

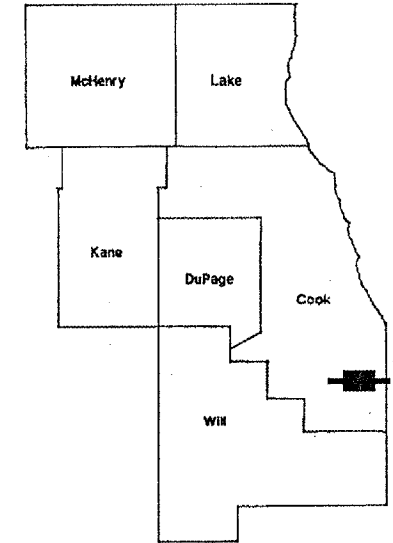
| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|---------|------------|--------|--------------|--------------|
| FAP 341 | 2004-114BR | COOK | 17 | 1 |

FOR INDEX OF SHEETS SEE SHEET 2

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

FAP RTE 341: STONEY ISLAND FEEDER RAMPS
 VARIOUS STRUCTURES
 SECTION 2004-114 BR
 BRIDGE SUBSTRUCTURE REPAIRS
 COOK COUNTY
 C-91-047-05

CONTRACT NO. 62870
D-91-047-05



**IMPROVEMENT IS
 LOCATED IN THE CITY OF
 CHICAGO**

LOCATION OF IMPROVEMENT INDICATED THUS:

DISTRICT ONE DESIGN PLAN PREPERATION ENGINEER:
 KEN ENG/ROBERT BORO (847) 705 4178

CONTRACT NO. 62870

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED: February 24, 2005
Dina O'Keefe
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 25, 2005
Mike Hine
 ENGINEER OF DESIGN AND ENVIRONMENT

March 25, 2005
Victor Moders
 DIRECTOR, DIVISION OF HIGHWAYS

**PRINTED BY THE AUTHORITY
 OF THE STATE OF ILLINOIS**

C.U.A.N.: CHICAGO UTILITY ALERT
 NETWORK
 (312) 744-7000

GENERAL NOTES

| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|---------|------------|--------|--------------|--------------|
| FAP 341 | 2004-114BR | COOK | 17 | 2 |

CONTRACT 62870

INDEX OF SHEETS

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| 5 | BRIDGE REPAIRS LOCATION 1 SN 016-2436 |
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| 13 | BRIDGE REPAIRS LOCATION 4 SN 016-2439 |
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| 15 | BRIDGE REPAIRS LOCATION 6 SN 016-2442 |
| 16 | TC17- TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES PARTIAL RAMP CLOSURES |
| 17 | TC8- FREEWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS |

STATE STANDARDS

| | |
|-----------|---|
| 701006-02 | Off Road Operations 2L, 2W 15' To Pavement Edge |
| 701101-01 | Off Road Operations; Multilane, Less Than 15' Away |
| 701201-02 | Lane Closure 2L, 2W, Day Only, For Speeds \geq 45 MPH |
| 701301-02 | Lane Closure 2L, 2W Short Time Operations |
| 701411-03 | Lane Closure, Multilane, at Entrance or Exit Ramp, for Speeds \geq 45 MPH |
| 702001-05 | Traffic Control Devices |

ILLINOIS DEPARTMENT OF TRANSPORTATION
INDEX OF SHEETS
STATE STANDARDS
GENERAL NOTES

1. 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 AND GAS UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED).

2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.

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

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

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

6. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 (FOR ARTERIALS) AND x4151 OR 4155 (FOR EXPRESSWAY RAMPS) A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

7. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

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

9. THE CONTRACTOR SHALL LOCATE AND PROTECT ALL EXISTING ELECTRICAL CONDUIT AND LIGHTING FACILITIES IN AND AROUND THE VICINITY OF THE REPAIR LOCATIONS OF THE BRIDGE SUBSTRUCTURE.

10. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

11. 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.

12. THE "ADVANCED WARNING SIGN DETAIL FOR ARTERIAL TRAFFIC" LOCATED IN THE SPECIAL PROVISIONS FOR "TEMPORARY INFORMATION SIGNING FOR LANE CLOSURES" AND THE SPECIAL PROVISION FOR "PUBLIC CONVENIENCE AND SAFETY" ARE APPLICABLE ONLY TO ARTERIAL ROADS AND SHALL NOT BE APPLIED TO EXPRESSWAYS.

| | | | | |
|---------|------------|--------|--------------|--------------|
| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
| FAP 341 | 2004-114BR | COOK | 17 | 3 |

SUMMARY OF QUANTITIES

CONTRACT 62870

| CODE NUMBER | DESCRIPTION | UNIT | TOTAL | URBAN SFTY-2A | | | | | | |
|----------------------|---|---------|-------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--|
| | | | | SN 016-2436 LOC 1 | SN 016-2437 LOC 2 | SN 016-2438 LOC 3 | SN 016-2439 LOC 4 | SN 016-2441 LOC 5 | SN 016-2442 LOC 6 | |
| 50102400 | CONCRETE REMOVAL | CU YD | 29.7 | | 29.7 | | | | | |
| 50300225 | CONCRETE STRUCTURES | CU YD | 31.5 | | 31.5 | | | | | |
| 50300320 | ELASTOMERIC BEARING ASSEMBLY, TYPE II | EACH | 8 | | 8 | | | | | |
| 50301245 | FORMED CONCRETE REPAIR (DEPTH EQUAL TO OR LESS THAN 5") | SQ FT | 659 | 207 | 355 | 20 | 53 | 20 | 4 | |
| 50301250 | FORMED CONCRETE REPAIR (DEPTH GREATER THAN 5") | SQ FT | 36 | | 36 | | | | | |
| 50500405 50800205 | <i>Furnishing & Erecting Structural</i> REINFORCEMENT BARS, EPOXY Steel COATED | POUND | 610 | | 610 | | | | | |
| 67000400 | ENGINEER'S FIELD OFFICE, TYPE A | CAL MO | 2 | 0.333 | 0.335 | 0.333 | 0.333 | 0.333 | 0.333 | |
| 67100100 | MOBILIZATION | L SUM | 1 | 0.166 | 0.170 | 0.166 | 0.166 | 0.166 | 0.166 | |
| 70100450 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701201 | L SUM | 1 | | | | 0.5 | | 0.5 | |
| X0321316 | ACCESS DOOR | EACH | 1 | | | 1 | | | | |
| X0322467 | TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE | SQ FT | 288 | 48 | | | 96 | 96 | 48 | |
| X7011015 | TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS) | L SUM | 1 | | 0.8 | | 0.2 | | | |
| Z0031300 | JACKING AND CRIBBING | L SUM | 1 | | 1 | | | | | |
| Z0073300 | TEMPORARY SHORING AND CRIBBING | L SUM | 1 | | | | | 1 | | |
| 58700200 | BRIDGE SEAT SEALER | SQ. FT. | 132.7 | | 132.7 | | | | | |

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

Rev.

TRAFFIC DATA

LOC. 1
I-94
 SPEED LIMIT = 55 MPH
 2001 ADT = 18,550
FAP 341
 SPEED LIMIT = 55 MPH
 2001 ADT = 18,550

LOC. 2
FAP 341
 SPEED LIMIT = 45 MPH
 1997 ADT = 5,009
STONEY ISLAND
 SPEED LIMIT = 45 MPH
 1998 ADT = 44,000

LOC. 3
 SPEED LIMIT = 45 MPH
 2001 ADT = 18,550
STONEY ISLAND
 SPEED LIMIT = 45 MPH
 1998 ADT = 44,000

LOC. 4
FAP 341
 SPEED LIMIT = 45 MPH
 2001 ADT = 37,100

LOC. 5
FAP 341
 SPEED LIMIT = 55 MPH
 1998 ADT = 22,000
103RD ST
 SPEED LIMIT = 35 MPH
 2002 ADT = 25,500

LOC. 6
FAP 341
 SPEED LIMIT = 55 MPH
 1998 ADT = 22,000
103RD ST
 SPEED LIMIT = 35 MPH
 2002 ADT = 25,500

| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|---------|------------|--------|--------------|--------------|
| FAP 341 | 2004-114BR | COOK | 17 | 4 |

CONTRACT NO. 62870

IMPROVEMENT AT LOC. 1: SN 016-2436
 100TH ST OFF RAMP OVER I-94 (CALUMET EXPWY)

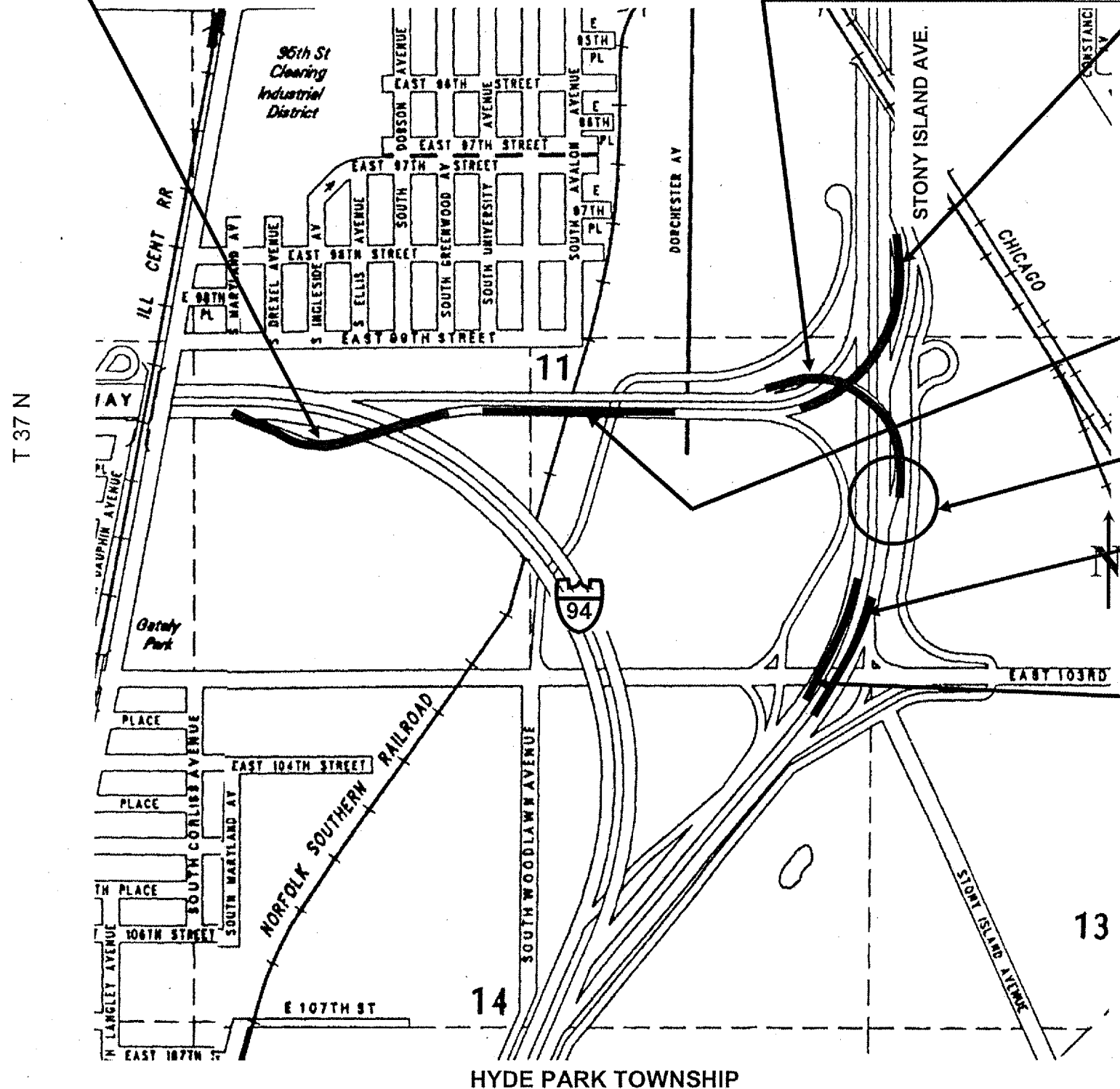
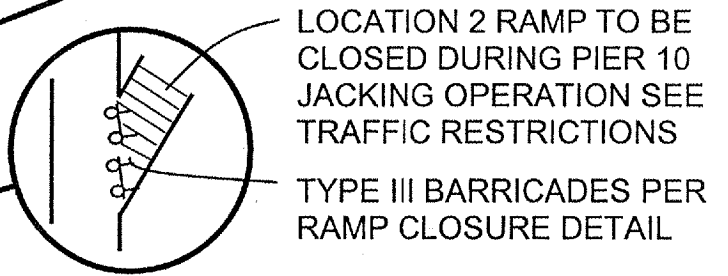
IMPROVEMENT AT LOC. 2: SN 016-2437
 STONEY NB TO 100TH ST WB OVER STONEY ISLAND AVE

