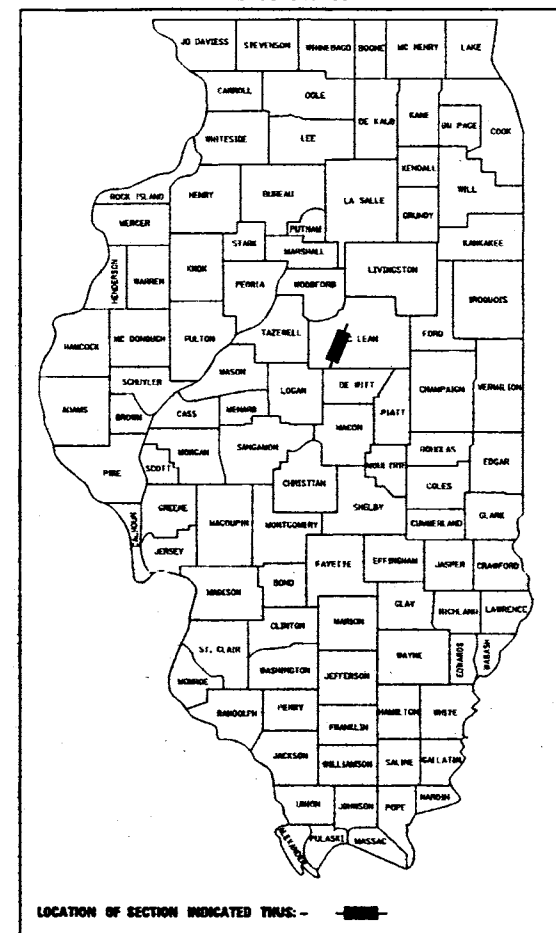


256

99.9%
6-4-2001

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 55	*	MCLEAN	44	1

ILLINOIS
* (57-8) RS, BR
P-93-050-99
D-93-043-00



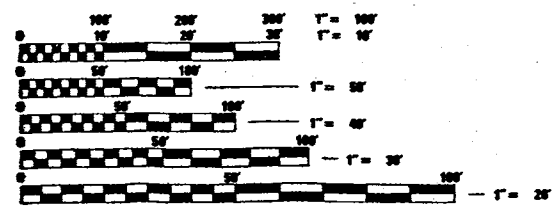
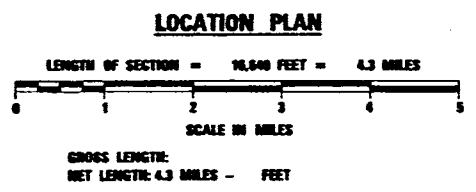
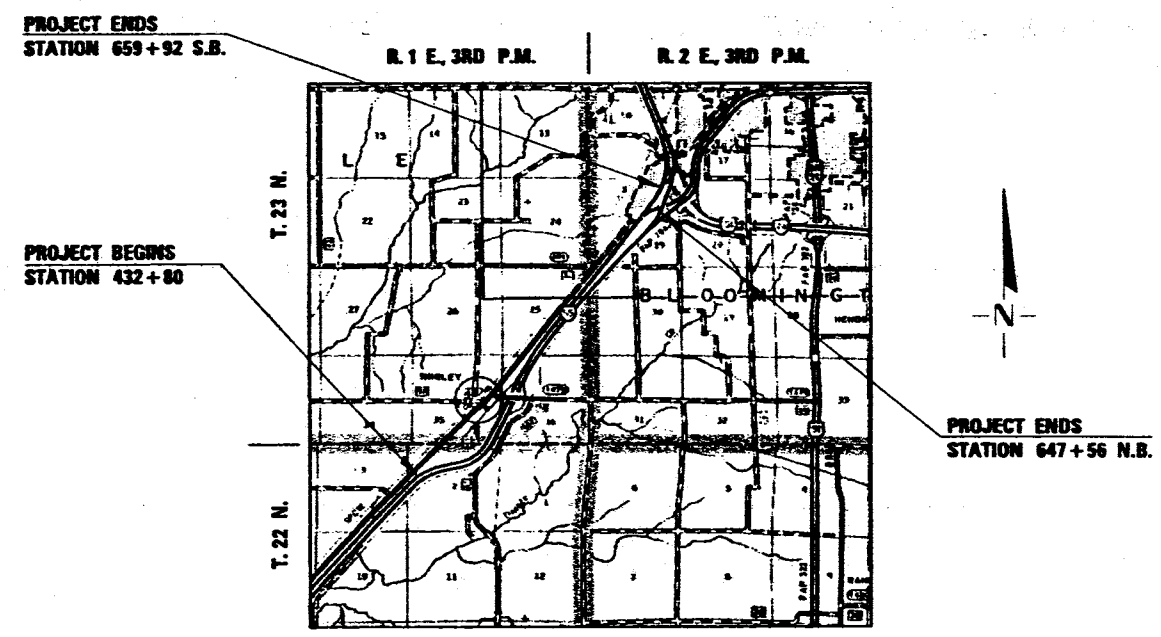
1999 ADT = 24,600
P.C. = 7% S.U. = 2% M.U. = 19%
DESIGN DESIGNATION - INTERSTATE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**
F.A.I. 55 (I-55)
SECTION (57-8) RS, BR
PROJECT ACIM-55-4(160)152
McLEAN COUNTY
C-93-044-00

INDEX OF SHEETS

SHEET NO.	TITLE
1.	COVER SHEET
2.	GENERAL NOTES & STANDARDS
3-4.	SUMMARY OF QUANTITIES
5-8.	TYPICAL SECTIONS
9-11.	SCHEDULES
12-25.	PLAN VIEW
26.	PAVEMENT RAMP MARKING
27-28.	LANE REDUCTION PLANS
29-41.	S.N.: 057-0161
42-44.	DETAILS

057-0161



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

U.L.L.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123

CONTRACT NO. 86993

057-0161

Ozyurt and Stone, Inc.
CONSULTING ENGINEERS
SPRINGFIELD, IL.

ILLINOIS PROFESSIONAL NO. 43408
EXPIRES 11-30-01



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED April 18, 2000

James J. [unintelligible]
DISTRICT ENGINEER

2000

ENGINEER OF PROJECT DEVELOPMENT AND IMPLEMENTATION

May 12, 2000
Michael Rhine
ENGINEER OF DESIGN AND ENVIRONMENT

May 12, 2000
James P. [unintelligible]
DIRECTOR, DIVISION OF HIGHWAYS

3-213

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 55	*	McLEAN	44	2
ROAD DISTRICT	ILLINOIS			

*(57-B) RS, BR

GENERAL NOTES

The thickness of Bituminous Mixtures shown in the on the plans is the nominal thickness. Deviations from the nominal thickness will be permitted when such deviations occur due to irregularities in the existing surface or base on which the bituminous mixture is placed. Be included in the cost of Bituminous Surfaces.

Except as noted on the plans, pavement grades shown are at the top of pavement surfaces.

Aggregate (Prime Coat): FA 20 may be used in addition to the gradations listed in the second paragraph of Article 1003.03(c).

The Engineer shall be the sole judge concerning curing time for the various bituminous lifts.

For stabilization, all Type III Barricades shall require a minimum of four sand bags per barricade.

Where section or subsection monuments are encountered. The Engineer shall be notified before such monuments are removed. The Contractor shall protect and carefully preserve all monuments until an authorized Surveyor or agent has witnessed or otherwise reference their location. The Contractor shall be responsible for having an authorized Surveyor reestablish any section or subsection monuments destroyed by his operations.

Seeding shall not be permitted at any time when the ground is frozen, wet, or in unfillable condition. Locations to be seeded shall be determined by the Engineer.

Short term pavement markings shall be used to outline exit and entrance ramps for the prime coat application and each resurfacing lift.

On existing pavement which may be superelevated, the new bituminous pavement shall be built with the same superlevation unless new superlevation rates are given on the plans.

All elevations referring to U.S.G.S. mean sea level datum.

Abandoned underground utilities that conflict with the construction shall be disposed of outside the limits of the right of way according to Article 202.03 of the Standard Specifications and as directed by the Engineer. This work shall not be paid for separately but shall be included in the cost of Bituminous Shoulder Removal.

Any reference to a standard in these plans shall be interpreted to mean the edition as indicated by the subnumber listed on the index of sheets or the copy of the standard included in these plans.

The following rates of application have been used in calculating plan quantities:

Granular Materials	2.05	Tons/C.Y.
Bituminous Mat (Prime Coat)	0.1	Gal./S.Y.
	0.3	Gal./S.Y.
Aggregate Prime Coat	0.002	Tons/S.Y.
Bituminous Concrete Surf Cse	112	Lbs./S.Y./In
Short Term Pavement Markings	10	Ft./100 Ft. Appl.
Mix for Cracks, Jts & Flaws	0.0003	Tons/S.Y.
Level Binder (Machine Method)	116	Lbs./S.Y./In.

The Contractor's attention is directed to the presence of department owned underground electrical cable within the limits of the proposed improvement. The Contractor shall request the Illinois Department of Transportation in Ottawa (815-434-8505) to locate the underground facilities, providing a minimum of 72 hours notice. The Department is not yet a member of the joint utility locating information for excavators (J.U.L.I.E.) System.

All damage to department owned underground facilities, caused by the Contractor shall be repaired to the satisfaction of the department at the Contractor's expense. This shall include all temporary repairs required to keep the facility operational while material is being obtained to make permanent repairs. Splicing of electrical cables will not be allowed. Electrical cable shall be replaced from pole to pole or controller.

STANDARDS

420001-02	Pavement Joints
420206-02	Typical Entrance Ramp Term - Jointed PCC Ramp Adj to CRC Pavement
420306-02	Typical Exit Ramp Term - Jointed PCC Ramp Adj to CRC Pavement
420701	Pavement Fabric
421001	Reinforcement for C R PCC Pavement
442001-01	Class A Patches
442101-02	Class B Patches
482006-01	Bituminous Shoulder - Adjacent to Rigid Pavement
482011-01	Bit. Shoulder Strips/Shoulders with RS or Widening & RS Projects
482101	Rumble Strip for PCC or Bituminous Shoulders
601001	Sub-Surface Drains
601101	Concrete Headwall for Pipe Drains
606301-02	P.C. Concrete Islands and Medians
610001-01	Shoulder Inlet with Curb
630001-02	Steel Plate Beam Guardrail
631031-02	Traffic Barrier Terminal, Type 6
635001	Delineators
701101	Off-Road Operations, Multilane, Less than 15' Away, Speeds ± 45 MPH
701106	Off-Road Opr., Multilane, More than 15' Away, for Speeds ± 45 MPH
701401	Lane Closure, Multilane, for Speeds ± 45 MPH
701406-02	Lane Closure, Multilane, Day Operation Only, for Speeds ± 45 MPH
701411-01	Lane Closure, Multilane, At Entrance or Exit Ramp, for Speeds ± 45 MPH
701426-01	Lane Closure, Multilane, Intermittent or Moving Operation, for Speeds ± 45 MPH
702001-01	Traffic Control Devices
704001	Temporary Concrete Barrier
720011	Metal Posts (signs, markers & delineators)
780001-01	Typical Pavement Markings
781001-02	Typical Applications, Raised Reflective Pavement Markers
813001	Junction Boxes
814001	Concrete Handholes
846001	Detector Loop Installations
000001-03	Standard Symbols, Abbreviations, and Patterns

GENERAL NOTES & STANDARDS

DESIGNED	G.J.C.
CHECKED	A.R.K.
DRAWN	R.S.J.
CHECKED	G.J.C.

511 WEST CAPITOL SPRINGFIELD, IL 62704 (217) 528-2958	Ozyurt and Stone, Inc. CONSULTING ENGINEERS	JOB #: 9931.2 FILE: NOTES.DGN DATE: 03-10-00
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EXISTING STRUCTURE NO. 057-0161 STA. 50+00

Two Span Continuous Steel Composite Plate Girder with Two Simple Span Precast Prestressed Concrete I-Beam Approach Spans with concrete deck on reinforced concrete vaulted abutments and multi-column pier.
Spans 29'-0", 2 • 106'-0", 29'-0" c.-c. brgs., 68'-0" o.-o. deck
Skew = 24°24'12" Lt.

PROPOSED REHABILITATION WORK

1. Concrete Deck Repair (Full and Partial Depth)
2. Concrete Crack Sealing by Epoxy Injection
3. Install Waterproofing Membrane System on deck roadway and overlay with bituminous concrete roadway surface
4. Replace open expansion joints with 4" Preformed Joint Seal
5. Extend or Eliminate existing drains
6. Substructure Concrete Repair
7. Existing Abutment Bearing Removal and Replacement (Spans 2 & 3)
8. Slope Wall Repair
9. Install Stone Riprap for Embankment Erosion Protection at Abutments

EXISTING BENCH MARK INFORMATION

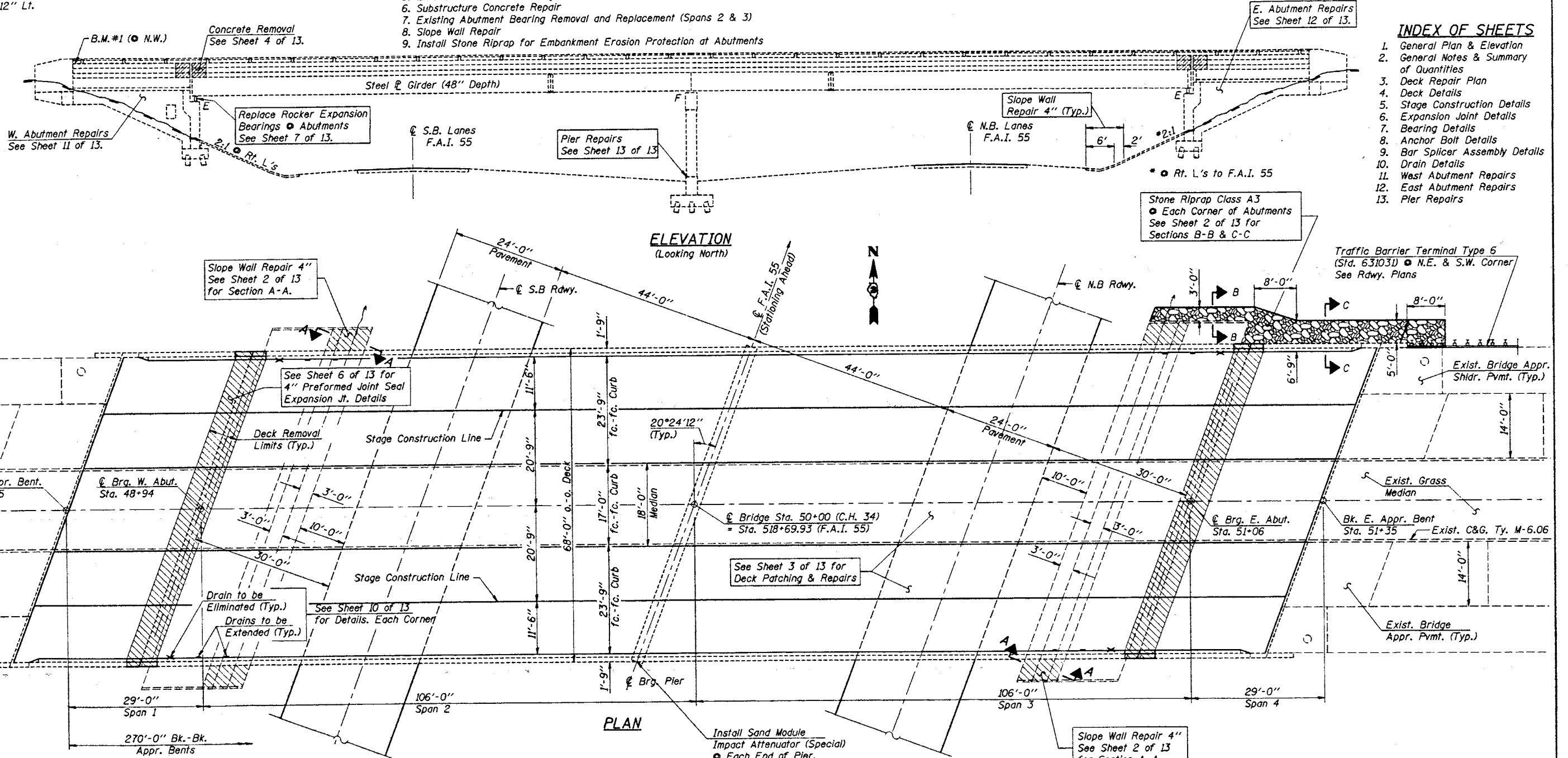
B.M. #1 - Top of parapet wall • face of N.W. wing endpost Elev. 769.28
B.M. #6 - (Found intact as shown in original construction plans) R.R. spike in powerpole 33' Lt. Sta. 80+71 (C.H. 34) Elev. 739.64

F.A.I. RTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	**	McLEAN	44	29
FED. RD. DIST. NO.	ILLINOIS	FED. AID PROJECT		
(57-8) RS, BR				

S.N. 057-0161 - Sheet 1 of 13

INDEX OF SHEETS

1. General Plan & Elevation
2. General Notes & Summary of Quantities
3. Deck Repair Plan
4. Deck Details
5. Stage Construction Details
6. Expansion Joint Details
7. Bearing Details
8. Anchor Bolt Details
9. Bar Splicer Assembly Details
10. Drain Details
11. West Abutment Repairs
12. East Abutment Repairs
13. Pier Repairs



DESIGN STRESSES & LOADING (ORIGINAL CONST.)

Live Load HS20-44 (1969 AASHTO Specification)
Dead Load included additional 25 p.s.f. for future wearing surface.
 $f_c = 1,400$ p.s.i. (Substructure & (GM) Parapet)
 $f_c = 1,200$ p.s.i. (Superstructure)
 $v_c = 75$ p.s.i. (Footings)
 $f_s = 20,000$ p.s.i. (Reinf. Bars Field)
 $f_s = 20,000$ p.s.i. (Structural Steel A-36)
 $n_b = 10$
 $f_c = 5,000$ p.s.i. (Prestressed Beams)
 $f_{c1} = 4,000$ p.s.i. (Prestressed Beams)
 $f_s = 248,000$ p.s.i. (Prestressed Strands)
 $f_{s1} = 173,600$ p.s.i. (Prestressed Strands)

NEW CONSTRUCTION DESIGN SPECIFICATIONS

1996 AASHTO & INTERIMS
LOADING HS-20
 $f_c = 1,400$ p.s.i. (Concrete)
 $f_s = 24,000$ p.s.i. (Reinforcement Bars)
 $f_s = 20,000$ p.s.i. (Structural Steel)(AASHTO M 270, Gr 36)
 Seismic Performance Category (S.P.C.) A
 Bedrock Acceleration Coeff. - (A) = 0.043
 Site Coefficient (S) = 1.2

APPROVED FOR STRUCTURAL ADEQUACY ONLY

Frederick J. Stone, Jr.
ENGINEER OF BRIDGES AND STRUCTURES



Frank J. Stone, Jr. (S-1-00)
ILLINOIS STRUCTURAL NO. 2934

Expires 11/30/00

Rehabilitation Project:

DESIGNED	A.R.K.
CHECKED	F.J.S. & S.F.M.
DRAWN	R.S.J.
CHECKED	A.R.K. & F.J.S.

REVISIONS	
NAME	DATE
A.R.K., R.S.J.	4/27/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
STRUCTURE # 057-0161
F.A.S. ROUTE 1479 (C.H. 34) OVER F.A.I. 55
McLEAN COUNTY

DATE: 5/11/00
511 WEST CAPITOL SPRINGFIELD, IL 62704 (217) 528-2958

Ozyurt and Stone, Inc.
CONSULTING ENGINEERS

DRAWN BY: 99312
CHECKED BY: GPE/DGM
DATE: 03-10-00

GENERAL NOTES

Fasteners shall be high strength bolts. Bolts 3/4"φ, open holes 7/8"φ, unless otherwise noted.

Calculated weight of Structural Steel = 10,020 Pounds

~~Exposure joint protection shall be shop painted with the~~

Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

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

Slope wall shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.

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.

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

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

~~Prior to pouring the new concrete for the deck, all loose rust, loose mill scale and all other loose, detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The removal shall be accomplished with appropriate power tools. Costs shall be included in the unit price for concrete deck slab repair.~~

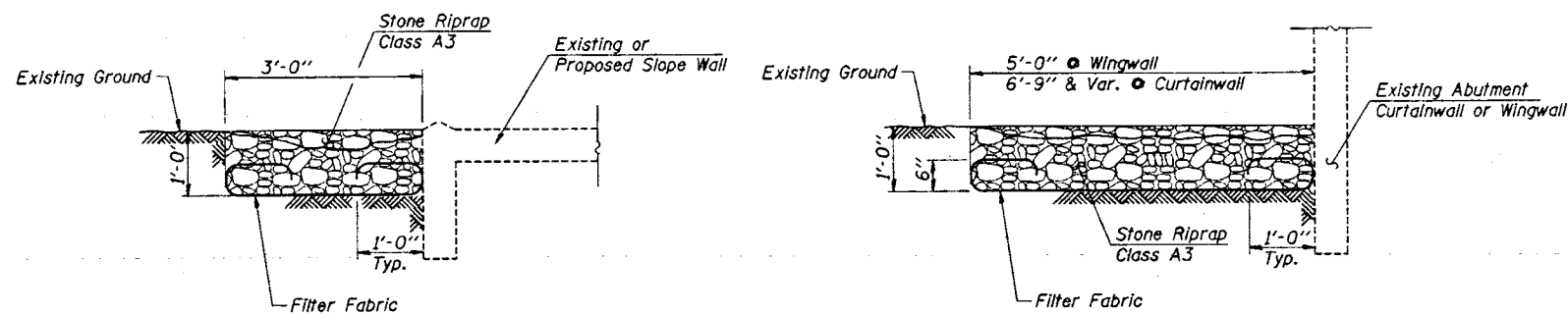
The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.

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

All new structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1.

Existing Structural Steel shall only be cleaned as required by the Special Provision "Cleaning and Painting Adjacent Areas of Existing Steel Structures".

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

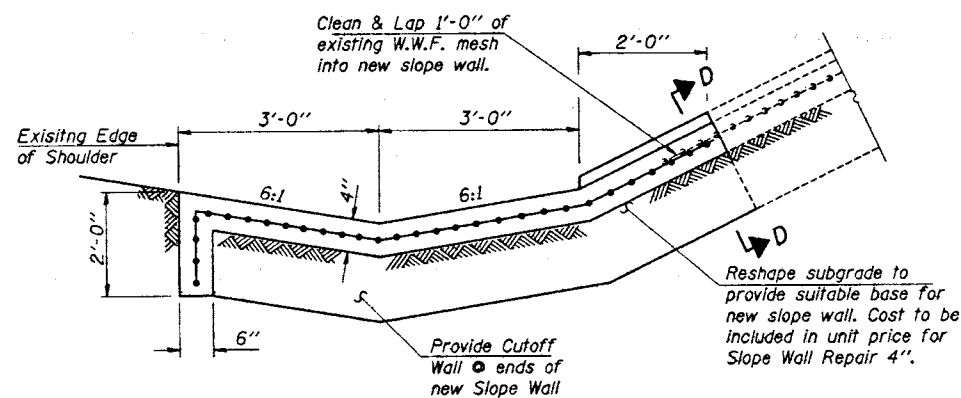


SECTION B-B

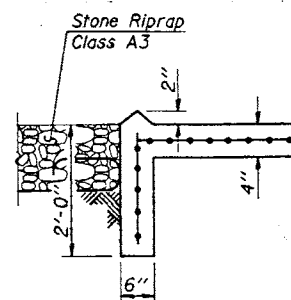
SECTION C-C

STONE RIPRAP SECTIONS

Typical • Abutments



SLOPE WALL SECTION A-A



SECTION D-D

Cutoff Wall

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Filter Fabric, For Use With Riprap	Sq Yd		160	160
Stone Riprap, Class A3	Ton		93	93
Polymerized Bit. Conc. Surf. Crck. Superpave, Mix "D", N90	Ton	115		115
Concrete Removal	Cu Yd	33.3		33.3
Preformed Joint Seal 4"	Foot	141		141
Concrete Structures	Cu Yd		1.8	1.8
Concrete Superstructure	Cu Yd	34.1		34.1
Protective Coat	Sq Yd	91		91
Elastomeric Bearing Assembly, Type 1	Each		18	18
Floor Drain Extension	Each	8		8
Formed Concrete Repair (Depth Equal to or Less Than 5")	Sq Ft	24	28	52
Formed Concrete Repair (Depth Greater Than 5")	Sq Ft		5	5
Furnishing and Erecting Structural Steel	Pound	10,020		10,020
Jack & Remove Existing Bearings	Each		18	18
Reinforcement Bars, Epoxy Coated	Pound	6850	390	7240
Waterproofing Membrane System	Sq Yd	1364		1364
Epoxy Crack Sealing	Foot	280	170	450
Bar Splicers	Each	96		96
Controlled Low-Strength Material	Cu Yd		3.1	3.1
Deck Slab Repair (Full Depth, Type II)	Sq Yd	49		49
Deck Slab Repair (Partial)	Sq Yd	284		284
Slope Wall Repair 4"	Sq Yd		15.3	15.3
Plug Existing Deck Drains	Each	4		4
Waterproofing Membrane System	Sq Yd			

Rehabilitation Project:

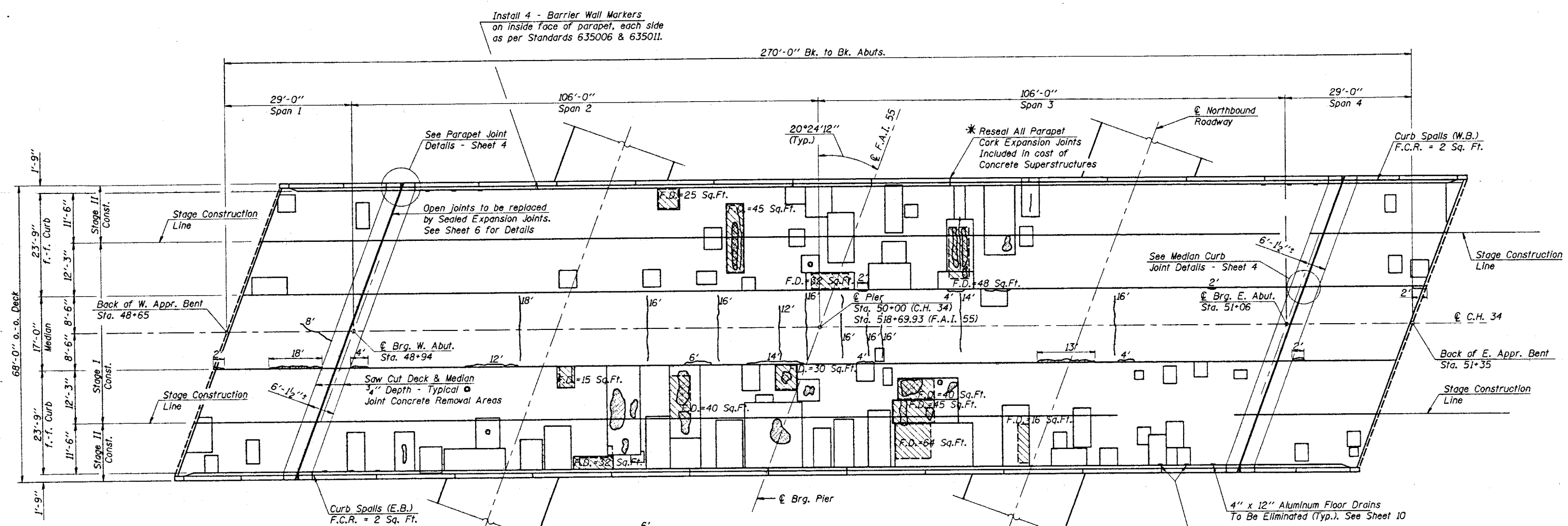
DESIGNED	A.R.K.
CHECKED	F.J.S. & S.F.M.
DRAWN	R.S.J.
CHECKED	A.R.K. & F.J.S.

REVISIONS	
NAME	DATE
A.R.K., R.S.J.	4/27/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL NOTES & SUMMARY OF QUANTITIES
STRUCTURE # 057-0161
F.A.S. ROUTE 1479 (C.H. 34) OVER F.A.I. 55
McLEAN COUNTY

DATE: _____ DRAWN BY: _____
 CHECKED BY: _____
 511 WEST CAPITOL SPRINGFIELD, IL 62704 (217) 528-2958 **Ozyurt and Stone, Inc.** CONSULTING ENGINEERS
 JOB #: 9931.2
 FILE: NOTES2.DGW
 DATE: 03-10-00

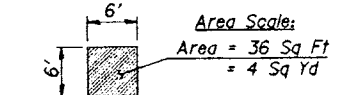
* Two component non-staining gray sealing compound with polysulfide liquid polymer gun-grade with primer.



LEGEND

- Deck Survey Dates: 12-30 & 31-99
- Deck Slab Repair (Partial)
 - Deck Slab Repair (Full Depth) w/ Est. Area
 - Median or Curb Epoxy Crack Sealing w/ Est. Length
 - Existing spall or cold patch area
 - Curb repair area (Formed Concrete Repair (Depth ≤ 5''))

TOP OF DECK PLAN



NOTE: DECK REPAIR AREAS SHOWN ARE ESTIMATED FROM SURVEY WORK 12-30 & 31-99. ACTUAL LOCATIONS OF REPAIRS MADE SHALL BE SHOWN BY THE ENGINEER ON AS BUILT PLANS.

DECK REPAIR - QUANTITY ESTIMATE

LOCATION	DELAM. AREA REPAIR		EPOXY CRACK SEALING	FORMED CONCRETE REPAIR (DEPTH ≤ 5'')
	PARTIAL DEPTH	FULL DEPTH		
WB	89 Sq Yd	17 Sq Yd	---	---
Median	4 Sq Yd	---	210 Ft	20 Sq Ft
EB	191 Sq Yd	32 Sq Yd	---	---
Parapet WB	---	---	50 Ft	2 Sq Ft
Parapet EB	---	---	20 Ft	2 Sq Ft
TOTALS	284 Sq Yd	49 Sq Yd	280 Ft	24 Sq Ft

NOTE TOTAL RDWY & MEDIAN AREA = 1925.4 Sq Yd
 % DELAMINATED AREA = 17.3%

Rehabilitation Project

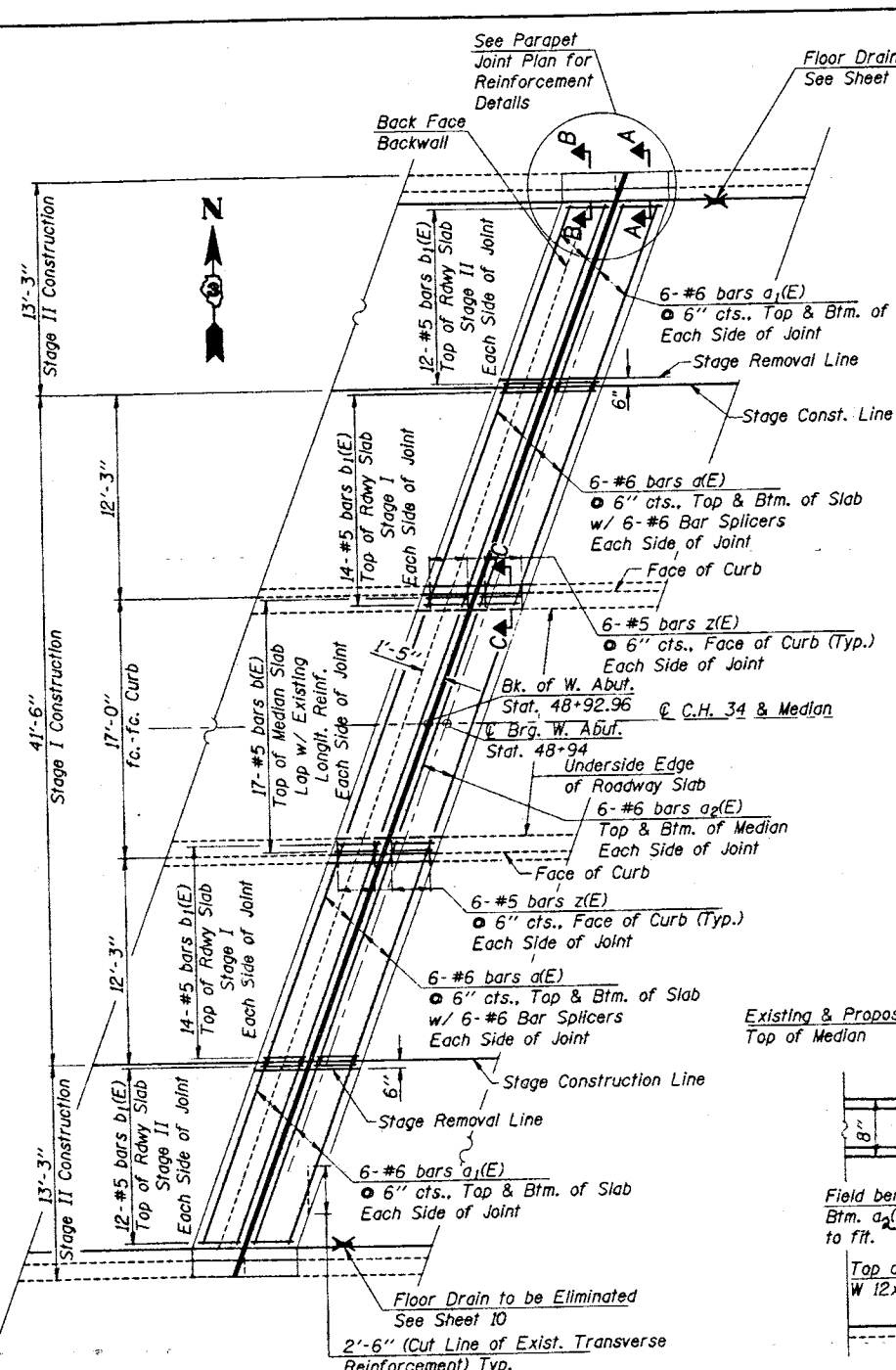
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CHECKED	F.J.S. & S.F.M.
DRAWN	R.S.J.
CHECKED	F.J.S. & A.R.K.

