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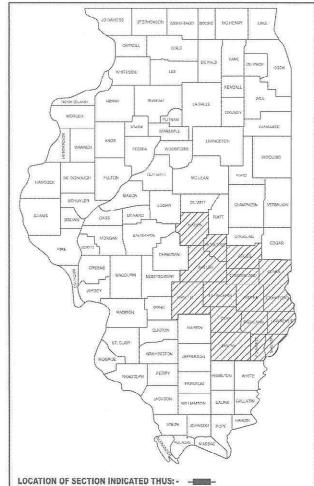
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# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

#### 

D-97-061-24



DEPARTMENT OF TRANSPORTATION

SUBMITTED DETOCAGE 23 20 24

PREGIONAL ENGINEER

ENGINEER OF DESIGN AND ENVIRONMENT

DECEMBER 6 0024

STATE OF ILLINOIS

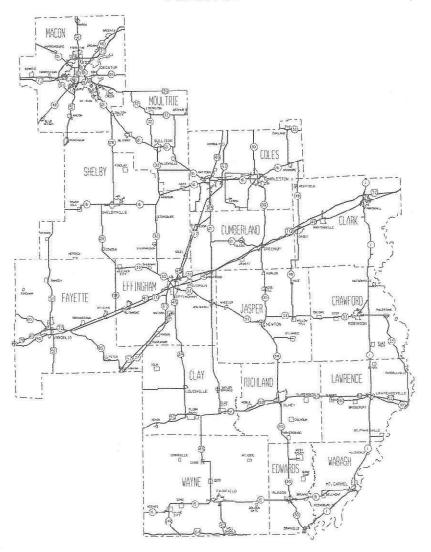
PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

## PROPOSED HIGHWAY PLANS

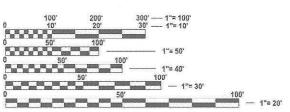
VARIOUS ROUTES
SECTION D7 GUARDRAIL 2025-1

GUARDRAIL REPAIRS VARIOUS COUNTIES

C-97-096-24



FOR INDEX OF SHEETS, SEE SHEET NO. 2



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: BRIAN LEWIS
PROJECT MANAGER: ANDREW NIEMERG

CONTRACT NO. 74D22

## **GENERAL NOTES**

THIS PROJECT IS LOCATED ON VARIOUS ROUTES IN SIXTEEN COUNTIES ALL LOCATED WITHIN DISTRICT 7. THE WORK INCLUDED IN THIS SECTION CONSISTS OF VARIOUS TYPES OF GUARDRAIL REPAIR AND ALL OTHER WORK NECESSARY TO COMPLETE THIS SECTION.

THIS PROJECT INCLUDES REPAIRS OF EXISTING DAMAGE AT KNOWN LOCATIONS AND REPAIRS OF FUTURE DAMAGE ON AN ON-CALL BASIS.

REMOVED GUARDRAIL THAT IS NOT REPLACED ON THE SAME DAY SHALL BE DELINEATED WITH LIGHTED BARRICADES. NO LOCATIONS SHALL BE LEFT WITHOUT EITHER LIGHTED BARRICADES OR RESTORED GUARDRAIL AT ANY TIME.

THE LIMITS OF THE DAMAGED GUARDRAIL WILL BE MARKED WITH PAINT. THE REPLACEMENT PARTS AND THE QUANTITIES INDICATED ARE WITHIN THESE LIMITS AS MARKED.

THE CONTRACTOR IS ADVISED THAT THE GUARDRAIL PAY ITEMS INCLUDED IN THE PLANS MAY BE USED TO REPLACE/REPAIR SPBGR AND TRAFFIC BARRIER TERMINALS FOR THE MIDWEST GUARDRAIL SYSTEM AS SHOWN IN THE HIGHWAY STANDARDS AS WELL AS SPBGR AND TRAFFIC BARRIER TERMINALS INSTALLED PRIOR TO JAN. 1, 2007. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR UTILIZING THE CURRENT MIDWEST GUARDRAIL SYSTEM STANDARD.

