

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

FAP ROUTE 348 : IL 43 (HARLEM AVE.)  
OVER CN RR (SN 016-0317, -0318)  
SECTION: 0708 (.2 & .2A) BR  
**BRIDGE REPAIR, JOINT RECONSTRUCTION & DECK SEALING**  
COOK COUNTY  
C-91-707-10

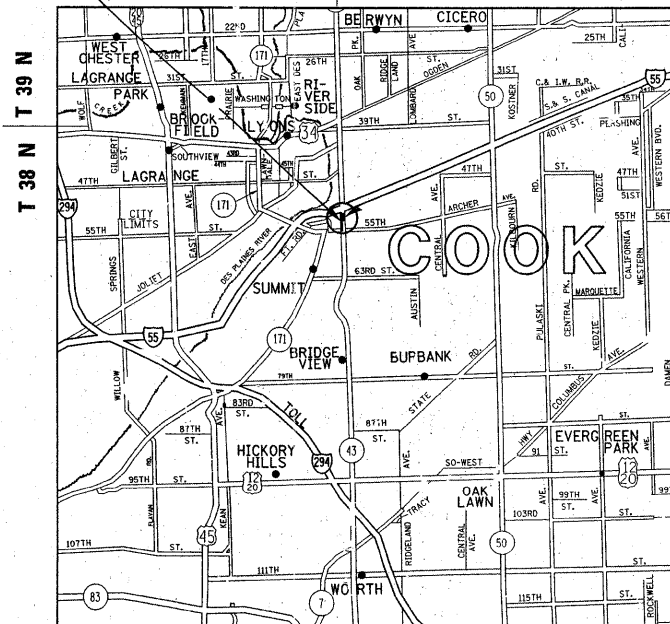
FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT IS LOCATED IN  
THE CITY OF CHICAGO

LOCATION OF  
IMPROVEMENT:  
SN 016-0317, -0318

LYON TOWNSHIP STICKNEY TOWNSHIP

R 12 E R 13 E



LYON AND STICKNEY TOWNSHIPS

|             |                   |                    |              |           |
|-------------|-------------------|--------------------|--------------|-----------|
| F.A.P. RTE. | SECTION           | COUNTY             | TOTAL SHEETS | SHEET NO. |
| 348         | 08708 (.2&.2A) BR | COOK               | 36           | 1         |
| ILLINOIS    |                   | CONTRACT NO. 60L53 |              |           |

\* 36 + 5 = 41

D-51-707-10



LOCATION OF SECTION INDICATED THIS: - ■ -

**TRAFFIC DATA:**

IL 43 (HARLEM AVE)

2609 ADT = 38000

POSTED SPEED LIMIT = 40 MPH

I-55 (STEVENSON EXPY)

1108 ADT = 119000

POSTED SPEED LIMIT = 55 MPH

PROJECT ENGINEER: ROBERT BORO (847) 705-4178  
PROJECT MANAGER: ISSAM RAYYAN (847) 705-4550

CONTRACT NO. 60L53

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED APRIL 8, 20 11

Diane M. O'Keefe DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 13 20 11

Scott E. Stett P.E. ENGINEER OF DESIGN AND ENVIRONMENT

May 13 20 11

Christine M. Reed DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

C. U. A. N.  
CHICAGO UTILITY ALERT NETWORK  
1-312-744-7000

INDEX OF SHEETS

STATE STANDARDS

GENERAL NOTES

| SHEET NO. | DESCRIPTION   |
|-----------|---|
| 1         | TITLE SHEET   |
| 2         | INDEX OF SHEETS, STATE STANDARDS, & GENERAL NOTES                                       |
| 3         | SUMMARY OF QUANTITIES   |
| 4-12A.    | BRIDGE REPAIR DETAILS - SN 016-0317 (IL 43 SB)  |
| 13-19A.   | BRIDGE REPAIR DETAILS - SN 016-0318 (IL 43 NB)  |
| 20-23     | TRAFFIC CONTROL PLANS (STAGE I & II)  |
| 24-26     | TRAFFIC STAGING   |
| 27-28     | DETOUR DURING STAGE I   |
| 29-30     | PAVEMENT MARKING PLANS  |
| 31        | TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE AND MULTI-LANE WEAVE (TC-09)                 |
| 32        | TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)         |
| 33        | TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES (TC-17) |
| 34        | ARTERIAL ROAD INFORMATION SIGN (TC-22)  |
| 35-36     | CITY OF CHICAGO TYPICAL PAVEMENT MARKINGS (TC-24)                                       |
| 36A.      | TRAFFIC CONTROL AND PROTECTION (TC-10)  |
| 36B.      | PAVEMENT MARKING DETAILS  |
| 36C.      | MISC. ELECTRICAL DETAILS  |

| STANDARD NO. | DESCRIPTION  |
|--------------|--|
| 701601-07    | URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN |
| 701701-07    | URBAN LANE CLOSURE, MULTILANE INTERSECTION                         |
| 701801-04    | LANE CLOSURE, MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE     |
| 701901-01    | TRAFFIC CONTROL DEVICES  |
| 704001-06    | TEMPORARY CONCRETE BARRIER   |

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "C. U. A. N." (CHICAGO UTILITY ALERT NETWORK) AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE & GAS UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED).

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF CHICAGO.

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

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 STRIPPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4470 FOR ARTERIALS, AND (847)705-4151 FOR EXPRESSWAYS A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE ENGINEER SHALL CONTACT PATRICE HARRIS AREA TRAFFIC FIELD TECHNICIAN AT (708) 597-9800 A MINIMUM OF TWO(2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION OF ALL EMERGENCY SERVICES, SCHOOL DISTRICTS, I.D.O.T.'S COMMUNICATIONS CENTER, SPRINGFIELD TRUCK PERMIT SECTION AND OTHER AGENCIES AFFECTED BY THE CLOSURE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR POSTING SIGNS THAT WILL INDICATE THE DATES THE CLOSURE WILL BE IN PLACE.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

THE "ARTERIAL ROAD INFORMATION SIGN (TC-22)" IS APPLICABLE ONLY TO ARTERIAL ROADS AND SHALL NOT BE APPLIED TO EXPRESSWAYS.

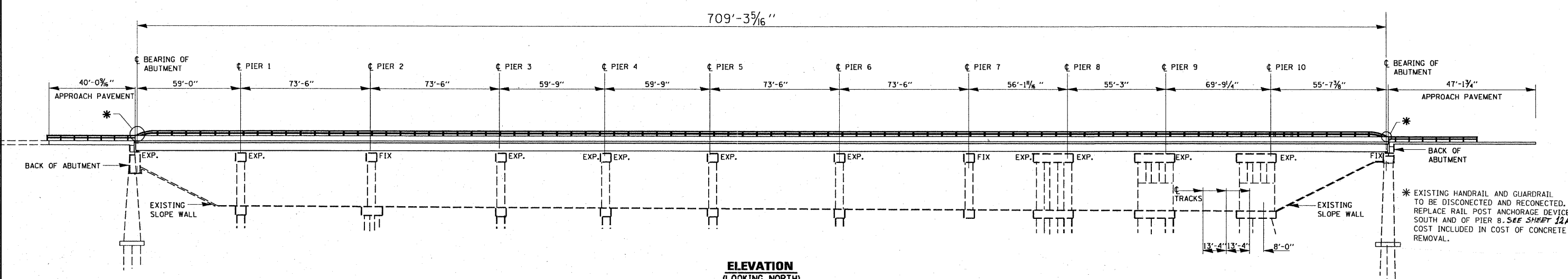
ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

|  |                             |            |           |   |   |                    |      |        |             |         |        |              |                 |
|--|-----------------------------|------------|-----------|---|---|--------------------|------|--------|-------------|---------|--------|--------------|-----------------|
| FILE NAME =                            | USER NAME = gorengautab     | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>INDEX OF SHEETS<br/>STATE STANDARDS, GENERAL NOTES</b> |                    |      |        | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | TOTAL SHEET NO. |
| c:\pw\work\pvidot\gorengautab\d0212247 | 170718-ehh-plan.dgn         | DRAWN -    | REVISED - |   | 348   | 0708 (.2 & .2A) BR | COOK | 36     | 2           |         |        |              |                 |
|  | PLOT SCALE = 50.0000' / IN. | CHECKED -  | REVISED - |   | CONTRACT NO. 60L53  |                    |      |        |             |         |        |              |                 |
|  | PLOT DATE = 4/19/2011       | DATE -     | REVISED - |   | ILLINOIS FED. AID PROJECT                                 |                    |      |        |             |         |        |              |                 |
|  |                             |            |           |   | SCALE: NONE   | SHEET NO.          | OF   | SHEETS | STA.        | TO STA. |        |              |                 |

Rev.

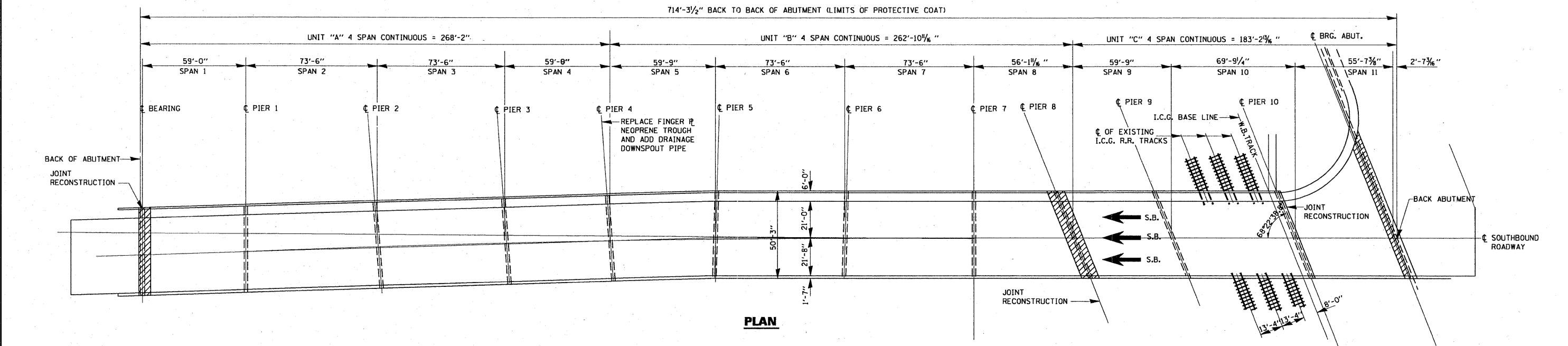
| SUMMARY OF QUANTITIES |  |        | URBAN<br>100% STATE CONSTRUCTION TYPE CODE 0014 |             |             |  |  |  | SUMMARY OF QUANTITIES |          |  | URBAN<br>100% STATE CONSTRUCTION TYPE CODE 0014 |                  |             |             |  |  |  |  |
|-----------------------|--|--------|---|-------------|-------------|--|--|--|-----------------------|----------|--|---|------------------|-------------|-------------|--|--|--|--|
| CODE NO               | ITEM   | UNIT   | TOTAL QUANTITIES                                | SN 016-0317 | SN 016-0318 |  |  |  |                       | CODE NO  | ITEM   | UNIT  | TOTAL QUANTITIES | SN 016-0317 | SN 016-0318 |  |  |  |  |
| 42001300              | PROTECTIVE COAT  | SQ YD  | 126   | 83          | 43          |  |  |  |                       | Z0030275 | IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, NARROW), TEST LEVEL 2 | EACH  | 2                | 1           | 1           |  |  |  |  |
| 50102400              | CONCRETE REMOVAL   | CU YD  | 42.2  | 25.9        | 16.3        |  |  |  |                       | Z0030340 | IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 2     | EACH  | 7                | 4           | 3           |  |  |  |  |
| 50300255              | CONCRETE SUPERSTRUCTURE  | CU YD  | 42.2  | 26.3        | 16.6        |  |  |  |                       | Z0030850 | TEMPORARY INFORMATION SIGNING                                    | SO FT   | 51.4             | 25.7        | 25.7        |  |  |  |  |
| 50800205              | REINFORCEMENT BARS, EPOXY COATED                                     | POUND  | 4270  | 4230        | 2340        |  |  |  |                       | Z0048665 | RAILROAD PROTECTIVE LIABILITY INSURANCE                          | L SUM   | 1                | 0.5         | 0.5         |  |  |  |  |
| 50800515              | BAR SPLICERS   | EACH   | 64  | 40          | 24          |  |  |  |                       | Z0033028 | MAINTENANCE OF LIGHTING SYSTEM                                   | CAL MD  | 4                | 2           | 2           |  |  |  |  |
| 52000110              | PREFORMED JOINT STRIP SEAL   | FOOT   | 330   | 202         | 128         |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| 67000400              | ENGINEER'S FIELD OFFICE, TYPE A                                      | CAL MD | 4   | 2           | 2           |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| 67100100              | MOBILIZATION   | L SUM  | 1   | 0.5         | 0.5         |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| 70102630              | TRAFFIC CONTROL AND PROTECTION, STANDARD 701601                      | L SUM  | 1   | 0.5         | 0.5         |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| 70102640              | TRAFFIC CONTROL AND PROTECTION, STANDARD 701801                      | L SUM  | 1   | 0.5         | 0.5         |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| 70301000              | WORK ZONE PAVEMENT MARKING REMOVAL                                   | SO FT  | 850   |             | 850         |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| 70400100              | TEMPORARY CONCRETE BARRIER   | FOOT   | 400   | 250         | 150         |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| 70400200              | RELOCATE TEMPORARY CONCRETE BARRIER                                  | FOOT   | 400   | 250         | 150         |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| * 78008200            | POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS               | SO FT  | 145.2   |             | 145.2       |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| * 78008210            | POLYUREA PAVEMENT MARKING TYPE I - LINE 4"                           | FOOT   | 490   | 291         | 199         |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| * 78008230            | POLYUREA PAVEMENT MARKING TYPE I - LINE 6"                           | FOOT   | 943   |             | 943         |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| * 78008240            | POLYUREA PAVEMENT MARKING TYPE I - LINE 8"                           | FOOT   | 395   |             | 395         |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| * 78008250            | POLYUREA PAVEMENT MARKING TYPE I - LINE 12"                          | FOOT   | 65  |             | 65          |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| 78300100              | PAVEMENT MARKING REMOVAL   | SO FT  | 1110  | 100         | 1010        |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| X7030025              | WET REFLECTIVE TEMPORARY TAPE, TYPE III - LETTERS AND SYMBOLS        | SO FT  | 242.4   |             | 242.4       |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| X7030030              | WET REFLECTIVE TEMPORARY TAPE TYPE III, 4 INCH                       | FOOT   | 699   | 4480        | 2489        |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| X7030040              | WET REFLECTIVE TEMPORARY TAPE TYPE III, 6 INCH                       | FOOT   | 1098  |             | 1098        |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| XX001782              | BRIDGE DRAINAGE SYSTEM REPAIRS                                       | FOOT   | 90  | 90          |             |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| Z0001905              | STRUCTURAL STEEL REPAIR  | POUND  | 730   | 480         | 250         |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| Z0012754              | STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES) | SO FT  | 24  | 24          |             |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| Z0021914              | SILICONE JOINT SEALER, 2.75"   | FOOT   | 12  |             | 12          |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| Z0026346              | NIGHTTIME WORK ZONE LIGHTING   | L SUM  | 1   | 0.5         | 0.5         |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |
| Z0030240              | IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2        | EACH   | 5   | 3           | 2           |  |  |  |                       |          |  |   |                  |             |             |  |  |  |  |

\*Specialty Items

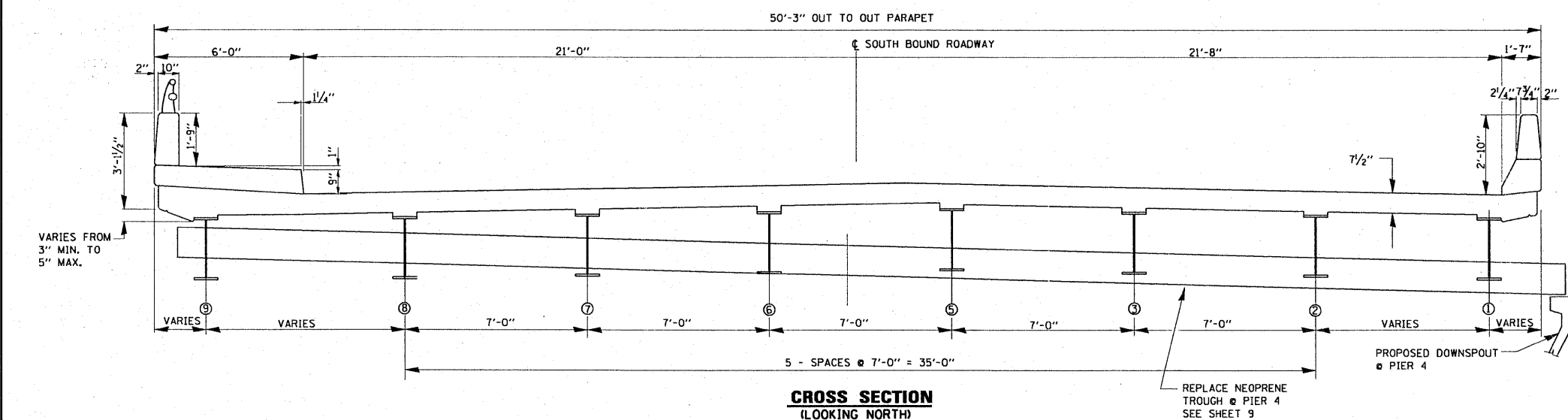


**ELEVATION**  
(LOOKING NORTH)

\* EXISTING HANDRAIL AND GUARDRAIL TO BE DISCONNECTED AND RECONNECTED. REPLACE RAIL POST ANCHORAGE DEVICE SOUTH AND OF PIER 8. SEE SHEET 12A. COST INCLUDED IN COST OF CONCRETE REMOVAL.



**PLAN**

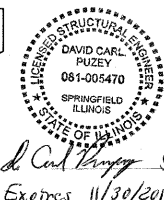


**CROSS SECTION**  
(LOOKING NORTH)

**TOTAL BILL OF MATERIALS SN 016-0317**

| ITEM                               | UNIT    | QUANTITY |
|------------------------------------|---------|----------|
| REINFORCEMENT BARS (EPOXY COATED)  | POUND   | 4230     |
| CONCRETE REMOVAL                   | CU. YD. | 25.9     |
| CONCRETE SUPERSTRUCTURE            | CU. YD. | 26.3     |
| PREFORMED JOINT STRIP SEAL         | FOOT    | 202      |
| BRIDGE DRAINAGE SYSTEM REPAIRS     | FOOT    | 90       |
| BAR SPLICERS                       | EACH    | 40       |
| STRUCTURAL STEEL REPAIR            | POUND   | 480      |
| * PROTECTIVE COAT                  | SQ. YD. | 83       |
| ELASTOMERIC NEOPRENE TROUGH        | EACH    | 1        |
| STRUCTURAL REPAIR OF CONCRETE < 5" | SQ. FT. | 24       |

\* NEW CONCRETE AREA ONLY  
**FOR GENERAL NOTES SEE SHEET 13**

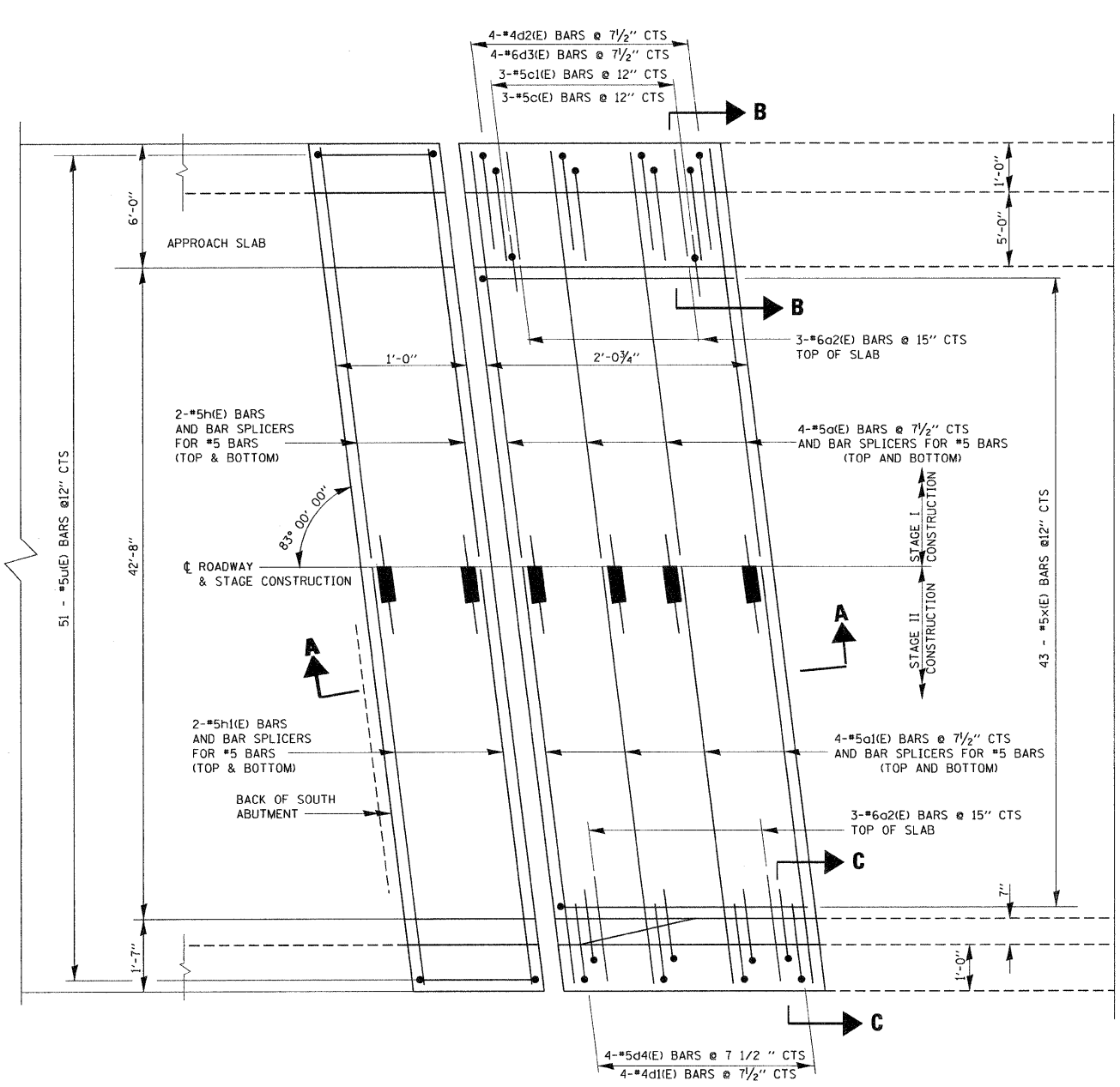


|  |                        |                |           |
|--|------------------------|----------------|-----------|
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| PLOT SCALE = 1/8" = 1'-0" / IN.                    |                        | CHECKED - MVT  | REVISED - |
| PLOT DATE = 4/19/2011                              |                        | DATE - 11/4/09 | REVISED - |

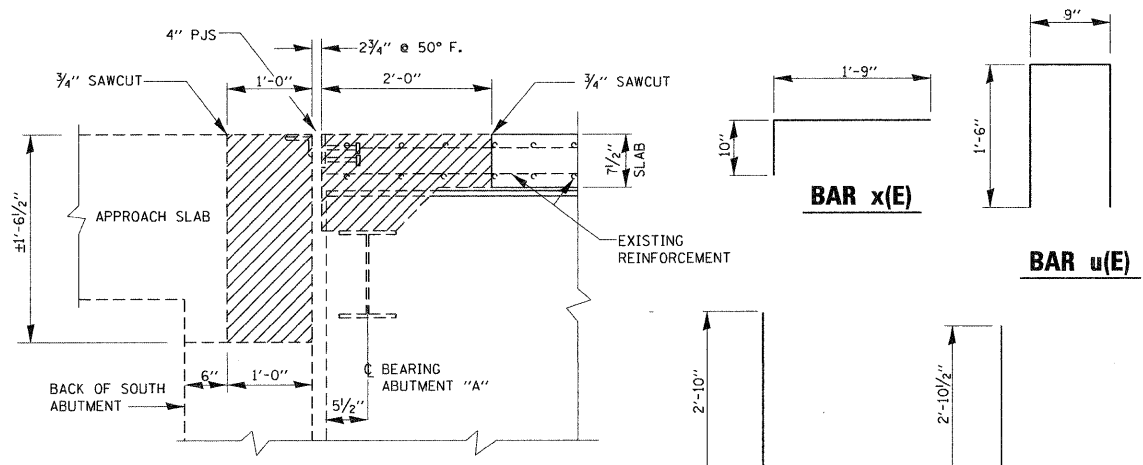
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**IL 43 SB (HARLEM AVENUE) OVER I.C. RR**  
**GENERAL PLAN, ELEVATION AND CROSS SECTION**  
**S.N. 016-0317**

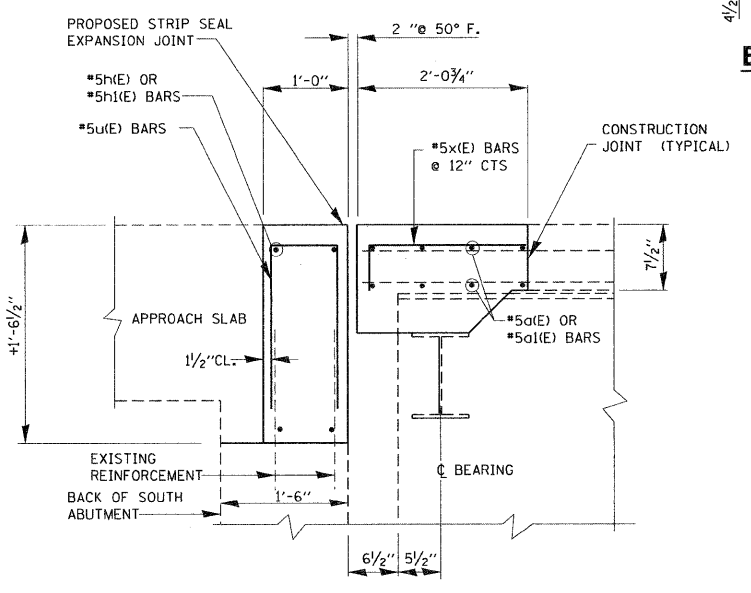
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|---------------------------|--------------------|--------|--------------------|-----------|
| F.A.P. RTE.               | SECTION            | COUNTY | TOTAL SHEETS       | SHEET NO. |
| 848                       | 0708 (.2 & .2A) BR | COOK   | 36                 | 4         |
|                           |                    |        | CONTRACT NO. 60L53 |           |
| ILLINOIS FED. AID PROJECT |                    |        |                    |           |



**TRANSVERSE EXPANSION JOINT**  
(SOUTH ABUTMENT "A")



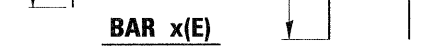
**SECTION A-A**  
(EXISTING)



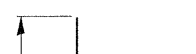
**SECTION A-A**  
(PROPOSED)

**BILL OF MATERIALS**

| BAR                               | NO. | SIZE | LENGTH  | SHARE |
|-----------------------------------|-----|------|---------|-------|
| a(E)                              | 8   | #5   | 26'-9"  |       |
| a1(E)                             | 8   | #5   | 23'-0"  |       |
| a2(E)                             | 6   | #6   | 4'-0"   |       |
| c(E)                              | 3   | #5   | 5'-9"   |       |
| c1(E)                             | 3   | #5   | 2'-1"   |       |
| d1(E)                             | 4   | #4   | 3'-9"   |       |
| d2(E)                             | 4   | #4   | 4'-0"   |       |
| d3(E)                             | 4   | #6   | 3'-9"   |       |
| d4(E)                             | 4   | #5   | 3'-7"   |       |
| h(E)                              | 4   | #5   | 26'-11" |       |
| h1(E)                             | 4   | #5   | 23'-2"  |       |
| u(E)                              | 51  | #5   | 3'-7"   |       |
| x(E)                              | 43  | #5   | 2'-7"   |       |
| REINFORCEMENT BARS (EPOXY COATED) |     |      | POUND   | 1056  |
| CONCRETE REMOVAL                  |     |      | CU.YD.  | 7.3   |
| CONCRETE SUPERSTRUCTURE           |     |      | CU.YD.  | 7.3   |



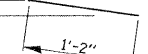
**BAR u(E)**



**BAR d2(E)**



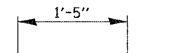
**BAR d3(E)**



**BAR d1(E)**

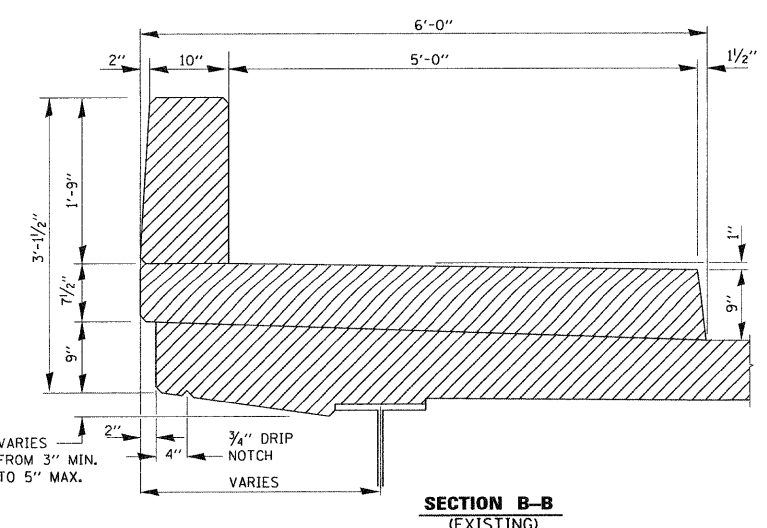


**BAR d4(E)**

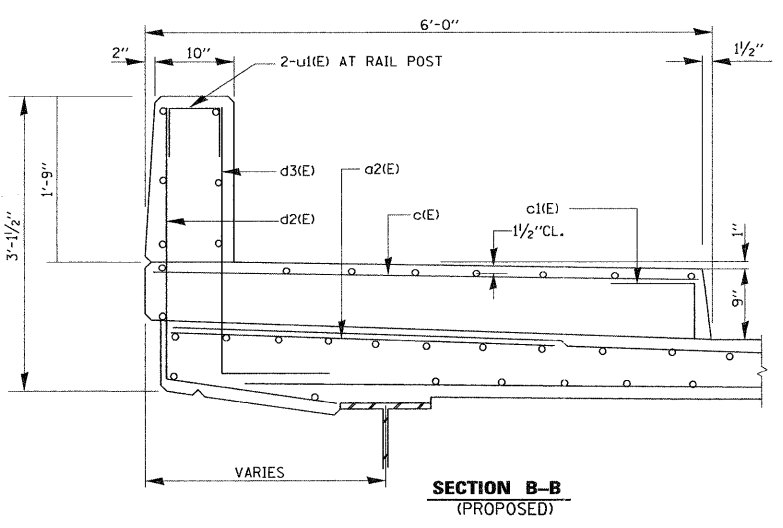


**BAR c1(E)**

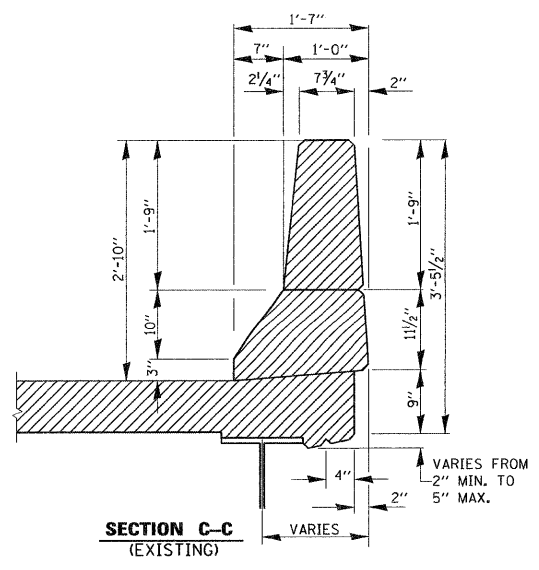
**LEGEND:**  
 HATCHED AREA INDICATES CONCRETE REMOVAL



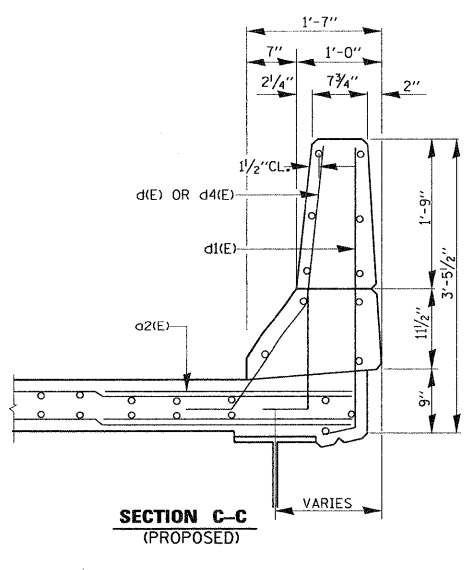
**SECTION B-B**  
(EXISTING)



**SECTION B-B**  
(PROPOSED)



**SECTION C-C**  
(EXISTING)




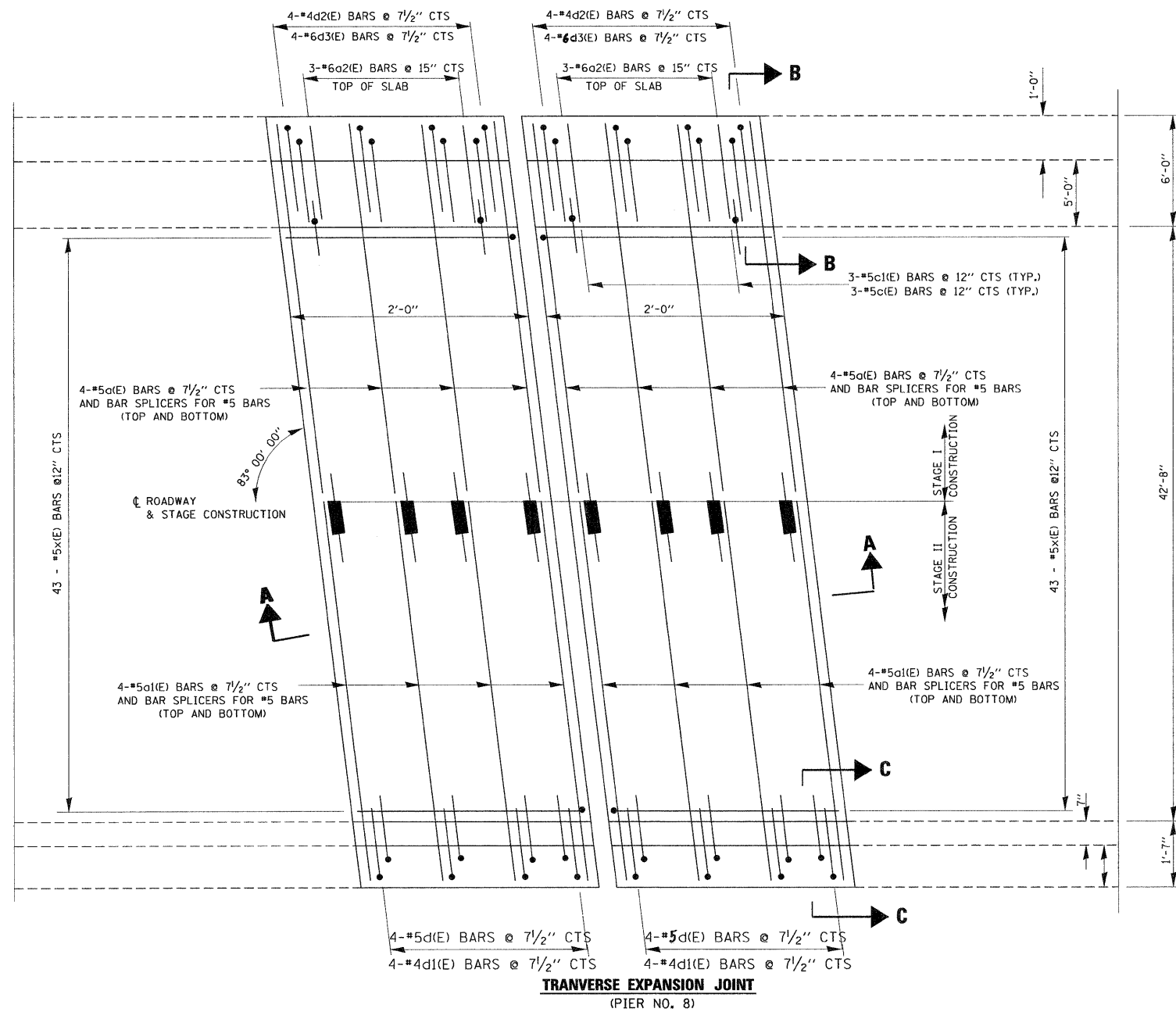
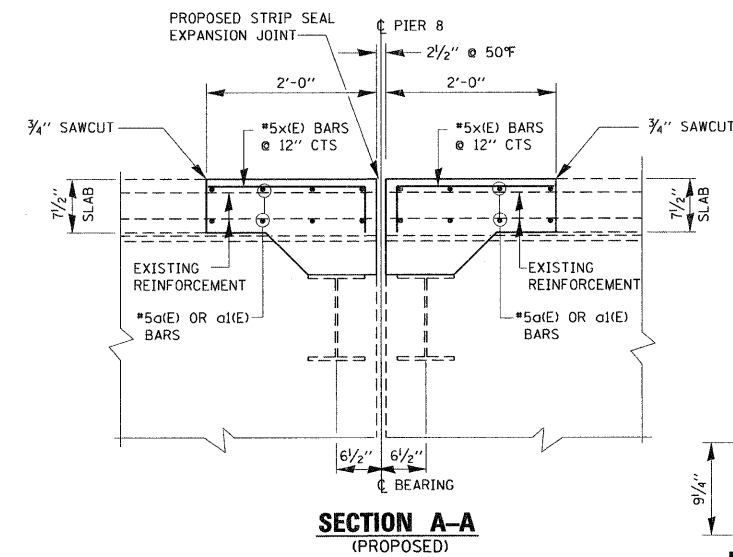
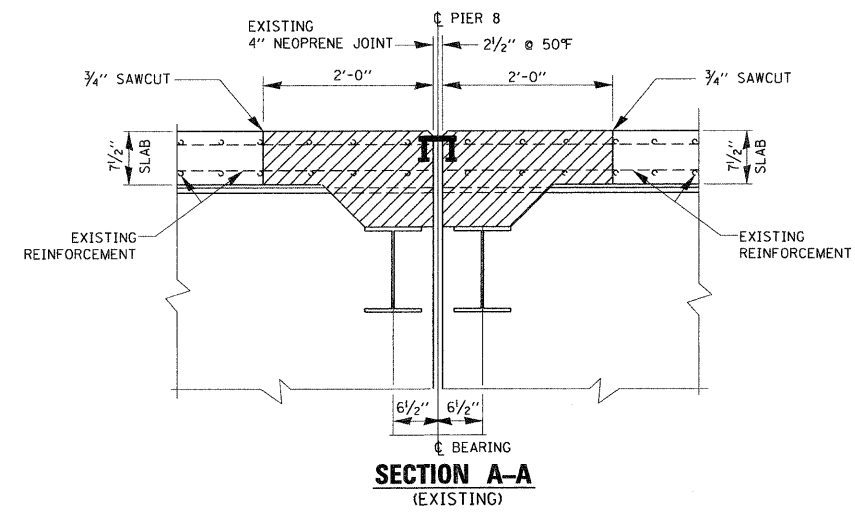
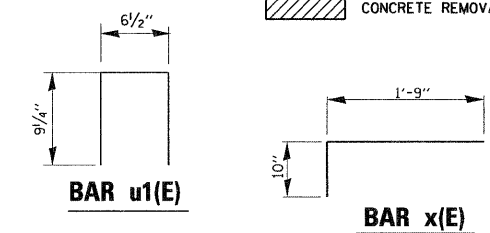
**SECTION C-C**  
(PROPOSED)

