PLAN PREPARATION ENGINEER (847) 705-4178 DISTRICT ONE – DESIGN – KEN ENG / ROBERT BORO

**FAP 362** N-6-7-I-1 COOK **FOR INDEX OF SHEETS SEE SHEET 2** 

TOTAL SHEET ROUTE **SECTION** COUNTY SHEETS NUMBER 14+2=16

# **CONTRACT NO. 60B28**

### D-91-318-06

Lake DuPage

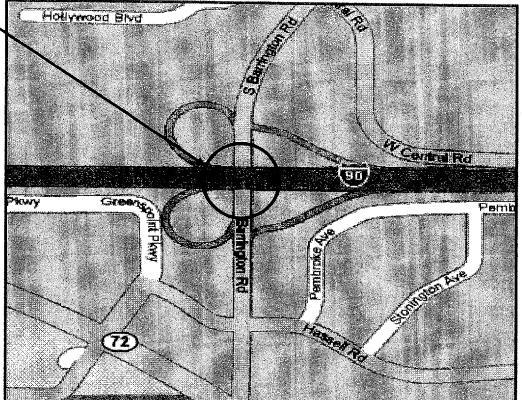
LOCATION OF IMPROVEMENT INDICATED THUS:

# STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS DISTRICT ONE PROPOSED HIGHWAY PLANS**

FAP ROUTE 362: BARRINGTON ROAD OVER I-90 (NORTHWEST TOLLWAY) **SECTION:** N-6-7-I-1 **BRIDGE REPAIR & OVERLAY APPROACHES COOK COUNTY** C-91-318-06 SN 016-0522

**LOCATION OF IMPROVEMENT** SN 016-0522

RAE



SCHAUMBURG TOWNSHIP

# TRAFFIC DATA:

BARRINGTON RD: SPEED LIMIT = 40 MPH 2006 ADT = 42,600

IMPROVEMENT IS LOCATED IN THE VILLAGE

OF HOFFMAN ESTATES

I-90 (NW TOLLWAY): SPEED LIMIT = 55 MPH

2006 ADT = 146900

**CONTRACT NO. 60B28** 

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS** 

SUBMITTED: March 27

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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

# INDEX OF SHEETS

| •                  |   |
|--------------------|---|
| SHEET NO.          | DESCRIPTION   |
| 1                  | COVER SHEET   |
| 2                  | INDEX OF SHEETS, STANDARDS, AND GENERAL NOTES   |
| 3                  | SUMMARY OF QUANTITIES   |
| 4                  | TYPICAL SECTION   |
| 5-8                | BRIDGE PLANS  |
| 9~10               | TRAFFIC STAGING   |
| 11<br>11 A<br>12 A | ALTERNATE ROUTE PLAN<br>PERMANENT PROTECTIVE SILIELD<br>BUTT JOINT AND HMA TAPER DETAIL |
| 13                 | TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANCE)          |
| 14                 | DISTRICT ONE TYPICAL PAVEMENT MARKINGS  |

## LIST OF STATE STANDARDS

| STANDARD NO.        | DESCRIPTION  |
|---------------------|--|
| 701301 - <i>0</i> 2 | LANE CLOSURE 2L,2W SHORT TIME OPERATIONS                           |
| 701411 - 03         | MULTI-LANE, TRAFFIC CONTROL AT ENTERANCE OR EXIT RAMPS             |
| 701400 - 02         | APPROCH TO LANE CLOSURE FREEWAY/EXPRESSWAY                         |
| 701401 - <i>03</i>  | LANE CLOSURE FREEWAY/EXPRESSWAY                                    |
| 701601 - <b>04</b>  | URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN |
| 702001-06           | TRAFFIC CONTROL DEVICES  |

| ROUTE   | SECTION   | COUNTY | TOTAL<br>SHEETS | SHEET<br>NUMBER |
|---------|-----------|--------|-----------------|-----------------|
| FAP 362 | N-6-7-I-1 | COOK   | . 14            | 2               |

## GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC. TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT

# The Contractor small coordinate construction activities with utility companies.

ALL DAMAGE TO EXISTING PAVEMENT MARKING OR RAISED REFLECTIVE PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

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 (I 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 13 (V3H).

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT). IN ACCORDANCE WITH "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDE IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 FOR ARTERIALS & ISTHA DAILY TRAFFIC CONTROL AUTHORIZATION AT (630) 241-6800 EXT. 3822 FOR TOLLWAYS.

WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREA.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESES LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

THE ENGINEER SHALL CONTACT WALLY CZARNY TRAFFIC FIELD ENGINEER (OR TECHNICIAN), AT (773) 685-4342. A MINIMUM OF (2) WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

THE "ADVANCE WARNING SIGN DETAIL FOR ARTERIAL TRAFFIC" LOCATED IN THE SPECIAL PROVISIONS FOR "TEMPORARY INFORMATION SIGNING FOR LANE CLOSURES" IS APPLICABLE ONLY TO ARTERIAL ROADS AND SHALL NOT BE APPLIED TO TOLLWAYS.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM BRIDGE INSPECTORS.

PAVEMENT MARKING TAPE, TYPE III SHALL BE USE FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE, TYPE III AND ITS REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING.

ILLINOIS DEPARTMENT OF TRANSPORTATION

CONTRACT: 60B28

INDEX OF SHEETS
LIST OF STATE STANDARDS
PLAN NOTES

Rev.

3/29/2007 cifiprojects@design@oddis\_maint.dgn vt-807

| <br>RTE. |      | SEC   | TION   |     | COUNT | Y   | TOTAL<br>SMEETS | SHEET<br>NO. |
|----------|------|-------|--------|-----|-------|-----|-----------------|--------------|
| 362      |      | N-6   | -7-1-1 |     | C00   | K   | 14              | 3            |
| FEO.     | ROAD | DIST. | NO. 1  | ILL | INOIS | HIC | HWAY PR         | DECT         |

|          | SUMMARY OF QUANTITIES  |        |                              |  | <br>CONSTRUCT | ION TYPE  | CODE |  |
|----------|--|--------|------------------------------|--|---------------|---|------|--|
| CODE NO  | . TEM  | UNIT   | URBAN<br>TOTAL<br>QUANTITIES | BRIDGE<br>SN 016-<br>0522<br>STATE 1002<br>SFTY-2A |               |   |      |  |
| 40668260 | BITUMINOUS MATERIALS (PRIME COAT)                            | TON    | 0.6                          | 0.6  | <br>          |   |      |  |
| 40600300 | AGGREGATE (PRIME COAT)                                       | TON    | 3                            | 3  |               |   |      |  |
| 40600400 | MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS                   | TON    | 0.4                          | 0.4  |               |   |      |  |
| 40600635 | LEVELING BINDER (MACHINE METHOD), N70                        | TON    | 27                           | 27   |               |   |      |  |
| 40600982 | HOT-MIX ASPHALT SURFACE RÉMOVAL - BUTT<br>JOINT              | SO YO  | 61                           | 61   |               |   |      |  |
| 40600985 | PORTLAND CEMENT CONCRETE SURFACE<br>REMOVAL - BUTT JOINT     | SO YO  | 203                          | 203  |               |   |      |  |
| 40603240 | POLYMERIZED HOT-MIX ASPHALT BINDER<br>COURSE, IL-19.0, N90   | TON    | 385                          | 385  |               |   |      |  |
| 40603595 | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90     | TON    | 150                          | 156  |               |   |      |  |
| 44000157 | HOT-MIX ASPHALT SURFACE REMOVAL, 2"                          | 50 YD  | 949                          | 949  |               |   |      |  |
| 44000705 | BARRIER MEDIAN REMOVAL                                       | SO FT  | 120                          | 120  |               |   |      |  |
| 45000130 | RELIEF JOINT 4"  | F00T   | 120                          | 120  |               |   |      |  |
| 50157300 | PROTECTIVE SHIELD  | -50 YO | <del>1552</del>              | 1552   |               |   |      |  |
| 50300300 | PROTECTIVE COAT  | SO YO  | 230                          | 230  |               |   |      |  |
| 60623800 | CONCRETE BARRIER MEDIAN                                      | SQ FT  | 120                          | 120  |               |   |      |  |
| 67100100 | MOBILIZATION   | L SUM  | ī                            | . 1  |               |   |      |  |
| 70102670 | TRAFFIC CONTROL AND PROTECTION,<br>STANDARD 701601 (SPECIAL) | L SUM  | 1                            | 1  |               |   |      |  |
| 70103815 | TRAFFIC CONTROL SURVEILLANCE                                 | CAL DA | 10                           | 10   |               |   |      |  |
| 70300100 | SHORT-TERM PAVEMENT MARKING                                  | FOOT   | 660                          | 660  |               |   |      |  |
| 70301000 | - NORK-ZONE-PAVEMENT-MARK INC-REMOVAL                        | SO FT  |                              | -5115-   |               |   |      |  |
| 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4"                     | FOOT   | 1045                         | 1045   |               |   |      |  |
| 78008210 | POLYUREA PAVEMENT MARKING TYPE I - LINE 4"                   | FOOT   | 592                          | 592  |               |   |      |  |
| 78100100 | RAISED REFLECTIVE PAVEMENT MARKER                            | EACH   | 23                           | 23   |               |   |      |  |
| 78300200 | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL                    | EACH   | 23                           | 23   |               | Action of the contract of the |      |  |
| X0322467 | TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE               | SO FT  | . 48                         | 48   |               |   | :    |  |
|          |  |        |                              |  |               |   |      |  |

