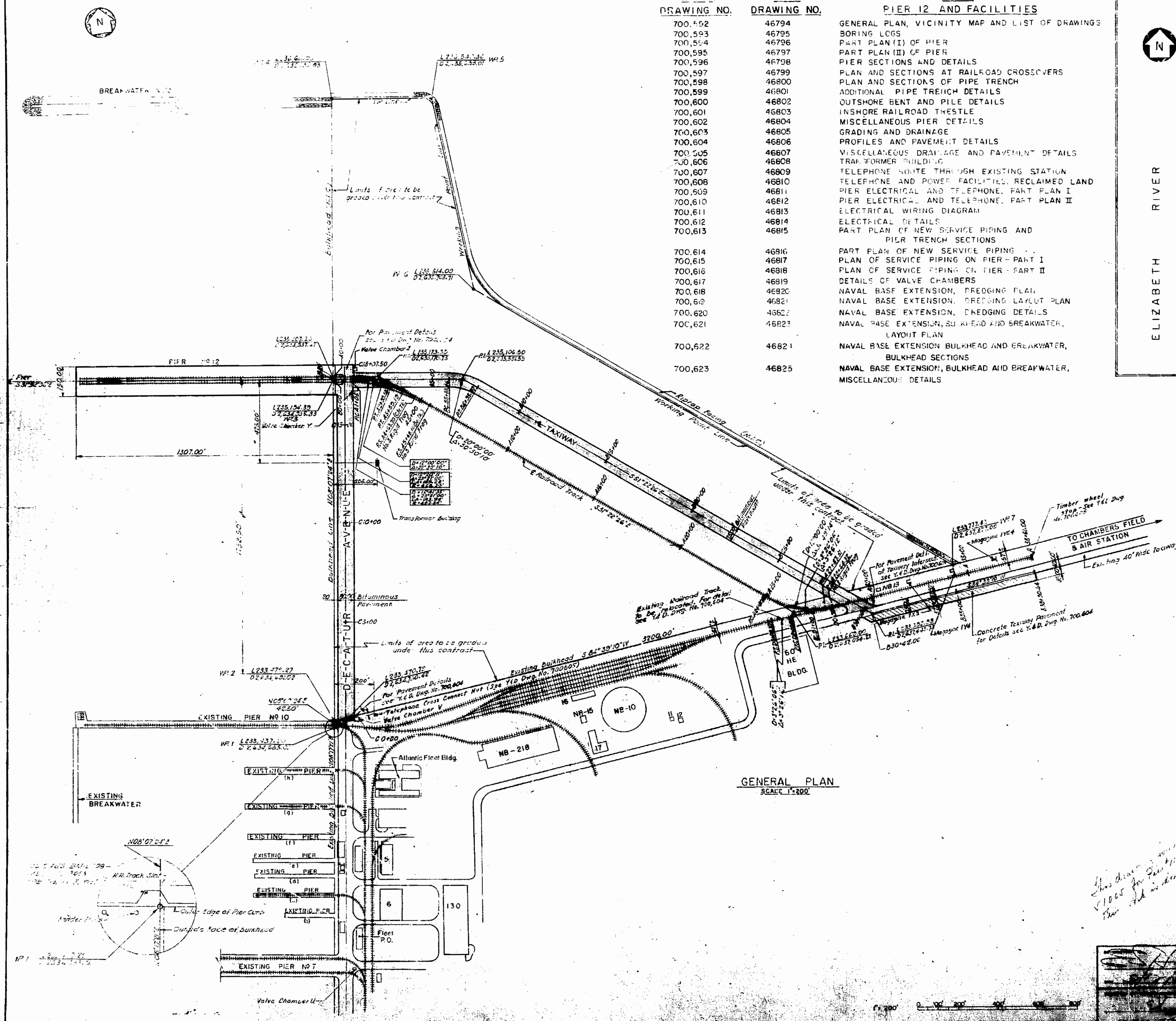
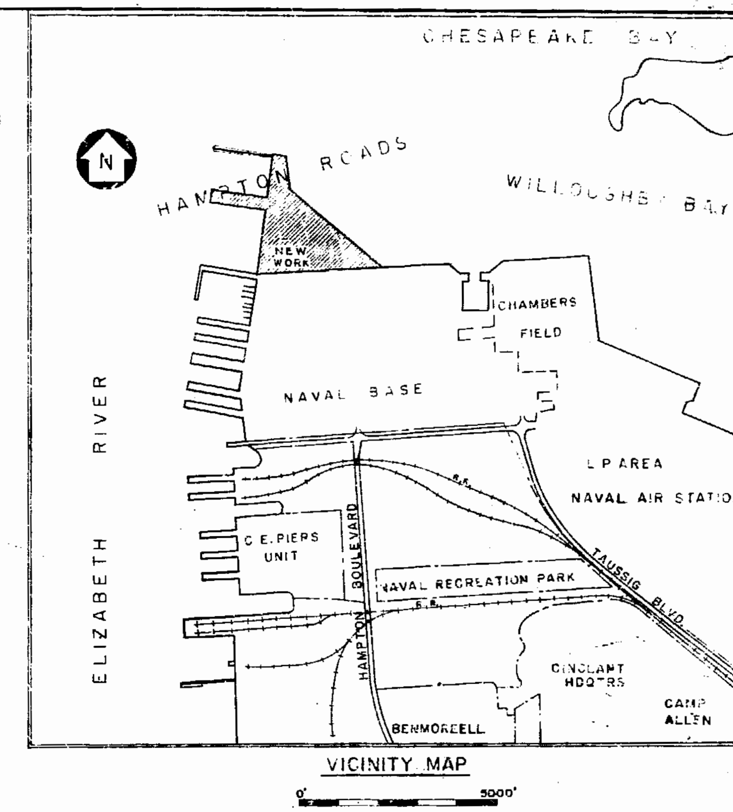


GENERAL PLAN
SCALE 1"=200'

LIST OF DRAWINGS

Y. & D. DRAWING NO.	D.P.W. DRAWING NO.	TITLE PIER 12 AND FACILITIES
700,592	46794	GENERAL PLAN, VICINITY MAP AND LIST OF DRAWINGS
700,593	46795	BORING LOGS
700,594	46796	PART PLAN (I) OF PIER
700,595	46797	PART PLAN (II) OF PIER
700,596	46798	PIER SECTIONS AND DETAILS
700,597	46799	PLAN AND SECTIONS AT RAILROAD CROSSOVERS
700,598	46800	PLAN AND SECTIONS OF PIPE TRENCH
700,599	46801	ADDITIONAL PIPE TRENCH DETAILS
700,600	46802	OUTSHORE BENT AND PILE DETAILS
700,601	46803	INSHORE RAILROAD TRESTLE
700,602	46804	MISCELLANEOUS PIER DETAILS
700,603	46805	GRADING AND DRAINAGE
700,604	46806	PROFILES AND PAVEMENT DETAILS
700,605	46807	MISCELLANEOUS DRAINAGE AND PAVEMENT DETAILS
700,606	46808	TRANSFORMER BUILDING
700,607	46809	TELEPHONE ROUTE THROUGH EXISTING STATION
700,608	46810	TELEPHONE AND POWER FACILITIES, RECLAIMED LAND
700,609	46811	PIER ELECTRICAL AND TELEPHONE, PART PLAN I
700,610	46812	PIER ELECTRICAL AND TELEPHONE, PART PLAN II
700,611	46813	ELECTRICAL WIRING DIAGRAM
700,612	46814	ELECTRICAL DETAILS
700,613	46815	PART PLAN OF NEW SERVICE PIPING AND PIER TRENCH SECTIONS
700,614	46816	PART PLAN OF NEW SERVICE PIPING
700,615	46817	PLAN OF SERVICE PIPING ON PIER - PART I
700,616	46818	PLAN OF SERVICE PIPING ON PIER - PART II
700,617	46819	DETAILS OF VALVE CHAMBERS
700,618	46820	NAVAL BASE EXTENSION, DREDGING PLAN
700,619	46821	NAVAL BASE EXTENSION, DREDGING LAYOUT PLAN
700,620	46822	NAVAL BASE EXTENSION, DREDGING DETAILS
700,621	46823	NAVAL BASE EXTENSION, BULKHEAD AND BREAKWATER, LAYOUT PLAN
700,622	46824	NAVAL BASE EXTENSION BULKHEAD AND BREAKWATER, BULKHEAD SECTIONS
700,623	46825	NAVAL BASE EXTENSION, BULKHEAD AND BREAKWATER, MISCELLANEOUS DETAILS



VICINITY MAP
0' 5000'

NOTES
1. Coordinates are in feet and are referred to the Virginia State Grid (South Zone)
2. All elevations shall be referred to NOB Datum (Mean Low Water Elevation 0.00) Elevation of USC&GS BM-L308 is shown in General Plan.
3. For Profiles A,B,C & D, see Y&D Dwg No. 700,604
4. For General Notes, see Y&D Dwg No. 700,594
5. Y&D Dwgs. No. 700,618 to No. 700,623 are for information only; Work shown on these drawings is not in this contract.

