



Ogle County Highway Department

Jeremy A. Ciesiel, P.E., County Engineer

1989 South IL Route 2

Oregon, IL 61061

REQUEST FOR QUALIFICATIONS FOR PHASE I & II PRELIMINARY ENGINEERING

MILL ROAD STRUCTURE REHABILITATION EXISTING STRUCTURE 071-3242 SECTION 23-03121-00-BR

Ogle County is requesting qualifications from interested firms for Phase I Preliminary Engineering and Phase II Preliminary Engineering to rehabilitate Structure Number 071-3242 in the year 2024 or 2025. This structure is located on Mill Road in Byron Township, just west of Byron, Illinois. One firm will be selected to perform all Preliminary Engineering work.

The existing structure was built in 1980. It is a 3-span (3@36.0') precast prestressed deck beam bridge, 24.0' wide no skew. The structure currently has a Sufficiency Rating of 69.5. While the substructure is in good to very good condition, the existing precast prestressed deck beams have experienced significant deterioration despite multiple attempts at patching.

Byron Township and the Ogle County Highway Department desire to rehabilitate the existing structure by replacing the superstructure. It is further desired that the rehabilitated structure includes a concrete wearing surface. It is expected that the project will be funded with a combination of Township Bridge Program (TBP) funds and local funds.

Anticipated issues for this project include:

- 1) Rehabilitation should also address any substructure deterioration.
- 2) The hydraulic capacity of the existing structure will need to be reviewed to determine if superstructure replacement is appropriate.
- 3) Ogle County is a known habitat of Indiana and Northern Long Eared Bats. Tree removal for the project must be completed no later than March 31 of the construction year to minimize any bat disturbance. Tree removal will be completed separate from the construction letting by local forces. Any tree removal needed will need to take place the winter ahead of the bid letting.

Phase I & II preliminary engineering services are needed for all necessary work to receive Design Approval and to prepare the plans, specifications and estimates (PS&E) package. Specific tasks may include, but are not limited to, the following:

- Data collection and survey
- Environmental studies coordination
- Bridge Condition Report.
- Preliminary Bridge Design and Hydraulic Report
- Prepare IDOT forms including the PDR
- Prepare contract plans and project special provisions/specifications
- Prepare estimates of cost and time
- Right of Way acquisition including Highway Plats and Legal Descriptions

Prime firm must be IDOT prequalified in the following categories:

- Structures: Highway-Typical

Mill Rd Bridge
Section 23-03121-00-BR

Firms who submit qualifications will be evaluated on the following criterion:

- Technical Approach – 25%
- Firm Experience – 15%
- Work Load Capacity (Anticipated Timeline) – 20%
- Past Performance on Similar Projects (Not necessarily with Ogle County) – 25%
- Approach to planning, organizing and management – 15%

Attached to this Request, please find the following information for your use:

- Location Plan
- Photos of Existing Structure
- 2021 Bridge Inspection Documents
- Existing Structure Plans

Interested firms shall submit three (3) copies of qualifications to the Ogle County Highway Department, in writing, no later than 3:00 P.M. on Monday, May 15, 2023. Emailed submittals will also be accepted. Firms must also submit a disclosure statement with their qualifications. The disclosure statement form can be found at:

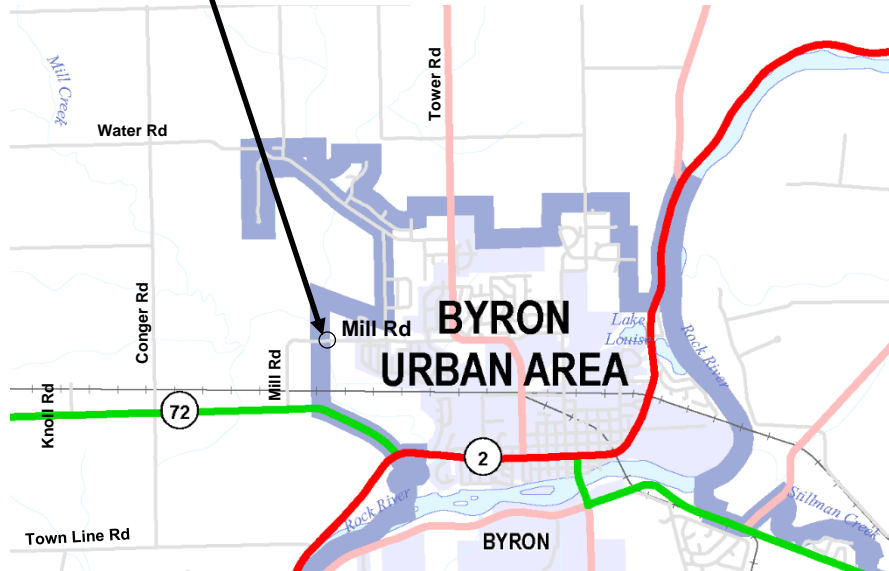
http://www.oglecounty.org/departments/highway_department/qbs.php

Responses and questions should be directed to:

Mr. Jeremy A. Ciesiel, P.E.
Ogle County Engineer
1989 South IL Route 2
Oregon, IL 61061
Phone: (815) 732-2851
Email: highway@oglecountyil.gov

Location & Functional Classification Map
Mill Road (TR 71)
Existing S.N. 071-3242
Sec. 23-03121-00-BR
Byron Township
Ogle County, IL

Existing 3-Span Bridge (3@36')
 (To be rehabilitated)



T25N, R10E of the 4th P.M.
 Byron Township, Section 25

5-Year Classification

1 Interstate	Interstate, U.S., State
2 Freeway or Expressway	Railroad
3 Other Principal Arterial	State Boundary
4 Minor Arterial	County Boundary
5 Major Collector	Urban Boundary
6 Minor Collector	River, Streams
7 Local Road or Street	Lakes
	Civil Township or District

**Mill Rd Existing Structure
Structure Number 071-3242
Byron Township
Ogle County, Illinois**





SN: 071-3242	District: 2	Spans: 3	Appr. Spans: 0	Skew: 0	ADT: 525	Truck Pct: 10
ADT Un: 0	Maint. Co: 71 - Ogle	Twsp: 03 - Byron	Status: 1-Open, no restrictions			
Facility Carried: MILL ROAD			Feature Crossed: MILL CREEK			
Location: 1.7 MI NW OF		Municipality: 0000	Team/Sub Section: /		Insp/Rte:	
Bridge Name:			Material & Type: Prestressed concrete / Box beam - Multiple			
Insp. Intervals Routine: 24		Fracture Critical: 0	Underwater: 0	Special: 0	Element Level:	
90 - Inspection Date: 8/5/2021		90C - Temp (°F): 71			90B1 - In Depth: <input checked="" type="checkbox"/>	
Is Delinquent: <input type="checkbox"/> Reason:						
90A - Agency Program Manager: Ciesiel, Jeremy						
90A1 - Team Leader: Wagner, Michael C			90A2 - Inspector: Wagner, Michael C.			

90B - Previous Inspection Remarks

- 1) Two longitudinal cracks in the 2nd beam from the South (W. Span) along each edge go the entire length of the beams.
- 2) Several areas of delamination in the beam tops that have not been repaired. Some patches sound delaminated as well.
- 3) Heavy leakage throughout the keyways of the deck beams in each span.

Resources

Time to Inspect (H:M): 01:00	Traffic Control: _	Boat: _	Waders: W	Snooper: _
Ladder: _	Manlift: _	Bucket Truck: _	Other: _	

Inspector's Appraisals

	Prev	New	Comments
58 - Deck Condition:	<u>5</u>	5	See item #1 below
59 - Superstructure Condition:	<u>5</u>	5	See item #1 below
60 - Substructure Condition:	<u>8</u>	8	
62 - Culvert Condition:	<u>N</u>	N	
61 - Channel Condition:	<u>7</u>	7	
71 - Waterway Adequacy:	<u>9</u>	9	
72 - Approach Rdwy Align:	<u>8</u>	8	
111 - Pier Navig Protection:	<u>N</u>	N	

	Prev	New		Prev	New		Prev	New
36A - Bridge Railing Adequacy:	<u>2</u>	2						
Approach Guardrail Adequacy:	<u>1</u>	1	36B - Transitions:	<u>1</u>	1	36C - Guardrail:	<u>1</u>	1
			36D - Ends:	<u>1</u>	1			

Additional Inventory Data - To Be Verified During Routine Inspection

108A - Wearing Surface Type: <u>A</u>	108B - Type of Membrane: <u>E</u>	108C - Deck Protection: <u>J</u>
108D - Total Deck Thickness (In.): <u>17.0</u>		
59A - Paint Date (Mo/Yr): <u>/</u>	59B - Paint Type: <u>- - - -</u>	
59C - Utilities Attached: <u>N N N</u>		
113A - Scour Critical Analysis Date: <u>10/30/1996</u>	113 - Scour Critical Rating: <u>5</u>	113B - Evaluation Method: <u>B</u>



<u>Weight Limit Posting:</u>	70A2 - Single Unit Vehicles:	-
	70B2 - Combination Type 3S-1 (3 or 4 axles):	-
	70C2 - Combination Type 3S-2 (5 or more axles):	-
	70D2 - One Truck at a Time:	<u>0</u>

90B - Inspection Remarks

- 1) Two longitudinal cracks in the 2nd beam from the South (W. Span) along each edge go the entire length of the beams.
- 2) Several beams have large areas of delamination's that have not been repaired on the top surface of the beams. And several of the patched areas sound delaminated.
- 3) Heavy leakage throughout the keyways of the deck beams in each span.

