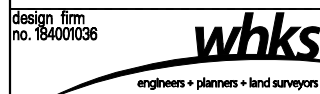
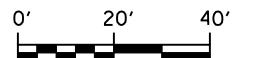


PI STA. = 161+12.74
 Δ = 27° 54' 28.8" (RT)
 D = 0° 52' 30"
 R = 6,548.09'
 T = 1,627.04'
 L = 3,189.49'
 E = 199.11'
 e = 2.0%
 T.R. = N/A
 S.E. RUN = N/A
 P.C. STA. = 144+85.70
 P.T. STA. = 176+75.19

NOTES:

1. THE TRAFFIC CONTROL DETAILS ABOVE SHALL BE WORKED IN CONJUNCTION WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321, "LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER".
2. REMOVE ALL EXISTING STRIPING THAT CONFLICTS WITH STAGE CONSTRUCTION STRIPING PRIOR TO STAGING.
3. OFFSETS FOR TEMPORARY PAVEMENT MARKING AND TEMPORARY CONCRETE BARRIER TAKEN FROM CENTERLINE.
4. COST OF TEMP PAVEMENT MARKING INCLUDED IN COST FOR HIGHWAY STANDARD 701321.



| | | |
|-------------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISOR |
| FILE NAME = D672854.pln sht chatham | CHEKED - | REVISOR |
| PLOT SCALE = 40.0000' / IN. | DRAWN - | REVISOR |
| PLOT DATE = 8/25/2014 | CHECKED - | REVISOR |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE I TRAFFIC CONTROL CHATHAM RD.

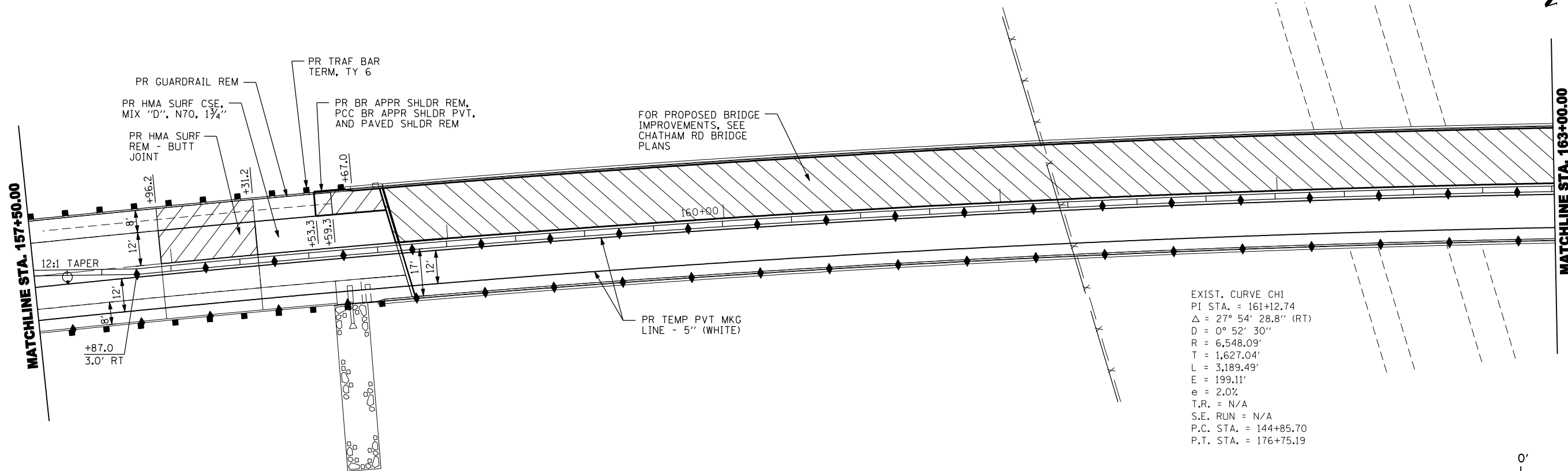
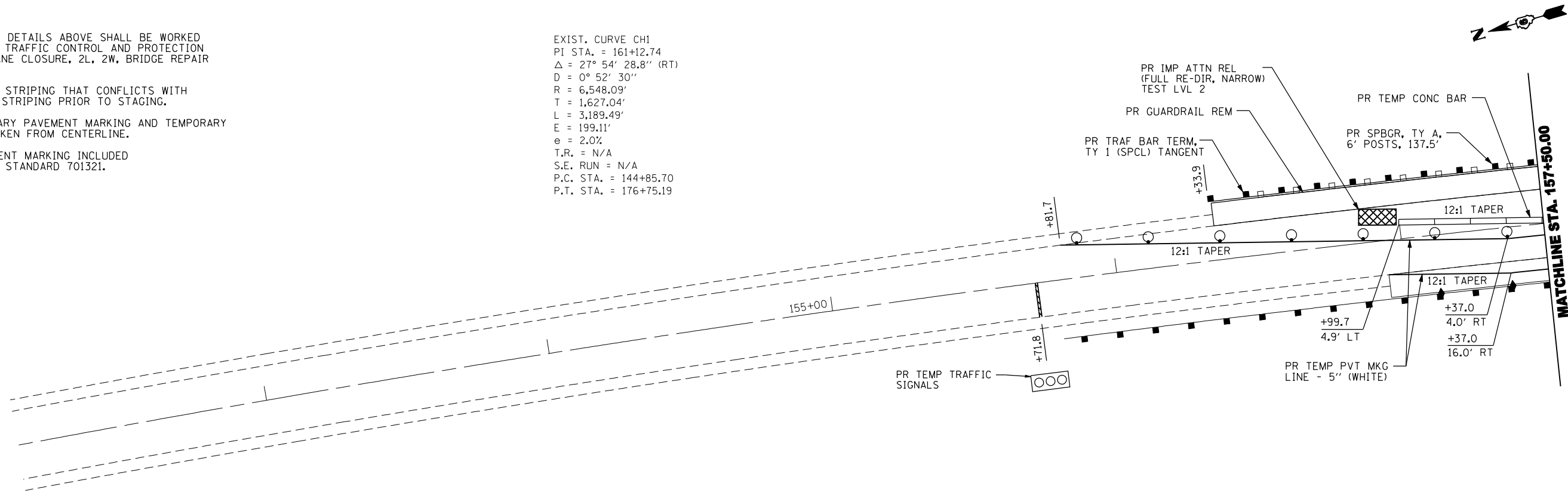
SCALE: 1" = 20' SHEET NO. 2 OF 5 SHEETS STA. 163+00.00 TO STA. 169+00.00

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------------|---------|----------|--------------------|-----------|
| 72 | | SANGAMON | 163 | 101 |
| * (84-9-2&3)RS-2&MISC STRUC REP | | | CONTRACT NO. 72B54 | |
| ILLINOIS FED. AID PROJECT | | | | |

NOTES:

1. THE TRAFFIC CONTROL DETAILS ABOVE SHALL BE WORKED IN CONJUNCTION WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321, "LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER".
2. REMOVE ALL EXISTING STRIPING THAT CONFLICTS WITH STAGE CONSTRUCTION STRIPING PRIOR TO STAGING.
3. OFFSETS FOR TEMPORARY PAVEMENT MARKING AND TEMPORARY CONCRETE BARRIER TAKEN FROM CENTERLINE.
4. COST OF TEMP PAVEMENT MARKING INCLUDED IN COST FOR HIGHWAY STANDARD 701321.

EXIST. CURVE CH1
 PI STA. = 161+12.74
 $\Delta = 27^\circ 54' 28.8''$ (RT)
 $D = 0^\circ 52' 30''$
 $R = 6,548.09'$
 $T = 1,627.04'$
 $L = 3,189.49'$
 $E = 199.11'$
 $e = 2.0\%$
 $T.R. = N/A$
 $S.E. RUN = N/A$
 $P.C. STA. = 144+85.70$
 $P.T. STA. = 176+75.19$



EXIST. CURVE CH1
 PI STA. = 161+12.74
 $\Delta = 27^\circ 54' 28.8''$ (RT)
 $D = 0^\circ 52' 30''$
 $R = 6,548.09'$
 $T = 1,627.04'$
 $L = 3,189.49'$
 $E = 199.11'$
 $e = 2.0\%$
 $T.R. = N/A$
 $S.E. RUN = N/A$
 $P.C. STA. = 144+85.70$
 $P.T. STA. = 176+75.19$



design firm
no. 184001036



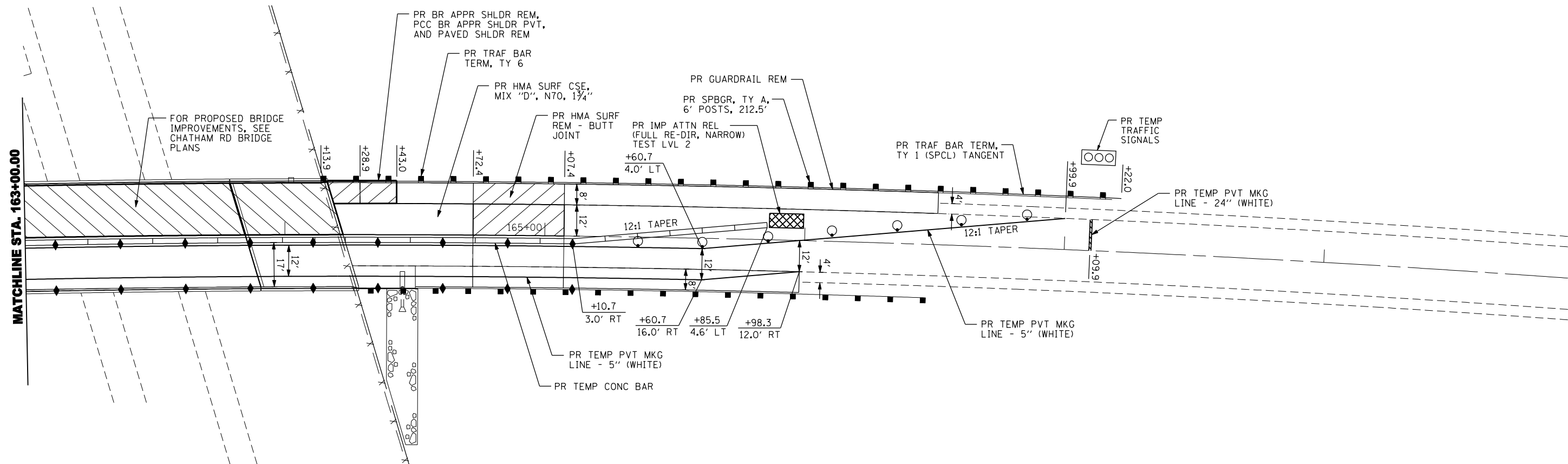
| | | |
|-------------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISOR |
| FILE NAME = D672854.pln sht chatham | CHECKED - | REVISOR |
| PLOT SCALE = 40.0000' / IN. | DRAWN - | REVISOR |
| PLOT DATE = 8/25/2014 | CHECKED - | REVISOR |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE II TRAFFIC CONTROL CHATHAM RD.

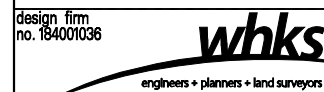
SCALE: 1" = 20' SHEET NO. 3 OF 5 SHEETS STA. 152+00.00 TO STA. 163+00.00

| | | | | |
|--------------------------------|---------|-----------------|--------------------|---------------|
| F.A.I. RTE. 72 | SECTION | COUNTY SANGAMON | TOTAL SHEETS 163 | SHEET NO. 102 |
| •(84-9-2&3)RS-2&MISC STRUC REP | | | CONTRACT NO. 72B54 | |
| ILLINOIS FED. AID PROJECT | | | | |



EXIST. CURVE CHI
 PI STA. = 161+12.74
 $\Delta = 27^\circ 54' 28.8''$ (RT)
 $D = 0^\circ 52' 30''$
 $R = 6,548.09'$
 $T = 1,627.04'$
 $L = 3,189.49'$
 $E = 199.11'$
 $e = 2.0\%$
 $T.R. = N/A$
 $S.E. RUN = N/A$
 $P.C. STA. = 144+85.70$
 $P.T. STA. = 176+75.19$

- NOTES:**
1. THE TRAFFIC CONTROL DETAILS ABOVE SHALL BE WORKED IN CONJUNCTION WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321, "LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER".
 2. REMOVE ALL EXISTING STRIPING THAT CONFLICTS WITH STAGE CONSTRUCTION STRIPING PRIOR TO STAGING.
 3. OFFSETS FOR TEMPORARY PAVEMENT MARKING AND TEMPORARY CONCRETE BARRIER TAKEN FROM CENTERLINE.
 4. COST OF TEMP PAVEMENT MARKING INCLUDED IN COST FOR HIGHWAY STANDARD 701321.



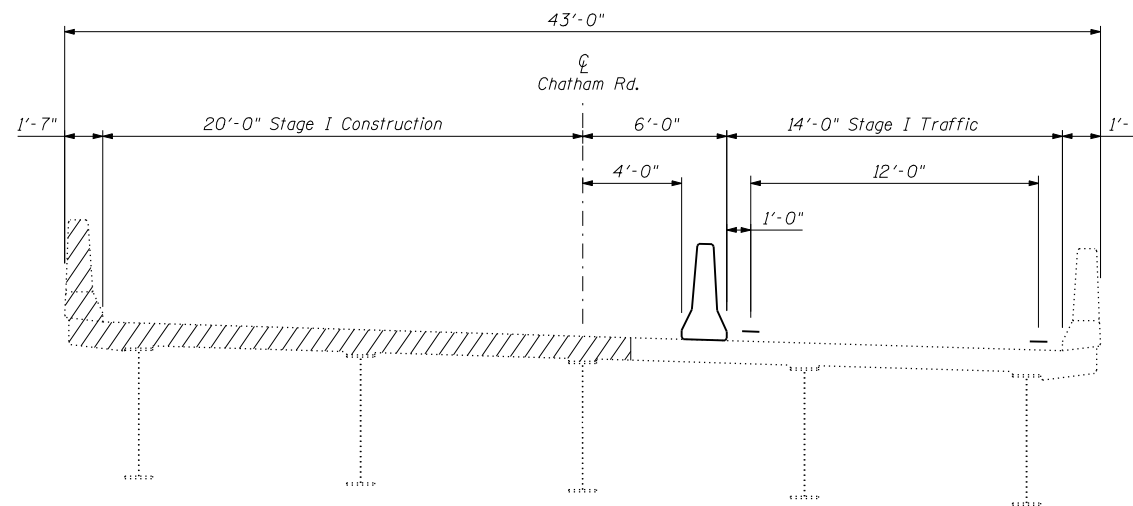
| | | |
|-------------------------------------|------------|-------|
| USER NAME = gjameson | DESIGNED - | REVIS |
| FILE NAME = D672854.pln sht chatham | CHECKED - | REVIS |
| PLOT SCALE = 40.0000' / IN. | DRAWN - | REVIS |
| PLOT DATE = 8/25/2014 | CHECKED - | REVIS |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

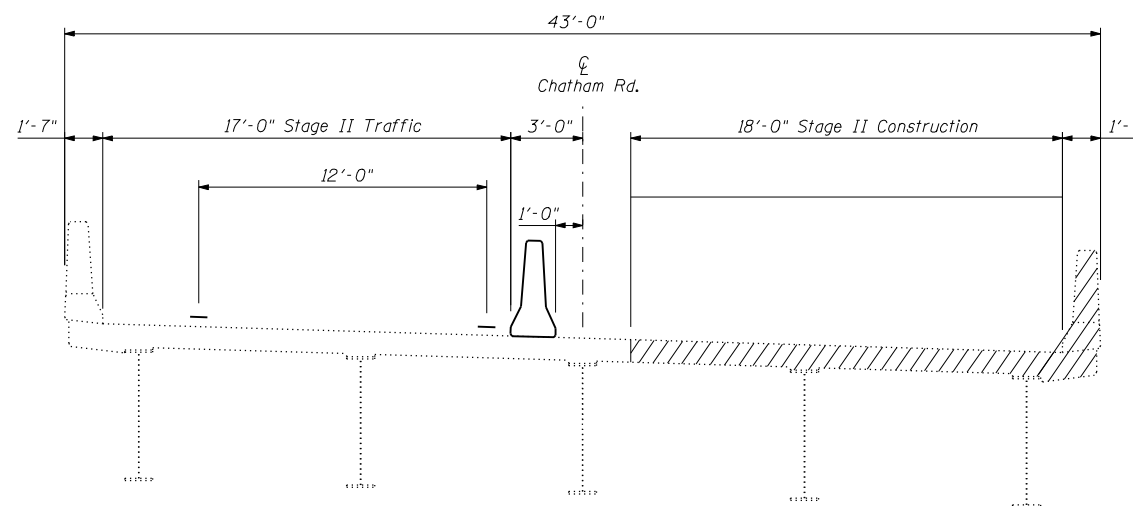
STAGE II TRAFFIC CONTROL CHATHAM RD.

SCALE: 1" = 20' SHEET NO. 4 OF 5 SHEETS STA. 163+00.00 TO STA. 169+00.00

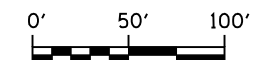
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------------------|---------|----------|--------------------|-----------|
| 72 | | SANGAMON | 163 | 103 |
| •(84-9-2&3)RS-2&MISC STRUC REP | | | CONTRACT NO. 72B54 | |
| ILLINOIS FED. AID PROJECT | | | | |



STAGE I
(Looking south)



STAGE II
(Looking south)



design firm
no. 184001036



| | | |
|-------------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672854.plt sht chatham | CHEKED - | REVISED |
| PLOT SCALE = 8.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/25/2014 | CHECKED - | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE I & STAGE II MAINTENANCE OF TRAFFIC
SN 084-0185, CHATHAM RD. OVER FAI 72**

SCALE: NTS SHEET NO. 5 OF 5 SHEETS STA. N/A TO STA. N/A

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------------------|---------|----------|--------------------|-----------|
| 72 | | SANGAMON | 163 | 104 |
| •(84-9-2&3)RS-2&MISC STRUC REP | | | CONTRACT NO. 72B54 | |
| ILLINOIS FED. AID PROJECT | | | | |

Notes:

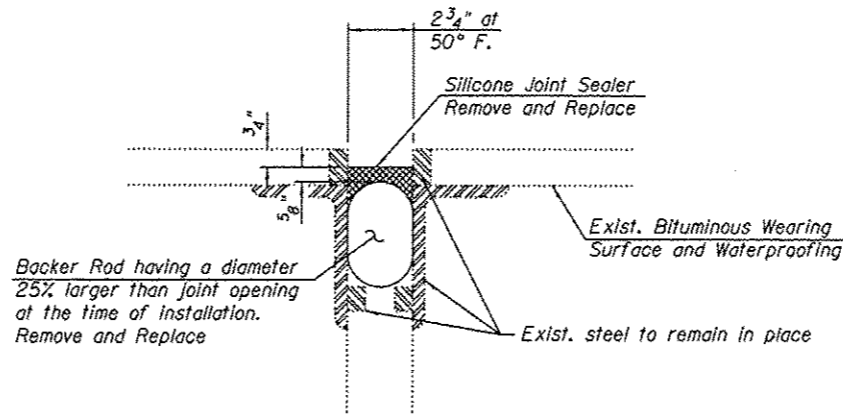
The existing expansion joints at the abutments of each of the following structures shall be replaced according to the details indicated herein:

- SN 084-0140
- SN 084-0141
- SN 084-0143
- SN 084-0144
- SN 084-0145
- SN 084-0146

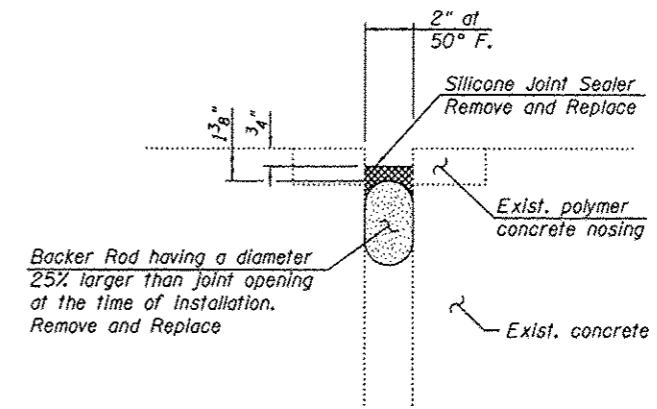
Except for SN 084-0141, the existing backer rod and silicone joint sealer shall be removed. At SN 084-0141, the existing preformed joint seal shall be removed. Removal of the existing backer rod, joint sealer, and preformed joint seal will not be measured for payment but shall be included in the cost of Silicone Joint Sealer, of the size specified.

Joint replacement for each of the structures shall be completed using daytime lane closures in accordance with Highway Standard 701201.

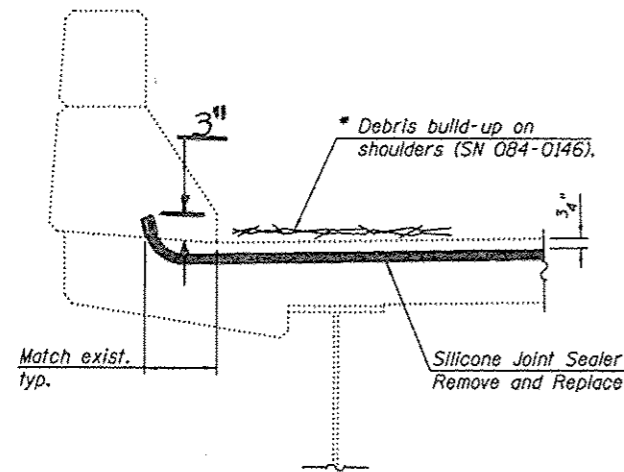
See sheets 2 through 13 for existing structure information.



SECTION THRU EXPANSION JOINT
(Typ. for SN 084-0140, SN 084-0141 similar.)



SECTION THRU EXPANSION JOINT
(Typ. for SN 084-0143, 0144, 0145, and 0146)



TYPICAL END OF SEAL TREATMENT

BILL OF MATERIAL

(SN 084-0140)

| Item | Unit | Total |
|-------------------------------|------|-------|
| Silicone Joint Sealer, 2 3/4" | Foot | 60 |

BILL OF MATERIAL

(SN 084-0141)

| Item | Unit | Total |
|-------------------------------|------|-------|
| Silicone Joint Sealer, 2 3/4" | Foot | 62 |

BILL OF MATERIAL

(SN 084-0143)

| Item | Unit | Total |
|---------------------------|------|-------|
| Silicone Joint Sealer, 2" | Foot | 59 |

BILL OF MATERIAL

(SN 084-0144)

| Item | Unit | Total |
|---------------------------|------|-------|
| Silicone Joint Sealer, 2" | Foot | 55 |

BILL OF MATERIAL

(SN 084-0145)

| Item | Unit | Total |
|---------------------------|------|-------|
| Silicone Joint Sealer, 2" | Foot | 61 |

*** BILL OF MATERIAL**

(SN 084-0146)

| Item | Unit | Total |
|---------------------------|------|-------|
| Silicone Joint Sealer, 2" | Foot | 55 |

* Debris build-up on structure shoulders shall be completely removed and disposed of according to the Standard Specifications. The cost of removing and disposing of debris shall be considered in the Contract Unit prices and no additional compensation will be made.



EXISTING STRUCTURE- S.N. 069-0140 is 32'-0" wide by 202'-0" Bk. to Bk. Approach Bents. 2 main spans and 2 approach spans, This structure carries T.R. 4 over F.A.I. Rte. 72

THIS IMPROVEMENT INCLUDES THE REMOVAL OF THE EXISTING BITUMINOUS WEARING SURFACE AND REPLACEMENT WITH PROPOSED BITUMINOUS CONCRETE SURFACE AND WATERPROOFING MEMBRANE SYSTEM, INSTALLING FLOOR DRAIN EXTENSIONS, AND INSTALLING SILICONE JOINT SEALER AT EXPANSION JOINTS.

| TOTAL BILL OF MATERIALS | | |
|--|---------|-------|
| ITEM | UNIT | TOTAL |
| ① SILICONE JOINT SEALER | FT. | 60 |
| ① FLOOR DRAIN EXTENSION | EACH | 20 |
| * BITUMINOUS CONCRETE REMOVAL (DECK) | SQ. YD. | 635 |
| BITUMINOUS CONCRETE SURFACE, CSE., MIX. C. CL. I, TYPE 2 | TON | 53.3 |
| WATERPROOFING MEMBRANE SYSTEM | SQ. YD. | 635 |
| DECK SLAB REPAIR (PARTIAL) | SQ. YD. | 4.0 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

① SEE SPECIAL PROVISIONS
* Milling is not allowed.

GENERAL NOTES

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.

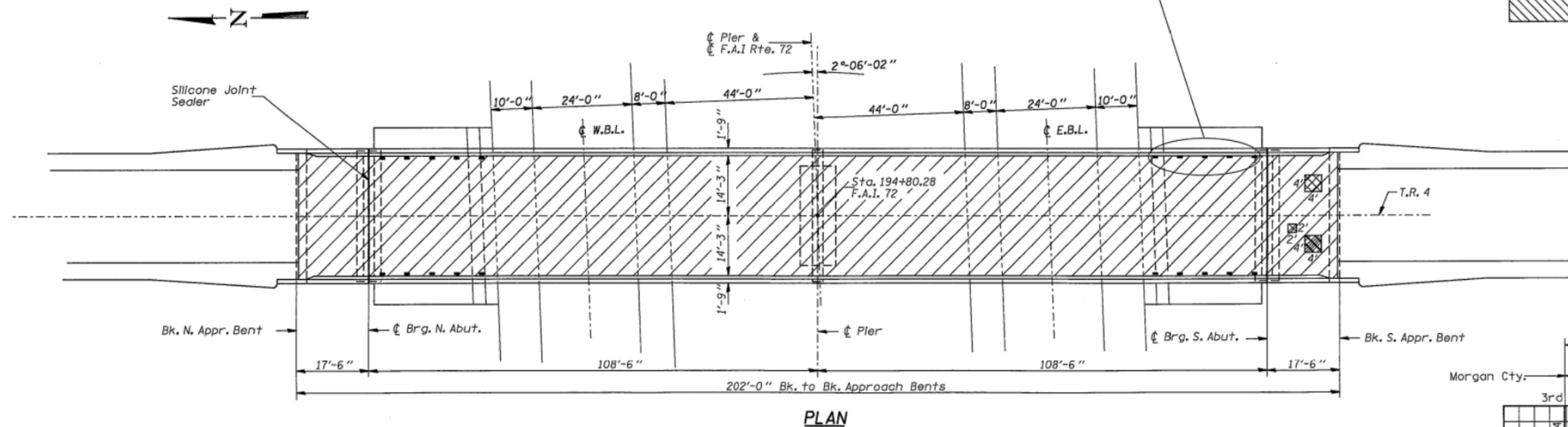
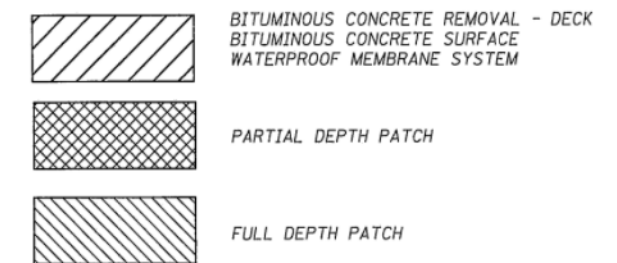
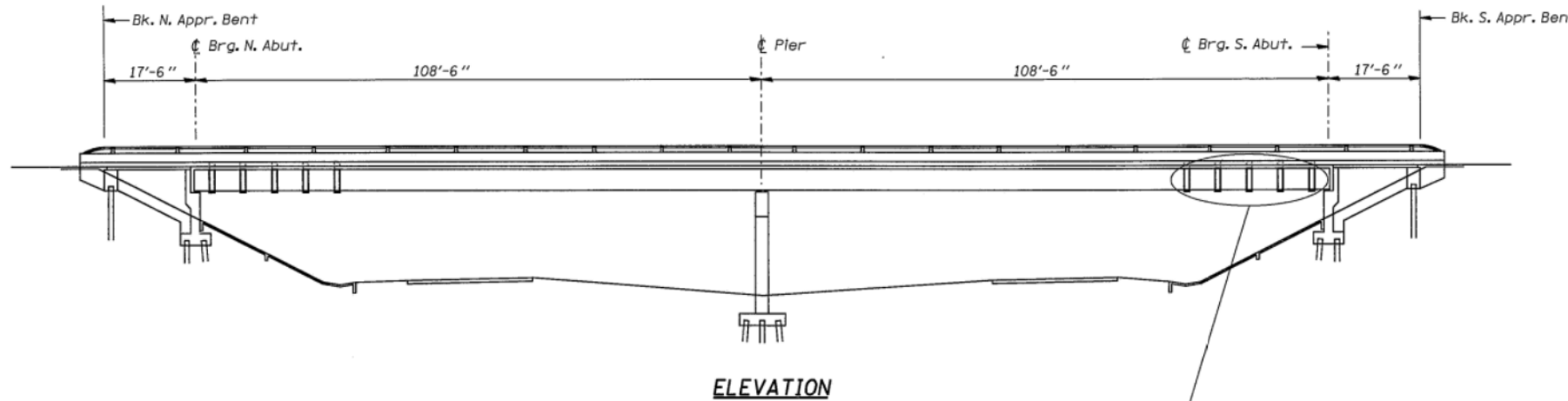
Deck patching/repair quantities are estimated and their locations are not known. The Engineer shall determine the exact locations and the quantities of the work in the field and draw them on the As-Built set of plans.

Date of Bridge Deck Survey - 12/16/99

| | | | | |
|-----------------------|---------|-----------------|--------------|-----------|
| F.A.I. Rte. No. | SEC | COUNTY | TOTAL SHEETS | SHEET NO. |
| 72 | * | MORGAN SANGAMON | 98 | 95 |
| FED. ROAD DIST. NO. 1 | SECTION | PROJECT | | |

SHEET NO. 1
2 SHEETS

• DISTRICT 6 RESURFACING 2000



GENERAL PLAN & ELEVATION
T.R. 4 OVER F.A.I. 72
DISTRICT 6 RESURFACING 2000
MORGAN & SANGAMON COUNTYS
STATION 194+80.28
STR. NO. 084-0140

FOR INFORMATION ONLY

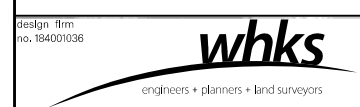
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 084-0140

| | | | | |
|-------------|---------|----------|--------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 72 | * | SANGAMON | 163 | 106 |
| | | | CONTRACT NO. 72B54 | |

SHEET NO. 2 OF 13 SHEETS

ILLINOIS FED. AID PROJECT
• (84-9-28)RS-2&MISC STRUC REP

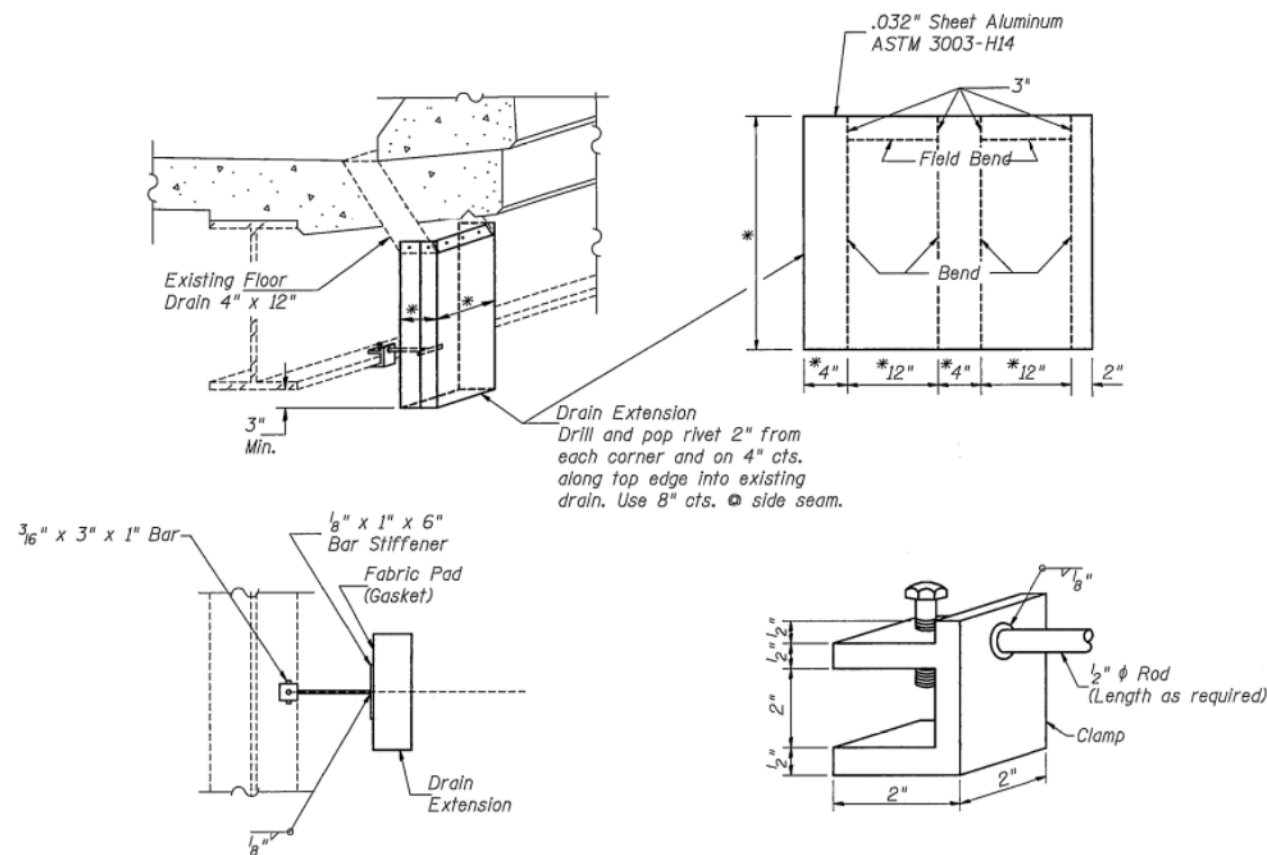


| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

| | | | | |
|-----------------------|----------|-----------------|--------------|-----------|
| F.A.I. ROUTE NO. | SEC. | COUNTY | TOTAL SHEETS | SHEET NO. |
| 72 | . | MORGAN SANGAMON | 98 | 96 |
| FED. ROAD DIST. NO. 1 | ILLINOIS | PROJECT | | |

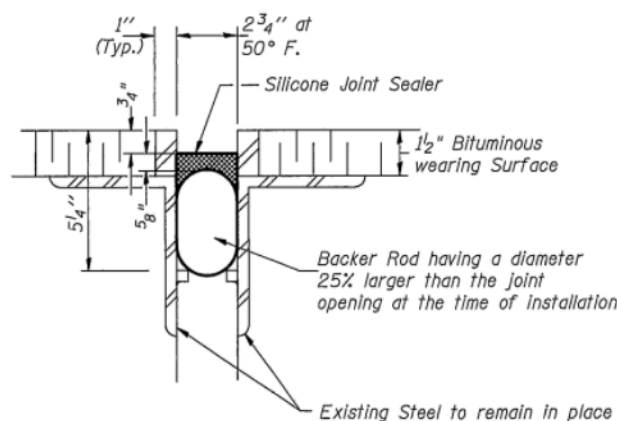
SHEET NO. 2
2 SHEETS

DISTRICT 6 RESURFACING 2000

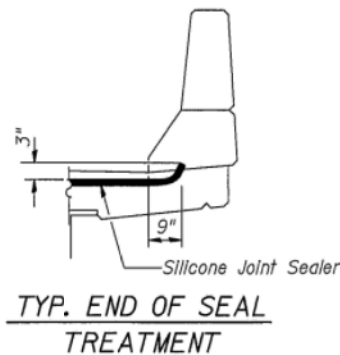


Notes: Pop rivet the $\frac{1}{8}$ " x 1" bar to Drain Extension. Weld or securely attach rod to both the clamp and bar stiffener. Use $\frac{3}{16}$ " stainless steel pop rivets of sufficient length. Clamp shown in approximate dimensions. Similar type commercially available may be substituted. An aluminum extrusion drain of similar dimensions may be substituted. * Field measure cut to fit existing drain.

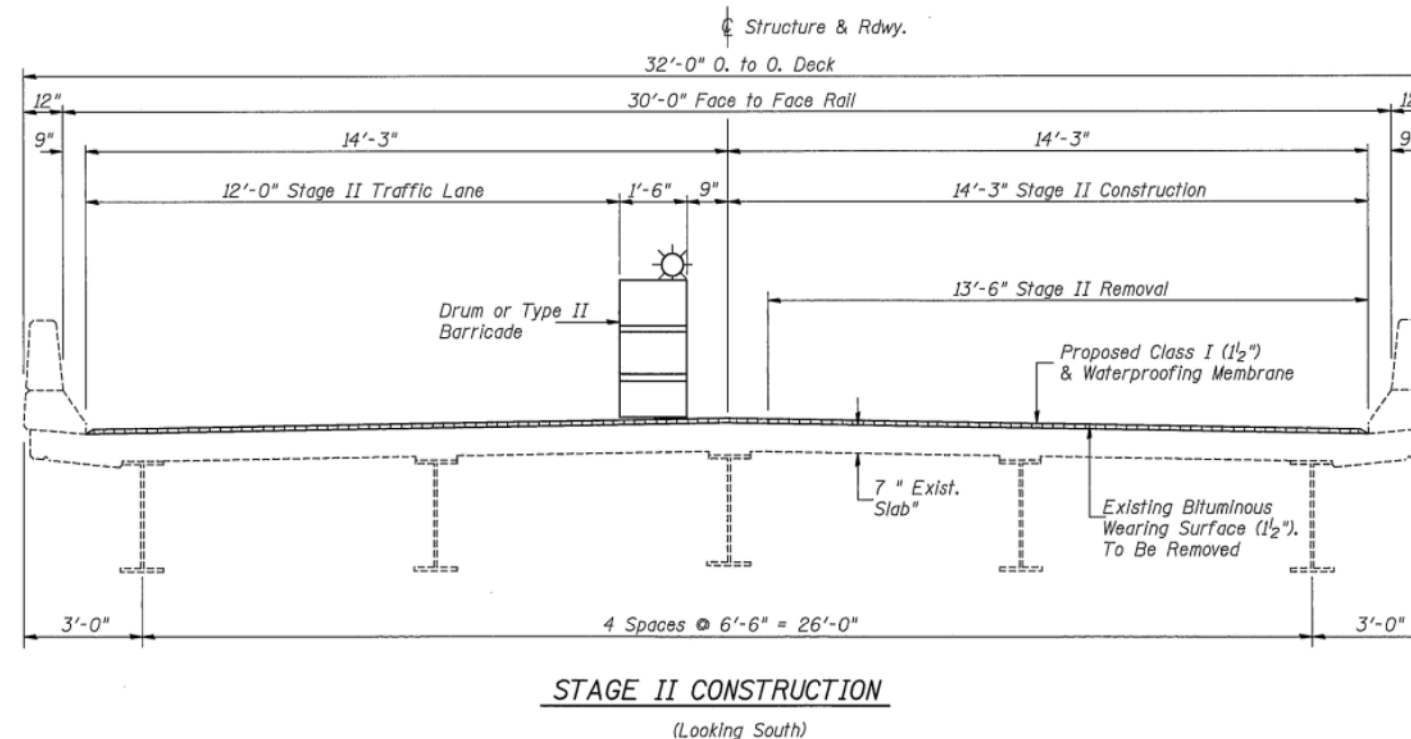
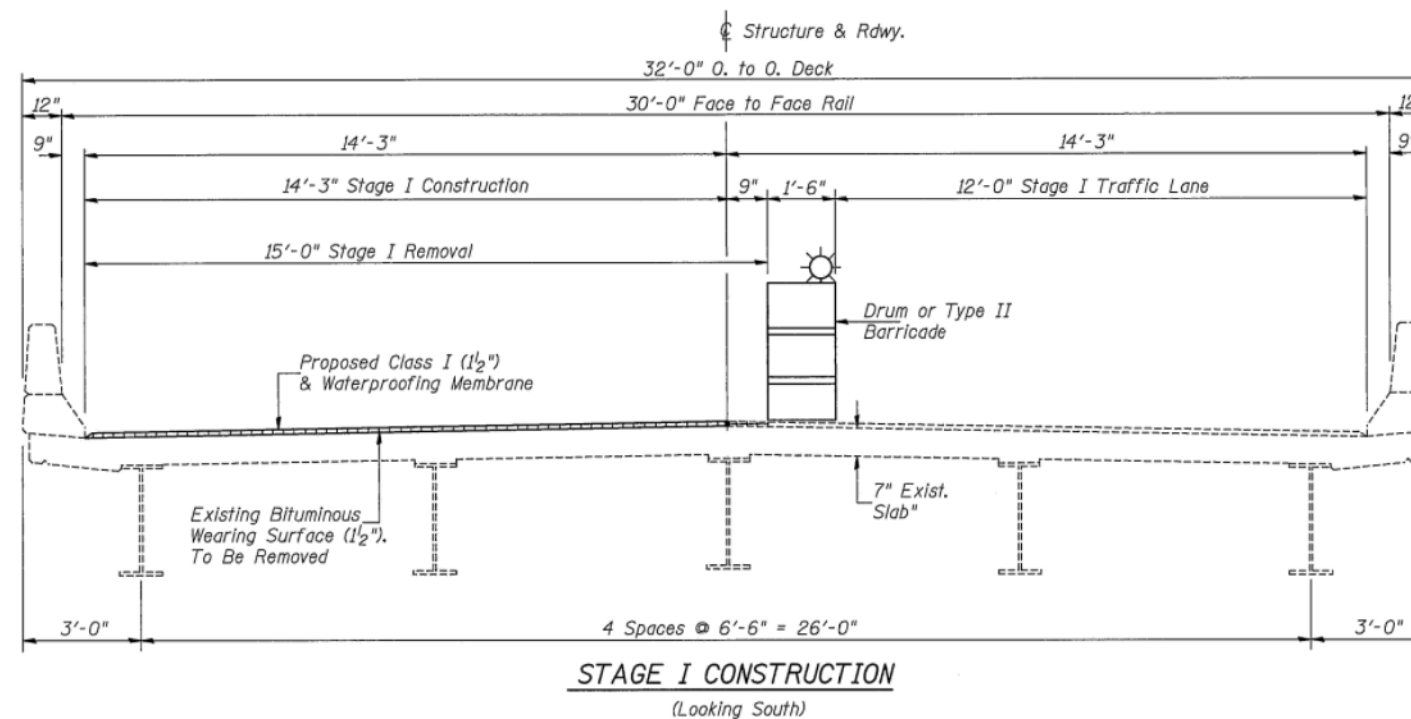
DECK DRAIN EXTENSION DETAIL



SILICONE JOINT SEALER DETAIL
(at Rt.L's to Joint)



TYP. END OF SEAL TREATMENT



DETAILS
I.R. 4 OVER F.A.I. 72
DISTRICT 6 RESURFACING 2000
MORGAN & SANGAMON COUNTYS
STATION 194+80.28
STR. NO. 084-0140

FOR INFORMATION ONLY

Design firm
no. 184001036



| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 084-0140

SHEET NO. 3 OF 13 SHEETS

| | | | | |
|--------------------|---------|----------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 72 | . | SANGAMON | 163 | 107 |
| CONTRACT NO. 72B54 | | | | |

ILLINOIS FED. AID PROJECT
• (84-9-283)RS-2&MISC STRUC REP

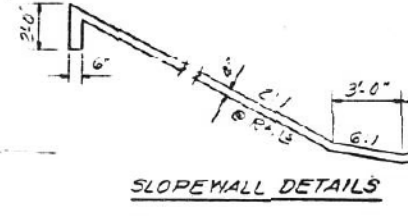
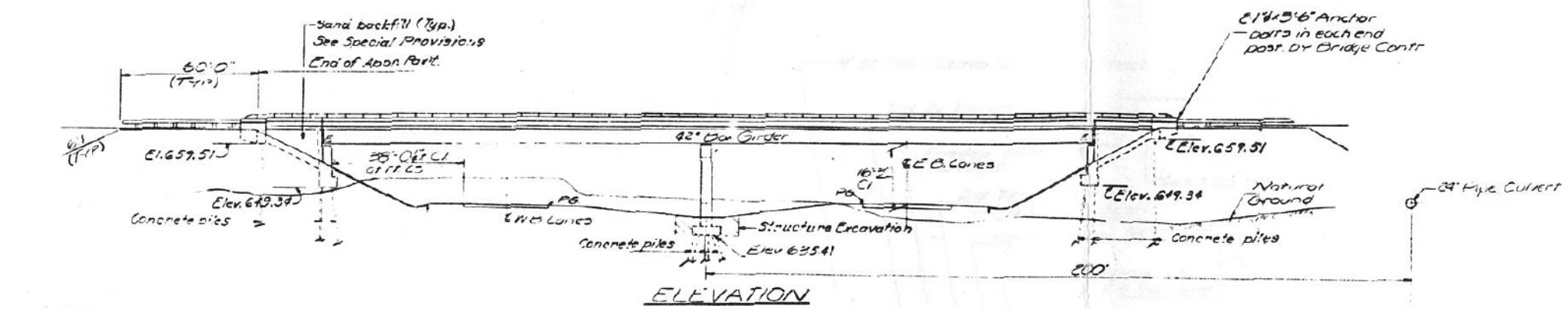
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | |
|--------------|-----|-------------|----|-------|
| DATE | NO. | DESCRIPTION | BY | CHKD. |
| 4-9-68 | 1 | PRELIMINARY | JL | JL |
| TOTAL SHEETS | | 13 SHEETS | | |

GENERAL NOTES

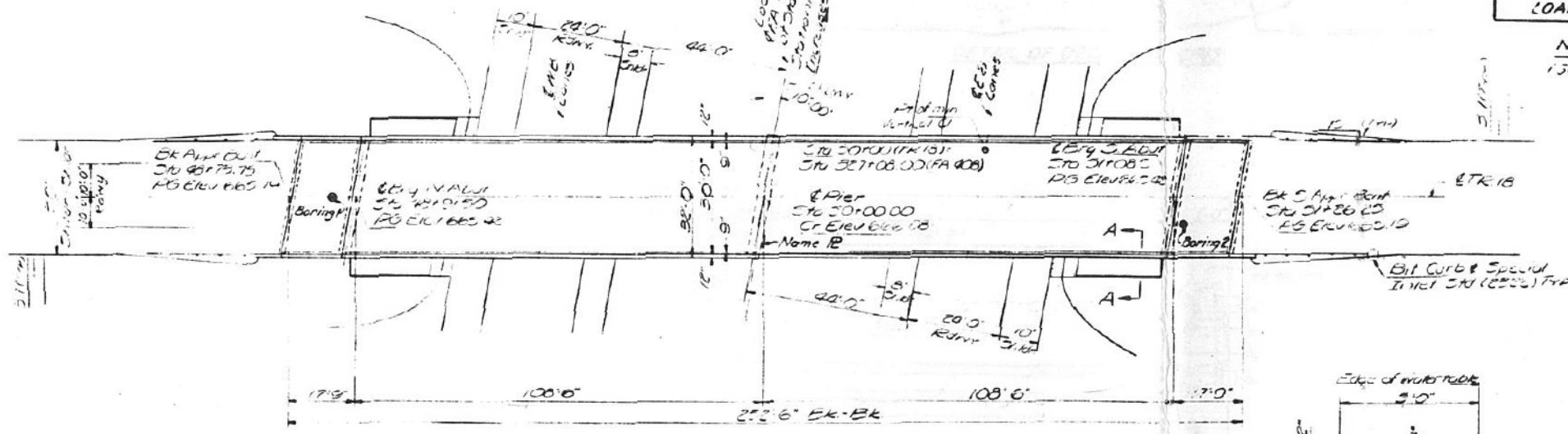
All reinforcement bars shall be lapped 24 dia. unless otherwise shown.
Fasteners shall be high strength bolts. Bolts 3/4"; cover holes 1/8"; unless otherwise noted.
Calculated weight of Structural Steel = 236,550 Lbs.
The basic lead silico chromate paint system shall be used for shop and field painting of Structural Steel.
Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length, each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
Slope wall shall be reinforced with welded wire fabric G-6 mesh, weighing 58# per 100 sq. ft.
The Contractor shall drive 3 concrete test piles in a permanent location, 1 @ North Abutment, 1 @ South Bend and 1 @ Pier as directed by the Engineer before ordering the remainder of piles.
Concrete piles at abutments shall be driven in holes precast through the embankment in accordance with Article 513.09(c) of the Standard Specifications.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Standard Concrete Protective Coat shall not be applied to surfaces to which Coal Tar Inter-layer Protective Coat is applied.
All interior surfaces of Box Girders shall be given two shop coats of paint and spot painted in the field after cross frames and trusses are removed. No additional field coat will be required for interior surfaces.
The exterior surface of Aluminum access doors shall be cleaned and given a washcoat pretreatment in accordance with steel structures painting Council's Specifications SSPC-SP1 and SSPC-PT3 followed by the basic lead silico chromate painting specified for Structural Steel.
Anchor bolts shall be set before beams are set in place.



STATION 327+08.00
BUILT BY
STATE OF ILLINOIS
F.A. RTE. 408 SEC. 84-9-1NB
F.A. PROJ. EBF-408-2 (13)
LOADING HS 15

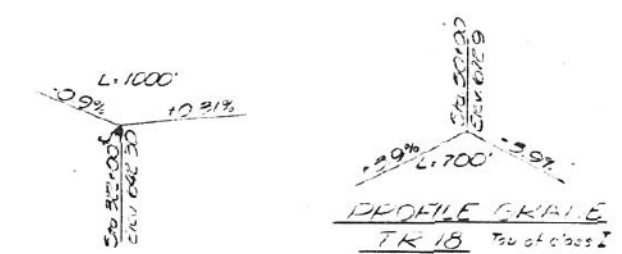
NAME PLATE
(See Std. 2113)



084-0141

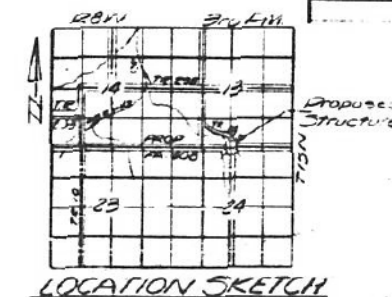
TOTAL BILL OF MATERIAL

| Item | Unit | Spec | Sub | Total |
|--|----------|--------|--------|--------|
| Structure Excavation | Cu. Yds. | | 50 | 50 |
| Class X Concrete | Cu. Yds. | 263.2 | 168.4 | 431.6 |
| Reinforcement Bars | Lbs. | 63,650 | 20,750 | 84,400 |
| Bitum. Concrete Surface Course Class I | Tons | 65 | | 65 |
| Protective Coat | Sq. Yds. | 194 | | 194 |
| Structural Steel | L.S. | L.S. | | L.S. |
| Steel Shear Connectors | Each | 4800 | | 4800 |
| Aluminum Railing | Lin. Ft. | 521 | | 521 |
| Concrete Piles | Lin. Ft. | | 1,147 | 1,147 |
| Test Piles (Concrete) | Each | | 3 | 3 |
| Name Plates | Each | | 1 | 1 |
| Slope Wall (4') | Sq. Yds. | | 356 | 356 |
| Coal Tar Interlayer Protective Coat | Sq. Yds. | 795 | | 795 |
| Preformed Joint Sealer | Lin. Ft. | 65 | | 65 |
| Sand Backfill | Cu. Yds. | | 145 | 145 |



DESIGN STRESSES
 $f_c = 1400 \text{ psi}$ (Sub., Curb, Parapet)
 $f_c = 1000 \text{ psi}$ (Super.)
 $f_s = 20000 \text{ psi}$ (Struct. Reinf.)
 $v_c = 75 \text{ psi}$ (Ftyg)
 $n = 10$
 Allow. for 25#150 ft for 10' HS
 Design Specifications 1969
 AASHTO (as applicable)
 LOADING HS 15-44

CURVE DATA F.A. 408
 PI Sta. 551+75.57
 $\Delta = 0^\circ 01' 18''$ LT
 $L = 0' 00''$
 $T = 532.51'$
 $L = 1065.0'$
 $R = 171,857.95'$
 $E = 0.83'$
 PC Sta. 551+75.57
 PT Sta. 551+75.57 (BK)
 $\Delta = 5^\circ 52' 51''$ (ANG)



PROFILE GRADE
FA RTE 408
(at median edge)

| | |
|----------|----|
| DESIGNED | |
| CHECKED | |
| DRAWN | |
| CHECKED | JL |

EXAMINED
 July 12 1972
 PASSED
 APPROVED

FOR INFORMATION ONLY.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 084-0141

PROJECT EBF-408-2 (13)
GENERAL PLAN & ELEVATION
TR 18 over F.A. RTE 408
F.A. RTE 408-SEC. 84-9-1NB
SANGAMON COUNTY
STATION 327+08.00 (FA 408)
STATION 50+00 (TR 18)

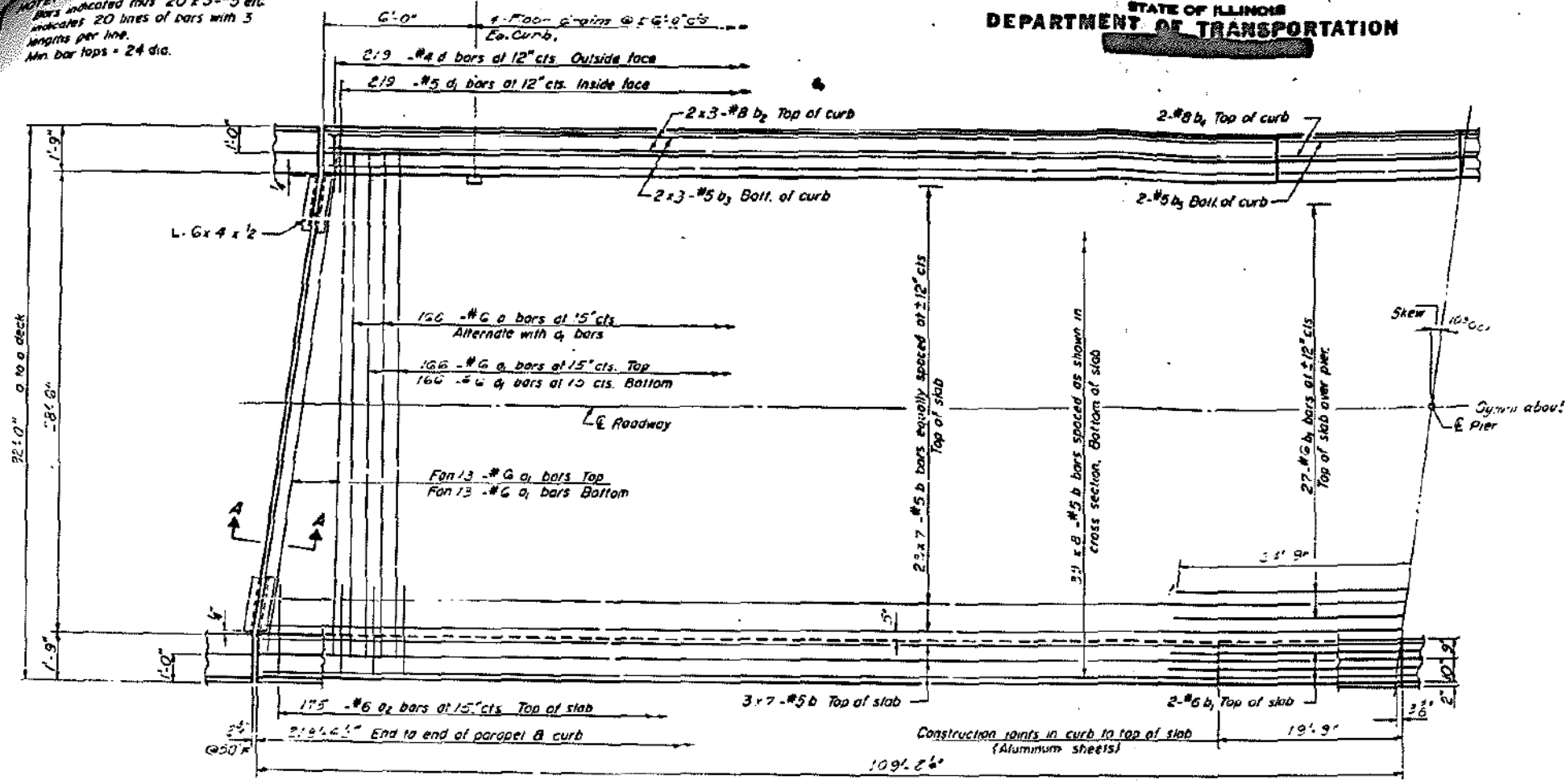
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| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

| | | | | |
|-----------|---------|----------|--------------|--------------------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 72 | . | SANGAMON | 163 | 108 |
| | | | | CONTRACT NO. 72B54 |

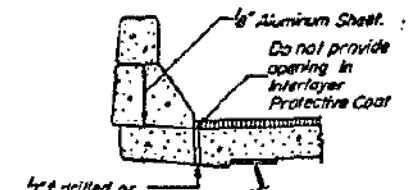
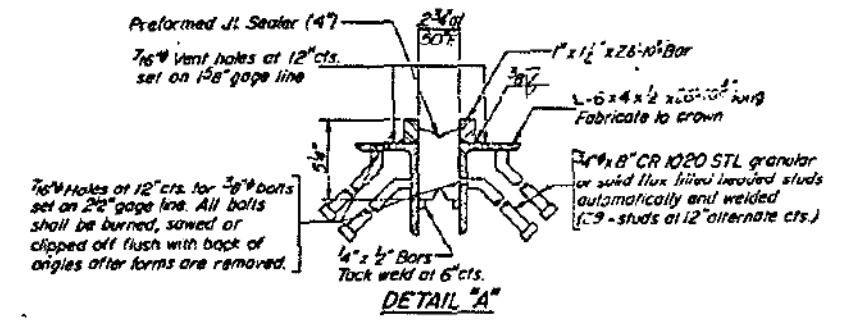
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | |
|-------------|---------|----------|-------|-----------|
| PROJECT NO. | DATE | DESIGNER | SCALE | SHEET NO. |
| 408 TR | 8/28/77 | SANGAMON | 48 | 13 |

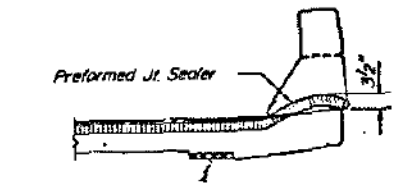
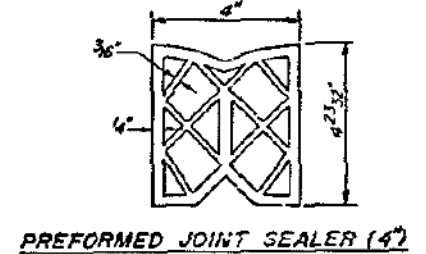
NOTE: Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line. Min. bar tops = 24 dia.



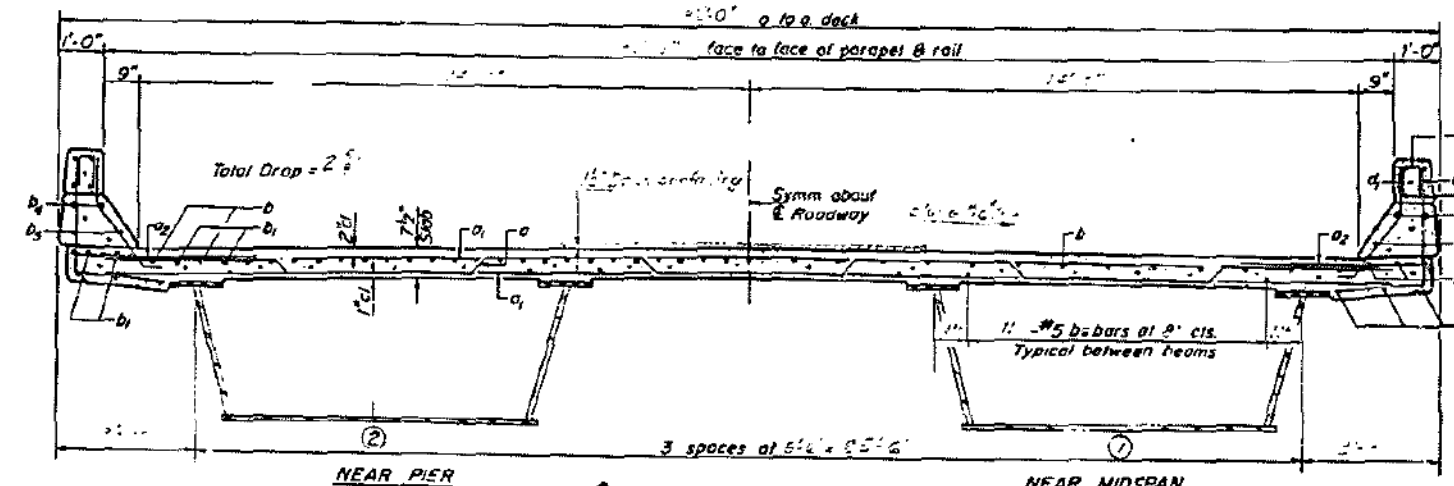
HALF PLAN



SECTION AT CURB JOINTS

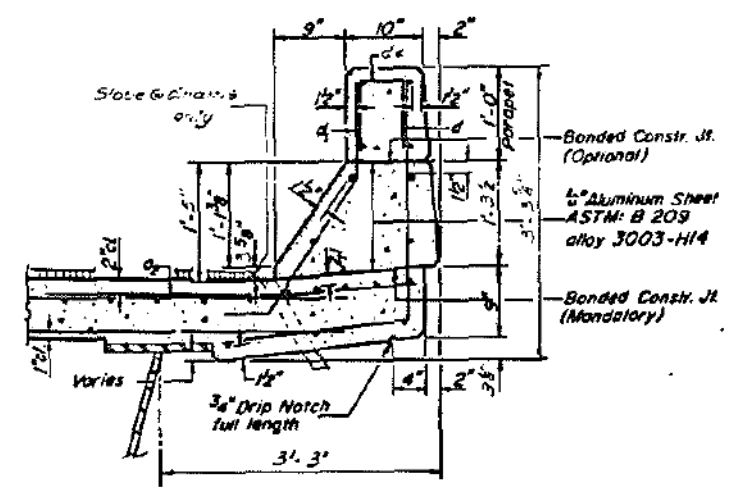


TYPICAL END OF SEALER TREATMENT



CROSS SECTION
Looking South

NOTE: For placement of bars d₁ and d₂ thru e₁ see sheet #6



CURB SECTION

Cost of Aluminum Sheets shall be incidental to Class X Concrete.

Parapet Reinforcement and Class X Concrete are based on sheet # 6
For Section A-A see sheet # 4

BILL OF MATERIAL

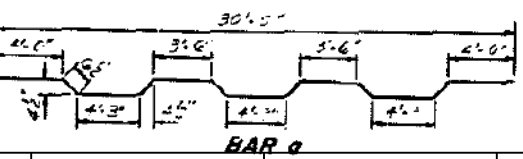
| Bar | No. | Size | Length | Shape |
|----------------|-----|------|--------|-------|
| a | 162 | #6 | 31'-0" | — |
| a ₁ | 384 | #6 | 30'-0" | — |
| a ₂ | 350 | #6 | 4'-0" | — |
| b | 238 | #5 | 32'-3" | — |
| b ₁ | 31 | #6 | 49'-6" | — |
| b ₂ | 24 | #8 | 31'-3" | — |
| b ₃ | 24 | #5 | 30'-9" | — |
| b ₄ | 6 | #8 | 19'-6" | — |
| b ₅ | 8 | #5 | 19'-6" | — |
| b ₆ | 372 | #5 | 26'-6" | — |
| c | 432 | #4 | 44'-9" | — |
| d | 432 | #5 | 5'-7" | — |

| | | |
|--------------------|----------|--------|
| Reinforcement Bars | LBS. | 53,100 |
| Class X Concrete | Cu. Yds. | 203.6 |

SUPERSTRUCTURE
F.A. RT. 408 SEC. 84-9-1H
SANGAMON CO.
STA. 527+08.00

| | |
|----------|--|
| DESIGNED | |
| CHECKED | |
| DRAWN | |
| CHECKED | |

| | |
|----------|--|
| EXAMINED | |
| DRAWN | |
| APPROVED | |



BAR SCHEDULE

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



EXISTING PLANS
STRUCTURE NO. 084-0141

S-A-L (1515) 4-22-68
whks
engineers • planners • land surveyors

| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

SHEET NO. 5 OF 13 SHEETS

| | | | | |
|-------------|---------|----------|--------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 72 | . | SANGAMON | 163 | 109 |
| | | | CONTRACT NO. 72B54 | |

ILLINOIS FED. AID PROJECT
(84-9-28)RS-2&MISC STRUC REP

EXISTING STRUCTURE-S.N. 084-0143 is 32'-0" wide by 246'-0" Bk. to Bk. Approach Bents. 2 main spans and 2 approach spans. This structure carries OR 10 (Link Rd) over F.A.I. Rte. 72

This improvement includes removal and installation of a bituminous concrete wearing surface, placement of a waterproofing membrane system and the removal and installation of the expansion joints.

| TOTAL BILL OF MATERIALS | | |
|--|---------|-------|
| ITEM | UNIT | TOTAL |
| ① SILICONE JOINT SEALER | FT. | 59 |
| CONCRETE SUPERSTRUCTURE | CU. YD. | 5.4 |
| CONCRETE REMOVAL | CU. YD. | 5.8 |
| BITUMINOUS CONCRETE REMOVAL (DECK) | SQ. YD. | 779 |
| BITUMINOUS CONCRETE SURFACE, CSE., MIX. C. CL. I, TYPE 2 | TON | 67.2 |
| WATERPROOFING MEMBRANE SYSTEM | SQ. YD. | 779 |
| ① DECK SLAB REPAIR (PARTIAL) | SQ. YD. | 19 |
| REINFORCEMENT BARS, EPOXY COATED | LBS. | 1,230 |
| BAR SPLICERS | EACH | 10 |
| ① POLYMER CONCRETE | CU. FT. | 4.2 |

① SEE SPECIAL PROVISIONS

| F.A.I. RTE. | SEC. | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|------|----------|--------------|-----------|
| * | ** | SANGAMON | 302 | 218 |

SHEET NO. 1
4 SHEETS

FED. ROAD DIST. NO. 1
* F.A.I. 72 & FAP 662
** DISTRICT 6 RESURFACING 2001 & 31-7

GENERAL NOTES

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.