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

D.P.W. DRAWING NO. 46794

DRN. C.D.M.
CHKD. E.F.G.
C.T.
C.D.M.

DEPARTMENT OF THE NAVY
DISTRICT PUBLIC WORKS OFFICE
BUREAU OF YARDS & DOCKS
PRAEGER — KAVANAGH
ENGINEERS
NEW YORK, NEW YORK
U.S. NAVAL BASE
NORFOLK, VIRGINIA

PIER 12 AND FACILITIES
GENERAL PLAN, VICINITY MAP
AND LIST OF DRAWINGS

700592

TEST BORING-B3

MATERIAL	DEPTH IN FT. BELW M.L.W.	BLOWS/FT.	SAMPLE NO.
WATER			
	15'-0		
LT. TAN CLAYEY SAND, WITH NUMEROUS SHELL FRAG.		34	1
		36	2
	25'-0		
		42	3
		34	4
LT. TAN CLAYEY SAND & SHELL FRAGMENTS		32	5
LGE. % OF GRAVEL PCS.		37	6
CLAY DECREASING WITH DEPTH.		34	7
MATERIAL DKR. IN COLOR WITH DEPTH.		39	8
	38'-0		
		35	9
		83	10
GREEN SILTY SAND & SHELL FRAGMENTS.		97	11
SAND MEDIUM FINE GRAINED		83	12
SOME TRACE OF CLAY		136	13
		84	14
	80'-0	79	15
		78	16
		91	17
GREY SILTY SAND & SHELL FRAGMENTS		96	18
SAND FINE TO COARSE GRN.		98	19
		72	20
		84	21
	120'-0		
GREENISH GREY SILTY SANDY CLAY. LGE. % OF SHELL FRAG. SAND FINE GRN.		12	22
		9	23
	130'-0		
GREENISH GREY SAND & SHELL FRAGMENTS		58	24
		69	25
SAND MEDIUM FINE GRAINED POORLY GRADED		98	26
		49	27
		66	28
		84	29
	163'		
GREY SILTY SAND & SHELL FRAGMENTS		94	30
		113	31
	172'		
DK. GREY SILTY SAND	175'	58	32

TEST BORING-B4

MATERIAL	DEPTH IN FT. BELW M.L.W.	BLOWS/FT.	SAMPLE NO.
WATER			
	14'-0		
GREEN SANDY CLAY AND VERY FINE GRAINED		4	1
		6	2
	27'-0		
TAN CLAYEY SAND & SHELL TR. OF GRAVEL		17	3
		14	4
		19	5
		31	6
		44	7
		39	8
		42	9
	62'-0		
BL. GREY SANDY CLAY, LGE. % SHELL, TRACE OF GRAVEL		36	10
	68'-0		
BLUE GREY CLAYEY SAND & SHELL		57	11
		61	12
	79'-0		
		37	13
BLUE GREY SANDY CLAY LGE. % OF SHELL		42	14
		49	15
	93'-0		
BLUE GREY CLAYEY SAND & SHELL TRACE OF GRAVEL.		64	16
		67	17
		71	18
		77	19
		72	20
		84	21
	125'-0	91	22

TEST BORING-B5

MATERIAL	DEPTH IN FT. BELW M.L.W.	BLOWS/FT.	SAMPLE NO.
WATER			
	15'-0		
BROWN CLAYEY SAND & COARSE GRAVEL, SMALL % OF SHELL		16	1
GRAVEL DECREASING WITH DEPTH.		31	2
	28'-0		
TAN CLAYEY SAND & SHELL TRACE OF FINE GRAVEL		48	3
		42	4
		37	5
		41	6
		57	7
	55'-0		
BLUE GREY CLAYEY SAND & SHELL. TRACE OF GRAVEL		62	8
		66	9
		71	10
		79	11
		77	12
		74	13
		61	14
		73	15
		67	16
		70	17
		72	18
		66	19
		63	20
		58	21
	125'-0	71	22

TEST BORING-B2

MATERIAL	DEPTH IN FEET BELW M.L.W.	BLOWS/FT.	SAMPLE NO.
WATER			
	12'-0		
LIGHT BROWN SAND, SHELLS, TRACE OF GRAVEL		51	1
		164	2
		41	3
		46	4
		33	5
	39'-0	44	6
BROWN CLAYEY SAND, SHELLS, TRACE OF GRAVEL		36	7
		52	8
	52'-0	79	9
BLUE GREY SAND, SHELLS, TRACE OF CLAY		76	10
SAND INCREASING & BECOMING FINER GRAINED WITH DEPTH		149	11
		59	12
		79	13
		53	14
		29	15
	83'-0	33	16
GREY SAND, SHELLS, TRACE OF GRAVEL		41	17
		39	18
		44	19
	108'-0	21	20
BLUE GREY SILTY CLAY, LARGE % SHELL FRAGMENTS DECREASING WITH DEPTH		17	21
		18	22
		14	23
		12	24
	125'-0		

TEST BORING-4

MATERIAL	DEPTH IN FEET BELW M.L.W.	BLOWS/FT.	SAMPLE NO.
WATER			
	9'-6		
BLK. SILT, GREY SAND, SOME SHELL GRAVEL & COAL	13'-0	Push	1
		20-27	2
BROWN SAND, LITTLE SILT, LARGE & SMALL GRAVEL			
	23'-0	15-19	3
COARSE BROWN SAND, TRACE OF SILT & SHELLS		20-27	4
		17-23	5
	54'-0	75-112	6
GREY MEDIUM TO COARSE SAND, SILT & SHELLS		21-28	7
	75'-0	40-52	8

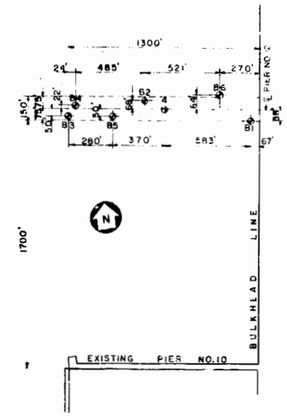
TEST BORING-B6

MATERIAL	DEPTH IN FEET BELW M.L.W.	BLOWS/FT.	SAMPLE NO.
WATER			
	9'-0		
BROWN SILTY SAND & SHELL FRAGMENTS, SOME GRAVEL		20	1
		2	
OBSTRUC. HERE	23'-0		
		36	3
TAN SILTY SAND SOME SHELL FRAGMENTS & GRAVEL.		41	4
		47	5
COARSE GRAV. SAND MED. FINE GRAINED		49	6
		43	7
		41	8
	63'-0		
		48	9
		46	10
		42	11
BLUEISH GREY CLAYEY SAND SHELL FRAG.		40	12
TRACE OF SMALL GRAVEL		37	13
		39	14
		46	15
	87'-0		
BLUE SILTY CLAY TRACE OF SHELL FRAGMENTS & SAND		17	16
	93'-0		
BLUE SILTY SAND, LGE. % OF COARSE SHELL FRAGMENTS		97	17
	98'-0		
BLUE SILTY SAND, TRACE OF SHELL FRAG.		15	18
	103'-0		
BLUE SILTY CLAY, TRACE OF MED. FINE SAND SLIGHT TRACE OF SHELL FRAG.		11	19
		*	U.S.
		20	21
	119'-0		
VERY SOFT MUCKY STRATA NO SAMPLE OBTAINED		0	N.S.
	125'-0	13	22
BLUE SILTY CLAY	128'-0		
BLUE CLAYEY SILTY SAND, TR. OF SHELL FRAG.		28	23
	153'-0		
SAND STRATA VERY CLEAN		44	24
SAND FINE GRAINED POORLY GRADED.		36	25
		24	26
		18	27
	156'	42	28
BLUE SILTY SAND, TRACE OF SHELL FRAG. & GRAVEL		27	29
	163'		
BLUE SAND, TRACE OF SHELL		14	30
	167'		
BLUE SANDY CLAY, LGE. % OF SHELL FRAG.		11	31
	175'	18	32

