

INDEX OF SHEETS

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

PROPOSED HIGHWAY PLANS

FAP RTE 103 (IL 4 /IL 13)

SECTION 22VB-RS

RESURFACE BRIDGE APPROACHES

ON SN 095-0070

IL 4 /IL 13 OVER IC RR

WASHINGTON COUNTY

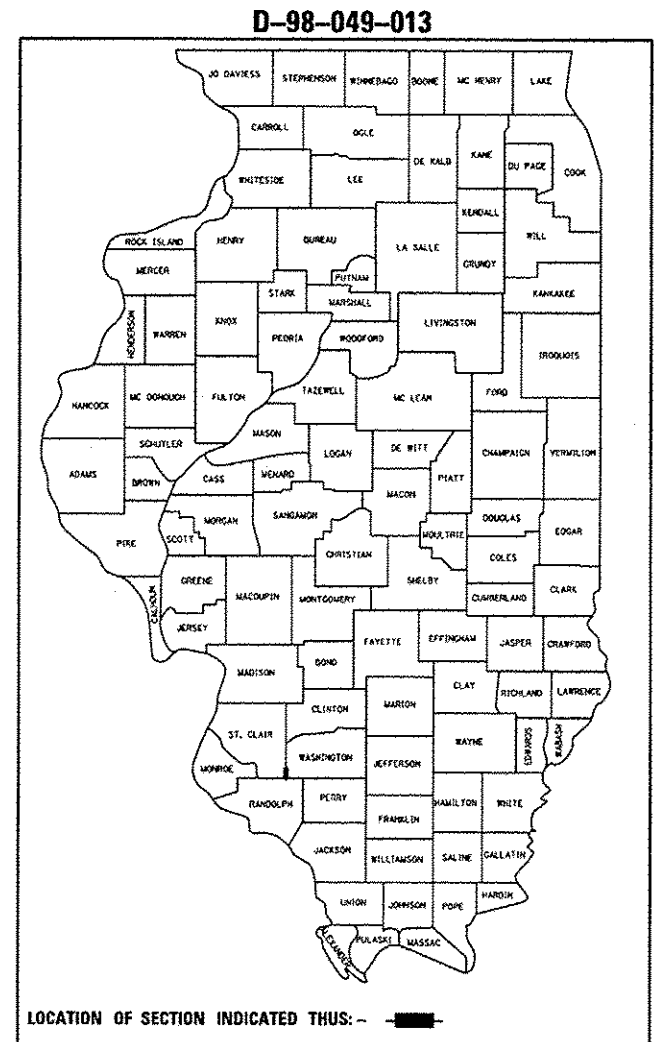
C-98-052-13

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	22VB-RS	WASHINGTON	7	1
		ILLINOIS	CONTRACT NO. 76G50	

DESIGN DESIGNATION

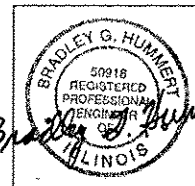
MINOR ARTERIAL

2011 ADT (ACTUAL) = 5,800
 2014 ADT (ESTIMATED) = 6,000
 2034 ADT (ESTIMATED) = 7,300
 SU = 3.3%
 MU = 6.5%
 DIRECTIONAL DIST. = 50%/50%

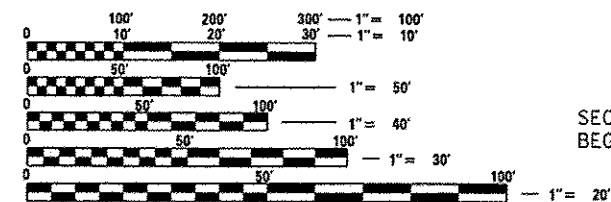


SN 095-0070 STA 354+68.89
 3 SPAN WF STRUCTURE
 171'-0" BK/BK ABUTS.
 LATITUDE: 38.22011° N
 LONGITUDE: 89.70325° W

HMG ENGINEERS, Inc.
 1075 Lake Road, P.O. Box 70
 Carlyle, Illinois 62231
 www.hmgengineers.com

