

06-15-12 LETTING ITEM 117

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

**FAI ROUTE 57 (I-57)  
SECTION D3 INTERMITTENT RS 2012-2  
PROJECT: IM-TOLL-057-6(192)287  
TYPE of IMPROVEMENT INTERMITTENT RESURF  
IROQUOIS COUNTY**

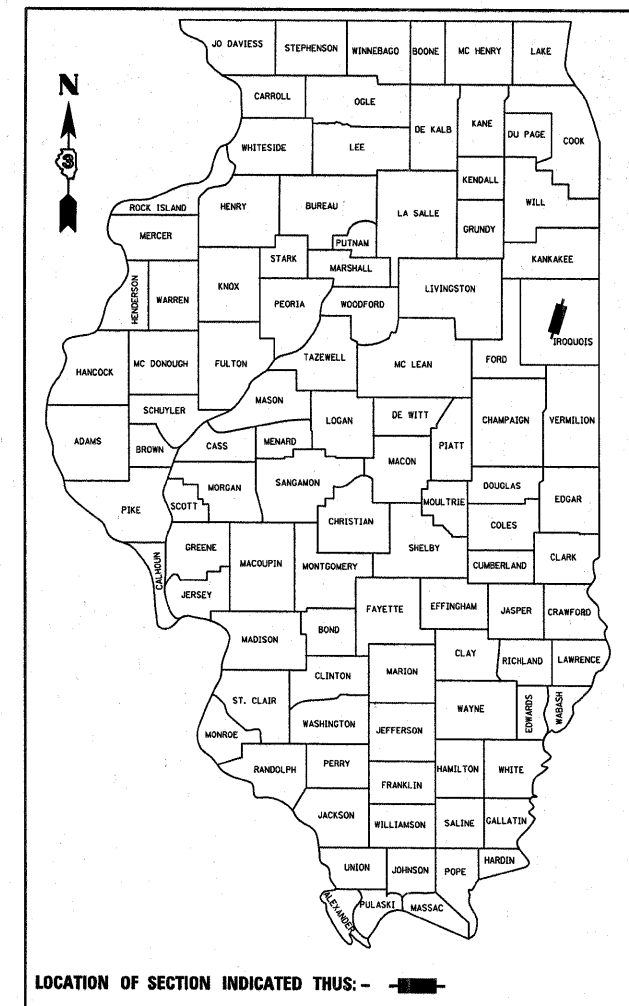
C-93-100-12

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	D3 INTERMITTENT RS 2012-2	IROQUOIS	5	1
		ILLINOIS	CONTRACT NO. 66C09	

- INDEX OF SHEETS
- COVER SHEET & STANDARDS
  - GENERAL NOTES & SUMMARY OF QUANTITIES
  - TYPICAL SECTION
  - SCHEDULE OF QUANTITIES
  - DETAILS

LIST OF ILLINOIS DOT HIGHWAY STANDARDS

- |           |   |
|-----------|---|
| 000001-06 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS                              |
| 701400-05 | APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY                              |
| 701401-06 | LANE CLOSURE, FREEWAY/EXPRESSWAY  |
| 701411-08 | LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP FOR SPEEDS **e** 45 MPH |
| 701901-02 | TRAFFIC CONTROL DEVICES   |
| 780001-03 | TYPICAL PAVEMENT MARKINGS   |
| 781001-03 | TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS                   |



**FUNCTIONAL CLASSIFICATION-INTERSTATE**

2011 ADT = 18,200  
P.V. = 67.0% S.U. = 4.6% M.U. = 28.4%

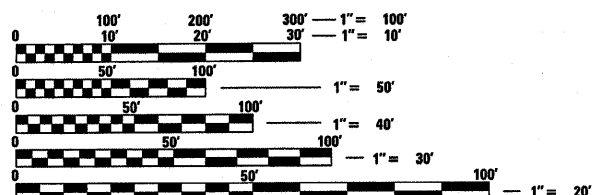
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED April 4 2012  
Eric S. Therkildsen  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 11 2012  
John D. Baranzelli, P.E.  
acting ENGINEER OF DESIGN AND ENVIRONMENT

May 11 2012  
William R. Flecker  
acting DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

