

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
CONTRACT MAINTENANCE**

F.A.P. ROUTE 510 (IL 96)
SECTION (120)I-7

BRIDGE DECK OVERLAYS
HANCOCK COUNTY

C-96-045-15

FOR INDEX OF SHEETS, SEE SHEET NO. 2

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	(120)I-7	HANCOCK	24	1
		ILLINOIS	CONTRACT NO. 72H69	

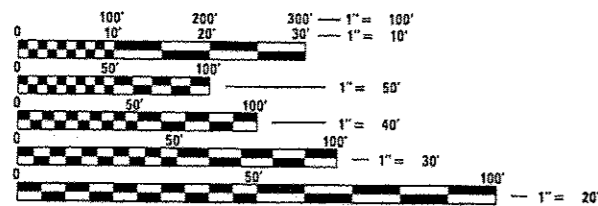
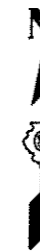
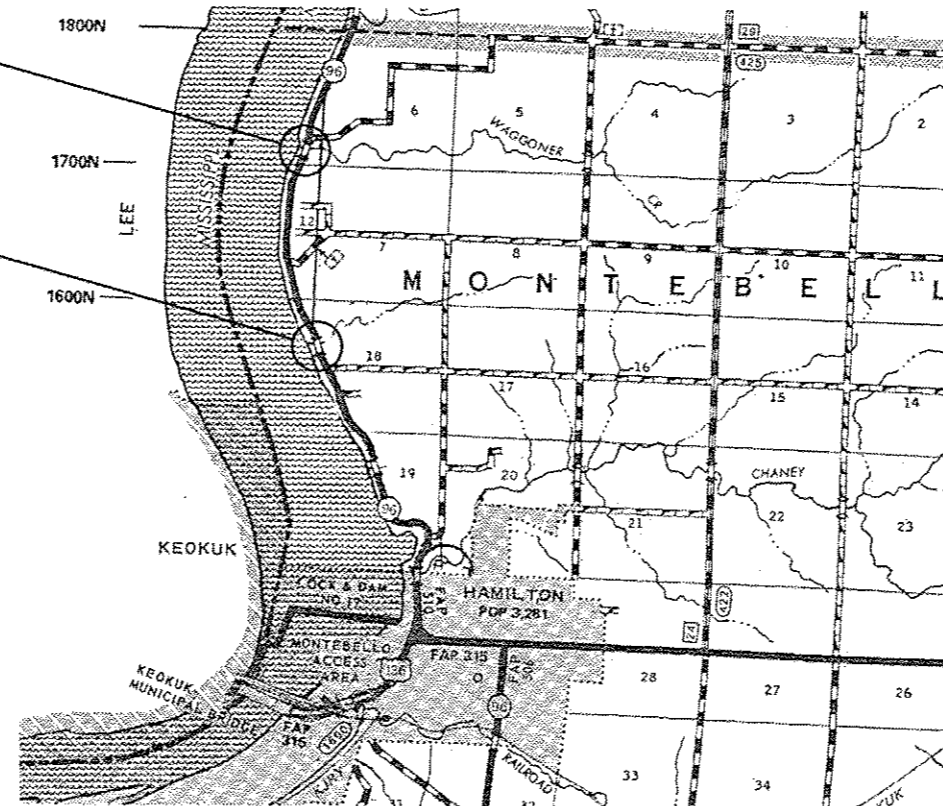
24+1 = 25 TOTAL SHEETS

D-96-045-15



LOCATION #1: SN 034-0058
IL 96 OVER WAGGONER CREEK
4.2 MI NORTH OF US 136 IN HAMILTON

LOCATION #2: SN 034-0056
IL 96 OVER GRAY BAY
2.5 MI NORTH OF US 136 IN HAMILTON



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

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

BRIDGE MAINTENANCE ENGINEER (ACTING): BRANDON DUDLEY (217) 785-9290
BRIDGE INSPECTION ENGINEER: DAVE COPENBARGER (217) 785-5306

GROSS LENGTH = 8800 FT. = 1.67 MILE
NET LENGTH = 816 FT. = 0.15 MILE

CONTRACT NO. 72H69

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED July 8 2015
Raymond
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Aug 14 2015
William D. Baranzelli PE
ENGINEER OF DESIGN AND ENVIRONMENT

Aug 14 2015
Omar Osman PE
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

INDEX OF SHEETS

1	COVER SHEET
2	INDEX, STANDARDS, SIGNATURES, AND GENERAL NOTES
3	QUANTITIES
4-5	TYPICAL SECTIONS
6	QUANTITY SCHEDULES
7	STAGING PLAN
8	ROADWAY PLAN
9-10	TRAFFIC CONTROL DETAILS
11-17	SN 034-0058 BRIDGE PLANS
* 18-24	SN 034-0056 BRIDGE PLANS

STANDARDS

000001-06
701001-02
701006-05
701201-04
701301-04
701306-03
701321-14
701326-04
701901-04
704001-07

* INCLUDES SHEET Z1A.

GENERAL NOTES:

BASE COURSE WIDENING SHALL BE COMPLETED PRIOR TO STAGING TRAFFIC.

ALL STRUCTURAL STEEL SHALL BE AASHTO M-270 GRADE 36

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

PRIOR TO POURING THE NEW CONCRETE DECK, ALL HEAVY OR 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 CONCRETE REMOVAL.

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 THE SCOPE OF WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

EXISTING REINFORCEMENT BARS EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED, AND INCORPORATED 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.

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.

THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

AREAS OF DECK REPAIRS SHOWN ARE ESTIMATED. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON AS-BUILT PLANS.

MIXTURE USE(S)	HMA BASE CSE WIDENING *	HMA SURFACE CSE	INCLD HMA SURF
AC/PG	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50	4.0% @ N50
MIX COMPOSITION (GRADATION MIXTURE)	IL 19.0 OR IL 19.0 CB	IL 9.5	IL 9.5
FRICTION AGGREGATE	N/A	MIX "C"	MIX "C"
QUALITY MANAGEMENT	QC/QA	QC/QA	QC/QA

* BASE COURSE PAY ITEMS ALLOW FOR HMA OR PCC USE.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT 6

EXAMINED March 9th 20 15
John C. Kuyumjian
ENGINEER OF OPERATIONS

EXAMINED March 11 20 15
Ron Dehambear
ENGINEER OF PROJECT IMPLEMENTATION

EXAMINED MARCH 11 20 15
Jeffrey P. Myers
ENGINEER OF PROGRAM DEVELOPMENT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX, STANDARDS, MIX TABLE,
GENERAL NOTES, & SIGNATURES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	(1201)-7	HANCOCK	24	2
			CONTRACT NO. 72H69	
ILLINOIS FED. AID PROJECT				

FILE NAME *	USER NAME * dudjaybm	DESIGNED -	REVISED -
D:\OPERATIONS\Bridges\Bridgplans.CAD\72H69 - 8348856 and 8348858 overlay\planshe		DRAWN -	REVISED -
Default	PLOT SCALE * 100.0000 "/ in.	CHECKED -	REVISED -
	PLOT DATE * 6/29/2015	DATE -	REVISED -

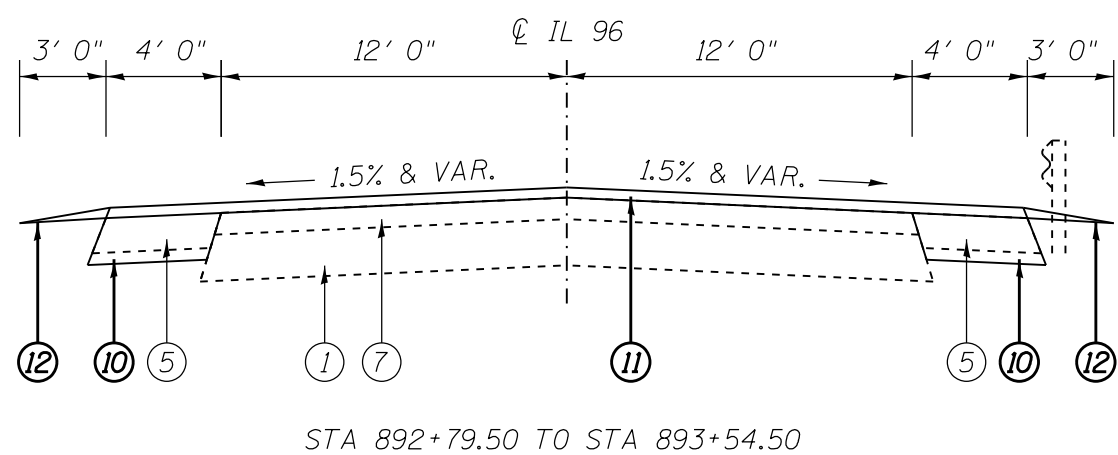
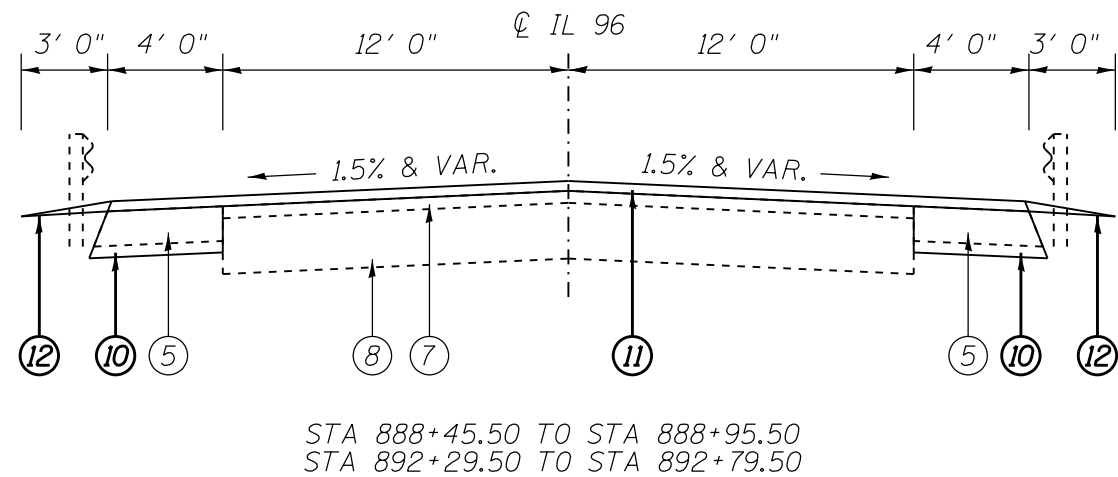
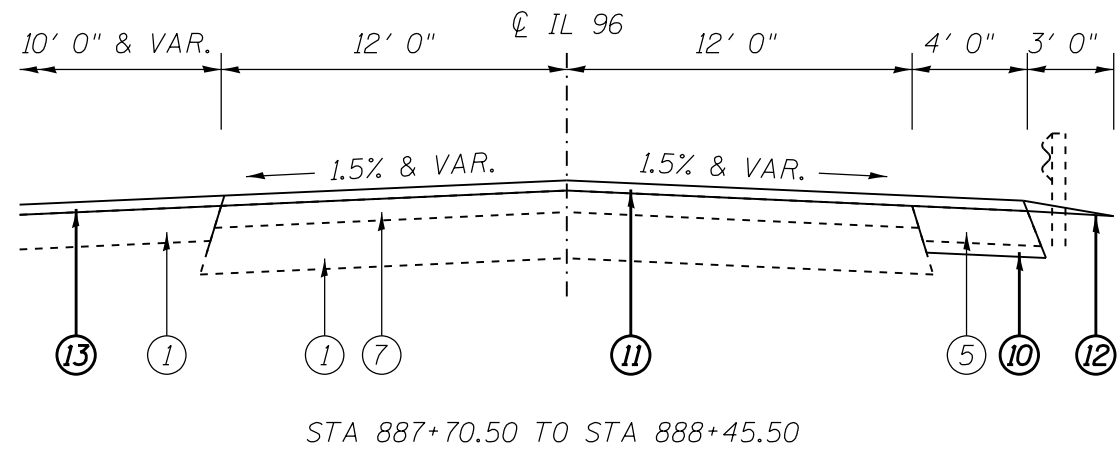
SCALE: SHEET OF SHEETS STA. TO STA.

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	CONSTR. CODE
				100% STATE	100% STATE
				ROADWAY 0014 SN 034-0056	ROADWAY 0014 SN 034-0058
20200500	EARTH EXCAVATION (WIDENING)	CU YD	17.5	7.0	10.5
35650300	BASE COURSE WIDENING 8"	SQ YD	301	112	189
35650530	BASE COURSE WIDENING 13"	SQ YD	112	112	-
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	830	400	430
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	745	389	356
40600990	TEMPORARY RAMP	SQ YD	197	85	112
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", NSO	TON	176	88	88
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACE	TON	6	-	6
44004250	PAVED SHOULDER REMOVAL	SQ YD	412	223	189
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	47	23	24
50102400	CONCRETE REMOVAL	CU YD	12	4	8
50300100	FLOOR DRAINS	EACH	39	3	36
50300255	CONCRETE SUPERSTRUCTURE	CU YD	14	5	9
50300260	BRIDGE DECK GROOVING	SQ YD	1367	262	1105
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	700	700	-
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1850	630	1220
50500505	STUD SHEAR CONNECTORS	EACH	36	36	-
50800515	BAR SPLICERS	EACH	36	12	24
52000110	PERFORMED JOINT STRIP SEAL	FOOT	111	37	74
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	6	6	-
52100520	ANCHOR BOLTS, 1"	EACH	13	12	1
67100100	MOBILIZATION	L SUM	1	0.5	0.5
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	2	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	0.5	0.5

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	CONSTR. CODE
				100% STATE	100% STATE
				ROADWAY 0014 SN 034-0056	ROADWAY 0014 SN 034-0058
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	0.5	0.5
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	0.5	0.5
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	2	1	1
70300100	SHORT TERM PAVEMENT MARKING	FOOT	170	70	100
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	56	23	33
70400100	TEMPORARY CONCRETE BARRIER	FOOT	913	325	588
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	813	325	488
70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4	2	2
70600332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4	2	2
78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	4752	1711	3041
78300100	PAVEMENT MARKING REMOVAL	SQ FT	1257	475	782
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	8	4	4
X0322469	PLUG EXISTING FLOOR DRAINS	EACH	68	-	68
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1	0.5	0.5
Z0001899	JACK AND REMOVE EXISTING BEARING ASSEMBLY	EACH	6	6	-
Z0012130	BRIDGE DECK SCARIFICATION, 3/4"	SQ YD	1437	272	1165
Z0012164	BRIDGE DECK MICROSILICA CONCRETE OVERLAY, 2-1/2"	SQ YD	1437	272	1165
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	16	4	12
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	8	8	-
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	10	2	8
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	57	13	44

* SPECIALTY ITEM

FILE NAME :	USER NAME : dduleym	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D:\OPERATIONS\Bridges\Bridgplans.CAD\72H69 - 0340056 and 0340058 overlays\planshe	DRAWN -	REVISED -	510					(1201)-7	HANCOCK	24	3	
Default	PLOT SCALE * 100.0000 / in	CHECKED -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	[ILLINOIS] FED. AID PROJECT CONTRACT NO. 72H69	
	PLOT DATE * 7/8/2015	DATE -	REVISED -									



- ① EXISTING HMA BASE COURSE, 8"
- ② EXISTING PCC PAVEMENT (9-6-9)
- ③ EXISTING HMA BASE COURSE WIDENING
- ④ EXISTING PCC GUTTER
- ⑤ EXISTING HMA SHOULDER, 6"
- ⑥ EXISTING HMA SHOULDER, 9"
- ⑦ EXISTING HMA OVERLAYS, +/- 4"
- ⑧ EXISTING PCC BRIDGE APPROACH
- ⑨ EXISTING SIDEROAD PAVEMENT
- ⑩ PROPOSED BASE COURSE WIDENING, 8"
- ⑪ PROPOSED HMA SURFACE COURSE, 1-3/4"
- ⑫ PROPOSED AGGREGATE WEDGE SHOULDER - TYPE B
- ⑬ PROPOSED INCIDENTAL HMA SURFACE, +/- 1-3/4"
- ⑭ PROPOSED BASE COURSE WIDENING, 13"

EXISTING CURVE DATA

P.I. STA= 883+86.25
 Δ = 13°-32'-00"
 D= 2°-00'
 R= 2864.79'
 T= 339.90'
 L= 676.65'
 E=
 e= 3.8%
 T.R.=
 S.E. RUN=
 P.C. STA= 880+46.35
 P.T. STA= 887+23.00
 S.E. ATTAINED: 878+96.00 TO 880+46.00
 886+73.00 TO 888+23.00

