

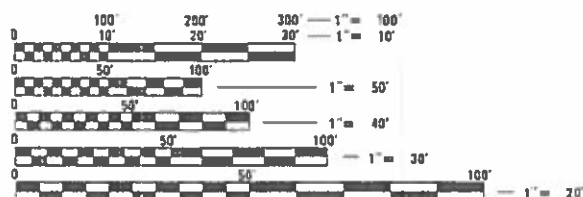
FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYSPROPOSED
HIGHWAY PLANSFAU ROUTE 383: IL 113 (JOHNSON RD.) OVER FAI ROUTE 55 (I-55)
SECTION 2019-086-BR
BRIDGE REPAIRS
SN 099-0151
WILL COUNTY
C-91-003-20THE IMPROVEMENT IS LOCATED IN THE CITY OF BRAIDWOOD,
WILMINGTON TOWNSHIP AND REED TOWNSHIP

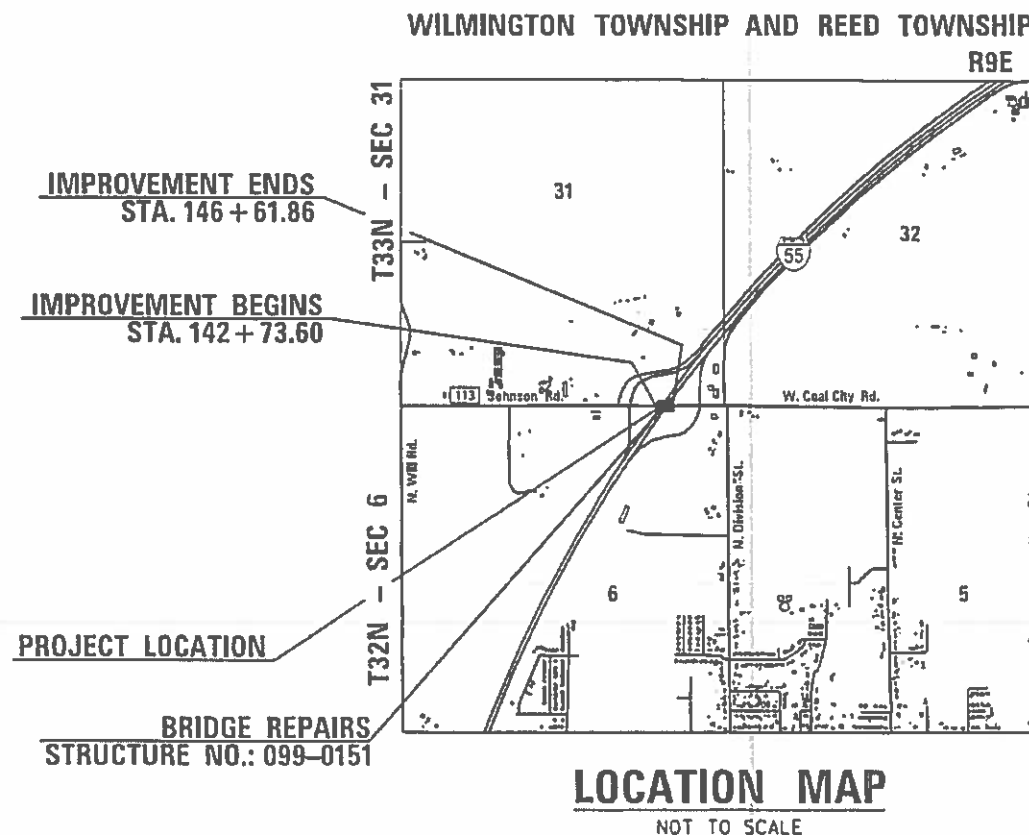
DESIGN DESIGNATION:

OTHER PRINCIPAL ARTERIAL

TRAFFIC DATA:

AADT (2019)=11,100
POSTED SPEED=45 MPHFULL 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 811PROJECT ENGINEER: PRAVEEN KAINI, PE
(847) 705-4237PROJECT MANAGER: FAWAD AQUEEL, PE, PTOE
(847) 705-4247

CONTRACT NO. 62J60

GROSS LENGTH = 388 FT. = 0.073 MILE
NET LENGTH = 388 FT. = 0.073 MILE

wood.

ILLINOIS PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-003962-0014DATE 10/10/19
LICENSE EXPIRES ON 11/30/2019FOR STRUCTURAL SEAL SEE SHEET
NO. 16 (GENERAL PLAN AND
ELEVATION)

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
383	2019-086-BR	WILL	* 35	1
ILLINOIS			CONTRACT NO. 62J60	

* 35 + 2 = 37 TOTAL SHEETS

D-91-225-20

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 09/08/15 2019

Anthony J. Drangy, Regional Engineer

Dec 19 2019, Engineer of Design and Environment

Dec 19 2019, Director of Highways Project Implementation

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS3745 W. HIGGINS ROAD
SUITE 300
CHICAGO, IL 60631
773-693-6030

INDEX OF SHEETS:

1	COVER SHEETS
2	HIGHWAY STANDARDS, GENERAL NOTES AND COMMITMENTS
3-5	SUMMARY OF QUANTITIES
6	SCHEDULES OF QUANTITIES
7	REMOVAL AND SEDIMENT CONTROL PLAN
8	ROADWAY PLAN
9-13	STAGING AND TRAFFIC CONTROL PLANS
14	PAVEMENT MARKING PLAN
15	ROADWAY DETAILS
16-31	STRUCTURAL PLANS
32-35	DISTRICT ONE DETAILS

HIGHWAY STANDARDS

STANDARD NO	DESCRIPTION
000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
606301-04	PC CONCRETE ISLANDS AND MEDIANS
701006-05	OFF-ROAD OPERATIONS 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF-ROAD MOVING OPERATIONS 2L, 2W, DAY ONLY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701400-09	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-12	LANE CLOSURE, FREEWAY/EXPRESSWAY
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-09	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

DISTRICT 1 STANDARDS

STANDARD NO	DESCRIPTION
TC-09	TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI-LANE WEAVE
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-16	SHORT TERM PAVEMENT MARKING LETTER AND SYMBOLS
TC-17	TRAFFIC CONTROL DETAIL FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES
TC-22	ARTERIAL ROAD INFORMATION SIGN

COMMITMENTS

NO COMMITMENTS FOR THIS PROJECT.

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES (48 HOUR NOTIFICATION IS REQUIRED).
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, CITY OF BRAIDWOOD, WILMINGTON TOWNSHIP AND REED TOWNSHIP.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- ANY PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
- WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1½ INCHES WHERE SPEED LIMIT IS 45 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H) OR A NOTED LONGITUDINAL WEDGE IS USED.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE PREFERENCE. ALL EXISTING PAVEMENT MARKING LINES AND REVISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- THE RESIDENT ENGINEER SHALL CONTACT ERIC CAMPOS THE AREA TRAFFIC FIELD ENGINEER AT ERIC.CAMPOS@ILLINOIS.GOV. A MINIMUM OF TWO WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCED OF BEGINNING WORK.
- 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 BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHOWN ON ROADWAY DETAILS SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- SEE THE EXPRESSWAY OPEN TO TRAFFIC CONTROL SPECIAL PROVISIONS FOR LANE AND SHOULDER CLOSURE REQUIREMENTS ON I-55


HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	PERCENT AIR VOIDS @NDEN	QUALITY MANAGEMENT PROGRAM (QMP)
OVERLAY AND BRIDGE APPROACH		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70: 1 3/4"	4% @ 70 GYR	QC/OA
PROPOSED PAVEMENT		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70: 2"	4% @ 70 GYR	QC/OA
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70: 8"	4% @ 70 GYR	QC/OA
TEMPORARY PAVEMENT		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70: 2"	4% @ 70 GYR	QC/OA
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70: 8"	4% @ 70 GYR	QC/OA
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/OA)		

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE COURSE IS 112 LBS/SQ YD/IN. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS. QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

	USER NAME = kendy.estimote	DESIGNED - KE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 113 OVER I-55 INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES AND COMMITMENTS			F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - GP	REVISED -					383	2019-086-BR	WILL	35	2
	PLOT SCALE = 40.0000' / in.	CHECKED - PK	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			CONTRACT NO. 62J60				
	PLOT DATE = 11/15/2019	DATE - 10/17/19	REVISED -					ILLINOIS FED. AID PROJECT				

				CONSTR. CODE
				100% STATE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE
				0047
				SN 099-0151
28000305	TEMPORARY DITCH CHECKS	FOOT	14	14
28000500	INLET AND PIPE PROTECTION	EACH	12	12
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	2,033	2,033
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	295	295
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	228	228
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	123	123
42001300	PROTECTIVE COAT	SQ YD	178	178
44000100	PAVEMENT REMOVAL	SQ YD	178	178
50102400	CONCRETE REMOVAL	CU YD	15	15
50157300	PROTECTIVE SHIELD	SQ YD	420	420
50300225	CONCRETE STRUCTURES	CU YD	24.5	24.5
50300255	CONCRETE SUPERSTRUCTURE	CU YD	16	16
50300260	BRIDGE DECK GROOVING	SQ YD	980	980
50300300	PROTECTIVE COAT	SQ YD	1,038	1,038
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	2,730	2,730
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	4,140	4,140
				*SPECIALTY ITEMS

	USER NAME : petar.knezevic	DESIGNED - KE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 113 OVER I-55 SUMMARY OF QUANTITIES			F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - GP	REVISED -					383	2019-086-BR	WILL	35	3
	PLOT SCALE : 40.0000 ' / in.	CHECKED - PK	REVISED -					CONTRACT NO. 62J60				
	PLOT DATE : 10/17/2019	DATE - 10/17/19	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT

				CONSTR. CODE	
				100% STATE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE	
				0047	
				SN 099-0151	
50800515	BAR SPLICERS	EACH	44	44	
50800530	MECHANICAL SPLICERS	EACH	34	34	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	105	105	
58700300	CONCRETE SEALER	SQ FT	5,010	5,010	
60260100	INLETS TO BE ADJUSTED	EACH	4	4	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	
67100100	MOBILIZATION	L SUM	1	1	
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	10,367	10,367	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1,700	1,700	
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	72.8	72.8
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	975	975
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2,212	2,212
	70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	457	457
	70600332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4	4
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	264	264
*	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	1,380	1,380
*	78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	204	204
*	78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	142	142
	X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	287	287
*	X4400100	PORTLAND CEMENT CONCRETE SURFACE REMOVAL (VARIABLE DEPTH)	SQ YD	82	82

*SPECIALTY ITEMS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				100% STATE
				BRIDGE
				0047
				SN 099-0151
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	103	103
X4403300	CONCRETE MEDIAN REMOVAL	SQ FT	1,603	1,603
X6060500	CORRUGATED MEDIAN REMOVAL	SQ FT	2,882	2,882
X6061100	CONCRETE MEDIAN, TYPE SB (SPECIAL)	SQ FT	1,603	1,603
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	3421	3421
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	3	3
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	2,670	2,670
Z0001905	STRUCTURAL STEEL REPAIR	POUND	530	530
Z0006014	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2 INCHES	SQ YD	1,010	1,010
Z0012130	BRIDGE DECK SCARIFICATION3/4"	SQ YD	1,010	1,010
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	353	353
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	3	3
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4
	STEEL PLATE	L SUM	1	1

*SPECIALTY ITEMS

SEDIMENT CONTROL SCHEDULE			
LOCATION		28000305	28000500
		TEMPORARY DITCH CHECKS	INLET AND PIPE PROTECTION
STATION	LT/RT	FOOT	EACH
139+15.52	RT	7	
149+82.71	RT	7	
139+43.13	RT		1
139+60.70	LT		1
141+31.21	RT		1
141+49.50	LT		1
143+14.98	RT		1
143+42.94	LT		1
145+89.52	RT		1
146+19.05	LT		1
147+74.21	RT		1
147+99.51	LT		1
149+76.42	RT		1
150+02.98	LT		1
TOTAL		14	12

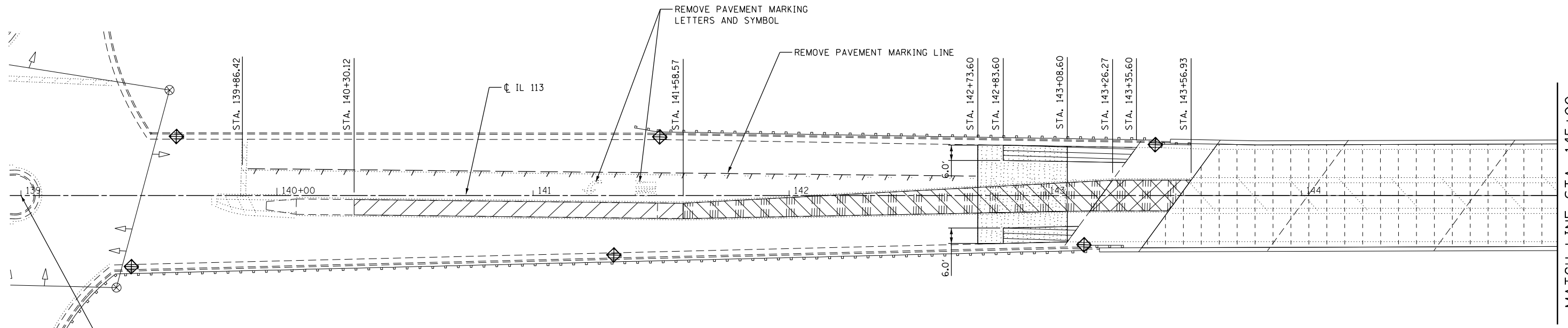
PAVEMENT SCHEDULE										
LOCATION				40600290	40600982	40603085	40604062	44000100	*X4400100	*X4401198
				BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	PAVEMENT REMOVAL	PORTLAND CEMENT CONCRETE SURFACE REMOVAL (VARIABLE DEPTH)	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
STATION	TO	STATION	LT/RT	POUND	SQ YD		TON	SQ YD	SQ YD	SQ YD
142+73.60		143+08.60	LT/RT		148					
146+26.86		146+61.86	LT/RT		147					
140+30.12		143+26.00	LT/RT	422		112	28			
140+30.12		141+58.57	LT/RT					86		
146+18.00		149+15.72	LT/RT	435		116	28			
147+77.17		149+15.72	LT/RT					92		
142+73.60		143+37.61	LT/RT	594			34			
145+68.12		146+61.86	LT/RT	582			33		41	
143+26.27		143+56.93	LT/RT						41	
145+86.93		146+17.60	LT/RT							
142+83.60		143+35.60	LT							33
142+83.60		143+08.60	RT							18
146+26.86		146+51.86	LT							19
145+98.57		146+51.86	RT							33
143+17.48		143+47.48	RT							
143+26.27		143+56.27	LT							
145+78.82		146+08.82	RT							
145+87.60		146+17.60	LT							
TOTAL				2,033	295	228	123	178	82	103

MEDIAN SCHEDULE							
LOCATION				42001300	*X4403300	*X8060500	*X8061100
				PROTECTIVE COAT	CONCRETE MEDIAN REMOVAL	CORRUGATED MEDIAN REMOVAL	CONCRETE MEDIAN, TYPE SB (SPECIAL)
STATION	TO	STATION	LT/RT	SQ YD	SQ FT	SQ FT	SQ YD
140+30.12		141+58.57	RT	86	770		770
147+77.17		149+15.72	LT	92	833		833
141+58.57		143+26.27	LT/RT			1,433	
146+08.82		147+77.17	LT/RT			1,449	
TOTAL				178	1,603	2,882	1,603

INLET SCHEDULE		
LOCATION		60260100
		INLETS TO BE ADJUSTED
STATION	LT/RT	EACH
143+14.98	RT	1
143+42.94	LT	1
145+89.52	RT	1
146+19.05	LT	1
TOTAL		4

TEMPORARY PAVEMENT MARKING SCHEDULE					*70300904	*X7030005
LOCATION				DESCRIPTION	PAVEMENT MARKING TAPE, TYPE IV 4"	TEMPORARY PAVEMENT MARKING REMOVAL
STATION	TO	STATION	LT/RT			
PRE-STAGE					FOOT	SQ FT
139+87.05		140+30.17	LT	WHITE SOLID	43.1	14.2
140+30.17		141+58.75	LT	SOLID DOTTED	32.1	10.4
147+77.17		149+15.66	RT	SOLID DOTTED	34.6	11.4
149+15.66		149+76.00	RT	WHITE SOLID	60.3	19.9
140+30.17		149+43.11	LT	YELLOW SOLID	912.9	301.3
140+07.52		149+15.69	RT	YELLOW SOLID	908.2	299.7
140+00.00			LT	ARROW	45.5	15.0
140+24.00			LT	LETTERS	64.1	21.2
STAGE I						
139+87.05		141+20.70	LT	WHITE SOLID	133.7	44.1
139+25.60		148+71.86	RT	WHITE SOLID	947.6	312.7
141+20.70		142+63.21	LT	SOLID DOTTED	35.6	11.8
140+30.19		149+15.68	LT/RT	YELLOW DOUBLE	2,441.2	805.6
147+55.20		148+71.86	RT	SOLID DOTTED	29.2	9.6
148+71.86		149+76.02	RT	WHITE SOLID	104.2	34.4
STAGE II						
139+87.05		140+93.60	LT	WHITE SOLID	106.6	35.2
140+93.60		150+09.86	LT	WHITE SOLID	916.2	302.4
140+93.60		141+90.30	LT	SOLID DOTTED	24.2	8.0
140+30.19		149+15.68	LT/RT	YELLOW DOUBLE	2,470.1	815.1
146+72.28		148+00.50	RT	SOLID DOTTED	32.1	10.6
148+00.50		149+76.02	RT	WHITE SOLID	175.5	57.9
STAGE III						
139+87.05		140+30.17	LT	WHITE SOLID	43.1	14.2
140+30.17		141+58.75	LT	SOLID DOTTED	32.1	10.6
147+77.17		149+15.66	RT	SOLID DOTTED	34.6	11.4
149+15.66		149+76.00	RT	WHITE SOLID	60.3	19.9
140+30.17		149+43.11	LT	YELLOW SOLID	912.9	301.3
140+07.52		149+15.69	RT	YELLOW SOLID	908.2	299.7
TOTAL					11,508	3,798

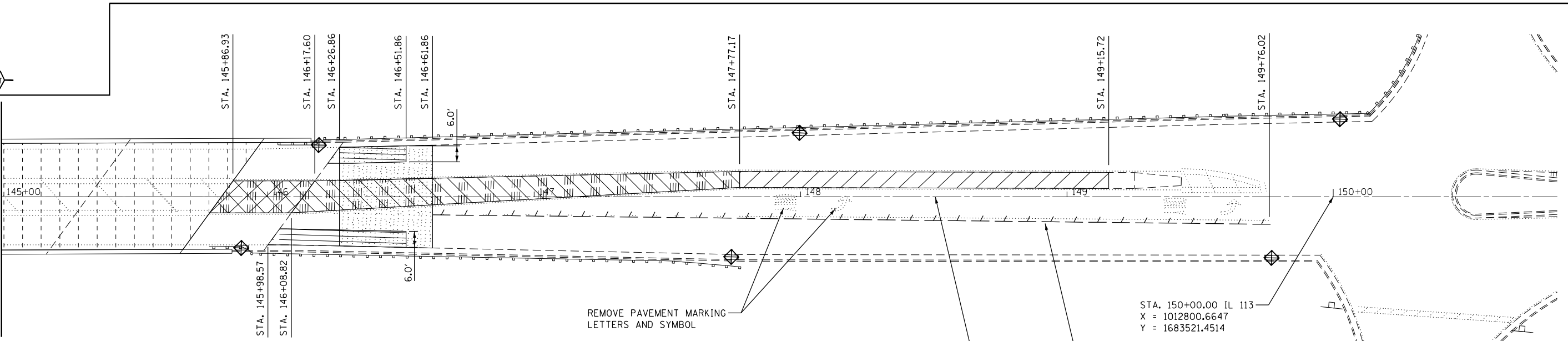
PERMANENT PAVEMENT MARKING SCHEDULE											
LOCATION				DESCRIPTION	78000100	78000200	78000400	78000600	78009004	78009012	X0327979
					THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	PAVEMENT MARKING REMOVAL - GRINDING
STATION	TO	STATION	LT/RT		SQ FT	FOOT	FOOT	FOOT	FOOT	FOOT	SQ FT
141+21.00			LT	ARROW	15.6						
141+44.00			LT	LETTERS	20.8						
147+91.00			RT	LETTERS	20.8						
148+15.00			RT	ARROW	15.6						
143+08.60		143+39.36	RT	WHITE EDGE		30.7					
143+35.60		143+65.73	LT	WHITE EDGE		30.1					
143+39.36		145+69.36	RT	WHITE EDGE					230.0		
143+65.73		145+95.73	LT	WHITE EDGE					230.0		
145+69.36		146+00.65	RT	WHITE EDGE		31.3					
145+95.73		146+26.86	LT	WHITE EDGE		31.1					
140+30.11		141+58.57	RT	YELLOW EDGE		128.5					
140+30.11		141+58.50	RT	YELLOW EDGE		128.5					
147+77.17		149+15.70	LT	YELLOW EDGE		138.5					
147+77.17		149+15.70	RT/LT	YELLOW EDGE		138.5					
141+58.57		143+52.54	LT/RT	DOUBLE YELLOW		387.9					
141+58.50		143+52.54	RT	DOUBLE YELLOW		388.1					
143+52.54		145+82.54	LR	DOUBLE YELLOW					460.0		
143+52.54		145+82.54	RT	DOUBLE YELLOW					460.0		
145+82.54		147+77.17	LT	DOUBLE YELLOW		389.3					
145+82.54		147+77.17	LT/RT	DOUBLE YELLOW		389.3					
139+86.42		141+58.69	LT	WHITE TURN			172.3				
147+77.09		149+76.02	RT	WHITE TURN			198.9				
141+58.69		143+29.32	LT	SKIP DASH			42.7				
146+05.77		147+77.09	RT	SKIP DASH			42.8				
141+58.57		143+52.54	LT/RT	DIAGONALS				135.0			
145+82.54		147+77.17	LT/RT	DIAGONALS				129.0			
143+52.54		145+82.54	LT/RT	DIAGONALS						204.0	
139+86.42		141+58.69	LT	WHITE TURN							86.1
147+77.09		149+76.02	RT	WHITE TURN							99.5
141+58.69		142+73.60	LT	SKIP DASH							14.4
146+61.86		147+77.09	RT	SKIP DASH							14.4
141+22.00			LT	ARROW							15.6
141+43.00			LT	LETTERS							20.8
147+94.00			RT	LETTERS							20.8
148+15.00			RT	ARROW							15.6
TOTAL					72.8	2,212	457	264	1,380	204	287



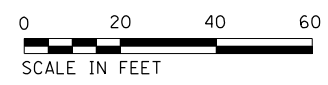
STA. 139+00.00 IL 113
X = 1011701.1919
Y = 1683487.3975



MATCH LINE STA. 145+00



STA. 150+00.00 IL 113
X = 1012800.6647
Y = 1683521.4514



LEGEND:

- | | | | |
|--|-----------------------------------------------------------|--|---------------------------|
| | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | | BRIDGE DECK SCARIFICATION |
| | PORTLAND CEMENT CONCRETE SURFACE REMOVAL (VARIABLE DEPTH) | | INLET AND PIPE PROTECTION |
| | CONCRETE MEDIAN REMOVAL/TEMPORARY PAVEMENT | | TEMPORARY DITCH CHECK |
| | HOT-MIX ASPHALT SURFACE REMOVAL VARIABLE DEPTH | | PAVEMENT MARKING REMOVAL |
| | CORRUGATED MEDIAN REMOVAL/PROPOSED PAVEMENT | | |

NOTES:

1. SEE ROADWAY DETAILS SHEET FOR MORE INFO ON HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT AND HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH.
2. SEE STRUCTURAL PLANS FOR BRIDGE DECK SCARIFICATION.
3. IL 113 CENTERLINE IS ESTABLISHED FROM EXISTING PLANS.



