## DEPARTMENT OF TRANSPORTATION

## **DIVISION OF HIGHWAYS**

# PLANS FOR PROPOSED

S.T.R.

#### THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE **INCLUDED AFTER SHEET 4.**

000001-04	STANDARD SYMBOLS, ABBREVIATIONS & PATTERNS (6 SHEETS)
406201	MAILBOX TURNOUT
631006-04	TRAFFIC BARRIER TERMINAL TYPE 1B
631046-03	TRAFFIC BARRIER TERMINAL TYPE 10
701006-02	OFF-RD OPERATIONS, 2-L, 2-W, 4.5 m (15') TO PAVEMENT EDGE FOR SPEEDS $\geq$ 45 MPH
701301-02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS,
701306-01	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS — DAY ONLY FOR SPEEDS $\geq$ 45 MPH
70131102	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS — DAY ONLY
702001-06	TRAFFIC CONTROL DEVICES (3 SHEETS)
78000101	TYPICAL PAVEMENT MARKINGS (2 SHEETS)
781001-02	TYPICAL APPLICATIONS RAISED REFLECTIVE

INDEX OF SHEETS

SHEET NO.

**DESCRIPTION** 

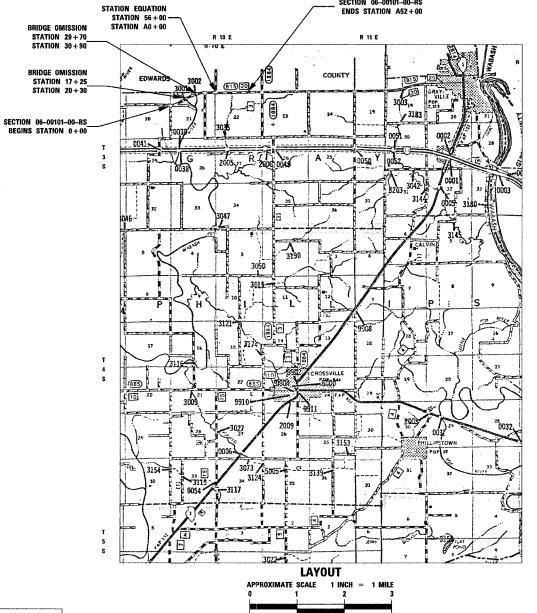
TITLE SHEET, SUMMARY OF QUANTITIES

DETAILS OF TAPERS, STREETS, & SIDEROADS

TYPICAL SECTIONS, GENERAL NOTES SCHEDULE SUPERELEVATION RATES

> F.A.S. 815(CH 20) SECTION 06-00101-00-RS WHITE COUNTY FEDERAL PROJECT NO. RS-815(108)

C-99-550-06 SECTION 06-00101-00-RS ENDS STATION A52+00



LOCATION OF SECTION INDICATED THUS: - -

405 W. STATE ST. SUITE1 PRINCETON, IN 47670

56284 REGISTERED ENGINEER "LINOIS

ARON M. MEFFORD 3-8-07 DATE

STATE OF ILLINOIS March 8, 2007 APRIL 6, 2007 Davi W. Hill RELEASING FOR BID 4-9-07 MARY C LAMIE P.E.

### SUMMARY OF QUANTITIES

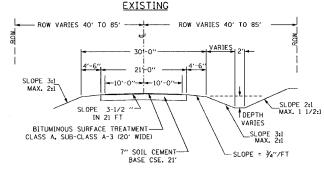
CODE NUMBER	ITEM	UNIT	QUANTITY
• 21400100	GRADING AND SHAPING DITCHES	FOOT	200.00
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1396.00
40600300	AGGREGATE (PRIME COAT)	TON	28.00
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	4559.00
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	444.50
40600990	TEMPORARY RAMP	SO YD	37.00
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	1804.00
48101200	AGGREGATE SHOULDERS, TYPE B	TON	1300.00
△ 50900205	STEEL RAILING, TYPE S1	FOOT	60.00
* 54223465	REMOVE & RELAY PIPE CULVERTS 30"	FOOT	15.00
* 54223471	REMOVE & RELAY PIPE CULVERTS 36"	FOOT	25.00
• 54223477	REMOVE & RELAY PIPE CULVERTS 42"	FOOT	10.00
△ 63100041	TRAFFIC BARRIER TERMINAL, TYPE 1B	EACH	1.00
△ 63100105	TRAFFIC BARRIER TERMINALL TYPE 10	EACH	1.00
• 67100100	MOBILIZATION	L SUM	1.00
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1.00
70100600	TRAFFIC CONTROL AND PROTECTION, STANDARD 701336	L SUM	1.00
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	4320.00
△ 78001110	PAINT PAVEMENT MARKING-LINE 4"	FOOT	39902.00
△ 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	150.00
* XX003140	SHORT-TERM PAVEMENT MARKING REMOVAL	FOOT	1080.00
* XX127400	PAVEMENT REMOVAL AND REPLACEMENT (SPECIAL)	TON	30.00
	A SPECIALTY ITEMS		