EXISTING CURVE DATA

P.I. STA= 895+86.83
 Δ = 13°-13'-00"
 D= 5°-00'
 R= 1145.92'
 T= 132.76'
 L= 264.32'
 E=
 e= 8.0%
 T.R.=
 S.E. RUN=
 P.C. STA= 894+54.07
 P.T. STA= 897+18.41
 S.E. ATTAINED: 893+26.07 TO 895+18.07
 896+44.76 TO 898+36.76

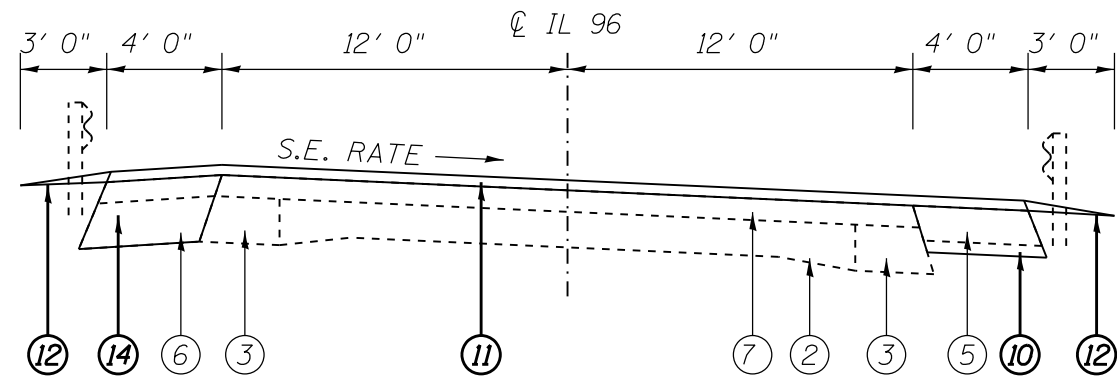
FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -
D:\OPERATIONS\Bridges\Bridgplans\CAD\72H69 - 0340056 and 0340058 overlays\planshe		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = 7/8/2015	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

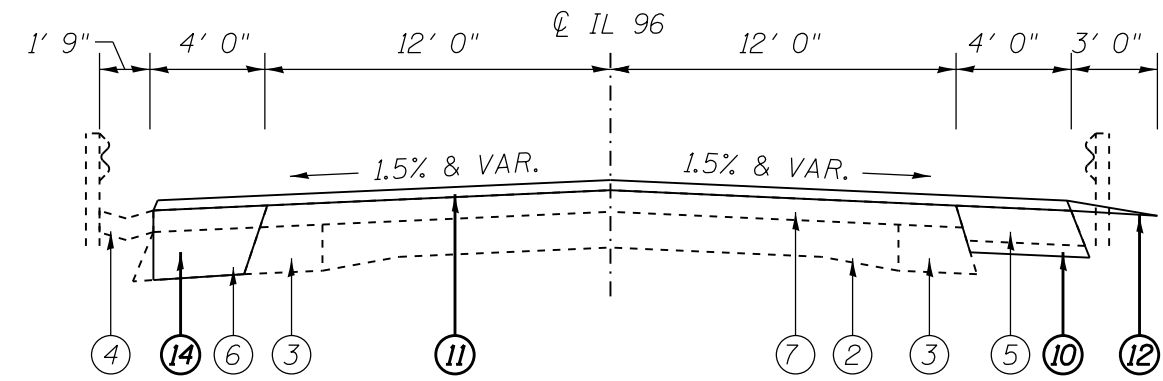
TYPICAL SECTIONS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	(120)I-7	HANCOCK	24	4
CONTRACT NO. 72H69				
ILLINOIS FED. AID PROJECT				

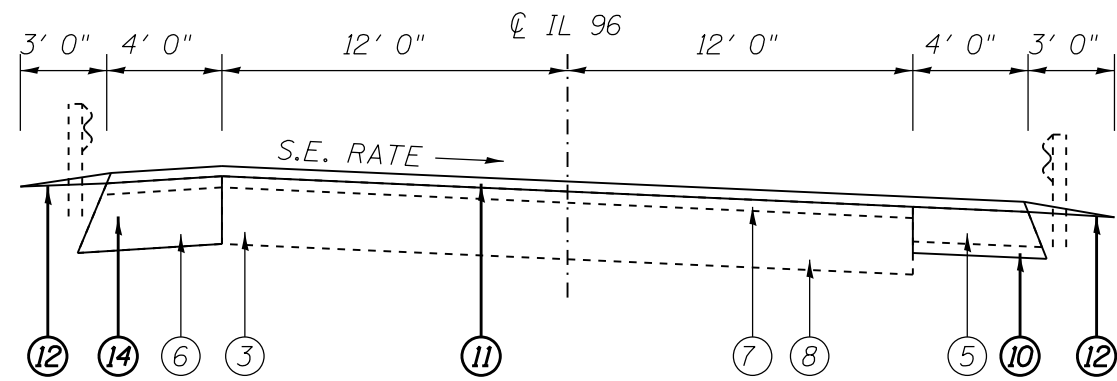


STA 973+22.08 TO STA 974+27.08

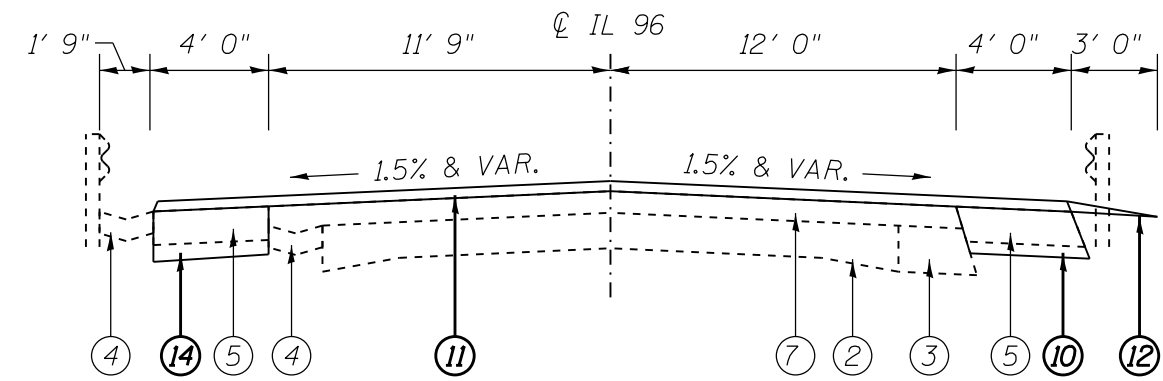


STA 975+46.91 TO STA 976+42.77

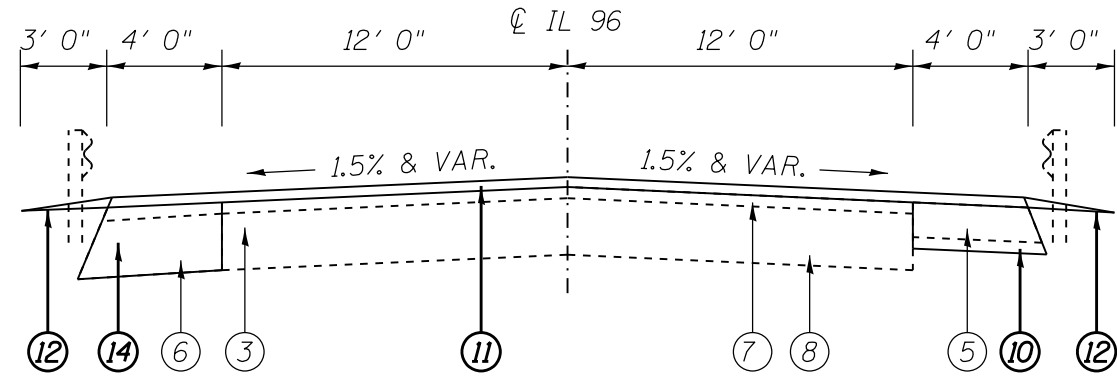
NOTE: EXISTING GUTTER IS NOT VISIBLE STA 975+46.91 TO STA 975+97 AND MAY HAVE BEEN REMOVED.



STA 974+27.08 TO STA 974+47.08



STA 976+42.77 TO STA 976+51.91



STA 975+26.91 TO STA 975+46.91

- ① EXISTING HMA BASE COURSE, 8"
- ② EXISTING PCC PAVEMENT (9-6-9)
- ③ EXISTING HMA BASE COURSE WIDENING
- ④ EXISTING PCC GUTTER
- ⑤ EXISTING HMA SHOULDER, 6"
- ⑥ EXISTING HMA SHOULDER, 9"
- ⑦ EXISTING HMA OVERLAYS, +/- 4"
- ⑧ EXISTING PCC BRIDGE APPROACH
- ⑨ EXISTING SIDEROAD PAVEMENT
- ⑩ PROPOSED BASE COURSE WIDENING, 8"
- ⑪ PROPOSED HMA SURFACE COURSE, 1-3/4"
- ⑫ PROPOSED AGGRAGATE WEDGE SHOULDER - TYPE B
- ⑬ PROPOSED INCIDENTAL HMA SURFACE, +/- 1-3/4"
- ⑭ PROPOSED BASE COURSE WIDENING, 13"

EXISTING CURVE DATA
 P.I. STA= 972+62.00
 Δ = 7°-00'
 D= 2°-00'
 R= 2864.79'
 T= 175.22'
 L= 350.00'
 E=
 e= 3.8%
 T.R.=
 S.E. RUN=
 P.C. STA= 970+86.78
 P.T. STA= 974+36.78
 S.E. ATTAINED: 969+86.78 TO 971+36.78
 973+86.78 TO 975+36.78

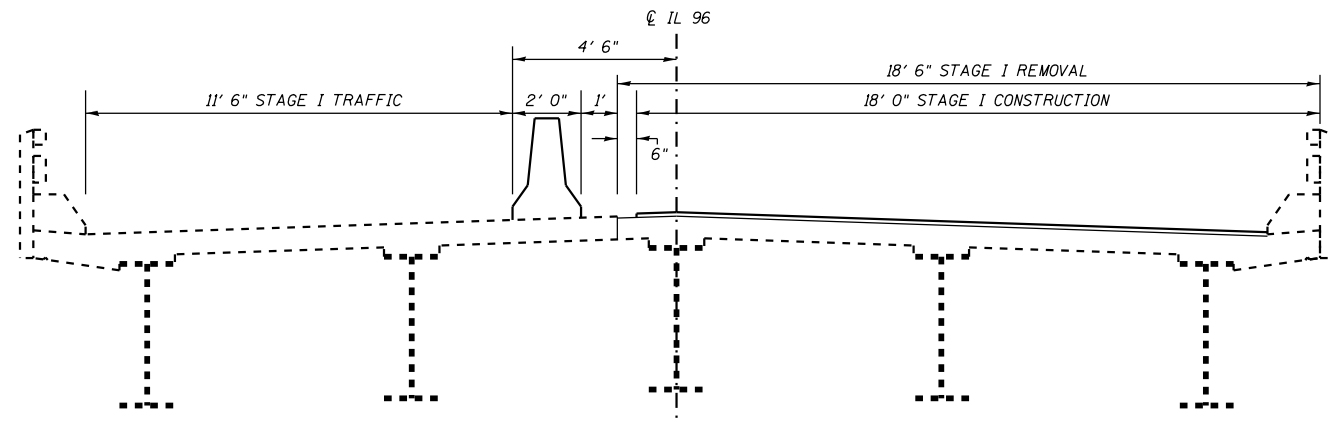
SHOULDER IMPROVEMENT SCHEDULE								
STA	TO	STA	SIDE	BASE COURSE WIDENING 8" (SQ YD)	BASE COURSE WIDENING 13" (SQ YD)	PAVED SHLDR REM (SQ YD)	EARTH EX WIDENING (CU YD)	AGG WEDGE SHLDR (TON)
887+70.50	-	888+95.50	RT	55.6	-	55.6	3.1	7.1
888+45.50	-	888+95.50	LT	22.2	-	22.2	1.2	2.8
892+29.50	-	893+54.50	RT	55.6	-	55.6	3.1	7.1
892+29.50	-	893+54.50	LT	55.6	-	55.6	3.1	7.1
973+22.08	-	974+47.08	RT	55.6	-	55.6	3.1	7.1
973+22.08	-	974+47.08	LT	-	55.6	55.6	-	7.1
975+26.91	-	976+51.91	RT	55.6	-	55.6	3.1	7.1
975+26.91	-	976+51.91	LT	-	55.6	55.6	0.3	1.1
TOTALS				301	112	412	17	47

BUTT JOINT SCHEDULE			
STA	TO	STA	HMA SURF REM (BJ) (SQ YD)
887+70.50	-	888+20.50	155.6
CR 1720	-		55.6
893+04.50	-	893+54.50	177.8
973+22.08	-	973+72.08	177.8
976+01.91	-	976+51.91	177.8
TOTAL			744.5

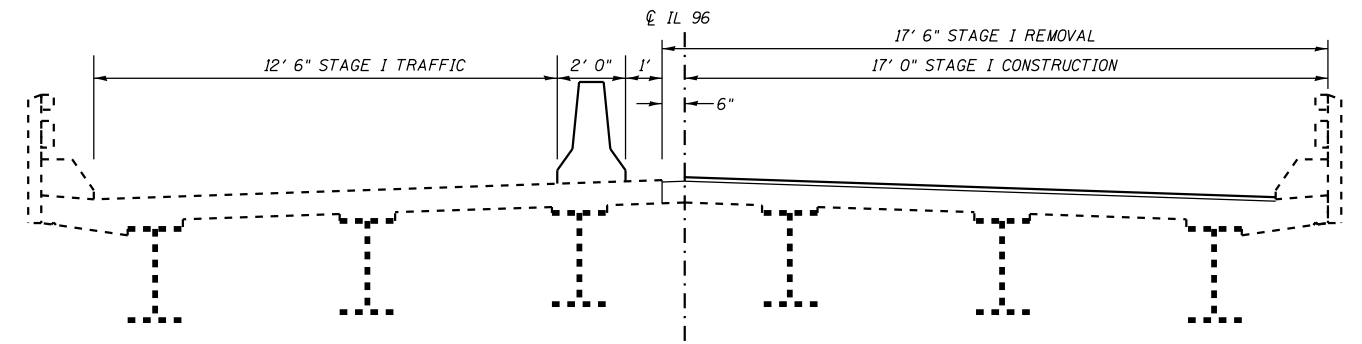
PAVING SCHEDULE					
STA	TO	STA	BIT MATL (PRIME CT) (POUND)	HMA SURF CSE (TON)	INCID HMA SURF (TON)
887+70.50	-	888+95.50	0.17	44	
CR 1720	-		0.02		6
892+29.50	-	893+54.50	0.17	44	
973+22.08	-	974+47.08	0.17	44	
975+26.91	-	976+51.91	0.17	44	
TOTALS			0.80	176	6

PAVEMENT MARKING REMOVAL SCHEDULE					
STA	TO	STA	LOC.	LINE TYPE	PAVT MARK REM (SQ FT)
887+35	-	893+54	LT	SOLID	258
885+59	-	888+35	℄	DOUBLE	230
893+00	-	895+28	℄	DOUBLE	190
887+71	-	888+96	RT	SOLID	52
892+29	-	893+54	RT	SOLID	52
973+30	-	976+39	LT	SOLID	129
971+55	-	973+50	℄	SOLID/SKIP	102
976+50	-	978+20	℄	DOUBLE	142
973+15	-	974+47	RT	SOLID	55
975+27	-	976+39	RT	SOLID	47
TOTAL					1257