**BILL OF MATERIALS**

| BAR                               | NO. | SIZE | LENGTH | SHARE |
|-----------------------------------|-----|------|--------|-------|
| a(E)                              | 16  | #5   | 26'-9" |       |
| a1(E)                             | 16  | #5   | 23'-0" |       |
| a2(E)                             | 6   | #6   | 4'-0"  |       |
| c(E)                              | 6   | #5   | 4'-9"  |       |
| c1(E)                             | 6   | #4   | 2'-6"  |       |
| d(E)                              | 8   | #5   | 4'-0"  | J     |
| d1(E)                             | 8   | #4   | 3'-9"  | J     |
| d2(E)                             | 8   | #4   | 4'-0"  | L     |
| d3(E)                             | 8   | #6   | 3'-9"  | L     |
| u1(E)                             | 2   | #4   | 2'-1"  | □     |
| x(E)                              | 86  | #5   | 2'-7"  | □     |
| REINFORCEMENT BARS (EPOXY COATED) |     |      | POUND  | 1265  |
| CONCRETE REMOVAL                  |     |      | CU.YD. | 6.56  |
| CONCRETE SUPERSTRUCTURE           |     |      | CU.YD. | 6.56  |

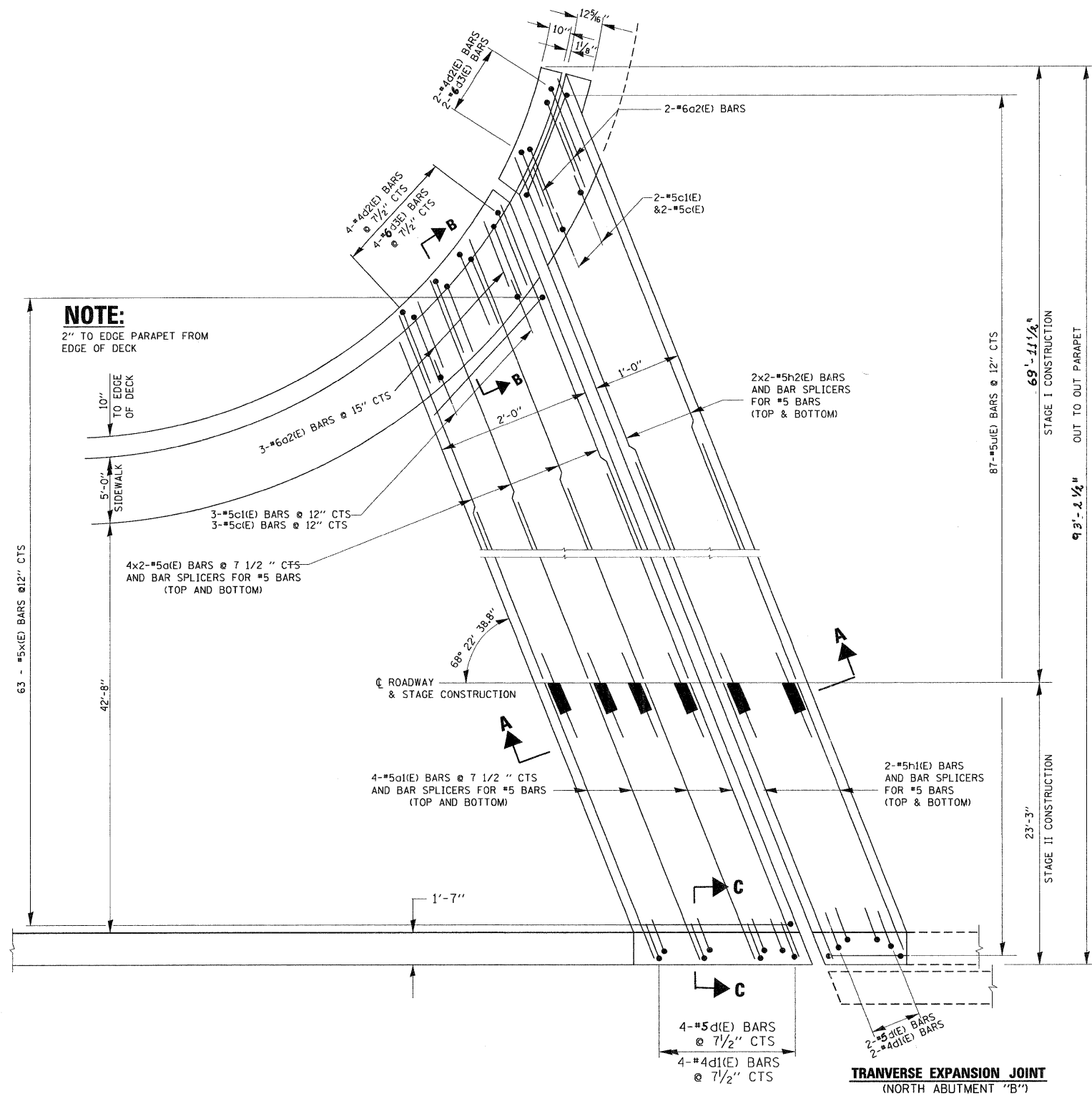
**LEGEND:**

 HATCHED AREA INDICATES CONCRETE REMOVAL

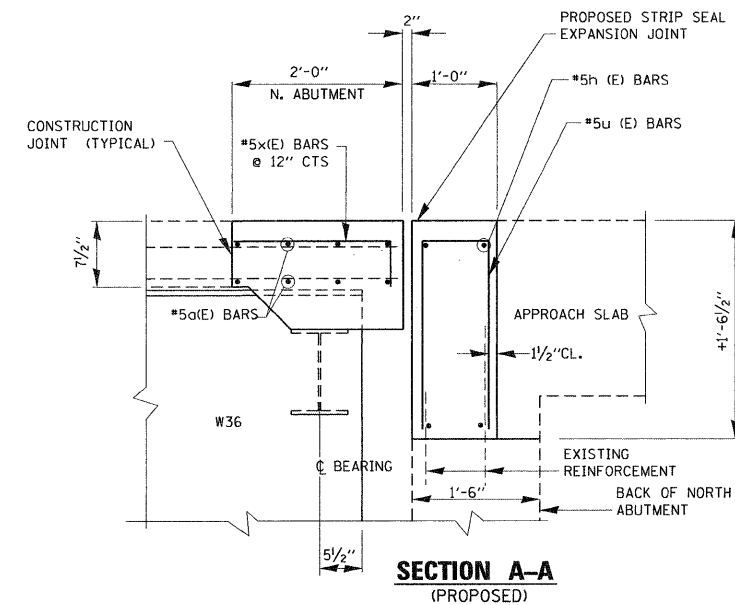
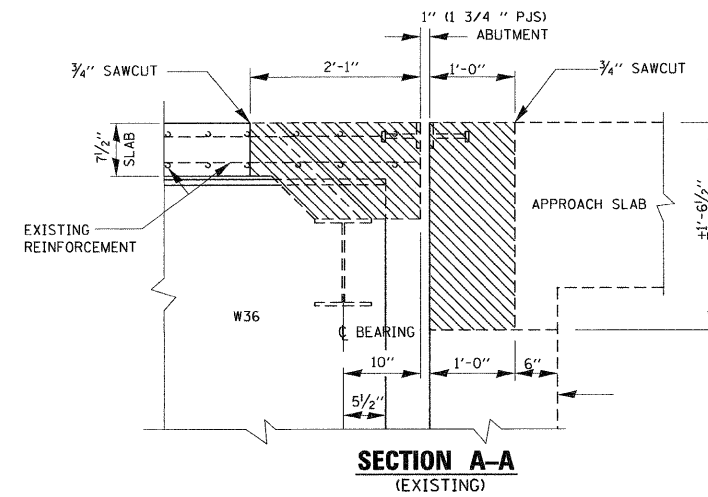


**NOTE:**

FOR SECTIONS B-B AND C-C SEE SHEET 5



**NOTE:**  
2" TO EDGE PARAPET FROM  
EDGE OF DECK



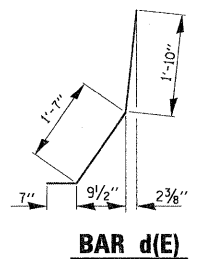
**BILL OF MATERIALS**

| BAR                               | NO. | SIZE | LENGTH | SHARE |
|-----------------------------------|-----|------|--------|-------|
| a <sub>2</sub> (E)                | 16  | #5   | 37'-0" |       |
| a <sub>1</sub> (E)                | 8   | #5   | 23'-0" |       |
| a <sub>2</sub> (E)                | 5   | #6   | 4'-0"  |       |
| c(E)                              | 5   | #5   | 4'-9"  |       |
| c <sub>1</sub> (E)                | 5   | #5   | 2'-6"  |       |
| d(E)                              | 6   | #5   | 4'-0"  |       |
| d <sub>1</sub> (E)                | 6   | #4   | 3'-9"  |       |
| d <sub>2</sub> (E)                | 6   | #4   | 4'-0"  |       |
| d <sub>3</sub> (E)                | 6   | #6   | 3'-9"  |       |
| h <sub>1</sub> (E)                | 4   | #5   | 23'-2" |       |
| h <sub>2</sub> (E)                | 8   | #5   | 38'-0" |       |
| u(E)                              | 87  | #5   | 3'-7"  |       |
| x(E)                              | 63  | #5   | 3'-7"  |       |
| REINFORCEMENT BARS (EPOXY COATED) |     |      | POUND  | 1905  |
| CONCRETE REMOVAL                  |     |      | CU.YD. | 12    |
| CONCRETE SUPERSTRUCTURE           |     |      | CU.YD. | 12    |

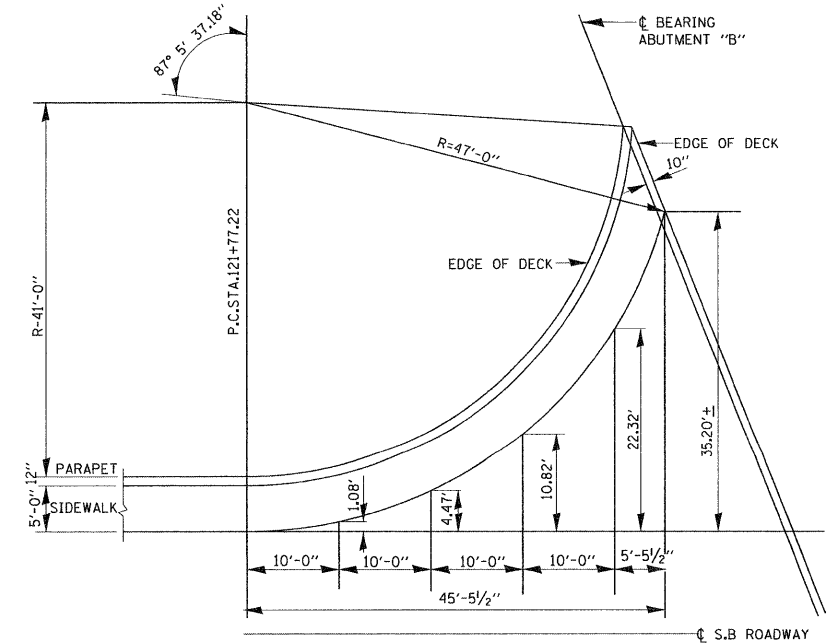
BARS INDICATED THUS 4x2-#5 ETC. INDICATES 4 LINES OF BARS WITH 2 LENGTHS PER LINE.

**MINIMUM BAR LAP**

| SIZE | LAP   |
|------|-------|
| #5   | 2'-6" |

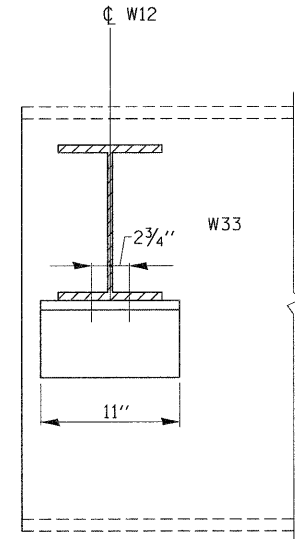
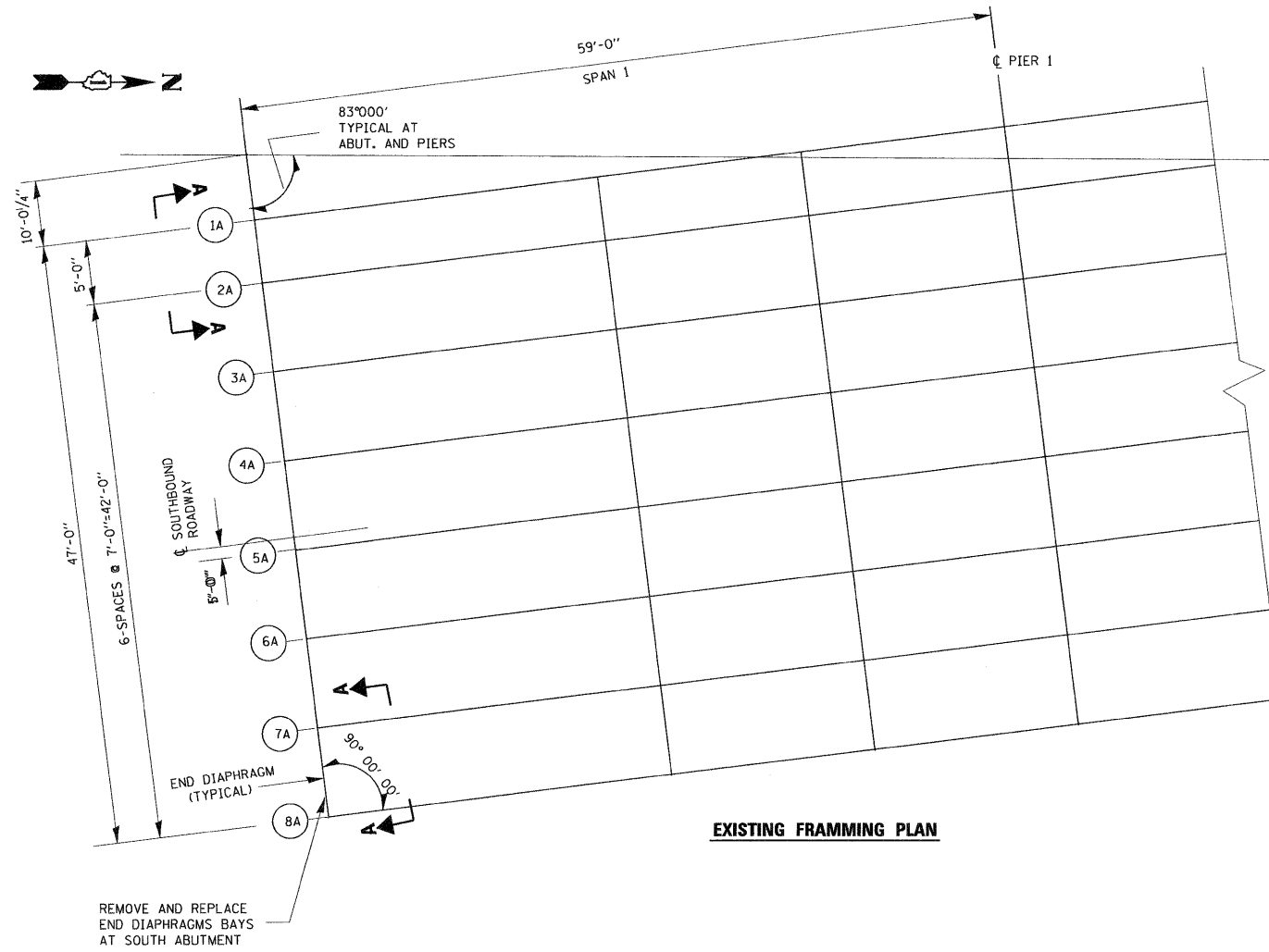


**BAR d(E)**

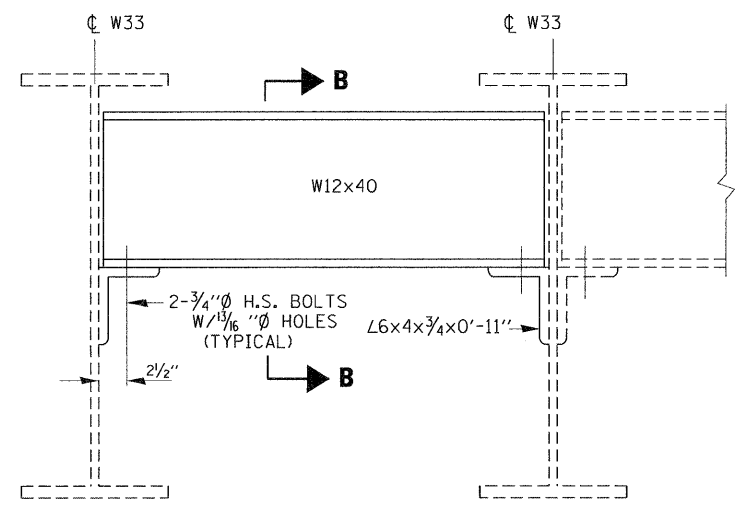


**GEOMETRY OF CURVED DECK**





**SECTION B-B**



**SECTION A-A**

**EXISTING FRAMMING PLAN**



**SOUTH ABUTMENT  
(LOOKING SOUTH)**

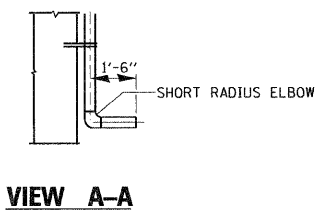
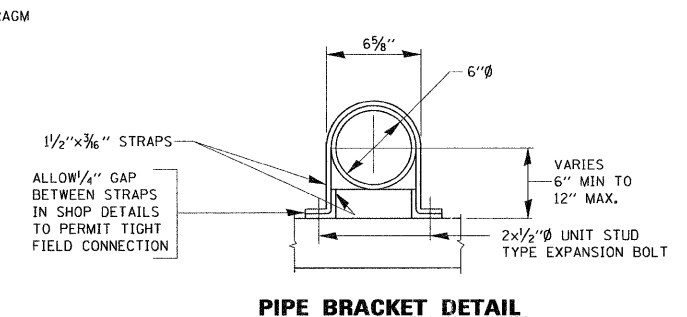
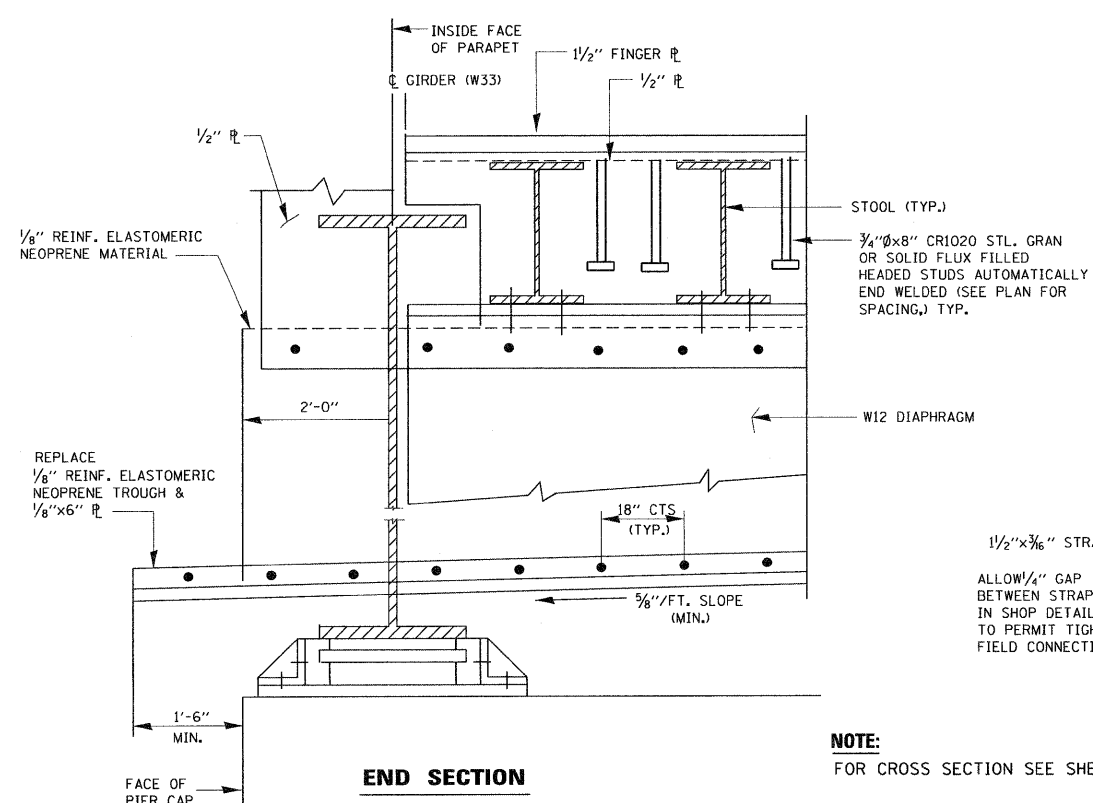
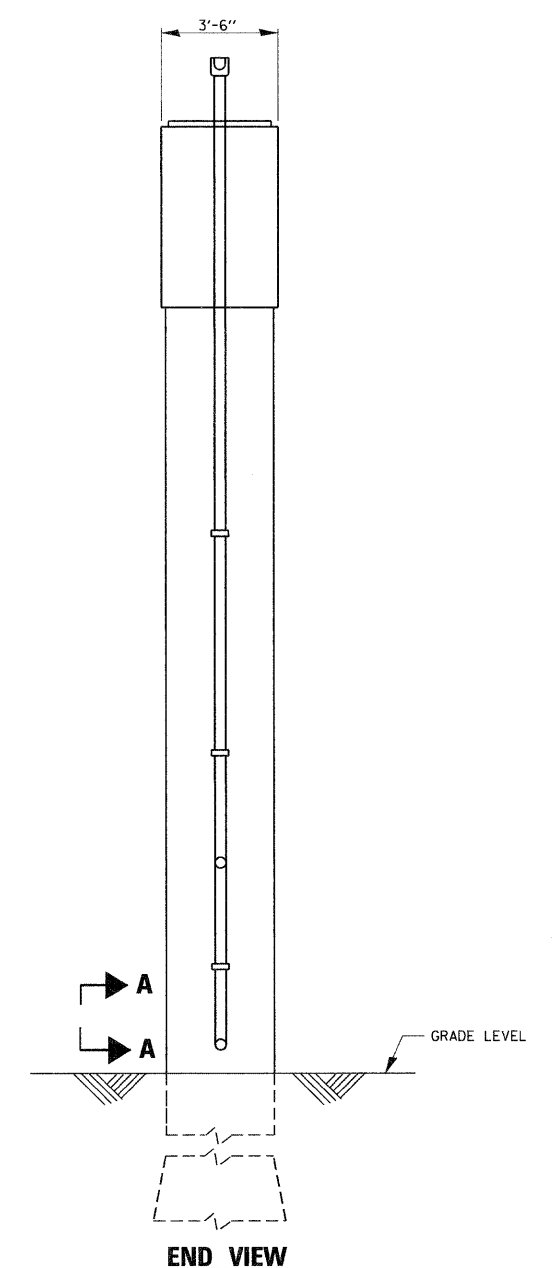
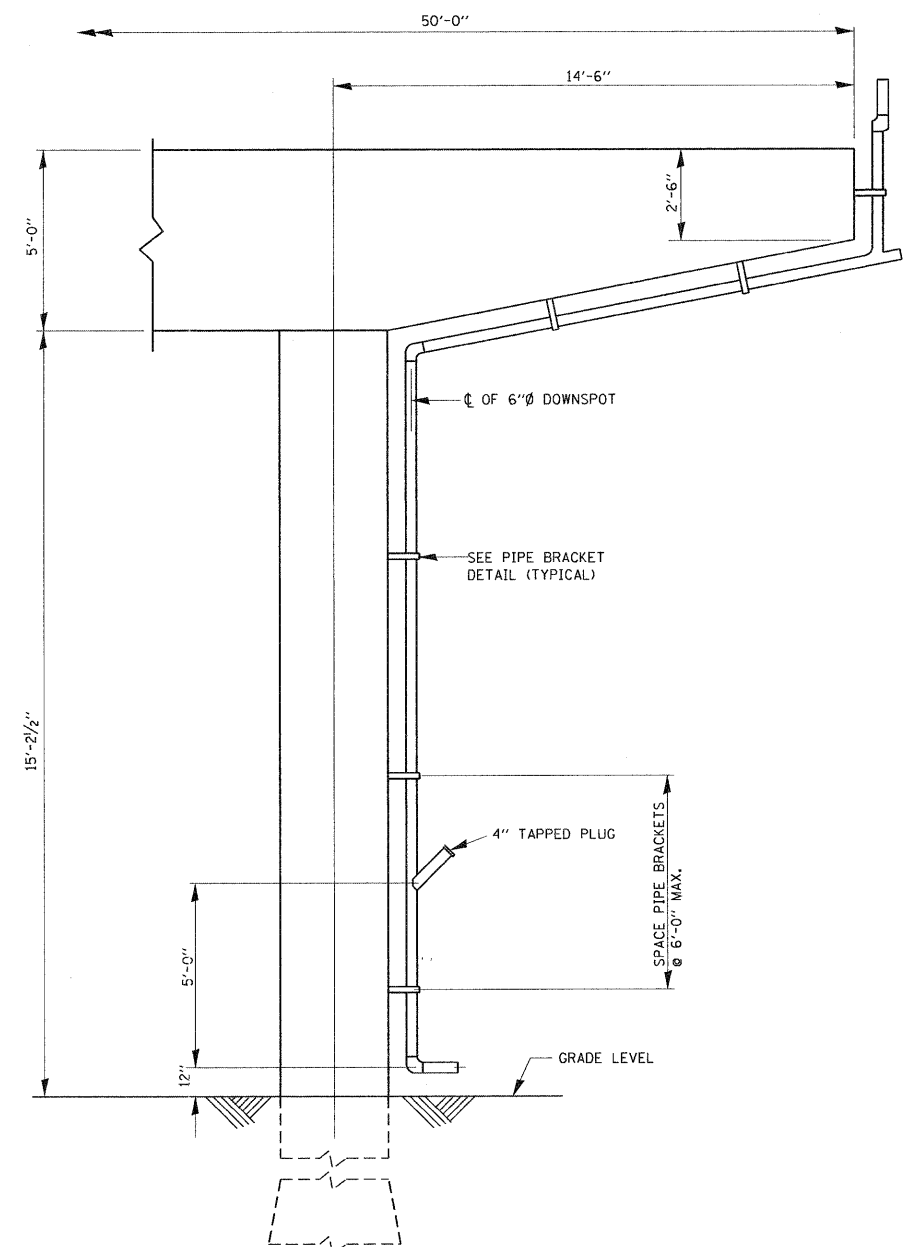
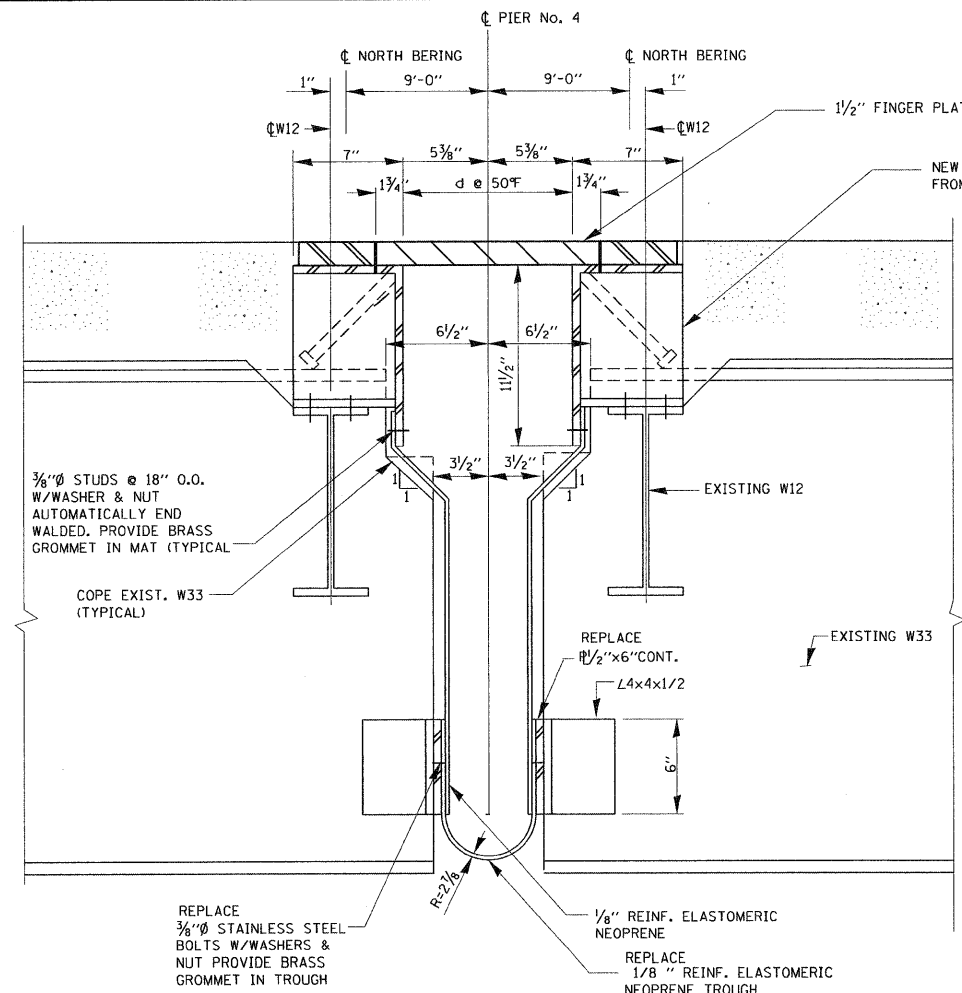
**BILL OF MATERIALS**

| ITEM                                    | UNIT   | QUANTITY |
|---|--------|----------|
| STRUCTURAL REPAIR OF CONCRETE $\leq$ 5" | SQ.FT. | 24       |
| STRUCTURAL STEEL REPAIR                 | POUND  | 480      |

**LEGEND:**

STRUCTURAL REPAIR OF CONCRETE  $\leq$  5"





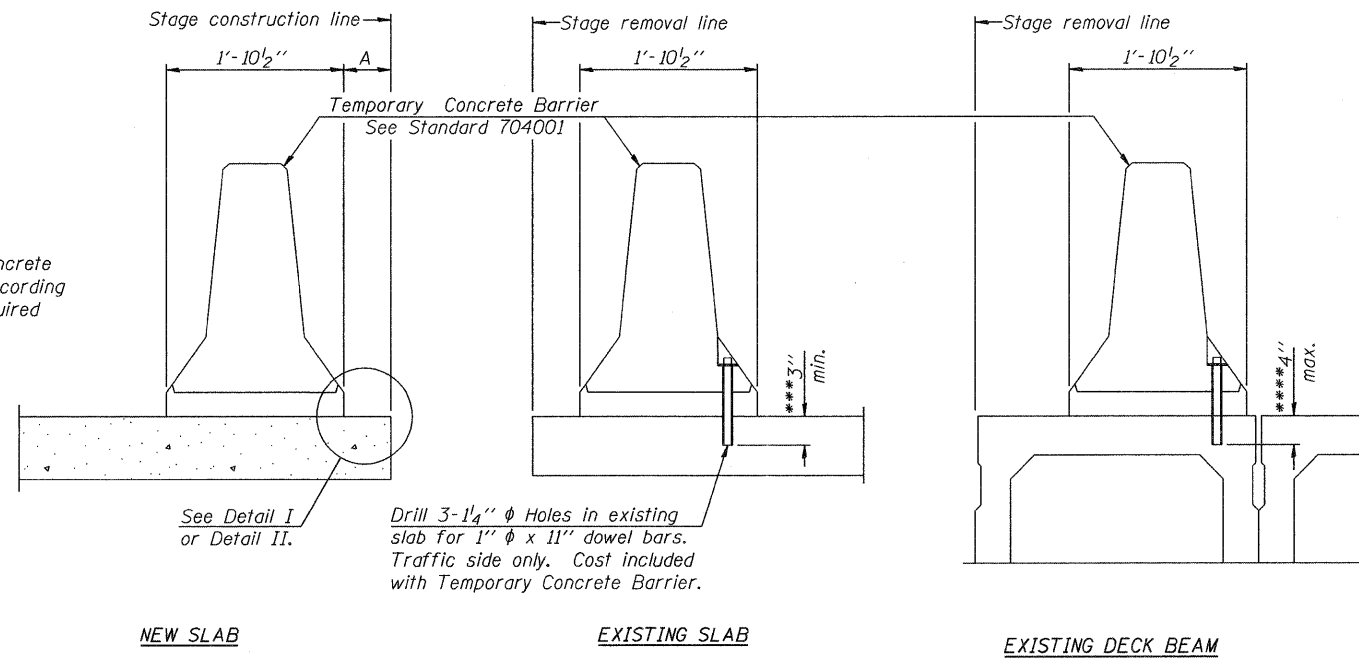
**BILL OF MATERIALS**

| ITEM                           | UNIT | QUANTITY |
|--------------------------------|------|----------|
| BRIDGE DRAINAGE SYSTEM REPAIRS | FOOT | 81       |
|                                |      |          |
|                                |      |          |

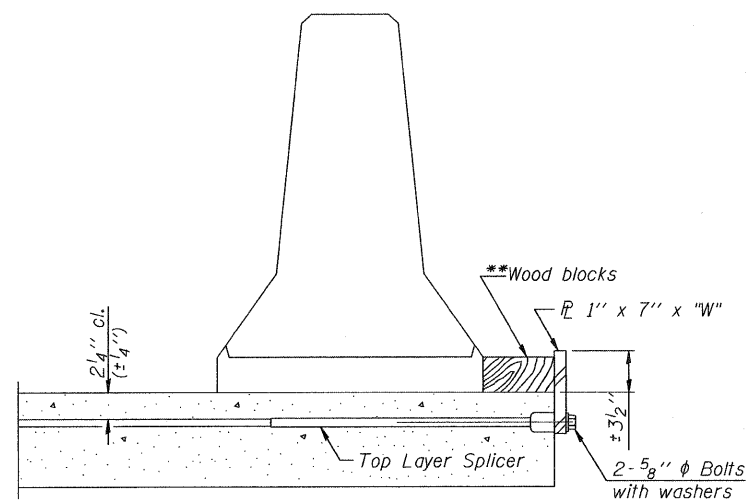
**DRAINAGE REPAIR NOTES**

THE CONTRACTOR SHALL REPLACE THE FABRIC REINFORCED ELASTOMERIC TROUGH, SPLICES, & STAINLESS STEEL BOLTS WITH WASHERS & NUTS AS DETAILED & ACCORDING TO 520 OF THE STANDARD SPECIFICATIONS. THE LENGTH OF NEOPRENE TROUGH REQUIRED IS INCLUDED IN THE QUANTITY FOR "BRIDGE DRAINAGE SYSTEM REPAIRS". REMOVAL OF EXISTING FINGER PLATE TROUGH & ANY DEBRIS IS INCLUDED IN THE COST OF "BRIDGE DRAINAGE SYSTEM REPAIRS".

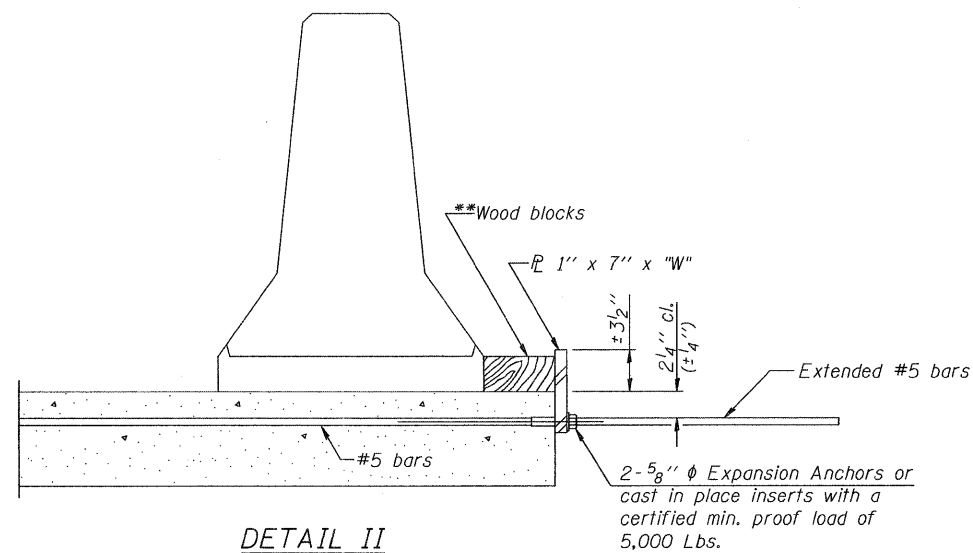
When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB OR DECK BEAM



DETAIL I



DETAIL II

\*\* Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"

**NOTES**

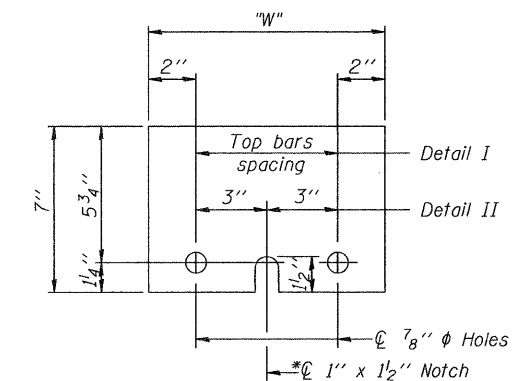
Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1" x 7" x "W" steel  $\bar{L}$  to the top layer of couplers with 2-5/8"  $\phi$  bolts screwed to coupler at approximate  $\bar{C}$  of each barrier panel.

Detail II - With Extended Reinforcement Bars:  
Connect one (1) 1" x 7" x "W" steel  $\bar{L}$  to the concrete slab or concrete wearing surface with 2-5/8"  $\phi$  Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate  $\bar{C}$  of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

\*\*\* Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

\*\*\*\* If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.

