

IOWA  
DEPARTMENT OF TRANSPORTATION

Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

LOCAL SYSTEM  
CRAWFORD COUNTY  
BRIDGE

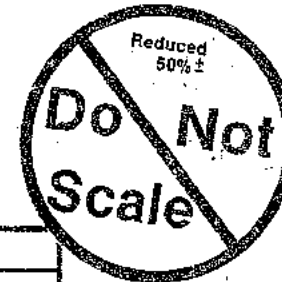
INDEX OF SHEETS

1. TITLE SHEET
2. SITUATION PLAN
3. GENERAL NOTES, GENERAL PLAN & SOUNDINGS
4. TOP OF SLAB ELEV. & MISC. DETAILS
5. TABULATIONS
6. DETAIL SHEET 520-26

STANDARD ROAD PLANS					
THE FOLLOWING STANDARD ROAD PLANS SHALL BE CONSIDERED APPLICABLE TO CONSTRUCTION WORK ON THIS PROJECT					
IDENT.	DATE	IDENT.	DATE	IDENT.	DATE
RE-21	2-17-87	RE-63	1-9-90		
RE-29	1-04-89	RE-68	8-08-89		
RE-7	5-13-86	RE-69	8-08-89		
RE-12A	10-11-88				
RE-12B	1-9-90	RL-1	1-23-82		
RE-17	11-10-87	RL-11	10-11-88		
RE-17A	8-20-85				
RE-52	8-08-89				

PROJECT TRAFFIC CONTROL PLAN  
THIS ROAD WILL BE CLOSED TO THROUGH TRAFFIC DURING CONSTRUCTION. LOCAL TRAFFIC TO ADJACENT PROPERTIES WILL BE MAINTAINED AS PROVIDED FOR IN ARTICLE 1107.03, 1984 SPECIFICATIONS PLUS CURRENT SUPPLEMENTAL SPECIFICATIONS. TRAFFIC CONTROL DEVICES, PROCEDURES AND LAYOUTS SHALL BE AS PROVIDED FOR BY SUPPLEMENTAL SPECIFICATIONS FOR TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS, SPECIFICATION 403 AND THE IOWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. 5001

THE STANDARD SPECIFICATIONS OF THE IOWA DEPARTMENT OF TRANSPORTATION, SERIES OF 1984, PLUS CURRENT SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS, SHALL APPLY TO WORK ON THIS PROJECT.



TOTAL ESTIMATED QUANTITIES						
ITEM NO.	ITEM	UNIT	2 ABUTS.	2 PIERS	SUPERST.	TOTAL
1	CONCRETE, STRUCTURAL	CU. YDS.	24.9	21.2	132.7	178.8
2	STEEL, REINFORCING	LBS.	3,467	2,246	37,378	43,091
3	BEAMS, PRETENSIONED	A 42	—	—	4	4
4	PRESTRESSED CONCRETE	A 30 R	—	—	4	4
5	PILING,	FURNISH 10 @ 64', 16 @ 68'	L.F.	640	1,088	1,728
6	STEEL BEARING	DRIVE 10 @ 64', 15 @ 68'	L.F.	640	1,088	1,728
7	HP 10 x 42	ENCASE 16 @ 17', P10A TYPE 3	L.F.	—	304	304
8	STEEL, STRUCTURAL	LBS.	—	—	2,511	2,511
9	EXCAVATION, CLASS 10 CHANNEL	CU. YDS.	—	—	—	4,710
10	EXCAVATION, CLASS 10 ROADWAY & BORROW	CU. YDS.	—	—	—	140
11	EXCAVATION, CLASS 20	CU. YDS.	80	—	—	80
12	REVEITEMENT, CLASS 'E' RIP-RAP	TONS	—	—	—	640
13	FABRIC ENGINEERING	SQ. YDS.	—	—	—	875
14	RAIL, CONCRETE OPEN	L.F.	—	—	312.6	312.6
15	REMOVAL OF EXISTING STRUCTURES	L.S.	—	—	—	LUMP SUM
16	PRE-BORED HOLES, AS PER PLAN 10 @ 8'	L.F.	80	—	—	80
17	TRAFFIC CONTROL	L.S.	—	—	—	LUMP SUM
18	BARRICADES	ONLY	—	—	—	2
19	GUARDRAIL, FORMED STEEL THIRTEEN BEAM	L.F.	—	—	—	62.5
20	GUARDRAIL, FORMED STEEL	L.F.	—	—	—	75
21	GUARDRAIL, POST, BEAM	ONLY	—	—	—	24
22	GUARDRAIL, END ANCHORAGES, BEAM, RE-52	ONLY	—	—	—	2
23	GUARDRAIL, END ANCHORAGES, BEAM, RE-69	ONLY	—	—	—	2
24	OBJECT MARKERS, TYPE 3	ONLY	—	—	—	4
25	OBJECT MARKERS, TRIPLE YELLOW, AS PER PLAN	ONLY	—	—	—	4
26	MOBILIZATION	L.S.	—	—	—	LUMP SUM

IOWA DEPARTMENT OF TRANSPORTATION STANDARDS REQUIRED		
STANDARD	DATE ISSUED	LATEST REVISION
H24-87	JANUARY, 1987	—
H24-1-87	JANUARY, 1987	1-1-88
H24-6-87	JANUARY, 1987	—
H24-7-87	JANUARY, 1987	1-1-89
H24-10-87	JANUARY, 1987	—
H24-13-87	JANUARY, 1987	1-1-89
H24-15-87	JANUARY, 1987	6-87
H24-18-87	JANUARY, 1987	—
P10A	AUGUST, 1988	—

THESE SHEETS MAY BE OBTAINED AT BRIDGE DESIGN SERVICES.

MILEAGE SUMMARY

BRIDGE AT STATION 20+95 = 142.297 FT. = 0.0270 MI.

