

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST CURB LINE

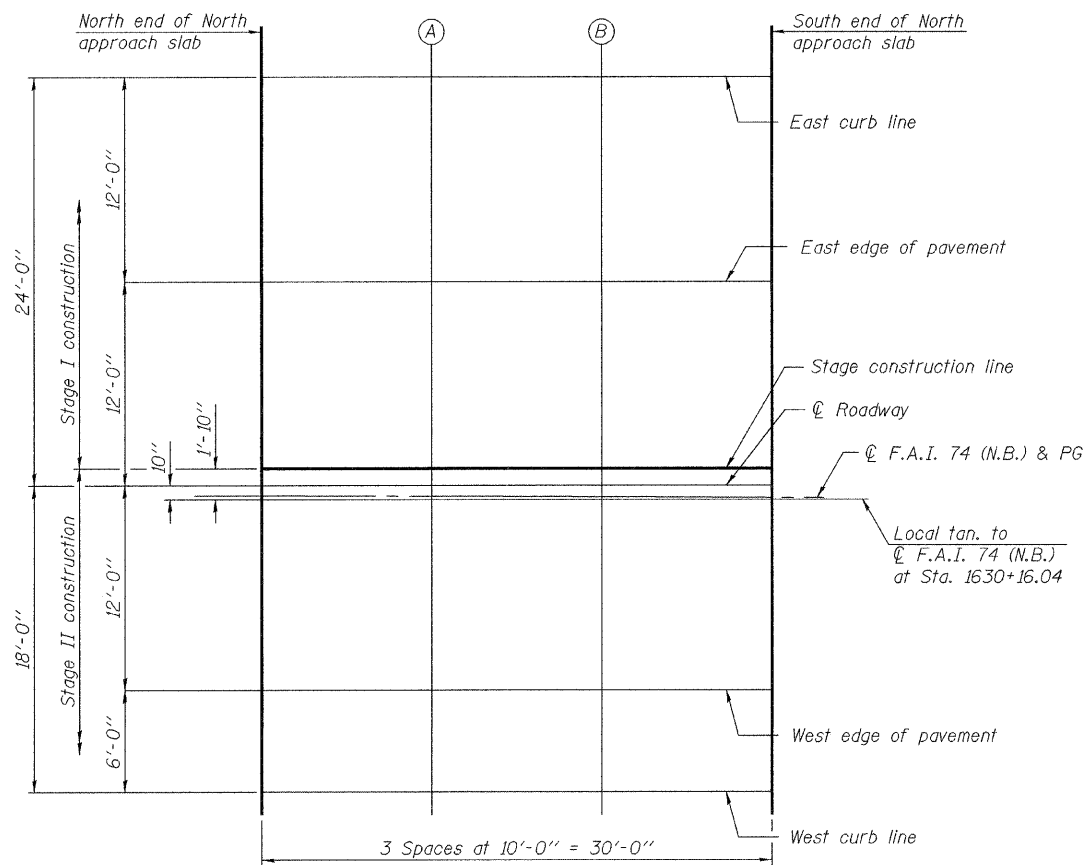
Location	Station	Offset	Theoretical Grade Elevations
N. end of N. approach slab	1629+18.78	17.38	808.64
A	1629+28.77	17.34	808.72
B	1629+38.76	17.30	808.81
S. end of N. approach slab	1629+48.75	17.27	808.89

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. end of N. approach slab	1629+18.75	11.38	808.76
A	1629+28.74	11.34	808.84
B	1629+38.74	11.30	808.93
S. end of N. approach slab	1629+48.73	11.27	809.01

☉ F.A.I. 74 (N.B.) & P.G.

Location	Station	Offset	Theoretical Grade Elevations
N. end of N. approach slab	1629+18.70	0.00	808.93
A	1629+28.70	0.00	809.02
B	1629+38.70	0.00	809.10
S. end of N. approach slab	1629+48.70	0.00	809.19



PLAN

☉ ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
N. end of N. approach slab	1629+18.70	-0.62	808.94
A	1629+28.70	-0.66	809.03
B	1629+38.70	-0.70	809.12
S. end of N. approach slab	1629+48.70	-0.73	809.20

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
N. end of N. approach slab	1629+18.69	-1.62	808.94
A	1629+28.69	-1.66	809.02
B	1629+38.69	-1.70	809.10
S. end of N. approach slab	1629+48.69	-1.73	809.19

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. end of N. approach slab	1629+18.64	-12.62	808.76
A	1629+28.65	-12.66	808.85
B	1629+38.66	-12.70	808.93
S. end of N. approach slab	1629+48.66	-12.73	809.02

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. end of N. approach slab	1629+18.59	-24.62	808.51
A	1629+28.60	-24.66	808.60
B	1629+38.61	-24.70	808.68
S. end of N. approach slab	1629+48.62	-24.73	808.77

DESIGNED Michael D. Rolape
CHECKED Nicholas R. Barnett
DRAWN Michael B. Mossman
CHECKED M.D.R./N.R.B./G.R.A.

September 29, 2009
EXAMINED <i>Thomas J. Demagalki</i>
PASSED <i>Ralph E. Anderson</i>
ENGINEER OF BRIDGES AND STRUCTURES

TOP OF NORTH APPROACH
SLAB ELEVATIONS
STRUCTURE NO. 037-0018 (N.B.)

SHEET NO. 8 27 SHEETS	F.A.I. RTE. 74	SECTION 37-4HB-1	COUNTY HENRY	TOTAL SHEETS 48	SHEET NO. 101
	CONTRACT NO. 64264				
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. end of S. approach slab	1630+84.15	17.27	810.05
A	1630+94.14	17.30	810.13
B	1631+04.13	17.34	810.22
S. end of S. approach slab	1631+14.12	17.38	810.30

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. end of S. approach slab	1630+84.17	11.27	810.17
A	1630+94.16	11.30	810.25
B	1631+04.16	11.34	810.34
S. end of S. approach slab	1631+14.15	11.38	810.42

☉ F.A.I. 74 (N.B.) & P.G.

Location	Station	Offset	Theoretical Grade Elevations
N. end of S. approach slab	1630+84.20	0.00	810.34
A	1630+94.20	0.00	810.43
B	1631+04.20	0.00	810.51
S. end of S. approach slab	1631+14.20	0.00	810.60

☉ ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
N. end of S. approach slab	1630+84.20	-0.73	810.35
A	1630+94.20	-0.70	810.44
B	1631+04.20	-0.66	810.52
S. end of S. approach slab	1631+14.20	-0.62	810.61

STAGE CONSTRUCTION LINE

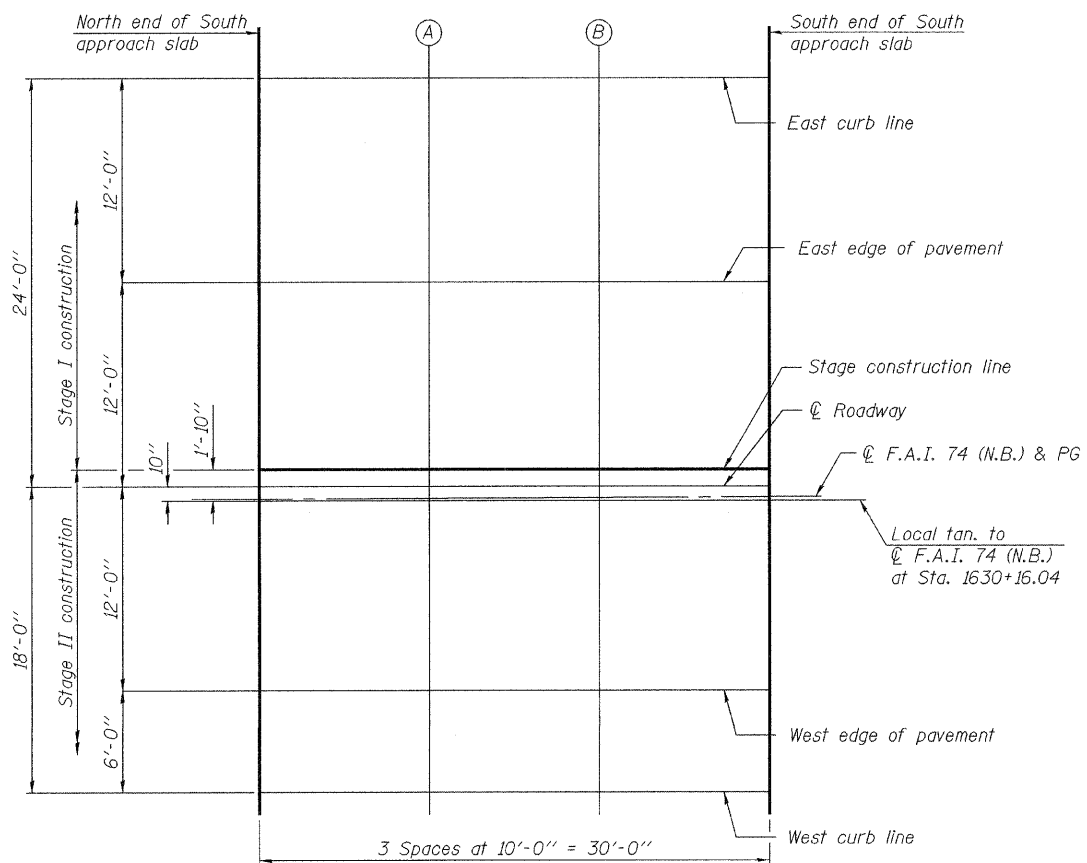
Location	Station	Offset	Theoretical Grade Elevations
N. end of S. approach slab	1630+84.21	-1.73	810.34
A	1630+94.21	-1.70	810.43
B	1631+04.21	-1.66	810.51
S. end of S. approach slab	1631+14.21	-1.62	810.60

EAST EDGE OF PAVEMENT

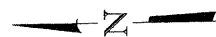
Location	Station	Offset	Theoretical Grade Elevations
N. end of S. approach slab	1630+84.24	-12.73	810.17
A	1630+94.24	-12.70	810.26
B	1631+04.25	-12.66	810.34
S. end of S. approach slab	1631+14.26	-12.62	810.43

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. end of S. approach slab	1630+84.28	-24.73	809.92
A	1630+94.29	-24.70	810.01
B	1631+04.30	-24.66	810.09
S. end of S. approach slab	1631+14.31	-24.62	810.18



PLAN



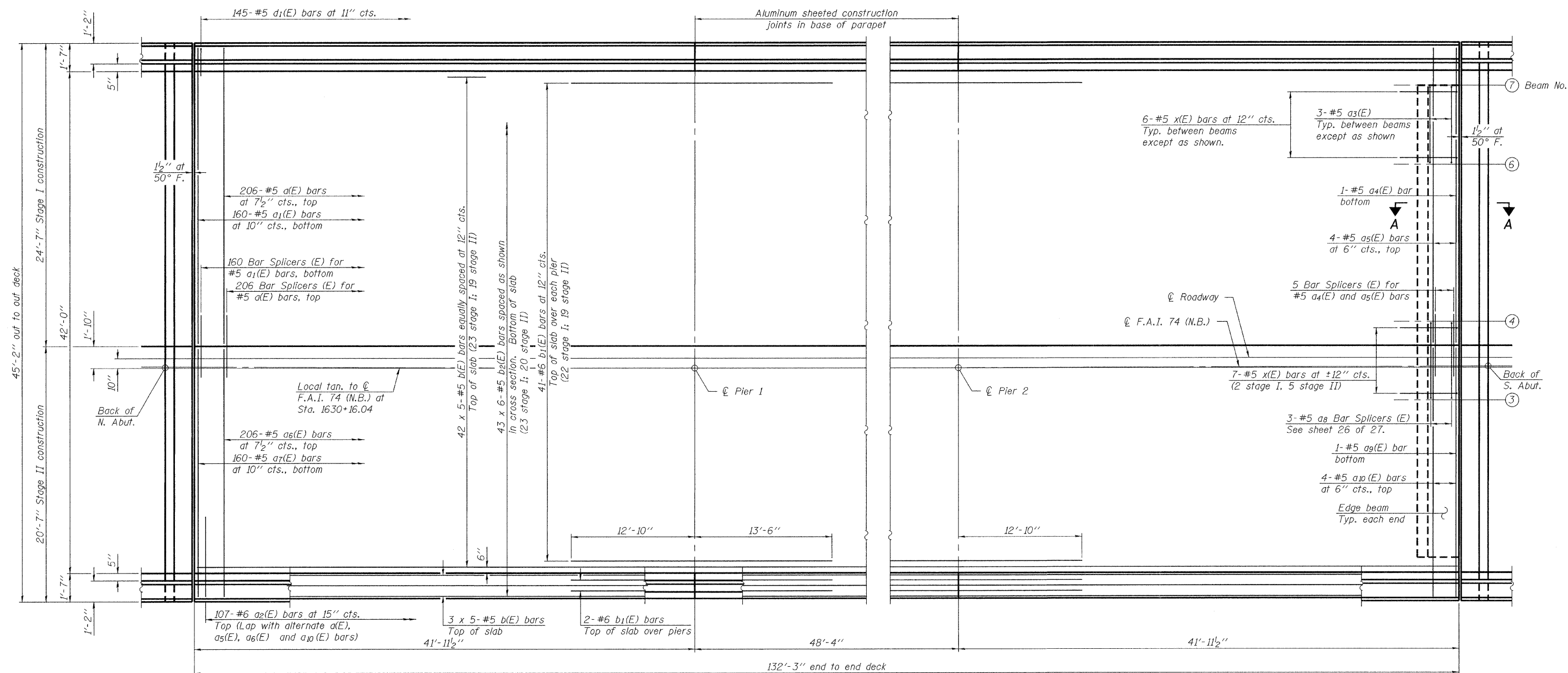
DESIGNED	Michael D. Rolape
CHECKED	Nicholas R. Barnett
DRAWN	Michael B. Mossman
CHECKED	M.D.R./N.R.B./G.R.A.

September 29, 2009
 EXAMINED *Thomas J. Demagalki*
 ENGINEER OF BRIDGE DESIGN
 PASSED *Ralph E. Anderson*
 ENGINEER OF BRIDGES AND STRUCTURES

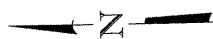
TOP OF SOUTH APPROACH
SLAB ELEVATIONS
STRUCTURE NO. 037-0018 (N.B.)

SHEET NO. 9 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	37-4HB-1	HENRY	148	102
			CONTRACT NO. 64264		
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN



MINIMUM BAR LAP
(Slab)
#5 bar = 2'-2"

Notes:
See Sheet 12 of 27 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet 12 of 27 for parapet reinforcement.
See sheet 12 of 27 for Section A-A.

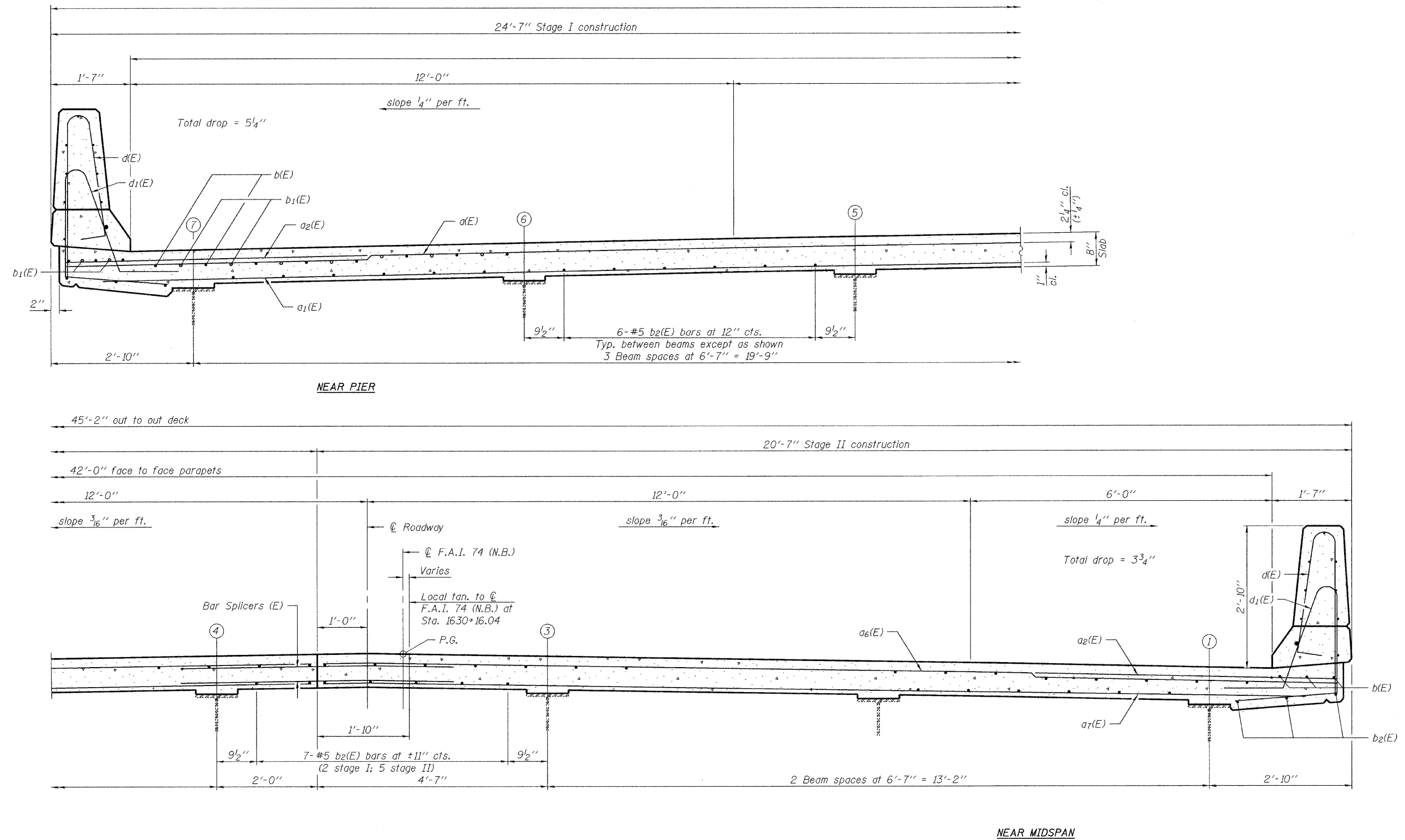
DESIGNED Michael D. Rolape
CHECKED Nicholas R. Barnett
DRAWN Michael B. Mossman
CHECKED M.D.R./N.R.B./G.R.A.

September 29, 2009
EXAMINED Thomas J. Domagalick
PASSED Ralph E. Anderson
ENGINEER OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES

**SUPERSTRUCTURE
STRUCTURE NO. 037-0018 (N.B.)**

SHEET NO. 10	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
27 SHEETS	74	37-4HB-1	HENRY	148	103
CONTRACT NO. 64264					
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



DESIGNED Michael D. Rolape
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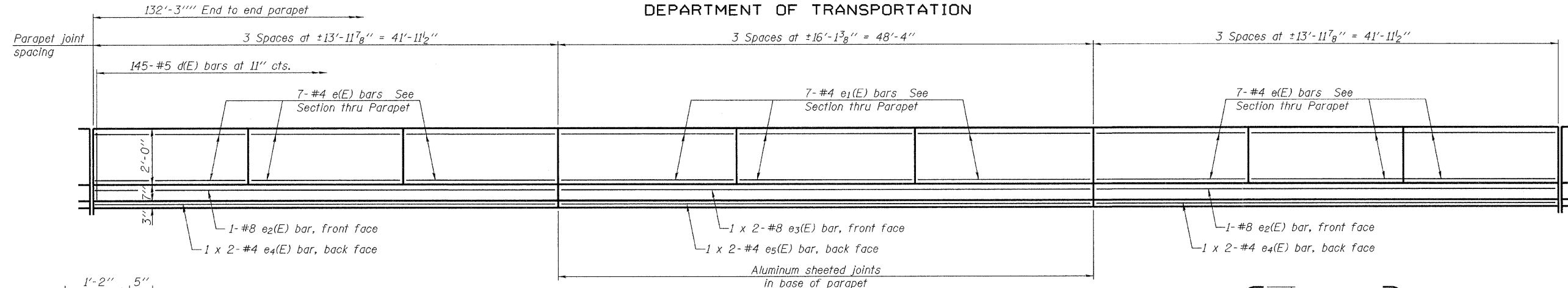
September 29, 2009
EXAMINED Thomas J. Demagali
PASSED Ralph E. Anderson

Notes:
See Sheet 12 of 27 for superstructure details and Bill of Material.
See Sheet 12 of 27 for parapet reinforcement.

SUPERSTRUCTURE
STRUCTURE NO. 037-0018 (N.B.)

SHEET NO. 11 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	37-4HB-1	HENRY	148	104
			CONTRACT NO. 64264		
ILLINOIS FED. AID PROJECT					

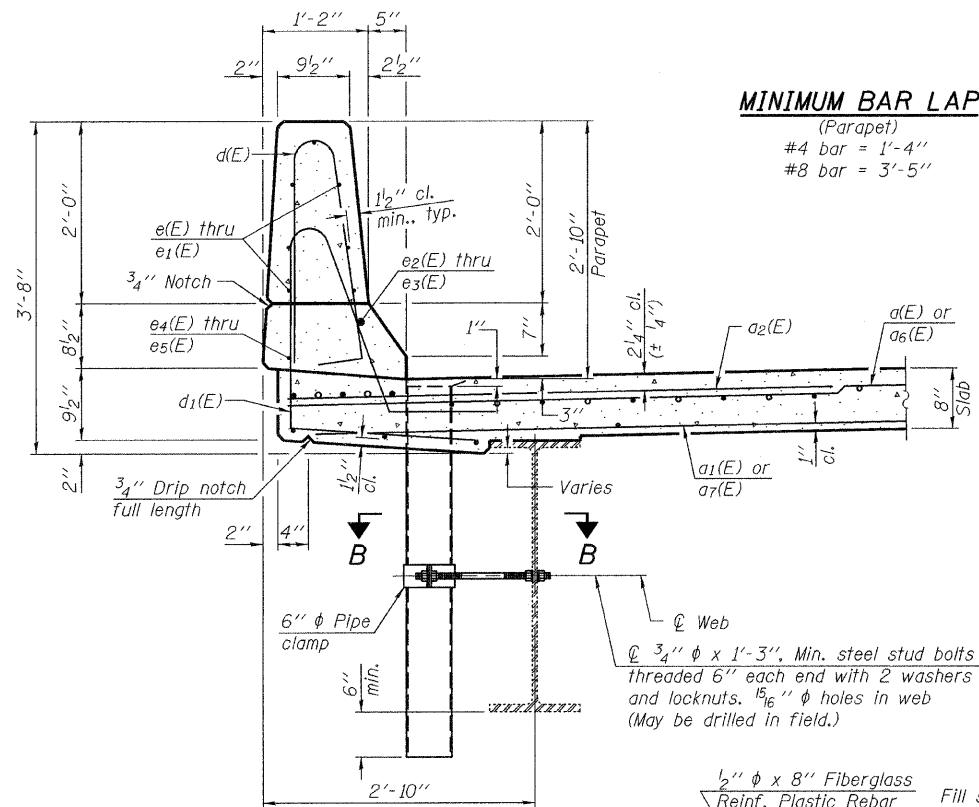
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



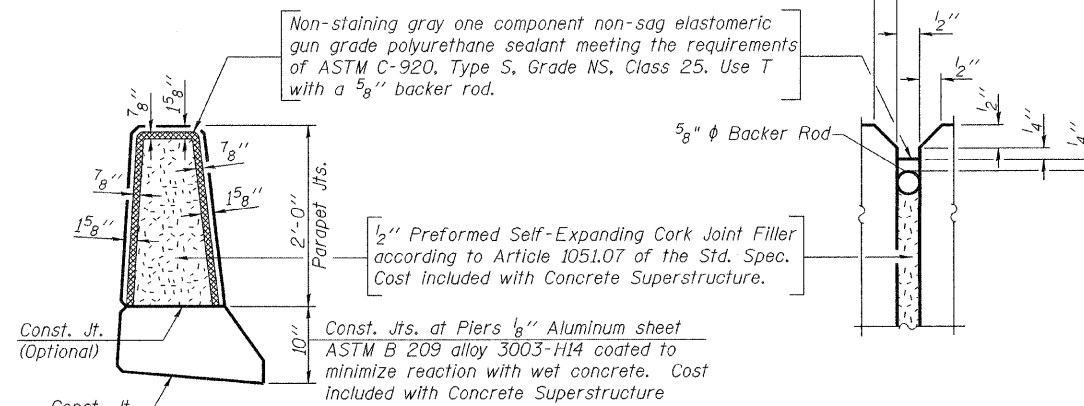
INSIDE ELEVATION OF PARAPET

MINIMUM BAR LAP

(Parapet)
#4 bar = 1'-4"
#8 bar = 3'-5"



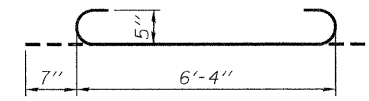
SECTION THRU PARAPET



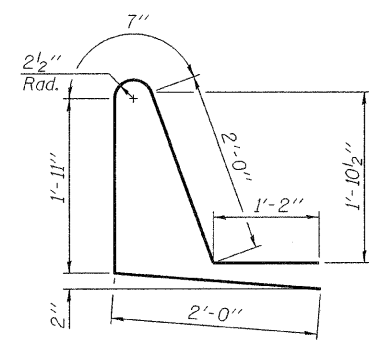
PARAPET JOINT DETAILS

Notes:

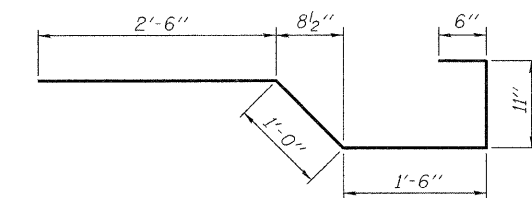
Drains shall be located clear of all diaphragms.
The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coatings Spec. SSPC-SP1 prior to painting.
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum. Galvanize clamping device according to AASHTO M232.



a3(E) BAR



BAR d1(E)

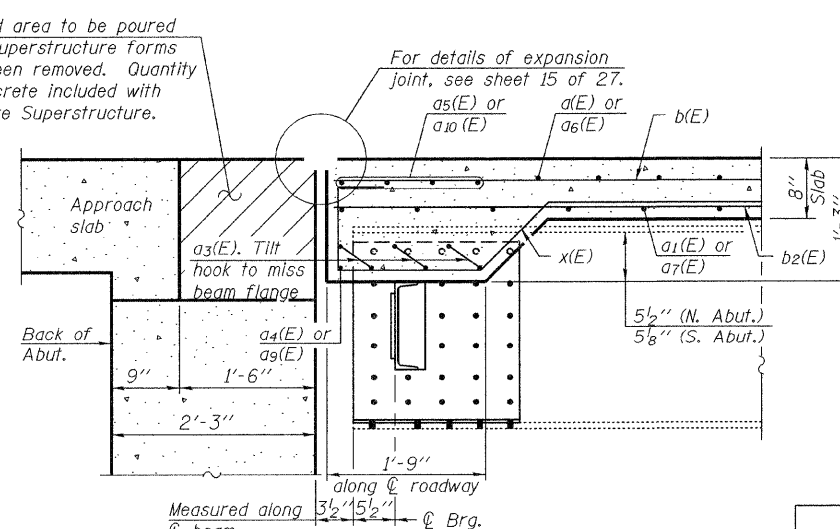


BAR x(E)

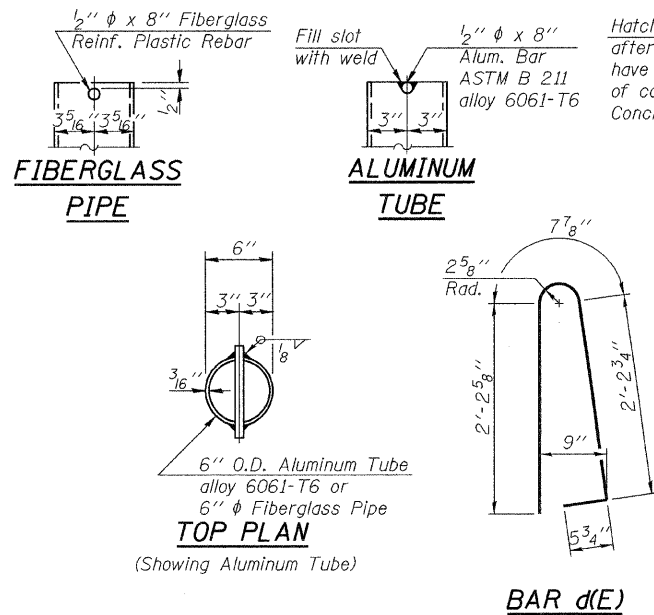
SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	206	#5	24'-2"	—
a1(E)	160	#5	23'-5"	—
a2(E)	214	#6	6'-0"	—
a3(E)	30	#5	7'-6"	⌋
a4(E)	2	#5	21'-5"	—
a5(E)	8	#5	24'-1"	—
a6(E)	206	#5	20'-1"	—
a7(E)	160	#5	19'-3"	—
a9(E)	2	#5	17'-5"	—
a10(E)	8	#5	20'-1"	—
b(E)	240	#5	28'-2"	—
b1(E)	90	#6	26'-4"	—
b2(E)	258	#5	23'-10"	—
d(E)	290	#5	5'-7"	⌋
d1(E)	290	#5	7'-8"	⌋
e(E)	84	#4	13'-8"	—
e1(E)	42	#4	15'-10"	—
e2(E)	4	#8	41'-8"	—
e3(E)	4	#8	25'-9"	—
e4(E)	8	#4	21'-7"	—
e5(E)	4	#4	24'-9"	—
x(E)	74	#5	6'-5"	⌋
Reinforcement Bars, Epoxy Coated		Pound	42,880	
Concrete Superstructure		Cu. Yds.	193.2	

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.



SECTION A-A

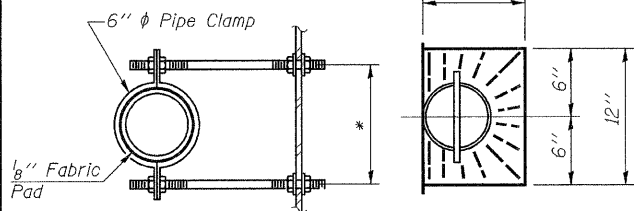


FIBERGLASS PIPE

ALUMINUM TUBE

TOP PLAN

(Showing Aluminum Tube)



SECTION B-B

* Dimension as required by Pipe Clamp

TOP PLAN

DESIGNED Michael D. Rolape
CHECKED Nicholas R. Barnett
DRAWN Michael B. Mossman
CHECKED M.D.R./N.R.B./G.R.A.

September 29, 2009
EXAMINED Thomas J. Demagali
PASSED Ralph E. Anderson

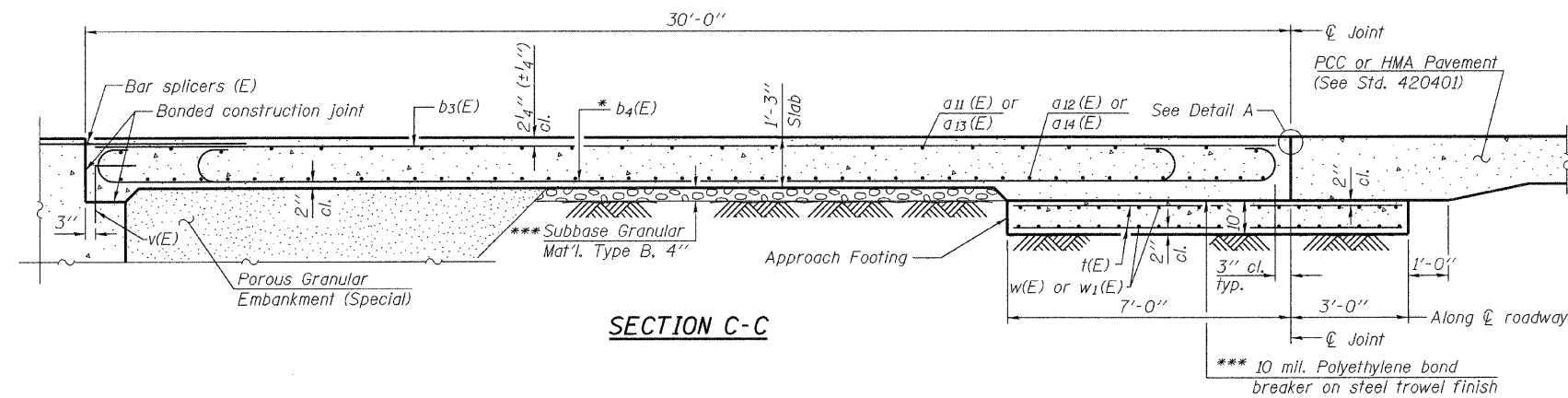
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 037-0018 (N.B.)

SHEET NO. 12	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
27 SHEETS	74	37-4HB-1	HENRY	148	105
CONTRACT NO. 64264					
ILLINOIS FED. AID PROJECT					

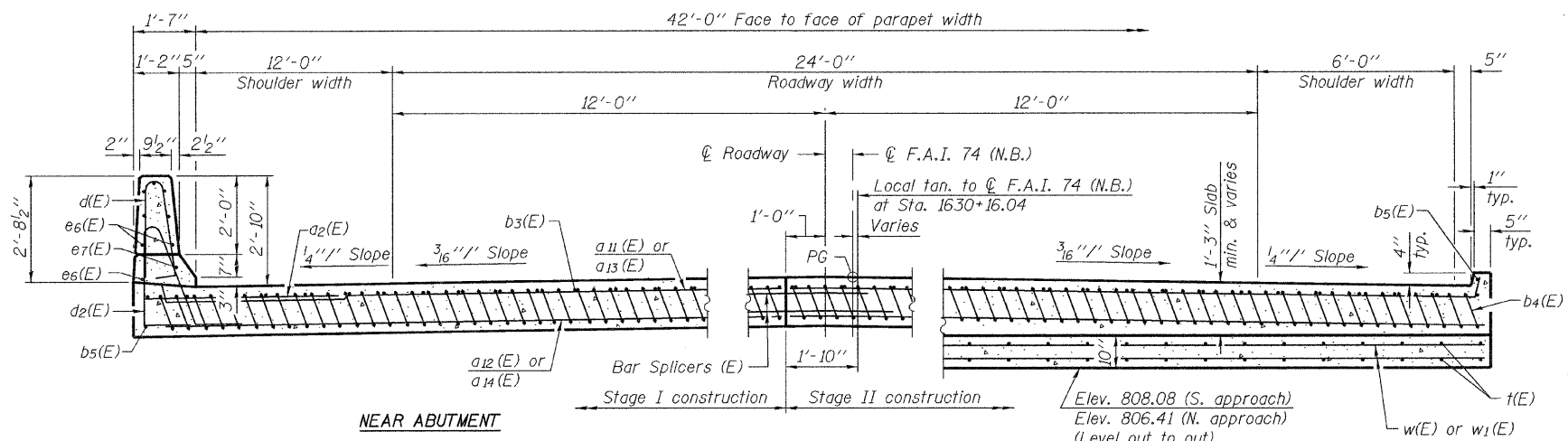
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Notes:

See sheet 13 of 27 for Detail A and View B-B.
Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheet 23 of 27.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet 26 of 27.
Cost of excavation for approach footing included with Concrete Structures.
For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 27.
For additional parapet details, see sheet 12 of 27.



SECTION C-C

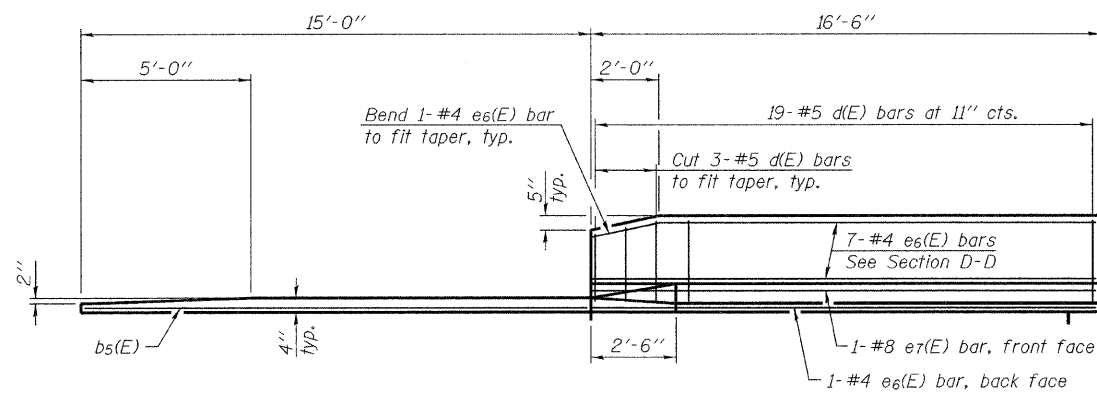


NEAR ABUTMENT

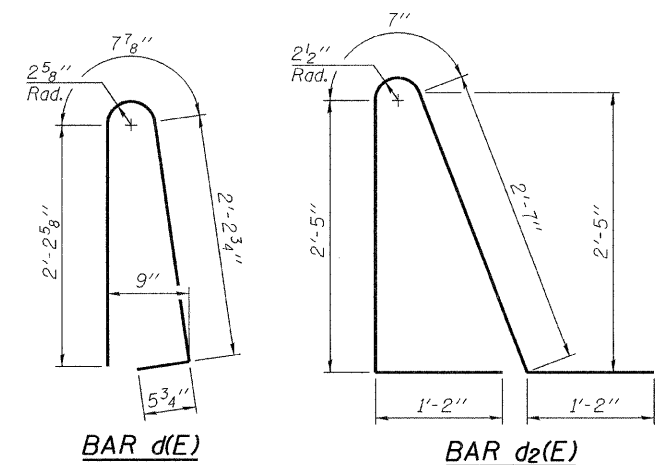
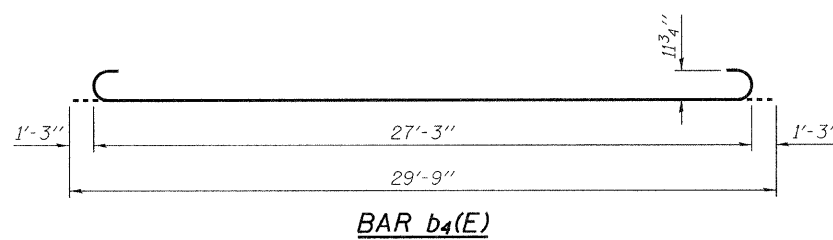
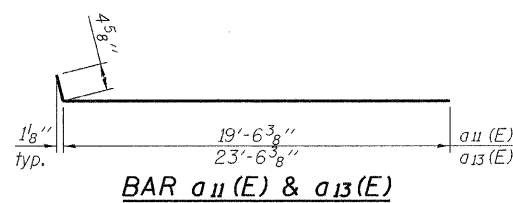
SECTION D-D

(See Plan for dimensions not shown)

AT APPROACH FOOTING



VIEW E-E



* Tilt #9 b4(E) bars as required to maintain clearance.
*** Cost included with Concrete Superstructure.

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2(E)	48	#6	6'-0"	—
a11(E)	50	#4	19'-11"	—
a12(E)	92	#5	23'-8"	—
a13(E)	50	#4	23'-11"	—
a14(E)	92	#5	19'-8"	—
b3(E)	74	#4	29'-8"	—
b4(E)	210	#9	29'-9"	—
b5(E)	8	#4	14'-8"	—
d(E)	76	#5	5'-7"	⤴
d2(E)	68	#5	7'-11"	⤴
e6(E)	32	#4	16'-3"	—
e7(E)	4	#8	16'-3"	—
t(E)	184	#4	9'-8"	—
w(E)	80	#5	23'-7"	—
w1(E)	80	#5	19'-7"	—
Concrete Superstructure		Cu. Yd.	138.3	
Concrete Structures		Cu. Yd.	27.0	
Reinforcement Bars, Epoxy Coated		Pound	35,160	

DESIGNED Michael D. Rolape
CHECKED Nicholas R. Barnett
DRAWN Michael B. Mossman
CHECKED M.D.R./N.R.B./G.R.A.

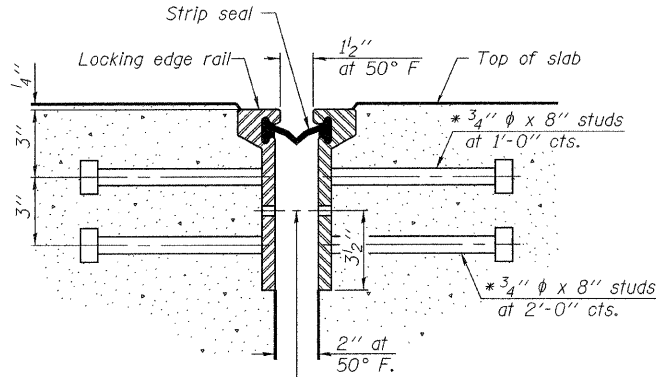
September 29, 2009
EXAMINED Thomas J. Demagali
PASSED Ralph E. Anderson

(Sheet 2 of 2)
BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 037-0018 (N.B.)

