

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|------------|--------|--------------|-----------|
| 345 | 22-1-2VB-1 | COOK | // | 1 |

CONTRACT NO. 60A27

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT LOCATED
IN THE VILLAGES OF HANOVER PARK

FAP 345 (ELGIN O'HARE EXPRESSWAY)
OVER WETLANDS AND METRA R.R.

SECTION: 22-1-2VB-1

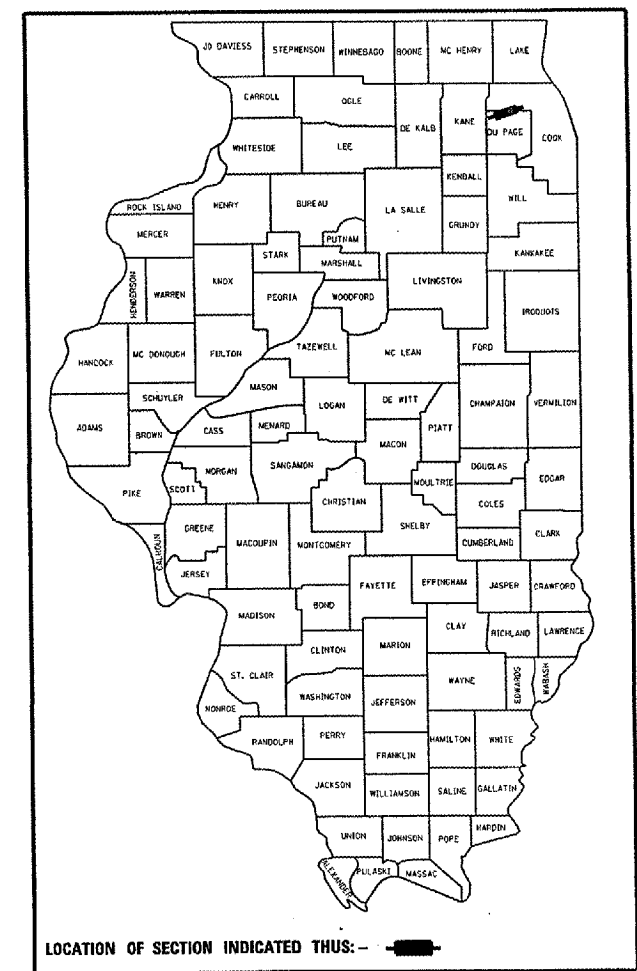
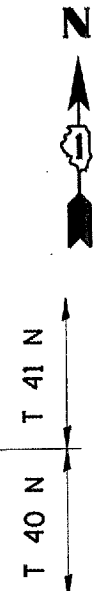
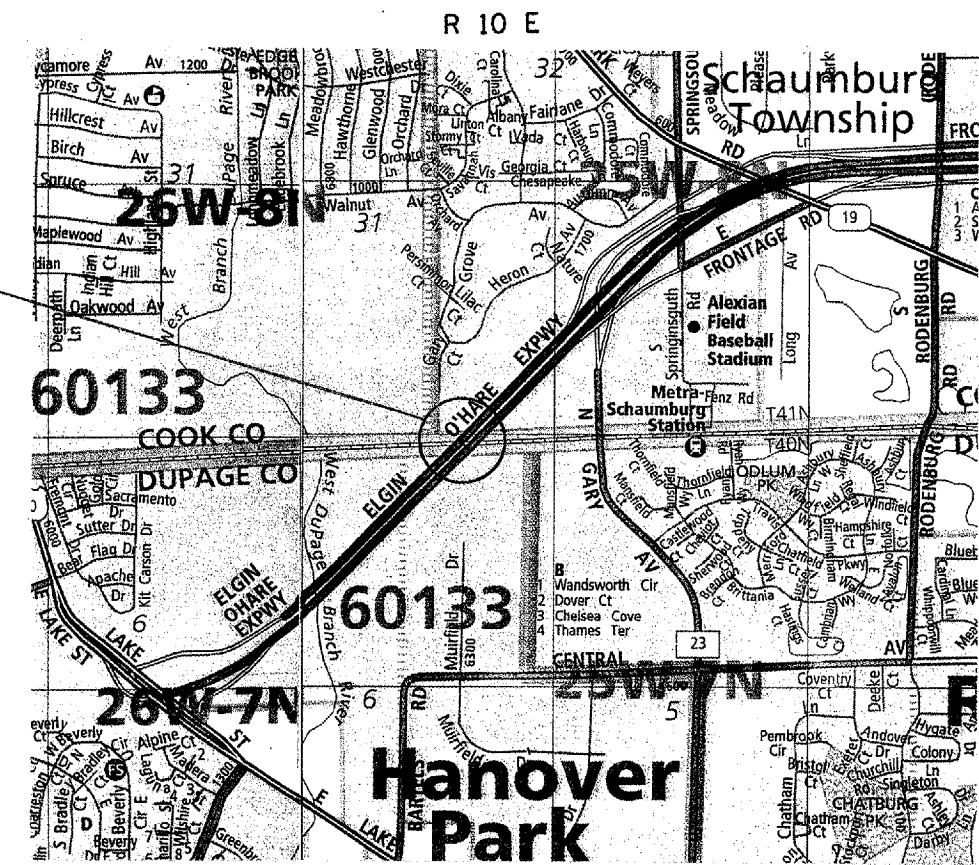
BRIDGE APPROACH RESURFACING

COOK COUNTY

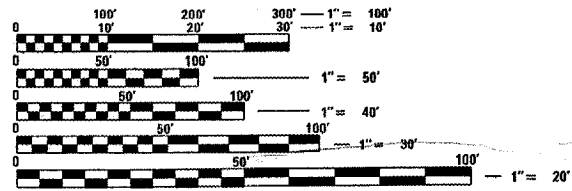
C-91-021-06

TRAFFIC DATA
ADT = 30,300
SPEED LIMIT = 55 MPH

IMPROVEMENT LOCATION
ELGIN O'HARE EXPRESSWAY
OVER WETLANDS AND METRA R.R.
(SN 016-2566)



