

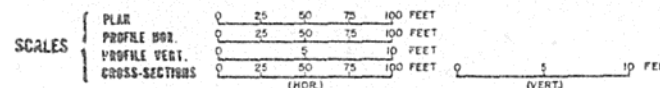
AS BUILT PLANS.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID INTERSTATE HIGHWAY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEET NUMBER
74	14	CHAMPAIGN	140

* (14-VB)BR, (14-1)R P-95-035-86
& (14-HB-2)BR

FOR INDEX OF SHEETS, SEE SHEET NO. 6
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 7 & 8



Contr. Helverson Const. Co.
Res. Engr. George G. Bobak / Gerry Miller

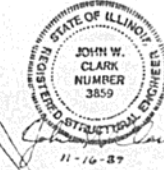
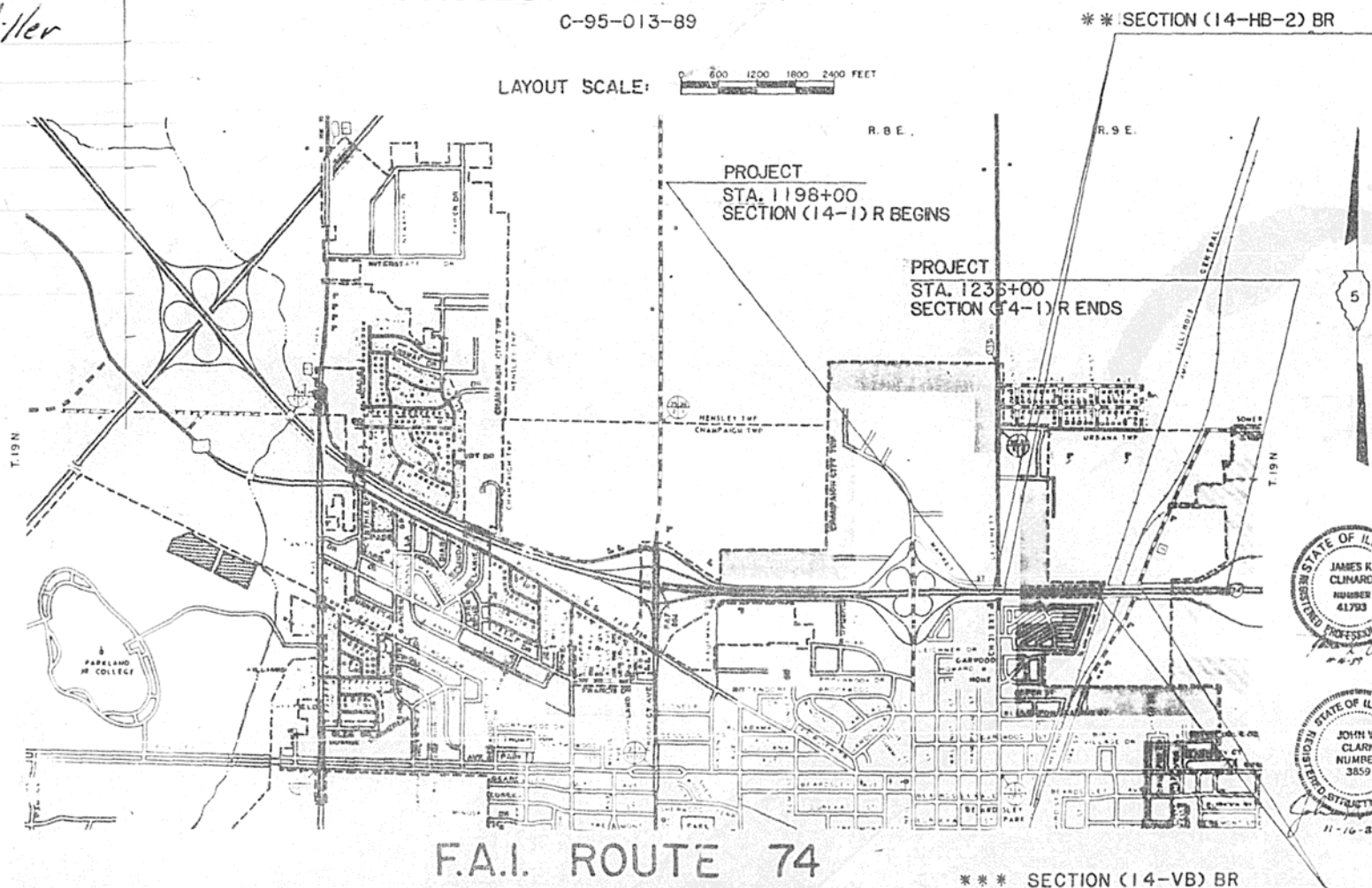
PROJECT ACIR-74-6(128)181
C-95-013-89

Start Date: 3-19-90

Completion Date 6-25-92

*** SECTION (14-HB-2) BR INCLUDES:
WIDENING THE EXISTING DUAL STRUCTURES
CARRYING F.A.I. ROUTE 74 OVER MARKET
STREET AT STA. 1200+06.10. THE WORK
CONSISTS OF WIDENING THE EXISTING 3 SPAN
STRUCTURES, SPANS AT 37'-9", 66'-6",
37'-9", FROM 2 LANES 24' WIDE WITH A
4' WIDE MEDIAN TO 2 LANES 36' WIDE
AND A 26' MEDIAN.

*** SECTION (14-VB) BR INCLUDES:
WIDENING THE EXISTING FOUR SPAN STRUCTURE
CARRYING F.A.I. ROUTE 74 OVER THE I.C. RAILROAD,
AT STA. 1219+00.14, FROM 2 - 24' ROADWAYS
WITH A 4' MEDIAN TO 2 - 36' ROADWAYS WITH A
26' MEDIAN. THE EXISTING SPANS ARE 184'-3",
225'-6", 184'-3" AND 124'-0". THE WORK
CONSISTS OF WIDENING THE EXISTING PIERS AND
ABUTMENTS, FURNISHING AND ERECTING 102" STEEL
PLATE GIRDERS ON THE WIDENED SUBSTRUCTURE
AND CONSTRUCTING A REINFORCED CONCRETE
DECK 121'-2" WIDE.



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED: November 18, 1989

DESIGNED: 12-2-89 J. J. Berman DISTRICT ENGINEER

PASSED: 12-29-89 Gary D. Douck DIVISION OF PLANS AND CONTRACTS

APPROVED: 12-29 12-89 Ralph A. Wilson ENGINEER OF RECORD

DESIGN DESIGNATION
4400(09) TRUNK 17.0GFLEX-20

F.A.I. ROUTE 74
SECTIONS (14-1)R &
14(HB-2, VB)BR
CHAMPAIGN COUNTY

TOTAL LENGTH OF SECTION (14-1)R & 14(HB-2, VB)BR = 3800.00 FEET (0.720 MILES)
NET LENGTH OF SECTION (14-1)R & 14(HB-2, VB)BR = 3800.00 FEET (0.720 MILES)
TOTAL LENGTH OF PROJECT IR-74-6(182) = 3800.00 FEET (0.720 MILES)
NET LENGTH OF PROJECT IR-74-6(182) = 3800.00 FEET (0.720 MILES)

TOLL FREE J.U.L.I.E. TELEPHONE NO
1-800-892-0123
Champaign City, Cunningham,
and Urbana Townships

PLANS PREPARED BY: HOMER L. CHASTAIN & ASSOC.
CONSULTING ENGINEERS
DECATUR, ILLINOIS
PHONE: 217-422-8544

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED _____

DIVISION ADMINISTRATOR DATE

B.M. # 32 : Chiseled "□" on N.W. Corner on Light Base, 47' Ri. Sta. 1198+95 Elev. 754.81

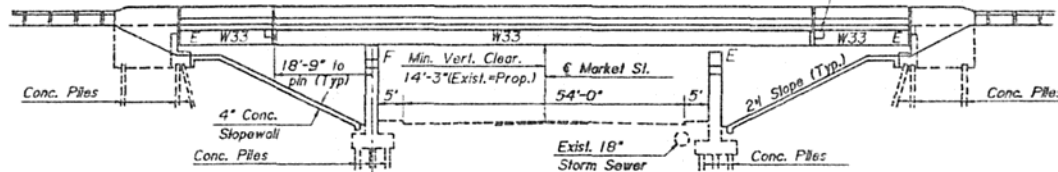
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET
F.A.I. 74	4HB-2BR	CHAMPAIGN	140	61	23
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT				

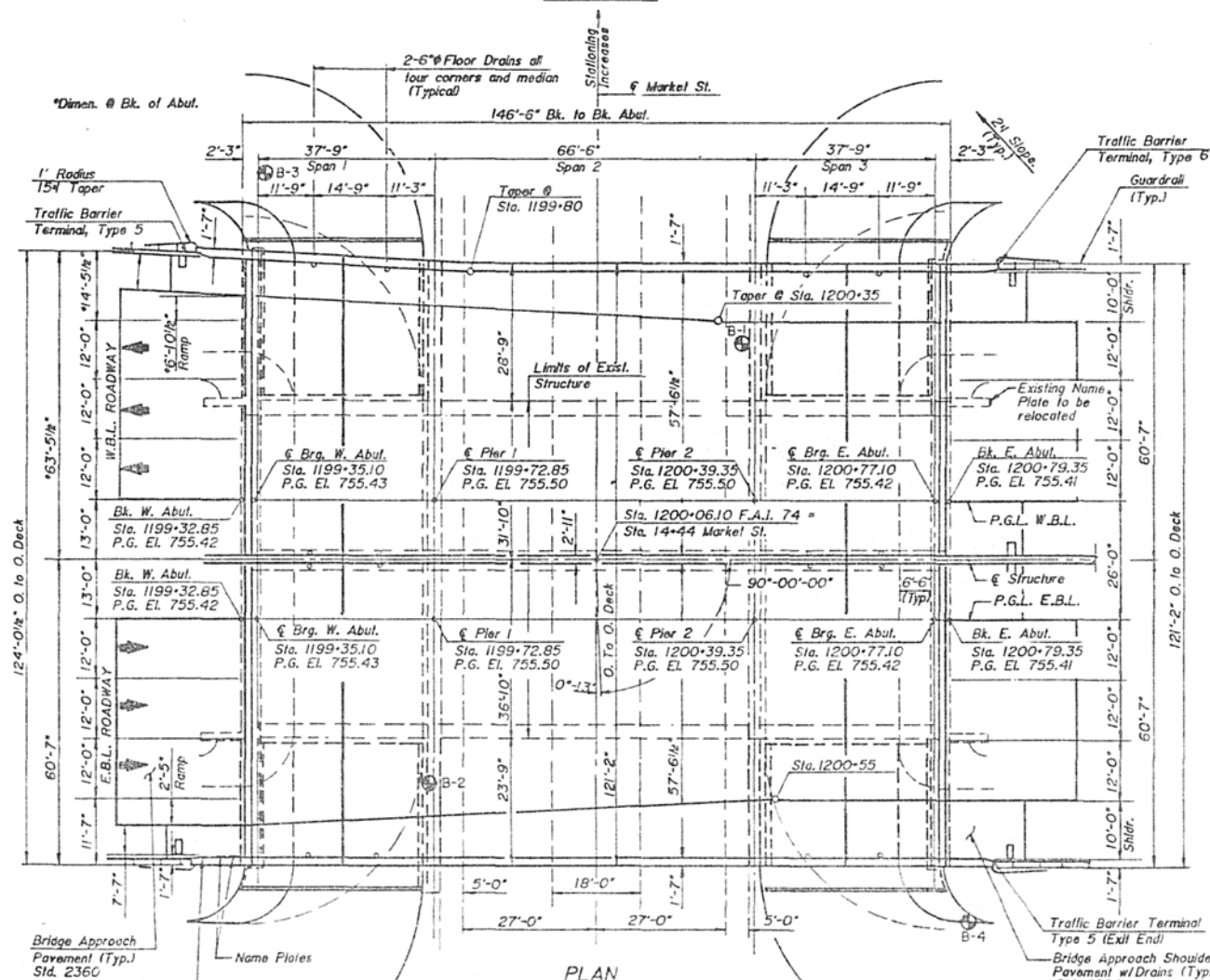
Existing Structure :

Structure No. 010-0020, built as Sec. 14-HB-2 in 1956 at Sta. 1200+06.10. Three span structure with spans of 37'-9", 66'-6", & 37'-9". Reinforced concrete deck & steel wide flange beams on two pile bent abutments and two hammerhead piers. Length bk. to bk. of abut. = 146'-6". Width o. to o. = 68'-8". The existing deck and wingwalls shall be removed. The rest of the existing structure shall remain in place and be incorporated into new construction. Existing beams to be designed for composite action in positive and negative moment regions for the addition of Alternate Military loading. Use W33 steel beams in widening to maintain existing vertical clearance.

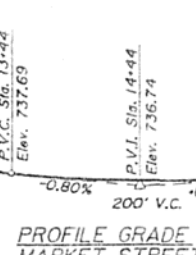
Steel Hanger Pin Connection (Typ.)
Existing Pin Connections on Beam (2) shall be inspected, cleaned and/or retubed as directed by the Engineer. (See Special Provisions for Pin Replacement.) See Sheet No. 12 for details of pin connection.



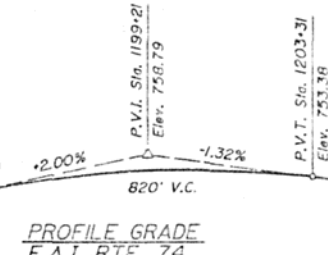
ELEVATION



PLAN



PROFILE GRADE MARKET STREET



PROFILE GRADE F.A.I. RTE. 74

GENERAL NOTES

See Proposal for Boring Data.
Fasteners shall be high strength bolts. Bolts 7/8"Ø, open holes 1 1/8"Ø, unless otherwise noted.
Calculated weight of Structural Steel = 268,030 LBS. (M185)
Field welding of construction accessories will not be permitted to the bottom flange of beams 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 main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams, all splice plate material and all material used in hanger connections.

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

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 work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Expansion bolts shall consist of approved expansion anchors, providing minimum certified proof load = 4,080 lbs., and 3/4"Øx12" hooked bolts.

Bearing seal surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustment shall be made either by grinding the surface or shimming the bearing. Two 1/2" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, shims of the dimensions of top plate shall be provided and placed as detailed.

Concrete piles at abutments shall be driven in holes prepared through the embankment in accordance with Article 513.03(c) of the Standard Specifications.

The Contractor shall drive two (2) concrete test piles in permanent locations, one at Pier No. 1 and one at the East Abutment, as directed by the Engineer before ordering the remainder of piles.

Protective Coat shall be applied to the top and inside face of parapets, median barrier and wingwalls in accordance with Art. 503.12 of the Std. Specifications.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to widening of the abutments.

The Contractor shall use extreme care during removal of the existing concrete deck and concrete removal at the abutments so as not to nick, cut or damage any of the structural steel or reinforcing steel to be incorporated into the widened structure.

The Contractor shall clean the top of all piers and abutments between bearings. Cost incidental to Class X Concrete.

Existing Name Plate shall be cleaned and relocated adjacent to new Name Plates. Cost incidental to Name Plates.

The three coat lead and chromate free alkyl paint system shall be used for field painting of Existing Structural Steel and for shop and field painting of New Structural Steel. The color of the final finish coat shall be "Interstate Green" (Munsell Std. 7.5G 4.5).

All contact surfaces of new and existing structural steel shall be free of paint or lacquer.

DESIGN STRESSES

NEW CONSTRUCTION
Concrete $f_c = 3,500$ psi $n=9$
Reinforcing Steel $F_y = 60,000$ psi
Structural Steel $F_s = 20,000$ psi (AASHTO M-183)
EXISTING CONSTRUCTION
Substructure Concrete $f_c = 800$ psi
Reinforcing Steel $F_s = 20,000$ psi
Structural Steel $F_s = 16,000$ psi

LOADING

HS20-44 & Alternate Military
Allow 25 psi for future wearing surface

DESIGN SPECIFICATIONS

Standard Specifications for Highway Bridges, AASHTO 1983 with 1984, 1985, 1986, 1987 and 1988 Interims.



Signed *James I. Paulsen*, Date 2 Feb. 1985
Henry Ecole, SE, Ill. Reg. No. 2487

APPROVED FOR STRUCTURAL ADEQUACY ONLY

James I. Paulsen
Engineer of Bridges and Structures

STATION 1200+06.10
WIDENED 198
STATE OF ILLINOIS
F.A.I. RT. 74 SEC. 04HB-21BR
F.A. PROJ. 112-74-1(118)
LOADING HS-20 & ALT.
STR. NO. 010-0020

NAME PLATE
(Std. 2113)

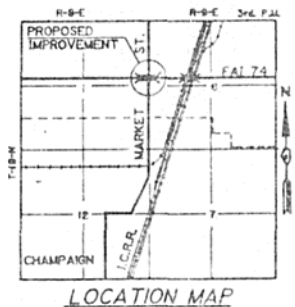
BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Concrete Removal	Cu.Yd.	—	23.2	23.2
Expansion Bolts 3/4 Inch	Each	—	48	48
Removal of Existing Concrete Deck No. 1	L.Sum	1	—	1
Structure Excavation	Cu.Yd.	—	235.6	235.6
Preformed Joint Seal 1 3/4"	Lin.Ft.	405	—	405
Preformed Joint Seal 2 1/2"	Lin.Ft.	124	—	124
Preformed Joint Seal 4"	Lin.Ft.	121	—	121
Class X Concrete Superstructure	Cu.Yd.	526.5	—	526.5
Protective Coat	Sq.Yd.	2071	20	2091
Elastomeric Bearing Assembly, Type I	Each	24	—	24
Elastomeric Bearing Assembly, Type II	Each	24	—	24
Floor Drains (Special)	Each	16	—	16
Class X Concrete	Cu.Yd.	—	230.8	230.8
Furnishing and Erecting Structural Steel	L.Sum	.1	—	.1
Stud Shear Connectors	Each	10,283	—	10,283
Jack and Replace Bearings	Each	30	—	30
Cleaning and Painting Steel Bridge No. 1	L.Sum	1	—	1
Reinforcement Bars	Pound	—	32,270	32,270
Reinforcement Bars, Epoxy Coated	Pound	124,630	1,100	125,730
Concrete Piles	Lin.Ft.	—	3,205	3,205
Test Pile Concrete	Each	—	2	2
Name Plates	Each	1	—	1
Bridge Seat Sealer	L. Sum	—	0.5	0.5
Slope Wall 4 Inch	Sq.Yd.	—	525.4	525.4
Epoxy Crack Sealing	Lin.Ft.	—	127	127
Repair Concrete Structures	Sq.Ft.	—	62	62
Pin Replacement	Each	30	—	30
Structural Steel Removal	Pound	16,640	—	16,640

*Includes Deck Surface
**Est. Quantity 1000 Sq Ft

BASCOR, INC.
consulting engineers and planners

DESIGN:	GSP
CHECK:	HE
DRAWN:	SAW
CHECKED:	GSP



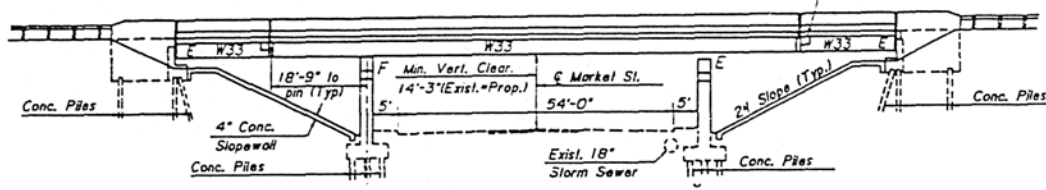
GENERAL PLAN & ELEVATION

F.A.I. ROUTE 74
OVER MARKET STREET
SECTION 04HB-21 BR
CHAMPAIGN COUNTY
STA. 1200+06.10

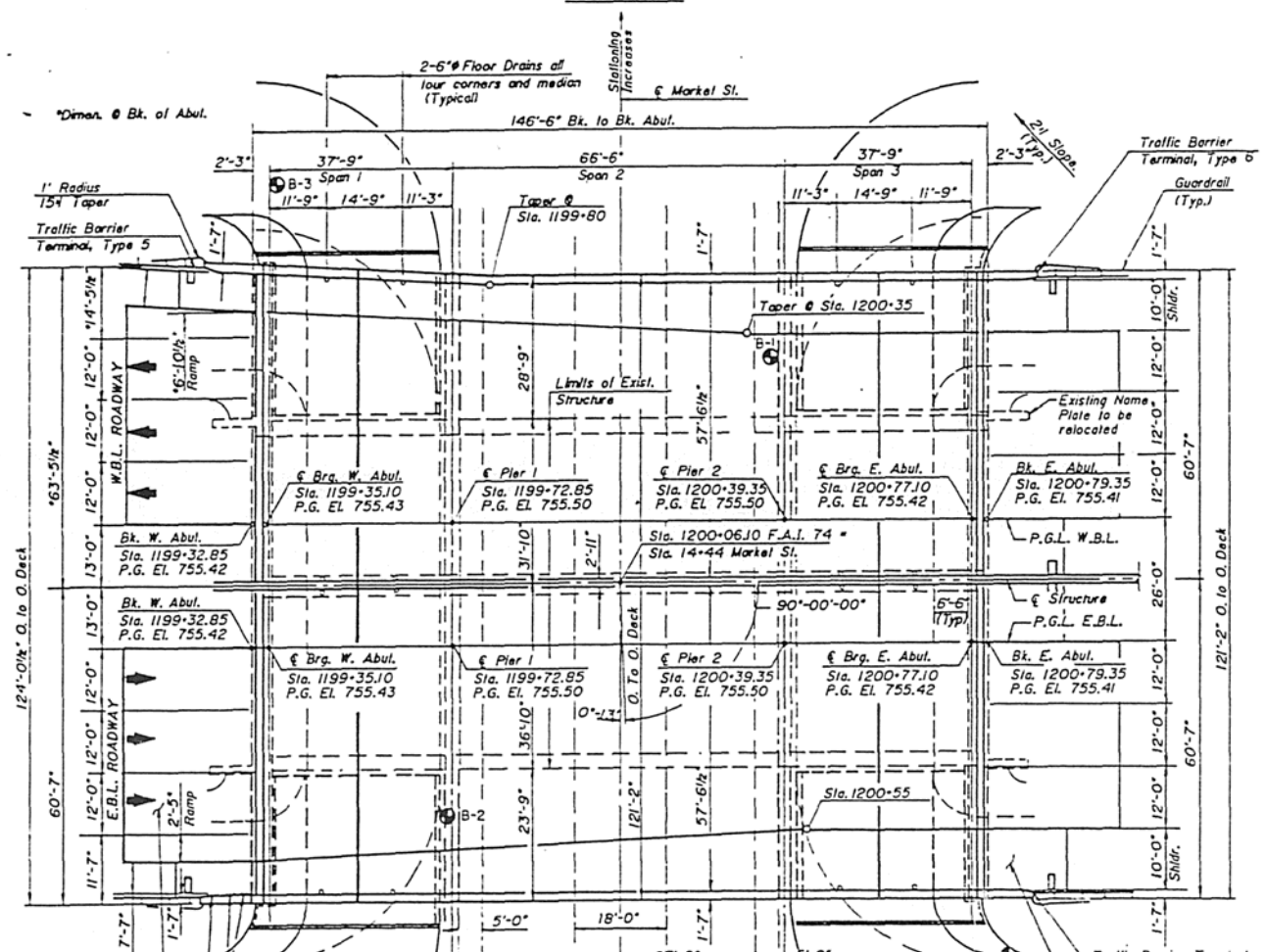
B.M. # 32 Chiseled "O" on N.W. Corner on Light Base, 47' Ri. Sta. 1198+95 Elev. 754.81

Existing Structure
Structure No. 010-0020, built as Sec. 14-HB-2 in 1956 at Sta. 1200+06.10. Three span structure with spans of 37'-9", 66'-6", & 37'-9". Reinforced concrete deck & steel wide flange beams on two pile bent abutments and two hammerhead piers. Length bk. to bk. of abuts. = 146'-6". Width o. to o. = 68'-8". The existing deck and wingwalls shall be removed. The rest of the existing structure shall remain in place and be incorporated into new construction. Existing beams to be designed for composite action in positive and negative moment regions for the addition of Alternate Military loading. Use W33 steel beams in widening to maintain existing vertical clearance.

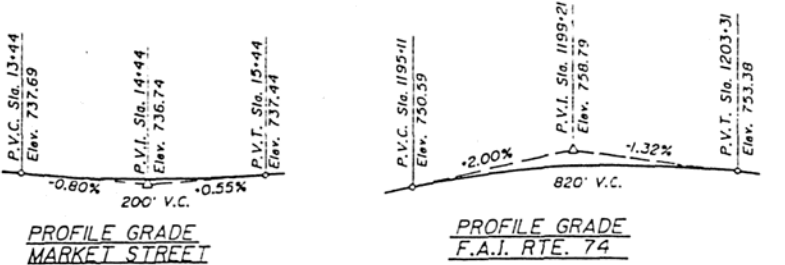
Steel Hanger Pin Connection (Typ.)
Existing Pin Connections on Beam (20) shall be inspected, cleaned and/or retubed as directed by the Engineer. (See Special Provisions for Pin Replacement.) See Sheet No. 12 for details of pin connection.



ELEVATION



PLAN



PROFILE GRADE MARKET STREET

PROFILE GRADE F.A.I. RTE. 74

BASCOR, INC.
consulting engineers and planners

GSP
HE
SAW
GSP

GENERAL NOTES

See Proposal for Boring Data.
Fasteners shall be high strength bolts. Bolts 7/8", open holes 1 1/4", unless otherwise noted.
Calculated weight of Structural Steel = 268,030 LBS. (M1E3)
Field welding of construction accessories will not be permitted to the bottom flange of beams 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 main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams, all splice plate material and all material used in hanger connections.
Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.
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 work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
Expansion bolts shall consist of approved expansion anchors, providing minimum certified proof load = 4,080 lbs., and 3/4"x9"x12" hooked bolts.
Bearing seal surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8" inch. Adjustment shall be made either by grinding the surface or shimming the bearing. Two 1/8" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, shims of the dimensions of top plate shall be provided and placed as detailed.
Concrete piles at abutments shall be driven in holes precored through the embankment in accordance with Article 513.09(c) of the Standard Specifications.
The Contractor shall drive two (2) concrete test piles in permanent locations; one at Pier No. 1 and one at the East Abutment, as directed by the Engineer before ordering the remainder of piles.
Protective Coat shall be applied to the top and inside face of parapets, median barrier and wingwalls in accordance with Art. 503.12 of the Std. Specifications.
The embankment configuration shown shall be the minimum embankment that must be constructed prior to widening of the abutments.
The Contractor shall use extreme care during removal of the existing concrete deck and concrete removal of the abutments so as not to nick, cut or damage any of the structural steel or reinforcing steel to be incorporated into the widened structure.
The Contractor shall clean the top of all piers and abutments between bearings. Cost incidental to Class X Concrete.
Existing Name Plate shall be cleaned and relocated adjacent to new Name Plate. Cost incidental to Name Plates.
The three coat lead and chromate free alkyl paint system shall be used for field painting of Existing Structural Steel and for shop and field painting of New Structural Steel. The color of the final finish coat shall be "Interstate Green" Munsell Std 7.5G 4.

AS REVISED

DESIGN STRESSES

NEW CONSTRUCTION
Concrete: $f_c = 3,500$ psi $n=9$
Reinforcing Steel: $F_y = 60,000$ psi
Structural Steel: $F_s = 20,000$ psi (AASHTO M-183)
EXISTING CONSTRUCTION
Substructure Concrete: $f_c = 800$ psi
Reinforcing Steel: $F_s = 20,000$ psi
Structural Steel: $F_s = 18,000$ psi

LOADING
HS20-44 & Alternate Military
Allow 25 psi for future wearing surface

DESIGN SPECIFICATIONS
Standard Specifications for Highway Bridges, AASHTO 1983 with 1984, 1985, 1986, 1987 and 1988 Interims.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
2487
SIGNED: *Henry E. Cole*, Date 2 Feb. 1989
Henry E. Cole, SE, Ill. Reg. No. 2487
APPROVED
FOR STRUCTURAL ADEQUACY ONLY
James J. ...
Chief of Bridges and Structures

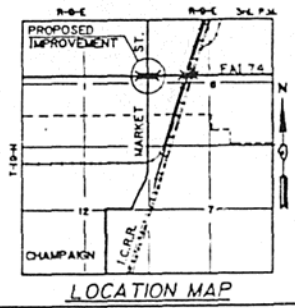
STATION 1200+06.10
WIDENED 198
STATE OF ILLINOIS
F.A.I. RT. 74 SEC. 14HB-2BR
F.A. PROJ. 618-74-14(11D)
LOADING HS-20 & ALT.
STR. NO. 010-0020

NAME PLATE
(Std. 2113)

BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Concrete Removal	Cu.Yd.	—	23.2	23.2
Expansion Bolts 3/4 Inch	Each	—	48	48
Removal of Existing Concrete Deck No. 1	L.Sum	—	—	—
Structure Excavation	Cu.Yd.	—	235.6	235.6
Prelformed Joint Seal 1 3/4"	Lin.Ft.	405	—	405
Prelformed Joint Seal 2 1/2"	Lin.Ft.	124	—	124
Prelformed Joint Seal 4"	Lin.Ft.	121	—	121
Class X Concrete Superstructure	Cu.Yd.	526.5	—	526.5
Protective Coat	Sq.Yd.	2071	20	2091
Elastomeric Bearing Assembly, Type I	Each	24	—	24
Elastomeric Bearing Assembly, Type II	Each	24	—	24
Floor Drains (Special)	Each	16	—	16
Class X Concrete	Cu.Yd.	—	230.8	230.8
Furnishing and Erecting Structural Steel	L.Sum	—	—	—
Stud Shear Connectors	Each	110,283	—	110,283
Jack and Replace Bearings	Each	30	—	30
Cleaning and Painting Steel Bridge No. 1	L.Sum	—	—	—
Reinforcement Bars	Pound	—	32,270	32,270
Reinforcement Bars, Epoxy Coated	Pound	24,630	1,100	25,730
Concrete Piles	Lin.Ft.	—	3,205	3,205
Test Pile Concrete	Each	—	2	2
Name Plates	Each	—	—	—
Bridge Seat Sealer	L. Sum	—	0.5	0.5
Slope Wall 4 Inch	Sq.Yd.	—	525.4	525.4
Epoxy Crack Sealing	Lin.Ft.	—	127	127
Repair Concrete Structures	Sq.Ft.	—	62	62
Pin Replacement	Each	—	30	30
Structural Steel Removal	Pound	—	16,640	16,640

*Includes Deck Surfaces
**Est. Quantity 1000 Sq Ft



LOCATION MAP

GENERAL PLAN & ELEVATION

F.A.I. ROUTE 74
OVER MARKET STREET
SECTION (14HB-2) BR
CHAMPAIGN COUNTY
STA. 1200+06.10

As Revised 4-5-90 L.W.

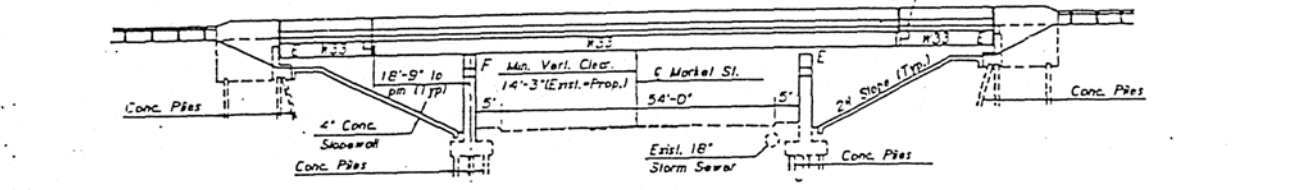
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO. 1140 (61A) SHEET 23
F.A.J. RT. 74 SEC. 04HB-2BR
CHAMPAIGN COUNTY

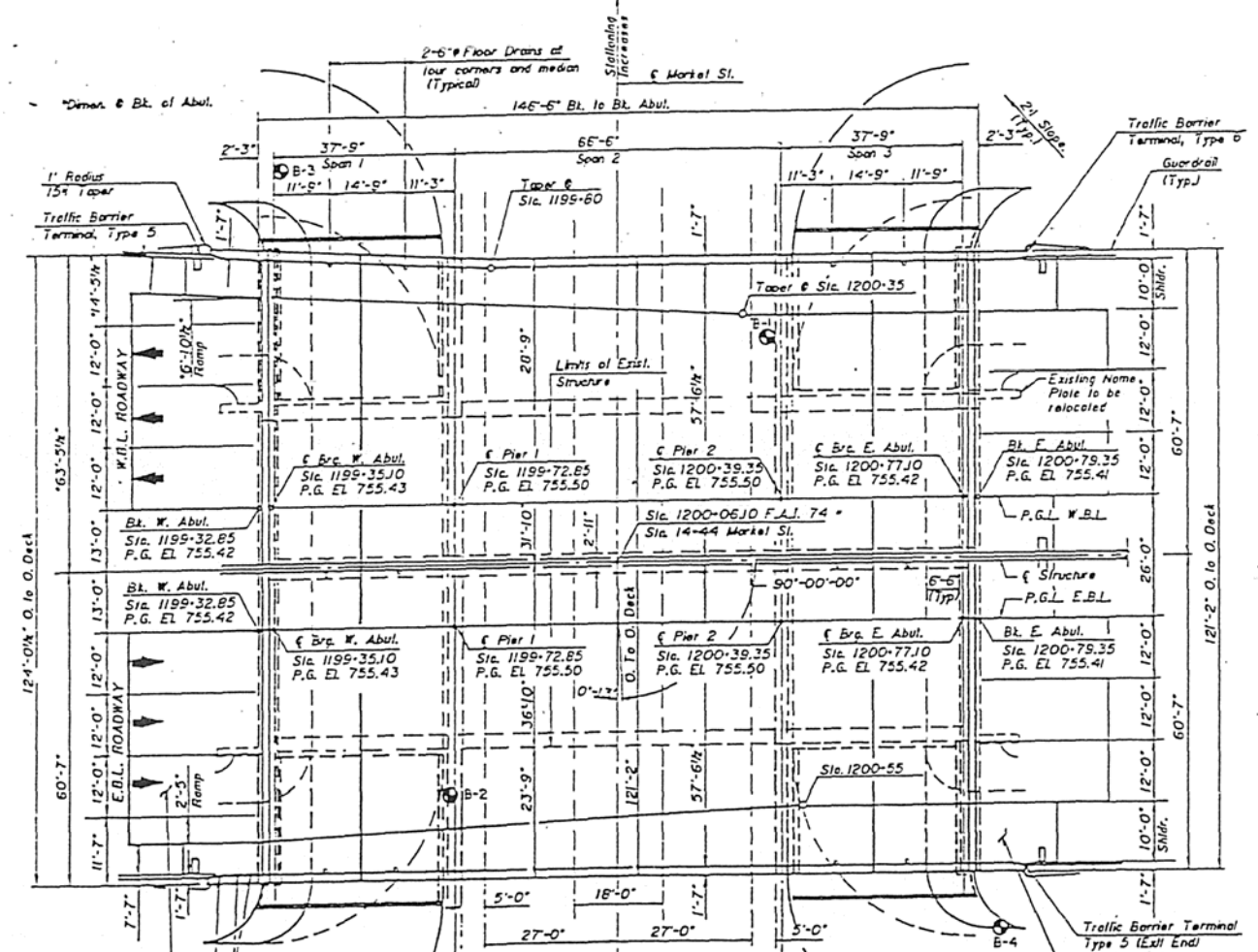
B.M. # 32 Chiseled "D" on N.W. Corner on Light Base, 47' Ri. Sta. 1196-95 Elev. 754.81

Existing Structure
Structure No. 010-0020, built as Sec. 14-HB-2 in 1956 at Sta. 1200-06J0. Three span structure with spans of 37'-9", 66'-6", & 37'-9". Reinforced concrete deck & steel wide flange beams on two pier abutments and two hammerhead piers. Length bk. to bk. of abut. = 146'-6". Width o. to o. = 68'-8". The existing deck and wingwalls shall be removed. The rest of the existing structure shall remain in place and be incorporated into new construction. Existing beams to be designed for composite action in positive and negative moment regions for the addition of Alternate Military loading. Use W33 steel beams in widening to maintain existing vertical clearance.

Steel Hanger Pin Connection (Typ.)
Existing Pin Connections on Beam (20) shall be inspected, cleaned and/or refurbished as directed by the Engineer. (See Special Provisions for Pin Replacement.) See Sheet No. 12 for details of pin connection.



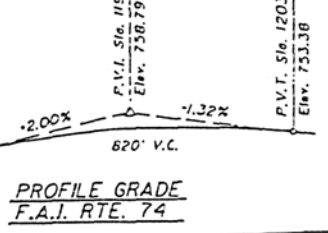
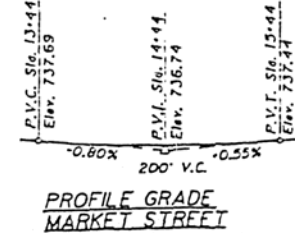
ELEVATION



PLAN

BASCOR, INC.
ENGINEERING CONSULTANTS AND ARCHITECTS

GSP
HE
SAW
GSP



GENERAL NOTES

- See Proposal for Boring Data.
- Fasteners shall be high strength bolts. Bolts 7/8"Ø, open holes 1 1/8"Ø, unless otherwise noted.
- Calculated weight of Structural Steel = 266,030 LBS. (MIE3)
- Field welding of construction accessories will not be permitted to the bottom flange of beams 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 main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams, of splice plate material and of material used in hanger connections.
- Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.
- Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to normal 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 work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Expansion bolts shall consist of approved expansion anchors, providing minimum certified proof load = 4,080 lbs., and 3/4"Øx12" hooked bolts.
- Bearing steel surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8" inch. Adjustment shall be made either by grinding the surface or shimming the bearing. Two 1/4" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, shims of the dimensions of top plate shall be provided and placed as detailed.
- Concrete piers at abutments shall be driven in holes prepared through the embankment in accordance with Article 513.05(c) of the Standard Specifications.
- The Contractor shall drive two (2) concrete test piers in permanent locations; one at Pier No. 1 and one at the East Abutment, as directed by the Engineer before ordering the remainder of piers.
- Protective Coat shall be applied to the top and inside face of parapets, median barrier and wingwalls in accordance with Art. 503J2 of the Std. Specifications.
- The embankment configuration shown shall be the minimum embankment that must be constructed prior to widening of the abutments.
- The Contractor shall use astreame core during removal of the existing concrete deck and concrete removal of the abutments so as not to nick, cut or damage any of the structural steel or reinforcing steel to be incorporated into the widened structure.
- The Contractor shall clean the top of all piers and abutments between bearings. Cost incidental to Class X Concrete.
- Existing Name Plate shall be cleaned and relocated adjacent to new Name Plate. Cost incidental to Name Plates.
- The three coat lead and chromate free oil/epoxy paint system shall be used for field painting of Existing Structural Steel and for shop and field painting of New Structural Steel. The color of the lead finish coat shall be "Interstate Green" (Munsell S-3, 7.5).
- All contact surface areas of new and existing structural steel shall be free of paint or lacquer.

STATION 1200-06J0
WIDENED 198...
STATE OF ILLINOIS
F.A.J. RT. 74 SEC. 04HB-2BR
LOADING HS-20 & ALT.
STR. NO. 010-0020

NAME PLATE
(Std. 2113)

BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Concrete Removal	1 Cu. Yd.	—	23.2	23.2
Expansion Bolts 3/4" Inch	1 Each	—	48	48
Removal of Existing Concrete Deck No. 1	1 Cu. Sum	—	—	—
Structure Excavation	1 Cu. Yd.	—	235.6	235.6
Preformed Joint Seal 1 3/4"	1 Lb. Ft.	405	—	405
Preformed Joint Seal 2 1/2"	1 Lb. Ft.	124	—	124
Preformed Joint Seal 4"	1 Lb. Ft.	121	—	121
Class X Concrete Superstructure	1 Cu. Yd.	526.5	—	526.5
Protective Coat	1 Sq. Yd.	2071	20	2091
Elastomeric Bearing Assembly, Type I	1 Each	24	—	24
Elastomeric Bearing Assembly, Type II	1 Each	24	—	24
Floor Drains (Special)	1 Each	16	—	16
Class X Concrete	1 Cu. Yd.	—	230.8	230.8
Furnishing and Erecting Structural Steel	1 L. Sum	—	—	—
Stud Shear Connectors	1 Each	110,283	—	110,283
Jack and Replace Beams	1 Each	30	—	30
Cleaning and Painting Steel Bridge No. 1	1 L. Sum	—	—	—
Reinforcement Bars	1 Pound	—	32,270	32,270
Reinforcement Bars, Epoxy Coated	1 Pound	124,630	1,100	125,730
Concrete Piles	1 Lb. Ft.	—	3,205	3,205
Test Pile Concrete	1 Each	—	2	2
Name Plates	1 Each	—	—	—
Bridge Seat Sealer	1 L. Sum	—	0.5	0.5
Slope Mat 4 Inch	1 Sq. Yd.	—	525.4	525.4
Epoxy Crack Sealing	1 Lb. Ft.	—	127	127
Repair Concrete Structures	1 Sq. Ft.	—	62	62
Pin Replacement	1 Each	—	30	30
Structural Steel Removal	1 Pound	—	116,640	116,640

*Includes Deck Surface
**Est. Quantity 1000 Sq Ft

AS REVISED

DESIGN STRESSES

NEW CONSTRUCTION
Concrete f'c = 3,500 psi n=9
Reinforcing Steel Fy = 60,000 psi
Structural Steel Fy = 20,000 psi (AASHTO M-183)
EXISTING CONSTRUCTION
Structural Concrete f'c = 800 psi
Reinforcing Steel Fy = 20,000 psi
Structural Steel fy = 18,000 psi

LOADING
HS20-44 & Alternate Military
Allow 25 psi for future wearing surface

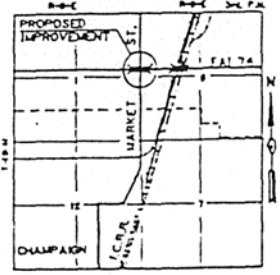
DESIGN SPECIFICATIONS
Standard Specifications for Highway Bridges,
AASHTO 1983 with 1984, 1985, 1986,
1987 and 1988 Interims.



Signed *Henry E. Coe*, Date 2-FEB-1989
Henry E. Coe, I.E., Ill. Reg. No. 2487

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

James J. Paulsen
Contractor



GENERAL PLAN & ELEVATION

F.A.I. ROUTE 74
OVER MARKET STREET
SECTION 04HB-2I BR
CHAMPAIGN COUNTY
STA. 1200-06J0

As Revised 4-5-90 L.W.

SHEET NO 2
SHEETS 23

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 174	X	CHAMPAIGN	140	62
FED. ROAD DIST. NO.		ILLINOIS PROJECT		
		(14HB-2)BR		

STAGING NOTES

STAGE I - CONSTRUCTION (1990)

1. CONSTRUCT WIDENED PORTIONS OF PIERS, ABUTMENTS, AND SLOPE-WALLS ON EACH SIDE OF CENTERLINE.
2. ERECT NEW STRUCTURAL STEEL ON WIDENED PIERS AND ABUTMENTS.

STAGE I - REMOVAL (1991)

1. LOCATE WESTBOUND TRAFFIC ON EXISTING EASTBOUND MEDIAN LANE AND EASTBOUND TRAFFIC ON EXISTING EASTBOUND OUTSIDE LANE.
2. REMOVE EXISTING WESTBOUND DECK AND ABUTMENT WINGWALLS.
3. REMOVE AND REPLACE BEAM 6.
4. REMOVE EXISTING ROLLER BEARINGS AT ABUTMENTS FOR BEAMS 6 THRU 12 AND REPLACE WITH NEW ELASTOMERIC BEARINGS.

STAGE I - CONSTRUCTION (1991)

1. CONSTRUCT NEW WESTBOUND CONCRETE DECK AND PARAPETS.

STAGE II - REMOVAL (1991)

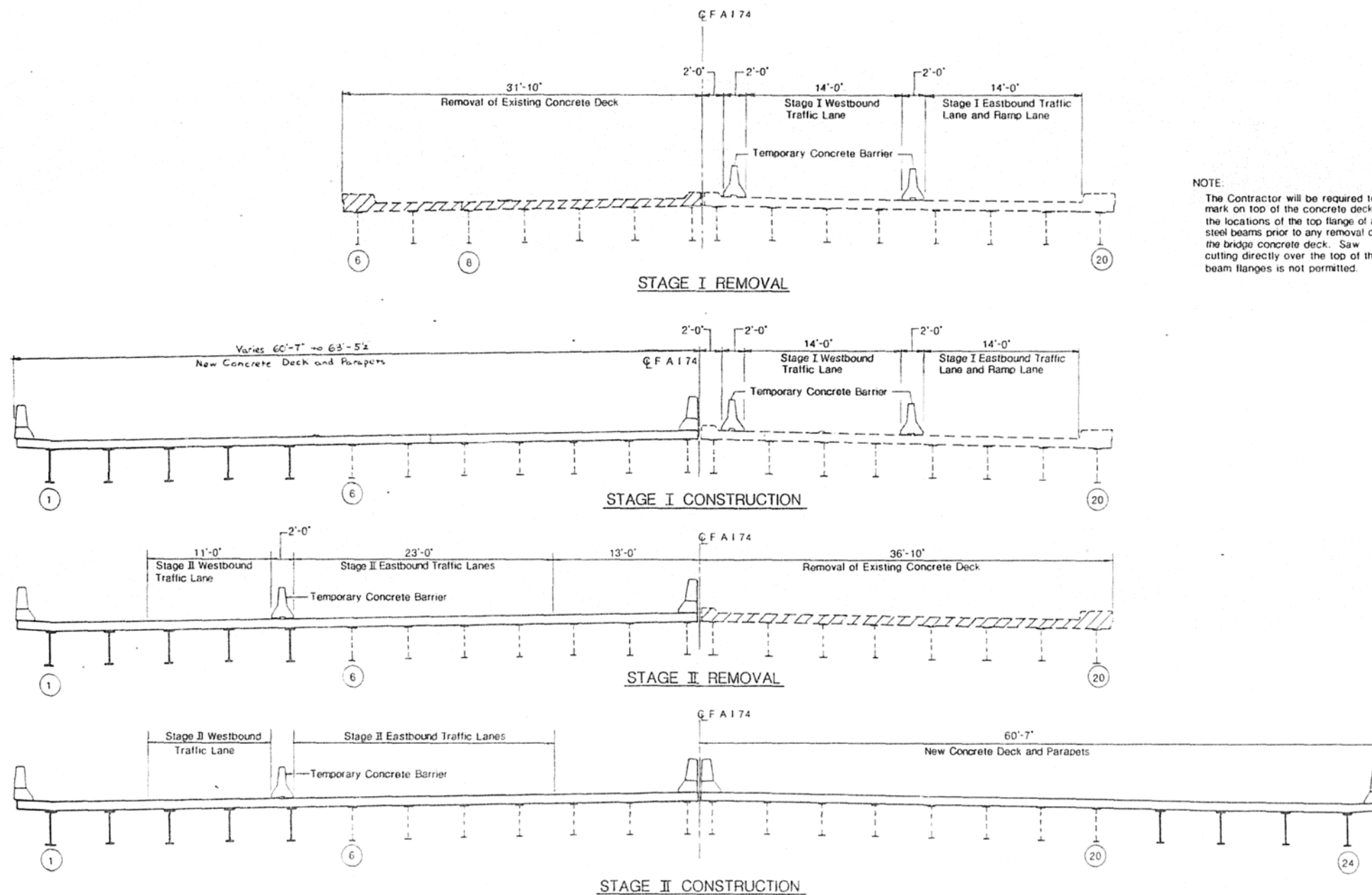
1. LOCATE WESTBOUND TRAFFIC ON NEW OUTSIDE WESTBOUND LANE AND EASTBOUND TRAFFIC ON NEW WESTBOUND CENTER AND MEDIAN LANES.
2. REMOVE EXISTING EASTBOUND DECK AND ABUTMENT WINGWALLS.
3. REMOVE EXISTING ROLLER BEARINGS AT ABUTMENTS FOR BEAMS 13 THRU 20 AND REPLACE WITH NEW ELASTOMERIC BEARINGS.

STAGE II - CONSTRUCTION (1991)

1. CONSTRUCT NEW EASTBOUND CONCRETE DECK AND PARAPETS.
2. INSTALL P.J.S. LONGITUDINAL JOINT SEAL BETWEEN MEDIAN PARAPETS.

NOTE:

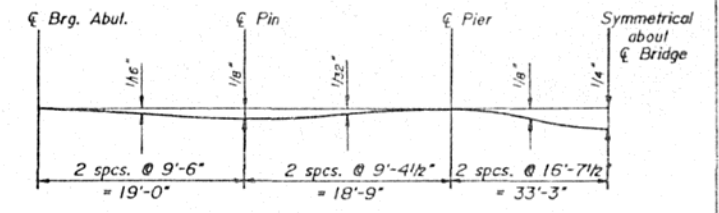
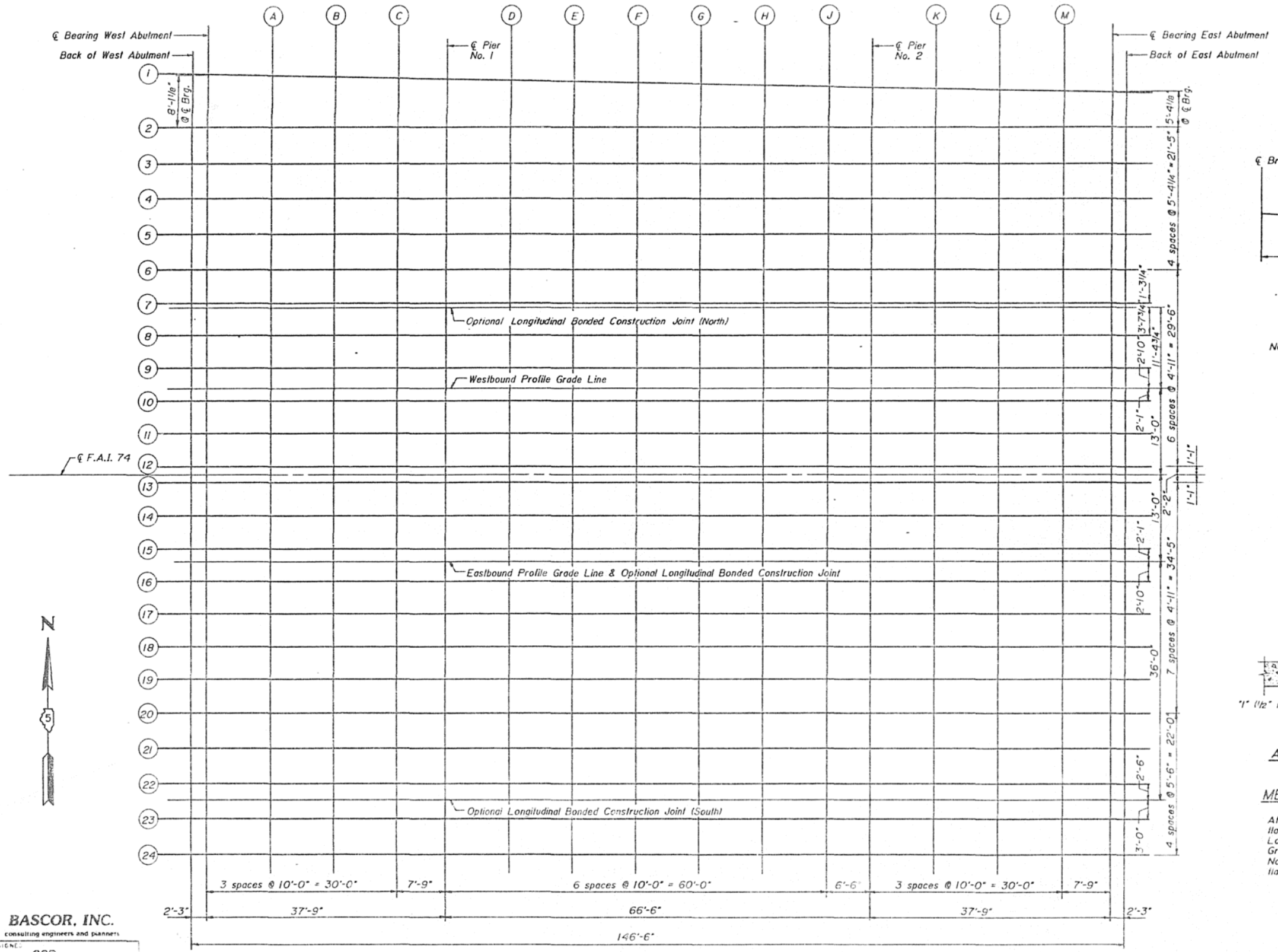
The Contractor will be required to mark on top of the concrete deck the locations of the top flange of all steel beams prior to any removal of the bridge concrete deck. Saw cutting directly over the top of the beam flanges is not permitted.



REVISIONS		STAGE CONSTRUCTION	
NO.	DATE	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	DRAWN BY DATE CHECKED BY DATE
1		FA 174	SEC (14HB-2) BR
2		CHAMPAIGN	COUNTY
3		HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS	PROJECT NO. 3400-2
4			SHEET NO.

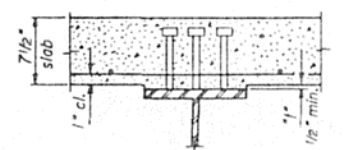
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3
F.A.I. 74	4HB-2BR	CHAMPAIGN	140	63	SHEETS 23
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT				

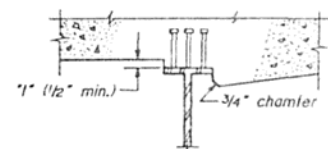


DEAD LOAD DEFLECTION DIAGRAM
(includes weight of concrete only)

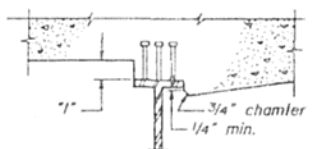
NOTE: The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown in tables on Sheet Nos. 4, 5 & 6.



INTERIOR BEAMS



AT MINIMUM FILLET



AT MAXIMUM FILLET

METHOD OF DETERMINING FILLET HEIGHTS "I"

After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on the Elevation Location Diagram. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheet Nos. 4, 5 & 6, minus slab thickness equals the fillet heights above top flange of beams.