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
APPROVED:  
DIVISION ADMINISTRATOR DATE

APPROVED:  
H. Dale Wright 2-5-90  
COUNTY ENGINEER DATE

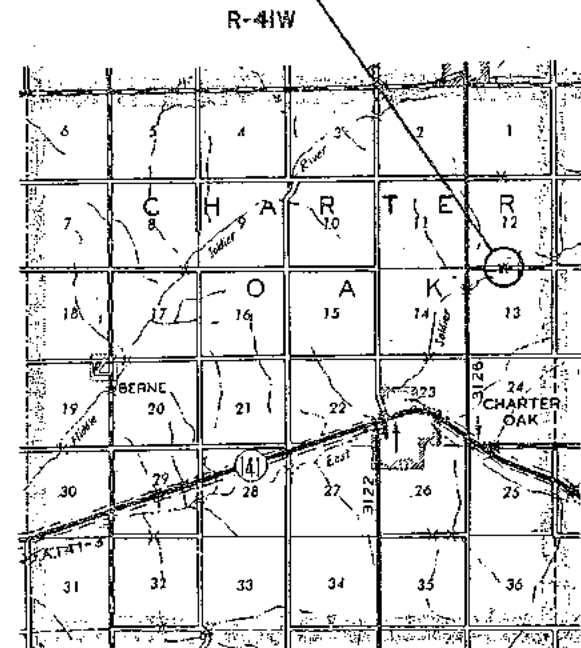
APPROVED:  
John P. Lawler  
BOARD OF SUPERVISORS DATE

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY SUPERVISION AND THAT ENGINEERING DECISIONS WITH REGARD TO THE DESIGN WERE MADE BY ME OR BY OTHER DULY REGISTERED PROFESSIONAL ENGINEERS UNDER THE LAWS OF THE STATE OF IOWA.  
J. Burns 2-3-90  
IOWA REGISTRATION NUMBER 3801 DATE

DEPARTMENT OF TRANSPORTATION  
IOWA  
Highway Division  
AUTHORIZED FOR LETTING  
Deputy Chief Engineer 4-2-90  
DEPUTY CHIEF ENGINEER DATE

IOWA DEPARTMENT OF TRANSPORTATION  
HIGHWAY DIVISION  
AUTHORIZED FOR LETTING  
DISTRICT LOCAL SYSTEMS ENGR. DATE

DESIGN NO.  
STATION 20+95.00  
PROPOSED 138'-10" x 24' PRETENSIONED  
PRESTRESSED CONCRETE  
BEAM BRIDGE, 30° SKEW, LT. AHEAD



PROJECT LOCATION  
SCALE 1" = 1 MILE

1980 TRAFFIC COUNT = 65 V.P.D.

BRIDGE

PROJECT NO. BROS-9024(25)--8J-24

CRAWFORD COUNTY

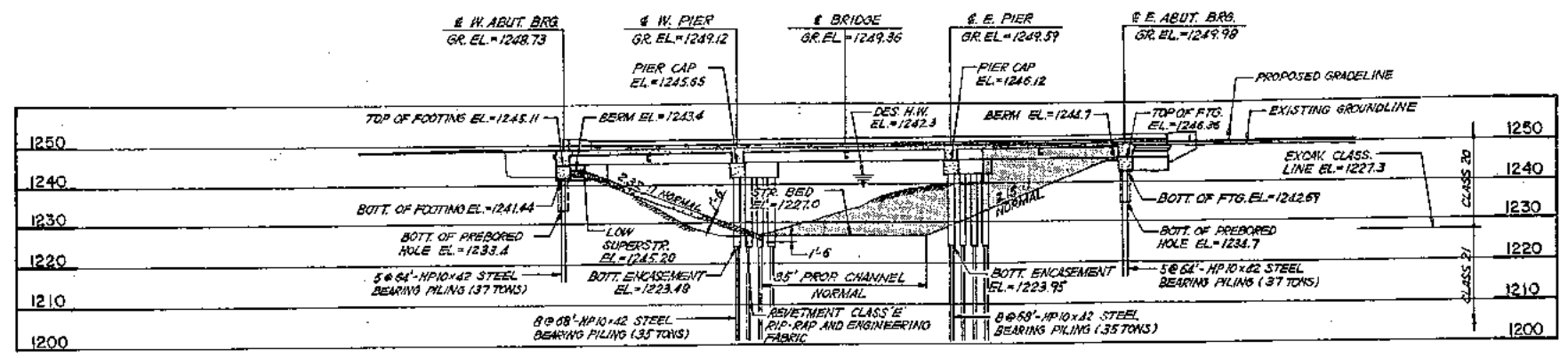
LETTING DATE: JUNE 5, 1990

901139 169  
006853 RFB

129651

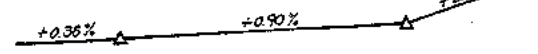
129651

BENCH MARK NO. 1: SPIKE IN POWER POLE, 34' RT. STA. 15+45, ELEV. = 1243.35  
 T.B.M.: SPIKE IN 48" DIA. TREE 100' RT. STA. 22+15, ELEV. = 1242.56