IMPROVEMENT AT LOC. 3: SN 016-2438
 EB 100TH ST TO NB STONEY OVER STONEY ISLAND AVE

IMPROVEMENT AT LOC. 4: SN 016-2439
 100TH ST OVER ACCESS RD

IMPROVEMENT AT LOC. 5: SN 016-2441
 STONEY ISLAND NB OVER 103RD ST

IMPROVEMENT AT LOC. 6: SN 016-2442
 STONEY ISLAND OVER 103RD ST



ILLINOIS DEPARTMENT OF TRANSPORTATION
 LOCATION MAP

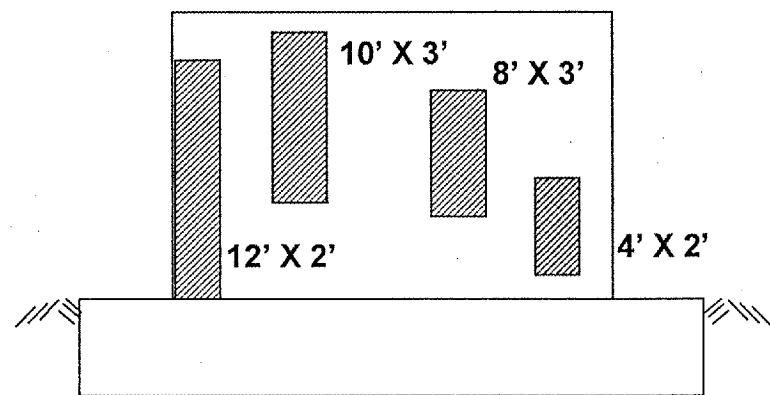
| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|-------------|-------------|--------|--------------|--------------|
| SN 016-2436 | 2004-114 BR | COOK | 17 | 5 |

CONTRACT 62870

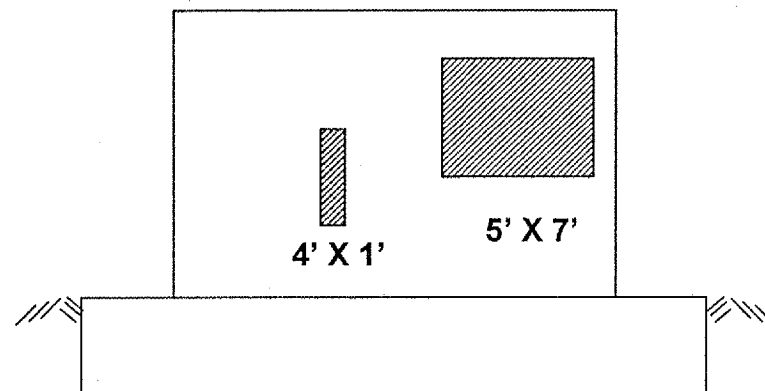
| Total Bill of Material | | |
|--------------------------------|-------|-------|
| Item | Unit | Qty |
| Formed Concrete Repair ≤ 5" | SQ FT | 207.0 |
| | | |
| | | |

General Note:

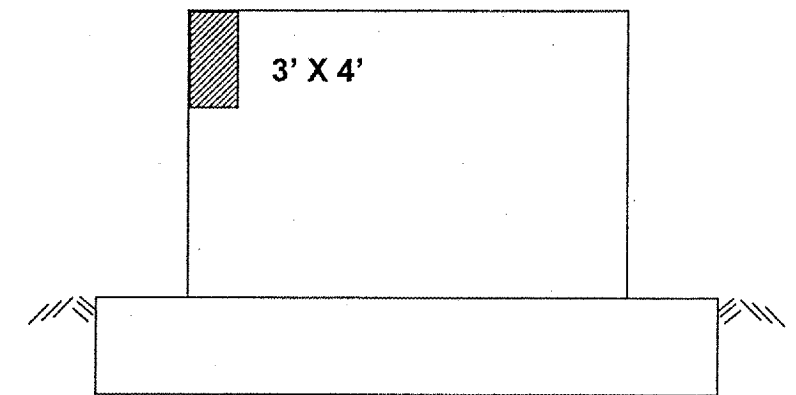
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.



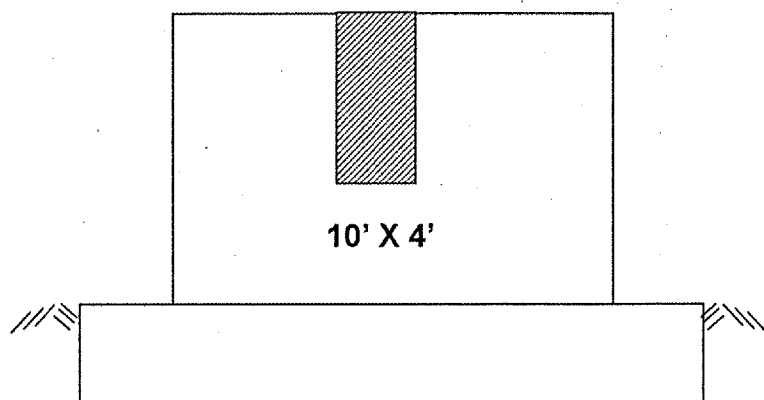
E. PIER 1
E. FACE



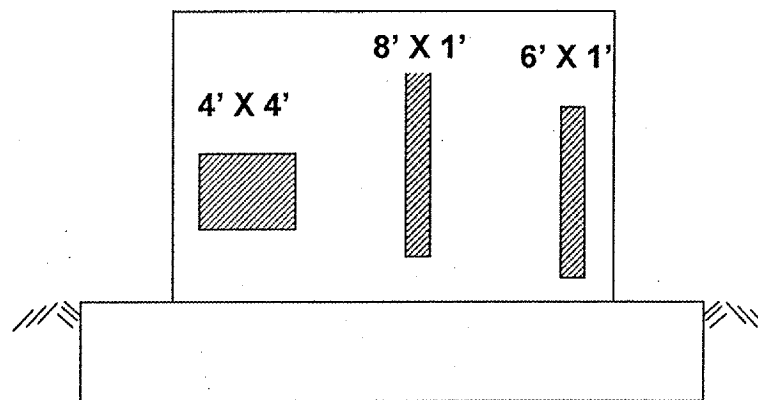
E. PIER 1
W. FACE



WEST ABUTMENT



W. PIER 2
E. FACE



W. PIER 2
W. FACE

Formed Concrete Repair ≤ 5" = 207 SQ FT

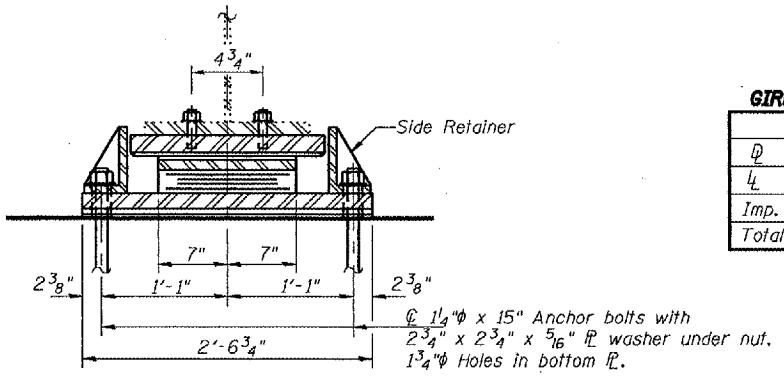
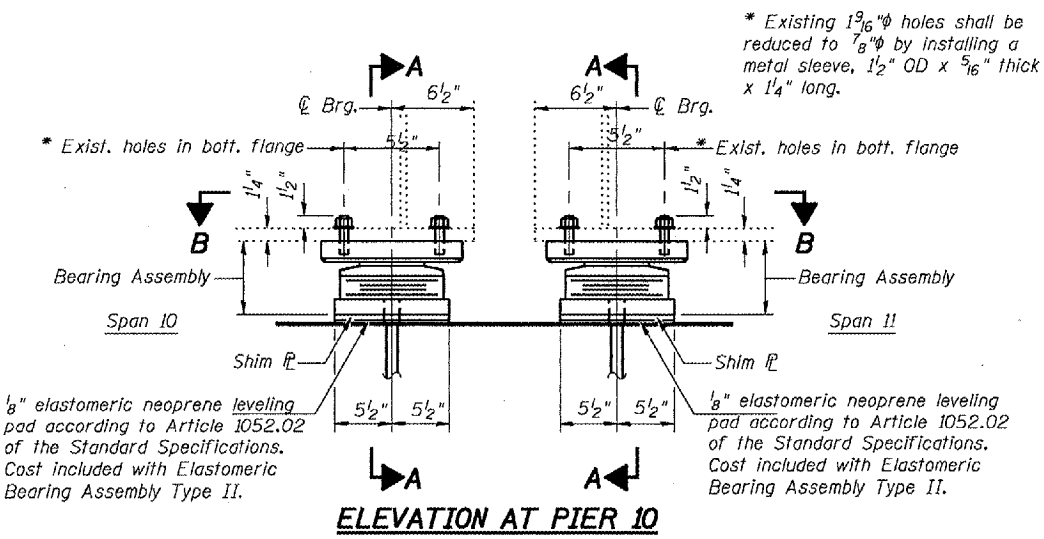
ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE REPAIR
LOCATION 1: 100TH ST. RAMP OFF RAMP
OVER I 94
SN 016-2436

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | |
|-----------------------|---------|--------|------------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | Cook | 17 | 7 |
| FED. ROAD DIST. NO. 7 | | PLANES | FED. AID PROJECT | |