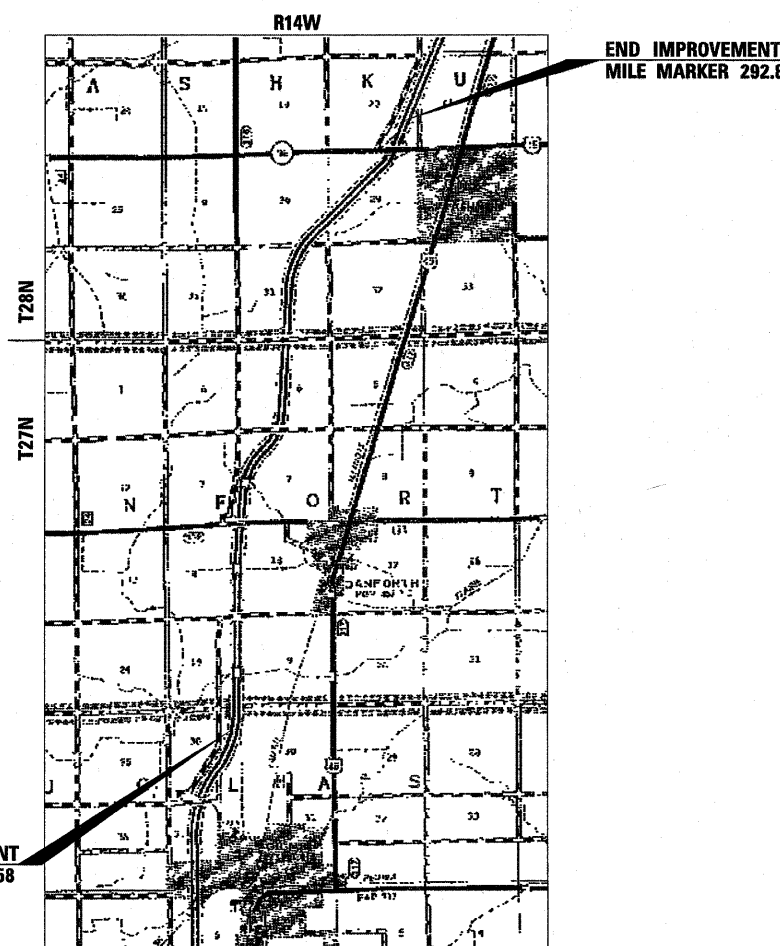


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: JOE KANNEL, P.E.  
UNIT CHIEF: PAT BRABOY

CONTRACT NO. 66C09



GROSS LENGTH = 38,121.6 FT. = 7.22 MILE  
NET LENGTH = 24,828 FT. = 4.70 MILE

GENERAL NOTES

THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS / CU YD
AGGREGATE (PRIME COAT)	0.002	TONS / SQ YD
HMA RESURFACING	112	LBS / SQ YD / IN
SHORT TERM PAVEMENT MARKING	10	FT /100 FT OF APPLICATION
MIX FOR CRACKS, JTS & FLGWY\$	0.0003	TONS / SQ YD

BITUMINOUS MATERIALS (PRIME COAT) RATES		
SURFACE TYPE	ESTIMATED TRUCK APPLICATION RATE	RESIDUAL RATE
AGGREGATE BASES	0.375 GAL / SQ YD	N/A
MILLED HMA OR PCC PAVEMENT	0.08 GAL / SQ YD	0.04 GAL / SQ YD
EXISTING PAVEMENT	0.05 GAL / SQ YD	0.025 GAL / SQ YD
FOG COAT (BETWEEN ADDITIONAL HMA LIFTS)	0.05 GAL / SQ YD	0.025 GAL / SQ YD

ESTIMATED TRUCK APPLICATION RATE USED FOR CALCULATING PLAN QUANTITIES

THE CONTRACTOR SHALL CONTACT JULIE AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.