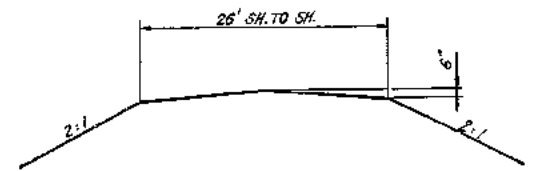


LONGITUDINAL SECTION ALONG E ROADWAY

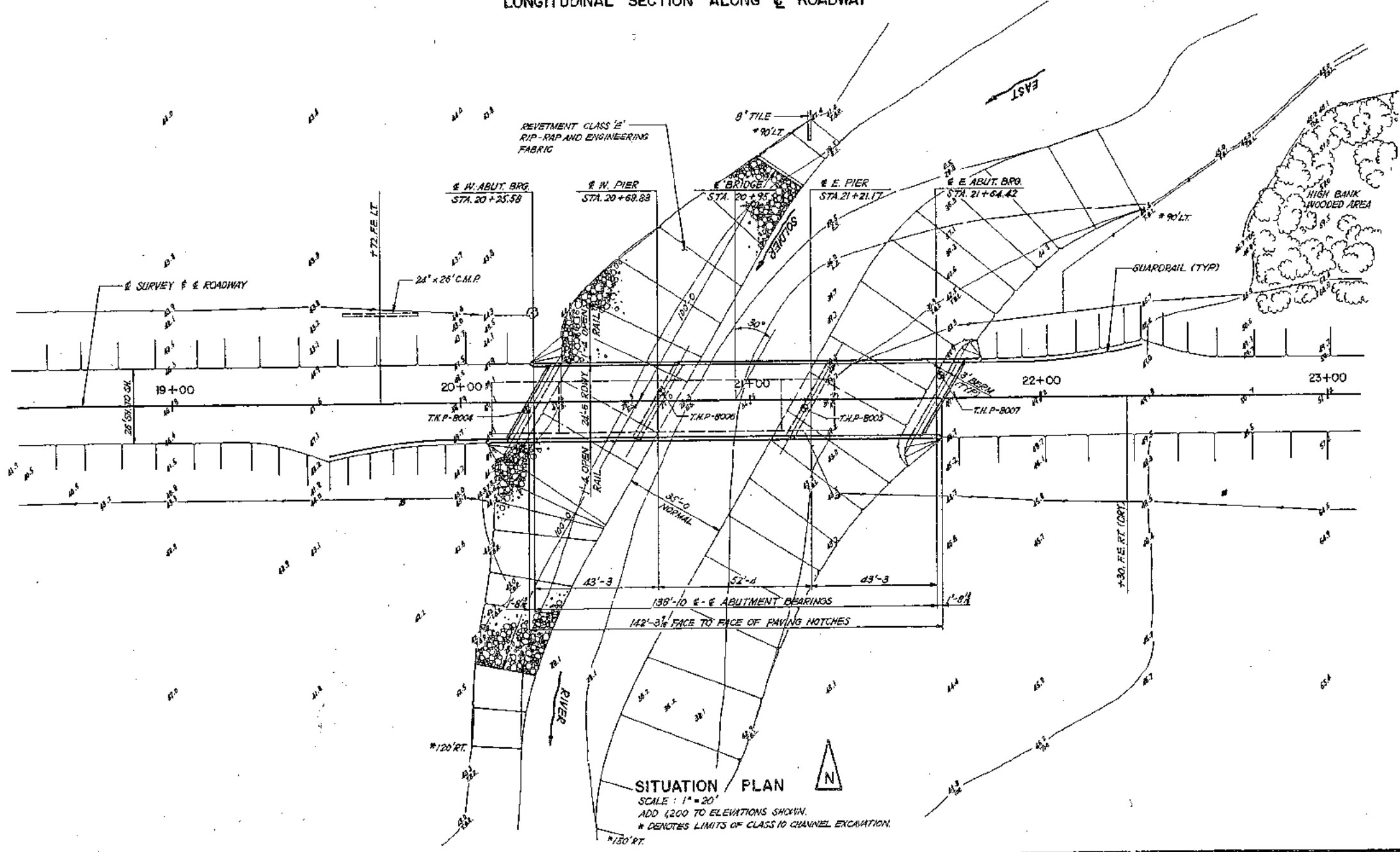
V.P.I. STA. 17+00 ELEV. = 1245.80 L.V.C. = 100' M.O. = 0.0675'  
 V.P.I. STA. 23+00 ELEV. = 1251.20 L.V.C. = 100' M.O. = 0.1688'



PROPOSED GRADE



TYPICAL APPROACH SECTION



SITUATION PLAN

SCALE: 1" = 20'  
 ADD 1200 TO ELEVATIONS SHOWN.  
 \* DENOTES LIMITS OF CLASS 10 CHANNEL EXCAVATION.

LOCATION

CRAWFORD COUNTY  
 T-84N, R-41W  
 SECTION 12, 13  
 CHARTER OAK TOWNSHIP  
 OVER EAST SOLDIER RIVER

HYDRAULIC DATA

DRAINAGE AREA = 31.8 SQ. MI.  
 DESIGN DISCHARGE = 5300 C.F.S.  
 DESIGN H.W. ELEV. = 1242.3  
 SLOPE = 0.0014 1/1  
 BRIDGE WATERWAY AREA = 1018 SF  
 DESIGN VELOCITY = 5.2 F.P.S.  
 Q 25 = 5300 C.F.S., STAGE EL. = 1242.3 (DESIGN)  
 Q 50 = 6400 C.F.S., STAGE EL. = 1243.4  
 Q 100 = 7700 C.F.S., STAGE EL. = 1244.3  
 Q 500 = 12200 C.F.S., STAGE EL. = 1246.3  
 EXTREME H.W. ELEV. = UNKNOWN

138'-10 x 24' PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE

INTEGRAL ABUTMENTS P.I.O.A. PIERS  
 43'-3 END SPANS 52'-4 INTERIOR SPAN  
 STATION 20+95.00 30° SKEW, LT. AHEAD  
 CRAWFORD COUNTY, IOWA

BENCH MARK NO. 1: SPIKE IN POWER POLE, 34' RT. STA. 15+45, ELEV. = 1243.35  
 T.B.M.: SPIKE IN 48" DIA. TREE 100' RT. STA. 22+15, ELEV. = 1248.56

**SPECIFICATIONS**

DESIGN: AASHTO SERIES OF 1993.  
 CONSTRUCTION: STANDARD SPECIFICATION OF THE IOWA DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION, SERIES OF 1984, PLUS CURRENT SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS.

