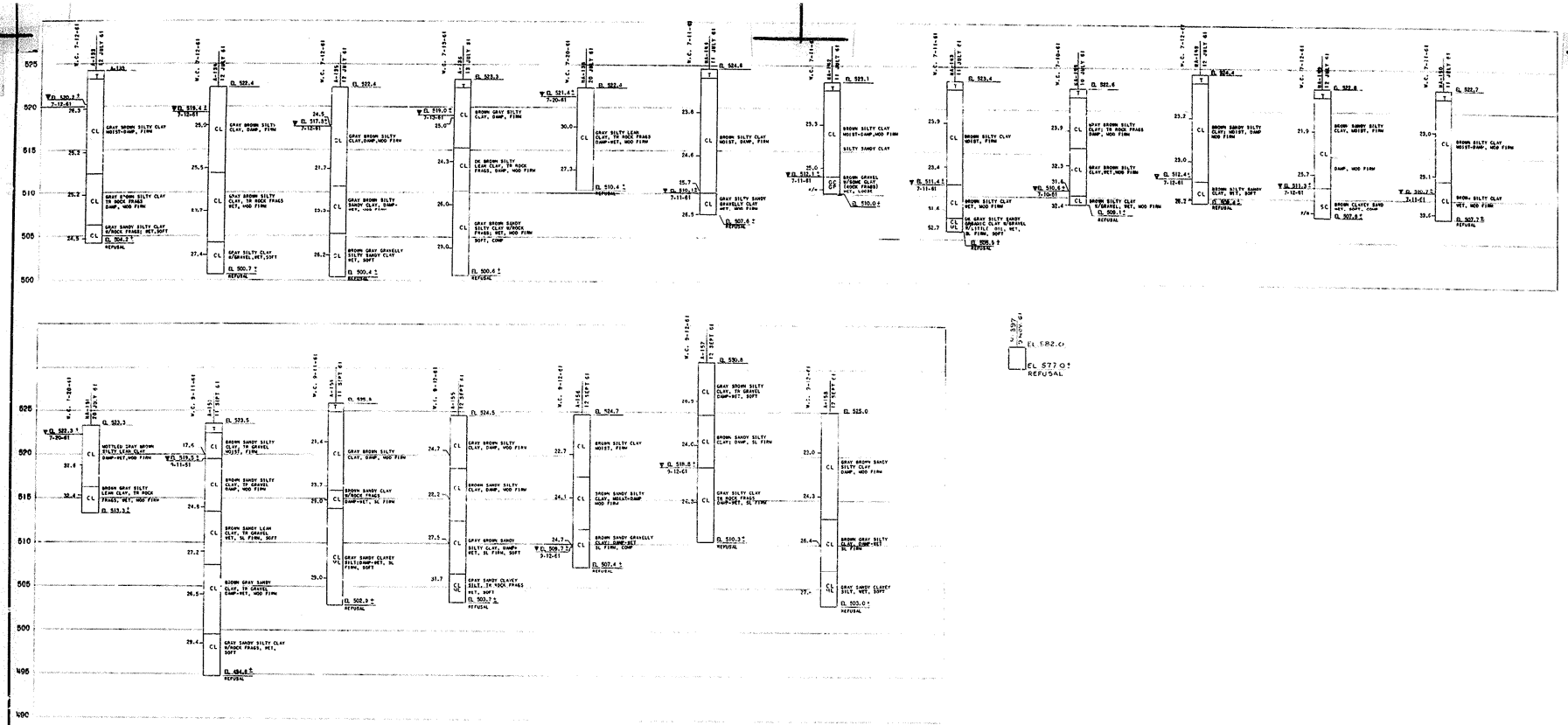


ALLEN CO. DRAWING No. 17561 SHEET 14

REVISION	DATE	DESCRIPTION	BY

U. S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

DESIGNED BY:
DRAWN BY: C. L. B.
TRACED BY: ——
CHECKED BY: M. R. P.
SUBMITTED: R. E. Karlen
ASST. CHIEF, ENGINEERING DIV.
APPROVED: R. E. Karlen
CHIEF, ENGINEERING DIVISION

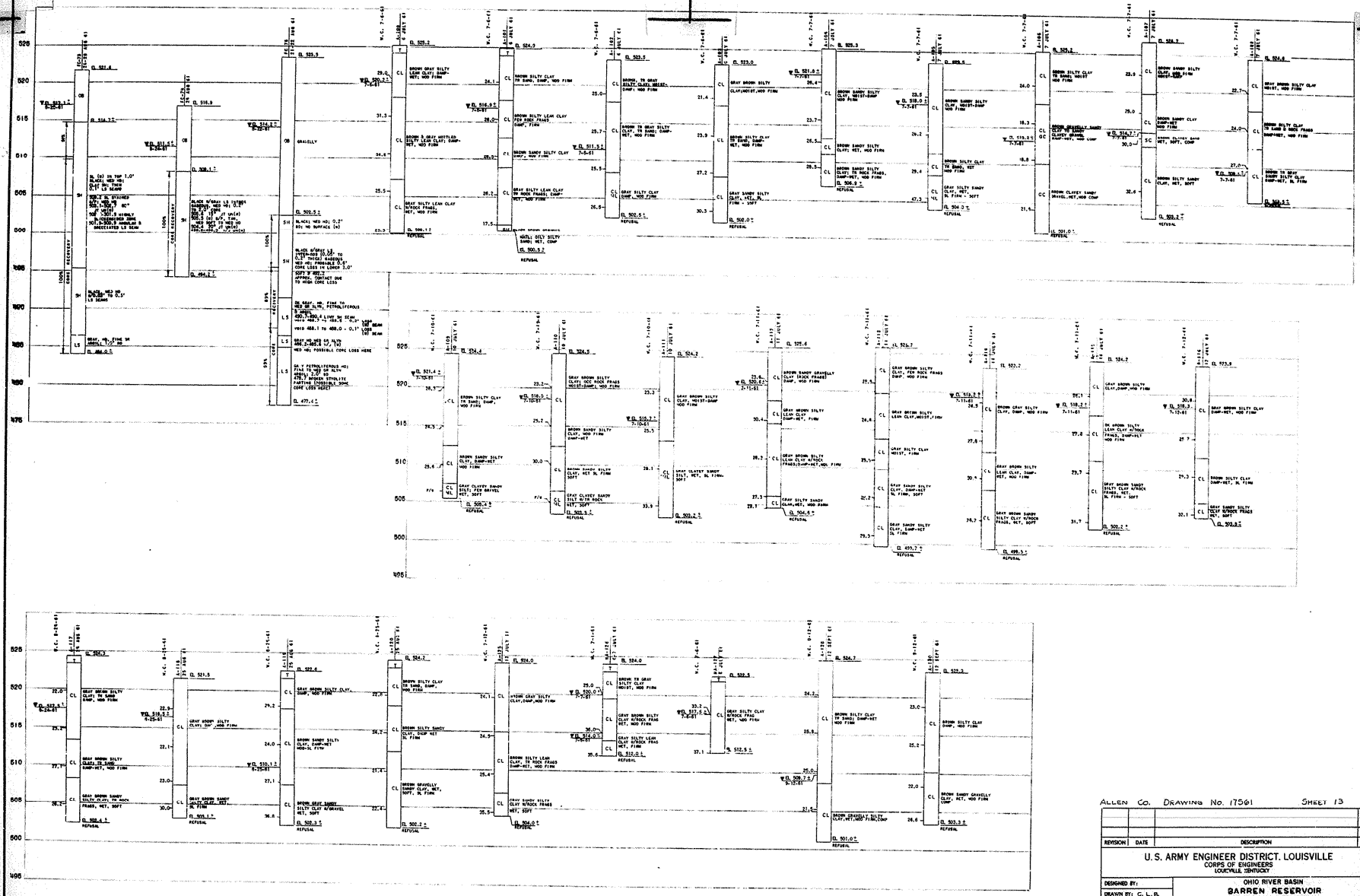
OHIO RIVER BASIN
BARREN RESERVOIR
BARREN RIVER, KENTUCKY
RELOCATION U.S. HIGHWAY 31E
SECTION 1
BORING LOGS
SHEET 5

APPROVED: James L. Fuentes
DATE: NOV. 1961

[redacted]

RECORD DRAWING-"AS BUILT"

Army-Cinti Drafting, Cinti, Ohio, 5-8-61-180



ALLEN CO. DRAWING No. 17561 SHEET 13

REVISION	DATE	DESCRIPTION	BY

U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

DESIGNED BY:
DRAWN BY: C. L. B.
TRACED BY: —
CHECKED BY: M. P. P.
SUBMITTED: [signature]
ASST. CHIEF, ENGINEERING DIV.

OHIO RIVER BASIN
BARREN RESERVOIR
BARREN RIVER, KENTUCKY
RELOCATION U.S. HIGHWAY 31E
SECTION I
BORING LOGS
SHEET 4

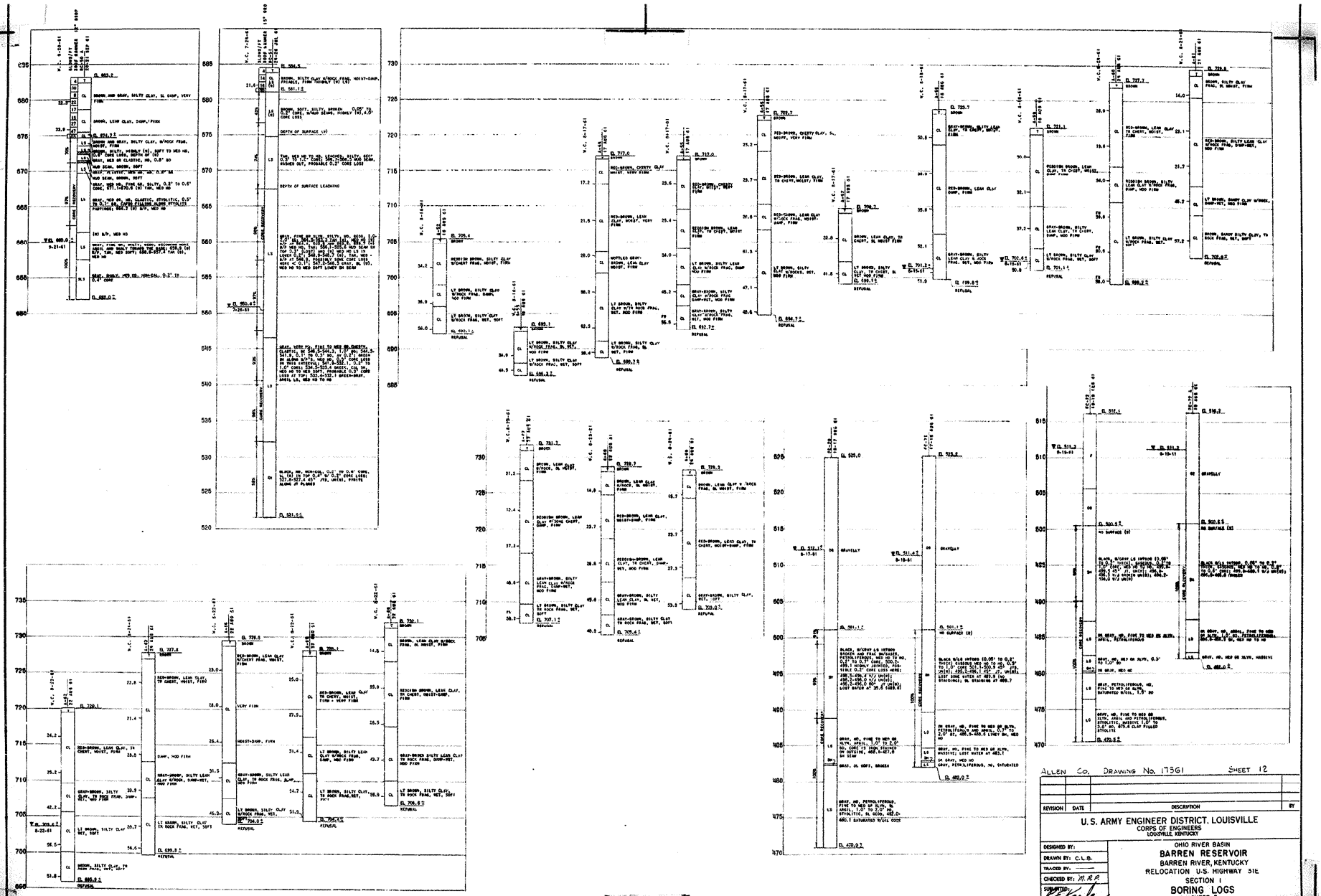
APPROVED: [signature] DATE:

[redacted]

BR 79-12-3/17

RECORD DRAWING-"AS BUILT"

Army - Cleat Drafting, Clark, Ohio, 5-6-61-250



ALLEN CO. DRAWING No. 17561 SHEET 12

REVISION	DATE	DESCRIPTION	BY

U. S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

OHIO RIVER BASIN
BARREN RESERVOIR
BARREN RIVER, KENTUCKY
RELOCATION U.S. HIGHWAY 31E
SECTION I
BORING LOGS
SHEET 3

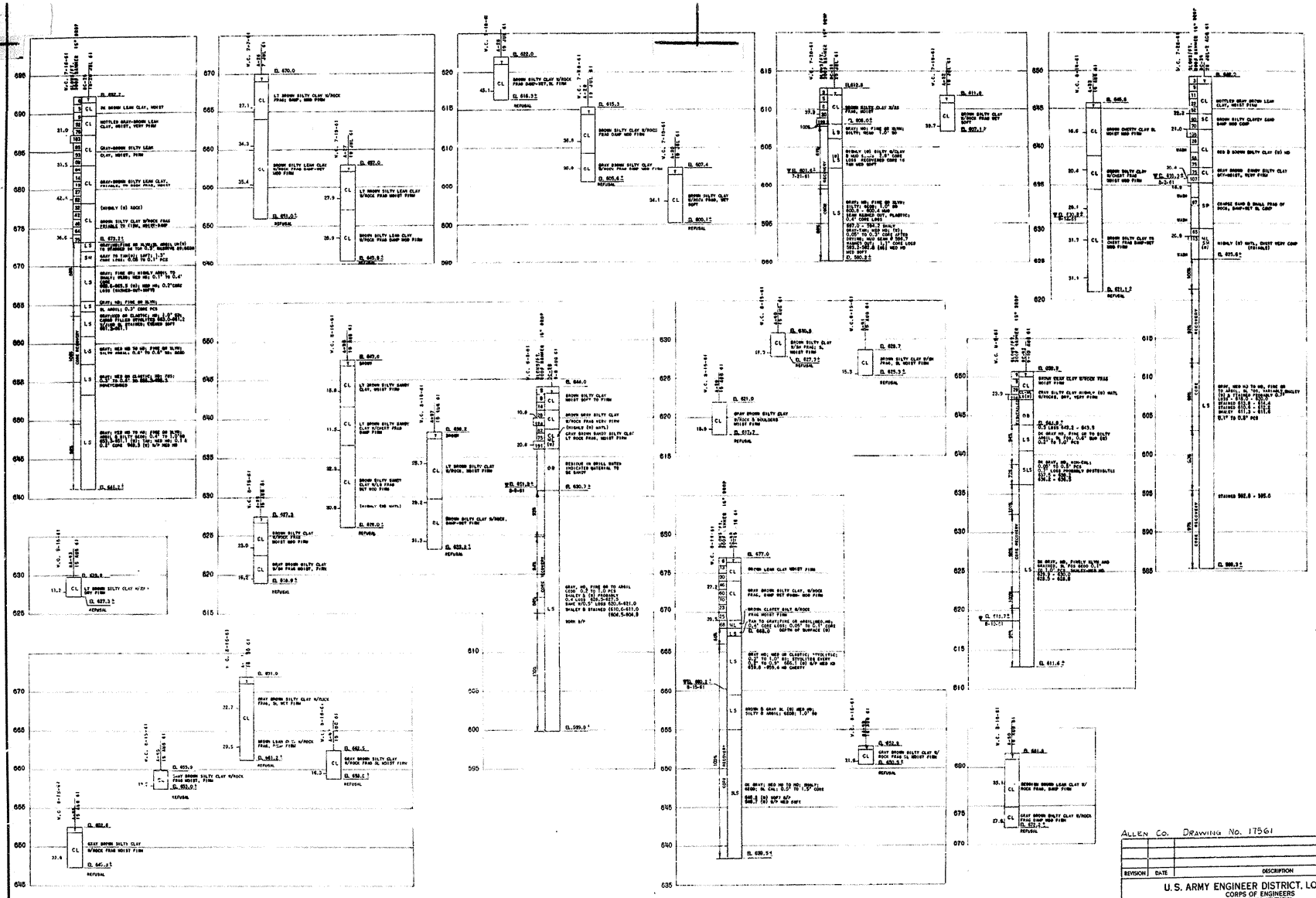
DESIGNED BY:
DRAWN BY: C.L.B.
TRACED BY:
CHECKED BY: M.R.R.
SUBMITTED: [signature]
ASST. CHIEF, ENGINEERING DIV.
APPROVED:
APPROVED:
DATE:
DATE:

[redacted]

BR 79-12-3/16

RECORD DRAWING "AS BUILT"

Army-Cloud Drafting, Cinci, Ohio, 5-6-61-380



ALLEN CO. DRAWING NO. 17561 SHEET 11

REVISION	DATE	DESCRIPTION	BY

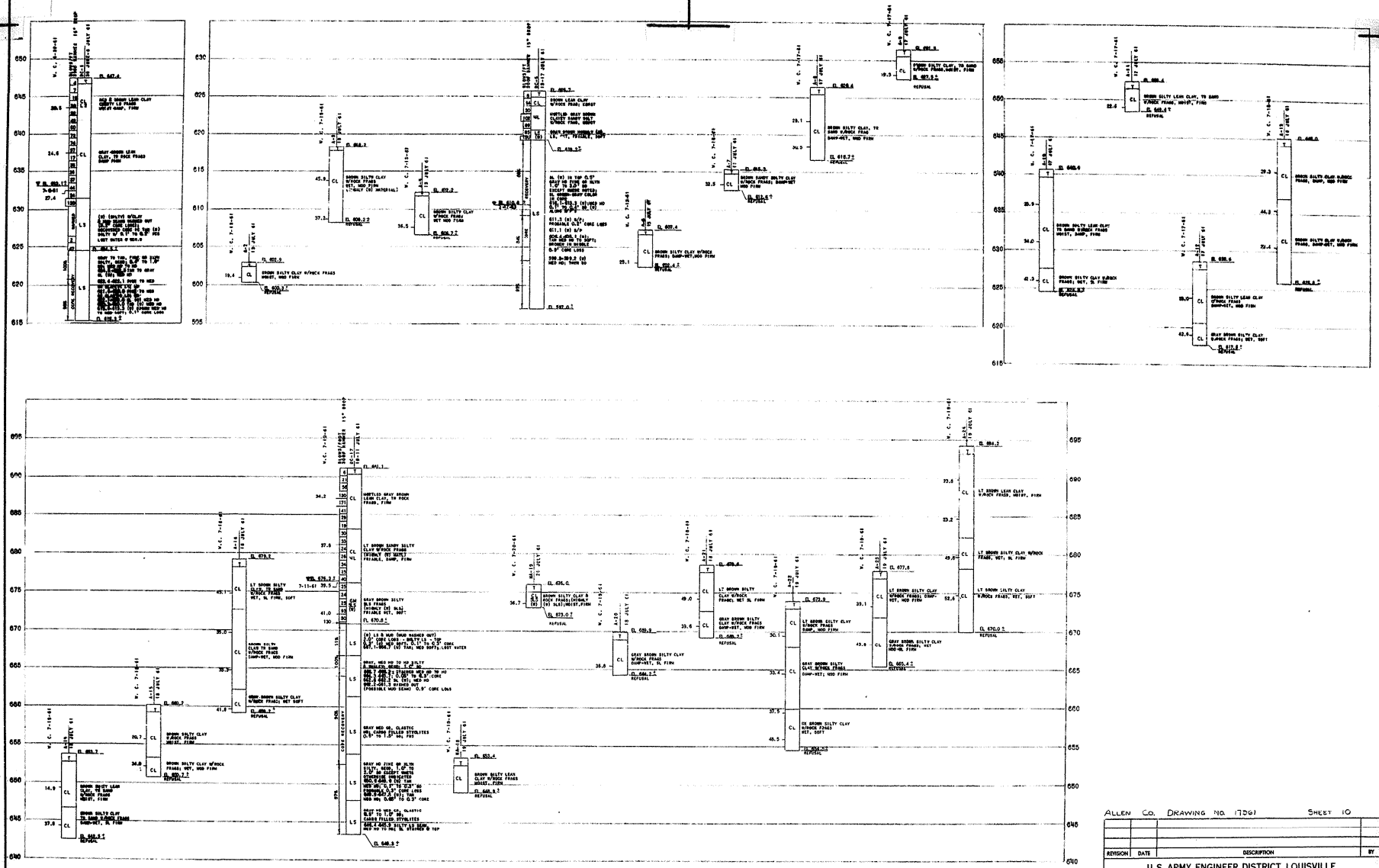
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

DESIGNED BY:
DRAWN BY: C. L. B.
TRACED BY:
CHECKED BY: M. R. P.
SUBMITTED: R. E. Karlan
ASST. CHIEF, ENGINEERING DIV.
APPROVED: R. E. Karlan
APPROVED: James L. Lewis
DATE: NOV. 1961