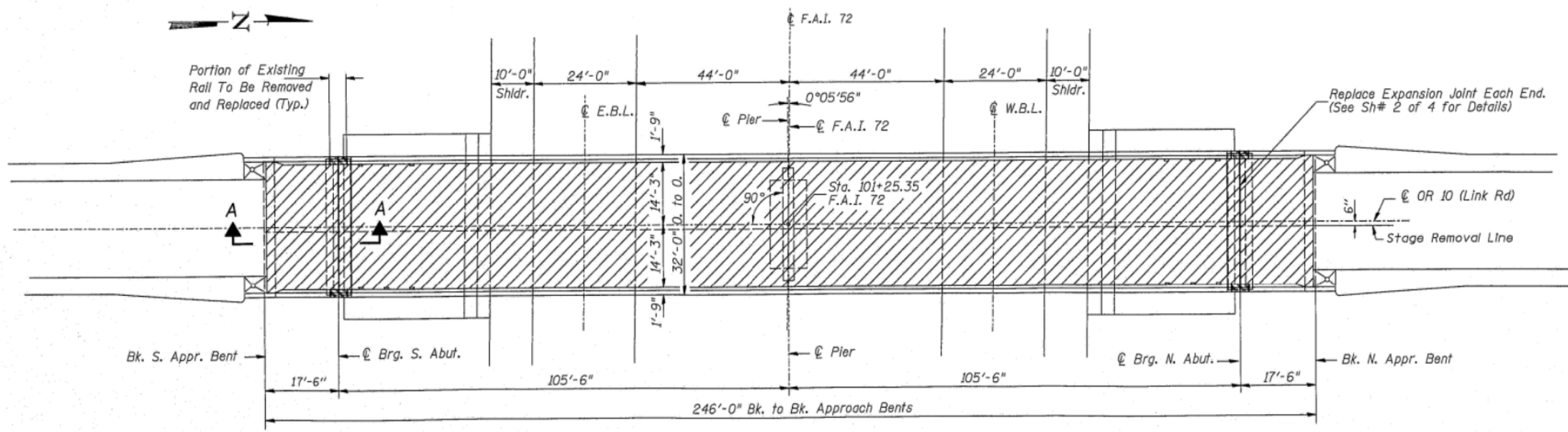
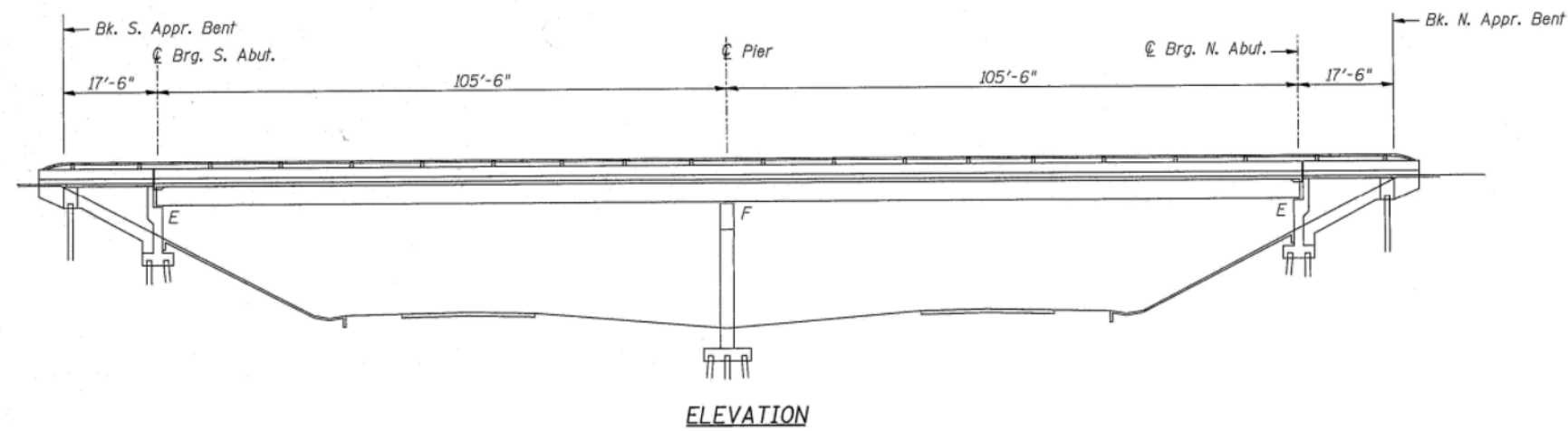
Reinforcement bars shall conform to AASHTO M-31, M-42 or M-53, Grade 60. Prior to pouring the new concrete for the deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work shall be paid for according to article 109.04 of the Standard Specifications.

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.

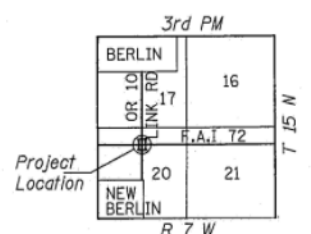
Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on As-built Plans.

The existing steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project. See Sh# 2 of 4 for section A-A.

Note: During stage construction the existing inlets shall be covered with a suitable steel plate and temporarily fill level to the existing grade with Bituminous Concrete (Hot Mix). Priming is not required. This Bituminous Concrete material shall be removed and inlets cleaned after stage construction is complete. Cost shall be included in the cost of "TRAFFIC CONTROL AND PROTECTION".

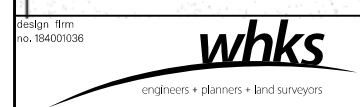


BITUMINOUS CONCRETE REMOVAL
BITUMINOUS CONCRETE SURFACE
WATERPROOF MEMBRANE SYSTEM



**GENERAL PLAN & ELEVATION
OR 10 (LINK RD) OVER F.A.I. 72
DISTRICT 6 RESURFACING 2001 & 31-7
SANGAMON COUNTY
STATION 101+25.35
STR. NO. 084-0143**

FOR INFORMATION ONLY



| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

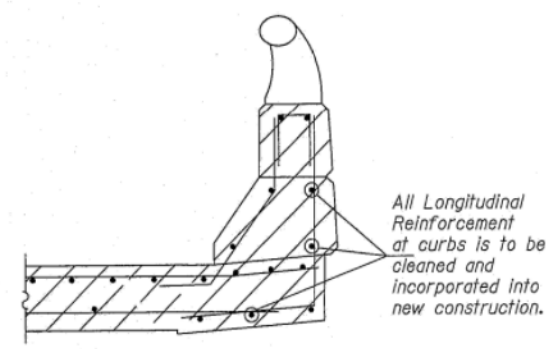
**EXISTING PLANS
STRUCTURE NO. 084-0143**

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|---------|----------|--------------|-----------|
| 72 | . | SANGAMON | 163 | 110 |

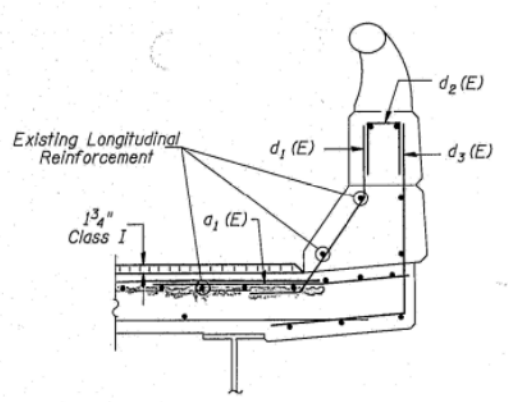
CONTRACT NO. 72B54

SHEET NO. 6 OF 13 SHEETS

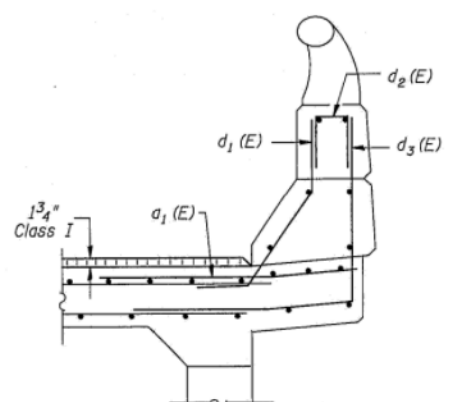
ILLINOIS FED. AID PROJECT
*(84-9-28)RS-2&MISC STRUC REP



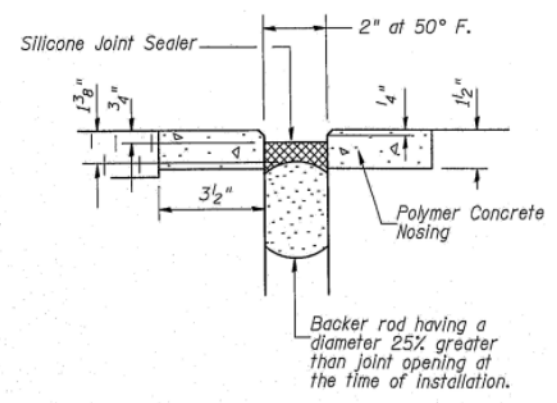
SECTION AT CURB



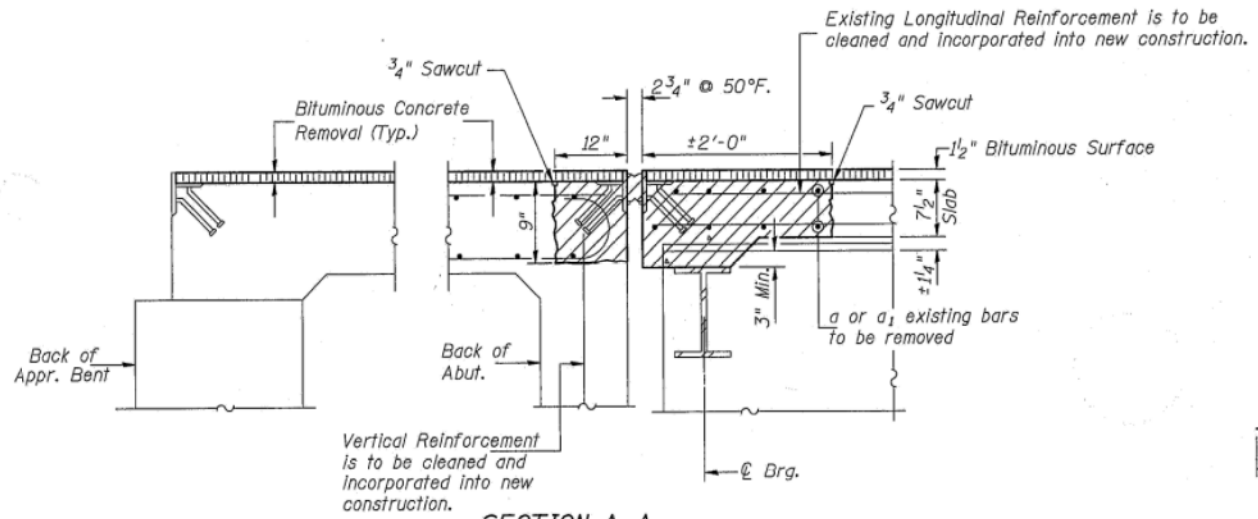
CURB SECTION AT MAIN SPAN



CURB SECTION AT VAULTED SPAN

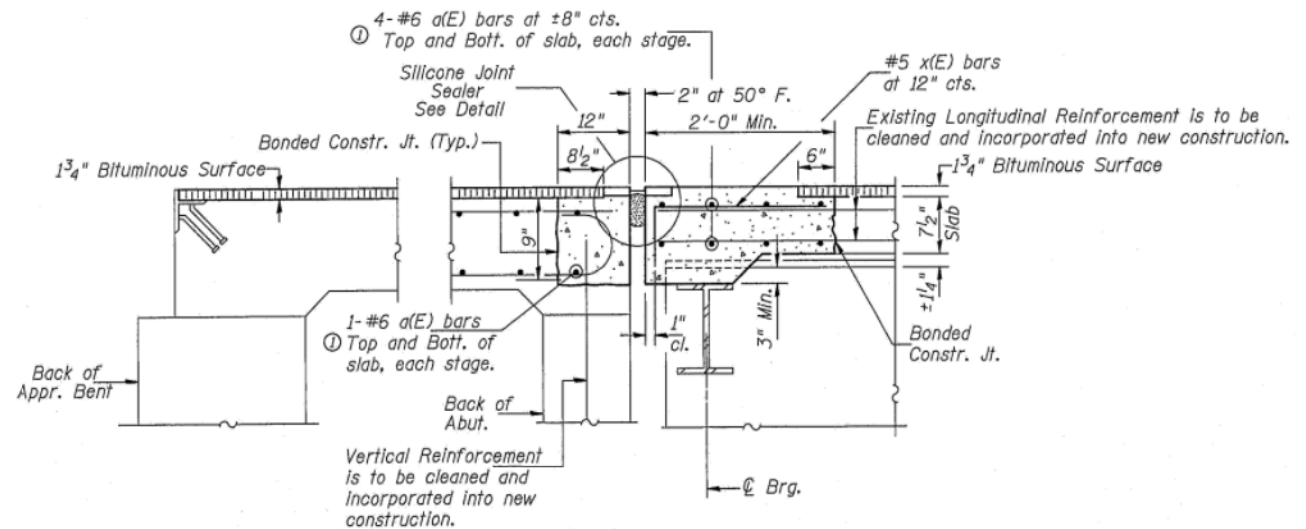


SILICONE JOINT SEALER DETAIL



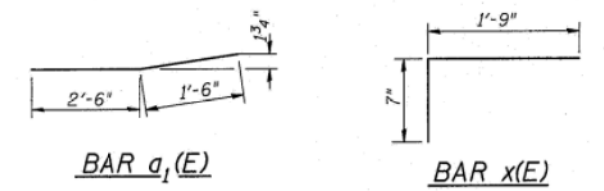
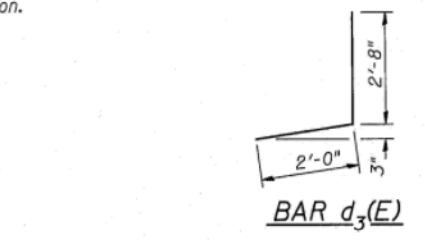
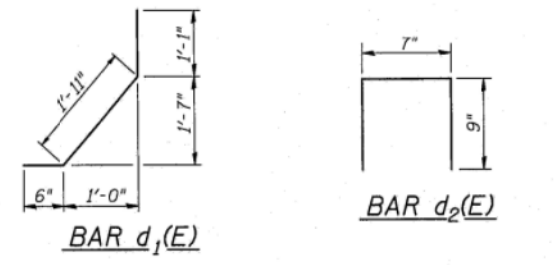
SECTION A-A SHOWING REMOVAL

Hatched area indicates Concrete and Exp. Joint Removal. The cost of removing the existing steel in the expansion joints shall be included with Concrete Removal.



PROPOSED SECTION A-A

① See Sh.#3 of 4 for Stage Construction



BILL OF MATERIAL (2 JOINTS)

| BAR | NO. | SIZE | LENGTH | SHAPE |
|-----------------------------------|-----|------|---------|-------|
| a(E) | 40 | #6 | 14'-9" | — |
| a1(E) | 12 | #6 | 4'-0" | ┘ |
| d1(E) | 16 | #5 | 3'-6" | ┘ |
| d2(E) | 16 | #4 | 2'-1" | □ |
| d3(E) | 16 | #4 | 4'-8" | ┘ |
| x(E) | 62 | #5 | 2'-4" | ┘ |
| Concrete Superstructure | | | Cu. Yd. | 5.4 |
| Reinforcement Bars (Epoxy Coated) | | | Lbs. | 1,230 |
| Silicone Joint Sealer | | | Ft. | 59 |
| Polymer Concrete | | | Cu. Ft. | 4.2 |

Reinforcement bars designated (E) shall be Epoxy Coated

DETAILS
OR 10 (LINK RD) OVER F.A.I. 72
DISTRICT 6 RESURFACING 2001 & 31-7
SANGAMON COUNTY
STATION 101+25.35
STR. NO. 084-0143

FOR INFORMATION ONLY

EXISTING STRUCTURE-S.N. 084-0144 Is 30'-0" wide by 246'-0" Bk. to Bk. Approach Bents. 2 main spans and 2 approach spans. This structure carries T.R. 94 (Bates Rd) over F.A.I. Rte. 72

This improvement includes removal and installation of a bituminous concrete wearing surface, placement of a waterproofing membrane system and the removal and installation of the expansion joints.

| TOTAL BILL OF MATERIALS | | |
|--|---------|-------|
| ITEM | UNIT | TOTAL |
| ① SILICONE JOINT SEALER | FT. | 55 |
| CONCRETE SUPERSTRUCTURE | CU. YD. | 5.4 |
| CONCRETE REMOVAL | CU. YD. | 5.5 |
| BITUMINOUS CONCRETE REMOVAL (DECK) | SQ. YD. | 725 |
| BITUMINOUS CONCRETE SURFACE, CSE., MIX. C, CL. I, TYPE 2 | TON | 68.5 |
| WATERPROOFING MEMBRANE SYSTEM | SQ. YD. | 725 |
| ① DECK SLAB REPAIR (PARTIAL) | SQ. YD. | 17 |
| REINFORCEMENT BARS, EPOXY COATED | LBS. | 1,150 |
| BAR SPLICERS | EACH | 10 |
| ① POLYMER CONCRETE | CU. FT. | 3.9 |

① SEE SPECIAL PROVISIONS

| F.A.I. Rte. | SEC. | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|------|----------|--------------|-----------|
| 72 | 22 | SANGAMON | 302 | 222 |

SHEET NO. 1
4 SHEETS

FBI 72 & FAP 662
DISTRICT 6 RESURFACING 2001 & 31-7

GENERAL NOTES

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.

Reinforcement bars shall conform to AASHTO M-31, M-42 or M-53, Grade 60.

Prior to pouring the new concrete for the deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work shall be paid for according to article 109.04 of the Standard Specifications.

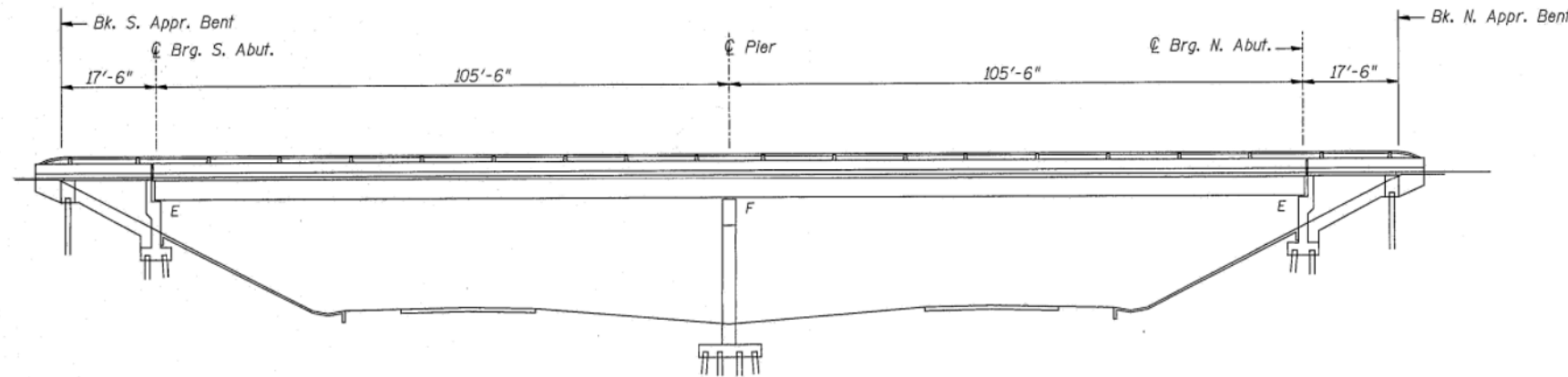
Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on As-built Plans.

The existing steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.

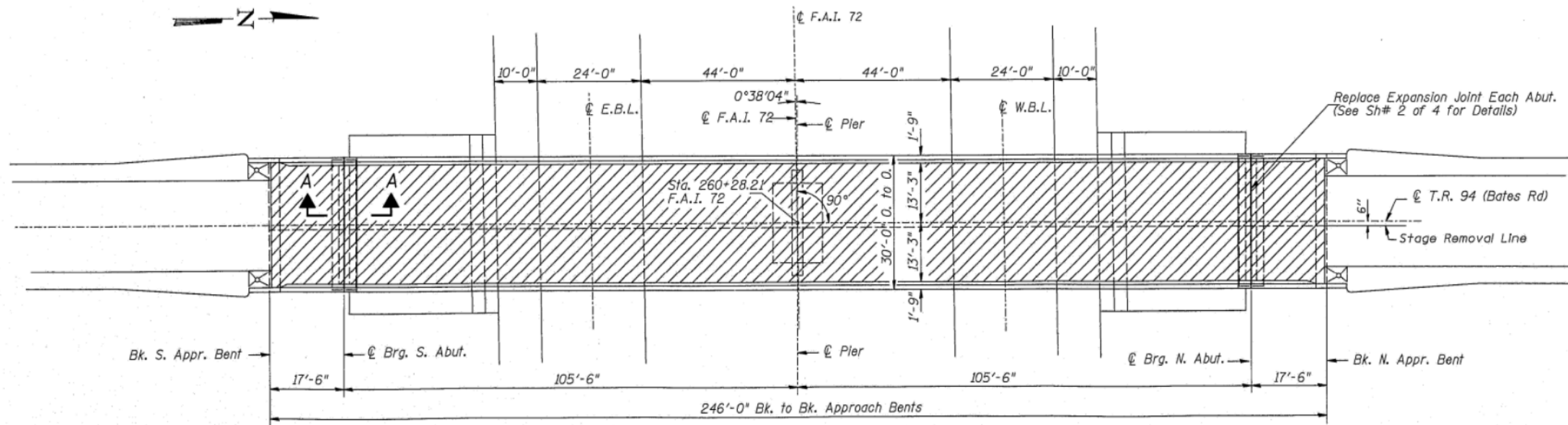
See Sh# 2 of 4 for section A-A.

Note: During stage construction the existing inlets shall be covered with a suitable steel plate and temporarily fill level to the existing grade with Bituminous Concrete (Hot Mix). Priming is not required. This Bituminous Concrete material shall be removed and inlets cleaned after stage construction is complete. Cost shall be included in the cost of "TRAFFIC CONTROL AND PROTECTION".



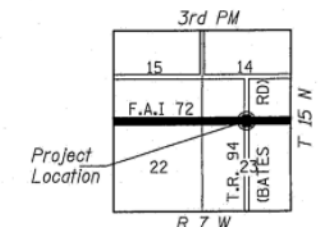
ELEVATION

BITUMINOUS CONCRETE REMOVAL
BITUMINOUS CONCRETE SURFACE
WATERPROOF MEMBRANE SYSTEM



PLAN

Replace Expansion Joint Each Abut. (See Sh# 2 of 4 for Details)



LOCATION SKETCH

GENERAL PLAN & ELEVATION
T.R. 94 (BATES RD) OVER F.A.I. 72
DISTRICT 6 RESURFACING 2001 & 31-7
SANGAMON COUNTY
STATION 260+28.21
STR. NO. 084-0144

FOR INFORMATION ONLY

Design firm
no. 184001036

whks
engineers • planners • land surveyors

| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

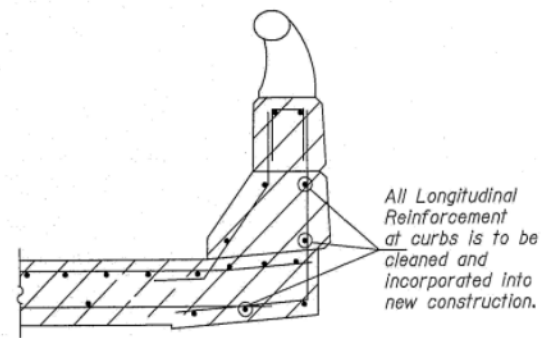
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 084-0144

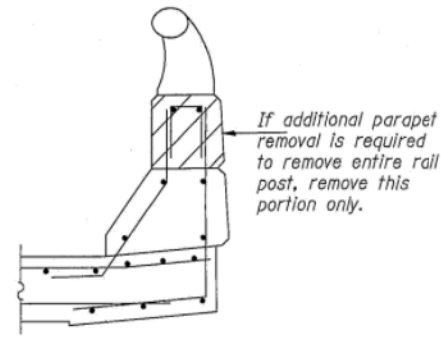
SHEET NO. 8 OF 13 SHEETS

| F.A.I. Rte. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|---------|----------|--------------------|-----------|
| 72 | . | SANGAMON | 163 | 112 |
| | | | CONTRACT NO. 72B54 | |

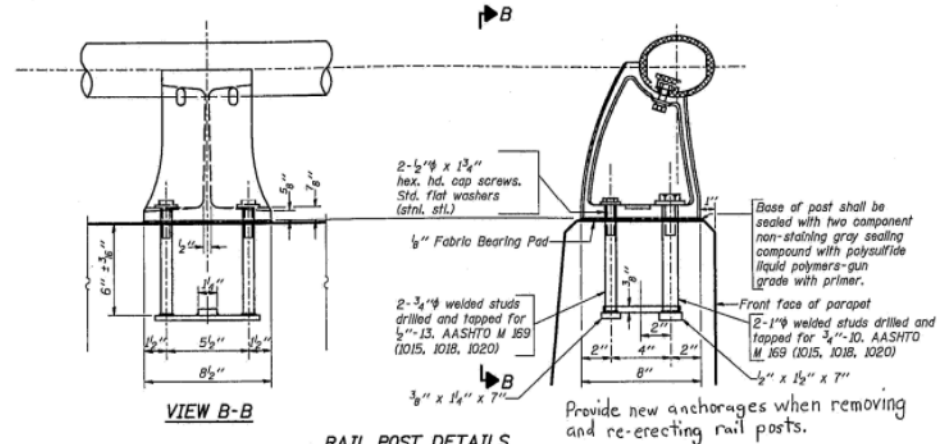
ILLINOIS FED. AID PROJECT
• (84-9-28)RS-2&MISC STRUC REP



SECTION AT CURB

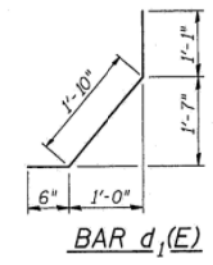


SECTION AT RAIL POST

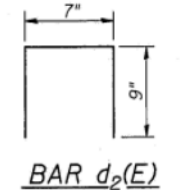


RAIL POST DETAILS

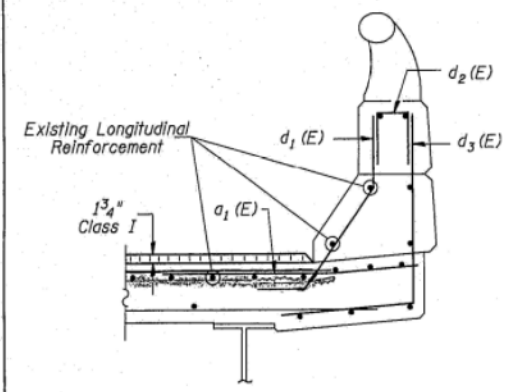
Cost of removing and reinstalling rail posts included with Concrete Removal.



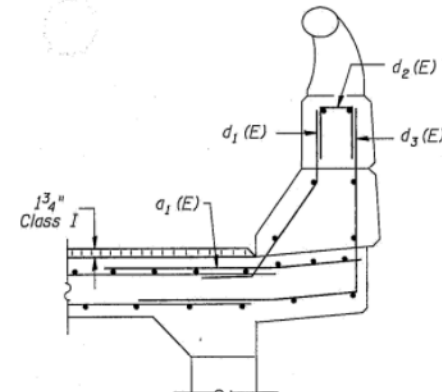
BAR d₁(E)



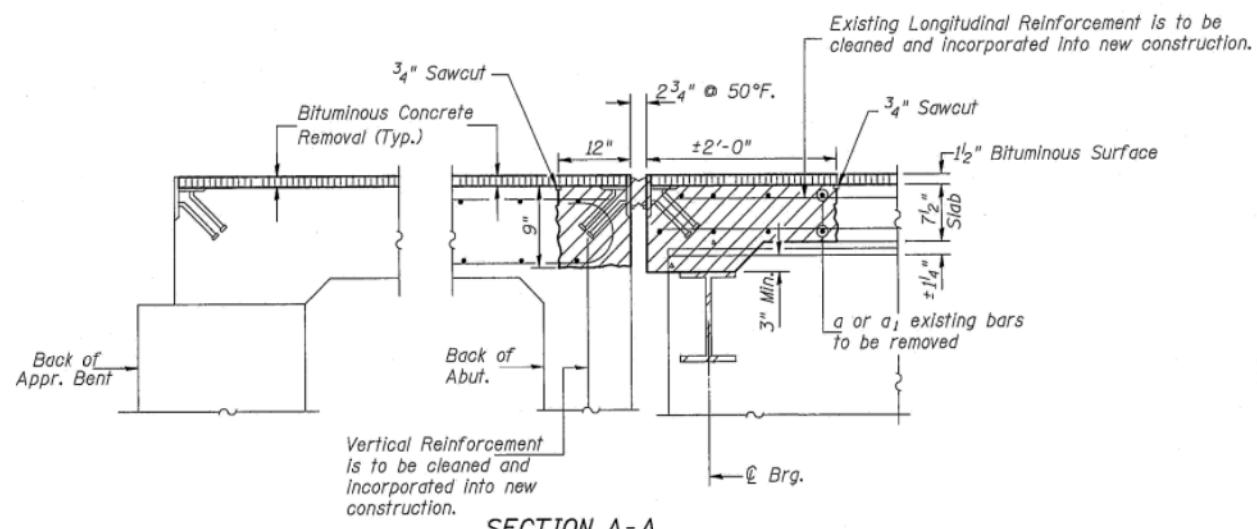
BAR d₂(E)



CURB SECTION AT MAIN SPAN

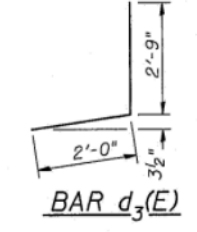


CURB SECTION AT VAULTED SPAN

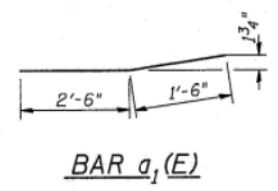


SECTION A-A SHOWING REMOVAL

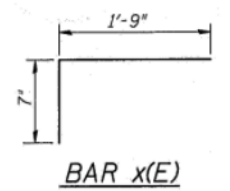
Hatched area indicates Concrete and Exp. Joint Removal. The cost of removing the existing steel in the expansion joints shall be included with Concrete Removal.



BAR d₃(E)



BAR a₁(E)

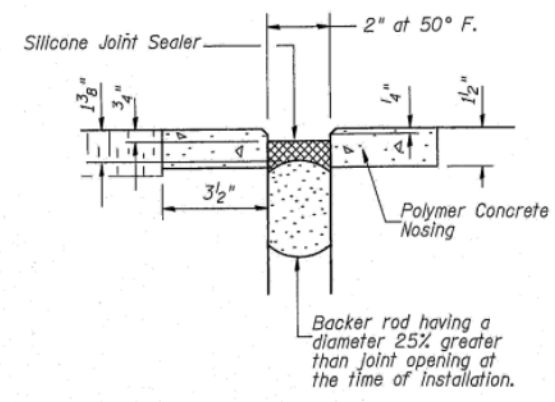


BAR x(E)

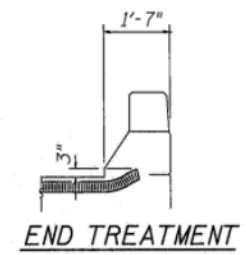
BILL OF MATERIAL (2 JOINTS)

| BAR | NO. | SIZE | LENGTH | SHAPE |
|-----------------------------------|-----|------|---------|-------|
| a(E) | 40 | #6 | 13'-9" | — |
| a ₁ (E) | 12 | #6 | 4'-0" | ┘ |
| d ₁ (E) | 16 | #5 | 3'-5" | ┘ |
| d ₂ (E) | 8 | #4 | 2'-1" | ┘ |
| d ₃ (E) | 16 | #4 | 4'-9" | ┘ |
| x(E) | 58 | #5 | 2'-4" | ┘ |
| Concrete Superstructure | | | Cu. Yd. | 5.4 |
| Reinforcement Bars (Epoxy Coated) | | | Lbs. | 1,150 |
| Silicone Joint Sealer | | | Ft. | 55 |
| Polymer Concrete | | | Cu. Ft. | 3.9 |

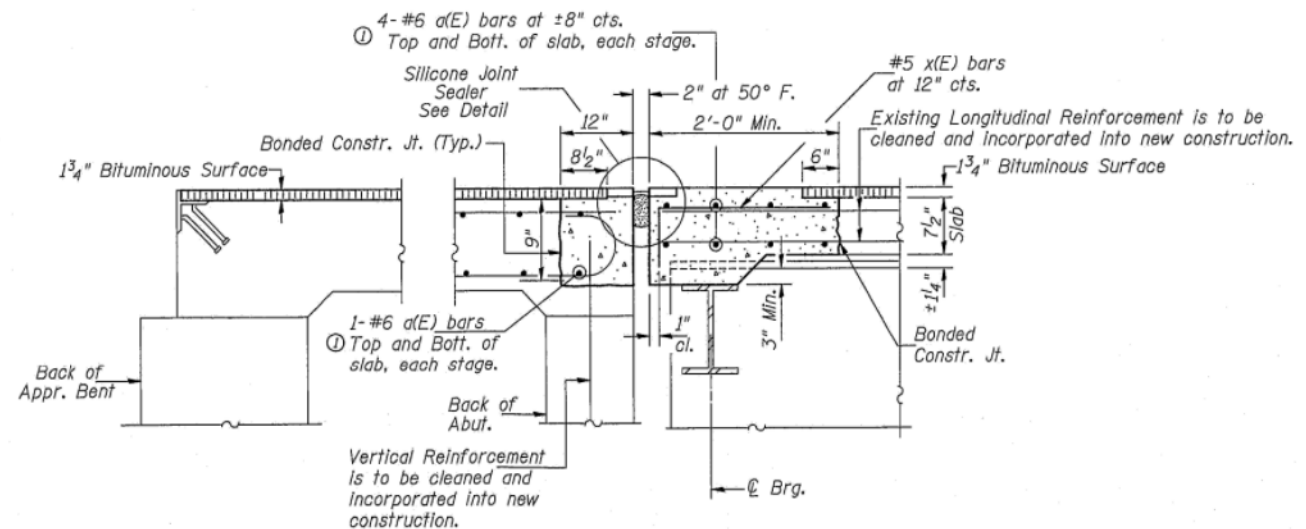
Reinforcement bars designated (E) shall be Epoxy Coated



SILICONE JOINT SEALER DETAIL



END TREATMENT



PROPOSED SECTION A-A

See Sh.#3 of 4 for Stage Construction

FOR INFORMATION ONLY

DETAILS
T.R. 94 (BATES RD) OVER F.A.I. 72
DISTRICT 6 RESURFACING 2001 & 31-7
SANGAMON COUNTY
STATION 260+28.21
STR. NO. 084-0144

EXISTING STRUCTURE- S.N. 084-0145 is 32'-0" wide by 246'-8" Bk. to Bk. Approach Bents. 2 main spans and 2 approach spans. This structure carries C.H. 15 (Farmingdale Rd) over F.A.I. Rte. 72

This improvement includes removal and installation of a bituminous concrete wearing surface, placement of a waterproofing membrane system, the removal and installation of the expansion joints and the installation of floor drain extensions.

| TOTAL BILL OF MATERIALS | | |
|--|---------|-------|
| ITEM | UNIT | TOTAL |
| ① SILICONE JOINT SEALER | FT. | 59 |
| CONCRETE SUPERSTRUCTURE | CU. YD. | 5.5 |
| CONCRETE REMOVAL | CU. YD. | 5.7 |
| BITUMINOUS CONCRETE REMOVAL (DECK) | SQ. YD. | 781 |
| BITUMINOUS CONCRETE SURFACE, CSE., MIX. C. CL. I, TYPE 2 | TON | 73.8 |
| WATERPROOFING MEMBRANE SYSTEM | SQ. YD. | 781 |
| ① DECK SLAB REPAIR (PARTIAL) | SQ. YD. | 12 |
| REINFORCEMENT BARS, EPOXY COATED | LBS. | 1,240 |
| ① FLOOR DRAIN EXTENSION | EACH | 8 |
| BAR SPLICERS | FT. | 10 |
| ① PLUG EXISTING DECK DRAINS | EACH | 4 |
| ① POLYMER CONCRETE | CU. YD. | 4.2 |
| DECK Slab Repair (Full Depth, Type II) | SQ. YD. | 6 |

① SEE SPECIAL PROVISIONS

| F.A.I. R.T.E. | SEC. | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------|------|----------|--------------|-----------|
| 72 | • | SANGAMON | 302 | 226 |

4 SHEETS

FED. ROAD DIST. NO. 7 ILLINOIS PROJECT
 • F.A.I. 72 & F.A.P. 662
 • DISTRICT 6 RESURFACING 2001 & 31-7

GENERAL NOTES

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.

Reinforcement bars shall conform to AASHTO M-31, M-42 or M-53, Grade 60.

Prior to pouring the new concrete for the deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work shall be paid for according to article 109.04 of the Standard Specifications.

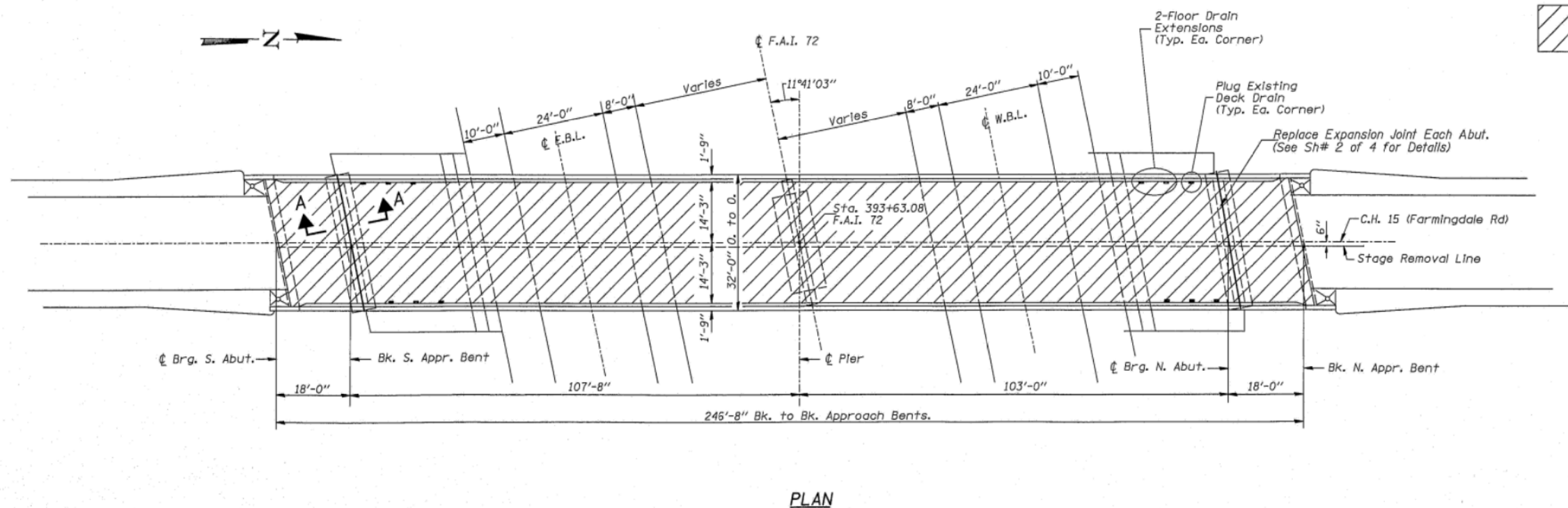
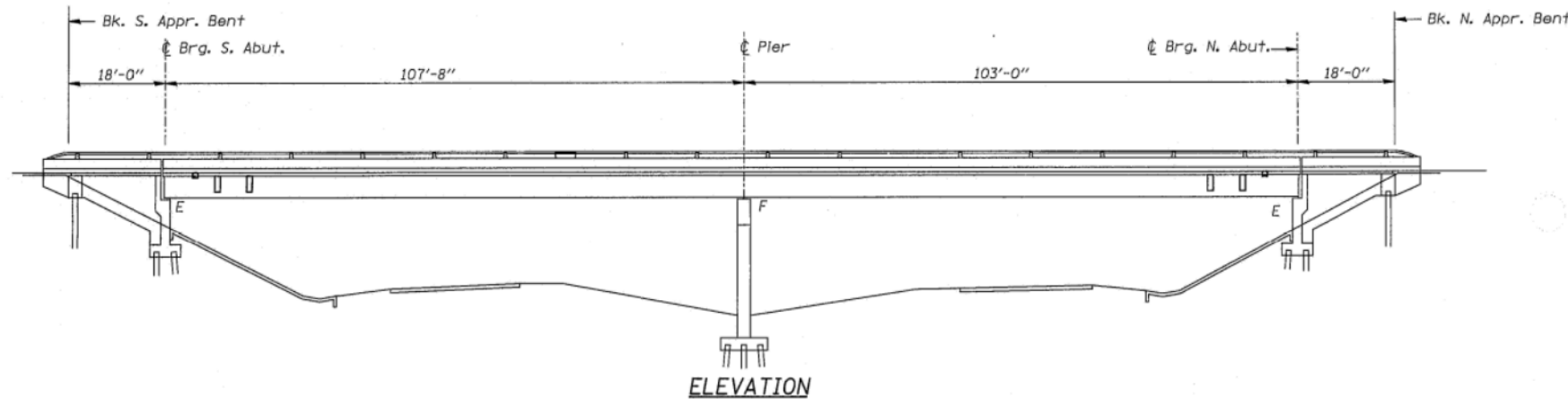
Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

The existing steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.

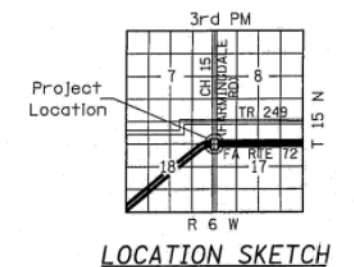
Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on As-built Plans.

See Sh# 2 of 4 for section A-A.

Note: During stage construction the existing inlets shall be covered with a suitable steel plate and temporarily fill level to the existing grade with Bituminous Concrete (Hot Mix). Priming is not required. This Bituminous Concrete material shall be removed and inlets cleaned after stage construction is complete. Cost shall be included in the cost of "TRAFFIC CONTROL AND PROTECTION".



Bituminous Concrete Removal
 Bituminous Concrete Surface
 Waterproof membrane System



GENERAL PLAN & ELEVATION
C.H. 15 (FARMINGDALE RD) OVER F.A.I. RTE. 72
DISTRICT 6 RESURFACING 2001 & 31-7
SANGAMON COUNTY
STATION 393+63.08
STR. NO 084-0145

FOR INFORMATION ONLY



| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

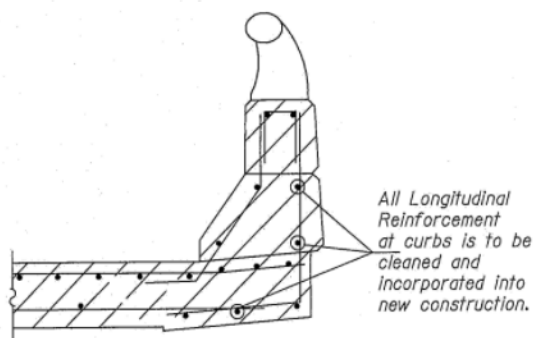
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
 STRUCTURE NO. 084-0145

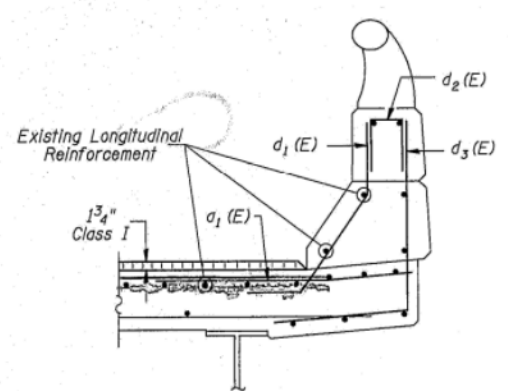
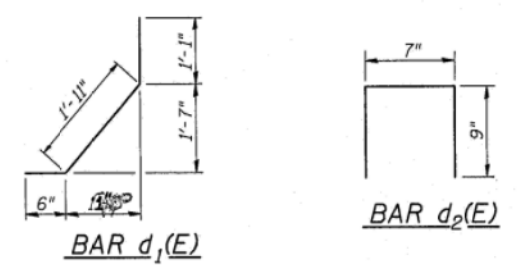
SHEET NO. 10 OF 13 SHEETS

| F.A.I. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|----------|--------------|-----------|
| 72 | • | SANGAMON | 163 | 114 |
| CONTRACT NO. 72B54 | | | | |

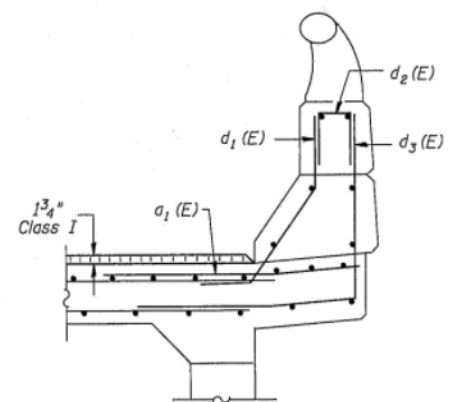
ILLINOIS FED. AID PROJECT
 • (84-9-28)RS-2&MISC STRUC REP



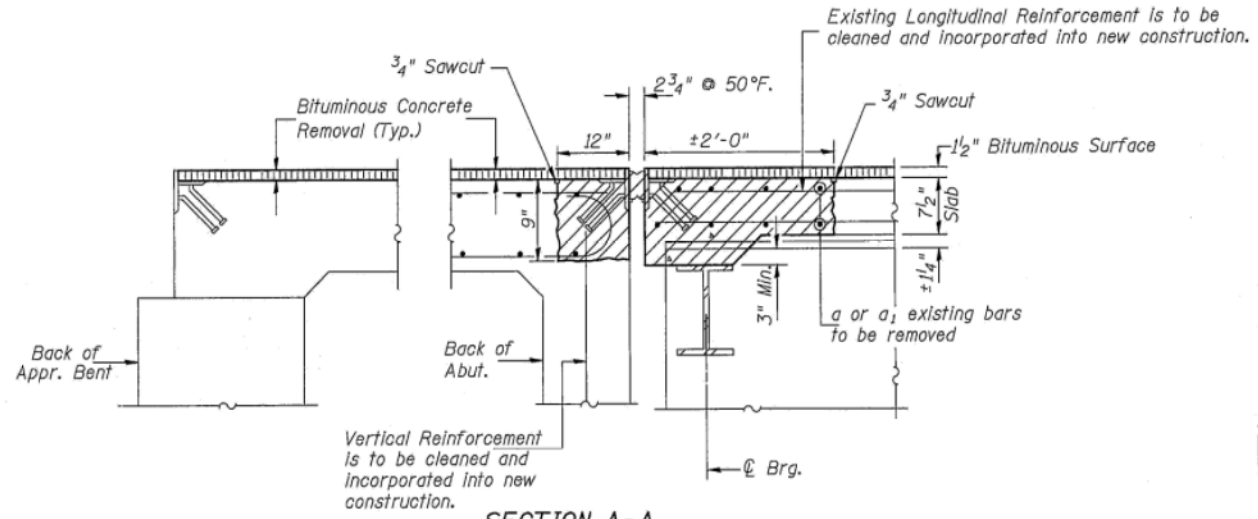
SECTION AT CURB



CURB SECTION AT MAIN SPAN

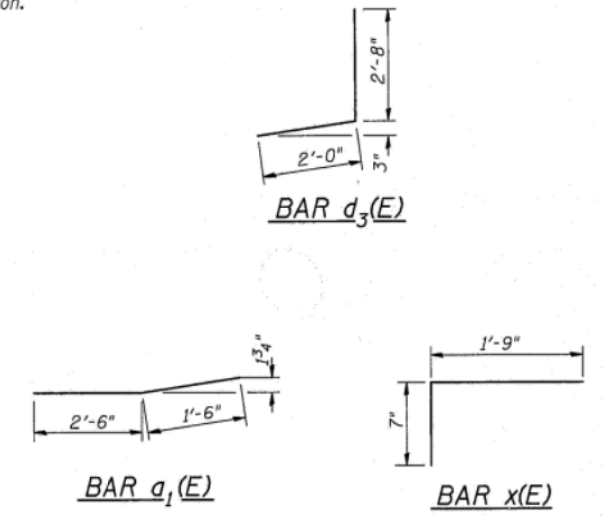


CURB SECTION AT VAULTED SPAN



**SECTION A-A
SHOWING REMOVAL**

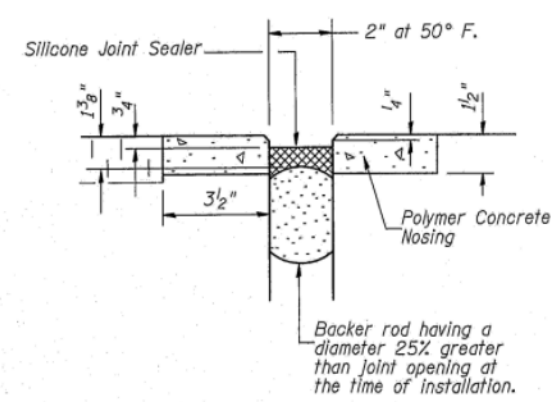
Hatched area indicates Concrete and Exp. Joint Removal. The cost of removing the existing steel in the expansion joints shall be included with Concrete Removal.



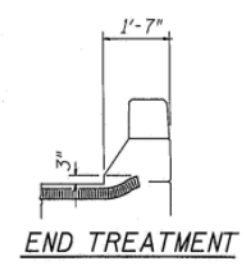
**BILL OF MATERIAL
(2 JOINTS)**

| BAR | NO. | SIZE | LENGTH | SHAPE |
|-----------------------------------|-----|------|---------|-------|
| a(E) | 40 | #6 | 15'-0" | — |
| a1(E) | 12 | #6 | 4'-0" | ┌ |
| d1(E) | 16 | #5 | 3'-6" | ┌ |
| d2(E) | 16 | #4 | 2'-1" | □ |
| d3(E) | 16 | #4 | 4'-6" | ┌ |
| x(E) | 62 | #5 | 2'-4" | ┌ |
| | | | Cu. Yd. | 5.5 |
| Concrete Superstructure | | | Lbs. | 1,240 |
| Reinforcement Bars (Epoxy Coated) | | | Fl. | 59 |
| Silicone Joint Sealer | | | Cu. Fl. | 4.2 |
| Polymer Concrete | | | | |

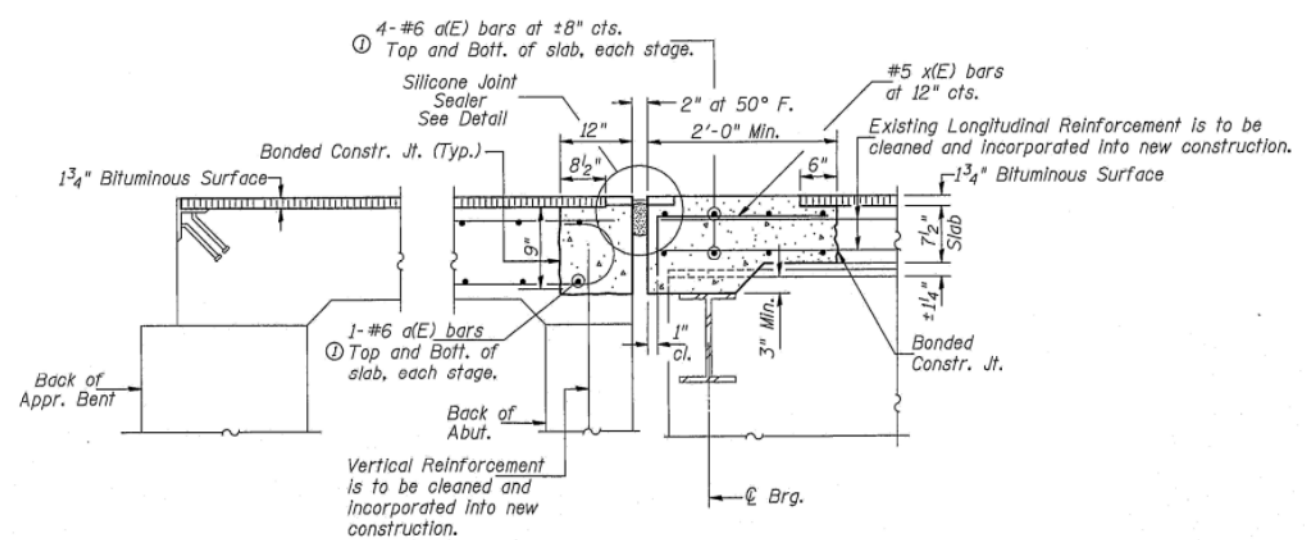
Reinforcement bars designated (E) shall be Epoxy Coated



SILICONE JOINT SEALER DETAIL



END TREATMENT



PROPOSED SECTION A-A

① See Sh.#3 of 4 for Stage Construction

DETAILS
C.H. 15 (FARMINGDALE RD) OVER F.A.I. RTE. 72
DISTRICT 6 RESURFACING 2001 & 3I-7
SANGAMON COUNTY
STATION 393+63.08
STR. NO 084-0145

FOR INFORMATION ONLY

EXISTING STRUCTURE-S.N. 084-0146 is 30'-0" wide by 230'-3" Bk. to Bk. Approach Bents. 2 main spans and 2 approach spans, This structure carries T.R. 156 (Curran Rd) over F.A.I. Rte. 72

This improvement includes removal and installation of a bituminous concrete wearing surface, placement of a waterproofing membrane system, the removal and installation of the expansion joints and the installation of floor drain extensions.

| TOTAL BILL OF MATERIALS | | |
|--|---------|-------|
| ITEM | UNIT | TOTAL |
| ① SILICONE JOINT SEALER | FT. | 55 |
| CONCRETE SUPERSTRUCTURE | CU. YD. | 5.4 |
| CONCRETE REMOVAL | CU. YD. | 5.5 |
| BITUMINOUS CONCRETE REMOVAL (DECK) | SQ. YD. | 678 |
| BITUMINOUS CONCRETE SURFACE, CSE., MIX. C. CL. I, TYPE 2 | TON | 64 |
| WATERPROOFING MEMBRANE SYSTEM | SQ. YD. | 678 |
| ① DECK SLAB REPAIR (PARTIAL) | SQ. YD. | 24 |
| REINFORCEMENT BARS, EPOXY COATED | LBS. | 1,160 |
| FLOOR DRAIN EXTENSION | EACH | 8 |
| BAR SPLICERS | EACH | 10 |
| ① POLYMER CONCRETE | CU. FT. | 3.9 |

① SEE SPECIAL PROVISIONS

| F.A.I. RTE. | SEC. | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|------|----------|--------------|-----------|
| * | ** | SANGAMON | 302 | 230 |

SHEET NO. 1
4 SHEETS

FBI 72 & FAP 662
DISTRICT 6 RESURFACING 2001 & 31-7

GENERAL NOTES

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.

Reinforcement bars shall conform to AASHTO M-31, M-42 or M-53, Grade 60.

Prior to pouring the new concrete for the deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work shall be paid for according to article 109.04 of the Standard Specifications.

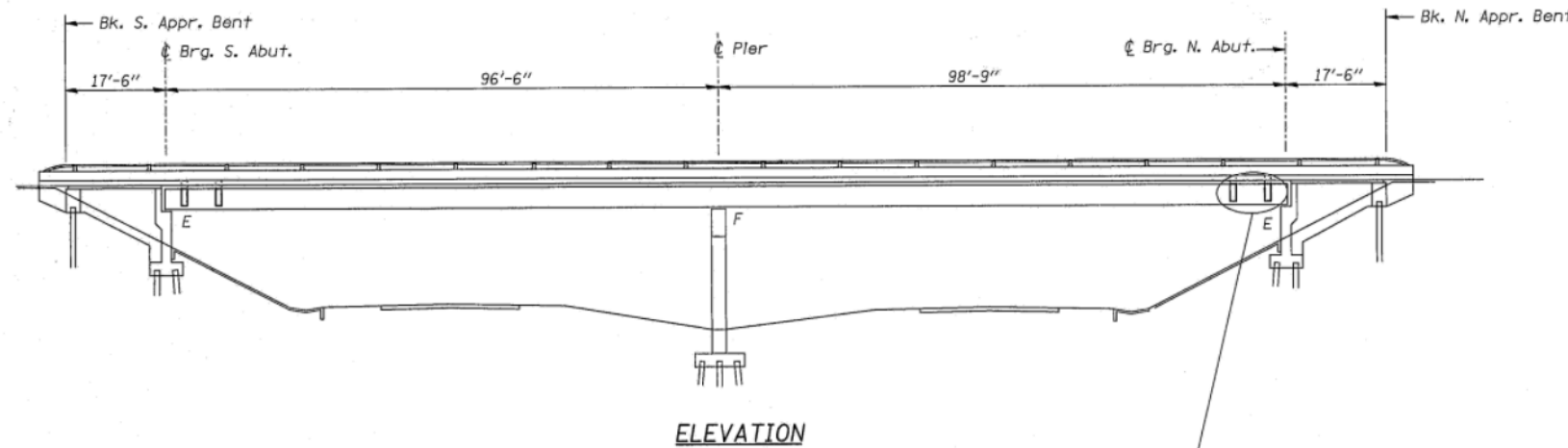
Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on As-built Plans.

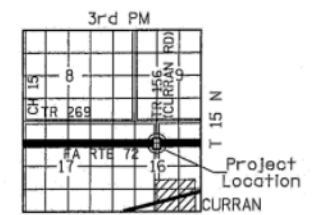
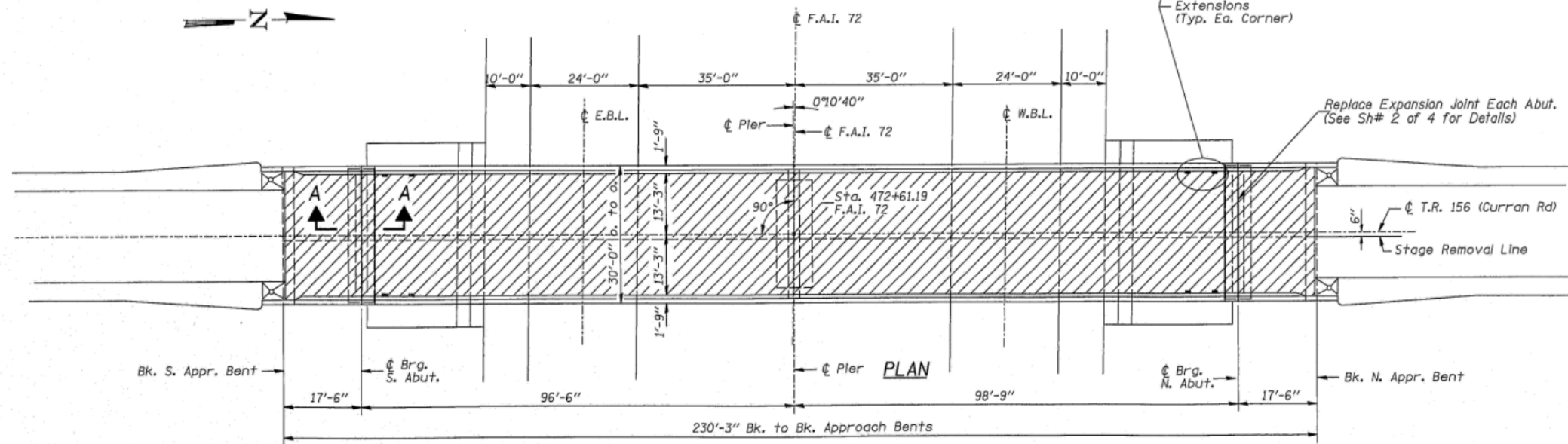
The existing steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.

See Sh# 2 of 4 for section A-A.

Note: During stage construction the existing inlets shall be covered with a suitable steel plate and temporarily fill level to the existing grade with Bituminous Concrete (Hot Mix). Priming is not required. This Bituminous Concrete material shall be removed and inlets cleaned after stage construction is complete. Cost shall be included in the cost of "TRAFFIC CONTROL AND PROTECTION".



BITUMINOUS CONCRETE REMOVAL
BITUMINOUS CONCRETE SURFACE
WATERPROOF MEMBRANE SYSTEM



GENERAL PLAN & ELEVATION
T.R. 156 (CURRAN RD) OVER F.A.I. 72
DISTRICT 6 RESURFACING 2001 & 31-7
SANGAMON COUNTY
STATION 472+61.19
STR. NO. 084-0146

FOR INFORMATION ONLY



| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

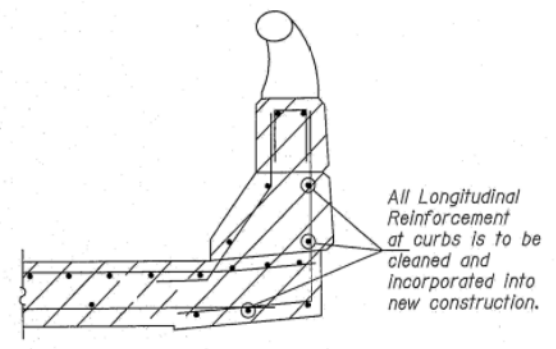
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 084-0146

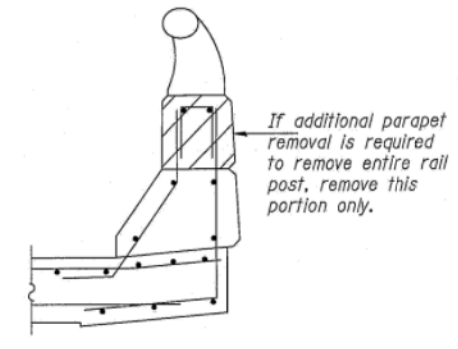
SHEET NO. 12 OF 13 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|----------|--------------|-----------|
| 72 | . | SANGAMON | 163 | 116 |
| CONTRACT NO. 72B54 | | | | |

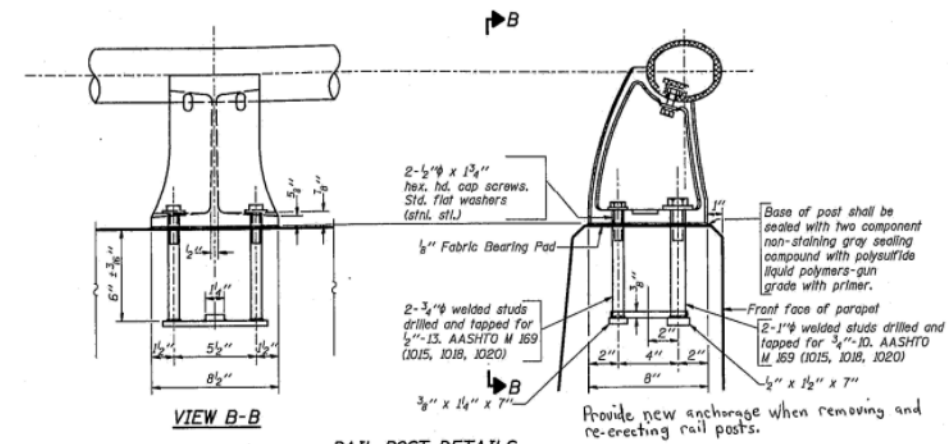
ILLINOIS FED. AID PROJECT
(84-9-28)RS-2&MISC STRUC REP



SECTION AT CURB

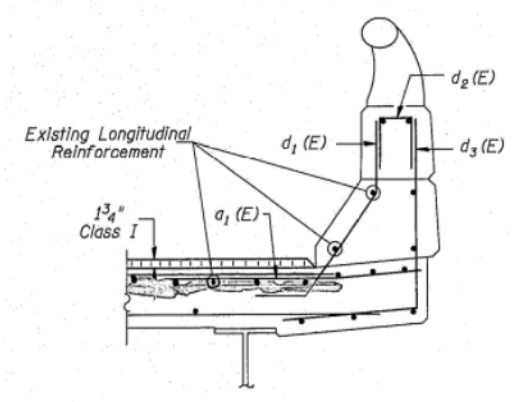
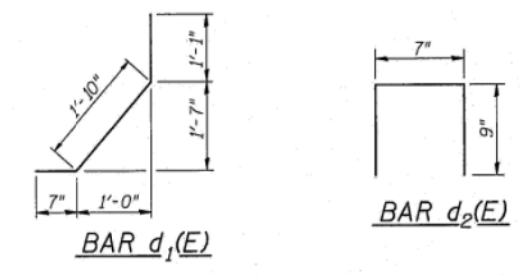


SECTION AT RAIL POST

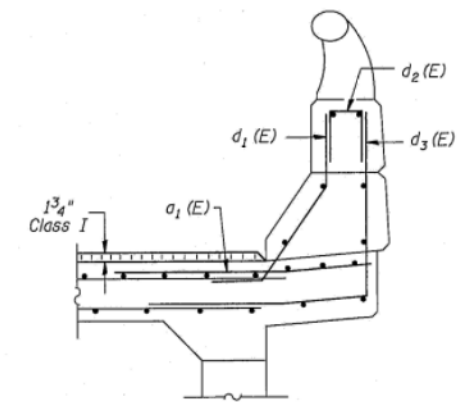


RAIL POST DETAILS

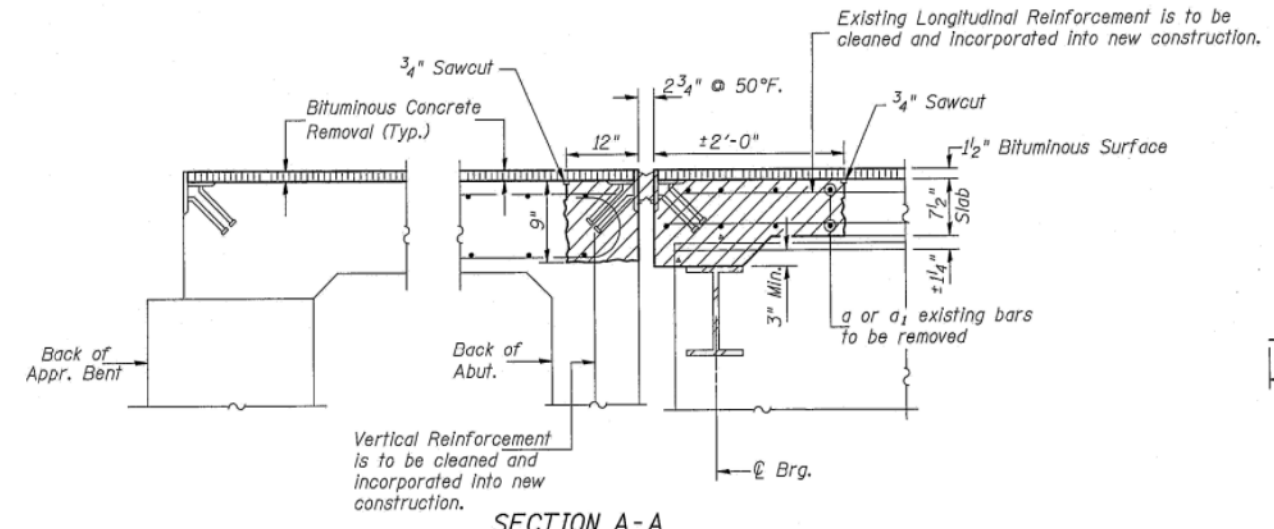
Cost of removing and reinstalling rail posts included with Concrete Removal.



CURB SECTION AT MAIN SPAN

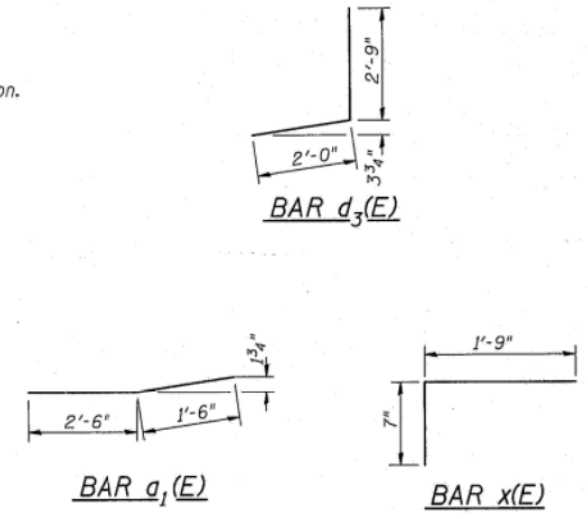


CURB SECTION AT VAULTED SPAN



SECTION A-A SHOWING REMOVAL

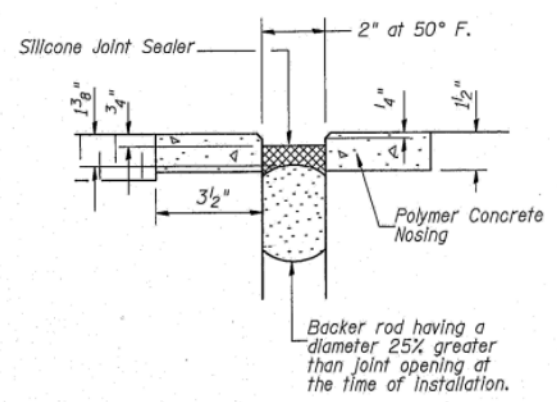
Hatched area indicates Concrete and Exp. Joint Removal. The cost of removing the existing steel in the expansion joints shall be included with Concrete Removal.