* UNDISTURBED SAMPLE

TEST BORING-B1

MATERIAL	DEPTH IN FEET BELW M.L.W.	BLOWS/FT.	SAMPLE NO.
WATER			
	6'-0		
TAN SANDY SHELL FRAG. & GRAVEL		18	1
	19'-0	40	2
		25	3
TAN CLAYEY, SANDY SHELL FRAGMENTS		29	4
TRACE OF GRAVEL		35	5
	40'-0	40	6
		43	7
TAN CLAYEY, SANDY SHELL FRAGMENTS		49	8
MIXED FINE GRAINED SAND		47	9
	58'-0	52	10
		60	11
GREY CLAYEY SILT SHELL FRAGMENTS		45	12
TRACES OF MED. FINE GRAINED SAND		40	13
	74'-0		
GREY SILTY CLAY, SOME SAND INCREASING WITH DEPTH.		50	14
		25	15
	88'-0	22	16
GREY SILTY SAND, TRACE OF SHELL FRAG.		27	17
	93'-0	28	18
GREY SILTY CLAY TRACE OF SHELL FRAG.		13	19
		12	20
		30	21
		22	22
	122'-0	13	23
GREY SILTY SAND TRACE OF SHELLS	125'-0	43	24



LOCATION PLAN
SCALE 1" = 400'

NOTES

1-2" O.D. 1.375" I.D. Split Spoon Sampler
2-Spoon Hammer 140 lbs.
3-Drop 30 inches.
4-All Depths In Feet below M.L.W.
5-The area beneath the pier will have been dredged to EL.-30 prior to beginning construction under this contract. Dredging is not included in this contract.
6-The boring information shown is solely for the information of the contractor. The Government does not guarantee that the borings are representative of the actual materials at the site.

1" = 400' 0' 400' 800' 1200' 1600'

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

D.P.W. DRAWING NO. 46795

DEPARTMENT OF THE NAVY, DISTRICT PUBLIC WORKS OFFICE — BUREAU OF YARDS & DOCKS, 5 TH NO. NORFOLK, VA.

ENGINEERS: PRAEGER — KAVANAGH, NEW YORK, NEW YORK

U.S. NAVAL BASE
NORFOLK, VIRGINIA

PIER 12 AND FACILITIES
BORING LOGS

DES. C.D.M.
DRWN. E.F.S.
CHK. C.D.M.
PRINC. ENGR. C.D.M.

DPWO
CHK.
DR. DRAFTSMAN
BY. ASST.
DR. DIR. Cramer
GENERAL DIR.

APPROVED: 15 MAR 1956
SUPVG. IN CHARGE
DATE

APPROVED FOR BUREAU OF YARDS & DOCKS
BY DIR. PUB. WORKS OFFICE
DATE 15 MAR 1956

SCALE AS SHOWN
SPEC. 47351
SHEET 2 OF 32
NO. 89504
Y & D DRAWING NO. 700,593

SATISFACTORY TO
DATE 3/17/56

SUBMITTED BY PRAEGER-KAVANAGH
DATE 10 MAR 1956

FILE 3D DRAWING
SHEET 2 OF 32
SOLICITATION NO. 89504 DATED 24 FEB 38

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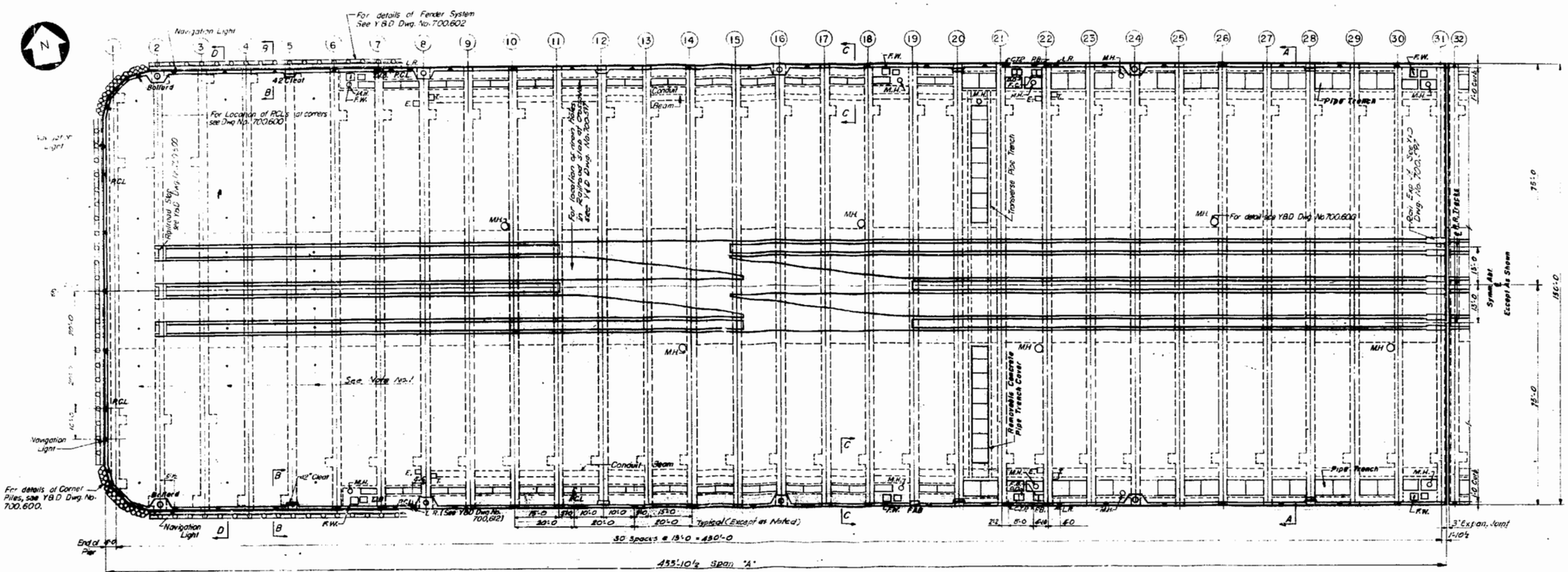
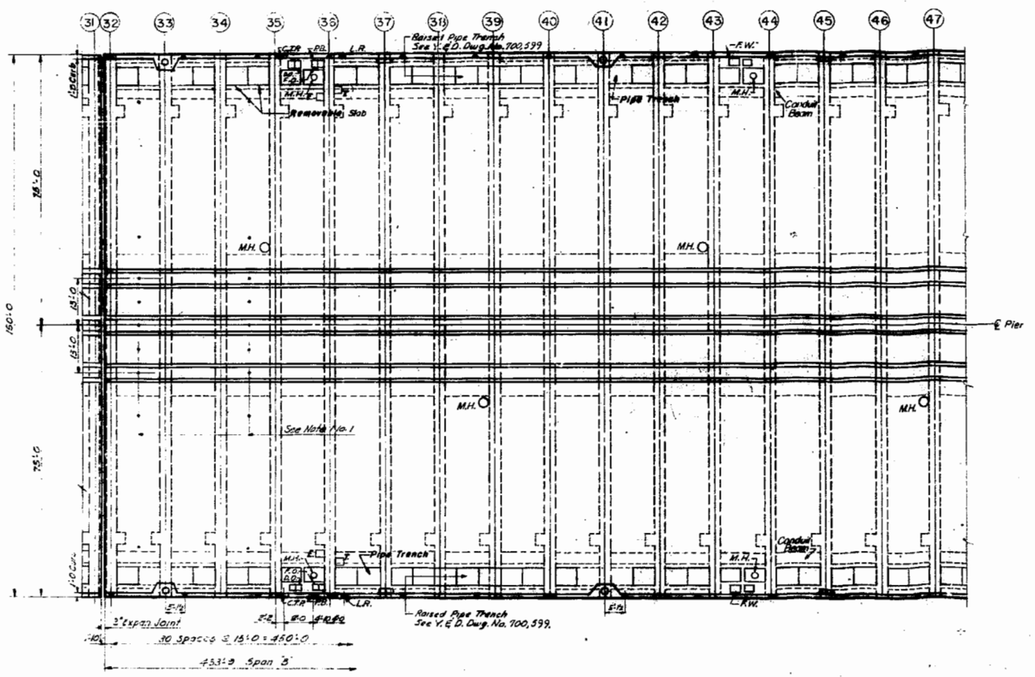


PLAN OF SPAN "A"

SCALE: 1/16" = 1'-0



PART PLAN OF SPAN "B"

SCALE: 1/16" = 1'-0

1/16" = 1'-0" 0 5' 10' 20' 30' 40' 50' 60'

1" = 300' 0 300' 600' 900' 1200'

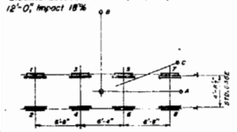
GENERAL NOTES:

1 All work and detailing under this contract shall conform to the applicable requirements of:
- (a) Design Criteria No. 29, Concrete; Department of the Navy, Bureau of Yards and Docks, February 1954.
- (b) Standards of Design for Structural Steel, No 12Yb; Department of the Navy, Bureau of Yards and Docks, November 1946.