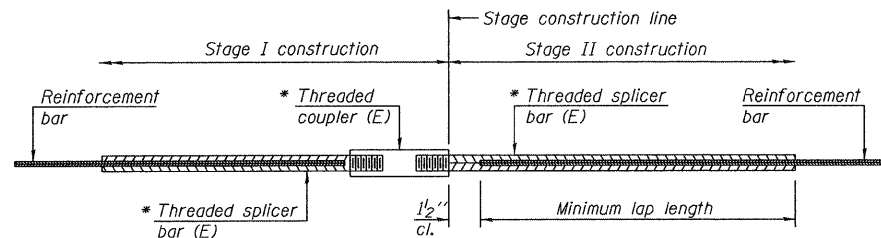


STEEL RETAINER  $\bar{L}$  1" x 7" x "W"

\* Required only with Detail II

R-27 7-1-10

|  |                       |                |                           |   |  |                           |         |         |              |           |  |
|--|-----------------------|----------------|---------------------------|---|--|---------------------------|---------|---------|--------------|-----------|--|
| FILE NAME =  | USER NAME = tlnakosmv | DESIGNED - MVT | REVISED -                 | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>IL 43 (HARLEM AVENUE) OVER I.C RR<br/>TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION<br/>S.N. 016-0317</b> | F.A.P. RTE.               | SECTION | COUNTY  | TOTAL SHEETS | SHEET NO. |  |
| ca:\pwwork\pwwork\dot\tlnakosmv\d0181671\016-0317-0318.dgn | DRAWN - MVT           | REVISED -      | 848                       |   |  | 07080 (2 & .2A) BR        | COOK    | 36      | 10           |           |  |
| PLOT SCALE = 50.0000' / IN.                                | CHECKED - RTB         | REVISED -      | CONTRACT NO. 60L53        |   |  |                           |         |         |              |           |  |
| PLOT DATE = 5/18/2011                                      | DATE - 3/8/11         | REVISED -      | ILLINOIS FED. AID PROJECT |   |  |                           |         |         |              |           |  |
|  |                       |                |                           |   | SCALE:   | SHEET NO. 10 OF 12 SHEETS | STA.    | TO STA. |              |           |  |



STANDARD BAR SPLICER ASSEMBLY

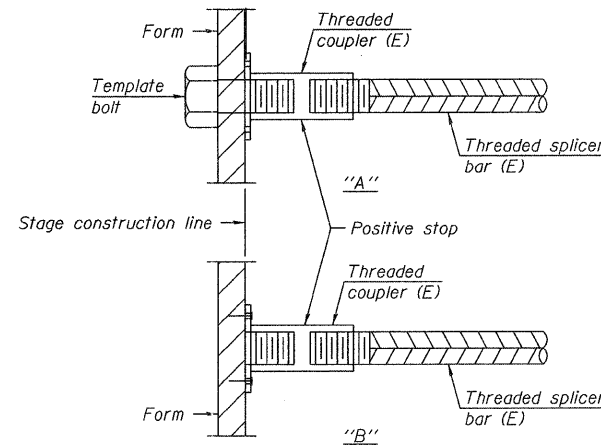
| Bar size to be spliced | Minimum Lap Lengths |         |         |         |
|------------------------|---------------------|---------|---------|---------|
|                        | Table 1             | Table 2 | Table 3 | Table 4 |
| 3, 4                   | 1'-5"               | 1'-11"  | 2'-1"   | 2'-4"   |
| 5                      | 1'-9"               | 2'-5"   | 2'-7"   | 2'-11"  |
| 6                      | 2'-1"               | 2'-11"  | 3'-1"   | 3'-6"   |
| 7                      | 2'-9"               | 3'-10"  | 4'-2"   | 4'-8"   |
| 8                      | 3'-8"               | 5'-1"   | 5'-5"   | 6'-2"   |
| 9                      | 4'-7"               | 6'-5"   | 6'-10"  | 7'-9"   |

Table 1: Black bar, 0.8 Class C  
 Table 2: Black bar, Top bar lap, 0.8 Class C  
 Table 3: Epoxy bar, 0.8 Class C  
 Table 4: Epoxy bar, Top bar lap, 0.8 Class C

Threaded splicer bar length = min. lap length + 1/2" + thread length

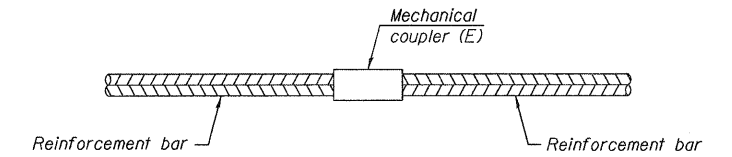
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

| Location | Bar size | No. assemblies required | Table for minimum lap length |
|----------|----------|-------------------------|------------------------------|
| Abutment | #5       | 8                       | 3                            |
| Deck     | #5       | 32                      | 3                            |
|          |          |                         |                              |
|          |          |                         |                              |



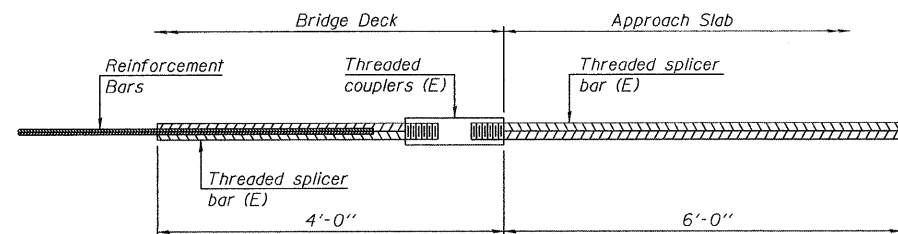
INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt.  
 "B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.  
 (E): Indicates epoxy coating.



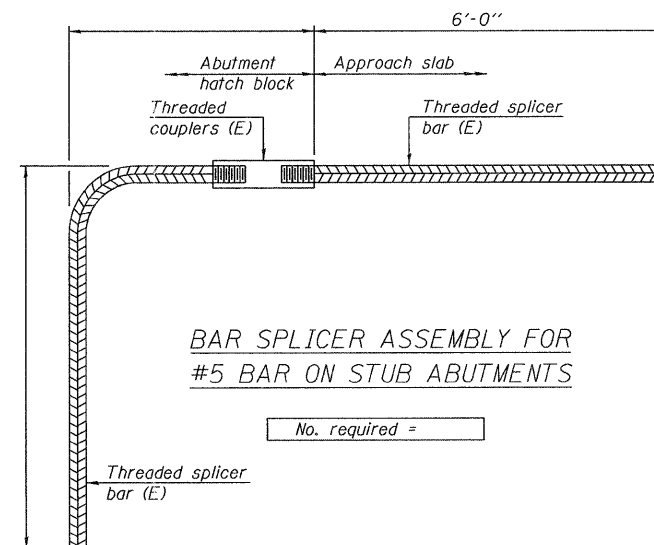
STANDARD MECHANICAL SPLICER

| Location | Bar size | No. assemblies required |
|----------|----------|-------------------------|
|          |          |                         |
|          |          |                         |
|          |          |                         |



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

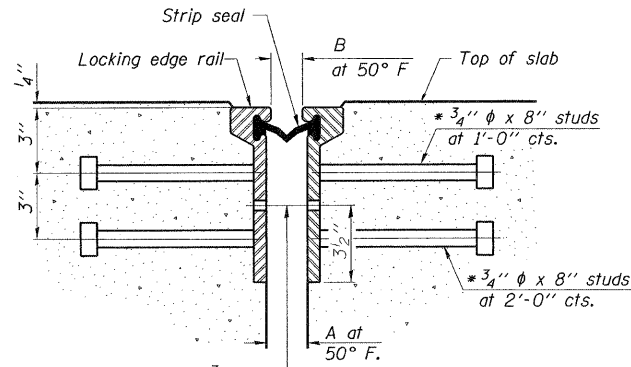
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.  
 All reinforcement shall be lapped and tied to the splicer bars.  
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.  
 See special provision for Mechanical Splicers.  
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 STRUCTURE NO.016-0317

BSD-1 11-1-09

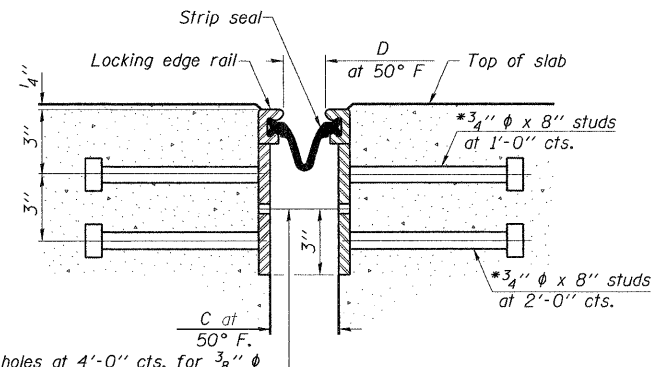
|   |                       |            |           |   |   |                   |                           |        |              |                           |
|---|-----------------------|------------|-----------|---|---|-------------------|---------------------------|--------|--------------|---------------------------|
| FILE NAME =   | USER NAME = tznakoemv | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>IL 43 (HARLEM AVENUE) OVER I.C RR<br/>BAR SPLICER ASSEMBLY<br/>S.N. 016-0317</b> | F.A.P. RTE.       | SECTION                   | COUNTY | TOTAL SHEETS | SHEET NO.                 |
| et:\pw_work\pwidot\tznakoemv\d0121671\016-0317-0318.dgn |                       | DRAWN -    | REVISED - |   |   | 848               | 0708 (.2 & '2A) BR        | COOK   | 36           | 11                        |
| PLOT SCALE = 58.0000' / IN.                             |                       | CHECKED -  | REVISED - |   |   | CONTRACT NO.60L53 |                           |        |              |                           |
| PLOT DATE = 5/18/2011                                   |                       | DATE -     | REVISED - |   |   | SCALE:            | SHEET NO. 11 OF 12 SHEETS | STA.   | TO STA.      | ILLINOIS FED. AID PROJECT |

\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



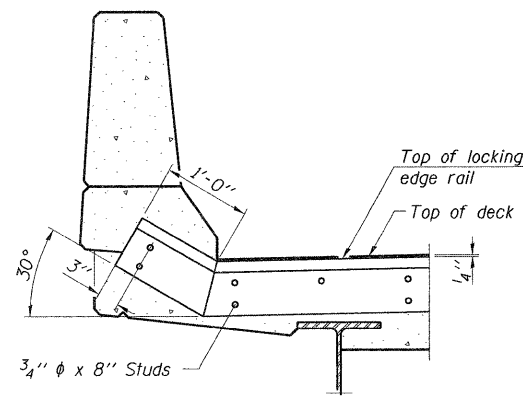
7/16"  $\phi$  holes at 4'-0" cts. for 3/8"  $\phi$  bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU ROLLED RAIL JOINT



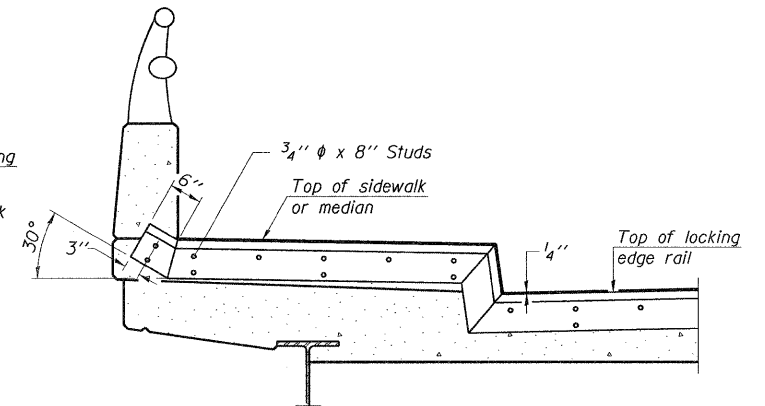
7/16"  $\phi$  holes at 4'-0" cts. for 3/8"  $\phi$  bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT



AT PARAPET

See Section A-A for end treatment of skews > 30°.



AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

TYPICAL END TREATMENTS

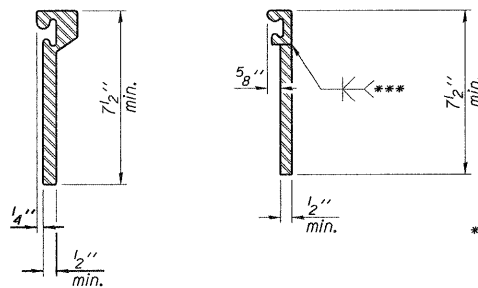
Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches. The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed. The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

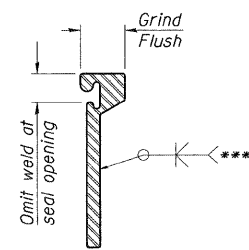
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.



ROLLED EXTRUDED RAIL

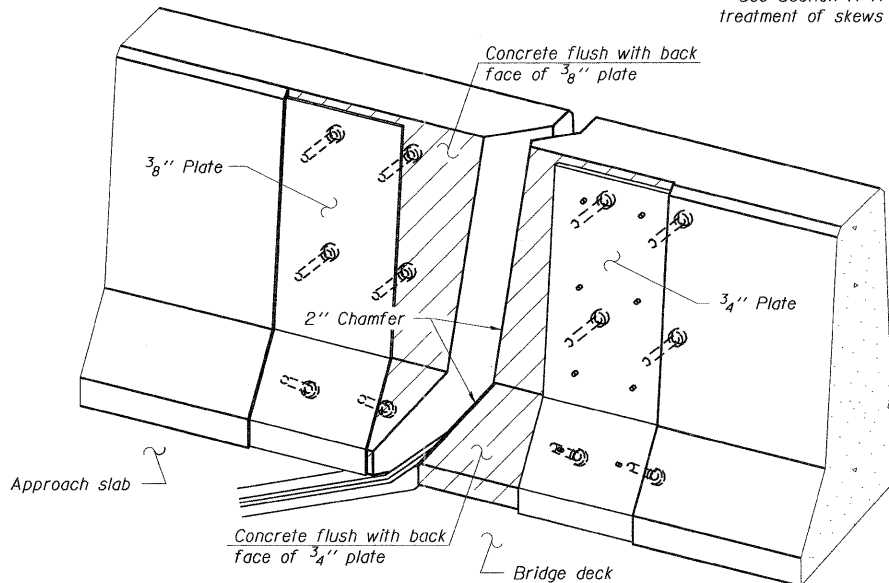
WELDED RAIL



\*\*\* Back gouge not required if complete joint penetration is verified by mock-up.

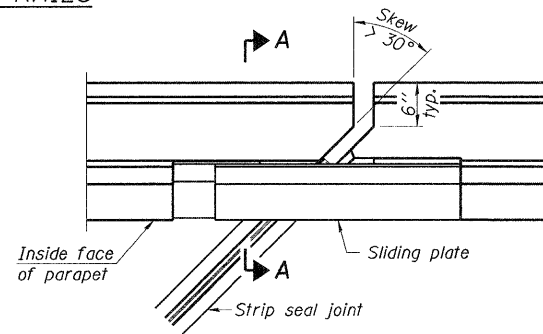
LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

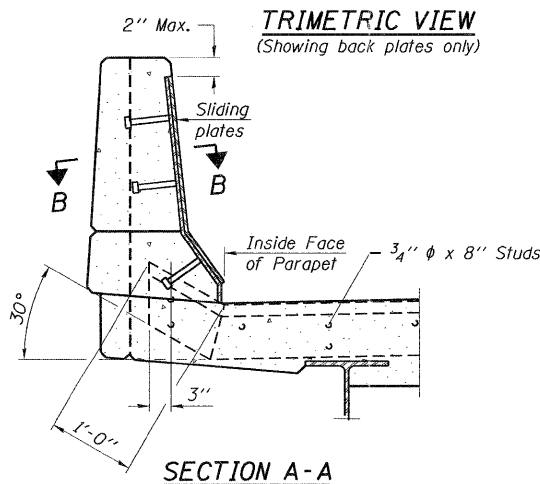


TRIMETRIC VIEW (Showing back plates only)

LOCKING EDGE RAILS

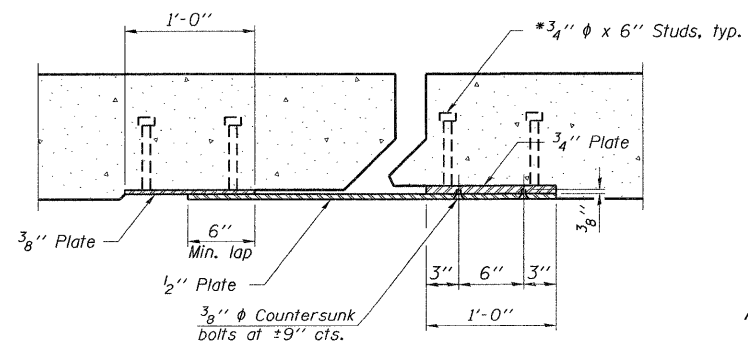


PLAN



SECTION A-A

POINT BLOCK DETAILS (for skews > 30°)



SECTION B-B

BILL OF MATERIAL

| Item                       | Unit | Total |
|----------------------------|------|-------|
| Preformed Joint Strip Seal | Foot | 202   |

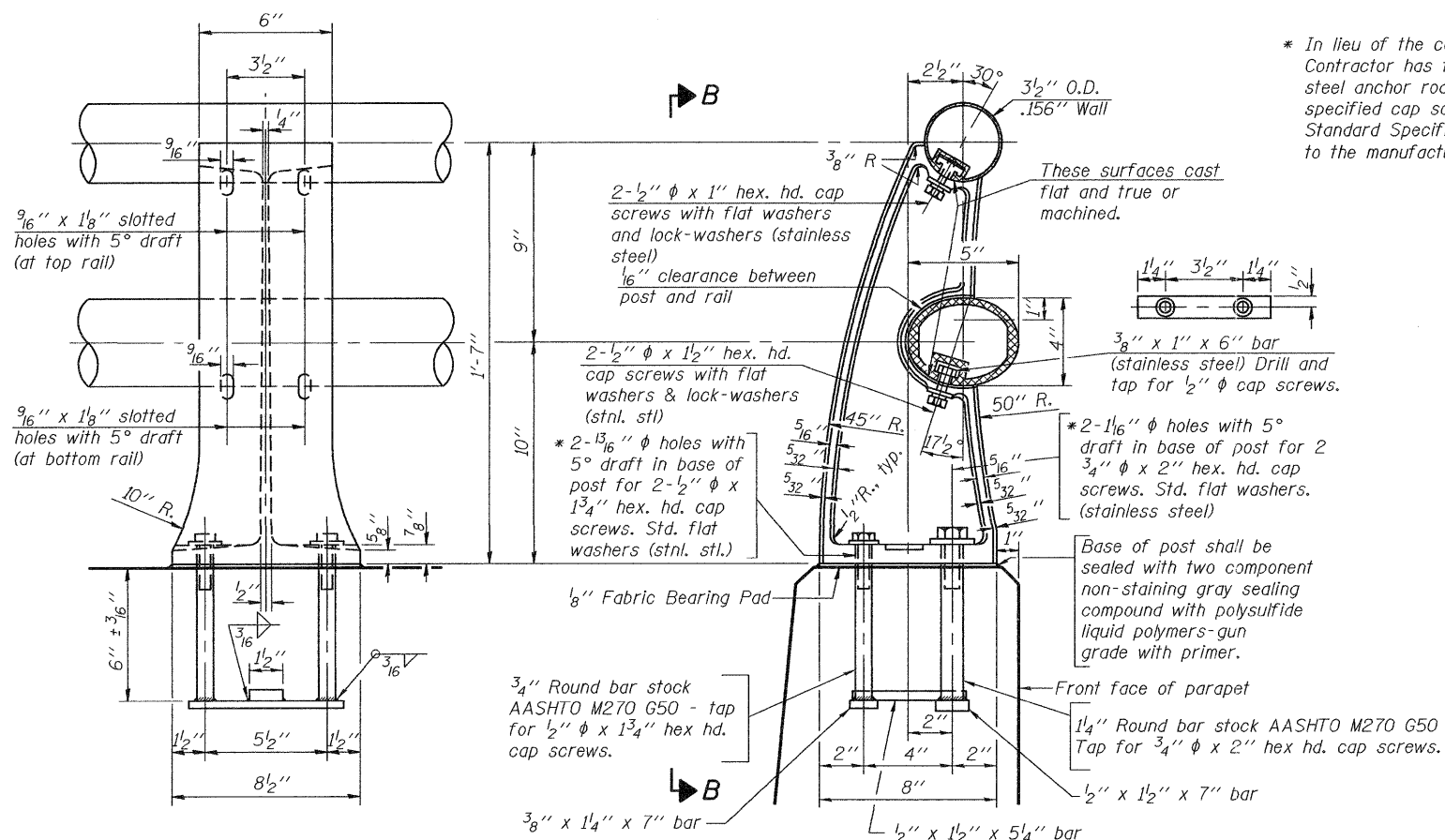
S.N. 016-0317

| ABUTMENTS | A      | B      | C      | D      |
|-----------|--------|--------|--------|--------|
| PIER 8    | 2      | 1 1/2" | 2 3/4" | 1 1/2" |
|           | 2 1/2" | 2"     | 3 1/4" | 2"     |

PREFORMED JOINT STRIP SEAL STRUCTURE NO. 016-0317

EJ-SSJ 11-1-09

|  |                       |                |           |   |   |                           |                    |        |              |           |  |
|--|-----------------------|----------------|-----------|---|---|---------------------------|--------------------|--------|--------------|-----------|--|
| FILE NAME =  | USER NAME = tznzkosmv | DESIGNED - MVT | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>IL 43 (HARLEM AVENUE) OVER I.C RR<br/>PREFORMED JOINT STRIP SEAL<br/>S.N. 016-0317</b> | F.A.P. RTE. =             | SECTION            | COUNTY | TOTAL SHEETS | SHEET NO. |  |
| ca:\pwork\spaidot\tznzkosmv\d0101671\016-0317-0318.dgn |                       | DRAWN -        | REVISED - |   |   | 848                       | 0708 (.2 & .2A) BR | COOK   | 36           | 12        |  |
| PLOT SCALE = 50.0000" / IN.                            |                       | CHECKED - RB   | REVISED - |   |   | CONTRACT NO. 60L53        |                    |        |              |           |  |
| PLOT DATE = 5/18/2011                                  |                       | DATE -         | REVISED - |   |   | ILLINOIS FED. AID PROJECT |                    |        |              |           |  |

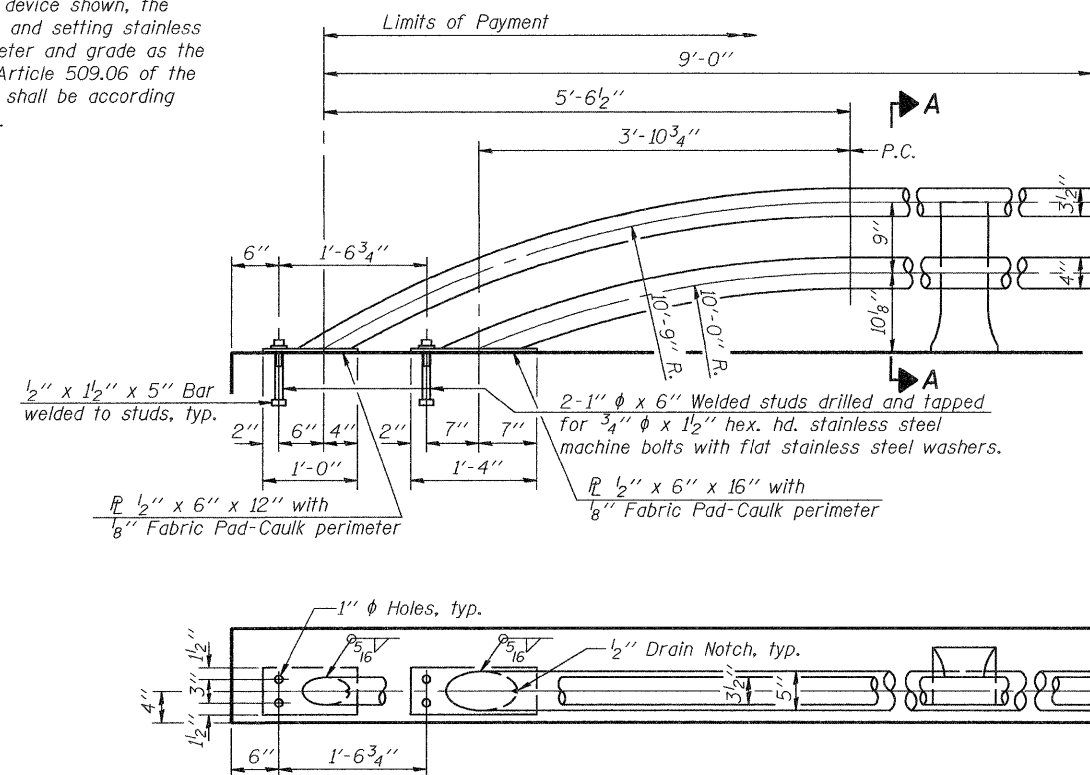


VIEW B-B

RAIL POST DETAILS

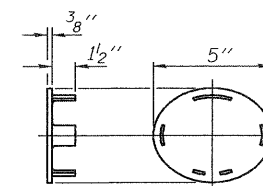
SECTION A-A

\* In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting stainless steel anchor rods of the same diameter and grade as the specified cap screws according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

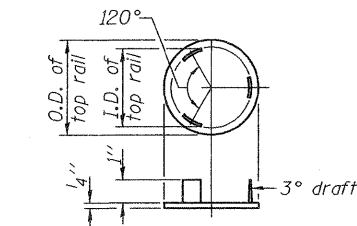


RAIL TERMINAL SECTION

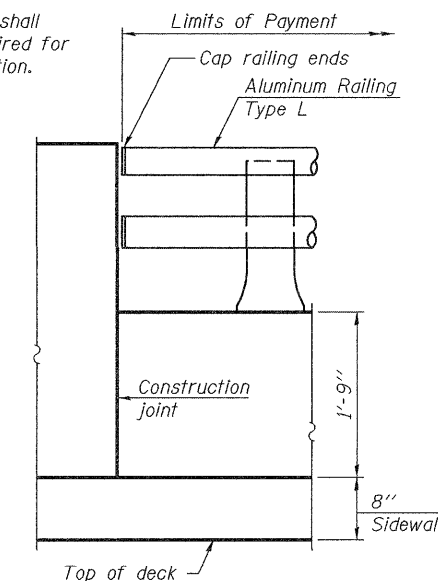
Note:  
The end rail post shall be set back as required for the terminal rail section.



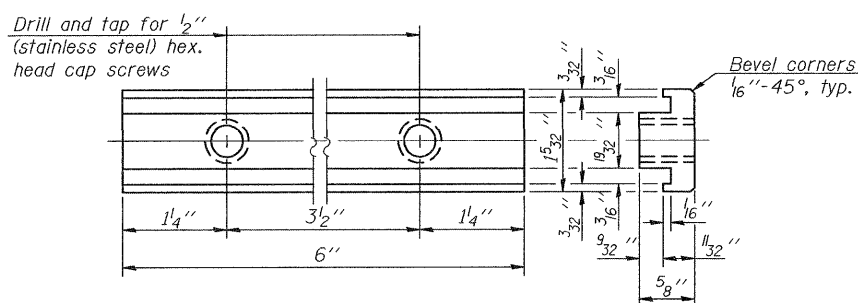
CAST END CAP  
For bottom rail  
DRIVE FIT TYPE



CAST END CAP  
For top rail

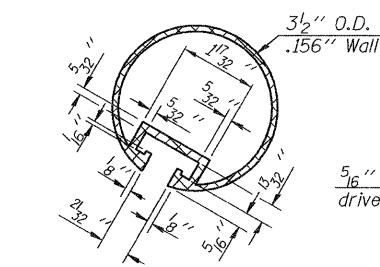


RAIL END TREATMENT FOR  
TYPE 5 AND 6 TERMINAL

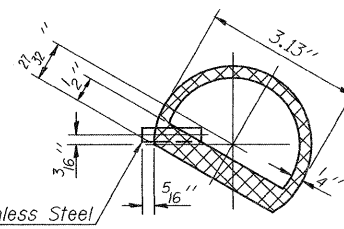


RAIL POST CLAMP BAR

For Top Rail

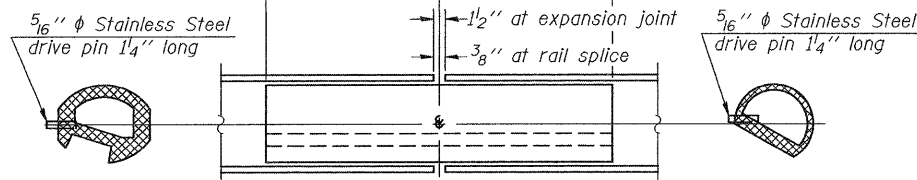


SECTION THRU TOP RAIL



SECTION THRU SPLICE

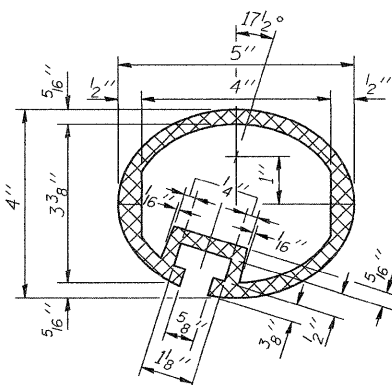
For Top Rail



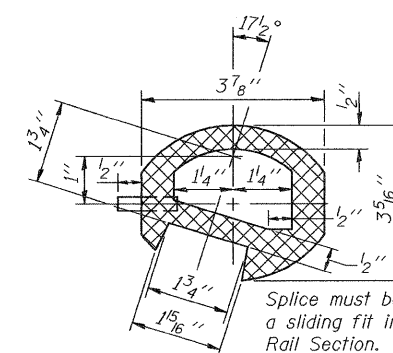
RAIL SPLICE

BOTTOM RAIL

TOP RAIL



SEC. THRU ELLIPTICAL  
RAIL SECTION



SEC. THRU SPLICE

Notes:  
All Posts shall be normal to parapet.  
All joints in rail shall be spliced per detail.  
All exposed rail ends shall be capped per detail.  
Provide 1-1/8" and 2-1/8" Aluminum Shims for 25% of the Posts. Rail elements shall be parallel to Grade-high spots will be ground and low spots shimmed.  
See sheet of for rail post spacing.

**BILL OF MATERIAL**

| Item                     | Unit | Quantity |
|--------------------------|------|----------|
| Aluminum Railing, Type L | Foot |          |

**FOR INFORMATION ONLY**

R-20

7-1-10 (7'-0" to 10'-0" Post spacing)

FILE NAME =  
#FILEL#

USER NAME = #USER#  
PLOT SCALE = #SCALE#  
PLOT DATE = #DATE#

DESIGNED RTB  
DRAWN MVT  
CHECKED MVT  
DATE 11/4/09

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

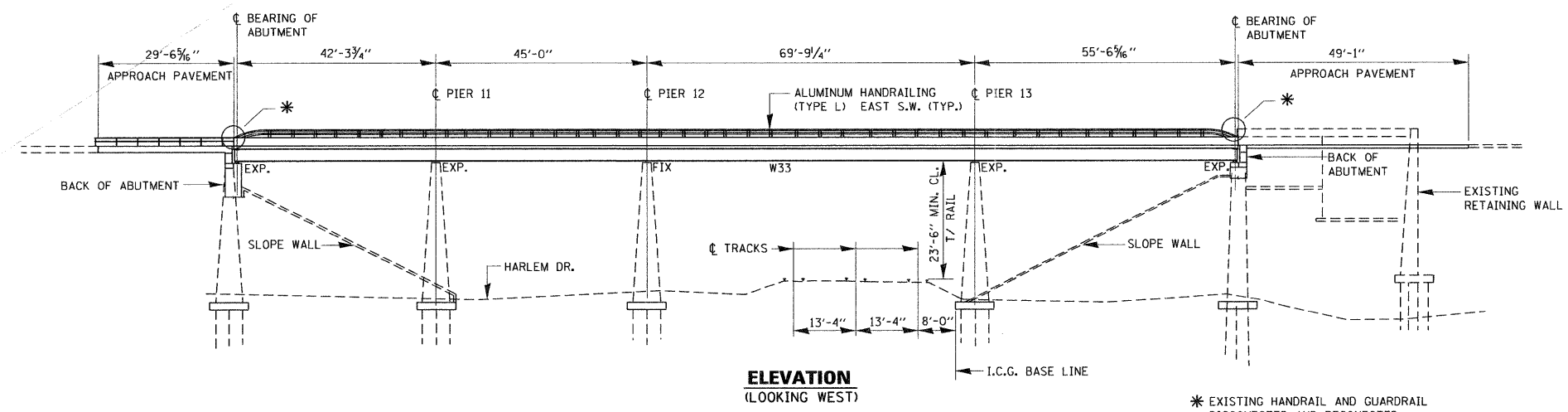
ALUMINUM RAILING, TYPE L  
SN 016-0317

SHEET NO. 12A OF 36 SHEETS

| F.A.P. RTE. | SECTION            | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|--------------------|--------|--------------|-----------|
| 848         | 0708 (L2 & '2A) BR | COOK   | 36           | 12A       |

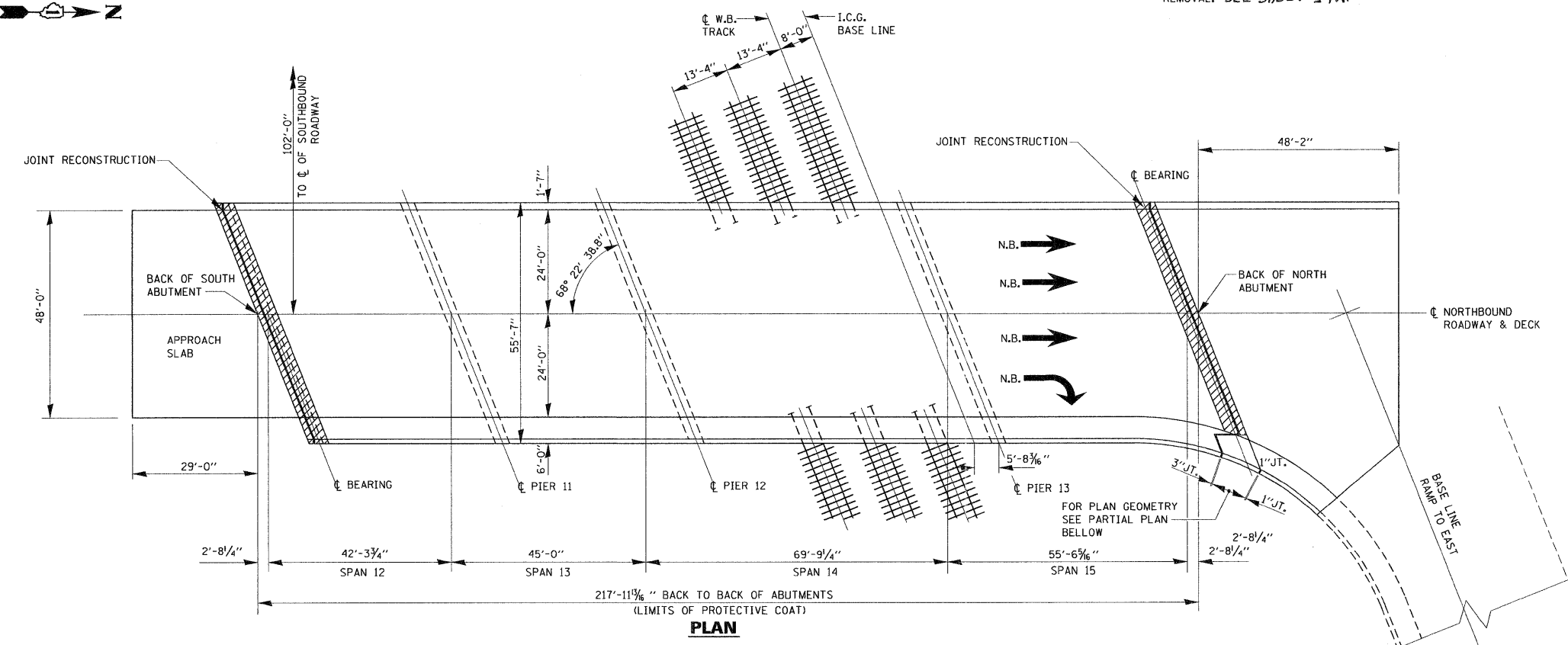
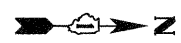
CONTRACT NO. 60L53

ILLINOIS FED. AID PROJECT

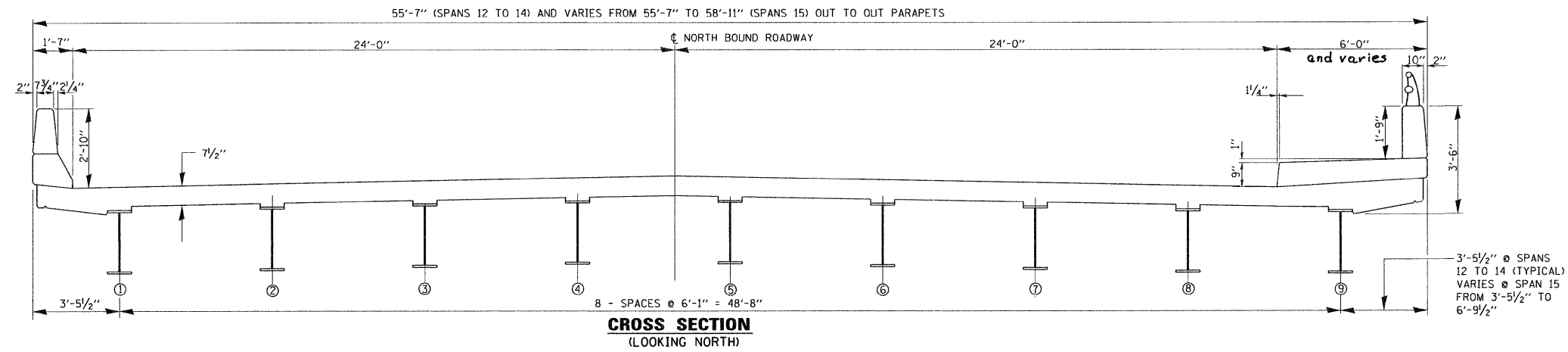


**ELEVATION**  
(LOOKING WEST)

\* EXISTING HANDRAIL AND GUARDRAIL DISCONNECTED AND RECONNECTED. COST INCLUDED IN COST OF CONCRETE REMOVAL. SEE SHEET 19A.



**PLAN**



**CROSS SECTION**  
(LOOKING NORTH)

**GENERAL NOTES:**

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENT PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED AT THE UNIT PRICE BID FOR THE WORK.

ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO CLASSIFICATION M-270 GR. 36, UNLESS OTHERWISE NOTED.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

EXISTING REINFORCEMENT BARS EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY REINFORCEMENT BARS THAT ARE DAMAGED DURING CONCRETE REMOVAL SHALL BE REPLACED WITH AN APPROVED BAR SPLICER OR ANCHORAGE SYSTEM. COST INCLUDED WITH CONCRETE REMOVAL.