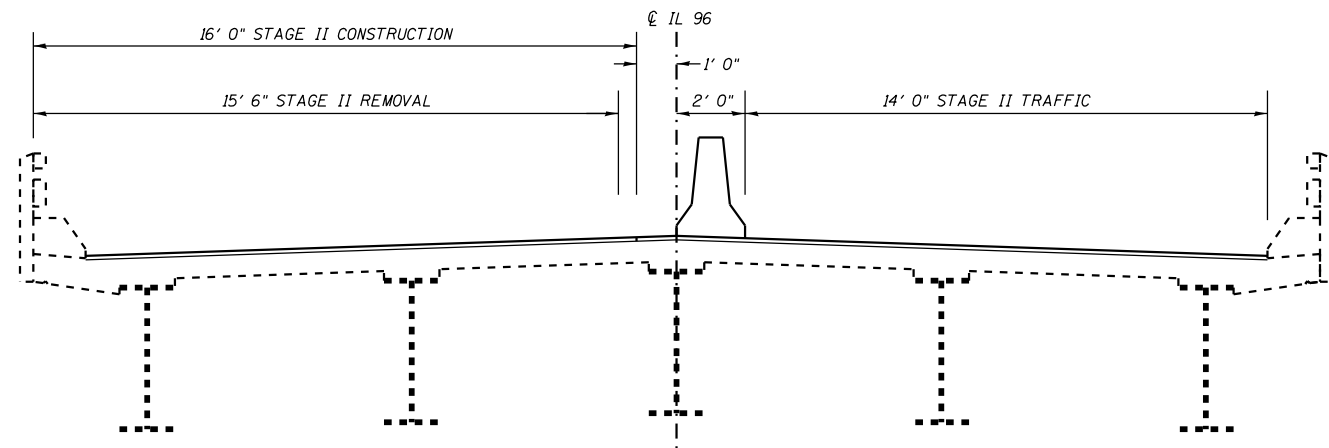
STRIPING SCHEDULE					
STA	TO	STA	LOC.	LINE TYPE	PAINT PAVT MARK - LINE 5" (FT)
887+70.50	-	893+54.50	RT	SOLID	584
885+59.00	-	895+28.00	℄	DOUBLE	1938
888+35.50	-	893+54.50	LT	SOLID	519
973+22.08	-	976+51.91	RT	SOLID	330
971+55.00	-	975+26.91	℄	SOLID/SKIP	465
975+26.91	-	978+20.00	℄	DOUBLE	586
973+22.08	-	976+51.91	LT	SOLID	330
TOTAL					4752



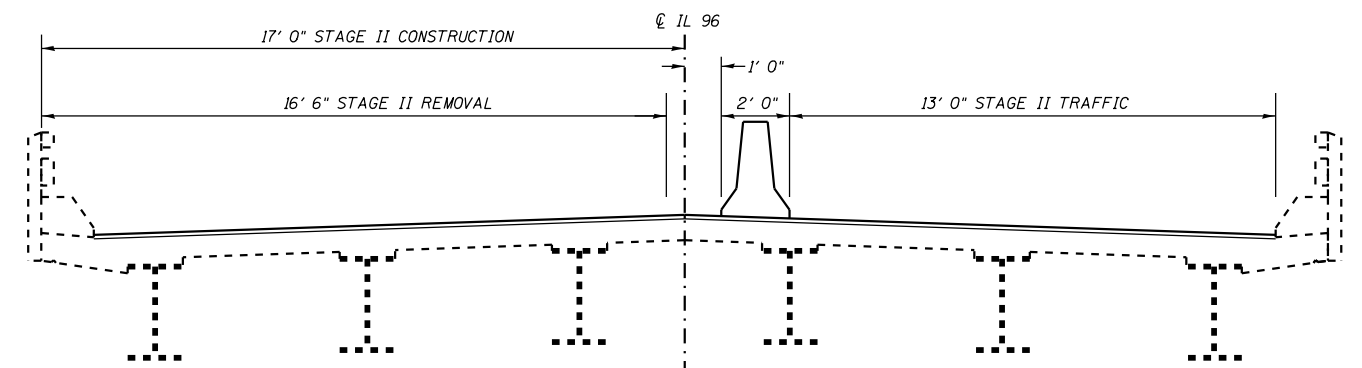
STAGE I CROSS SECTION (LOOKING SOUTH)



STAGE I CROSS SECTION (LOOKING SOUTH)



STAGE II CROSS SECTION (LOOKING SOUTH)



STAGE II CROSS SECTION (LOOKING SOUTH)

SN 034-0058

SN 034-0056

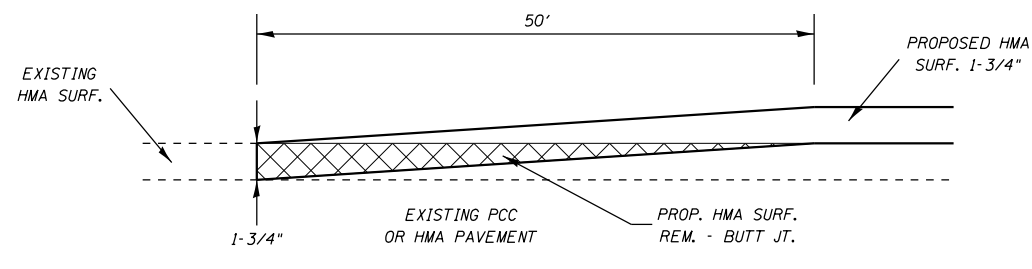
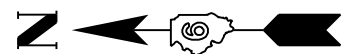
FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -
D:\OPERATIONS\Bridges\Bridgplans\CAD\72	H69 - 0340056 and 0340058 overlays\plansho	DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 7/8/2015	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC STAGING DETAILS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	(120)I-7	HANCOCK	24	7
CONTRACT NO. 72H69				
ILLINOIS FED. AID PROJECT				



MAINLINE BUTT JOINT ELEVATION



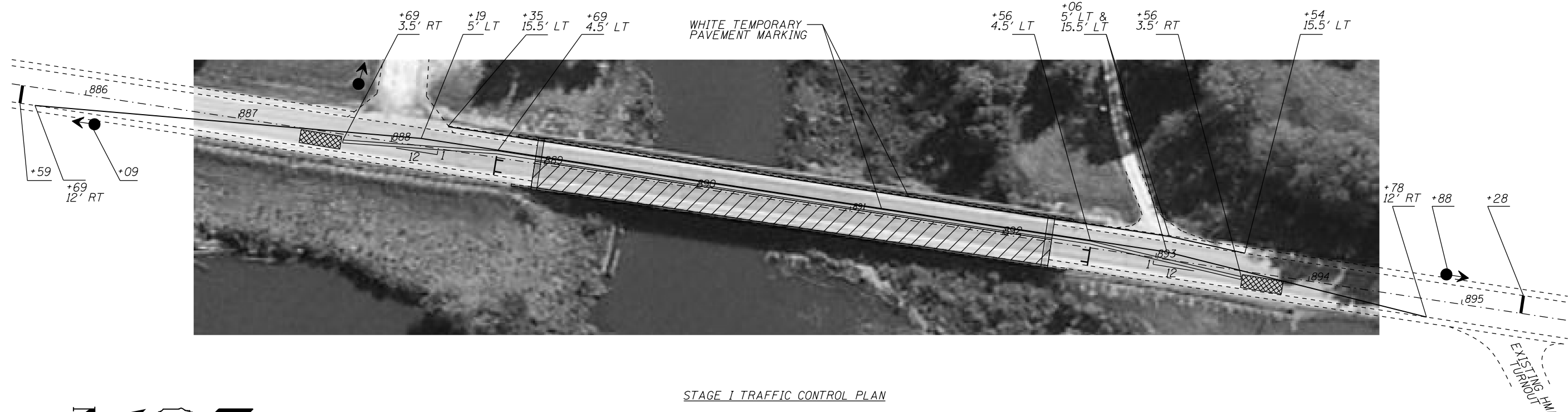
FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -
D:\OPERATIONS\Bridges\Bridgplans\CAD\72	H69 - 0340056 and 0340058 overlays\planshe	DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 7/8/2015	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

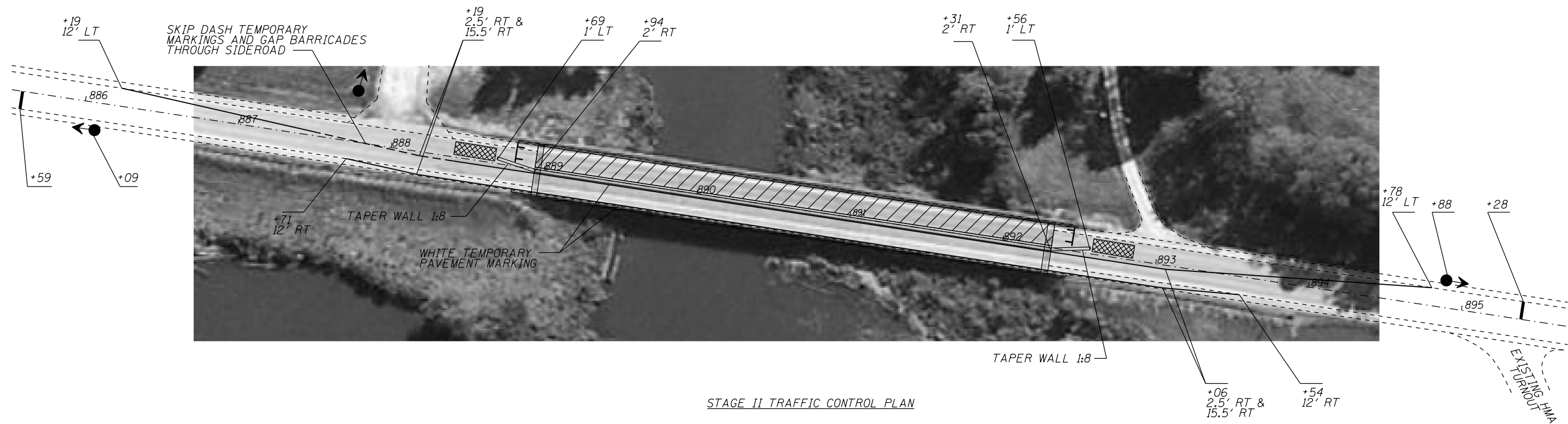
**ROADWAY PLAN &
BUTT JOINT DETAIL**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	(120)I-7	HANCOCK	24	8
CONTRACT NO. 72H69				
ILLINOIS FED. AID PROJECT				







STAGE I TRAFFIC CONTROL PLAN



STAGE II TRAFFIC CONTROL PLAN

SYMBOLS

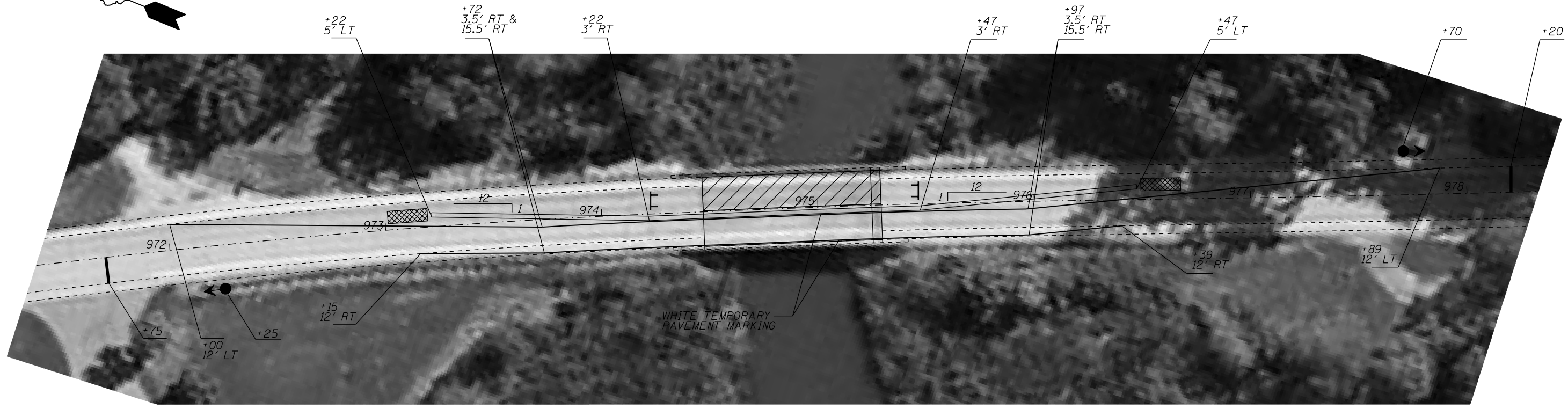
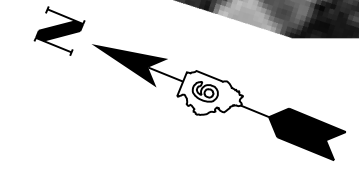
-  Work area
-  Impact attenuator
-  Type III barricade
-  Traffic signal

NOTE:
 SIGNS AND TRAFFIC CONTROL DEVICES NOT SHOWN IN THIS DETAIL SHALL CONFORM TO STANDARD 701321.
 RUMBLE STRIPS WILL BE REQUIRED PER STANDARD 701321. PLACEMENT WILL BE AS DIRECTED BY THE ENGINEER.

FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 034-0058 TRAFFIC CONTROL PLAN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
D:\OPERATIONS\Bridges\Bridgplans\CAD\7269 - 0340058 and 0340058 overlays\plansheet	DRAWN -	REVISED -	510			(120)I-7	HANCOCK	24	9		
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 72H69					
	PLOT DATE = 7/8/2015	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
						SCALE:	SHEET	OF	SHEETS	STA. TO STA.	



STAGE I TRAFFIC CONTROL PLAN



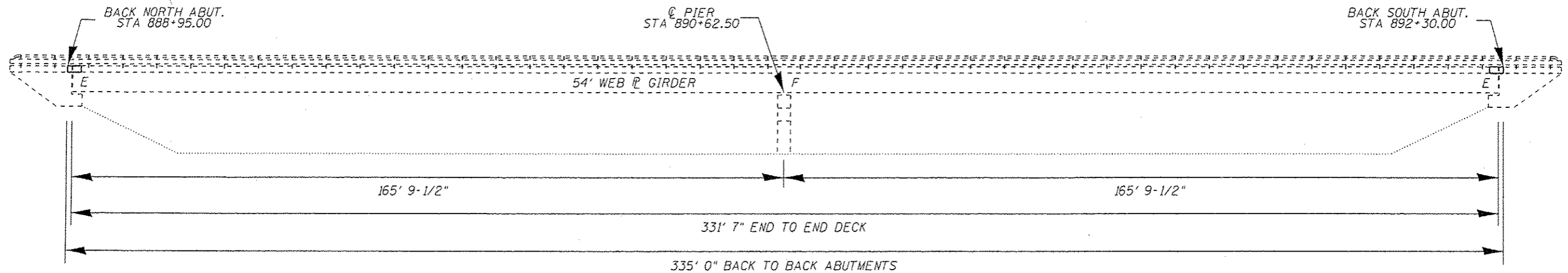
STAGE II TRAFFIC CONTROL PLAN

SYMBOLS

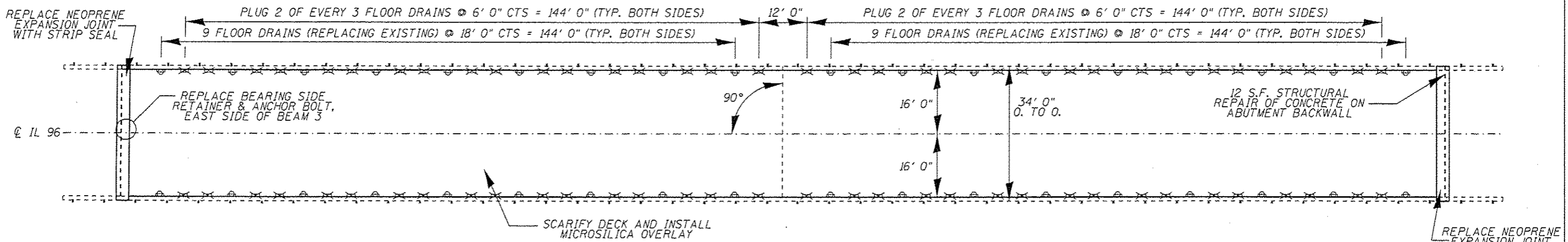
-  Work area
-  Impact attenuator
-  Type III barricade
-  Traffic signal

NOTE:
 SIGNS AND TRAFFIC CONTROL DEVICES NOT SHOWN IN THIS DETAIL SHALL CONFORM TO STANDARD 701321.
 RUMBLE STRIPS WILL BE REQUIRED PER STANDARD 701321. PLACEMENT WILL BE AS DIRECTED BY THE ENGINEER.

FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 034-0056 TRAFFIC CONTROL PLAN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
D:\OPERATIONS\Bridges\Bridgplans\CAD\72H69 - 0340056 and 0340058 overlays\plansheet	DRAWN -	REVISED -	510			(120)I-7	HANCOCK	24	10		
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 72H69					
	PLOT DATE = 7/8/2015	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
				SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	



ELEVATION



PLAN

GENERAL NOTES:

- ALL STRUCTURAL STEEL SHALL BE AASHTO M-270 GRADE 36
- REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.
- PRIOR TO POURING THE NEW CONCRETE DECK, ALL HEAVY OR 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 CONCRETE REMOVAL.
- 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 THE SCOPE OF WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.
- EXISTING REINFORCEMENT BARS EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED, AND INCORPORATED 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.
- 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.
- THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.
- AREAS OF DECK REPAIRS SHOWN ARE ESTIMATED. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON AS-BUILT PLANS.
- THE ABUTMENT SURFACE IN THE AREAS OF EXPANSION JOINT REPLACEMENT SHALL HAVE A TINED FINISH AS PER ARTICLE 420.09(6)(D) OF THE STANDARD SPECIFICATIONS. COST INCLUDED WITH CONCRETE SUPERSTRUCTURE. THE DECK SURFACE IN THE AREAS OF EXPANSION JOINT REPLACEMENT SHALL BE GROOVED WITH THE DECK OVERLAY PER ARTICLE 503.16(a)(3)(b) OF THE STANDARD SPECIFICATIONS AND SHALL BE PAID AT THE BID PRICE PER SQUARE YARD FOR "BRIDGE DECK GROOVING."

TOTAL BILL OF MATERIAL (034-0058)

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	8
Concrete Superstructure	Cu. Yd.	9
Bridge Deck Grooving	Sq. Yd.	1105
Reinforcement Bars, Epoxy Coated	Pound	1220
Bar Splicers	Each	24
Preformed Joint Strip Seal	Foot	74
Bridge Deck Scarification, 3/4"	Sq. Yd.	1165
Bridge Deck Microsilica Concrete Overlay, 2-1/2"	Sq. Yd.	1165
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	8
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	44
Floor Drains	Each	36
Plug Existing Floor Drains	Each	68
Anchor Bolts, 1"	Each	1
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	12

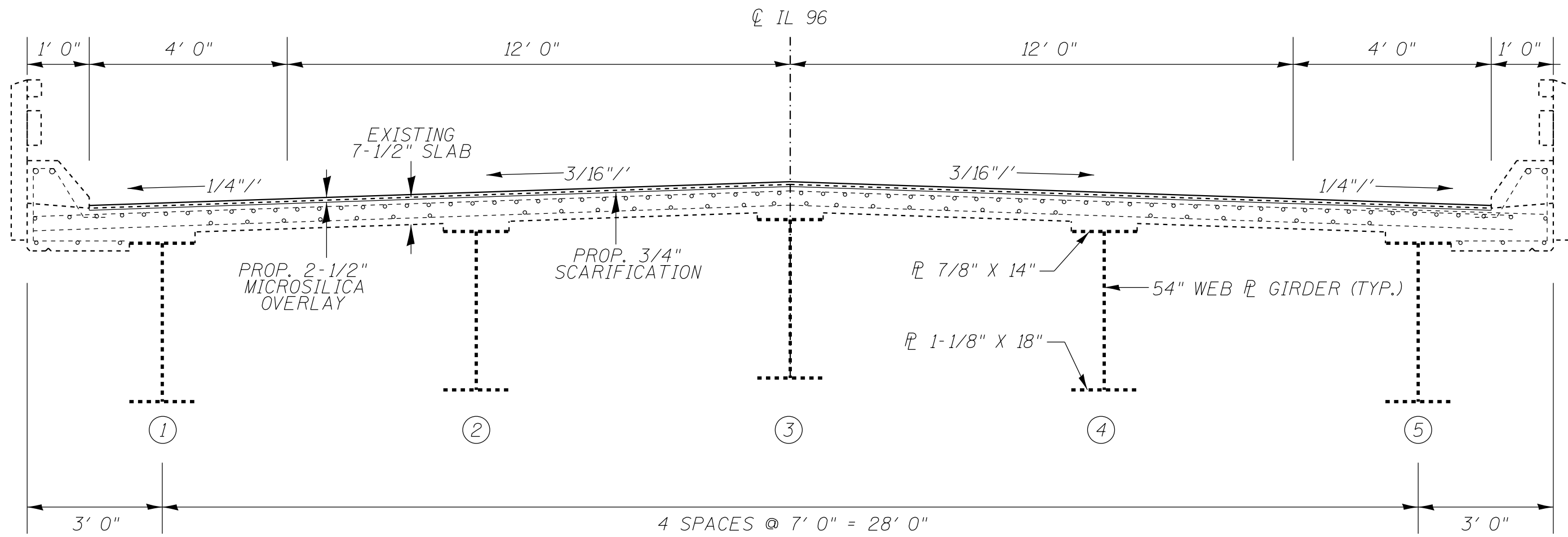


David Carl Puzey 8/10/15
Expires 11/30/16

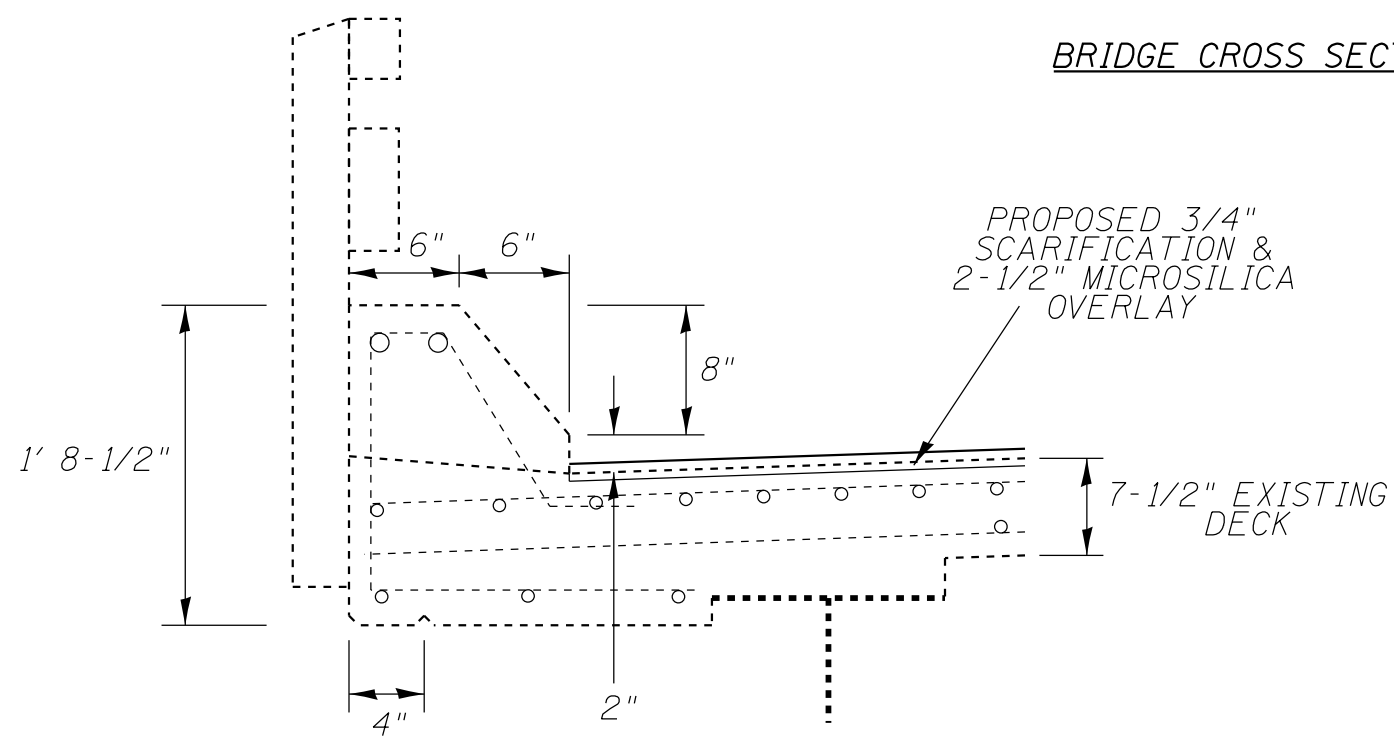
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BRIDGE PLAN AND ELEVATION
 SN 034-0058

FILE NAME :	USER NAME : dudlesgm	DESIGNED - BHD	REVISED -	SCALE: SHEET 1 OF 7 SHEETS STA. TO STA.	F.A.P. RYE. 510	SECTION (12011-7	COUNTY HANCOCK	TOTAL SHEETS 24	SHEET NO. 11	CONTRACT NO. 72H69	[ILLINOIS] FED. AID PROJECT
OPERATIONS\Bridges\Bridgplans\CAD\72H69 - 0340058 and 0340058 overlays\planshe	DRAWN -	REVISED -									
Default	PLOT SCALE = 100.0000' / 1"	CHECKED - ATW	REVISED -								
	PLOT DATE = 7/8/2015	DATE -	REVISED -								

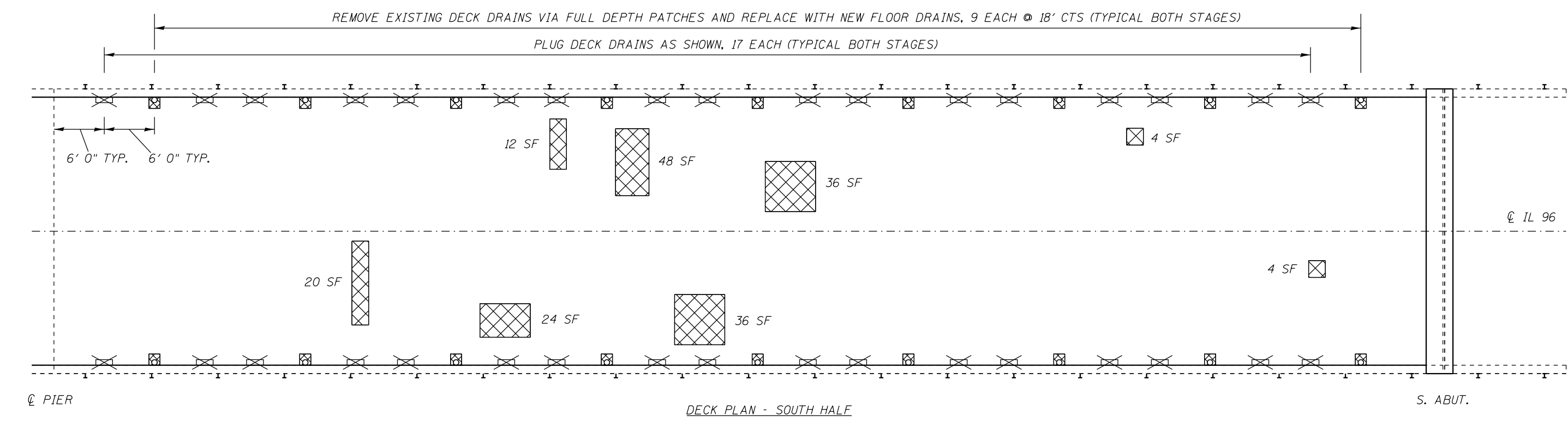
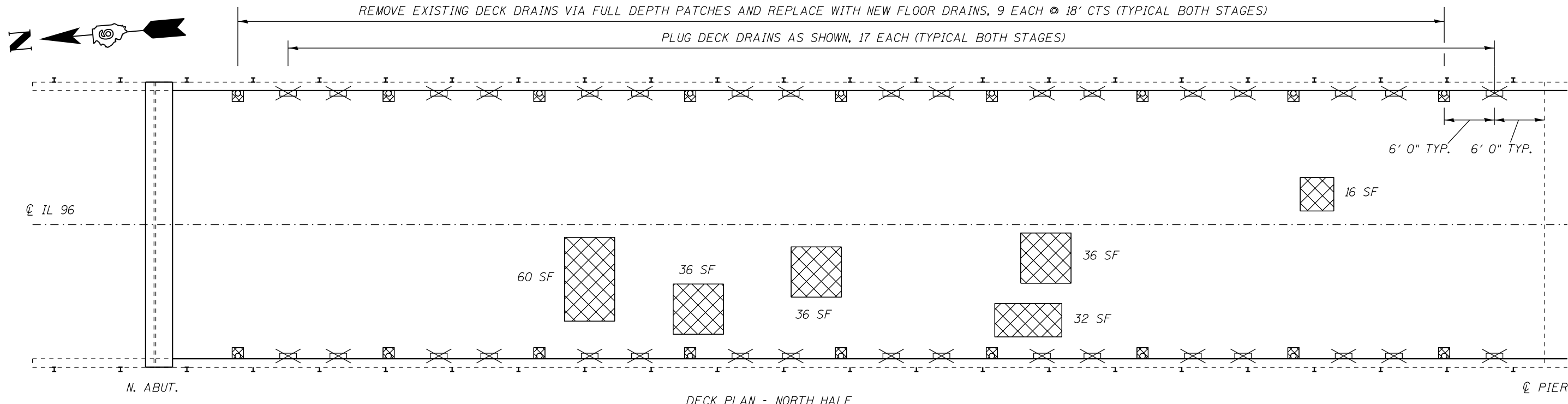


BRIDGE CROSS SECTION (LOOKING SOUTH)



CURB CROSS SECTION

FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE CROSS SECTION SN 034-0058			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	PLOT DATE = 7/8/2015	DATE -	REVISED -					510	(120)I-7	HANCOCK	24	12
					CONTRACT NO. 72H69			ILLINOIS FED. AID PROJECT				
					SCALE:	SHEET 2	OF 7	SHEETS	STA.	TO STA.		



- PROP. FLOOR DRAIN CAST IN FD PATCH - 1.75 SF TYP.
- PROP. FD PATCH
- PLUG EXISTING FLOOR DRAIN

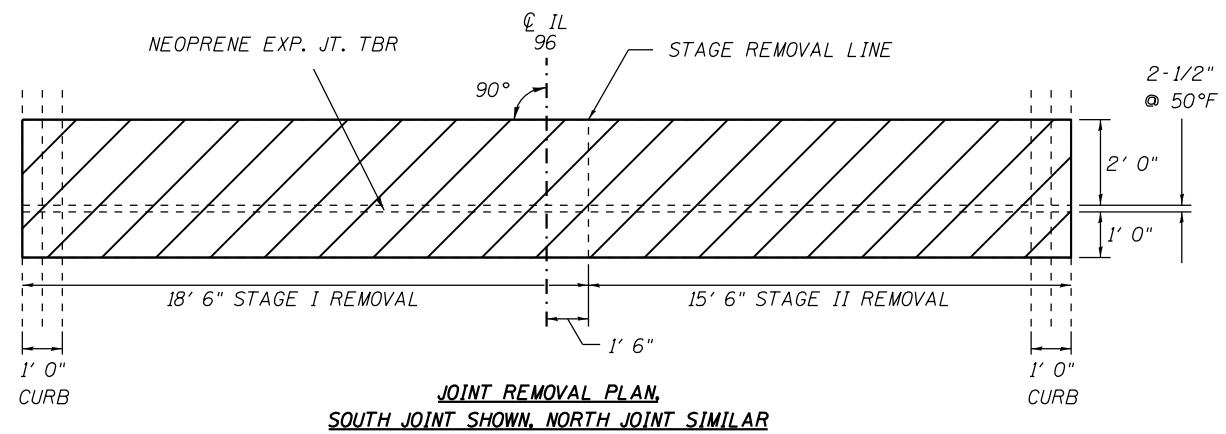
NOTES:

NEW FLOOR DRAINS SHALL BE INSTALLED AFTER SCARIFICATION OPERATIONS ARE COMPLETED FOR EACH STAGE. FULL DEPTH PATCHES APPROXIMATELY 16" SQUARE SHALL BE USED TO REMOVE THE EXISTING FLOOR DRAINS AND INSTALL PROPOSED DRAINS. REFER TO SHEET 5 OF 7 FOR FLOOR DRAIN DETAILS. COST OF EXISTING FLOOR DRAIN REMOVAL SHALL BE INCLUDED WITH FULL DEPTH PATCHING AND WILL NOT BE MEASURED FOR PAYMENT SEPARATELY. THE DECK PATCHES SURROUNDING THE NEW DRAINS SHALL BE CAST FULL DEPTH MONOLITHICALLY WITH THE OVERLAY.