## **INDEX OF SHEETS**

### SHEET NO. ITEM

- 1 COVER SHEET
- 2 INDEX OF SHEETS, GENERAL NOTES & LIST OF STANDARDS
- 3 SUMMARY OF QUANTITIES
- 4 SAND BARREL DETAILS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED FOLLOWING THE LAST NUMBERED SHEET OF THE PLANS.

#### STD. NO. DESCRIPTION

| 630001-13 | STEEL PLATE BEAM GUARDRAIL  |
|-----------|---|
| 631011-10 | TRAFFIC BARRIER TERMINAL, TYPE 2                                    |
| 631031-18 | TRAFFIC BARRIER TERMINAL, TYPE 6                                    |
| 631033-09 | TRAFFIC BARRIER TERMINAL, TYPE 6B                                   |
| 636001-02 | CABLE ROAD GUARD SINGLE STRAND                                      |
| 643001-03 | SAND MODULE IMPACT ATTENUATORS                                      |
| 665001-02 | WOVEN WIRE FENCE  |
| 701001-02 | OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY                     |
| 701006-05 | OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE          |
| 701101-05 | OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE       |
| 701106-02 | OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY                  |
| 701201-05 | LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH                |
| 701301-04 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS                         |
| 701426-09 | LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY               |
| 701501-06 | URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED                               |
| 701601-09 | URBAN LANE CLOSURE, MULTILANE, 1W OR 2W, WITH NONTRAVERSABLE MEDIAN |
| 701901-10 | TRAFFIC CONTROL DEVICES   |
| 725001-01 | OBJECT AND TERMINAL MARKERS   |
| 782006-01 | GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS               |
| 000001-08 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS                        |
| 001006    | DECIMAL OF AN INCH AND OF A FOOT                                    |
| 630301-09 | SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS          |
| 631026-06 | TRAFFIC BARRIER TERMINAL, TYPE 5                                    |

**REV - MS** 

| 9 | USER NAME = andrew.niemerg | DESIGNED -        | REVISED -             |                              | INDEX OF SHEETS. GENERAL NOTES. |         |                     |         |        | F.A.<br>RTF. | SECTION | COUNTY            | TOTAL     | SHEE<br>NO. |     |
|---|----------------------------|-------------------|-----------------------|------------------------------|---------------------------------|---------|---------------------|---------|--------|--------------|---------|-------------------|-----------|-------------|-----|
|   | DRAWN - REVISED -          | STATE OF ILLINOIS | AND LIST OF STANDARDS |                              |                                 |         | D7 GUARDRAIL 2025-1 | VARIOUS | 4      | 2            |         |                   |           |             |     |
|   |                            | CHECKED -         | REVISED -             | DEPARTMENT OF TRANSPORTATION |                                 | A       | MD FI2 I            | OF STA  | MDAKD2 |              |         |                   | CONTRAC   | T NO. 74    | D22 |
|   | PLOT DATE = 9/5/2024       | DATE =            | REVISED -             |                              | SCALE:                          | SHEET 1 | OF 1                | SHEETS  | STA.   | TO STA.      |         | ILLINOIS FED. AII | D PROJECT |             |     |

| CONSTRUCTION | CODE          |
|--------------|---------------|
|              | 100%<br>STATE |
|              |               |