CONCRETE SUPERSTRUCTURE SHALL HAVE A SEVEN DAY MINIMUM CURE.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706 Gr 60. SEE SPECIAL PROVISIONS.

JOINT OPENINGS SHALL BE ADJUSTED ACCORDING TO ARTICLE 520.04 OF THE STANDARD SPECIFICATIONS. WHEN THE DECK IS POURED AT AN AMBIENT TEMPERATURE OTHER THAN 50° F.

PRIOR TO POURING THE NEW CONCRETE DECK, ALL HEAVY OR LOOSE RUST, LOOSE MILL SCALE, AND OTHER LOOSE OR POTENTIALLY DETRIMENTAL FOREIGN MATERIAL SHALL BE REMOVED FROM THE SURFACES IN CONTACT WITH CONCRETE. TIGHTLY ADHERED PAINT MAY REMAIN UNLESS OTHERWISE NOTED. REMOVAL SHALL BE ACCOMPLISHED BY METHODS THAT WILL NOT DAMAGE THE STEEL AND THE COST WILL BE INCLUDED IN THE PAY ITEM COVERING REMOVAL OF THE EXISTING CONCRETE.

THE REMOVAL OF THE EXISTING JOINT IS INCLUDED IN THE COST OF THE CONCRETE REMOVAL.

FASTENERS SHALL BE AASHTO M 164 TYPE 1, MECHANICALLY GALVANIZED. BOLTS 3/4" Ø, HOLES 1/2" Ø. UNLESS OTHERWISE NOTED.

EXISTING STRUCTURAL STEEL THAT WILL BE IN CONTACT WITH NEW STRUCTURAL STEEL SHALL BE CLEANED AND PAINTED PRIOR TO ERECTION AS REQUIRED BY THE SPECIAL PROVISION "CLEANING AND PAINTING CONTACT SURFACE AREAS OF EXISTING STEEL STRUCTURES".

ALL STRUCTURAL STEEL SHALL BE SHOP PAINTED WITH THE INORGANIC ZINC RICH PRIMER PER AASHTO M300, TYPE 1. COST INCLUDED WITH STRUCTURAL STEEL REPAIR.

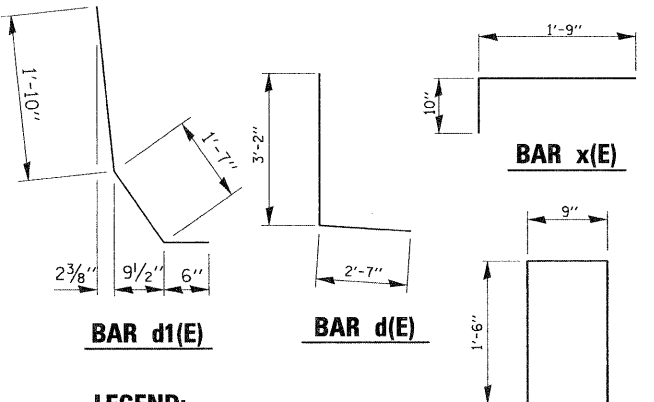
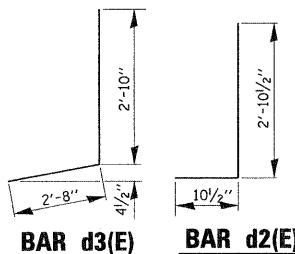
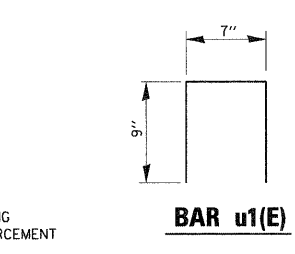
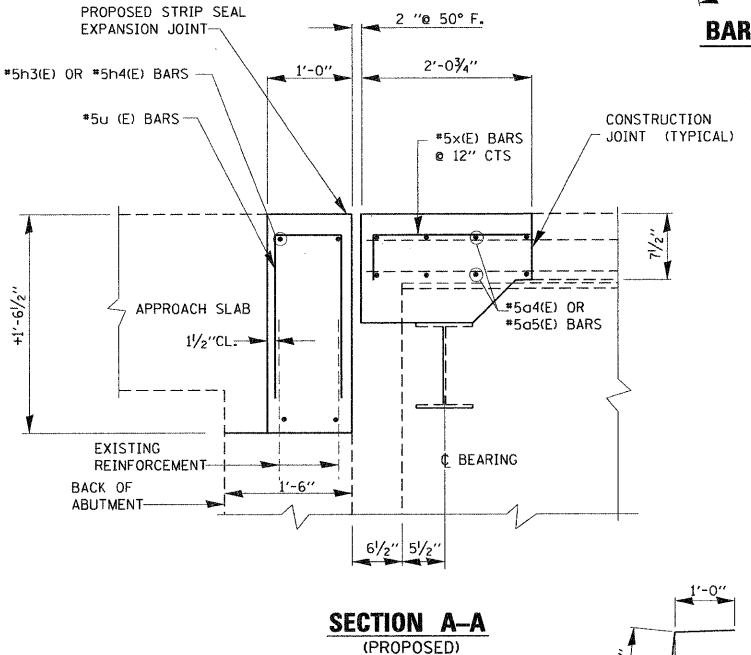
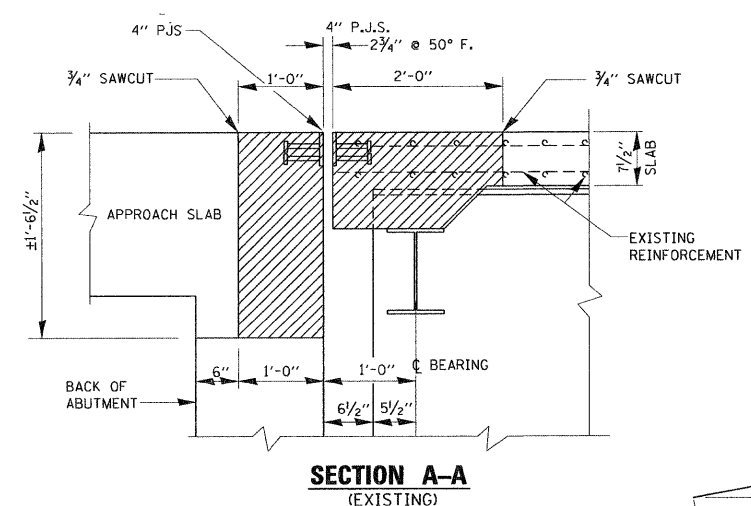
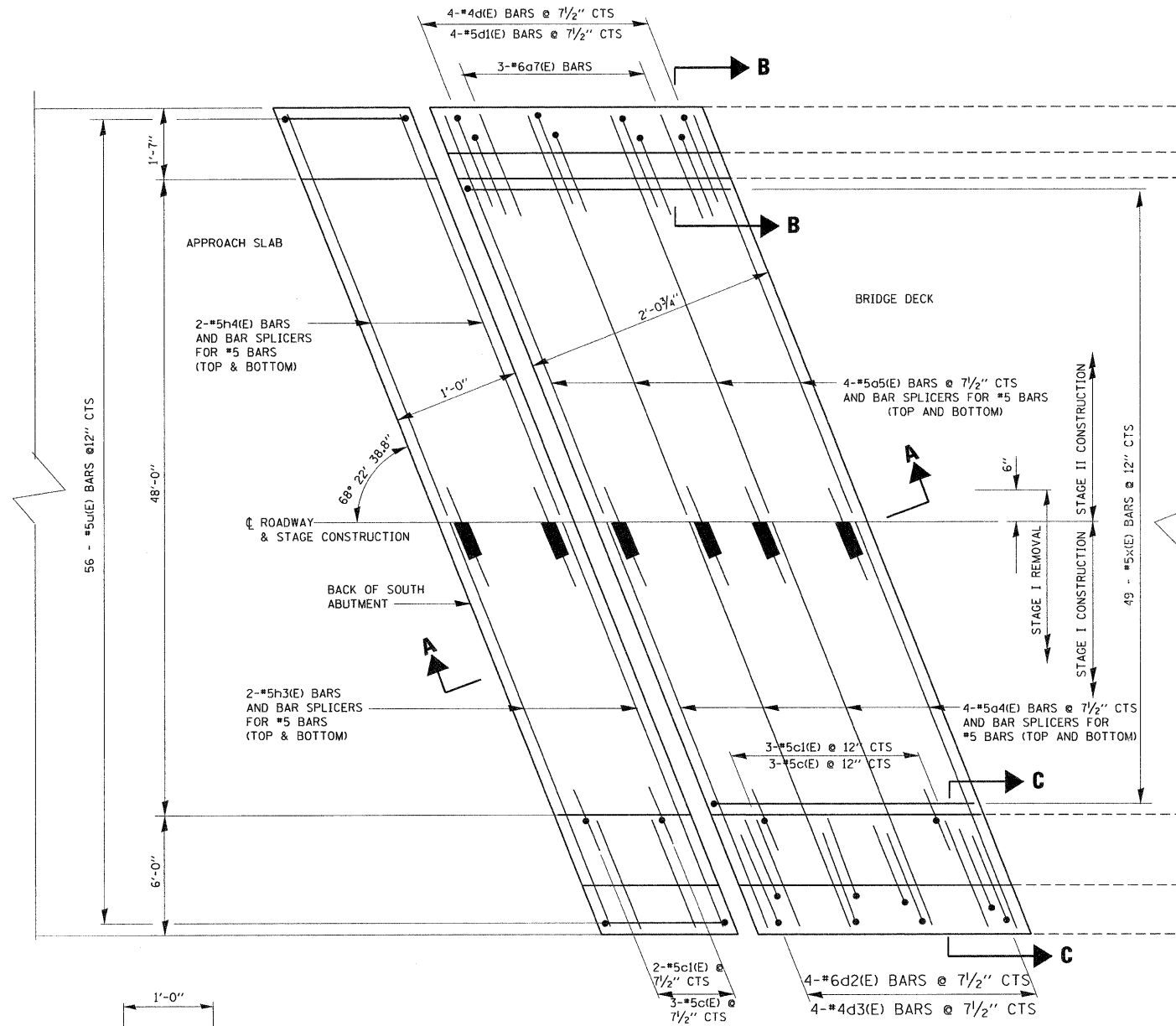
**TOTAL BILL OF MATERIALS S.N. 016-0318**

| ITEM                              | UNIT    | QUANTITY |
|-----------------------------------|---------|----------|
| REINFORCEMENT BARS (EPOXY COATED) | POUND   | 2340     |
| CONCRETE REMOVAL                  | CU. YD. | 16.3     |
| CONCRETE SUPERSTRUCTURE           | CU. YD. | 16.6     |
| PREFORMED JOINT STRIP SEAL        | FOOT    | 117      |
| BAR SPLICERS                      | EACH    | 24       |
| STRUCTURAL STEEL REPAIR           | POUND   | 250      |
| ** PROTECTIVE COAT                | SQ. YD. | 43       |
| SILICONE JOINT SEALER 2 3/4"      | FOOT    | 12       |

\*\* NEW CONCRETE AREA ONLY

**BILL OF MATERIALS**

| BAR                               | NO. | SIZE | LENGTH | SHAPE |
|-----------------------------------|-----|------|--------|-------|
| a4(E)                             | 8   | #5   | 31'-9" | —     |
| a5(E)                             | 8   | #5   | 27'-0" | —     |
| a7(E)                             | 3   | #6   | 5'-0"  | —     |
| c(E)                              | 6   | #5   | 5'-9"  | —     |
| c1(E)                             | 6   | #4   | 2'-6"  | ┌     |
| d(E)                              | 4   | #4   | 5'-9"  | └     |
| d1(E)                             | 4   | #5   | 3'-11" | ┌     |
| d2(E)                             | 4   | #6   | 3'-9"  | └     |
| d3(E)                             | 4   | #4   | 5'-6"  | └     |
| h3(E)                             | 4   | #5   | 32'-0" | —     |
| h4(E)                             | 4   | #5   | 27'-3" | —     |
| u(E)                              | 56  | #5   | 3'-7"  | ┌     |
| u1(E)                             | 4   | #4   | 2'-1"  | ┌     |
| x(E)                              | 49  | #5   | 2'-7"  | ┌     |
| REINFORCEMENT BARS (EPOXY COATED) |     |      | POUND  | 1230  |
| CONCRETE REMOVAL                  |     |      | CU.YD. | 8.0   |
| CONCRETE SUPERSTRUCTURE           |     |      | CU.YD. | 8.0   |

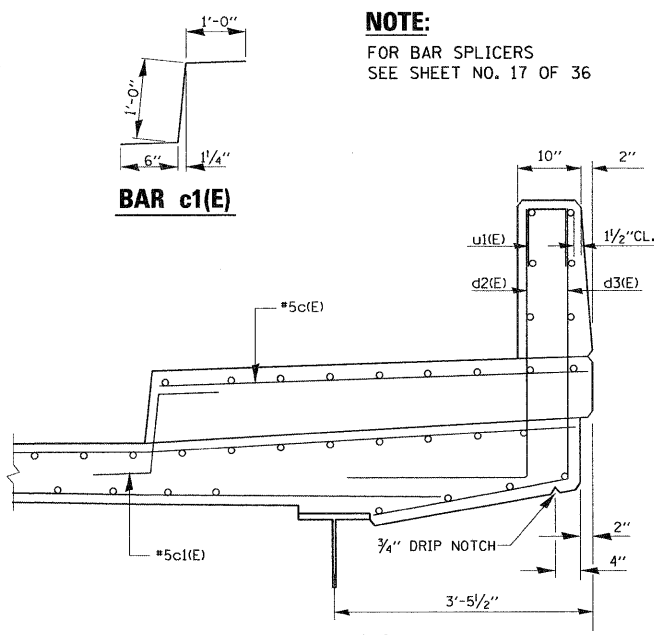
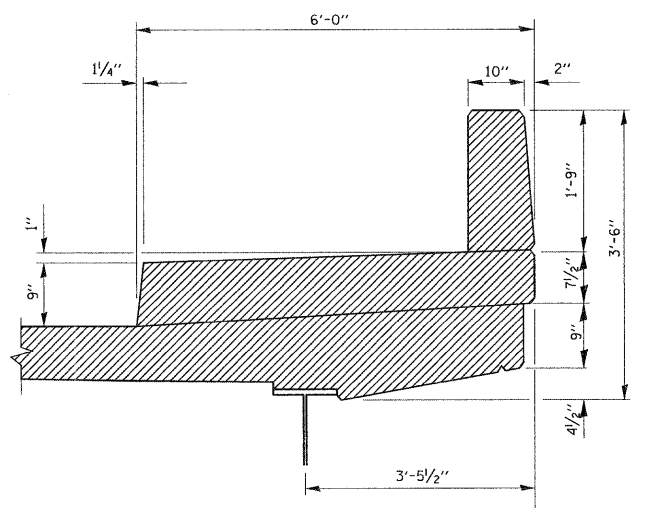
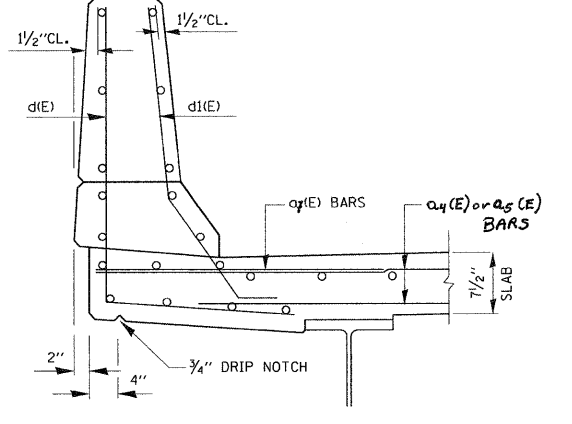
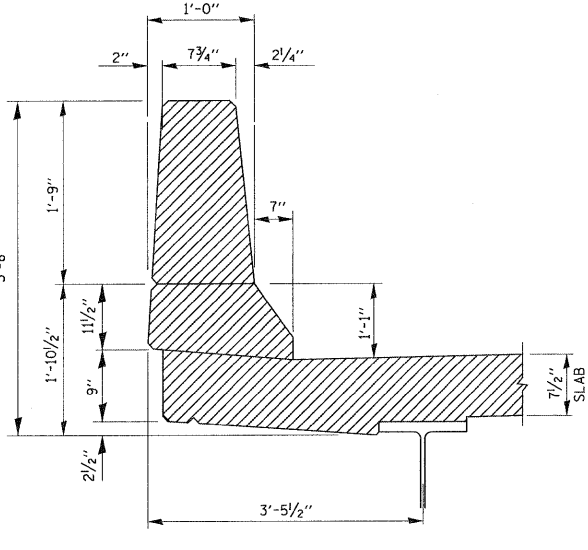


**LEGEND:**

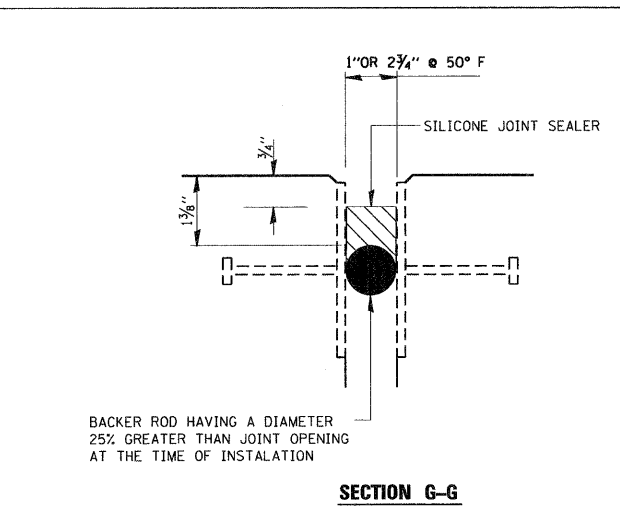
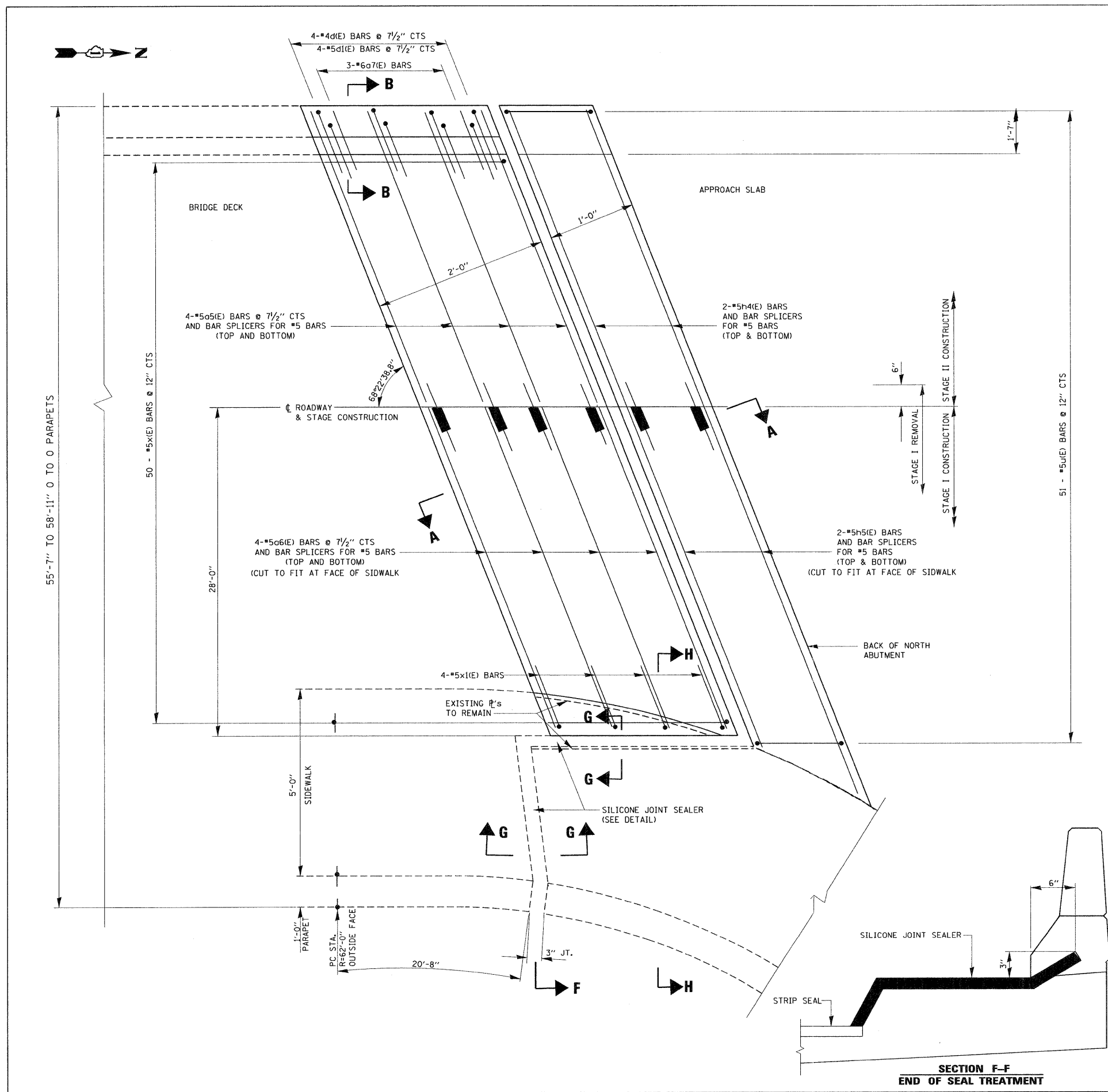
HATCHED AREA INDICATES CONCRETE REMOVAL

**NOTE:**

FOR BAR SPLICERS SEE SHEET NO. 17 OF 36

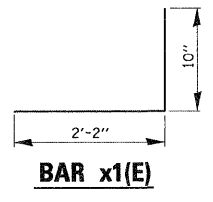
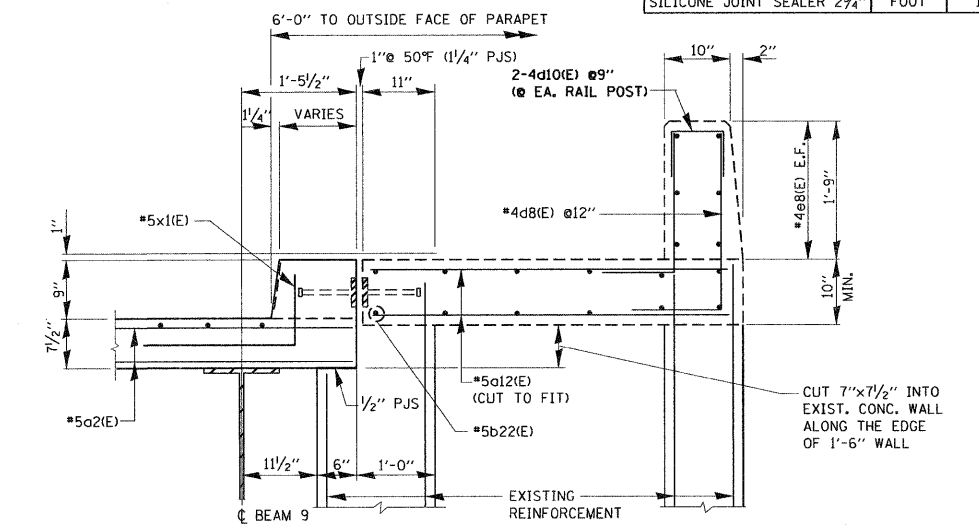




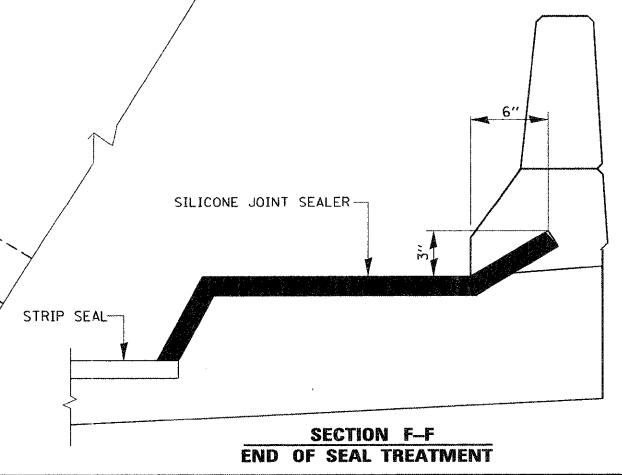
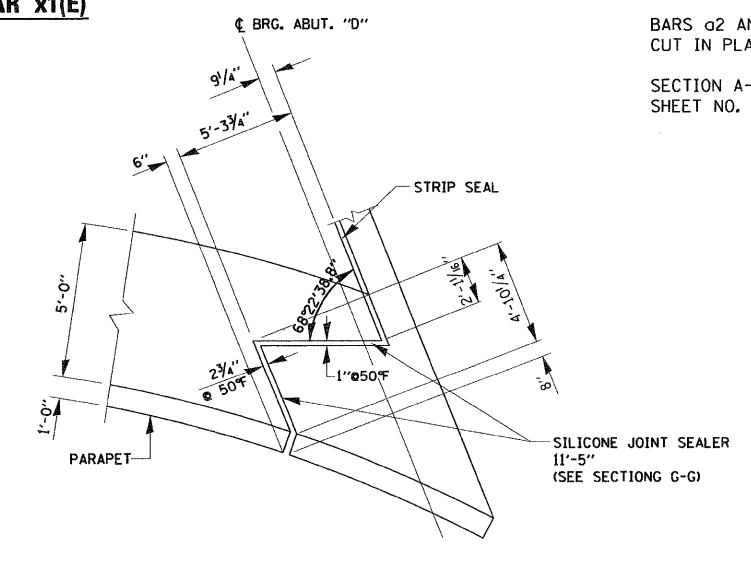


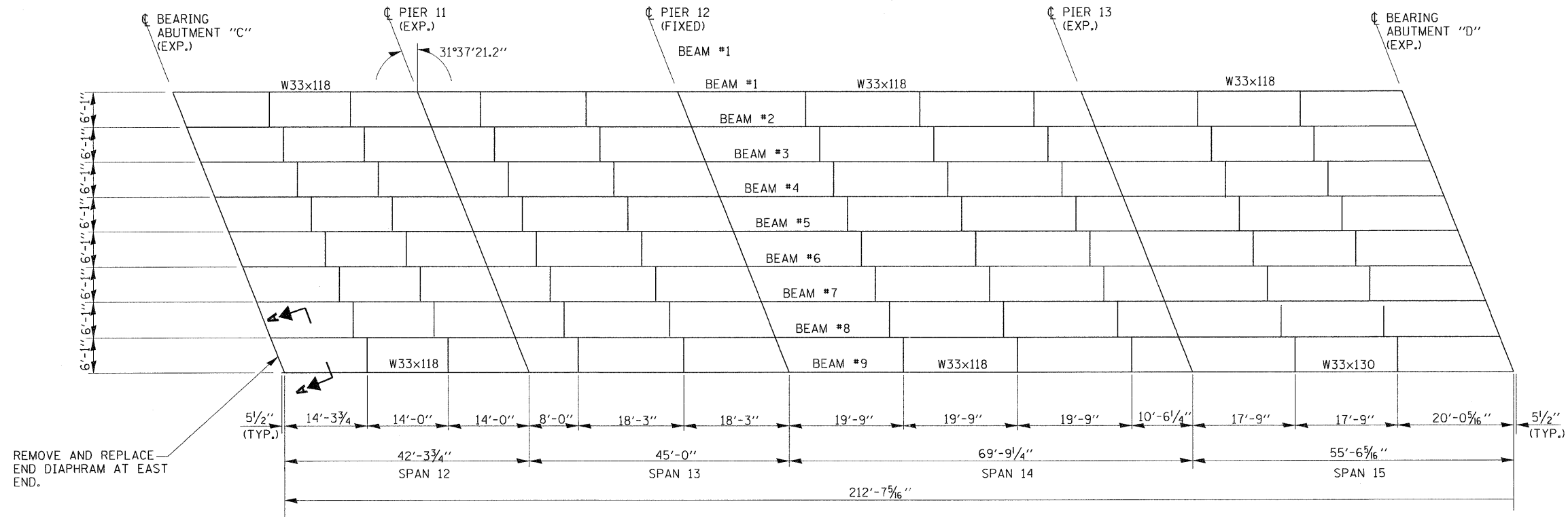
**BILL OF MATERIALS**

| BAR                               | NO. | SIZE | LENGTH  | SHAPE  |      |
|-----------------------------------|-----|------|---------|--------|------|
| a5(E)                             | 8   | #5   | 27'-0"  | —      |      |
| a6(E)                             | 8   | #5   | 29'-10" | —      |      |
| a7(E)                             | 3   | #6   | 5'-0"   | —      |      |
| d(E)                              | 4   | #4   | 5'-9"   | L      |      |
| d1(E)                             | 4   | #5   | 3'-11"  | L      |      |
| h4(E)                             | 4   | #5   | 27'-3"  | —      |      |
| h5(E)                             | 4   | #5   | 30'-11" | —      |      |
| u(E)                              | 51  | #5   | 3'-7"   | □      |      |
| x(E)                              | 50  | #5   | 2'-7"   | □      |      |
| x1(E)                             | 4   | #5   | 3'-0"   | J      |      |
| REINFORCEMENT BARS (EPOXY COATED) |     |      |         | POUND  | 1110 |
| CONCRETE REMOVAL                  |     |      |         | CU.YD. | 6.7  |
| CONCRETE SUPERSTRUCTURE           |     |      |         | CU.YD. | 6.7  |
| SILICONE JOINT SEALER 2 3/4"      |     |      |         | FOOT   | 12   |

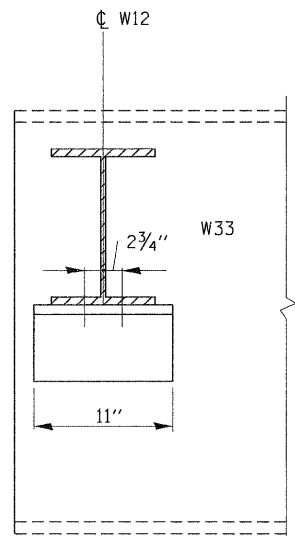


**NOTE:**  
 FOR BAR SPLICERS SEE SHEET NO. 17 OF 36.  
 BARS a2 AND h1 SHALL BE CUT IN PLACE TO FIT  
 SECTION A-A, B-B SEE SHEET NO. 14..

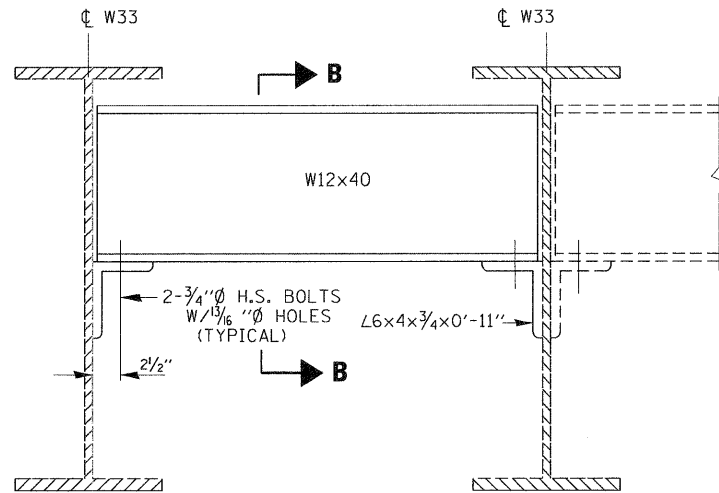




**FRAMING PLAN**



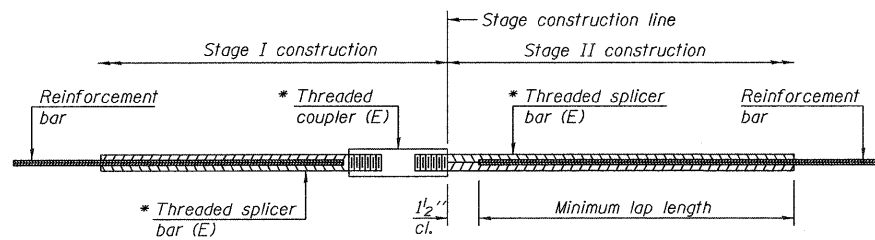
**SECTION B-B**



**SECTION A-A**

**NOTE:**  
FOR STRUCTURAL STEEL REPAIR  
SEE SHEET NO. 13 OF 36.

|  |                             |                |           |   |  |                           |                   |        |              |           |  |
|--|-----------------------------|----------------|-----------|---|--|---------------------------|-------------------|--------|--------------|-----------|--|
| FILE NAME =  | USER NAME = ttnakosmv       | DESIGNED - RTB | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>IL 43 NB (HARLEM AVENUE) OVER I.C RR<br/>FRAMING PLAN, DETAIL AND SECTION<br/>S.N. 016-0318</b> | F.A.P. RTE.               | SECTION           | COUNTY | TOTAL SHEETS | SHEET NO. |  |
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| PLOT DATE = 5/18/2011                              | DATE - 11/4/09              | CHECKED - MVT  | REVISED - |   |  | CONTRACT NO. 60L53        |                   |        |              |           |  |
|  |                             | REVISIED -     | REVISED - |   |  | ILLINOIS FED. AID PROJECT |                   |        |              |           |  |



STANDARD BAR SPLICER ASSEMBLY

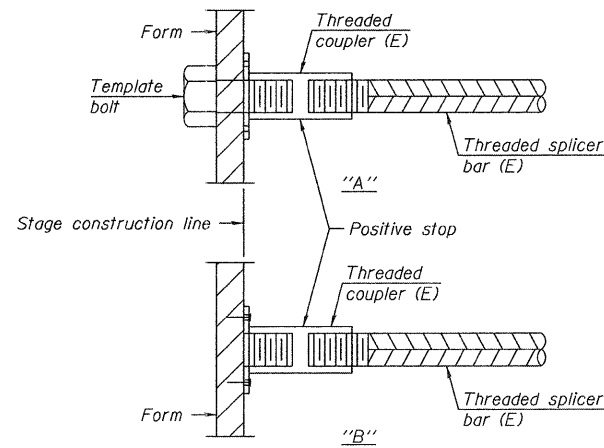
| Bar size to be spliced | Minimum Lap Lengths |         |         |         |
|------------------------|---------------------|---------|---------|---------|
|                        | Table 1             | Table 2 | Table 3 | Table 4 |
| 3, 4                   | 1'-5"               | 1'-11"  | 2'-1"   | 2'-4"   |
| 5                      | 1'-9"               | 2'-5"   | 2'-7"   | 2'-11"  |
| 6                      | 2'-1"               | 2'-11"  | 3'-1"   | 3'-6"   |
| 7                      | 2'-9"               | 3'-10"  | 4'-2"   | 4'-8"   |
| 8                      | 3'-8"               | 5'-1"   | 5'-5"   | 6'-2"   |
| 9                      | 4'-7"               | 6'-5"   | 6'-10"  | 7'-9"   |

Table 1: Black bar, 0.8 Class C  
 Table 2: Black bar, Top bar lap, 0.8 Class C  
 Table 3: Epoxy bar, 0.8 Class C  
 Table 4: Epoxy bar, Top bar lap, 0.8 Class C

Threaded splicer bar length = min. lap length + 1/2" + thread length

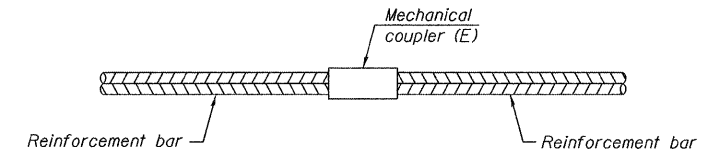
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

| Location | Bar size | No. assemblies required | Table for minimum lap length |
|----------|----------|-------------------------|------------------------------|
| Abutment | #5       | 8                       | 3                            |
| Deck     | #5       | 16                      | 3                            |
|          |          |                         |                              |
|          |          |                         |                              |



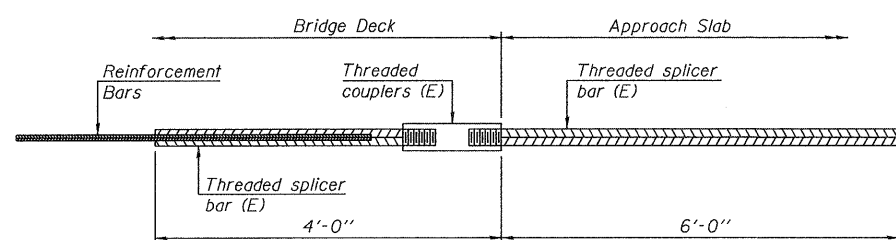
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.  
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.  
 (E) : Indicates epoxy coating.