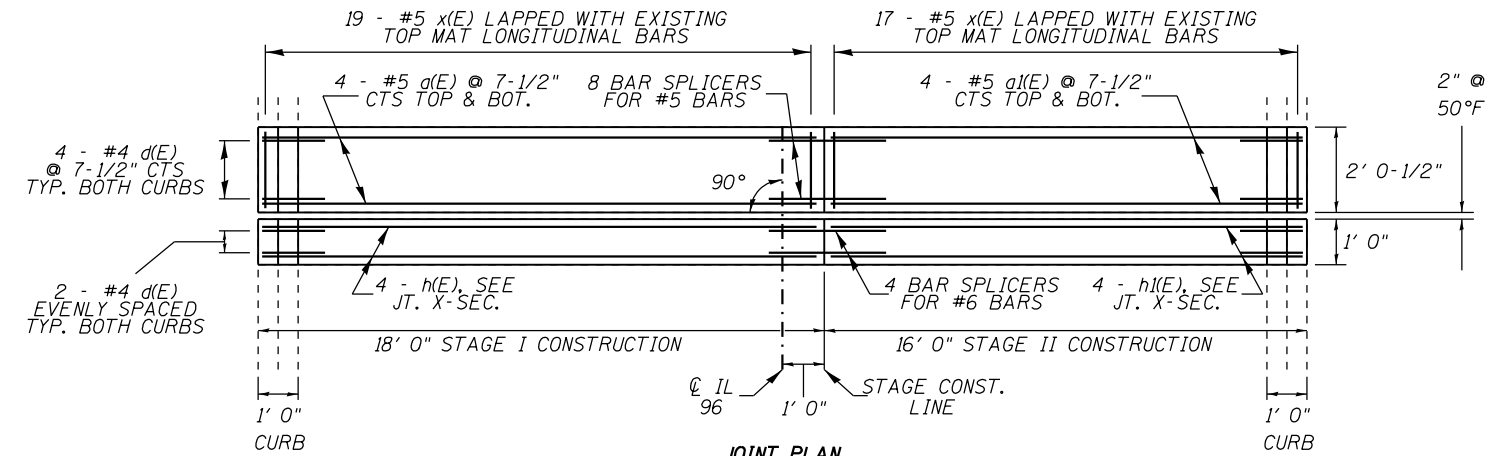
IDENTIFIED PATCHING LOCATIONS NOT ASSOCIATED WITH FLOOR DRAIN INSTALLATION ARE ESTIMATED FROM A DECK SURVEY PERFORMED ON 1/20/2015. THESE LOCATIONS INDICATE PORTIONS OF THE DECK THAT HAVE HIGHER POTENTIAL FOR REQUIRING FULL DEPTH REPAIRS. THE CONTRACTOR SHALL NOT PERFORM FULL DEPTH PATCHING ANYWHERE ON THE DECK UNLESS THE SCARIFICATION OPERATIONS REVEAL THE NEED TO DO SO. THE PATCHING SURVEY INFORMATION IS INCLUDED FOR INFORMATION ONLY.

FULL DEPTH PATCHING AREAS IDENTIFIED = 52 SQ YD.

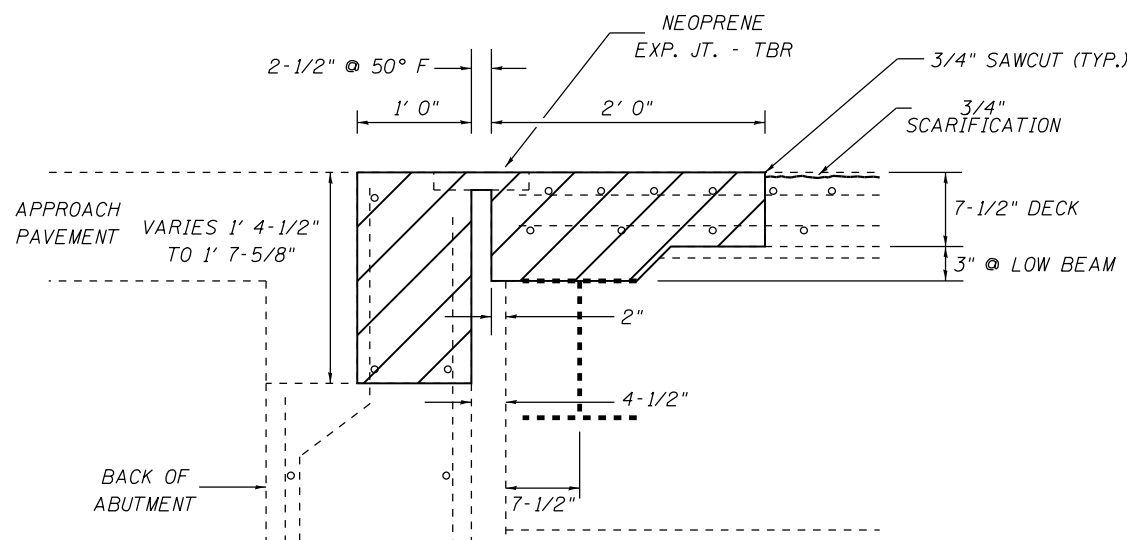
FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DECK PLAN SN 034-0058			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	PLOT DATE = 7/8/2015	DATE -	REVISED -					510	(1201-7)	HANCOCK	24	13
					CONTRACT NO. 72H69			ILLINOIS FED. AID PROJECT				
					SCALE:	SHEET 3	OF 7 SHEETS	STA.	TO STA.			



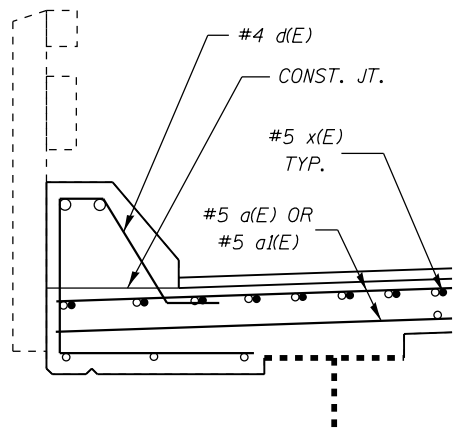
**JOINT REMOVAL PLAN,
SOUTH JOINT SHOWN, NORTH JOINT SIMILAR**



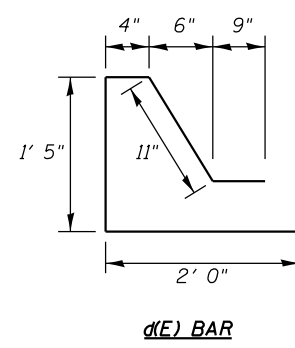
**JOINT PLAN,
SOUTH JOINT SHOWN, NORTH JOINT SIMILAR**



JOINT REMOVAL CROSS SECTION - TYP.



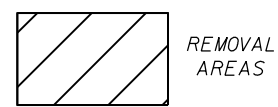
CURB CROSS SECTION



d(E) BAR

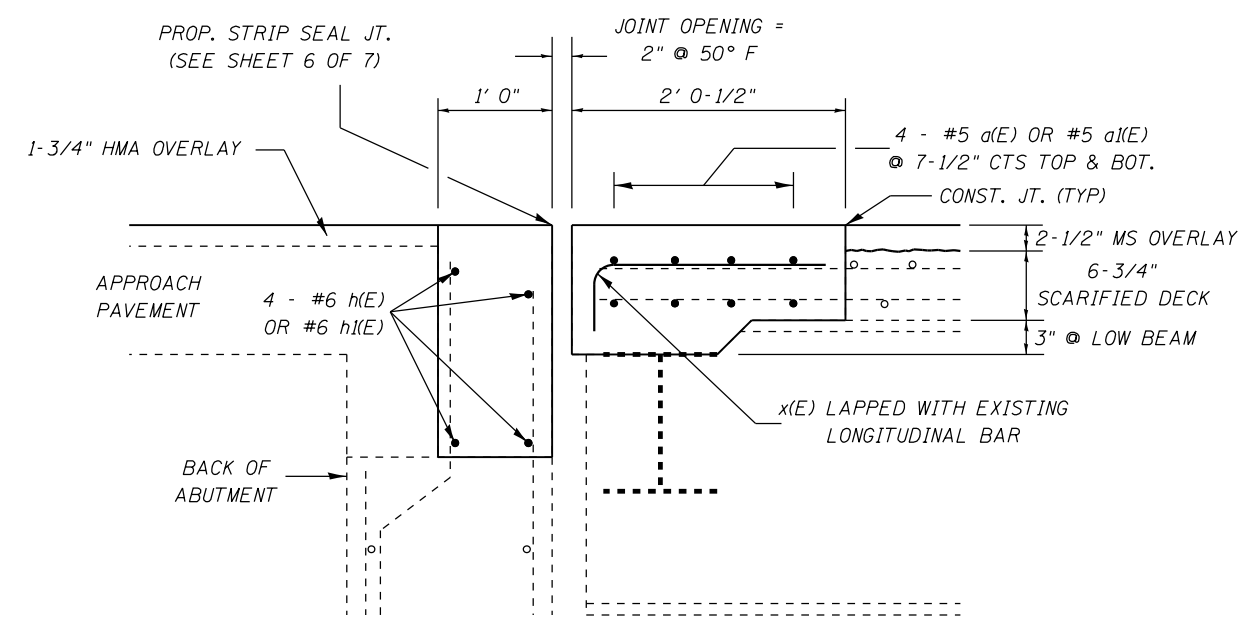


x(E) BAR



REMOVAL AREAS

NOTE:
ANY BRIDGE RAIL HARDWARE ENCOUNTERED IN THE REMOVAL AREAS SHALL BE LEFT IN PLACE AND RE-INCORPORATED INTO THE NEW CONCRETE.

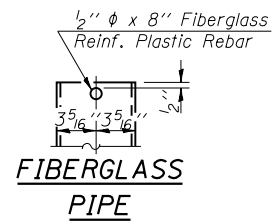


JOINT CROSS SECTION - TYP.

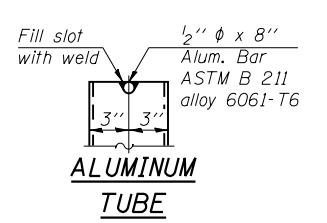
BILL OF MATERIAL - 2 JOINTS

BAR	#	SIZE	LENGTH	SHAPE
a(E)	16	#5	17' 8"	—
a(I(E))	16	#5	15' 8"	—
d(E)	24	#4	5' 5"	└┘
h(E)	8	#6	17' 8"	—
h(I(E))	8	#6	15' 8"	—
x(E)	72	#5	2' 4"	└┘

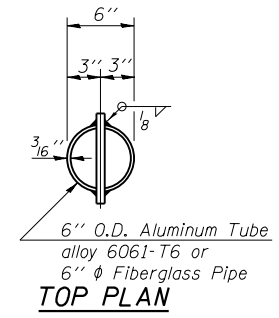
REINFORCEMENT BARS (EPOXY COATED)	POUND	1220
CONC. SUPERSTRUCTURE	CU YD	8.9
CONC. REMOVAL	CU YD	7.9
BAR SPLICERS	EACH	24



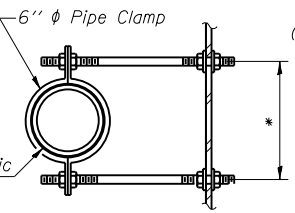
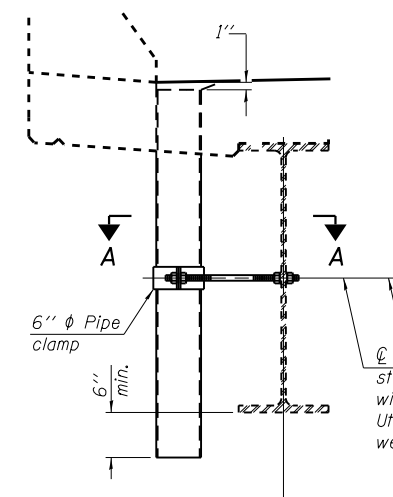
FIBERGLASS PIPE



ALUMINUM TUBE

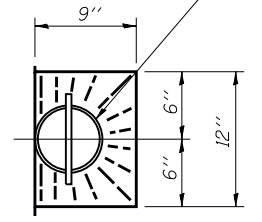


TOP PLAN
(Showing Aluminum Tube)



SECTION A-A
* Dimension as required by Pipe Clamp

Minimum conc. edge thickness at edge of drain = 1"



TOP PLAN

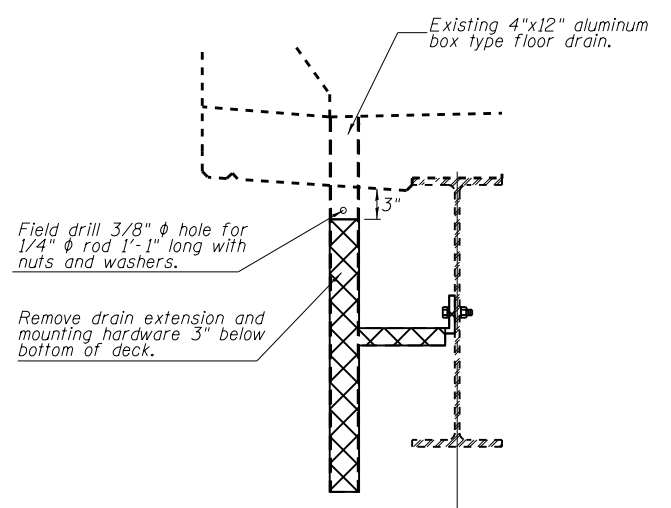
6" ϕ Pipe clamp
6" min.
6" ϕ Web
3/4" ϕ x 2' 0", Min. steel stud bolts threaded 6" each end with 2 washers and locknuts. Utilize existing 7/8" ϕ hole in web and field drill another similar.

SECTION THRU PARAPET

ITEM	UNIT	QUANTITY
Floor Drains	Each	36

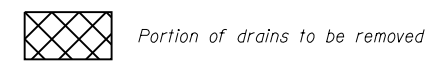
Notes:
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
Galvanize clamping device according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.
Any unused holes remaining in the beam web shall be plugged with HS bolts.

FLOOR DRAINS



SECTION THRU PARAPET

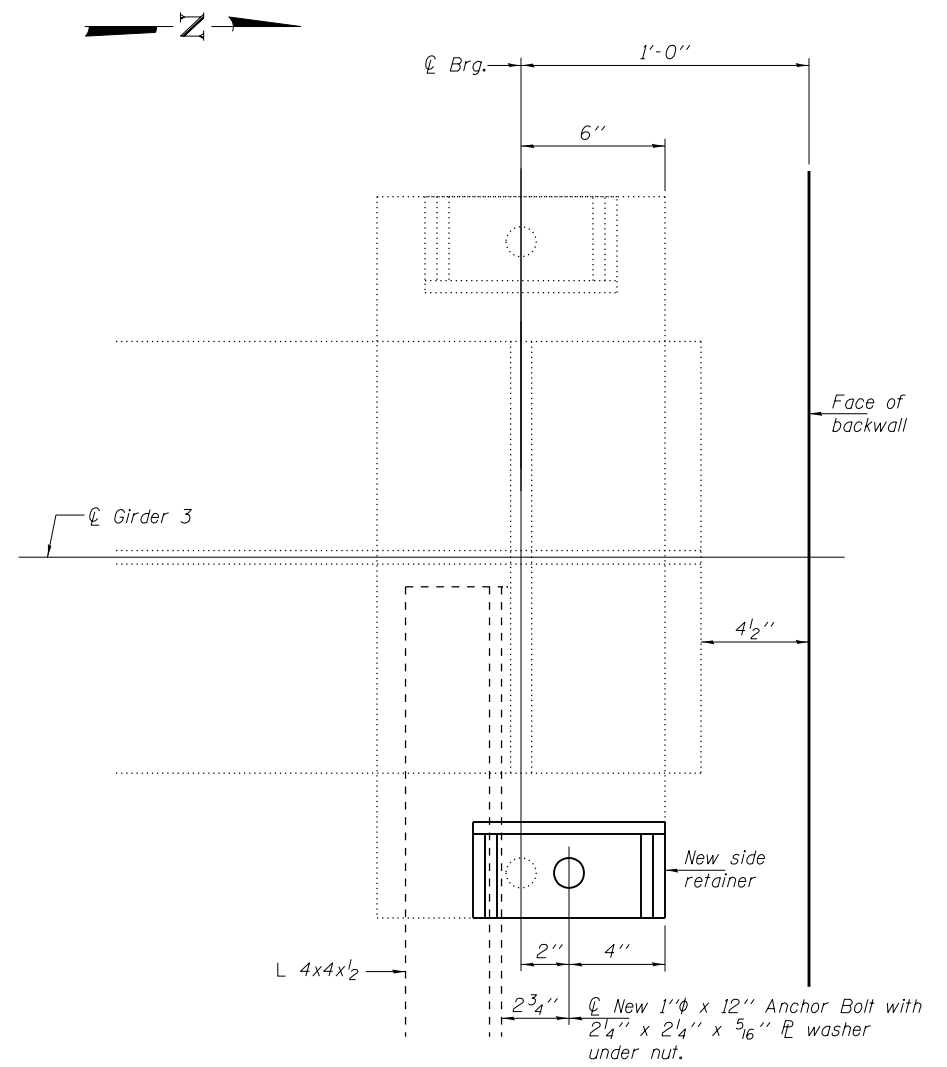
Field drill 3/8" ϕ hole for 1/4" ϕ rod 1'-1" long with nuts and washers.
Remove drain extension and mounting hardware 3" below bottom of deck.