2 MATERIALS
- (a) Concrete $f'c$ = 3500 p.s.i. except as noted.
- (b) Reinforcing Steel (Intermediate Grade) f_s = 20,000 p.s.i.
- (c) Structural Steel f_s = 20,000 p.s.i.
- (d) Timber shall be Treated Stress Grade Douglas Fir or Yellow Pine.

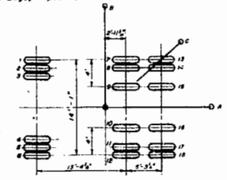
3 LOADS
- (a) Vertical Load
  - (1) Uniform Live Load of 600 p.s.f.
  - (2) Airplane Wheel Load of 40,000 lbs; Minimum Wheel Spacing of 10'-0"; Tire Pressure of 150 p.s.i., Single Wheel Type Landing Gear, Tire Size 44" x 13", Impact 15 %.
  - (3) Railroad Loading – Diesel – Electric Locomotive Crane, Capacity 40 Ton at 12'-0", Impact 18%

WHEEL LOADS – MAX. LIFT (lb)		
Boom at	Wheel	Load (lb)
A	1,2,3,4	33,000
	5,6,7,8	21,700
B	1,3,5,7	47,500
	2,4,6,8	17,200
C	1,3	60,600
	2,4	17,500
	5,7	71,000
	6,8	20,500



  - (4) 40 – Ton Truck Crane, Wide Gage, Impact 15 %

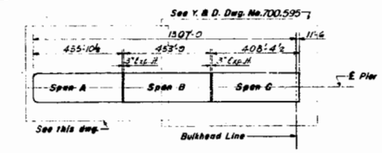
TIRE LOADS – MAX. LIFT (lb)		
Boom at	Tire	Load (lb)
A	1 TO 6	8,270
	7 TO 18	14,115
B	1 TO 6	9,180
	7,8,13,14	16,280
	9,15	13,330
	10,16	8,070
	11,12,17,18	5,020
C	1 TO 6	4,640
	7,8,13,14	18,410
	9,15	15,680
	10,16	9,890
	11,12,17,18	6,500



  - (5) Railroad Train Loading – Diesel – Electric Locomotive Crane followed by Uniform Load of 6,000 lbs. per linear foot of Track.
- (b) Lateral Load
  - (1) Wind – Design Wind Velocity V = 90 m.p.h. Velocity Pressure $q = .00256V^2$.
    - q = Velocity Pressure in p s f
    - V = Velocity of Wind in M.P.H.
  - (2) Surge – 33% of Wind Load
  - (3) Current – Design Current Velocity = 2 Knots

Distribution of Wind, Surge and Current Loads is assumed over 360 Ft. of Camel and 450 Ft. of Pier. Allowable Working Stresses are increased to 150% of Basic Unit Stresses for Combined Loading of 90 MPH Wind plus Surge plus Current.
- (c) Longitudinal Forces
  - (1) Braking Force of Trains – 15% of R.R. Live Load without Impact
  - (2) Force on Railroad Car Stop at End of each Track – 75,000 lbs.

4 PILES
- (a) Precast Concrete Bearing Pile. – 50 Ton Capacity
- (b) Treated Timber Bearing Pile – 20 Ton Capacity
- (c) Treated Timber Fender Pile – 5 Ton Capacity



KEY PLAN

Scale: 1" = 300'

LEGEND

F.O. – Fuel Oil Outlet (8" dia.)
D.O. – Diesel Oil Outlet (4" dia.)
F.W. – Fresh Water Outlet
M.H. – Manhole 24" Dia.
C.T.P. – Combined Telephone & Pushbutton Station
T.J.B. – Telephone Station
F.A.B. – Fire Alarm Box
P.C.L. – Pier Curb Light
E. – Electrical Pull Box
T. – Telephone Pull Box
L.R. – Lighting Receptacle
P.B. – Pushbutton Station

NOTES

1. 3" ϕ Std. Steel Pipe @ 30'-0" for drain hoses in center of alternate bays. For detail and location, see Typical Transverse Half-Section Y.B.D. Dwg. No. 701,596
2. For Sections A-A, B-B, C-C & E-E, See Y.B.D. Dwg. No. 700,595.
3. For details of PCL, Navigation Lights, T.J.B., C.T.P., F.B. and F.A.B. see Y.B.D. Dwg. No. 700,600.

SYMBOL	DESCRIPTION	DATE	APPROVAL

REVISIONS

D.Y.N. DRAWING NO. 46796

DEPARTMENT OF THE NAVY, DISTRICT PUBLIC WORKS OFFICE — BUREAU OF YARDS & DOCKS, 5 TH NAV. DISTRICT, VA.

PRAEGER – KAVANAGH, NEW YORK, NEW YORK

U.S. NAVAL BASE NORFOLK, VIRGINIA

FIER 12 AND FACILITIES
PART PLAN (I) OF PIER

DES. C.D.M.
DRWN. E.F.G.
CHK. C.T.
FIELD INSP. CDM

OPWO
CHK. NER
DR. MGR. H.R.Kellgren
QT. ASST.
DR. MGR. Praeger
COORD. DRG.