OHIO RIVER BASIN
BARREN RESERVOIR
BARREN RIVER, KENTUCKY
RELOCATION U.S. HIGHWAY 31E
SECTION 1
BORING LOGS
SHEET 2

RECORD DRAWING-"AS BUILT"

Army - Cinci Drafting, Cinci, Ohio, 5-8-61-280



ALLEN CO. DRAWING NO. 17561 SHEET 10

REVISION	DATE	DESCRIPTION	BY

U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

DESIGNED BY:
DRAWN BY: C. L. B.
TRACED BY: —
CHECKED BY: M.R.P.
SUBMITTED:
ASST. CHIEF, ENGINEERING DIV.
APPROVED:

OHIO RIVER BASIN
BARREN RESERVOIR
BARREN RIVER, KENTUCKY
RELOCATION U.S. HIGHWAY 31E
SECTION 1
BORING LOGS
SHEET 1

APPROVED: DATE:

[redacted]

DATE:

BR 79-12.3/14

RECORD DRAWING-"AS BUILT"

Army - Cinti Drafting, Cinti, Ohio, 5-8-61-280

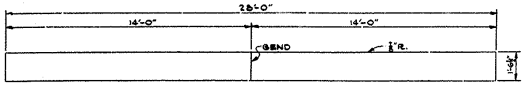


PLATE MK "A"

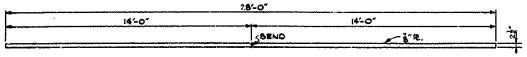


PLATE MK "B"

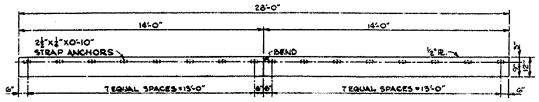


PLATE MK "C"

EXPANSION JOINT PLATES FOR PIER NO.1

MATERIAL: STRUCTURAL STEEL
MAKE: 1 OF EACH
SCALE: 3/8" = 1'-0"

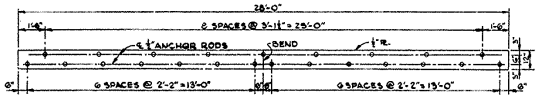


PLATE MK "D"

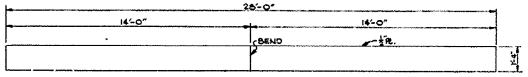
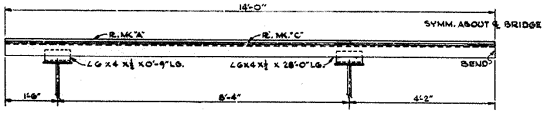


PLATE MK "E"

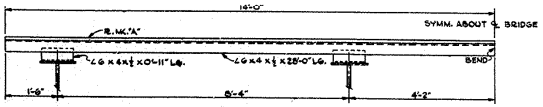
EXPANSION JOINT PLATES FOR ABUTMENT NO.2

MATERIAL: STRUCTURAL STEEL
MAKE: 1 OF EACH
SCALE: 3/8" = 1'-0"



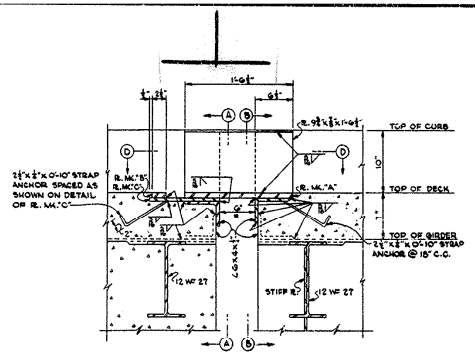
ELEVATION A-A

SCALE: 3/8" = 1'-0"



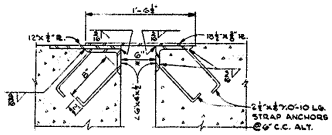
ELEVATION B-B

SCALE: 3/8" = 1'-0"



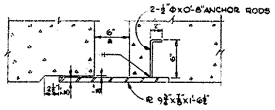
EXPANSION JOINT PIER NO.1

SCALE: 1½" = 1'-0"

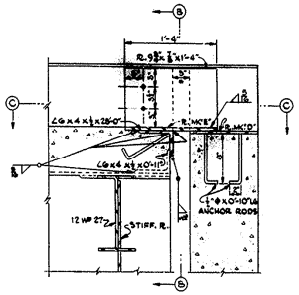


SECTION THRU SAFETY CURB

SCALE: 1½" = 1'-0"

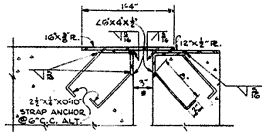


SECTION D-D



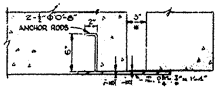
EXPANSION JOINT

SCALE: 1½" = 1'-0"



SECTION THRU SAFETY CURB

SCALE: 1½" = 1'-0"

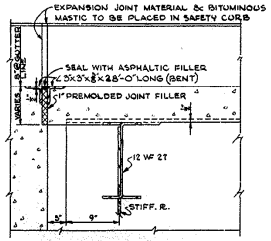


SECTION C-C

SCALE: 1½" = 1'-0"

ABUTMENT NO.2

NOTE:
* OPENING BETWEEN END OF DECK & BACKWALL AT 60°F. FOR EACH 10° FALL IN TEMPERATURE INCREASE OPENING BY ½" @ PIER NO.1 & @ ABUT. NO.2. DECREASE OPENING SIMILARLY FOR RISE IN TEMPERATURE.



DETAIL AT ABUTMENT NO.1

SCALE: 1½" = 1'-0"

ALLEN CO. DRAWING NO. 17561 SHEET 9

REVISION	DATE	DESCRIPTION	BY

U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

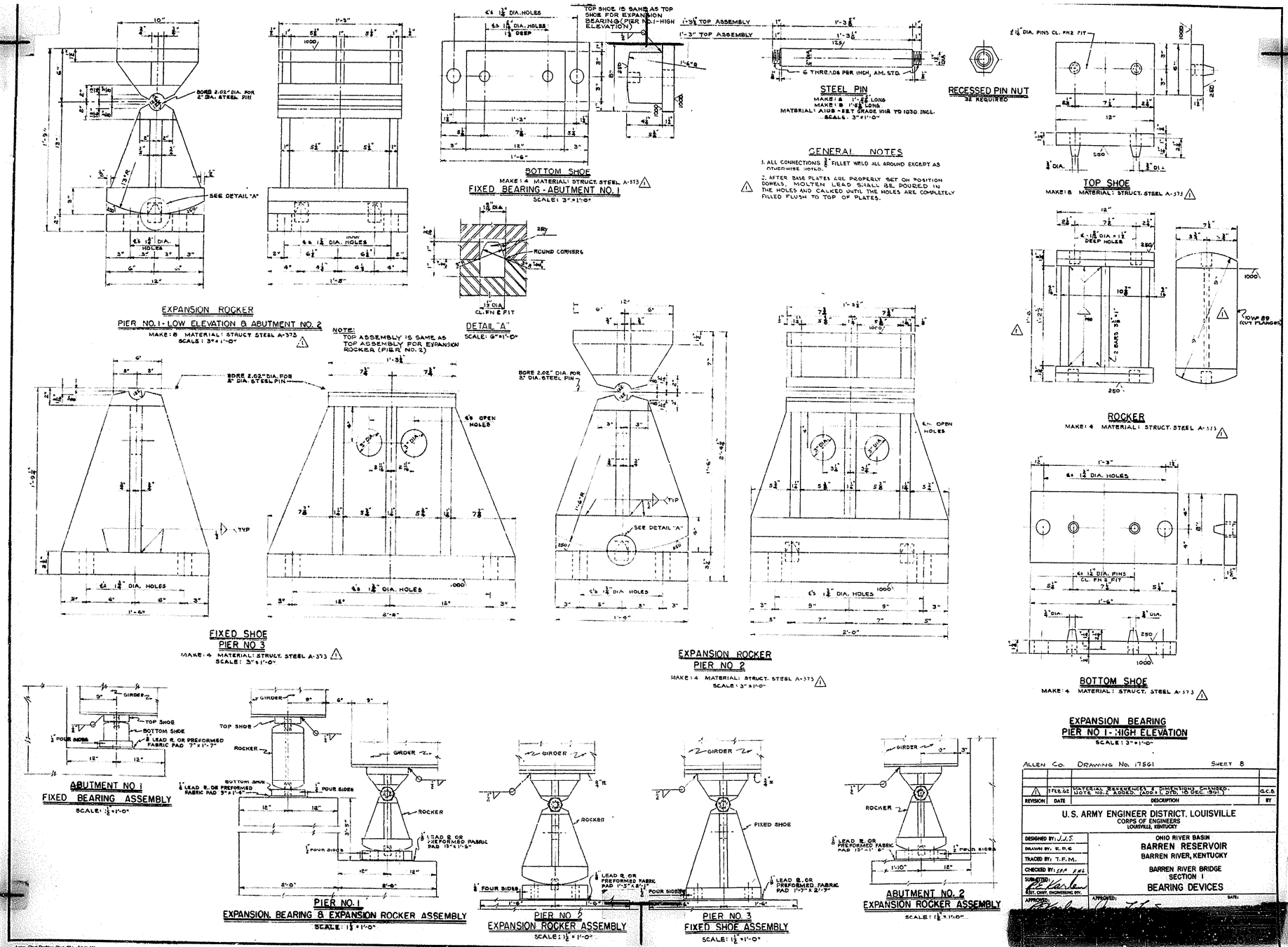
DESIGNED BY: J.J.S.
DRAWN BY: R.W.D
TRACED BY: R.W.S.
CHECKED BY: [illegible]
SUBMITTED: [illegible]
ASST. CHIEF, ENGINEERING DIV.
APPROVED: [illegible]
APPROVED: [illegible] DATE:

OHIO RIVER BASIN
BARREN RESERVOIR
BARREN RIVER, KENTUCKY

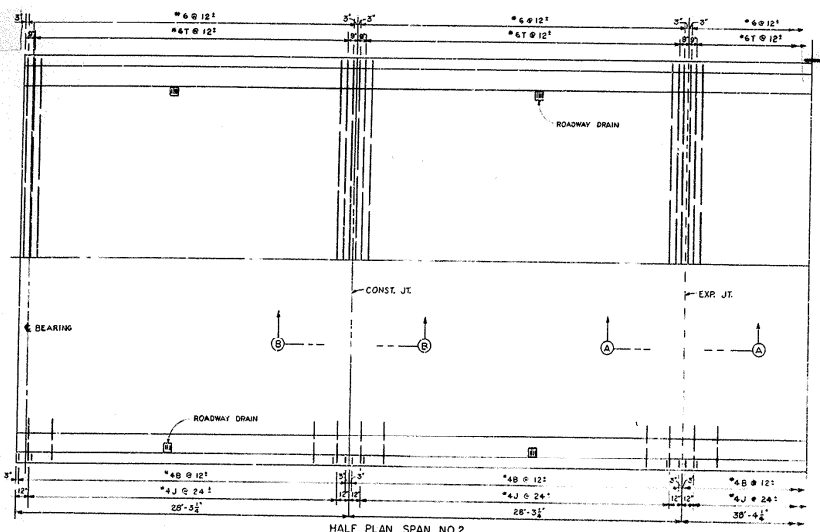
BARREN RIVER BRIDGE
SECTION I
EXPANSION DEVICES