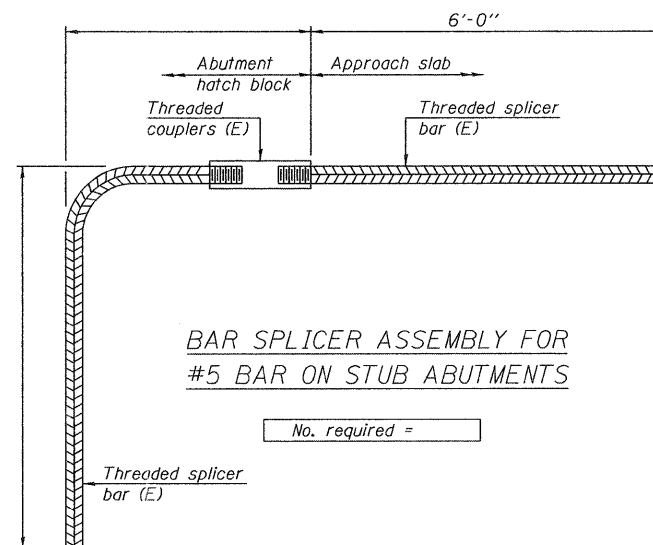
STANDARD MECHANICAL SPLICER

| Location | Bar size | No. assemblies required |
|----------|----------|-------------------------|
|          |          |                         |
|          |          |                         |
|          |          |                         |



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

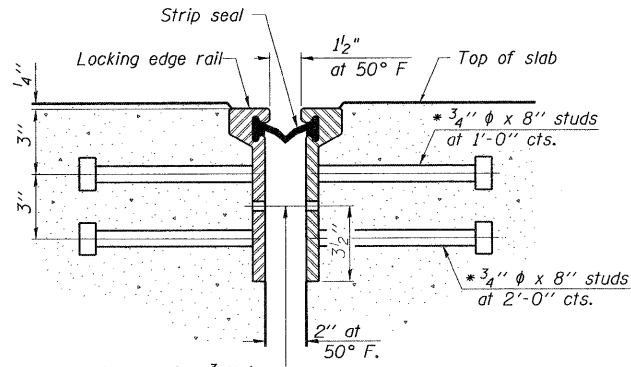
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.  
 All reinforcement shall be lapped and tied to the splicer bars.  
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.  
 See special provision for Mechanical Splicers.  
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 STRUCTURE NO. 016-0318

BSD-1 11-1-09

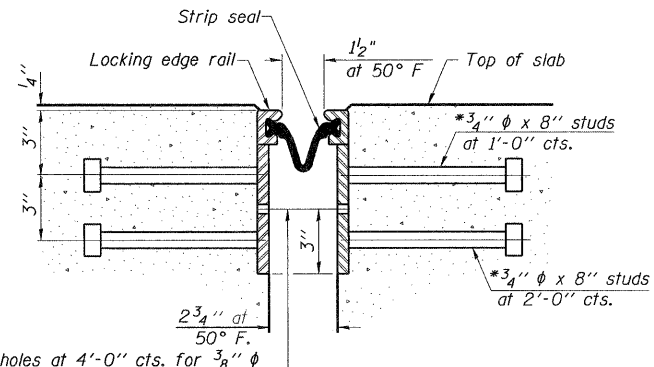
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| FILE NAME =   | USER NAME = tnsakosmv | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>IL 43 (HARLEM AVENUE) OVER I.C RR<br/>BAR SPLICER ASSEMBLY<br/>S.N. 016-0318</b> | F.A.P. RTE.        | SECTION                   | COUNTY | TOTAL SHEETS | SHEET NO.                 |
| c:\pwork\pwork\tnsakosmv\d0101671\016-0317-0318.dgn |                       | DRAWN -    | REVISED - |   |   | 848                | 0708 (2 & '2A) BR         | COOK   | 36           | 17                        |
| PLOT SCALE = 50.0000" / IN.                         |                       | CHECKED -  | REVISED - |   |   | CONTRACT NO. 60L53 |                           |        |              |                           |
| PLOT DATE = 5/18/2011                               |                       | DATE -     | REVISED - |   |   | SCALE:             | SHEET NO. 17 OF 19 SHEETS | STA.   | TO STA.      | ILLINOIS FED. AID PROJECT |

\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



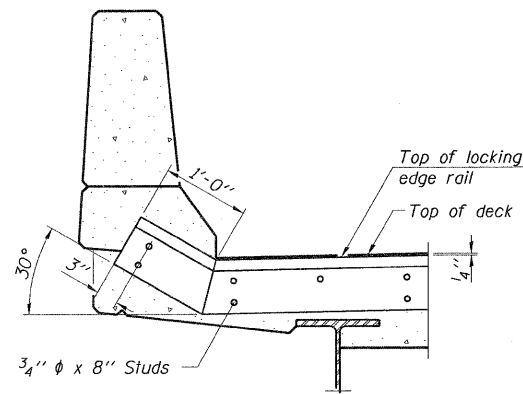
7/16"  $\phi$  holes at 4'-0" cts. for 3/8"  $\phi$  bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU ROLLED RAIL JOINT



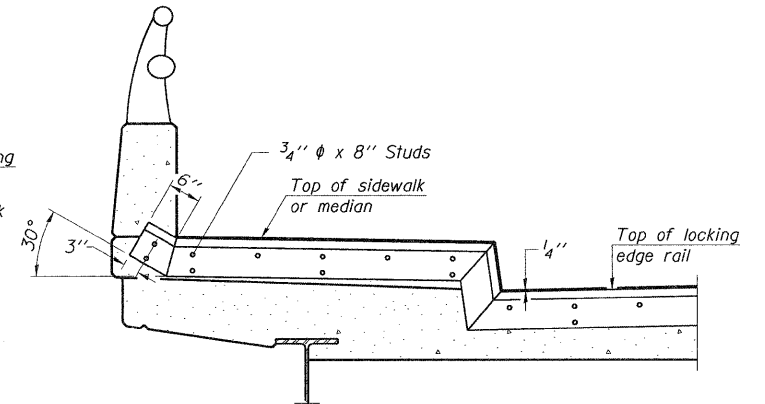
7/16"  $\phi$  holes at 4'-0" cts. for 3/8"  $\phi$  bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT



AT PARAPET

See Section A-A for end treatment of skews > 30°.



AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

TYPICAL END TREATMENTS

Notes:

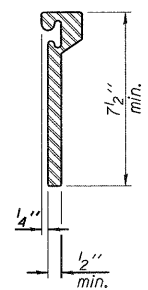
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

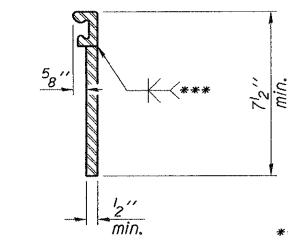
The manufacturer's recommended installation methods shall be followed. The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

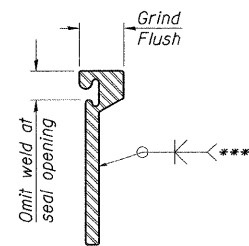
Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.



ROLLED EXTRUDED RAIL



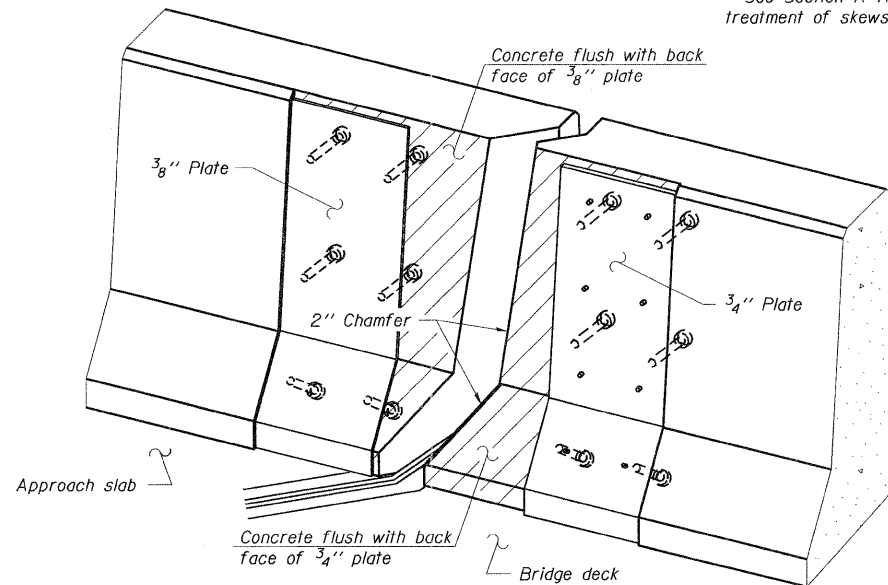
WELDED RAIL



\*\*\* Back gouge not required if complete joint penetration is verified by mock-up.

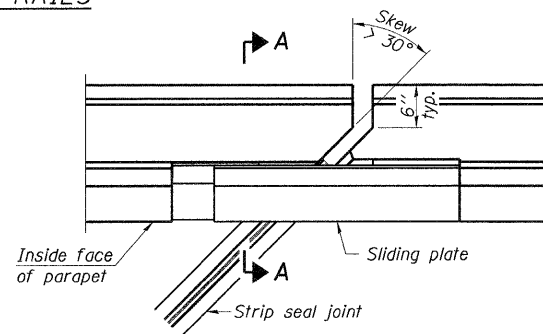
LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

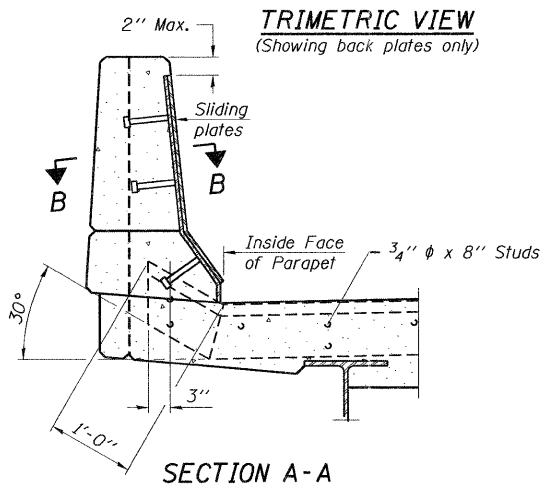


TRIMETRIC VIEW (Showing back plates only)

LOCKING EDGE RAILS

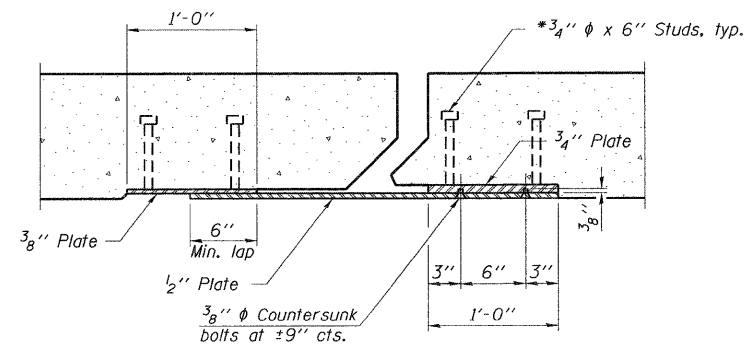


PLAN



SECTION A-A

POINT BLOCK DETAILS (for skews > 30°)



SECTION B-B

BILL OF MATERIAL

| Item                       | Unit | Total |
|----------------------------|------|-------|
| Preformed Joint Strip Seal | Foot | 128   |

EJ-SSJ 11-1-09

FILE NAME = c:\pwork\pmsdot\trnakoasm\10181671\018

USER NAME = trnakoasm  
 DESIGNED - MVT  
 DRAWN - RB  
 CHECKED - RB  
 DATE - 5/18/2011

REVISIONS  
 REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

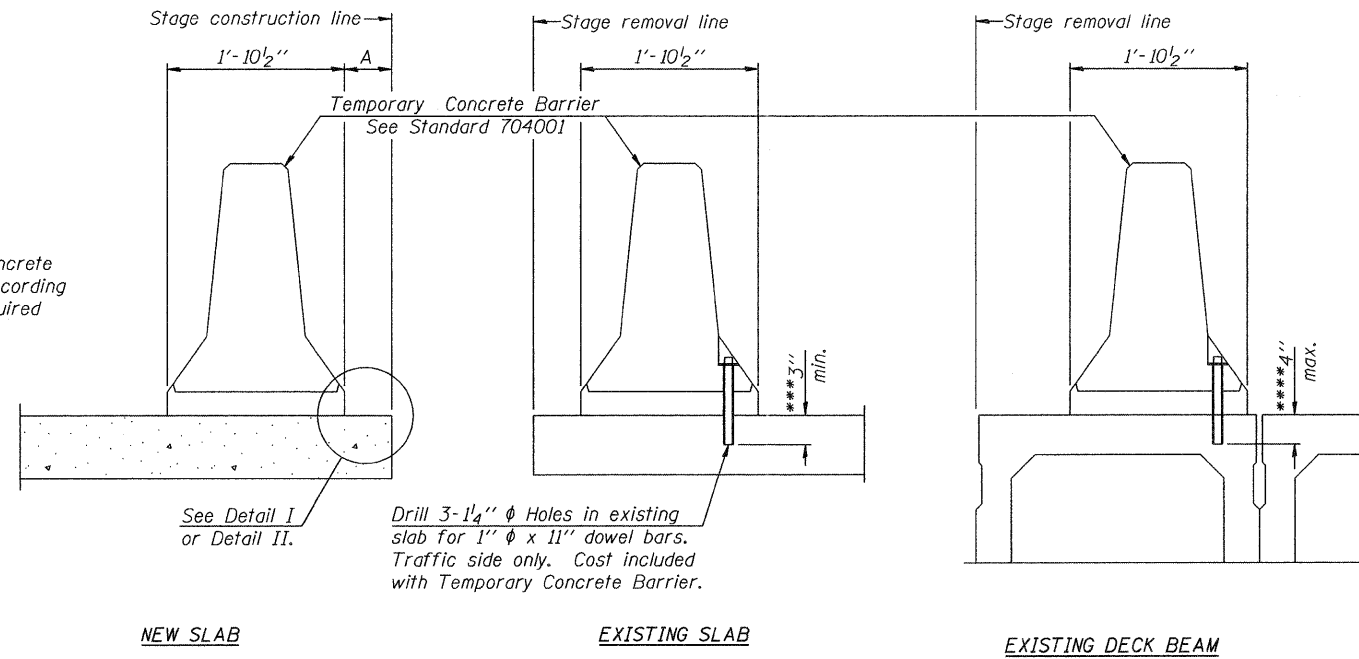
IL 43 (HARLEM AVENUE) OVER I.C RR  
 PREFORMED JOINT STRIP SEAL  
 S.N. 016-0318

SCALE: SHEET NO. 18 OF 19 SHEETS STA. TO STA.

F.A.P. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.  
 848 0708 (.2 & .2A) BR COOK 36 18  
 CONTRACT NO. 60L53  
 ILLINOIS FED. AID PROJECT

PREFORMED JOINT STRIP SEAL  
 STRUCTURE NO. 016-0318

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



See Detail I or Detail II.

Drill 3-1/4"  $\phi$  Holes in existing slab for 1"  $\phi$  x 11" dowel bars. Traffic side only. Cost included with Temporary Concrete Barrier.

NEW SLAB

EXISTING SLAB

EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

NOTES

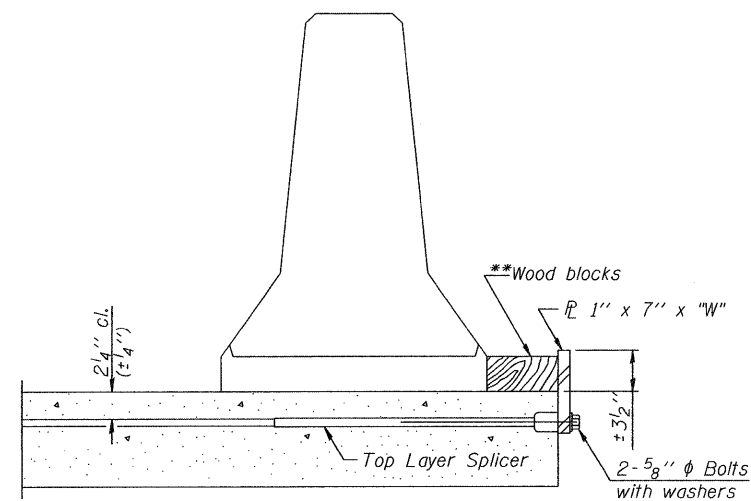
Detail I - With Bar Splicer or Couplers:  
Connect one (1) 1" x 7" x "W" steel  $\bar{R}$  to the top layer of couplers with 2-5/8"  $\phi$  bolts screwed to coupler at approximate  $\bar{C}$  of each barrier panel.

Detail II - With Extended Reinforcement Bars:  
Connect one (1) 1" x 7" x "W" steel  $\bar{R}$  to the concrete slab or concrete wearing surface with 2-5/8"  $\phi$  Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate  $\bar{C}$  of each barrier panel.

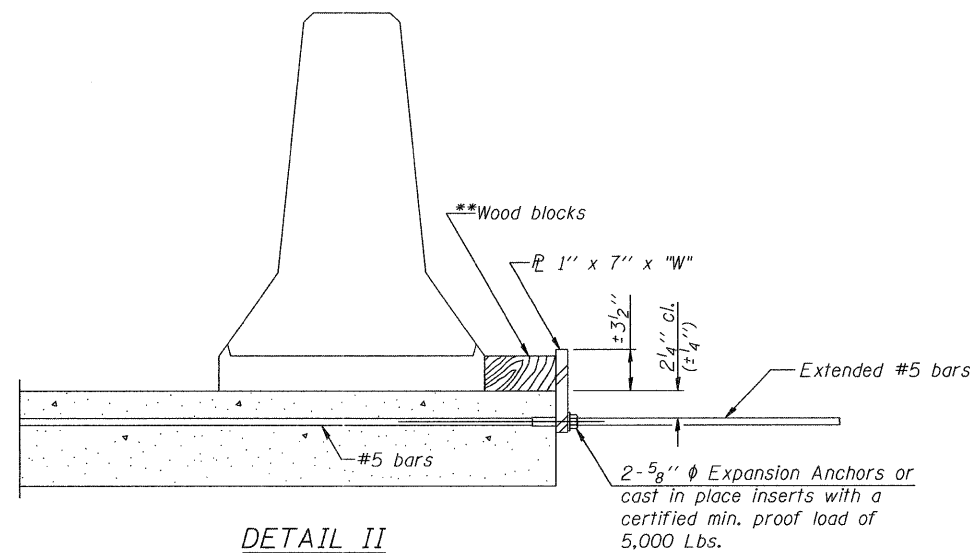
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

\*\*\* Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

\*\*\*\* If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



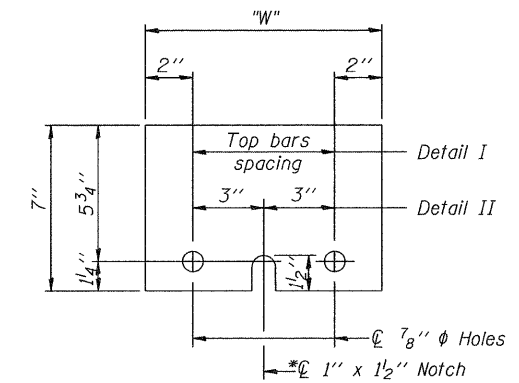
DETAIL I



DETAIL II

\*\* Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"



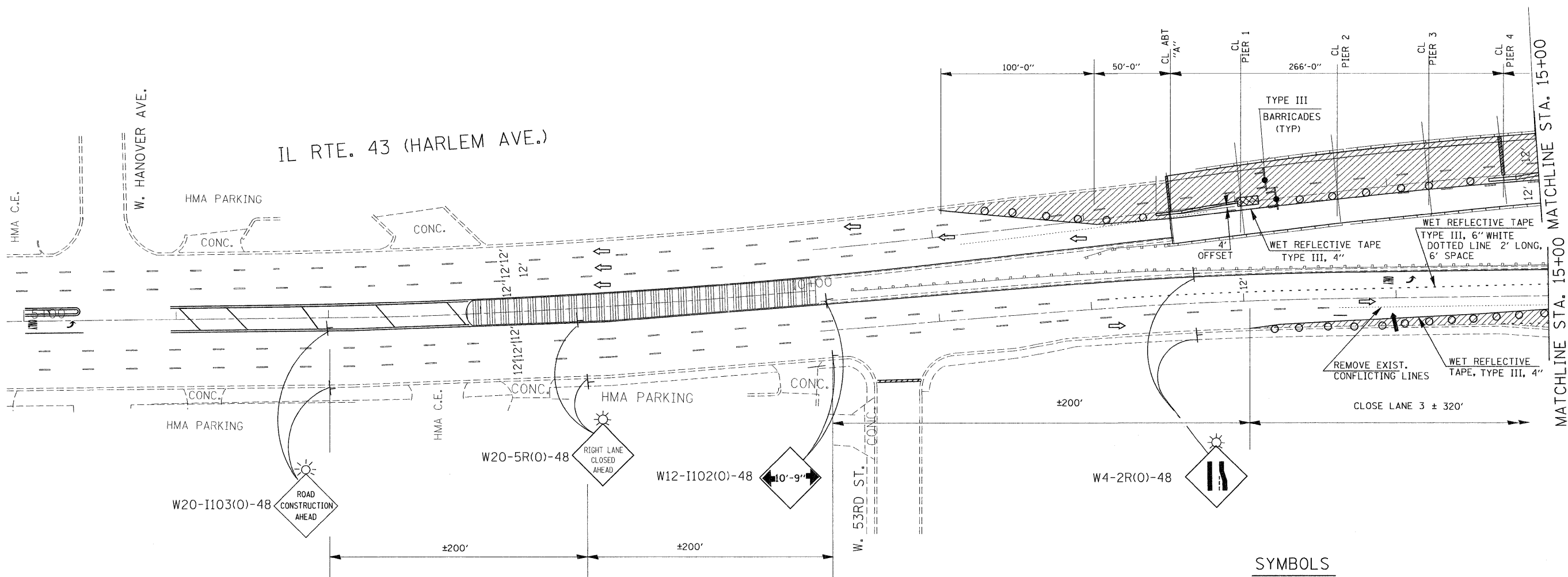
STEEL RETAINER  $\bar{R}$  1" x 7" x "W"

\* Required only with Detail II








R-27 7-1-10

|  |                      |                |           |   |  |                           |                    |         |              |           |  |
|--|----------------------|----------------|-----------|---|--|---------------------------|--------------------|---------|--------------|-----------|--|
| FILE NAME =                            | USER NAME = tmakosmv | DESIGNED - MVT | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>IL 43 (HARLEM AVENUE) OVER I.C RR<br/>TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION<br/>S.N. 016-0318</b> | F.A.P. RTE. =             | SECTION            | COUNTY  | TOTAL SHEETS | SHEET NO. |  |
| c:\pwork\pmsidot\tmakosmv\d0101671\016 | 0317-0318.dgn        | DRAWN - MVT    | REVISED - |   |  | 848                       | 07080 (2 & .2A) BR | COOK    | 36           | 19        |  |
| PLOT SCALE = 50.0000' / IN.            | CHECKED - RTB        | REVISED -      | REVISED - |   |  | CONTRACT NO. 60L53        |                    |         |              |           |  |
| PLOT DATE = 5/18/2011                  | DATE - 3/8/11        | REVISED -      | REVISED - |   |  | ILLINOIS FED. AID PROJECT |                    |         |              |           |  |
|  |                      |                |           |   | SCALE:   | SHEET NO. 19 OF 19 SHEETS | STA.               | TO STA. |              |           |  |





**SYMBOLS**

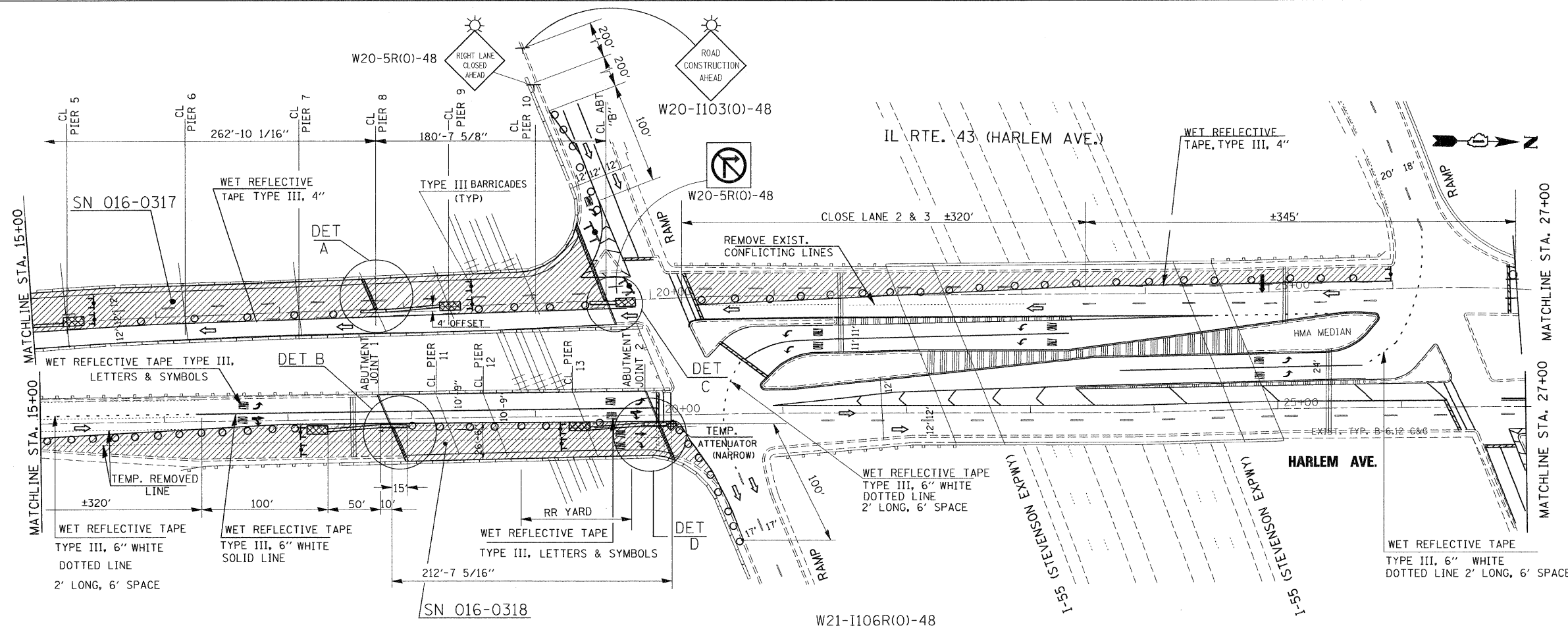
-  TYPE II BARRICADE WITH FLASHING LIGHT
-  WORK AREA
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  DIRECTION INDICATOR BARRICADE WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
-  TYPE II BARRICADE OR DRUM, 20' CTS IN TAPER, 50' IN WEAVE, 100' IN TANGENT
-  ARROW BOARD
-  DIRECTION OF TRAFFIC

**NOTES:**

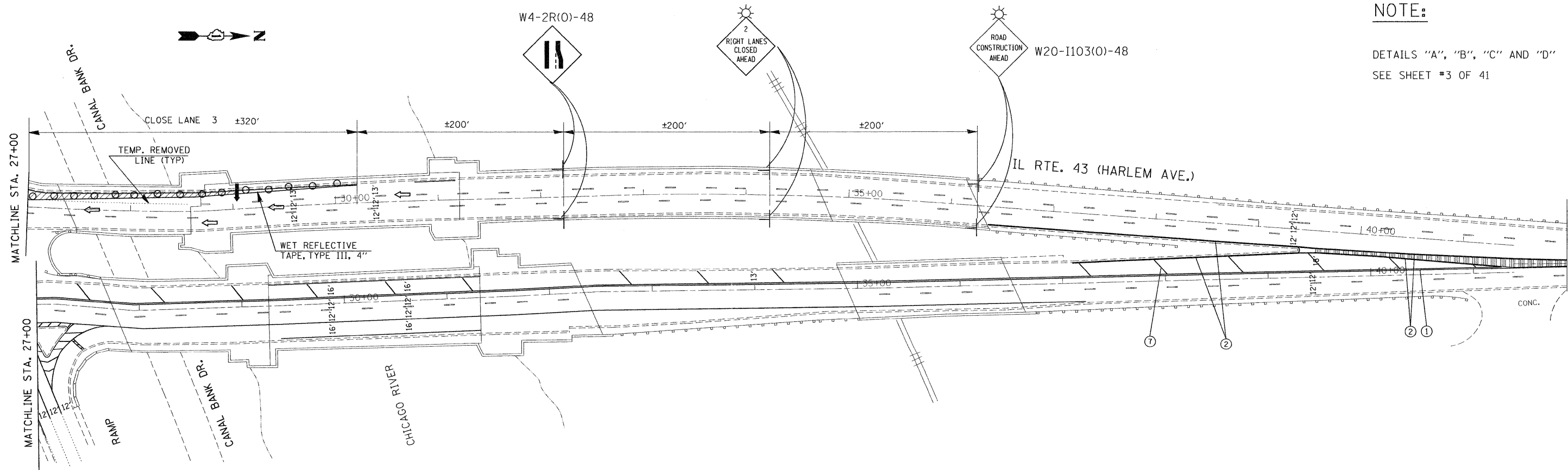
- ① EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED.
- ② CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE.
- ③ ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR HOURS.

|   |                         |            |           |   |  |                    |      |    |                    |         |        |              |           |
|---|-------------------------|------------|-----------|---|--|--------------------|------|----|--------------------|---------|--------|--------------|-----------|
| FILE NAME =   | USER NAME = gorengautab | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>IL 43 (HARLEM AVE) OVER CN RR<br/>TRAFFIC CONTROL PLAN. STAGE 1 (SN 016-0317;-0318)</b> |                    |      |    | F.A.P. RTE.        | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 01\pwork\pwork\dot\gorengautab\0212247\0170710\shp\plan.dgn |                         | DRAWN -    | REVISED - |   | 348  | 0708 (2 & .02A) BR | COOK | 36 | 20                 |         |        |              |           |
| PLOT SCALE = 5/8"=1'-0"                                     |                         | CHECKED -  | REVISED - |   | SCALE: SHEET NO. OF SHEETS STA. TO STA.  |                    |      |    | CONTRACT NO. 60L53 |         |        |              |           |
| PLOT DATE = 5/18/2011                                       |                         | DATE -     | REVISED - |   | ILLINOIS FED. AID PROJECT  |                    |      |    |                    |         |        |              |           |



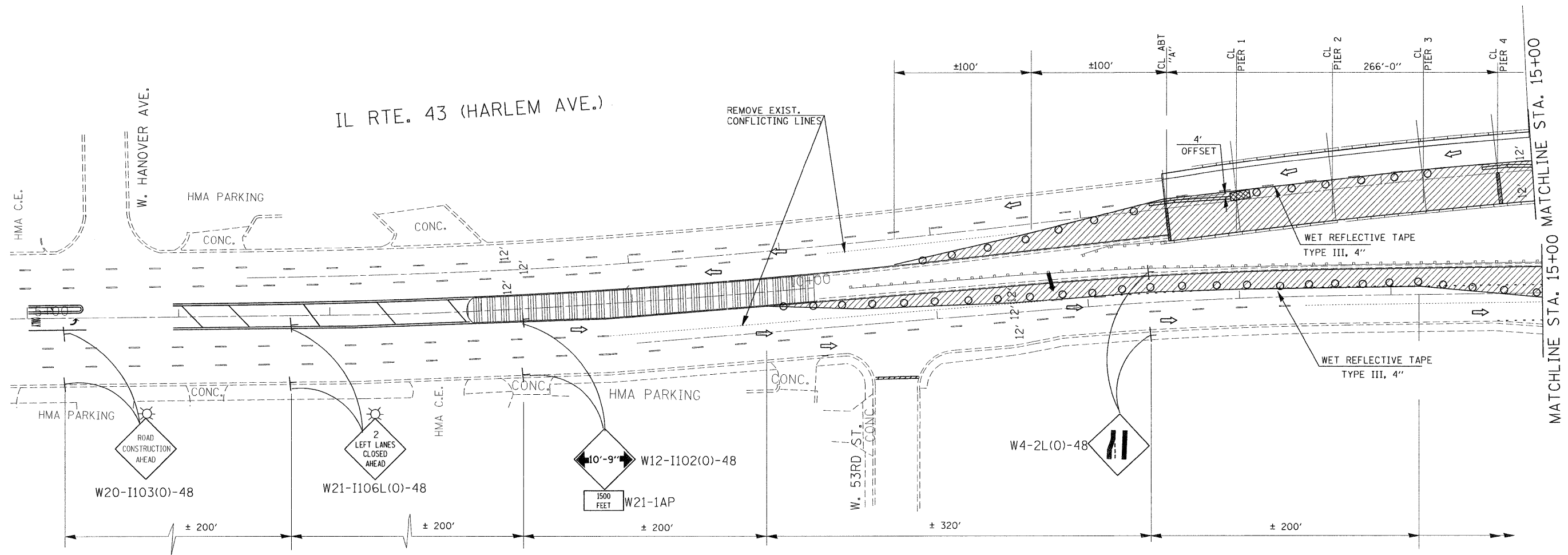


**NOTE:**  
 DETAILS "A", "B", "C" AND "D"  
 SEE SHEET #3 OF 41



|   |                             |            |           |   |  |    |        |             |                    |                    |              |           |
|---|-----------------------------|------------|-----------|---|--|----|--------|-------------|--------------------|--------------------|--------------|-----------|
| FILE NAME =<br>c:\pwwork\paidot\gorengautab\2212247\170718-sht-plan.dgn | USER NAME = gorengautab     | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>IL 43 (HARLEM AVE) OVER CN RR<br/>TRAFFIC CONTROL PLAN. STAGE 1 (SN 016-0317,-0318)</b> |    |        | F.A.P. RTE. | SECTION            | COUNTY             | TOTAL SHEETS | SHEET NO. |
|   | PLOT SCALE = 50.0000' / IN. | DRAWN -    | REVISED - |   |  |    |        | 348         | 0708 (.2 & .2A) BR | COOK               | 36           | 21        |
| PLOT DATE = 5/18/2011   | CHECKED -                   | REVISED -  | REVISED - | SCALE:  | SHEET NO.  | OF | SHEETS | STA.        | TO STA.            | CONTRACT NO. 60L53 |              |           |
|   | DATE -                      | REVISED -  | REVISED - | ILLINOIS FED. AID PROJECT                                 |  |    |        |             |                    |                    |              |           |

IL RTE. 43 (HARLEM AVE.)


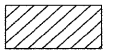







MATCHLINE STA. 15+00

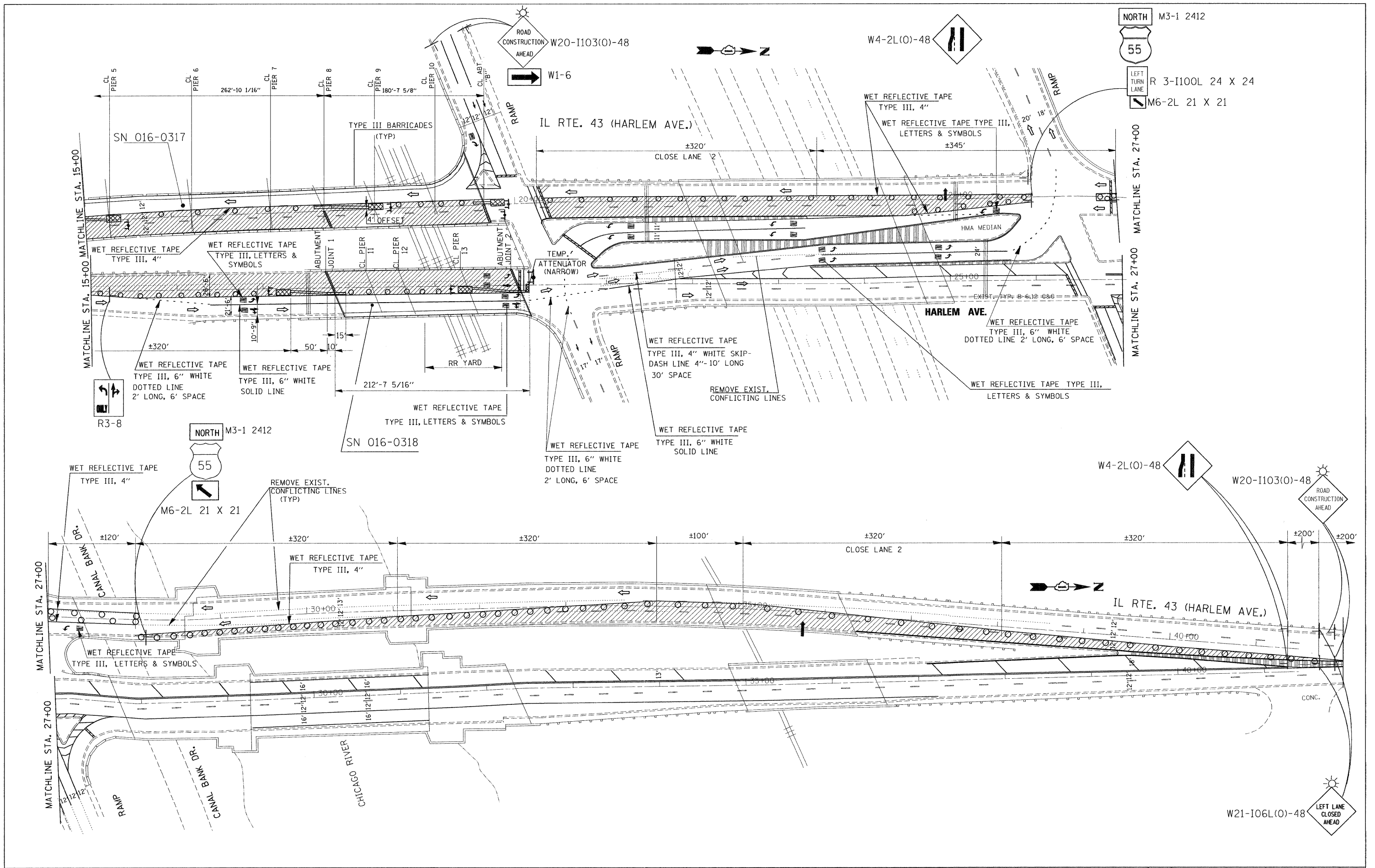
**NOTES:**

- ① EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED.
- ② CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE.
- ③ ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR HOURS.