BASCOR, INC.
consulting engineers and planners

DESIGNED:	GSP
CHECKED:	HE
DRAWN:	SAW
CHECKED:	GSP

ELEVATION LOCATION DIAGRAM

TOP OF SLAB ELEVATIONS-LAYOUT

F.A.I. ROUTE 74
OVER MARKET STREET
SECTION (4HB-2) BR
CHAMPAIGN COUNTY
STA. 1200+06.10

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 4
F.A.I. 74	14HB-2BR	CHAMPAIGN	100	64	64
FED ROAD DIST NO. 7	ALIGN	PROJECT			

BEAM 1

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	-47.138	755.005	755.005
CL Brg W Abut	1199+35.100	-47.094	755.012	755.012
A	1199+45.100	-46.900	755.043	755.053
B	1199+35.100	-46.707	755.069	755.065
C	1199+65.100	-46.513	755.091	755.093
CL Pier No. 1	1199+72.850	-46.363	755.105	755.105
D	1199+82.850	-46.169	755.120	755.123
E	1199+92.850	-45.976	755.131	755.141
F	1200+02.850	-45.782	755.138	755.152
G	1200+12.850	-45.588	755.141	755.155
H	1200+22.850	-45.393	755.140	755.149
J	1200+32.850	-45.201	755.135	755.136
CL Pier No. 2	1200+39.350	-45.075	755.129	755.129
K	1200+49.350	-44.881	755.117	755.122
L	1200+59.350	-44.688	755.101	755.113
M	1200+69.350	-44.494	755.081	755.087
CL Brg E Abut	1200+77.100	-44.344	755.063	755.063
Bk E Abut	1200+79.350	-44.300	755.057	755.057

BEAM 2

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	-39.000	755.174	755.174
CL Brg W Abut	1199+35.100	-39.000	755.181	755.181
A	1199+45.100	-39.000	755.207	755.217
B	1199+35.100	-39.000	755.229	755.243
C	1199+65.100	-39.000	755.247	755.252
CL Pier No. 1	1199+72.850	-39.000	755.258	755.258
D	1199+82.850	-39.000	755.269	755.272
E	1199+92.850	-39.000	755.276	755.286
F	1200+02.850	-39.000	755.279	755.293
G	1200+12.850	-39.000	755.278	755.292
H	1200+22.850	-39.000	755.273	755.282
J	1200+32.850	-39.000	755.264	755.265
CL Pier No. 2	1200+39.350	-39.000	755.255	755.255
K	1200+49.350	-39.000	755.240	755.244
L	1200+59.350	-39.000	755.219	755.231
M	1200+69.350	-39.000	755.195	755.201
CL Brg E Abut	1200+77.100	-39.000	755.174	755.174
Bk E Abut	1200+79.350	-39.000	755.167	755.167

BEAM 3

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	-33.646	755.273	755.273
CL Brg W Abut	1199+35.100	-33.646	755.280	755.280
A	1199+45.100	-33.646	755.306	755.311
B	1199+35.100	-33.646	755.328	755.336
C	1199+65.100	-33.646	755.346	755.348
CL Pier No. 1	1199+72.850	-33.646	755.358	755.358
D	1199+82.850	-33.646	755.369	755.375
E	1199+92.850	-33.646	755.376	755.390
F	1200+02.850	-33.646	755.379	755.397
G	1200+12.850	-33.646	755.377	755.393
H	1200+22.850	-33.646	755.372	755.383
J	1200+32.850	-33.646	755.363	755.366
CL Pier No. 2	1200+39.350	-33.646	755.353	755.353
K	1200+49.350	-33.646	755.339	755.341
L	1200+59.350	-33.646	755.319	755.327
M	1200+69.350	-33.646	755.293	755.299
CL Brg E Abut	1200+77.100	-33.646	755.273	755.273
Bk E Abut	1200+79.350	-33.646	755.267	755.267

BEAM 4

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	-28.292	755.357	755.357
CL Brg W Abut	1199+35.100	-28.292	755.364	755.364
A	1199+45.100	-28.292	755.390	755.395
B	1199+35.100	-28.292	755.412	755.420
C	1199+65.100	-28.292	755.430	755.432
CL Pier No. 1	1199+72.850	-28.292	755.442	755.442
D	1199+82.850	-28.292	755.453	755.458
E	1199+92.850	-28.292	755.459	755.474
F	1200+02.850	-28.292	755.462	755.481
G	1200+12.850	-28.292	755.461	755.479
H	1200+22.850	-28.292	755.456	755.467
J	1200+32.850	-28.292	755.447	755.450
CL Pier No. 2	1200+39.350	-28.292	755.439	755.439
K	1200+49.350	-28.292	755.423	755.425
L	1200+59.350	-28.292	755.403	755.410
M	1200+69.350	-28.292	755.379	755.383
CL Brg E Abut	1200+77.100	-28.292	755.357	755.357
Bk E Abut	1200+79.350	-28.292	755.350	755.350

BEAM 5

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	-22.938	755.441	755.441
CL Brg W Abut	1199+35.100	-22.938	755.448	755.448
A	1199+45.100	-22.938	755.474	755.479
B	1199+35.100	-22.938	755.496	755.504
C	1199+65.100	-22.938	755.514	755.516
CL Pier No. 1	1199+72.850	-22.938	755.526	755.526
D	1199+82.850	-22.938	755.536	755.542
E	1199+92.850	-22.938	755.543	755.558
F	1200+02.850	-22.938	755.546	755.565
G	1200+12.850	-22.938	755.545	755.563
H	1200+22.850	-22.938	755.540	755.551
J	1200+32.850	-22.938	755.531	755.534
CL Pier No. 2	1200+39.350	-22.938	755.522	755.522
K	1200+49.350	-22.938	755.507	755.509
L	1200+59.350	-22.938	755.487	755.494
M	1200+69.350	-22.938	755.463	755.467
CL Brg E Abut	1200+77.100	-22.938	755.441	755.441
Bk E Abut	1200+79.350	-22.938	755.434	755.434

BEAM 6

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	-17.583	755.525	755.525
CL Brg W Abut	1199+35.100	-17.583	755.531	755.531
A	1199+45.100	-17.583	755.558	755.563
B	1199+35.100	-17.583	755.580	755.587
C	1199+65.100	-17.583	755.598	755.600
CL Pier No. 1	1199+72.850	-17.583	755.609	755.609
D	1199+82.850	-17.583	755.620	755.626
E	1199+92.850	-17.583	755.627	755.641
F	1200+02.850	-17.583	755.630	755.649
G	1200+12.850	-17.583	755.629	755.646
H	1200+22.850	-17.583	755.624	755.635
J	1200+32.850	-17.583	755.615	755.618
CL Pier No. 2	1200+39.350	-17.583	755.606	755.606
K	1200+49.350	-17.583	755.590	755.593
L	1200+59.350	-17.583	755.570	755.578
M	1200+69.350	-17.583	755.546	755.551
CL Brg E Abut	1200+77.100	-17.583	755.525	755.525
Bk E Abut	1200+79.350	-17.583	755.518	755.518

BEAM 7

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	-12.667	755.602	755.602
CL Brg W Abut	1199+35.100	-12.667	755.608	755.608
A	1199+45.100	-12.667	755.635	755.644
B	1199+35.100	-12.667	755.657	755.663
C	1199+65.100	-12.667	755.675	755.677
CL Pier No. 1	1199+72.850	-12.667	755.686	755.686
D	1199+82.850	-12.667	755.697	755.703
E	1199+92.850	-12.667	755.704	755.718
F	1200+02.850	-12.667	755.707	755.726
G	1200+12.850	-12.667	755.706	755.723
H	1200+22.850	-12.667	755.701	755.712
J	1200+32.850	-12.667	755.692	755.695
CL Pier No. 2	1200+39.350	-12.667	755.683	755.683
K	1200+49.350	-12.667	755.667	755.670
L	1200+59.350	-12.667	755.647	755.656
M	1200+69.350	-12.667	755.623	755.632
CL Brg E Abut	1200+77.100	-12.667	755.602	755.602
Bk E Abut	1200+79.350	-12.667	755.595	755.595

OPTIONAL LONGITUDINAL BONDED CONSTRUCTION JOINT (NORTH)

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	-11.396	755.603	755.603
CL Brg W Abut	1199+35.100	-11.396	755.609	755.609
A	1199+45.100	-11.396	755.636	755.645
B	1199+35.100	-11.396	755.658	755.665
C	1199+65.100	-11.396	755.676	755.678
CL Pier No. 1	1199+72.850	-11.396	755.687	755.687
D	1199+82.850	-11.396	755.698	755.704
E	1199+92.850	-11.396	755.705	755.719
F	1200+02.850	-11.396	755.708	755.727
G	1200+12.850	-11.396	755.707	755.724
H	1200+22.850	-11.396	755.702	755.713
J	1200+32.850	-11.396	755.693	755.696
CL Pier No. 2	1200+39.350	-11.396	755.684	755.684
K	1200+49.350	-11.396	755.668	755.671
L	1200+59.350	-11.396	755.648	755.657
M	1200+69.350	-11.396	755.624	755.633
CL Brg E Abut	1200+77.100	-11.396	755.603	755.603
Bk E Abut	1200+79.350	-11.396	755.596	755.596

BEAM 8

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	-7.750	755.546	755.546
CL Brg W Abut	1199+35.100	-7.750	755.552	755.552
A	1199+45.100	-7.750	755.579	755.586
B	1199+35.100	-7.750	755.601	755.608
C	1199+65.100	-7.750	755.619	755.621
CL Pier No. 1	1199+72.850	-7.750	755.630	755.630
D	1199+82.850	-7.750	755.641	755.647
E	1199+92.850	-7.750	755.648	755.662
F	1200+02.850	-7.750	755.651	755.669
G	1200+12.850	-7.750	755.650	755.667
H	1200+22.850	-7.750	755.645	755.656
J	1200+32.850	-7.750	755.635	755.639
CL Pier No. 2	1200+39.350	-7.750	755.627	755.627
K	1200+49.350	-7.750	755.611	755.614
L	1200+59.350	-7.750	755.591	755.600
M	1200+69.350	-7.750	755.567	755.576
CL Brg E Abut	1200+77.100	-7.750	755.546	755.546
Bk E Abut	1200+79.350	-7.750	755.539	755.539

BEAM 9

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	-2.833	755.469	755.469
CL Brg W Abut	1199+35.100	-2.833	755.475	755.475
A	1199+45.100	-2.833	755.502	755.511
B	1199+35.100	-2.833	755.524	755.531
C	1199+65.100	-2.833	755.542	755.544
CL Pier No. 1	1199+72.850			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 5
F.A.I. 74	44B-2BR	CHAMPAIGN	140	66	SHEET 23
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT			

Westbound Profile Grade Line

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	0.000	755.424	755.424
CL Brg W Abut	1199+35.100	0.000	755.431	755.431
A	1199+45.100	0.000	755.437	755.447
B	1199+55.100	0.000	755.479	755.487
C	1199+65.100	0.000	755.498	755.499
CL Pier No. 1	1199+72.850	0.000	755.509	755.509
D	1199+82.850	0.000	755.520	755.526
E	1199+92.850	0.000	755.527	755.541
F	1200+02.850	0.000	755.530	755.548
G	1200+12.850	0.000	755.528	755.546
H	1200+22.850	0.000	755.523	755.534
J	1200+32.850	0.000	755.514	755.517
CL Pier No. 2	1200+39.350	0.000	755.506	755.506
K	1200+49.350	0.000	755.490	755.493
L	1200+59.350	0.000	755.470	755.479
M	1200+69.350	0.000	755.446	755.454
CL Brg E Abut	1200+77.100	0.000	755.424	755.424
Bk E Abut	1200+79.350	0.000	755.418	755.418

BEAM 10

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	2.083	755.381	755.381
CL Brg W Abut	1199+35.100	2.083	755.388	755.388
A	1199+45.100	2.083	755.414	755.423
B	1199+55.100	2.083	755.436	755.444
C	1199+65.100	2.083	755.454	755.456
CL Pier No. 1	1199+72.850	2.083	755.465	755.465
D	1199+82.850	2.083	755.476	755.482
E	1199+92.850	2.083	755.483	755.498
F	1200+02.850	2.083	755.486	755.505
G	1200+12.850	2.083	755.485	755.502
H	1200+22.850	2.083	755.480	755.491
J	1200+32.850	2.083	755.471	755.474
CL Pier No. 2	1200+39.350	2.083	755.462	755.462
K	1200+49.350	2.083	755.446	755.449
L	1200+59.350	2.083	755.426	755.435
M	1200+69.350	2.083	755.402	755.411
CL Brg E Abut	1200+77.100	2.083	755.381	755.381
Bk E Abut	1200+79.350	2.083	755.374	755.374

BEAM 11

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	7.000	755.279	755.279
CL Brg W Abut	1199+35.100	7.000	755.285	755.285
A	1199+45.100	7.000	755.311	755.321
B	1199+55.100	7.000	755.333	755.341
C	1199+65.100	7.000	755.352	755.353
CL Pier No. 1	1199+72.850	7.000	755.363	755.363
D	1199+82.850	7.000	755.374	755.380
E	1199+92.850	7.000	755.381	755.393
F	1200+02.850	7.000	755.384	755.402
G	1200+12.850	7.000	755.383	755.400
H	1200+22.850	7.000	755.377	755.389
J	1200+32.850	7.000	755.368	755.371
CL Pier No. 2	1200+39.350	7.000	755.360	755.360
K	1200+49.350	7.000	755.344	755.347
L	1200+59.350	7.000	755.324	755.333
M	1200+69.350	7.000	755.300	755.308
CL Brg E Abut	1200+77.100	7.000	755.279	755.279
Bk E Abut	1200+79.350	7.000	755.272	755.272

BEAM 12

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	11.917	755.176	755.176
CL Brg W Abut	1199+35.100	11.917	755.183	755.183
A	1199+45.100	11.917	755.209	755.213
B	1199+55.100	11.917	755.231	755.236
C	1199+65.100	11.917	755.249	755.250
CL Pier No. 1	1199+72.850	11.917	755.261	755.261
D	1199+82.850	11.917	755.272	755.275
E	1199+92.850	11.917	755.278	755.288
F	1200+02.850	11.917	755.281	755.293
G	1200+12.850	11.917	755.280	755.292
H	1200+22.850	11.917	755.275	755.282
J	1200+32.850	11.917	755.266	755.267
CL Pier No. 2	1200+39.350	11.917	755.258	755.258
K	1200+49.350	11.917	755.242	755.243
L	1200+59.350	11.917	755.222	755.227
M	1200+69.350	11.917	755.196	755.201
CL Brg E Abut	1200+77.100	11.917	755.176	755.176
Bk E Abut	1200+79.350	11.917	755.169	755.169

BEAM 13

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	-11.917	755.176	755.176
CL Brg W Abut	1199+35.100	-11.917	755.183	755.183
A	1199+45.100	-11.917	755.209	755.213
B	1199+55.100	-11.917	755.231	755.236
C	1199+65.100	-11.917	755.249	755.250
CL Pier No. 1	1199+72.850	-11.917	755.261	755.261
D	1199+82.850	-11.917	755.272	755.275
E	1199+92.850	-11.917	755.278	755.288
F	1200+02.850	-11.917	755.281	755.293
G	1200+12.850	-11.917	755.280	755.292
H	1200+22.850	-11.917	755.275	755.282
J	1200+32.850	-11.917	755.266	755.267
CL Pier No. 2	1200+39.350	-11.917	755.258	755.258
K	1200+49.350	-11.917	755.242	755.243
L	1200+59.350	-11.917	755.222	755.227
M	1200+69.350	-11.917	755.196	755.201
CL Brg E Abut	1200+77.100	-11.917	755.176	755.176
Bk E Abut	1200+79.350	-11.917	755.169	755.169

BEAM 14

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	-7.000	755.279	755.279
CL Brg W Abut	1199+35.100	-7.000	755.285	755.285
A	1199+45.100	-7.000	755.311	755.321
B	1199+55.100	-7.000	755.333	755.341
C	1199+65.100	-7.000	755.352	755.353
CL Pier No. 1	1199+72.850	-7.000	755.363	755.363
D	1199+82.850	-7.000	755.374	755.380
E	1199+92.850	-7.000	755.381	755.393
F	1200+02.850	-7.000	755.384	755.402
G	1200+12.850	-7.000	755.383	755.400
H	1200+22.850	-7.000	755.377	755.389
J	1200+32.850	-7.000	755.368	755.371
CL Pier No. 2	1200+39.350	-7.000	755.360	755.360
K	1200+49.350	-7.000	755.344	755.347
L	1200+59.350	-7.000	755.324	755.333
M	1200+69.350	-7.000	755.300	755.308
CL Brg E Abut	1200+77.100	-7.000	755.279	755.279
Bk E Abut	1200+79.350	-7.000	755.272	755.272

BEAM 15

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	-2.083	755.381	755.381
CL Brg W Abut	1199+35.100	-2.083	755.388	755.388
A	1199+45.100	-2.083	755.414	755.423
B	1199+55.100	-2.083	755.436	755.444
C	1199+65.100	-2.083	755.454	755.456
CL Pier No. 1	1199+72.850	-2.083	755.465	755.465
D	1199+82.850	-2.083	755.476	755.482
E	1199+92.850	-2.083	755.483	755.498
F	1200+02.850	-2.083	755.486	755.505
G	1200+12.850	-2.083	755.485	755.502
H	1200+22.850	-2.083	755.480	755.491
J	1200+32.850	-2.083	755.471	755.474
CL Pier No. 2	1200+39.350	-2.083	755.462	755.462
K	1200+49.350	-2.083	755.446	755.449
L	1200+59.350	-2.083	755.426	755.435
M	1200+69.350	-2.083	755.402	755.411
CL Brg E Abut	1200+77.100	-2.083	755.381	755.381
Bk E Abut	1200+79.350	-2.083	755.374	755.374

Eastbound Profile Grade Line

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	0.000	755.424	755.424
CL Brg W Abut	1199+35.100	0.000	755.431	755.431
A	1199+45.100	0.000	755.437	755.447
B	1199+55.100	0.000	755.479	755.487
C	1199+65.100	0.000	755.498	755.499
CL Pier No. 1	1199+72.850	0.000	755.509	755.509
D	1199+82.850	0.000	755.520	755.526
E	1199+92.850	0.000	755.527	755.541
F	1200+02.850	0.000	755.530	755.548
G	1200+12.850	0.000	755.528	755.546
H	1200+22.850	0.000	755.523	755.534
J	1200+32.850	0.000	755.514	755.517
CL Pier No. 2	1200+39.350	0.000	755.506	755.506
K	1200+49.350	0.000	755.490	755.493
L	1200+59.350	0.000	755.470	755.479
M	1200+69.350	0.000	755.446	755.454
CL Brg E Abut	1200+77.100	0.000	755.424	755.424
Bk E Abut	1200+79.350	0.000	755.418	755.418

BEAM 16

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	2.833	755.469	755.469
CL Brg W Abut	1199+35.100	2.833	755.475	755.475
A	1199+45.100	2.833	755.502	755.511
B	1199+55.100	2.833	755.524	755.531
C	1199+65.100	2.833	755.542	755.544
CL Pier No. 1	1199+72.850	2.833	755.553	755.553
D	1199+82.850	2.833	755.564	755.570
E	1199+92.850	2.833	755.571	755.583
F	1200+02.850	2.833	755.574	755.592
G	1200+12.850	2.833	755.573	755.590
H	1200+22.850	2.833	755.568	755.579
J	1200+32.850	2.833	755.558	755.562
CL Pier No. 2	1200+39.350	2.833	755.550	755.550
K	1200+49.350	2.833	755.534	755.537
L	1200+59.350	2.833	755.514	755.523
M	1200+69.350	2.833	755.490	755.499
CL Brg E Abut	1200+77.100	2.833	755.469	755.469
Bk E Abut	1200+79.350	2.833	755.462	755.462

BEAM 17

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	7.750	755.546	755.546
CL Brg W Abut	1199+35.100	7.750	755.552	755.552
A	1199+45.100	7.750	755.579	755.588
B	1199+55.100	7.750	755.601	755.608
C	1199+65.100	7.750	755.619	755.621
CL Pier No. 1	1199+72.850	7.750	755.630	755.630
D	1199+82.850	7.750	755.641	755.647
E				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 6
F.A.I. 74	04B-2BR	CHAMPAIGN	140	66	23
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT			

BEAM 18

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	12.667	755.602	755.602
CL Brg W Abut	1199+35.100	12.667	755.606	755.606
A	1199+45.100	12.667	755.635	755.644
B	1199+55.100	12.667	755.657	755.665
C	1199+65.100	12.667	755.675	755.677
CL Pier No. 1	1199+72.850	12.667	755.686	755.686
D	1199+82.850	12.667	755.677	755.703
E	1199+92.850	12.667	755.704	755.718
F	1200+02.850	12.667	755.707	755.726
G	1200+12.850	12.667	755.706	755.723
H	1200+22.850	12.667	755.701	755.712
J	1200+32.850	12.667	755.692	755.695
CL Pier No. 2	1200+39.350	12.667	755.683	755.683
K	1200+49.350	12.667	755.667	755.670
L	1200+59.350	12.667	755.647	755.656
M	1200+69.350	12.667	755.623	755.632
CL Brg E Abut	1200+77.100	12.667	755.602	755.602
Bk E Abut	1200+79.350	12.667	755.595	755.595

BEAM 19

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	17.583	755.525	755.525
CL Brg W Abut	1199+35.100	17.583	755.531	755.531
A	1199+45.100	17.583	755.558	755.567
B	1199+55.100	17.583	755.580	755.587
C	1199+65.100	17.583	755.598	755.600
CL Pier No. 1	1199+72.850	17.583	755.609	755.609
D	1199+82.850	17.583	755.620	755.626
E	1199+92.850	17.583	755.627	755.641
F	1200+02.850	17.583	755.630	755.649
G	1200+12.850	17.583	755.629	755.646
H	1200+22.850	17.583	755.624	755.635
J	1200+32.850	17.583	755.615	755.618
CL Pier No. 2	1200+39.350	17.583	755.606	755.606
K	1200+49.350	17.583	755.590	755.593
L	1200+59.350	17.583	755.570	755.579
M	1200+69.350	17.583	755.546	755.555
CL Brg E Abut	1200+77.100	17.583	755.525	755.525
Bk E Abut	1200+79.350	17.583	755.518	755.518

BEAM 20

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	22.500	755.448	755.448
CL Brg W Abut	1199+35.100	22.500	755.454	755.454
A	1199+45.100	22.500	755.481	755.486
B	1199+55.100	22.500	755.503	755.510
C	1199+65.100	22.500	755.521	755.523
CL Pier No. 1	1199+72.850	22.500	755.532	755.532
D	1199+82.850	22.500	755.543	755.549
E	1199+92.850	22.500	755.550	755.564
F	1200+02.850	22.500	755.553	755.572
G	1200+12.850	22.500	755.552	755.569
H	1200+22.850	22.500	755.547	755.558
J	1200+32.850	22.500	755.537	755.541
CL Pier No. 2	1200+39.350	22.500	755.529	755.529
K	1200+49.350	22.500	755.513	755.516
L	1200+59.350	22.500	755.493	755.501
M	1200+69.350	22.500	755.469	755.474
CL Brg E Abut	1200+77.100	22.500	755.448	755.448
Bk E Abut	1200+79.350	22.500	755.441	755.441

BEAM 21

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	28.000	755.362	755.362
CL Brg W Abut	1199+35.100	28.000	755.368	755.368
A	1199+45.100	28.000	755.394	755.400
B	1199+55.100	28.000	755.417	755.424
C	1199+65.100	28.000	755.435	755.437
CL Pier No. 1	1199+72.850	28.000	755.446	755.446
D	1199+82.850	28.000	755.457	755.463
E	1199+92.850	28.000	755.464	755.478
F	1200+02.850	28.000	755.467	755.485
G	1200+12.850	28.000	755.466	755.483
H	1200+22.850	28.000	755.461	755.472
J	1200+32.850	28.000	755.451	755.455
CL Pier No. 2	1200+39.350	28.000	755.443	755.443
K	1200+49.350	28.000	755.427	755.430
L	1200+59.350	28.000	755.407	755.415
M	1200+69.350	28.000	755.383	755.387
CL Brg E Abut	1200+77.100	28.000	755.362	755.362
Bk E Abut	1200+79.350	28.000	755.355	755.355

BEAM 22

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	33.500	755.276	755.276
CL Brg W Abut	1199+35.100	33.500	755.282	755.282
A	1199+45.100	33.500	755.308	755.314
B	1199+55.100	33.500	755.331	755.338
C	1199+65.100	33.500	755.349	755.351
CL Pier No. 1	1199+72.850	33.500	755.360	755.360
D	1199+82.850	33.500	755.371	755.377
E	1199+92.850	33.500	755.378	755.392
F	1200+02.850	33.500	755.381	755.399
G	1200+12.850	33.500	755.380	755.397
H	1200+22.850	33.500	755.374	755.386
J	1200+32.850	33.500	755.365	755.368
CL Pier No. 2	1200+39.350	33.500	755.357	755.357
K	1200+49.350	33.500	755.341	755.344
L	1200+59.350	33.500	755.321	755.329
M	1200+69.350	33.500	755.297	755.301
CL Brg E Abut	1200+77.100	33.500	755.276	755.276
Bk E Abut	1200+79.350	33.500	755.269	755.269

Opt. Long. Bonded Const. Jt. (South)

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	36.000	755.236	755.236
CL Brg W Abut	1199+35.100	36.000	755.243	755.243
A	1199+45.100	36.000	755.269	755.274
B	1199+55.100	36.000	755.291	755.299
C	1199+65.100	36.000	755.310	755.311
CL Pier No. 1	1199+72.850	36.000	755.321	755.321
D	1199+82.850	36.000	755.332	755.338
E	1199+92.850	36.000	755.339	755.353
F	1200+02.850	36.000	755.342	755.360
G	1200+12.850	36.000	755.340	755.358
H	1200+22.850	36.000	755.335	755.346
J	1200+32.850	36.000	755.326	755.329
CL Pier No. 2	1200+39.350	36.000	755.318	755.318
K	1200+49.350	36.000	755.302	755.305
L	1200+59.350	36.000	755.282	755.290
M	1200+69.350	36.000	755.258	755.262
CL Brg E Abut	1200+77.100	36.000	755.236	755.236
Bk E Abut	1200+79.350	36.000	755.230	755.230

BEAM 23

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	39.000	755.174	755.174
CL Brg W Abut	1199+35.100	39.000	755.181	755.181
A	1199+45.100	39.000	755.207	755.212
B	1199+55.100	39.000	755.229	755.237
C	1199+65.100	39.000	755.247	755.249
CL Pier No. 1	1199+72.850	39.000	755.258	755.258
D	1199+82.850	39.000	755.269	755.275
E	1199+92.850	39.000	755.276	755.291
F	1200+02.850	39.000	755.279	755.298
G	1200+12.850	39.000	755.278	755.296
H	1200+22.850	39.000	755.273	755.284
J	1200+32.850	39.000	755.264	755.267
CL Pier No. 2	1200+39.350	39.000	755.255	755.255
K	1200+49.350	39.000	755.240	755.242
L	1200+59.350	39.000	755.219	755.227
M	1200+69.350	39.000	755.195	755.200
CL Brg E Abut	1200+77.100	39.000	755.174	755.174
Bk E Abut	1200+79.350	39.000	755.167	755.167

BEAM 24

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
Bk W Abut	1199+32.850	44.500	755.060	755.060
CL Brg W Abut	1199+35.100	44.500	755.066	755.066
A	1199+45.100	44.500	755.092	755.098
B	1199+55.100	44.500	755.115	755.122
C	1199+65.100	44.500	755.133	755.135
CL Pier No. 1	1199+72.850	44.500	755.144	755.144
D	1199+82.850	44.500	755.155	755.161
E	1199+92.850	44.500	755.162	755.176
F	1200+02.850	44.500	755.165	755.183
G	1200+12.850	44.500	755.164	755.181
H	1200+22.850	44.500	755.159	755.170
J	1200+32.850	44.500	755.149	755.153
CL Pier No. 2	1200+39.350	44.500	755.141	755.141
K	1200+49.350	44.500	755.125	755.128
L	1200+59.350	44.500	755.105	755.113
M	1200+69.350	44.500	755.081	755.085
CL Brg E Abut	1200+77.100	44.500	755.060	755.060
Bk E Abut	1200+79.350	44.500	755.053	755.053

BASCOR, INC.
consulting engineers and planners

DESIGNED	GSP
CHECKED	HE
DRAWN	SAW
CHECKED	GSP

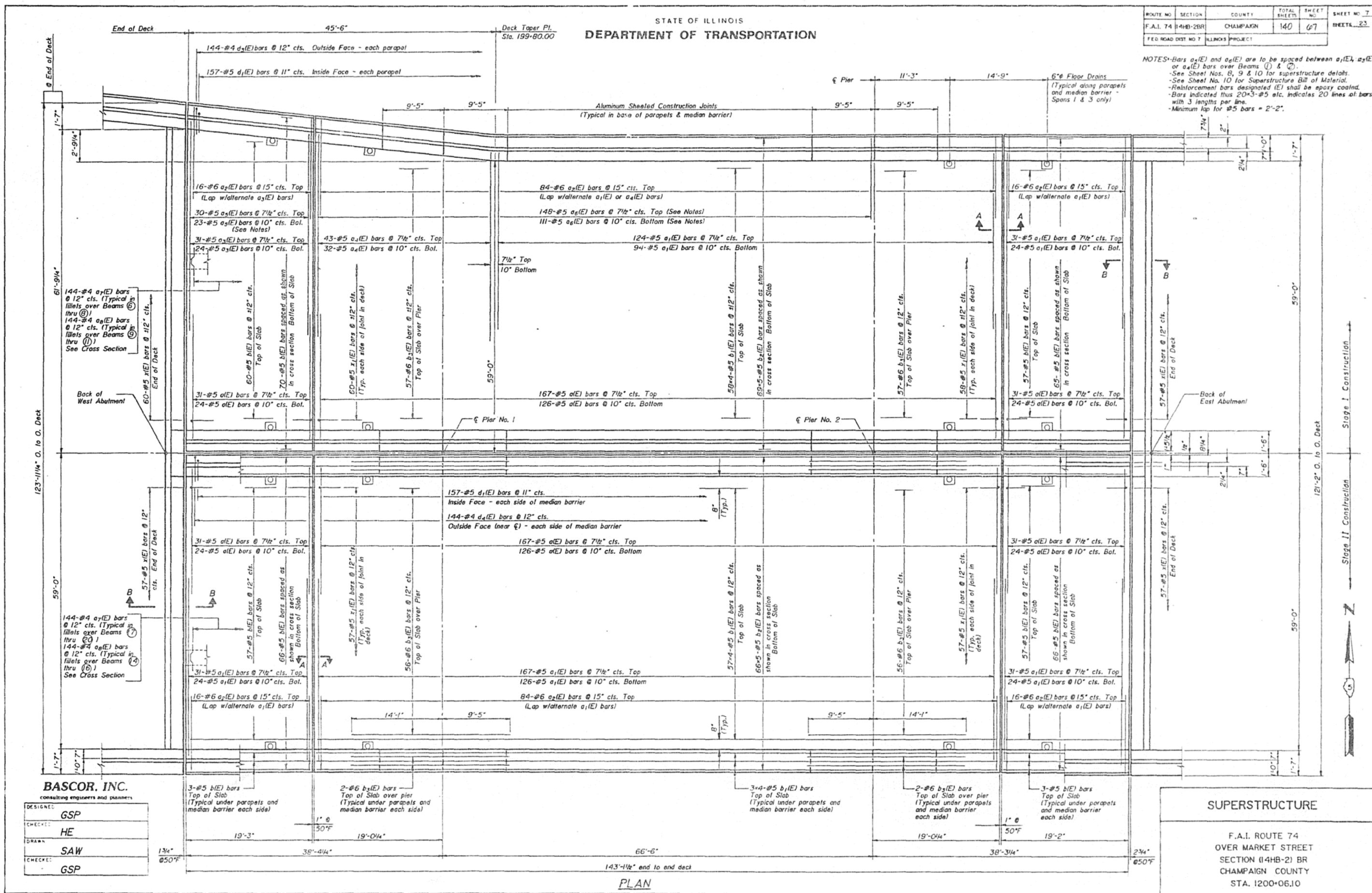
TOP OF SLAB ELEVATIONS 3

F.A.I. ROUTE 74
OVER MARKET STREET
SECTION 04B-2) BR
CHAMPAIGN COUNTY
STA. 1200+06.10

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO	SHEET NO. 7
F.A.I. 74	14HB-2BR	CHAMPAIGN	140	67	SHEETS 23
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT			

NOTES: Bars $a_1(E)$ and $a_2(E)$ are to be spaced between $a_1(E)$, $a_2(E)$ or $a_4(E)$ bars over Beams (1) & (2).
-See Sheet Nos. 8, 9 & 10 for superstructure details.
-See Sheet No. 10 for Superstructure Bill of Material.
-Reinforcement bars designated (E) shall be epoxy coated.
-Bars indicated thus 20'-3"-#5 etc. indicates 20 lines of bars with 3 lengths per line.
-Minimum lap for #5 bars = 2'-2".



BASCOR, INC.
consulting engineers and planners

DESIGNED:	GSP
CHECKED:	HE
DRAWN:	SAW
CHECKED:	GSP

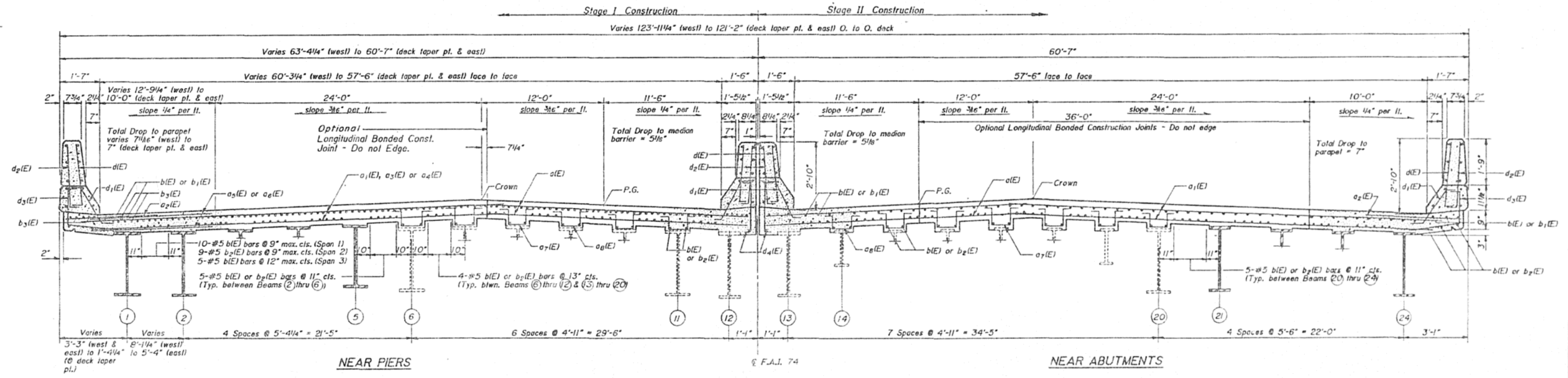
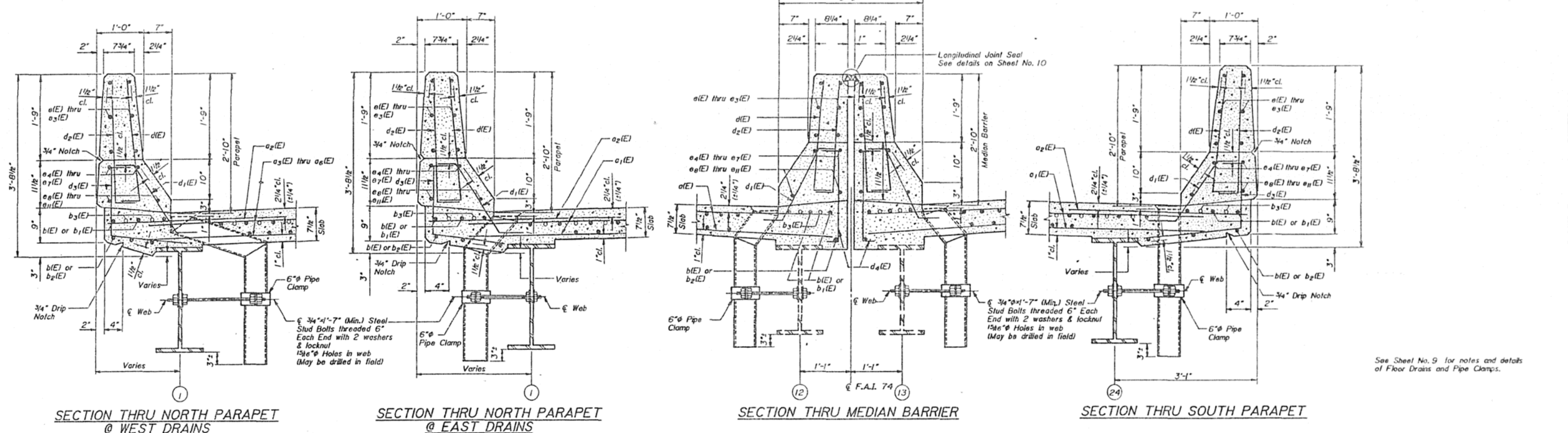
SUPERSTRUCTURE

F.A.I. ROUTE 74
OVER MARKET STREET
SECTION (14HB-2) BR
CHAMPAIGN COUNTY
STA. 1200+06.10

PLAN

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. B
F.A.I. 74	44B-2BR	CHAMPAIGN	140	68	23
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT					



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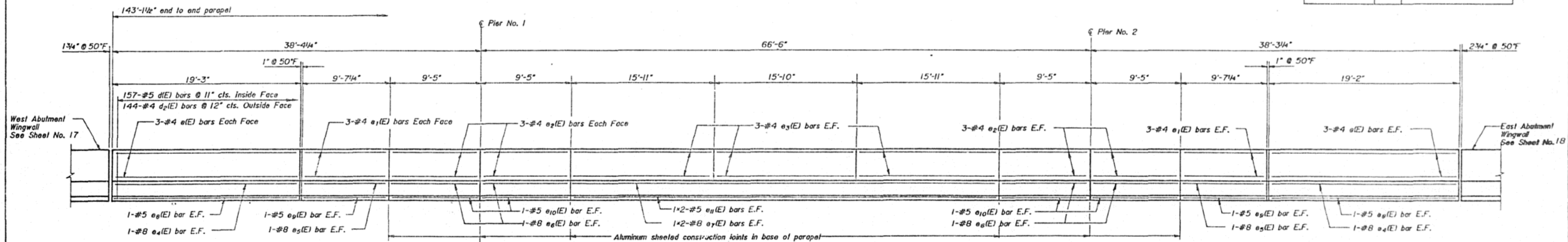
DESIGNED:	GSP
CHECKED:	HE
DRAWN:	SAW
CHECKED:	GSP

SUPERSTRUCTURE DETAILS I

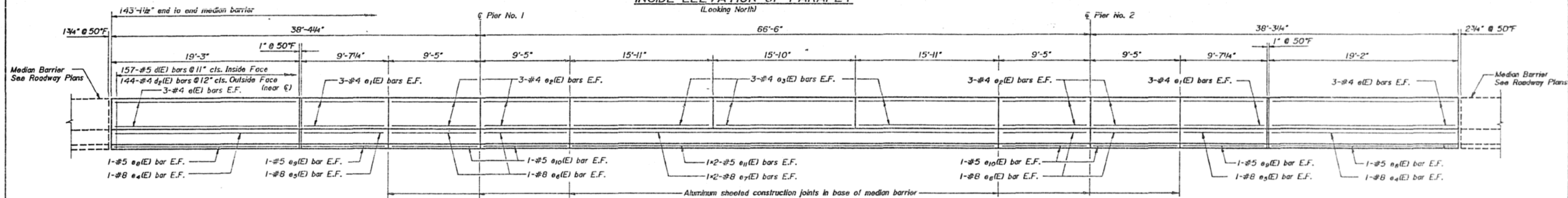
F.A.I. ROUTE 74
OVER MARKET STREET
SECTION 04B-2) BR
CHAMPAIGN COUNTY
STA. 1200-0610

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
F.A.I. 74 (4HB-2) BR		CHAMPAIGN	140	69	23
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT				



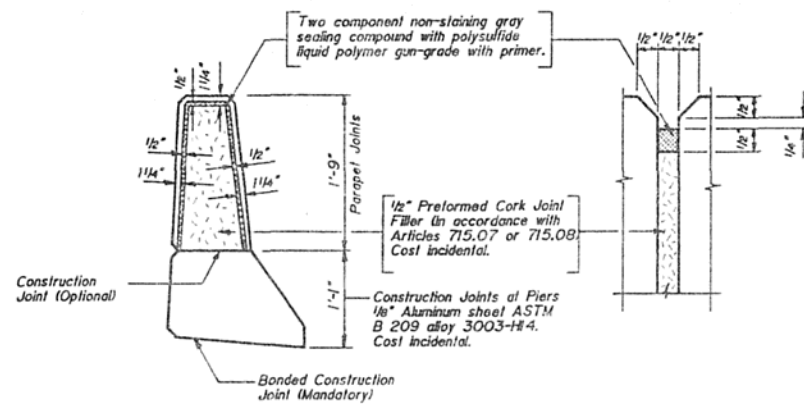
INSIDE ELEVATION OF PARAPET
(Looking North)



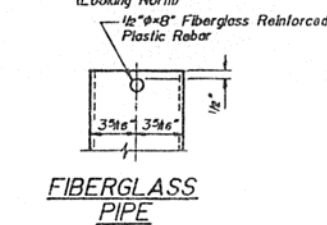
INSIDE ELEVATION OF MEDIAN BARRIER
(Looking North)

E.F. = Each Face

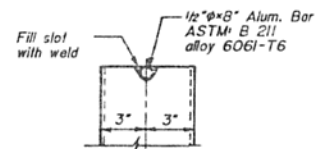
Minimum Laps*
#5 bars = 2'-2"
#8 bars = 4'-6"



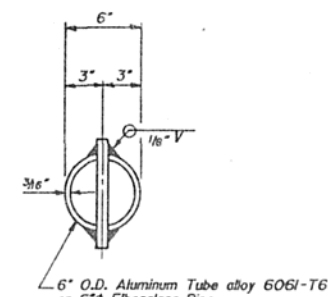
PARAPET & MEDIAN BARRIER JOINT
DETAILS



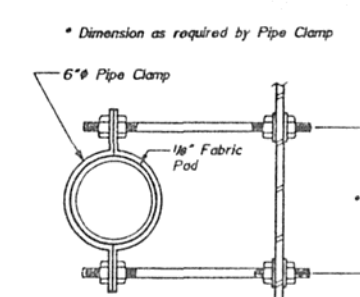
FIBERGLASS
PIPE



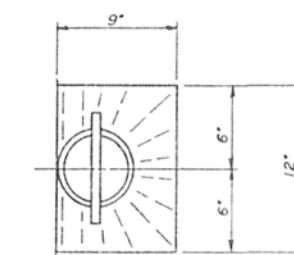
ALUMINUM
TUBE



TOP PLAN
(Showing Aluminum Tube)



SECTION THRU CLAMP



TOP PLAN

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CHECKED:	HE
DRAWN:	SAW
CHECKED:	GSP

NOTES:

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 Structures Painting Council's Spec. SSPC-SP1 & SSPC Paint 27 prior to painting. Fiberglass to have prewash as per MIL-P-15328 prior to painting.

Fiberglass pipe shall conform to ASTM D2996 with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum. The surface of the Fiberglass pipe shall be free of bond inhibiting agents.

SUPERSTRUCTURE DETAILS 2

F.A.I. ROUTE 74
OVER MARKET STREET
SECTION (4HB-2) BR
CHAMPAIGN COUNTY
STA. 1200+06.10

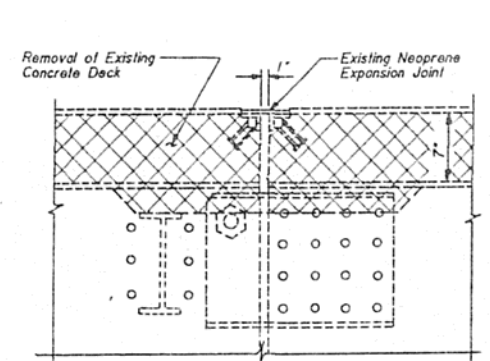
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 10
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FED. ROAD DIST. NO. 7 ILLINOIS PROJECT					

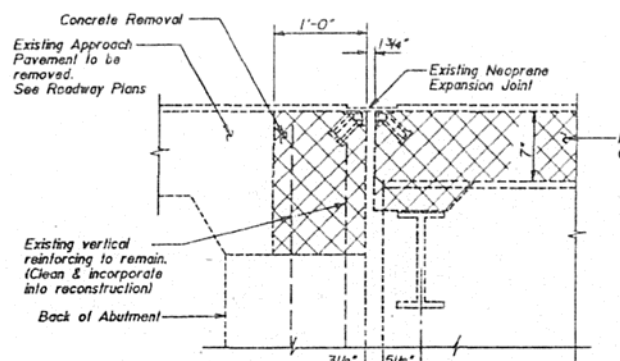
SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	806	#5	24'-2"	—
a1(E)	676	#5	37'-5"	—
a2(E)	232	#6	4'-0"	—
a3(E)	55	#5	40'-2"	—
a4(E)	75	#5	39'-0"	—
a5(E)	53	#5	11'-4"	—
a6(E)	259	#5	10'-2"	—
a7(E)	1008	#4	4'-4"	—
a8(E)	864	#4	3'-6"	—
b(E)	498	#5	18'-11"	—
b1(E)	460	#5	27'-9"	—
b2(E)	675	#5	22'-8"	—
b3(E)	242	#6	23'-6"	—
d(E)	628	#5	3'-0"	—
d1(E)	628	#5	2'-7"	—
d2(E)	576	#4	3'-0"	—
d3(E)	288	#4	3'-11"	—
d4(E)	288	#4	2'-4"	—
e(E)	48	#4	18'-10"	—
e1(E)	48	#4	9'-3"	—
e2(E)	96	#4	9'-1"	—
e3(E)	72	#4	15'-6"	—
e4(E)	16	#8	18'-10"	—
e5(E)	16	#8	9'-3"	—
e6(E)	32	#8	9'-1"	—
e7(E)	16	#8	25'-8"	—
e8(E)	16	#5	18'-10"	—
e9(E)	16	#5	9'-3"	—
e10(E)	32	#5	9'-1"	—
e11(E)	16	#5	24'-6"	—
x(E)	231	#5	4'-2"	—
x1(E)	464	#5	3'-7"	—
Item	Unit	Quantity		
Class X Concrete Superstructure	Cu.Yd.	526.1		
Reinforcement Bars, Epoxy Coated	Pound	124,630		
Protective Coat	Sq.Yd.	2071		
Floor Drains (Special)	Each	16		
Preformed Joint Seal 1 3/4"	Lin.Ft.	405		
Preformed Joint Seal 2 1/2"	Lin.Ft.	124		
Preformed Joint Seal 4"	Lin.Ft.	121		

SUPERSTRUCTURE DETAILS 3
F.A.I. ROUTE 74
OVER MARKET STREET
SECTION 04HB-2) BR
CHAMPAIGN COUNTY
STA. 1200+06.10



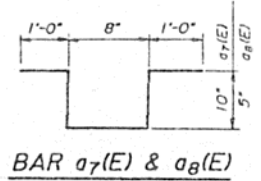
EXISTING SECTION THRU PIN



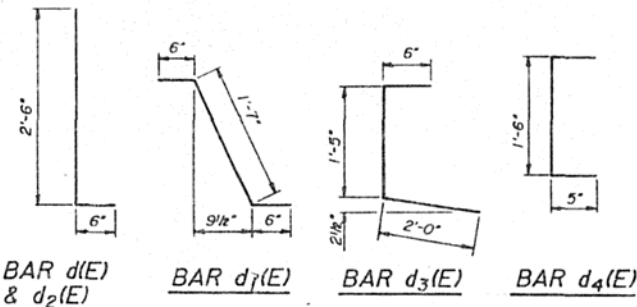
EXISTING SECTION THRU ABUTMENT

PLATE LENGTHS FOR JOINT SEALS

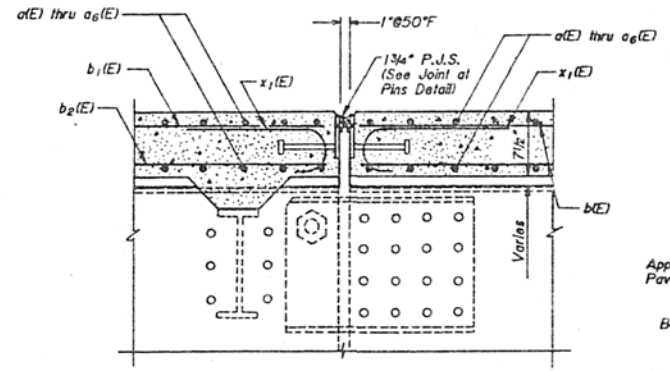
LOCATION	STAGE		
	I	II	III
W. Abut.	37'-4 1/2"	22'-10 3/4"	57'-6"
W. Pin Jt.	36'-2 3/4"	22'-10 3/4"	57'-6"
E. Pin Jt.	34'-7 1/4"	22'-10 3/4"	57'-6"
E. Abut.	34'-7 1/4"	22'-10 3/4"	57'-6"



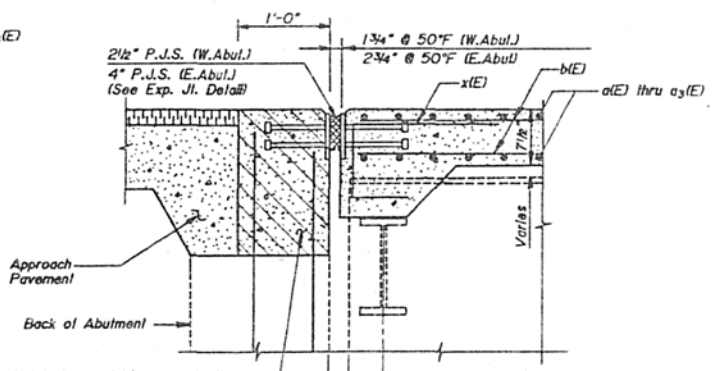
BAR a7(E) & a8(E)



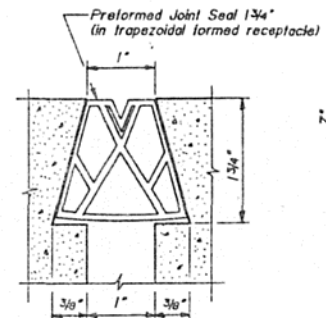
BAR d(E) & d2(E) BAR d7(E) BAR d3(E) BAR d4(E)



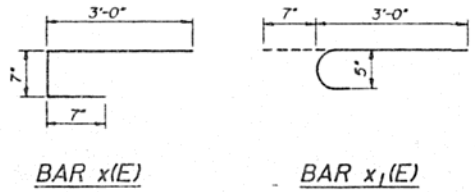
SECTION A-A



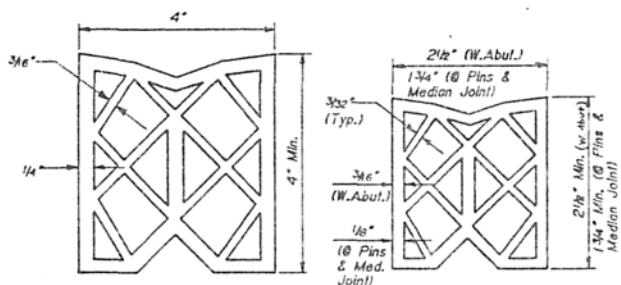
SECTION B-B



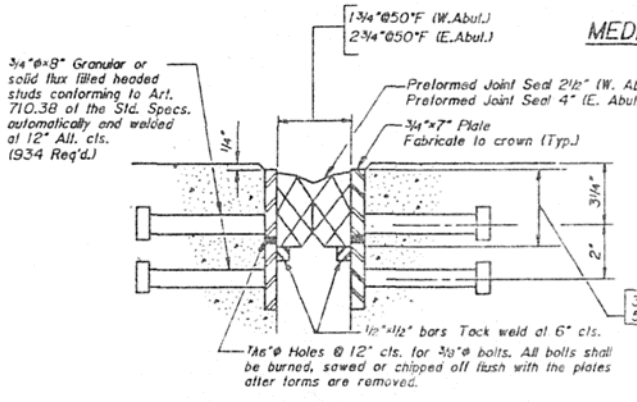
MEDIAN JOINT SEAL



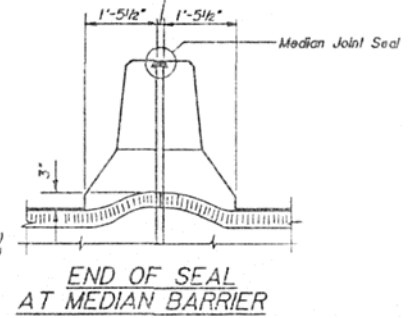
BAR x(E) BAR x1(E)



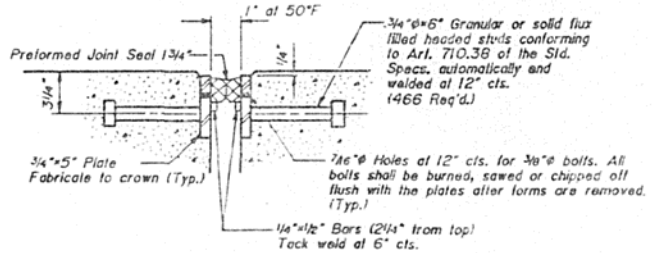
EAST ABUTMENT WEST ABUTMENT, JOINT AT PINS & MEDIAN JOINT



EXPANSION JOINT



END OF SEAL AT MEDIAN BARRIER END OF SEAL AT PARAPETS

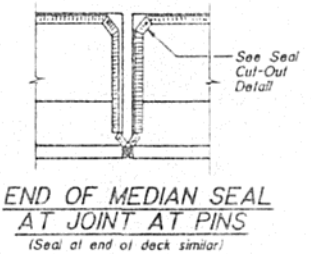


JOINT AT PINS

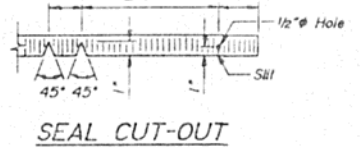
NOTES: 3/4" Plates for expansion joint and for joint at pins are to be furnished in segments of 20 ft. maximum length. Maximum space between installed segments shall be 3/8". Seal space with Silicone Sealant suitable for Structural Steel.

After fabrication all surfaces of the steel plates shall be given one shop coat of paint specified for Structural Steel.

See Table of Plate Lengths for Joint Seal above for total lengths of plates required in each stage of construction.



END OF MEDIAN SEAL AT JOINT AT PINS (Seal at end of deck similar)



SEAL CUT-OUT

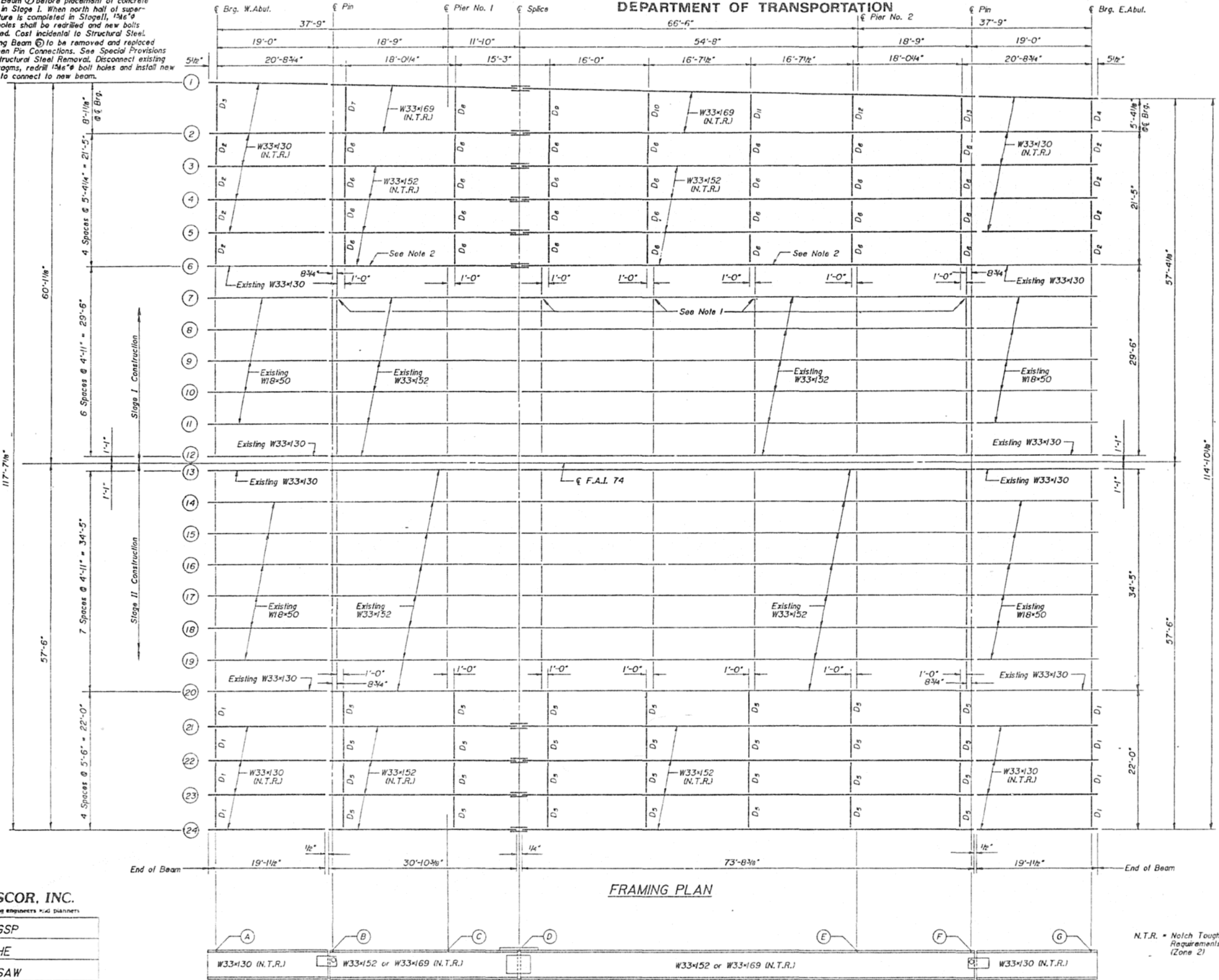
BASCOR, INC.
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DESIGNED:	GSP
CHECKED:	HE
DRAWN:	SAW
CHECKED:	GSP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 11
F.A.I. 74	44B-2BR	CHAMPAIGN	140	71	SHEET 23
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT				

NOTES:
1. Disconnect existing diaphragms, except at abutments and piers, between Beams ① and ② at Beam ② before placement of concrete deck in Stage I. When north half of superstructure is completed in Stage I, 1 1/2" dia bolt holes shall be re-drilled and new bolts installed. Cost incidental to Structural Steel.
2. Existing Beam ② to be removed and replaced between Pin Connections. See Special Provisions for Structural Steel Removal. Disconnect existing diaphragms, re-drill 1 1/2" dia bolt holes and install new bolts to connect to new beam.



