

CONTRACT NO. 60D05

| | | | | |
|---------------------|---------|---------------------------|--------------|-----------|
| F.A. ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** | ** | COOK | 32 | 1 |
| STA. TO STA. | | 33 TOTAL SHEETS | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

D-91-293-07

*2007-029-RS
**FAP 330, FAU 1362

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
HIGHWAY**

FAP 330 (US 12/45 - MANNHEIM RD.) & FAU 1362 (LAWRENCE AVENUE)

SECTION: 2007-029 RS

US 12/45 (MANNHEIM ROAD) FROM ZEMKE BOULEVARD TO IL 19

LAWRENCE AVENUE FROM US 12/45 TO FORSTER AVENUE

RESURFACING (3P)

COOK COUNTY

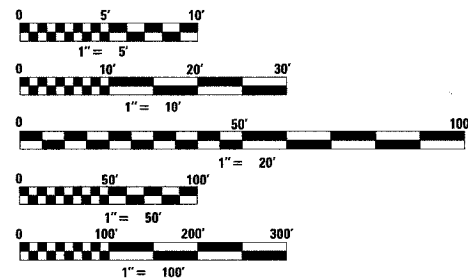
C-91-293-07

FOR INDEX OF SHEETS, SEE SHEET NO. 2

TRAFFIC DATA

EXISTING ADT
US 12/45 MANNHEIM RD. 48,100 (2005)
LAWRENCE AVE. 19,400 (2005)
SPEED LIMIT 40 MPH US 12/45 MANNHEIM RD
SPEED LIMIT 35 MPH LAWRENCE AVE

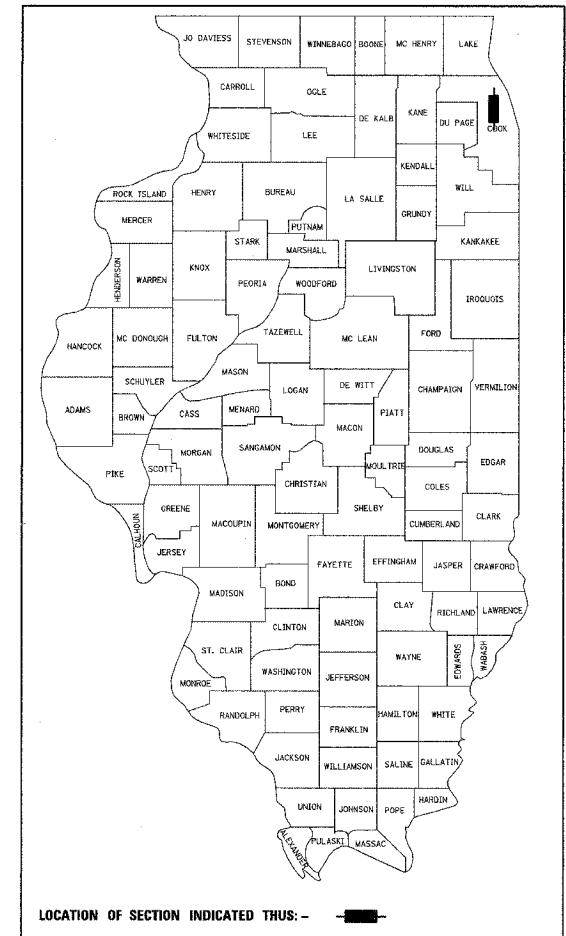
PROJECT LOCATED IN THE
VILLAGE OF SCHILLER PARK
AND THE CITY OF CHICAGO



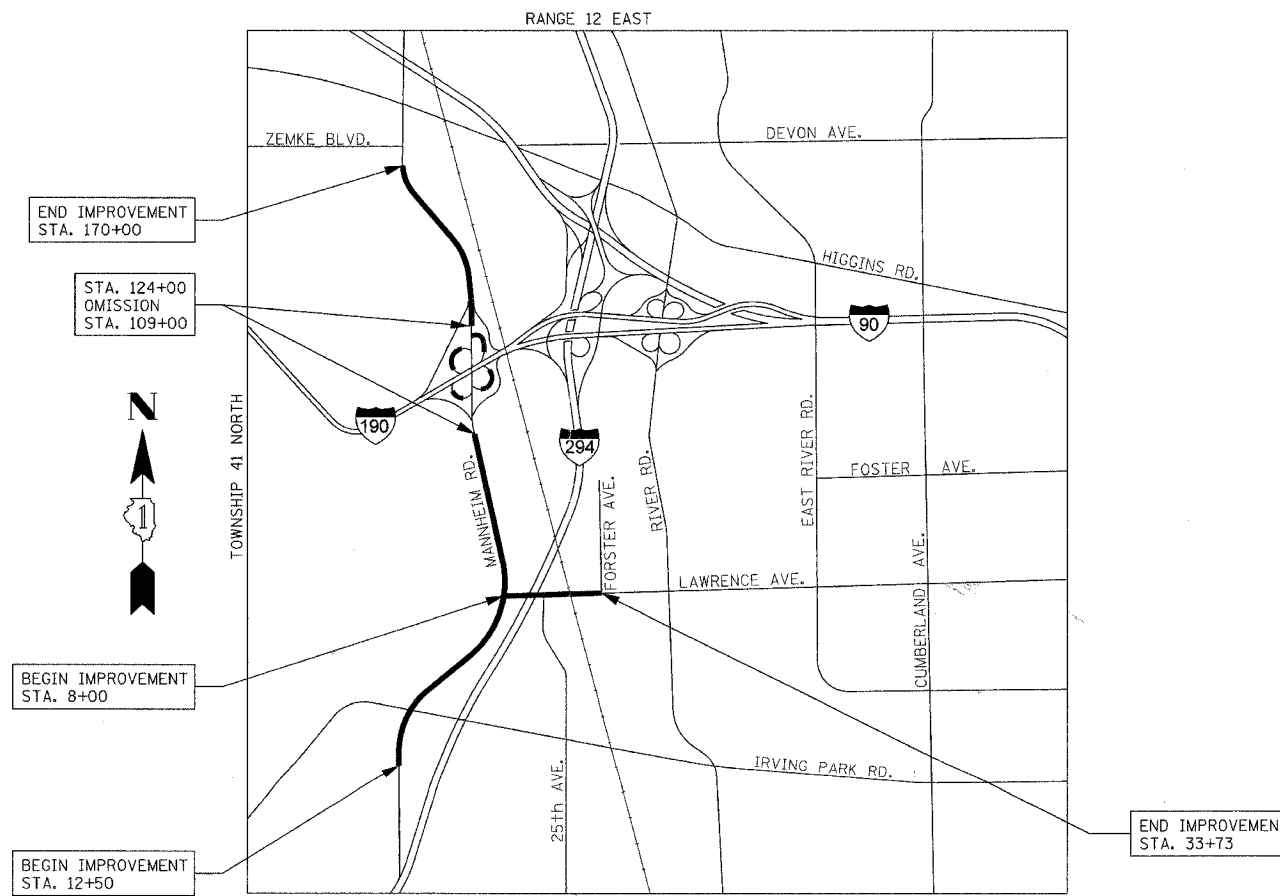
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

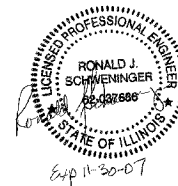
CONTRACT NO. 60D05



LOCATION OF SECTION INDICATED TRUS: - [shaded area]



US 12/45 MANNHEIM RD: GROSS LENGTH OF IMPROVEMENT: 18,673 FT (3.537 MILES)
NET LENGTH OF IMPROVEMENT: 17,173 FT (3.252 MILES)
LAWRENCE AVE: GROSS & NET LENGTH OF IMPROVEMENT: 2,573 FT (0.488 MILES)



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED April 9, 2007

Diane O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

May 11, 2007
Eric E. Harshbarger
ENGINEER OF DESIGN AND ENVIRONMENT

May 11, 2007
Milton R. See, P.E.
DIRECTOR, DIVISION OF HIGHWAYS

PRINTED BY THE AUTHORITY OF
THE STATE OF ILLINOIS

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
ENGINEERS & SCIENTISTS
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0112

DISTRICT ONE PLAN PREPARATION ENGINEER: KEN ENG (847) 705-4247

CONTRACT NO. 60D05

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INDEX OF SHEETS

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- 2 INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
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- 32 DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING

STATE STANDARDS

| STD. NO. | DESCRIPTION |
|-----------|---|
| 000001-04 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 442201-02 | CLASS C AND D PATCHES |
| 482011-02 | HMA SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS |
| 604001-02 | FRAME AND LIDS, TYPE 1 |
| 604086-01 | FRAME AND GRATE, TYPE 23 |
| 604091-01 | FRAME AND GRATE, TYPE 24 |
| 606001-03 | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER |
| 630001-07 | STEEL PLATE BEAM GUARDRAIL |
| 635006-02 | REFLECTOR AND TERMINAL PLACEMENT |
| 635011-01 | REFLECTOR MARKER AND MOUNTING DETAILS |
| 701411-03 | LANE CLOSURE, MULTI LANE AT ENTRANCE OR EXIT RAMP FOR SPEEDS ≥ 45 MPH |
| 701422-01 | LANE CLOSURE, MULTILANE FOR SPEEDS ≥ 45 MPH TO 55 MPH |
| 701426-02 | LANE CLOSURE, MULTI LANE, INTERMITTENT OR MOVING OPERATIONS, FOR SPEEDS ≥ 45 MPH |
| 701606-04 | URBAN LANE CLOSURE, MULTI LANE, 2W WITH MOUNTABLE MEDIUM |
| 701701-04 | URBAN LANE CLOSURE, MULTI LANE INTERSECTION |
| 702001-06 | TRAFFIC CONTROL DEVICES |
| 780001-01 | TYPICAL PAVEMENT MARKINGS |
| 781001-02 | TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS |

GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 800-892-0123 OR "CUAN" (CHICAGO UTILITY ALERT NETWORK), 312-744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED).
2. 3 METER (10 FEET) TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB & GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTERS AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF CHICAGO.
4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
5. BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED - ONE (1) WEIGHTED SANDBAG ACROSS EACH BOTTOM RAIL.
6. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
7. ON STATE STANDARDS 482001 AND 483001 AGGREGATE SUBGRADE 300 MM (12") SHALL BE USED AS THE IMPROVED SUBGRADE. THE ADDITIONAL THICKNESS OF AGGREGATE SUBGRADE UNDER THE SHOULDER SHALL BE INCLUDED IN THE COST PER SQUARE METER (SQ YARD) OF "AGGREGATE SUBGRADE 300 MM (12)".
8. ALL STORM SEWER CONNECTIONS WITH PIPES 675 MM (27 INCHES) DIAMETER AND SMALLER SHALL BE MADE WITH PRECAST "TEE" OR "WYE" PIPES. FOR PROPOSED STORM SEWER PIPES LARGER THAN 675 MM (27 INCHES) DIAMETER, OPENINGS OF THE SPECIFIED DIAMETER SHALL BE MADE IN THE PIPE AT THE TIME IT IS MANUFACTURED. PRECAST "TEE" AND "WYE" PIPE CONNECTIONS FOR PROPOSED STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST FOR THE STORM SEWERS.
9. USE NO. 25 (#8) EPOXY-COATED TIE BARS CONFORMING TO ART. 1006.10 (B)(2) OF THE STANDARD SPECIFICATIONS FOR LONGITUDINAL CONSTRUCTION JOINT GROUTED-IN-PLACE TIE BAR AS SHOWN ON STATE STANDARD 420001 AND FOR TIEING PC CONCRETE WIDENING TO EXISTING CONCRETE PAVEMENT AS SHOWN ON THE PLANS. THE TIE BARS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PAVEMENT ITEMS BEING CONSTRUCTED.
10. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 40 MM (1 1/2 INCHES) WHERE THE SPEED LIMIT IS 80 KM/H (45 MPH) OR LESS AND 25 MM (1 INCH) WHERE THE SPEED LIMIT IS GREATER THAN 80 KM/H (45 MPH). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 75 MM (3 INCHES) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
11. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND BITUMINOUS TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
12. FOR PAVEMENT MARKING, REFER TO DISTRICT ONE TYPICAL MARKINGS FOR DETAILS NOT SHOWN.
13. MATCH EXISTING PAVEMENT MARKINGS AT PROJECT AND OMISSION LIMITS.
14. THE CONTRACTOR SHALL SAW CUT PAVEMENT PRIOR TO REMOVING PAVEMENT FOR PATCHING. THE COST FOR SAW CUTTING WILL NOT BE PAID FOR SEPARATELY BUT INCLUDED IN THE COST OF CLASS D PATCHES OF TYPE SPECIFIED.

HOT MIX ASPHALT MIXTURE REQUIREMENTS

| DESCRIPTION | AC TYPE | AIR VOIDS | MIX TYPE |
|---|---------------------|--------------|-------------------------------------|
| POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 | SBS/SBR PG 70-22 | 4% @ 90 GYR. | SAME |
| POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL4.75, N50 | SBS/SBR PG 76-28/22 | 4% @ 50 GYR. | SAME |
| CLASS D PATCHES * | PG 64-22 / 58-22 | 4% @ 70 GYR. | HMA BINDER IL 19 mm |
| HOT-MIX ASPHALT REPLACEMENT OVER PATCHES * | PG 64-22 / 58-22 | 4% @ 70 GYR. | HMA BINDER IL 19 mm |
| HOT-MIX ASPHALT SHOULDERS | PG 64-22 | 4% @ 70 GYR. | HMA SURFACE COURSE, MIX "D", N70 |

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 Lbs/SqYd/in
* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER SHALL BE PG 58-22

| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION INDEX OF SHEETS, STATE STANDARDS, GENERAL NOTES AND HOT MIX ASPHALT MIXTURE REQUIREMENTS |
|-----------|------|---|
| NAME | DATE | |
| | | FAP 330 (US 12/45) FAU 1362 (LAWRENCE AVENUE) SCALE: DRAWN BY: DATE: CHECKED BY: |
| | | |
| | | |
| | | |
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GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
CHICAGO, ILLINOIS


SUMMARY OF QUANTITIES

CONTRACT NO. 60D05

| | | | | |
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| F.A. ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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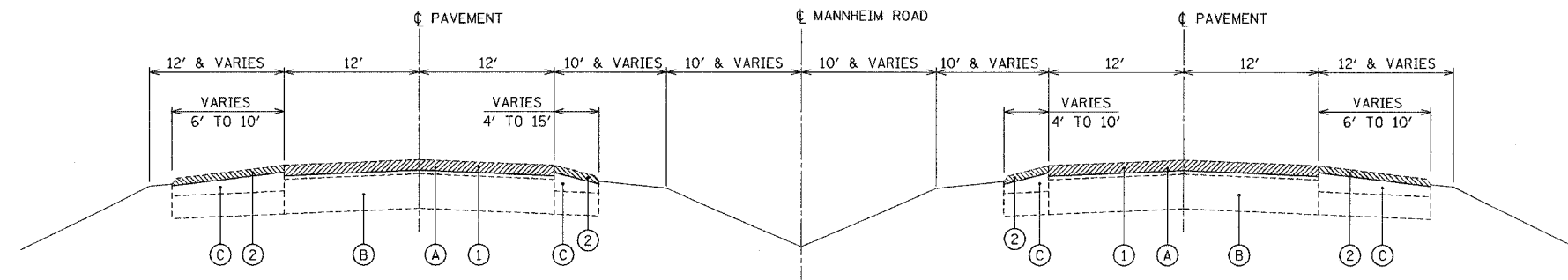
| ENGLISH | PAY ITEM DESCRIPTION | UNIT | FAP 330 FAU 1362 | | |
|------------|--|--------|---------------------------------|--------------------|----------------------|
| | | | URBAN TOTAL QUANTITY 100% STATE | 1000 MANNHEIM ROAD | 1000 LAWRENCE AVENUE |
| 20200600 | EXCAVATING AND GRADING EXISTING SHOULDERS | UNIT | 534 | 534 | |
| 40600200 | BITUMINOUS MATERIALS (PRIME COAT) | TON | 149 | 138 | 11 |
| 40600300 | AGGREGATE (PRIME COAT) | TON | 679 | 624 | 55 |
| 40600400 | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS | TON | 68 | 62 | 6 |
| 40603595 | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 | TON | 11,921 | 10,577 | 1,344 |
| 40600895 | CONSTRUCTING TEST STRIP | EACH | 4 | 2 | 2 |
| 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | SQ YD | 825 | 608 | 217 |
| 40600990 | TEMPORARY RAMP | SQ YD | 558 | 414 | 144 |
| 40601005 | HOT-MIX ASPHALT REPLACEMENT OVER PATCHES | TON | 1,660 | 1,270 | 390 |
| 42001300 | PROTECTIVE COAT | SQ YD | 527 | 342 | 185 |
| 44000159 | HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2" | SQ YD | 121,639 | 107,927 | 13,712 |
| 44001700 | COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT | FOOT | 1,835 | 1,025 | 810 |
| 44002206 | HOT-MIX ASPHALT REMOVAL OVER PATCHES, 1 1/2" | SQ YD | 4,660 | | 4,660 |
| 44002214 | HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3 1/2" | SQ YD | 6,500 | 6,500 | |
| 44201753 | CLASS D PATCHES, TYPE II, 9 INCH | SQ YD | 75 | | 75 |
| 44201757 | CLASS D PATCHES, TYPE III, 9 INCH | SQ YD | 20 | | 20 |
| 44201759 | CLASS D PATCHES, TYPE IV, 9 INCH | SQ YD | 3,990 | | 3,990 |
| 44201765 | CLASS D PATCHES, TYPE II, 10 INCH | SQ YD | 3,900 | 3,900 | |
| 44201769 | CLASS D PATCHES, TYPE III, 10 INCH | SQ YD | 360 | 360 | |
| 44201771 | CLASS D PATCHES, TYPE IV, 10 INCH | SQ YD | 1,438 | 1,438 | |
| 44000155 | HOT-MIX ASPHALT SURFACE REMOVAL 1 1/2" | SQ YD | 48,041 | 48,041 | |
| 48102100 | AGGREGATE WEDGE SHOULDER, TYPE B | TON | 748 | 748 | |
| 48203100 | HOT-MIX ASPHALT SHOULDERS | TON | 4,035 | 4,035 | |
| 55039700 | STORM SEWERS TO BE CLEANED | FOOT | 800 | | 800 |
| 60250200 | CATCH BASINS TO BE ADJUSTED | EACH | 9 | 0 | 9 |
| 60251900 | CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 24 FRAME AND GRATE | EACH | 38 | 38 | |
| 60252800 | CATCH BASINS TO BE RECONSTRUCTED | EACH | 4 | 0 | 4 |
| 60300305 | FRAMES AND LIDS TO BE ADJUSTED | EACH | 16 | | 16 |
| 60300310 | FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) | EACH | 51 | 26 | 25 |
| 60404940 | FRAMES AND GRATE, TYPE 23 | EACH | 8 | | 8 |
| 60406000 | FRAMES AND LIDS, TYPE 1, OPEN LID | EACH | 10 | | 10 |
| 60406100 | FRAMES AND LIDS, TYPE 1, CLOSED LID | EACH | 4 | | 4 |
| * 63100167 | TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT) | EACH | 5 | 5 | |
| 63200310 | GUARDRAIL REMOVAL | FOOT | 225 | 225 | |
| 67000200 | ENGINEER'S FIELD OFFICE, TYPE A | EACH | 4 | 3 | 1 |
| 67100100 | MOBILIZATION | L SUM | 1 | 0.8 | 0.2 |
| 70100315 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701422 | EACH | 1 | 1 | |
| 70300210 | TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS | SQ FT | 2330 | 2038 | 292 |
| 70102625 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701606 | L SUM | 1 | | 1 |
| 70102635 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701 | L SUM | 1 | 1 | |
| 70106800 | CHANGEABLE MESSAGE SIGN | CAL MO | 16 | 16 | |
| 70300100 | SHORT-TERM PAVEMENT MARKING | FOOT | 23,858 | 22,408 | 1,450 |
| * 78000100 | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS | SQ FT | 1,165 | 1,019 | 146 |
| * 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" | FOOT | 68,997 | 62,540 | 6,457 |
| * 78000400 | THERMOPLASTIC PAVEMENT MARKING - LINE 6" | FOOT | 5,664 | 5,264 | 400 |
| * 78000500 | THERMOPLASTIC PAVEMENT MARKING - LINE 8" | FOOT | 11,179 | 11,179 | |
| * 78000600 | THERMOPLASTIC PAVEMENT MARKING - LINE 12" | FOOT | 2,360 | 2,360 | |
| * 78000650 | THERMOPLASTIC PAVEMENT MARKING - LINE 24" | FOOT | 482 | 394 | 88 |
| * 78100100 | RAISED REFLECTIVE PAVEMENT MARKER | EACH | 1,372 | 1,372 | |
| * 78201000 | TERMINAL MARKER - DIRECT APPLIED | EACH | 5 | 5 | |
| 78300200 | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL | EACH | 1,372 | 1,372 | |
| * 88600600 | DETECTOR LOOP REPLACEMENT | FOOT | 2,567 | 1,782 | 785 |
| X0322256 | TEMPORARY INFORMATION SIGNING | SQ FT | 154 | 103 | 51 |
| X4067107 | POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 | TON | 5,109 | 4,533 | 576 |
| X7011015 | TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS) | L SUM | 1 | 1 | |
| Z0018500 | DRAINAGE STRUCTURES TO BE CLEANED | EACH | 47 | | 47 |
| Z0048665 | RAILROAD PROTECTIVE LIABILITY INSURANCE | L SUM | 1 | | 1 |
| 70300220 | TEMPORARY PAVEMENT MARKING - LINE 4" | FOOT | 137,994 | 125,080 | 12,914 |
| 70300240 | TEMPORARY PAVEMENT MARKING - LINE 6" | FOOT | 11,328 | 10,528 | 800 |
| 70300250 | TEMPORARY PAVEMENT MARKING - LINE 8" | FOOT | 22,358 | 22,358 | |
| 70300260 | TEMPORARY PAVEMENT MARKING - LINE 12" | FOOT | 4,710 | 4,720 | |
| 70300280 | TEMPORARY PAVEMENT MARKING - LINE 24" | FOOT | 964 | 788 | 176 |

