Public Notice

U.S. Army Corps of Engineers
Baltimore District
PN-23-46

In Reply to Application Number NAB-2018-60174-M30 (MTA/Nice Bridge Replacement) - Modification
Comment Period: October 19, 2023 to November 3, 2023

THE PURPOSE OF THIS PUBLIC NOTICE IS TO INFORM INTERESTED PARTIES OF THE PROPOSED ACTIVITY AND TO SOLICIT COMMENTS. NO DECISION HAS BEEN MADE AS TO WHETHER OR NOT A PERMIT WILL BE ISSUED AT THIS TIME.

This District has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344),as described below:

APPLICANT:

Maryland Transportation Authority (MDTA)
c/o Mr. Brian Wolfe
Director of Project Development
Office of Engineering and Construction
8019 Corporate Drive, Suite F
Nottingham, Maryland 21236

WATERWAY AND LOCATION OF THE PROPOSED WORK:

The proposed project is located in the Potomac River at the existing Nice Bridge, in Newburg, Charles County, Maryland (Project Latitude: 38.363889 N; Longitude: -76.981667 W)

OVERALL PROJECT PURPOSE:

The overall purpose of the project is to replace the existing Governor Harry W. Nice/Senator Thomas “Mac” Middleton Bridge with a new structure and subsequently demolish the existing structure once the new structure has been opened to traffic.

PROJECT DESCRIPTION:

The applicant is proposing a modification to the approved bridge removal plans for the use of subaqueous blasting means and methods to include removing a total of five (5) deep-water concrete piers (Piers 14-18) associated with the replacement bridge project and as outlined in the attached blasting/demolition plan.

LEAD FEDERAL AGENCY:

The Federal Highway Administration (FHWA), as the lead federal agency, is responsible for all coordination pursuant to applicable federal authorities.

APPLICANT'S PROPOSED AVOIDANCE, MINIMIZATION, AND COMPENSATORY MITIGATION:

The applicant has reviewed multiple methods of removal of the proposed structures and reduce impacts to the river bottom. Due to the depths of the existing piers, it was determined that mechanical removal would be dangerous and impracticable. Leaving the piers in place would potentially cause a navigational hazard and would increase the original impacts by approximately 17,000 square feet.

CORPS EVALUATION REQUIREMENTS:

This project will be evaluated pursuant to Corps Regulatory Program Regulations (33 CFR Parts 320-332). The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonable may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economic, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, and consideration of property ownership and in general, the needs and welfare of the people. The evaluation of the impact of this project will also include application of the Clean Water Act Section 404(b)(1) Guidelines promulgated by the Administrator, United States Environmental Protection Agency.

ENDANGERED SPECIES:

As the lead federal agency, the FHWA is reviewing the project for potential impacts on federally listed threatened or endangered species and their designated critical habitat pursuant to Section 7 of the Endangered Species Act as amended. FHWA is coordinating with the NMFS and/or United States Fish and Wildlife Service on listed species. As the evaluation of this application continues, additional information may become available which could modify this preliminary determination.

ESSENTIAL FISH HABITAT:

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 04-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely affect Essential Fish Habitat (EFH), including species of concern, life cycle habitat, or Habitat Areas of Particular Concern. The project site lies in or adjacent to EFH as described under MSFCMA for managed species under the MSFCMA. Further consultation with the National Marine Fisheries Service regarding EFH conservation recommendations is being conducted by FHWA as the lead federal agency.

HISTORIC RESOURCES:

The FHWA is the lead federal agency for coordination of impacts to historic resources under Section 106 of the National Historic Preservation Act. The applicant coordinated with the Virginia Department of Historic Resources, the Maryland Historical Trust and the Advisory Council on Historic Preservation and entered into a Programmatic Agreement in 2011 to allow for the phased final identification, evaluation, and determination of effects on terrestrial and underwater archeological resources pending the completion and results of ongoing archeological identification and evaluation studies. The Programmatic Agreement identified four properties in Maryland and one in Virginia that are eligible for listing on the National Register of Historic Places. Currently unknown archeological, scientific, prehistoric, or historical data may be lost or destroyed by the work to be accomplished under the requested permit.

TRIBAL RESOURCES:

Section 106 of the National Historic Preservation Act also requires federal agencies to consult with federally recognized American Indian tribes that attach religious and cultural significance to historic properties that may be affected by the agency’s undertaking. Corps Tribal Consultation Policy mandates an open, timely, meaningful, collaborative, and effective deliberative communication process that emphasizes trust, respect, and shared responsibility. The policy further emphasizes that, to the extent practicable and permitted by law, consultation works toward mutual consensus and begins at the earliest planning stages before decisions are made and actions taken. The Corps final eligibility and effect determination will be based on coordination with interested tribes, in accordance with the Corps current tribal standard operating procedures as appropriate and required, and with full consideration given to the proposed undertaking’s potential direct and indirect effects on tribal resources.

MODIFICATION OF CIVIL WORKS PROJECTS: 33 USC 408 (SECTION 408):

All Section 408 proposals will be coordinated internally at the United States Army Corps of Engineers. The Section 408 decision will be issued along with the Section 404 and/or Section 10 decision. Please see the following link for more information regarding Section 408: https://www.nab.usace.army.mil/Missions/Regulatory/Section-408-Requests/.

WATER QUALITY CERTIFICATION:

The applicant is required to obtain a water quality certification in accordance with Section 401 of the Clean Water Act.

COASTAL ZONE MANAGEMENT PROGRAMS:

Where applicable, the applicant has certified in this application that the proposed activity complies with and will be conducted in a manner consistent with the approved Coastal Zone Management Program. By this public notice, we are requesting the state concurrence or objection to the applicant's consistency statement.

The applicant must obtain any state or local government permits which may be required.

SUBMISSION OF COMMENTS:

The Corps of Engineers is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments provided will become part of the public record for this action and are subject to release to the public through the Freedom of Information Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Written comments concerning the work described above related to the factors listed above or other pertinent factors must be received by the United States Army Corps of Engineers, Baltimore District within the comment period specified above through postal mail at the address below or electronic submission to the project manager email address below. Written comments should reference the Application Number NAB-2018-60174-M30 (MTA/Nice Bridge Replacement).

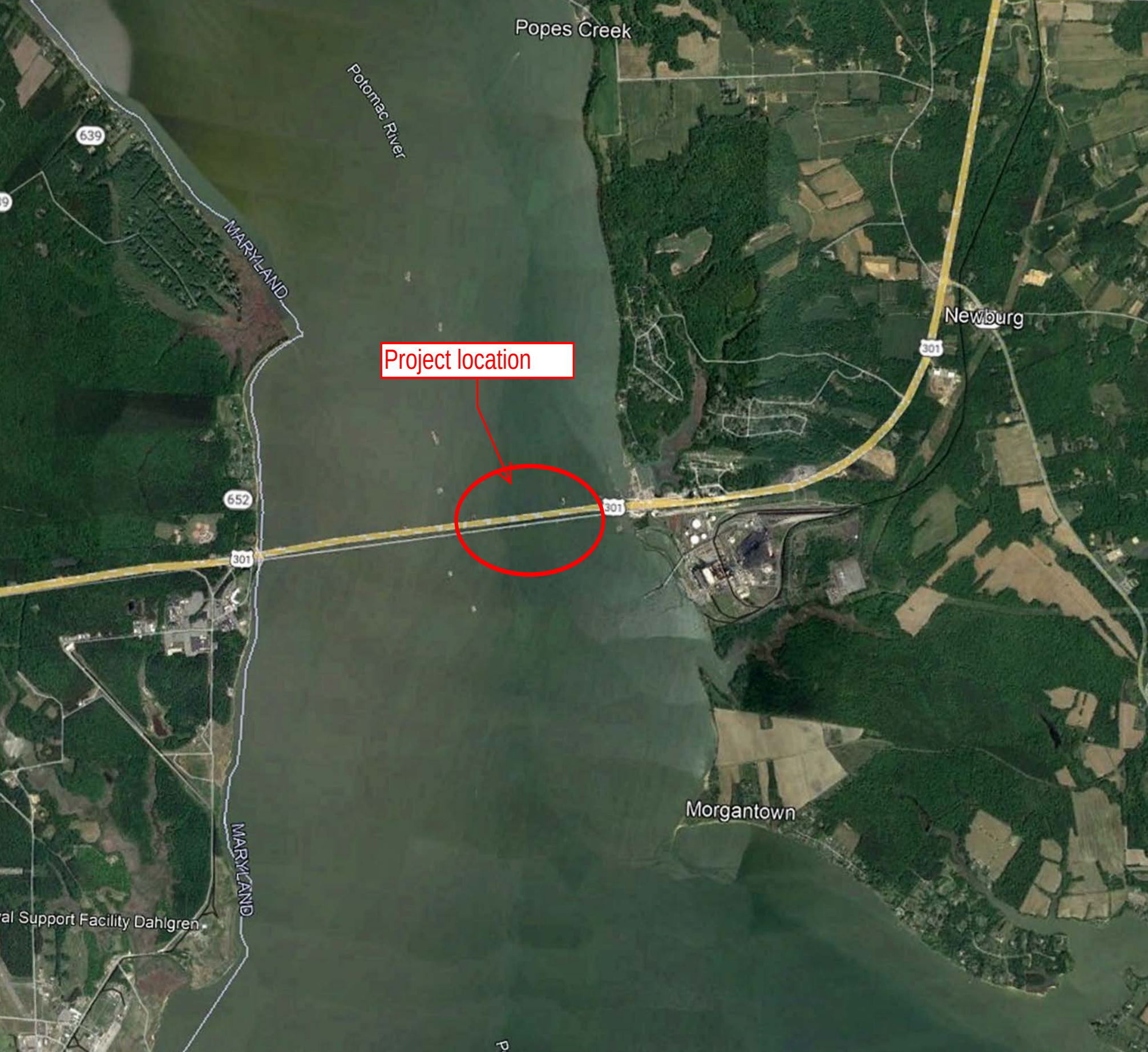
PUBLIC HEARING REQUESTS:

Any person who has an interest which may be adversely affected by the issuance of this permit may request a public hearing. The request, which must be in writing, must be received within the comment period as specified above to receive consideration. Also, it must clearly set forth the interest which may be adversely affected by this activity and the manner in which the interest may be adversely affected. The public hearing request may be submitted by electronic mail or mailed to the following address:

Erica Schmidt
erica.schmidt@usace.army.mil
U.S. Army Corps of Engineers, Baltimore District
Regulatory Branch
2 Hopkins Plaza
Baltimore, Maryland 21201

It is requested that you communicate this information concerning the proposed work to any persons known by you to be interested, who did not receive a copy of this notice.

General information regarding the Corps' permitting process can be found on our website at https://www.nab.usace.army.mil/Missions/Regulatory.aspx. This public notice has been prepared in accordance with Corps implementing regulations at 33 CFR 325.3. If you have any questions concerning this specific project or would like to request a paper copy of this public notice, please contact Ms. Erica Schmidt at 410-962-6029 or erica.schmidt@usace.army.mil. This public notice is issued by the Chief, Regulatory Branch.


Popes Creek
Potomac River
639
MARYLAND
Newburg
301
Project location
652
301
301
Morgantown
MARYLAND
al Support Facility Dahlgren


388+95.42
160'-10 1/4"
100'-3"
148'-6 1/2"
137'-0"
149'-3 1/2"
135'-4 1/4"
131'-9 1/4"
EXISTING PIER 14
EXISTING PIER 15
EXISTING PIER 16
EXISTING PIER 17
EXISTING PIER 18
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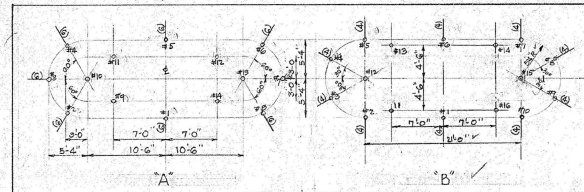
SCALE 1" = 150'

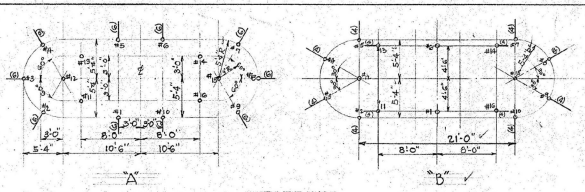
P.W.A. PROJECT MD. 1139-2-F



PIER Nº 1

Batter	(D)	(A)	(G)	Total
Nº Piles	6		8	14

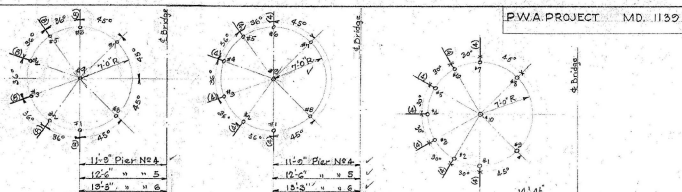
Batter	(D)	(A)	(G)	Total
Nº Piles	6	10		16



PIER Nº 2

Batter	(D)	(A)	(G)	Total
Nº Piles	6		10	16

Batter	(D)	(A)	(G)	Total
Nº Piles	4	12		16

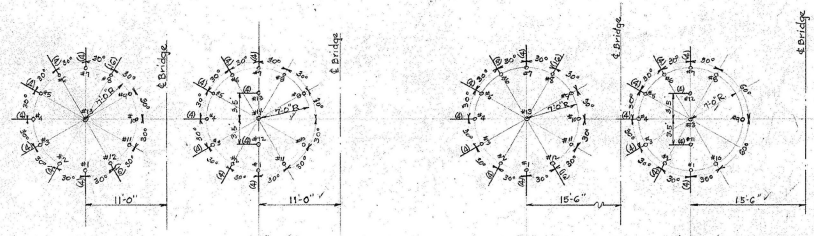


PIERS Nos 4-5-6-7

Piers Nos 4-5-6-7				
Batter	(D)	(A)	(B)	Total
Nº Piles	24		48	72

Piers Nos 4-5-6				
Batter	(D)	(A)	(B)	Total
Nº Piles	18	36		54

Pier Nº 7				
Batter	(D)	(A)	(B)	Total
Nº Piles	6	14		20



PIER Nº 8

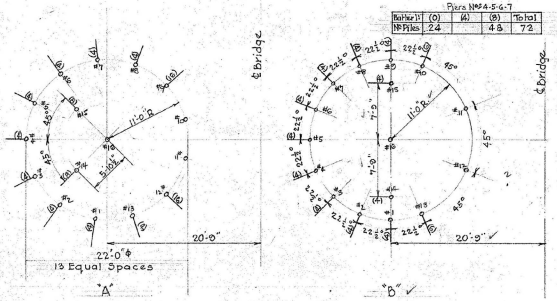
Batter	(D)	(A)	(G)	Total
Nº Piles	8	14	4	26

Batter	(D)	(A)		Total
Nº Piles	10	18		28

PIER Nº 9

Batter	(D)	(A)	(G)	Total
Nº Piles	8	14	4	26

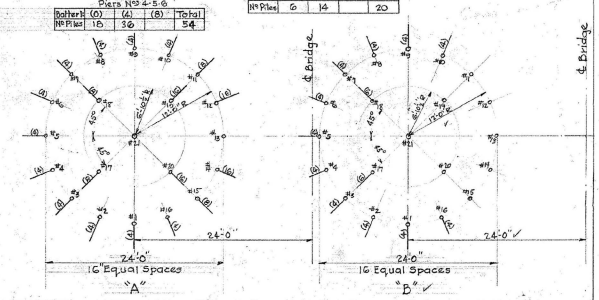
Batter	(D)	(A)		Total
Nº Piles	8	18		26



PIER Nº 11

Batter	(D)	(A)	(G)	(B)	Total
Nº Piles	6	18	4	4	32

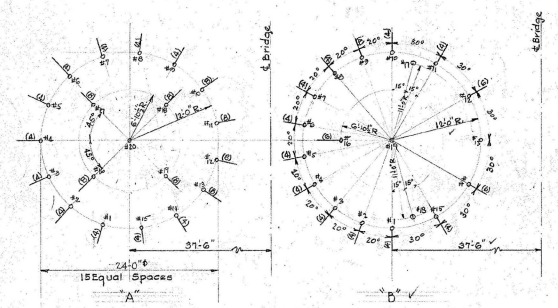
Batter	(D)	(A)	(G)	Total
Nº Piles	6	22	4	32



PIER Nº 12

Batter	(D)	(A)	(B)	(G)	Total
Nº Piles	4	22	8	8	42

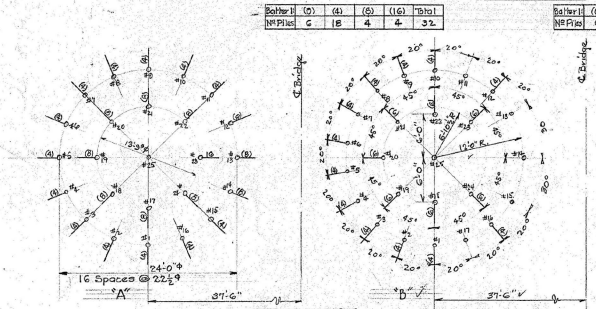
Batter	(D)	(A)	(G)	Total
Nº Piles	16	22	4	42



