

04-22-2016 LETTING ITEM 099

**INDEX OF SHEETS**

1. COVER SHEET, STANDARDS, & SUMMARY OF QUANTITIES
2. TYPICAL CROSS-SECTIONS & TRANSITIONS AT BEGIN AND END
3. INTERSECTION DETAILS
4. ENTRANCE & MAILBOX TURNOUT DETAILS
5. SCHEDULE OF RESURFACING QUANTITIES

**HIGHWAY STANDARDS**

- 701301-04 LANE CLOSURE 2L, 2W SHORT TIME OPERATIONS
- 701306-03 LANE CLOSURE 2L, 2W SLOW MOVING OPERATIONS DAY ONLY ≥45MPH
- 701311-03 LANE CLOSURE 2L, 2W MOVING OPERATIONS DAY ONLY
- 701901-05 TRAFFIC CONTROL DEVICES
- 780001-05 TYPICAL PAVEMENT MARKINGS

| SUMMARY OF QUANTITIES CONST. CODE 0005 |   |       |            |
|--|---|-------|------------|
| ITEM NO.                               | ITEM  | UNIT  | QUANTITIES |
| * 40600290                             | BITUMINOUS MATERIALS (TACK COAT)                | POUND | 58,926.0   |
| * 40600627                             | LEVELING BINDER (MACHINE METHOD), IL-9.5FG, N50 | TON   | 9,093.0    |
| 40603310                               | HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50    | TON   | 11,072.0   |
| * 40800025                             | BITUMINOUS MATERIALS (PRIME COAT)               | POUND | 1,523.0    |
| 40800050                               | INCIDENTAL HOT-MIX ASPHALT SURFACING            | TON   | 389.0      |
| 44000155                               | HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"         | SQ YD | 129,636.0  |
| * 48102100                             | AGGREGATE WEDGE SHOULDER, TYPE B                | TON   | 5,389.0    |
| 67100100                               | MOBILIZATION                                    | LSUM  | 1.0        |
| 70300100                               | SHORT TERM PAVEMENT MARKING                     | FOOT  | 10,646.0   |
| 70301000                               | WORK ZONE PAVEMENT MARKING REMOVAL              | SQ FT | 1,774.0    |
| △ 78001110                             | PAINT PAVEMENT MARKING - LINE 4"                | FOOT  | 24,415.0   |
| * X4401198                             | HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH | SQ YD | 888.0      |
| * X7010216                             | TRAFFIC CONTROL AND PROTECTION, (SPECIAL)       | LSUM  | 1.0        |
| * Z0055300                             | RUMBLE STRIP                                    | EACH  | 4.0        |

\* SEE SPECIAL PROVISIONS

△ SPECIALTY ITEMS

THIS PROJECT CONSISTS OF HMA SURFACE REMOVAL, HMA LEVELING BINDER, HMA SURFACE COURSE, MIX "C", N50, AND AGGREGATE SHOULDERS BEGINNING AT A POINT NEAR THE INTERSECTION OF COUNTY HIGHWAY 3 (3300E) AND COUNTY HIGHWAY 1 (2700N) AND EXTENDING IN A SOUTHERLY DIRECTION A POINT NEAR THE INTERSECTION OF COUNTY HIGHWAY 3 AND IL RT 116 WEST OF CULLOM, IL.

**TRAFFIC DATA**

C.H. 3 - COLLECTOR  
 POSTED SPEED = 55 MPH-RURAL  
 DESIGN SPEED = 50 MPH-RURAL  
 DESIGN ADT= 650/ YR 2031  
 CLASS III ROADS, 80,000#