CONTRACT # 99295

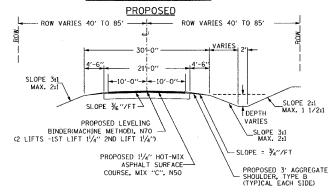
DESIGN SPEED = 40 MPH

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

## TYPICAL CROSS SECTION



#### TYPICAL CROSS SECTION



#### GENERAL NOTES:

BINDER (MACHINE METHOD) N70, AND HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50, AGGREGATE SHOULDERS, AND OTHER MISCELLANEOUS ITEMS NECESSARY TO COMPLETE THE PROJECT, ALL IN ACCORDANCE WITH THE PLANS, SPECIAL PROVISIONS AND "STANDARD

THE EXISTING GRADE, ALIGNMENT, DRAINAGE STRUCTURES, BASE AND SURFACE WERE CONSTRUCTED UNDER SECTIONS 30-B AND 27-Q AND SHALL REMAIN IN PLACE, ALL STATIONS REFERRED TO IN THE PLANS AND PROPOSAL ARE REFERENCED TO THE ABOVE MENTIONED SECTIONS.

MAXIMUM PERCENT OF GRADE	4.20 %
MINIMUM STOPPING SIGHT DISTANCE	425 FT
DESIGN SPEED	50 MPH
CURRENT ADT	600 VPD
DESIGN ADT (20 YEAR)	750 VPD

THE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 SHALL BE PLACED IN ONE LIFT WITH A MINIMUM THICKNESS OF 11/4".

THE QUANTITY SHOWN IN THE SUMMARY OF QUANTITIES FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 ALLOWS 162.7 TON FOR THE INTERSECTIONS, SIDEROADS, AND TAPERS; 73.2 TON FOR THE ENTRANCES; 26.8 TON FOR THE MAILBOX TURNOUTS, AND

A HOT-MIX ASPHALT TAPER OF O" TO 33/4" SHALL BE CONSTRUCTED FROM STATION 0+00 TO STATION 0+55 AND 334" TO 0" FROM STATION A151+50 TO STATION 152+00.

THE FOLLOWING RATES HAVE BEEN USED TO CALCULATE PLAN QUANTITIES:

AGGREGATE SHOULDERS TY. B 0.0560 T / SQ YD \* INCH HOT-MIX ASPHALT AGGREGATE PRIME COAT 0.001 T / SQ YD BITUMINOUS MATERIAL (PRIME COAT) 0.05 GAL / SQ YD

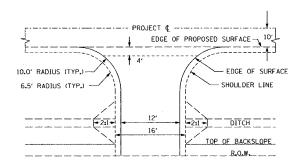
THE QUANNITY SHOWN IN THE SUMMARY OF QUANTITIES FOR GRADING AND

THIS SECTION CONSISTS OF PAVEMENT REMOVAL AND REPLACEMENT SPECIAL, LEVELING SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2007.

1541.0 TON FOR THE 11/2" HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50.

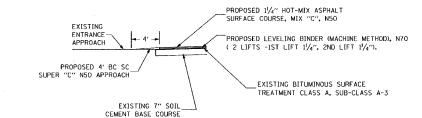
SHAPING DITCHES ALLOWS 50 FOOT AT EACH END OF ALL PIPES TO BE REPLACED AT STATIONS SHOWN IN SCHEDULE OF AR PIPE CULVERTS, CLASS C.

#### DETAIL OF PRIVATE AND FIELD ENTRANCES



NOTE: THE 4' AREA FROM THE EDGE OF SURFACE. AS SHOWN ABOVE, SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIX "C". N50 FOR THE PRIVATE ENTRANCES AND THE FIELD ENTRANCES. THIS QUANTITY IS INCLUDED IN THE QUANTITY FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50.

