0

0

03-06-2020 LETTING ITEM 029

FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

# **PROPOSED** HIGHWAY PLANS

F.A.I. ROUTE 94: I-90/94 (DAN RYAN EXPRESSWAY) AT CTA BRIDGE (0.5 MILES SOUTH OF 55TH STREET,

SN 016-0141) **SECTION: 2019-128-BR** BRIDGE REPAIR **COOK COUNTY** 

C-91-057-20

47% (\$1100)

BARFELD BLY

hetma

R 14 E

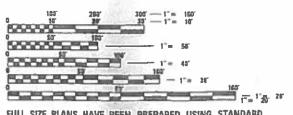
IMPROVEMENT IS LOCATED IN THE CITY OF CHICAGO

**DESIGN DESIGNATION: INTERSTATE** 

I-90/94 (DAN RYAN EXPWY)

ADT (2018) = 311,200POSTED SPEED: 55 M.P.H.

S.N. 016-0141



ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

PROJECT MANAGER: FAWAD AQUEEL, PE, PTOE (847) 705-4247 PROJECT ENGINEER: PRAVEEN KAINI, PE (847) 705-4237

ccurate GROUP, INC.

MAP NOT TO SCALE

WWW ACCOLOGN 101 SCHELTER NO L SUITE 8-200 LINCOLHSHIRE, ILLINOIS 60069 T (847) 613-1108 F (847) 613-1105 ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184 002053



DATE SIGNED: 11/20/2019 EXP. DATE: 11-30-2021 SHEETS: 1-4



Dr. Mousso A. Isso, S.E. II. Lic, No. 081-005738 Expires 11-30-2020 SHEETS: 5-6, 8-11



DATE SIGNED: 11/20/20/A EXP. DATE: 11-30-2020 SHEETS: 7, 12-16

SECTION COOK ZO 1 2019-126-BN

D-91-274-20



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SUBMITTED DECEMBER 13

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS



CONTRACT NO. 62K01

0

0

#### **INDEX OF SHEETS**

SHEET NO. DESCRIPTION

1 COVER SHEET
2 INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES, AND COMMITMENTS
3 SUMMARY OF QUANTITIES
4 MAINTENANCE OF TRAFFIC GENERAL NOTES AND SEQUENCE OF CONSTRUCTION
5-16 STRUCTURE REPAIR PLANS - S.N. 016-0141
17 TC-08 ENTRANCE AND EXIT RAMP CLOSURE DETAILS
18 TC-09 TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI-LANE WEAVE
19 TC-17 TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES
20 TC-18 FREEWAY/EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS ON FREEWAYS/EXPRESSWAYS

#### **HIGHWAY STANDARDS**

701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701400-09	APPROACH TO LANE CLOSURE, FREEWAY/ EXPRESSWAY
701401-12	LANE CLOSURE, FREEWAY/EXPRESSWAY
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS $\geq$ 45 MPH
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
701446-10	TWO LANE CLOSURE, FREEWAY/EXPRESSWAY
701901-08	TRAFFIC CONTROL DEVICES

#### **GENERAL NOTES**

- 1. EXISTING UNDERGROUND AND ABOVE-GROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED ON THESE CONTRACT DOCUMENTS BASED UPON THE INFORMATION AND SURVEYS AVAILABLE AT THE TIME OF DRAWING PREPARATION. THE LOCATION OF THESE FEATURES MUST, THEREFORE, BE CONSIDERED APPROXIMATE ONLY. IN ADDITION, THERE MAY BE OTHER FACILITIES, STRUCTURES, AND UTILITIES WHICH DID NOT EXIST OR THE EXISTENCE OF WHICH WAS NOT KNOWN AT THE TIME OF DRAWING PREPARATION. IT IS THE SOLE RESPONSIBILITY OF CONTRACTOR(S) TO HAVE ALL EXISTING FACILITIES, STRUCTURES, AND UTILITIES LOCATED IN THE FIELD PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITY; AND TO PROTECT ALL SUCH EXISTING FEATURES DURING CONSTRUCTION.
- . IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING FIELD DIMENSIONS AND CONDITIONS PRIOR TO ORDERING MATERIALS AND THE BEGINNING OF CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT 1 TRAFFIC CONTROL SUPERVISOR A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 4. THE CONTRACTOR SHALL REQUEST AND GAIN APPROVAL FROM THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S DISTRICT ONE EXPRESSWAY TRAFFIC OPERATIONS ENGINEER AT <u>WWW.IDOTLCS.COM</u> TWENTY-FOUR (24) HOURS IN ADVANCE OF ALL DAILY LANES, RAMPS, AND SHOULDER CLOSURES AND 7 DAYS IN ADVANCE OF ALL PERMANENT AND WEEKEND CLOSURES ON ALL FREEWAYS AND/OR EXPRESSWAYS IN DISTRICT ONE. THIS ADVANCE NOTIFICATION IS CALCULATED BASED ON WORK WEEK OF MONDAY THROUGH FRIDAY AND SHALL NOT INCLUDE WEEKENDS OR HOLIDAYS.
- 5. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 6. DO NOT SCALE FOR CONSTRUCTION DIMENSIONS.
- THE CONTRACTOR SHALL COORDINATE ACTIVITIES WITH UTILITY COMPANIES, THE CITY OF CHICAGO, THE CTA, AND THE CHICAGO SKYWAY.
- 8. ALL INCIDENTAL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT. TWO WEEKS PRIOR TO THE REPLACEMENT OF PERMANENT PAVEMENT MARKINGS, THE ENGINEER SHALL CONTACT MATTHEW DAEDA, EXPRESSWAYS AREA TRAFFIC FIELD ENGINEER, AT MATTHEW.DAEDA@ILLINOIS.GOV.
- 9. THE CONTRACTOR SHALL PROVIDE MANLIFTS TO THE ENGINEER (OR ENGINEER'S DESIGNATED REPRESENTATIVE), AS REQUIRED IN NUMBER AND TYPE, FOR THE ENGINEER'S USE IN INSPECTING THE VARIOUS ASPECTS OF THE CONTRACTOR'S WORK. COST SHALL BE INCLUDED IN THE VARIOUS ITEMS OF WORK.
- 10. THE CONTRACTOR SHALL COORDINATE WITH CTA BUS OPERATION SERVICES PRIOR TO IMPLEMENTING THE MAINTENACE OF TRAFFIC PLAN.

#### **COMMITMENTS**

SCALE:

NONE.

A A	С	С	u	r	а	t
		GF	ROUP	, IN	C.	

П	USER NAME = lchrzasc	DESIGNED	-	LRC	REVISED -	
		DRAWN	-	LRC	REVISED -	
	PLOT SCALE = 2.0000 ' / in.	CHECKED	-	JMT	REVISED -	
	PLOT DATE = 12/11/2019	DATE	-	12/11/2019	REVISED -	

## URBAN CONSTR. CODE 100% STATE

				BRIDGE
CODE			TOTAL	0013
NO.	ITEM	UNIT	QUANTITY	016-0141
59000200	EPOXY CRACK INJECTION	FOOT	19	19
67100100	MOBILIZATION	L SUM	1	1
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	21	21
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1
Z0001905	STRUCTURAL STEEL REPAIR	POUND	3450	3450
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	49	49
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	87	87
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1

Sheets\Civil\D162KØl-s
23/CADD/CADD
0rder
HBM\Work
S
\13@4@_IDOT
LiveProjects
Engineering\
á

A A	С	С	u	r	а	t	е	
		GF	ROUP	, IN	c.			

USER NAME = JENT	DESIGNED	-	LRC	REVISED -	_
	DRAWN	-	LRC	REVISED -	
PLOT SCALE = 2.0000 '/ in.	CHECKED	-	JMT	REVISED -	
PLOT DATE = 12/11/2019	DATE	-	12/11/2019	REVISED -	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES I-90/94 AT CTA RAILROAD							
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.		

#### **MOT GENERAL NOTES**

- THE TRAFFIC CONTROL DEPICTED HERE IS THE MINIMUM REQUIREMENT. ADDITIONAL TRAFFIC CONTROL DEVICES AS SPECIFIED IN THE HIGHWAY STANDARDS AS SHOWN IN THE INDEX OF SHEETS AND THE SPECIAL PROVISIONS SHALL BE PLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. ALL TRAFFIC CONTROL DEVICES SHALL BE CONSIDERED INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, (EXPRESSWAYS) UNLESS OTHERWISE INDICATED WITHIN THESE GENERAL NOTES, PLANS OR SPECIAL PROVISIONS.
- 2. TRAFFIC CONDITIONS, ACCIDENTS, AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL PROMPTLY RESPOND AT THE TIME OF NOTIFICATION BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC CONTROL DEVICES.
- ALL EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED OR REMOVED IN ACCORDANCE WITH ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.
- 4. THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR TRAFFIC CONTROL AND PROTECTION.
- 5. ALL "ROAD CONSTRUCTION AHEAD", "SHOULDER CLOSED AHEAD", AND "SPEED LIMIT AHEAD" SIGNS SHALL BE EQUIPPED WITH MONO-DIRECTIONAL TYPE A AMBER FLASHING LIGHTS.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE EXPRESSWAY TRAFFIC CONTROL SUPERVISOR AT (847)-705-4155
   A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING OF WORK.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING LABOR, SIGNS AND TRAFFIC CONTROL DEVICES NECESSARY FOR THE MAINTENANCE OF TRAFFIC UNLESS NOTED OTHERWISE IN THE SPECIAL PROVISIONS.
- 8. LANES MAY ONLY BE CLOSED DURING THE ALLOWABLE HOURS LISTED IN THE KEEPING THE EXPRESSWAY OPEN TO TRAFFIC SPECIAL PROVISION. THIS CONTRACT WILL ONLY ALLOW NIGHTTIME CLOSURES AS LISTED IN THE SPECIAL PROVISIONS.
- 9. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL GENERAL NOTES, SPECIAL PROVISIONS, APPLICABLE STATE STANDARDS, AND AS DIRECTED BY THE ENGINEER. ANY CHANGES TO THE TRAFFIC CONTROL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO IMPLEMENTING ANY CHANGES.
- 10. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY PROPOSED CHANGE TO THE SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLAN.
- 11. THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY DRAINAGE AND EROSION CONTROL PROTECTION DURING ALL PHASES OF CONSTRUCTION.
- 12. THE CONTRACTOR SHALL PLACE ONE (1) CHANGEABLE MESSAGE SIGN AT EACH END OF THE PROJECT AND/OR AS DIRECTED BY THE ENGINEER TO INFORM MOTORISTS OF UPCOMING CONSTRUCTION ACTIVITIES. THE MESSAGE SIGNS WITH APPROPRIATE INFORMATION SHALL BE PLACED SEVEN (7) DAYS BEFORE START OF CONSTRUCTION ACTIVITY. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER CALENDAR DAY, "CHANGEABLE MESSAGE SIGN". TWO (2) CHANGEABLE MESSAGE SIGNS WILL BE PLACED AT LOCATIONS WITH CLOSURES ON BOTH SIDES OF THE EXPRESSWAY.
- 13. CONTACT MICHAEL LOWREY, CHICAGO SKYWAY CHIEF OPERATING OFFICER, AT MLOWREY@CHICAGOSKYWAY.ORG, 72 HOURS IN ADVANCE OF THE CLOSURE OF THE I-90/94 SLIP RAMP FROM THE EXPRESS LANES TO THE LOCAL LANES ADJACENT TO 59TH STREET.
- 14. IMMEDIATELY AFTER THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL RESTORE ALL PERMANENT PAVEMENT MARKINGS, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES THAT WERE COVERED, IF THEY WERE REMOVED, DAMAGED, OR OTHERWISE AFFECTED BY CONSTRUCTION. THE COST TO REPAIR ANY DAMAGES WILL BE BORNE BY THE CONTRACTOR AND NOT THE RESPONSIBILITY OF THE DEPARTMENT.
- 15. CONTRACTOR SHALL REQUEST AND GAIN THE APPROVAL FROM THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S EXPRESSWAY TRAFFIC OPERATIONS ENGINEER AT <a href="https://www.idotlcs.com">www.idotlcs.com</a> TWENTY-FOUR (24) HOURS IN ADVANCE OF ALL DAILY LANE, RAMP AND SHOULDER CLOSURES.
- 16. PLEASE SEE KEEPING THE EXPRESSWAY OPEN TO TRAFFIC CONTRACT SPECIAL PROVISIONS FOR NIGHT TIME LANE CLOSURE ALLOWABLE HOURS.