**UTILITIES**

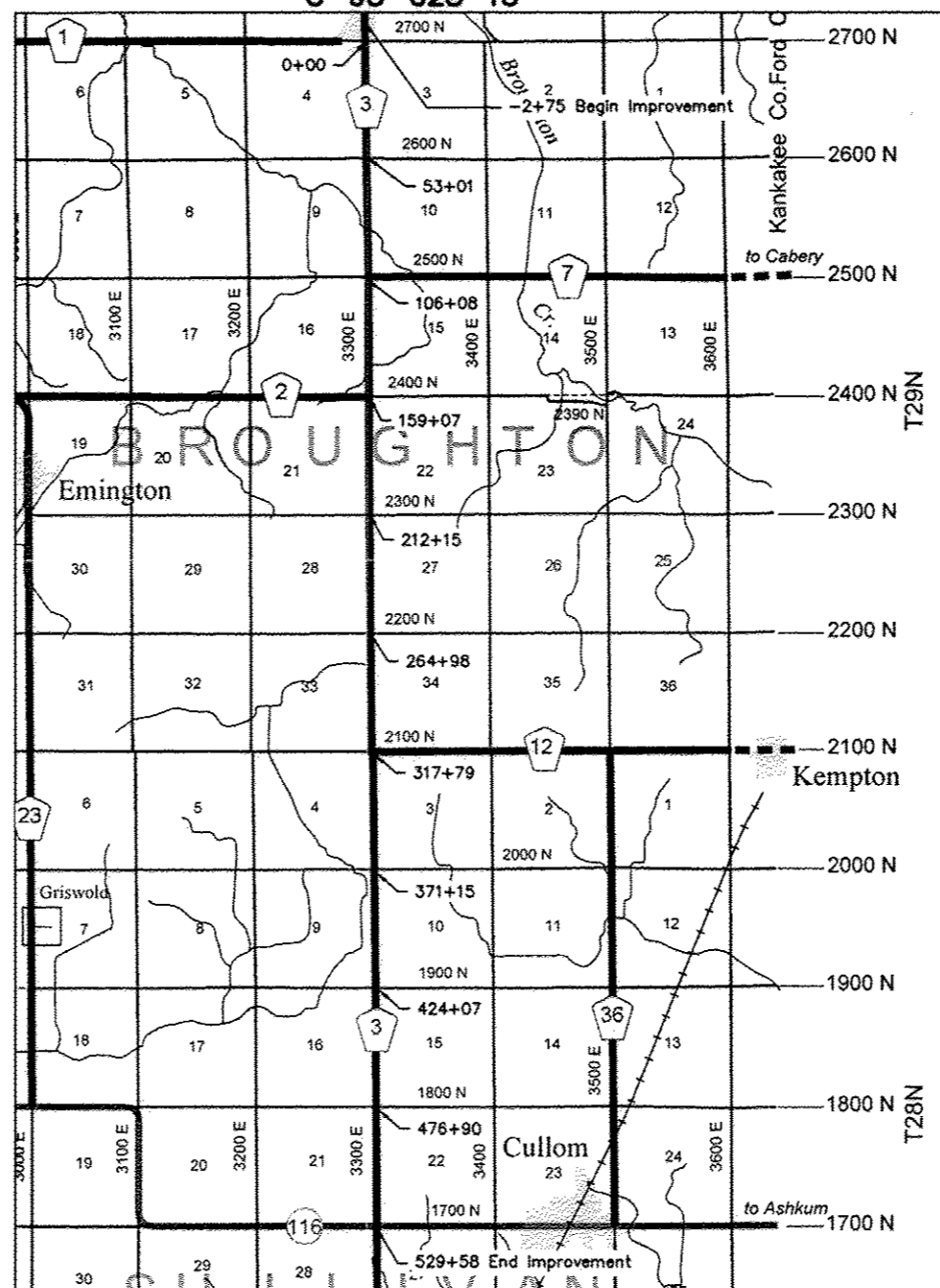
CONTACT J.U.L.I.E. 811 or  
 800-892-0123 BEFORE DIGGING



CONTRACT NO. 87608

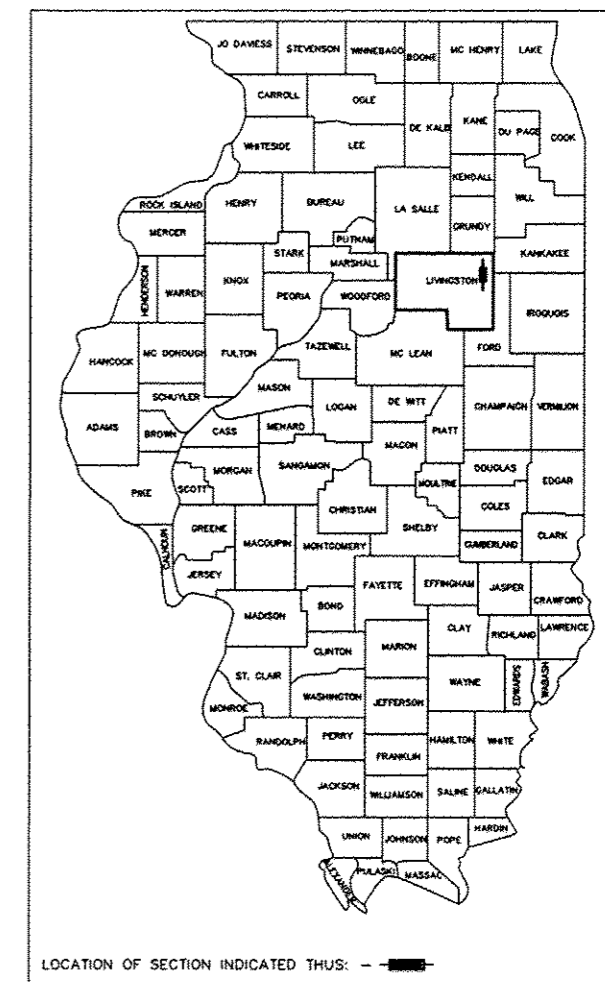
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**PLANS FOR PROPOSED  
 FEDERAL AID HIGHWAY  
 SURFACE TRANSPORTATION PROGRAM**  
 F.A.S. ROUTE 343, CH 3, (CAMPUS ROAD)  
 SECTION 08-00144-04-RS  
 PROJECT RS-0343(109)  
 LIVINGSTON COUNTY  
 C-93-028-15