[redacted]

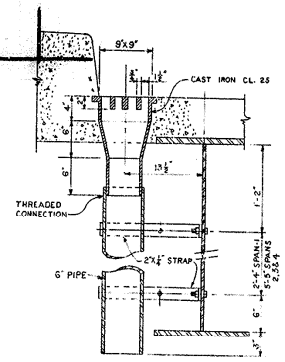
RECORD DRAWING-"AS BUILT"



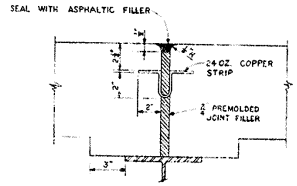
EXPANSION ROCKER
PIER NO. 1 - LOW ELEVATION & ABUTMENT NO. 2
MAKE: 8 MATERIAL: STRUCT. STEEL A-373
SCALE: 3" = 1'-0"
NOTE: TOP ASSEMBLY IS SAME AS TOP ASSEMBLY FOR EXPANSION ROCKER (PIER NO. 2)
BORE 2.02" DIA. FOR 2" DIA. STEEL PIN
SEE DETAIL "A"
BOTTOM SHOE
MAKE: 4 MATERIAL: STRUCT. STEEL A-373
FIXED BEARING - ABUTMENT NO. 1
SCALE: 3" = 1'-0"
TOP SHOE IS SAME AS TOP SHOE FOR EXPANSION BEARING (PIER NO. 1 - HIGH ELEVATION)
DETAIL "A"
SCALE: 6" = 1'-0"
ROUND CORNERS
STEEL PIN
MAKE: A 1'-5 5/8" LONG
MAKE: B 1'-5 5/8" LONG
MATERIAL: A108 - SET GRADE 1018 TO 1030 INCL.
SCALE: 3" = 1'-0"
6 THREADS PER INCH, AM. STD.
RECESSED PIN NUT
32 REQUIRED
GENERAL NOTES
1. ALL CONNECTIONS 3/8" FILLET WELD ALL AROUND EXCEPT AS OTHERWISE NOTED.
2. AFTER BASE PLATES ARE PROPERLY SET ON POSITION DOWELS, MOLTEN LEAD SHALL BE POURED IN THE HOLES AND CALKED UNTIL THE HOLES ARE COMPLETELY FILLED FLUSH TO TOP OF PLATES.
TOP SHOE
MAKE: 8 MATERIAL: STRUCT. STEEL A-373
ROCKER
MAKE: 4 MATERIAL: STRUCT. STEEL A-373
FIXED SHOE
PIER NO 3
MAKE: 4 MATERIAL: STRUCT. STEEL A-373
SCALE: 3" = 1'-0"
EXPANSION ROCKER
PIER NO 2
MAKE: 4 MATERIAL: STRUCT. STEEL A-373
SCALE: 3" = 1'-0"
BOTTOM SHOE
MAKE: 4 MATERIAL: STRUCT. STEEL A-373
EXPANSION BEARING
PIER NO 1 - HIGH ELEVATION
SCALE: 3" = 1'-0"
ABUTMENT NO 1
FIXED BEARING ASSEMBLY
SCALE: 1 1/2" = 1'-0"
PIER NO. 1
EXPANSION BEARING & EXPANSION ROCKER ASSEMBLY
SCALE: 1 1/2" = 1'-0"
PIER NO 2
EXPANSION ROCKER ASSEMBLY
SCALE: 1 1/2" = 1'-0"
PIER NO 3
FIXED SHOE ASSEMBLY
SCALE: 1 1/2" = 1'-0"
ABUTMENT NO. 2
EXPANSION ROCKER ASSEMBLY
SCALE: 1 1/2" = 1'-0"
ALLEN Co. DRAWING No. 17561 SHEET 8
REVISION DATE DESCRIPTION BY
1 7 FEB. 62 MATERIAL REFERENCES & DIMENSIONS CHANGED. NOTE NO. 2 ADDED. (ADD. 1, DTD. 18 DEC. 1961) G.C.B.
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY
DESIGNED BY: J.J.S.
DRAWN BY: R.P.C.
TRACED BY: T.F.M.
CHECKED BY: SFP KHL
SUBMITTED:
ASST. CHIEF, ENGINEERING DIV.
APPROVED:
OHIO RIVER BASIN
BARREN RESERVOIR
BARREN RIVER, KENTUCKY
BARREN RIVER BRIDGE
SECTION 1
BEARING DEVICES
APPROVED:
DATE:
RECORD DRAWING "AS BUILT"



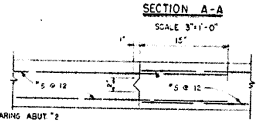
HALF PLAN SPAN NO.2
ALL OTHER SPANS TYPICAL
SCALE ¼"=1'-0"



ROADWAY DRAIN
SCALE 1½"=1'-0"



SECTION A-A
SCALE 3"=1'-0"

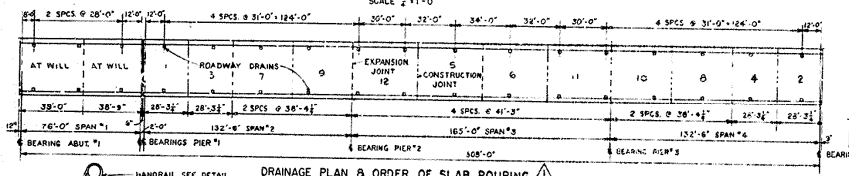


SECTION B-B
SCALE 1½"=1'-0"

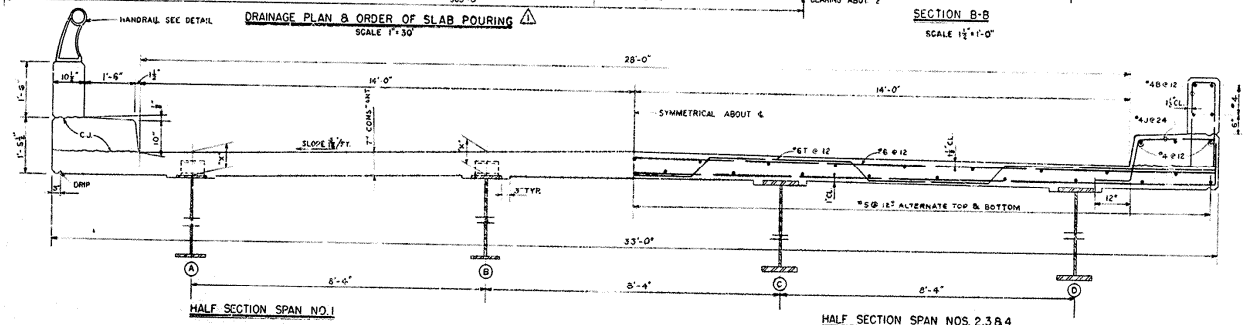
SCREED ELEVATION TABLE

	STATION	PROFILE GRADE	CONSTR. ELEV. "A" OR "D"	BEAM "A" TOP OF STEEL	BEAM "A" "X"	BEAM "D" TOP OF STEEL	BEAM "D" "X"	CONSTR. ELEV. "B" OR "C"	BEAM "B" TOP OF STEEL	BEAM "B" "X"	BEAM "C" TOP OF STEEL	BEAM "C" "X"
℄ BRG. PIER "A"	79+70	594.0	593.805					593.935				
	79+85.60		593.842					593.971				
	79+93.20		593.878					594.002				
	80+00.80		593.905					594.027				
	80+08.40		593.922					594.043				
	80+16.00		593.928					594.046				
	80+23.60		593.922					594.043				
	80+31.20		593.905					594.027				
	80+38.80		593.878					594.002				
	80+46.40		593.842					593.971				
℄ BRG. PIER "B"	80+54.00		593.805					593.935				
	80+56.00		593.805					593.935				
	80+69.25		593.842					593.972				
	80+82.50		593.872					594.002				
	80+95.75		593.881					594.011				
	81+09.00		593.899					594.029				
	81+22.25		593.894					594.024				
	81+35.50		593.879					594.009				
	81+48.75		593.856					593.987				
	81+62.00		593.832					593.962				
	81+75.25		593.813					593.943				
℄ BRG. PIER "C"	81+88.50		593.805					593.935				
	82+05.00		593.814					593.944				
	82+21.50		593.838					593.967				
	82+38.00		593.869					593.999				
	82+54.50		593.890					594.020				
	82+71.00		593.898					594.027				
	82+87.50		593.890					594.020				
	83+04.00		593.869					593.999				
	83+20.50		593.838					593.967				
	83+37.00		593.814					593.944				
℄ BRG. PIER "D"	83+53.50		593.805					593.935				
	83+66.75		593.813					593.943				
	83+80.00		593.832					593.962				
	83+93.25		593.856					593.987				
	84+06.50		593.879					594.009				
	84+19.75		593.894					594.024				
	84+33.00		593.909					594.029				
	84+46.25		593.891					594.011				
	84+55.50		593.872					594.002				
	84+72.75		593.842					593.972				
	84+96.00		593.805					593.935				

NOTE: SEE DECK SECTION FOR MEANING OF "X" AND BEAM LETTERS. TO OBTAIN "X" TAKE ELEVATIONS ON TOP OF STEEL ON POINTS INDICATED AFTER ALL STEEL IS CRECTED, BUT BEFORE DECK FORMS ARE PLACED. ENTER THESE ELEVATIONS IN TABLE AND SUBTRACT FROM CONSTRUCTION ELEVATIONS. SET TEMPLATES BY MEASURING "X" ABOVE TOP OF STEEL. DO NOT SET TEMPLATES BY ELEVATIONS.