USER NAME = kenny.estimable	DESIGNED - KE	REVISED -
	DRAWN - GP	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - PK	REVISED -
PLOT DATE = 11/18/2019	DATE - 10/17/19	REVISED -

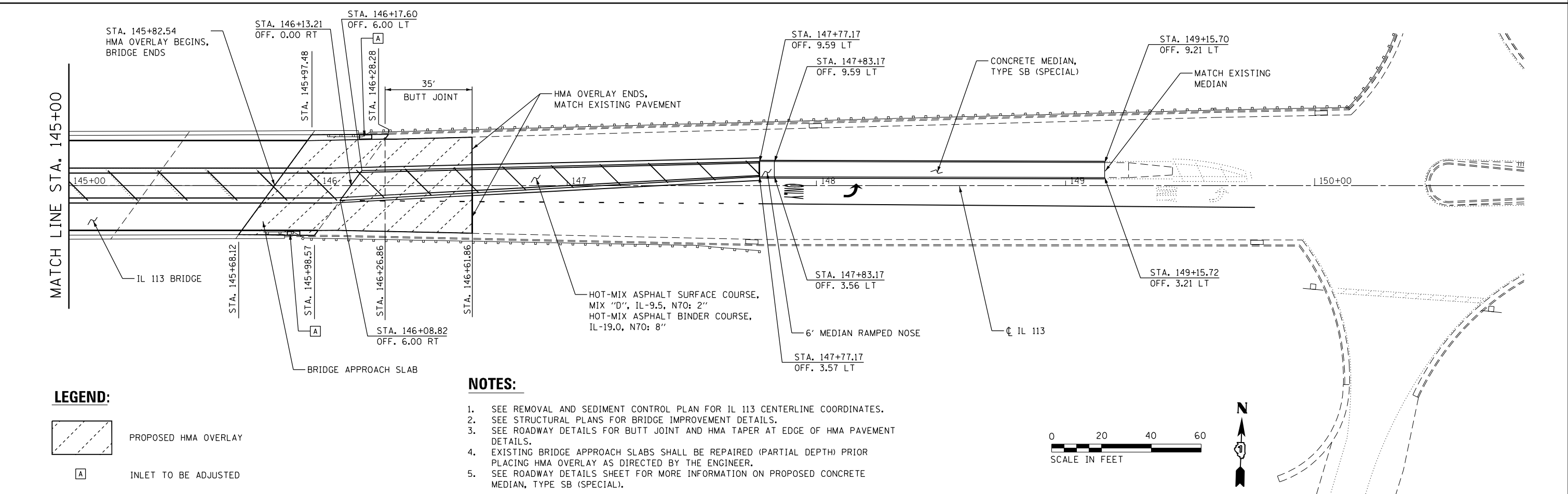
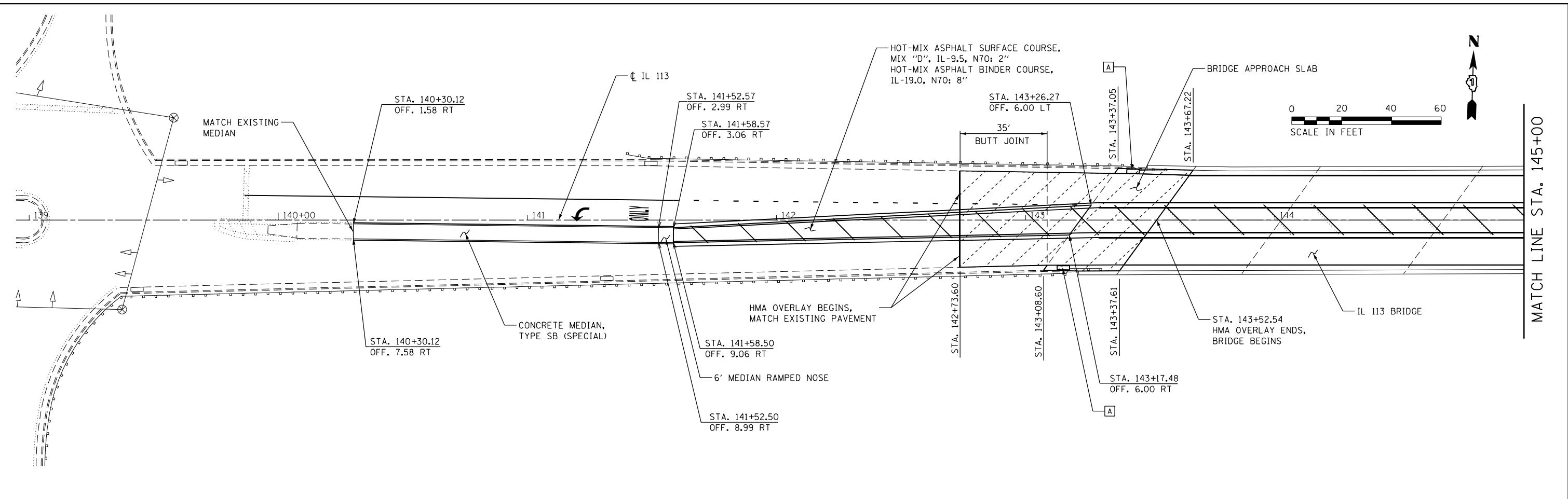
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 113 OVER I-55
REMOVAL AND SEDIMENT CONTROL PLAN

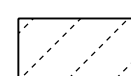

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
383	2019-086-BR	WILL	35	7
CONTRACT NO. 62J60				

ILLINOIS FED. AID PROJECT



LEGEND:

-  PROPOSED HMA OVERLAY
-  INLET TO BE ADJUSTED

NOTES:

1. SEE REMOVAL AND SEDIMENT CONTROL PLAN FOR IL 113 CENTERLINE COORDINATES.
2. SEE STRUCTURAL PLANS FOR BRIDGE IMPROVEMENT DETAILS.
3. SEE ROADWAY DETAILS FOR BUTT JOINT AND HMA TAPER AT EDGE OF HMA PAVEMENT DETAILS.
4. EXISTING BRIDGE APPROACH SLABS SHALL BE REPAIRED (PARTIAL DEPTH) PRIOR PLACING HMA OVERLAY AS DIRECTED BY THE ENGINEER.
5. SEE ROADWAY DETAILS SHEET FOR MORE INFORMATION ON PROPOSED CONCRETE MEDIAN, TYPE SB (SPECIAL).

wood.

USER NAME = kenny.estimable	DESIGNED - KE	REVISED -
	DRAWN - GP	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - PK	REVISED -
PLOT DATE = 11/15/2019	DATE - 10/17/19	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 113 OVER I-55
ROADWAY PLAN**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
383	2019-086-BR	WILL	35	8
CONTRACT NO. 62J60				
ILLINOIS FED. AID PROJECT				

STAGING GENERAL NOTES:

1. ONE LANE OF TRAFFIC SHALL BE MAINTAINED IN EACH DIRECTION AT ALL TIME. LANE WIDTH SHALL BE A MINIMUM OF 10 FT.
2. EXISTING TRAFFIC SIGNALS SHALL REMAIN DURING CONSTRUCTION. SIGNAL TIMING AND SIGNAL HEAD LOCATIONS SHALL REMAIN THE SAME.
3. TEMPORARY PAVEMENT MARKINGS SHALL BE TAPE, TYPE IV.
4. EXISTING PAVEMENT MARKINGS IN CONFLICT WITH TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED.

PRE-STAGE

- PLACE TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PLANS.
- REMOVE THE CORRUGATED MEDIANS AND REPLACE WITH PROPOSED PAVEMENT.
- REMOVE PART OF THE RAISED MEDIANS AND REPLACE WITH TEMPORARY PAVEMENT.
- PAVEMENT OPENING DROP OFFS CAUSE BY CORRUGATED/RAISED MEDIANS REMOVAL SHALL NOT BE GREATER THAN 12".
- PAVEMENT OPENINGS CAUSE BY CORRUGATED/RAISED MEDIANS REMOVAL SHALL BE FILLED WITH PROPOSED/TEMPORARY PAVEMENT WITHIN 2 DAYS.
- SEE REMOVAL AND SEDIMENT CONTROL PLAN FOR REMOVAL LOCATIONS.

STAGE I

- NARROW TRAVEL LANES TO 10 FT AS SHOWN ON THE PLANS.
- SHIFT EASTBOUND TRAFFIC TO THE MEDIAN REPLACED PREVIOUSLY WITH PROPOSED/TEMPORARY PAVEMENT. SEE PLANS FOR LANE TRANSITIONS.
- PROCEED WITH WORK ON THE SOUTH SIDE OF THE BRIDGE.
- PERFORM HMA SURFACE REMOVAL-BUT JOINT ON THE SOUTH SECTION FROM STA.142+73.60 TO STA.143+08.60 AND STA.146+26.86 TO STA.146+61.86 AND PLACE OVERLAY FROM STA.142+73.60 TO STA.143+37.61 AND STA.145+68.12 TO STA.146+61.86

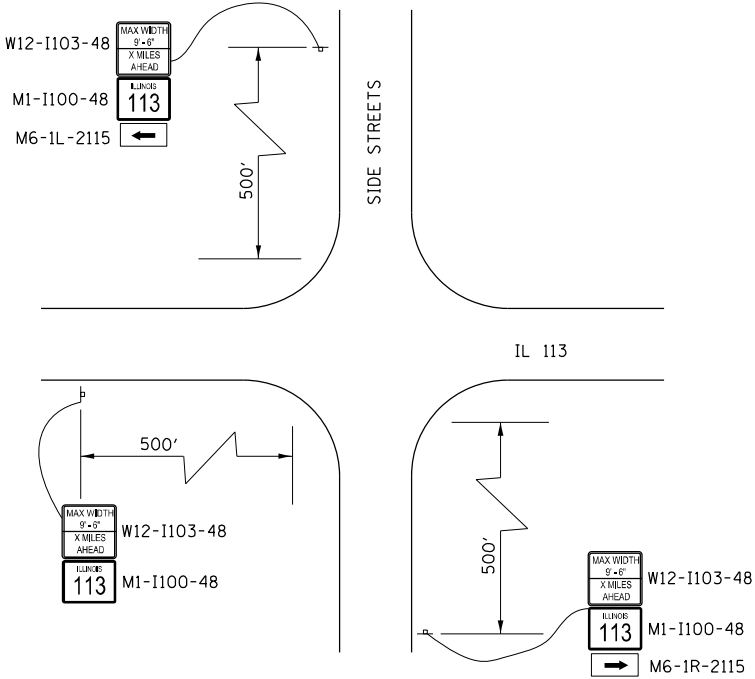
STAGE II

- NARROW TRAVEL LANES TO 10 FT AS SHOWN ON THE PLANS.
- SHIFT WESTBOUND TRAFFIC TO THE MEDIAN REPLACED PREVIOUSLY WITH PROPOSED/TEMPORARY PAVEMENT. SEE PLANS FOR LANE TRANSITIONS.
- PROCEED WITH WORK ON THE NORTH SIDE OF THE BRIDGE.
- PERFORM HMA SURFACE REMOVAL-BUT JOINT ON THE NORTH SECTION FROM STA.142+73.60 TO STA.143+08.60 AND STA.146+26.86 TO STA.146+61.86 AND PLACE OVERLAY FROM STA.142+73.60 TO STA.143+67.22 AND STA.145+97.48 TO STA.146+61.86

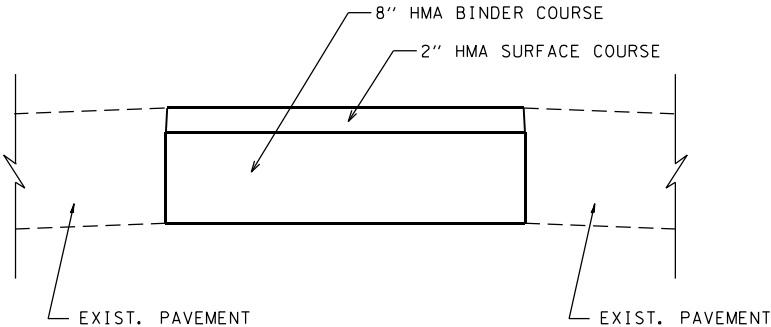
STAGE III

- NARROW TRAVEL LANES TO 10 FT.
- PLACE TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PLANS.
- COMPLETE WORK ON THE MIDDLE SECTION OF THE BRIDGE.
- PERFORM HMA SURFACE REMOVAL-BUT JOINT ON THE MIDDLE SECTION FROM STA.142+73.60 TO STA.143+08.60 AND STA.146+26.86 TO STA.146+61.86 AND PLACE OVERLAY FROM STA.142+73.60 TO STA.143+52.54 AND STA.145+82.54 TO STA.146+61.86
- REMOVE TEMPORARY PAVEMENT AND REPLACE WITH RAISED MEDIAN.
- PAVEMENT OPENING DROP OFFS CAUSE BY TEMPORARY PAVEMENT REMOVAL SHALL NOT BE GREATER THAN 12".
- PAVEMENT OPENINGS CAUSE BY TEMPORARY PAVEMENT REMOVAL SHALL BE REPLACED WITH RAISED MEDIANS WITHIN 2 DAYS.
- REMOVE TEMPORARY PAVEMENT MARKINGS AND REPLACE WITH PERMANENT PAVEMENT MARKINGS. SEE PAVEMENT MARKING PLAN FOR MORE INFO.

NOTE:
3 WIDTH RESTRICTION SIGNS SHALL BE PLACED AT EACH OF THE INTERSECTIONS OF IL 113 WITH IL 47, CARBON HILL ROAD AND BROADWAY STREET AS SHOWN BELOW.



ADDITIONAL SIGNS DETAIL



TEMPORARY PAVEMENT
STA.140+30.12 TO STA.141+58.57
STA.147+77.17 TO STA.149+15.72

PROPOSED PAVEMENT
STA.141+58.57 TO STA.143+26.27
STA.146+08.82 TO STA.147+77.17

PROPOSED AND TEMPORARY PAVEMENT
DETAIL

	USER NAME = kendy.estimable	DESIGNED - KE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 113 OVER I-55 STAGING AND TRAFFIC CONTROL PLAN (NOTES)				F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - GP	REVISED -						383	2019-086-BR	WILL	35	9
	PLOT SCALE = 40.0000 ' / in.	CHECKED - PK	REVISED -						CONTRACT NO. 62J60				
	PLOT DATE = 11/18/2019	DATE - 10/17/19	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT	

NOTE:
SEE SHEET NO. 9 FOR
ADDITIONAL SIGNS DETAILS

MAX WIDTH
9'-6"
AHEAD ON
ILLINOIS
113

W12-I102-48
M1-I100-48

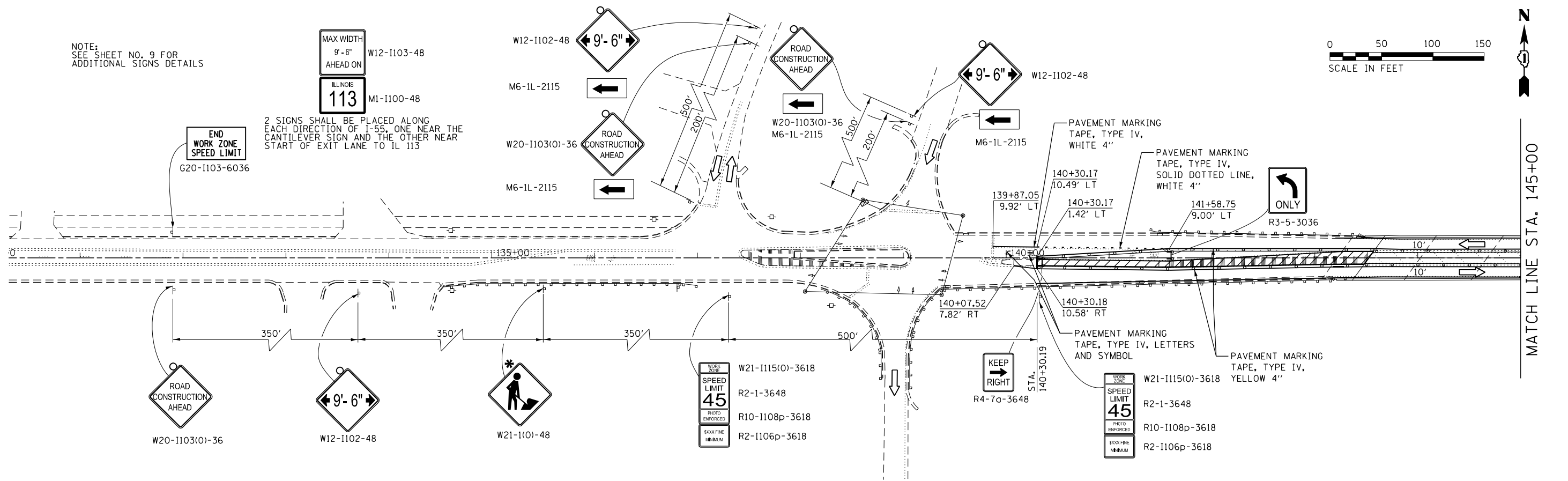
2 SIGNS SHALL BE PLACED ALONG
EACH DIRECTION OF I-55, ONE NEAR THE
CANTILEVER SIGN AND THE OTHER NEAR
START OF EXIT LANE TO IL 113

END
WORK ZONE
SPEED LIMIT
G20-I103-6036

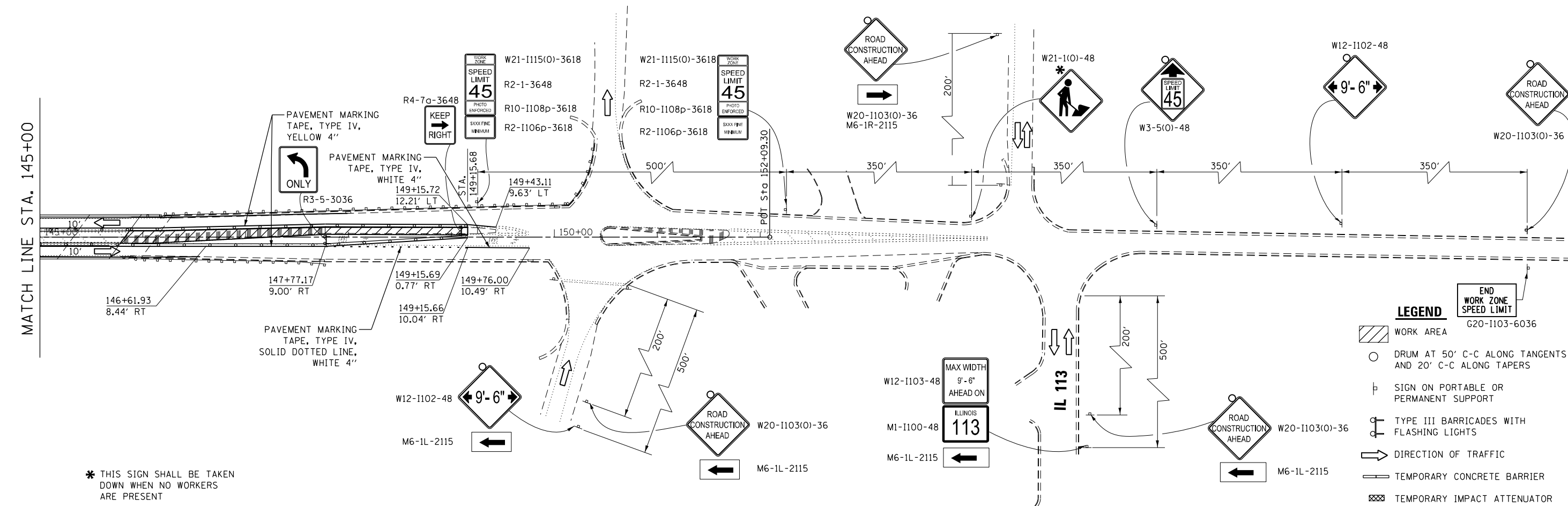
0 50 100 150
SCALE IN FEET



MATCH LINE STA. 145+00



MATCH LINE STA. 145+00



* THIS SIGN SHALL BE TAKEN
DOWN WHEN NO WORKERS
ARE PRESENT

LEGEND

- WORK AREA
- DRUM AT 50' C-C ALONG TANGENTS
AND 20' C-C ALONG TAPERS
- SIGN ON PORTABLE OR
PERMANENT SUPPORT
- TYPE III BARRICADES WITH
FLASHING LIGHTS
- DIRECTION OF TRAFFIC
- TEMPORARY CONCRETE BARRIER
- TEMPORARY IMPACT ATTENUATOR

wood.

USER NAME = kendy.estimable
PLOT SCALE = 100.0000' / in.
PLOT DATE = 11/15/2019

DESIGNED - KE
DRAWN - GP
CHECKED - PK
DATE - 10/17/19

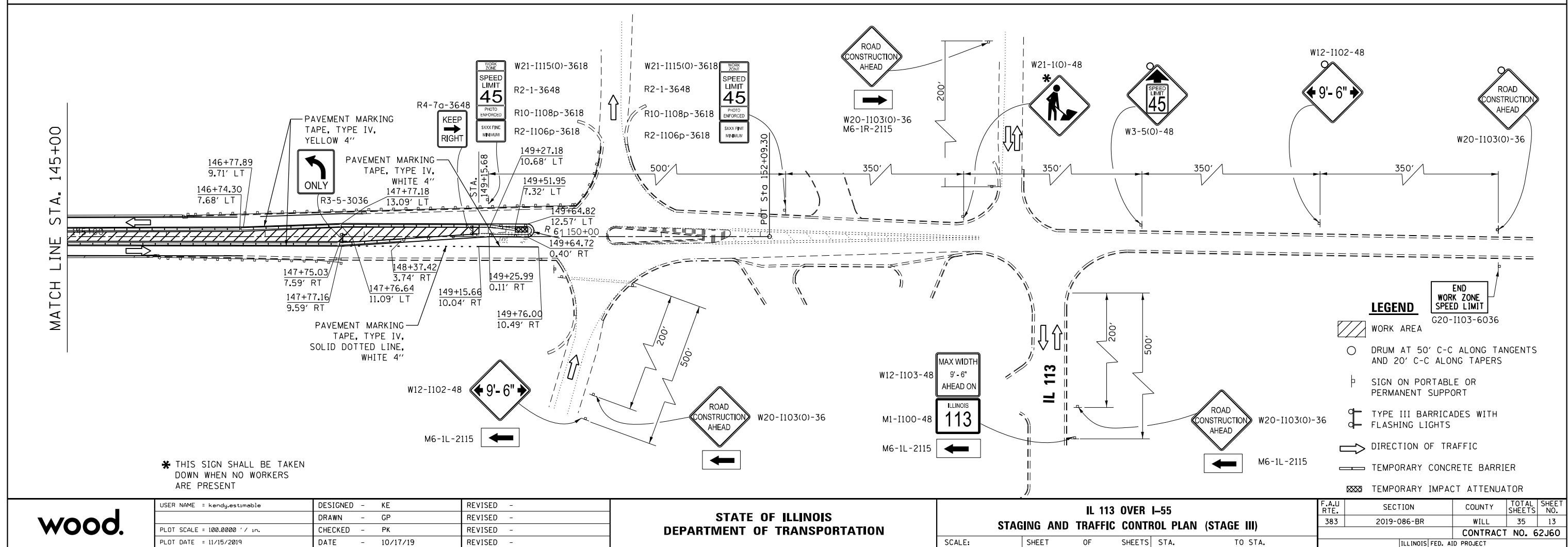
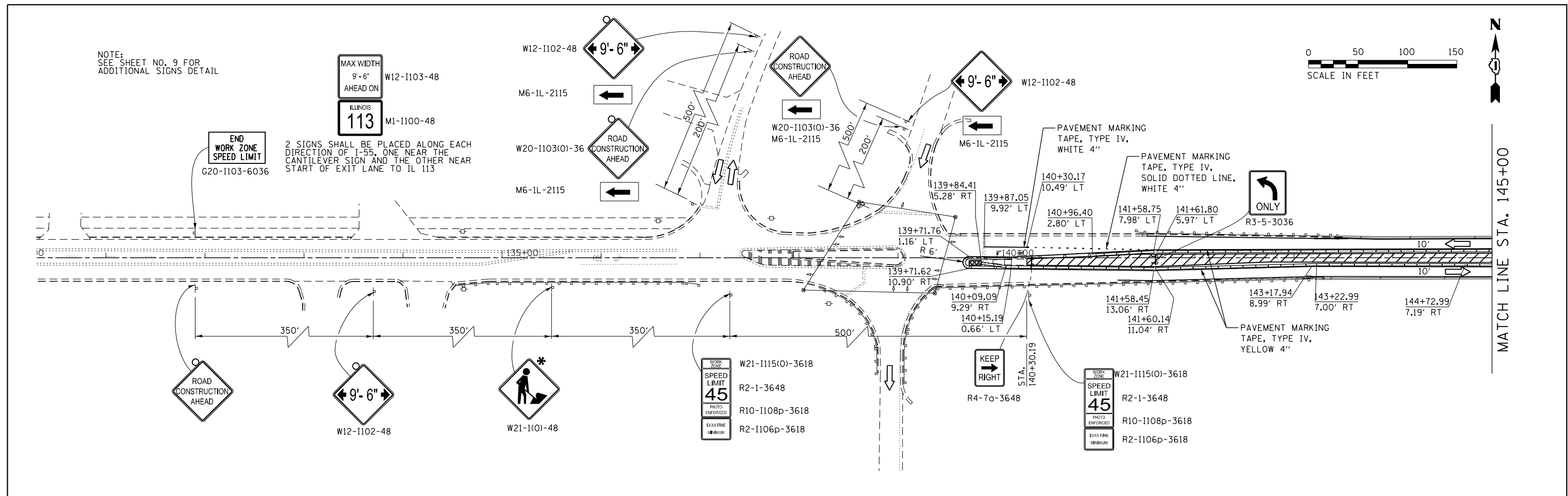
REVISED -
REVISED -
REVISED -
REVISED -

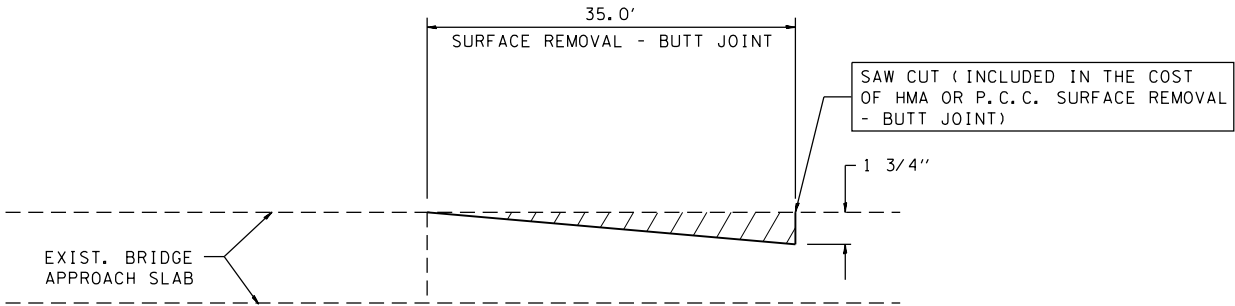
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 113 OVER I-55
STAGING AND TRAFFIC CONTROL PLAN (PRE-STAGE)

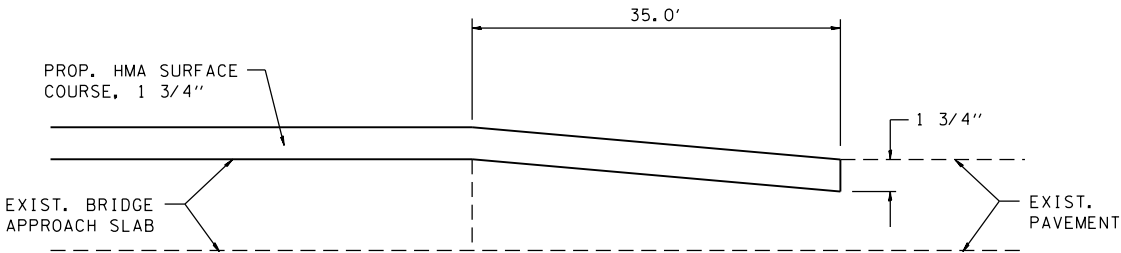
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
383	2019-086-BR	WILL	35	10
CONTRACT NO. 62J60				
ILLINOIS FED. AID PROJECT				