R 8 E, 3rd PM

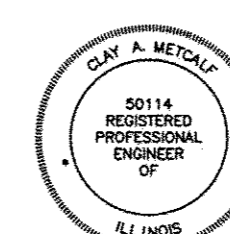


| ROUTE NO. | SECTION        | COUNTY     | TOTAL SHEETS | SHEET NO. |
|-----------|----------------|------------|--------------|-----------|
| 343       | 08-00144-04-RS | LIVINGSTON | 5            | 1         |

PROJECT NO. RS-0343(109)



LOCATION OF SECTION INDICATED THUS: ———



THESE PLANS WERE MADE BY ME OR BY A MEMBER OF MY STAFF WORKING UNDER MY PERSONAL SUPERVISION.

2/3/16 DATE  
 Clay Metcalf COUNTY ENGINEER, P.E. NO. 50114  
 EXPIRATION DATE 11/30/2017

"THE ACCEPTANCE OF THIS PROJECT IS BASED ON THE MINIMUM DESIGN CRITERIA UNDER LAFO GUIDELINES."

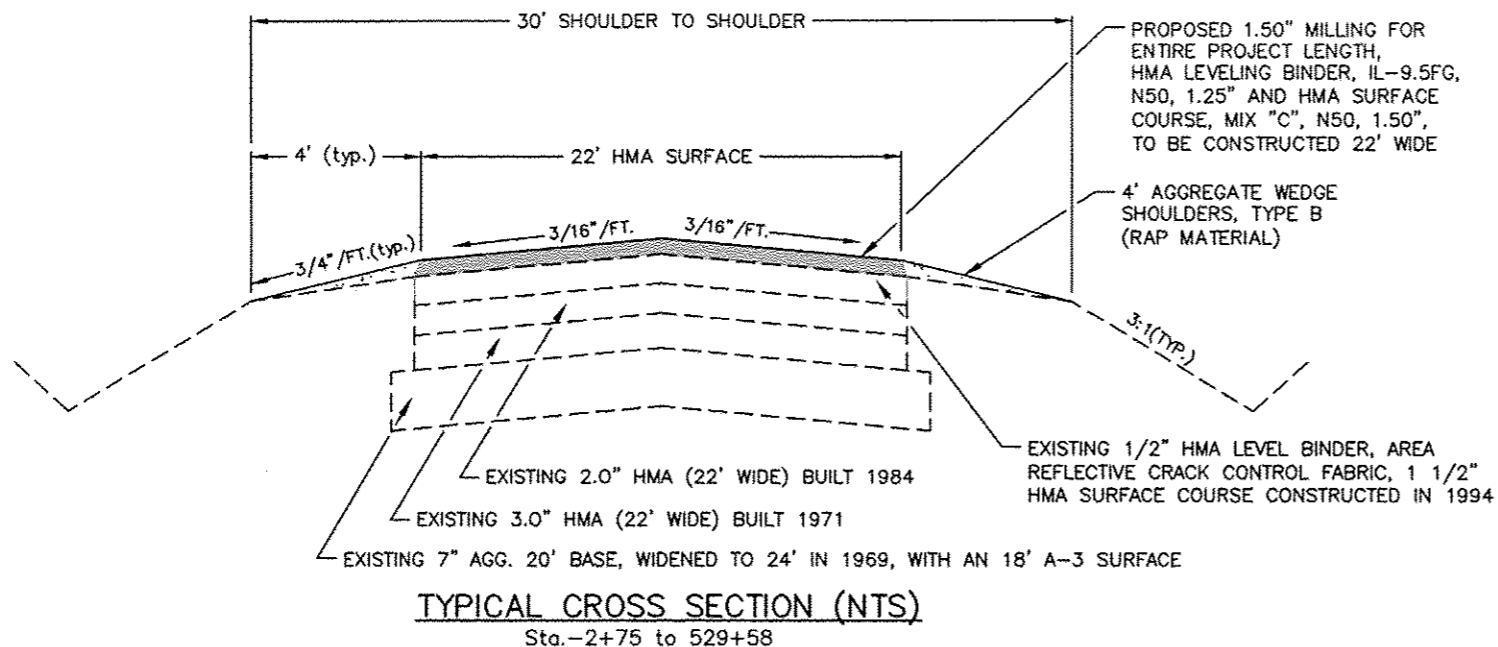
APPROVED 2/3 20 16  
 Clay Metcalf LIVINGSTON COUNTY OFFICIAL  
 PASSED 2/16 20 16  
 District Three Local Roads & Streets Engineer  
 RELEASING FOR BID BASED ON LIMITED REVIEW 2/16 20 16  
 Paul A. Lutzke DEPUTY DIRECTOR OF HIGHWAYS, REGION TWO ENGINEER  
 STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