INTERIOR BEAM MOMENT TABLE

	0.25 Span 1 or 0.75 Span 3		Pier No. 1 or 2		0.5 Span 2	
	Existing	New	Existing	New	Existing	New
	W18x50	W33x130	W33x152	W33x152	W33x152	W33x152
I_s (in ⁴)	800	6710	8160	8160	8160	8160
I_c (in ⁴)	4971.1	15670.2	10639.1	9827.3	24857.3	18780.6
S_s (in ³)	89.1	406	487	487	487	487
S_c (in ³)	213.2	564.1	565.9	530.6	811.8	669.5
Q (k/ft)	0.60	0.70	0.70	0.70	0.70	0.70
M_Q (k)	27.1	31.6	229.9	248.7	157.0	138.3
I_s (ksi)	3.65	0.93	5.66	6.13	3.87	3.41
S_Q (k/ft)	0.19	0.21	0.19	0.21	0.19	0.21
M_{S_Q} (k)	8.6	9.5	67.1	74.4	37.9	41.7
M_L (k)	80.8	90.2	359.8	402.0	410.4	458.5
M_{imp} (k)	24.2	27.1	101.5	113.4	107.1	119.7
Total (k)	113.6	126.8	528.4	589.8	555.4	620.1
I_s (ksi)	6.45	2.72	11.20	13.34	8.30	11.19
I_s (ksi)	10.10	3.65	16.86	19.47	12.17	14.60
VR (k)	25.0	27.9	36.7	41.0	27.3	30.5

INTERIOR BEAM REACTION TABLE

	Abutment		Pier	
	Existing W18x50	New W33x130	Existing W33x152	New W33x152
R_Q (k)	7.5	8.7	53.8	56.0
R_L (k)	19.2	21.5	36.8	41.1
Imp. (k)	5.8	6.4	10.4	11.6
R_{total} (k)	32.5	36.6	101.0	108.7

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing I_s total.
 I_c and S_c are the moment of inertia and section modulus of the composite section used in computing I_s total.
VR is the maximum I_s - impact shear range in span.

TOP OF FLANGE ELEVATIONS

Beam No.	W. Brg. (A)	W. Pin (B)	Pier 1 (C)	Splice (D)	Pier 2 (E)	E. Pin (F)	E. Brg. (G)
1	754.34	754.41	754.36	754.33	754.41	754.44	754.39
2	754.51	754.57	754.51	754.48	754.53	754.56	754.50
3	754.61	754.66	754.62	754.60	754.64	754.66	754.60
4	754.69	754.75	754.71	754.68	754.72	754.74	754.69
5	754.78	754.83	754.79	754.77	754.81	754.82	754.77
21	754.70	754.75	754.71	754.69	754.73	754.74	754.69
22	754.61	754.66	754.62	754.60	754.64	754.66	754.60
23	754.51	754.56	754.52	754.50	754.54	754.56	754.50
24	754.39	754.45	754.41	754.39	754.43	754.44	754.39

(For Fabrication Only)

FRAMING PLAN
F.A.I. ROUTE 74
OVER MARKET STREET
SECTION (44B-2) BR
CHAMPAIGN COUNTY
STA. 1200-06.10

BASCOR, INC.
Consulting Engineers and Planners
DESIGNED: GSP
CHECKED: HE
DRAWN: SAW
CHECKED: GSP

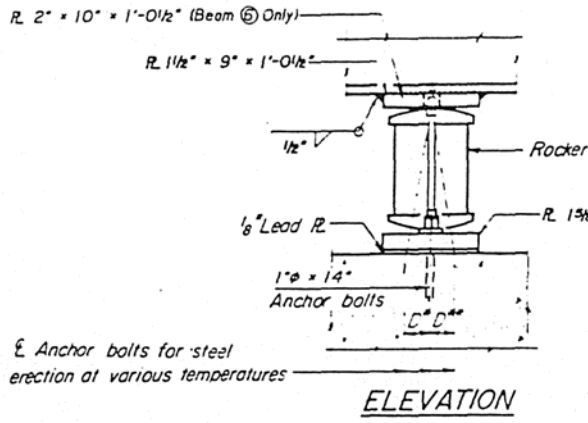
FRAMING PLAN

ELEVATION

N.T.R. = Notch Toughness Requirements (Zone 2)

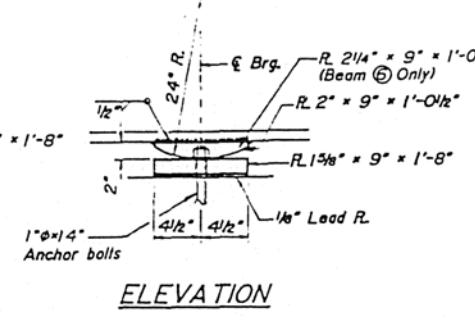
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO	SHEET NO 12
F.A.I. 74	144B-2BR	CHAMPAIGN	140	(72A)	SHEET 23
FED ROAD DIST NO 7	ILLINOIS PROJECT				

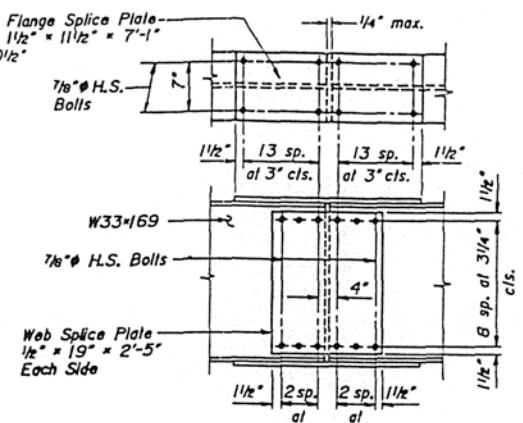


Anchor bolts for steel erection at various temperatures

ELEVATION



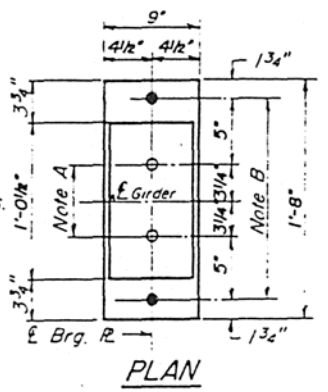
ELEVATION



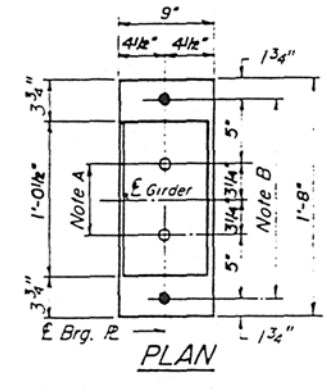
DETAIL OF SPLICE
(For New Beams (1) & (2))

NOTE A
1 3/8" Holes - 1" deep in top R. for pintles. Thread or press fit pintles into bottom R.

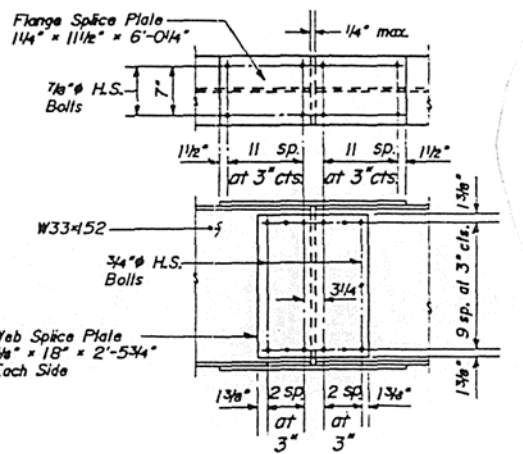
NOTE B
1 1/2" Holes for 1" anchor bolts. 5/16" x 2 1/2" R. Washers under nut



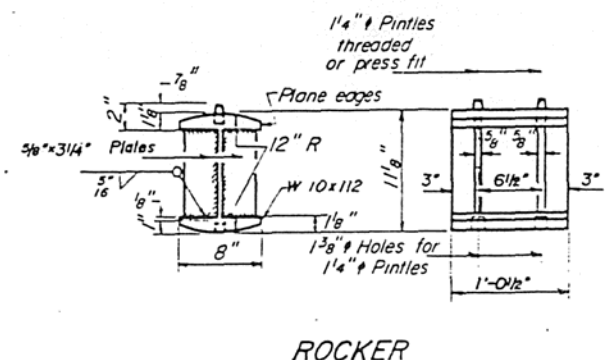
PLAN
AT PIER NO. 2



PLAN
AT PIER NO. 1



DETAIL OF SPLICE
(For New Beams (3) thru (5) & (2) thru (24))



ROCKER
(9 Required)

BEARING ASSEMBLY DETAILS
(For New Beams (1) thru (5) & (2) thru (24))

NOTE: For Beam (6) replacement provide top plates only of sizes shown. Existing rocker, pintles and base plates to remain.

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

- a) D* (Side of brg away from fixed brg):
D* = 1/8" per each 100' of expansion for every 15' fall below the normal temp. of 50°F
- D** (Side of brg toward fixed brg):
D** = 1/8" per each 100' of expansion for every 15' rise above the normal temp. of 50°F
- b) After girders have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be installed as shown on Sheet No. 14. All fixed anchor bolts may be built into the masonry

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DESIGNER	GSP
CHECKER	HE
DRAWN	SAW
CHECKED	GSP

AS REVISED

DIAPHRAGM D₁ THRU D₄
(See Table)

DIAPHRAGM D₅ THRU D₁₃
(See Table)

NOTES: Two hardened washers shall be required over all 1 3/8" holes in diaphragm connections.
All contact surfaces of joints shall be free of paint or lacquer.

DIAPHRAGM TABLE

Diaphragm No.	Req'd.	Beam Spacing
D ₁	8	5'-6"
D ₂	8	5'-4 1/4"
D ₃	1	8'-1 1/8"
D ₄	1	5'-4 1/8"
D ₅	28	5'-6"
D ₆	28	5'-4 1/4"
D ₇	1	7'-8 1/4"
D ₈	1	7'-4 1/8"
D ₉	1	7'-0 3/8"
D ₁₀	1	6'-8 7/8"
D ₁₁	1	6'-5"
D ₁₂	1	6'-1 1/8"
D ₁₃	1	5'-9"

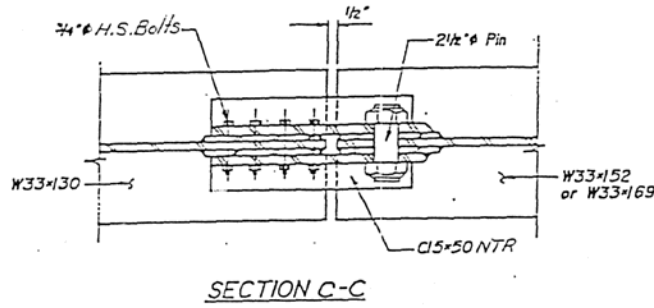
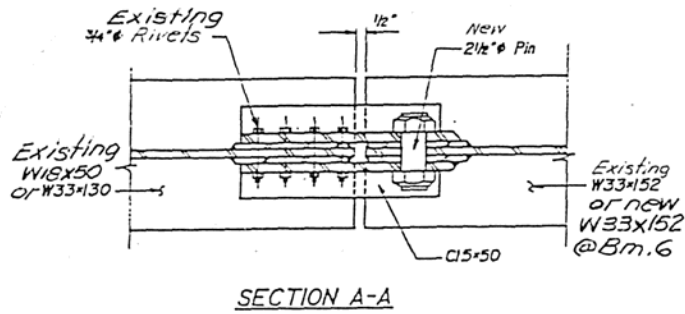
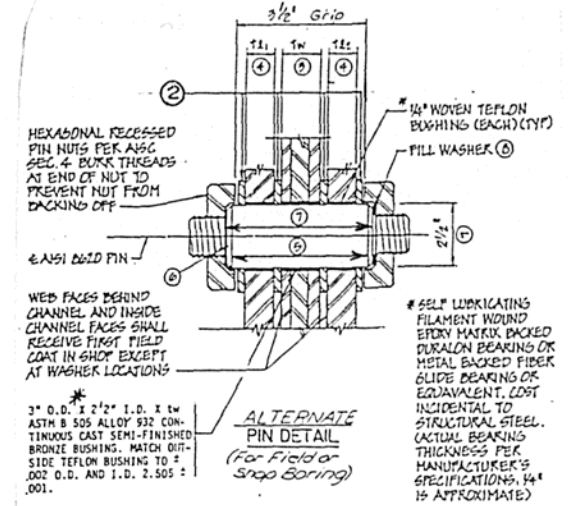
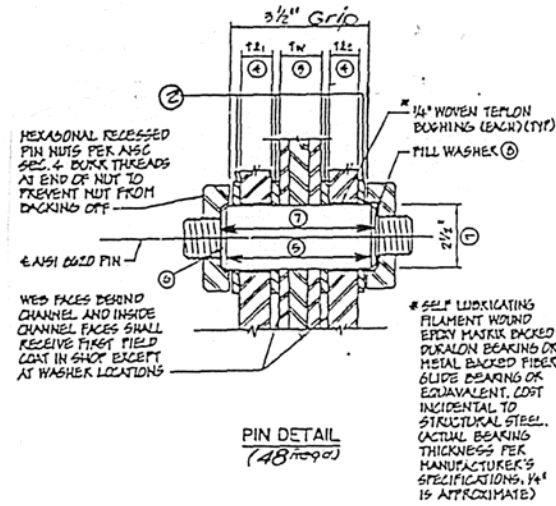
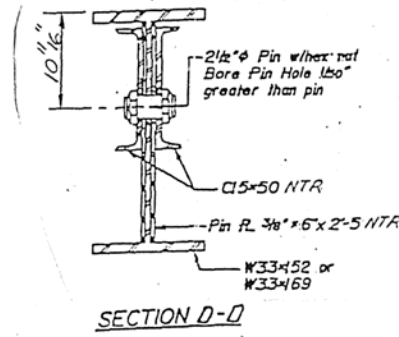
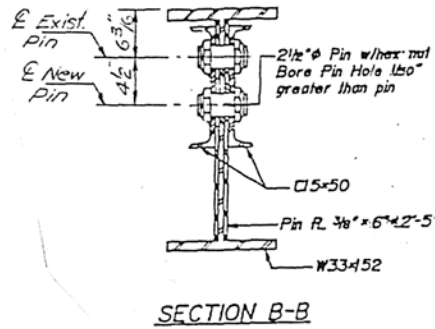
FRAMING DETAILS I

F.A.I. ROUTE 74
OVER MARKET STREET
SECTION 144B-2 BR
CHAMPAIGN COUNTY
STA. 1200+06.10

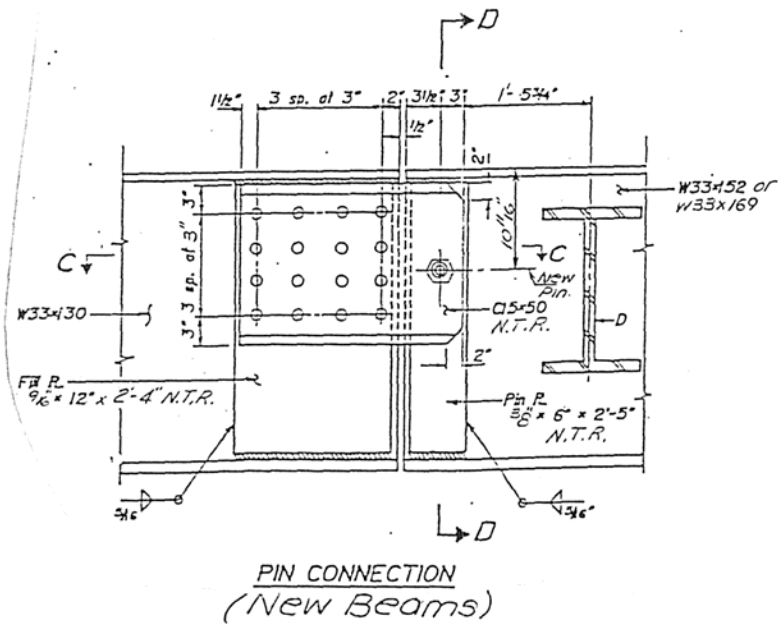
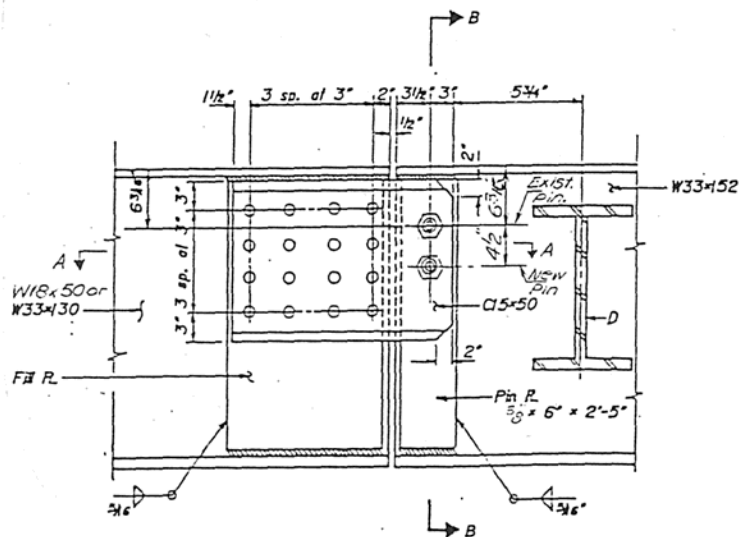
As Revised 4-5-90 L.W.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO	SHEET NO 12
F.A.I. 74	44B-2BR	CHAMPAIGN	140	74-1A	22
FED ROAD DIST NO 7	ALLOYS PROJECT				



- Pin Notes:
- Provide 4 washers per pin. Outside Dia. = 2 (Pin Ø) - 1/2". Inside Dia. = Pin Ø + 1/8". Washer thickness: 1/8" min. unless greater required for special material or maintenance. Material: Bronze, or Teflon (Do not paint washers & Do not use galvanized steel washers).
 - Web thickness shall be measured after fabrication and painting to include gaps between multiple plates and over thickness (within AASHTO A150 allowables) of individual plates. Faces of webs shall be primed, including area behind washers. Faces in contact with washers shall be perpendicular to Cl. pin.
 - Channel shall be primed, including area behind washers. No primer shall be allowed on Teflon bushing.
 - Bore hole for bushing shall be as specified by bearing manufacturer.
 - Each face of channel at washers shall be perpendicular to Cl. of pin. Faces may be machined to proper thickness if channels are thicker than spec'd, but this must not cause abrupt changes in geometry.
 - Limits of area to be case hardened per Act. 504.04(p). After polishing, protect from corrosion until installation. (See 9)
 - Chamfer per AISC Section 4.
 - Shoulder to shoulder dimension based on design plate thickness and nut recesses. If $S < Grip + 2$ recesses, add fills per 8.
 - Fill washer to insure nuts may be tightened against pin body without "clamping" material (See 7).
 - Bore diameter through web per 1007 art. 507.04(c). Inside of bore and pin surface shall be protected from corrosion until erection by grease or other temporary coatings. The coating must not degrade bearings or interfere with shop or field paint adhesion.
- Washers, fills, special coatings & dimensional checks are incidental to "Structural Steel" or "Pin Replacement" as applicable.



BASCOR, INC.
Consulting Engineers and Planners

DESIGNER	GSP
CHECKED	HE
DRAWN	SAW
CHECKED	GSP

Note: Existing pins shall be removed after new pins are in place.

Core shall be taken so as not to damage the existing beams when the pins are removed.

As Revised 4-5-90 L.W.

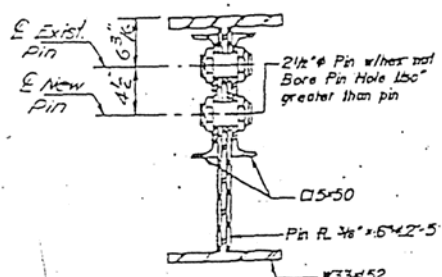
AS REVISED

FRAMING DETAILS (1A)

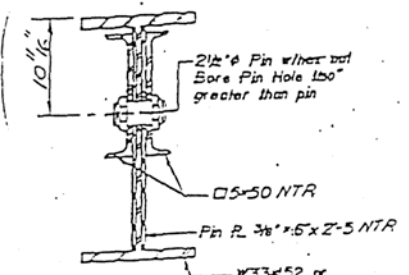
F.A.I. ROUTE 74
OVER MARKET STREET
SECTION (44B-2) BR
CHAMPAIGN COUNTY
STA. 1200+06.10

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

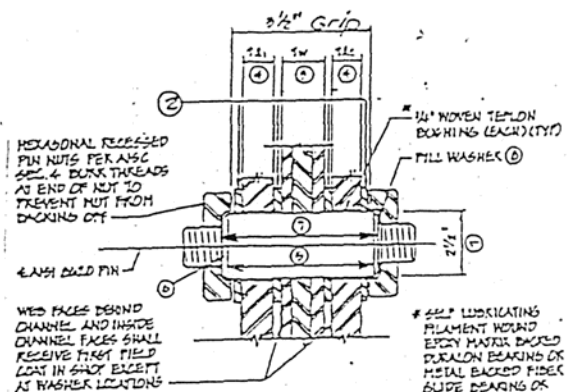
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F.A.I. 74	04MB-2B	CHAMPAIGN	100	100	12
FED. ROAD DIST. NO. 1	ILLINOIS PROJECT				



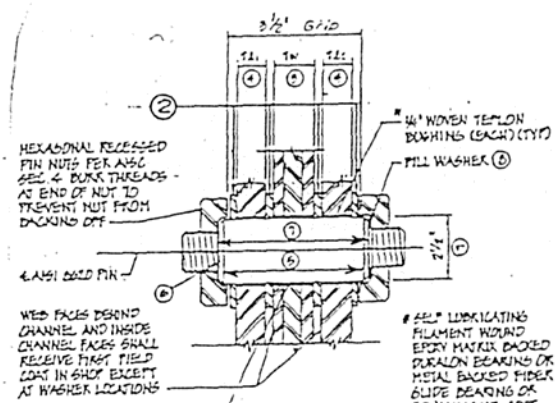
SECTION B-B



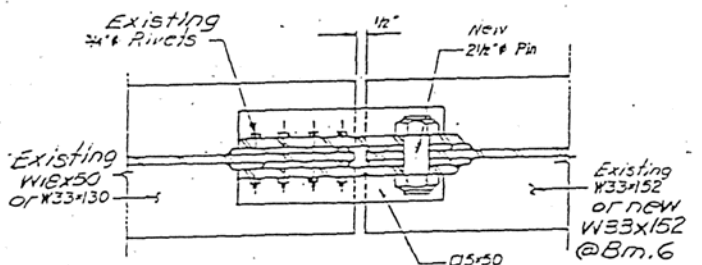
SECTION D-D



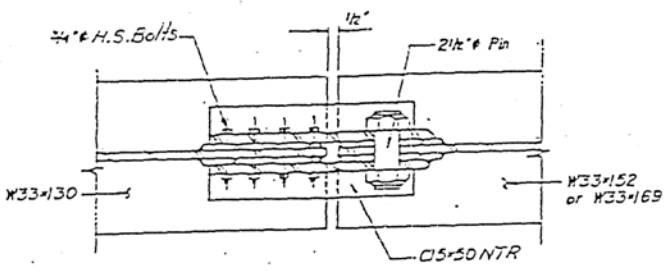
PIN DETAIL
(487-90)



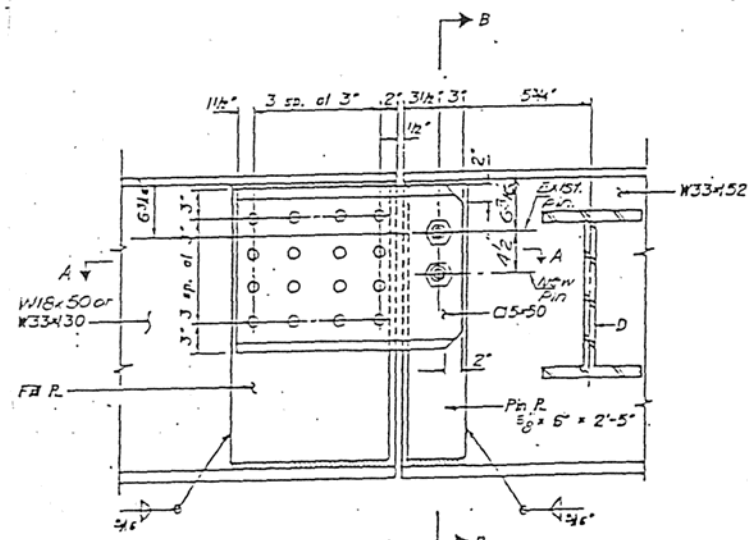
ALTERNATE
PIN DETAIL
(For Field or
Shop Boring)



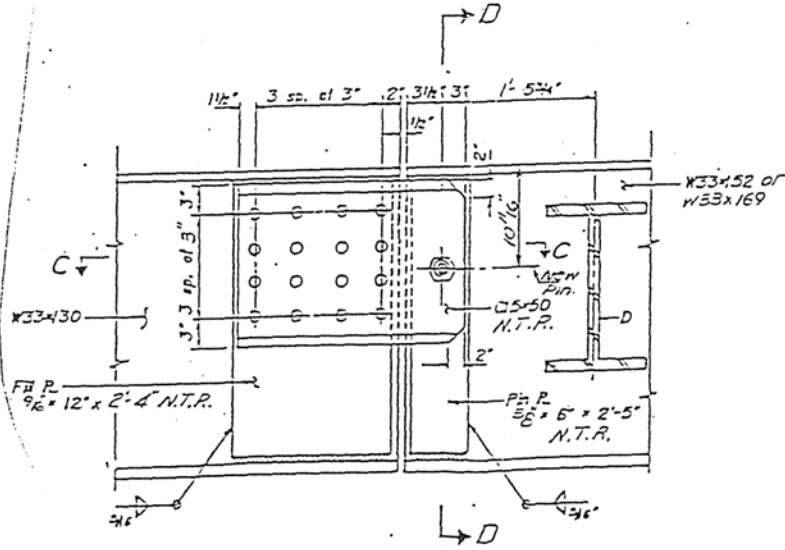
SECTION A-A



SECTION C-C



PIN CONNECTION
(Existing Beams)



PIN CONNECTION
(New Beams)

- Pin Notes:**
- Provide 4 washers per pin.
Outside Dia. = 3 (Pin Ø) - 1/2"
Inside Dia. = Pin Ø + 1/8"
Washer thickness = 1/8" min. unless greater required for special material or maintenance.
Material: bronze, or Teflon. Do not paint washers & do not use galvanized steel washers!
 - Web thickness shall be measured after fabrication and painting to include gaps between multiple plates and over thickness (within AASHTO limit allowances) of individual plates. Faces of webs shall be primed, including area behind washers. Faces in contact with washers shall be perpendicular to CL pin.
 - Channel shall be primed, including area behind washers. No primer shall be allowed on top flange bushing.
 - Note: hole for bushing shall be as specified by bearing manufacturer.
 - Each face of channel at washers shall be perpendicular to C.L. of pin. Faces may be machined to proper thickness if channels are thicker than spec'd, but this must not cause abrupt changes in geometry.
 - Limits of area to be case hardened per Art. 304.04(p). After polishing, protect from corrosion until installation. (See 9)
 - Chamber per AISC Section 4.
 - Shoulder to shoulder dimension based on design plate thickness and nut recesses. If $S < Grip + 2$ increase, and fill per 8.
 - Fill washer to insure nuts may be tightened against pin body without "clamping" material (See 7).
 - Note: hole diameter through web per IDOT art. 307.04(f). Inside of hole and pin surface shall be protected from corrosion until erection by grease or other temporary coatings. The coating must not degrade bearings or interfere with shop or field paint adhesion.
- Washers, fills, special coatings (dimensional checks) are incidental to "Structural Steel" or "Pin Replacement" as applicable.

BASCOR, INC.
Consulting Engineers and Planners

DESIGNED	GSP
CHECKED	HE
DRAWN	SAW
CHECKED	GSP

Note: Existing pins shall be removed after new pins are in place.
Core shall be taken so as not to damage the existing beams when the pins are removed.

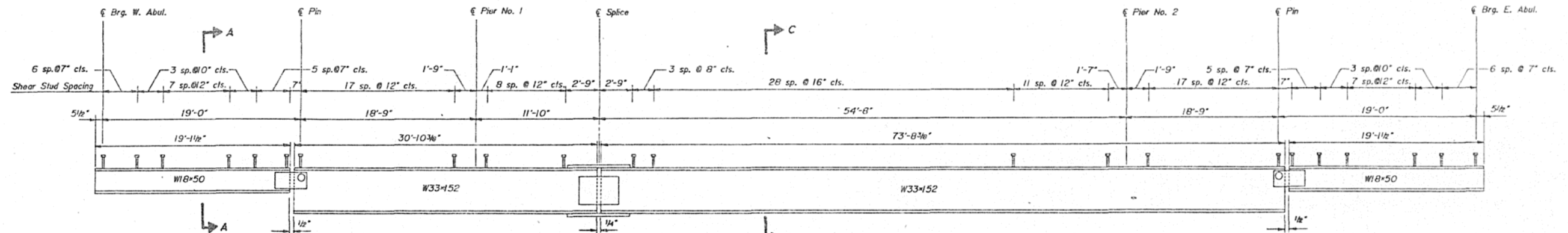
As Revised 4-5-90 L.W.

AS REVISED

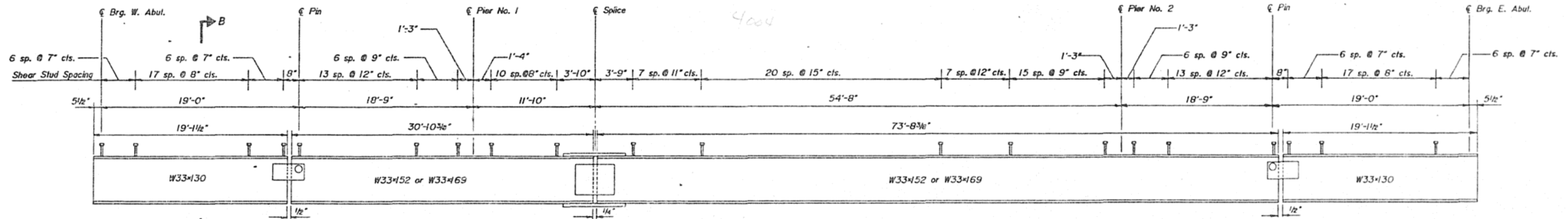
FRAMING DETAILS (1A)
F.A.I. ROUTE 74
OVER MARKET STREET
SECTION 04MB-2J BR
CHAMPAIGN COUNTY
STA. 1200-06J0

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
F.A.I. 74	14HB-2BR	CHAMPAIGN	140	73	23
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT				

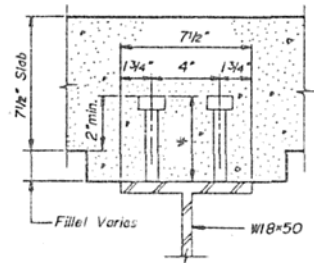


BEAMS (7) thru (11) & (14) thru (19)
(No. of Studs Req'd. = 364 per beam)

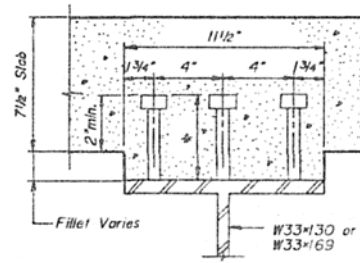


BEAMS (1) thru (6), (12), (13) & (20) thru (24)
(No. of Studs Req'd. = 483 per beam)

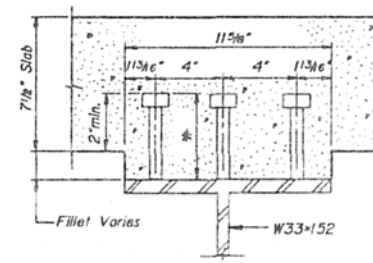
NOTE: Stud Shear Connectors at the spacing indicated shall be installed on the top flanges of all existing and new beams in accordance with Art. 507.081m) of the Standard Specifications.



SECTION A-A



SECTION B-B



SECTION C-C

4" minimum

BILL OF MATERIAL

Item	Unit	Quantity
Stud Shear Connectors	Each	10,283

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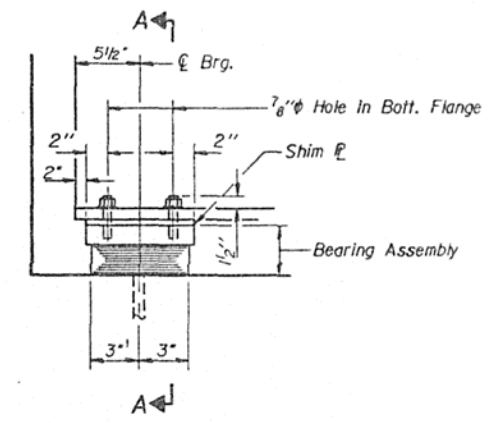
DESIGNED:	GSP
CHECKED:	HE
DRAWN:	SAW
CHECKED:	GSP

FRAMING DETAILS 2

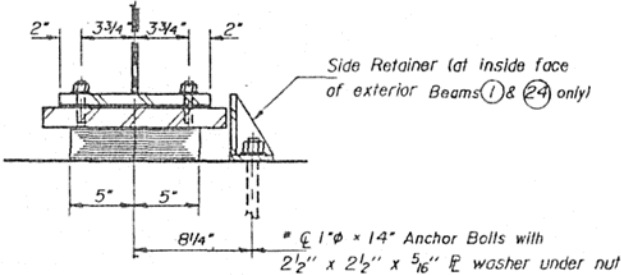
F.A.I. ROUTE 74
OVER MARKET STREET
SECTION (14HB-2) BR
CHAMPAIGN COUNTY
STA. 1200+06.10

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

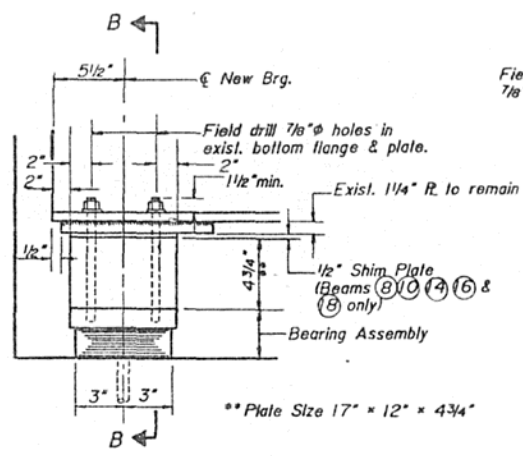
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 14
F.A.I. 74	4HB-2BR	CHAMPAIGN	140	74	SHEETS 23
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT				



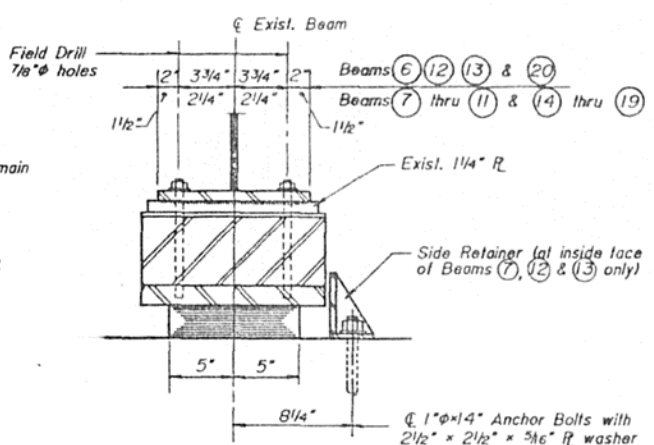
ELEVATION AT ABUT.



SECTION A-A

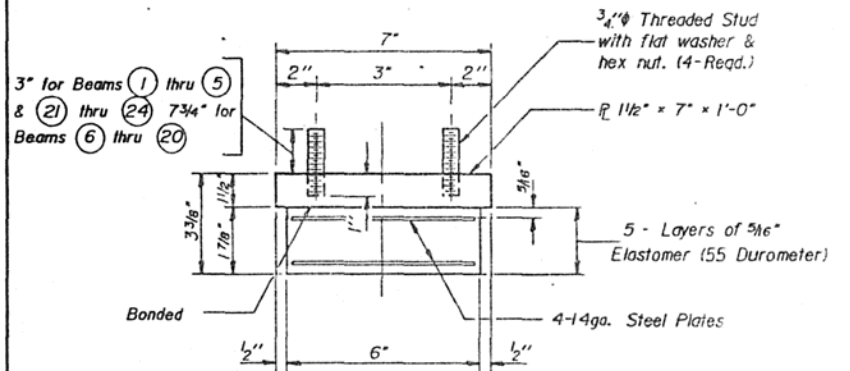


ELEVATION AT ABUT.



SECTION B-B

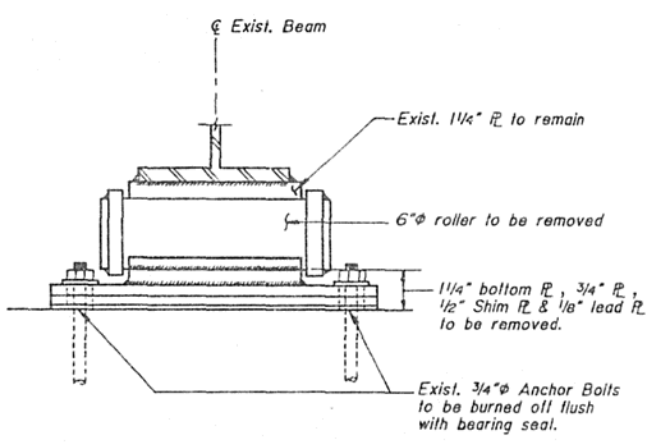
TYPE I ELASTOMERIC EXP. BRG.
AT NEW BEAMS (1) THRU (5) & (21) THRU (24)



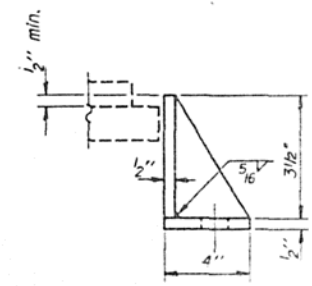
BEARING ASSEMBLY

Note: Shim plates shall not be placed under Bearing Assembly.

TYPE I ELASTOMERIC EXP. BRG.
AT EXIST. BEAMS (6) THRU (20)



EXISTING ROLLER BEARING



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

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DESIGNED	GSP
CHECKED	HE
DRAWN	SAW
CHECKED	GSP

I-2-EI 12-1-83

BILL OF MATERIAL

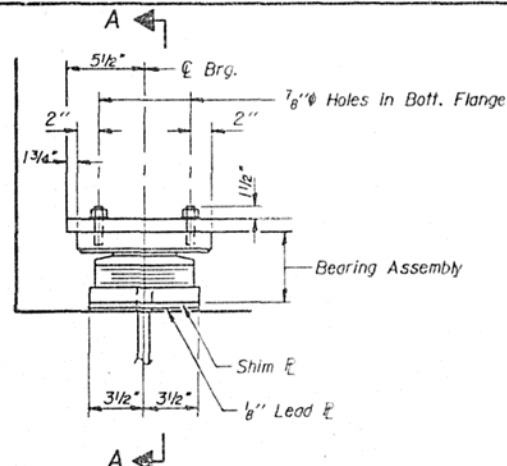
Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	24
Jack and Replace Bearings	Each	15

ELASTOMERIC BEARINGS-WEST ABUT.

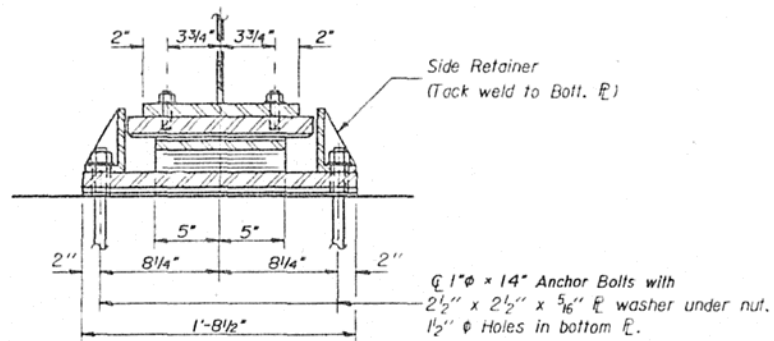
F.A.I. ROUTE 74
OVER MARKET STREET
SECTION (4HB-2) BR
CHAMPAIGN COUNTY
STA. 1200+06.10

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 15
F.A.I. 74	44B-2BR	CHAMPAIGN	140	75	SHEETS 23
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT				

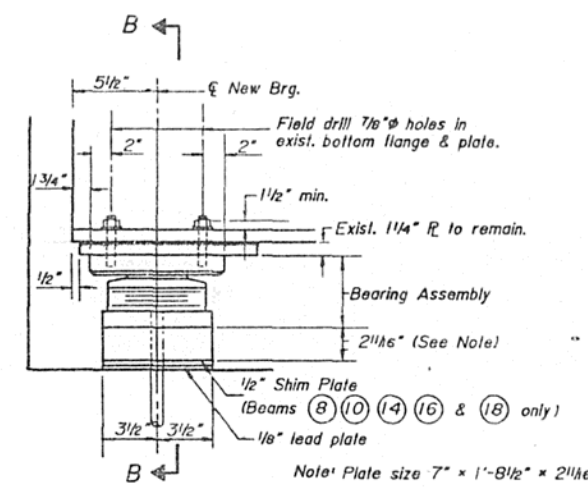


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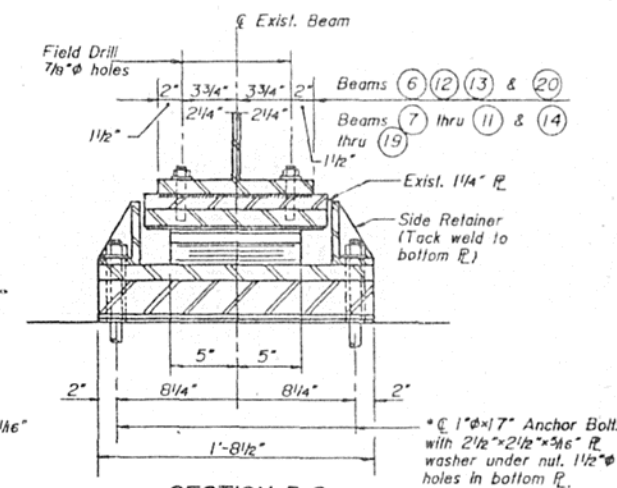


SECTION A-A

* See Sheet No. 16 for Anchor Bolt Installation.

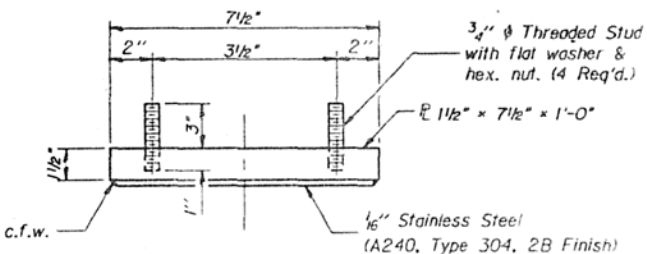


ELEVATION AT ABUT.

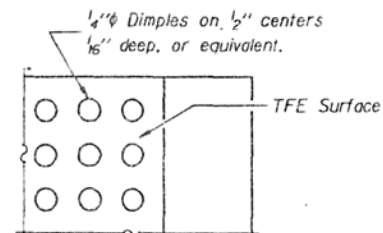


SECTION B-B

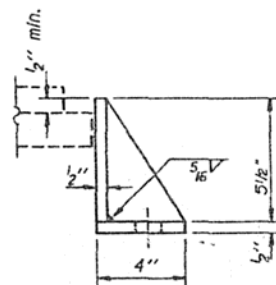
TYPE II TFE ELASTOMERIC EXP. BRG.
AT NEW BEAMS (1) THRU (5) & (2) THRU (4)



TOP BEARING ASSEMBLY

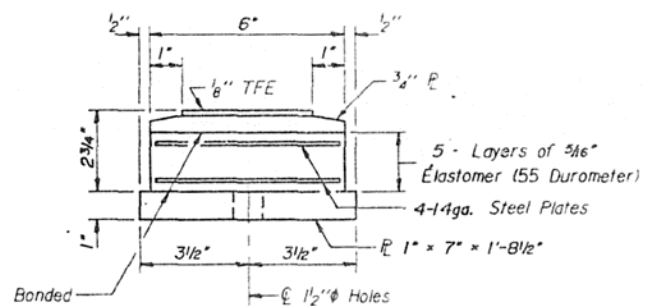


PLAN-TFE SURFACE

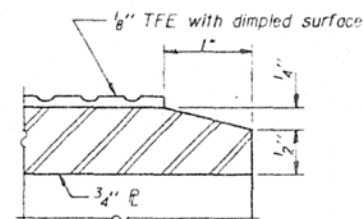


SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



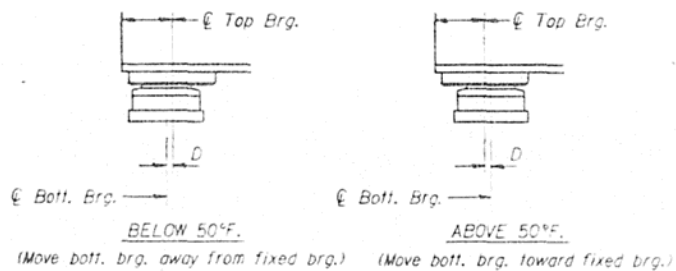
BOTTOM BEARING ASSEMBLY



SECTION THRU TFE

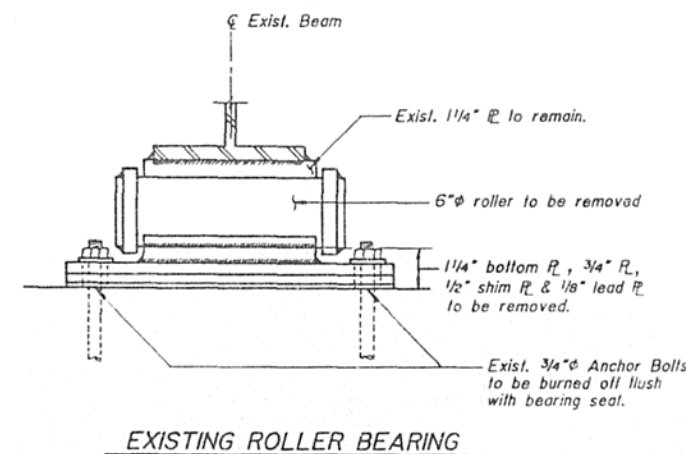
Note: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type 1. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



SETTING ANCHOR BOLTS AT EXP. BRG.

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.



EXISTING ROLLER BEARING

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	24
Jack and Replace Bearings	Each	15

ELASTOMERIC BEARINGS-EAST ABUT.

F.A.I. ROUTE 74
OVER MARKET STREET
SECTION (44B-2) BR
CHAMPAIGN COUNTY
STA. 1200-06.10

BASCOR, INC.
consulting engineers and planners

DESIGNED	GSP
CHECKED	HE
DRAWN	SAW
CHECKED	GSP

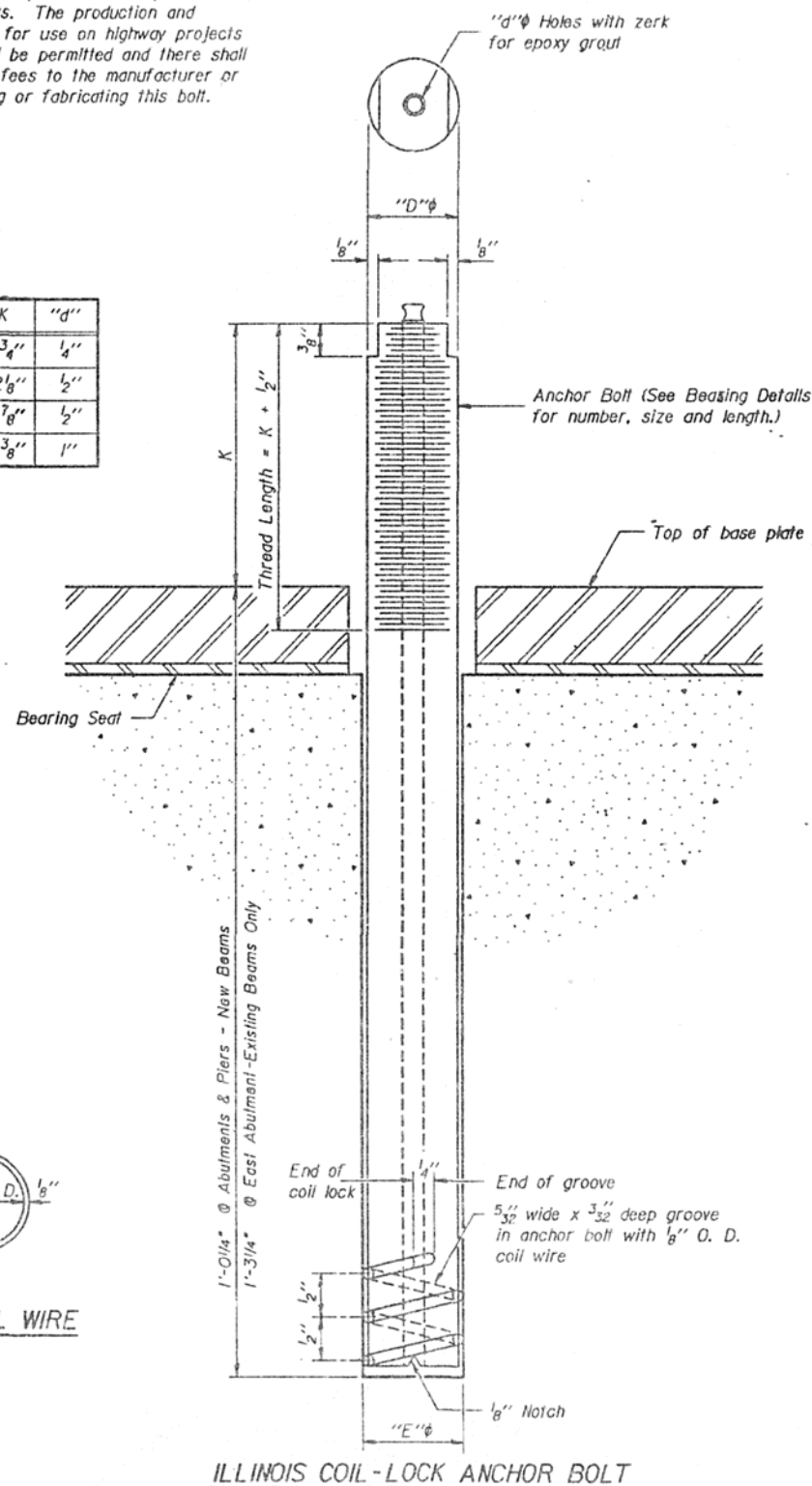
I-2-E2 12-1-83

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 16
F.A.I. 74	44B-2BR	CHAMPAIGN	140	76	SHEETS 33
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT			

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K	"d"
1"	1 1/8"	5/16"	1 3/4"	1/4"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 3/8"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A519, Grade 1025 and supplied with hexagonal nuts and cut washers.
The coil wire shall be made of any suitable soft steel wire.
The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C881, Type I, Grade I and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

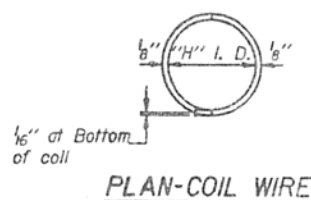
1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes in accordance with the manufacturer's recommendations and procedures.
The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
1. A threaded rod stud with nut and washer conforming to ASTM A307.
2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or in accordance with the manufacturer's recommendation after beams or girders have been erected and adjusted.
Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.
The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for "Furnishing and Erecting Structural Steel".
Anchor bolts, nuts and washers shall be completely coated by either the hot-dipped process conforming with AASHTO M232 or the mechanical plating method conforming to ASTM B695, Class 50. Zinc coated nuts shall be topped oversize in accordance with the requirements of AASHTO M291 and shall meet the supplementary requirements SI.1 thru SI.2.1 of the same specifications for lubricant and testing.



BASCOR, INC.
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DESIGNED	GSP
CHECKED	HE
DRAWN	SAW
CHECKED	GSP

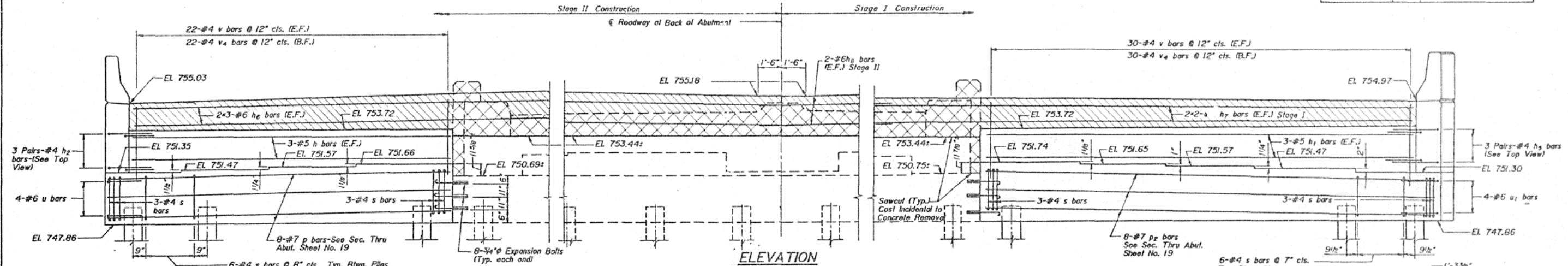
ABB-1 12-1-83

ANCHOR BOLT DETAILS

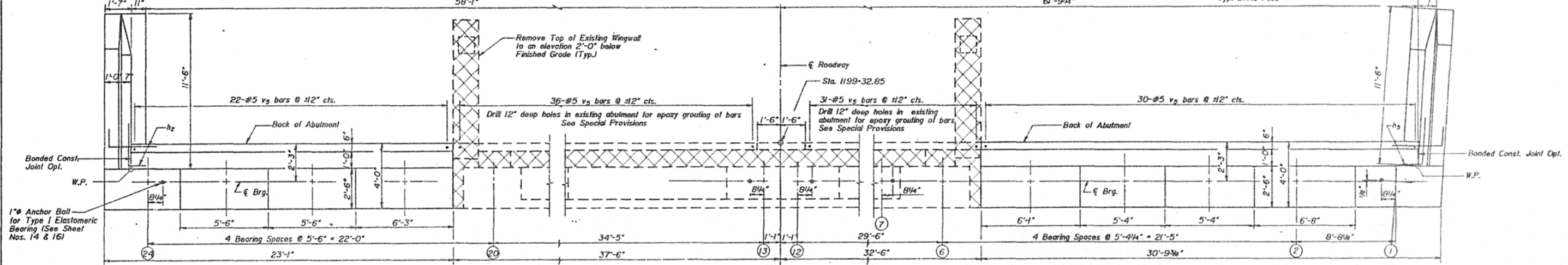
F.A.I. ROUTE 74
OVER MARKET STREET
SECTION (44B-2) BR
CHAMPAIGN COUNTY
STA. 1200+06.10

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

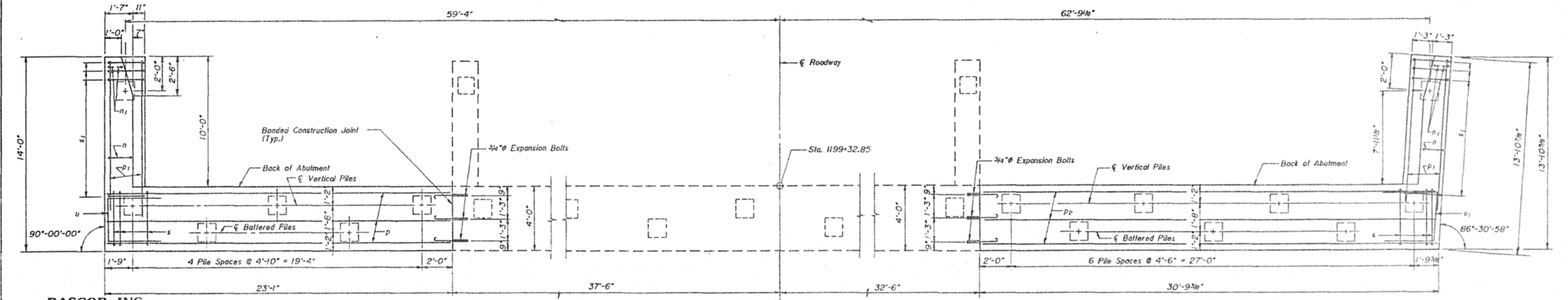
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 17
F.A.I. 74	14HB-2BR	CHAMPAIGN	140	77	SHEET 23
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT				



ELEVATION



TOP VIEW



PLAN PILE CAP

BASCOR, INC.
consulting engineers and planners

DESIGN:	GSP
CHECKED:	HE
DRAWN:	SAW
CHECKED:	GSP

- Cross-hatched area indicates Concrete Removal.
- Hatched area to be poured after superstructure is in place. Quantity included with Class X Concrete Superstructure

PILE DATA
Type: Concrete
Capacity: 45 Tons
Est. Length: 40'
No. Required: 14

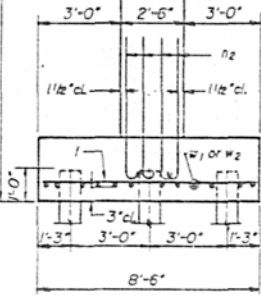
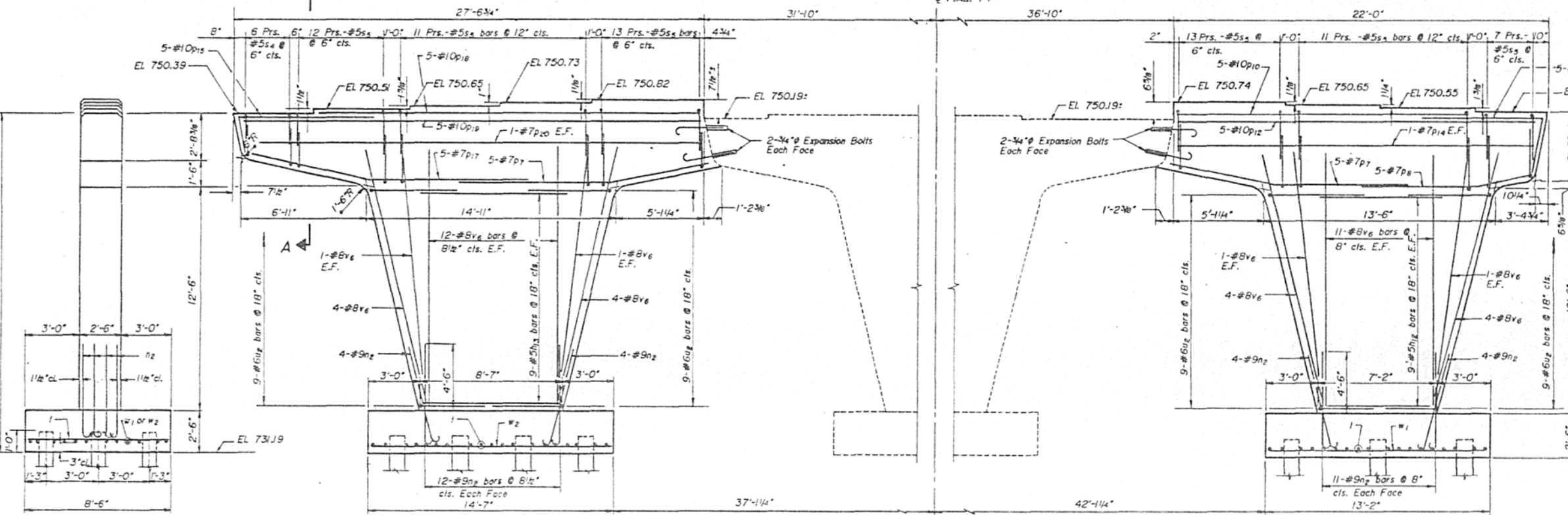
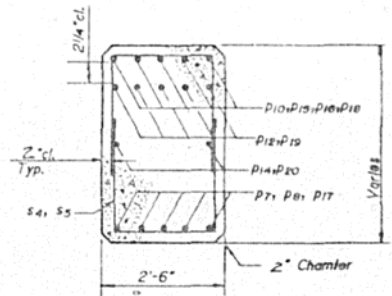
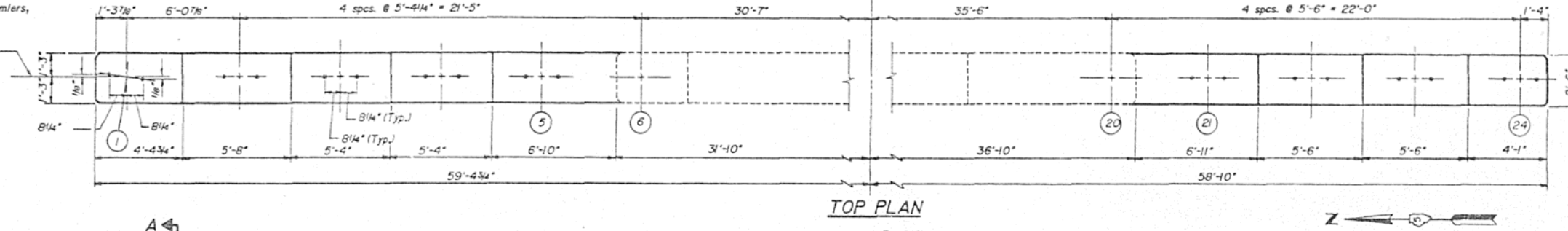
WEST ABUTMENT
F.A.I. ROUTE 74
OVER MARKET STREET
SECTION (14HB-2) BR
CHAMPAIGN COUNTY
STA. 1200+06.10

See Notes on Sheet No. 19.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
F.A.I. 74

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
F.A.I. 74	14HE-2BR	CHAMPAIGN	140	81	23
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT				

NOTE:
Space reinforcement in cap to miss Anchor Bolts.
Pour steps monolithically with cap.
All edges shall have 1/2" chamfers, similar to existing pier.