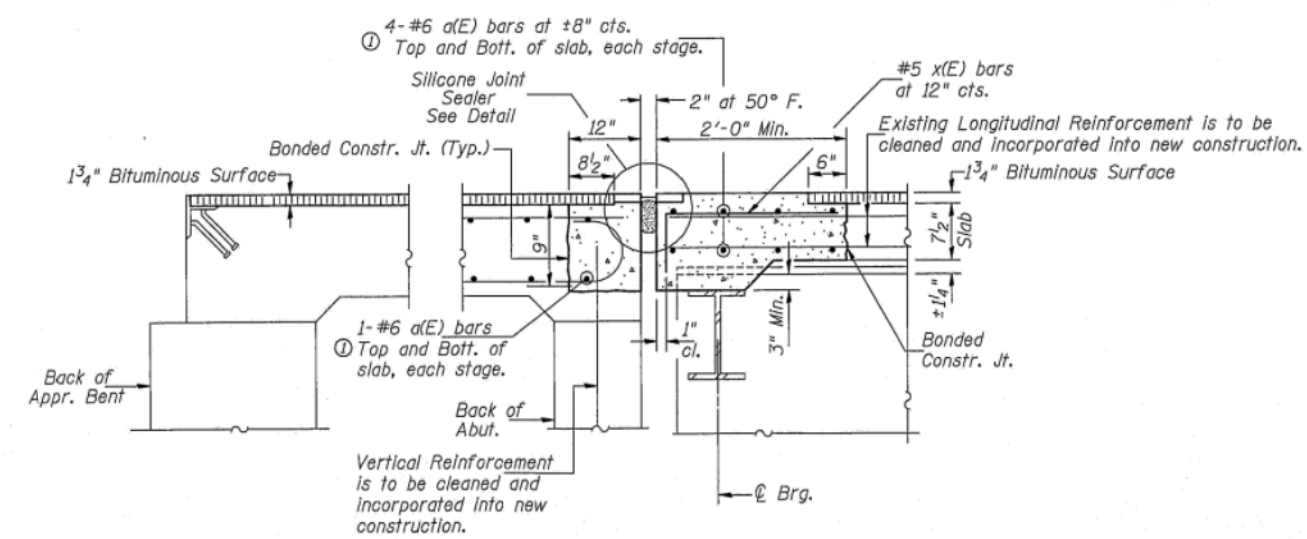
BILL OF MATERIAL (2 JOINTS)

| BAR | NO. | SIZE | LENGTH | SHAPE | |
|-----------------------------------|-----|------|--------|---------|-------|
| a(E) | 40 | #6 | 13'-9" | — | |
| a1(E) | 12 | #6 | 4'-0" | — | |
| d1(E) | 16 | #5 | 3'-6" | ┘ | |
| d2(E) | 8 | #4 | 2'-1" | □ | |
| d3(E) | 16 | #4 | 4'-9" | ┘ | |
| x(E) | 58 | #5 | 2'-4" | ┘ | |
| Concrete Superstructure | | | | Cu. Yd. | 5.4 |
| Reinforcement Bars (Epoxy Coated) | | | | Lbs. | 1,160 |
| Silicone Joint Sealer | | | | Fl. | 55 |
| Polymer Concrete | | | | Cu. Ft. | 3.9 |

Reinforcement bars designated (E) shall be Epoxy Coated



SILICONE JOINT SEALER DETAIL



PROPOSED SECTION A-A

See Sh.#3 of 4 for Stage Construction

EXPANSION JOINT DETAILS
 T.R. 156 (CURRAN RD) OVER F.A.I. 72
 DISTRICT 6 RESURFACING 2001 & 31-7
 SANGAMON COUNTY
 STATION 472+61.19
 STR. NO. 084-0146

FOR INFORMATION ONLY

| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

| | | | | |
|--------------------|---------|----------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 72 | . | SANGAMON | 163 | 117 |
| CONTRACT NO. 72B54 | | | | |

Existing Structure: The existing structure was constructed in 1974 as FA 408, Section 84-9-2HB. In 1998, the existing wearing surface and expansion joints were replaced. The structure is a two span continuous bridge with a reinforced concrete deck supported on nine 48 inch steel plate girders with vaulted abutments and a multicolumn pier. The existing structure is at right angles to the crossed feature. The structure measures 249'-6" back to back of the approach bents and 68'-0" out to out of bridge deck. One lane of traffic shall be maintained during the rehabilitation using traffic signals.

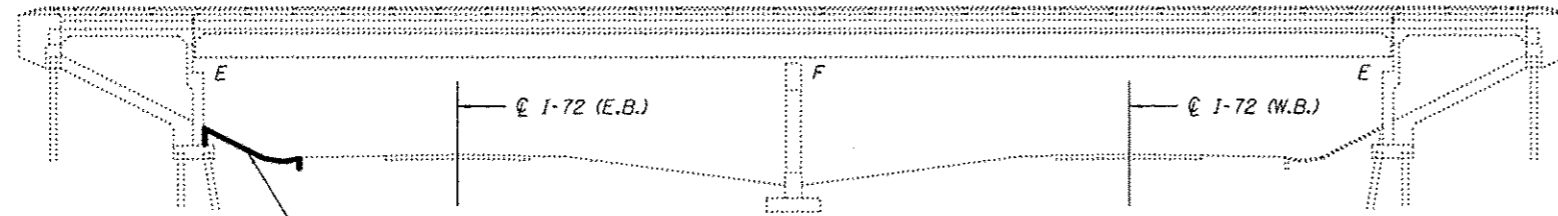
Sloped wall repair shall be sequenced to occur simultaneously with adjacent lane closures used for the I-72 resurfacing.

INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
3. Existing Plans

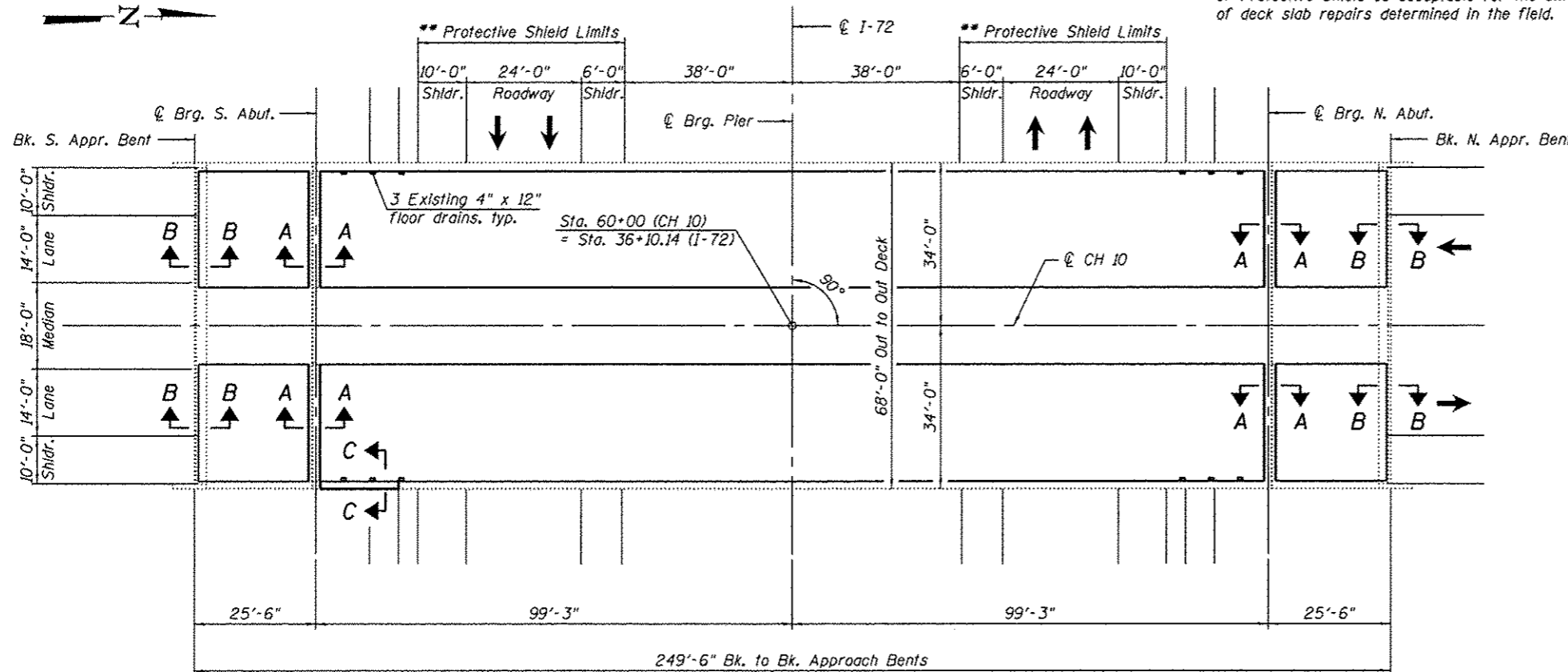
GENERAL NOTES

1. 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 adjustments 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 at the unit price bid for the work.
2. Removal of existing backer rod and silicone joint sealer will not be measured for payment but shall be included in the cost of Silicone Joint Sealer, of the size specified.
3. Resident Engineer shall determine deck slab repair areas after removal of existing HMA overlay. Repair areas shall be documented in the as-built plans.
4. The indicated portion of the existing slope wall shall be removed and replaced in-kind. See existing plans for details. Backfilling, compaction, and dressing of the existing earth bedding may be required and shall be completed to the satisfaction of the Engineer. Backfilling, compaction, and dressing of the existing earth bedding will not be measured for payment but shall be included in the cost of Slope Wall, of the thickness specified.
5. Sloped walls shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.
6. Reinforcement bars designated (E) shall be epoxy coated.



ELEVATION

** Resident Engineer may reduce the required limits of Protective Shield as acceptable for the extent of deck slab repairs determined in the field.



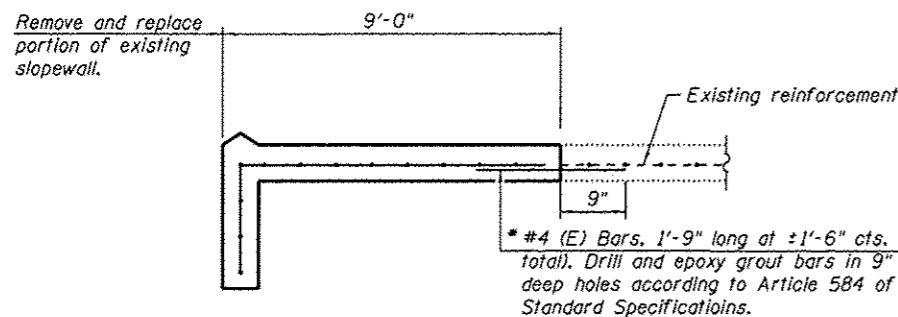
PLAN

TOTAL BILL OF MATERIAL

| ITEM | UNIT | TOTAL |
|--|---------|--------|
| Hot-Mix Asphalt Surface Course, Mix "C", N50 | Ton | 165 |
| Waterproofing Membrane System (Special) | Sq. Yd. | 1309.5 |
| Hot-Mix Asphalt Surface Removal (Deck) | Sq. Yd. | 1309.5 |
| Deck Slab Repair (Partial) | Sq. Yd. | 131 |
| Silicone Joint Sealer, 2" | Foot | 135.5 |
| Slope Wall Removal | Sq. Yd. | 22 |
| Slope Wall, 4" | Sq. Yd. | 22 |
| Protective Shield | Sq. Yd. | 587 |



WELL
Expires: 11/30/2016
10/14/14

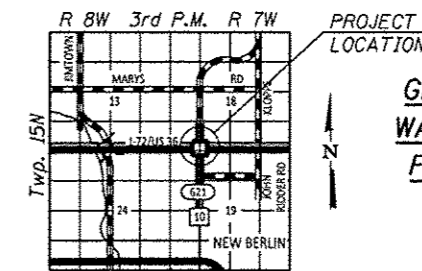


SECTION C-C

SCOPE OF WORK

1. Remove and replace the existing HMA overlay and waterproofing membranes.
2. Repair bridge deck.
3. Remove and replace existing expansion joints at both abutments.
4. Repair sloped wall.

* This work and the cost of the reinforcement bars will not be measured or paid for separately but shall be considered as included in the unit price bid for Slope Wall, 4".



LOCATION SKETCH

**GENERAL PLAN AND ELEVATION
WAVERLY ROAD (CH10) OVER I-72
F.A.I. 72 SEC. (84-9-2&3)RS-2
SANGAMON COUNTY
STATION 36+10.14
STRUCTURE NO. 084-0142**



| | | |
|--------------|-------------------|---------|
| USER NAME * | DESIGNED - CEH | REVISED |
| FILE NAME * | CHECKED - CWC | REVISED |
| PLOT SCALE * | DRAWN - DLH | REVISED |
| PLOT DATE * | CHECKED - CEH/CWC | REVISED |

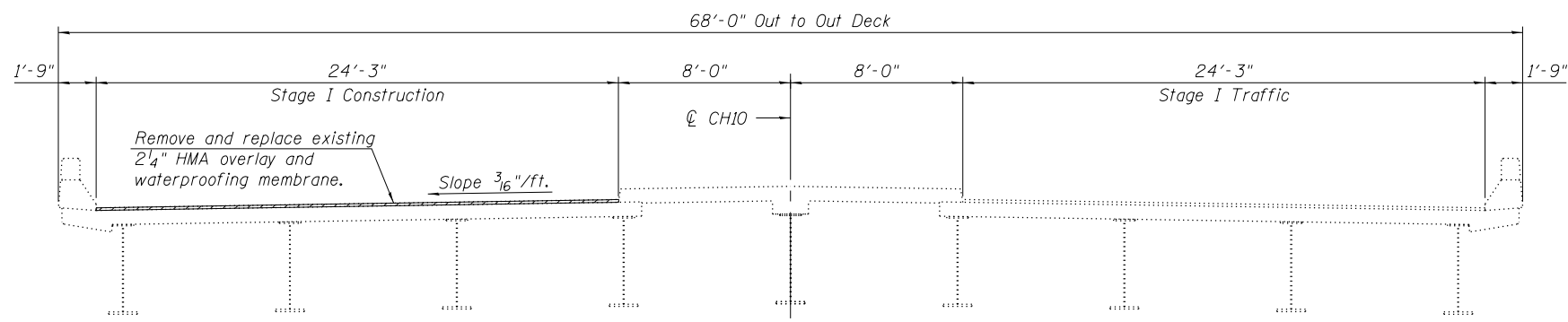
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN AND ELEVATION
STRUCTURE NO. 084-0142**

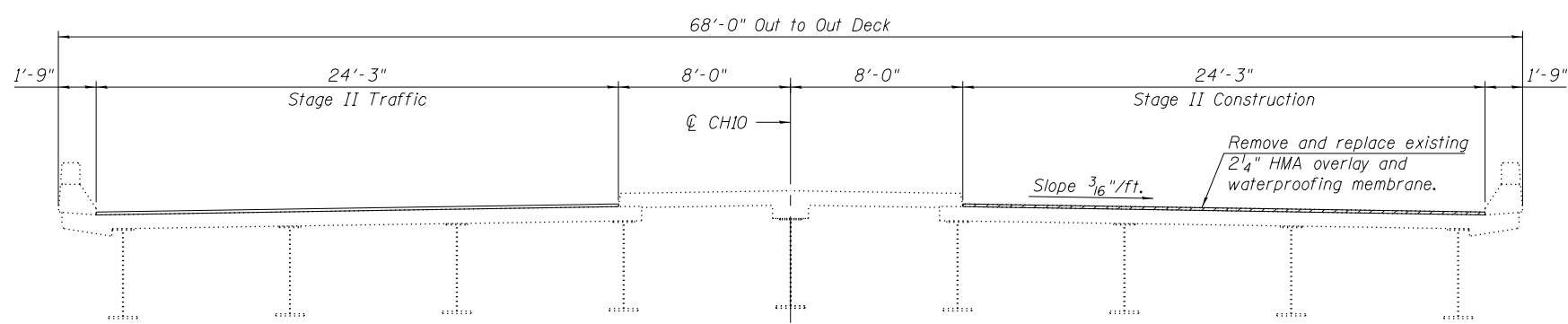
SHEET NO. 1 OF 3 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|---------|----------|--------------------|-----------|
| 72 | | SANGAMON | 163 | 118 |
| | | | CONTRACT NO. 72B54 | |

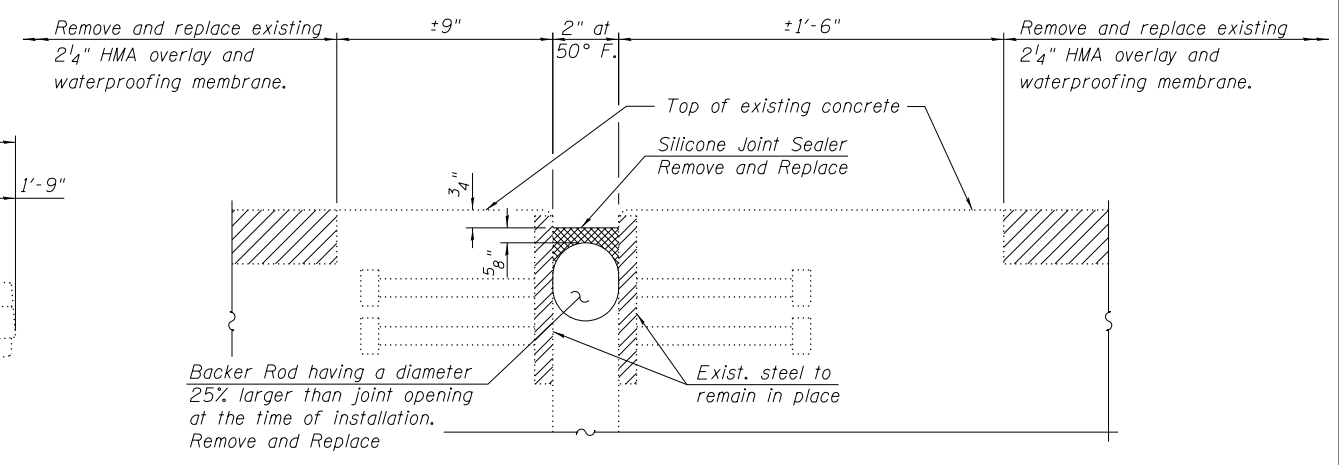
ILLINOIS FED. AID PROJECT
*(84-9-2&3)RS-2&MISC STRUC REP



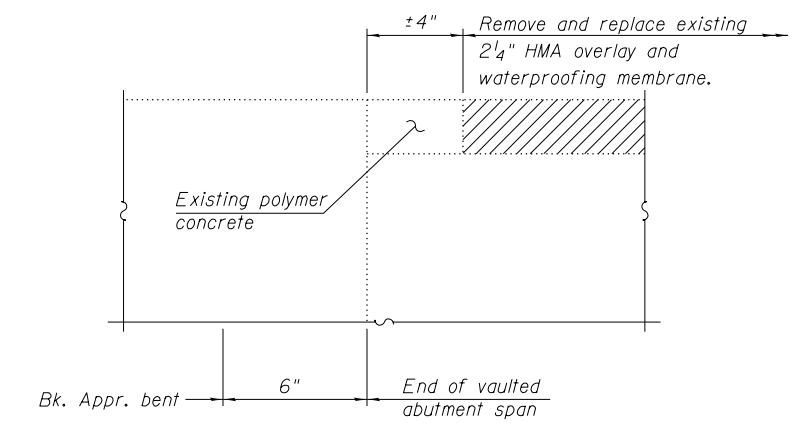
STAGE I CONSTRUCTION
(Looking North)



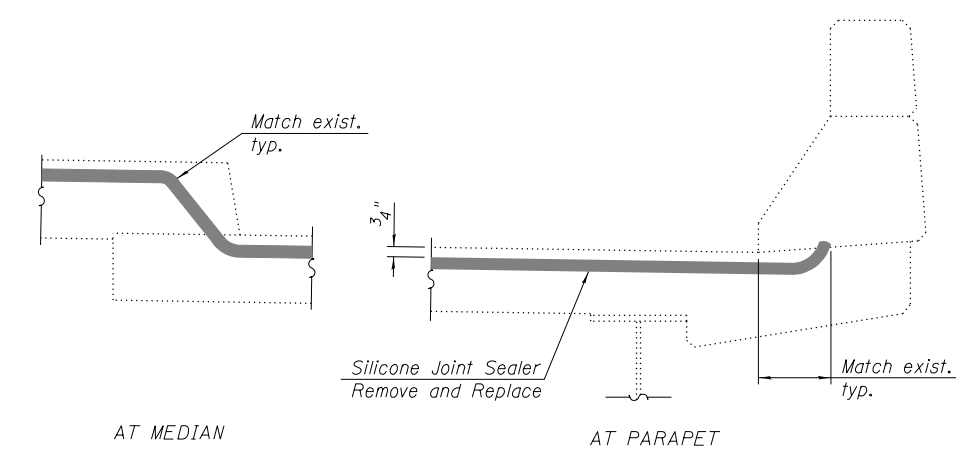
STAGE II CONSTRUCTION
(Looking North)



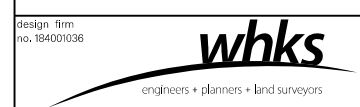
SECTION A-A



SECTION B-B



TYPICAL END OF SEAL TREATMENT



| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA
STRUCTURE NO. 084-0142**

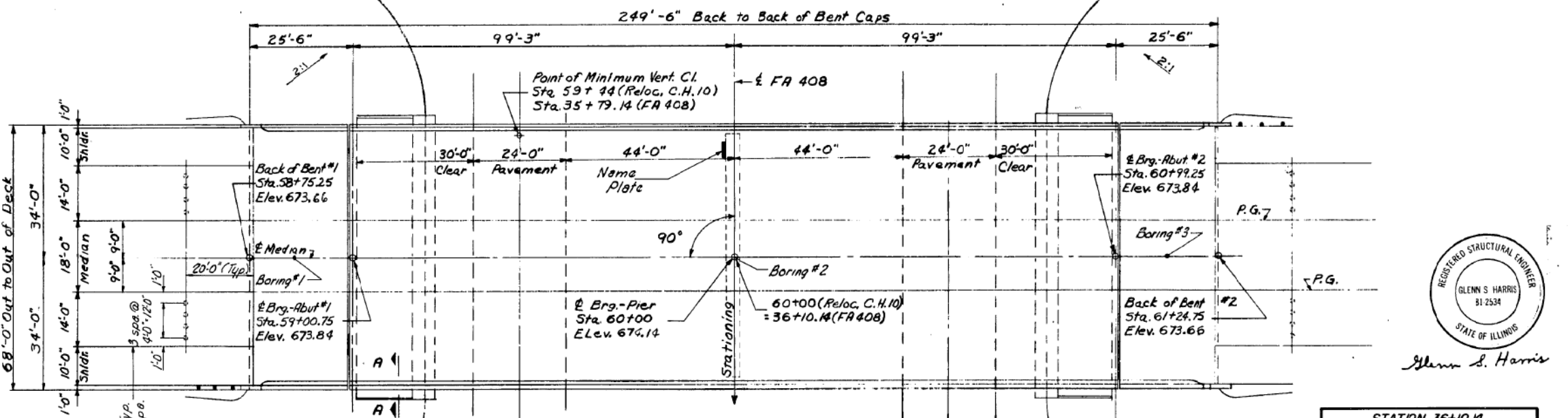
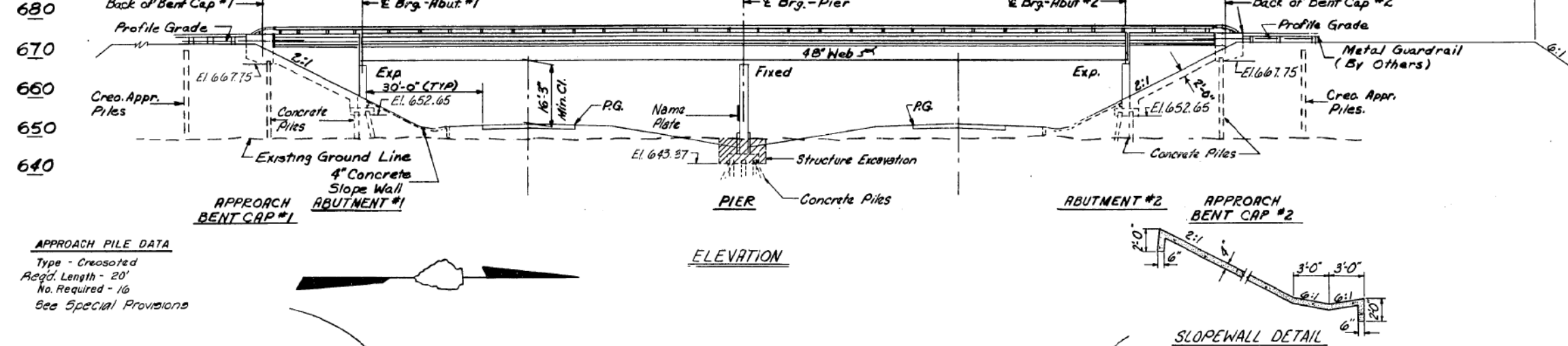
SHEET NO. 2 OF 3 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|----------|--------------|-----------|
| 72 | • | SANGAMON | 163 | 119 |
| CONTRACT NO. 72B54 | | | | |

ILLINOIS FED. AID PROJECT
• (84-9-2&3)RS-2&MISC STRUC REP

T.B.M. #3 - Nail and Brace in 18" Hedge tree 22' Left of FA 408 Sta. 31+44. Elev. 653.65.

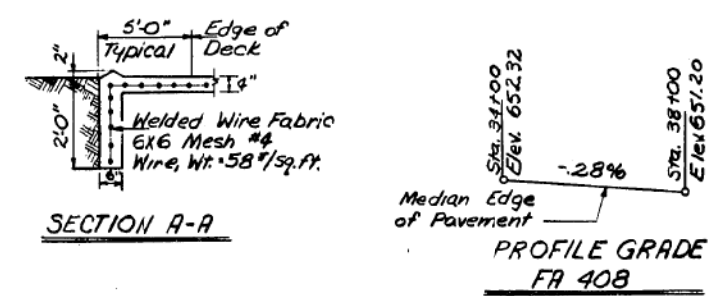
NO Existing Structure



DESIGN LOADING
Live HS-20-44 AASHTO 1969 Spec. & 1971 Interim Dead Load includes 25#/Sq Ft. of Roadway for Future Wearing Surface plus 13#/Sq Ft. for Initial Waterproofing.

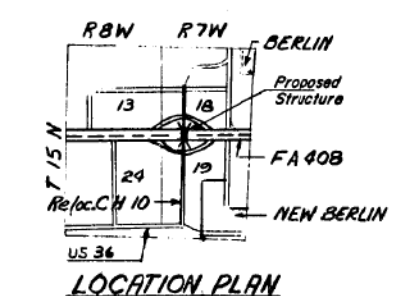
DESIGN STRESSES
fc = 1400 p.s.i. Substructure, Curbs & Parapets.
fc = 1200 p.s.i. Superstructure Slab
vc = 75 p.s.i. Footings
fs = 20,000 p.s.i. Reinforcing Steel
fs = 20,000 p.s.i. Structural Steel (A-36)
n = 10

LIVE LOAD DEFLECTION
1/1200 for composite construction



STATION 36+10.14 BUILT 197 BY STATE OF ILLINOIS F.A. RT. 408 SEC. 04-9-2HB F.A. PROJ. LOADING HS20

LETTERING FOR NAME PLATE (See Sta. 2113)



GENERAL NOTES

- All reinforcement bars shall be lapped 24 diameters unless otherwise noted.
- Fasteners shall be high strength bolts. Bolts 3/4" open holes 13/16" unless otherwise noted.
- Calculated weight of Structural Steel = 426,050 LBS.
- The basic lead silico chromate paint system shall be used for shop and field painting of Structural Steel.
- Field welding of Construction Accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the Pier Supports. Field welding in other areas will be permitted only when approved by the Engineer.
- Anchor bolts shall be set before bolting diaphragms over Supports.
- The Contractor shall drive one Concrete Test Pile each in a permanent location at Bent No. 1, Pier and Abutment No. 2 as directed by the Engineer before ordering the remainder of piles.
- The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the Abutments.
- The Concrete Rail Section above the mandatory construction joint at the top of the Slab shall be constructed of Class "X" Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.
- *Protective coat shall not be applied to surfaces to which Coal Tar Interlayer Protective Coat is applied.
- Slope wall shall be reinforced with Welded Wire Fabric 6"x6" mesh, weighing 58#/100 Sq. ft.
- The Contractor shall take precautions against over-driving piles due to presence of extremely dense and hard material.
- The main load carrying member components subject to the Supplemental Requirements for Arch Toughness are the flanges, webs, and splice plates of the steel girders or wide flange beams.

| TOTAL BILL OF MATERIAL | | | | |
|--|----------|-----------|---------|---------|
| ITEM | UNIT | SUPERSTR. | SUBSTR. | TOTAL |
| Structure Excavation | Cu. Yds. | | 180.0 | 180.0 |
| Class "X" Concrete | Cu. Yds. | 577.0 | 424.3 | 1001.3 |
| Reinforcement Bars | Lbs. | 131,800 | 45,290 | 177,090 |
| Structural Steel | L. S. | L. S. | | L. S. |
| Aluminum Railing | Lin. Ft. | 513 | | 513 |
| Name Plates | Each | | 1 | 1 |
| Concrete Piles | Lin. Ft. | | 2970 | 2970 |
| Test Piles (Concrete) | Each | | 3 | 3 |
| Slope wall 4" | Sq. Yds. | | 648 | 648 |
| Stud Shear Connectors | Each | 3510 | | 3510 |
| Preformed Joint Sealer 2 1/2" | Lin. Ft. | 136 | | 136 |
| * Protective Coat | Sq. Yds. | 662 | | 662 |
| Creosoted Piles (Up to 20') | Lin. Ft. | | 320 | 320 |
| * Coal Tar Interlayer Protective Coat | Sq. Yds. | 1338 | | 1338 |
| * Bituminous Concrete Surface Course - Class I | Tons | 112.4 | | 112.4 |
| Sand Backfill | Cu. Yds. | | 940.0 | 940.0 |

* These items to be constructed by Sec. 04-9-2

| GENERAL PLAN & ELEVATION | | | | |
|--------------------------|------|----------|------------|------|
| REVISIONS | DATE | INITIALS | CHECKED BY | DATE |
| 1 | 8/78 | GSH | | 7-72 |

| | | | |
|---|--|--------------------------|--|
| STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | | DRAWN BY DATE SRK 12-71 | |
| RELOC. CH 10 OVER FA 408 PROJECT | | CHECKED BY DATE RKS 7-72 | |
| FA 408 SEC 04-9-2HB SANGAMON CO. | | BOOK NUMBER | |
| Sta. 36+10.14 (FA 408) | | PROJECT NO. 2385-1 | |
| HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS DECATUR, ILLINOIS | | SHEET NO. 86 | |



| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

FOR INFORMATION ONLY

EXISTING PLANS STRUCTURE NO. 084-0142

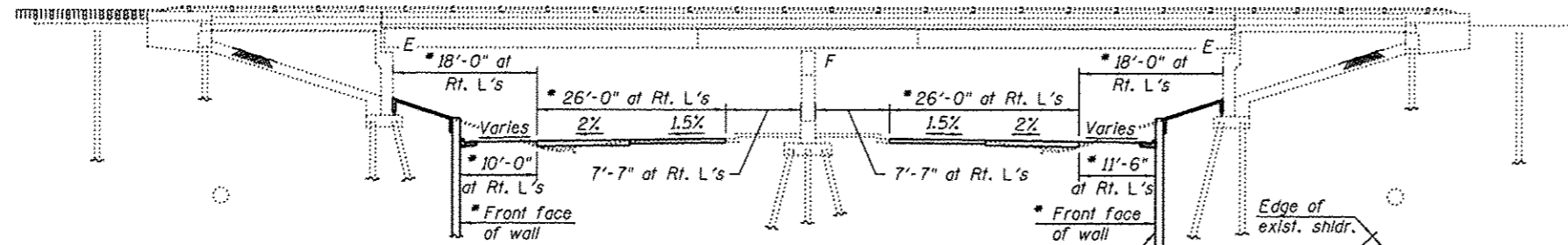
SHEET NO. 3 OF 3 SHEETS

| | | | | |
|---------------------------|-----------|-----------------|--------------------|---------------|
| F.A.I. RTE. 72 | SECTION . | COUNTY SANGAMON | TOTAL SHEETS 163 | SHEET NO. 120 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 72B54 | |

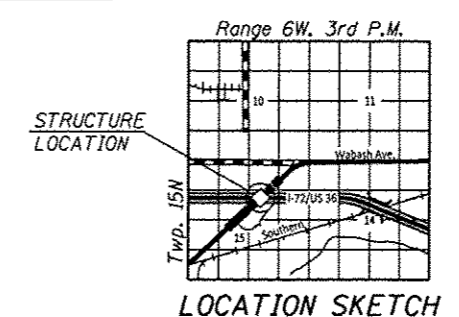
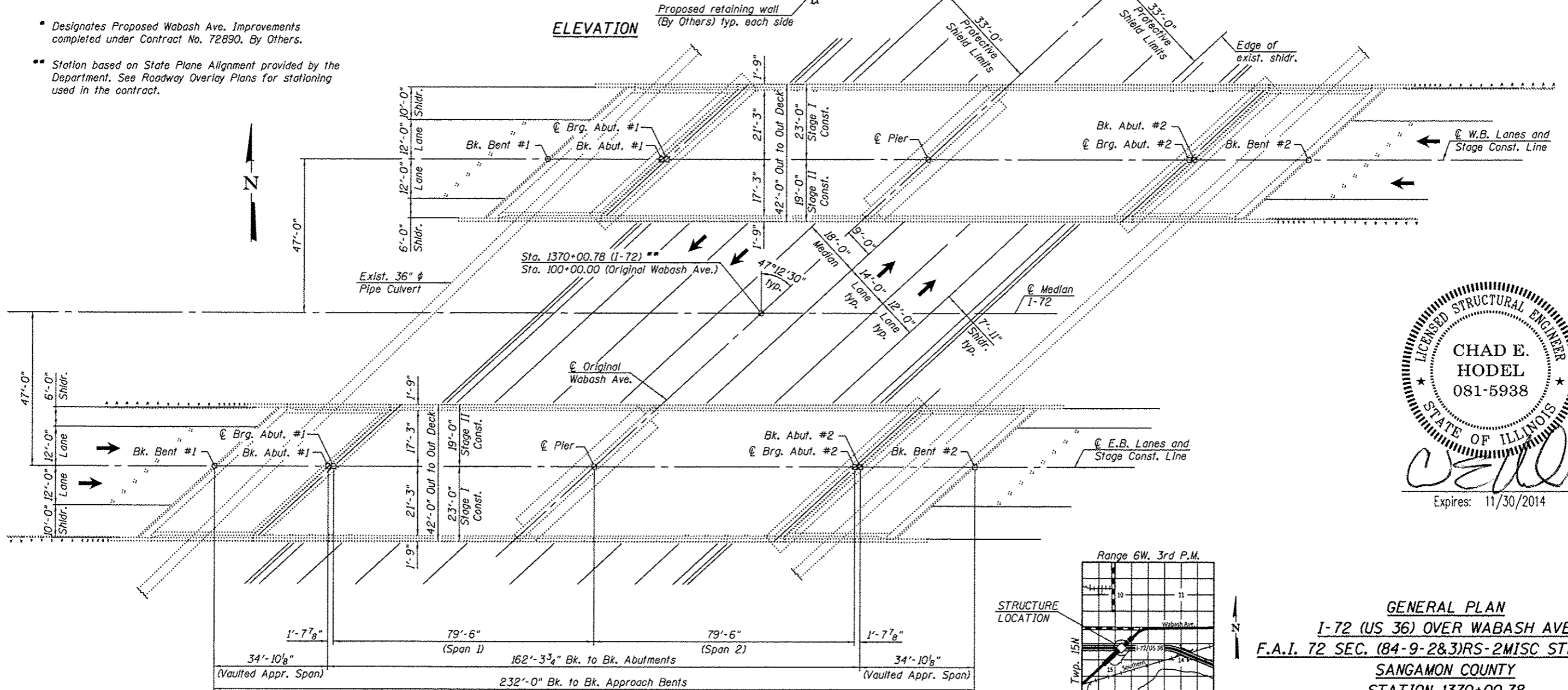
Existing Structure: The existing structures were constructed in 1974 as FA 408, Section 84-9-2HB-5. In 1992, the expansion joints were replaced on SN 084-0148. In 1998, the existing wearing surfaces on both structures were replaced with a microsilica overlay and the expansion joints were replaced on SN 084-0149. In 2004, both structures were repainted. Each structure is a two span, composite (positive moment regions only), continuous steel welded plate girder bridge consisting of a reinforced concrete deck supported on six 42" plate girders with vaulted abutments and a multicolumn pier. The approach bents, vaulted abutments, and pier are supported on concrete piles. The span lengths for each structure are 36'-6", 79'-6", 79'-6", and 36'-6" respectively. The existing structures are skewed 47°12'30" right forward. Each existing structure measures 232'-0" back to back approach bents and 42'-0" out to out bridge deck. One lane of traffic in each direction shall be maintained utilizing stage construction to perform deck patching.

INDEX OF SHEETS

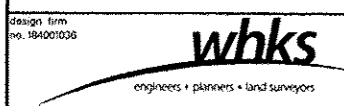
1. General Plan and Elevation
2. General Data
3. Temporary Concrete Barrier for Stage Construction
4. Deck Repair Details
- 5.-6. Existing Plans (For Information Only)



- * Designates Proposed Wabash Ave. Improvements completed under Contract No. 72890, By Others.
- ** Station based on State Plane Alignment provided by the Department. See Roadway Overlay Plans for stationing used in the contract.



GENERAL PLAN
I-72 (US 36) OVER WABASH AVE.
F.A.I. 72 SEC. (84-9-2&3)RS-2MISC STRUC REP
SANGAMON COUNTY
STATION 1370+00.78
STRUCTURE NO. 084-0148 (W.B.) & 0149 (E.B.)

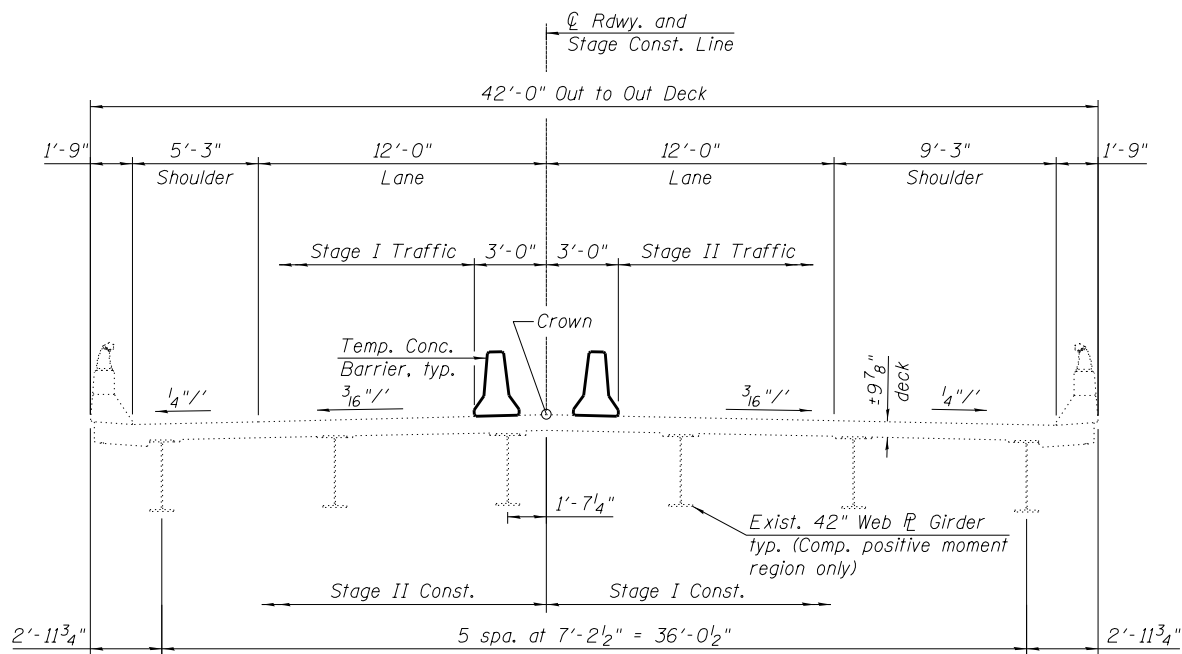


| | | |
|---|----------------|---------|
| USER NAME • dhaberling | DESIGNED - CEH | REVISED |
| FILE NAME • 0040148-0149-72854 (D:\proj\0840148-0149-72854.dwg) | REVISED | REVISED |
| PLOT SCALE • 1/8" = 1'-0" | DRAWN - DLH | REVISED |
| PLOT DATE • 6/21/2014 | CHECKED - CEH | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 084-0148(W.B.) & 0149(E.B.)
SHEET NO. 1 OF 6 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|----------|--------------|-----------|
| 72 | * | SANGAMON | 163 | 121 |
| CONTRACT NO. 72854 | | | | |



* Existing 7⁵/₈" slab plus 2¹/₄" microsilica concrete overlay.

CROSS SECTION THRU BRIDGE

SN: 084-0148 (W.B. Looking West)
 SN: 084-0149 (E.B. Looking East)

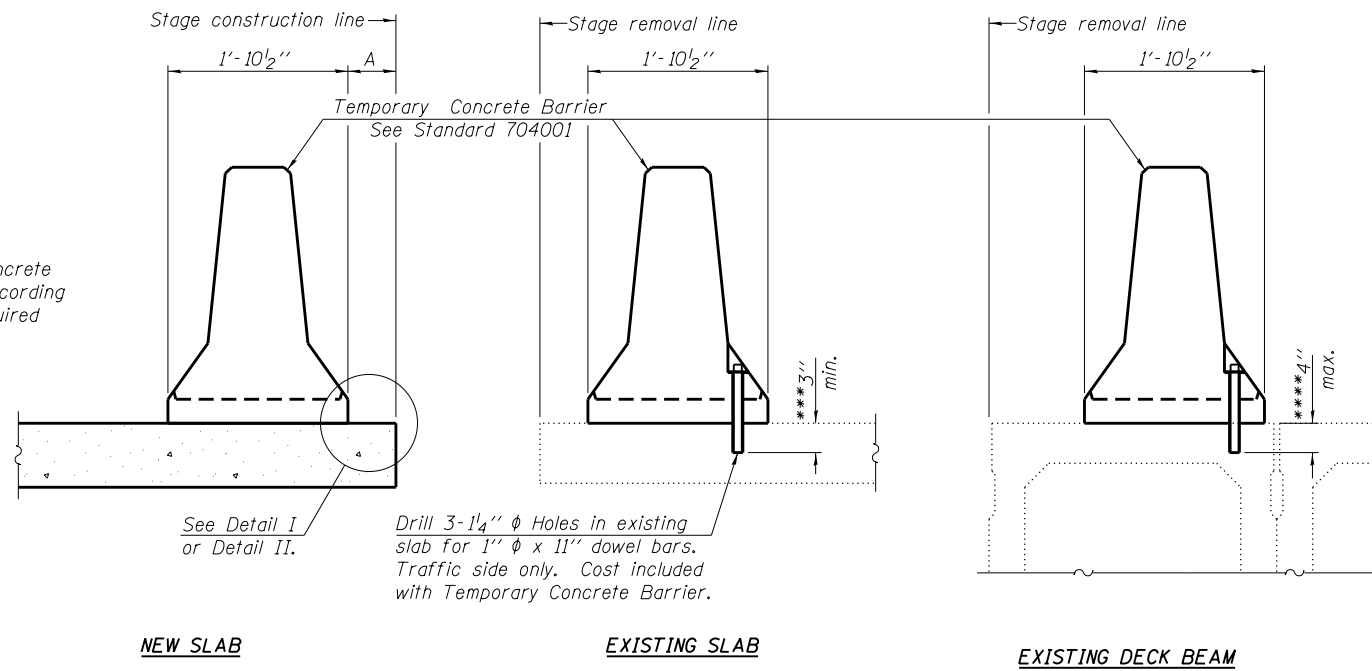
GENERAL NOTES

1. 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 adjustments 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 at the unit price bid for the work.
2. No field welding is permitted except as specified in the contract documents.
3. 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
4. The Resident Engineer shall determine the deck slab repair areas. Repair areas not shown in the contract plans shall be documented in the as-built plans. If the Resident Engineer determines that there are no full depth type deck slab repair areas for Stage II Construction, the Stage II traffic staging and construction sequence details shown herein may be disregarded and the Stage II deck repairs shall be sequenced with temporary lane closures used for the I-72 resurfacing.
5. The protective shield limits shown may be adjusted by the Resident Engineer to that needed to adequately project the existing Wabash Ave. traffic lanes for the deck slab repair areas determined in the field.

TOTAL BILL OF MATERIAL

| Item | Unit | Total |
|--|---------|-------|
| Deck Slab Repair (Partial) | Sq. Yd. | 18.1 |
| Deck Slab Repair (Full Depth, Type II) | Sq. Yd. | 55.6 |
| Protective Shield | Sq. Yd. | 454 |

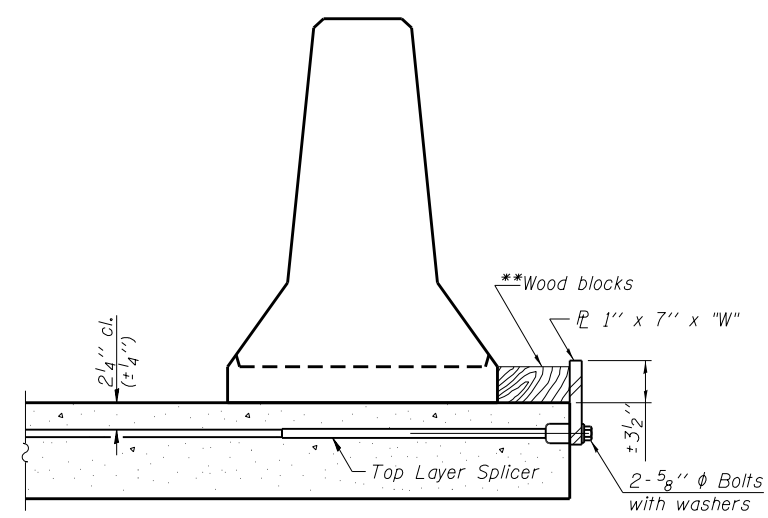
When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



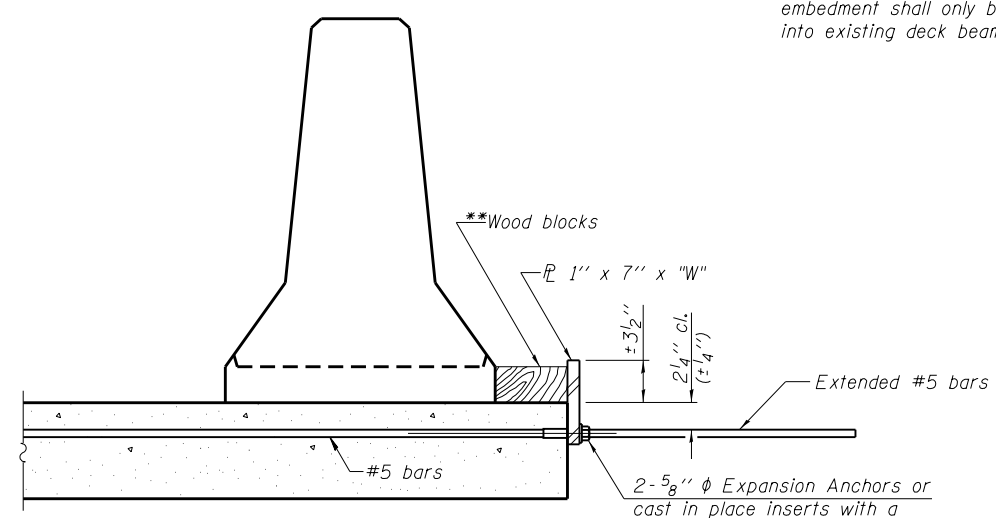
SECTIONS THRU SLAB OR DECK BEAM

*** 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.

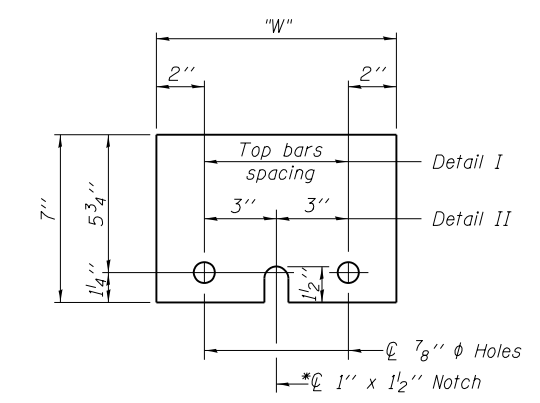
"W" = Top bars spacing + 4"

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel \bar{P} to the top layer of couplers with 2-5/8" ϕ 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{P} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

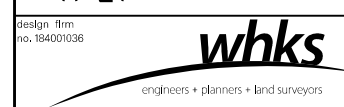
Cost of anchorage is included with Temporary Concrete Barrier.
The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



STEEL RETAINER \bar{P} 1" x 7" x "W"
* Required only with Detail II

R-27

7-1-10



| | | |
|---|----------------|---------|
| USER NAME = dheberling | DESIGNED - CEH | REVISED |
| FILE NAME = 0840148-0149-72854 (Desktop) - 0840148-0149-72854.dwg | CHKD - DLH | REVISED |
| PLOT SCALE = 0:2.00 " = 1" / in. | DRAWN - DLH | REVISED |
| PLOT DATE = 8/25/2014 | CHECKED - CEH | REVISED |

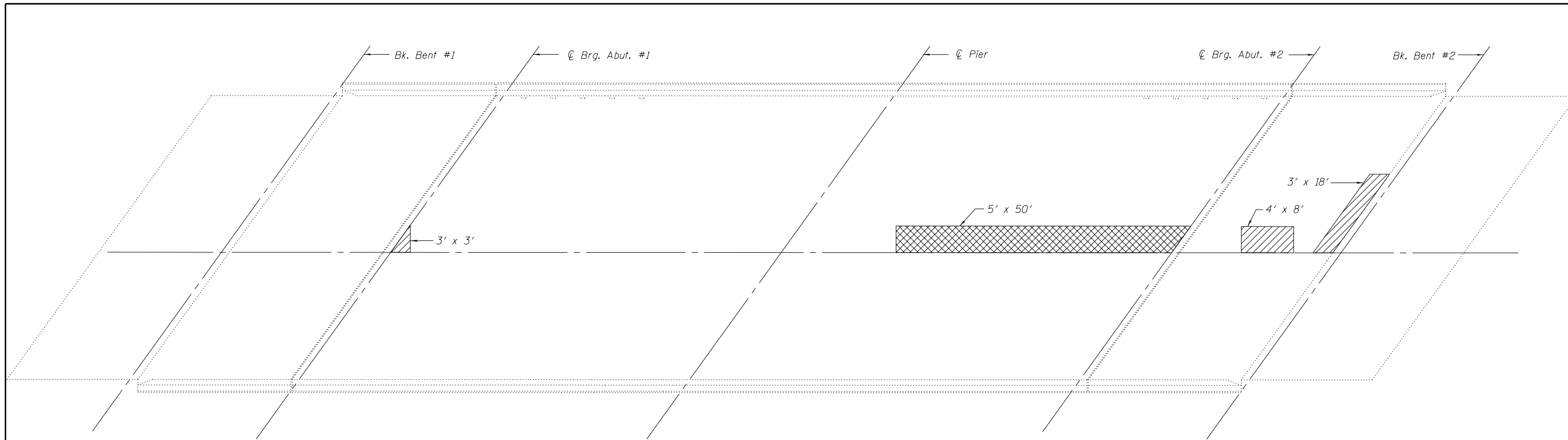
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 084-0148(W.B.) & 0149(E.B.)**

SHEET NO. 3 OF 6 SHEETS

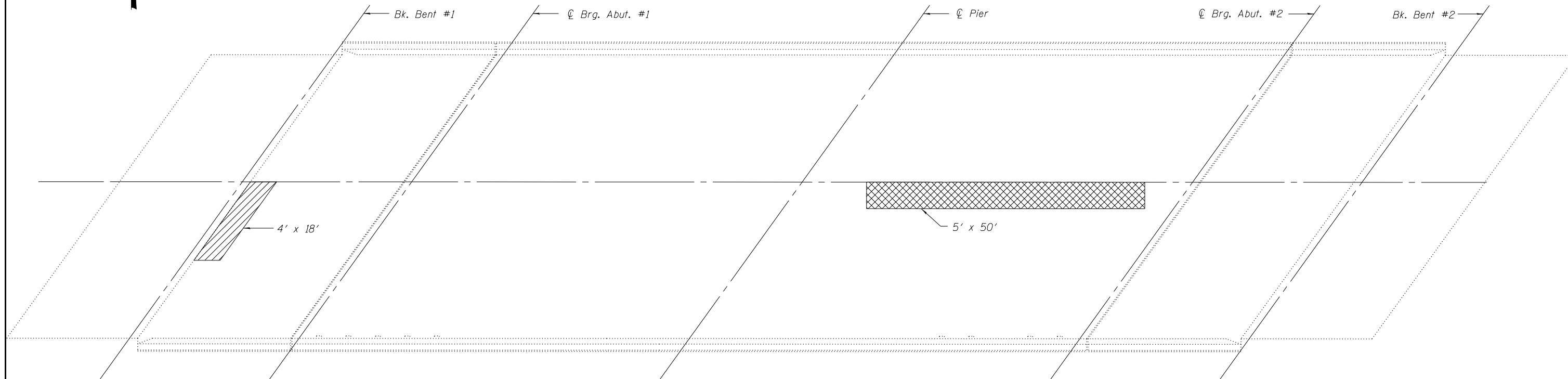
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|----------|--------------|-----------|
| 72 | . | SANGAMON | 163 | 123 |
| CONTRACT NO. 72B54 | | | | |

ILLINOIS FED. AID PROJECT
• (84-9-2&3)RS-2&MISC STRUC REP



STRUCTURE NO. 084-0148 (W.B.)

Notes:
 Hatching indicates Deck Slab Repair (Partial).
 Cross hatching indicates Deck Slab Repair (Full Depth, Type II).



STRUCTURE NO. 084-0149 (E.B.)

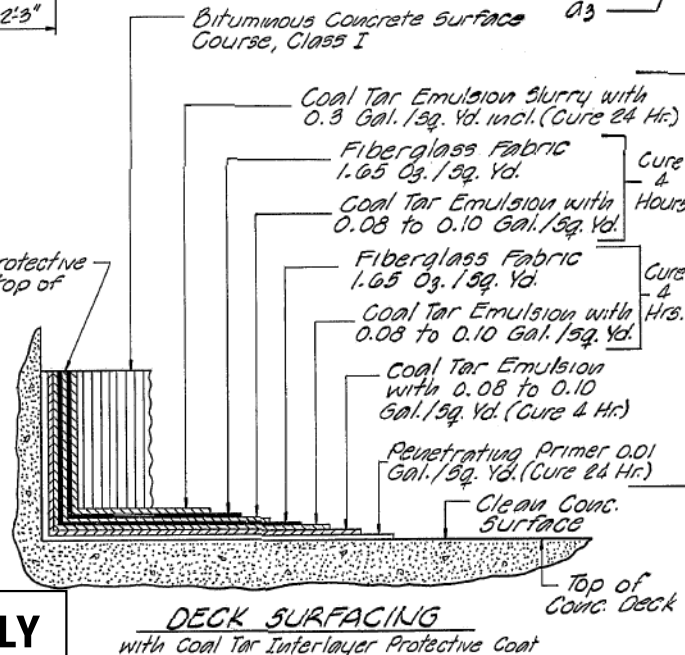
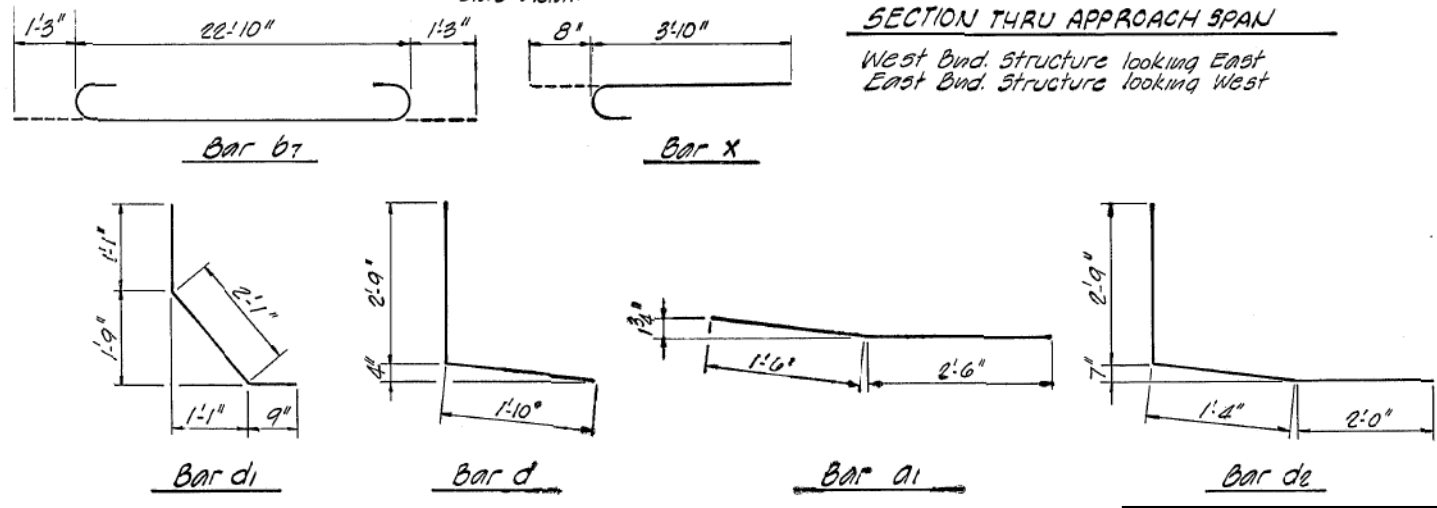
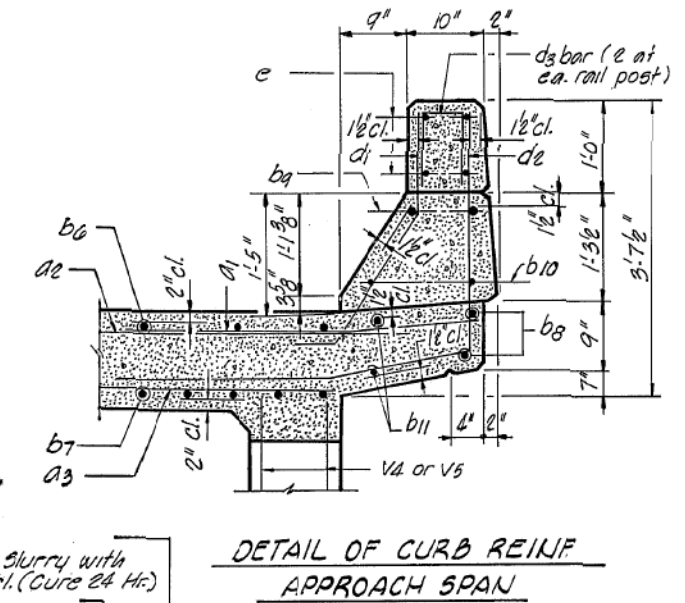
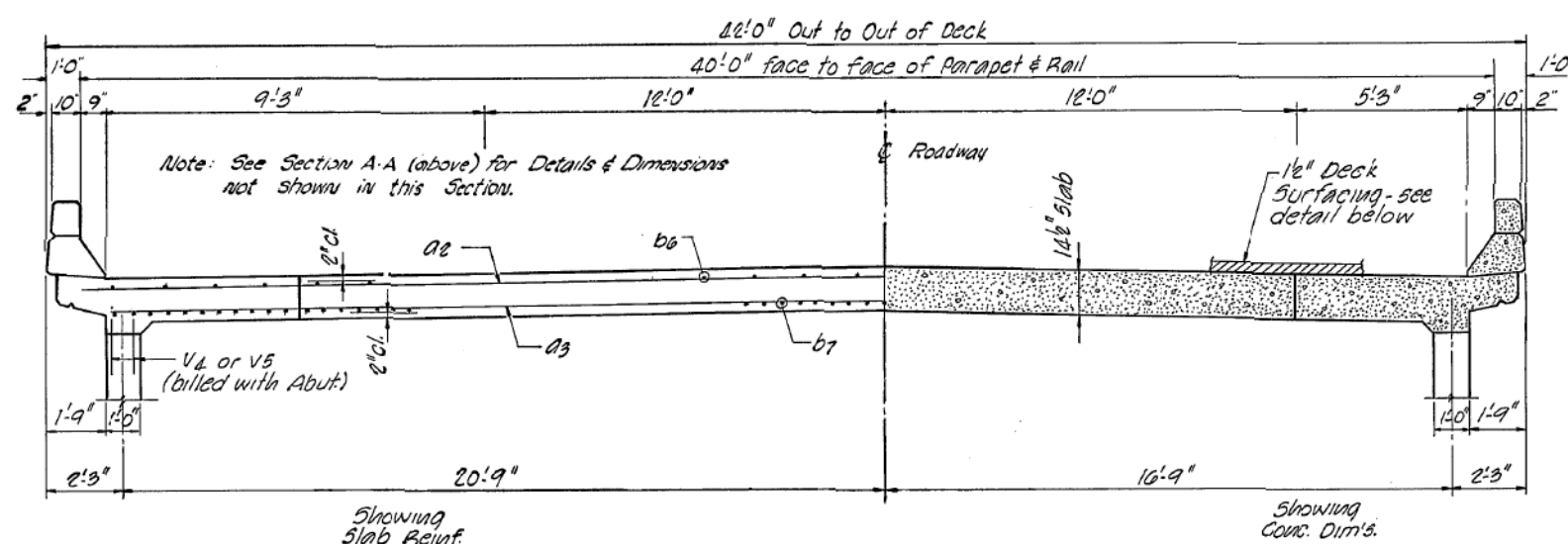
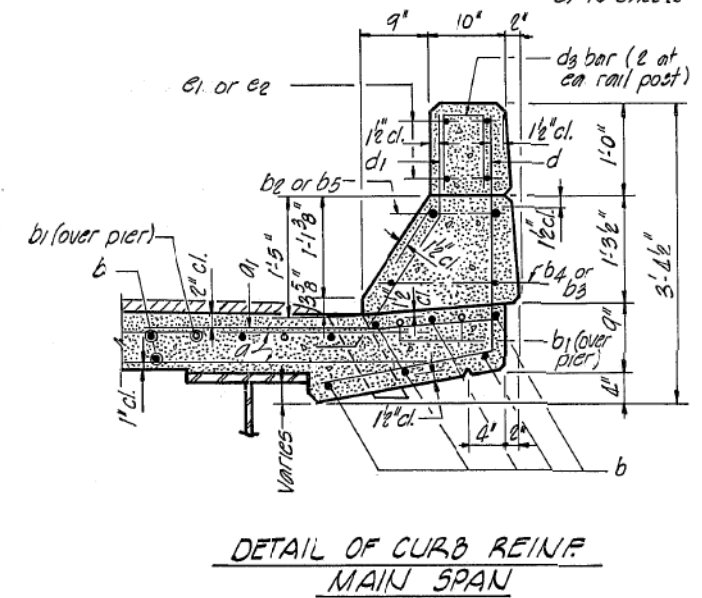
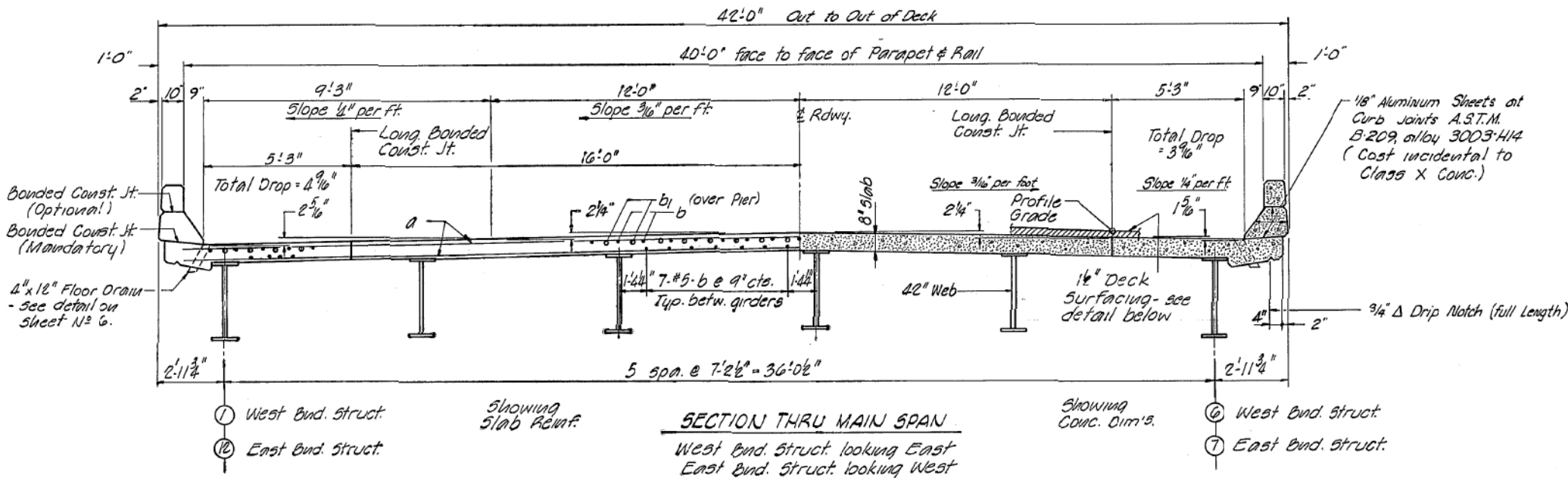
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| FILE NAME = 0840148-0149-72854 (Deck Slab Repair).dgn | CHECKED - DLH | REVISED |
| PLOT SCALE = 0:2.00" = 1' / in. | DRAWN - DLH | REVISED |
| PLOT DATE = 8/25/2014 | CHECKED - CEH | REVISED |

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|----------|--------------|-----------|
| 72 | • | SANGAMON | 163 | 124 |
| CONTRACT NO. 72B54 | | | | |

Note:
All edges shall have 3/4" chamfers
unless otherwise noted.

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|----------------|---------|------------------|--------------|-----------|
| FA-408 | 84-9-2 | SANGAMON | 35 | 15 |
| ROAD DIST. NO. | | ILLINOIS PROJECT | | |

Sheet No. 7
of 18 Sheets



To be paid for
as: Coal Tar
Interlayer Pro-
tective Coat
(See Special Provisions)

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 084-0148(W.B.) & 0149(E.B.)