	Signature	Date
Inspection Team Leader:		
Agency Program Manager:		

Use Additional Forms as Needed

**Illinois Department of Transportation
Structures Information Management System
Master Structure Report (S-107)**

Date: 9/13/2021

Page 1

Structure Number: 071-3242 District: 2

Inventory Data

Facility Carried:	MILL ROAD	Bridge Name:		Sufficiency Rating:	69.5	Structure Length:	110.0
Feature Crossed:	MILL CREEK	Location:	1.7 MI NW OF BYRON	HBP Eligible:	No	AASHTO Bridge Length:	99.9
Bridge Remarks:				Replaced By:		Length of Long Span:	36.0
Bridge Status:	1 OPEN - NO RESTRICT	StatusDate:	4/1/1988	Replaces:		Bridge Roadway Width:	24.0
Status Remarks:				Last Update Date:	03/30/2021	Appr Roadway Width:	28.0
Maint County:	071 OGLE	Maint Township:	03 BYRON	Parallel Structure:	None	Deck Width:	24.0
Maint Responsibility:	90 TOWNSHIP OR ROAD DISTRICT	UNKNOWN		Multi-Level Structure Nbr:		Sidewalk Width Right:	0.0
Service On/Under:	1 HIGHWAY	/ 5 WATERWAY		Skew Direction:	None	Sidewalk Width Left:	0.0
Reporting Agency:	3 COUNTY			Skew Angle:	0 D	Navigation Control:	0 No
Main Span Matl/Type:	5 PRESTRESS CONCRETE	/ 05 BOX BEAM OR GIRDER-MULTIPLE		Structure Flared:	No	Navigation Horiz Clear:	0
Nbr Of Main Spans:	3	Nbr Of Approach Spans:	0	Historical Significance:	No	Navigation Vert Clear:	0
Approaches				Border Bridge State:		Culvert Fill Depth:	0.0
Near #1 Matl/Type:		/		Bdr State SN:		Number Culvert Cells:	0
Near #2 Matl/Type:		/		Bdr State % Responsibility:	0	Culvert Opening Area:	0.0
Far #1 Matl/Type:		/		Structural Steel Wt:	0	Culvert Cell Height:	0.00
Far #2 Matl/Type:		/		Substructure Material:		Culvert Cell Width:	0.00
Median Width/Type:	0 Ft / 0 None			Rated By:	N N/A	Rate Method:	D ASSIGNED RATING BAS
Guardrail Type L/R:	0 None / 0 None			Inventory Rating:	1.000 (36)	Load Rating Date:	01/01/1900
Toll Facility Indicator:	0 No Toll			Operating Rating:	1.365 (49)	***Railroad Crossing Info***	
Latitude:	42.13803934	Longitude:	89.29427328	Design Load:	02 HS20	Crossing 1 Nbr:	
Deck Structure Type:	E PCAST PRES CN DK BM	Deck Structure Thickness:	17.0	SD:	N	FO:	N
Sidewalks Under Structure:	0 None					RR Lateral Underclear:	0.0
						RR Vertical Underclear:	0 Ft 0 In

Key Route On Data

Key Route Nbr:	TOWNSHIP OR ROAD DISTRICT	0071	Station:	0.6900
Appurtenances	Main Route	00000	Segment:	
Inventory County:	071 OGLE		Linked:	Y
Township/Road Dist	03 BYRON		Natl. Hwy System:	Not on NHS
Municipality	0000		Inventory Direction:	
Urban Area:	None		Curr AADT Yr/Count:	2017 / 525
Functional Class:	7 LOCAL		Est Truck Percentage:	10 %
** CLEARANCES **	South/East	North/West	Number Of Lanes:	2
Max Rdwy Width:	24.0		One Or Two Way:	2 Two-Way
Horizontal:	24.0	0.0	Bypass Length:	40
Min Vertical:	99 Ft 11 In	00 Ft 00 In	Future AADT Yr/Cnt:	2040 / 800
10 Ft Vertical:	99 Ft 11 In	00 Ft 00 In	Designated Truck Rte:	NONE
Lateral:			Special Systems:	No

Key Route Under Data

		Station:	
		Segment:	
		Linked:	
		Natl. Hwy System:	
		Inventory Direction:	
		Curr AADT Yr/Count:	/
		Est Truck Percentage:	%
South/East	North/West	Number Of Lanes:	
		One Or Two Way:	
		Bypass Length:	
Ft In	Ft In	Future AADT Yr/Cnt:	/
Ft In	Ft In	Designated Truck Rte:	
Ft	Ft	Special Systems:	

***** Marked Route On Data *****

	Designation	Kind	Number
Route #1:	1 Mainline	4 FAS, CH, or TR's Unmarked	
Route #2:	1 Mainline		
Route #3:	1 Mainline		

***** Marked Route Under Data *****

	Designation	Kind	Number

**Illinois Department of Transportation
Structures Information Management System
Master Structure Report (S-107)**

Date: 9/13/2021

Page 2

Structure Number: 071-3242 District: 2

Data Related to Inspection Information

Inspection Intervals				*** Maximum Allowable Posting Limits ***				Bridge Posting Level:		
Routine NBIS:	24	MOS	Underwater:	0	MOS	One Truck At A Time:	0	Combination Type 3S-1:	5	No Posting Required
Fracture Critical:	0	MOS	Special:	N		Single Unit Vehicles:		Combination Type 3S-2:		

Inspection/Appraisal Information

Inspection Date:	08/05/2021	Inspection Temperature:	71	Deg. F	Insp by (Name):	Wagner, Michael C	** Actual Posted Limits **
Deck:	5	FAIR CONDITION - MINOR SECTION LOSS, CRACKS			Insp by (Name):	Wagner, Michael C.	Single Unit Vehicles:
Superstructure:	5	FAIR CONDITION - MINOR SECTION LOSS, CRACKS			Utilities Attached:	N N/A	Combination Type 3S-1:
Substructure:	8	VERY GOOD CONDITION - NO PROBLEMS NOTED				N N/A	Combination Type 3S-2:
Culvert:	N	NOT APPLICABLE				N N/A	One Truck At A Time:
Channel and Protection:	7	GOOD CONDITION - SOME MINOR PROBLEMS			Deck Wearing Surf:	A BARE DECK NO OVRLAY	Last Paint Type:
Structural Evaluation:	5	BETTER THAN ADEQUATE TO BE LEFT IN PLACE			Deck Membrane:	F NONE	
Deck Geometry:	4	MINIMUM ADEQUACY TO BE LEFT IN PLACE			Deck Protection:	J NONE	
Underclearance-Vert/Lat.:	N	NOT APPLICABLE			Total Deck Thick:	17.0	
Waterway Adequacy:	9	SUPERIOR TO PRESENT DESIRABLE CRITERIA			Last Paint Date:		
Approach Roadway Align:	8	EQUAL TO PRESENT DESIRABLE CRITERIA			Inspection Remarks:		
Bridge Railing Appraisal:	2	Doesn't Meet Standards			1) Two longitudinal cracks in the 2nd beam from the South (W. Span) along each edge go the entire length of the beams.2) Several beams have large areas of de lamination's that have not been repaired on the top surface of the beams. And s		
Approach Guardrail:	111	Does Not Exist	Does Not Exist	Does Not Exist			
Pier Navig Protection:	N	N/A					

Underwater Inspection/Appraisal Information

Inspection Date:		Inspection Method:					
Temperature:		Inspected By:		Appraisal Rating:			
Inspection Remarks:							

Scour Critical Information

Rating:	5	CALCULATED SCOUR ACCEPTABLE	Evaluation Method:	B	Rational Analysis
Analysis Date:	10/30/1996		Analysis By:	CURTIS COOK	

Miscellaneous

Fracture Critical Members:	No
Microfilm Data Recorded:	No

Construction Information

Year:	1980	Original		Reconstructed
Route:		Sta:	11+20.00	Sta:
Section Nbr:	79-03107-00-BR			
Contract Nbr:				
Fed Aid Pr #:	00000000000000			
Built By:	9	TOWNSHIP OR ROAD DISTRICT		

Proposed Improvement

Cost Estimate Year:		Length:		*** Costs in Dollars ***
Type of Work:				Bridge Cost:
Done By:				Roadway Cost:
Remarks:				Total Project Cost:

OGLE COUNTY PLANS FOR PROPOSED BRIDGE CONSTRUCTION

TOWNSHIP BRIDGE PROGRAM (FY-80)

SECTION 79-03107-00-BR
BYRON ROAD DISTRICT

1980

NET LENGTH 700 FEET = 0.1326 MILES

INDEX OF SHEETS

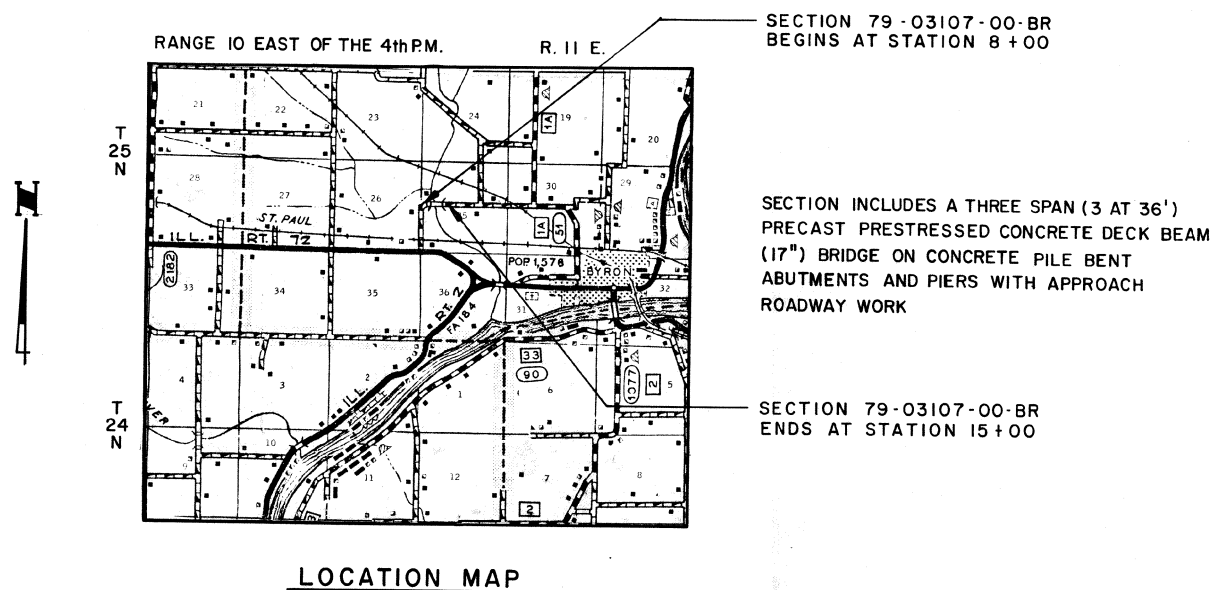
1	COVER SHEET
2	PLAN AND PROFILE
3-4	CROSS SECTIONS
5	GENERAL PLAN AND ELEVATION
6	DECK BEAM DETAILS
7	STEEL RAILING TYPE S
8	ABUTMENT DETAILS
9	PIER DETAILS
10	PILE DETAILS