### SUGGESTED SEQUENCE OF CONSTRUCTION

BENTS D AND E AND SPANS 3 AND 5:

- 1. INSTALL PORTABLE CHANGEABLE MESSAGE SIGNS AS DIRECTED BY THE ENGINEER.
- PERFORM REPAIRS TO BENTS D AND E AND SPAN 3 AND 5 DURING NIGHTTIME EXPRESS LANE AND ADJACENT SHOULDER CLOSURES.
- 3. REOPEN THE EXPRESS LANES TO TRAFFIC AND REMOVE TEMPORARY TRAFFIC DEVICES.
- 4. UTILIZE IDOT TRAFFIC CONTROL STANDARDS TO MAINTAIN TRAFFIC.

#### BENTS C AND G AND SPAN 2:

- 1. INSTALL PORTABLE CHANGEABLE MESSAGE SIGNS AS DIRECTED BY THE ENGINEER.
- PERFORM REPAIRS TO BENTS C AND G BY PROVIDING SHOULDER AND ADJACENT LANE CLOSURES DURING NIGHTTIME HOURS.
- PERFORM REPAIRS TO SPAN 2 BY PROVIDING LANE WEAVES TO PERFORM STRUCTURAL STEEL REPAIRS.
- 4. REOPEN ALL LANES AND RAMPS TO TRAFFIC AND REMOVE TEMPORARY TRAFFIC DEVICES.
- 5. UTILIZE IDOT TRAFFIC CONTROL STANDARDS TO MAINTAIN TRAFFIC

#### BENT F AND SPAN 6:

- 1. INSTALL PORTABLE CHANGEABLE MESSAGE SIGNS AS DIRECTED BY THE ENGINEER.
- PERFORM REPAIRS TO THE EAST SIDE OF BENT F DURING EXPRESS LANE AND ADJACENT SHOULDER CLOSURES, POSSIBLY IN CONJUNCTION WITH THE REPAIR WORK ON BENT E AND SPAN 5.
- PERFORM REPAIRS TO THE WEST SIDE OF BENT F BY CLOSING THE I-90/94 SLIP RAMP FROM THE
  EXPRESS LANES TO THE LOCAL LANES ADJACENT TO 59TH STREET. COORDINATION WITH THE CHICAGO
  SKYWAY WILL BE REQUIRED.
- 4. PERFORM REPAIRS TO SPAN 6 BY PROVIDING LANE WEAVES TO PERFORM STRUCTURAL STEEL REPAIRS.
- 5. REOPEN ALL LANES, SHOULDERS AND RAMPS TO TRAFFIC AND REMOVE TEMPORARY TRAFFIC DEVICES.
- 6. UTILIZE IDOT TRAFFIC CONTROL STANDARDS TO MAINTAIN TRAFFIC

USER NAME = lchrzasc	DESIGNED	-	LRC	REVISED -	
	DRAWN	-	LRC	REVISED -	
PLOT SCALE = 2.0000 '/ in.	CHECKED	-	JMT	REVISED -	
PLOT DATE = 12/16/2019	DATE	-	12/11/2019	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	GESTED	OF TRAFFI SEQUENC 34 AT CTA F	E OF CON	ISTRUCTION
SHEET	OF	SHEETS	STA.	TO STA.

SCALE:

Existing Structure: The existing structure was built in 1961. The current structure is a six- span structure carrying CTA DESIGN SPECIFICATIONS tracks. The bridge is 424'-2¾" long from centerline bearings along the centerline of span. The bridge 1. For General Notes, Index of Sheets, Total Bill width varies from 21'-0" to 32'-0". The superstructure consists of steel plate girders, floorbeams and of Material and Scope of Work, see Sheet S-02 2002 AASHTO Standard Specifications for Highway lateral bracing. The substructure consists of steel bents. Bridges, 17th Edition Traffic Control: Traffic is to be maintained utilizing Temporary Lane Closures. Salvage: No salvage. 424'-23/4" 64'-35/8" 63'-45/8" 87'-9" 71'-6" 50'-8" 86'-71/5" Measured along & Span Span 3 Span 2 Span 1 Span 4 Span 5 Span 6 40'-41/5' 22'-105/8" 41'-61/4 52'-111/4" 37'-21/4" 39'-9" 56'-6" CTA Column 41'-11/4" 35'-0" 21'-45/8" 23'-6' Spacing © CTA Column, typ. - C Bent B - C Bent D G Bent E - G Bent A G Bent C -Perform Structural & Bent G G Bent F-Perform Structural Perform Structural Perform Structural Steel Repair Steel Repair Steel Repair — CTA- Electric conduits Steel Repair ///20/20 Perform Structural Repair of Concrete and Epoxy Crack Injection ELEVATION Perform Structural Perform Structural Perform Structural Repair of Concrete Repair of Concrete Repair of Concrete (Looking North) and Epoxy Crack Injection 50'-8" 87'-9" 71'-6" 64'-35/8 Span 2 Span 1 Span 3 Span 4 Perform Structural 63'-45/8" € Floorbeam 87 - Exist. CTA Tracks Steel Repair to Girde Span 5 ← Floorbeam 85 € Floorbeam 90 & Floorbeam 86 € Floorbeam 93 € Floorbeam 89 -₹ Floorbeam 88 © Floorbeam 91 CTA- Electric conduits @ Floorbeam 94 - @ Bent A @ Bent D G Bent C @ Bent B Perform Structural
Steel Renair Steel Repair to Girder Perform Structural Perform Structural Steel Repair to G Floorbeam 92 Steel Repair to Girden Floorpeam Perform Structural Repair Perform Structural Repair Perform Structural Repair of Concrete, and Gusset plate € Bent F of Concrete to Crashwall of Concrete, Epoxy Crack Perform Structural Repair and Structural Steel Injection to Crashwall and Epoxy Crack Injection to Repair to Bearing Stool of Concrete, Epoxy Crack Structural Steel Repair to Structure Crashwall and Structural Injection to Crashwall and Bearing Stool Location Steel Repair to Bearing Structural Steel Repair to Floorbeam 95 - Exist. CTA Tracks LOCATION SKETCH & Bent G PLAN Perform Structural Repair of Concrete to Crashwall, Structural Moussa A. Isa Steel Repair to GENERAL PLAN & ELEVATION SIGNED Bearing Stool and 081-007062 DR. MOUSSA A. ISSA, S.E. IL. LIC. NO. 081-005738 MOUSSA A SNEHA PRIYANG SHAH, S.E. IL. LIC. NO. 081-007062 RR - CTA OVER I-90/94 DAN RYAN Bent Cap LICENSED EXPIRES 11-30-2020 STRUCTURAL 081-005738 F.A.I RTE, 94 ENGINEER CHICAGO. ILL INDIS 12/11/2019 COOK COUNTY 12/11/2019 FOR SHEETS S-03 FOR SHEETS S-01 . S-02 AND S-04 THRU S-07 AND S-08 THRU S-12 STRUCTURE NO. 016-0141 (TOTAL OF 6 SHEETS) (TOTAL OF 6 SHEETS) COUNTY TOTAL SHEET NO.

COOK 20 5 SECTION JSER NAME = DESIGNED - MAA. EBK REVISED STATE OF ILLINOIS CHECKED - MI, MA REVISED 2019-128-BR **STRUCTURE NO. 016-0141** DRAWN -EBK REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 62K01 PLOT SCALE = SHEET S-01 OF S-12 SHEET ILLINOIS FED. AID PRO DATE 12/11/2019 REVISED PLOT DATE = 12/11/2019 10:21:31 AM

#### GENERAL NOTES:

- 1. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- 2. All exposed concrete edges shall have a  $\frac{3}{4}$ x45° chamfer except where shown otherwise.
- 3. All new fasteners shall be ASTM A325, Type 1 hot-dipped galvanized bolts. Holes shall be  ${}^{1}\mathcal{Y}_{16}$ " dia. for  $\mathcal{Y}_{4}$ " dia. bolts, and  ${}^{1}\mathcal{Y}_{16}$ " dia. for  $\mathcal{Y}_{6}$  " dia. bolts, unless otherwise noted.
- 4. All Structural Steel shall conform to AASHTO M270 Grade 50 unless otherwise noted.
- 5. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- 6. 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".
- 7. Cost of the field welding is included with the cost of Structural Steel Repair.
- 8. All bearing stools shall be cleaned per Power Tool Cleaning to Bare Metal SSPC-SP-11.
- 9. All new structural steel shall be Hot-Dip galvanized. See Special Provision for "Hot-Dip Galvanizing for Structural Steel". Cost included with the cost of Structural Steel Repair.
- 10.Load carrying components designated "CVN" shall conform to the Impact Testing Requirement,
- 11. During repair operations, the Contractor shall locate and protect all utilities or facilities in the vicinity of the work including, but not limited to, fiber optic and/or electrical conduits attached to the structure. This work shall be performed to the satisfaction of the Engineer and will not be paid for separately, but shall be included with Structural Steel Repair. It shall be the Contractor's responsibility to restore and replace any damaged utilities or facilities to the satisfaction of the Engineer at no cost to the Department.
- 12. All repair plates are non Fracture Critical Members.

