

BRIDGE FOUNDATION BORING LOG

PROJECT I-72-2(10)40
ROUTE FAI 72
SEC. 74-68 VB
COUNTY PIATT

BRIDGE FAI 72 OVER
NORFOLK AND WESTERN R.R.
STA. 1438 + 71.2

Date 11-15-71
Bored By BAKER
Checked By CWK

Boring No. 1
Station 1436+72
Offset 56' RT

Elevation	Z	Qu t/s.f.	w (%)	Surface Water El.	Groundwater El. at Completion	After 24 Hours	Elevation	Z	Qu t/s.f.	w (%)
Ground Surface	640.2 0									
STIFF BLACK SILTY CLAY	638.7									
LOOSE BROWN SAND	636.2	10	3.1B	23						
	-5	6	1.0B	24						
LOOSE BROWN SAND	629.2	7	-	-						
	-10	15	-	-						
MEDIUM BROWN SAND AND GRAVEL	618.2	23	-	-						
	-15	25	-	-						
	-20									
	-25									
	-30									
	-35									
	-40									
	-45									

N-Standard Penetration Test -
Blows per foot to drive 2"
O.D. Split Spoon Sampler 12" with
140# hammer falling 30".

Qu-Unconfined Compressive
Strength - t/sf

w-Water Content-percentage
of oven dry weight-%.

Type failure:
B-Bulge Failure
S-Shear Failure
E-Estimated Value
P-Penetrometer

60

	Elevation	N	Qu t/s.f.	w (%)		Elevation	N	Qu t/s.f.
DENSE GRAY SILT LOAM	-45	44	—	—				
592.7								
DENSE VERY FINE GRAY SAND								
589.7	-50	32	—	—		-75		
LIMIT OF BORING								
BRIDGE LOCATED: THE NW CORNER OF THE SW ¹ / ₄ OF THE NW ¹ / ₄ OF SECTION 6, T. 18 N., R. 6E, OF THE 3RD. PM								
	-55					-80		
	-60					-85		
	-65					-90		
	-70					-95		

BRIDGE LOCATED: THE NW
CORNER OF THE SW $\frac{1}{4}$ OF
THE NW $\frac{1}{4}$ OF SECTION 6,
T. 18 N., R. 6E, OF THE
3RD. PM

60

BRIDGE FOUNDATION BORING LOG

PROJECT I-72-2(10)40
 ROUTE FAI-72
 SEC. 74-68 VB
 COUNTY PIATT

BRIDGE FAI 72 OVER NORFOLK
 AND WESTERN RR
 STA. 1438+71.2

Date 11-15-71
 Bored By BAKER
 Checked By CWK

Boring No. 2
 Station 1438+12
 Offset 56' LT.

Ground Surface 639.7 0

STIFF BLACK SILTY CLAY
638.2

VERY STIFF BROWN MOT.
SILTY CLAY
636.2

STIFF BROWN GRAY MOT.
SILTY CLAY
633.7

SOFT BROWN-GRAY MOT.
SILTY CLAY
631.2

SOFT BROWN-GRAY MOT.
CLAY
629.2

MEDIUM BROWN SAND

623.7

MEDIUM BROWN AND GRAY
SAND AND GRAVEL

-20

21

-15

27

14

3

0.5B

28

3

0.5B

31

7

1.3B

25

8

2.3B

22

Elevation

N

Qu t/s.f.

w (%)

Surface Water El.

Groundwater El. at
Completion

634.2

After 24 Hours

633.7

Elevation

N

Qu t/s.f.

w (%)

MEDIUM GRAY AND BROWN
SAND WITH SOME GRAVEL

-25

27

612.2

MEDIUM GRAY SAND

-30

27

607.2

LOOSE GRAY SAND WITH
SOME GRAVEL

-35

9

602.2

MEDIUM GRAY SAND AND
GRAVEL

-40

23

597.2

DENSE VERY FINE GRAY SAND
AND SAND LOAM

-45

40

Standard Penetration Test -
 blows per foot to drive 2"
 O.D. Split Spoon Sampler 12" with
 7# hammer falling 30".