PIER Nº 13

Batter	(D)	(A)	(B)	Total
Nº Piles	8	22	16	46

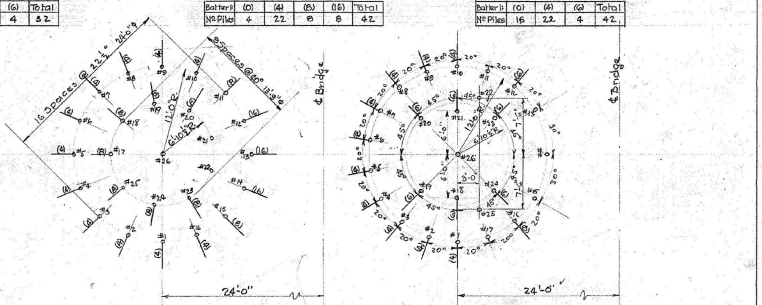
Batter	(D)	(A)	(G)	Total
Nº Piles	8	24	6	38



PIER Nº 16

Batter	(D)	(A)	(B)	(G)	Total
Nº Piles	12	24	14	6	56

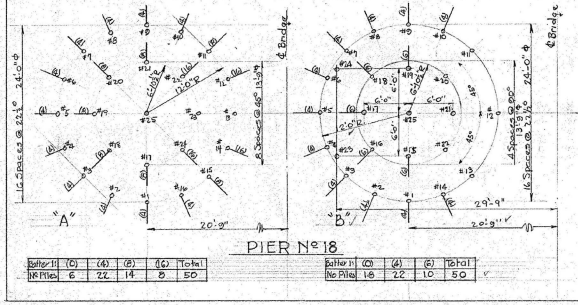
Batter	(D)	(A)	(B)	(G)	Total
Nº Piles	6	22	18	6	52



PIER Nº 17

Batter	(D)	(A)	(B)	Total
Nº Piles	16	20	16	52

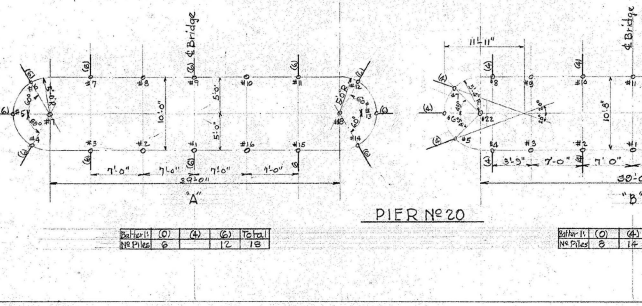
KEY
"A" DENOTES BID PLAN
"B" " PROPOSED PLAN
PILES ADDED.



PIER Nº 18

Batter	(D)	(A)	(B)	(G)	Total
Nº Piles	6	22	14	8	50

Batter	(D)	(A)	(B)	(G)	Total
Nº Piles	18	22	10		50



PIER Nº 20

Batter	(D)	(A)	(G)	Total
Nº Piles	6		12	18

Batter	(D)	(A)		Total
Nº Piles	8	14		22

Note:- This is not a contract drawing

CONSULTING ENGINEERS

REVISIONS

STATE OF MARYLAND
STATE ROADS COMMISSION
BALTIMORE MD.

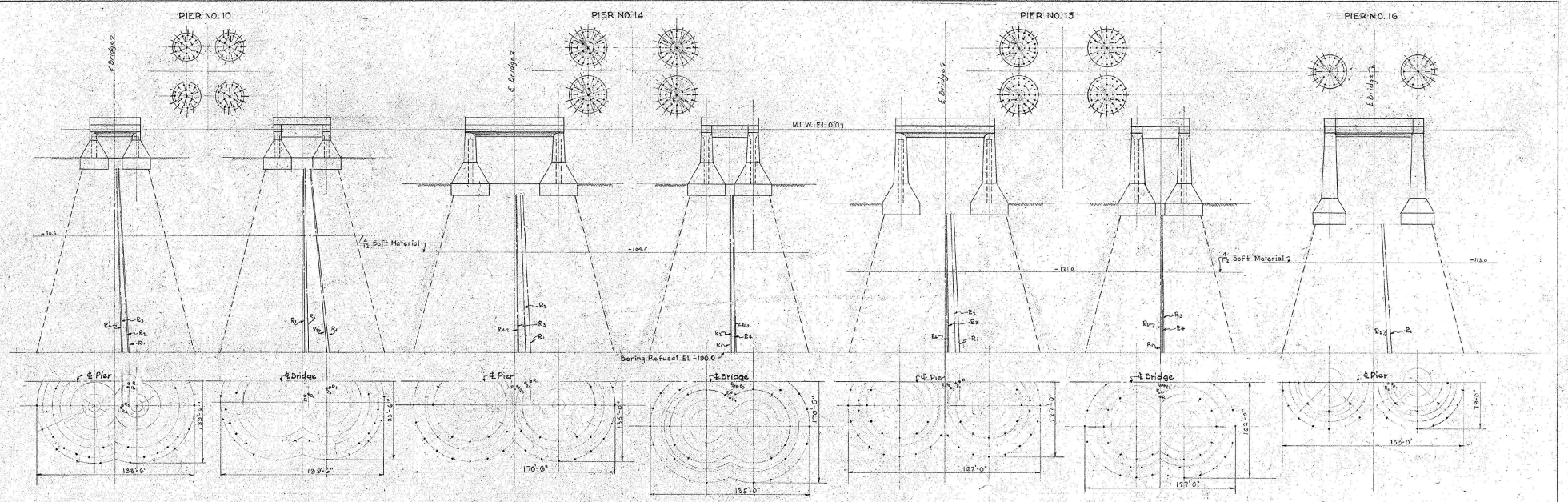
POTOMAC RIVER BRIDGE
FROM LUDLOW FERRY, MD.
TO NEAR DAHLGREN, VA.

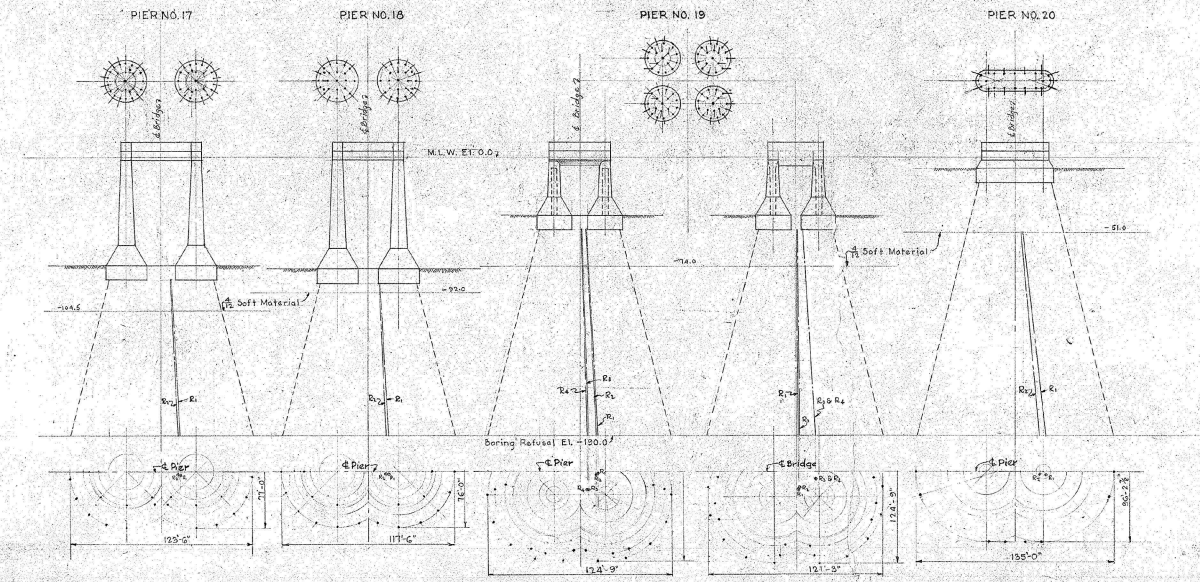
PROPOSED CHANGES IN PILE LAYOUT

SCALE 1"=1'-0" March 27-1939 CONTRACT CH. 124-2-842 C-355-2-

MADE BY J.E.GREINER Co. JAS. APPROVED
TRACED BY _____
CHECKED BY _____ CHIEF ENGINEER
APPROVED
_____ BRIDGE ENGINEER

SHEET No. 1 of 2
C-355-2-A





LOAD CASES ON PIERS

Fixed Piers

Rocker Piers

R_1	Case I	Dead Load + 30° Transverse Wind + Current + Ice + 5% Roller Friction
R_2	" II	" " + 15° " " " + " + Live Load + Live Load Trans. Wind + Traction + 5% Roller Friction
R_3	" III	" " + Current + Ice + 30° Longitudinal Wind + 5% Roller Friction
R_4	" IV	" " + Live Load + Current + Ice + 15° Longitudinal Wind + Live Load Longitudinal Wind + Traction + 5% Roller Friction

REVISIONS

STATE OF MARYLAND
STATE ROADS COMMISSION
BALTIMORE MD.

POTOMAC RIVER BRIDGE
FROM LUDLOW FERRY MD.
TO NEAR DAHLGREN VA.