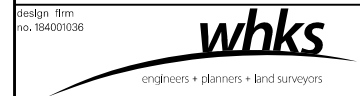
| REVISIONS | | DATE | INITIALS |
|-----------|--|------|----------|
| | | | |
| | | | |
| | | | |

| | | |
|-----------------|--|----------|
| DRAWN BY DATE | | REJ 6-72 |
| CHECKED BY DATE | | GSH 7-72 |
| PROJECT NO. | | 2385-2 |
| SHEET NO. | | 15 |

CONCRETE DECK

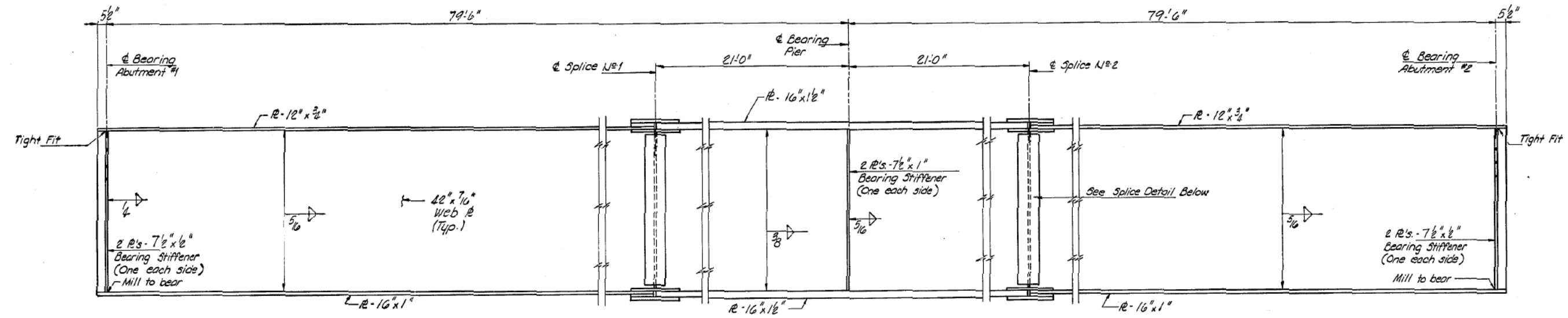
FA.408 OVER ILL. RT. 54
SECTION 84-9-2(HB-5) PROJ.
57A, 1370+00.78(FA.408) SANGAMON CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

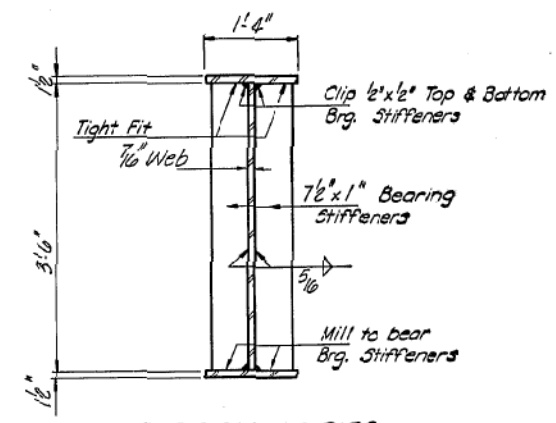
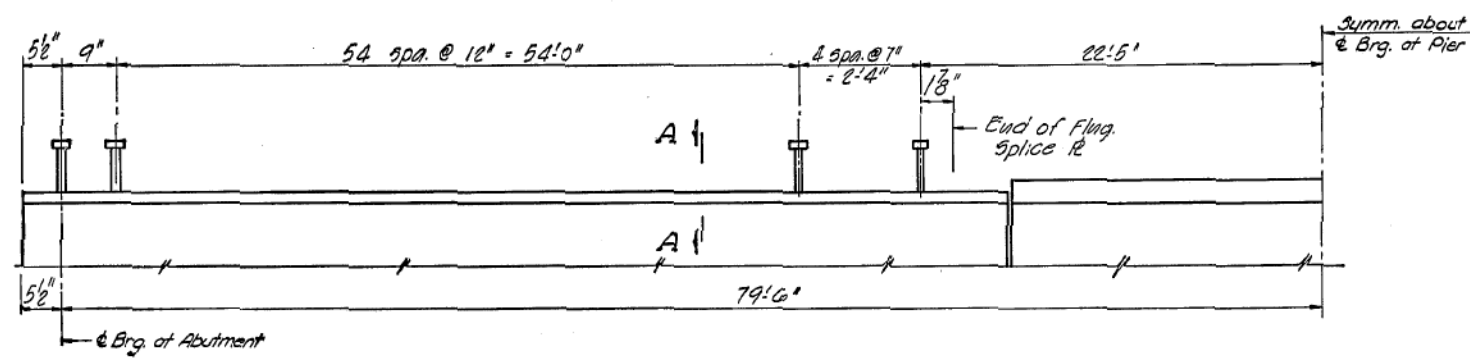


| | | |
|---|----------------|---------|
| USER NAME = dheberling | DESIGNED - CEH | REVISED |
| FILE NAME = 0840148-0149-72854 (Deck Surfacing) (DWG) | DRAWN - DLH | REVISED |
| PLOT SCALE = 0:2.00 1" = 2'-0" | CHECKED - CEH | REVISED |
| PLOT DATE = 8/25/2014 | | |

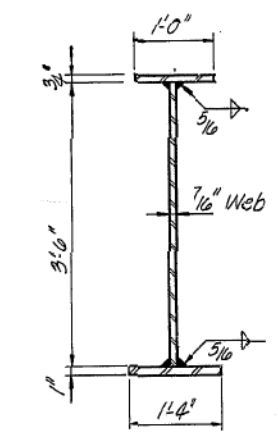
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------|----------------|----------|--------------|-----------|
| FA-408 | 84-9-2 HB-5 | SANGAMON | 35 | 18 |
| FED. ROAD DIST. NO. | | ILLINOIS | PROJECT | |



GIRDER ELEVATION

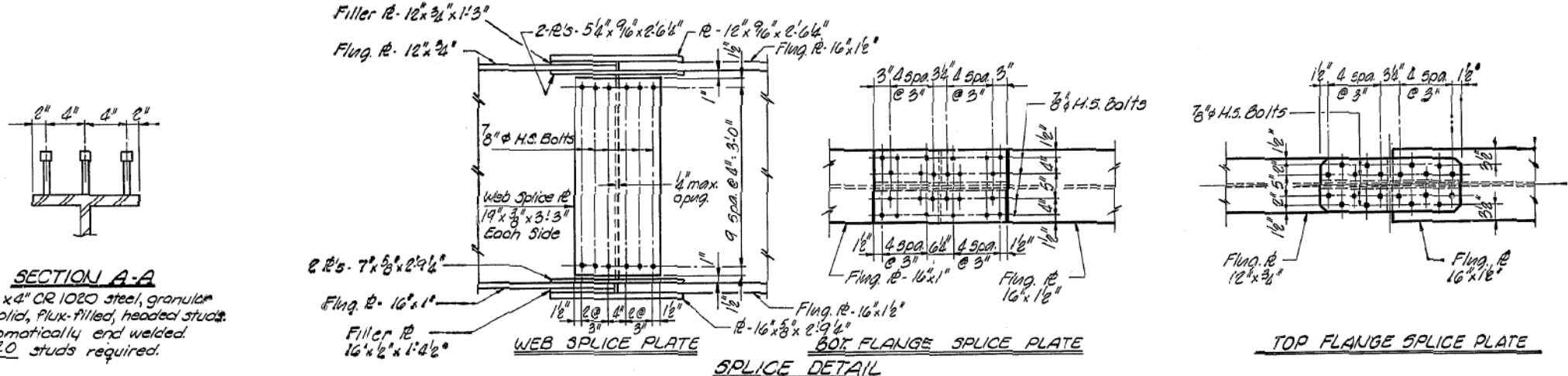


SECTION AT PIER



TYPICAL GIRDER SECTION
(Except From Splice to Pier)

SHEAR CONNECTOR ELEVATION
(360 stud shear connectors req'd. ea. girder)



SECTION A-A
3/4" x 4" CR 1020 steel, granular or solid, flux-filled, headed studs. Automatically end welded. 4320 studs required.

FOR INFORMATION ONLY

W.B. & E.B. STRUCT.
STRUCTURAL STEEL

| REVISIONS | | | DRAWN BY | DATE |
|-----------|-----|------|----------|------|
| 1 | RES | 6-72 | RES | 6-72 |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |

FA.408 OVER ILL. RT. 5A
FA.408 SEC. 84-9-2 HB-5 PROJ.
STA. 1370+00.78 (FA.408) SANGAMON CO.
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

PROJECT NO. 2385-2
SHEET NO. 18



| | | |
|---|----------------|---------|
| USER NAME = dheberling | DESIGNED - CEH | REVISED |
| FILE NAME = 0840148-0149-72854 (Design) (DWG) (PLOT) (PRINT) (DWG) (PLOT) (PRINT) | REVISED | REVISED |
| PLOT SCALE = 0:2.00 " = 1' / in. | DRAWN - DLH | REVISED |
| PLOT DATE = 8/25/2014 | CHECKED - CEH | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 084-0148(W.B.) & 0149(E.B.)

| | | | | |
|---------------------------|---------|-----------------|--------------------|---------------|
| F.A.I. RTE. 72 | SECTION | COUNTY SANGAMON | TOTAL SHEETS 163 | SHEET NO. 126 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 72B54 | |

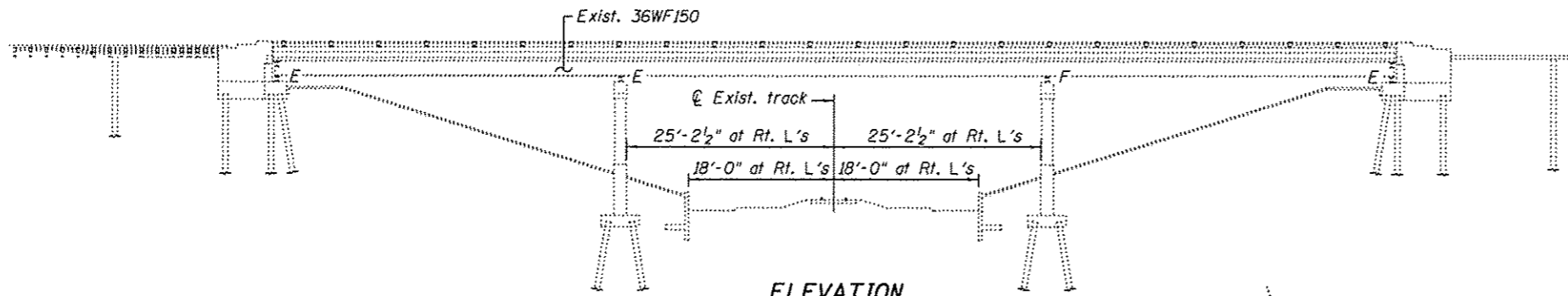
Existing Structure: S.N. 084-0127 & S.N. 084-0128 was built in 1969 as F.A.P 196, Section 1.VB. Each structure consists of a 3 span reinforced concrete deck on continuous WF steel beams supported by 2 reinforced concrete stub abutments and 2 reinforced concrete multiple column piers all founded on steel piles. The deck was patched in 1985 and 1998. The 1998 repair also consisted of a microsilica overlay (for a total deck thickness of 8 7/8") and expansion joint repair. The structural steel was cleaned and painted in 2001. 224'-0" back-to-back abutments and 42'-0" out-to-out of deck. Concrete deck to be patched using temporary lane closures.

INDEX OF SHEETS

1. General Plan and Elevation
2. Deck Slab Repair Plans
3. Existing Plans (For Information Only)

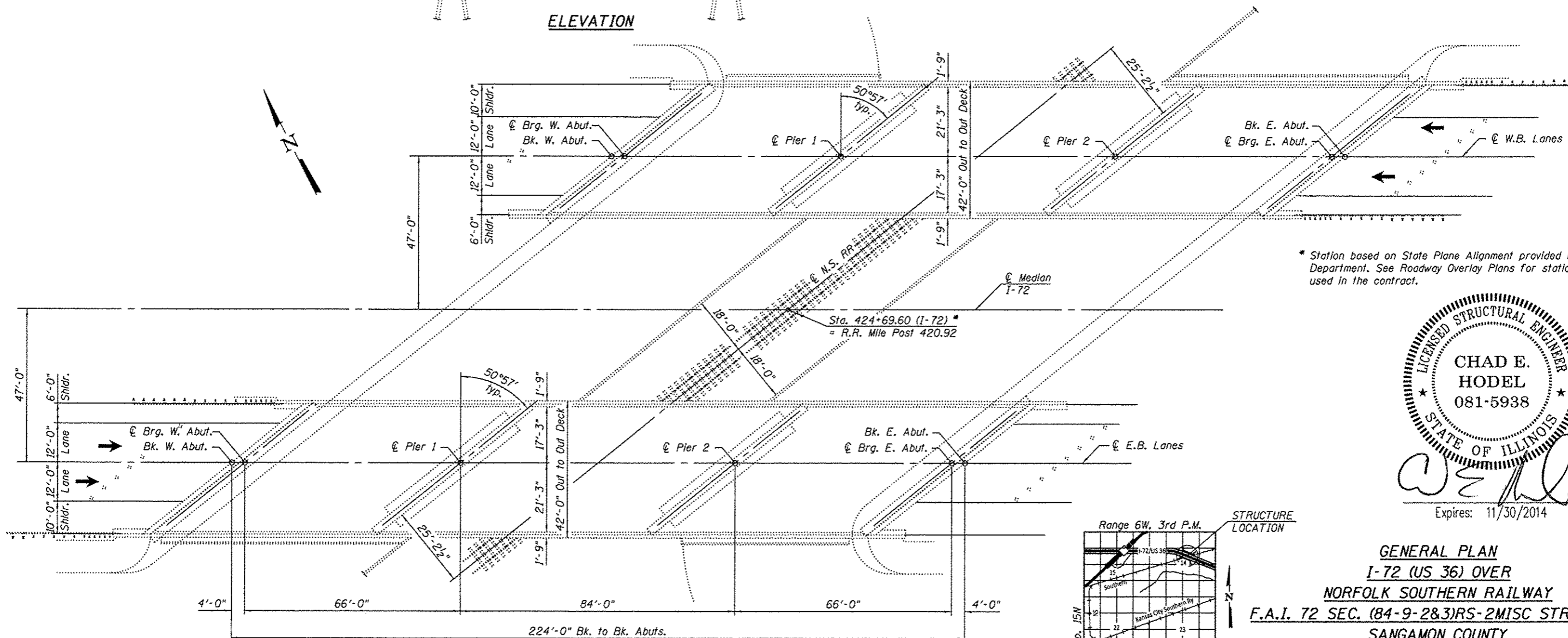
GENERAL NOTES

1. 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 adjustments 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 at the unit price bid for the work.
2. The Resident Engineer shall determine the deck slab repair areas. Repair areas not shown in the contract plans shall be documented in the as-built plans. Deck repairs shall be sequenced with temporary lane closures used for the I-72 resurfacing.



TOTAL BILL OF MATERIAL

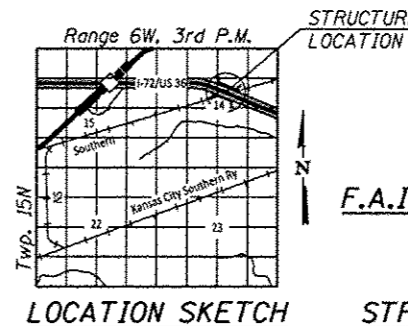
| Item | Unit | Total |
|----------------------------|---------|-------|
| Deck Slab Repair (Partial) | Sq. Yd. | 19.3 |



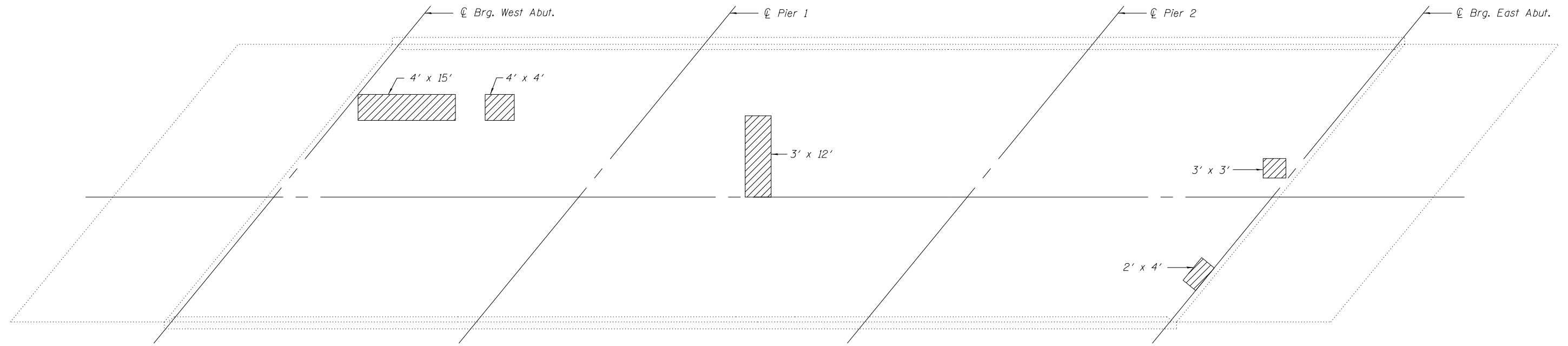
* Station based on State Plane Alignment provided by the Department. See Roadway Overlay Plans for stationing used in the contract.



W E Hodel 8-21-14
Expires: 11/30/2014

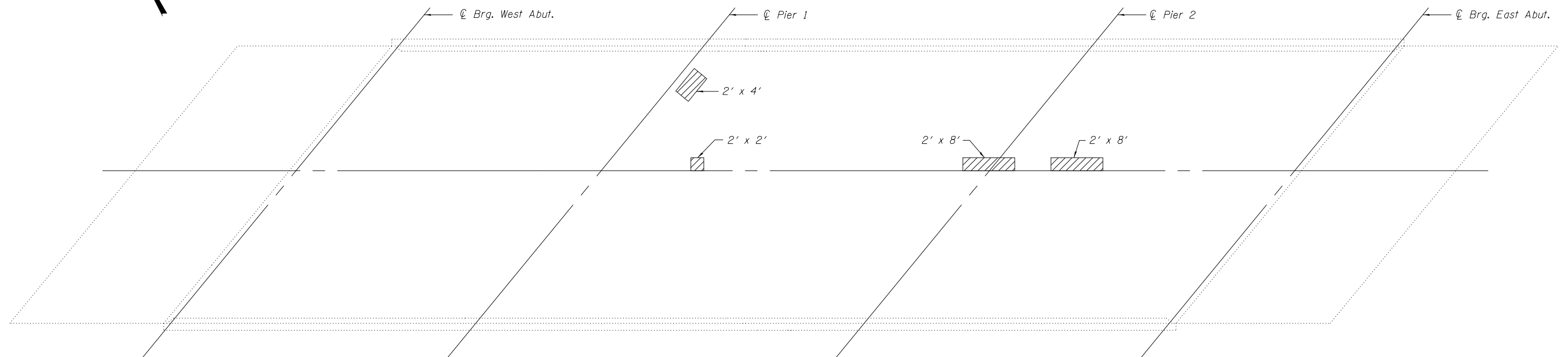


GENERAL PLAN
I-72 (US 36) OVER
NORFOLK SOUTHERN RAILWAY
F.A.I. 72 SEC. (84-9-2&3)RS-2MISC STRUC REP
SANGAMON COUNTY
STATION 424+69.60
STRUCTURE NO. 084-0127 (E.B.) & 0128 (W.B.)



STRUCTURE NO. 084-0128 (W.B.)

Note:
Hatching indicates Deck Slab Repair (Partial).



STRUCTURE NO. 084-0127 (E.B.)

Design firm
no. 184001036



| | | |
|--------------|----------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - BRD | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

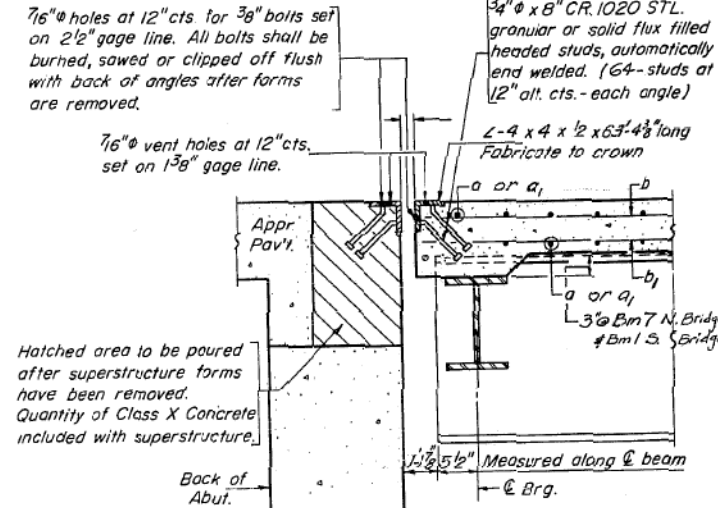
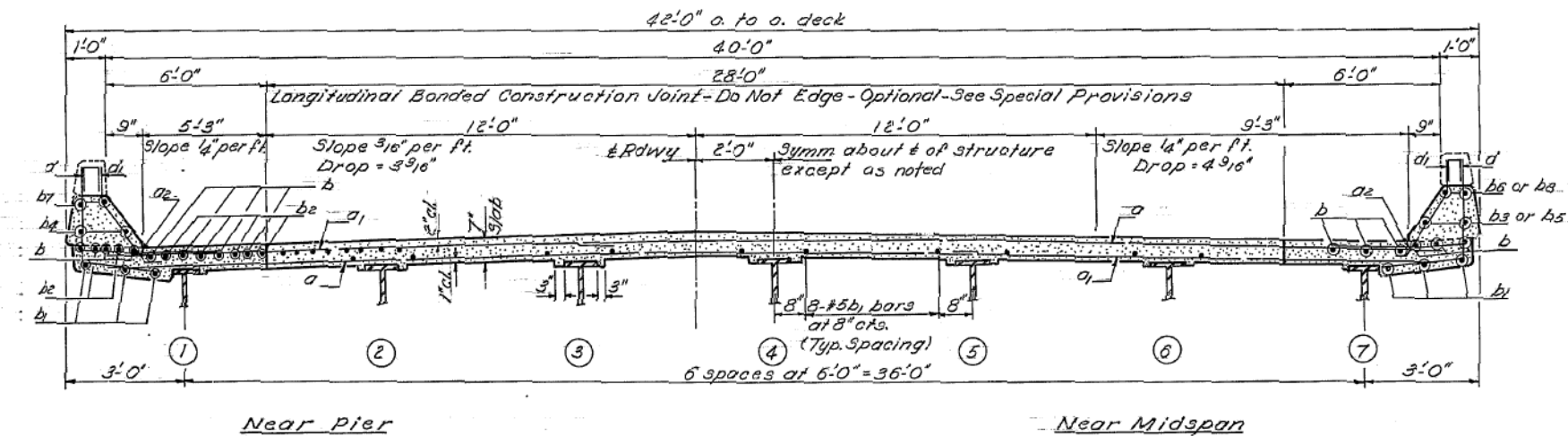
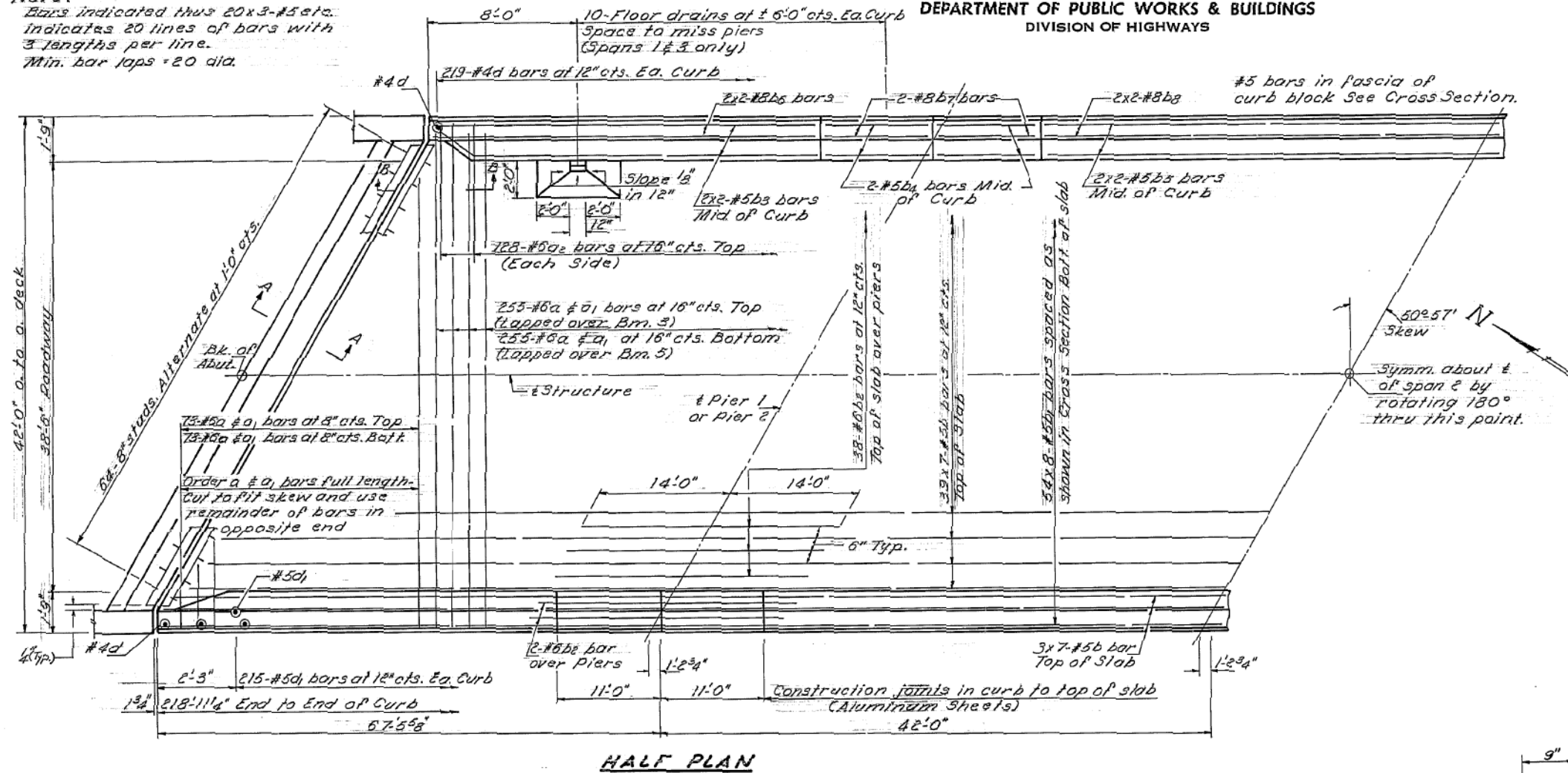
**DECK SLAB REPAIR PLANS
STRUCTURE NO. 084-0127 & 084-0128**

SHEET NO. 2 OF 3 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|----------|--------------|-----------|
| 72 | • | SANGAMON | 163 | 128 |
| CONTRACT NO. 72B54 | | | | |

ILLINOIS FED. AID PROJECT
• (84-9-2&3)RS-2&MISC STRUC REP

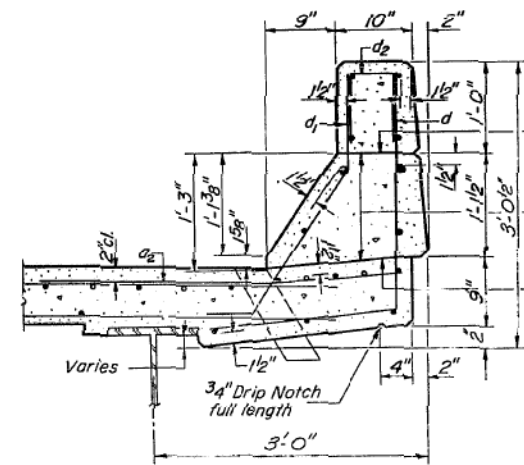
Note:
Bars indicated thus 20x3-#5 etc.
Indicates 20 lines of bars with
3 lengths per line.
Min. bar laps = 20 dia.



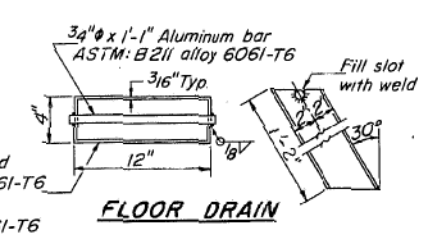
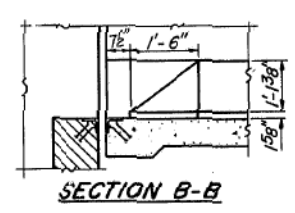
TWO BRIDGES
BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------|------|------|---------|-------|
| a | 1312 | #5 | 27'-9" | |
| a ₁ | 1312 | #6 | 16'-0" | |
| a ₂ | 512 | #6 | 4'-0" | |
| b | 630 | #5 | 32'-2" | |
| b ₁ | 864 | #5 | 28'-4" | |
| b ₂ | 168 | #6 | 28'-0" | |
| b ₃ | 32 | #5 | 28'-8" | |
| b ₄ | 32 | #5 | 10'-9" | |
| b ₅ | 16 | #5 | 31'-5" | |
| b ₆ | 32 | #8 | 29'-1" | |
| b ₇ | 32 | #8 | 10'-9" | |
| b ₈ | 16 | #8 | 31'-11" | |
| d | 876 | #4 | 4'-7" | |
| d ₁ | 860 | #5 | 3'-5" | |

Reinforcement Bars, Lbs. 155380
* Structural Steel Lbs. 540820
Class X Concrete Cu. Yds. 539.1



Cost of Aluminum Drains and Sheets shall be incidental to Class X Concrete



FOR INFORMATION ONLY

SUPERSTRUCTURE
NORTH & SOUTH BRIDGES
F.A. RT 196 SEC. IVB
SANGAMON COUNTY
STATION 424+68.85

| | | | |
|----------|---------------|----------|----|
| DESIGNED | S. Lin | EXAMINED | 19 |
| CHECKED | John W. Clark | PASSED | |
| DRAWN | J. Kessler | APPROVED | |
| CHECKED | John W. Clark | | |



| | | |
|--------------|----------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - BRD | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 084-0127 & 084-0128

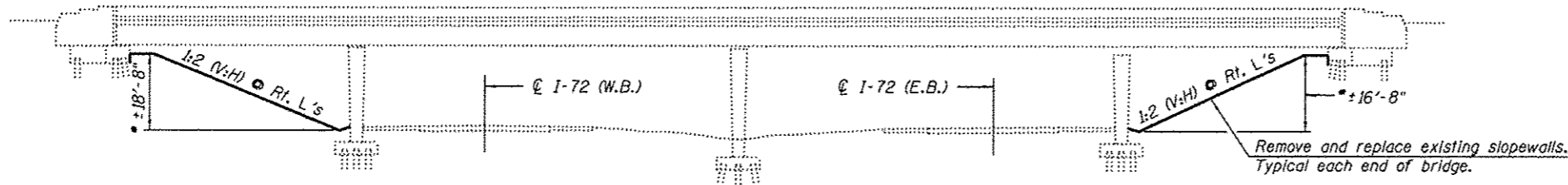
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|---------|----------|--------------|--------------------|
| 72 | . | SANGAMON | 163 | 129 |
| | | | | CONTRACT NO. 72B54 |

Existing Structure: The existing structures were constructed in 1969 as FA 196, Section 1HB. In 2001, miscellaneous structural repairs were performed and a microsilica wearing surface was added. The structure is a four span continuous bridge with a reinforced concrete deck supported on five PPC I-beams with pile bent abutments and multicolumn piers. The existing structure is skewed 22°45' left forward. The structure measures 249'-0" back to back of abutments and 30'-0" out to out of bridge deck.

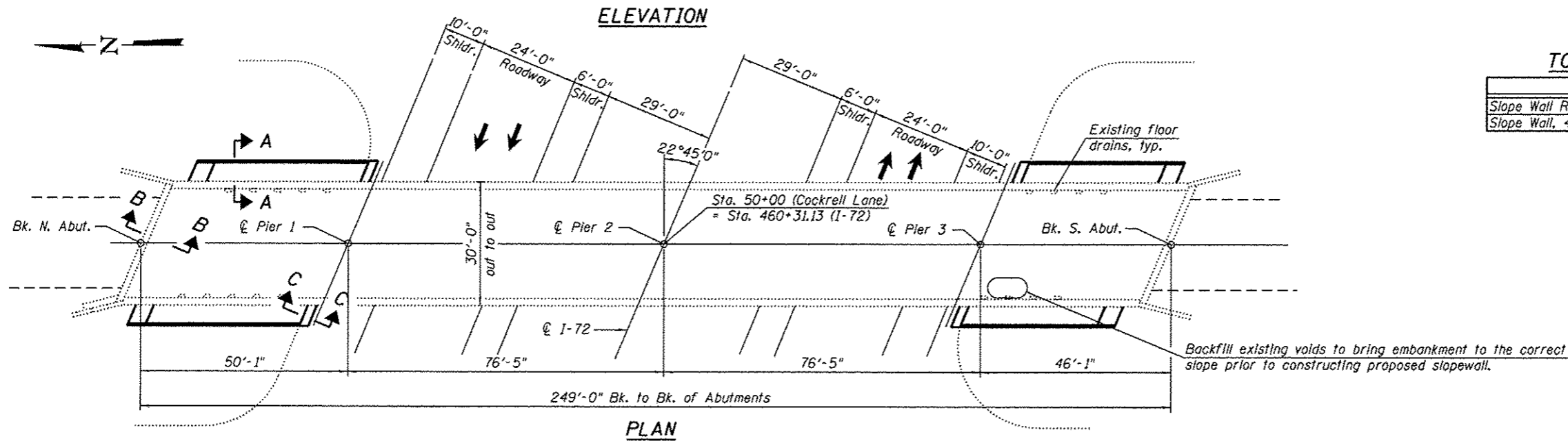
The existing slopewalls shall be removed and replaced. This work shall be sequenced to occur simultaneously with adjacent lane closures used for the I-72 resurfacing.

GENERAL NOTES

1. 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 adjustments 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 at the unit price bid for the work.
2. Slopewalls shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.
3. Backfilling and dressing of the existing earth bedding is required where erosion or voids exist and to bring the existing bedding to the correct grade for the 4" proposed slopewall. Backfilling and dressing shall conform to the requirements of Article 205 of the Standard Specifications and be to the satisfaction of the Engineer. Backfilling and dressing of the existing earth bedding will not be measured for payment but shall be included in the cost of Slope Wall, of the thickness specified.
4. The slopewall shall be constructed so that there are no construction joints within 5 feet of the existing floor drains.

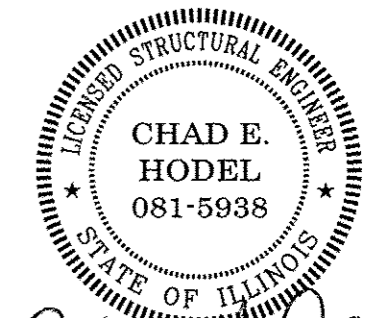


* Adjust in field to match existing conditions.

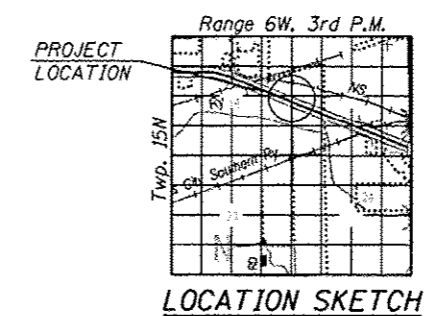
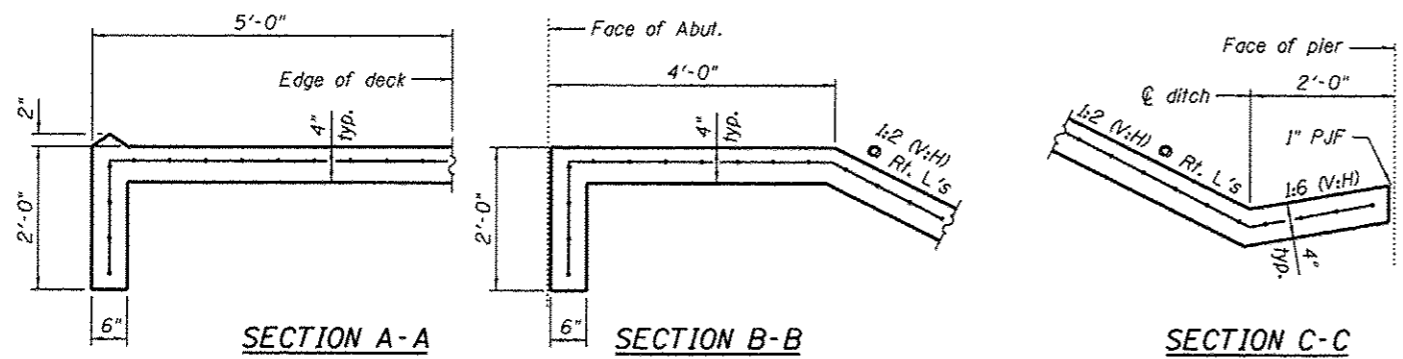


TOTAL BILL OF MATERIAL

| ITEM | UNIT | TOTAL |
|--------------------|---------|-------|
| Slope Wall Removal | Sq. Yd. | 380 |
| Slope Wall, 4 inch | Sq. Yd. | 447 |



WEL 8-21-14
Expires: 11/30/2014

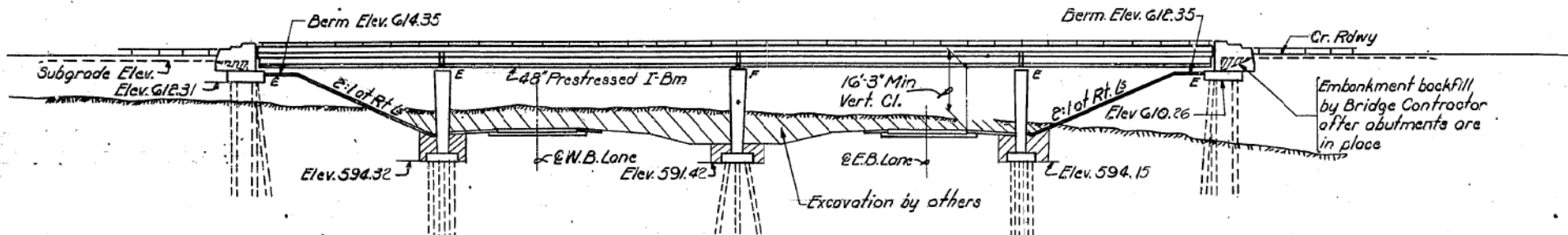


**GENERAL PLAN AND ELEVATION
COCKRELL LANE OVER I-72
F.A.I. 72 SEC. (84-9-2&3)RS-2MISC STRUC REP
SANGAMON COUNTY
STATION 460+31.13
STRUCTURE NO. 084-0126**

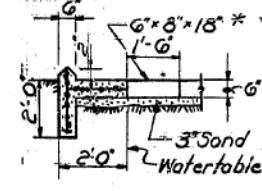
B.M. - #9A R.R. Spike in telephone pole 135'
Rt. Sta. 460+05 Elev. 606.82

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

| | | | | |
|----------------------|---------|---------------------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 196 | 1HB | SANGAMON | 55 | 12 |
| F.A. PROJ. F-277(14) | | SHEET NO. 12 SHEETS | | |

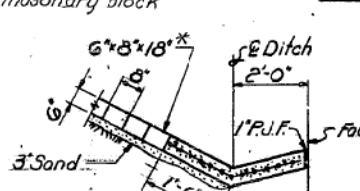


All Piles Steel
ELEVATION

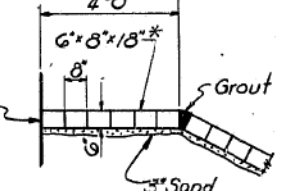


SECTION A-A

* Concrete masonry block
Welded wire fabric shown in Sections A-A & B-B shall be 6" x 6" mesh, weighing 38# per 100 Sq. Ft.



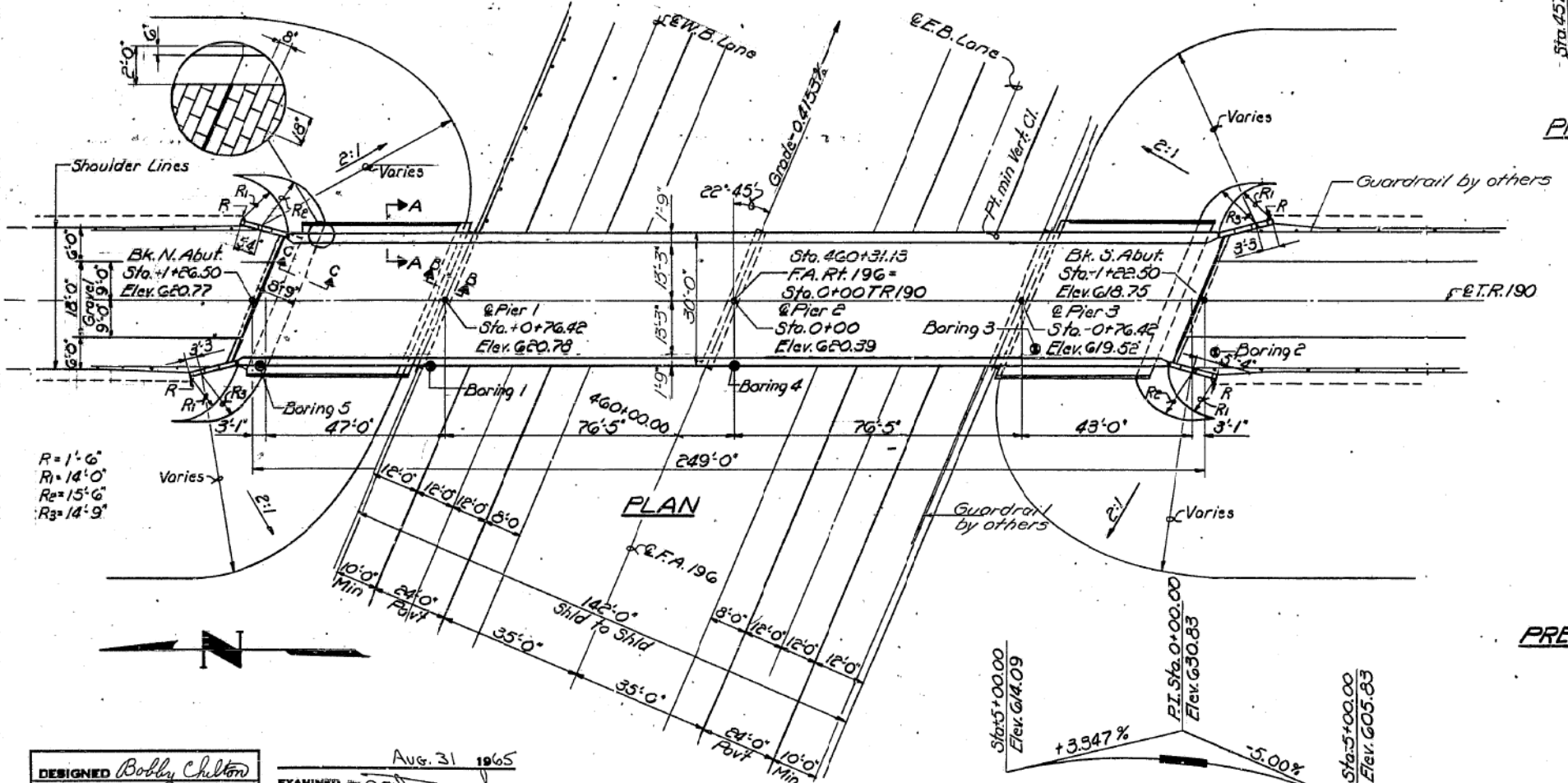
SECTION B-B



SECTION C-C

STATION 460+31.13
BUILT 196 BY
STATE OF ILLINOIS
F.A. RT. 196 SEC. 1HB
F.A. PROJ. F-277(14)
LOADING HS-15

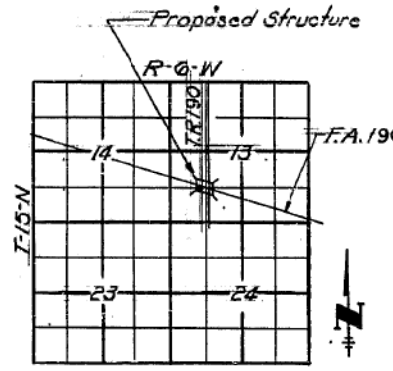
NAME PLATE
See Std 2113-1



PLAN

PROPOSED PROFILE T.R.190

PROPOSED PROFILE F.A.196



LOCATION SKETCH

**DESIGN STRESSES
PRESTRESSED PRECAST UNITS**

$f'_c = 5000$ psi
 $f'_ti = 4000$ psi
 $f_c = 2000$ psi after losses
 $f_s = 248,000$ psi
 $f'_si = 173,600$ psi

DESIGN STRESSES

$f_c = 4000$ psi Super & Sub
 $V_c = 75$ psi Ftgs
 $f_s = 20,000$ psi Reinf.
 $n = 10$
LOADING HS15-44

GENERAL NOTES

Coarse aggregate to be used in parapet handrails and end post must be free of chert, flint, limonite, lignite and soft sandstone. The concrete floor slab shall be finished in accordance with Art. 51.19 of the Standard Specifications. Permanent forms will not be permitted in forming the concrete floor. For item precast prestressed conc. I-beams, see supplemental specifications. For Slope Wall (Special) see Special Provisions.

All reinforcement bars shall be lapped 20 diameters unless otherwise shown. All structural steel shall conform to A.S.T.M. Designation A-36. Exposed surfaces of the expansion devices, inaccessible after erection, shall receive two shop coats of red lead paint. All other surfaces shall be given one shop coat of red lead paint. Anchor studs shall not be painted. Expansion devices are included in the quantity of structural steel. Est. weight = 840 Lbs. Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint.

The contractor shall drive one Steel test pile at Pier #2 and one Steel test pile at the S. Abutment, in a permanent location, as directed by the Engineer before ordering the remainder of piles. Excavations for portions of structures in the embankments shall not be classified.

TOTAL BILL OF MATERIAL

| Items | Units | Super | Sub | Total |
|--|----------|-------|-------|-------|
| ** Class A Excav. for Structures | Cu. Yds. | | 187 | 187 |
| Structural Steel | Lbs. | 2570 | | 2570 |
| Furnishing & Erecting Precast & Prestressed Concrete I-Beam #8 | Lin. Ft. | 1216 | | 1216 |
| Class X Concrete | Cu. Yds. | 254.7 | 271.6 | 526.3 |
| Alum. Handrail | Lin. Ft. | | | 491 |
| Reinforcement Bars | Lbs. | 33600 | 29680 | 83280 |
| Steel Pile (108P42) | Lin. Ft. | | 1748 | 1748 |
| Test Pile (Steel) | Each | | 2 | 2 |
| Name Plates | Each | | 2 | 2 |
| Slope Wall (Special) | Sq. Yds. | | | 380 |
| *** Protective Coat | Sq. Yds. | | | 928 |

** Class A Excav. for Structures includes Excav. for slope wall.
*** Includes use on inside vertical face, top & exposed ends of the Abut. Wings.

GENERAL PLAN & ELEVATION

PROJECT F-277(14)
TOWNSHIP RD. 190 OVER
F.A. RT. 196 SEC. 1HB
SANGAMON COUNTY
STA. 460+31.13

| | |
|------------------------|----------------------|
| DESIGNED Bobby Chilton | EXAMINED [Signature] |
| CHECKED Sam F. Melvin | PASSED [Signature] |
| DRAWN W.E. Dickerson | APPROVED [Signature] |
| CHECKED SFM | |

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 084-0126

| | | | | |
|---------------------------|---------|----------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 72 | | SANGAMON | 163 | 131 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 72B54 | |



| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

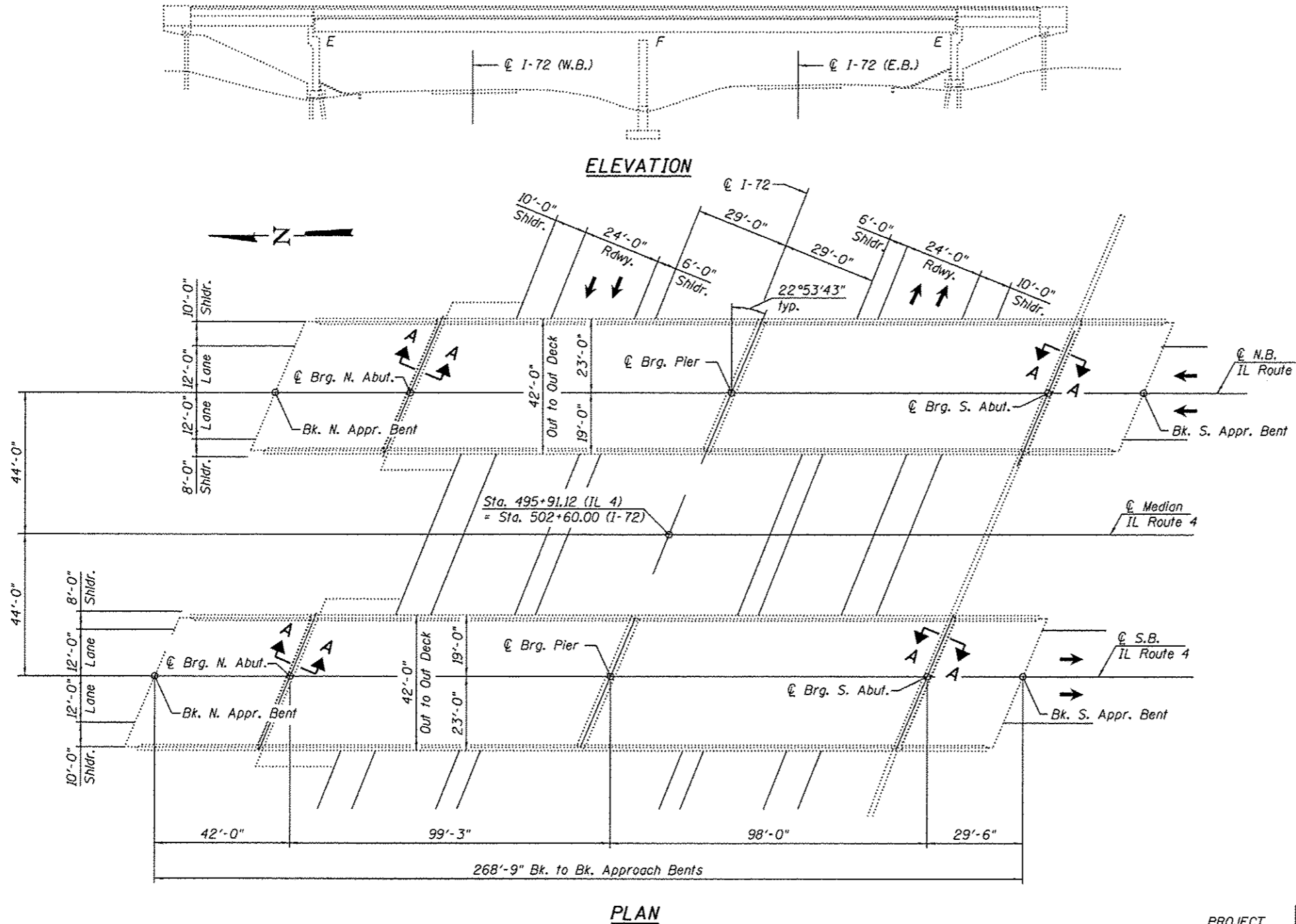
Existing Structure: The existing structures were constructed in 1973 as FA 68, Section 3-HB. In 2000, miscellaneous structural repairs were performed and the existing wearing surface and expansion joints were replaced. Each structure is a two span continuous bridge with a reinforced concrete deck supported on six steel welded plate girders with vaulted abutments and a multicolumn pier. The existing structures are skewed 22°53'43" left forward. Each structure measures 268'-9" back to back of approach bents and 42'-0" out to out of bridge deck. All work shall be completed using temporary lane closures.

SCOPE OF WORK

1. Approach slab patching.
2. Remove and replace expansion joints at both abutments.
3. Parapet repairs.
4. Abutment repairs.

INDEX OF SHEETS

1. General Plan and Elevation
2. Approach Patching and Expansion Joint Replacement
3. Parapet Repairs
4. Abutment Repairs
- 5-6. Existing Plans (For Information Only)

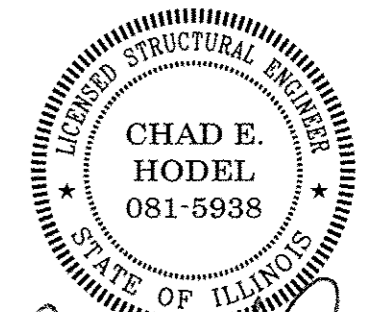


GENERAL NOTES

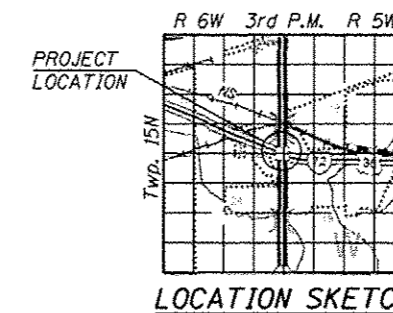
1. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations 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 at the unit price bid for the work.
2. Existing preformed joint seals shall be removed at each of the abutments. Removal of the existing preformed joint seals will not be measured for payment but shall be included in the cost of Silicone Joint Sealer, of the size specified.
3. Approach patching shall be completed using nighttime lane closures in accordance with Highway Standard 701422. All other work may be completed using daytime lane closures in accordance with Highway Standard 701421 except abutment repairs which shall be sequenced to occur simultaneously with adjacent lane closures being used for the I-72 resurfacing.
4. The Resident Engineer shall determine the approach patching and parapet and abutment repair areas. Patching and repair areas not shown in the contract plans shall be documented in the as-built plans.

TOTAL BILL OF MATERIAL

| ITEM | UNIT | TOTAL |
|---|---------|-------|
| Silicone Joint Sealer, 2 3/4" | Foot | 172 |
| Approach Slab Repair (Partial Depth) | Sq. Yd. | 48 |
| Structural Repair of Concrete (Depth Equal to or Less than 5 in.) | Sq. Ft. | 771 |



WELH 8-21-14
Expires: 11/30/2014



GENERAL PLAN AND ELEVATION
IL RTE 4 OVER I-72
F.A.I. 72 SECTION (84-9-283)RS-2
SANGAMON COUNTY
STATION 502+60.00
STRUCTURE NO. 084-0136 (SB)
STRUCTURE NO. 084-0137 (NB)



| | | |
|--------------|-------------------|---------|
| USER NAME * | DESIGNED - CEH | REVISED |
| FILE NAME * | CHECKED - CWC | REVISED |
| PLDT SCALE * | DRAWN - DLH | REVISED |
| PLDT DATE * | CHECKED - CEH/CWC | REVISED |

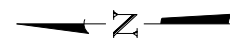
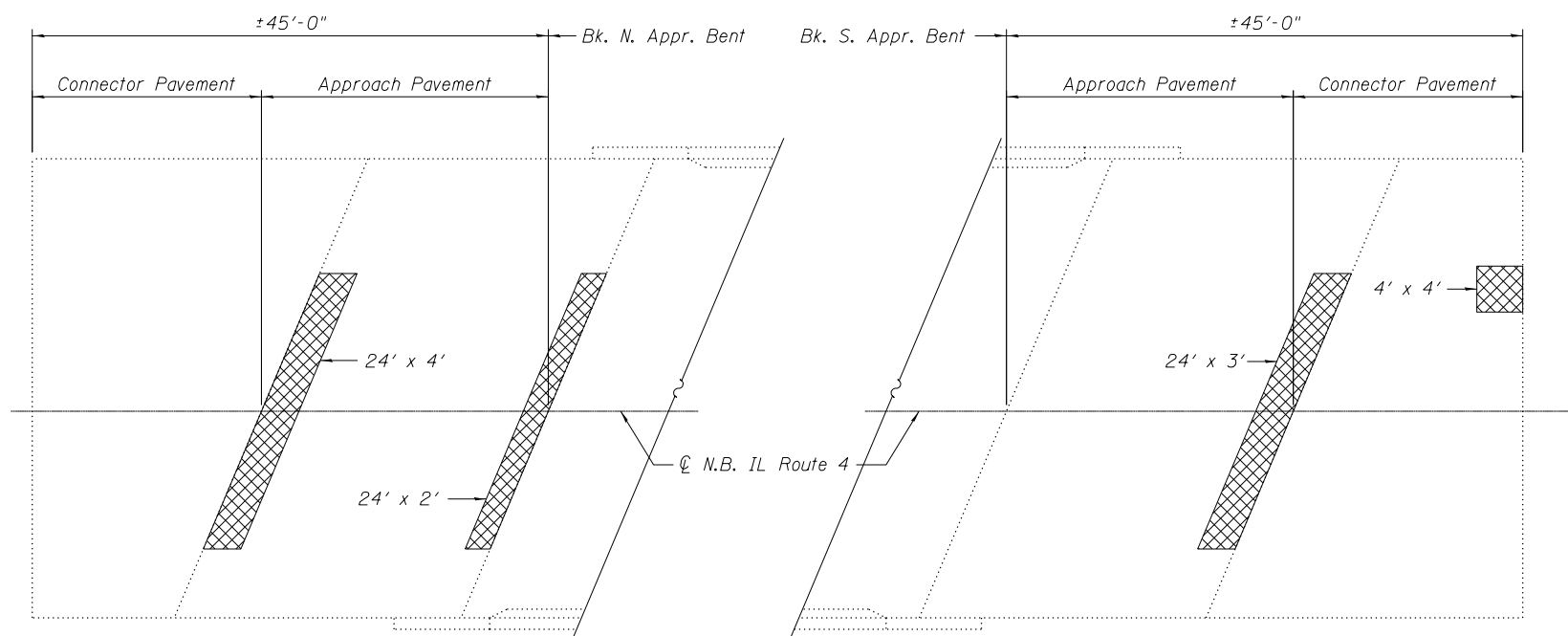
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 084-0136 & 084-0137

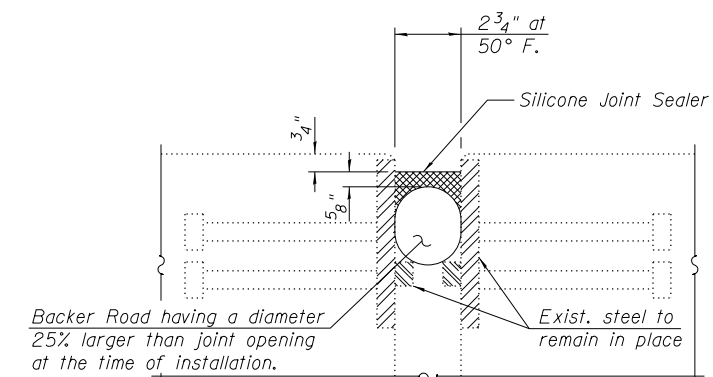
| | | | | |
|-------------|---------|----------|--------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 72 | * | SANGAMON | 163 | 132 |
| | | | CONTRACT NO. 72B54 | |

SHEET NO. 1 OF 6 SHEETS

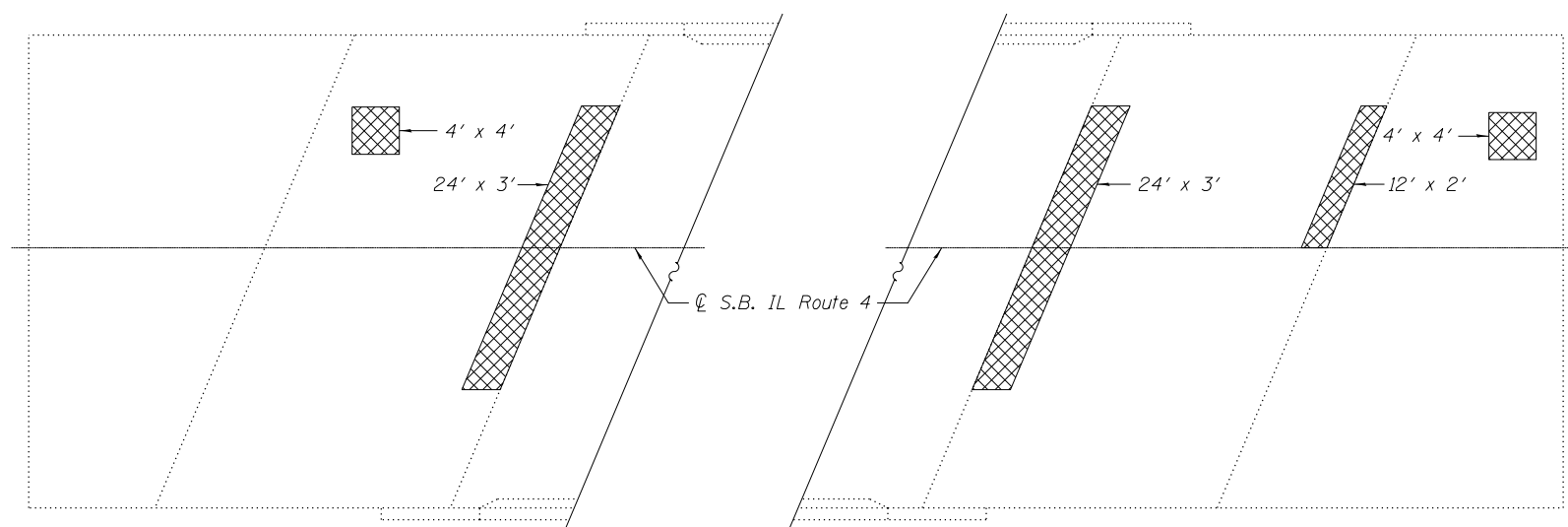
ILLINOIS FED. AID PROJECT
 (84-9-283)RS-2&MISC STRUC REP



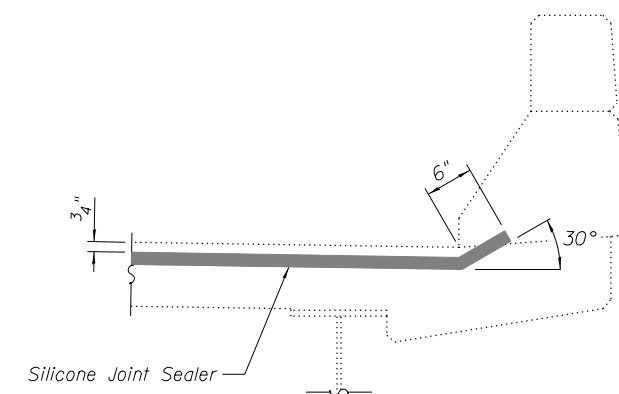
APPROACH PATCHING PLAN - SN 084-0137



SECTION A-A
(Showing proposed expansion joint)

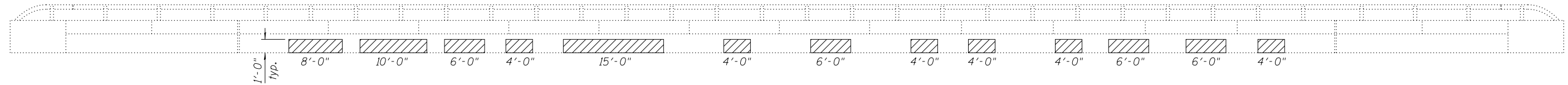


APPROACH PATCHING PLAN - SN 084-0136

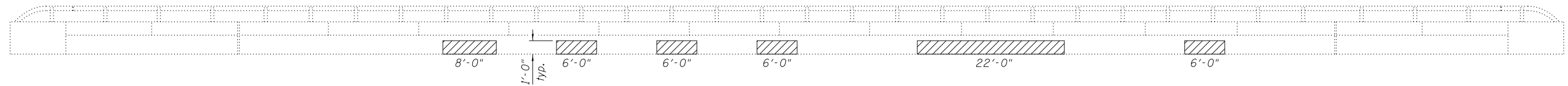


TYPICAL END OF SEAL TREATMENT

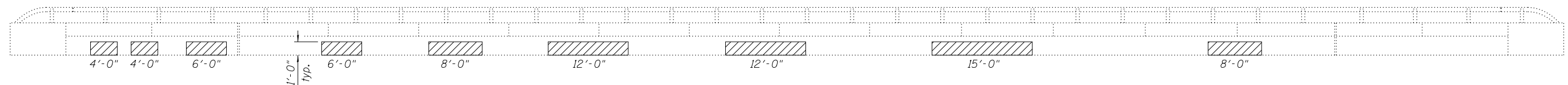
Note:
Crosshatching indicates Approach Slab Repair (Partial Depth).



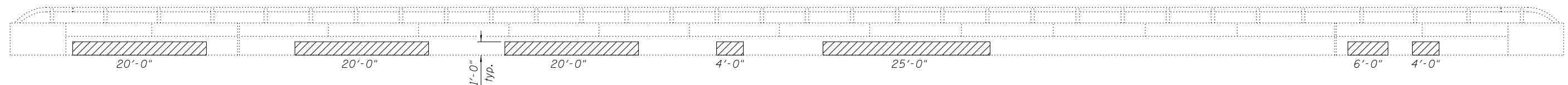
WEST PARAPET ELEVATION - SN 084-0136
(Looking west at inside face.)



EAST PARAPET ELEVATION - SN 084-0136
(Looking east at inside face.)



EAST PARAPET ELEVATION - SN 084-0137
(Looking east at inside face.)



WEST PARAPET ELEVATION - SN 084-0137
(Looking west at inside face.)

Note:
Hatching indicates Structural Repair of Concrete
(Depth Equal to or Less than 5 in.).