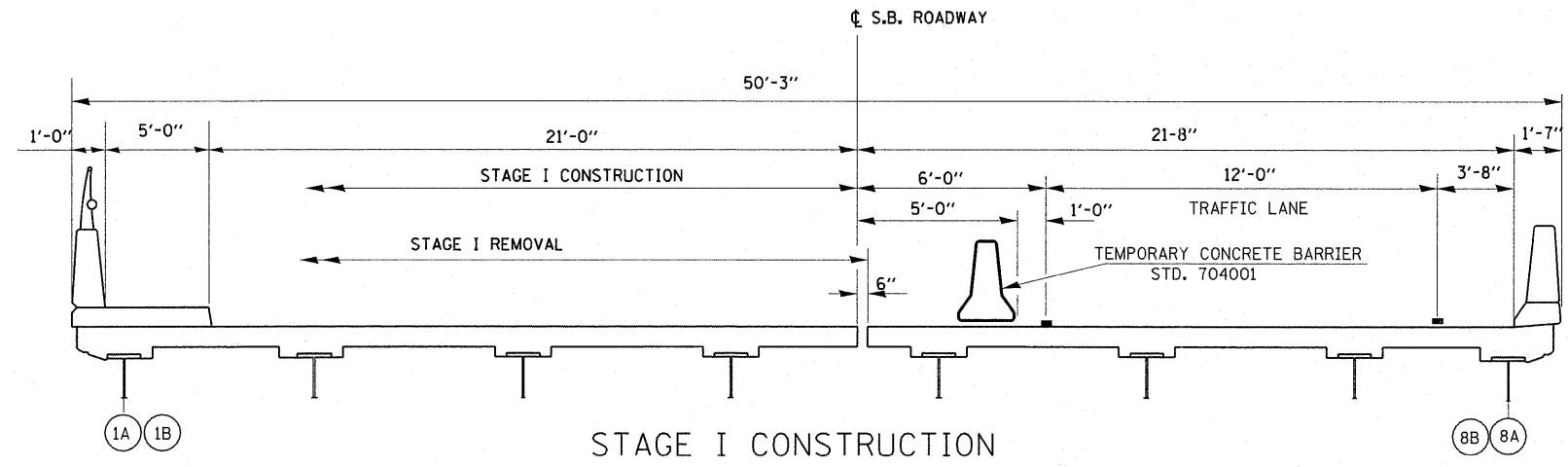
**SYMBOLS**

-  TYPE II BARRICADE WITH FLASHING LIGHT
-  WORK AREA
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  DIRECTION INDICATOR BARRICADE WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
-  TYPE II BARRICADE OR DRUM, 20' CTS IN TAPER, 50' IN WEAVE, 100' IN TANGENT
-  ARROW BOARD
-  DIRECTION OF TRAFFIC

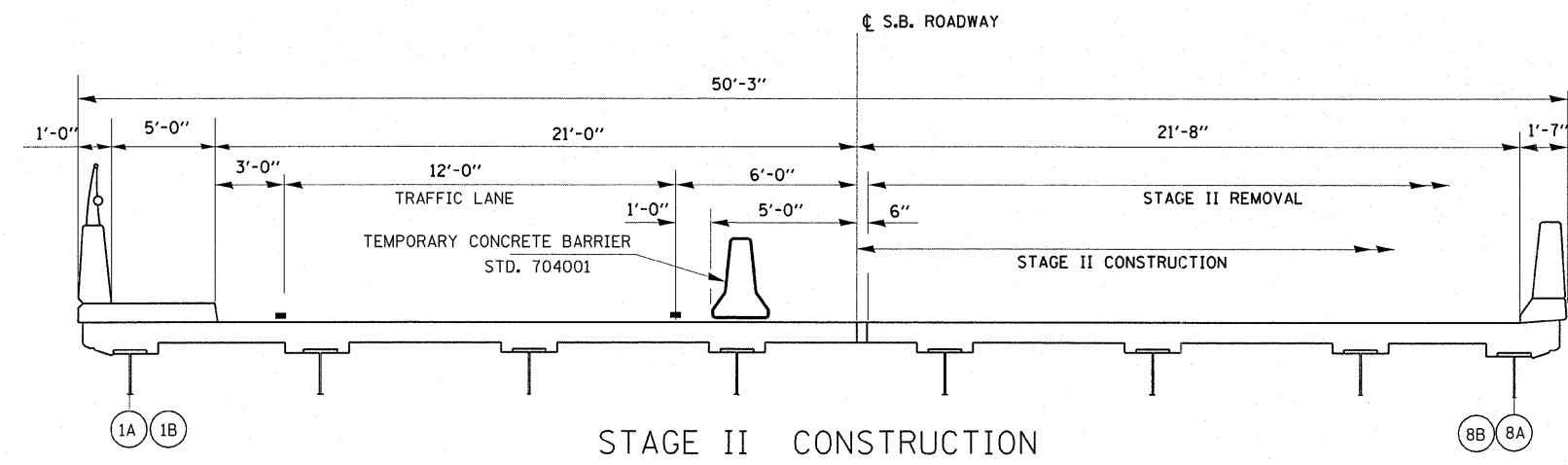
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|  | PLOT SCALE = 50.0000' / IN. | DRAWN -    | REVISED - |   |  |           |      | 348         | 0708 (L2 & .02A) BR | COOK   | 36           | 22        |
| PLOT DATE = 5/18/2011  | CHECKED -                   | REVISED -  | REVISED - | SCALE:  | SHEET NO.  | OF SHEETS | STA. | TO STA.     | CONTRACT NO. 60L53  |        |              |           |
|  | DATE -                      | REVISED -  | REVISED - | ILLINOIS FED. AID PROJECT                                 |  |           |      |             |                     |        |              |           |



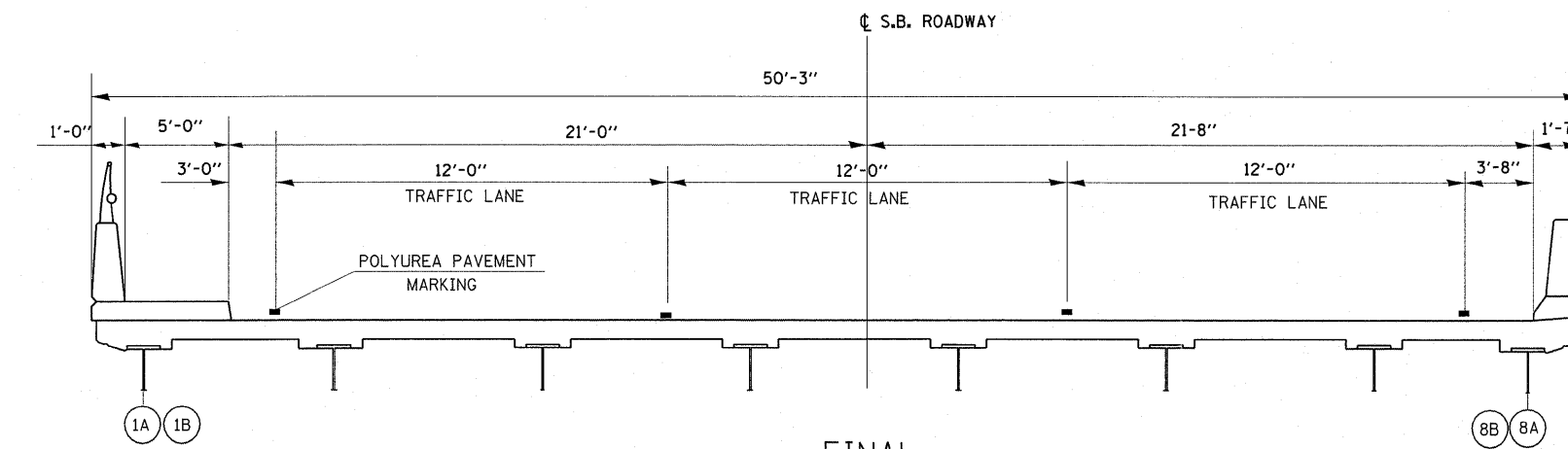
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|  | PLOT SCALE = 58,0000' / IN. | CHECKED -  | REVISED - |   |  |  |   | 348         | 0708 (L2 & .2A) BR | COOK   | 36           | 23        |
| PLOT DATE = 5/18/2011  | DATE -                      | REVISED -  | REVISED - | SCALE: SHEET NO. OF SHEETS STA. TO STA.                   |  |  | CONTRACT NO. 60L53<br>ILLINOIS FED. AID PROJECT |             |                    |        |              |           |



STAGE I CONSTRUCTION



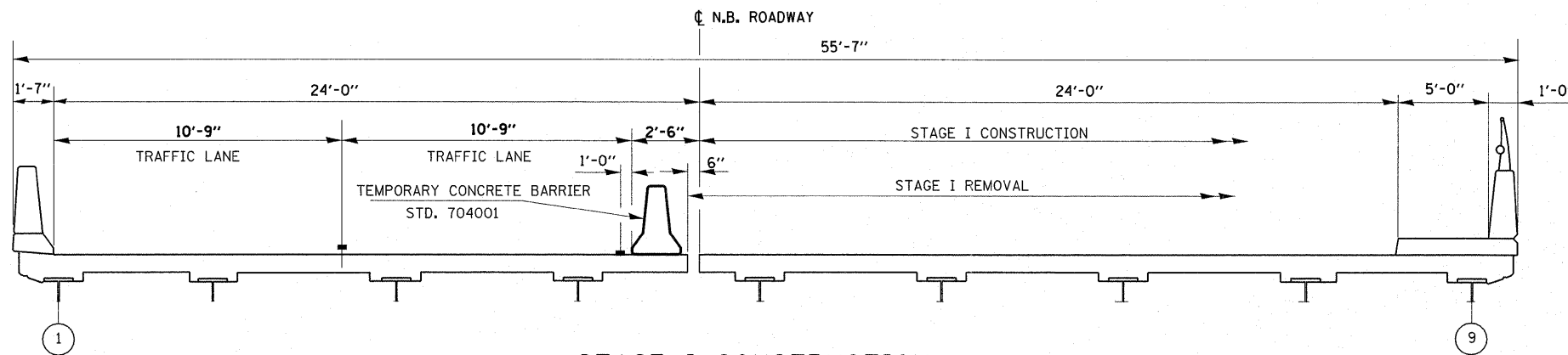
STAGE II CONSTRUCTION



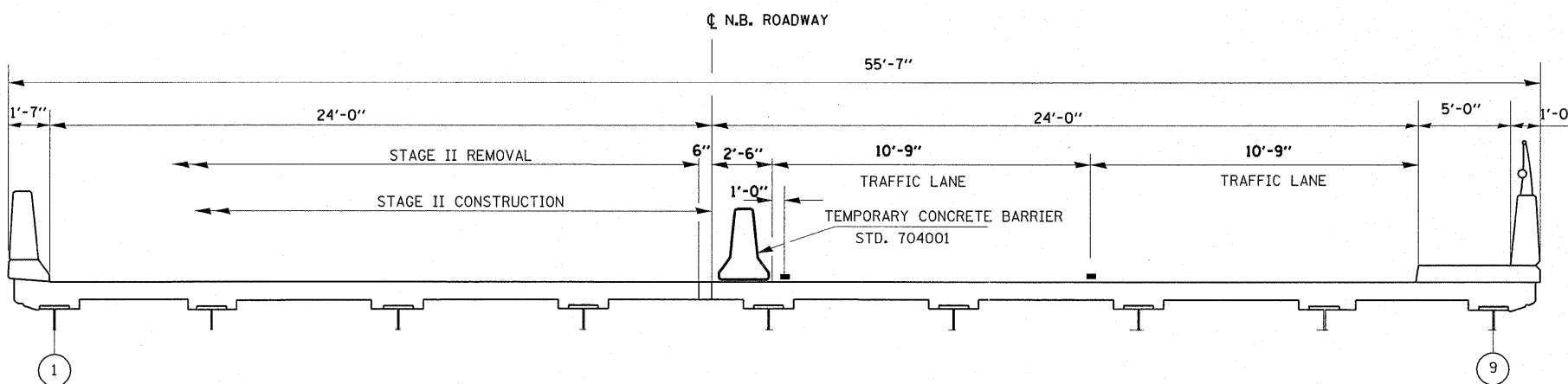
FINAL

ALL VIEWS LOOKING NORTH

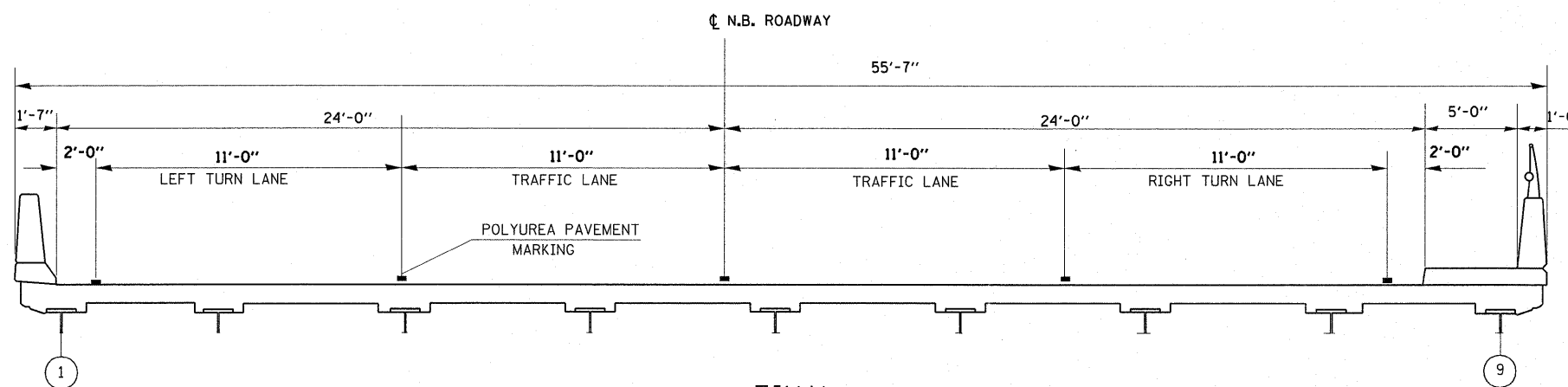
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| FILE NAME =  | USER NAME = gorengautab      | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>IL 43 SB (HARLEM AVE) OVER CN RR<br/>TRAFFIC STAGING S.N. 016-0317</b> | F.A.P. RTE.               | SECTION            | COUNTY | TOTAL SHEETS | SHEET NO. |  |
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|  | PLOT DATE = 4/18/2011        | CHECKED -  | REVISED - |   |   | CONTRACT NO. 60L53        |                    |        |              |           |  |
|  |                              | DATE -     | REVISED - |   |   | ILLINOIS FED. AID PROJECT |                    |        |              |           |  |
|  |                              |            |           |   | SCALE:  | SHEET NO. 1 OF 2 SHEETS   |                    | STA.   | TO STA.      |           |  |



STAGE I CONSTRUCTION



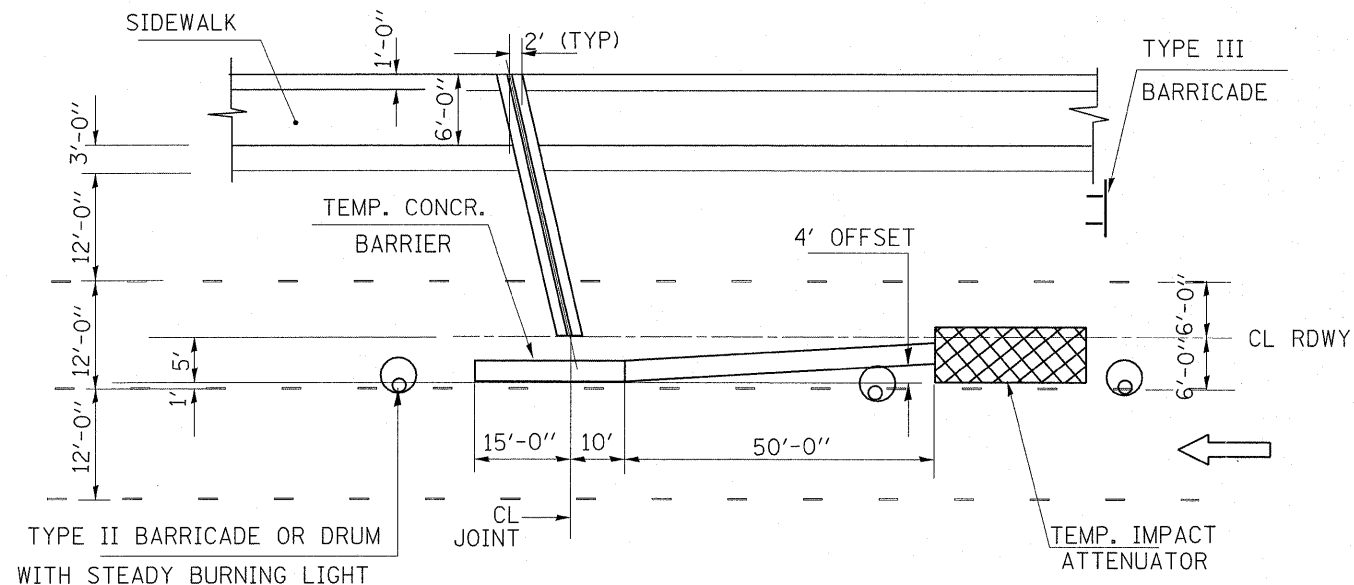
STAGE II CONSTRUCTION



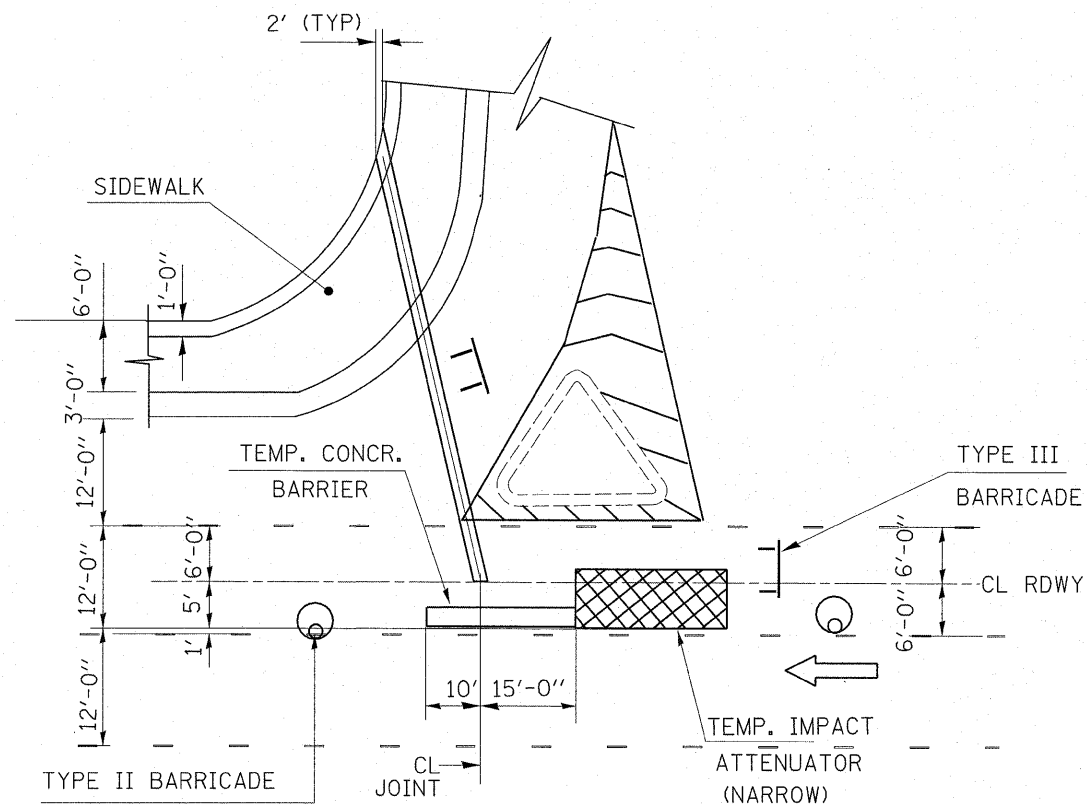
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ALL VIEWS LOOKING NORTH

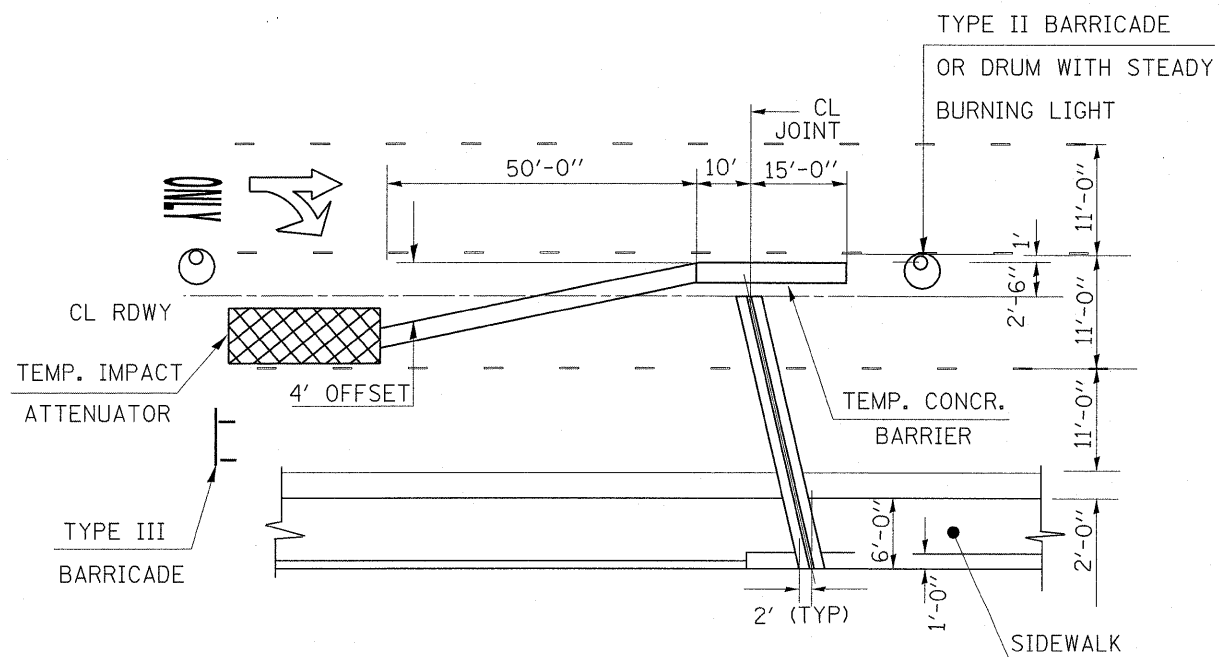
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| FILE NAME =   | USER NAME = gorengoutab     | DESIGNED - MVT | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>IL 43 NB (HARLEM AVE) OVER CN RR<br/>TRAFFIC STAGING S.N. 016-0318</b> | F.A.P. RTE.               | SECTION           | COUNTY | TOTAL SHEETS | SHEET NO. |  |
| ca:\pw\work\p\dot\gorengoutab\d0212247\0178710-sht-plan.dgn | PLOT SCALE = 50.0000' / IN. | DRAWN - MVT    | REVISED - |   |   | 348                       | 0708 (.2&.02A) BR | COOK   | 36           | 25        |  |
| PLOT DATE = 4/18/2011                                       | DATE -                      | CHECKED - RB   | REVISED - |   |   | CONTRACT NO. 60L53        |                   |        |              |           |  |
|   |                             | DATE -         | REVISED - |   |   | ILLINOIS FED. AID PROJECT |                   |        |              |           |  |
|   |                             |                |           |   | SCALE:  | SHEET NO. 2 OF 2 SHEETS   |                   | STA.   | TO STA.      |           |  |



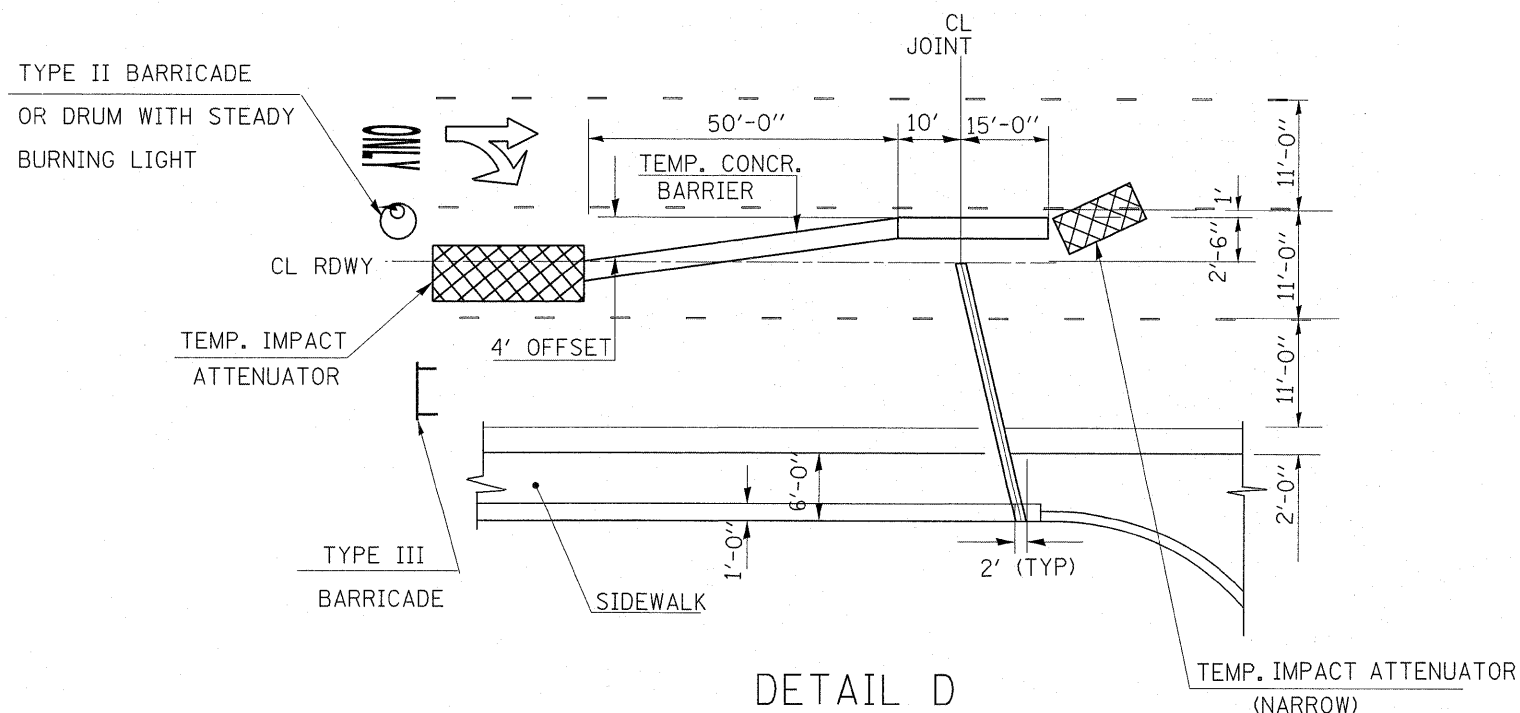
DETAIL A



DETAIL C



DETAIL B



DETAIL D

FILE NAME =  
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USER NAME = gorengautab  
 170710-sht-plan.dgn  
 PLOT SCALE = 50.0000' / IN.  
 PLOT DATE = 4/18/2011

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

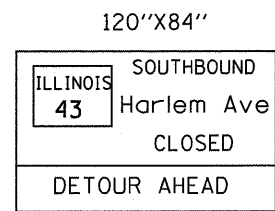
REVISED -  
 REVISED -  
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

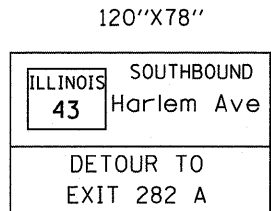
IL 43 (HARLEM AVE) OVER CN RR  
 DETAILS. (SN 016-0317;-0318)

SCALE: SHEET NO. OF SHEETS STA. TO STA.

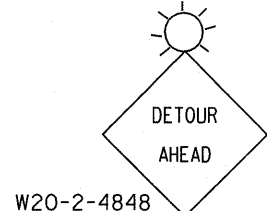
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|---------------------------|-------------------------------|----------------|--------------------|-----------------|
| F.A.P. RTE.<br>348        | SECTION<br>0708 (.2 & .2A) BR | COUNTY<br>COOK | TOTAL SHEETS<br>36 | SHEET NO.<br>26 |
| CONTRACT NO. 60L53        |                               |                |                    |                 |
| ILLINOIS FED. AID PROJECT |                               |                |                    |                 |



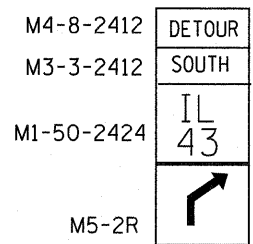
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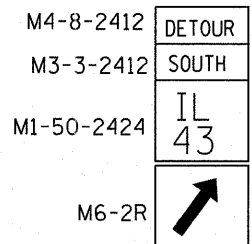
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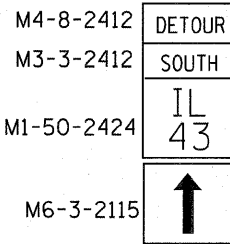
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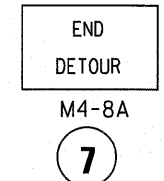
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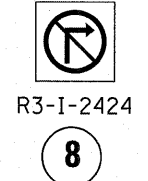
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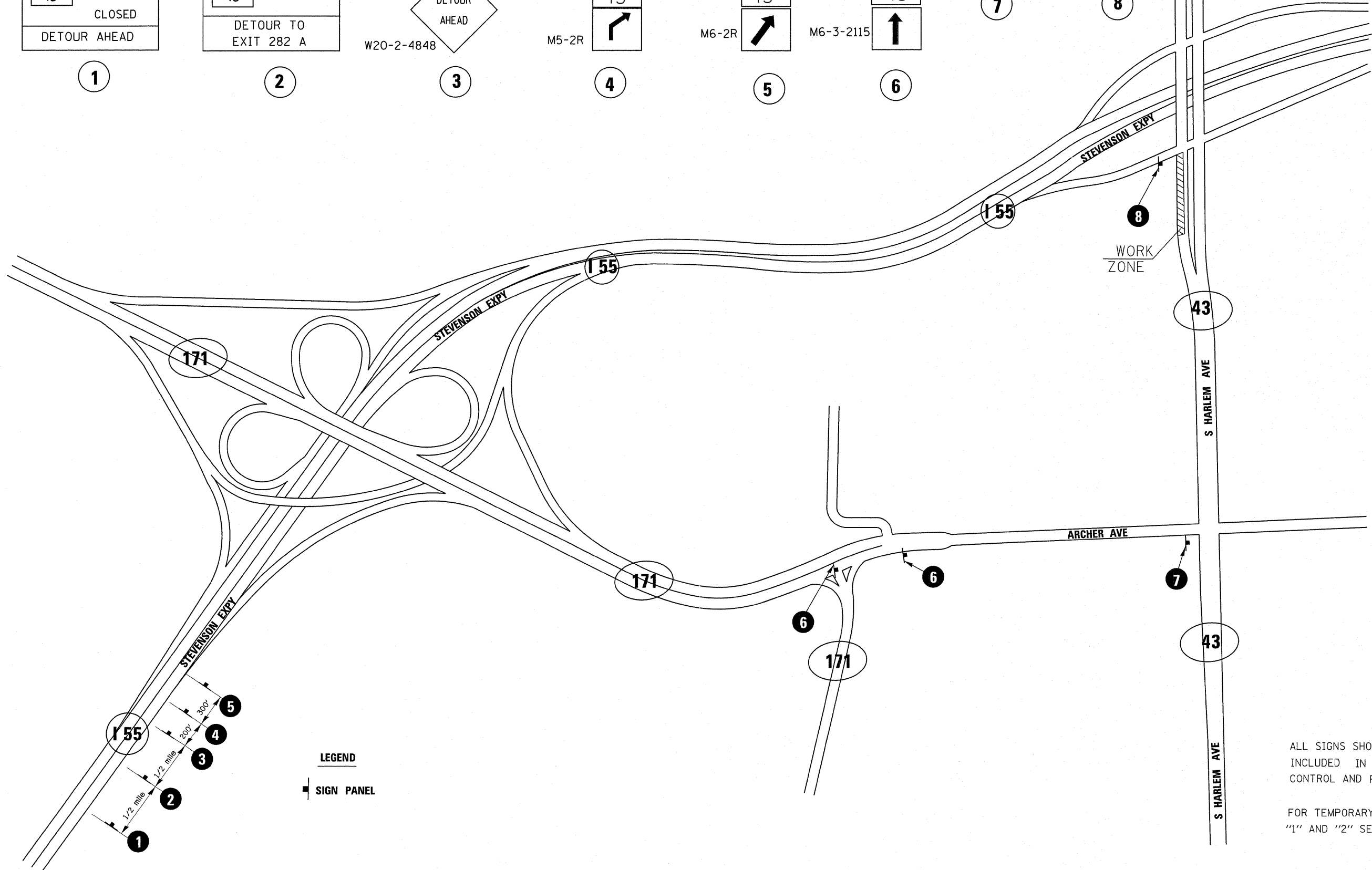
6



7



8



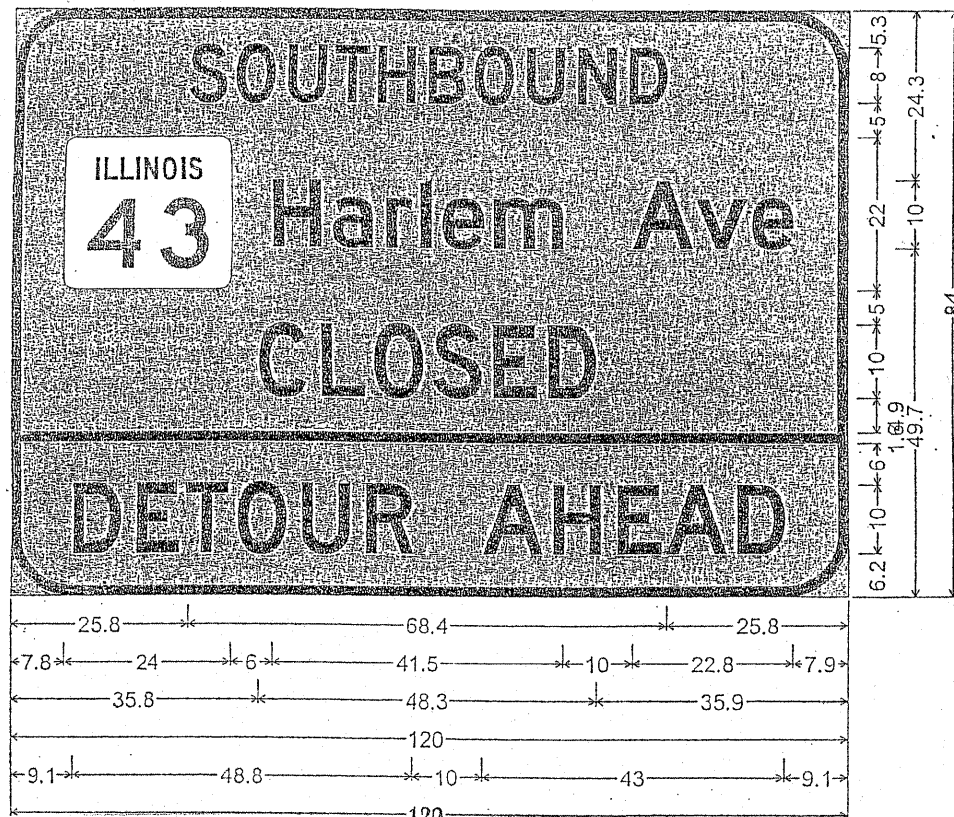
LEGEND  
SIGN PANEL

ALL SIGNS SHOWN ON THIS SHEET ARE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION, ARTERIALS".  
FOR TEMPORARY ROAD INFORMATION SIGN "1" AND "2" SEE SHEET # 2 OF 2

|   |                         |            |           |   |  |                           |                    |        |              |           |  |
|---|-------------------------|------------|-----------|---|--|---------------------------|--------------------|--------|--------------|-----------|--|
| FILE NAME =   | USER NAME = gorengoutab | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>I-55 NB TO IL 43 S.B. DETOUR DURING STAGE I</b> | F.A.P. RTE.               | SECTION            | COUNTY | TOTAL SHEETS | SHEET NO. |  |
| ct:\pv_work\pwwdot\gorengoutab\d0212247\0170710-sh-t-plan.dgn |                         | DRAWN -    | REVISED - |   |  | 348                       | 0708 (.2 & .2A) BR | COOK   | 36           | 27        |  |
| PLOT SCALE = 50.0000' / IN.                                   |                         | CHECKED -  | REVISED - |   |  | CONTRACT NO. 60L53        |                    |        |              |           |  |
| PLOT DATE = 4/18/2011   |                         | DATE -     | REVISED - |   |  | ILLINOIS FED. AID PROJECT |                    |        |              |           |  |
| SCALE: SHEET NO. 1 OF 2 SHEETS STA. TO STA.                   |                         |            |           |   |  |                           |                    |        |              |           |  |



①

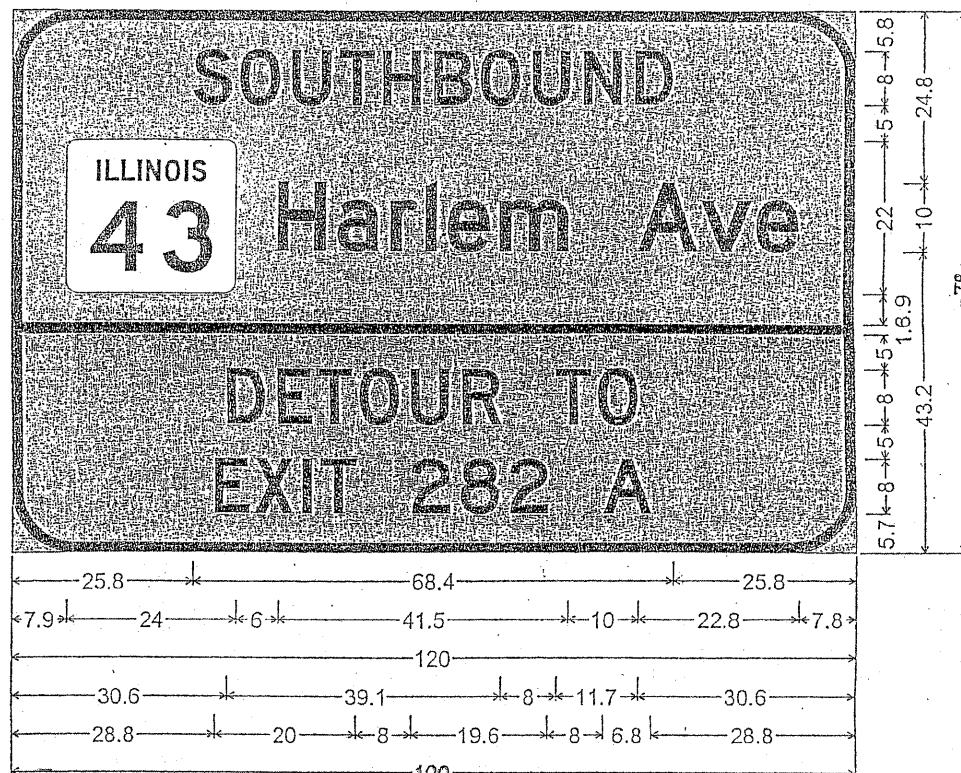


9.0" Radius, 1.5" Border, Black on Orange;  
 "SOUTHBOUND" D 2K; "Harlem Ave" D 2K; "CLOSED" D 2K;  
 "DETOUR AHEAD" D 2K;

Table of letter and object lefts.

|      |      |      |      |      |      |      |      |      |       |       |
|------|------|------|------|------|------|------|------|------|-------|-------|
| S    | O    | U    | T    | H    | B    | O    | U    | N    | D     |       |
| 25.8 | 32.4 | 39.8 | 46.5 | 52.6 | 60.0 | 66.6 | 74.1 | 81.4 | 88.8  |       |
| 43   | H    | a    | r    | l    | e    | m    | A    | v    | e     |       |
| 7.8  | 37.8 | 46.3 | 53.9 | 59.0 | 62.1 | 69.4 | 89.3 | 98.3 | 106.3 |       |
| C    | L    | O    | S    | E    | D    |      |      |      |       |       |
| 35.8 | 44.8 | 52.3 | 61.0 | 69.4 | 77.3 |      |      |      |       |       |
| -0.0 |      |      |      |      |      |      |      |      |       |       |
| D    | E    | T    | O    | U    | R    | T    | O    |      |       |       |
| 9.1  | 18.1 | 25.1 | 32.6 | 41.9 | 51.1 | 67.9 | 77.9 | 87.1 | 94.1  | 104.1 |

②



9.0" Radius, 1.5" Border, Black on Orange;  
 "SOUTHBOUND" D 2K; "Harlem Ave" D 2K; "DETOUR TO"  
 "EXIT 282 A" D 2K;

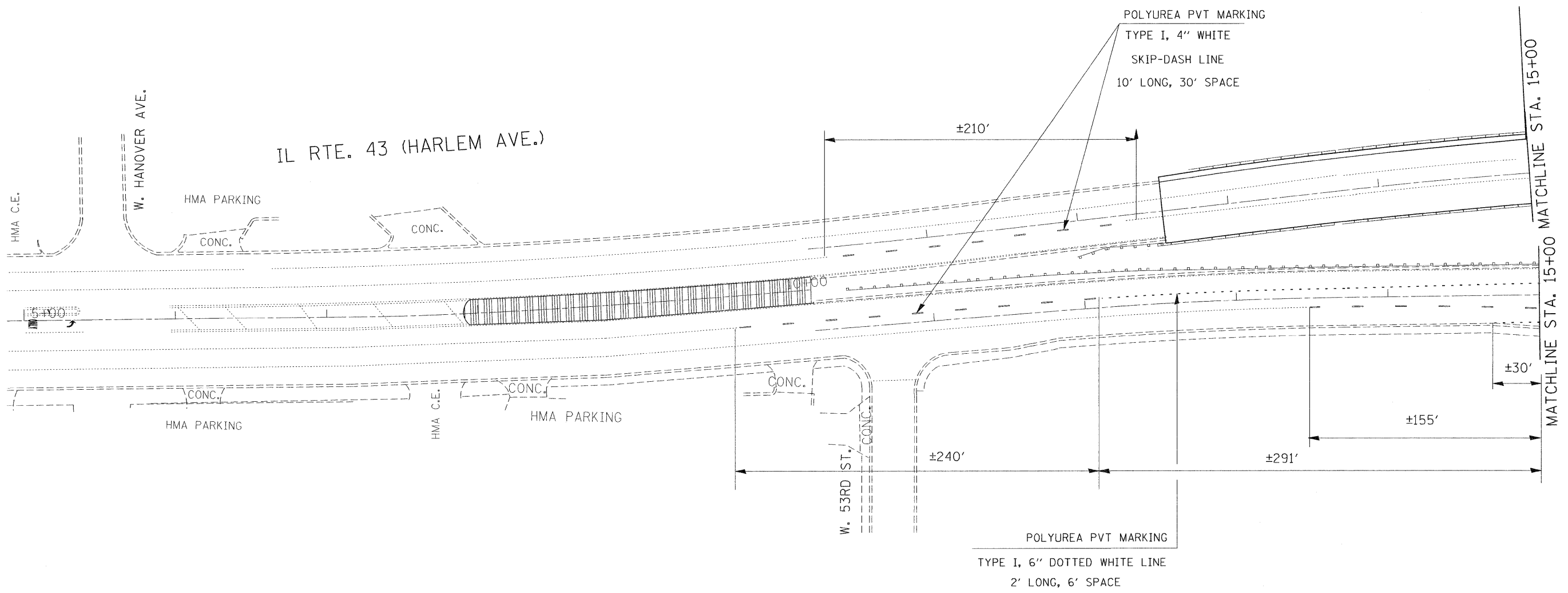
Table of letter and object lefts.

|      |      |      |      |      |      |      |      |      |       |
|------|------|------|------|------|------|------|------|------|-------|
| S    | O    | U    | T    | H    | B    | O    | U    | N    | D     |
| 25.8 | 32.4 | 39.8 | 46.5 | 52.6 | 60.0 | 66.6 | 74.1 | 81.4 | 88.8  |
| 43   | H    | a    | r    | l    | e    | m    | A    | v    | e     |
| 7.9  | 37.9 | 46.4 | 54.0 | 59.0 | 62.2 | 69.5 | 89.4 | 98.4 | 106.3 |
| -0.0 |      |      |      |      |      |      |      |      |       |
| D    | E    | T    | O    | U    | R    | T    | O    |      |       |
| 30.6 | 37.8 | 43.4 | 49.4 | 56.9 | 64.2 | 77.7 | 83.7 |      |       |
| E    | X    | I    | T    | 2    | 8    | 2    | A    |      |       |
| 28.8 | 34.6 | 41.4 | 43.9 | 56.8 | 63.9 | 70.9 | 84.4 |      |       |

**NOTES:**

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS ① & ② IN ADVANCE OF THE LOCATION FOR THE "DETOUR AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. SEE SPECIAL PROVISION FOR " TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
4. SIGN ASSEMBLY "1" EQUALS TO 70.0 SQ. FT. SIGN "2" EQUALS TO 65.0 SQ. FT.

