

| FAP RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|----------|---------|----------|--------------|-----------|
| 325 | * | MACOUPIN | 6 | 1 |

* - D-6 RUMBLE STRIPS 2008-03

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP 325 (IL RTE. 16)
SECTION D-6 SHLDR RUMBLE STRIPS 2008-03
PROJECT NO. ACHSIP-0325 (046)
MACOUPIN COUNTY
C-96-109-07

INDEX OF SHEETS:

- 1 COVER SHEET
- 2 GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4 TYPICAL CROSS SECTIONS
- 5 PROJECT LAYOUT
- 6 SCHEDULES AND SHOULDER & RUMBLE STRIP DETAILS

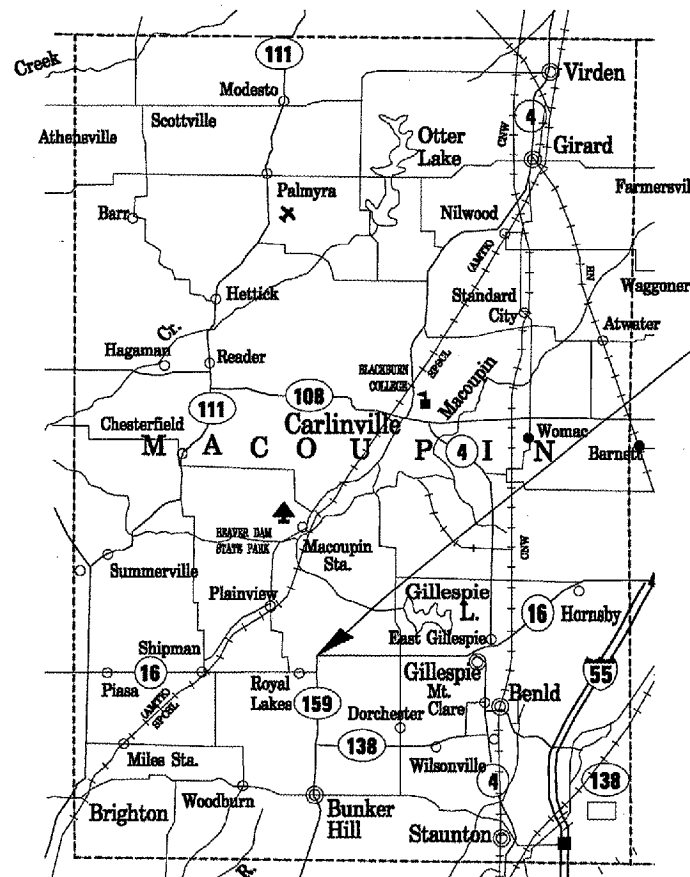
HIGHWAY STANDARDS

| | |
|-----------|-----------|
| 000001-05 | 701301-02 |
| 001006 | 701306-01 |
| 630001-07 | 701311-02 |
| 630301-04 | 701326-02 |
| 635006-02 | 701401 |
| 635011-01 | 720001 |
| 701001-01 | 720006-01 |
| 701006-02 | 728001 |
| 701011-01 | 780001-01 |

D-96-109-07



LOCATION OF SECTION INDICATED THUS: -



PROJECT LOCATION
STA. 49+00.00 TO STA. 73+50.00

LOCATION MAP

A.D.T. = 2,150 (YEAR 2006)
NET LENGTH OF PROJECT = 2,450 FT. (.464 MILES)

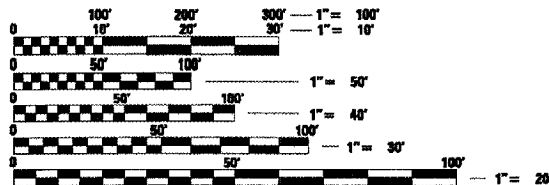
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *Oct 5, 2007*
OT + m Red
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Dec 7, 2007
Eric E. Harn
ENGINEER OF DESIGN AND ENVIRONMENT

Dec 7, 2007
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
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
1-800-992-0123

CONTRACT NO. 72B32

PROJECT ENGINEER: SAL MADONIA (217) 782-4761
SQUAD LEADER: MARCUS BRUCE / TIM SLAGLE (217) 524-0946

| FAP RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------|---------|---------------------------|--------------|-----------|
| 325 | # | MACOUPIN | 6 | 2 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