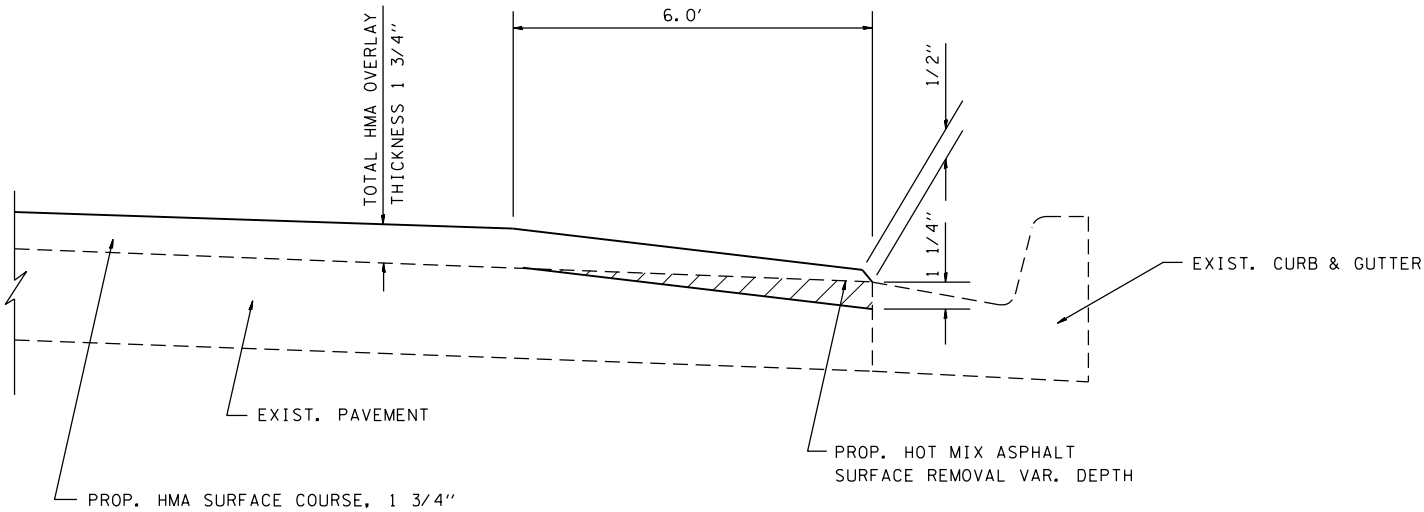


BUTT JOINT DETAIL

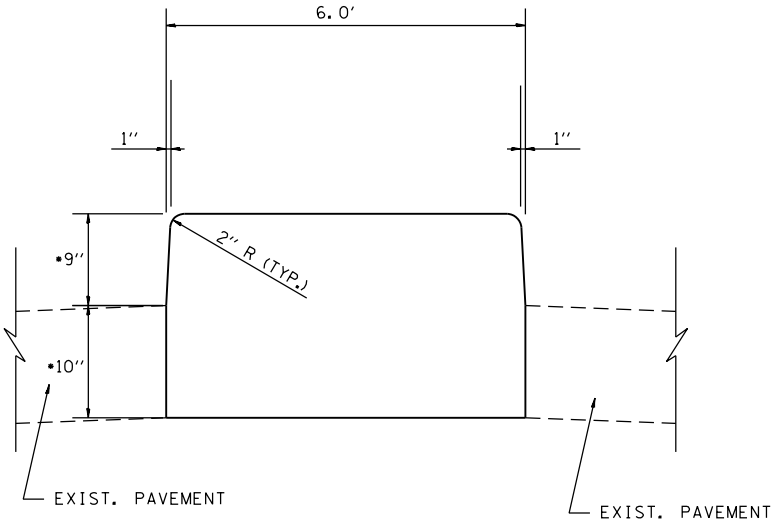


HMA TAPER DETAIL

BUTT JOINT AND HMA TAPER DETAILS



HMA TAPER AT EDGE OF HMA PAVEMENT
DETAIL



• DIMENSIONS TO BE VERIFIED IN THE FIELD

CONCRETE MEDIAN, TYPE SB (SPECIAL)
DETAIL

wood.

USER NAME : petar.knezevic	DESIGNED - KE	REVISED -
	DRAWN - GP	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - PK	REVISED -
PLOT DATE = 10/17/2019	DATE - 10/17/19	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

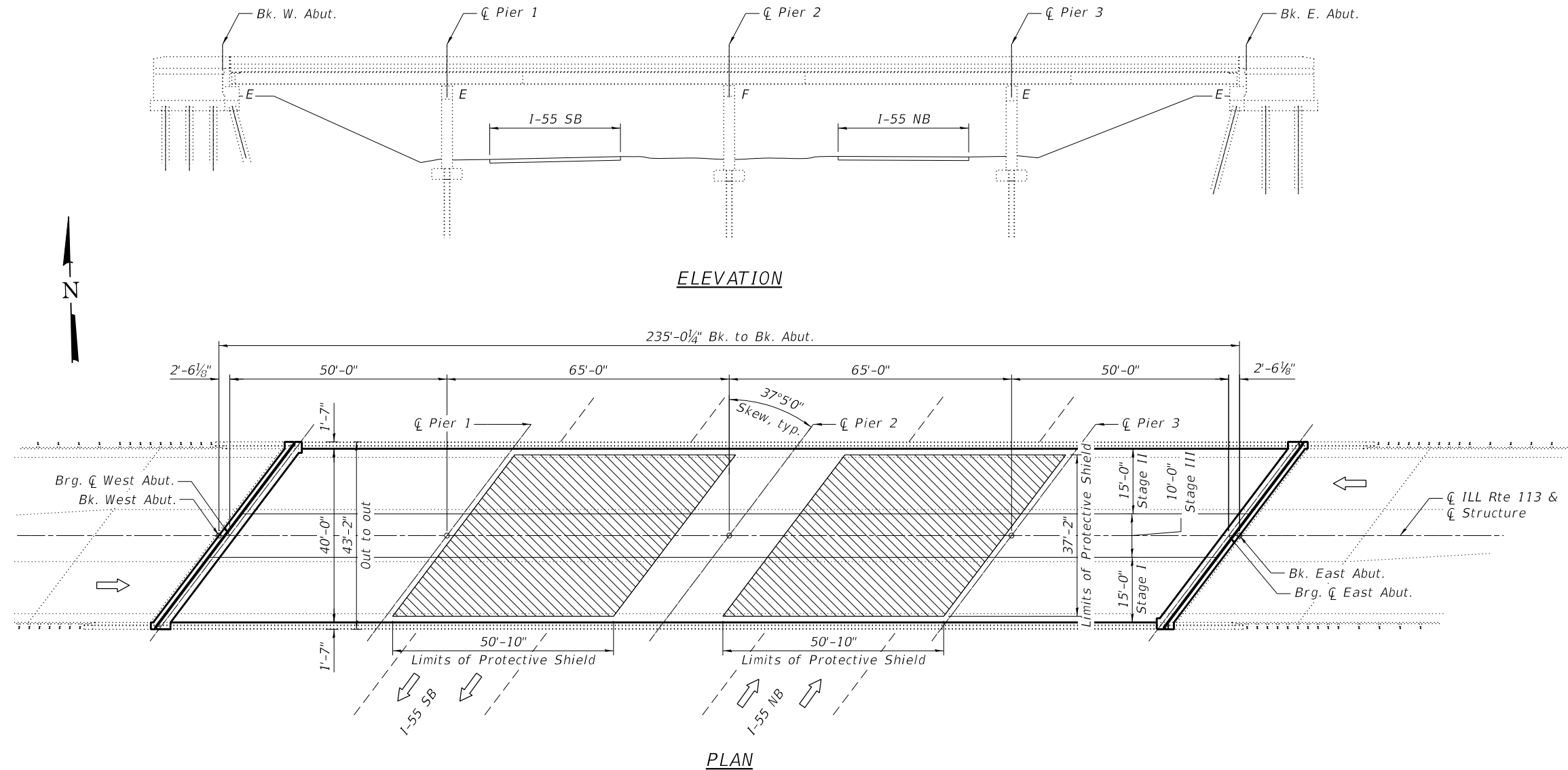
IL 113 OVER I-55
ROADWAY DETAILS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
383	2019-086-BR	WILL	35	15
CONTRACT NO. 62J60				
ILLINOIS FED. AID PROJECT				

Existing Structure: S.N. 099-0151, originally built in 1956 as a four-span continuous non-composite wide flange steel beam superstructure with spill thru abutments and multi-column pile supported piers. It was widened in kind in 1995. The back to back length = 235' - 0 1/4" and the out to out width = 43'-2". Structure is to be repaired as detailed in these plans. The structure will be repaired using staged construction to maintain traffic.

No Salvage



DESIGN STRESSES

FIELD UNITS (EXIST. CONST.)

Superstructure

$f'_c = 3,500$ psi (Superstructure)
 $f_y = 40,000$ psi (Reinforcement - 1956 Const.)
 $f_y = 60,000$ psi (Reinforcement - 1995 Const.)
 $f_y = 33,000$ psi (Structural Beams 2 - 7)
 $f_y = 36,000$ psi (Structural Beams 1 & 8)

FIELD UNITS (NEW CONST.)

$f'_c = 4,000$ psi (Superstructure)
 $f'_c = 3,500$ psi (Substructure)
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 36,000$ psi (M270 Grade 36)

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications
for Highway Bridges

LOADING HS20-44

Existing and Proposed



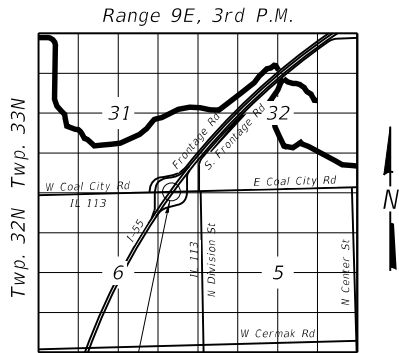
Michael D. Cima 10/17/2019
Michael D. Cima, Illinois S.E. 081-005984 Date
Expires 11/30/2020

INDEX OF SHEETS

1. General Plan and Elevation
2. General Details
3. Stage Construction Details
4. Deck Overlay Plan
5. Expansion Joint Repair
6. Expansion Joint Details
7. Preformed Joint Strip Seal
8. Steel Diaphragm Repairs
9. Steel Beam End Repairs
10. Pier 1 Concrete Repair
11. Pier 2 Concrete Repair
12. Pier 3 Concrete Repair
13. Pier 1 Crash Wall Modification
14. Pier 2 Crash Wall Modification
15. Pier 3 Crash Wall Modification
16. Bar Splicer Assembly and Mechanical Splicer Details

SCOPE OF WORK

1. Replace the transverse expansion joints located at the ends of the bridge deck
2. Deck Scarification and latex concrete overlay
3. Deck slab full depth repair
4. Repair beam ends and replace diaphragms at abutments
5. Concrete repair of pier
6. Pier crash wall modifications



LOCATION SKETCH

GENERAL PLAN & ELEVATION

ILLINOIS ROUTE 113 OVER F.A.I. 55 (I-55)

SECTION 2019-086-BR

WILL COUNTY

STRUCTURE NO. 099-0151

MODEL: Default
FILE NAME: S:\2018\181042-AES PH2 IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-001-GPE.dgn
10/17/2019 11:54:02 AM



QUIGG ENGINEERING INC

USER NAME =	rwhteside	DESIGNED -	AWM	REVISED -	
		CHECKED -	SDY	REVISED -	
PLOT SCALE =	30:0.0000 " = 1 in.	DRAWN -	KFO	REVISED -	
PLOT DATE =	10/17/2019	CHECKED -	MDC	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 099-0151

SHEET 1 OF 16 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	16
CONTRACT NO. 62J60				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts 3/4 in. Ø, holes 15/16 in. Ø, unless otherwise noted.

Calculated weight of Structural Steel = 2730 lbs

All structural steel shall be AASHTO M 270 Grade 36.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

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.

Concrete Sealer shall be applied to all faces of Pier 1, 2, and 3, below the bearing seats and above the ground line.

Protective Coat shall be applied to the top and front face of the new parapet and concrete deck, including new concrete overlay.

Cleaning and field painting of structural steel shall be done under a separate painting contract.

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

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.

Synthetic fibers shall be added to the Bridge Deck Latex Concrete Overlay, see Special Provisions.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Concrete Removal	Cu. Yd.	15	-	15
Protective Shield	Sq. Yd.	420	-	420
Concrete Structures	Cu. Yd.	-	24.5	24.5
Concrete Superstructure	Cu. Yd.	16	-	16
Bridge Deck Grooving	Sq. Yd.	980	-	980
Protective Coat	Sq. Yd.	1038	-	1038
Furnishing and Erecting Structural Steel	Pound	2730	-	2730
Reinforcement Bars, Epoxy Coated	Pound	1750	2390	4140
Bar Splicers	Each	44	-	44
Mechanical Splicers	Each	34	-	34
Preformed Joint Strip Seal	Foot	105	-	105
Concrete Sealer	Sq. Ft.	-	5010	5010
Approach Slab Repair (Partial Depth)	Sq. Yd.	3	-	3
Structural Steel Removal	Pound	2670	-	2670
Structural Steel Repair	Pound	530	-	530
Bridge Deck Latex Concrete Overlay, 2 1/2"	Sq. Yd.	1010	-	1010
Bridge Deck Scarification, 3/4"	Sq. Yd.	1010	-	1010
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	-	353	353
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	3	-	3

MODEL: Default
FILE NAME: S:\2018\181042-AES PH2 IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-002-GN.dgn



QUIGG ENGINEERING INC

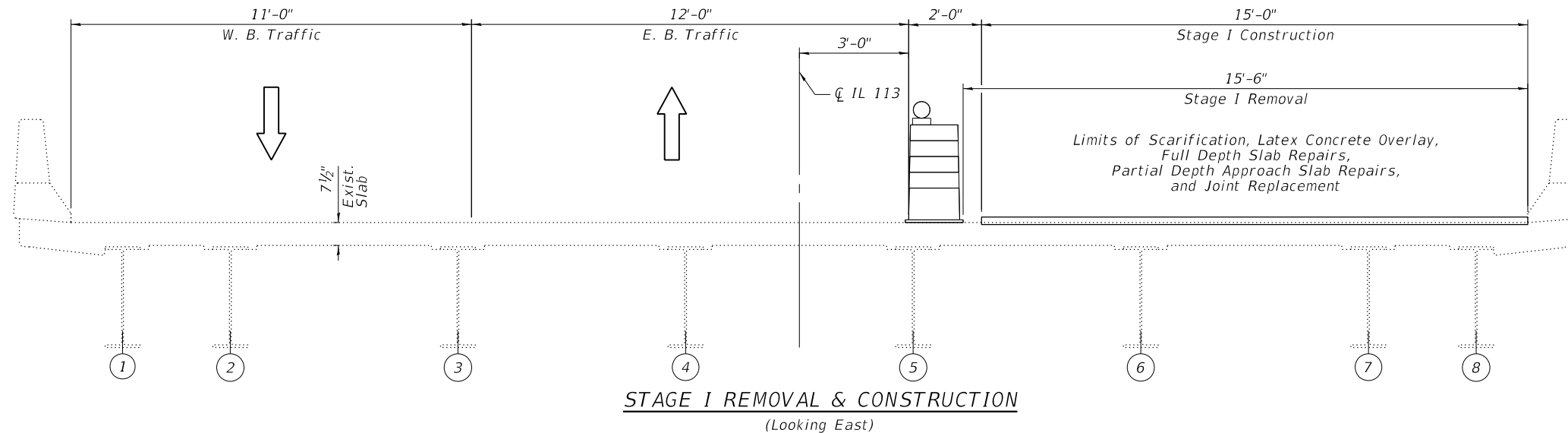
USER NAME =	wmohammed	DESIGNED -	AWM	REVISED -	
		CHECKED -	SDY	REVISED -	
PLOT SCALE =	0:2.0000 " = 1' in.	DRAWN -	KFO	REVISED -	
PLOT DATE =	10/16/2019	CHECKED -	MDC	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

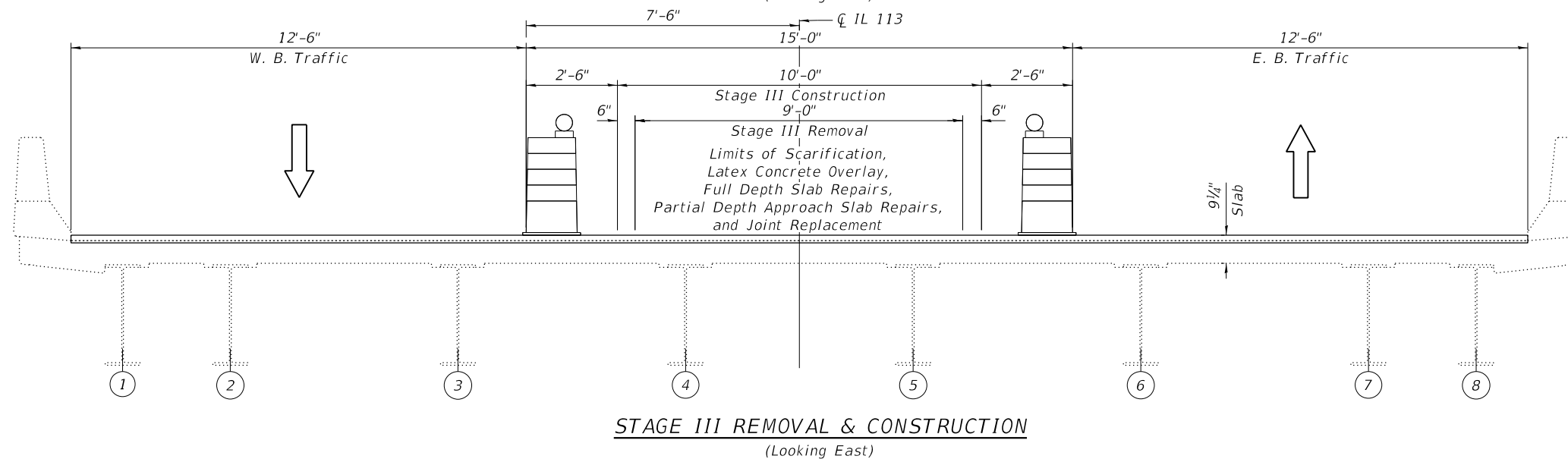
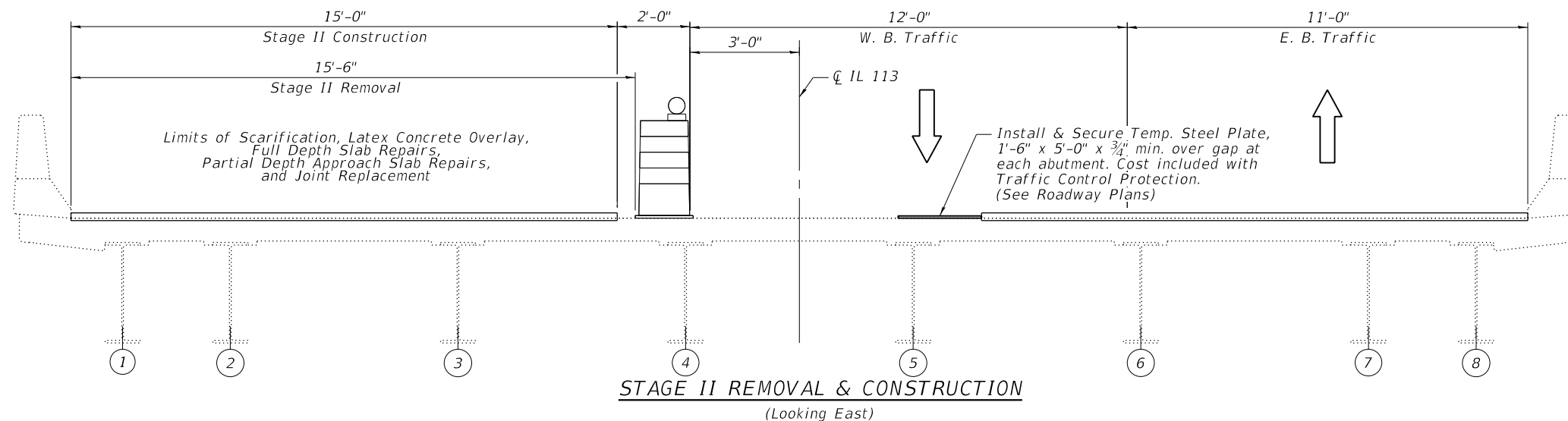
GENERAL DETAILS
STRUCTURE NO. 099-0151

SHEET 2 OF 16 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	17
CONTRACT NO. 62J60				
		ILLINOIS	FED. AID PROJECT	



Note:
Diaphragm removal and installation at the abutments will be completed full length between beams 5-6 during Stage I and beams 3-4 during Stage II. The new concrete and joint installation will be completed to the limits shown for the deck work.



MODEL: Default
FILE NAME: S:\2018\181042-AES PH2 IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-003-Stage Constr. Details.dgn
10/17/2019 11:19:59 AM



QUIGG ENGINEERING INC

USER NAME =	WMohammed	DESIGNED -	AWM	REVISED -	
		CHECKED -	SDY	REVISED -	
PLOT SCALE =	0:2,0000 " / in.	DRAWN -	KFO	REVISED -	
PLOT DATE =	10/17/2019	CHECKED -	MDC	REVISED -	

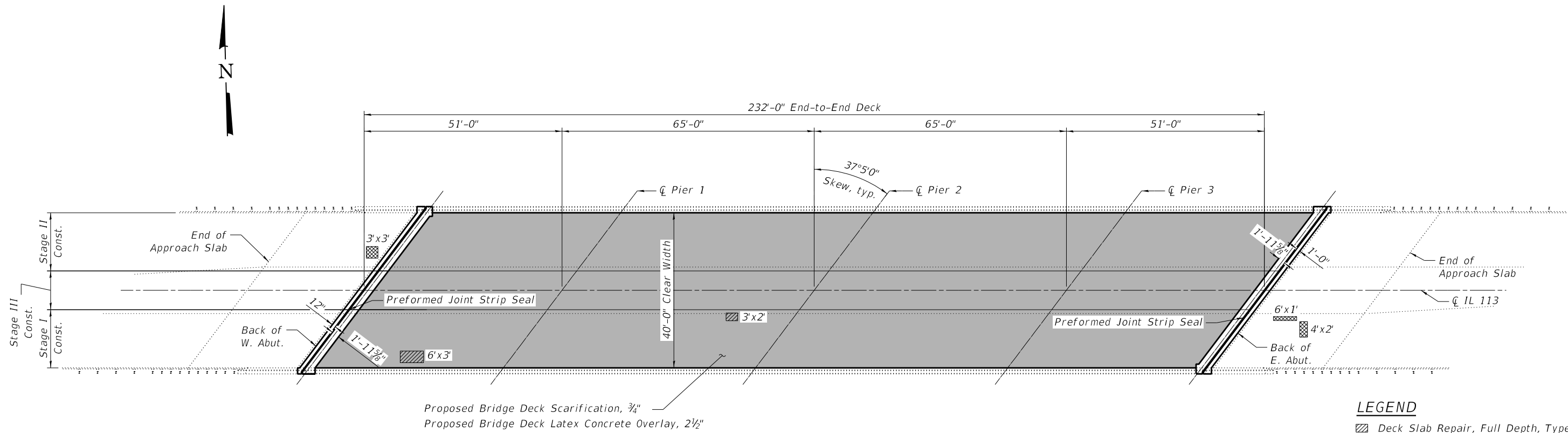
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 099-0151**

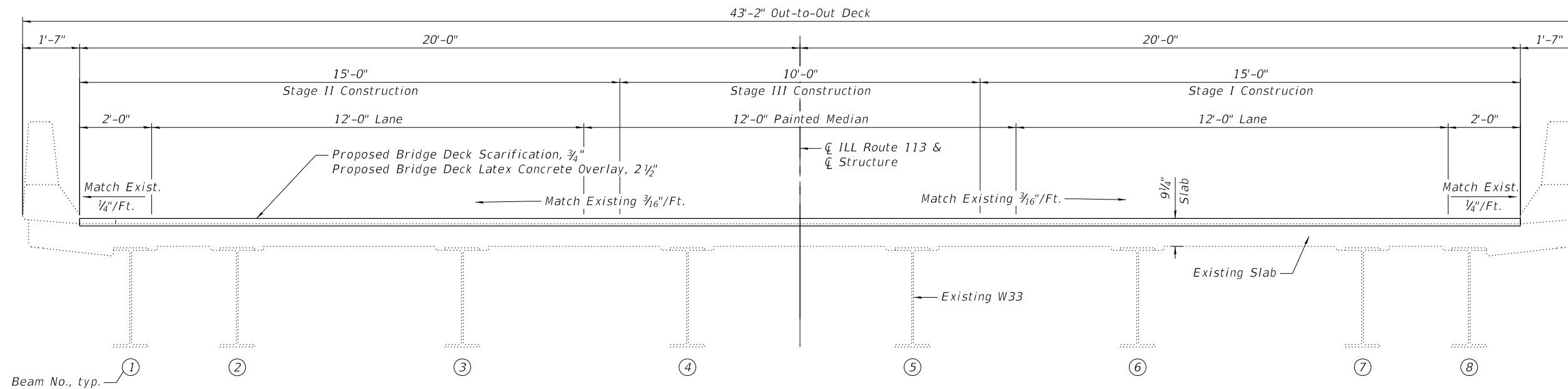
SHEET 3 OF 16 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	18
				CONTRACT NO. 62J60
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
FILE NAME: S:\2018\181042-AES PH2 IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-004-Deck Overlay.dgn



PLAN



CROSS SECTION
(Looking East)

BILL OF MATERIAL

Item	Unit	Total
Bridge Deck Grooving	Sq. Yd.	980
Protective Coat	Sq. Yd.	1038
Approach Slab Repair (Partial Depth)	Sq. Yd.	3
Bridge Deck Latex Concrete Overlay, 2 1/2"	Sq. Yd.	1010
Bridge Deck Scarification 3/4"	Sq. Yd.	1010
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	3
Protective Shield	Sq. Yd.	420