REVISIONS

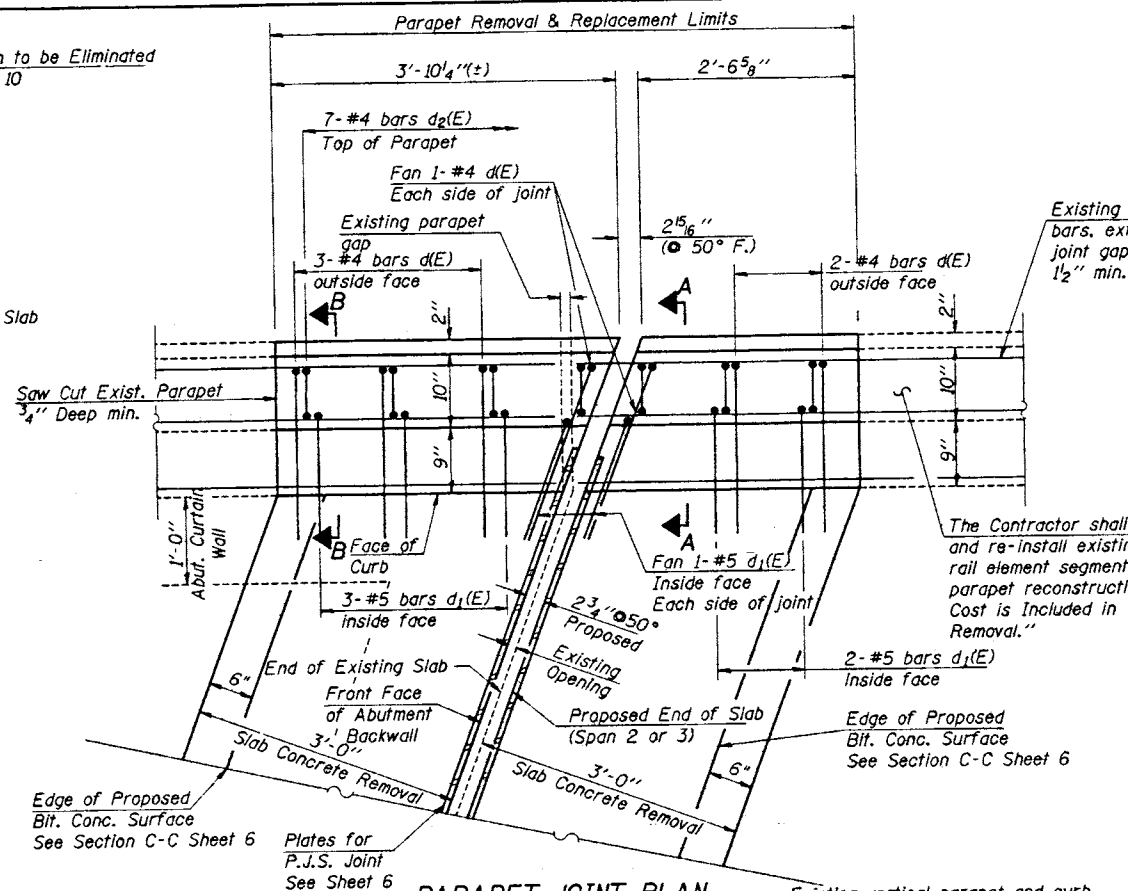
NAME	DATE
A.R.K., R.S.J.	4/27/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK REPAIR PLAN
 STRUCTURE #057-0161
 F.A.S. ROUTE 1479 (C.H. 34) OVER F.A.I. 55
 McLEAN COUNTY

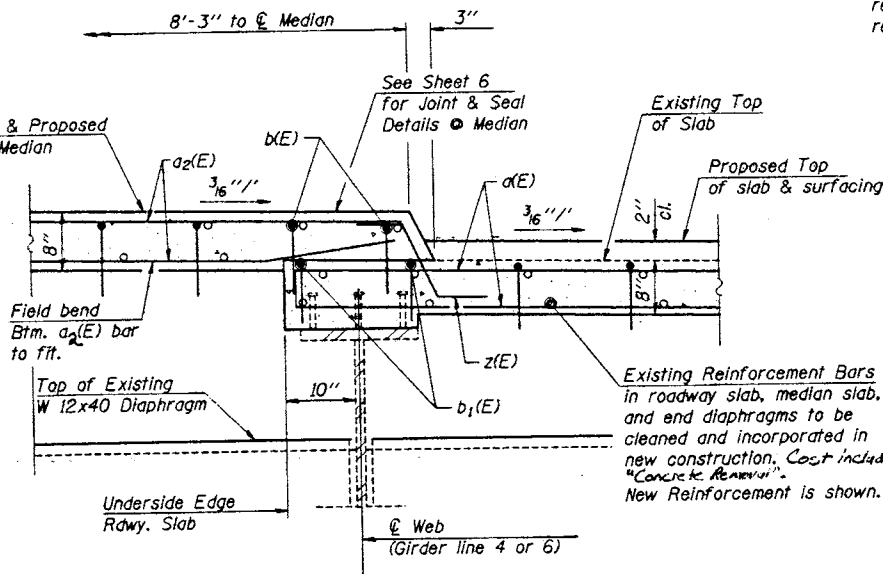
DATE: _____ DRAWN BY: _____
 CHECKED BY: _____
 511 WEST CAPITOL SPRINGFIELD, IL 62704 (217) 528-2958
Ozyurt and Stone, Inc.
 CONSULTING ENGINEERS
 JOB #: 99312
 FILE: DECKPLN.DGN
 DATE: 03-10-00



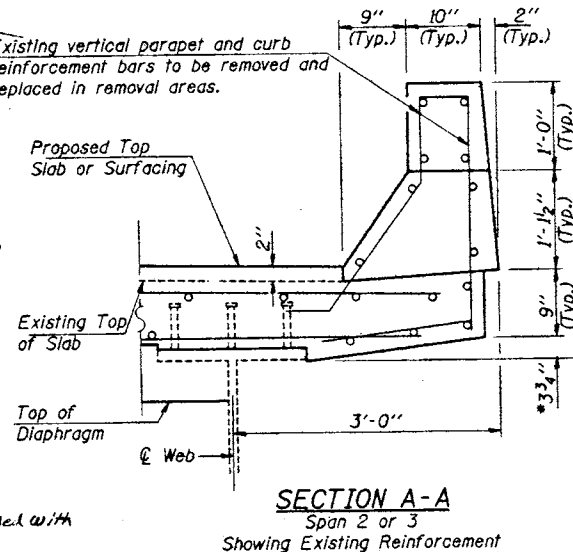
JOINT PLAN SHOWING REINFORCEMENT
W. Abut. Joint Shown - E. Abut. Similar



PARAPET JOINT PLAN

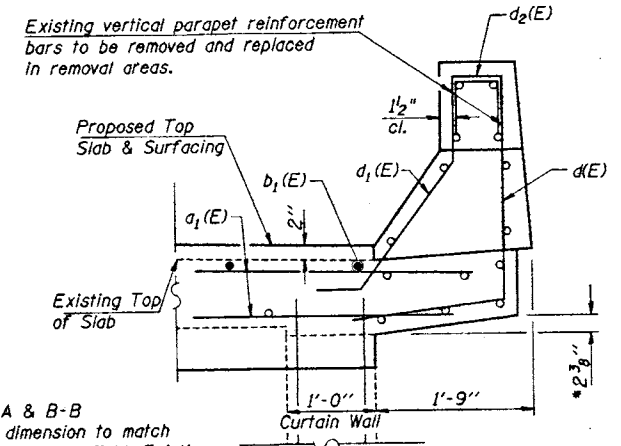


SECTION C-C



SECTION A-A

Span 2 or 3
Showing Existing Reinforcement



SECTION B-B

Span 1 or 4
Showing Proposed Reinforcement

SUPERSTRUCTURE BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
a(E)	96	#6	14'-7"	—
a1(E)	96	#6	13'-9"	—
a2(E)	48	#6	17'-10"	—
b(E)	68	#5	4'-5"	┌
b1(E)	208	#5	3'-11"	┌
d(E)	28	#4	4'-7"	┌
d1(E)	28	#5	3'-5"	┌
d2(E)	28	#4	2'-1"	┌
z(E)	48	#5	1'-10"	┌

Concrete Removal	Cu. Yd.	33.3
Concrete Superstructure	Cu. Yd.	34.1
Reinforcement Bars, Epoxy Coated	Pound	6850
Bar Splicers	Each	96
Protective Coat	Sq. Yd.	91
Waterproofing Membrane System	Sq. Yd.	1364
Polymerized Bit. Conc. Surf. Coat., Superf. Mix, M-80	Ton	115

Work this sheet with sheets 3 & 6.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK DETAILS
STRUCTURE # 057-0161
F.A.S. ROUTE 1479 (C.H. 34) OVER F.A.I. 55
McLEAN COUNTY

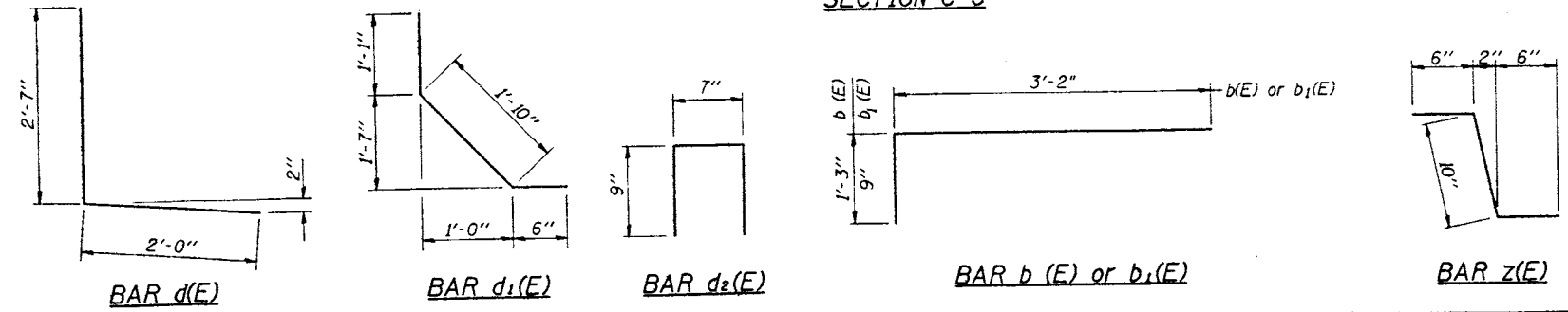
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DRAWN BY: _____
CHECKED BY: _____

511 WEST CAPITOL SPRINGFIELD, IL 62704 (217) 528-2958
Ozyurt and Stone, Inc.
CONSULTING ENGINEERS

JOB #: 9931.2
FILE: REINFDTL.DGN
DATE: 03-10-00

Rehabilitation Project

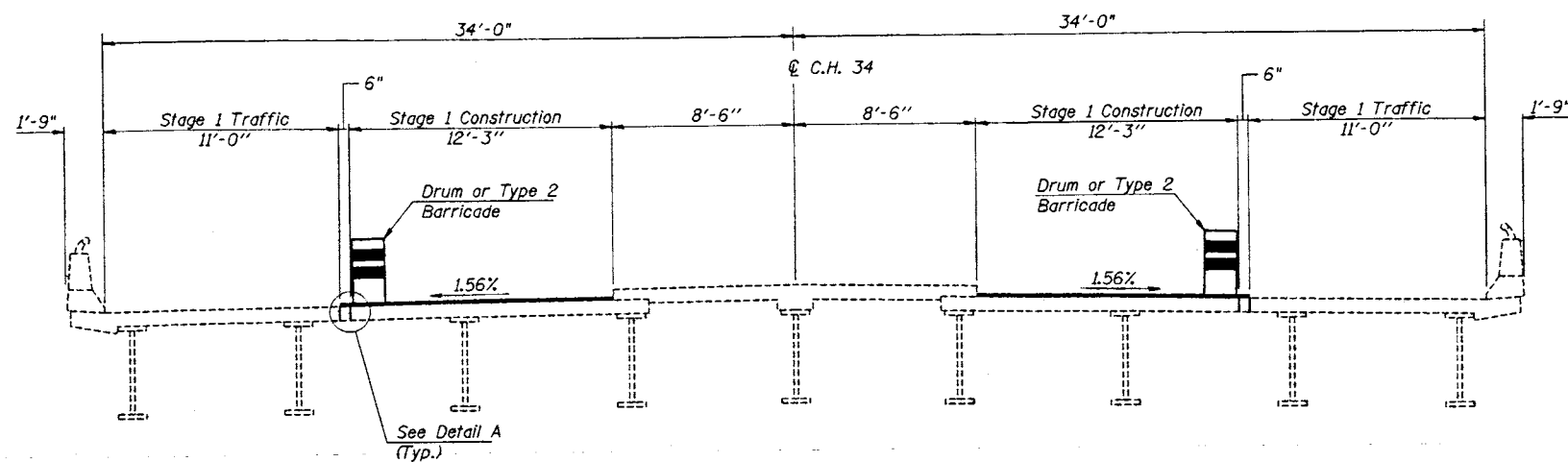
DESIGNED	A.R.K.
CHECKED	F.J.S. & S.F.M.
DRAWN	R.S.J.
CHECKED	A.R.K. & F.J.S.



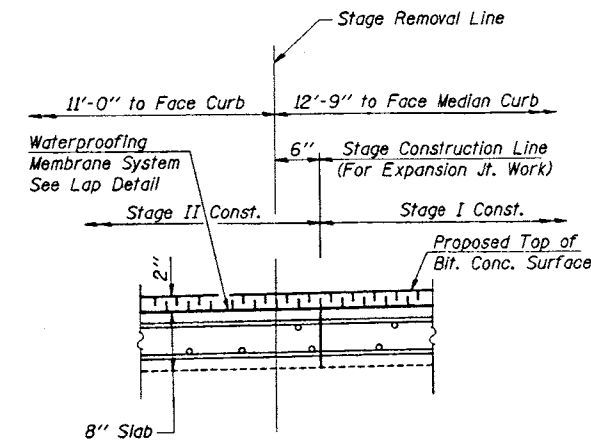
REVISIONS

NO.	NAME	DATE
1	A.R.K., R.S.J.	4/27/00

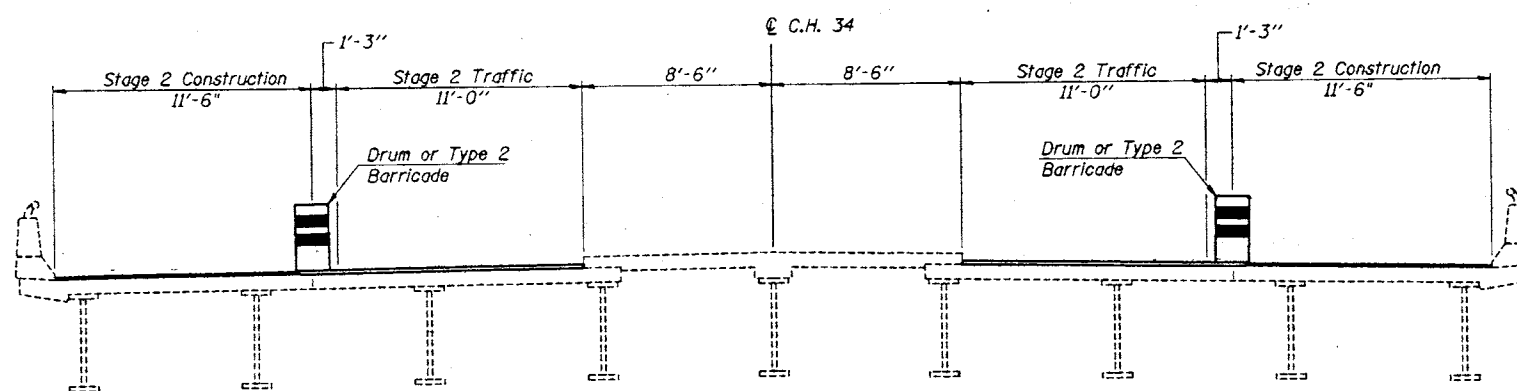
F.A.I. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	**	McLEAN	44	33
FED. RD. DIST. NO.	ILLINOIS	FED. AID PROJECT		
** (57-8) RS. BR				
S.N. 057-0161 - Sheet 5 of 13				



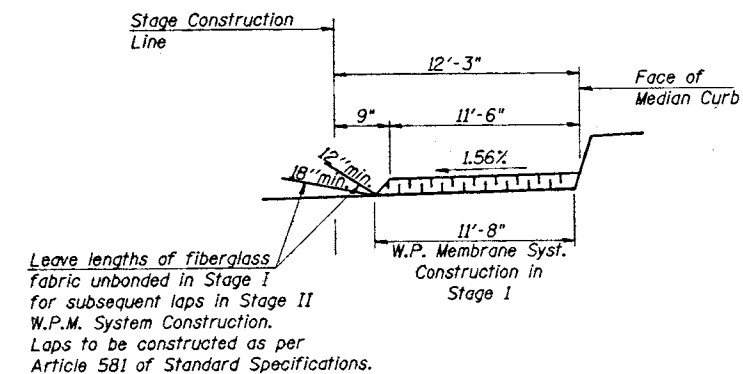
STAGE 1 CONSTRUCTION
S.N. 057-0161



DETAIL A



STAGE 2 CONSTRUCTION
S.N. 057-0161



W.P.M. LAP DETAIL

See Roadway Plan Sheets 27 & 28 of 44
for Lane Reduction Plans Over S.N. 057-0161.

Rehabilitation Project:

DESIGNED	A.R.K.
CHECKED	F.J.S. & S.F.M.
DRAWN	R.S.J.
CHECKED	A.R.K. & F.J.S.

REVISIONS	
NAME	DATE
A.R.K., R.S.J.	4/27/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
STAGE CONSTRUCTION DETAILS
STRUCTURE # 057-0161
F.A.S. ROUTE 1479 (C.H. 34) OVER F.A.I. 55
McLEAN COUNTY

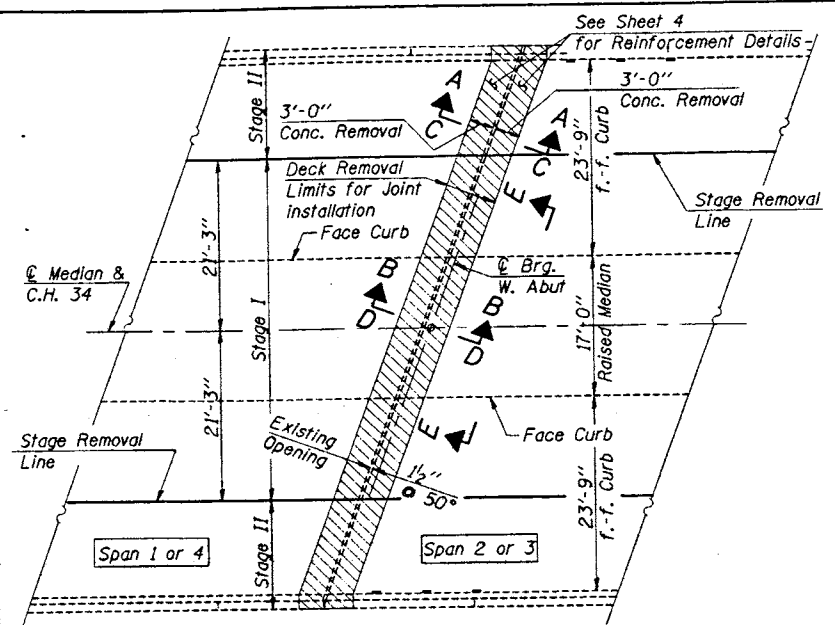
DATE: _____ DRAWN BY: _____
 CHECKED BY: _____

511 WEST CAPITOL SPRINGFIELD, IL 62704 (217) 528-2958
Ozyurt and Stone, Inc.
 CONSULTING ENGINEERS

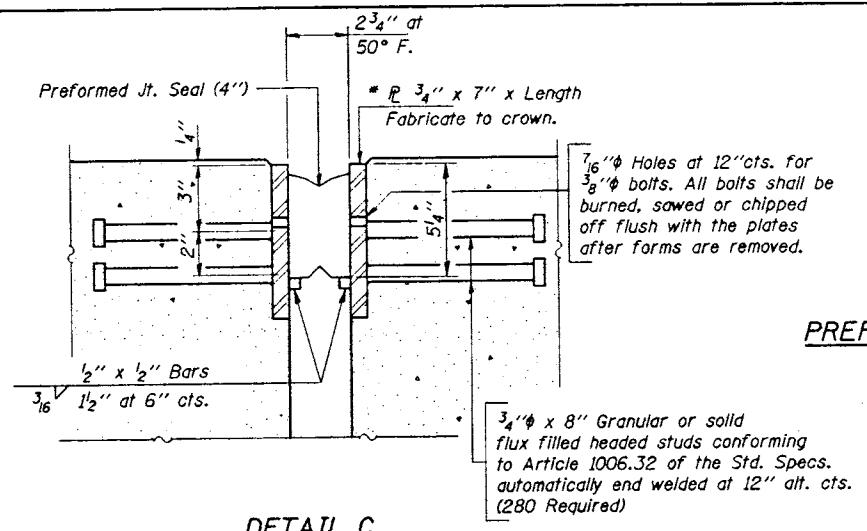
JOB #: 99312
 FILE: STAGE.DGN
 DATE: 03-10-00

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 55	••	McLEAN	44	34
ROAD DISTRICT	ILLINOIS			

•• (57-8) RS. BR
S.N. 057-0161 - Sheet 6 of 13



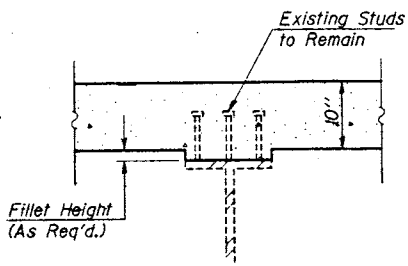
JOINT PLAN - SHOWING REMOVAL
(W. Abut Shown)



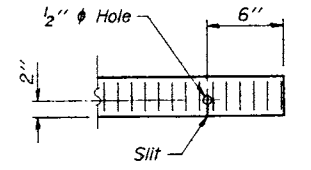
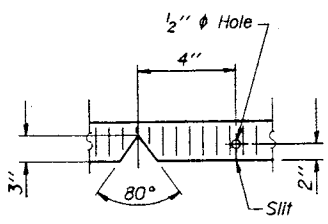
DETAIL C

* Furnish lengths in segments as required for stage construction. Maximum space between installed segments shall be 3/16". Seal space with Silicone Sealant suitable for Structural Steel.

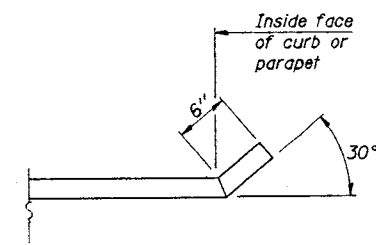
PREFORMED JOINT SEAL (4'') SEAL CUT-OUT AT MEDIAN CURB



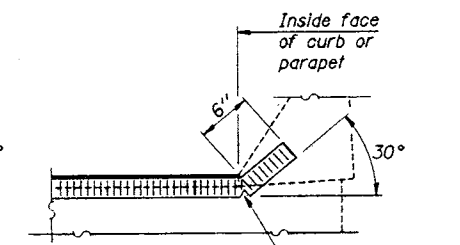
SECTION F-F
Girder Fillet Detail



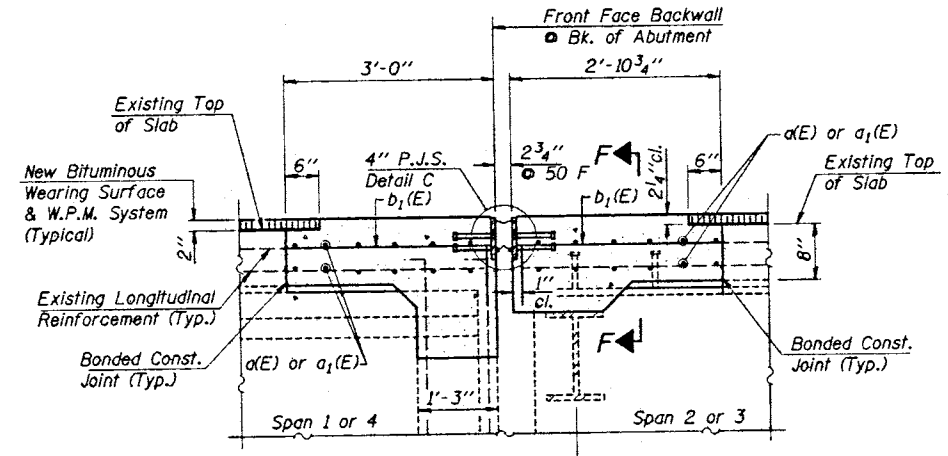
SEAL CUT-OUT (4'')



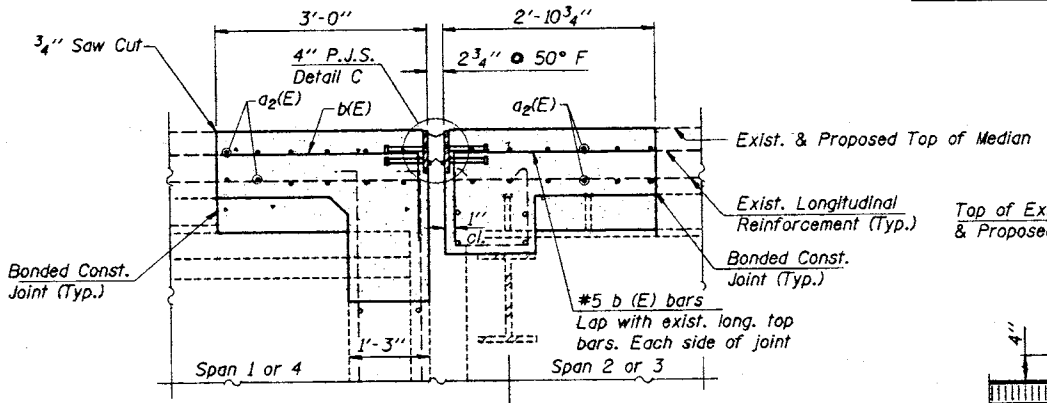
END OF PLATE



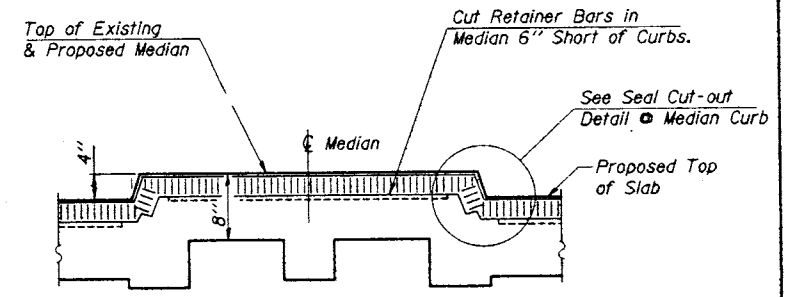
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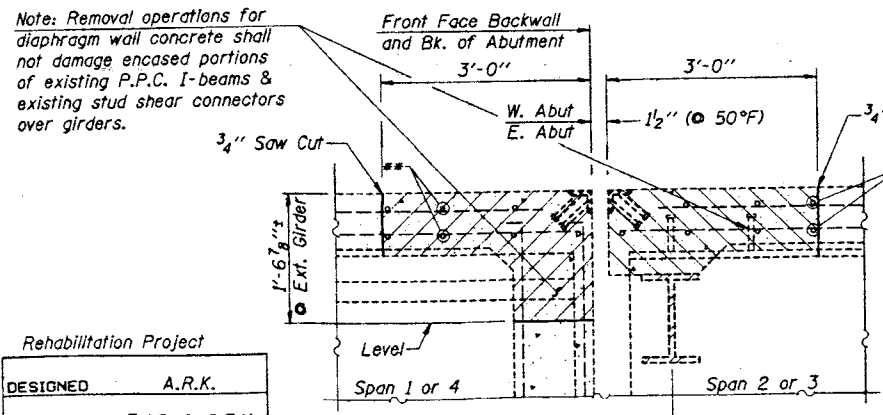
SECTION C-C
Proposed Rdwy. Joint



SECTION D-D
Proposed Median Joint



SECTION E-E
Proposed Median Joint (Along Skew)

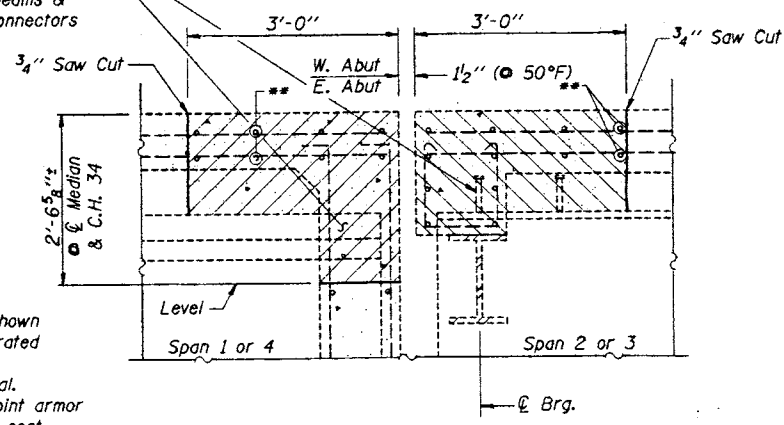


SECTION A-A
Existing Rdwy. Joint

Note: Removal operations for diaphragm wall concrete shall not damage encased portions of existing P.P.C. I-beams & existing stud shear connectors over girders.

**Cut Exist. Transverse Reinf. to extend 2'-6" into new construction (Typ.) See Sheet 4 for Plan View.

Note: For Sections A-A thru D-D Existing Reinforcement Bars shown are to be cleaned and incorporated into new construction. Hatched areas indicate Concrete Removal. Cost of removal for existing joint armor angles shall be included in the cost of Concrete Removal.



SECTION B-B
Existing Median Joint

Rehabilitation Project	
DESIGNED	A.R.K.
CHECKED	F.J.S. & S.F.M.
DRAWN	R.S.J.
CHECKED	A.R.K., G.J.C.

Work this sheet with Sheet 3 & 4 of 13.