Std. 2113-1
Std. 2298-4
Std. 2299-7
BLR 21

Inserted in Proposal

SUMMARY OF QUANTITIES

QUANTITY	UNIT	ITEM
410	CU YD	EARTH EXCAVATION
300	CU YD	CHANNEL EXCAVATION
1300	CU YD	EMBANKMENT
820	TON	AGGREGATE SURFACE COURSE, TYPE B
108	LIN. FT	PIPE CULVERTS, TYPE 1, 15" (CSCP)
1	EACH	REMOVAL OF EXISTING SUBSTRUCTURES
40	CU YD	STRUCTURE EXCAVATION
24.6	CU YD	CLASS X CONCRETE
2592	SQ FT	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)
2620	POUND	REINFORCEMENT BARS
216	LIN FT	STEEL RAILING, TYPE S
602	LIN FT	FURNISHING CONCRETE PILES
602	LIN FT	DRIVING CONCRETE PILES
2	EACH	TEST PILES (CONCRETE)
364	SQ YD	FABRIC FORMED CONCRETE REVETMENT MAT
1	EACH	NAME PLATES



James Hinrichs
COUNTY HIGHWAY SUPERINTENDENT

APPROVED

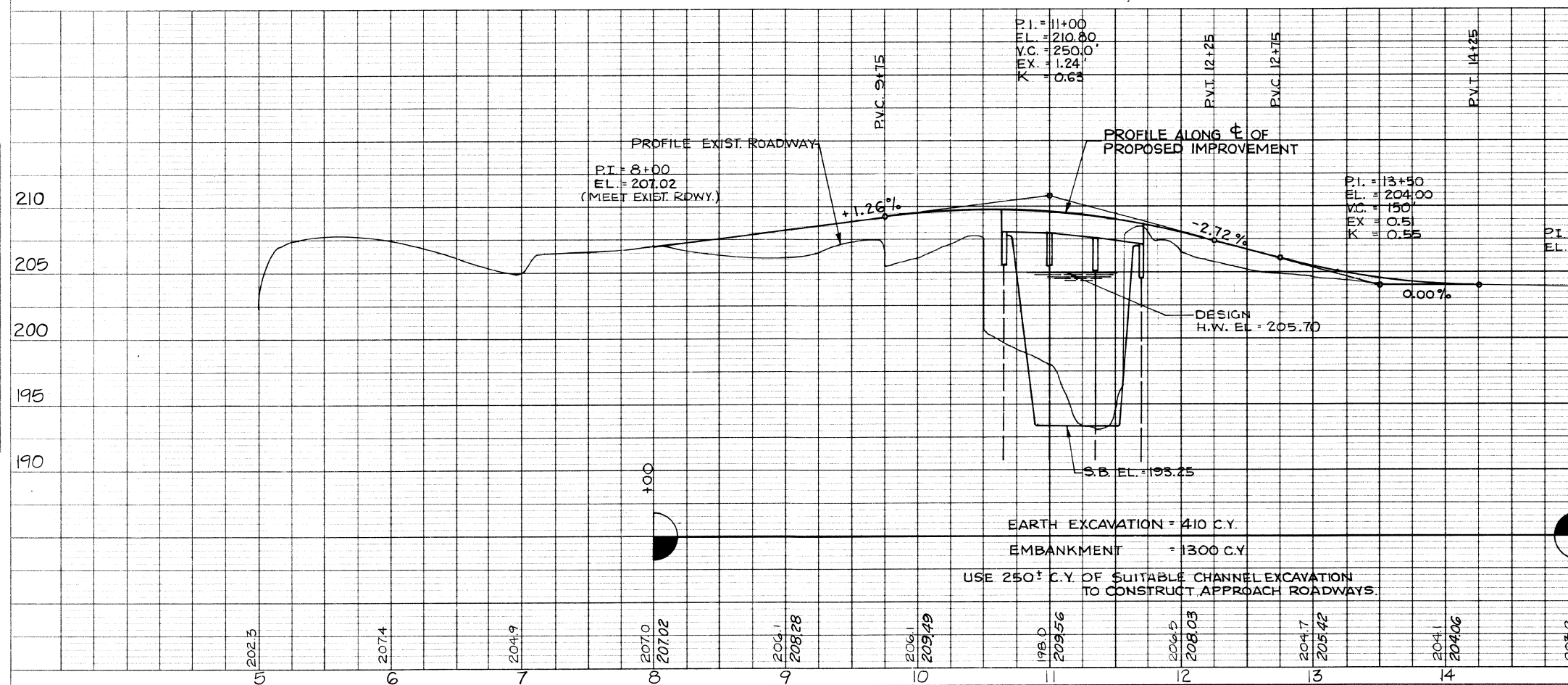
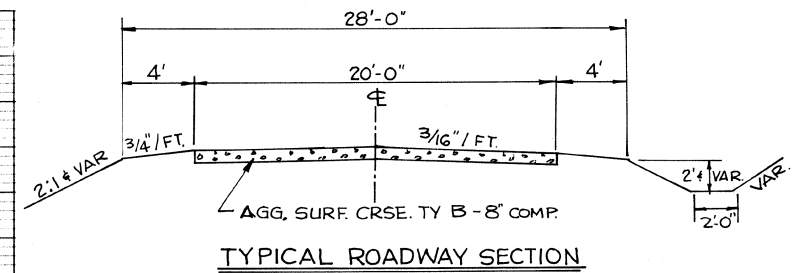
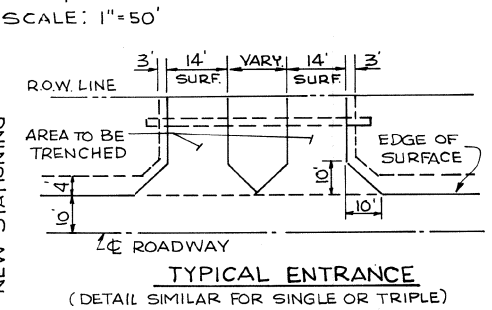
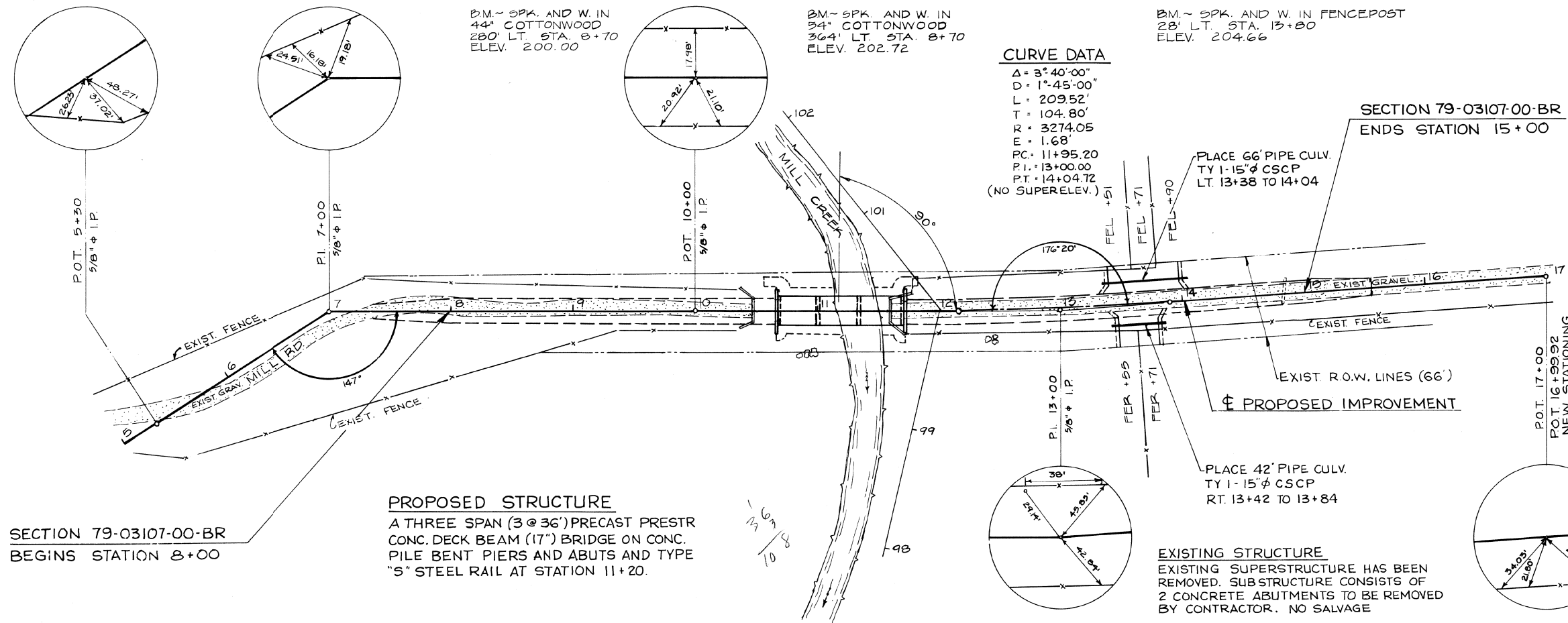
William Thompson
District Engineer

William Thompson
11/1/80

**WILLETT
HOFMANN &
ASSOCIATES, Inc.**
Consulting Engineers

WHA JOB NO. 79-0074-03-BR

SEC. 79-03107-00-BR BYRON ROAD DIST. OGLE CO.