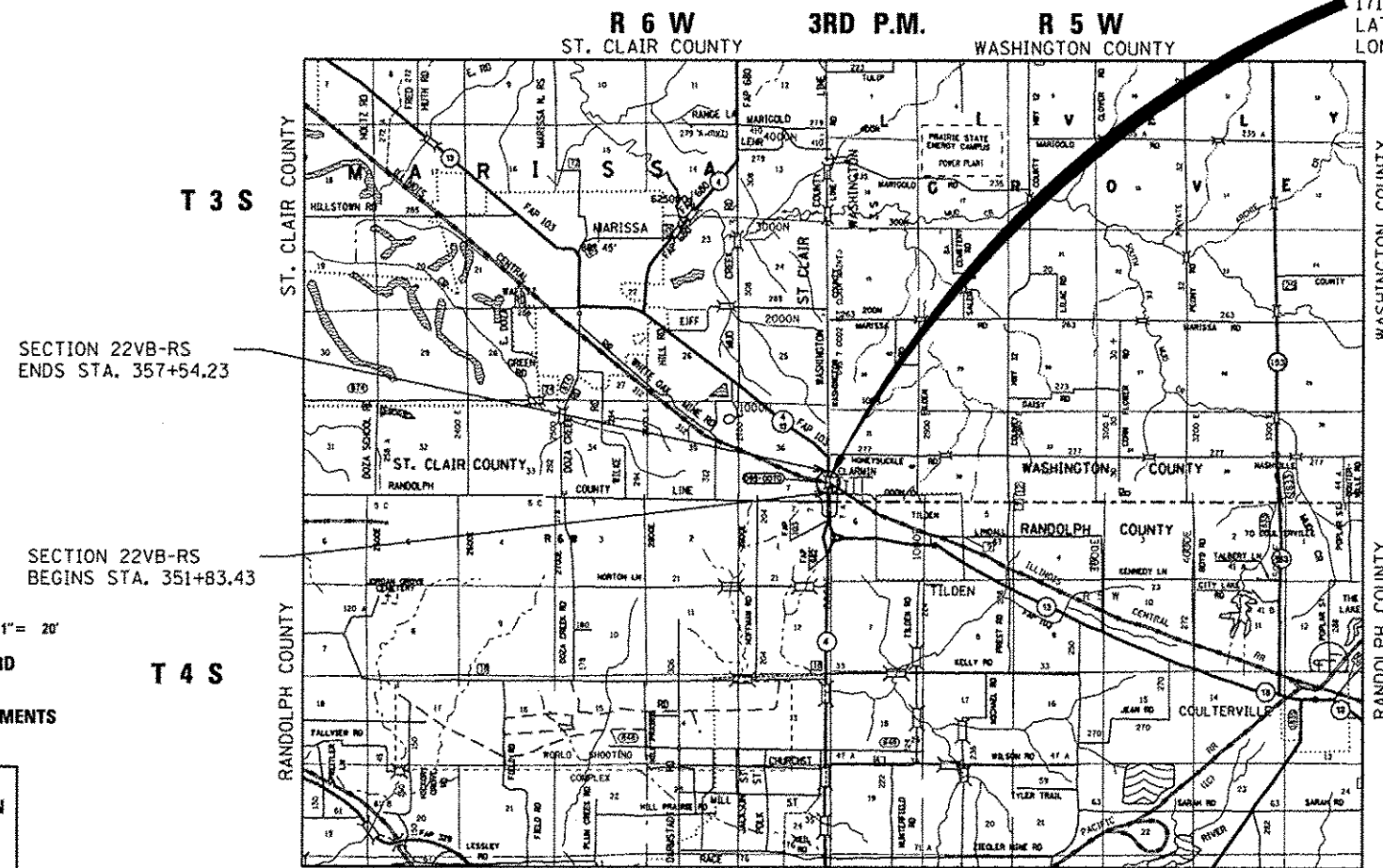


Bradley G. Hummel
 10/29/13
 Exp. 11/30/13



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



SECTION 22VB-RS
 ENDS STA. 357+54.23

SECTION 22VB-RS
 BEGINS STA. 351+83.43

GROSS LENGTH = 571 FT. = 0.110 MILE
 NET LENGTH = 400 FT. = 0.076 MILE

PROJECT ENGINEER: PATTI LEBEAU (618) 346-3179
 SQUAD LEADER: BILLIE OWEN (618) 346-3209

CONTRACT NO. 76G50

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED *Oct 31, 2013*
Jeffrey Z. Kan
 DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER

Dec 6, 2013
John D. Baranzelli P.E. B
 ENGINEER OF DESIGN AND ENVIRONMENT

Dec 6, 2013
Omer Osman P.E. B
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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 OF THE STATE OF ILLINOIS**