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXPANSION JOINT DETAILS

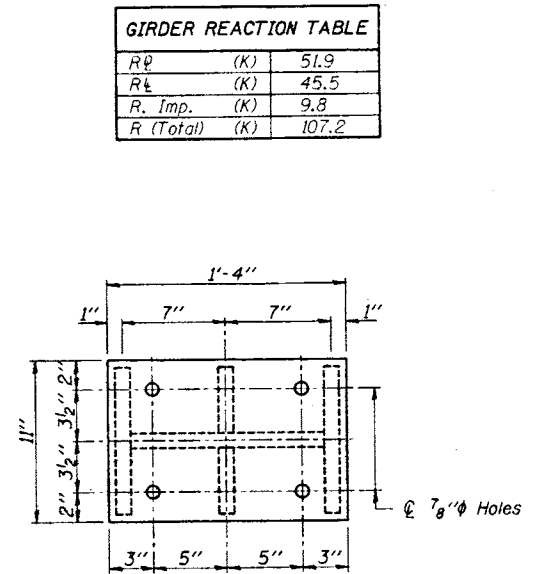
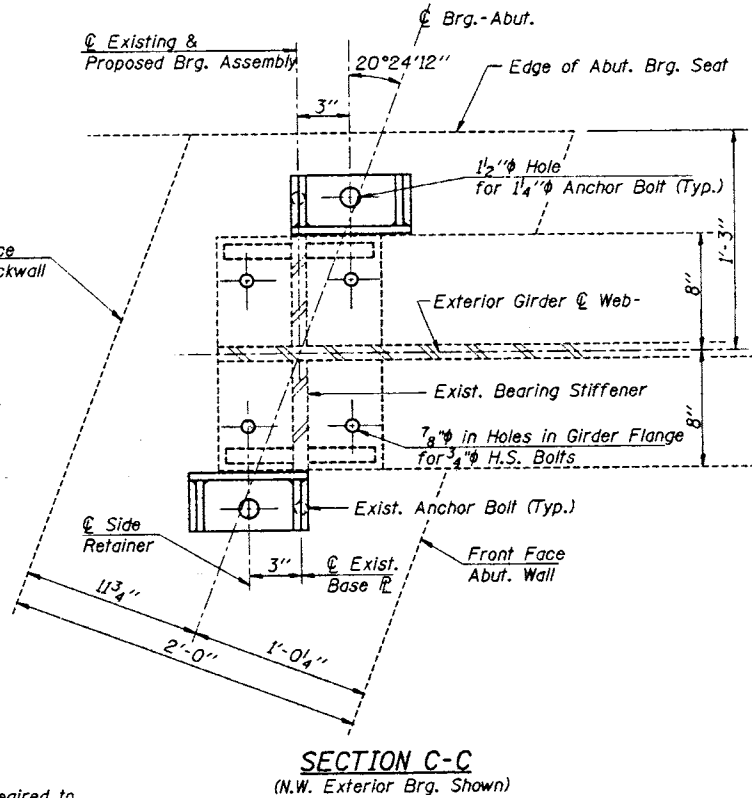
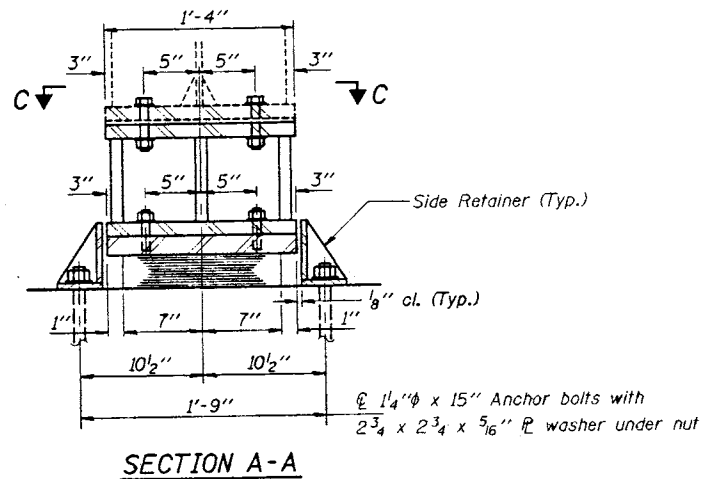
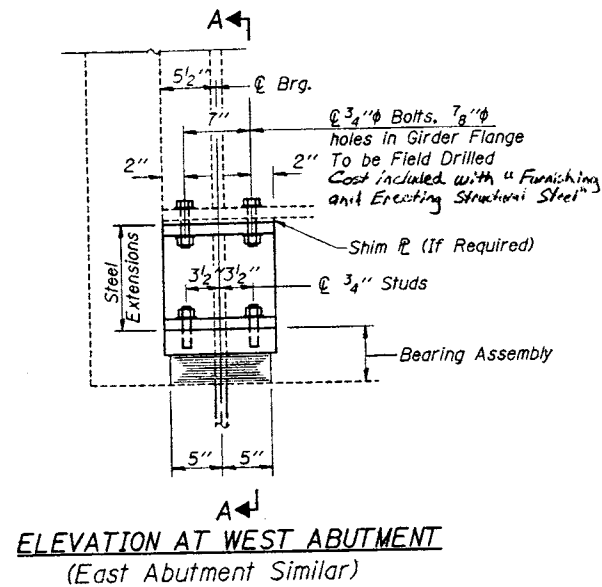
STRUCTURE #057-0161
F.A.S. ROUTE 1479 (C.H. 34) OVER F.A.I. 55
McLEAN COUNTY

DATE: _____
DRAWN BY: _____
CHECKED BY: _____

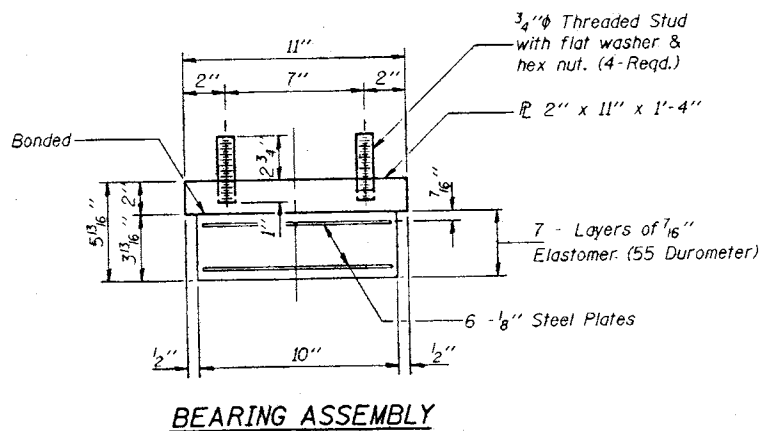
511 WEST CAPITOL SPRINGFIELD, IL 62704 (217) 528-2958
Ozyurt and Stone, Inc.
CONSULTING ENGINEERS

JOB #: 9931.2
FILE: JOINT.DGN
DATE: 03-10-00

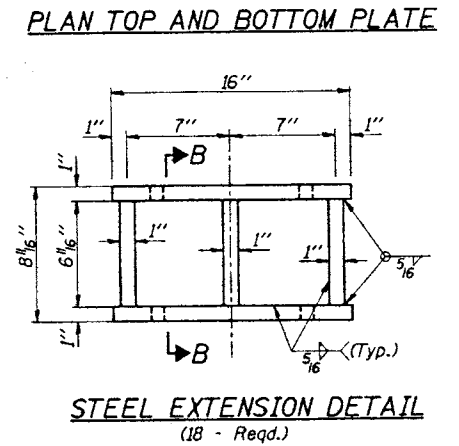
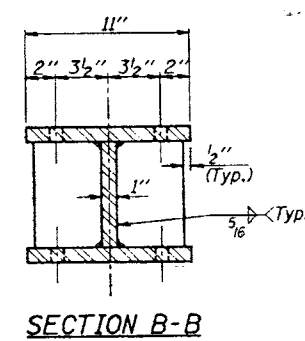
REVISIONS	
NAME	DATE
A.R.K., R.S.J.	4/27/00



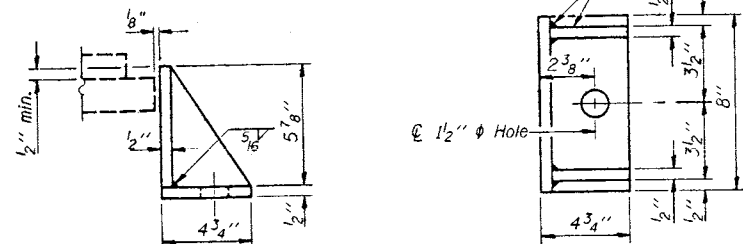
TYPE I ELASTOMERIC EXP. BRG.
(18 Total Req'd.)



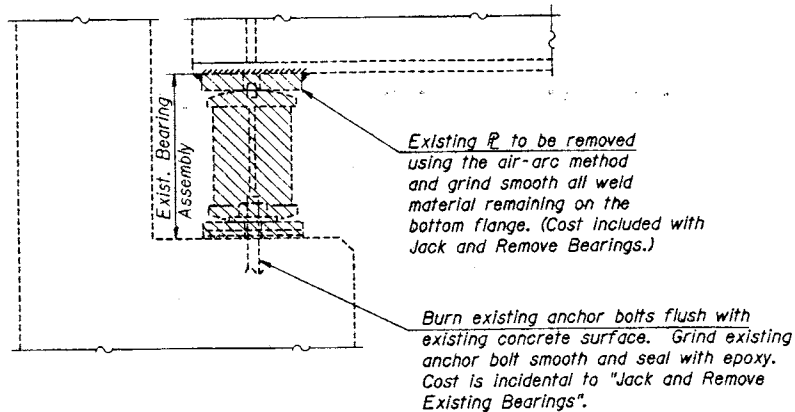
Note: Diaphragm removal and reattachment may be required to facilitate drilling holes. Cost is included in "Furnishing and Erecting Structural Steel".
New steel extensions, side retainers, connection bolts, adjusting shims, and anchor bolts are included in "Furnishing and Erecting Structural Steel". See sheet 8 for Anchor Bolt installation.
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Minimum jack capacity = 180K=90T
The Contractor shall submit, for approval by the Engineer, plans for lifting existing girders and installing new bearings prior to commencing any related work.



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



Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. Weight included with Structural Steel.
No. Req'd. = 36



BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	18
Jack & Remove Existing Bearings	Each	18

Rehabilitation Project:

DESIGNED	A.R.K.
CHECKED	F.J.S. & S.F.M.
DRAWN	R.S.J.
CHECKED	A.R.K. & F.J.S.

REVISIONS

NAME	DATE
A.R.K., R.S.J.	4/27/00

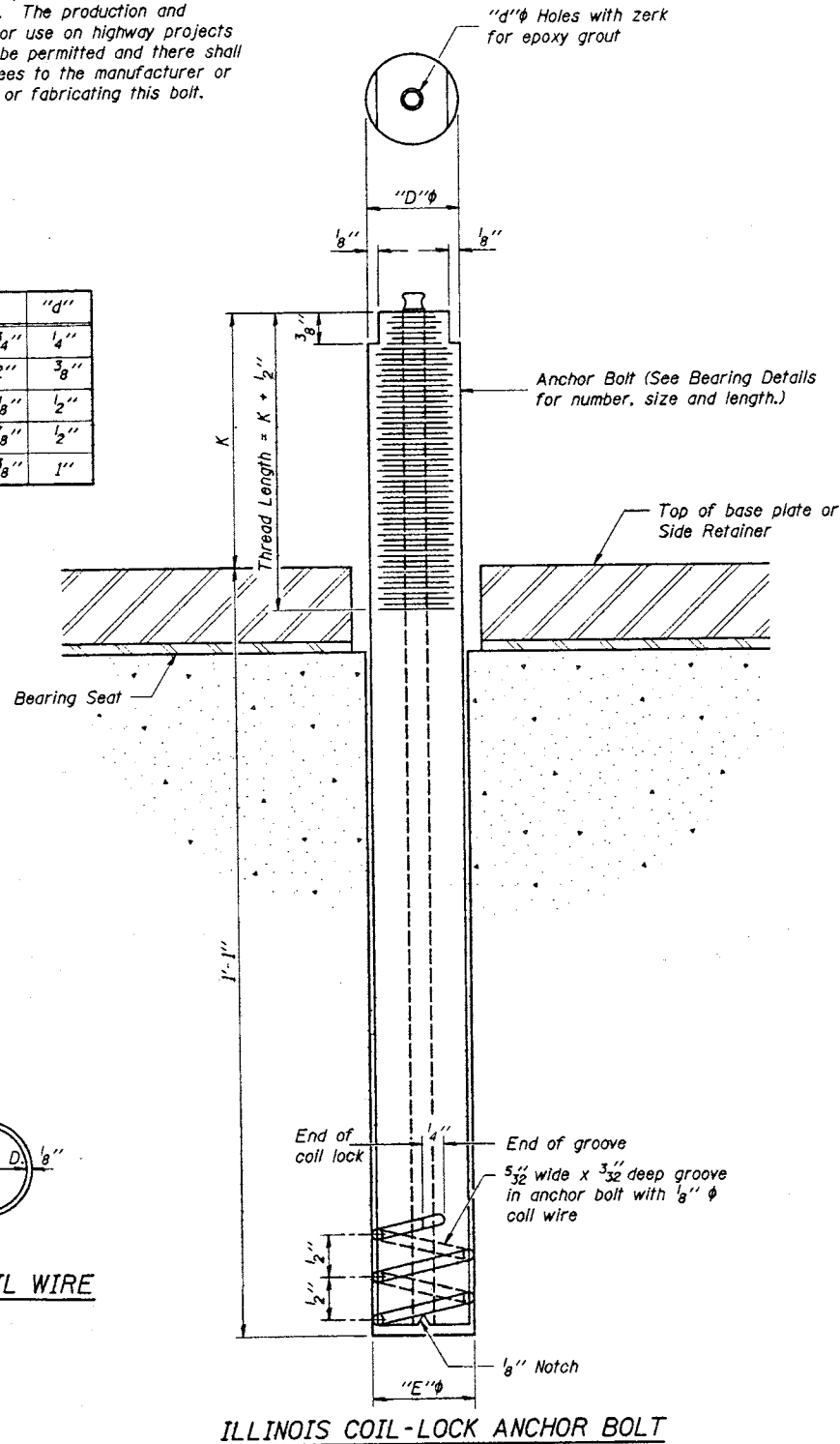
ILLINOIS DEPARTMENT OF TRANSPORTATION
BEARING DETAILS
STRUCTURE # 057-0161
F.A.S. ROUTE 1479 (C.H. 34) OVER F.A.I. 55
McLEAN COUNTY

DATE: _____
DRAWN BY: _____
CHECKED BY: _____

511 WEST CAPITOL SPRINGFIELD, IL 62704 (217) 528-2958
Ozyurt and Stone, Inc.
CONSULTING ENGINEERS
JOB #: 9931.2
FILE: BEARING.DGN
DATE: 03-10-00

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

D	E	H	K	"d"
1"	1 1/8"	1 3/16"	1 3/4"	1/4"
1 1/4"	1 3/8"	1 1/8"	2"	3/8"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 13/16"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.
 The coil wire shall be made of any suitable soft steel wire.
 The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
 The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

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

ALTERNATE ANCHOR BOLTS

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

Location	Type
W. Abut.	A 307
E. Abut.	A 307

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

GENERAL NOTES

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

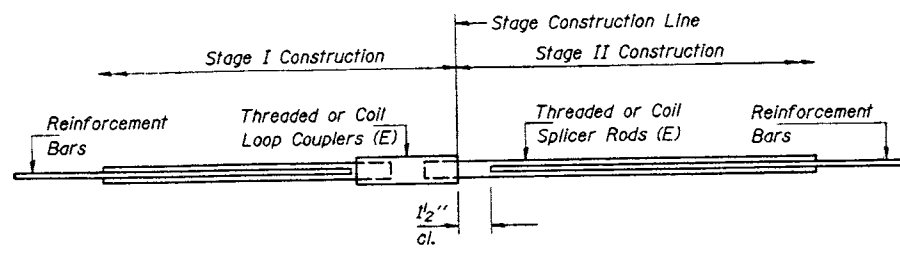
Rehabilitation Project	
DESIGNED	A.R.K.
CHECKED	F.J.S. & S.F.M.
DRAWN	R.S.J.
CHECKED	A.R.K. & F.J.S.

REVISIONS	
NAME	DATE
A.R.K., R.S.J.	4/27/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ANCHOR BOLT DETAILS
 STRUCTURE # 057-0161
 F.A.S. ROUTE 1479 (C.H. 34) OVER F.A.I. 55
 McLEAN COUNTY

DATE: _____
 511 WEST CAPITOL SPRINGFIELD, IL 62704 (217) 528-2958
Ozyurt and Stone, Inc.
 CONSULTING ENGINEERS

DRAWN BY: _____
 CHECKED BY: _____
 JOB #: 9931.2
 FILE: ANCHOR.DGN
 DATE: 03-10-00

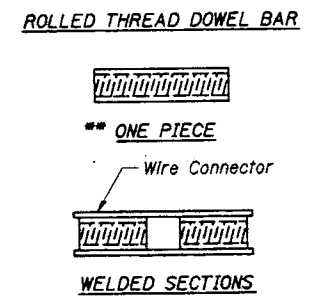


SPLICER DETAIL

Bar Size	No. Assemblies Required	Location
#6	96	Deck Slab @ Exp. Jts.

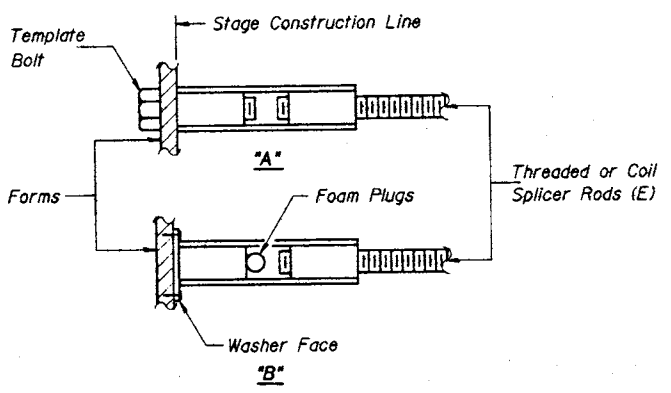
The diameter of this part is the same as the diameter of the bar spliced.

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 563, Grade C, D or DH may be used.



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

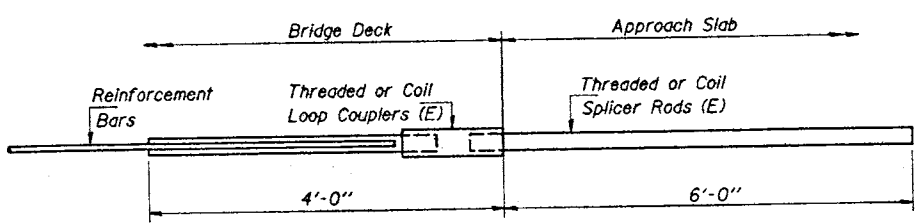
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the 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 = $1.25 \times f_y \times A_t$
(Tension in kips)
- ② Minimum Pull-out Strength = $1.25 \times f_{s_{allow}} \times A_t$
(Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6

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."



**INTEGRAL ABUTMENT
BAR SPLICER ASSEMBLY DETAIL
FOR #5 BAR**

Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required =

Rehabilitation Project

DESIGNED	A.R.K.
CHECKED	F.J.S. & S.F.M.
DRAWN	R.S.J.
CHECKED	A.R.K. & F.J.S.

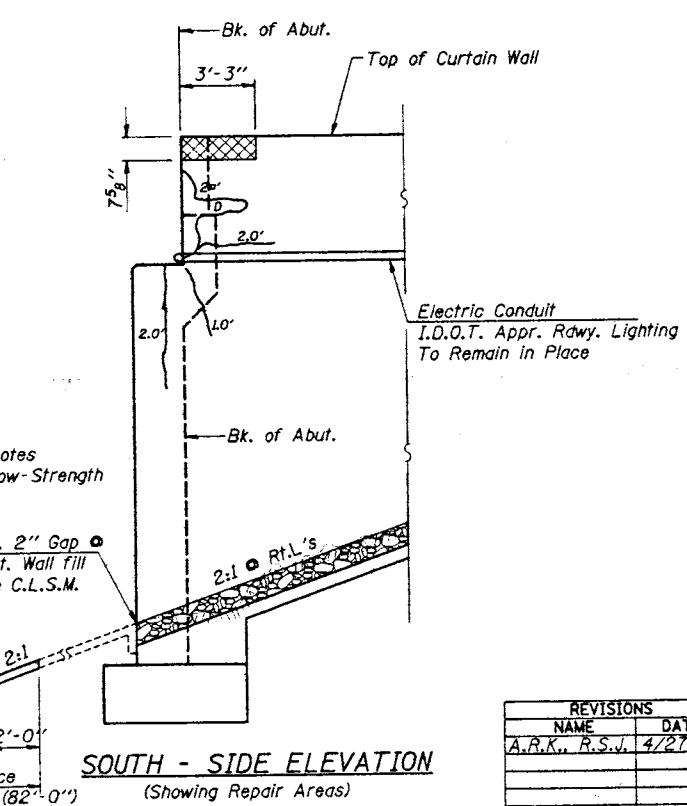
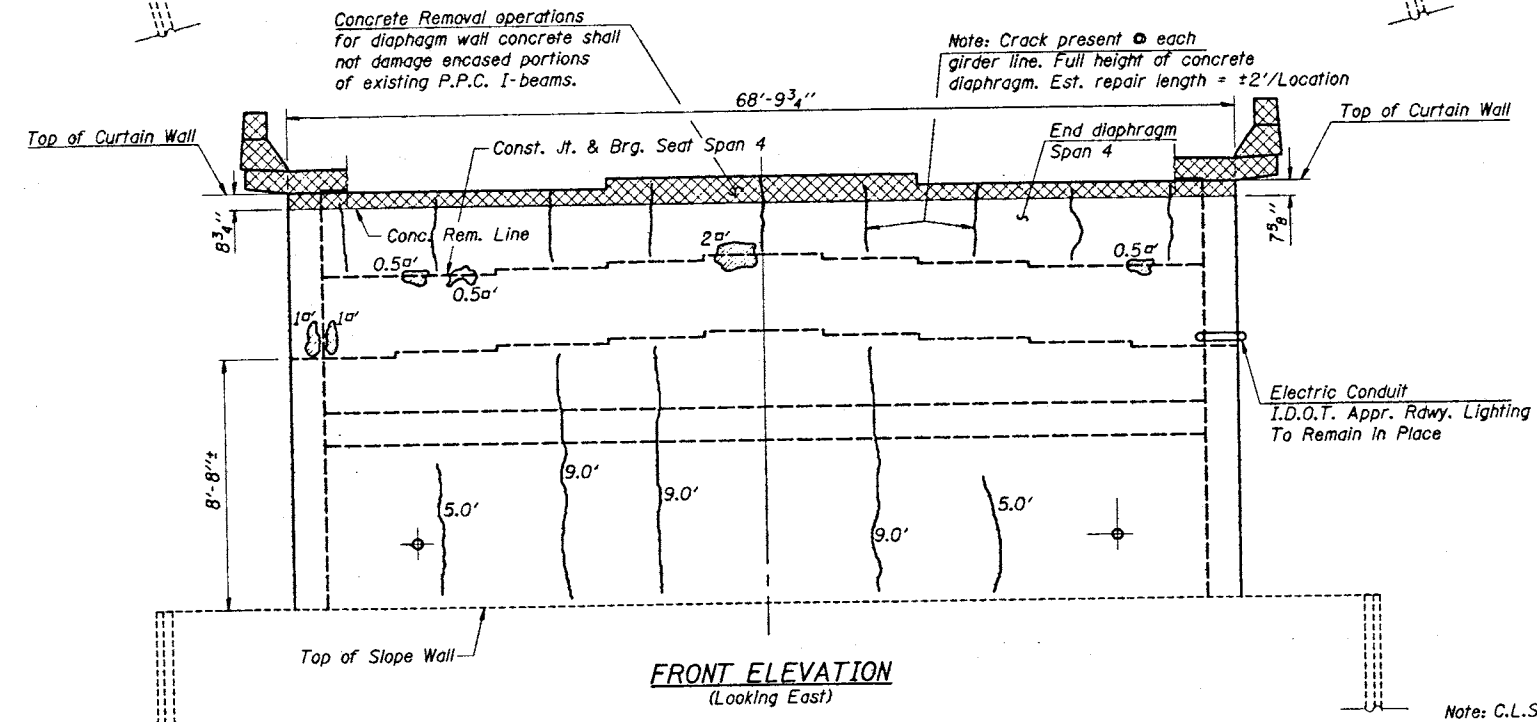
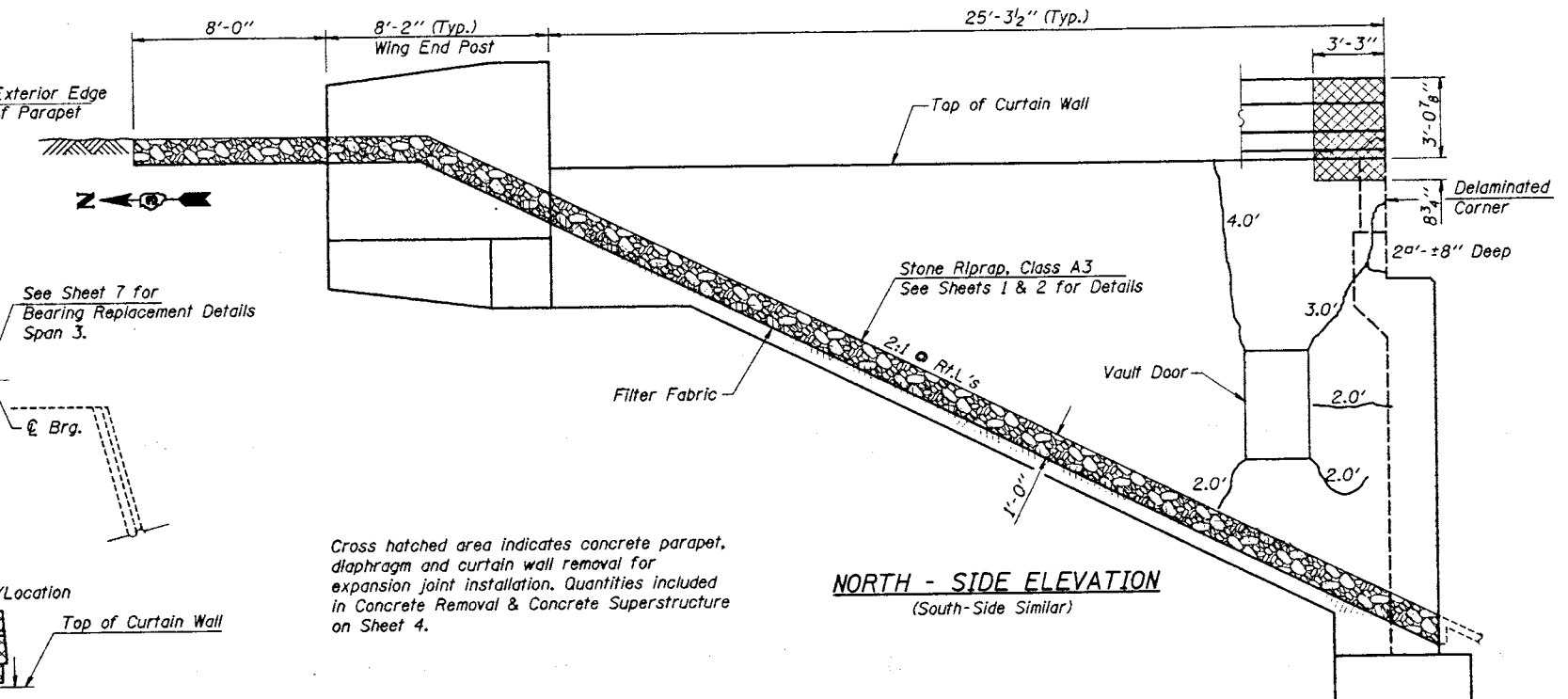
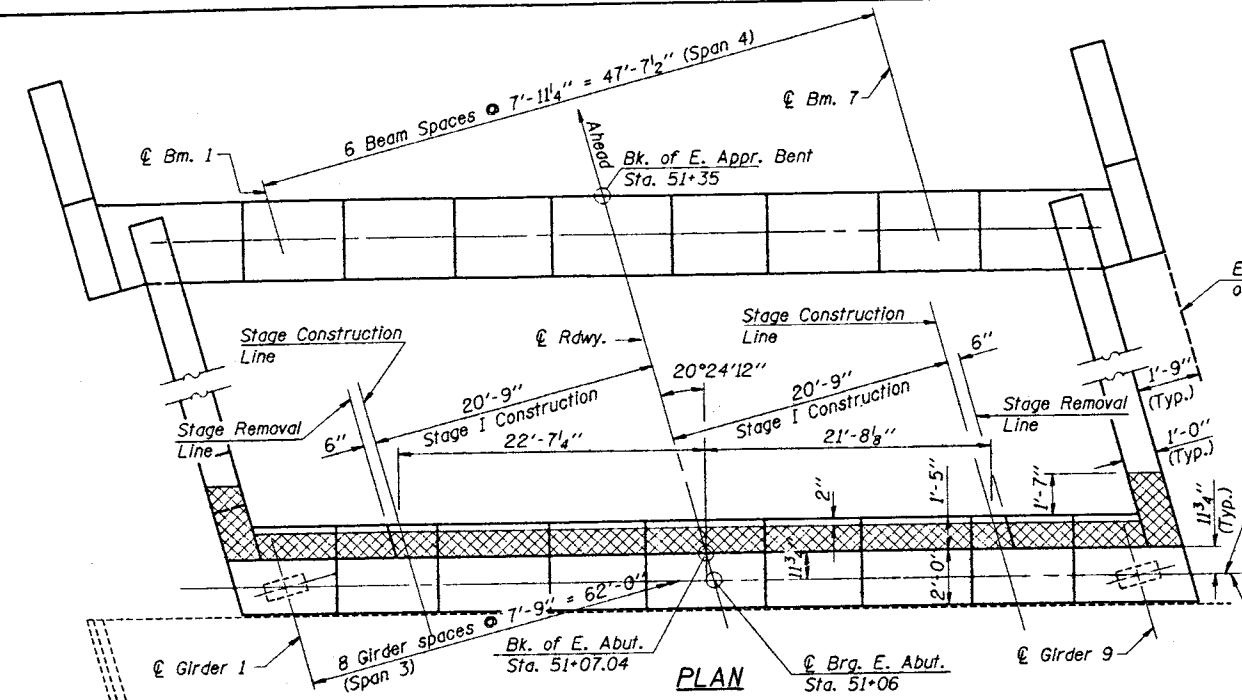
REVISIONS	
NAME	DATE
A.R.K., R.S.J.	4/27/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
BAR SPLICER ASSEMBLY DETAILS
 STRUCTURE # 057-0161
 F.A.S. ROUTE 1479 (C.H. 34) OVER F.A.I. 55
 McLEAN COUNTY

DATE: _____ DRAWN BY: _____
 CHECKED BY: _____

511 WEST CAPITOL SPRINGFIELD, IL 62704 (217) 528-2958
Ozyurt and Stone, Inc.
 CONSULTING ENGINEERS

JOB #: 9931.2
 FILE: BARSPLICE.DGN
 DATE: 03-10-00



Concrete Removal operations for diaphragm wall concrete shall not damage encased portions of existing P.P.C. I-beams.

Note: Crack present @ each girder line. Full height of concrete diaphragm. Est. repair length = ±2'/Location

Cross hatched area indicates concrete parapet, diaphragm and curtain wall removal for expansion joint installation. Quantities included in Concrete Removal & Concrete Superstructure on Sheet 4.

Note: Abutment Concrete and Crack Repair areas are estimated from survey work (1-14-00). Actual locations of repairs made shall be shown by the Engineer on as-built plans.

CONCRETE REPAIRS - E. ABUT.

Epoxy Crack Sealing	70 Foot
Formed Concrete Repair (Depth ≤ 5")	8 Sq. Ft.
Formed Concrete Repair (Depth > 5")	2 Sq. Ft.
Slope Wall Repair 4"	76 Sq. Yd.
Controlled Low-Strength Material	2.0 Cu. Yd.

LEGEND
 Inspection Date: 1-14-00
 Method: Visual

1" F.C.R. ≤ 5" Depth
 1" F.C.R. > 5" Depth
 5.0' Epoxy Crack Sealing

Rehabilitation Project:

DESIGNED	A.R.K.
CHECKED	F.J.S. & S.F.M.
DRAWN	R.S.J.
CHECKED	A.R.K. & F.J.S.