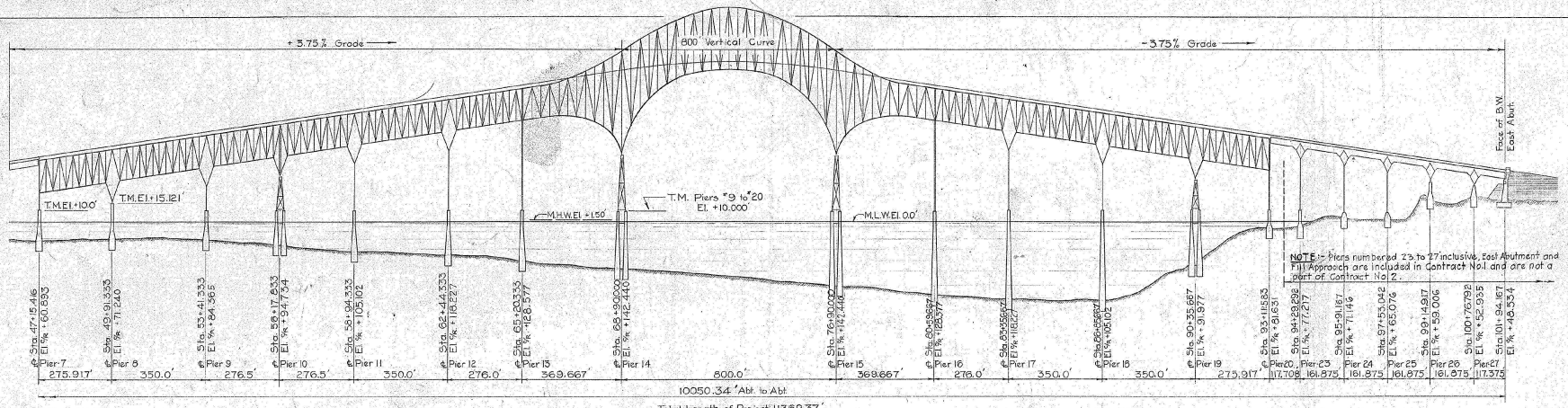
RESULTANTS OF LOADS ON PIERS
PIERS NOS. 10, 14, 15, 16, 17, 18, 19 & 20

SCALE 1" = 40'

MADE BY J.E. GREINER CO. W.W.W.
TRACED BY " W.W.W.
CHECKED BY " B.A.H.

SHEET 2 OF 2
C 355-2-8

P.W.A. PROJECT MD.-1139-2-F

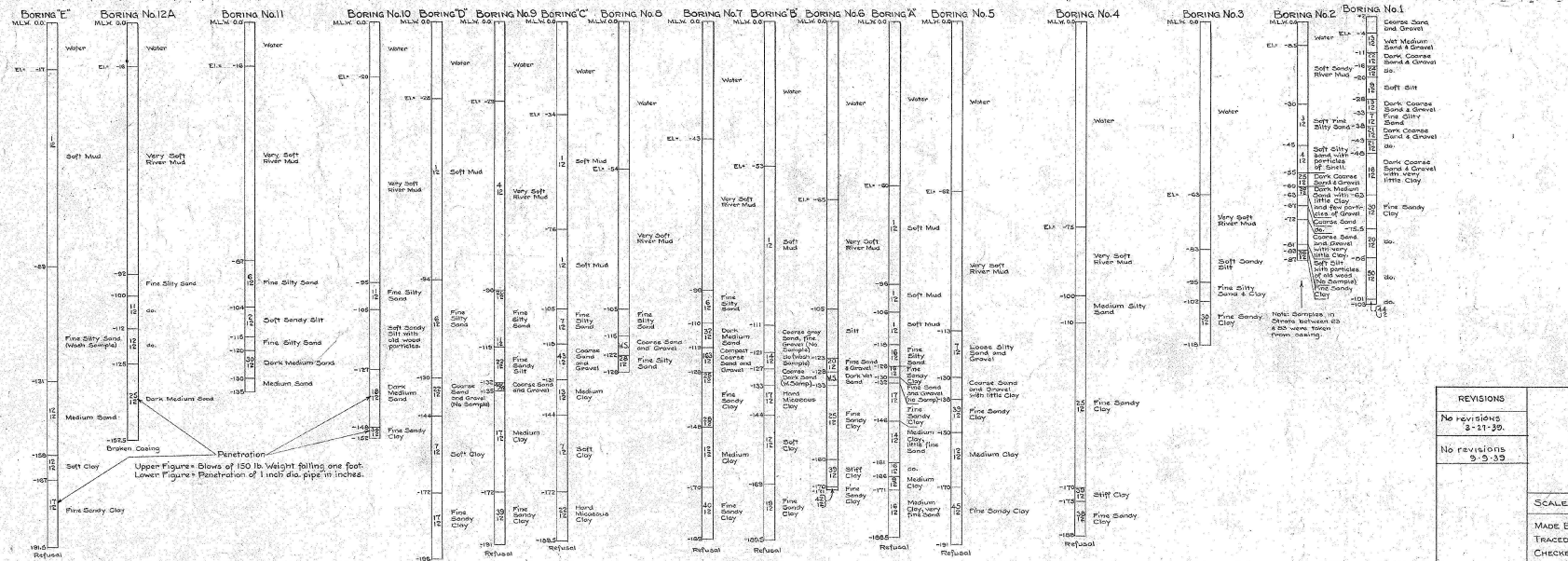


ELEVATION

Scales { Horiz: 1" = 200'
Vert: 1" = 50'

NOTE:- Piers numbered 21 and 22 have been eliminated due to rearrangement of river spans after Contract No.1 was awarded.

NOTE:- Ground Elevations shown on ℄ of Bridge



Scales (Borings) { Horiz. 1" = 200'
Vert. 1" = 20'

J.E. Greiner Co. CONSULTING ENGINEERS 1/23/39

REVISIONS
No revisions 2-21-39.
No revisions 9-9-39

STATE OF MARYLAND
STATE ROADS COMMISSION
BALTIMORE, MD.

POTOMAC RIVER BRIDGE
FROM LUDLOW FERRY, MD.
TO NEAR DAHLGREN, VA.

GENERAL ELEVATION

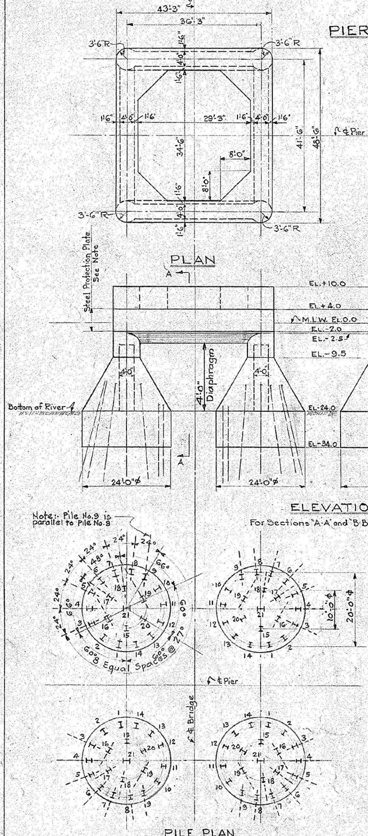
SCALE: Horiz. 1" = 200' Vert. as shown CONTRACT CH-124-2-842 C-355-2

MADE BY J.E. GREINER CO. VA. APPROVED
TRACED BY J.E. GREINER CO. W.B.T.
CHECKED BY J.E. GREINER CO. L.T.S.