LOCATION OF SECTION INDICATED THIS: -



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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED June 15, 2006
Diane M. O'Keefe/CML
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

August 18, 2006
Mike Hine/RO
ENGINEER OF DESIGN AND ENVIRONMENT

August 18, 2006
Milton R. Sees, P.E. /RO
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

REGION ONE/BUREAU OF DESIGN
PLAN PREPARATION ENGINEER: K. ENG /R. BORO - (847) 705-4178

CONTRACT NO. 60A27

| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|---------|------------|--------|--------------|--------------|
| FAP 345 | 22-1-2VB-1 | COOK | 11 | 2 |

STATE STANDARDS

| STANDARD NO. | <u>DESCRIPTION</u> |
|--------------|---|
| 701400-02 | APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY |
| 701401-03 | LANE CLOSURE, FREEWAY/EXPRESSWAY |
| 701426-02 | LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION |
| 701446 | TWO LANE CLOSURE, FREEWAY/EXPRESSWAY |
| 702001-06 | TRAFFIC CONTROL DEVICES |

INDEX OF SHEETS

| SHEET NO. | <u>DESCRIPTION</u> |
|-----------|--|
| 1 | TITLE SHEET |
| 2 | INDEX OF SHEETS AND STATE STANDARDS |
| 3 | GENERAL NOTES |
| 4 | SUMMARY OF QUANTITIES |
| 5-7 | TYPICAL SECTIONS |
| 8-9 | PLAN SHEET |
| 10 | EXIST. APPROACH PAVEMENT DETAIL |
| 11 | DETAIL – FREEWAY SHOULDER CLOSURE AND PARTIAL RAMP CLOSURE |

| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|---------|------------|--------|--------------|--------------|
| FAP 345 | 22-1-2VB-1 | COOK | // | 3 |

GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
2. TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS 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.
4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE (or TOLLWAY) PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT (or ISTHA).
5. ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
6. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
7. 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 THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
9. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4151 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
10. THE ENGINEER SHALL CONTACT WALTER CZARNY, TRAFFIC FIELD ENGINEER, AT (773)685-8386 TWO (2) WEEKS PRIOR TO THE START OF THIS PROJECT SO THAT EXACT STATIONING OF NO PASSING ZONES AND OTHER PERMANENT PAVEMENT MARKINGS MAY BE ESTABLISHED.

11. THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF MAINTENANCE (or CONSTRUCTION or BRIDGE INSPECTORS).

12. THE THICKNESS OF BITUMINOUS MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS MIXTURE IS PLACED.

13. WHEN THE CONTRACTOR CHOOSES THE RAP OPTION, THE AMOUNT OF RAP INCLUDED IN THE MIXTURE SHALL NOT EXCEED 0% FOR BINDER COURSE, 0% FOR SURFACE COURSE.

14. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

15. DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS.

16. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED 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.

17. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO INSURE THAT NO DEBRIS WILL ENDANGER OR INTERFERE WITH TRAFFIC ON THE ROADWAY BENEATH THE BRIDGE ACCORDING TO ARTICLE 107.09 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL NOT BE PAID FOR SEPERATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE APROPRIATE PAYITEM INVOLVED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

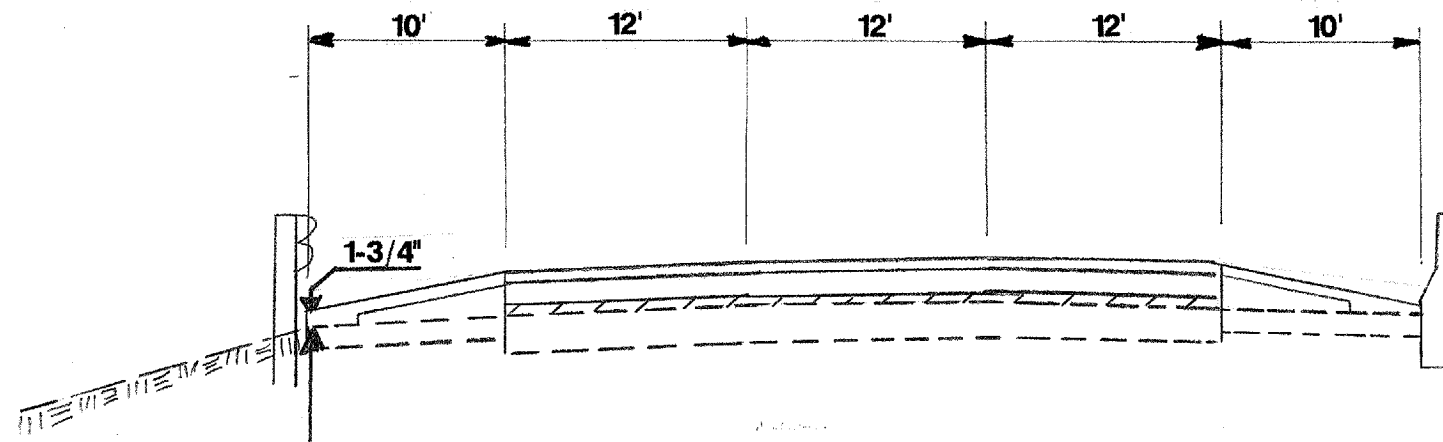
| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|---------|------------|--------|--------------|--------------|
| FAP 345 | 22-1-2VB-1 | COOK | // | 4 |