#### INDEX OF SHEETS

-01 General Plan and Elevation

S-02 General Notes, Index of Sheets & Total Bill of Material

S-03 Field Welding General Notes

S-04 Framing Plan

S-05 Girder Repair Details Spans 2 and 4

S-06 Structural Steel Repair Sections And Details I

5-07 Structural Steel Repair Sections And Details II

S-08 Bent C Repairs

S-09 Bent D Repairs S-10 Bent E Repairs

S-11 Bent F Repairs

S-12 Bent G Repairs

#### SCOPE OF WORK

- 1. Perform Structural Repair of Concrete for the crash walls of the Bents.
- 2. Perform Epoxy Crack Injection for the crash walls of the Rents
- 3. Perform Steel Plating Repairs to Girders G2R, G2L and G4B.
- 4. Perform Steel Plating Repairs to Floorbeam 92.
- 5. Perform Steel Plating Repairs to the gusset plate at the south end of Floorbeam 86.
- 6. Install new stiffeners to the outside faces of the stool webs (Total of 84 stiffeners).
- 7. Perform Steel Plating Repairs to the north end of the transverse beam supported on the stools at Bent G.

#### TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
EPOXY CRACK INJECTION	FOOT	-	19	19
STRUCTURAL STEEL REPAIR	POUND	740	2710	3450
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	-	49	49
STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	-	87	87

HBM ENGINEERING GROUP, LLC

 USER NAME
 =
 DESIGNED
 MAA, EBK
 REVISED

 CHECKED
 MI, MA
 REVISED

 PLOT SCALE
 =
 DATE
 12/11/2019
 REVISED

 PLOT DATE
 =
 DATE
 12/11/2019
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS & TOTAL BILL OF MATERIAL STRUCTURE NO. 016-0141

SHEET S-02 OF S-12 SHEET

 
 F.A.I. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 SHEET NO.

 I-90/94
 2019-128-BR
 COOK
 20
 6

 CONTRACT NO. 62K0

#### Field Welding:

- 1. All field welding operations, including cleaning, testing and inspection, shall be performed in accordance with the AASHTO/AWS Bridge Welding Code D 1.5-2015 (BWC) and additional requirements as specified in these notes.
- 2. All field welding shall be performed by the manual Shielded Metal Arc Welding (SMAW) process. Other welding processes will not be considered for approval. Welding electrodes used to perform the welding handling on the work site shall be in accordance with Clause 4.5 of the BWC and shall be constantly monitored and approved by the Contractor's QC Certified Welding Inspector (CWI).
- Prior to start of the work, the Contractor shall submit to the Engineer for approval a properly prepared Welding Procedure Specification (WPS). The WPS shall include all information as required by the BWC.

#### Welder Qualification Tests:

- Welders proposed to perform the work shall be qualified for overhead position fillet welds in accordance with BWC requirements. Copies of welder qualification documents shall be reviewed and approved by the Contractor's QC CWI and subsequently provided to the Engineer.
- 2. In addition, all welders shall be required to successfully complete a one-time special on-site overhead fillet weld qualification test immediately prior to start of the work. The qualification test shall be a fillet weld T-Test Plate (Option 1) as per Clause 5.23.1.4 of the BWC. Only visual and fillet weld break testing is required. Macrotech testing is not required. On-site welder qualification testing shall be administered by the Contractor's QC CWI. Cost for the additional testing shall be included with the various items of work. No additional compensation will be made to the Contractor for performing these tests.

#### Cleaning Prior to Welding:

- The existing bearing stools shall be cleaned per Power Tool Cleaning to Bare Metal - SSPC-SP-11.
- 2. Surfaces to be welded shall be free of surface rust and meet SSPC-SP-11 condition requirements immediately prior to welding. Should there be a delay between power tool cleaning and welding that results in surface flash rusting, power tool cleaning of the weld area shall be repeated.

#### Welding Preheat:

1. Preheating operations shall be in accordance with Clause 4 of the BWC, except that the minimum preheat and interpass temperature shall be 250 degrees F. The Contractor's QC CWI shall verify and monitor minimum preheat and interpass temperatures.

#### Weld Quality:

- 1. All welds shall be visually inspected and approved by the Contractor's QC CWI.
- 2. Weld quality shall meet the requirements of Clause 6.26 of the BWC.

#### Non-Destructive Testing (NDT) of Welds:

- 1. After visual inspection and approval by the Contractor's QC CWI, all welds shall be 100% inspected by Magnetic Particle Testing (MT). Personnel performing the MT and testing procedures shall be in accordance with Clause 6 of the BWC.
- 2. The Contractor's QC CWI shall verify qualifications of the NDT personnel, witness all MT testing and countersign all MT reports. Copies of completed MT reports shall be provided to the Engineer.
- Costs for NDT shall be borne by the Contractor and included in the various items of work. No separate payment will be made for NDT.

#### Quality Control (QC) Inspection:

- 1. All phases of work including cleaning, welding and testing shall be witnessed, inspected and approved by an inspector who is qualified as a Certified Welding Inspector (CWI) by the American Welding Society. Reference Clause 6 of the BWC.
- 2. The CWI shall be employed/engaged by the Contractor and costs will be included with the various items of work. No separate payment will be made for inspection costs. Scheduling of QC CWI inspection is the Contractor's responsibility.
- 3. Should the Contractor elect to perform work in multiple locations on the structure, a sufficient number of CWI's shall be made available to provide inspection at each work site location. The number of inspectors assigned and work locations shall be approved by the Engineer.
- 4. The Contractor's QC CWI shall prepare daily reports, suitable to the Engineer, which will document the work inspected and welds approved.

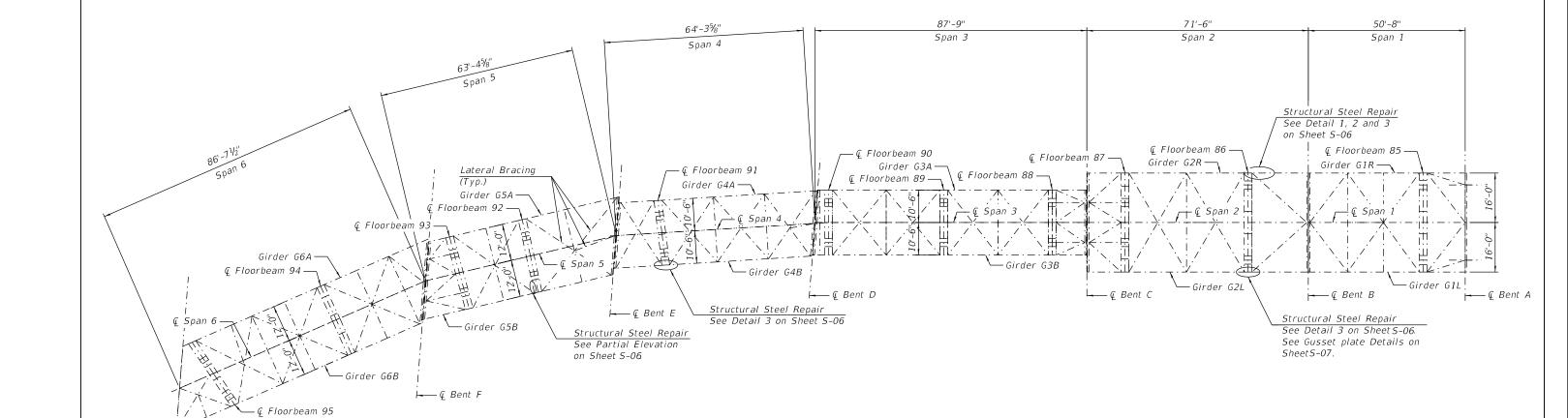
JSER NAME = DESIGNED - SAT REVISED -CHECKED - SPS REVISED -DRAWN - JN REVISED -PLOT DATE = CHECKED - SPS REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  FIELD WELDING GENERAL NOTES STRUCTURE NO.: 016-0141 SHEET S-03 OF S-12 SHEETS

SECTION COUNTY COOK -90/94 2019-128-BR 20 7 CONTRACT NO. 62K01

#### BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	740



FRAMING PLAN (Substructure Structural Steel Repairs not shown for clarity)

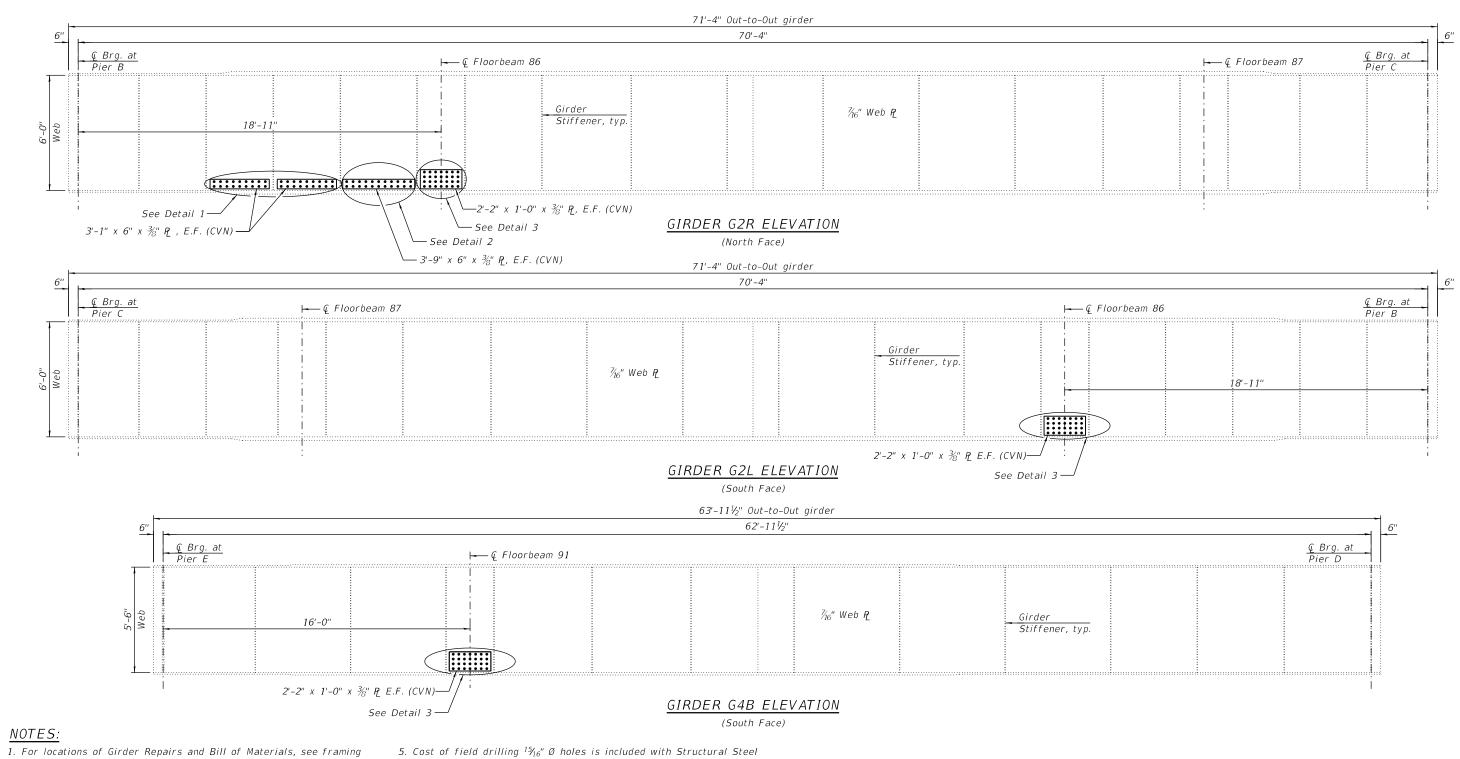
├--- Ç Bent G

USER NAME =	DESIGNED	-	MAA, CP	REVISED	-
	CHECKED	-	MI, MA	REVISED	-
PLOT SCALE =	DRAWN	-	CP	REVISED	-
PLOT DATE =	DATE	-	12/11/2019	REVISED	-

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	RAM URE			AN 16-0141	
SHEET	S-04	OF	S-12	SHEET	

ΞĒ	SEC	LION		COUNTY	TOTAL SHEETS	SHEET NO.
)/94	2019-1	28-BR		соок	20	8
				CON	TRACT NO	D. 62K01
		ILLINOIS	FED All	D PROJECT		



- plan sheet S-04.
- 2. All contact surfaces of joints for the Girders shall be free of paint
- 3. Plate connection holes shall be  $^{15}\!\!/_{16}$ " Ø for  $^{7}\!\!/_{8}$ " Ø bolts. Two hardened washers shall be required.
- 6. All connection bolts and fasteners shall be paid for as Structural
- 7. For Detail 1, 2 and 3, see sheet S-06.