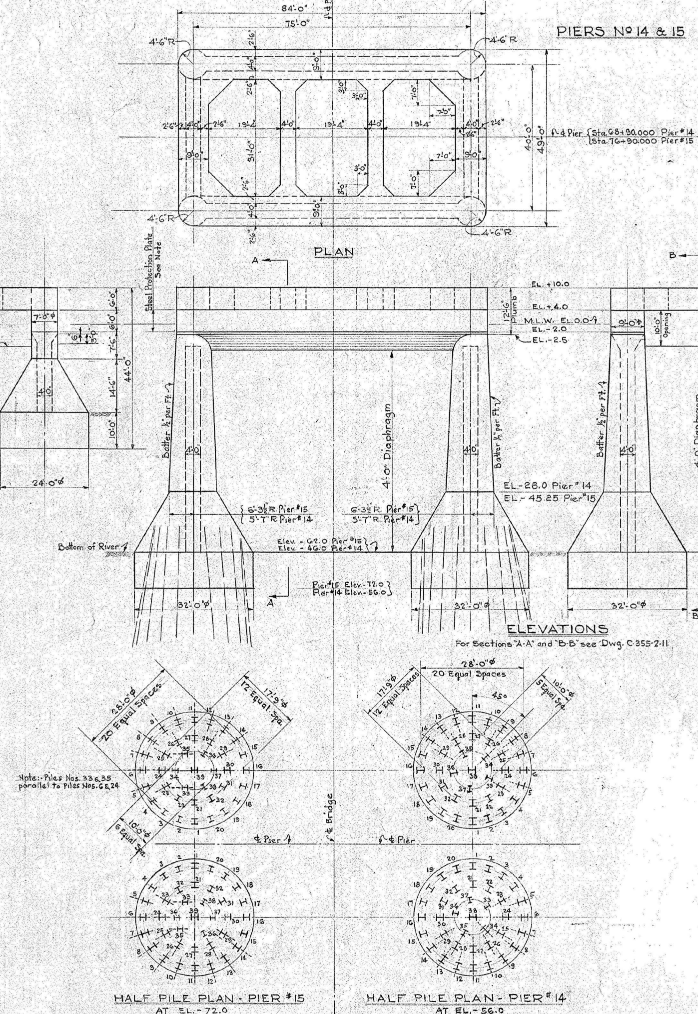
Nathan D. Smith CHIEF ENGINEER 1-23-39

APPROVED C.S. Stowman BRIDGE ENGINEER 1/24/39

SHEET No. 3 OF 19
C-355-2-2



PILE No.	TYPE	APPROX. EL. CUT OFF		
1	Plumb	-24.0	All Piles 14"×16"@102#	All Piles 14"×14½" @ 89# Reinforced with 2-15"×3/8" PLs.
2	"	-24.0		
3	Batter 1:6	-21.0		
4	" 1:4	-17.0		
5	" 1:4	-17.0		
6	" 1:4	-17.0		
7	" 1:4	-17.0		
8	" 1:4	-17.0		
9	" 1:6	-21.0		
10	Plumb	-24.0		
11	"	-24.0		
12	"	-24.0		
13	"	-24.0		
14	"	-24.0		
15	"	-17.0		
16	Batter 1:4	-24.0		
17	" 1:4	-24.0		
18	" 1:4	-24.0		
19	" 1:4	-24.0		
20	Plumb	-17.0		
21	"	-17.0		

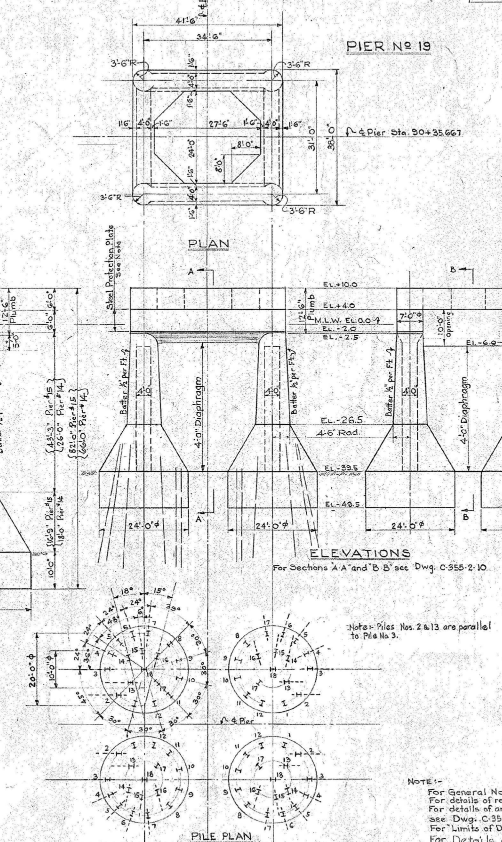


HALF PILE PLAN - PIER #15 — AT EL. -72.0

PILE No.	TYPE	APPROX. EL. CUT OFF	PILE No.	TYPE	APPROX. EL. CUT OFF	PILE No.	TYPE	APPROX. EL. CUT OFF
1	Plumb	-62.0	15	Plumb	-62.0	29	Batter 1:6	-57.0
2	"	-62.0	16	"	-62.0	30	Plumb	-55.0
3	"	-62.0	17	"	-62.0	31	"	-55.0
4	"	-62.0	18	"	-62.0	32	"	-55.0
5	Batter 1:4	-55.0	19	"	-62.0	33	Batter 1:4	-62.0
6	" 1:4	-55.0	20	"	-62.0	34	Plumb	-55.0
7	" 1:4	-55.0	21	"	-55.0	35	Batter 1:4	-62.0
8	" 1:4	-55.0	22	"	-55.0	36	Plumb	-55.0
9	" 1:4	-55.0	23	Batter 1:6	-57.0	37	"	-55.0
10	" 1:4	-55.0	24	" 1:6	-57.0	38	"	-55.0
11	" 1:4	-55.0	25	" 1:6	-57.0	39	"	-55.0
12	" 1:4	-55.0	26	" 1:6	-57.0			
13	" 1:4	-55.0	27	" 1:6	-57.0			
14	" 1:6	-59.0	28	" 1:6	-57.0			
All Piles 14"×16"@102#								

HALF PILE PLAN - PIER #14 — AT EL. -56.0

PILE No.	TYPE	APPROX. EL. CUT OFF	PILE No.	TYPE	APPROX. EL. CUT OFF	PILE No.	TYPE	APPROX. EL. CUT OFF
1	Plumb	-46.0	14	Batter 1:6	-43.0	27	Batter 1:6	-41.0
2	"	-46.0	15	Plumb	-46.0	28	" 1:6	-46.0
3	"	-46.0	16	"	-46.0	29	" 1:6	-41.0
4	"	-46.0	17	"	-46.0	30	Plumb	-39.0
5	Batter 1:4	-39.0	18	"	-46.0	31	"	-39.0
6	" 1:4	-39.0	19	"	-46.0	32	"	-39.0
7	" 1:4	-39.0	20	"	-46.0	33	" "	-39.0
8	" 1:4	-39.0	21	"	-39.0	34	Batter 1:4	-46.0
9	" 1:4	-39.0	22	"	-39.0	35	Plumb	-39.0
10	" 1:4	-39.0	23	Batter 1:6	-46.0	36	"	-39.0
11	" 1:4	-39.0	24	" 1:6	-41.0	37	"	-39.0
12	" 1:4	-39.0	25	" 1:6	-41.0	38	"	-39.0
13	" 1:4	-39.0	26	" 1:6	-41.0			
All Piles 14"×16"@102#								



PILE No.	TYPE	APPROX. EL. CUT OFF	
1	Plumb	-39.5	All Piles 14"×16"@102#
2	Batter 1:6	-39.5	
3	" 1:4	-32.5	
4	" 1:4	-35.5	
5	" 1:4	-32.5	
6	" 1:4	-35.5	
7	" 1:4	-32.5	
8	Plumb	-39.5	
9	"	-39.5	
10	"	-39.5	
11	"	-39.5	
12	"	-39.5	
13	Batter 1:4	-32.5	
14	" 1:4	-32.5	
15	" 1:4	-39.5	
16	" 1:4	-32.5	
17	Plumb	-32.5	
18	"	-32.5	

NOTE:-
For General Notes see Dwg. C-355-2-5.
For details of reinforcing steel see dwgs. C-355-2-10, -11.
For details of anchor bolts and Steel Protection Plates see Dwg. C-355-2-12.
For "Limits of Dredging" see Dwg. C-355-2-7.
For Details of Piles, Splices, and Points for Pier No. 10, see sheet C-355-2-12X

REVISIONS
Pile Plans and Cut offs revised 3-27-39
Pile sections Pier 10 changed & note added. 9-9-39

STATE OF MARYLAND
STATE ROADS COMMISSION
BALTIMORE, MD.

POTOMAC RIVER BRIDGE
FROM LUDLOW FERRY, MD.
TO NEAR DAHLGREN, VA.

PIERS NOS. 10, 14, 15 & 19
PLANS AND ELEVATIONS

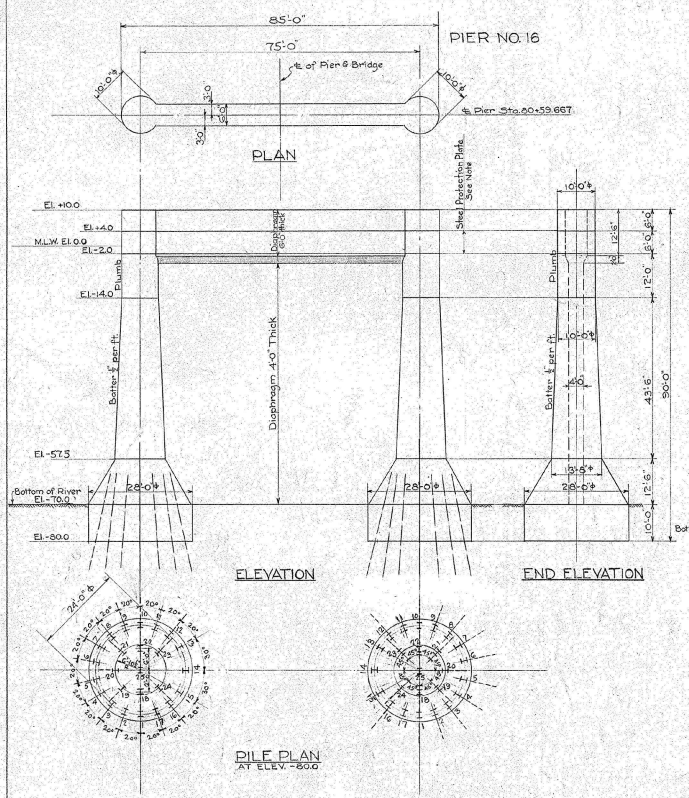
SCALE 1/16" = 1'-0" CONTRACT CH-124-2-842 / C-355-2