- D-6 SHLDR RUMBLE STRIPS 2008-03

GENERAL NOTES:

1. ANY REFERENCE TO THE STANDARDS THROUGHOUT THE PLANS SHALL BE INTERPETED TO BE THE LATEST STANDARD OF THE DEPARTMENT AS INCLUDED IN THE PLANS.
2. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING J.U.L.I.E. A MINIMUM OF 24 HOURS PRIOR TO COMMENCING WORK - (800) 892-0123.
3. THE CONTRACTOR WILL BE REQUIRED TO CONTACT THE OPERATIONS ENGINEER (217) 782-7314 AT LEAST 72 HOURS PRIOR TO DRIVING ANY POST, TO MAKE SURE STATE OWNED UTILITIES ARE NOT IN THE WAY.
4. ALL SIGNS SHALL HAVE A PRELIMINARY LAYOUT. SIGN POSTS SHALL BE ADJUSTED SO AS TO MISS ANY SHOULDER DRAINS, INLETS, CULVERTS, ETC. OR ANY OTHER HAZARDS THAT MAY INTERFERE WITH CONSTRUCTION.
5. CHEVRONS SHALL BE PLACED AT APPROXIMATELY 120 FOOT SPACING.

| MIXTURE REQUIREMENTS | |
|---|----------------------------|
| LOCATION(S): | PROPOSED LT. & RT. SHLDRS. |
| MIXTURE USE(S): | HMA SHOULDERS |
| P.G.: | PG 58-22 |
| DESIGN AIR VOIDS: | 2.0% @ N DESIGN = 30 |
| MIXTURE COMPOSITION: (GRADATION MIXTURE) | BAM |
| FRICITION AGGREGATE: | NOT APPLICABLE |

| | |
|---------------------------------|-----------------|
| DISTRICT SIX | |
| EXAMINED | October 3 20 07 |
| <i>Samir A. Hossain</i> | |
| OPERATIONS ENGINEER | |
| EXAMINED | Oct 5 20 07 |
| <i>W.R. J...</i> | |
| PROGRAM IMPLEMENTATION ENGINEER | |
| EXAMINED | Oct 5 20 07 |
| <i>W.R. J...</i> | |
| PROGRAM DEVELOPMENT ENGINEER | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL NOTES
 FAP 325 (IL RTE. 16)
 SECTION D-6 SHLDR RUMBLE STRIPS 2008-03
 MACOUPIN COUNTY

| | | | | |
|---------------------|----------|------------------|--------------|-----------|
| FAP RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 325 | # | MACOUPIN | 6 | 3 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT | | |

- D-6 SHLDR RUMBLE STRIPS 2008-03

SUMMARY OF QUANTITIES

| CODE NO | PAY ITEM | UNIT | 90% FED 10% STATE SFTY - 2A QUANTITY |
|------------|---|--------|---|
| 20200600 | EXCAVATING AND GRADING EXISTING SHOULDER | UNIT | 48 |
| 25000200 | SEEDING, CLASS 2 | ACRE | 0.3 |
| 25000400 | NITROGEN FERTILIZER NUTRIENT | POUND | 27 |
| 25000500 | PHOSPHOROUS FERTILIZER NUTRIENT | POUND | 27 |
| 25000600 | POTASSIUM FERTLIZER NUTRIENT | POUND | 27 |
| 25100115 | MULCH, METHOD 2 | ACRE | 0.3 |
| 48101200 | AGGREGATE SHOULDERS, TYPE B | TON | 256 |
| 48203029 | HOT-MIX ASPHALT SHOULDERS, 8" | SQ YD | 1652 |
| * 63000000 | STEEL PLATE BEAM GUARDRAIL TYPE A | FOOT | 112.5 |
| * 63100167 | TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT) | EACH | 2 |
| 63200310 | GUARDRAIL REMOVAL | FOOT | 169 |
| 64200105 | SHOULDER RUMBLE STRIP | FOOT | 4750 |
| 67100100 | MOBILIZATION | L SUM | 1 |
| 70100460 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701306 | L SUM | 1 |
| 70100500 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701326 | L SUM | 1 |
| 70103815 | TRAFFIC CONTROL SURVEILLANCE | CAL DA | 10 |
| * 72000100 | SIGN PANEL, TYPE 1 | SQ FT | 90.5 |
| * 78001120 | PAINT PAVEMENT MARKING - LINE 5" | FOOT | 5359 |
| * 72800100 | TELESCOPIC STEEL SIGN SUPPORT | FOOT | 190 |
| * 78201000 | TERMINAL MARKER - DIRECT APPLIED | EACH | 2 |