REVISED -

4. "CVN" denotes Charpy-V-Notch Impact Energy Requirements, Zone 2.

DESIGNED - MAA, CP REVISED -CHECKED - MI, MA REVISED -DRAWN - EBK CP REVISED -

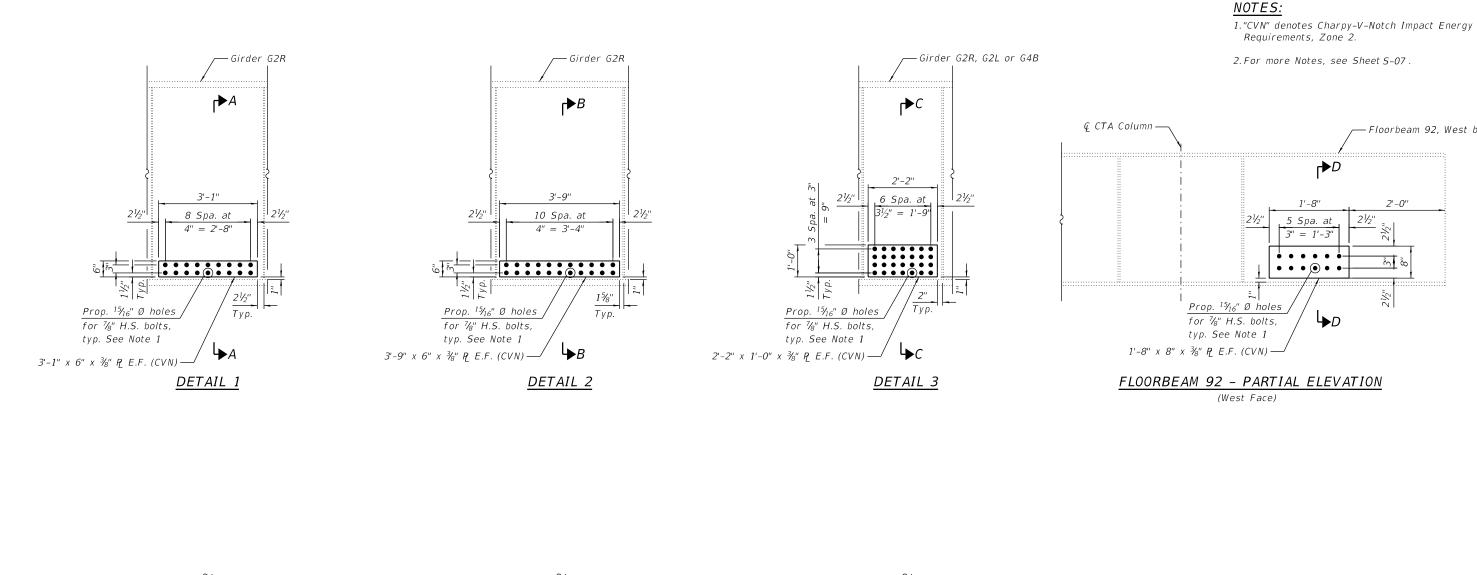
DATE - 12/11/2019

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  GIRDER REPAIR DETAILS SPAN 2 AND 4 **STRUCTURE NO. 016-0141** SHEET S-05 OF S-12 SHEET

SECTION COUNTY 20 9 I-90/94 2019-128-BR COOK CONTRACT NO. 62K0

LEGEND

Each Face

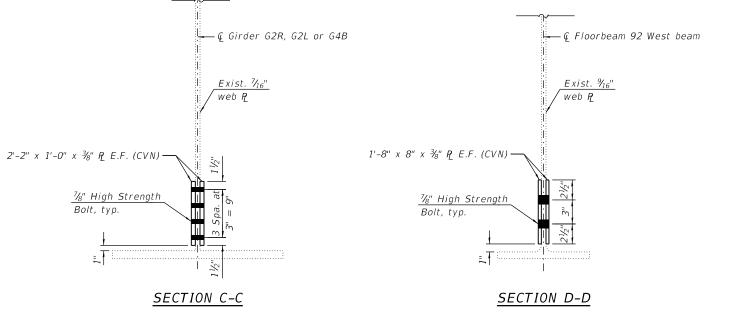


- & Girder G2R

Exist. 72" x 1/16"

web R

SECTION B-B



 $3'-1'' \times 6'' \times \frac{3}{8}'' R E.F. (CVN) -$ 

Bolt, typ.

⅓" High Strength

JSER NAME = DESIGNED - MAA, EBK REVISED -REVISED -CHECKED - MI, MA DRAWN - EBK REVISED -DATE - 12/11/2019 REVISED -

3'-9" x 6" x 3%" P E.F. (CVN) -

½" High Strength

Bolt, typ.

€ Girder G2R

Exist. 72" x 7/16"

web R

SECTION A-A

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  STRUCTURAL STEEL REPAIR SECTIONS AND DETAILS I **STRUCTURE NO. 016-0141** SHEET S-06 OF S-12 SHEET

SECTION COUNTY 2019-128-BR COOK 20 10 CONTRACT NO. 62K0

*LEGEND* 

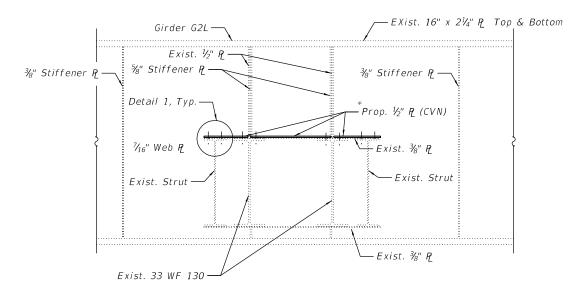
Each Face

Floorbeam 92, West beam

r▶D

5 Spa. at

\*New gusset plates to match existing gusset plates in shape, size and hole locations. The Contractor shall verify all dimensions in field prior to ordering materials. The number and spacing for proposed 7/8" Ø H.S. bolts shall match existing holes. Contractor shall use existing plate as template.



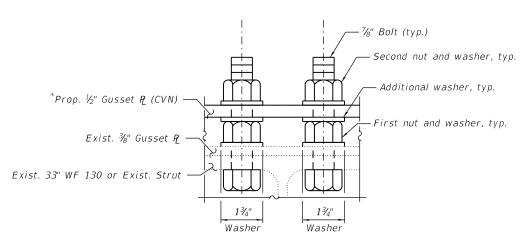
### SECTION D-D

#### NOTES

- 1. Portions of this drawing are extracted from the original drawing for this bridge. Details shown are provided to illustrate the work to be performed.
- 2. Repairs and replacement shown are based on field inspection. Conditions in field may have changed. Contractor to verify all components for repair or replacement as directed by the Engineer.
- 3. Existing gusset plate bolts shall be replaced with  $\frac{7}{6}$ " Ø H.S. bolts according to the "Construction Sequence for PL Stiffening" presented on this sheet. At no time shall there be more than one empty fastener hole.
- 4. Holes will be field drilled, using the holes in existing plates and angles as a template. Cost included with Structural Steel Repair.
- 5. Holes in existing steel plates shall be field reemed to obtain diameter required for bolt installation.
- 6. Contractor shall field verify the required bolt length and length of thread necessary to install all bolts in accordance with the Standard Specifications and Section 8.2.1 of the 2004 RCSC "Specification for Structural Joints using ASTM A325 or A490 Bolts."
- 7. For tightening of the double-nut H.S. bolts for the gusset plate repair, as shown in Detail 1, using Turn-of-the-Nut Method in accordance with Section 505.04(f)(2)d of the Standard Specifications and Section 8.2.1 of the 2004 RCSC "Specification for Structural Joints using ASTM A325 or A490 Bolts," the bolt length used to determine the amount of nut rotation from the snug-tight condition shall be taken as the following: For tightening of the first nut, the length shall be from the underside of the head to the far side of the first nut; for tightening of the second nut, the length shall be from the inside face of the proposed gusset plate to the far side of the second nut.
- 8. Twist-off type fastener systems will not be permitted for the double-nut H.S. bolt for the gusset plate repair as shown in Detail 1.
- 9. The Contractor shall take care to avoid exposing the threads, nuts and washers of the double-nut H.S. bolts for the gusset plate repair, as shown in Detail 1, to paint, dirt, moisture or other foreign material that may alter their as-received condition. Fastener components that accumulate rust, dirt or debris shall not be incorporated in the work unless they are requalified as specified in Section 7 of the 2004 RCSC "Specification for Structural Joints using ASTM A325 or A490 Bolts."
- 10. For Bill of Materials, see Sheet S-04.
- 11. "CVN" denotes Charpy-V-Notch Impact Energy Requirements, Zone 2.

#### CONSTRUCTION SEQUENCE FOR R STIFFENING:

- 1. Clean exterior faces of existing steel (angles, plates and gusset plates) according to the special provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures."
- 2. Remove existing gusset plate bolt and replace with proposed H.S. bolts. Existing bolts shall be replaced one at a time. As each rivet/bolt is replaced with a H.S. bolt, the first washer and nut shall be installed and fully tightened as shown in Detail 1 on this sheet.
- 3. Construct template for location of newly installed H.S. bolts to determine if field reaming of fill or repair plates is required.
- 4. Install additional washer as shown in Detail 1 on this sheet.
- 5. Place repair plate with holes centered with centerline of new H.S. bolts. Install second washer and nut and fully tighten.