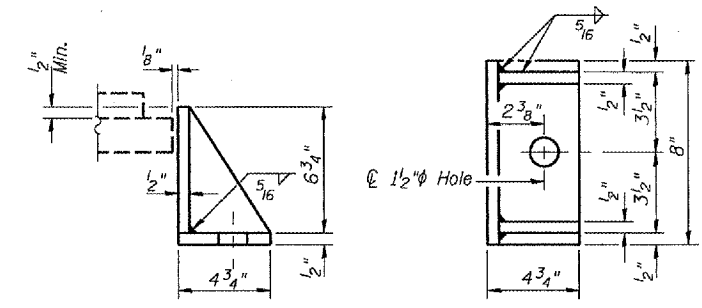
SHEET NO. 2
5 SHEETS

Contract Number: 62870



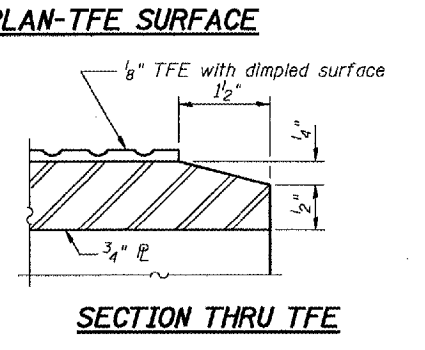
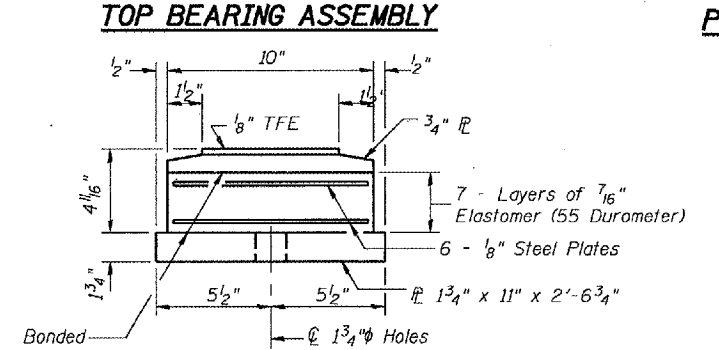
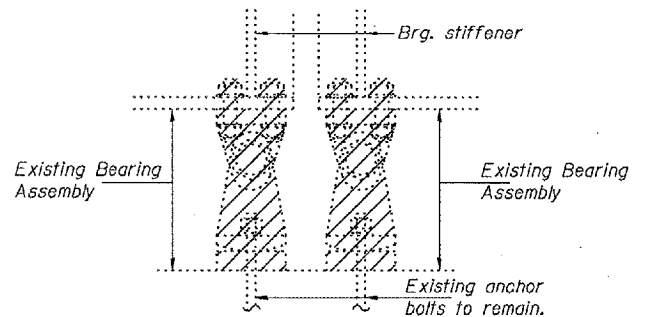
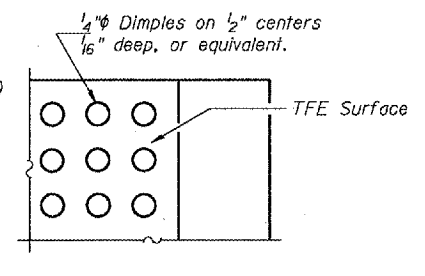
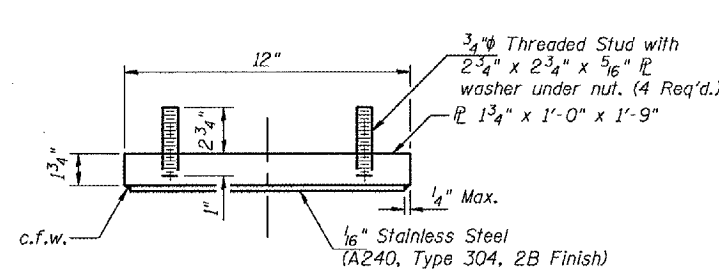
GIRDER REACTIONS AT PIER 10

| | S. Brg. | N. Brg. |
|-----------|---------|---------|
| D (k) | 49.3 | 49.7 |
| L (k) | 40.8 | 41.9 |
| Imp. (k) | 9.7 | 9.3 |
| Total (k) | 99.8 | 100.9 |

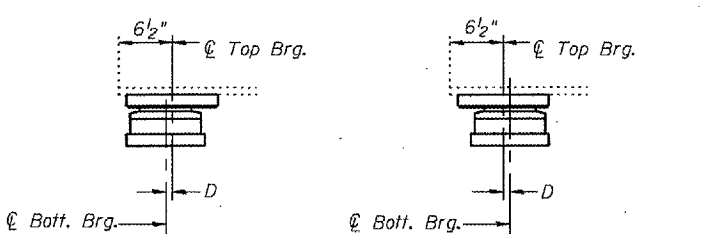
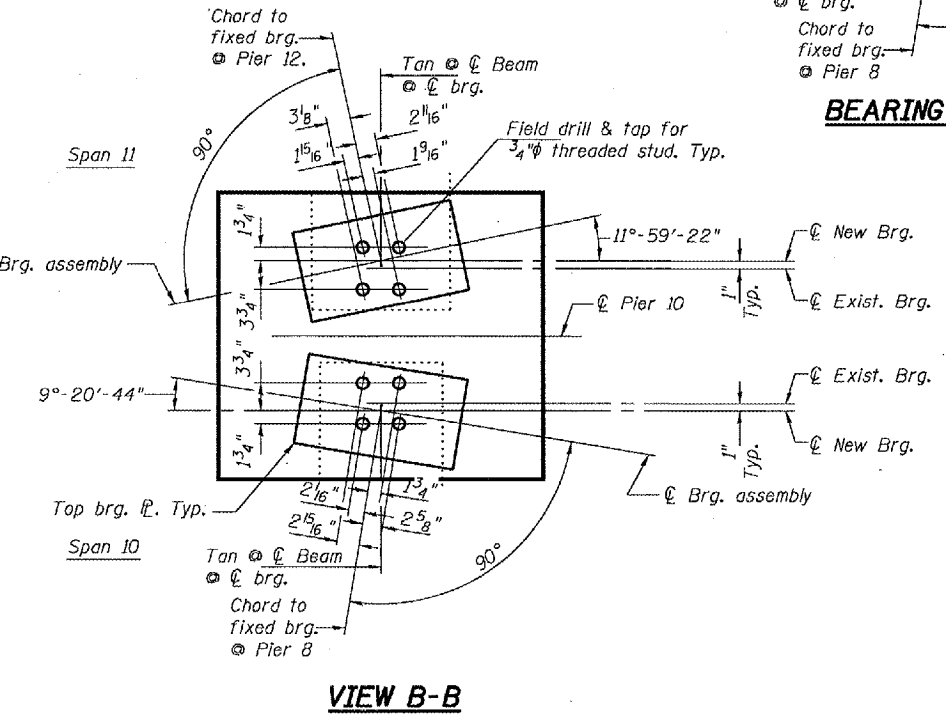
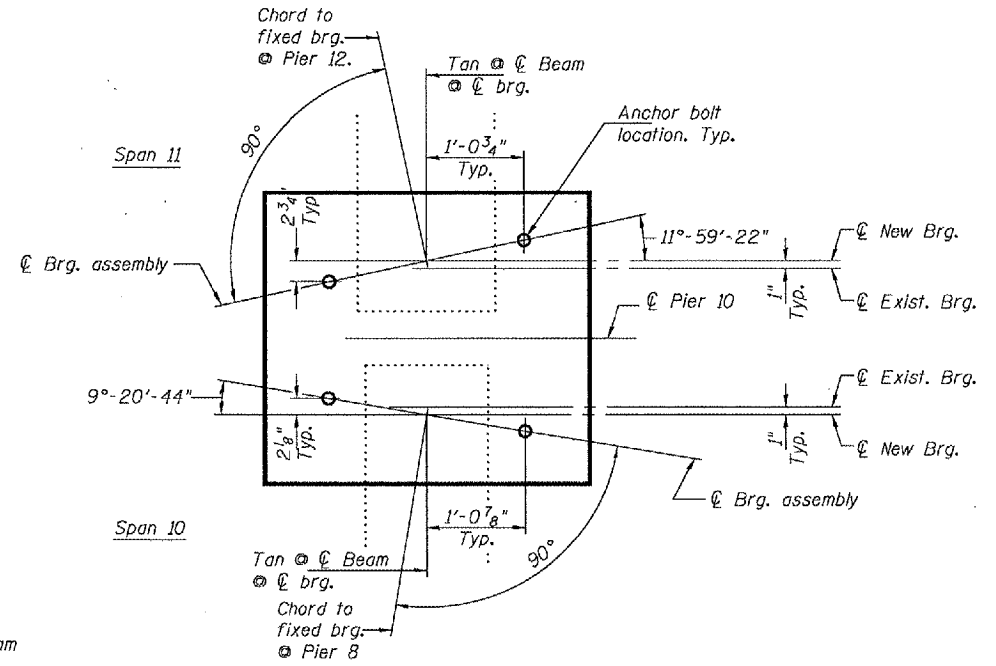


TYPE II ELASTOMERIC EXP. BRG.

Notes:
New side retainers, shim plates, connection bolts and anchor bolts are included in Furnishing and Erecting Structural Steel.
See sheet 3 of 5 for anchor bolt installation.
Prior to ordering any material, the contractor shall verify, in the field, all bearing height and shim thickness dimensions
Min. jack capacity = 75 Tons.



Notes:
The $\frac{1}{8}$ " TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
Bonding of $\frac{1}{8}$ " TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



BELOW 50°F. (Move bott. brg. away from fixed brg.)
ABOVE 50°F. (Move bott. brg. toward fixed brg.)
D = $\frac{1}{8}$ " per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

BILL OF MATERIAL

| Item | Unit | Total |
|--|------|-------|
| Elastomeric Bearing Assembly Type II | Each | 8 |
| Jacking and Cribbing | LS | 1 |
| Furnishing and Erecting Structural Steel | Lbs. | 610 |

