FOR INDEX OF SHEETS, SEE SHEET NO. 3

FOR STRUCTURAL PAVEMENT DESIGN

INFORMATION, SEE SHEET NO. N/A

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4-6

STATE OF ILLINOIS

877 D9 BRIDGE DECK REPAIR 2020-1 WHITE 12 1 ILLHOIS CONTRACT NO. 78724

DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 877 (IL 141) **SECTION D9 BRIDGE DECK REPAIR 2020-1** PROJECT STP-UWAZ(733) **BRIDGE REPAIRS & CONCRETE OVERLAY** WHITE COUNTY

C-99-053-19

R9E

T7S

TRAFFIC DATA IL 141 TRAFFIC DATA

2017 ADT = 2400 14% TRUCKS

TOWNSHIPS HERALDS PRAIRIE

GALLATIN COUNTY

DESIGN DESIGNATION : N/A

COORDINATE SYSTEM : ILLINOIS COORDINATE SYSTEM, EAST ZONE

POSTED SPEED: 55 MPH

J.U.L.I.E.

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

OR 811

PROJECT ENGINEER: DAVID PICHE PROJECT DESIGNER: AUSTIN HENK PROJECT LOCATION SN 097-0067

IL 141 OVER TRIB TO CANE CREEK

GROSS LENGTH = 110 FT. = 0.02 MILE NET LENGTH = 110 FT. = 0.02 MILE

LOCATION OF SECTION INDICATED THUS: - -

D-99-031-19

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 12-04-2019 SUBMITTED. REGION FIVE ENGINEER ENGINEER OF DESIGN AND ENVIRONMENT DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

> PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 78724

0

0

0

0

Examined By:

Examined By:

Examined By:

Examined By:

Examined By:

Examined Bys DISTRICT MATERIALS ENGINEER

DESIGNED - ASH USER NAME - henkas REVISED -DRAWN - ASH REVISED -PLOT SCALE = 100.0000 1 / in. CHECKED - MAS REVISED PLOT DATE = 11/12/2019 DATE - 11/12/19 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNATURES

FA.P. SECTION COUNTY SHEETS NO.

877 99 MADDE SECE REPAIR 2020-1 WHITE 12 2

CONTRACT NO. 78724

OF SHEETS STA. SHEET

SCALE:

TO STA

INDEX OF SHEETS

COVER SHEET 2 SIGNATURES

GENERAL NOTES, INDEX OF SHEETS, AND STANDARDS

SUMMARY OF QUANTITIES GENERAL PLAN AND ELEVATION

TYPICAL SECTION STAGING

PLAN STAGING 10 BUTT JOINT DETAIL 11-12 PARAPET DETAILS

STANDARDS

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS 2 45 MPH
701316-13	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR FOR SPEEDS > 45 MPH
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
862001-01	UNINTERRUPTIBLE POWER SUPPLY
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45 MF

REVISED

GENERAL NOTES

THE ADVANCE DETECTOR LOOPS ARE TYPICALLY LOCATED 275 FEET IN ADVANCE OF THE STOP BAR. THE BUREAU OF OPERATIONS SHALL APPROVE THE LOOP LOCATIONS PRIOR TO INSTALLATION.

FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

ALL HOT MIX ASPHALT 2.016 TONS/CU YD

THE CENTERLINE PAVEMENT MARKING SHALL BE REMOVED FROM THE STOP BAR TO THE SAND ATTENUATORS OR DRUMS. EDGLE LINE PAVEMENT MARKING SHALL BE REMOVED IF A 10 FOOT LANE WIDTH CANNOT BE MAINTAINED. TEMPORARY EDGE LINES SHALL BE INSTALLED WHEN THE EDGE LINES ARE REMOVED.

CONCRETE REMOVAL QUANTITIES ARE ESTIMATED. THE FINAL LOCATIONS AND QUANTITIES WILL BE DETERMINED BY THE ENGINEER AND MARKED ON THE AS-BUILT PLANS.