<u>DETAIL 1</u>



USER NAME =	DESIGNED	-	MAA, EBK	REVISED	-
	CHECKED	-	MI, MA	REVISED	-
PLOT SCALE =	DRAWN	-	EBK	REVISED	-
PLOT DATE =	DATE	-	12/11/2019	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL REPAIR SECTIONS AND DETAILS II
STRUCTURE NO. 016-0141

SHEET S-07 OF S-12 SHEET

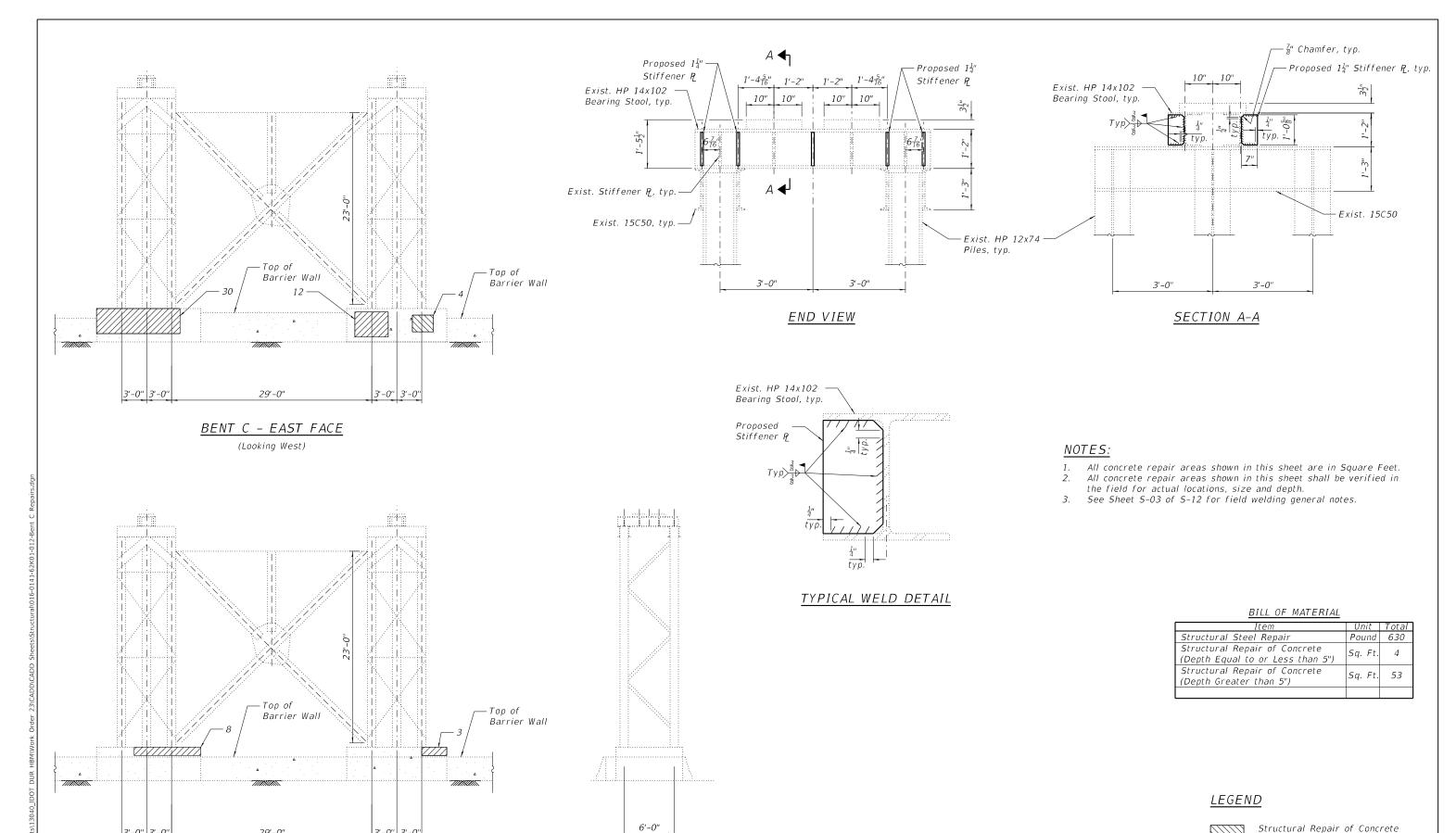
 
 F.A.I. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 SHEETS NO.

 I-90/94
 2019-128-BR
 COOK
 20
 11

 CONTRACT NO. 62K01

12/11/2019 10:21:35 AM

\WO 23 Dan Ryan @ CTA\CADD\_Sheets\D9100315-SHT-006-StructSteel



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

Structural Repair of Concrete (Depth Greater than 5")



3'-0" 3'-0"

USER NAME =	DESIGNED -	SAT	REVISED -
	CHECKED -	SPS	REVISED -
PLOT SCALE =	DRAWN -	JN	REVISED -
PLOT DATE =	CHECKED -	SPS	REVISED -

3'-0" 3'-0"

29'-0"

BENT C - WEST FACE

(Looking East)

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

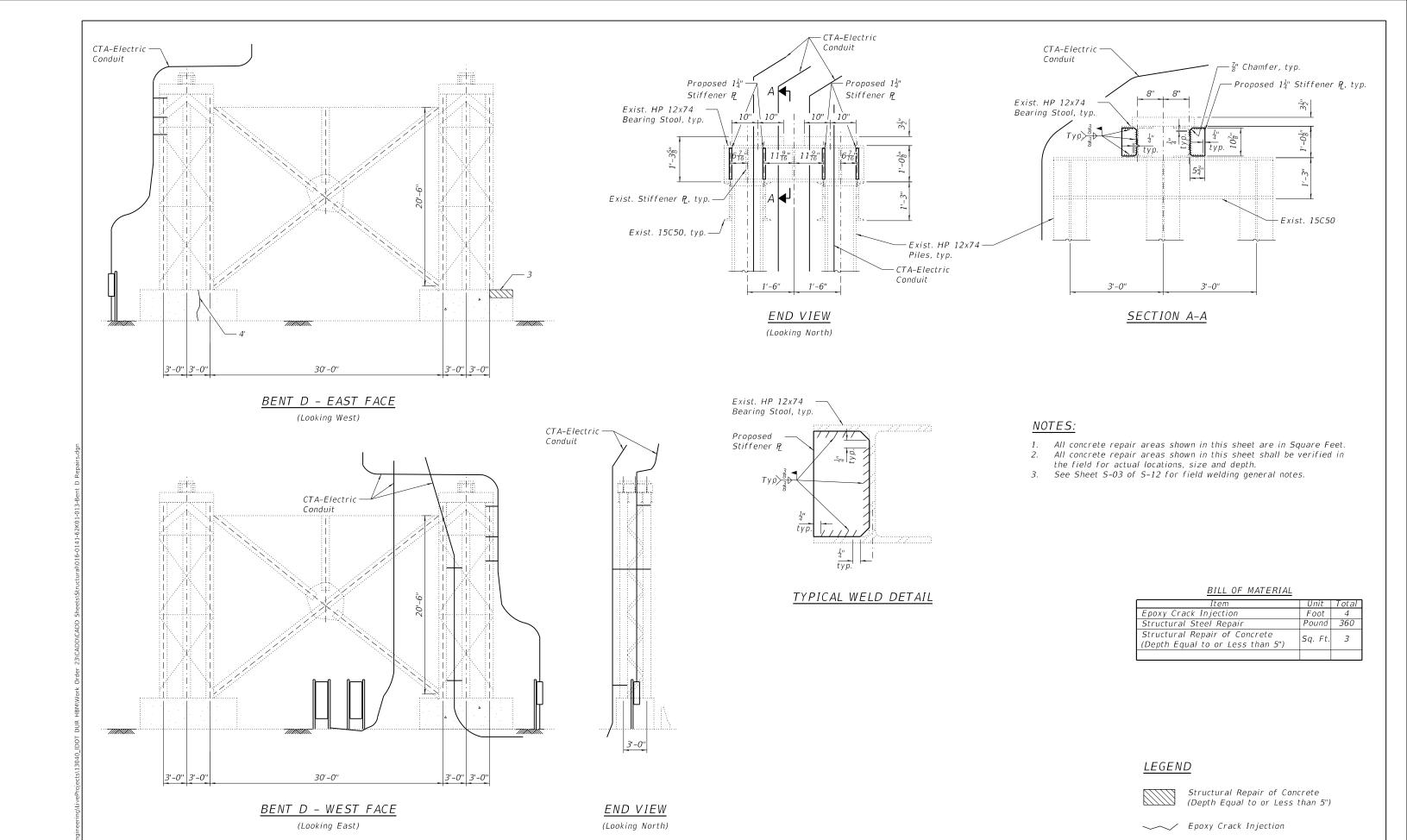
END VIEW

(Looking North)