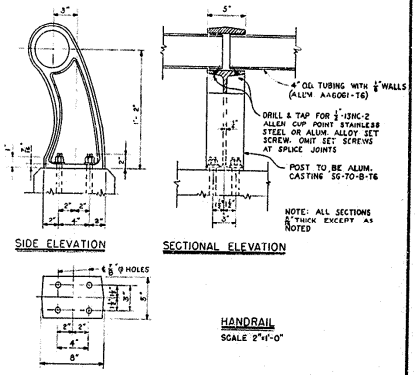
DRAINAGE PLAN & ORDER OF SLAB POURING ⚠
SCALE 1"=30'



HALF SECTION SPAN NO.1

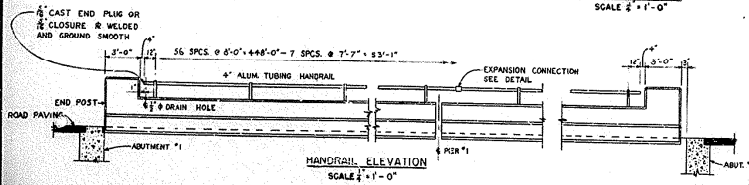
DECK SECTION
SCALE ¼"=1'-0"

HALF SECTION SPAN NOS. 2,3 & 4

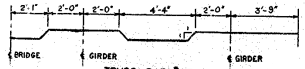


HANDRAIL
SCALE 2"=1'-0"

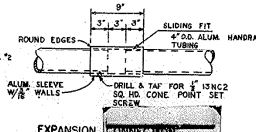
NOTE:
FOR REINFORCING STEEL COVERAGE NOTES & BAR BENDING SCHEDULE SEE SH. 29. ⚠



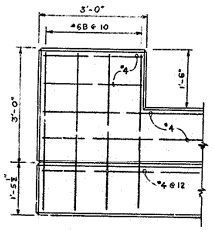
HANDRAIL ELEVATION
SCALE ¼"=1'-0"



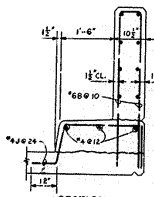
TRUSS BAR #6T
SCALE NONE



EXPANSION CONNECTION
SCALE 1½"=1'-0"



ELEVATION



SECTION

END POST
SCALE ¼"=1'-0"

ALLEN Co. DRAWING No. 17561 SHEET 7

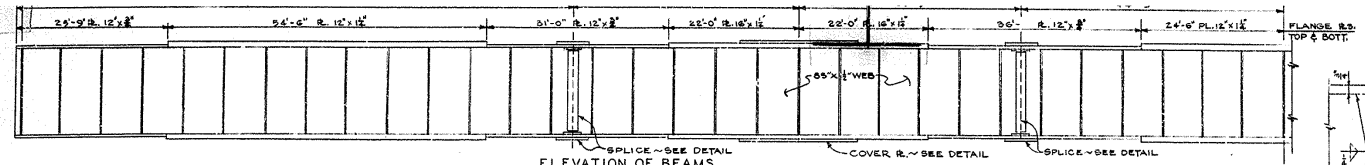
REVISION	DATE	DESCRIPTION	BY
⚠	7 FEB. 62	SHEET REFERENCE ADDED, POURING SEQUENCE CHANGED. (ADDY 1 & 3, DTD. 15 & 21 DEC. 61)	G.C.S.

U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

DESIGNED BY: J.J.S.
DRAWN BY: W.E.R.
TRACED BY: H.J.C.
CHECKED BY: [illegible]
SUBMITTED: [illegible]
ASST. CHIEF, ENGINEERING DIV.
APPROVED: [illegible]
APPROVED: [illegible] DATE:

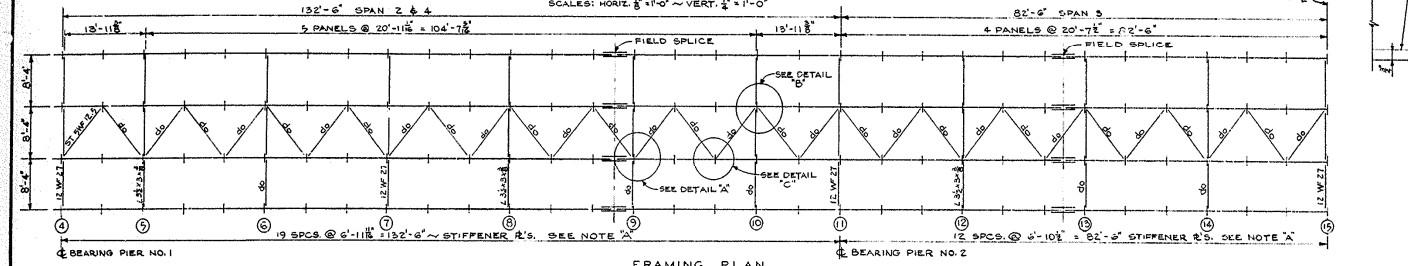
OHIO RIVER BASIN
BARREN RESERVOIR
BARREN RIVER, KENTUCKY
BARREN RIVER BRIDGE
SECTION 1
DECK PLAN

RECORD DRAWING-"AS BUILT"



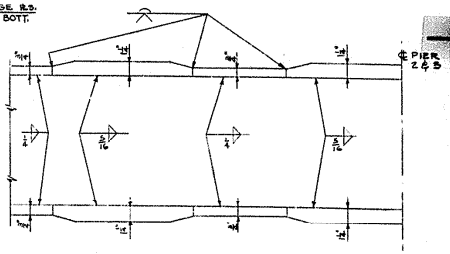
ELEVATION OF BEAMS

SCALES: HORIZ. 1/8" = 1'-0" ~ VERT. 1/4" = 1'-0"



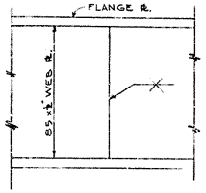
FRAMING PLAN

SCALE: 1/8" = 1'-0"



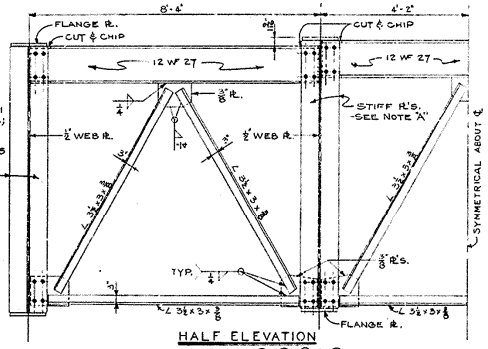
GIRDER WEB TO FLANGE WELD DETAIL

SCALE: NONE



SHOP WEB SPLICE

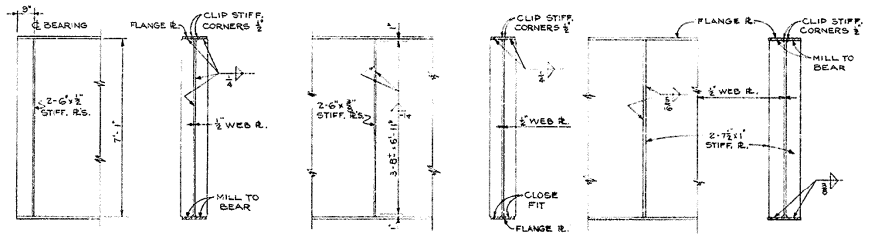
SCALE: NONE



HALF ELEVATION

AT PANEL POINTS ④, ⑦, ⑪ & ⑮

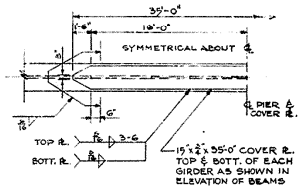
SCALE: 1/2" = 1'-0"



AT PIER NO. 1 & ABUT. NO. 2 — INTERMEDIATE — AT PIER NO'S. 2 & 3

STIFFENER DETAILS

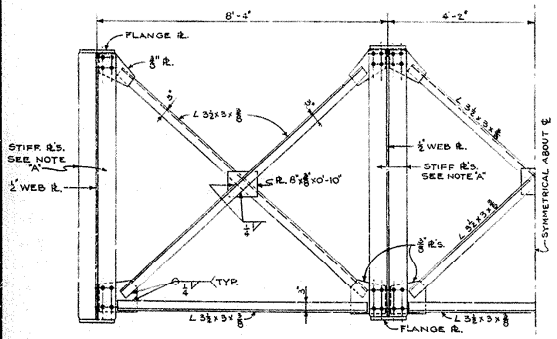
SCALE: 1/2" = 1'-0"



COVER PLATE DETAIL

MATERIAL: ASTM - A36

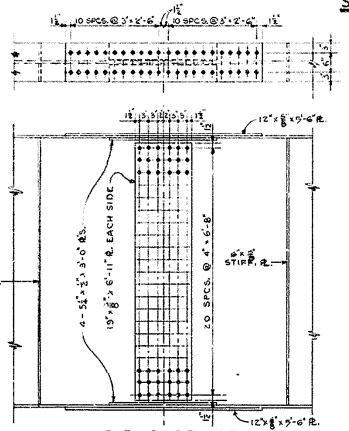
SCALE: NONE



HALF ELEVATION

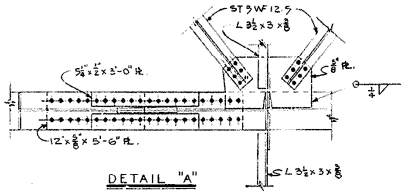
AT PANEL POINTS ⑤, ⑥, ⑧, ⑨, ⑩, ⑫, ⑬ & ⑭

SCALE: 1/2" = 1'-0"

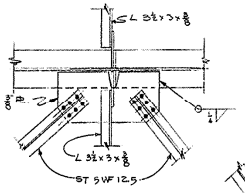


FIELD SPLICE

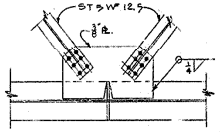
SCALE: 1/2" = 1'-0"



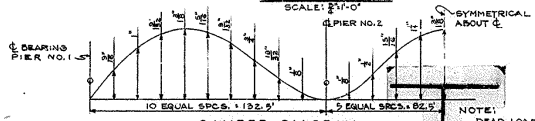
DETAIL "A"



DETAIL "B"



DETAIL "C"



CAMBER DIAGRAM

TOTAL DEAD LOAD

NOTE: DEAD LOAD INCLUDES THE WEIGHT OF CONCRETE DECK, HANDRAIL, FUTURE SURFACING & STRUCTURAL STEEL.

NOTES:

1.— PANEL POINTS ON R.H. SIDE OF BRIDGE NUMBERED SAME AS L.H. SIDE BEGINNING WITH ④ ABUT. NO. 2 EXCEPT THAT ALL NUMBERS WILL BE PRIME, THUS ④'.
2.— ALL OPEN HOLE 13/16" ϕ FOR 3/4" HIGH STRENGTH BOLTS OR RIVETS.
3.— MATERIAL: WEB, FLANGE & BRACING STIFFENERS, ASTM-A36; ALL OTHERS, ASTM-A7.
4.— AT THE CONTRACTORS OPTION, THE BRACING IN THE PLANE OF THE BOTTOM FLANGES MAY BE LOWERED TO CONNECT TO THE OUTSIDE OF THE FLANGE PLATES, SUBJECT TO APPROVAL OF SHOP DRAWING DETAILS.
5.— FOR GENERAL NOTES, SEE SH. 29. △1

ALLEN Co. DRAWING No. 17561 SHEET 6

REVISION	DATE	DESCRIPTION	BY
△1	7 FEB. 62	SHEET REFERENCE ADDED, (ADD. # 1. DTD 18 DEC. 1961)	G.C.B.