|                     | SUMMARY OF QUANTITIES  |       |                              |  | Cı  | ONSTRUCT                                | ION TYPE                                | CODE |       |
|---------------------|--|-------|------------------------------|--|---|---|---|------|-------|
| CODE NO             | ITEM   | UNIT  | URBAN<br>TOTAL<br>OUANTITIES | BRIDGE<br>SN 016-<br>0522<br>STATE 1002<br>SFTY-2A |   |   |   |      |       |
| x0323077            | SILICONE JOINT SEALER, 2 3/4"                                | FOOT  | 100                          | 160  |   | *************************************** | *************************************** |      |       |
| X7011015            | TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)                 | L SUM | 1                            | 1  |   |   |   |      |       |
| <del>*7030100</del> | WET TEMPORARY PAVENCHT MARKING TAPE .                        | F001  | 6400                         | 6400   |   |   |   |      |       |
| Z0016002            | DECK SLAB REPAIR (FULL DEPTH, TYPE   )                       | SO YD | 74                           | 74   |   |   |   |      |       |
| Z0016200            | DECK SLAB REPAIR (PARTIAL)                                   | SO YO | 167                          | 167  |   |   |   |      |       |
| X0325775            | WET REFLECTIVE TEMPORARY TAPE TYPE !!!,                      | FOOT  | 6400                         | 6400   |   |   |   |      |       |
| X0322066            | PROTECTIVE SHIELD (PERMANENT)                                | 5Q YD | 1458                         | 1458   |   |   |   |      |       |
| 20001700            | APPROACH SLAB REPAIR (FULL DEPTH)                            | SQ YD | 17                           | 17   |   |   |   |      |       |
| 60300310            | FRAMES AND LIDS TO BE<br>ADJUSTED (SPECIAL)                  | EACH  | /                            | /  | d made population in the state of the state |   |   |      | ·     |
| X4400100            | PORTLAND CEMENT CONCRETE<br>SURFACE REMOVAL (VARIABLE DEPTH) | 5Q YO | 18                           | 18   |   |   |   |      |       |
|                     |  |       |                              |  |   |   | ·                                       |      |       |
|                     |  |       |                              |  |   |   |   |      |       |
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|                     |  |       |                              |  |   |   |   |      |       |
|                     |  |       |                              | 1 1  |   |   |   | 1    |       |

\*SPECIALTY ITEMS

REVISIONS DATE

ILLINDIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES

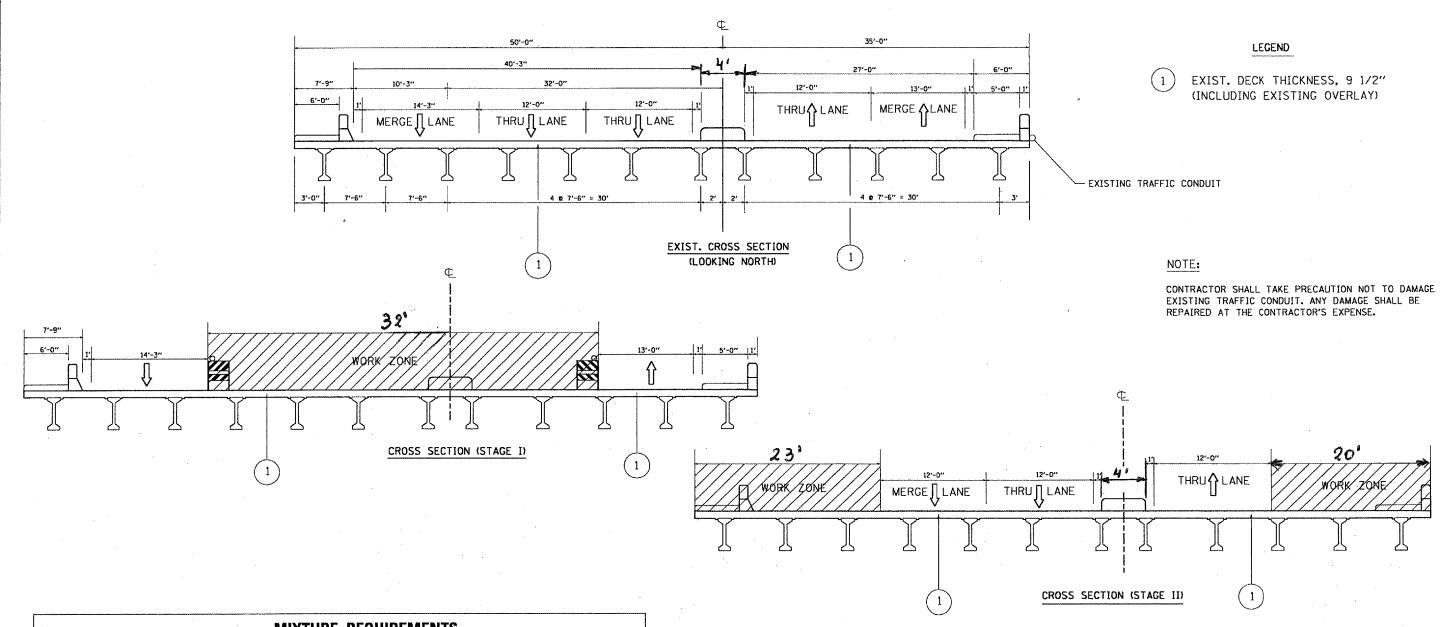
Rey,

PLOT DATE: 4/3/2007

ROUTE SECTION COUNTY SHEETS NUMBER

FAP 362 N-6-7-I-1 COOK 14 4

CONTRACT: 60B28



| MIXTURE REQUIR  | EMENTS           |               |
|---|------------------|---------------|
| MIXTURE USES  | AC TYPE          | VOIDS         |
| POLY. HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, IL 9.5 mm | SBS/SBR PG 70-22 | 4% AT 90 GYR. |
| POLY. HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90             | SBS/SBR PG 70-22 | 4% AT 90 GYR. |
| LEVELING BINDER (MACHINE METHOD), N70, IL 9.5 mm              | PG 64-22 *       | 4% AT 70 GYR. |

NOTE 1: THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE IS 112 LBS/SQYD/IN