GENERAL NOTES

- ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES WITHIN THE PROJECT AREA BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:
 - AMEREN ILLINOIS (GAS & ELECTRIC)
 - CLEARWAVE COMMUNICATIONS (COMMUNICATIONS)
 - EGYPTIAN TELEPHONE COOP. ASSN. (COMMUNICATIONS)
 - FRONTIER NORTH, INC. (COMMUNICATIONS)
 - KASKASKIA WATER DISTRICT (WATER)
 - VERIZON BUSINESS (COMMUNICATIONS)
 - VILLAGE OF TILDEN (WATER & SANITARY SEWER)
 - ZAYO GROUP (COMMUNICATIONS)
- MEMBERS OF J.U.L.I.E. (800) 892-0123 OR 811 ARE INDICATED BY •. NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.
- THE INTENT OF THIS PROJECT IS TO SMOOTH THE DRIVING SURFACE AT THE BRIDGE APPROACHES BY USING PCC & HMA BUTT JOINTS AND VARIABLE DEPTH HMA MILLING, AS REQUIRED, TO PROVIDE A 1/2" MINIMUM HMA SURFACE THICKNESS OVER THE GIVEN LIMITS. THE SHOULDERS SHALL ALSO BE MILLED, AS REQUIRED, TO PROVIDE A 1/2" MINIMUM THICKNESS FOR HMA SHOULDERS TO ACCOMMODATE THE PROFILE CHANGES. THE ENGINEER MAY ADJUST THE LAYOUT TO SUIT VARYING FIELD CONDITIONS.
- ANY AREAS DISTURBED DUE TO CONSTRUCTION ACTIVITIES SHALL BE SEEDED (TEMPORARY AND PERMANENT) AT THE CONTRACTOR'S EXPENSE AND NO OTHER COMPENSATION WILL BE PERMITTED.
- THE RE/RT SHALL RECORD THE EXISTING PAVEMENT MARKING LOCATIONS AND TYPES TO MAKE CERTAIN THAT THE PROPOSED PAVEMENT MARKINGS MATCH THE EXISTING PAVEMENT MARKINGS.
- THE CONTRACTOR AND THE ENGINEER SHALL BE AWARE THAT LIMITED SURVEY WAS PERFORMED FOR THIS PROJECT. THE STATIONING AND TOPOGRAPHY SHOWN IN THE PLANS WAS CREATED USING MICROFILM AND FIELD MEASUREMENTS. BOTH SHALL BE ASSUMED APPROXIMATE. THE CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- THE THICKNESS OF HOT-MIX ASPHALT MIXTURES SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS MIXTURE IS PLACED.
- THE VARIOUS THICKNESS OF HOT-MIX ASPHALT SURFACE REMOVAL SHOWN ON THE PLANS IS THE AVERAGE THICKNESS BASED UPON CONTROLLING THICKNESS AS INDICATED. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE.
- THE WIDTHS OF HOT-MIX ASPHALT SURFACE REMOVAL SHOWN ON THE PLANS ARE NOMINAL WIDTHS. IRREGULARITIES IN THE SURFACE WIDTH MAY OCCUR THROUGHOUT THE LENGTH OF SECTION. HOT-MIX ASPHALT SURFACE REMOVAL WILL BE PAID FOR IN SQUARE YARDS BASED UPON THE NOMINAL WIDTHS INDICATED.
- THE ESTIMATED QUANTITY OF 80 TONS OF CUTTINGS IS FROM THE HOT-MIX ASPHALT SURFACE REMOVAL OPERATION.
- ALL TEMPORARY PAVEMENT MARKING WILL BE PLACED IN SUCH A MANNER SO AS NOT TO INTERFERE WITH THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- SHORT-TERM PAVEMENT MARKING SHALL BE APPLIED TO THE MILLED, PRIMED, AND FINAL ASPHALT SURFACE. A QUANTITY FOR TEMPORARY PAVEMENT MARKING EQUAL TO THE AMOUNT OF PERMANENT PAVEMENT MARKING HAS BEEN INCLUDED IN THE PLANS. "WORK ZONE PAVEMENT MARKING REMOVAL" SHALL BE PAID FOR THE FINAL SURFACE ONLY.
- THE CONTRACTOR SHALL PROVIDE POSITIVE AND ADEQUATE DRAINAGE AT ALL LOCATIONS AT ALL TIMES. THIS MAY INCLUDE, BUT IS NOT LIMITED TO, REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED, REGRADING, PLUGGING ABANDONED PIPES, OR OTHER ACTIVITIES REQUIRED BY THE ENGINEER.
- "ROAD CONSTRUCTION AHEAD" SIGNS SHALL BE PLACED AT ENTRANCES AND SIDE STREETS WHERE WORK IS BEING CONDUCTED AS DIRECTED BY THE ENGINEER. ALL CONSTRUCTION SIGNS SHALL BE FLORESCENT ORANGE AND 48" X 48". THIS SHALL BE INCLUDED IN THE COST OF THE TRAFFIC CONTROL AND PROTECTION.
- IT IS THE INTENT OF THIS PROJECT TO MATCH UP TO ANY PREVIOUS, ADJACENT OVERLAY SECTIONS. THE ENGINEER SHALL DICTATE WHERE TO BEGIN THE PROJECT SO THAT TWO BUTT JOINTS ARE NOT ADJACENT TO ONE ANOTHER.
- WORK FOR THE ITEM "REMOVE AND REERECT RAIL ELEMENT OF EXISTING GUARDRAIL" MAY INCLUDE RAIL ELEMENTS FOR TRAFFIC BARRIER TERMINALS AS INDICATED ON THE PLAN.