SHEET NO. 14 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	37-4HB-1	HENRY	148	101
CONTRACT NO. 64264					
ILLINOIS FED. AID PROJECT					

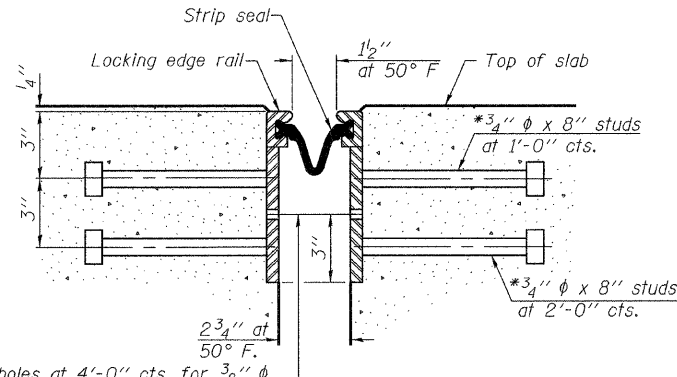
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



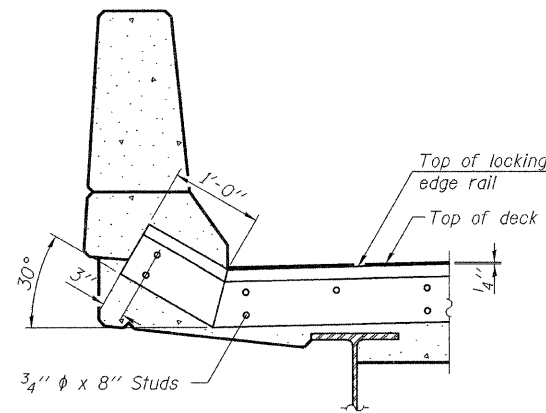
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU
ROLLED RAIL JOINT

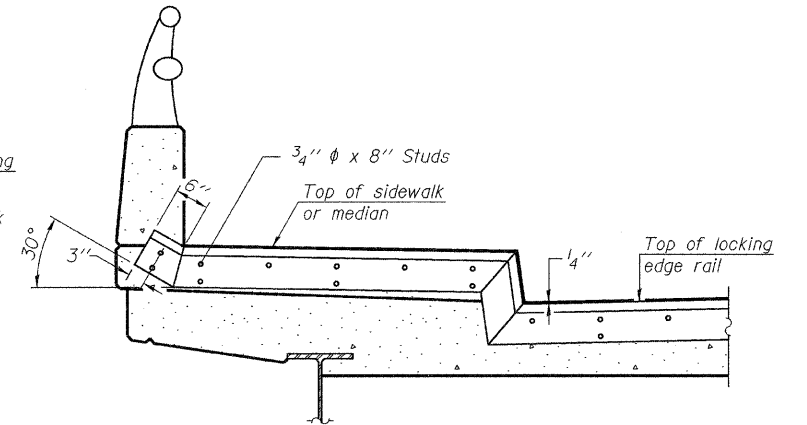


7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU
WELDED RAIL JOINT



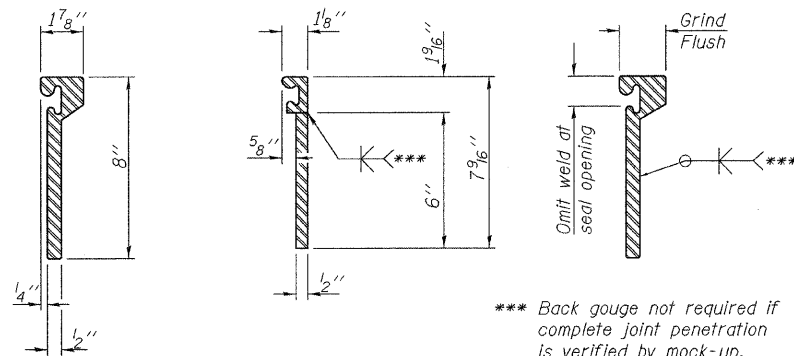
AT PARAPET
See Section A-A for end treatment of skews > 30°.



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

TYPICAL END TREATMENTS

Notes:
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.
The manufacturer's recommended installation methods shall be followed.
The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

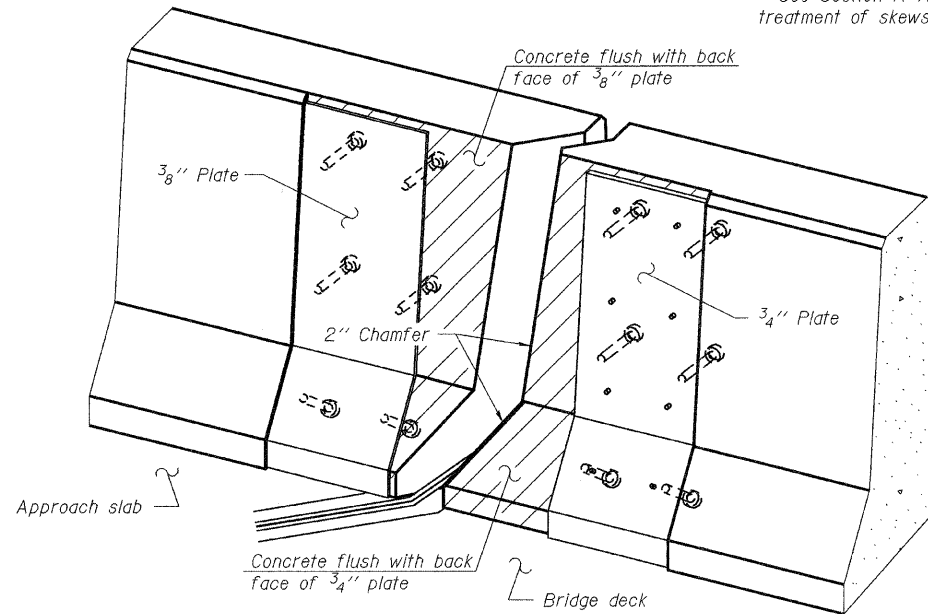


ROLLED
EXTRUDED RAIL WELDED RAIL

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

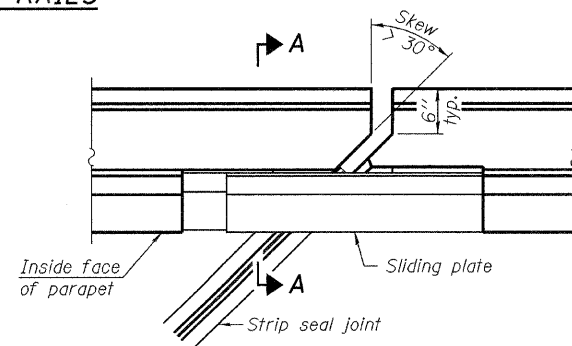
LOCKING EDGE
RAIL SPLICE

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

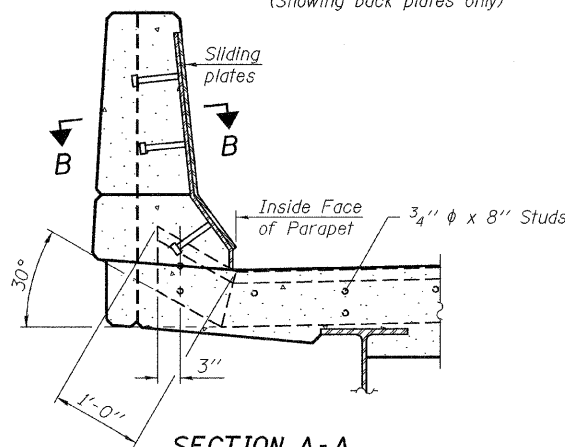


TRIMETRIC VIEW
(Showing back plates only)

LOCKING EDGE RAILS

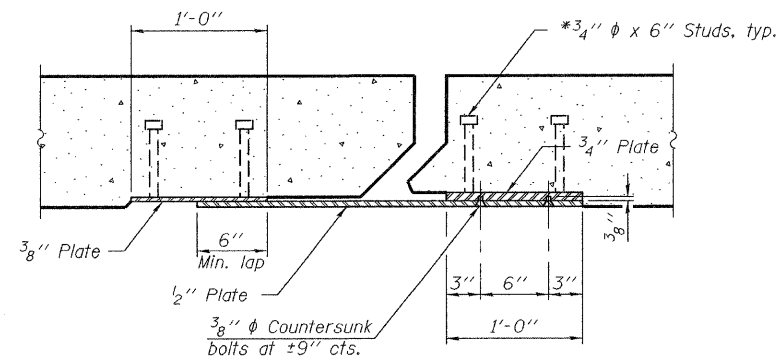


PLAN



SECTION A-A

POINT BLOCK DETAILS
(for skews > 30°)



SECTION B-B

BILL OF MATERIAL

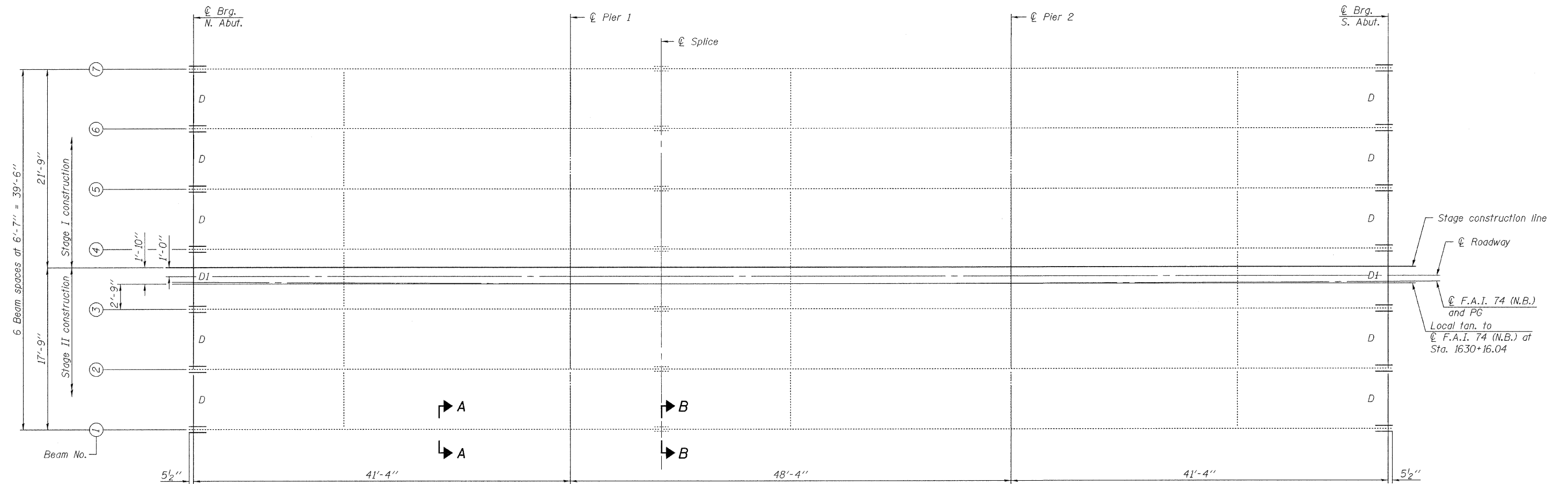
Item	Unit	Total
Preformed Joint Strip Seal	Foot	88'-0"

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 037-0018 (N.B.)

DESIGNED Michael D. Rolape	September 29, 2009
CHECKED Nicholas R. Barnett	EXAMINED Thomas J. Domagala
DRAWN Michael B. Mossman	PASSED Ralph E. Anderson
CHECKED M.D.R./N.R.B./G.R.A.	ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 15 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	37-4HB-1	HENRY	148	108
CONTRACT NO. 64264					
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN
Existing beams 27WF94



Note:
See sheet 18 of 27 for diaphragm D and D1 details.
Shear connectors over the splice are in rows of 2. See Sec. B-B. Shear connectors in other locations, except over the splice, are in rows of 3. See Sec. A-A.
See sheet 17 of 27 for Sections A-A and B-B.

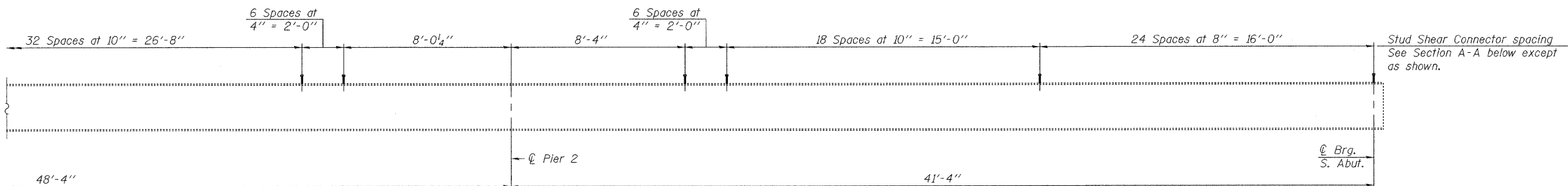
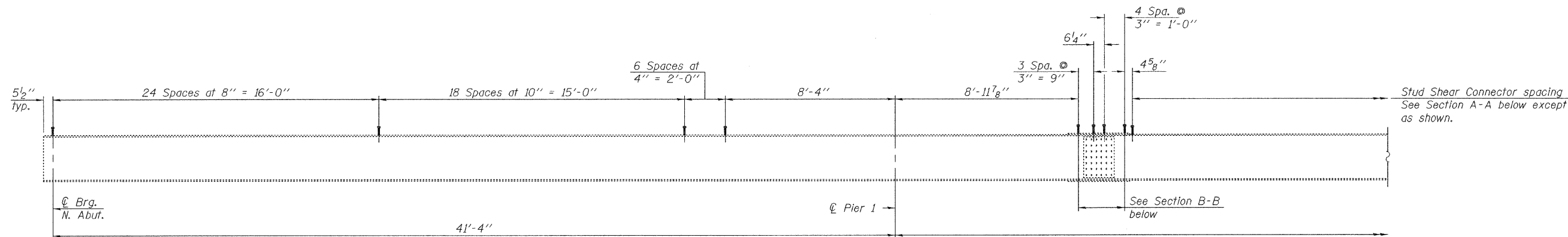
DESIGNED	Michael D. Rolape
CHECKED	Nicholas R. Barnett
DRAWN	Michael B. Mossman
CHECKED	M.D.R./N.R.B./G.R.A.

September 29, 2009
EXAMINED *Thomas J. Demagali*
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

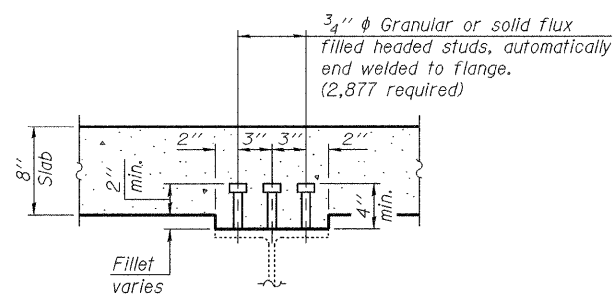
STRUCTURAL STEEL
STRUCTURE NO. 037-0018 (N.B.)

SHEET NO. 16 27 SHEETS	F.A.I. RTE. 74	SECTION 37-4HB-1	COUNTY HENRY	TOTAL SHEETS 148	SHEET NO. 109
	CONTRACT NO. 64264				
ILLINOIS FED. AID PROJECT					

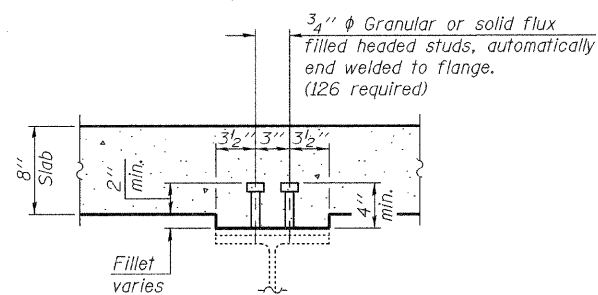
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION



SECTION A-A



SECTION B-B

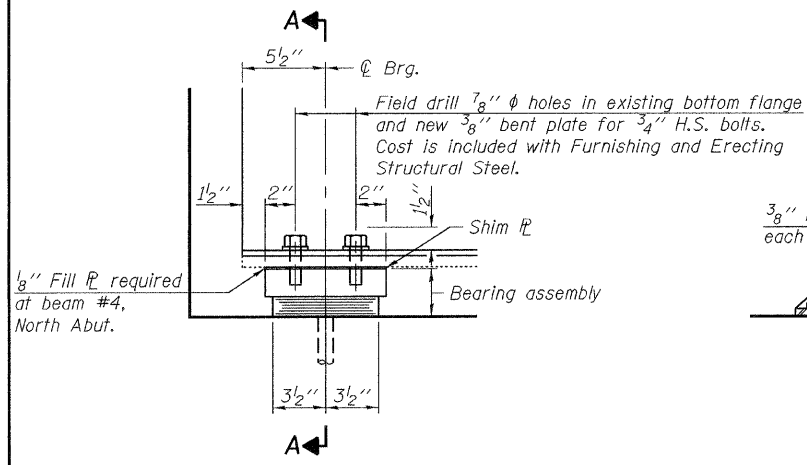
STRUCTURAL STEEL DETAILS
STRUCTURE NO. 037-0018 (N.B.)

DESIGNED Michael D. Rolape
CHECKED Nicholas R. Barnett
DRAWN Michael B. Mossman
CHECKED M.D.R./N.R.B./G.R.A.

September 29, 2009
EXAMINED Thomas J. Demagala
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

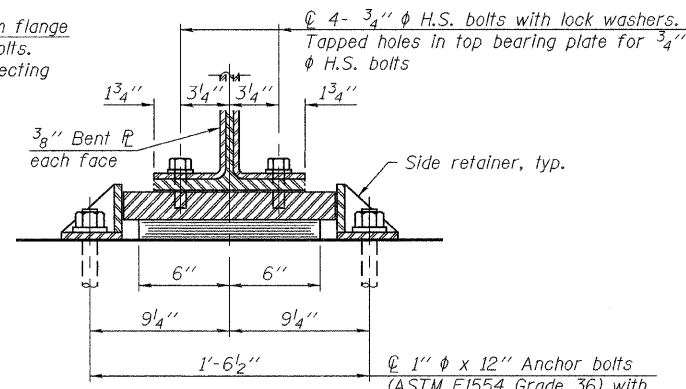
SHEET NO. 17 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	37-4HB-1	HENRY	148	110
			CONTRACT NO. 64264		
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

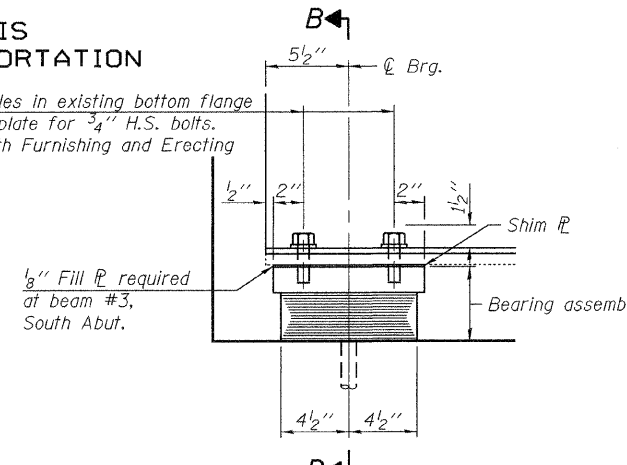


ELEVATION AT ABUT.

TYPE I ELASTOMERIC EXP. BRG.
AT NORTH ABUTMENT

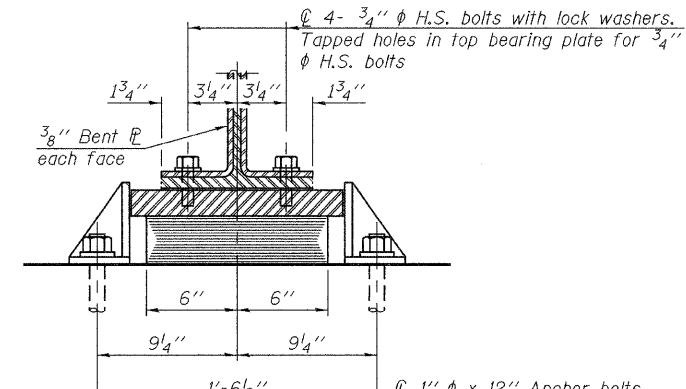


SECTION A-A

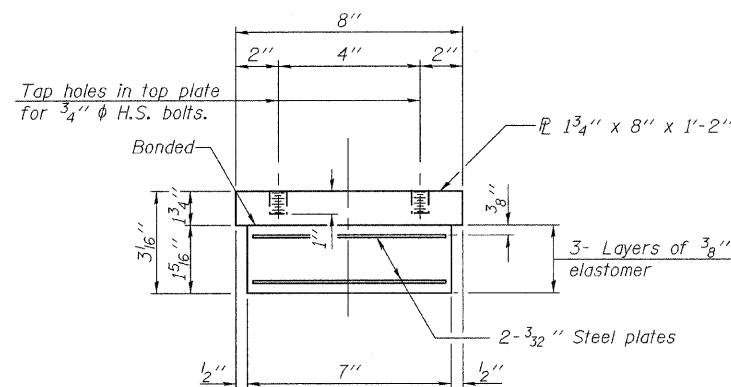


ELEVATION AT ABUT.

TYPE I ELASTOMERIC EXP. BRG.
AT SOUTH ABUTMENT



SECTION B-B



NORTH ABUTMENT
BEARING ASSEMBLY

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

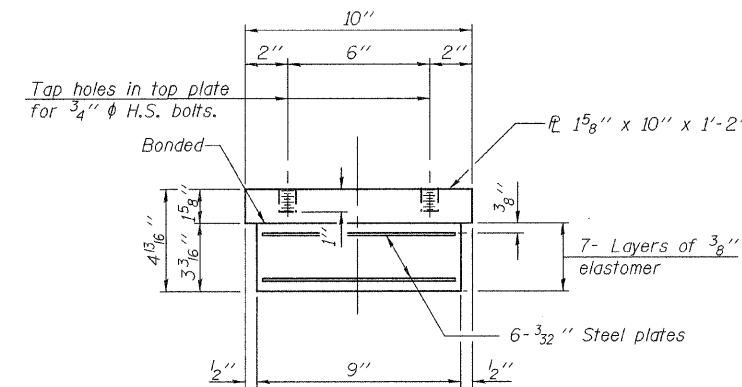
Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

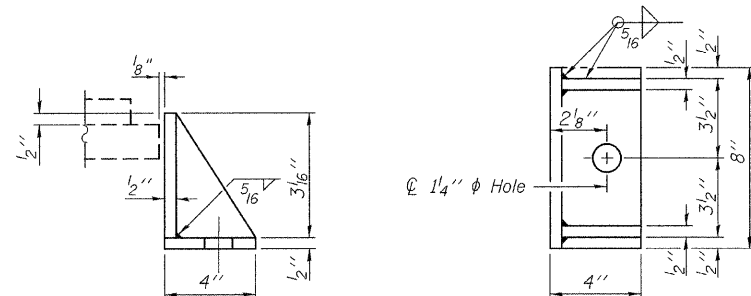
Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Two $1/8$ " adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Shim plates shall not be placed under Bearing Assembly.

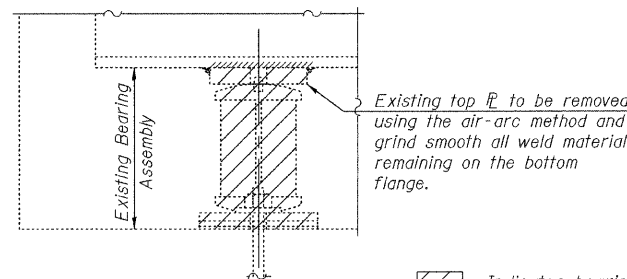


SOUTH ABUTMENT
BEARING ASSEMBLY



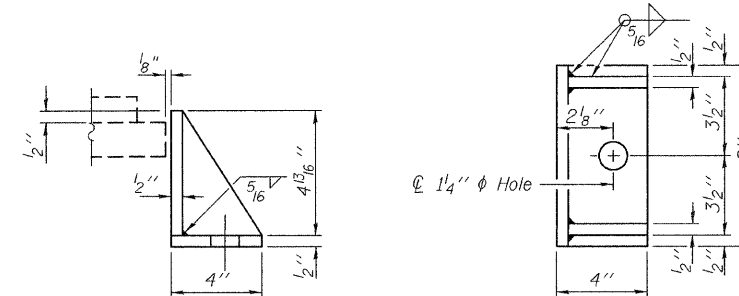
NORTH ABUTMENT
SIDE RETAINER

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



EXISTING BEARING REMOVAL DETAIL

Cost included with Jacking and Cribbing.



SOUTH ABUTMENT
SIDE RETAINER

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

DESIGNED	Michael D. Rolape
CHECKED	Nicholas R. Barnett
DRAWN	Michael B. Mossman
CHECKED	M.D.R./N.R.B./G.R.A.

EXAMINED	September 29, 2009
PASSED	Thomas J. Domagalaki Ralph E. Anderson

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	14
Anchor Bolts	Each	28

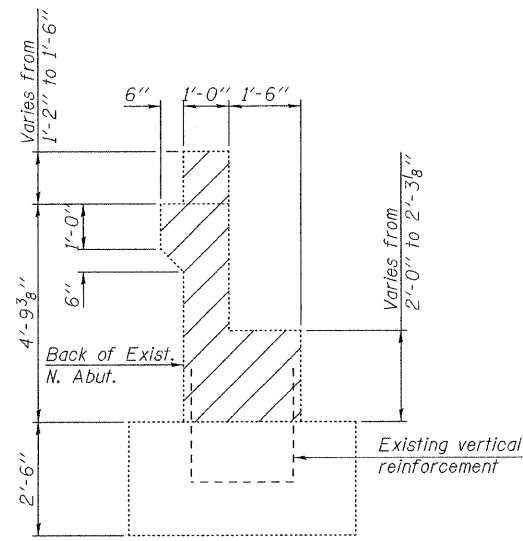
BEARING DETAILS
STRUCTURE NO. 037-0018 (N.B.)

SHEET NO. 19 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	37-4HB-1	HENRY	148	112
				CONTRACT NO. 64264	
ILLINOIS FED. AID PROJECT					

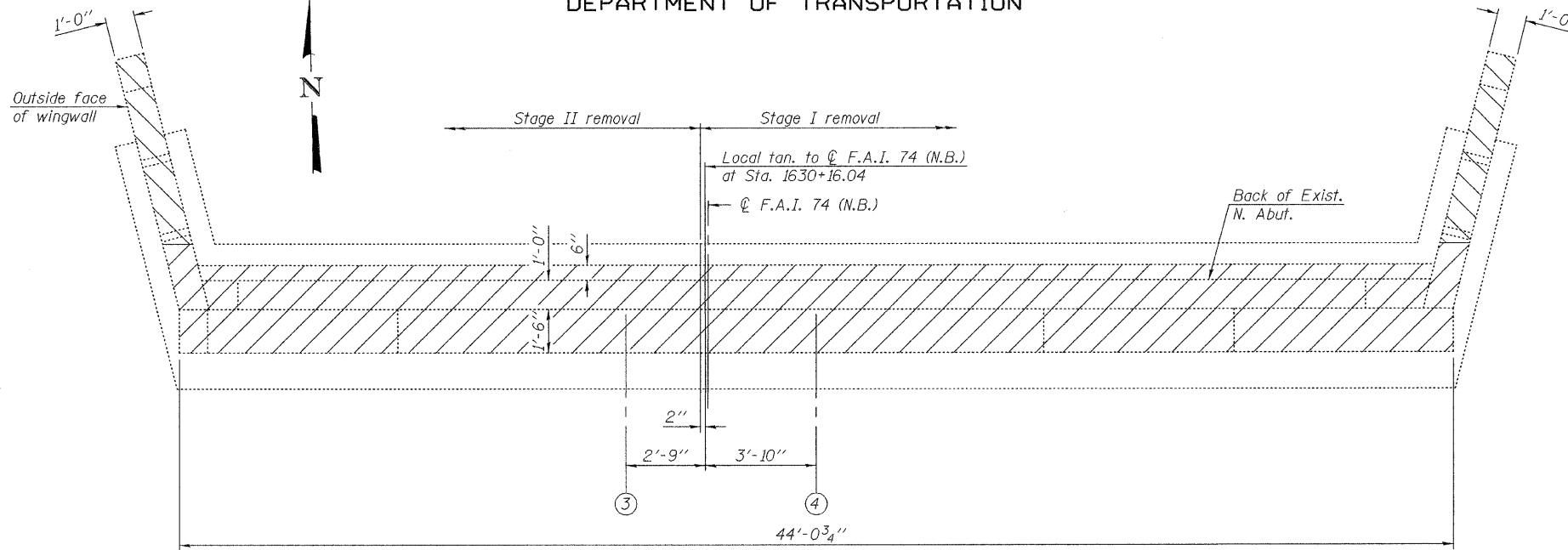
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**JACKING AND CRIBBING
AT NORTH ABUTMENT**

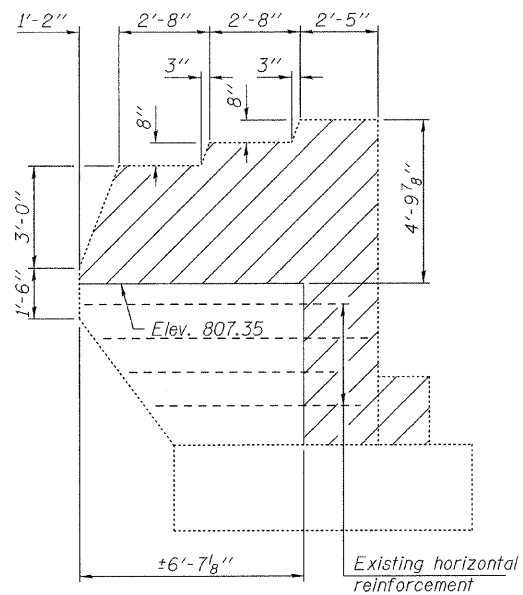
- 1.) The Contractor shall submit for approval by the Engineer plans for jacking and cribbing prior to commencing any work at the bearings.
- 2.) Jacking and removing existing bearings shall be done after the deck removal is completed and before the concrete removal at the abutments.
- 3.) Jacking shall be limited to a maximum of $\frac{3}{4}$ " lift to remove the existing bearing assembly, utilizing a jack or series of jacks. The max. dead load reaction at each beam with the deck removed is 1.8 k at abutments. The minimum jack capacity for each beam is 4 k at abutments.
- 4.) Reconstruct abutment as detailed on sheets 22 and 23 of 27.
- 5.) The new bearings, fill plates and shim plates shall be in place and the beams shall be lowered before the new concrete deck is poured.



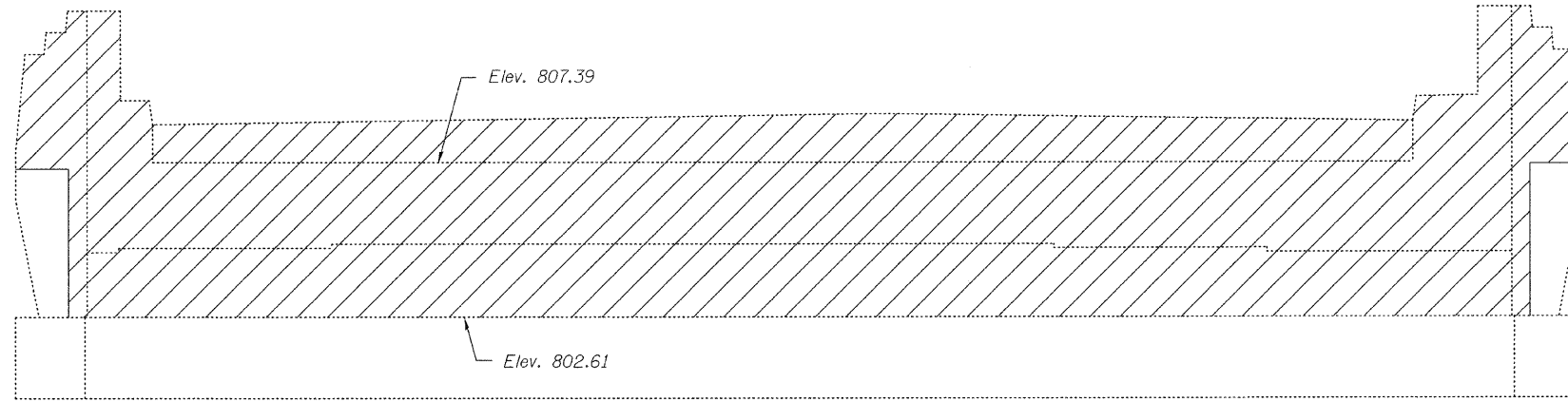
**SECTION THRU
ABUTMENT**



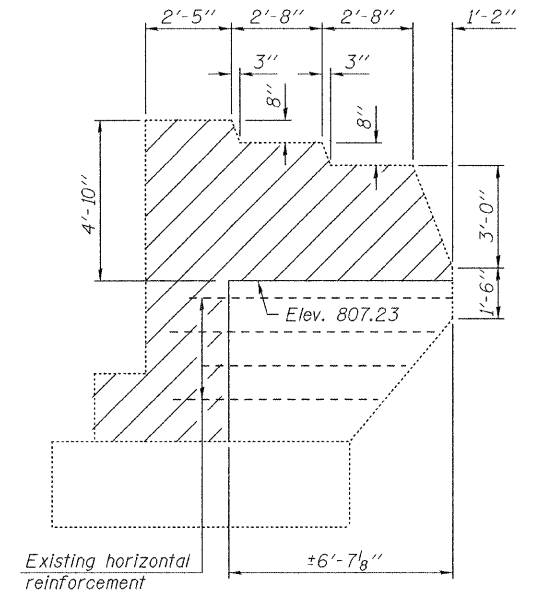
PLAN



**WEST WINGWALL
ELEVATION
(Outside Face)**



ELEVATION



**EAST WINGWALL
ELEVATION
(Outside face)**

Notes:
Existing horizontal and vertical reinforcement extending into new construction shall be cleaned, straightened, and incorporated into the new construction. Cost included with Concrete Removal.
Existing reinforcement not extending into new construction shall be cut off and covered with a 2" layer of cement grout. Cost shall be included with the cost of Concrete Removal.
Hatched areas indicate the limits of concrete removal.

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	19
Jacking and Cribbing	Each	7

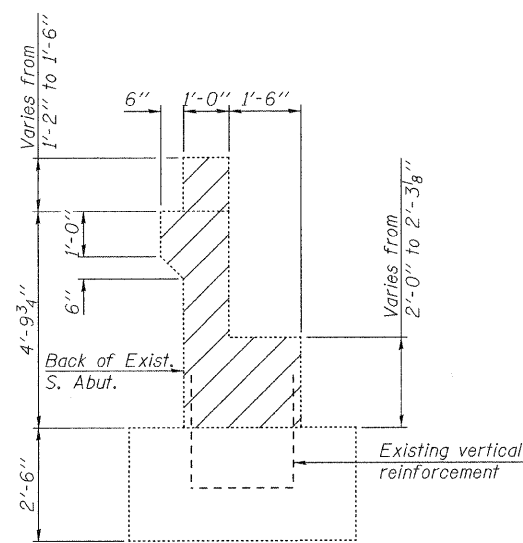
**NORTH ABUTMENT CONCRETE REMOVAL
STRUCTURE NO. 037-0018 (N.B.)**

DESIGNED Michael D. Rolape
CHECKED Nicholas R. Barnett
DRAWN Michael B. Mossman
CHECKED M.D.R./N.R.B./G.R.A.

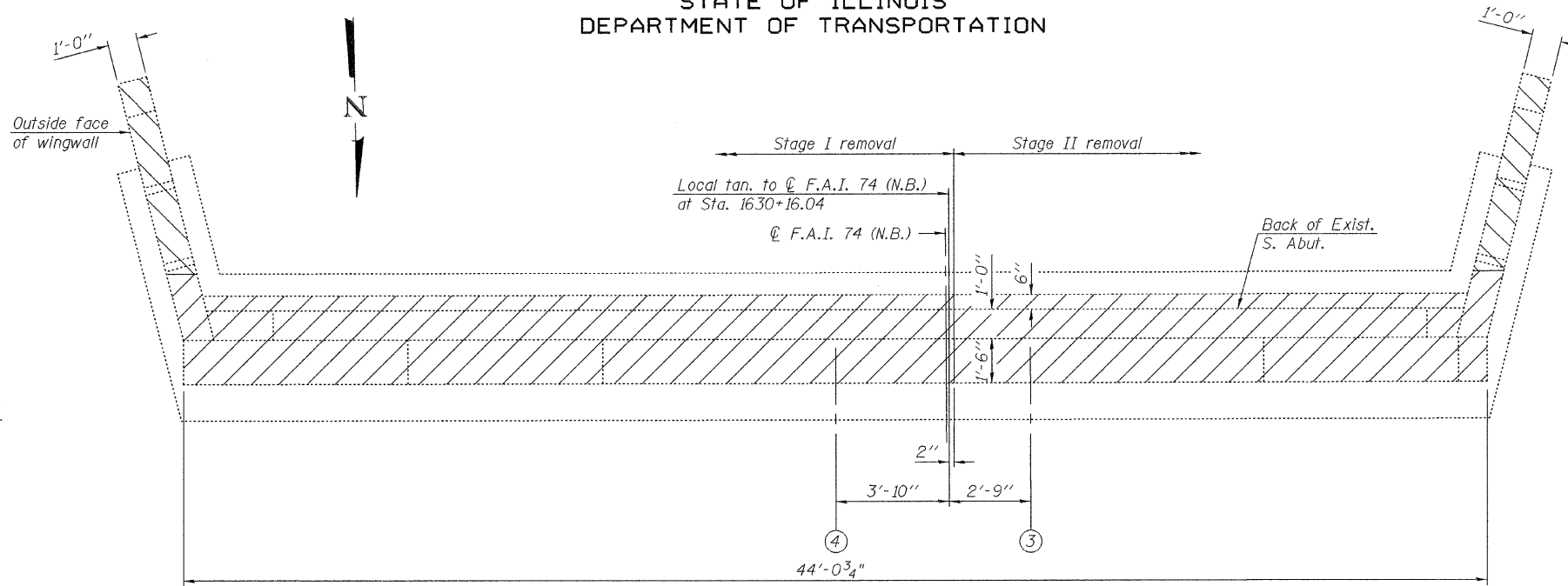
September 29, 2009
EXAMINED Thomas J. Domagala
PASSED Ralph E. Anderson

SHEET NO. 20 27 SHEETS	F.A.I. RTE. 74	SECTION 37-4HB-1	COUNTY HENRY	TOTAL SHEETS 148	SHEET NO. 113
	CONTRACT NO. 64264				
ILLINOIS FED. AID PROJECT					

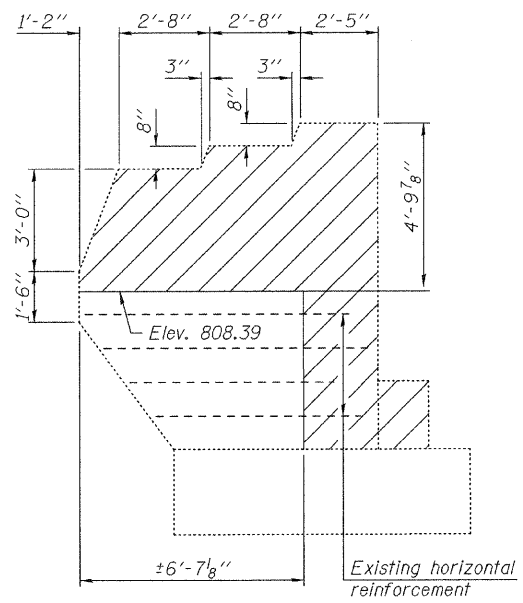
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



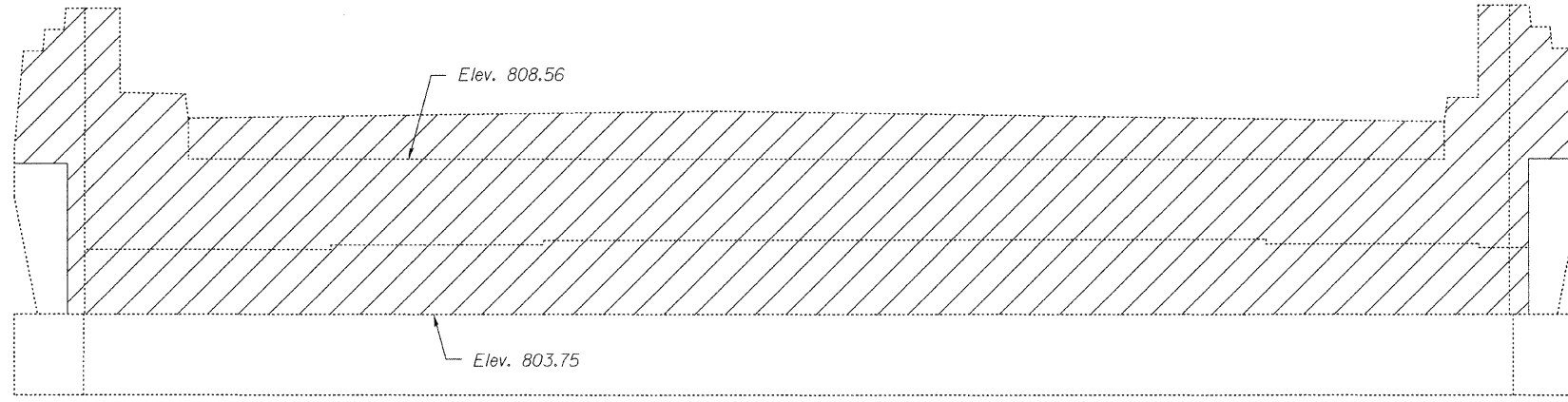
SECTION THRU
ABUTMENT



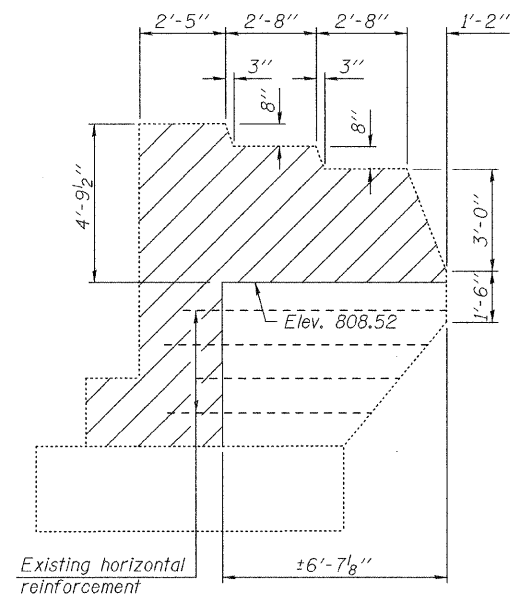
PLAN



EAST WINGWALL
ELEVATION
(Outside face)



ELEVATION



WEST WINGWALL
ELEVATION
(Outside face)

**JACKING AND CRIBBING
AT SOUTH ABUTMENT**

- 1.) The Contractor shall submit for approval by the Engineer plans for jacking and cribbing prior to commencing any work at the bearings.
- 2.) Jacking and removing existing bearings shall be done after the deck removal is completed and before the concrete removal at the abutments.
- 3.) Jacking shall be limited to a maximum of 3/4" lift to remove the existing bearing assembly, utilizing a jack or series of jacks. The max. dead load reaction at each beam with the deck removed is 1.8 k at abutments. The minimum jack capacity for each beam is 4 k at abutments.
- 4.) Reconstruct abutment as detailed on sheets 24 and 25 of 27.
- 5.) The new bearings, fill plates and shim plates shall be in place and the beams shall be lowered before the new concrete deck is poured.