REVISIONS

NAME	DATE
A.R.K., R.S.J.	4/27/00

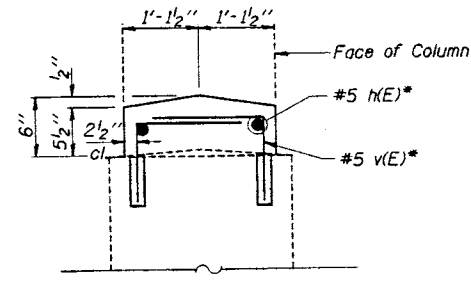
ILLINOIS DEPARTMENT OF TRANSPORTATION
EAST ABUTMENT REPAIRS
STRUCTURE # 057-0161
 F.A.S. ROUTE 1479 (C.H. 34) OVER F.A.I. 55
 McLEAN COUNTY

DATE: _____
 511 WEST CAPITOL SPRINGFIELD, IL 62704 (217) 528-2958

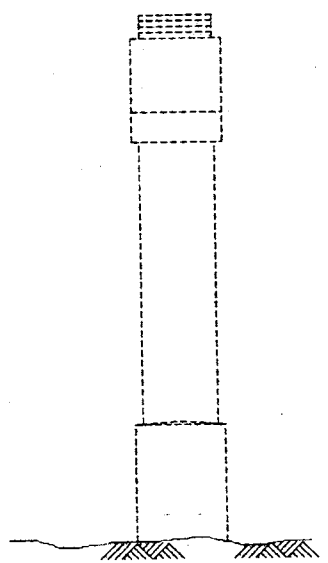
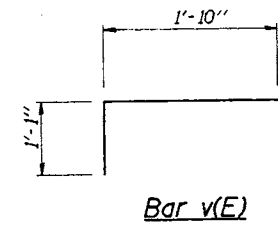
DRAWN BY: _____
 CHECKED BY: _____
 JOB #: 9931.2
 FILE: EABUTREP.DGN
 DATE: 03-10-00

Ozyurt and Stone, Inc.
 CONSULTING ENGINEERS

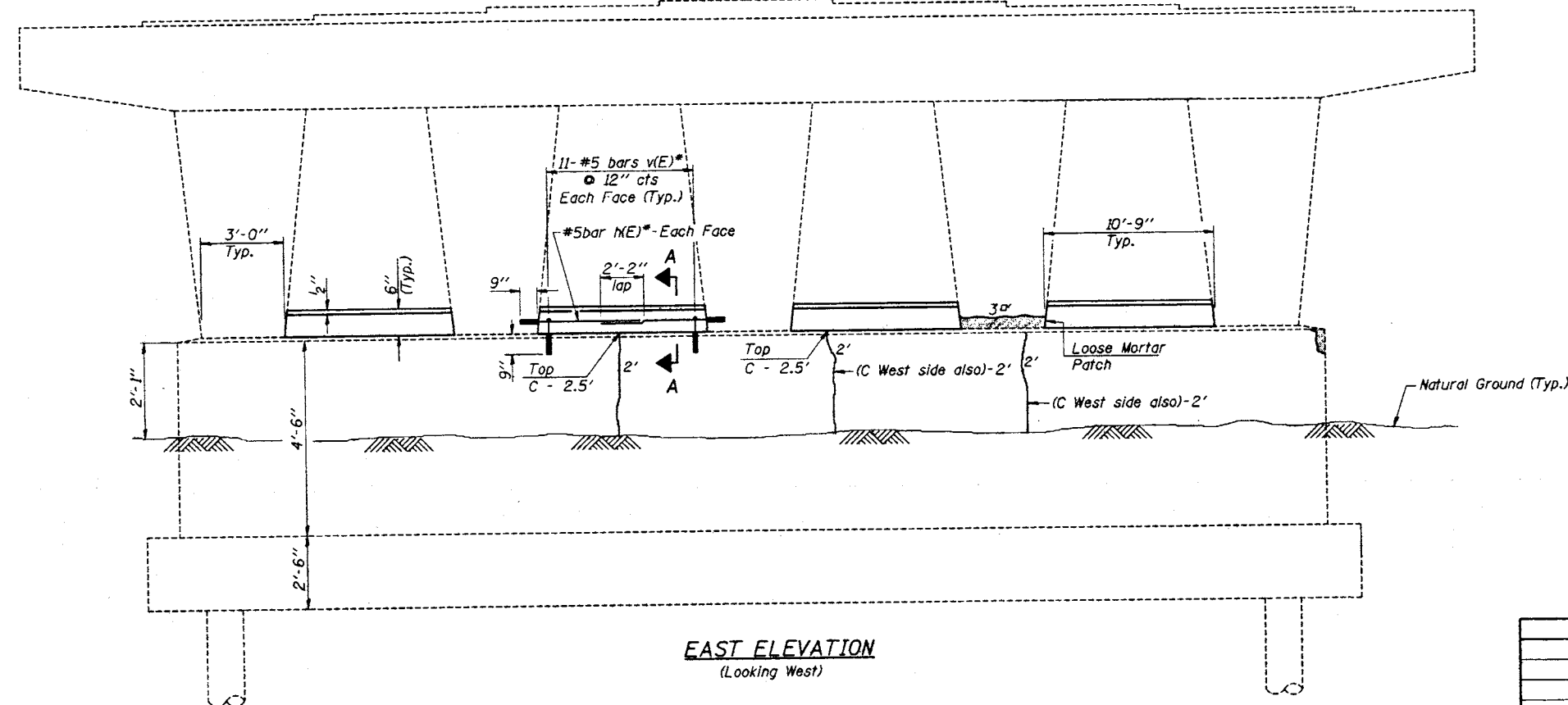
FAT RTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	**	McLEAN	44	41
FED. RD. DIST. NO.	ILLINOIS	FED. AID PROJECT		
** (57-8) RS, BR				
S.N. 057-0161 - Sheet 13 of 13				



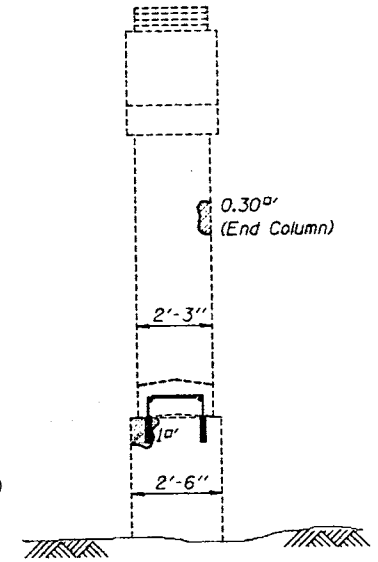
SECTION A-A
Crashwall Extension



SOUTH ELEVATION
(Looking North)



EAST ELEVATION
(Looking West)



NORTH ELEVATION
(Looking South)

PIER
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
*v(E)	88	#5	2'-11"	□
*h(E)	16	#5	7'-3"	—
Concrete Structures			Cu. Yd.	1.8
Reinforcement Bars, Epoxy Coated			Pound	390

* Indicates drill & epoxy grout bars in 7/8"Ø x 9" minimum drilled holes according to Art. 584 of the Standard Specifications.

LEGEND

- Inspection Date: 1-14-00
Method: Visual
- F.C.R. ≤ 5" Depth
 - F.C.R. > 5" Depth
 - Epoxy Crack Sealing

CONCRETE REPAIRS - PIER

Epoxy Crack Sealing	15 Foot
Formed Concrete Repair (Depth ≤ 5")	5 Sq. Ft.

NOTE:
PIER CONCRETE AND CRACK REPAIR AREAS SHOWN ARE ESTIMATED FROM SURVEY WORK (1-14-00). ACTUAL LOCATIONS OF REPAIRS MADE SHALL BE SHOWN BY THE ENGINEER ON AS-BUILT PLANS.

Rehabilitation Project

DESIGNED	A.R.K.
CHECKED	F.J.S. & S.F.M.
DRAWN	R.S.J.
CHECKED	A.R.K. & F.J.S.

REVISIONS

NAME	DATE
A.R.K., R.S.J.	4/27/00

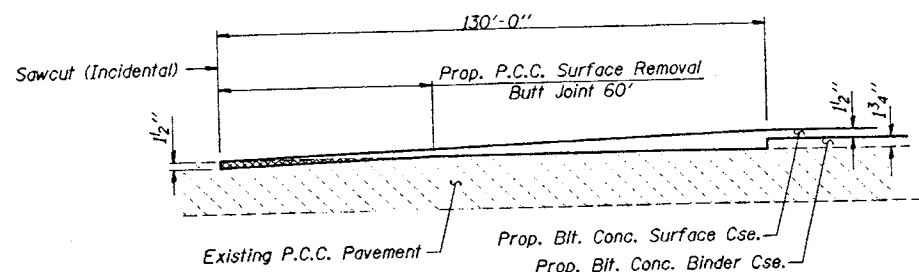
ILLINOIS DEPARTMENT OF TRANSPORTATION
PIER REPAIRS
STRUCTURE # 057-0161
F.A.S. ROUTE 1479 (C.H. 34) OVER F.A.I. 55
McLEAN COUNTY

DATE: _____ DRAWN BY: _____
CHECKED BY: _____

511 WEST CAPITOL SPRINGFIELD, IL 62704 (217) 528-2958
Ozyurt and Stone, Inc.
CONSULTING ENGINEERS

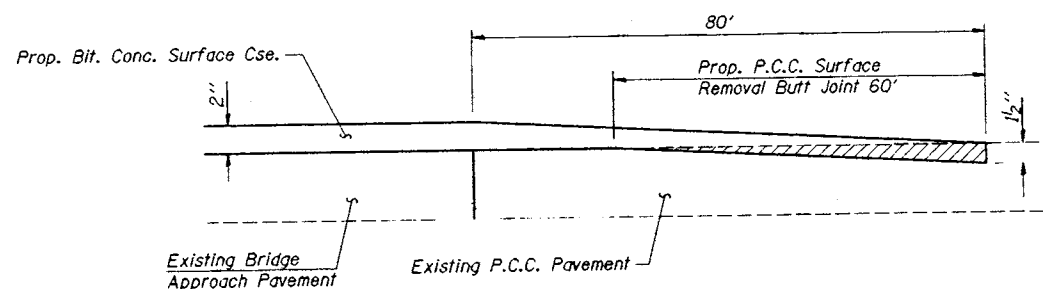
JOB #: 9931.2
FILE: PIERREPOGN
DATE: 03-10-00

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 55		McLEAN	44	42
ROAD DISTRICT		ILLINOIS		
*57-8) RS. BR				



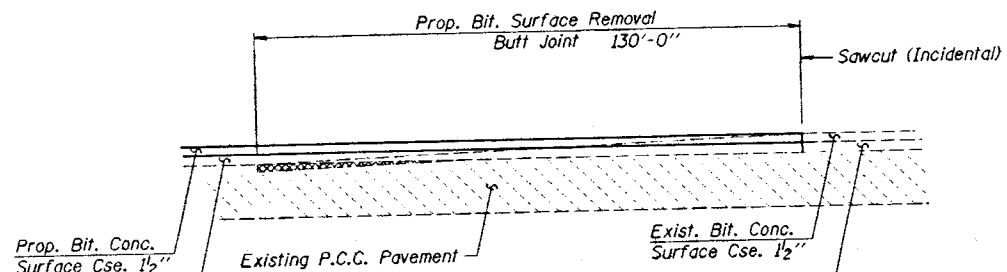
BUTT JOINT DETAIL

Sta. 432+80.00 F.A.I. 55
 Sta. 0+35.72 Ramp A
 Sta. 21+75.00 Ramp B
 Sta. 23+85.29 Ramp C
 Sta. 0+34.70 Ramp D



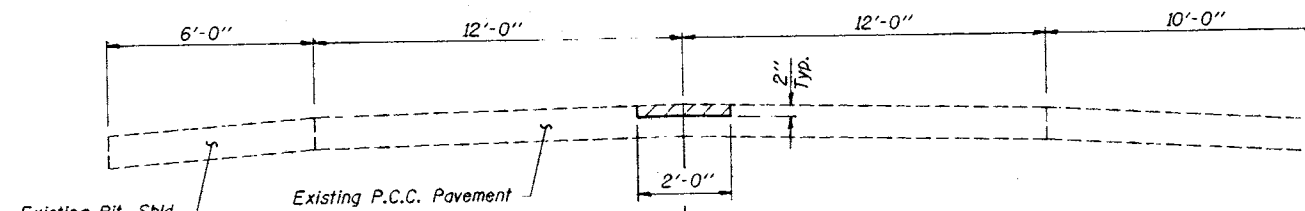
TAPER DETAIL

Rt. Sta. 47+36.97 C.H. 34
 Lt. Sta. 47+48.88 C.H. 34
 Rt. Sta. 52+51.12 C.H. 34
 Lt. Sta. 52+63.03 C.H. 34



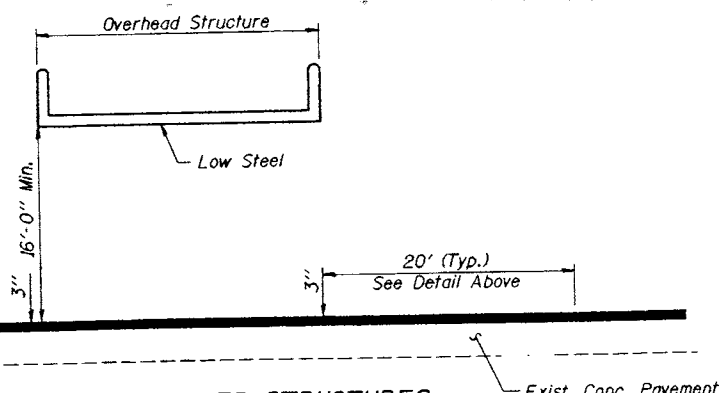
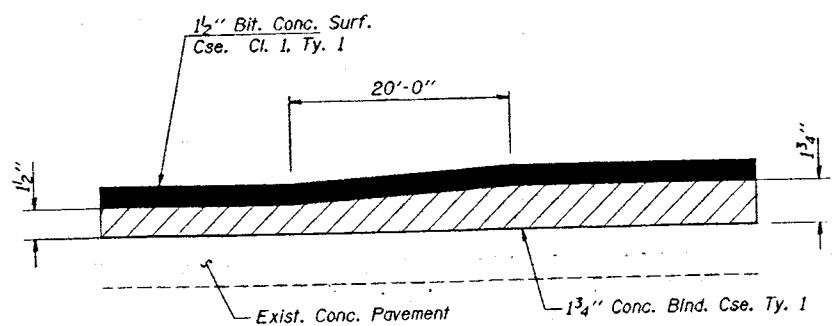
BUTT JOINT DETAIL

Sta. 647+56.00 N.B.
 Sta. 659+92.00 S.B.



PAVEMENT REMOVAL SPECIAL

Note:
 Quantities have been calculated throughout the project
 Exact locations to be determined in the field by the Engineer.



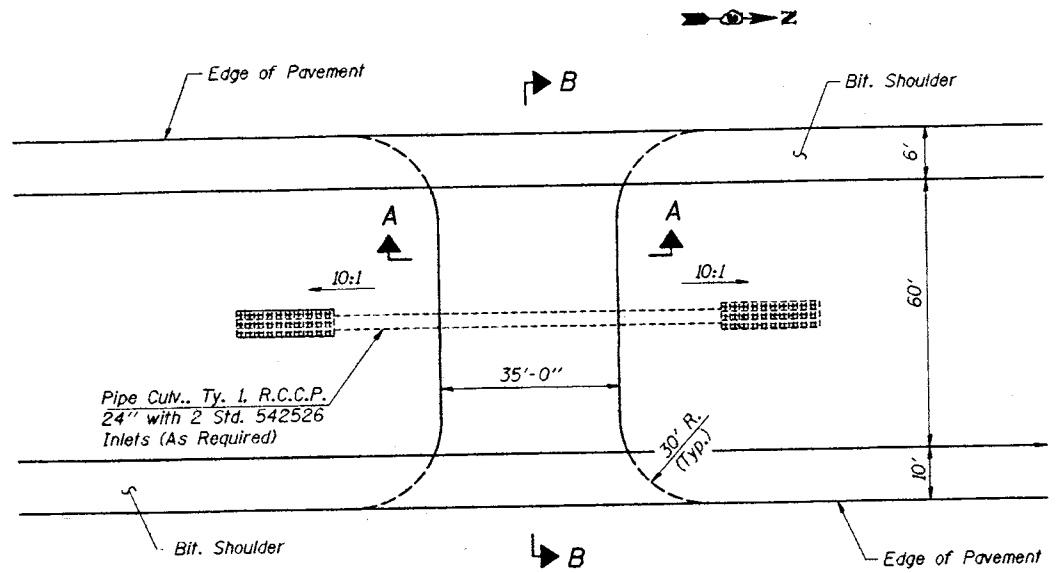
TAPER DETAIL UNDER STRUCTURES

S.N. 057-0161

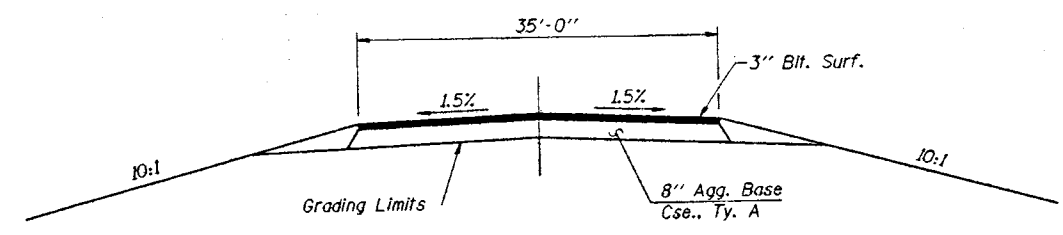
DESIGNED	G.J.C.
CHECKED	A.R.K.
DRAWN	R.S.J.
CHECKED	G.J.C.

DETAILS	
511 WEST CAPITOL SPRINGFIELD, IL 62704 (217) 528-2958	Ozyurt and Stone, Inc. CONSULTING ENGINEERS
JOB #: 99312 FILE: DETAIL.DGN DATE: 03-10-00	

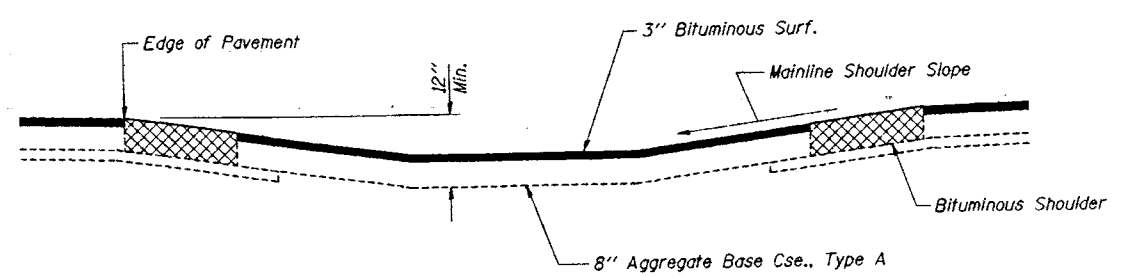
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 55		McLEAN	44	43
ROAD DISTRICT	ILLINOIS			
*157-91 RS. BR				



BITUMINOUS MAINTENANCE CROSSOVER
Sta. 473+95±
Sta. 613+47±

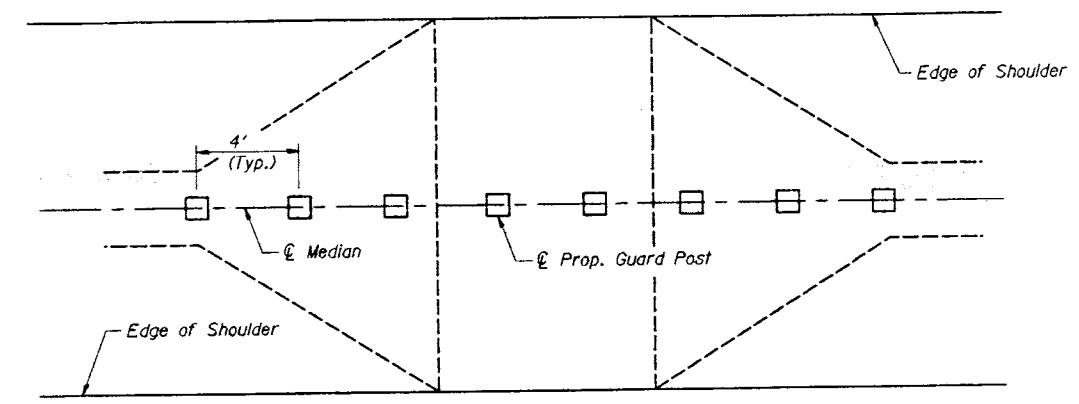


SECTION A-A



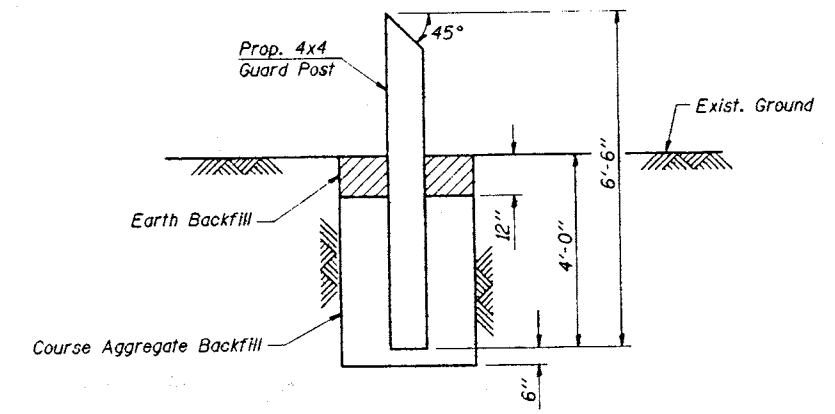
SECTION B-B

DESIGNED	G.J.C.
CHECKED	A.R.K.
DRAWN	R.S.J.
CHECKED	G.J.C.



GUARD POST PLAN

LOCATION	# PRESENT	ADDITIONAL # REQUIRED
Sta. 457+18±	3	5
Sta. 487+29±	5	3
Sta. 541+83±	4	4
Sta. 555+91±	3	5
Sta. 569+62±	2	6
Sta. 579+82±	4	4

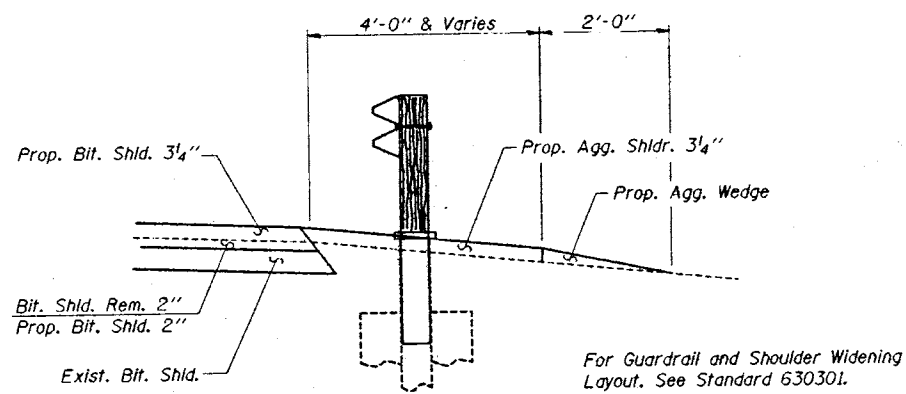


SECTION THRU POST

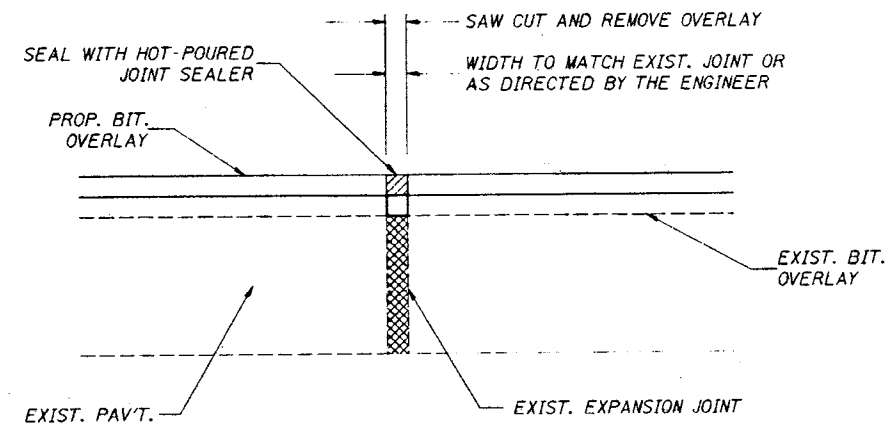
DETAILS

511 WEST CAPITOL SPRINGFIELD, IL 62704 (217) 528-2958	Ozyurt and Stone, Inc. CONSULTING ENGINEERS	JOB #: 9931.2 FILE: DETAIL2.DGN DATE: 03-10-00
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 55	*	MCLEAN	44	44
ROAD DISTRICT	ILLINOIS			
*57-8) RS. BR				



**SHOULDER WIDENING AT TRAFFIC
BARRIER TERMINAL TYPE 1 SPECIAL**



EXPANSION JOINT REHABILITATION DETAIL

GENERAL NOTES:

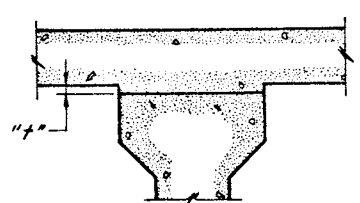
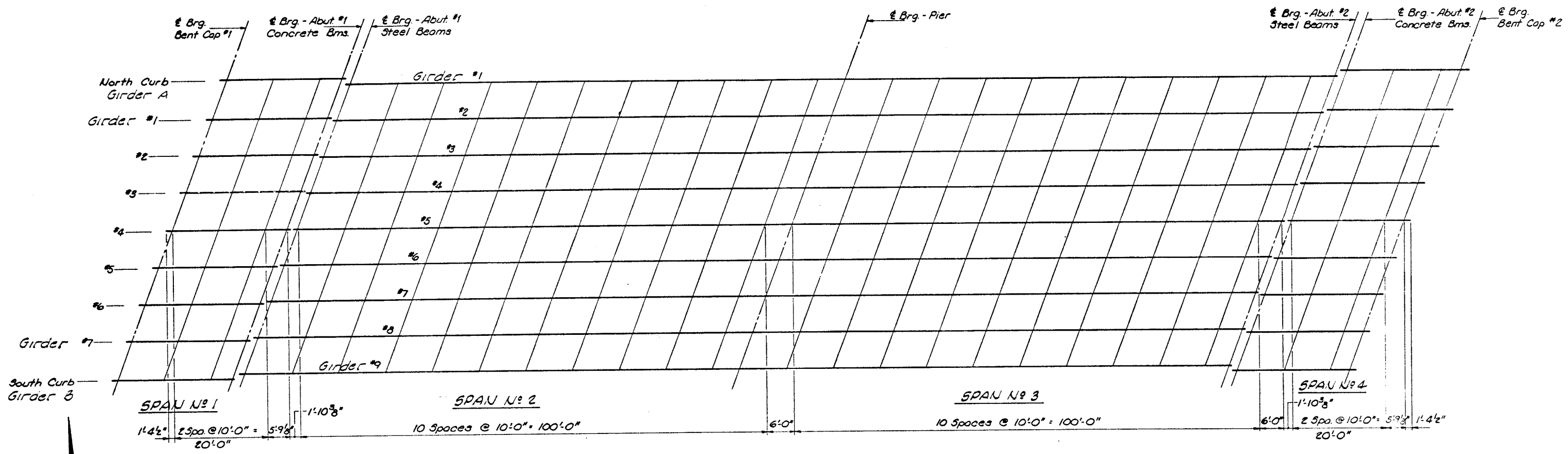
1. THE NEW BITUMINOUS OVERLAY SHALL BE SAWED, REMOVED, AND THE JOINT AREA CLEANED. PRIOR TO PLACING THE HOT-POURED JOINT SEALER THE JOINT SHALL BE BLOWN OUT WITH COMPRESSED AIR.
2. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR EXPANSION JOINT REHABILITATION.

DESIGNED	G.J.C.
CHECKED	A.R.K.
DRAWN	R.S.J.
CHECKED	G.J.C.

**EMBANKMENT WIDENING AND
EXPANSION JOINT REHABILITATION**

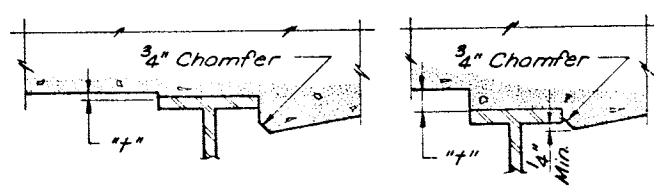
511 WEST CAPITOL SPRINGFIELD, IL 62704 (217) 528-2958	Ozyurt and Stone, Inc. CONSULTING ENGINEERS	JOB #: 99312 FILE: EMBRWID.DGN DATE: 03-10-00
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-55	57-848-1	MCLEAN	32	10
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



FILLET HEIGHTS

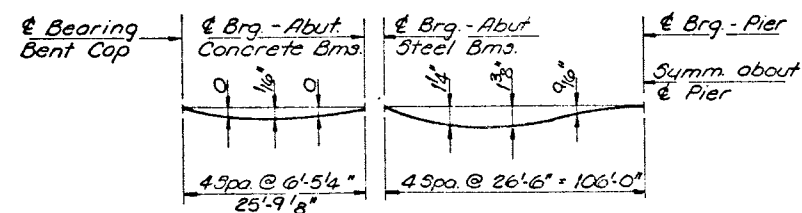
To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted algebraically from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown on sh. #3 & #4, minus slab thickness, equals the fillet height "t". A positive value of "t" equals the fillet height above the beam. A negative value of "t", not to exceed "e", equals embedment of the beam above the theoretical bottom of slab elevations.



AT MINIMUM FILLET AT MAXIMUM FILLET

FILLET HEIGHTS

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted algebraically from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sh. #3 & #4, minus slab thickness, equals the fillet heights "t" above top flange of beams.



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)
NOTE: The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown on sheet #3 & 5, #4.