SUMMARY OF QUANTITIES			
CODE NO.	CONSTRUCTION CODE TYPE: ITEM	UNIT	100% FED.
			0005
			TOTAL QUANTITY
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	4082
40600300	AGGREGATE (PRIME COAT)	TON	99
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGWAYS	TON	15
40600895	CONSTRUCTING TEST STRIP	EACH	1
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	186
40603545	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N90	TON	5547
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	49527
44000165	HOT-MIX ASPHALT SURFACE REMOVAL, 4"	SQ YD	1500
44002220	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 5"	SQ YD	664
48203100	HOT-MIX ASPHALT SHOULDERS	TON	336
67100100	MOBILIZATION	L SUM	1
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	4
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	2529
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	835
78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	24828
78004230	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 6"	FOOT	6620
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	626
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	626
X0326867	RADAR SPEED TRAILER	CAL MO	1
X0326880	MESSAGE BOARD VEHICLE DRIVER	HOUR	160
X0326907	PORTABLE, VEHICLE MOUNTED, CHANGEABLE MESSAGE SIGN	CAL MO	2
X7830070	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	24828
X7010805	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401 (SPECIAL)	L SUM	1

\* SPECIALTY ITEMS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DISTRICT THREE

PREPARED BY: Don Bonin  
DISTRICT STUDIES & PLANS ENGINEER

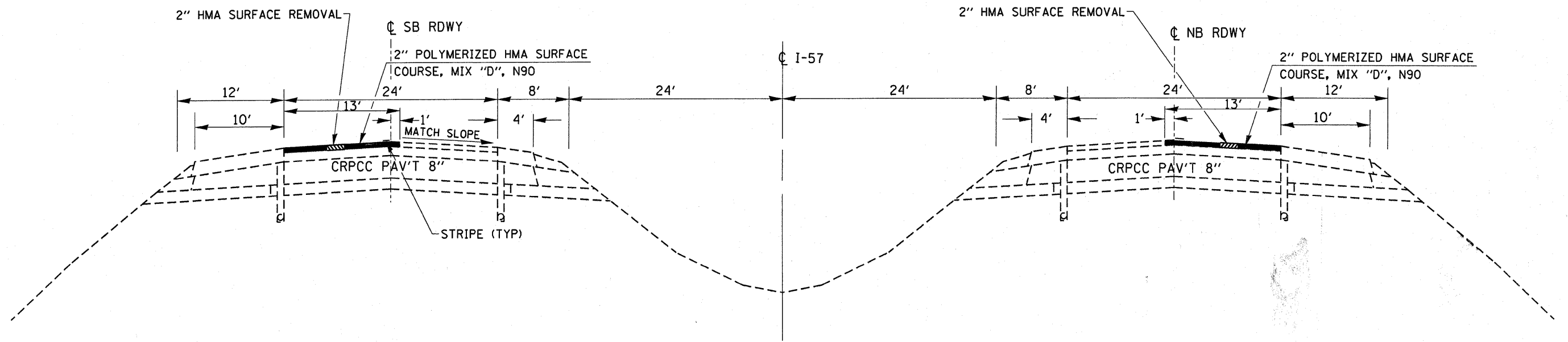
DATE: 3-21-12

EXAMINED BY: Herbert D. ...  
DISTRICT CONSTRUCTION ENGINEER

Wayne L. Phillips  
DISTRICT MATERIALS ENGINEER

Steve A. ...  
DISTRICT OPERATIONS ENGINEER

FILE NAME =	USER NAME = brcbopco	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES AND SUMMARY OF QUANTITIES	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwork\brabopco\0297593\036609-sht-cover.dgn	PLOT SCALE = 50.0000' / in.	DRAWN -	REVISED -			57	03 INTERMITTENT RS 2012-2	IROQUOIS	5	2	
PLOT DATE = 3/20/2012	DATE -	CHECKED -	REVISED -			CONTRACT NO. 66C09					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



**TYPICAL SECTION**

LOOKING NORTH  
DL SHOWN, PL SIMILAR

MIXTURES TABLE			
	POLY HMA SURFACE	HMA SHLDS FOR SHLD REPAIR	HMA REPLACEMENT OVER PATCHES*
PG GRADE	SBS PG-70-22	PG64-22	SBS PG-70-22
DESIGN AIR VOIDS	4.0% @ N90	4.0% @N70	4.0% @ N90
MIXTURE COMPOSITION	IL 9.5	IL 19.0	IL 9.5
FRICITION AGGREGATE	MIXTURE D		MIXTURE D
DENSITY TEST METHOD	CORES	SATISFACTION OF ENGINEER	CORES