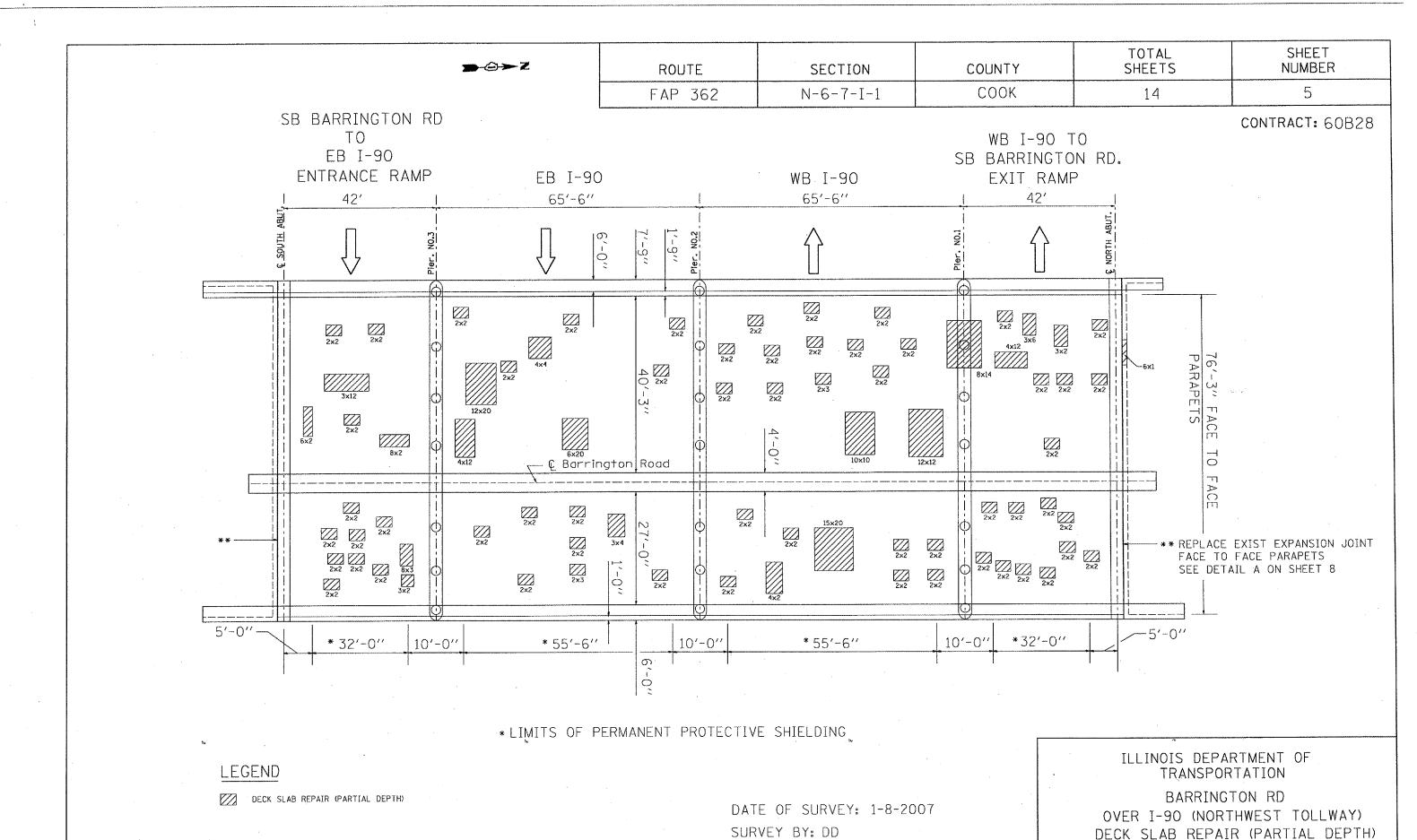
\* NOTE 2: WHEN RAP EXCEEDS 20% THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

ILLINOIS DEPARTMENT OF TRANSPORTATION

BARRINGTON RD

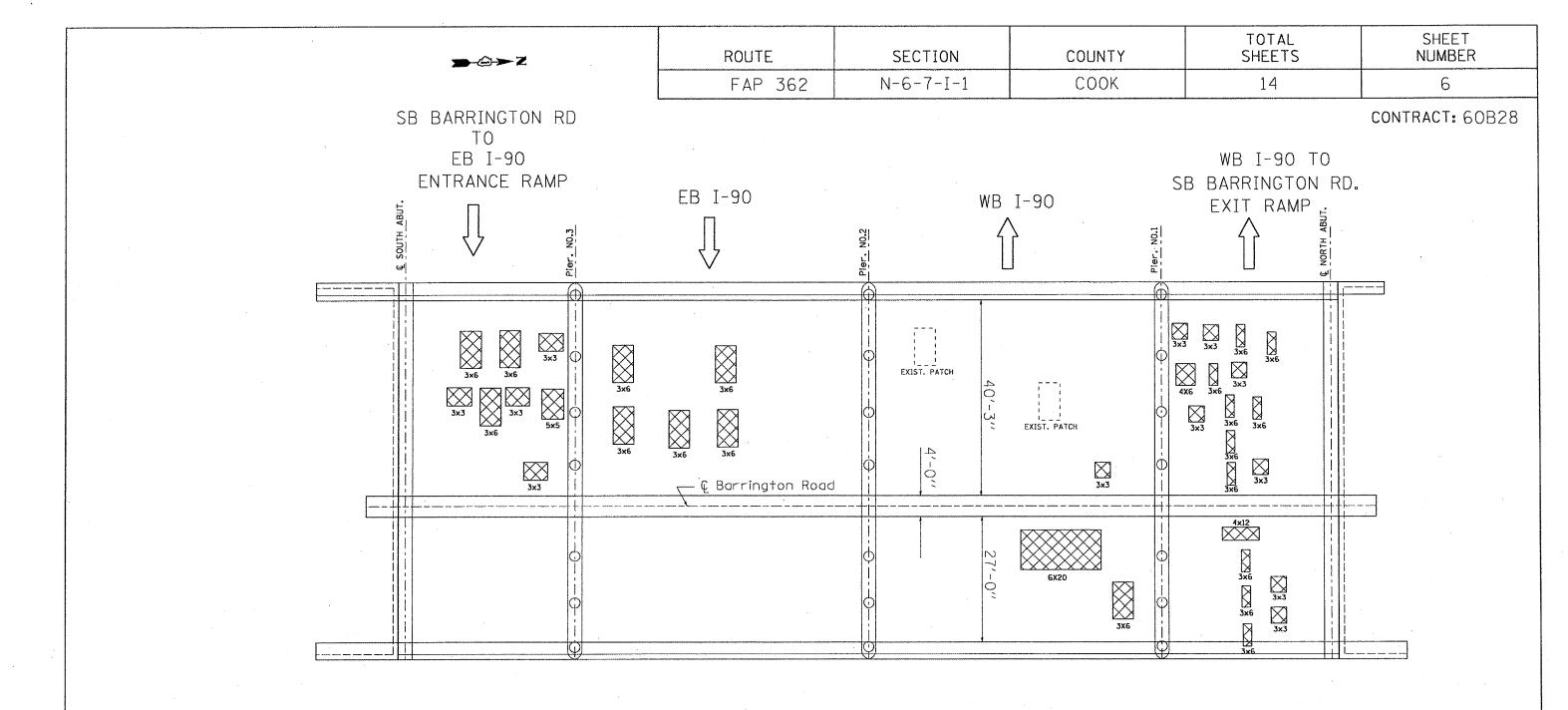
OVER I-90 (NORTHWEST TOLLWAY)