** Applied to new concrete at joints, parapet sections, and overlay.



QUIGG ENGINEERING INC

USER NAME =	wmohammed	DESIGNED -	AWM	REVISED -	
		CHECKED -	SDY	REVISED -	
PLOT SCALE =	0:2.0000 " = 1' in.	DRAWN -	KFO	REVISED -	
PLOT DATE =	10/16/2019	CHECKED -	MDC	REVISED -	

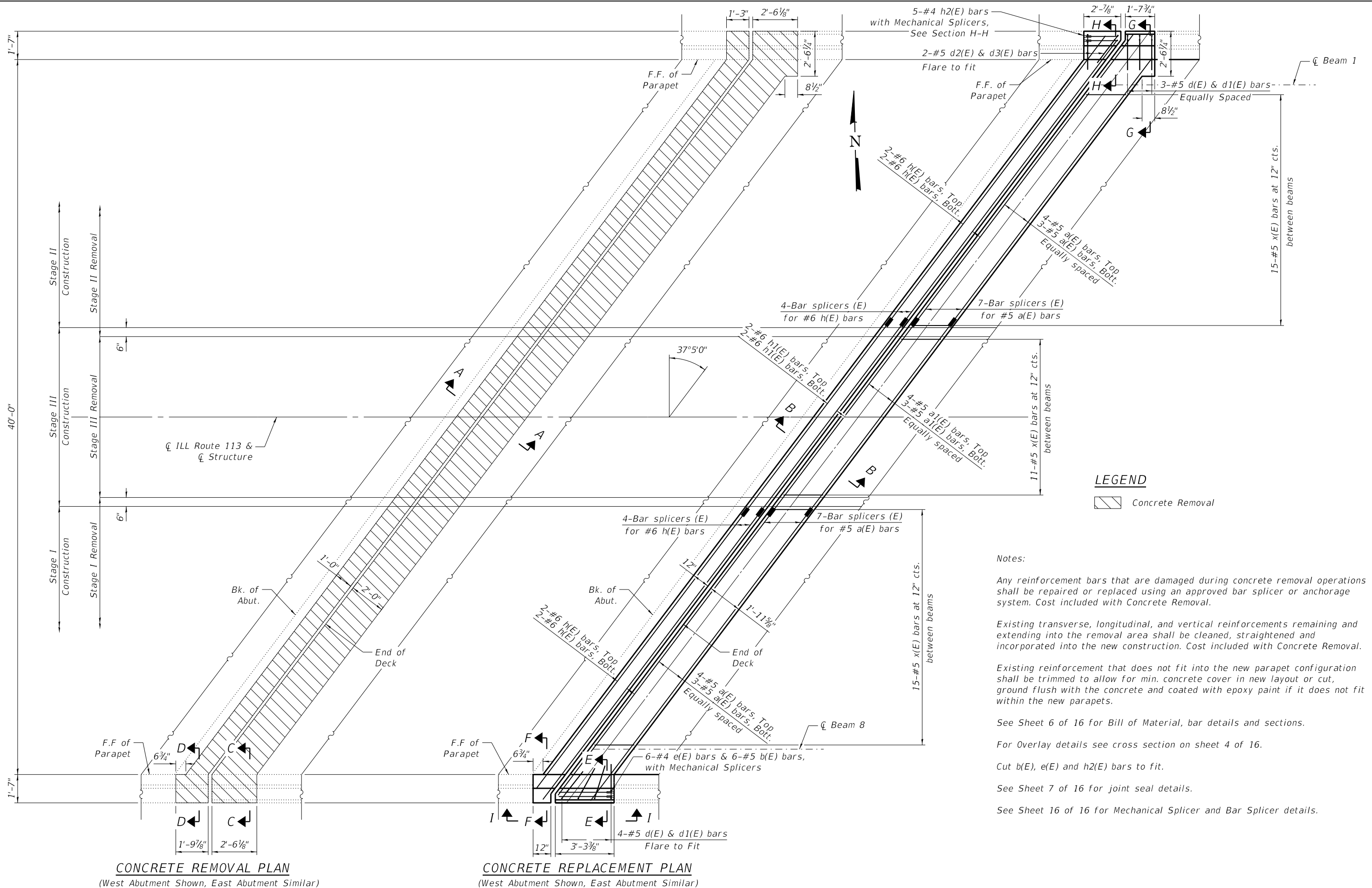
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK OVERLAY PLAN
STRUCTURE NO. 099-0151

SHEET 4 OF 16 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	19
CONTRACT NO. 62J60				
ILLINOIS FED. AID PROJECT				

MODEL: Default
FILE NAME: S:\2018\181042-AES PH2 IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-005-Exp. Joint Repair.dgn
10/16/2019 2:31:57 PM



QUIGG ENGINEERING INC

USER NAME	=	wmohammed	DESIGNED	-	AWM	REVISED	-
CHECKED	-	SDY	REVISED	-			
PLOT SCALE	=	0:2,0000 " = 1' in.	DRAWN	-	KFO	REVISED	-
PLOT DATE	=	10/16/2019	CHECKED	-	MDC	REVISED	-

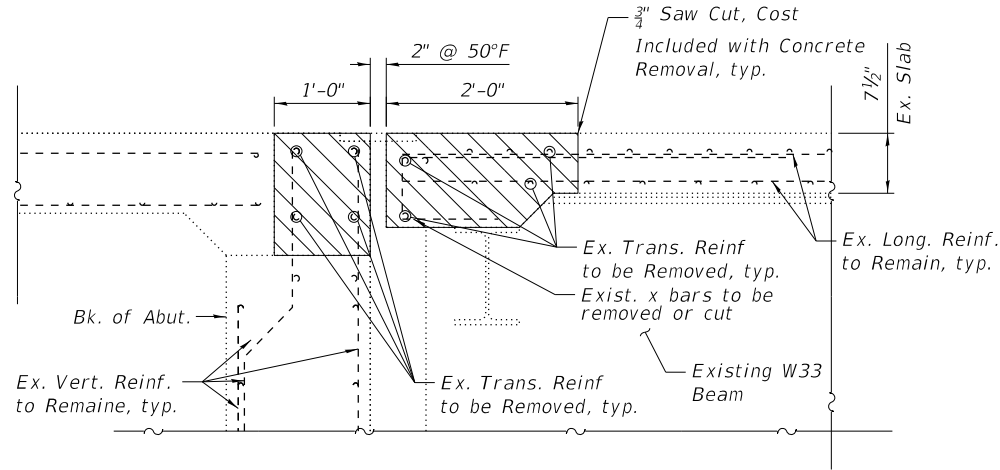
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REPAIR
STRUCTURE NO. 099-0151

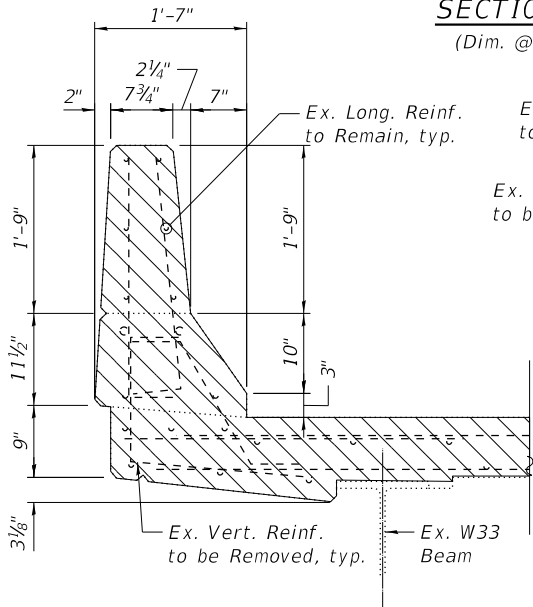
SHEET 5 OF 16 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	20
CONTRACT NO. 62J60				
ILLINOIS FED. AID PROJECT				

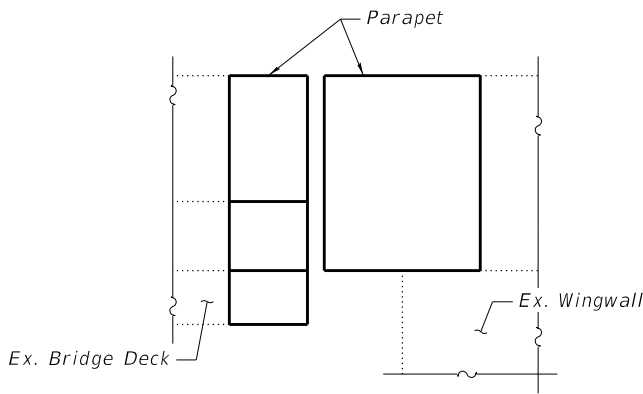
MODEL: Default
FILE NAME: S:\2018\181042-AES PH2 IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-006-Exp. Joint Repair Details.dgn
10/16/2019 2:31:58 PM



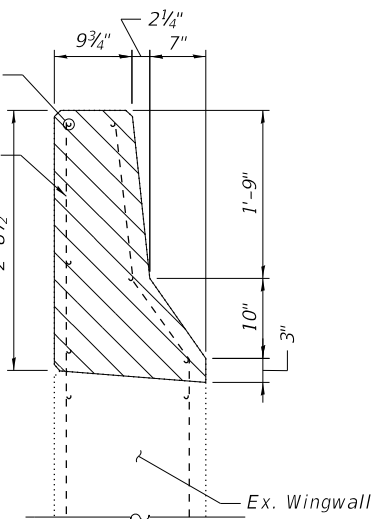
SECTION A-A
(Dim. @ Rt. L's)



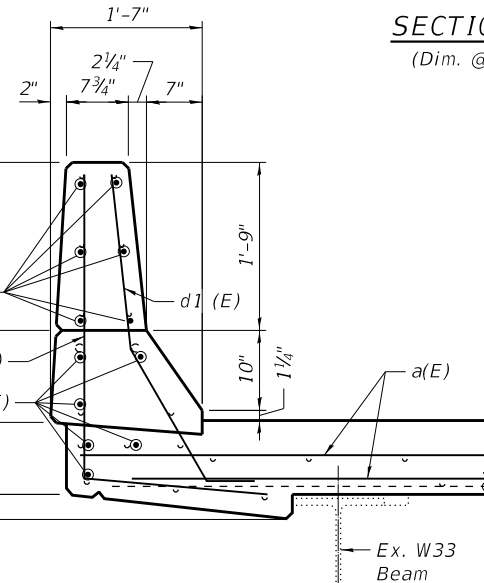
SECTION C-C



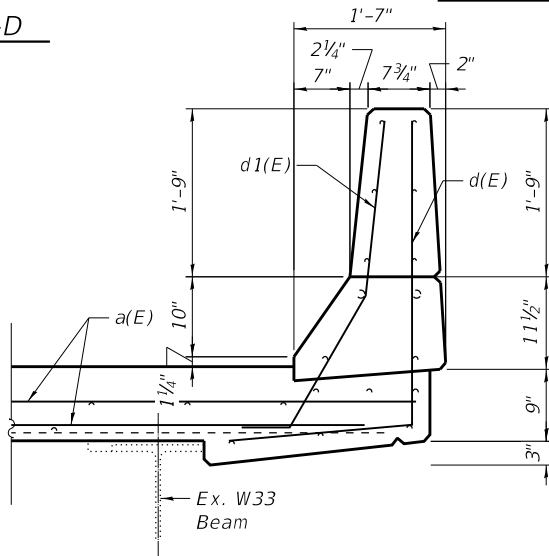
VIEW I-I



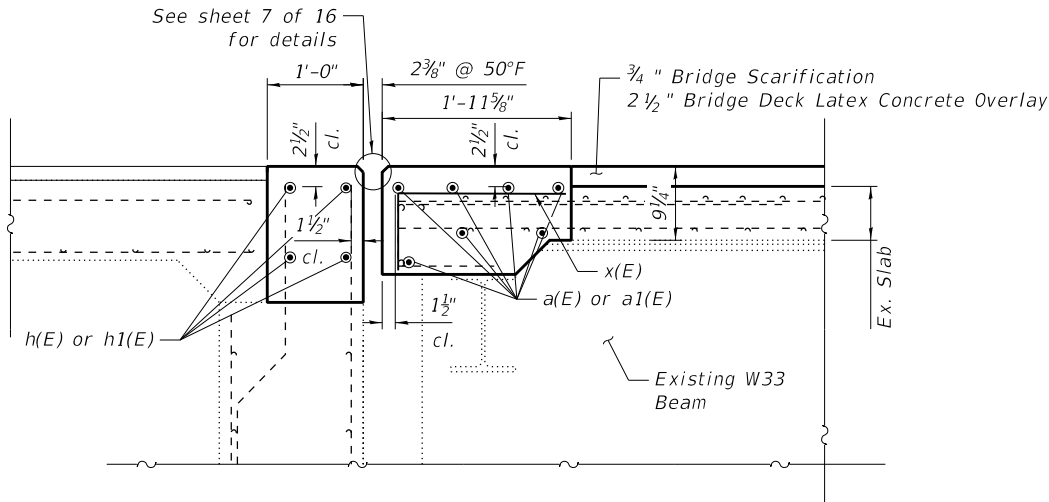
SECTION D-D



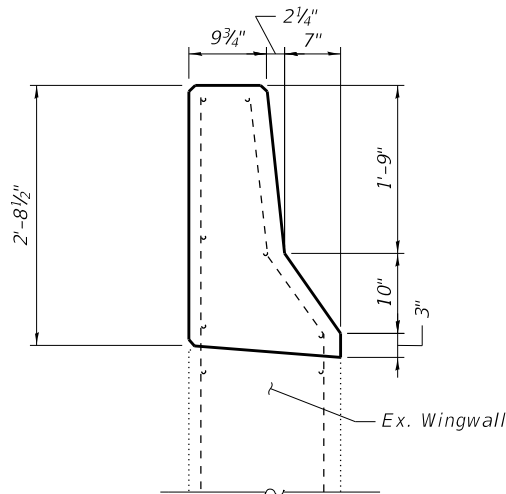
SECTION E-E



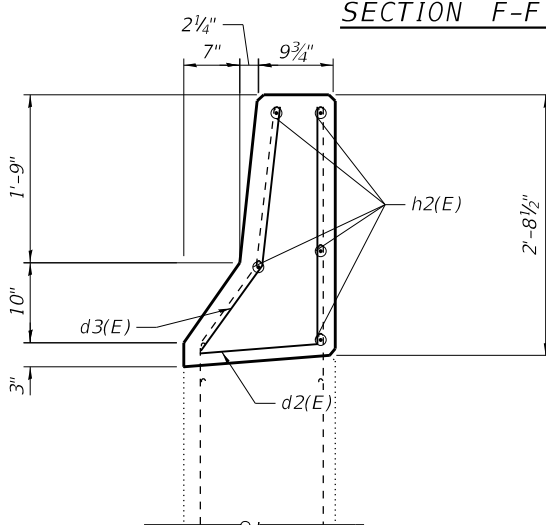
SECTION G-G



SECTION B-B
(Dim. @ Rt. L's)



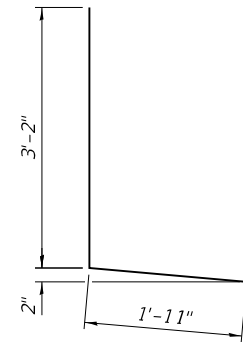
SECTION F-F



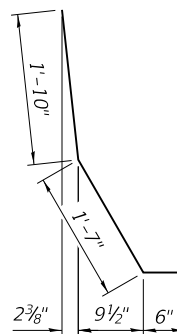
SECTION H-H

LEGEND

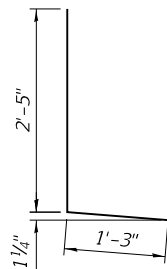
Concrete Removal



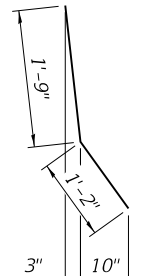
BAR d(E)



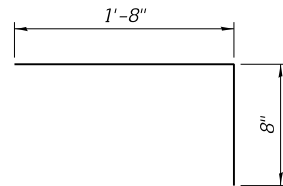
BAR d1(E)



BAR d2(E)



BAR d3(E)



BAR x(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	28	#5	18'-6"	—
a1(E)	14	#5	12'-3"	—
b(E)	12	#5	3'-1"	—
d(E)	14	#5	5'-1"	L
d1(E)	14	#5	3'-11"	L
d2(E)	4	#5	3'-8"	L
d3(E)	4	#5	2'-11"	L
e(E)	12	#4	3'-1"	—
h(E)	16	#6	18'-6"	—
h1(E)	8	#6	12'-3"	—
h2(E)	10	#4	1'-10"	—
x(E)	82	#5	2'-4"	—
Item			Unit	Total
Concrete Removal			Cu. Yd.	15
Concrete Superstructure			Cu. Yd.	16
Reinforcement Bars, Epoxy Coated			Pound	1750
Bar Splicers			Each	44
Mechanical Splicers			Each	34

Notes:
See Sheet 7 of 16 for joint seal details.



QUIGG ENGINEERING INC

USER NAME =	wmohammed	DESIGNED -	AWM	REVISED -	
CHECKED -	SDY	REVIS		REVISED -	
PLOT SCALE =	0:2.0000 " / in.	DRAWN -	KFO	REVISED -	
PLOT DATE =	10/16/2019	CHECKED -	MDC	REVISED -	

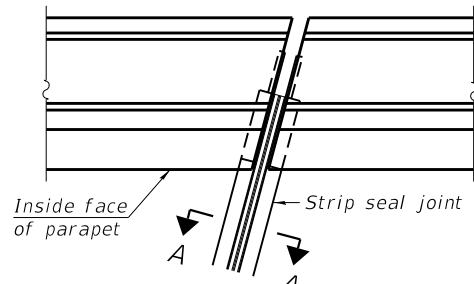
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS
STRUCTURE NO. 099-0151

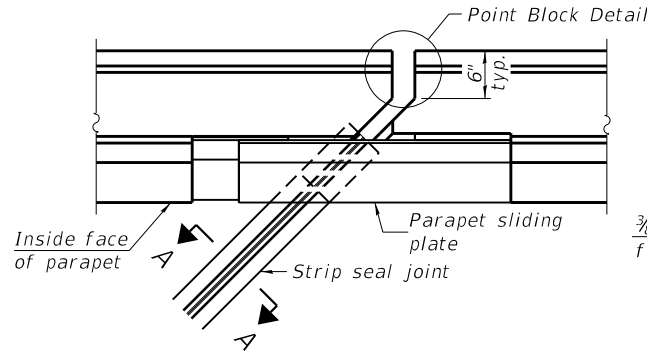
SHEET 6 OF 16 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	21
CONTRACT NO. 62J60				
ILLINOIS FED. AID PROJECT				

MODEL: Default
FILE NAME: S:\2018\1810402-AES PH2 IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-007-Preformed Joint Strip Seal.dgn
10/16/2019 2:31:59 PM

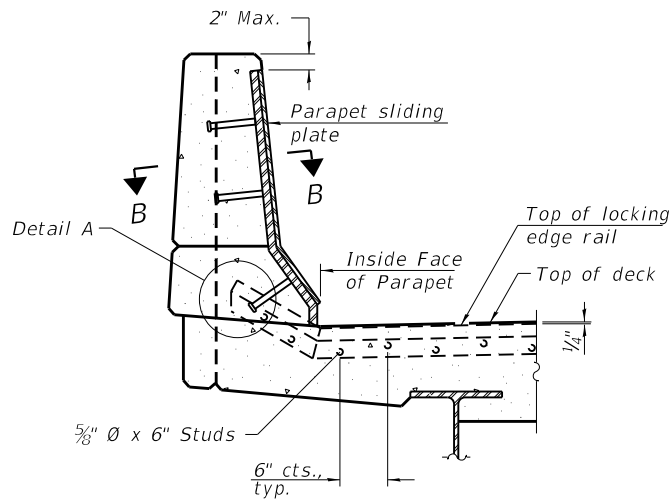


FOR SKEWS $\leq 30^\circ$



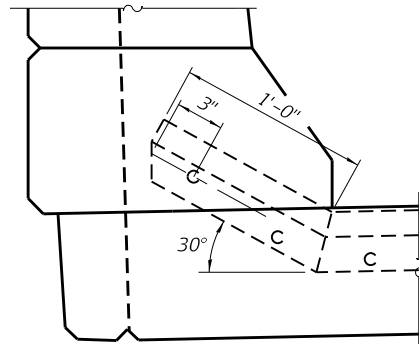
FOR SKEWS $> 30^\circ$

PLAN AT PARAPET

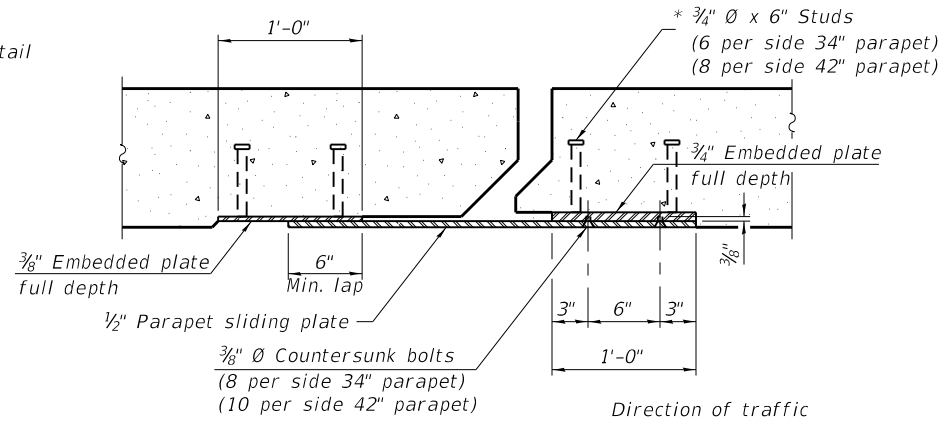


ELEVATION AT PARAPET

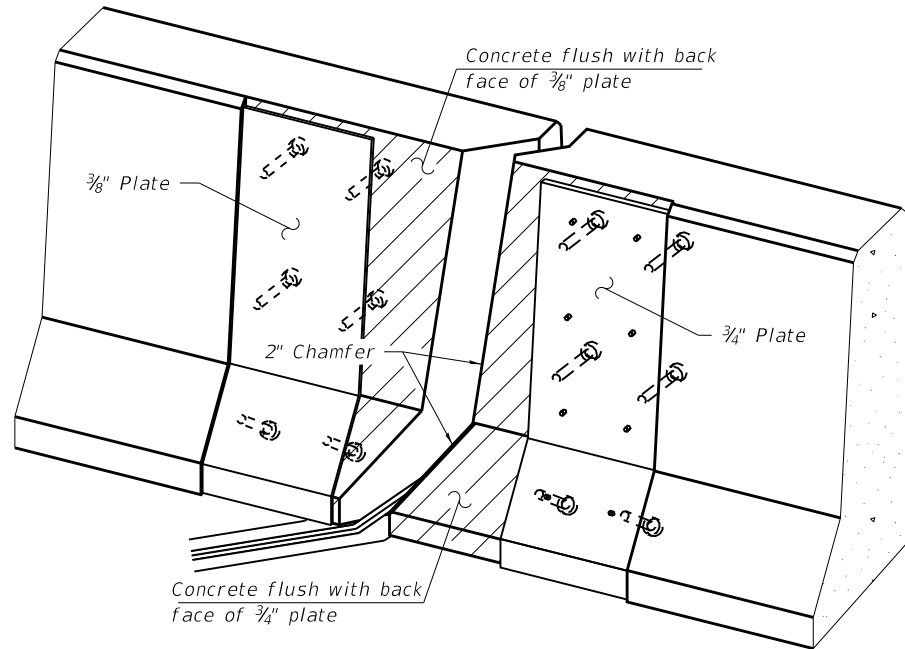
(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



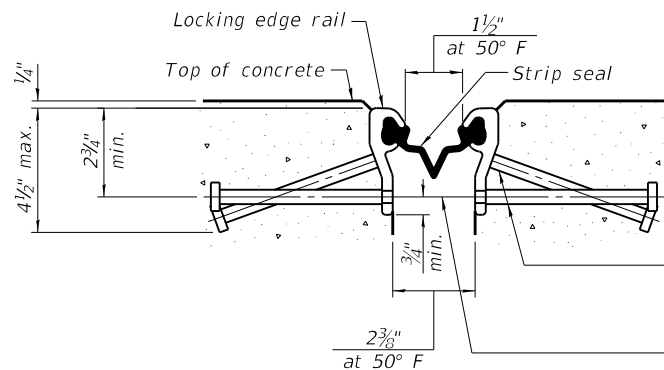
DETAIL A



SECTION B-B



TRIMETRIC VIEW (Showing embedded plates only)



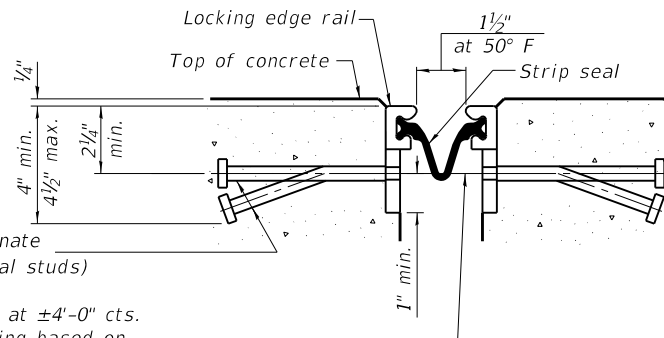
SHOWING ROLLED RAIL JOINT

* $\frac{5}{8}$ " \varnothing x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

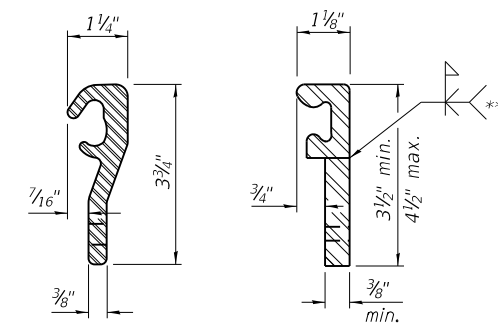
$\frac{3}{8}$ " \varnothing threaded rods in $\frac{7}{16}$ " \varnothing holes at ± 4 "-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