BEARING DETAILS
LOC 2: STONEY ISLAND CONNECTOR TO FAI 94 RAMP Q STRUCTURE
COOK COUNTY
SN 016-2437

| | |
|----------|---------|
| DESIGNED | JSB |
| CHECKED | ATH |
| DRAWN | baliva |
| CHECKED | JSB ATH |

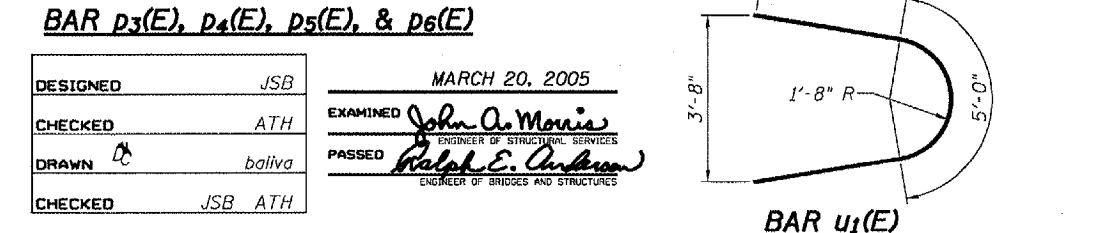
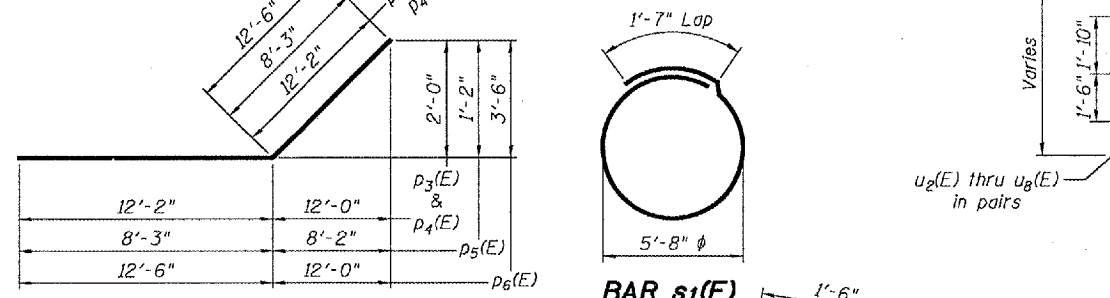
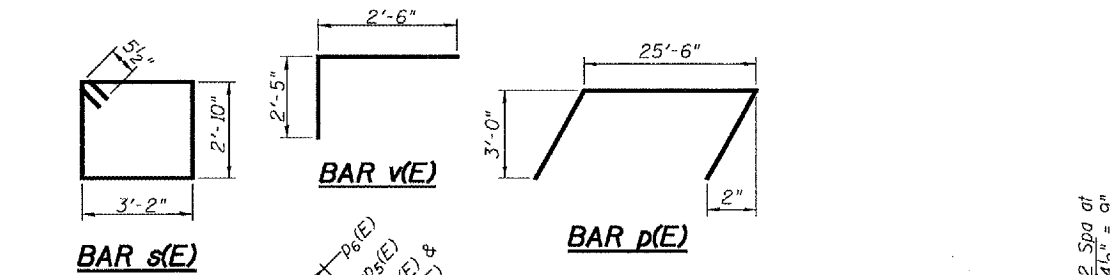
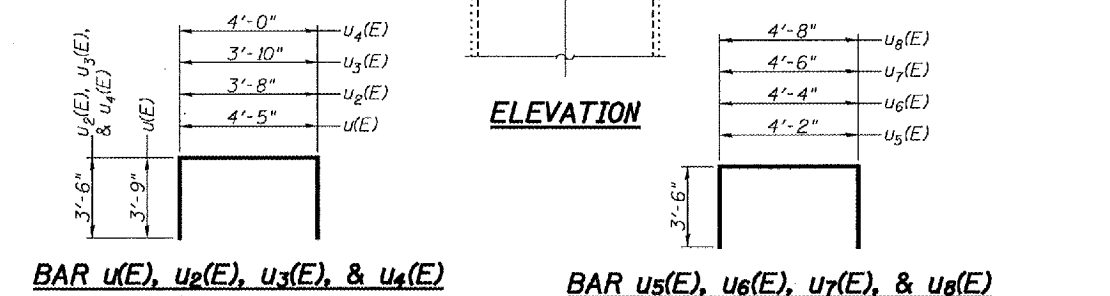
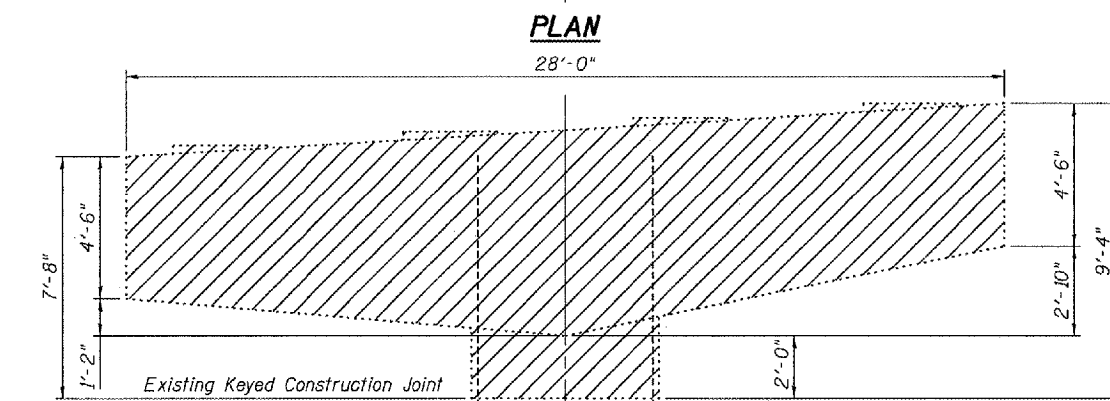
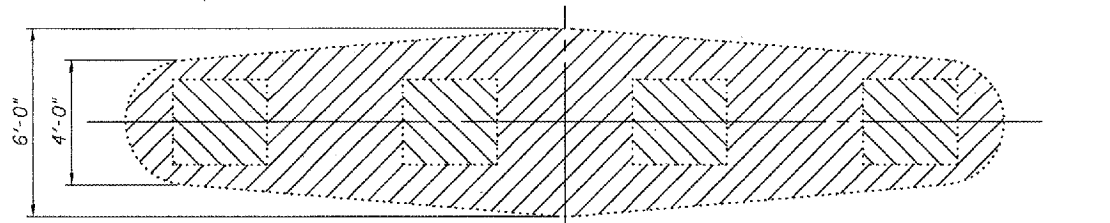
I-2-E2 9-1-03

MARCH 20, 2005
EXAMINED *John A. Morris*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

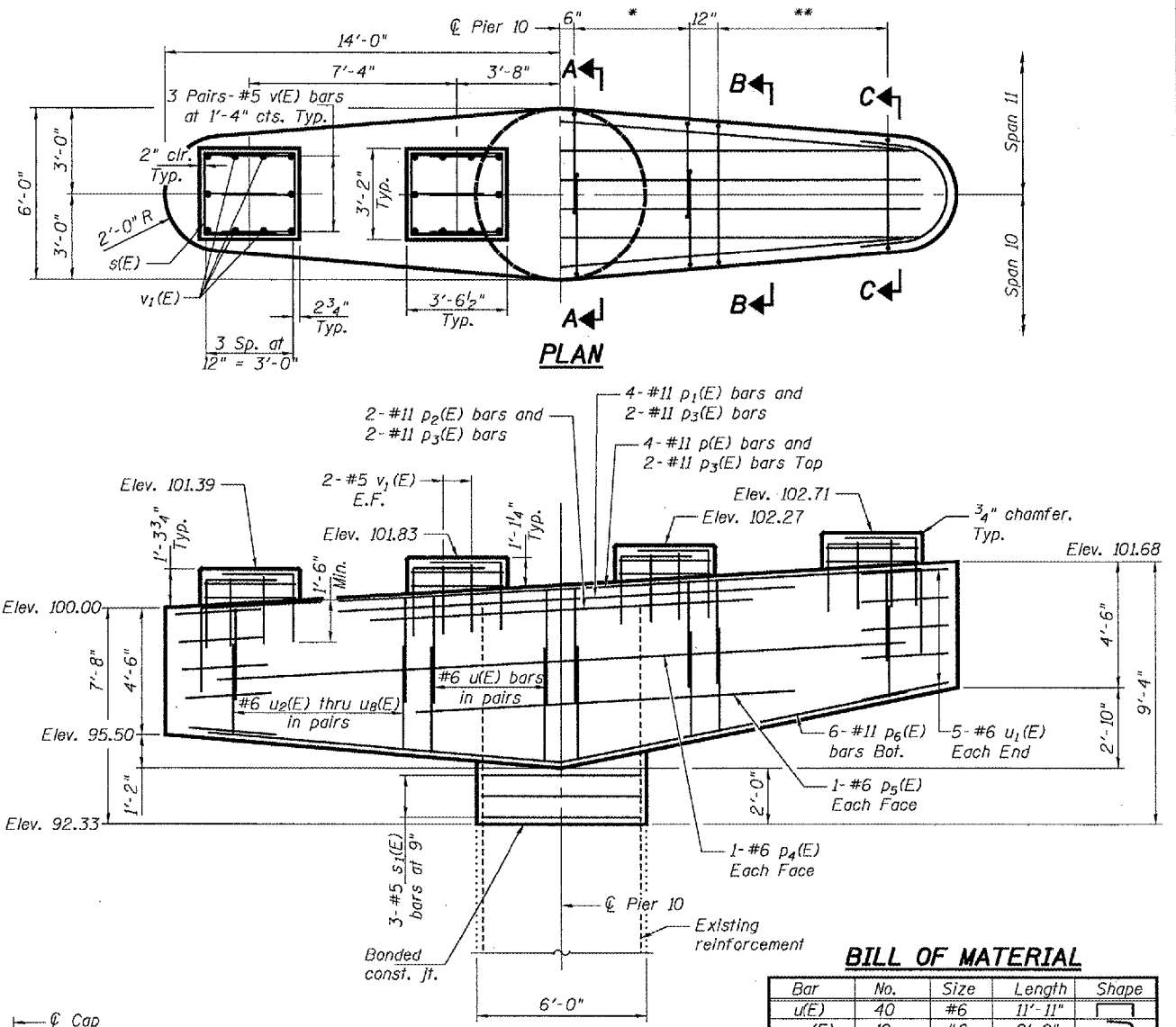
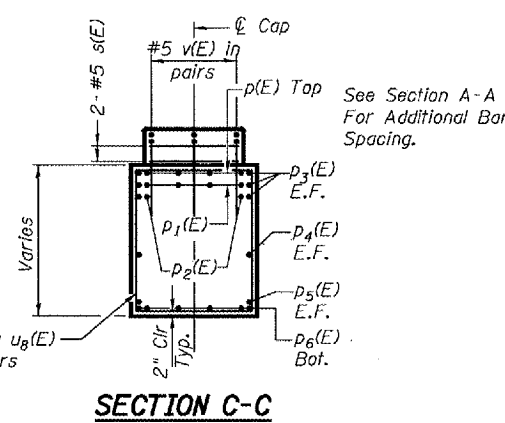
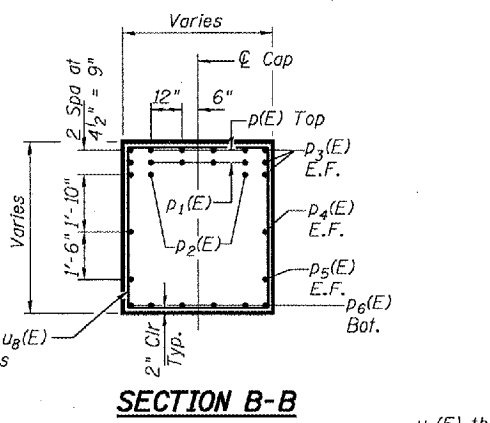
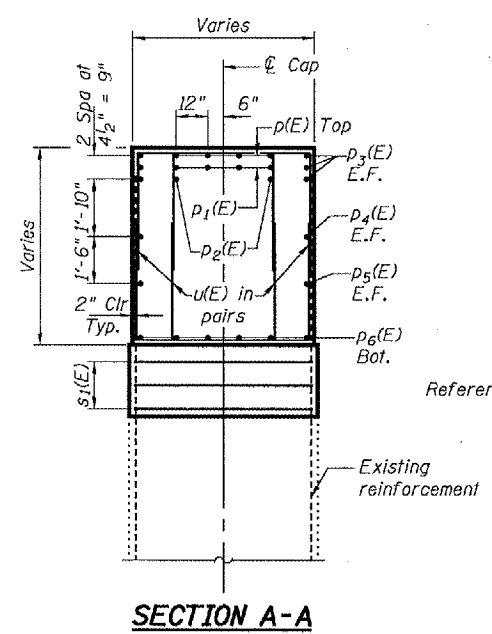
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | | |
|-----------------------|---------|----------|------------------|-------|-------------------------|
| ROUTE NO. | SECTION | COUNTY | DATE | SHEET | SHEET NO. 4 5 SHEETS |
| | | Cook | 17 | 9 | |
| FED. ROAD DIST. NO. 7 | | ILLINOIS | FED. AID PROJECT | | Contract Number: 62870 |

*5-#6 u(E) bars at 12" in Double Pairs
**1-#6 u₂(E) thru u₈(E) bars at 12" in Pairs



| | | |
|----------|---------|---|
| DESIGNED | JSB | MARCH 20, 2005 |
| CHECKED | ATH | EXAMINED <i>John A. Morris</i> ENGINEER OF STRUCTURAL SERVICES |
| DRAWN | baliva | PASSED <i>Ralph E. Anderson</i> ENGINEER OF BRIDGES AND STRUCTURES |
| CHECKED | JSB ATH | |



BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|--------------|
| u(E) | 40 | #6 | 11'-11" | □ |
| u ₁ (E) | 10 | #6 | 8'-0" | □ |
| u ₂ (E) | 4 | #6 | 10'-8" | □ |
| u ₃ (E) | 4 | #6 | 10'-10" | □ |
| u ₄ (E) | 4 | #6 | 11'-0" | □ |
| u ₅ (E) | 4 | #6 | 11'-2" | □ |
| u ₆ (E) | 4 | #6 | 11'-4" | □ |
| u ₇ (E) | 4 | #6 | 11'-6" | □ |
| u ₈ (E) | 4 | #6 | 11'-8" | □ |
| v(E) | 24 | #5 | 4'-11" | □ |
| v ₁ (E) | 16 | #5 | 2'-7" | □ |
| Concrete Removal | | | | Cu. Yd. 29.7 |
| Concrete Structures | | | | Cu. Yd. 31.5 |
| Reinforcement Bars, Epoxy Coated | | | | Lbs. 4480 |

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|--------------------|-----|------|---------|-------|
| p(E) | 4 | #11 | 31'-6" | □ |
| p ₁ (E) | 4 | #11 | 16'-6" | □ |
| p ₂ (E) | 2 | #11 | 13'-6" | □ |
| p ₃ (E) | 6 | #11 | 24'-4" | □ |
| p ₄ (E) | 2 | #6 | 24'-4" | □ |
| p ₅ (E) | 2 | #6 | 16'-6" | □ |
| p ₆ (E) | 6 | #11 | 25'-0" | □ |
| s(E) | 8 | #5 | 12'-11" | □ |
| s ₁ (E) | 3 | #5 | 19'-7" | ○ |

Reinforcement bars designated (E) shall be epoxy coated.