#### PRIVATE & FIELD ENTRANCE APPROACH DETAIL



GRAYVILLE-BURNT PRAIRIE

CONTRACT # 99295

SECTION

LEC JOB # HOSIL014WH

FED. ROAD DIST. NO. 9 ILLINGIS

WHITE

815 06-00101-00-RS

F.A.S.

PHONE: (618)–262–8651 FAX: (618)–263–3327 405 W. STATE ST SUITE1 PRINCETON, IN 47670

PHONE: (812)-386-7611 FAX: (812)-385-2812



PROFESSIONAL DESIGN FIRM LAND SURVEY & PROFESSIONAL ENGINEERING CORPORATION 184-000887 (62-032435)(35-002769

M. MECK 56284 REGISTERED PROFESSIONAL ENGINEER OF ALINOIS.

AARON M. MEFFOR Leur Mos SIGNATURE 3-8-07 11-30-07 EXPIRES

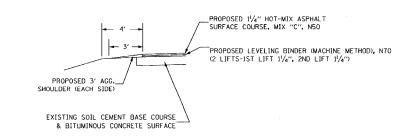
#### SCHEDULE FOR SUPERELEVATION RATES

#### CURVE #1

TANGENT RUNOFF BEGINS STA. 0+55.65 S.E. RUNOFF BEGINS STA. 0+83.65 FULL S.E. BEGINS STA. 1+59.65 FULL S.E. ENDS STA. 13+24.13 S.E. RUNOFF ENDS STA. 14+00.13 TANGENT RUNOFF ENDS STA. 14+28.13 S.E. RATE = 0.040 FT / FT

TANGENT RUNGEE BEGINS STA, 24+10, 31 S. E. RUNOFF BEGINS STA. 24+35.31 FULL S. F. BEGINS STA. 24+77, 31 FULL S.E. ENDS STA, 36+66.78 S. E. RUNOFF ENDS STA. 37+08.78 TANGENT RUNOFF ENDS STA, 37+33, 78 S. E. RATE = 0.025 FT / FT

#### AGGREGATE SHOULDER DETAIL



(TYP, BASE REM, AND REPL.)

EXISTING SURFACE TREATMENT CLASS A, - SUB-CLASS A-3 EXISTING GRADE LINE LEV BIND MM N70

EXISTING 7" SOIL

CEMENT BASE CSE.

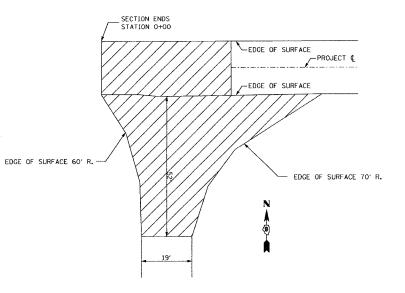
DETAIL OF PAVEMENT REMOVAL AND REPLACEMENT SPECIAL

NOTE: IN THE TYPICAL DETAIL ABOVE THE DISTANCE FROM THE CENTERLINE LEFT OR RIGHT

AND THE WIDTH OF PAVEMENT REMOVAL AND REPLACEMENT VARIES. SEE SCHEDULE OF PAVEMENT REMOVAL AND REPLACEMENT SPECIAL FOR PROPOSED LOCATIONS.

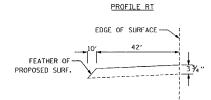
A.S.	A.S. SECTION		COL	JNTY	TOTAL SHEETS	SHEET No.
315	06-00101-00	W	HITE	4	3	
FED. ROAD DIST. NO. 9 ILLUMOS			NOIS	GRAYV	LLE-BURN1	PRAIRIE
LEC JOB # H95IL014WH			CON	TRACT #	99295	

# DETAIL OF TAPER STA, 0+00 TO STA, 0+50 DETAIL OF INTERSECTION 0+25 RT

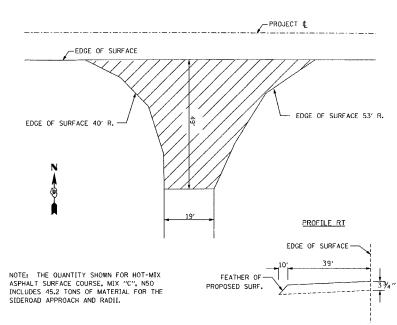


NOTE: THE QUANTITY SHOWN FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 INCLUDES 25.7 TONS OF MATERIAL FOR THE TAPER FROM STATION 0+00 TO STATION 0+50. IT ALSO INCLUDES 45.7 TONS OF MATERIAL FOR THE SIDEROAD RT. APPROACH AND RADII.