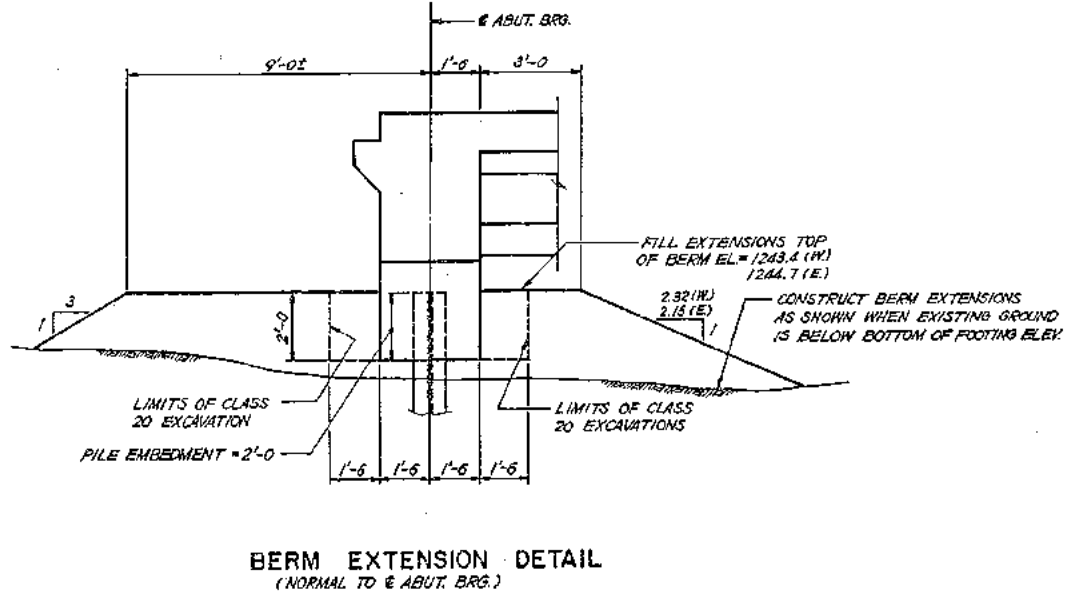
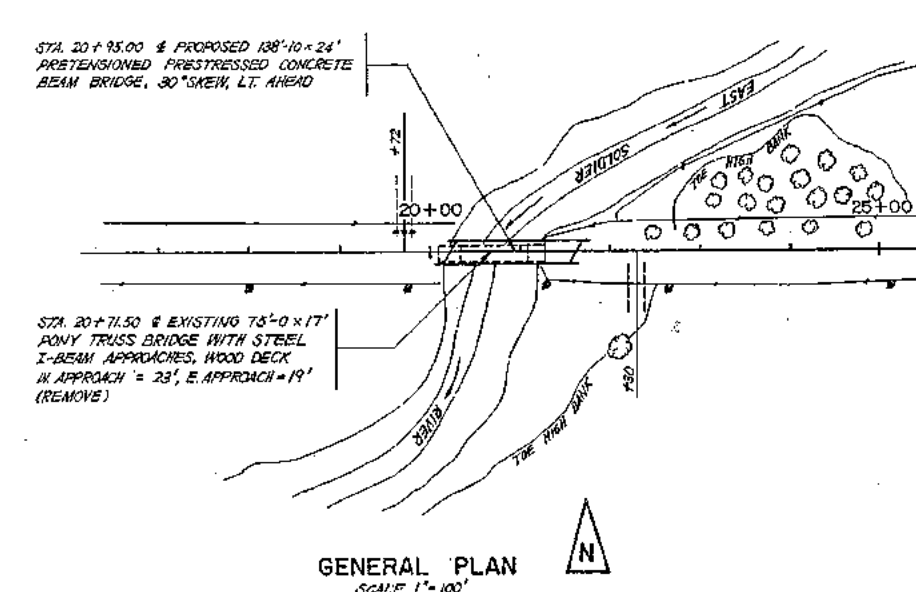
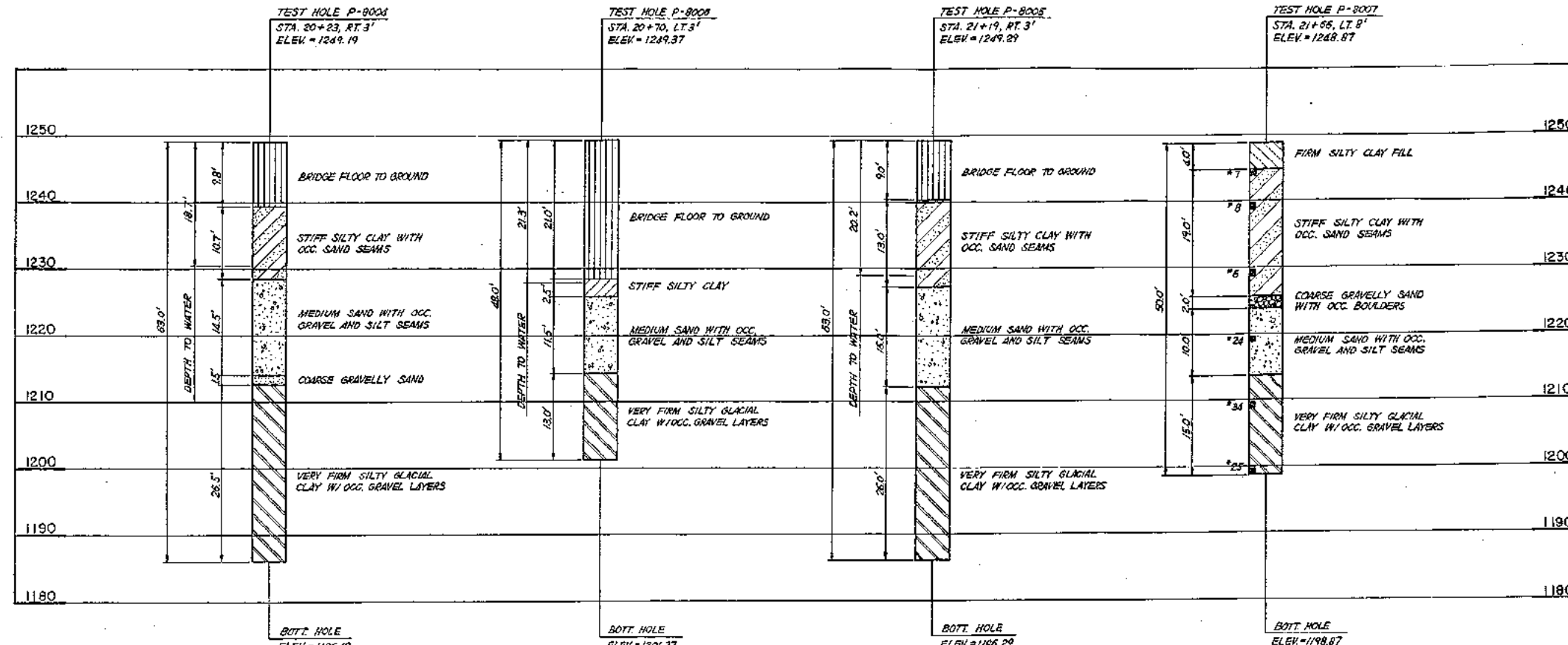
**DESIGN STRESSES**

DESIGN STRESSES FOR THE FOLLOWING MATERIAL ARE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SERIES OF 1993.

CONCRETE	SECTION 9 F'c = 3,500 PSI
REINFORCING STEEL	SECTION 8
ASTM A615	GRADE 60, F <sub>s</sub> = 24,000 PSI
PRESTRESSING STEEL	SEE STANDARD BEAM SHEET N24-10
PRESTRESSED CONCRETE	SEE STANDARD BEAM SHEET N24-10
STRUCTURAL STEEL	SECTION 10
ASTM A36	F <sub>s</sub> = 20,000 PSI