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| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES FAP 330 (US 12/45) FAU 1362 (LAWRENCE AVENUE) SCALE: DRAWN BY: DATE: CHECKED BY: |
| NAME | DATE | |
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|  GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC. CHICAGO, ILLINOIS | | |

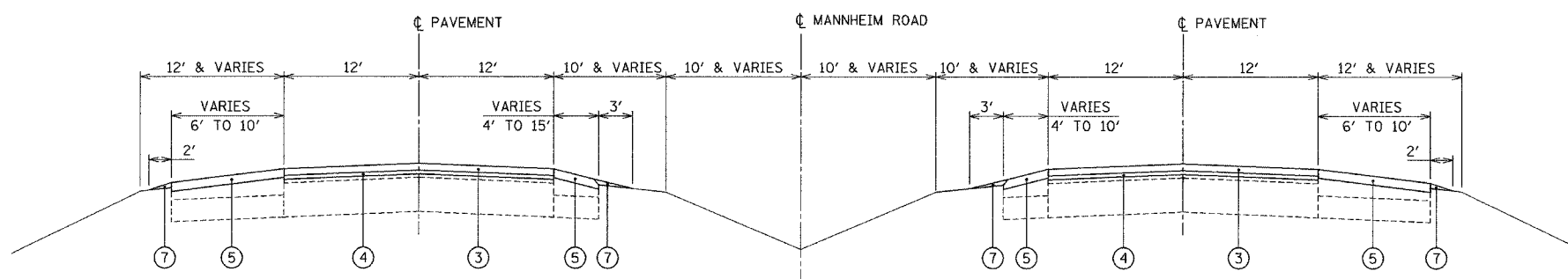
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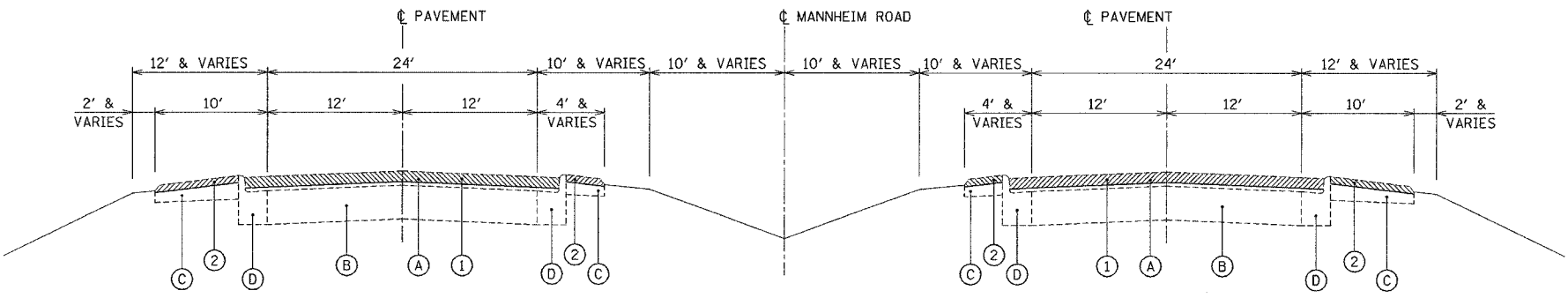
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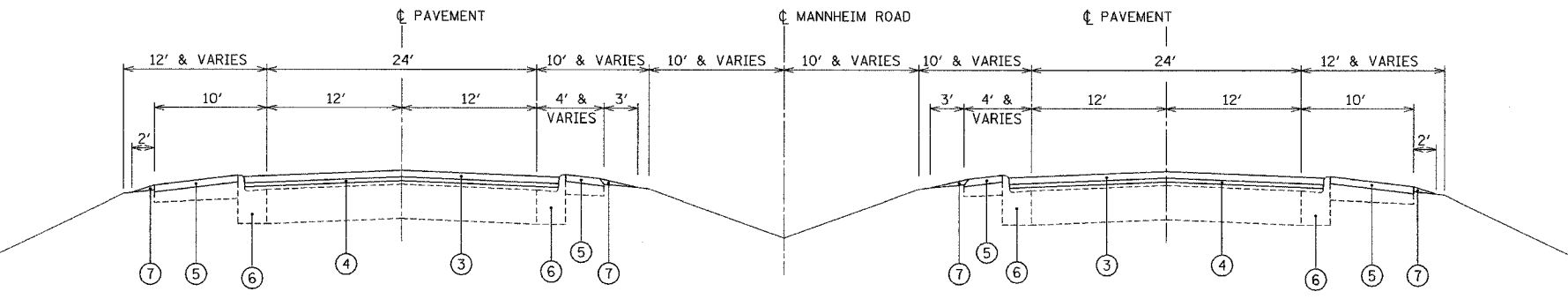
EXISTING TYPICAL SECTION WITH BITUMINOUS SHOULDER
MANNHEIM ROAD



PROPOSED TYPICAL SECTION WITH BITUMINOUS SHOULDER
MANNHEIM ROAD



EXISTING TYPICAL SECTION WITH COMB. CONCRETE CURB & GUTTER
MANNHEIM ROAD



PROPOSED TYPICAL SECTION WITH COMB. CONCRETE CURB & GUTTER
MANNHEIM ROAD

LEGEND:

EXISTING CONDITIONS:

- (A) HOT-MIX ASPHALT SURFACE AND BINDER COURSE, (6" AVE.)
- (B) PORTLAND CEMENT CONCRETE PAVEMENT, 10"
- (C) HOT-MIX ASPHALT SHOULDERS, 3 1/2 " TO 5 1/2 "
- (D) COMBINATION CONCRETE CURB & GUTTER

PROPOSED CONDITIONS:

- (1) HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- (2) HOT-MIX ASPHALT SURFACE REMOVAL (1 1/2")
- (3) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, (1 3/4")
- (4) POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, (3/4")
- (5) HOT-MIX ASPHALT SHOULDERS, (1 1/2") (HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70)
- (6) COMBINATION CONCRETE CURB & GUTTER REMOVAL AND REPLACEMENT (AS DETERMINED BY THE ENGINEER)
- (7) AGGREGATE WEDGE SHOULDER, TYPE B

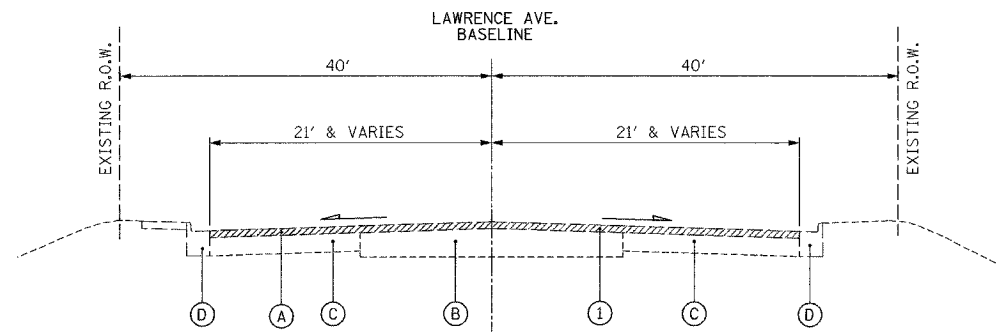
| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION |
|-----------|------|--|
| NAME | DATE | |
| | | <p>TYPICAL SECTION</p> <p>FAP 330 (US 12/45) MANNHEIM ROAD</p> <p>SCALE: _____ DATE: _____</p> <p>DRAWN BY: _____ CHECKED BY: _____</p> <p>GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC. CHICAGO, ILLINOIS</p> |
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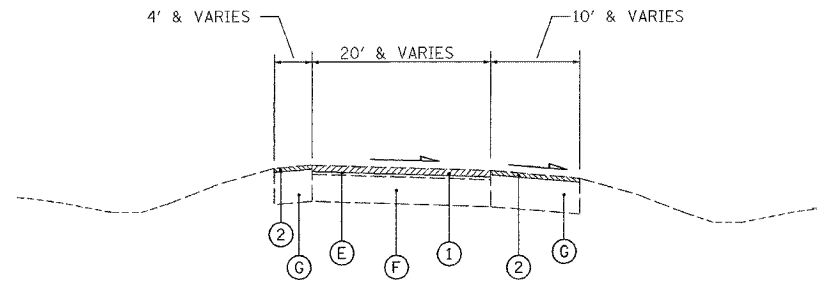
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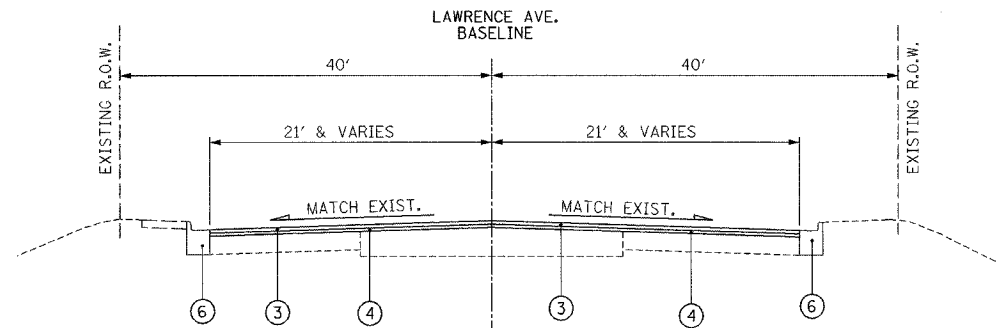
* 2007-029-RS
** FAP 330, FAU 1362



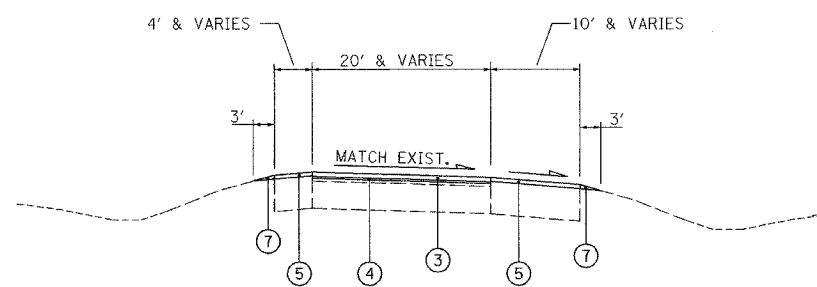
LAWRENCE AVENUE - EXISTING TYPICAL SECTION
STA. 9+00 TO STA. 33+73



EXISTING TYPICAL RAMP SECTION



LAWRENCE AVENUE - PROPOSED TYPICAL SECTION
STA. 9+00 TO STA. 33+73



PROPOSED TYPICAL RAMP SECTION

LEGEND:

EXISTING CONDITIONS:

- (A) HOT-MIX ASPHALT SURFACE AND BINDER COURSE, (4" AVE.)
- (B) PORTLAND CEMENT CONCRETE PAVEMENT, 9"
- (C) PORTLAND CEMENT CONCRETE BASE COURSE, 9"
- (D) COMBINATION CONCRETE CURB AND GUTTER
- (E) HOT-MIX ASPHALT SURFACE AND BINDER COURSE, (3 1/4" AVE.)
- (F) PORTLAND CEMENT CONCRETE PAVEMENT, 10"
- (G) HOT-MIX ASPHALT SHOULDERS, 10"

PROPOSED CONDITIONS:

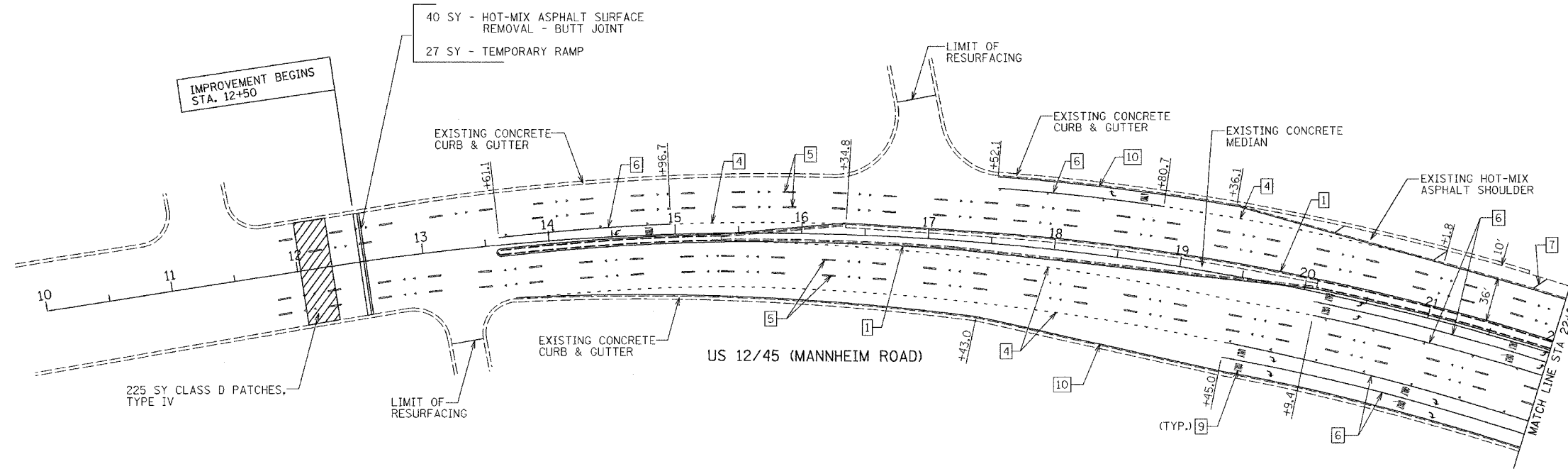
- (1) HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- (2) HOT-MIX ASPHALT SURFACE REMOVAL (1 1/2")
- (3) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, (1 3/4")
- (4) POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, (3/4")
- (5) HOT-MIX ASPHALT SHOULDERS, (1 1/2") (HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70)
- (6) COMBINATION CONCRETE CURB & GUTTER REMOVAL AND REPLACEMENT (AS DETERMINED BY THE ENGINEER)
- (7) AGGREGATE WEDGE SHOULDER, TYPE B

| | | |
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| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION |
| NAME | DATE | |
| | | TYPICAL SECTION LAWRENCE AVENUE AND RAMPS |
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| | | SCALE: DRAWN BY: |
| | | DATE: CHECKED BY: |
| | | GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC. CHICAGO, ILLINOIS |

Rev.

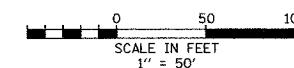
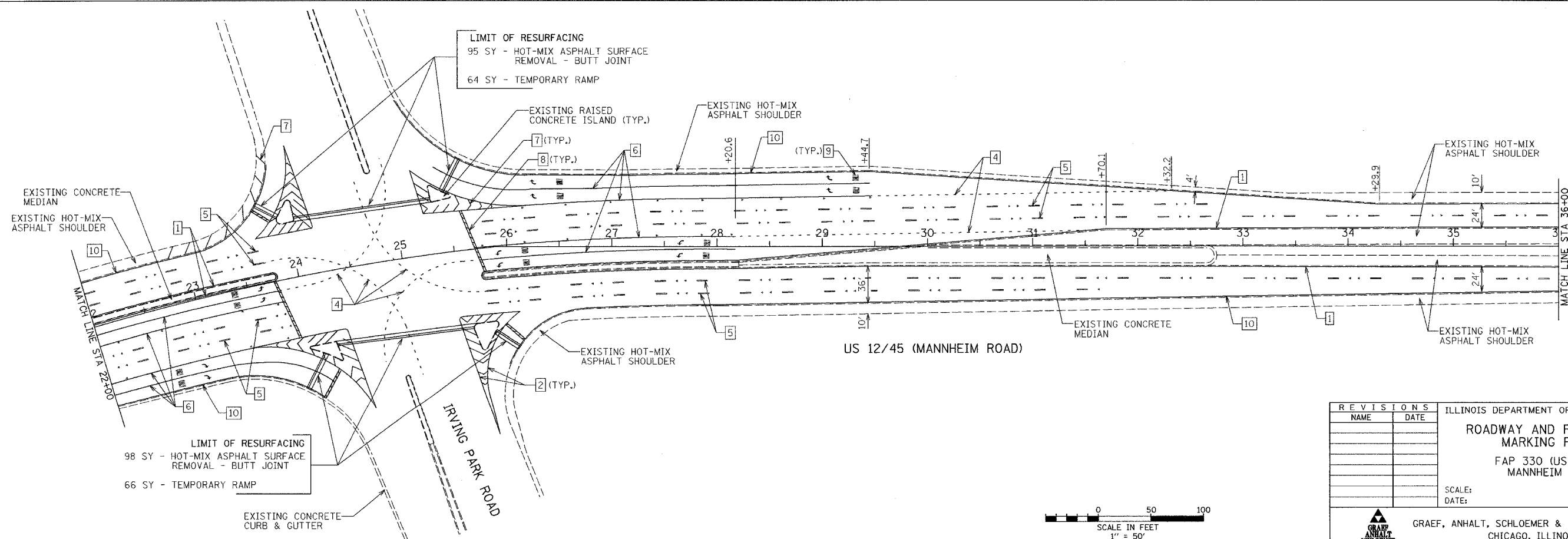
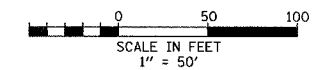
CONTRACT NO. 60D05

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| F.A. ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** | * | COOK | 32 | 6 |
| STA. TO STA. | | FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT | | |
| * 2007-029-RS | | | | |
| ** FAP 330, FAU 1362 | | | | |



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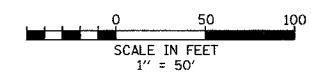
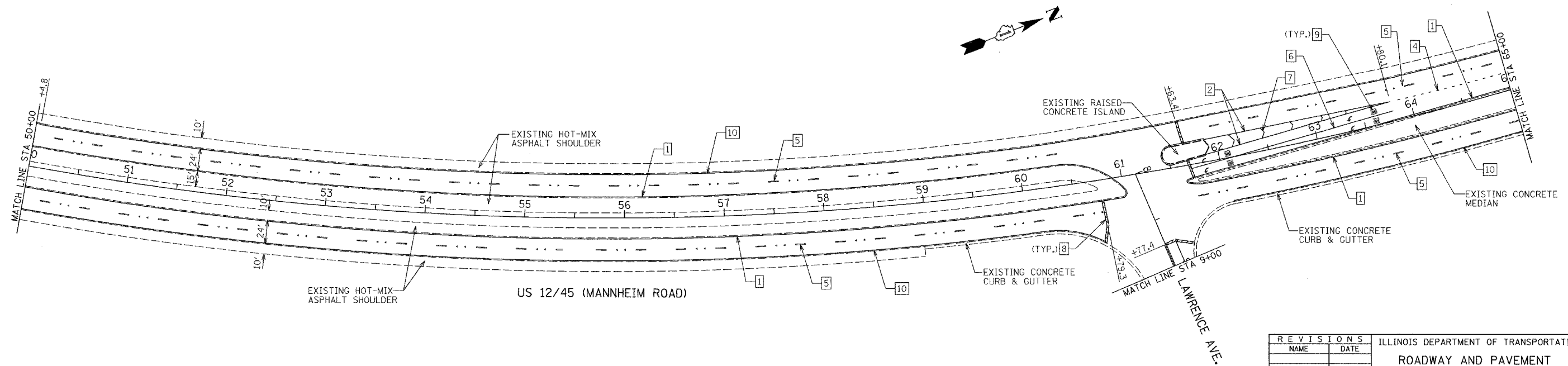
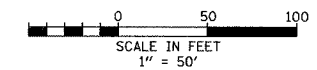
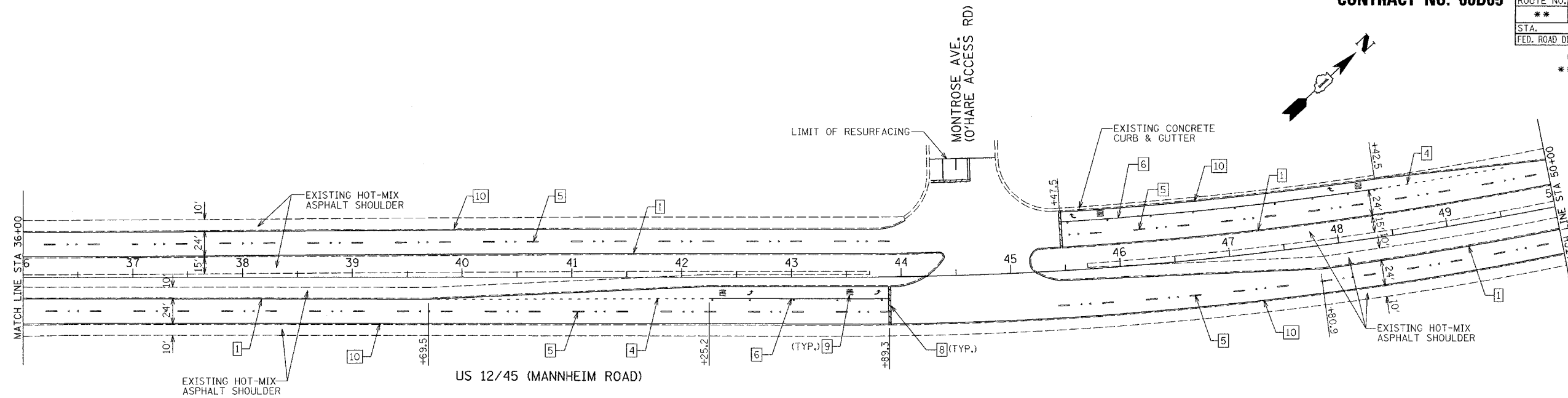
- | | |
|---|---|
| 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID EDGE LINE) | 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) |
| 2 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE SOLID LINE) | 7 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE DIAGONAL LINE) |
| 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE) | 8 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP LINES) |
| 4 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP) | 9 THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS (TYP.) |
| 5 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP W/ 2 CRYSTAL/OPAQUE RPM'S) | 10 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE SOLID EDGE LINE) |



| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION |
|-----------|------|---|
| NAME | DATE | |
| | | ROADWAY AND PAVEMENT MARKING PLANS FAP 330 (US 12/45) MANNHEIM ROAD |
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| | | SCALE: DRAWN BY: DATE: CHECKED BY: |
| | | GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC. CHICAGO, ILLINOIS |