Notes:
Existing horizontal and vertical reinforcement extending into new construction shall be cleaned, straightened, and incorporated into the new construction. Cost included with Concrete Removal.
Existing reinforcement not extending into new construction shall be cut off and covered with a 2" layer of cement grout. Cost shall be included with the cost of Concrete Removal.
Hatched areas indicate the limits of concrete removal.

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	19
Jacking and Cribbing	Each	7

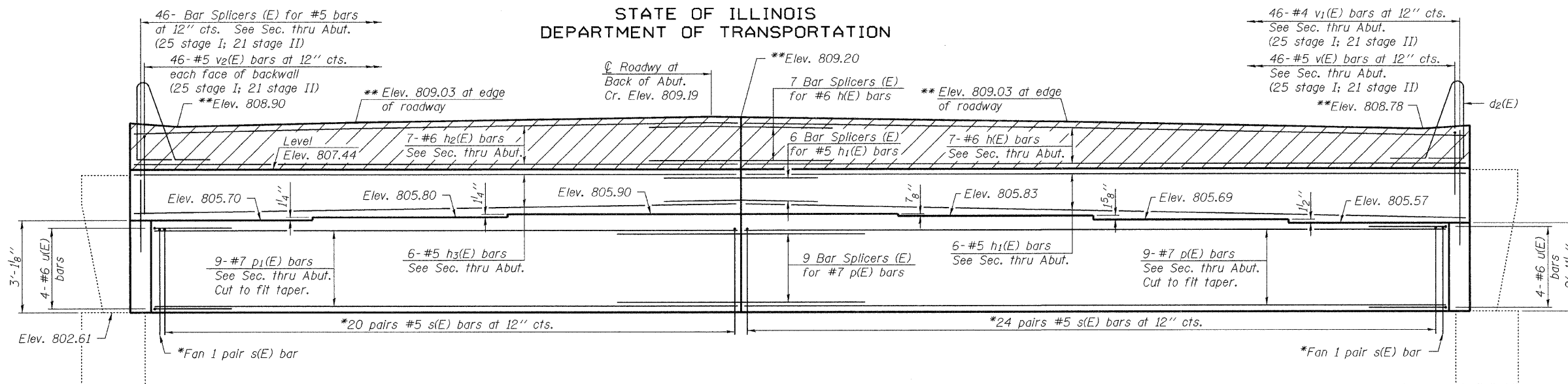
**SOUTH ABUTMENT CONCRETE REMOVAL
STRUCTURE NO. 037-0018 (N.B.)**

SHEET NO. 21 27 SHEETS	F.A.I. RTE. 74	SECTION 37-4HB-1	COUNTY HENRY	TOTAL SHEETS 148	SHEET NO. 114
	CONTRACT NO. 64264			ILLINOIS FED. AID PROJECT	

DESIGNED Michael D. Rolape	September 29, 2009
CHECKED Nicholas R. Barnett	EXAMINED <i>Thomas J. Domagalaki</i> ENGINEER OF BRIDGE DESIGN
DRAWN Michael B. Mossman	PASSED <i>Ralph E. Anderson</i> ENGINEER OF BRIDGES AND STRUCTURES
CHECKED M.D.R./N.R.B./G.R.A.	

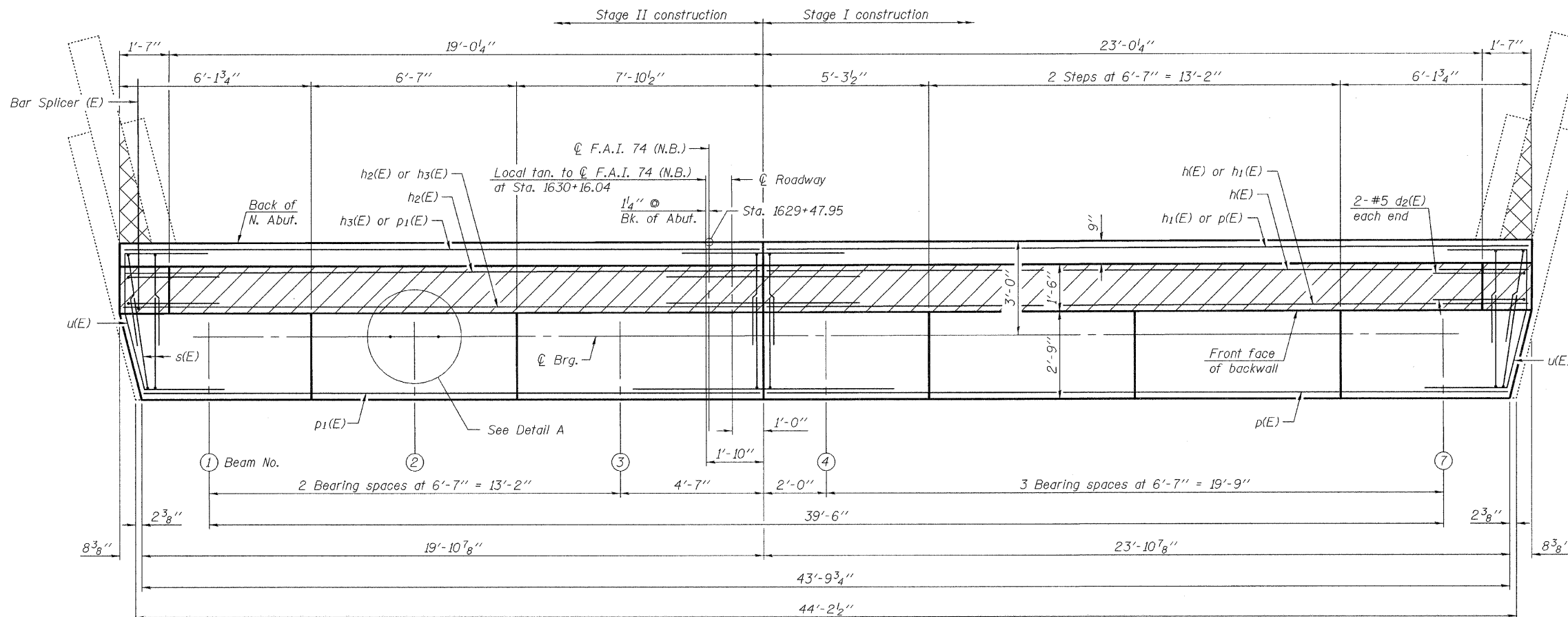
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* Epoxy grout s(E) bars in 9" min. drilled holes according to Section 584 of the Standard Specifications. All grouted bars shall have 4" cl. to the edge of existing concrete.

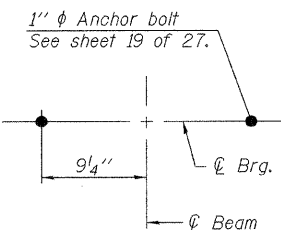


ELEVATION

** Elevations are taken at front face of backwall.



PLAN



DETAIL A

Notes:
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
Cross-hatched area indicates location of 1" P/JF at top of remaining wingwalls. See wingwall elevations on sheet 23 of 27.
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
p(E) and p₁(E) bars may need to be cut to maintain minimum clearance.

NORTH ABUTMENT
STRUCTURE NO. 037-0018 (N.B.)

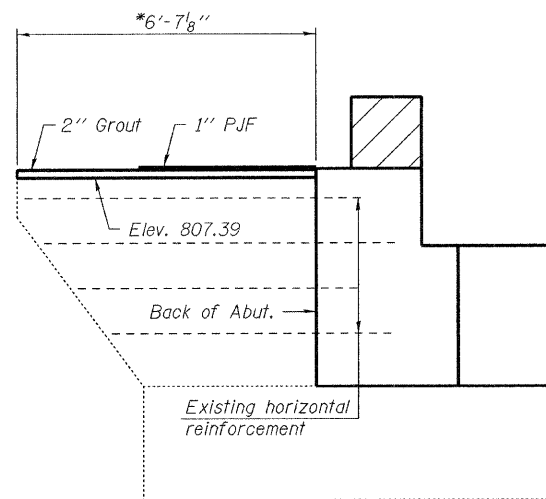
DESIGNED	Michael D. Rolape
CHECKED	Nicholas R. Barnett
DRAWN	Michael B. Mossman
CHECKED	M.D.R./N.R.B./G.R.A.

EXAMINED	September 29, 2009	Thomas J. Demagali
PASSED		Ralph E. Anderson

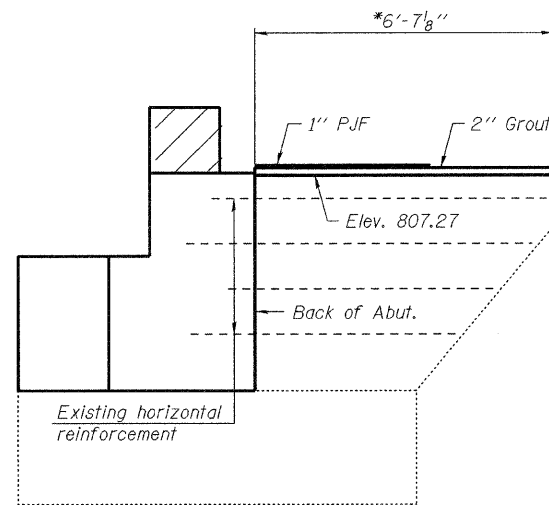
SHEET NO. 22 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	37-4HB-1	HENRY	148	115
CONTRACT NO. 64264					
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Notes:
Existing horizontal and vertical reinforcement extending into new construction shall be cleaned, straightened, and incorporated into the new construction. Cost included with Concrete Removal.
Existing reinforcement not extending into new construction shall be cut off and covered with a 2" layer of cement grout.
Cost shall be included with the cost of Concrete Removal.
Cost of 1" PJF is included with Concrete Structures.
Cost of 2" cement grout is included with Concrete Removal.

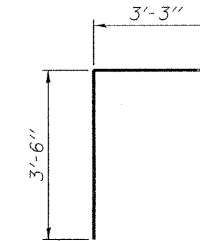


WEST WINGWALL
ELEVATION

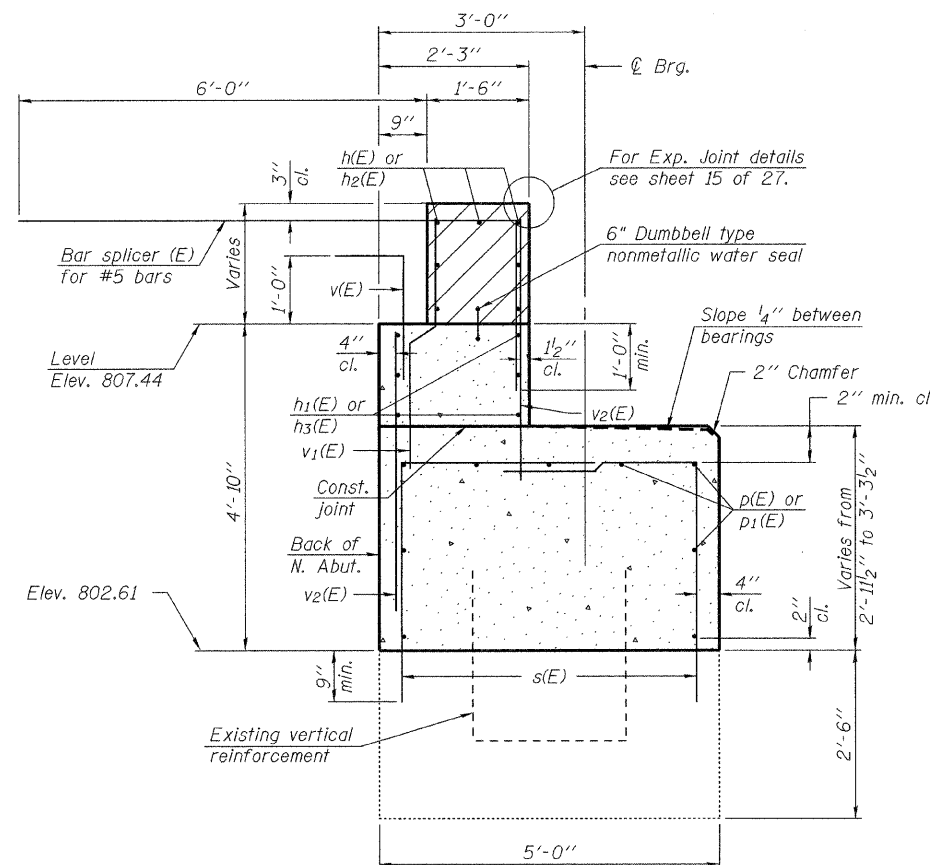


EAST WINGWALL
ELEVATION

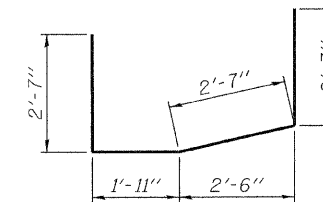
* Measured along outside face of wingwall.



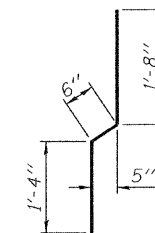
BAR s(E)



SECTION THRU
ABUTMENT



BAR u(E)



BAR v1(E)



BAR v(E)

NORTH ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d2(E)	4	#5	7'-11"	Δ
h(E)	7	#6	24'-4"	—
h1(E)	6	#5	24'-4"	—
h2(E)	7	#6	20'-4"	—
h3(E)	6	#5	20'-4"	—
p(E)	9	#7	24'-4"	—
p1(E)	9	#7	20'-4"	—
s(E)	92	#5	6'-9"	└
u(E)	8	#6	9'-8"	└
v(E)	46	#5	3'-3"	└
v1(E)	46	#4	3'-6"	└
v2(E)	92	#5	3'-11"	—
Structure Excavation			Cu. Yd.	95
Concrete Structures			Cu. Yd.	32.5
Reinforcement Bars, Epoxy Coated			Pound	3,010
Concrete Sealer			Sq. Ft.	198

For details of Bar Splicers, see sheet 26 of 27.
For d2(E) bar bending diagram, see sheet 14 of 27.

NORTH ABUTMENT
STRUCTURE NO. 037-0018 (N.B.)

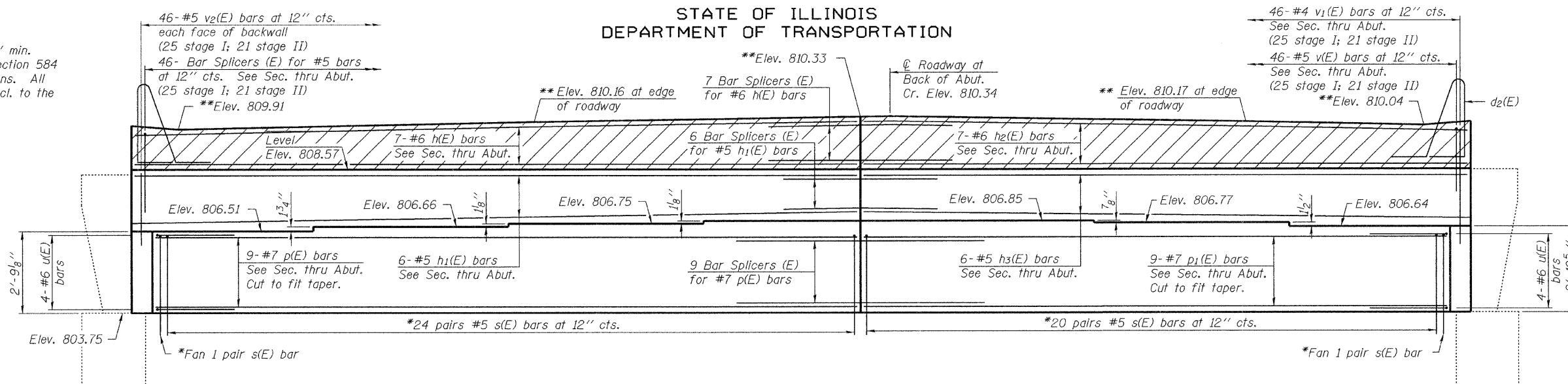
DESIGNED Michael D. Rolape
CHECKED Nicholas R. Barnett
DRAWN Michael B. Mossman
CHECKED M.D.R./N.R.B./G.R.A.

September 29, 2009
EXAMINED Thomas J. Domagalak
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 23 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	74	37-4HB-1	HENRY	148	116
CONTRACT NO. 64264					
ILLINOIS FED. AID PROJECT					

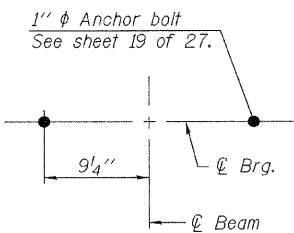
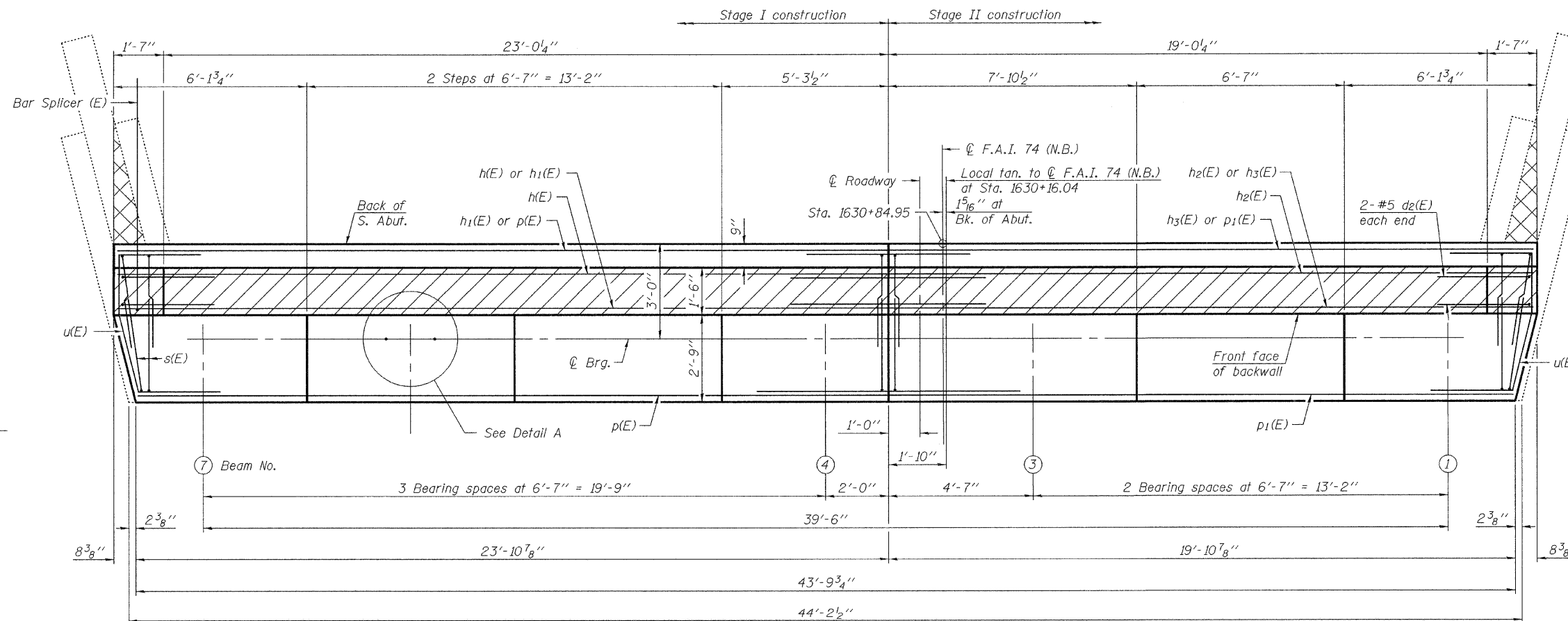
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* Epoxy grout s(E) bars in 9" min. drilled holes according to Section 584 of the Standard Specifications. All grouted bars shall have 4" cl. to the edge of existing concrete.



ELEVATION

** Elevations are taken at front face of backwall.



DETAIL A

Notes:
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure. Cross-hatched area indicates location of 1" PJF at top of remaining wingwalls. See wingwall elevations on sheet 25 of 27. Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap. p(E) and p₁(E) bars may need to be cut to maintain minimum clearance.

PLAN

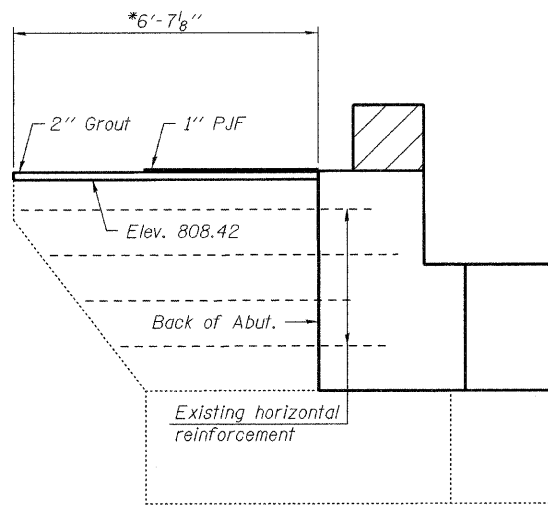
SOUTH ABUTMENT
STRUCTURE NO. 037-0018 (N.B.)

DESIGNED Michael D. Rolape	September 29, 2009
CHECKED Nicholas R. Barnett	EXAMINED Thomas J. Demagala
DRAWN Michael B. Mossman	PASSED Ralph E. Anderson
CHECKED M.D.R./N.R.B./G.R.A.	ENGINEER OF BRIDGES AND STRUCTURES

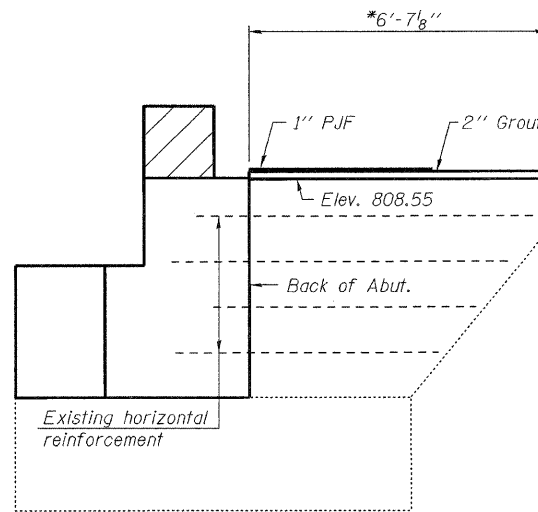
SHEET NO. 24 27 SHEETS	F.A.I. RTE. 74	SECTION 37-4HB-1	COUNTY HENRY	TOTAL SHEETS 148	SHEET NO. 117
	CONTRACT NO. 64264				
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Notes:
Existing horizontal and vertical reinforcement extending into new construction shall be cleaned, straightened, and incorporated into the new construction. Cost included with Concrete Removal.
Existing reinforcement not extending into new construction shall be cut off and covered with a 2" layer of cement grout. Cost shall be included with the cost of Concrete Removal.
Cost of 1" PJF is included with Concrete Structures.
Cost of 2" cement grout is included with Concrete Removal.

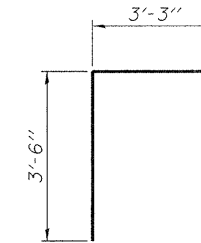


**EAST WINGWALL
ELEVATION**

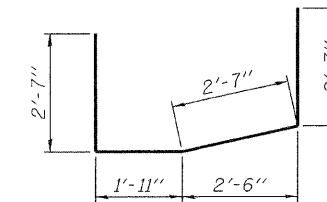


**WEST WINGWALL
ELEVATION**

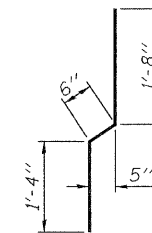
* Measured along outside face of wingwall.



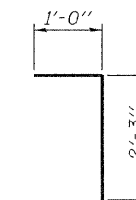
BAR s(E)



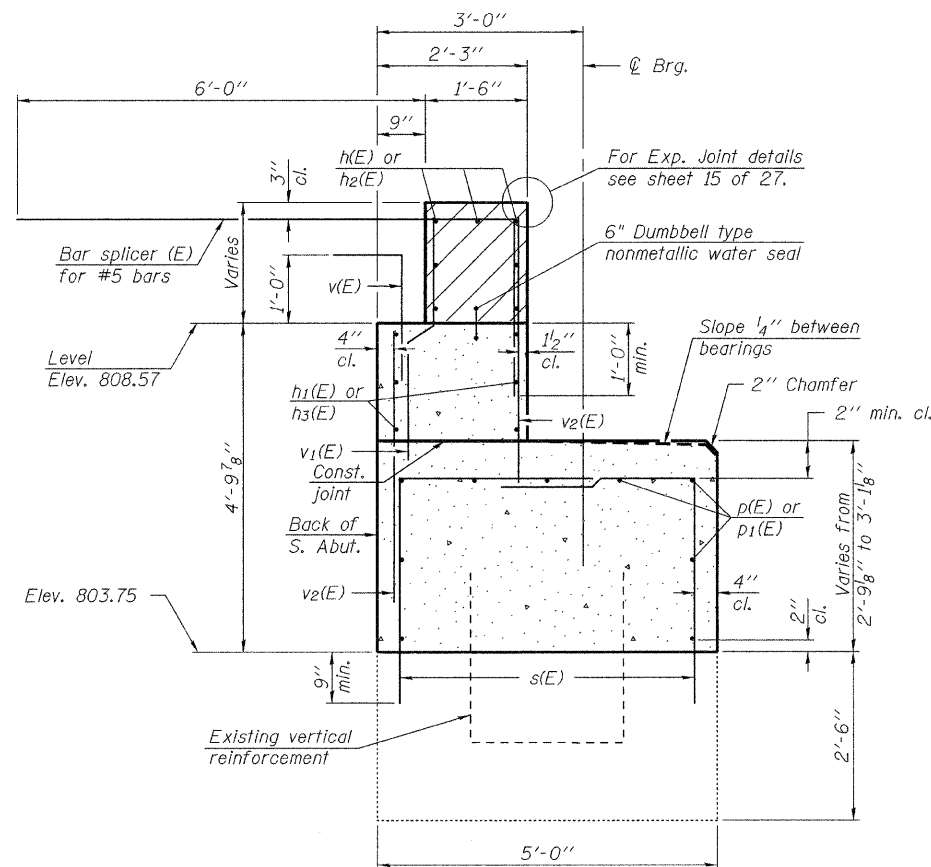
BAR u(E)



BAR v1(E)



BAR v(E)



**SECTION THRU
ABUTMENT**

**SOUTH ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d2(E)	4	#5	7'-11"	Δ
h(E)	7	#6	24'-4"	—
h1(E)	6	#5	24'-4"	—
h2(E)	7	#6	20'-4"	—
h3(E)	6	#5	20'-4"	—
p(E)	9	#7	24'-4"	—
pi(E)	9	#7	20'-4"	—
s(E)	92	#5	6'-9"	└
u(E)	8	#6	9'-8"	└
v(E)	46	#5	3'-3"	└
v1(E)	46	#4	3'-6"	└
v2(E)	92	#5	3'-11"	—
Structure Excavation			Cu. Yd.	95
Concrete Structures			Cu. Yd.	31.6
Reinforcement Bars, Epoxy Coated			Pound	3,010
Concrete Sealer			Sq. Ft.	206

For details of Bar Splicers, see sheet 26 of 27.

For d2(E) bar bending diagram, see sheet 14 of 27.

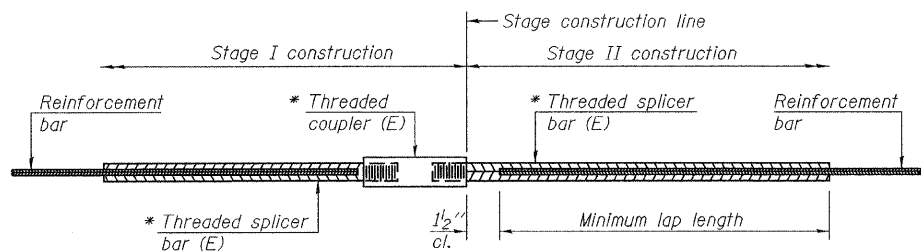
DESIGNED	Michael D. Rolape
CHECKED	Nicholas R. Barnett
DRAWN	Michael B. Mossman
CHECKED	M.D.R./N.R.B./G.R.A.

EXAMINED	Thomas J. Damagalki	September 29, 2009
PASSED	Ralph E. Anderson	

**SOUTH ABUTMENT
STRUCTURE NO. 037-0018 (N.B.)**

SHEET NO. 25	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
27 SHEETS	74	37-4HB-1	HENRY	198	118
CONTRACT NO. 64264					
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



STANDARD BAR SPLICER ASSEMBLY

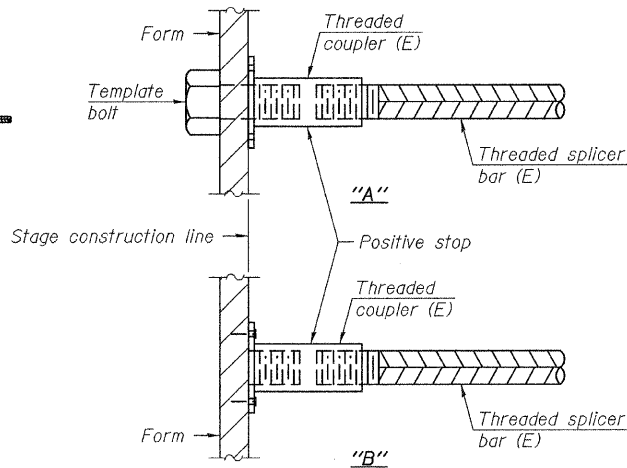
Bar size to be spliced	Minimum Lap Lengths			
	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

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

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

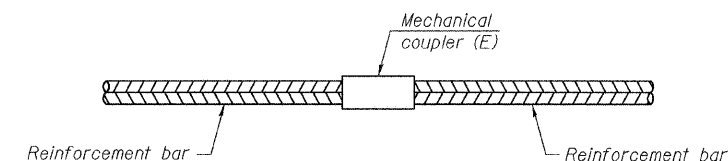
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Slab	#5	366	3
Slab edge beams	#5	10	3
Approach slab	#4	50	3
Approach slab	#5	92	3
Approach slab ftg.	#5	80	3
Abutments	#6	14	3
Abutments	#5	12	3
Abutments	#7	18	3



INSTALLATION AND SETTING METHODS

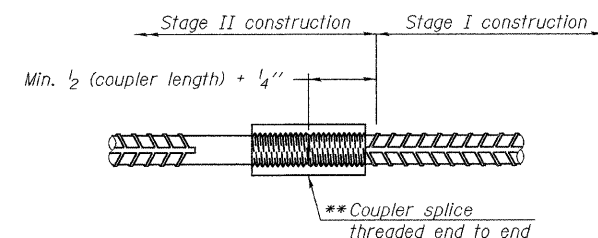
"A": Set bar splicer assembly by means of a template bolt.
"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



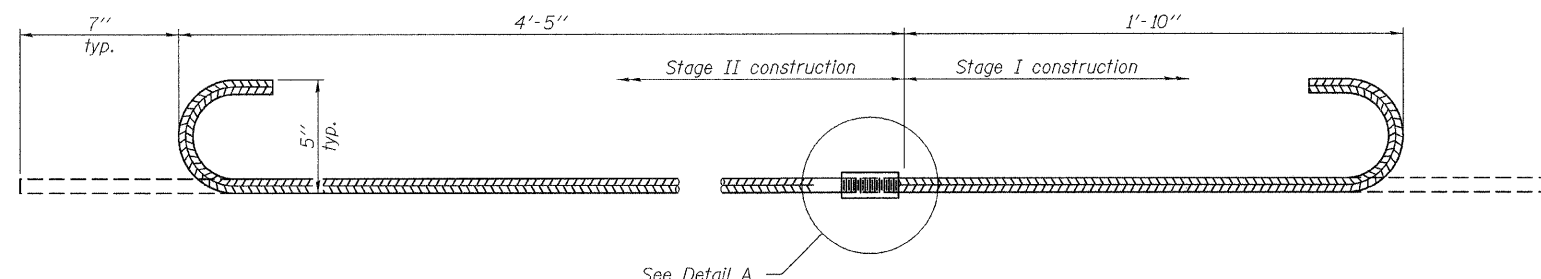
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

** The bar splicer assembly shall utilize splice bars with the threaded ends oversized to ensure no reduction in cross sectional area after threading and be designed to allow completion of the splice without turning either of the splice bars.

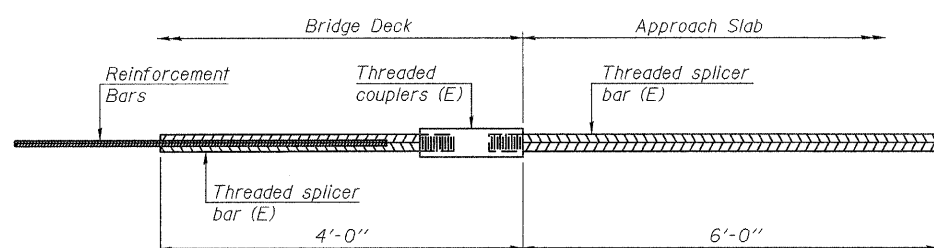


DETAIL A



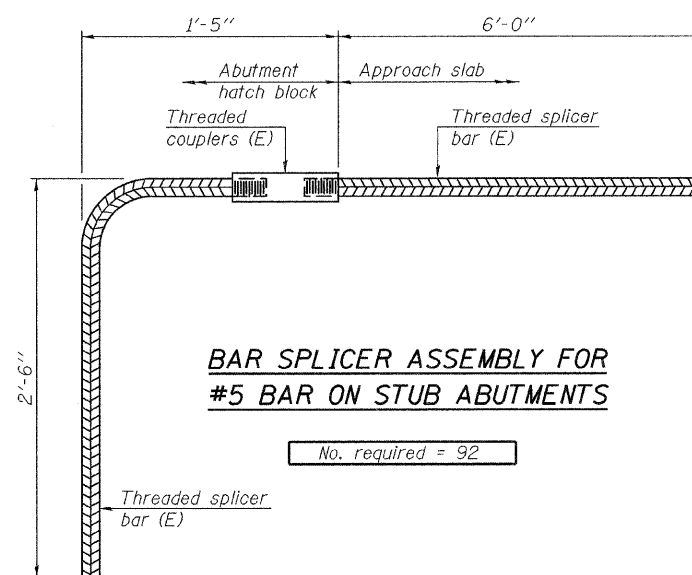
#5 #8(E) BAR SPLICER ASSEMBLY FOR EDGE BEAMS AT STAGE CONSTRUCTION JOINT

No. required = 6



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

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 92

NOTES

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

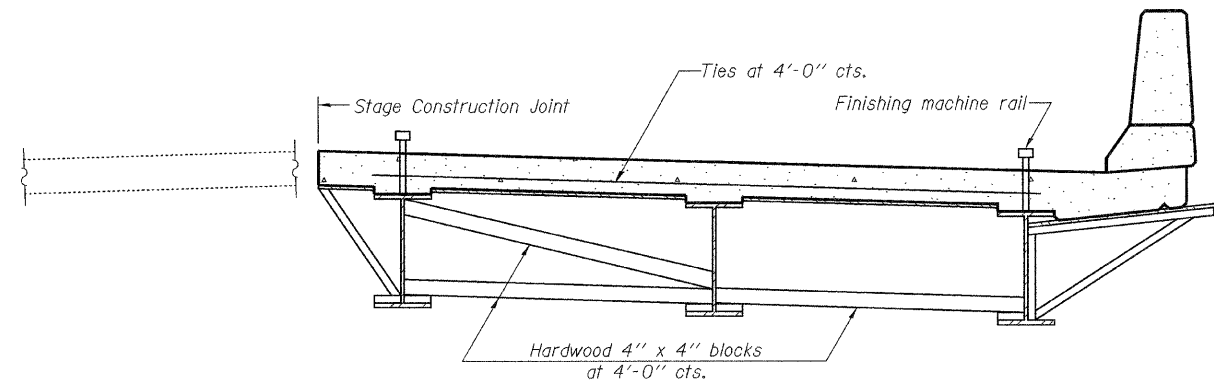
**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 037-0018 (N.B.)**

DESIGNED Michael D. Rolape
CHECKED Nicholas R. Barnett
DRAWN Michael B. Mossman
CHECKED M.D.R./N.R.B./G.R.A.

September 29, 2009
EXAMINED Thomas J. Domagalicki
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

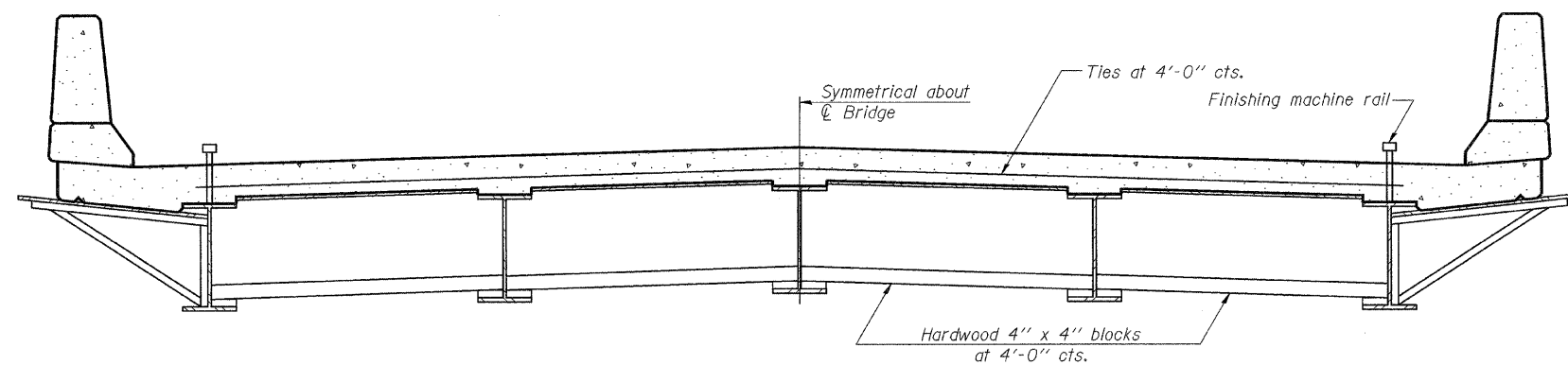
SHEET NO. 26 27 SHEETS	F.A.I. RTE. 74	SECTION 37-4HB-1	COUNTY HENRY	TOTAL SHEETS 143	SHEET NO. 119
	CONTRACT NO. 64264				
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



**FORM BRACES FOR
STAGE CONSTRUCTION**

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.
The finishing machine rails shall be placed on the top flange of the exterior beams.
The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.
For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.



**FORM BRACES FOR
STANDARD CONSTRUCTION**

**CANTILEVER FORMING BRACKETS
FOR SUPERSTRUCTURES WITH
W27 BEAMS AND SMALLER
STRUCTURE NO. 037-0018 (N.B.)**

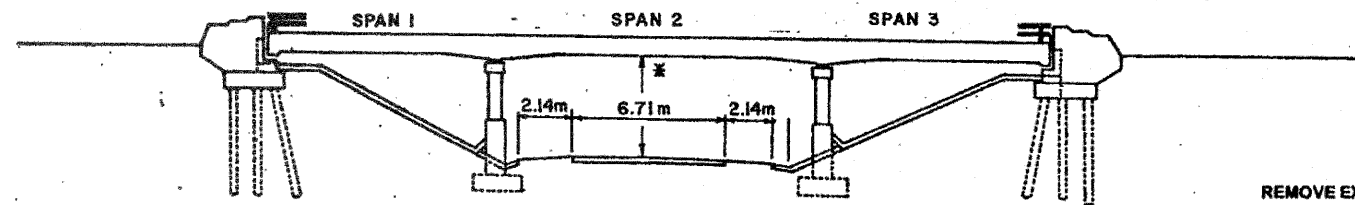
DESIGNED *Michael D. Rolape*
CHECKED *Nicholas R. Barnett*
DRAWN *Michael B. Mossman*
CHECKED *M.D.R./N.R.B./G.R.A.*

September 29, 2009
EXAMINED *Thomas J. Domagalaki*
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 27	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
27 SHEETS	74	37-4HB-1	HENRY	148	120
			CONTRACT NO. 64264		
ILLINOIS FED. AID PROJECT					

ROUTE NO.	ENCL.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	*	HENRY	149	109
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT				

37-3RS-1(37-4)RS & 37-4B-D
SHEET NO. 1
6 SHEETS



SEQUENCE OF WORK

REMOVE EXISTING BITUMINOUS WEARING SURFACE BACK TO BACK ABUTS. IN STAGE I CONST. PRIOR TO STARTING DECK SLAB REPAIRS.

COMPLETE DECK SLAB REPAIR IN SEQUENCE I.
(NOTE: NEW CONCRETE IN SEQUENCE I SHALL MEET A MINIMUM OF 4480 KPA MODULUS OF RUPTURE BEFORE STARTING SEQUENCE II REMOVAL.)

COMPLETE DECK SLAB REPAIRS IN SEQUENCE II.

REPEAT SEQUENCING IN STAGE I CONSTRUCTION FOR STAGE II CONSTRUCTION.

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42M, or M-53M Grade 400.