GROSS LENGTH = 53233' = 10.08 MILES  
 NET LENGTH 53233' = 10.08 MILES

NOT PLOTTED TO SCALE

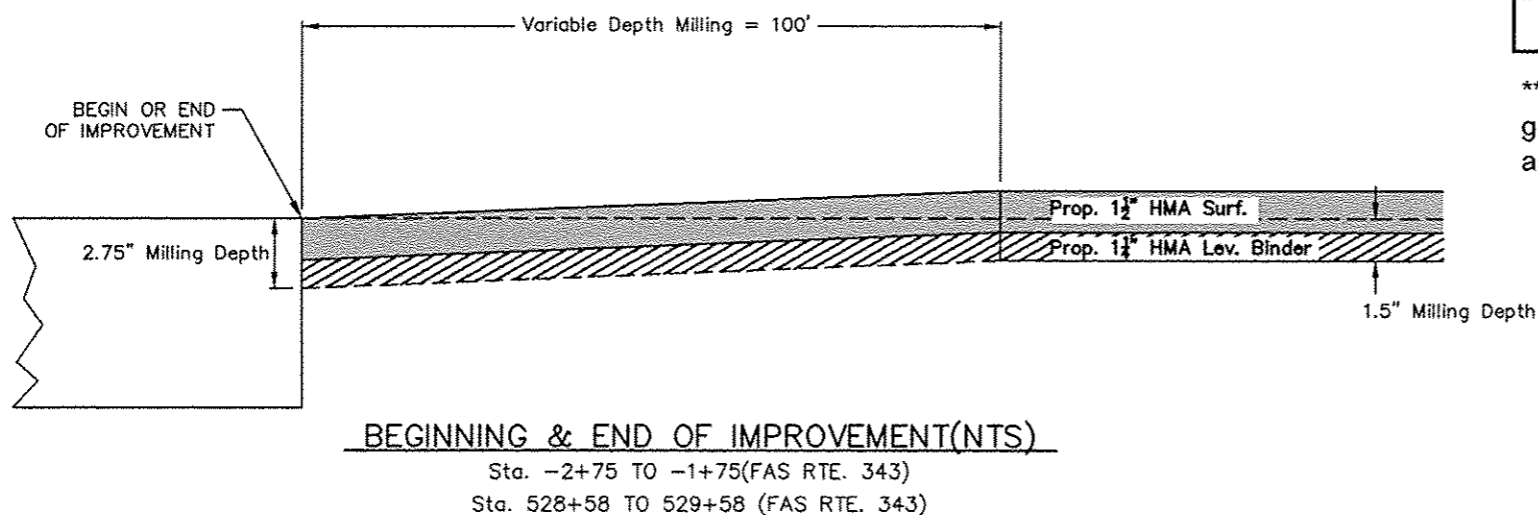
| ROUTE NO. | SECTION        | COUNTY     | TOTAL SHEETS | SHEET NO. |
|-----------|----------------|------------|--------------|-----------|
| 343       | 08-00144-04-RS | LIVINGSTON | 5            | 2         |

PROJECT NO. RS-0343(109)



|                                   | HMA Level Binder    | HMA Surface         | HMA Incidental           |
|-----------------------------------|---------------------|---------------------|--------------------------|
| <b>PG Grade **</b>                | PG64-22             |                     |                          |
| <b>Design Air Voids</b>           | 4.0% @ N50          | 4.0% @ N50          | 4.0% @ N50               |
| <b>Mixture Composition</b>        | IL 9.5FG            | IL 9.5              | IL 9.5                   |
| <b>Friction Aggregate</b>         | N/A                 | Mixture C           | Mixture C                |
| <b>Density Test Method</b>        | LR1030              | Cores / Correlation | Satisfaction of Engineer |
| <b>Mixture Weight</b>             | 112 # / s.y. / inch | 112 # / s.y. / inch | 112 # / s.y. / inch      |
| <b>Quality Management Program</b> | QC/QA               | QC/QA               | QC/QA                    |
| <b>Sublot Size</b>                | N/A                 | N/A                 | N/A                      |
| <b>Location(s)</b>                | N/A                 | N/A                 | N/A                      |

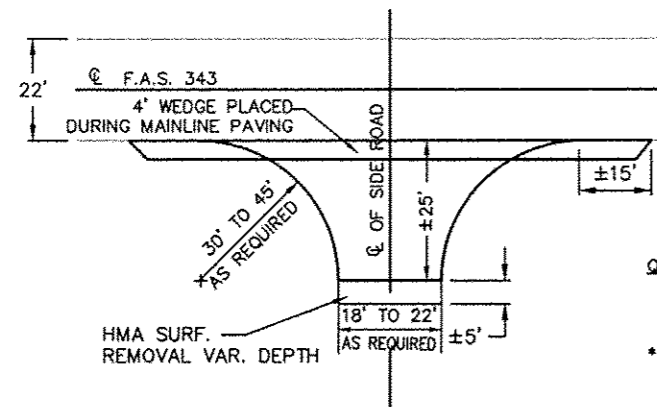
\*\* When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25% ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to PG 58-22)