**GENERAL NOTES**

THIS BRIDGE IS DESIGNED FOR HS20-44 LOADING, PLUS 20 LBS. PER SQ. FT. OF ROADWAY FOR FUTURE WEARING SURFACE.  
 THE EXISTING STRUCTURE IS A 117' X 17' RIVETED STEEL PONY TRUSS INCLUDING 2 APPROACH SPANS, TIMBER DECK, HIGH WOOD ABUTMENTS AND TIMBER TRESTLE PIERS. THE LUMP SUM BID FOR "REMOVAL OF EXISTING STRUCTURES" SHALL INCLUDE ALL COSTS TO REMOVE AND DISPOSE OF THE EXISTING STRUCTURE IN ACCORDANCE WITH SECTION 2401 OF THE STANDARD SPECIFICATIONS. ANY SALVAGEABLE MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR. EXISTING PILING ARE TO BE REMOVED TO AN ELEVATION AT LEAST ONE FOOT BELOW PROPOSED GROUNDLINE AND TO THE EXTENT THAT THEY DO NOT INTERFERE WITH THE CONSTRUCTION OF THE PROPOSED BRIDGE.  
 THE PREBORED HOLES AS PER PLAN SHALL CONFORM TO SECTION 2501 OF THE STANDARD SPECIFICATIONS EXCEPT THE DIAMETER OF THE HOLE SHALL BE 15". THE PRICE BID FOR "PREBORED HOLES AS PER PLAN" SHALL INCLUDE ALL LABOR AND MATERIALS REQUIRED FOR CONSTRUCTION.  
 REINFORCING STEEL IS TO BE GRADE 60.  
 THE CONTRACTOR MAY PLACE UP TO 200 CUBIC YARDS OF FILL MATERIAL BELOW ELEVATION 1227.3 TO CONSTRUCT A TEMPORARY STREAM CROSSING AND/OR ACCOMPLISH OTHER WORK NECESSARY TO COMPLETE CONSTRUCTION. ADDITIONAL FILL MATERIAL MAY BE PLACED ABOVE ELEVATION 1227.3 AS NECESSARY TO COMPLETE THE WORK. CULVERTS SHALL BE INSTALLED, AS REQUIRED, IN ANY TEMPORARY CROSSING TO CARRY LOW STREAM FLOWS. THE CONTRACTOR SHALL REMOVE ANY TEMPORARY CROSSINGS PRIOR TO COMPLETION OF THE PROJECT. THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF TEMPORARY CROSSINGS SHALL BE INCIDENTAL TO THE PROJECT.  
 PILE AND ABUTMENT PILES SHALL BE DRIVEN TO FULL PENETRATION WHERE PRACTICABLE. MINIMUM BEARING CAPACITY IS TO BE 35 TONS PER PILE AT PIERS AND 37 TONS PER PILE AT ABUTMENTS.  
 CLASS 20 EXCAVATION FOR THE ABUTMENTS IS BASED ON THE ASSUMPTION THAT THE CHANNEL EXCAVATION AND ANY NECESSARY BERM CONSTRUCTION HAS BEEN COMPLETED. UTILITY COMPANIES WHOSE FACILITIES ARE KNOWN TO BE WITHIN THE CONSTRUCTION LIMITS SHALL BE NOTIFIED BY THE CONTRACTOR OF THE CONSTRUCTION STARTING DATE.  
 THE CONTRACTOR SHALL VISIT THE CONSTRUCTION SITE TO ENSURE THAT HE IS FAMILIAR WITH THE EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. SHOULD ANY UNDERGROUND UTILITIES BE FOUND, THEY SHALL BE PROTECTED IN PLACE AND THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.  
 IF ARCHAEOLOGICAL MATERIALS ARE ENCOUNTERED DURING THE CONSTRUCTION PHASE OF THIS PROJECT, THE OFFICE OF PROJECT PLANNING AND/OR THE OFFICE OF LOCAL SYSTEMS (IA DOT) MUST BE CONTACTED IMMEDIATELY SO THE PROPER AUTHORITIES CAN BE NOTIFIED ACCORDING TO THE EXISTING FEDERAL REGULATIONS AND STATE PROCEDURES. ADDITIONALLY, IT SHOULD BE NOTED THAT FINDINGS AND RECOMMENDATIONS FOR CLEARANCE OF FURTHER TESTING CANNOT BE CONSIDERED FINAL UNTIL CONCURRENCE IS RECEIVED FROM THE STATE HISTORIC PRESERVATIONS OFFICER. PHONE: OFFICE OF PROJECT PLANNING 515/239-1228; OFFICE OF LOCAL SYSTEMS 515/239-1528.  
 ALL UNSALVAGEABLE MATERIAL AND RUBBLE REMOVED FROM THE BRIDGE SHALL BE DISPOSED OF OFF THE HIGHWAY RIGHT-OF-WAY ON A WASTE AREA PROVIDED BY THE BRIDGE CONTRACTOR. THIS WASTE MATERIAL MUST NOT CREATE AN UNSTABLE CONDITION WHEN VIEWED FROM PUBLIC HIGHWAYS. THE COST OF WASTING THIS MATERIAL IS TO BE INCLUDED IN THE LUMP SUM BID FOR "REMOVAL OF THE EXISTING STRUCTURES". NO PAYMENT WILL BE MADE FOR OVERHAUL.  
 CLEAR DISTANCE BETWEEN FACE OF CONCRETE AND NEAR REINFORCING STEEL IS TO BE 2" UNLESS SHOWN OR NOTED OTHERWISE.  
 THE BRIDGE CONTRACTOR IS TO CLEAR THE CHANNEL TO THE SHAPE, DEPTH AND EXTENT NOTED OR SHOWN BY THE SHADDED AREAS ON THE "CENTERLINE SECTION" AND "SITUATION PLAN". THIS WORK SHALL BE PAID FOR AS "EXCAVATION CLASS 10 CHANNEL".  
 THE BRIDGE CONTRACTOR IS TO CONSTRUCT THE BERM EXTENSIONS WHERE NEEDED FOR ABUTMENT CONSTRUCTION AS SHOWN ON SHEET 3 AS "EXCAVATION CLASS 10 ROADWAY AND BORROW" IN ACCORDANCE WITH ARTICLE 2107 OF THE STANDARD SPECIFICATIONS. SUITABLE "EXCAVATION CLASS 10 CHANNEL" MAY BE USED IN THE FILL IN ACCORDANCE WITH 1.9.0.1, ROAD STANDARD RL-1 OR WASTED AS DIRECTED BY THE ENGINEER. IF ADDITIONAL SUITABLE MATERIALS ARE REQUIRED, THE BRIDGE CONTRACTOR IS TO PROVIDE HIS OWN BORROW AREA. HE IS TO FAMILIARIZE HIMSELF WITH THE PROVISIONS OF THE IOWA LAW AS IT APPLIES TO REMOVAL AND REPLACEMENT OF TOPSOIL ON BORROW AREA. THE QUANTITY SHOWN FOR "EXCAVATION CLASS 10 ROADWAY AND BORROW" INCLUDES AND ADDITIONAL 25% TO COMPENSATE FOR SHRINKAGE. EXCESS "EXCAVATION CLASS 10 CHANNEL" NOT REQUIRED IN CONSTRUCTION OF FILL OR WASTED IS TO BE STOCKPILED ON AN AREA AND IN A MANNER AS DIRECTED BY THE COUNTY ENGINEER.  
 THE BRIDGE CONTRACTOR IS TO LEVEL OFF AND SHAPE THE BERMS TO THE ELEVATIONS AND DIMENSIONS SHOWN. DRESSING OF SLOPES OUTSIDE THE BRIDGE AREA NOT DISTURBED BY THE BRIDGE CONTRACTOR SHALL BE PAID FOR AS EXTRA WORK.  
 COMPLETION OF APPROACH GRADING, SURFACING, PERMANENT EROSION CONTROL AND ANY NECESSARY RELOCATION OF FIELD ENTRANCES SHALL BE BY OTHERS AND IS NOT A PART OF THIS CONTRACT.  
 CLEARING AND GRUBBING (0.1 AC.) IS TO BE INCIDENTAL TO "EXCAVATION CLASS 10 CHANNEL". NO DIRECT PAYMENT WILL BE MADE.  
 THE UNIT PRICE BID FOR "REVEITEMENT", CLASS E, RFD-NAP" SHALL INCLUDE COST OF LABOR, EQUIPMENT AND MATERIALS REQUIRED TO PLACE CLASS E REVEITEMENT STONE TO THE EXTENT SHOWN ON SHEET 2 IN ACCORDANCE WITH SECTION 4130.04 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.