TYPICAL SECTION



SN 016-0522

5/2/2007 c:@projects@design@oddis\_maint.dgn vi=Rn7



LEGEND

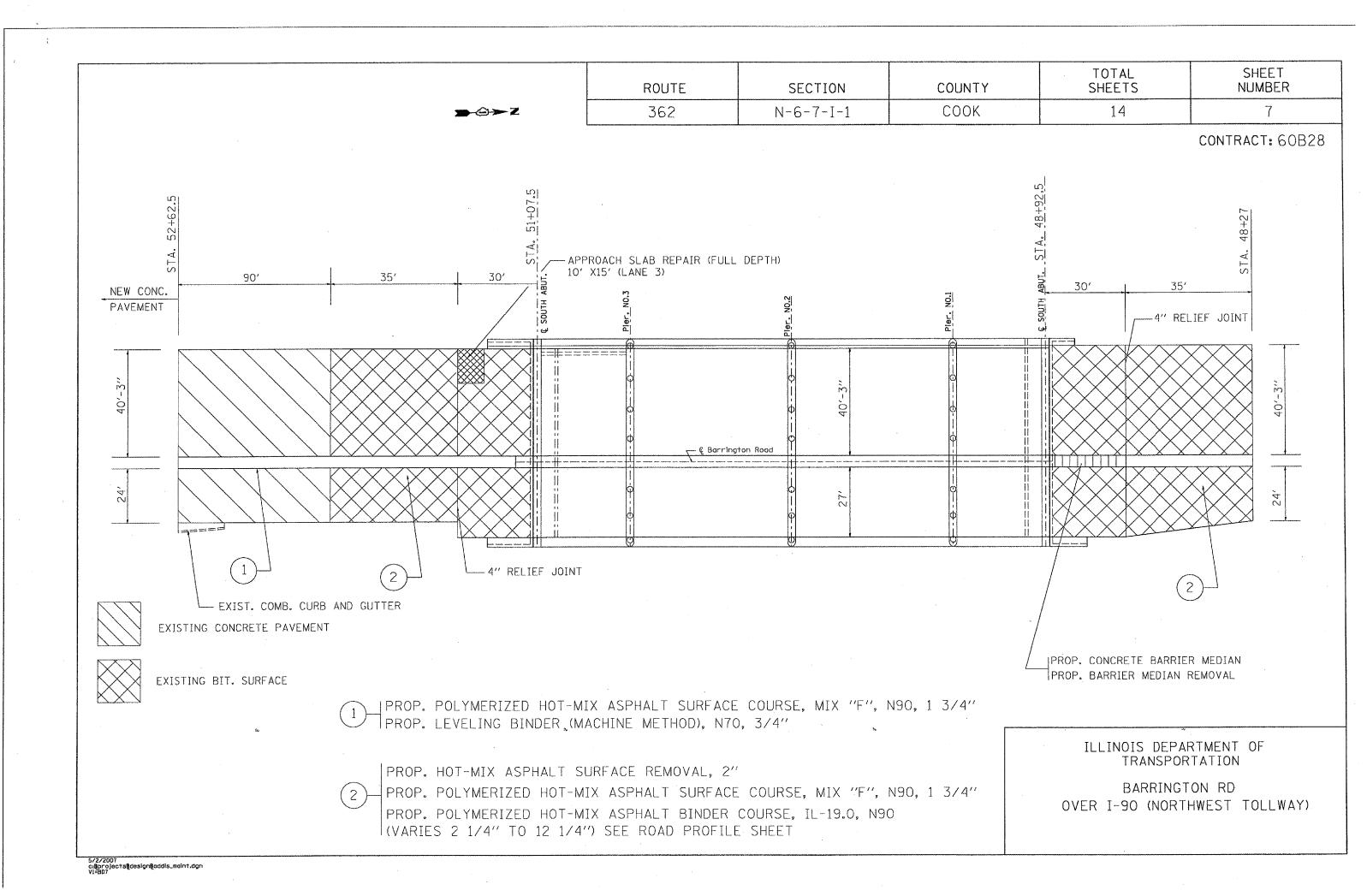
DECK SLAB REPAIR (FULL DEPTH)