CONTRACT NO. 60D05

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| F.A. ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** | * | COOK | 32 | 7 |
| STA. TO STA. | | ILLINOIS FED. AID PROJECT | | |
| FED. ROAD DIST. NO. | | * 2007-029-RS | | |
| | | ** FAP 330, FAU 1362 | | |



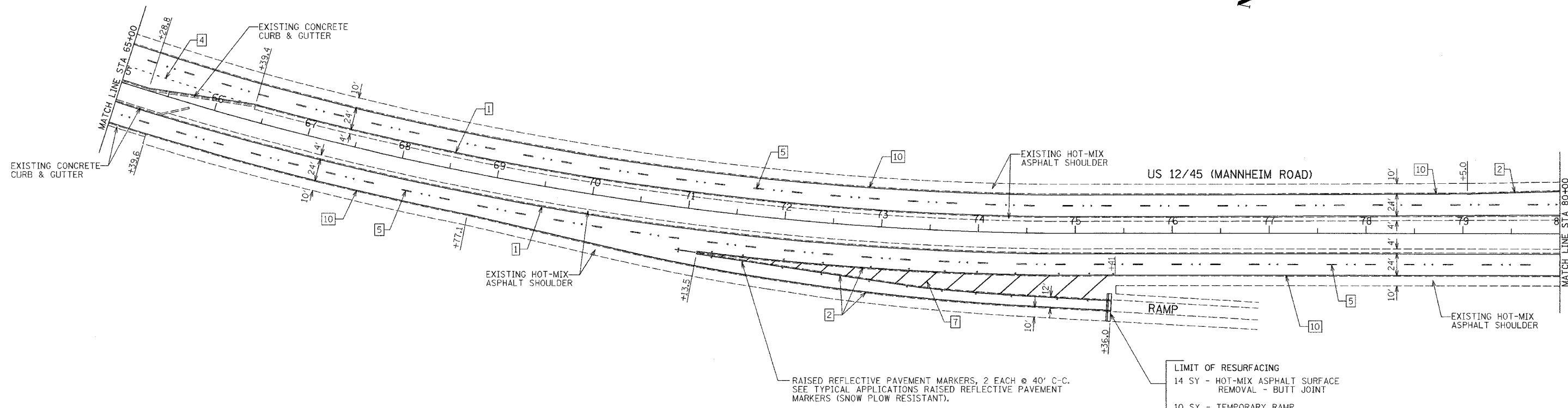
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|---|---|
| [1] THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID EDGE LINE) | [6] THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) |
| [2] THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE SOLID LINE) | [7] THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE DIAGONAL LINE) |
| [3] THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE) | [8] THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP LINES) |
| [4] THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP) | [9] THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS (TYP.) |
| [5] THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP W/ 2 CRYSTAL/OPAQUE RPM'S) | [10] THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE SOLID EDGE LINE) |

| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION ROADWAY AND PAVEMENT MARKING PLANS FAP 330 (US 12/45) MANNHEIM ROAD |
|-----------|------|---|
| NAME | DATE | |
| | | SCALE: _____ DATE: _____ DRAWN BY: _____ CHECKED BY: _____ GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC. CHICAGO, ILLINOIS |
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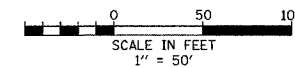
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| F.A. ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** | * | COOK | 32 | B |
| STA. TO STA. | | ILLINOIS FED. AID PROJECT | | |
| FED. ROAD DIST. NO. | | * 2007-029-RS | | |
| | | ** FAP 330, FAU 1362 | | |



LEGEND

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|---|---|
| 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID EDGE LINE) | 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) |
| 2 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE SOLID LINE) | 7 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE DIAGONAL LINE) |
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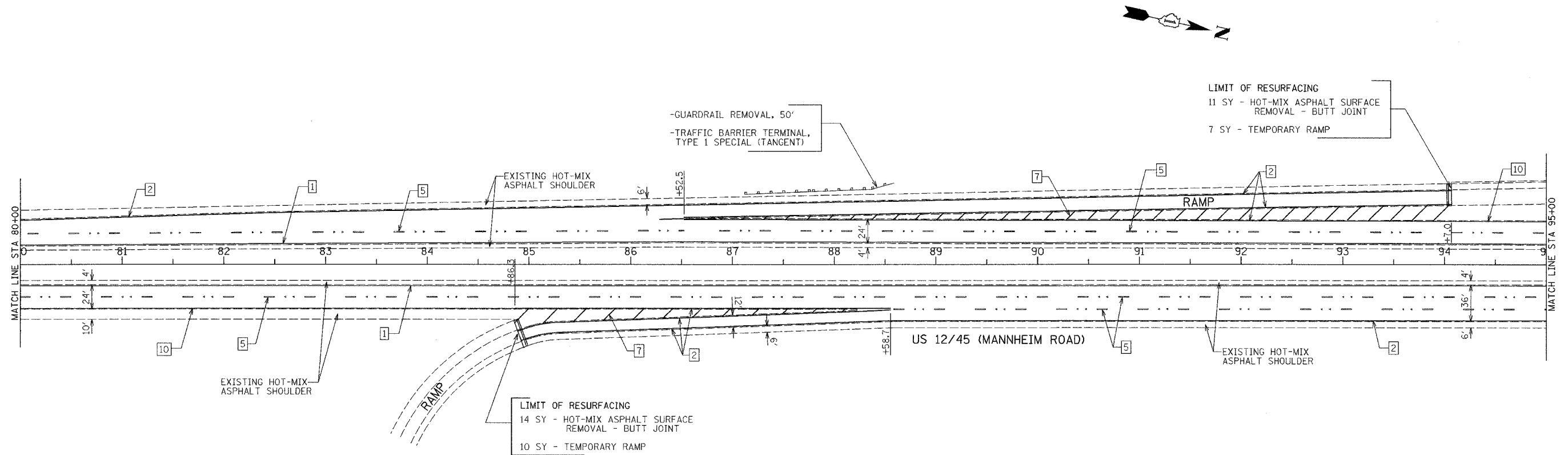


| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION ROADWAY AND PAVEMENT MARKING PLANS FAP 330 (US 12/45) MANNHEIM ROAD |
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| NAME | DATE | |
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GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
CHICAGO, ILLINOIS

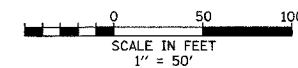
CONTRACT NO. 60D05

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| F.A. ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** | * | COOK | 32 | 9 |
| STA. TO STA. | | ILLINOIS FED. AID PROJECT | | |
| FED. ROAD DIST. NO. | | * 2007-029-RS ** FAP 330, FAU 1362 | | |



LEGEND

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|---|---|
| 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID EDGE LINE) | 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) |
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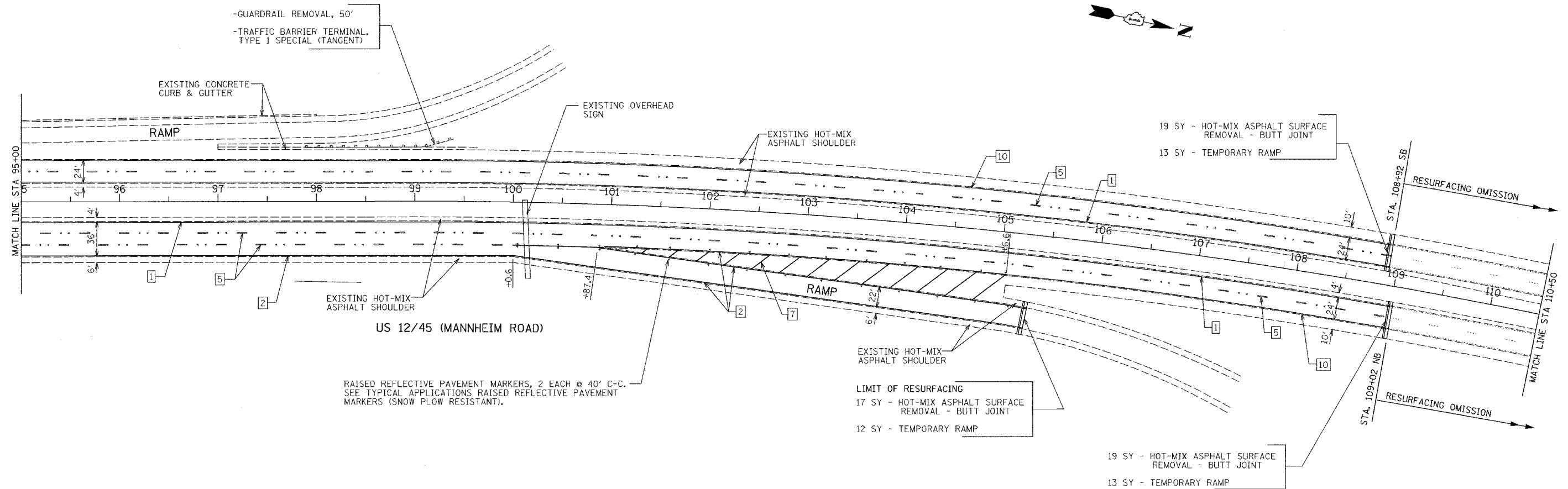


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| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION ROADWAY AND PAVEMENT MARKING PLANS FAP 330 (US 12/45) MANNHEIM ROAD |
| NAME | DATE | |
| | | SCALE: _____ DATE: _____ |
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| DRAWN BY: _____ CHECKED BY: _____ | | GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC. CHICAGO, ILLINOIS |
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CONTRACT NO. 60D05

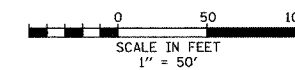
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| F.A. ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** | * | COOK | 32 | 10 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

* 2007-029-RS
** FAP 330, FAU 1362



LEGEND

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|---|---|
| 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID EDGE LINE) | 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) |
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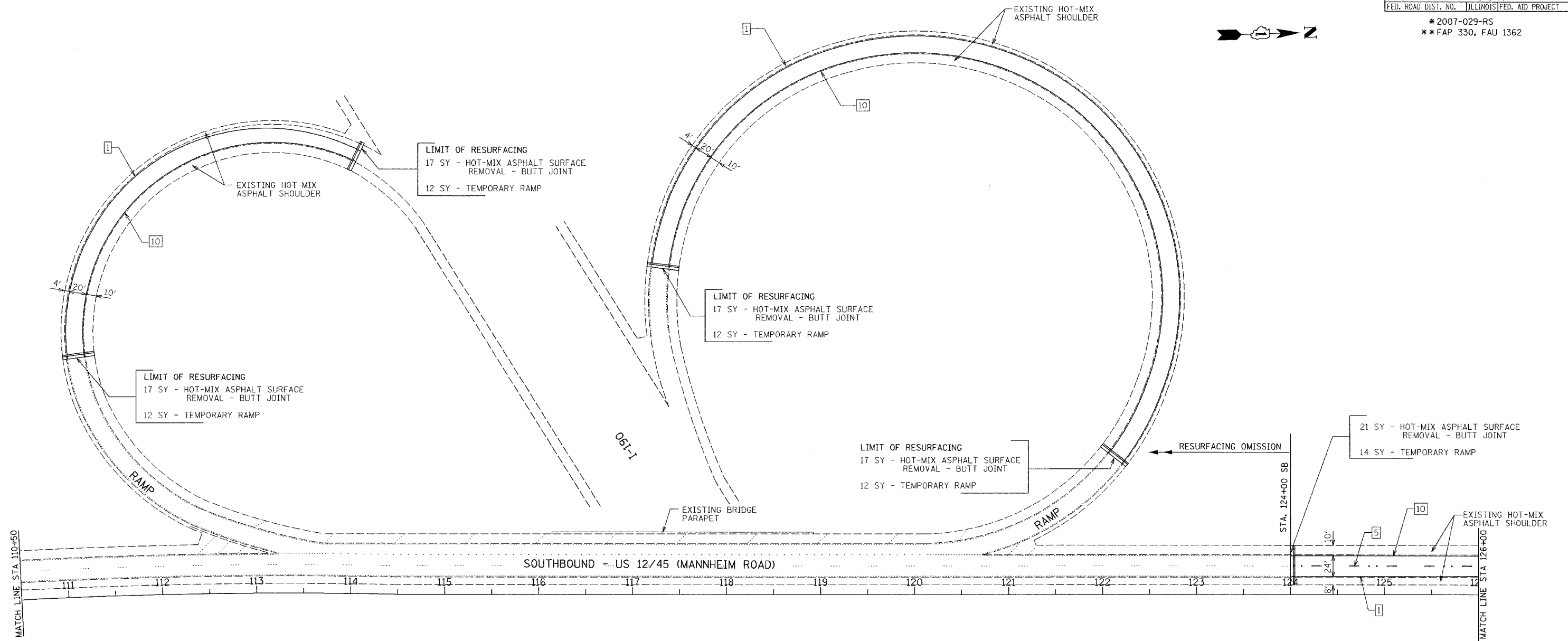


| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION |
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| NAME | DATE | |
| | | ROADWAY AND PAVEMENT MARKING PLANS FAP 330 (US 12/45) MANNHEIM ROAD SCALE: DATE: DRAWN BY: CHECKED BY: |
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CONTRACT NO. 60D05

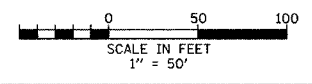
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| F.A. ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** | * | COOK | 32 | 11 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

* 2007-029-RS
** FAP 330, FAU 1362



LEGEND

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| [1] THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID EDGE LINE) | [6] THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) |
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| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION ROADWAY AND PAVEMENT MARKING PLANS FAP 330 (US 12/45) MANNHEIM ROAD |
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| NAME | DATE | |
| | | SCALE: _____ DRAWN BY: _____ DATE: _____ CHECKED BY: _____ |
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GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
CHICAGO, ILLINOIS

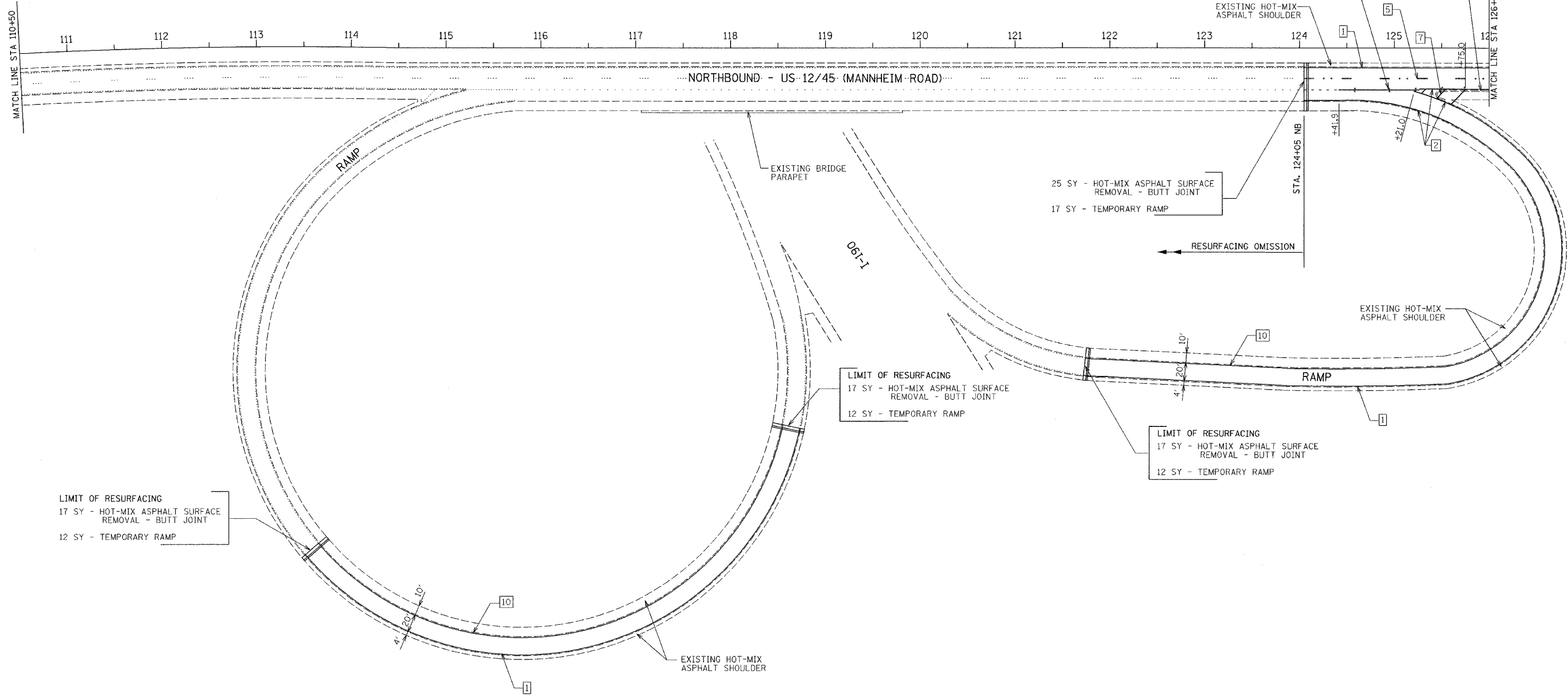
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| F.A. ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** | * | COOK | 32 | 12 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT | | |

* 2007-029-RS
** FAP 330, FAU 1362

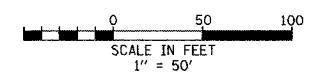


RAISED REFLECTIVE PAVEMENT MARKERS, 2 EACH @ 40' C-C.
SEE TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT).