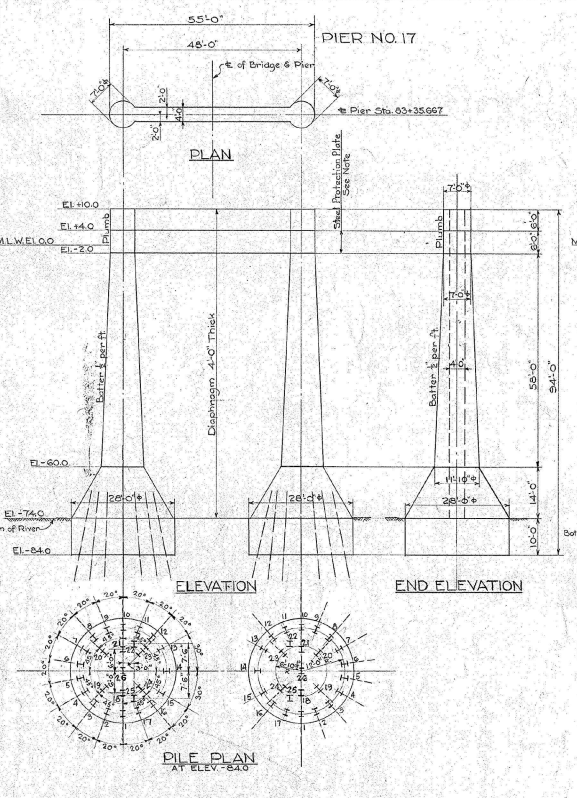
MADE BY J.E. GREINER CO. W.H.P. J.J.J.-E.H.B. APPROVED
TRACED BY
CHECKED BY J.E. GREINER CO. L.T.S. J.J.J.
[signature] CHIEF ENGINEER
1-23-39
APPROVED
[signature] BRIDGE ENGINEER
1/23/39

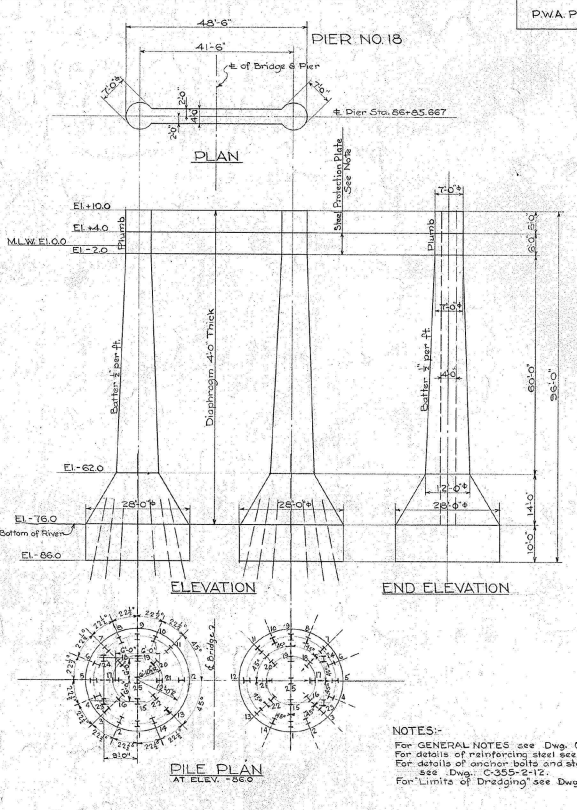
J.E. Greiner Co
CONSULTING ENGINEERS
1/23/39 H.H.A.

SHEET No. 7 OF 19
C-355-2-6

P.W.A. PROJECT MD-1139-2-F







Pile No.	Type	Approx. El. Cut Off	Pile No.	Type	Approx. El. Cut Off	Piles
1	Batter 1:4	-63.0	14	Plumb	-70.0	All piles 14"x 16"@ 10.7#
2	" 1:4	"	15	"	-70.0	
3	" 1:4	"	16	Batter 1:4	-63.0	
4	" 1:4	"	17	Plumb	-70.0	
5	" 1:4	"	18	Batter 1:6	-69.0	
6	" 1:4	"	19	" 1:6	"	
7	" 1:4	"	20	" 1:6	"	
8	" 1:4	"	21	" 1:6	"	
9	" 1:4	"	22	" 1:6	"	
10	" 1:4	"	23	" 1:6	"	
11	Plumb	-70.0	24	" 1:6	"	
12	Batter 1:6	-63.0	25	Plumb	-63.0	
13	Plumb	-70.0				

Pile No.	Type	Approx. El. Cut Off	Pile No.	Type	Approx. El. Cut Off	Piles
1	Batter 1:4	-67.0	14	Plumb	-74.0	All piles 14"x 16"@ 10.7#
2	" 1:4	"	15	"	"	
3	" 1:4	"	16	Batter 1:6	-72.0	
4	" 1:4	"	17	Plumb	-74.0	
5	" 1:4	"	18	Batter 1:6	-67.0	
6	" 1:4	"	19	" 1:6	"	
7	" 1:4	"	20	" 1:6	"	
8	" 1:4	"	21	" 1:6	"	
9	" 1:4	"	22	Plumb	-68.0	
10	" 1:4	"	23	" 1:6	-67.0	
11	Plumb	-74.0	24	Batter 1:6	"	
12	Batter 1:6	-72.0	25	Plumb	-63.0	
13	Plumb	-74.0	26	Plumb	-67.0	

Pile No.	Type	Approx. El. Cut Off	Pile No.	Type	Approx. El. Cut Off	Piles
1	Batter 1:4	-69.0	14	Batter 1:4	-69.0	All piles 14"x 16"@ 10.7#
2	" 1:4	"	15	" 1:6	"	
3	" 1:4	"	16	" 1:6	"	
4	" 1:4	"	17	" 1:6	"	
5	" 1:4	"	18	" 1:6	"	
6	" 1:4	"	19	" 1:6	"	
7	" 1:4	"	20	Plumb	"	
8	" 1:4	"	21	"	"	
9	" 1:4	"	22	"	"	
10	" 1:4	"	23	"	-75.0	
11	Plumb	-76.0	24	"	-75.0	
12	"	"	25	"	-69.0	
13	"	"				

NOTES:-
For GENERAL NOTES see Dwg. C-355-2-5.
For details of reinforcing steel see Dwg. C-355-2-9.
For details of anchor bolts and steel protection plates see Dwg. C-355-2-12.
For "Limits of Dredging" see Dwg. C-355-2-7.

REVISIONS
Pile Plans and Cut Offs revised 3-27-39
Dimensions Added Pier 17 5-10-39
No revisions 9-3-39

J.E. Greiner Co. CONSULTING ENGINEERS
1/23/39

STATE OF MARYLAND
STATE ROADS COMMISSION
BALTIMORE, MD.

POTOMAC RIVER BRIDGE
FROM LUDLOW FERRY, MD.
TO NEAR DAHLGREN, VA.

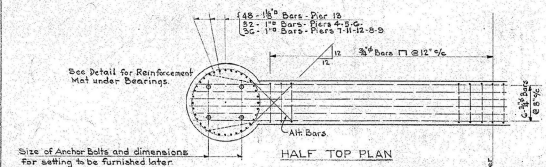
PIERS NOS. 16, 17 & 18
PLANS & ELEVATIONS

SCALE 1/16" = 1'-0" CONTRACT CH-124-2-842 C-355-2

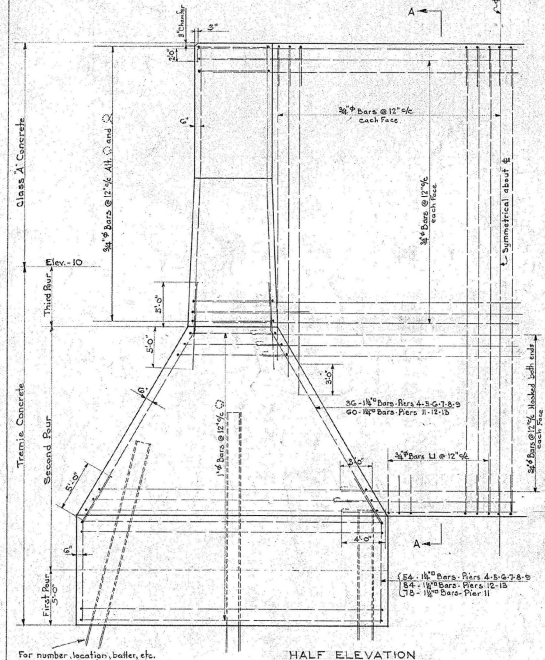
MADE BY J.E. GREINER CO. WBT APPROVED
TRACED BY
CHECKED BY J.E. GREINER CO. L.T.S. J.J.J. Edward Smith CHIEF ENGINEER
APPROVED 1-23-39
BRIDGE ENGINEER 1-23-39

SHEET No. 9 OF 19
C-355-2-8

P.W.A. PROJECT MD.-1139-2-F



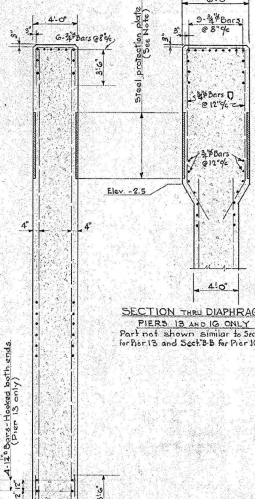
HALF TOP PLAN



HALF ELEVATION

For number, location, batter, etc. of Piles see Dwgs. C-355-2-4, -5, -7. For details of lug angles on Piles see Dwg. C-355-2-12.