APPROVED: OFFICER IN CHARGE — DATE 15 MAR 1956

APPROVED FOR BUREAU OF YARDS & DOCKS BY THE CHIEF OF BUREAU: W. Schlen — DATE 15 MAR 1956

SCALE AS SHOWN — DWG. 47391

SHEET 3 OF 32 — JOB 82998

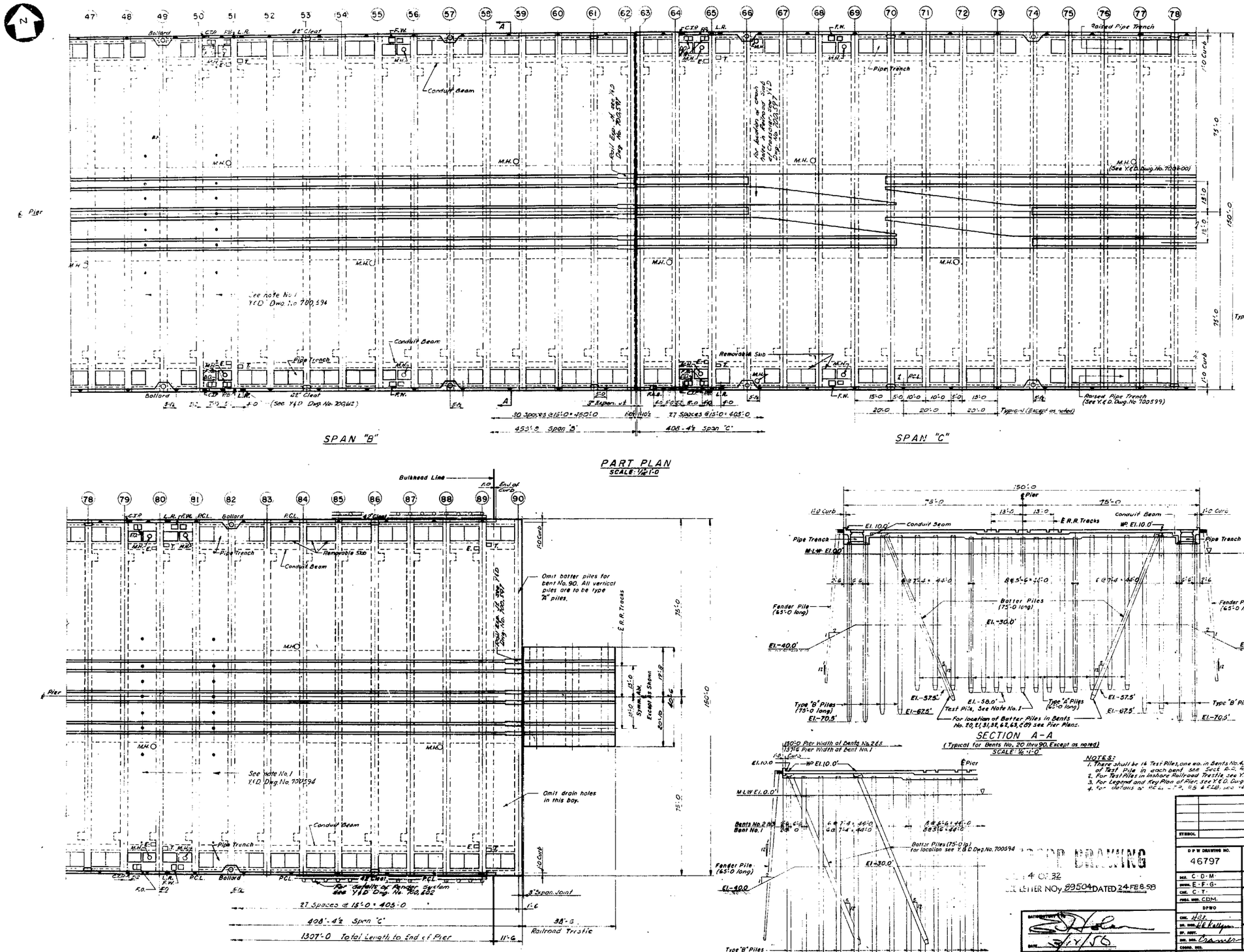
Y & D DRAWING NO. 700,594

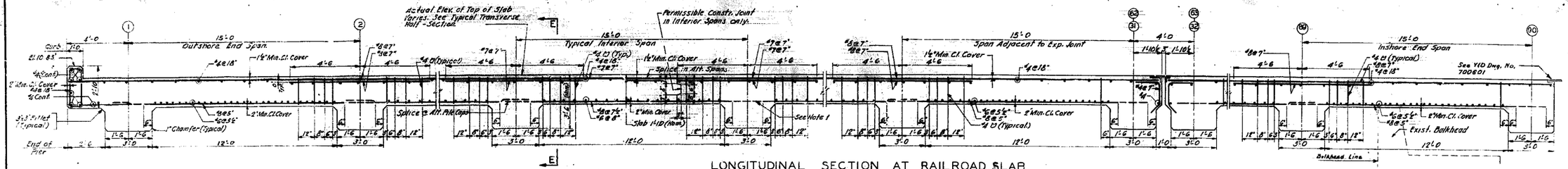
DATE 3/12/56

SUBMITTED BY PRAEGER-KAVANAGH — DATE 10 MAR 1956

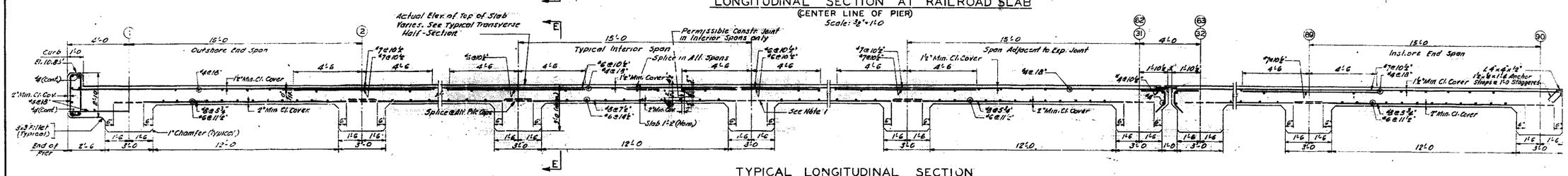
DRAWING SHEET 3 OF 32 SEE LITER NOV 89504 DATED 24 FEB 58

FILMED

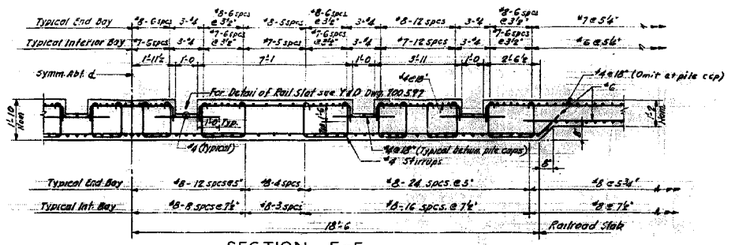

SPAN "B"
SPAN "C"
PART PLAN
SCALE: 1/16"=1'-0
Conduit Beam
Pipe Trench
Raised Pipe Trench
Removable Slab
See note No. 1 Y&D Dwg. No. 700,594
Omit batter piles for bent No. 90. All vertical piles are to be type "A" piles.
Omit drain holes in this bay.
For details of fender system see Y&D Dwg. No. 700,602
27 Spaces @ 15'-0 = 405'-0
408'-4½ Span "C"
1307'-0 Total Length to End of Pier
Railroad Trestle
PART PLAN OF SPAN "C"
SCALE: 1/16"=1'-0
150'-0 Pier Width
For Details not shown see Sect. A-A
SECTION C-C
(Typical for Bents No. 6 thru 19)
SCALE: 1/16"=1'-0
SECTION A-A
(Typical for Bents No. 20 thru 90, Except as noted)
SCALE: 1/16"=1'-0
SECTION B-B
(Typical for Bents No. 4 & 5)
SCALE: 1/16"=1'-0
SECTION D-D
(Typical for Bents No. 1, 2 & 3)
NOTES:
1. There shall be 14 Test Piles, one ea. in Bents No. 4, 9, 14, 19, 24, 29, 34, 39, 44, 49, 54, 59, 64, 70, 76, 82, & 88. For location of Test Pile in each bent see Sect. A-A. Test Pile shall be Type "B" pile.
2. For Test Piles in Inshore Railroad Trestle see Y.&D. Dwg. No. 700601.
3. For Legend and Key Plan of Pier, see Y.&D. Dwg. No. 700,594.
4. For details at HE-1, -2, -3 & FEB, see HE Dwg. No. 700601.
SYMBOL | DESCRIPTION | DATE | APPROVAL
REVISIONS
D P W DRAWING NO. 46797
DEPARTMENT OF THE NAVY DISTRICT PUBLIC WORKS OFFICE
BUREAU OF YARDS & DOCKS 5TH AND BRAMBLE, VA.
PRAEGER — KAVANAGH
ENGINEERS
NEW YORK, NEW YORK
U.S. NAVAL BASE
NORFOLK, VIRGINIA
PIER 12 AND FACILITIES
PART PLAN(II) OF PIER
SCALE AS SHEET 4 OF 32
LETTER NO. 89504 DATED 24 FEB 58
SCALE AS SHOWN
700,595
FILMED



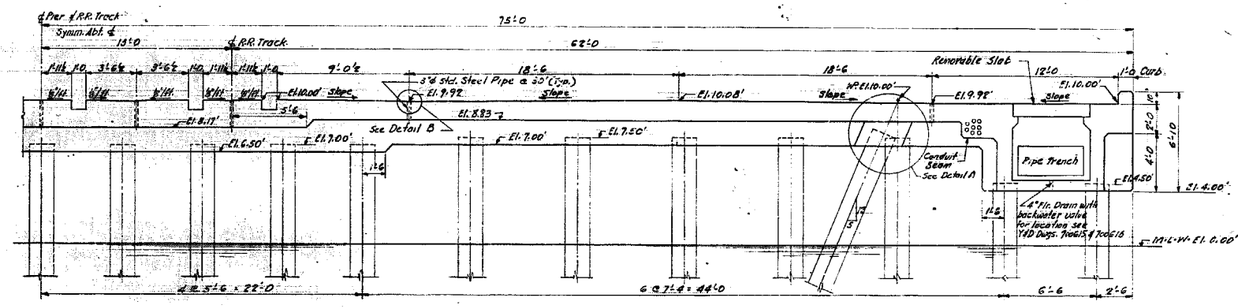
LONGITUDINAL SECTION AT RAILROAD SLAB
(CENTER LINE OF PIER)
Scale: 3/8"=1'-0



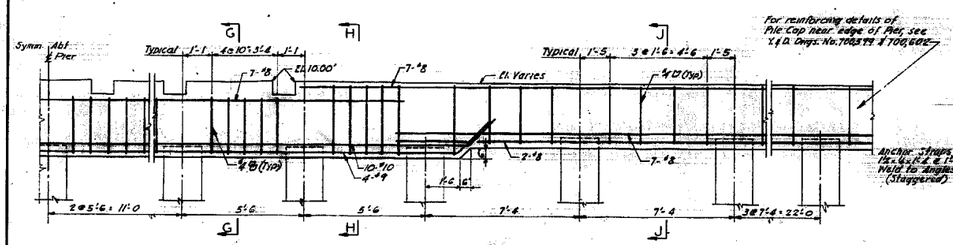
TYPICAL LONGITUDINAL SECTION
(EXCEPT AT RAILROAD SLAB & PIPE TRENCH)
Scale: 3/8"=1'-0