Notes:
Hatched areas indicate "Concrete Removal".
Existing reinforcement 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.

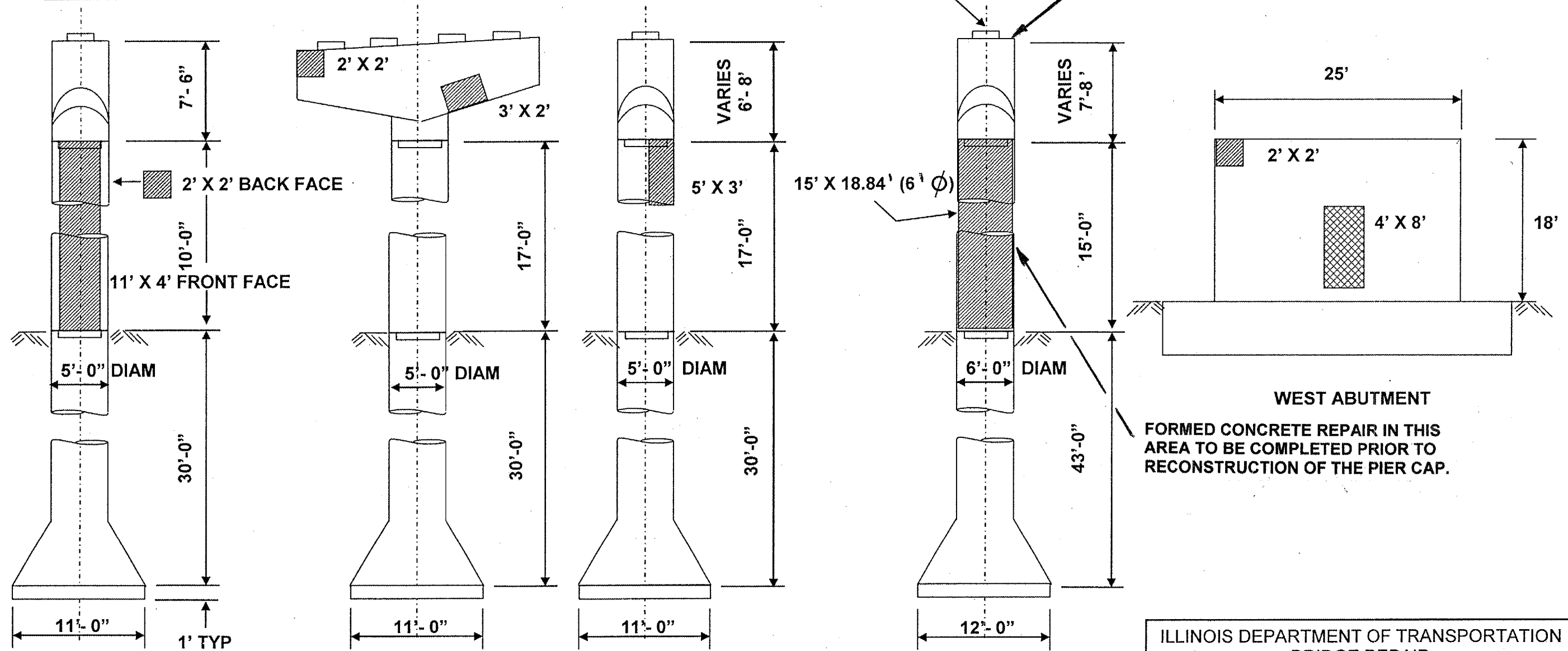
PIER 10
LOC 2: STONEY ISLAND CONNECTOR
TO FAI 94 RAMP Q STRUCTURE
COOK COUNTY
SN 016-2437

| | | | | |
|-------------|-------------|--------|--------------|--------------|
| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
| SN 016-2437 | 2004-114 BR | COOK | 17 | 10 |

SHEET NO 5 OF 5 SHEETS

CONTRACT 62870

| Bill of Material | | |
|--------------------------------|-------|-------|
| Item | Unit | Qty |
| Formed Concrete Repair ≤ 5" | SQ FT | 355.0 |
| Formed Concrete Repair ≥ 5" | SQ FT | 36.0 |



END VIEW
PIER 3

ELEVATION

PIER 6

END VIEW

END VIEW
PIER 10

- Formed Concrete Repair ≤ 5" = 355 SQ FT
- Formed Concrete Repair ≥ 5" = 36 SQ FT

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE REPAIR
LOCATION 2: RAMP Q
(STONEY NB TO 100TH ST SB)
OVER STONEY ISLAND AVE
SN 016-2437

| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|-------------|-------------|--------|--------------|--------------|
| SN 016-2438 | 2004-114 BR | COOK | 17 | 11 |

| Total Bill of Material | | |
|--------------------------------|-------|------|
| Item | Unit | Qty |
| Formed Concrete Repair ≤ 5" | SQ FT | 20.0 |
| Access Door | EACH | 1 |
| | | |

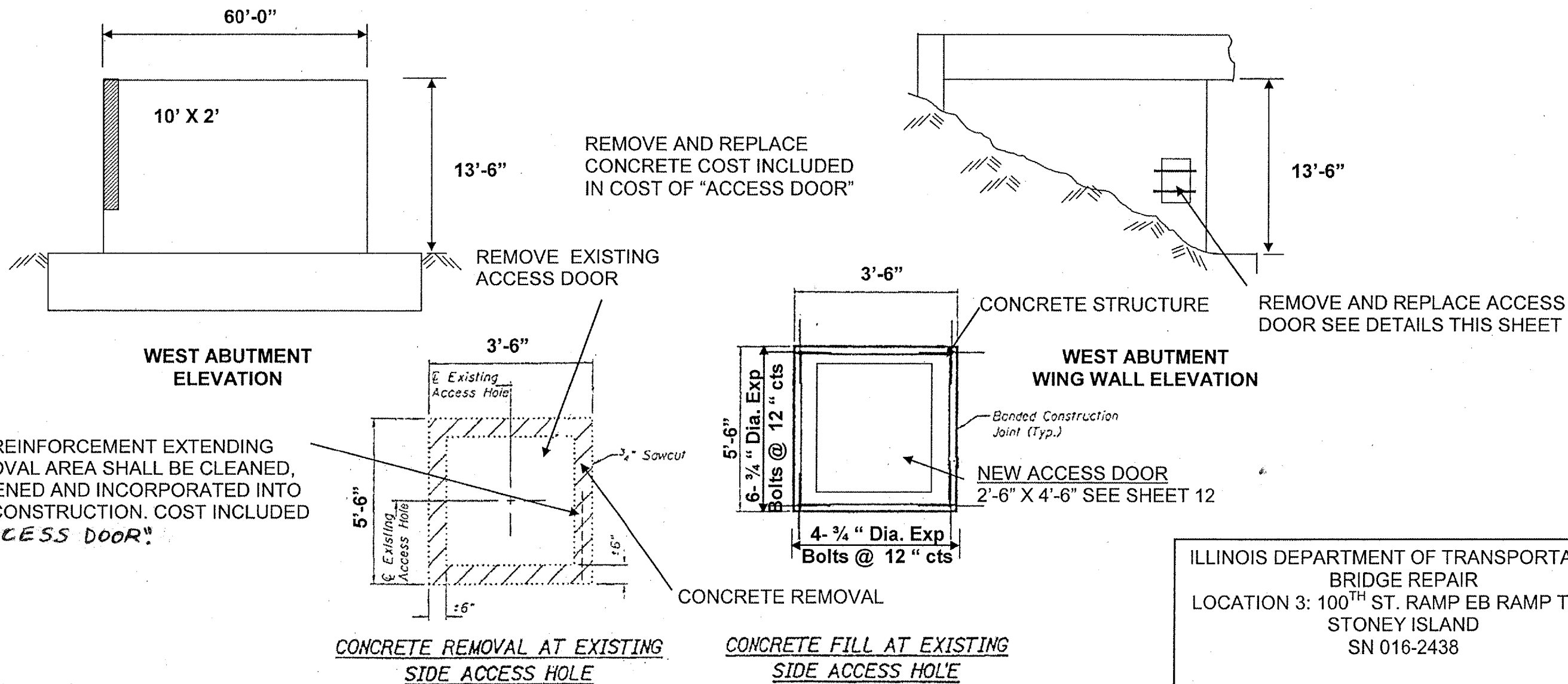
SHEET 1 OF 2

CONTRACT 62870

General Note:

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Expansion bolts shall be 3/4" diameter hooked bolts & shall extend 9" min. into concrete.



EXISTING REINFORCEMENT EXTENDING INTO REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. COST INCLUDED WITH "ACCESS DOOR".

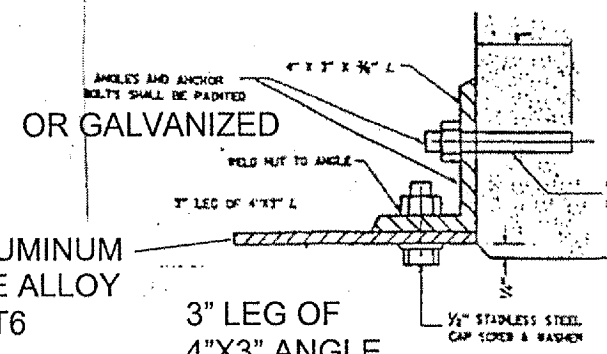
Formed Concrete Repair ≤ 5" = 20 SQ FT

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE REPAIR
LOCATION 3: 100TH ST. RAMP EB RAMP TO NB
STONEY ISLAND
SN 016-2438

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|------------|--------|--------------|-----------|
| 341 | 2004-114BR | COOK | 17 | 12 |