ALL DIMENSIONS ARE IN INCHES.



FILE NAME =  
 c:\pw\work\pedit\gorengautab\d0212247

USER NAME = gorengautab  
 178718-sht-plan.dgn  
 PLOT SCALE = 50.0000' / IN.  
 PLOT DATE = 5/18/2011

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

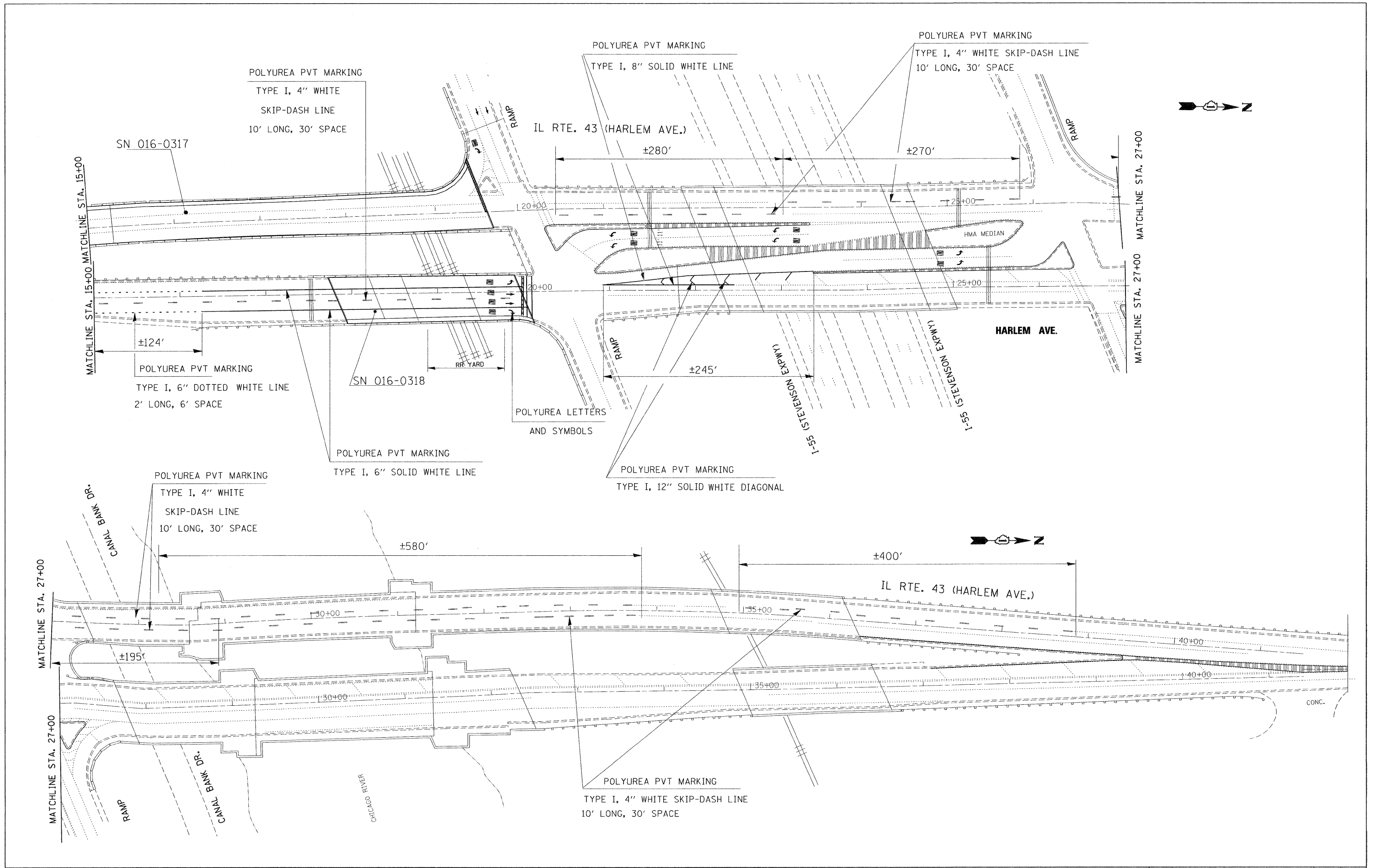
REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL 43 (HARLEM AVE) OVER CN RR  
 PAVEMENT MARKING PLAN**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

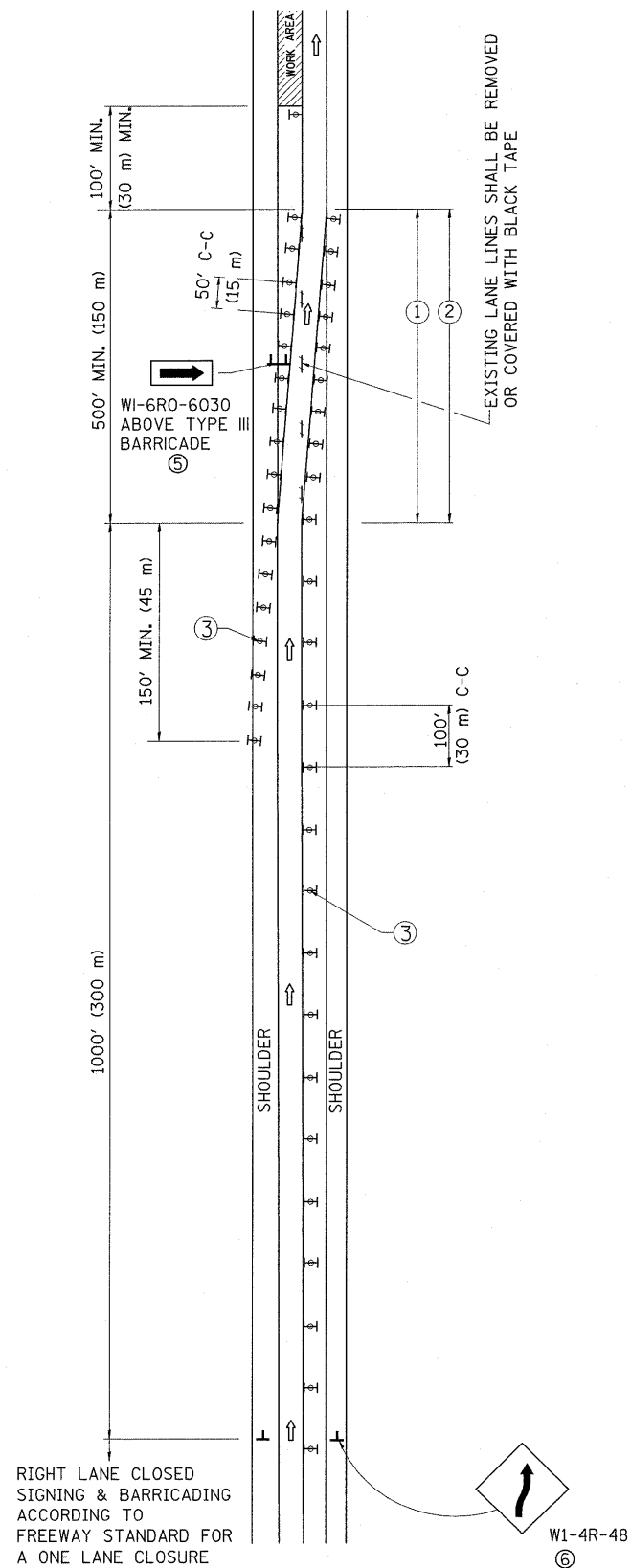
|                           |                                |                |                    |                 |
|---------------------------|--------------------------------|----------------|--------------------|-----------------|
| F.A.P. RTE.<br>348        | SECTION<br>0708 (.2 & .02A) BR | COUNTY<br>COOK | TOTAL SHEETS<br>36 | SHEET NO.<br>29 |
| CONTRACT NO. 60L53        |                                |                |                    |                 |
| ILLINOIS FED. AID PROJECT |                                |                |                    |                 |



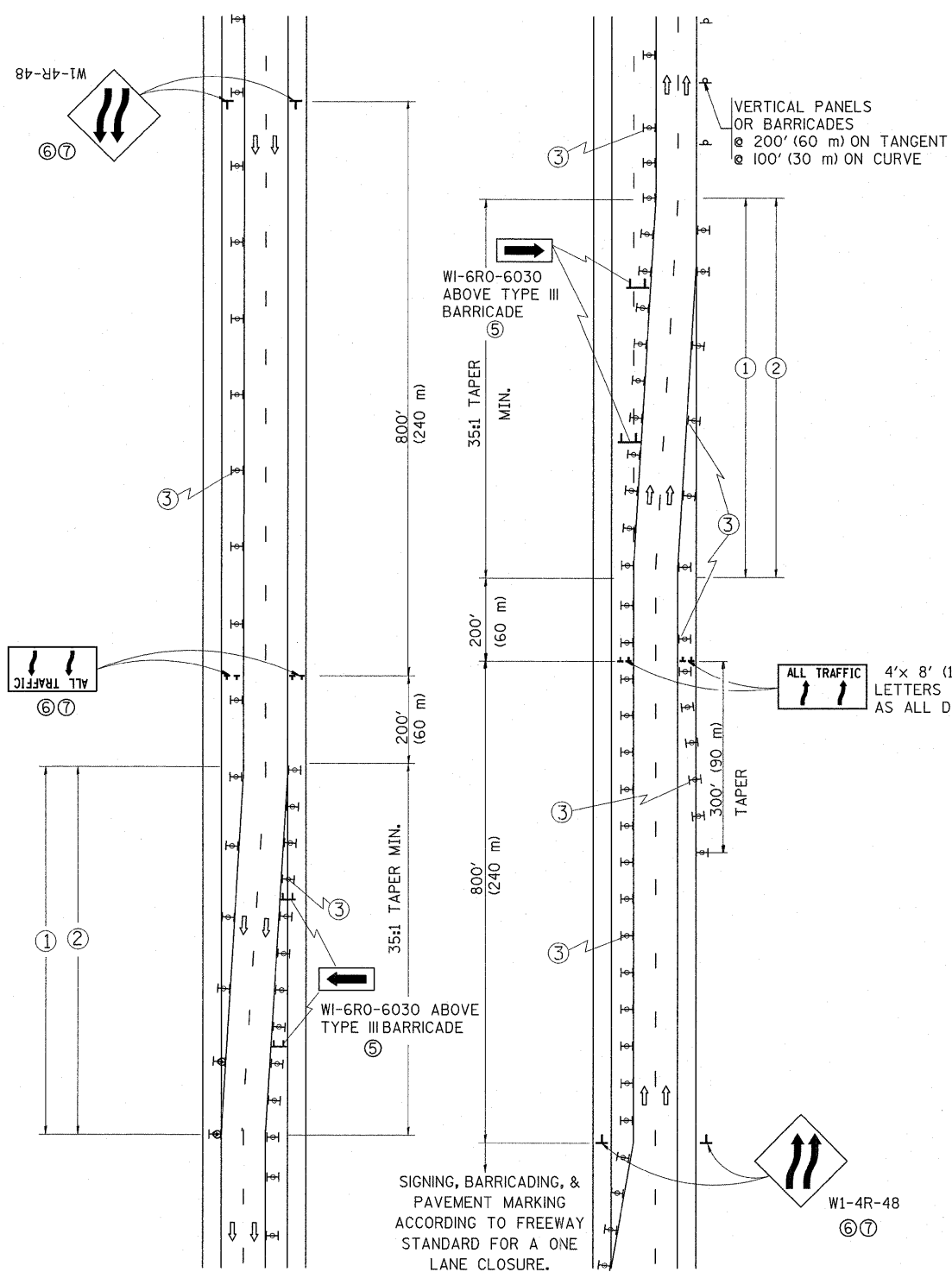
|  |                          |            |           |   |  |  |  |                |         |        |                 |              |
|--|--------------------------|------------|-----------|---|--|--|--|----------------|---------|--------|-----------------|--------------|
| FILE NAME =<br>c:\pwork\pvidot\gorengoutab\d8212247\0178718-ahp-plan.dgn | USER-NAME = gorengoutab  | DESIGNED - | REVISED - | STATE OF ILLINOIS<br>DEPARTMENT OF TRANSPORTATION | IL 43 (HARLEM AVE) OVER CN RR<br>PAVEMENT MARKING PLAN |  |  | F.A.P.<br>RTE. | SECTION | COUNTY | TOTAL<br>SHEETS | SHEET<br>NO. |
|  | PLOT SCALE = 50,0000 "/> |            |           |   |  |  |  |                |         |        |                 |              |

|                           |                    |      |    |    |
|---------------------------|--------------------|------|----|----|
| 348                       | 0708 (.2 & .2A) BR | COOK | 36 | 30 |
| CONTRACT NO. 60L53        |                    |      |    |    |
| ILLINOIS FED. AID PROJECT |                    |      |    |    |

# SINGLE LANE WEAVE



# MULTI-LANE WEAVE



### GENERAL NOTES

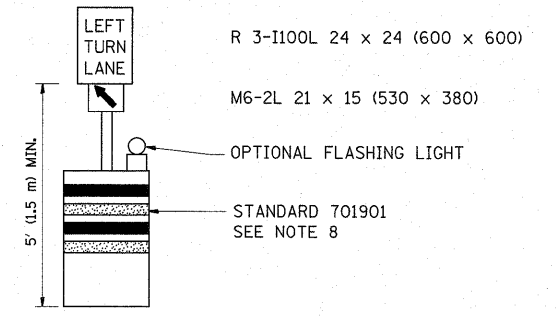
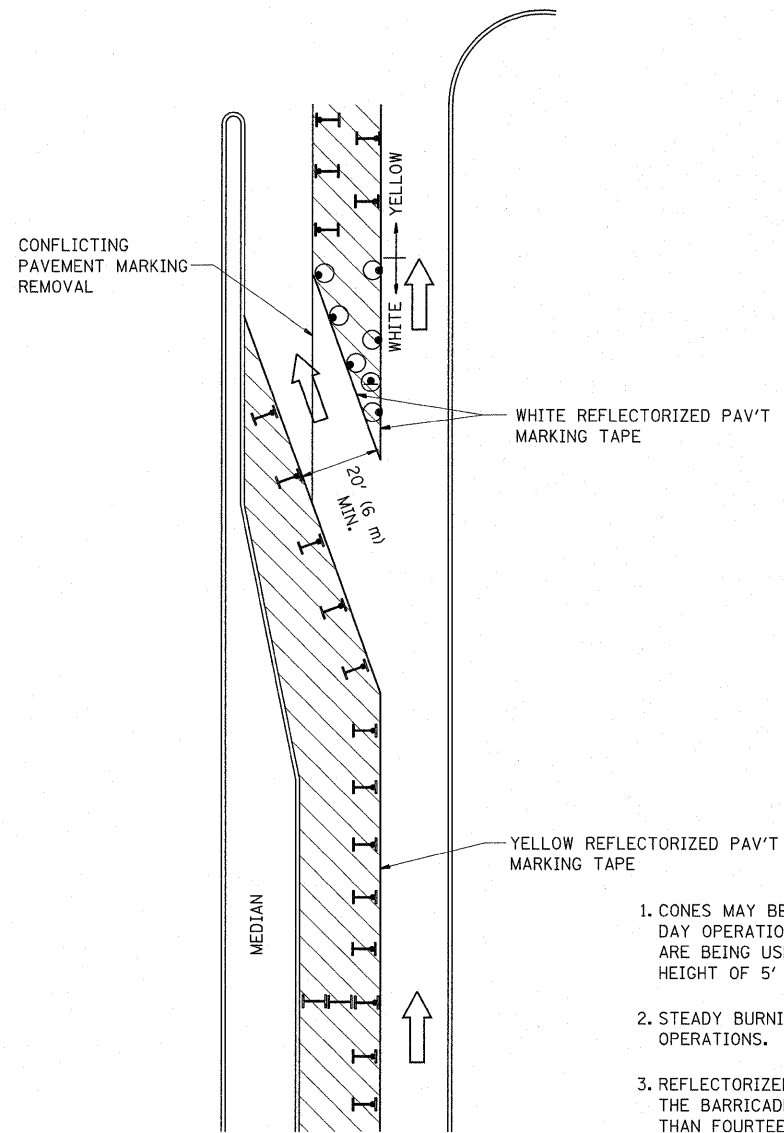
- EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 24 HOURS IN DURATION.
- CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.
- PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- 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. TYPE III BARRICADES MAY BE OMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. W1-6 SIGNS WILL STILL BE REQUIRED. IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.
- WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.
- THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.

### SYMBOLS

- DIRECTION OF TRAFFIC
  - WORK AREA
  - SIGN ON PORTABLE OR PERMANENT SUPPORT
  - TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- W1-4R-48 (W1-4R-48)  
W24-1-48 (W24-1-48)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

|  |                         |                |                     |   |  |                         |              |   |         |        |              |           |
|--|-------------------------|----------------|---------------------|---|--|-------------------------|--------------|---|---------|--------|--------------|-----------|
| FILE NAME =  | USER NAME = gorengautab | DESIGNED - DWS | REVISED - JAF 01-03 | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>TRAFFIC CONTROL DETAILS FOR<br/>FREEWAY SINGLE &amp; MULTI-LANE WEAVE</b> |                         |              | F.A.P. RTE.                                     | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ca:\pw\work\pw\dot\gorengautab\d0212247\1stStd.dgn |                         | DRAWN -        | REVISED - JAF 02-06 |   | 348  | 0708 (2 7 .2A) BR       | COOK         | 36  | 31      |        |              |           |
|  |                         | CHECKED -      | REVISED - SPB 01-07 |   | <b>TC-09</b>   |                         |              | CONTRACT NO. 60L53                              |         |        |              |           |
|  |                         | DATE - 02-87   | REVISED - SPB 12-09 |   | SCALE: NONE  | SHEET NO. 1 OF 1 SHEETS | STA. TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |         |        |              |           |

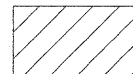







**GENERAL NOTES**

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

**LEGEND**

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

|  |                             |                                |                            |
|--|-----------------------------|--------------------------------|----------------------------|
| FILE NAME =  | USER NAME = gorengautab     | REVISED -T. RAMMACHER 09-08-94 | REVISED - R. BORO 09-14-09 |
| cr:\pw_work\pwidot\gorengautab\d0212247\1ststd.dgn |                             | REVISED - A. HOUSEH 11-07-95   | REVISED -                  |
|  | PLOT SCALE = 50.0000' / IN. | REVISED - A. HOUSEH 10-12-96   | REVISED -                  |
|  | PLOT DATE = 4/18/2011       | REVISED -T. RAMMACHER 01-06-00 | REVISED -                  |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

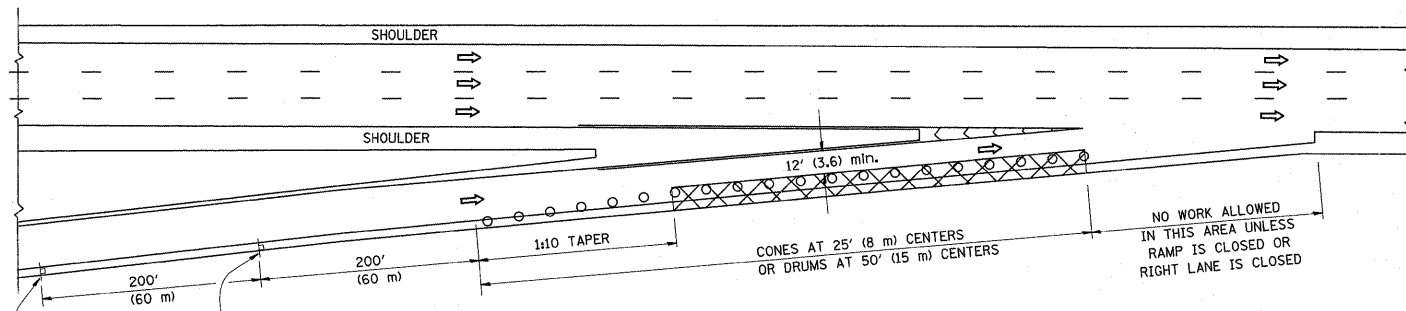
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS  
(TO REMAIN OPEN TO TRAFFIC)**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

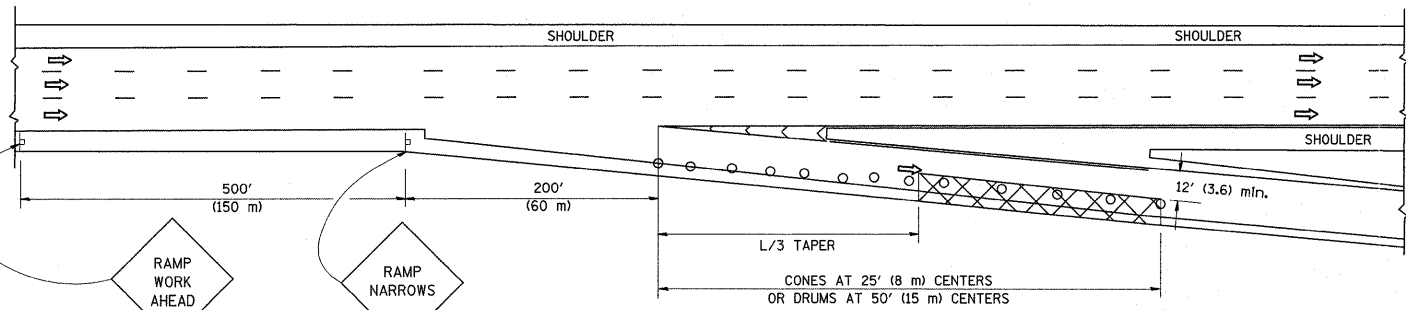
| F.A.P. RTE.                                     | SECTION            | COUNTY             | TOTAL SHEETS | SHEET NO. |
|---|--------------------|--------------------|--------------|-----------|
| 348   | 0708 (.2 & .2A) BR | COOK               | 36           | 32        |
| <b>TC-14</b>                                    |                    | CONTRACT NO. 60L53 |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                    |                    |              |           |

PARTIAL RAMP CLOSURE DETAILS

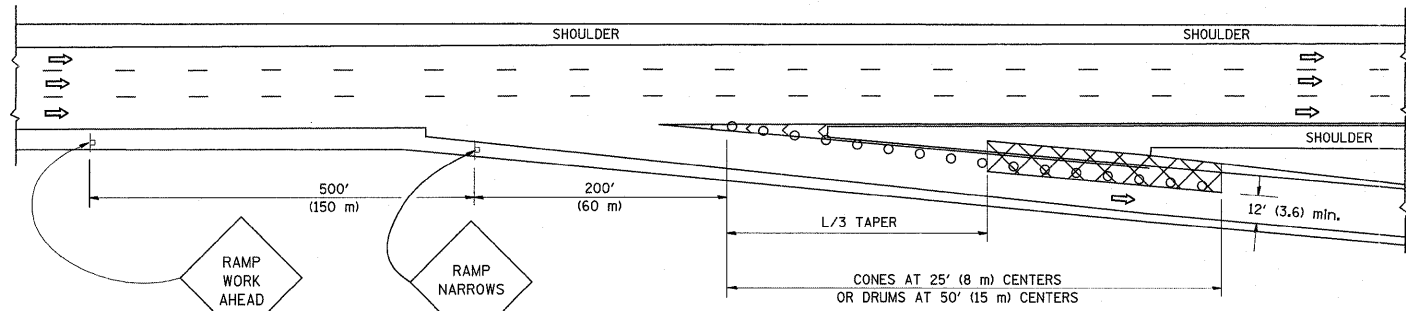
SHOULDER CLOSURE DETAILS



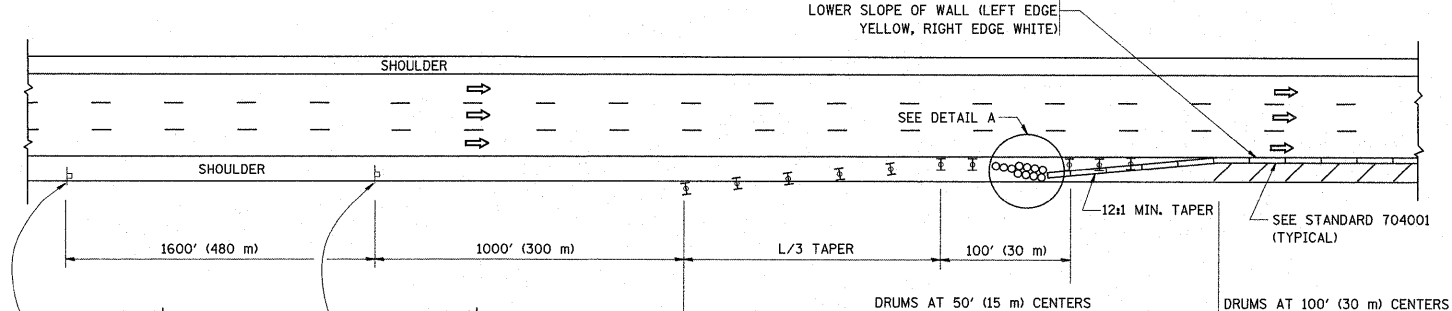
TYPICAL ENTRANCE RAMP



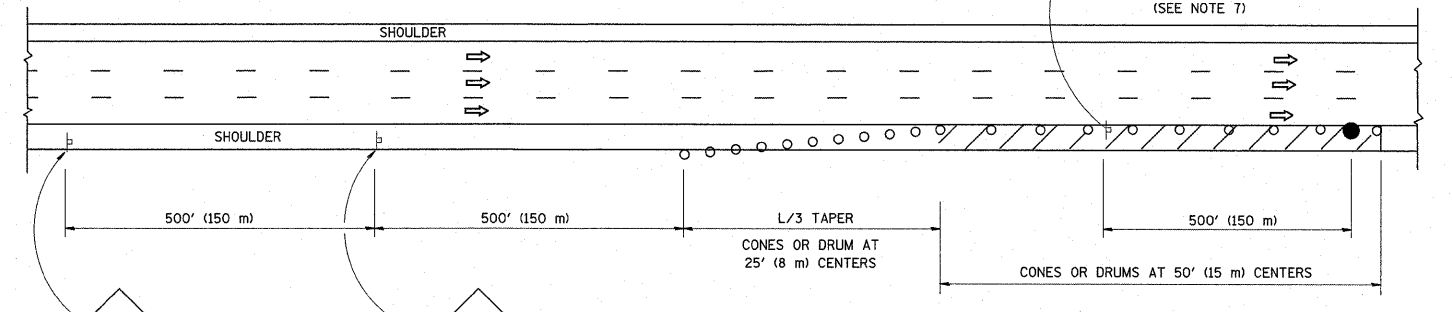
TYPICAL EXIT RAMP



TYPICAL EXIT RAMP



PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

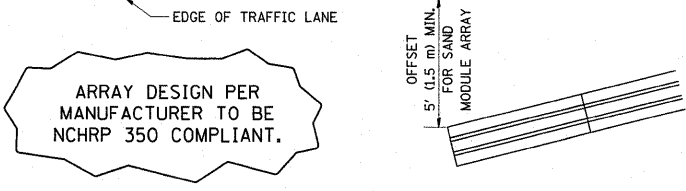
SYMBOLS

- ACTIVE 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) OR GREATER: | METRIC ENGLISH<br>L=0.65(W)(S) L=(W)(S)                                    |
|                              | W = WIDTH OF OFFSET IN FEET (METERS)<br>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.
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 NARROW USE TYPE DEVICE TO MEET NCHRP350.
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 ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.



ARRAY DESIGN PER MANUFACTURER TO BE NCHRP 350 COMPLIANT.

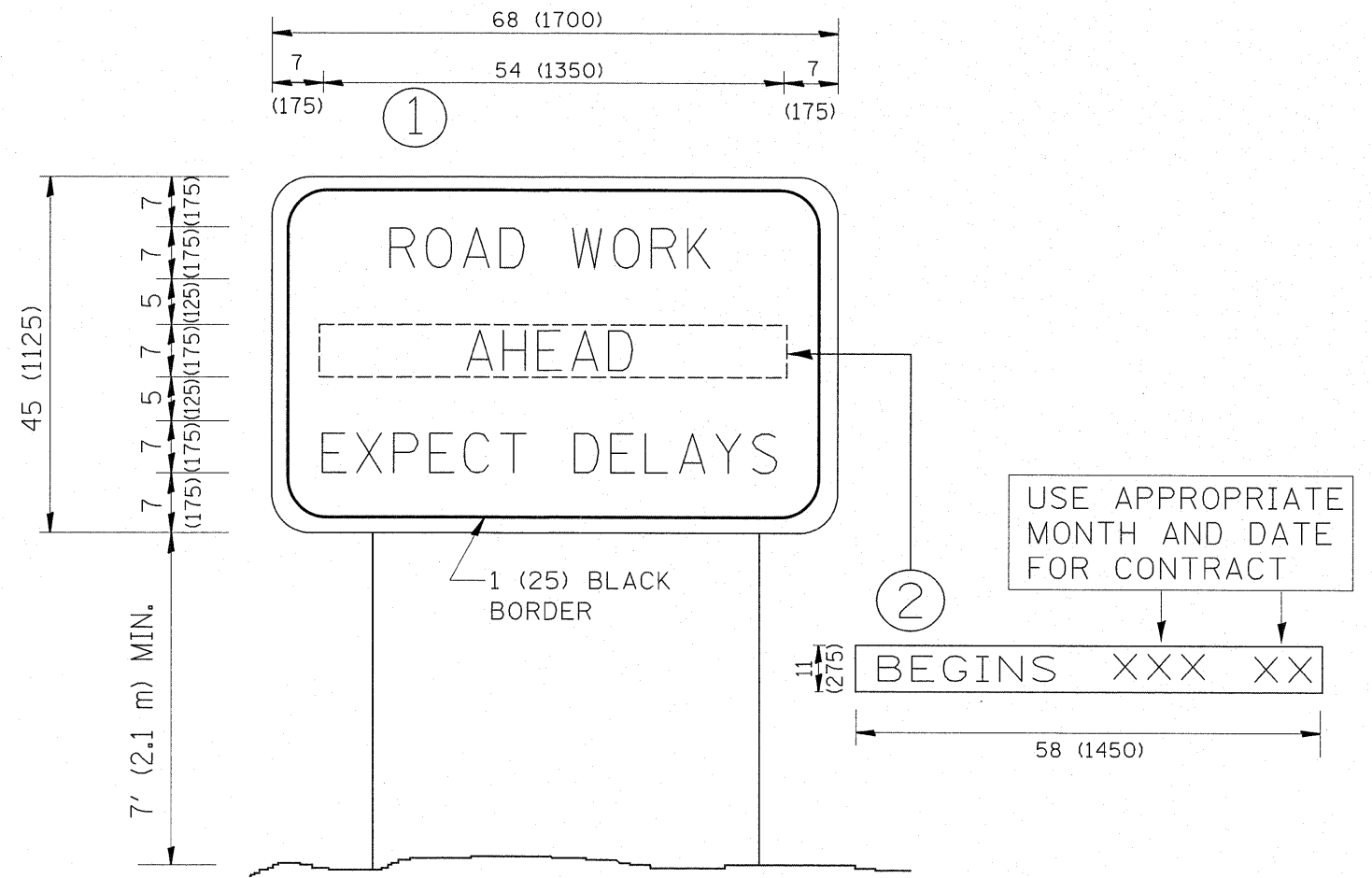
DETAIL "A" IMPACT ATTENUATOR, TEMPORARY (SEE NOTE 5)

OR WHEN SPECIFIED INSTALL TEMPORARY CONCRETE BARRIER WALL WITH BARRIER WALL REFLECTORS PER TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)

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

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

|  |                         |                        |                        |   |  |                         |              |   |         |        |              |           |
|--|-------------------------|------------------------|------------------------|---|--|-------------------------|--------------|---|---------|--------|--------------|-----------|
| FILE NAME =                                    | USER NAME = gorengautab | DESIGNED -             | REVISED - 04-03        | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>TRAFFIC CONTROL DETAILS FOR FREEWAY<br/>SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES</b> |                         |              | F.A.P. RTE.                                     | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ci:\pwork\pwork\gorengautab\0212247\1stStd.dgn | 1stStd.dgn              | DRAWN - D.W.S.         | REVISED - J.A.F. 12-06 |   | 348  | 0708 (2 & 2A) BR        | COOK         | 36  | 33      |        |              |           |
| PLOT SCALE = 50.0000" / IN.                    | CHECKED -               | REVISED - S.P.B. 01-07 |                        |   | <b>TC-17</b>   |                         |              | CONTRACT NO. 60L53                              |         |        |              |           |
| PLOT DATE = 4/18/2011                          | DATE - 11-96            | REVISED - S.P.B. 12-09 |                        |   | SCALE: NONE  | SHEET NO. 1 OF 1 SHEETS | STA. TO STA. | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |         |        |              |           |



**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.

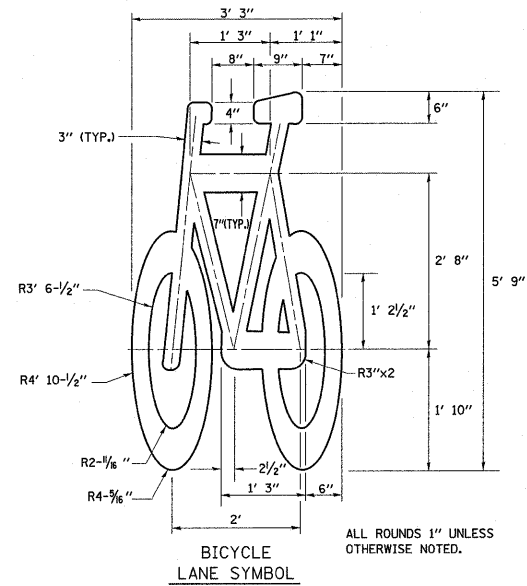
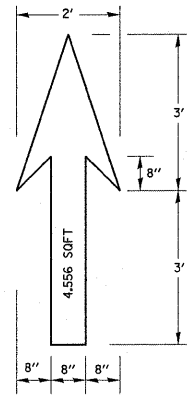
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| FILE NAME =                                       | USER NAME = gorangautab     | DESIGNED - | REVISED - R. MIRS 09-15-97      |
| c:\pw\work\pwidot\gorangautab\d0212247\1stStd.dgn |                             | DRAWN -    | REVISED - R. MIRS 12-11-97      |
|   | PLOT SCALE = 50.0000 "/ IN. | CHECKED -  | REVISED - T. RAMMACHER 02-02-99 |
|   | PLOT DATE = 4/18/2011       | DATE -     | REVISED - C. JUCIUS 01-31-07    |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

|   |                         |      |         |
|---|-------------------------|------|---------|
| <b>ARTERIAL ROAD<br/>INFORMATION SIGN</b> |                         |      |         |
| SCALE: NONE                               | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA. |