REVISIONS		STATE OF ILLINOIS		DATE
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

CH. 34 OVER FAI-55		DRAWN BY: D.M.
FAI-55 SEC. 57-848-1 PROJECT		CHECKED BY: D.A.
STA. 5+00 TO 9+33 (FAI-55) MCLEAN COUNTY		DATE: 10-1-55
HOMER L. CHASTAIN & ASSOCIATES		PROJECT NO. 2109
CONSULTING ENGINEERS		
DECATUR, ILLINOIS		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PA. 55	57-ENB-1	MCLEAN	30	11
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

SPAN NO. 1

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
A	4878.1877	22.7500	767.2972	767.2972	0.0000
A	4888.1855	22.7500	767.3361	767.3361	0.0000
A	4898.1833	22.7500	767.3717	767.3717	0.0000
A	4903.9425	22.7500	767.3907	767.3907	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
1	4875.2352	14.8125	767.4091	767.4091	0.0000
1	4885.2331	14.8125	767.4490	767.4519	0.0029
1	4895.2309	14.8125	767.4856	767.4877	0.0021
1	4900.9901	14.8125	767.5051	767.5051	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
2	4872.2828	8.8750	767.5207	767.5207	0.0000
2	4882.2807	8.8750	767.5616	767.5645	0.0029
2	4892.2785	8.8750	767.5991	767.6012	0.0021
2	4898.0376	8.8750	767.6193	767.6193	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
3	4869.3304	-1.0625	767.6320	767.6320	0.0000
3	4879.3282	-1.0625	767.6739	767.6768	0.0029
3	4889.3261	-1.0625	767.7124	767.7145	0.0021
3	4895.0852	-1.0625	767.7331	767.7331	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
4	4855.3780	-9.0000	767.7430	767.7430	0.0000
4	4876.3758	-9.0000	767.7859	767.7888	0.0029
4	4886.3737	-9.0000	767.8254	767.8275	0.0021
4	4892.1328	-9.0000	767.8467	767.8467	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
5	4863.4256	-16.9375	767.6057	767.6057	0.0000
5	4873.4234	-16.9375	767.6495	767.6524	0.0029
5	4883.4213	-16.9375	767.6900	767.6921	0.0021
5	4889.1804	-16.9375	767.7119	767.7119	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
6	4860.4732	-24.8750	767.4681	767.4681	0.0000
6	4870.4710	-24.8750	767.5129	767.5158	0.0029
6	4880.4688	-24.8750	767.5544	767.5565	0.0021
6	4886.2280	-24.8750	767.5768	767.5768	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
7	4857.5208	-32.8125	767.3302	767.3302	0.0000
7	4867.5186	-32.8125	767.3760	767.3789	0.0029
7	4877.5164	-32.8125	767.4185	767.4206	0.0021
7	4883.2756	-32.8125	767.4414	767.4414	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
B	4854.5684	-40.7500	767.1920	767.1920	0.0000
S	4864.5662	-40.7500	767.2388	767.2388	0.0000
R	4874.5640	-40.7500	767.2822	767.2822	0.0000
R	4880.3232	-40.7500	767.3058	767.3058	0.0000

SPAN NO. 2

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
1	4905.5306	22.0000	767.4075	767.4075	0.0000
1	4915.5306	22.0000	767.4473	767.4473	0.0000
1	4925.5306	22.0000	767.4868	767.4868	0.0000
1	4935.5306	22.0000	767.5262	767.5262	0.0000
1	4945.5306	22.0000	767.5656	767.5656	0.0000
1	4955.5306	22.0000	767.6050	767.6050	0.0000
1	4965.5306	22.0000	767.6444	767.6444	0.0000
1	4975.5306	22.0000	767.6838	767.6838	0.0000
1	4985.5306	22.0000	767.7232	767.7232	0.0000
1	4995.5306	22.0000	767.7626	767.7626	0.0000
1	5005.5306	22.0000	767.8020	767.8020	0.0000
1	5011.5306	22.0000	767.8414	767.8414	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
2	4902.6480	14.2500	767.5193	767.5193	0.0000
2	4912.6480	14.2500	767.5591	767.5591	0.0000
2	4922.6480	14.2500	767.5989	767.5989	0.0000
2	4932.6480	14.2500	767.6387	767.6387	0.0000
2	4942.6480	14.2500	767.6785	767.6785	0.0000
2	4952.6480	14.2500	767.7183	767.7183	0.0000
2	4962.6480	14.2500	767.7581	767.7581	0.0000
2	4972.6480	14.2500	767.7979	767.7979	0.0000
2	4982.6480	14.2500	767.8377	767.8377	0.0000
2	4992.6480	14.2500	767.8775	767.8775	0.0000
2	5002.6480	14.2500	767.9173	767.9173	0.0000
2	5008.6480	14.2500	767.9571	767.9571	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
3	4899.7653	6.5000	767.6309	767.6309	0.0000
3	4909.7653	6.5000	767.6707	767.6707	0.0000
3	4919.7653	6.5000	767.7105	767.7105	0.0000
3	4929.7653	6.5000	767.7503	767.7503	0.0000
3	4939.7653	6.5000	767.7901	767.7901	0.0000
3	4949.7653	6.5000	767.8299	767.8299	0.0000
3	4959.7653	6.5000	767.8697	767.8697	0.0000
3	4969.7653	6.5000	767.9095	767.9095	0.0000
3	4979.7653	6.5000	767.9493	767.9493	0.0000
3	4989.7653	6.5000	767.9891	767.9891	0.0000
3	4999.7653	6.5000	768.0289	768.0289	0.0000
3	5005.7653	6.5000	768.0687	768.0687	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
4	4896.8826	-1.2500	767.7423	767.7423	0.0000
4	4906.8826	-1.2500	767.7821	767.7821	0.0000
4	4916.8826	-1.2500	767.8219	767.8219	0.0000
4	4926.8826	-1.2500	767.8617	767.8617	0.0000
4	4936.8826	-1.2500	767.9015	767.9015	0.0000
4	4946.8826	-1.2500	767.9413	767.9413	0.0000
4	4956.8826	-1.2500	767.9811	767.9811	0.0000
4	4966.8826	-1.2500	768.0209	768.0209	0.0000
4	4976.8826	-1.2500	768.0607	768.0607	0.0000
4	4986.8826	-1.2500	768.1005	768.1005	0.0000
4	4996.8826	-1.2500	768.1403	768.1403	0.0000
4	5002.8826	-1.2500	768.1801	768.1801	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
5	4894.0000	-9.0000	767.8533	767.8533	0.0000
5	4904.0000	-9.0000	767.8931	767.8931	0.0000
5	4914.0000	-9.0000	767.9329	767.9329	0.0000
5	4924.0000	-9.0000	767.9727	767.9727	0.0000
5	4934.0000	-9.0000	768.0125	768.0125	0.0000
5	4944.0000	-9.0000	768.0523	768.0523	0.0000
5	4954.0000	-9.0000	768.0921	768.0921	0.0000
5	4964.0000	-9.0000	768.1319	768.1319	0.0000
5	4974.0000	-9.0000	768.1717	768.1717	0.0000
5	4984.0000	-9.0000	768.2115	768.2115	0.0000
5	4994.0000	-9.0000	768.2513	768.2513	0.0000
5	5000.0000	-9.0000	768.2911	768.2911	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
6	4891.1173	-16.7500	767.7219	767.7219	0.0000
6	4901.1173	-16.7500	767.7617	767.7617	0.0000
6	4911.1173	-16.7500	767.8015	767.8015	0.0000
6	4921.1173	-16.7500	767.8413	767.8413	0.0000
6	4931.1173	-16.7500	767.8811	767.8811	0.0000
6	4941.1173	-16.7500	767.9209	767.9209	0.0000
6	4951.1173	-16.7500	767.9607	767.9607	0.0000
6	4961.1173	-16.7500	768.0005	768.0005	0.0000
6	4971.1173	-16.7500	768.0403	768.0403	0.0000
6	4981.1173	-16.7500	768.0801	768.0801	0.0000
6	4991.1173	-16.7500	768.1199	768.1199	0.0000
6	4997.1173	-16.7500	768.1597	768.1597	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
7	4888.2346	-24.5000	767.5902	767.5902	0.0000
7	4898.2346	-24.5000	767.6300	767.6300	0.0000
7	4908.2346	-24.5000	767.6698	767.6698	0.0000
7	4918.2346	-24.5000	767.7096	767.7096	0.0000
7	4928.2346	-24.5000	767.7494	767.7494	0.0000
7	4938.2346	-24.5000	767.7892	767.7892	0.0000
7	4948.2346	-24.5000	767.8290	767.8290	0.0000
7	4958.2346	-24.5000	767.8688	767.8688	0.0000
7	4968.2346	-24.5000	767.9086	767.9086	0.0000
7	4978.2346	-24.5000	767.9484	767.9484	0.0000
7	4988.2346	-24.5000	767.9882	767.9882	0.0000
7	4994.2346	-24.5000	768.0280	768.0280	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
8	4885.3519	-32.2500	767.4592	767.4592	0.0000
8	4895.3519	-32.2500	767.4990	767.4990	0.0000
8	4905.3519	-32.2500	767.5388	767.5388	0.0000
8	4915.3519	-32.2500	767.5786	767.5786	0.0000
8	4925.3519	-32.2500	767.6184	767.6184	0.0000
8	4935.3519	-32.2500	767.6582	767.6582	0.0000
8	4945.3519	-32.2500	767.6980	767.6980	0.0000
8	4955.3519	-32.2500	767.7378	767.7378	0.0000
8	4965.3519	-32.2500	767.7776	767.7776	0.0000
8	4975.3519	-32.2500	767.8174	767.8174	0.0000
8	4985.3519	-32.2500	767.8572	767.8572	0.0000
8	4991.3519	-32.2500	767.8970	767.8970	0.0000
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
9	4882.4693	-40.0000	767.3260	767.3260	0.0000
9	4892.4693	-40.0000	767.3658	767.3658	0.0000
9	4902.4693	-40.0000	767.4056	767.4056	0.0000
9	4912.4693	-40.0000	767.4454	767.4454	0.0000
9	4922.4693	-40.0000	767.4852	767.4852	0.0000
9	4932.4693	-40.0000	767.5250	767.5250	0.0000
9	4942.4693	-40.0000	767.5648	767.5648	0.0000
9	4952.4693	-40.0000	767.6046	767.6046	0.0000
9	4962.4693	-40.0000	767.6444	767.6444	0.0000
9	4972.4693	-40.0000	767.6842	767.6842	0.0000
9	4982.4693	-40.0000	767.7240	767.7240	0.0000
9	4988.4693	-40.0000	767.7638	767.7638	0.0000

* Correction for raised median
Add 0.5' to Theoretically Adjusted Elevations for Girder No. 4 in Span No. 1 and for Girder No. 5 in Span No. 2.

REVISIONS		DRAWN BY DATE	
1		RES	3-7
2		RES	

SPAN NO. 3

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
1	5011.5306	22.0000	767.5540	767.5540	0.0000
1	5021.5306	22.0000	767.5485	767.5528	0.0043
1	5031.5306	22.0000	767.5396	767.5617	0.0220
1	5041.5306	22.0000	767.5275	767.5754	0.0479
1	5051.5306	22.0000	767.5119	767.5862	0.0742
1	5061.5306	22.0000	767.4931	767.5878	0.0946
1	5071.5306	22.0000	767.4709	767.5759	0.1049
1	5081.5306	22.0000	767.4454	767.5480	0.1026
1	5091.5306	22.0000	767.5037	767.5037	0.0871
1	5101.5306	22.0000	767.3844	767.4442	0.0597
1	5111.5306	22.0000	767.3489	767.3727	0.0237
1	5117.5306	22.0000	767.3260	767.3260	0.0000

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
2	5008.6480	14.2500	767.6760	767.6760	0.0000
2	5018.6480	14.2500	767.6715	767.6758	0.0043
2	5028.6480	14.2500	767.6636	767.6857	0.0220
2	5038.6480	14.2500	767.6524	767.7003	0.0479
2	5048.6480	14.2500	767.6379	767.7121	0.0742
2	5058.6480	14.2500	767.6200	767.7145	0.0946
2	5068.6480	14.2500	767.5988	767.7037	0.1049
2	5078.6480	14.2500	767.5742	767.6768	0.1026
2	5088.6480	14.2500	767.5463	767.6335	0.0871
2	5098.6480	14.2500	767.5151	767.5749	0.0597
2	5108.6480	14.2500	767.4806	767.5043	0.0237
2	5114.6480	14.2500	767.4582	767.4582	0.0000

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
3	5005.7653	6.5000	767.7978	767.7978	0.0000
3	5015.7653	6.5000	767.7942	767.7986	0.0043
3	5025.7653	6.5000	767.7873	767.8094	0.0220
3	5035.7653	6.5000	767.7771	767.8250	0.0479
3	5045.7653	6.5000	767.7635	767.8377	0.0742
3	5055.7653	6.5000	767.7466	767.8412	0.0946
3	5065.7653	6.5000	767.7263	767.8312	0.1049
3	5075.7653	6.5000	767.7027	767.8053	0.1026
3	5085.7653	6.5000	767.6758	767.7629	0.0871
3	5095.7653	6.5000	767.6455	767.7033	0.0597
3	5105.7653	6.5000	767.6119	767.6357	0.0237
3	5111.7653	6.5000	767.5902	767.5902	0.0000

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
4	5002.8826	-1.2500	767.9193	767.9193	0.0000
4	5012.8826	-1.2500	767.9167	767.9210	0.0043
4	5022.8826	-1.2500	767.9108	767.9328	0.0220
4	5032.8826	-1.2500	767.9015	767.9494	0.0479
4	5042.8826	-1.2500	767.8888	767.9631	0.0742
4	5052.8826	-1.2500	767.8729	767.9675	0.0946
4	5062.8826	-1.2500	767.8535	767.9585	0.1049
4	5072.8826	-1.2500	767.8309	767.9336	0.1026
4	5082.8826	-1.2500	767.8050	767.8921	0.0871
4	5092.8826	-1.2500	767.7757	767.8355	0.0597
4	5102.8826	-1.2500	767.7431	767.7668	0.0237
4	5108.8826	-1.2500	767.7219	767.7219	0.0000

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
5	5000.0000	-9.0000	768.0406	768.0406	0.0000
5	5010.0000	-9.0000	768.0389	768.0432	0.0043
5	5020.0000	-9.0000	768.0337	768.0559	0.0220
5	5030.0000	-9.0000	768.0256	768.0735	0.0479
5	5040.0000	-9.0000	768.0139	768.0881	0.0742
5	5050.0000	-9.0000	767.9989	768.0936	0.0946
5	5060.0000	-9.0000	767.9806	768.0859	0.1049
5	5070.0000	-9.0000	767.9589	768.0615	0.1026
5	5080.0000	-9.0000	767.9339	768.0210	0.0871
5	5090.0000	-9.0000	767.9056	767.9654	0.0597
5	5100.0000	-9.0000	767.8739	767.8977	0.0237
5	5106.0000	-9.0000	767.8533	767.8533	0.0000

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
6	4997.1173	-16.7500	767.9193	767.9193	0.0000
6	5007.1173	-16.7500	767.9186	767.9230	0.0043
6	5017.1173	-16.7500	767.9146	767.9366	0.0220
6	5027.1173	-16.7500	767.9072	767.9552	0.0479
6	5037.1173	-16.7500	767.8965	767.9707	0.0742
6	5047.1173	-16.7500	767.8825	767.9771	0.0946
6	5057.1173	-16.7500	767.8651	767.9700	0.1049
6	5067.1173	-16.7500	767.8444	767.9470	0.1026
6	5077.1173	-16.7500	767.8204	767.9075	0.0871
6	5087.1173	-16.7500	767.7930	767.8528	0.0597
6	5097.1173	-16.7500	767.7623	767.7861	0.0237
6	5103.1173	-16.7500	767.7423	767.7423	0.0000

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
7	4994.2346	-24.5000	767.7978	767.7978	0.0000
7	5004.2346	-24.5000	767.7981	767.8024	0.0043
7	5014.2346	-24.5000	767.7950	767.8171	0.0220
7	5024.2346	-24.5000	767.7886	767.8365	0.0479
7	5034.2346	-24.5000	767.7789	767.8531	0.0742
7	5044.2346	-24.5000	767.7658	767.8604	0.0946
7	5054.2346	-24.5000	767.7494	767.8543	0.1049
7	5064.2346	-24.5000	767.7296	767.8322	0.1026
7	5074.2346	-24.5000	767.7065	767.7937	0.0871
7	5084.2346	-24.5000	767.6801	767.7399	0.0597
7	5094.2346	-24.5000	767.6504	767.6742	0.0237
7	5100.2346	-24.5000	767.6309	767.6309	0.0000

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
8	4991.3519	-32.2500	767.6760	767.6760	0.0000
8	5001.3519	-32.2500	767.6773	767.6816	0.0043
8	5011.3519	-32.2500	767.6751	767.6972	0.0220
8	5021.3519	-32.2500	767.6697	767.7176	0.0479
8	5031.3519	-32.2500	767.6609	767.7351	0.0742
8	5041.3519	-32.2500	767.6488	767.7434	0.0946
8	5051.3519	-32.2500	767.6333	767.7383	0.1049
8	5061.3519	-32.2500	767.6146	767.7172	0.1026
8	5071.3519	-32.2500	767.5924	767.6796	0.0871
8	5081.3519	-32.2500	767.5670	767.6268	0.0597
8	5091.3519	-32.2500	767.5382	767.5620	0.0237
8	5097.3519	-32.2500	767.5193	767.5193	0.0000

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
9	4988.4693	-40.0000	767.5540	767.5540	0.0000
9	4998.4693	-40.0000	767.5562	767.5605	0.0043
9	5008.4693	-40.0000	767.5550	767.5770	0.0220
9	5018.4693	-40.0000	767.5505	767.5985	0.0479
9	5028.4693	-40.0000	767.5427	767.6169	0.0742
9	5038.4693	-40.0000	767.5315	767.6262	0.0946
9	5048.4693	-40.0000	767.5170	767.6220	0.1049
9	5058.4693	-40.0000	767.4992	767.5918	0.1026
9	5068.4693	-40.0000	767.4781	767.5652	0.0871
9	5078.4693	-40.0000	767.4536	767.5134	0.0597
9	5088.4693	-40.0000	767.4252	767.4495	0.0237
9	5094.4693	-40.0000	767.4075	767.4075	0.0000

* Correction for raised median
Add 0.5' to Theoretically Adjusted Elevations for Girder No 5 in Span No 3 and Girder No 4 in Span No 4.

SPAN NO. 4

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
A	5119.6767	22.7500	767.3058	767.3058	0.0000
A	5129.6746	22.7500	767.2642	767.2642	0.0000
A	5139.6724	22.7500	767.2193	767.2193	0.0000
A	5149.4315	22.7500	767.1920	767.1920	0.0000

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
1	5116.7243	14.8125	767.4414	767.4414	0.0000
1	5126.7222	14.8125	767.4009	767.4038	0.0029
1	5136.7200	14.8125	767.3570	767.3591	0.0021
1	5142.4791	14.8125	767.3302	767.3302	0.0000

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
2	5113.7719	6.8750	767.5768	767.5768	0.0000
2	5123.7697	6.8750	767.5372	767.5401	0.0029
2	5133.7676	6.8750	767.4943	767.4964	0.0021
2	5139.5267	6.8750	767.4681	767.4681	0.0000

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
3	5110.8195	-1.0625	767.7119	767.7119	0.0000
3	5120.8173	-1.0625	767.6733	767.6752	0.0029
3	5130.8152	-1.0625	767.6313	767.6334	0.0021
3	5136.5743	-1.0625	767.6057	767.6057	0.0000

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
4	5107.8671	-9.0000	767.8467	767.8467	0.0000
4	5117.8649	-9.0000	767.8090	767.8119	0.0029
4	5127.8628	-9.0000	767.7681	767.7702	0.0021
4	5133.6219	-9.0000	767.7430	767.7430	0.0000

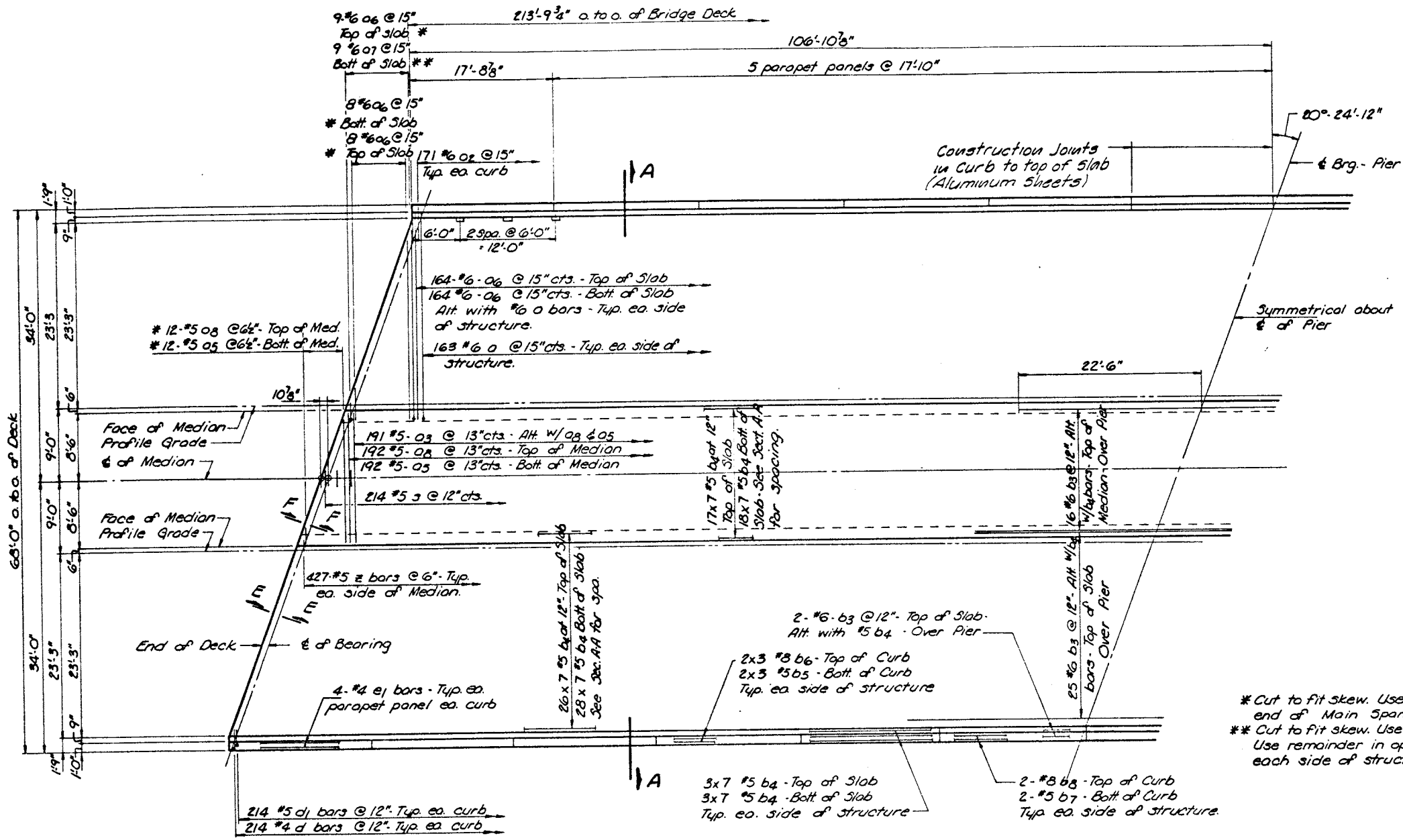
GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
5	5104.9147	-16.9375	767.7331	767.7331	0.0000
5	5114.9125	-16.9375	767.6965	767.6994	0.0029
5	5124.9103	-16.9375	767.6565	767.6586	0.0021
5	5130.6695	-16.9375	767.6320	767.6320	0.0000

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
6	5101.9623	-24.8750	767.6193	767.6193	0.0000
6	5111.9601	-24.8750	767.5836	767.5855	0.0029
6	5121.9579	-24.8750	767.5445	767.5467	0.0021
6	5127.7171	-24.8750	767.5207	767.5207	0.0000

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
7	5099.0099	-32.8125	767.5051	767.5051	0.0000
7	5109.0077	-32.8125	767.4705	767.4734	0.0029
7	5119.0055	-32.8125	767.4325	767.4346	0.0021
7	5124.7647	-32.8125	767.4091	767.4091	0.0000

GIRDER	STATION	NORMAL OFFSET	ELEVATION	DEFL + ELEV	DEFLECTION
8	5096.0574	-40.7500	767.3907	767.3907	0.0000

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-55	57-848-1	MCLEAN	32	13
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



* Cut to fit skew. Use remainder of bars in opposite end of Main Spans. Typical each side of structure.
** Cut to fit skew. Use bent-up portion in this section. Use remainder in opposite end of Main Spans. Typical each side of structure.

PLAN

BAR	NO	SIZE	LENGTH	SHAPE
O	326	#6	27'-8"	~
O2	342	#6	4'-0"	~
O3	191	#5	17'-2"	~
O5	204	#5	16'-10"	~
O6	706	#6	26'-0"	~
O7	18	#6	26'-11"	~
O8	210	#5	16'-9"	~
O9	4	#5	8'-0"	~
b3	70	#6	45'-0"	~
b4	1085	#5	31'-7"	~
b5	24	#5	30'-6"	~
b6	24	#8	31'-0"	~
b7	8	#5	17'-7"	~
b8	8	#8	17'-7"	~
d	428	#4	4'-7"	L
d1	428	#5	3'-5"	L
d2	96	#4	2'-1"	□
e1	96	#4	17'-6"	~
s	214	#5	4'-3"	U
s1	32	#5	4'-9"	□
z	854	#5	1'-10"	L
REINFORCEMENT BARS			LBS.	105,180
CLASS X CONCRETE			CU. YDS.	441.2

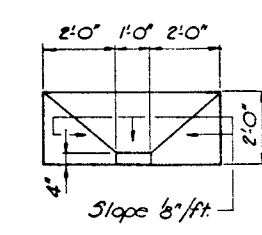
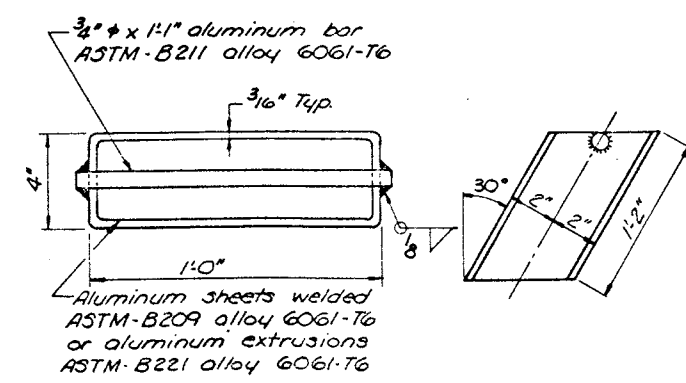
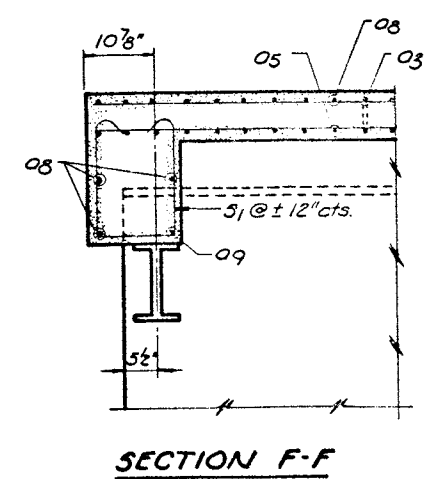
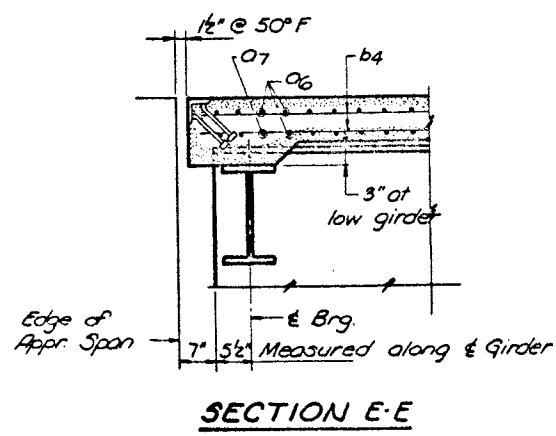
CONCRETE DECK - MAIN SPAN

REVISIONS	STATE OF ILLINOIS	MLT 7-K
1 7-77 GSH		CHECKED BY FML 10-77
2		DATE
3		
4		
5		
6		
7		
8		
9		
10		

C.H. 34 OVER FAI-55
FAI-55 SEC. 57-848-1 PROJECT
STA 518 + 69.93 (FAI-55) MCLEAN COUNTY

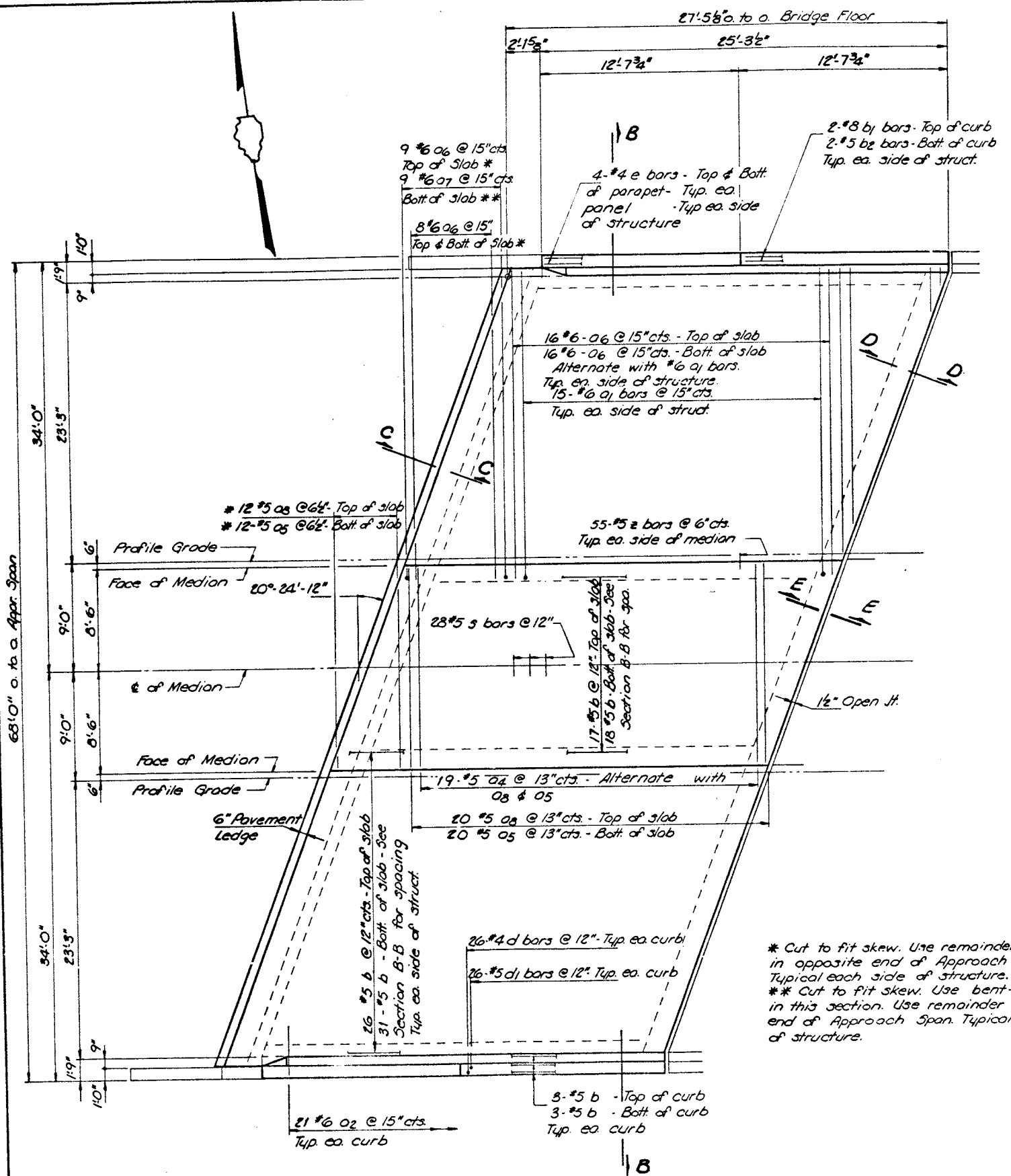
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

2109



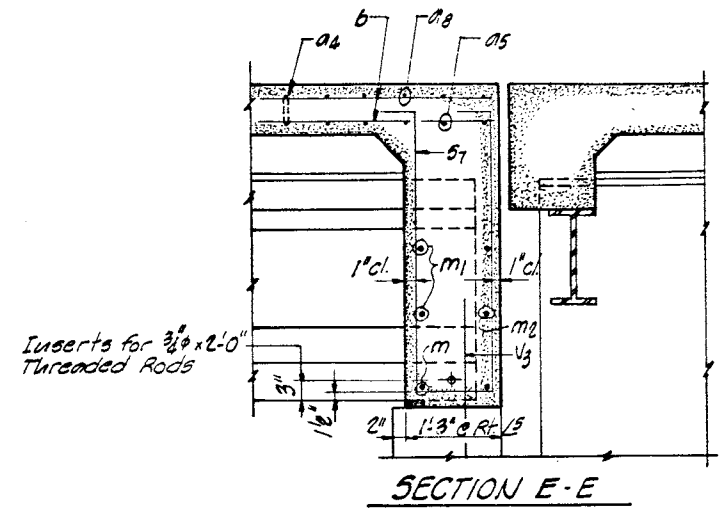
Cost of Aluminum Floor Drains and Aluminum Sheets shall be incidental to Class X Concrete.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-1-55	57-84B-1	MCLEAN	32	6
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

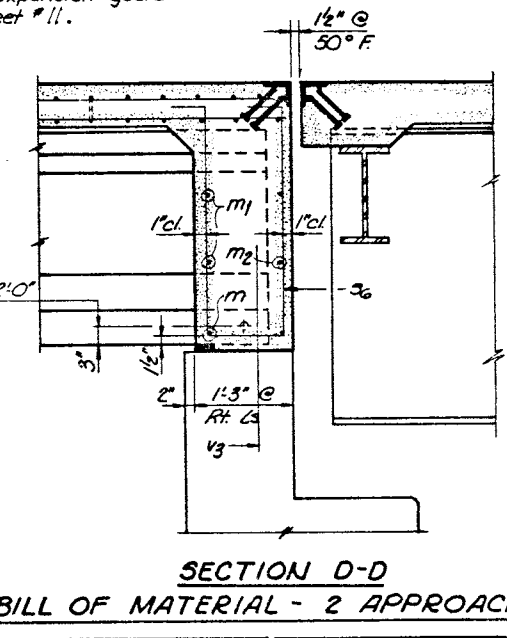
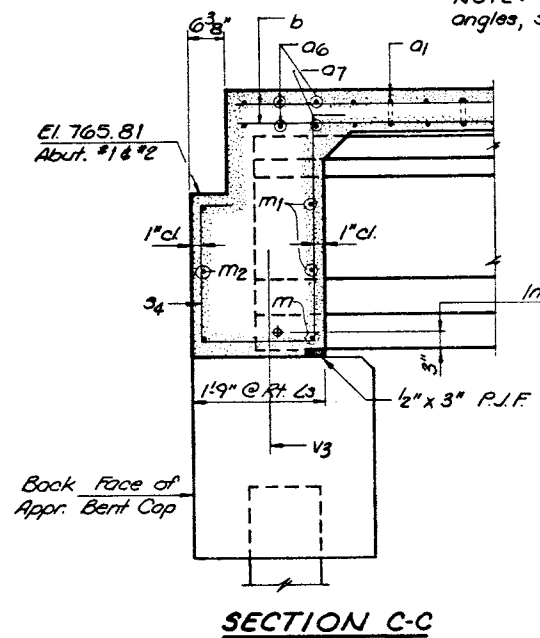


* Cut to fit skew. Use remainder of bars in opposite end of Approach Span. Typical each side of structure.

** Cut to fit skew. Use bent-up portion in this section. Use remainder in opposite end of Approach Span. Typical each side of structure.



NOTE: For details of expansion guard angles, see Detail "A" sheet # 11.