Qu - Unconfined Compressive
 Strength - t/sf

w - Water Content - percentage
 of oven dry weight - %.

Type failure:
 B - Bulge Failure
 S - Shear Failure
 E - Estimated Value

60

BRIDGE FOUNDATION BORING LOG

	Elevation	N	Qu t/s.f.	w (%)		Elevation	N	Qu t/s.f.	w (%)
DENSE VERY FINE GRAY SAND AND SAND LOAM	-45 592.7	40	—	—					
MEDIUM FINE GRAY SAND									
	-50	26	—	—		-75			
	-55 584.2	21	—	—		-80			
LIMIT OF BORING ↗									
	-60					-85			
	-65					-90			
	-70					-95			

60

PROJECT I-72-2(10)40 BRIDGE FAI 72 OVER NORFOLK Date 11-16-71
ROUTE FAI 72 AND WESTERN RR Bored By BAKER
SEC. 74-68 VB STA. 1438+71.2 Checked By CWK

1 - Standard Penetration Test -
blows per foot to drive 2"
D.D. Split Spoon Sampler 12" with
40# hammer falling 30".

Type failure:
B—Bulge Failure
S—Shear Failure
E—Estimated Value

60

BRIDGE FOUNDATION BORING LOG

PROJECT I-72-2(10)40
ROUTE FAI 72
SEC. 74-68 VB
COUNTY PLATT

BRIDGE F.A.I. 72 OVER NORFOLK
AND WESTERN RR
STA. 1438+71.2

Date 11-16-71
Bored By BAKER
Checked By CWK

Boring No. 4
Station 1440+26
Offset 56' LT.

Ground Surface 641.10

STIFF BLACK SILTY CLAY
639.6

HARD BROWN SILTY CLAY
637.6

VERY STIFF BROWN MOT.
SILTY CLAY
634.6

VERY LOOSE FINE BROWN
SANDY CLAY LOAM TO
SAND LOAM
632.1

VERY LOOSE FINE BROWN
SAND
629.6

VERY LOOSE FINE DARK
GRAY SAND TO SAND
LOAM
627.1

SOFT DARK GRAY VARVE
ORGANIC SILTY CLAY TO
CLAY LOAM WITH
SNALES SHELLS
624.6

MEDIUM BROWN SAND
AND GRAVEL

- Standard Penetration Test -
blows per foot to drive 2"
D.D. Split Spoon Sampler 12" with
40# hammer falling 30".

Elevation	Z	Qu t/s.f.	w (%)
641.10			
639.6			
637.6	14	4.58	22
634.6	10	2.38	24
632.1	4	—	—
629.6	2	—	—
627.1	3	—	—
624.6	1	0.48	49
	23	—	—
	22	—	—

Surface Water El. _____
Groundwater El. at
Completion 35.6
After _____ Hours _____

MEDIUM BROWN SAND
AND GRAVEL

MEDIUM GRAY SAND AND
GRAVEL

Elevation	Z	Qu t/s.f.	w (%)
-25	13	—	—
-30	27	—	—
-35	24	—	—
-40	21	—	—
-45	21	—	—

Qu - Unconfined Compressive
Strength - t/sf
w - Water Content - percentage
of oven dry weight - %

Type failure:
B - Bulge Failure
S - Shear Failure
E - Estimated Value

60

BRIDGE FOUNDATION BORING LOG

	Elevation	N	Qu t/s.f.	w (%)		Elevation	N	Qu t/s.f.	w (%)
	-45	21	—	—					
MEDIUM GRAY SAND AND GRAVEL	-50	17	—	—		-75			
588.6									
DENSE GRAY SAND AND GRAVEL	-55	46	—	—		-80			
585.6									
LIMIT OF BORING ↗									
	-60					-85			
	-65					-90			
	-70					-95			

W. E. Baumann

J. C. Mulgrew

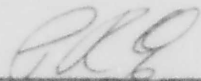
November 29, 1971

Foundation Investigation
F.A.I. Route 72
Section 74-68VB
Project I-72-2(10)40
Piatt County
Job Number P-95-082-70

Attached are the boring logs made from the investigation made in conjunction with the design of the above section.