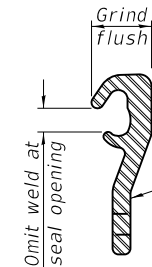
SHOWING WELDED RAIL JOINT



LOCKING EDGE RAILS (EXTRUDED) RAIL WELDED RAIL

LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	105

EJ-SS

8-11-17



QUIGG ENGINEERING INC

USER NAME =	wmohammed	DESIGNED -	AWM	REVISED -	
CHECKED -	SDY	CHECKED -	SDY	REVISED -	
PLOT SCALE =	0:2.0000 " = 1" in.	DRAWN -	KFO	REVISED -	
PLOT DATE =	10/16/2019	CHECKED -	MDC	REVISED -	

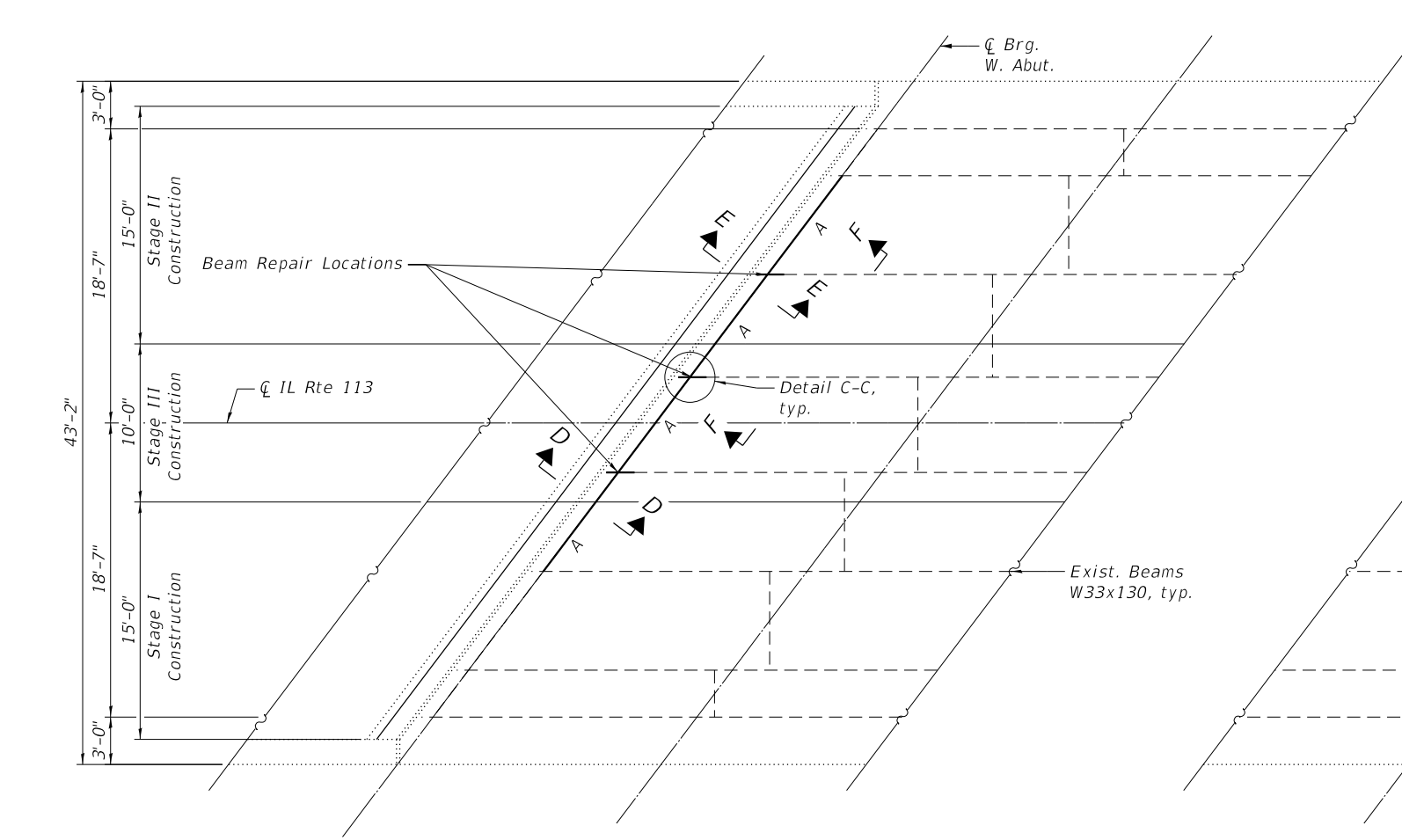
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 099-0151

SHEET 7 OF 16 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	22
CONTRACT NO. 62J60				
ILLINOIS FED. AID PROJECT				

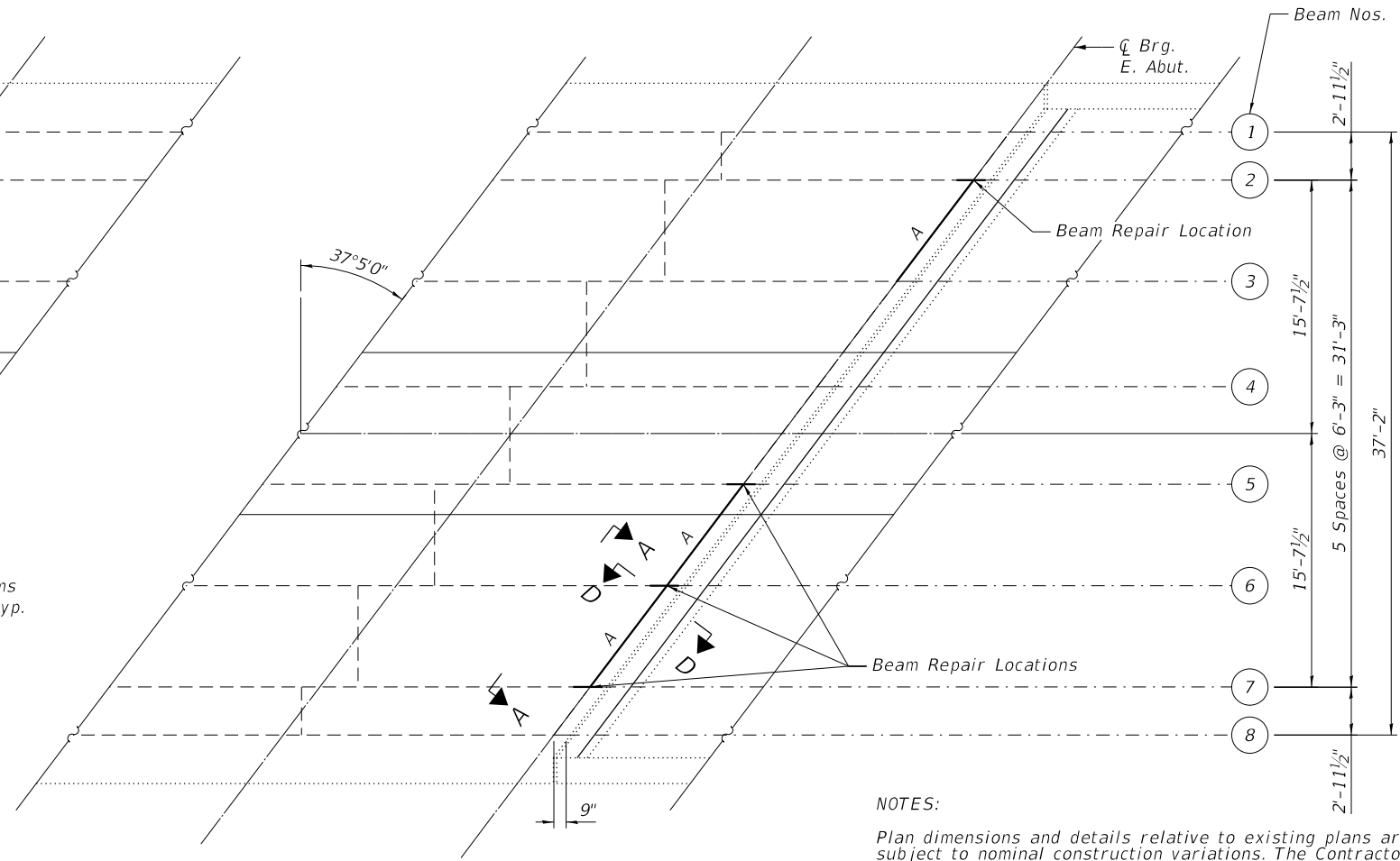
MODEL: Default
FILE NAME: S:\2018\1810402-AES PH2 IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-008-Steel Diaphragm Repairs.dgn
10/16/2019 2:32:00 PM



WEST ABUTMENT

PARTIAL FRAMING PLAN

A = Diaphragm Replacement Location



EAST ABUTMENT

NOTES:

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 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.

Diaphragms in bays 2, 3, 4, and 5 at the West Abutment and diaphragms in bays 2, 5, and 6 at the East Abutment shall be repaired per details on this sheet.

All structural steel shall be AASHTO M 270 Grade 36, unless otherwise notes.

No field welding is permitted except as specified in the contract documents.

Fasteners shall be high strength bolts. Bolts $\frac{3}{4}$ " ϕ .

Diaphragm connections holes shall be $\frac{15}{16}$ " ϕ for $\frac{3}{4}$ " ϕ bolts. Two hardened washers shall be required at diaphragm connections.

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". Cost included in Furnishing & Erecting Structural Steel.

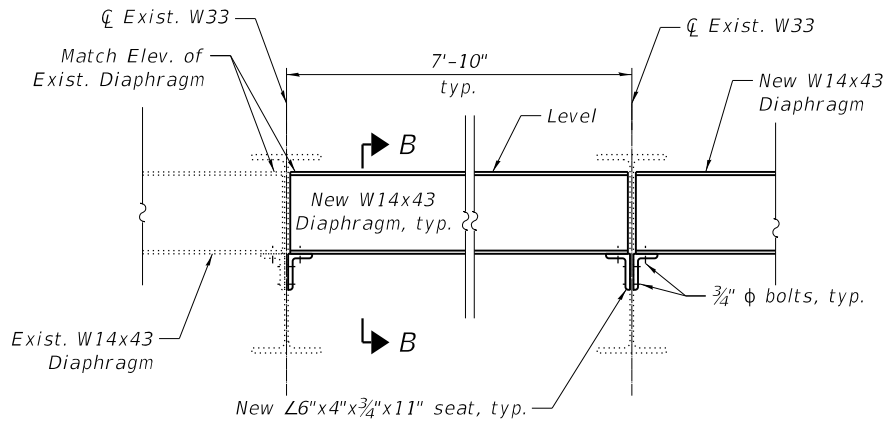
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

All repairs including structural steel wide flanges, angles, bolts, nuts, and washers shall be galvanized per the special provision "Hot Dip Galvanizing for Structural Steel". Cost included in Furnishing and Erecting Structural Steel.

See sheet 9 of 16 for sections D-D, E-E, F-F, and additional details.

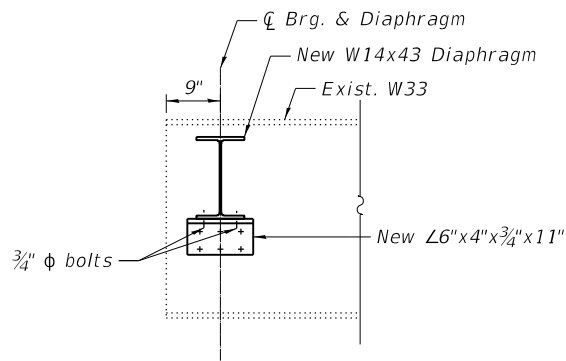
BILL OF MATERIAL

Item	Unit	Total
Structural Steel Removal	Pound	2670
Furnishing & Erecting Structural Steel	Pound	2730

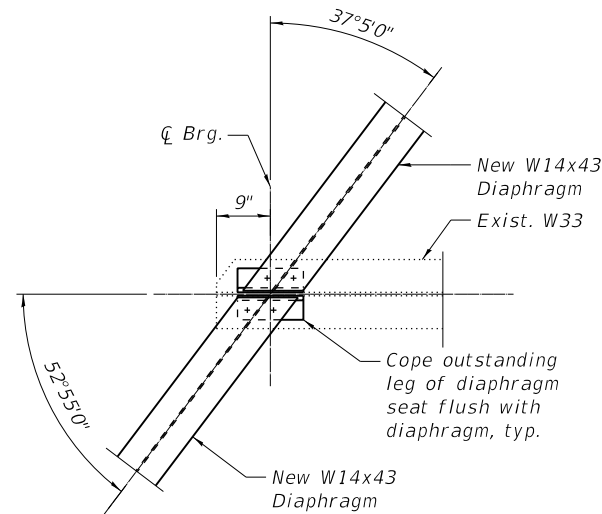


SECTION A-A

(No. of diaphragms to be replaced = 7 each)



SECTION B-B



DETAIL C-C

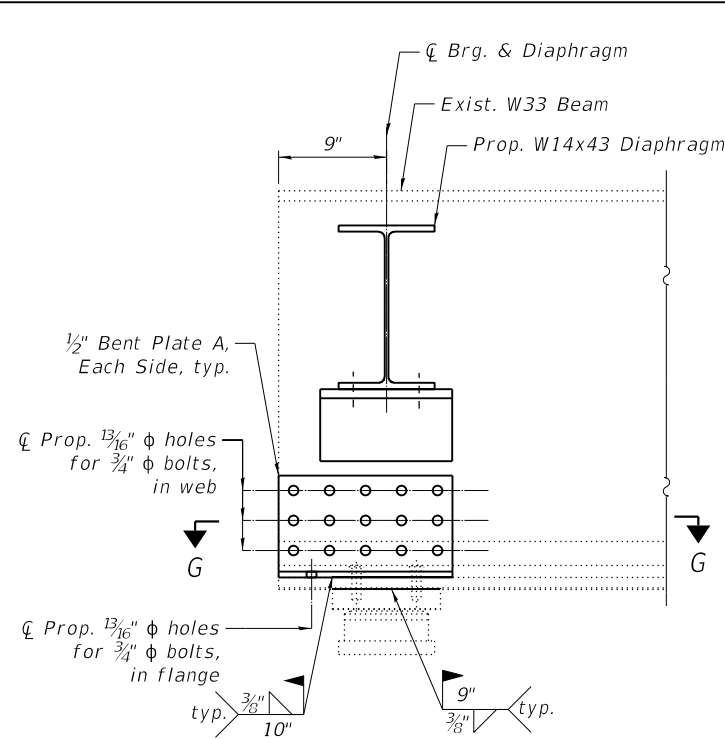
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL DIAPHRAGM REPAIRS
STRUCTURE NO. 099-0151

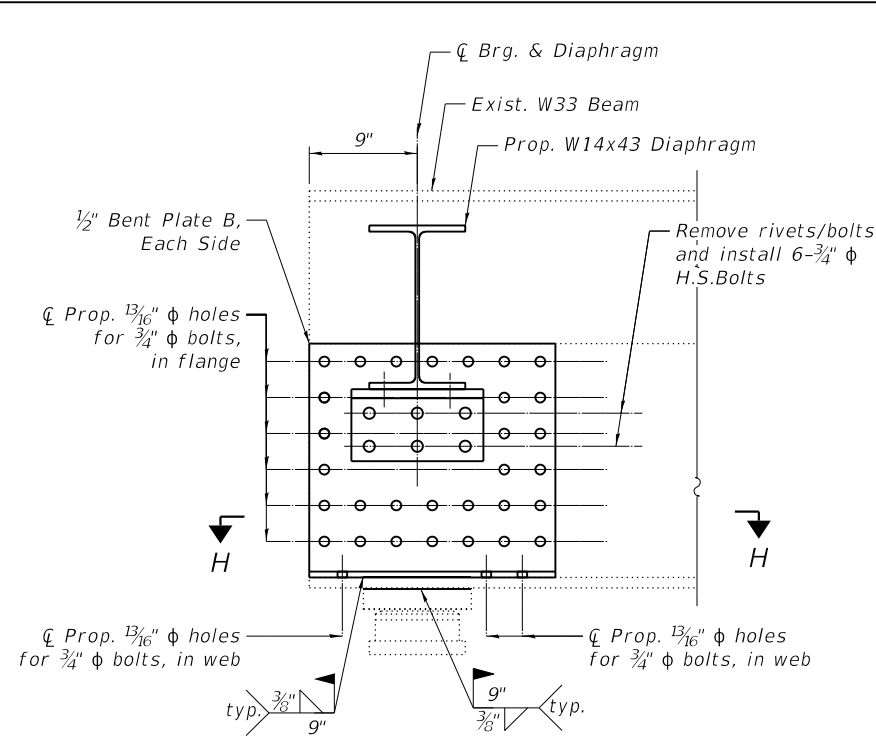
SHEET 8 OF 16 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	23
CONTRACT NO. 62J60				
ILLINOIS FED. AID PROJECT				

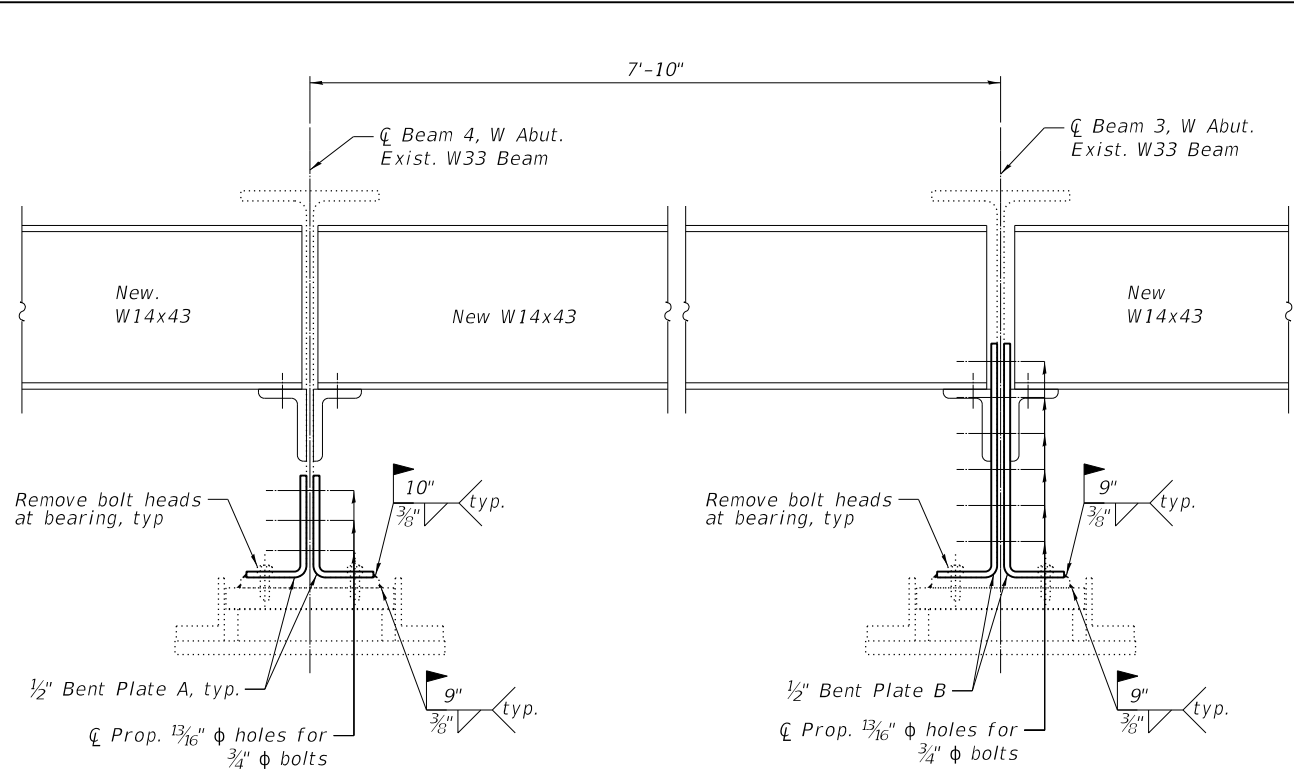
MODEL: Default
FILE NAME: S:\2018\181042-AES PH2 IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-009-Steel Beam End Repairs.dgn
12/2/2019 4:53:01 PM



SECTION D-D
(E & W Abut., Typ.)



SECTION E-E
(Beam 3, W Abut.)



SECTION F-F

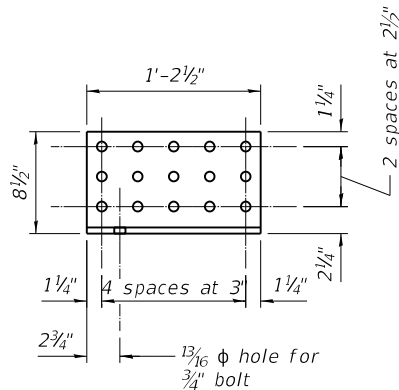


PLATE A
(12 each)

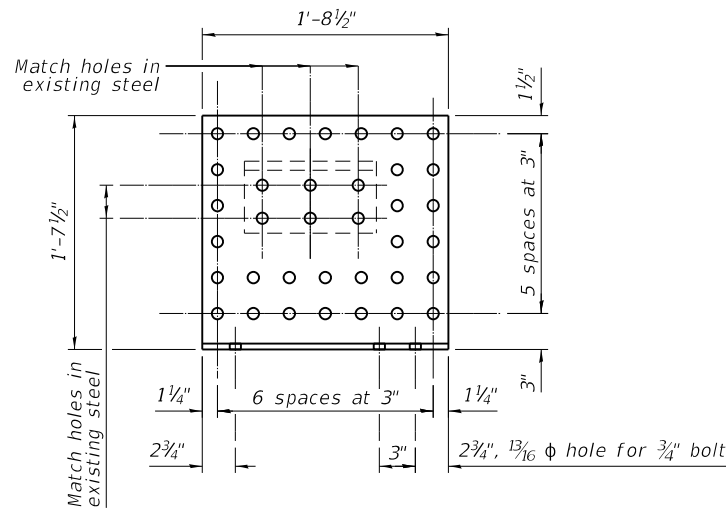
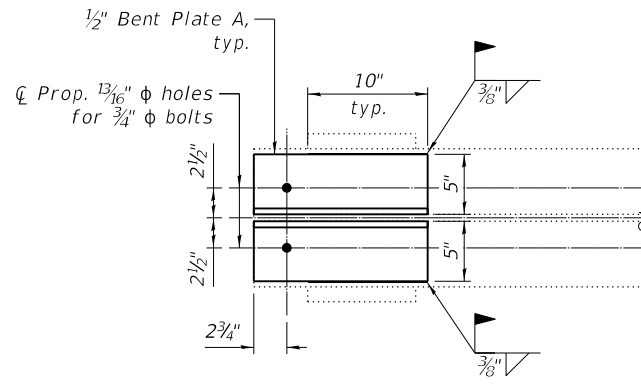
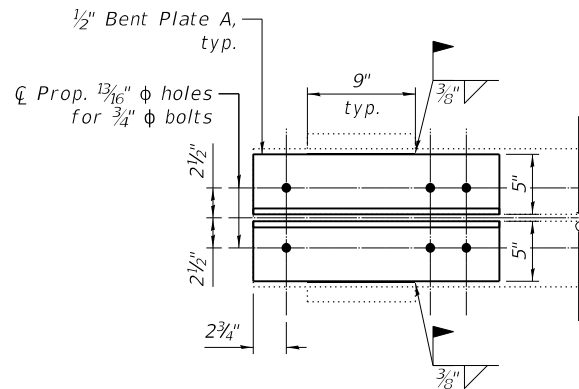


PLATE B
(2 each)



SECTION G-G



SECTION H-H

Notes:

Girders 3, 4, and 5 at the West Abutment and girders 2, 5, 6, and 7 at the East Abutment shall be repaired per the details on this sheet.

All structural steel shall be AASHTO M 270 Grade 36, unless otherwise notes.

All repair materials including structural steel plates, bolts, nuts and washers shall be galvanized per the special provision "Hot Dip Galvanizing for Structural Steel". Cost included in "Structural Steel Repair".

Fasteners shall be high strength bolts. Holes shall be 13/16 inch phi for 3/4 inch phi bolts. Two hardened washers shall be required at all connections.

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". Cost included in Furnishing & Erecting Structural Steel.

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

Use holes in new steel as template to field drill holes in existing steel.