\* FINAL LIFT SHALL BE 2"

MAINLINE						
LOCATIONS MILE MARKERS	LENGTH	HMA SURF	MIX FOR JTS	BIT MAT	AGG.	POLY HMA SURF
		REM 2"	CRKS & FLANG	PRIME COAT	PR CT	CSE "D", N90
		SQ YD	TON	GALLON	TON	TON
SOUTHBOUND DRIVING LANE						
287.8-288.3	2640	3813	1.1	305	7.6	427.1
291.5-292.0	2640	3813	1.1	305	7.6	427.1
SOUTHBOUND PASSING LANE						
288.4-288.8	2112	3051	0.9	244	6.1	341.7
291.7-292.0	1584	2288	0.7	183	4.6	256.3
NORTHBOUND DRIVING LANE						
285.7-286.1	2112	3051	0.9	244	6.1	341.7
287.5-287.7	1056	1525	0.5	122	3.1	170.8
288.5-288.6*	528	763	0.2	61	1.5	85.4
288.9-289.3	2112	3051	0.9	244	6.1	341.7
289.4-289.9	2640	3813	1.1	305	7.6	427.1
290.1-290.6	2640	3813	1.1	305	7.6	427.1
290.8-291.1	1584	2288	0.7	183	4.6	256.3
291.7-292.1	2112	3051	0.9	244	6.1	341.7
NORTHBOUND PASSING LANE						
288.5-288.6*	528	763	0.2	61	1.5	85.4
TOTALS	34288	49527	15	3962	99	5547

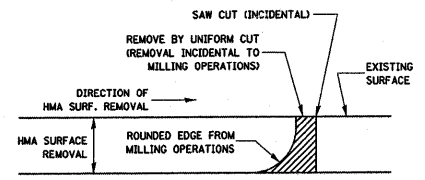
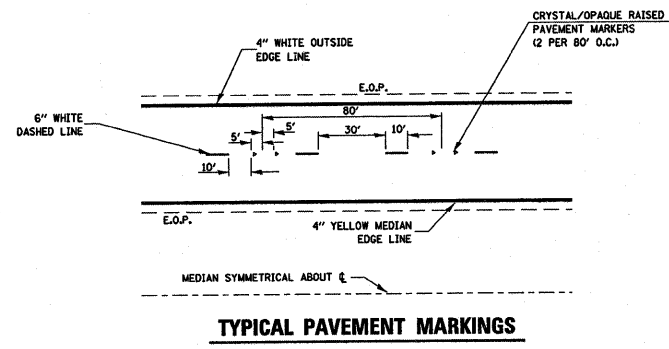
\*OMIT SN 038-0011

SHOULDER REPAIR			
LOCATIONS MILE MARKERS	HMA SURF	BIT MAT	HMA
	REM 4"	PRIME COAT	SHLDS
	SQ YD	GALLON	TON
VARIOUS LOCATIONS			
285.6-292.8	1500	120	336
TOTALS	1500	120	336

PATCHING SCHEDULE							
SOUTHBOUND				NORTHBOUND			
MILE MARKER	HMA REMOVAL OVER PATHCES 5"		HMA REPLACEMENT OVER PATCHES TONS	MILE MARKER	HMA REMOVAL OVER PATHCES 5"		HMA REPLACEMENT OVER PATCHES TONS
	SO YD	SO YD			SO YD	SO YD	
	PL	DL			PL	DL	
MM				MM			
292.9			2.24	292.8(1)			2.24
292.9	8	8	2.24	292.7(2)	16	8	4.48
292.6	16		4.48	292.2		8	2.24
292.4		8	2.24	292.1		8	2.24
292.1		8	2.24	292		8	2.24
292		8	2.24	291.9		16	4.48
291.8		16	4.48	291.6		8	2.24
291.3	8	8	4.48	291.5		16	4.48
290.4		8	2.24	291.3		8	2.24
290.4	8		2.24	291.2		8	2.24
289.85	8	8	4.48	290.7		8	2.24
290.2	8		2.24	290.6		8	2.24
290.2	8	8	4.48	290.55		8	2.24
290		8	2.24	290.3		8	4.48
289.9	8	8	4.48	290.2		8	2.24
289.6		8	2.24	290.1		8	2.24
289.4	8		2.24	289.3		8	2.24
288.7	8	8	4.48	288.6		8	4.48
288.65	8		2.24	288.58		8	4.48
288.3	8	8	4.48	288.56		8	4.48
287.8	16	16	8.96	288.55		8	4.48
287.1		16	4.48	288.54		8	4.48
286.7	16	16	8.96	288.1		8	4.48
286.1	8		2.24	287.8		8	4.48
285.7	8	8	4.48	287.7		8	4.48
285.6	8		2.24	286.8		8	2.24
				286.6		8	4.48
				285.58		8	2.24
SUBTOTAL	160	176	94.08		168	160	91.84
GRANDTOTAL						664	186