|            |  |                           |          | 100%<br>MCHD | 100%<br>STATE |                       |   |                  |          | 100%<br>MCHD   | 100%<br>STATE |
|------------|--|---------------------------|----------|--------------|---------------|-----------------------|---|------------------|----------|----------------|---------------|
|            |  |                           |          | CONSTRUC     | TION CODE     |                       |   |                  |          | CONSTRUC       | TION CODE     |
|            | SUMMARY OF QUANTITES   |                           |          |              | CONT.         | SUMMARY OF QUANTITIES |   |                  |          | MCHD           | CONT.         |
|            | Ì  | MCHD MAINT. SAFETY SAFETY |          |              |               |                       |   | MAINT.<br>SAFETY |          |                |               |
| CODE       |  |                           | TOTAL    | 0021         | 0021          | CODE                  |   |                  | TOTAL    | SAFETY<br>0021 | 0021          |
| NO.        | ITEM   | UNIT                      | QUANTITY | NONE         | NONE          | NO.                   | ITEM  | UNIT             | QUANTITY | NONE           | NONE          |
|            |  |                           |          |              | ĺ             | 1                     |   |                  |          |                |               |
|            |  |                           |          |              | -             | -                     |   |                  |          |                |               |
| 63100045   | TRAFFIC BARRIER TERMINAL, TYPE 2   | EACH                      | 2        | 1            | 1             | X6300225              | SINGLE END SECTION  | EACH             | 2        | 1              | 1             |
|            |  |                           |          |              |               |                       |   |                  |          |                |               |
| 63100070   | TRAFFIC BARRIER TERMINAL, TYPE 5   | EACH                      | 2        | 1            | 1 1           | X6300231              | STEEL POST, ATTACHED TO STRUCTURES                            | EACH             | 6        | 4              | 2             |
| 55155515   | The state of the s | 2,1011                    | -        | 1            | <u> </u>      | -                     |   | 2.7.0.1          |          | 7              |               |
| 7          |  |                           |          |              |               |                       |   |                  |          |                |               |
| 63100085   | TRAFFIC BARRIER TERMINAL, TYPE 6   | EACH                      | 2        | 1            | 1             | X6300236              | STEEL POSTS 6'  | EACH             | 750      | 550            | 200           |
|            |  | +                         | 1        |              | 1             |                       |   | 1                |          |                |               |
|            |  |                           |          |              | 4             |                       |   |                  |          |                |               |
| 63100167   | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT   | EACH                      | 40       | 30           | 10            | X6300239              | STEEL POSTS 9'  | EACH             | 60       | 40             | 20            |
|            |  |                           |          |              | 4.0 1         |                       |   |                  |          |                |               |
| 63100169   | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED  | EACH                      | 3        | 2            | 1             | X6310302              | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT)     | EACH             | 3        | 2              | 1             |
| 00100100   | TOTAL BANGLEY LENGTHALE, THE TYOUR ESTADY ENGLES   | L/XOIT                    | ,        |              | 1             | 70010002              | THE TAIN TO BANNER TERMINAL, THE TOT ESIAE (MISERT)           | L/(OI)           | 3        | 2              | 1             |
|            |  |                           |          |              |               |                       |   |                  |          |                |               |
| 63600105   | CABLE ROAD GUARD, SINGLE STRAND  | FOOT                      | 70       | 50           | 20            | X6310304              | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (FLARED)      | EACH             | 2        | 1              | 1             |
|            |  | Î                         |          |              | 1             |                       |   |                  |          |                |               |
|            |  |                           |          |              | ł             | -                     |   |                  |          |                |               |
| 66500105   | WOVEN WIRE FENCE, 4'   | FOOT                      | 150      | 100          | 50            | X6310306              | REPAIR TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL - POST         | EACH             | 3        | 2              | 1             |
|            |  |                           |          |              |               |                       |   |                  |          |                |               |
| 67100100   | MOBILIZATION   | L SUM                     | 1        | 0.5          | 0.5           | X6310310              | REPAIR TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL - RAIL ELEMENT | EACH             | 2        | 1              | 1             |
| 07 100 100 | NOBILIZATION   | LOOM                      | 1        | 0.5          | 0.5           | 70010010              | PLATE   | LAGIT            | 2        | 1              | 1             |
|            |  |                           |          |              |               |                       |   |                  |          |                |               |
| 72501000   | TERMINAL MARKER - DIRECT APPLIED   | EACH                      | 40       | 30           | 10            | X6310316              | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 2                       | EACH             | 3        | 2              | 1             |
|            |  | 1                         |          |              | 1             | 1                     |   | 1                |          |                |               |
| _          |  |                           | -        |              | 1             | -                     |   |                  |          |                |               |
| 78200005   | GUARDRAIL REFLECTORS, TYPE A   | EACH                      | 150      | 100          | 50            | X6310330              | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 6                       | EACH             | 3        | 2              | 1             |
|            |  |                           |          |              |               |                       |   |                  |          |                |               |
| X6300210   | GUARDRAIL BLOCKS   | EACH                      | 1000     | 700          | 300           | X6310334              | REPAIR TRAFFIC BARRIER TERMINAL, TYPE 6B                      | EACH             | 2        | 1              | 1             |
| 70000210   | GOARDIVIL BLOOKS   | LAOIT                     | 1000     | 700          | 300           | 1 /0010004            | THE FAIR THOU IS SAUNDER TERMINOLE, THE COS                   | 2,1011           |          | 1              | 1             |
|            |  | 8                         |          |              |               |                       |   |                  |          |                |               |
| X6300215   | RAIL ELEMENT PLATES  | EACH                      | 350      | 250          | 100           | X6431220              | REMOVE AND REPLACE IMPACT ATTENUATOR SAND MODULE              | EACH             | 40       | 30             | 10            |
|            |  |                           |          |              |               | 1                     |   |                  |          |                |               |
|            |  |                           | -        |              |               |                       |   |                  |          |                |               |
| X6300217   | RAIL ELEMENT PLATES (RADIUS)   | EACH                      | 11       | 8            | 3             | Z0008760              | EMERGENCY WORK CALL OUT                                       | EACH             | 2        | 1              | 1             |
|            |  |                           |          |              |               |                       |   |                  |          |                |               |