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

Any reinforcement bars that are damaged during concrete removal operations shall be replaced using an approved bar splicer or anchorage system. Cost shall be included in the unit cost of "Concrete Removal".

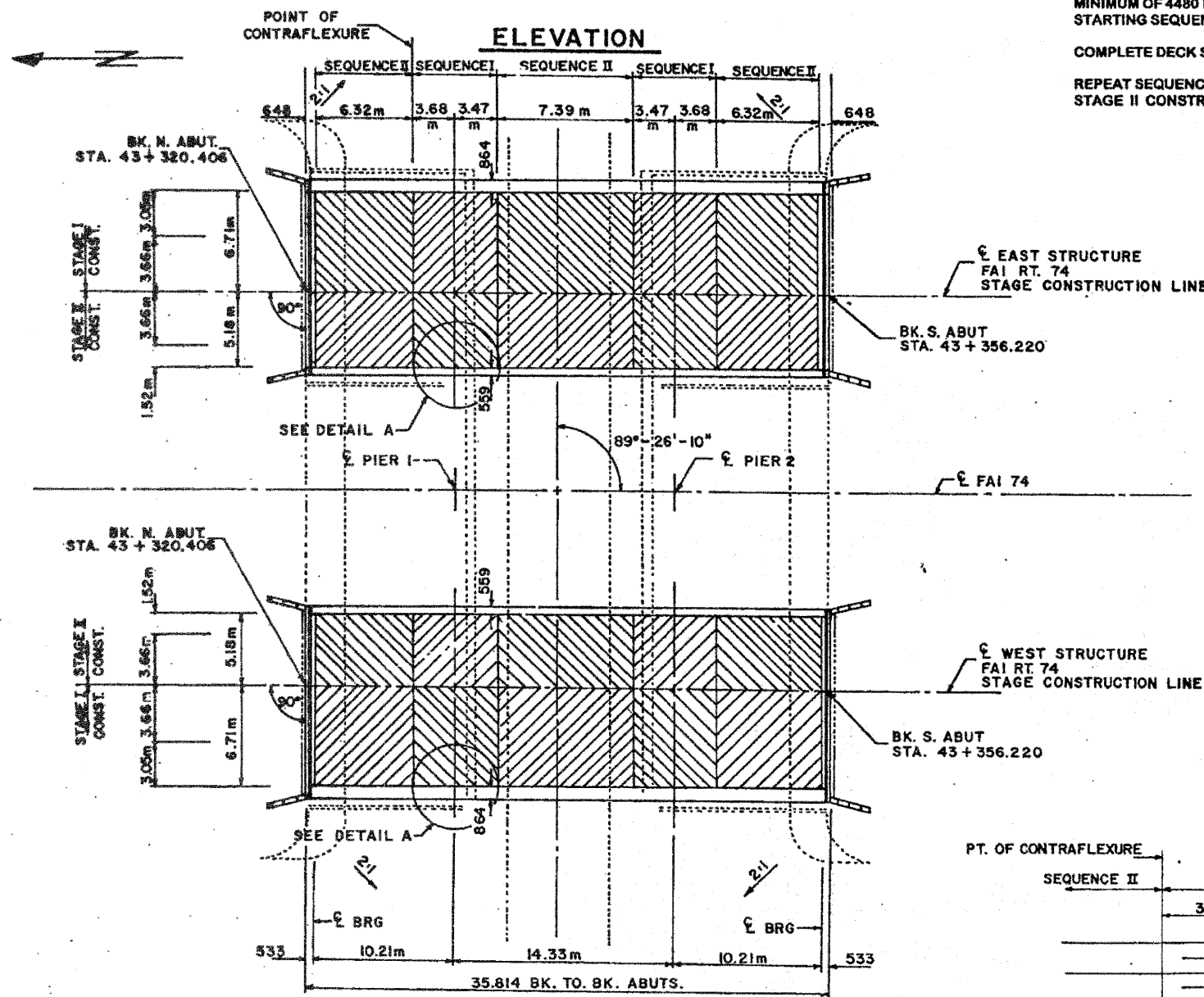
After fabrication, all surfaces of the steel plates shall be given one shop coat of the inorganic zinc-silicate primer. Cost shall be included in the unit cost of "Concrete Removal".

Existing reinforcement extending into the removed area shall be cleaned, straightened and incorporated into the new construction. Existing transverse reinforcement may be cut as shown and removed.

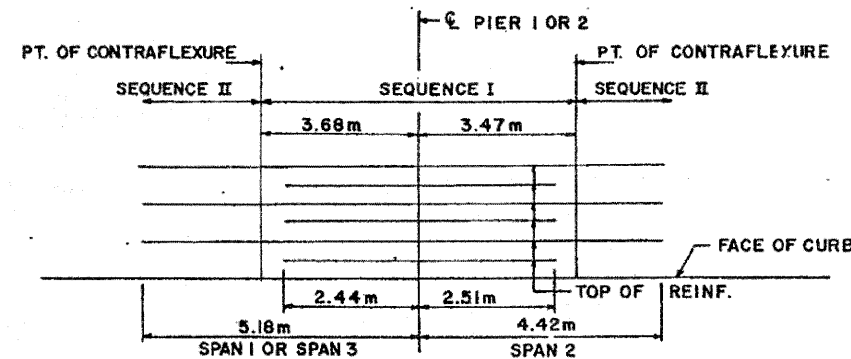
ALL NEW STRUCTURAL STEEL SHALL BE AASHTO M-208M GRADE 250, UNLESS OTHERWISE SHOWN

TOTAL BILL OF MATERIALS

ITEM	UNIT	QUANTITY
CONCRETE REMOVAL	CU M	29.4
CONCRETE SUPER STRUCTURES	CU M	7.4
CONCRETE STRUCTURES	CU M	6.85
REINFORCEMENT BARS, EPOXY COATED	KG	1601
BITUMINOUS CONC REMOVAL (DECK)	SQ M	852
POLYBIT CONC SURF CSE, MIX D, CL I, TYPE 1	M TON	100
SHEET WATERPROOFING MEMBRANE SYSTEM	SQ M	828
DECK SLAB REPAIR (PARTIAL)	SQ M	248
DECK SLAB REPAIR (FULL DEPTH, TYPE 1)	SQ M	10
DECK SLAB REPAIR (FULL DEPTH, TYPE 2)	SQ M	10
STEEL BRIDGE RAIL	METER	143.6
SILICONE JOINT SEALER	METER	55.0
FURN & ERECT STRUCTURAL STEEL	KG	1390.1
BAR SPLICERS	EACH	28



EXISTING BRIDGE PLANS FOR REFERENCE ONLY



PLAN STAGING SEQUENCE DETAIL

DETAIL A

GENERAL PLAN
I-74 OVER OPHIEM ROAD
F.A.I. ROUTE 74 - SECTION 37-4HB
HENRY COUNTY
STATION 43+338.313
STRUCTURE NO. 037-0015 (W. STRUCT.)
037-0016 (E. STRUCT.)

DISTRICT NO. 2 DIXON
DESIGNED D. PAUSER
DRAWN D. LINK
CHECKED
DATE 10/97
SCALE

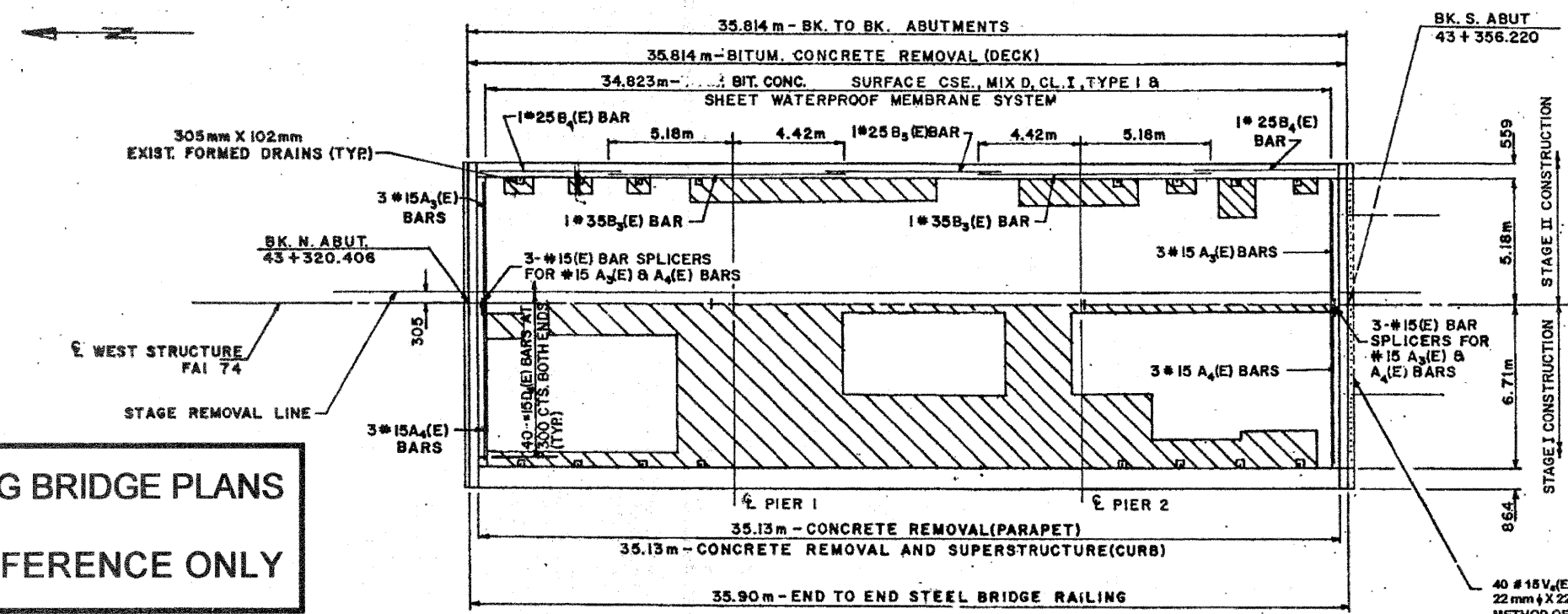
REVISED 11-20-97

FILE NAME =	USER NAME = perkinsdr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS (FOR REFERENCE ONLY)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
cd:\pwwork\pwwdot\PERKINS\DR\036777.dgn	002298-ahd-deta1.s.dgn	DRAWN -	REVISED -			74	37-4HB,4HB-1,4HB-2ID	HENRY	148	121	
PLOT SCALE = 50.0000' / 1"		CHECKED -	REVISED -			CONTRACT NO. 64264					
PLOT DATE = Wed Aug 05 07:35:12 2009		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

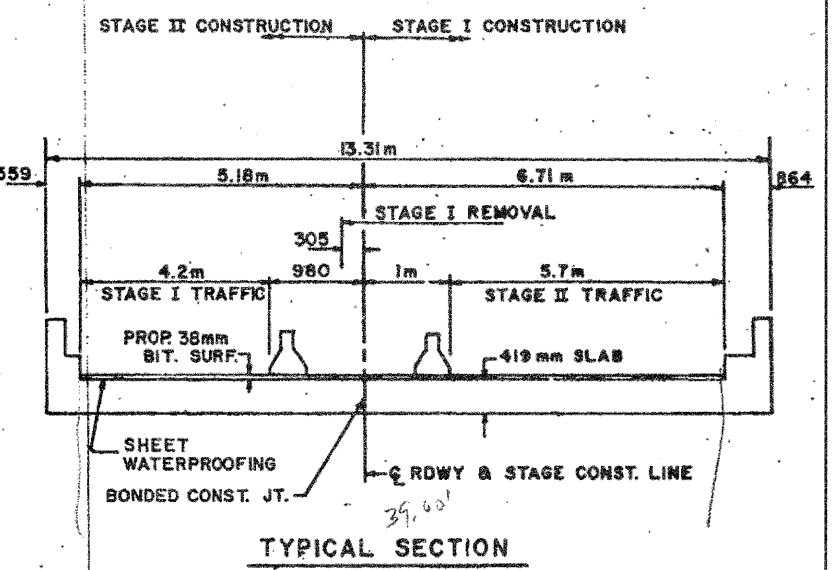
NOTE: EXISTING FORMED DRAINS TO BE FILLED WITH SUPERSTRUCTURE CONCRETE. COST TO BE PAID AS SQ. METER, INCLUDED IN DECK SLAB REPAIR (PARTIAL). BONDING AGENT REQUIRED IN ALL FORMED DRAIN OPENINGS.

☒ - DECK SLAB REPAIR (PARTIAL DEPTH)

ROUTE NO.	DIST.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	2	HENRY	149	105
SHEET NO. 2 OF 6 SHEETS				

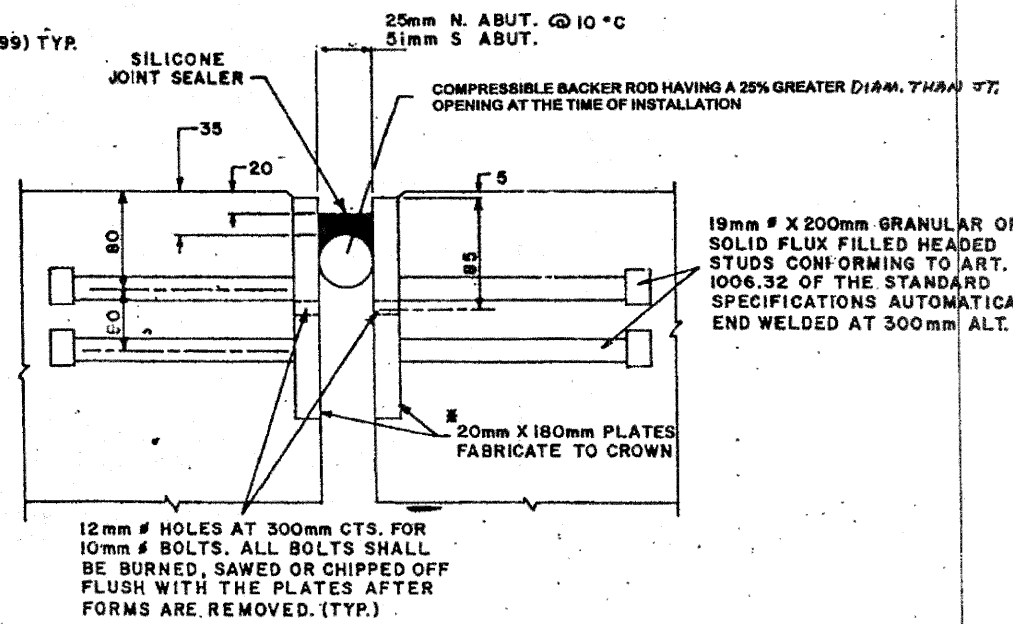
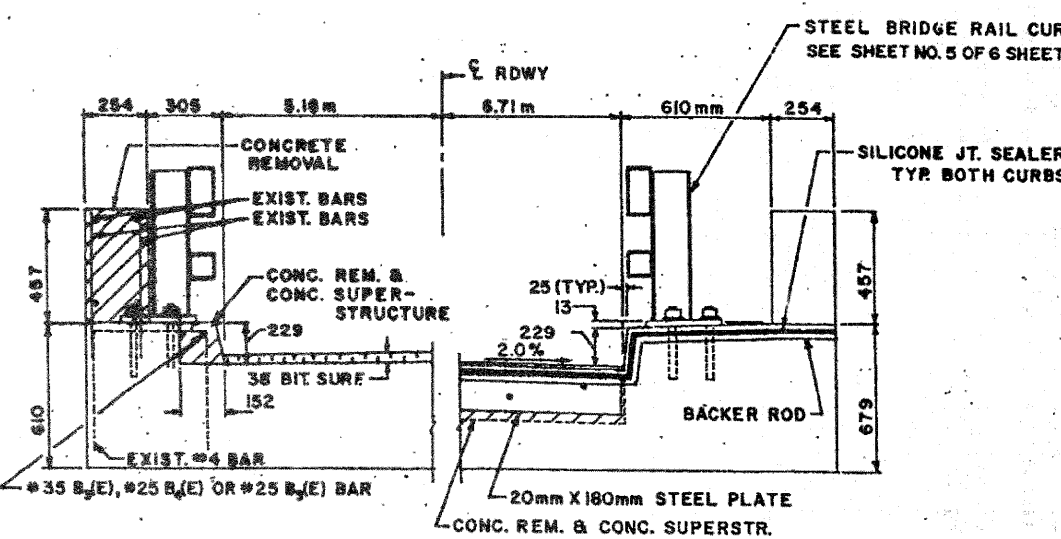


EXISTING BRIDGE PLANS FOR REFERENCE ONLY



NOTE: LOCATIONS OF DECK REPAIRS ARE ESTIMATED. ACTUAL DECK REPAIRS TO BE SHOWN BY FIELD ENGINEER FOR AS-BUILT PLANS.

40 #15 V₄(E) BARS AT 305mm CTS. EPOXY GROUTED IN 22mm ϕ X 229mm MIN. DRILLED HOLES. THE GROUT AND METHOD OF APPLICATION SHALL BE APPROVED BY THE DEPT. COST SHALL BE INCLUDED IN THE COST OF REINFORCEMENT BARS, EPOXY COATED (TYP. BOTH ABUTS.)



BILL OF MATERIALS

BAR	No.	SIZE	LENGTH	SHAPE
A ₃ (E)	6	#15	5.1	
A ₄ (E)	6	#15	6.63	
B ₃ (E)	2	#35	9.6	
B ₄ (E)	2	#25	7.01	
B ₅ (E)	1	#25	5.79	
D ₄ (E)	80	#15	0.381	
V ₆ (E)	80	#15	0.6	

ITEM	UNIT	QUANTITY
CONCRETE REMOVAL	Cu. M.	11.67
CONCRETE SUPERSTRUCTURE	Cu. M.	3.7
REINFORCEMENT BARS, EPOXY CTD.	Kg.	461
POLYBIT. CONC. SURF. CSE, MIX D, CL I, TYPE I	M. Ton	50
BITUMINOUS CONC. REMOVAL (DECK)	Sq. M.	426
SHEET WATERPROOFING MEMBRANE	Sq. M.	414
DECK SLAB REPAIR (PARTIAL)	Sq. M.	125
DECK SLAB REPAIR (FULL DEPTH, TYPE 1)	Sq. M.	5
DECK SLAB REPAIR (FULL DEPTH, TYPE 2)	Sq. M.	5
STEEL BRIDGE RAIL	M.	71.8
SILICONE JOINT SEALER	M.	27.5

TYPICAL HALF SECTION THRU DECK

TYPICAL HALF SECTION AT ABUT.

JOINT DETAILS

* FURNISH IN SEGMENTS OF 6m MAXIMUM LENGTH. MAX. SPACING BETWEEN INSTALLED SEGMENTS SHALL BE 5mm. SEAL SPACES WITH SILICONE SEALANT SUITABLE FOR STRUCTURAL STEEL. NO FIELD PAINT REQUIRED.

S.N. 037-0015
DISTRICT NO. 2 DIXON
DESIGNED M. ETEMADI
DRAWN D. LINK
CHECKED
DATE 8/97
SCALE

REVISED 11-20-97

FILE NAME =	USER NAME = perkinsdr	DESIGNED -	REVISED -
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	PLOT SCALE = 50.0000 / IN.	CHECKED -	REVISED -
	PLOT DATE = Wed Aug 05 07:35:12 2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS
(FOR REFERENCE ONLY)

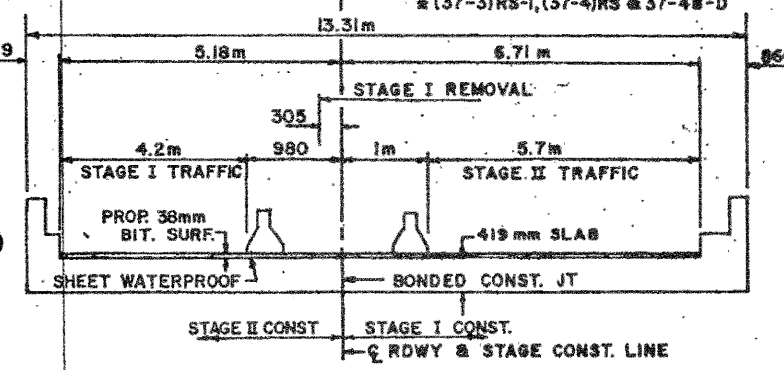
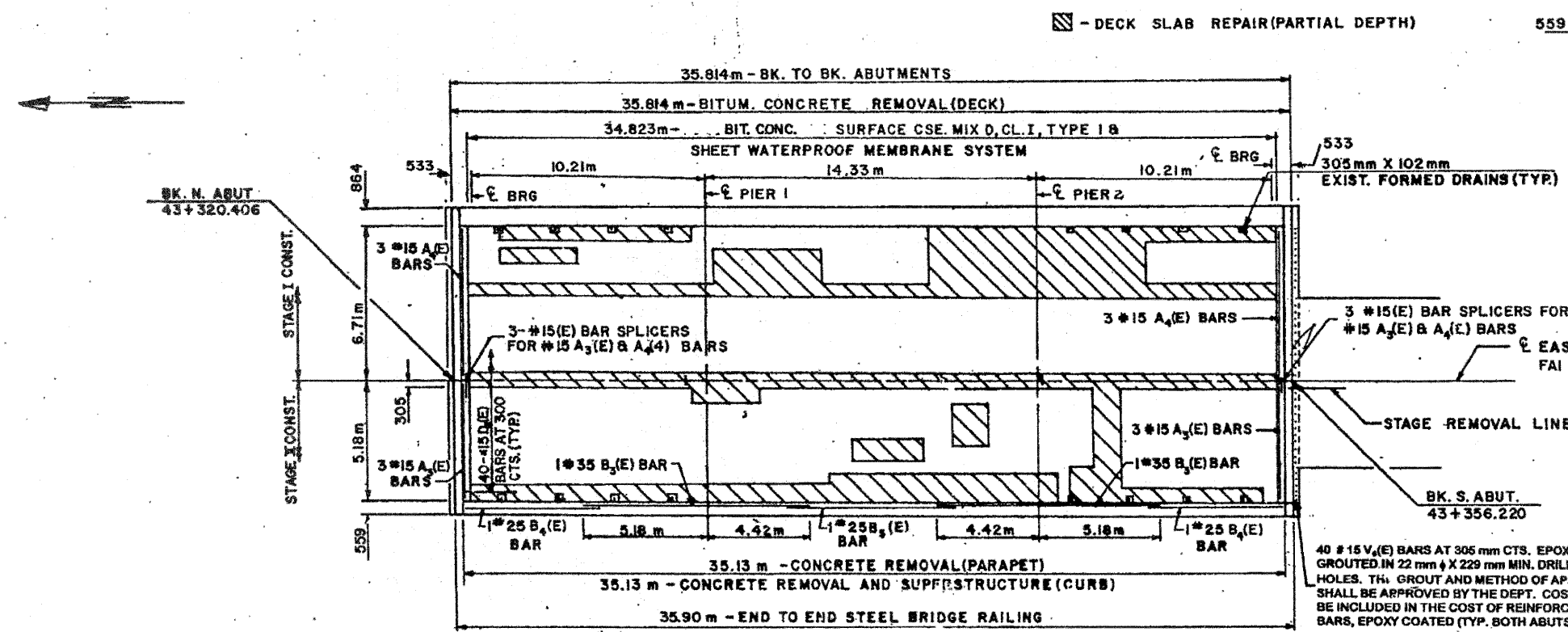
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	37-(4)HB,4HB-1,4HB-2JD	HENRY	148	122
CONTRACT NO. 64264				

SCALE: SHEET NO. SHEETS STA. TO STA.

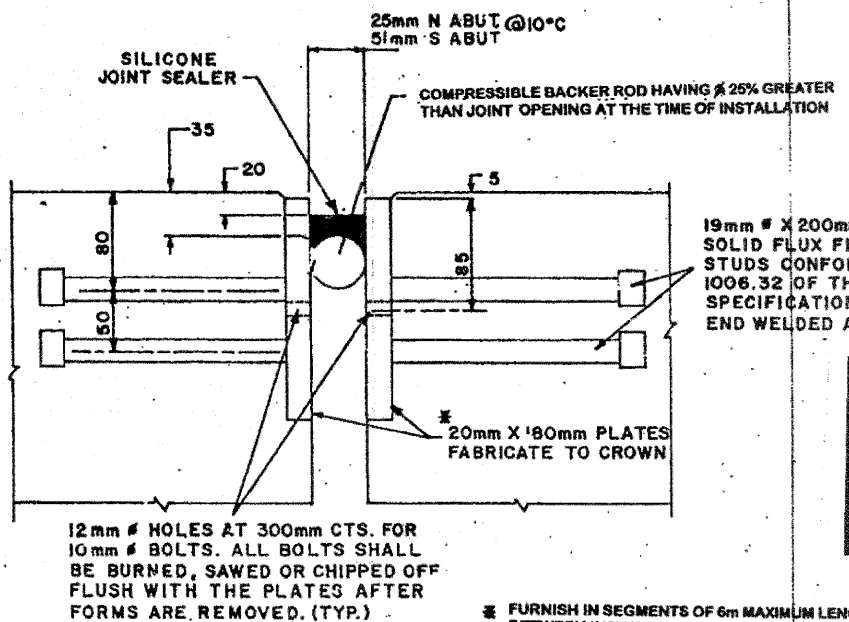
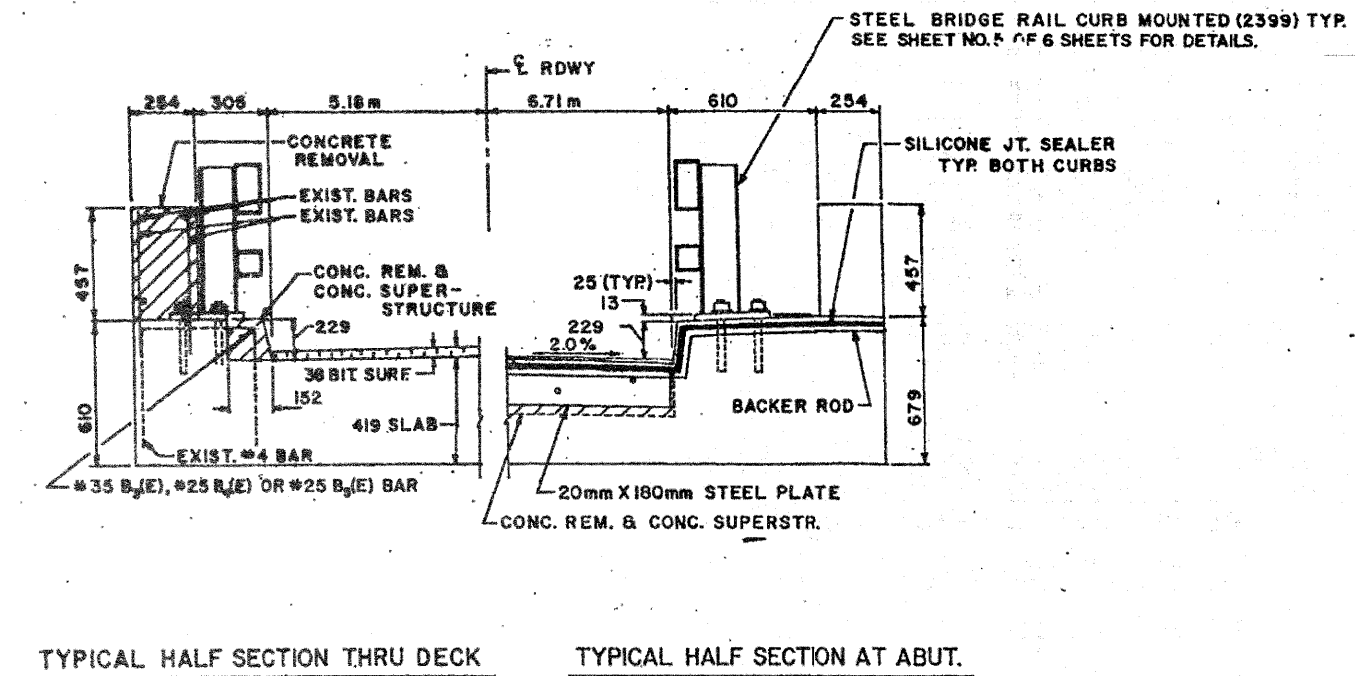
ILLINOIS FED. AID PROJECT

REVISED NO.	DATE	BY	REASON
1			
2			
3			
4			
5			

NOTE: EXISTING FORMED DRAINS TO BE FILLED WITH SUPERSTRUCTURE CONCRETE. COST TO BE PAID AS SQ. METER, INCLUDED IN DECK SLAB REPAIR (PARTIAL). BONDING AGENT REQUIRED IN ALL FORMED DRAIN OPENINGS.



NOTE: LOCATIONS OF DECK REPAIRS ARE ESTIMATED. ACTUAL DECK REPAIRS TO BE SHOWN BY FIELD ENGINEER FOR AS-BUILT PLANS.



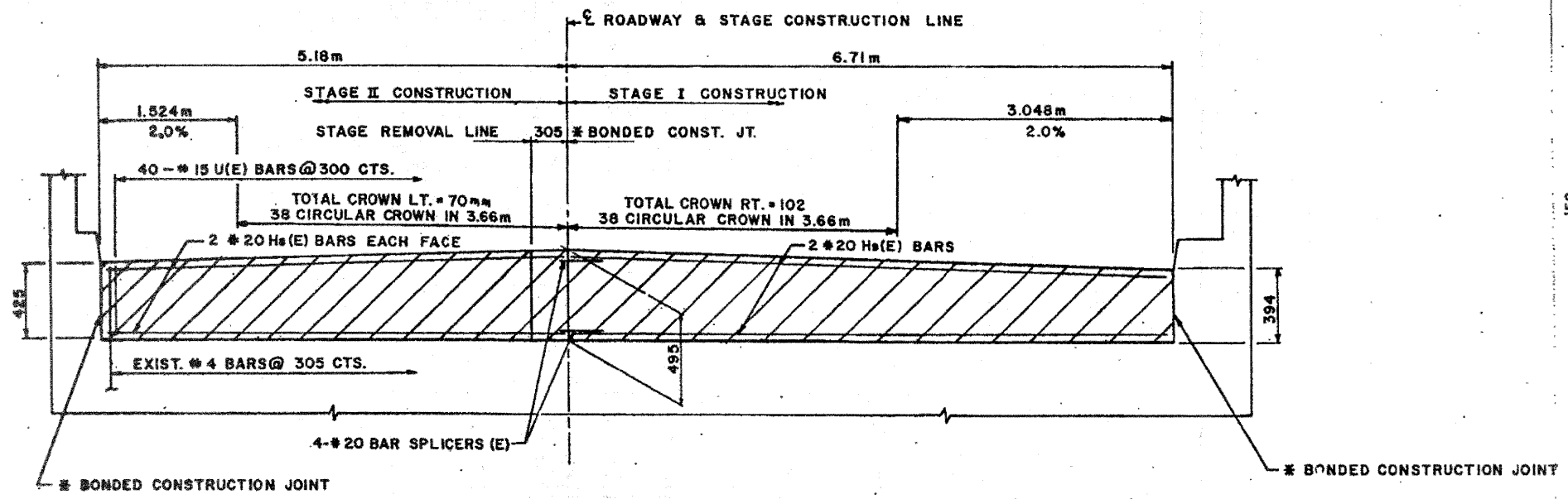
BILL OF MATERIALS

BAR	No.	SIZE	LENGTH	SHAPE
A ₃ (E)	6	#15	5.1	
A ₄ (E)	6	#15	6.63	
B ₃ (E)	2	#35	9.6	
B ₄ (E)	2	#25	7.01	
B ₅ (E)	1	#25	5.79	
D ₃ (E)	80	#15	0.381	
V ₆ (E)	80	#15	0.6	

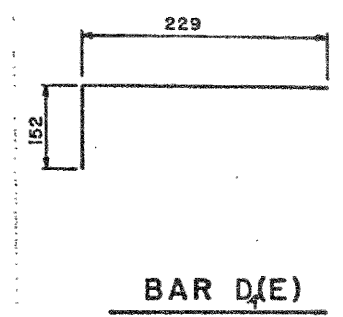
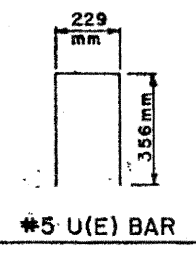
ITEM	UNIT	QUANTITY
CONCRETE REMOVAL	Cu. M.	11.67
CONCRETE SUPERSTRUCTURE	Cu. M.	3.7
REINFORCEMENT BARS, EPOXY CTD.	Kg.	461
Poly BIT. CONC. SURF. CSE. MIX D, CL. I, TYPE I	M. Ton	60
BITUMINOUS CONC. REMOVAL (C ₁ & C ₂)	Sq. M.	426
SHEET WATERPROOFING MEMBRANE SYSTEM	Sq. M.	414
DECK SLAB REPAIR (PARTIAL)	Sq. M.	123
DECK SLAB REPAIR (FULL DEPTH, TYPE 1)	Sq. M.	5
DECK SLAB REPAIR (FULL DEPTH, TYPE 2)	Sq. M.	5
STEEL BRIDGE RAIL	M.	71.8
SILICONE JOINT SEALER	M.	27.5

EXISTING BRIDGE PLANS FOR REFERENCE ONLY

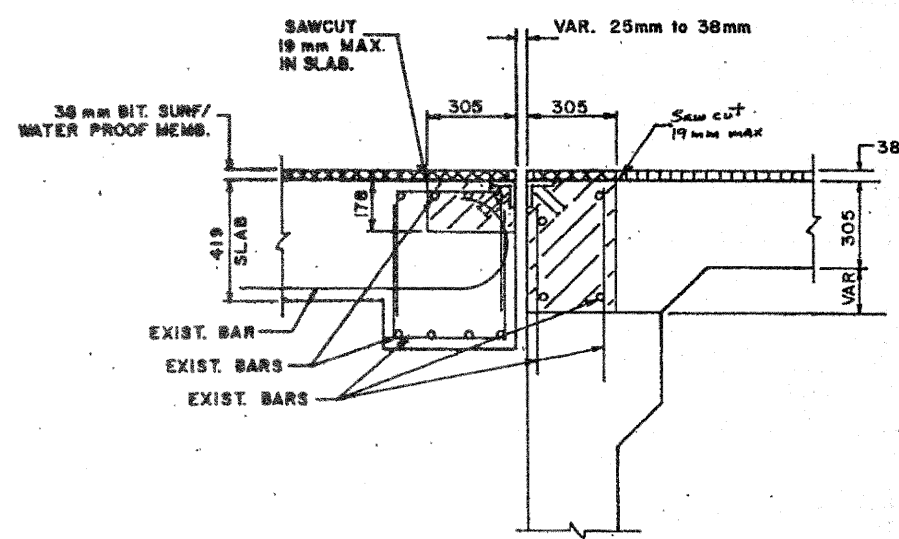
S.N. 037-0016
 DISTRICT NO. 2 DIXON
 DRAWN BY M. ETEMADI
 DRAWN BY D. LINK
 DATE 8/97
 CHECKED
 SCALE



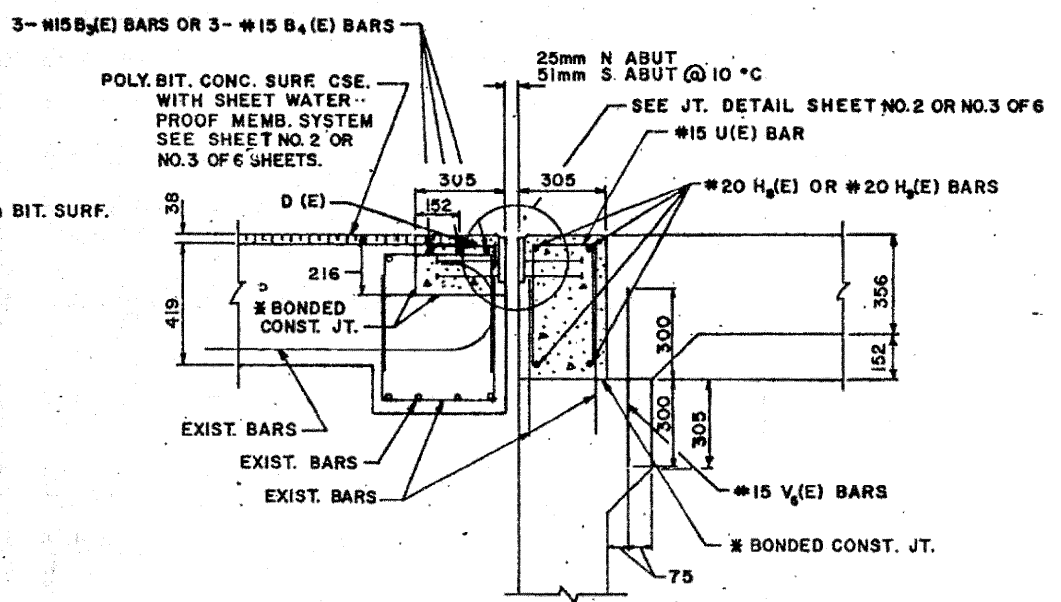
ABUTMENT ELEVATION
SB FACING SOUTH
NB FACING NORTH



**EXISTING BRIDGE PLANS
FOR REFERENCE ONLY**



TYPICAL SECTION THRU EXIST. ABUTMENT



TYPICAL SECTION THRU PROP. ABUTMENT

BILL OF MATERIAL - 4 ABUTMENTS

BAR	No.	SIZE	LENGTH	SHAPE
H ₉ (E)	16	#20	5.10	—
H ₉ (E)	16	#20	6.63	—
U(E)	160	#15	0.94	—
ITEM		UNIT	QUANTITY	
CONCRETE REMOVAL		Cu. M.	6.10	
CONCRETE STRUCTURES		Cu. M.	6.85	
REINFORCEMENT BARS, EPOXY CTD.		Kg.	679	
STRUCTURAL STEEL		Kg.	1390.1	

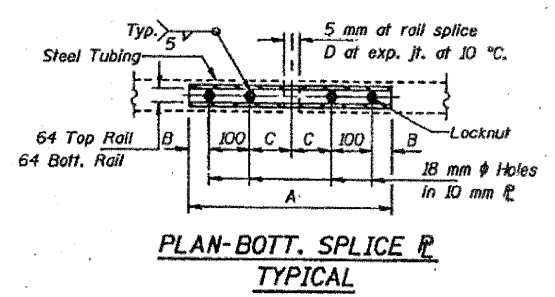
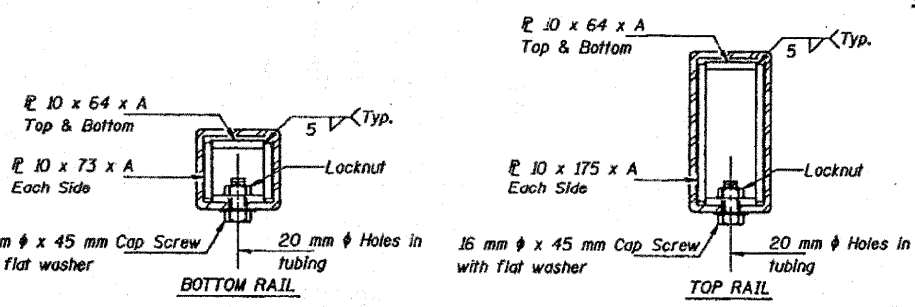
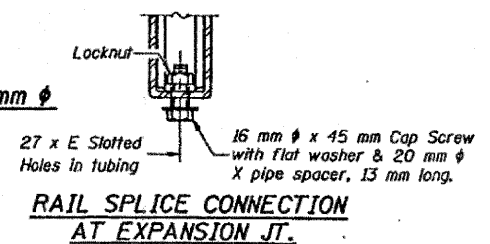
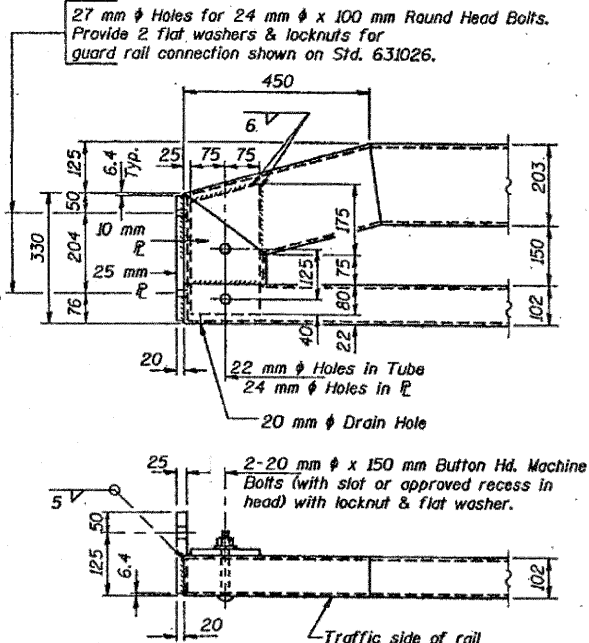
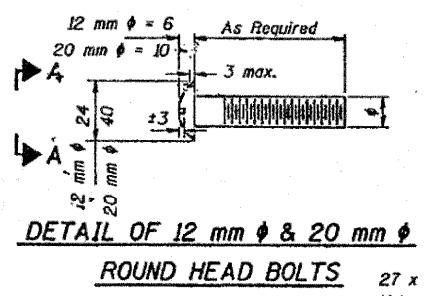
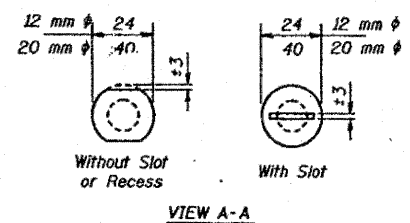
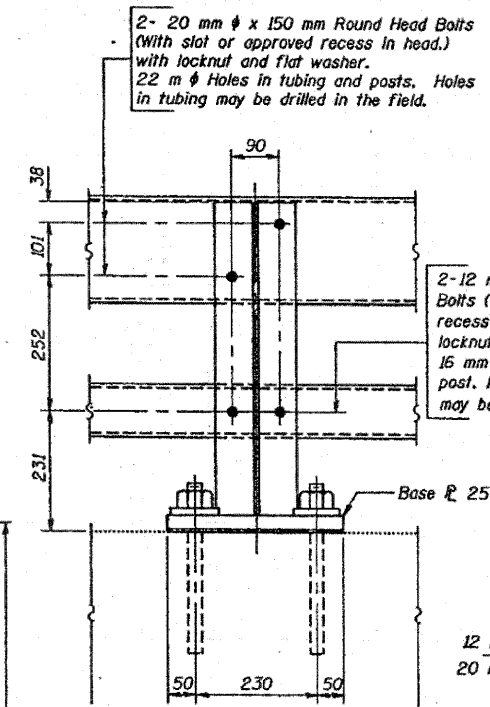
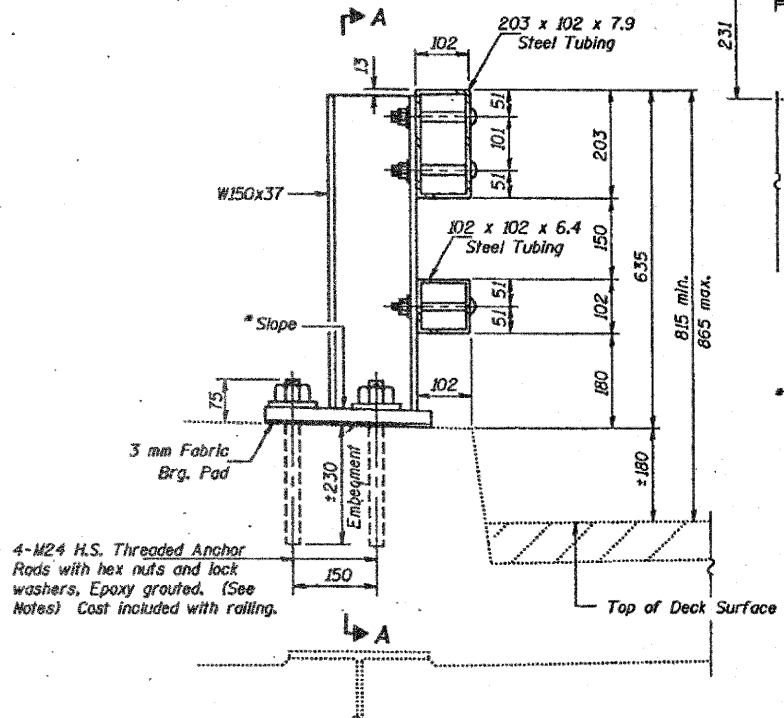
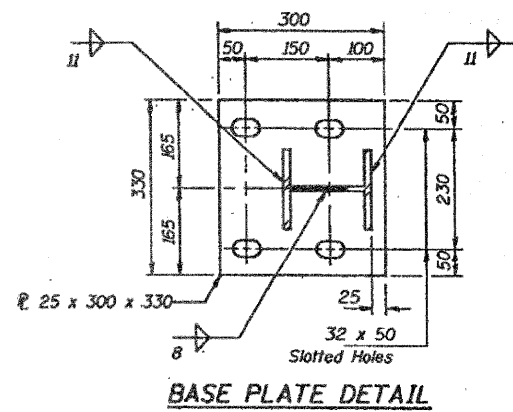
SN 037-0015 & 0016
DISTRICT NO. 2, DIXON
DESIGNED D. PAUSER
DRAWN D. LINK
CHECKED
DATE 8/97
SCALE

* BONDED CONSTRUCTION JOINT IN ACCORDANCE WITH ART. 503.09(a)(2) OF THE STANDARD SPECIFICATIONS.