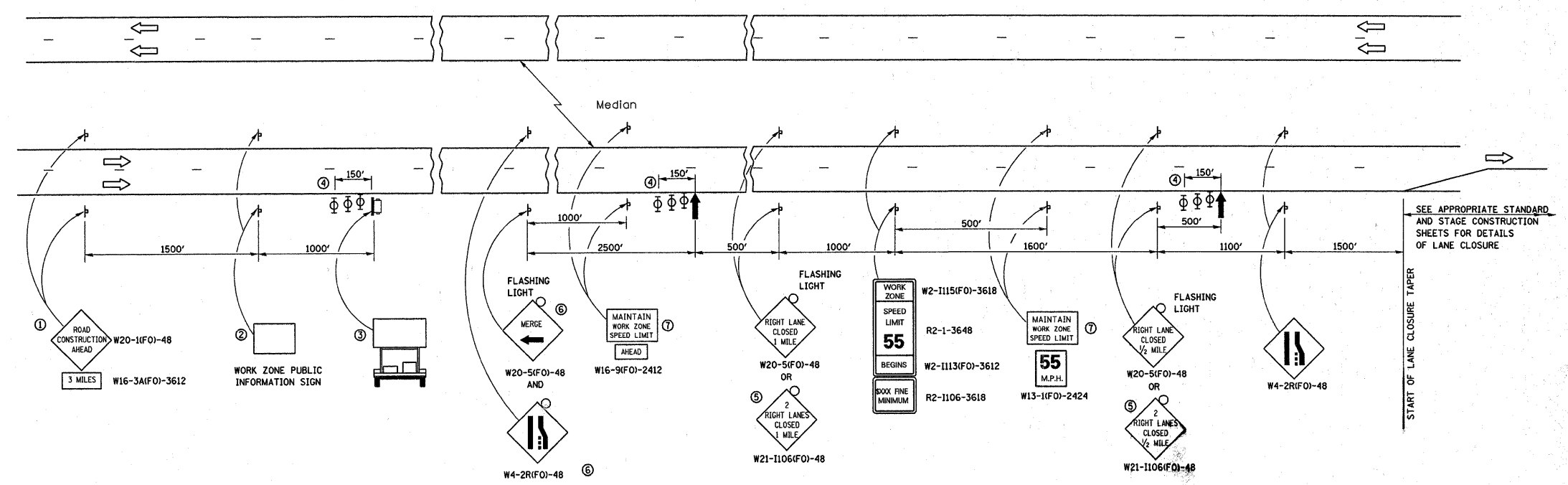
(1)ON ENTRANCE RAMP-TWO PATCHES  
(2)ON EXIT RAMP-TWO PATCHES