DATE OF SURVEY: 1-8-2007

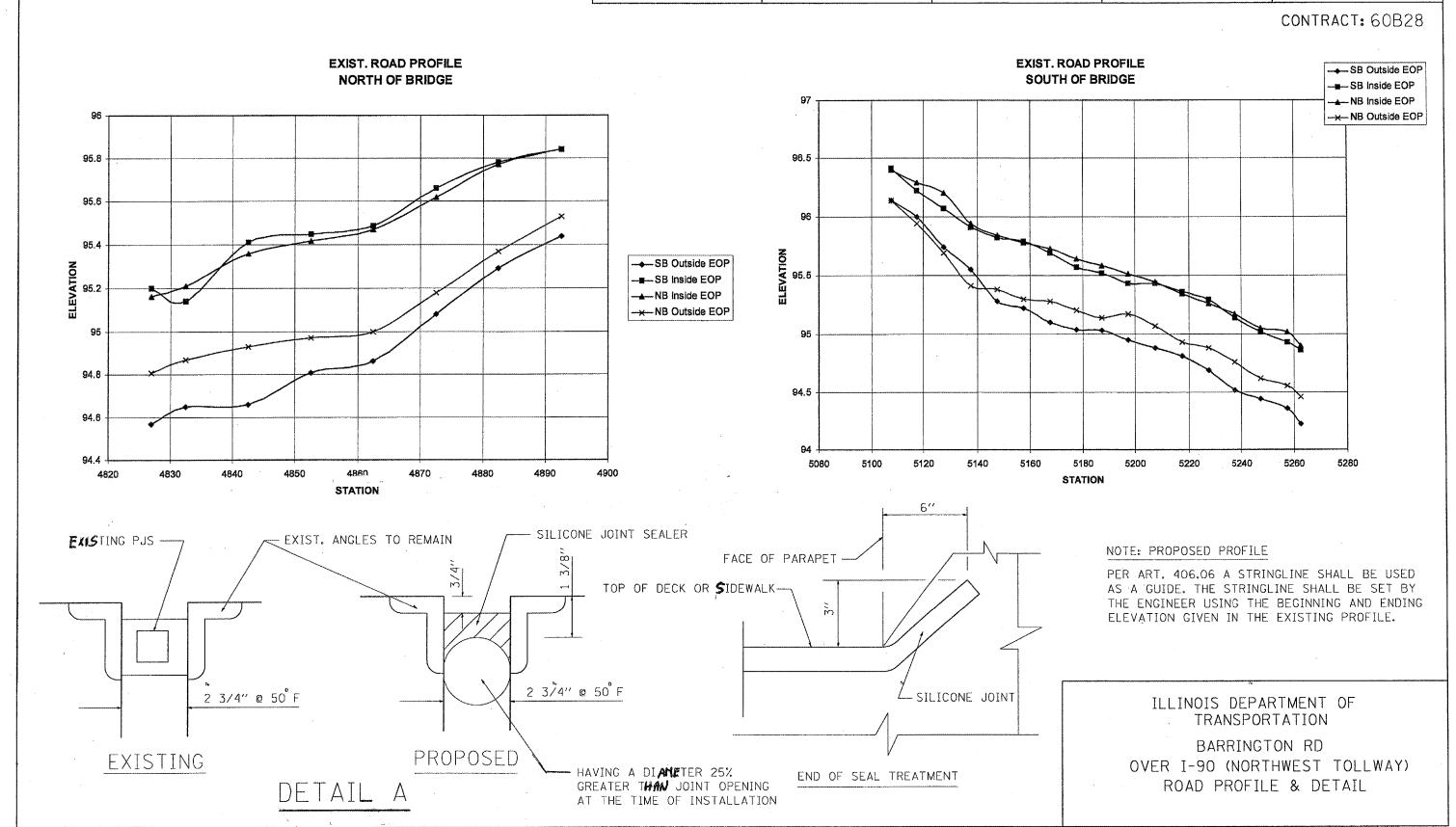
SURVEY BY: DD

ILLINOIS DEPARTMENT OF
TRANSPORTATION
BARRINGTON RD
OVER I-90 (NORTHWEST TOLLWAY)
BOTTOM DECK SURVEY
SN 016-0522

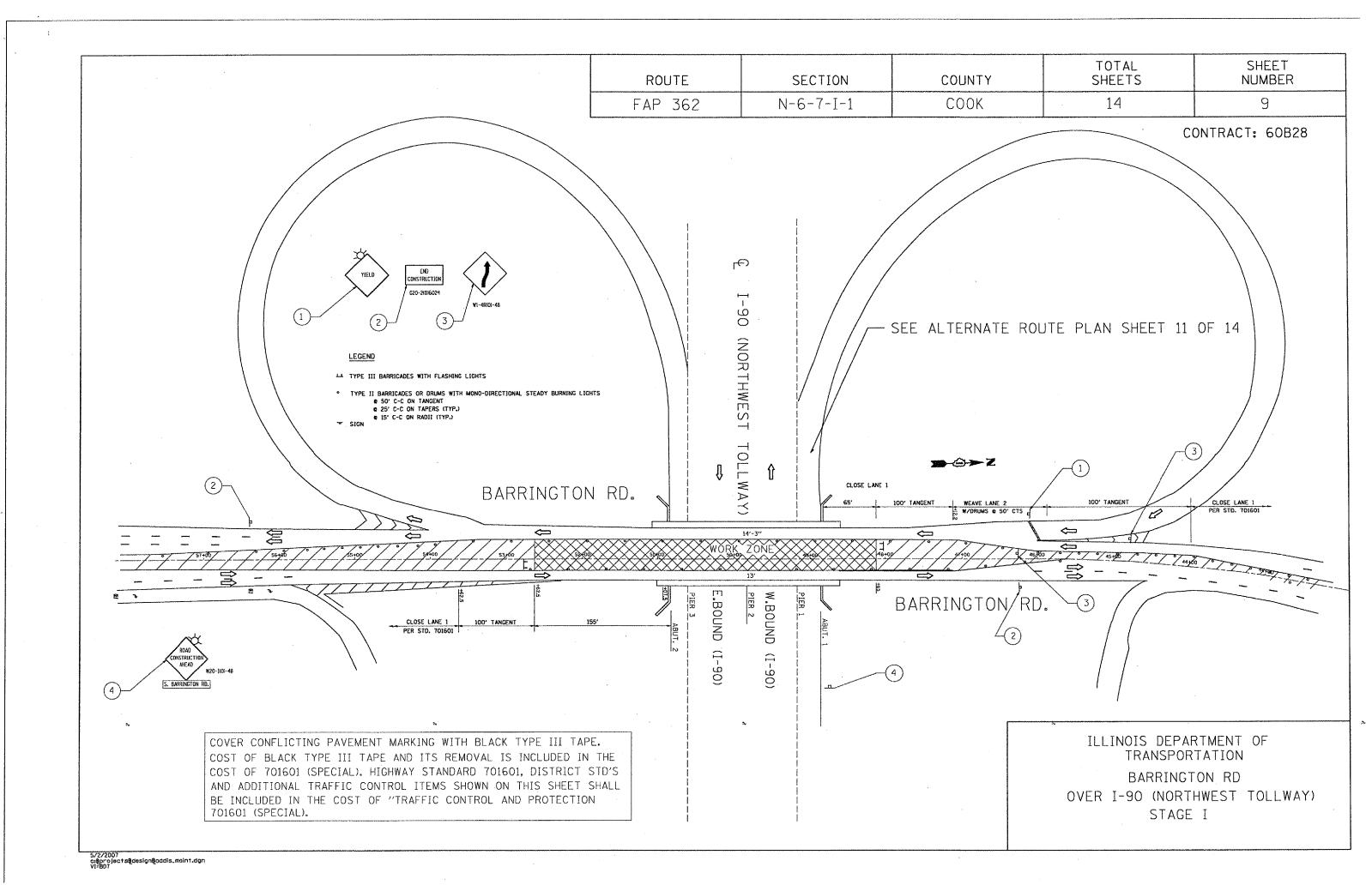
5/2/2007 c:@projects@design@addis\_maint.dgn vi-anz