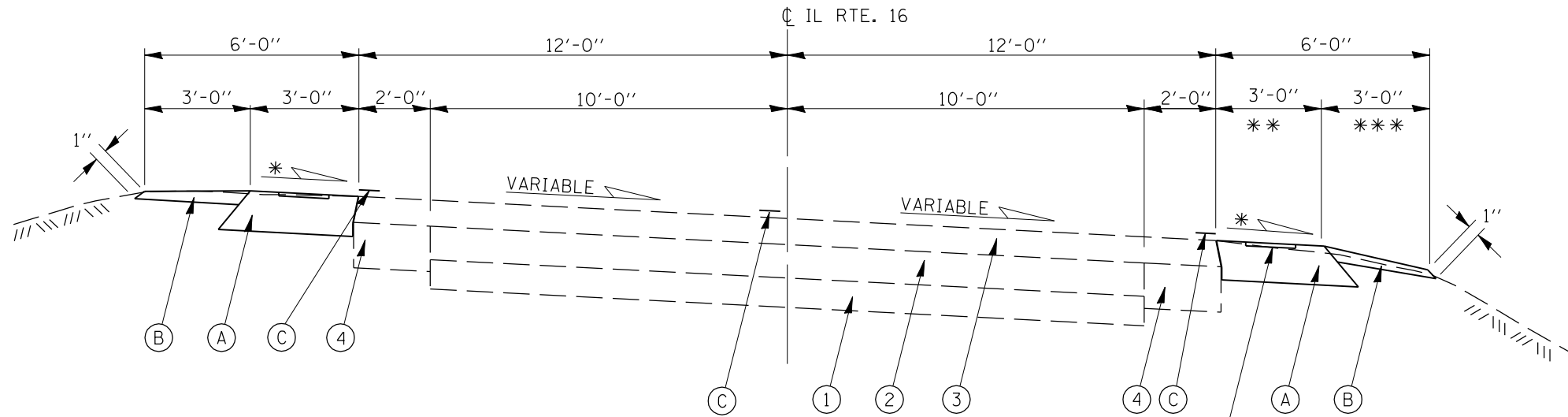
PLT FILE : C:\p05-2007\810211PM
 FILE NAME : 810211PM.dwg
 PLT SCALE : 1/32"=1'-0"
 USER NAME : lauplin-1

*SPECIALTY ITEMS

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
 FAP 325 (IL RTE. 16)
 SECTION D-6 SHLDR RUMBLE STRIPS 2008-03
 MACOUPIN COUNTY
 DATE JULY 23, 2007 DRAWN BY RTS

| | | | | |
|---------------------|----------|------------------|--------------|-----------|
| FAP RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 325 | # | MACOUPIN | 6 | 4 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT | | |

- D-6 SHLDR RUMBLE STRIPS 2008-03

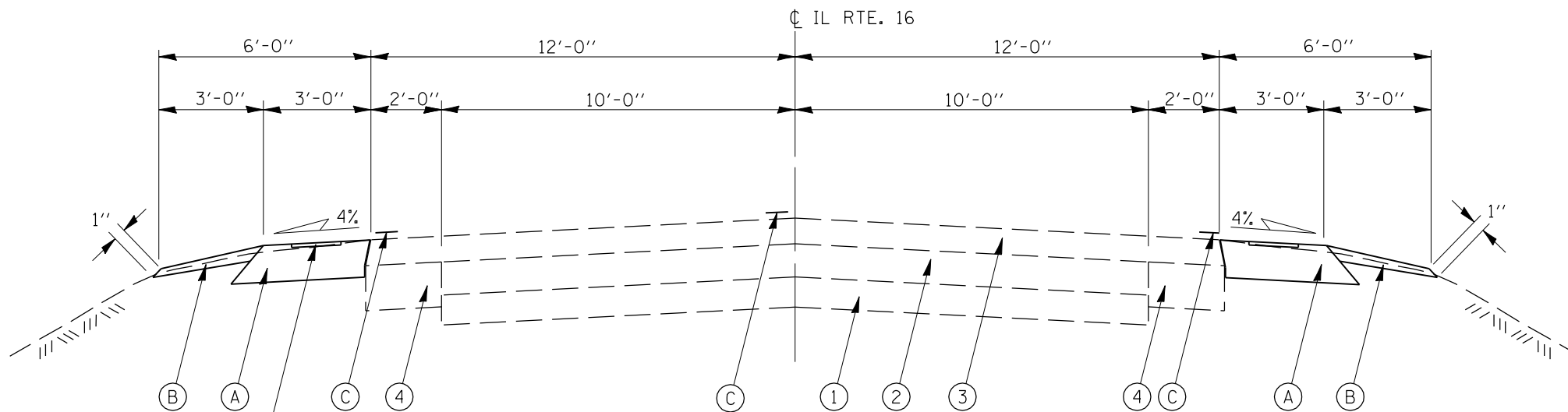


S.E. TRANSITION STA. 52+27 TO STA. 54+97
FULL SUPER EL. STA. 54+97 TO STA. 68+50
S.E. TRANSITION STA. 68+50 TO STA. 71+20

- * - PROPOSED BIT SHLDR SLOPE TO MATCH EXISTING PAVEMENT SLOPE.
- ** - 5'-0" WIDTH FOR BIT. SHLDRS. FROM STA. 58+60 TO STA. 61+00
- *** - NO AGGREGATE SHOULDERS FROM STA. 58+60 TO STA. 61+00

LEGEND

- ① EXISTING COMPACTED GRAVEL, 6"
- ② EXISTING BITUMINOUS MATERIAL, 7"
- ③ EXISTING BITUMINOUS SURFACE, ±6"
- ④ EXISTING BITUMINOUS BASE COURSE WIDENING, 9"
- Ⓐ PROPOSED BITUMINOUS SHOULDERS, 8" WITH RUMBLE STRIPING
- Ⓑ PROPOSED AGGREGATE SHOULDERS, TYPE B
- Ⓒ PROPOSED PAVEMENT MARKING - LINE, 5"



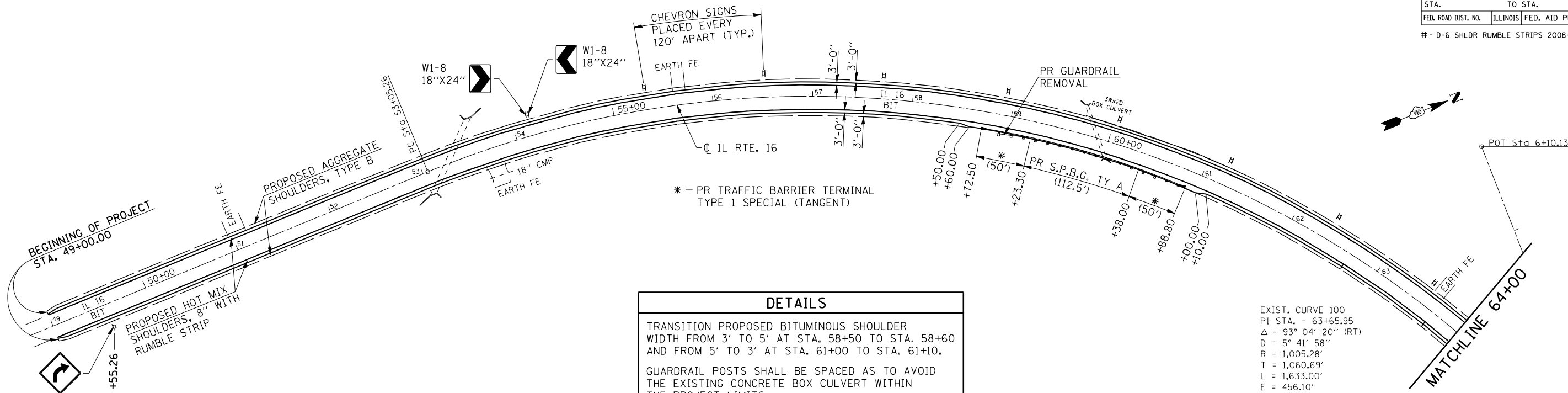
PROPOSED SHOULDER RUMBLE STRIP (TYP.)