REVISED 11-20-97

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74		HENRY	148	108
SHEETS				



NOTES

Hollow structural steel tubing shall conform to the requirements of ASTM designation A 500, Grade B, Structural Steel Tubing and shall meet the longitudinal CVN requirements of 20 N m at 18 $^{\circ}$ C.

All other steel shapes and plates shall conform to the requirements of AASHTO M 270M Grade 250 except posts shall conform to AASHTO M 270M, Grade 345.

Bolts, cap screws and nuts shall conform to the requirements of ASTM designation A 307 except that threaded rods, nuts and washers shall conform to AASHTO M 164M.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized according to AASHTO M 232.

All posts, railing, rail splices and anchor rods shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM A 385. Galvanized rail shall not be painted.

Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per meter for STEEL BRIDGE RAIL.

All field drilled holes shall be coated with an approved zinc rich paint before erection.

Posts shall not be located closer than 400 mm to an existing bridge expansion joint or end of bridge.

STEEL BRIDGE RAIL expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.

Provide one 3 mm and two 1.6 mm steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.

Expansion joint width shall be "D" at 10 $^{\circ}$ C and shall be adjusted for other temperatures according to Article 503.10(c) of the Standard Specifications.

The Contractor shall use 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 according to the manufacturer's recommendations and procedures.

The capsule or the adhesive cartridge shall be a sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Nuts for 24 mm ϕ threaded anchor rods connecting the base plate to the concrete shall be tightened to a snug fit and given an additional $\frac{1}{8}$ turn.

All dimensions are in millimeters (mm) except as noted.

EXISTING BRIDGE PLANS FOR REFERENCE ONLY

BILL OF MATERIAL

Item	Unit	Quantity
Steel Bridge Rail	m	143.60

SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 100	65	500	50	100	65
$> 100 \leq 165$	95	610	65	140	90
$\geq 165 \leq 230$	125	710	90	165	230
$> 230 \leq 330$	175	860	115	215	280
Rail Splice	6	500	50	100	—

T = Total movement at expansion joint as shown on the design plans.

SN 037-0015 & SN 037-0016

STEEL BRIDGE RAIL

CURB MOUNTED

(2399)

DESIGNED: _____

CHECKED: _____

DRAWN: _____

CHECKED: _____

R-31 (M) 4-30-97

(1.90 m Maximum Post Spacing)

SECTIONS AT RAIL SPLICE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS
(FOR REFERENCE ONLY)

SCALE:	SHEET NO.	SHEETS	STA.	TO STA.

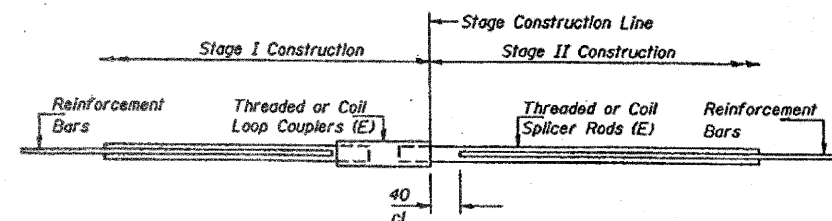
FILE NAME =	USER NAME = perkinsdr	DESIGNED -	REVISED -
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PLOT SCALE = 50.0000 / IN.		CHECKED -	REVISED -
PLOT DATE = Wed Aug 05 07:35:12 2009		DATE -	REVISED -

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	37-4HB,4HB-1,4HB-2ID	HENRY	148	125
CONTRACT NO. 64264				

ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74		HENRY	177	126
FED. ROAD DIST. NO. ILLINOIS PROJECT				
*(37-3)RS-1, (37-4)RS & 37-4B-D				

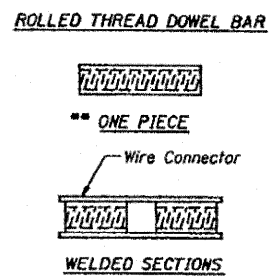


BAR SPLICER ASSEMBLY DETAIL

Bar Size	No. Assemblies Required	Location
#15	12	DECK
#20	16	ABUTMENTS

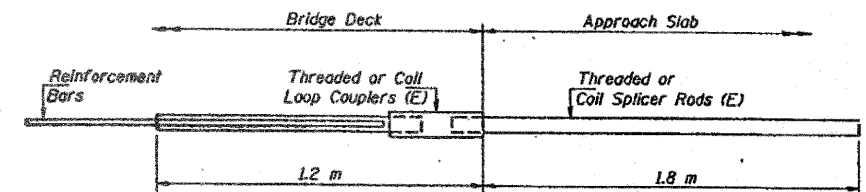
The diameter of this part is the same as the diameter of the bar spliced.

The diameter of this part is equal or larger than the diameter of bar spliced.



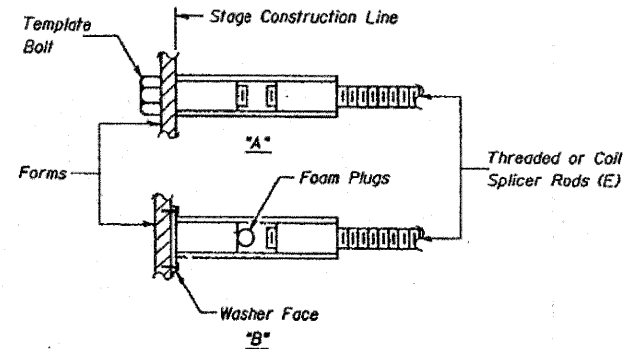
BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563M, Grade C, D or DH may be used.



INTEGRAL ABUTMENT
BAR SPLICER ASSEMBLY DETAIL
FOR #15 BAR

Min. Capacity = 100 kN - tension
Min. Pull-out Strength = 40 kN - tension
No. Required =



INSTALLATION AND SETTING METHODS

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

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars. Splicer rods shall be of minimum 400 MPa yield strength, threaded or coiled full length. All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kN) = $1.25 \times 10^{-3} \times f_y \times A_s$
- ② Minimum Pull-out Strength (Tension in kN) = $1.25 \times 10^{-3} \times f_{sallow} \times A_s$

Where f_y = Yield strength of lapped reinforcement bars in MPa.
 f_{sallow} = Allowable tensile stress in lapped reinforcement bars in MPa (Service Load)
 A_s = Tensile stress area of lapped reinforcement bars (mm²).
* = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kN - tension	Min. Pull-Out Strength kN - tension
#15	610 mm	100	40
#20	790 mm	150	60
#25	1.04 m	250	100
#30	1.37 m	350	140

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS." All dimensions are in millimeters (mm) except as noted.

EXISTING BRIDGE PLANS
FOR REFERENCE ONLY

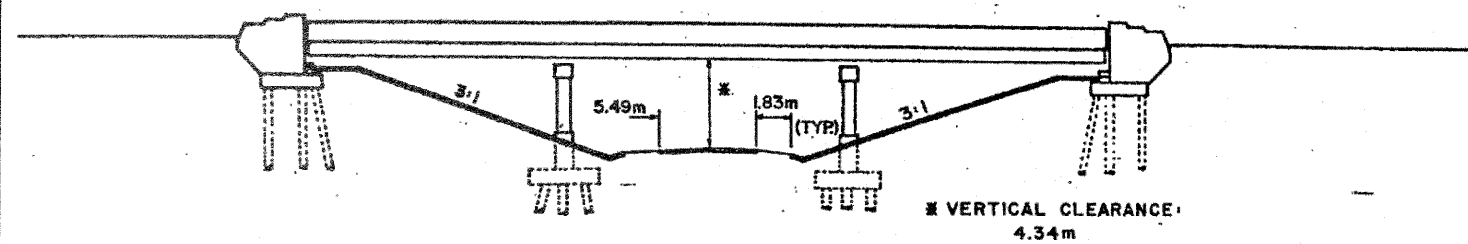
I-74 OVER OPHIEM ROAD
F.A.I. ROUTE 74 - SECTION 37-4HB
HENRY COUNTY
STATION 43+338.313
STRUCTURE NO. 037-0015 (W. STRUCT.)
037-0016 (E. STRUCT.)

BAR SPLICER ASSEMBLY DETAIL:

DESIGNED	19
CHECKED	EXAMINED
DRAWN	PASSED
CHECKED	ENGINEER OF BRIDGES AND STRUCTURES

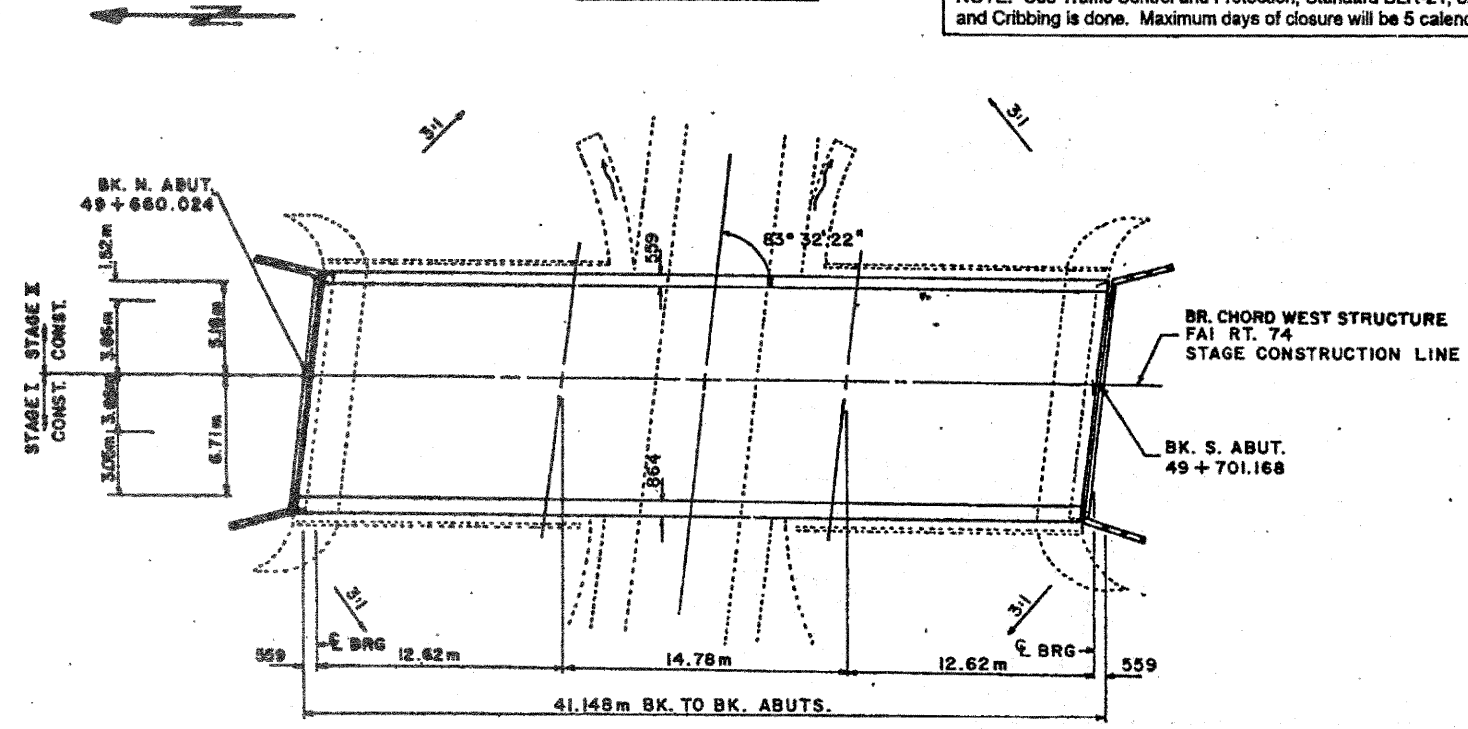
BSD-1 (M) 4-30-97

REVISED 11-20-97



ELEVATION

NOTE: Use Traffic Control and Protection, Standard BLR-21, on T.R. 379B when Temporary Shoring and Cribbing is done. Maximum days of closure will be 5 calendar days.



PLAN

**EXISTING BRIDGE PLANS
FOR REFERENCE ONLY**

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M-31M, M-42M, or M-52M Grade 400.

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

Any reinforcement bars that are damaged during concrete removal operations shall be replaced using an approved bar splicer or anchorage system. Cost shall be included in unit price for "Concrete Removal".

See sheet 4 of 7 for additional General Notes.

TOTAL BILL OF MATERIALS

ITEM	UNIT	QUANTITY
CONCRETE REMOVAL	CU M	6.6
CONCRETE SUPER STRUCTURES	CU M	1.9
REINFORCEMENT BARS, EPOXY COATED	KG	140
BITUMINOUS CONC REMOVAL (DECK)	SQ M	460
POLY BIT CONC SURF CSE, MIX D, C.I. TYPE 1	M TON	56
SHEET WATERPROOFING MEMBRANE SYSTEM	SQ M	460
SILICONE JOINT SEALER	METER	27.5
DECK SLAB REPAIR (PARTIAL)	SQ M	33
DECK SLAB REPAIR (FULL DEPTH, TYPE 1)	SQ M	5
DECK SLAB REPAIR (FULL DEPTH, TYPE 2)	SQ M	26
FLOOR DRAINS	EACH	12
STEEL BRIDGE RAIL	METER	82
F & E STRUCTURAL STEEL	KG	1290
BEAM STRAIGHTENING	L.S.	1
TEMPORARY SLAB SUPPORT SYSTEM	L.S.	1
TEMPORARY SHORING & CRIBBING	L.S.	1

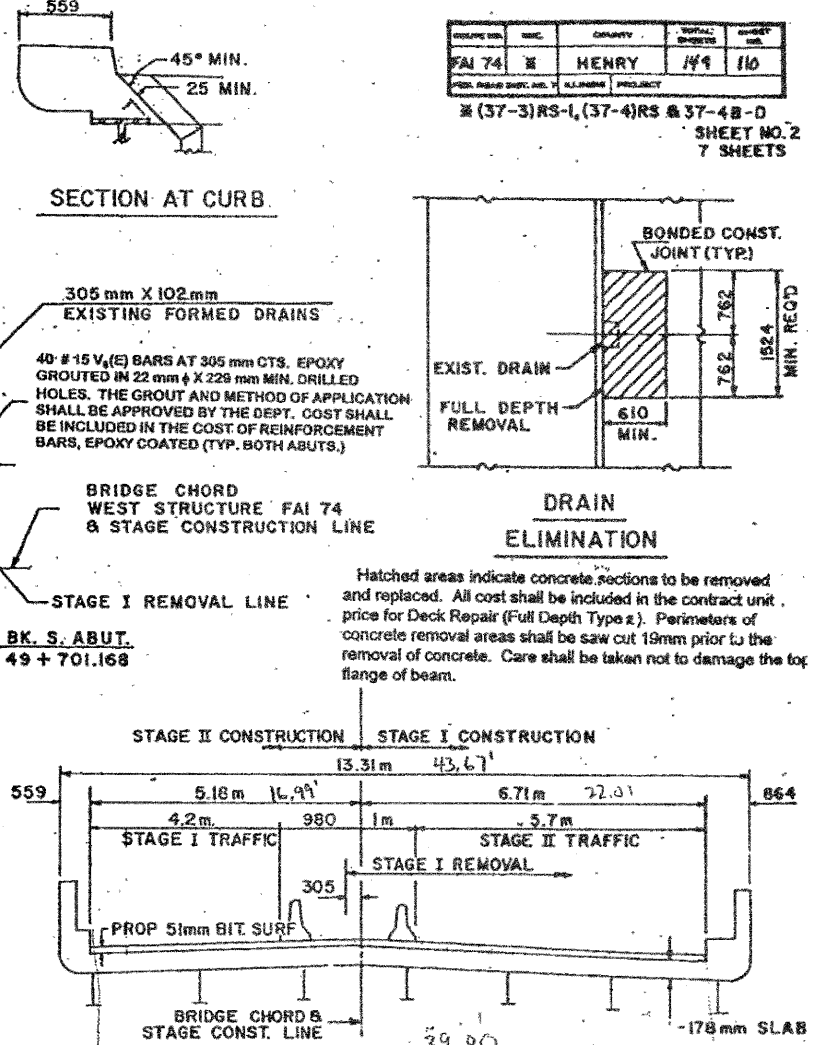
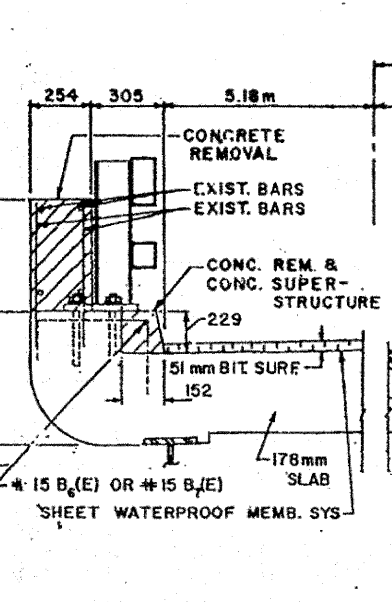
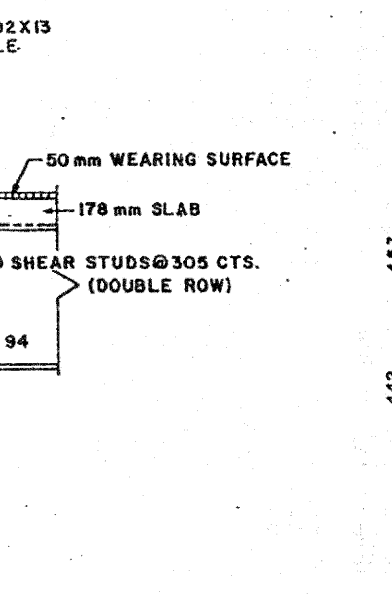
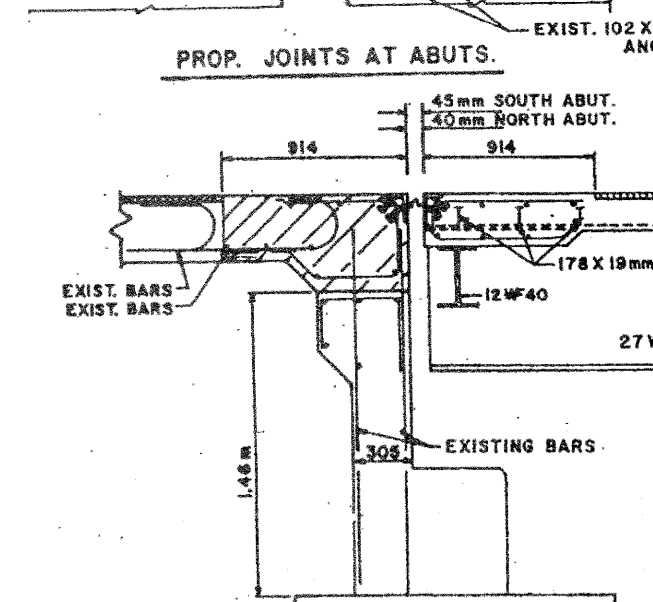
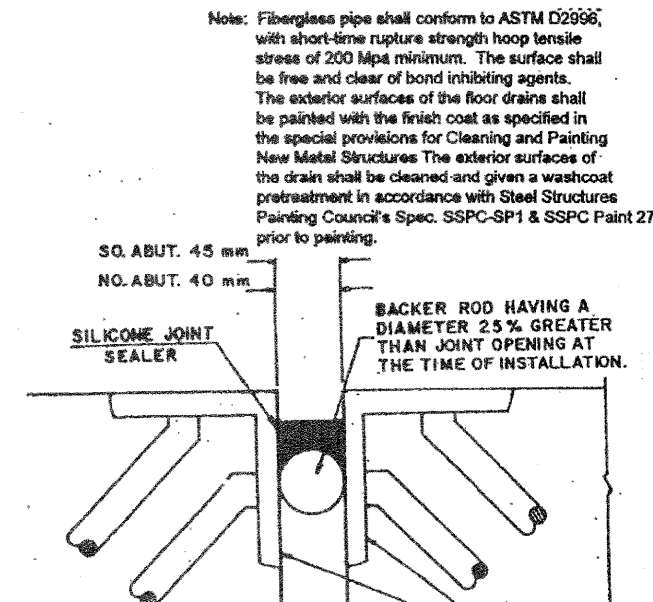
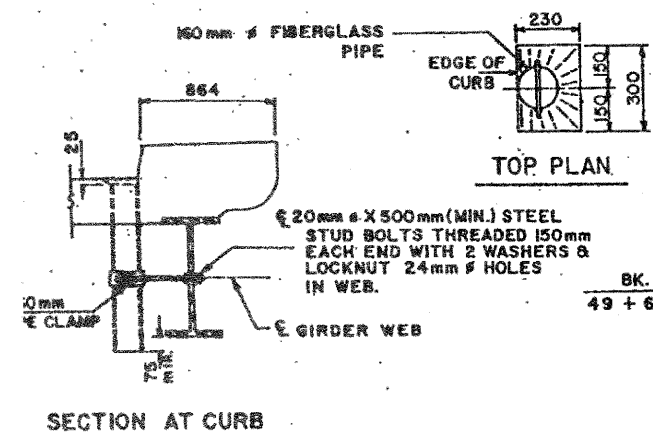
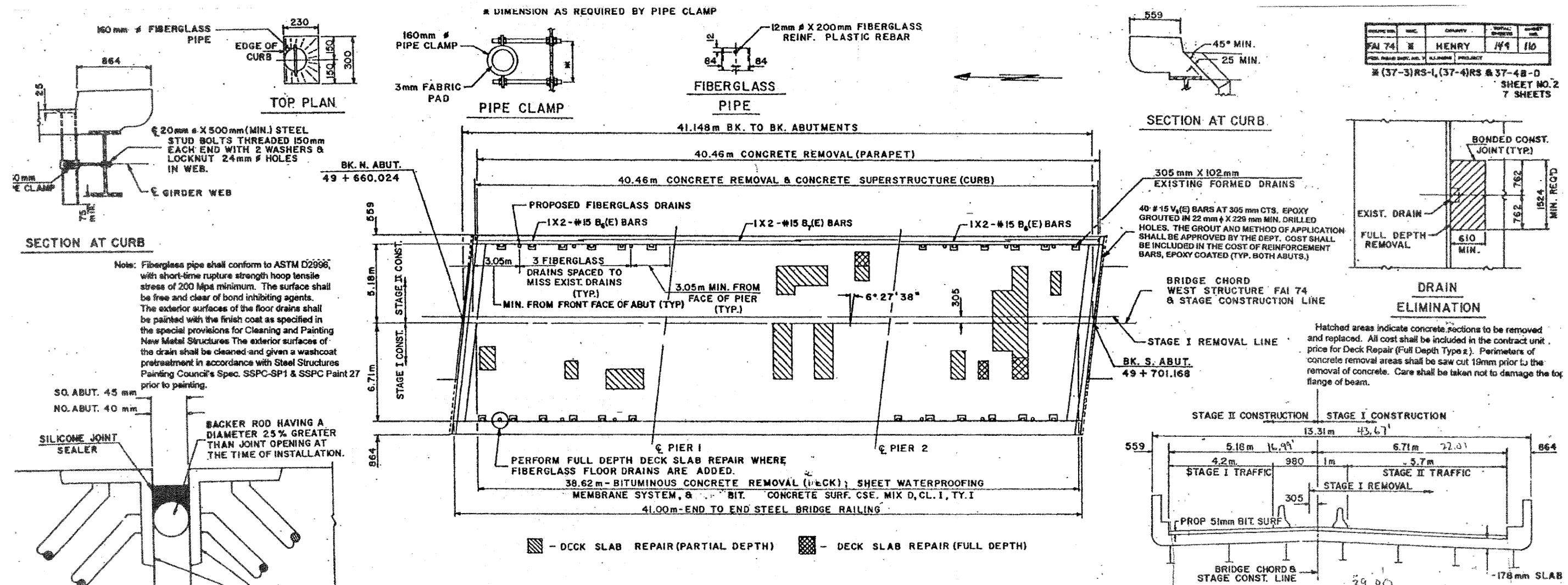
**GENERAL PLAN
I-74 OVER TR. 379 B
F.A.I. 74 - SECTION 37-4HB-2
HENRY COUNTY
STATION 49+680.596
STRUCTURE NO. 037-0017 (W. STRUCT.)**

DISTRICT NO. 2 DIXON
DESIGNED D. PAUSER
DRAWN D. LINK DATE 10/97
CHECKED SCALE

REVISED 11-20-97

FILE NAME =	USER NAME = parkusdr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS (FOR REFERENCE ONLY)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT SCALE = 50.0000 / IN.	CHECKED -	REVISED -			CONTRACT NO. 64264					
	PLOT DATE = Wed Aug 05 07:35:12 2009	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	HENRY	149	110	
SHEET NO. 2 OF 7 SHEETS				



BILL OF MATERIALS

BAR	No.	SIZE	LENGTH	SHAPE
B ₆ (E)	4	#15	6.55	
B ₇ (E)	2	#15	7.47	
V ₆ (E)	80	#15	0.6	

ITEM	UNIT	QUANTITY
CONCRETE REMOVAL	Cu. M.	6.1
CONCRETE SUPERSTRUCTURE	Cu. M.	14
REINFORCEMENT BARS, EPOXY CTD.	Kg.	140.0
BITUMINOUS CONC. REMOVAL (DECK)	Sq. M.	460
POLY BIT. CONC. SURF. CSE MIX D, CL. I, TYP.	M. Ton	58
SHEET WATERPROOFING MEMBRANE SYS.	Sq. M.	460
SILICONE JOINT SEALER	M.	27.5
DECK SLAB REPAIR (PARTIAL)	Sq. M.	33
DECK SLAB REPAIR (FULL DEPTH-T1)	Sq. M.	5
DECK SLAB REPAIR (FULL DEPTH-T2)	Sq. M.	26
FLOOR DRAINS	EA.	12
STEEL BRIDGE RAIL	M.	82

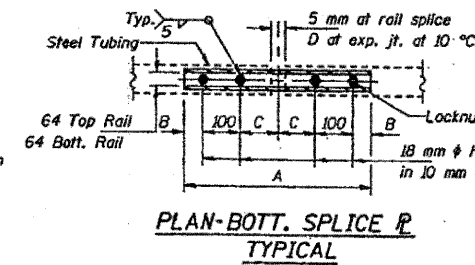
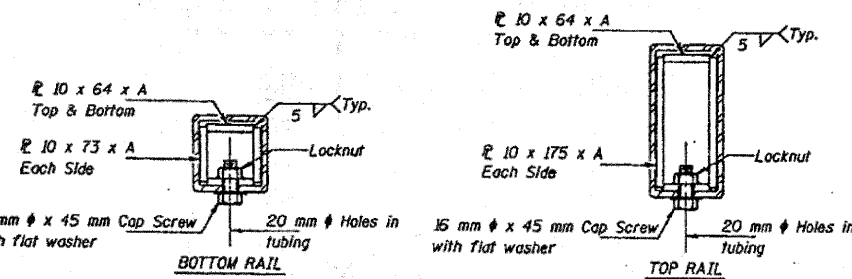
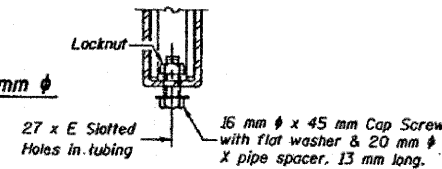
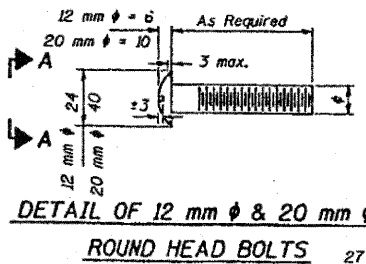
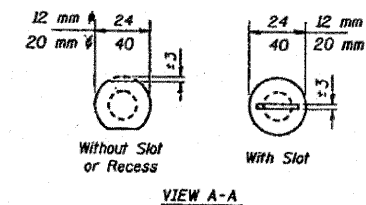
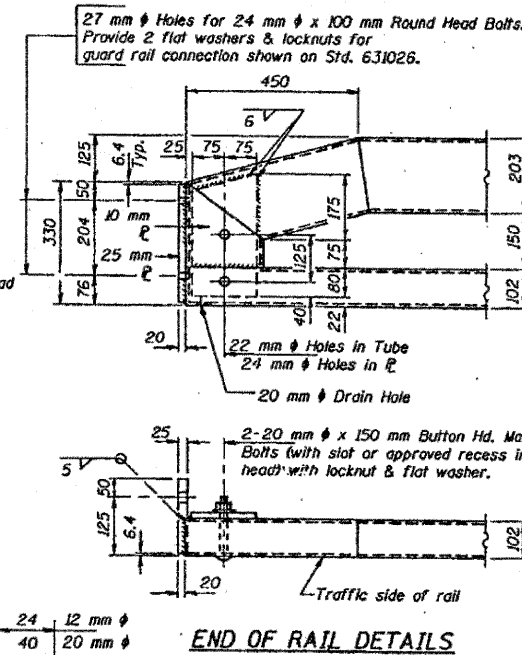
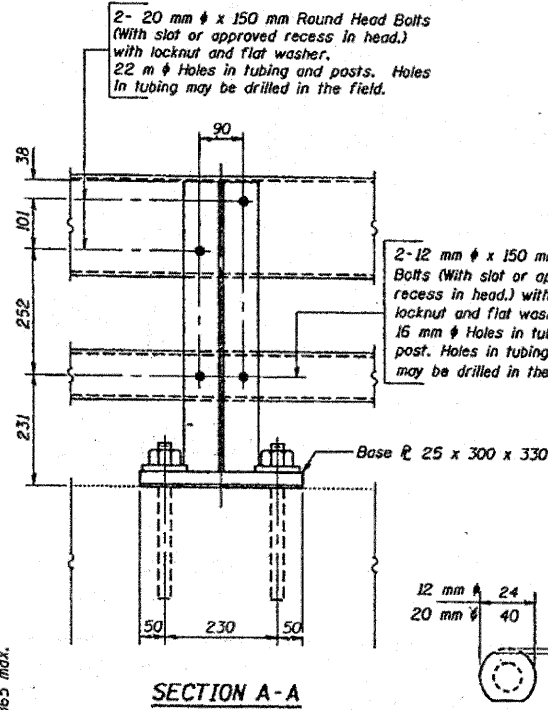
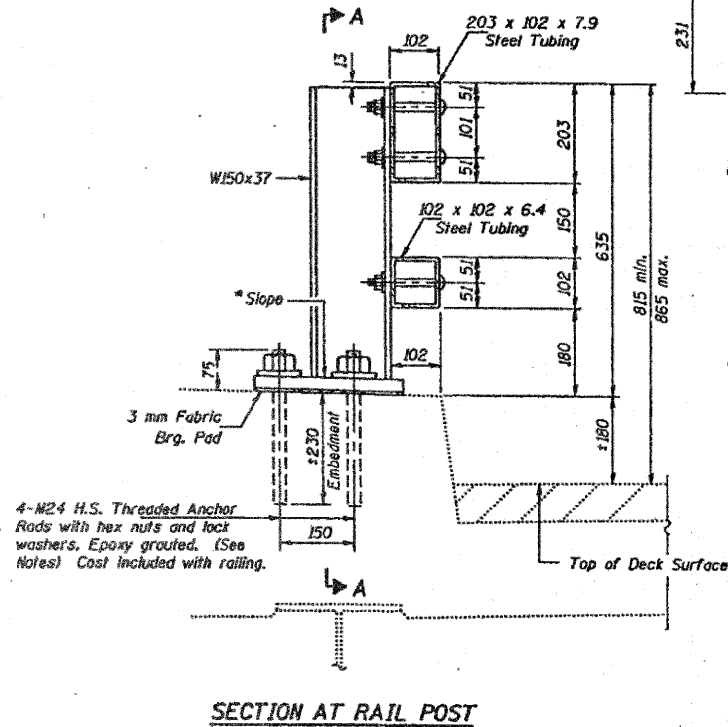
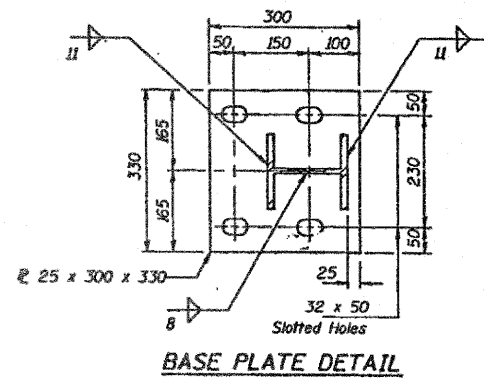
**EXISTING BRIDGE PLANS
FOR REFERENCE ONLY**

S.N. 037-0017
DISTRICT NO. 2 DIXON
FORWARDED D. PAUSER
DRAWN D. LINK
CHECKED
DATE 9/97
SCALE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

(37-3) RS-1 (37-4) RB & 37-4B-D

DATE	DESIGN	SCALE	SHEET NO.
74	HENRY	1/4"	111
			7 SHEETS



NOTES

Follow structural steel tubing shall conform to the requirements of ASTM designation A 500, Grade B, Structural Steel Tubing and shall meet the longitudinal CVN requirements of 20 J at 18 °C.

All other steel shapes and plates shall conform to the requirements of AASHTO M 270M Grade 250 except posts shall conform to AASHTO M 270M, Grade 345.

Bolts, cap screws and nuts shall conform to the requirements of ASTM designation A 307 except that threaded rods, nuts and washers shall conform to AASHTO M 154M.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized according to AASHTO M 232.

All posts, railing, rail splices and anchor rods shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM A 385. Galvanized rail shall not be painted.

Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per meter for STEEL BRIDGE RAIL.

All field drilled holes shall be coated with an approved zinc rich paint before erection.

Posts shall not be located closer than 400 mm to an existing bridge expansion joint or end of bridge.

STEEL BRIDGE RAIL expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.

Provide one 3 mm and two 1.6 mm steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.

Expansion joint width shall be "D" at 10 °C and shall be adjusted for other temperatures according to Article 503.10(c) of the Standard Specifications.

The Contractor shall use 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 according to the manufacturer's recommendations and procedures.

The capsule or the adhesive cartridge shall be a sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Nuts for 24 mm diameter threaded anchor rods connecting the base plate to the concrete shall be tightened to a snug fit and given an additional 1/8 turn.

All dimensions are in millimeters (mm) except as noted.

**EXISTING BRIDGE PLANS
FOR REFERENCE ONLY**

BILL OF MATERIAL

Item	Unit	Quantity
Steel Bridge Rail	m	82.0

SPLICE DIMENSIONS

T	D	A	B	C	E
≤100	65	500	50	100	65
>100 ≤ 165	95	610	65	140	90
>165 ≤ 230	125	710	90	165	230
>230 ≤ 330	175	860	115	215	280
Rail Splice	6	500	50	100	—

T = Total movement at expansion joint as shown on the design plans.

SN 037-0017

**STEEL BRIDGE RAIL
CURB MOUNTED
(2399)**

REVISED 11-21-97

DESIGNED	EXAMINED
CHECKED	PASSED
DRAWN	
CHECKED	

R-31 (M) 4-30-97

(1.90 m Maximum Post Spacing)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS
(FOR REFERENCE ONLY)

SCALE: SHEET NO. SHEETS STA. TO STA.

