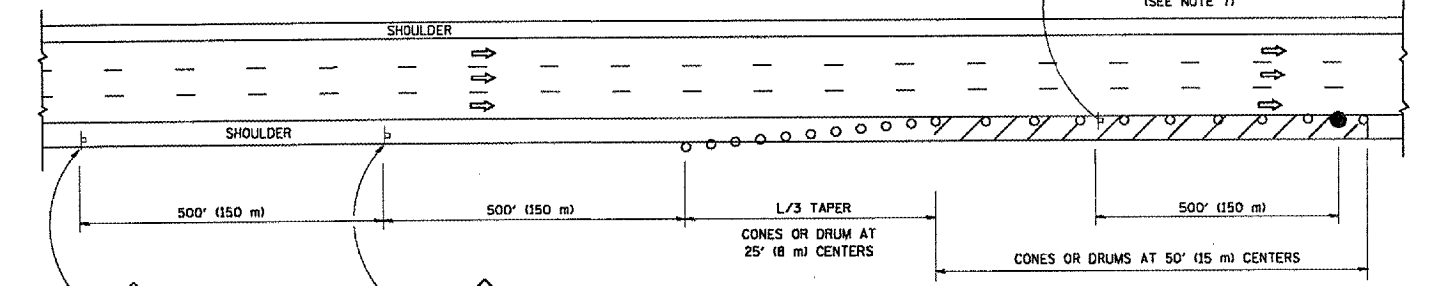
GENERAL NOTES

- THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER	METRIC: $L=0.65(W/S)$ ENGLISH: $L=(W/S)$
	W = WIDTH OF OFFSET IN FEET (METERS)
	S = NORMAL POSTED SPEED MPH (KM/H)
- PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.



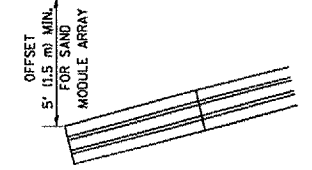
PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:
 1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCR OACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

ARRAY DESIGN PER MANUFACTURER TO BE NCHRP 350 COMPLIANT FOR POSTED SPEED.



DETAIL "A"
 IMPACT ATTENUATOR, TEMPORARY
 (SEE NOTE 5)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
DWS	11/96
JAF	12/02
NCHRP 350	04/03
JAF	2/06
SPB	1/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL DETAILS
 FOR FREEWAY
 SHOULDER CLOSURES
 PARTIAL RAMP CLOSURES

SCALE: NONE
 DESIGNED BY: DWS
 DRAWN BY:
 CHECKED BY:
 TC-17

PLOT DATE = 3/7/2007
 PLOT SCALE = 1/8" = 1'-0"
 USER: NAME = bbarnerd