BILL OF MATERIAL - 2 APPROACH SPANS

BAR	N ^o	SIZE	LENGTH	SHAPE	BAR	N ^o	SIZE	LENGTH	SHAPE
a1	60	#6	27'-8"	~	e	82	#4	12'-4"	—
a2	84	#6	4'-0"	~	m	32	#5	6'-6"	—
a3	38	#5	17'-2"	~	m1	64	#4	7'-8"	—
a4	64	#5	16'-10"	~	m2	24	#5	35'-8"	—
a5	228	#6	26'-0"	—	s	56	#5	4'-3"	┌
a6	36	#6	26'-11"	—	s4	72	#4	7'-5"	└
a7	64	#5	16'-9"	—	s5	24	#4	7'-10"	└
a8	64	#5	16'-9"	—	s6	72	#4	8'-7"	└
b	322	#5	27'-2"	—	s7	24	#4	9'-7"	└
b1	8	#8	25'-0"	—	z	220	#5	1'-10"	└
b2	8	#5	25'-0"	—					
d	104	#4	4'-7"	L					
d1	104	#5	3'-5"	L					
a2	24	#4	2'-1"	□					
					Reinforcement Bars		lbs.	30,290	
					Class "X" Concrete		cu yds.	145.8	

CONCRETE DECK-APPROACH SPANS

REVISIONS		STATE OF ILLINOIS	
1	2-7-55		
2			
3			
4			
5			
6			
7			
8			
9			
10			

CH 34 OVER FA-1-55
FA-1-55 SEC 57-84B-1 PROJECT
STA 518 + 8793 FA-1-55, MCLEAN COUNTY

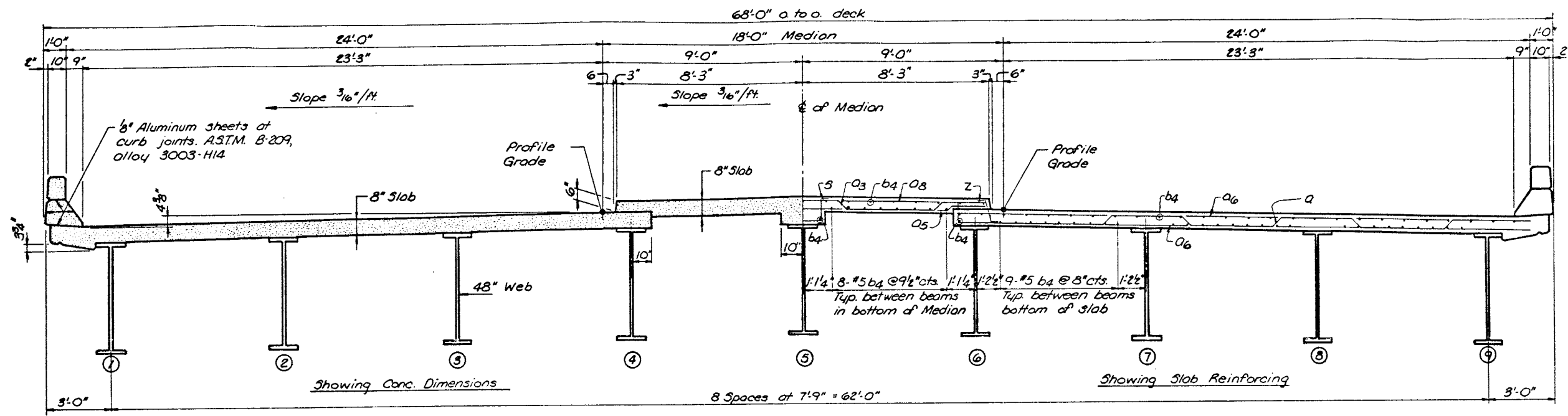
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

2109

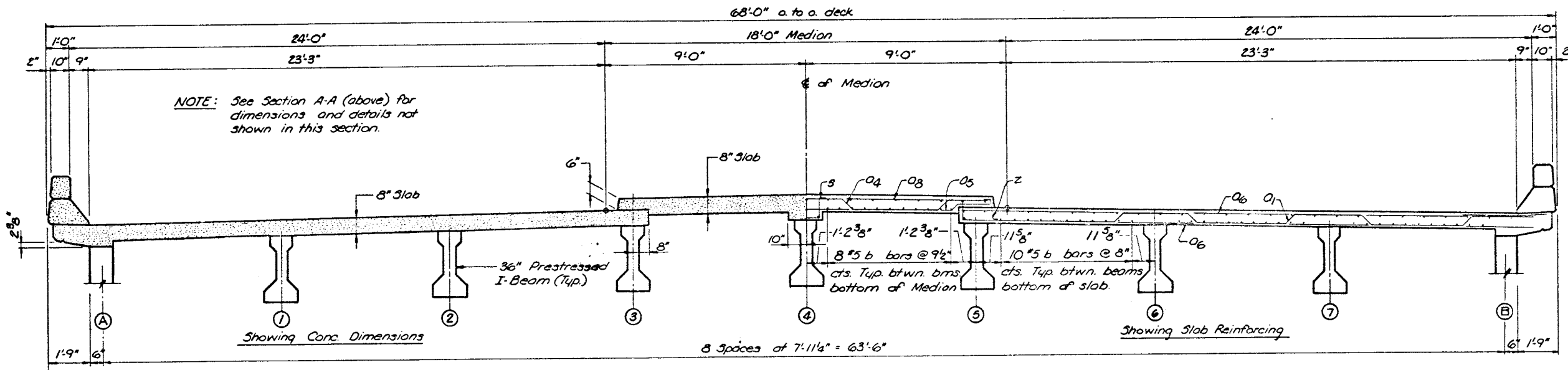
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-55	57-848-1	MCLEAN	32	15
FED. ROAD DIST. NO.		ILLINOIS	PROJECT	

Sheet No. 7
of 13 Sheets

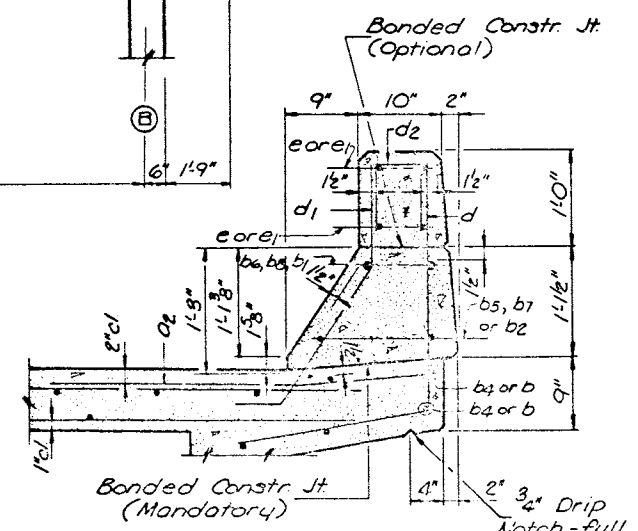
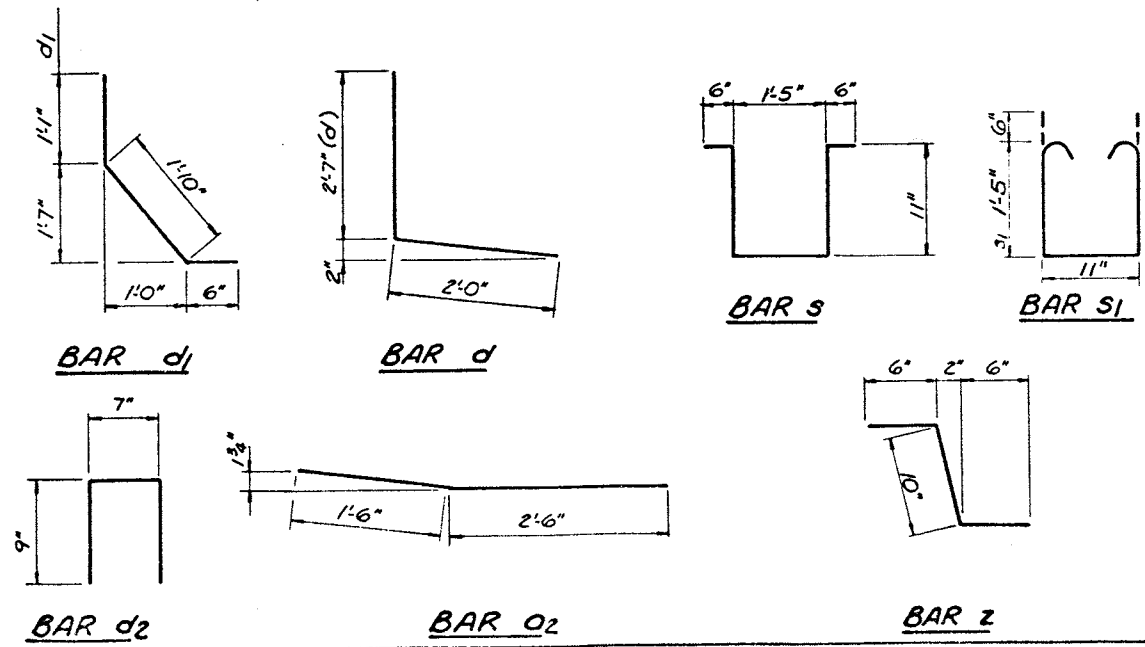
NOTE: All edges shall have 1/4" chamfers.



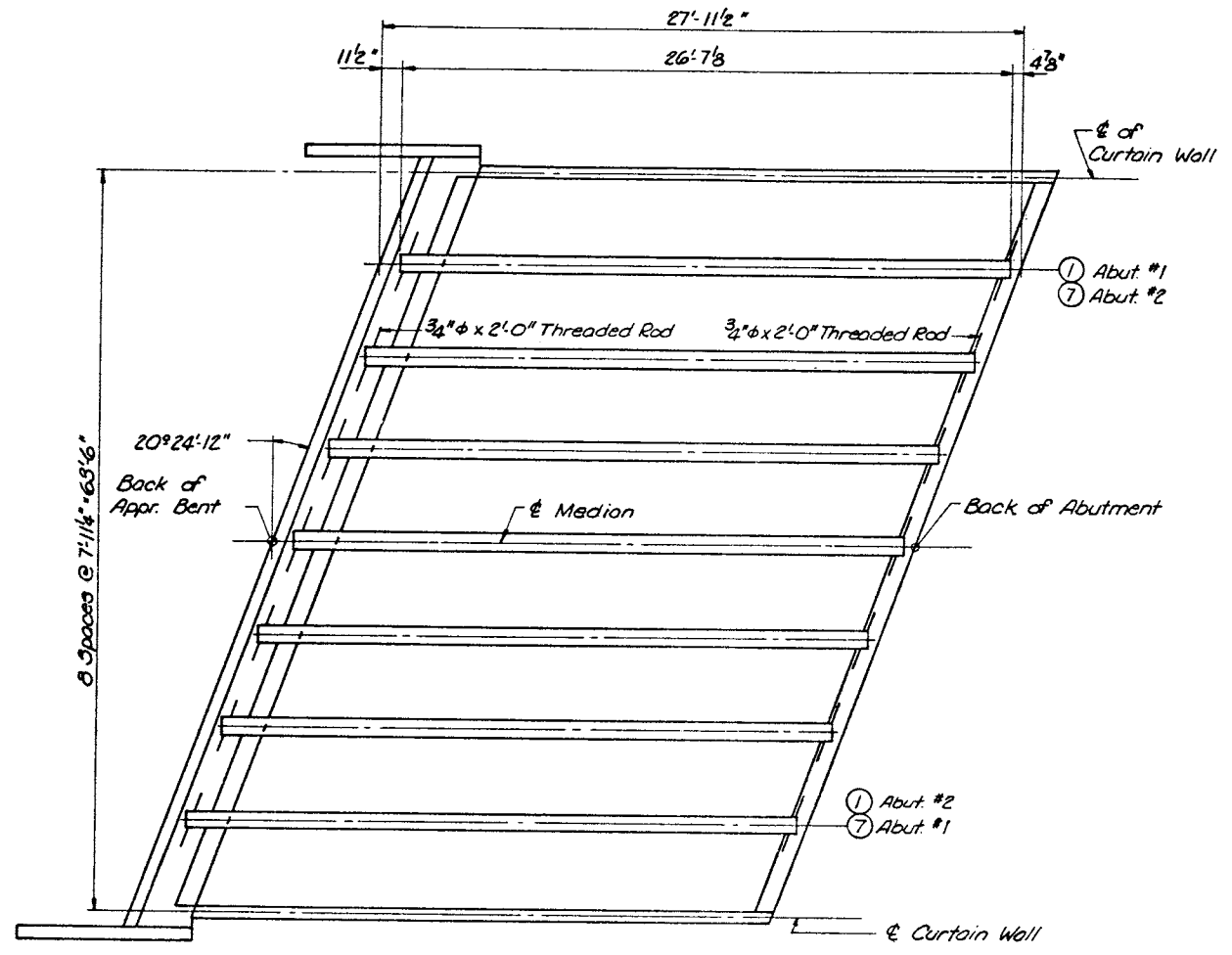
SECTION A-A



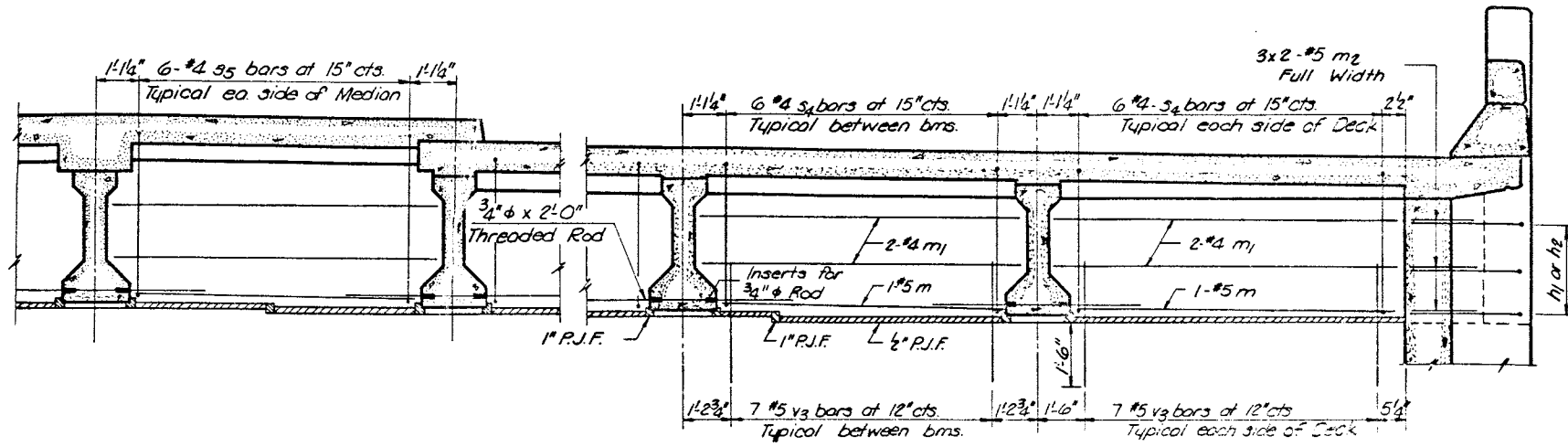
SECTION B-B



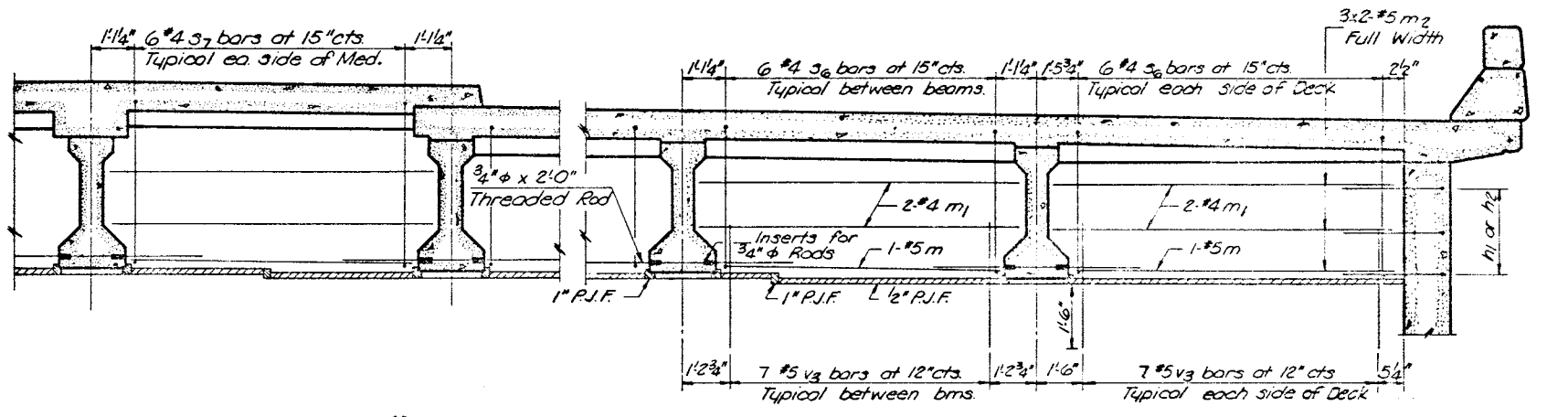
REVISIONS			STATE OF ILLINOIS		DRAWN BY DATE	
NO.	DATE	INITIALS	M.L.T. 11-70		CHECKED BY DATE	
1			E.M.L. 11-70		PROJECT NO.	
2			2109		SHEET NO.	
3			C.H. 34 OVER FAI-55		PROJECT	
4			FAI-55 SEC 57 848-1		PROJECT	
5			STA 518+003 (FAI-55)		MCLEAN COUNTY	
6			HOMER L. CHASTAIN & ASSOCIATES			
7			CONSULTING ENGINEERS			
8			DECATUR, ILLINOIS			
9						
10						



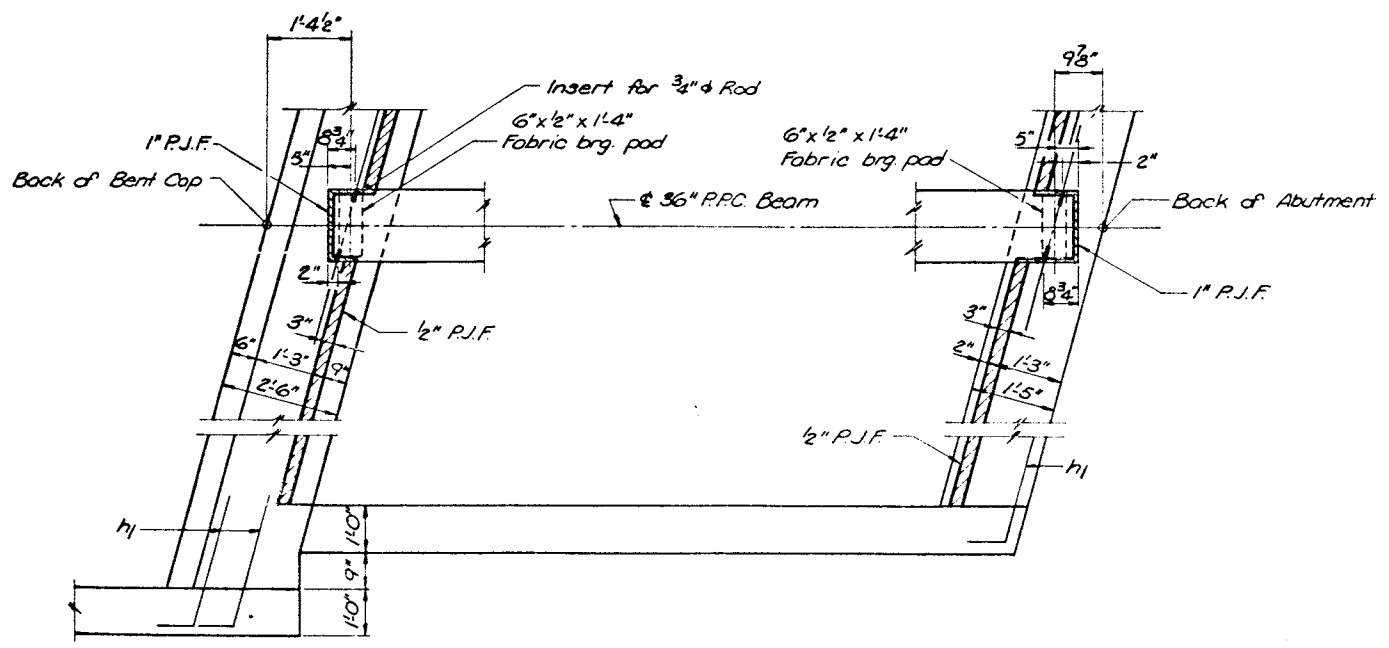
FRAMING PLAN



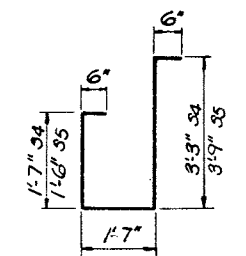
DIAPHRAGM AT APPROACH BENT CAP



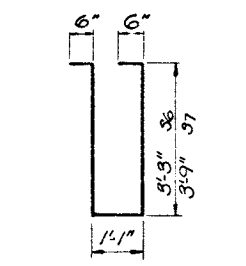
DIAPHRAGM AT ABUTMENT



PARTIAL PLAN



BARS S4 & S5



BARS S6 & S7

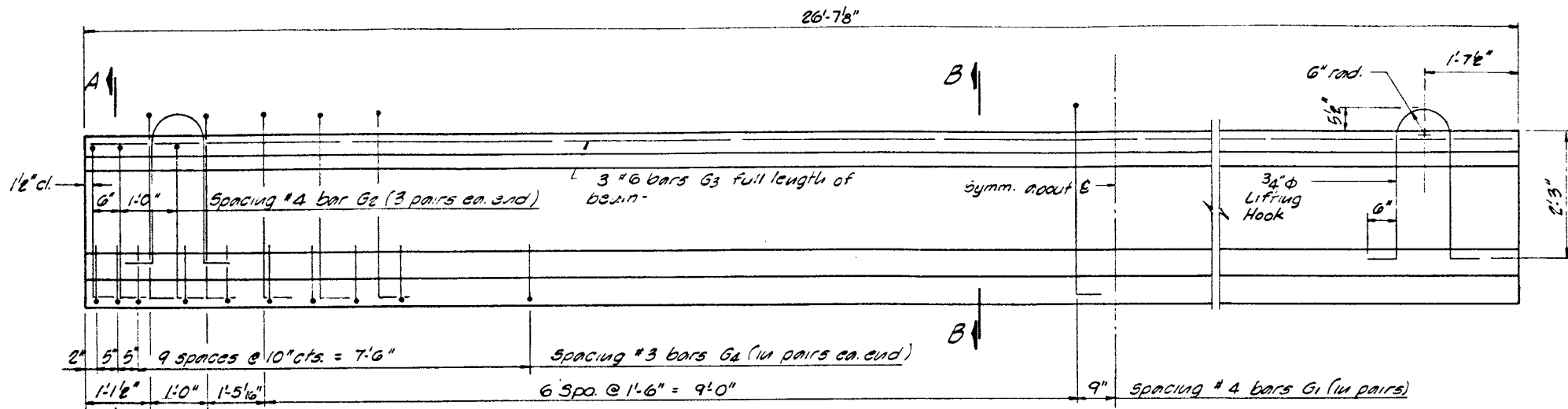
NOTES:

- Bars S4 thru S7 and m thru m2 are billed with Approach Span Bill of Material on sheet #6.
- Bars h1, h2, and v3 are billed with Abutment Bill of Material on sheet #14.
- See Sheet #6 for sections thru abutment and approach bent cap diaphragms.

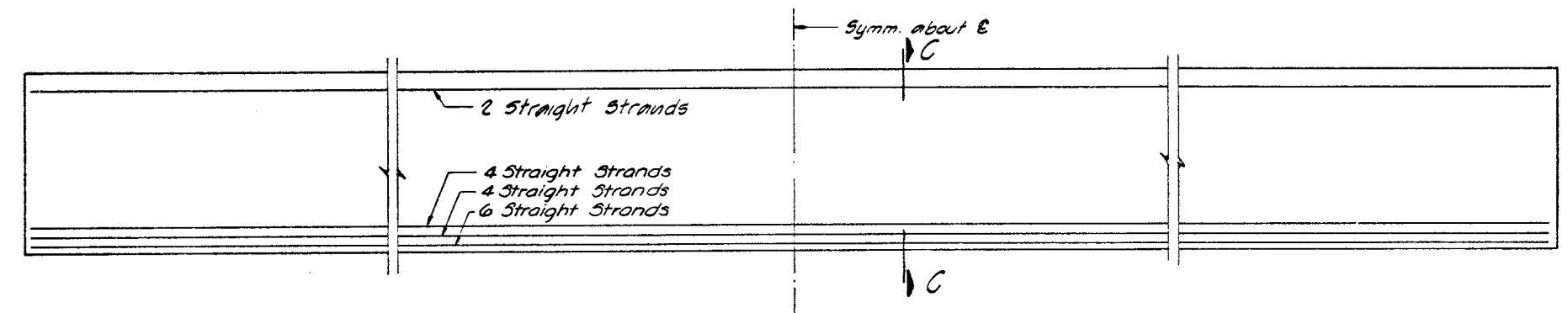
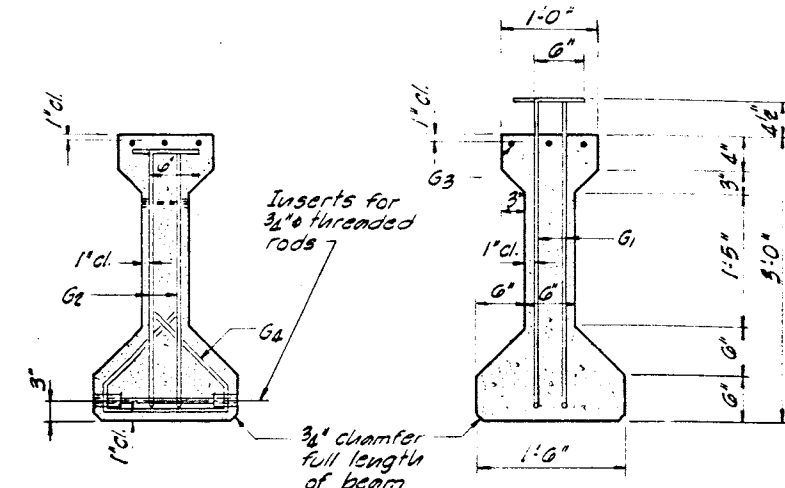
REVISIONS		STATE OF ILLINOIS		DRAWN BY DATE
1	7.71.65			MLT 9-70
2				EML 10-70
3				
4				
5				
6				
7				
8				
9				
10				

CHASE OVERPASS FAI-55 SEC 57-84-1 PROJECT STA 5.8 + 0.73 (FA-55)	MCLEAN COUNTY HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS DECATUR, ILLINOIS	2109
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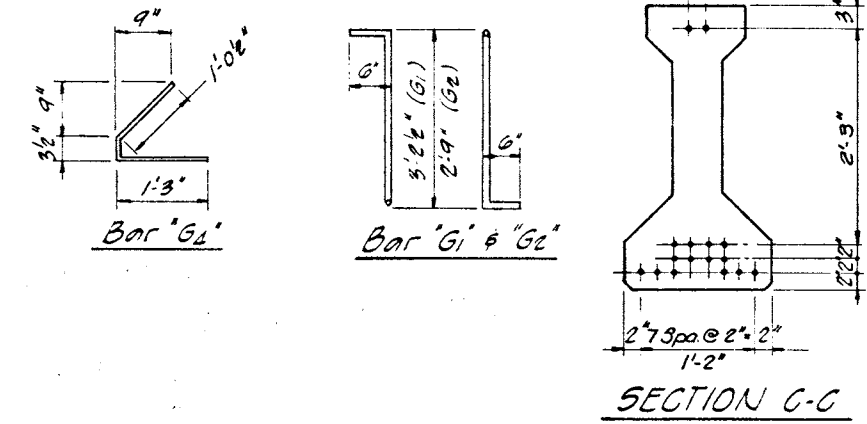
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-55	57-84B-1	MCLEAN	32	18
PROJECT NO.	PROJECT			



ELEVATION OF BEAMS -
(Showing reinf. and dimensions)



ELEVATION OF BEAMS -
(Showing Prestressing Steel)
16 Required



* BAR LIST - BEAMS

Bar	No.	Size	Length	Shape
G1	36	#4	4'-2 1/2"	TL
G2	12	#4	3'-9"	TL
G3	3	#6	26'-4"	—
G4	48	#3	2'-7"	L

* For one beam only

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 36"	Lin Ft.	372

-NOTES-

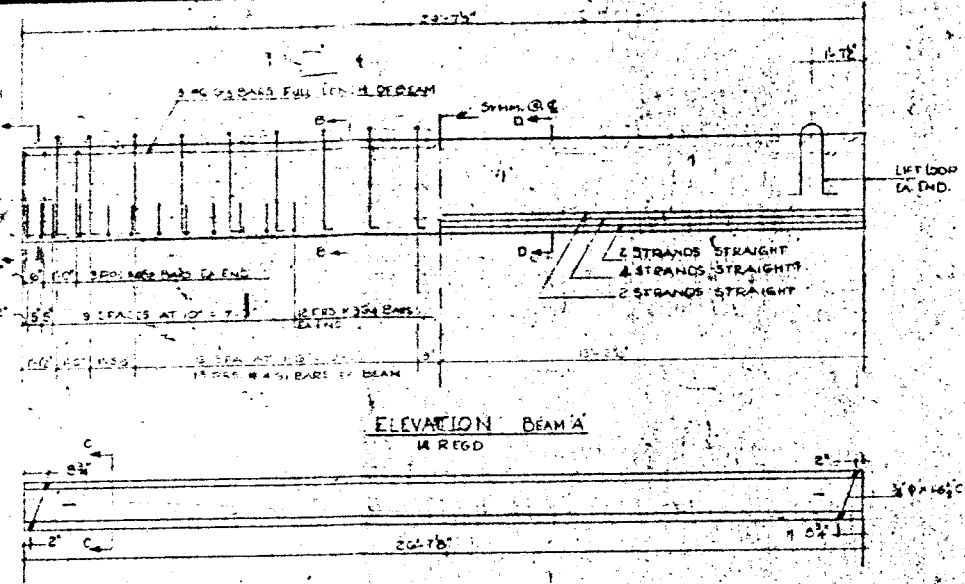
All inserts and threaded rods for inserts, reinforcing and prestressing steel, and other items which are cast into the Precast Concrete I-Beams shall be included in the contract unit price per linear foot of "Furnishing & Erecting Precast Prestressed Concrete I-Beams, 36 in." See Standard Specifications for additional information regarding materials, prestressing equipment, construction & handling methods and other requirements for Precast Prestressed Concrete I-Beams. Prestressing Steel shall have a nominal diameter of 1/16". Inserts for 3/4" threaded rods are to be two struct coil type for interior I-beams and single coil flared top type for exterior I-beams. Steel for Lifting Hooks shall be AS-4 2-306 Grade 70-80. End of beams to be enclosed with cast in place concrete shall not be coated with asphalt paint.