**138'-10" x 24' PRESTENSIONED PRESTRESSED CONCRETE BEAM BRIDGE**

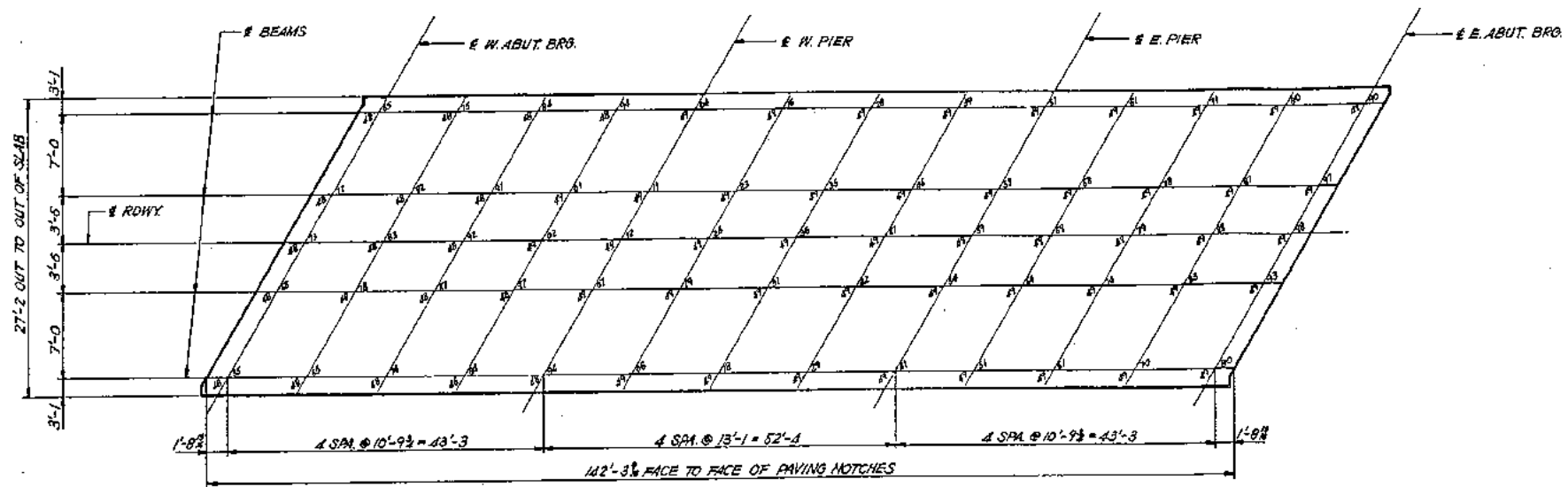
INTEGRAL ABUTMENTS P10A PIERS  
 43'-3" END SPANS 52'-4" INTERIOR SPAN

**SOUNDING DATA & GENERAL NOTES**

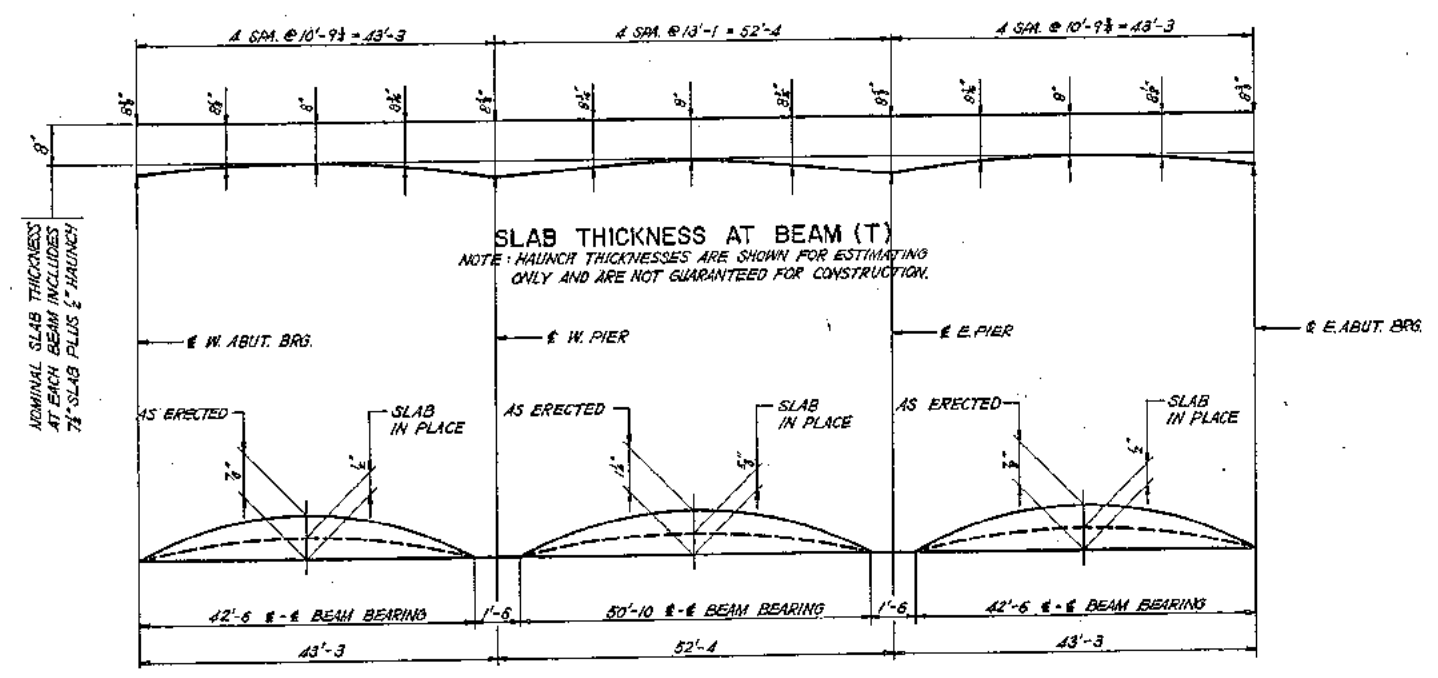
STATION 20+95.00 30° SKEW, LT. AHEAD  
 CRAWFORD COUNTY, IOWA

