BRIDGE FOUNDATION INVESTIGATION

121-0270-0

121-0260M-005.23N

PR-5610 D Fulton

Northridge Road Over North Fulton Expressway

1. Location - 12

This site is located northeast of Roswell at the intersection of the North Fulton Expressway and Northridge Road. It is geologically sited in the Carolina formation of the Georgia Piedmont.

2. Subsurface Conditions -

Reference should be made to the attached boring logs. Some pertinent details are as follows:

a. All borings reached refusal of a power auger on rock.

b. The underlying rock at the site is quite irregular in depth and density.

c. Hard rock is overlain by layers of weathered rock and dense soil.

d. The ground water was not encountered at this site.

3. Foundation Recommendations -

Bent 1 - A pile bent using steel "H" piles is recommended for this bent. Maximum recommended bearing for piles is as follows:

10 BP 42	55 Tons
12 BP 53	70 Tons

Piles may be driven to bearing as determined by the dynamic driving formula, but reference should be made to the boring logs during driving to insure that pile points are seated in weathered rock.

Bent 2 - Spread footings are recommended for this bent. These footings should be placed at or below elevation 1052.5 with a design bearing not to exceed 6 kips per square foot.

Bent 3 - Spread footings are recommended at this bent. Footings should be placed at or below elevation 1054.0 with a design bearing not to exceed 6 kips per square foot.

Bent 4 - Spread footings are recommended at this bent. Footings should be placed at or below elevation 1052.0 with a design bearing not to exceed 6 kips per square foot.

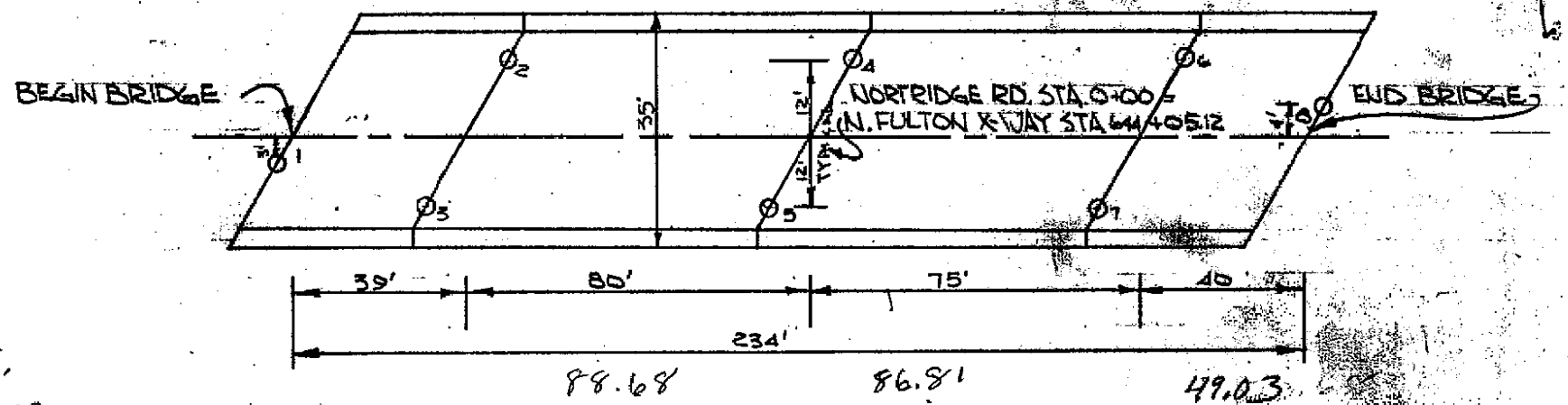
Bent 5-- Spread footings are recommended for this bent. Footings should be placed at or below elevation 1072.0 with a design bearing not to exceed 4 kips per square foot.

4. Danger From Fill Settlement - No danger.

Thomas D. Moreland
Highway Materials Engineer

TDM:sev

10-20-65



N.S.
1076.10

S.S.
1076.80

61.76

88.68

86.81

49.03

	STATE HIGHWAY DEPARTMENT OF GEORGIA Bridge Foundation Investigation
DRW. R.	PR-5610-D FULTON CO. NORTHRIDGE ROAD OVER NORTH FULTON EXPRESSWAY
CKD. LM	
APP. TDM	NO SCALE 10-11-65

STATE HIGHWAY DEPARTMENT OF GEORGIA

DIVISION OF MATERIALS AND TEST, ATLANTA, GEORGIA

BRIDGE SUBSURFACE INVESTIGATION

PROJECT PR-5610 D COUNTY FULTON DATE 9-23-65

LOCATION NORTHBRIDGE RD. OVER N. FULTON EXP. BORING NO. 1

BENT NO. 1 FOOTING CENTER GROUND ELEV. 1083.67

PROPOSED FOOTING ELEV. 1080.0± PARTY CHIEF PORTER

3' OFFSET - RIGHT

ELEV.	BORING LOG	SAMPLE	BLOW	REMARKS	W	γ	Gs	C	ø	BC	PI	LL	% 200	% CLAY	e
	GR. ELEV.														
	RED AND BROWN MICACEOUS SILTY CLAY (MOIST)	1S	34												
1080	DENSE MULTI-COLORED MICACEOUS SANDY SILT (MOIST)	2S	40												
	SAME (LOOSE)	3S	7												
1070	SOFT ROCK														
	DENSE MULTI-COLORED MICACEOUS SANDY SILT (MOIST)	4S	29												
	WEATHERED ROCK			ESTIMATED PILE TIP											
1060	REFUSAL ON ROCK														
1050															
1040															
1030															