COMMITMENTS: NONE

Locations	Hot-Mix Asphalt Surface Course
Mixture Use(s):	Hot-Mix Asphalt Surface Course, Mix C, N70
AC/PG:	PG64-22
ABR % (Max):	See Special Provision
Design Air Voids:	4.0 %, 70 Gyration Design
Mixture Composition:	IL-9.5mm
(Gradation Mixture)	
Friction Aggregate:	C Surface
Mixture Weight:	112 lbs/Sq Yd/in
Quality Management	QCQA
Program:	
Sublot Size:	TBD

Locations	Hot-Mix Asphalt Base Course Widening
Mixture Use(s):	Hot-Mix Asphalt Binder Course, N30, 19.0L
AC/PG:	PG64-22
ABR % (Max):	See Special Provision
Design Air Voids:	4.0 %, 30 Gyration Design
Mixture Composition:	IL-19.0L
(Gradation Mixture)	
Friction Aggregate:	None
Mixture Weight:	112 lbs/Sq Yd/in
Quality Management	QCQA
Program:	
Sublot Size:	NA

REV. - MS

USER NAME = henkas DESIGNED - ASH REVISED SECTION COUNTY INDEX OF SHEETS, STANDARDS STATE OF ILLINOIS DRAWN - ASH REVISED 877 D9 BRIDGE DECK REPAIR 2020-1 WHITE 12 3 & GENERAL NOTES CHECKED - MAS REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 78724 PLOT DATE = 12/5/2019 DATE - 11/12/19 SHEET SHEETS STA. TO STA.

SUMMARY OF QUANTITIES

COUNTY: WHITE
ROUTE: IL 141
FUNDING: 80% FED 20% STATE

	LOCATION:				
CODE	ITEM DESCRIPTION	ITEM DESCRIPTION UNIT			
NUMBER	TI EIVI DESCRIFTION	ONII	0013		
35600716	HOT-MIX ASPHALT BASE COURSE WIDENING, 10"	SQ YD	42		
	·				
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	252		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	214		
40600990	TEMPORARY RAMP	SQ YD	41		
40604002	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70	TON	52		
44004250	PAVED SHOULDER REMOVAL	SQ YD	42		
50102400	CONCRETE REMOVAL	CU YD	0.6		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	0.6		
50300260	BRIDGE DECK GROOVING	SQ YD	387		
50300300	PROTECTIVE COAT	SQ YD	387		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	30		
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	4		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3		

REV. - MS

USER NAME = henkas	DESIGNED - ASH	REVISED -
	DRAWN - ASH	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - MAS	REVISED -
PLOT DATE = 12/5/2019	DATE - 11/12/19	REVISED -

SUMMARY OF QUANTITIES - CONT

COUNTY: WHITE
ROUTE: IL 141
FUNDING: 80% FED 20% STATE
OCATION: RURAL

	LOCATION:				
CODE	ITEM DESCRIPTION	UNIT	STRUCTURE		
NUMBER	TIEW DESCRIPTION	UNII	0013		
67100100	MOBILIZATION	L SUM	1		
70100100	TRAFFIC CONTROL AND PROTECTION, STANDARD 701316	EACH	1		
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1		
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1		
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1		
70106700	TEMPORARY RUMBLE STRIPS	EACH	6		
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28		
70300100	SHORT TERM PAVEMENT MARKING	FOOT	100		
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	33		
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	370		
86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1		
X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	90		
Z0012111	BRIDGE DECK FLY ASH OR GGBF SLAG CONCRETE OVERLAY, 2 1/2"	SQ YD	387		

★ SPECIALTY ITEM

USER NAME = henkas	DESIGNED - ASH	REVISED -							F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - ASH	REVISED -	STATE OF ILLINOIS		S	UMMAR	RY OF QUANTITIES		877	D9 BRIDGE DECK REPAIR 2020-1	WHITE	12	5
PLOT SCALE = 100.0000 ' / in.	CHECKED - MAS	REVISED -	DEPARTMENT OF TRANSPORTATION								CONTRAC	NO. 78	724ء
PLOT DATE = 12/5/2019	DATE - 11/12/19	REVISED -		SCALE:	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