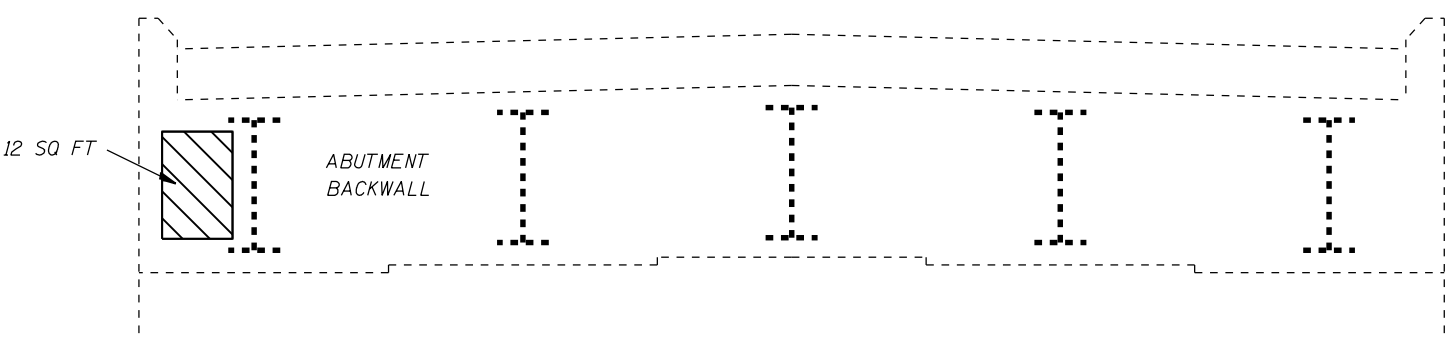
Notes:
Deck drains shall be eliminated by field drilling a 3/8" ϕ hole through the bottom of the drain just below the deck, installing a 1/4" ϕ threaded rod and filling the drain with concrete. Alternate methods of plugging may be accepted with the approval of the engineer.
Drain plugs shall be poured monolithically with the overlay concrete.
Removal and disposal of the existing drain as shown in the plan detail shall be included in the cost of Plug Existing Floor Drains.
Existing 7/8" ϕ holes in the beam webs shall be filled with HS bolts. The existing bolts may be reused.
See sheet 3 of 7 for locations of drains to be plugged.

ITEM	UNIT	QUANTITY
Plug Existing Floor Drains	Each	68

PLUGGING EXISTING FLOOR DRAINS



PLAN AT N. ABUTMENT



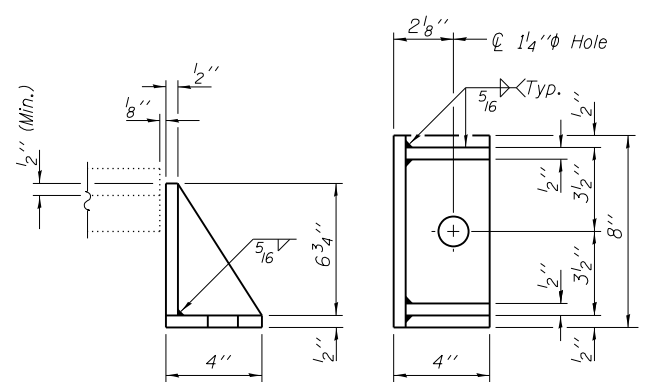
SOUTH ABUTMENT ELEVATION - LOOKING SOUTH

STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	SQ FT	12

STRUCTURAL REPAIR OF CONCRETE

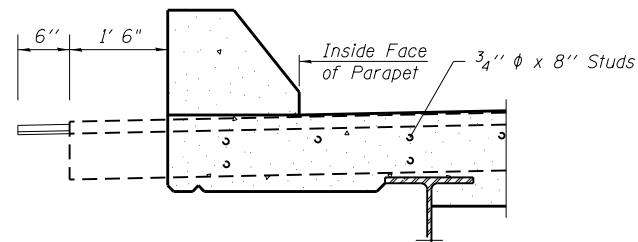
Notes:
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
All materials shall conform to Article 521.02 of the Standard Specifications.
The cost of fabricating, furnishing, and installing the side retainer shall be included in the bid price for ANCHOR BOLTS, 1".



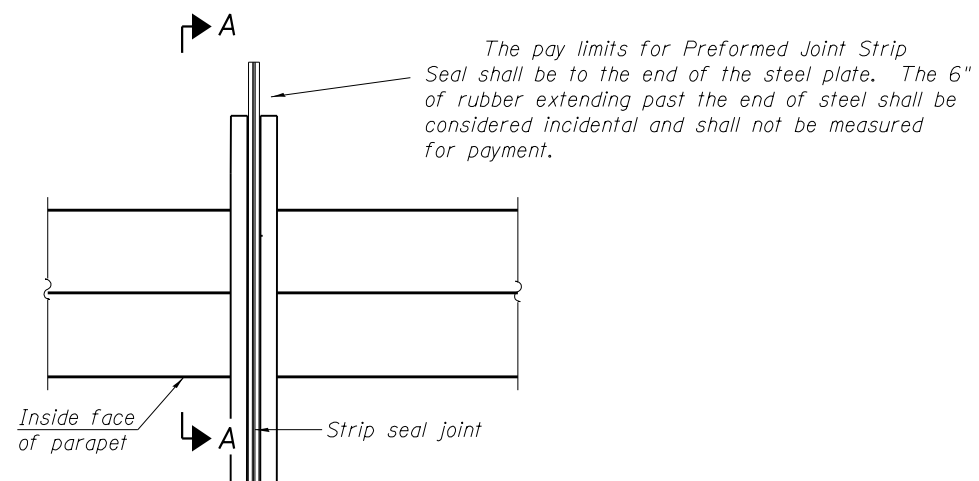
SIDE RETAINER

ITEM	UNIT	QUANTITY
Anchor Bolts, 1"	Each	1

BEARING SIDE RETAINER AND ANCHOR BOLT AND REPLACEMENT



SECTION A-A



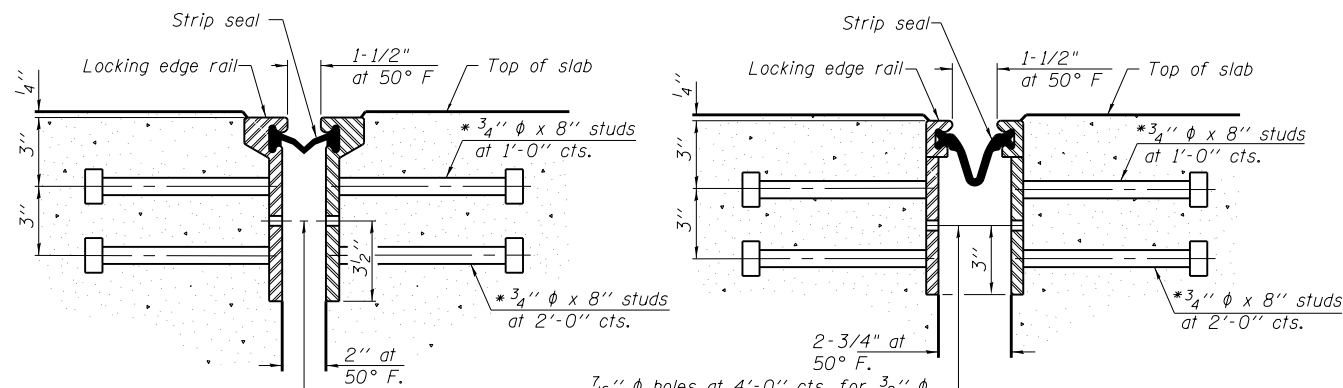
PLAN THROUGH CURB

Notes:
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
 The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.
 The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications. Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.



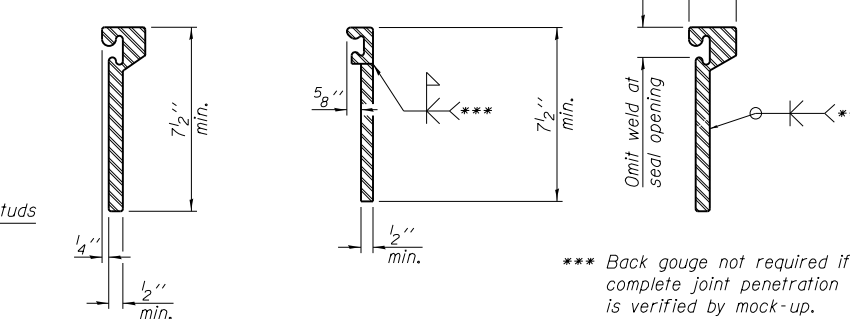
SECTION THRU ROLLED RAIL JOINT

SECTION THRU WELDED RAIL JOINT

3/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

3/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

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



ROLLED EXTRUDED RAIL

WELDED RAIL

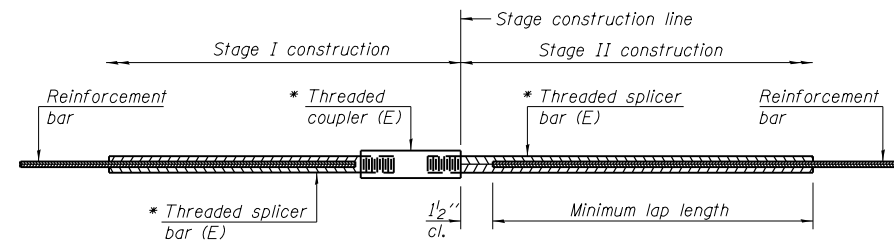
LOCKING EDGE RAIL SPLICE

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

LOCKING EDGE RAILS

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	74



STANDARD BAR SPLICER ASSEMBLY

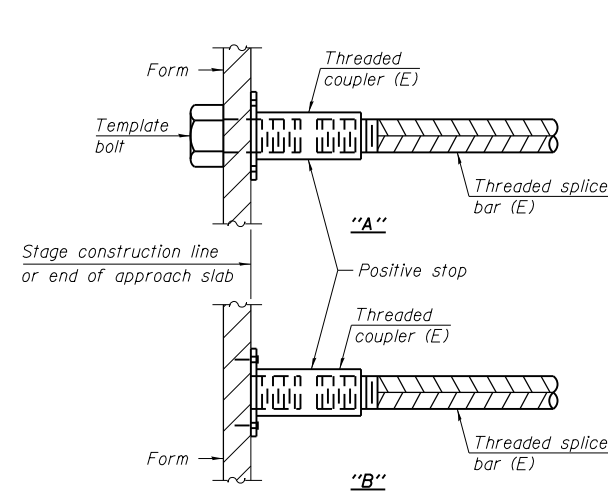
Bar size to be spliced	Minimum Lap Lengths					
	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar lap, Class C

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

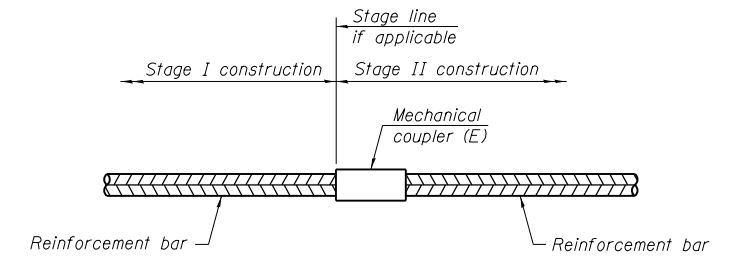
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Abuts. (Apr. Side)	#6	8	3
Abuts. (Deck Side)	#5	16	3



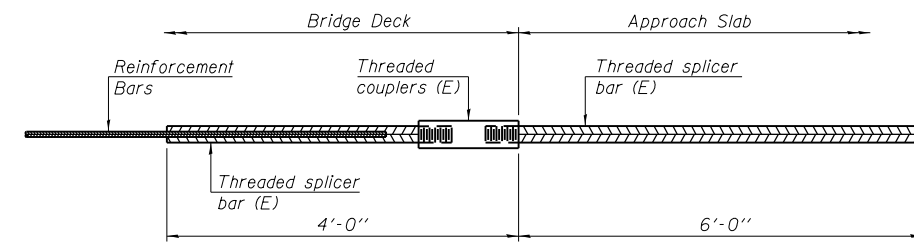
INSTALLATION AND SETTING METHODS

"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.



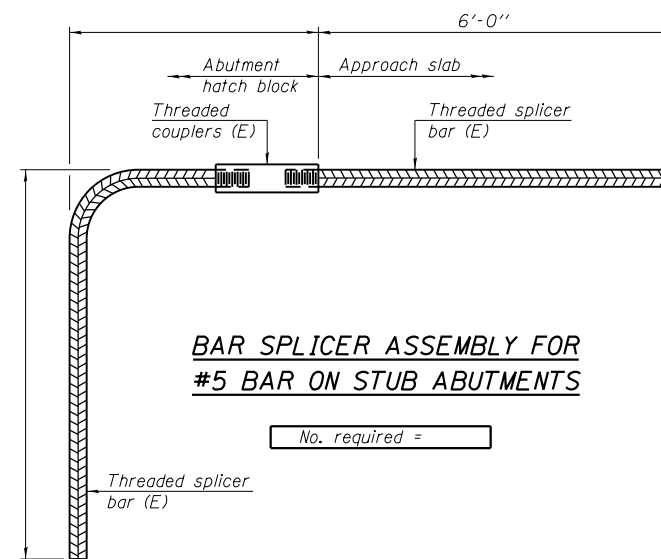
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =

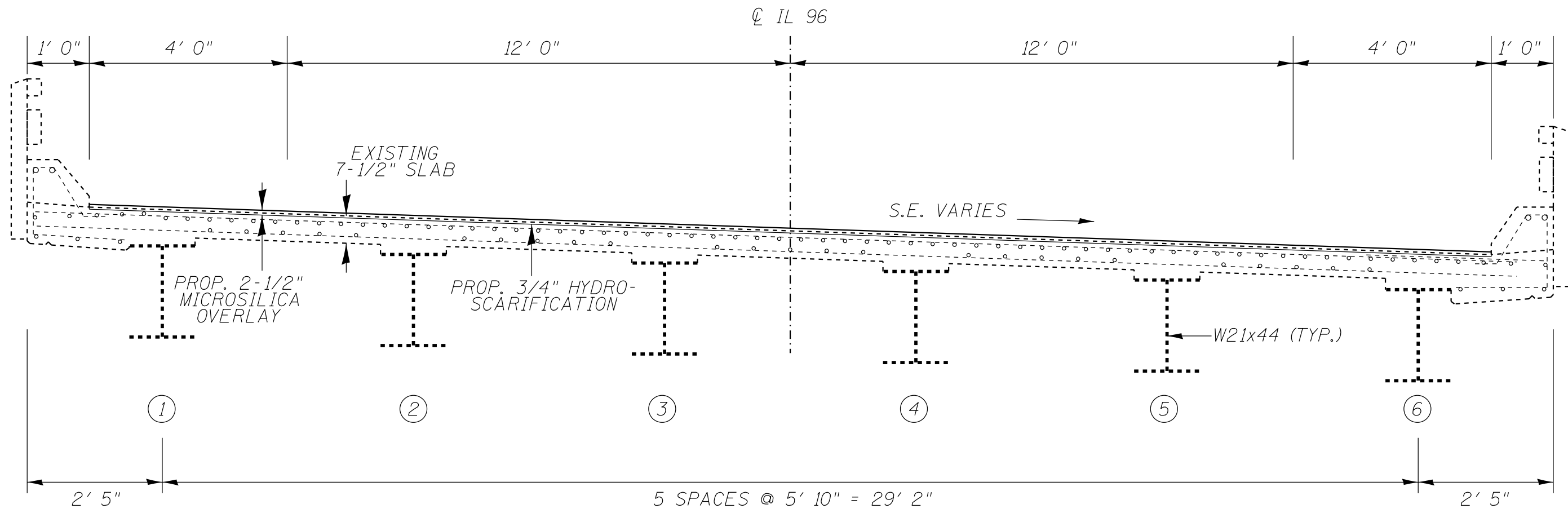


BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

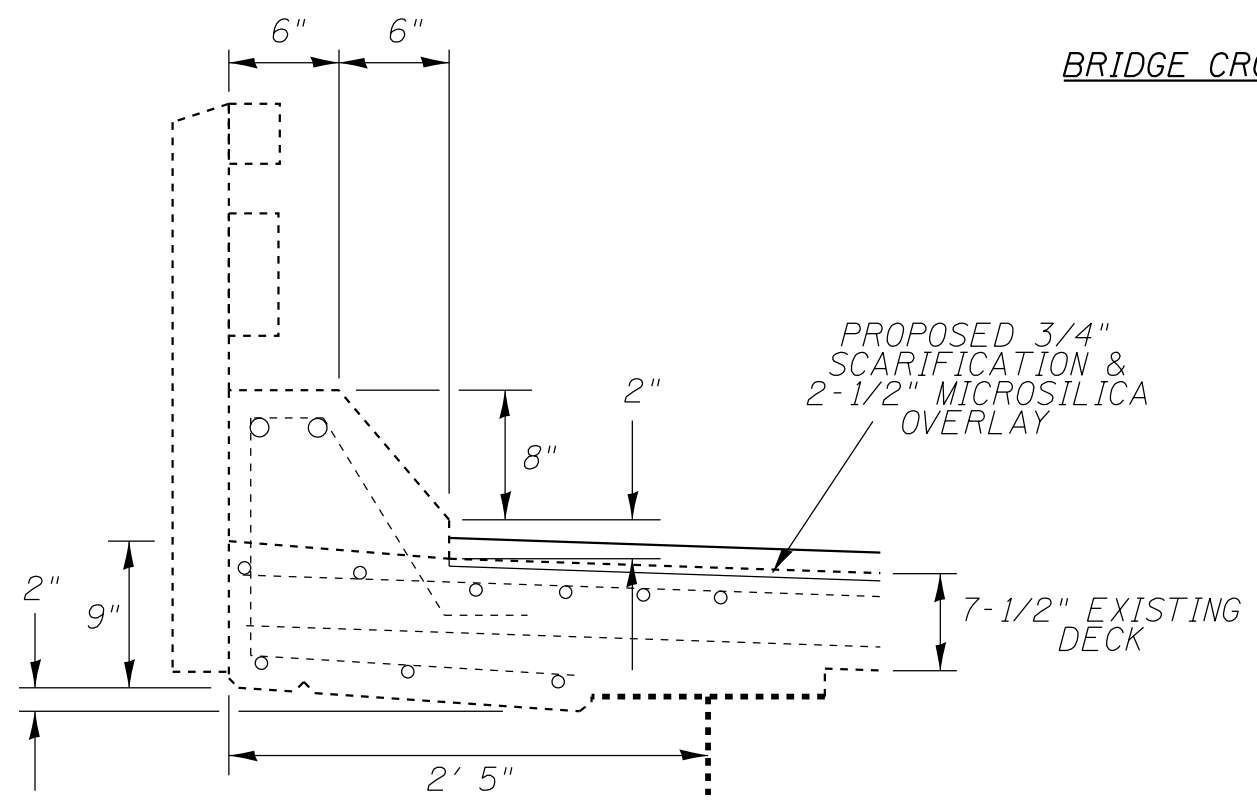
No. required =

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.

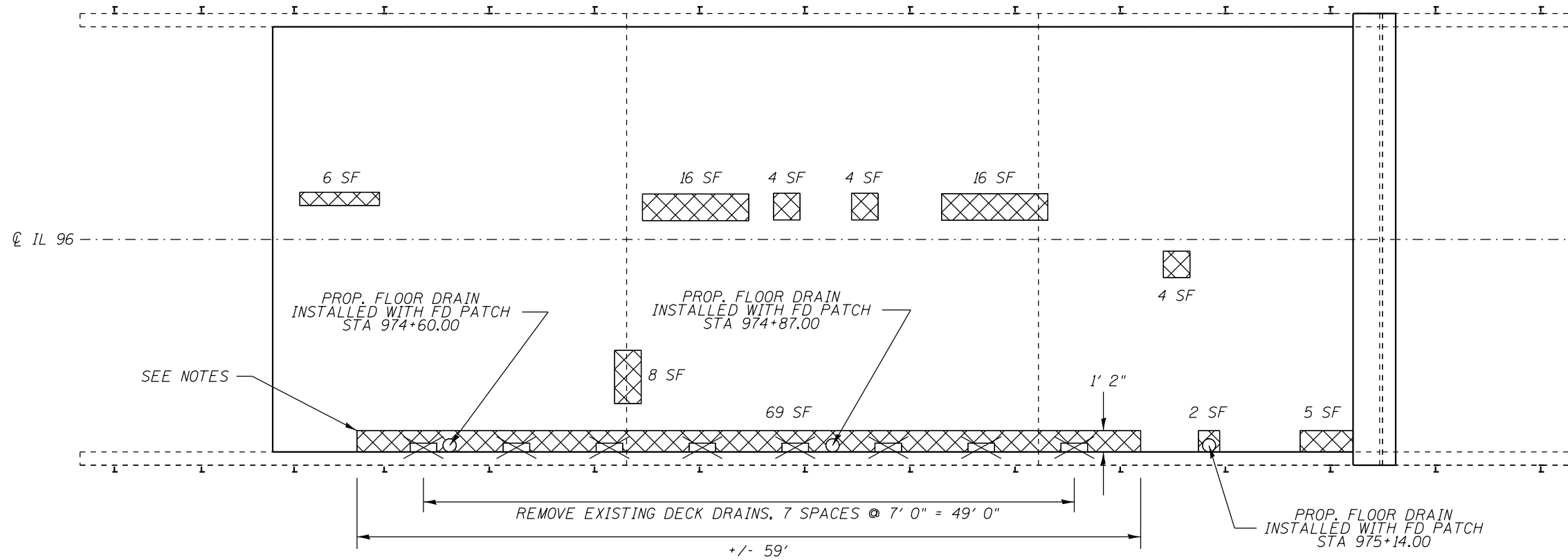
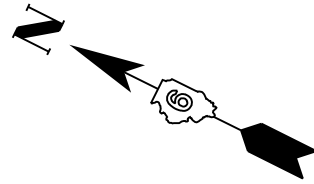


BRIDGE CROSS SECTION (LOOKING SOUTH)



CURB CROSS SECTION

FILE NAME = D:\OPERATIONS\Bridges\Bridgplans\CAD\72H69 - 0340056 and 0340058 overlays\plansheet.dwg	USER NAME = dudleybm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE CROSS SECTION SN 034-0056			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000' / 1" / 1" / 1"	CHECKED -	REVISED -					510	(120)I-7	HANCOCK	24	19
Default	PLOT DATE = 7/8/2015	DATE -	REVISED -	SCALE: SHEET 2 OF 7 SHEETS STA. TO STA.			CONTRACT NO. 72H69 ILLINOIS FED. AID PROJECT					



DECK PLAN

NOTES:

FULL DEPTH PATCHES SHALL BE USED TO REMOVE THE EXISTING FLOOR DRAINS AND TO INSTALL PROPOSED DRAINS. REFER TO SHEET 5 OF 7 FOR FLOOR DRAIN DETAILS. COST OF EXISTING FLOOR DRAIN REMOVAL SHALL BE INCLUDED WITH FULL DEPTH PATCHING AND WILL NOT BE MEASURED FOR PAYMENT SEPARATELY.

PATCHING ALONG THE WEST EDGE OF THE DECK SHALL BE ACCOMPLISHED IN 2 PHASES IN ORDER TO PRESERVE THE STRUCTURAL INTEGRITY OF THE DECK'S CANTILEVERED EDGE. FOR PHASE 1, THE CONTRACTOR SHALL REMOVE 3 NON-CONTIGUOUS SECTIONS AT +/- 10' IN LENGTH, WHILE LEAVING +/- 10' OF THE EXISTING DECK INTACT BETWEEN THE REMOVAL SECTIONS. PHASE 2 SHALL NOT COMMENCE UNTIL A MINIMUM OF 72 HOURS AFTER THE PHASE 1 POUR AND THE CONCRETE HAS REACHED A MINIMUM MODULUS OF RUPTURE OF 650 PSI (3500 PSI COMPRESSIVE STRENGTH). THE CONTRACTOR SHALL REPEAT THE PROCESS FOR PHASE 2 REMOVING THE SECTIONS LEFT IN PLACE INITIALLY. THE ENGINEER SHALL APPROVE THE CONTRACTOR'S PATCHING PLAN BEFORE REMOVAL OPERATIONS BEGIN. THIS SECTION OF PATCHING SHALL BE COMPLETED PRIOR TO AND OMITTED FROM THE SCARIFICATION OPERATION. THE SURFACE OF PATCHES IN THIS SECTION SHALL BE LEFT ROUGH IN LEIU OF SCARIFICATION. BLOCKOUTS APPROXIMATELY 14" SQUARE SHALL BE LEFT AT LOCATIONS IDENTIFED TO RECEIVE NEW FLOOR DRAINS. NEW FLOOR DRAINS SHALL BE INSTALLED AFTER SCARIFICATION OPERATIONS ARE COMPLETED. THE DECK PATCHES SURROUNDING THE NEW DRAINS SHALL BE CAST FULL DEPTH MONOLITHICALLY WITH THE OVERLAY.

IDENTIFIED PATCHING LOCATIONS NOT INCLUDING THE WEST EDGE OF THE DECK ARE ESTIMATED FROM A DECK SURVEY PERFORMED ON 1/20/2015. THESE LOCATIONS INDICATE PORTIONS OF THE DECK THAT HAVE HIGHER POTENTIAL FOR REQUIRING FULL DEPTH REPAIRS. THE CONTRACTOR SHALL NOT PERFORM FULL DEPTH PATCHING ANYWHERE ON THE DECK UNLESS THE SCARIFICATION OPERATIONS REVEAL THE NEED TO DO SO. THE PATCHING SURVEY INFORMATION IS INCLUDED FOR INFORMATION ONLY.

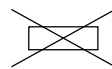
FULL DEPTH PATCHING AREAS IDENTIFIED = 15 SQ YD.



PROP. FLOOR DRAIN
CAST IN FD PATCH

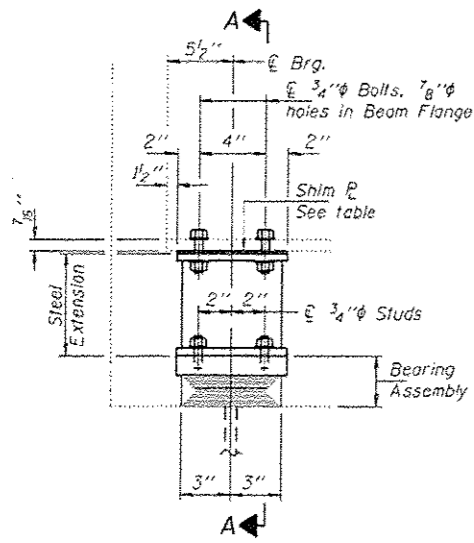


PROP. FD PATCH

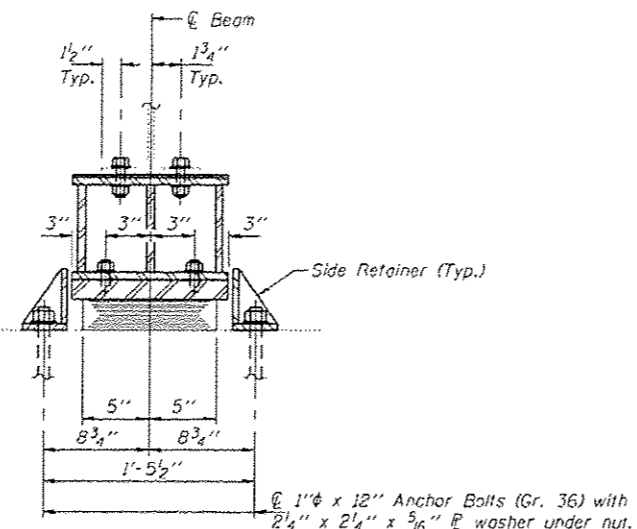


PLUG EXISTING FLOOR DRAIN

FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DECK PLAN SN 034-0056	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D:\OPERATIONS\Bridges\Bridgplans.CAD\72H69 - 0340056 and 0340058 overlays\plansheet	DRAWN -	REVISED -	510			(120)I-7	HANCOCK	24	20	
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 72H69			ILLINOIS FED. AID PROJECT	
	PLOT DATE = 7/8/2015	DATE -	REVISED -			SCALE:	SHEET 3 OF 7 SHEETS	STA.	TO STA.	



ELEVATION AT S. ABUTMENT



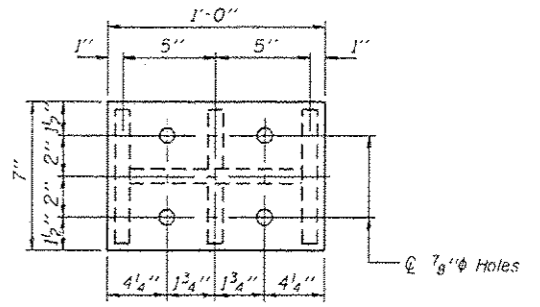
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.

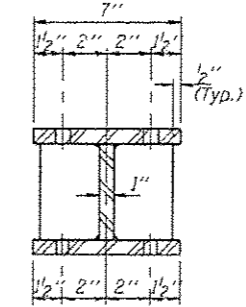
BEAM REACTIONS

R ₁	(K)	7.5
R ₂	(K)	22.3
Imp.	(K)	1.3
R (Total)	(K)	31.5

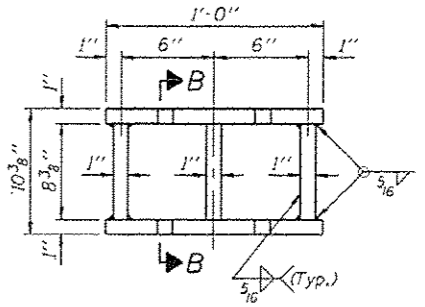
Notes:
 Diaphragm removal and installation may be required to facilitate drilling holes. Cost Included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. jack capacity = 20 Tons.
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (F_y=36ksi). The corresponding specified grade of AASHTQ M314 anchor bolts may be used in lieu of ASTM F1554.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type 1.
 The deck at the south abutment has risen off the existing bearings. The new bearing assemblies shall account for this vertical adjustment and are intentionally called out to be taller than the existing bearings.



PLAN TOP PLATE



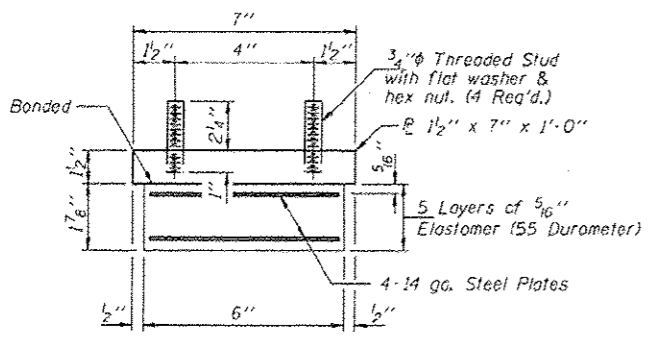
SECTION B-B



STEEL EXTENSION DETAIL

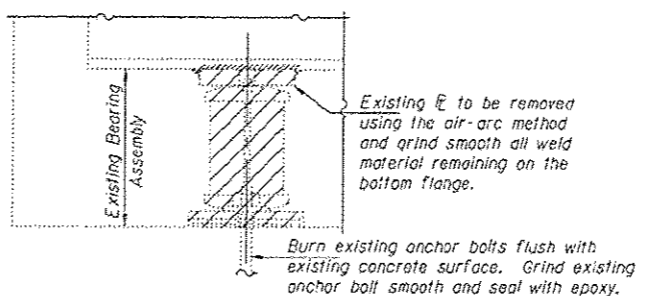
SHIM TABLE

Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6
0	1/8"	0	3/16"	3/8"	5/8"



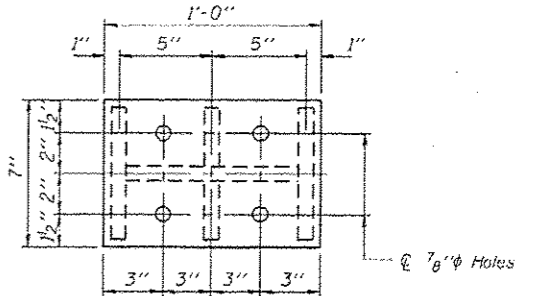
BEARING ASSEMBLY

Note:
 Shim plates shall not be placed under Bearing Assembly.