X6300220

EXTRUDER HEAD

REV - MS

| USER NAME = andrew.niemerg | DESIGNED - | REVISED _ |  |
|----------------------------|------------|-----------|--|
|                            | DRAWN -    | REVISED - |  |
|                            | CHECKED -  | REVISED - |  |
| PLOT DATE = 9/17/2024      | DATE -     | REVISED = |  |

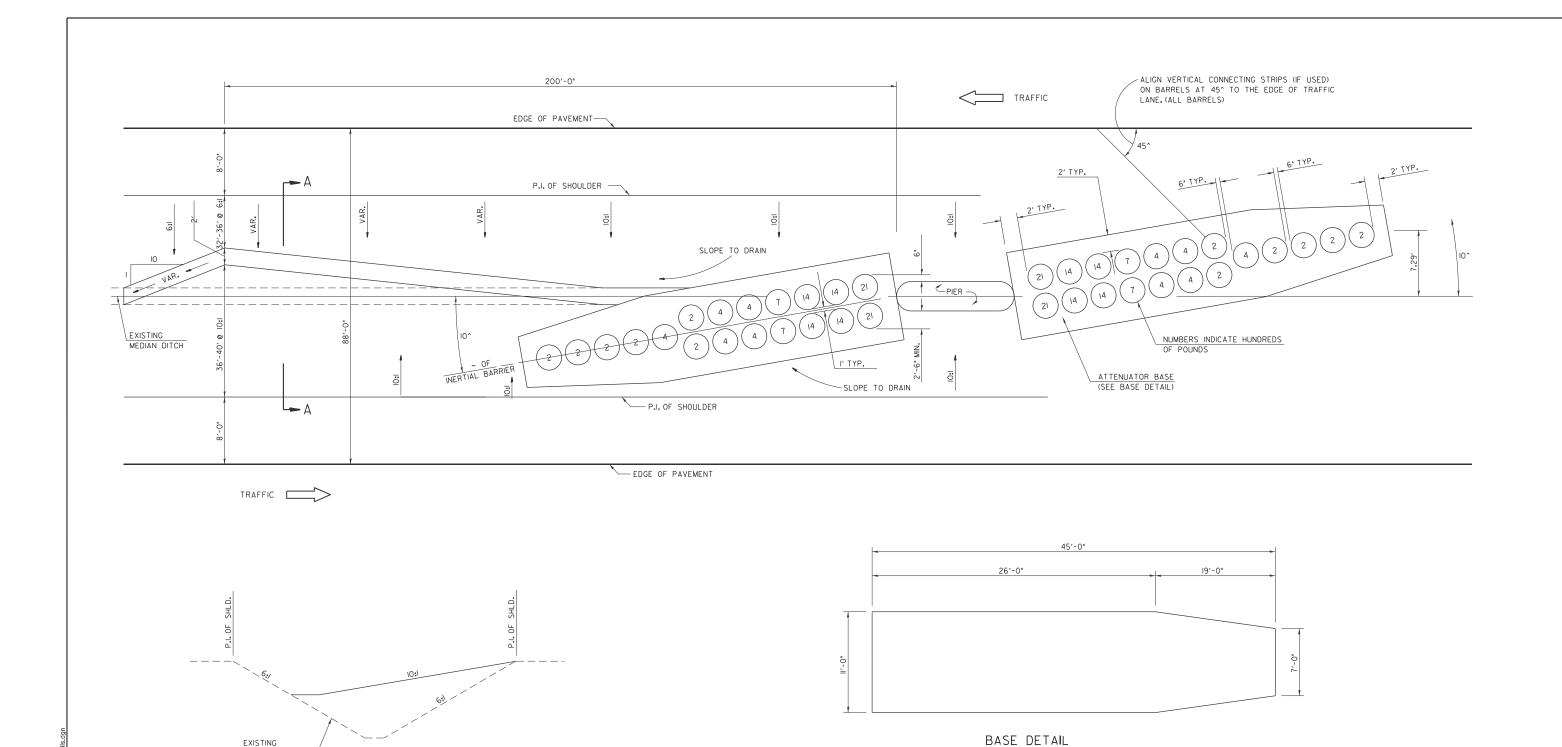
EACH

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| STATE OF ILLINOIS            |
|------------------------------|
| DEPARTMENT OF TRANSPORTATION |

SHEET 1

| SUMMARY OF QUANTITIES |      | F.A.P<br>RTE. |        |      |         | COUNTY | TOTAL<br>SHEETS | SHEET<br>NO. |          |           |           |     |
|-----------------------|------|---------------|--------|------|---------|--------|-----------------|--------------|----------|-----------|-----------|-----|
|                       |      |               |        |      |         | VAR    | D7 GUARDE       | RAIL 202     | 5-1      | VARIOUS   | 4         | 3   |
|                       |      |               |        |      |         |        |                 |              |          | CONTRAC   | Γ NO. 74I | D22 |
| 1                     | OF ' | 1             | SHEETS | STA. | TO STA. |        |                 | ILLINOIS     | FED. AII | D PROJECT |           |     |



SECTION A-A
GRADING AND SHAPING DETAIL

EXISTING CROSS SECTION

## GENERAL NOTES

- 1. ALL 10:1 SLOPES SHOWN ON THIS DETAIL SHALL BE CONSTRUCTED 10:1 OR FLATTER.
- 2. THE SLOPES AS SHOWN ON THIS DETAIL SHALL APPLY TO BOTH ENDS OF THE BRIDGE PIERS.
- 3. THE LENGTH X WIDTH OF MODULE LAYOUT IS 41.0' x 7.0': 19 MODULES 14,400 LBS.