| Pay Item | Description | Unit | Total |
|------------|---|-------|--------|
| 40600200 | BITUMINOUS MATERIALS (PRIME COAT) | TON | 0.30 |
| 40600300 | AGGREGATE (PRIME COAT) | TON | 1.30 |
| 40600400 | MIXTURE FOR CRACKS, JOINTS, AND FLANGWAYS | TON | 0.20 |
| 40600985 | PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT | SQ YD | 60.00 |
| 44000004 | BITUMINOUS SURFACE REMOVAL 1" | SQ YD | 650.00 |
| 67100100 | MOBILIZATION | L SUM | 1.00 |
| * 78000200 | THERMOPLASTIC PAVEMENT MARKING - LINE 4" | FOOT | 200.00 |
| * 78000300 | THERMOPLASTIC PAVEMENT MARKING - LINE 5" | FOOT | 30.00 |
| * 78100100 | RAISED REFLECTIVE PAVEMENT MARKER | EACH | 4.00 |
| 78300200 | RAISED REFLECTIVE PAVEMENT MARKER REMOVAL | EACH | 4.00 |
| X4066548 | POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90 | TON | 9.00 |
| X4066658 | POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N90 | TON | 150.00 |
| X7011015 | TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS) | L SUM | 1.00 |

URBAN
100% STATE
1000

* SPECIALTY ITEMS

| | | | | |
|---------|------------|--------|--------------|--------------|
| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
| FAP 345 | 22-1-2VB-1 | COOK | 11 | 5 |



EASTBOUND ELGIN – O’HARE EXPRESSWAY APPROACH PAVEMENT
STATION 693 + 95 TO STATION 694 + 95

1. EXIST. PCC APPROACH PAVEMENT – 10" VARIES TO 15"
2. EXIST. BITUMINOUS SURFACE TO BE REMOVED – 1" VARIES TO 0"
3. EXIST. PCC APPROACH SHOULDER
4. PROP. POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90, 5-1/2" VARIES TO 0"
5. PROP. POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX. F, N90, 1-3/4"

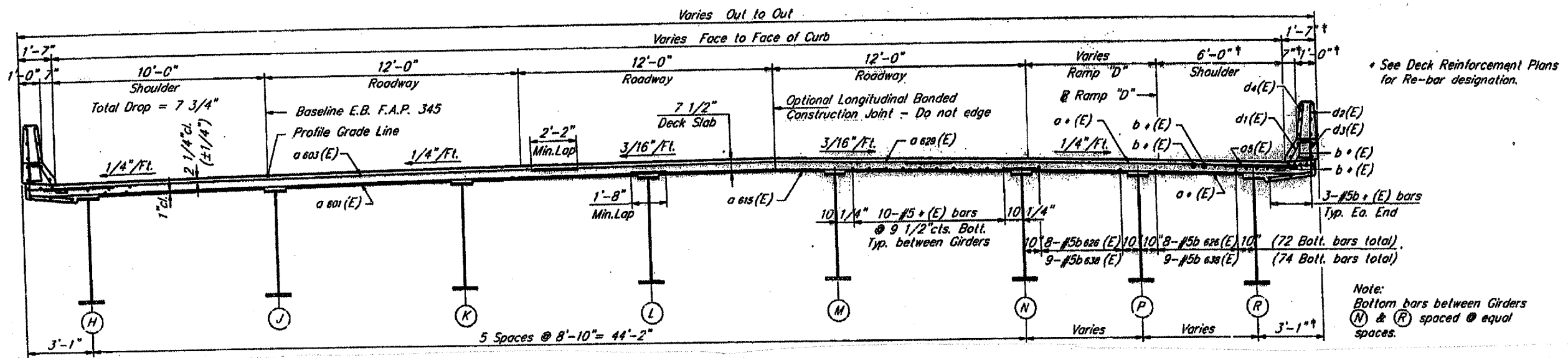
BITUMINOUS MIXTURE REQUIREMENTS

| MIXTURE | AC TYPE | MAX RAP (%) | AIR VOIDS (%) |
|--|------------------|-------------|---------------|
| POLY. BIT. CONC. SURFACE CSE, SUPERPAVE, MIX "F", N90 | SBS/SBR PG 70-22 | 10% | 4% @ 90 GYR. |
| POLY. BIT. CONC. BINDER CSE, SUPERPAVE, IL-19, N90 | SBS/SBR PG 70-22 | 10% | 4% @ 90 GYR. |

THE UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS SURFACE MIXTURE QUANTITIES IS 112 LBS. /SQ. YD. /IN.