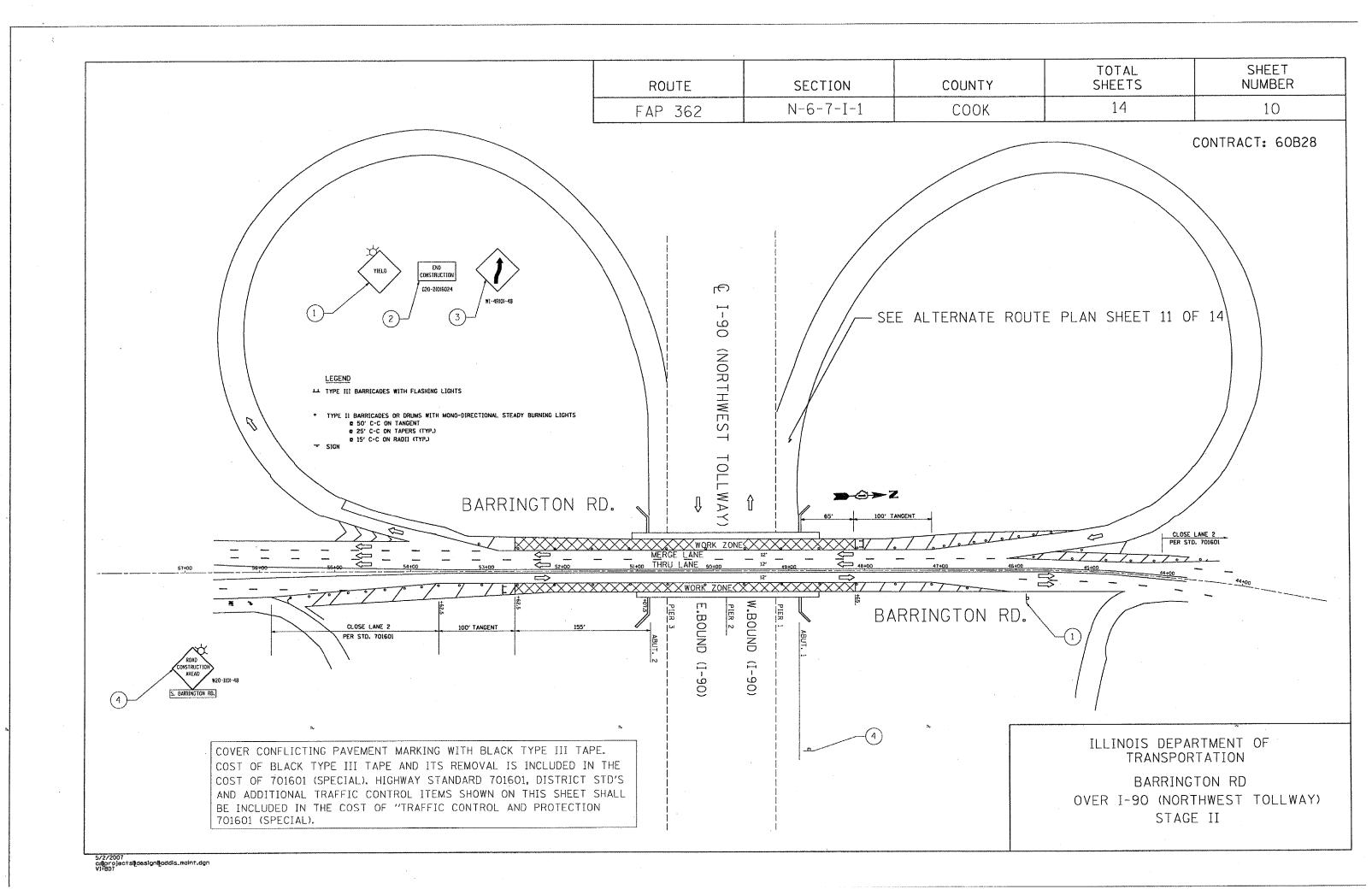


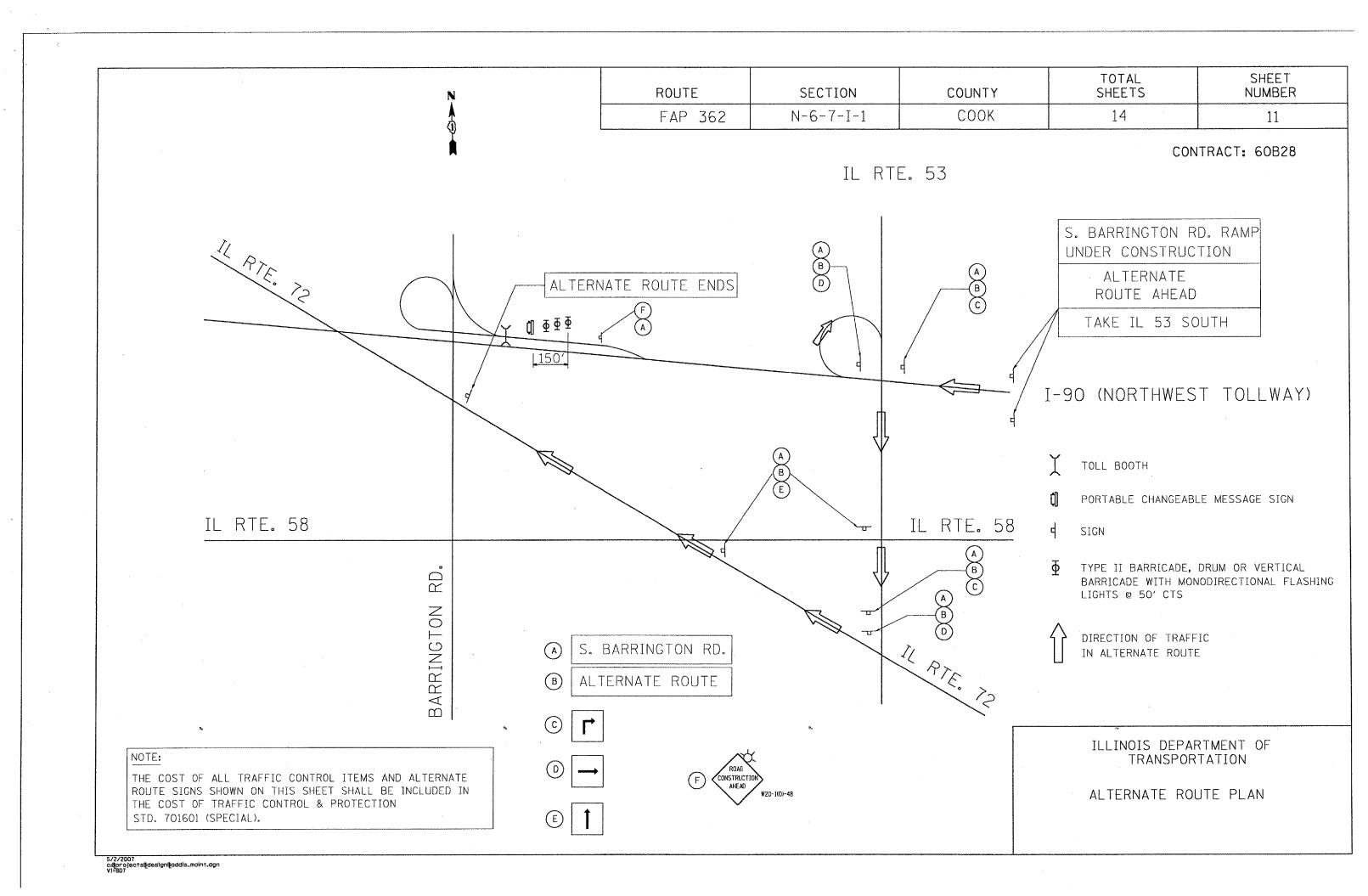
| ROUTE | SECTION   | COUNTY | TOTAL<br>SHEETS | SHEET<br>NUMBER |
|-------|-----------|--------|-----------------|-----------------|
| . 362 | N-6-7-I-1 | COOK   | 14              | 8               |



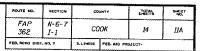
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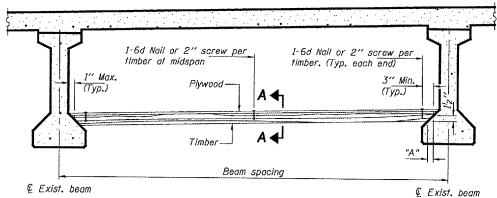




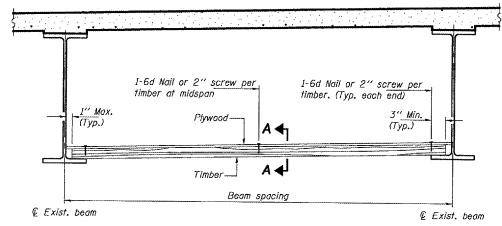
#### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



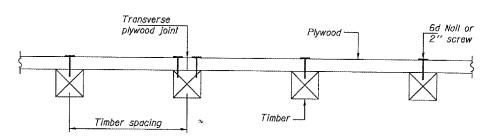
Contract # 60B28



## PPC I-BEAMS AND BULB-T's



#### STEEL BEAMS



SECTION A-A

#### TIMBER SPACING

|                          | 7  | imber Sizes (ir                                  | · 1  |
|--------------------------|--|--|--|
|                          |  |  |  |
| Beam<br>Spacing<br>(ft.) | 4" x 4"<br>with min.<br>Fb≈775 psi<br>Fv=135 psi | 4" x 6"<br>with min.<br>Fb=775 psi<br>Fv=135 psi | 6" x 6"<br>with min.<br>Fb=575 psi<br>Fv=125 psi |
|                          | Maximu   | m Timber Spac                                    |  |
| 4.5                      | 16   | 16   | 16   |
| 4.75                     | 16   | 16   | 16   |
| 5.0                      | <i>1</i> 6                                       | 16   | 16   |
| 5.25                     | 16   | 16   | 16   |
| 5.5                      | 16   | <i>1</i> 6                                       | 16   |
| 5.75                     | 16   | <i>1</i> 6                                       | 16   |
| 6.0                      | 16   | 16   | 16   |
| 6.25                     | 12   | 16   | <i>1</i> 6                                       |
| 6.5                      | 12   | 16   | <i>1</i> 6                                       |
| 6.75                     | 12   | 16   | <i>1</i> 6                                       |
| 7.0                      | 8  | 16   | 16   |
| 7.25                     | 8  | 16   | 16   |
| 7.5                      | 8  | 16   | 16   |
| 7.75                     | 8  | 16   | 16   |
| 8.0                      | 8  | 12   | 16   |
| 8.25                     | 8  | 12   | 16   |
| 8.5                      | 6  | 12   | 12   |
| 8.75                     | 6  | 12   | 12   |
| 9.0                      | 6  | 8  | 12   |

## PPC I-BEAMS AND BULB-T'S

| BEAM        | "A " |
|-------------|------|
| 36" I-Beam  | 1'2" |
| 42'' I-Beam | 12"  |
| 48" I-Beam  | 12"  |
| 54'' I-Beam | 158" |
| 63" Bulb-T  | 338" |
| 72" Bulb-T  | 338" |

See special provision for Permanent Protective Shield System. Notes: Timber sizes shown are nominal sizes. Rough sawn timber of the dimensions shown will also be considered acceptable.

The minimum Fb and Fv values shown are the tabulated design values given in the National Design Specification for Wood Construction for No. 2 Spruce-Pine-Fir without adjustment factors applied. Better grades or other species with equal or higher allowable stresses will also be considered acceptable.

The timber spacings shown have been determined using allowable stresses with all adjustment factors necessary for the anticipated service conditions. All timber shall be treated.

Plywood shall be 58" Exterior type plywood.

Plywood shall be placed such that the face grain is perpendicular to the timber supports. When less than a full sheet (4' width) of plywood is used, the width of the strip used shall not be less than 2'.