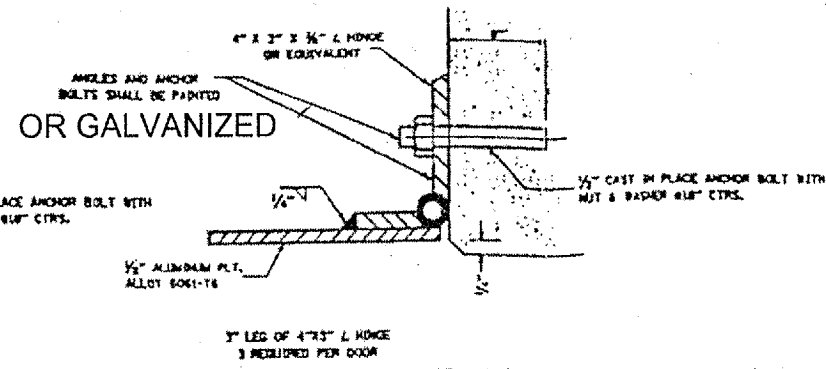
SHEET 2 OF 2

CONTRACT 62870

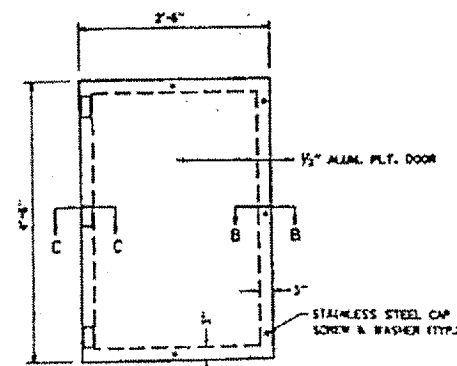


3" LEG OF
4"x3" ANGLE
5 REQD.
PER DOOR

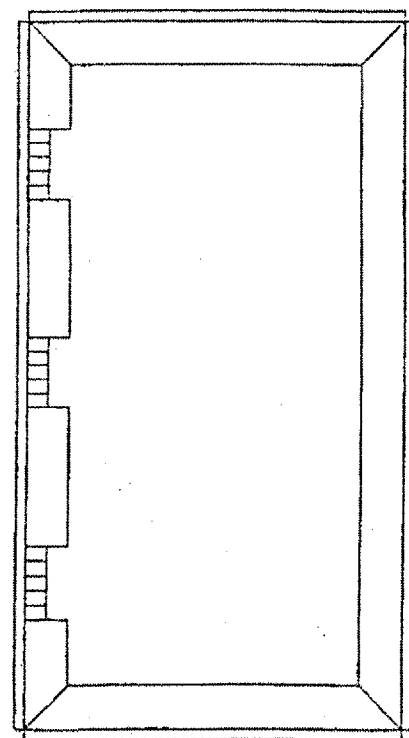
SEC. B-B



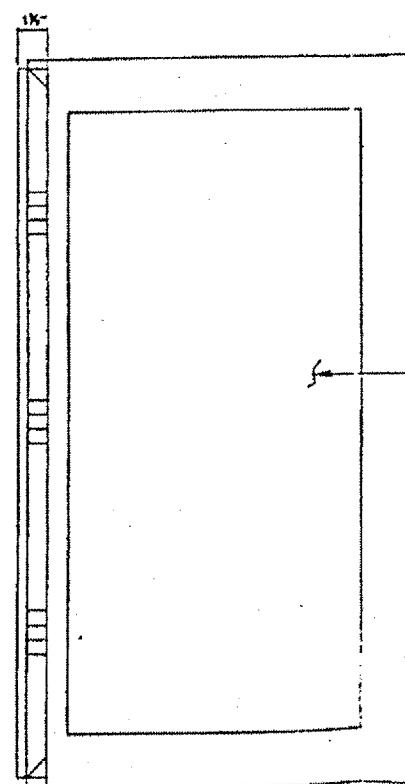
SEC. C-C



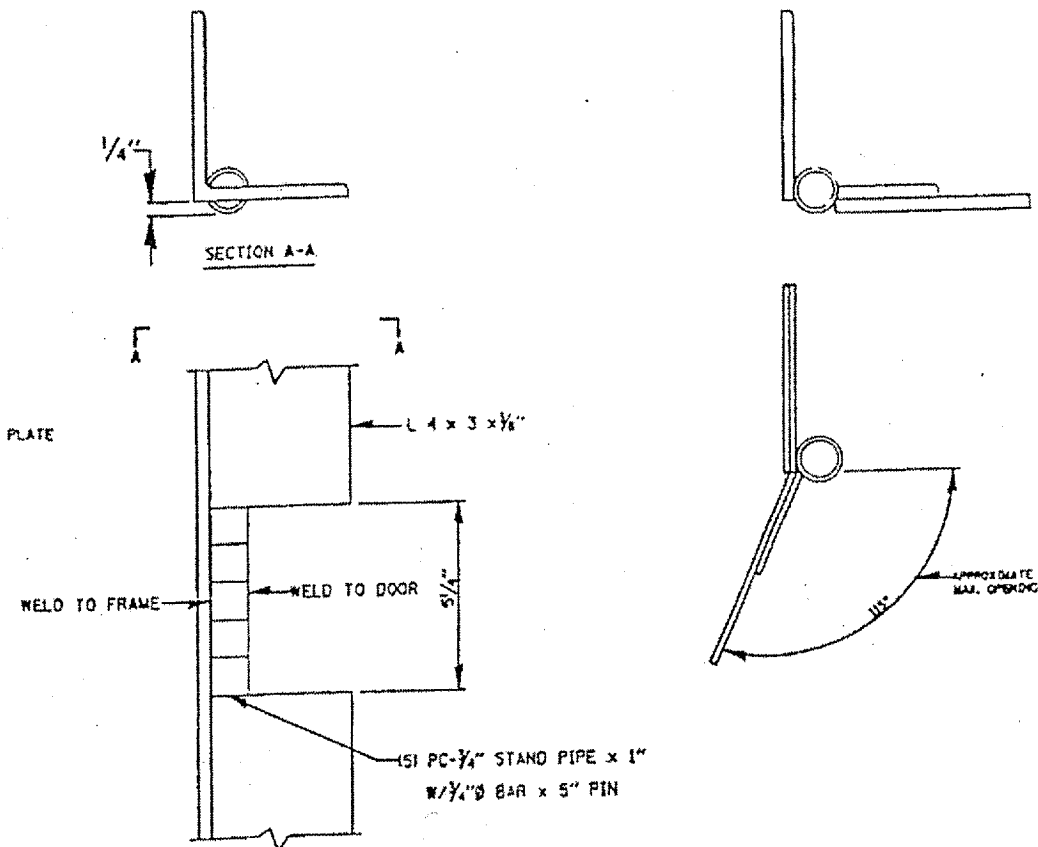
PROPOSED DOOR



FRAME



FRAME WITH COVER



HINGE DETAIL

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE REPAIR
VAULTED ABUTMENT DOOR DETAILS
LOCATION 3: 100TH ST. RAMP EB RAMP TO NB
STONEY ISLAND
SN 016-2438

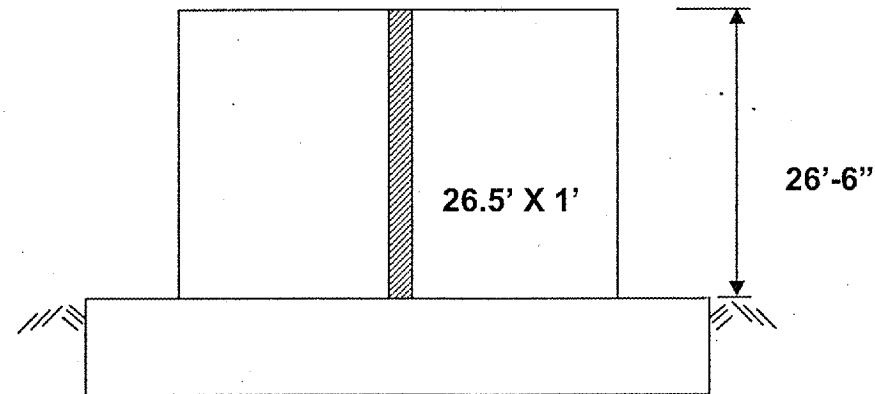
| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|-------------|-------------|--------|--------------|--------------|
| SN 016-2439 | 2004-114 BR | COOK | 17 | 13 |

CONTRACT 62870

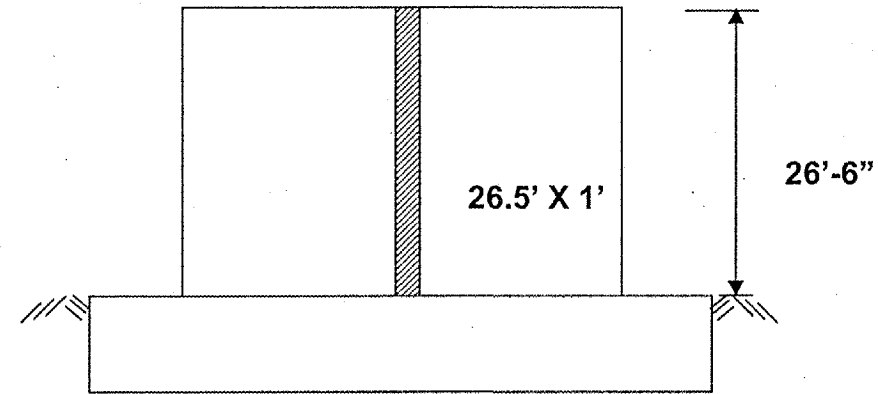
| Total Bill of Material | | |
|--------------------------------|-------|------|
| Item | Unit | Qty |
| Formed Concrete Repair ≤ 5" | SQ FT | 53.0 |
| | | |
| | | |

General Note:

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.



EAST PIER
EAST FACE



EAST PIER
WEST FACE



Formed Concrete Repair ≤ 5" = 53 SQ FT

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE REPAIR
LOCATION 4: 100TH ST. OFF RAMP
OVER ACCESS RD
SN 016-2439

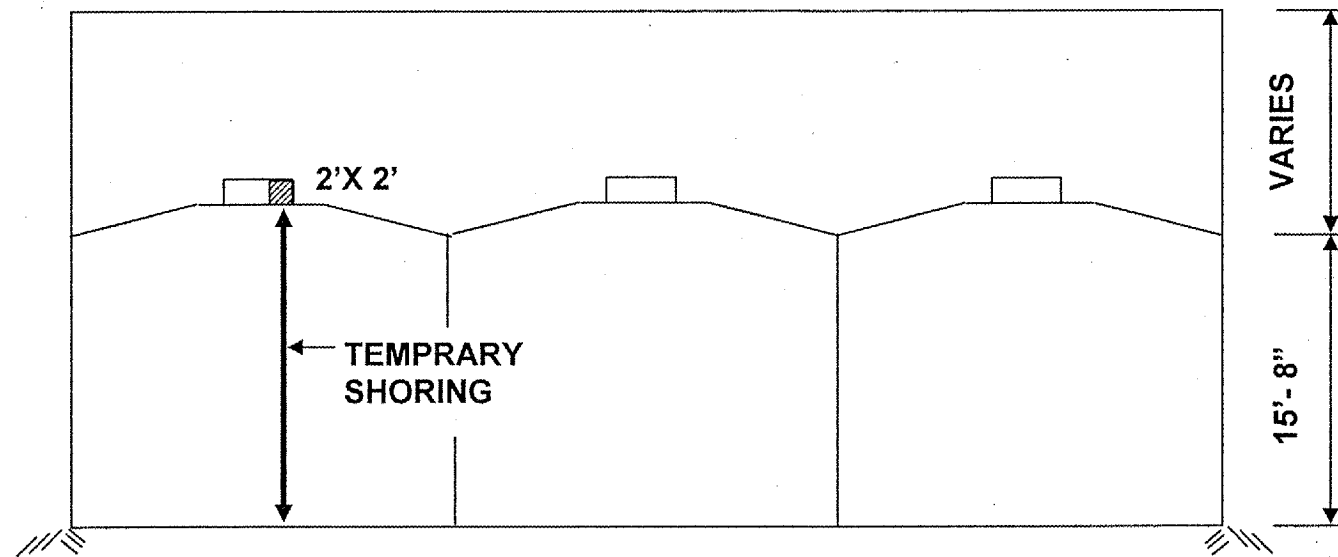
| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|-------------|-------------|--------|--------------|--------------|
| SN 016-2441 | 2004-114 BR | COOK | 17 | 14 |