PIERS NOS. 4-5-6-7-8-9-11-12-13



SECTION THRU DIAPHRAGM
PIERS 13 AND 16 ONLY
Part not shown similar to Sect 'A-A' for Pier 13 and Sect 'B-B' for Pier 16

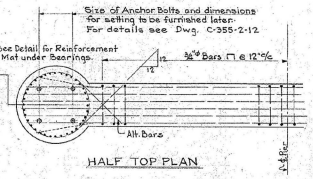
SECTION "A-A"

For number, location, batter, etc. of Piles see Dwg. C-355-2-8. For details of lug angles on Piles see Dwg. C-355-2-12.

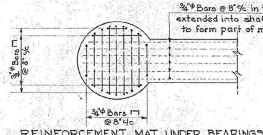
HALF ELEVATION

PIERS NOS. 16-17-18

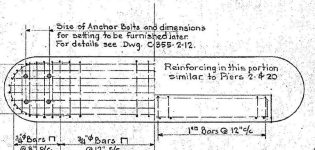
SECTION "B-B"



HALF TOP PLAN

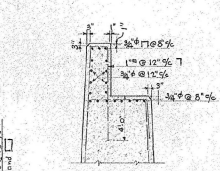


REINFORCEMENT MAT UNDER BEARINGS
Typical for Piers 4-5-6-7-8-9-11-12-13-16-17-18

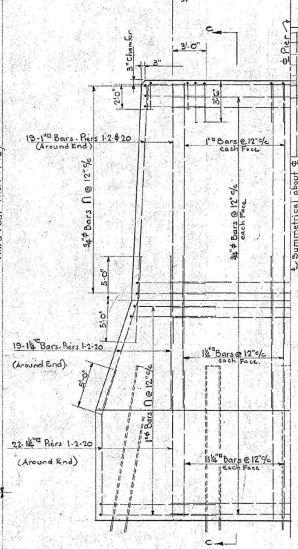


HALF TOP PLAN
Typical for Piers 2 & 20

HALF TOP PLAN: PIER 1



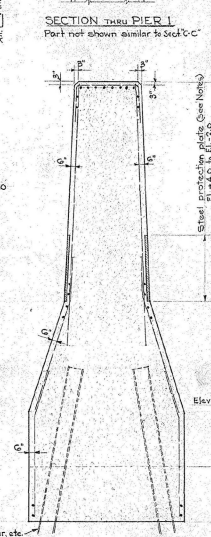
SECTION THRU PIER 1
Part not shown similar to Sect 'C-C'



PART ELEV. - PIER 1
Part not shown similar to Piers 2 & 20

HALF ELEVATION
PIERS 2 & 20

NOTE:
For General Notes see Dwg. C-355-2-5.
For detail of Steel protection plates see Dwg. - C-355-2-12



For number, location, batter, etc. of Piles see Dwgs. C-355-2-4, -5. For location of lug angles on Piles see Dwg. - C-355-2-12.

SECTION "C-C"

PIERS NOS. 1-2-& 20

REVISIONS
References to Pier 3 removed 3-27-39
No revisions 9-9-39

STATE OF MARYLAND
STATE ROADS COMMISSION
BALTIMORE, MD.

POTOMAC RIVER BRIDGE
FROM LUDLOW FERRY, MD.
TO NEAR DAHLGREN, VA.

REINFORCING STEEL DETAILS
PIERS NOS. 1, 2 & 4 TO 9, 11 TO 13, 16 TO 18, AND 20

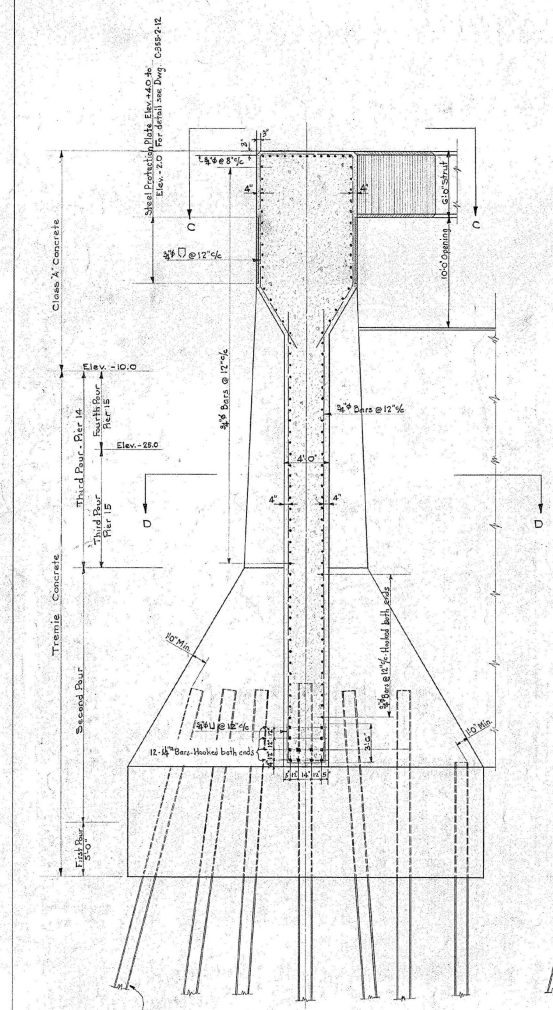
SCALE ⅜" = 1'-0" CONTRACT < CH-124-2-842 C-355-2

MADE BY J.E. GREINER CO. LTD. ENG. APPROVED
TRACED BY
CHECKED BY J.E. GREINER CO. P.W.D. — CHIEF ENGINEER 1-23-39
APPROVED — BRIDGE ENGINEER 1-23-39

J.E. Greiner Co — CONSULTING ENGINEERS 1/23/39 J.K.P.A.

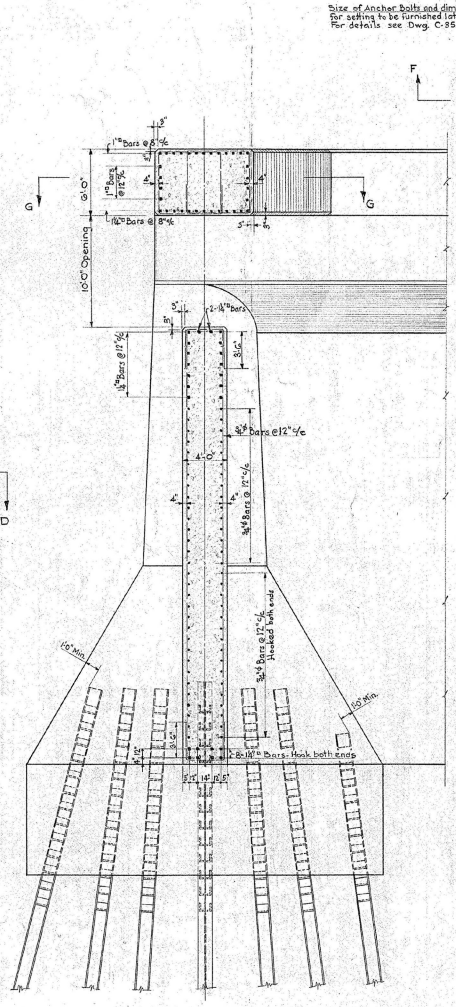
SHEET No. 10 OF 19
C-355-2-9

P.W.A. PROJECT MD.-1139-2-F



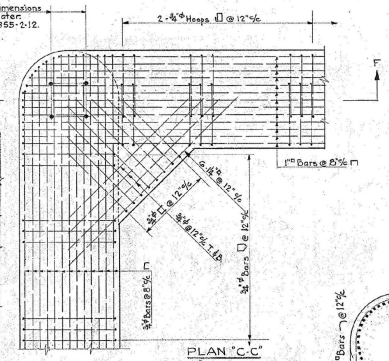
TYPICAL SECTION "A-A"
(See Dwg. C-355-2-G)

For number, location, batter, etc. of Piles see Dwg. C-355-2-G. For details of lug angles on Piles see Dwg. C-355-2-12.