SUMMARY OF QUANTITIES - CONT

COUNTY:	WHITE
ROUTE:	IL 141
FUNDING:	80% FED 20% STATE
LOCATION:	RURAL

		LOCATION.	KUKAL
CODE	ITEM DESCRIPTION	UNIT	STRUCTURE
NUMBER	TIEW DESCRIPTION	ONII	0013
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	387
Z0041895	POLYMER CONCRETE	CU FT	4.0

planroom.dot.lllinols.gov.PWIDOT\Documents\IDOT Offices\District 9\Projec

USER NAME = henkas	DESIGNED -	ASH	REVISED -
	DRAWN -	ASH	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	MAS	REVISED -
PLOT DATE = 12/5/2019	DATE -	11/12/19	REVISED -

CHARARADY OF CHARITITICS					F.A.P RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
SUMMARY OF QUANTITIES				877	D9 BRIDGE DECK REPAIR 2020-1	1	WHITE	12	6	
								CONTRACT	NO. 78	3724
SHEET OF SHEETS STA. TO STA.					ILLINOIS FI	ED. AID	PROJECT			

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

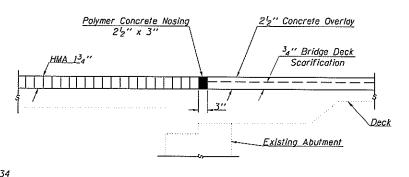
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details offecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall 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

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorparated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

The work, material, and equipment involved in saw cutting shall be considered included in the price of Concrete Removal.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANITY
Concrete Removal	Cu. Yd.	0.6
Concrete Superstructure	Cu. Yd.	0.6
Bridge Deck Grooving	Sq. Yd.	387
Reinforcement Bars, Epoxy Coated	Pound	30
Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 212"	Sq. Yd.	387
Bridge Deck Scarification 3/4"	Sq. Yd.	387
Polymer Concrete	Cu. Ft.	4.0
Protective Coat	Sq. Yd.	387



BRIDGE REPAIRS ILLINOIS ROUTE 141 OVER TRIB TO CANE CREEK F.A.P. ROUTE 877 - SECTION D9 BRIDGE DECK REPAIR 2020-1 WHITE COUNTY

STATION 178+22.50 STRUCTURE NO. 097-0067

DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION SHEET OF SHEETS STA. TO STA.

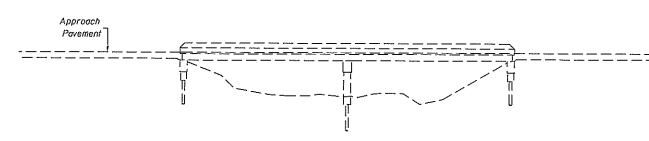
SCALE:

COUNTY TOTAL SHEET NO. SECTION 877 D9 BRIDGE DECK REPAIR 2020-1 WHITE 12 7 CONTRACT NO. 78724 ILLINOIS FED. AID PROJECT

Design Stresses

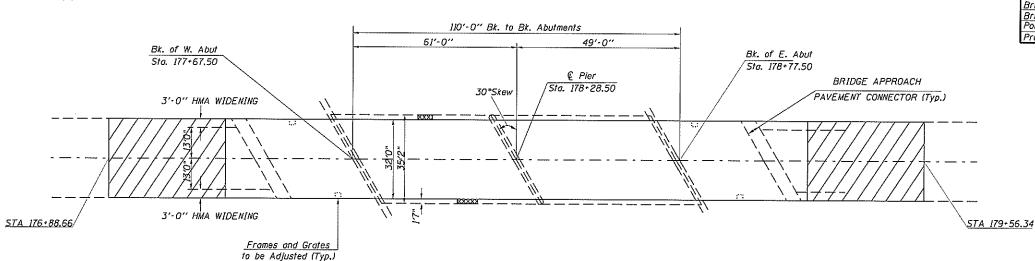
NEW CONSTRUCTION FIFLD UNITS

f'c = 3.500 psi fy = 60,000 psi (reinforcement)