Transverse plywood joints shall be supported by timbers.

When 4" x 6" timbers are used, they shall be placed such that the wide face is horizontal and the narrow face is vertical.

Design load = 200 psf.

### BILL OF MATERIAL

| <u> Item</u>                  | Unit    | Total |
|-------------------------------|---------|-------|
| Protective Shield (Permanent) | Sq. Yd. | 1458  |

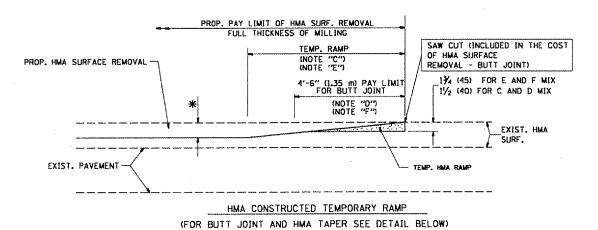
ILLINOIS DEPARTMENT OF TRANSPORTATION

PERMANENT PROTECTIVE SHIELD

OVER I-90 (NORTHWEST TOLLWAY) 016-0522

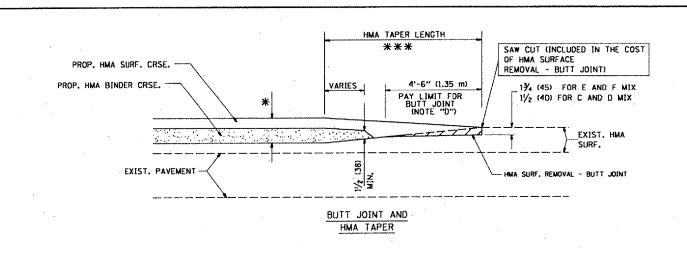
PROP. PAY LIMIT OF HMA SURF, REMOVAL FULL THICKNESS OF MILLING (NOTE "C") (NOTE "E") PROP. HMA SURFACE REMOVAL -EXIST. PAVEMENT (FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

#### OPTION 1



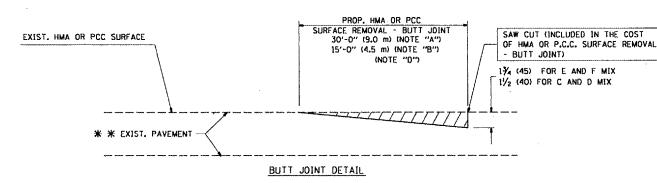
#### OPTION 2

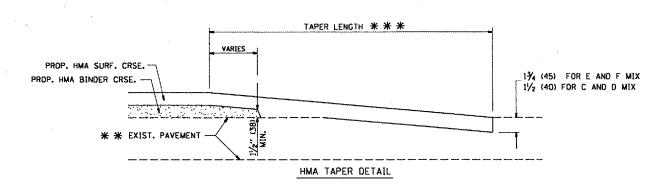
#### TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

RYE. SECTION COUNTY 362 N-6-7-1-1 14 12 STA. TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT





## 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 IMILLIMETERS) LINLESS OTHERWISE SHOWN.

#### BASIS OF PAYMENT:

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

| REVISIO    | NS.      |
|------------|----------|
| HAME       | DATE     |
| M. DE YONG | 6-13-90  |
| NL 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. COMEZ   | 04/06/0  |
| R. BORD    | 01/01/07 |
|            |          |

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

DRAWN BY CHECKED BY

BD400-05 (VI=BD32)

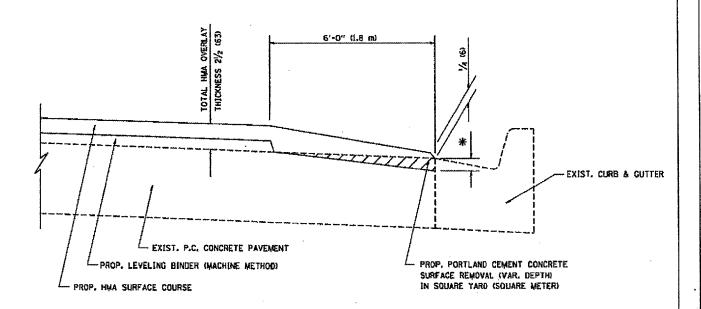
CONTRACT NO.

FA. SECTION COUNTY SHEETS NO.

362 N-6-7-I-1 CCO C 14 12 A

STA. TO STA.

FED. ROLG DIST. NO. 1 ILLINOIS FED. AID PROJECT



# HMA TAPER AT EDGE OF P.C.C PAVEMENT

| HMA<br>SURFACE |           | LEVELING<br>BINDER |                             |
|----------------|-----------|--------------------|-----------------------------|
| MIX            | THICKNESS | THICKNESS          | * MILLING AT<br>GUTTER FLAG |
| CORD           | (1/2 (38) | 1 (26)             | 11/4 (33)                   |
| F              | [¾ (44)   | ¥4 (19)            | 11/2 (38)                   |

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

| REVISIONS |       |          | ILLINOIS DEPARTMENT     | OF TRANSPORTATION   |  |
|-----------|-------|----------|-------------------------|---------------------|--|
|           | NAME  | DATE     | TECHNOTO DEI HUINGHI    | OF TEMPOS DITERTION |  |
| R,        | SHAH  | 09/10/94 |                         | 1                   |  |
| R         | SHAH  | 10/25/94 |                         | 1                   |  |
| A         | ABBAS | 05/05/99 | TA                      | DED AT              |  |
| E         | GOMEZ | 12/21/00 | НМА ТА                  | PER AI              |  |
| R         | BORO  | 01/01/07 | EDGE OF P.C.C. PAVEMENT |                     |  |
| <u> </u>  |       | <u> </u> |                         |                     |  |
| _         |       |          |                         | I I                 |  |
|           |       |          | SCALET VERT. NONE       | DRAWN BY IIS        |  |
|           |       |          | HORIZ. WORLE            | ,                   |  |
|           |       |          |                         | CHECKED BY A. ABBAS |  |
|           |       |          |                         | BD400-06 (BD33)     |  |

PLOT DATE - 275/2007 FILE NAME - KLANAKONAGSAGA PLOT SCALE - 68.8008 '/ IK. USER NAME - Converdi

CONTRACT NO. CON

SECTION DOC.

13 F V 102 MI D.C.

14 F V 102 MI D.C.

15 F V 102 MI D.C.

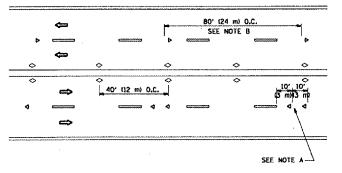
16 F V 102 MI D.C.

17 F V 102 MI D.C.

18 F V 102 MI D.C.

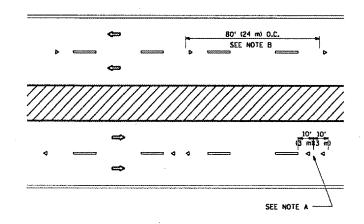
19 F V 102 MI D.C.