- THE FOLLOWING RATES OF APPLICATIONS HAVE BEEN USED IN THE COMPUTATION OF PLAN QUANTITIES.

HOT-MIX ASPHALT	2.016 TONS/CU YD
BITUMINOUS MATERIALS (PRIME COAT)	0.0003129 TONS/SO YD
AGGREGATE (PRIME COAT)	3.0 LBS/SO YD
AGGREGATE/GRANULAR MATERIAL	2.05 TONS/CU YD

- THE CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS REQUIRED TO IMPRINT PAVEMENT STATION NUMBERS IN THE FINISHED SURFACE OF THE PAVEMENT AND/OR OVERLAY. THE NUMBERS SHALL BE APPROXIMATELY 3/4 INCHES WIDE, 5 INCHES HIGH AND 5/8 INCHES DEEP. THE PAVEMENT STATION NUMBERS SHALL BE INSTALLED AS SPECIFIED HEREIN:
 - INTERVAL - 250 FEET
 - BOTTOM OF NUMBERS - 6 INCHES FROM THE INSIDE EDGE OF PAVEMENT MARKING
 - LOCATION:
 - 2, 3 & 5 LANE PAVEMENTS - RIGHT EDGE OF PAVEMENT IN DIRECTION OF INCREASING STATIONS
 - MULTI-LANE DIVIDED ROADWAYS - OUTSIDE EDGE OF PAVEMENT IN BOTH DIRECTIONS
 - RAMPS - ALONG BASELINE EDGE OF PAVEMENT
 - POSITION - STATIONS SHALL BE PLACED SO THEY CAN BE READ FROM THE ADJACENT SHOULDER
 - FORMAT - "XX+XX", WHERE X REPRESENTS THE PAVEMENT STATION
 - THE STAMPED STATIONS SHALL BE FILLED WITH SAND IMMEDIATELY AFTER STAMPING AND PRIOR TO ADDITIONAL ROLLING.
 - THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCLUDED IN THE COST OF ASSOCIATED PAVEMENT AND/OR OVERLAY PAY ITEMS.

HIGHWAY STANDARDS

000001-06	701001-02
001006	701006-05
482011-03	701306-03
630001-10	701311-03
631031-12	701901-03
635006-03	780001-04
635011-02	781001-03