BILL OF MATERIAL

| ITEM | UNIT | TOTAL |
|--|---------|-------|
| Structural Repair of Concrete (Depth Equal to or Less than 5 in.) | Sq. Ft. | 309 |

Design firm
no. 184001036



| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

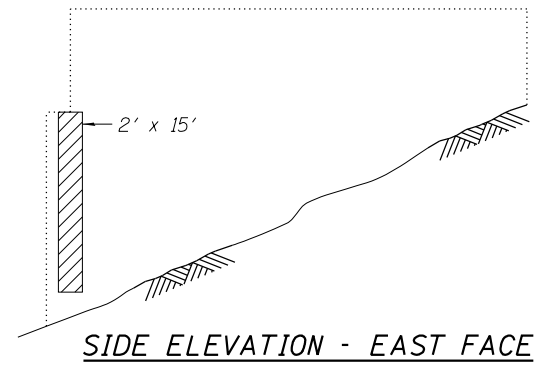
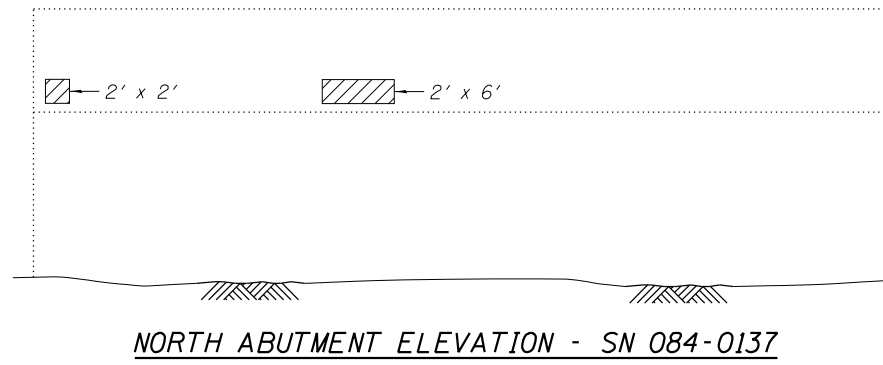
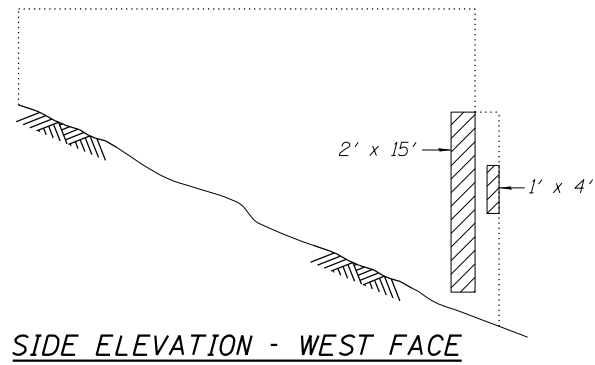
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PARAPET REPAIR DETAILS
STRUCTURE NO. 084-0136 & 084-0137**

SHEET NO. 3 OF 6 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|----------|--------------|-----------|
| 72 | • | SANGAMON | 163 | 134 |
| CONTRACT NO. 72B54 | | | | |

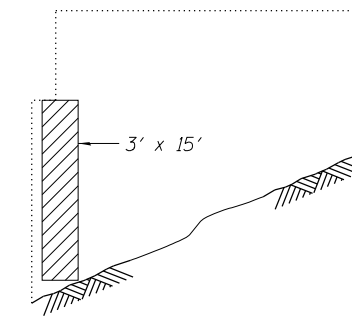
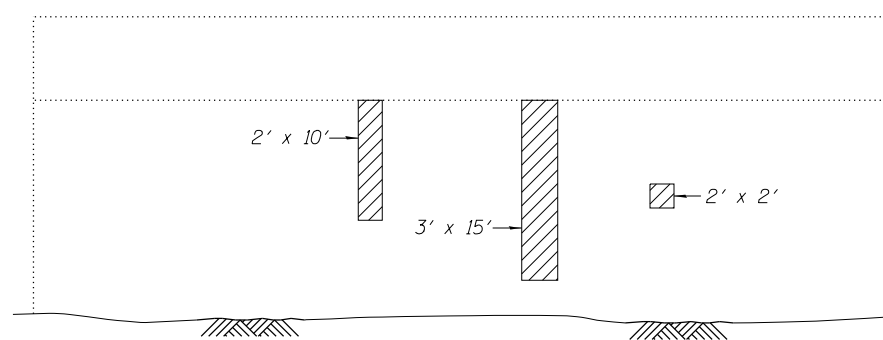
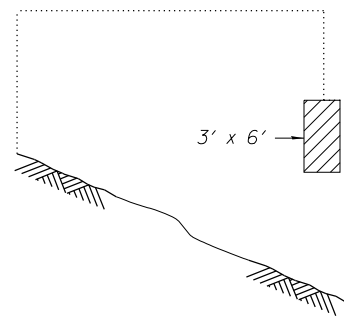
ILLINOIS FED. AID PROJECT
• (84-9-2&3)RS-2&MISC STRUC REP



SIDE ELEVATION - WEST FACE

NORTH ABUTMENT ELEVATION - SN 084-0137

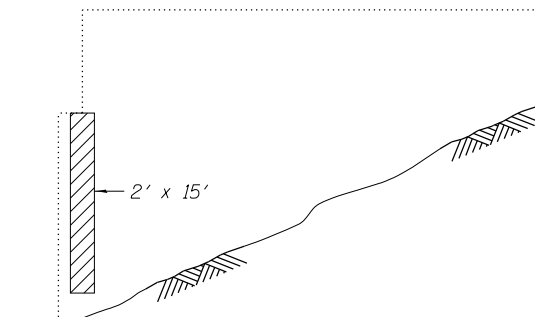
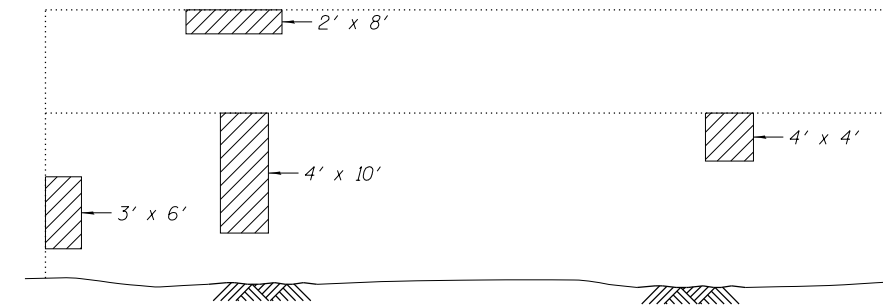
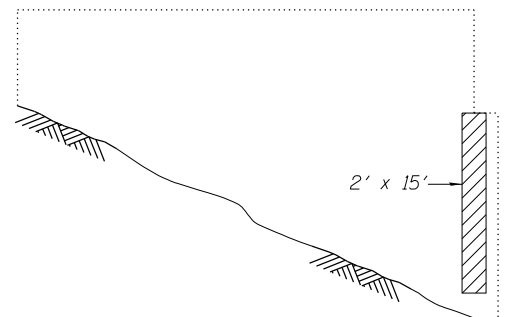
SIDE ELEVATION - EAST FACE



SIDE ELEVATION - EAST FACE

SOUTH ABUTMENT ELEVATION - SN 084-0137

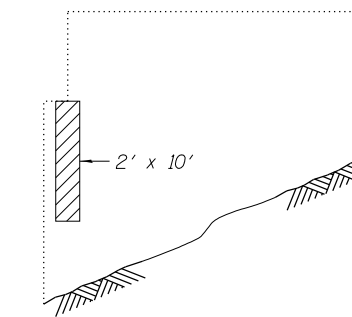
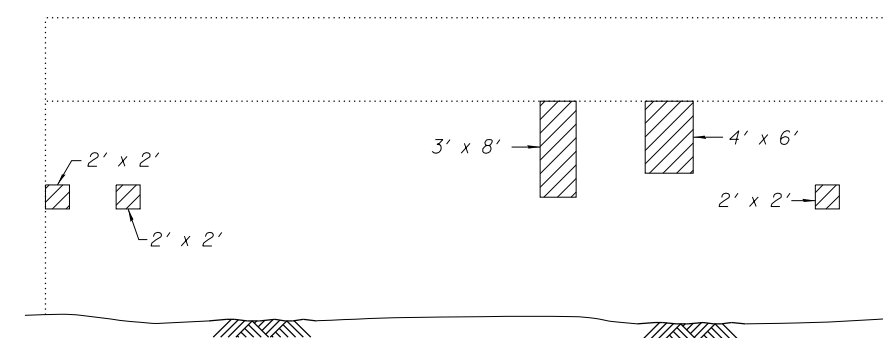
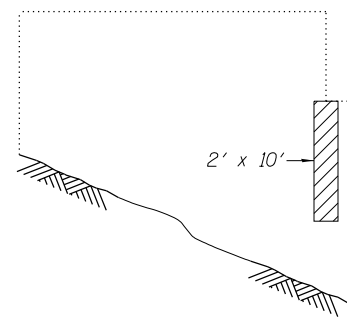
SIDE ELEVATION - WEST FACE



SIDE ELEVATION - WEST FACE

NORTH ABUTMENT ELEVATION - SN 084-0136

SIDE ELEVATION - EAST FACE



SIDE ELEVATION - EAST FACE

SOUTH ABUTMENT ELEVATION - SN 084-0136

SIDE ELEVATION - WEST FACE

Note:
Hatching indicates Structural Repair of Concrete (Depth Equal to or Less than 5 in.).

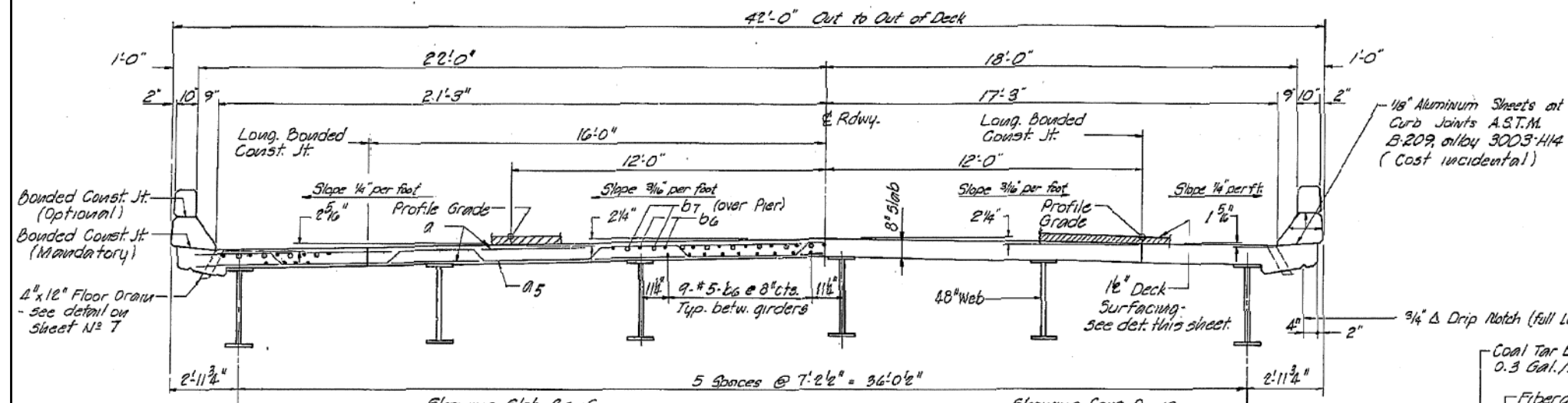
BILL OF MATERIAL

| ITEM | UNIT | TOTAL |
|--|---------|-------|
| Structural Repair of Concrete (Depth Equal to or Less than 5 in.) | Sq. Ft. | 462 |

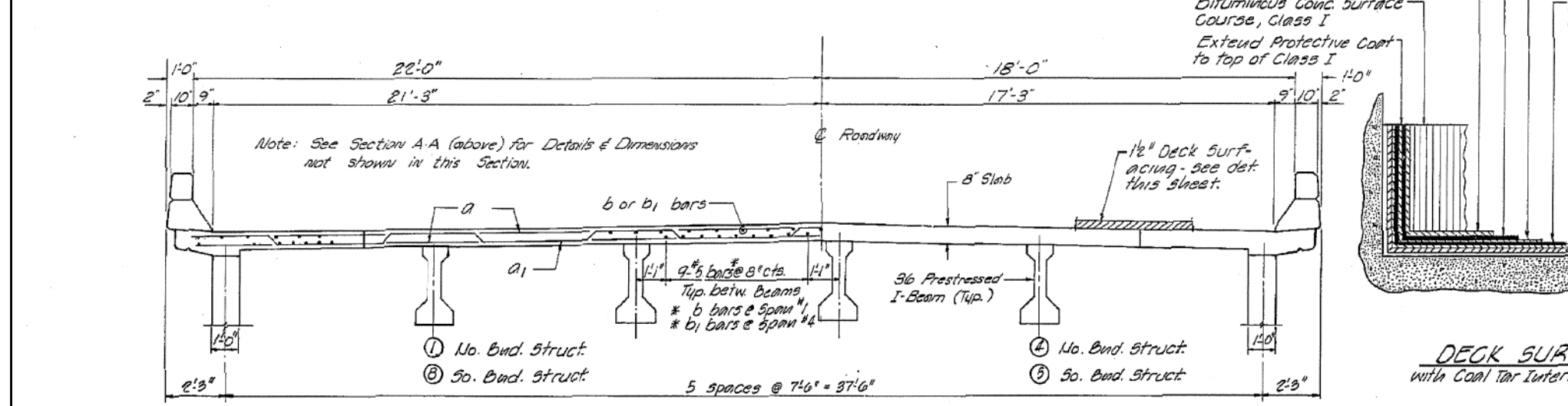
Note:
All edges shall have 3/16" chamfers
unless otherwise noted.

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|------------------|--------------|-----------|
| FA 68 | 3-1 | SANGAMON | 221 | 114 |
| CD B ROAD DIST NO. | | ILLINOIS PROJECT | | |

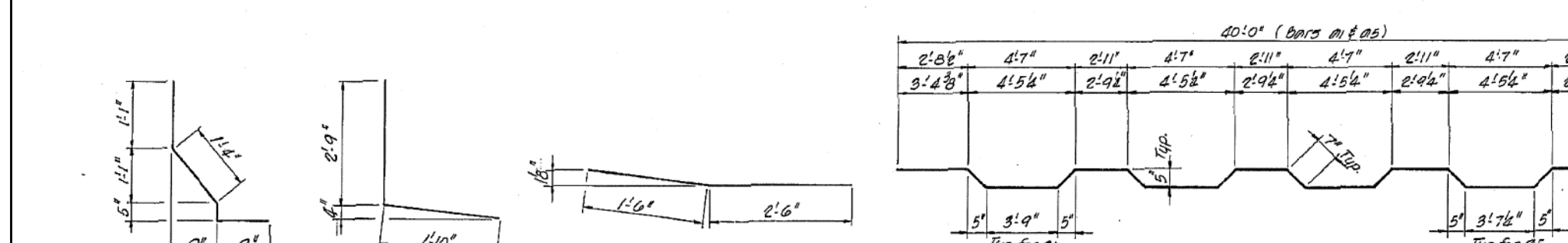
Sheet No 8
of 22 Sheets



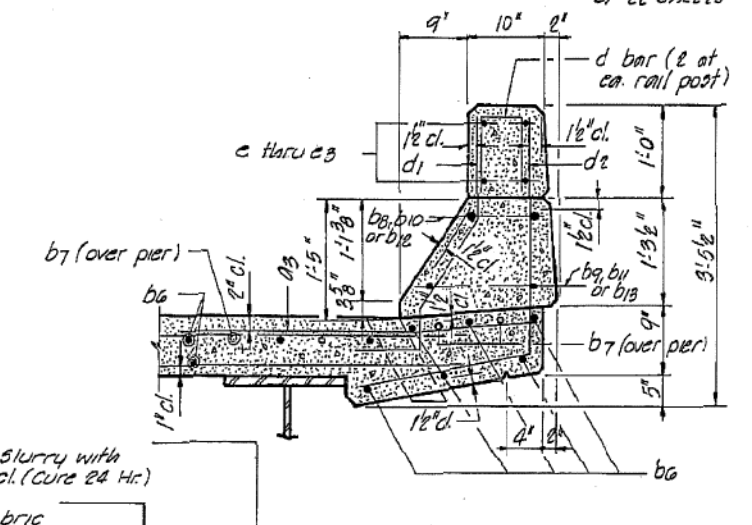
SECTION THRU MAIN SPANS
No. Bnd. Struct. looking South
So. Bnd. Struct. looking North



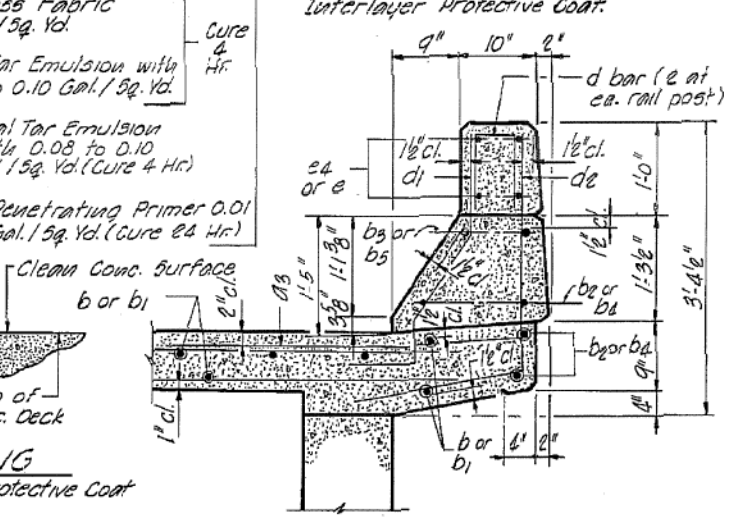
SECTION THRU APPROACH SPANS
No. Bnd. Struct. looking South
So. Bnd. Struct. looking North



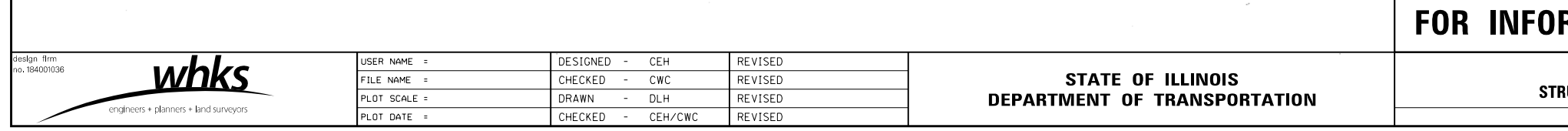
DECK SURFACING
with Coal Tar Interlayer Protective Coat



DETAIL OF CURB REINF.
MAIN SPAN



DETAIL OF CURB REINF.
APPROACH SPAN



N.B. & S.B. STRUCT.
CONCRETE DECK

Coal Tar Emulsion Slurry with
0.3 Gal./Sq. Yd. incl. (Cure 24 Hr.)
Fiberglass Fabric
1.65 Oz./Sq. Yd.
Cure 4 Hours
Coal Tar Emulsion with
0.08 to 0.10 Gal./Sq. Yd.
Fiberglass Fabric
1.65 Oz./Sq. Yd.
Cure 4 Hr.
Coal Tar Emulsion with
0.08 to 0.10 Gal./Sq. Yd.
Cure 4 Hr.
Coal Tar Emulsion with
0.08 to 0.10 Gal./Sq. Yd. (Cure 4 Hr.)
Penetrating Primer 0.01
Gal./Sq. Yd. (Cure 24 Hr.)
Clean Conc. Surface
b or b1
Top of
Conc. Deck

DECK SURFACING
with Coal Tar Interlayer Protective Coat

| REVISIONS | | DRAWN BY DATE | |
|-----------|---------|---------------|-------|
| NO. | DATE | INITIALS | DATE |
| 1 | 6-28-88 | RES | 11-77 |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |

FOR INFORMATION ONLY

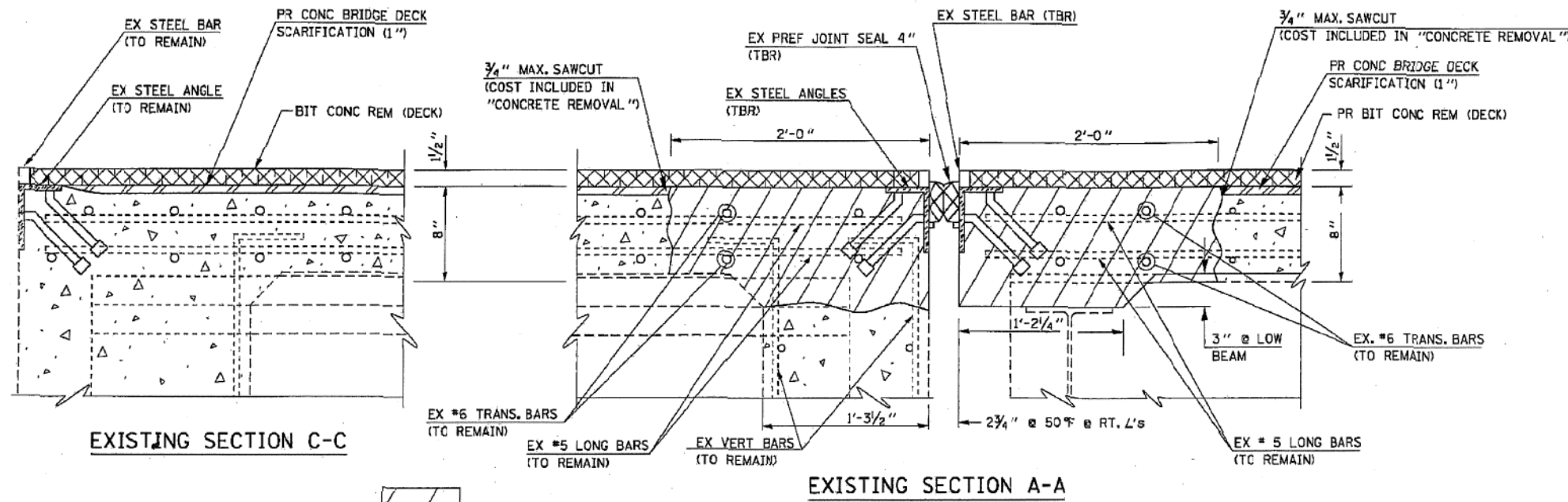
EXISTING PLANS
STRUCTURE NO. 084-0136 & 084-0137
SHEET NO. 5 OF 6 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|----------|--------------|--------------------|
| 72 | | SANGAMON | 163 | 136 |
| ILLINOIS FED. AID PROJECT | | | | CONTRACT NO. 72B54 |



| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



| BAR | SIZE | NO. | LENGTH | SHAPE |
|-------|------|-----|--------|-------|
| a(E) | #6 | 4 | 21'-3" | --- |
| a1(E) | #6 | 4 | 23'-0" | --- |
| a2(E) | #5 | 4 | 21'-3" | --- |
| a3(E) | #5 | 4 | 23'-0" | --- |
| b(E) | #5 | 160 | 2'-4" | --- |

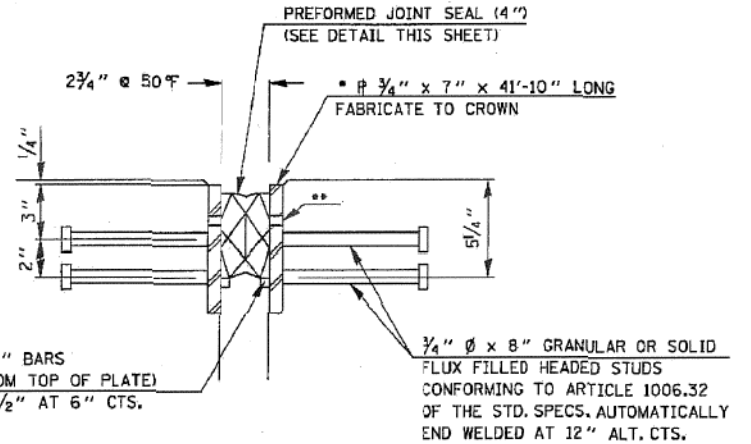
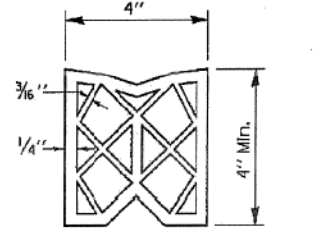
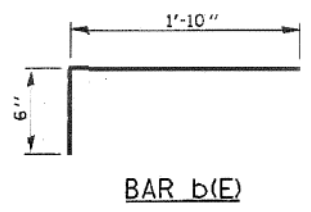
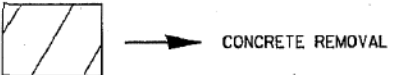
| ITEM | UNITS | QUANTITY |
|----------------------------------|--------|----------|
| CONCRETE REMOVAL | CU YD | 10.3 |
| PREFORMED JOINT SEAL 4" | FOOT | 86 |
| CONCRETE SUPERSTRUCTURE | CU YD | 11.9 |
| BAR SPLICERS | EACH | 8 |
| REINFORCEMENT BARS, EPOXY COATED | POUNDS | 840 |
| F & E STRUCTURAL STEEL | POUNDS | 3410 |
| POLYMER CONCRETE | CU FT | 3.7 |

NOTES:

THE CONTRACTOR SHOULD EXERCISE EXTREME CARE NOT TO DAMAGE THE TOP OF THE EXISTING PPC I BEAMS DURING CONCRETE REMOVAL.

CARE SHALL BE EXERCISED BY THE CONTRACTOR DURING AND FOLLOWING REMOVAL OPERATIONS TO ENSURE THAT THE EXISTING REBAR REMAINING IN PLACE ARE NOT DAMAGED. ALL PROTRUDING REBAR SHALL BE CLEANED, STRAIGHTENED, AND PROPERLY POSITIONED PRIOR TO CONCRETE PLACEMENT. ANY REBAR DAMAGED DURING CONCRETE REMOVAL SHALL BE REPAIRED OR REPLACED USING AN APPROVED BAR SPLICER OR MECHANICAL SYSTEM. COST INCLUDED IN "CONCRETE REMOVAL".

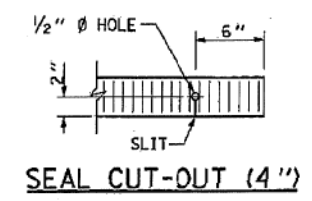
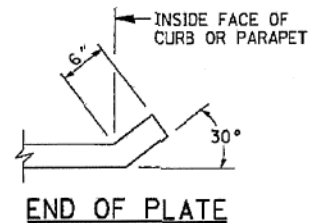
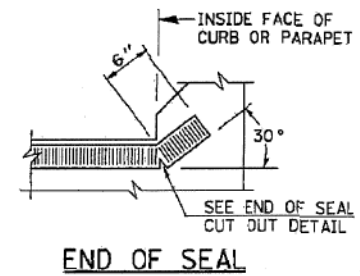
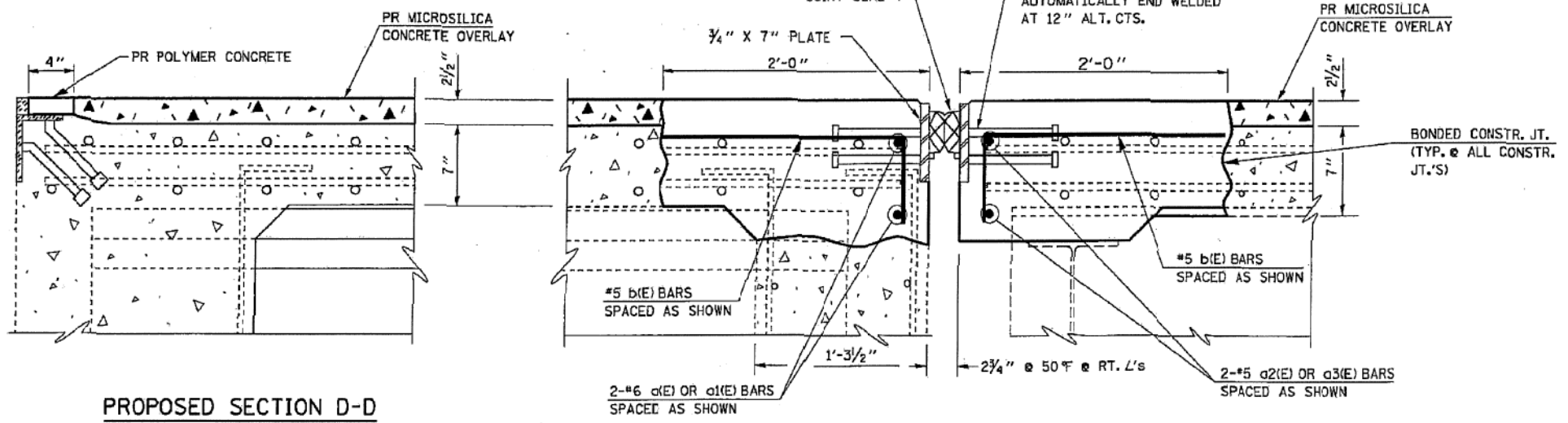
EXPANSION JOINT RECONSTRUCTION ON THE APPROACH SPAN REQUIRES FORM WORK INSIDE OF THE VAULTED ABUTMENT.



PREFORMED JOINT SEAL DETAIL

* FURNISH IN SEGMENTS OF 20' MAX. LENGTH. MAX. SPACE BETWEEN INSTALLED SEGMENTS SHALL BE 1/4". SEAL SPACE WITH SILICONE SEALANT SUITABLE FOR STRUCTURAL STEEL.

** 1/2" Ø HOLES @ 12" CTS FOR 3/8" Ø BOLTS. ALL BOLTS SHALL BE BURNED, SAWED, OR CLIPPED OFF FLUSH WITH THE PLATES AFTER THE FORMS ARE REMOVED. (TYP.)



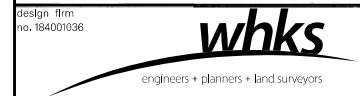
FOR INFORMATION ONLY
(SN 084-0137 SIMILAR)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 084-0136 & 084-0137

SHEET NO. 6 OF 6 SHEETS

SHEET 4 OF 10
ILLINOIS DEPARTMENT OF TRANSPORTATION
EXPANSION JOINT DETAILS
S.N. 084-0136
F.A.P. 662 (IL 4)
DISTRICT 6 BRIDGE REPAIR 2000-1
SANGAMON COUNTY



| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

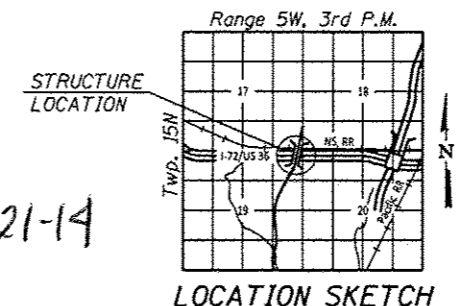
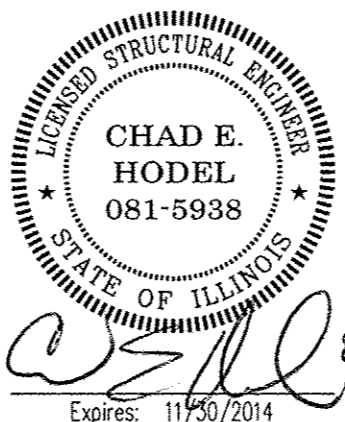
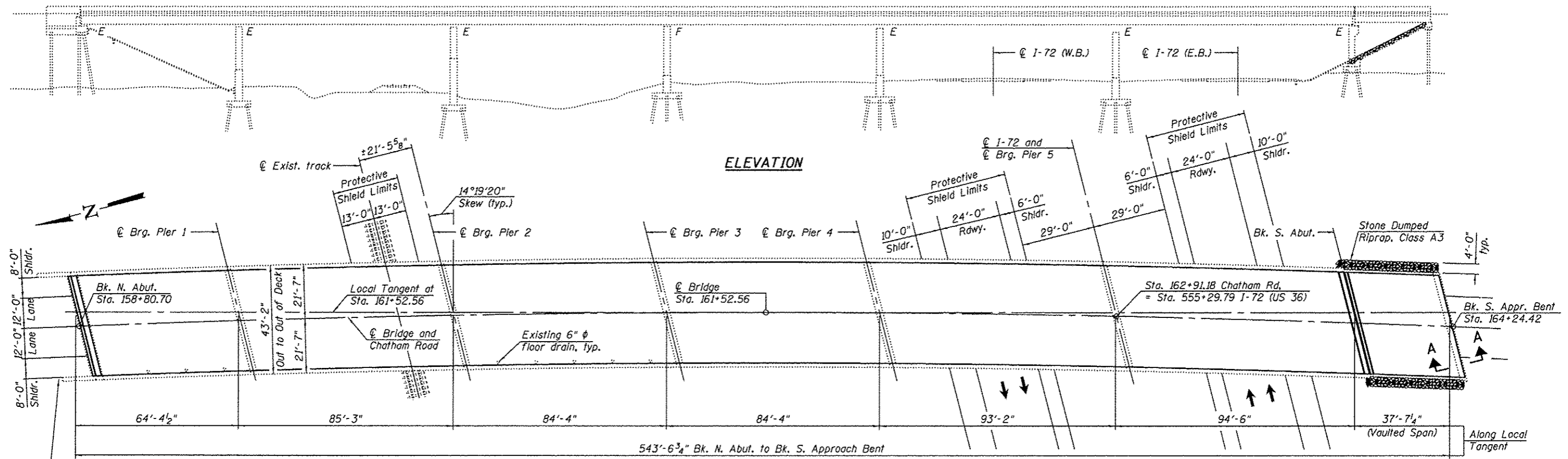
| | | | | |
|--------------------------------|---------|----------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 72 | . | SANGAMON | 163 | 137 |
| CONTRACT NO. 72B54 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |
| • (84-9-28)RS-2&MISC STRUC REP | | | | |

Existing Structure: The existing structure was constructed in 1991 as FAP 408, Section 3VB-1. The structure is a curved six span continuous bridge with a reinforced concrete deck supported on five 42" steel composite (positive moment regions only) welded plate girders with a pile bent abutment (north end), open vaulted abutment (south end) and multicolumn piers. The existing structure is skewed 14°19'20" right forward. The structure measures 543'-6³/₄" along a local tangent from back of north abutment to back of south approach bent and 43'-2" out to out of bridge deck. One lane of traffic shall be maintained on Chatham Road by utilizing stage construction.

No Slavage

INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
3. Temporary Concrete Barrier for Stage Construction
4. North Abutment Joint Replacement Details
5. South Abutment Joint Replacement Details
6. North Abutment Preformed Joint Strip Seal
7. South Abutment Preformed Joint Strip Seal
8. Bar Splicer Assembly and Mechanical Splicer Details
9. Abutment Repairs
- 10.-15. Existing Structure Plans (For Information Only)



**GENERAL PLAN AND ELEVATION
CHATHAM ROAD OVER I-72/NSRR
F.A.I. 72 SECTION (84-9-2&3)RS-2MISC STRUC REP
SANGAMON COUNTY
STATION 555+29.79
STRUCTURE NO. 084-0185**

HORIZ. CURVE DATA

P.I. Sta. = 161+12.74
 $\Delta = 27^\circ 54' 28.8''$
 $D_c = 0^\circ 52' 30''$
 $R = 6548.09'$
 $L = 3189.49'$
 $T = 1627.04'$
 $E = 199.11'$
 $S.E. = 0.02\%$

SCOPE OF WORK

1. Replace existing expansion joints at both abutments.
2. Scarify deck and add microsillca overlay.
3. Deck slab repairs.
4. Clean and paint beam ends.
5. Repair abutments.
6. Place riprap adjacent to south abutment.
7. Replace existing terminal guardrail sections (See Roadway Plans).

Fill void under approach shoulder with Controlled Low-Strength Material.



| | | |
|--------------|-------------------|---------|
| USER NAME * | DESIGNED - CEH | REVISED |
| FILE NAME * | CHECKED - CWC | REVISED |
| PLOT SCALE * | DRAWN - DLH | REVISED |
| PLOT DATE * | CHECKED - CEH/CWC | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

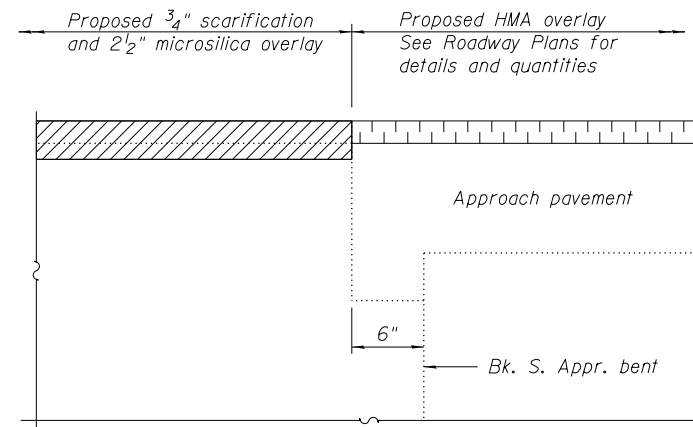
**GENERAL PLAN AND ELEVATION
STRUCTURE NO. 084-0185
SHEET NO. 1 OF 15 SHEETS**

| | | | | |
|--------------------|---------|----------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 72 | * | SANGAMON | 163 | 138 |
| CONTRACT NO. 72B54 | | | | |

ILLINOIS FED. AID PROJECT
 * (84-9-2&3)RS-2&MISC STRUC REP

GENERAL NOTES

- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- 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.
- 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 adjustments 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 at the unit price bid for the work.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- Resident Engineer shall determine deck slab repair areas after scarification is complete. Repair areas shall be documented in the as-built plans.
- Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within 5 ft (measured along the beam) of either side of deck joints shall be cleaned per Near White Blast Cleaning SSPC-SP10. The designated areas cleaned per Near White Blast Cleaning shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Interstate Green, Munsell No 7.5G 4/8.
- Containment of cleaning residue is required to control nuisance dust. See special provisions.

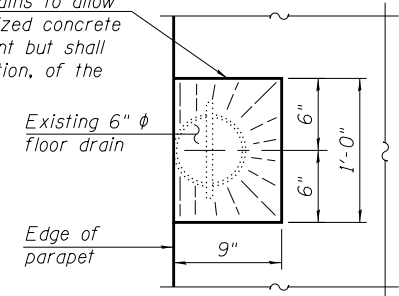


SECTION A-A

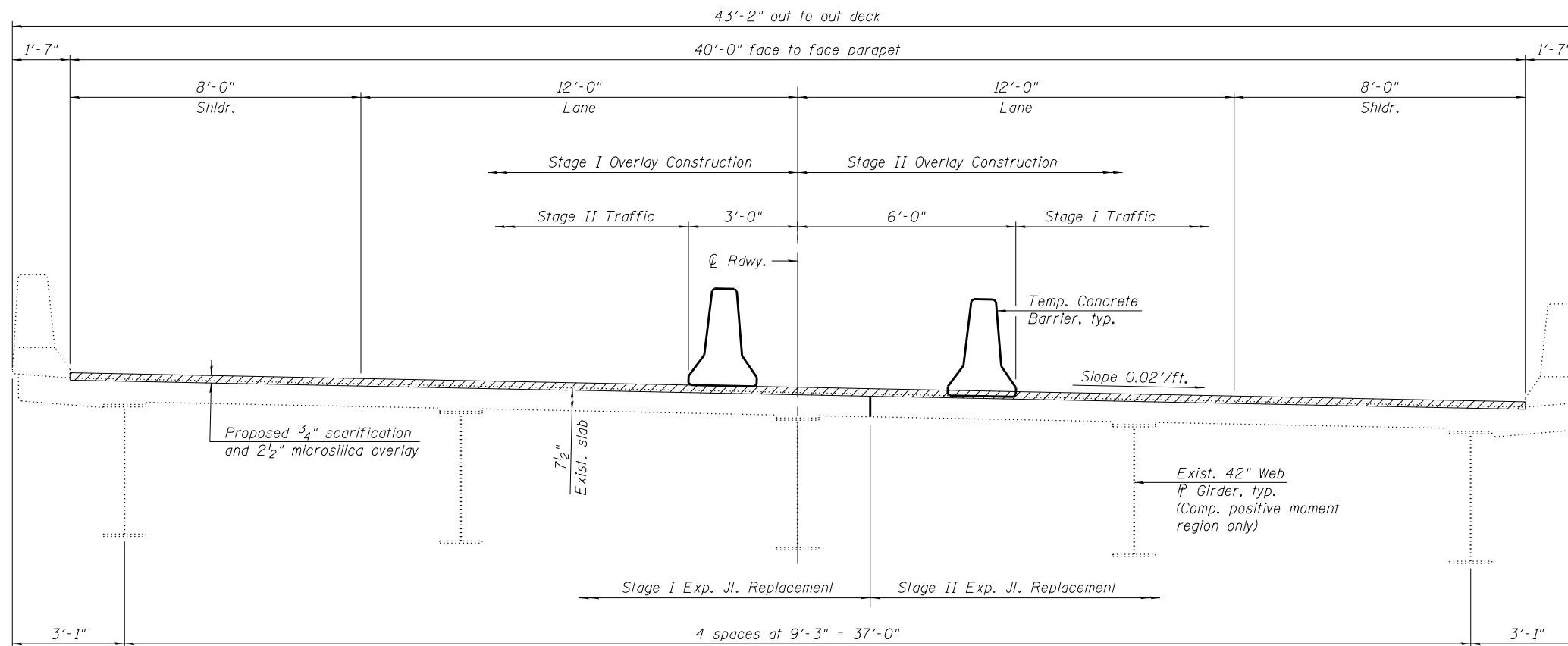
TOTAL BILL OF MATERIAL

| ITEM | UNIT | TOTAL |
|---|---------|-------|
| Concrete Removal | Cu. Yd. | 10.1 |
| Concrete Superstructure | Cu. Yd. | 11.7 |
| Controlled Low-Strength Material | Cu. Yd. | 2 |
| Bar Splicers | Each | 26 |
| Bridge Deck Grooving | Sq. Yd. | 2284 |
| Bridge Deck Scarification, 3/4" | Sq. Yd. | 2382 |
| Bridge Deck Microsilica Overlay, 2 1/2" | Sq. Yd. | 2382 |
| Reinforcement Bars, Epoxy Coated | Pound | 1730 |
| Protective Shield | Sq. Yd. | 527 |
| Deck Slab Repair (Full Depth, Type I) | Sq. Yd. | 8 |
| Deck Slab Repair (Full Depth, Type II) | Sq. Yd. | 22 |
| Structural Repair of Concrete (Depth Equal to or Less than 5 in.) | Sq. Ft. | 25 |
| Preformed Joint Strip Seal | Foot | 88.7 |
| Stone Dumped Riprap, Class A3 | Ton | 31 |
| Cleaning and Painting Steel Bridge, No. 1 | L. Sum | 1.0 |
| Containment and Disposal of Non-lead Paint Cleaning Residues | L. Sum | 1.0 |

Localized concrete removal may be required at the drains to allow a minimum microsilica overlay thickness of 2 1/4". Localized concrete removal at the drains will not be measured for payment but shall be included in the unit cost of Bridge Deck Scarification, of the thickness specified.

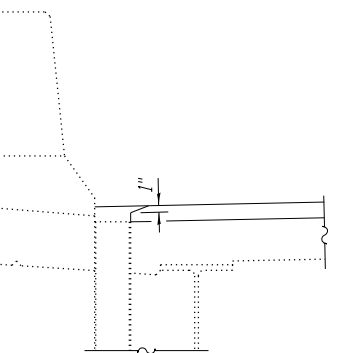


OVERLAY TREATMENT AT DRAINS



CROSS SECTION

(Looking South)
(Bridge section shown. See existing plans for vault span cross section.)
(Horiz. dimensions are radial to ϕ Rdwy.)



SECTION AT DRAINS



| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

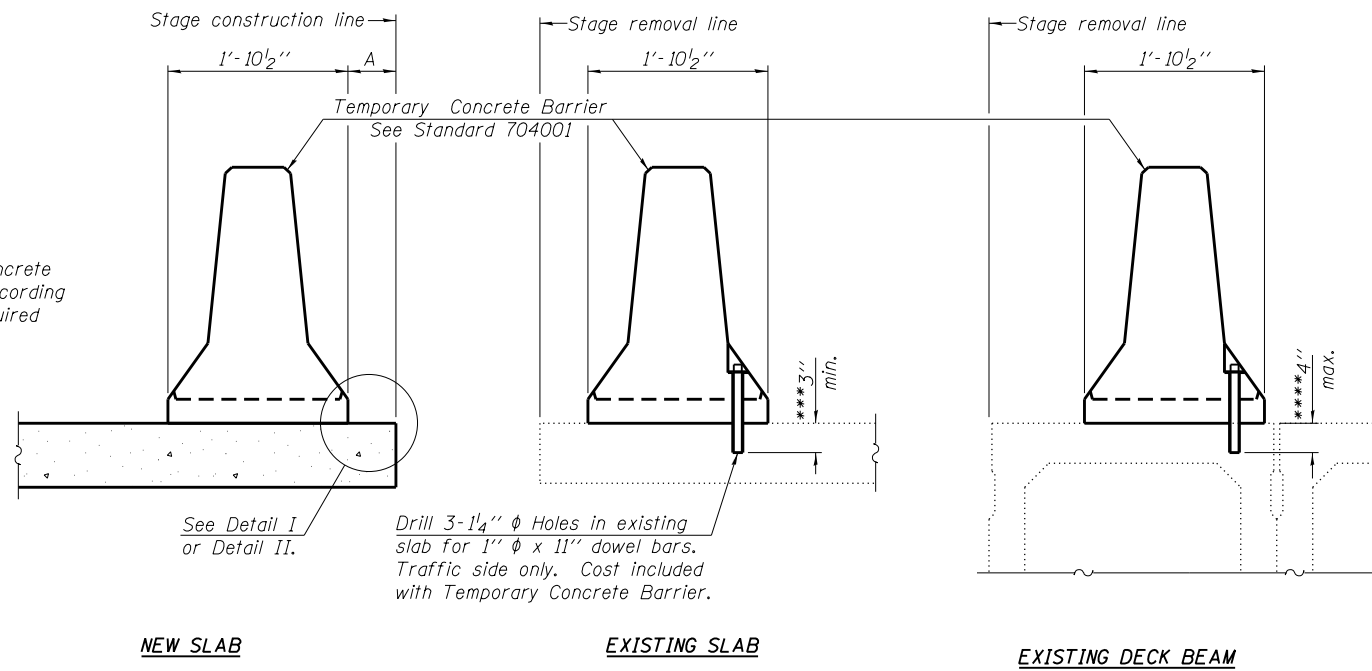
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA
STRUCTURE NO. 084-0185**

SHEET NO. 2 OF 15 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|----------|--------------|-----------|
| 72 | . | SANGAMON | 163 | 139 |
| CONTRACT NO. 72B54 | | | | |

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

NOTES

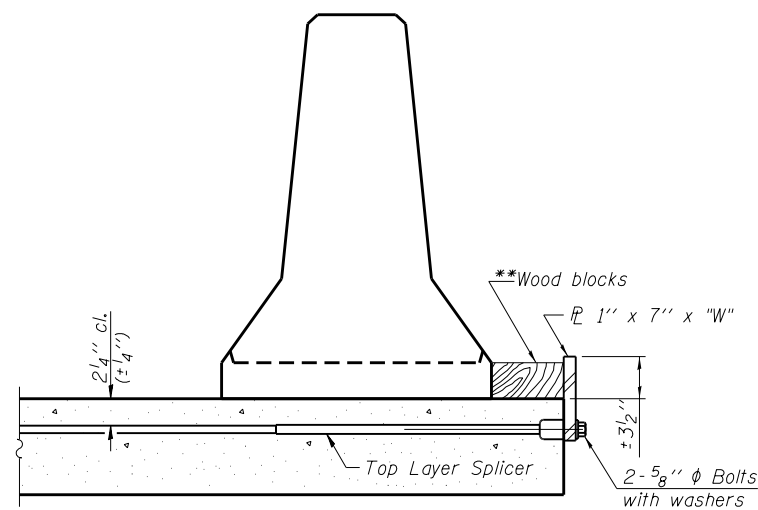
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

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

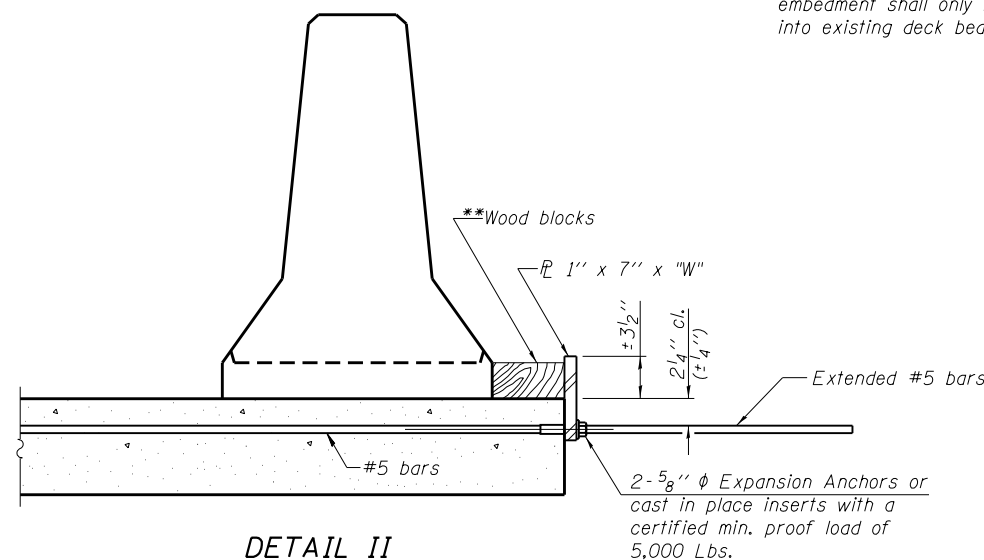
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** 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.

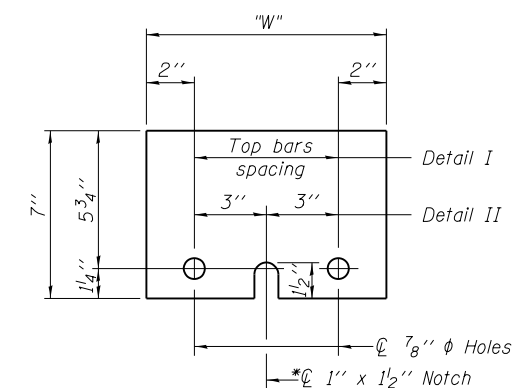
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER PL 1" x 7" x "W"

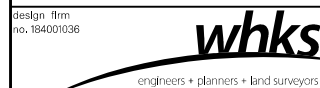
* Required only with Detail II

** 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"

R-27

7-1-10



| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 084-0185**

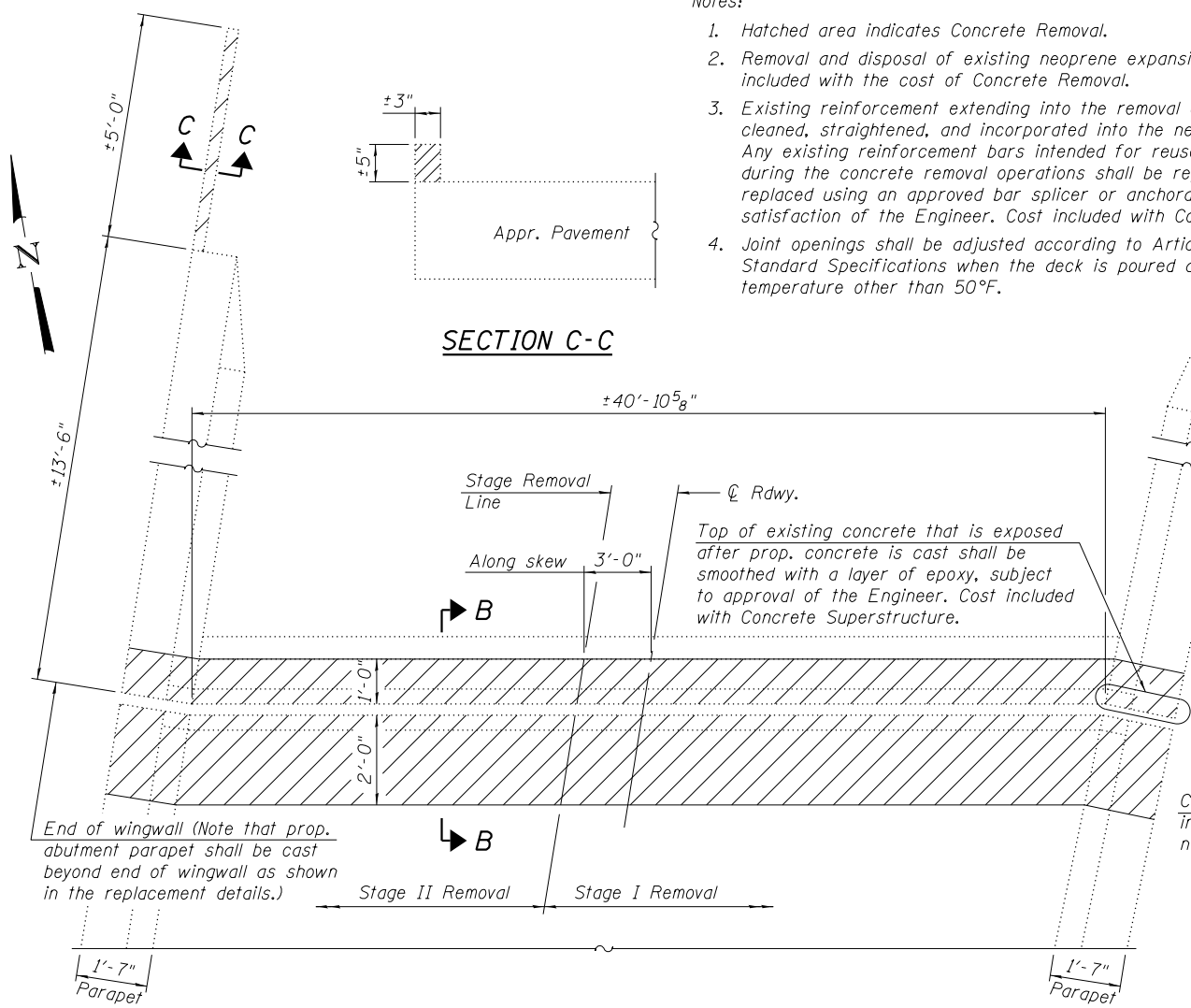
SHEET NO. 3 OF 15 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|----------|--------------|-----------|
| 72 | . | SANGAMON | 163 | 140 |
| CONTRACT NO. 72B54 | | | | |

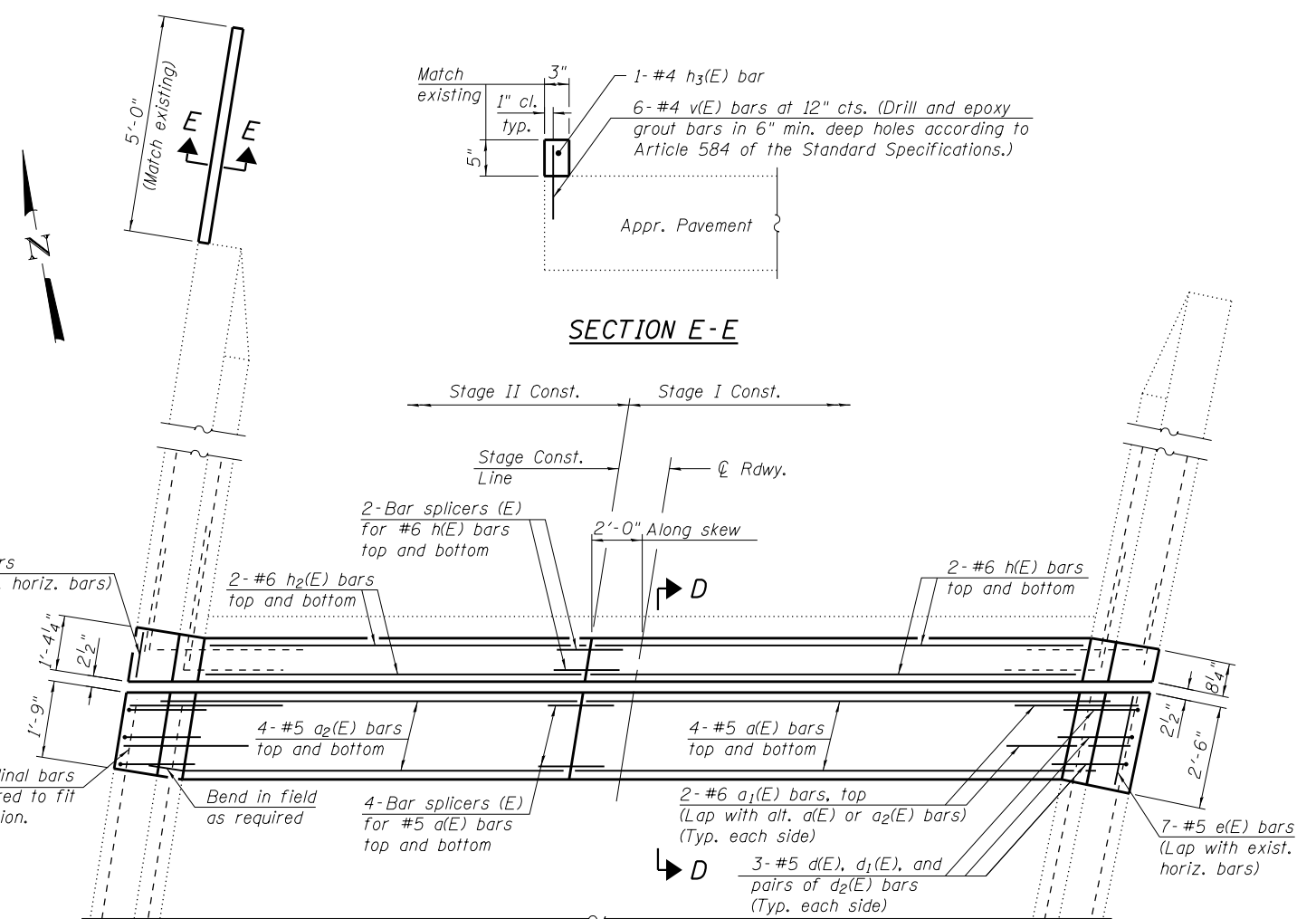
ILLINOIS FED. AID PROJECT
• (84-9-2&3)RS-2&MISC STRUC REP

Notes:

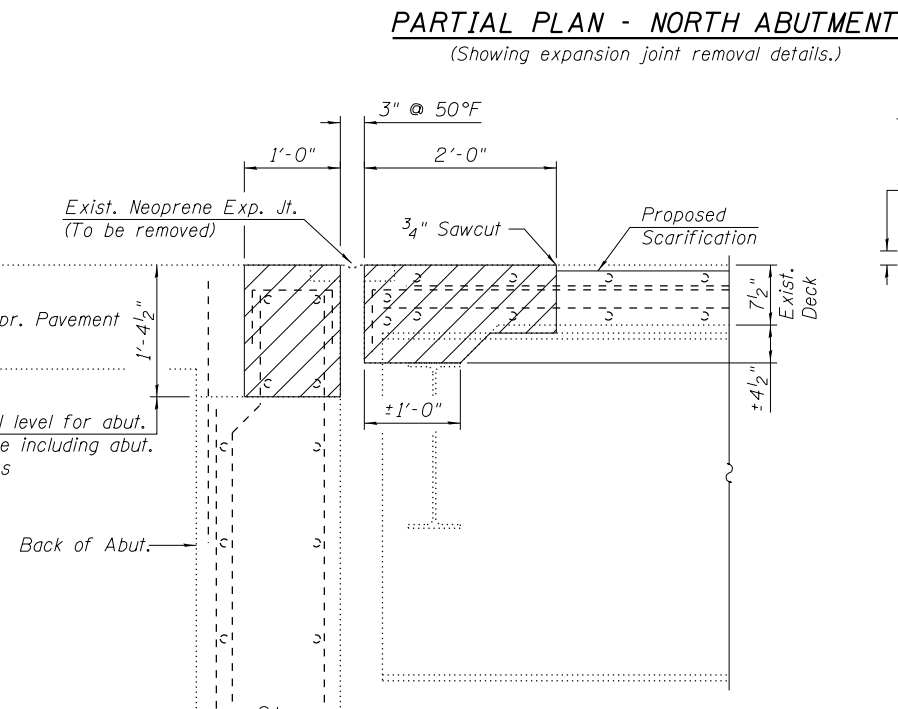
- Hatched area indicates Concrete Removal.
- Removal and disposal of existing neoprene expansion joint shall be included with the cost of Concrete Removal.
- Existing reinforcement extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any existing reinforcement bars intended for reuse and damaged during the concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system to the satisfaction of the Engineer. Cost included with Concrete Removal.
- 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.



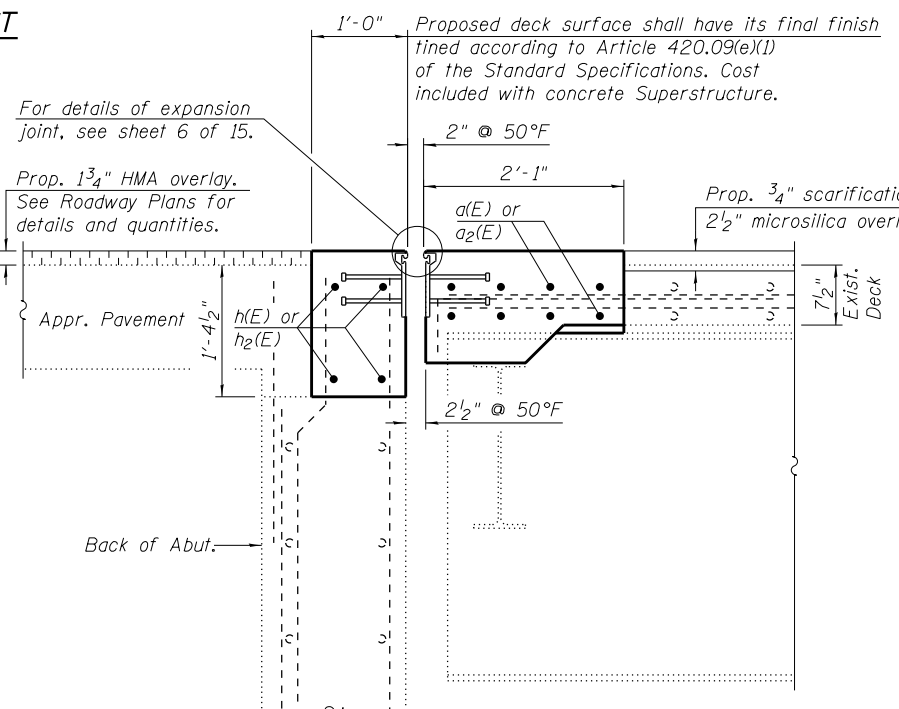
SECTION C-C



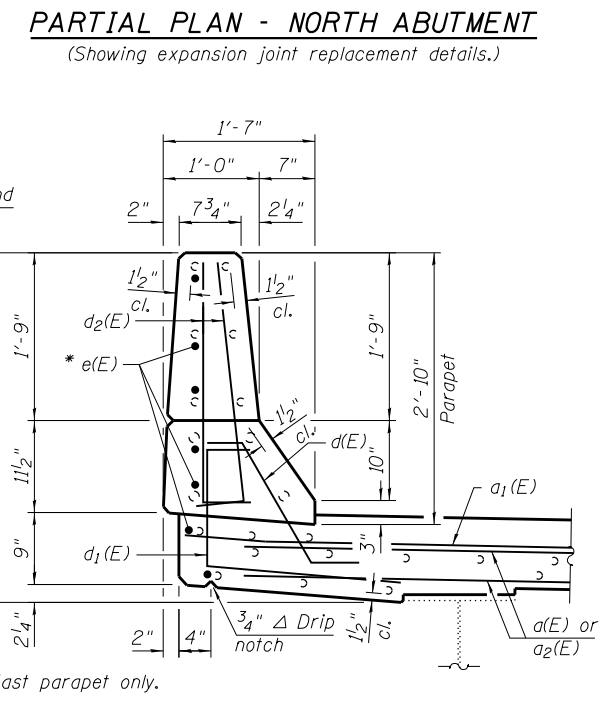
SECTION E-E



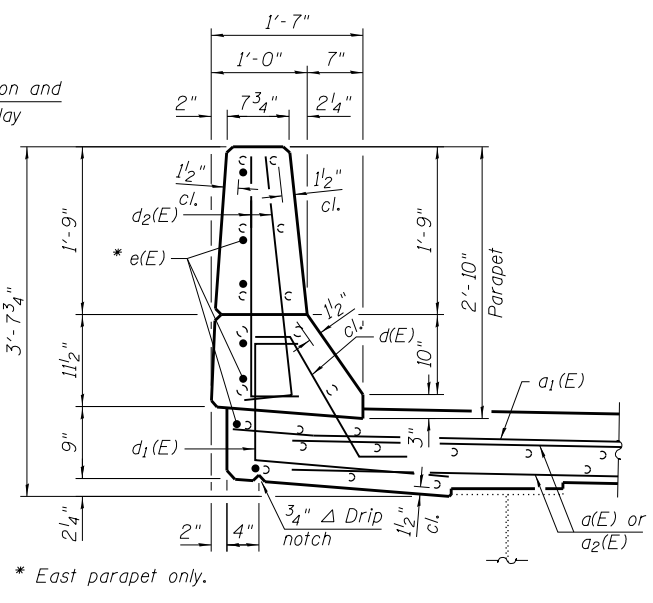
PARTIAL PLAN - NORTH ABUTMENT
(Showing expansion joint removal details.)



SECTION D-D
(Dimensions at Rt. L's to back of abut.)



PARTIAL PLAN - NORTH ABUTMENT
(Showing expansion joint replacement details.)

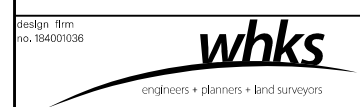


SECTION THRU BRIDGE PARAPET
(Section thru abutment parapet similar.)