10 F V 102 MI



MULTI-LANE/UNDIVIDED

PATE SCALE



MULTI-LANE/DIVIDED

#### GENERAL NOTES

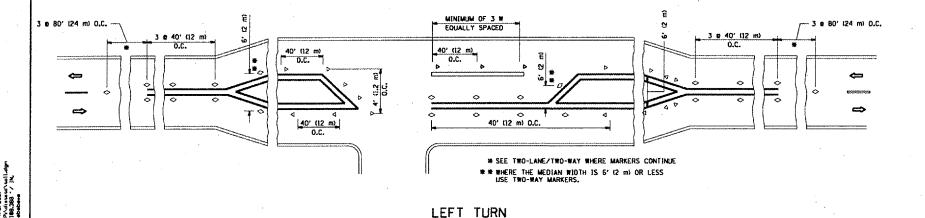
- MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- 2. MARKERS USED ADJACENT TO SOLID LIMES SHALL BE OFFSET 2 TO 3 (SO TO TS) TOWARD TRAFFIC AS SHOWN.
- 3. MARKERS THROUGH TANGENTS LESS THAN 500' 1150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

#### LANE MARKER NOTES

- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H 120 km/h) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

#### SYMBOLS

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



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

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

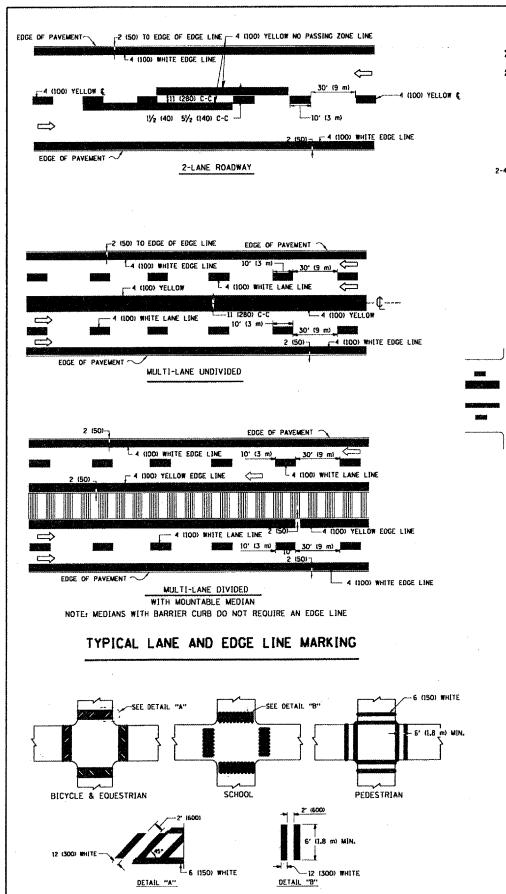
ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT
MARKERS (SNOW-PLOW RESISTANT)

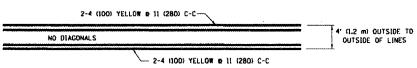
SCALE: NONE

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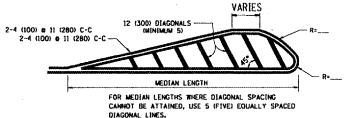
.



TYPICAL CROSSWALK MARKING

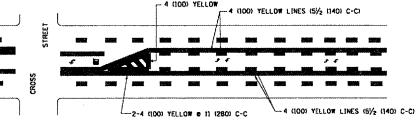


#### 4' (1.2 m) WIDE MEDIANS ONLY

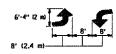


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

#### MEDIANS OVER 4' (1.2 m) WIDE

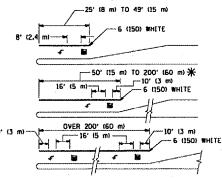


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' 190 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

#### TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS B' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SO. FT. (1.5 m²)  $\P$  AREA = 20.8 SO. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

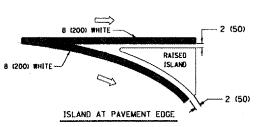
#### TYPICAL TURN LANE MARKING



| RTE. | SECTION   | COUNTY | SHEETS | SHEET<br>NO. |
|------|-----------|--------|--------|--------------|
| 362  | N-6-7-1-1 | COOK   | 14     | 14           |

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

8 (200) WHITE-12 (300) WHITE DIAGONALS m 10' (3 m) OR LESS SPACING ISLAND OFFSET FROM PAVEMENT EDGE



#### 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 UNDIVEDED PAVEMENT   | 2 6 4 (100)   | SOLID                  | YELLOW                         | 11 (280) C-C   |
| NO PASSING ZONE LINES:<br>FOR ONE DIRECTION<br>FOR BOTH DIRECTIONS                                | 4 (100)<br>2 a 4 (100)  | SOL10<br>SOL10         | YELLOW                         | 5½ (140) C-C FROM SKIP-DASH CENTERLINE<br>11 (280) C-C<br>OMIT SKIP-DASH CENTERLINE BETWEEN  |
| LANE LINES  | 4 (100)<br>5 (125) ON FREEWAYS  | SKIP-DASH<br>SKIP-DASH | WHITE<br>WHITE                 | 10' (3 m) LINE WITH 30' (9 m) SPACE  |
| DOTTED LINES<br>(EXTENSIONS OF CENTER, LANE OR<br>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)   | SOLIO                  | YELLOW-LEFT<br>WHITE-RIGHT     | OUTLINE MOUNTABLE MEDIANS IN<br>YELLOW: EDGE LINES ARE NOT<br>USED NEXT TO BARRIER CURB  |
| TURN LANE MARKINGS  | 6 (150) LINE; FULL<br>SIZE LETTERS &<br>SYMBOLS (8' (2.4m))                           | SOL10                  | #HETE                          | SEE TYPICAL TURN LANE MARKING DETAIL   |
| TWO WAY LEFT TURN MARKING   | 2 p 4 (100)<br>EACH DIRECTION   | SKIP-DASH<br>AND SOLID | YELLOW                         | 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE  |
|   | B' (2.4m) LEFT ARROW  | IN PAIRS               | WHITE                          | SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL   |
| CROSSWALK LINES IPEDESTRIAND<br>A. DIACONALS (BIKE & EQUESTRIAN)<br>B. LONGITHDINAL BARS (SCHOOL) | 2 m 6 (150)<br>12 (300) m 45°<br>12 (300) m 90°                                       | SOLID<br>SOLID         | WHITE<br>WHITE<br>WHITE        | NOT LESS THAN 6' (1.8 m) APART<br>2' (500) APART<br>2' (500) APART<br>SEE TYPICAL CROSSWALK MARKING DETAILS.   |
| STOP LINES  | 24 (600)  | SOL10                  | WHITE                          | PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSMALE, IF PRESENT. OTHERWISE, PLADE AT OSSISTROS STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE |
| PAINTED MEDIANS   | 2 9 4 (100) WITH<br>12 (300) DIAGONALS  | SOLID                  | YELLOW:<br>TWO WAY TRAFFIC     | 11 (280) C-C FOR THE DOUBLE LINE   |
|   | NO DIAGONALS USED FOR<br>4' (1.2 m) WIDE MEDIANS                                      |                        | WHITE:<br>ONE WAY TRAFFIC      | SEE TYPICAL PAINTED MEDIAN MARKING.  |
| GORE MARKING AND CHANNELIZING LINES   | 8 (200) WITH 12 (300)<br>DIAGONALS # 45"  | SOL 1D                 | WHITE                          | DIACONALS:<br>15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h))<br>20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))<br>30' (9 m) C-C (OVER 45MPH (70 km/h))               |
| RAILROAD CROSSING   | 24 (600) TRANSVERSE<br>LINES; "RR"-IS 6' (1.8 m)<br>LETTERS; 16 (400)<br>LINE FOR "X" | SOLID                  | WH]TE                          | SEE STATE STANDARD 780001<br>AREA OF:<br>"R":3.6 SO. FT. (0.33 m²) EACH<br>"X":54.0 SO. FT. (5.0 m²)   |
| SHOULDER DIAGONALS  | 12 (300) <b>e</b> 45°   | SOL10                  | WHITE - RIGHT<br>YELLOW - LEFT | 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))<br>75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h))<br>150' (45 m) C-C (DVER 45MPH (70 km/h))                         |

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

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

| REVISIO                                 | ILL INO  |             |
|---|----------|-------------|
| NAME                                    | DATE     | ICE INO     |
| EVERS                                   | 03-19-90 |             |
| T. RAMMACHER                            | 10-27-94 |             |
| ALEX HOUSEH                             | 10-09-96 |             |
| ALEX HOUSEH                             | 10-17-96 |             |
| T, RAMMACHER                            | 01-06-00 |             |
|   |          |             |
|   |          |             |
| *************************************** |          | SCALE: NONE |

IS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE TYPICAL PAVEMENT MARKINGS

DRAWN BY CADD CHECKED BY