LEGEND

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|---|---|
| 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID EDGE LINE) | 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) |
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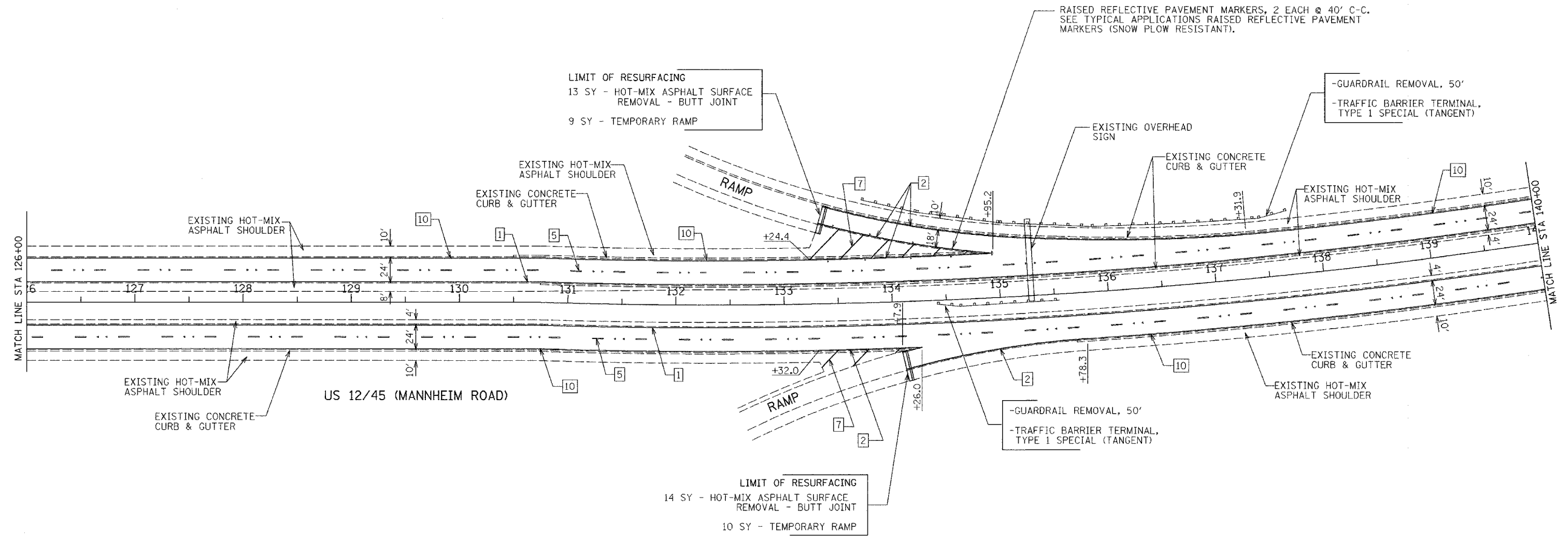
| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION ROADWAY AND PAVEMENT MARKING PLANS FAP 330 (US 12/45) MANNHEIM ROAD |
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| NAME | DATE | |
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GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
CHICAGO, ILLINOIS

CONTRACT NO. 60D05

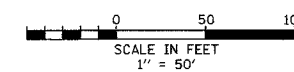
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| F.A. ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** | * | COOK | 32 | 13 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

*2007-029-RS
**FAP 330, FAU 1362



LEGEND

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|---|---|
| 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID EDGE LINE) | 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) |
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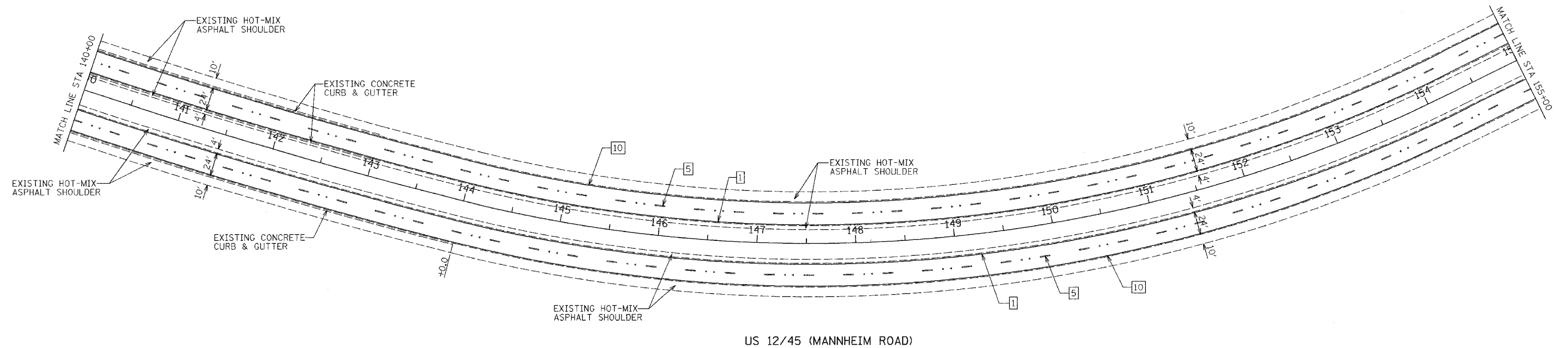
| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION ROADWAY AND PAVEMENT MARKING PLANS FAP 330 (US 12/45) MANNHEIM ROAD |
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GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
CHICAGO, ILLINOIS

CONTRACT NO. 60D05

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| F.A. ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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| STA. TO STA. | | ILLINOIS FED. AID PROJECT | | |

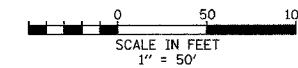
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** FAP 330, FAU 1362



US 12/45 (MANNHEIM ROAD)

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|---|---|
| 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID EDGE LINE) | 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) |
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| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION |
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| NAME | DATE | |
| | | ROADWAY AND PAVEMENT MARKING PLANS FAP 330 (US 12/45) MANNHEIM ROAD SCALE: _____ DRAWN BY: _____ DATE: _____ CHECKED BY: _____ |
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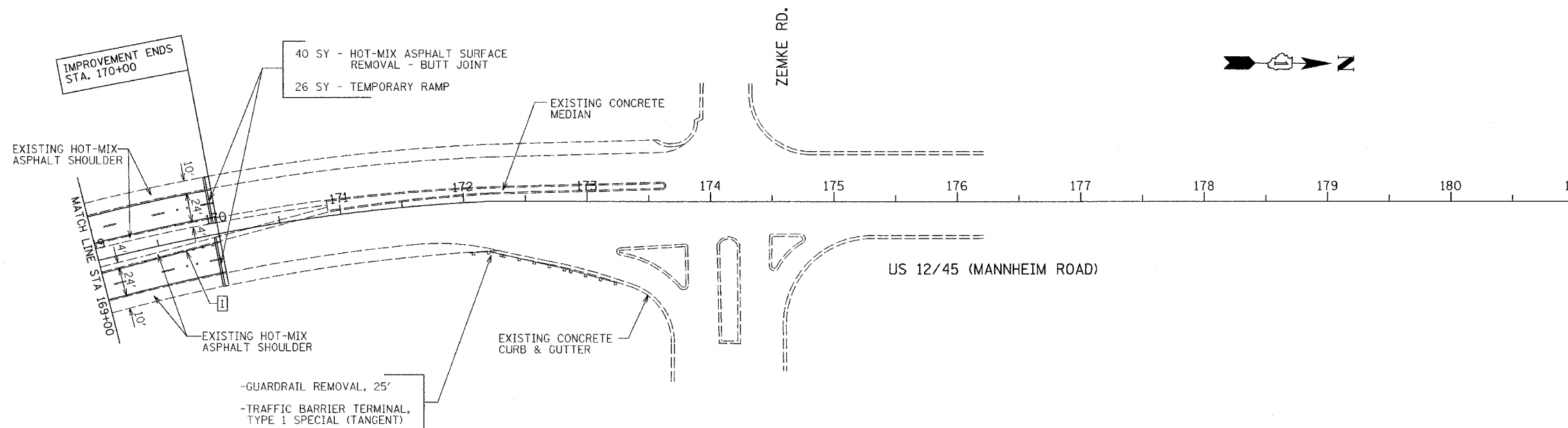
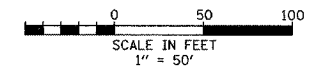
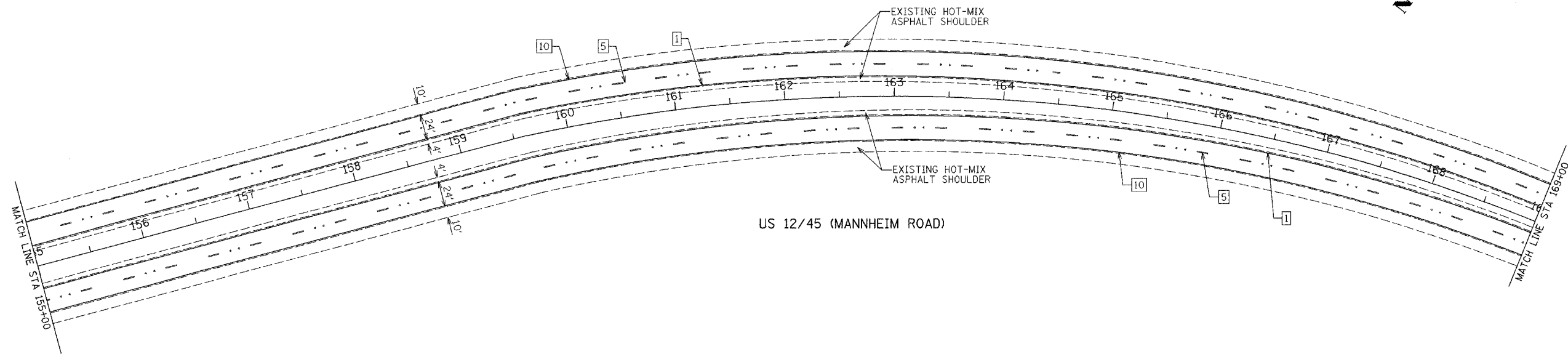


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CHICAGO, ILLINOIS

CONTRACT NO. 60D05

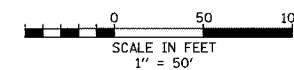
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| F.A. ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** | * | COOK | 32 | 15 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

* 2007-029-RS
** FAP 330, FAU 1362



LEGEND

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|---|---|
| 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID EDGE LINE) | 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) |
| 2 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE SOLID LINE) | 7 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE DIAGONAL LINE) |
| 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE) | 8 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP LINES) |
| 4 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP) | 9 THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS (TYP.) |
| 5 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP W/ 2 CRYSTAL/OPAQUE RPM'S) | 10 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE SOLID EDGE LINE) |

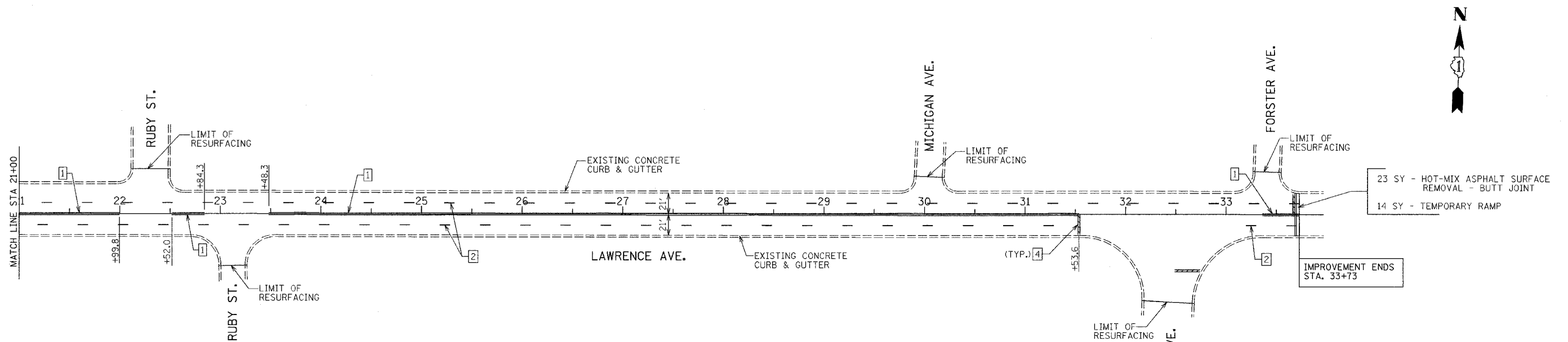
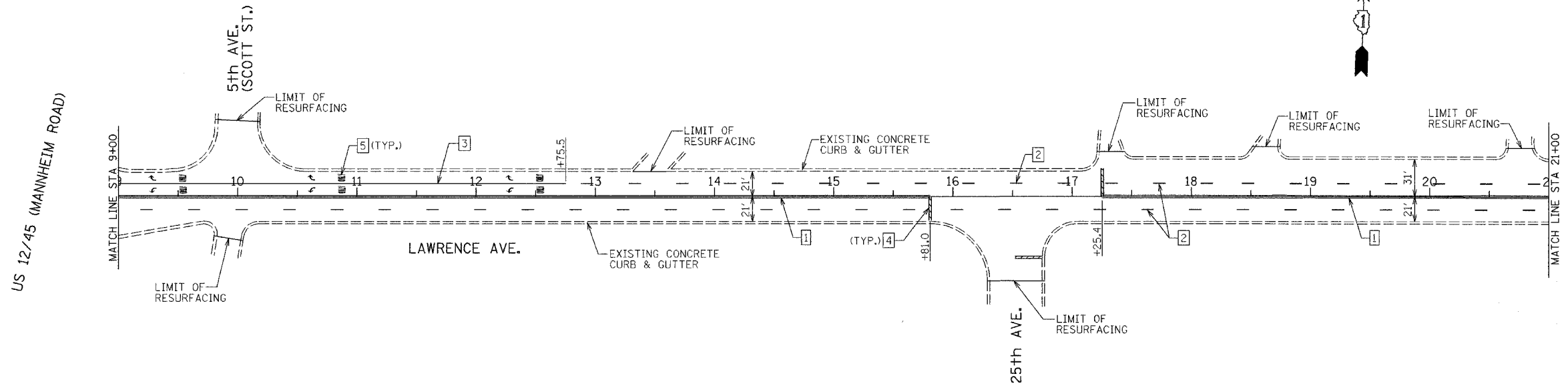


| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION |
|--------------|------|--|
| NAME | DATE | |
| | | ROADWAY AND PAVEMENT MARKING PLANS FAP 330 (US 12/45) MANNHEIM ROAD |
| | | |
| | | |
| | | |
| | | |
| SCALE: DATE: | | DRAWN BY: CHECKED BY: |
| | | GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC. CHICAGO, ILLINOIS |

CONTRACT NO. 60D05

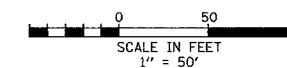
| | | | | |
|---------------------|----------|--------|------------------|-----------|
| F.A. ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** | * | COOK | 32 | 16 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS | | FED. AID PROJECT | |

*2007-029-RS
**FAP 330, FAU 1362



LEGEND

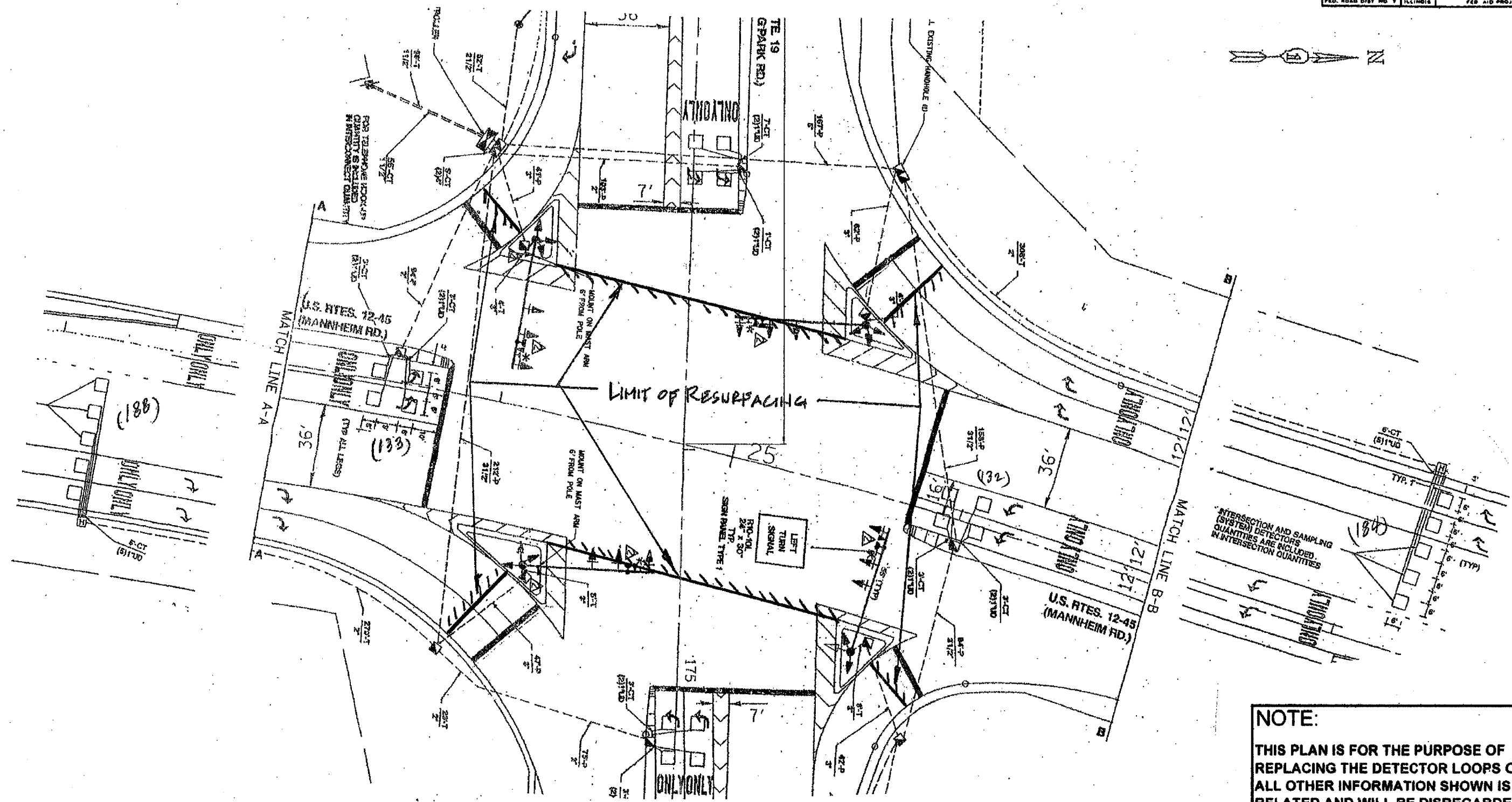
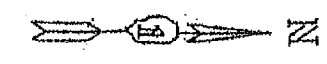
- 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE)
- 2 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP)
- 3 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE)
- 4 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP LINES)
- 5 THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS (TYP.)
- 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP)



| REVISIONS | | ILLINOIS DEPARTMENT OF TRANSPORTATION |
|-----------|------|---|
| NAME | DATE | |
| | | ROADWAY AND PAVEMENT MARKING PLANS |
| | | |
| | | |
| | | |
| | | |
| | | LAWRENCE AVENUE |
| | | SCALE: DRAWN BY: |
| | | DATE: CHECKED BY: |
| | | GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC. |
| | | CHICAGO, ILLINOIS |

C:\Users\p1001\Documents\2007-029-RS\60D05\16.dwg 04/11/2007 08:48:18 AM

| | | | |
|-------------------------------|--------|-----------------|-----------|
| SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | COOK | 32 | 17 |
| STA. | | TO STA. | |
| FED. ROAD DIST NO. 9 ILLINOIS | | FED AID PROJECT | |



REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN THE RESURFACING LIMITS)

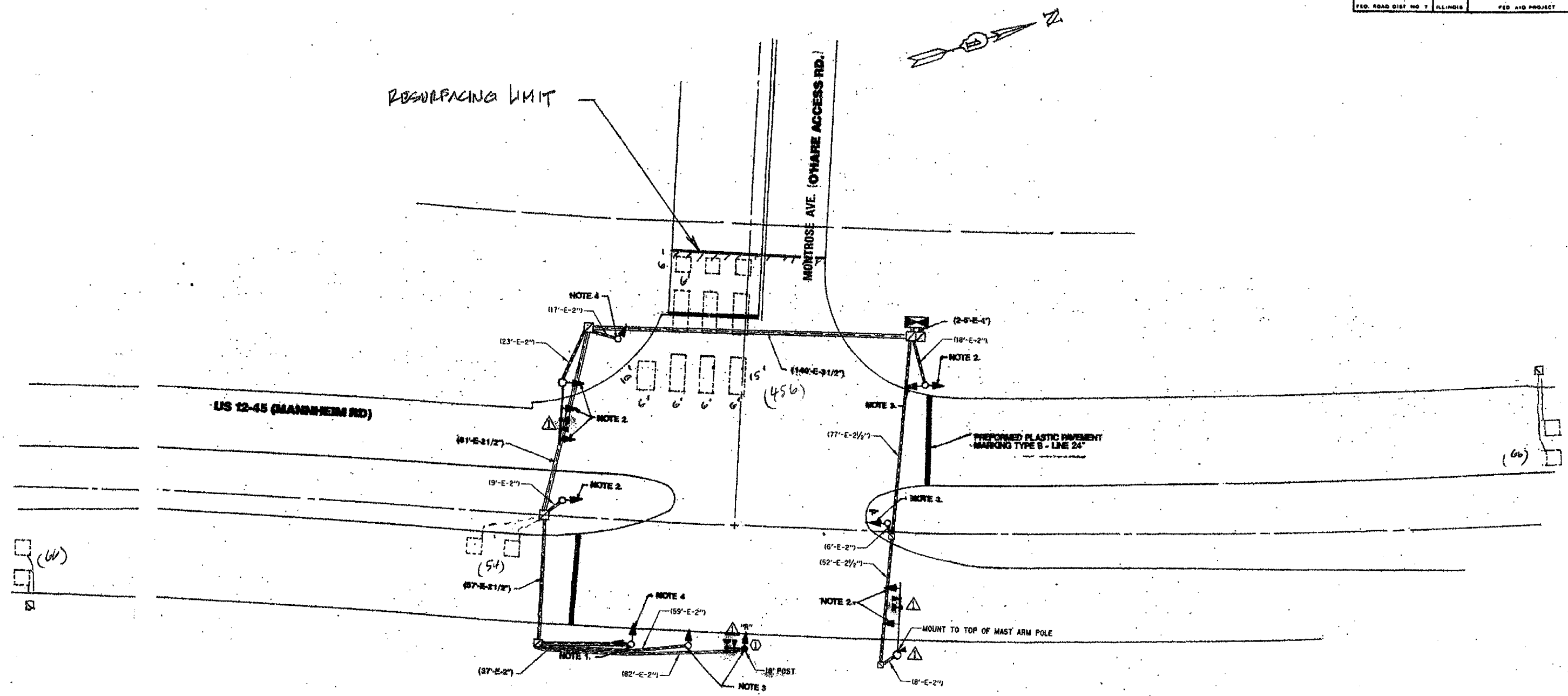
| CODE NO. | QUANTITY | UNIT | ITEM |
|----------|----------|------|---------------------------|
| 86600600 | 637 | Foot | Detector Loop Replacement |

| REVISIONS | |
|-----------|------|
| NAME | DATE |
| | |
| | |
| | |
| | |

NOTE:
THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOP REPLACEMENT
U.S. 12/45 (MANNHEIM RD.) @ ILL. 19
SCALE: NONE
DATE: MARCH 07
DRAWN BY: J.H.E.
DESIGNED BY: J.H.E.
CHECKED BY: D.A.D.

| SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|----------------------|--------|--------------|------------------|
| | COOK | 52 | 18 |
| STA. TO STA. | | | |
| FED. ROAD DIST NO. 1 | | ILLINOIS | FED. AID PROJECT |