- 4. IN AREAS OF 10:1 SLOPES PRECEDING THE ATTENUATOR IN THE MEDIAN INSTALLATION, FOUR OR MORE WOOD POSTS SHALL BE PLACED AT 5' INTERVALS IN THE MEDIAN ~. SEE SPECIAL PROVISIONS AND SCHEDULES.

#### NOTE:

This sheet applies ONLY when making partial repair of an existing sand barrel array that was installed according to this drawing.

Use Standard 643001 for a complete replacement.

NOT TO SCALE

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

| USER NAME = andrew.niemerg | DESIGNED - | REVISED - |                              | EXISTING SAND BARREL DETAIL |                                  | EXISTING SAND BARREL DETAIL |                   |                    | SECTION   | COUNTY | TOTAL SHEET |
|----------------------------|------------|-----------|------------------------------|-----------------------------|----------------------------------|-----------------------------|-------------------|--------------------|-----------|--------|-------------|
|                            | DRAWN -    | REVISED - | STATE OF ILLINOIS            |                             | EXISTING CARD DANNEL DETAIL      | VAR                         | D7 GUARDRAIL 2025 | 25-1 VARIOUS       | 4 4       |        |             |
|                            | CHECKED -  | REVISED - | DEPARTMENT OF TRANSPORTATION |                             |                                  |                             |                   | CONTRACT           | NO. 74D22 |        |             |
| PLOT DATE = 9/17/2024      | DATE -     | REVISED - |                              | SCALE:                      | SHEET 1 OF 1 SHEETS STA. TO STA. |                             | ILLINOIS          | S FED. AID PROJECT |           |        |             |