NOT PLOTTED TO SCALE

| ROUTE NO. | SECTION        | COUNTY     | TOTAL SHEETS | SHEET NO. |
|-----------|----------------|------------|--------------|-----------|
| 343       | 08-00144-04-RS | LIVINGSTON | 5            | 3         |

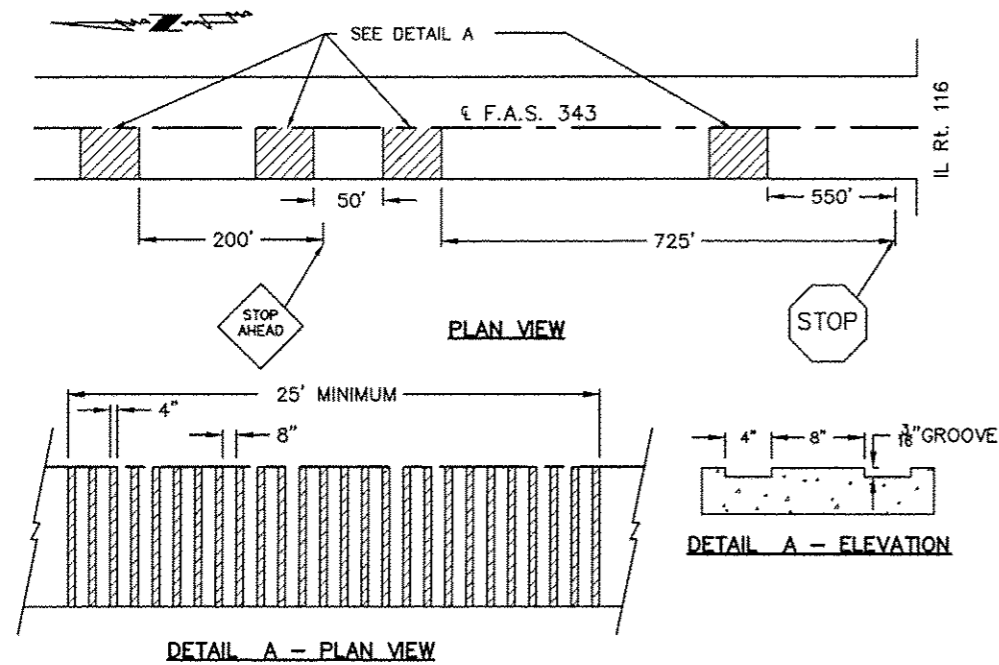
PROJECT NO. RS-0343(109)



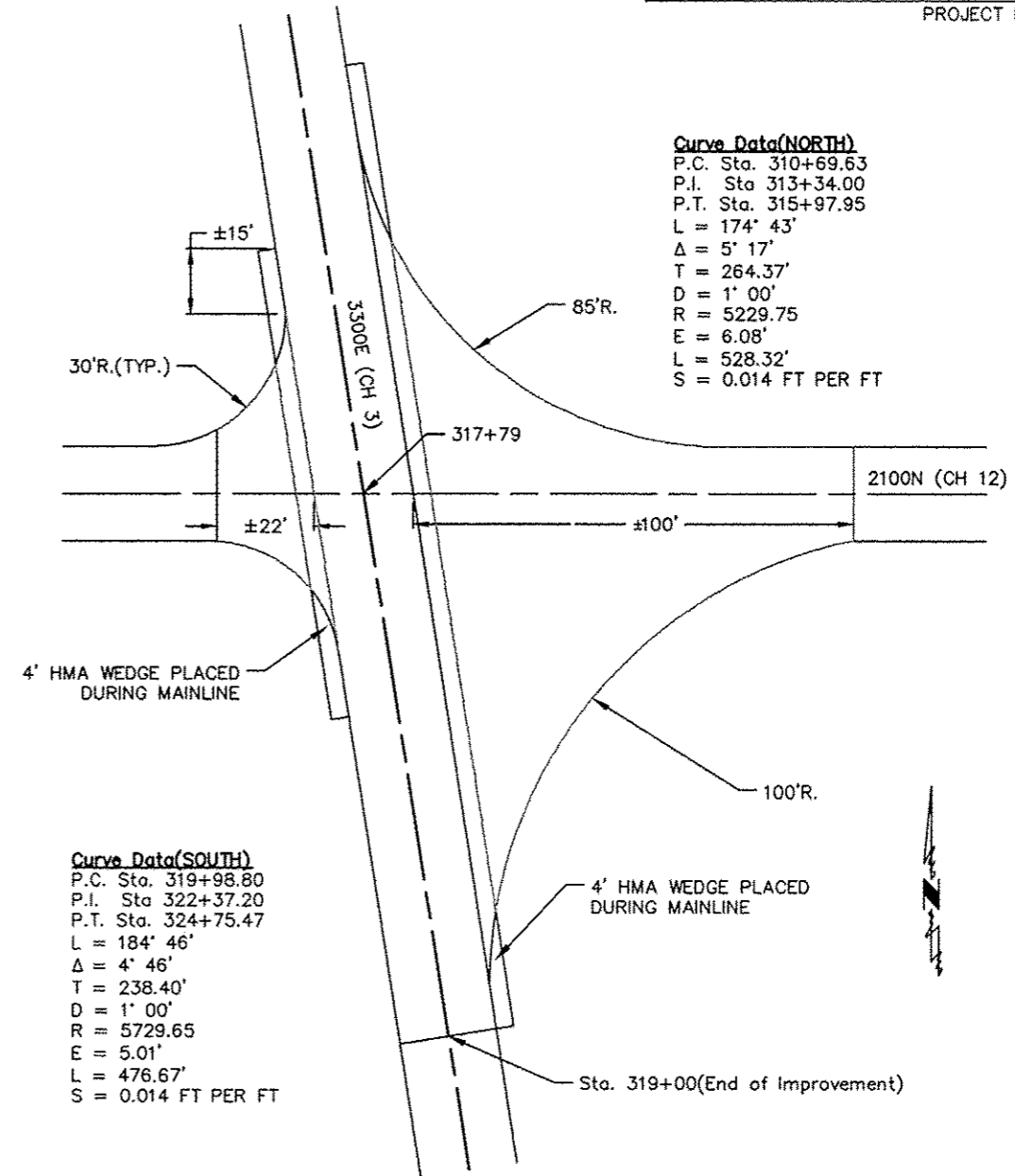
**QUANTITIES(AVERAGE)**  
 HMA SURFACE COURSE = 4 TON  
 INCIDENTAL BITUMINOUS = 10.0 TON/20.0 TON(AT CH)  
 BITUMINOUS MATERIALS(PG64-22) = 20.0 POUND  
 \* BITUMINOUS MATERIALS(MC 30) = 20.0 POUND  
 HMA SURF. REM. VAR. DEPTH = 15 SQ YD