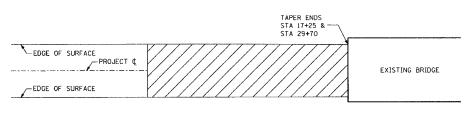
# 



#### DETAIL OF INTERSECTION RT. STA. 43+33



#### DETAIL OF TAPER STA. 16+50 TO STA. 17+25 & STA. 28+95 TO STA. 29+70

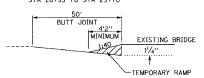




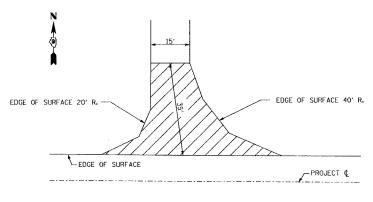
EXISTING SURFACE & PAVEMENT

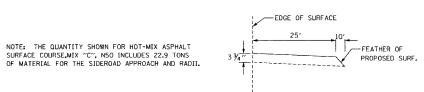
HOT-MIX ASPHALT SURFACE REMOVAL (BUTT JOINT)

# TEMPORARY RAMP DETAIL STA 16+50 TO STA 17+25 & STA 28+95 TO STA 29+70



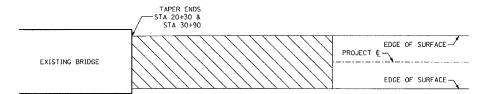
#### DETAIL OF INTERSECTION LT. STA. A0+27



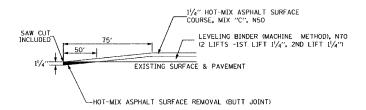


PROFILE LT

#### DETAIL OF TAPER STA. 16+50 TO STA. 17+25 & STA. 30+90 TO STA 31+65



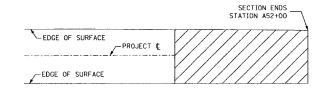
# BUTT JOINT DETAIL STA 20+30 TO STA 21+05 & STA 30+90 TO STA 31+65



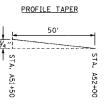
#### TEMPORARY RAMP DETAIL STA 20+30 TO STA 21+05 & STA 30+90 TO STA 31+65



#### DETAIL OF TAPER STA. A51+50 TO STA. A52+00



NOTE: THE QUANTITY SHOWN FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 INCLUDES 23.3 TONS OF MATERIAL FOR THE TAPER FROM STATION A51+50 TO STATION A52+00.



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184-000887 (62-032435)(35-002769)



AARON M. MEFFORD
NAME
FRIGO MISSE
SIGNATURE
3-8-07
DATE

#### SCHEDULE OF PAVEMENT MARKINGS

STATION	<u>TO</u>	STATION	05VT50V IV5	LOCATION	LENGTH - FOOT
0+00		A52+00	CENTERLINE	¢.	1049
			EDGELINE		
0+65		43+10		RT.	4245
43+60		56+00		RT.	1240
00+0A		A52+00		RT,	5200
			EDGELINE		
0+00		56+00		LT.	5600
00+0A		AO+11		LT.	11
A0+46		A52+00		LŦ.	5154
			NO PASSING		
0+00		8+20		RT.	820
0+00		56+00		LT.	5600
12+50		32+33		RT.	1983
36+78		56+00		RT.	1922
A0+00		A5+50		RT.	550
A0+00		A21+60		LT. RT.	2160
A21+27 A36+50		A49+45 A52+00		KI.	2818 1550
OCTOUR		MJ2 700		L1.	TOTAL 39,902

THE ABOVE QUANTITY IS SHOW IN THE PAVEMENT MARKING-LINE  $4^{\prime\prime}$  IN THE SUMMARY OF CUANTITIES.

#### SCHEDULE OF PAV'T REMOVAL AND REPLACEMENT SPECIAL

STATION	<u>T0</u>	STATION	LOCATION	WIDTH (FEET)	SO. YD.	TON
37+95		38+40	RT. EDGE	3.0	15.0	5.9
A10+78		A11+65	RT. EDGE	3.0	29.0	11.4
A31+00		A31+55	RT. EDGE	3.0	18.3	7.2
A47+73		A48+11	RT. EDGE	3.0	12.7	5.0
				TOTALS	75.0	20.5

THE SCHEDULE ABOVE REFLECTS APPROXIMATE LOCATION AND ESTIMATED QUANTITIES. THE ACTUAL AREAS SHALL BE LOCATED AND MARKED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE ABOVE QUANTITY IS INCLUDED IN PAVEMENT REMOVAL AND REPLACEMENT SPECIAL IN THE SUMMARY OF QUANTITIES.