SCALES
VERT. 1" = 5'
HORIZ. 1" = 1'

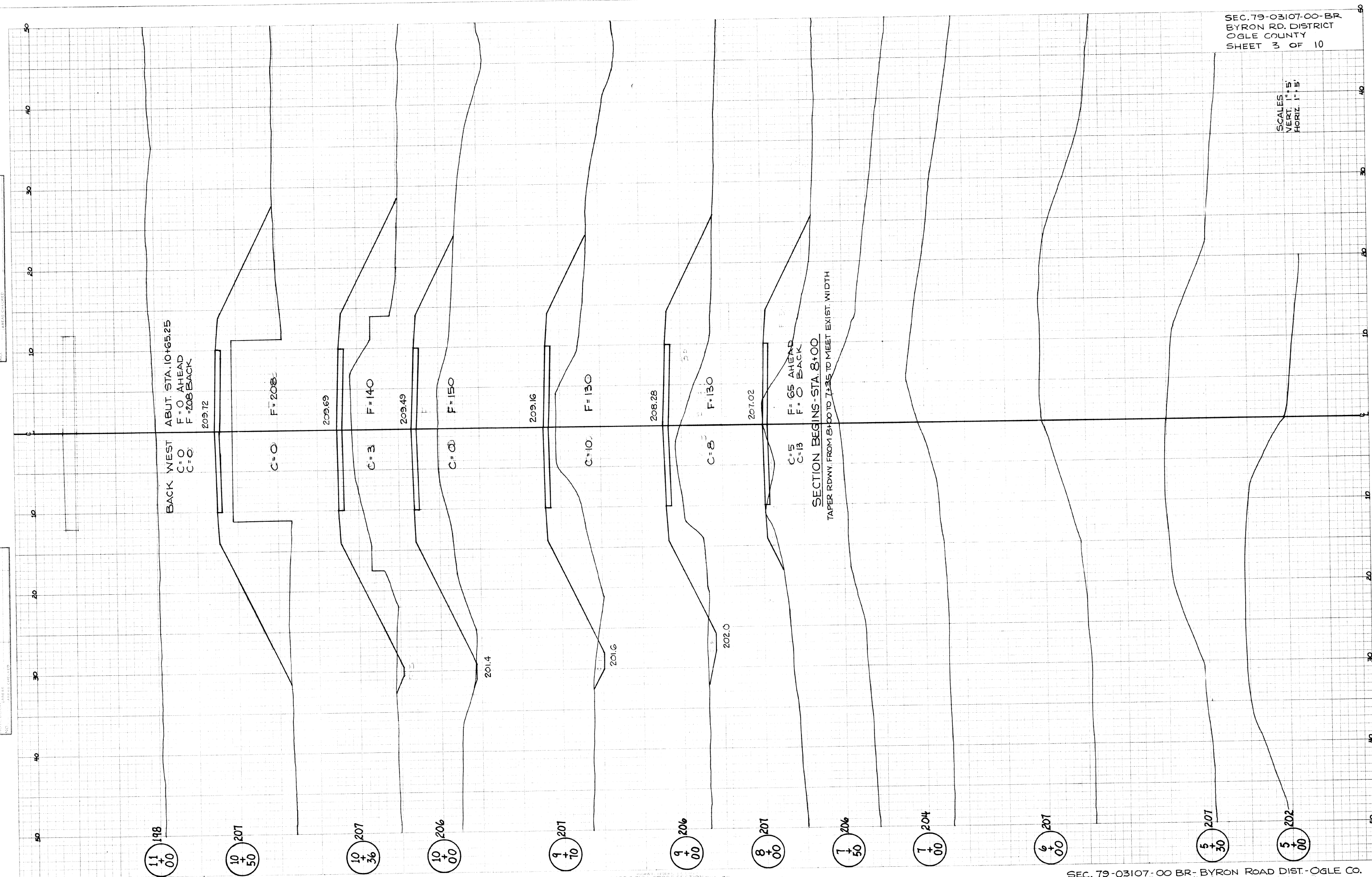
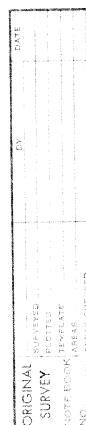


PLATE 3-FULL CROSS SECTION-FULL LINE
TELETYPE
PRINTED IN U.S.A.

SEC. 79-03107-00 BR-BYRON ROAD DIST.-OGLE CO.

ORIGINAL SURVEY
DATE
BY
EAT

FINAL SURVEY
DATE
BY
EAT

17
+
00
204

16
+
00
204

15
+
00
203

14
+
82
203

14
+
00
204

13
+
90
204
F.E.L.

13
+
71
204
F.E.L. & F.E.R.

13
+
55
204
F.E.R.

13
+
51
204
F.E.L.

13
+
00
204

12
+
00
206

11
+
78
207

11
+
70
208

11
+
56
207

SECTION ENDS STA. 15+00
TAPER ROWY. FROM STA. 15+00
TO MEET EXIST. WIDTH AT STA. 15+50

C=18
F=5 BACK
C=13
F=0 AHEAD

C=21
F=17 BACK

C=26
F=0

C=30
F=0

C=27
F=1

C=21
F=2

C=30
F=1

C=27
F=12

C=31
F=45

C=0
F=56
ABUT. 11+74.75
F=56 AHEAD
F=0 BACK
C=0

202.45
PIPE CULV.
TY. 1-15" CSCP

202.35
PIPE CULV.
TY. 1-15" CSCP

202.25
PIPE CULV.
TY. 1-15" CSCP

202.25
PIPE CULV.
TY. 1-15" CSCP

PLACE 66" PIPE CULV.
TY. 1-15" CSCP
LT. 13+35 - 14+04

8 DEAF
202.2
42" PIPE CULV.
TY. 1-15" CSCP
STA. 13+42 - 13+84

10 DEAF

SPECIAL DITCH STA. 12+00 TO 15+00

SCALE
VERT. 1"=5'
HORIZ. 1"=5'

SEC. 79-03107-00-BR
BYRON RD. DISTRICT
OGLE COUNTY
SHEET 4 OF 10

PLATE 3-FULL CROSS SECTION FULL LINE
NOTED
PRINTED IN U.S.A.

SEC. 79-03107-00-BR-BYRON ROAD DIST.- OGLE CO.

BENCH MARK: Spk. & Washer in 44"
Cottonwood 1280' Lt. 8+70 Elev. 200.00 (Assum)

EXISTING STRUCTURE:

Superstructure has been removed.
substructure consists of two
concrete abutments. To be removed
by contractor, see Special Provisions
Structure No. 071-3095

No salvage.

MILL CREEK
SEC. 79-03107-00-BR
BUILT 1980 BY
BYRON ROAD DIST.
OGLE COUNTY
LOADING HS 20
STR. NO. 071-3242

NAME PLATE LETTERING
Std. 2113

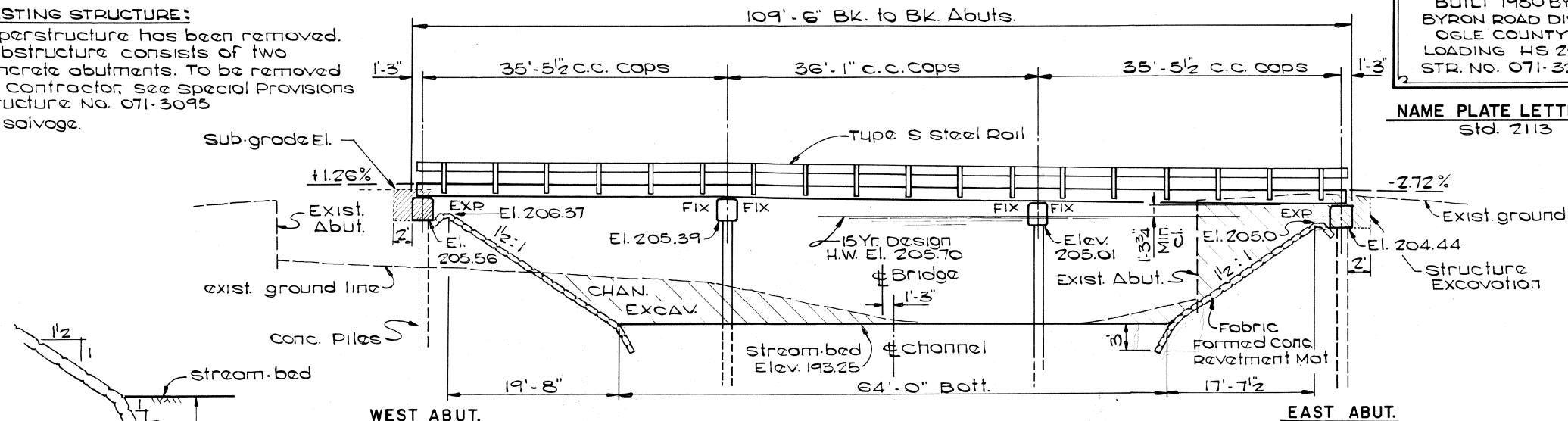
GENERAL NOTES

See Proposal for Boring Data.

The Contractor shall drive one Concrete Test
Pile in a permanent location at Pier No. 1 and East
Abutment as directed by the Engineer before
ordering the remainder of piles.