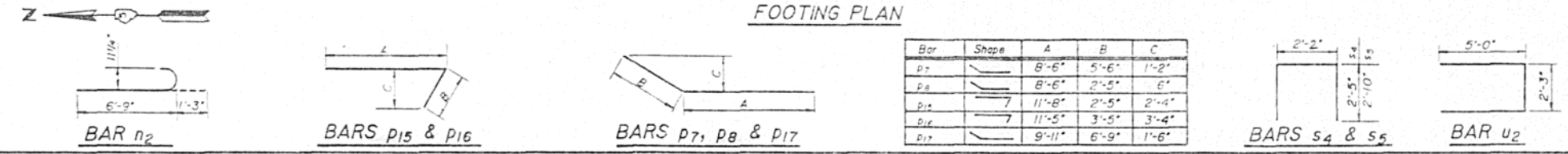
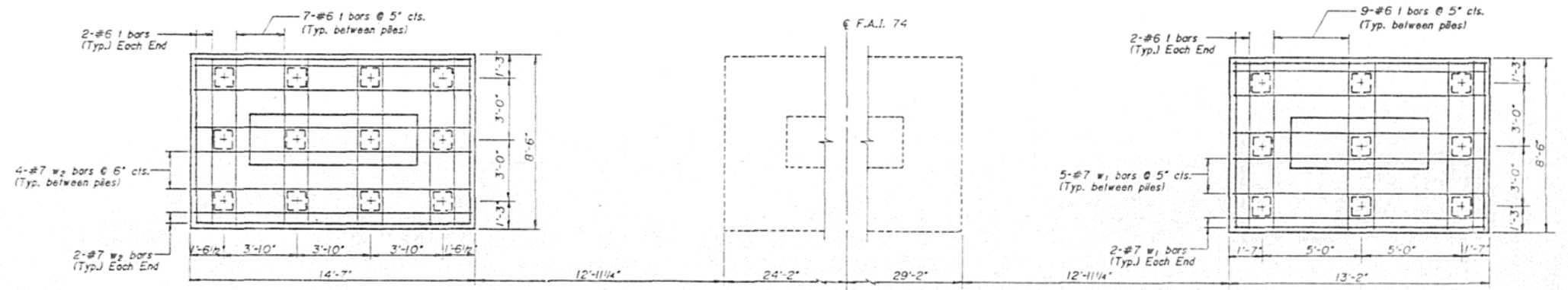
PIER No. 2
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
n2	18	#5	6'-11"	—
n2	18	#5	8'-4"	—
n2	70	#9	8'-0"	—
p7	10	#7	14'-0"	—
p8	5	#7	10'-11"	—
p10	5	#10	17'-9"	—
p12	5	#10	21'-9"	—
p14	2	#7	21'-9"	—
p15	5	#10	14'-1"	—
p16	5	#10	14'-10"	—
p17	5	#7	16'-8"	—
p18	5	#10	23'-0"	—
p19	5	#10	27'-3"	—
p20	2	#7	27'-3"	—
s4	12	#5	7'-0"	□
s5	134	#5	7'-10"	□
u2	47	#6	8'-2"	—
u2	36	#6	12'-3"	—
y6	70	#8	14'-6"	—
w1	14	#7	12'-10"	—
w2	12	#7	14'-3"	—
Item	Unit	Quantity		
Structure Excavation	Cu. Yd.	66.4		
Class X Concrete	Cu. Yd.	66.9		
Reinforcement Bars	Pound	11,380		
Expansion Bolts, 3/4 Inch	Each	8		
Concrete Piles	Lin. Ft.	966		

PILE DATA
Type: Concrete
Capacity: 45 Tons
Est. Length: 46'
No. Req'd: 21

BASCOR, INC.
CONSULTING ENGINEERS AND ARCHITECTS

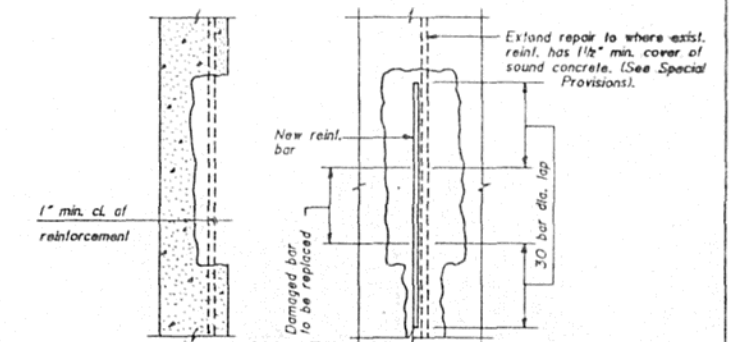
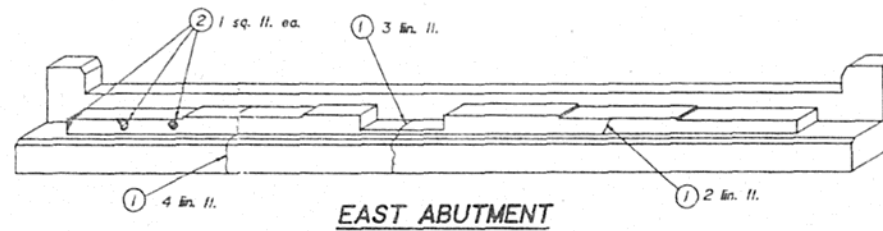
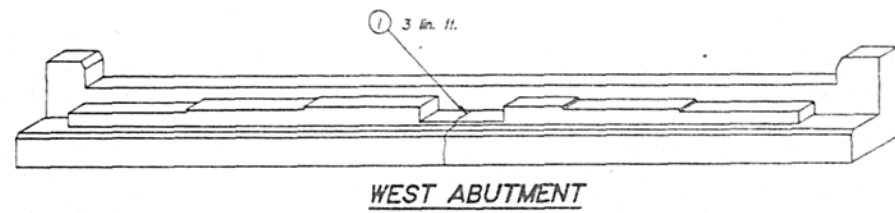
DESIGNED:	GSP
CHECKED:	HE
DRAWN:	SAW
RECHECKED:	GSP



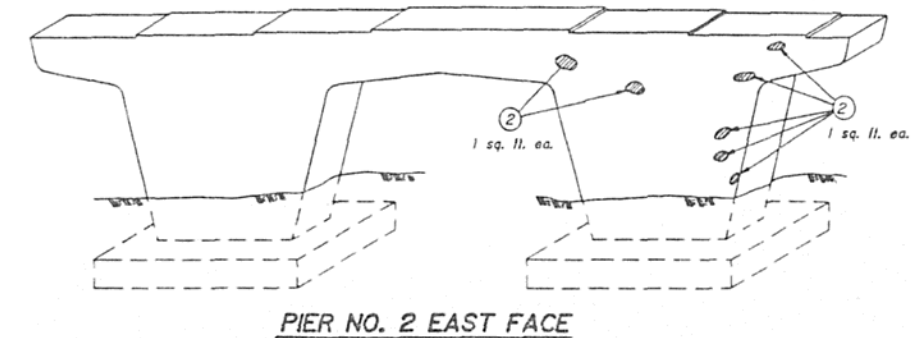
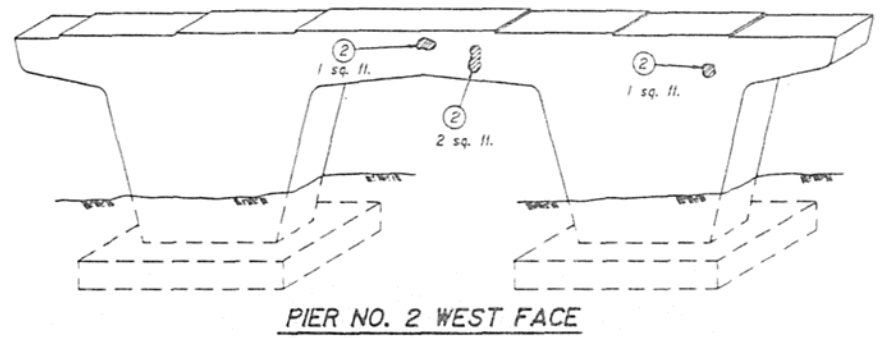
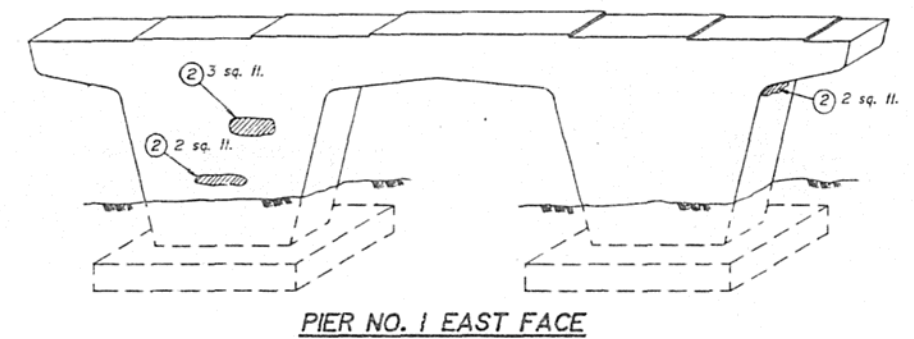
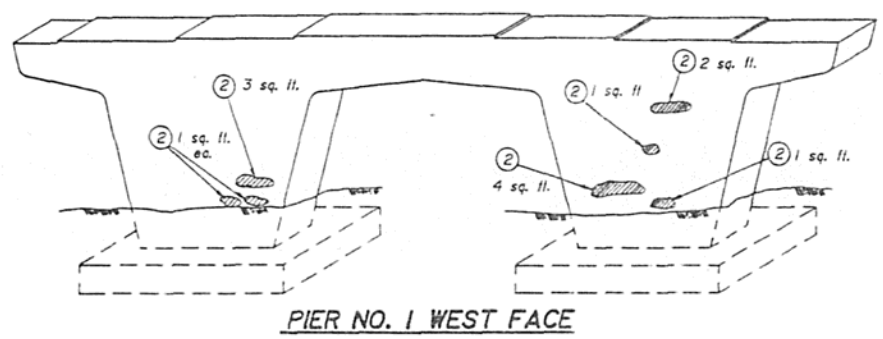
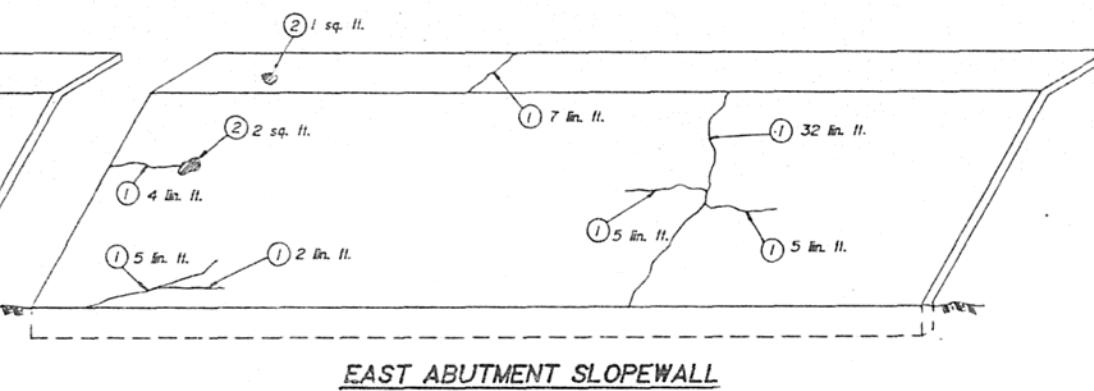
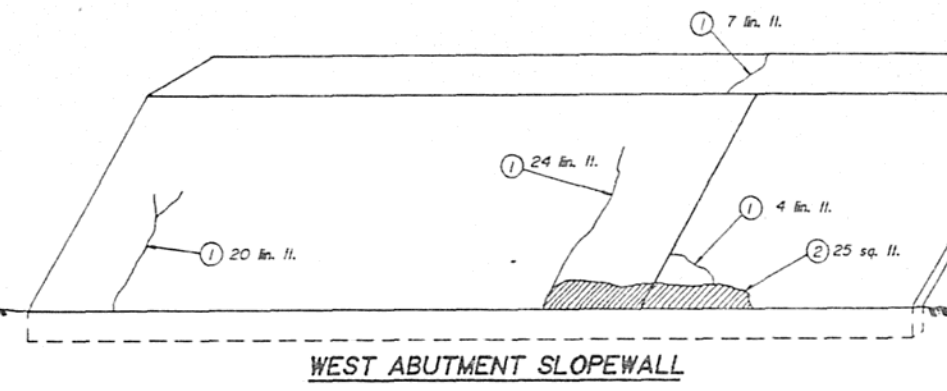
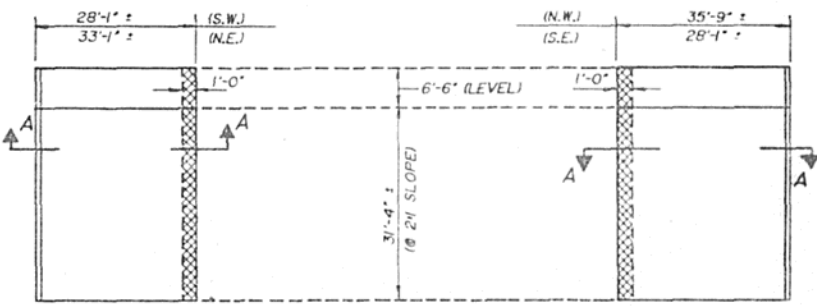
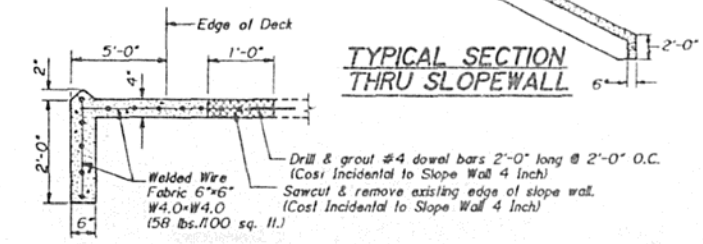
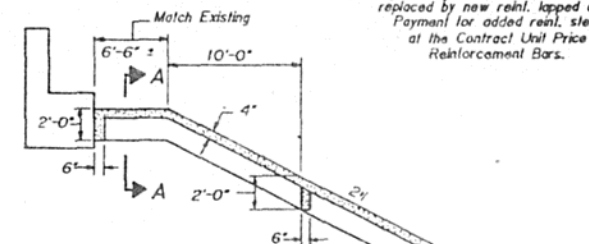
PIER NO. 2
F.A.I. ROUTE 74
OVER MARKET STREET
SECTION 14HE-2) BR
CHAMPAIGN COUNTY
STA. 1200+06.10

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 22
F.A.I. 74	14HB-2BR	CHAMPAIGN	140	62	SHEET 23
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT				



This detail applies where exist. reinf. is exposed as a result of removing unsound conc. Exist. reinf. having 25% or more of cross-sectional area loss due to corrosion or damage during concrete removal shall be replaced by new reinf. lapped as shown. Payment for added reinf. steel shall be at the Contract Unit Price for Reinforcement Bars.



BASCOR, INC.
consulting engineers and planners

DESIGNED:	GSP
CHECKED:	HE
DRAWN:	SAW
CHECKED:	GSP

LEGEND

① Denotes Epoxy Crack Sealing

② Denotes Repair Concrete Structures

NOTE - Quantities listed on Elevations and in Bill of Material for Epoxy Crack Sealing and Repair Concrete Structures were derived from field notes and are given as a base for unit pricing. Exact quantities will be determined in the field and approved by the Engineer.

BILL OF MATERIAL

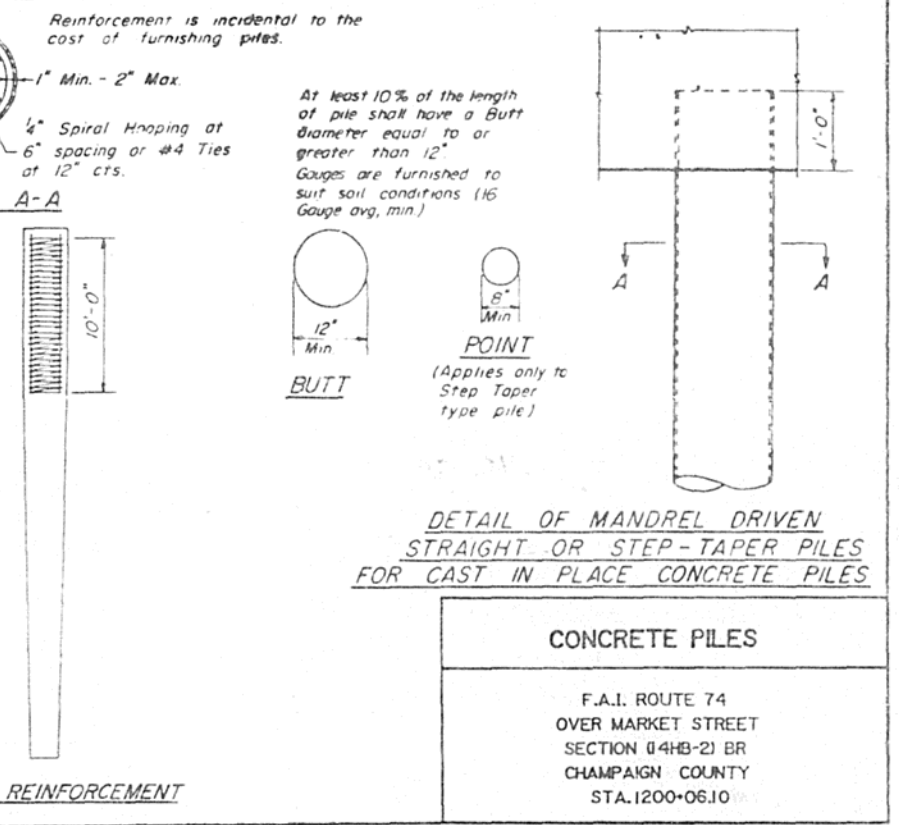
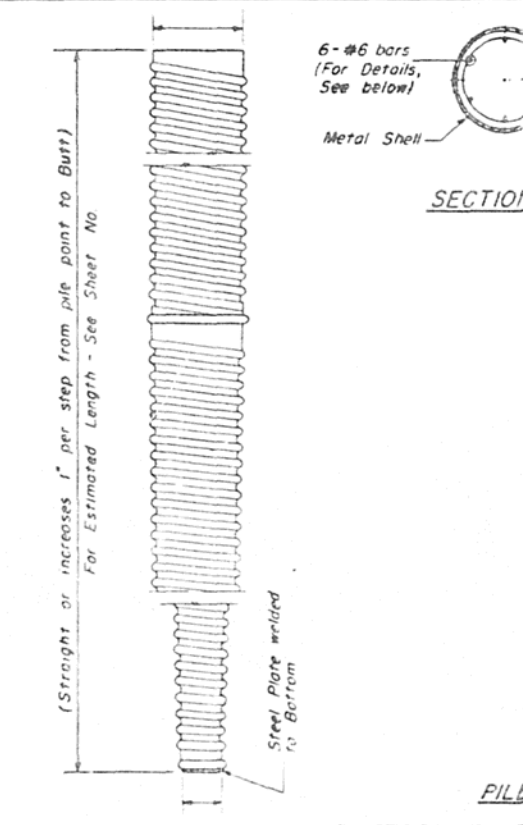
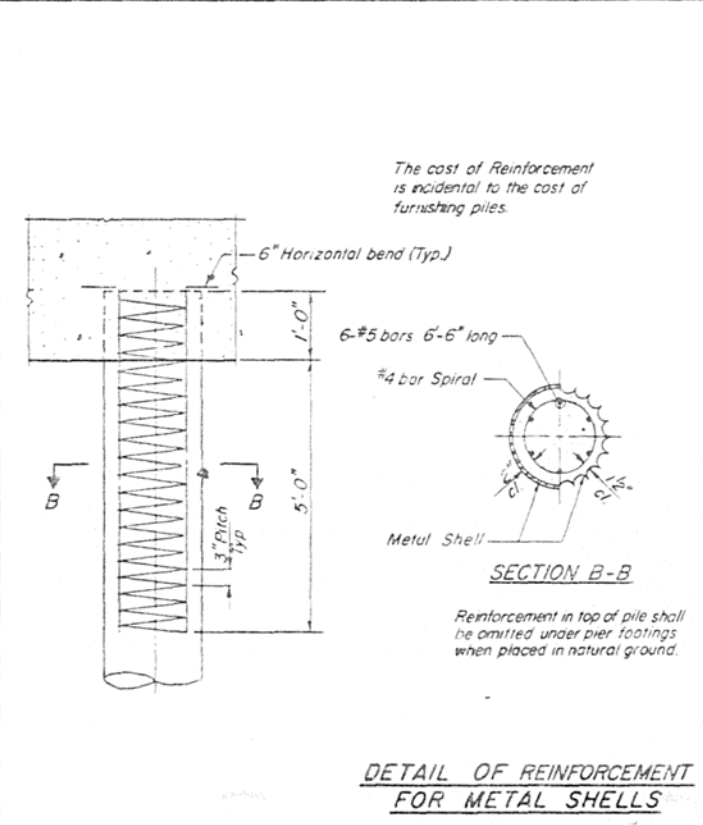
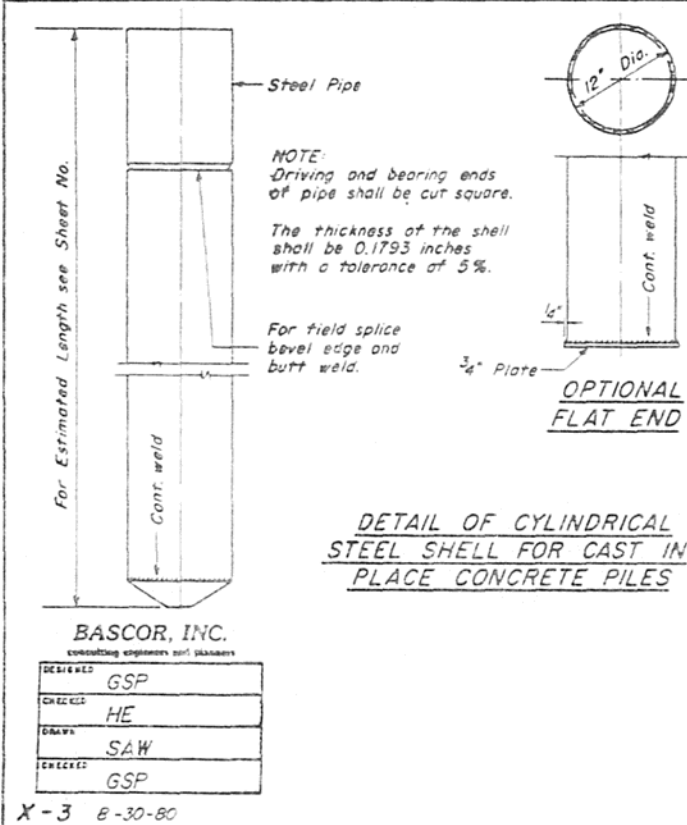
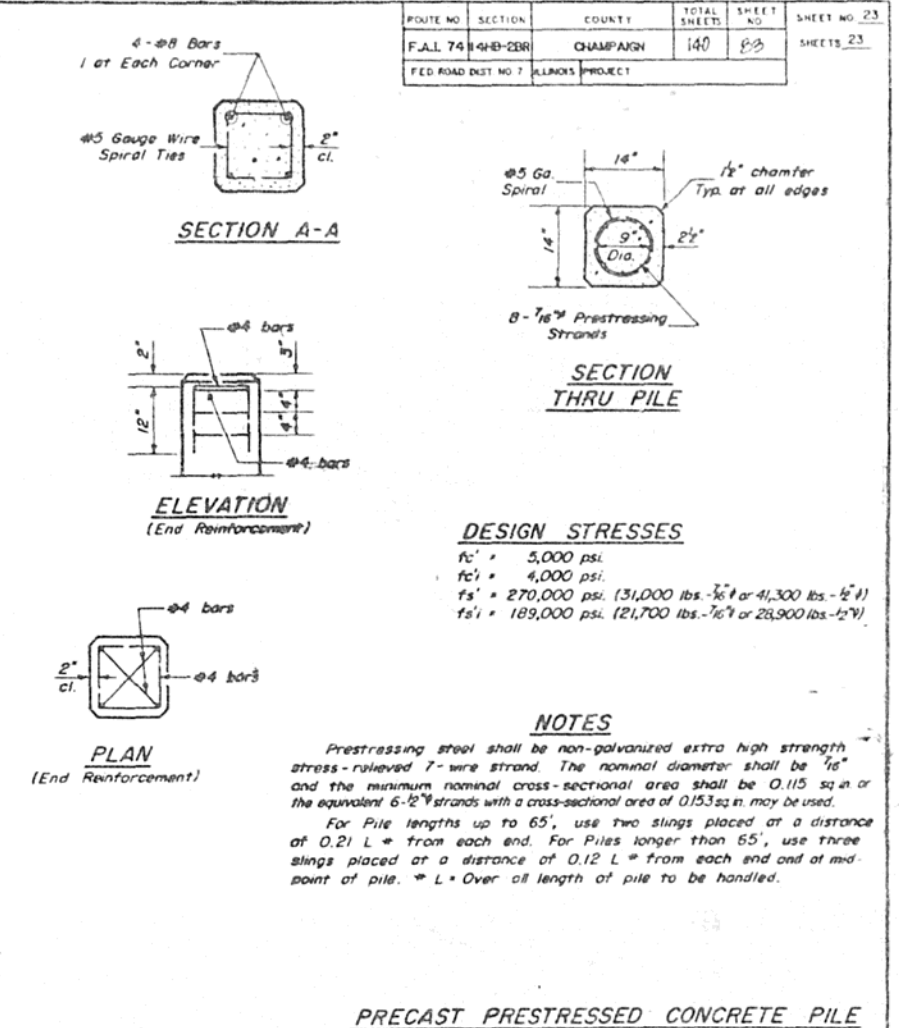
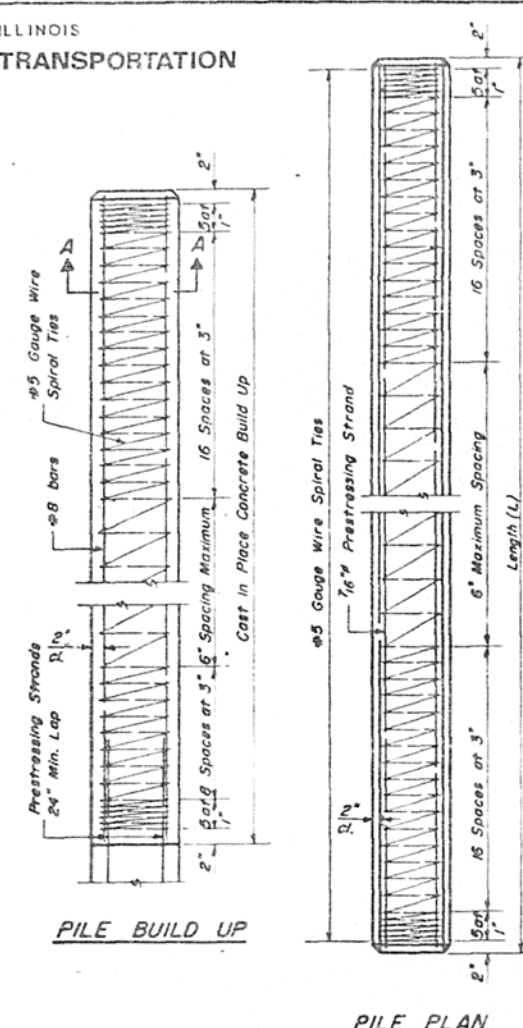
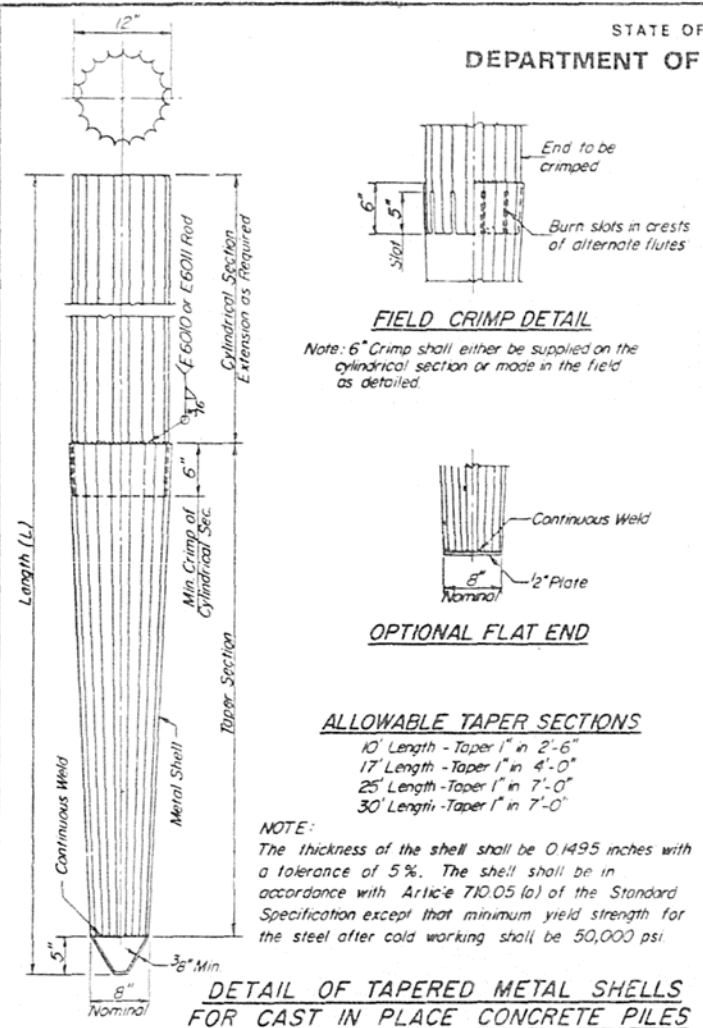
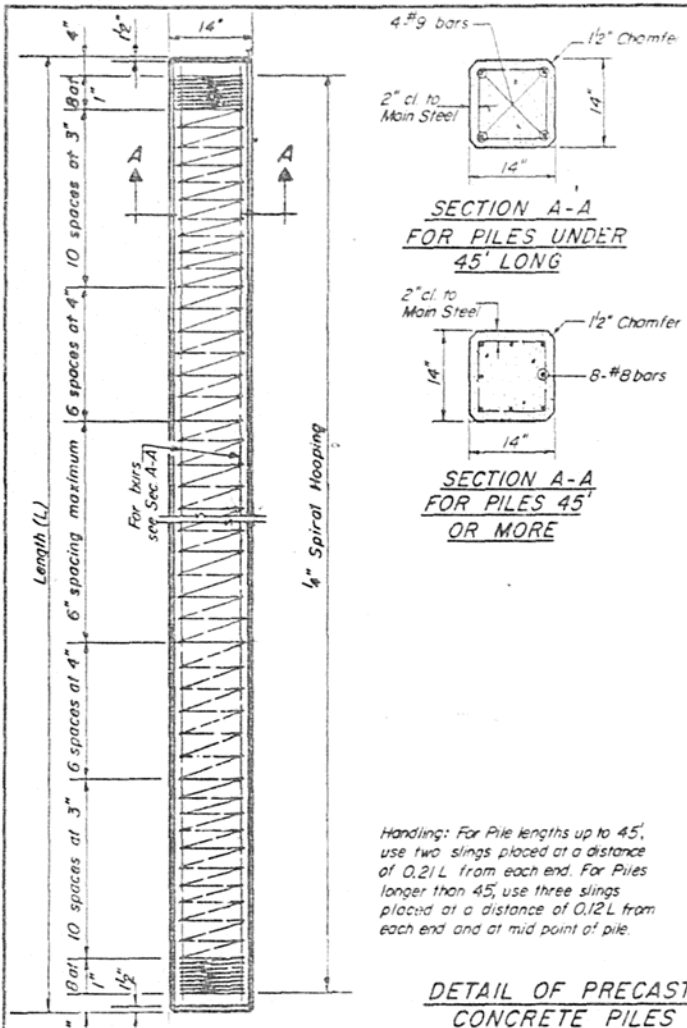
Item	Unit	Quantity
Slope Wall 4 Inch	Sq. Yd.	525.4
Epoxy Crack Sealing	Lin. Ft.	127
Repair Concrete Structures	Sq. Ft.	62

EXISTING SUBSTRUCTURE REPAIRS

F.A.I. ROUTE 74
OVER MARKET STREET
SECTION (14HB-2) BR
CHAMPAIGN COUNTY
STA. 1200+06.10

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 23
F.A.I. 74	44B-2BR	CHAMPAIGN	140	83	SHEETS 23
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT				



GENERAL NOTES

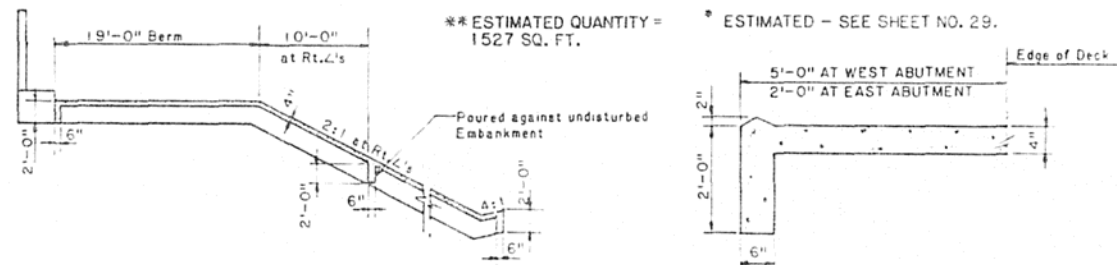
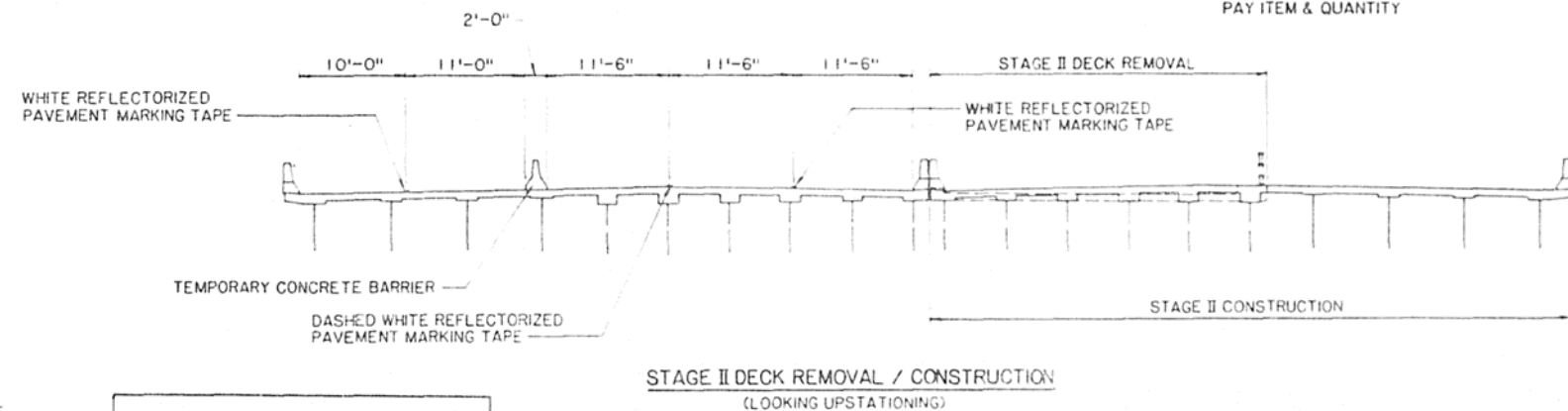
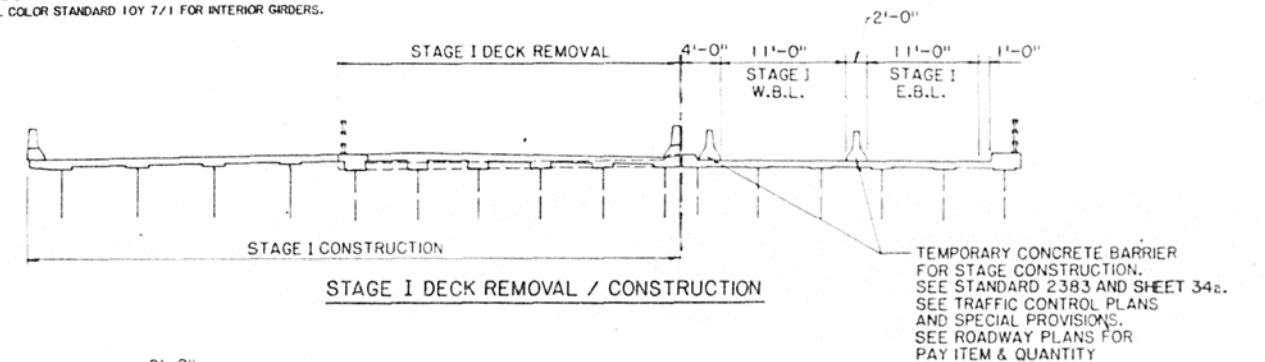
Sheet No. 5
of 35 Sheets

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	114-VB BR	CHAMPAIGN	146	85
FED. ROAD DIST. NO.	ILLINOIS PROJECT			

TOTAL BILL OF MATERIAL				
ITEM	UNIT	SUPERSTRUCTURE	SUBSTRUCTURE	TOTAL
CONCRETE REMOVAL	CU YD	-	78.9	78.9
REMOVAL OF EXISTING CONCRETE DECK NO. 2	L SUM	1	-	1
STRUCTURE EXCAVATION	CU YD	-	3389	3389
FLOOR DRAINS	EACH	8	-	8
PREFORMED JOINT SEAL 1 3/4"	LIN FT	722	-	722
PREFORMED JOINT SEAL 4"	LIN FT	128	-	128
CLASS X CONCRETE SUPERSTRUCTURE	CU YD	2694.1	-	2694.1
PROTECTIVE COAT	SQ YD	11,268	-	11,268
CLASS X CONCRETE	CU YD	-	844.6	844.6
FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	0.9	-	0.9
STRUCTURAL STEEL REPAIR	POUND	2150	-	2150
CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1	-	1
REINFORCEMENT BARS	POUND	-	79,610	79,610
REINFORCEMENT BARS, EPOXY COATED	POUND	636,170	11,540	647,710
FURNISHING CONCRETE PILES	LIN FT	-	8724	8724
TEST PILE CONCRETE	EACH	-	3	3
NAME PLATES	EACH	1	-	1
TEMPORARY SHEET PILING	SO FT	-	797 *	797 *
SLOPE WALL 4 INCH	SQ YD	-	721	721
REINFORCED NEOPRENE EXP. JOINT TREATMENT	LIN FT	128	-	128
BRIDGE SEAT SEALER	L SUM	-	1	1
NEOPRENE EXPANSION JOINT, 2 1/2"	LIN FT	134	-	134
REPAIR CONCRETE STRUCTURES	SQ FT	-	407	407
STRUCTURAL STEEL REMOVAL	POUND	158,630	-	158,630
REMOVE AND RELOCATE EXISTING DIAPHRAGMS	EACH	-	-	-

- SEE PROPOSAL FOR BORING DATA.
- FASTENERS SHALL BE HIGH STRENGTH BOLTS. (AASHTO M 164) BOLTS 7/8" Ø, OPEN HOLES 15/16" Ø, UNLESS OTHERWISE NOTED.
- CALCULATED WEIGHT OF STRUCTURAL STEEL = 2,675,090 POUND
- CAST STEEL SHALL BE AASHTO M 192 CLASS 70. STRUCTURAL STEEL WELDMENTS OF EQUAL SECTIONS AND MEETING AASHTO M 163 MAY BE SUBSTITUTED FOR CASTINGS AT THE OPTION OF THE CONTRACTOR, SUBJECT TO APPROVAL BY THE ENGINEER PRIOR TO FABRICATION. NO ADDITIONAL COMPENSATION WILL BE ALLOWED THE CONTRACTOR FOR THIS SUBSTITUTION.
- ROADWAY EXPANSION GUARDS SHALL BE ASSEMBLED IN THE PROPER POSITION WITH THE ENDS IN PLACE AND SHALL BE LEFT ASSEMBLED FOR SHOP INSPECTION.
- THE ROADWAY EXPANSION PLATES SHALL BE FLAME CUT AS PROVIDED IN ARTICLE 507.041(2) OF THE STANDARD SPECIFICATIONS.
- 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 CROSS FRAMES OVER SUPPORTS.
- THE MAIN LOAD CARRYING MEMBER COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS ZONE 2. THESE COMPONENTS ARE THE TENSION FLANGES, WEBS AND ALL SPLICE PLATE MATERIAL OF THE STEEL GIRDERS.
- REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31, M-42 OR M-53 GRADE 60.
- ALL EXISTING STRUCTURAL STEEL SHALL BE CLEANED BY METHOD II EXCEPT METHOD I CLEANING SHALL BE USED WITHIN 10 FEET OF OPEN JOINTS.
- THE THREE COAT LEAD AND CHROMATE FREE ALKYD PAINT SYSTEM SHALL BE USED FOR FIELD PAINTING OF EXISTING STRUCTURAL STEEL. THE THREE COAT LEAD AND CHROMATE FREE ALKYD PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF NEW STRUCTURAL STEEL. ALL CONTACT SURFACE AREAS OF NEW AND EXISTING STRUCTURAL STEEL SHALL BE FREE OF PAINT OR LACQUER. THE PAINT COLORS FOR THE STRUCTURE SHALL BE MUNSSELL COLOR STANDARD 7.5G 4/B FOR THE EXTERIOR GIRDERS AND MUNSSELL COLOR STANDARD 10Y 7/1 FOR INTERIOR GIRDERS.

- SLOPE WALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC, 6" X 6" - #4.0 X #4.0, WEIGHING 58 LBS. PER 100 SQ. FT.
- LAYOUT OF SLOPE WALLS MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.
- THE EMBANKMENT CONFIGURATION SHOWN SHALL BE THE MINIMUM EMBANKMENT THAT MUST BE CONSTRUCTED PRIOR TO CONSTRUCTION OF THE ABUTMENTS.
- PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NORMAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.
- EXPANSION BOLTS SHALL CONSIST OF APPROVED EXPANSION ANCHORS, PROVIDING MINIMUM CERTIFIED PROOF LOAD = 4,000 LBS., AND 3/4" Ø X 18" HOOKED BOLTS.
- BEARING SEAT SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE DESIGNATED ELEVATIONS WITHIN A TOLERANCE OF 1/8 INCH. ADJUSTMENT SHALL BE MADE EITHER BY GRINDING THE SURFACE OR BY SHIMMING THE BEARING. TWO 1/8" ADJUSTING SHIMS, OF THE DIMENSIONS OF THE BOTTOM BEARING PLATE, SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OR SHIMS.
- CONCRETE PILES AT ABUTMENTS SHALL BE DRIVEN IN HOLES PRECORED THROUGH THE EMBANKMENT IN ACCORDANCE WITH ARTICLE 513.091(C) OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL DRIVE CONCRETE TEST PILES IN PERMANENT LOCATIONS, AS DIRECTED BY THE ENGINEER, BEFORE ORDERING THE REMAINDER OF THE PILES. THE CONTRACTOR SHALL DRIVE ONE TEST PILE, EACH, AT THE WEST ABUTMENT, AT PIER 2, AND AT PIER 3.
- THE CONTRACTOR WILL BE REQUIRED TO MARK ON TOP OF THE CONCRETE DECK THE LOCATIONS OF THE TOP FLANGE OF ALL STEEL BEAMS OR GIRDERS, PRIOR TO ANY REMOVAL OF THE BRIDGE CONCRETE DECK. SAW CUTTING DIRECTLY OVER THE TOP OF THE BEAM OR GIRDER FLANGES IS NOT PERMITTED.



TYPICAL SECTION THRU PROPOSED SLOPEWALL

SECTION A-A

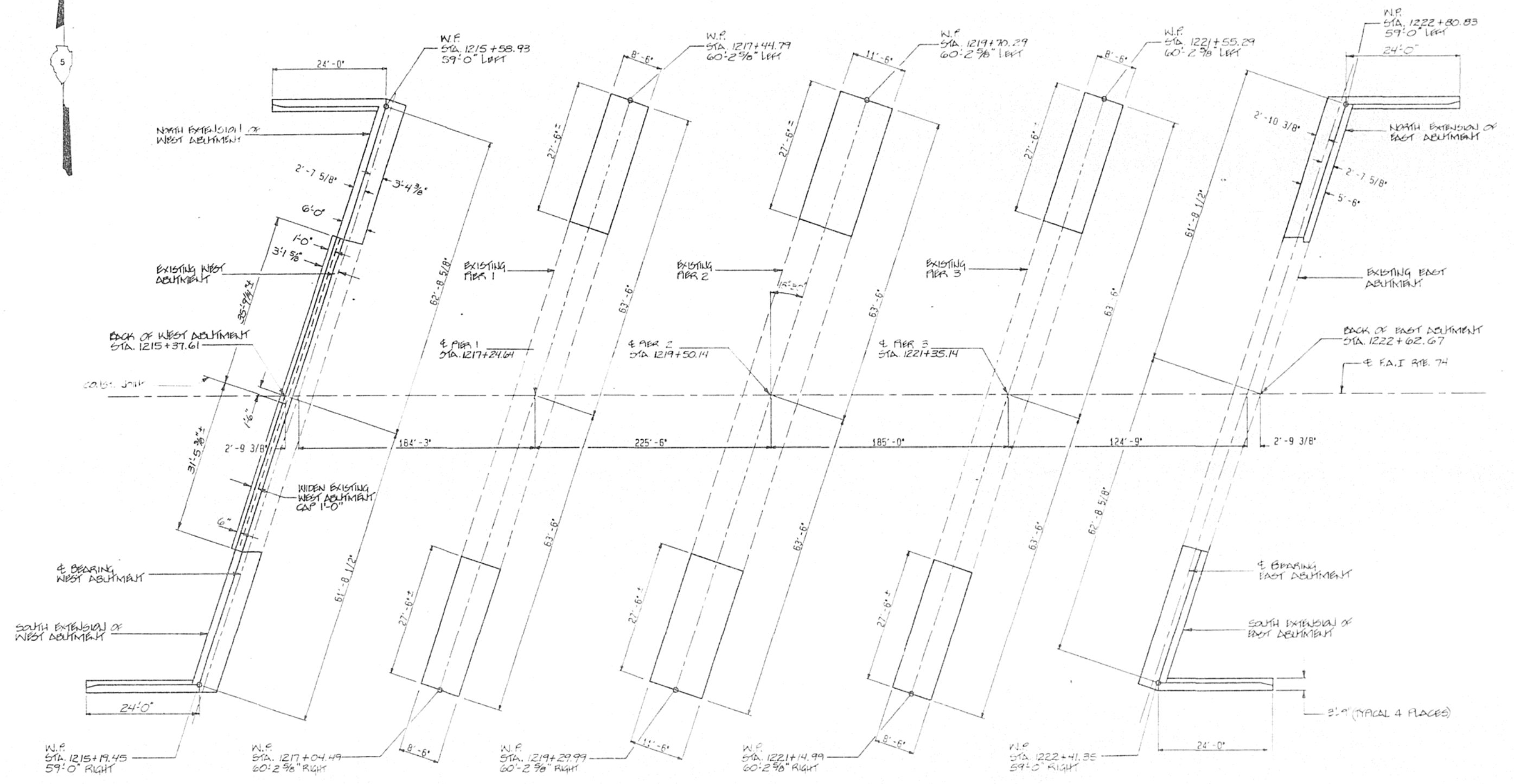
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BUILT 19 BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC.(14-VB)BR
F.A. PROJ. ACIR-14-6 (126)
LOADING HS20 & ALT.
STR. NO. 010-0021

NAME PLATE
STD. 2113

STRUCTURE QUANTITIES & GENERAL NOTES

REVISIONS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	DRAWN BY DATE
1	F.A.I. 74 S.N. 010-0021 SEC.(14-VB)BR	CHECKED BY DATE
2	STA. 1219+00.14 CHAMPAIGN COUNTY	APPROVED BY DATE
3	HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS	PROJECT NO.
4		3400-5
5		SHEET NO.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	114-VB3 BP	CHAMPAIGN	140	86
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

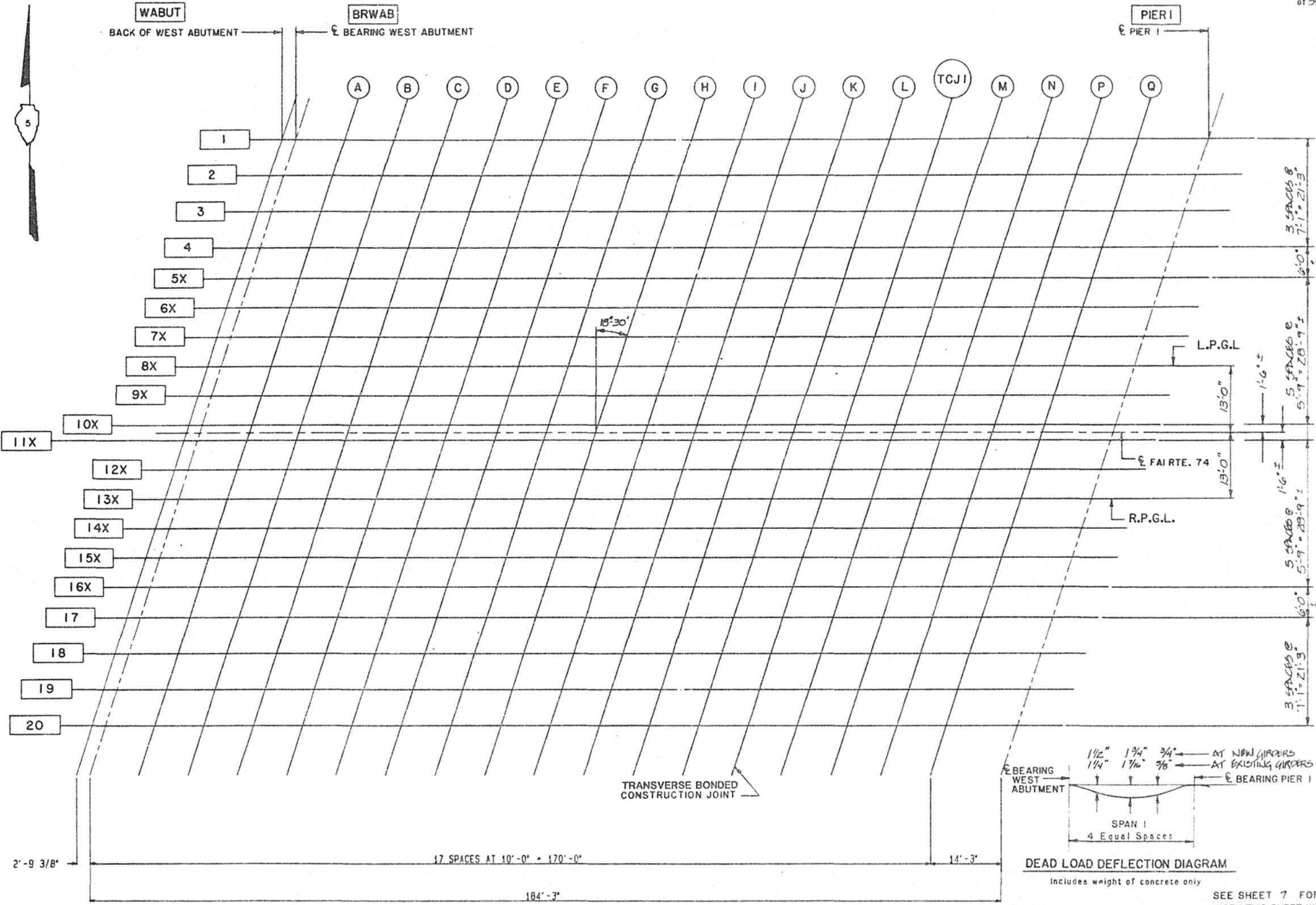


SUBSTRUCTURE LAYOUT
N.T.S.

REVISIONS		SUBSTRUCTURE LAYOUT		DATE
NO.	DATE	INITIALS		
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			DRAWN BY DATE E.S. 1-98
F.A.I. 74	S.N. 010-0021	SEC. (114-VB)BP	CHECKED BY DATE 1-98
STA. 1219+00.14	CHAMPAIGN COUNTY	PROJECT NO. 3400-5	
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS			SHEET NO.