U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

DESIGNED BY: J.J.S.
DRAWN BY: W.E.R.
TRACED BY: V.H.P.
CHECKED BY: J.J.S. & W.E.
SUBMITTED: [illegible] ASST. CHIEF, ENGINEERING DIV.
APPROVED: [illegible]

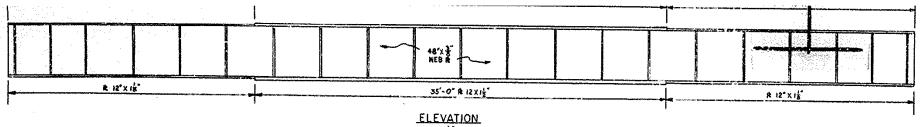
OHIO RIVER BASIN
BARREN RESERVOIR
BARREN RIVER, KENTUCKY
BARREN RIVER BRIDGE
SECTION 1

SPAN 2,3&4
FRAMING PLAN

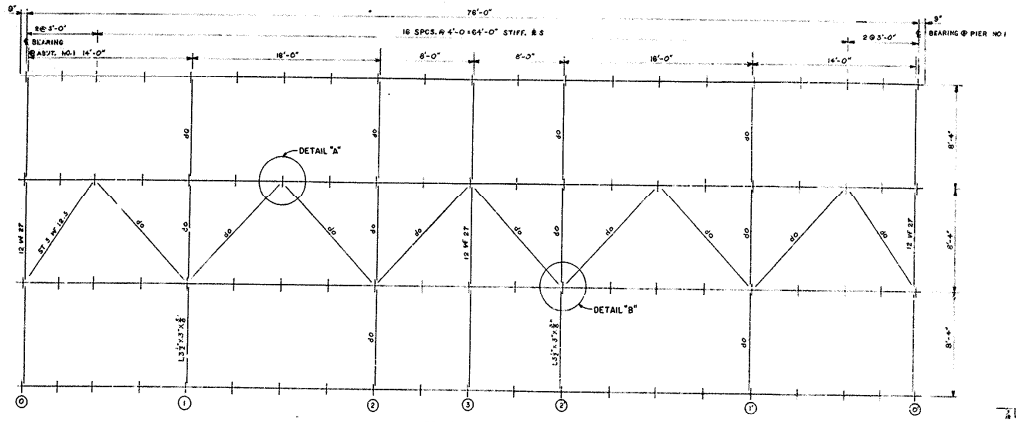
APPROVED: [illegible] DATE: NOV. 19[illegible]

RECORD DRAWING "AS BUILT"

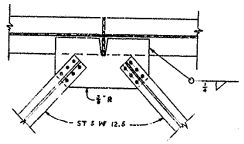
Army - Cust Drafting, Cinti, Ohio, 5-61-120



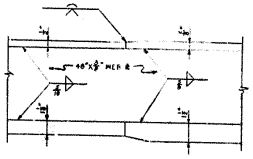
ELEVATION
SCALE 1/8" = 1'-0"



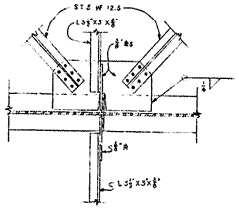
FRAMING PLAN
SCALE 1/8" = 1'-0"



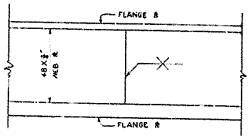
DETAIL "A"



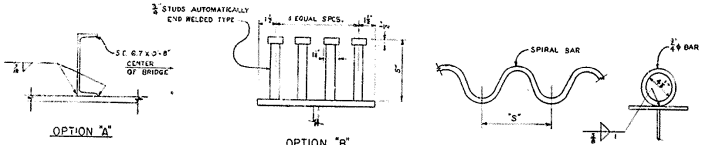
GIRDER WEB TO FLANGE
WELD DETAIL
SCALE: NONE



DETAIL "B"



SHOP WELD SPLICE
SCALE: NONE

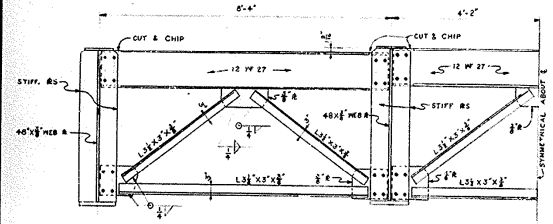


OPTION "A" OPTION "B" OPTION "C"

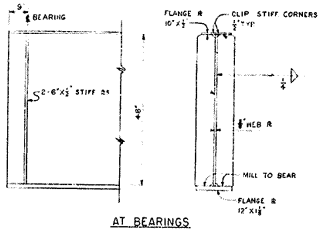
SHEAR DEVELOPERS

SHEAR DEVELOPER SPACING		
STUD SPACING	CHANNEL SPACING	MAX. PITCH SPIRAL BAR
6 SPCS. @ 8'-4'-0"	8 SPCS. @ 8'-4'-8"	20 SPCS. @ 3/4"x7'-6"
6 SPCS. @ 11'-5'-8"	6 SPCS. @ 10'-5'-0"	16 SPCS. @ 3/4"x7'-4"
9 SPCS. @ 12'-9'-0"	9 SPCS. @ 12'-9'-0"	16 SPCS. @ 3/4"x11'-8"
6 SPCS. @ 15'-7'-6"	6 SPCS. @ 15'-7'-6"	12 SPCS. @ 3/4"x8'-6"
4 SPCS. @ 18'-6'-0"	4 SPCS. @ 18'-6'-0"	6 SPCS. @ 12'-6'-0"
3 SPCS. @ 24'-6'-0"	3 SPCS. @ 24'-6'-0"	

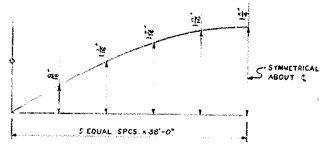
NOTE:
SPACING GIVEN FOR HALF SPAN. SPAN SYMMETRICAL ABOUT CENTER LINE.



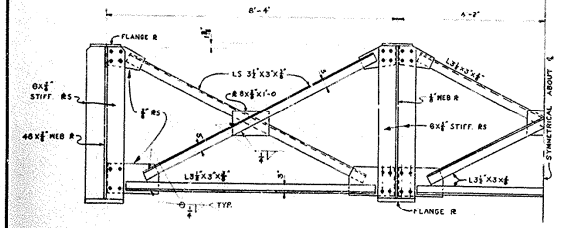
HALF ELEVATION
AT PANEL POINTS ⓪, ③ & ⑦



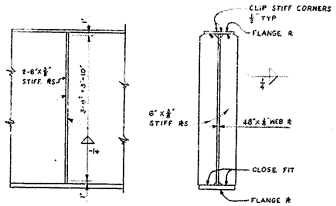
AT BEARINGS



CAMBER DIAGRAM
TOTAL DEAD LOAD



HALF ELEVATION
AT PANEL POINTS ①, ②, ② & ⑦



INTERMEDIATE
STIFFNER DETAILS

NOTES:
1. PANEL POINTS ON R.H. SIDE OF TAIL SPAN NUMBERED SAME AS L.H. SIDE BEGINNING WITH ZERO PIER NO. 1 EXCEPT THAT ALL NUMBERS WILL BE PRIME THUS ⓪
2. ALL OPEN HOLES 13/16 Ø FOR 3/4" HIGH STRENGTH BOLTS OR RIVETS
3. MATERIAL WEB, FLANGE & BEARING STIFF. ASTM-A36 ALL OTHERS ASTM-A 7
4. AT THE CONTRACTOR'S OPTION, THE BRACING IN THE PLANE OF THE BOTTOM FLANGES MAY BE LOWERED TO CONNECT TO THE OUTSIDE OF THE FLANGE PLATES, SUBJECT TO APPROVAL OF SHOP DRAWING DETAILS.
5. FOR GENERAL NOTES SEE SH. 29.

ALLEN CO. DRAWING NO. 17561 SHEET 5

REVISION	DATE	DESCRIPTION	BY
1	7 FEB. 62	SHEET REFERENCE ADDED, (ADD. # 1, DTD. 18 DEC. 1961)	G.C.B.

U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

DESIGNED BY: J.J.S.
DRAWN BY: W.E.R.
TRACED BY: H.J.C.
CHECKED BY: J.S.P. F.M.E.
SUBMITTED: [illegible]
ASST. CHIEF, ENGINEERING DIV.
APPROVED: [illegible]
APPROVED: [illegible] DATE:

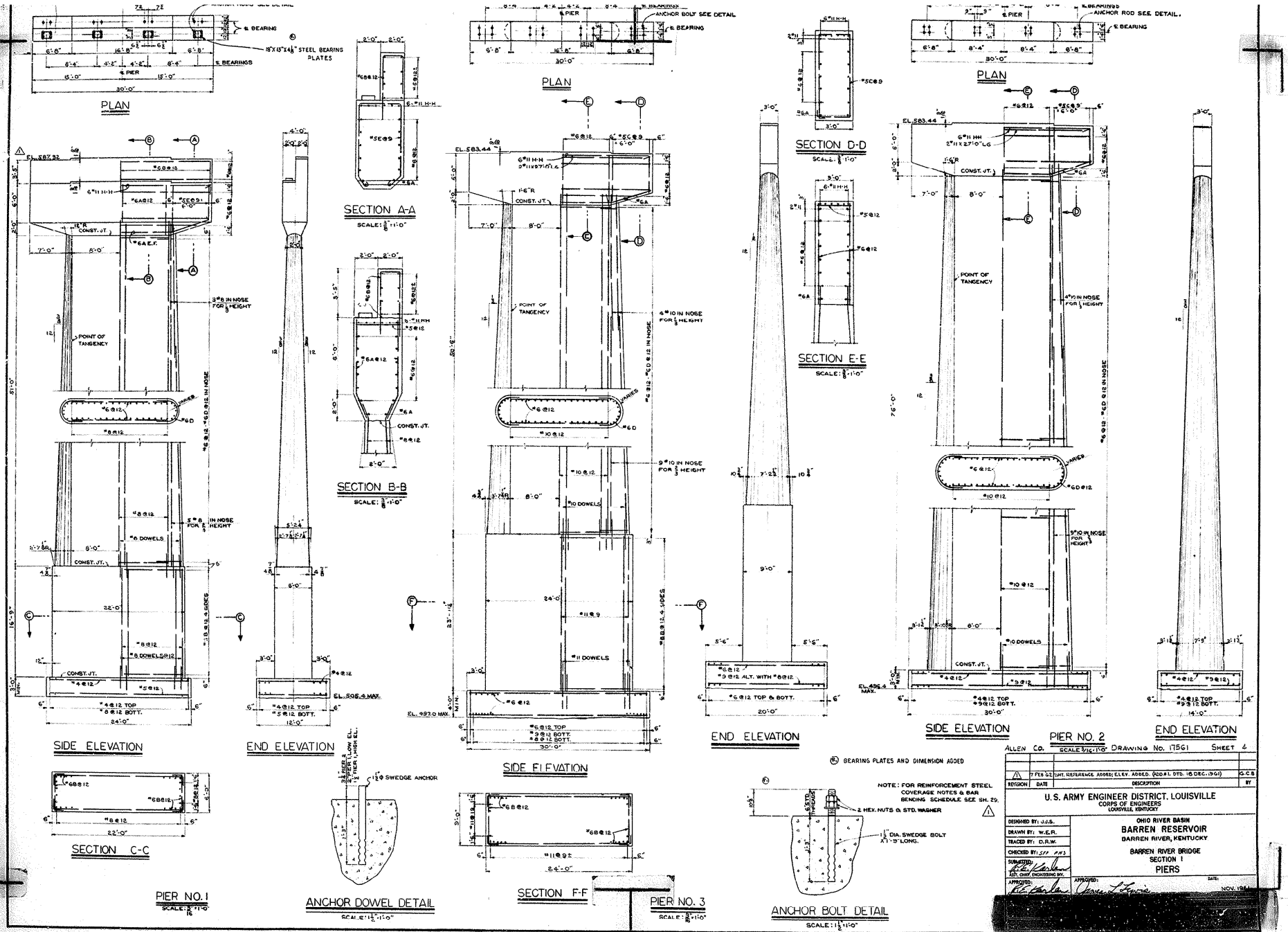
OHIO RIVER BASIN
BARREN RESERVOIR
BARREN RIVER, KENTUCKY
BARREN RIVER BRIDGE
SECTION 1