#### SCHEDULE OF MAILBOX TURNOUTS

TATION	LOCATION	EST. QUANTIT ALLOWED TONS
53+25	LT.	8.6
A8+14	LT.	5.3
414+04	LT.	4.3
450+12	LT.	8.6
		26.8

THE ABOVE QUANTITY IS INCLUDED IN THE HOT-MIX ASPHALT SURFACE COURSE, MIX "C". N50 IN THE SUMMARY OF QUANTITIES.

#### SCHEDULE OF REMOVE & RELAY PIPE CULVERTS

STATION	SIZE	LENGTH	END OF CULVE
44+60	36"	5′	SOUTH
A1+57	30"	15′	SOUTH
A37+67	36"	20'	NORTH
A45+21	42"	10′	SOUTH

## SCHEDULE OF GUARDRAILS

STATION	10	STATION	SIDE OF ROAD	LENGTH
30+90		31+50	LEFT	60'

# SCHEDULE OF TRAFFIC BARRIER TERMINAL TYPE 1B

STATION	SIDE OF RO
31+50	LEET

F.A.S.	SECTION		CO	UNTY	TOTAL SHEETS	SHEET NO.
815	06-00101-00	WHITE		4	4	
FED. ROAD DIST. NO. 9 ILLI			NOIS	GRAYV	LLE-BURNT	PRAIRIE
LEC JOB # HO5IL014WH			CON	TRACT #	99295	

# SCHEDULE OF PRIVATE AND FIELD ENTRANCES

STATION	LOCATION	BC SC SUPER "C" N50
SIMITON	LOCATION	
		(IN TONS)
0+25	LT	1.8
5+95	RT	1.8
12+40	RT	3.0
24+61	RT	3.9
25+13	LT	2.3
42+68	RT	2.4
43+24	LT	3.8
52+72	LT	4.0
53+62	RT	4.5
AO+13	RT	2.7
A4+21	RT	2.6
A8+15	RT	2.3
A13+77	RT	1.6
A17+14	LT	2.4
A18+71	RT	2.5
A21+48	RT	2.4
A23+55	RT	2.6
A26+42	LT	2.5
A32+98	RT	2.0
A33+93	RT	2.6
A36+62	LT	2.4
A39+90	RT	3.1
A43+29	RT	2.5
A46+56	RT	2.1
A48+12	LT	2.3
A48+99	LT	3.1
A49+17	RT	2.1
A51+00	LT	1.9
		TOTAL 73.2

THE ABOVE QUANTITY IS INCLUDED IN THE HOT-MIX ASPHALT SURFACE COURSE, MIX "C". N50 IN THE SUMMARY OF QUANTITIES.

# SCHEDULE OF AGGREGATE SHOULDER STONE IN TANGENT

STATION	<u>10</u>	STATION	LOCATION	ALLOWED TONS EST. QUANTITY
14+28		17+25	LT.	18.3
20+30		24+10	LT	17.7
37+34		A52+00	LT	360.5
14+28		17+25	RT	14.3
20+30		24+10	RT	21.1
37+34		A52+00	RT TO	509.0 TAI 940.9

THE ABOVE QUANTITY IS FOR THE ENTIRE SECTION AND IS INCLUDED IN THE QUANTITY FOR AGGREGATE SHOULDERS, TYPE B IN THE SUMMARY OF QUANTITIES.

# SCHEDULE OF AGGREGATE SHOULDER STONE IN SUPERFLEVATION

STATION	<u>TO</u>	STATION	LOCATION	ALLOWED TO
0+00		14+28	LT.	66.4
24+10		29+70	ŁT	38.7
30+90		37+34	LT	40.6
0+00		14+28	RY.	147.9
24+10		29+70	RT.	26.9
30+90		37+34	RT.	38.7

THE ABOVE QUANTITY IS FOR THE ENTIRE SECTION AND IS INCLUDED IN THE QUANTITY FOR AGGREGATE SHOULDERS, TYPE B IN THE SUMMARY OF QUANTITIES.

TOTAL 359.1

323 W. 3RD ST. P.O. BOX 160 MT. CARMEL, IL 62863 PHONE: (618)–262–8651 FAX: (618)–263–3327

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AARON M. MEFFORI JAME JULE MA SIGNATURE 3-8-07 DATE 11-30-07 EXPIRES