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|-------|
| a(E) | 8 | #5 | 23'-4" | — |
| a1(E) | 4 | #6 | 6'-6" | — |
| a2(E) | 8 | #5 | 19'-4" | — |
| d(E) | 6 | #5 | 2'-7" | ⌋ |
| d1(E) | 6 | #5 | 4'-0" | ⌋ |
| d2(E) | 12 | #5 | 3'-0" | ⌋ |
| e(E) | 7 | #5 | 2'-1" | — |
| h(E) | 4 | #6 | 22'-2" | — |
| h1(E) | 3 | #4 | 1'-1" | — |
| h2(E) | 4 | #6 | 18'-2" | — |
| h3(E) | 1 | #4 | 4'-10" | — |
| v(E) | 6 | #4 | 0'-10" | — |
| Concrete Removal | | | Cu. Yd. | 5.5 |
| Concrete Superstructure | | | Cu. Yd. | 6.3 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 750 |
| Bar Splicers | | | Each | 12 |

(See sheet 5 of 15 for bar bend details.)



| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

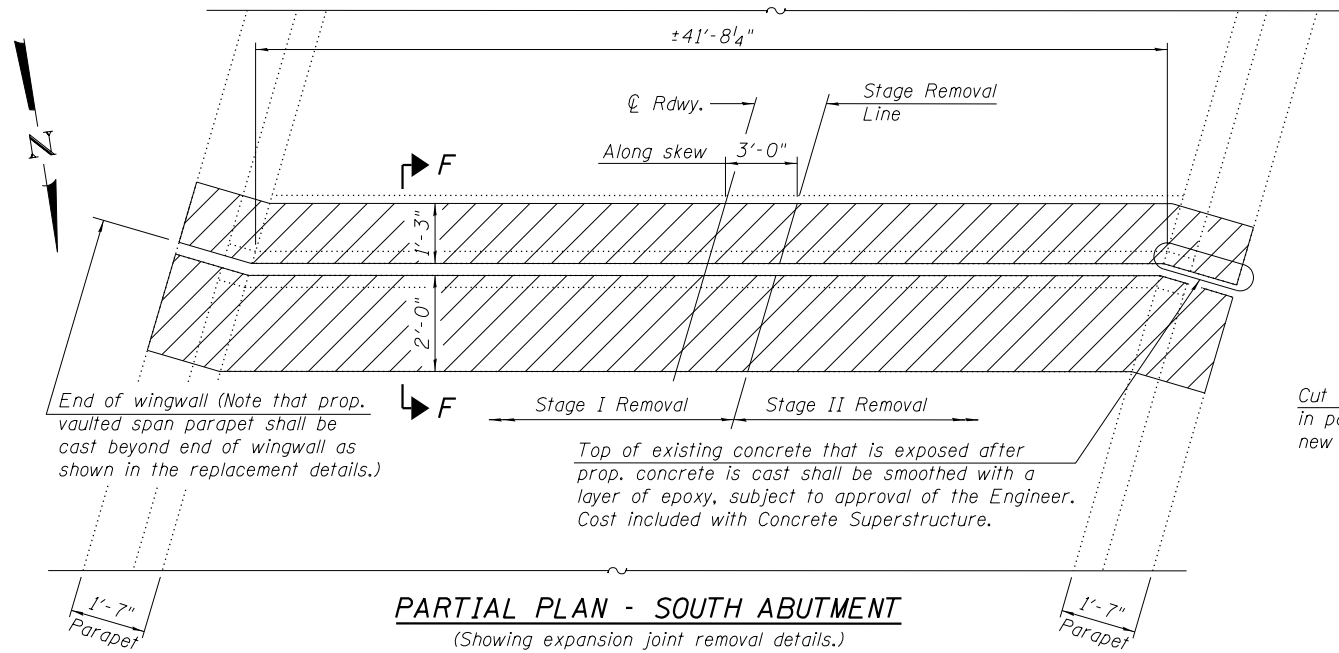
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT JOINT REPLACEMENT DETAILS
STRUCTURE NO. 084-0185

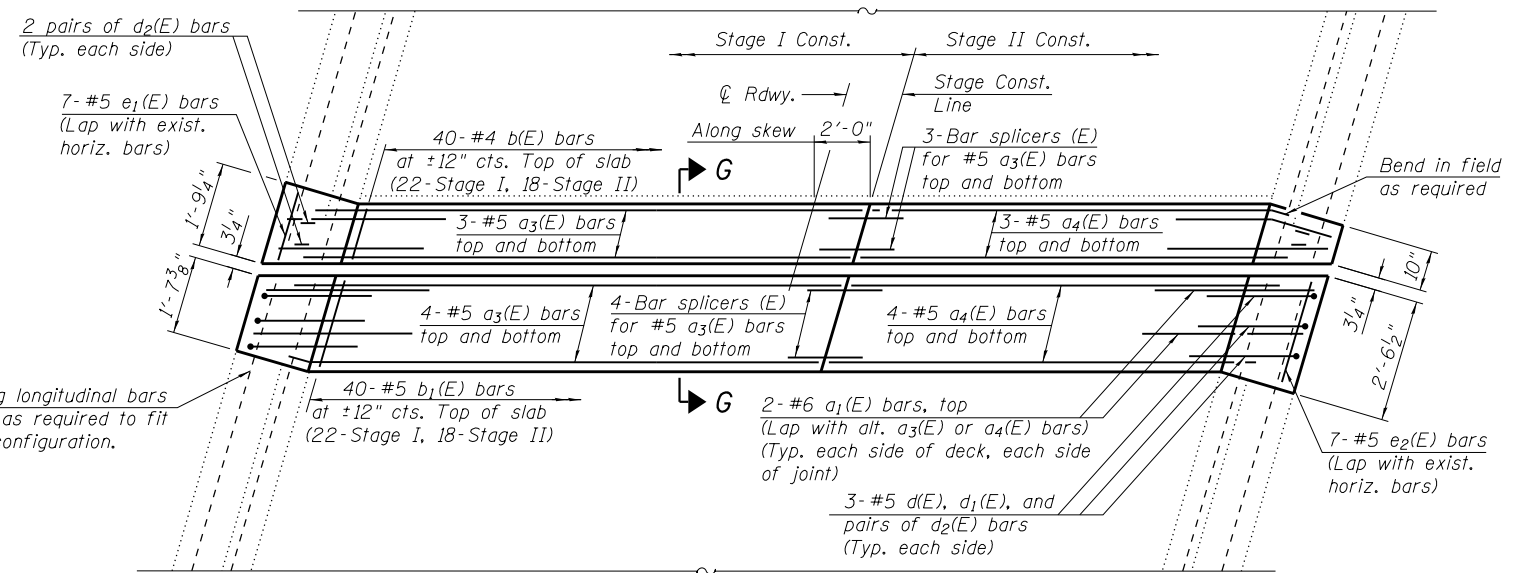
SHEET NO. 4 OF 15 SHEETS

| F.A.I. RT.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|----------|--------------|-----------|
| 72 | . | SANGAMON | 163 | 141 |
| CONTRACT NO. 72B54 | | | | |

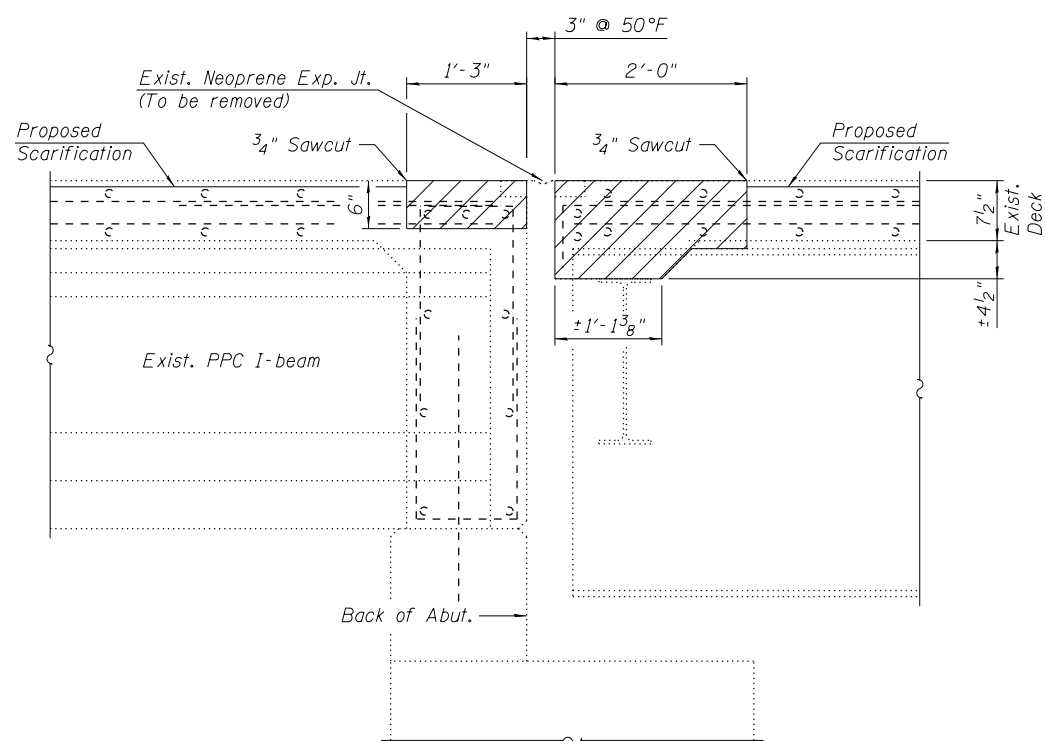
ILLINOIS FED. AID PROJECT
• (84-9-2&3)RS-2&MISC STRUC REP



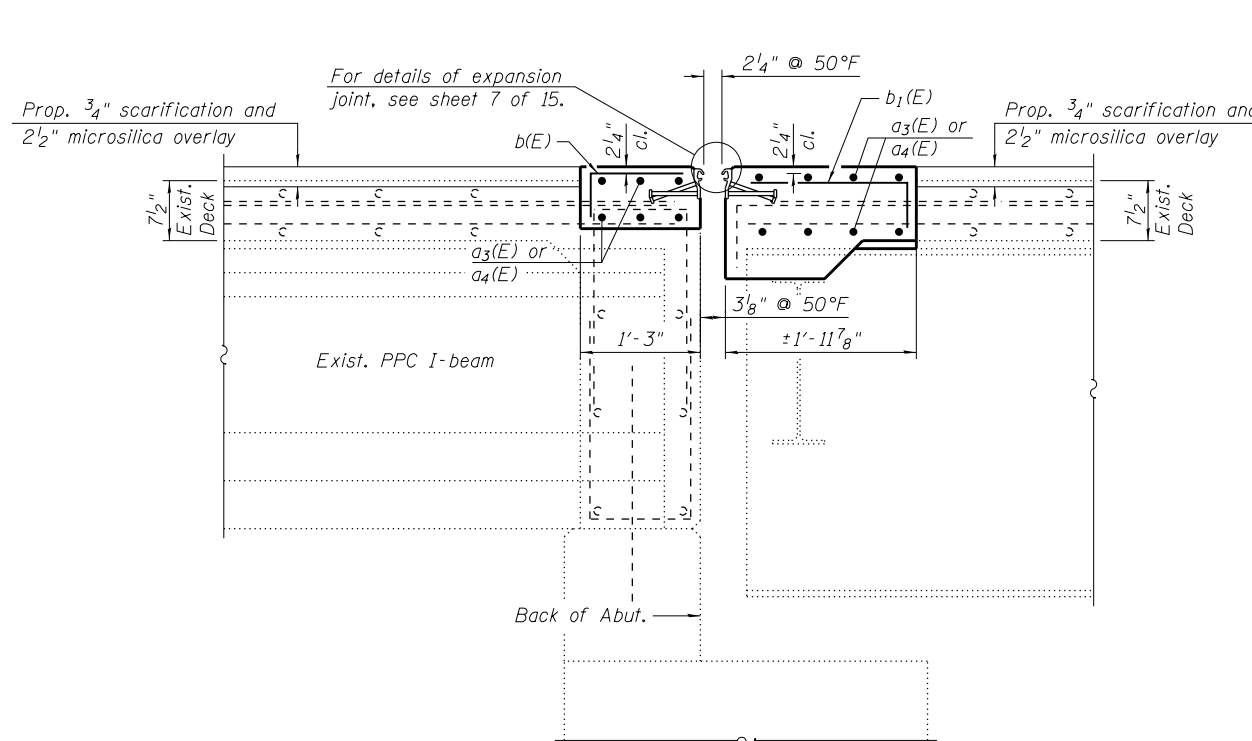
PARTIAL PLAN - SOUTH ABUTMENT
 (Showing expansion joint removal details.)



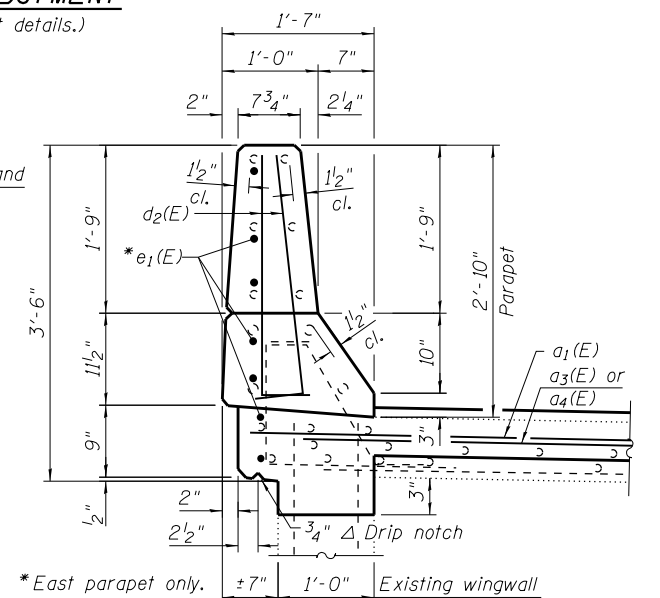
PARTIAL PLAN - SOUTH ABUTMENT
 (Showing expansion joint replacement details.)



SECTION F-F
 (Dimensions at Rt. L's to back of abut.)



SECTION G-G
 (Dimensions at Rt. L's to back of abut.)

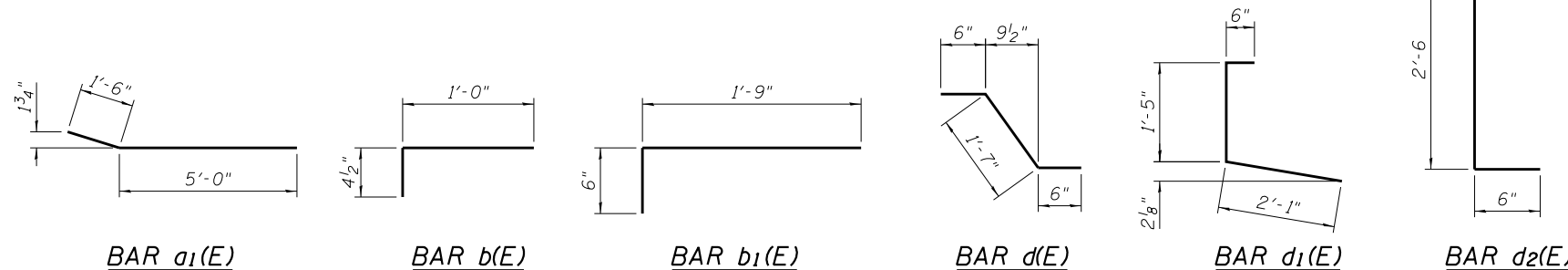


SECTION THRU VAULTED SPAN PARAPET
 (Details for bridge parapet similar to the section on sheet 4 of 15).

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|-------|
| a ₁ (E) | 8 | #6 | 6'-6" | ┌ |
| a ₃ (E) | 14 | #5 | 23'-9" | — |
| a ₄ (E) | 14 | #5 | 19'-9" | — |
| b(E) | 40 | #4 | 1'-5" | ┌ |
| b ₁ (E) | 40 | #5 | 2'-3" | ┌ |
| d(E) | 6 | #5 | 2'-7" | ┌ |
| d ₁ (E) | 6 | #5 | 4'-0" | ┌ |
| d ₂ (E) | 20 | #5 | 3'-0" | ┌ |
| e ₁ (E) | 7 | #5 | 1'-6" | — |
| e ₂ (E) | 7 | #5 | 2'-4" | — |
| Concrete Removal | | | Cu. Yd. | 4.6 |
| Concrete Superstructure | | | Cu. Yd. | 5.4 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 980 |
| Bar Splicers | | | Each | 14 |

- Notes:
- Hatched area indicates Concrete Removal.
 - Removal and disposal of existing neoprene expansion joint shall be included with the cost of Concrete Removal.
 - Existing reinforcement extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any existing reinforcement bars intended for reuse and damaged during the concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system to the satisfaction of the Engineer. Cost included with Concrete Removal.
 - 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.
 - b(E) and b₁(E) bar bends shall utilize the radius permitted for stirrups.



| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

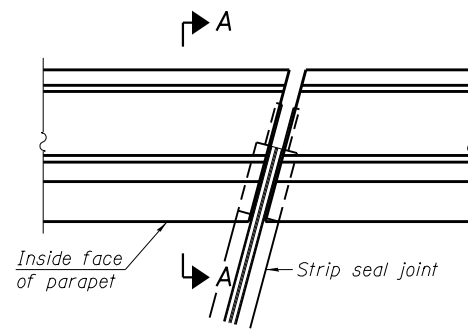
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT JOINT REPLACEMENT DETAILS
 STRUCTURE NO. 084-0185

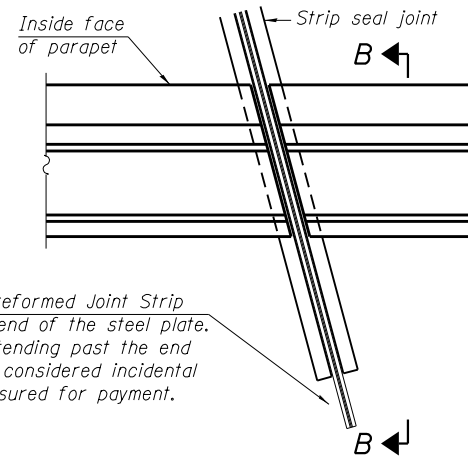
SHEET NO. 5 OF 15 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|----------|--------------|-----------|
| 72 | . | SANGAMON | 163 | 142 |
| CONTRACT NO. 72B54 | | | | |

ILLINOIS FED. AID PROJECT
 (84-9-2&3)RS-2&MISC STRUC REP

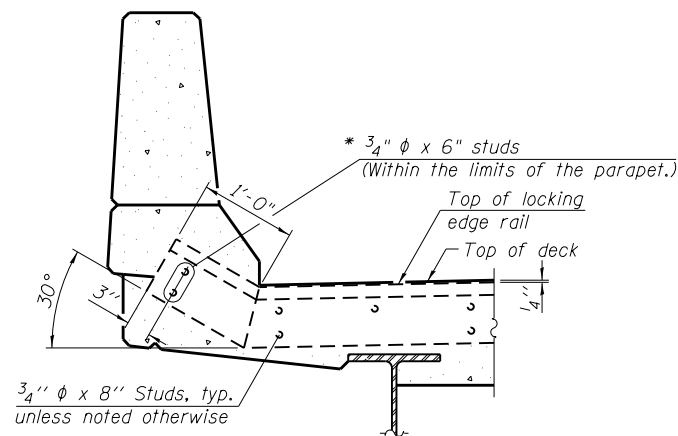


PLAN - EAST PARAPET
(For skews $\le 30^\circ$)

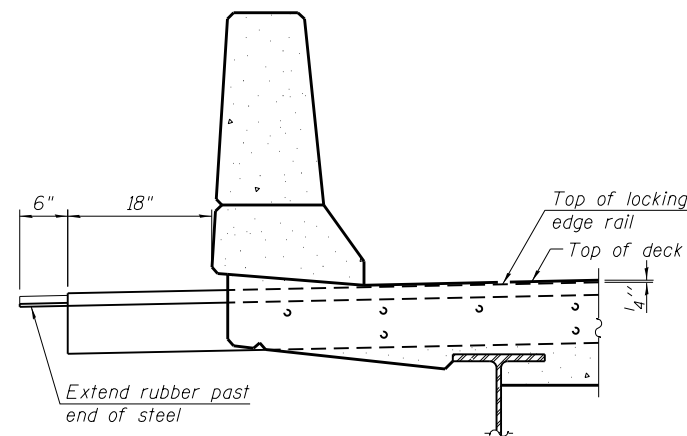


PLAN - WEST PARAPET

The pay limits for Preformed Joint Strip Seal shall be to the end of the steel plate. The 6" of rubber extending past the end of the steel shall be considered incidental and shall not be measured for payment.



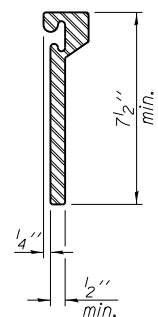
SECTION A-A



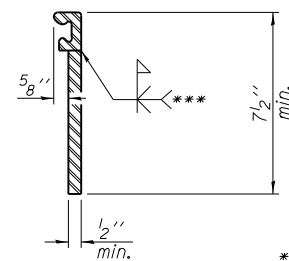
SECTION B-B

(See Section A-A for details not shown.)

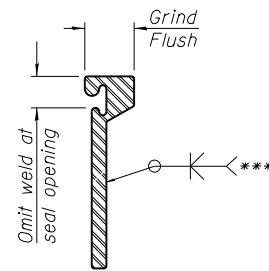
ROLLED EXTRUDED RAIL



WELDED RAIL



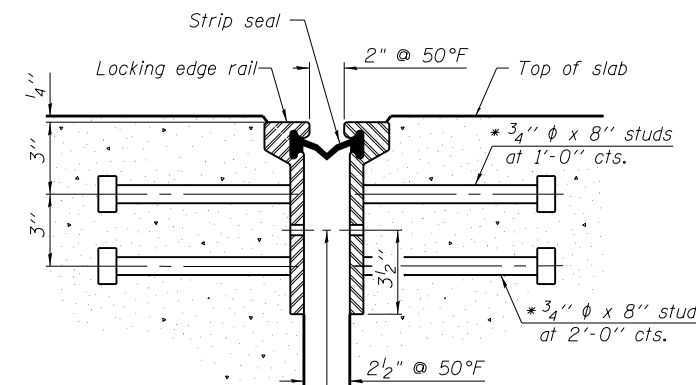
LOCKING EDGE RAIL SPLICE



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

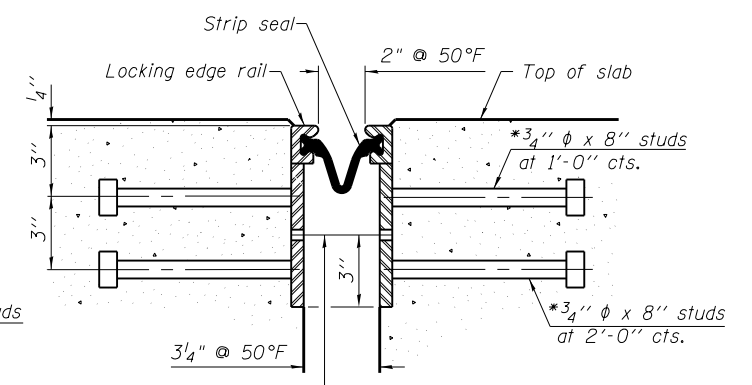
The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS



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

SECTION THRU WELDED RAIL JOINT

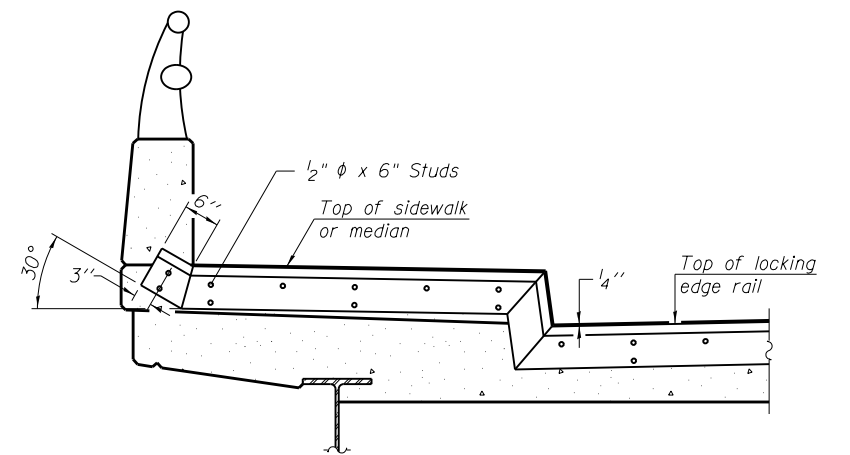
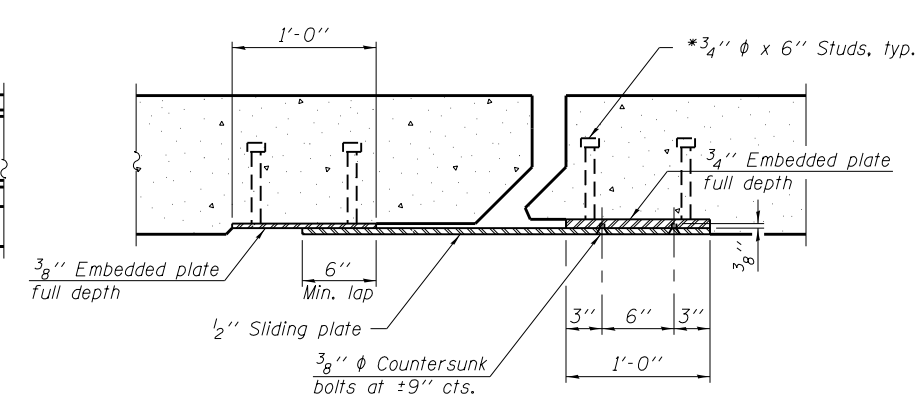
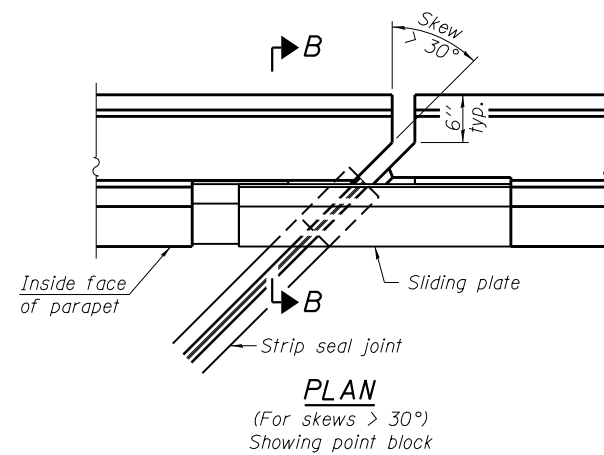
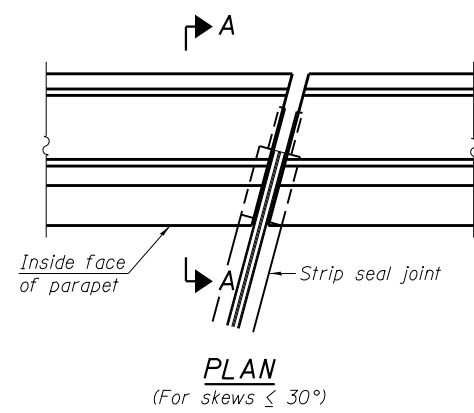
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

Notes:

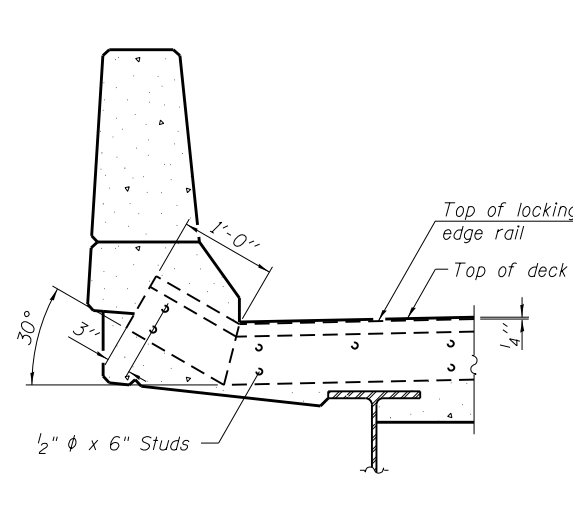
- The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement 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 shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

BILL OF MATERIAL

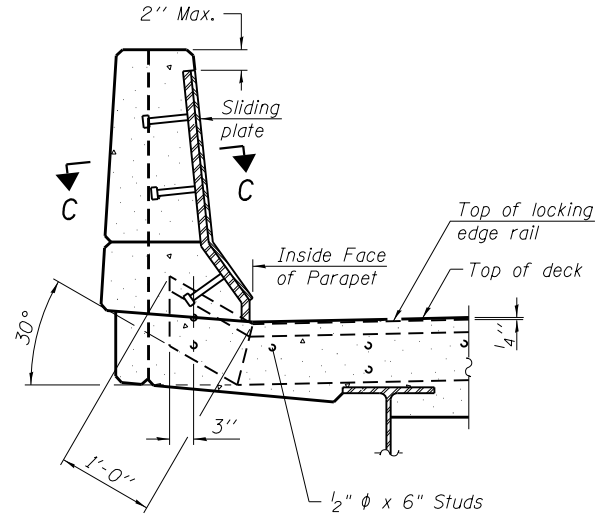
| Item | Unit | Total |
|----------------------------|------|-------|
| Preformed Joint Strip Seal | Foot | 45.0 |



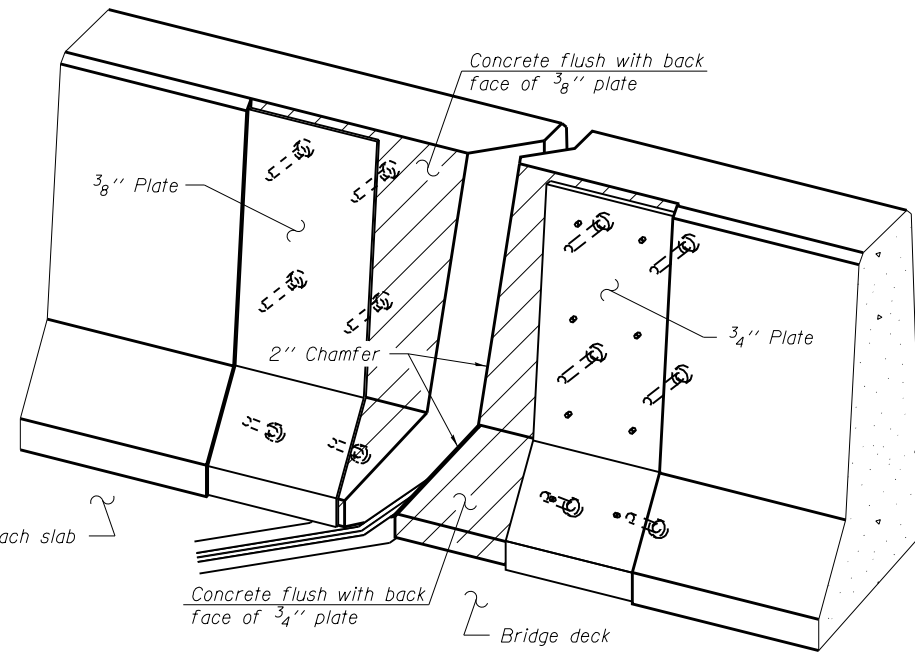
TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN
 Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



SECTION A-A

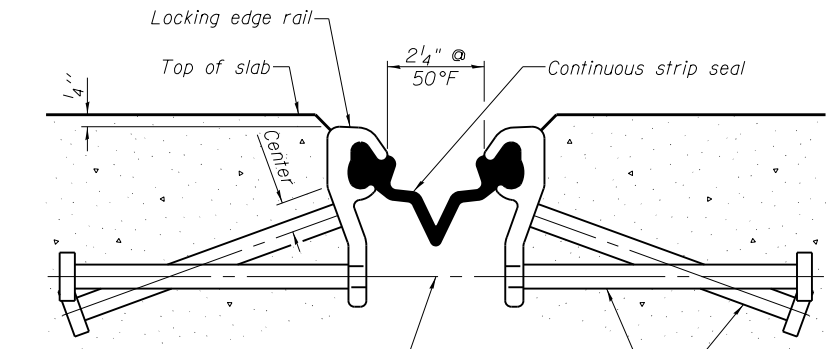


SECTION B-B



TRIMETRIC VIEW (Showing back plates only)

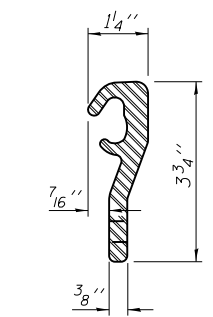
- Notes:
- The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated 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.
 - All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
 - Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.
 - Parapet plates and anchorage studs > 30° included in the cost of Preformed Joint Strip Seal.
 - The inside of the Locking Edge Rail groove shall be free of weld residue.



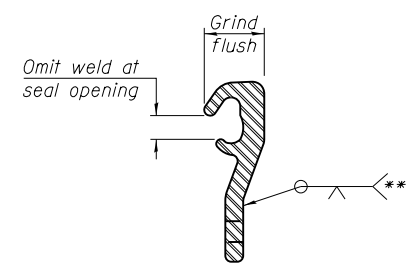
SECTION THRU SHALLOW STRIP SEAL JOINT

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

Place 1/2" φ x 6" granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded at 1'-0" alt. cts.



LOCKING EDGE RAIL



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

| Item | Unit | Total |
|----------------------------|------|-------|
| Preformed Joint Strip Seal | Foot | 43.7 |



| | | |
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| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

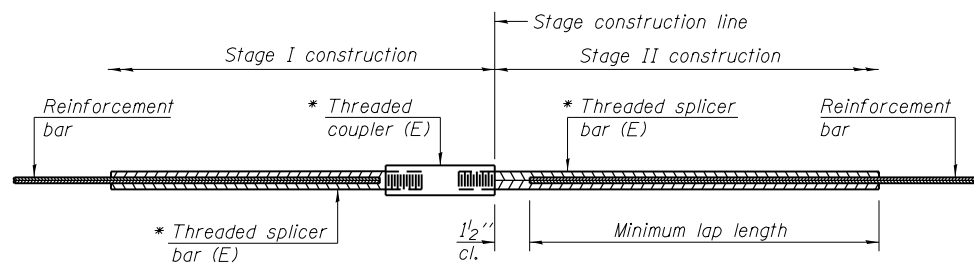
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PREFORMED JOINT STRIP SEAL - SOUTH ABUTMENT
 STRUCTURE NO. 084-0185**

| | | | | |
|----------------|---------|-----------------|--------------------|---------------|
| F.A.I. RTE. 72 | SECTION | COUNTY SANGAMON | TOTAL SHEETS 163 | SHEET NO. 144 |
| | | | CONTRACT NO. 72B54 | |

SHEET NO. 7 OF 15 SHEETS

ILLINOIS FED. AID PROJECT
 (84-9-2&3)RS-2&MISC STRUC REP



STANDARD BAR SPLICER ASSEMBLY

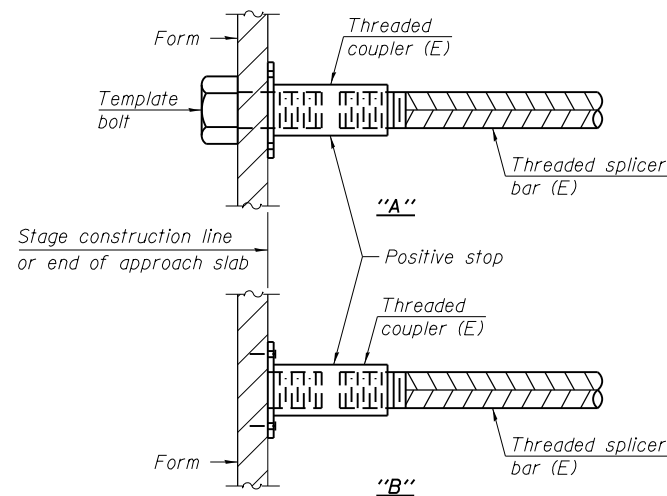
| Minimum Lap Lengths | | | | | | |
|------------------------|---------|---------|---------|---------|---------|---------|
| Bar size to be spliced | Table 1 | Table 2 | Table 3 | Table 4 | Table 5 | Table 6 |
| 3, 4 | 1'-5" | 1'-11" | 2'-1" | 2'-4" | 2'-7" | 2'-11" |
| 5 | 1'-9" | 2'-5" | 2'-7" | 2'-11"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

- 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
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar top, Class C

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

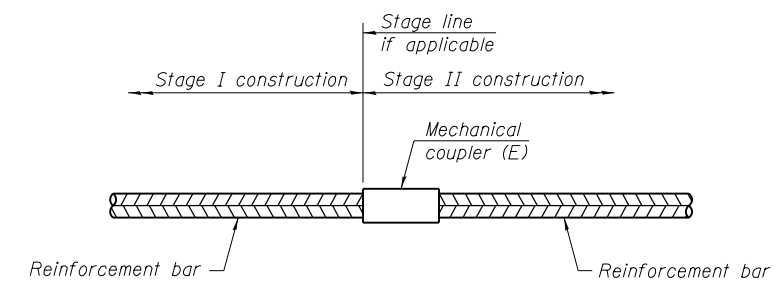
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

| Location | Bar size | No. assemblies required | Table for minimum lap length |
|---------------|----------|-------------------------|------------------------------|
| Deck/N. Abut. | #5 | 8 | 5 |
| Deck/N. Abut. | #6 | 4 | 5 |
| Deck/S. Abut. | #5 | 14 | 5 |
| | | | |



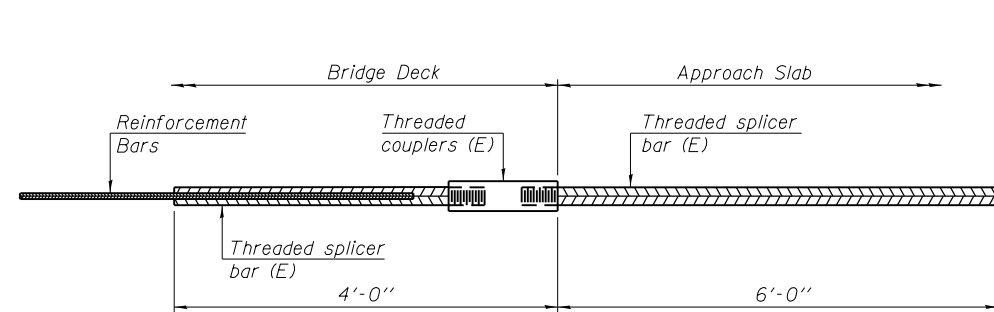
INSTALLATION AND SETTING METHODS

"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.



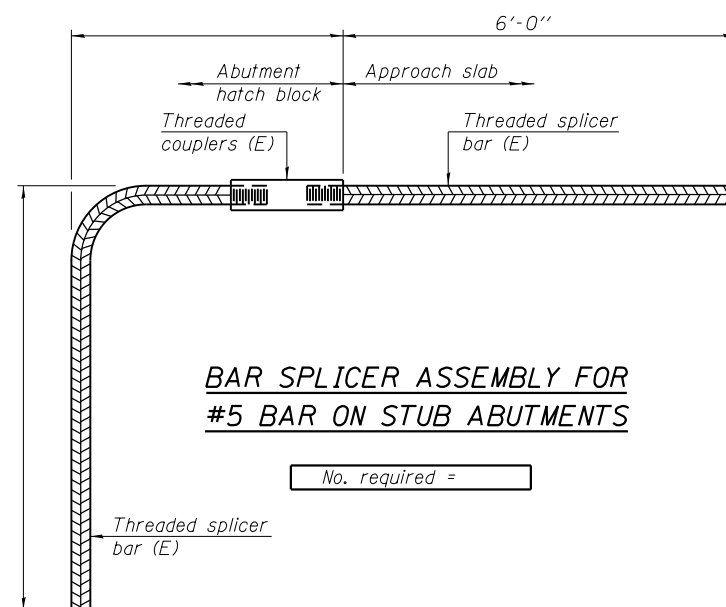
STANDARD MECHANICAL SPLICER

| 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

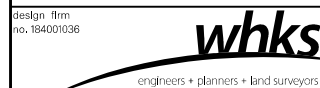
No. required =

NOTES

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

BSD-1

1-27-12



| | | |
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| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

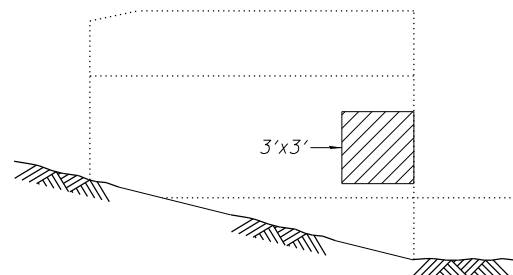
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 084-0185

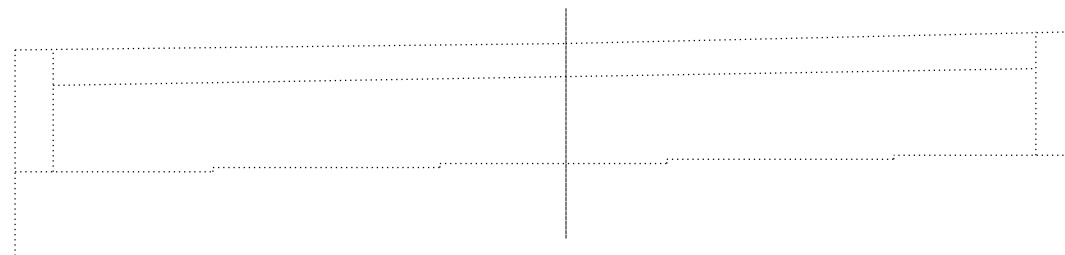
SHEET NO. 8 OF 15 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|----------|--------------|-----------|
| 72 | . | SANGAMON | 163 | 145 |
| CONTRACT NO. 72B54 | | | | |

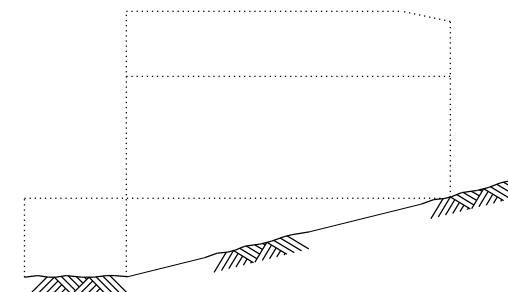
ILLINOIS FED. AID PROJECT
• (84-9-2&3)RS-2&MISC STRUC REP



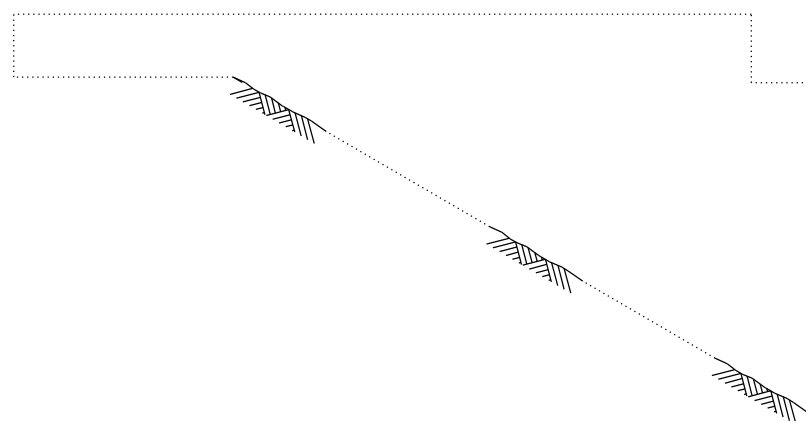
SIDE ELEVATION - WEST FACE



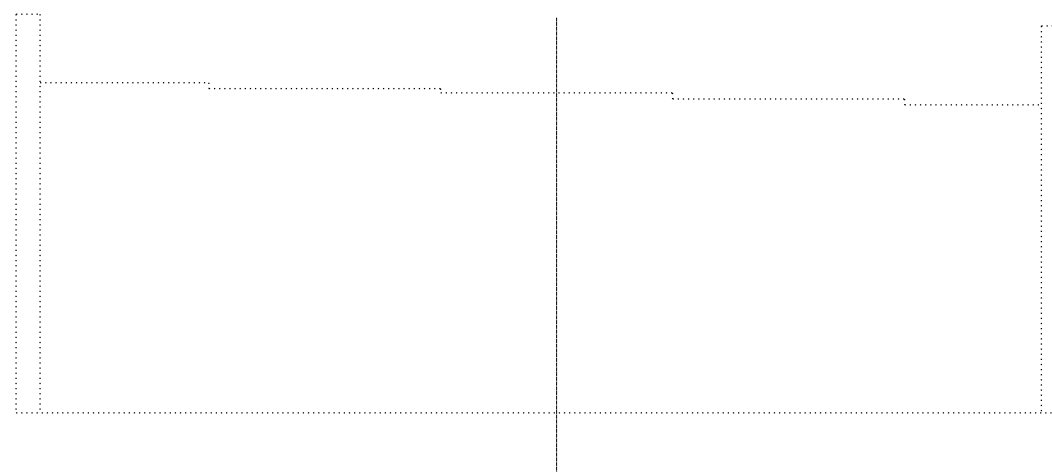
NORTH ABUTMENT ELEVATION



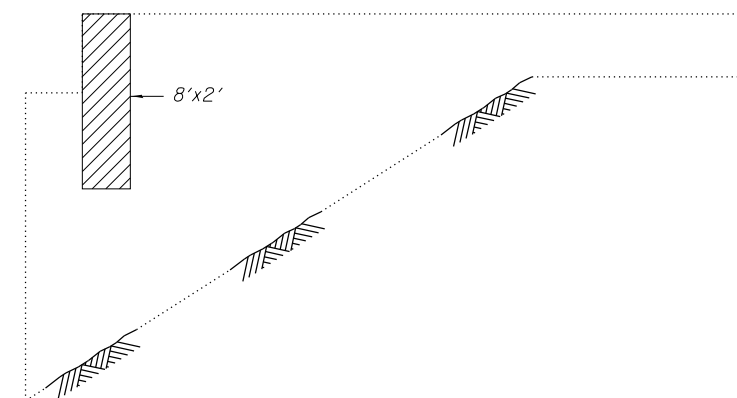
SIDE ELEVATION - EAST FACE



SIDE ELEVATION - EAST FACE



SOUTH ABUTMENT ELEVATION

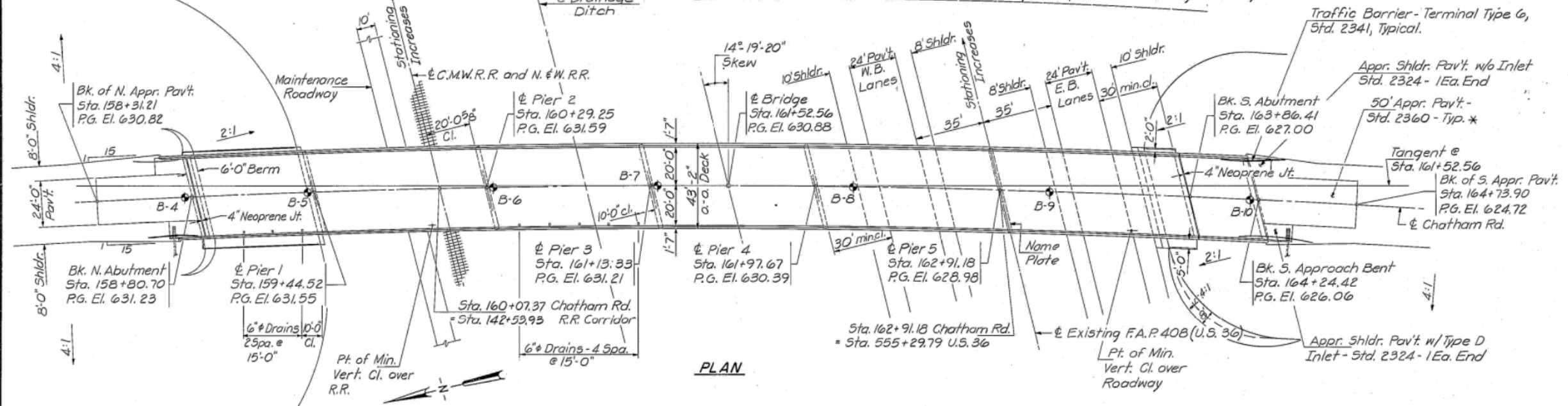
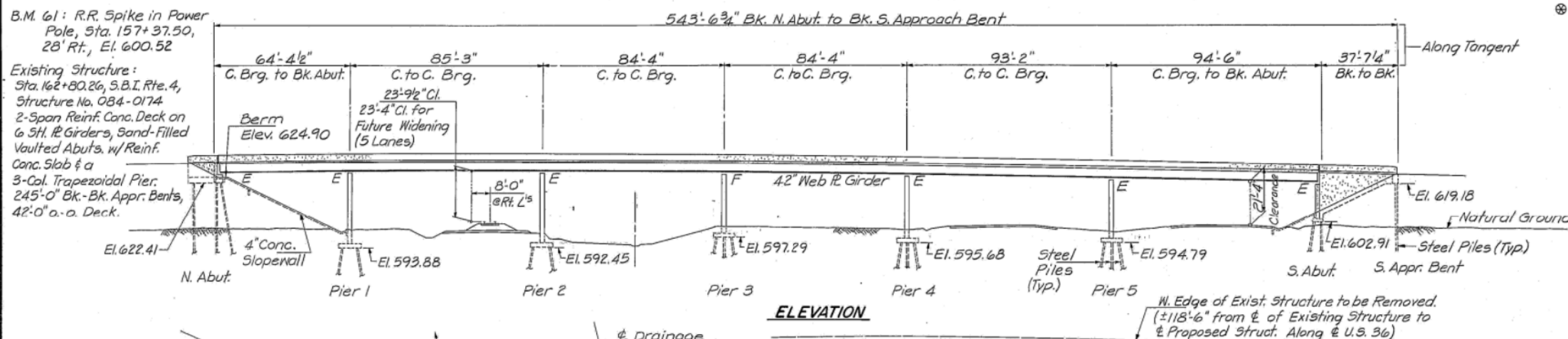


SIDE ELEVATION - WEST FACE

Note:
Hatching indicates Structural Repair of Concrete
(Depth equal to or less than 5 in.).

| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|----------|--------------|-----------|
| 72 | • | SANGAMON | 163 | 146 |
| CONTRACT NO. 72B54 | | | | |



HORIZ. CURVE DATA

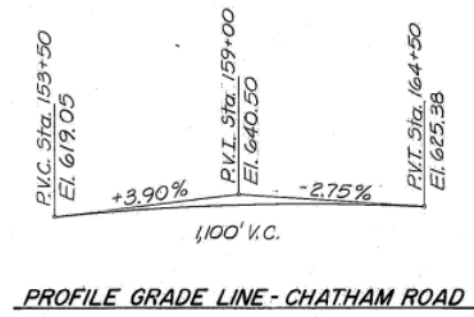
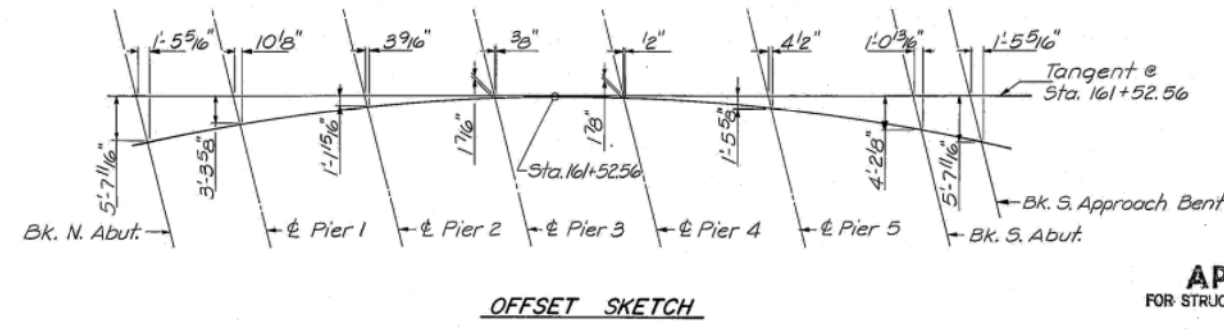
P.I. Sta. 161+12.74
 $\Delta = 27^\circ 54' 28.8''$
 $D_c = 0^\circ 52' 30''$
 $R = 6548.09'$
 $L = 3189.49'$
 $T = 1627.04'$
 $E = 199.11'$
 $S.E. = 0.02\%$

PROPOSED TOP OF RAIL ELEVATIONS

| | |
|-------------|------------|
| Sta. 140+00 | El. 602.76 |
| Sta. 141+00 | El. 602.90 |
| Sta. 142+00 | El. 603.03 |
| Sta. 143+00 | El. 603.16 |
| Sta. 144+00 | El. 603.30 |
| Sta. 145+00 | El. 603.43 |

PROFILE GRADE LINE - U.S. 36

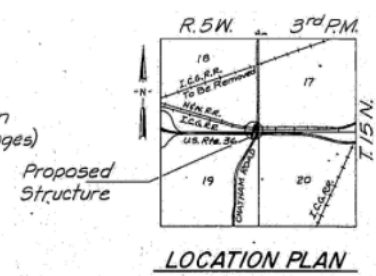
| | |
|-------------|------------|
| Sta. 554+00 | El. 601.45 |
| Sta. 555+00 | El. 601.68 |
| Sta. 556+00 | El. 601.91 |



DESIGN STRESSES

Precast Prestressed Units:
 $f_c = 5,000$ p.s.i.
 $f_{ti} = 4,000$ p.s.i.
 $f_s = 270,000$ p.s.i. (1/2" Strands)
 $f_{si} = 189,000$ p.s.i. (1/2" Strands)
 Concrete: Load Factor Design
 $f_c = 3,500$ p.s.i.
 $f_y = 60,000$ p.s.i. (Reinf.)
 Structural Steel: Load Factor Design
 $f_y = 50,000$ p.s.i. (M-223 Gr. 50, Flanges)
 $f_y = 36,000$ p.s.i. (M-183, Web)
 Loading: AASHTO HS 20-44
 Allowance for 25 p.s.f. Fut. W.S., 1983 AASHTO Specifications with 1984 thru 1988 Interim Specs.

FOR INFORMATION ONLY



* LIME MODIFIED SOIL NOT REQUIRED



Sta. 142+53.93
 Built 199_ By
 State of Illinois
 Spfld. R.R. Rel. Sec. 3VB-1
 F.A. Proj RR-1(7)
 LOADING HS20
 Str. No. 084-0185

NAME PLATE
 See Standard 2113

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY
 Ralph E. Anderson
 Engineer of Bridges and Structures

STRUCTURE NUMBER: 084-0185
GENERAL PLAN & ELEVATION
 CHATHAM ROAD over
 C.M.W. and N.&W. Railroads and FAP RTE 40B
 USABLE SEGMENT NO. 3, VB-1
 SANGAMON COUNTY
 STATION 161+52.56

| | |
|-----------------|-------------------|
| DESIGNED J.E.H. | FILE NO. 655,309? |
| CHECKED T.E.H. | DATE 12-14-89 |
| DRAWN D.A.B. | |
| CHECKED T.E.H. | |



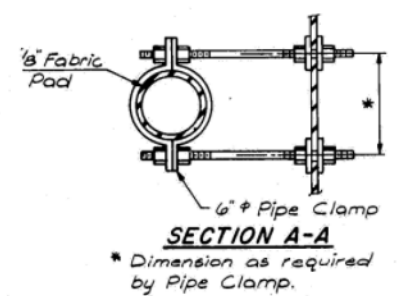
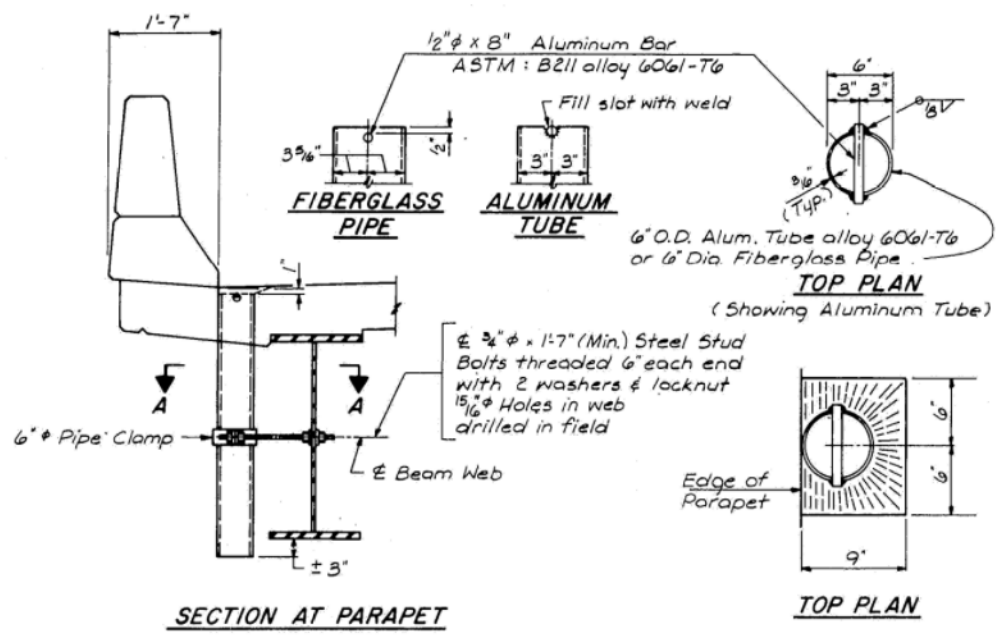
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| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
 STRUCTURE NO. 084-0185
 SHEET NO. 10 OF 15 SHEETS

| | | | | |
|--------------------|---------|-----------------|------------------|---------------|
| F.A.I. RTE. 72 | SECTION | COUNTY SANGAMON | TOTAL SHEETS 163 | SHEET NO. 147 |
| CONTRACT NO. 72B54 | | | | |

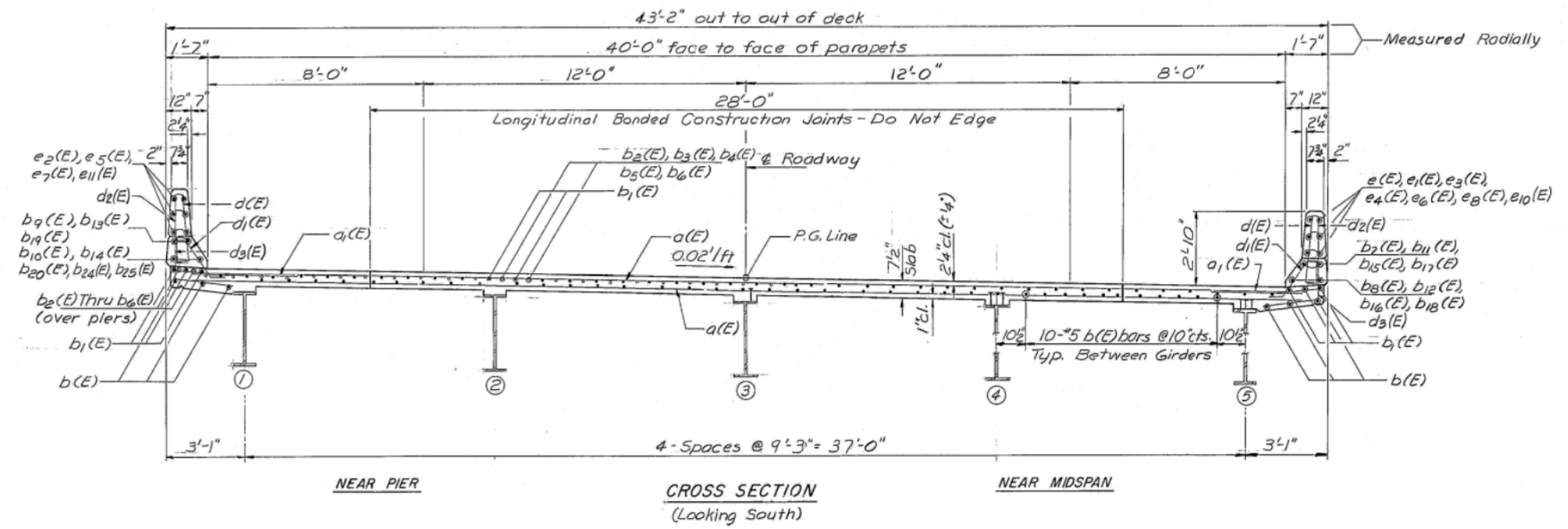
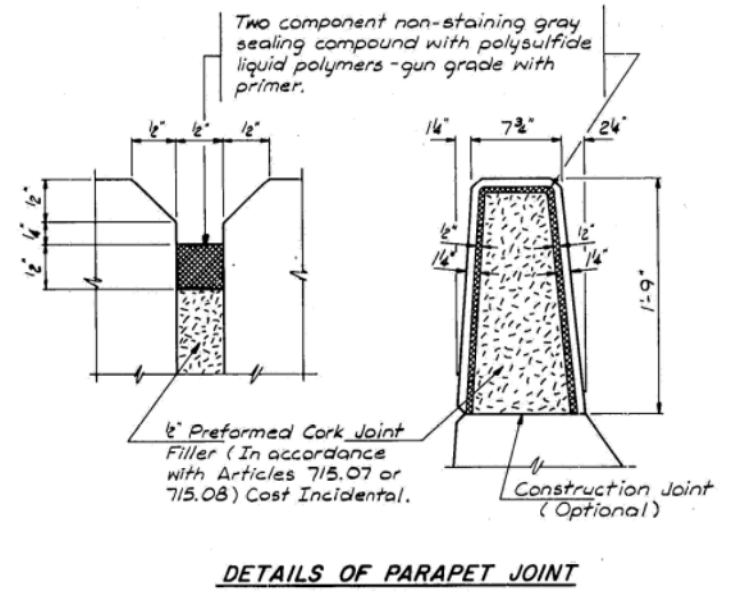
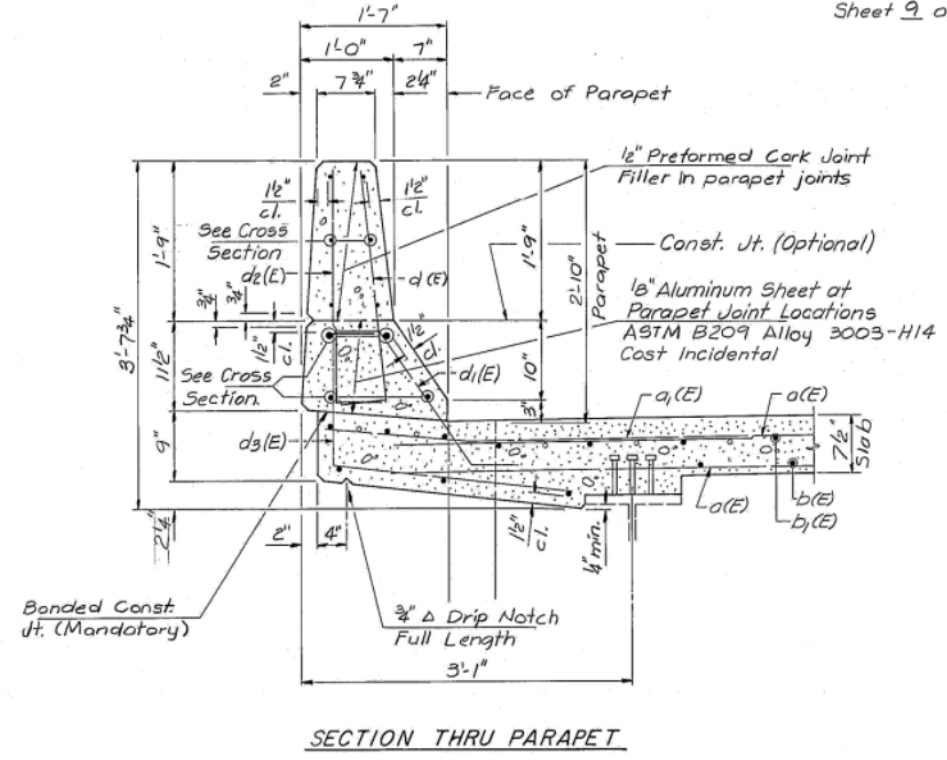
Usable Segment No. 3, VB-1



NOTE: Fiberglass pipe shall conform to ASTM: D2996, with short-time rupture strength hoop tensile stress of 90,000 p.s.i. minimum.

The exterior surfaces of the Floor Drain shall be painted with the Vinyl Enamel Coat painting specified for Structural Steel. The exterior surfaces of the Aluminum tube shall be cleaned and given a washcoat pretreatment in accordance with Steel Structural Painting Council's Spec. SSPC-SP1 & SSPC-Paint 27 prior to painting.

The surface of the fiberglass pipe shall be free of bond inhibiting agents.



FOR INFORMATION ONLY

STRUCTURE NUMBER: 084-0185
SUPERSTRUCTURE DETAILS
 CHATHAM ROAD over
 C.M.W. and N.&W. Railroads and FAP RTE 40B
 USABLE SEGMENT NO. 3, VB-1
 SANGAMON COUNTY
 STATION 161+52.56

DESIGNED T.E.H.
 CHECKED C.D.P.
 DRAWN M.J.M.
 CHECKED T.E.H.

HANSON ENGINEERS
 INCORPORATED
 SPRINGFIELD, PEORIA & ROCKFORD, ILLINOIS

FILE NO. 8553092
 DATE 12-14-89

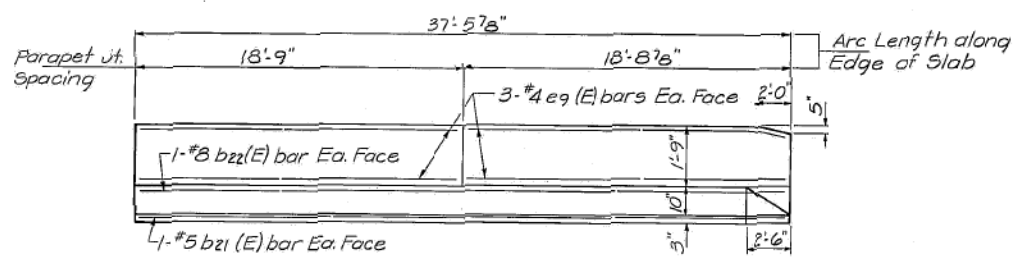
whks
 engineers + planners + land surveyors

| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

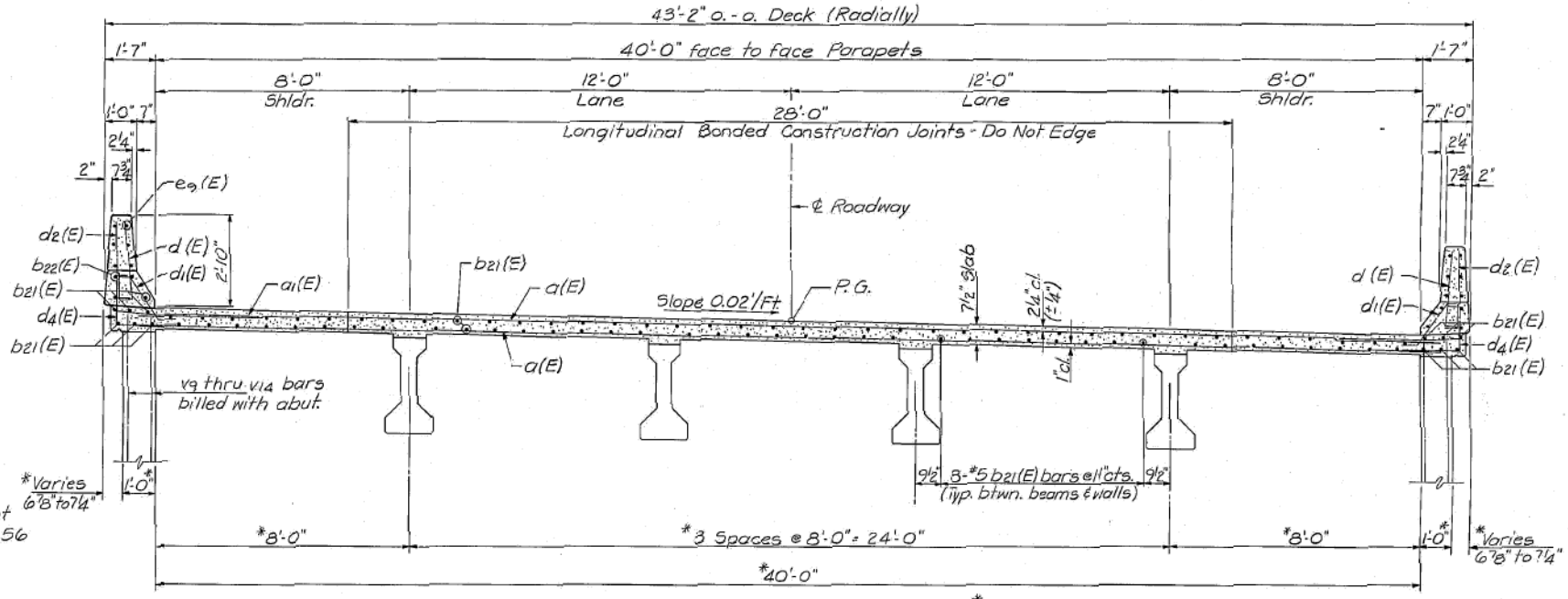
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
 STRUCTURE NO. 084-0185
 SHEET NO. 11 OF 15 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|----------|--------------|-----------|
| 72 | . | SANGAMON | 163 | 148 |
| CONTRACT NO. 72B54 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

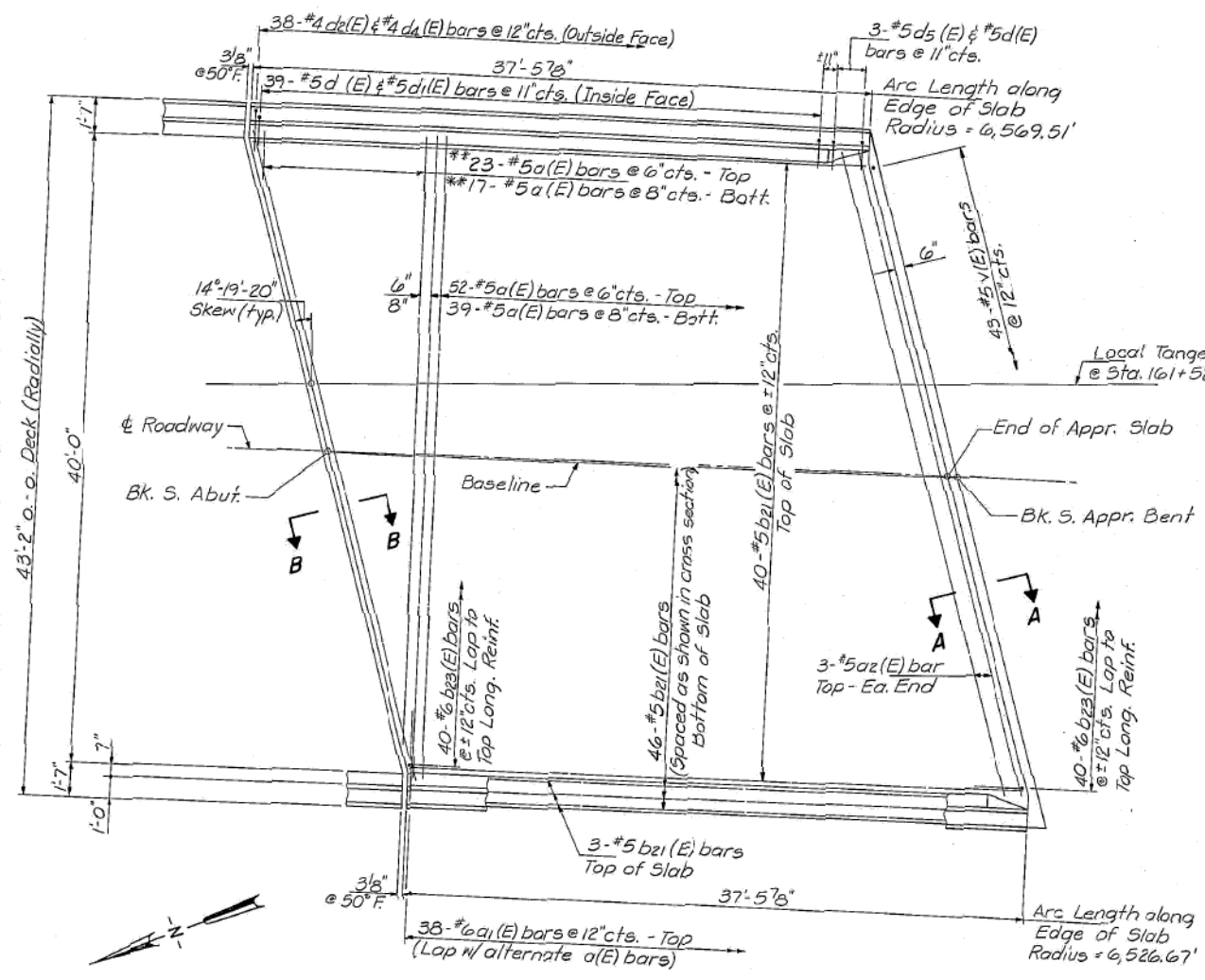


INSIDE ELEVATION OF PARAPET



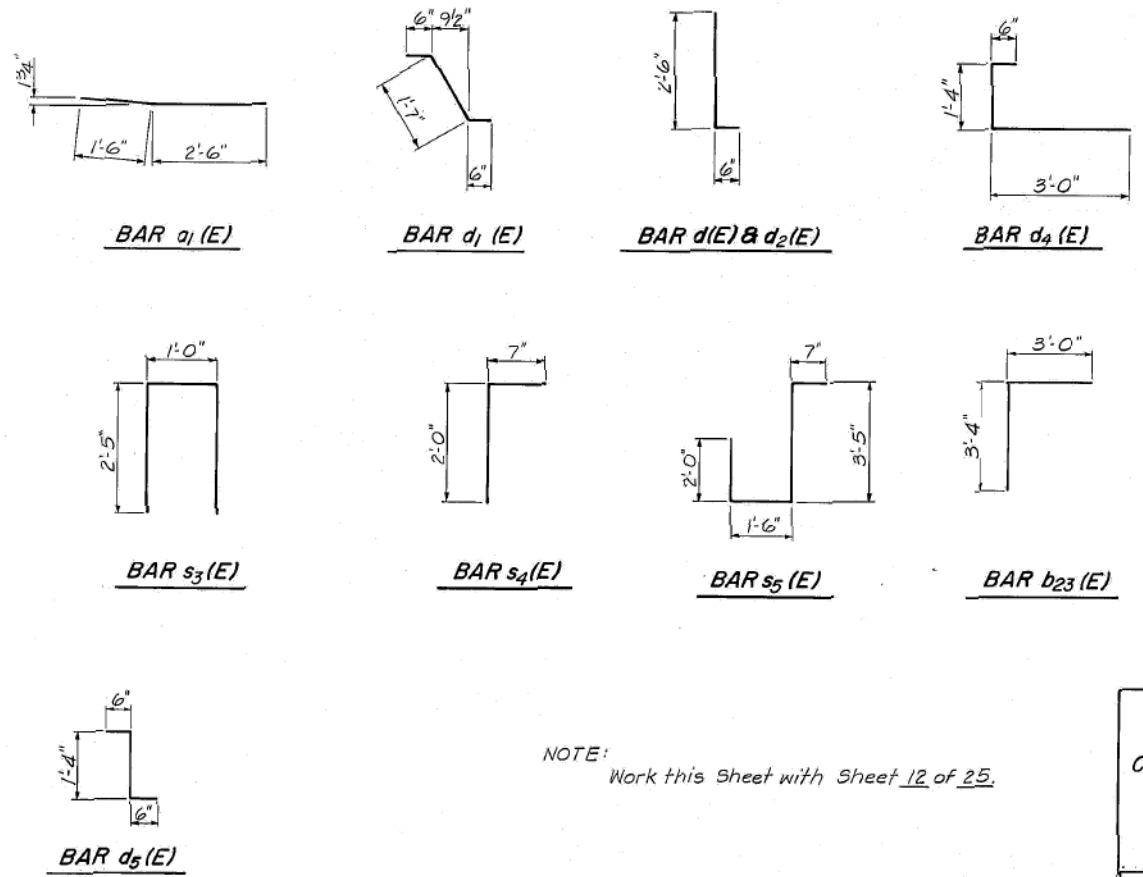
CROSS SECTION

*Note: Measured @ Rt. L's to Baseline Btwn. Bk. S. Abut. & Bk. S. Appr. Bent.