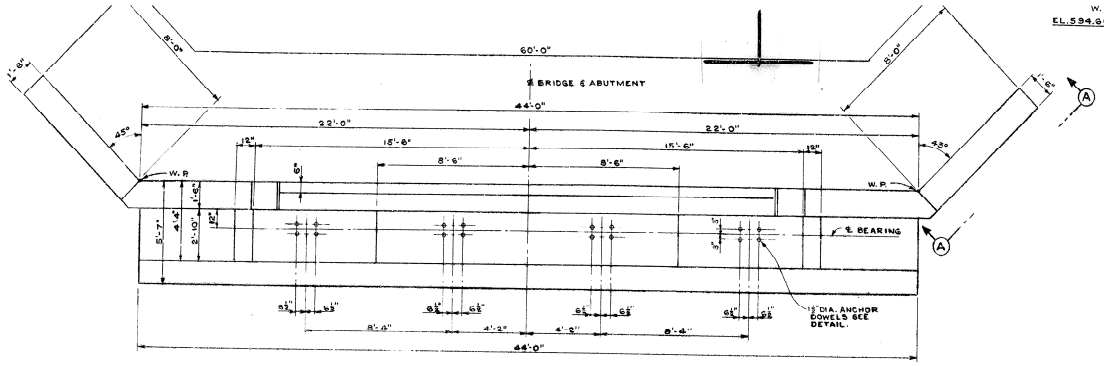
SPAN 1
FRAMING PLAN

[redacted]

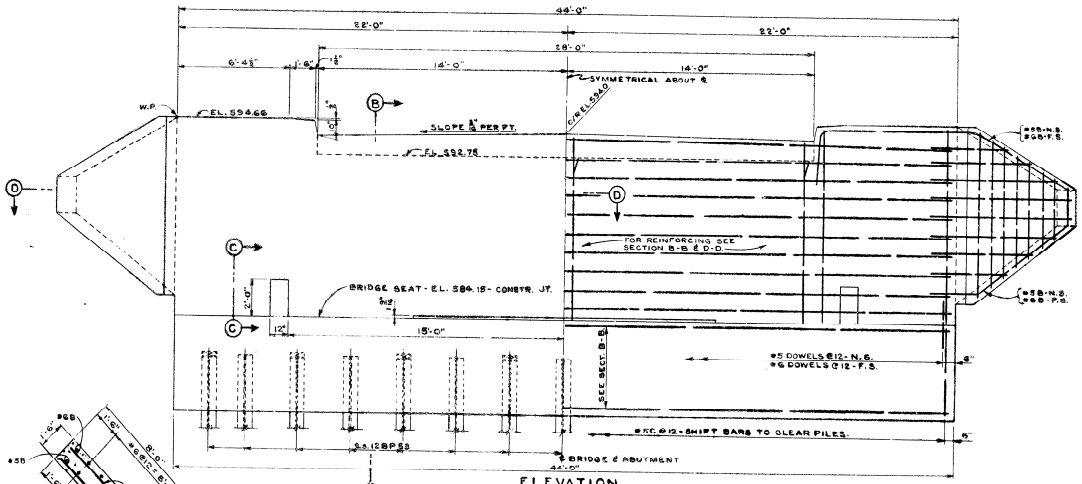
RECORD DRAWING-"AS BUILT"

Army-Chief Drafting, Chief, Ohio, 5-61-300

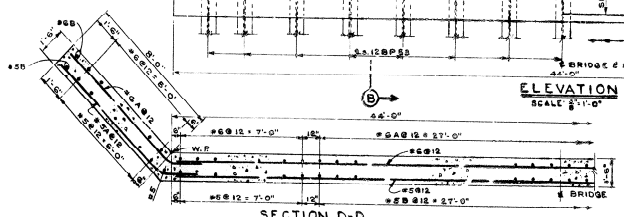

PLAN
SECTION A-A
SCALE: 3/8"=1'-0"
SECTION B-B
SCALE: 3/8"=1'-0"
SIDE ELEVATION
END ELEVATION
SECTION C-C
PIER NO. 1
SCALE: 3/16"=1'-0"
ANCHOR DOWEL DETAIL
SCALE: 1 1/2"=1'-0"
SECTION F-F
PIER NO. 3
SCALE: 3/16"=1'-0"
SECTION D-D
SCALE: 3/8"=1'-0"
SECTION E-E
SCALE: 3/8"=1'-0"
ANCHOR BOLT DETAIL
SCALE: 1 1/2"=1'-0"
PIER NO. 2
SCALE 3/16"=1'-0"
BEARING PLATES AND DIMENSION ADDED
NOTE: FOR REINFORCEMENT STEEL COVERAGE NOTES & BAR BENDING SCHEDULE SEE SH. 29.
ALLEN CO.
DRAWING No. 17561
SHEET 4
REVISION
DATE
DESCRIPTION
BY
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY
DESIGNED BY: J.J.S.
DRAWN BY: W.E.R.
TRACED BY: D.R.W.
CHECKED BY: SPP PHS
SUBMITTED:
ASST. CHIEF, ENGINEERING DIV.
APPROVED:
OHIO RIVER BASIN
BARREN RESERVOIR
BARREN RIVER, KENTUCKY
BARREN RIVER BRIDGE
SECTION 1
PIERS
DATE:
NOV. 1961
RECORD DRAWING-"AS BUILT"



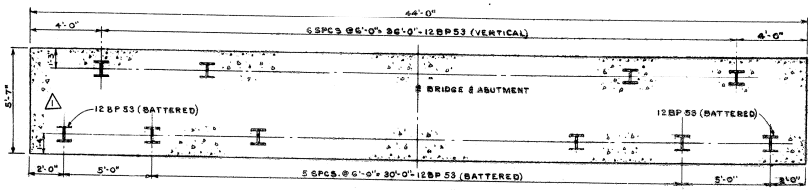
PLAN OF CAP
SCALE: ⅜" = 1'-0"



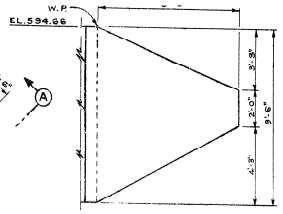
ELEVATION
SCALE: ⅜" = 1'-0"



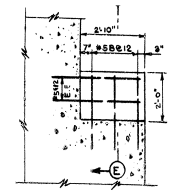
SECTION D-D
SCALE: ⅜" = 1'-0"



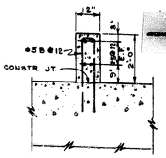
PLAN OF PILES
SCALE: ⅜" = 1'-0"



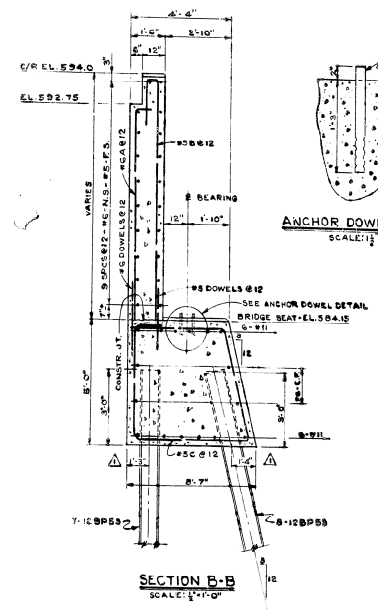
ELEVATION A-A
SCALE: ⅜" = 1'-0"



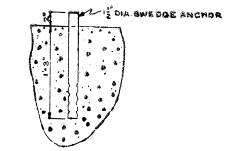
SECTION C-C
SCALE: ½" = 1'-0"



SECTION E-E
SCALE: ½" = 1'-0"



SECTION B-B
SCALE: ½" = 1'-0"



ANCHOR DOWEL DETAIL
SCALE: 1½" = 1'-0"

NOTES:
1. FOR REINFORCING STEEL COVERAGE NOTES AND BAR BENDING SCHEDULE SEE SH. 29.
2. FOR GENERAL NOTES SEE SH. 29.

ALLEN CO. DRAWING No. 17561 SHEET 3

REVISION	DATE	DESCRIPTION	BY
1	7 FEB. '62	SHT. REFERENCES ADDED, DIMENSIONS CHANGED. (ADD #1, DTD. 18 DEC. '61)	G.C.B.