STATE HIGHWAY DEPARTMENT OF GEORGIA

DIVISION OF MATERIALS AND TEST, ATLANTA, GEORGIA

BRIDGE SUBSURFACE INVESTIGATION

PROJECT PR-5610 D COUNTY FULTON DATE 9-24-65

LOCATION NORTHRIDGE RD. OVER N. FULTON EXP. BORING NO. 2

BENT NO. 2 FOOTING LEFT GROUND ELEV. 1082.89

PROPOSED FOOTING ELEV. 1052.00 ± PARTY CHIEF PORTER

NO SAMPLES - POWER LINES

ELEV.	BORING LOG	SAMPLE	BLOW	REMARKS	W	γ	Gs	C	ø	BC	PI	LL	% 200	% CLAY	e
	GR. ELEV.														
1080	RED MICACEOUS SILTY CLAY (MOIST)														
	MULTI-COLORED MICACEOUS SANDY SILT														
1070															
1060															
	WEATHERED ROCK														
1050	MULTI-COLORED MICACEOUS SANDY SILT (MOIST)														
	WEATHERED ROCK														
1040	MULTI-COLORED MICACEOUS SANDY SILT (WET)														
1030	WEATHERED ROCK														
	REFUSAL ON ROCK														

STATE HIGHWAY DEPARTMENT OF GEORGIA

DIVISION OF MATERIALS AND TEST, ATLANTA, GEORGIA

BRIDGE SUBSURFACE INVESTIGATION

PROJECT PR-5610 D COUNTY FULTON DATE 9-23-65

LOCATION NORTHRIDGE RD. OVER N. FULTON EXP. BORING NO. 3

BENT NO. 2 FOOTING RIGHT GROUND ELEV. 1082.75

PROPOSED FOOTING ELEV. 1052.00 PARTY CHIEF PORTER

NO SAMPLES

ELEV.	BORING LOG	SAMPLE	BLOW	REMARKS	W	γ	Gs	C	Ø	BC	PI	LL	% 200	% CLAY	e
	GR. ELEV.														
1080	MULTI-COLORED MICACEOUS SANDY SILT (MOIST)														
1070															
	WEATHERED ROCK														
1060	MULTI-COLORED MICACEOUS SANDY SILT (MOIST)														
1050	WEATHERED ROCK														
1040	REFUSAL ON ROCK														
1030															

STATE HIGHWAY DEPARTMENT OF GEORGIA

DIVISION OF MATERIALS AND TEST, ATLANTA, GEORGIA

BRIDGE SUBSURFACE INVESTIGATION

PROJECT PR-5610 D COUNTY FULTON DATE 6-24-65

LOCATION NORTHRIDGE RD. OVER N. FULTON EXP. BORING NO. 4

BENT NO. 3 FOOTING LEFT GROUND ELEV. 1031.02

PROPOSED FOOTING ELEV. 1052.00 ± PARTY CHIEF PORTER

NO SAMPLES

ELEV.	BORING LOG	SAMPLE	BLOW	REMARKS	W	γ	Gs	C	Ø	BC	PI	LL	% 200	% CLAY	e
1080	GR. ELEV. →														
	MULTI-COLORED MICACEOUS SILT (MOIST)														
1070															
1060	WEATHERED ROCK														
	REFUSAL ON ROCK														
1050															

STATE HIGHWAY DEPARTMENT OF GEORGIA

DIVISION OF MATERIALS AND TEST, ATLANTA, GEORGIA

BRIDGE SUBSURFACE INVESTIGATION

PROJECT PR-5610 D COUNTY FULTON DATE 9-23-65

LOCATION NORTHRIDGE RD. OVER N. FULTON BORING NO. 5

BENT NO. 3 FOOTING RIGHT GROUND ELEV. 1081.20

PROPOSED FOOTING ELEV. 1052.00 PARTY CHIEF PORTER

NO SAMPLES

ELEV.	BORING LOG	SAMPLE	BLOW	REMARKS	W	γ	Gs	C	ø	BC	PI	LL	% 200	% CLAY	e
	GR. ELEV.														
1080	MULTI-COLORED MICACEOUS SILT (MOIST)														
1070															
1060															
	WEATHERED ROCK														
1050	REFUSAL ON ROCK														
1040															