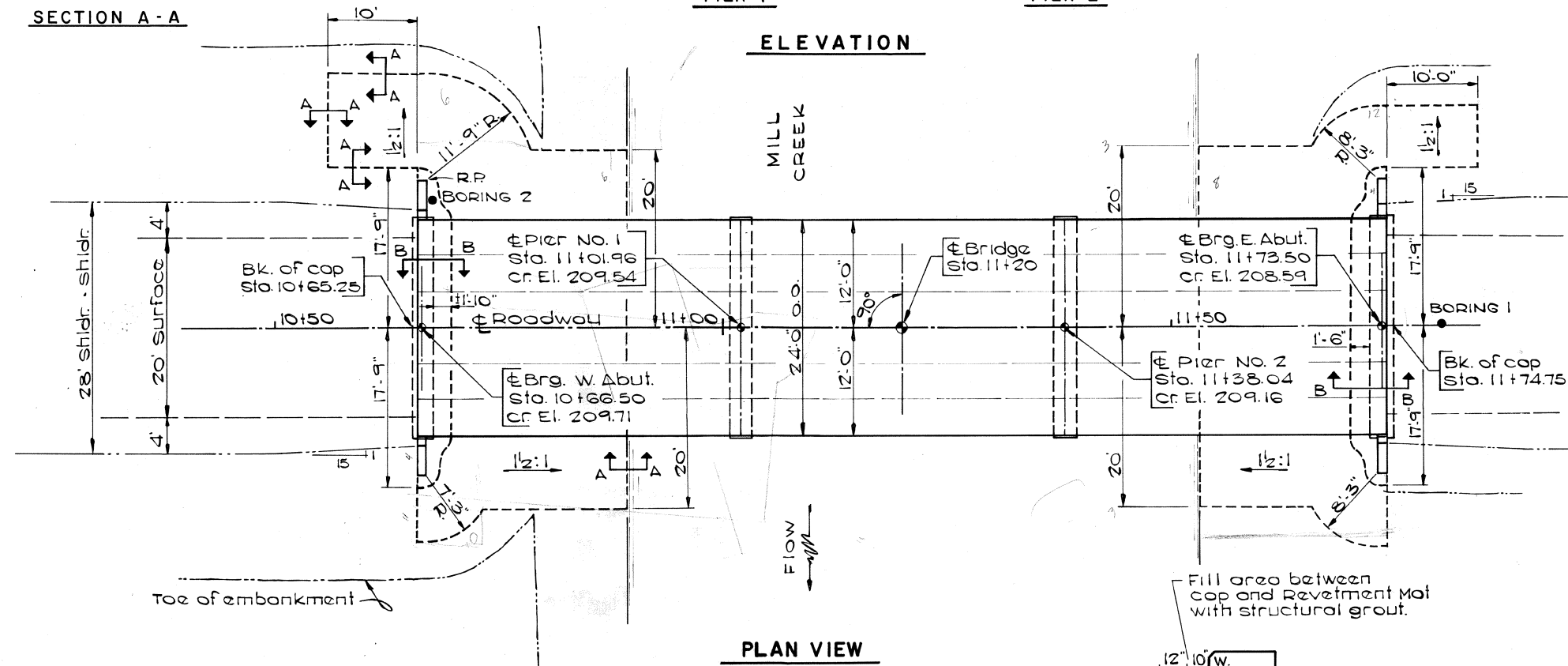
Layout of concrete Revetment Mat may be varied
the field to suit ground conditions as directed
by the Engineer.

Reinforcement bars shall conform to A.A.S.H.T.O.
M-31 or M-53 Grade 60.



SECTION A-A

ELEVATION



PLAN VIEW

BILL OF MATERIAL - BRIDGE

ITEM	UNIT	SUB.	SUPER.	TOTAL
CHANNEL EXCAVATION	CU. YDS.			300
REMOVAL OF EXISTING SUBSTRUCTURE	EACH			1
CLASS X CONCRETE	CU. YDS.	24.6		24.6
PRECAST PRESTRESSED CONC. DECK BMS. (17')	SQ. FT.		2592	2592
STEEL RAILING, TYPE S	LIN. FT.		216	216
REINFORCEMENT BARS	LBS.	2620		2620
PRECAST CONCRETE PILES - 14"	LIN. FT.	562		562
TEST PILE - CONCRETE	EACH	2		2
NAME PLATES	EACH		1	1
FABRIC FORMED CONCRETE REVETMENT MATS	SQ. YDS.			364
STRUCTURE EXCAVATION	CU. YDS.			40

WATERWAY INFORMATION

DRAINAGE AREA	50.3 Sq. Miles
DESIGN DISCHARGE (15 YR.)	4,200 c.f./s.
EXISTING OPENING	950 Sq. Ft.
REQUIRED OPENING	1000 Sq. Ft.
PROPOSED OPENING	1000 Sq. Ft.
CREATED HEAD (15 YR.)	0.5 Foot
100 YR. DISCHARGE	6,330 c.f./s.
CREATED HEAD (100 YR.)	0.1 Foot (overflows roadway)
HIGH WATER ELEV. (100 YR.)	207.1

LOADING HS 20-44

Allowance for 25 p.s.f. future
wearing surface.

DESIGN STRESSES

FIELD UNITS	PRESTRESSED UNITS
$f_s = 24,000$ p.s.i.	$f_c = 5,000$ p.s.i.
$f_{ci} = 1,400$ p.s.i.	$f_{ci} = 4,200$ p.s.i.
$v = 56$ p.s.i.	$f_s = 270,000$ p.s.i.
$n = 9$	$f_{si} = 189,000$ p.s.i.

Structure designed in accordance
with A.A.S.H.T.O. Specification dated
1977 and interim specification dated
1978 and 1979.

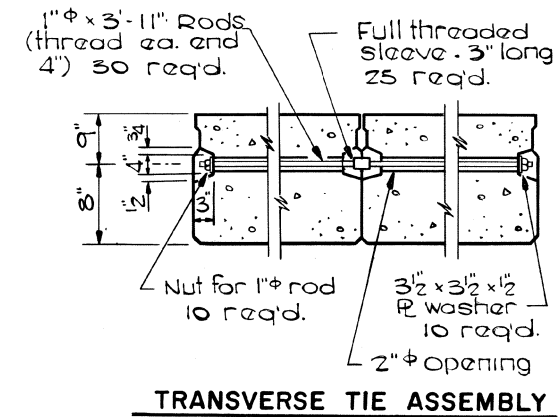
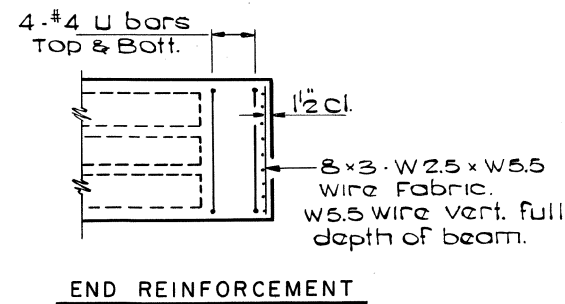
SECTION 79-03107-00-BR
BYRON ROAD DISTRICT
OGLE COUNTY

GENERAL PLAN & ELEVATION

DESIGNED BY:
B. THOMPSON
DATE: NOV. 1979
DRAWN BY:
R. RHODES
DATE: NOV. 1979
CHECKED BY:
C. HUFFMAN
DATE: DEC. 1979
APPROVED BY:
DATE:

**WILLETT
HOFFMANN &
ASSOCIATES, Inc.**
Consulting Engineers

11/80



GENERAL NOTES:

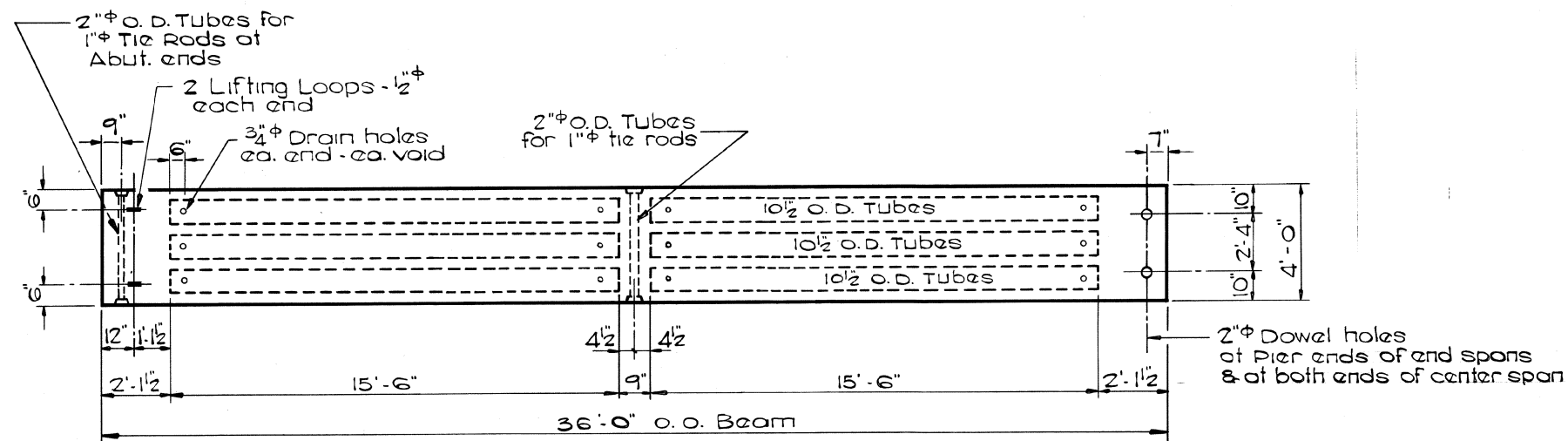
Prestressing steel shall be non-galvanized high strength stress-relieved 7-wire strand, grade 270. The nominal dia. shall be 1/2" and the nominal cross-sectional area shall be 0.153 Sq. Inch. Reinforcement bars shall conform to AASHTO: M-31 or M-53, Grade 60. The 1" dia. rods in the transverse tie assembly shall be tightened to a snug fit and set threads.

Pockets that receive transverse tie bar on outside beam shall be filled with grout after transverse tie assembly is in place. Cost of reinforcement and accessories cost into beams, of bearing pads, and of grouting longitudinal shear keys is included in unit price bid for "Precast Prestressed Concrete Deck Beams."

Lifting loops shall be 1/2" diameter, 6x25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 21,000 lbs.

Longitudinal shear keys shall be packed with a very dry mix of 2:1 sand and P.C. mortar.