PRECAST PRESTRESSED CONC. I-BEAM

REVISIONS	STATE OF ILLINOIS	DATE BY
7-71 GSH	CH 34 OVER FAI-55 FAI-55 SEC 57-84B-1 STA 518 + 6993 (FAI-55)	MLT 10-70 EM 10-70
	PROJECT MCLAN CO.	PROJECT NO. 2109
	HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS DECATUR, ILLINOIS	

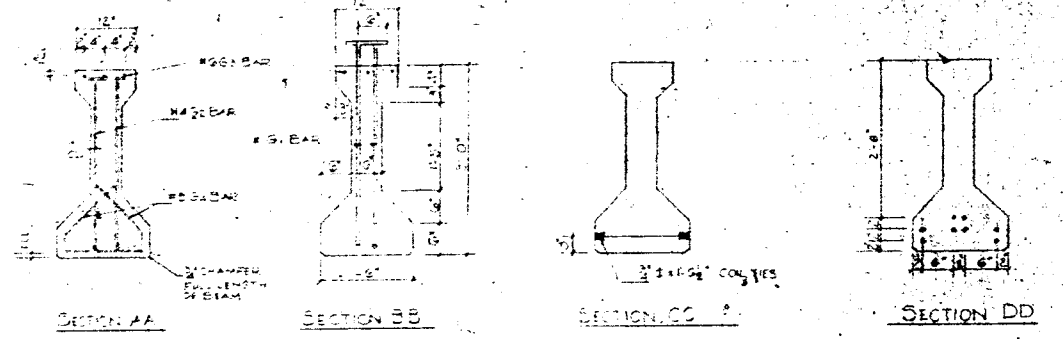
JOB NO.
910

SHEET
2 OF 2



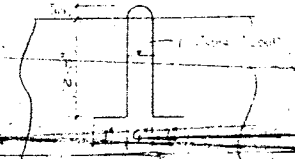
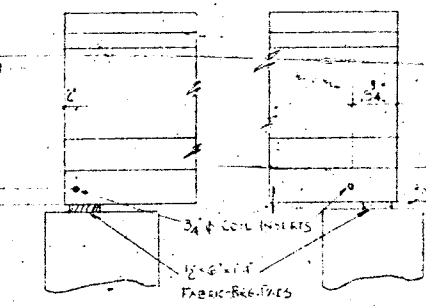
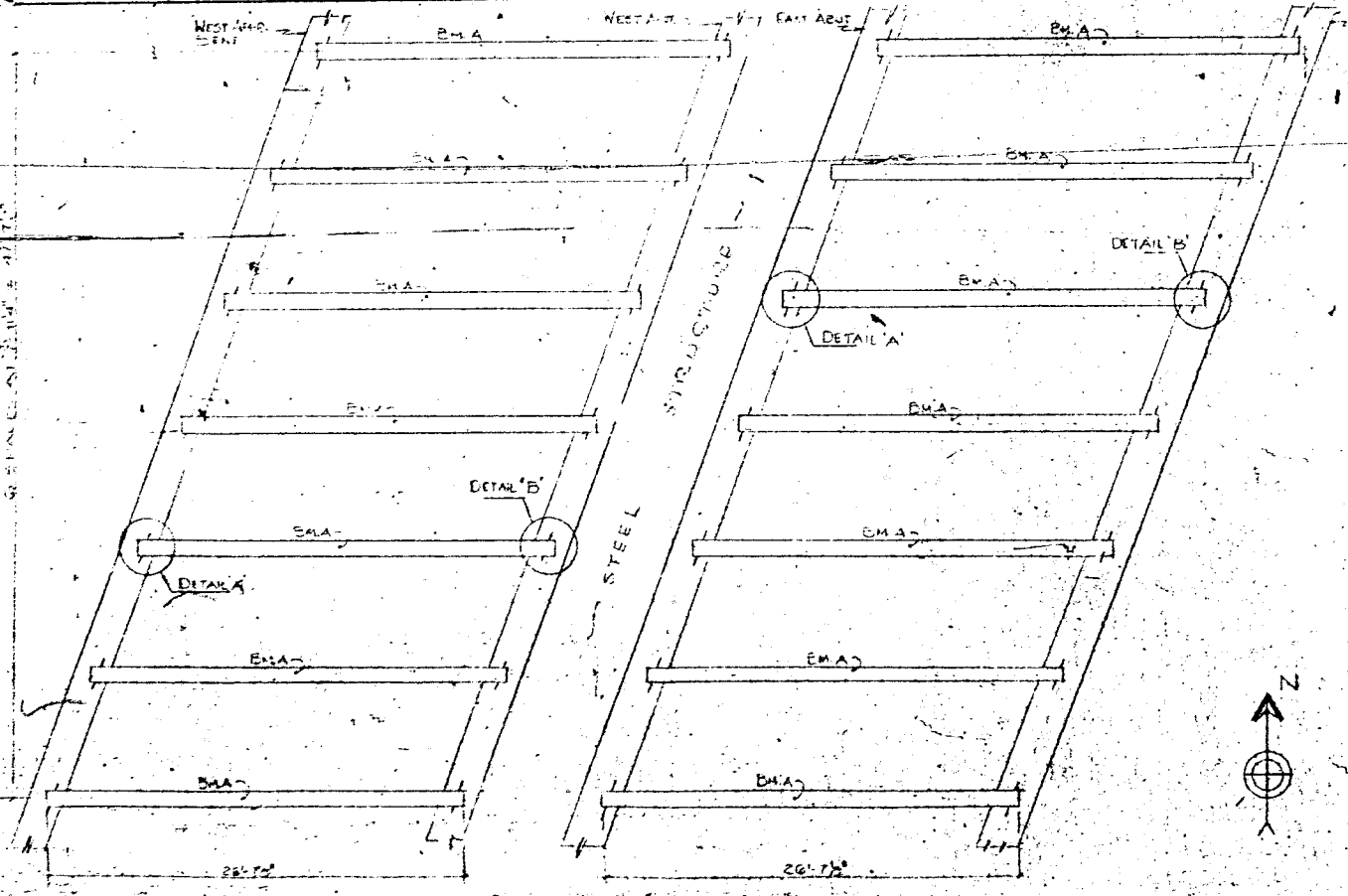
ELEVATION BEAM A
14 REGD.

PLAN

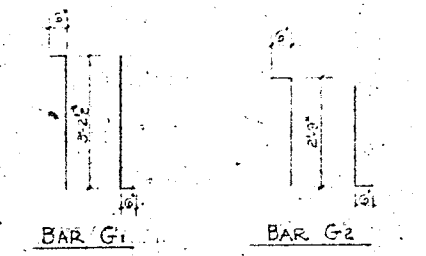


PRODUCTION Note: 270 Strands

BEAM NO.	NUMBER OF STRANDS	NO. OF STRANDS PER FOOT OF BEAM	NO.	THICKNESS IN IN.
3"	2	2	1/2"	2.950
4"	4	4	1/2"	2.950
6"	2	2	1/2"	2.950



LIFT LOOP DETAILS
USE 2 #4 STRANDS PER BEAM



BEARING PAD DETAILS
FANCO SPLIT
2B REVD.

FILE SET
ZSS-A(105)152
FAI RTG. 55
SECTION 57-8HB-1
MCLEAN COUNTY
C 96-097-71
CONTR. 910

GENERAL NOTES
END OF BEAM TO BE ENCASED WITH CAST IN PLACE CONCRETE AND SHALL NOT BE LOCATED WITH ASPHALT PAVEMENT.
ANCHOR BOLTS, WELLS AND BOLDS TO BE SUPPLIED BY CONCRETE ACCESSORIES CO. OF FRANKLIN PARK, ILL. OR EQUAL.

APPROVED
For Use in Dimensions and Materials Only
SEP 18 8/2
CARE Thompson
Engineer of Bridge & Traffic Structure

BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
G1	504	#4	4'-22"	1L
G2	158	#4	3'-3"	1L
G3	42	#4	26'-4"	1L
G4	272	#4	2'-3"	1L

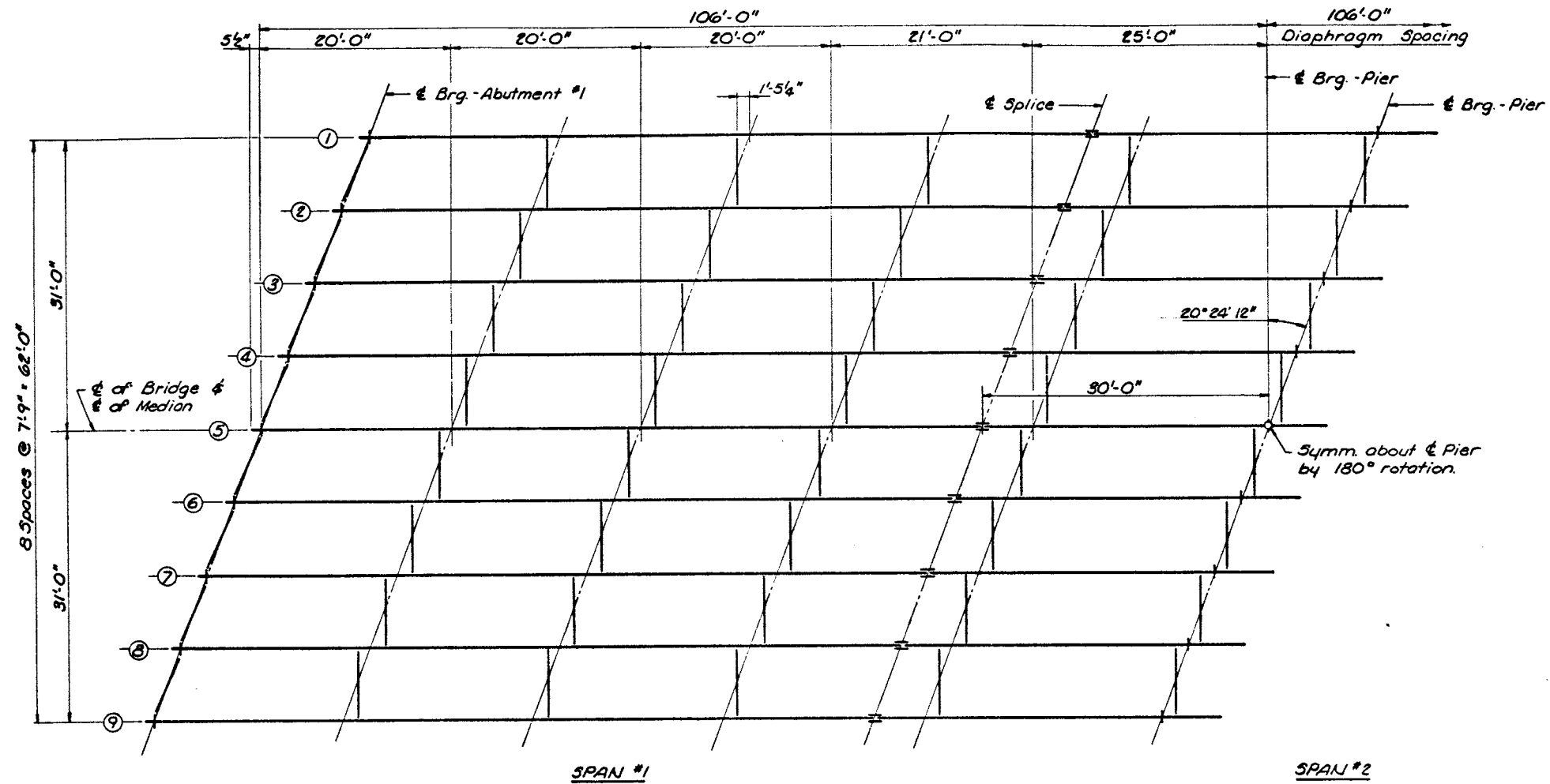
3/4" x 1/2" COIL TIES 20 REGD.
3/4" x 2" COIL RODS 56 REGD.

JOB NO. 910
SHEET 2 OF 2
DRAWN BY K.M.
CHECKED BY J.W.
APPROVED BY J.W.
DATE 9/4/72

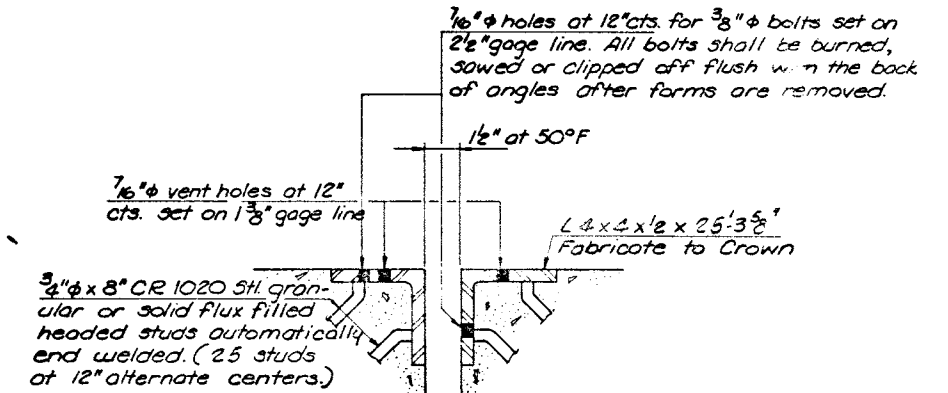
NO. COUNTY MCLEAN
FAI RTG. 55 SEC 57-8HB-1
STA. 510+50.35

8/4/72 (69)

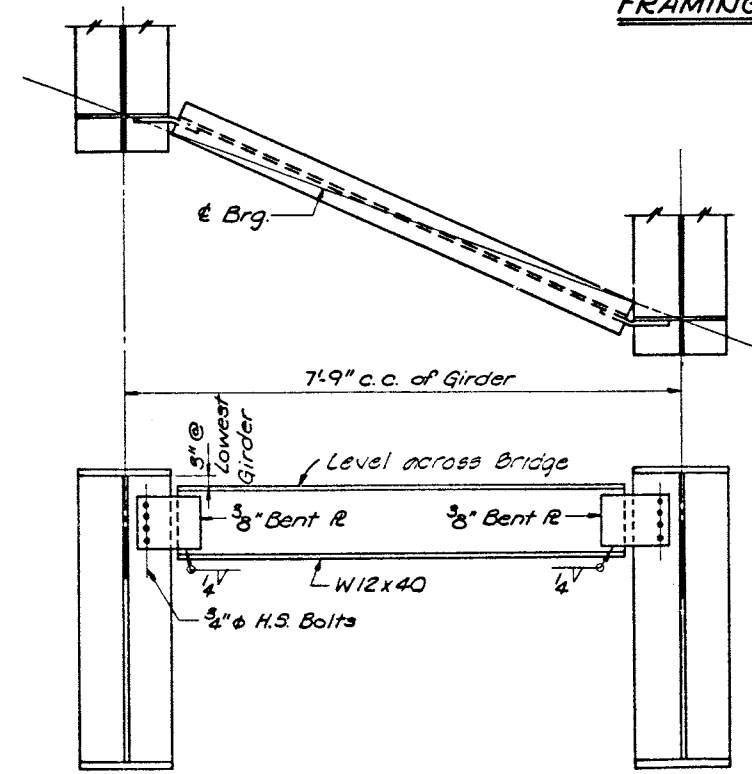
STATE	COUNTY	TOTAL SHEETS	SHEET NO.
ILLINOIS	MCLEAN	32	19
PROJECT		DATE	
FAI-55 SEC. 57-8-8- MCLEAN		2100	



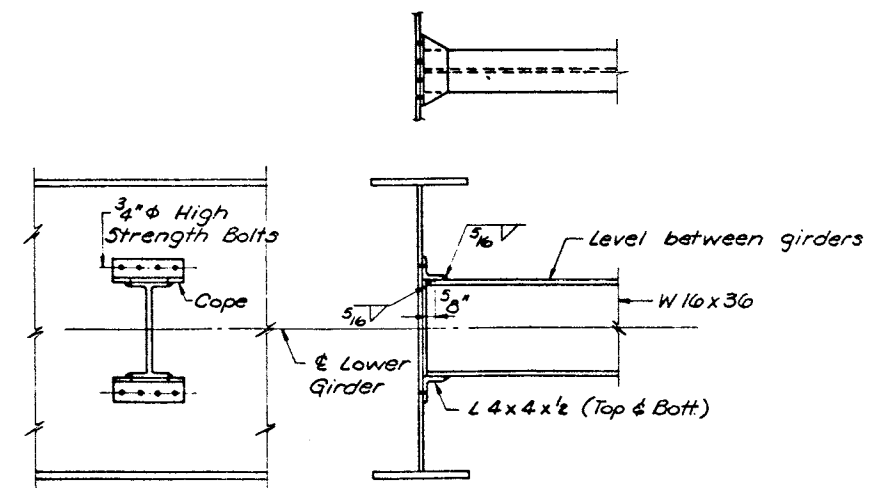
FRAMING PLAN



EXPANSION GUARD DETAIL
4 Pair Req'd.



END DIAPHRAGM
16 Required



INTERIOR DIAPHRAGM
72 Required

TOP OF WEB ELEVATIONS

GIRDER	169	288	367	486	5
Brg. - Abut #1	766.58	766.70	766.82	766.94	767.06
Splice #1	766.70	766.82	766.94	767.07	767.19
Pier	766.70	766.82	766.94	767.07	767.19
Splice #2	766.70	766.82	766.94	767.07	767.19
Brg. - Abut #2	766.58	766.70	766.82	766.94	767.06

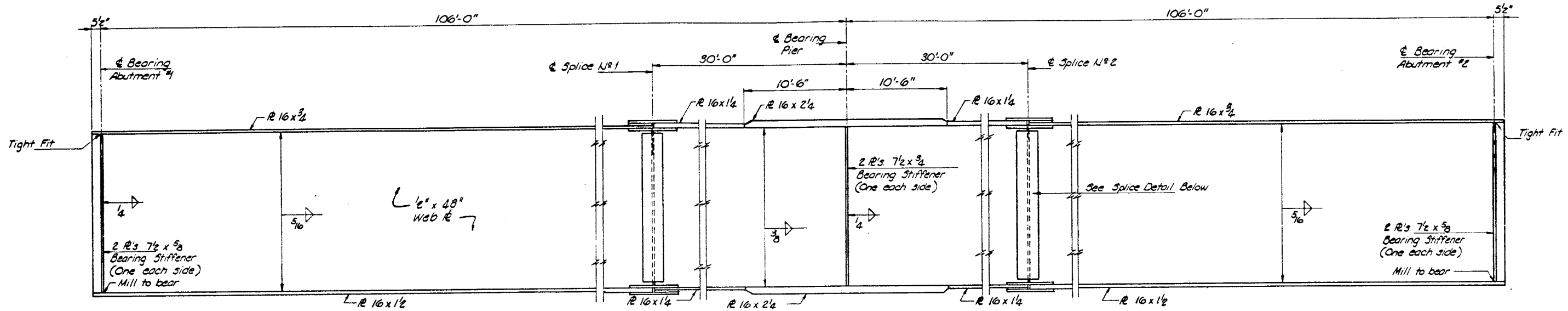
STRUCTURAL STEEL DETAILS

REVISIONS		STATE OF ILLINOIS		DRAWN BY
NO.	DATE	BY	DATE	MLT
1	7-71	CSH		
2				
3				
4				
5				
6				
7				
8				
9				
10				

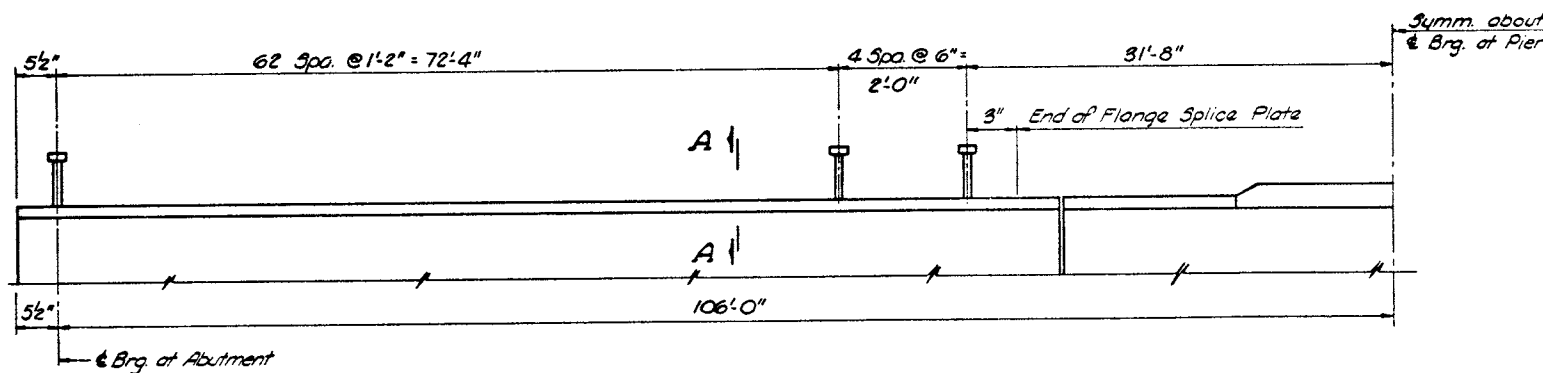
CH 34 OVER FAI-55
FAI-55 SEC. 57-8-8-1 PROJECT
STA 518 + 6993 (FAI-55) MCLEAN COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

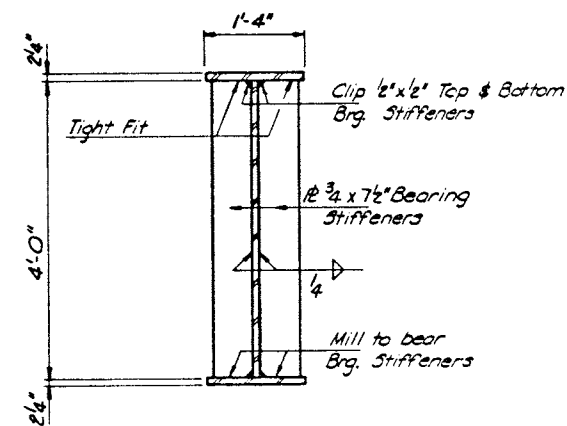
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-55	57-848V	MCLEAN	32	20
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



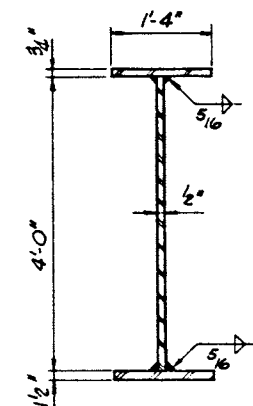
GIRDER ELEVATION



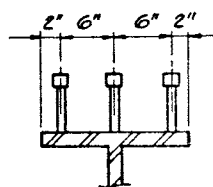
SHEAR CONNECTOR ELEVATION
(402 stud shear connectors req'd. ea girder)



SECTION AT PIER

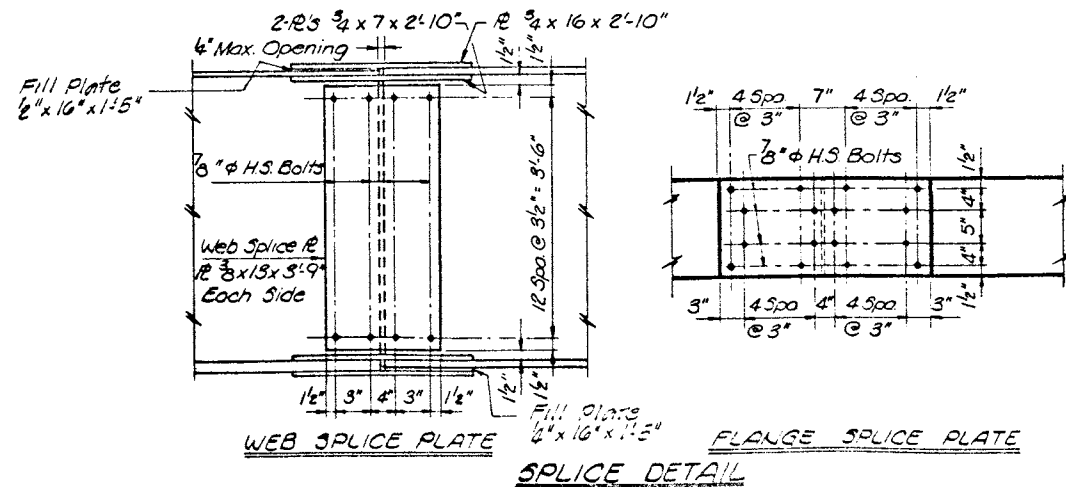


TYPICAL GIRDER SECTION
(Except From Splice to Pier)



SECTION A-A

3/4" φ x 4" CR 1020 steel, granular or solid, flux-filled, headed studs. Automatically end welded. 3618 studs required.



WEB SPICE PLATE

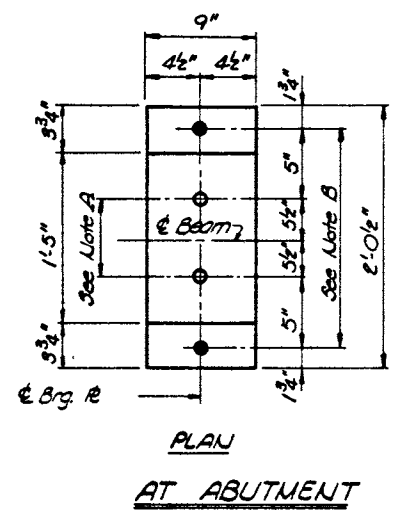
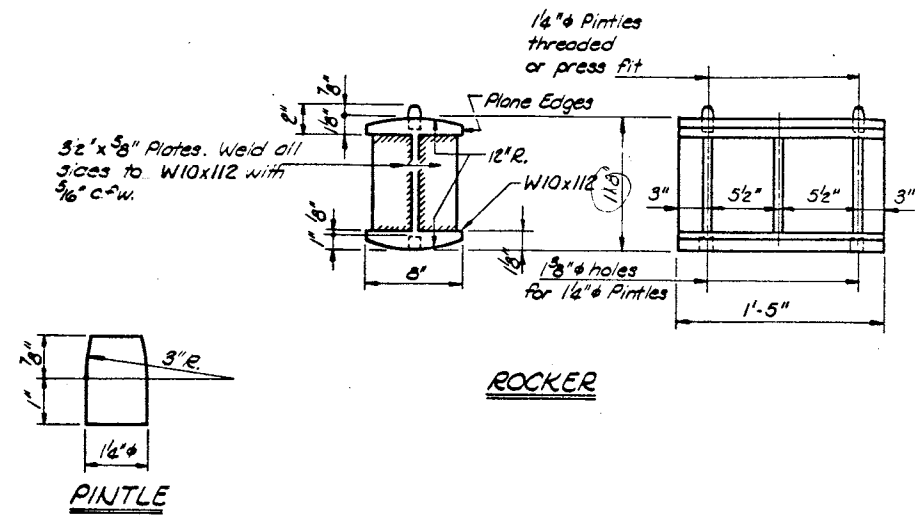
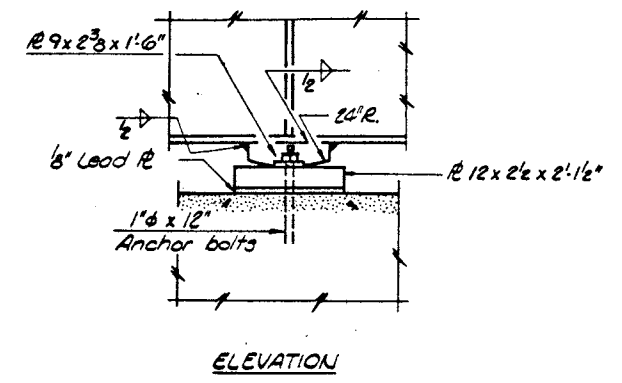
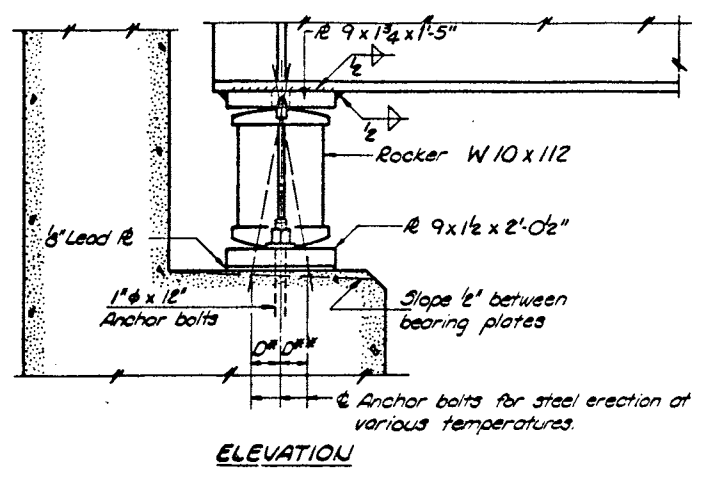
FLANGE SPICE PLATE

SPICE DETAIL

REVISIONS		STRUCTURAL STEEL	
NO.	DATE	BY	CHKD.
1	7-27-54	EM	MLT
2			
3			
4			
5			
6			
7			
8			
9			
10			

STATE OF ILLINOIS		DRAWN BY: EM
CH 34 OVER FAI-55		MLT 9-70
FAI-55 SEC 57-848V		CHECKED BY: EM
STA 513 + 6993 (FAI-55)		EM 10-2-54
MCLEAN COUNTY		PROJECT NO. 2109
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS DECATUR, ILLINOIS		

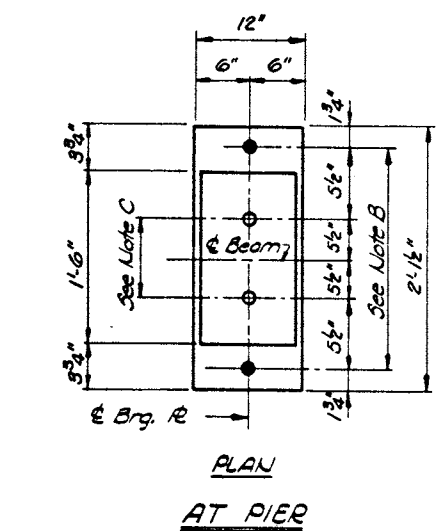
ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAI-55	57-B4B-1	MCLEAN	32	21
FED ROAD DIST NO	ILLINOIS PROJECT			



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

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

NOTE C
1 3/8" holes 1" deep in top flange only for 1/4" pintles.



NOTES ON SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

- a) D* (Side of brg. away from fixed brg.)
D* = 6" per each 100' of expansion for every 15° below the normal temperature of 50°F.
- D** (Side of brg. toward fixed brg.)
D** = 6" per each 100' of expansion for every 15° above the normal temperature of 50°F.
- b) After beams have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

MOMENT TABLE - Symm. Composite 2 Span (Composite in Positive Moment Areas Only)

INTERIOR GIRDER MOMENT TABLE		
	Abutment	Pier
I _g (in ⁴)	24,927	50,058
I _c (in ⁴)	57,800	
S _g (in ³)	1215	1907
S _c (in ³)	1490	
Q (k/ft)	1.059	1.059
M _D (k)	740	1740
F ₃ (ksi)	7.3	10.9
S ₃ (in ³)	0.296	
M ₃ (k)	256	395
M ₆ (k)	1000	846
M _{imp} (k)	216	183
TOTAL (k)	1472	1424
F ₃ + S ₃ (ksi)	11.9	9.0
F ₃ TOTAL (ksi)	19.2	19.9
V _R (k)	69.7	

REACTION TABLE		
INTERIOR GIRDER REACTION TABLE		
	ABUTMENT	PIER
R _D (k)	52.2	144.1
R ₆ + S ₆ (k)	55.0	119.6
Imp. (k)	11.9	17.2
R TOTAL (k)	119.1	280.9

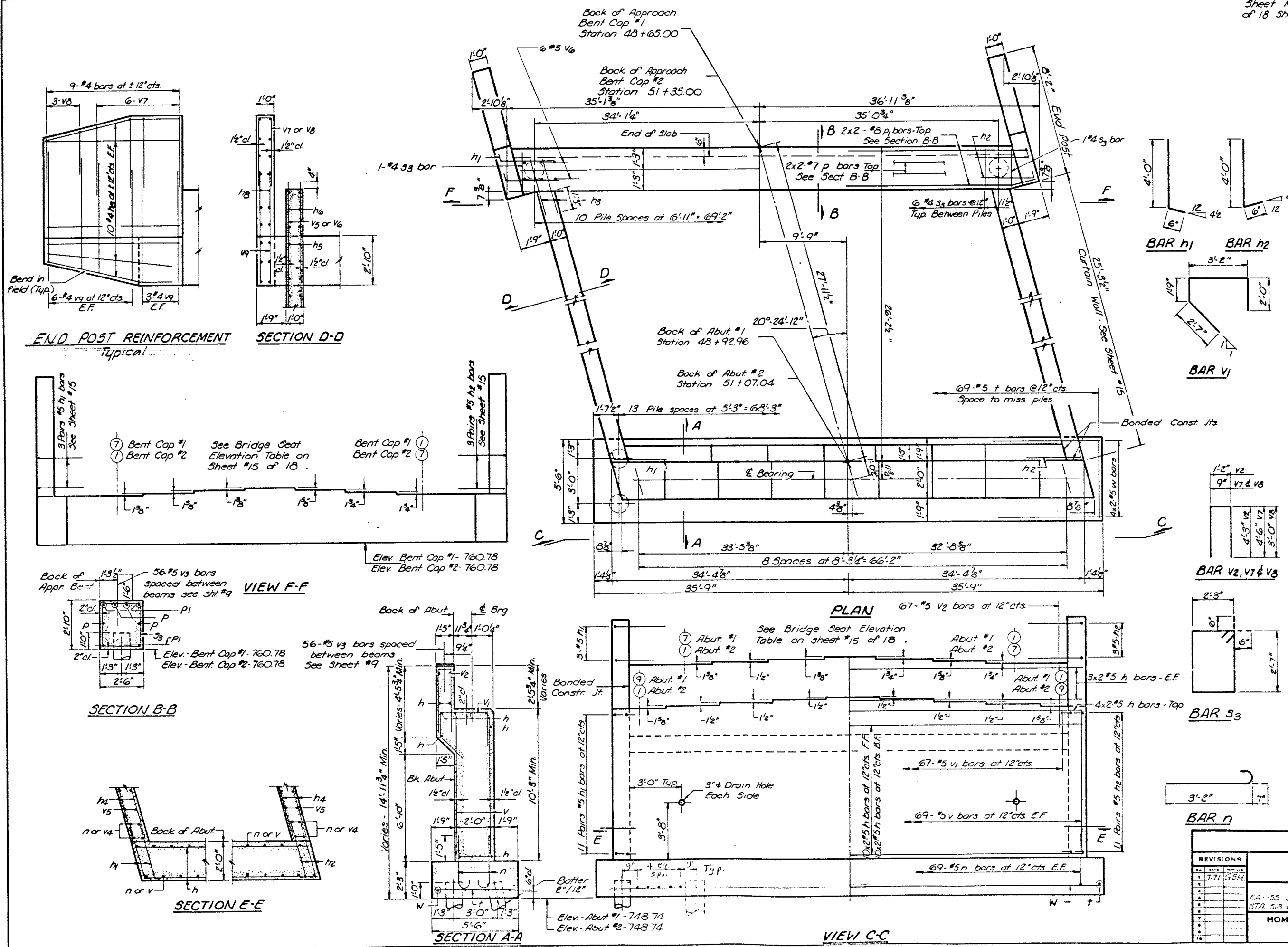
I_g and S_g are the moment of inertia and section modulus of the steel section.
I_c and S_c are the moment of inertia and section modulus of the composite section used in computing F₃.
V_R is the maximum & + Impact shear range.