STATE HIGHWAY DEPARTMENT OF GEORGIA

DIVISION OF MATERIALS AND TEST, ATLANTA, GEORGIA

BRIDGE SUBSURFACE INVESTIGATION

PROJECT PR-5610 D COUNTY FULTON DATE 9-24-65

LOCATION NORTHRIDGE RD. OVER N. FULTON EXP. BORING NO. 6

BENT NO. 4 FOOTING LEFT GROUND ELEV. 1077.67

PROPOSED FOOTING ELEV. 1052.00 ± PARTY CHIEF PORTER

NO SAMPLES

ELEV.	BORING LOG	SAMPLE	BLOW	REMARKS	W	γ	Gs	C	Ø	BC	PI	LL	% 200	% CLAY	e
1080															
	GR. ELEV.														
	MULTI-COLORED MICACEOUS SILT (MOIST)														
1070															
	ROCK														
	MULTI-COLORED MICACEOUS SILT (MOIST)														
1060															
	WEATHERED ROCK														
1050															
	REFUSAL ON ROCK														
1040															
1030															

STATE HIGHWAY DEPARTMENT OF GEORGIA

DIVISION OF MATERIALS AND TEST, ATLANTA, GEORGIA

BRIDGE SUBSURFACE INVESTIGATION

PROJECT PR-5610 D COUNTY FULTON DATE 9-24-65

LOCATION NORTHRIDGE ROAD OVER N. FULTON EXP. BORING NO. 7

BENT NO. 4 FOOTING RIGHT GROUND ELEV. 1078.43

PROPOSED FOOTING ELEV. 1052.00 ± PARTY CHIEF PORTER

NO SAMPLES - REFUSAL ABOVE FTG.

ELEV.	BORING LOG	SAMPLE	BLOW	REMARKS	W	γ	Gs	C	Ø	BC	PI	LL	% 200	% CLAY	e
1080	GR. ELEV.														
	RED MICACEOUS SILTY CLAY (MOIST)														
	MULTI-COLORED MICACEOUS SILT (MOIST)														
1070															
1060	WEATHERED ROCK														
	REFUSAL ON ROCK														
1050															
1040															

STATE HIGHWAY DEPARTMENT OF GEORGIA

DIVISION OF MATERIALS AND TEST, ATLANTA, GEORGIA

BRIDGE SUBSURFACE INVESTIGATION

PROJECT PR-5610 D COUNTY FULTON DATE 9-24-65

LOCATION NORTHRIDGE RD. OVER N. FULTON EXP BORING NO. 8

BENT NO. 5 FOOTING CENTER GROUND ELEV. 1076.27

PROPOSED FOOTING ELEV. 1073 ± PARTY CHIEF PORTER

4' OFFSET - LEFT

ELEV.	BORING LOG	SAMPLE	BLOW	REMARKS	W	γ	Gs	C	ø	BC	PI	LL	% 200	% CLAY	e
1080															
	GR. ELEV.														
	VERY DENSE MULTI-COLORED MICACEOUS SANDY SILT	1S	50												
1070		2S	60=7'												
		3S	60=5'												
1060	WEATHERED ROCK														
	REFUSAL ON ROCK														
1050															
1040															
1030															

H.D. 499
(3-67)

"AS-BUILT" BRIDGE FOUNDATION REPORT

DATA FOR BRIDGE ENGINEER, ATLANTA

PROJECT NO. APD 056-1 (10) CT. 2 COUNTY FULTON

BRIDGE NO. 13 (Lt.) (Rt.) OVER/AT NORTHRIDGE AT STA. 8 + 49

DATE OF THIS REPORT January 3 19 69 BY R. E. SIMS JR. ENGINEER

ELEVATIONS OF BOTTOMS OF FOOTINGS (= BF) & LOWEST AND HIGHEST ELEVATIONS OF PILE TIPS (= LOW, HIGH)
(Express this data in whole numbers only — NO DECIMALS)

BENT NO.	ELEVATION OF	FOR FOUNDATION BENTS ONLY AT LEFT FOOTING		MIDDLE FOOTING		RIGHT FOOTING		FOR PILE BENTS ONLY LOW	HIGH	REMARKS, INCLUDING SURVEY ORIENTATION
1	BF			1076						
	LOW HIGH			1042	1069					END BENT
2	BF	1051		1051		1051				
	LOW HIGH									SPREAD FTG
3	BF	1050		1050		1050				" "
	LOW HIGH									
4	BF	1050		1050		1050				" "
	LOW HIGH									
5	BF			1069						
	LOW HIGH									END BENT
6	BF									
	LOW HIGH									
7	BF									
	LOW HIGH									
8	BF									
	LOW HIGH									
9	BF									
	LOW HIGH									
10	BF									
	LOW HIGH									
11	BF									
	LOW HIGH									
12	BF									
	LOW HIGH									
13	BF									
	LOW HIGH									
14	BF									
	LOW HIGH									
15	BF									
	LOW HIGH									
16	BF									
	LOW HIGH									
17	BF									
	LOW HIGH									
18	BF									
	LOW HIGH									
19	BF									
	LOW HIGH									
20	BF									
	LOW HIGH									
21	BF									
	LOW HIGH									
22	BF									
	LOW HIGH									

ORIGINAL TO: BRIDGE ENGINEER
COPY TO : DIVISION OFFICE

NOTE: COMPLETE THIS FORM FOR EVERY BRIDGE AS SOON AS THE INFORMATION IS KNOWN AND MAIL PROMPTLY.