**TYPICAL SIDE ROAD INTERSECTION (NTS)**

|             |                 |             |             |                 |         |
|-------------|-----------------|-------------|-------------|-----------------|---------|
| STA. 0+00   | LT. & RT.(CH 1) | (2700N)     | STA. 1+91   | RT.             | (ALLEY) |
| STA. 3+64   | RT.             | (FLOOD ST.) | STA. 53+01  | LT. & RT.       | (2600N) |
| STA. 106+08 | LT.(CH 7) & RT. | (2500N)     | STA. 159+07 | LT. & RT.(CH 2) | (2400N) |
| STA. 212+15 | LT. & RT.(*)    | (2300N)     | STA. 264+98 | LT. & RT.       | (2200N) |
| STA. 371+15 | LT.(*) & RT.    | (2000N)     | STA. 424+07 | LT.(*) & RT.    | (1900N) |
| STA. 476+90 | LT. & RT.       | (1800N)     |             |                 |         |



**GROOVED RUMBLE STRIP APPLICATION (NTS)**  
 IN ADVANCE OF IL RT. 116 INTERSECTION



**Curve Data(NORTH)**  
 P.C. Sta. 310+69.63  
 P.I. Sta 313+34.00  
 P.T. Sta. 315+97.95  
 L = 174' 43'  
 Δ = 5' 17'  
 T = 264.37'  
 D = 1' 00'  
 R = 5229.75  
 E = 6.08'  
 L = 528.32'  
 S = 0.014 FT PER FT

**Curve Data(SOUTH)**  
 P.C. Sta. 319+98.80  
 P.I. Sta 322+37.20  
 P.T. Sta. 324+75.47  
 L = 184' 46'  
 Δ = 4' 46'  
 T = 238.40'  
 D = 1' 00'  
 R = 5729.65  
 E = 5.01'  
 L = 476.67'  
 S = 0.014 FT PER FT

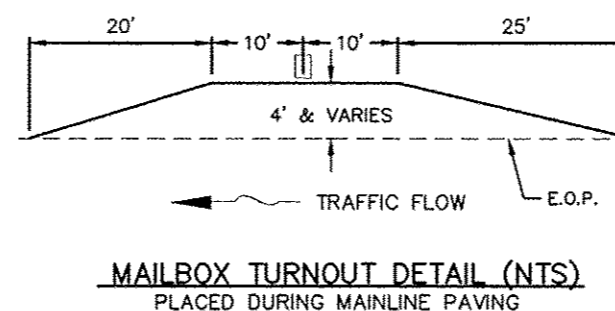
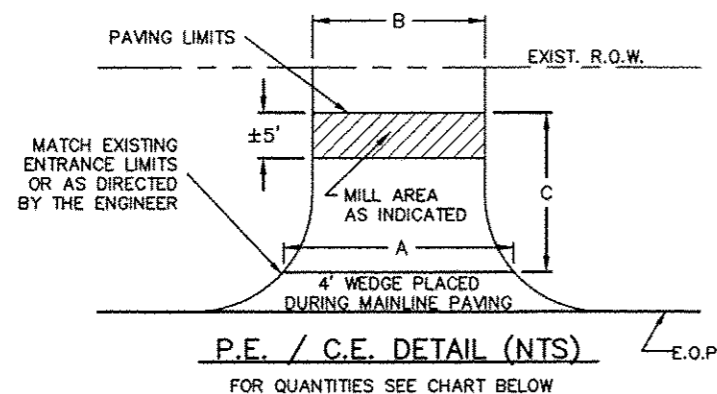
**INTERSECTION AT 2100N(CH 12)**