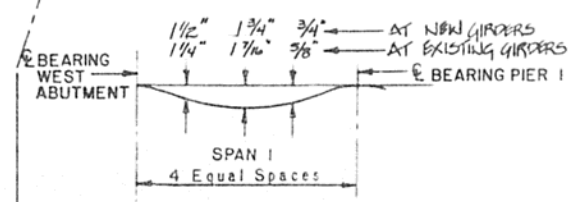
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	X14-VB BR	CHAMPAIGN	140	87
FED. ROAD DIST. NO.	ALLIANCE	PROJECT		



LEGEND

L.P.G.L. LEFT PAVEMENT GRADE LINE
 R.P.G.L. RIGHT PAVEMENT GRADE LINE
 # NEW GIRDER NUMBER
 #X EXISTING GIRDER NUMBER
 TCJ# TRANSVERSE CONSTRUCTION JOINT NUMBER

(SEE SHEET 8 FOR POURING SEQUENCE FOR DECK)



PLAN
SPAN I

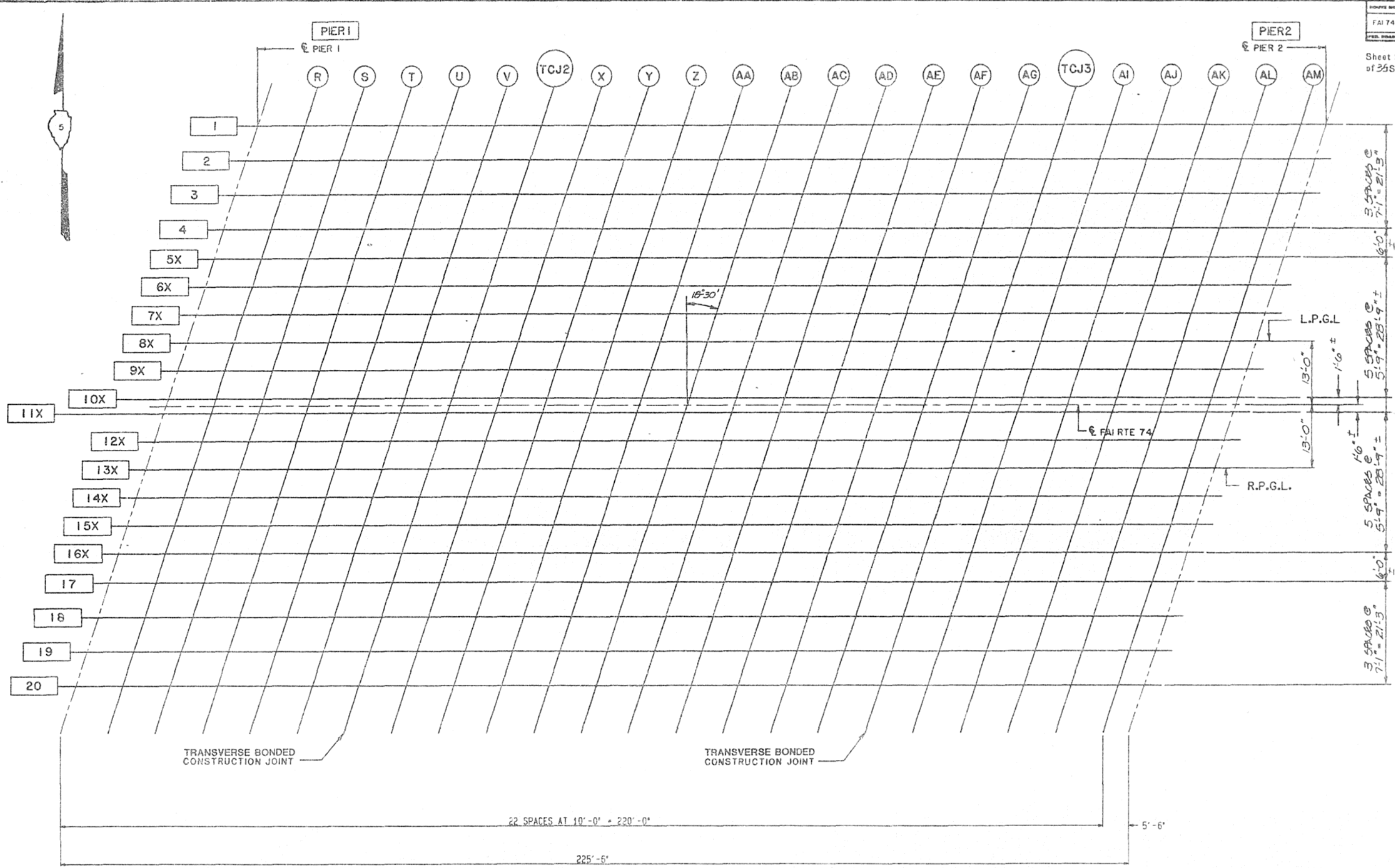
SEE SHEET 7 FOR FILLET DETAILS
 WORK THIS SHEET WITH SHEETS 5 THRU 13

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DATE BY DATE
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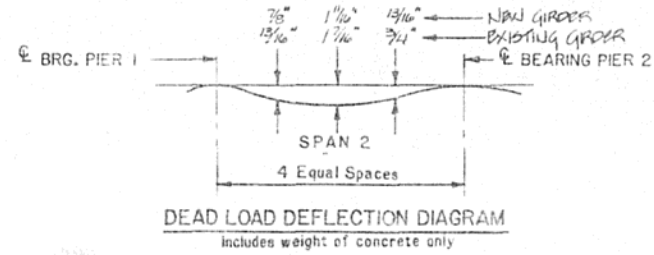
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STA. 1219+00.14		CHAMPAIGN COUNTY	
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS		3400-5	

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	(14-VB) BR	CHAMPAIGN	40	5
FED. ROAD DIST. NO.	STATE	FUNDING		

Sheet No. 5
of 25 Sheets



PLAN
SPAN 2



SEE SHEET 4 FOR LEGEND
WORK THIS SHEET WITH SHEETS 4 AND 6 THRU 13

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DATE
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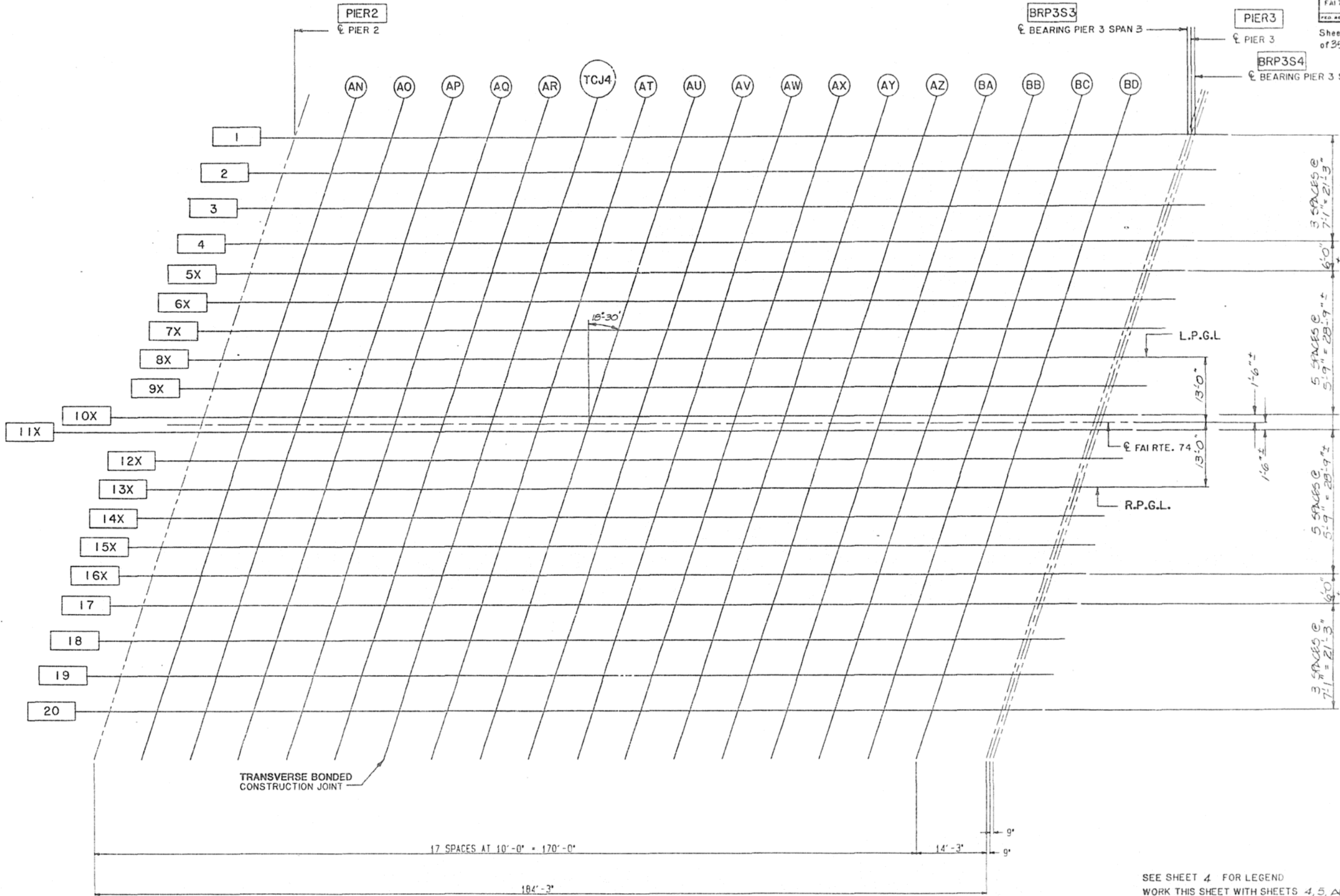
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F.A.L. 74 S.N. 010-0021 - SEC. (14-VB) BR		REK 7-55
STA. 1219+00.14 CHAMPAIGN COUNTY		DESIGNED BY DATE
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS		JKL 8-55
PROJECT NO. 3400-5		CHECKED BY
		DATE



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	(14-VB) BR	CHAMPAIGN	140	89

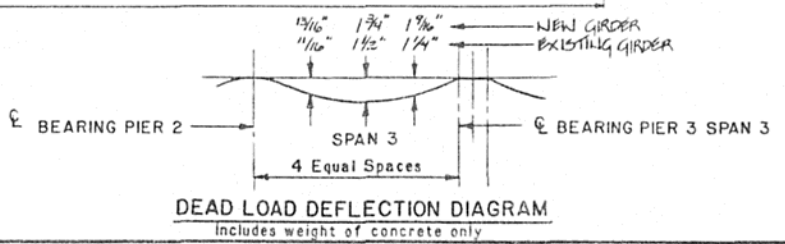
FED. ROAD DIST. NO. ILLINOIS PROJECT

Sheet No. 6 of 35 Sheets



TRANSVERSE BONDED CONSTRUCTION JOINT

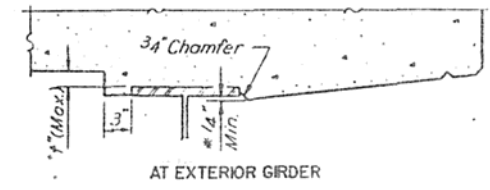
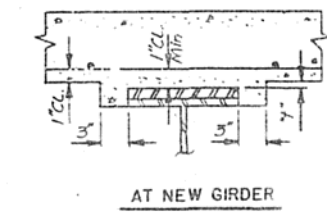
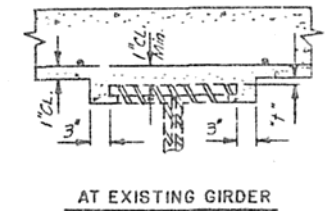
PLAN SPAN 3



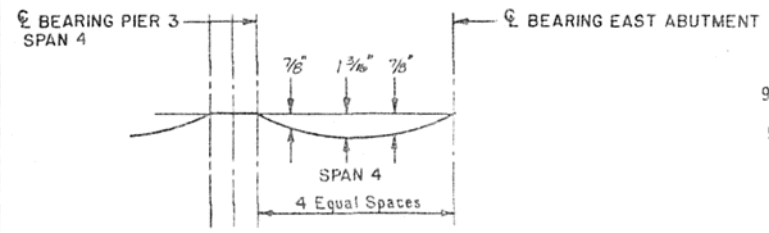
SEE SHEET 4 FOR LEGEND
WORK THIS SHEET WITH SHEETS 4, 5, AND 7 THRU 13

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DESIGNED BY RAS 2-88
1		FAI 74	S.N. 010-0021	CHECKED BY DATE JKL 3-88
2		STA. 1219+00.14	SEC. (14-VB) BR	PROJECT NO. 3400-5
3		CHAMPAIGN COUNTY		SHEET NO.
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS				

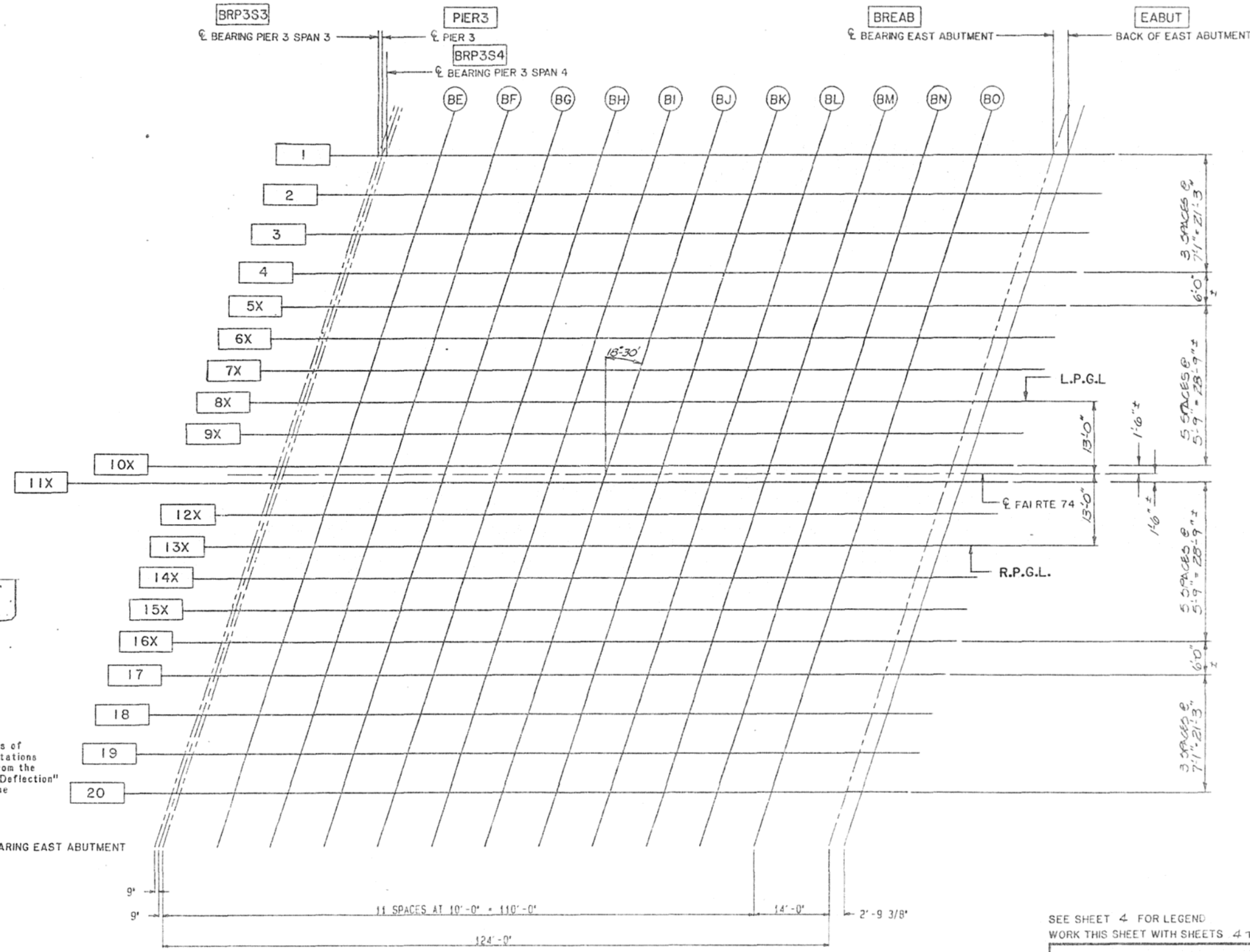
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	K14-VB BR	CHAMPAIGN	140	70
FED. ROAD DIST. NO.	SLIPNO.	PROJECT		



METHOD OF DETERMINING FILLET HEIGHTS "t"
 After all structural steel has been erected, elevations of the top flanges of the Girders shall be taken at the stations shown on Sheets 3-13. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets 3-13, minus slab thickness equals the fillet heights above top flange of Girders.



DEAD LOAD DEFLECTION DIAGRAM
 Includes weight of concrete only



PLAN SPAN 4

SEE SHEET 4 FOR LEGEND
 WORK THIS SHEET WITH SHEETS 4 THRU 8 AND 3 THRU 13

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE
1				
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F.A.I. 74	S.N. 010-0021	SEC. 114-VB)BR
STA. 1219+00.14	CHAMPAIGN COUNTY	PROJECT NO. 3400-5
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS		SHEET NO.

PROJECT NO.	SECTION	SUBJECT	TOTAL SHEETS	SHEET NO.
F.A. 74	(14-VB) DL	CHAMPAIGN	140	41
DESIGNER'S NAME	ALLOTTED	PRIORITIES		

SCREED INFORMATION FOR BEAM OR GIRDER = 11X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
WABUT	121537.108	-1.500	771.010	771.010
BRWAB	121539.889	-1.500	771.028	771.028
A	121549.889	-1.500	771.090	771.117
B	121559.889	-1.500	771.148	771.201
C	121569.889	-1.500	771.202	771.278
D	121579.889	-1.500	771.252	771.347
E	121589.889	-1.500	771.298	771.408
F	121599.889	-1.500	771.340	771.460
G	121609.889	-1.500	771.378	771.503
H	121619.889	-1.500	771.412	771.537
I	121629.889	-1.500	771.442	771.563
J	121639.889	-1.500	771.468	771.580
K	121649.889	-1.500	771.490	771.590
L	121659.889	-1.500	771.508	771.593
TCJ1	121669.889	-1.500	771.522	771.589
M	121679.889	-1.500	771.532	771.580
N	121689.889	-1.500	771.538	771.568
P	121699.889	-1.500	771.540	771.555
Q	121709.889	-1.500	771.538	771.543

SCREED INFORMATION FOR BEAM OR GIRDER = 12X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
WABUT	121535.184	-7.250	771.117	771.117
BRWAB	121537.965	-7.250	771.135	771.135
A	121547.965	-7.250	771.198	771.226
B	121557.965	-7.250	771.257	771.310
C	121567.965	-7.250	771.311	771.388
D	121577.965	-7.250	771.362	771.458
E	121587.965	-7.250	771.409	771.519
F	121597.965	-7.250	771.452	771.572
G	121607.965	-7.250	771.491	771.616
H	121617.965	-7.250	771.526	771.651
I	121627.965	-7.250	771.556	771.677
J	121637.965	-7.250	771.583	771.696
K	121647.965	-7.250	771.606	771.706
L	121657.965	-7.250	771.625	771.709
TCJ1	121667.965	-7.250	771.640	771.706
M	121677.965	-7.250	771.650	771.698
N	121687.965	-7.250	771.657	771.687
P	121697.965	-7.250	771.660	771.675
Q	121707.965	-7.250	771.659	771.664

SCREED INFORMATION FOR BEAM OR GIRDER = 13X AND RPGL
(RPGL = RIGHT PROFILE GRADE LINE)

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
WABUT	121533.260	-13.000	771.224	771.224
BRWAB	121536.042	-13.000	771.242	771.242
A	121546.042	-13.000	771.306	771.334
B	121556.042	-13.000	771.366	771.419
C	121566.042	-13.000	771.421	771.498
D	121576.042	-13.000	771.473	771.568
E	121586.042	-13.000	771.520	771.630
F	121596.042	-13.000	771.564	771.684
G	121606.042	-13.000	771.603	771.729
H	121616.042	-13.000	771.639	771.764
I	121626.042	-13.000	771.671	771.792
J	121636.042	-13.000	771.698	771.811
K	121646.042	-13.000	771.722	771.822
L	121656.042	-13.000	771.741	771.826
TCJ1	121666.042	-13.000	771.757	771.823
M	121676.042	-13.000	771.769	771.816
N	121686.042	-13.000	771.776	771.806
P	121696.042	-13.000	771.780	771.795
Q	121706.042	-13.000	771.779	771.784

SCREED INFORMATION FOR BEAM OR GIRDER = 14X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
WABUT	121531.336	-18.750	771.301	771.301
BRWAB	121534.118	-18.750	771.320	771.320
A	121544.118	-18.750	771.384	771.412
B	121554.118	-18.750	771.444	771.498
C	121564.118	-18.750	771.501	771.577
D	121574.118	-18.750	771.553	771.649
E	121584.118	-18.750	771.602	771.712
F	121594.118	-18.750	771.646	771.766
G	121604.118	-18.750	771.686	771.811
H	121614.118	-18.750	771.723	771.848
I	121624.118	-18.750	771.755	771.876
J	121634.118	-18.750	771.783	771.896
K	121644.118	-18.750	771.808	771.908
L	121654.118	-18.750	771.828	771.912
TCJ1	121664.118	-18.750	771.844	771.911
M	121674.118	-18.750	771.857	771.904
N	121684.118	-18.750	771.865	771.895
P	121694.118	-18.750	771.869	771.884
Q	121704.118	-18.750	771.870	771.875

SCREED INFORMATION FOR BEAM OR GIRDER = 15X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
WABUT	121529.412	-24.500	771.378	771.378
BRWAB	121532.194	-24.500	771.397	771.397
A	121542.194	-24.500	771.462	771.490
B	121552.194	-24.500	771.523	771.577
C	121562.194	-24.500	771.580	771.657
D	121572.194	-24.500	771.633	771.729
E	121582.194	-24.500	771.683	771.793
F	121592.194	-24.500	771.728	771.848
G	121602.194	-24.500	771.769	771.894
H	121612.194	-24.500	771.806	771.931
I	121622.194	-24.500	771.839	771.960
J	121632.194	-24.500	771.868	771.981
K	121642.194	-24.500	771.893	771.993
L	121652.194	-24.500	771.914	771.999
TCJ1	121662.194	-24.500	771.932	771.998
M	121672.194	-24.500	771.945	771.993
N	121682.194	-24.500	771.954	771.984
P	121692.194	-24.500	771.955	771.974
Q	121702.194	-24.500	771.960	771.965

PIER1	121724.139	-1.500	771.529	771.529
R	121734.139	-1.500	771.517	771.521
S	121744.139	-1.500	771.501	771.513
T	121754.139	-1.500	771.482	771.505
U	121764.139	-1.500	771.458	771.496
V	121774.139	-1.500	771.430	771.485
TCJ2	121784.139	-1.500	771.399	771.470
X	121794.139	-1.500	771.363	771.450
Y	121804.139	-1.500	771.323	771.423
Z	121814.139	-1.500	771.280	771.390
AA	121824.139	-1.500	771.232	771.348
AB	121834.139	-1.500	771.180	771.299
AC	121844.139	-1.500	771.125	771.241
AD	121854.139	-1.500	771.065	771.176
AE	121864.139	-1.500	771.001	771.104
AF	121874.139	-1.500	770.934	771.024
AG	121884.139	-1.500	770.862	770.938
TCJ3	121894.139	-1.500	770.786	770.845
AI	121904.139	-1.500	770.707	770.746
AJ	121914.139	-1.500	770.623	770.648
AK	121924.139	-1.500	770.535	770.548
AL	121934.139	-1.500	770.444	770.447
AM	121944.139	-1.500	770.348	770.349

PIER1	121722.215	-7.250	771.650	771.650
R	121732.215	-7.250	771.639	771.643
S	121742.215	-7.250	771.624	771.636
T	121752.215	-7.250	771.606	771.629
U	121762.215	-7.250	771.583	771.621
V	121772.215	-7.250	771.556	771.614
TCJ2	121782.215	-7.250	771.525	771.596
X	121792.215	-7.250	771.490	771.577
Y	121802.215	-7.250	771.451	771.551
Z	121812.215	-7.250	771.408	771.518
AA	121822.215	-7.250	771.361	771.477
AB	121832.215	-7.250	771.311	771.429
AC	121842.215	-7.250	771.256	771.372
AD	121852.215	-7.250	771.197	771.308
AE	121862.215	-7.250	771.134	771.236
AF	121872.215	-7.250	771.067	771.157
AG	121882.215	-7.250	770.996	771.072
TCJ3	121892.215	-7.250	770.921	770.980
AI	121902.215	-7.250	770.842	770.884
AJ	121912.215	-7.250	770.759	770.785
AK	121922.215	-7.250	770.673	770.685
AL	121932.215	-7.250	770.582	770.585
AM	121942.215	-7.250	770.487	770.487

PIER1	121720.292	-13.000	771.772	771.772
R	121730.292	-13.000	771.762	771.765
S	121740.292	-13.000	771.748	771.759
T	121750.292	-13.000	771.729	771.753
U	121760.292	-13.000	771.707	771.745
V	121770.292	-13.000	771.681	771.735
TCJ2	121780.292	-13.000	771.651	771.722
X	121790.292	-13.000	771.617	771.704
Y	121800.292	-13.000	771.579	771.679
Z	121810.292	-13.000	771.537	771.647
AA	121820.292	-13.000	771.491	771.607
AB	121830.292	-13.000	771.440	771.559
AC	121840.292	-13.000	771.386	771.503
AD	121850.292	-13.000	771.328	771.439
AE	121860.292	-13.000	771.266	771.368
AF	121870.292	-13.000	771.200	771.290
AG	121880.292	-13.000	771.130	771.205
TCJ3	121890.292	-13.000	771.056	771.115
AI	121900.292	-13.000	770.976	771.015
AJ	121910.292	-13.000	770.896	770.921
AK	121920.292	-13.000	770.809	770.822
AL	121930.292	-13.000	770.719	770.723
AM	121940.292	-13.000	770.625	770.626

PIER1	121718.368	-18.750	771.863	771.863
R	121728.368	-18.750	771.854	771.858
S	121738.368	-18.750	771.841	771.852
T	121748.368	-18.750	771.823	771.847
U	121758.368	-18.750	771.802	771.840
V	121768.368	-18.750	771.777	771.831
TCJ2	121778.368	-18.750	771.747	771.818
X	121788.368	-18.750	771.714	771.800
Y	121798.368	-18.750	771.677	771.776
Z	121808.368	-18.750	771.635	771.745
AA	121818.368	-18.750	771.590	771.706
AB	121828.368	-18.750	771.541	771.659
AC	121838.368	-18.750	771.487	771.604
AD	121848.368	-18.750	771.430	771.543
AE	121858.368	-18.750	771.368	771.473
AF	121868.368	-18.750	771.303	771.393
AG	121878.368	-18.750	771.234	771.309
TCJ3	121888.368	-18.750	771.160	771.219
AI	121898.368	-18.750	771.083	771.124
AJ	121908.368	-18.750	771.002	771.027
AK				

ROUTE NO.	SECTION	QUANTITY	TOTAL SHEETS	SHEET NO.
FAI 74	(14-VB) BR	CHAMPAIGN	140	92
FED. ROAD DIST. NO.	ALLEN	PROJECT		

SCREED INFORMATION FOR BEAM OR GIRDER = 16X

SCREED INFORMATION FOR BEAM OR GIRDER = 17

SCREED INFORMATION FOR BEAM OR GIRDER = 18

SCREED INFORMATION FOR BEAM OR GIRDER = 19

SCREED INFORMATION FOR BEAM OR GIRDER = 20

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
WABUT	121527.488	-30.250	771.291	771.291	WABUT	121525.481	-36.250	771.183	771.183	WABUT	121520.741	-50.417	770.921	770.921	WABUT	121518.371	-57.500	770.756	770.756	WABUT	121518.371	-57.500	770.756	770.756
BRWAB	121530.270	-30.250	771.310	771.310	BRWAB	121528.262	-36.250	771.202	771.202	BRWAB	121525.522	-50.417	770.941	770.941	BRWAB	121521.152	-57.500	770.776	770.776	BRWAB	121521.152	-57.500	770.776	770.776
A	121540.270	-30.250	771.376	771.403	A	121538.262	-36.250	771.269	771.299	A	121533.522	-50.417	771.009	771.039	A	121531.152	-57.500	770.846	770.876	A	121531.152	-57.500	770.846	770.876
B	121550.270	-30.250	771.438	771.491	B	121546.262	-36.250	771.332	771.390	B	121543.522	-50.417	771.074	771.132	B	121541.152	-57.500	770.911	770.970	B	121541.152	-57.500	770.911	770.970
C	121560.270	-30.250	771.495	771.572	C	121558.262	-36.250	771.390	771.474	C	121555.522	-50.417	771.134	771.218	C	121553.152	-57.500	770.973	771.057	C	121553.152	-57.500	770.973	771.057
D	121570.270	-30.250	771.549	771.645	D	121568.262	-36.250	771.445	771.549	D	121563.522	-50.417	771.191	771.295	D	121561.152	-57.500	771.030	771.135	D	121561.152	-57.500	771.030	771.135
E	121580.270	-30.250	771.599	771.705	E	121578.262	-36.250	771.496	771.616	E	121573.522	-50.417	771.244	771.364	E	121571.152	-57.500	771.064	771.204	E	121571.152	-57.500	771.064	771.204
F	121590.270	-30.250	771.645	771.765	F	121588.262	-36.250	771.543	771.673	F	121583.522	-50.417	771.297	771.427	F	121581.152	-57.500	771.093	771.243	F	121581.152	-57.500	771.093	771.243
G	121600.270	-30.250	771.687	771.812	G	121598.262	-36.250	771.585	771.722	G	121593.522	-50.417	771.337	771.473	G	121591.152	-57.500	771.129	771.316	G	121591.152	-57.500	771.129	771.316
H	121610.270	-30.250	771.725	771.850	H	121608.262	-36.250	771.624	771.761	H	121603.522	-50.417	771.377	771.514	H	121601.152	-57.500	771.167	771.357	H	121601.152	-57.500	771.167	771.357
I	121620.270	-30.250	771.759	771.880	I	121618.262	-36.250	771.659	771.791	I	121613.522	-50.417	771.414	771.546	I	121611.152	-57.500	771.201	771.390	I	121611.152	-57.500	771.201	771.390
J	121630.270	-30.250	771.789	771.901	J	121628.262	-36.250	771.689	771.812	J	121623.522	-50.417	771.447	771.579	J	121621.152	-57.500	771.232	771.415	J	121621.152	-57.500	771.232	771.415
K	121640.270	-30.250	771.815	771.915	K	121638.262	-36.250	771.716	771.826	K	121633.522	-50.417	771.475	771.585	K	121631.152	-57.500	771.261	771.431	K	121631.152	-57.500	771.261	771.431
L	121650.270	-30.250	771.837	771.921	L	121648.262	-36.250	771.739	771.832	L	121643.522	-50.417	771.500	771.594	L	121641.152	-57.500	771.287	771.459	L	121641.152	-57.500	771.287	771.459
TCJ1	121660.270	-30.250	771.854	771.921	TCJ1	121658.262	-36.250	771.757	771.831	TCJ1	121653.522	-50.417	771.520	771.593	TCJ1	121651.152	-57.500	771.312	771.442	TCJ1	121651.152	-57.500	771.312	771.442
M	121670.270	-30.250	771.868	771.916	M	121668.262	-36.250	771.772	771.825	M	121663.522	-50.417	771.537	771.590	M	121661.152	-57.500	771.336	771.439	M	121661.152	-57.500	771.336	771.439
N	121680.270	-30.250	771.878	771.908	N	121678.262	-36.250	771.789	771.806	N	121673.522	-50.417	771.549	771.583	N	121671.152	-57.500	771.359	771.433	N	121671.152	-57.500	771.359	771.433
P	121690.270	-30.250	771.884	771.895	P	121688.262	-36.250	771.789	771.806	P	121683.522	-50.417	771.558	771.575	P	121681.152	-57.500	771.409	771.426	P	121681.152	-57.500	771.409	771.426
Q	121700.270	-30.250	771.886	771.891	Q	121698.262	-36.250	771.792	771.798	Q	121693.522	-50.417	771.563	771.568	Q	121691.152	-57.500	771.414	771.420	Q	121691.152	-57.500	771.414	771.420

WORK THIS SHEET WITH SHEETS 4 THRU 7

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DATE	BY
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

PROJECT NO.	3400-5
PROJECT NAME	CHAMPAIGN COUNTY
SECTION	SEC. (14-VB) BR
STATION	STA. 1219+00.14
DATE	F.A.I. 74
SCALE	S.N. 010-0021
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS	

ROUTE NO.	SECTION	QUANTITY	TOTAL	AMOUNT
F 1 74	(14-VB) BR	CHAMPAIGN	140	73
FED. ROAD DIST. NO.		ILLINOIS	PROJECT	

SCREED INFORMATION FOR BEAM OR GIRDER = 11X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122135.388	-1.500	767.749	767.749
BE	122145.388	-1.500	767.573	767.598
BF	122155.388	-1.500	767.393	767.441
BG	122165.388	-1.500	767.209	767.277
BH	122175.388	-1.500	767.020	767.104
BI	122185.388	-1.500	766.828	766.923
BJ	122195.388	-1.500	766.632	766.731
BK	122205.388	-1.500	766.432	766.528
BL	122215.388	-1.500	766.228	766.316
BM	122225.388	-1.500	766.020	766.095
BN	122235.388	-1.500	765.807	765.865
BO	122245.388	-1.500	765.591	765.626
BREAB	122259.388	-1.500	765.282	765.282
EABUT	122262.169	-1.500	765.220	765.220

SCREED INFORMATION FOR BEAM OR GIRDER = 12X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122133.464	-7.250	767.902	767.902
BE	122143.464	-7.250	767.727	767.752
BF	122153.464	-7.250	767.548	767.596
BG	122163.464	-7.250	767.364	767.432
BH	122173.464	-7.250	767.177	767.261
BI	122183.464	-7.250	766.985	767.080
BJ	122193.464	-7.250	766.790	766.889
BK	122203.464	-7.250	766.591	766.687
BL	122213.464	-7.250	766.387	766.476
BM	122223.464	-7.250	766.180	766.255
BN	122233.464	-7.250	765.968	766.026
BO	122243.464	-7.250	765.753	765.788
BREAB	122257.464	-7.250	765.445	765.445
EABUT	122260.245	-7.250	765.383	765.383

SCREED INFORMATION FOR BEAM OR GIRDER = 13X AND RPGL
(RPGL = RIGHT PROFILE GRADE LINE)

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122131.540	-13.000	768.055	768.055
BE	122141.540	-13.000	767.881	767.906
BF	122151.540	-13.000	767.702	767.751
BG	122161.540	-13.000	767.520	767.588
BH	122171.540	-13.000	767.333	767.417
BI	122181.540	-13.000	767.142	767.237
BJ	122191.540	-13.000	766.948	767.047
BK	122201.540	-13.000	766.749	766.846
BL	122211.540	-13.000	766.547	766.635
BM	122221.540	-13.000	766.340	766.415
BN	122231.540	-13.000	766.129	766.187
BO	122241.540	-13.000	765.915	765.950
BREAB	122255.540	-13.000	765.608	765.608
EABUT	122258.322	-13.000	765.546	765.546

SCREED INFORMATION FOR BEAM OR GIRDER = 14X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122129.616	-18.750	768.179	768.179
BE	122139.616	-18.750	768.005	768.030
BF	122149.616	-18.750	767.827	767.875
BG	122159.616	-18.750	767.645	767.713
BH	122169.616	-18.750	767.459	767.543
BI	122179.616	-18.750	767.269	767.364
BJ	122189.616	-18.750	767.076	767.174
BK	122199.616	-18.750	766.878	766.974
BL	122209.616	-18.750	766.676	766.764
BM	122219.616	-18.750	766.470	766.545
BN	122229.616	-18.750	766.260	766.318
BO	122239.616	-18.750	766.046	766.081
BREAB	122253.616	-18.750	765.740	765.740
EABUT	122256.398	-18.750	765.679	765.679

SCREED INFORMATION FOR BEAM OR GIRDER = 15X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122127.692	-24.500	768.302	768.302
BE	122137.692	-24.500	768.129	768.154
BF	122147.692	-24.500	767.952	768.000
BG	122157.692	-24.500	767.771	767.839
BH	122167.692	-24.500	767.585	767.670
BI	122177.692	-24.500	767.396	767.491
BJ	122187.692	-24.500	767.203	767.302
BK	122197.692	-24.500	767.006	767.103
BL	122207.692	-24.500	766.805	766.894
BM	122217.692	-24.500	766.600	766.675
BN	122227.692	-24.500	766.391	766.448
BO	122237.692	-24.500	766.178	766.213
BREAB	122251.692	-24.500	765.873	765.873
EABUT	122254.474	-24.500	765.811	765.811

SCREED INFORMATION FOR BEAM OR GIRDER = 16X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122125.768	-30.250	768.260	768.260
BE	122135.768	-30.250	768.088	768.113
BF	122145.768	-30.250	767.912	767.960
BG	122155.768	-30.250	767.731	767.800
BH	122165.768	-30.250	767.547	767.631
BI	122175.768	-30.250	767.359	767.454
BJ	122185.768	-30.250	767.167	767.265
BK	122195.768	-30.250	766.970	767.067
BL	122205.768	-30.250	766.770	766.858
BM	122215.768	-30.250	766.566	766.641
BN	122225.768	-30.250	766.357	766.415
BO	122235.768	-30.250	766.145	766.180
BREAB	122249.768	-30.250	765.841	765.841
EABUT	122252.550	-30.250	765.780	765.780

SCREED INFORMATION FOR BEAM OR GIRDER = 17

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122123.761	-36.250	768.201	768.201
BE	122133.761	-36.250	768.029	768.054
BF	122143.761	-36.250	767.854	767.902
BG	122153.761	-36.250	767.674	767.742
BH	122163.761	-36.250	767.491	767.575
BI	122173.761	-36.250	767.303	767.398
BJ	122183.761	-36.250	767.112	767.211
BK	122193.761	-36.250	766.916	767.013
BL	122203.761	-36.250	766.717	766.805
BM	122213.761	-36.250	766.513	766.588
BN	122223.761	-36.250	766.306	766.363
BO	122233.761	-36.250	766.094	766.129
BREAB	122247.761	-36.250	765.791	765.791
EABUT	122250.542	-36.250	765.730	765.730

SCREED INFORMATION FOR BEAM OR GIRDER = 18

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122121.391	-43.333	768.130	768.130
BE	122131.391	-43.333	767.960	767.985
BF	122141.391	-43.333	767.785	767.833
BG	122151.391	-43.333	767.606	767.675
BH	122161.391	-43.333	767.424	767.508
BI	122171.391	-43.333	767.237	767.332
BJ	122181.391	-43.333	767.047	767.146
BK	122191.391	-43.333	766.852	766.949
BL	122201.391	-43.333	766.654	766.742
BM	122211.391	-43.333	766.451	766.526
BN	122221.391	-43.333	766.245	766.302
BO	122231.391	-43.333	766.034	766.069
BREAB	122245.391	-43.333	765.733	765.733
EABUT	122248.172	-43.333	765.672	765.672

SCREED INFORMATION FOR BEAM OR GIRDER = 19

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122119.021	-50.417	768.052	768.052
BE	122129.021	-50.417	767.882	767.908
BF	122139.021	-50.417	767.709	767.757
BG	122149.021	-50.417	767.531	767.599
BH	122159.021	-50.417	767.349	767.434
BI	122169.021	-50.417	767.164	767.259
BJ	122179.021	-50.417	766.974	767.073
BK	122189.021	-50.417	766.781	766.877
BL	122199.021	-50.417	766.583	766.672
BM	122209.021	-50.417	766.381	766.457
BN	122219.021	-50.417	766.176	766.233
BO	122229.021	-50.417	765.966	766.001
BREAB	122243.021	-50.417	765.666	765.666
EABUT	122245.802	-50.417	765.605	765.605

SCREED INFORMATION FOR BEAM OR GIRDER = 20

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122116.651	-57.500	767.944	767.944
BE	122126.651	-57.500	767.775	767.801
BF	122136.651	-57.500	767.603	767.653
BG	122146.651	-57.500	767.426	767.494
BH	122156.651	-57.500	767.245	767.329
BI	122166.651	-57.500	767.061	767.156
BJ	122176.651	-57.500	766.872	766.971
BK	122186.651	-57.500	766.679	766.776
BL	122196.651	-57.500	766.483	766.571
BM	122206.651	-57.500	766.282	766.357
BN	122216.651	-57.500	766.077	766.135
BO	122226.651	-57.500	765.869	765.904
BREAB	122240.651	-57.500	765.570	765.570
EABUT	122243.432	-57.500	765.510	765.510

WORK THIS SHEET WITH SHEETS 4 THRU 7

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DATE
1				JEC 3-57
2				
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F.A.I. 74		S.N. 010-0021		SEC.(14-VB)BR
STA. 1219+00.14		CHAMPAIGN COUNTY		3400-5
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS				PROJECT NO.

ROUTE NO.	SECTION	PROJECT	TOTAL SHEETS	SHEET NO.
FAI 74	(14-VB) BR	CHAMPAIGN	140	94
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

SCREED INFORMATION FOR BEAM OR GIRDER = 1

SCREED INFORMATION FOR BEAM OR GIRDER = 2

SCREED INFORMATION FOR BEAM OR GIRDER = 3

SCREED INFORMATION FOR BEAM OR GIRDER = 4

SCREED INFORMATION FOR BEAM OR GIRDER = 5

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
MABUT	121556.849	57.500	771.006	771.006	MABUT	121554.479	50.417	771.140	771.140	MABUT	121552.109	43.333	771.244	771.244	MABUT	121549.739	36.250	771.341	771.341	MABUT	121547.732	30.250	771.422	771.422
BRNAB	121559.630	57.500	771.022	771.022	BRNAB	121557.260	50.417	771.156	771.156	BRNAB	121554.890	43.333	771.260	771.260	BRNAB	121552.520	36.250	771.357	771.357	BRNAB	121550.513	30.250	771.439	771.439
A	121569.630	57.500	771.076	771.106	A	121567.260	50.417	771.211	771.241	A	121564.890	43.333	771.316	771.347	A	121562.520	36.250	771.414	771.444	A	121560.513	30.250	771.497	771.525
B	121579.630	57.500	771.126	771.185	B	121577.260	50.417	771.262	771.321	B	121574.890	43.333	771.368	771.427	B	121572.520	36.250	771.467	771.526	B	121570.513	30.250	771.551	771.604
C	121589.630	57.500	771.172	771.256	C	121587.260	50.417	771.309	771.393	C	121584.890	43.333	771.417	771.500	C	121582.520	36.250	771.516	771.600	C	121580.513	30.250	771.600	771.677
D	121599.630	57.500	771.214	771.319	D	121597.260	50.417	771.352	771.457	D	121594.890	43.333	771.463	771.565	D	121592.520	36.250	771.561	771.666	D	121590.513	30.250	771.646	771.742
E	121609.630	57.500	771.253	771.373	E	121607.260	50.417	771.391	771.512	E	121604.890	43.333	771.512	771.633	E	121602.520	36.250	771.621	771.742	E	121600.513	30.250	771.722	771.798
F	121619.630	57.500	771.287	771.418	F	121617.260	50.417	771.427	771.557	F	121614.890	43.333	771.567	771.688	F	121612.520	36.250	771.639	771.770	F	121610.513	30.250	771.726	771.846
G	121629.630	57.500	771.317	771.453	G	121627.260	50.417	771.458	771.594	G	121624.890	43.333	771.569	771.705	G	121622.520	36.250	771.672	771.809	G	121620.513	30.250	771.760	771.885
H	121639.630	57.500	771.343	771.480	H	121637.260	50.417	771.485	771.622	H	121634.890	43.333	771.597	771.734	H	121632.520	36.250	771.701	771.838	H	121630.513	30.250	771.789	771.915
I	121649.630	57.500	771.365	771.498	I	121647.260	50.417	771.508	771.640	I	121644.890	43.333	771.597	771.753	I	121642.520	36.250	771.726	771.859	I	121640.513	30.250	771.815	771.936
J	121659.630	57.500	771.383	771.506	J	121657.260	50.417	771.527	771.650	J	121654.890	43.333	771.641	771.764	J	121652.520	36.250	771.747	771.870	J	121650.513	30.250	771.837	771.949
K	121669.630	57.500	771.397	771.520	K	121667.260	50.417	771.542	771.652	K	121664.890	43.333	771.657	771.767	K	121662.520	36.250	771.764	771.874	K	121660.513	30.250	771.855	771.953
L	121679.630	57.500	771.408	771.500	L	121677.260	50.417	771.553	771.646	L	121674.890	43.333	771.669	771.762	L	121672.520	36.250	771.777	771.870	L	121670.513	30.250	771.869	771.953
TCJ1	121689.630	57.500	771.414	771.487	TCJ1	121687.260	50.417	771.560	771.634	TCJ1	121684.890	43.333	771.677	771.750	TCJ1	121682.520	36.250	771.786	771.859	TCJ1	121680.513	30.250	771.878	771.945
M	121699.630	57.500	771.416	771.469	M	121697.260	50.417	771.563	771.616	M	121694.890	43.333	771.681	771.734	M	121692.520	36.250	771.791	771.825	M	121690.513	30.250	771.884	771.932
N	121709.630	57.500	771.414	771.447	N	121707.260	50.417	771.562	771.596	N	121704.890	43.333	771.681	771.714	N	121702.520	36.250	771.792	771.825	N	121700.513	30.250	771.886	771.916
O	121719.630	57.500	771.408	771.425	O	121717.260	50.417	771.558	771.574	O	121714.890	43.333	771.677	771.694	O	121712.520	36.250	771.789	771.805	O	121710.513	30.250	771.884	771.899
P	121729.630	57.500	771.398	771.404	P	121727.260	50.417	771.549	771.554	P	121724.890	43.333	771.669	771.675	P	121722.520	36.250	771.782	771.788	P	121720.513	30.250	771.878	771.883

WORK THIS SHEET WITH SHEETS 4 THRU 7

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DATE
1	BY DATE	1	BY DATE	
2		2		
3		3		
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F.A.I. 74
 STA. 1219+00.14
 S.N. 010-0021
 CHAMPAIGN COUNTY
 HOMER L. CHASTAIN & ASSOCIATES
 CONSULTING ENGINEERS

PROJECT NO. 3400-5
 SHEET NO.

SECTION	SECTION	SECTION	TOTAL SHEETS	SHEET NO.
F.A.I. 74	(14-VR) BR	CHAMPAIGN	140	95
FED. ROAD DIST. NO.		ALLIANCE	POLARITY	

SCREED INFORMATION FOR BEAM OR GIRDER = 6X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
MABUT	121545.808	24.500	771.485	771.485
BRWAB	121548.589	24.500	771.502	771.502
A	121558.589	24.500	771.560	771.588
B	121568.589	24.500	771.615	771.668
C	121578.589	24.500	771.665	771.742
D	121588.589	24.500	771.712	771.808
E	121598.589	24.500	771.754	771.865
F	121608.589	24.500	771.793	771.913
G	121618.589	24.500	771.828	771.953
H	121628.589	24.500	771.858	771.984
I	121638.589	24.500	771.885	772.006
J	121648.589	24.500	771.907	772.020
K	121658.589	24.500	771.926	772.026
L	121668.589	24.500	771.940	772.025
TCJ1	121678.589	24.500	771.951	772.018
N	121688.589	24.500	771.958	772.005
M	121698.589	24.500	771.960	771.990
P	121708.589	24.500	771.959	771.974
Q	121718.589	24.500	771.953	771.958

SCREED INFORMATION FOR BEAM OR GIRDER = 7X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
MABUT	121543.684	18.750	771.383	771.383
BRWAB	121546.665	18.750	771.400	771.400
A	121556.665	18.750	771.459	771.487
B	121566.665	18.750	771.515	771.568
C	121576.665	18.750	771.566	771.643
D	121586.665	18.750	771.613	771.709
E	121596.665	18.750	771.657	771.767
F	121606.665	18.750	771.696	771.816
G	121616.665	18.750	771.731	771.856
H	121626.665	18.750	771.763	771.888
I	121636.665	18.750	771.790	771.912
J	121646.665	18.750	771.813	771.926
K	121656.665	18.750	771.833	771.933
L	121666.665	18.750	771.848	771.932
TCJ1	121676.665	18.750	771.859	771.926
N	121686.665	18.750	771.867	771.914
M	121696.665	18.750	771.870	771.900
P	121706.665	18.750	771.869	771.884
Q	121716.665	18.750	771.865	771.870

SCREED INFORMATION FOR BEAM OR GIRDER = 8X AND LPGL
(LPGL = LEFT PROFILE GRADE LINE)

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
MABUT	121541.960	13.000	771.280	771.280
BRWAB	121544.741	13.000	771.298	771.298
A	121554.741	13.000	771.358	771.386
B	121564.741	13.000	771.414	771.468
C	121574.741	13.000	771.466	771.543
D	121584.741	13.000	771.514	771.610
E	121594.741	13.000	771.558	771.669
F	121604.741	13.000	771.599	771.718
G	121614.741	13.000	771.635	771.760
H	121624.741	13.000	771.667	771.792
I	121634.741	13.000	771.695	771.816
J	121644.741	13.000	771.719	771.831
K	121654.741	13.000	771.739	771.839
L	121664.741	13.000	771.755	771.840
TCJ1	121674.741	13.000	771.767	771.834
M	121684.741	13.000	771.775	771.823
N	121694.741	13.000	771.779	771.809
P	121704.741	13.000	771.780	771.795
Q	121714.741	13.000	771.776	771.781

SCREED INFORMATION FOR BEAM OR GIRDER = 9X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
MABUT	121540.036	7.250	771.148	771.148
BRWAB	121542.817	7.250	771.166	771.166
A	121552.817	7.250	771.227	771.255
B	121562.817	7.250	771.284	771.338
C	121572.817	7.250	771.337	771.413
D	121582.817	7.250	771.386	771.481
E	121592.817	7.250	771.430	771.541
F	121602.817	7.250	771.471	771.591
G	121612.817	7.250	771.508	771.633
H	121622.817	7.250	771.541	771.666
I	121632.817	7.250	771.570	771.692
J	121642.817	7.250	771.595	771.707
K	121652.817	7.250	771.616	771.716
L	121662.817	7.250	771.633	771.717
TCJ1	121672.817	7.250	771.645	771.712
M	121682.817	7.250	771.654	771.702
N	121692.817	7.250	771.659	771.689
P	121702.817	7.250	771.660	771.675
Q	121712.817	7.250	771.657	771.662

SCREED INFORMATION FOR BEAM OR GIRDER = 10X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
MABUT	121538.112	1.500	771.016	771.016
BRWAB	121540.893	1.500	771.034	771.034
A	121550.893	1.500	771.096	771.123
B	121560.893	1.500	771.153	771.207
C	121570.893	1.500	771.207	771.284
D	121580.893	1.500	771.257	771.352
E	121590.893	1.500	771.302	771.412
F	121600.893	1.500	771.344	771.464
G	121610.893	1.500	771.382	771.507
H	121620.893	1.500	771.415	771.541
I	121630.893	1.500	771.445	771.566
J	121640.893	1.500	771.471	771.583
K	121650.893	1.500	771.492	771.592
L	121660.893	1.500	771.510	771.594
TCJ1	121670.893	1.500	771.523	771.590
M	121680.893	1.500	771.533	771.581
N	121690.893	1.500	771.539	771.569
P	121700.893	1.500	771.540	771.555
Q	121710.893	1.500	771.538	771.543

PIER1	121732.839	24.500	771.939	771.939
R	121742.839	24.500	771.923	771.927
S	121752.839	24.500	771.904	771.916
T	121762.839	24.500	771.881	771.905
U	121772.839	24.500	771.854	771.892
V	121782.839	24.500	771.823	771.877
TCJ2	121792.839	24.500	771.788	771.859
X	121802.839	24.500	771.749	771.835
Y	121812.839	24.500	771.706	771.805
Z	121822.839	24.500	771.658	771.768
AA	121832.839	24.500	771.607	771.723
AB	121842.839	24.500	771.552	771.670
AC	121852.839	24.500	771.493	771.610
AD	121862.839	24.500	771.430	771.541
AE	121872.839	24.500	771.363	771.465
AF	121882.839	24.500	771.292	771.382
AG	121892.839	24.500	771.216	771.292
TCJ3	121902.839	24.500	771.137	771.196
AI	121912.839	24.500	771.054	771.096
AJ	121922.839	24.500	770.967	770.992
AK	121932.839	24.500	770.876	770.888
AL	121942.839	24.500	770.781	770.784
AM	121952.839	24.500	770.682	770.682

PIER1	121730.915	18.750	771.851	771.851
R	121740.915	18.750	771.837	771.840
S	121750.915	18.750	771.818	771.830
T	121760.915	18.750	771.796	771.819
U	121770.915	18.750	771.770	771.807
V	121780.915	18.750	771.739	771.793
TCJ2	121790.915	18.750	771.705	771.776
X	121800.915	18.750	771.666	771.753
Y	121810.915	18.750	771.624	771.724
Z	121820.915	18.750	771.578	771.687
AA	121830.915	18.750	771.527	771.643
AB	121840.915	18.750	771.473	771.591
AC	121850.915	18.750	771.415	771.531
AD	121860.915	18.750	771.352	771.463
AE	121870.915	18.750	771.286	771.388
AF	121880.915	18.750	771.215	771.306
AG	121890.915	18.750	771.141	771.217
TCJ3	121900.915	18.750	771.063	771.122
AI	121910.915	18.750	770.980	771.022
AJ	121920.915	18.750	770.894	770.919
AK	121930.915	18.750	770.804	770.816
AL	121940.915	18.750	770.709	770.713
AM	121950.915	18.750	770.611	770.611

PIER1	121728.991	13.000	771.763	771.763
R	121738.991	13.000	771.750	771.753
S	121748.991	13.000	771.732	771.744
T	121758.991	13.000	771.710	771.734
U	121768.991	13.000	771.685	771.723
V	121778.991	13.000	771.655	771.710
TCJ2	121788.991	13.000	771.622	771.693
X	121798.991	13.000	771.584	771.671
Y	121808.991	13.000	771.542	771.642
Z	121818.991	13.000	771.497	771.607
AA	121828.991	13.000	771.447	771.563
AB	121838.991	13.000	771.394	771.512
AC	121848.991	13.000	771.336	771.453
AD	121858.991	13.000	771.274	771.386
AE	121868.991	13.000	771.209	771.311
AF	121878.991	13.000	771.139	771.229
AG	121888.991	13.000	771.066	771.141
TCJ3	121898.991	13.000	770.988	771.047
AI	121908.991	13.000	770.906	770.948
AJ	121918.991	13.000	770.821	770.846
AK	121928.991	13.000	770.731	770.743
AL	121938.991	13.000	770.638	770.641
AM	121948.991	13.000	770.540	770.540

PIER1	121727.067	7.250	771.646	771.646
R	121737.067	7.250	771.633	771.637
S	121747.067	7.250	771.616	771.628
T	121757.067	7.250	771.595	771.618
U	121767.067	7.250	771.570	771.608
V	121777.067	7.250	771.541	771.596
TCJ2	121787.067	7.250	771.509	771.580
X	121797.067	7.250	771.472	771.558
Y	121807.067	7.250	771.431	771.531
Z	121817.067	7.250	771.386	771.496
AA	121827.067	7.250	771.337	771.453
AB	121837.067	7.250	771.284	771.403
AC	121847.067	7.250	771.228	771.344
AD	121857.067	7.250	771.167	771.278
AE	121867.067	7.250	771.102	771.204
AF	121877.067	7.250	771.033	771.123
AG	121887.067	7.250	770.960	771.036
TCJ3	121897.067	7.250	770.883	770.942
AI	121907.067	7.250	770.803	770.844
AJ	121917.067	7.250	770.718	770.743

SCALE NO.	SECTION	SUBJECT	TOTAL SHEETS	SHEET NO.
FAI 74	(14-VB) BR	CHAMPAIGN	140	13
FED. ROAD DIST. NO.		ILLINOIS	PROJECT	

SCREED INFORMATION FOR BEAM OR GIRDER # 1

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122155.129	57.500	767.273	767.273
BE	122165.129	57.500	767.089	767.114
BF	122175.129	57.500	766.901	766.949
BG	122185.129	57.500	766.705	766.777
BH	122195.129	57.500	766.513	766.597
BI	122205.129	57.500	766.313	766.408
BJ	122215.129	57.500	766.109	766.208
BK	122225.129	57.500	765.901	765.997
BL	122235.129	57.500	765.689	765.777
BM	122245.129	57.500	765.473	765.548
BN	122255.129	57.500	765.253	765.310
BO	122265.129	57.500	765.028	765.063
BREAB	122275.129	57.500	764.708	764.708
EABUT	122281.910	57.500	764.644	764.644

SCREED INFORMATION FOR BEAM OR GIRDER # 2

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122152.759	50.417	767.464	767.464
BE	122162.759	50.417	767.281	767.306
BF	122172.759	50.417	767.093	767.142
BG	122182.759	50.417	766.902	766.971
BH	122192.759	50.417	766.707	766.791
BI	122202.759	50.417	766.508	766.603
BJ	122212.759	50.417	766.305	766.404
BK	122222.759	50.417	766.098	766.194
BL	122232.759	50.417	765.887	765.975
BM	122242.759	50.417	765.672	765.747
BN	122252.759	50.417	765.453	765.510
BO	122262.759	50.417	765.230	765.264
BREAB	122276.759	50.417	764.910	764.910
EABUT	122279.540	50.417	764.846	764.846