STA. 49+00 TO STA. 52+27
STA. 71+20 TO STA. 73+50

ILLINOIS DEPARTMENT OF TRANSPORTATION
TYPICAL CROSS SECTIONS
 FAP 325 (IL RTE. 16)
 SECTION D-6 SHLDR RUMBLE STRIPS 2008-03
 MACOUPIN COUNTY

| FAP RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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| 325 | # | MACOUPIN | 6 | 5 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

- D-6 SHLDR RUMBLE STRIPS 2008-03



DETAILS

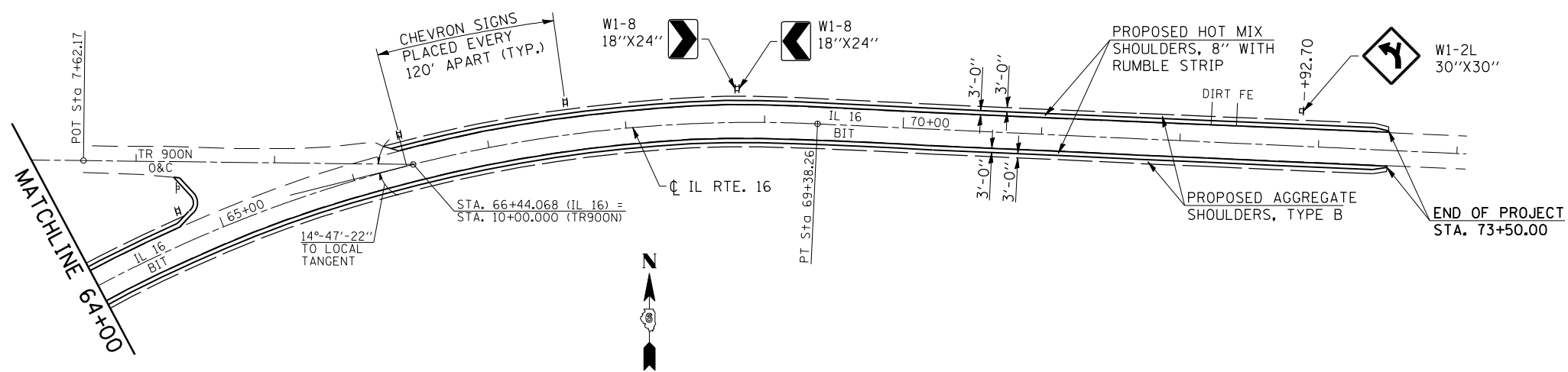
TRANSITION PROPOSED BITUMINOUS SHOULDER WIDTH FROM 3' TO 5' AT STA. 58+50 TO STA. 58+60 AND FROM 5' TO 3' AT STA. 61+00 TO STA. 61+10.

GUARDRAIL POSTS SHALL BE SPACED AS TO AVOID THE EXISTING CONCRETE BOX CULVERT WITHIN THE PROJECT LIMITS.

PROPOSED CHEVRON SIGN PANELS AND SIGN POSTS ALONG THE OUTSIDE OF THE CURVE AT STATIONS: 54+16, 55+36, 56+56, 57+76, 58+96, 60+16, 61+36, 62+56, 63+76, 64+75, 66+40, 67+60, 68+80
TOTAL = 78 SQ FT (26 SIGN PANELS @ 18"X24")

PROPOSED CURVE SIGN PANELS AT STATIONS: 49+52.26 RT. AND 72+92.70 LT.
TOTAL = 12.5 SQ FT (2 SIGN PANELS @ 30"X30")

EXIST. CURVE 100
 PI STA. = 63+65.95
 $\Delta = 93^\circ 04' 20''$ (RT)
 $D = 5^\circ 41' 58''$
 $R = 1,005.28'$
 $T = 1,060.69'$
 $L = 1,633.00'$
 $E = 456.10'$
 $e = \text{---}$
 $T.R. = \text{---}$
 $S.E. \text{ RUN} = \text{---}$
 $P.C. \text{ STA.} = 53+05.26$
 $P.T. \text{ STA.} = 69+38.26$



ILLINOIS DEPARTMENT OF TRANSPORTATION
PROPOSED PROJECT LAYOUT
 FAP 325 (IL RTE. 16)
 SECTION D-6 SHLDR RUMBLE STRIPS 2008-03
 MACOUPIN COUNTY