PAVEMENT MARKING								
LOCATIONS MILE MARKERS	LENGTH	EPOXY PVT MRKS	GROOVING FOR	PREF PLAST	RAISED REFL	RAISED REFL	SHORT TERM	WORK ZONE
		LINE 4"	RECESSED PVT MRKS-5"	TY B INLAID 6"	PAVT MARK	PAVT MARK REM	PAVT MARK	PAVT MARK REM
		FOOT	FOOT	FOOT	EACH	EACH	FOOT	SQ FT
SOUTHBOUND DRIVING LANE								
287.8-288.3	2640	2640	2640	660	66	66	264	87.1
291.5-292.0	2640	2640	2640	660	66	66	264	87.1
SOUTHBOUND PASSING LANE								
288.4-288.8	2112	2112	2112	530	52	52	211	69.7
291.7-292.0	1584	1584	1584	400	40	40	158	52.3
NORTHBOUND DRIVING LANE								
285.7-286.1	2112	2112	2112	530	52	52	211	69.7
287.5-287.7	1056	1056	1056	260	26	26	106	34.8
288.5-288.6*	528	528	528	130	14	14	53	17.4
288.9-289.3	2112	2112	2112	530	52	52	211	69.7
289.4-289.9	2640	2640	2640	660	66	66	264	87.1
290.1-290.6	2640	2640	2640	660	66	66	264	87.1
290.8-291.1	1584	1584	1584	400	40	40	158	52.3
291.7-292.1	2112	2112	2112	530	52	52	211	69.7
NORTHBOUND PASSING LANE								
288.5-288.6*	528	528	528	130	14	14	53	17.4
PVT MK NEEDED FOR PATCHING AREAS -SEE PATCHING SCHEDULE FOR LOCATIONS								
		540	540	540	20	20	100	33.0
TOTALS	31648	24828	24828	6620	626	626	2529	835



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.

**HMA DETAIL AT BUTT JOINTS**



- ① THE ROAD CONSTRUCTION AHEAD SIGN SHALL BE LOCATED 3 MILES IN ADVANCE OF THE PROJECT LIMITS.
- ② THE MESSAGE AND SIZE OF THE WORK ZONE PUBLIC INFORMATION SIGN SHALL BE AS SPECIFIED BY THE DEPARTMENT.
- ③ TO BE PLACED IN THE MEDIAN WHEN FEASIBLE. THE MESSAGE BOARD SHALL BE USED TO DISPLAY STATUS OF LANES WITHIN THE PROJECT. THE PRIMARY MESSAGES SHALL BE:  
"RIGHT LANE CLOSED" / " x MILES AHEAD"  
"LEFT LANE CLOSED" / " x MILES AHEAD"  
"ALL LANES OPEN"
- ④ THREE, TYPE II BARRICADES, DRUMS, OR VERTICAL BARRICADES AT 50' CENTERS.
- ⑤ THIS SIGN SHALL BE USED WHEN 2 LANES ARE CLOSED.
- ⑥ WHEN THE LEFT LANE IS CLOSED, SWITCH THESE TWO SIGNS AND THE DIRECTION OF THE MERGE ARROW.

- ⑦ 48"x36" FLUORESCENT ORANGE SIGN WITH BLACK LETTERS. 48"
- |             |    |
|-------------|----|
| MAINTAIN    | 8" |
| WORK ZONE   | 6" |
| SPEED LIMIT | 6" |
- ↑ ARROW BOARD
  - PORTABLE CHANGEABLE MESSAGE SIGN
  - ⊥ SIGN
  - ⊕ TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH MONODIRECTIONAL FLASHING LIGHT

**GENERAL NOTE:**

THIS STANDARD IS USED WHERE AT ANY TIME A LANE IS CLOSED ON A FREEWAY/EXPRESSWAY.

WHEN THE LEFT LANE IS CLOSED, LEFT LANE CLOSED SIGNS SHALL BE SUBSTITUTED FOR THE RIGHT LANE CLOSED SIGNS.

THE FIRST TWO SIGNS AND THE MESSAGE BOARD ARE STATIONARY. THE OTHER SIGNS AND ARROWBOARDS SHALL BE MOVED AS NECESSARY TO MAINTAIN THE REQUIRED DISTANCE FROM THE START OF THE LANE CLOSURE TAPER(S).

SEE SPECIAL PROVISIONS.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN.

**STANDARD 701400 (SPECIAL)**

FILE NAME =	USER NAME = braboypc	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETAILS</b>			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\pwwork\braboypc\d0297593\036509-shr-cover.dgn		DRAWN -	REVISED -		SCALE: _____	SHEET NO. _____ OF _____ SHEETS	STA. _____ TO STA. _____	57	D3 INTERMITTENT RS 2012-2	ILLINOIS	5	5
		CHECKED -	REVISED -									
		DATE -	REVISED -									