ELEVATION





PLAN

XXX Parapet to be repaired

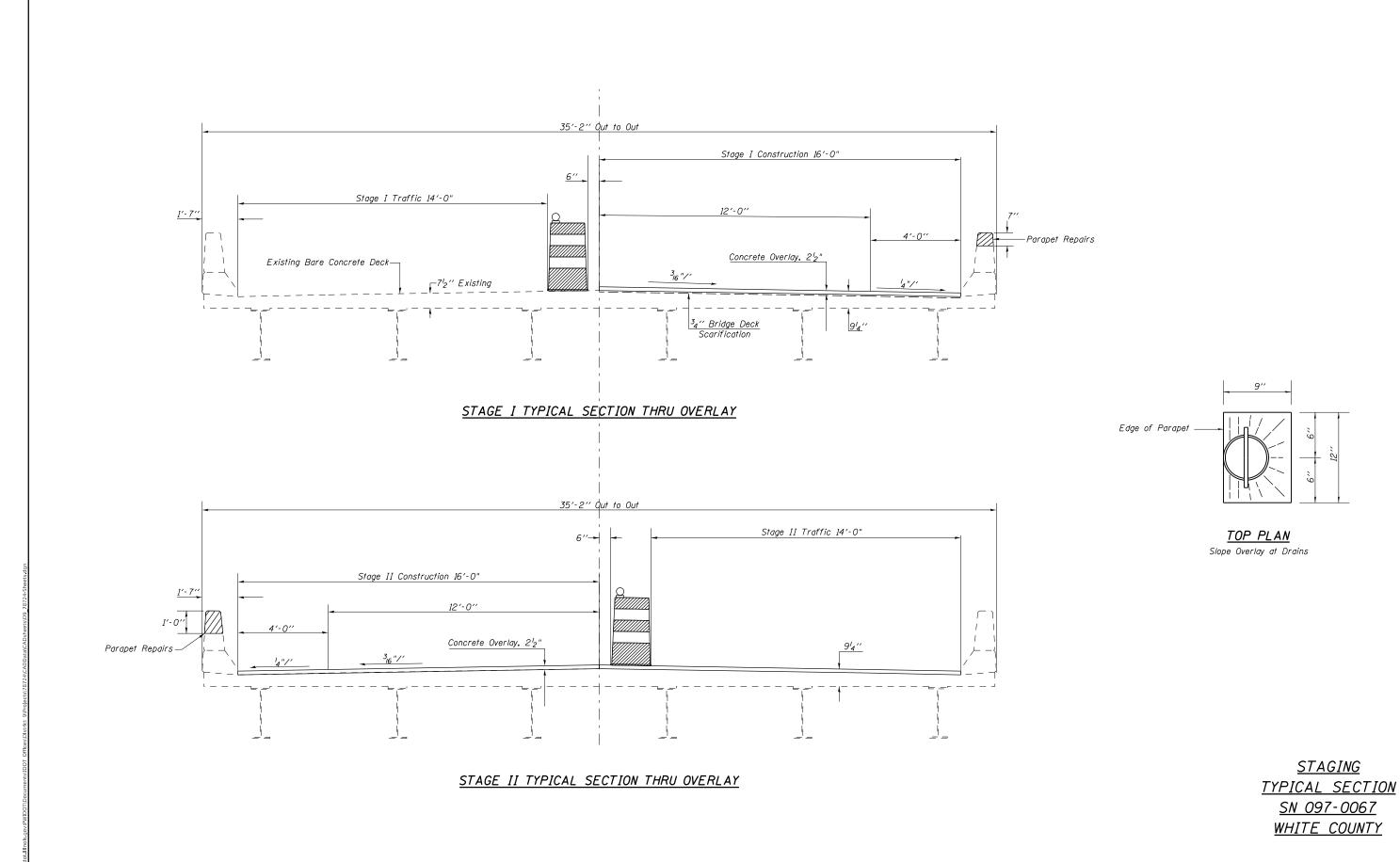
III HMA Surface Removal - Butt Joint

Existing Preformed Joint Seal at Bridge Approach Pavement connector to be removed and filled with an Expansion Board Filler as approved by the Engineer, Sawcul a 1/4" x 3,4" joint into the new HMA Surface and seal with an Elastic Joint Sealer (Full Width), Cost to be included in HMA Surface Course.