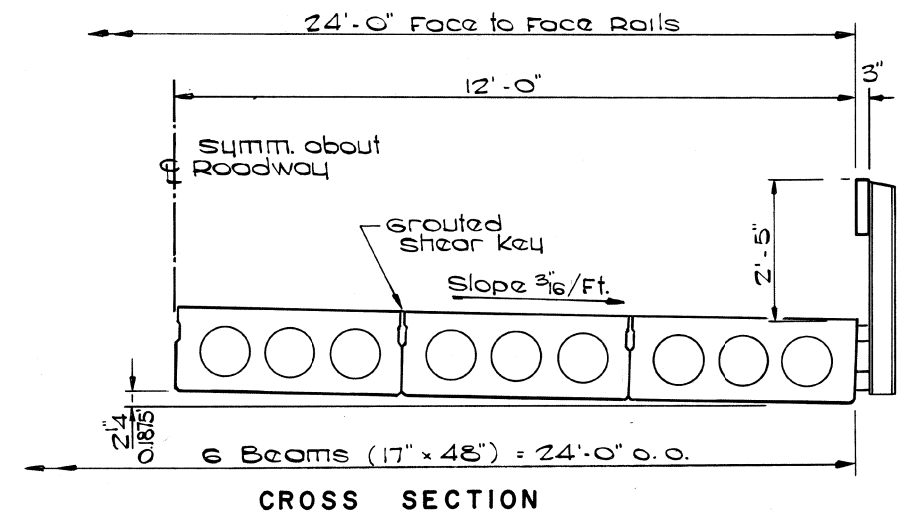
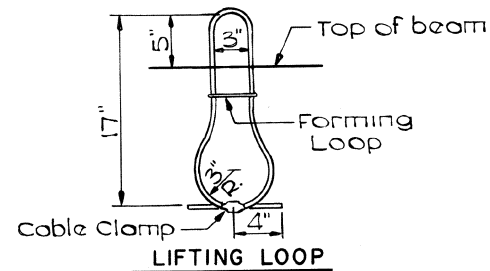
After beams have been erected, holes for the dowel anchors shall be drilled into the substructure and anchor dowels shall be grouted in place.



PLAN OF BEAM

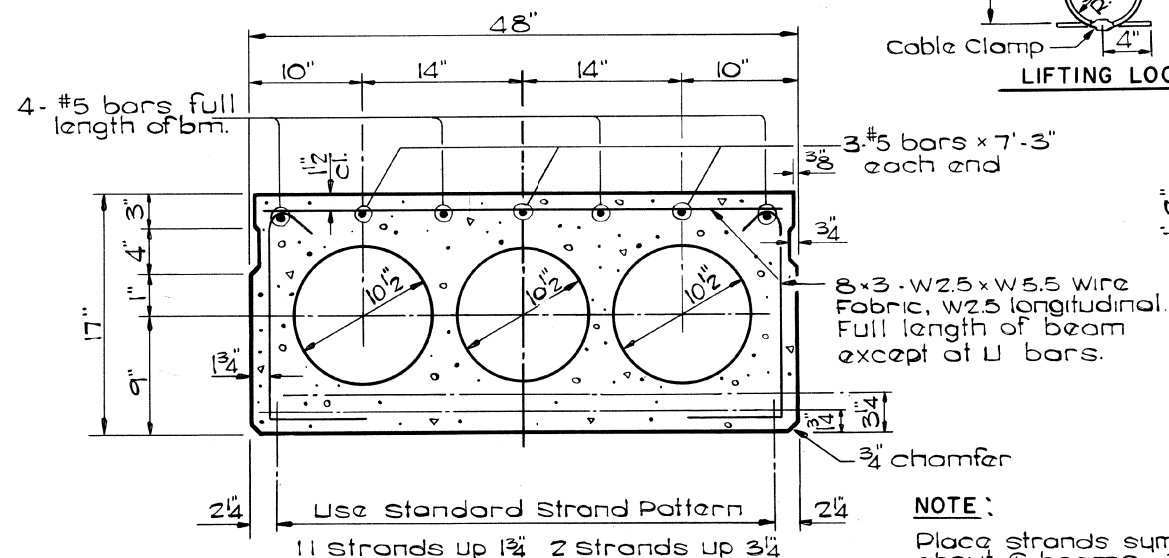
18 Required

OMIT SHEAR KEY ON
OUTSIDE FACE OF
EXTERIOR BEAMS



BILL OF MATERIAL - DECK

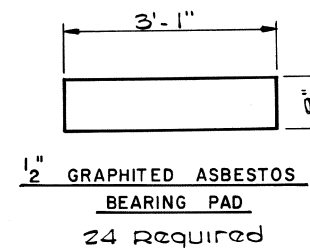
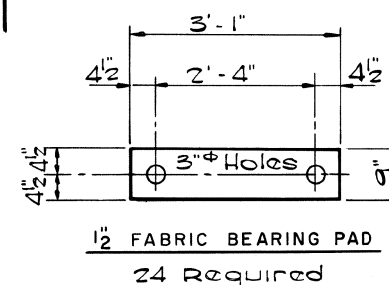
ITEM	UNIT	QUANT.
Precast Prestressed Conc. Deck Beams (17")	Sq. Ft.	2592



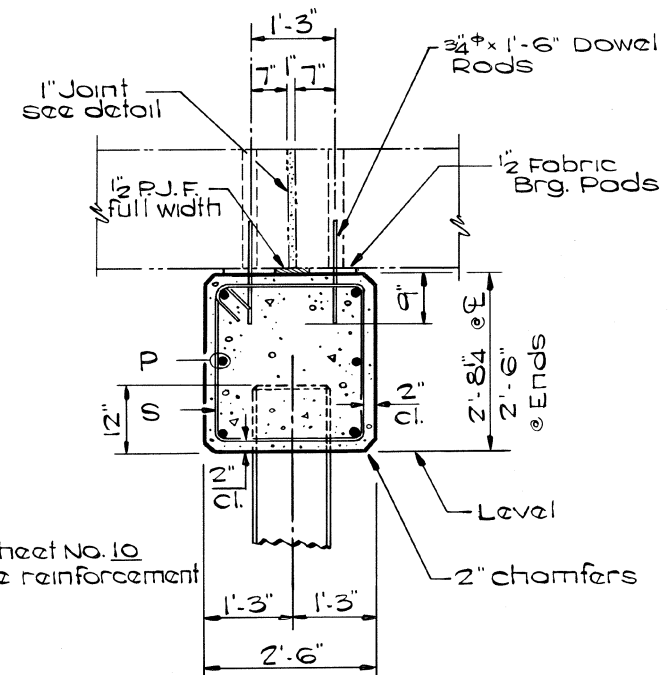
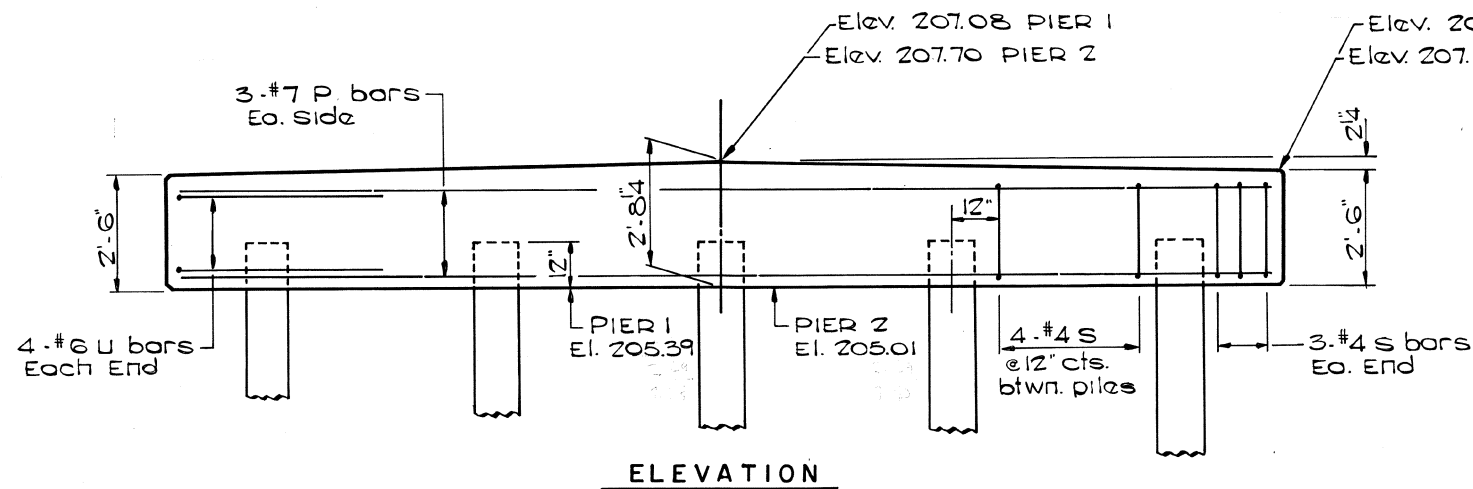
SECTION THRU BEAM

NOTE:

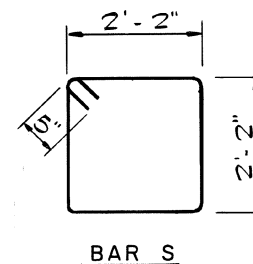
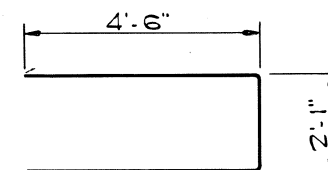
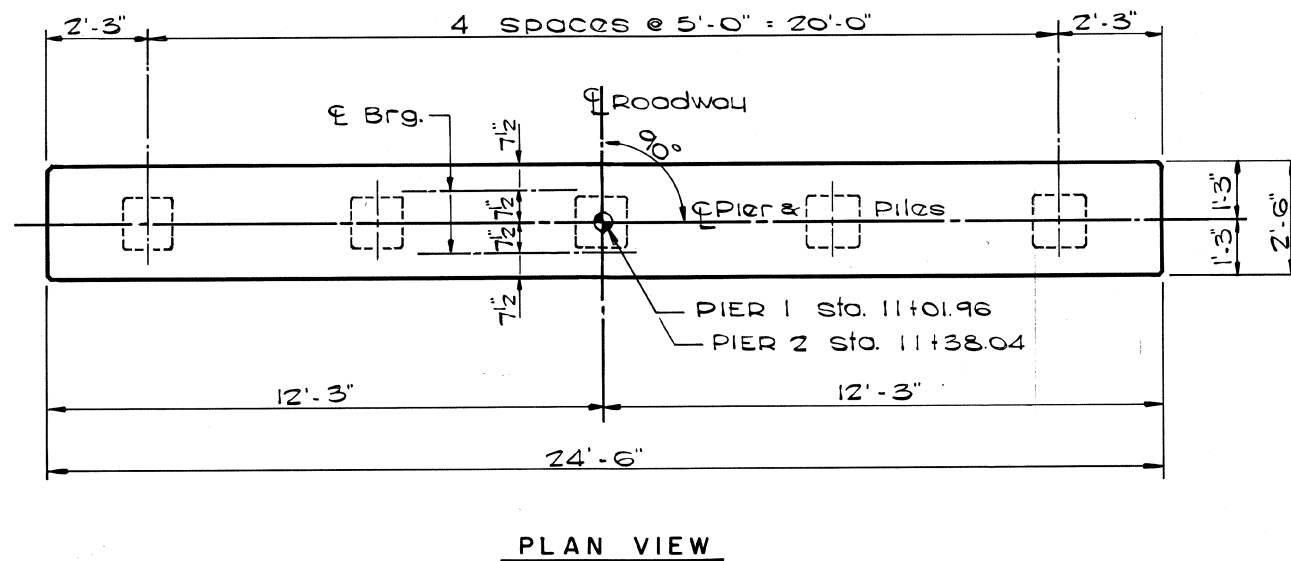
Place strands symmetrically about center of beams. 7 wire 1/2" strands. Stress to 28,900 lbs. per strand