**BENT C REPAIRS** STRUCTURE NO.: 016-0141 SHEET S-08 OF S-12 SHEETS

SECTION 2019-128-BR COOK 20 12 CONTRACT NO. 62K01

12/11/2019 10:38:36 AM



STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

SECTION

2019-128-BR

COOK

20 13

CONTRACT NO. 62K01

**BENT D REPAIRS** 

STRUCTURE NO.: 016-0141

SHEET S-09 OF S-12 SHEETS

12/11/2019 10:39:08 AM

JSER NAME =

PLOT DATE =

DESIGNED - SAT

CHECKED - SPS

DRAWN - JN

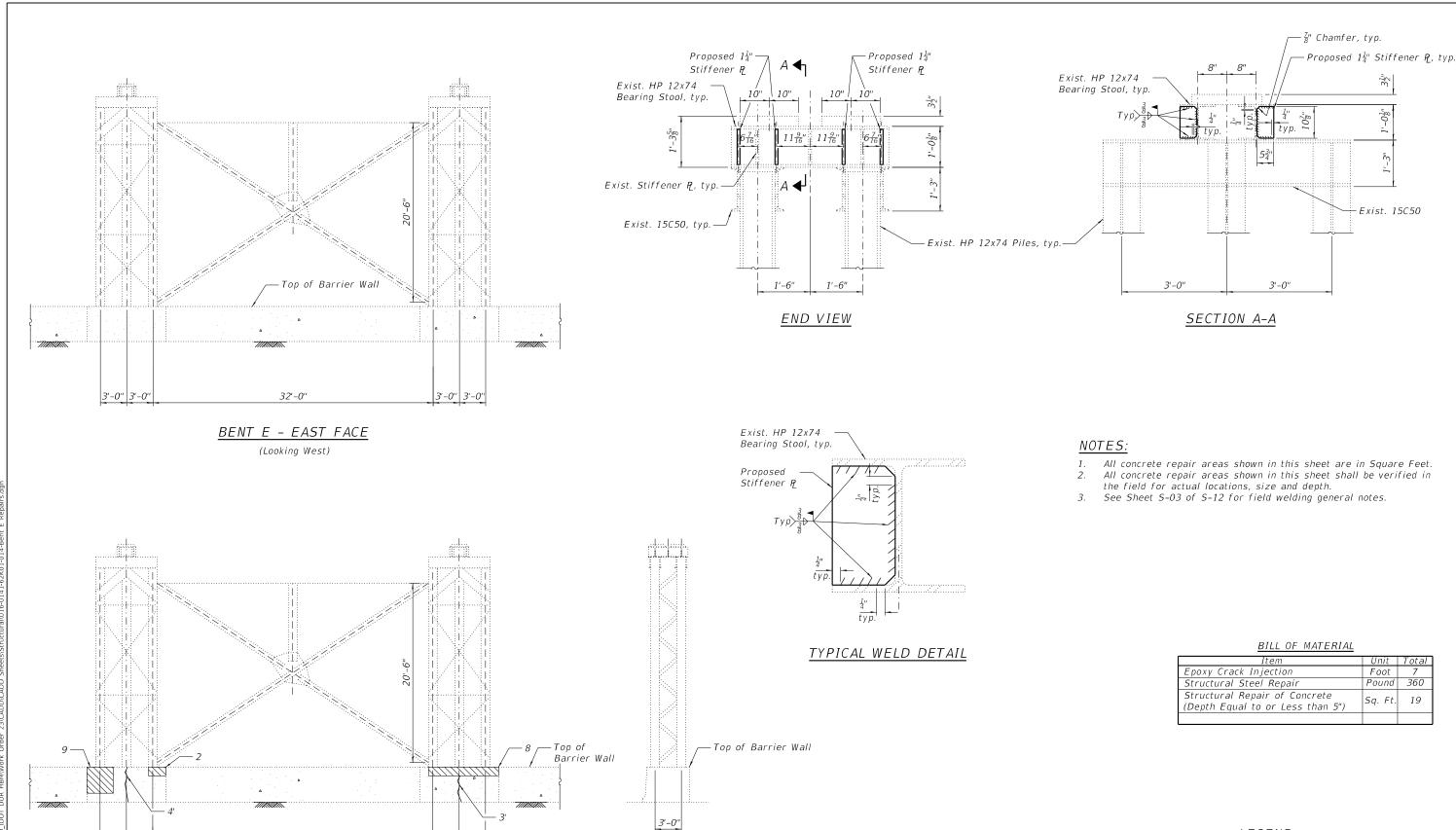
CHECKED - SPS

REVISED -

REVISED -

REVISED -

REVISED -



## LEGEND



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



Epoxy Crack Injection



3'-0" 3'-0"

USER NAME =	DESIGNED -	SAT	REVISED -
	CHECKED -	SPS	REVISED -
PLOT SCALE =	DRAWN -	JN	REVISED -
PLOT DATE =	CHECKED -	SPS	REVISED -

32'-0"

BENT E - WEST FACE

(Looking East)

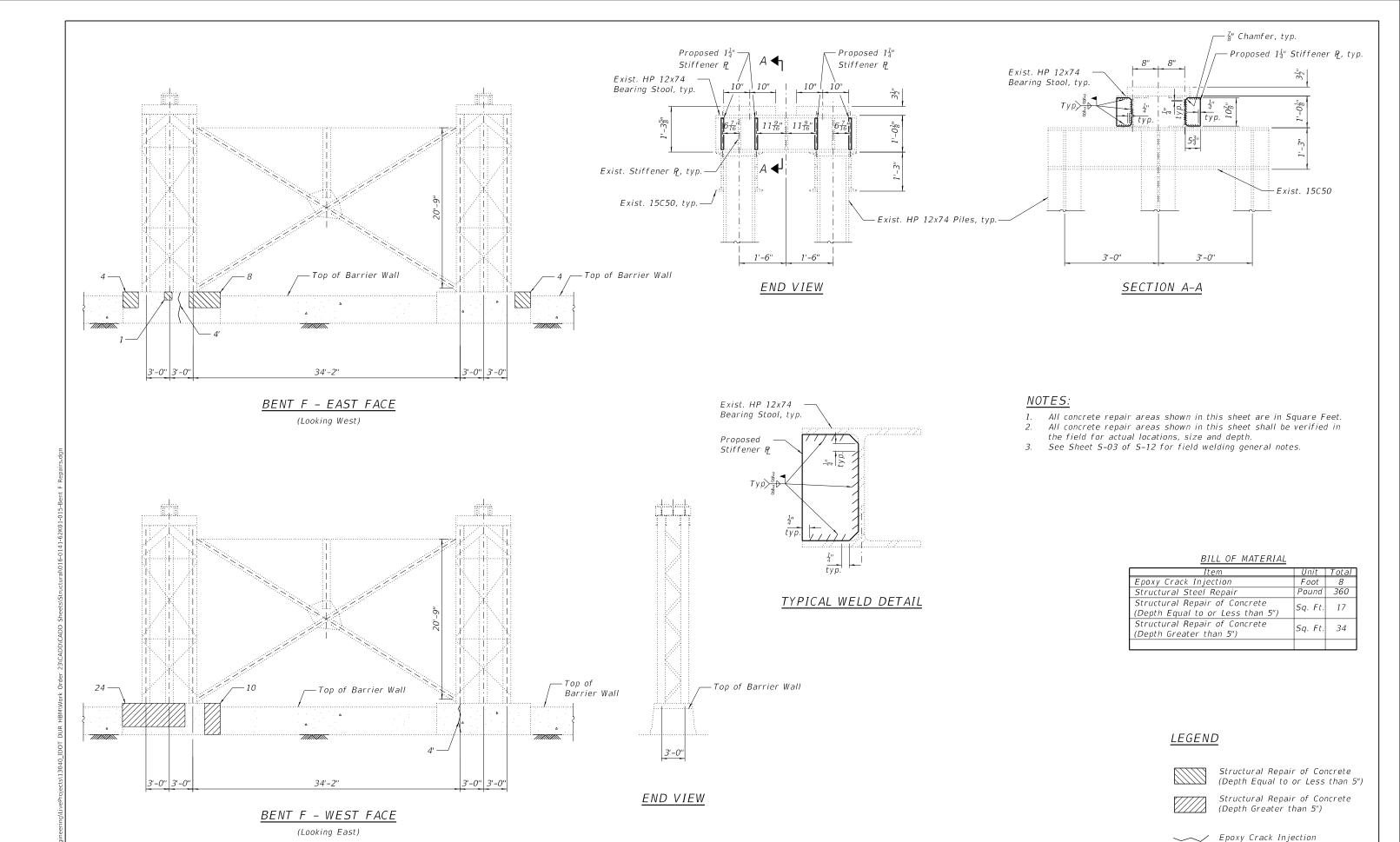
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

END VIEW

(Looking North)

BENT E REPAIRS STRUCTURE NO.: 016-0141 SHEET S-10 OF S-12 SHEETS

A.I. RTE.	SEC.	TION		COUNTY	TOTAL SHEETS	SHE
90/94	2019-1	28-BR		соок	20	14
				CONTRA	CT NO.	62K
		II I INIOIS	EED AL	D DDO IECT		



Accurate group, INC.

 USER NAME
 =
 DESIGNED
 SAT
 REVISED

 CHECKED
 SPS
 REVISED

 PLOT SCALE
 =
 DRAWN
 JN
 REVISED

 PLOT DATE
 =
 CHECKED
 SPS
 REVISED

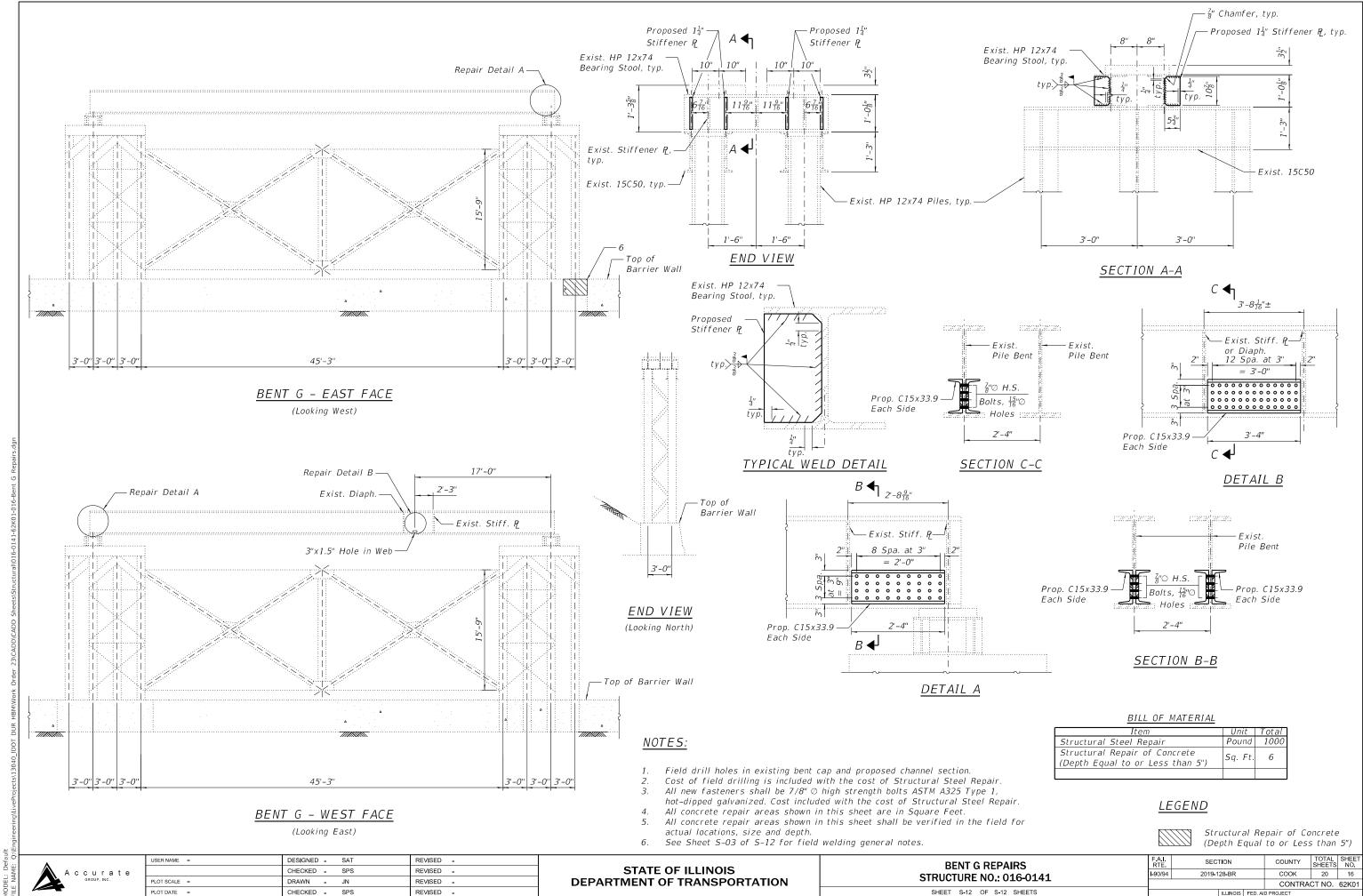
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

BENT F REPAIRS STRUCTURE NO.: 016-0141 SHEET S-11 OF S-12 SHEETS  
 F.A.I. RTE.
 SECTION
 COUNTY SHEETS NO.
 SHEETS NO.