SHEET 3 OF 6

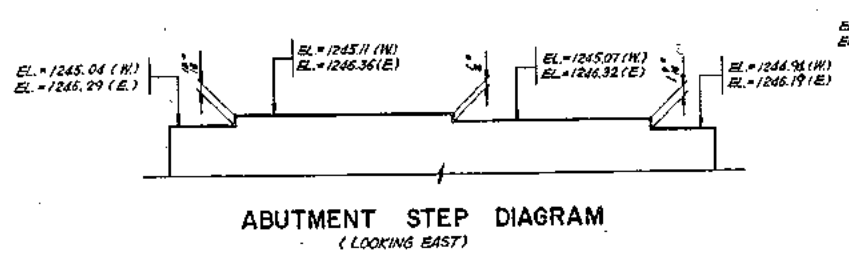
BENCH MARK NO. 1: SPIKE IN POWER POLE, 34' RT. STA. 15+45, ELEV. = 1243.55  
 T.B.M.: SPIKE IN 40" DIA. TREE 100' RT. STA. 22+15, ELEV. = 1246.55



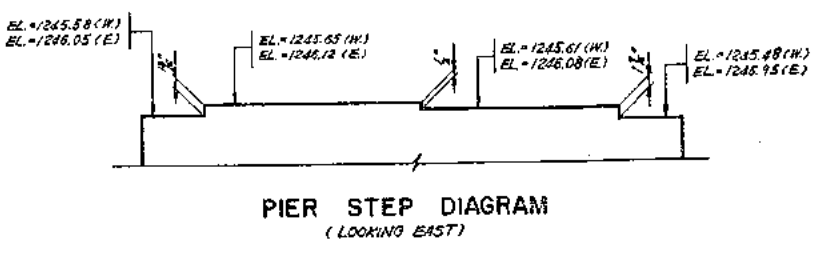
TOP OF SLAB ELEVATIONS  
 (ADD 1,200 TO ELEVATIONS SHOWN)



BEAM CAMBER DATA



ABUTMENT STEP DIAGRAM  
 (LOOKING EAST)



PIER STEP DIAGRAM  
 (LOOKING EAST)

138'-10 x 24' PRETENSIONED PRESTRESSED  
 CONCRETE BEAM BRIDGE  
 INTEGRAL ABUTMENTS P10A PIERS  
 43'-3 END SPANS 52'-4 INTERIOR SPAN  
 TOP OF SLAB ELEV. & MISC. DETAILS  
 STATION 20+95.00 30° SKEW, LT. AHEAD  
 CRAWFORD COUNTY, IOWA  
 SHEET 4 OF 6

TABULATION OF DELINEATORS AND OBJECT MARKERS							REMARKS
Refer to Standard Road Plan RE-48A-B and RE-29C ** Not a Bid Item							
LOCATION		DELINEATOR		OBJECT MARKER			
STATION	TYPE	SINGLE WHITE D-1W	TRIPLE YELLOW OM2-3YV	TYPE 3		OFFSET BRACKETS **	
		NO.	NO.	OM-3L NO.	OM-3R NO.	NO.	
20+95	/	—	2	/	/	—	W. END
20+95	/	—	2	/	/	—	E. END

TRAFFIC CONTROL PLAN	
<p>THE PROJECT ROUTE WILL BE CLOSED TO TRAFFIC. TRAFFIC CONTROL ON THIS PROJECT SHALL BE IN ACCORDANCE WITH DETAIL SHEET S20-26. FOR ADDITIONAL COMPLIMENTARY INFORMATION, REFER TO SUPPLEMENTAL SPECIFICATION 5001 AND THE IOWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.</p>	
<p>ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR.</p>	
<p>SLAT FENCE BARRICADES OR PLASTIC SAFETY FENCE SHALL BE PLACED ON BOTH SIDES OF THE BRIDGE SITE. IN ADDITION, A TYPE III BARRICADE SHALL BE PLACED IN ADVANCE OF THE SLAT FENCE OR PLASTIC SAFETY FENCE. A "ROAD CLOSED" SIGN (R-11-2, 48" x 30") SHALL BE PLACED ON EACH TYPE III BARRICADE ALONG WITH TWO TYPE "A" LOW INTENSITY FLASHING WARNING LIGHTS.</p>	
<p>CRAWFORD COUNTY MAINTENANCE SHALL SALVAGE ALL ROAD MARKERS AFTER ROAD IS CLOSED.</p>	
<p>THE BID ITEM "TRAFFIC CONTROL" SHALL INCLUDE THE COST FOR ALL TRAFFIC CONTROL MEASURES REQUIRED OF THE CONTRACTOR EXCEPT FOR THOSE WHICH ARE SEPARATE BID ITEMS OR ARE INCIDENTAL TO OTHER BID ITEMS.</p>	
<p>THE GUARDRAIL INSTALLATION MUST BE COMPLETED BEFORE THE ROAD IS OPENED TO TRAFFIC.</p>	

TABULATION OF GRADING FOR GUARDRAIL INSTALLATIONS										
* Refer to Standard Road Plan RL-II or Typical 4303 and 4306										
LOCATION POINT		TYPE	DIMENSIONS *			CLASS 10 EXCAV. Cu. Yds.	EMBANK. IN PLACE Cu. Yds.	PIPE		REMARKS
No.	Station		(A) / (T) Lin. Ft.	(Y) Lin. Ft.	(Z) Lin. Ft.			SIZE inches	TYPE	
1	19+56.00	/	56.25	6.9	26	35	—	—	—	W. END, RT.
2	22+34.00	/	56.25	6.9	26	35	—	—	—	E. END, LT.