CARL DOLLING WITH STRUCTURAL ENGINEER OF ILLE WITH STRUCTURAL ENGI Expires 1/30/2020

USER NAME = henkas DESIGNED - ASH REVISED -DRAWN - ASH REVISED -PLOT SCALE = 32.0000 * / In. CHECKED - MAS REVISED . PLOT DATE = 1/24/2020 DATE • 11/12/19 REVISED

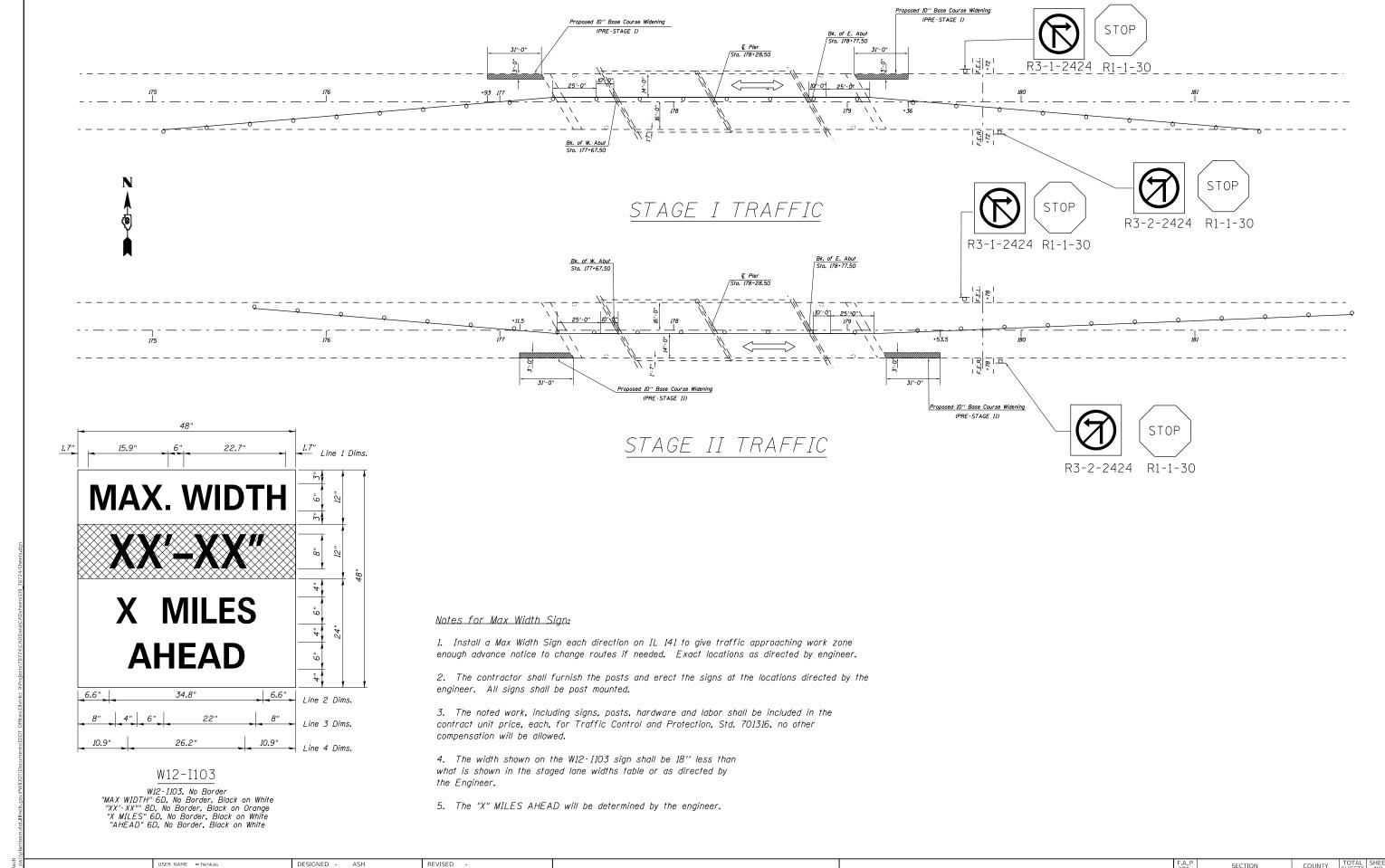
STATE OF ILLINOIS



All sections looking East

JSER NAME = henkas DESIGNED - ASH REVISED -SECTION ## SECTION COUNTY SHEETS NO.