NOTE:
 THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

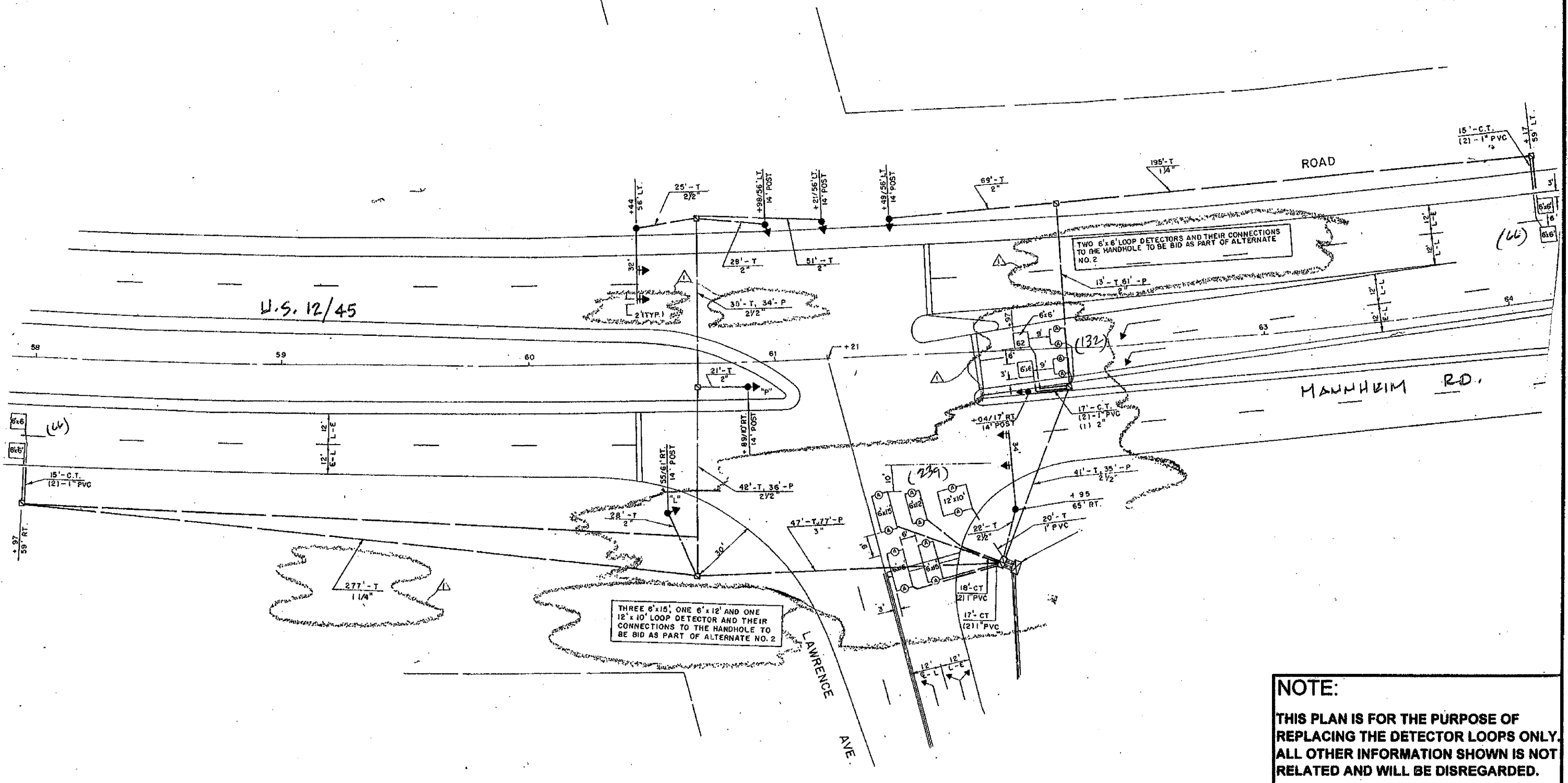
REPLACE ALL DETECTOR LOOPS AS SHOWN
 (WITHIN THE RESURFACING LIMITS)

| CODE NO. | QUANTITY | UNIT | ITEM |
|----------|----------|------|---------------------------|
| 86600600 | 642 | Foot | Detector Loop Replacement |

| REVISIONS | |
|-----------|------|
| NAME | DATE |
| | |
| | |
| | |
| | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOP REPLACEMENT
 U.S. 12/45 @ O'HARE ACCESS RD.
 SCALE: AS SHOWN
 DATE: MARCH 07
 DRAWN BY: J.H.E.
 DESIGNED BY: J.H.E.
 CHECKED BY: D.A.D.

| | | | |
|-------------------------------|--------|-----------------|-----------|
| SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | COOK | 32 | 13 |
| STA. TO STA. | | | |
| FED. ROAD DIST NO. 7 ILLINOIS | | FED AID PROJECT | |



REPLACE ALL DETECTOR LOOPS AS SHOWN
 (WITHIN THE RESURFACING LIMITS)

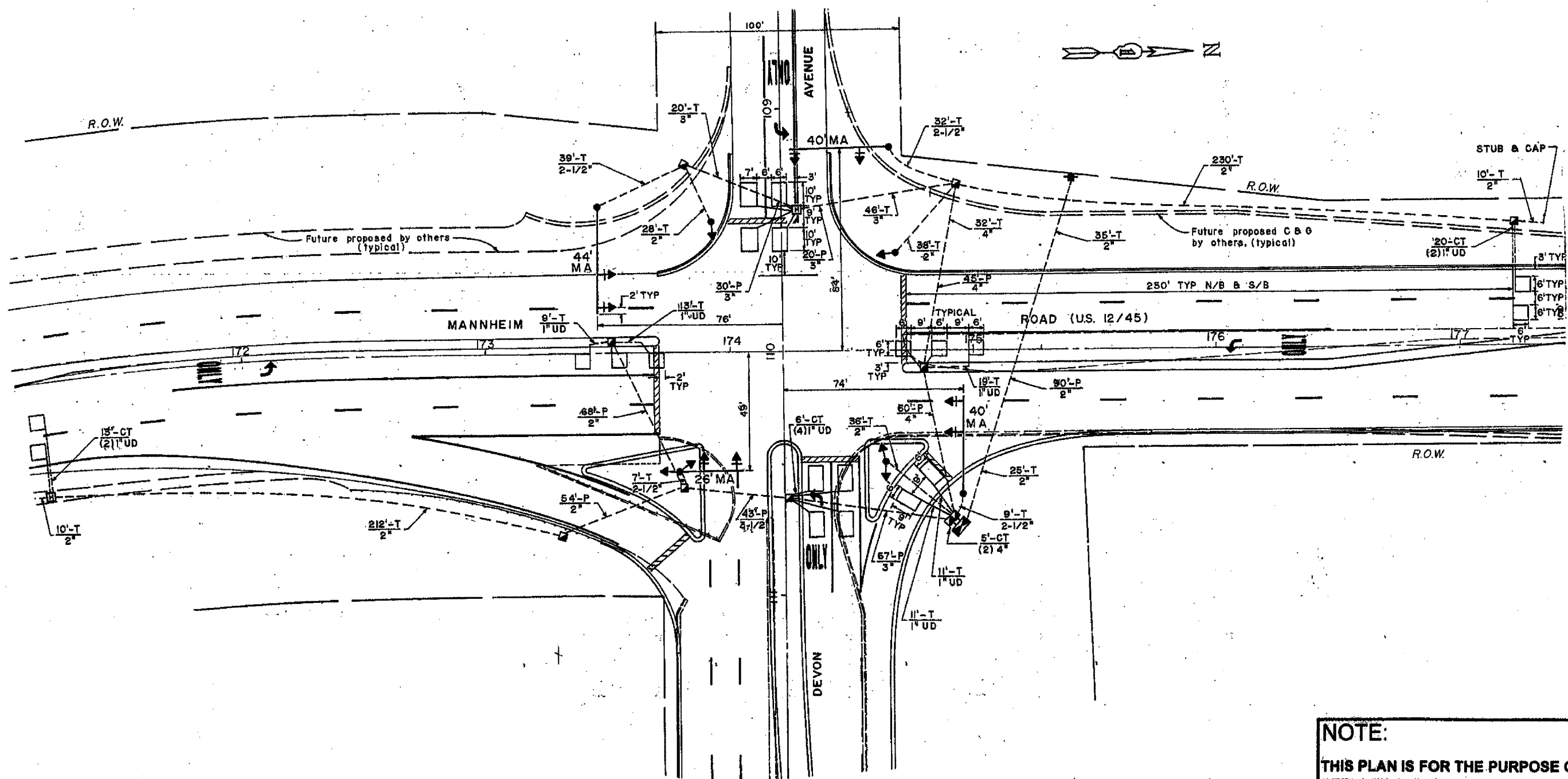
| CODE NO. | QUANTITY | UNIT | ITEM |
|----------|----------|------|---------------------------|
| 86600600 | 503 | Foot | Detector Loop Replacement |

| REVISIONS | |
|-----------|------|
| NAME | DATE |
| | |
| | |
| | |
| | |

NOTE:
 THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOP REPLACEMENT
 U.S. RTE. 12/45 (MANNHEIM ROAD) @ LAWRENCE AVE.
 SCALE: NONE
 DATE: MARCH 07
 DRAWN BY: JHE
 DESIGNED BY: JHE
 CHECKED BY: DAD.

| | | | |
|--------------|--------|------------------------------|-----------|
| SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | COOK | 32 | 20 |
| STA. TO STA. | | FED. ROAD DIST NO 7 ILLINOIS | |
| | | FED AID PROJECT | |



FOR INFORMATION ONLY

REPLACE ALL DETECTOR LOOPS AS SHOWN

(WITHIN THE RESURFACING LIMITS)

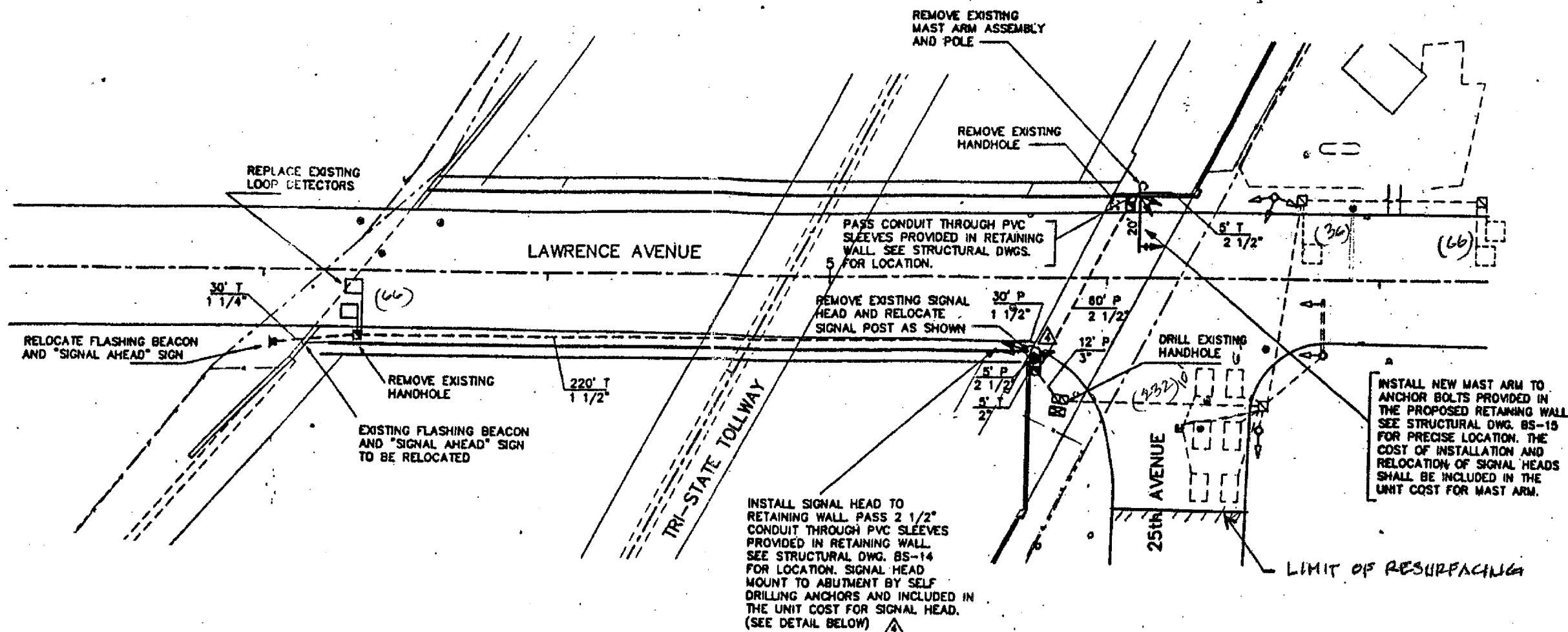
| CODE NO. | QUANTITY | UNIT | ITEM |
|----------|----------|------|---------------------------|
| 86600600 | - 0 - | Foot | Detector Loop Replacement |

| REVISIONS | |
|-----------|------|
| NAME | DATE |
| | |
| | |
| | |
| | |

NOTE:
THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOP REPLACEMENT
U.S. ROUTE 12-45 @ DEVON (ZEMKE)
SCALE: AS SHOWN
DATE: APRIL 07
DRAWN BY: JHE
DESIGNED BY: JHE
CHECKED BY: DAD

| | | | |
|--------------|--------|---|-----------|
| SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | COOK | 32 | 21 |
| STA. TO STA. | | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | |



NOTE:
 THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

REPLACE ALL DETECTOR LOOPS AS SHOWN

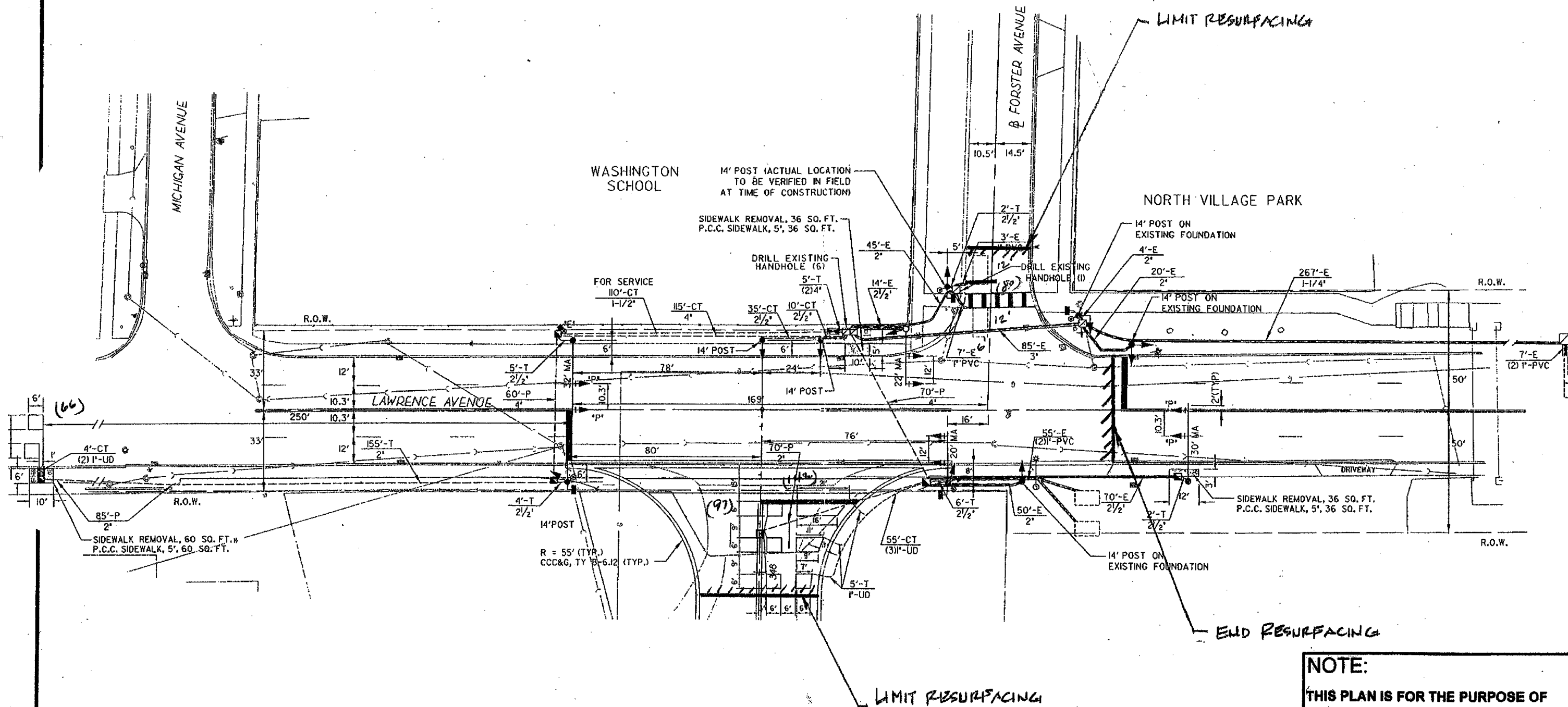
(WITHIN THE RESURFACING LIMITS)

| CODE NO. | QUANTITY | UNIT | ITEM |
|----------|----------|------|---------------------------|
| 88600600 | 400 | Foot | Detector Loop Replacement |

| REVISIONS | |
|-----------|------|
| NAME | DATE |
| | |
| | |
| | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOP REPLACEMENT
 LAWRENCE AV @ 25TH AVE.
 SCALE: NONE
 DATE: MAR. 2007
 DRAWN BY: JHE
 DESIGNED BY: JHE
 CHECKED BY: DAD.

| SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------------------------|--------|------------------|-----------|
| | | 32 | 22 |
| STA. TO STA. | | | |
| FED. ROAD DIST NO. 1 ILLINOIS | | FED. AID PROJECT | |



REPLACE ALL DETECTOR LOOPS AS SHOWN
 (WITHIN THE RESURFACING LIMITS)

| CODE NO. | QUANTITY | UNIT | ITEM |
|----------|----------|------|---------------------------|
| 86600600 | 385 | Foot | Detector Loop Replacement |

| REVISIONS | |
|-----------|------|
| NAME | DATE |
| | |
| | |
| | |
| | |

NOTE:
 THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOP REPLACEMENT

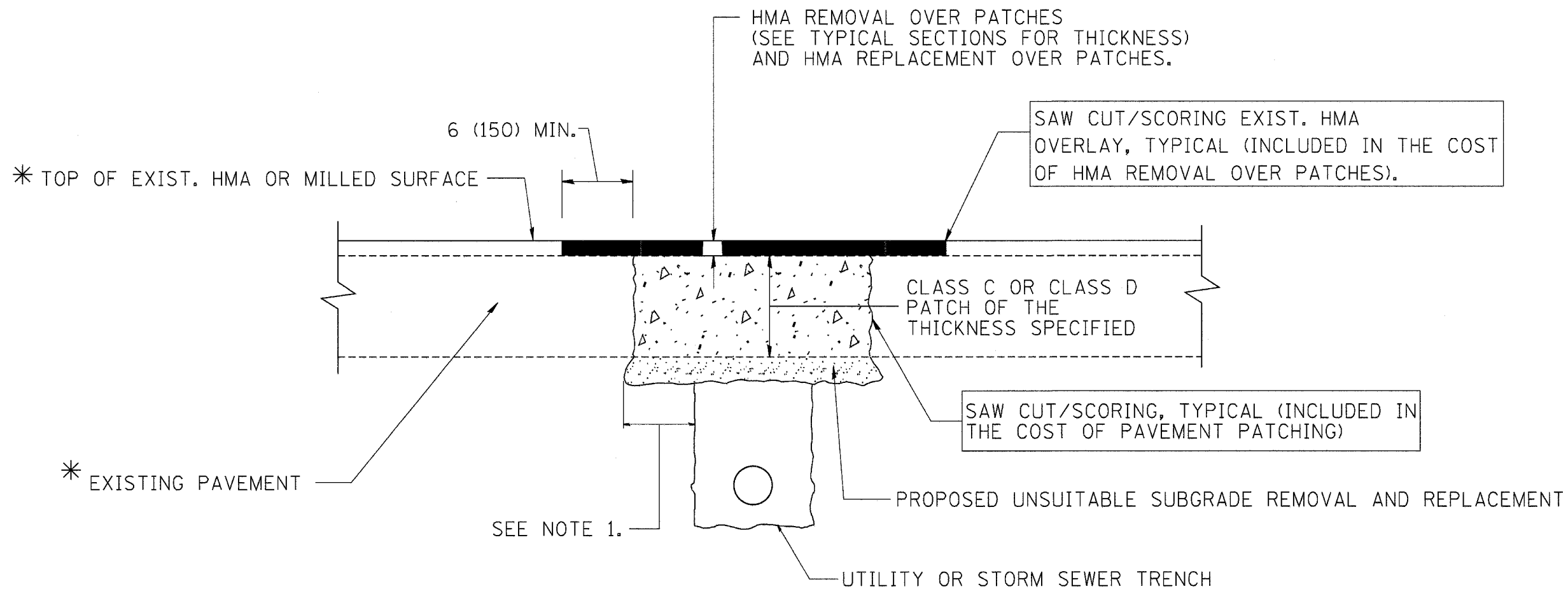
LAWRENCE AV. @ FORSTER AV.