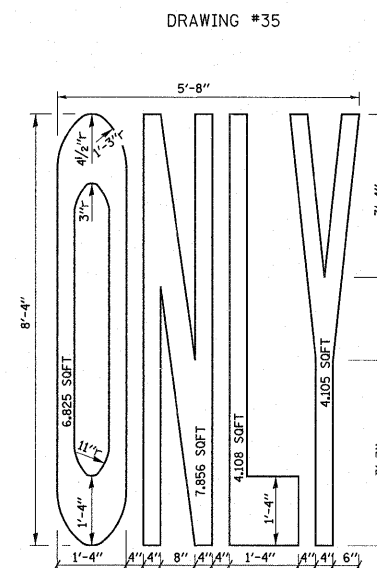
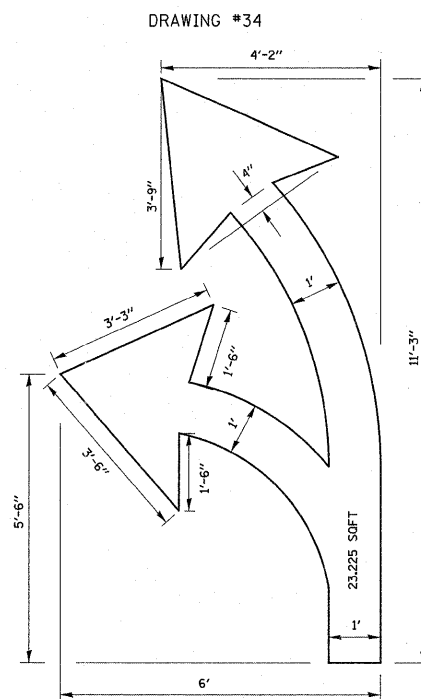
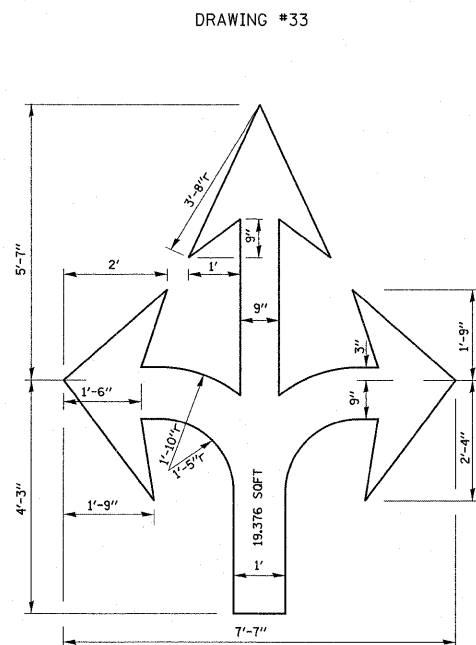
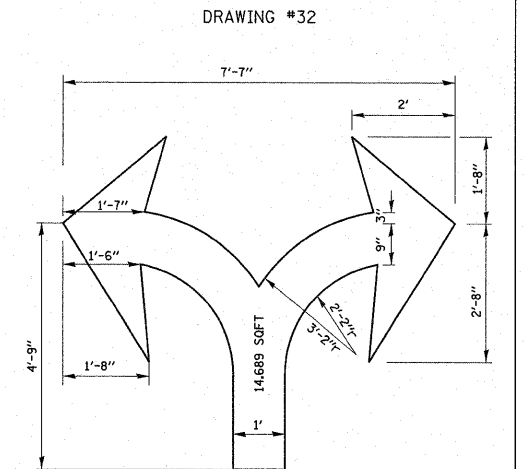
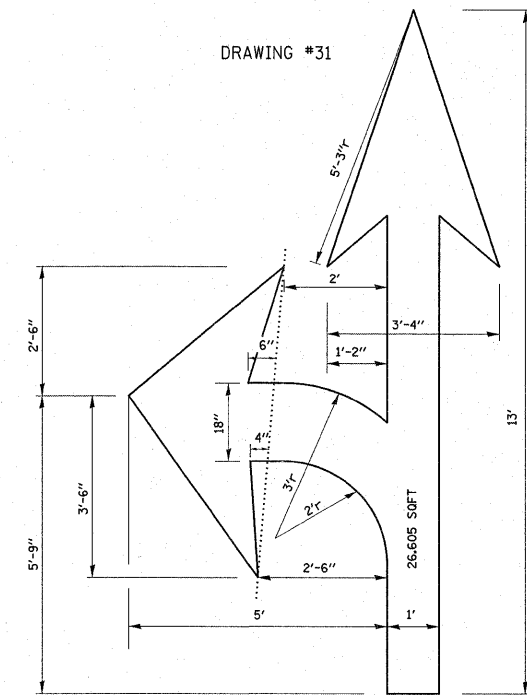
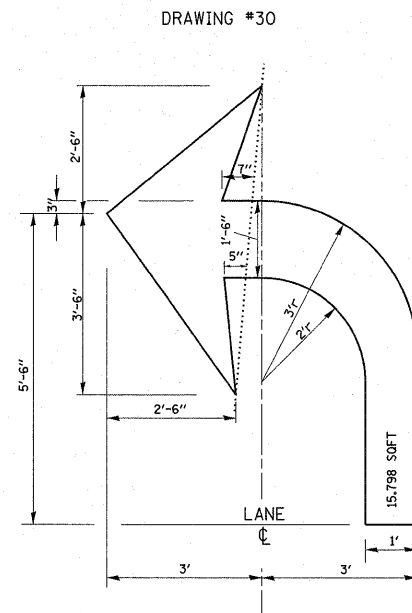
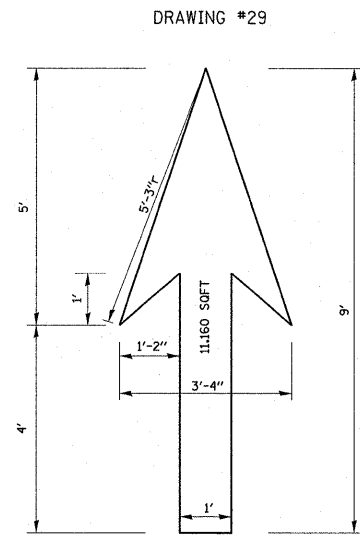
|   |                    |                    |              |           |
|---|--------------------|--------------------|--------------|-----------|
| F.A.P. RTE.                                     | SECTION            | COUNTY             | TOTAL SHEETS | SHEET NO. |
| 348   | 0708 (.2 & .2A) BR | COOK               | 36           | 34        |
| TC-22   |                    | CONTRACT NO. 60L53 |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                    |                    |              |           |





- NOTE:**
- FOR BIKE LANE SYMBOLS ONLY, USE PRE-FORMED THERMOPLASTIC WITH A MINIMUM THICKNESS OF 90 MILS, MINIMUM SKID RESISTANCE VALUE OF 60 BPN, & A MINIMUM INDEX OF REFRACTION OF 1.50.
  - THE RESIDENT ENGINEER SHALL CONTACT MR. BEN GOMBERG AT 312-744-8093 AT LEAST ONE CALENDAR WEEK PRIOR TO INSTALLING BIKE LANE SYMBOLS.

**TYPICAL BIKE LANE SYMBOLS**  
DRAWING #28



**NOTE:** ALL MARKINGS SHALL BE SOLID WHITE UNLESS OTHERWISE NOTED IN THE PLANS

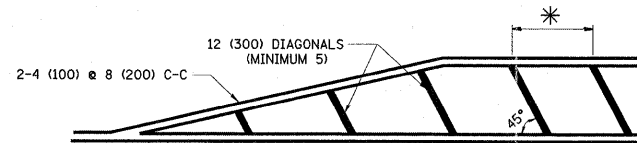
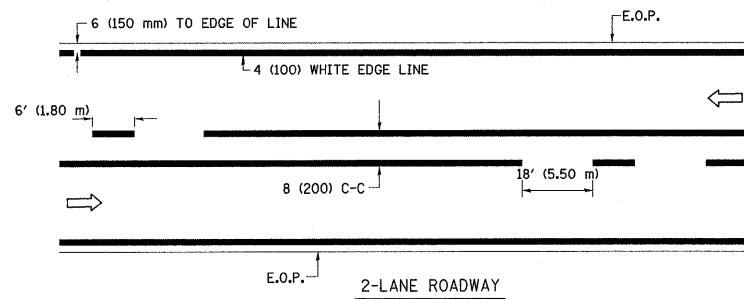
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| FILE NAME =                                       | USER NAME = gorengautab  | DESIGNED - | REVISED - T. RAMMACHER 12-07-00 |
| ca:\pw\work\p\dot\gorengautab\d0212247\1stStd.dgn |  | DRAWN -    | REVISED -                       |
|   | PLOT SCALE = 50.0000 "/td> <td>CHECKED -</td> <td>REVISED -</td> | CHECKED -  | REVISED -                       |
|   | PLOT DATE = 4/18/2011  | DATE -     | REVISED -                       |

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**CITY OF CHICAGO**  
**TYPICAL PAVEMENT MARKINGS**

SCALE: NONE SHEET NO. 2 OF 2 SHEETS STA. TO STA.

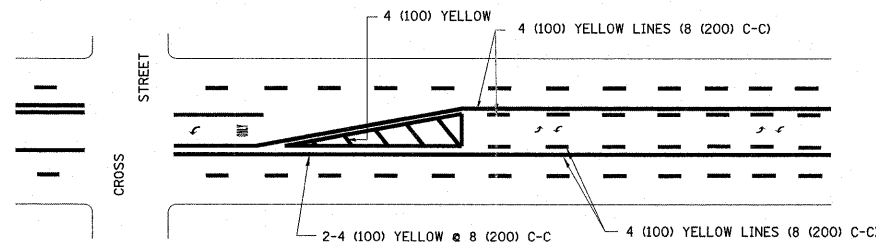
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|---|--------------------|--------------------|--------------|-----------|
| F.A.P. RTE.                                     | SECTION            | COUNTY             | TOTAL SHEETS | SHEET NO. |
| 348   | 0708 (.2 & .2A) BR | COOK               | 36           | 35        |
| <b>TC-24</b>                                    |                    | CONTRACT NO. 60L53 |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                    |                    |              |           |



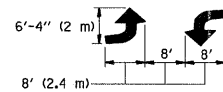
\* FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

\* DIAGONAL LINE SPACING: 20' (6.1 m) C-C

PAINTED MEDIANS

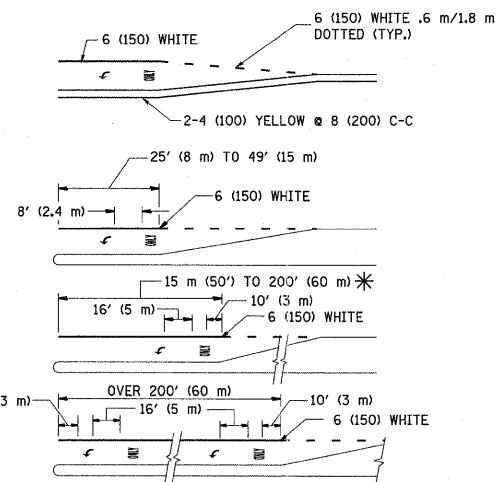


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

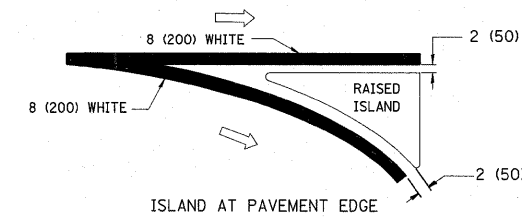
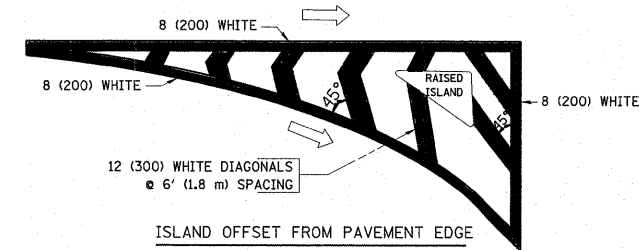


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.8 SQ. FT. (1.47 m<sup>2</sup>) ONLY AREA = 22.9 SQ. FT. (2.13 m<sup>2</sup>)

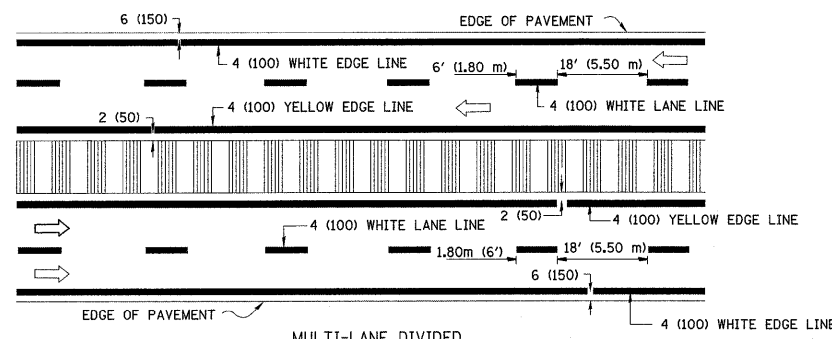
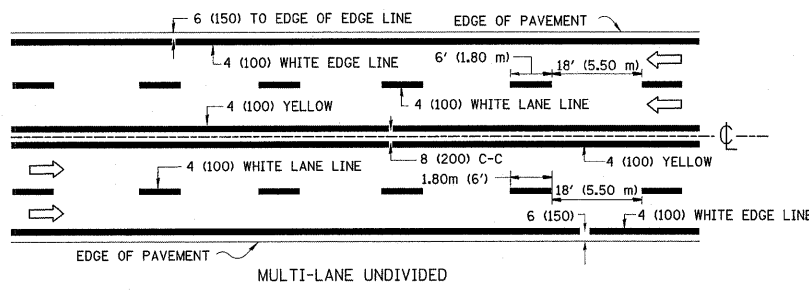
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



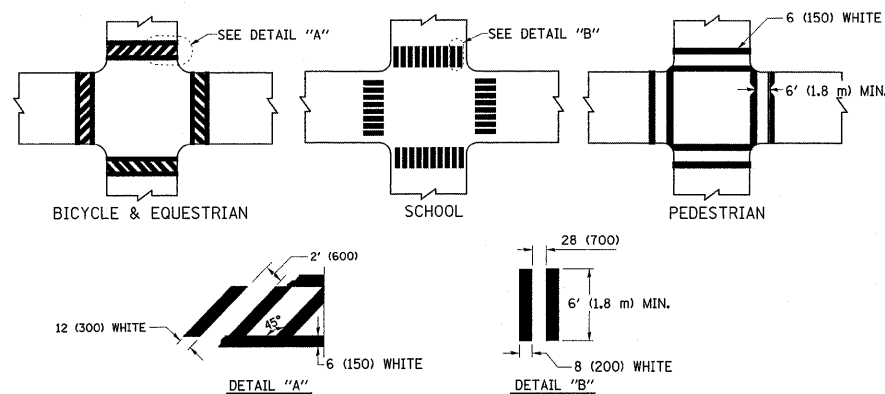
TYPICAL ISLAND MARKING



MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

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

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

| TYPE OF MARKING   | WIDTH OF LINE  | PATTERN                         | COLOR   | SPACING / REMARKS  |
|---|--|---------------------------------|---|--|
| CENTERLINE ON 2 LANE PAVEMENT   | 4 (100)  | SKIP-DASH                       | YELLOW  | 6' (1.80 m) LINE WITH 18' (5.50 m) SPACE   |
| CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT   | 2 @ 4 (100)  | SOLID                           | YELLOW  | 8 (200) C-C  |
| NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS                                      | 4 (100)<br>2 @ 4 (100)   | SOLID<br>SOLID                  | YELLOW<br>YELLOW  | 8 (200) C-C  |
| LANE LINES  | 4 (100)<br>5 (125) ON FREEWAYS   | SKIP-DASH<br>SKIP-DASH          | WHITE<br>WHITE  | 6' (1.80 m) LINE WITH 18' (5.50 m) SPACE   |
| 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) SPACE  |
| EDGE LINES  | 4 (100)  | SOLID                           | YELLOW-LEFT<br>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' (2.4 m))                       | SOLID                           | WHITE   | SEE TYPICAL TURN LANE MARKING DETAIL   |
| TWO WAY LEFT TURN MARKING   | 2 @ 4 (100) EACH DIRECTION<br>8' (2.4 m) LEFT ARROW                          | SKIP-DASH AND SOLID<br>IN PAIRS | YELLOW<br>WHITE   | 6' (1.8 m) LINE WITH 18' (5.50 m) SPACE FOR SKIP-DASH; 8 (200) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE<br>SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL           |
| CROSSWALK LINES (PEDESTRIAN)<br>A. DIAGONALS (BIKE & EQUESTRIAN)<br>B. LONGITUDINAL BARS (SCHOOL) | 2 @ 6 (150)<br>12 (300) @ 45°<br>8 (200) @ 90°                               | SOLID<br>SOLID<br>SOLID         | WHITE<br>WHITE<br>WHITE                                 | NOT LESS THAN 6' (1.8 m) APART<br>2' (600) APART<br>2'-4" (700) APART<br>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;<br>TWO WAY TRAFFIC<br>WHITE;<br>ONE WAY TRAFFIC | 8 (200) C-C FOR THE DOUBLE LINE<br>SEE TYPICAL PAINTED MEDIAN MARKING.   |
| GORE MARKING AND CHANNELIZING LINES   | 8 (200) WITH 12 (300) DIAGONALS @ 45°  | SOLID                           | WHITE   | DIAGONALS;<br>20' (6.1 m) (LESS THAN 30 MPH (50 km/h))   |
| RAILROAD CROSSING   | 24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X" | SOLID                           | WHITE   | SEE STATE STANDARD 780001<br>AREA OF:<br>"R"=3.6 SQ. FT. (0.33m <sup>2</sup> ) EACH<br>"X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )                                      |

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STREET MARKING STANDARDS, PRINTED BY CITY OF CHICAGO, DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC.

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

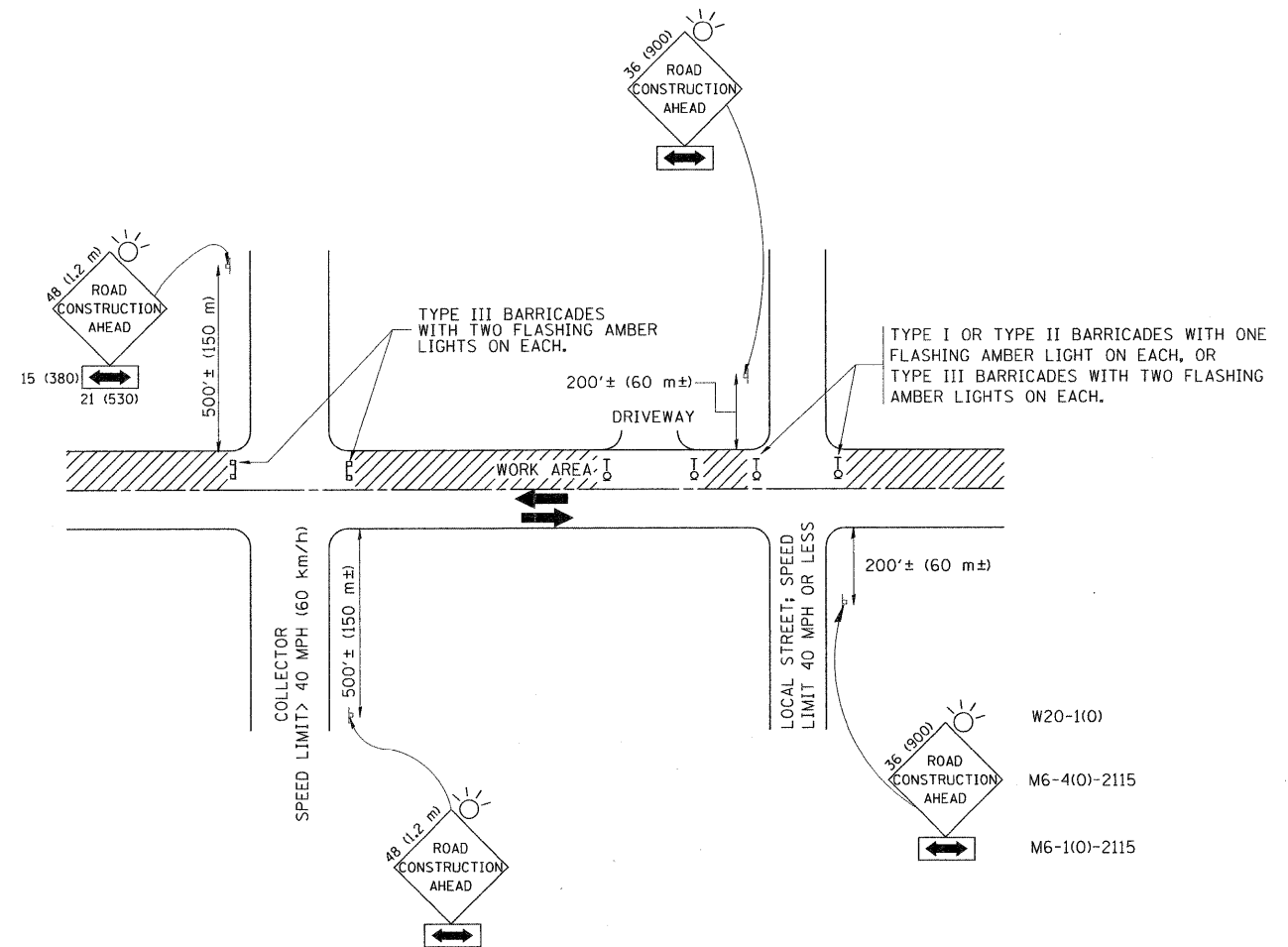
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|  | PLOT SCALE = 50.0000 "/ IN. | CHECKED -  | REVISED -                       |
|  | PLOT DATE = 4/18/2011       | DATE -     | REVISED -                       |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO  
TYPICAL PAVEMENT MARKINGS

SCALE: NONE SHEET NO. 1 OF 2 SHEETS STA. TO STA.

|   |                    |                    |              |           |
|---|--------------------|--------------------|--------------|-----------|
| F.A.P. RTE.                                     | SECTION            | COUNTY             | TOTAL SHEETS | SHEET NO. |
| 348   | 0708 (.2 & .2A) BR | COOK               | 36           | 36        |
| TC-24   |                    | CONTRACT NO. 60L53 |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                    |                    |              |           |



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

NOTES:

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

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

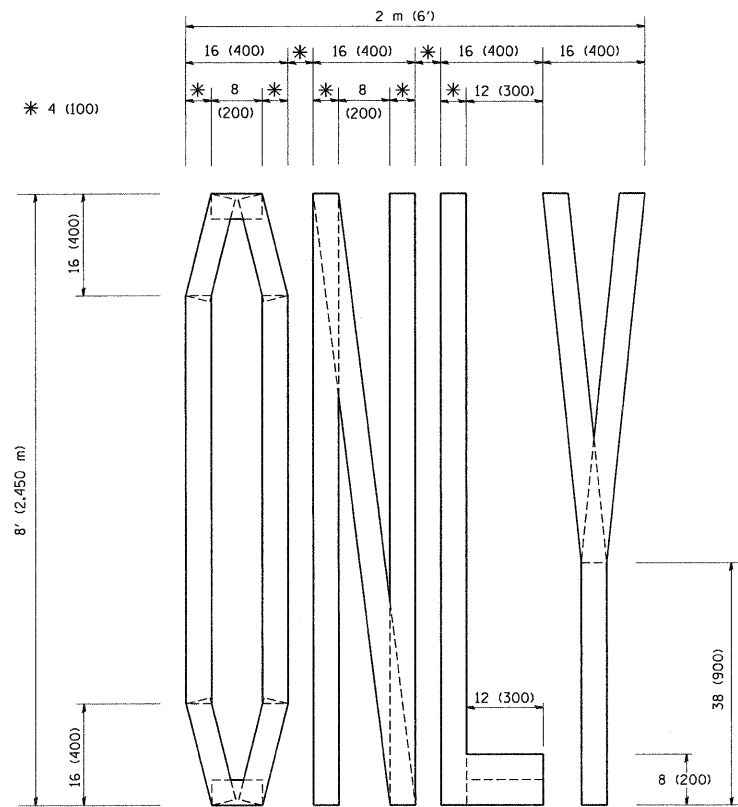
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|  | PLOT SCALE = 50,0000 ' / IN. | CHECKED -      | REVISED - A. HOUSEH 10-15-96    |
|  | PLOT DATE = 5/19/2011        | DATE - 06-89   | REVISED - T. RAMMACHER 01-06-00 |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

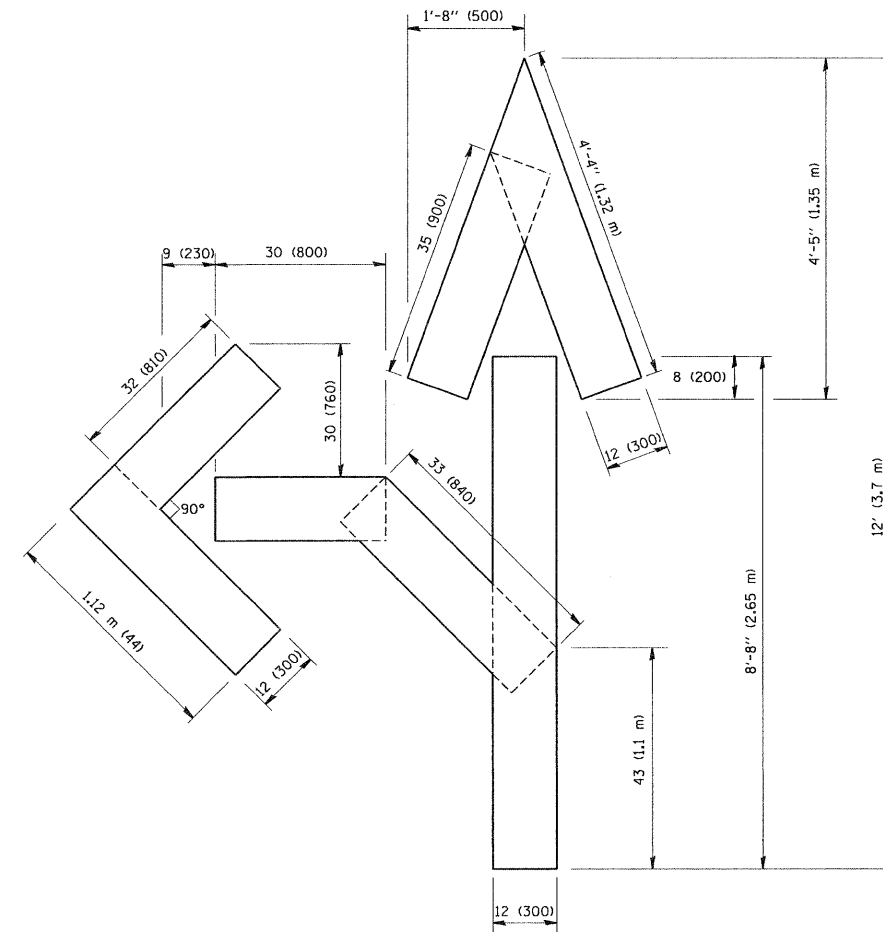
TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

| F.A.P. RTE.                                     | SECTION            | COUNTY | TOTAL SHEETS       | SHEET NO. |
|---|--------------------|--------|--------------------|-----------|
| 348   | 0708 (.2 & .2A) BR | COOK   | 36                 | 36A       |
| TC-10   |                    |        | CONTRACT NO. 60L53 |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                    |        |                    |           |

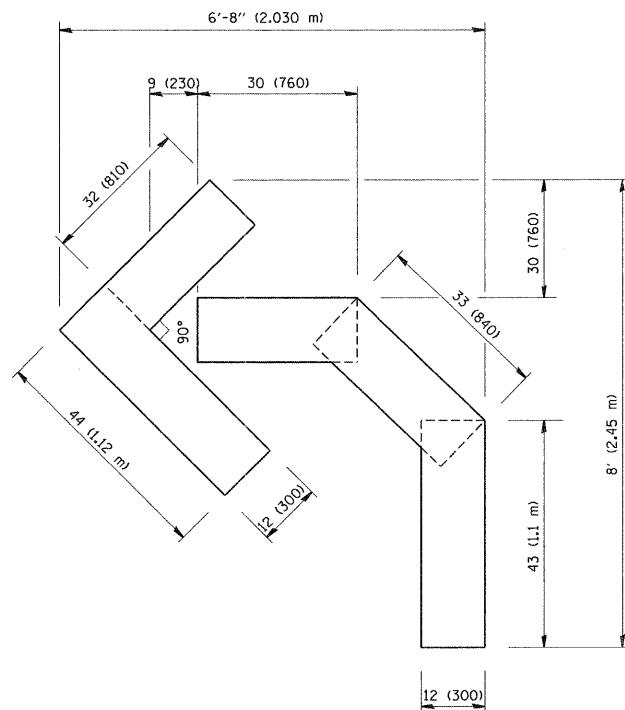
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.



QUANTITY  
 4 (100) LINE = 64.1 ft. (19.7 m)  
 21.1 sq. ft. (1.97 sq. m)



QUANTITY  
 4 (100) LINE = 82.5 ft. (25.3 m)  
 27.5 sq. ft. (2.53 sq. m)



QUANTITY  
 4 (100) LINE = 45.5 ft. (13.9 m)  
 15.2 sq. ft. (1.39 sq. m)

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

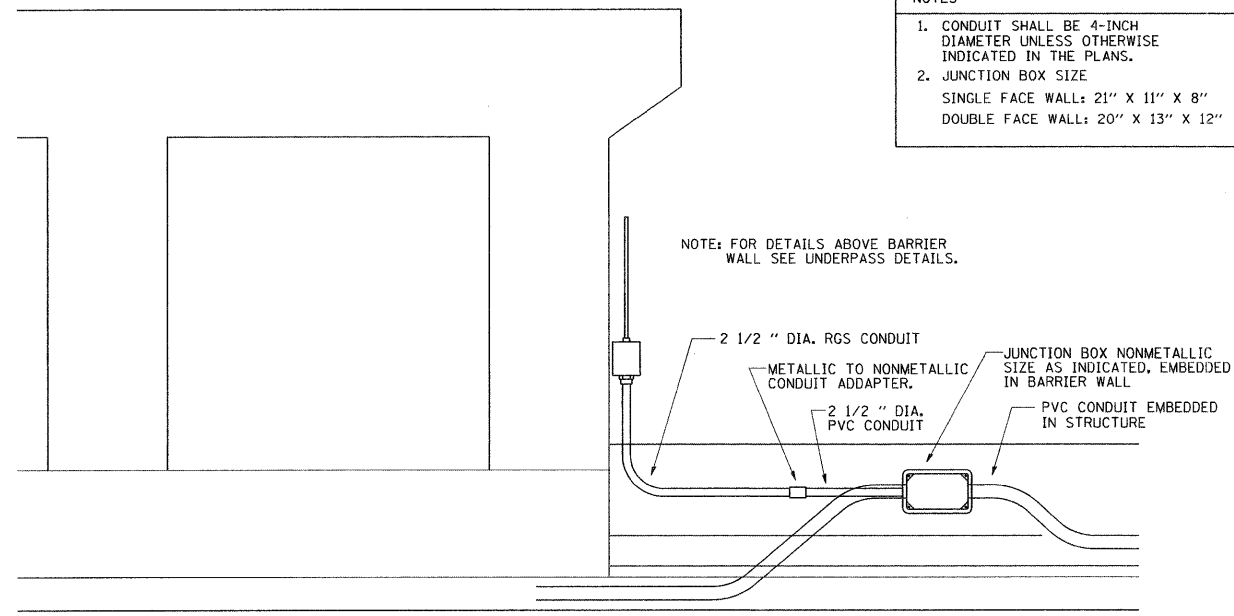
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| PLOT SCALE = 58.0000 ' / IN.            |                         | CHECKED -       | REVISED -T. RAMMACHER 03-02-98 |
| PLOT DATE = 5/19/2011                   |                         | DATE - 09-18-94 | REVISED -E. GOMEZ 08-28-00     |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING LETTERS AND SYMBOLS  
 FOR TRAFFIC STAGING**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

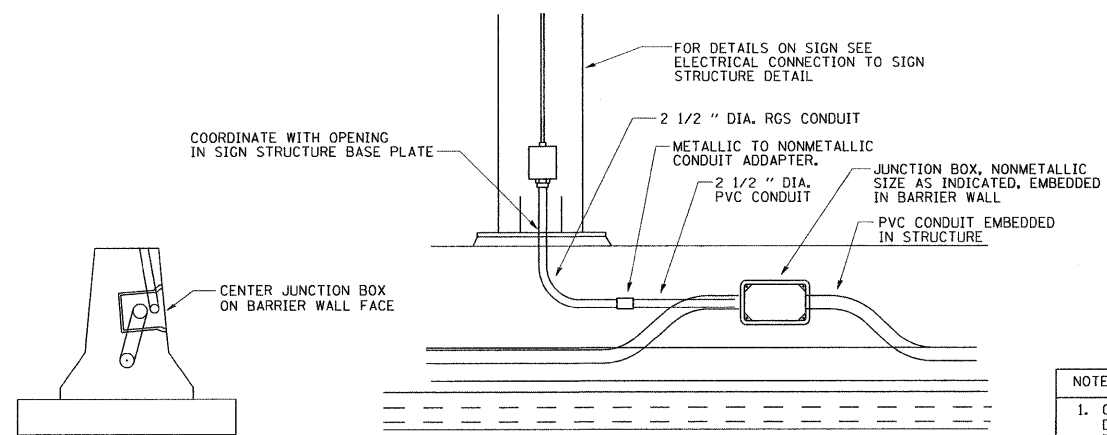
| F.A.P. RTE.                                     | SECTION            | COUNTY | TOTAL SHEETS       | SHEET NO. |
|---|--------------------|--------|--------------------|-----------|
| 348   | 0708 (.2 & .2A) BR | COOK   | 36                 | 36B       |
| <b>TC-16</b>                                    |                    |        | CONTRACT NO. 60L53 |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |                    |        |                    |           |



NOTES

1. CONDUIT SHALL BE 4-INCH DIAMETER UNLESS OTHERWISE INDICATED IN THE PLANS.
2. JUNCTION BOX SIZE  
SINGLE FACE WALL: 21" X 11" X 8"  
DOUBLE FACE WALL: 20" X 13" X 12"

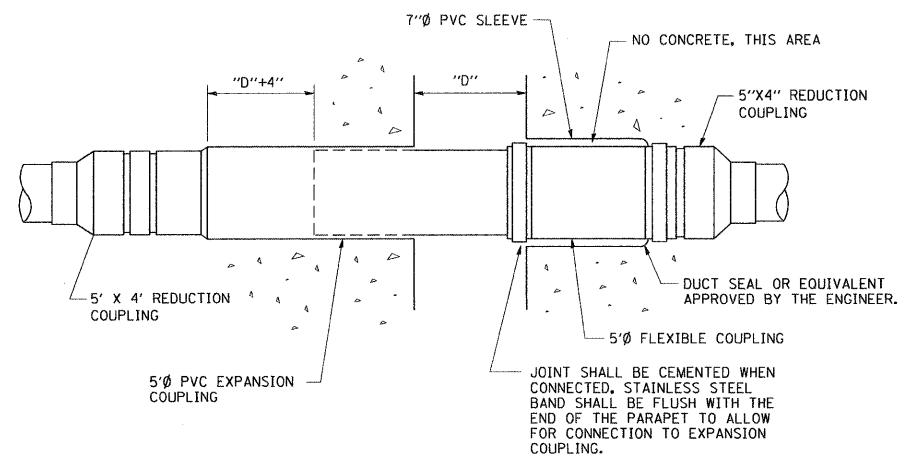
ED - BWD  
ELECTRIC CONNECTION TO UNDERPASS LIGHTING



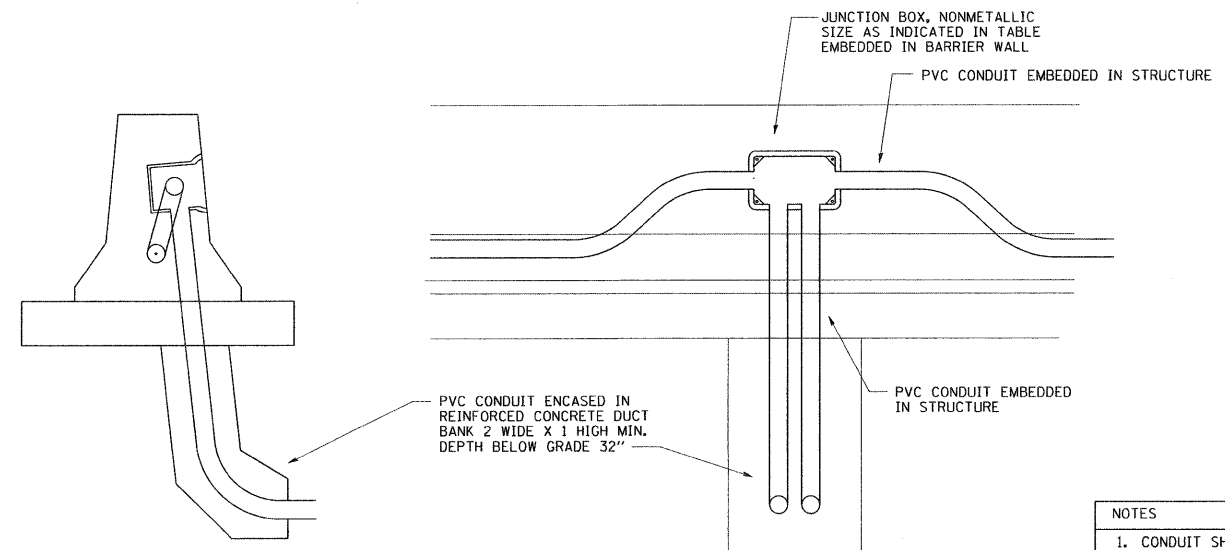
NOTES

1. CONDUIT SHALL BE 4-INCH DIAMETER UNLESS OTHERWISE INDICATED IN THE PLANS.
2. JUNCTION BOX SIZE  
SINGLE FACE WALL: 21" X 11" X 8"  
DOUBLE FACE WALL: 20" X 13" X 12"

ED - SGN  
JUNCTION BOX EMBEDDED IN BARRIER WALL FOR SIGN LIGHTING



INSTALLATION OF CONDUIT  
IN BRIDGE PARAPET EXPANSION JOINT  
(N.T.S.)



NOTES

1. CONDUIT SHALL BE 4-INCH DIAMETER UNLESS OTHERWISE INDICATED IN THE PLANS.
2. JUNCTION BOX SIZE  
SINGLE FACE WALL: 21" X 11" X 8"  
DOUBLE FACE WALL: 20" X 13" X 12"

ED - BW  
JUNCTION BOX EMBEDDED IN BARRIER WALL

|                            |                             |            |           |   |   |  |                    |   |              |           |  |
|----------------------------|-----------------------------|------------|-----------|---|---|--|--------------------|---|--------------|-----------|--|
| FILE NAME =<br>DistStd.dgn | USER NAME = gorengautab     | DESIGNED - | REVISED - | <b>STATE OF ILLINOIS<br/>DEPARTMENT OF TRANSPORTATION</b> | <b>MISCELLANEOUS ELECTRICAL DETAILS, SHEET B<br/>J BOX EMBEDDED IN BARRIER WALL - INSTALLATION OF CONDUIT IN BRIDGE<br/>PARAPET EXPANSION JOINT - ELECTRIC CONNECTION TO UNDERPASS LIGHTING</b> | F.A.P. RTE.                                      | SECTION            | COUNTY  | TOTAL SHEETS | SHEET NO. |  |
|                            | PLOT SCALE = 58.0000' / IN. | DRAWN -    | REVISED - |   |   | 348  | 0708 (L2 & .2A) BR | COOK  | 36           | 36C       |  |
|                            | PLOT DATE = 5/19/2011       | CHECKED -  | REVISED - |   |   | <b>BE-703</b>                                    |                    | CONTRACT NO. 60L53                                  |              |           |  |
|                            | DATE = 01-20-2009           | DATE -     | REVISED - |   |   | SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. |                    | FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT |              |           |  |