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	530



QUIGG ENGINEERING INC

USER NAME =	cstokes	DESIGNED -	AWM	REVISED -	
		CHECKED -	SDY	REVISED -	
PLOT SCALE =	0:2.0000 " = 1 in.	DRAWN -	KFO	REVISED -	
PLOT DATE =	12/2/2019	CHECKED -	MDC	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL BEAM END REPAIRS
STRUCTURE NO. 099-0151

SHEET 9 OF 16 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	24
CONTRACT NO. 62J60				
ILLINOIS FED. AID PROJECT				

MODEL: Default
FILE NAME: S:\2018\181042-AES PH2 IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-010-Pier 1 Concrete Repair.dgn
10/16/2019 2:32:02 PM



QUIGG ENGINEERING INC

USER NAME	=	wmohammed
PLOT SCALE	=	0:2.0000 " = 1' in.
PLOT DATE	=	10/16/2019

DESIGNED	-	AWM
CHECKED	-	SDY
DRAWN	-	KFO
CHECKED	-	MDC

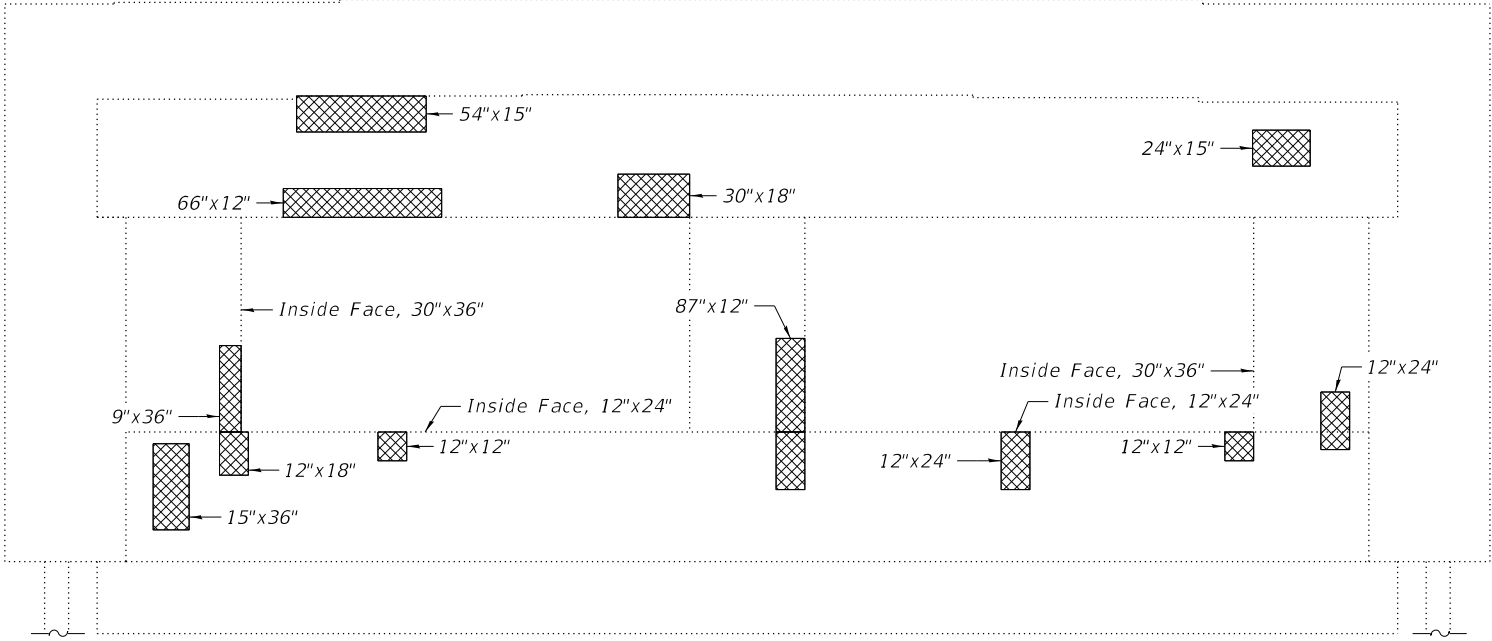
REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 CONCRETE REPAIR
STRUCTURE NO. 099-0151

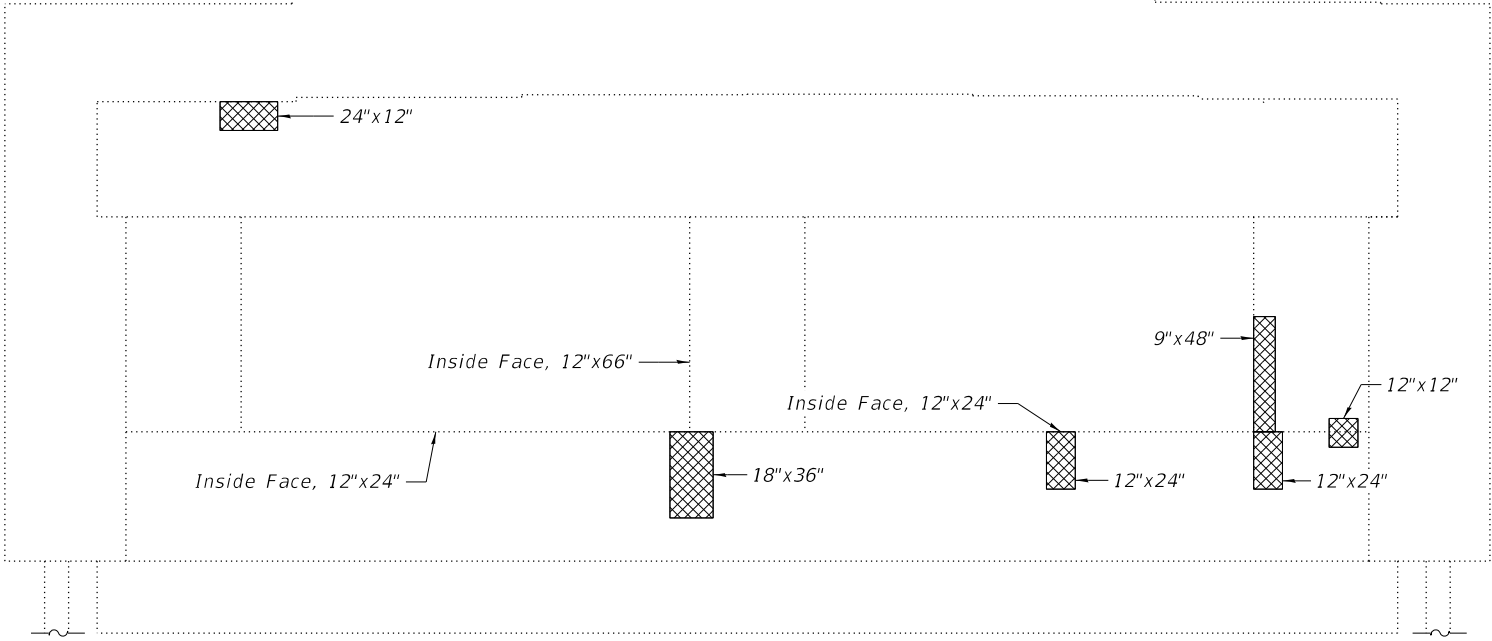
SHEET 10 OF 16 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	25
CONTRACT NO. 62J60				
ILLINOIS FED. AID PROJECT				



PIER 1 ELEVATION
(Looking West)

Notes:
Dimensions given for repair areas are width by height.



PIER 1 ELEVATION
(Looking East)

LEGEND
Concrete Repair Area

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concete (Depth Equal to or Less Than 5")	Sq. Ft.	79
Concrete Sealer	Sq. Ft.	1714

MODEL: Default
FILE NAME: S:\2018\181L042-AES PH2 IDOT IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-011-Pier 2 Concrete Repair.dgn
10/16/2019 2:32:02 PM



QUIGG ENGINEERING INC

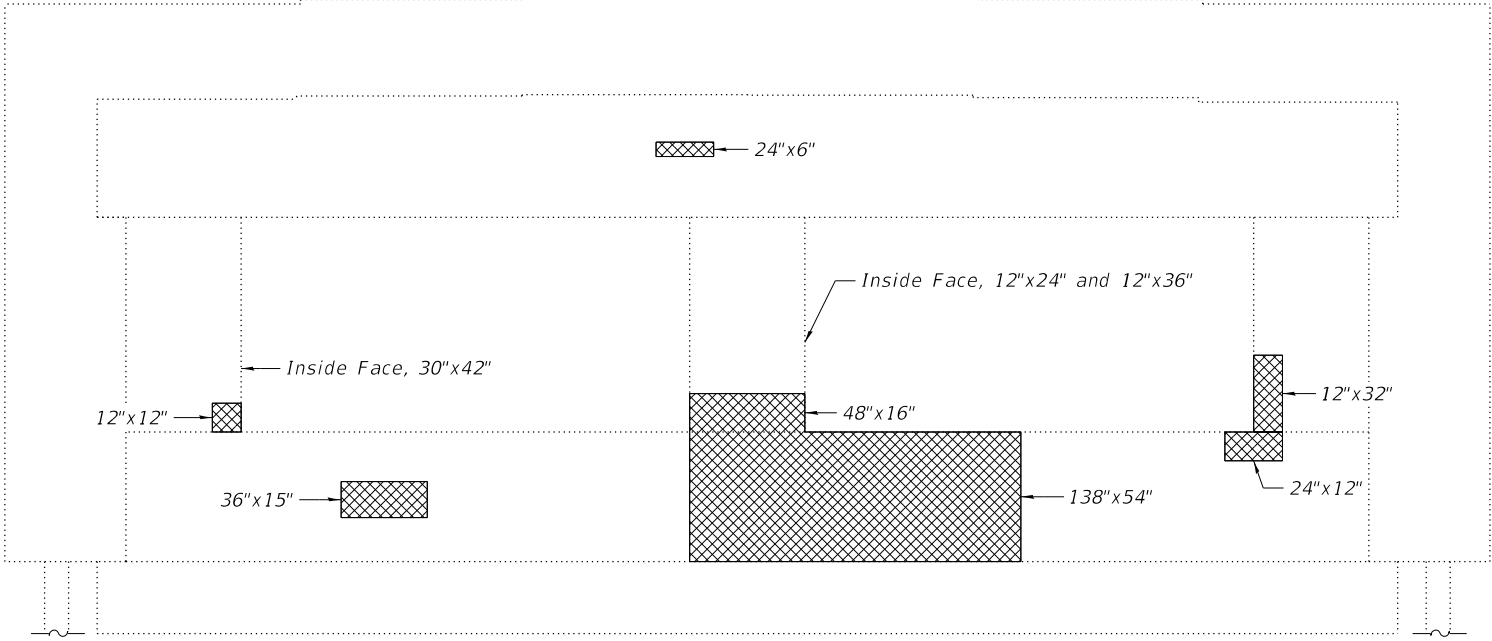
USER NAME	=	wmohammed	DESIGNED	-	AWM	REVISED	-
			CHECKED	-	SDY	REVISED	-
PLOT SCALE	=	0:2.0000 " = 1 in.	DRAWN	-	KFO	REVISED	-
PLOT DATE	=	10/16/2019	CHECKED	-	MDC	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 CONCRETE REPAIR
STRUCTURE NO. 099-0151

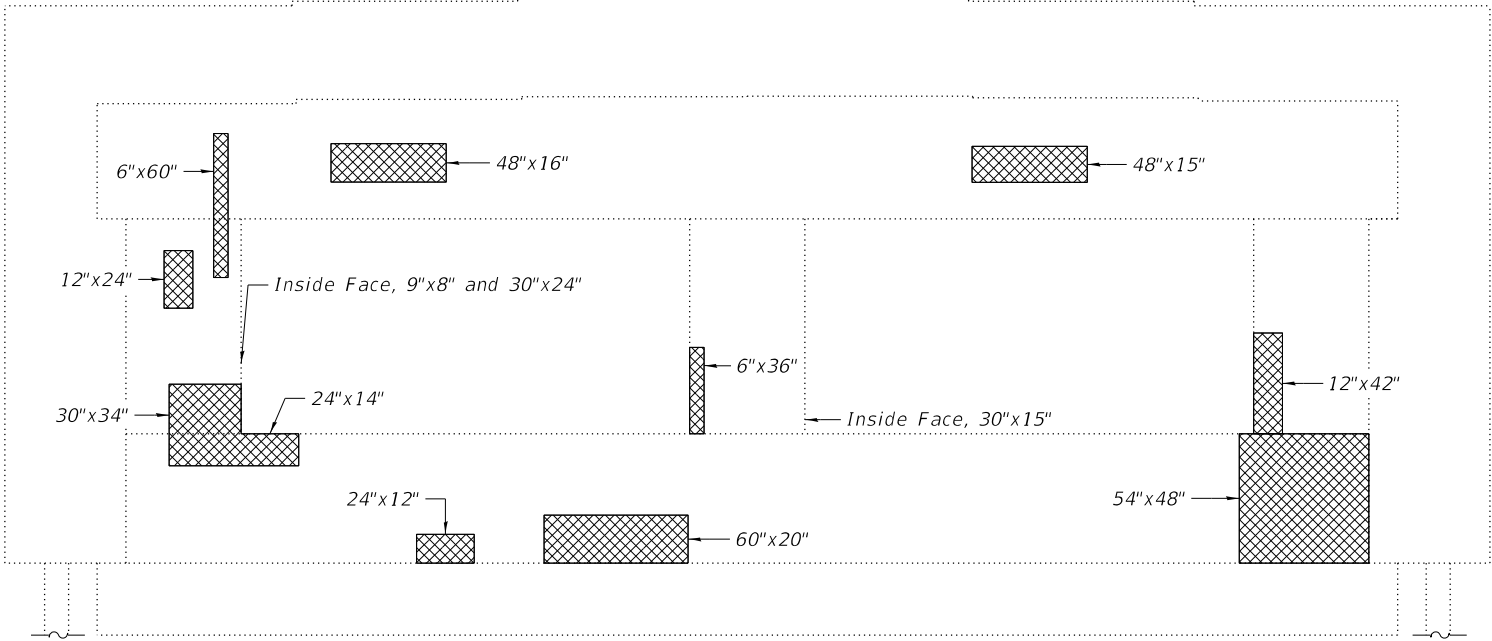
SHEET 11 OF 16 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	26
CONTRACT NO. 62J60				
		ILLINOIS	FED. AID PROJECT	



PIER 2 ELEVATION
(Looking West)

Notes:
Dimensions given for repair areas are width by height.



PIER 2 ELEVATION
(Looking East)

LEGEND
Concrete Repair Area

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concete (Depth Equal to or Less Than 5")	Sq. Ft.	148
Concrete Sealer	Sq. Ft.	1625

MODEL: Default
FILE NAME: S:\2018\181042-AES PH2 IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-012-Pier 3 Concrete Repair.dgn
10/16/2019 2:32:03 PM



QUIGG ENGINEERING INC

USER NAME	=	wmohammed
PLOT SCALE	=	0:2.0000 " = 1' in.
PLOT DATE	=	10/16/2019

DESIGNED	-	AWM
CHECKED	-	SDY
DRAWN	-	KFO
CHECKED	-	MDC

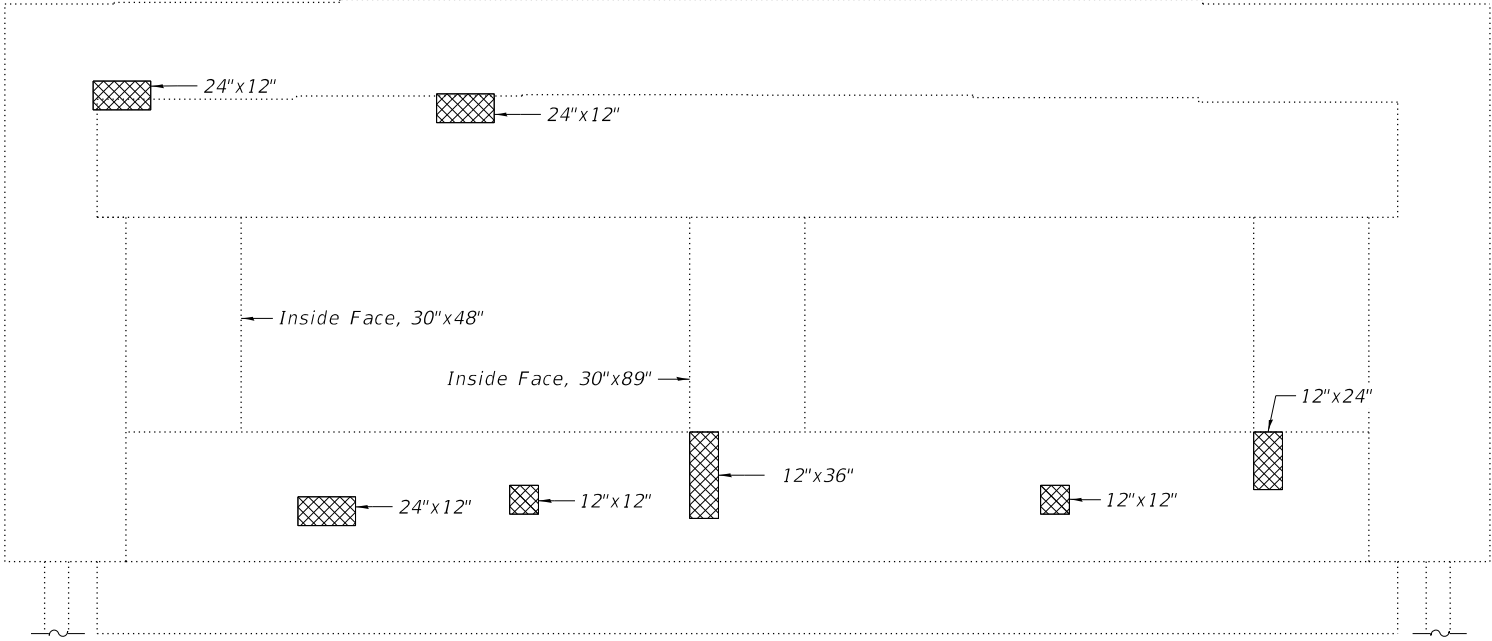
REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 CONCRETE REPAIR
STRUCTURE NO. 099-0151

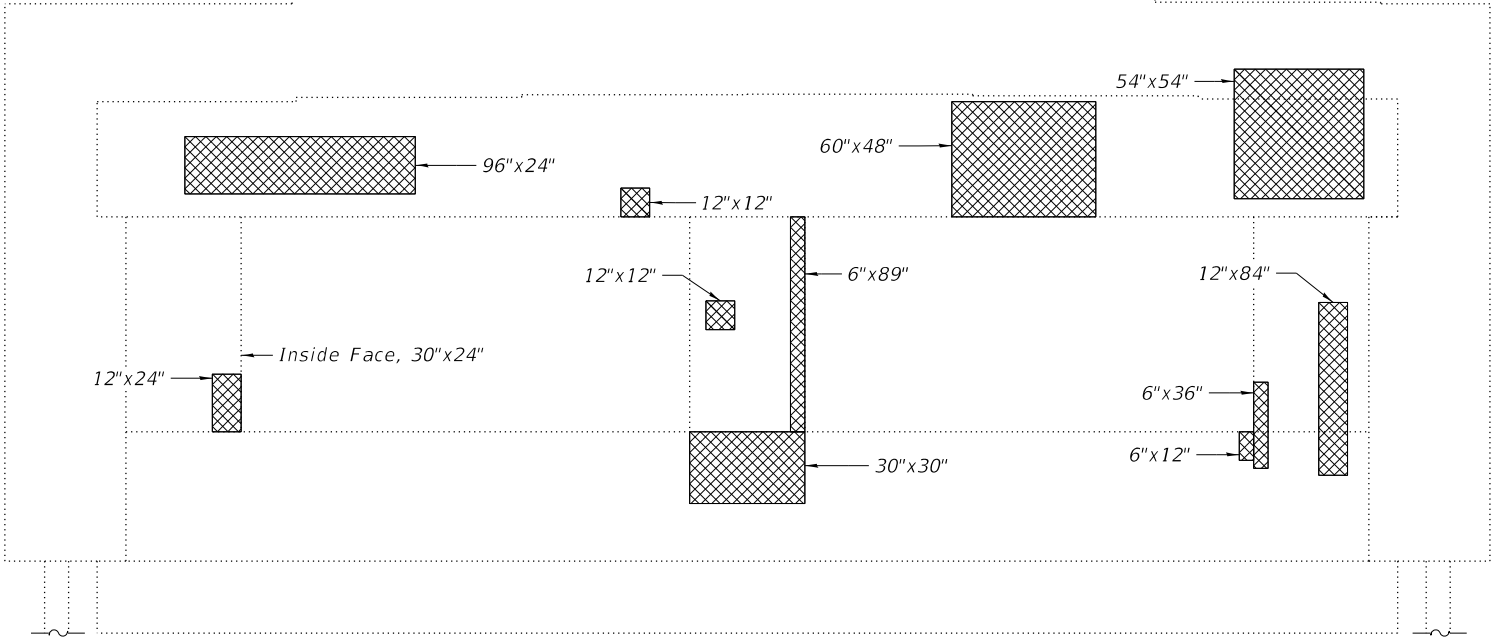
SHEET 12 OF 16 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	27
CONTRACT NO. 62J60				
ILLINOIS FED. AID PROJECT				



PIER 3 ELEVATION
(Looking West)

Notes:
Dimensions given for repair areas are width by height.



PIER 3 ELEVATION
(Looking East)

LEGEND
Concrete Repair Area

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concete (Depth Equal to or Less Than 5")	Sq. Ft.	126
Concrete Sealer	Sq. Ft.	1671

MODEL: Default
FILE NAME: S:\2018\181042-AES PH2 IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-013-Pier 1 Crash Wall Modification.dgn
10/16/2019 2:32:03 PM



QUIGG ENGINEERING INC

USER NAME	=	wmohammed
PLOT SCALE	=	0:2.0000 " = 1' in.
PLOT DATE	=	10/16/2019

DESIGNED	-	AWM
CHECKED	-	SDY
DRAWN	-	KFO
CHECKED	-	MDC

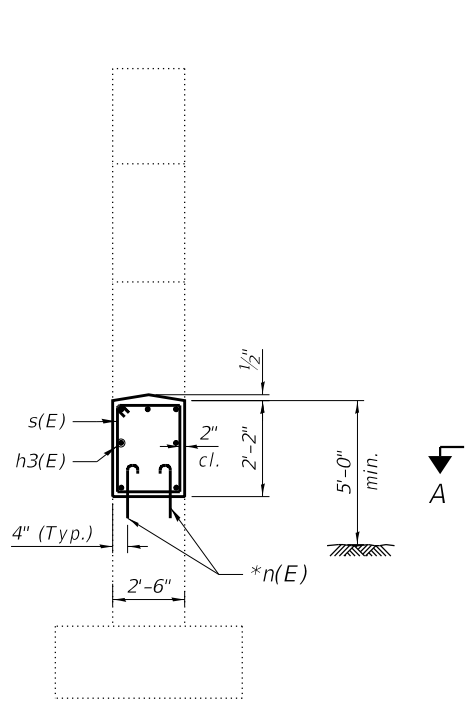
REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

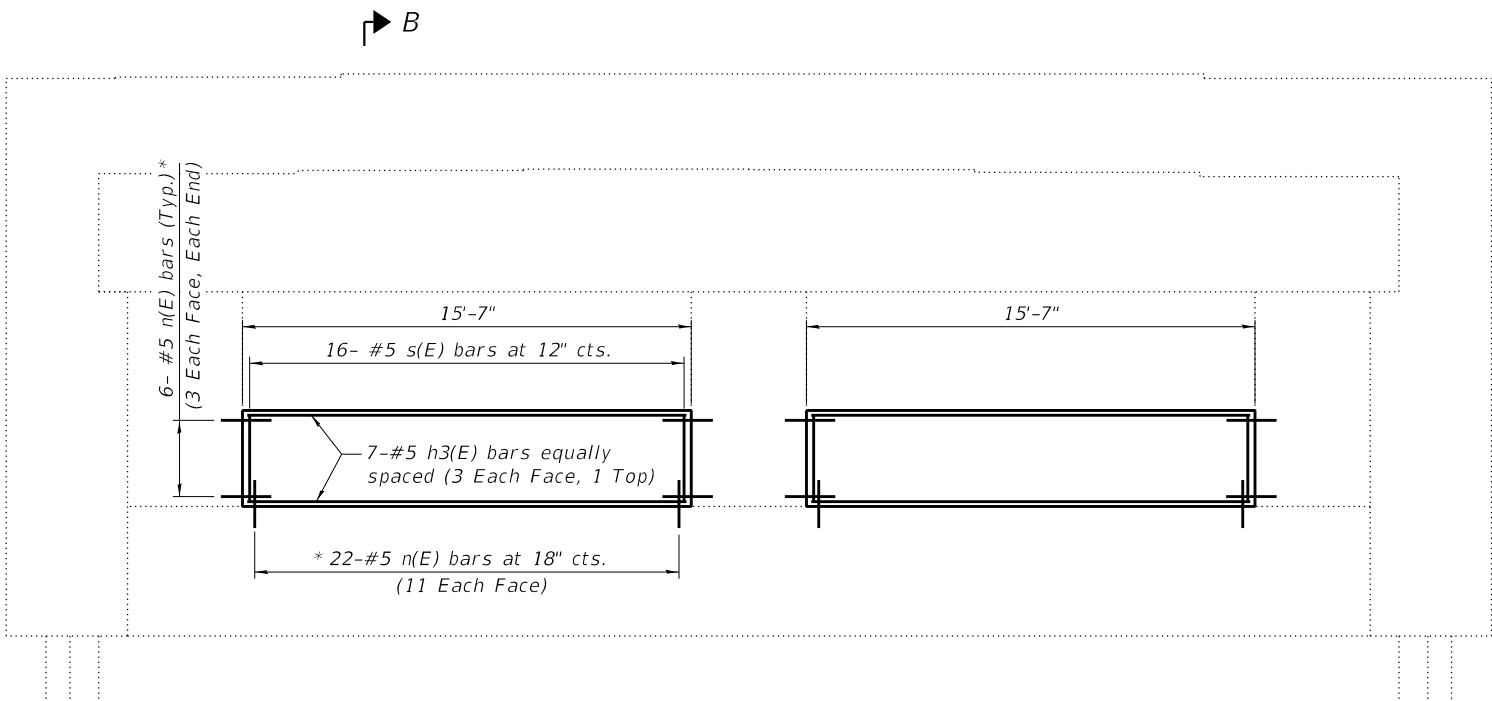
PIER 1 - CRASH WALL MODIFICATION
STRUCTURE NO. 099-0151

SHEET 13 OF 16 SHEETS

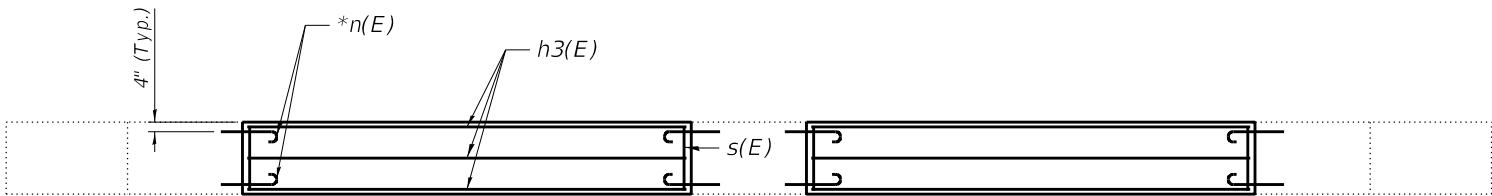
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	28
CONTRACT NO. 62J60				
ILLINOIS FED. AID PROJECT				



SECTION B-B



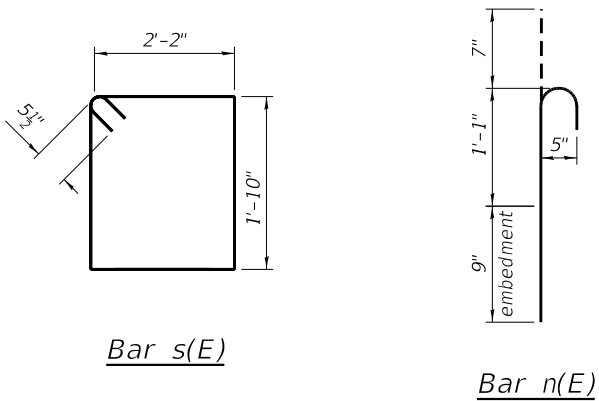
ELEVATION



SECTION A-A

Notes:

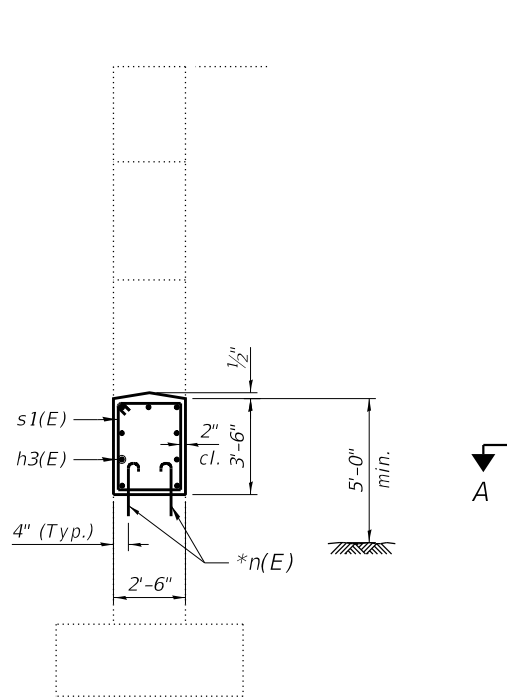
* Epoxy grout n(E) bars 9" min. holes according to Article 584 of the Standard Specifications. The cost of epoxy grouting threaded rods shall be included with Reinforcement Bars, Epoxy Coated.