F.A.I. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	37-(4HB,4HB-1,4HB-2)D	HENRY	148	129
				CONTRACT NO. 64264
ILLINOIS FED. AID PROJECT				

FILE NAME =
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USER NAME = perkinsd
DESIGNED -
DRAWN -
CHECKED -
DATE -

EXAMINED -
PASSED -
DATE -

DESIGNED -
REVISOR -
CHECKED -
DATE -

DESIGNED -
REVISOR -
CHECKED -
DATE -

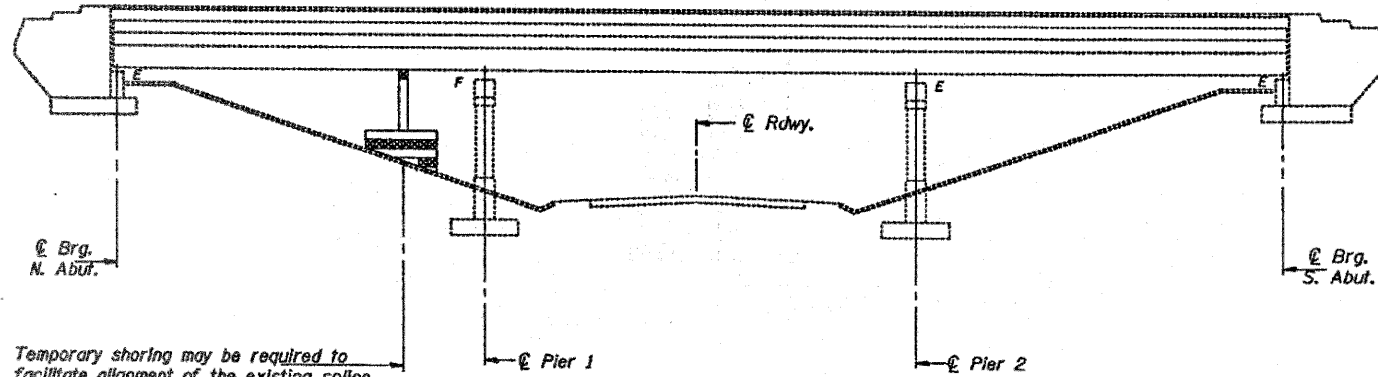
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	DISTRICT	DATE	SHEET	SHEET NO. 4
F.A.I. 74		HENRY	149	112	7 SHEETS
ILLINOIS FEDERAL PROJECT					

(37-3)RS-1 (37-4)RS & 37-4B-D

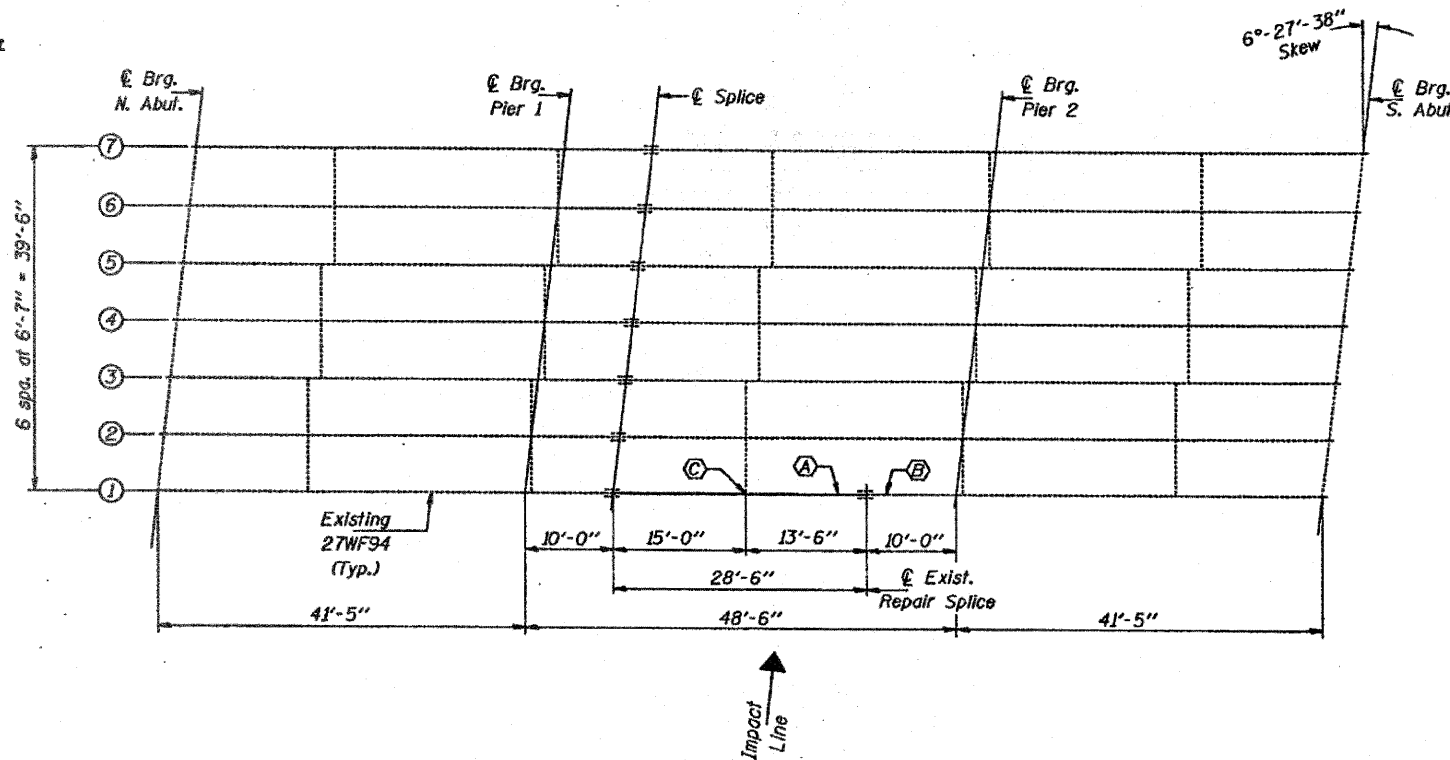
GENERAL NOTES

All new structural steel shall conform to AASHTO Classification M-270 Gr. 36. The Contractor shall provide support and/or shoring systems for the slab and beam in the area of existing beam removal. See Special Provisions "Temporary Shoring and Cribbing" and "Temporary Slab Support System."
Existing Structural steel shall only be cleaned and painted as required by the Special Provision "Cleaning and Painting Adjacent Areas of Existing Steel Structures".
The Inorganic zinc rich primer/acrylic/acrylic paint system shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the acrylic finish coat shall be Gray, Munsell No. 5B 7/1. See Special Provisions "Cleaning and Painting New Metal Structures".
Grind existing nicks, gouges and shallow cracks in the damaged beams as detailed. Ground surfaces shall be inspected for cracks using magnetic particle testing prior to initiating any beam straightening operations. Cost shall be included in the cost of "Beam Straightening". Any cracks that cannot be removed by grinding approximately 1/4" deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition.
After the new beam is in its final position and/or beam straightening operations have been completed, the Engineer in the field shall check to see that the top flange is tight against the slab. If not, the Contractor shall inject epoxy between the existing concrete deck and the top flange of the beam. See Special Provision "Epoxy Injection".
Cost of removal of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included in the cost of "Furnishing and Erecting Structural Steel".



Temporary shoring may be required to facilitate alignment of the existing splice. Use 12" x 12" Timber or HP's, to be paid for as "Temporary Shoring and Cribbing". Removal and replacement of the slope wall, if required, is included in the cost of "Temporary Shoring and Cribbing".

**EXISTING BRIDGE PLANS
FOR REFERENCE ONLY**



FRAMING PLAN

- Notes: (A) Existing Beam to be replaced.
(B) Existing Beam to be straightened.
(C) Existing diaphragm clip L's to be replaced.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY	Metric
Concrete Removal	Cu. Yd.	0.7	0.5 m ³
Concrete Superstructure	Cu. Yd.	0.7	0.5 m ³
Furnishing & Erecting Structural Steel	Pound	2840	1290 kg
Beam Straightening	L.S.	1	1
Temporary Slab Support System	L.S.	1	1
Temporary Shoring & Cribbing	L.S.	1	1

DESIGNED <i>Anthony Vinson</i>	DECEMBER 03, 1997
CHECKED <i>Dierbert</i>	EXAMINED <i>John E. Hanna</i>
DRAWN <i>Dierbert</i>	ENGINEER OF STRUCTURAL SERVICES
CHECKED <i>A.Y.V.</i>	ENGINEER OF BRIDGES AND STRUCTURES

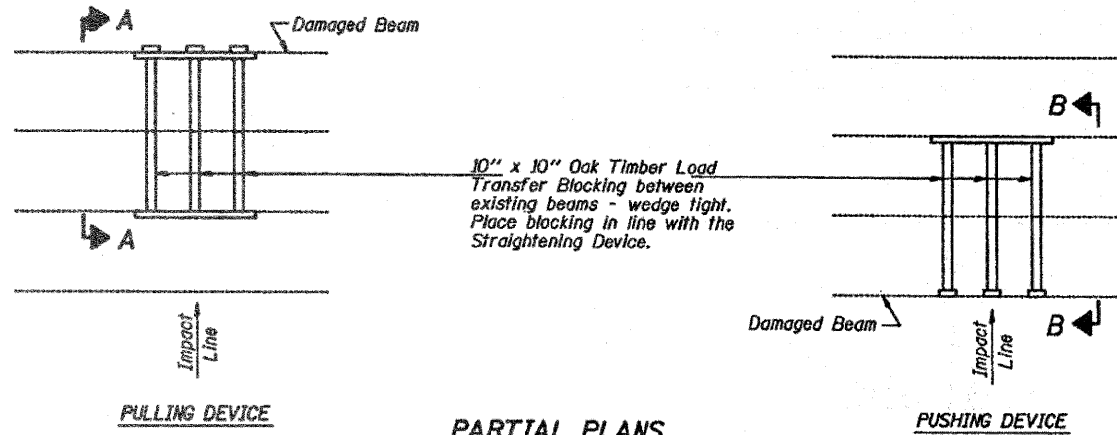
BRIDGE REPAIRS
F.A.I. RT. 74 SEC 37-4HB-2
HENRY COUNTY
STA. 1468+34.24
S.N. 037-0017

FILE NAME =	USER NAME = parknsdr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS (FOR REFERENCE ONLY)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 64264				
PLOT DATE = Wed Aug 05 07:35:12 2009		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
F.A.I. 74	0	HENRY	149	1120
SHEET NO. 5 7 SHEETS				

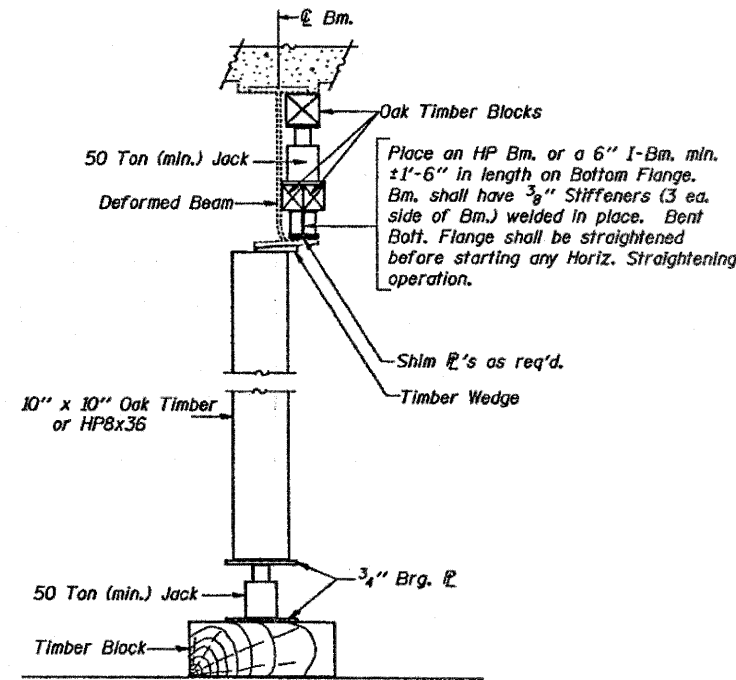
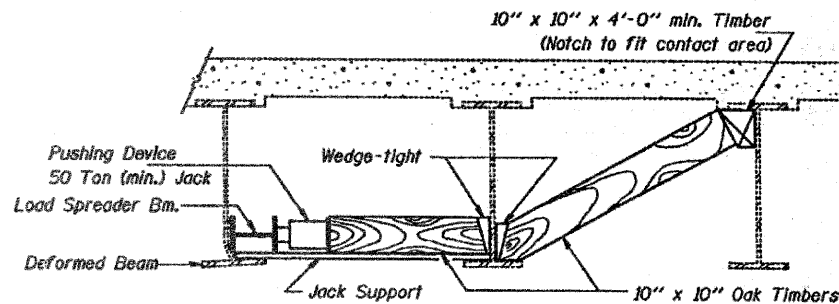
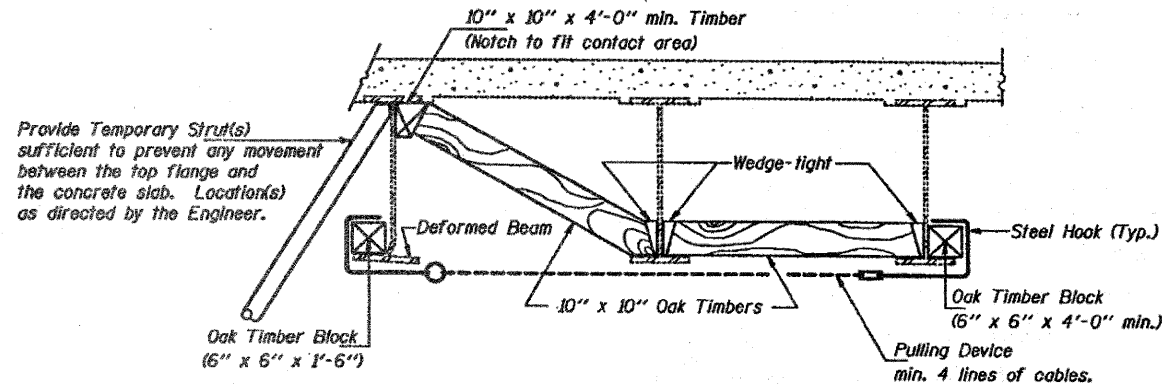
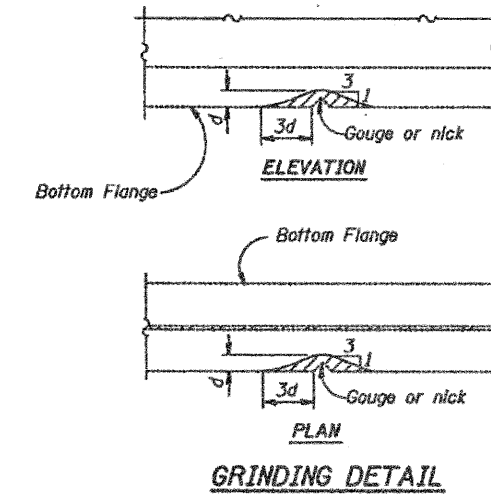
* (37-3ARS-1 (37-4RS & 37-4B-D



**PARTIAL PLANS
SUGGESTED BEAM STRAIGHTENING METHODS**

Straightening force shall be maintained on all load transfer blocking during beam straightening.

**EXISTING BRIDGE PLANS
FOR REFERENCE ONLY**



DESIGNED	A.Y.V.	DECEMBER 03, 1997
CHECKED	D-terbert	EXAMINED <i>Joseph E. Adams</i> ENGINEER OF STRUCTURAL SERVICES
DRAWN	D-terbert	PASSED
CHECKED	A.Y.V. R.T.B.	ENGINEER OF BRIDGES AND STRUCTURES

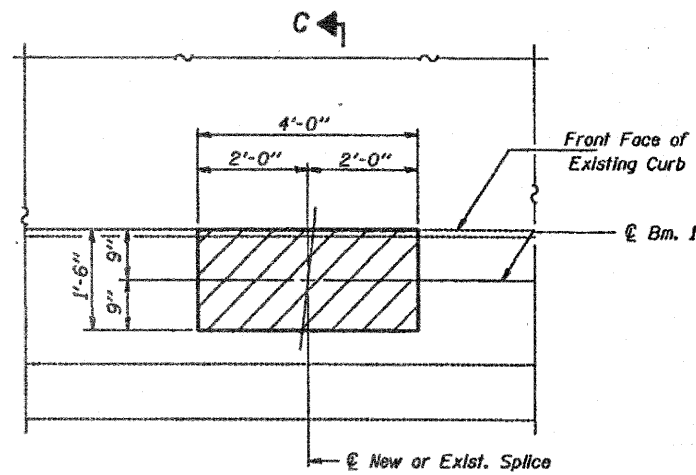
BRIDGE REPAIRS
F.A.I. RT. 74 SEC 37-4HB-2
HENRY COUNTY
STA. 1468+34.24
S.N. 037-0017

FILE NAME =	USER NAME = perkinsdr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS (FOR REFERENCE ONLY)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\p\work\p\WIDOT\PERKINS\DR\ms36777\d200298-sht-detailed.dgn	DESIGNED -	REVISED -	74			37-14HB,4HB-1,4HB-2ID	HENRY	148	131	
PLOT SCALE = 50,0000' / IN.	DRAWN -	REVISED -	CONTRACT NO. 64264							
PLOT DATE = Wed Aug 05 07:35:12 2009	CHECKED -	REVISED -	ILLINOIS FED. AID PROJECT							
		DATE -	REVISED -	SCALE:	SHEET NO.	SHEETS	STA.	TO STA.		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

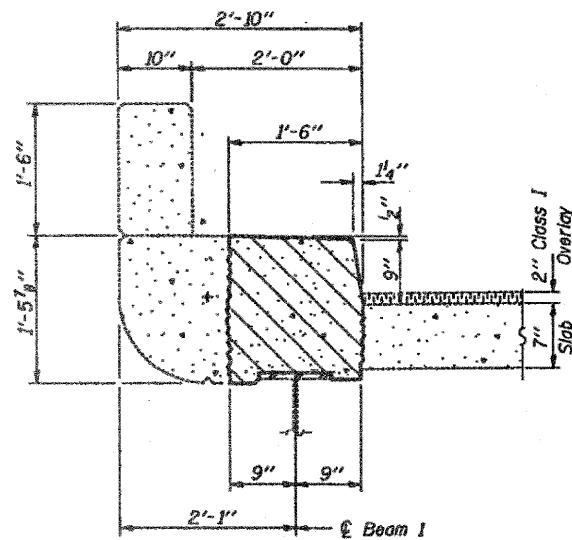
DATE	SECTION	COUNTY	SHEET	TOTAL SHEETS
F.A.I. 74	*	HENRY	148	132
SHEET NO. 6 7 SHEETS				

* (37-3RS-1 (37-4RS & 37-4B-D

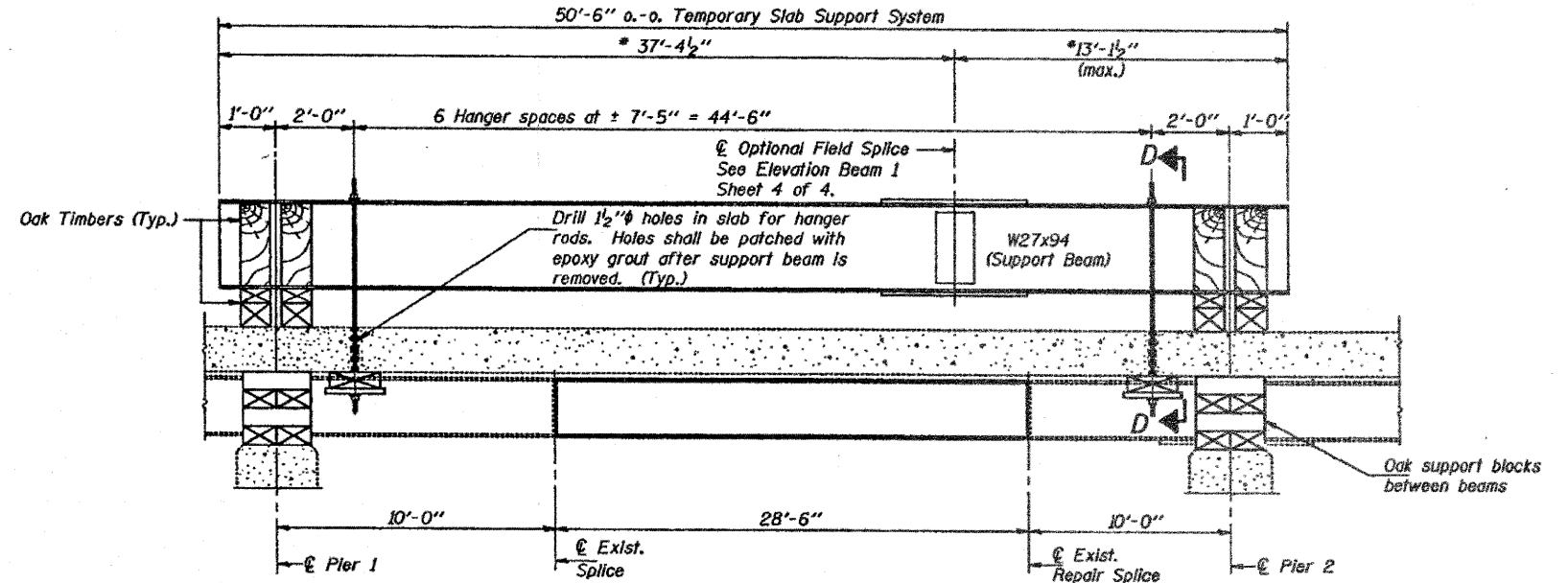


**TYPICAL CONCRETE
REMOVAL AND REPLACEMENT**

Hatched areas indicate concrete sections to be removed and replaced. Perimeters of Concrete Removal areas shall be saw cut $\frac{3}{4}$ " prior to the removal of concrete. Reinforcement shall be cut only if required for fitting bolts. Cut reinforcement shall be spliced as directed by the Engineer. Cost to be included in the cost of "Concrete Removal".



SECTION C-C

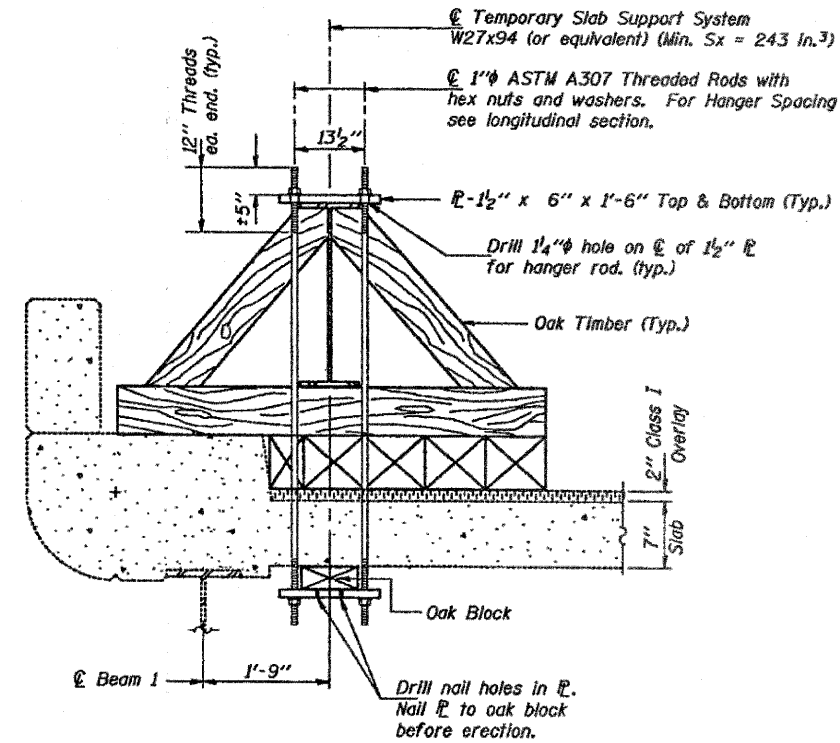


LONGITUDINAL SECTION

SUGGESTED TEMPORARY SLAB SUPPORT SYSTEM

* These dimensions may vary for available beams in stock.

**EXISTING BRIDGE PLANS
FOR REFERENCE ONLY**



SECTION D-D

DESIGNED	A.Y.V.	DECEMBER 03,	19 97
CHECKED	DHerbert	EXAMINED	<i>John C. Adams</i> ENGINEER OF STRUCTURAL SERVICES
DRAWN	DHerbert	PASSED	ENGINEER OF BRIDGES AND STRUCTURES
CHECKED	A.Y.V. R.T.B.		

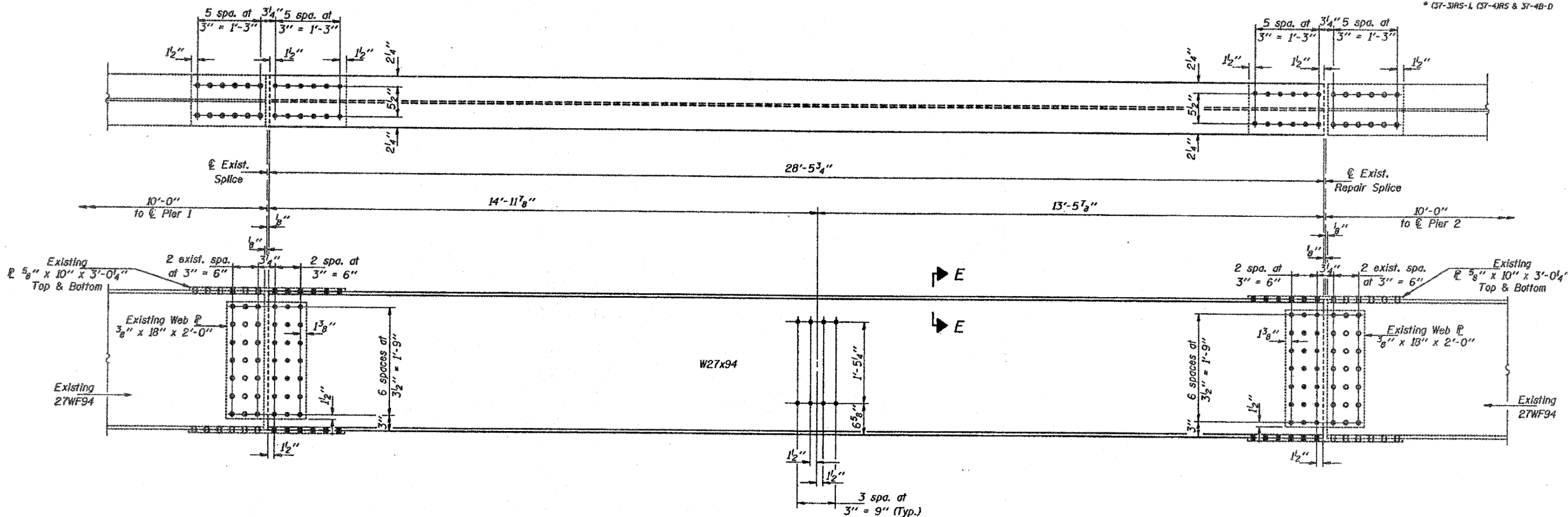
BRIDGE REPAIRS
F.A.I. RT. 74 SEC 37-4HB-2
HENRY COUNTY
STA. 1468+34.24
S.N. 037-0017

FILE NAME =	USER NAME = perkinsdr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS (FOR REFERENCE ONLY)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\pwwork\PERKINS\DR\14683424.dwg	08/29/05	DRAWN -	REVISED -			74	37-4HB,4HB-1,4HB-2ID	HENRY	148	132
PLOT SCALE = 50,0000 / IN.		CHECKED -	REVISED -			CONTRACT NO. 64264				
PLOT DATE = Wed Aug 03 07:35:12 2005		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				

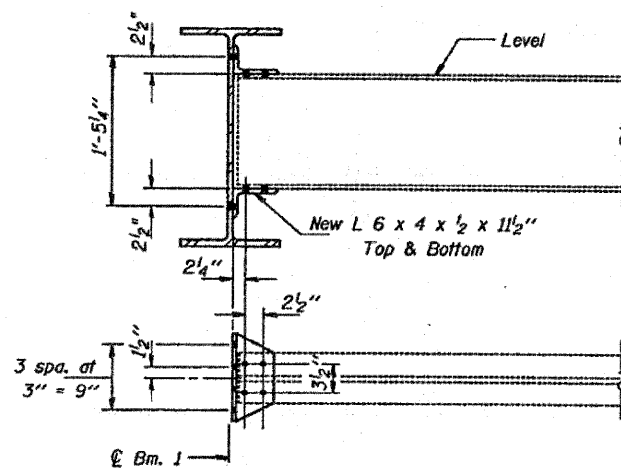
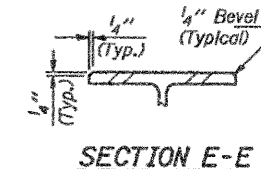
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	DISTRICT	COUNTY	SECTION	SHEET NO.
F.A.I. 74	0	HENRY	149	1120
FED. ROAD DIST. NO. 7		ALIGNED	FED. AID PROJECT	
		* 37-41RS-1, 37-41RS & 37-4B-D		

SHEET NO. 7
7 SHEETS



ELEVATION BEAM 1
(Looking East)



EXISTING DIAPHRAGM (12WF36)

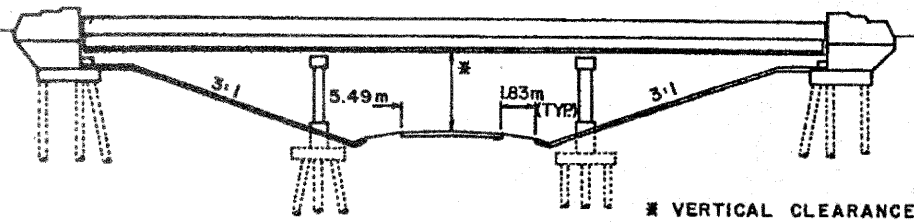
**EXISTING BRIDGE PLANS
FOR REFERENCE ONLY**

Notes: Natural camber of new beam shall be placed upward for fabrication.
Flange splice holes shall be subpunched or subdrilled $\frac{1}{16}$ " and reamed in the field to $\frac{1}{8}$ " for $\frac{7}{8}$ " H.S. Bolts after new steel is fitted into position.
Web splice holes shall be subpunched or subdrilled $\frac{1}{16}$ " and reamed in the field to $\frac{1}{8}$ " for $\frac{3}{4}$ " H.S. Bolts after new steel is fitted into position.
 $\frac{1}{16}$ " Holes for new $\frac{3}{4}$ " H.S. Bolts shall be used for all diaphragm connections. Two hardened washers shall be required at diaphragm connections.
Existing splice $\frac{1}{2}$'s to be matched, marked, removed and reused, using new H.S. Bolts.

DESIGNED	A.Y.V.	DECEMBER 03, 19 97
CHECKED	D-herbert	REVISIONS
DRAWN	D-herbert	APPROVED
CHECKED	A.Y.V. R.T.B.	ENGINEER OF BRIDGES AND STRUCTURES

BRIDGE REPAIRS
F.A.I. RT. 74 SEC 37-4HB-2
HENRY COUNTY
STA. 1468+34.24
S.N. 037-0017

FILE NAME =	USER NAME = perkinsdr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS (FOR REFERENCE ONLY)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cd:\pw_work\pw\DOT\PERKINS\DR\des35777\00248-sht-deta1.sldgn	00248-sht-deta1.sldgn	DRAWN -	REVISED -			74	37-4HB,4HB-1,4HB-2ID	HENRY	148	133
PLOT SCALE = 56.0000 / IN.		CHECKED -	REVISED -			CONTRACT NO. 64264				
PLOT DATE = Wed Aug 05 07:35:12 2009		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				



ELEVATION

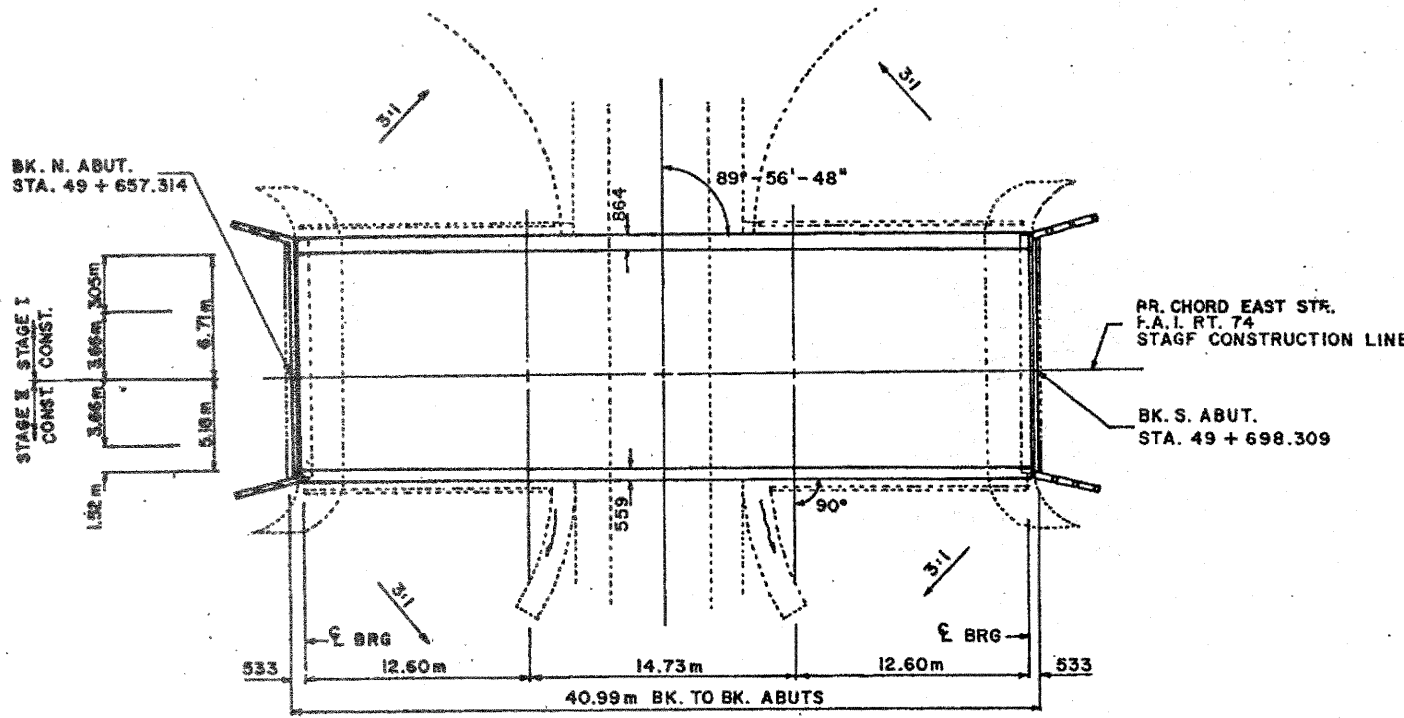
**EXISTING BRIDGE PLANS
FOR REFERENCE ONLY**

GENERAL NOTES

Reinforcements bars shall conform to the requirements of AASHTO M-31M, M-42M, OR M-53M GRADE 400.

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

Any reinforcement bars that are damaged during concrete removal operations shall be replaced using an approved bar splicer or anchorage system. Cost shall be included in unit price for "Concrete Removal".



PLAN

TOTAL BILL OF MATERIALS

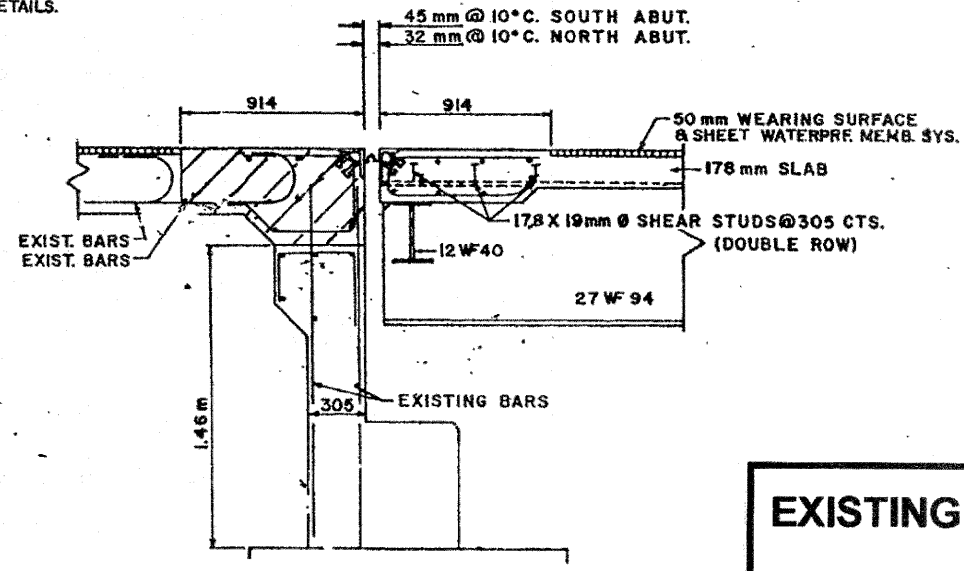
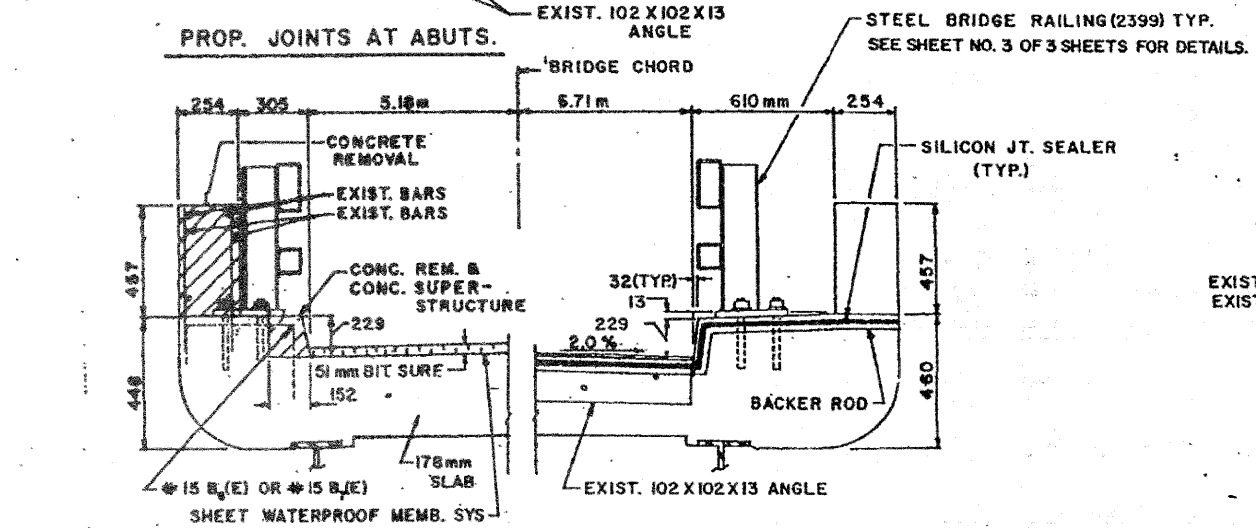
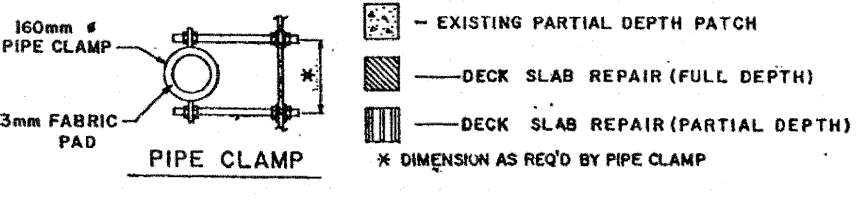
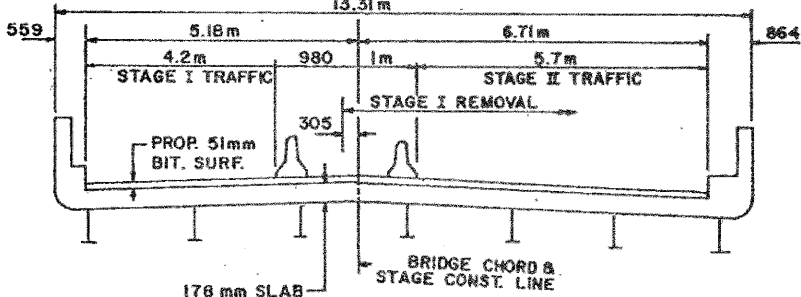
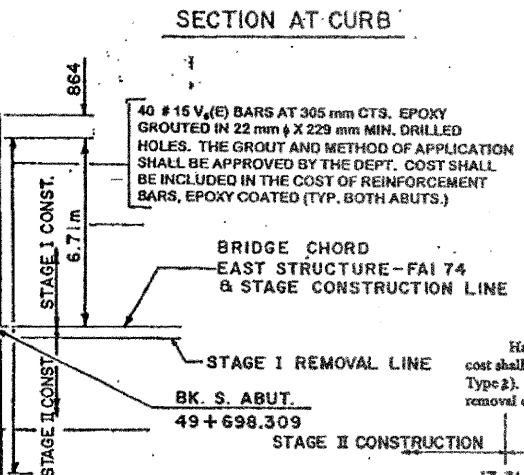
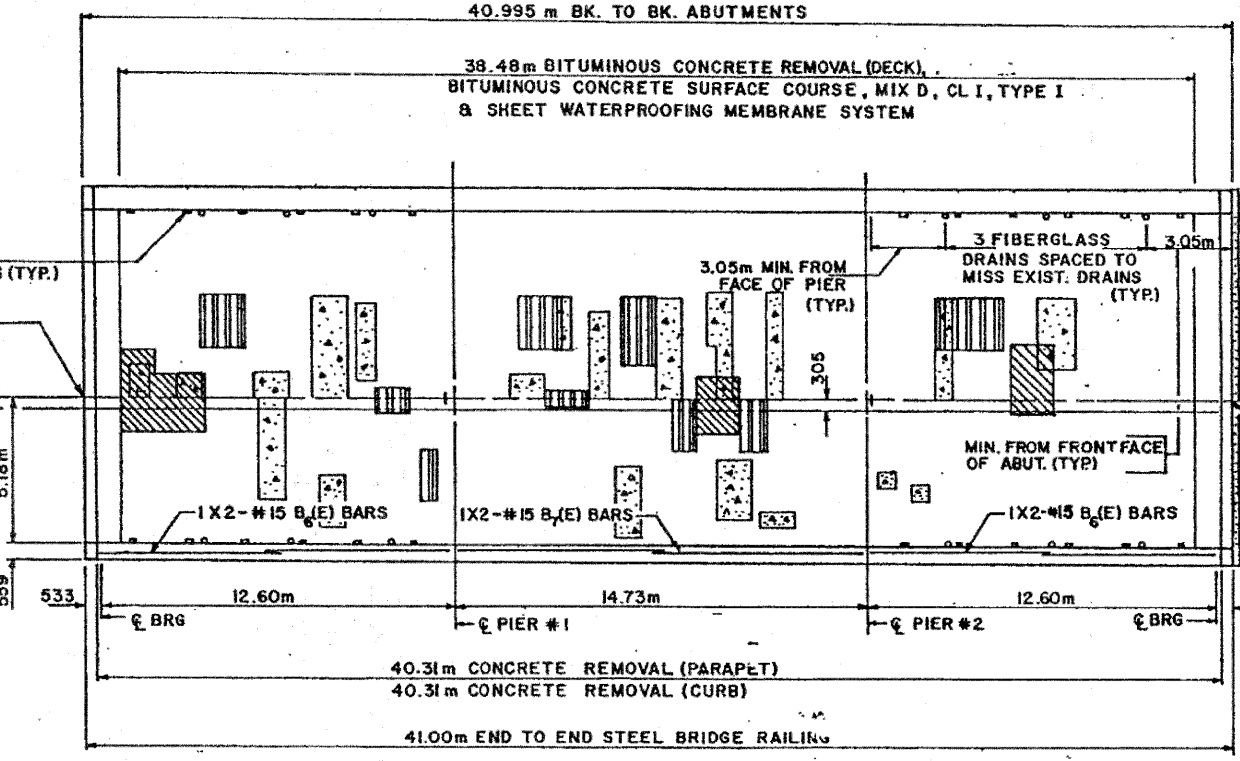
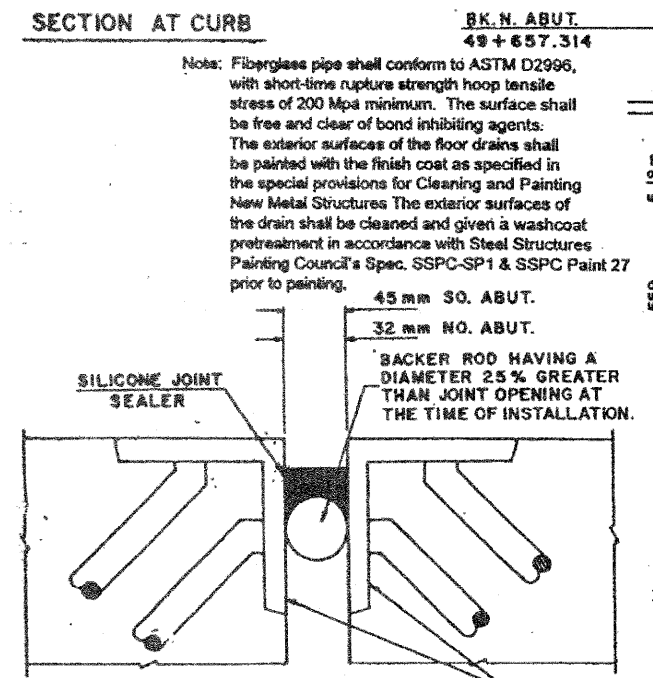
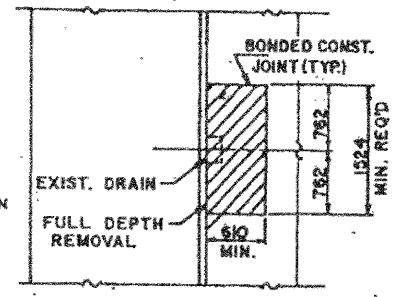
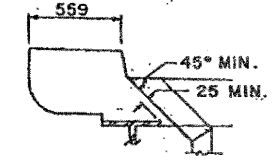
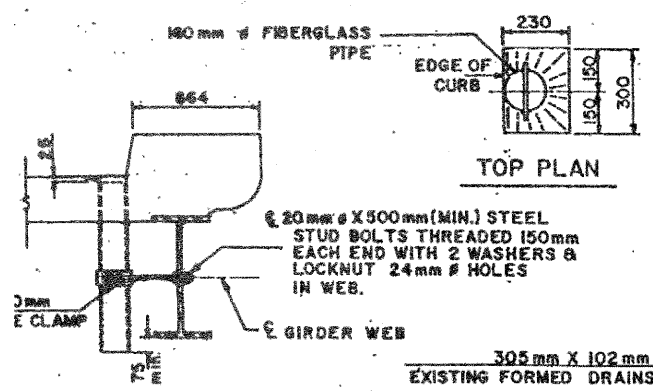
ITEM	UNIT	QUANTITY
CONCRETE REMOVAL	CU M	6.03
CONCRETE SUPER STRUCTURES	CU M	1.35
REINFORCEMENT BARS, EPOXY COATED	KG	140.0
BITUMINOUS CONC REMOVAL (DECK)	SQ M	458
POLY. BIT CONC SURF CSE, MIX D, CL I, TYPE 1	M TON	56
WATERPROOFING MEMBRANE SYSTEM	SQ M	458
SILICONE JOINT SEALER	METER	27.5
DECK SLAB REPAIR (PARTIAL)	SQ M	20
DECK SLAB REPAIR (FULL DEPTH, TYPE 1)	SQ M	5
DECK SLAB REPAIR (FULL DEPTH, TYPE 2)	SQ M	37
FLOOR DRAINS	EACH	12
STEEL BRIDGE RAIL	METER	82