SCALE: *please*
 DATE: APRIL 07

DRAWN BY: JHE
 DESIGNED BY: JHE
 CHECKED BY: JHE

| | | | | |
|-----------------------|---------|---------------------------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** 3007-034 RS | COOK | | 32 | 23 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. 1 | | ILLINOIS FED. AID PROJECT | | |

** FH 330, FAU 136a



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE FULL DEPTH PATCHES
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

| REVISIONS | |
|-----------|----------|
| NAME | DATE |
| R. SHAH | 10/25/94 |
| R. SHAH | 01/14/95 |
| R. SHAH | 03/23/95 |
| R. SHAH | 04/24/95 |
| A. HOUSEH | 03/15/96 |
| A. ABBAS | 03/21/97 |
| A. ABBAS | 01/20/98 |
| ART ABBAS | 04/27/98 |
| R. BORO | 01/01/07 |

ILLINOIS DEPARTMENT OF TRANSPORTATION

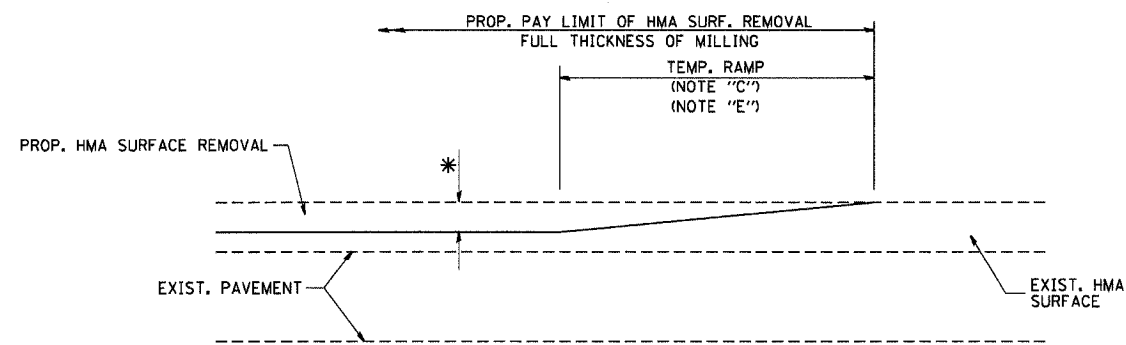
PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY

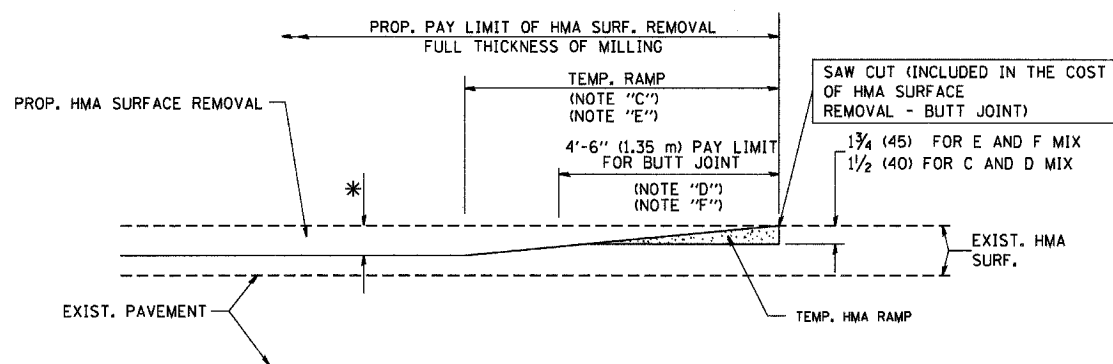
BD400-04 (BD-22)

| | | | | |
|-----------------------|---------|---------------------------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** 1057-099-RS | 000K | COOK | 32 | 24 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. 1 | | ILLINOIS FED. AID PROJECT | | |
| ** FAP 330, FAU 1362 | | | | |



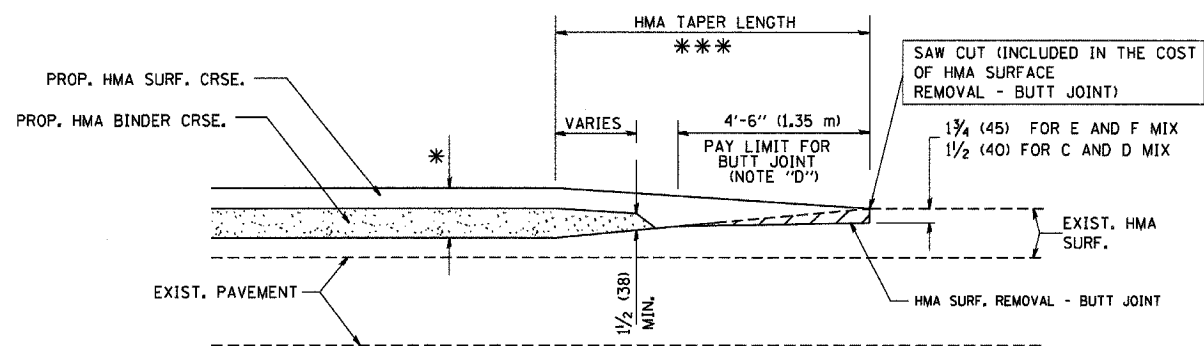
MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1



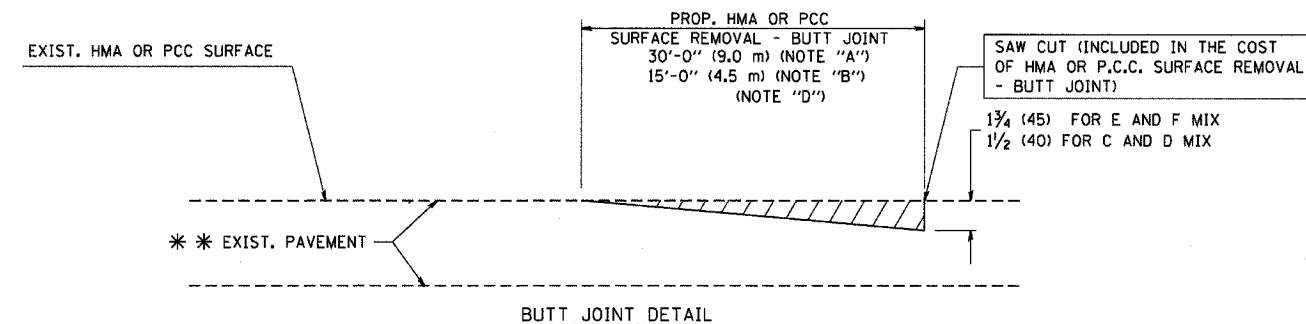
HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2
TYPICAL TEMPORARY RAMP

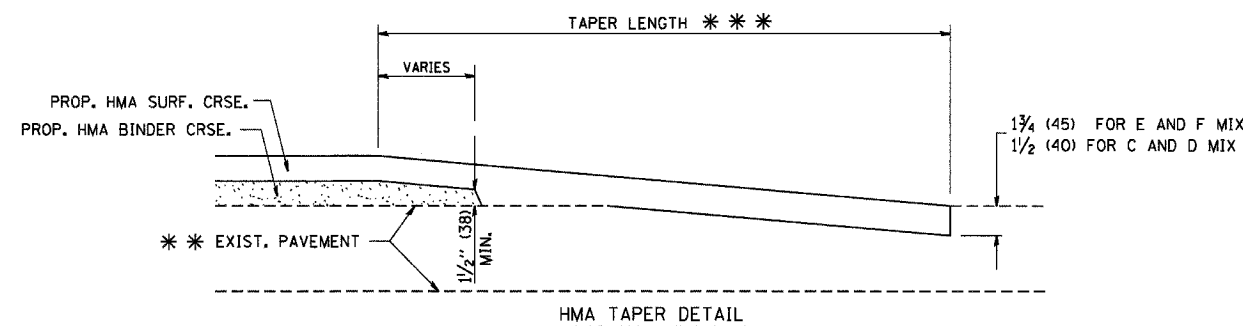


BUTT JOINT AND
HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER
FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



TYPICAL BUTT JOINT AND HMA TAPER
FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- ** SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

| REVISIONS | |
|------------|----------|
| NAME | DATE |
| M. DE YONG | 6-13-90 |
| M. DE YONG | 7-3-90 |
| M. DE YONG | 3-27-92 |
| R. SHAH | 09/09/94 |
| R. SHAH | 10/25/94 |
| A. ABBAS | 03/21/97 |
| M. GOMEZ | 04/06/01 |
| R. BORO | 01/01/07 |

ILLINOIS DEPARTMENT OF TRANSPORTATION

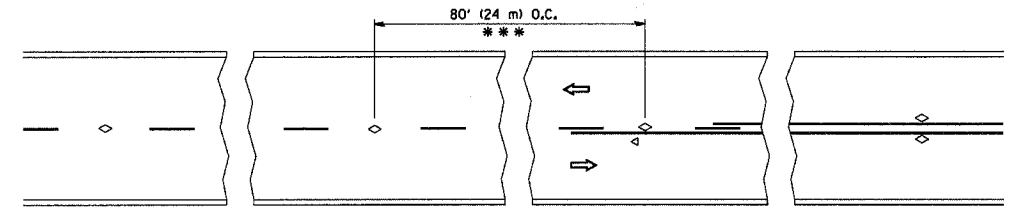
BUTT JOINT AND
HMA TAPER
DETAILS

SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY

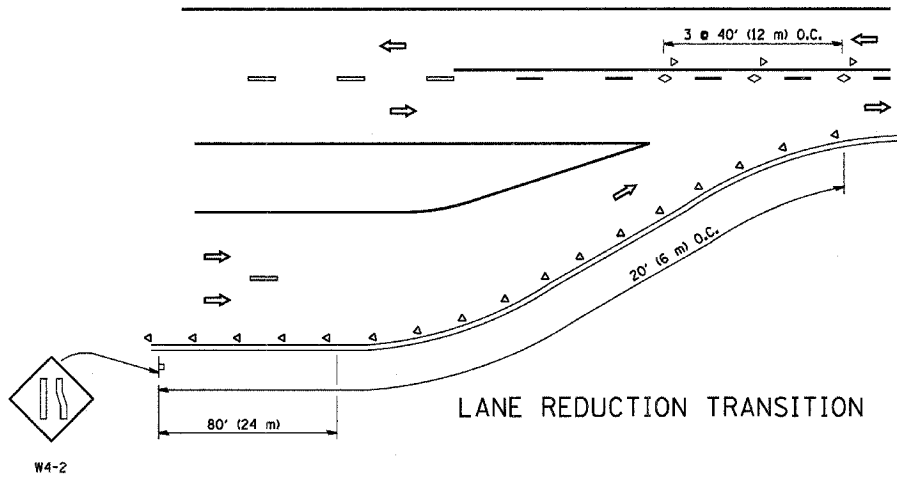
BD400-05 (VI=BD32)

| | | | | |
|----------------------|---------|---------------------------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** 2007-034 RS | | COOK | 22 | 25 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |
| ** FAP 330, FAU 1302 | | | | |

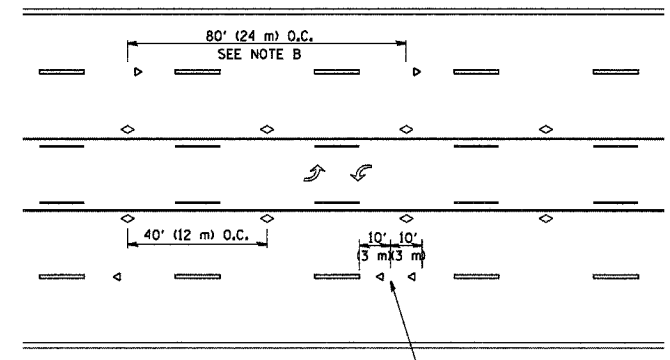


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

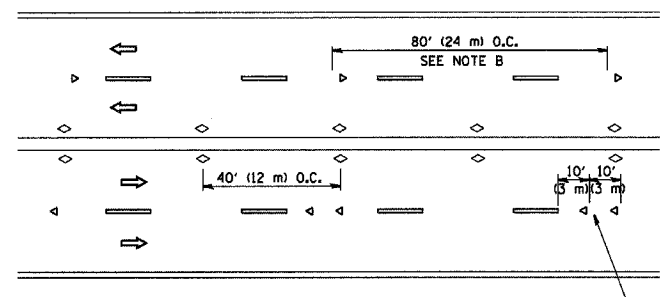
TWO-LANE/TWO-WAY



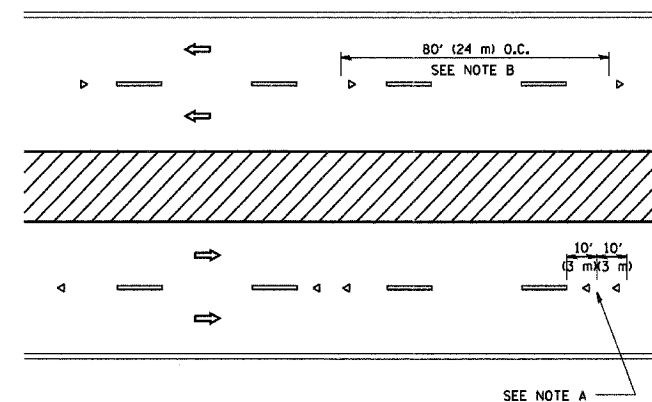
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

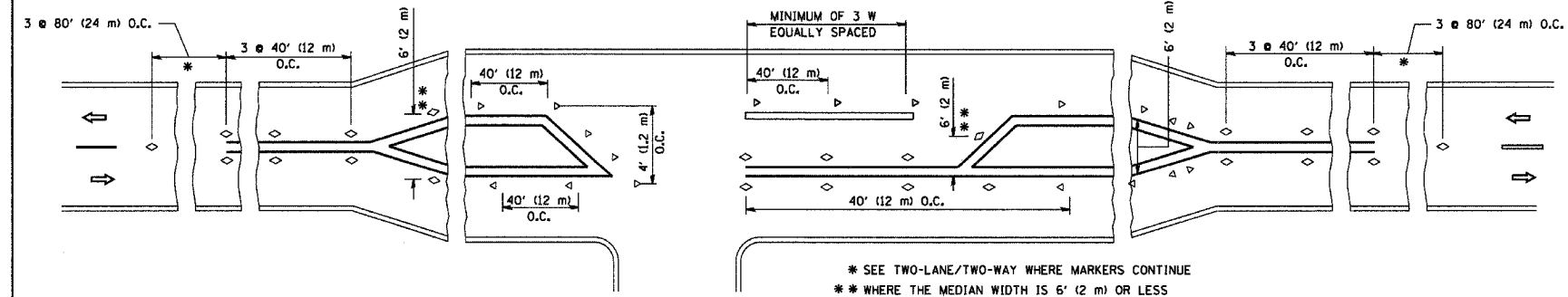
- YELLOW STRIPE
- WHITE STRIPE
- ◁ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◊ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

All dimensions are in inches (millimeters) unless otherwise shown.

| REVISIONS | |
|--------------|----------|
| NAME | DATE |
| T. RAMMACHER | 09-19-94 |
| T. RAMMACHER | 03-12-99 |
| T. RAMMACHER | 01-06-00 |
| | |
| | |
| | |
| | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT
 MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE

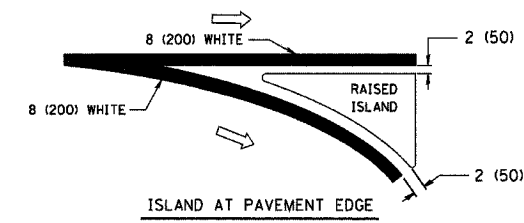
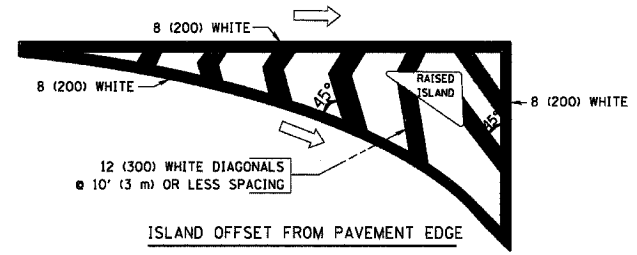
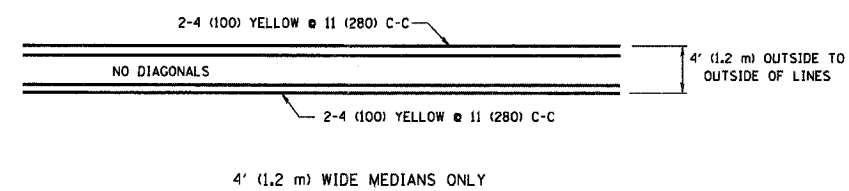
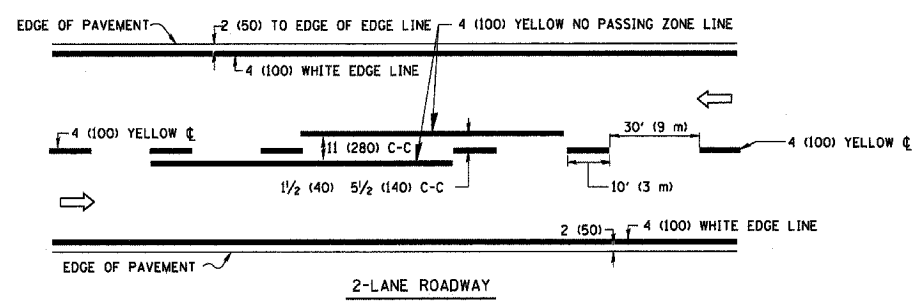
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CHECKED BY

TC-11

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|---------------------|---------------------------|--------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** 0007-039-15 | COOK | | 32 | 26 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT | | | |

** FAP 330, FAU 1362



TYPICAL ISLAND MARKING

| TYPE OF MARKING | WIDTH OF LINE | PATTERN | COLOR | SPACING / REMARKS |
|---|--|---------------------|--|--|
| CENTERLINE ON 2 LANE PAVEMENT | 4 (100) | SKIP-DASH | YELLOW | 10' (3 m) LINE WITH 30' (9 m) SPACE |
| CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT | 2 @ 4 (100) | SOLID | YELLOW | 11 (280) C-C |
| NO PASSING ZONE LINES: FOR ONE DIRECTION | 4 (100) | SOLID | YELLOW | 5/2 (140) C-C FROM SKIP-DASH CENTERLINE |
| NO PASSING ZONE LINES: FOR BOTH DIRECTIONS | 2 @ 4 (100) | SOLID | YELLOW | 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN |
| LANE LINES | 4 (100) | SKIP-DASH | WHITE | 10' (3 m) LINE WITH 30' (9 m) SPACE |
| LANE LINES (EXTENSIONS ON FREEWAYS) | 5 (125) | SKIP-DASH | WHITE | |
| DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS) | SAME AS LINE BEING EXTENDED | SKIP-DASH | SAME AS LINE BEING EXTENDED | 2' (600) LINE WITH 6' (1.8 m) SPACE |
| EDGE LINES | 4 (100) | SOLID | YELLOW-LEFT WHITE-RIGHT | OUTLINE MOUNTABLE MEDIANS IN YELLOW, EDGE LINES ARE NOT USED NEXT TO BARRIER CURB |
| TURN LANE MARKINGS | 6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m)) | SOLID | WHITE | SEE TYPICAL TURN LANE MARKING DETAIL |
| TWO WAY LEFT TURN MARKING | 2 @ 4 (100) EACH DIRECTION | SKIP-DASH AND SOLID | YELLOW | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE |
| TWO WAY LEFT TURN MARKING | 8' (2.4m) LEFT ARROW | IN PAIRS | WHITE | SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL |
| CROSSWALK LINES (PEDESTRIAN) | 2 @ 6 (150) | SOLID | WHITE | NOT LESS THAN 6' (1.8 m) APART |
| CROSSWALK LINES (BIKE & EQUESTRIAN) | 12 (300) @ 45° | SOLID | WHITE | 2' (600) APART |
| CROSSWALK LINES (LONGITUDINAL BARS (SCHOOL)) | 12 (300) @ 90° | SOLID | WHITE | 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS. |
| STOP LINES | 24 (600) | SOLID | WHITE | PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE |
| PAINTED MEDIANS | 2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° | SOLID | YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC | 11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING. |
| PAINTED MEDIANS | NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS | | | |
| GORE MARKING AND CHANNELIZING LINES | 8 (200) WITH 12 (300) DIAGONALS @ 45° | SOLID | WHITE | DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h)) |
| RAILROAD CROSSING | 24 (600) TRANSVERSE LINES; "RR" 15 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X" | SOLID | WHITE | SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²) |
| SHOULDER DIAGONALS | 12 (300) @ 45° | SOLID | WHITE - RIGHT YELLOW - LEFT | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h)) |