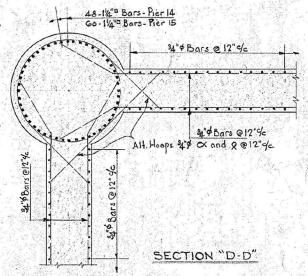


TYPICAL SECTION "B-B"
(See Dwg. C-355-2-G)

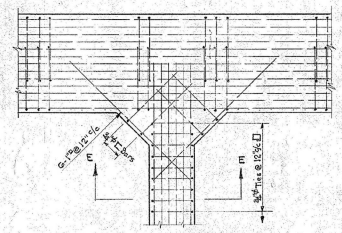
Size of Anchor Bolts and dimensions for setting to be furnished later. For details see Dwg. C-355-2-12.



PLAN "C-C"

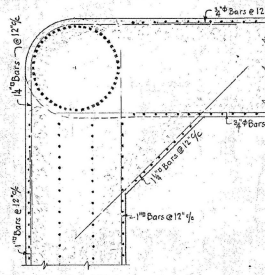


SECTION "D-D"

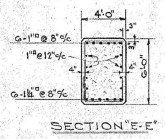


PLAN

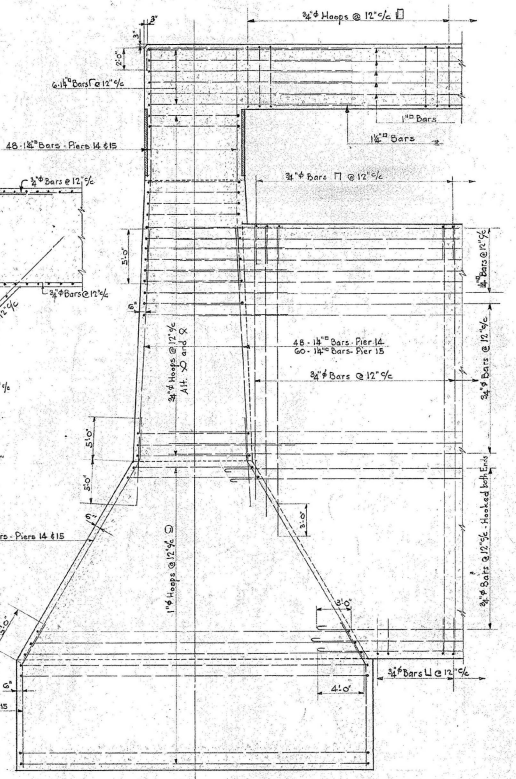
INTERMEDIATE STRUTS



SECTION "G-G"



SECTION "E-E"



SECTION "F-F"

NOTE:-
For General Notes see Dwg. C-355-2-S

REVISIONS
No revisions 3-27-39
No revisions 9-9-39

STATE OF MARYLAND
STATE ROADS COMMISSION
BALTIMORE, MD.

POTOMAC RIVER BRIDGE
FROM LUDLOW FERRY, MD.
TO NEAR DAHLGREN, VA.

REINFORCING STEEL DETAILS
PIERS NOS. 14 AND 15

SCALE 3/8" = 1'-0" CONTRACT CH-124-2-842 C-355-2

MADE BY J.E. GREINER CO. L.T.S. E.H.B. APPROVED
TRACED BY
CHECKED BY J.E. GREINER CO. P.W.D. CHIEF ENGINEER 1-23-39
APPROVED BRIDGE ENGINEER 1/23/39

J.E. Greiner Co CONSULTING ENGINEERS 1/25/39

SHEET NO. 12 OF 19
C-355-2-11

PROTECTION OF THE PUBLIC

General

The blast designs have taken into consideration the proximity of buildings in the area, the new bridge, waterways, and adjacent work areas. All explosives will be handled, transported, used and stored in accordance with all State and Federal Regulations. All on site workers will be notified of the activities and instructed to stay clear of the blast area. Signs will be posted to identify the blast area to other workers on the site. Only those authorized by the Blaster will be permitted in this area. All unused product will be removed from the area and secured prior to detonating the blast. Each charge location will be covered with a combination of rubber conveyor belting and geotech fabric on a wooden frame which will be secured to the structure, alternate cover materials may be used as well. Prior to detonation the Blaster will ensure that a 1500' radius Danger Area is clear of all people, marine traffic and vehicular traffic and secured by guards. This will be accomplished by designated persons stationed at designated locations on the site and safety boats at designated locations on the adjacent waterway. The waterway way will be secured 30 minutes prior to the scheduled shot time and will remain secured until the blaster gives the "All Clear". All persons involved with securing the blast zone will be equipped with radios. When it is confirmed the zone is clear and the Blaster is comfortable with the conditions he will sound the 5 minute warning, check with stationed personnel to ensure the zone is still clear, sound the one minute warning, check again to ensure the area is secured, the fish scare will be set off, proceed with the radio transmitted 10 second count down from 10 - 5. After reaching 5, radio transmission will cease to provide opportunity for security/guards to issue an Abort transmission. f no "abort" warning is received the blast will be detonated. The Blaster-in-Charge will then check the post shot conditions to ensure all is good and give the All Clear signal.

State Police, Local Police and Local Fire Departments will be made aware of the blasting schedules and any changes in the schedule in advance. Should a circumstance arise that prevents the firing of any loaded explosives at the scheduled time a security person will "guard" the shot until the blast is fired at a new shot time. No structures loaded with explosives will be left unattended. Local Police and Fire Departments will be notified of the situation.

Warnings and Signals

The Blaster will warn all employees on the job site of an impending blast through communication with the General Contractor's Superintendent and the use of warning signals. The warning signals will be posted and all employees on site will be advised of the schedule of warning signals. The warning signals to be used are as follows:

5 minute warning – three 3 second blasts of the air horn.

1 minute warning – two 3 second blasts of the air horn.

All Clear – one 10 second blast of the air horn.

Once the Blaster-in-Charge has finished his post-blast assessment, there will be an All Clear signal sounded so all in the area understand that all blasting operations are finished and regular activities may resume.

Pre-Blast Notifications

The Blaster-in-Charge will notify the General Contractor's representative 48 hours before any blast to coordinate with the Blaster in Charge to determine the proper time for the blasting. On blast day a two hour notification will be given to the General Contractor’s Superintendent. A blast will not be fired until communication with the Guards at the perimeter of the secured Danger Area and visual inspection of the Danger area to confirm it is clear.

Guarding Before a Blast

The Blaster in Charge will identify the perimeter of the Danger Area prior to commencing loading of explosive for the planned blast. It will be a 1500 foot radius safety zone from the blast location. The contractor will place guards around the Danger Area,when instructed to do so by the Blaster-in-Charge. The Contractor will provide sufficient guards to secure the Marine Safety Zone as well as keep traffic off the new bridge for the blast event. The guards must be in radio communication with the blaster and able to stop the blast if necessary.

Control of Blast Debris

Prior to the firing of any blast in areas where blast generated flying debris may result in personal injury or damage to property, the structure to be blasted will be covered with wire rope blast mats.

PROTECTION OF EXISTING STRUCTURES

General

Each blast will be covered with wire rope blast mats prior to detonation to prevent any flying debris.

Piers will be blasted at high slack tide.

Weather conditions will be considered when choosing Blast Days to lessen the blast impacts due to low ceiling/heavy cloud cover.

Pre-condition Surveys

The Contractor shall arrange for a pre-blast condition survey of any nearby buildings, structures, and utilities as required by State regulations, the Project Owner, and the Contractor's Insurance company prior to any blasting activity. The survey method used shall be acceptable to the Contractor's insurance company, Project Owner, and State regulatory boards. The pre-blast condition survey records shall be made available to the Engineer for review. Occupants of local buildings within the Safety Zone shall be notified prior to the commencement of blasting.

Vibration Control and Monitoring

Each blast event will be monitored and recorded using Blast Seismographs capable of recording particle velocity for three mutually perpendicular components of vibration (Transverse, Vertical and Horizontal) and air overpressure (in the Linear scale). Seismographs will be located at the closest structure subject to blast damage and other locations as identified by the Engineer. Data recorded for each shot shall be furnished to the Blaster-in-Charge and the Engineer prior to the next blast. The information provided shall include:

1. Identification of instrument used and calibration date.
2. Name of equipment operator.
3. Distance and direction of recording station from blast area.
4. Type of ground at recording station and material on which the instrument is placed.
5. Maximum particle velocity in each component,(T, V, L)
6. Maximum air over-pressure in dBL.
7. Frequency, in hertz, of the maximum particle velocity in each component.
8. A dated and signed copy of records of seismograph readings.


Land side safety zone for blast of piers 16-18
Marine Safety Zone for Blasts
Marine Safety Zone for Blasts
New Bridge will be closed for blasts
VIRGINIA
Potomac River
301 Truckstop & Plaza
Crain Memorial
Morgantown
652
301
Google Earth
N