TYPICAL SECTION

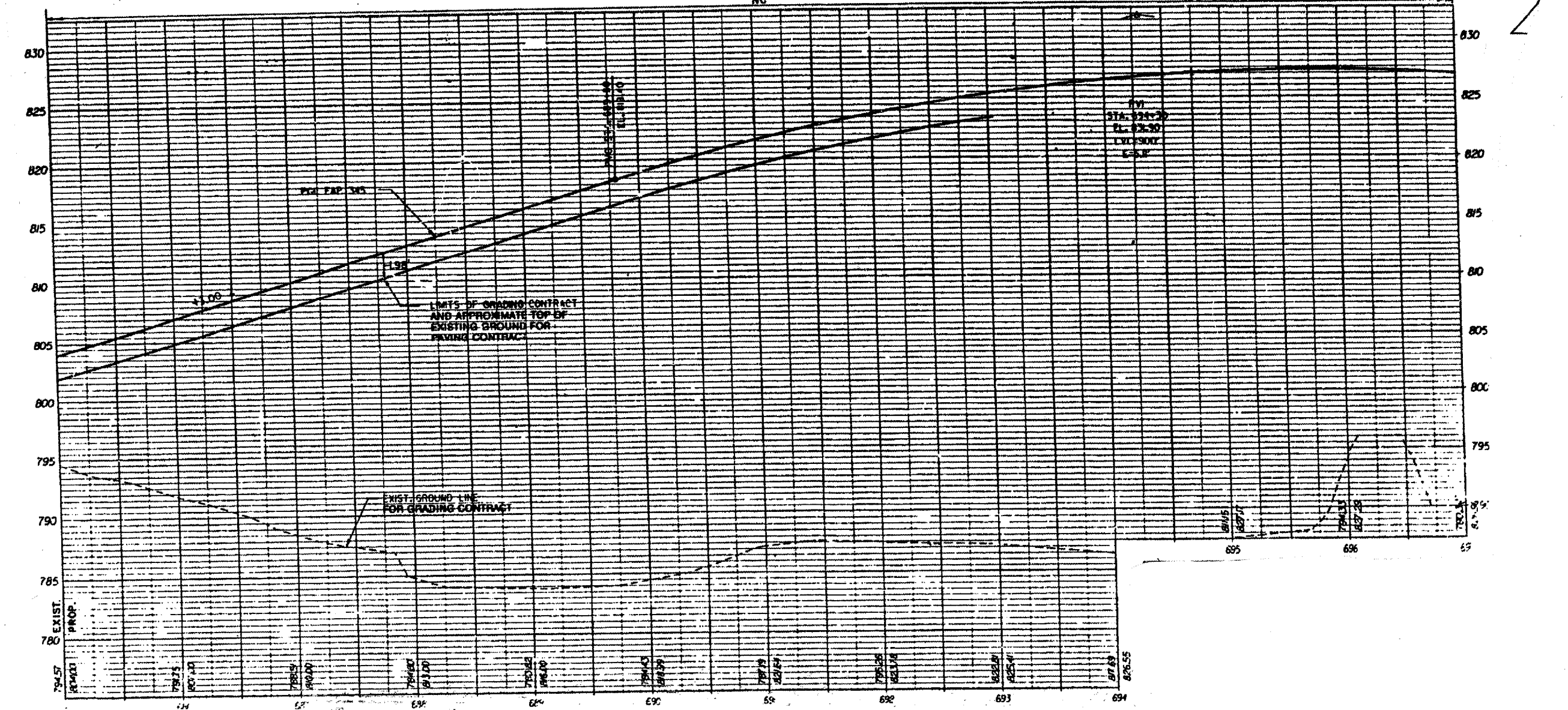
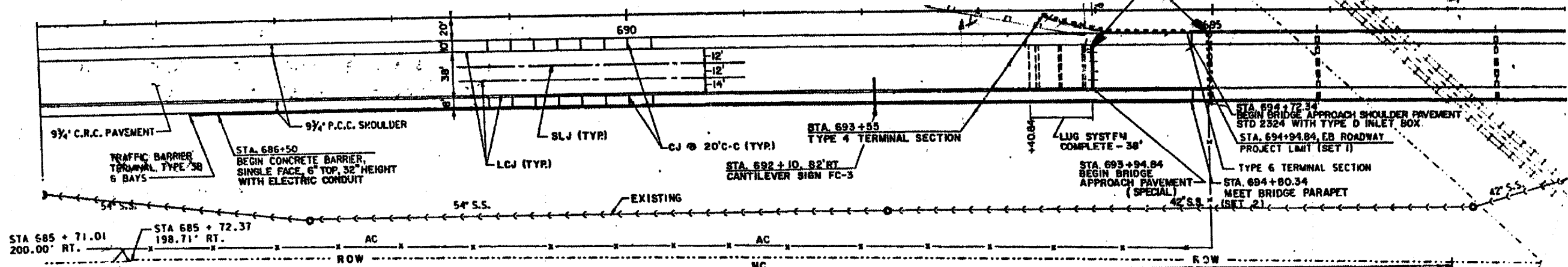
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| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
| FAP 345 | 22-1-2VB-1 | COOK | 11 | 7 |