SCREED INFORMATION FOR BEAM OR GIRDER # 3

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122150.389	43.333	767.625	767.625
BE	122160.389	43.333	767.442	767.468
BF	122170.389	43.333	767.256	767.305
BG	122180.389	43.333	767.066	767.134
BH	122190.389	43.333	766.872	766.956
BI	122200.389	43.333	766.674	766.769
BJ	122210.389	43.333	766.472	766.570
BK	122220.389	43.333	766.265	766.362
BL	122230.389	43.333	766.055	766.144
BM	122240.389	43.333	765.841	765.916
BN	122250.389	43.333	765.623	765.680
BO	122260.389	43.333	765.401	765.436
BREAB	122274.389	43.333	765.083	765.083
EABUT	122277.170	43.333	765.019	765.019

SCREED INFORMATION FOR BEAM OR GIRDER # 4

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122148.019	36.250	767.778	767.778
BE	122158.019	36.250	767.597	767.622
BF	122168.019	36.250	767.411	767.460
BG	122178.019	36.250	767.222	767.290
BH	122188.019	36.250	767.029	767.113
BI	122198.019	36.250	766.832	766.927
BJ	122208.019	36.250	766.631	766.729
BK	122218.019	36.250	766.425	766.522
BL	122228.019	36.250	766.216	766.305
BM	122238.019	36.250	766.003	766.078
BN	122248.019	36.250	765.786	765.843
BO	122258.019	36.250	765.565	765.599
BREAB	122272.019	36.250	765.248	765.248
EABUT	122274.800	36.250	765.184	765.184

SCREED INFORMATION FOR BEAM OR GIRDER # 5X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122146.012	30.250	767.907	767.907
BE	122156.012	30.250	767.727	767.752
BF	122166.012	30.250	767.543	767.591
BG	122176.012	30.250	767.354	767.422
BH	122186.012	30.250	767.162	767.246
BI	122196.012	30.250	766.965	767.060
BJ	122206.012	30.250	766.765	766.864
BK	122216.012	30.250	766.561	766.657
BL	122226.012	30.250	766.352	766.441
BM	122236.012	30.250	766.140	766.215
BN	122246.012	30.250	765.923	765.981
BO	122256.012	30.250	765.703	765.738
BREAB	122270.012	30.250	765.388	765.388
EABUT	122272.793	30.250	765.324	765.324

SCREED INFORMATION FOR BEAM OR GIRDER # 6X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122144.088	24.500	768.016	768.016
BE	122154.088	24.500	767.836	767.861
BF	122164.088	24.500	767.653	767.701
BG	122174.088	24.500	767.465	767.533
BH	122184.088	24.500	767.273	767.357
BI	122194.088	24.500	767.078	767.173
BJ	122204.088	24.500	766.878	766.977
BK	122214.088	24.500	766.674	766.771
BL	122224.088	24.500	766.467	766.555
BM	122234.088	24.500	766.255	766.330
BN	122244.088	24.500	766.040	766.097
BO	122254.088	24.500	765.820	765.855
BREAB	122268.088	24.500	765.506	765.506
EABUT	122270.869	24.500	765.442	765.442

SCREED INFORMATION FOR BEAM OR GIRDER # 7X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122142.164	18.750	767.960	767.960
BE	122152.164	18.750	767.781	767.806
BF	122162.164	18.750	767.598	767.646
BG	122172.164	18.750	767.411	767.480
BH	122182.164	18.750	767.220	767.305
BI	122192.164	18.750	767.026	767.121
BJ	122202.164	18.750	766.827	766.926
BK	122212.164	18.750	766.624	766.720
BL	122222.164	18.750	766.417	766.506
BM	122232.164	18.750	766.206	766.281
BN	122242.164	18.750	765.991	766.049
BO	122252.164	18.750	765.772	765.807
BREAB	122266.164	18.750	765.459	765.459
EABUT	122268.945	18.750	765.396	765.396

SCREED INFORMATION FOR BEAM OR GIRDER # 8X AND LPGL
(LPGL = LEFT PROFILE GRADE LINE)

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122140.240	13.000	767.904	767.904
BE	122150.240	13.000	767.726	767.751
BF	122160.240	13.000	767.544	767.592
BG	122170.240	13.000	767.357	767.426
BH	122180.240	13.000	767.167	767.251
BI	122190.240	13.000	766.973	767.068
BJ	122200.240	13.000	766.775	766.874
BK	122210.240	13.000	766.573	766.670
BL	122220.240	13.000	766.367	766.456
BM	122230.240	13.000	766.157	766.232
BN	122240.240	13.000	765.943	766.000
BO	122250.240	13.000	765.725	765.760
BREAB	122264.240	13.000	765.413	765.413
EABUT	122267.021	13.000	765.350	765.350

SCREED INFORMATION FOR BEAM OR GIRDER # 9X

LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122138.316	7.250	767.818	767.818
BE	122148.316	7.250	767.640	767.666
BF	122158.316	7.250	767.459	767.507
BG	122168.316	7.250	767.274	767.342
BH	122178.316	7.250	767.084	767.169
BI	122188.316	7.250	766.891	766.986
BJ	122198.316	7.250	766.694	766.793
BK	122208.316	7.250	766.493	766.589
BL	122218.316	7.250	766.287	766.376
BM	122228.316	7.250	766.078	766.153
BN	122238.316	7.250	765.865	765.922
BO	122248.316	7.250	765.647	765.682
BREAB	122262.316	7.250	765.336	765.336
EABUT	122265.097	7.250	765.274	765.274

SCREED INFORMATION FOR BEAM OR GIRDER # 10X

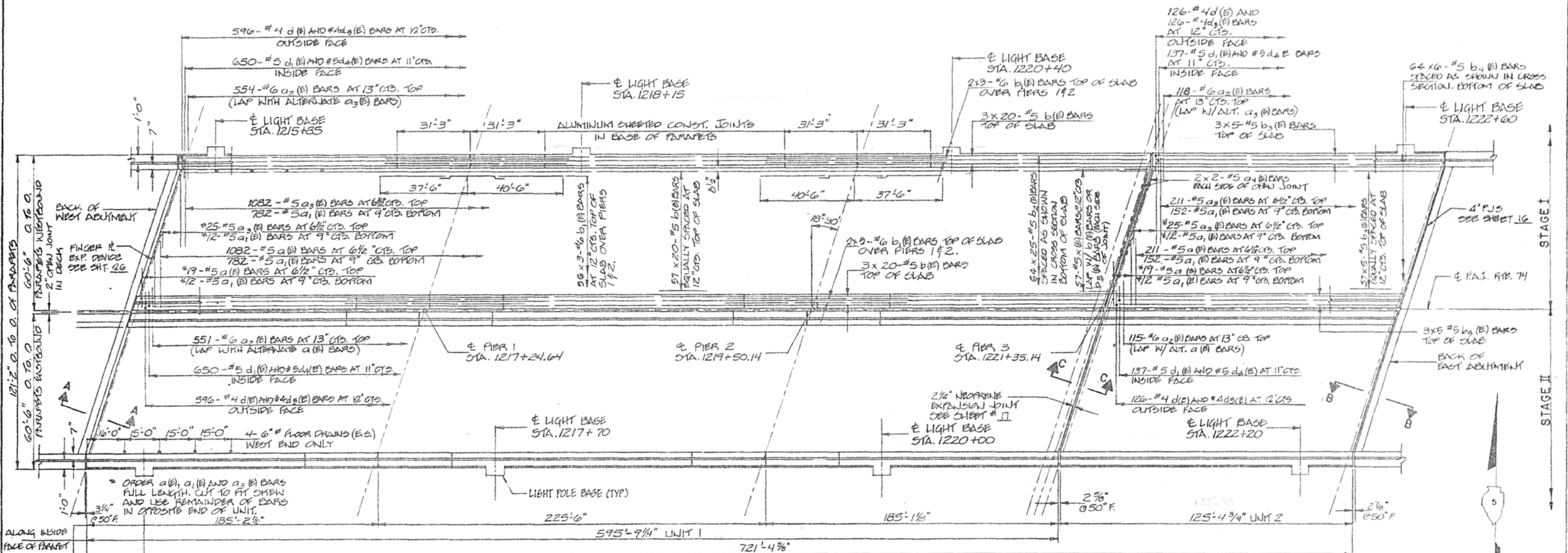
LINE	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
BRP3S4	122136.392	1.500	767.732	767.732
BE	122146.392	1.500	767.555	767.580
BF	122156.392	1.500	767.375	767.423
BG	122166.392	1.500	767.190	767.258
BH	122176.392	1.500	767.001	767.085
BI	122186.392	1.500	766.808	766.904
BJ	122196.392	1.500	766.612	766.711
BK	122206.392	1.500	766.412	766.508
BL	122216.392	1.500	766.207	766.296
BM	122226.392	1.500	765.999	766.074
BN	122236.392	1.500	765.786	765.843
BO	122246.392	1.500	765.570	765.604
BREAB	122260.392	1.500	765.260	765.260
EABUT	122263.173	1.500	765.197	765.197

WORK THIS SHEET WITH SHEETS 4 THRU 7

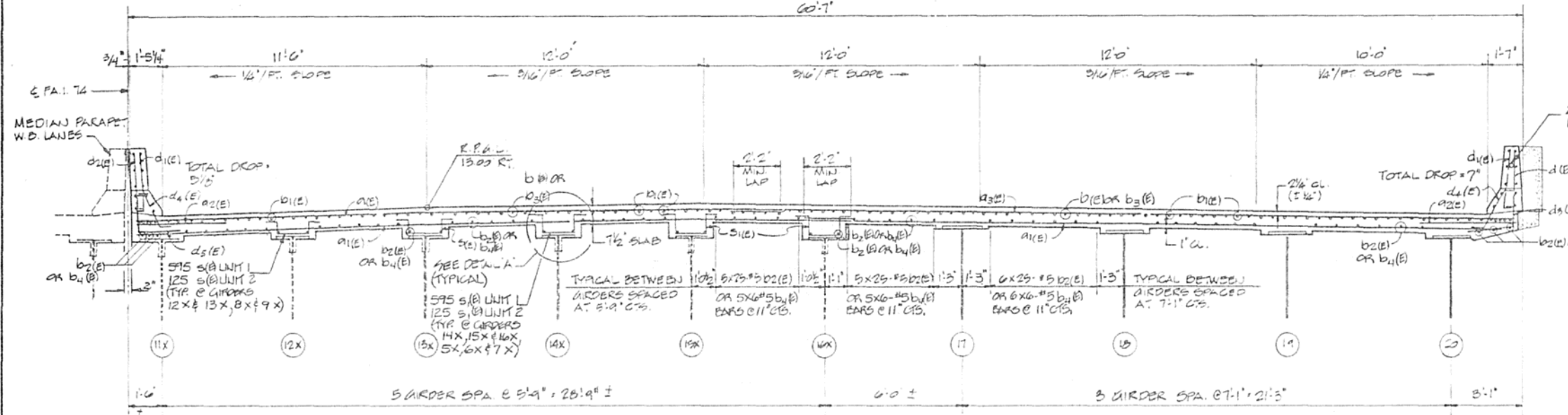
REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DATE
1				11-7-92
2				
3				
4				
5				
6				
7				
8				
9				
10				

FAI 74	S.N. 010-0021	SEC. 14-VB1BR
ST. 1219+00.14	CHAMPAIGN COUNTY	3400-5
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS		

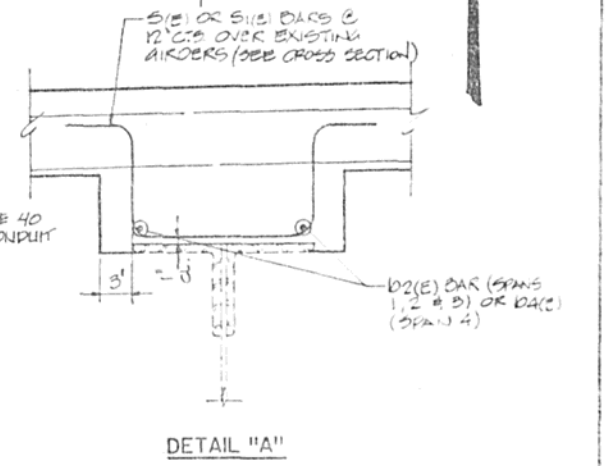
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	14-VB	CHAMPAIGN	140	47
ST. ROAD DIST. NO.	ILLINOIS	PROJECT		



PLAN
(REINFORCEMENT SHOWN FOR WESTBOUND LANES;
EASTBOUND LANES SIMILAR)



CROSS SECTION (LOOKING EAST)
EASTBOUND LANES (WESTBOUND LANES SIMILAR)

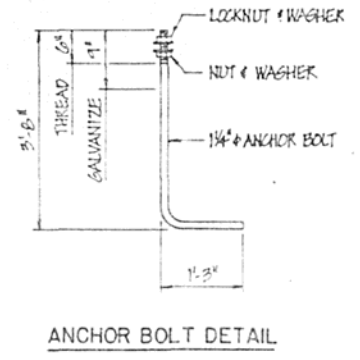
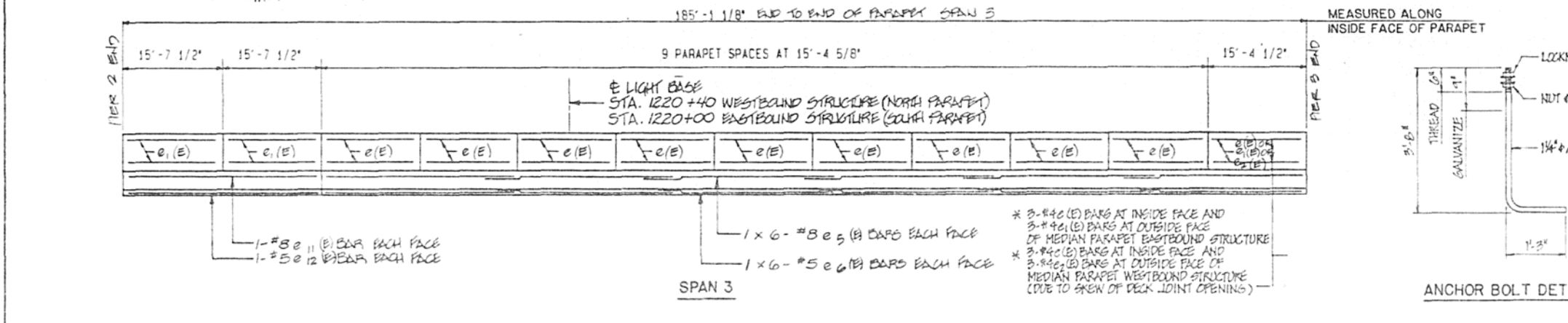
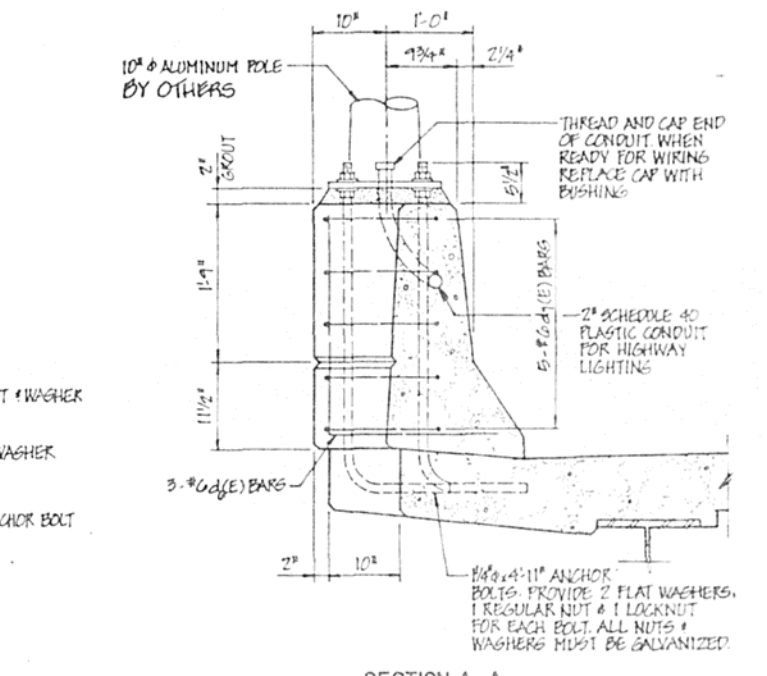
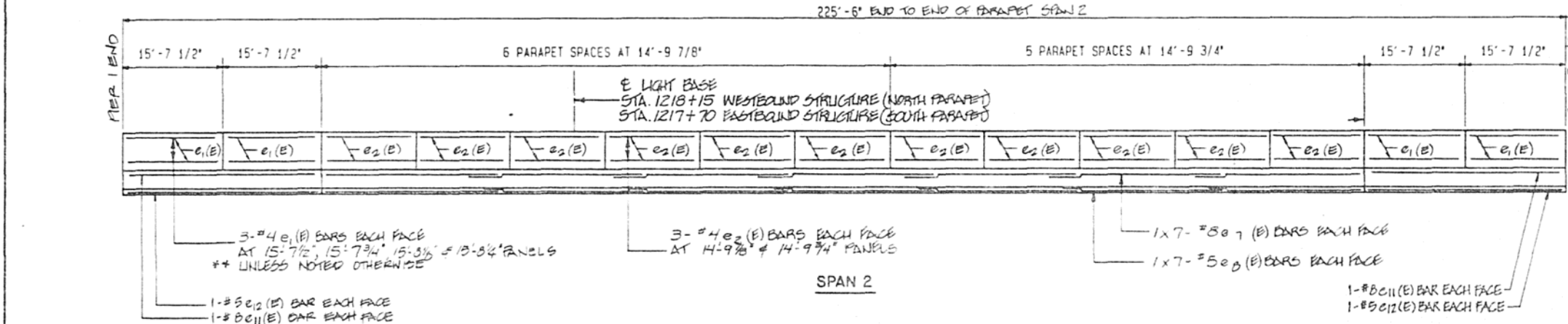
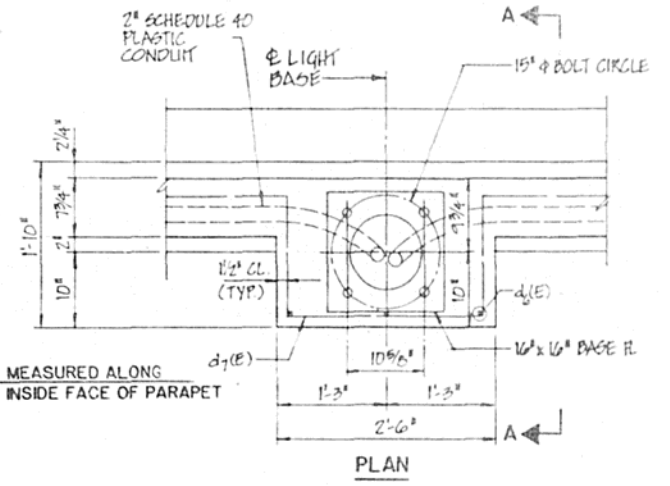
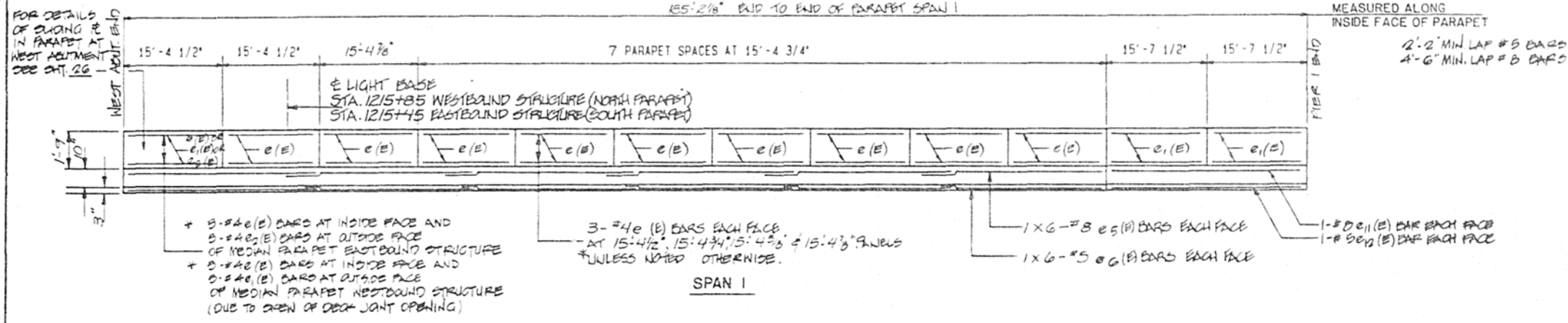


WORK THIS SHEET WITH SHEETS 15 & 16

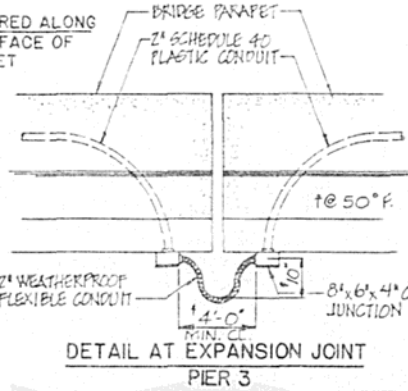
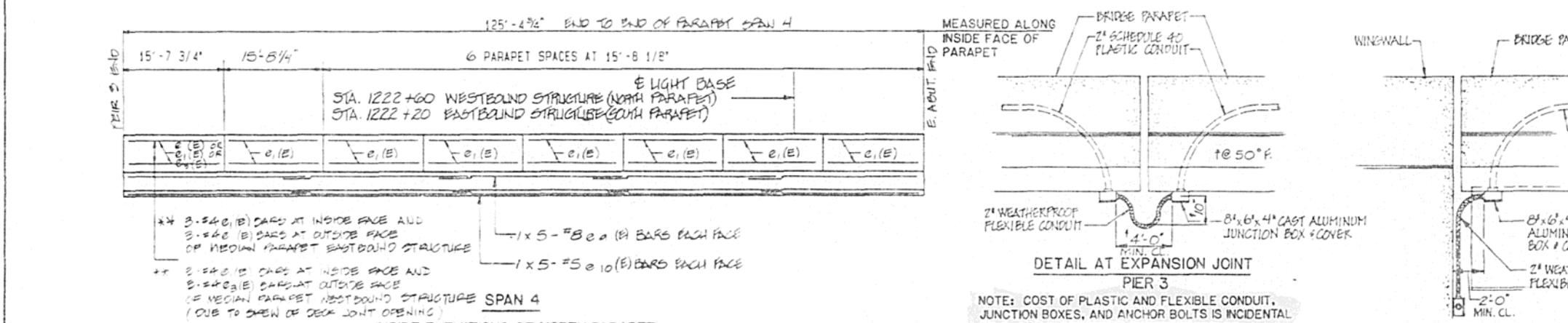
REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY FAI 111
1		FAI 74	S.N. 010-0021	CHECKED BY KE 388
2		STA. 1213+00.1	SEC. 14-VB-1	DATE 3-88
3		HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS		PROJECT NO. 3400-5
4				SHEET NO.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	K14-VB	CHAMPAIGN	140	15
BR				
FILED ROAD DIST. NO.	DATE	PROJECT NO.		

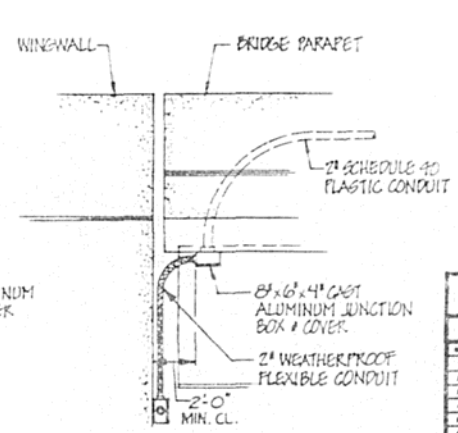
FOR DETAILS OF BRACING IN PARAPET AT WEST ABUTMENT SEE DET. 26



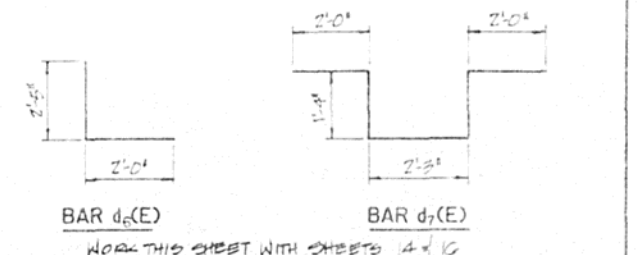
NOTE: GROUT MIXTURE SHALL CONSIST OF 1 PART SAND, 1 PART CEMENT & 1 PART CHIPS (PEA GRAVEL). THE GROUT SHALL CONTAIN WATER FOR A 1" SLUMP. COST INCIDENTAL TO POLE.



NOTE: COST OF PLASTIC AND FLEXIBLE CONDUIT, JUNCTION BOXES, AND ANCHOR BOLTS IS INCIDENTAL TO CLASS X CONCRETE SUPERSTRUCTURE.



S.W. CORNER WEST ABUTMENT SHOWN, EACH CORNER EAST ABUTMENT SIMILAR.



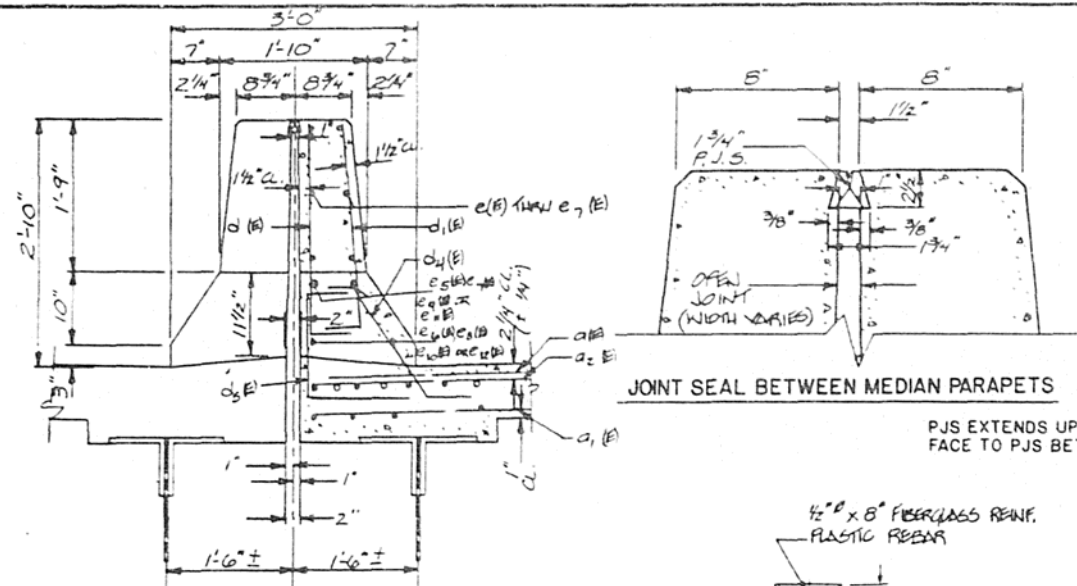
REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DESIGNED BY: B.A.T.
1	DATE	DATE	INITIALS	11/1
2				11/1
3				11/1
4				11/1
5				11/1
6				11/1
7				11/1
8				11/1
9				11/1
10				11/1

STA. 1219+00.14 CHAMPAIGN COUNTY PROJECT NO. 3400-5 SHEET NO. 15

HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS

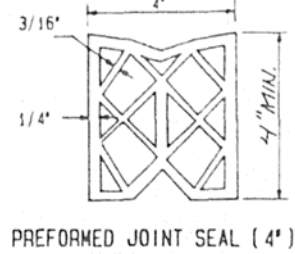
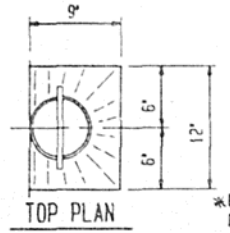
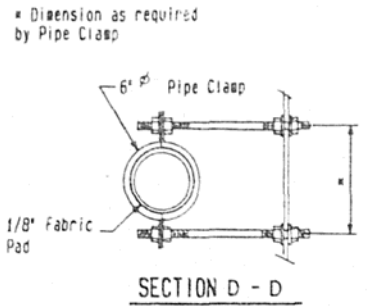
INSIDE ELEVATIONS OF NORTH PARAPET WEST BOUND LANES AND EAST BOUND LANES SOUTH PARAPET OPPOSITE HAND

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	14-VB BP	CHAMPAIGN	140	19
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

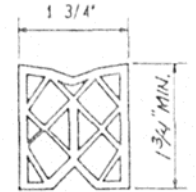


* Dimension as required by Pipe Clamp

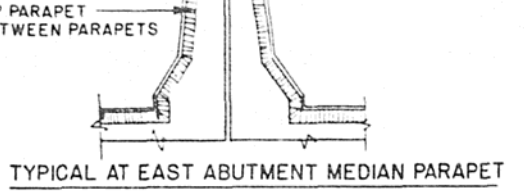
SEAL BETWEEN P.J.S. UNITS AS SPECIFIED BY MANUFACTURER.



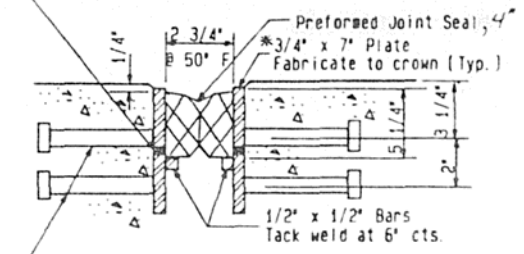
*Furnish in segments of 20' maximum length. Maximum space between installed segments shall be 3/16". Seal space with Silicone Sealant suitable for structural steel.



7/16" Ø Holes at 12" cts. for 3/8" Ø bolts. All bolts shall be burned, sawed or chipped off flush with the plates after forms are removed. [Typ]



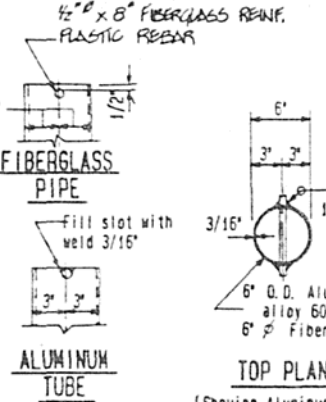
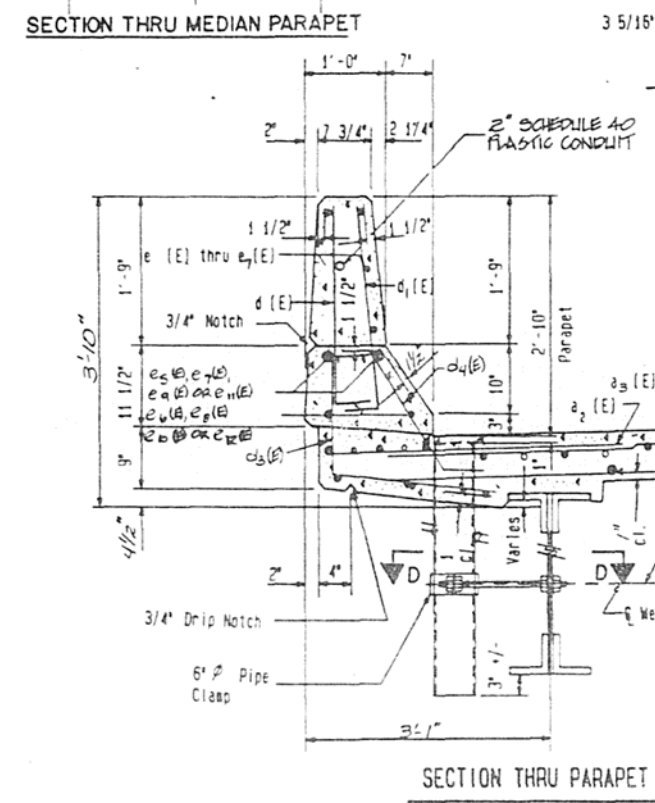
END OF SEAL TREATMENT



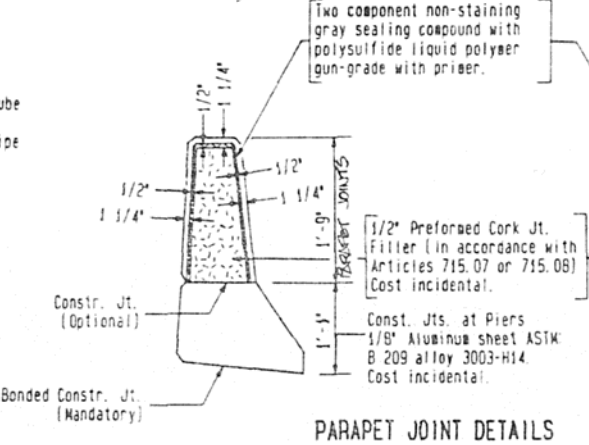
SUPERSTRUCTURE BILL OF MATERIAL

Bar	No	Size	Length	Shape
a1(E)	2662	#5	28.7'	
a1(E)	3832	5	31.7'	
a2(E)	2676	6	4.0'	
a2(E)	2686	5	34.2'	
a4(E)	16	5	33.0'	
b1(E)	2520	5	31.9'	
b1(E)	720	6	27.9'	
b2(E)	3220	5	25.10'	
b2(E)	630	5	26.9'	
b4(E)	768	5	22.8'	
d1(E)	6888	7	3.0'	L
d1(E)	3148	5	3.0'	L
d3(E)	1444	4	3.9'	J
d4(E)	3143	5	2.7'	J
d5(E)	1444	4	3.9'	J
d6(E)	74	6	4.6'	L
d7(E)	40	6	8.11'	J
e1(E)	471	4	15.1'	
e1(E)	408	4	15.4'	
e2(E)	210	4	14.6'	
e3(E)	3	4	15.6'	
e4(E)	96	8	24.4'	
e6(E)	46	5	27.5'	
e7(E)	56	8	21.7'	
e8(E)	56	5	25.2'	
e9(E)	40	5	26.8'	
e10(E)	40	5	26.1'	
e11(E)	32	5	31.0'	
e12(E)	22	5	31.0'	
s1(E)	2800	4	9.4'	J
s1(E)	4320	4	4.0'	J
s1(E)	228	5	4.7'	J
Reinforcement Bars (Epoxy Coated)			POUND	1636,170
Class X Concrete Superstructure			Cu. Yds.	2694.1

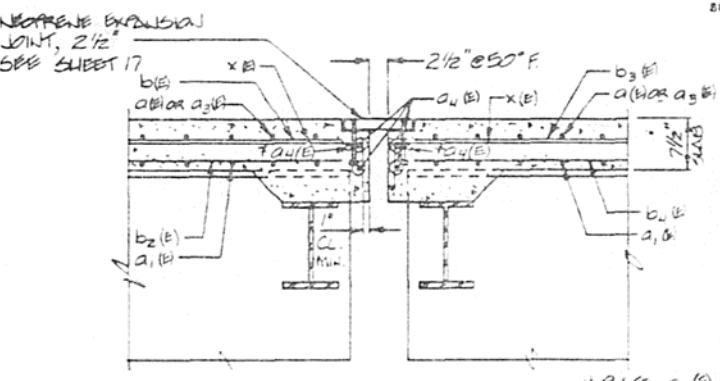
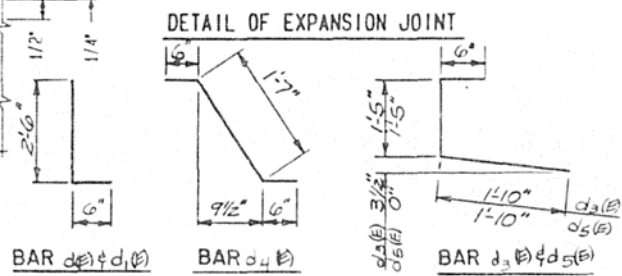
Reinforcement bars designated (E) shall be epoxy coated
* INCLUDES 18.3 CU. YD. FROM ABUTMENT BACKWALLS



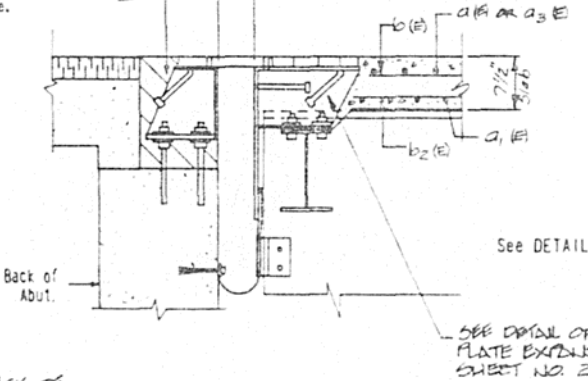
TOP PLAN (Showing Aluminum Tube)



Notes:
The exterior surfaces of the Floor Drain shall be painted with the Alkyd painting specified for Structural Steel. The exterior surfaces of the Aluminum tube shall be cleaned and given a washcoat pretreatment in accordance with Steel Structures Painting Council's Spec. SSPC-SPI & SSPC-Paint 27 prior to painting.
Fiberglass pipe shall conform to ASTM: D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum. The surface of the Fiberglass pipe shall be free of bond inhibiting agents.
Fiberglass to have prewash as per MIL-P-1532B prior to painting.
The clamping device shall be galvanized in accordance with AASHTO M232.



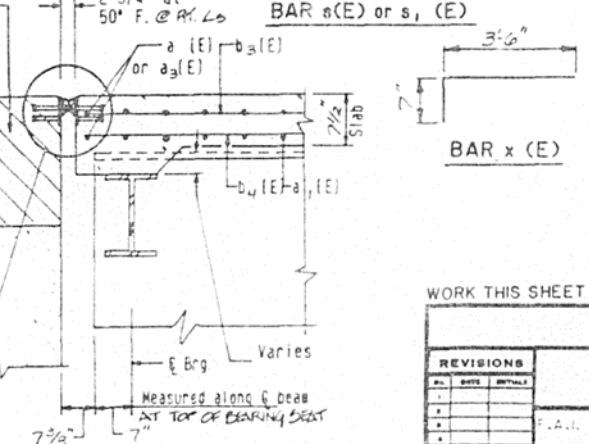
Hatched area to be poured after superstructure forms have been removed. Quantity of Class X Concrete Superstructure included with superstructure.



Hatched area to be poured after superstructure forms have been removed. Quantity of Class X Concrete Superstructure included with superstructure

See DETAIL OF EXPANSION JOINT

SEE DETAIL OF FINGER PLATE EXPANSION DEVICE SHEET NO. 26



WORK THIS SHEET WITH SHEETS 14 & 15

SUPERSTRUCTURE DETAILS

REVISIONS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	DESIGNED BY E.S. L. 80
DATE	PROJECT NO.	ENGINEERED BY J.C. 3.17
NO.	DATE	DATE
1	10/1/74	10/1/74
2	11/1/74	11/1/74
3	12/1/74	12/1/74
4	1/1/75	1/1/75
5	2/1/75	2/1/75
6	3/1/75	3/1/75
7	4/1/75	4/1/75
8	5/1/75	5/1/75
9	6/1/75	6/1/75
10	7/1/75	7/1/75

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	14-VB BR	CHAMPAIGN	140	100
FED. ROAD DIST. NO.	ALL SHEETS	PROJECT		

Joint Size	"C" at 50°F	"D" at 50°F
2	2"	1½" min
2½	2½"	1¾" min
4	3"	2¼" min

INSTALLATION NOTES

Use anchor blocks and continuous seal as anchor bolt location templates

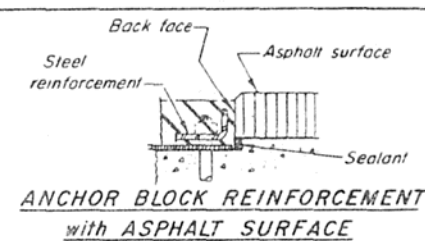
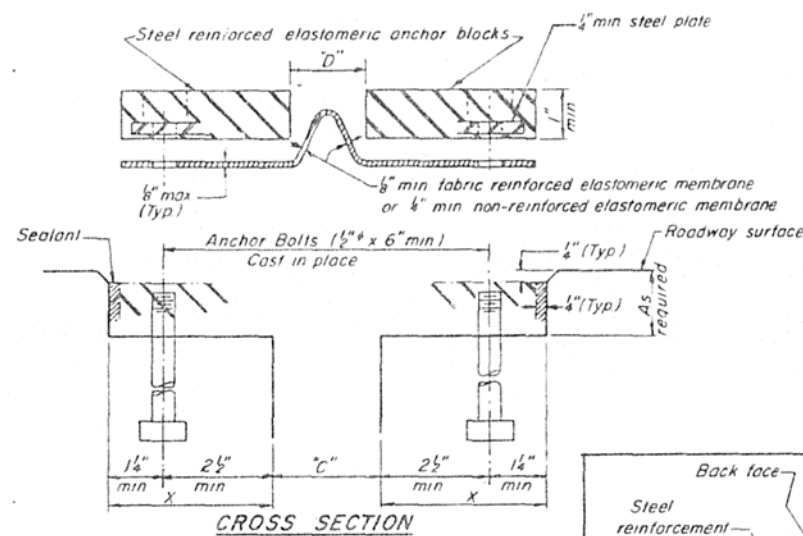
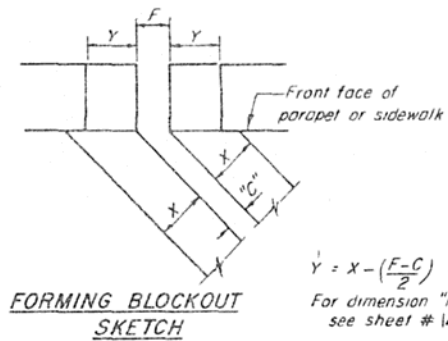
- ① Install sponge mandrels into positions shown to form flap convolution
- ② Install parapet or sidewalk piece (trim roadway flap to fit before applying epoxy)
- ③ Install continuous seal in roadway
- ④ Install anchor blocks as indicated

NOTE A - Maximum spacing of anchor bolts shall be 12" centers

SKEW LIMITATIONS

The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews

For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed in accordance with dimension "D", might require modifications to insure a minimum clearance of 1½" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at 2" cts



GENERAL NOTES

Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane. See Special Provisions

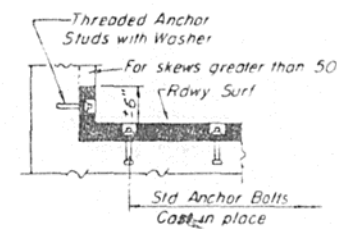
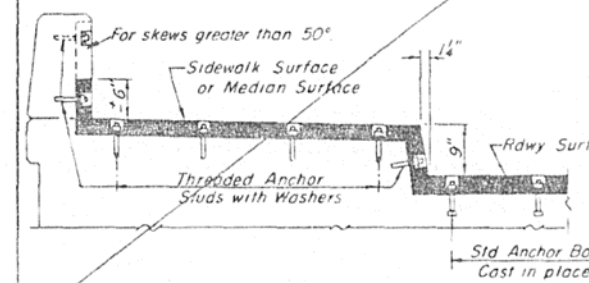
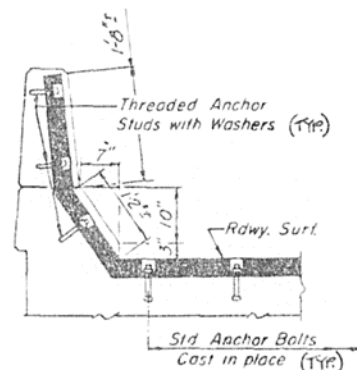
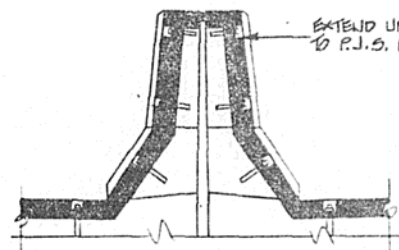
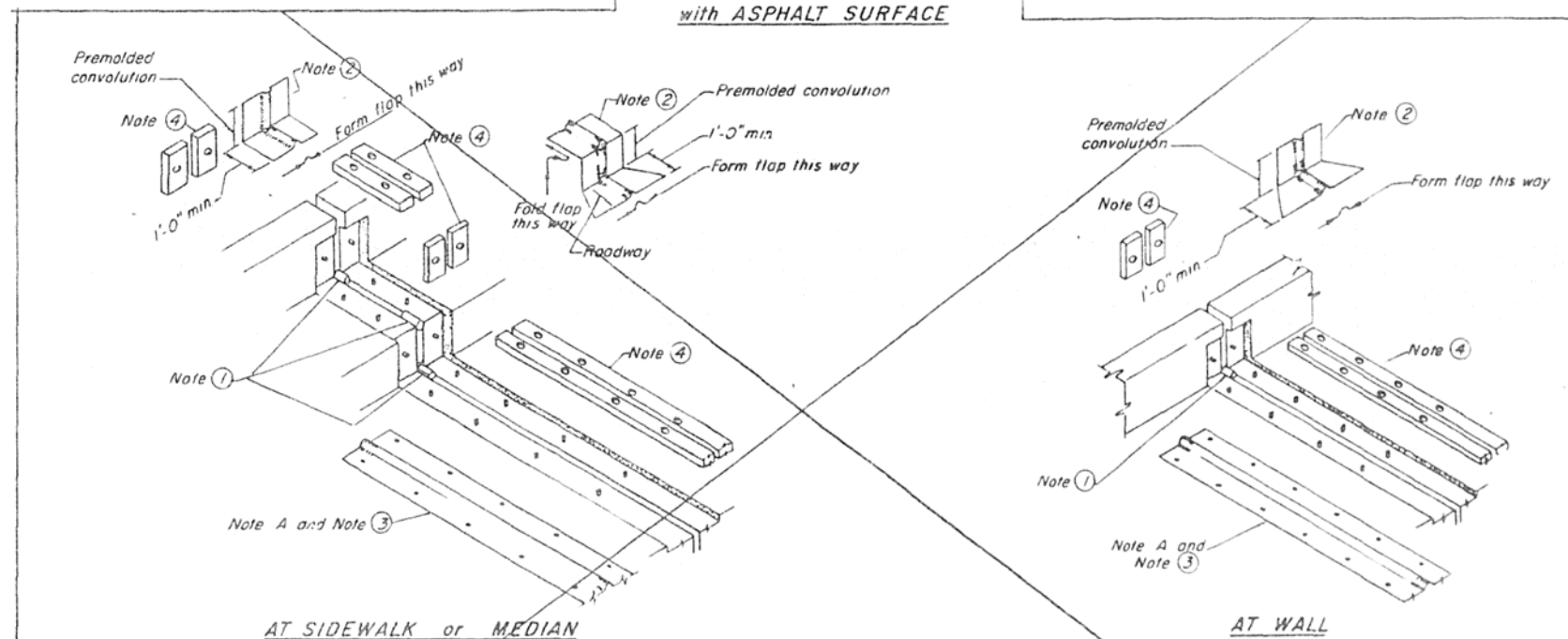
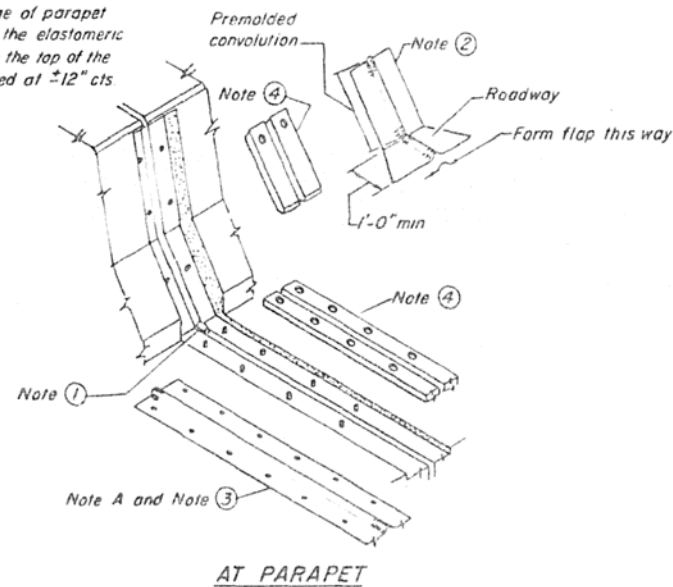
The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure

The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is optional in concrete blockout

The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed

Joint openings shall be adjusted in accordance with Article 503.07(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F

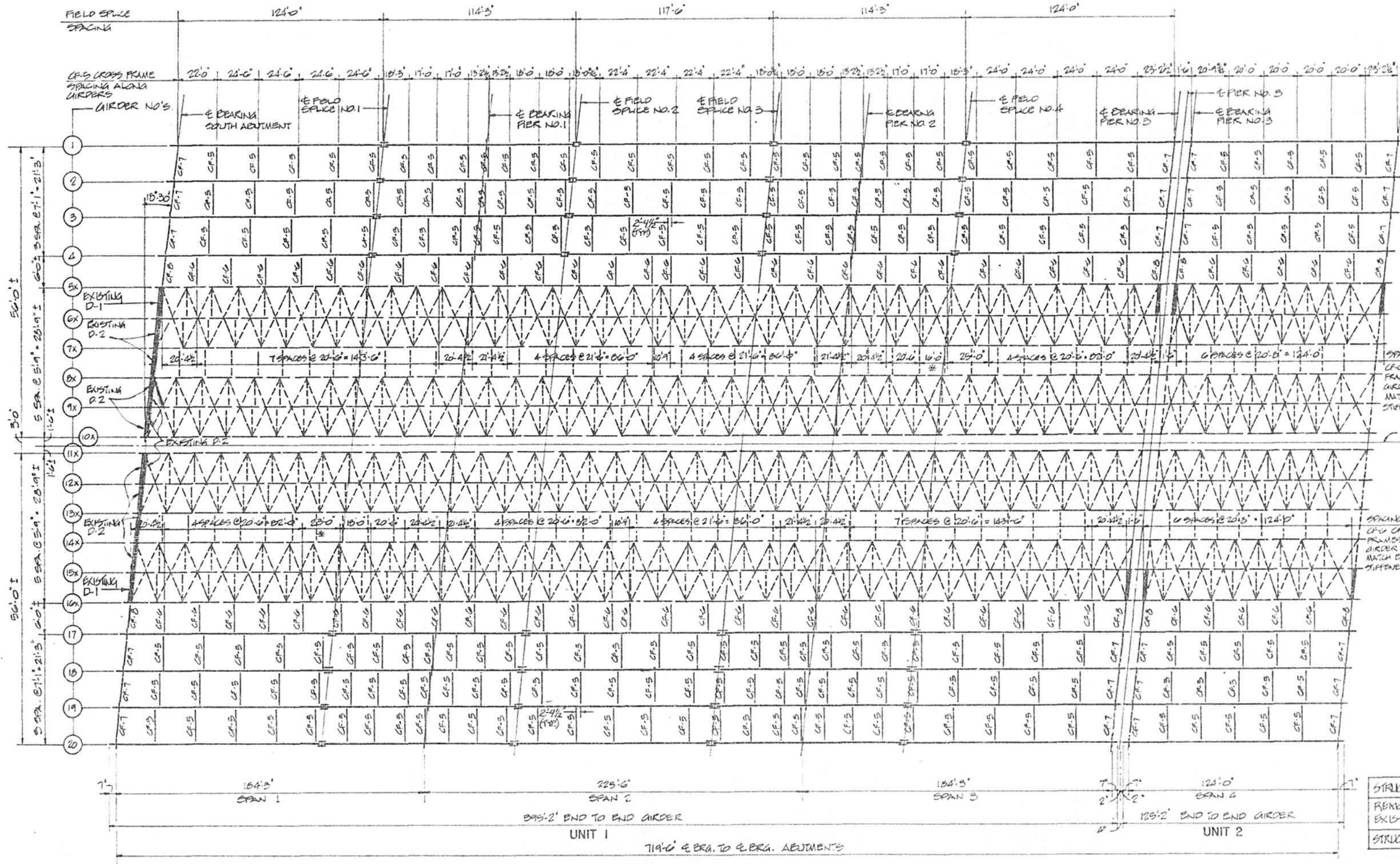
The parapet and sidewalk flaps may be furnished factory vulcanized to the roadway membrane provided the centerline of the convolution is maintained and the process and method meet the approval of the Engineer



TYPICAL END TREATMENTS

REVISIONS		EXPANSION JOINT DETAILS		DATE
1	DATE	STATE OF ILLINOIS	DEPARTMENT OF TRANSPORTATION	DESIGNED BY: BAY
2	REVISIONS	DIVISION OF HIGHWAYS		DRAWN BY: J.S.P.
3		F.A.I. 74	S.N. 010-0021	SEC. (14-VB) BR
4		STA. 1219+00.14	CHAMPAIGN COUNTY	PROJECT NO. 3400-5
5		HOMER L. CHABSTAIN & ASSOCIATES		SHEET NO.
6		CONSULTING ENGINEERS		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	K14-VB BR	CHAMPAIGN	140	101
PER ROAD DIST NO.	SLURRY	PROJECT		



* NOTE 'A': FIELD COLT 3/8" FILLER PLATE AND L 7x4x3/4 TO EXISTING GIRDER AT THIS LOCATION PER CONNECTION TO CF-6 (SEE SHEET NO. 21)

* NOTE: CONTRACTOR SHALL VERIFY SIZE AND SPACING OF EXISTING STIFFENERS PRIOR TO FABRICATION OF GIRDERS, 4 AND 17

LEGEND

- CF-# = CROSS FRAME NUMBER
- * STRUCTURAL STEEL TO BE REMOVED AND REPLACED AS STRUCTURAL STEEL REPAIR.
- REMOVE AND RELOCATE EXISTING DIAPHRAGMS

STRUCTURAL STEEL REPAIR	POUND	2150
REMOVE AND RELOCATE EXISTING DIAPHRAGMS	EACH	6
STRUCTURAL STEEL REMOVAL	POUND	158,050

* SEE SHEET 23

WORK THIS SHEET WITH SHEETS NO 19 THRU 23

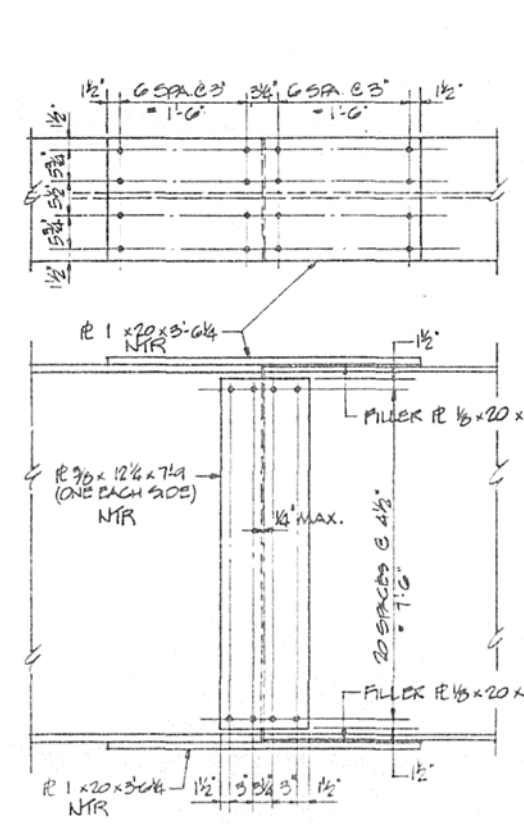
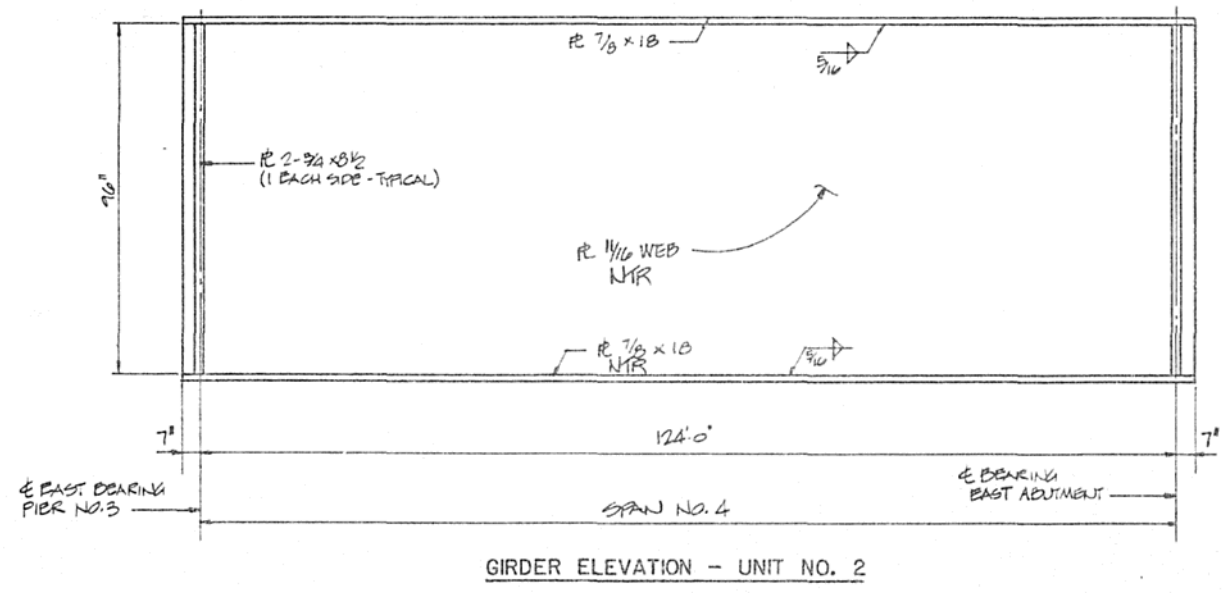
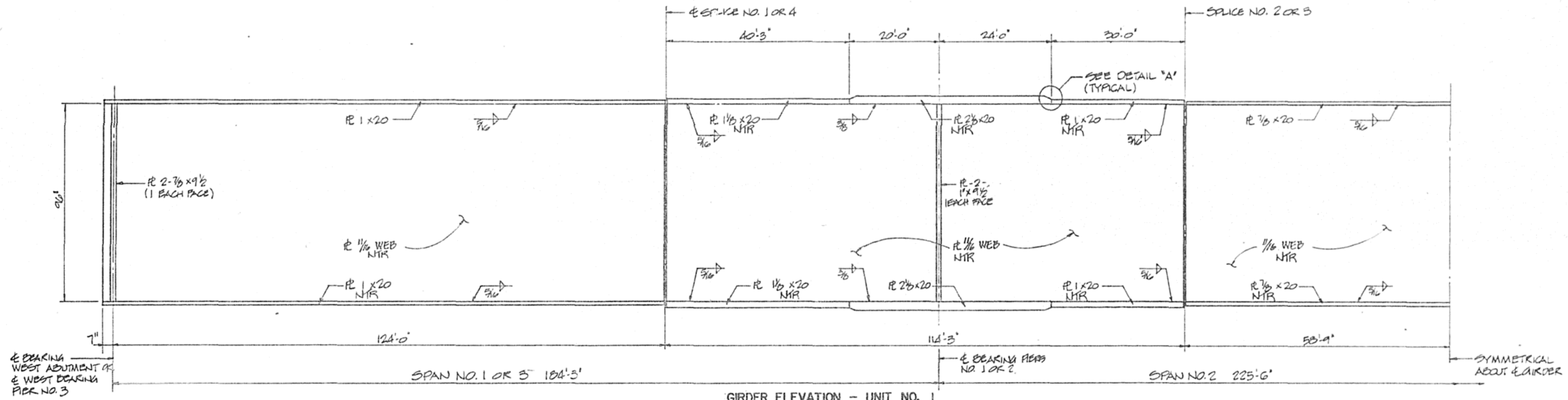
FRAMING PLAN

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE
1		STATE OF ILLINOIS	DEPARTMENT OF TRANSPORTATION	CHAMPAIGN COUNTY
2		STATE OF ILLINOIS	DEPARTMENT OF TRANSPORTATION	CHAMPAIGN COUNTY
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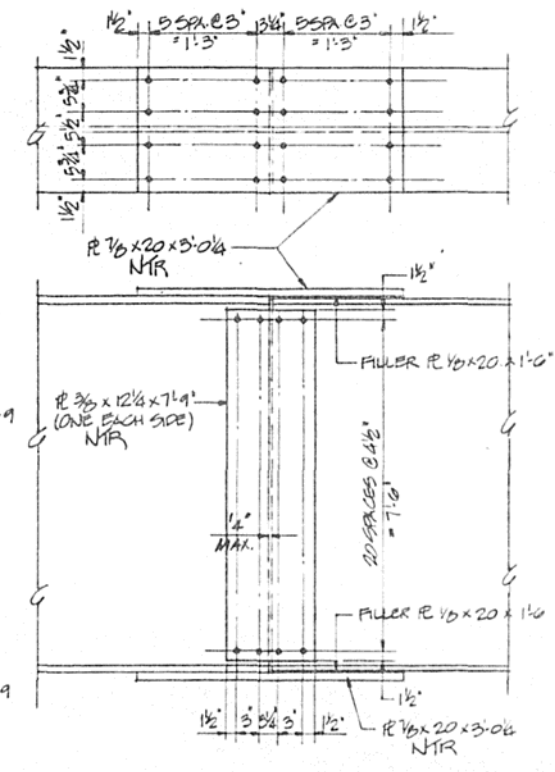
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STA. 1219+00.14 CHAMPAIGN COUNTY
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS

3400-5

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	(14-VB) BR	CHAMPAIGN	140	102
FED. ROAD DIST. NO.		ALL WORK	PROJECT	

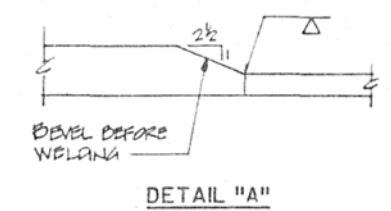


SPlice NO. 1 OR 4
(SPlice NO. 4 SHOWN
SPlice NO. 1 SIMILAR)



SPlice NO. 2 OR 3
(SPlice NO. 3 SHOWN
SPlice NO. 2 SIMILAR)

ALL TOP AND BOTTOM
SPlice FLANGE PLATES
ARE IDENTICAL.
NOTE: BOLTS SHALL BE 7/8".