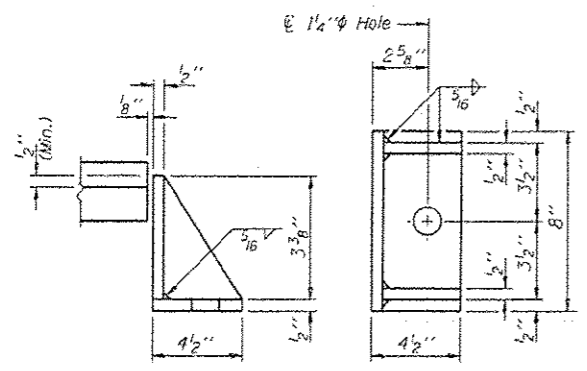


EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

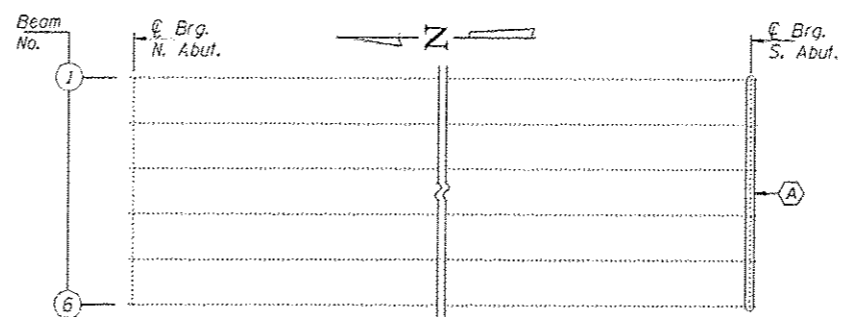


PLAN BOTTOM PLATE



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

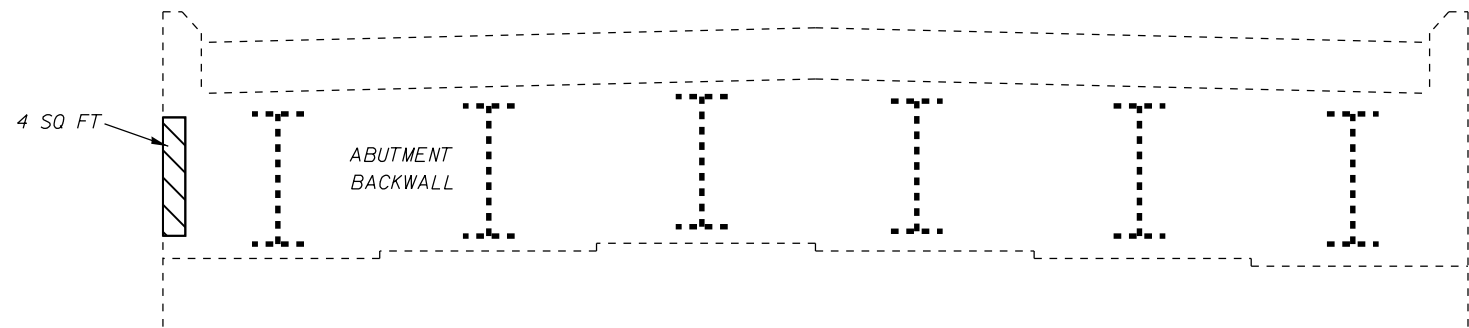


PARTIAL PLAN

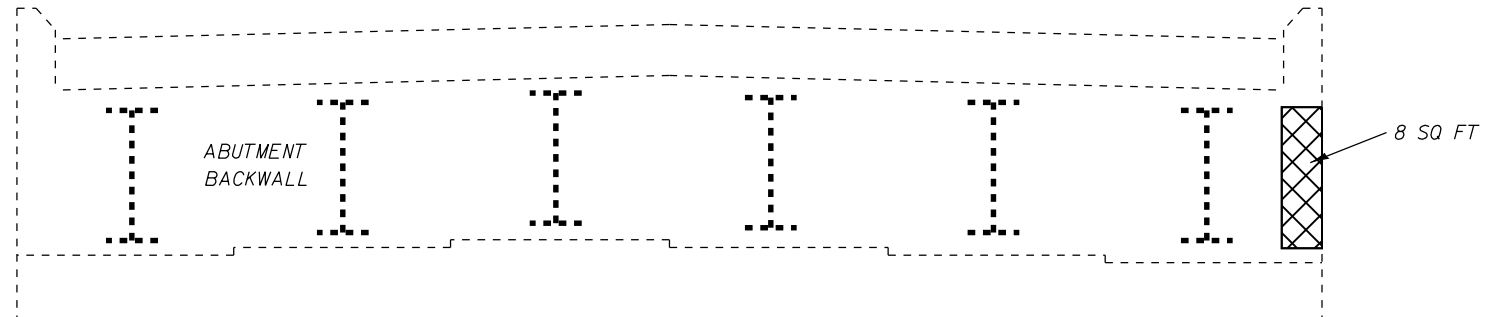
(A) - Bearing replacement

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type 1	Each	6
Jack and Remove Existing Bearings	Each	6
Furnishing and Erecting Structural Steel	Pound	700
Anchor Bolts 1"φ	Each	12



SOUTH ABUTMENT ELEVATION - LOOKING SOUTH

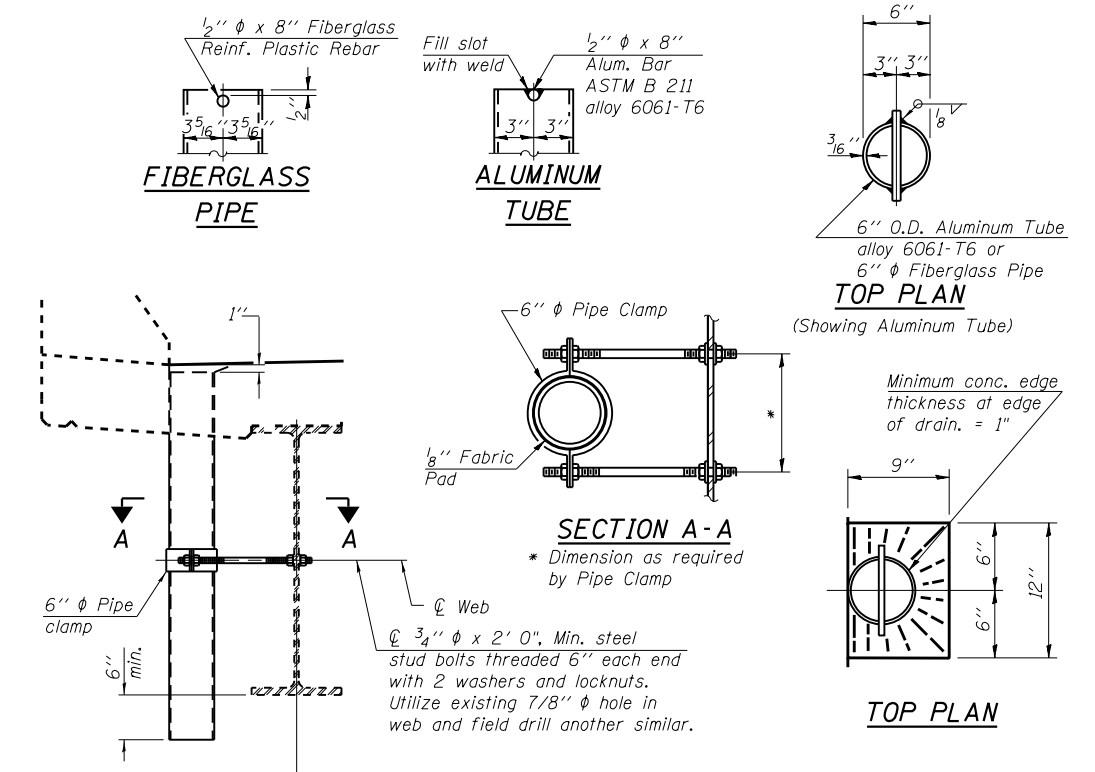


NORTH ABUTMENT ELEVATION - LOOKING NORTH

- STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")
- STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5")

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	SQ FT	4
Structural Repair of Concrete (Depth Greater Than 5 Inches)	SQ FT	8

STRUCTURAL REPAIR OF CONCRETE



SECTION THRU PARAPET

ITEM	UNIT	QUANTITY
Floor Drains	Each	3

Notes:
 Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
 Galvanize clamping device according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.
 Any unused holes remaining in the beam web shall be plugged with HS bolts.

FLOOR DRAINS

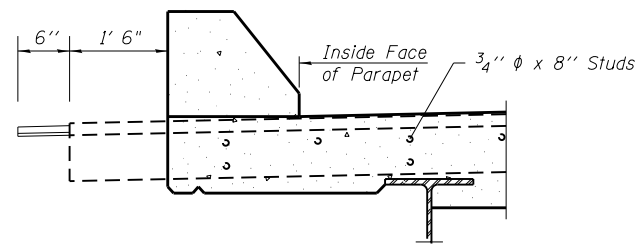
FILE NAME =	USER NAME = dudleybm	DESIGNED -	REVISED -
D:\OPERATIONS\Bridges\Bridgplans\CAD\72H69 - 0340056 and 0340058 overlays\planshe		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
	PLOT DATE = 7/8/2015	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

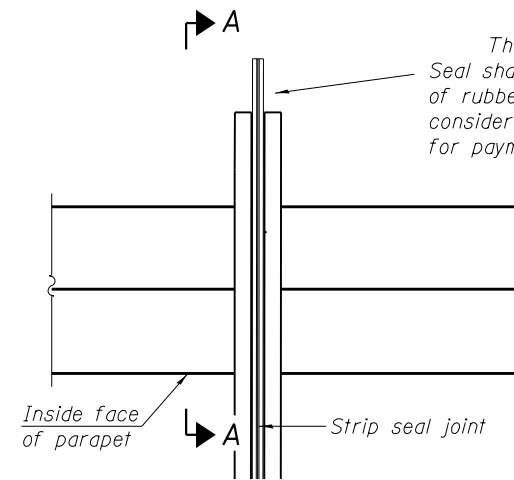
**MISCELLANEOUS DETAILS
 SN 034-0056**

SCALE: SHEET 5 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	(120)I-7	HANCOCK	24	22
CONTRACT NO. 72H69				
ILLINOIS FED. AID PROJECT				



SECTION A-A



PLAN THROUGH CURB

The pay limits for Preformed Joint Strip Seal shall be to the end of the steel plate. The 6" of rubber extending past the end of steel shall be considered incidental and shall not be measured for payment.

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

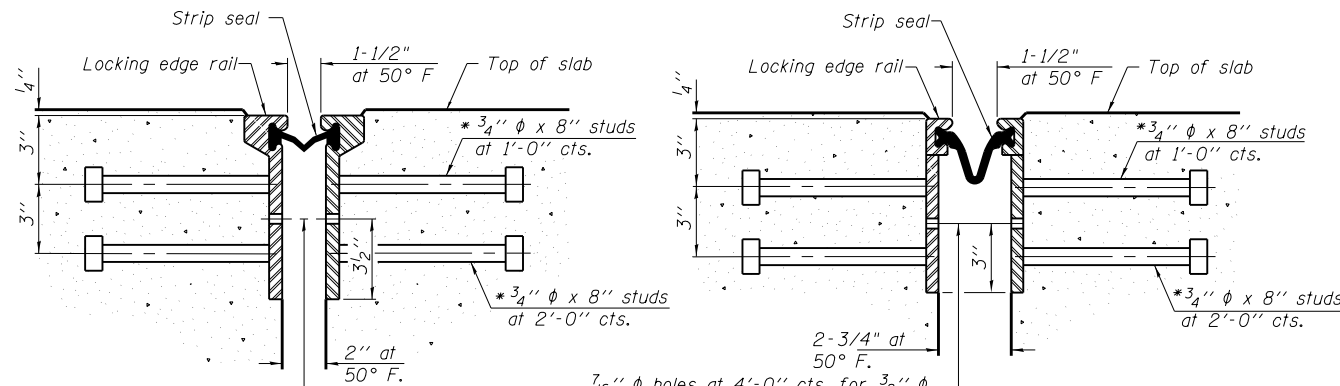
The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.



SECTION THRU ROLLED RAIL JOINT

SECTION THRU WELDED RAIL JOINT

3/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

3/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

ROLLED EXTRUDED RAIL

WELDED RAIL

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

Rolled rail shown, welded rail similar.

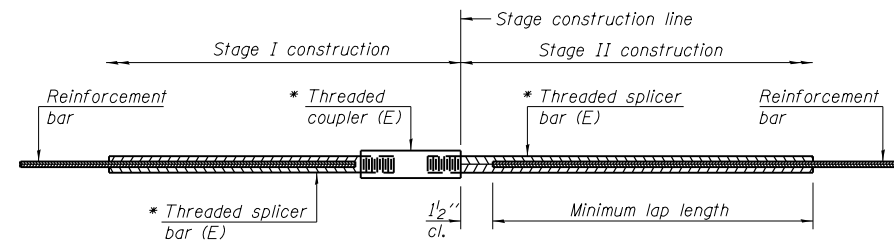
*** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAILS

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	37

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



STANDARD BAR SPLICER ASSEMBLY

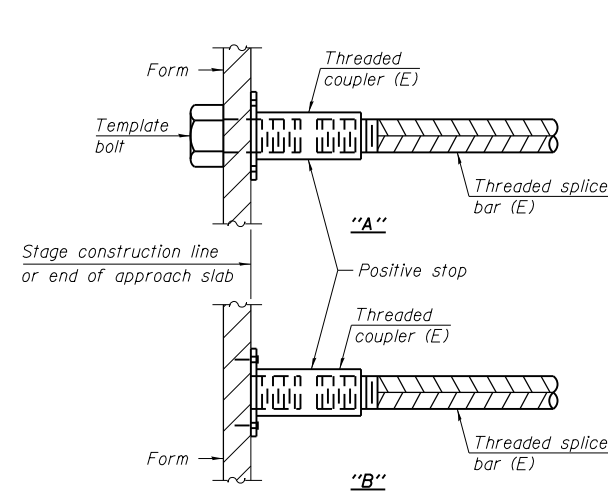
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar lap, Class C

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

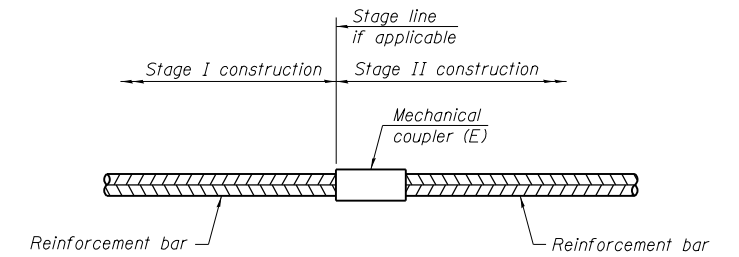
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
S. Abut. (Appr. Side)	#6	4	3
S. Abut. (Deck Side)	#5	8	3



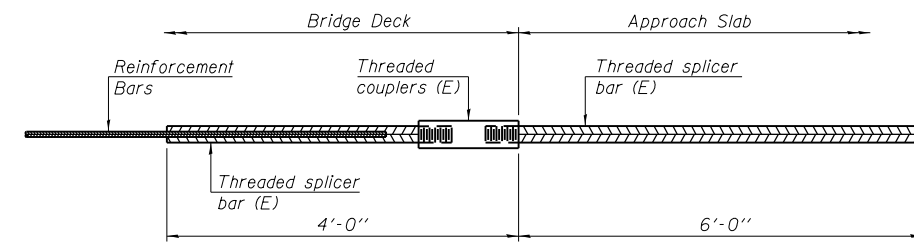
INSTALLATION AND SETTING METHODS

"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.



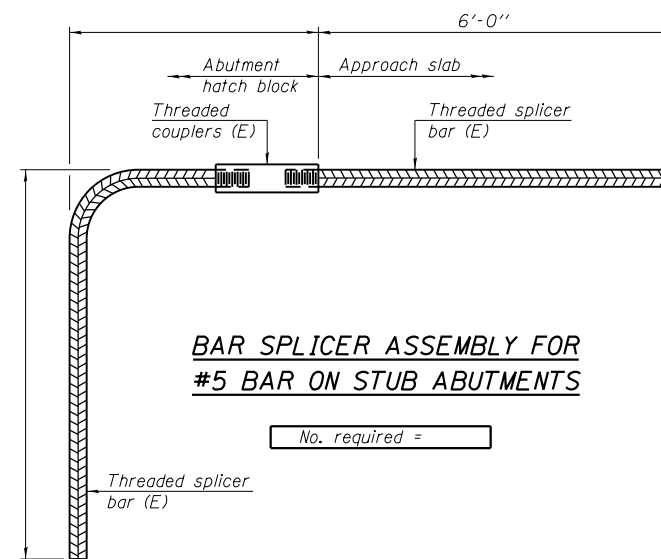
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

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.