PLAN

** Cut bars in field to fit skew and use remainder at opposite end of approach slab.



BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|--------|--------|
| a1 (E) | 131 | #5 | 41'-2" | — |
| a1 (E) | 76 | #6 | 4'-0" | — |
| a2 (E) | 6 | #5 | 42'-6" | — |
| b21 (E) | 96 | #5 | 37'-2" | — |
| b22 (E) | 2 | #8 | 37'-2" | — |
| b23 (E) | 80 | #6 | 6'-4" | — |
| d (E) | 84 | #5 | 3'-0" | — |
| d1 (E) | 78 | #5 | 2'-7" | — |
| d2 (E) | 76 | #4 | 3'-0" | — |
| d4 (E) | 76 | #4 | 4'-10" | — |
| d5 (E) | 6 | #5 | 2'-4" | — |
| e9 (E) | 12 | #4 | 18'-5" | — |
| m | 20 | #4 | 7'-6" | — |
| m1 | 6 | #6 | 6'-6" | — |
| m1 (E) | 3 | #6 | 6'-6" | — |
| m2 (E) | 4 | #5 | 41'-3" | — |
| m3 | 4 | #6 | 7'-3" | — |
| m3 (E) | 2 | #6 | 7'-3" | — |
| m4 (E) | 1 | #6 | 41'-3" | — |
| s3 (E) | 74 | #4 | 5'-10" | □ |
| s4 (E) | 37 | #4 | 2'-7" | □ |
| s5 (E) | 37 | #4 | 7'-6" | □ |
| v (E) | 43 | #5 | 2'-6" | — |
| Class X Concrete Super. Cu. Yds. | | | | 58.9 |
| Reinforcement Bars Lbs. | | | | 200 |
| Reinf. Bars Epoxy Ctd. Lbs. | | | | 13,000 |

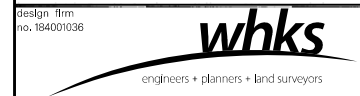
NOTE: Work this Sheet with Sheet 12 of 25.

STRUCTURE NUMBER: 084-0185

SUPERSTRUCTURE - APPR. SPAN
CHATHAM ROAD over
C.M.W. and N. & W. Railroads and FAP RTE 40B
USABLE SEGMENT NO. 3, VB-1
SANGAMON COUNTY
STATION 161+52.56

FOR INFORMATION ONLY

| | | |
|------------------------|--|----------|
| DESIGNED T.E.H. | | FILE NO. |
| CHECKED M.D.M. | | 8553092 |
| DRAWN D.A.B. | | DATE |
| CHECKED T.E.H. | | 12-14-89 |



| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

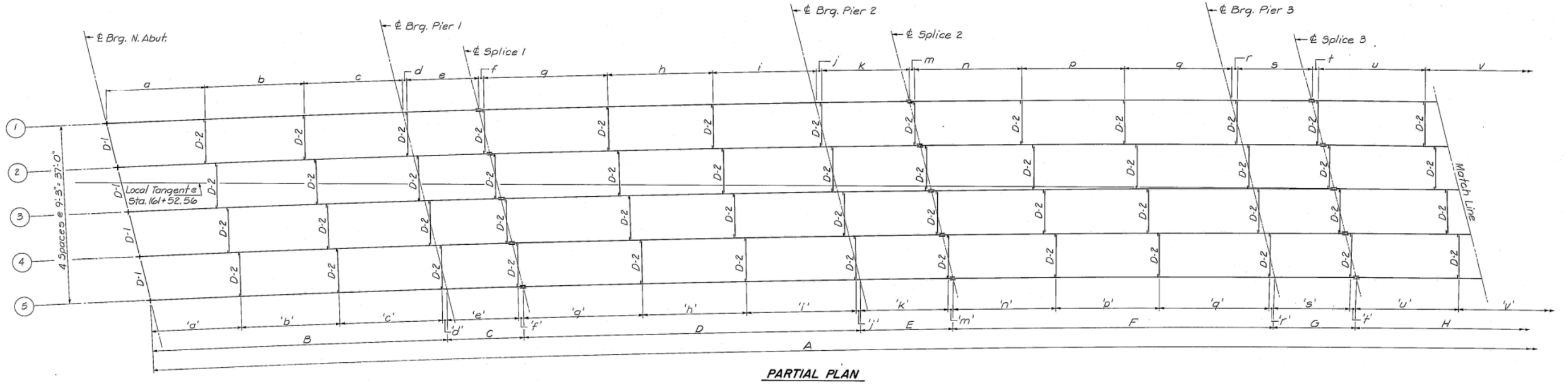
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 084-0185

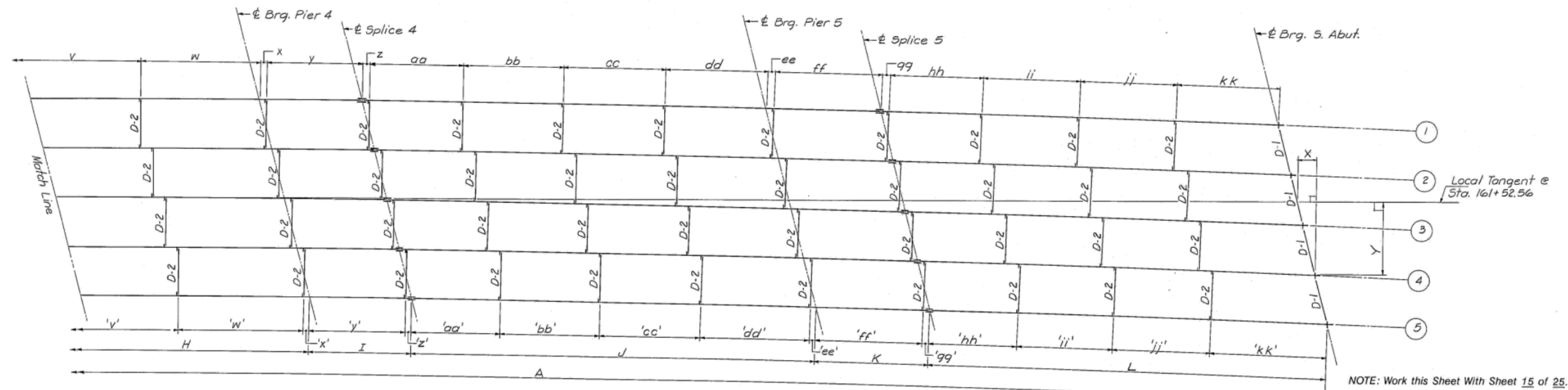
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|---------|----------|--------------|--------------------|
| 72 | | SANGAMON | 163 | 149 |
| | | | | CONTRACT NO. 72B54 |

Usable Segment No. 3, VB-1

Sheet 14 of 25



PARTIAL PLAN



PARTIAL PLAN

NOTE: Work this Sheet With Sheet 15 of 25.

STRUCTURE NUMBER: 084-0185

GIRDER LAYOUT DIMENSIONS

| Girder | Brg. N. Abut. | | Brg. Pier 1 | | Splice 1 | | Brg. Pier 2 | | Splice 2 | | Brg. Pier 3 | | Splice 3 | | Brg. Pier 4 | | Splice 4 | | Brg. Pier 5 | | Splice 5 | | Brg. S. Abut. | |
|--------|---------------|------------|-------------|-----------|-----------|-----------|-------------|-----------|----------|-----------|-------------|-----------|----------|-----------|-------------|-----------|----------|------------|-------------|-----------|----------|-----------|---------------|-----------|
| | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y |
| 1 | 3'3 3/4" | 12'9 1/4" | 3'10 1/8" | 15'0 3/8" | 3'11 3/8" | 15'6 3/8" | 4'4 1/8" | 17'3" | 4'5 1/4" | 17'7 3/8" | 4'8 1/4" | 18'4 1/4" | 4'8 1/2" | 18'5 1/4" | 4'8 3/4" | 18'4 1/2" | 4'7 3/8" | 18'2 3/4" | 4'4 1/2" | 17'1 3/8" | 4'3 1/4" | 16'8 1/4" | 3'8 3/4" | 14'6 3/4" |
| 2 | 0'11 1/8" | 3'7 1/2" | 1'6" | 5'10 1/2" | 1'7 1/2" | 6'4 1/4" | 2'0 3/8" | 8'0 1/4" | 2'1 1/4" | 8'4 1/4" | 2'3 1/4" | 9'1 1/4" | 2'4 1/4" | 9'2 1/4" | 2'3 1/4" | 9'2 1/4" | 2'0" | 7'10" | 1'10 1/4" | 7'4 3/8" | 1'3 1/4" | 5'2 1/4" | | |
| 3 | 1'4 1/4" | 5'6 1/4" | 0'10 3/8" | 3'3 3/8" | 0'8 3/8" | 2'9 1/4" | 0'2 1/4" | 1'1 1/4" | 0'2 1/4" | 0'9 1/4" | 0'0 3/8" | 0'1 1/4" | 0'0 1/2" | 0'1 1/4" | 0'0 1/2" | 0'1 1/4" | 0'0 1/2" | 0'2 1/4" | 0'2 1/4" | 1'5 3/8" | 0'5 1/4" | 1'11 3/8" | 1'0 1/4" | 4'1 3/8" |
| 4 | 3'9 1/4" | 14'8 3/8" | 3'2 1/4" | 12'5 1/4" | 3'0 3/4" | 12'0" | 2'7 3/4" | 10'4 1/4" | 2'6 3/4" | 10'0 1/4" | 2'4 1/4" | 9'4 1/4" | 2'4 1/4" | 9'3 3/8" | 2'4 1/4" | 9'5 1/4" | 2'9" | 10'9 1/4" | 2'10 1/2" | 11'3 1/4" | 3'5 1/4" | 13'5 1/4" | | |
| 5 | 6'1 1/8" | 23'10 3/8" | 5'6 3/8" | 21'8" | 5'4 1/4" | 21'2 1/4" | 5'0" | 19'6 1/4" | 4'11" | 19'3 3/8" | 4'8 1/4" | 18'7 3/8" | 4'8 3/4" | 18'6 1/4" | 4'9 1/4" | 18'8 1/4" | 4'9 1/2" | 18'10 3/8" | 5'1 1/4" | 20'0 3/8" | 5'3 1/4" | 20'6 3/8" | 5'9 1/4" | 22'9 1/8" |

FRAMING PLAN
 CHATHAM ROAD over
 C.M.W. and N. & W. Railroads and FAP RTE, 408
 USABLE SEGMENT NO. 3, VB-1
 SANGAMON COUNTY
 STATION 161+52.56

DESIGNED: []
 CHECKED: []
 DRAWN: D.A.B.
 CHECKED: []

HANSON ENGINEERS
 INCORPORATED
 SPRINGFIELD, PEORIA & ROCKFORD, ILLINOIS

FILE NO. 8553092
 DATE: 12-14-89

FOR INFORMATION ONLY



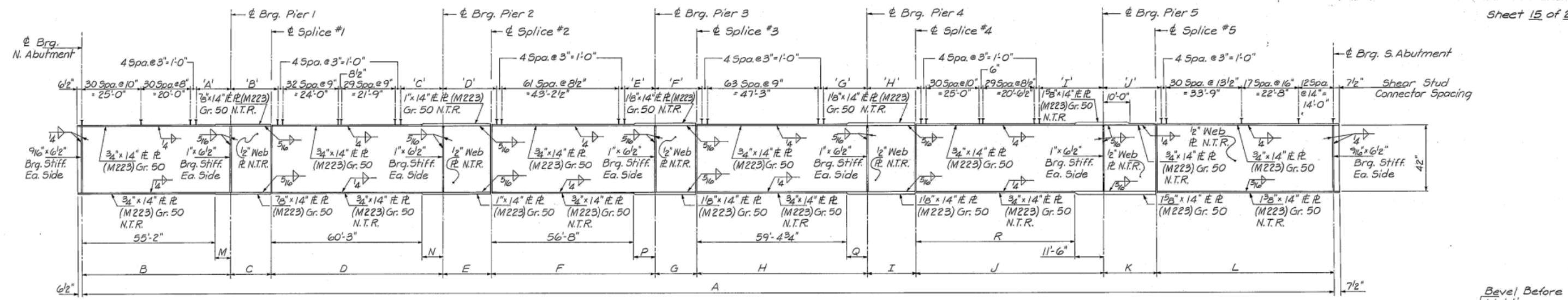
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|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
 STRUCTURE NO. 084-0185

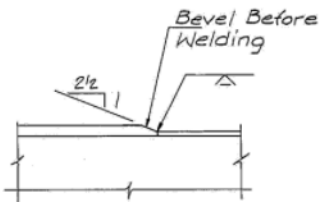
SHEET NO. 13 OF 15 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|----------|--------------|-----------|
| 72 | | SANGAMON | 163 | 150 |
| CONTRACT NO. 72B54 | | | | |

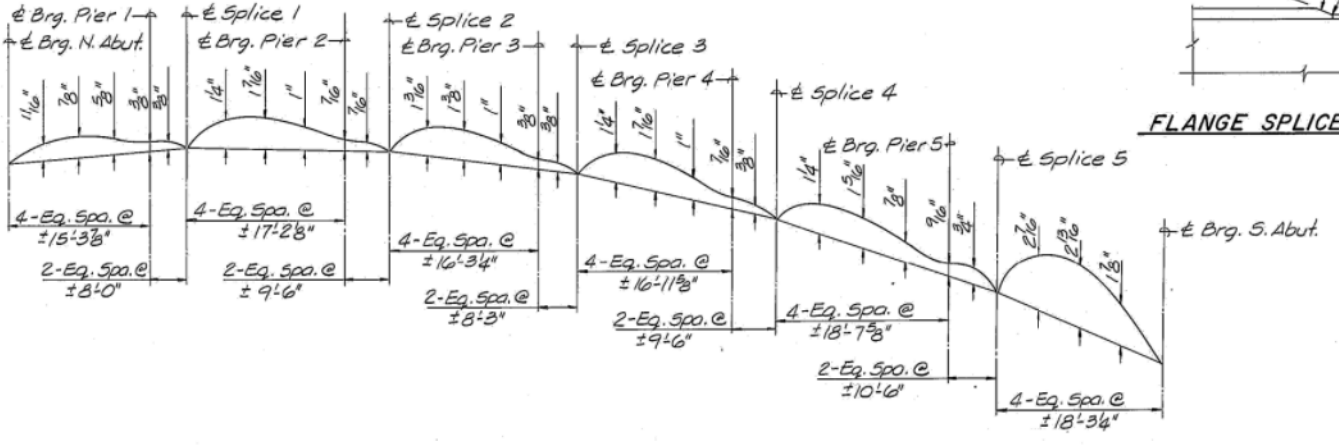


Note: N.T.R. refers to the supplemental requirements for notch toughness.

GIRDER ELEVATION



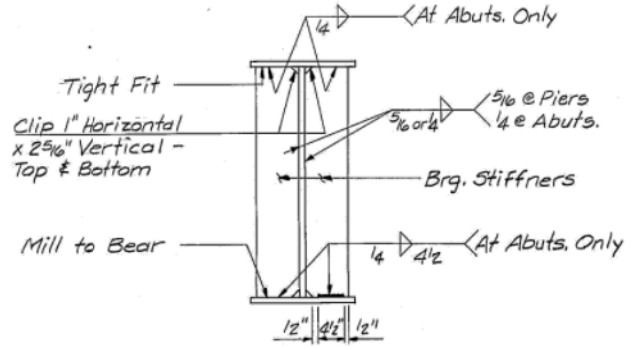
FLANGE SPLICE DETAIL



CAMBER DIAGRAM

TOP OF WEB ELEVATIONS

| | Girder 1 | Girder 2 | Girder 3 | Girder 4 | Girder 5 |
|-----------------|----------|----------|----------|----------|----------|
| ± Brg. N. Abut. | 630.769 | 630.597 | 630.425 | 630.254 | 630.082 |
| ± Brg. Pier 1 | 631.083 | 630.905 | 630.726 | 630.547 | 630.368 |
| ± Splice 1 | 631.128 | 630.948 | 630.768 | 630.587 | 630.406 |
| ± Brg. Pier 2 | 631.153 | 630.958 | 630.768 | 630.579 | 630.389 |
| ± Splice 2 | 631.102 | 630.910 | 630.718 | 630.526 | 630.334 |
| ± Brg. Pier 3 | 630.783 | 630.583 | 630.381 | 630.180 | 629.978 |
| ± Splice 3 | 630.662 | 630.459 | 630.255 | 630.051 | 629.846 |
| ± Brg. Pier 4 | 629.992 | 629.778 | 629.564 | 629.349 | 629.133 |
| ± Splice 4 | 629.755 | 629.538 | 629.320 | 629.102 | 628.883 |
| ± Brg. Pier 5 | 628.615 | 628.385 | 628.154 | 627.923 | 627.691 |
| ± Splice 5 | 628.233 | 627.999 | 627.765 | 627.530 | 627.294 |
| ± Brg. S. Abut. | 626.699 | 626.451 | 626.202 | 625.953 | 625.703 |



BEARING STIFFENER DETAILS

STRUCTURE NUMBER: 084-0185

**GIRDER ELEVATION
 CHATHAM ROAD over
 C.M.W. and N.&W. Railroads and FAP RTE 40B
 USABLE SEGMENT NO. 3, VB-1
 SANGAMON COUNTY
 STATION 161+52.56**

DESIGNED BY TEH
 CHECKED BY MDM
 DRAWN BY DAB
 CHECKED BY TEH

 SPRINGFIELD, PEORIA & ROCKFORD, ILLINOIS
 FILE NO. 8553092
 DATE: 12-14-89

FOR INFORMATION ONLY

GIRDER DIMENSIONS

| Girder | Radius | A | B | C | D | E | F | G | H | I | J | K | L | M | N | P | Q | R | 'A' | 'B' | 'C' | 'D' | 'E' | 'F' | 'G' | 'H' | 'I' | 'J' |
|--------|---------|--------------|------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|-------------|------------|------------|-------------|------------|------------|------------|------------|------------|------------|------------|
| 1 | 6566.59 | 501'-11 1/4" | 61'-3 3/4" | 16'-0" | 68'-8 3/8" | 19'-0 1/4" | 65'-0 1/8" | 16'-0" | 67'-9 1/4" | 19'-0 1/4" | 74'-5 3/8" | 21'-0 1/4" | 73'-0 1/4" | 6'-1 1/4" | 8'-5 1/4" | 8'-4 1/4" | 8'-5 3/4" | 62'-11 1/8" | 15'-3 3/4" | 17'-3 3/4" | 18'-11 1/4" | 21'-1" | 17'-9 5/8" | 17'-9 1/2" | 17'-3 3/4" | 20'-3 3/4" | 25'-1 1/8" | 22'-7 3/8" |
| 2 | 6557.34 | 501'-11 1/4" | 61'-3 3/8" | 16'-0 1/4" | 68'-8 3/8" | 19'-0 1/8" | 65'-0 3/8" | 16'-0 1/4" | 67'-10" | 19'-0 1/8" | 74'-5 3/8" | 21'-0 1/8" | 73'-0 1/8" | 6'-1 1/8" | 8'-5 3/8" | 8'-4 3/8" | 8'-5 3/8" | 62'-11 1/8" | 15'-3 3/8" | 17'-3 3/8" | 18'-11 1/8" | 21'-1" | 17'-9 5/8" | 17'-9 1/8" | 17'-3 3/8" | 20'-3 3/8" | 25'-1 1/8" | 22'-7 3/8" |
| 3 | 6548.09 | 502'-0 5/8" | 61'-3 3/8" | 16'-0 1/8" | 68'-8 3/8" | 19'-0 1/8" | 65'-0 1/8" | 16'-0 1/8" | 67'-10 1/8" | 19'-0 1/8" | 74'-6 1/8" | 21'-0 1/8" | 73'-0 1/8" | 6'-1 1/8" | 8'-5 1/8" | 8'-4 1/8" | 8'-5 1/8" | 63'-0 1/8" | 15'-3 1/8" | 17'-3 1/8" | 18'-11 1/8" | 21'-1" | 17'-9 1/8" | 17'-9 1/8" | 17'-3 1/8" | 20'-3 1/8" | 25'-2 1/8" | 22'-8 1/8" |
| 4 | 6538.84 | 502'-0 5/8" | 61'-3 3/8" | 16'-0 1/8" | 68'-8 3/8" | 19'-0 1/8" | 65'-0 1/8" | 16'-0 1/8" | 67'-10 1/8" | 19'-0 1/8" | 74'-6 1/8" | 21'-0 1/8" | 73'-1 1/8" | 6'-1 1/8" | 8'-5 1/8" | 8'-4 3/8" | 8'-5 3/8" | 63'-0 1/8" | 15'-3 3/8" | 17'-3 1/8" | 18'-11 1/8" | 21'-1 1/4" | 17'-9 1/2" | 17'-9 1/8" | 17'-3 3/8" | 20'-3 3/8" | 25'-2 1/8" | 22'-8 3/8" |
| 5 | 6529.59 | 502'-1 1/8" | 61'-3 3/8" | 16'-0 1/8" | 68'-8 3/8" | 19'-0 1/8" | 65'-0 1/8" | 16'-0 1/8" | 67'-10 1/4" | 19'-0 1/8" | 74'-6 1/4" | 21'-0 1/8" | 73'-1 1/8" | 6'-1 1/4" | 8'-5 3/8" | 8'-4 3/8" | 8'-5 1/2" | 63'-0 1/4" | 15'-3 1/4" | 17'-3 1/4" | 18'-11 1/4" | 21'-1 1/4" | 17'-9 5/8" | 17'-9 1/8" | 17'-3 3/8" | 20'-3 3/8" | 25'-2 1/4" | 22'-8 3/8" |

Design Firm
 no. 18401036

 engineers • planners • land surveyors

| | | |
|--------------|-------------------|---------|
| USER NAME = | DESIGNED - CEH | REVISED |
| FILE NAME = | CHECKED - CWC | REVISED |
| PLOT SCALE = | DRAWN - DLH | REVISED |
| PLOT DATE = | CHECKED - CEH/CWC | REVISED |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
 STRUCTURE NO. 084-0185
 SHEET NO. 14 OF 15 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|---------|----------|--------------|-----------|
| 72 | | SANGAMON | 163 | 151 |

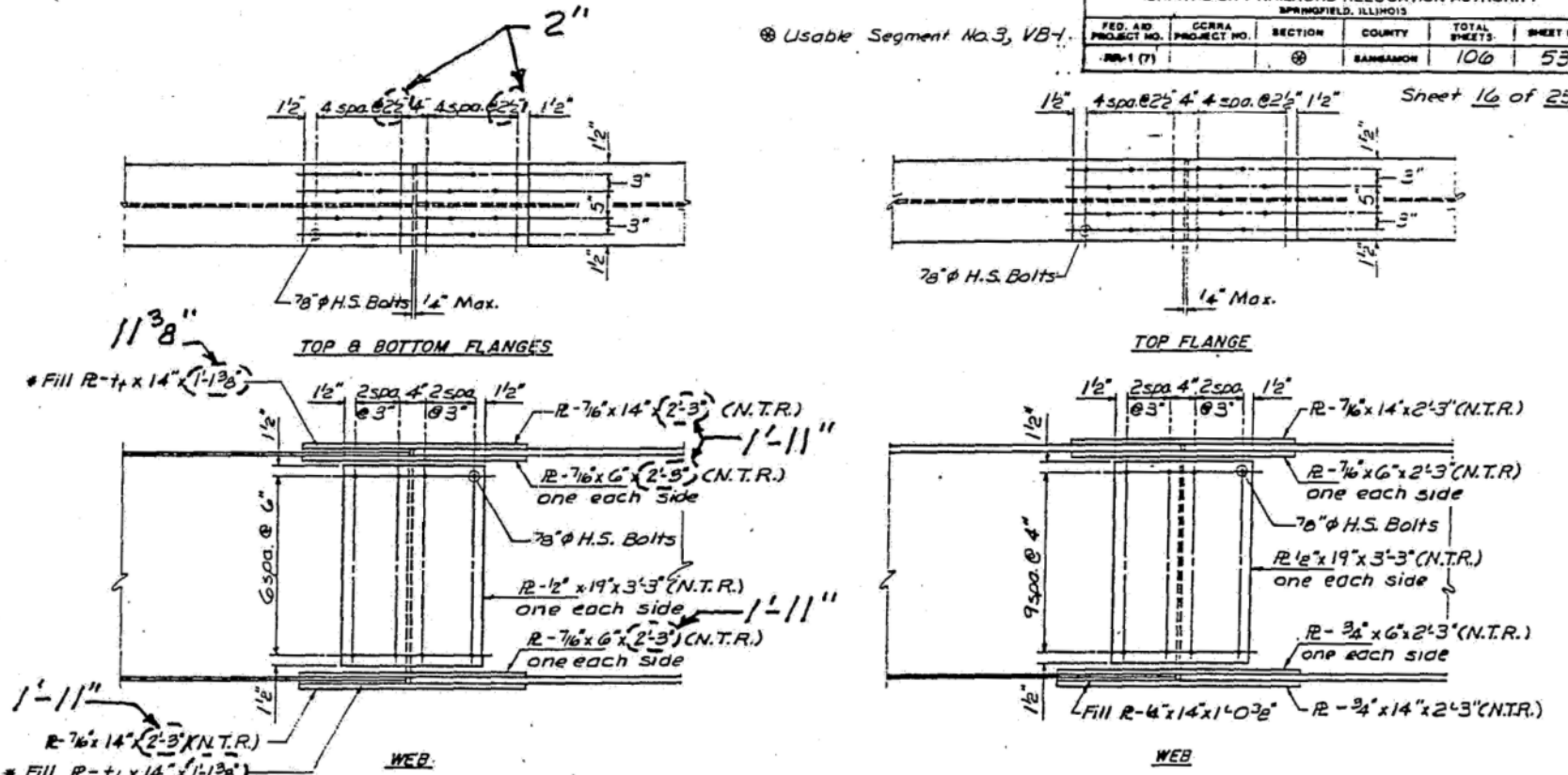
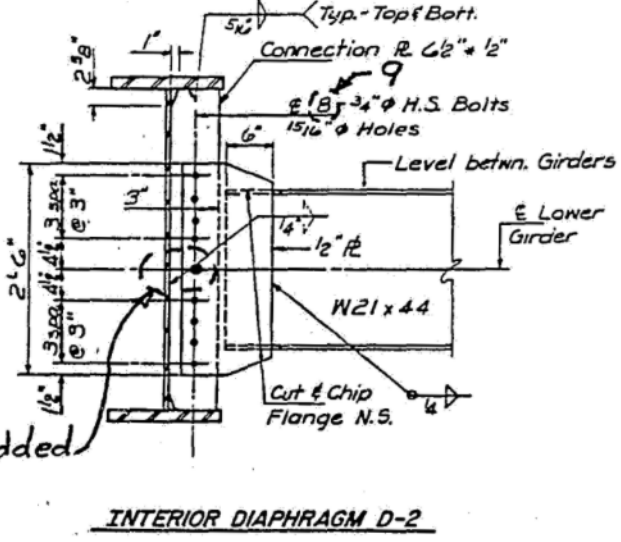
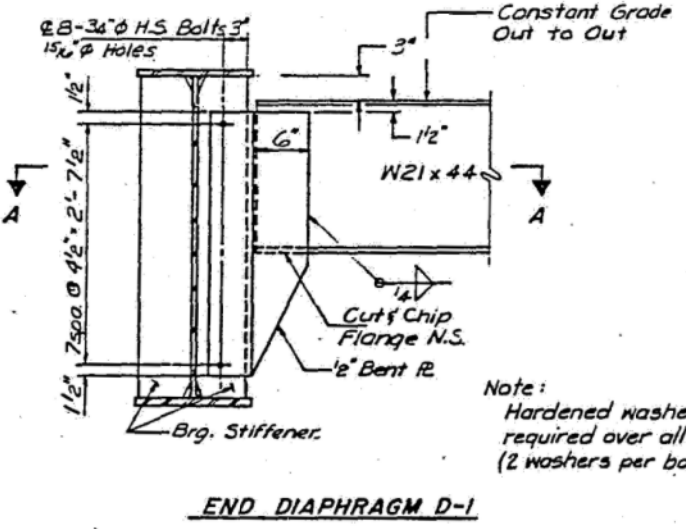
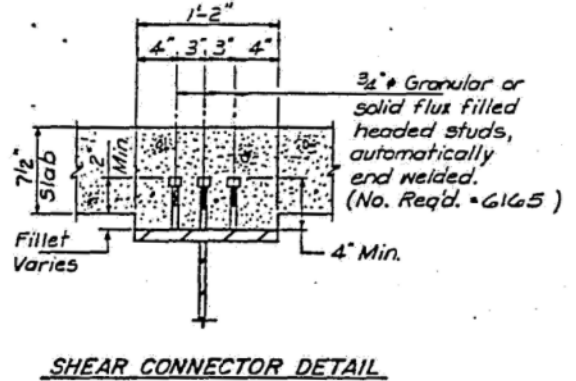
INTERIOR GIRDER MOMENT TABLE

| | Q4 Span 1 | Pier 1 | Q5 Span 2 | Pier 2 | Q5 Span 3 | Pier 3 | Q5 Span 4 | Pier 4 | Q5 Span 5 | Pier 5 | Q6 Span 6 |
|-----------------------------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|
| Is (in ⁴) | 12680 | 14345 | 12680 | 16030 | 12680 | 17730 | 12680 | 17730 | 12680 | 24735 | 16205 |
| Ic(n=27) (in ⁴) | 22990 | — | 22990 | — | 22990 | — | 22990 | — | 22990 | — | 30705 |
| Ic(n=9) (in ⁴) | 30540 | — | 30540 | — | 30540 | — | 30540 | — | 30540 | — | 42550 |
| Ss (in ³) | 583 | 656 | 583 | 729 | 583 | 801 | 583 | 801 | 583 | 1093 | 873 |
| Sc(n=27) (in ³) | 735 | — | 735 | — | 735 | — | 735 | — | 735 | — | 1087 |
| Sc(n=9) (in ³) | 802 | — | 802 | — | 802 | — | 802 | — | 802 | — | 1180 |
| ϕ (K/1) | 1.105 | 1.50 | 1.105 | 1.50 | 1.105 | 1.50 | 1.105 | 1.50 | 1.105 | 1.50 | 1.105 |
| Mϕ (K/1) | 260 | 794 | 328 | 970 | 329 | 903 | 320 | 954 | 290 | 1492 | 736 |
| sϕ (K/1) | .395 | — | .395 | — | .395 | — | .395 | — | .395 | — | .395 |
| Msϕ (K/1) | 102 | — | 144 | — | 138 | — | 133 | — | 137 | — | 283 |
| Mϕ (K) | 607 | 451 | 731 | 537 | 730 | 592 | 734 | 603 | 800 | 718 | 1013 |
| MIMP (K) | 164 | 113 | 176 | 129 | 175 | 142 | 176 | 138 | 184 | 165 | 233 |
| S ₃ (Mϕ+I) (K) | 1285 | 940 | 1512 | 1110 | 1509 | 1224 | 1518 | 1235 | 1640 | 1472 | 2077 |
| Ma (K) | 2141 | 2254 | 2579 | 2704 | 2569 | 2765 | 2562 | 2846 | 2687 | 3853 | 4025 |
| Mu (K) | — | 2541 | — | 2745 | — | 3086 | — | 2986 | — | 4118 | — |
| fsϕ non-comp. (ksi) | 5.4 | 14.5 | 6.8 | 16.0 | 6.8 | 13.5 | 6.6 | 14.3 | 6.0 | 16.4 | 10.1 |
| fsϕ comp. (ksi) | 1.7 | — | 2.3 | — | 2.3 | — | 2.2 | — | 2.2 | — | 3.1 |
| fs ₃ (ϕ+I) (ksi) | 19.2 | 17.2 | 22.6 | 18.3 | 22.6 | 18.3 | 22.7 | 18.5 | 24.5 | 16.2 | 21.1 |
| fn(Total) (ksi) | 1.2 | 1.1 | 2.2 | 1.2 | 1.8 | 1.1 | 1.8 | 1.2 | 1.2 | 1.0 | 1.0 |
| fs(Overload) (ksi) | 27.5 | 32.8 | 33.9 | 35.5 | 33.5 | 32.9 | 33.3 | 34.0 | 33.9 | 33.6 | 35.3 |
| fs(Total) (ksi) | 35.8 | 42.6 | 44.1 | 46.2 | 43.6 | 42.8 | 43.3 | 44.2 | 44.1 | 43.7 | 45.9 |
| VR (K) | 72 | — | 64 | — | 64 | — | 65 | — | 65 | — | 71 |

INTERIOR GIRDER REACTION TABLE

| | N. Abut. | Pier 1 | Pier 2 | Pier 3 | Pier 4 | Pier 5 | S. Abut. |
|------------|----------|--------|--------|--------|--------|--------|----------|
| Rϕ (K) | 33 | 120 | 131 | 133 | 129 | 162 | 55 |
| Rϕ (K) | 50 | 68 | 73 | 81 | 76 | 81 | 53 |
| Imp. (K) | 13 | 17 | 18 | 19 | 18 | 19 | 12 |
| RTotal (K) | 96 | 205 | 222 | 233 | 223 | 262 | 120 |

Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).
 Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs (Total & Overload).
 VR is the maximum $\frac{1}{2}$ Impact shear range in span.
 Mu is the moment capacity for braced non-compact hybrid section ($F_{bu} \times S$). F_{bu} computed according to AASHTO Guide Spec. for Horizontally Curved Highway Bridges 2.12 & 2.19.
 Ma (Applied Moment) = $1.3[M\phi + Ms\phi + S_3(M\phi + I)]$.
 fn is the normal stress due to lateral flange bending.
 fs (Overload) is the sum of the stresses due to $M\phi + Ms\phi + S_3(M\phi + I)$.
 fs (Total) is the sum of the stresses due to $1.3[M\phi + Ms\phi + S_3(M\phi + I)]$.
 Girder 1 has largest moments and is used for Moment Table.



FILL R THICKNESS

| Splice | T _f | T _b |
|--------|----------------|----------------|
| #1 | 18" | 18" |
| #2 | 14" | 14" |
| #3 | 38" | 38" |
| #4 | 38" | 38" |

AS REVISED

Notes: All Girder Splice Plates, except Fill R's are M-223, Grade 50 Steel.
 All Splice Bolts shall have threads excluded from the shear planes.
 N.T.R. refers to the supplemental requirements for notch toughness, Zone 2.

STRUCTURE NUMBER: 084-0185
STRUCTURAL STEEL DETAILS
 CHATHAM ROAD over
 C.M.W and N.B.W. Railroads and FAP RTE 408
 USABLE SEGMENT NO. 3, VB-1
 SANGAMON COUNTY
 STATION 161+52.56

HANSON ENGINEERS
 INCORPORATED
 SPRINGFIELD, ILLINOIS
 8553092
 12-14-88

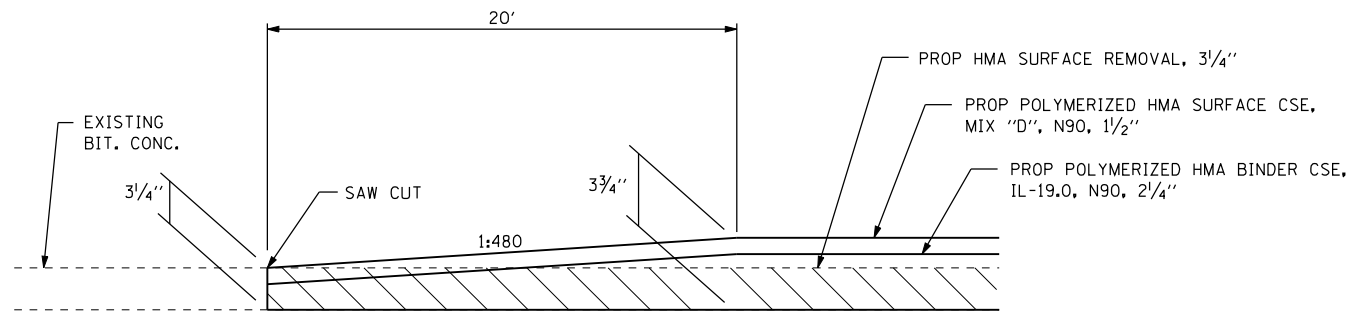
FOR INFORMATION ONLY

EXISTING PLANS
 STRUCTURE NO. 084-0185
 SHEET NO. 15 OF 15 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|---------|----------|--------------|-----------|
| 72 | | SANGAMON | 163 | 152 |

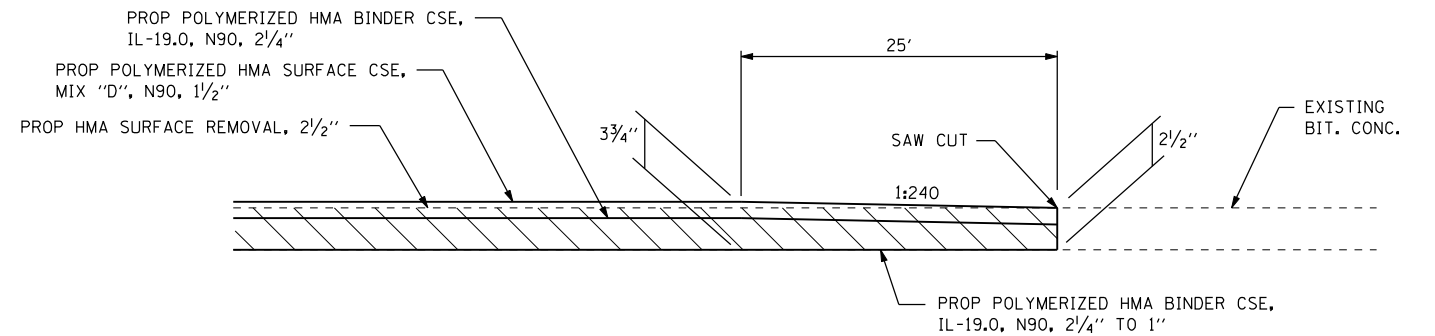
CONTRACT NO. 72B54

| USER NAME = | DESIGNED - | CEH | REVISED |
|--------------|------------|---------|---------|
| FILE NAME = | CHECKED - | CWC | REVISED |
| PLOT SCALE = | DRAWN - | DLH | REVISED |
| PLOT DATE = | CHECKED - | CEH/CWC | REVISED |



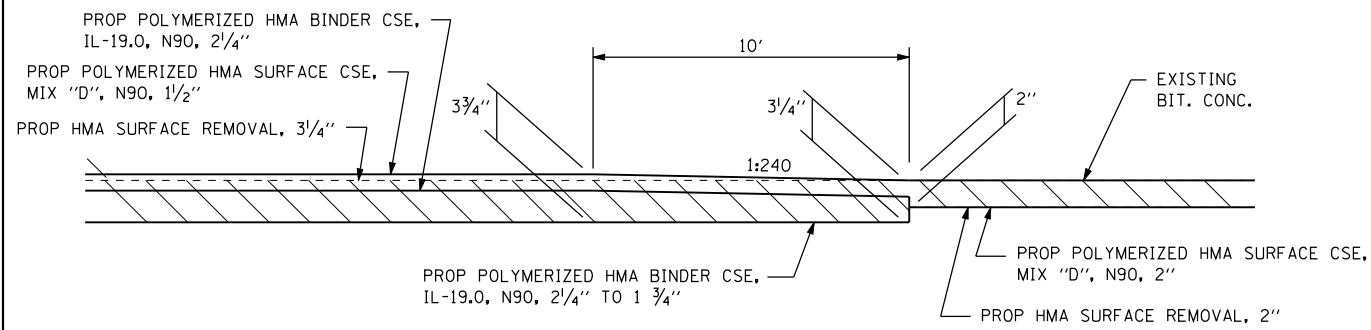
BUTT JOINT DETAIL I-72

STA. 10+00.00 TO 10+20.00 EB & WB
 STA. 553+80.00 TO 554+00.00 EB & WB



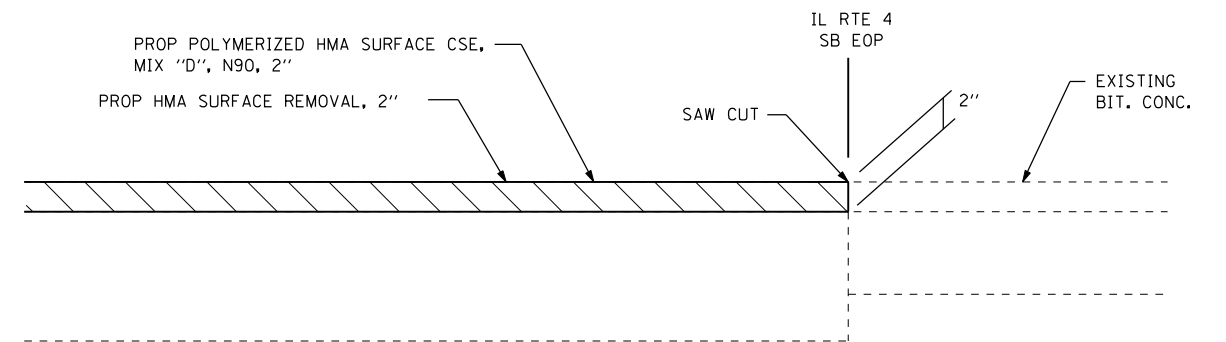
HMA RAMP DETAIL I-72 INTERCHANGE RAMP

STA. 120+56.00 TO STA. 120+81.00 RAMP A CH 10
 STA. 200+17.66 TO STA. 200+42.66 RAMP B CH 10
 STA. 320+63.54 TO STA. 320+88.54 RAMP C CH 10
 STA. 400+28.04 TO STA. 401+53.04 RAMP D CH 10
 STA. 113+11.88 TO STA. 113+36.88 RAMP A IL RTE 54
 STA. 221+46.84 TO STA. 221+71.84 RAMP B IL RTE 54
 STA. 310+86.46 TO STA. 311+11.46 RAMP C IL RTE 54
 STA. 418+27.27 TO STA. 418+52.27 RAMP D IL RTE 54
 STA. 200+69.79 TO STA. 200+94.79 RAMP B IL RTE 4
 STA. 326+77.38 TO STA. 327+02.38 RAMP C IL RTE 4
 STA. 400+56.21 TO STA. 400+81.21 RAMP D IL RTE 4



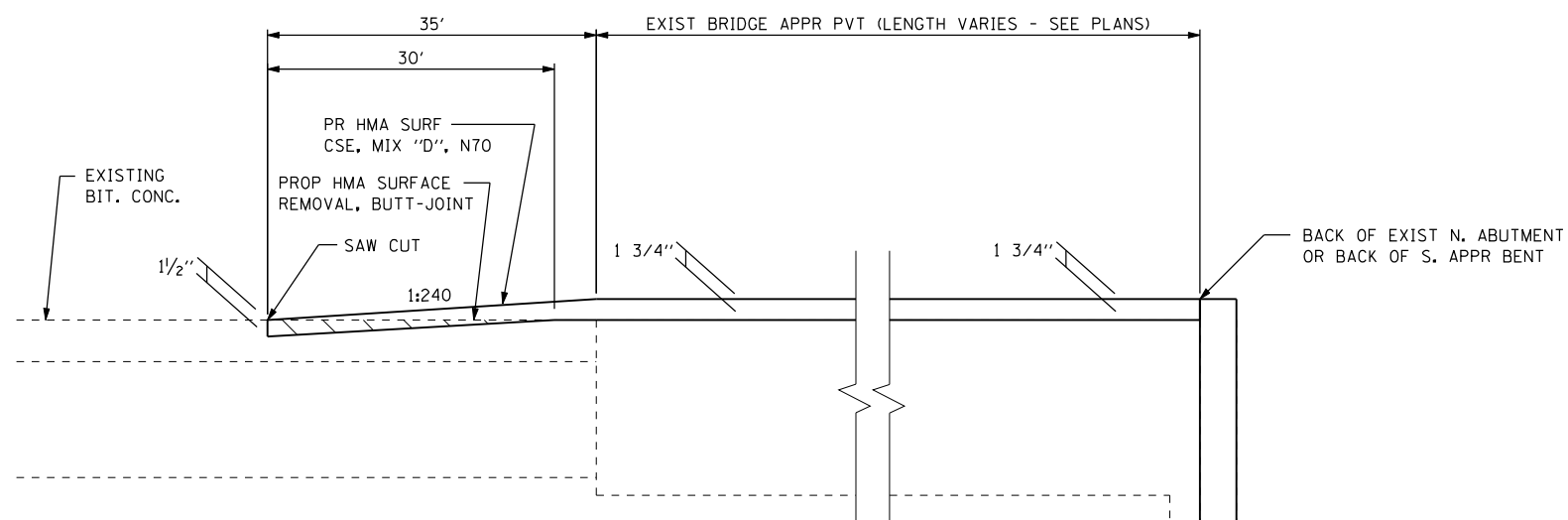
HMA RAMP DETAIL I-72 INTERCHANGE RAMP

STA. 106+61.09 TO STA. 106+71.09 RAMP A IL RTE 4
 STA. 522+99.44 TO STA. 523+09.44 RAMP E IL RTE 4



BUTT JOINT DETAIL I-72 INTERCHANGE RAMP

STA. 127+62.63 RAMP A IL RTE 4



BUTT JOINT DETAIL I-72

STA. 157+96.21 TO 158+79.70 CHATHAM RD.
 STA. 164+24.42 TO 165+08.90 CHATHAM RD.

NOT TO SCALE

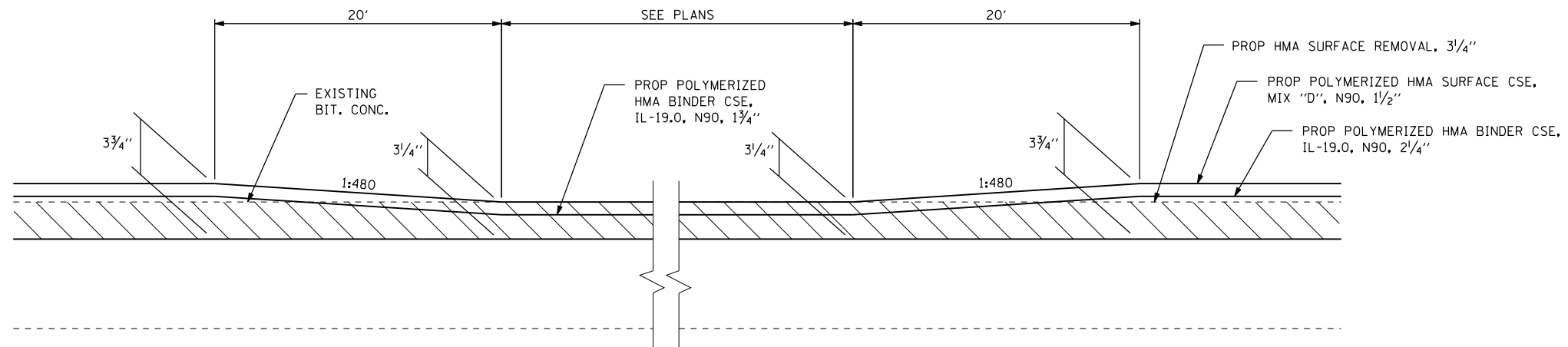


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|--------------------------------------|------------|-----------|
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| FILE NAME = D672854-Sht-Bt Jt Detail | CHECKED - | REVISED - |
| PLOT SCALE = 2.0000 "/> | | |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

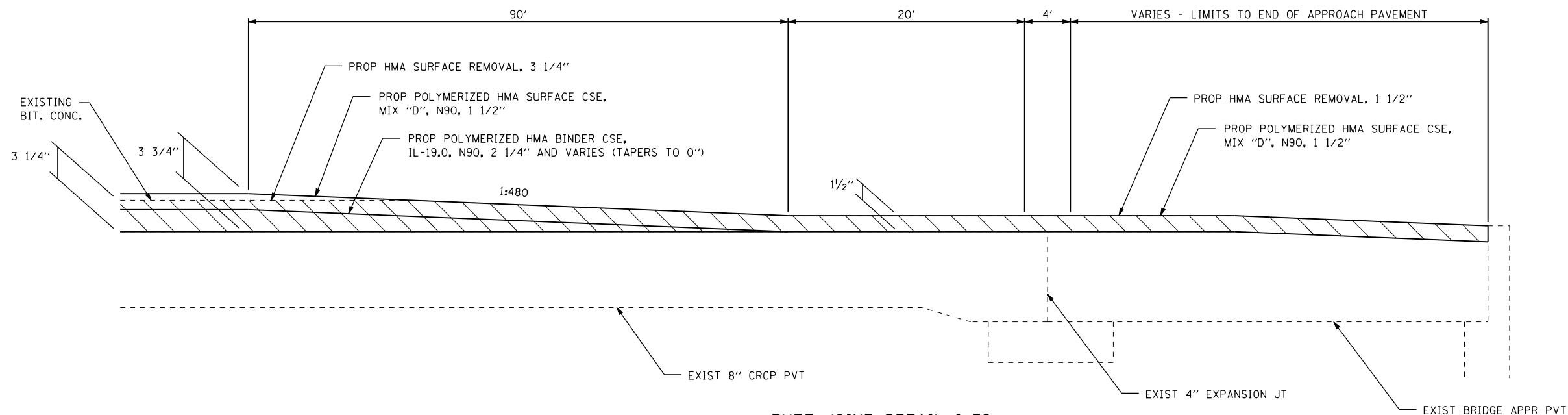
| | |
|--|-------------------------|
| BUTT JOINT & HMA RAMP DETAILS | |
| SCALE: | SHEET NO. 1 OF 3 SHEETS |
| STA. | TO STA. |

| | | | | |
|--------------------------------|---------|-----------------|--------------------|---------------|
| F.A.I. RTE. 72 | SECTION | COUNTY SANGAMON | TOTAL SHEETS 163 | SHEET NO. 153 |
| •(84-9-2&3)RS-2&MISC STRUC REP | | | CONTRACT NO. 72B54 | |
| ILLINOIS FED. AID PROJECT | | | | |



HMA RAMP DETAIL I-72

| | |
|-------------------------------------|-------------------------------------|
| STA. 34+90.00 TO STA. 37+30.00 EB | STA. 34+90.00 TO STA. 37+30.00 WB |
| STA. 100+05.00 TO STA. 102+45.00 EB | STA. 100+05.00 TO STA. 102+45.00 WB |
| STA. 259+08.00 TO STA. 261+48.00 EB | STA. 259+08.00 TO STA. 261+48.00 WB |
| STA. 392+31.00 TO STA. 394+73.00 EB | STA. 392+55.00 TO STA. 394+93.00 WB |
| STA. 471+41.00 TO STA. 473+81.00 EB | STA. 471+41.00 TO STA. 473+81.00 WB |
| STA. 501+08.00 TO STA. 503+48.00 EB | STA. 501+08.00 TO STA. 503+48.00 WB |
| STA. 459+30.00 TO STA. 461+70.00 EB | STA. 458+92.00 TO STA. 461+32.00 WB |
| STA. 501+12.00 TO STA. 504+44.00 EB | STA. 500+73.00 TO STA. 504+09.00 WB |



BUTT JOINT DETAIL I-72

| | |
|----------------------------------|----------------------------------|
| STA. 1366+68.00 TO 1368+35.30 EB | STA. 1366+68.00 TO 1368+35.30 WB |
| STA. 1370+65.30 TO 1372+32.00 EB | STA. 1370+65.30 TO 1372+32.00 WB |
| STA. 421+24.00 TO 423+00.50 EB | STA. 421+24.00 TO 423+00.50 WB |
| STA. 425+22.70 TO 426+98.00 EB | STA. 425+22.70 TO 426+98.00 WB |
| STA. 1367+71.00 TO 1369+37.50 WB | STA. 1367+71.00 TO 1369+37.50 EB |
| STA. 1371+66.60 TO 1373+33.00 WB | STA. 1371+66.60 TO 1373+33.00 EB |
| STA. 422+41.00 TO 424+16.20 WB | STA. 422+41.00 TO 424+16.20 EB |
| STA. 426+38.70 TO 428+14.00 WB | STA. 426+38.70 TO 428+14.00 EB |

NOT TO SCALE

design firm
no. 184001036



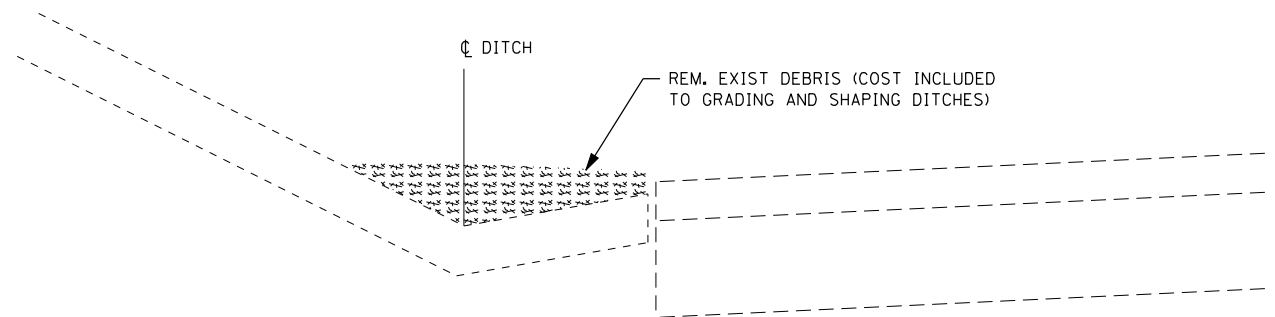
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| FILE NAME = D672854-Shr-Bt Jt Det | CHECKED - | REVISIONS - |
| PLOT SCALE = 2.0000 ' / IN. | DRAWN - | DATE - |
| PLOT DATE = 8/25/2014 | CHECKED - | REVISIONS - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT & HMA RAMP DETAILS

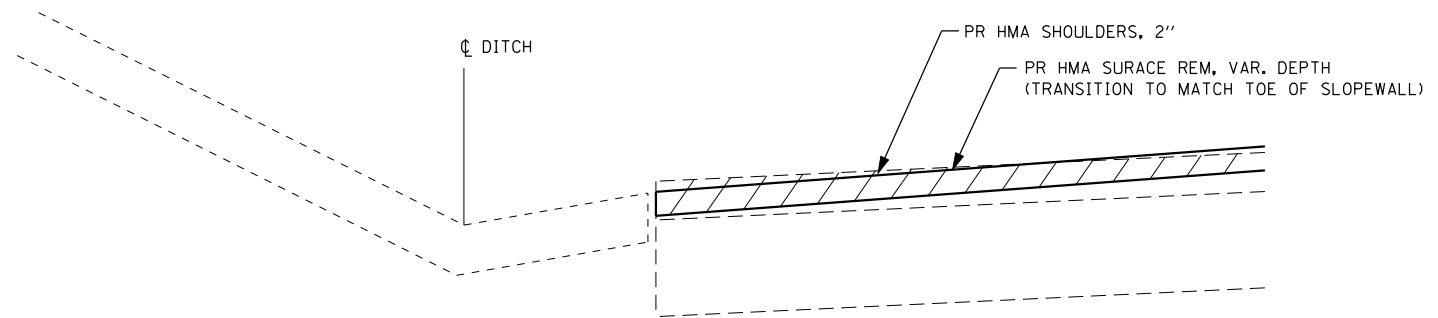
SCALE: SHEET NO. 2 OF 3 SHEETS STA. TO STA.

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------------------|---------|----------|--------------------|-----------|
| 72 | | SANGAMON | 163 | 154 |
| •(84-9-2&3)RS-2&MISC STRUC REP | | | CONTRACT NO. 72B54 | |
| ILLINOIS FED. AID PROJECT | | | | |



EXISTING TYPICAL DETAIL AT BRIDGES

- SN 084-0142 STA. 35+00 TO STA. 36+15 (EB) (WB)
- SN 084-0143 STA. 100+37 TO STA. 102+15 (EB) (WB)
- SN 084-0144 STA. 259+25 TO STA. 261+32 (EB) (WB)
- SN 084-0145 STA. 392+30 TO STA. 394+25 (EB) STA. 392+85 TO STA. 394+80 (WB)
- SN 084-0146 STA. 471+81 TO STA. 473+45 (EB) (WB)
- SN 084-0147 STA. 501+37 TO STA. 503+18 (EB) (WB)
- SN 084-0136 & SN 084-0137 STA. 498+50 TO STA. 505+10 (WB)
- SN 084-0185 STA. 552+15 TO STA. 556+15 (EB)



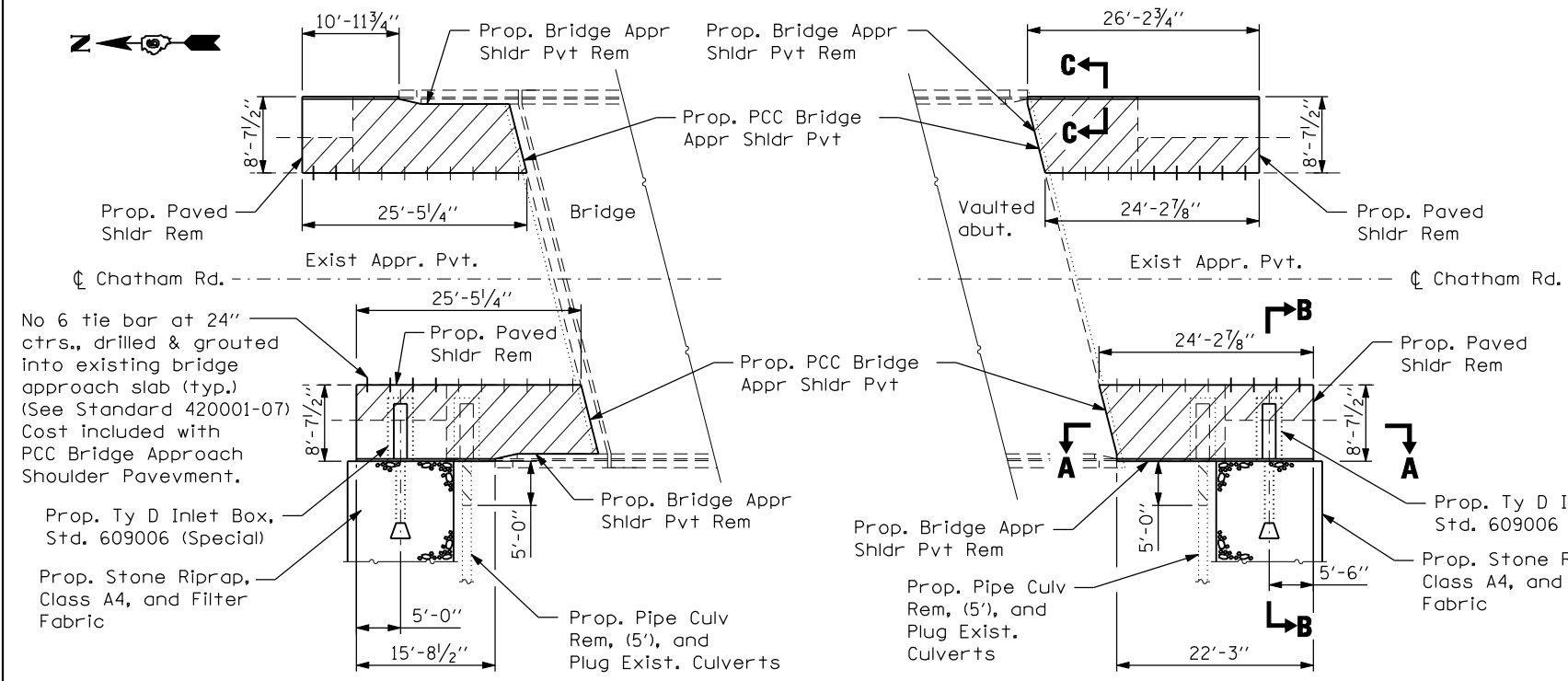
PROPOSED TYPICAL DETAIL AT BRIDGES

- SN 084-0142 STA. 35+00 TO STA. 36+15 (EB) (WB)
- SN 084-0143 STA. 100+37 TO STA. 102+15 (EB) (WB)
- SN 084-0144 STA. 259+25 TO STA. 261+32 (EB) (WB)
- SN 084-0145 STA. 392+30 TO STA. 394+25 (EB) STA. 392+85 TO STA. 394+80 (WB)
- SN 084-0146 STA. 471+81 TO STA. 473+45 (EB) (WB)
- SN 084-0147 STA. 501+37 TO STA. 503+18 (EB) (WB)
- SN 084-0136 & SN 084-0137 STA. 498+50 TO STA. 505+10 (WB)
- SN 084-0185 STA. 552+15 TO STA. 556+15 (EB)

NOTE: TRANSITION HMA SURF REM, VAR DEPTH TO HMA SURF REM, 1/2" AT A RATE OF 1" PER 40', ACCORDING TO THE HEIGHT OF THE EXISTING SHOULDER ABOVE THE TOE OF THE EXISTING SLOPEWALL.

| | | |
|------------------------------------|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
| FILE NAME = D672B54-Shft-Bt Jt Det | CHECKED - | REVISED |
| PLOT SCALE = 2.0000 ' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/25/2014 | CHECKED - | REVISED |

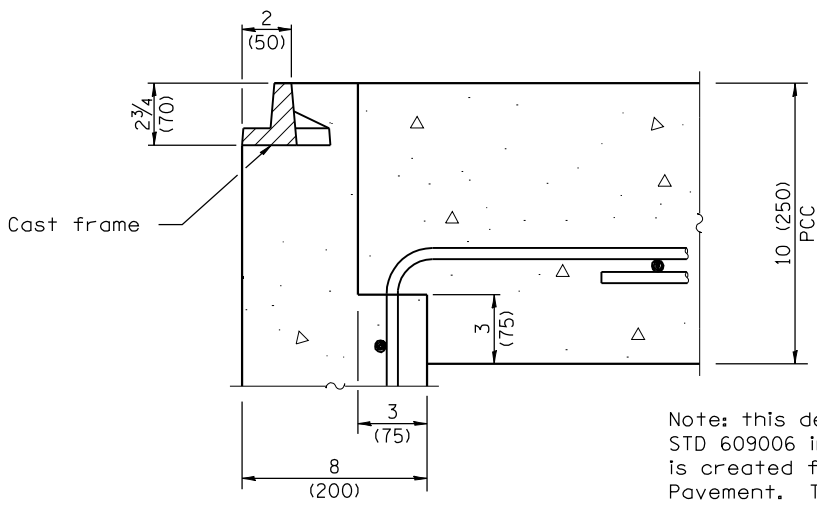
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------------------|---------|----------|--------------------|-----------|
| 72 | | SANGAMON | 163 | 155 |
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| ILLINOIS FED. AID PROJECT | | | | |



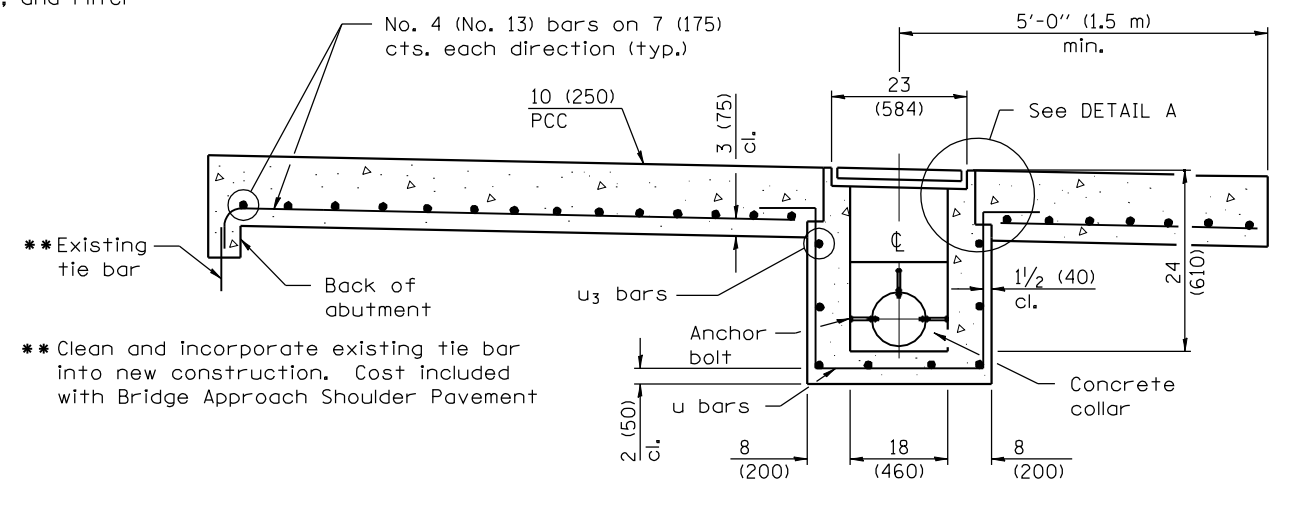
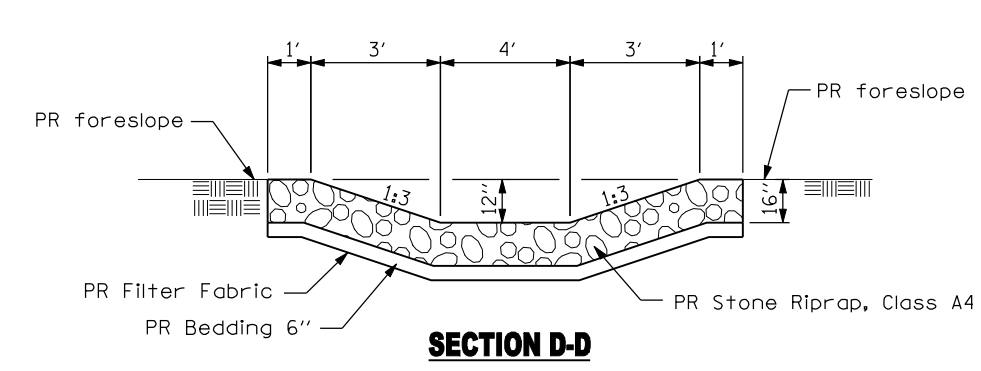
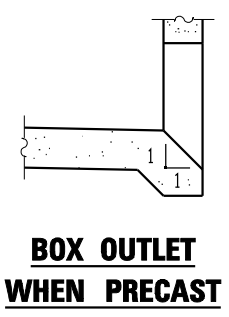
No 6 tie bar at 24" ctrs., drilled & grouted into existing bridge approach slab (typ.) (See Standard 420001-07) Cost included with PCC Bridge Approach Shoulder Pavement.