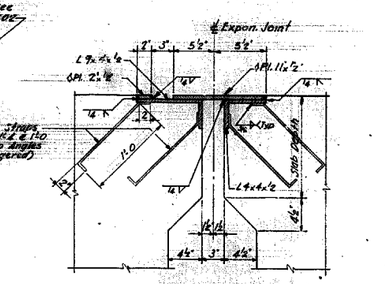
SECTION E-E
Scale: 3/8"=1'-0



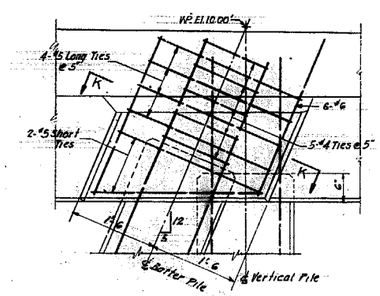
TYPICAL TRANSVERSE HALF-SECTION
Scale: 1/4"=1'-0



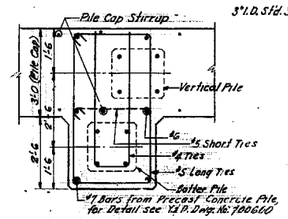
TYPICAL PILE CAP REINFORCING
Scale: 3/8"=1'-0



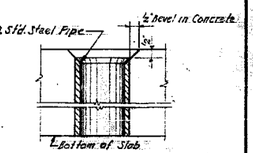
TYPICAL EXPANSION JOINT DETAIL
Scale: 1½"=1'-0



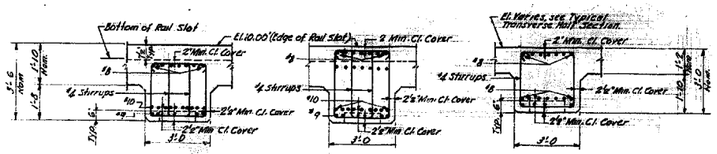
DETAIL A
Scale: 1"=1'-0



SECTION K-K
Scale: 1/2"=1'-0



DETAIL B
Not To Scale



SECTION G-G
Scale: 1/2"=1'-0

SECTION H-H
Scale: 1/2"=1'-0

SECTION J-J
Scale: 1/2"=1'-0

NOTES:
1. Every other bar in the bottom face of the slabs of the Pile Cap shall be continuous as shown dashed lines in the Longitudinal Section.
2. All reinforcing bars shall be lapped 25 diameters at splices.

RECORD DRAWING
SHEET 5 OF 32
SEE LETTER NO. 89504 DATED 24 FEB. 56

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

D P W DRAWING NO. 46798

DEPARTMENT OF THE NAVY, DISTRICT PUBLIC WORKS OFFICE — BUREAU OF YARDS & DOCKS, 9TH ND NORFOLK, VA.

ENGINEERS: PRAEGER — KAVANAGH, NEW YORK, NEW YORK

DES. T.A.S.
DWN. H.L.K.
CHK. R.H.B. C.T.
PROJ. ENG. C.D.M.
DPWO
CHK. H.R.K.
SR. MAST. H.R.Kelly
DIV. MAST.
SUB. ENG. J.A.Brown

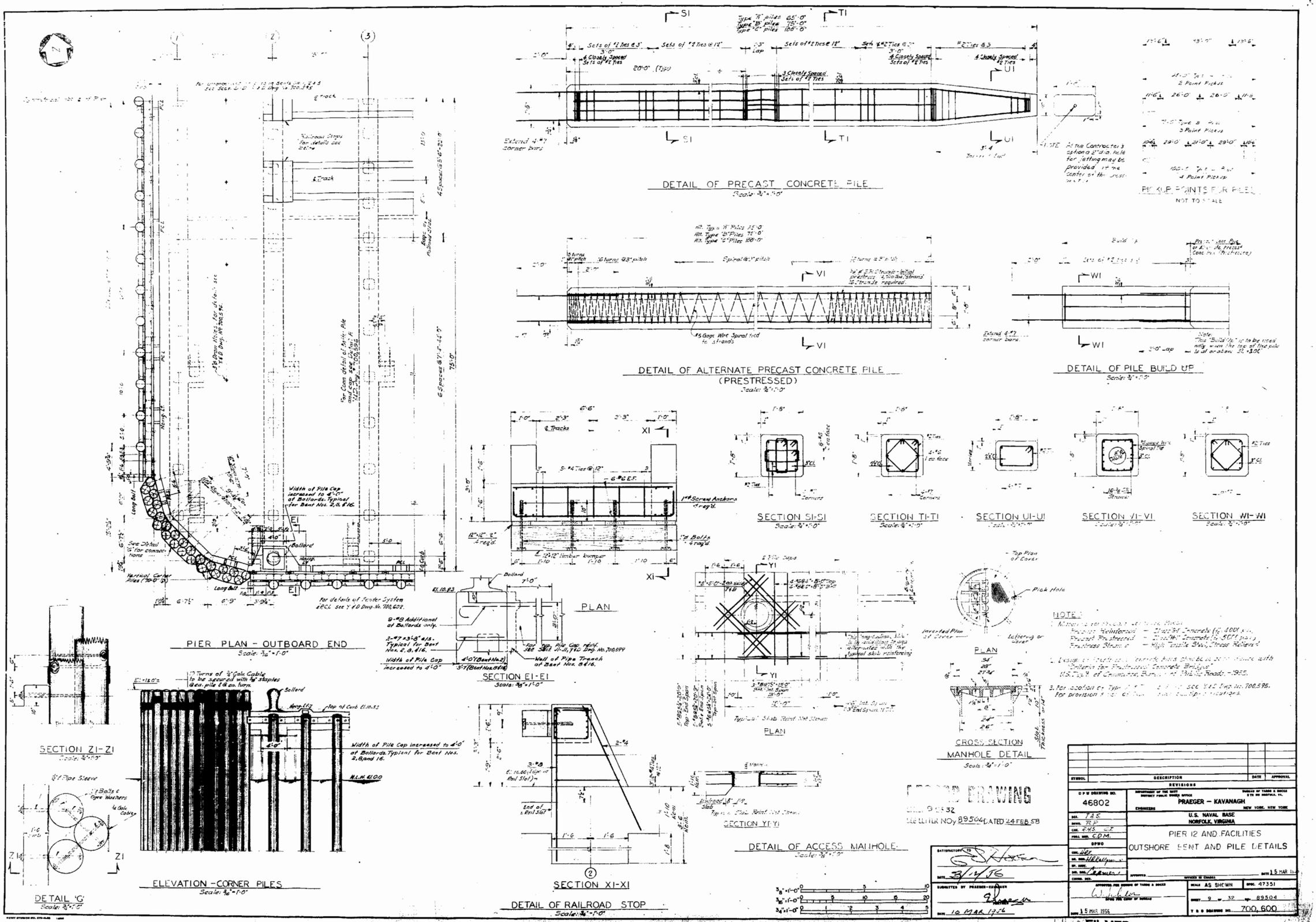
U.S. NAVAL BASE
NORFOLK, VIRGINIA

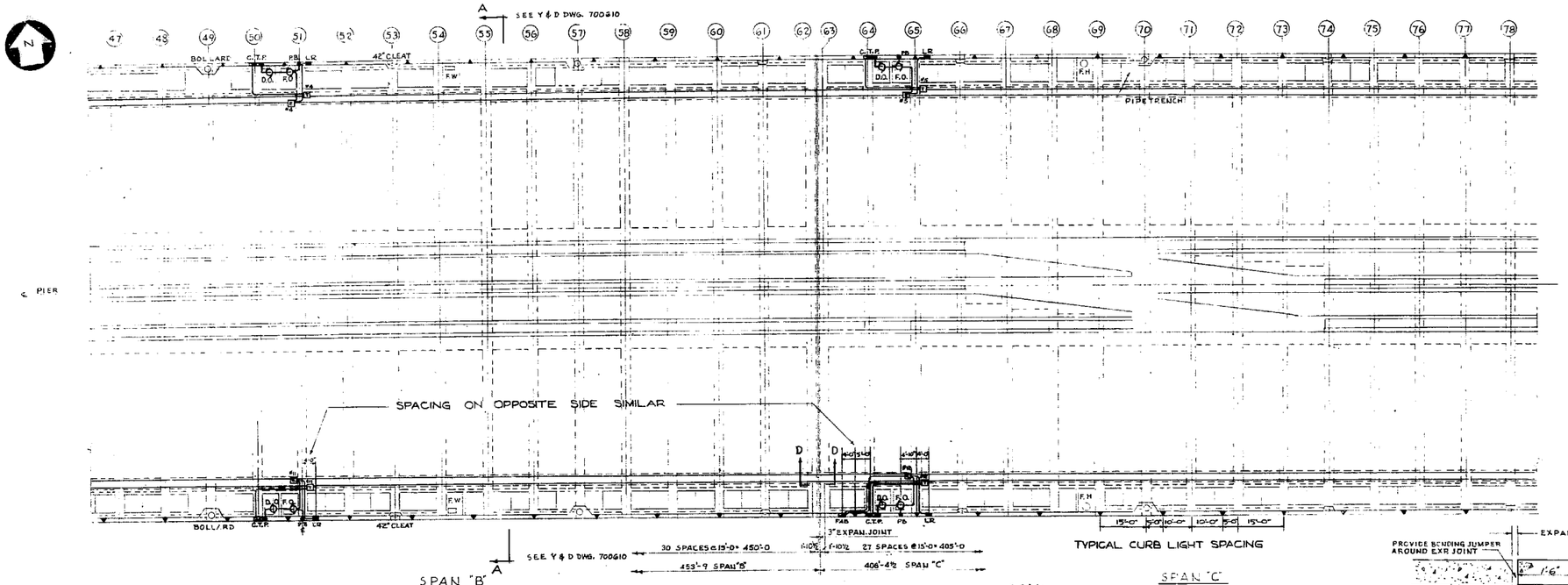
PIER 12 AND FACILITIES
PIER SECTIONS AND DETAILS