HMA SURFACE REMOVAL VARIABLE DEPTH = 100 SQ YD  
 HMA SURFACE COURSE = 15 TON  
 INCIDENTAL BITUMINOUS SURFACING = 80 TON  
 BITUMINOUS MATERIALS(PG64-22) = 30 POUNDS  
 BITUMINOUS MATERIALS(MC 30) = 20.0 POUND

| ROUTE NO. | SECTION        | COUNTY     | TOTAL SHEETS | SHEET NO. |
|-----------|----------------|------------|--------------|-----------|
| 343       | 08-00144-04-RS | LIVINGSTON | 5            | 4         |

PROJECT NO. RS-0343(109)

NOT PLOTTED TO SCALE



| SCHEDULE OF PAINT PAVEMENT MARK 4" |           |                 |       |           |
|------------------------------------|-----------|-----------------|-------|-----------|
| LOCATION                           |           | NO PASSING ZONE |       | SKIP DASH |
| STATION TO                         | STATION   | NBL             | SBL   | ¢         |
| -0+45                              | to 18+42  |                 |       | 472       |
| 18+42                              | to 23+99  |                 | 557   | 139       |
| 23+99                              | to 32+29  |                 |       | 208       |
| 32+29                              | to 37+40  | 511             |       | 128       |
| 37+40                              | to 92+55  |                 |       | 1,379     |
| 92+55                              | to 97+84  |                 | 529   | 132       |
| 97+84                              | to 105+73 |                 |       | 197       |
| 105+73                             | to 112+09 | 636             |       | 159       |
| 112+09                             | to 121+34 |                 |       | 231       |
| 121+34                             | to 128+28 |                 | 694   | 174       |
| 128+28                             | to 135+60 |                 |       | 183       |
| 135+60                             | to 140+79 | 519             |       | 130       |
| 140+79                             | to 351+25 |                 |       | 5,262     |
| 351+25                             | to 358+25 |                 | 700   | 175       |
| 358+25                             | to 362+91 |                 |       | 117       |
| 362+91                             | to 374+86 | 1,195           |       | 299       |
| 374+86                             | to 409+08 |                 |       | 856       |
| 409+08                             | to 420+23 |                 | 1,115 | 279       |
| 420+23                             | to 424+52 | 429             | 429   | *         |
| 424+52                             | to 427+59 | 307             |       | 77        |
| 427+59                             | to 428+67 |                 |       | 27        |
| 428+67                             | to 434+49 |                 | 582   | 146       |
| 434+49                             | to 440+70 |                 |       | 155       |
| 440+70                             | to 446+52 | 582             |       | 146       |
| 446+52                             | to 483+46 |                 |       | 924       |
| 483+46                             | to 488+89 |                 | 543   | 136       |
| 488+89                             | to 495+13 |                 |       | 156       |
| 495+13                             | to 500+61 | 548             |       | 137       |
| 500+61                             | to 510+15 |                 |       | 239       |
| 510+15                             | to 517+25 |                 | 710   | 178       |
| 517+25                             | to 521+47 |                 |       | 106       |
| 521+47                             | to 528+24 | 677             |       | 169       |
| 528+24                             | to 529+93 |                 |       | 42        |
| TOTALS                             |           | 5,404           | 5,859 | 13,152    |
| TOTAL PAY QUANTITY 24,415 FOOT     |           |                 |       |           |

| CAMPUS RD.(SOUTH) / CH 3- ENTRANCE QUANTITIES |           |        |        |        |             |                        |                |             |
|---|-----------|--------|--------|--------|-------------|------------------------|----------------|-------------|
| TYPE  | STATION   | A(Ft.) | B(Ft.) | C(Ft.) | AREA (S.Y.) | BIT. MAT. PRIME(MC-30) | SURFACE COURSE | INCID. BIT. |
| CE  | -2+03(R)  | 23     | 10     | 12     | 22          | 50                     | 2              | 3           |
| CE  | -1+57(R)  | 23     | 23     | 12     | 31          | 70                     | 2              | 4           |
| CE  | 12+79(L)  | 21     | 15     | 10     | 20          | 45                     | 2              | 3           |
| CE  | 14+47(L)  | 21     | 15     | 10     | 20          | 45                     | 2              | 3           |
| CE  | 16+14(L)  | 33     | 15     | 10     | 27          | 61                     | 2              | 4           |
| CE  | 28+31(L)  | 35     | 15     | 15     | 42          | 95                     | 2              | 5           |
| PE  | 79+74(L)  | 50     | 25     | 17     | 71          | 160                    | 3              | 8           |
| PE  | 191+17(L) | 42     | 20     | 15     | 52          | 117                    | 2              | 6           |
| PE  | 230+70(L) | 45     | 20     | 15     | 54          | 122                    | 3              | 7           |
| PE  | 274+64(R) | 30     | 22     | 12     | 35          | 79                     | 2              | 4           |
| PE  | 358+98(L) | 30     | 22     | 12     | 35          | 79                     | 2              | 4           |
| PE  | 387+84(L) | 30     | 22     | 14     | 40          | 90                     | 2              | 5           |
| PE  | 420+05(R) | 50     | 28     | 12     | 52          | 117                    | 3              | 6           |
| PE  | 456+00(R) | 36     | 14     | 17     | 47          | 106                    | 2              | 6           |
| PE  | 491+38(R) | 28     | 15     | 17     | 41          | 92                     | 2              | 5           |
| PE  | 527+40(R) | 42     | 12     | 17     | 51          | 115                    | 2              | 6           |
| MBTO  | 8 Total   |        |        |        | 151         |                        | 13             |             |
| TOTALS  |           |        |        |        |             | 1,443                  | 48             | 79          |