EXIST. BRIDGE TYPICAL SECTION

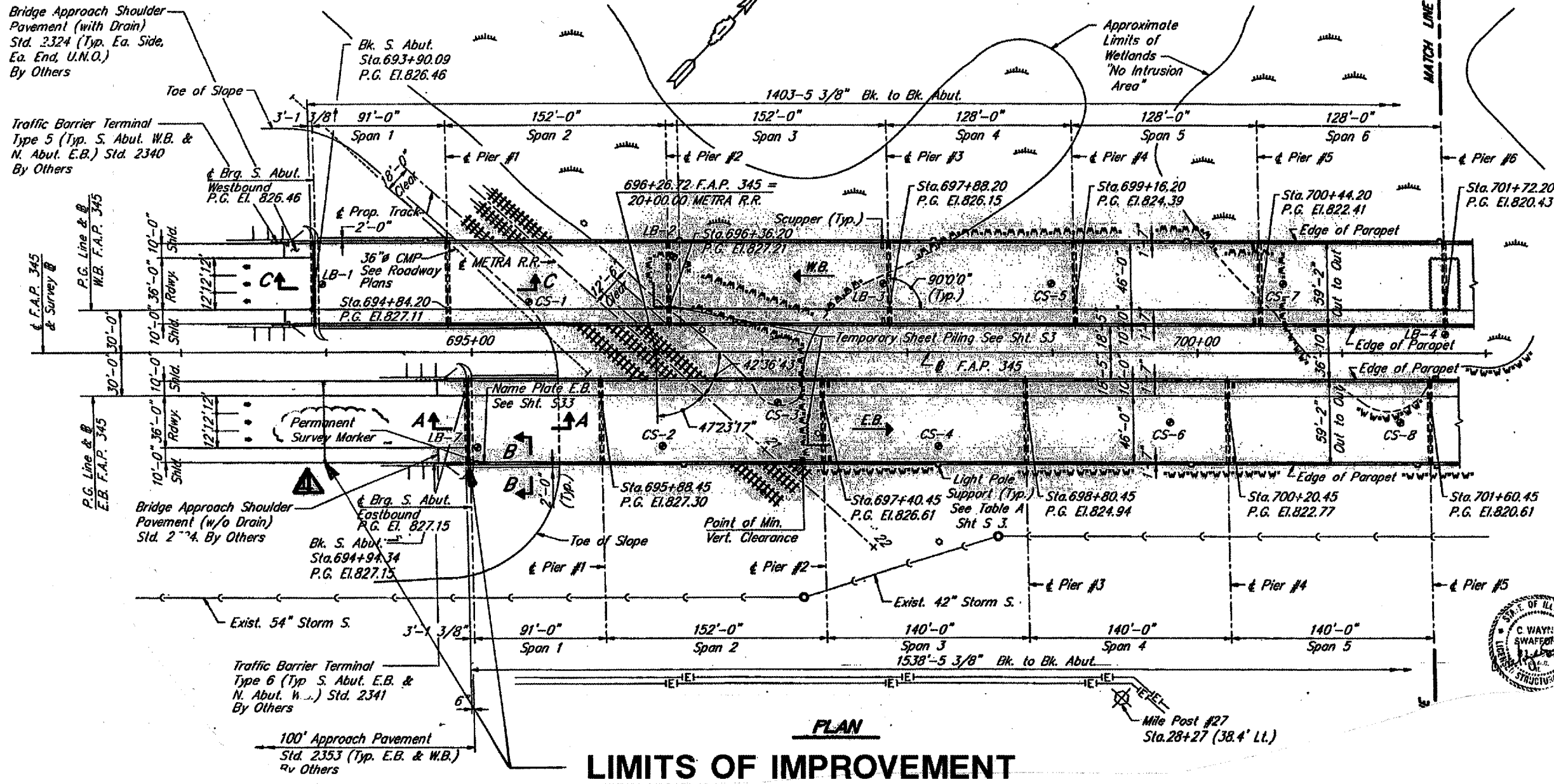
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| ROUTE FAP 345 | SECTION 22-1-2VB-1 | COUNTY COOK | TOTAL SHEETS 11 | SHEET NUMBER 8 |
|------------------|-----------------------|----------------|--------------------|-------------------|

LIMITS OF IMPROVEMENT



| | | | | |
|---------|------------|--------|--------------|--------------|
| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
| FAP 345 | 22-1-2VB-1 | COOK | 11 | 9 |

BENCHMARK:
 Square cut in Headwall 500± East of
 Ontarioville Rd. on South Side of
 U.S. Rte. 20 (Lake St.) Elev. 794.02
 No Existing Structure.

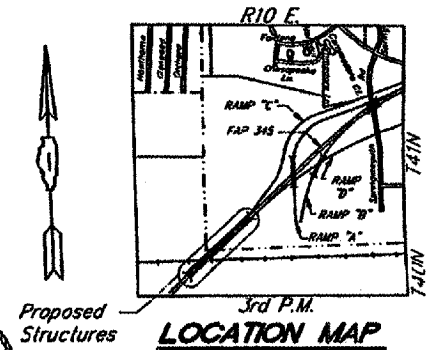


STATION 696+26.72
 BUILT 199 BY
 STATE OF ILLINOIS
 F.A.P. 345 SEC. 22-1-2VB
 F.A. PROJ. IX-345(6)
 LOADING HS 20
 STR. NO. E.B. 016-2565