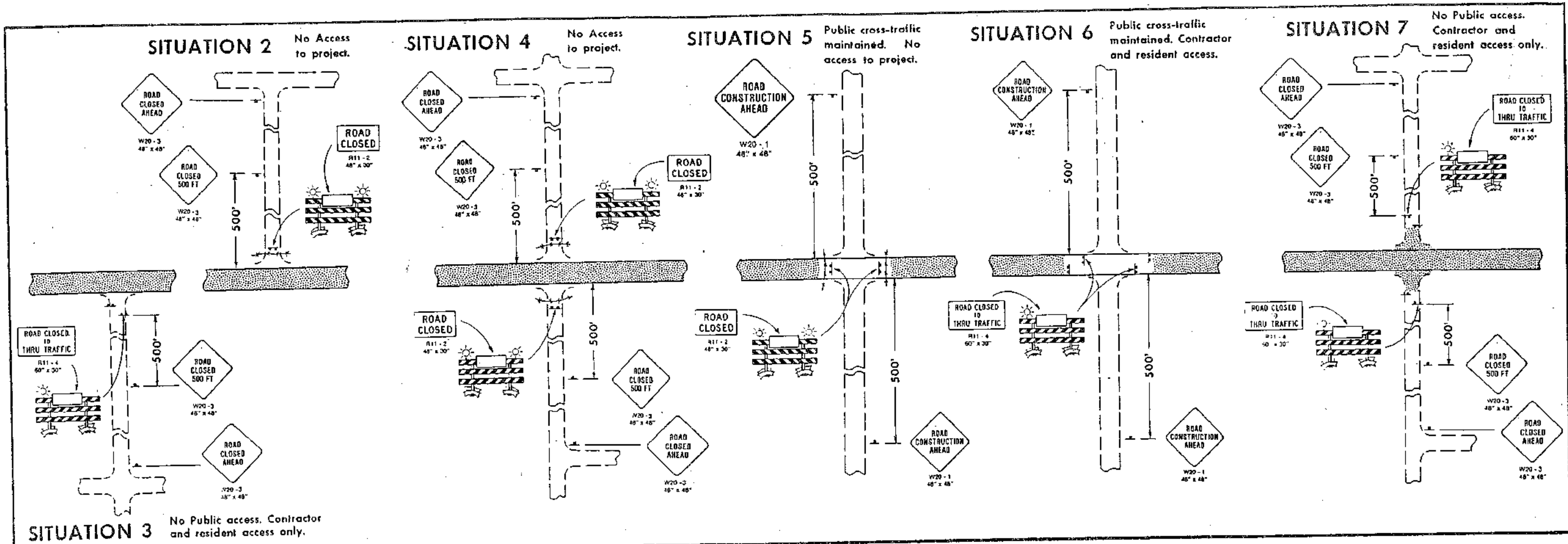
\* INCLUDES 35% FOR SHRINKAGE.

TABULATION OF BARRICADES		108-13A
(Refer to Section 2518 of the St'd. Spec's.)		6-25-76
NO.	STATION	
1	18+00	
1	23+00	

TABULATION OF STEEL BEAM GUARDRAIL FOR STANDARD ROAD PLANS RE-63, 64 or 65																
NO.	STATION	STANDARD ROAD PLAN	CASE	FORMED STEEL BEAM GUARDRAIL					BEAM GUARDRAIL POSTS				POST & ADAPTOR RE-37	ANCHOR SYSTEM	REMARKS	
				(A)		(R)		(T)		WITH SPACER BLOCKS		WITHOUT SPACER BLOCKS				
				"W" BEAM	THRIE BEAM	THRIE BEAM	THRIE BEAM	"W" BEAM	TOTAL "W" BEAM	TOTAL THRIE BEAM	10"x10" x6'-6"	8"x8" x6'-0"				8"x8" x6'-0"
				NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	
1	20+12.25	RE-63	U	37.5	3/25	—	—	—	37.5	3/25	3	2	—	RE-52	/	W. END, RT.
2	21+77.75	RE-63	U	37.5	3/25	—	—	—	37.5	3/25	3	2	—	RE-52	/	E. END, LT.

136'-10 x 24' PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE  
 INTEGRAL ABUTMENTS P/OA PIERS  
 43'-3 END SPANS 52'-4 INTERIOR SPAN  
 TABULATIONS  
 STATION 20+95.00 30° SKEW, LT. AHEAD  
 CRAWFORD COUNTY, IOWA





**GENERAL NOTES**

- SITUATION 1 illustrates traffic control necessary to close the project route. SITUATIONS 2 through 7 are for signing of sideroads based on existing agreements and field conditions and will be selected by the engineer in charge of construction.
- Type "A" Low Intensity Flashing Warning Lights shall be visible to both directions of traffic. The back side of the barricade shall be reflectorized by a minimum of six yellow reflectors, one at each end of each rail, or at least one rail on the barricade will show reflectorized stripes properly sloped down toward the traffic side.
- All "Stop" and other regulatory signs on the sideroads are not to be disturbed. If a "Stop" or other regulatory sign must be removed, it will be relocated by the Contracting Authority.
- This layout does not include all barricades as may be required by Section 2518 of the Standard Specifications.
- In Situation 1, when distance "A" is less than 500 feet the barricade should be placed in the middle of the traffic lane approaching the work area. In this case, Note 2 shall apply. The barricade may be omitted if the distance to the work area is less than 400 feet.
- In Situation 1, if the intersection is the point of detour these two signs and barricade will become the responsibility of the contracting authority and may be modified by the contracting authority to fit detour signing.

**LEGEND**

- ▶ Traffic Sign
- ⊥ Type III Barricade (Type "A" Low Intensity Flashing Warning Light Required for Nighttime Use)
- ☀ Type "A" Low Intensity Flashing Warning Light
- ▨ Work Area
- \*\*\* Slat Fence Barricade or Orange Plastic Safety Fence

DETAIL SHEET	520-26
Revision Date 1-23-85	
SIGNING FOR TEMPORARY ROAD CLOSURES IN RURAL AREAS (PROJECT ROUTE CLOSED TO TRAFFIC)	