DECK BEAM DETAILS
SECTION 79-03107-00-BR
BYRON ROAD DISTRICT
OGLE COUNTY

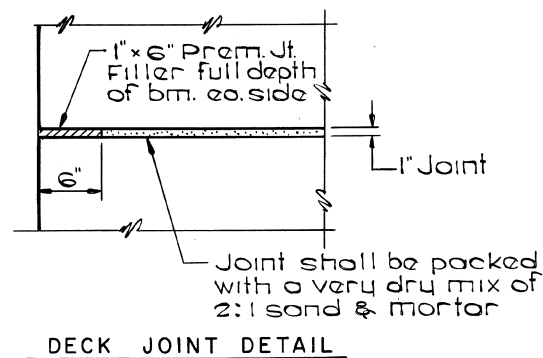


NOTE
see sheet No. 10
for pile reinforcement



BILL OF MATERIAL - 2 PIERS

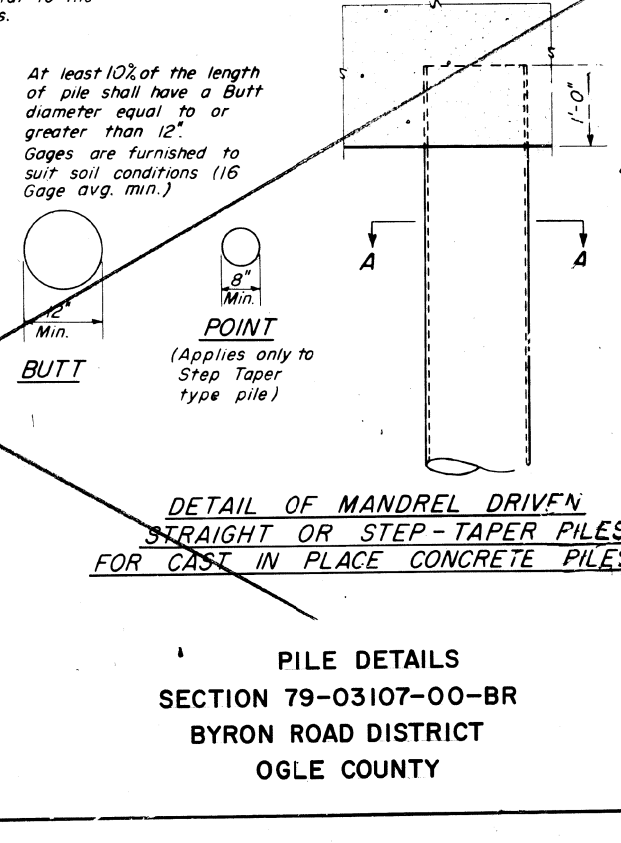
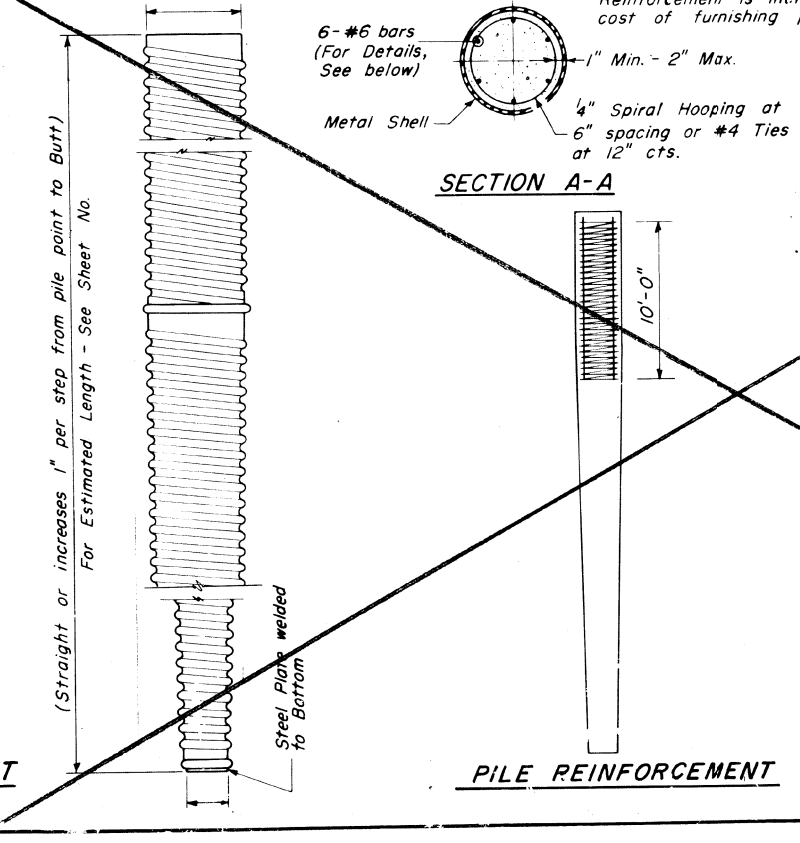
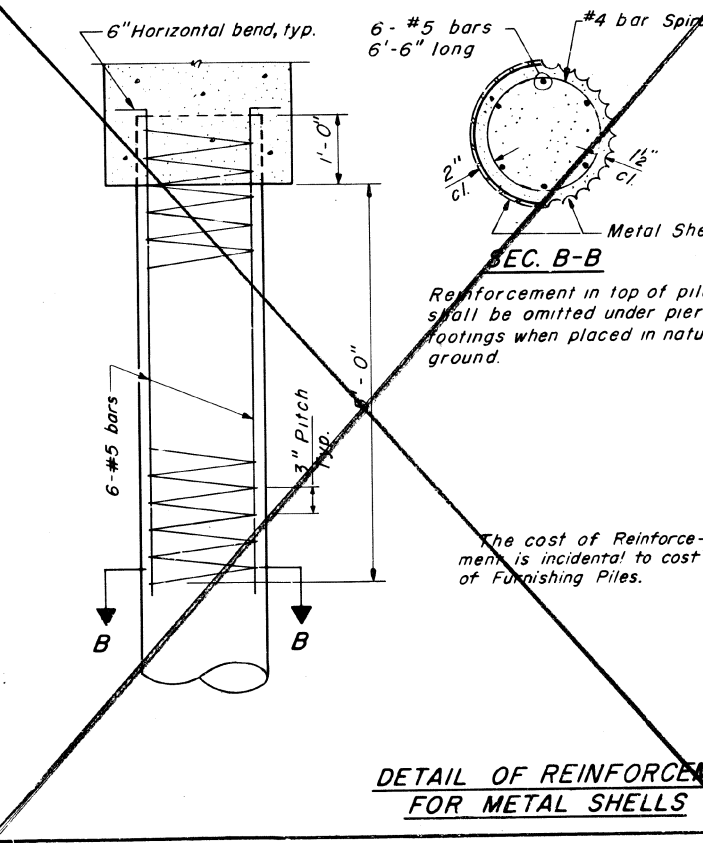
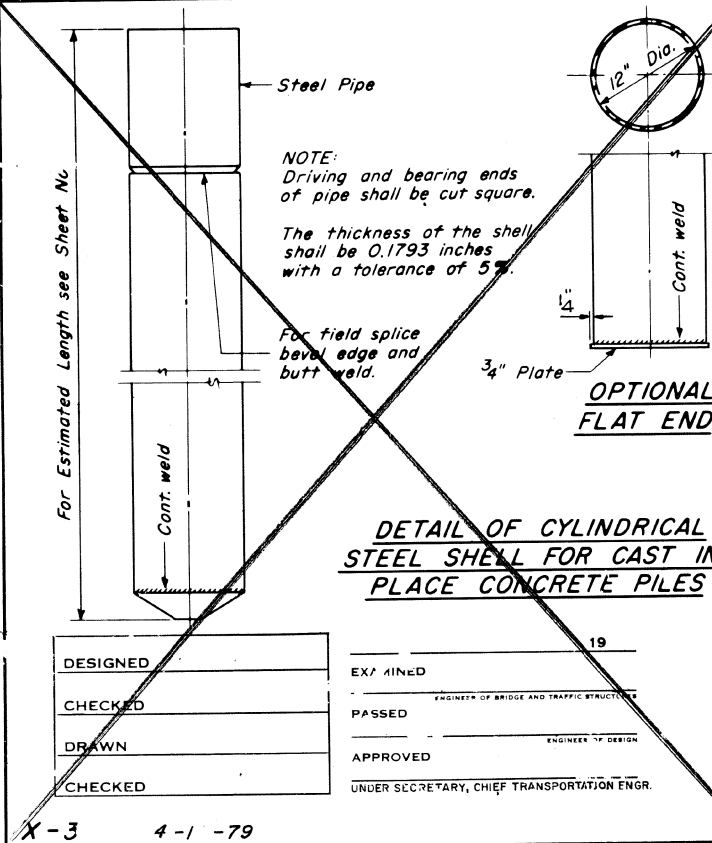
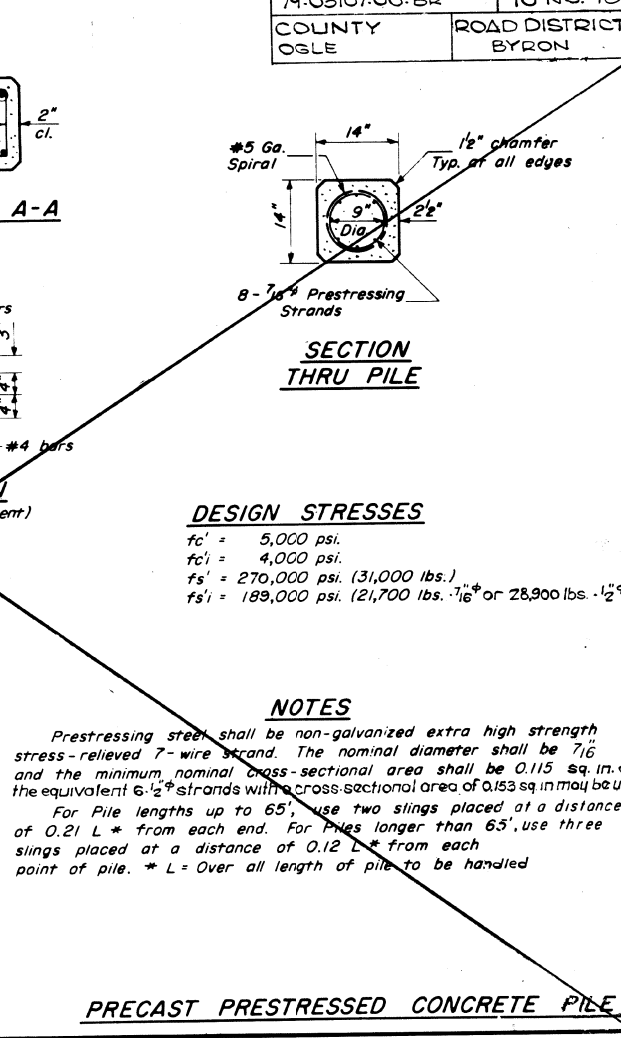
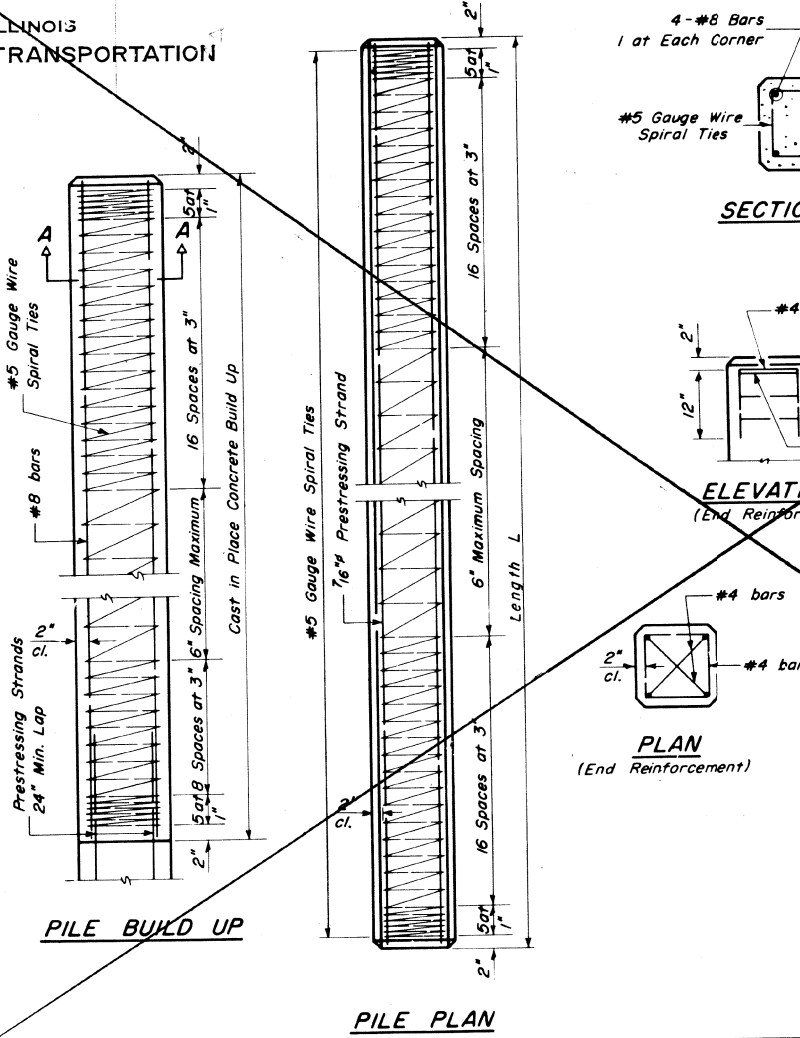
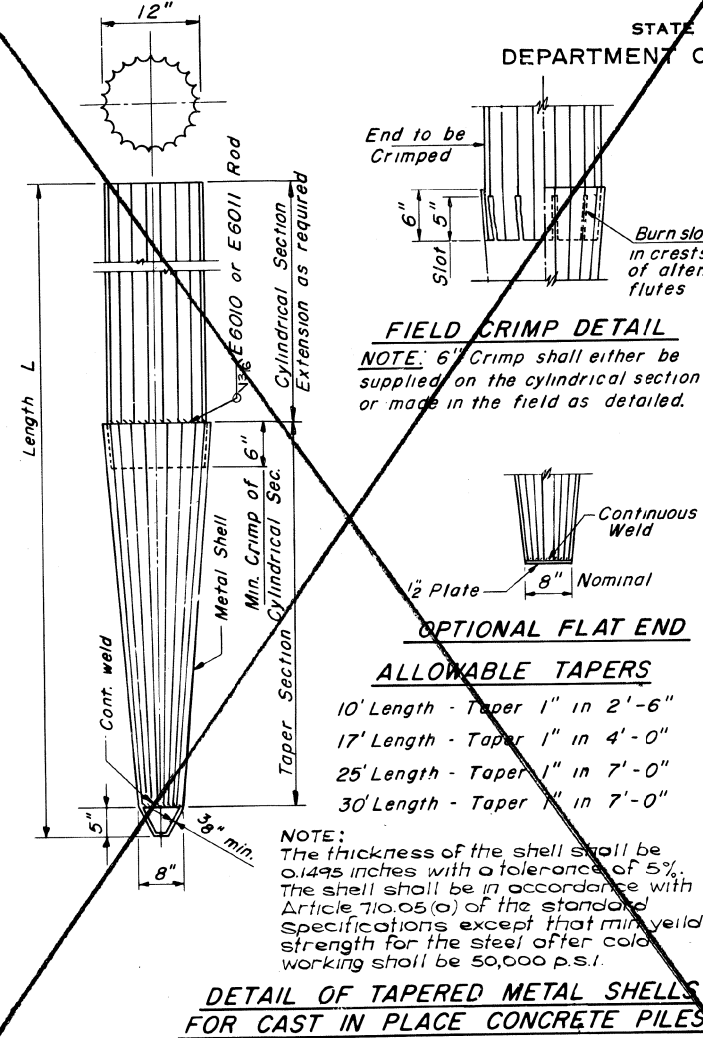
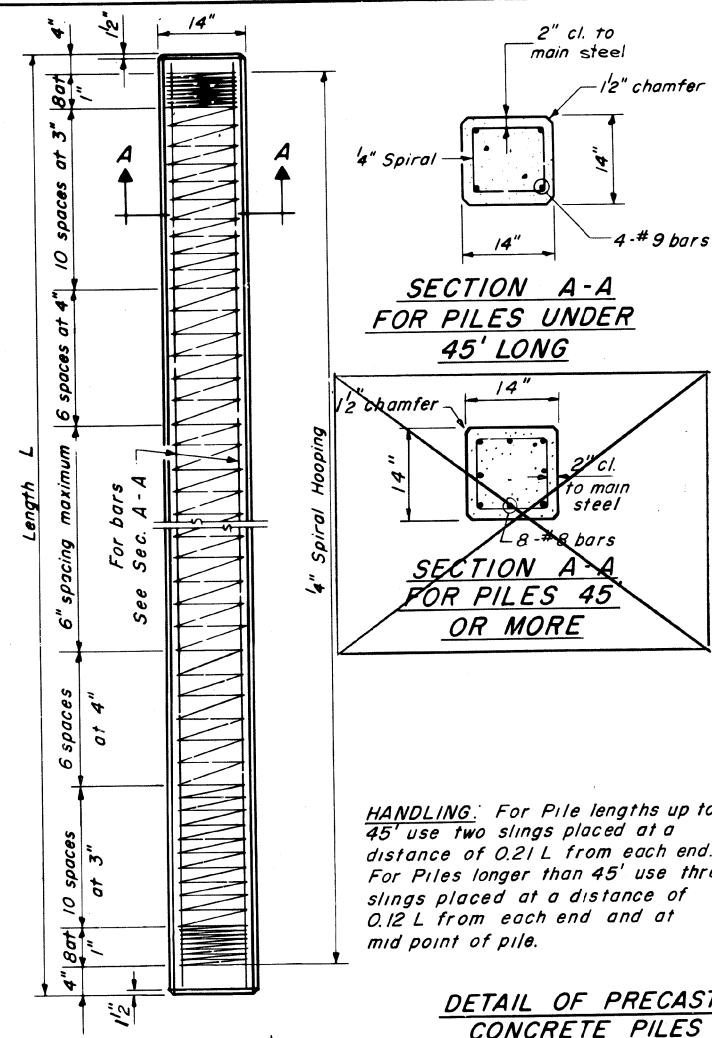
BAR	NO.	SIZE	LENGTH	SHAPE
P	12	#7	24'-0"	—
S	44	#4	9'-6"	□
U	16	#6	11'-1"	U
Class X Concrete Cu. Yds.				11.3
Reinforcement Bars Lb.				1130
Concrete Piles Lin. Ft.				315
Test Piles (Concrete) Ea.				1



PILE DATA

TYPE Precast concrete Piles - 14"
CAPACITY . . . 30 Ton
LENGTH . . . 35 Feet
NO. REQ'D. . . 4 + 1 Test Pile - Pier 1
5 - Pier 2

PIER DETAILS
SECTION 79-03107-00-BR
BYRON ROAD DISTRICT
OGLE COUNTY



PILE DETAILS
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