CONTRACT 62870

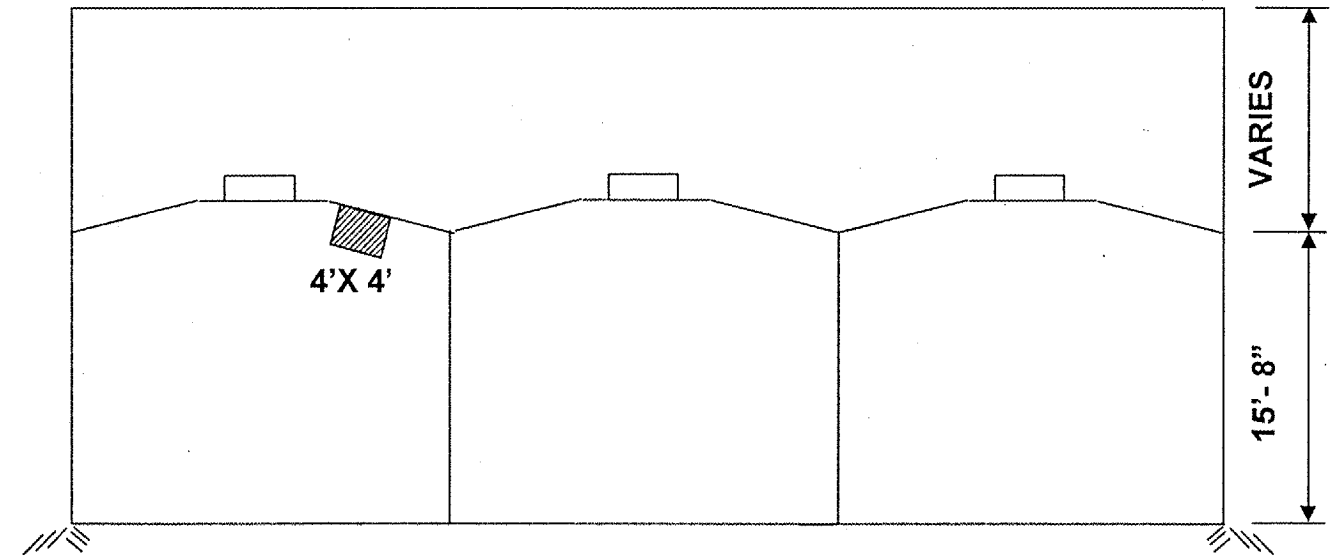
| Total Bill of Material | | |
|-----------------------------------|-------|------|
| Item | Unit | Qty |
| Formed Concrete Repair ≤ 5" | SQ FT | 20.0 |
| Temporary Shoring and Cribbing | L SUM | 1 |
| | | |

General Note:

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.



SOUTH ABUTMENT



NORTH ABUTMENT

| Reaction Table for Temp. Shoring & Cribbing | | | | |
|---|---------------|----------------|---------------|--------------|
| | RDL (kips) | RSDL (kips) | RLI (kips) | RI (kips) |
| SO ABUT | 236 | 0 | 100 | 20 |
| | | | | |
| | | | | |

 Formed Concrete Repair ≤ 5" = 20 SQ FT

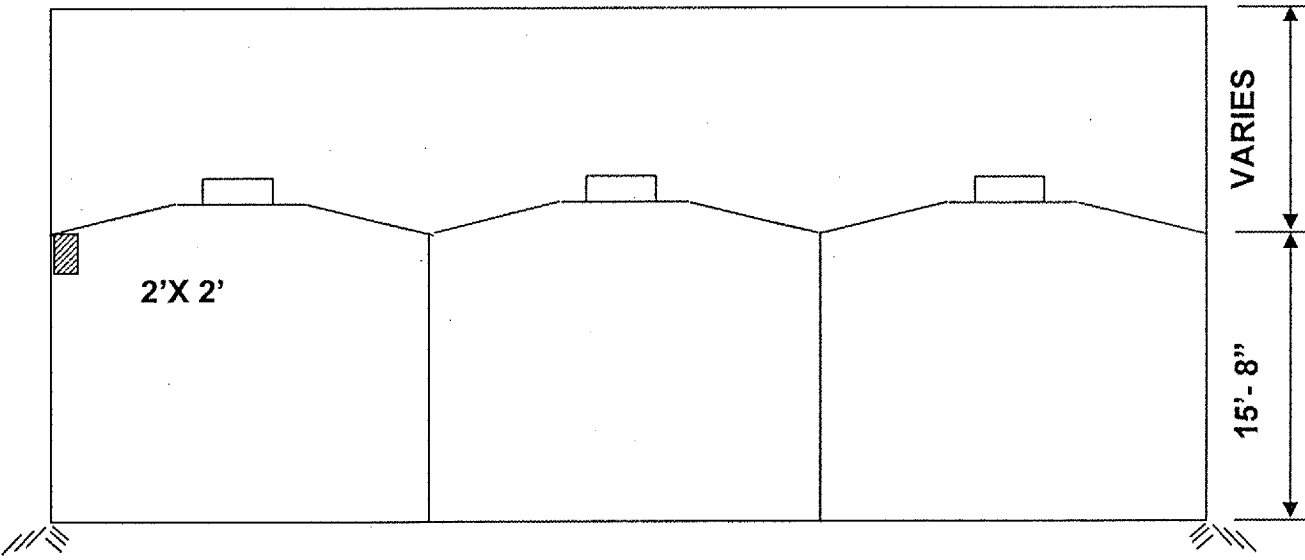
ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE REPAIR
LOCATION 5: STONEY ISLAND AVE
NB OVER 103RD ST
SN 016-2441

| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|-------------|-------------|--------|--------------|--------------|
| SN 016-2442 | 2004-114 BR | COOK | 17 | 15 |

CONTRACT 62870


| Total Bill of Material | | |
|--------------------------------|-------|-----|
| Item | Unit | Qty |
| Formed Concrete Repair ≤ 5" | SQ FT | 4.0 |
| | | |
| | | |

General Note:
 Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

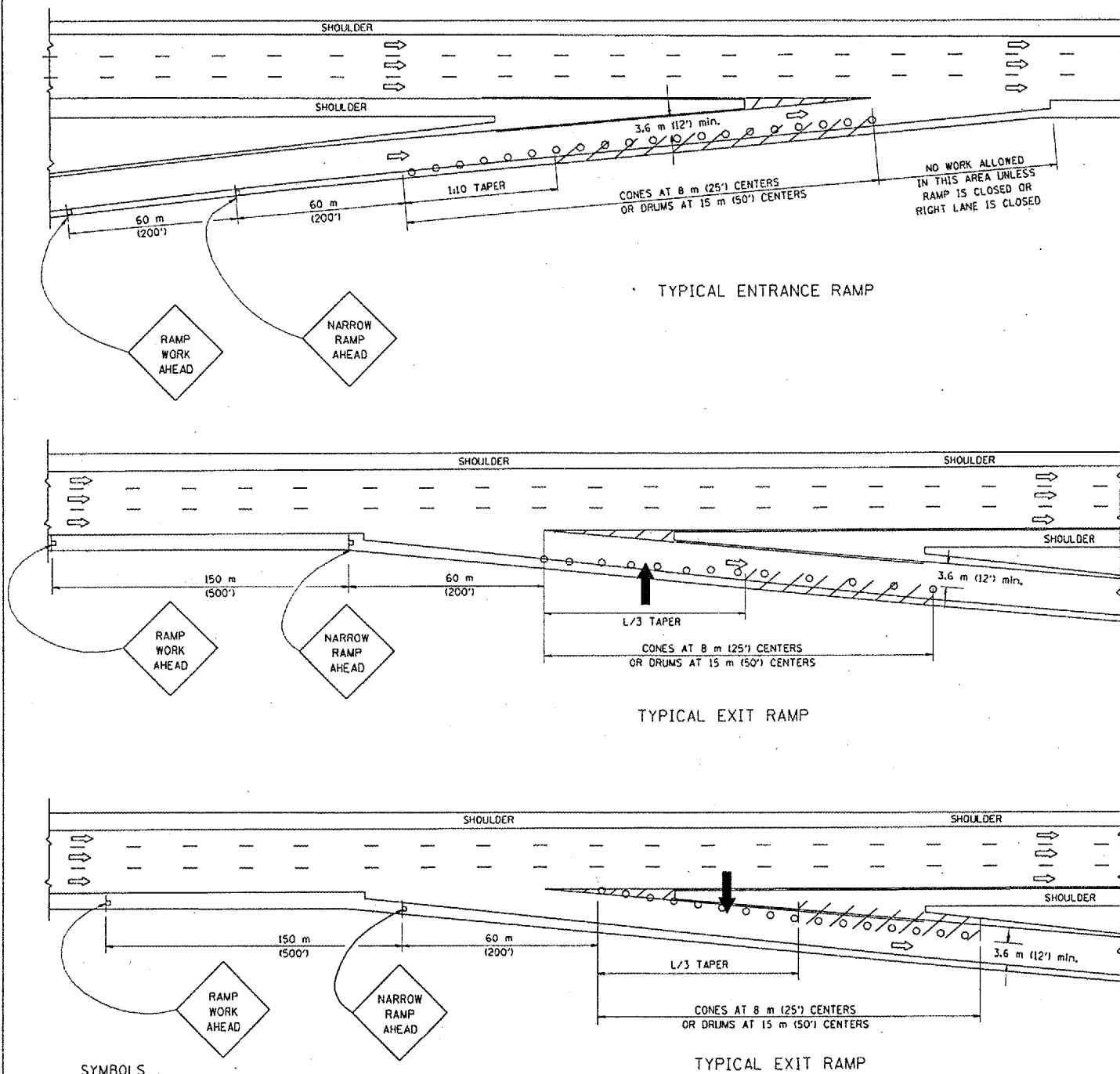


NORTH ABUTMENT

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BRIDGE REPAIR
 LOCATION 6: STONEY ISLAND AVE
 SB OVER 103RD ST
 SN 016-2442