877 D9 BRIDGE DECK REPAIR 2020-1 WHITE 12 8 STATE OF ILLINOIS STAGE CONSTRUCTION DETAILS DRAWN -ASH REVISED PLOT SCALE = 4.0000 / in. REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 78724 PLOT DATE = 12/5/2019 REVISED SHEET OF SHEETS STA. TO STA.



STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PLAN STAGING

SHEETS STA.

SCALE:

SHEET

877 D9 BRIDGE DECK REPAIR 2020-1

WHITE 12 9

CONTRACT NO. 78724

MODEL: Default

DRAWN -

HECKED -

PLOT DATE = 12/5/2019

ASH

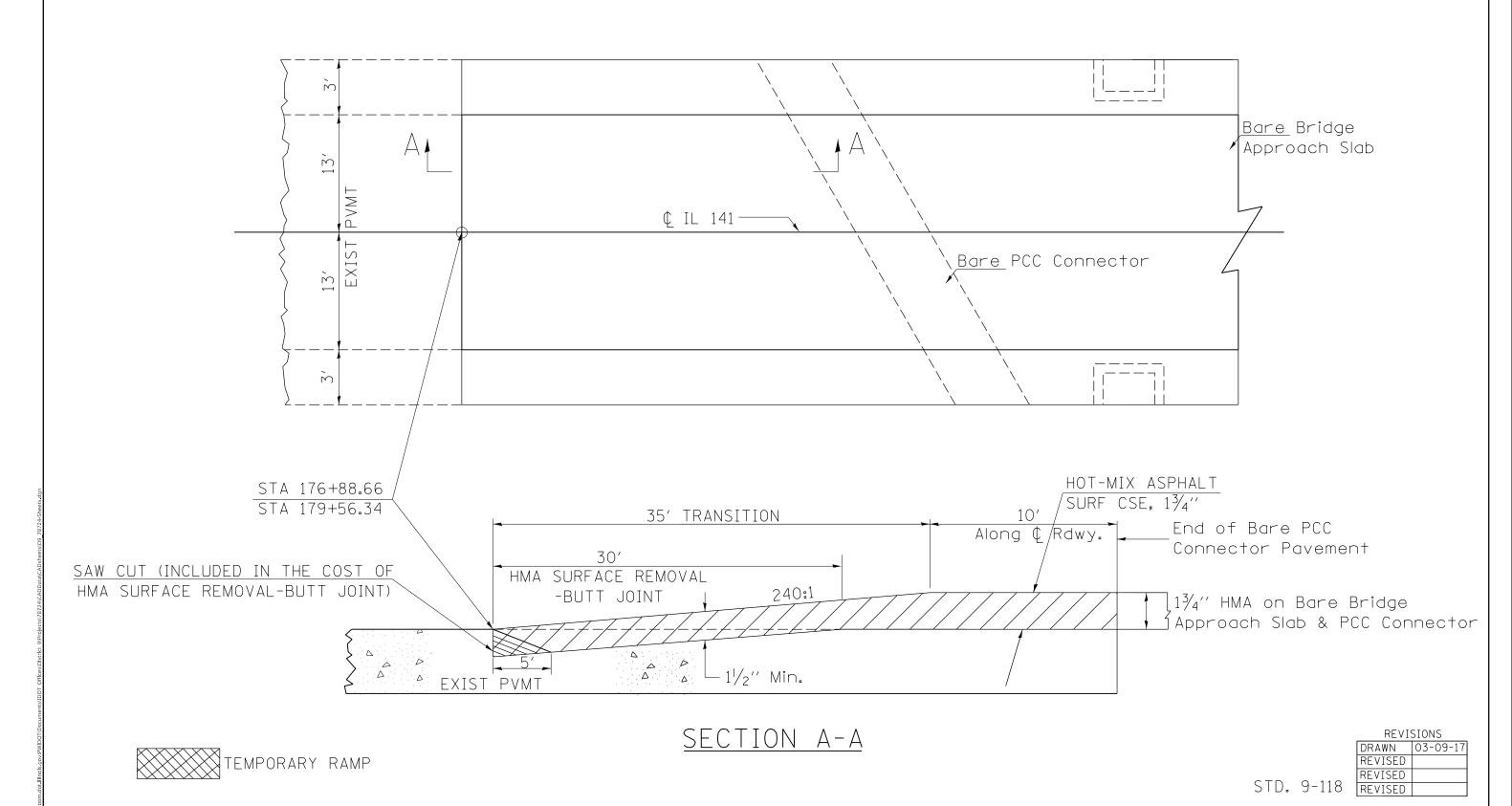
MAS

REVISED

REVISED

REVISED

BUTT JOINT



STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

BUTT JOINT DETAIL