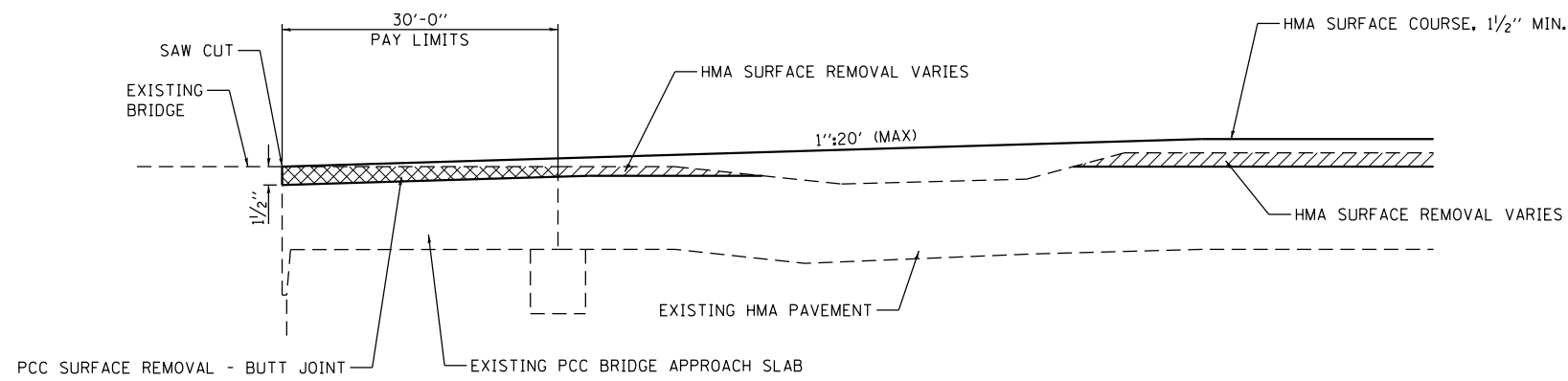
COMMITMENTS

NONE

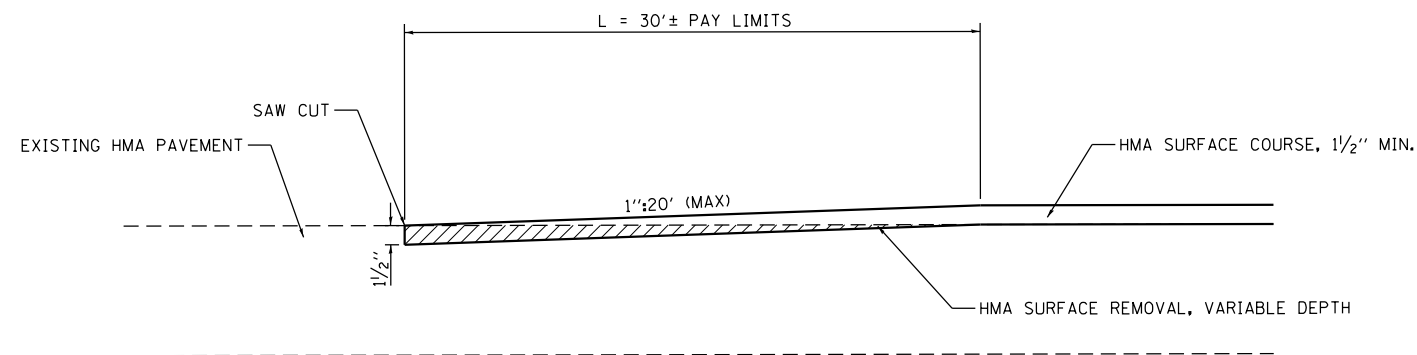
PAVEMENT MIXTURE DESIGNS

MIXTURE REQUIREMENTS			
MIXTURE	SURFACE	SHOULDERS ≥ 2.25"	SHOULDERS < 2.25"
PG GRADE	PG 64-22	PG 64-22	PG 64-22
MAX RAP ALLOWABLE	SEE SPEC.	SEE SPEC.	SEE SPEC.
DESIGN AIR VOIDS	4.0% @ Ndes=70	**2.0% @ Ndes=30	**2.0% @ Ndes=30
MIXTURE COMPOSITION		NMAS 3/4"	NMAS 1/2"
GRADATION MIXTURE	IL-9.5		
FRICTION AGGREGATE	MIXTURE D		

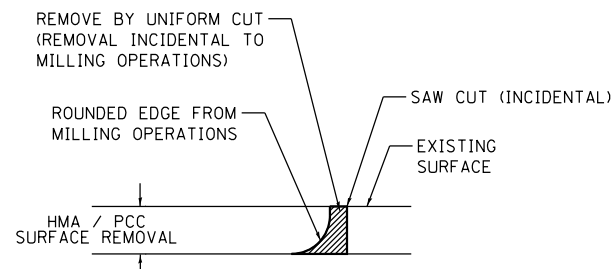
** TOP LIFT SHOULDERS - DESIGN THIS MIX AT 2.0% VOIDS AND ADD ASPHALT TO REDUCE VOIDS TO 1.5%.
 PLAN QUANTITIES FOR HMA SURFACE COURSE ITEMS ARE CALCULATED USING A UNIT WEIGHT OF 112 LB/SO YD/IN.



BUTT JOINT AT BRIDGE APPROACH



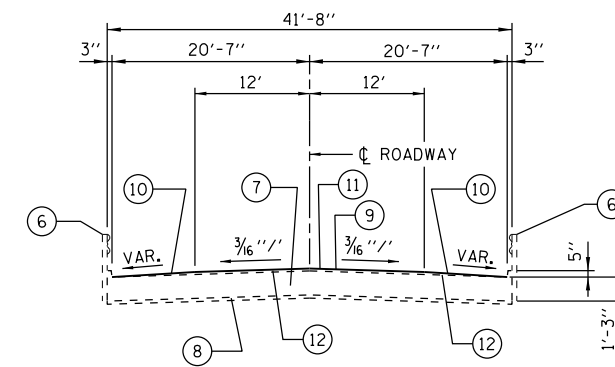
BUTT JOINT AT EXISTING HMA



NOTE:
WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE,
THEN A SAW CUT SHALL BE USED TO MANUFACTURE
A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL.
THE ENGINEER SHALL BE THE SOLE JUDGE
CONCERNING THE USE OF THIS DETAIL.