 Formed Concrete Repair ≤ 5 " = 4 SQ FT

PARTIAL RAMP CLOSURE DETAILS



SYMBOLS

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

GENERAL NOTES

1. THE "L" DISTANCE EQUALS:

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

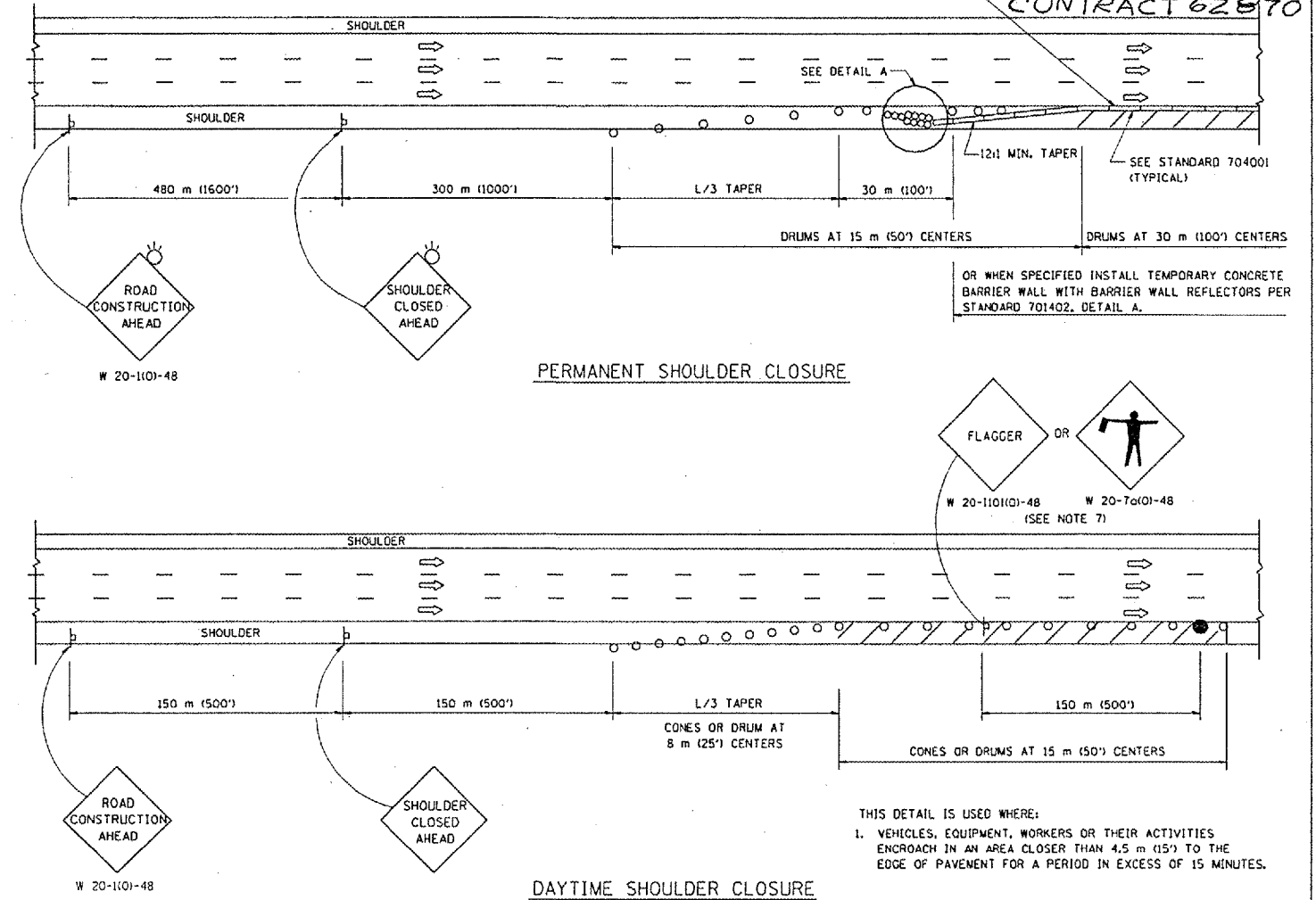
W = WIDTH OF OFFSET IN METERS (FEET)
 S = NORMAL POSTED SPEED KM/H (MPH)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE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

SHOULDER CLOSURE DETAILS

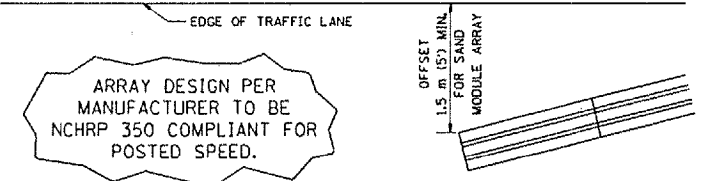
* FAP 341
 ** 2004-114 BR
 REFLECTIVE 150 (6) EDGE LINE ON LOWER SLOPE OF WALL (LEFT EDGE YELLOW, RIGHT EDGE WHITE)

| | | | | |
|---------------------|----------|------------------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ** | ** | COOK | 17 | 16 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT | | |

CONTRACT 62870



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



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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES PARTIAL RAMP CLOSURES

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

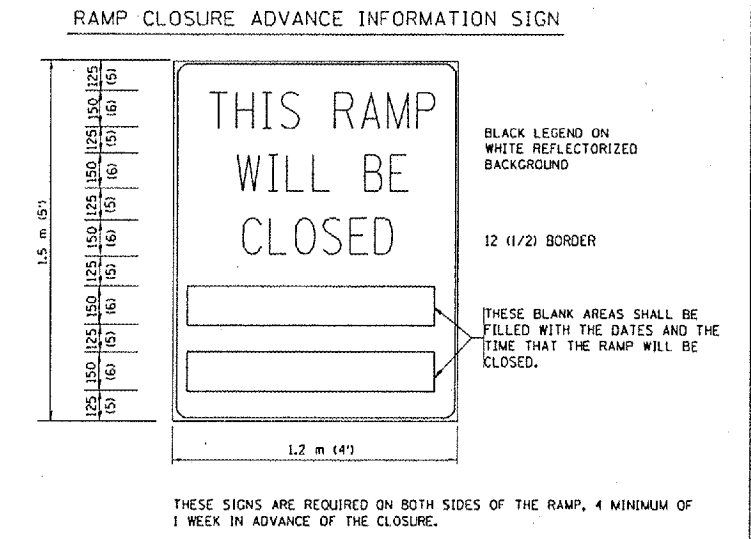
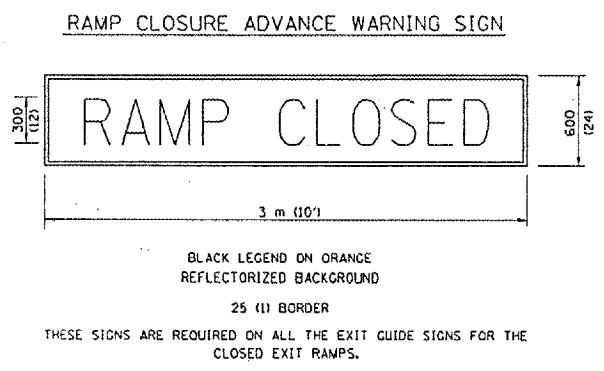
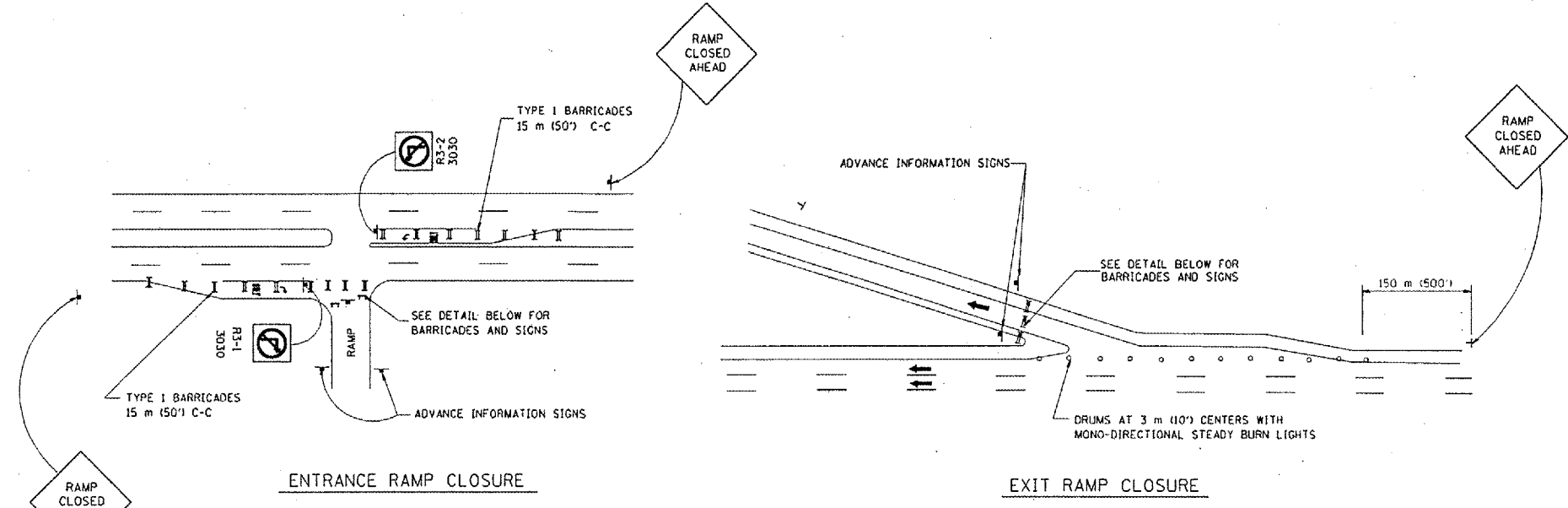
SCALE: NONE
 DATE: 05/06/2003

DRAWN BY: DWS
 CHECKED BY: TC-17

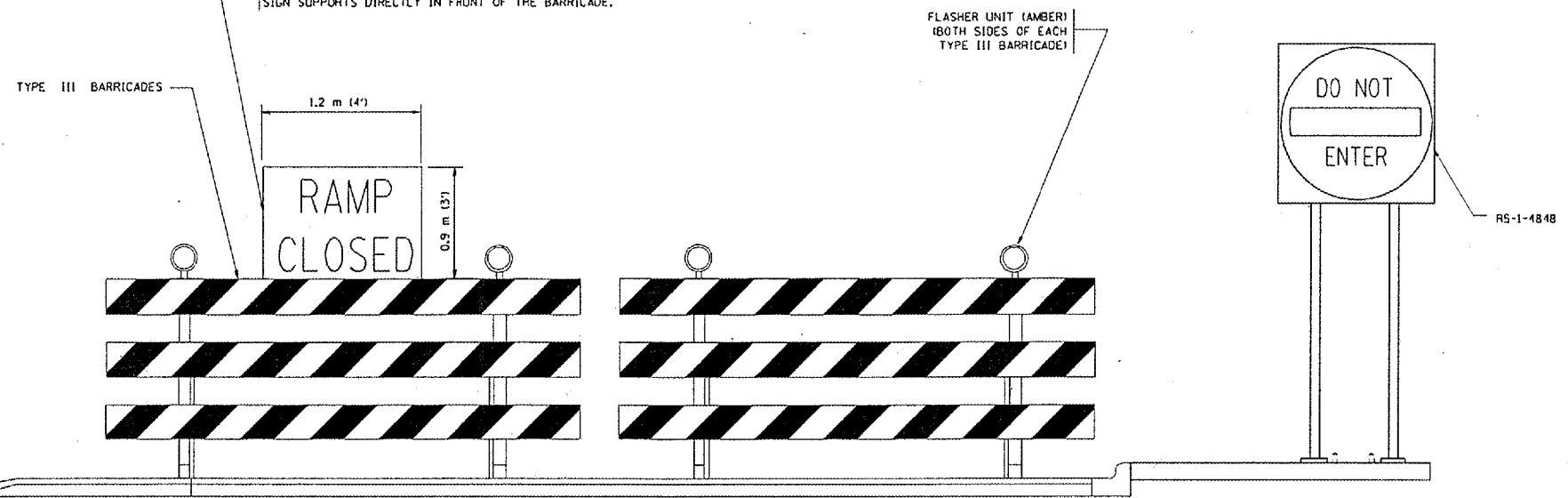
*FAP 341
**2004-114BR

| | | | | |
|---------------------|---------|----------|------------------|-----------|
| P.A. NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | ** | COOK | 1717 | |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | | ILLINOIS | FED. AID PROJECT | |

CONTRACT 62870



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



DETAIL FOR REQUIRED BARRICADES & SIGNS

- GENERAL NOTES:
1. CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 700 (28) HIGH.
 2. STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
 3. A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
 4. FOR DAYTIME RAMP CLOSURES, LASTING 6 HOURS OR LESS, THE CONTRACTOR MAY ELIMINATE THE ADVANCE WARNING SIGNS ON THE EXIT GUIDE SIGNS.
 5. ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
 6. THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL AND PROTECTION.
 7. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.

- NOTES:
1. CONES MAY BE SUBSTITUTED FOR TYPE I AND TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28" IN HEIGHT.
 2. STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
 3. THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS.
 4. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY FOUR (24) HOURS IN LENGTH.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

FREEWAY
ENTRANCE AND EXIT RAMP
CLOSURE DETAILS

| REVISIONS | |
|----------------------------------|-------|
| NAME | DATE |
| DWS | 2-83 |
| DWS | 1/90 |
| DWS | 5/94 |
| DWS | 12/94 |
| DWS/JAF | 12/02 |
| Revise devices to meet NCHRP 350 | 4/03 |

SCALE: NONE
DATE 05/06/2003

DRAWN BY
CHECKED BY
TC-8