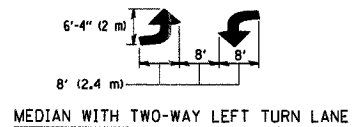
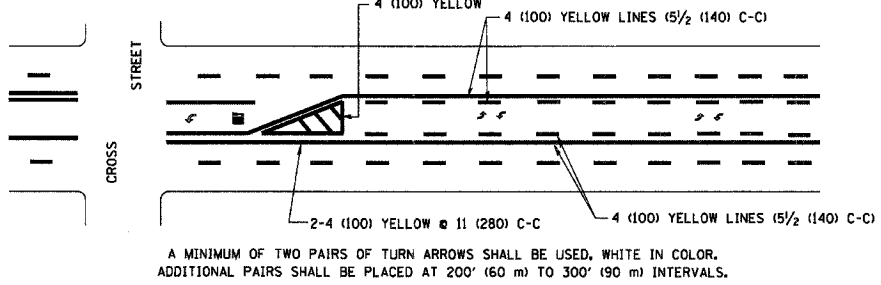
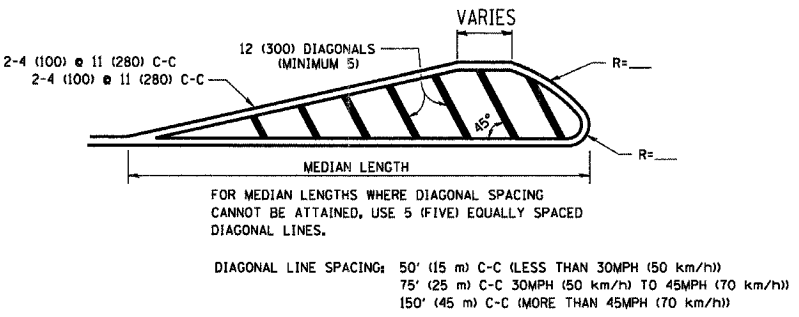
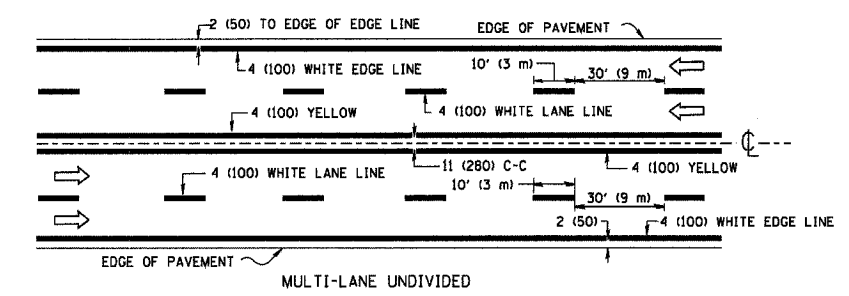
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

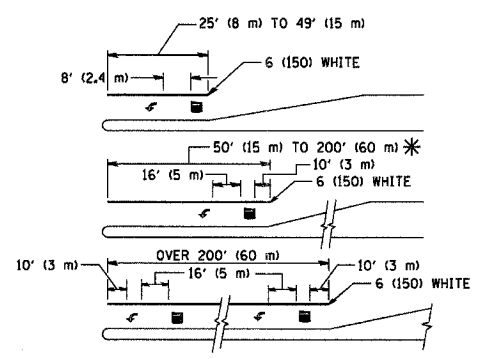
| REVISIONS | |
|--------------|----------|
| NAME | DATE |
| EVERS | 03-19-90 |
| T. RAMMACHER | 10-27-94 |
| ALEX HOUSEH | 10-09-96 |
| ALEX HOUSEH | 10-17-96 |
| T. RAMMACHER | 01-06-00 |

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE
DRAWN BY CADD
CHECKED BY
TC-13



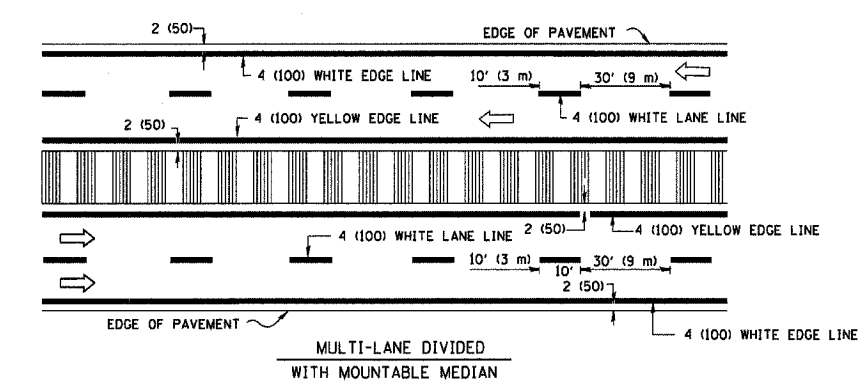
TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m²) AREA = 20.8 SQ. FT. (1.9 m²)

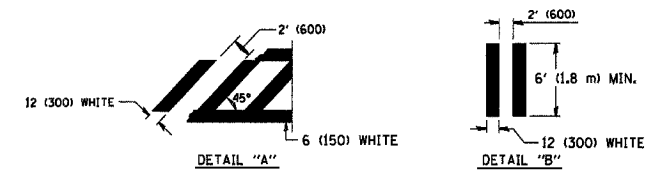
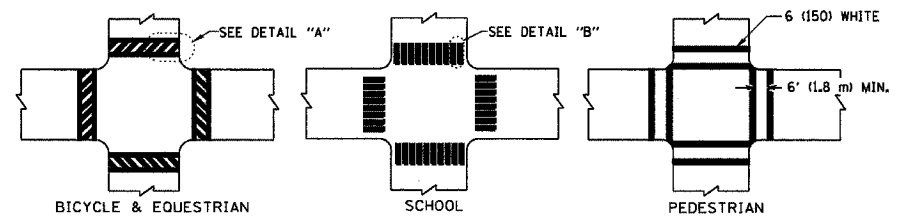
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE



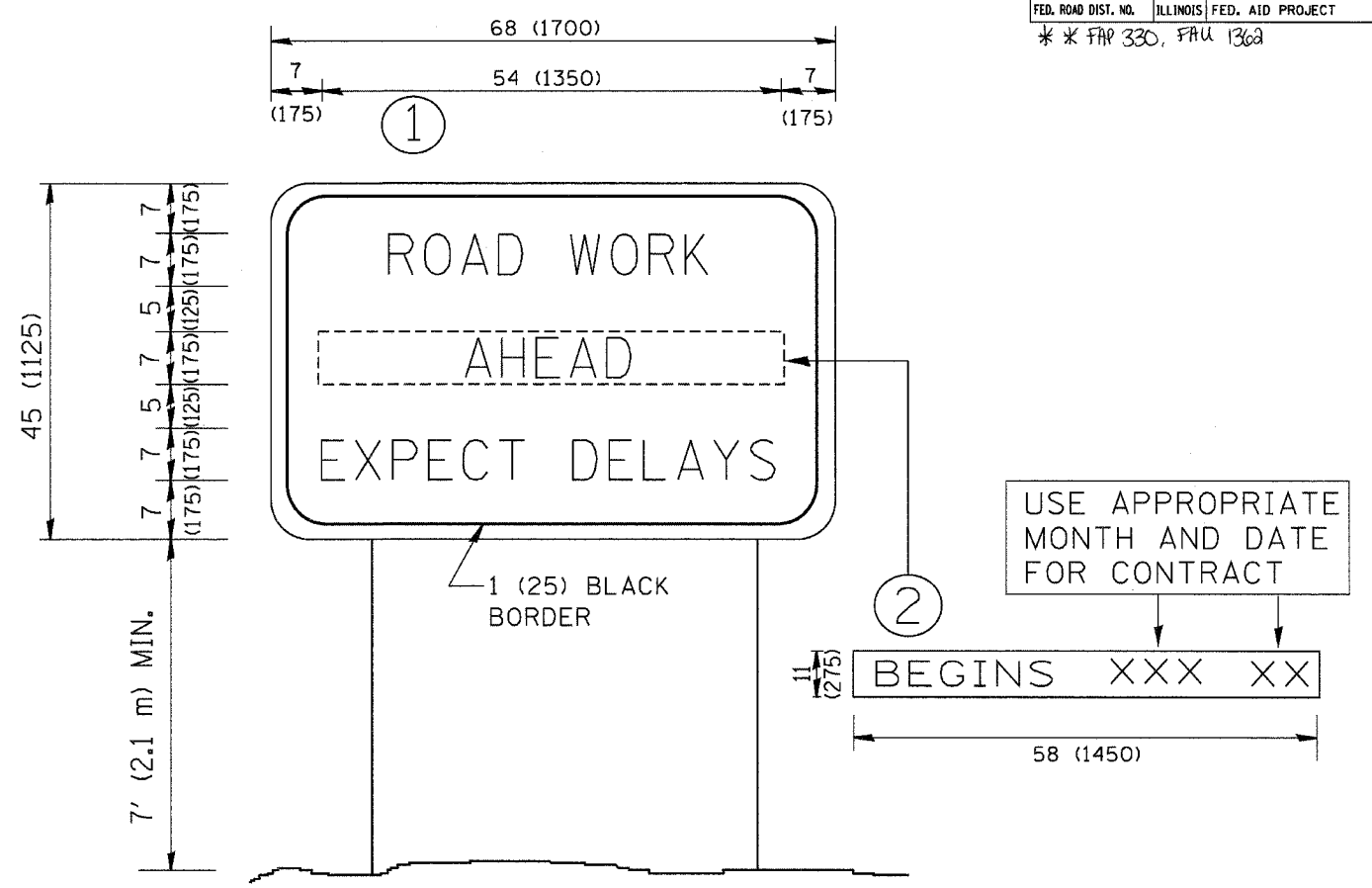
NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

| | | | | |
|---------------------|---------|---------------------------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** 2007-089 RS | COOK | | 32 | 27 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |
| | | ** FAP 330, FAP 1362 | | |



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

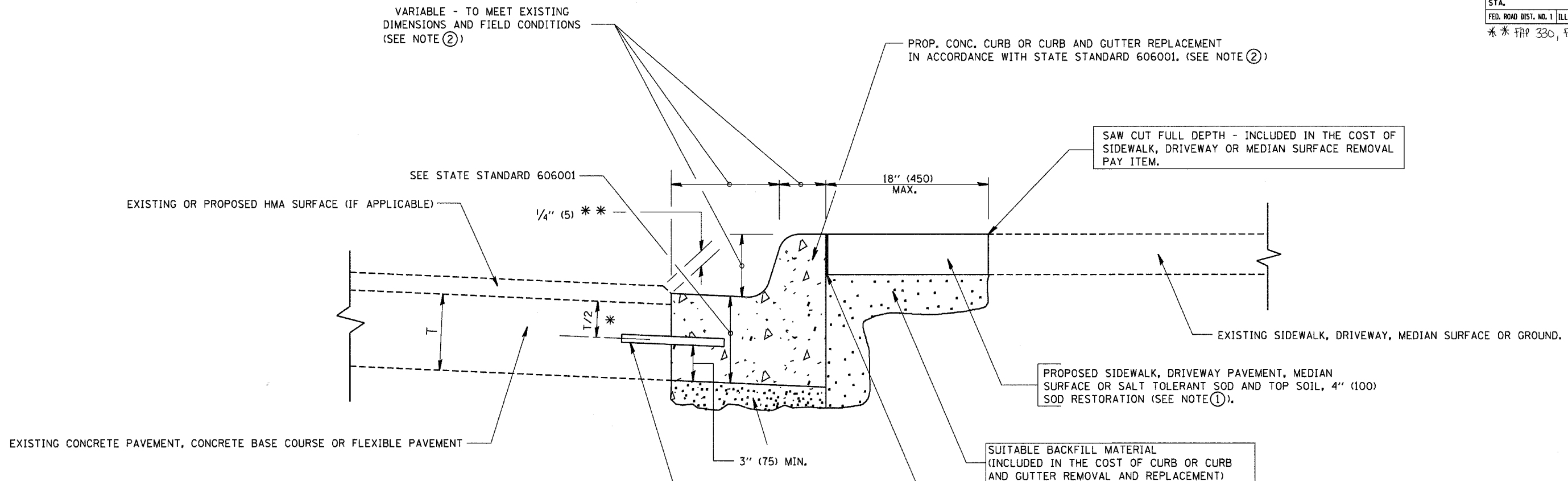
| REVISIONS | |
|--------------|----------|
| NAME | DATE |
| R. MIRS | 9-15-97 |
| R. MIRS | 12-11-97 |
| T. RAMMACHER | 2-2-99 |
| C. JUCIUS | 1-31-07 |
| | |
| | |
| | |
| | |
| | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
ARTERIAL ROAD INFORMATION SIGN

SCALE: NONE

DRAWN BY DESIGN
CHECKED BY
TC22

| | | | | |
|-----------------------|----------|------------------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** 8007-084 RS | COOK | | 22 | 25 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT | | |
| ** FAP 330, FHU 1362 | | | | |



- * 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- ** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

- NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.
- SALT TOLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
 - ③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
 - ④ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
 - ⑤ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.
 - ⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.
 - ⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:
 THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

| REVISIONS | |
|-----------|----------|
| NAME | DATE |
| A. HOUSEH | 03/11/94 |
| R. SHAH | 02/24/95 |
| R. SHAH | 03/02/95 |
| R. SHAH | 08/19/96 |
| R. SHAH | 09/12/96 |
| R. SHAH | 09/19/96 |
| R. SHAH | 10/03/96 |
| A. ABBAS | 03/21/97 |
| M. GOMEZ | 01/22/01 |
| R. BORO | 01/01/07 |

ILLINOIS DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

SCALE: VERT. NONE
 HORIZ.

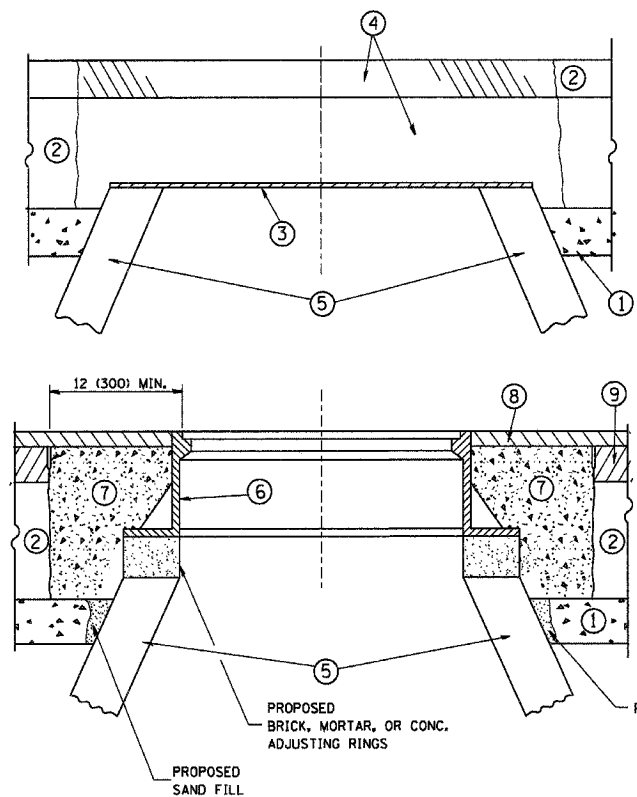
DRAWN BY
 CHECKED BY

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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 PLOT SCALE = 1/8" = 1'-0"
 USER NAME = bborod

| | | | | |
|-----------------------|---------|---------------------------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** 2007-09-15 | COOK | | 32 | 29 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. 1 | | ILLINOIS FED. AID PROJECT | | |

** FRP 330, FRU 1362



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS S1 CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

LEGEND

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS S1 CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

| REVISIONS | |
|-------------|----------|
| NAME | DATE |
| R. SHAH | 10/25/94 |
| R. SHAH | 01/30/98 |
| R. SHAH | 03/10/98 |
| A. ABBAS | 03/21/97 |
| R. WIEDEMAN | 05/14/04 |
| R. BORO | 01/01/07 |

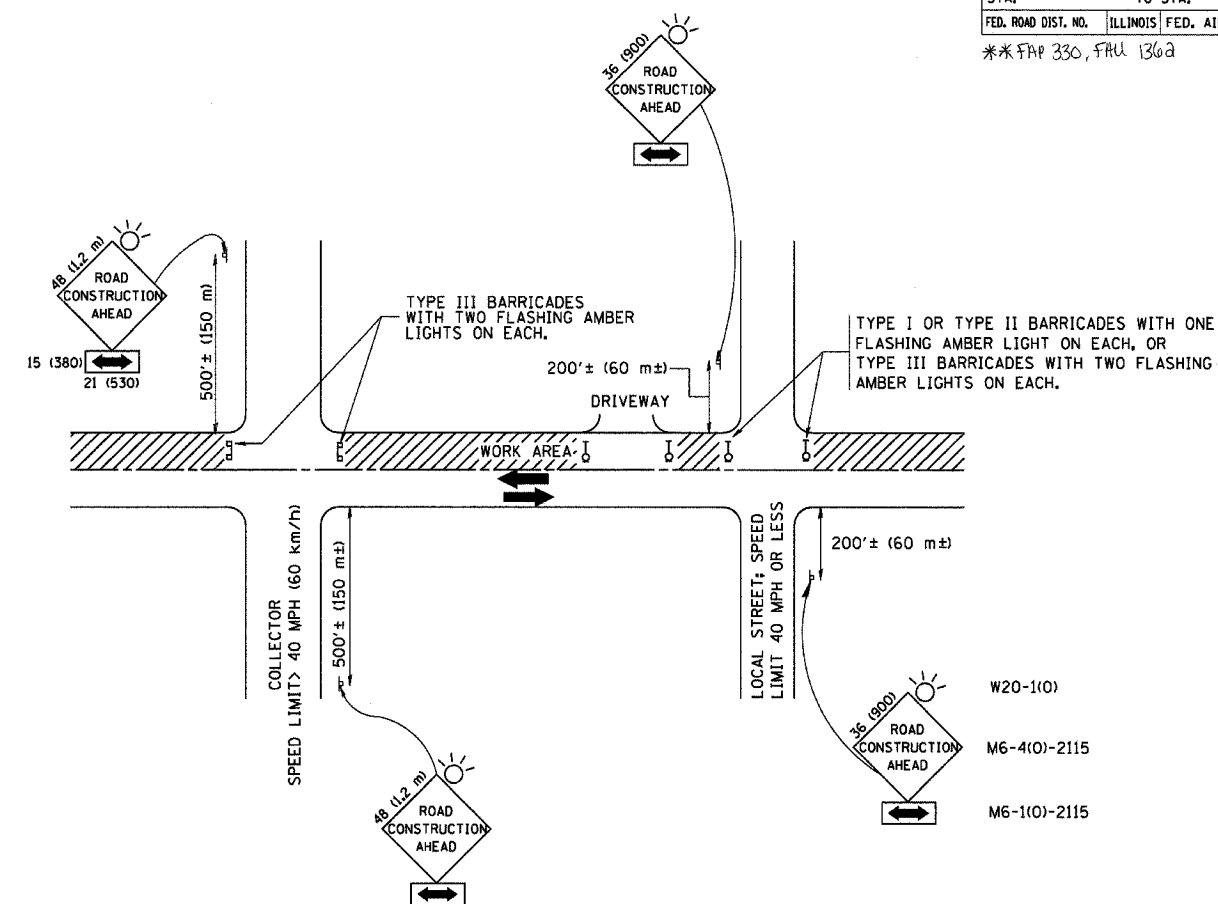
ILLINOIS DEPARTMENT OF TRANSPORTATION
DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: VERT. NONE
 HORIZ.