APPROVED: 15 MAR 1956

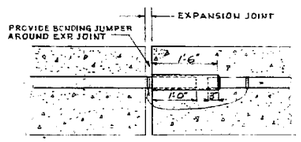
SCALE: AS SHOWN — SPEC. 47351
SHEET 5 OF 32 — NO. 89504
Y & D DRAWING NO. 700596

FILMED


PIER PLAN - OUTBOARD END
Scale: 3/32" = 1'-0"
DETAIL OF PRECAST CONCRETE PILE
Scale: 3/4" = 1'-0"
PICK UP POINTS FOR PILES
NOT TO SCALE
DETAIL OF ALTERNATE PRECAST CONCRETE PILE
(PRESTRESSED)
Scale: 3/4" = 1'-0"
DETAIL OF PILE BUILD UP
Scale: 3/4" = 1'-0"
SECTION S1-S1
Scale: 3/4" = 1'-0"
SECTION T1-T1
Scale: 3/4" = 1'-0"
SECTION U1-U1
SECTION V1-V1
SECTION W1-W1
PLAN
SECTION E1-E1
Scale: 3/8" = 1'-0"
SECTION Z1-Z1
Scale: 3/4" = 1'-0"
DETAIL 'G'
Scale: 3/4" = 1'-0"
ELEVATION - CORNER PILES
Scale: 3/8" = 1'-0"
SECTION X1-X1
DETAIL OF RAILROAD STOP
Scale: 3/4" = 1'-0"
PLAN
SECTION Y1-Y1
DETAIL OF ACCESS MANHOLE
Scale: 3/8" = 1'-0"
CROSS SECTION
MANHOLE DETAIL
Scale: 3/8" = 1'-0"
NOTES
1. Materials for Precast Concrete Piles:
Precast Reinforced = Class "B" Concrete (f'c 4000 p.s.i.)
Precast Prestressed = Class "H" Concrete (f'c 5000 p.s.i.)
Prestress Strand = High Tensile Steel, Stress Relieved
2. Design of precast concrete piles should be in accordance with "Criteria for Prestressed Concrete Bridges" U.S. Dept. of Commerce, Bureau of Public Roads - 1955.
3. For location of Pier 12 see Y&D Dwg. No. 700,595.
For Division 9 (C) of Pier 12 see Y&D Dwg. No. 700,596.
CHANGE DRAWING
SEE LETTER NO. y 89504 DATED 24 FEB 58
DPW DRAWING NO. 46802
PRAEGER - KAVANAGH
NEW YORK, NEW YORK
U.S. NAVAL BASE
NORFOLK, VIRGINIA
PIER 12 AND FACILITIES
OUTSHORE BENT AND PILE DETAILS
SCALE AS SHOWN
SHEET 9 OF 32
Y & D DRAWING NO. 700,600
FILMED

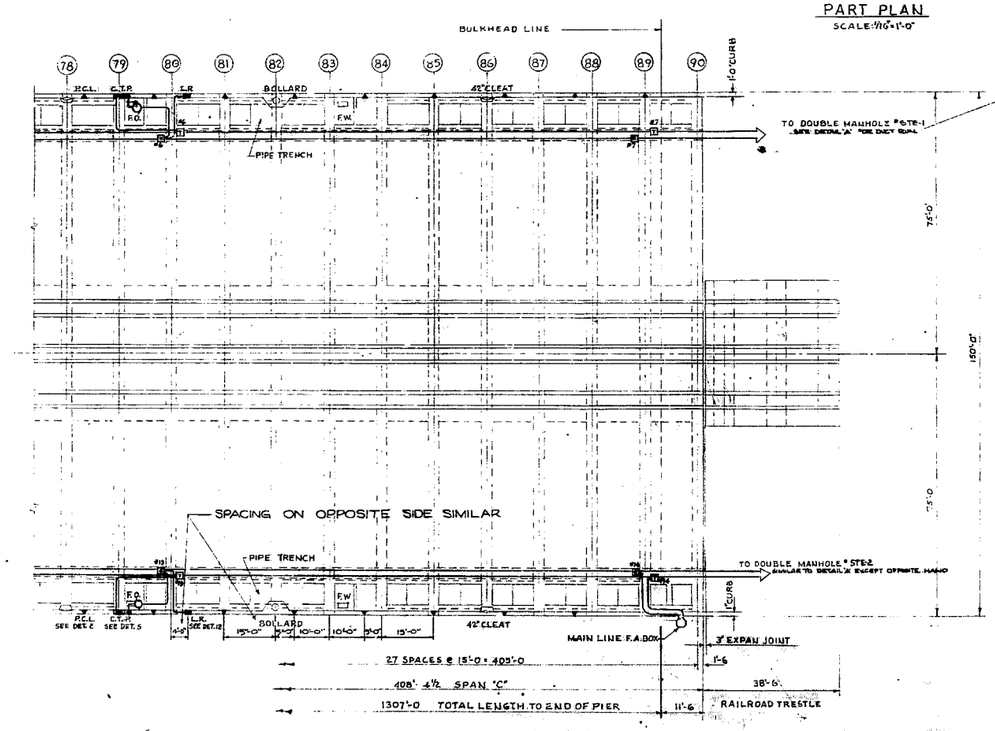


PART PLAN
SCALE: 1/16" = 1'-0"

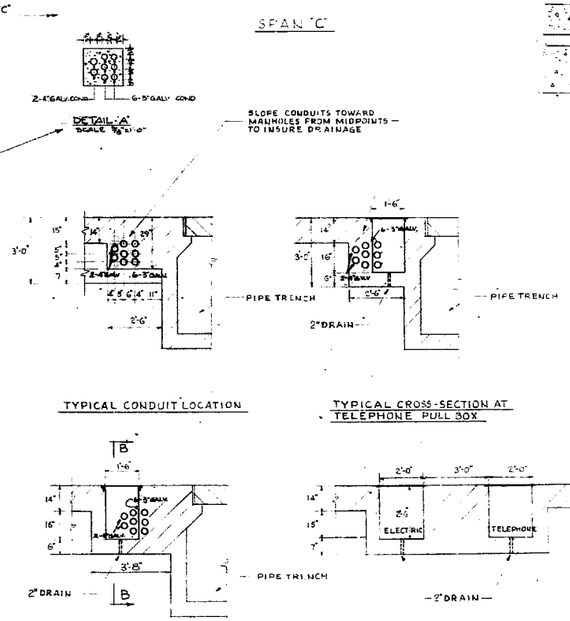


SECTION "D-D"
CONDUIT EXPANSION JOINT
NO SCALE

NOTES:
1. SEE Y & D DWG. 700611 FOR SYMBOLS.
2. SEE Y & D DWG. 700612 FOR ELEC. DETAILS.



PART PLAN OF SPAN "C"
SCALE: 1/16" = 1'-0"



TYPICAL CONDUIT LOCATION

TYPICAL CROSS-SECTION AT TELEPHONE PULL BOX

TYPICAL CROSS-SECTION AT ELECTRIC PULL BOX

SECTION B-B

PULL BOX & CONDUIT SECTIONS ON PIER
SCALE: 3/8" = 1'-0"

GRAPHIC SCALES

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

D P W DRAWING NO. 46811

DEPARTMENT OF THE NAVY — BUREAU OF YARDS & DOCKS — DISTRICT PUBLIC WORKS OFFICE — 5 TH AVE. BROOKLYN, N.Y.