NOTE: ALL STRUCTURAL STEEL FABRICATORS
PERFORMING WORK ON THE MAJOR LOAD CARRYING
COMPONENTS OF STEEL STRUCTURES SHALL BE
CERTIFIED UNDER CATEGORY III (AISC) OF THE
QUALITY CERTIFICATION PROGRAM.

REVISIONS			STRUCTURAL STEEL DETAILS	
NO.	DATE	INITIALS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	DRAWN BY: JLM CHECKED BY: BAY DATE: 3/82
1			PROJECT NO. 3400-5	
2				
3				
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5				
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7				
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10				

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	(14-VB) BR	CHAMPAIGN	100	103
FED. ROAD DIST. NO.	ALLOTMENT	PROJECT		

UNIT 1

INTERIOR GIRDER MOMENT TABLE

	0.4 Sp. 1	Pier	0.5 Sp. 2
I _b (in ⁴)	144,781	255,326	132,807
I _c (in ⁴)	—	—	—
S _b (in ³)	2955	5094	2717
S _c (in ³)	—	—	—
Z (in)	—	—	—
ρ (K/I)	1.115	1.115	1.115
M _R (K)	2490.5	5059.4	1848.6
M _S (K)	0.225	0.225	0.225
M _{SE} (K)	249.4	1049.0	340.8
M _T (K)	1892.7	2687.2	1796.3
M (Imp) (K)	302.1	401.6	251.2
M ₃ (M _T + I) (K)	9908.0	9161.7	9349.5
M ₀ (K)	2499.3	12043.2	7261.1
M _U (K)	—	—	—
f _{CR} (comp)(K.S.I.)	10.0	11.9	8.2
f _{SR} (comp)(K.S.I.)	2.0	2.5	1.7
f _S (B ₃)(K.S.I.)	14.6	12.2	14.8
f _S (overload)(K.S.I.)	26.5	26.5	24.7
f _S (Total)(K.S.I.)	34.5	34.5	32.1
V _K (K)	71.4	—	84.7

UNIT 1

INTERIOR GIRDER REACTION TABLE

	Abut./P.3	Pier 1, Pier 2
R _R (K)	58.7	309.6
R _L (K)	56.1	123.9
Imp _R (K)	9.1	18.0
R (Total)(K)	154.1	451.4

UNIT 2

INTERIOR GIRDER MOMENT TABLE

	0.5 Sp. 1
I _b (in ⁴)	124,595
I _c (in ⁴)	—
S _b (in ³)	2549
S _c (in ³)	—
Z (in)	—
ρ (K/I)	1.074
M _R (K)	2064.2
M _S (K)	0.225
M _{SE} (K)	492.4
M _T (K)	1257.4
M (Imp) (K)	251.5
M ₃ (M _T + I) (K)	2512.5
M ₀ (K)	6514.8
M _U (K)	—
f _{CR} (comp)(K.S.I.)	9.7
f _{SR} (comp)(K.S.I.)	2.0
f _S (B ₃)(K.S.I.)	11.8
f _S (overload)(K.S.I.)	23.6
f _S (Total)(K.S.I.)	30.7
V _K (K)	58.7

UNIT 2

INTERIOR GIRDER REACTION TABLE

	Pier 3/E. Abut.
R _R (K)	80.5
R _L (K)	40.9
Imp _R (K)	9.0
R (Total)(K)	139.2

I_b AND S_b ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE STEEL SECTION USED IN COMPUTING F_S (TOTAL AND OVERLOAD).

I_c AND S_c ARE THE MOMENT OF INERTIA AND SECTION MODULUS OF THE COMPOSITE SECTION USED IN COMPUTING F_S (TOTAL AND OVERLOAD).

V_K IS THE MAXIMUM $\frac{1}{4}$ + IMPACT SHEAR RANGE IN SPAN.

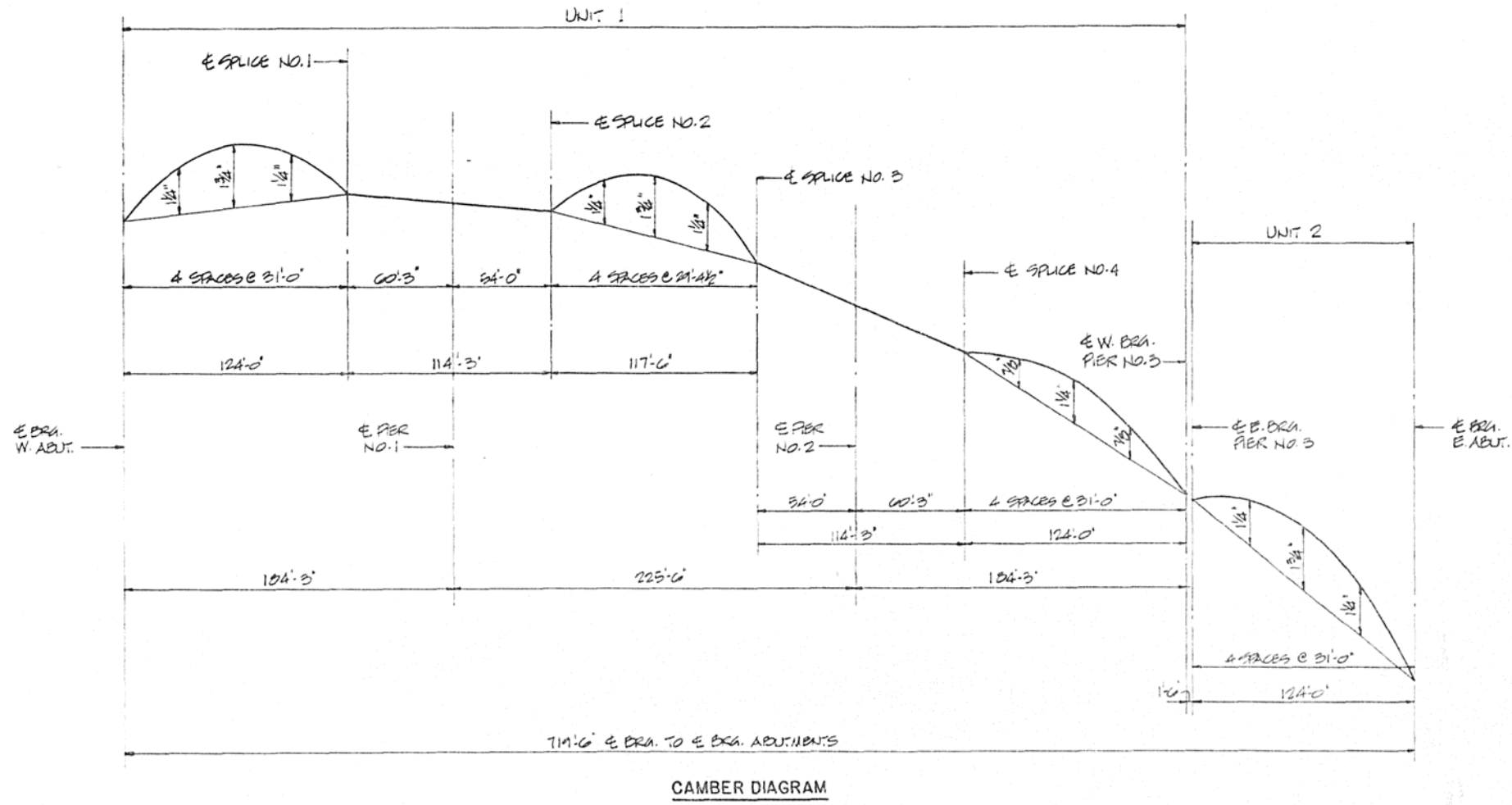
Z IS THE PLASTIC SECTION MODULUS USED TO DETERMINE THE FULLY PLASTIC MOMENTS IN THE NON-COMPOSITE AREAS.

M₃ (APPLIED MOMENT) = 1.3 [M_R + M_{SE} + S_b (M_T + I)].

M_U IS THE FULL PLASTIC MOMENT CAPACITY FOR COMPACT, BRACED SECTION.

f_S (OVERLOAD) IS THE SUM OF THE STRESSES DUE TO M_R + M_{SE} + S_b (M_T + I).

f_S (TOTAL) IS THE SUM OF THE STRESSES DUE TO 1.3 [M_R + M_{SE} + S_b (M_T + I)].



TOP OF WEB ELEVATIONS - UNIT 1 (FOR FABRICATION ONLY)

LOCATION	GIRDER	A-1	A-2	A-3	A-4	A-17	A-18	A-19	A-20
E BRG. W. ABUT.		710.23	710.37	710.47	710.57	710.41	710.29	710.15	709.99
E SPLICE NO. 1		710.61	710.75	710.81	710.90	710.94	710.83	710.71	710.55
E BRG. PIER NO. 1		710.50	710.65	710.77	710.88	710.91	710.80	710.68	710.53
E SPLICE NO. 2		710.39	710.55	710.68	710.80	710.88	710.77	710.66	710.52
E SPLICE NO. 3		709.66	709.85	709.97	710.10	710.21	710.19	710.09	709.96
E BRG. PIER NO. 2		709.08	709.26	709.40	709.54	709.70	709.69	709.59	709.47
E SPLICE NO. 4		708.44	708.62	708.77	708.91	709.21	709.13	709.04	708.92
E W. BRG. PIER NO. 3		708.51	708.70	708.86	709.02	709.26	709.37	709.29	709.15

TOP OF WEB ELEVATIONS - UNIT 2 (FOR FABRICATION ONLY)

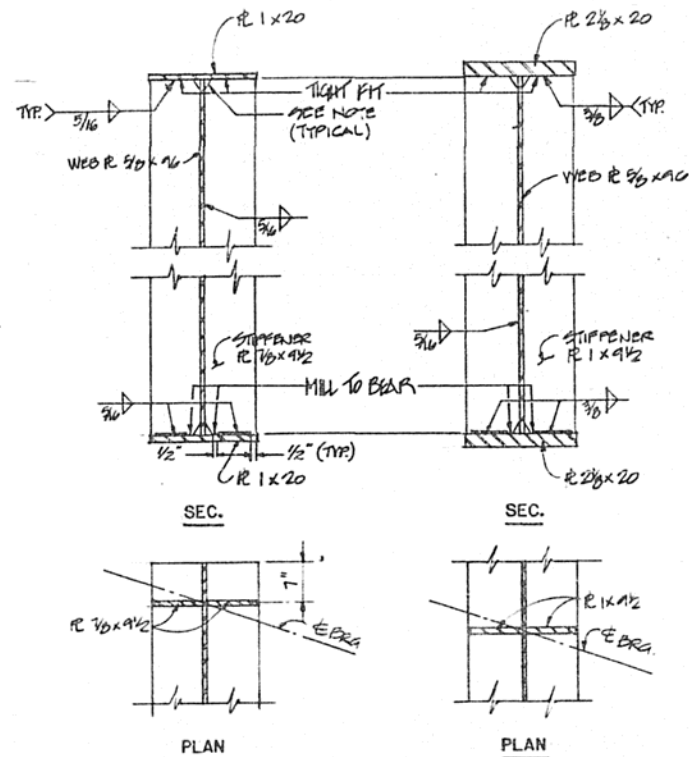
LOCATION	GIRDER	A-1	A-2	A-3	A-4	A-17	A-18	A-19	A-20
E BRG. PIER NO. 3		708.50	708.69	708.85	709.00	709.43	709.26	709.23	709.17
E BRG. E. ABUT.		708.43	708.14	708.21	708.47	708.02	708.96	708.89	708.80

WORK THIS SHEET WITH SHEETS 18, 19, 21, 22 AND 23

STRUCTURAL STEEL DETAILS

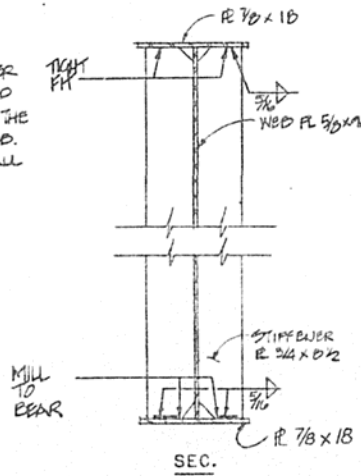
REVISIONS NO. DATE INITIALS 1 2 3 4 5 6 7 8 9 10	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY: B.A.T. CHECKED BY: B.A.T. DATE: 3-72 SCALE: AS SHOWN SHEET NUMBER: 3400-5
	F.A.I. 74 S.N. 010-002 SEC. (14-VB) 25 STA. 1219+00.14 CHAMPAIGN COUNTY		PROJECT NO.: SHEET NO.:
	HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	K14-VB3 BR	CHAMPAIGN	140	104
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

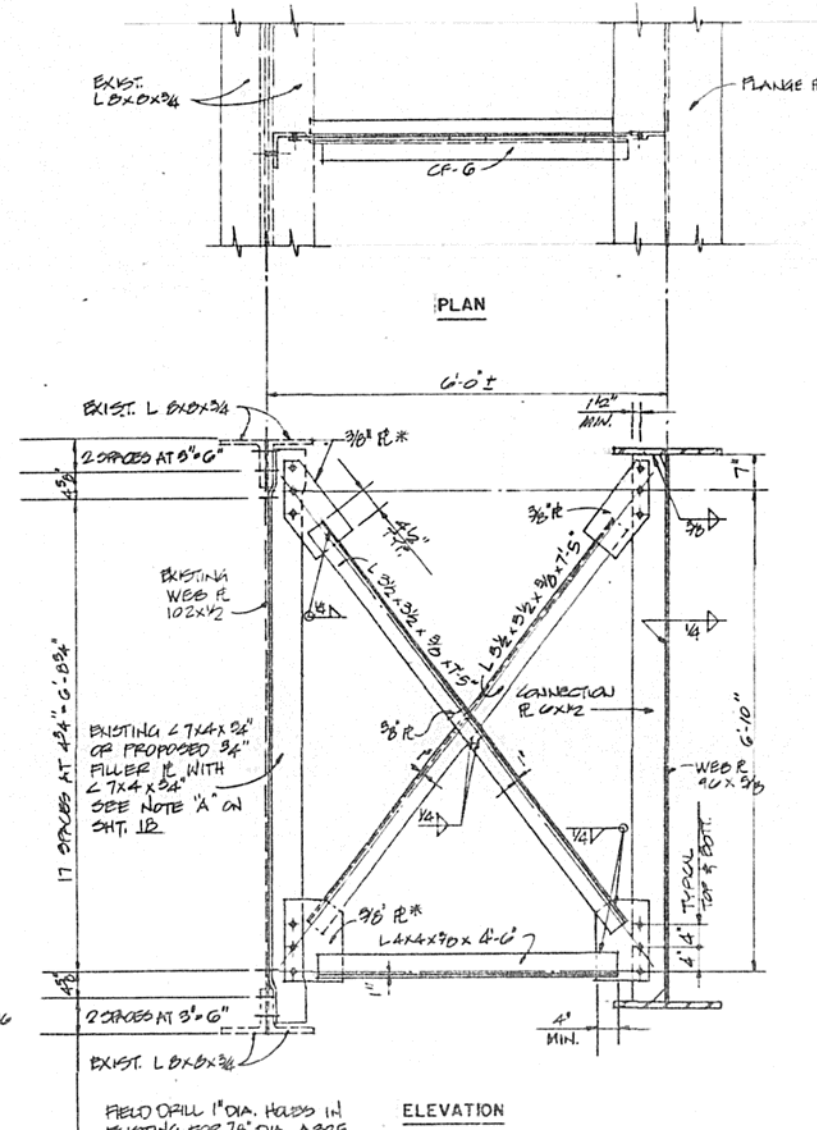


AT W. ABUT. OR
W. BEARING PIER NO. 3
GIRDER STIFFENER DETAILS-UNIT 1

NOTE: THE TOP AND BOTTOM OF STIFFENER PLATES AT BEARINGS SHALL BE CLIPPED 1" HORIZONTALLY AND 2 3/8" VERTICALLY AT THE JUNCTION OF THE FLANGES AND THE WEB. INTERMEDIATE STIFFENER PLATES SHALL BE CLIPPED IN A LIKE MANNER AT THE JUNCTION OF COMPRESSION FLANGES AND THE WEB.

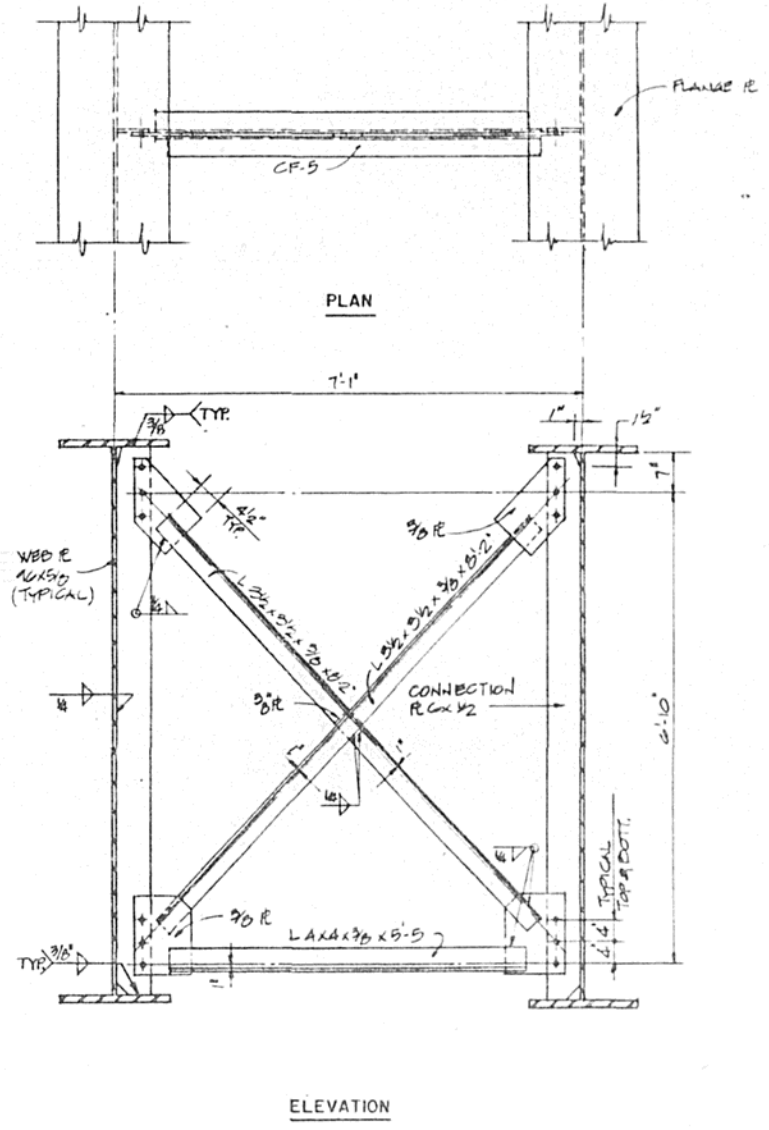


GIRDER STIFFENER DETAILS-UNIT 2



CROSS FRAME CF-6

* 1/2" x 1 1/4" SLOTTED HOLES IN GUSSET PLATES AT GIRDERS 6X AND 10X. ONE 9/16" THICK STRUCTURAL PLATE WASHER SHALL BE PROVIDED OVER ALL SLOTTED HOLES.



CROSS FRAME CF-5

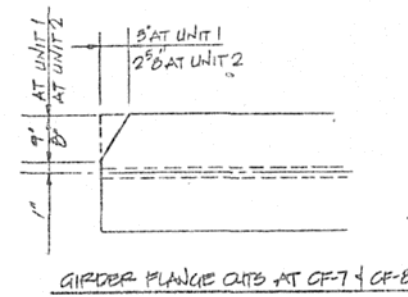
NOTE: ALL BOLTS FOR CROSS FRAME CONNECTIONS SHALL BE 3/8" & H.S. HOLES FOR BOLTS SHALL BE 15/16" & P. EXCEPT AS NOTED.

HARDENED WASHERS SHALL BE REQUIRED OVER ALL HOLES, EXCEPT AS NOTED.

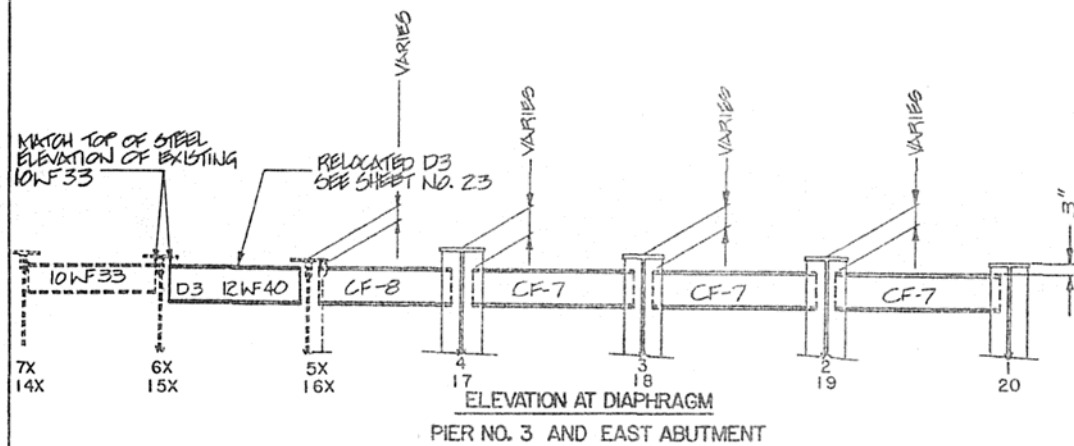
NOTE: WORK THIS SHEET WITH SHEET NO. 18, 19, 20, 22 AND 23

STRUCTURAL STEEL DETAILS				
REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY: DATE J.W. 7/55
1				CHECKED BY: DATE J.E.L. 3/59
2				WORK NUMBER
3		F.A.I. 74	S.N. 010-0021	PROJECT NO. 3400-5
4		STA. 1219+00.14	CHAMPAIGN COUNTY	SHEET NO.
5		HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS		

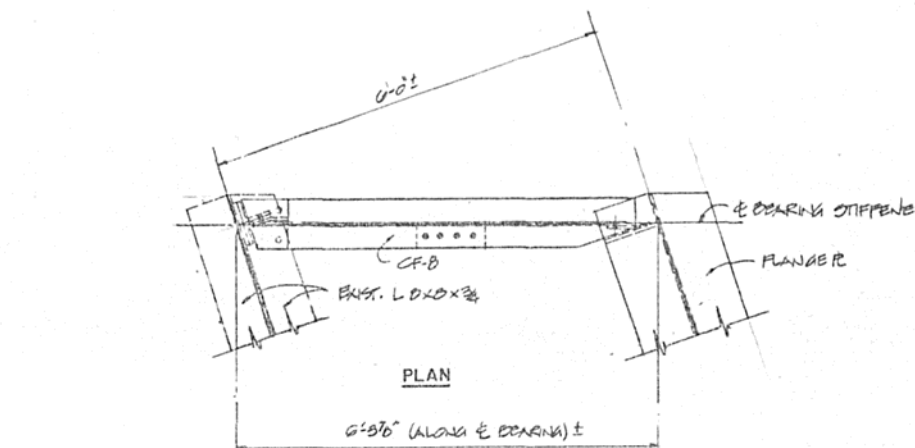
ROUTE NO.	SECTION	QUANTITY	TOTAL SHEETS	SHEET NO.
FAI 74	(14-VB) BR	CHAMPAIGN	140	105
FEE ROAD DIST NO.	ALUMINUM PROJECT			



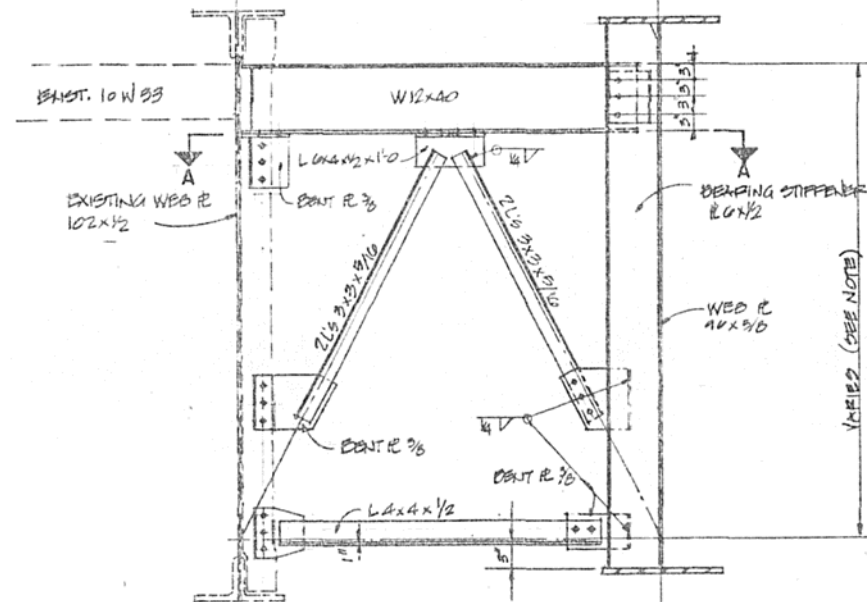
GIRDER FLANGE CUTS AT CF-7 & CF-8



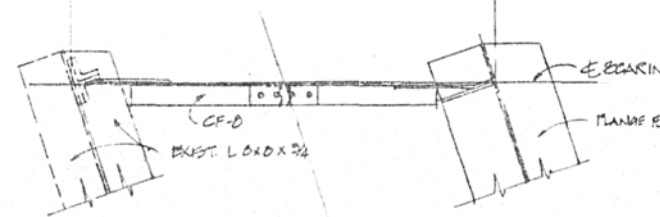
NOTE:
AT PIER NO. 3 AND EAST ABUTMENT - STRAIGHT LINE ELEVATIONS OF TOP OF STEEL OF NEW AND RELOCATED MEMBERS FROM TOP OF STEEL OF EXISTING ADJACENT 10WF33 AT GIRDERS 5X AND 16X TO 3" CLEARANCE AS SHOWN AT NEW EXTERIOR GIRDERS 1 AND 20.
AT WEST ABUTMENT - SET ALL NEW W12X40 MEMBERS LEVEL AT THE SAME ELEVATION AS ADJACENT EXISTING 10WF33 AT GIRDERS 5X AND 16X.



PLAN



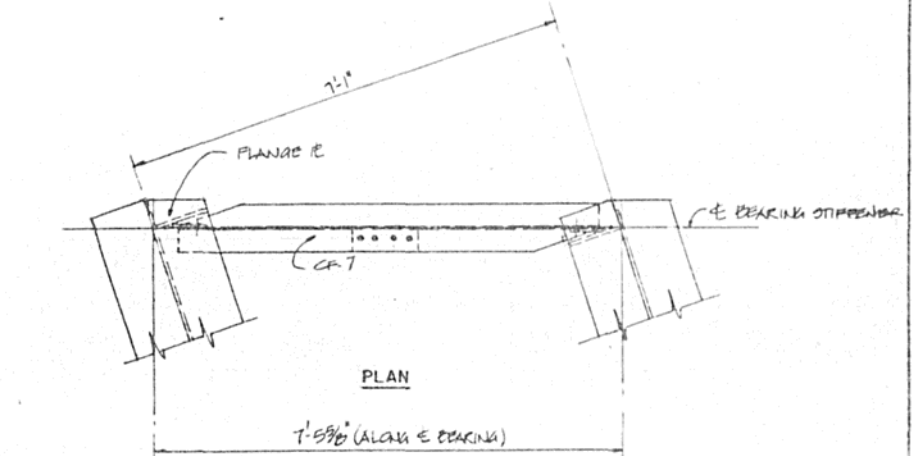
ELEVATION



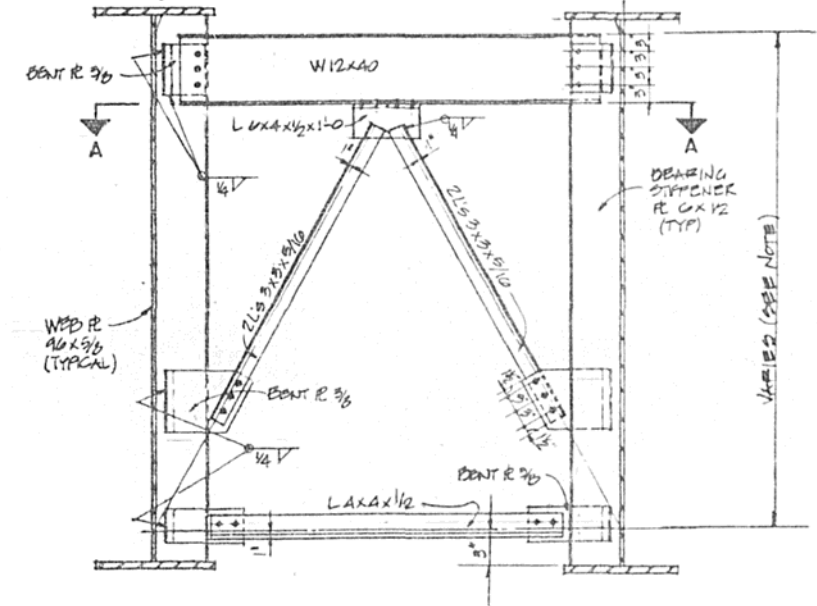
SECTION A-A

CROSS FRAME CF-8

NOTE: SEC. A-A FOR CROSS FRAME C-7 SIMILAR



PLAN



ELEVATION

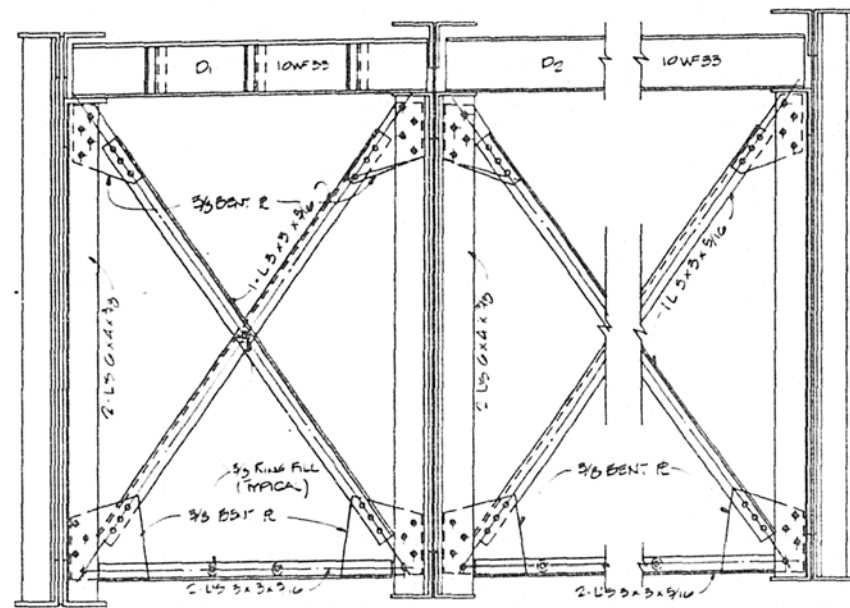
CROSS FRAME CF-7

NOTE: WORK THIS SHEET WITH SHEET NO. 18, 19, 20, 21, AND 23

REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY JCH	DATE 5/05
1		F.A.I. 74	S.N. 010-0021	SEC. (14-VB) BR	EDGE NUMBER
2		STA. 1219+00.14	CHAMPAIGN COUNTY	PROJECT NO.	3400-5
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS				SHEET NO.	

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	E14-VB	CHAMPAIGN	140	106
PROJ. ROAD DIST. NO.	ALIGNMENT	PROJECT		

NOTE: SEE SHEET NO. 20 FOR FINGER PLATE EXPANSION DEVICE PEDESTAL HOLES.



EXISTING CROSS FRAME CF-3
(AT ABUTMENTS)

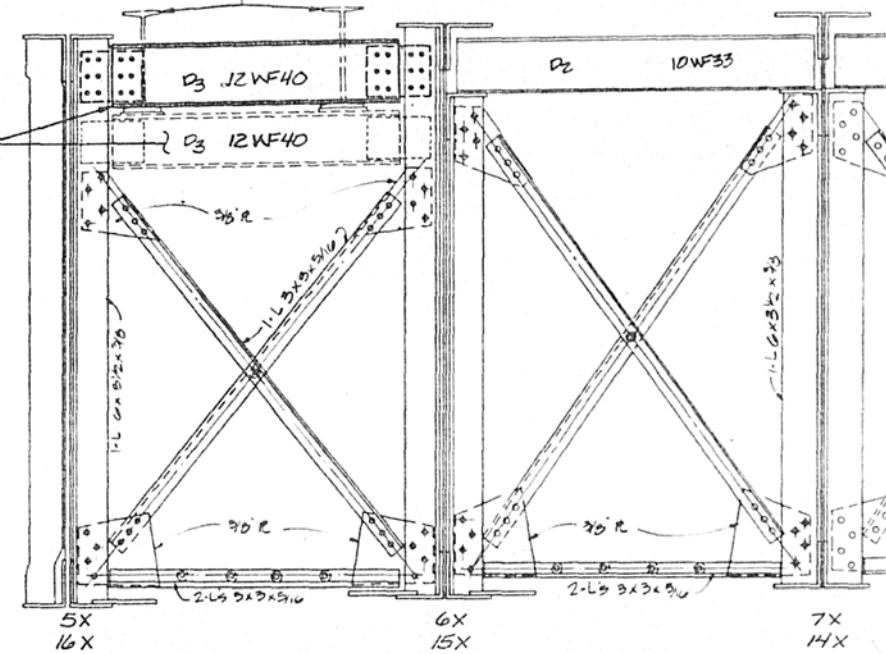
STRUCTURAL STEEL REPAIR:

STRUCTURAL STEEL TO BE REMOVED AND REPLACED WITH NEW SECTIONS:

1. ALL EXISTING DIAPHRAGMS (D-1 AND D-2) (10 WF 33) BETWEEN EXISTING GIRDERS.
2. LATERAL BRACE AND GUSSET PLATE, BETWEEN GIRDERS 8X AND 9X.
3. BOTTOM HORIZONTAL ANGLES PARALLEL WITH ABUTMENT BACKWALL, BETWEEN GIRDERS 8X AND 9X, AND 9X AND 10X. SEE SHEET 18.

REMOVE EXISTING 18I 54.7 FULL LENGTH BOTH SIDES.

REMOVE AND RELOCATE EXISTING DIAPHRAGMS SEE ELEVATION AT DIAPHRAGM, SHEET NO. 22.



EXISTING CROSS FRAME CF-4 **EXISTING CROSS FRAME CF-3**

(AT PIER 3 AND EAST ABUTMENT)

REMOVE AND RELOCATE EXISTING DIAPHRAGMS AT PIER NO. 3 AND AT EAST ABUTMENT :

- (D3)(12 WF 40) BETWEEN GIRDERS 5X AND 6X, AND BETWEEN GIRDERS 15X AND 16X.

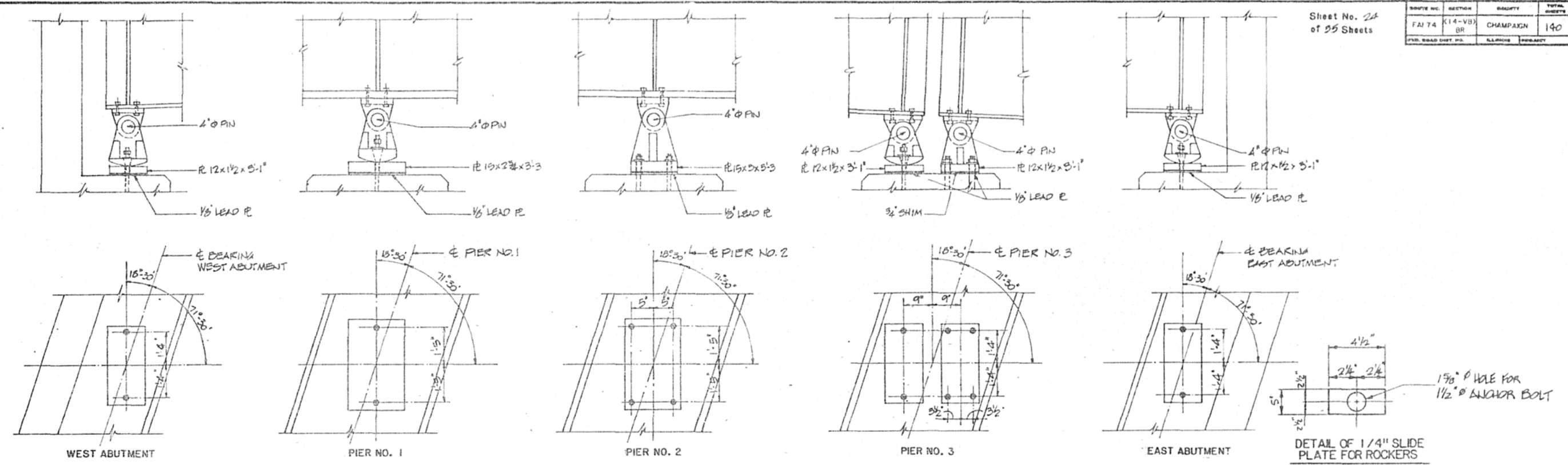
NOTE: THIS SHEET IS FOR REFERENCE FOR STRUCTURAL STEEL REPAIR, STRUCTURAL STEEL REMOVAL, AND REMOVAL AND RELOCATION OF EXISTING DIAPHRAGMS.

NOTE: WORK THIS SHEET WITH SHEETS 18 THRU 22

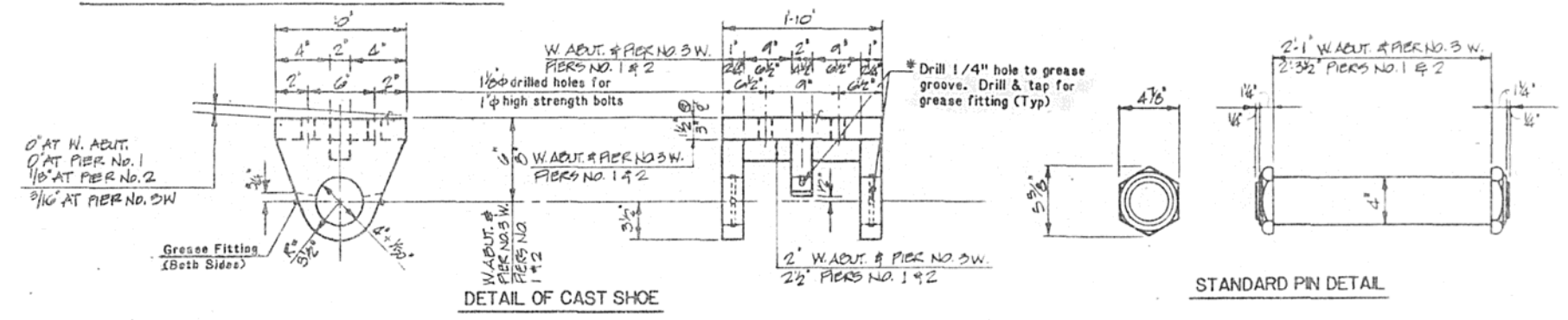
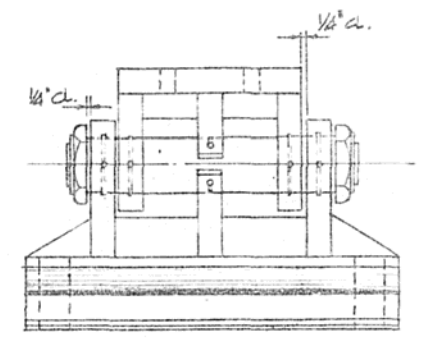
REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DATE
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

F.A.I. 74 STA. 1219+00.14	S.N. 010-0021 CHAMPAIGN COUNTY	SEC. 14-VB137 PROJECT NO. 3400-5
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	(14-VB) BR	CHAMPAIGN	140	107
PUR. ROAD DIST. NO.	CLASSIFICATION	PROJECT		



PLANS AND ELEVATIONS OF BEARING DETAILS

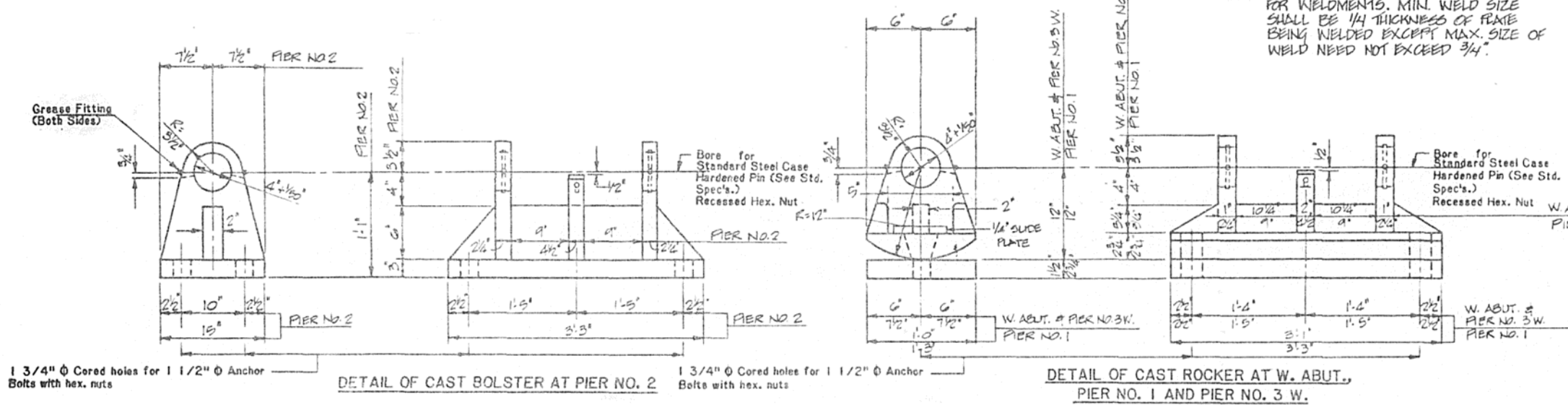


NOTE:
STRUCTURAL STEEL WELDMENTS OF EQUAL SECTION MAY BE SUBSTITUTED FOR CASTINGS. FILLET OR PARTIAL PENETRATION WELD SHALL BE USED FOR WELDMENTS. MIN. WELD SIZE SHALL BE 1/4 THICKNESS OF PLATE BEING WELDED EXCEPT MAX. SIZE OF WELD NEED NOT EXCEED 3/4".

GREASE GROOVE ON SADDLE

* Note: Grease bearing assembly with molybdenum grease before installation.

NOTE: FOR BEARING DETAILS AT PIER NO. 3 E. AND E. ABUT. SEE SHEET NO. 25
FOR ANCHOR BOLT DETAIL SEE SHEET NO. 25.



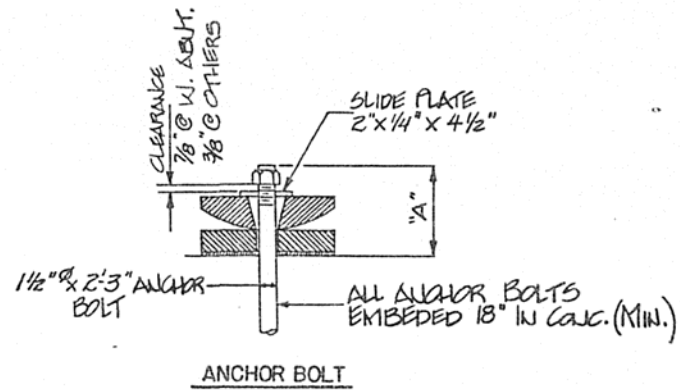
REVISIONS		BEARING DETAILS	
NO.	DATE	DESCRIPTION	DRAWN BY DATE
1			JKS VJL
2			ENG BY DATE
3			JOE 2-78
4			WORK NUMBER
5			3400-5
6			SHEET NO.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

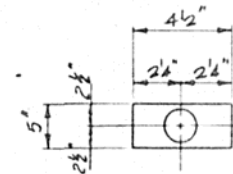
F.A.I. 74 S.N. 010-0021 SEC. (14-VB) BR
STA. 1219+00.14 CHAMPAIGN COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS

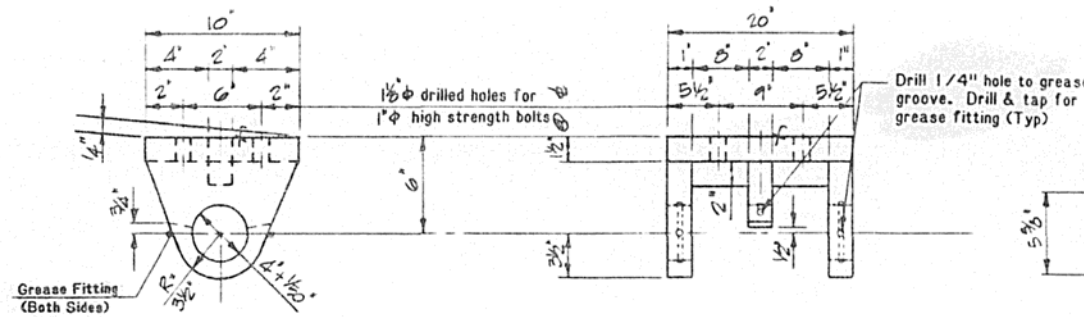
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	K14-VB) BR	CHAMPAIGN	140	108
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



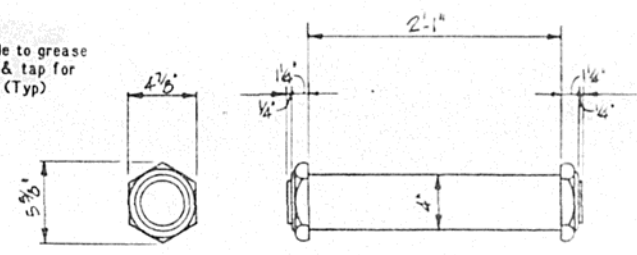
LOCATION	A
AT WEST ABUTMENT	8 3/8"
AT PIER 1	9 1/8"
AT PIER 3	7 7/8"
AT EAST ABUTMENT	7 3/8"



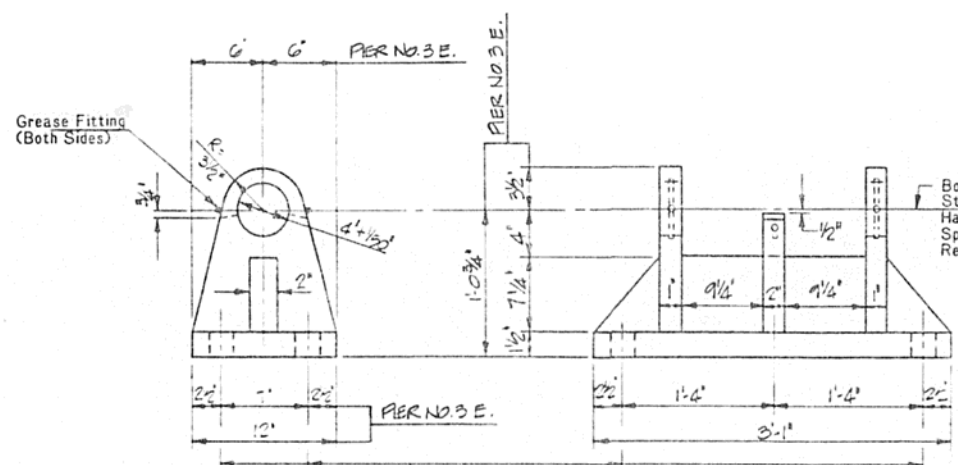
DETAIL OF 1/4" SLIDE PLATE FOR ROCKERS



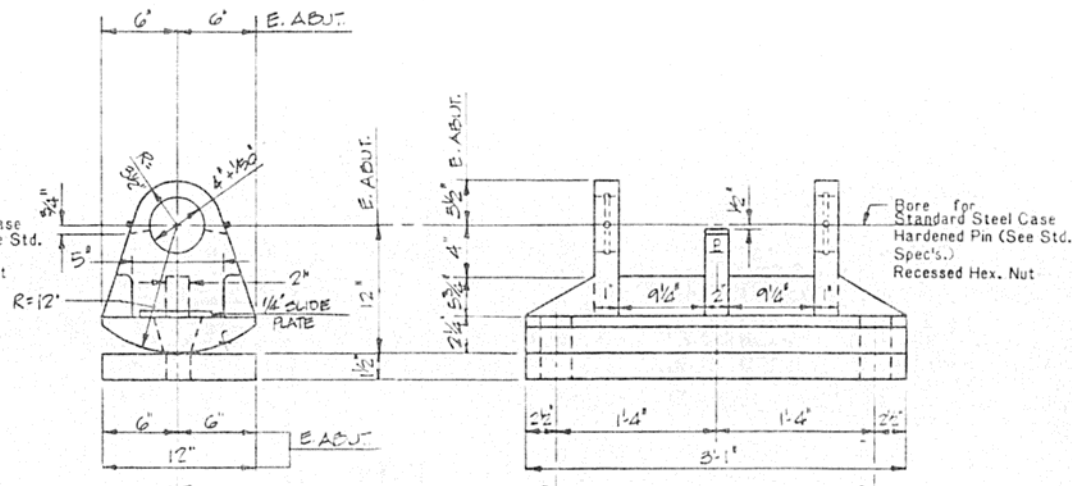
DETAIL OF CAST SHOE



STANDARD PIN DETAIL



DETAIL OF CAST BOLSTER AT PIER NO. 3 E.

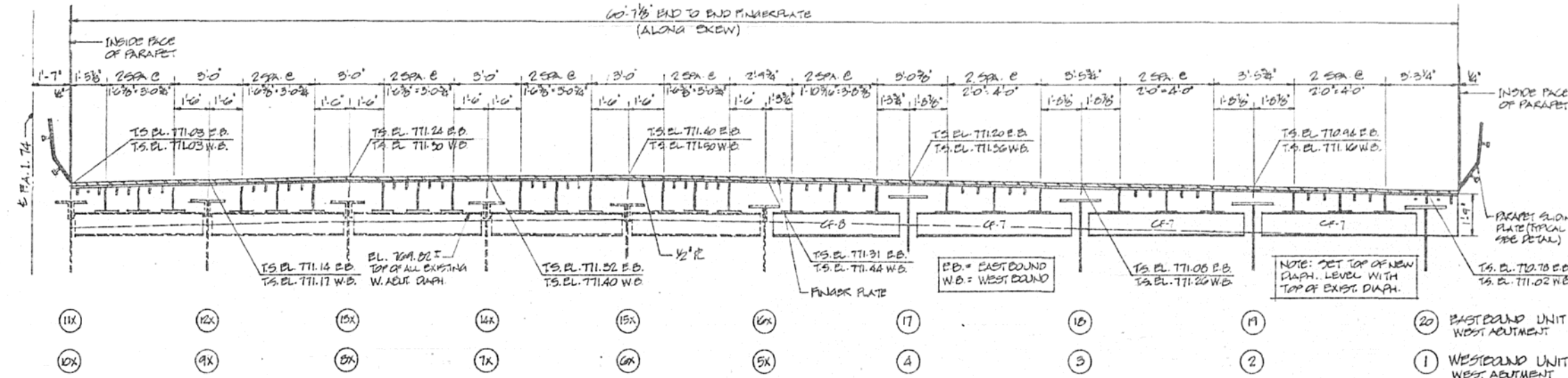


DETAIL OF CAST ROCKER AT E. ABUT.