U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

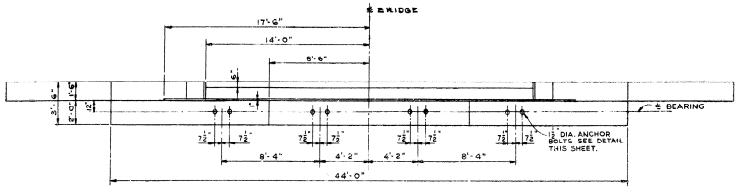
DESIGNED BY: J.J.S.
DRAWN BY: E.R.S.
TRACED BY: E.R.S.
CHECKED BY: SFF FHS
SUBMITTED: R.E. Karlen
ASST. CHIEF, ENGINEERING DIV.
APPROVED: R.E. Karlen
CHIEF, ENGINEERING DIVISION
APPROVED:

OHIO RIVER BASIN
BARREN RESERVOIR
BARREN RIVER, KENTUCKY
BARREN RIVER BRIDGE
SECTION 1
ABUTMENT NO. 2

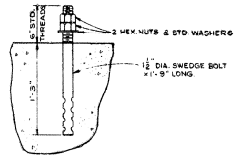
APPROVED: James L. Lewis
COL. CORPS OF ENGINEERS, DISTRICT ENGINEER
DATE: NOV. 1961
SCALE: AS SHOWN

[redacted]

Army - Cinti Drafting, Cinti, Ohio, 5-641-190

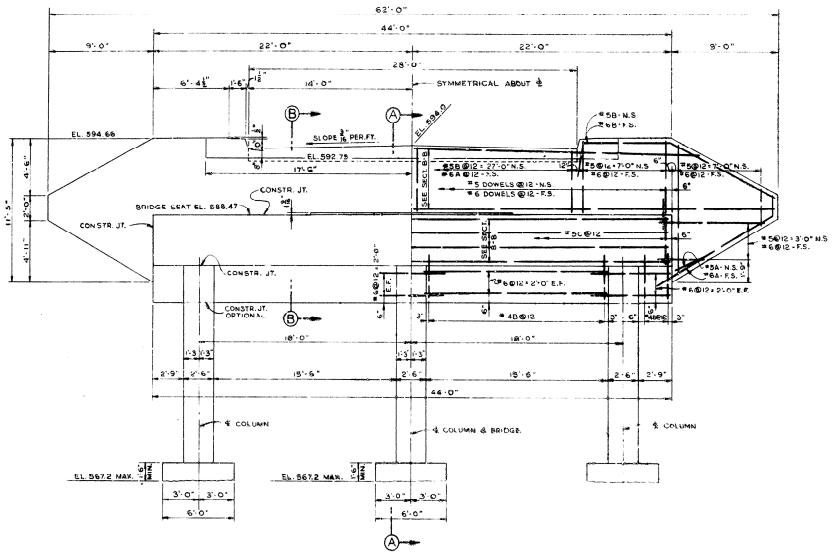


PLAN OF CAP
SCALE: 1/4" = 1'-0"

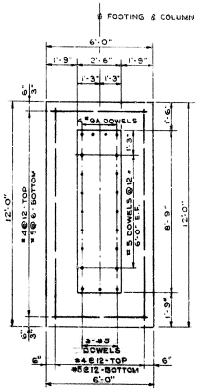


ANCHOR BOLT DETAIL
SCALE: 1½" = 1'-0"

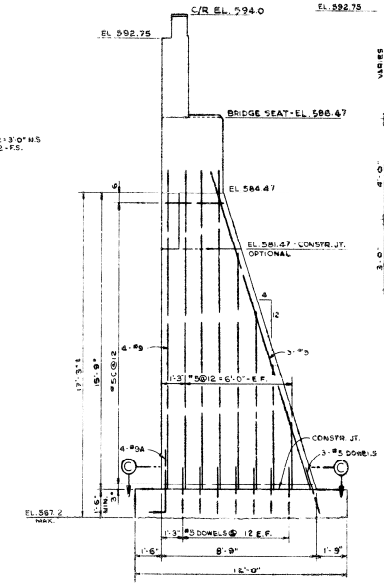
BAR BENDING SCHEDULE	
SYMBOL	BENDING
A	
B	
C	
D	
E	
H-H	
J	



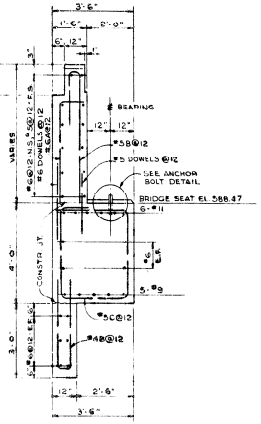
ELEVATION
SCALE: 1/4" = 1'-0"



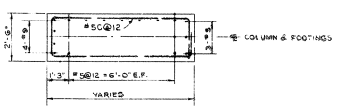
FOOTING
SCALE: 3/8" = 1'-0"



SECTION A-A
SCALE: 3/8" = 1'-0"



SECTION B-B
SCALE: 1/2" = 1'-0"



SECTION C-C
SCALE: 3/8" = 1'-0"

GENERAL NOTES

1. DESIGN LOADING: H20-44
2. DESIGN SPECIFICATIONS: AASHO, 1957 EDITION, WITH CURRENT REVISIONS.
3. BASIC WORKING STRESSES:
   STRUCTURAL STEEL: fs = 20,000 P.S.I.
   REINFORCING STEEL: fs = 20,000 P.S.I.
   CONCRETE: fc = 3500 P.S.I.
4. ALL LAPS TO BE 24 BAR DIAMETERS UNLESS OTHERWISE NOTED. WHERE BARS ARE OF DIFFERENT SIZE, LAP SHOULD BE BASED ON DIAMETER OF SMALLER BAR.
5. LETTER SUFFIX TO BAR NUMBER 5A, 6B, ETC. INDICATES TYPE OF BAR BENDING. SEE SCHEDULE THIS SHEET.
6. UNLESS OTHERWISE NOTED, THE DISTANCE FROM THE FACE OF THE CONCRETE TO THE OUTSIDE LAYER OF REINFORCING STEEL SHALL BE 2½" CLEAR, EXCEPT WHERE THE CONCRETE IS PLACED AGAINST EARTH OR ROCK, THE DISTANCE THEN SHALL BE 4" CL.

ALLEN CO. DRAWING No. 11561 SHEET 2

DIVISION	DATE	DESCRIPTION	BY

U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

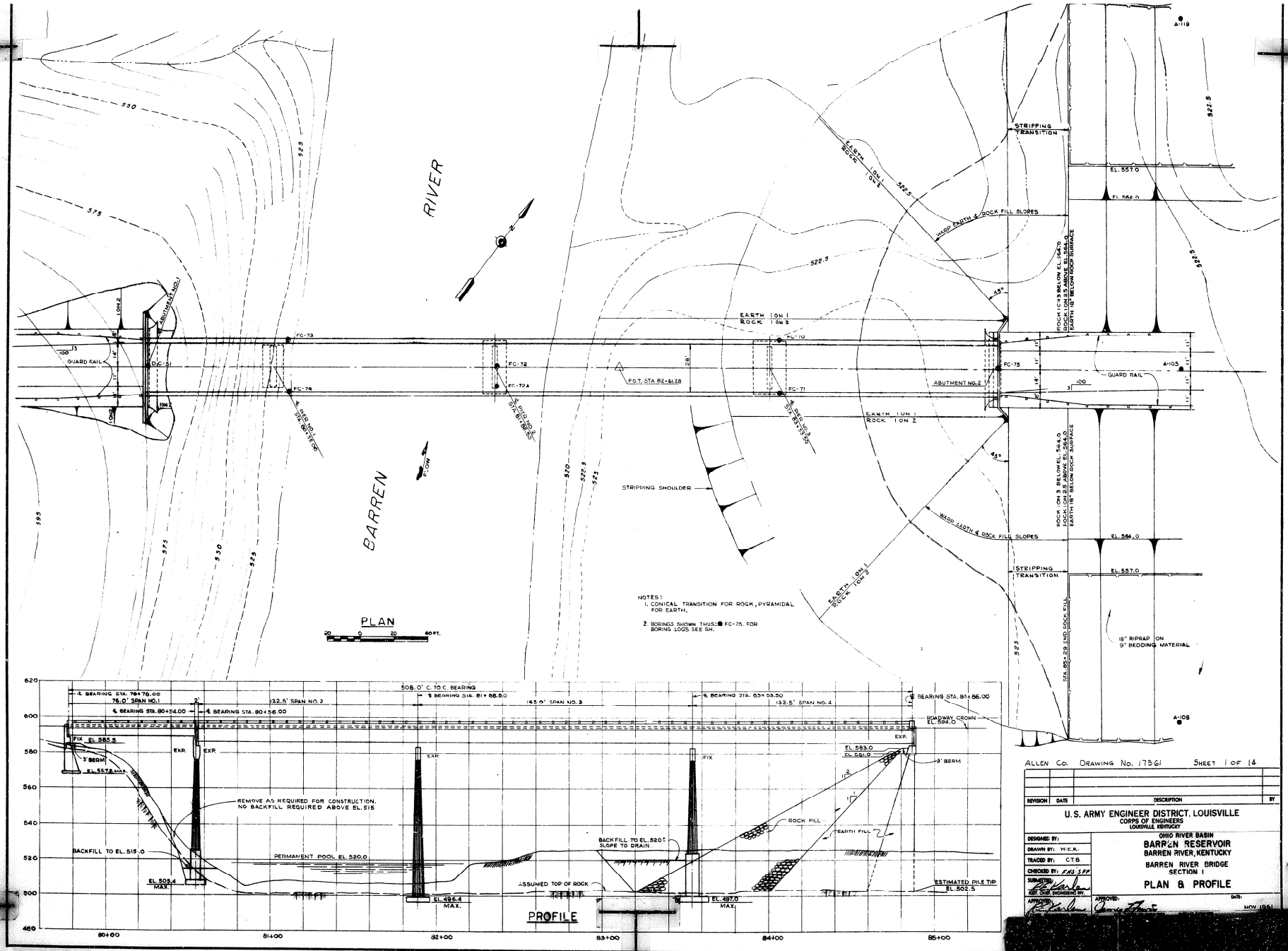
DESIGNED BY: H.J.D.
DRAWN BY: E.P.S.
TRACED BY: C.T.B.
CHECKED BY: SFF FHS
SUBMITTED: R.E. Karlen, ASST. CHIEF ENGINEERING BR.
APPROVED: R.E. Karlen, CHIEF, ENGINEERING DIVISION

OHIO RIVER BASIN
BARREN RESERVOIR
BARREN RIVER, KENTUCKY
BARREN RIVER BRIDGE
SECTION 1
ABUTMENT NO. 1

APPROVED: James L. Lewis, COL. CORPS OF ENGINEERS, DISTRICT ENGINEER
DATE: NOV. 1961

RECORD DRAWING - AS BUILT

Army-Chief Drafting, Cinci, Ohio, 5-61-220



ALLEN Co. DRAWING No. 17561 SHEET 1 OF 14

REVISION	DATE	DESCRIPTION	BY

U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
LOUISVILLE, KENTUCKY

DESIGNED BY:
DRAWN BY: W.E.K.
TRACED BY: C.T.B.
CHECKED BY: J.H.S. S.F.F.
SUBMITTED: Asst. Chief, Engineering Div.
APPROVED: Chief, Engineering Div.

OHIO RIVER BASIN
BARREN RESERVOIR
BARREN RIVER, KENTUCKY
BARREN RIVER BRIDGE
SECTION 1
PLAN & PROFILE

APPROVED: DATE: NOV 1961

RECORD DRAWING-"AS BUILT"

Army - Chief Drafting, Chief, Ohio, 54-61-250