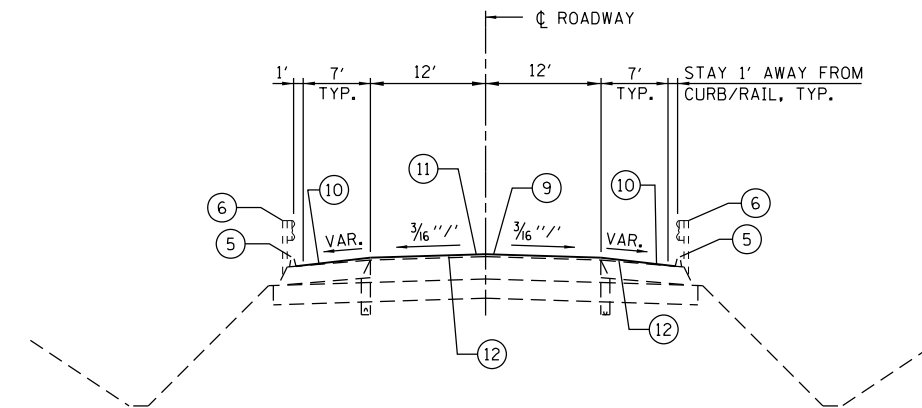
BUTT JOINT DETAIL

- ① EXISTING BITUMINOUS PAVEMENT (Full Depth) 1 3/4"
- ② EXISTING BITUMINOUS SHOULDER 8"
- ③ EXISTING 12" MODIFIED LIME SOIL
- ④ EXISTING PIPE UNDERDRAIN, 4"
- ⑤ EXISTING BITUMINOUS CONCRETE CURB
- ⑥ EXISTING GUARDRAIL
- ⑦ EXISTING PCC BRIDGE APPROACH PAVEMENT
- ⑧ EXISTING SUBBASE GRANULAR MATERIAL TYPE B, 4"
- ⑨ HOT-MIX ASPHALT SURFACE COURSE, MIX D, N70 (1 1/2" MIN.)
- ⑩ HOT-MIX ASPHALT SHOULDERS
- ⑪ BITUMINOUS MATERIALS (PRIME COAT) AND AGGREGATE (PRIME COAT)
- ⑫ HMA/PCC SURFACE REMOVAL (SEE SCHEDULE FOR THICKNESS AND LOCATIONS)



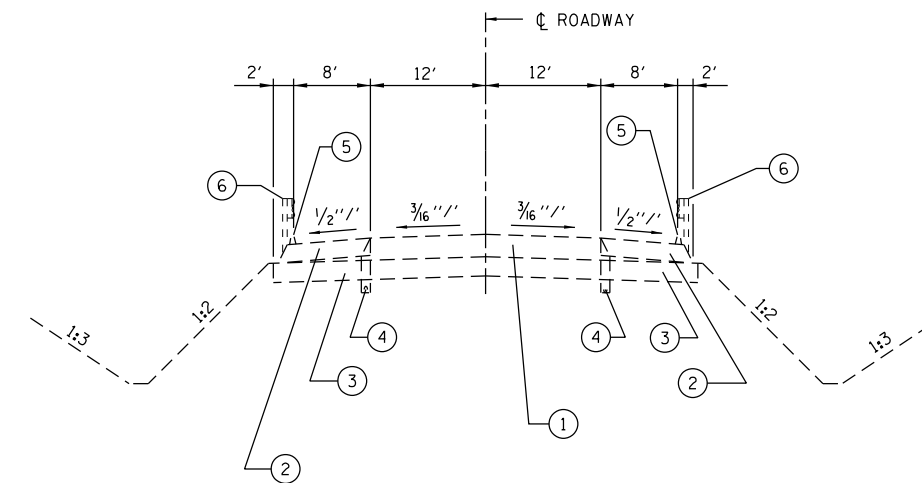
TYPICAL BRIDGE APPROACH SECTION

STA 353+53.43 TO STA 353+83.43
STA 355+54.23 TO STA 355+84.23



PROPOSED TYPICAL ROADWAY SECTION

STA 351+83.43 TO STA 353+53.43
STA 355+84.23 TO STA 357+54.23



EXISTING TYPICAL ROADWAY SECTION

STA 351+83.43 TO STA 353+53.43
STA 355+84.23 TO STA 357+54.23

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	PLOT SCALE = 20.0000' / 1"	DRAWN - KHL	REVISED -
	PLOT DATE = 10/31/2013	CHECKED - BGH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS AND
MISCELLANEOUS DETAILS**

SHEET NO. 1 OF 1 SHEETS

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	22VB-RS	WASHINGTON	7	5
CONTRACT NO. 76G50				
ILLINOIS FED. AID PROJECT				

HMC NO. 6513.081

ROADWAY SCHEDULE

LOCATION				HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	TEMPORARY RAMP	BITUMINOUS MATERIALS (PRIME COAT)	AGGREGATE (PRIME COAT)	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	HOT-MIX ASPHALT SHOULDERS	INLETS TO BE ADJUSTED	REMOVE AND REERECT RAIL ELEMENT OF EXISTING GUARDRAIL
STA.	TO	STA.		SO YD	SO YD	SO YD	SO YD	TON	TON	TON	TON	EACH	FOOT
IL 4/IL 13													
351+83.43	TO	353+53.43	HMA	592.8	126.7		21.1	0.23	2	44	26		40
353+53.43	TO	353+83.43	BR APPR			138.4	23.0	0.06	1	10	6	2	60
BRIDGE OMISSION													
355+54.23	TO	355+84.23	BR APPR			136.6	22.9	0.08	1	12	6	2	60
355+84.23	TO	357+54.23	HMA	593.6	126.7		21.1	0.23	2	47	26		40
TOTAL				1,186.4	253.4	275.0	88.1	0.6	6	113	64	4	200
USE				1,187	254	275	89	0.6	6	113	64	4	200