NOTE: FOR PLANS AND ELEVATIONS OF BEARING DETAILS SEE SHEET NO. 24
FOR ELEVATION OF ASSEMBLED BEARING SEE SHEET NO. 24

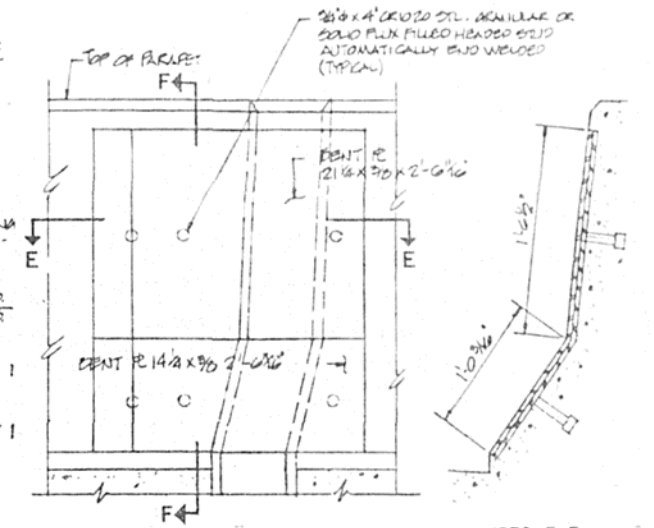
REVISIONS		BEARING DETAILS	
1		STATE OF ILLINOIS	DRAWN BY DATE
2		DEPARTMENT OF TRANSPORTATION	WJH 2/25
3		DIVISION OF HIGHWAYS	CHECKED BY DATE
4		F.A.I. 74	J.C. 3-11
5		S.N. 010-0021	SEC. (14-VB) BR
6		STA. 1219+00.14	CHAMPAIGN COUNTY
7		PROJECT NO. 3400-5	
8		HOMER L. CHASTAIN & ASSOCIATES	
9		CONSULTING ENGINEERS	
10			

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	14-VB BR	CHAMPAIGN	140	109
PROJ. NO.	ALL WORK	DATE		



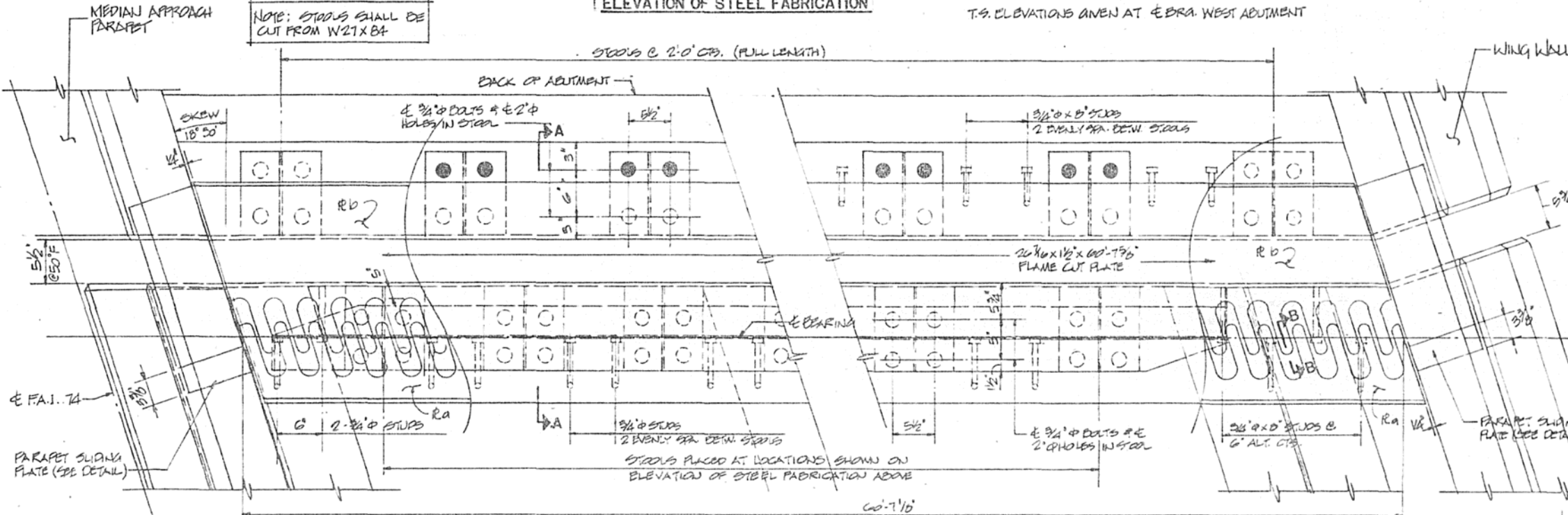
ELEVATION OF STEEL FABRICATION

T.S. ELEVATIONS GIVEN AT E.B.R.A. WEST ABUTMENT

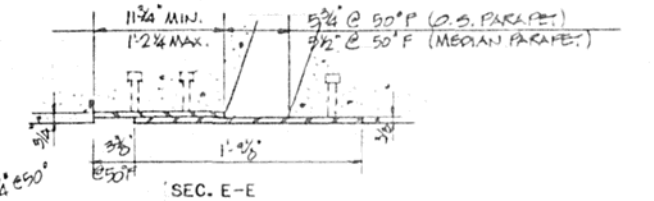


ELEVATION

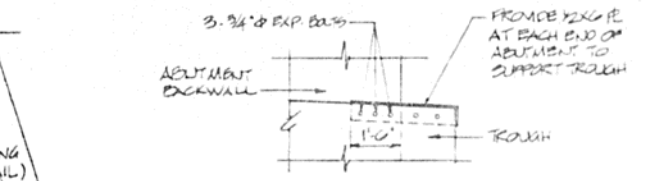
SEC. F-F



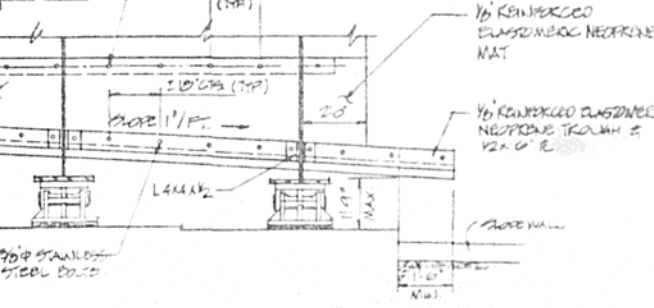
PLAN OF EXPANSION GUARD "A"



DETAILS OF PARAPET SLIDING PLATE
(TWO REQUIRED THIS - TWO OPPOSITE HAND)

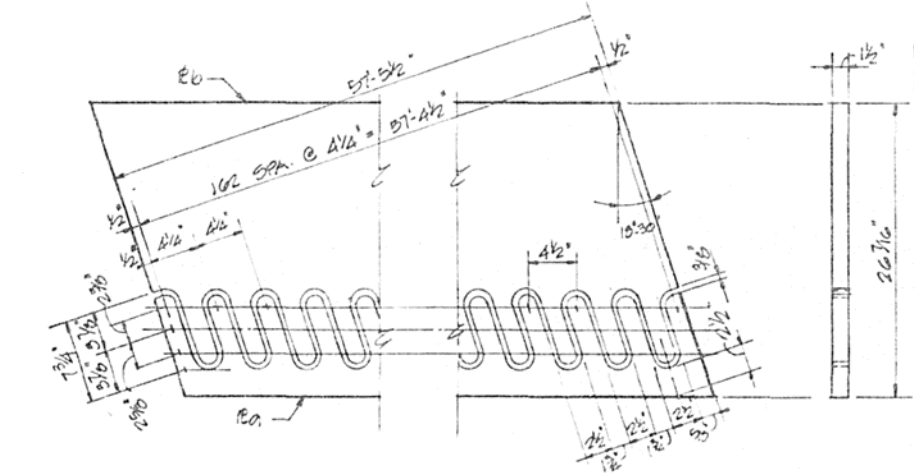


VIEW D-D

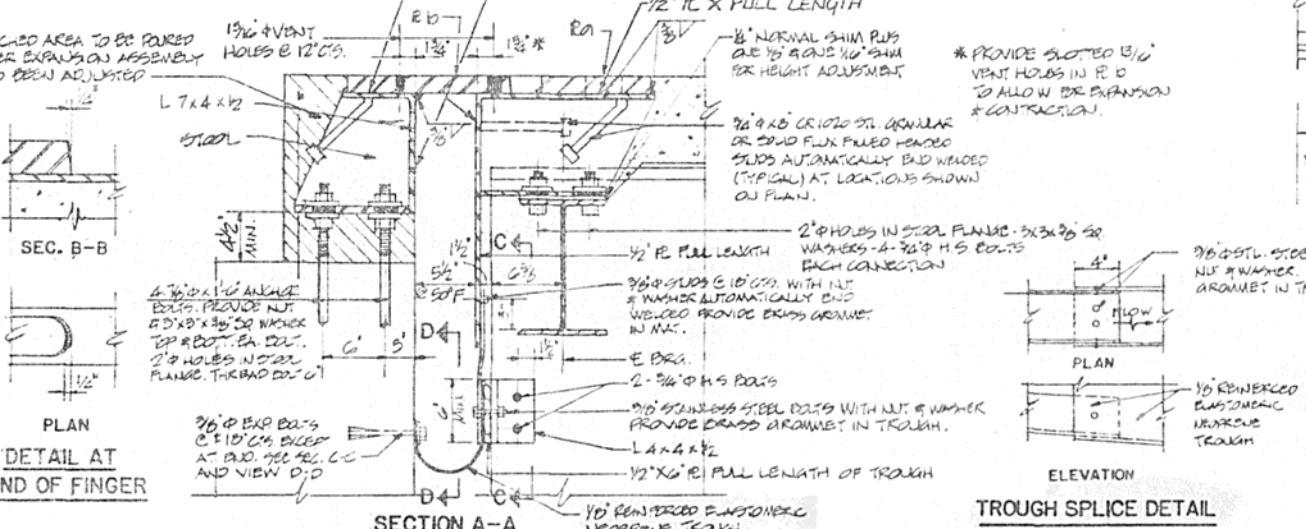


SECTION C-C

NOTE: TROUGH SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LIN. FT. FOR REINFORCED NEOPRENE EXPANSION JOINT TREATMENT. 125 L.F. REQUIRED



DETAILS OF FLAME CUT PLATE
MATCH MARK AFTER CUTTING

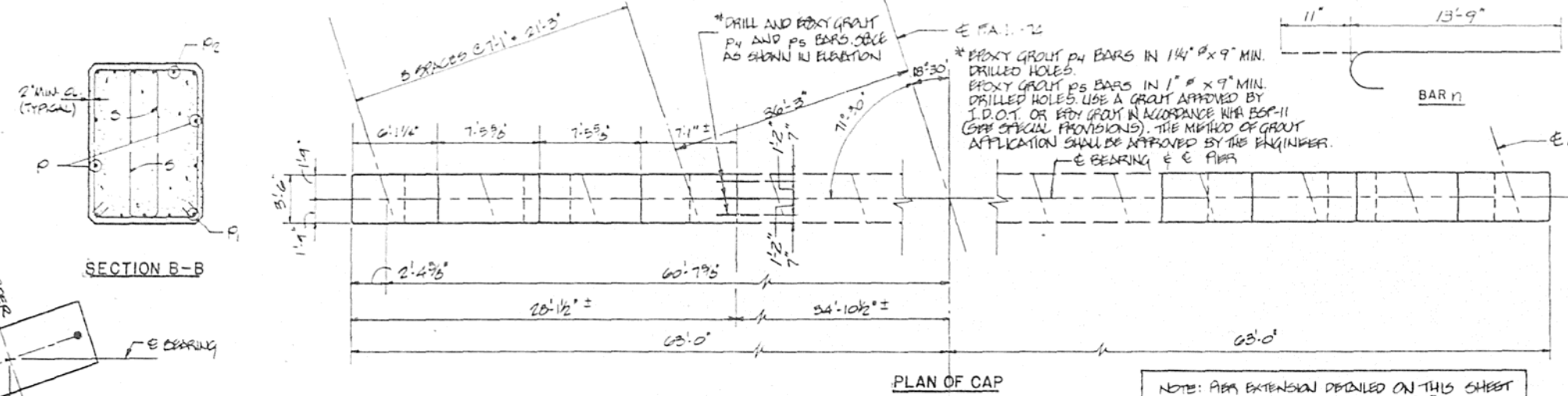


SECTION A-A

TROUGH SPLICE DETAIL

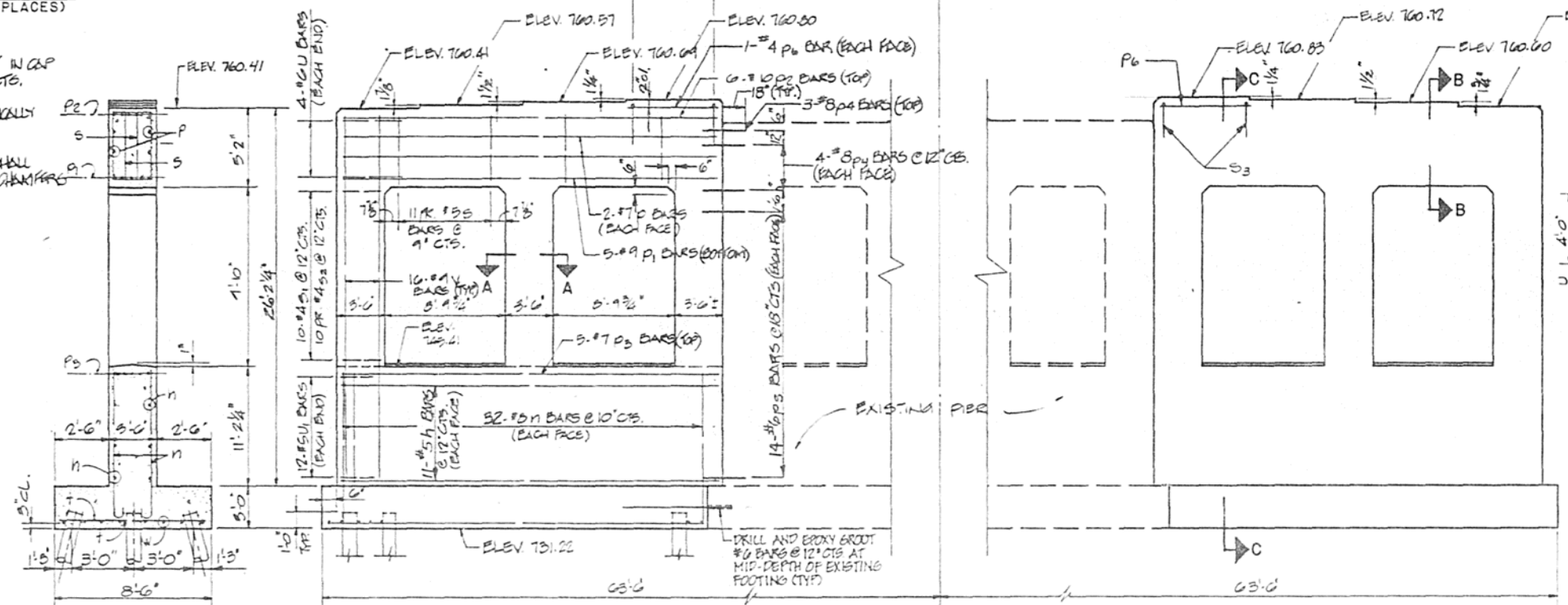
REVISIONS		FINGER PLATE EXPANSION DEVICE	
NO.	DATE	BY	INITIALS

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	CHAMPAIGN COUNTY	PROJECT NO. 3400-5
F.A.I. 74	S.N. 010-0021 - SEC. (14-VB) BR	DATE JULY 27, 1953
STA. 1215+00.14	CHAMPAIGN COUNTY	DESIGNED BY E. C. BENTLEY
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS		CHECKED BY E. C. BENTLEY
		SCALE NUMBER
		SHEET NO.

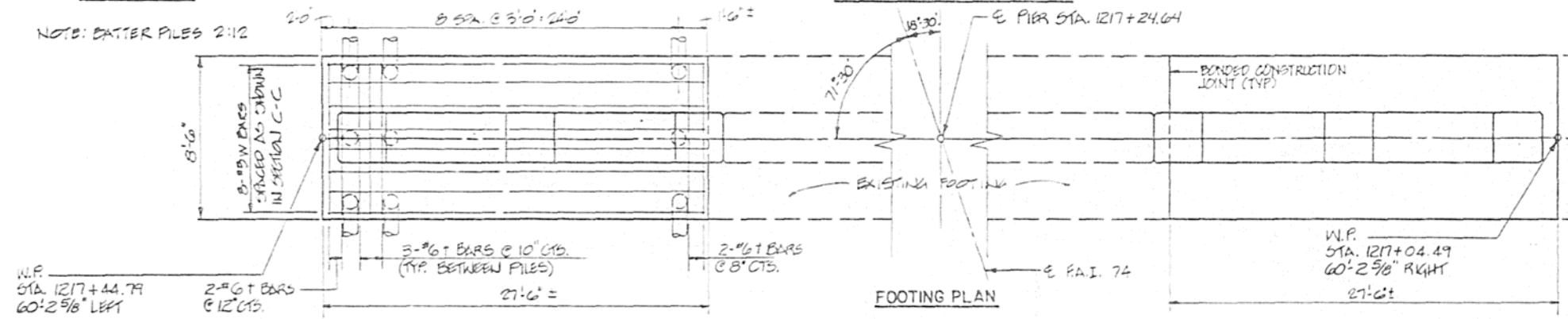


ANCHOR BOLT LAYOUT
(TYPICAL 8 PLACES)

NOTES:
SPACE REINFORCEMENT IN CAP TO MISS ANCHOR BOLTS.
FOUR STEPS MANUALLY WITH CAP.
ALL EXPOSED EDGES SHALL HAVE STANDARD 3/4" CHAMFER EXCEPT AS NOTED.



ELEVATION (LOOKING EAST)

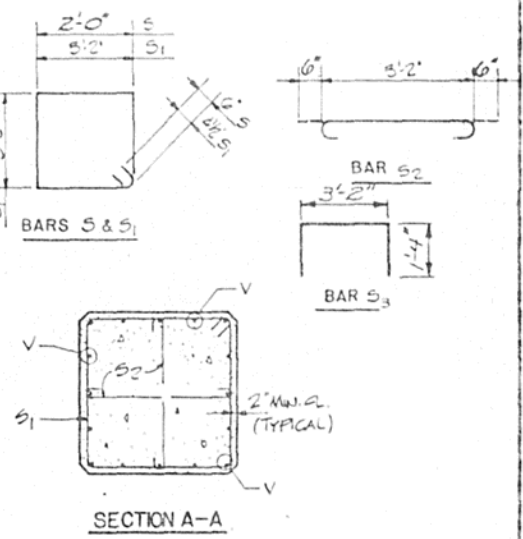


FOOTING PLAN

PILE DATA
Type CONCRETE
Capacity 40 TON
Est. Length 33'
No. Required 54

NOTE: BATTER PILES 2:12

NOTE: PIER EXTENSION DETAILED ON THIS SHEET IS SYMMETRICAL ABOUT E EXCEPT AS NOTED.



SECTION A-A

BILL OF MATERIAL
PIER NO. 1 EXTENSIONS

Bar	No.	Size	Length	Shape
n	48	#3	27'-4"	—
n	128	#6	14'-8"	—
p	8	#7	27'-4"	—
p1	10	#9	27'-4"	—
p2	12	#10	27'-4"	—
p3	10	#7	27'-4"	—
p4	22	#8	3'-0"	—
p5	50	#6	3'-0"	—
p6	4	#4	6'-0"	—
s1	88	#5	14'-8"	—
s2	60	#4	13'-5"	—
s3	120	#4	4'-2"	—
s4	14	#4	5'-10"	—
t	50	#6	8'-2"	—
u	10	#6	11'-2"	—
u1	48	#3	7'-2"	—
v	96	#4	20'-0"	—
w	16	#9	27'-3"	—

CLASS X CONCRETE
REINFORCEMENT BARS ROUND
STRUCTURAL EXCAVATION
CONCRETE PILES

PIER NO. 1 EXTENSIONS

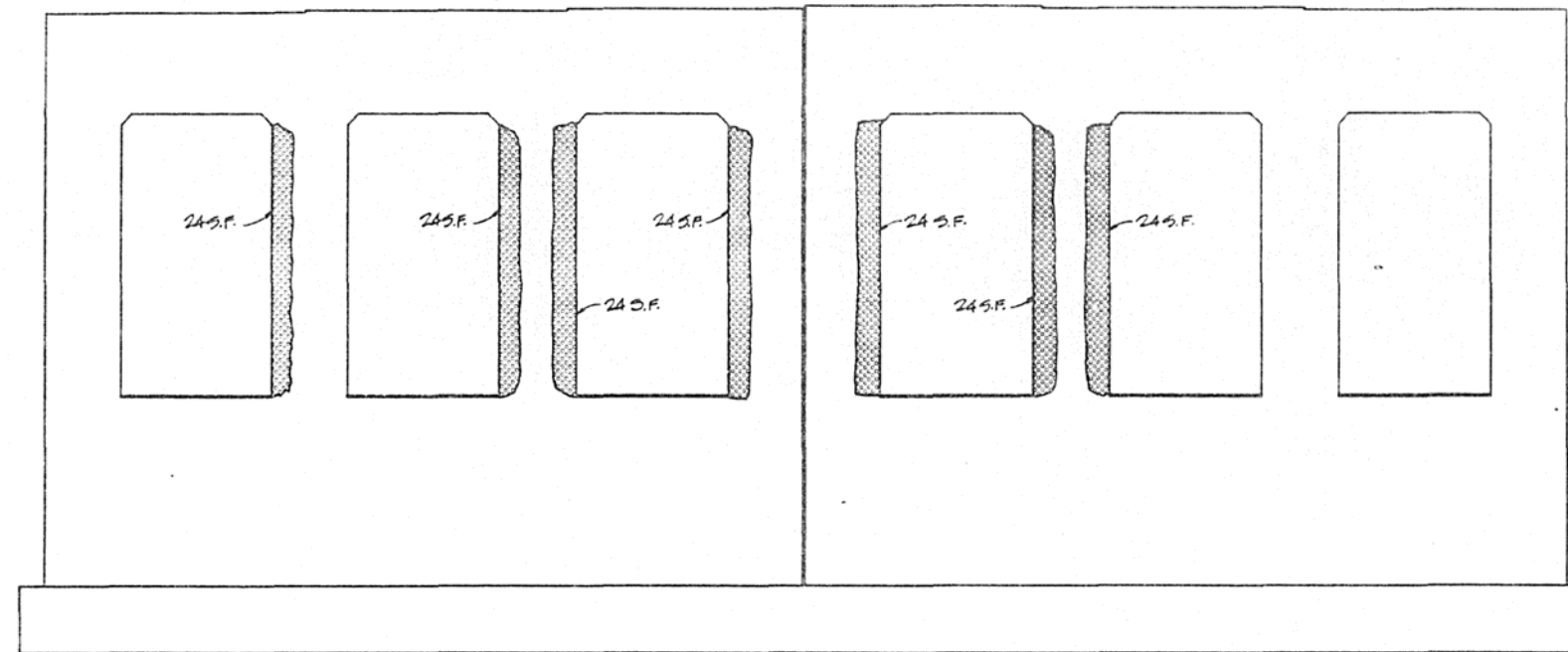
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

FAI 74 S.N. 010-0021 SEC. (14-VB) BR
STA. 1218+00.14 CHAMPAIGN COUNTY

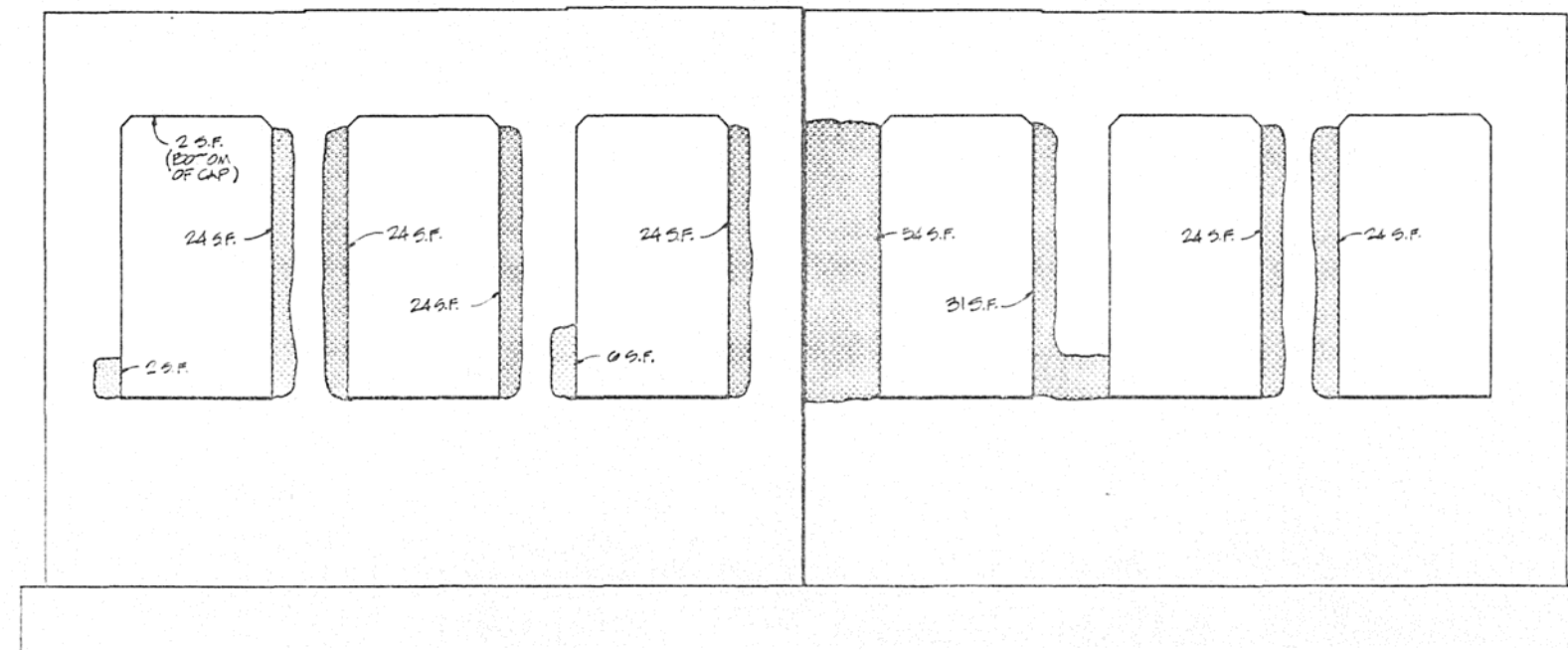
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS

PROJECT NO. 3400-5
SHEET NO.

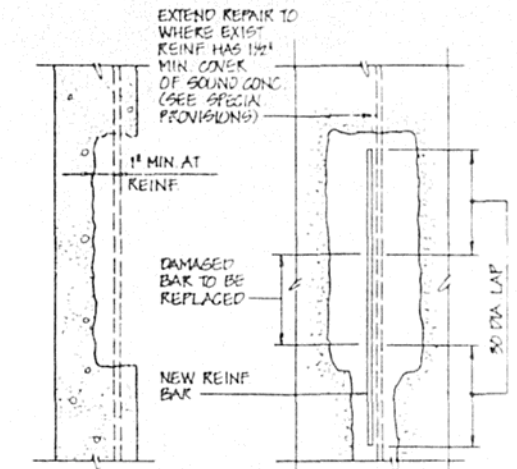
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	K14-VB BR	CHAMPAIGN	140	110
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



ELEVATION
PIER NO. 3 (LOOKING EAST)



ELEVATION
PIER NO. 3 (LOOKING WEST)



**CONCRETE STRUCTURE
REPAIR DETAIL**

DETAIL APPLIES WHERE EXISTING REINFORCEMENT IS EXPOSED AS A RESULT OF REMOVING UNSOUND CONCRETE. EXISTING REINFORCEMENT HAVING 25% OR MORE OF CROSS SECTIONAL AREA LOST DUE TO CORROSION OR DAMAGE DURING CONCRETE REMOVAL SHALL BE REPLACED BY NEW REINFORCEMENT LAPPED AS SHOWN. PAYMENT FOR ADDED REINFORCEMENT STEEL SHALL BE AT THE UNIT PRICE FOR REINFORCEMENT BARS.

AREA OF CONCRETE TO BE REPAIRED
NOTE: SQUARE FOOT AREAS LISTED ON THIS DRAWING INCLUDE AREAS ON SIDE FACE OF PIER COLUMNS.

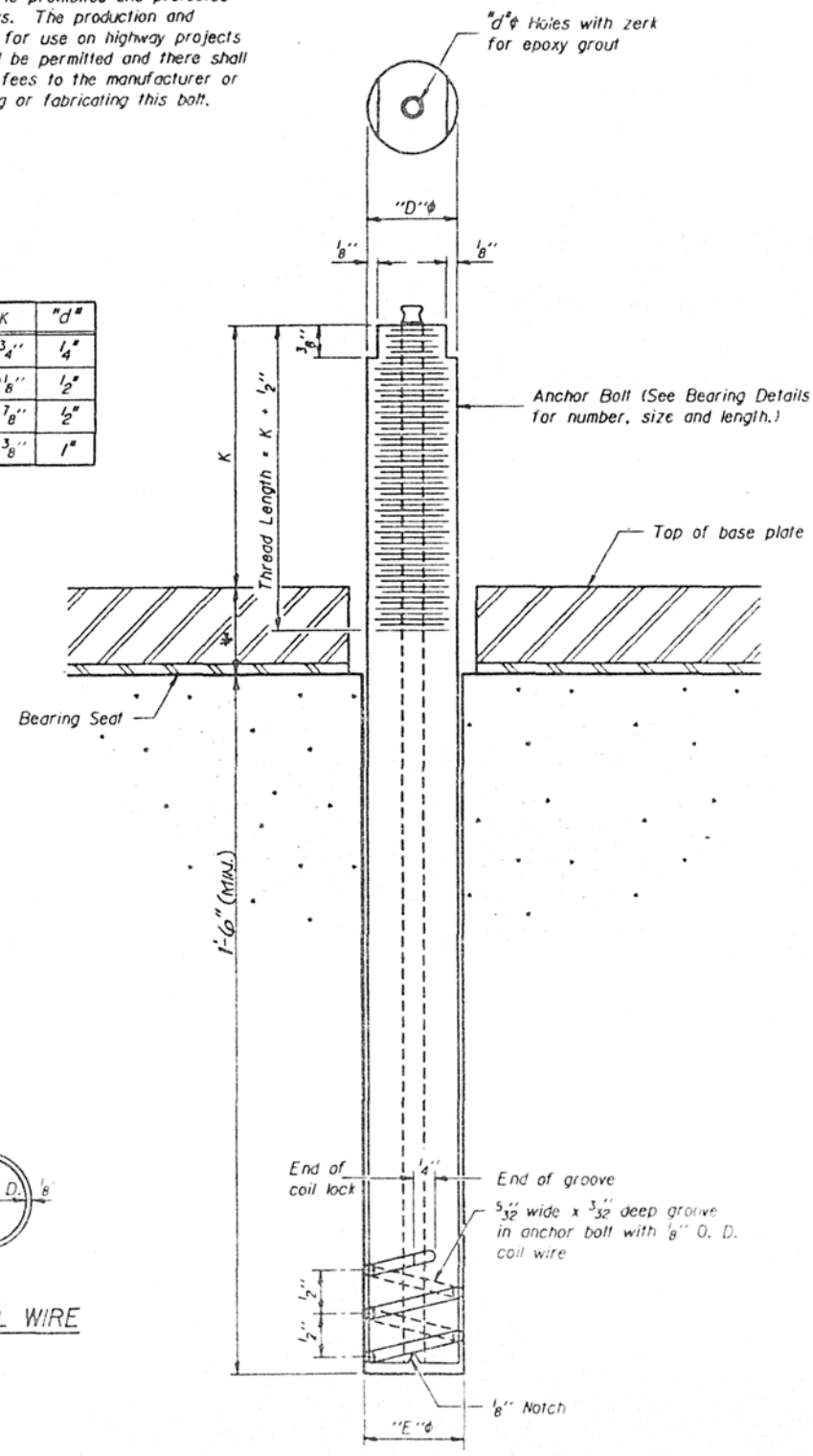
REPAIR OF CONCRETE STRUCTURES 407 S.F.

REVISIONS NO. DATE DETAILS 1 2 3 4 5 6 7 8 9 10		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS F.A.N. 74 S.N. 010-002 SEC. K14-VB BR STA. 1219+00.15 CHAMPAIGN COUNTY HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS		DRAWN BY DATE JCL CHECKED BY DATE JCL 7-78 PROJECT NO. 3400-5 SHEET NO.
SUBSTRUCTURE REPAIR - PIER NO. 3				

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	K14-VB BR	CHAMPAIGN	140	117
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

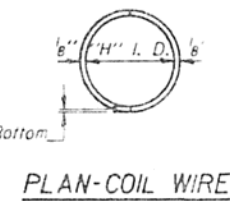
The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K	"d"
1"	1 1/8"	1 3/8"	1 3/4"	1/4"
1 1/2"	1 5/8"	1 5/8"	2 1/8"	1/2"
2"	2 1/8"	1 3/8"	2 7/8"	3/4"
2 1/2"	2 5/8"	2 5/8"	3 3/8"	1"



ILLINOIS COIL-LOCK ANCHOR BOLT

AS REQUIRED BY BEARING



MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A519, Grade K26 and supplied with hexagonal nuts and cut washers.
The coil wire shall be made of any suitable soft steel wire.
The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C881, Type I, Grade I and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

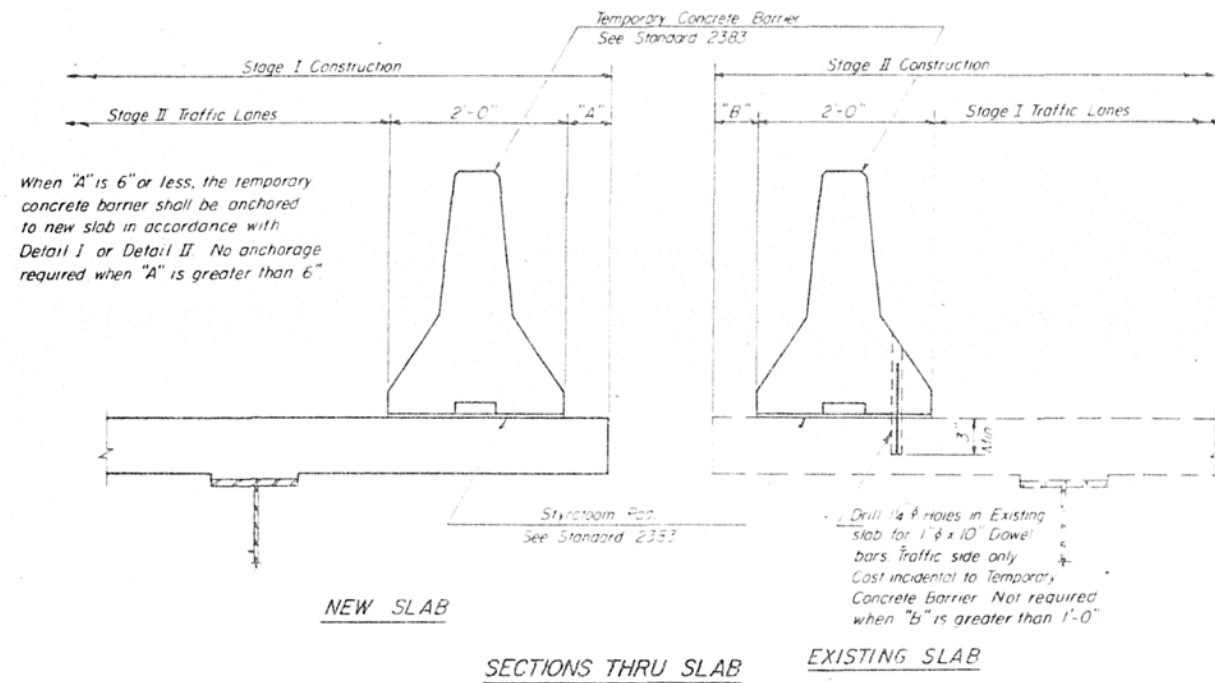
The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes in accordance with the manufacturer's recommendations and procedures.
The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
1. A threaded rod stud with nut and washer conforming to ASTM A307.
2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or in accordance with the manufacturer's recommendation after beams or girders have been erected and adjusted.
Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.
The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for "Furnishing and Erecting Structural Steel".

ANCHOR BOLT DETAILS FOR BEARINGS			
REVISIONS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY: DWT
1	F.A.I. 74	S.N. 010-0021 SEC (14-VB)BR	CHECKED BY: J.S.
2	STA. 1219+00.14	CHAMPAIGN COUNTY	PROJECT NO. 3400-5
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS			SHEET NO.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	(14-VB) BR	CHAMPAIGN	40	11a
PRO ROAD DIST NO.	CLINCH	PROJECT		

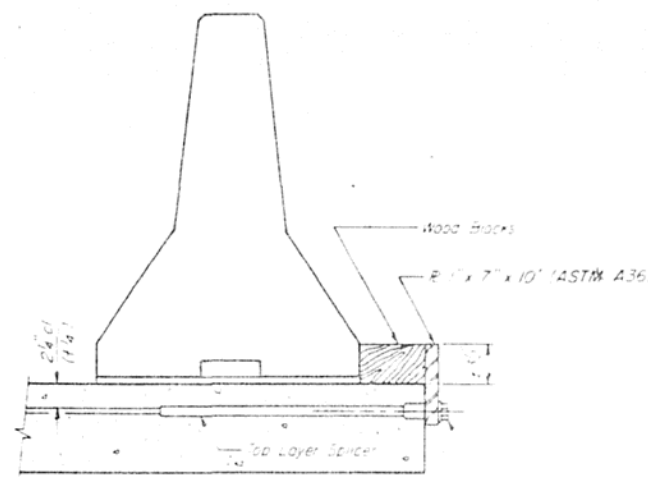


NOTES

Detail I - With Bar Splicer or Couplers
Connect one (1) 1" x 7" x 10" steel R to the top layer of couplers with 2- $\frac{3}{8}$ " bolts screwed to coupler at approximate $\frac{1}{2}$ of each 10'-0" barrier panel

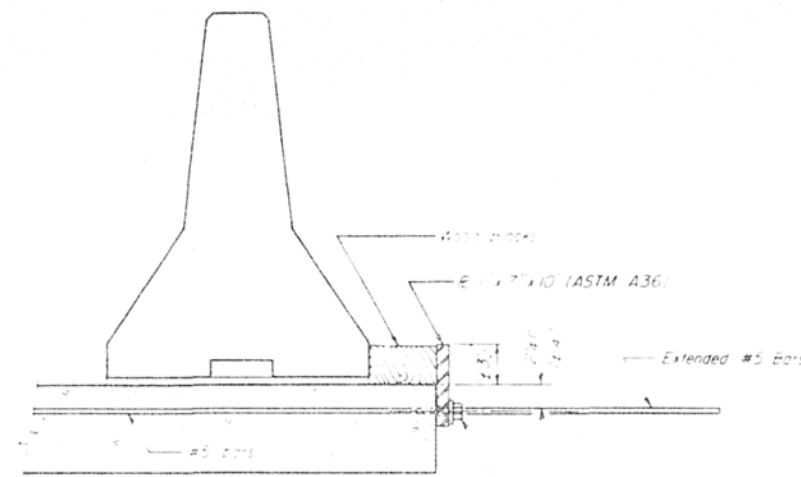
Detail II - With Extended Reinforcement Bars
Connect one (1) 1" x 7" x 10" steel R to the concrete slab with 2- $\frac{3}{8}$ " Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate $\frac{1}{2}$ of each 10'-0" barrier panel

Cost of anchorage is incidental to Temporary Concrete Barrier



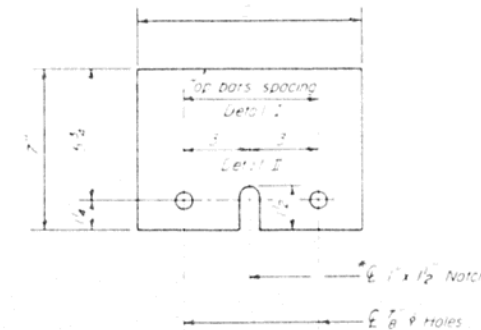
DETAIL I

The 1" x 7" x 10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place



DETAIL II

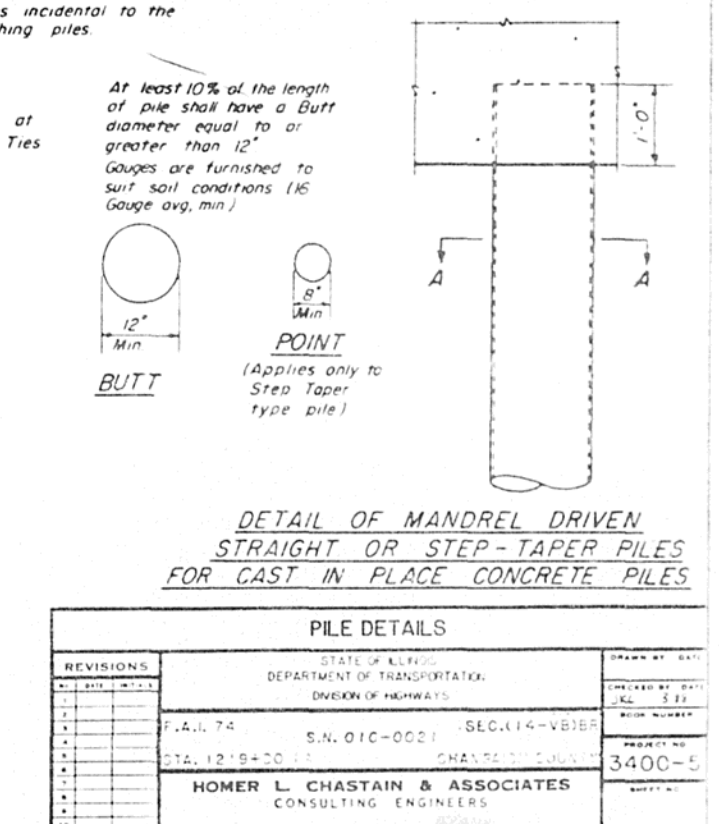
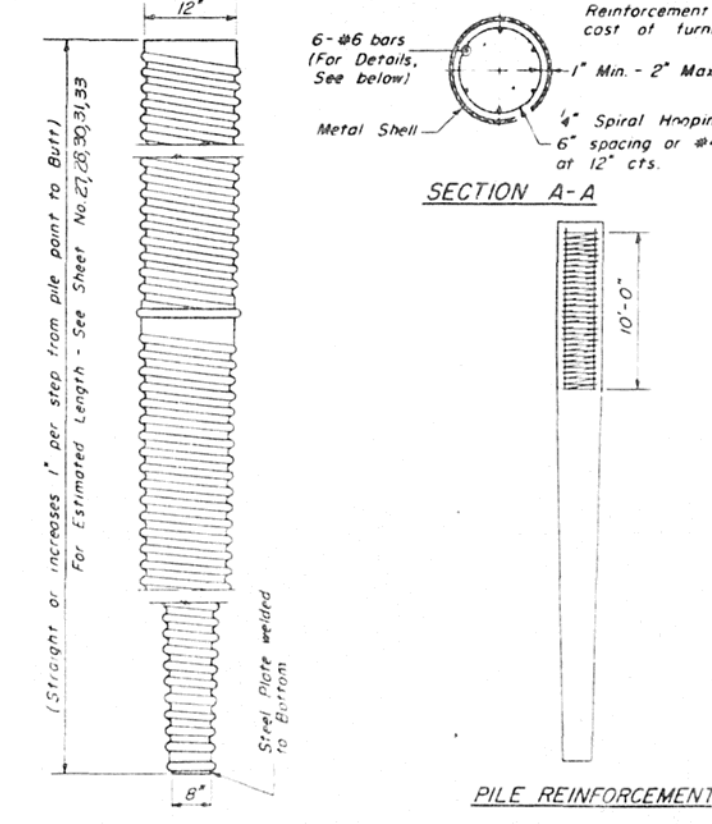
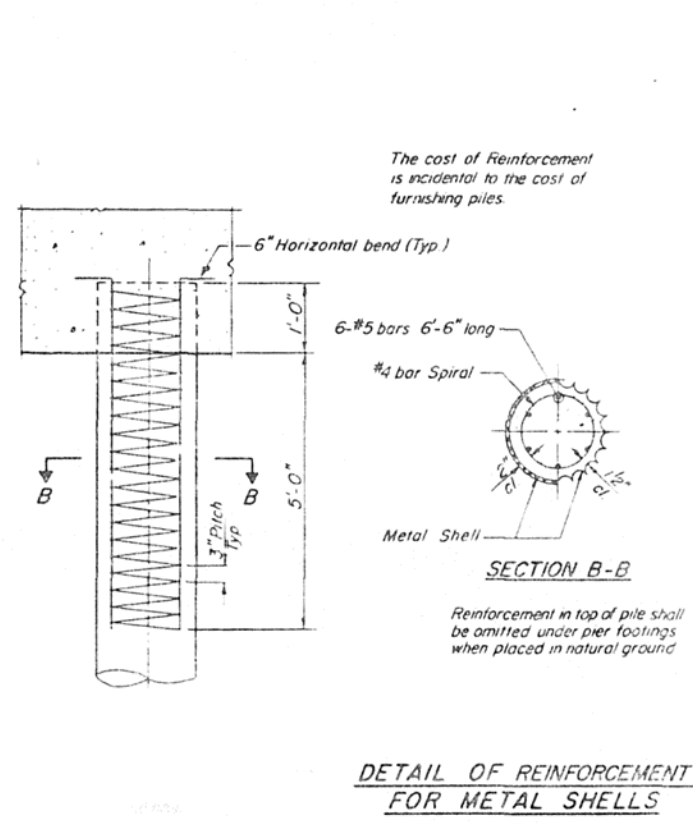
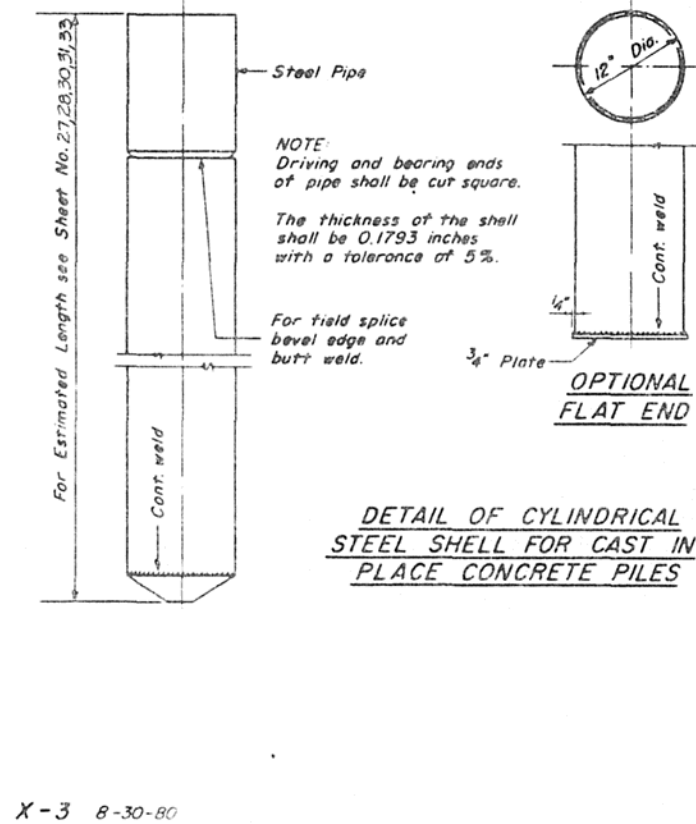
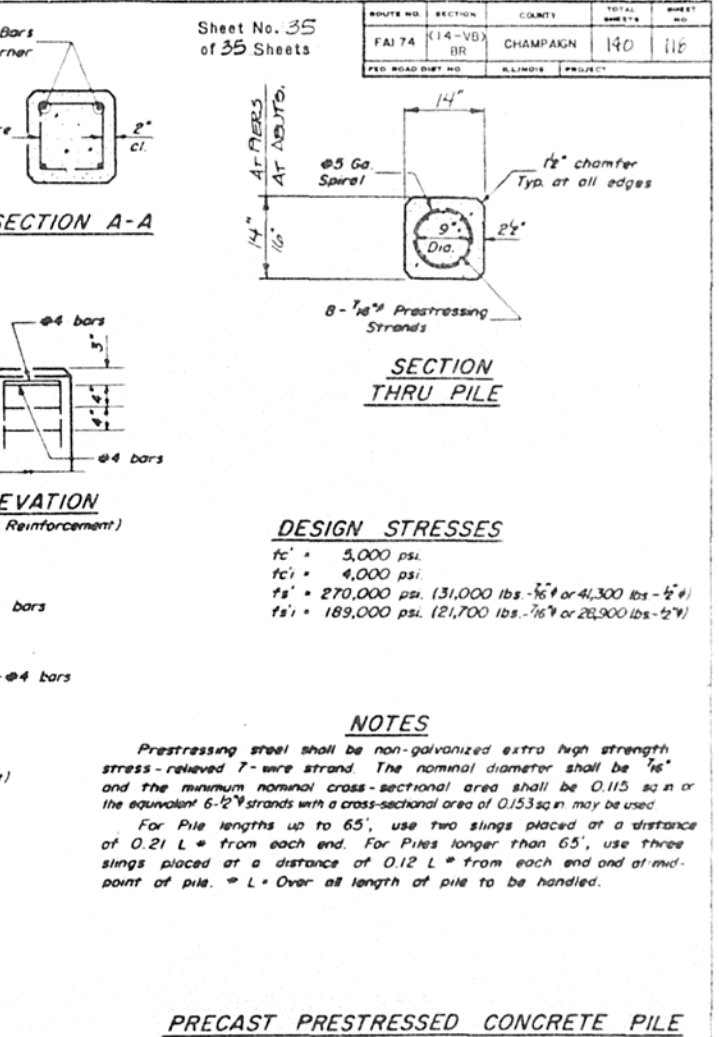
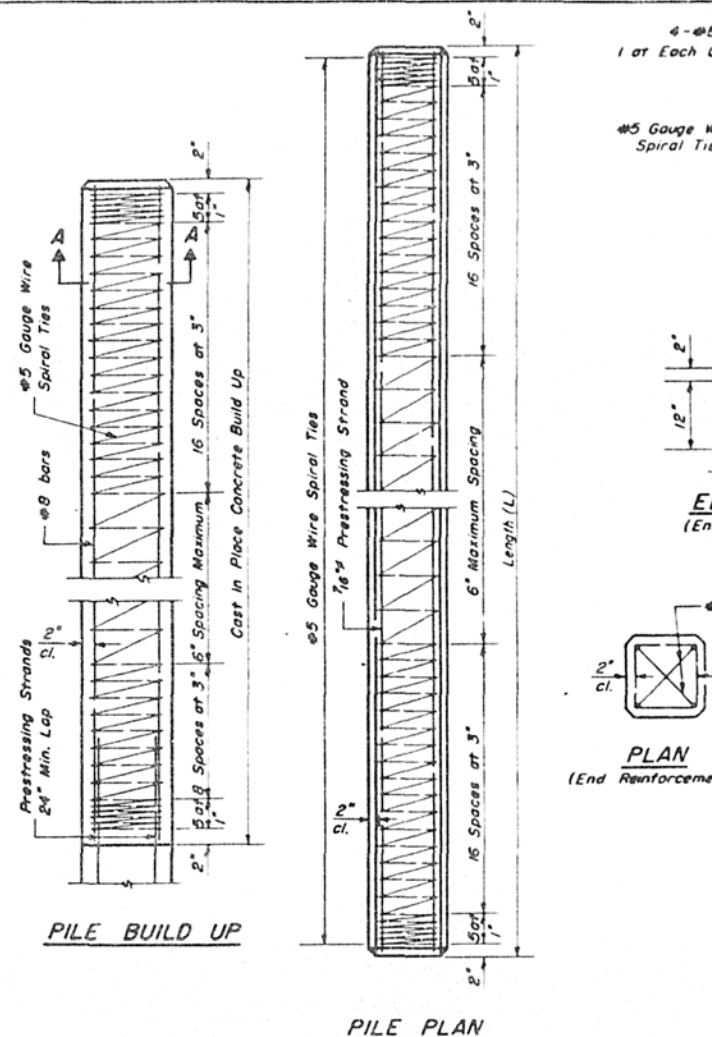
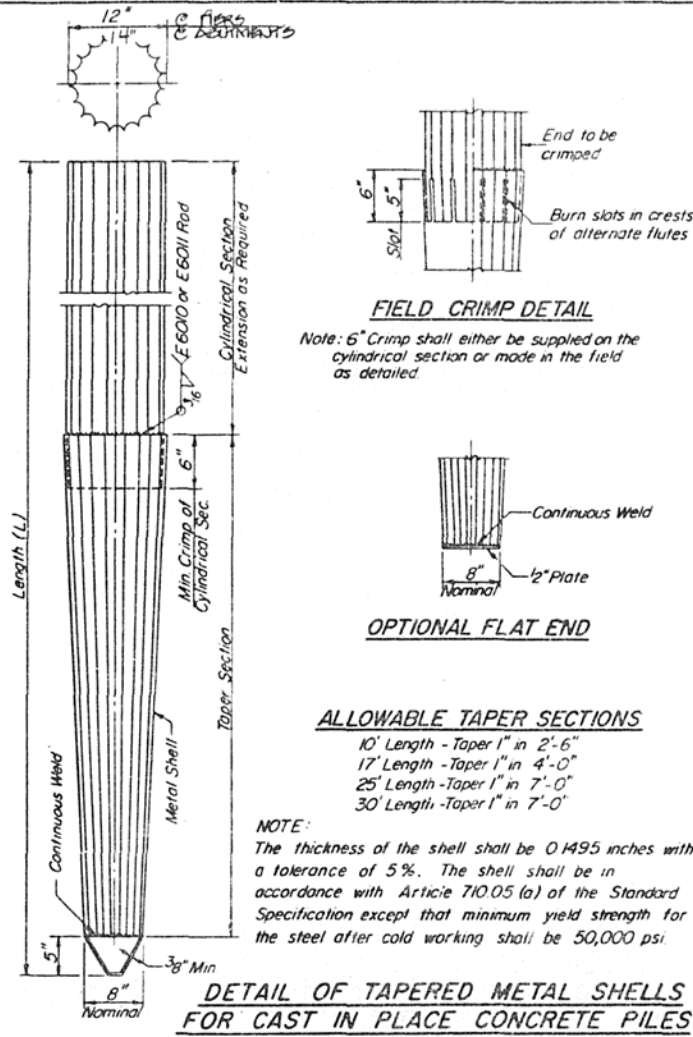
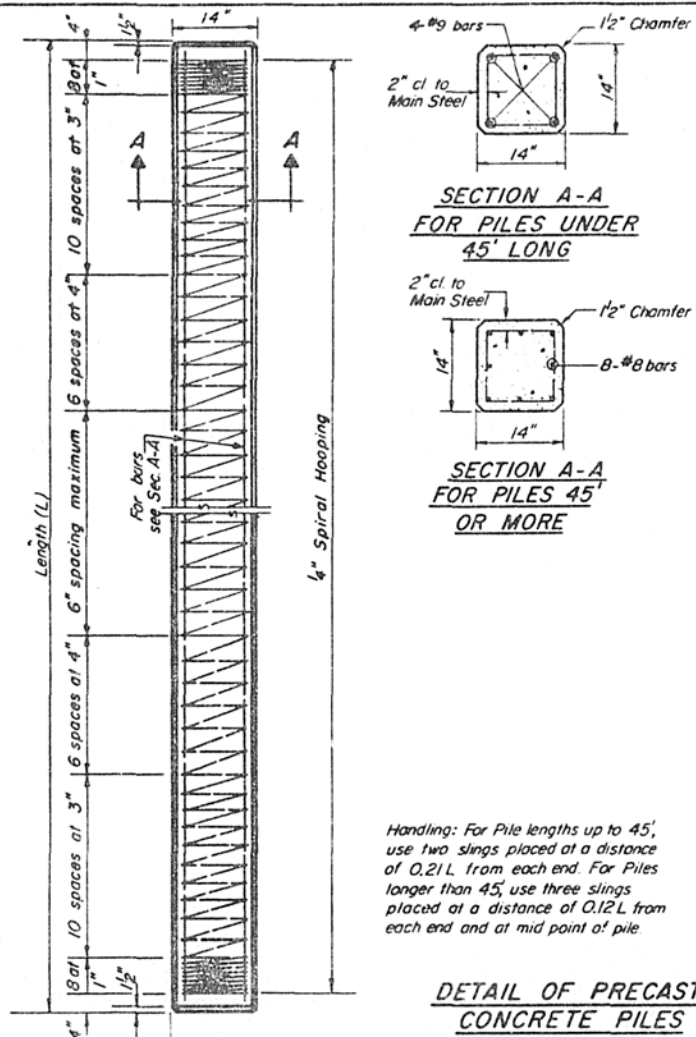
The 1" x 7" x 10" Plate shall not be removed until Stage II Construction forms and all reinforcement bars are in place and the concrete is ready to be placed



R 1" x 7" x 10"

* Required only with Detail I

TEMPORARY CONCRETE BARRIER			
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	F.A.I. 74 S.N. 010-0021 STA. 1219+00.14	SEC. (14-VB)BR CHAMPAIGN COUNTY	PROJECT NO. 3400-5
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS DECATUR, ILLINOIS			SHEET NO.



REVISIONS		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS		DRAWN BY DATE	
1		F.A.L. 74	S.N. 010-0021 (SEC. 114-VB) BR	J.K.C.	5 11
2		STA. 12+94.00	CHAMPAIGN COUNTY	PROJECT NO.	3400-5
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS				SHEET NO.	