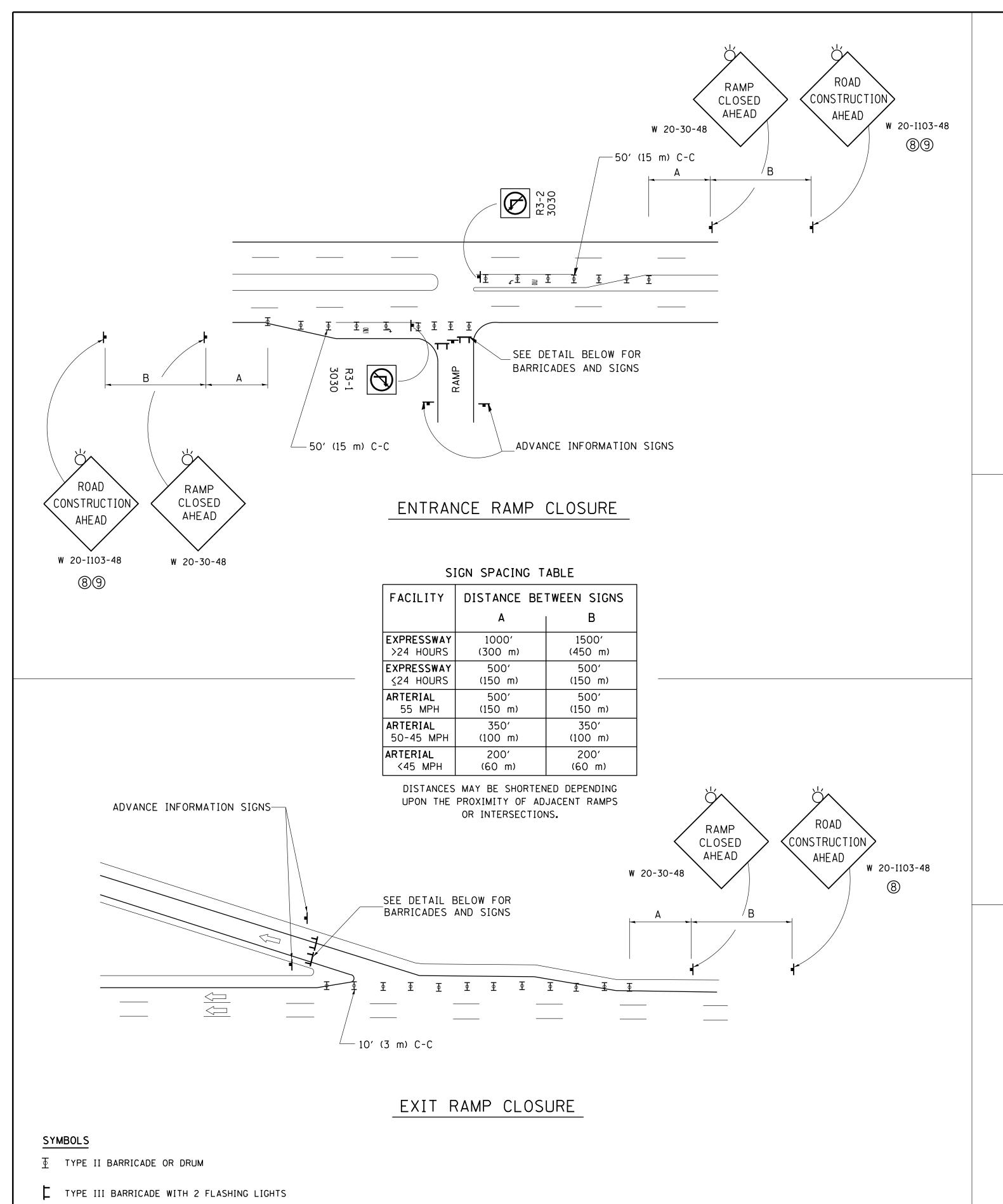
 I-90/94
 2019-128-BR
 COOK
 20
 15

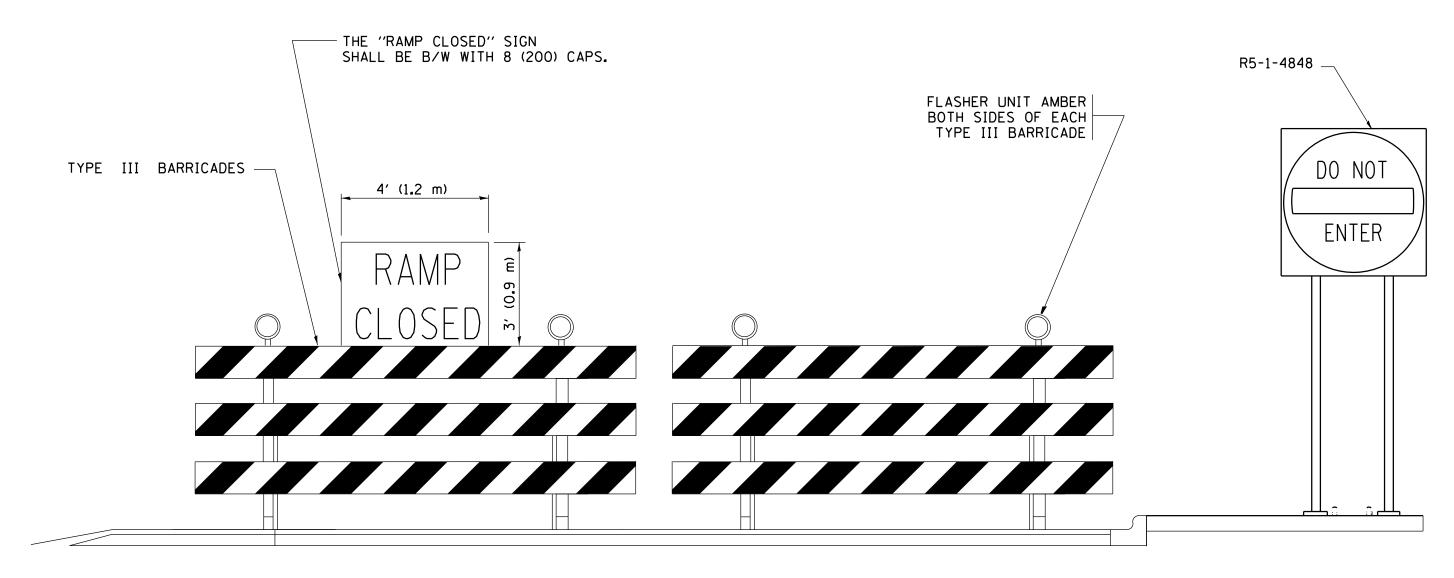
 CONTRACT NO. 62K01

12/11/2019 10:40:14 AM



12/11/2019 10:42:18 AM





DETAIL FOR REQUIRED BARRICADES & SIGNS

RAMP CLOSURE ADVANCE INFORMATION SIGN

RAMP CLOSURE ADVANCE WARNING SIGN

BLACK LEGEND ON ORANGE

BACKGROUND MOUNTED

DIAGONALLY

E MOD FONT

1 (25) BORDER

THESE SIGNS ARE REQUIRED ON ALL THE EXIT
GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE

CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

6 (150) 5 (125) BLACK LEGEND ON WHITE BACKGROUND 5 (125)  $\frac{1}{2}$  (12) BORDER (150) E MOD FONT 5 (125) 6 (150) THESE BLANK AREAS SHALL BE FILLED WITH THE DATES AND THE 5 (125) TIME THAT THE RAMP WILL BE |CLOSED. 6 (150) 5 (125) 4' (1.2 m)

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

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

## GENERAL NOTES:

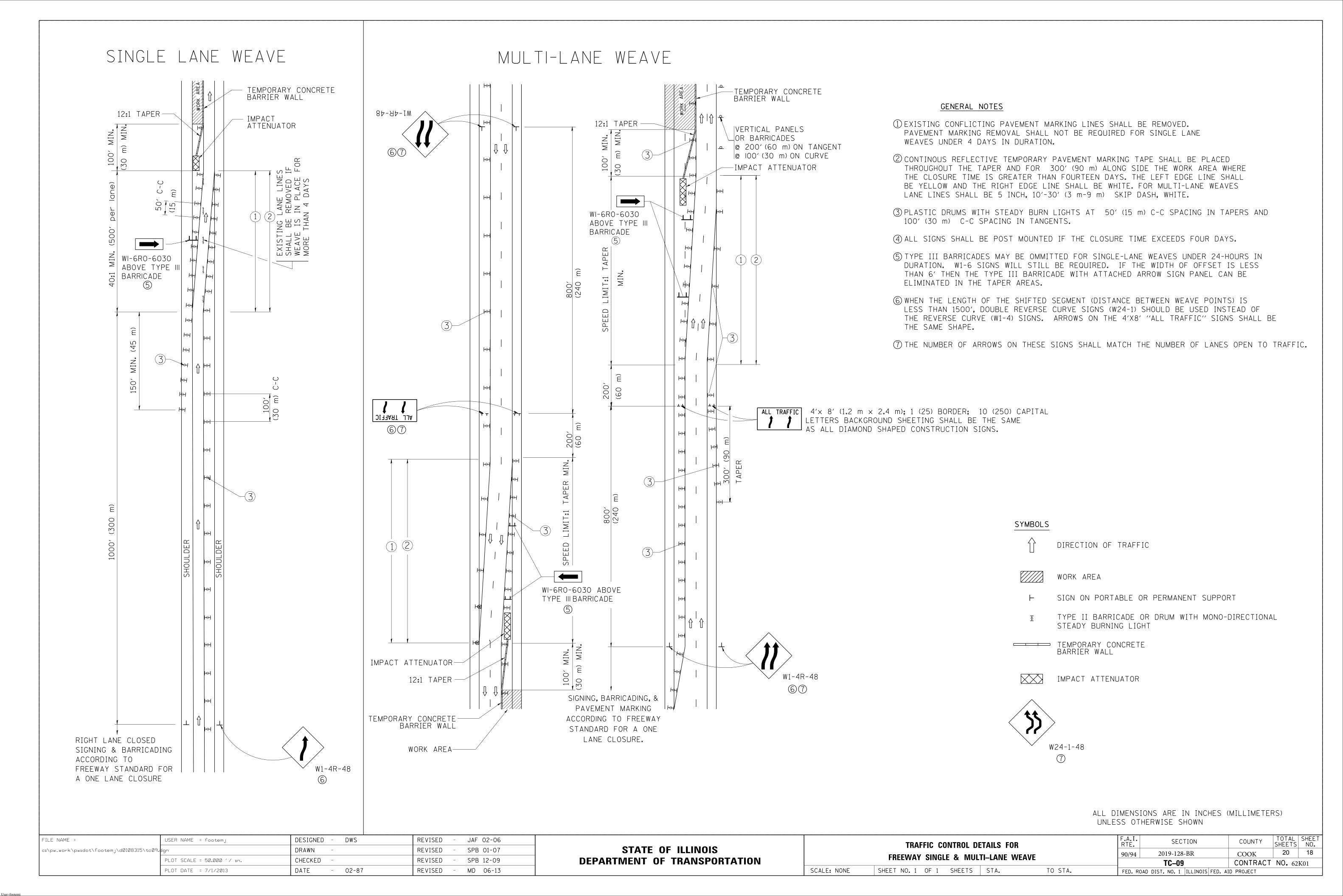
- CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II
  BARRICADES DURING DAY OPERATIONS. CONES SHALL BE
  A MINIMUM OF 28 (700) HIGH.
- (2) VERTICAL BARRICADES SHALL NOT BE USED FOR RAMP CLOSURES.
- 3 A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEEDED BY A W20-7 FLAGGER WARNING SIGN.
- 4 ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).