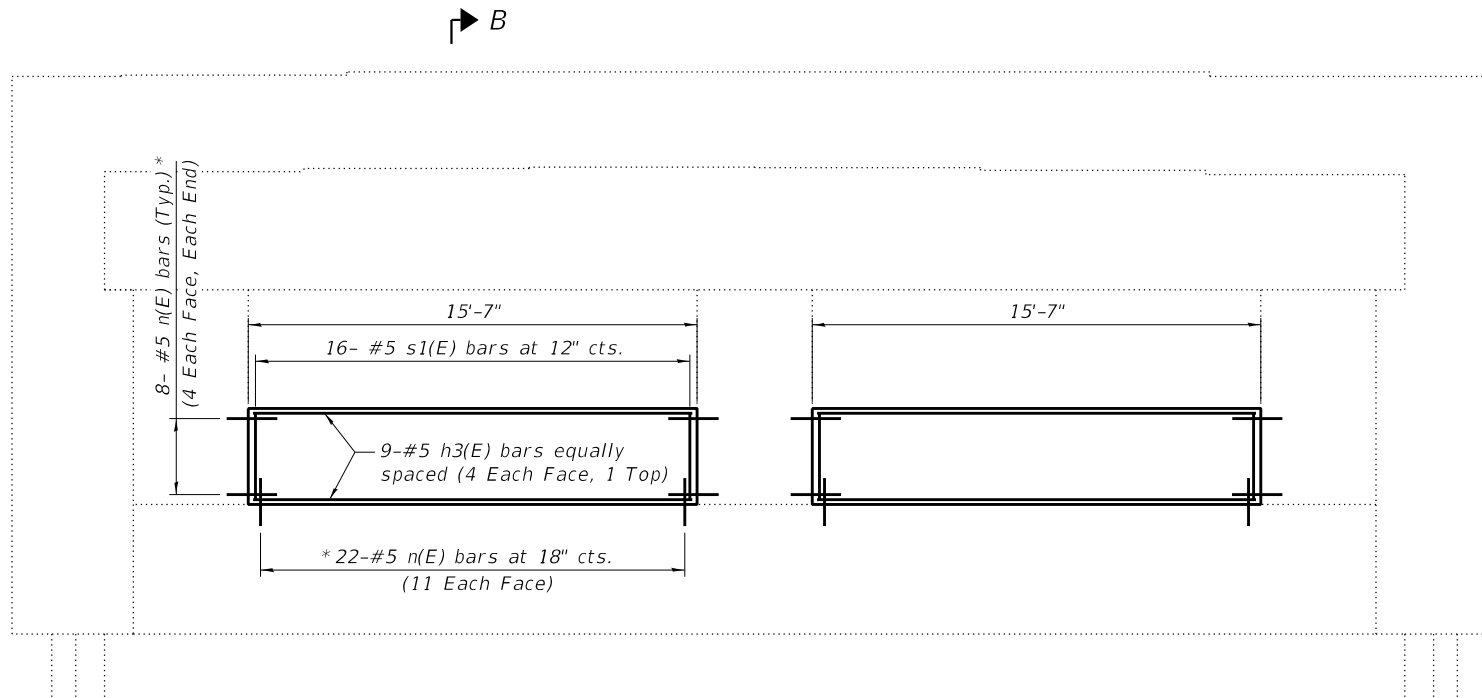
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h3(E)	14	#5	15'-3"	
n(E)	68	#5	2'-5"	
s(E)	32	#5	8'-11"	
Concrete Structures				Cu. Yd. 6.3
Reinforcement Bars, Epoxy Coated				Pound 700

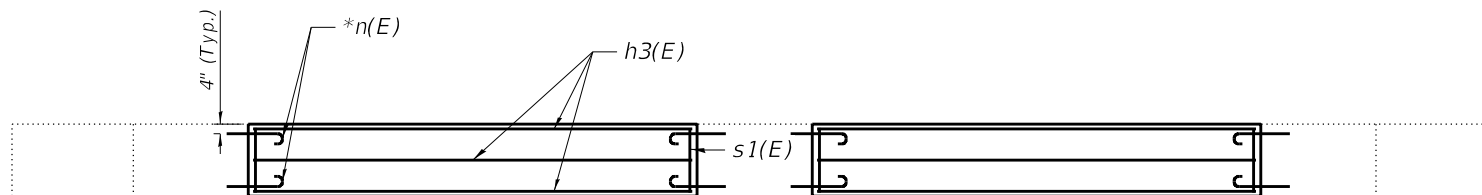
MODEL: Default
FILE NAME: S:\2018\181042-AES PH2 IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-014-Pier 2 Crash Wall Modification.dgn



SECTION B-B



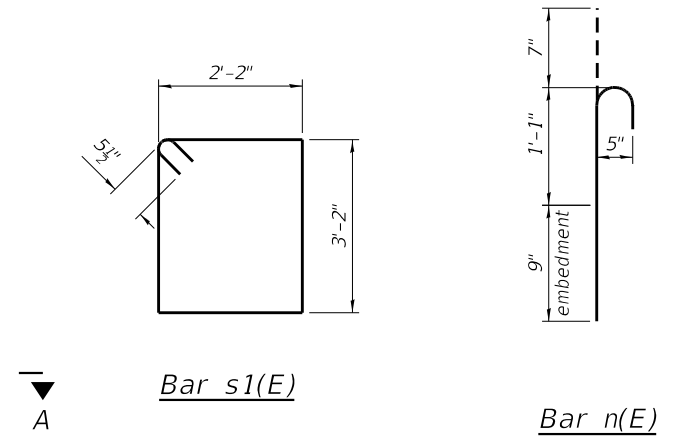
Elevation



SECTION A-A

Notes:

* Epoxy grout n(E) bars 9" min. holes according to Article 584 of the Standard Specifications. The cost of epoxy grouting threaded rods shall be included with Reinforcement Bars, Epoxy Coated.



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h3(E)	18	#5	15'-3"	—
n(E)	76	#5	2'-5"	—
s1(E)	32	#5	11'-7"	□
Concrete Structures			Cu. Yd.	10.2
Reinforcement Bars, Epoxy Coated			Pound	870



QUIGG ENGINEERING INC

USER NAME =	wmohammed	DESIGNED -	AWM	REVISED -	
		CHECKED -	SDY	REVISED -	
PLOT SCALE =	0:2,0000 " = 1"	DRAWN -	KFO	REVISED -	
PLOT DATE =	10/16/2019	CHECKED -	MDC	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 - CRASH WALL MODIFICATION
STRUCTURE NO. 099-0151

SHEET 14 OF 16 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	29
CONTRACT NO. 62J60				
ILLINOIS FED. AID PROJECT				

MODEL: Default
FILE NAME: S:\2018\181042-AES PH2 IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-015-Pier 3 Crash Wall Modification.dgn
10/16/2019 2:32:04 PM



QUIGG ENGINEERING INC

USER NAME = wmoammed
PLOT SCALE = 0:2.0000 " = 1" / in.
PLOT DATE = 10/16/2019

DESIGNED - AWM
CHECKED - SDY
DRAWN - KFO
CHECKED - MDC

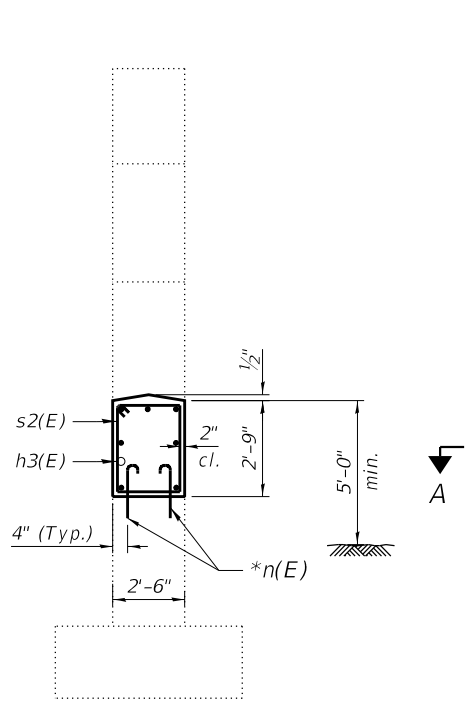
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

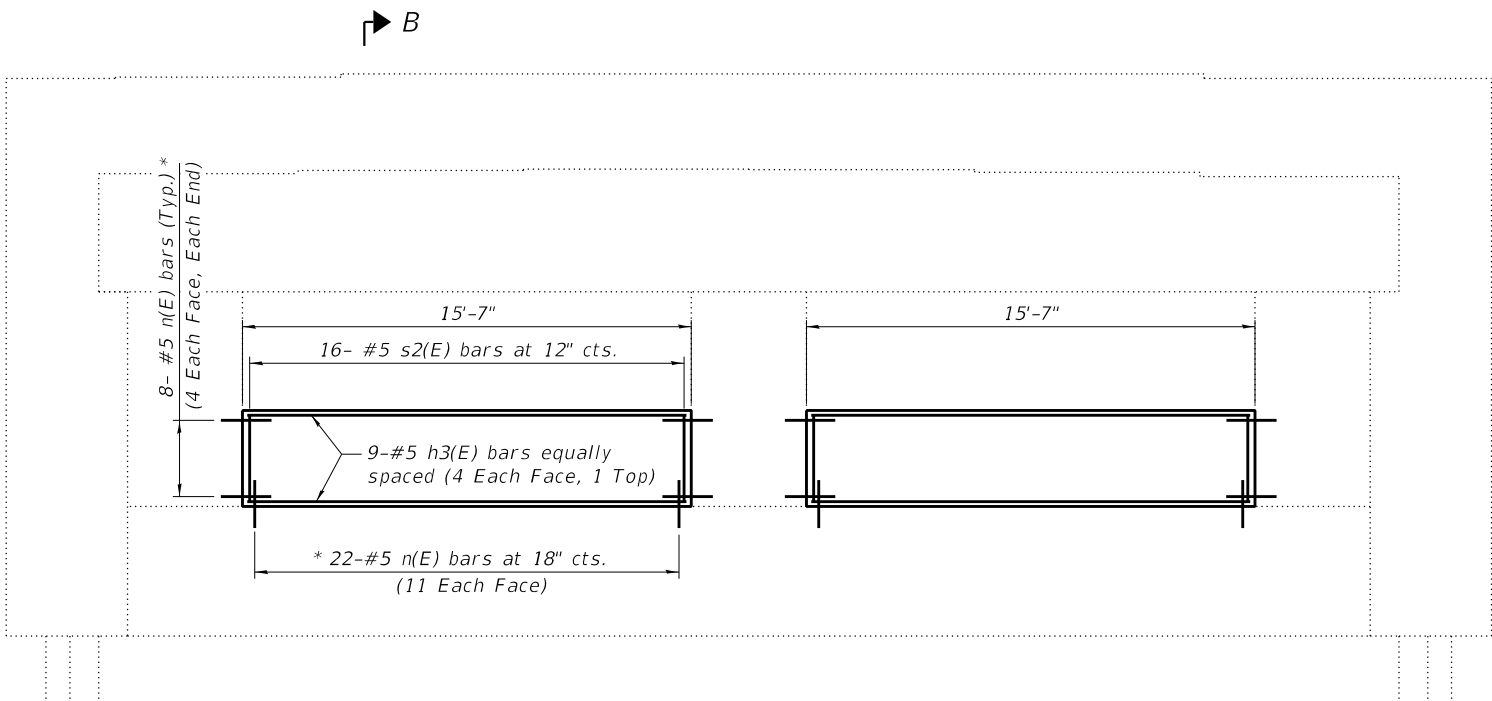
PIER 3 - CRASH WALL MODIFICATION
STRUCTURE NO. 099-0151

SHEET 15 OF 16 SHEETS

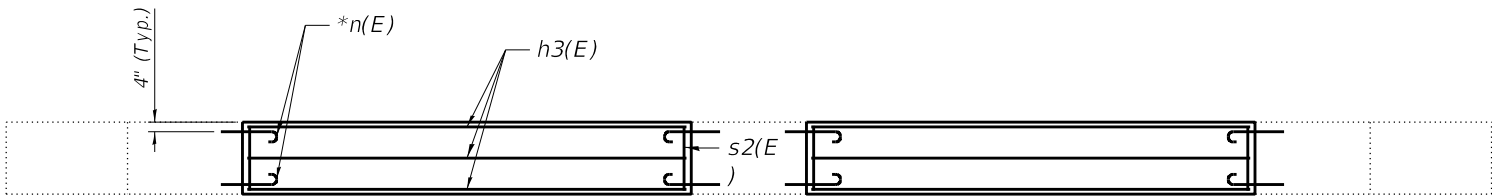
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	30
CONTRACT NO. 62J60				
ILLINOIS FED. AID PROJECT				



SECTION B-B



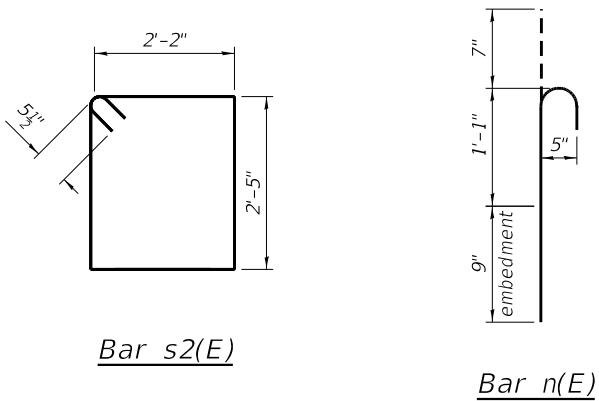
ELEVATION



SECTION A-A

Notes:

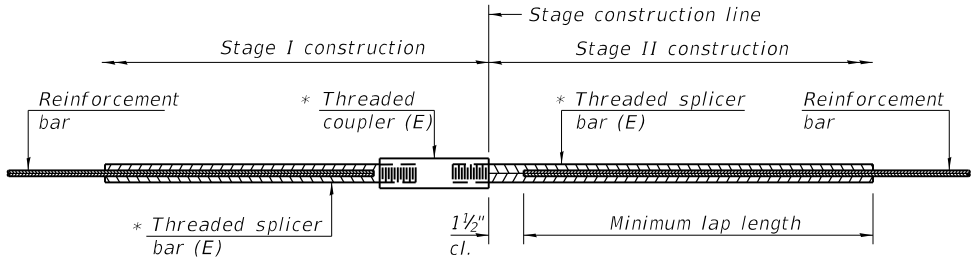
* Epoxy grout n(E) bars 9" min. holes according to Article 584 of the Standard Specifications. The cost of epoxy grouting threaded rods shall be included with Reinforcement Bars, Epoxy Coated.



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h3(E)	18	#5	15'-3"	
n(E)	76	#5	2'-5"	
s2(E)	32	#5	10'-1"	
Concrete Structures				Cu. Yd. 8.0
Reinforcement Bars, Epoxy Coated				Pound 820

MODEL: Default
FILE NAME: S:\2018\181042-AES PH2 IDOT D1-PTB 185-02\WO16-CN15213-IL-113 over I-55\CADD\CADD Sheets\0990151-CN62160-016-Bar Splicers.dgn

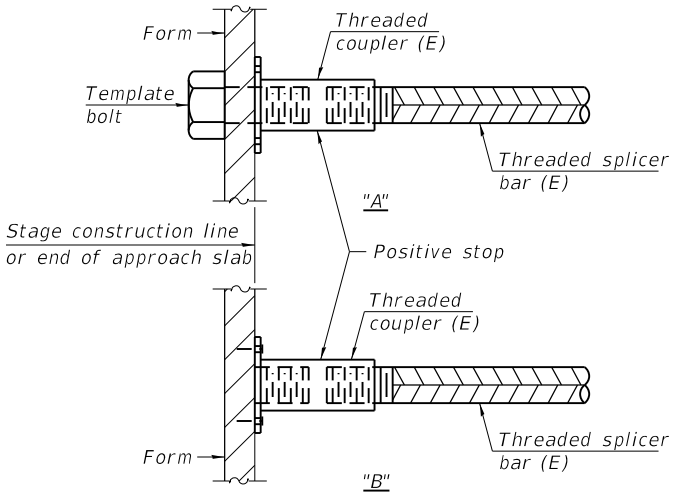


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
W. End of Deck	#5	14	3'-6"
W. Abut. Hatched Block	#6	8	4'-0"
E. End of Deck	#5	14	3'-6"
E. Abut. Hatched Block	#6	8	4'-0"

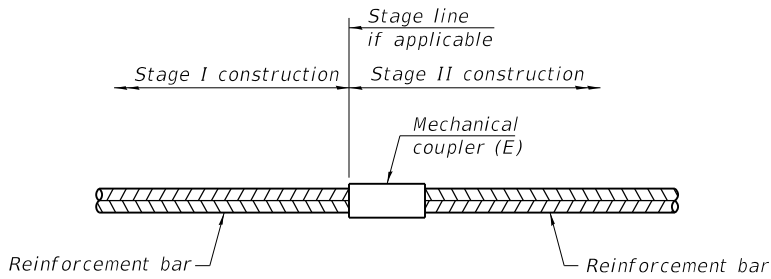


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

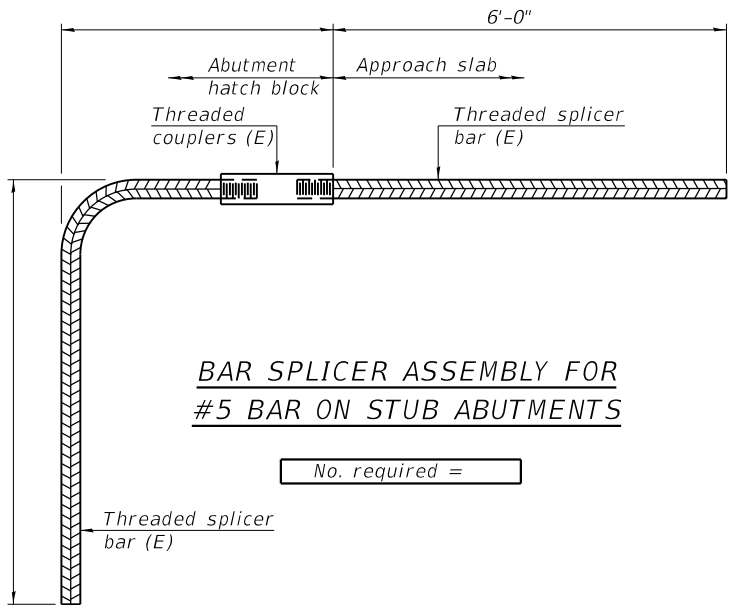
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
W. End S Parapet	#4	6
W End S Parapet	#5	6
W End N Parapet	#4	5
E. End N Parapet	#4	6
E End N Parapet	#5	6
E End S Parapet	#4	5



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

2-17-2017



QUIGG ENGINEERING INC

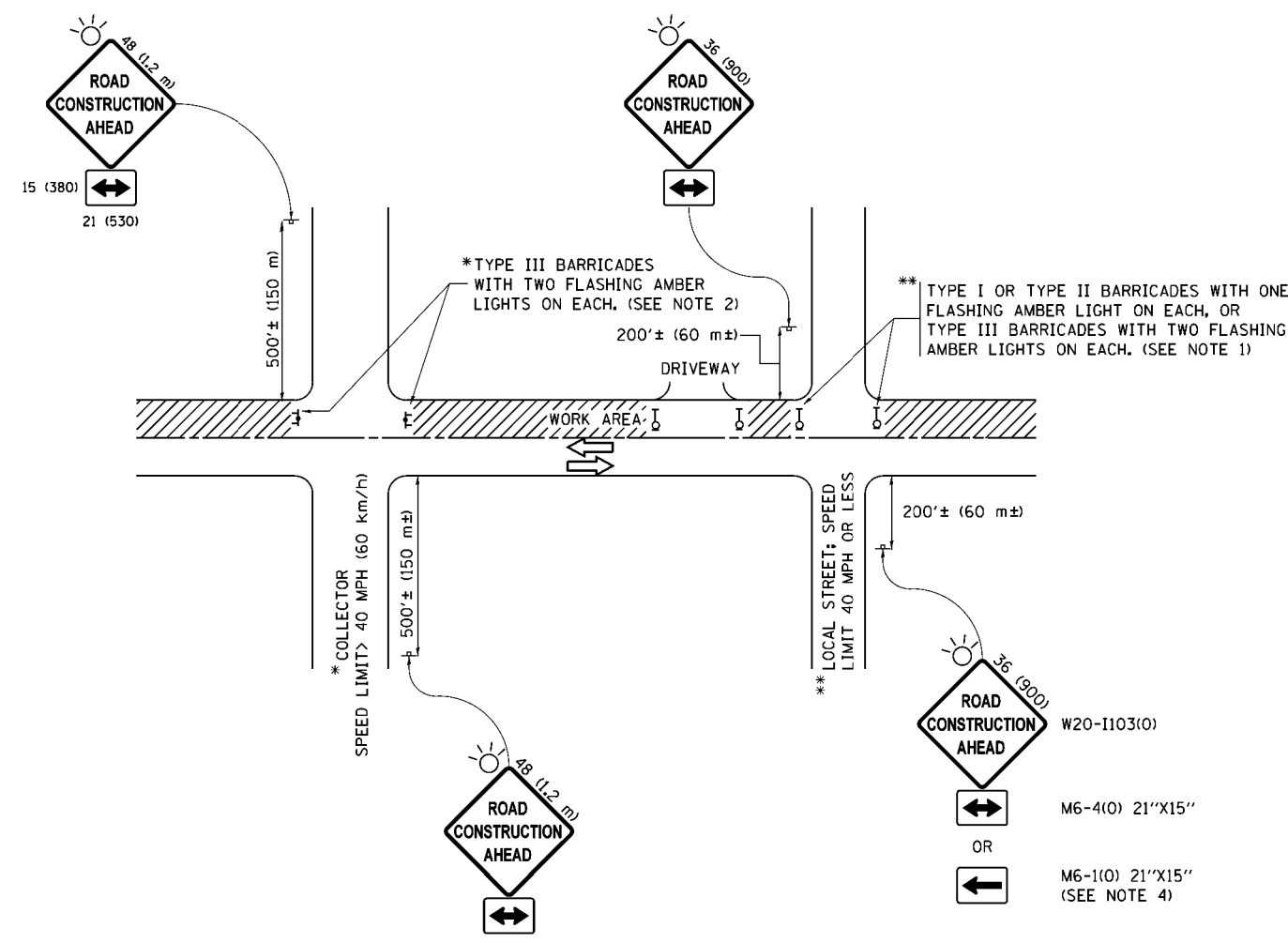
USER NAME =	wmohammed	DESIGNED -	AWM	REVISED -	
		CHECKED -	SDY	REVISED -	
PLOT SCALE =	0:2,0000 " / in.	DRAWN -	KFO	REVISED -	
PLOT DATE =	10/16/2019	CHECKED -	MDC	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 099-0151

SHEET 16 OF 16 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	2019-086-BR	WILL	35	31
CONTRACT NO. 62J60				
		ILLINOIS	FED. AID PROJECT	

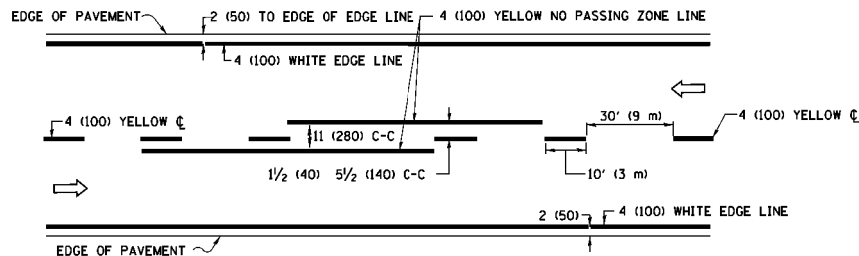


NOTES:

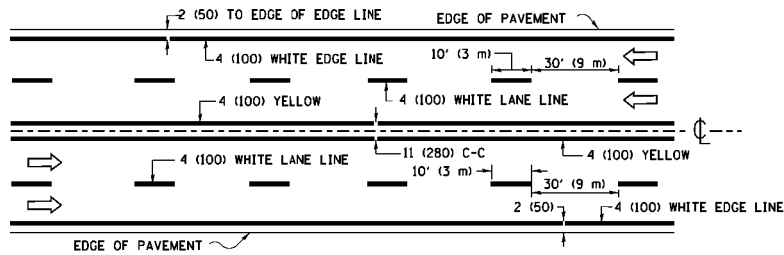
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