PLOT DATE = 08-19-2007 08:27:46PM
 FILE NAME = c:\p\projects\6181987\shldr\shldr.dwg
 PLOT SCALE = 1/8"=1'-0" / IN.
 USER NAME = laughlin-1

| | | | | |
|---------------------|---------|---------------------------|--------------|-----------|
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| 325 | # | MACOUPIN | 6 | 6 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

- D-6 SHLDR RUMBLE STRIPS 2008-03

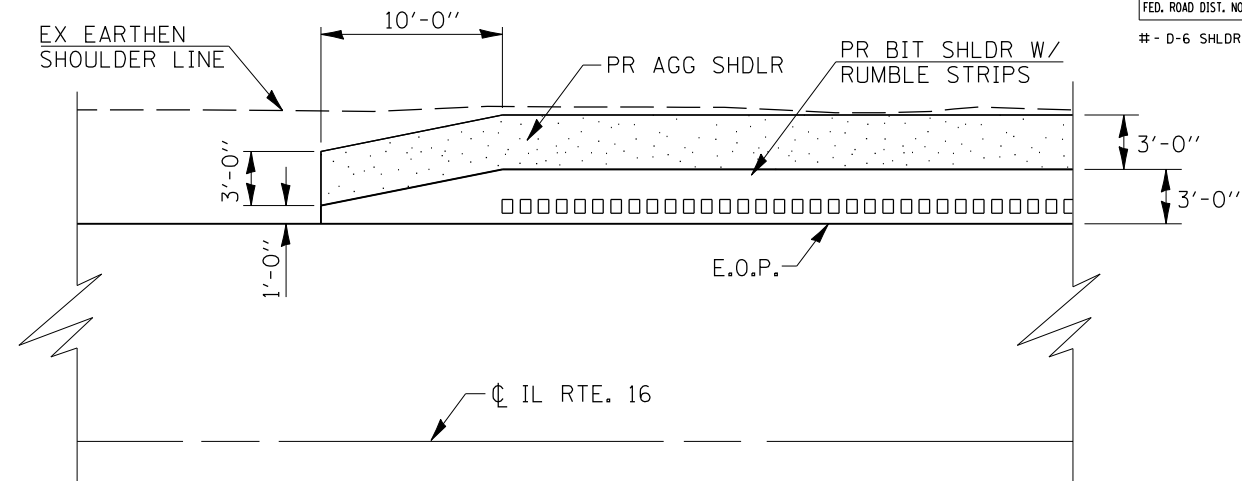
| HOT MIX ASPHALT SHOULDERS, 8" SCHEDULE | | |
|--|----------------|------------------|
| STATION RANGE | SHOULDER WIDTH | QUANTITY (SQ YD) |
| 49+00.00 TO 64+90.00 LT. | 3'-0" | 537.0 |
| 66+31.50 TO 73+50.00 LT. | 3'-0" | 239.5 |
| 49+00.00 TO 58+50.00 RT. | 3'-0" | 316.7 |
| 58+50.00 TO 61+10.00 RT. | 5'-0" | 144.5 |
| 61+10.00 TO 73+50.00 RT. | 3'-0" | 413.4 |
| TOTAL = | | 1651.1 SQ YD |

| AGGREGATE SHOULDERS, TYPE B (3" AVG. DEPTH) SCHEDULE | | | |
|--|----------------|------------------|----------------|
| STATION RANGE | SHOULDER WIDTH | QUANTITY (SQ YD) | QUANTITY (TON) |
| 49+00.00 TO 64+78.00 LT. | 3'-0" | 526.0 | 89.9 |
| 66+31.50 TO 73+50.00 LT. | 3'-0" | 239.5 | 40.9 |
| 49+00.00 TO 58+50.00 RT. | 3'-0" | 316.7 | 54.1 |
| 61+00.00 TO 73+50.00 RT. | 3'-0" | 416.7 | 71.2 |
| TOTAL = | | 256.1 TONS | |

| PAINT PAVEMENT MARKING - LINE 5" SCHEDULE | | |
|---|------------------------------|-----------------|
| STATION RANGE | DESCRIPTION | QUANTITY (FOOT) |
| 49+00.00 TO 64+78.00 | LEFT EDGE LINE - WHITE | 1578.0 |
| 66+31.50 TO 73+50.00 | LEFT EDGE LINE - WHITE | 718.5 |
| 49+00.00 TO 73+50.00 | RIGHT EDGE LINE - WHITE | 2450.0 |
| 49+00.00 TO 73+50.00 | 30' SKIP / 10' DASH - YELLOW | 612.5 |
| TOTAL = | | 5359.0 FOOT |