**GENERAL PLAN
I-74 OVER T.R. 379B
F.A.I. ROUTE 74 - SECTION 37-4HB-1
HENRY COUNTY
STATION 49 + 677.812
STRUCTURE NO. 037 - 0018 (E. STRUCT.)**

DISTRICT NO. 2 DIXON
DESIGNED D. PAUSER
DRAWN D. LINK
CHECKED
DATE 10/97
SCALE

REVISED 11-20-97

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 74	H	HENRY	149	112
PROJECT NO. 037-0018				
SHEET NO. 2 OF 3 SHEETS				



BILL OF MATERIALS

BAR	No.	SIZE	LENGTH	SHAPE
B _s (E)	4	#15	6.55	
B _s (E)	2	#15	7.47	
V _s (E)	80	#15	0.6	

ITEM	UNIT	QUANTITY
CONCRETE REMOVAL	Cu. M.	6.03
CONCRETE SUPERSTRUCTURE	Cu. M.	1.35
REINFORCEMENT BARS, EPOXY CTD.	Kg.	140.0
BITUMINOUS CONC. REMOVAL (DECK)	Sq. M.	458
POLY. BIT. CONC. SURF. CES. MIX D, CL I, TYP.	M. Ton	56
SHEET WATERPROOFING MEMBRANE SYS.	Sq. M.	458
SILICONE JOINT SEALER	M.	27.5
DECK SLAB REPAIR (PARTIAL)	Sq. M.	20
DECK SLAB REPAIR (FULL DEPTH-T1)	Sq. M.	5
DECK SLAB REPAIR (FULL DEPTH-T2)	Sq. M.	37
FLOOR DRAINS	Es.	12
STEEL BRIDGE RAIL	M.	82

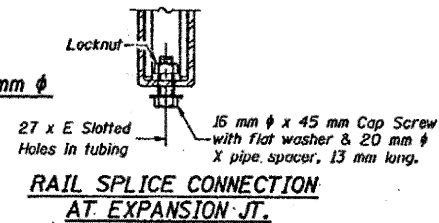
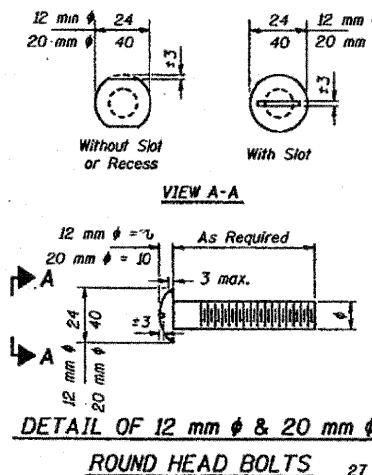
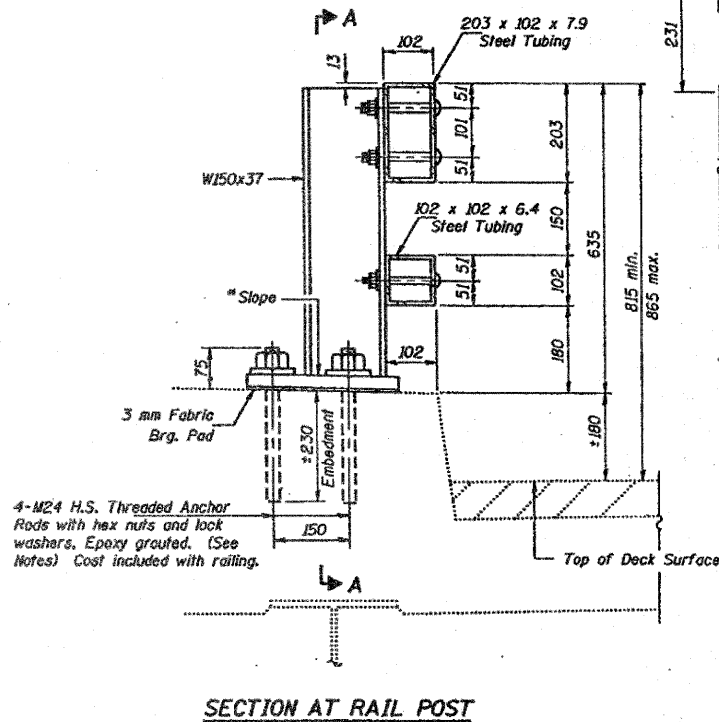
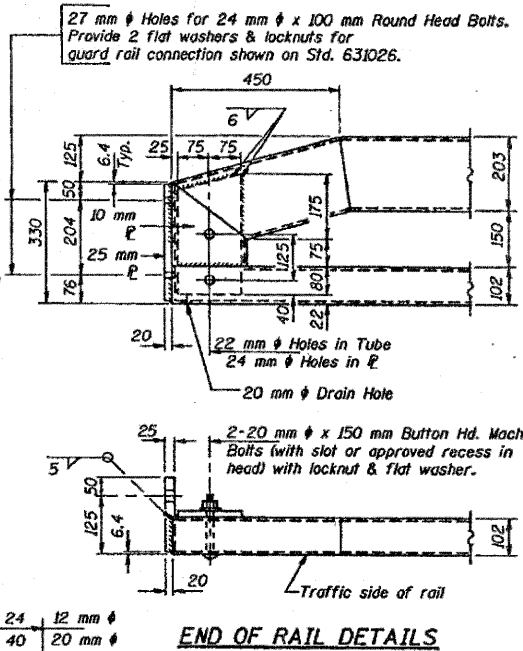
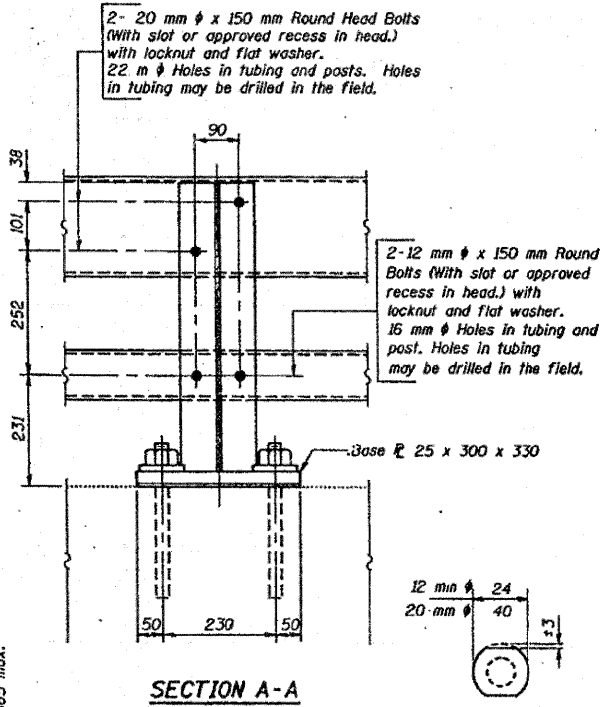
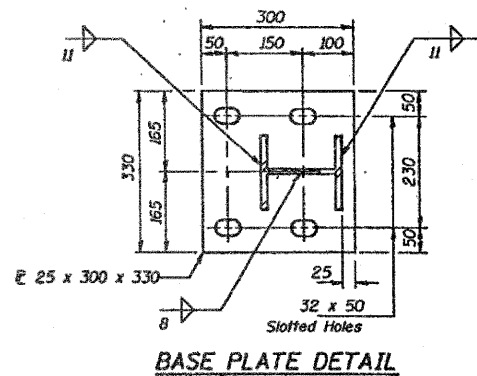
EXISTING BRIDGE PLANS FOR REFERENCE ONLY

S.N. 037-0018
DISTRICT NO. 2 DIXON
DESIGNED D. PAUSER
DRAWN D. LINK
CHECKED
DATE 9/97
SCALE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

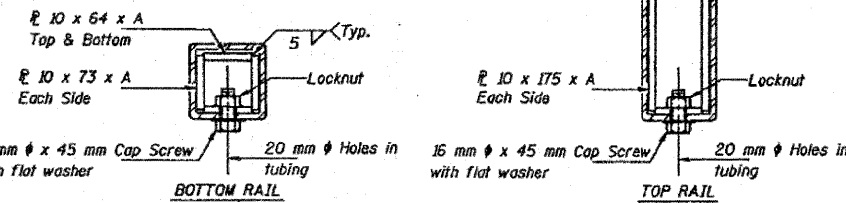
*(37-3) RS-1, (37-4) RS & 37-4B-D

DESIGNER	DATE	SCALE	SHEET NO.
HENRY	1/4/97	1/8"	3

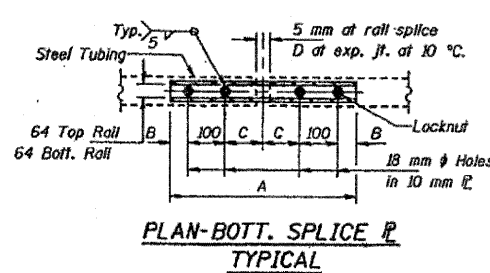


DESIGNED	EXAMINED
CHECKED	DESIGNER OF BRIDGE DESIGN
DRAWN	PASSED
CHECKED	CHIEF OF BRIDGES AND STRUCTURES

SECTION AT RAIL POST



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE TYPICAL

NOTES

Hollow structural steel tubing shall conform to the requirements of ASTM designation A 500, Grade B, Structural Steel Tubing and shall meet the longitudinal CVN requirements of 20 N m at 18 °C.

All other steel shapes and plates shall conform to the requirements of AASHTO M 270M Grade 250 except posts shall conform to AASHTO M 270M, Grade 345.

Bolts, cap screws and nuts shall conform to the requirements of ASTM designation A 307 except that threaded rods, nuts and washers shall conform to AASHTO M 164M.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized according to AASHTO M 2.32.

All posts, railing, rail splices and anchor rods shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM A 385. Galvanized rail shall not be painted.

Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per meter for STEEL BRIDGE RAIL.

All field drilled holes shall be coated with an approved zinc rich paint before erection.

Posts shall not be located closer than 400 mm to an existing bridge expansion joint or end of bridge.

STEEL BRIDGE RAIL expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.

Provide one 3 mm and two 1.6 mm steel shims for 25% of the posts. Shim shall be similar to base plates in size and holes.

Expansion joint width shall be "D" at 10 °C and shall be adjusted for other temperatures according to Article 503.10(c) of the Standard Specifications.

The Contractor shall use 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 according to the manufacturer's recommendations and procedures. The capsule or the adhesive cartridge shall be a sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Nuts for 24 mm diameter threaded anchor rods connecting the base plate to the concrete shall be tightened to a snug fit and given an additional 1/4 turn.

All dimensions are in millimeters (mm) except as noted.

**EXISTING BRIDGE PLANS
FOR REFERENCE ONLY**

BILL OF MATERIAL

Item	Unit	Quantity
Steel Bridge Rail	m	82.0

SPLICE DIMENSIONS

T	D	A	B	C	E
≤100	65	500	50	100	65
>100 ≤165	95	610	65	140	90
>165 ≤230	125	710	90	165	230
>230 ≤330	175	860	115	215	280
Rail Splice	6	500	50	100	---

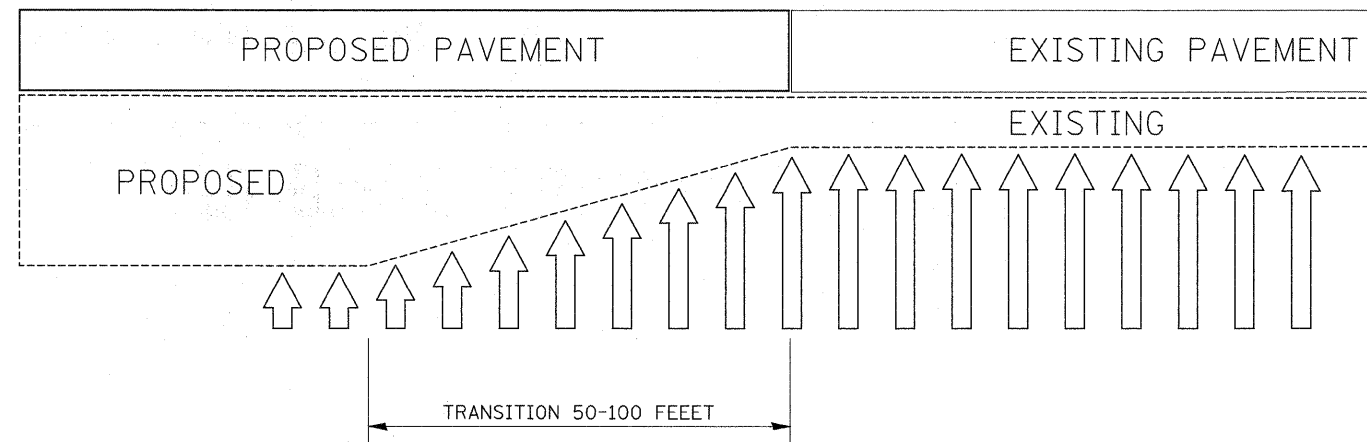
T = Total movement of expansion joint as shown on the design plans.

**SN 037-0018
STEEL BRIDGE RAIL
CURB MOUNTED
(2399)**

REVISED 11-21-97

FILE NAME =	USER NAME = perkinsdr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE PLANS (FOR REFERENCE ONLY)	SCALE:	SHEET NO.	SHEETS	STA.	TO STA.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
at:\pwwork\PMIDOT\PERKINS\DR\dms36777\2002\95-shr-detailed.dgn	DRAWN -	REVISED -	74								37-(4)B,4B-1,4B-2(D)	HENRY	148	136	
PLOT SCALE = 50.0000 / IN.	CHECKED -	REVISED -	CONTRACT NO. 64264												
PLOT DATE = Wed Aug 05 07:35:12 2009	DATE -	REVISED -	ILLINOIS FED. AID PROJECT												

SUBBASE THICKNESS TRANSITION



NOTES

1. FOLLOW SECTION 301.04 OF THE SPEC. BOOK FOR SUBGRADE COMPACTION AND STABILITY. IN DETERMINING THICKNESS OF SUBGRADE BEYOND 12".

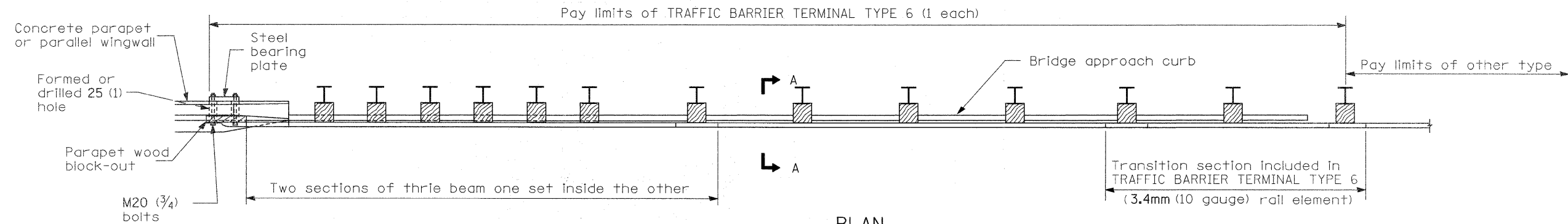
LEGEND

AGGREGATE SUBBASE

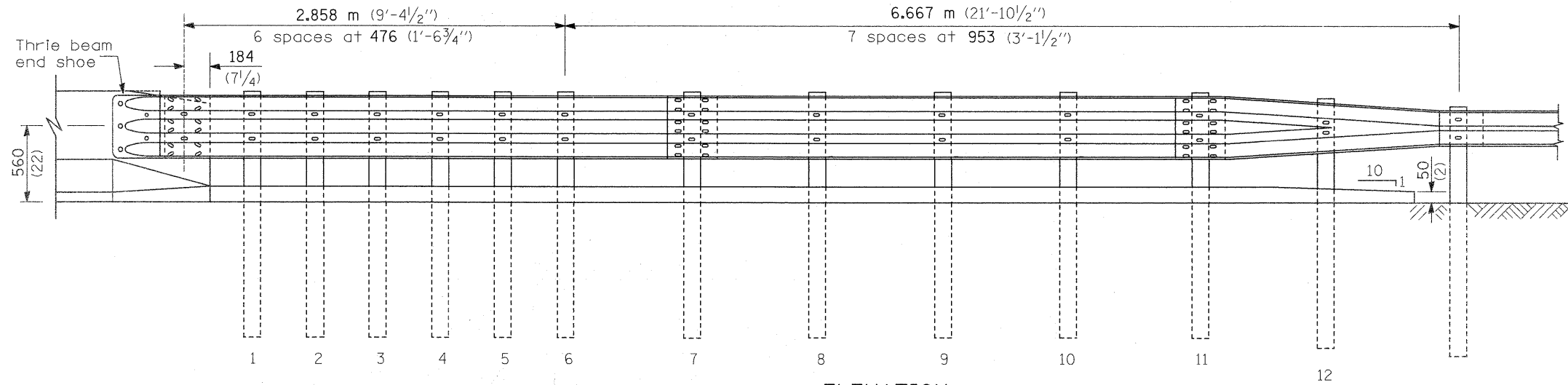
FROST HEAVE MAGNITUDE
EQUALLS LENGTH OF ARROW

FILE NAME =	USER NAME = cushmanbw	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUBBASE THICKNESS TRANSITION DETAIL	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pw_work\PMIDOT\CUSHMANBW\dms36777\	00298-sht-details.dgn	DRAWN -	REVISED -			74	37-(4HB,4HB-1,4HB-2)D	HENRY	148	137	
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -			SCALE: SHEET NO. OF SHEETS STA. TO STA.		CONTRACT NO. 64264			
	PLOT DATE = Wed Aug 05 13:33:01 2009	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

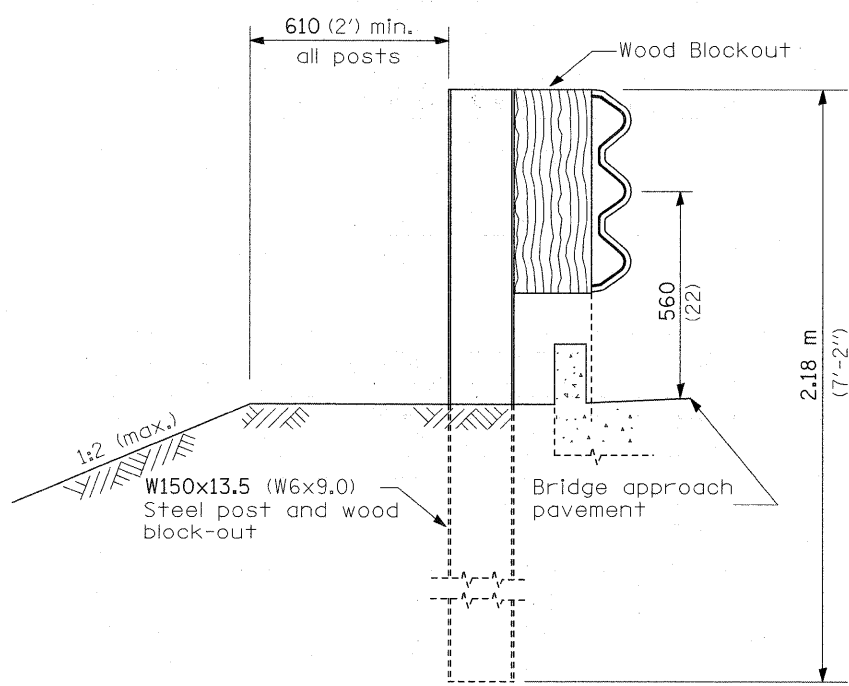
PARAPET OR WINGWALL



PLAN



ELEVATION



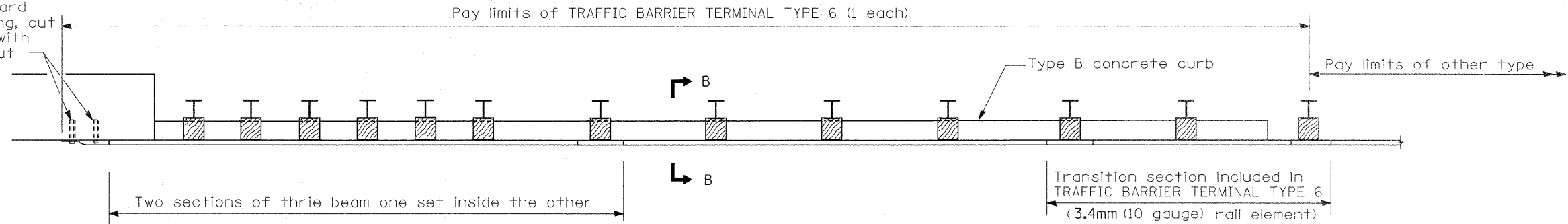
SECTION A-A

GENERAL NOTES

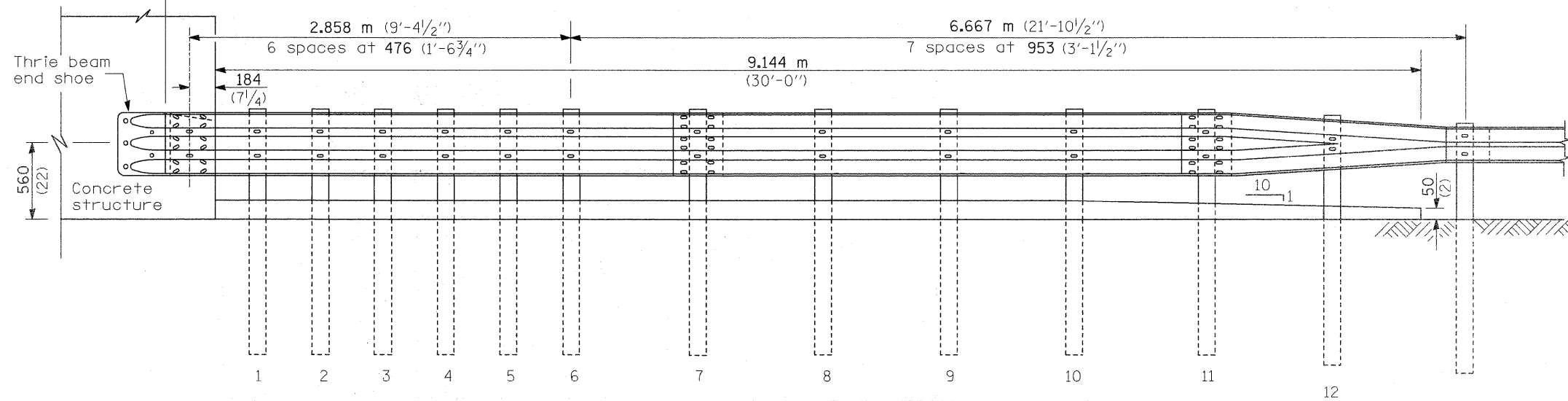
- See Standard 630001 for details of guardrail not shown.
- Thrie beam rail shall be bolted to block-out at all posts.
- See Standard 420401 for details of bridge approach pavement.
- All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).
- All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME =	USER NAME = cushmanbw	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL) DETAIL	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
cr\pwork\PMIDOT\CUSHMANBW\dms36777\200298-sht-detail.dgn	200298-sht-detail.dgn	DRAWN -	REVISED -			74	37-(4HB,4HB-1,4HB-2)D	HENRY	148	138	
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -			SCALE: SHEET NO. 1 OF 3 SHEETS		STA.	TO STA.	CONTRACT NO. 64264	
PLOT DATE = Wed Aug 05 13:33:00 2009		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

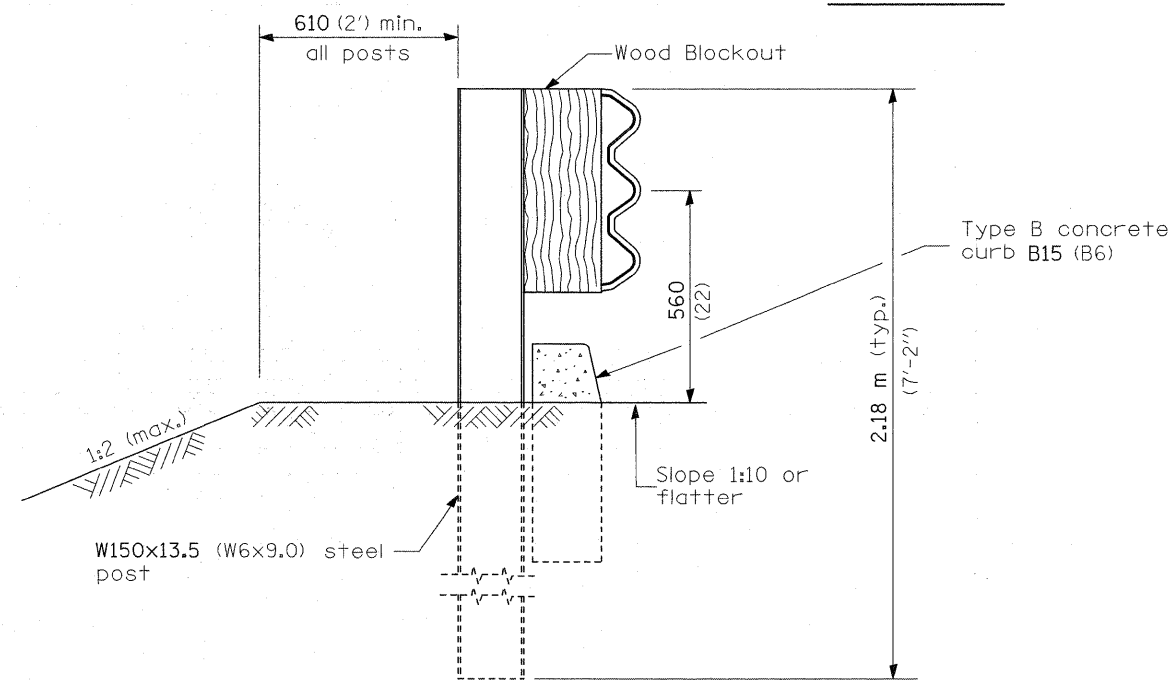
5 Epoxy grouted M20 (3/4) anchor bolts with standard washers. After tightening, cut the anchor bolts flush with nuts, and damage the nut to prevent it from loosening.



PLAN

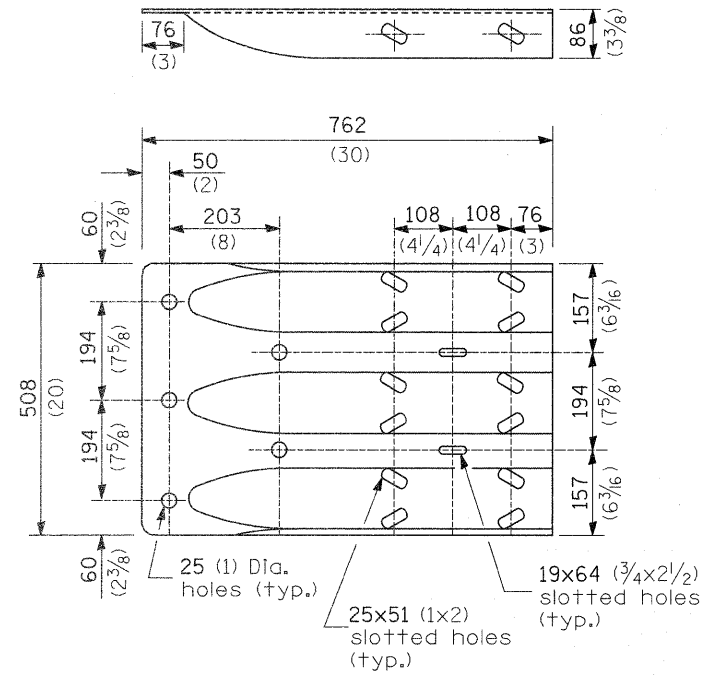


ELEVATION

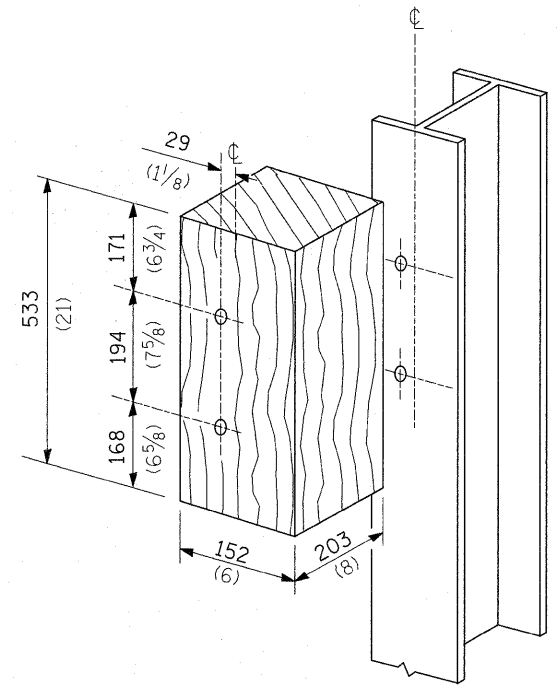


SECTION B-B

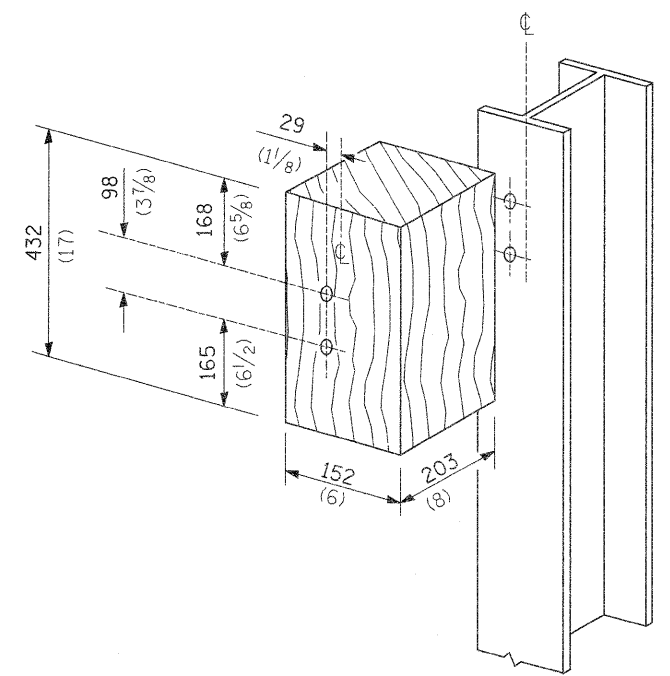
FILE NAME =	USER NAME = cushmanbw	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL) DETAIL			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
01\pwork\PIWIDOT\CUSHMANBW\dms36777\200298-sht-details.dgn		DRAWN -	REVISED -					74	37-(4HB,4HB-1,4HB-2)D	HENRY	148	139
PLOT SCALE = 50.0000 ' / IN.		CHECKED -	REVISED -		CONTRACT NO. 64264							
PLOT DATE = Wed Aug 05 13:33:00 2009		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



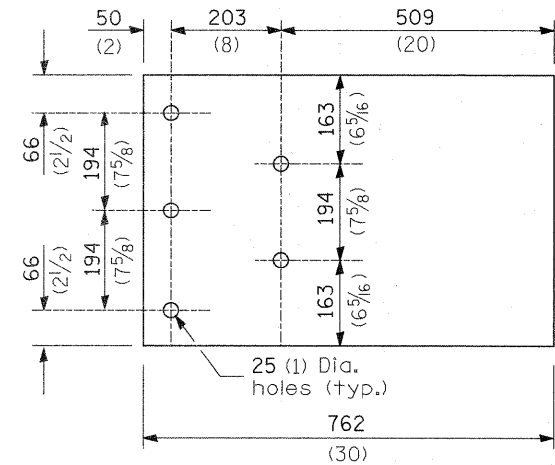
THRIE BEAM END SHOE DETAIL



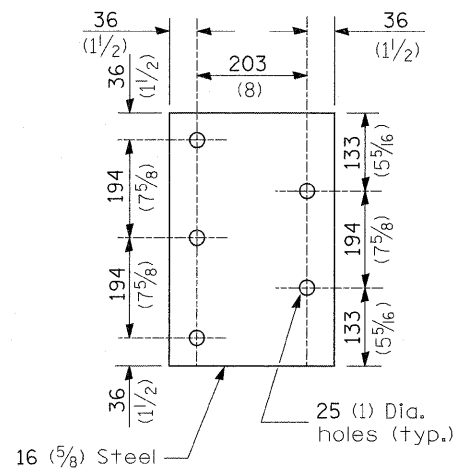
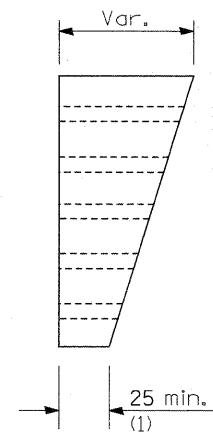
POSTS 1-11 WOOD BLOCKOUT DETAIL



POST 12 WOOD BLOCKOUT DETAIL



PARAPET WOOD BLOCK-OUT DETAIL

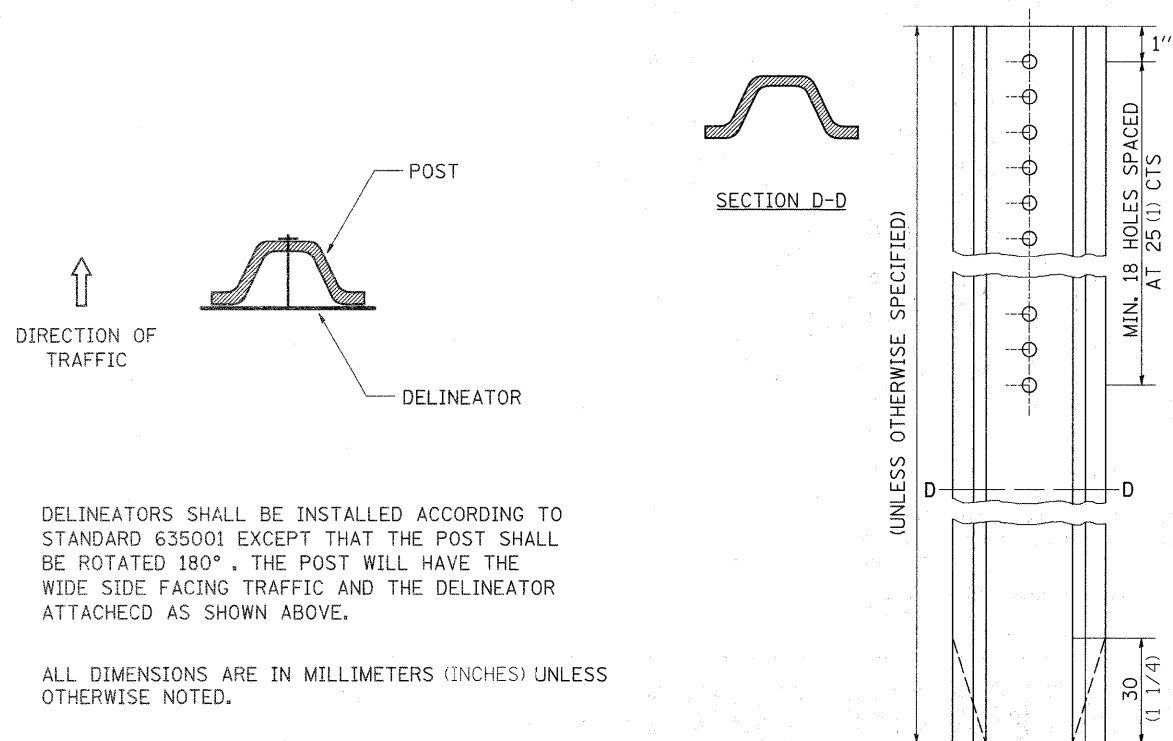


PARAPET STEEL BEARING PLATE DETAIL

(5 each individual 125x125x16 (5x5x5/8) steel plates with centered 25 (1) holes may be substituted for the plate shown.)

FILE NAME =	USER NAME = cushmanbw	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL) DETAIL	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pwwork\PMIDOT\CUSHMANBW\dms36777.d	02298-sht-details.dgn	DRAWN -	REVISED -			74	37-(4HB,4HB-1,4HB-2)D	HENRY	148	140
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -	REVISED -			CONTRACT NO. 64264				
PLOT DATE = Wed Aug 05 13:33:01 2009	DATE -	REVISED -	REVISED -			ILLINOIS FED. AID PROJECT				
					SCALE:	SHEET NO. 3 OF 3 SHEETS	STA.	TO STA.		

DELINEATOR AND POST ORIENTATION



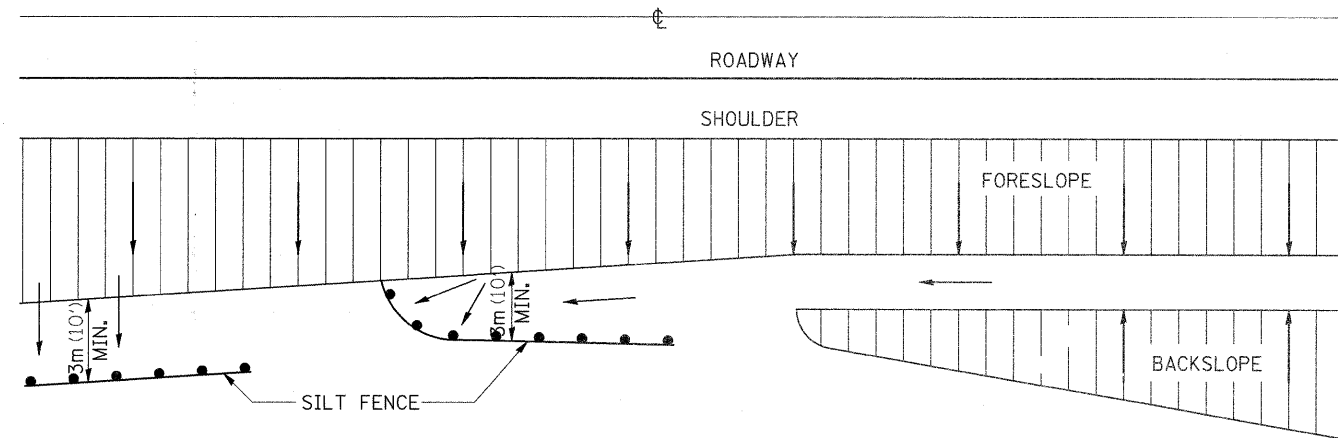
DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180°. THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE DELINEATOR ATTACHED AS SHOWN ABOVE.

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

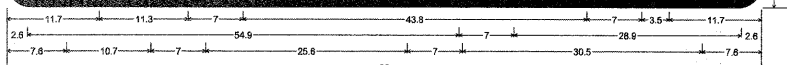
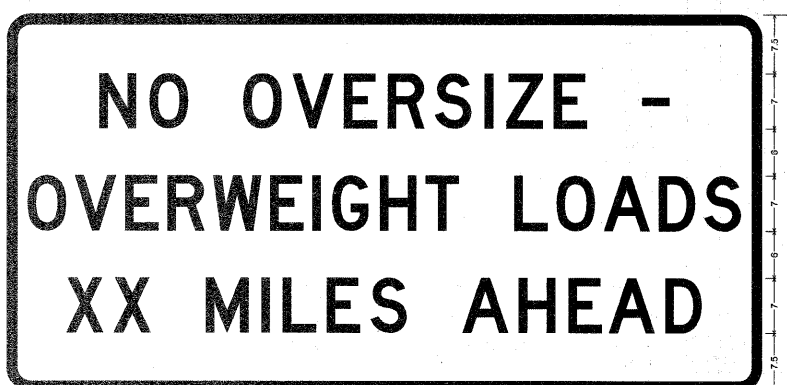
REVISED - 11-01-07

DELINEATOR AND POST ORIENTATION 37.4

EROSION CONTROL DETAILS FOR SILT FENCE



ROAD CLOSED TO OVERSIZED LOADS



Permit Loads - Loads Over 13 Feet, 3.0' Radius, 1.3" Border, Black on Orange;
(NO OVERSIZE -) D. (OVERWEIGHT LOADS) D 80% spacing; (XX MILES AHEAD) D.