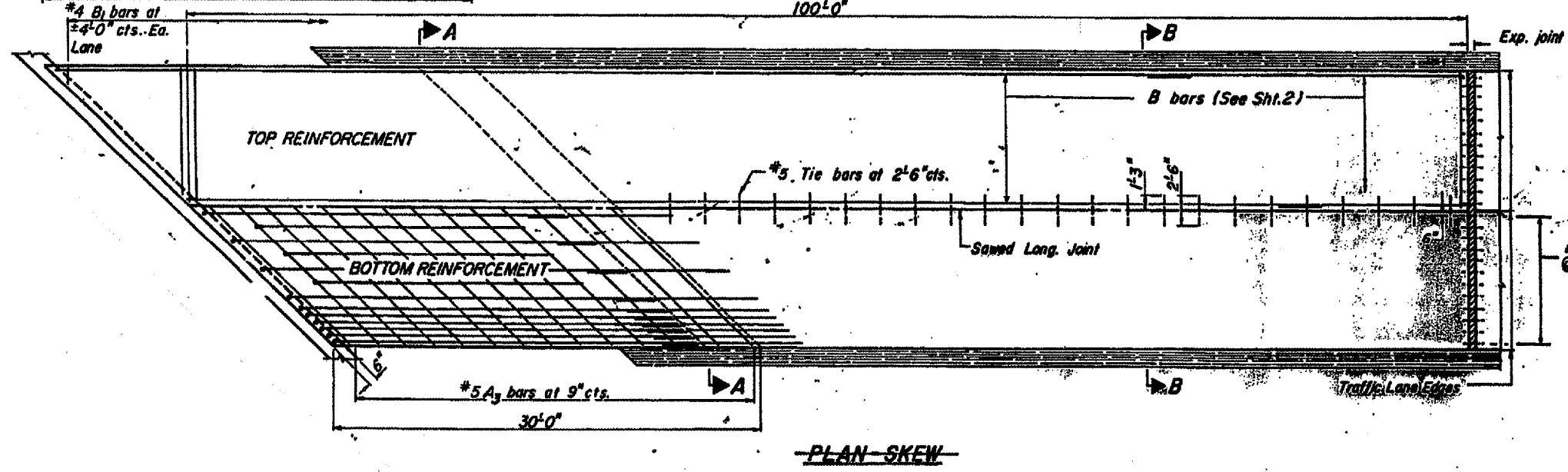
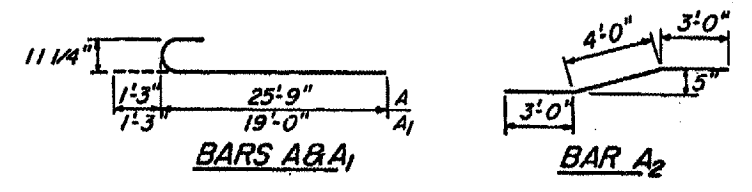
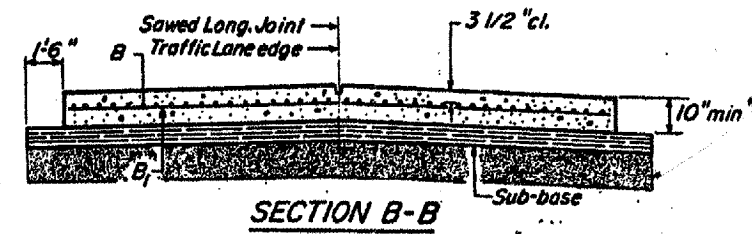
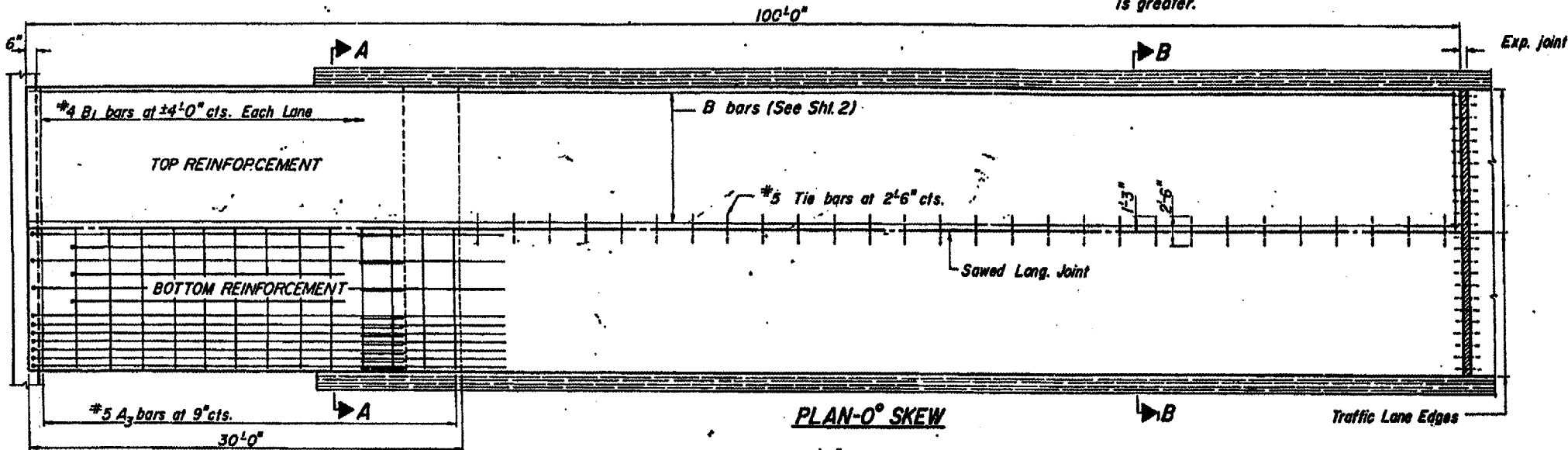
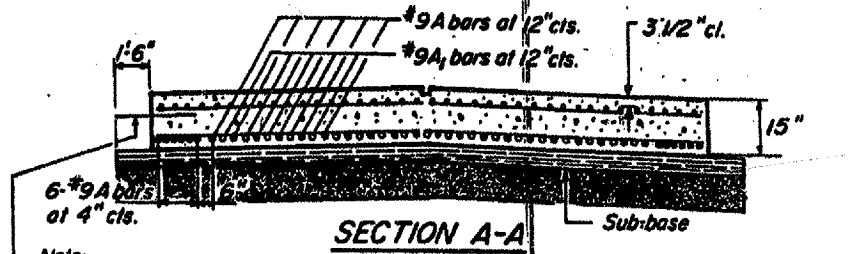
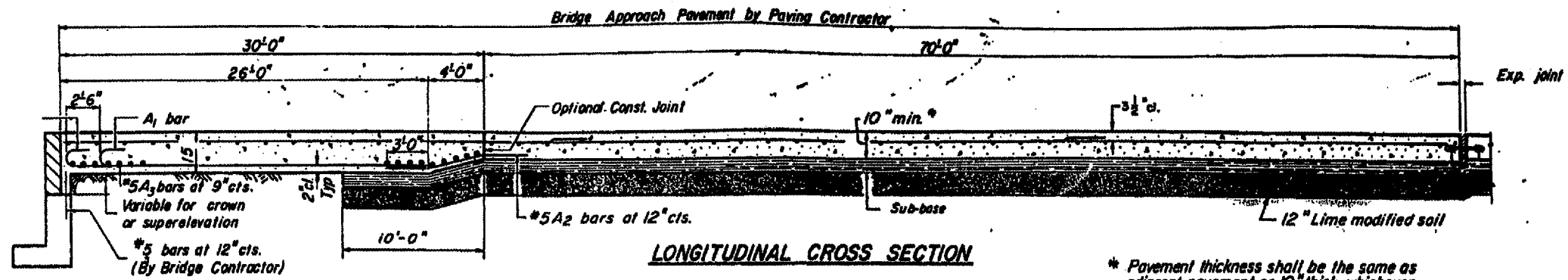
NAME PLATE E.B.
 (See Std. 2113)
 Locate as shown on Sheet S 33