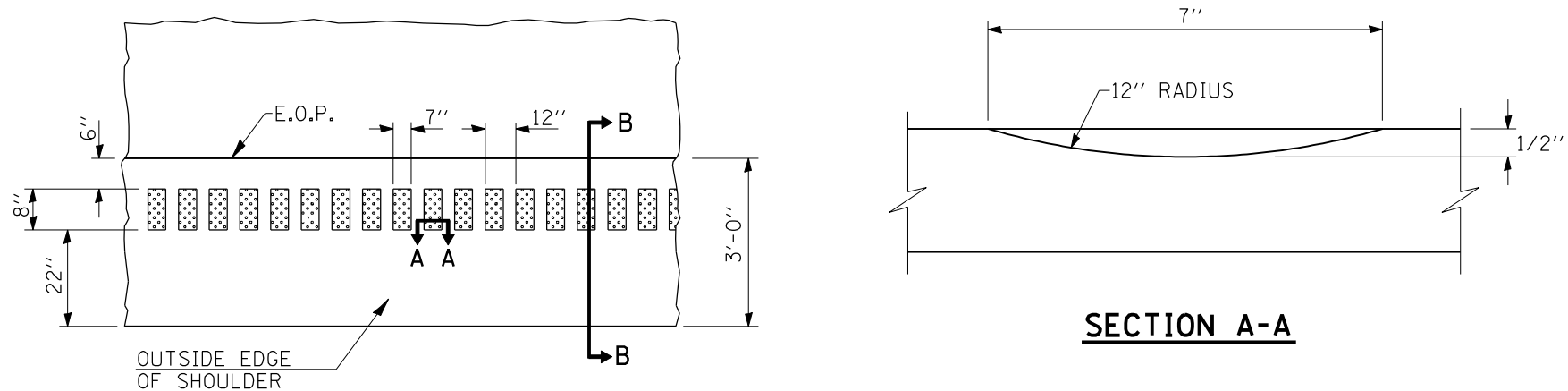
| STEEL PLATE BEAM GUARDRAIL, TYPE A | |
|------------------------------------|-----------------|
| STATION RANGE | QUANTITY (FOOT) |
| 59+23.30 RT. TO 60+38.00 RT. | 112.5 |
| TOTAL = 112.5 FOOT | |

| GUARDRAIL REMOVAL | |
|------------------------------|-----------------|
| STATION RANGE | QUANTITY (FOOT) |
| 58+88.62 RT. TO 60+57.15 RT. | 168.53 |
| TOTAL = 168.53 FOOT | |



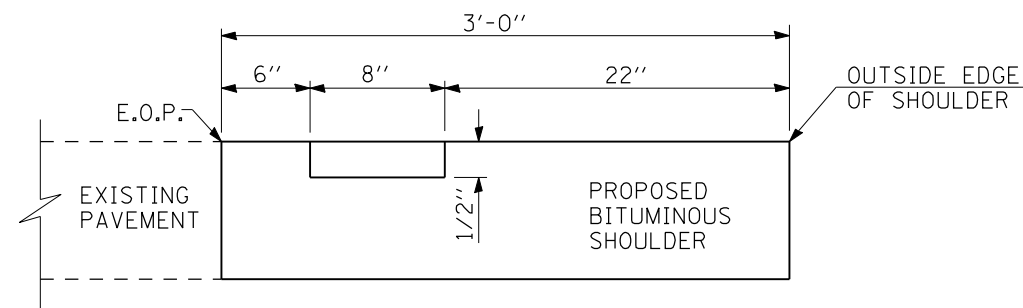
TAPER DETAIL FOR PROPOSED AGGREGATE & BITUMINOUS SHOULDERS

(TRANSITION WIDTH FOR PROPOSED BITUMINOUS SHOULDERS FROM 1'-0" TO 3'-0" WITHIN 10'-0")



PLAN VIEW

SECTION A-A



SECTION B-B

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULES AND SHOULDER & RUMBLE STRIP DETAILS
 FAP 325 (IL RTE. 16)
 SECTION D-6 SHLDR RUMBLE STRIPS 2008-03
 MACOUPIN COUNTY