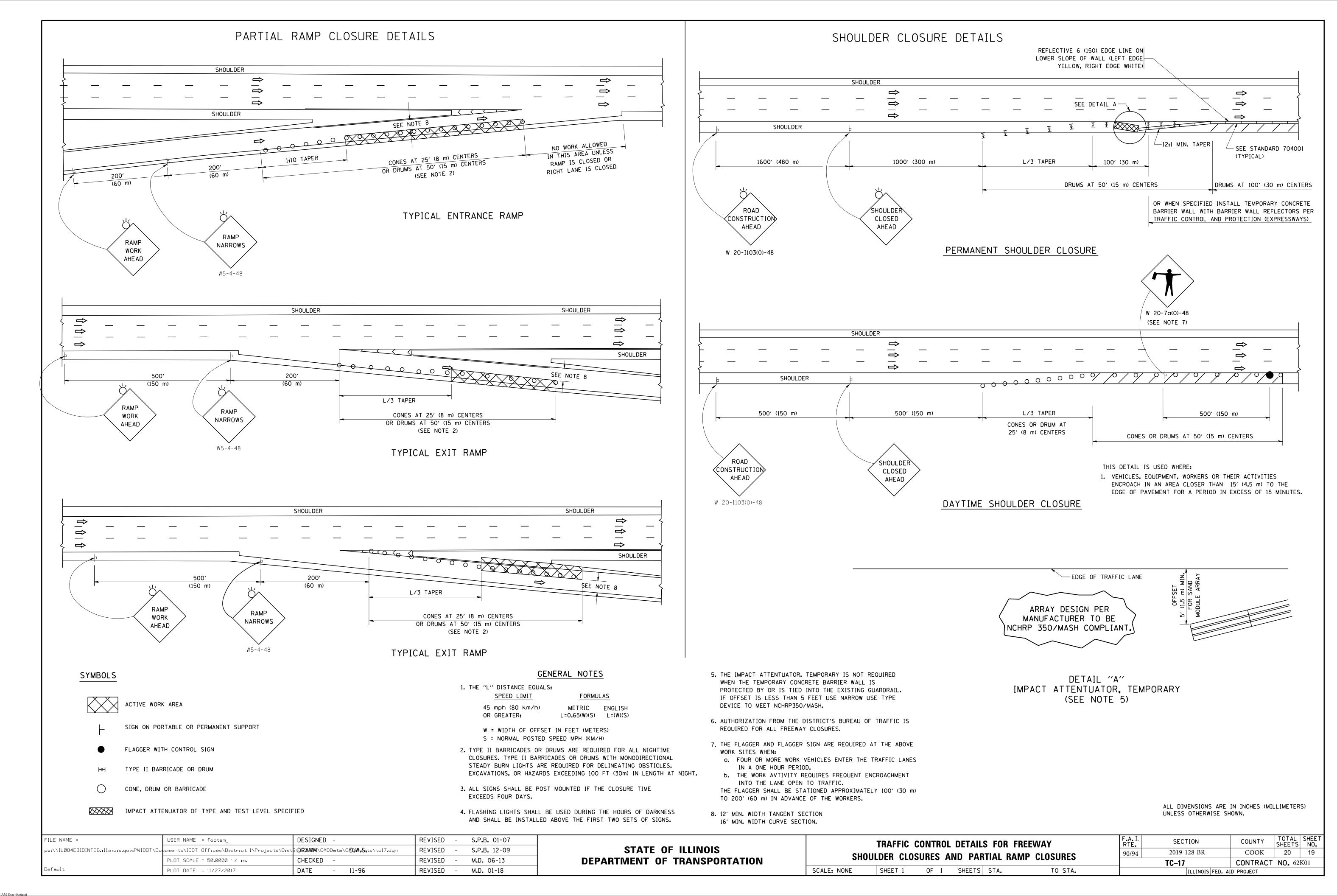
- 6 AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH
- ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED
  ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

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

FILE NAME =	USER NAME = footemj	DESIGNED - D.W.S.	REVISED - S.P.B. 01-07		ENTRANCE AND EXIT RAMP	F.A. I.	SECTION	COUNTY TOTAL SHEET
pw:\\ILØ84EBIDINTEG.:lll:nois.gov:PWID	OT\Documents\IDOT Offices\District 1\Pro	ojects\Dıstət <b>DRAWM</b> \CADDəta\CADsheets\tc08.dgn	REVISED - S.P.B. 12-09	STATE OF ILLINOIS		90/94	2019-128-BR	COOK 20 17
	PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED - M.D. 06-13	DEPARTMENT OF TRANSPORTATION	CLOSURE DETAILS		TC-08	CONTRACT NO. 62K01
Default	PLOT DATE = 11/27/2017	DATE - 02-83	REVISED - M.D. 01-18		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FED.	

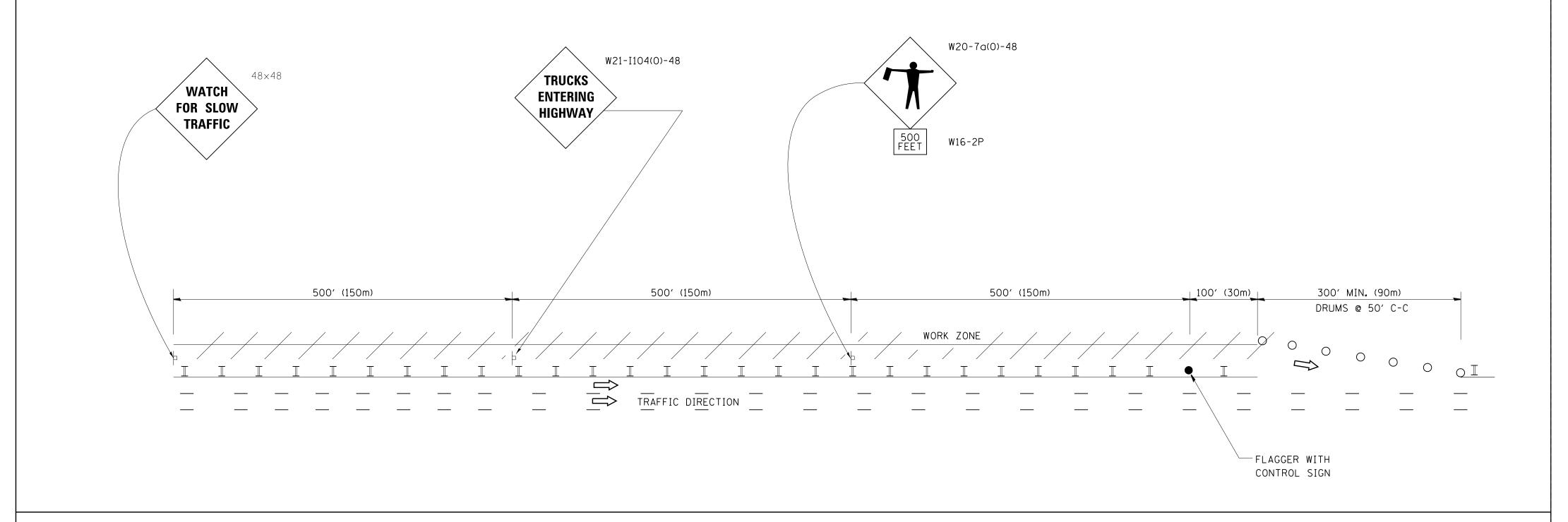
--09 J--- 11/07/2017 7.40.07 AM



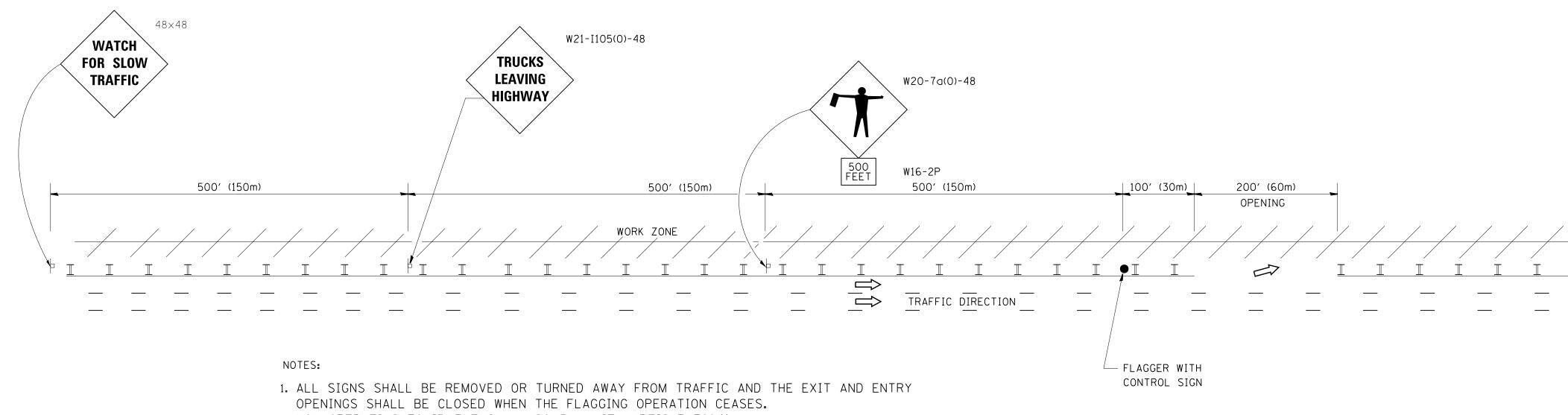


## SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

## WORK ZONE EXIT OPENING



## WORK ZONE ENTRY OPENING



- NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
- 2. WORK ZONE OPENINGS SHALL BE A MINIMUM OF ONE HALF MILE APART AND A MINIMUM OF ONE QUARTER MILE FROM ALL ENTRANCE AND EXIT RAMPS.
- 3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
- 4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS
- 5. FLAGGERS SHALL NOT STOP TRAFFIC OR DIRECT TRAFFIC INTO AN ADJACENT LANE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED - J.A.F. 02-06		FREEWAY/EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS	F.A.I. SECTION	COUNTY TOTAL SHEET SHEETS NO.
c:\pw_work\pwidot\footemj\d0108315\tc18.0	gn	DRAWN -	REVISED - S.P.B. 01-07	STATE OF ILLINOIS	AT WORK ZONE OPENINGS ON FREEWAYS/EXPRESSWAYS	90/94 2019-128-BR	COOK 20 20
	PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED - S.P.B. 12-09	DEPARTMENT OF TRANSPORTATION	AT WORK ZUNE UPENINGS UN FREEWATSEAPRESSWATS	TC-18	CONTRACT NO. 62K01
	PLOT DATE = 7/8/2013	DATE -	REVISED - M.D. 06-13		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FE	ED. AID PROJECT