Shelby tubes were taken 58' left of station 1438+00, centerline station 1432+00, and centerline station 1441+00. These tubes were sent to the central laboratory for testing. The results of the tests will be sent to you as soon as they are completed.

By


P. R. Engelberth
District Materials Engineer

GWK:jh

cc: J. Witters
Brighton Engineering Co.
Soil Lab. File

BRIDGE FOUNDATION BORING LOG

PROJECT I-72-2(10)40
ROUTE FAI 72
SEC. 74-68 VB
COUNTY PIATT

BRIDGE PAI 72 OVER
NORFOLK AND WESTERN R.R.

STA 1438 + 71.2

Date 11-15-71
Bored By BAKER
Checked By CWK

Boring No. 1
Station 1436+72
Offset 56' RT

Elevation	N	Qu t/s.f.	W (%)	Surface Water El.	_____	Elevation	N	Qu t/s.f.	W (%)
				Groundwater El. at Completion	634.7				
				After 24 Hours	634.2				

Ground Surface	640.20
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STIFF BLACK SILTY CLAY
638.7

LOOSE BROWN SAND

636.2

-5	6	1.0B	24
----	---	------	----

LOOSE BROWN SAND

-10	7
-----	---

629.2

15		
----	--	--

MEDIUM BROWN SAND AND GRAVEL

-15

23

- 20

25 — —

618.2

DENSE GRAY-BROWN SAND
AND GRAVEL

- 25

32

—

MEDIUM GRAY SAND AND GRAVEL

- 30

18

1000000

DENSE GRAY FINE SAND

- 40

42

—

DENSE GRAY SILT LOAM

- 45

444

—

N-Standard Penetration Test -
Blows per foot to drive 2"
O.D. Split Spoon Sampler 12" with
140# hammer falling 30".

Qu - Unconfined Compressive Strength - t/sf
w - Water Content - percentage of oven dry weight - %.

Type failure:
B—Bulge Failure
S—Shear Failure
E—Estimated Value
P—Penetrometer

BRIDGE FOUNDATION BORING LOG

	Elevation	N	Qu t/s.f.	w (%)		Elevation	N	Qu t/s.f.	w (%)
	-45	44	—	—					
DENSE GRAY SILT LOAM									
592.7									
DENSE VERY FINE GRAY SAND									
589.7	-50	32	—	—		-75			
— LIMIT OF BORING									
BRIDGE LOCATED: THE NW CORNER OF THE SW ¹ / ₄ OF THE NW ¹ / ₄ OF SECTION 6, T. 18 N., R. 6E, OF THE 3RD. PM									
	-55					-80			
	-60					-85			
	-65					-90			
	-70					-95			

BRIDGE FOUNDATION BORING LOG

 PROJECT I-72-2(10)40
 ROUTE FAI-72
 SEC 74-68 VB
 COUNTY PIATT

 BRIDGE FAI 72 OVER NORFOLK
 AND WESTERN RR
 STA. 1438+71.2

 Date 11-15-71
 Bored By BAKER
 Checked By CWK

 Boring No. 2
 Station 1438+12
 Offset 56' LT.

Elevation	Z	Qu t/s.f.	w (%)	Surface Water El.	Groundwater El. at Completion	After 24 Hours	Elevation	Z	Qu t/s.f.	w (%)
Ground Surface	639.7 0									
STIFF BLACK SILTY CLAY	638.2									
VERY STIFF BROWN MOT. SILTY CLAY	636.2	8	2.3B	22			-25	27	—	—
STIFF BROWN GRAY MOT. SILTY CLAY	633.7	7	1.3B	25			612.2			
SOFT BROWN-GRAY MOT. SILTY CLAY	631.2	3	0.5B	31			-30	27	—	—
SOFT BROWN-GRAY MOT. CLAY	629.2	3	0.5B	28			607.2			
MEDIUM BROWN SAND	623.7	14	—	—			-35	9	—	—
		27	—	—			602.2			
MEDIUM BROWN AND GRAY SAND AND GRAVEL		21	—	—			-40	23	—	—
							597.2			
							-45	40	—	—

 N - Standard Penetration Test -
 Blows per foot to drive 2"
 O.D. Split Spoon Sampler 12" with
 140# hammer falling 30".