Prop. Ty D Inlet Box, Std. 609006 (Special)

Prop. Stone Riprap, Class A4, and Filter Fabric



Note: this detail differs from the current STD 609006 inlet box. The current inlet box is created for a 15" thick Bridge Approach Pavement. This box is designed for a 10" thick PCC Bridge Approach Shoulder Pavement. In Detail A, the 3" lip for the pcc slab is located 7" down from the top of the inlet box; in the current STD 609006, the 3" lip is located 12" down from the top of the inlet box.



GENERAL NOTES

Inlet shall be placed such that the exiting pipe will miss the posts of the proposed Type 6 Traffic Barrier Terminals.

All exposed edges of the inlet, except the upper perimeter, shall be beveled 3/4" (20).

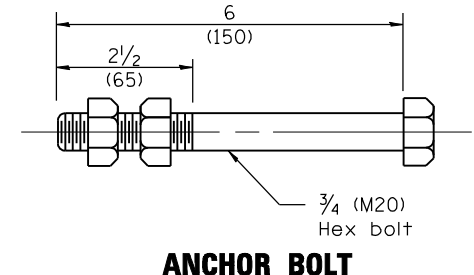
For placement of approach shoulder pavement on existing construction substitute expansion anchor ties for bars.

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

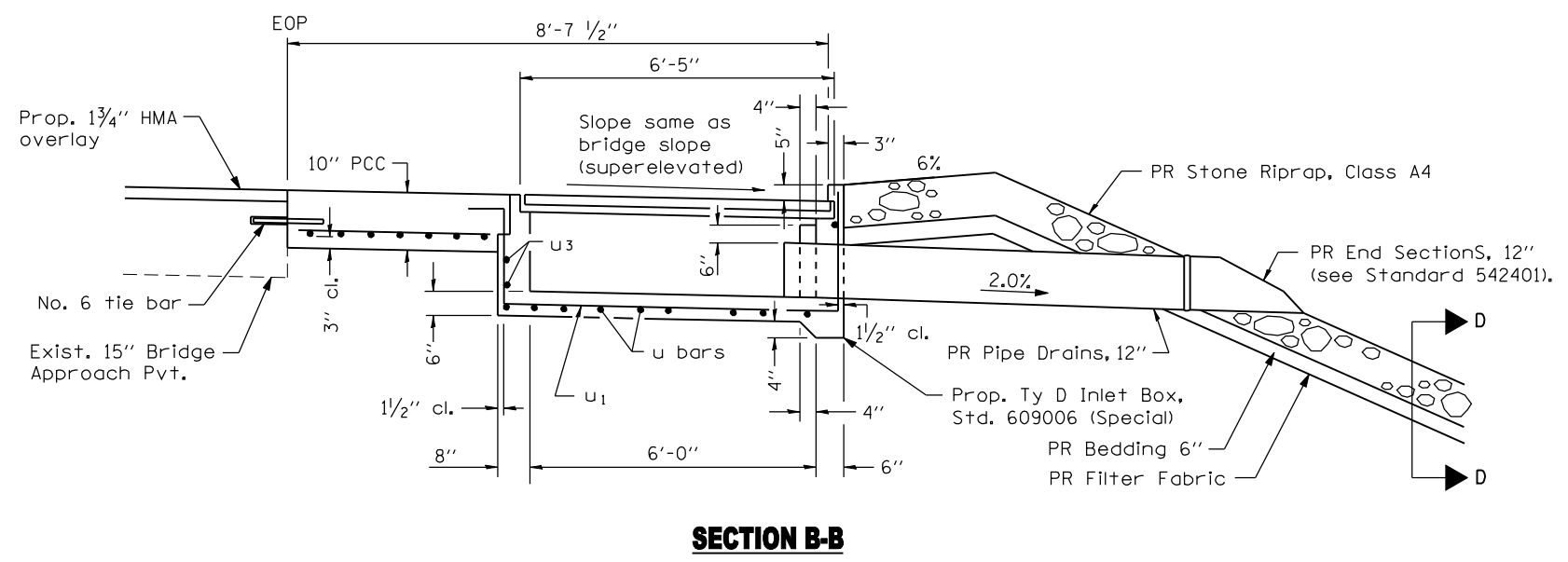
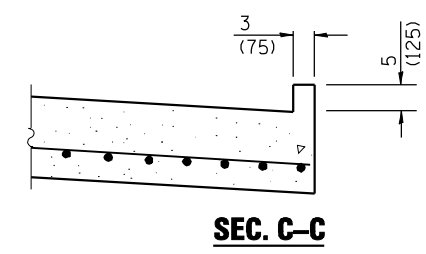
Cost of Removing and disposing of existing inlets included with Bridge Approach Shoulder Pavement Removal.

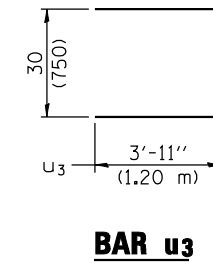
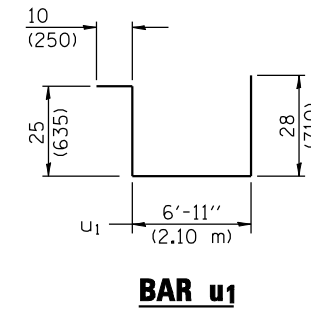
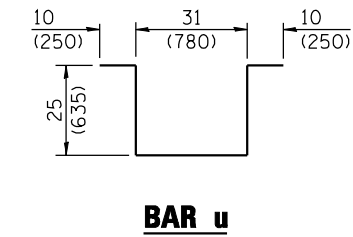
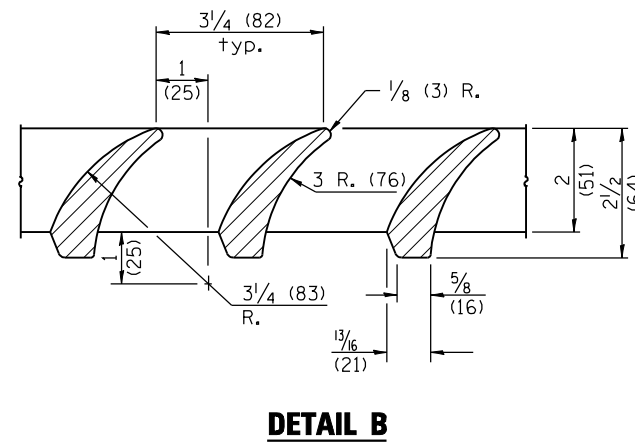
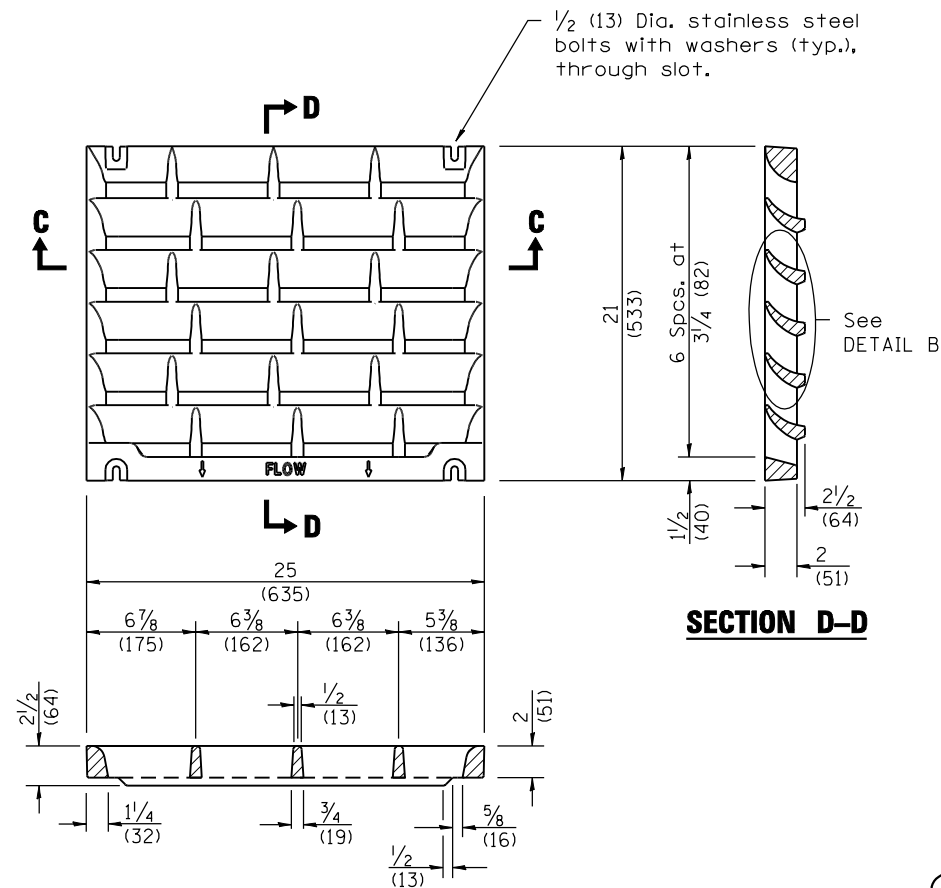
Work this sheet with Type D Inlet Box Details sheet.

The Contractor shall use Subbase Granular Material, Type C in order to establish the proper subgrade for the proposed PCC Bridge Approach Shoulder Pavements. Cost included in PCC Bridge Approach Shoulder Pavement.



Used to tie pipe to concrete collar. Cost included with Ty D Inlet Box Standard 609006 (Special)





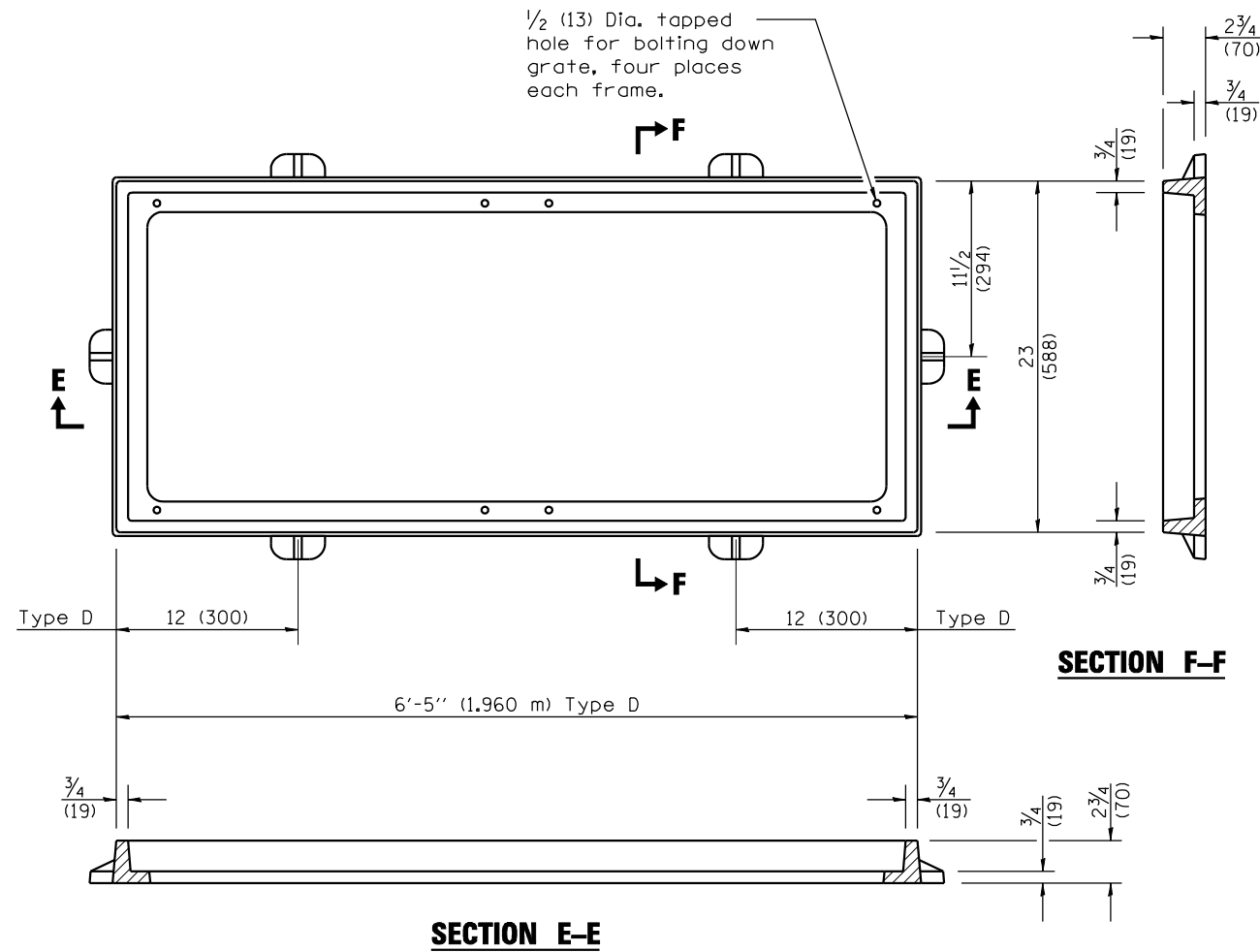
INLET BOX

| TYPE D | | | |
|-------------|------|----------------------------|------------------|
| Bar | Qty. | Size | Length |
| u | 8 | No. 4 (No.13) | 8'-5" (2,550 m) |
| u1 | 4 | No. 4 (No.13) | 12'-2" (3,695 m) |
| u3 | 6 | No. 4 (No.13) | 10'-4" (3,150 m) |
| Concrete | | cu. yds. (m ³) | 1.1 (0.8) |
| Reinf. bars | | lbs. (kg) | 120.0 (54.0) |
| Grating | | sq. ft. (m ²) | 10.9 (1.02) |

SECTION C-C

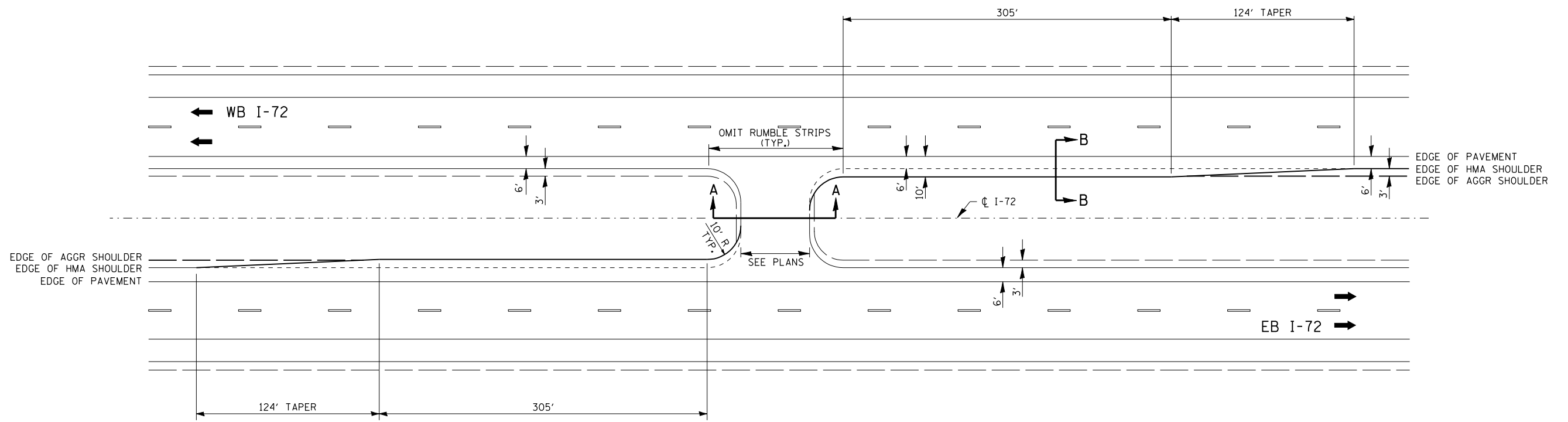
DETAIL OF CAST GRATE

Type D requires 3 grates



DETAIL OF CAST FRAME

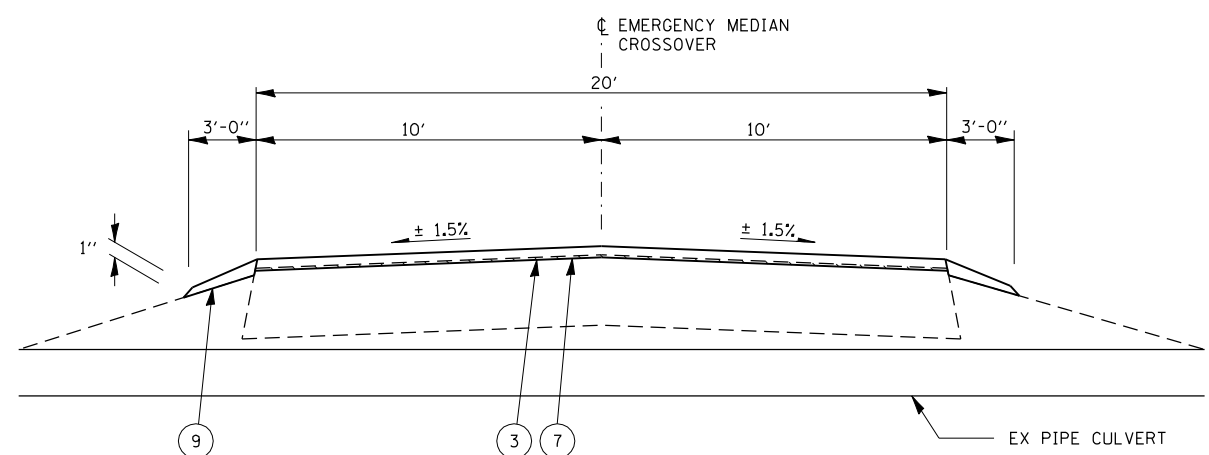
(Type D shown)



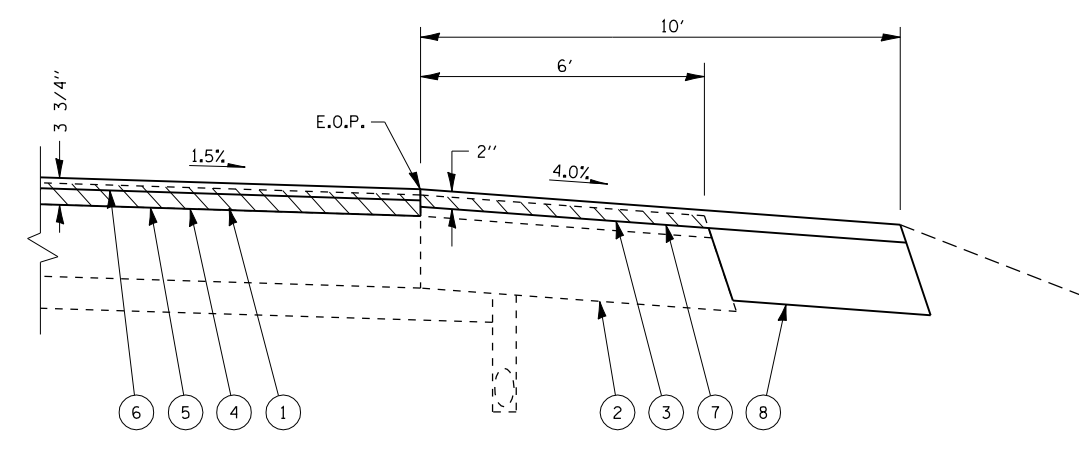
PLAN VIEW

STA. 84+00.00
 STA. 280+86.00
 STA. 445+19.00
 STA. 443+84.00
 * STA. 546+00.00

* EASTBOUND LANES WILL NOT HAVE THE SAME IMPROVEMENTS AS SHOWN ABOVE. SEE PLANS FOR DETAILS.



SECTION A - A

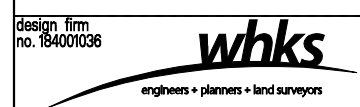


SECTION B - B

LEGEND

- ① EXIST HMA, 3 1/4"
- ② EXIST HMA SHOULDER, 11 1/4"
- ③ PROP HMA SURFACE REMOVAL, 1 1/2"
- ④ PROP HMA SURFACE REMOVAL, 3 1/4"
- ⑤ PROP POLYMERIZED HMA BINDER COURSE, IL 19.0, N90, 2 1/4"
- ⑥ PROP POLYMERIZED HMA SURFACE COURSE, MIX "D", N90, 1 1/2"
- ⑦ PROP HMA SHOULDERS, 2"
- ⑧ PROP HMA BASE COURSE, 10"
- ⑨ PROP AGGR WEDGE SHOULDER, TYPE B

NOT TO SCALE

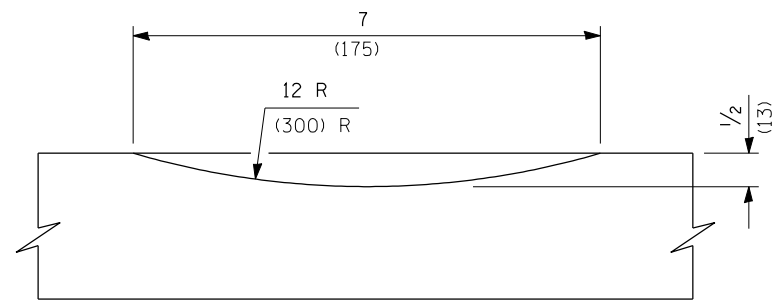
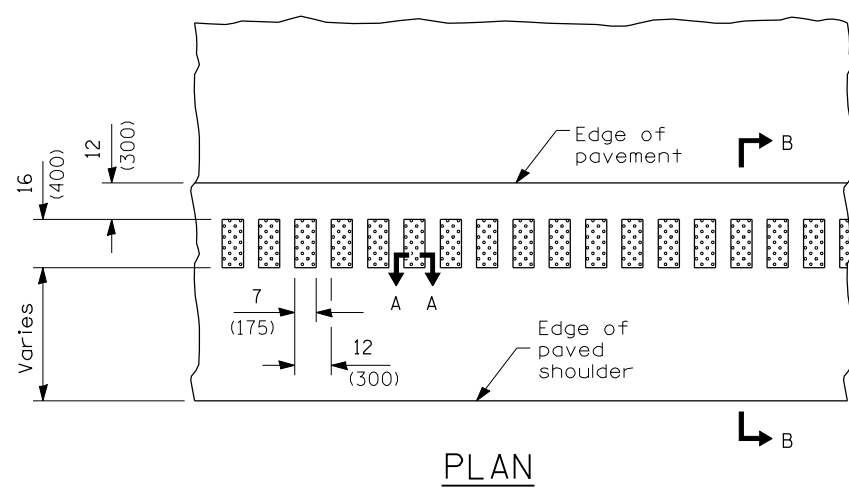


| | | |
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| FILE NAME = D672854-Emergency Crossover.dgn | CHECKED - | REVISED |
| PLOT SCALE = 2.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/25/2014 | CHECKED - | REVISED |

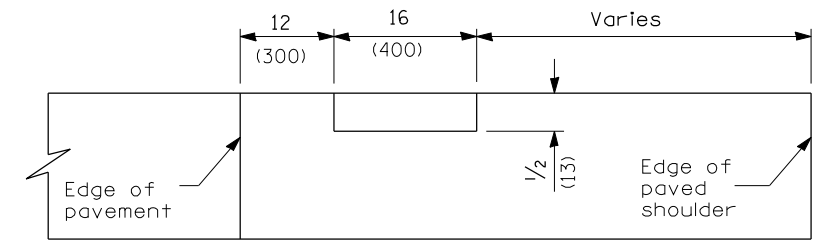
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

| | | | |
|--|-----------|-----------|--------------|
| EMERGENCY MEDIAN CROSSOVER DETAIL | | | |
| SCALE: | SHEET NO. | OF SHEETS | STA. TO STA. |

| | | | | |
|---------------------------------|---------|----------|--------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 72 | | SANGAMON | 163 | 158 |
| * (84-9-2&3)RS-2&MISC STRUC REP | | | CONTRACT NO. 72B54 | |
| ILLINOIS FED. AID PROJECT | | | | |

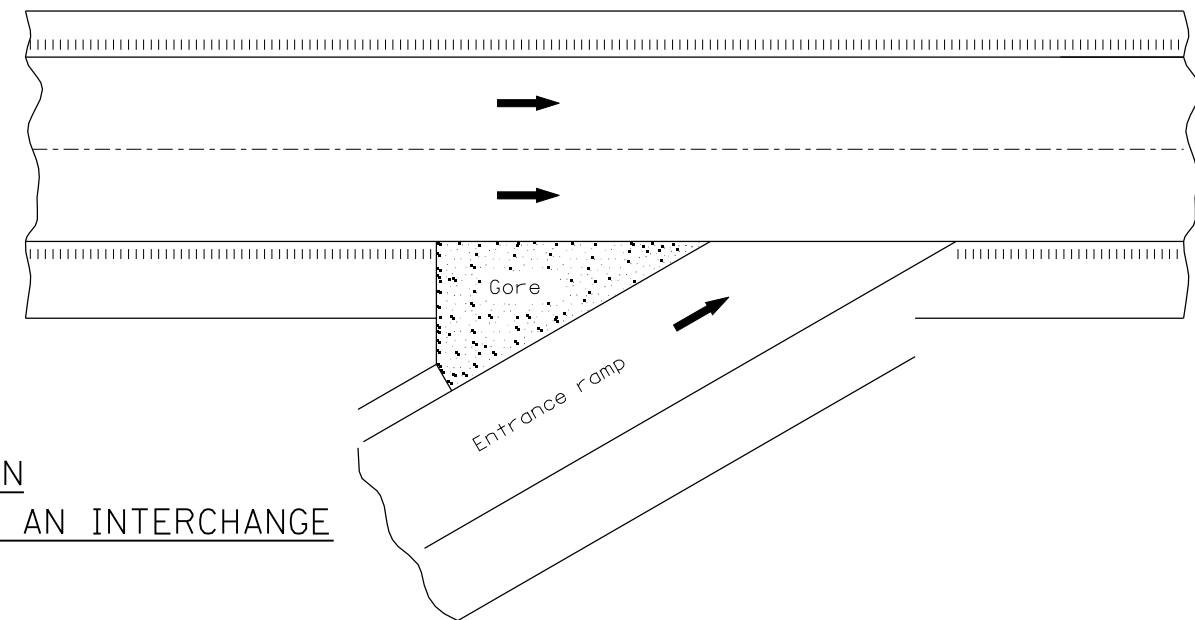
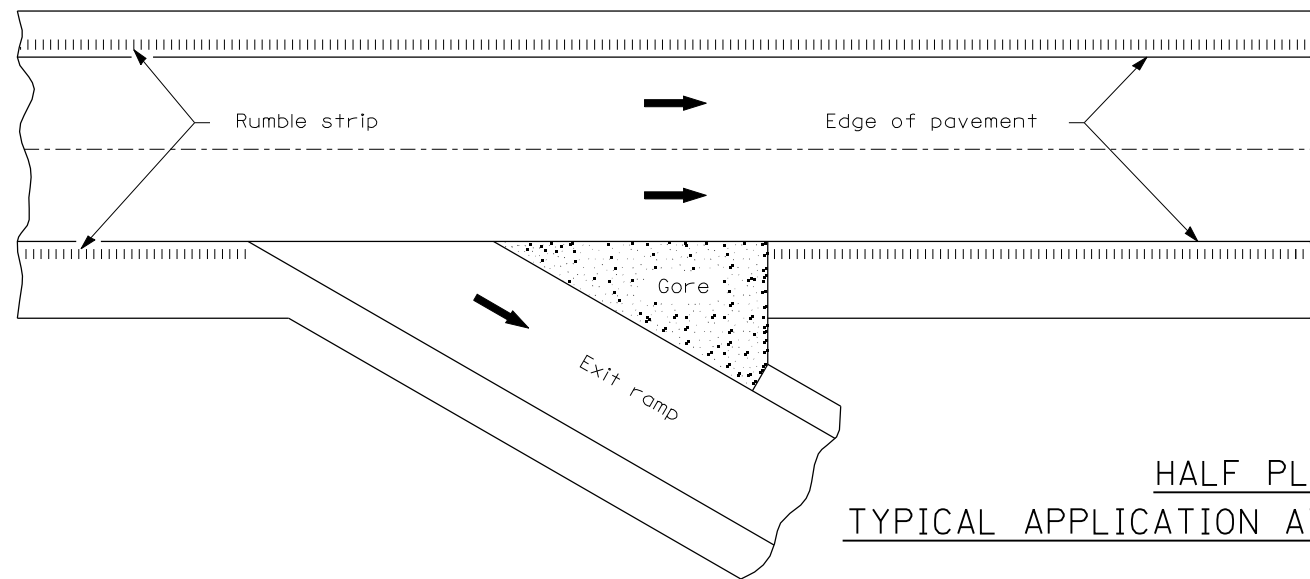


SECTION A-A

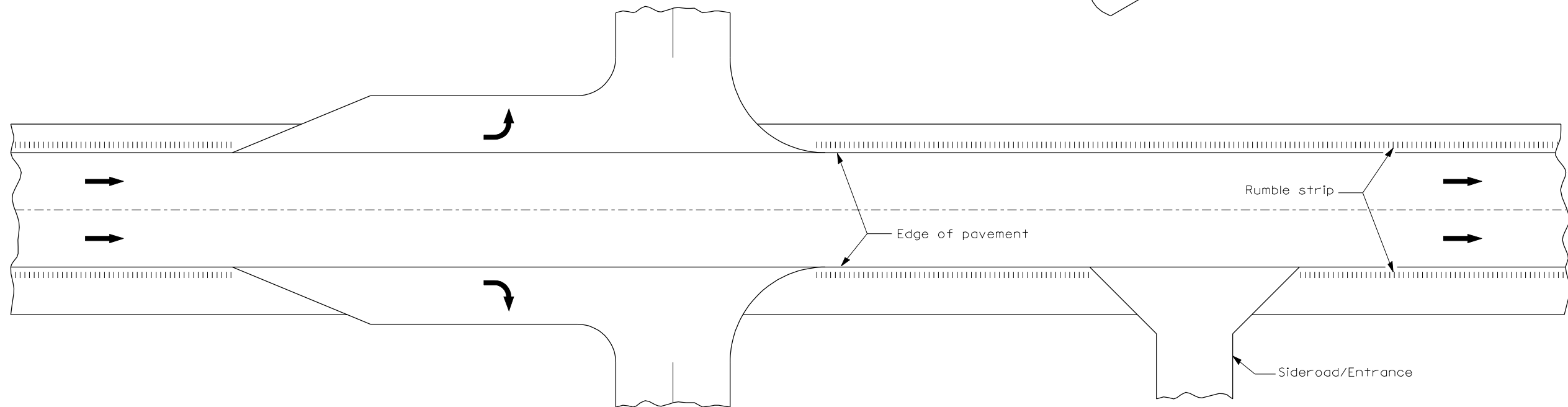


SECTION B-B

PLAN

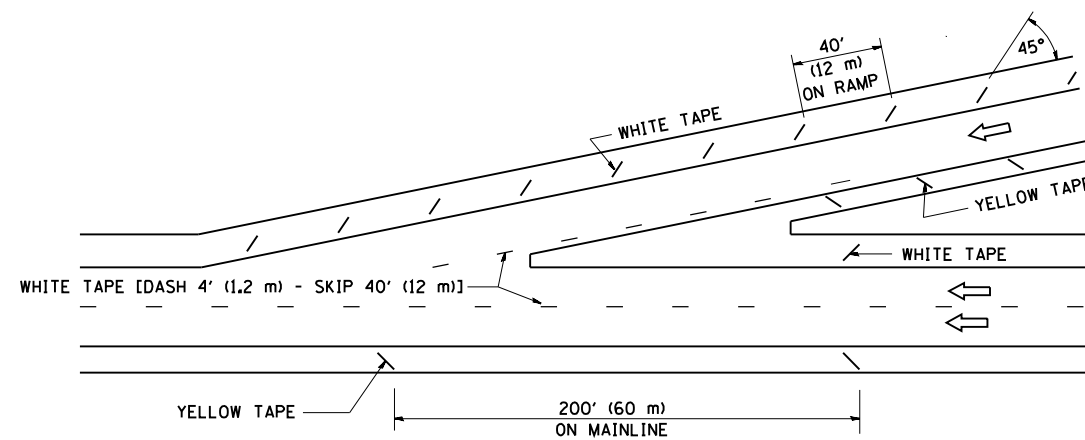
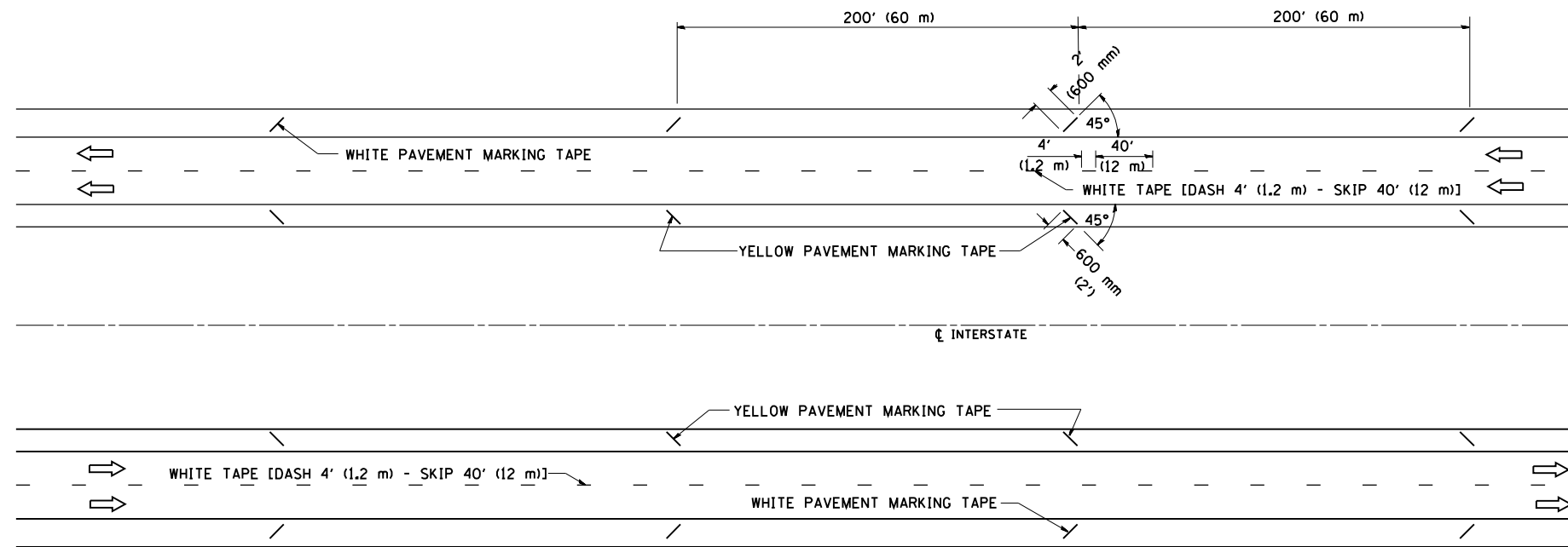


HALF PLAN
TYPICAL APPLICATION AT AN INTERCHANGE

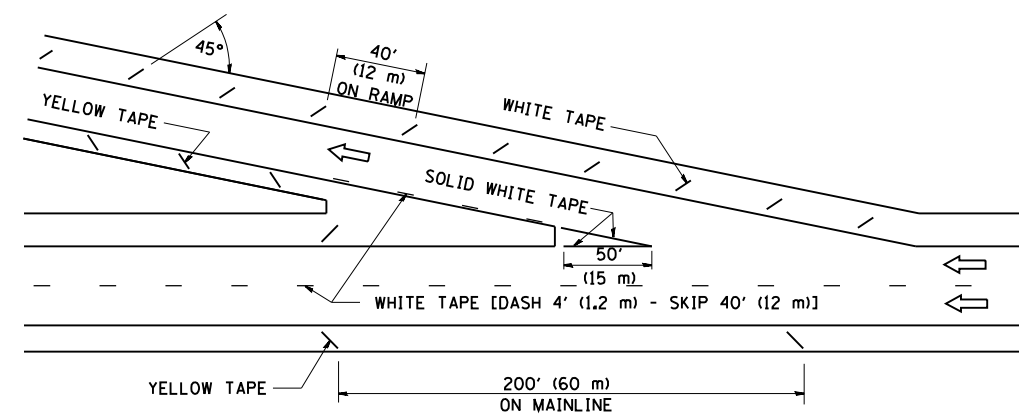


HALF PLAN
TYPICAL APPLICATION EXPRESSWAY INTERSECTION

TYPICAL SHORT TERM PAVEMENT MARKING FOR INTERSTATE ROUTES

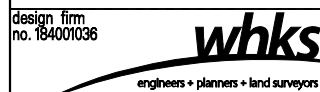


TYPICAL ENTRANCE TERMINAL



TYPICAL EXIT TERMINAL

TEMPMK.DGN



| | | |
|--|------------|----------|
| USER NAME = gjameson | DESIGNED - | REVISOR |
| FILE NAME = D672854-short term pavement marking detail.dwg | CHECKED - | REVISION |
| PLOT SCALE = 40.0000' / IN. | DRAWN - | REVISION |
| PLOT DATE = 8/25/2014 | CHECKED - | REVISION |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

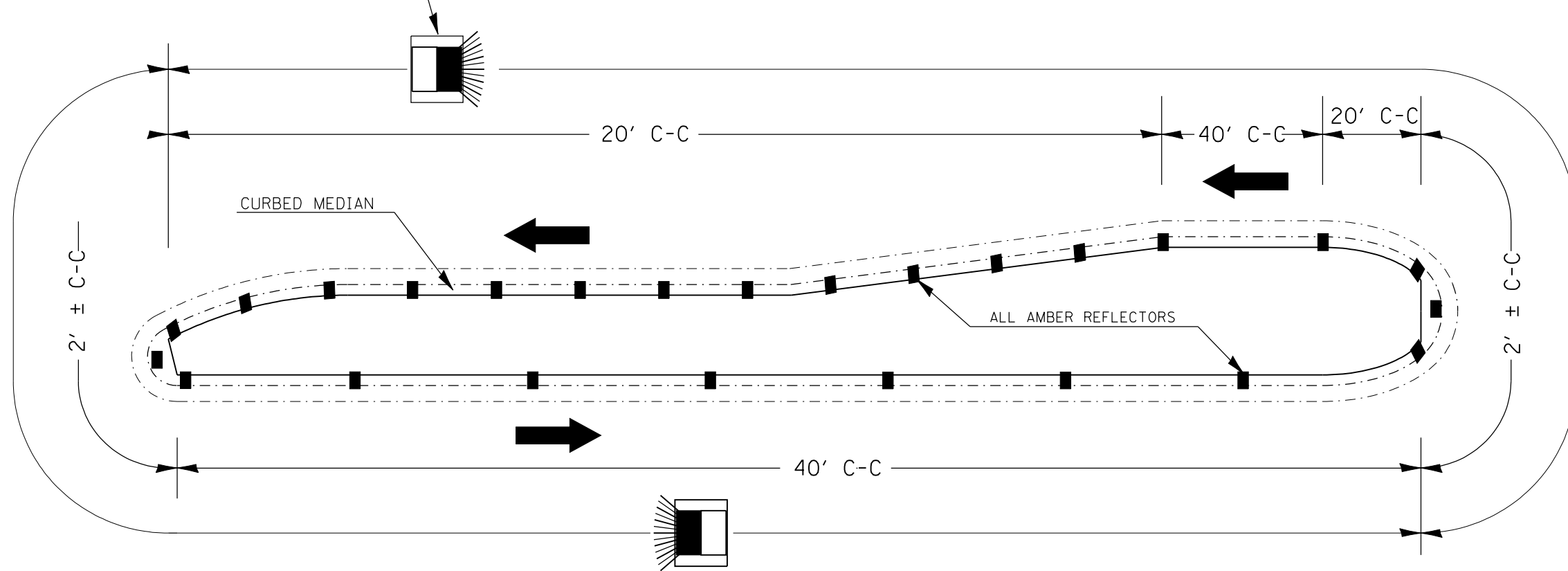
SHORT TERM PAVEMENT MARKING
FOR INTERSTATE ROUTES

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

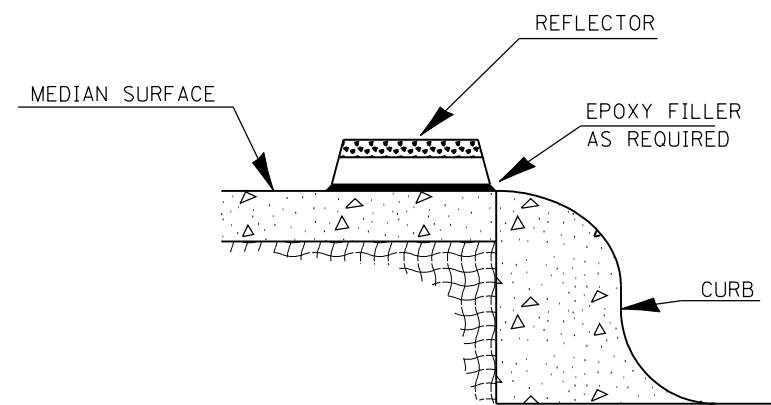
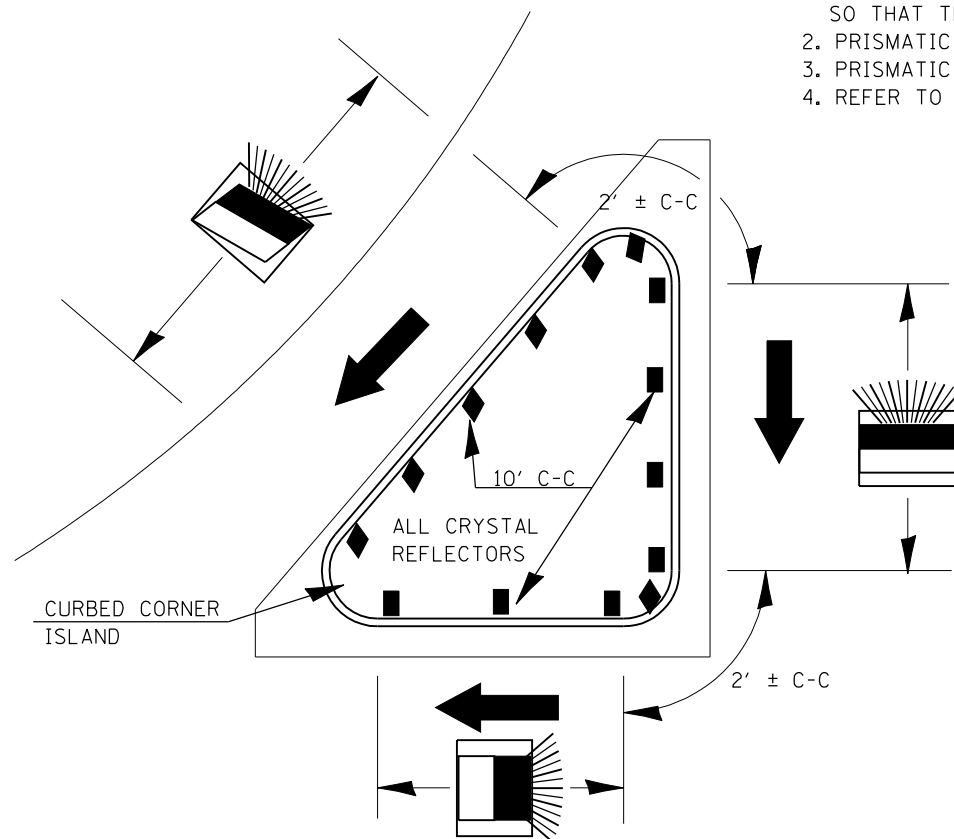
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------------------|---------|----------|--------------------|-----------|
| 72 | | SANGAMON | 163 | 160 |
| •(84-9-2&3)RS-2&MISC STRUC REP | | | CONTRACT NO. 72B54 | |
| ILLINOIS FED. AID PROJECT | | | | |

TYPICAL PLACEMENT OF PRISMATIC REFLECTORS ON CURBS

MARKER ORIENTATION WITHIN LIMITS SHOWN

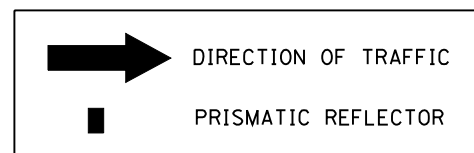


1. PRISMATIC REFLECTORS SHALL BE MONO-DIRECTIONAL AND POSITIONED SO THAT THE REFLECTIVE FACE IS FACING THE APPROACHING TRAFFIC.
2. PRISMATIC REFLECTORS SHALL BE SECURED IN PLACE WITH AN EPOXY ADHESIVE.
3. PRISMATIC REFLECTORS SHALL BE EITHER AMBER OR CRYSTAL IN COLOR.
4. REFER TO SCHEDULES FOR PRISMATIC REFLECTOR QUANTITIES.

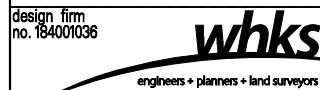


SECTION VIEW

LEGEND



PRISM.DGN



| | | |
|--|------------|---------|
| USER NAME = gjameson | DESIGNED - | REVISED |
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| PLOT SCALE = 40.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/25/2014 | CHECKED - | REVISED |

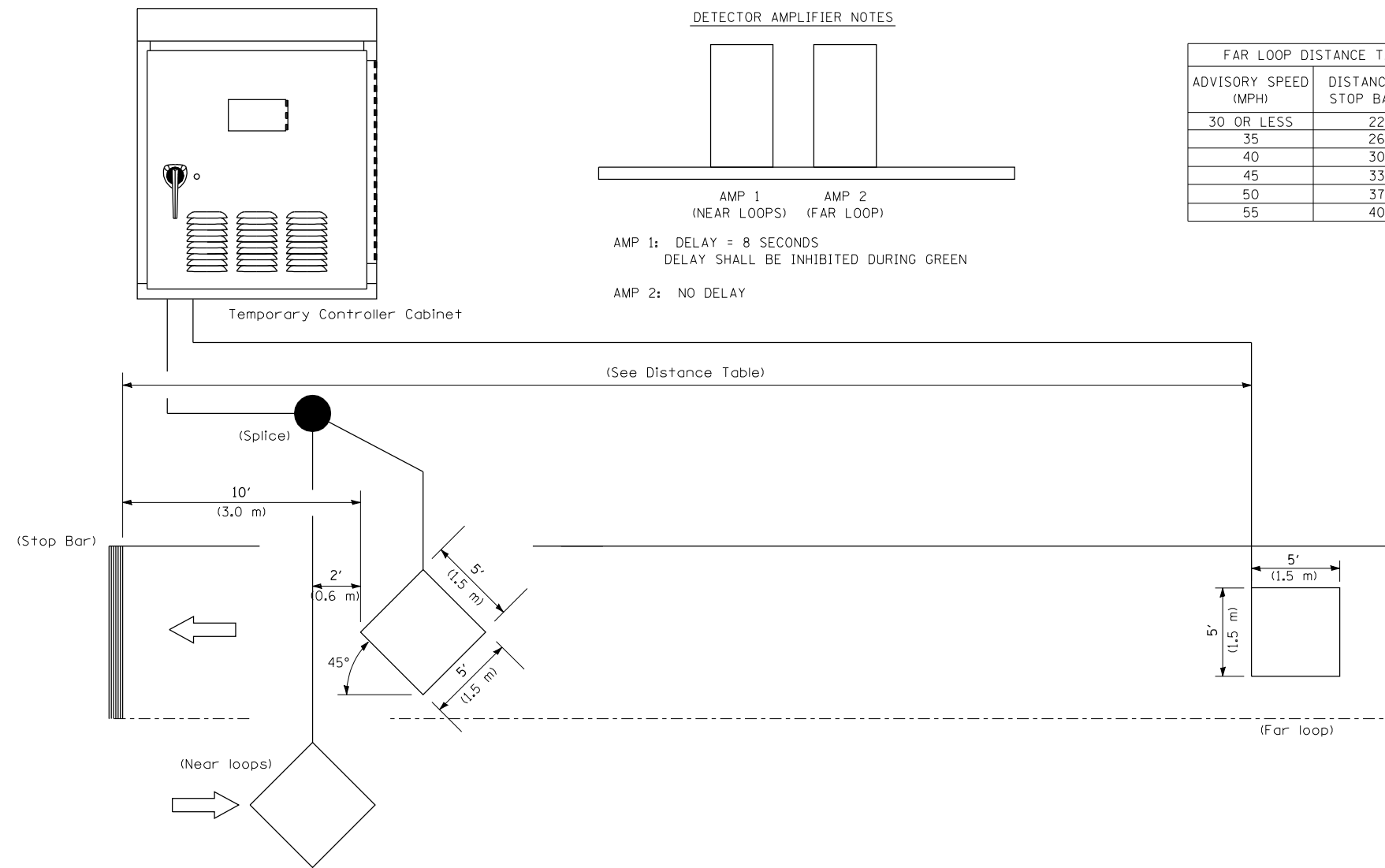
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRISMATIC REFLECTOR DETAILS
(PLACED ON CURB)

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

NOT TO SCALE

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------------------|---------|----------|--------------------|-----------|
| 72 | | SANGAMON | 163 | 161 |
| •(84-9-2&3)RS-2&MISC STRUC REP | | | CONTRACT NO. 72B54 | |
| ILLINOIS FED. AID PROJECT | | | | |



DETECTOR AMPLIFIER NOTES

| FAR LOOP DISTANCE TABLE | |
|-------------------------|------------------------------|
| ADVISORY SPEED (MPH) | DISTANCE FROM STOP BAR (FT.) |
| 30 OR LESS | 220 |
| 35 | 260 |
| 40 | 300 |
| 45 | 330 |
| 50 | 370 |
| 55 | 400 |

AMP 1: DELAY = 8 SECONDS
 DELAY SHALL BE INHIBITED DURING GREEN

AMP 2: NO DELAY

NOTE: All loops centered in lane.

INDUCTION LOOP DETECTOR

BRIDGE TEMP SIGNAL.DGN



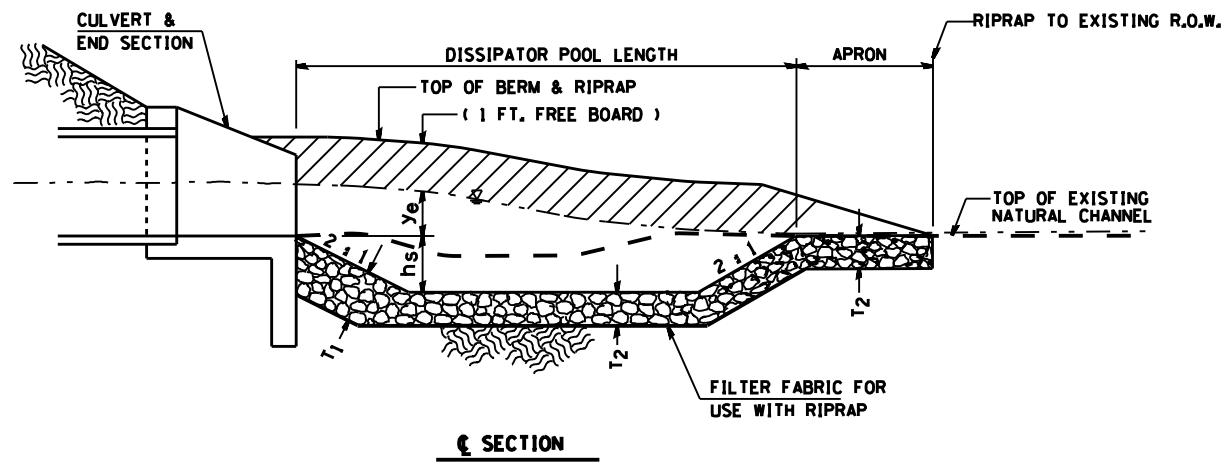
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| FILE NAME = D672854-temp bridge | CHECKED detail.dwg | REVISED |
| PLOT SCALE = 40.0000' / IN. | DRAWN - | REVISED |
| PLOT DATE = 8/25/2014 | CHECKED - | REVISED |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

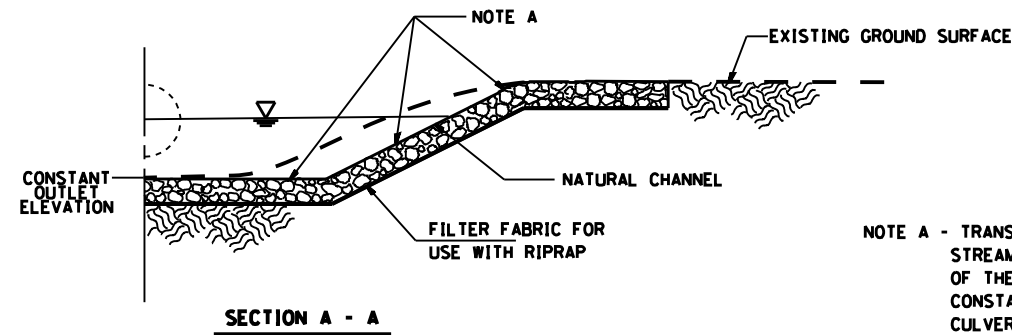
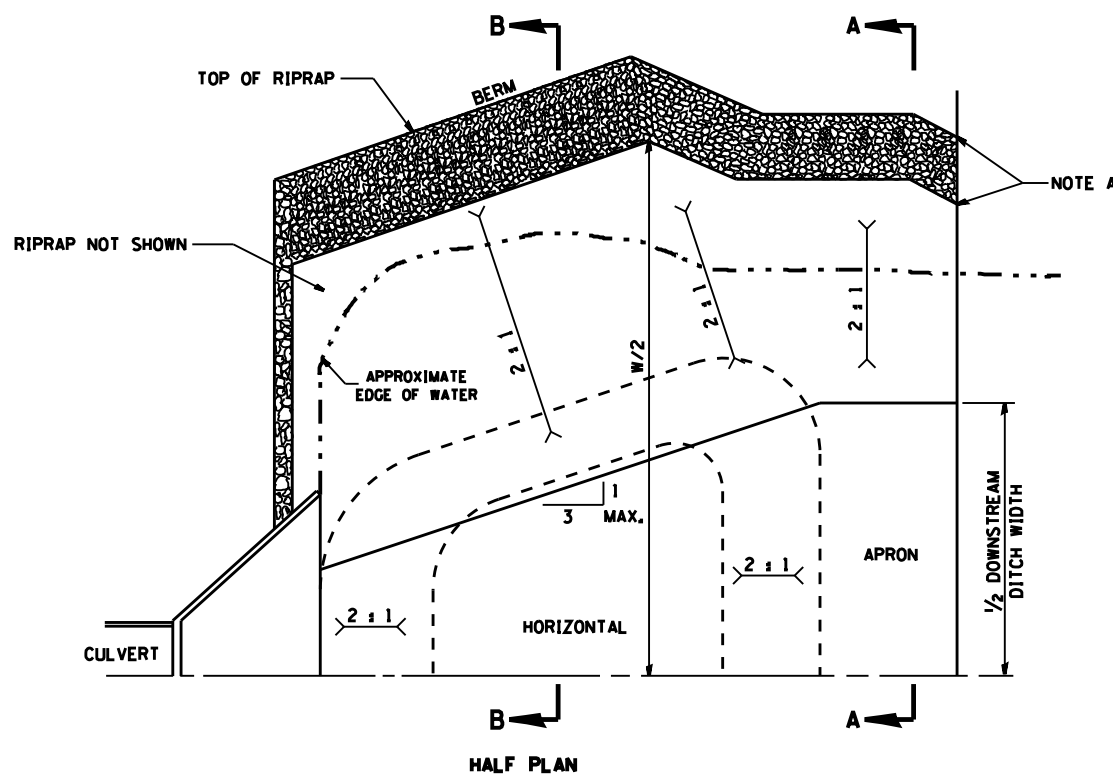
TEMPORARY BRIDGE TRAFFIC SIGNAL
 LOOP PLACEMENT DETAIL SHEET

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

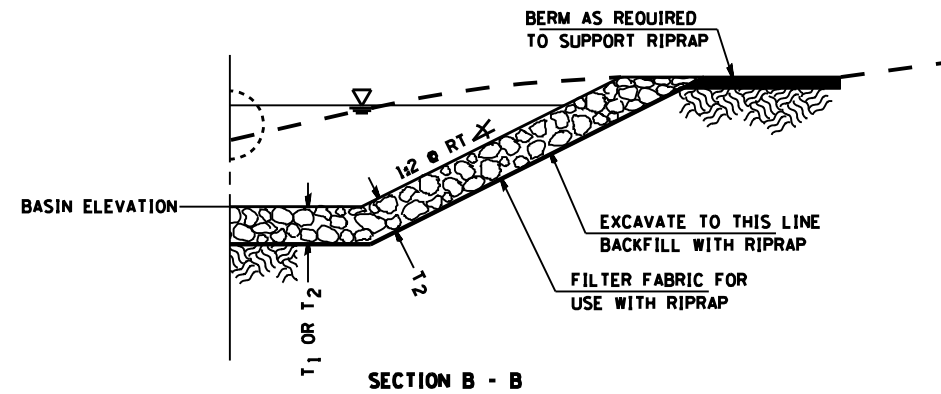
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------------------|---------|----------|--------------------|-----------|
| 72 | | SANGAMON | 163 | 162 |
| •(84-9-2&3)RS-2&MISC STRUC REP | | | CONTRACT NO. 72B54 | |
| ILLINOIS FED. AID PROJECT | | | | |



| STATION | DISSIPATOR POOL LENGTH | APRON LENGTH | W WIDTH | h _s | TOP OF BERM | RIPRAP THICKNESS INCH | | RIPRAP CLASS | STONE DUMPED RIPRAP TON | FILTER FABRIC FOR USE WITH RIPRAP SQ YD |
|---------|------------------------|--------------|---------|----------------|-------------|-----------------------|----------------|--------------|-------------------------|---|
| | FT | FT | FT | FT | FT | T ₁ | T ₂ | | | |
| 328+90 | 39 | 6 | 13.2 | 1.1 | 4.4 | 42 | 28 | A4 | 248 | 135 |
| 339+67 | 23 | 10 | 31.5 | 2.1 | 7.3 | 42 | 28 | A4 | 318 | 175 |
| 346+90 | 43 | 10 | 15.8 | 1.8 | 6.7 | 42 | 28 | A4 | 262 | 145 |



NOTE A - TRANSITION BASIN TO CONFORM TO THE NATURAL STREAM CHANNEL. TOP OF RIPRAP IN THE FLOOR OF THE BASIN AND OUTLET APRON SHOULD BE AT A CONSTANT ELEVATION AS SHOWN ON CROSS SECTION/ CULVERT PROFILE ELSEWHERE HEREIN THE PLANS.



EARTH EXCAVATION FOR ENERGY DISSIPATING BASINS

THIS WORK INVOLVES THE EXCAVATION OF EARTH AS SHOWN IN THE DETAIL TO THE LENGTH, WIDTH, AND DEPTH DETERMINED BY THE ENGINEER. THE EARTH EXCAVATION WILL BE UTILIZED IN THE ROADWAY EMBANKMENT OR WASTED AS DIRECTED BY THE ENGINEER.

THE EARTHWORK WILL NOT BE MEASURED SEPERATELY, BUT WILL BE CONSIDERED AS PART OF THE CONTRACT UNIT BID PRICE PER TON FOR "STONE RIPRAP" OF THE CLASS AND SIZE OF RIPRAP SPECIFIED.

REMOVAL OF EXISTING DISSIPATOR STRUCTURE TO BE INCLUDED IN "STONE RIPRAP" OF TYPE CLASS AND SIZE OF RIPRAP SPECIFIED

RIPRAP FOR ENERGY DISSIPATING BASINS

RIPRAP FOR ENERGY DISSIPATING BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 281 OF THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISION FOR RIPRAP FOR ENERGY DISSIPATING BASINS.

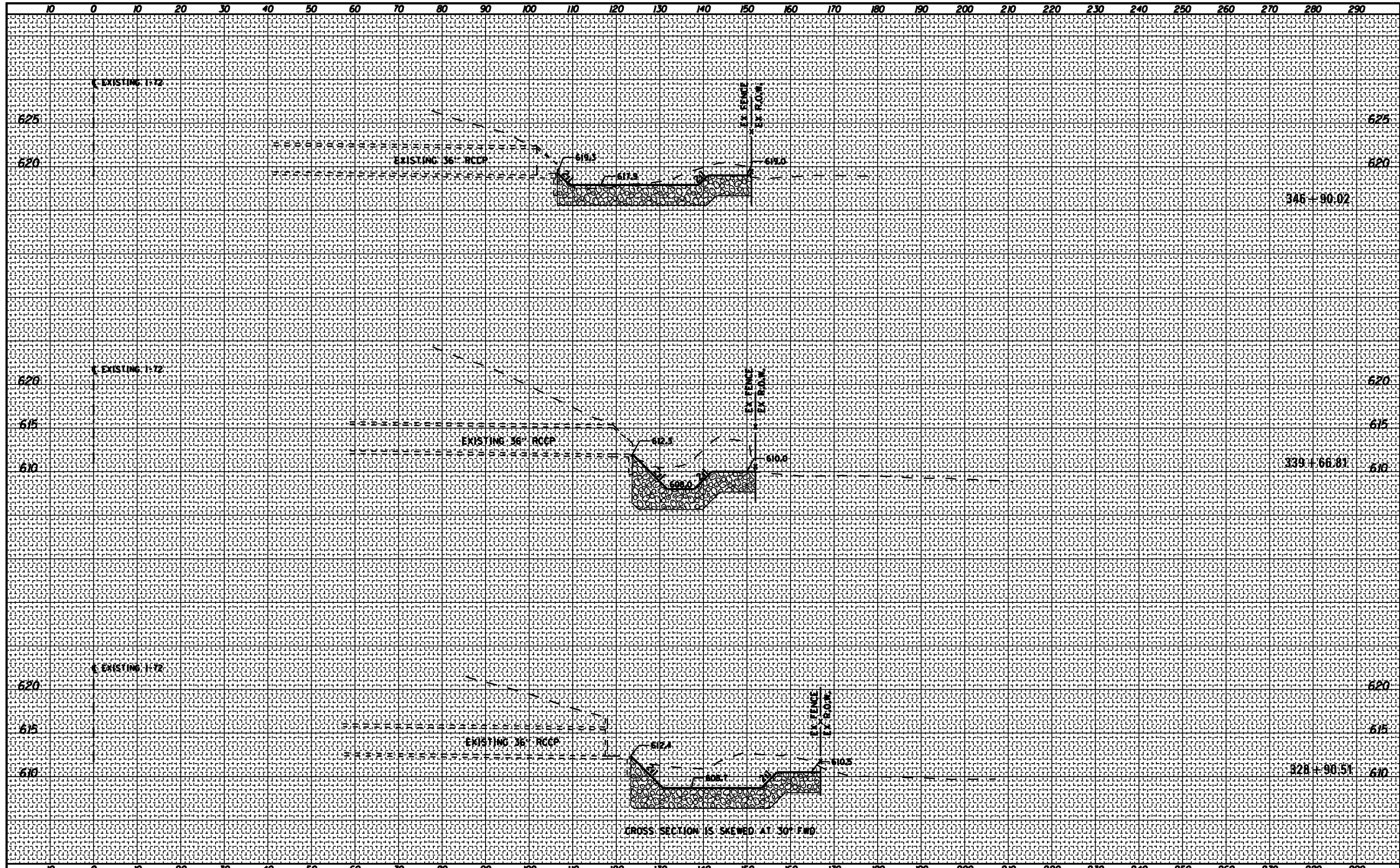
THE LENGTH, WIDTH, AND DEPTH FOR RIPRAP PLACEMENT WILL BE DETERMINED BY THE ENGINEER.

FILTER FABRIC WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR FILTER FABRIC.

| | | | | | | | | | | | | | |
|--|------------------------------------|------------|-----------|---|--------------|-------|----|--------|-------------|---------|---------------------------|--------------------|-----------|
| FILE NAME : c:\p\work\p\idot\sparksg\10218164\0672854-sht-detail-culverts.dgn | USER NAME : sparksg | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | DETAIL SHEET | | | | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| PLOT SCALE = 48.0000' / in. | CHECKED - | REVISED - | REVISED - | | | | | | 72 | - | SANGAMON | 163 | 163 |
| Default | PLOT DATE = Aug-27-2014 03:20:06PM | DATE - | REVISED - | | SCALE: | SHEET | OF | SHEETS | STA. | TO | STA. | CONTRACT NO. 72B54 | |
| | | | | | | | | | | | ILLINOIS FED. AID PROJECT | | |

| | | | |
|----------------------------|---|----|------|
| FINAL SURVEY NOTE BOOK NO. | SURVEYED PLOTTED TEMPLATE AREAS CHECKED | BY | DATE |
|----------------------------|---|----|------|

| | | | |
|-------------------------------|---|----|------|
| ORIGINAL SURVEY NOTE BOOK NO. | SURVEYED PLOTTED TEMPLATE AREAS CHECKED | BY | DATE |
|-------------------------------|---|----|------|



| | | | | | | | | | |
|---|-----------------------------------|-----------------|--------------------|------------------------------|--------------------------|-----------------------------|--------------------|-------------------|-----------------|
| FILE NAME: c:\pwork\p1dot\sparksg\ad218164\0672854-sh | USER NAME: sparksg | DESIGNED: _____ | REVISED: _____ | STATE OF ILLINOIS | F.A. RTE: T2 | SECTION: _____ | COUNTY: SANGAMON | TOTAL SHEETS: 163 | SHEET NO.: 163A |
| Default | PLOT SCALE: 20.0000' / in. | DRAWN: _____ | REVISED: _____ | DEPARTMENT OF TRANSPORTATION | SCALE: _____ | SHEET _____ OF _____ SHEETS | CONTRACT NO. 12B54 | | |
| | PLOT DATE: Aug-27-2014 03:20:49PM | CHECKED: _____ | REVISED: _____ | | STA. _____ TO STA. _____ | | | | |
| | | DATE: _____ | REVISOR: 346+90.51 | | | | | | |