DRAWN BY
 CHECKED BY

| | | | | |
|---------------------|----------|------------------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** 3007 094 RS | COOK | | 32 | 30 |
| STA. | | TO STA. | | |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT | | |

** FRP 330, FRU 136a



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

| REVISIONS | |
|--------------|----------|
| NAME | DATE |
| LHA | 6/89 |
| T. RAMMACHER | 09/08/94 |
| J. OBERLE | 10/18/95 |
| A. HOUSEH | 03/06/96 |
| A. HOUSEH | 10/15/96 |
| T. RAMMACHER | 01/06/00 |

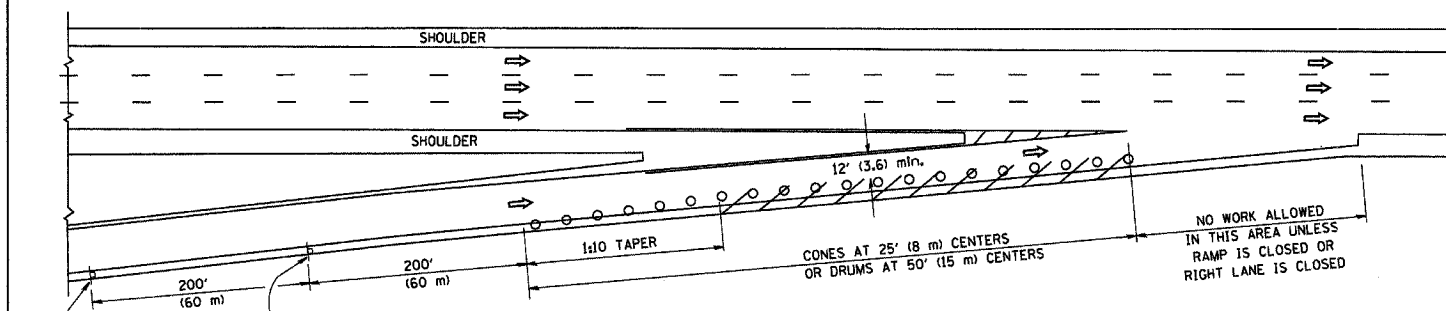
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL AND PROTECTION
 FOR
 SIDE ROADS, INTERSECTIONS, AND
 DRIVEWAYS

SCALE: NONE

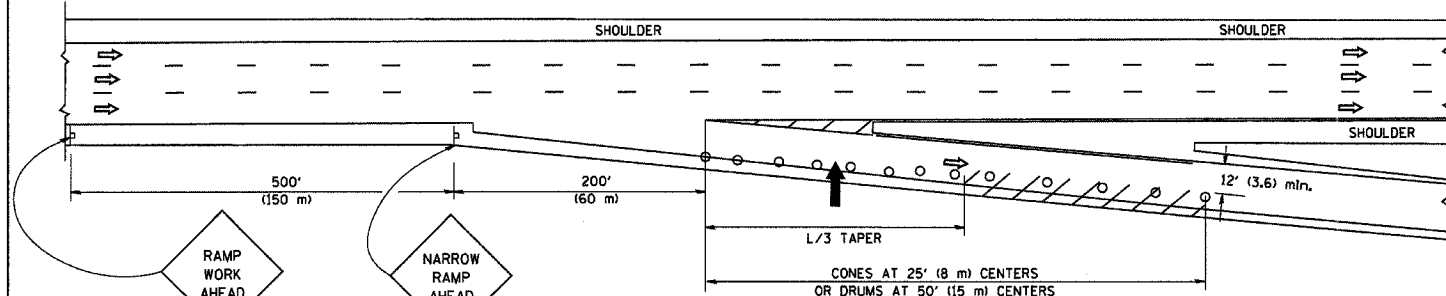
DRAWN BY
 CHECKED BY

TC-10

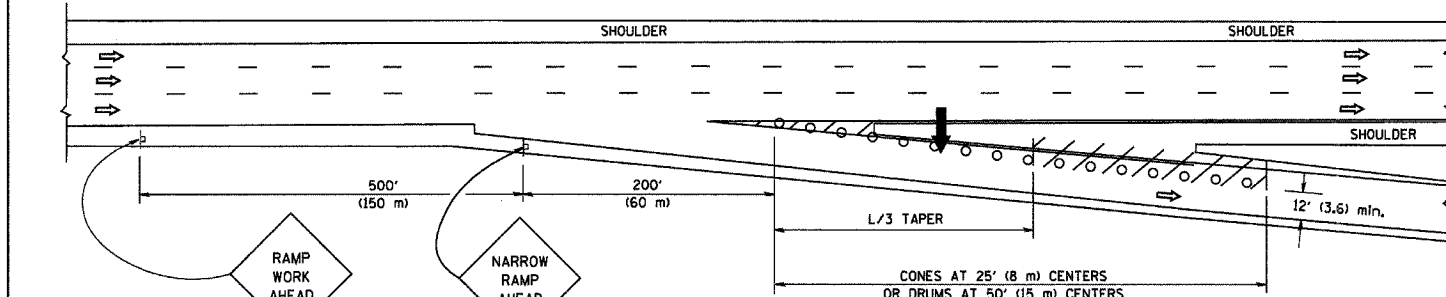
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

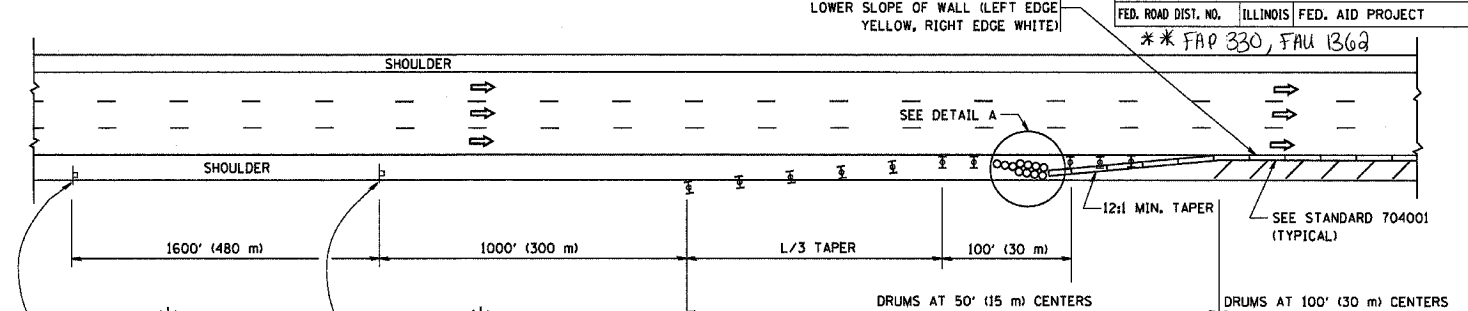
GENERAL NOTES

1. THE "L" DISTANCE EQUALS:

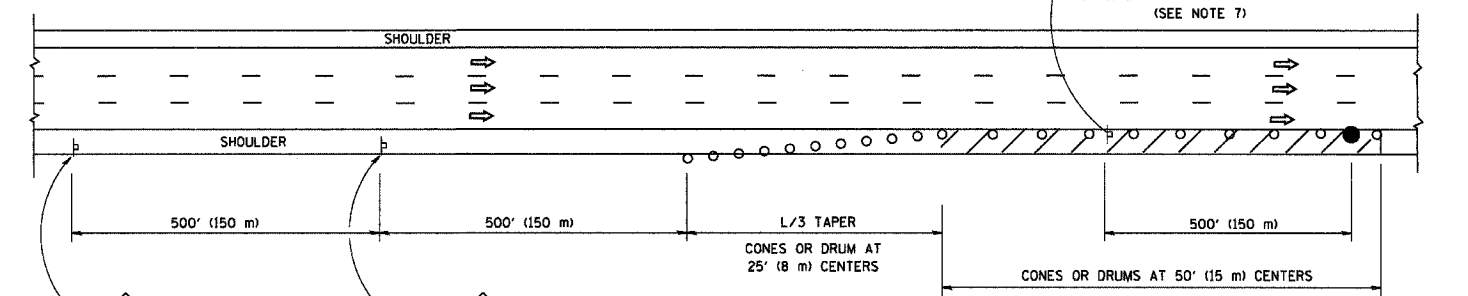
| | |
|------------------|---------------------------|
| SPEED LIMIT | FORMULAS |
| 45 mph (80 km/h) | METRIC ENGLISH |
| OR GREATER: | $L=0.65(W)(S)$ $L=(W)(S)$ |

W = WIDTH OF OFFSET IN FEET (METERS)
S = NORMAL POSTED SPEED MPH (KM/H)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

SHOULDER CLOSURE DETAILS

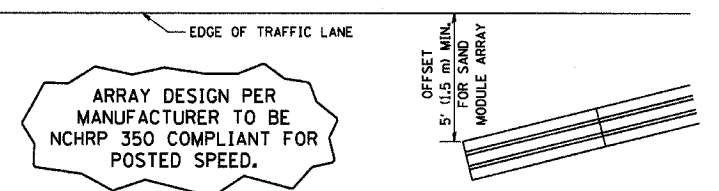


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCR OACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



ARRAY DESIGN PER MANUFACTURER TO BE NCHRP 350 COMPLIANT FOR POSTED SPEED.

DETAIL "A"
IMPACT ATTENUATOR, TEMPORARY
(SEE NOTE 5)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

| REVISIONS | |
|-----------|-------|
| NAME | DATE |
| DWS | 11/96 |
| JAF | 12/02 |
| NCHRP 350 | 04/03 |
| JAF | 2/06 |
| SPB | 1/07 |

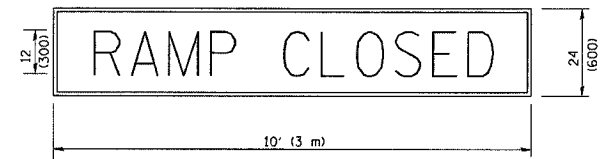
ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL DETAILS
FOR FREEWAY
SHOULDER CLOSURES
PARTIAL RAMP CLOSURES
DESIGNED BY: DWS
DRAWN BY:
CHECKED BY:

SCALE: NONE

PLOT DATE = 3/17/2007
 FILE NAME = K:\data\17.dgn
 PLOT SCALE = 8.00000000
 USER NAME = bauerd

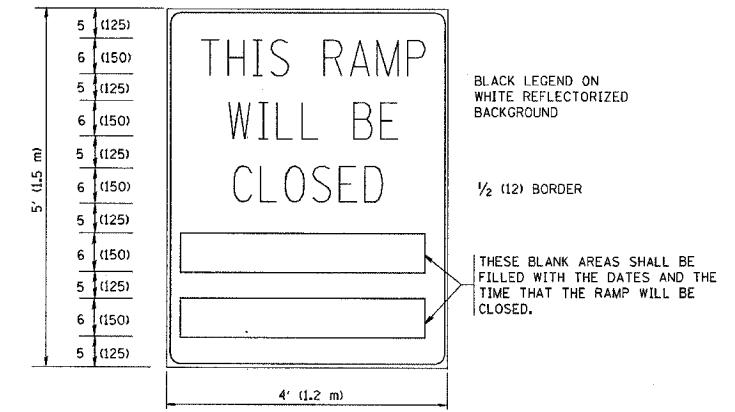
| | | | | |
|---------------------|---------------------------|--------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| A* | 2007-029B | Cook | 32 | 31A |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT | | | |
| *FAP 330, FAD 1362 | | | | |

RAMP CLOSURE ADVANCE WARNING SIGN



BLACK LEGEND ON ORANGE REFLECTORIZED BACKGROUND
1 (25) BORDER
THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR THE CLOSED EXIT RAMP.

RAMP CLOSURE ADVANCE INFORMATION SIGN



THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

GENERAL NOTES:

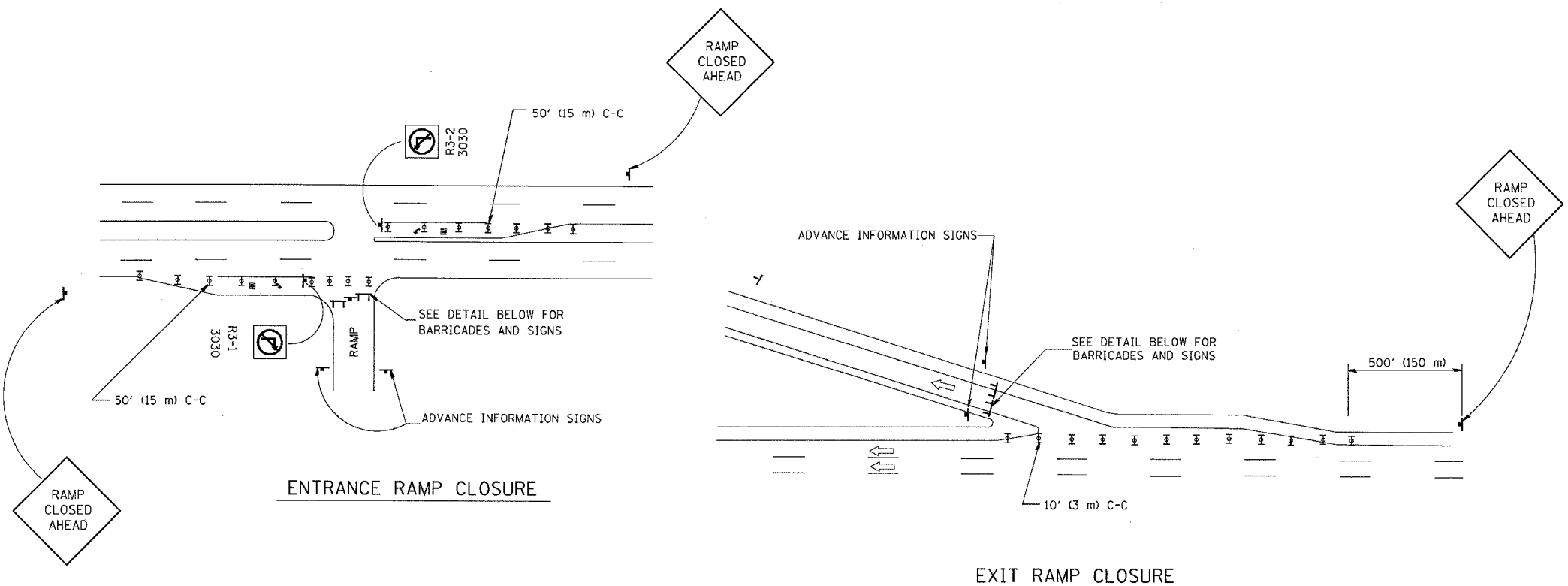
- CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
- A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
- ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
- THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
- AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY FOUR (24) HOURS IN LENGTH.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

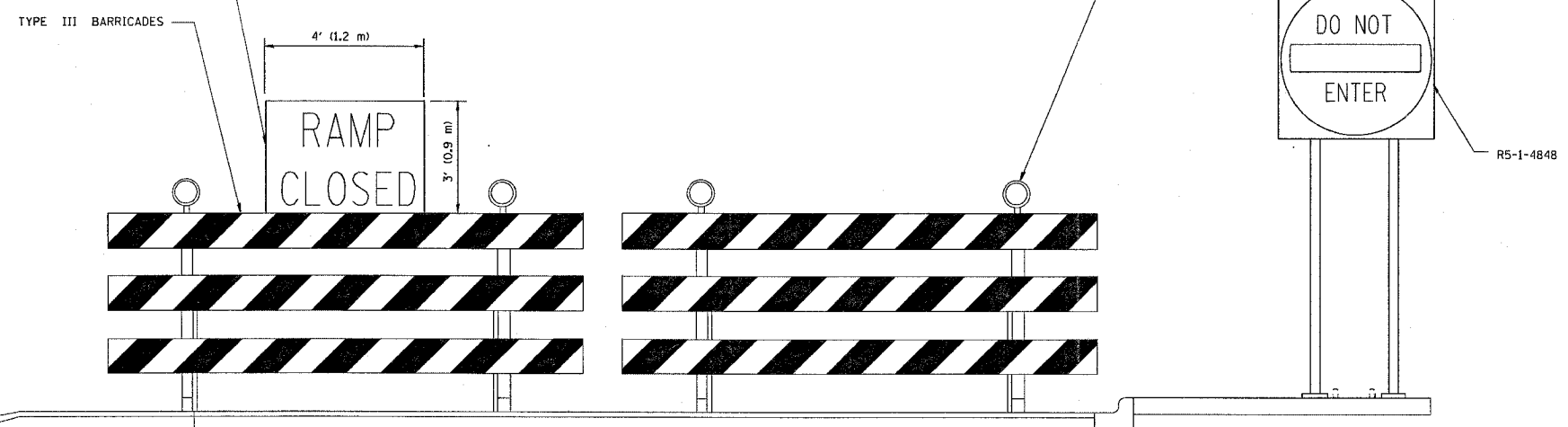
| REVISIONS | |
|----------------------------------|-------|
| NAME | DATE |
| DWS | 2-83 |
| DWS | 1/90 |
| DWS | 9/94 |
| DWS | 12/94 |
| DWS/JAF | 12/02 |
| JAF | 2/06 |
| SPB | 1/07 |
| Revise devices to meet NCHRP 350 | 4/03 |

ILLINOIS DEPARTMENT OF TRANSPORTATION
FREWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS

SCALE: NONE
DRAWN BY
CHECKED BY
TC-B



THE "RAMP CLOSED" SIGN SHALL BE B/W WITH 8 (200) CAPS. IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS DIRECTLY IN FRONT OF THE BARRICADE.



DETAIL FOR REQUIRED BARRICADES & SIGNS

- SYMBOLS**
- ☐ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
 - ☐ TYPE III BARRICADE WITH FLASHING LIGHT

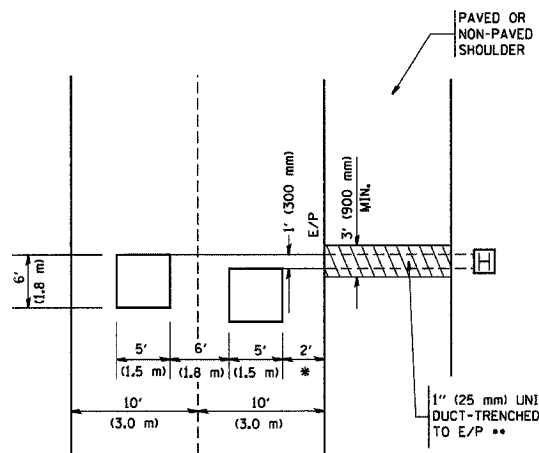
PLOT DATE = 3/6/2007
PLOT SCALE = 1/8" = 1'-0"
USER NAME = bbeard1

| | | | | |
|---------------------|---------------------------|--------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** 2001-029 R6 C00K | | | 32 | 32 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT | | | |

** FAR 330, FAU B62

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.

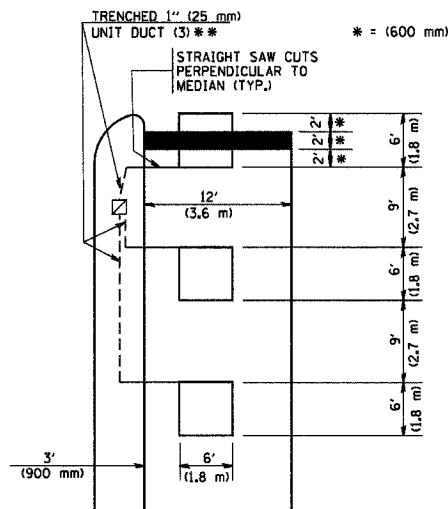


* = (600 mm)

** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

LEFT TURN LANES WITH MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)

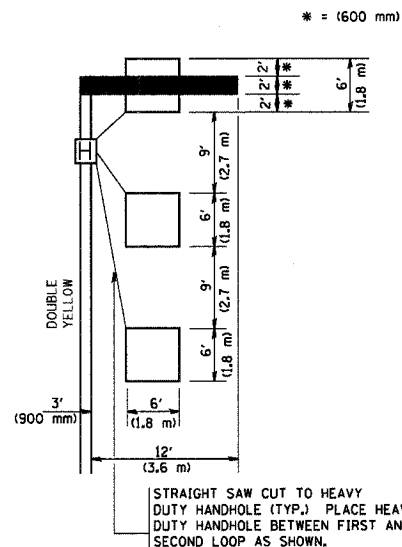
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)



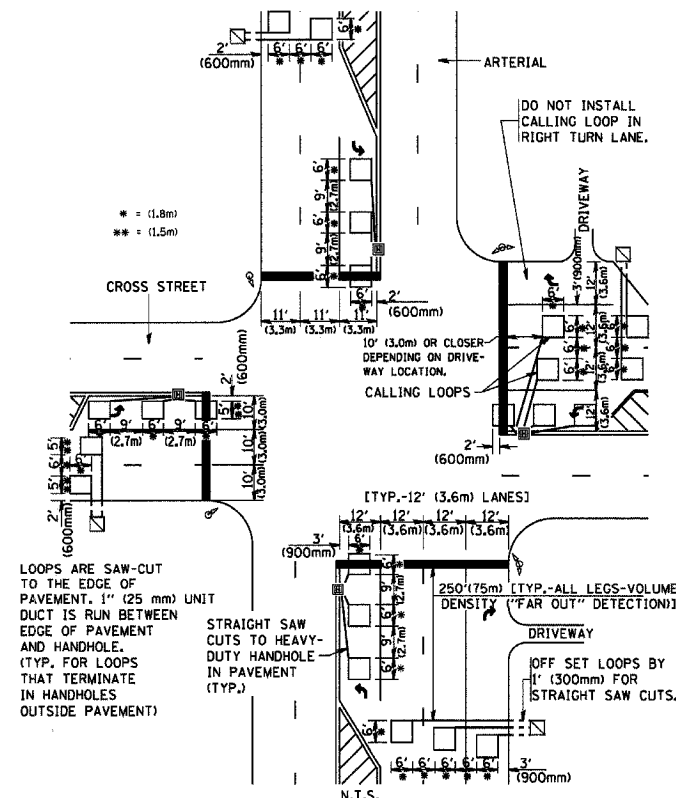
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

NOTES:

VEHICLES LOOP DETECTORS

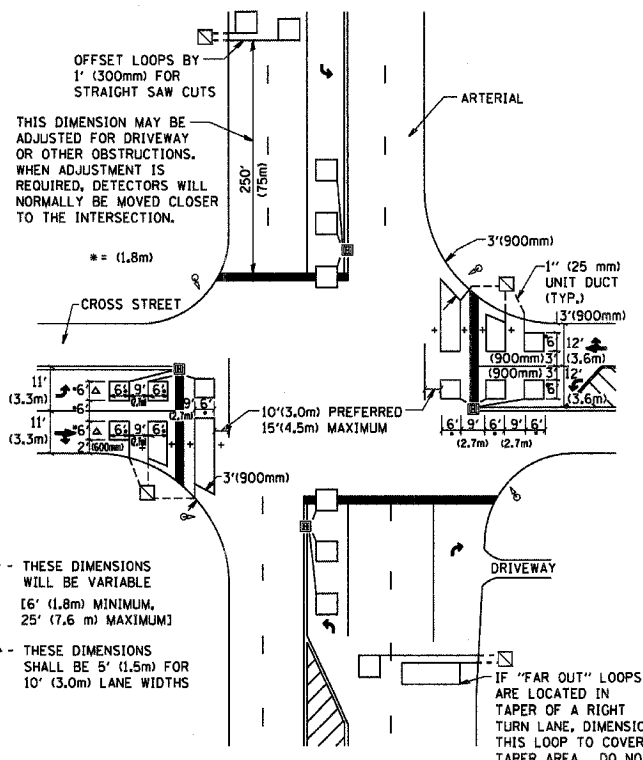
- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)



DETAIL 1
N.T.S.

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)



DETAIL 2
N.T.S.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

| REVISIONS | |
|-----------|------|
| NAME | DATE |
| | |
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| | |
| | |
| | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
DETECTOR LOOP
INSTALLATION DETAILS
FOR ROADWAY RESURFACING

SCALE: NONE

DESIGNED BY
DRAWN BY CADD
CHECKED BY R.K.F.
TS07