REVISIONS		STATE OF ILLINOIS		DRAWN BY DATE
NO.	DATE			MLT 9-70
1	7-71			CHECKED BY DATE
2	65-4			EML 10-70
3				BOOK NUMBER
4				PROJECT NO
5				2109
6				SHEET NO
7				
8				
9				
10				

CH. 34 OVER FAI-55
FAI-55 SEC 57-B4B-1 PROJECT
STA 518 + 6993 (FAI-55) MCLEAN COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FA.1-55	5-8-3-1	MCLEAN	32	22
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



**TWO ABUTMENTS
BILL OF MATERIAL**

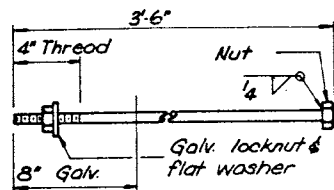
Bar	No	Size	Length	Shape
h	120	#5	34'-11"	
h1	62	#5	4'-6"	
h2	62	#5	4'-6"	
h3	24	#5	2'-6"	
h4	32	#5	20'-0"	
h5	24	#5	25'-0"	
h6	24	#5	27'-2"	
h7	8	#6	20'-3"	
h8	30	#4	7'-1"	
n	292	#5	3'-9"	
p	16	#7	36'-6"	
p1	16	#8	37'-0"	
s3	124	#4	10'-8"	
t	138	#5	5'-3"	
v	276	#5	10'-0"	
v1	134	#5	9'-6"	
v2	134	#5	9'-8"	
v3	240	#5	3'-0"	
v4	16	#5	15'-9"	
v5	68	#5	20'-0"	
v6	80	#5	5'-9"	
v7	24	#4	9'-9"	
v8	12	#4	6'-9"	
v9	72	#4	6'-0"	
w	16	#5	36'-3"	

REINFORCEMENT BARS	LBS.	22.81
CLASS X CONCRETE	CU. YDS.	291.1
CONCRETE PILES	LIN. FT.	3391
TEST PILES-CONCRETE	EACH	2

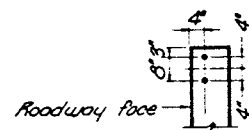
ABUTMENTS

STATE OF ILLINOIS		DRAWN BY DA M.L.T. 9-7
C.H. 34 OVER FA.1-55		CHECKED BY D. F.M.L. 10-7
PROJECT FA.1-55 SEC 57-B&C-1 STA 518 PG 293 (FA.1-55)		PROJECT NO 2109
HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS DECATUR, ILLINOIS		SHEET NO

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-55	57-B4B-1	MCLEAN	32	15
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



DETAIL OF 1" ϕ ANCHOR BOLT
(Cost incidental to Bridge Struct.)



VIEW B-B

END POST DIMENSIONS

Location	A	B
N. Wall - Abut. #1	9'-11 $\frac{3}{8}$ "	5'-11 $\frac{3}{8}$ "
S. Wall - Abut. #1	9'-10 $\frac{3}{8}$ "	5'-10 $\frac{3}{8}$ "
N. Wall - Abut. #2	9'-10 $\frac{3}{8}$ "	5'-10 $\frac{3}{8}$ "
S. Wall - Abut. #2	9'-11 $\frac{3}{8}$ "	5'-11 $\frac{3}{8}$ "

TOP OF CURTAIN WALL ELEVATIONS

Location	A	B
N. Wall - Abut. #1	766.44	766.53
S. Wall - Abut. #1	766.33	766.44
N. Wall - Abut. #2	766.33	766.44
S. Wall - Abut. #2	766.44	766.53

APPROACH BENT CAP PILE DATA

Type: Concrete
Capacity: 29 Tons
Estimated Length: 52' West, 48' East
Number Required: 11 each Bent Cap
Includes 1 Test Pile, Bent Cap #1

ABUTMENT PILE DATA

Type: Concrete
Capacity: 45 Tons
Estimated Length: 48' West, 37' East
Number Required: 28 Each Abut.
Includes 1 Test Pile, Abutment #2

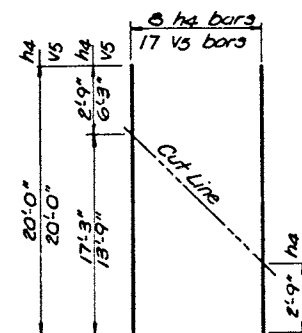
ABUT. SEAT ELEVATIONS

STEEL GIRDERS

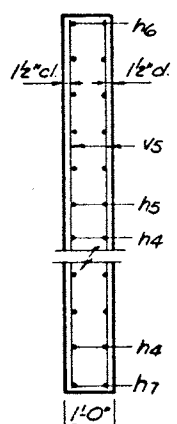
BEAM	ABUT. 1 & 2
1 & 9	761.24
2 & 8	761.37
3 & 7	761.49
4 & 6	761.61
5	761.73

PRESTRESSED BEAMS

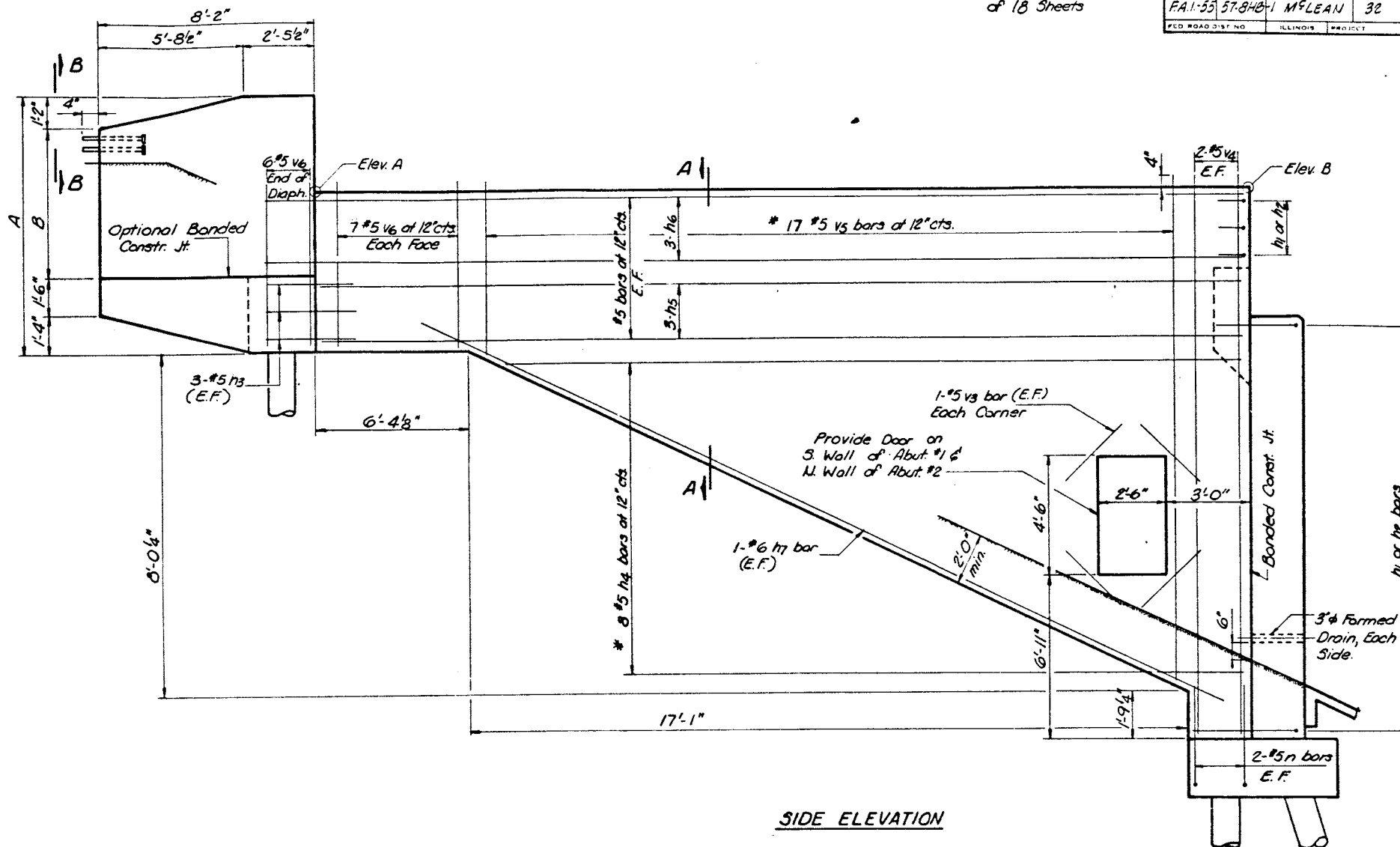
BEAM	ABUT. 1	ABUT. 2	BENT 1	BENT 2
1	763.79	763.72	763.69	763.61
2	763.90	763.86	763.80	763.75
3	764.02	763.99	763.91	763.89
4	764.13	764.13	764.02	764.02
5	763.99	764.02	763.89	763.91
6	763.86	763.90	763.75	763.80
7	763.72	763.79	763.61	763.69



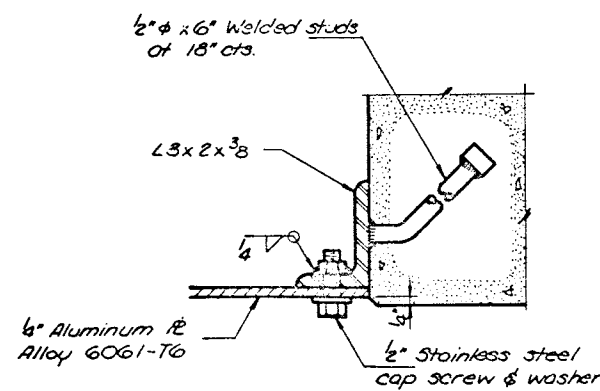
FIELD CUTTING DIAGRAM
* Order h4 and v5 bars full length. Cut to fit as shown and use remainder of bars in other face.



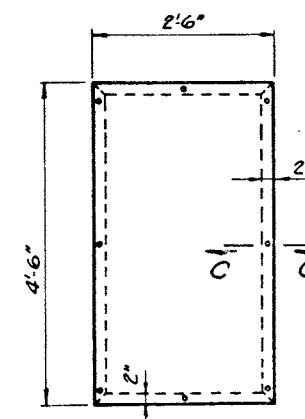
SECTION A-A



SIDE ELEVATION



SECTION C-C



DOOR ELEVATION
(Cost of door and frame are incidental)

ABUTMENT DETAILS

REVISIONS	DATE	INITIALS	STATE OF ILLINOIS	DRAWN BY DA
1	7-71	MSH		MLT 9-76
2				CHECKED BY DA
3				FML 10-
4				BOTH NUMBERS
5				PROJECT NO.
6				2109
7				SHEET NO.
8				
9				
10				

CH 34 OVER FAI 55
FAI 55 SEC 57-B4B-1 PROJECT
STA 518+6993 (FAI 55) MCLEAN COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

BORING NO. 1
Sta. 51+35 (C.H. 34)
on E

Depth (ft)	N	Q _u /B/W %	Soil Description	Notes
0			Ground Surface	747.8
0			GRAY CLAY TILL (H ₂ O)	
17	4.2	11	HARD	
23	1.3	23		
743.3			BROWN CLAY MEDIUM	
-5				
8	0.6	20		
740.8			BROWN SANDY CLAY LOAM MEDIUM	
-30				
6	0.5	15		
738.3			BROWN SILTY LOAM (SANDY) MEDIUM	
-10				
10	-	14		
735.8			GRAY CLAY LOAM STIFF	
-35				
9	1.3	14	VERY STIFF	
-15				
12	1.6	13	STIFF	
-40				
18	3.1	13	VERY STIFF	
-20				
12	1.6	14	BROWN CLAY LOAM HARD	705.8
-45				
9	2.6	10	BROWN CLAY LOAM VERY STIFF	
-50				
17	3.1	11		
-50				
21	4.1	11	HARD	
696.3			BORING COMPLETE	

BORING NO. 2
Sta. 51+06 (C.H. 34)
on E

Depth (ft)	N	Q _u /B/W %	Soil Description	Notes
0			Ground Surface	748.0
0			BLACK SILTY CLAY LOAM	
17	4.2	11		
23	1.3	23		
747.0			BROWN SILTY CLAY	
-25				
107	6.2	9	HARD	
-5				
3	0.3	23	SOFT	
741.0			BROWN CLAY LOAM	
-30				
8	2.3	14	VERY STIFF	
-10				
7	1.2	14	STIFF	
-35				
7	1.3	15	GRAY CLAY TILL HARD	
-15				
11	2.3	15	GRAY CLAY LOAM VERY STIFF	
-40				
15	2.6	14	VERY STIFF	
-20				
17	3.5	15		
696.5			BORING COMPLETE	

BORING NO. 3
Sta. 50+00 (C.H. 34)
on E

Depth (ft)	N	Q _u /B/W %	Soil Description	Notes
0			Ground Surface	748.3
0			BLACK SILTY CLAY LOAM	
14	2.1	13		
25	3.1	16		
747.3			BROWN SILTY CLAY	
-25				
16	3.1	16	VERY STIFF	
-5				
4	0.9	28	MEDIUM	
721.3			GRAY COARSE SAND DENSE	
-30				
3	0.3	21	SOFT (H ₂ O)	
-10				
5	0.7	17	BROWN CLAY LOAM	
-35				
9	4.0	13	MEDIUM GRAY CLAY LOAM	
-15				
11	3.0	13	HARD	
-40				
21	3.0	12	VERY STIFF	
-20				
17	2.6	13	VERY STIFF	
713.8			GRAY CLAY TILL STIFF	
-45				
16	1.0	11	GRAY CLAY TILL	
-50				
37	4.2	11	HARD	
-50				
37	6.0	12		
696.8			BORING COMPLETE	

BORING NO. 4
Sta. 48+91 (C.H. 34)
on E

Depth (ft)	N	Q _u /B/W %	Soil Description	Notes
0			Ground Surface	748.5
0			BLACK SILTY CLAY LOAM	
18	3.9	15		
25	2.5	15		
747.5			BROWN SILTY CLAY	
-25				
16	2.5	15	VERY STIFF	
-5				
4	0.5	23	MEDIUM	
721.5			GRAY COARSE SAND VERY DENSE	
-30				
201	-	-	HARD	
30	5.5	14		
719.0			BROWN PEAT	
-30				
27	2.0	51		
-55				
30	4.5	14		
-10				
11	1.3	18	VERY STIFF	
-35				
26	2.1	47	BROWN CLAY LOAM VERY STIFF	
-15				
11	1.6	19	GRAY CLAY LOAM	
-40				
10	1.4	23	MEDIUM	
-20				
10	1.8	23	STIFF	
-45				
5	0.6	24	MEDIUM	
692.0			BORING COMPLETE	

BORING NO. 5
Sta. 48+65 (C.H. 34)
on E

Depth (ft)	N	Q _u /B/W %	Soil Description	Notes
0			Ground Surface	748.6
0			BLACK SILTY CLAY LOAM	
25	3.5	13		
747.6			BROWN & GRAY MOTTLED SILTY CLAY STIFF	
-25				
17	3.1	16	GRAY CLAY TILL VERY STIFF	
-5				
6	1.3	15	MEDIUM	
-30				
2	0.3	31	GRAY COARSE SAND DENSE	
721.6				
-30				
3	0.3	19	SOFT BROWN CLAY LOAM (H ₂ O)	
-10				
11	1.3	18	SOFT	
-35				
17	3.5	15	STIFF	
-15				
12	2.0	11	GRAY SILTY VERY STIFF	
-40				
11	0.5	11	GRAY SANDY CLAY LOAM	
-20				
9	0.5	9	MEDIUM GRAY SILTY LOAM	
-45				
726.6			BORING COMPLETE	

N - Standard Penetration Test - Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".
Q_u - Unconfined Compressive Strength - t/d
w - Water Content - percentage of oven dry weight - %

Type failure:
B - Bulge Failure
S - Shear Failure
E - Estimated Value
P - Penetrometer

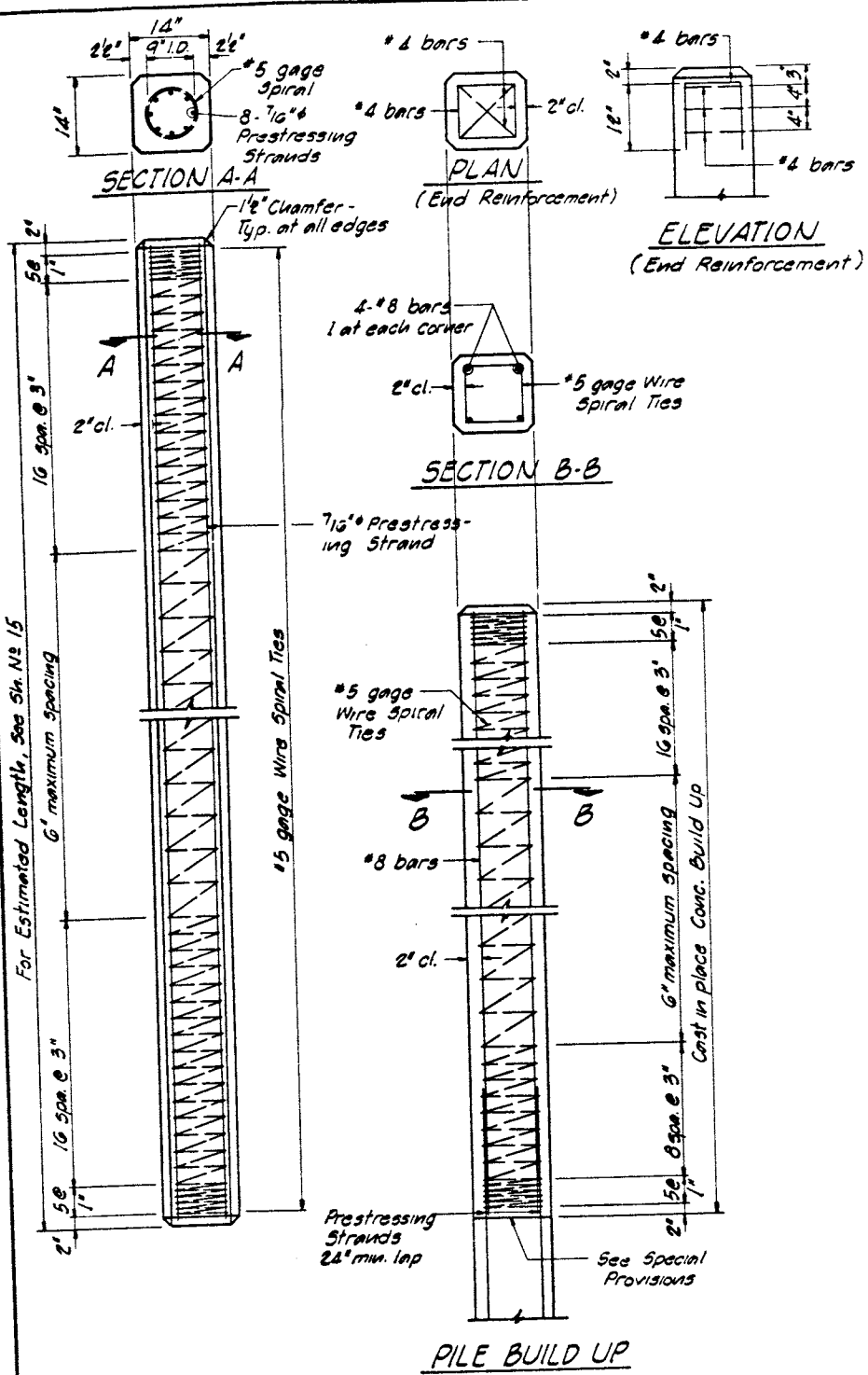
BORING LOGS
STATE OF ILLINOIS

REVISIONS	DATE	BY	REASON
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

DESIGNED BY: GSH 2-7
CHECKED BY: GSH 2-7
PROJECT NO: 2109
DATE: 11-1-55

C.H. 34 OVER FA. 1-55
FA. 1-55 SEC. 57-848-1 PROJECT
STA. 51+69.93 (FA. 1-55) MCLEAN COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS



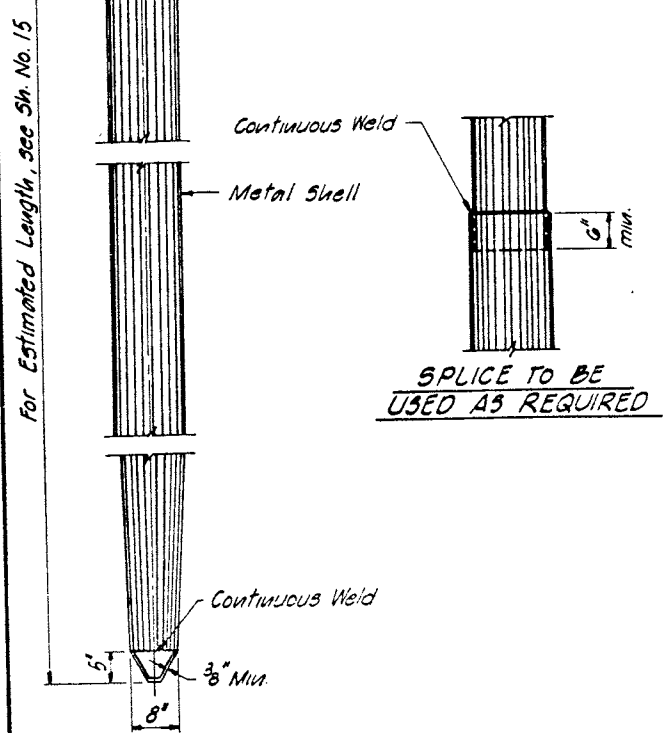
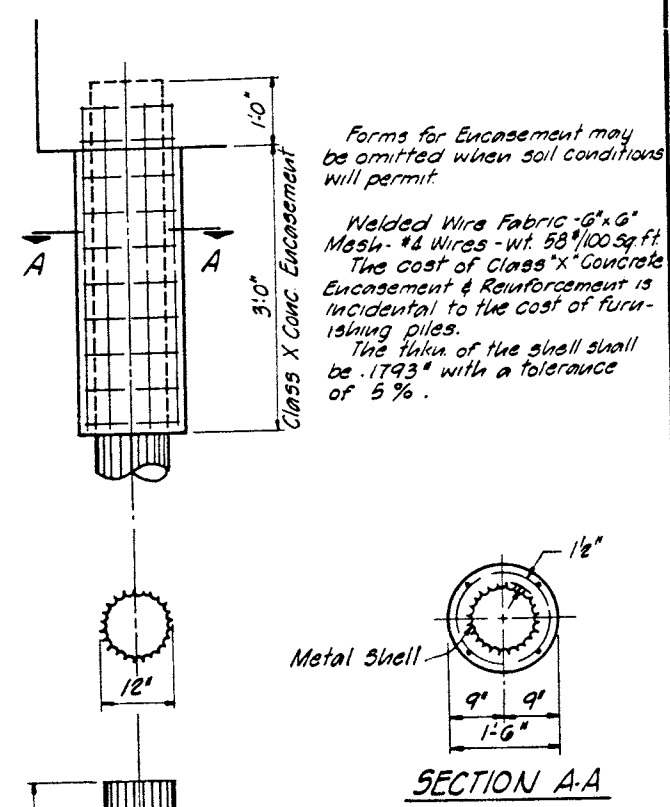
NOTE: Prestressing steel shall be non-galvanized extra high strength stress-relieved 7 Wire Strand. The nominal diameter shall be 1/8 inch and the minimum nominal cross-sectional area shall be 0.1155 square inch.

Handling: For pile lengths up to 65', use two slings placed at a distance of 0.21 L* from each end. For piles longer than 65', use three slings placed at a distance of 0.12 L* from each end and at midpoint of pile.

* L = Over all length of Pile to be handled.

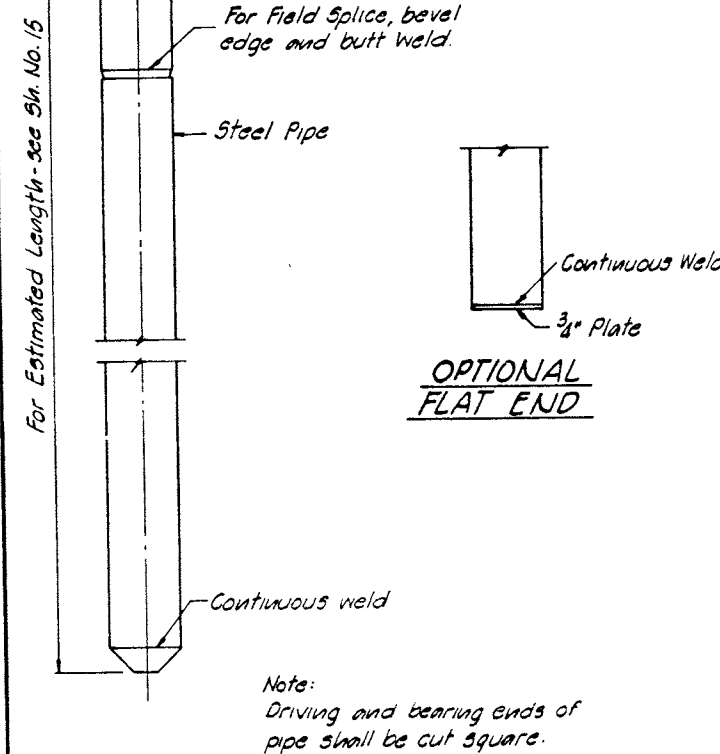
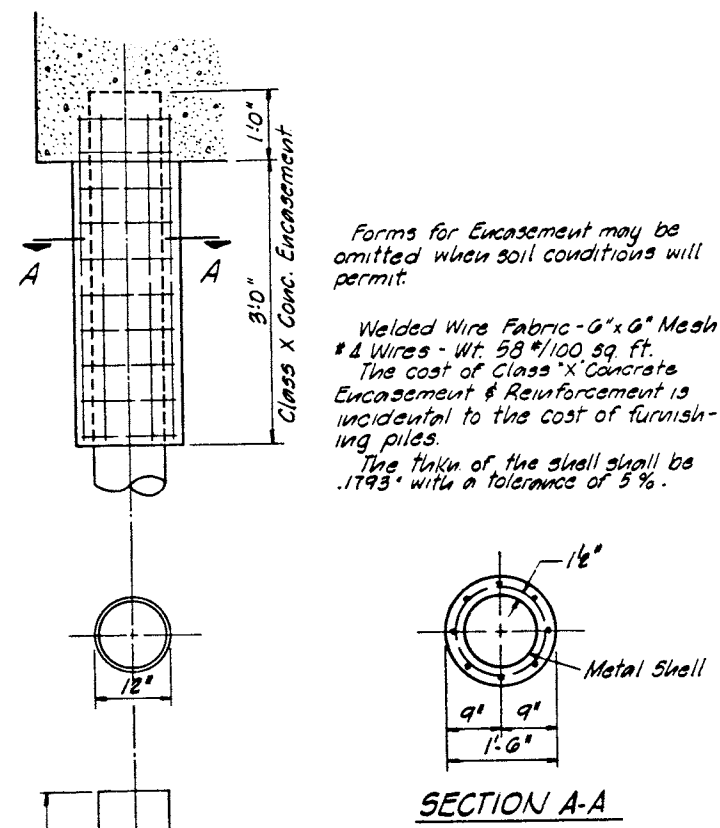
DESIGN STRESSES
 F_c' = 5000 p.s.i.
 F_c'_i = 4000 p.s.i.
 F_s' = 268,000 p.s.i. (31,000 lbs.)
 F_s'_i = 188,000 p.s.i. (21,700 lbs.)

DETAIL OF PRECAST PRESTRESSED CONCRETE PILES

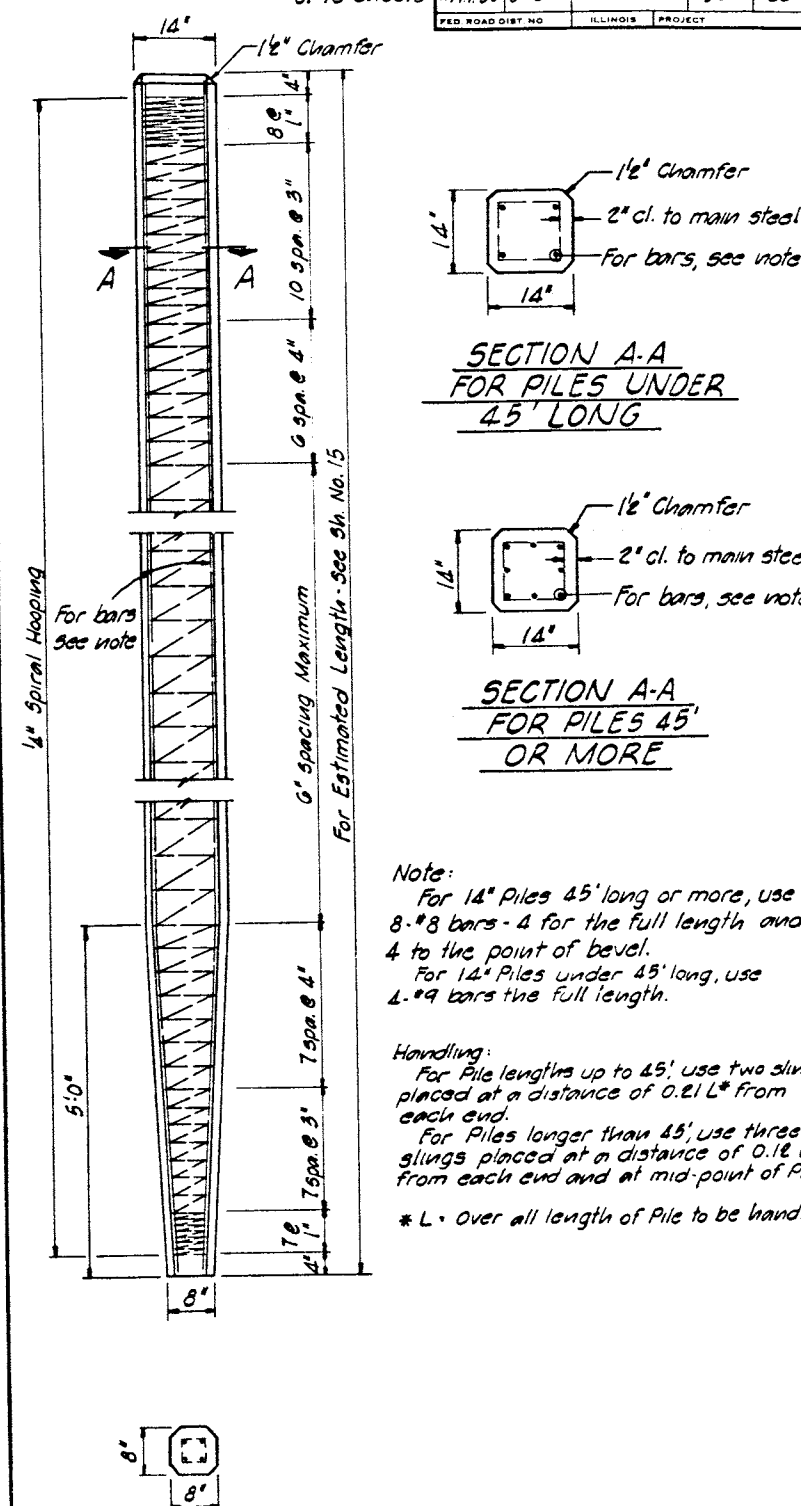


ALLOWABLE TAPERS
 1.- Taper 1"/12" for 10'+12" Cylindrical Section Extension
 2.- Taper 1 1/4"/10" for 17'+12" Cylindrical Section Extension
 3.- Taper 1 1/2"/10" for 30'+12" Cylindrical Section Extension

DETAIL OF TAPERED METAL SHELL FOR CAST IN PLACE CONCRETE PILES



DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



Note:
 For 14" Piles 45' long or more, use 8 #8 bars - 4 for the full length and 4 to the point of bevel.
 For 14" Piles under 45' long, use 4 #9 bars the full length.

Handling:
 For Pile lengths up to 45', use two slings placed at a distance of 0.21 L* from each end.
 For Piles longer than 45', use three slings placed at a distance of 0.12 L* from each end and at mid-point of Pile.
 * L = Over all length of Pile to be handled

DETAIL OF PRECAST CONCRETE PILES

REVISIONS		STATE OF ILLINOIS		DRAWN BY
NO.	DATE	BY	DATE	RES. 2K
1				RES. 2K
2				RES. 2K
3				RES. 2K
4				RES. 2K
5				RES. 2K
6				RES. 2K
7				RES. 2K
8				RES. 2K
9				RES. 2K
10				RES. 2K

CH 34 OVER FAI-55
 FAI-55 SEC 57-B-8-1 PROJECT
 STA 518+6993 (FAI-55) McLEAN COUNTY PROJECT NO. 2100

HOMER L. CHASTAIN & ASSOCIATES
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 DECATUR, ILLINOIS