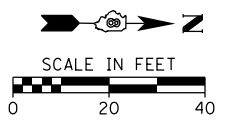
SN 095-0070 APPROACHES

STATION	EXISTING ELEV. (FT)	PROPOSED ELEV. (FT)	CHANGE IN ELEV. (IN)
351+83.43	548.674	548.686	0.14
351+90.00	548.772	548.784	0.14
352+00.00	548.917	548.929	0.14
352+10.00	549.059	549.069	0.12
352+20.00	549.185	549.203	0.22
352+30.00	549.313	549.331	0.22
352+40.00	549.433	549.454	0.25
352+50.00	549.545	549.571	0.31
352+60.00	549.650	549.682	0.38
352+70.00	549.730	549.788	0.70
352+80.00	549.820	549.889	0.83
352+90.00	549.910	549.984	0.89
353+00.00	550.016	550.073	0.68
353+10.00	550.130	550.157	0.32
353+20.00	550.241	550.235	-0.07
353+30.00	550.314	550.308	-0.07
353+40.00	550.361	550.375	0.17
353+50.00	550.380	550.436	0.67
353+60.00	550.318	550.492	2.09
353+70.00	550.396	550.542	1.75
353+80.00	550.580	550.587	0.08
353+83.43	550.623	550.601	-0.26
BRIDGE OMISSION			
355+54.23	550.456	550.474	0.22
355+60.00	550.337	550.442	1.26
355+70.00	550.156	550.381	2.70
355+80.00	550.092	550.314	2.66
355+90.00	550.090	550.242	1.82
356+00.00	550.026	550.165	1.67
356+10.00	549.966	550.081	1.38
356+20.00	549.874	549.993	1.43
356+30.00	549.765	549.898	1.60
356+40.00	549.651	549.798	1.76
356+50.00	549.548	549.693	1.74
356+60.00	549.440	549.582	1.70
356+70.00	549.333	549.465	1.58
356+80.00	549.233	549.343	1.32
356+90.00	549.116	549.215	1.19
357+00.00	549.010	549.082	0.86
357+10.00	548.884	548.943	0.71
357+20.00	548.755	548.798	0.52
357+30.00	548.616	548.648	0.38
357+40.00	548.474	548.494	0.24
357+50.00	548.334	548.338	0.05
357+54.23	548.274	548.272	-0.02

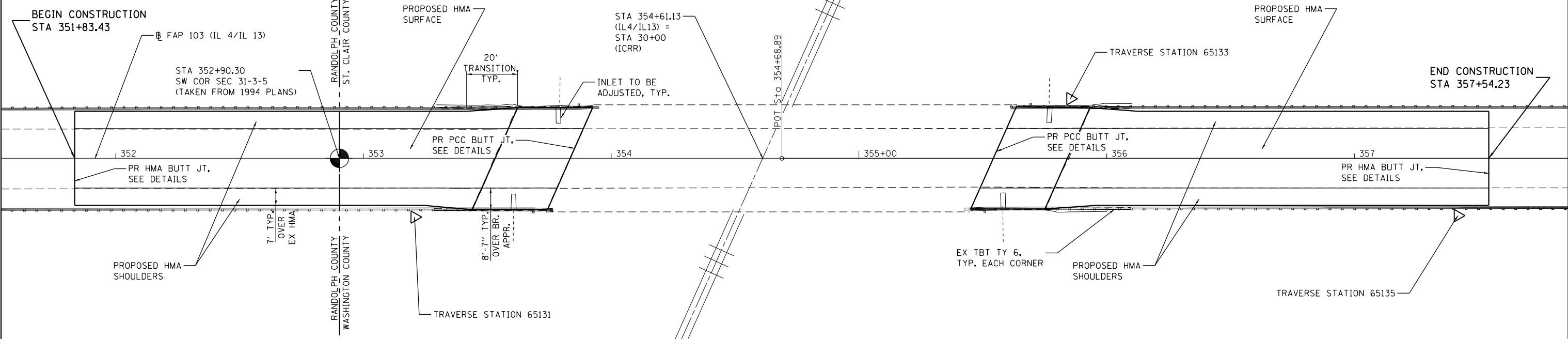
PAVEMENT MARKING SCHEDULE

LOCATION			RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	SHORT TERM PAVEMENT MARKING	TEMPORARY PAVEMENT MARKING - LINE 4"		WORK ZONE PAVEMENT MARKING REMOVAL	PAINT PAVEMENT MARKING - LINE 4"		RAISED REFLECTIVE PAVEMENT MARKER
STA.	TO	STA.	EACH	FOOT	SOLID WHITE FOOT	SOLID YELLOW FOOT	SO FT	SOLID WHITE FOOT	SOLID YELLOW FOOT	EACH
IL 4/IL 13										
351+83.43	TO	353+53.43	2	48	340	340	242.7	340	340	2
353+53.43	TO	353+83.43	1	16	60	60	45.3	60	60	1
BRIDGE OMISSION										
355+54.23	TO	355+84.23	1	16	60	60	45.3	60	60	1
355+84.23	TO	357+54.23	2	48	340	340	242.7	340	340	2
TOTAL			6.0	128	800	800	576.0	800	800	6
USE			6	128	1,600		576	1,600		6