 Qu - Unconfined Compressive
 Strength - t/sf

 w - Water Content - percentage
 of oven dry weight - %.

 Type failure:
 B - Bulge Failure
 S - Shear Failure
 E - Estimated Value
 R - Reconstituted

BRIDGE FOUNDATION BORING LOG

	Elevation	N	Qu t/s.f.	w (%)		Elevation	N	Qu t/s.f.	w (%)
DENSE VERY FINE GRAY SAND AND SAND LOAM	-45 592.7	40	—	—					
MEDIUM FINE GRAY SAND	-50	26	—	—		-75			
584.2	-55	21	—	—		-80			
LIMIT OF BORING ↗									
	-60					-85			
	-65					-90			
	-70					-95			

BRIDGE FOUNDATION BORING LOG

PROJECT I-72-2(10)40
ROUTE FAI 72
SEC. 74-68 VB
COUNTY PIATT

BRIDGE FAI 72 OVER NORFOLK
AND WESTERN RR
STA. 1438+71.2

Date 11-16-71
Bored By BAKER
Checked By CWK

Boring No. 3
Station 1438+97
Offset 60' RT.

[illegible]

N - Standard Penetration Test -
Blows per foot to drive 2"
O.D. Split Spoon Sampler 12" with
140# hammer falling 30".

Qu - Unconfined Compressive Strength - t/sf
w - Water Content - percentage of oven dry weight - %.

Type failure:
B—Bulge Failure
S—Shear Failure
E—Estimated Value
P—Penetrometer

BRIDGE FOUNDATION BORING LOG

PROJECT I-72-2(10)40 BRIDGE F.A.I. 72 OVER NORFOLK Date 11-16-71
ROUTE FAI 72 AND WESTERN RR Bored By BAKER
SEC. 74-68 VB STA. 1438+71.2 Checked By CWK

COUNTY <u>PIATT</u>	Boring No. <u>4</u>	Station <u>1440+26</u>	Offset <u>56' LT.</u>	Elevation	Z	Qu t/s.f.	w (%)	Surface Water El.	Groundwater El. at Completion	After — Hours	Elevation	Z	Qu t/s.f.	w (%)
Ground Surface				641.10										
STIFF BLACK SILTY CLAY				639.6										
HARD BROWN SILTY CLAY				637.6	14	4.58	22				-25	13	—	—
VERY STIFF BROWN MOT. SILTY CLAY				634.6	-5	10	2.3B	24						
VERY LOOSE FINE BROWN SANDY CLAY LOAM TO SAND LOAM				632.1	4	—	—				-30	27	—	—
VERY LOOSE FINE BROWN SAND				629.6	2	—	—							
VERY LOOSE FINE DARK GRAY SAND TO SAND LOAM				627.1	3	—	—				-35	24	—	—
SOFT DARK GRAY VARVED ORGANIC SILTY CLAY TO CLAY LOAM WITH SNAILS SHELLS				624.6	1	0.4B	49							
MEDIUM BROWN SAND AND GRAVEL				-20	22	—	—				-40	21	—	—
											-45	21	—	—

N — Standard Penetration Test — Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".

Qu — Unconfined Compressive Strength — t/sf
w — Water Content — percentage of oven dry weight — %

Type failure:
B — Bulge Failure
S — Shear Failure
E — Estimated Value

	Elevation	N	Qu t / s. f.	w (%)		Elevation	N	Qu t / s. f.	w (%)
	-45	21	—	—					
MEDIUM GRAY SAND AND GRAVEL	-50	17	—	—		-75			
588.6									
DENSE GRAY SAND AND GRAVEL									
585.6	-55	46	—	—		-80			
LIMIT OF BORING ↗									
	-60					-85			
	-65					-90			
	-70					-95			