| SECTION        | COUNTY     | TOTAL SHEETS | SHEET NO. |
|----------------|------------|--------------|-----------|
| 08-00144-04-RS | LIVINGSTON | 5            | 5         |

PROJECT NO. RS-0355(122)

**SCHEDULE OF RESURFACING QUANTITIES**

Unit weight Constant = 112.0 lbs./s.y./inch

| LOCATION (QUANTITY)                         | LENGTH   | AREA<br>(SQ YD) | HMA SURF<br>REMOVAL<br>VAR DEPTH<br>(SQ YD) | SHORT-<br>TERM PAVT<br>MARKING<br>(FOOT) | WORK<br>ZONE PAVT<br>MK REM<br>(SQ FT) | PAINT PVT<br>MARKING<br>LINE, 4"<br>(FOOT)               | BIT MATLS<br>TACK CT<br>*<br>(POUND) | BIT MATLS<br>PR CT<br>MC-30<br>(POUND) | HMA SURF<br>REMOVAL<br>1.5" DEPTH<br>(SQ YD) | LEVEL BINDER<br>IL-9.5FG<br>N50<br>(TON) | BIT CONC<br>SURF CSE<br>"C" N50<br>(TON) | INCIDENTAL<br>BIT SURF<br>(TON) | AGG WEDGE<br>SHOULDERS<br>TYPE B<br>(TON) |
|---|----------|-----------------|---|--|--|--|--------------------------------------|--|--|--|--|---------------------------------|---|
| -2+75. to <u>MAINLINE</u><br>-1+75. (TAPER) | 100      | 244             | 244   | (3 Apps.)<br>20                          | (1 App.)<br>3                          | O<br>S<br>N<br>C<br>H<br>S<br>H<br>E<br>E<br>T<br>E<br>4 | 110                                  | -                                      | -  | 9  | 20                                       | -                               | 10  |
| -1+75. to 528+58.                           | 53033    | 129636          | -   | 10606                                    | 1768                                   |  | 58,336                               | -                                      | 129636                                       | 9,075                                    | 10,889                                   | -                               | 5369                                      |
| 528+58. to 529+58. (TAPER)                  | 100      | 244             | 244   | 20                                       | 3                                      |  | 110                                  | -                                      | -  | 9  | 20                                       | -                               | 10  |
| TOTAL JOB LENGTH OR MAINLINE QUANTITY       | 53233.00 | 130125          | 488   | 10646                                    | 1774                                   | 24415  | 58556                                | -                                      | 129636                                       | 9093                                     | 10929                                    | -                               | 5389                                      |
| <u>MISCELLANEOUS</u>                        |          |                 |   |  |  |  |                                      |  |  |  |  |                                 |   |
| PRIVATE & COMMERCIAL ENTRANCES (14)         | -        | -               | -   | -  | -                                      | -  | -                                    | 1,443.0                                | -  | 0  | 35                                       | 79.0                            | -   |
| SIDEROAD INTERSECTIONS (22)                 | -        | -               | 400.0                                       | -  | -                                      | -  | 370.0                                | 80.0                                   | -  | -  | 95                                       | 310.0                           | -   |
| M.B.T.O.'s (8)                              | -        | -               | -   | -  | -                                      | -  | -                                    | -                                      | -  | 0  | 13                                       | -                               | -   |
| TOTALS OF MAINLINE & MISC.                  | 53,233   | 130,125         | 888   | 10,646                                   | 1,774                                  | 24,415   | 58,926                               | 1,523                                  | 129,636                                      | 9,093                                    | 11,072                                   | 389                             | 5,389                                     |

\* BITUMINOUS MATERIALS (PRIME COAT) SHALL BE IN ACCORDANCE WITH THE TABLE SHOWN IN ARTICLE 406.02 OF THE STANDARD SPECIFICATIONS.

Z:\00\Work\ROAD Projects\0014\RS4-Campus Rd South\Planning\Est\Cost-Resurf\Sched-Campus Rd(2700-116).xls\SchedResurfQty