OF SHEETS STA.

TO STA.

SHEET

877 D9 BRIDGE DECK REPAIR 2020-1 WHITE 12 10

CONTRACT NO. 78724

MUDEL: Derault FILE NAME: ow:\\olan!

JSER NAME = henkas

LOT SCALE = 50.0000 ' / in.

PLOT DATE = 12/5/2019

DESIGNED - ASH

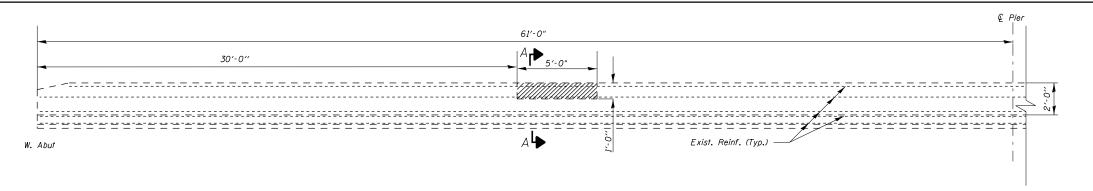
DRAWN - ASH

CHECKED -

REVISED

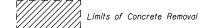
REVISED

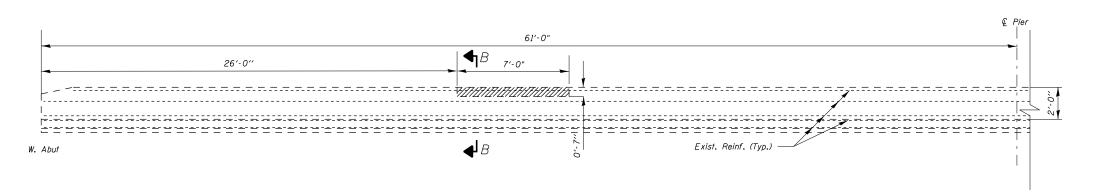
REVISED -



ELEV VIEW OF NORTH PARAPET

Looking North

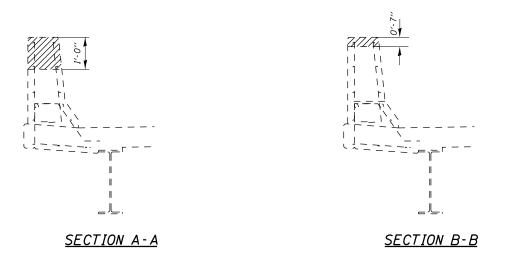




Note: Existing reinforcement shall be cut a min. 2'-7" (or as required) from removal line to provide required min. bar lap as shown on sheet 11 of 11. (Typ.)