STATION 696+26.72
 BUILT 199 BY
 STATE OF ILLINOIS
 F.A.P. 345 SEC. 22-1-2VB
 F.A. PROJ. IX-345(6)
 LOADING HS 20
 STR. NO. W.B. 016-2566

NAME PLATE W.B.
 (See Std. 2113)
 Locate as shown on Sheet S 31



| | | | | |
|---------|------------|--------|--------------|--------------|
| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
| FAP 345 | 22-1-2VB-1 | COOK | 11 | 10 |



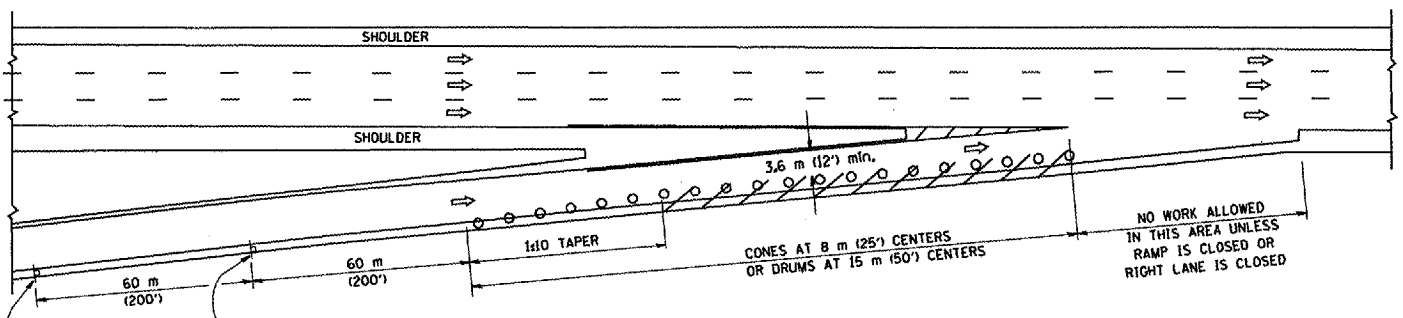
GENERAL NOTES

- With the approval of the Engineer the contractor will be permitted to reduce the paving widths by substituting a Keyed Longitudinal Construction Joint with tie bars in lieu of the Specified Sawed Longitudinal Joint.
- When Bridge Approach Pavement is constructed adjacent to flexible pavement, the expansion joint and dowel bars are not required.
- Pavement joints shall be as detailed on Standard 2323.
- The Contractor at his option may place the subbase monolithic with the bridge approach pavement. When this option is used, the subbase may be constructed to the same width as the pavement, and the reinforcement shall be in accordance to the total pavement or sub-base thickness.
- The cost of tie bars, expansion joint and sub-base shall be included in the cost of Bridge Approach Pavement.
- The sub-base shall be of the same material and thickness as under adjacent pavement. When sub-base is not required under adjacent pavement, the sub-base shall be either 6" granular or 4" stabilized material.

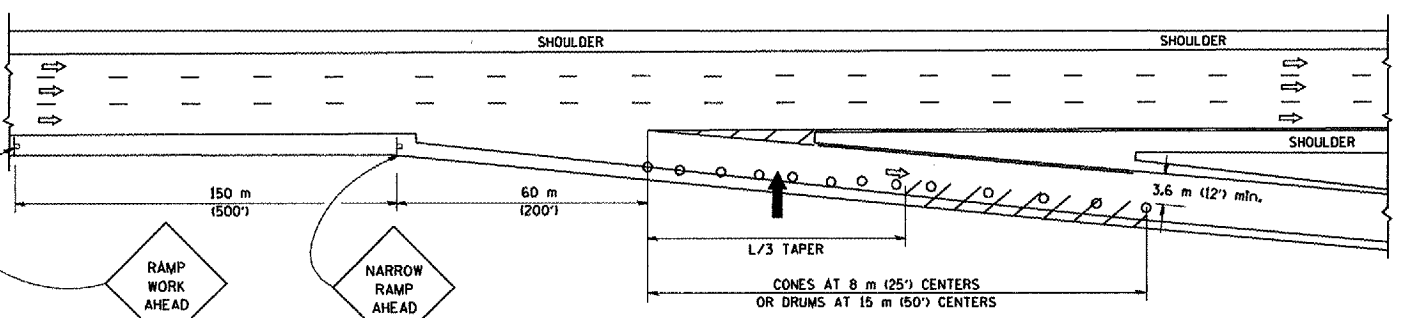
PARTIAL RAMP CLOSURE DETAILS

SHOULDER CLOSURE DETAILS

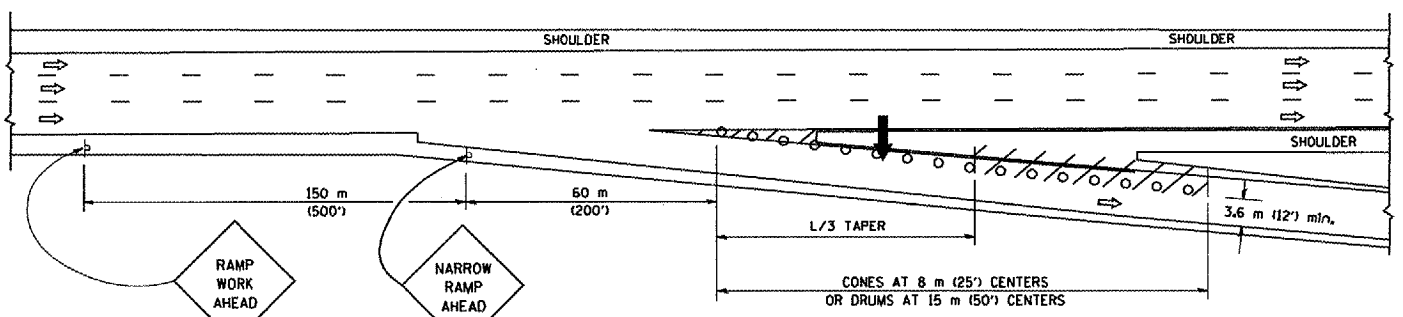
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| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | 221-248 | Cook | 11 | 11 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT | | | |



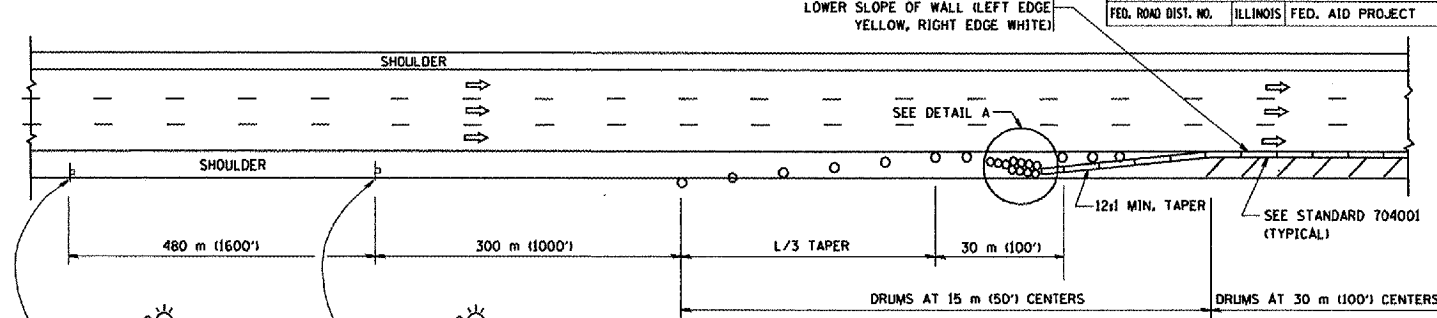
TYPICAL ENTRANCE RAMP



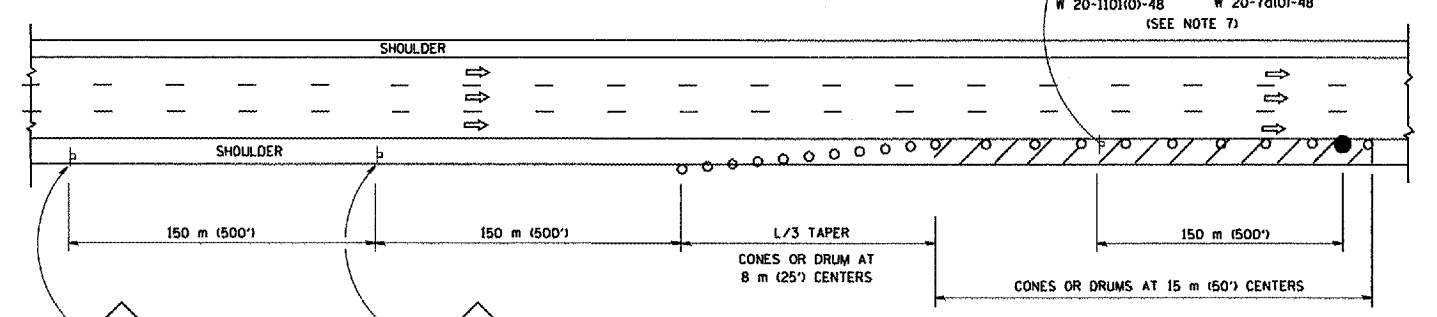
TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

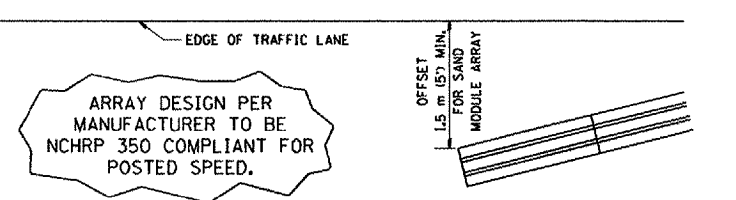


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

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



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

SYMBOLS

- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- CONES - 700 (28) IN HEIGHT

GENERAL NOTES

1. THE "L" DISTANCE EQUALS:
 SPEED LIMIT FORMULAS
 80 km/h (45 mph) METRIC ENGLISH
 OR GREATER: L=0.65(W/S) L=(W/S)
 W = WIDTH OF OFFSET IN METERS (FEET)
 S = NORMAL POSTED SPEED KM/H (MPH)
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.

5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE "TRAFFIC BARRIER TERMINAL, TYPE III, TEMPORARY" DEVICE TO MEET NCHRP350 FOR POSTED SPEED.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
 - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
 - b. THE WORK ACTIVITY REQUIRES FREQUENT ENCRDACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 30 m (100') TO 60 m (200') IN ADVANCE OF THE WORKERS.

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL DETAILS
 FOR FREEWAY
 SHOULDER CLOSURES
 PARTIAL RAMP CLOSURES
 DESIGNED BY: DWS
 DRAWN BY:
 CHECKED BY:
 SCALE: NONE
 DATE: 3/1/2006

PLOT DATE = 3/1/2006
 FILE NAME = K:\classes\0327.dgn
 PLOT SCALE = 30.0000 / IN.
 USER NAME = lrygo