ALIGNMENT INFORMATION (FAP 103 (IL 4/IL 13))		
STA 348+44.88	STA 354+68.89	STA 360+49.89
N=565248.374	N=565872.379	N=566453.374
E=2429716.721	E=2429714.357	E=2429712.156



PLAN	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
NO.	ALIGNED	
	CHECKED	
	FILE NAME	

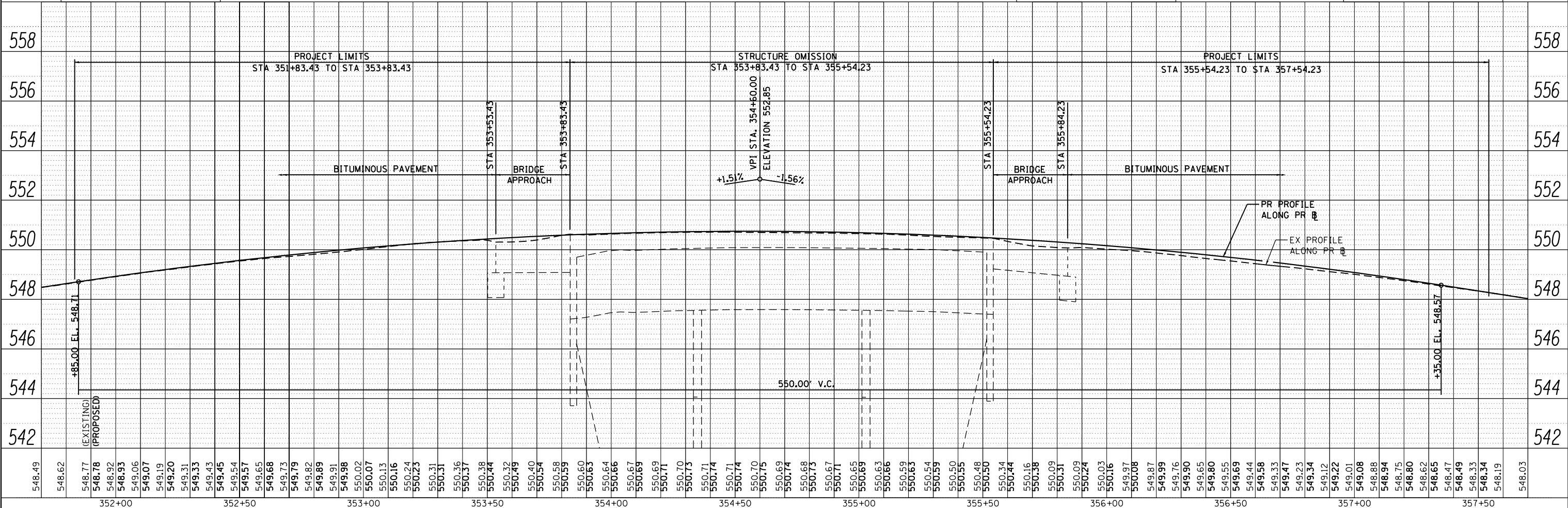


TRAVERSE STATION 65131
 STA 353+20.62, OFF 23.69' RT
 N=565724.204 E=2429738.610
 EL=548.863

TRAVERSE STATION 65133
 STA 355+85.32, OFF 24.06' LT
 N=565988.721 E=2429689.859
 EL=548.420

TRAVERSE STATION 65135
 STA 357+41.73, OFF 23.10' RT
 N=566145.309 E=2429736.422
 EL=546.984

PROFILE	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
NO.	GRADES CHECKED	
	STRUCTURE	
	NOTATIONS	



FILE NAME = H:\6513 IDOT D8 Var\6513.08 W0 8\IL 4-13\ADD Sheets\0876050-sh07-plnprf.dgn	USER NAME = k1eux	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND PROFILE SCALE: SHEET NO. 1 OF 1 SHEETS STA. 351+70 TO STA. 357+70	FAP R/E 103	SECTION 22VB-RS	COUNTY WASHINGTON	TOTAL SHEETS 7	SHEET NO. 7
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 76G50							
PLOT DATE = 10/31/2013	DATE -	REVISED -	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							

HWG NO. 6513.081