ELEV VIEW OF SOUTH PARAPET

Looking North



PARAPET DETAILS

F.A.P. 877 SEC. D9 BRIDGE DECK REPAIR 2020-1

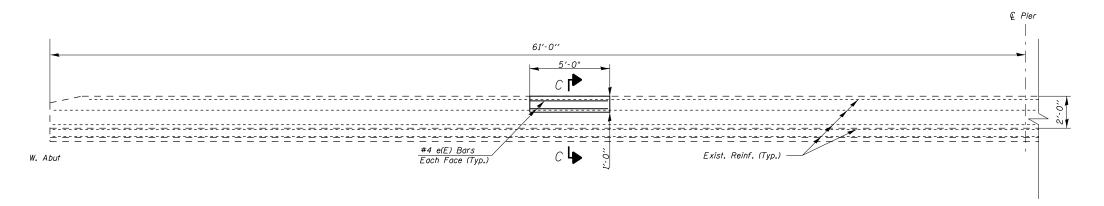
WHITE COUNTY

STATION 178+22.50

STRUCTURE 097-0067

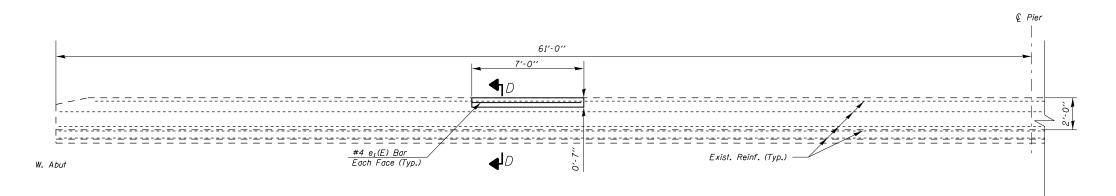
ODER MAINE - HERKOS	DESIGNED - ASIT	INEVISED -		i
	DRAWN - ASH	REVISED -	STATE OF ILLINOIS	i
PLOT SCALE = 6.0000 ' / in.	CHECKED - MAS	REVISED -	DEPARTMENT OF TRANSPORTATION	ı
PLOT DATE = 12/5/2019	DATE - 11/12/19	REVISED -		S

2.2.2.							SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
PARAPET DETAILS						877	77 D9 BRIDGE DECK REPAIR 2020-1			WHITE	12	11
										CONTRACT	NO. 78	3724
CALE:	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. AID PROJECT					



ELEV VIEW OF NORTH PARAPET

Looking North

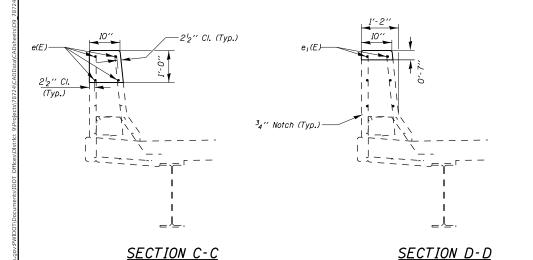


MIN, BAR LAP

#4 Bar = 2'-7"

ELEV VIEW OF SOUTH PARAPET

Looking North



BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE		
e(E)	4	4	4'-8''			
e ₁ (E)	2	6'-8''				
CONCRE	TE SUPER	CU YD	0.6			
CONCRE	TE REMO	CU YD	0.6			
REINFOR COATED	CEMENT	POUND	30			

PARAPET DETAILS

F.A.P. 877 SEC. D9 BRIDGE DECK REPAIR 2020-1

WHITE COUNTY

STATION 178+22.50

STRUCTURE 097-0067

USER NAME = henkas	DESIGNED -	ASH	REVISED -							F.A.P	SECTION	COUNTY	TOTAL	SHEET
	DRAWN -	ASH	REVISED -	STATE OF ILLINOIS				PET DETAILS		877	D9 BRIDGE DECK REPAIR 2020-1	WHITE	12	12
PLOT SCALE = 6.0000 ' / in.	CHECKED -	MAS	REVISED -	DEPARTMENT OF TRANSPORTATION						CONTRAC	T NO. 78	8724		
PLOT DATE = 12/5/2019	DATE -	11/12/19	REVISED -		SCALE:	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED. A	D PROJECT		