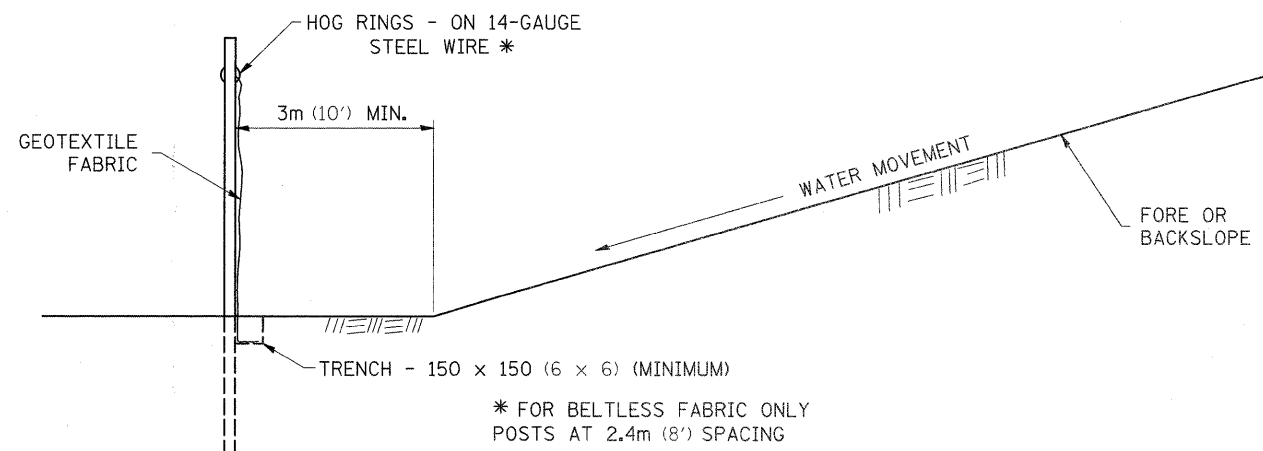
W	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
11.7	18.1	20.0	26.2	28.9	35.4	38.1	44.6	47.3	53.8	56.5	63.0	65.7	72.2	74.9	81.4
2.9	8.5	15.0	20.4	26.2	33.4	38.8	41.3	47.4	53.2	64.5	69.9	75.9	82.9	89.7	
7.8	13.8	25.3	32.3	35.1	40.8	46.2	57.9	65.1	71.4	78.8	83.7				

All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 3-11-09

ROAD CLOSED TO OVERSIZED LOADS 40.4



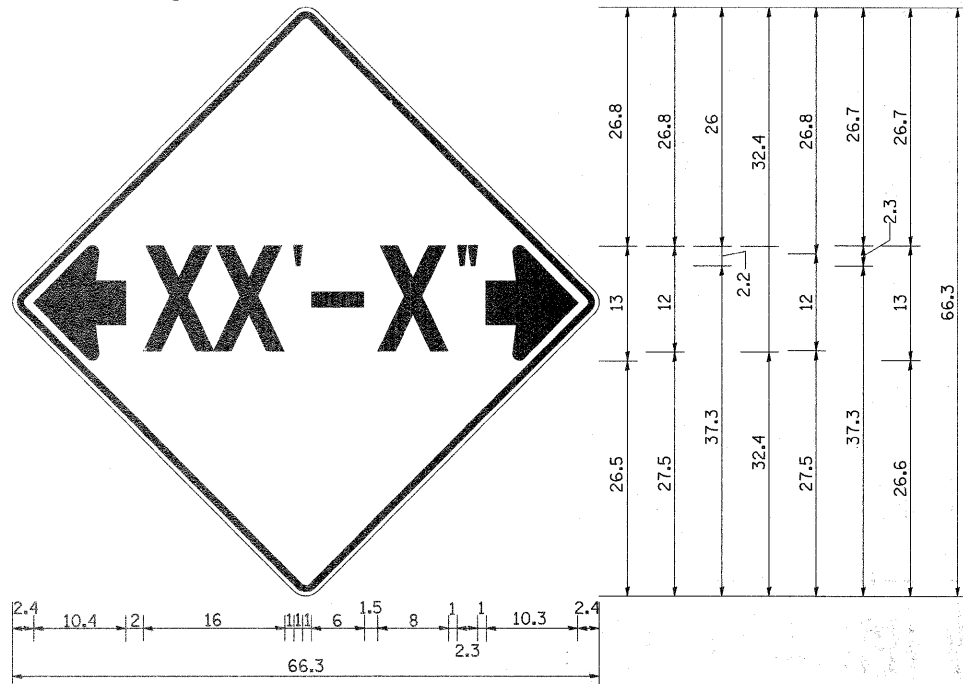
DETAILS OF SILT FENCE

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

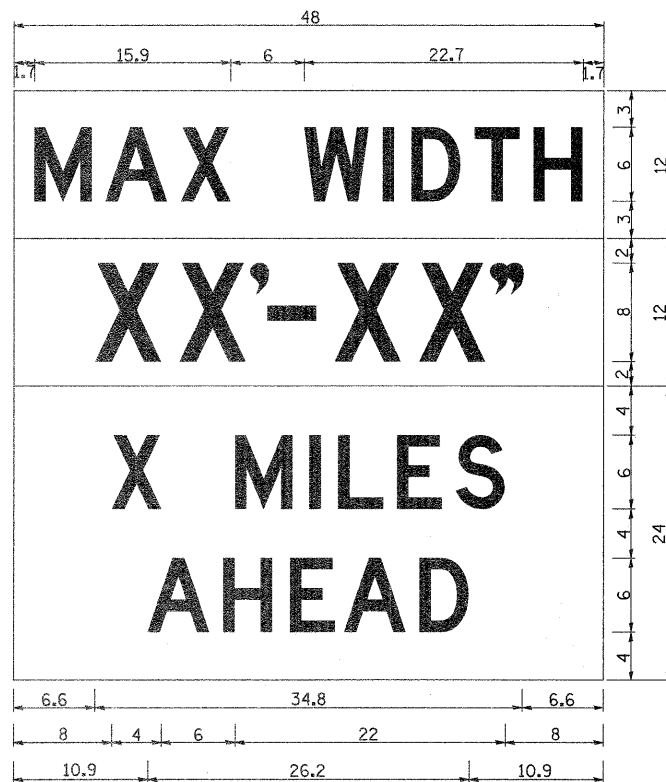
REVISED - 10-22-01	REGION 2 / DISTRICT 2 STANDARD				F.A.I. RTE. 74	SECTION 37-14HB,4HB-1,4HB-2ID	COUNTY HENRY	TOTAL SHEETS 148	SHEET NO. 141
REVISED -	SCALE: 50:0000' / IN	SHEET NO.	OF SHEETS	STA. TO STA.	CONTRACT NO. 64264				
REVISED -	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT								

EROSION CONTROL DETAILS FOR SILT FENCE 29.2

INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES)



NOTES
 W12-2 - Horizontal Clearance Sign
 48.0" across sides, 1.9" Radius,
 0.8" Border, 0.5" Indent, Black on
 Orange; Standard Arrow Custom
 10.4" X 8.1" 180° Black 11 Inch
 D Series Lettering; Standard Arrow
 Custom 10.4" X 8.1" 0°



W12-1103 (Width is 8D);
 No border, Black on White;
 [MAX WIDTH] D;

No border, Black on Orange;
 [XX'-XX''] D;

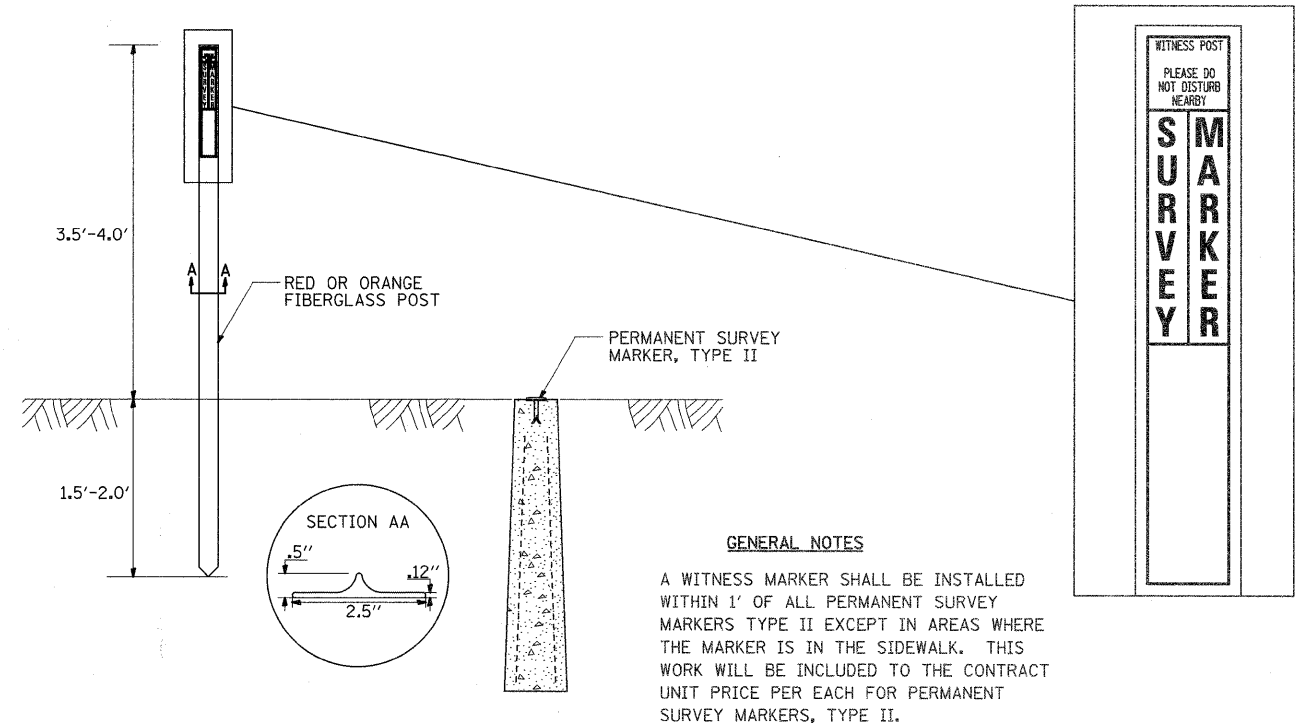
No border, Black on White;
 [X MILES] D; [AHEAD] D;

All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 5-15-09

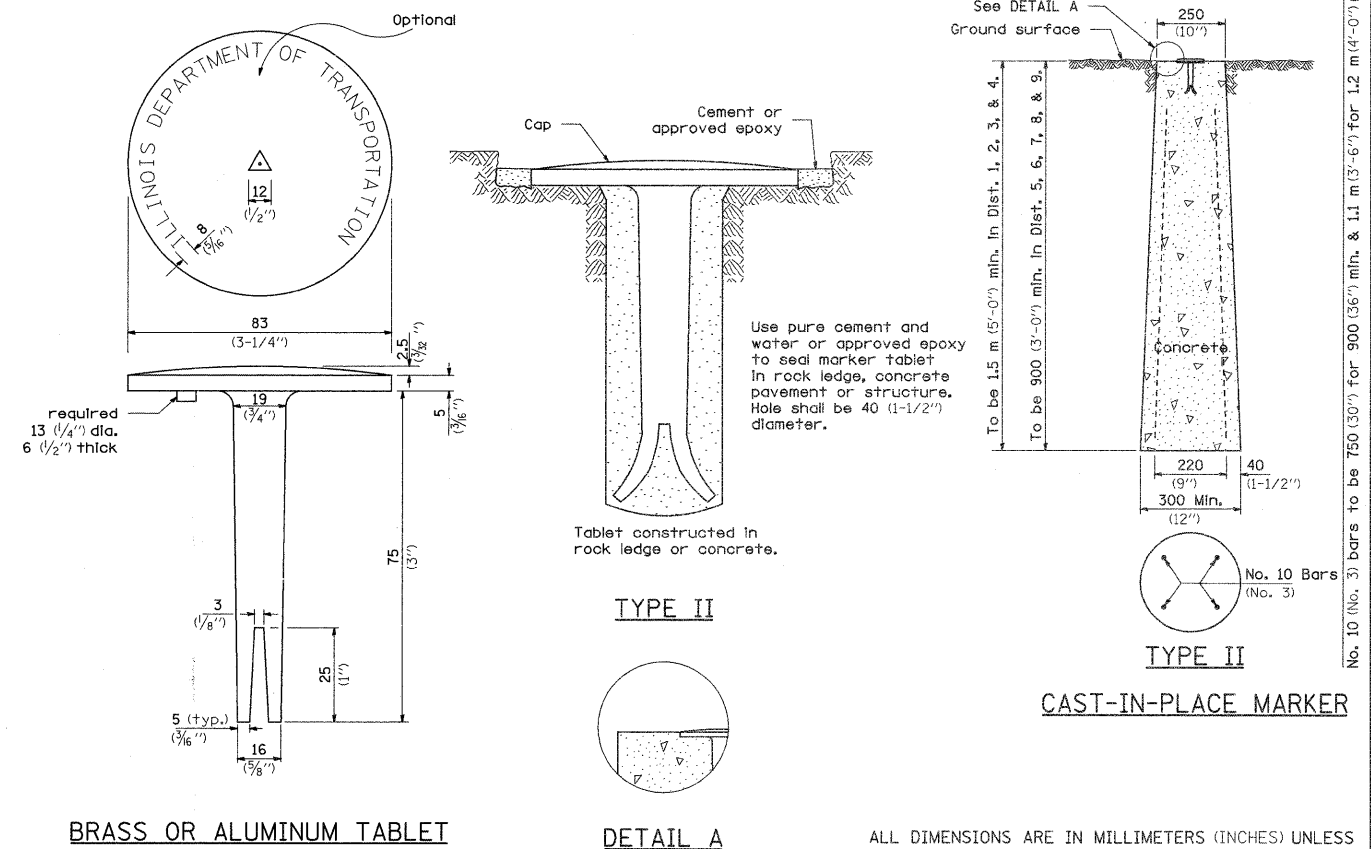
WITNESS MARKER FOR PERMANENT SURVEY MARKERS, TYPE II



GENERAL NOTES

A WITNESS MARKER SHALL BE INSTALLED WITHIN 1' OF ALL PERMANENT SURVEY MARKERS TYPE II EXCEPT IN AREAS WHERE THE MARKER IS IN THE SIDEWALK. THIS WORK WILL BE INCLUDED TO THE CONTRACT UNIT PRICE PER EACH FOR PERMANENT SURVEY MARKERS, TYPE II.

PERMANENT SURVEY MARKERS, TYPE II



BRASS OR ALUMINUM TABLET

DETAIL A

TYPE II CAST-IN-PLACE MARKER

No. 10 (No. 3) bars to be 750 (30") for 900 (36") min. & 1.1 m (3'-6") for 1.2 m (4'-0") min.

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

REVISED - 10-21-08	REGION 2 / DISTRICT 2 STANDARD		F.A.I. RTE. 74	SECTION 37-(4HB,4HB-1,4HB-2)D	COUNTY HENRY	TOTAL SHEETS 148	SHEET NO. 142
REVISED -	SCALE: 50,000' / IN	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		CONTRACT NO. 64264		

STORM WATER POLLUTION PREVENTION PLAN EROSION CONTROL PLAN

THE FOLLOWING PLAN WAS ESTABLISHED AND INCLUDED IN THESE PLANS TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION CONTROL SYSTEMS AND TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE UNDER NPDES.

THE PURPOSE OF THIS PLAN IS TO MINIMIZE SILTATION WITHIN THE CONSTRUCTION ZONE AND TO ELIMINATE SEDIMENTS FROM ENTERING AND LEAVING THE CONSTRUCTION ZONE BY UTILIZING PROPER TEMPORARY EROSION CONTROL SYSTEMS AND PROVIDING GROUND COVER WITHIN A REASONABLE AMOUNT OF TIME.

CERTAIN ITEMS, AS SHOWN IN THIS PLAN AND REFERENCED BY THE LEGEND, SHALL BE PLACED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION. OTHER ITEMS SHALL BE PLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER ON A CASE BY CASE SITUATION RESULTING FROM THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, TIME OF YEAR, AND EXPECTED WEATHER CONDITIONS.

THE CONTRACTOR SHALL PLACE PERMANENT EROSION CONTROL SYSTEMS AND SEEDING WITHIN A REASONABLE AMOUNT OF TIME: THEREFORE, REDUCING THE AMOUNT OF AREA BEING OPEN TO THE POSSIBILITY OF EROSION AND REDUCING THE AMOUNT OF TEMPORARY SEEDING. THE RESIDENT ENGINEER WILL DETERMINE IF TEMPORARY EROSION CONTROL SYSTEMS SHOWN IN THE PLAN CAN BE DELETED, THE SIZE OF THE PROPOSED DITCH CHECKS, THE PROPER METHOD OF INSTALLATION, AND IF ANY ADDITIONAL TEMPORARY EROSION CONTROL SYSTEMS SHALL BE ADDED WHICH ARE NOT INCLUDED IN THE PLANS. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN IN STANDARD 280001 OF THE PLANS.

SITE DESCRIPTION

DESCRIPTION OF CONSTRUCTION ACTIVITY:

THIS PROJECT CONSISTS OF the proposed removal and replacement of two superstructures carrying I-74 over Ophiem Road and two decks on structures carrying I-74 over TR 379B.

Also included is a vertical alignment change on Ophiem Road for approximately 950 feet.

DESCRIPTION OF INTENDED SEQUENCE OF ACTIVITIES:

THE SEQUENCE OF EVENTS ARE AS FOLLOW: CLEARING, EMBANKMENT, EXCAVATION, GRADING AND PAVING. THIS PROJECT WILL BE CONSTRUCTED IN SEGMENTS AS SHOWN IN THE "STAGING PLANS".

TOTAL CONSTRUCTION SITE (CONSTRUCTION LIMIT TO CONSTRUCTION LIMIT) 1.84 ACRES

PROPOSED R.O.W (TOTAL PARCEL AREA) 0 ACRES

DISTURBED BY EXCAVATION (E.O.P TO CONSTRUCTION LIMIT) 1.60 ACRES

SUPPORTING REPORTS AND PLANS

THE FOLLOWING ASSISTED IN DEVELOPING THE EROSION CONTROL PLAN AS REFERENCED DOCUMENTS:

SOIL PROFILE SHEETS, SOILS REPORTS, BORING LOGS
USGS DRAINAGE MAPS, PROJECT PLAN DOCUMENTS

DRAINAGE TRIBUTARIES RECEIVING WATER FROM CONSTRUCTION SITE

tributaries of the Mississippi River

EROSION CONTROLS AND SEDIMENT CONTROL PROCEDURES

STABILIZATION PRACTICES AT THE BEGINNING OF CONSTRUCTION:

PERIMETER EROSION CONTROL SHALL BE PLACED PRIOR TO BEGINNING EARTHWORK.

STABILIZATION PRACTICES DURING CONSTRUCTION:

AS EARTH EXCAVATION AND EMBANKMENT ARE BEING COMPLETED THE CONTRACTOR SHALL PLACE DITCH CHECKS, INLET AND PIPE PROTECTION, EROSION CONTROL BLANKET, AND SEEDING AS STAGES OF THE PROJECT ARE COMPLETED. PERIMETER EROSION BARRIER WILL BE INSTALLED AT ADDITIONAL LOCATIONS AS THE PROJECT PROGRESSES. SEEDING SHALL BE COMPLETED AS SPECIFIED IN THE EROSION CONTROL/SEEDING MOBILIZATION AND TEMPORARY SEEDING SPECIAL PROVISION.

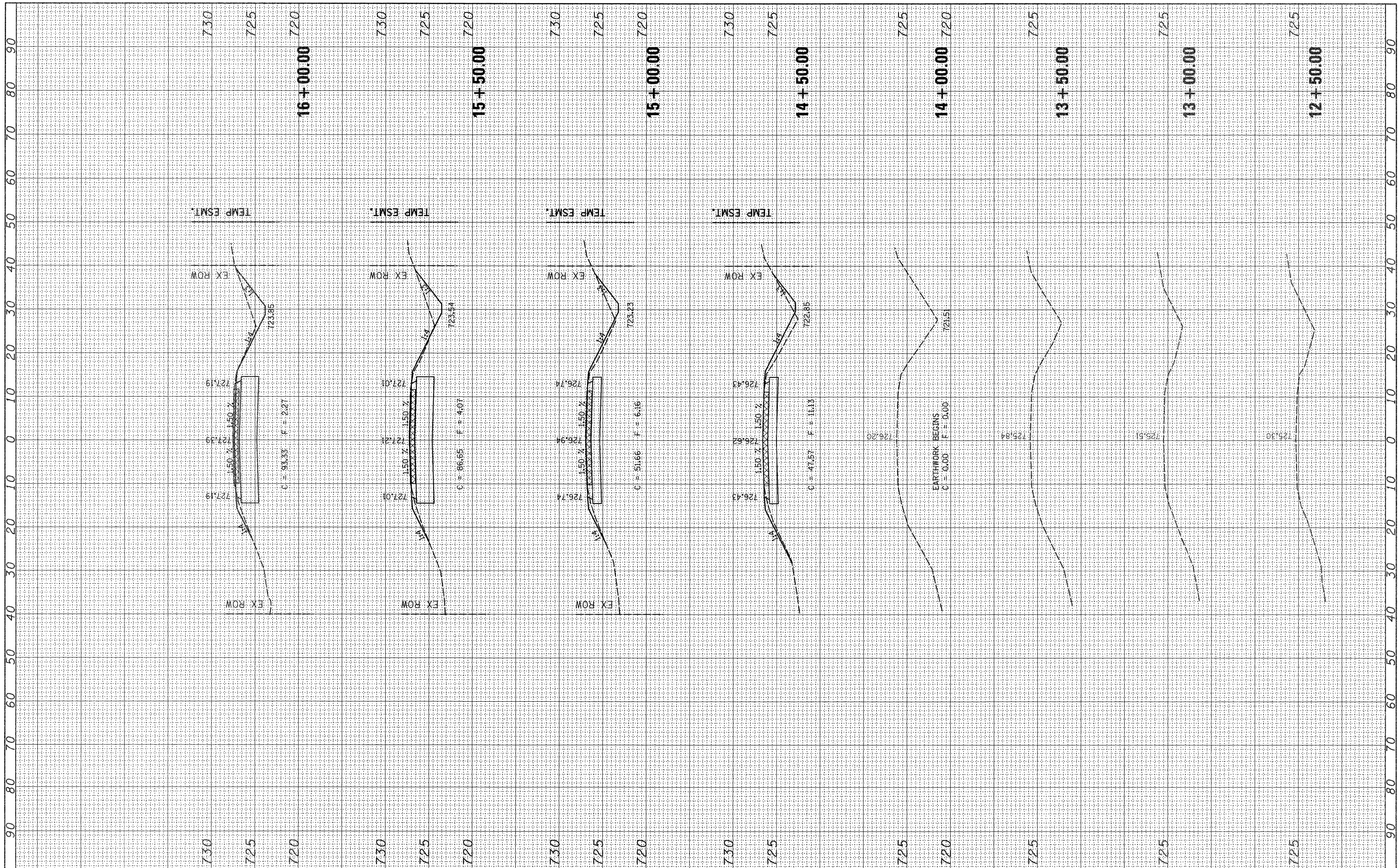
MAINTENANCE AFTER FINAL GRADING

TEMPORARY EROSION CONTROL SYSTEMS SHALL BE LEFT IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY AND ALL PROPOSED TURF AREAS SEEDED AND ESTABLISHED WITH THE PROPER STAND. ONCE PERMANENT EROSION CONTROL SYSTEMS AS PROPOSED IN THE PLANS ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED, CLEANED UP AND DISTURBED TURF RESEDED.

FILE NAME =	USER NAME = cushmanbw	DESIGNED -	REVISED - 5-12-04	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ot\p_w\work\PMIDOT\CUSHMANBW\dms36777	200298-sht-details.dgn	DRAWN -	REVISED -			74	37-14HB,4HB-1,4HB-2ID	HENRY	148	143	
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -			SCALE: SHEET NO. OF SHEETS STA. TO STA.					
	PLOT DATE = Wed Aug 05 13:33:01 2009	DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 64264					

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

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



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USER NAME = cushmanbw
 PLOT SCALE = 10.0000' / IN.
 PLOT DATE = Wed Aug 05 13:36:56 2009

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

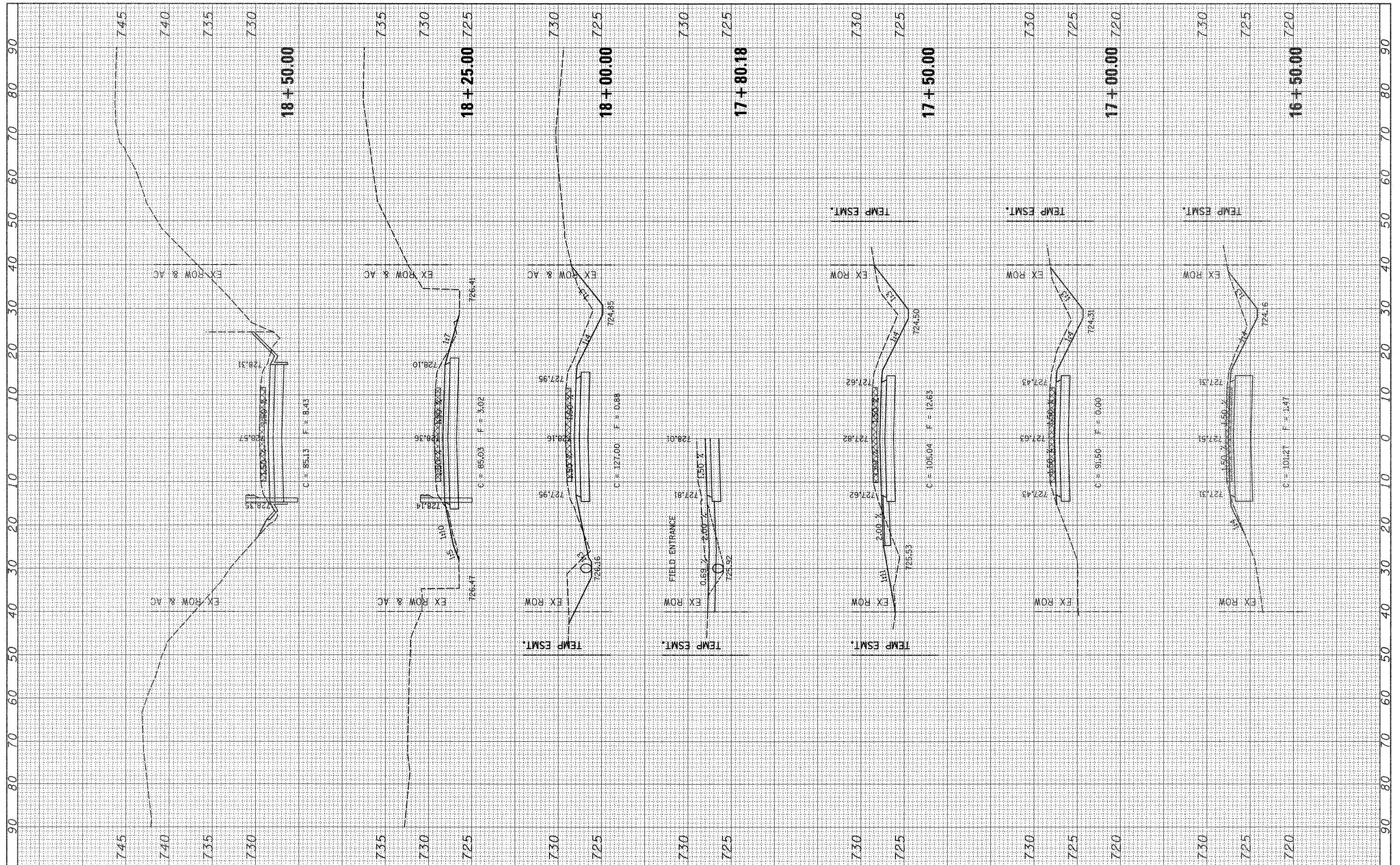
SCALE: SHEET NO. OF SHEETS STA. 12+50.00 TO STA. 16+00.00

**OPHIEM RD
 CROSS SECTIONS**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	37-(4HB, 4HB-1, 4HB-2)D	HENRY	148	144
CONTRACT NO. 64264				
ILLINOIS FED. AID PROJECT				

BY	DATE	BY	DATE
ORIGINAL SURVEY	SURVEYED	FINISH SURVEY	SURVEYED
NOTE BOOK	PLOTTED	NOTE BOOK	PLOTTED
NO.	AREAS CHECKED	NO.	AREAS CHECKED

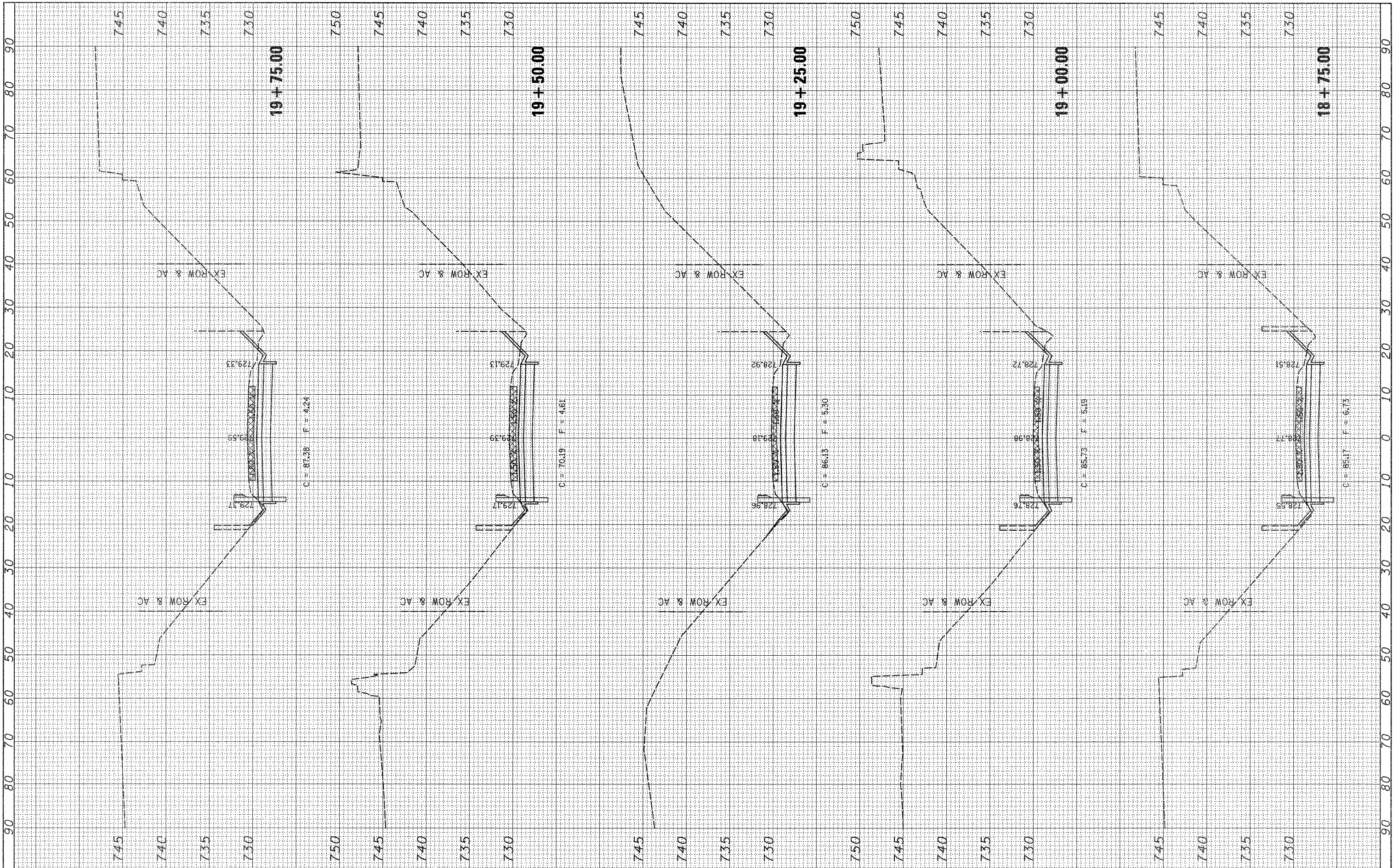
BY	DATE	BY	DATE
ORIGINAL SURVEY	SURVEYED	FINISH SURVEY	SURVEYED
NOTE BOOK	PLOTTED	NOTE BOOK	PLOTTED
NO.	AREAS CHECKED	NO.	AREAS CHECKED



FILE NAME =	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		OPIHEM RD CROSS SECTIONS		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pw_work\p\101\dot\cushmanbw\dms36779\400298.sxdgn	cushmanbw	DRAWN -	REVISED -					74	37-(4HB, 4HB-1, 4HB-2ID)	HENRY	148	145
PLOT SCALE = 10.0000' / IN.		CHECKED -	REVISED -					CONTRACT NO. 64264				
PLOT DATE = Wed Aug 05 13:36:53 2009		DATE -	REVISED -									
								SCALE:	SHEET NO.	OF	SHEETS	STA. 16+50.00

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

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



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DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

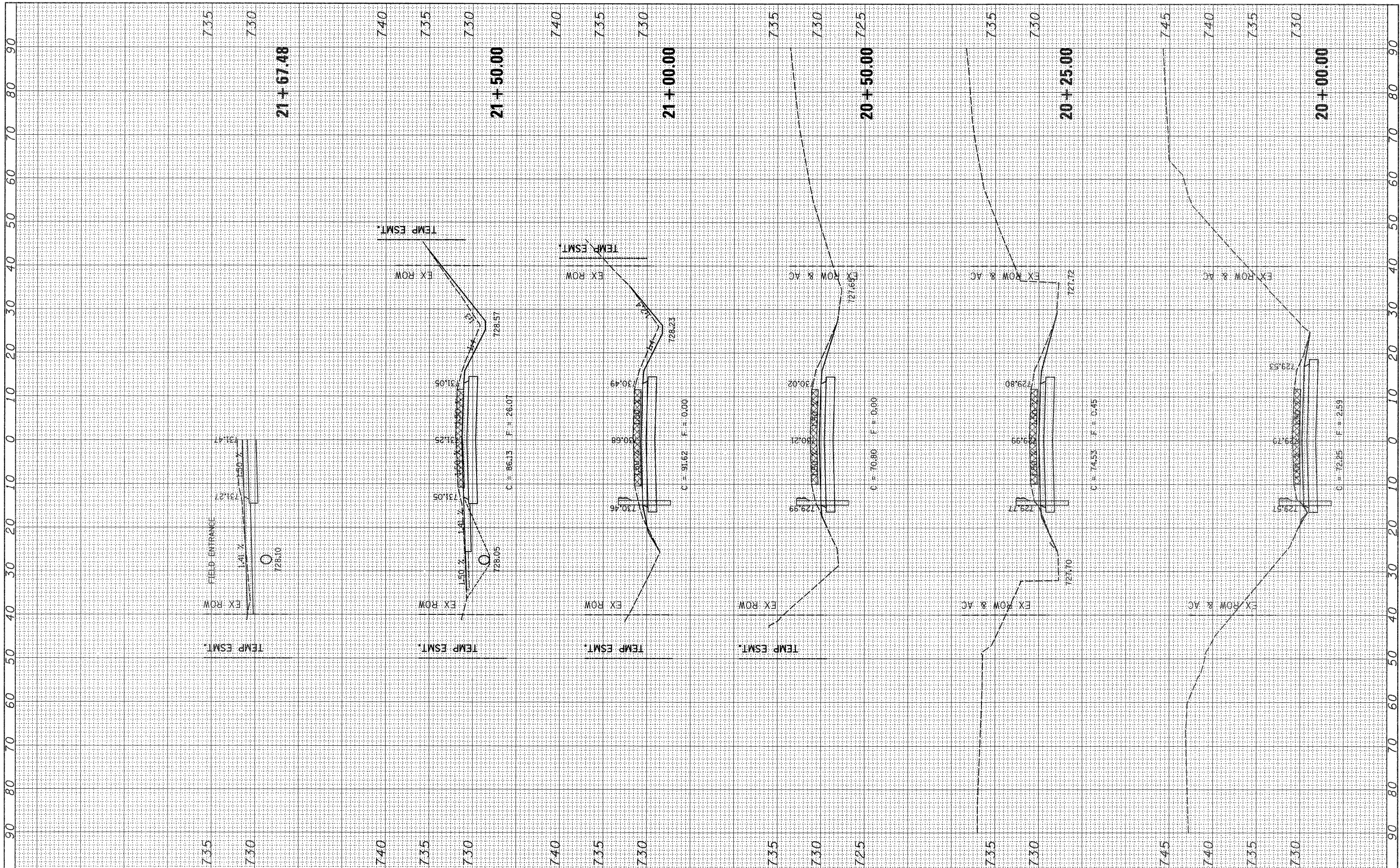
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OPIHEM RD
CROSS SECTIONS**
 SCALE: SHEET NO. OF SHEETS STA. 18+75.00 TO STA. 19+75.00

F.A.T. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	37-14HB, 4HB-1, 4HB-2/D	HENRY	148	146
CONTRACT NO. 64264			ILLINOIS FED. AID PROJECT	

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

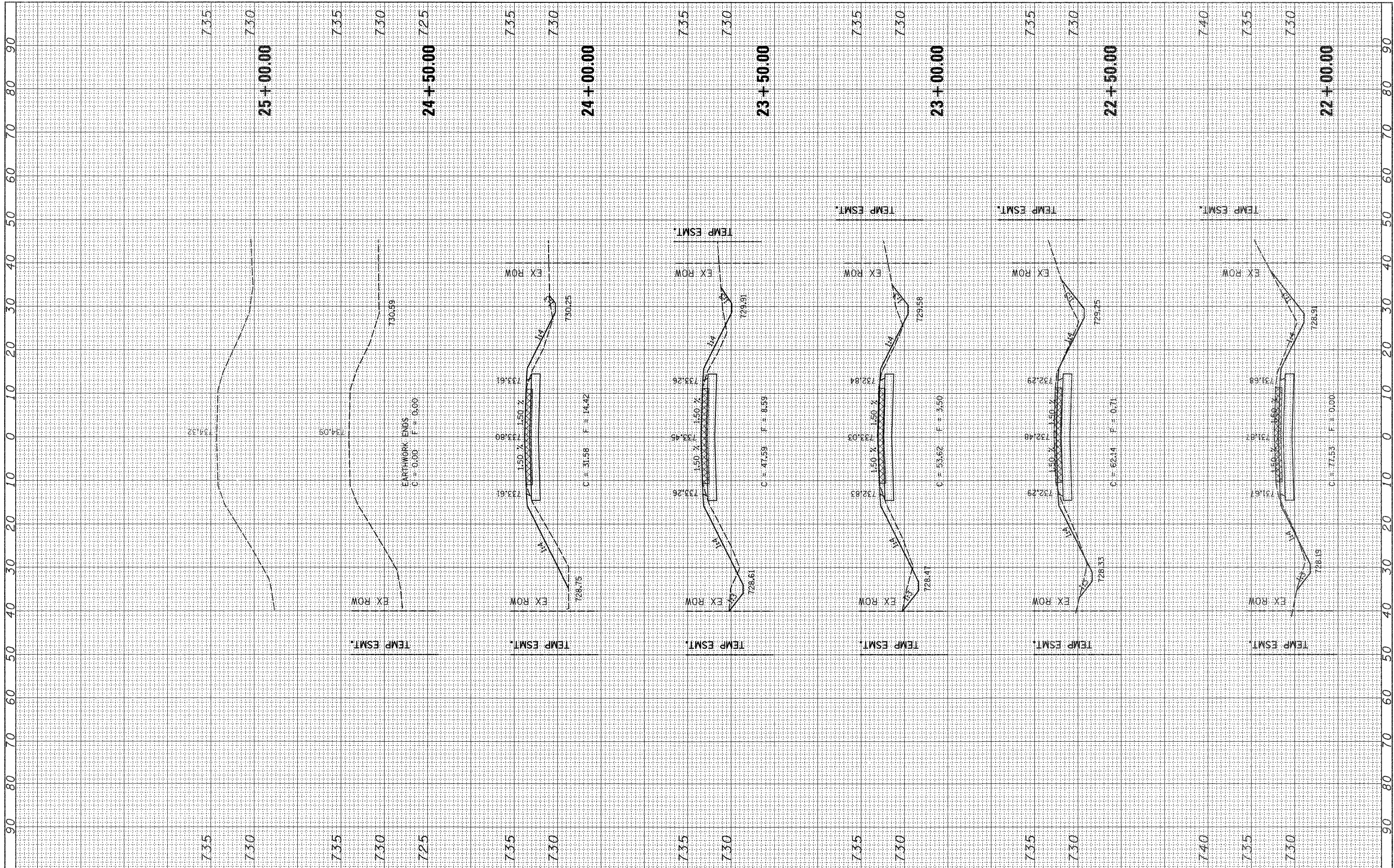
ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
	TEMPLATE		
	AREAS CHECKED		



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FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



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 PLOT DATE = Wed Aug 05 13:36:55 2009

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**OPHIEM RD
 CROSS SECTIONS**

SCALE: SHEET NO. OF SHEETS STA. 22+00.00 TO STA. 25+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	37-(4HB, 4HB-1, 4HB-2)D	HENRY	148	148
CONTRACT NO. 64264				
[ILLINOIS] FED. AID PROJECT				