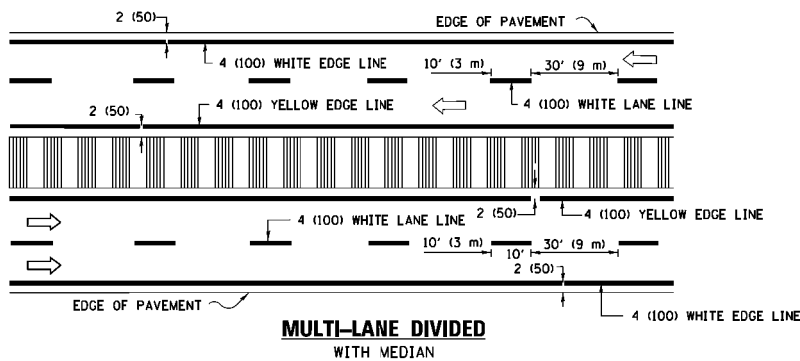
FILE NAME =	USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pwi\11084EBID\INTEG\Illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\District 1\CAD\Drawings\CADsheets\tc10.dgn	DRAWN	CHECKED	REVISED - T. RAMMACHER 01-06-00									2320	2019-086-BR	WILL	35	32
Default	PLOT SCALE = 50,000' / in.	DATE - 06-89	REVISED - A. SCHUETZE 07-01-13									TC-10		CONTRACT NO. 62J60		
	PLOT DATE = 9/15/2016		REVISED - A. SCHUETZE 09-15-16									ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY

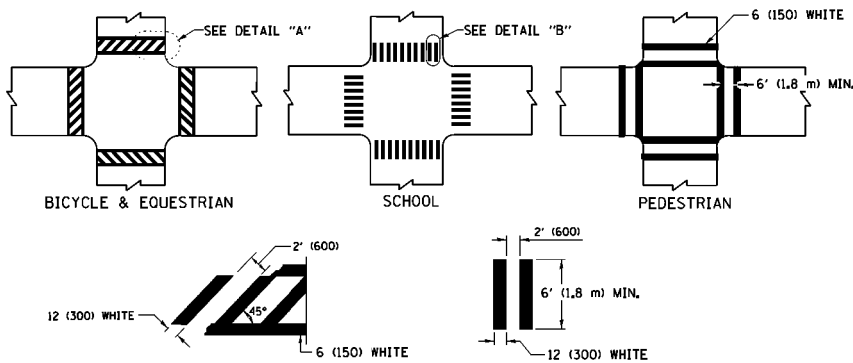


MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

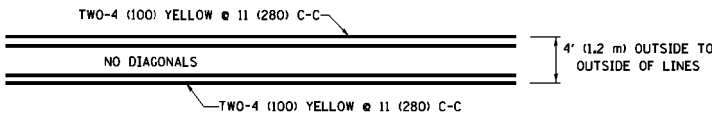


DETAIL "A"

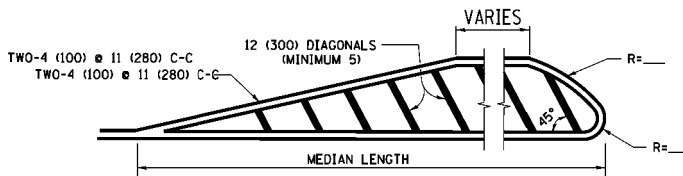
DETAIL "B"

TYPICAL CROSSWALK MARKING

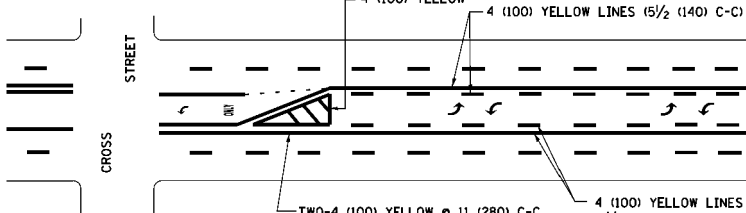
* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



4' (1.2 m) WIDE MEDIANS ONLY

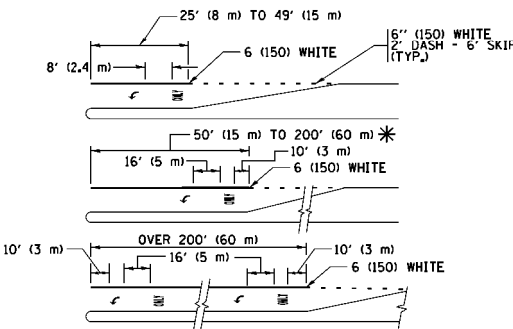


MEDIANS OVER 4' (1.2 m) WIDE



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

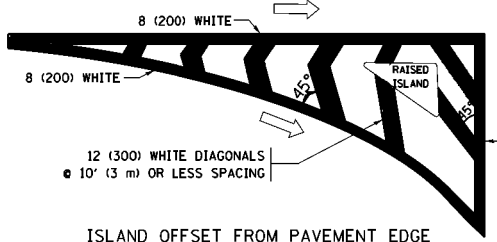


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

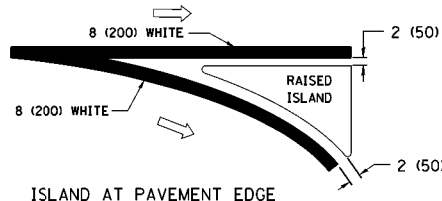
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

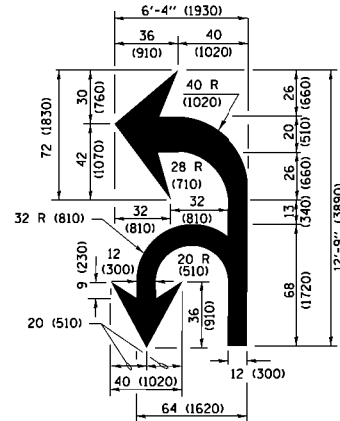


ISLAND OFFSET FROM PAVEMENT EDGE

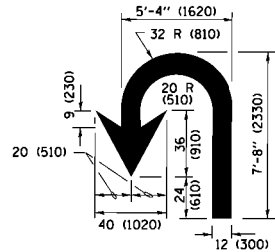


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF "RR" IS 6' (1.8 m) "X" IS 54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

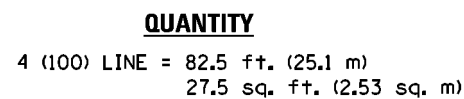
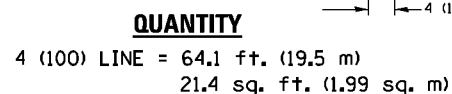
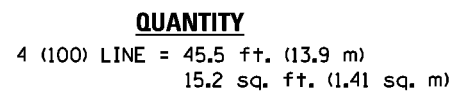
FILE NAME =	USER NAME = lrysa	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
W:\diststd\22x34\td13.dgn		DRAWN -	REVISED - C. JUCIUS 07-01-13
Default	PLOT SCALE = 50,000' / in.	CHECKED -	REVISED - C. JUCIUS 12-21-15
	PLOT DATE = 6/23/2017	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

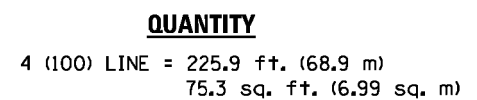
DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	2019-086-BR	WILL	35	33
TC-13		CONTRACT NO. 62J60		
		ILLINOIS FED. AID PROJECT		

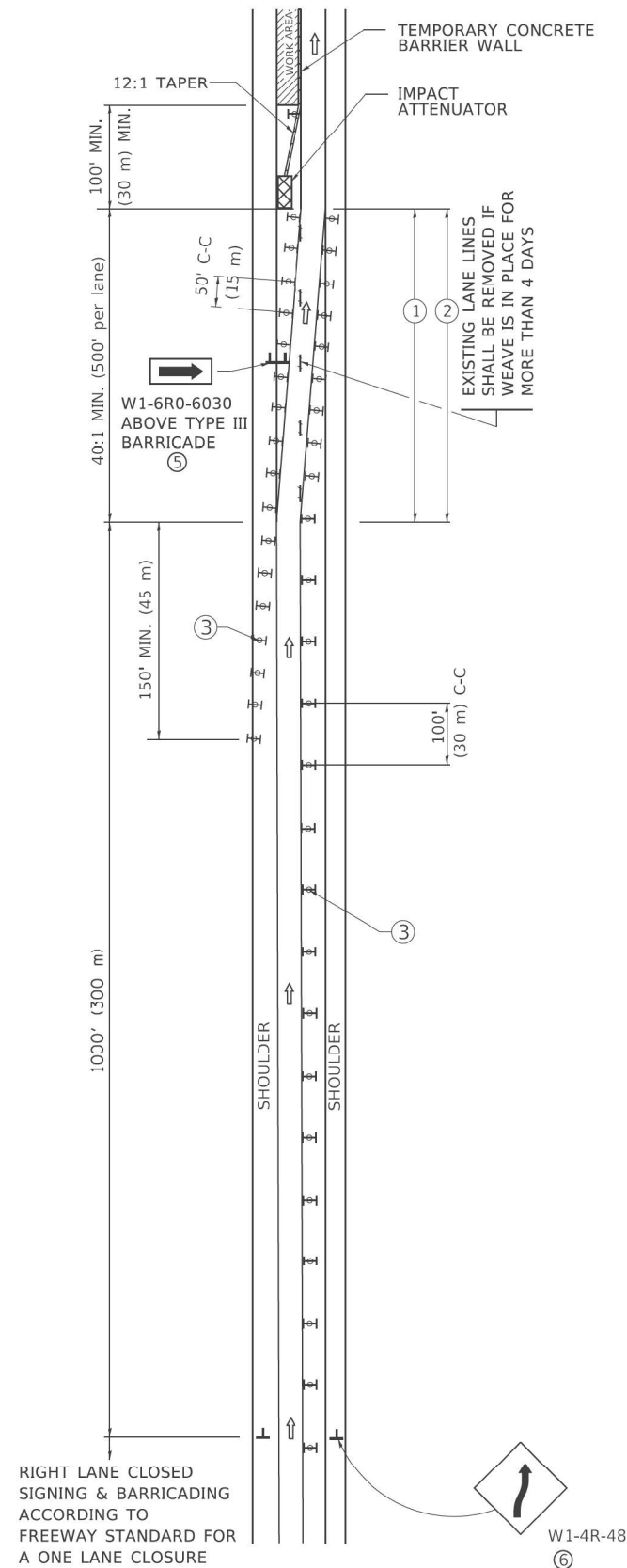


ALL QUANTITIES OF PLACEMENT ARE REPRESENTED
IN LINEAR FEET OF 4" LINES TO MATCH THE
4" TEMPORARY TAPE PAY ITEM AND REPRESENTS
THE TOTAL QUANTITY OF 4" TAPE REQUIRED.

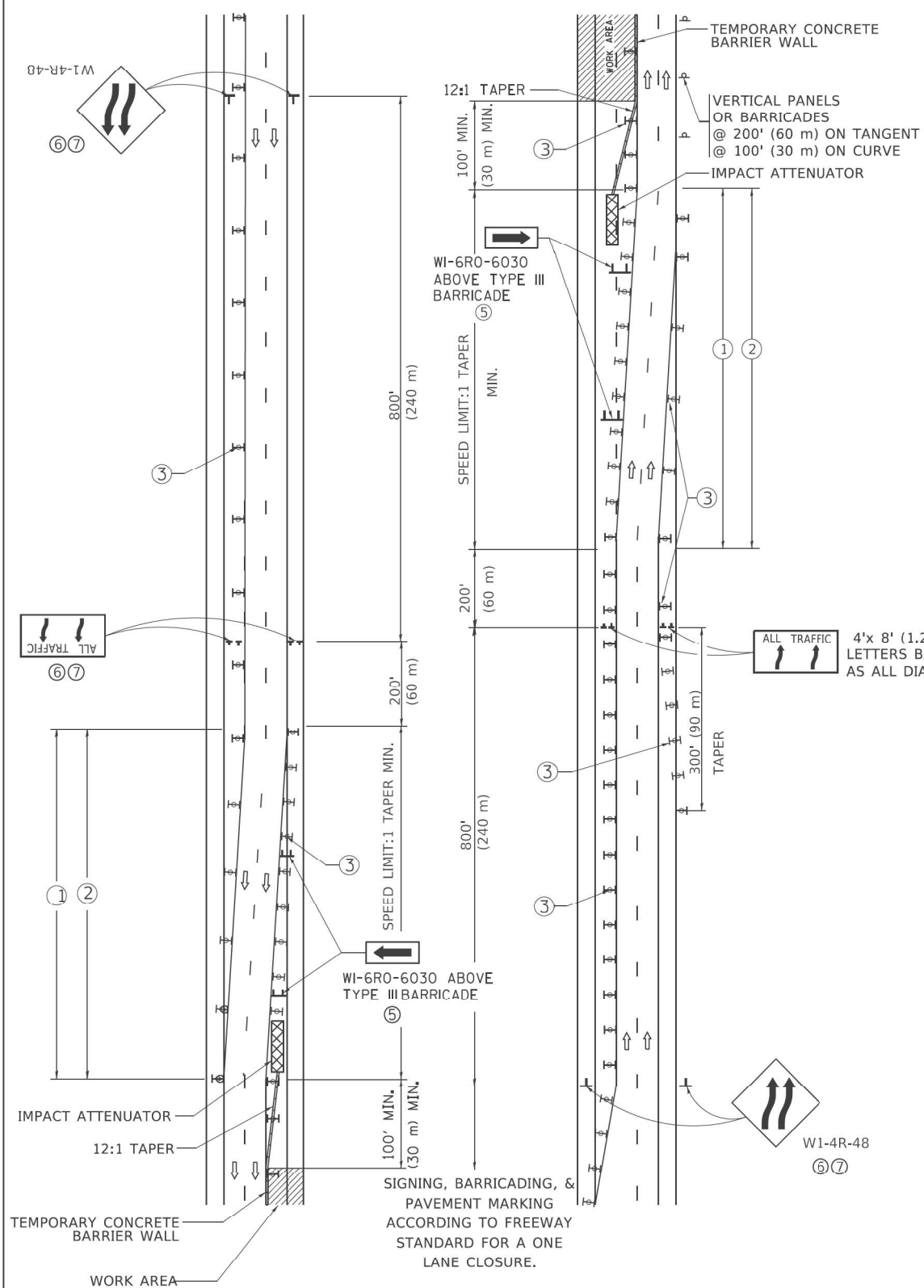


FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED -T. RAMMACHER 03-02-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS				F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pwt\IL084EBIDINTEGillinois.gov\PWDOT\Documents\DOT Offices\District 1\Projects\Dist 1\DRAWN\CADDData\CADsheets\tal5.dgn	PLOT SCALE = 50.0000' / 1"	CHECKED -	REVISED -E. GOMEZ 08-28-00						2320	2019-086-BR	WILL	35	34
	PLOT DATE = 9/15/2016	DATE - 09-18-94	REVISED -A. SCHUETZE 09-15-16		TC-16		CONTRACT NO. 62J60						
					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SINGLE LANE WEAWE










MULTI-LANE WEAVE



- GENERAL NOTES:

- ① EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 4 DAYS IN DURATION.
- ② CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.
- ③ PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
- ④ ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- ⑤ TYPE III BARRICADES MAY BE OMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. W1-6 SIGNS WILL STILL BE REQUIRED. IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.
- ⑥ WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.
- ⑦ THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.

SYMBOLS

- | | |
|---------------------------------------------------------------------------------------|----------------------------------------------------------------------|
|  | DIRECTION OF TRAFFIC |
|  | WORK AREA |
|  | SIGN ON PORTABLE OR PERMANENT SUPPORT |
|  | TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT |
|  | TEMPORARY CONCRETE BARRIER WALL |
|  | IMPACT ATTENUATOR |
|  | |
- W24-1-48
- ⑦

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN

USER NAME = footemj	DESIGNED - D.W.S.	REVISED - J.A.F. 02-06
	DRAWN -	REVISED - S.P.B. 01-07
PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED - S.P.B. 12-09
PLOT DATE = 3/4/2019	DATE = 02-87	REVISED - M.D. 06-13

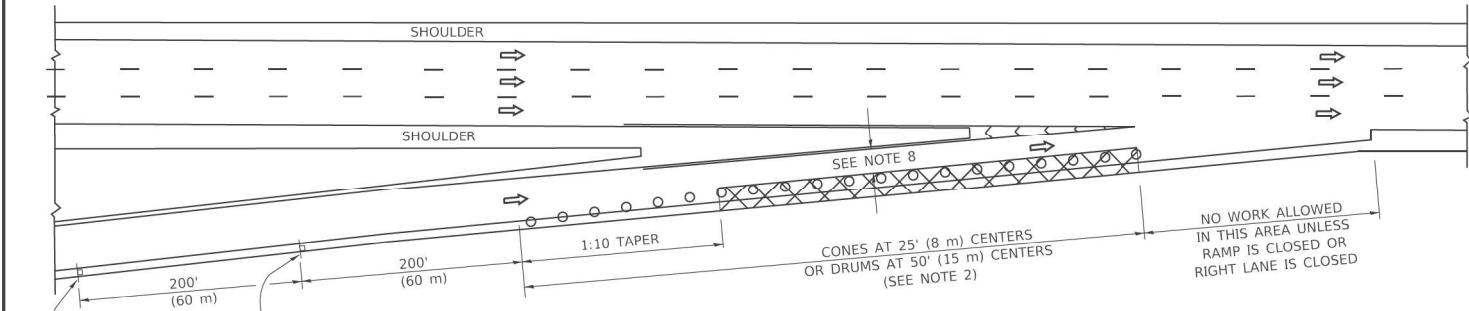
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI-LANE WEAVE

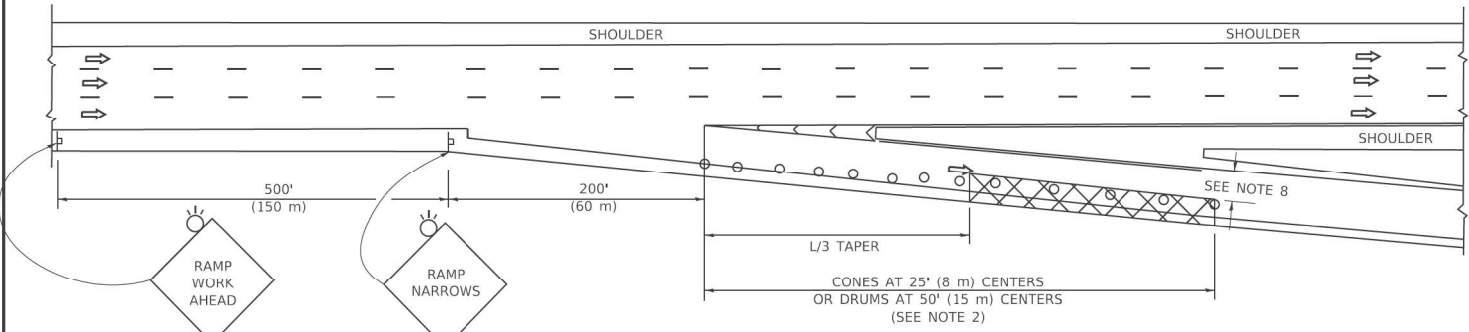
SCALE: NONE	SHEET 1 OF 1 SHEETS	STA. TO STA.
-------------	---------------------	--------------

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	2019-086-BR	WILL	35	35A
TC-09		CONTRACT NO. 62J60		
ILLINOIS		FED. AID PROJECT		

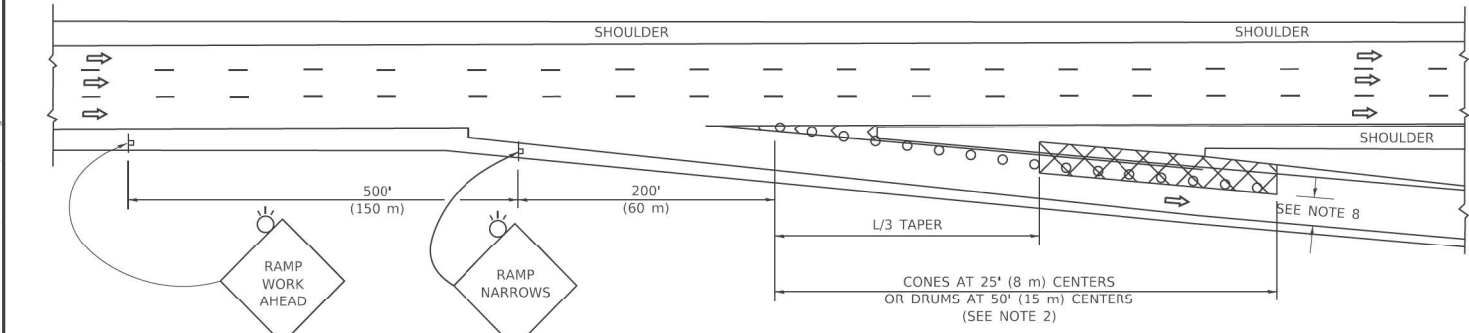
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

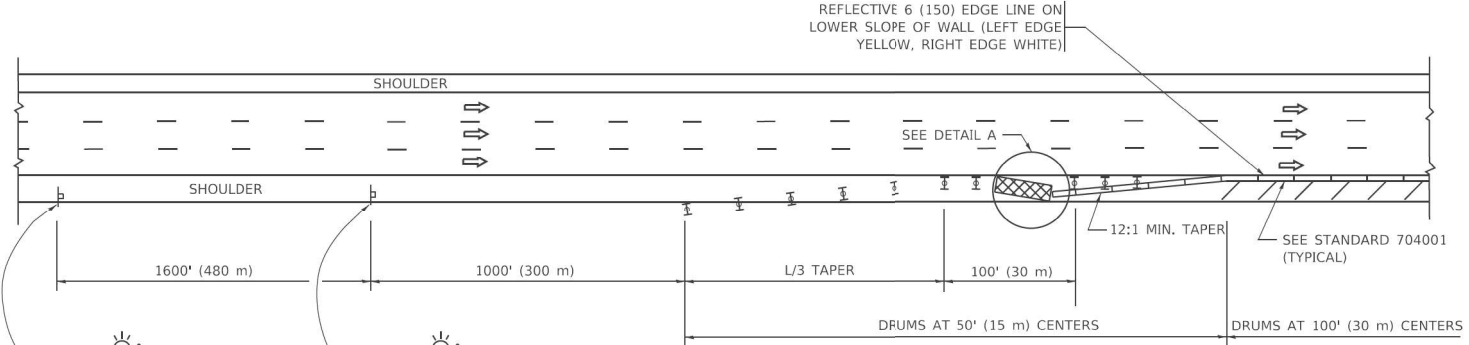
SYMBOLS

- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

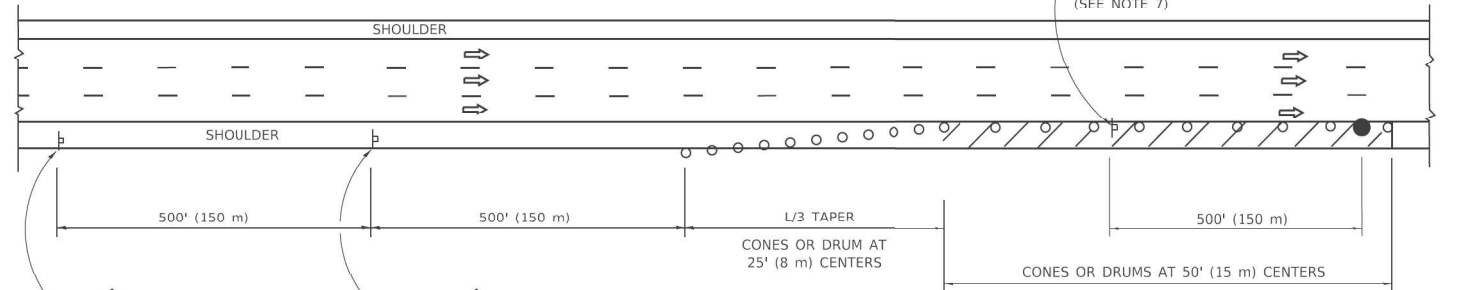
GENERAL NOTES:

- THE "L" DISTANCE EQUALS:
 $L = \frac{S^2}{24.5}$
SPEED LIMIT
45 mph (80 km/h)
OR GREATER
W = WIDTH OF OFFSET IN FEET (METERS)
S = NORMAL POSTED SPEED MPH (KM/H)
FORMULAS
METRIC
ENGLISH
 $L = 0.65(W)(S)$
 $L = (W)(S)$
- TYPE II BARRICADES OR DRUMS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES. TYPE II BARRICADES OR DRUMS WITH MONODIRECTIONAL STEADY BURN LIGHTS ARE REQUIRED FOR DELINEATING OBSTACLES, EXCAVATIONS, OR HAZARDS EXCEEDING 100 FT (30m) IN LENGTH AT NIGHT.
- 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.

SHOULDER CLOSURE DETAILS



PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

ARRAY DESIGN PER MANUFACTURER TO BE NCHRP 350/MASH COMPLIANT.

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

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

MODEL Default
FILE NAME: p:\080848\BUD\NTEC\Illinois.gov-RWDOT\Documents\DOT_Offices\Bldg\1\Projects\DH\542323\ACAD\Bldg\CAD\Sheet\TC17.dgn
17:4m 3/4/2019 10:41:43 AM User:footem

USER NAME	= footemj	DESIGNED -	REVISED -	S.P.B. 01-07
DRAWN -	D.W.S.	REVISED -	S.P.B. 12-09	
PLOT SCALE	= 50.0000' / in.	CHECKED -	REVISED -	M.D. 06-13
PLOT DATE	= 3/4/2019	DATE -	REVISED -	M.D. 01-18

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY
SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2320	2019-086-BR	WILL	35	35B
TC-17		CONTRACT NO. 62J60		
ILLINOIS		FED. AID PROJECT		