ENGINEERS: PRAEGER — KAVANAGH — NEW YORK, NEW YORK

U.S. NAVAL BASE — NORFOLK, VIRGINIA

PIER 12 AND FACILITIES
PIER ELECTRICAL AND TELEPHONE
PART PLAN NO. 1

DES. H.G.L.
DRWN. F.T.
INK. H.G.L.
TRACD. CDM.
SPEC.
CHK. BM
DR. MGR. A.L.L.
EN. MGR.
BR. MGR. Samuel
CONST. ENG.
APPROVED
DATE 8 FEB 1956

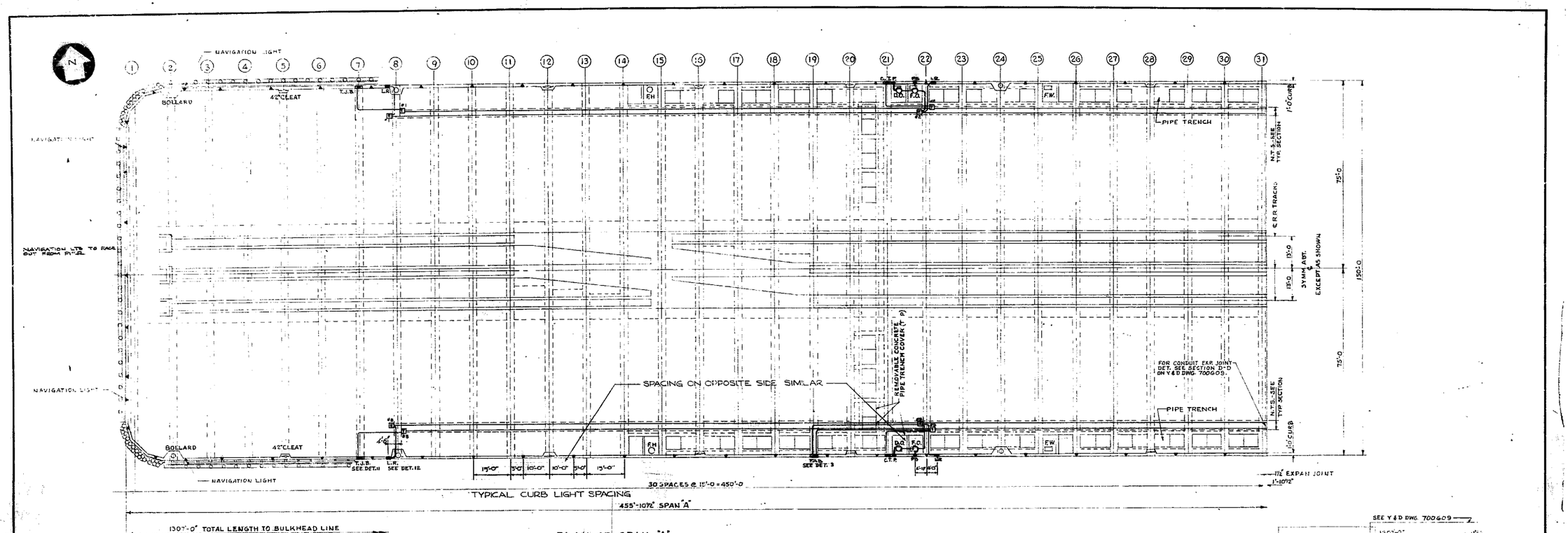
SCALE AS SHOWN — SPEC. 47351
SHEET 18 OF 32 — 89504
Y. & D. DRAWING NO. 700609

DATE 15 MAR 1956

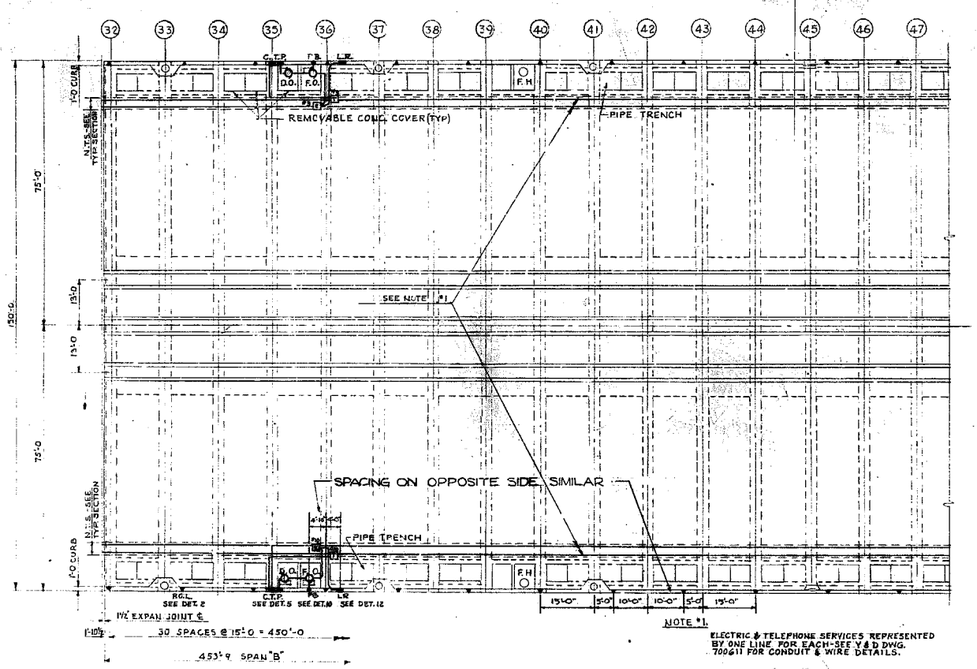
DATE 3/12/56

DATE 10 MAR 1956

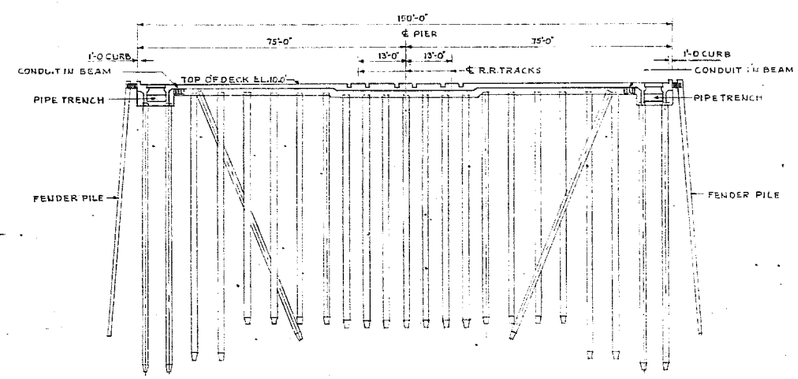
FILMED



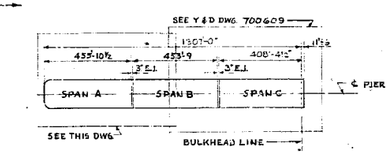
PLAN OF SPAN "A"
SCALE 1/16"=1'-0"



PART PLAN OF SPAN "B"
SCALE 1/16"=1'-0"



SECTION A-A
SCALE: 1/16"=1'-0"
(SEE Y & D DWG. 700609)



KEY PLAN
SCALE 1"=300'

NOTES:
1. SEE Y & D DWG. 700611 FOR SYMBOLS.
2. SEE Y & D DWG. 700612 FOR ELEC. DETAILS.

GRAPHIC SCALES
1/16" = 1'-0"
1" = 300'

SYMBOL	DESCRIPTION	DATE	APPROVAL
	REVISIONS		

D P W DRAWING NO. 46812

DEPARTMENT OF THE NAVY
DISTRICT PUBLIC WORKS OFFICE
BUREAU OF YARDS & DOCKS
5TH NO NORFOLK, VA.

ENGINEERS PRAEGER — KAVANAGH NEW YORK, NEW YORK

U.S. NAVAL BASE
NORFOLK, VIRGINIA

PIER 12 AND FACILITIES
PIER ELECTRICAL AND TELEPHONE
PART PLAN NO. 2

DES. H.G.L.
DRWN. D.G.
CHK. H.G.L.
VAL. DES. C.D.M.
DPWO
CHK. B.M.
DR. DES. A.L.L.
DF. DIST.
DR. DES. Chanaud
DRWG. DES.

SATISFACTORY TO
DATE 3/12/56

SUBMITTED BY PRAEGER-KAVANAGH
DATE 10 MAR 1956

APPROVED
DATE 15 MAR 1956

APPROVED FOR BUREAU OF YARDS & DOCKS
W. Siller
CHIEF CIVIL DIVISION
DATE 16 MAR 1956

OFFICER IN CHARGE

SCALE AS SHOWN
SPEC. 47351
SHEET 19 OF 32
DR. 89504
Y & D DRAWING NO. 700.610

FILMED