

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: April 13, 1995

TO: Richard Pauser
Construction and Materials Supervisor
Transportation District 6

FROM: Dennis G. Althaus
Geologist

SUBJECT: Site Investigation Report
Project I.D. 7200-04-00
Structure C-55-24
STH 35 over Kinnicinic Creek
River Falls to I-94
St. Croix County

Attached is the Site Investigation Report for the above project.

DGA:\

Attachments

cc: District 6 (orig. +3)
C.O. Bridge (2)
C.O. Files
C.O. Design
J.E. Haverberg
Geotechnical File

SITE INVESTIGATION REPORT

Project I.D. 7200-04-00

Structure C-55-24

STH 35 over Kinnicinic Creek

River Falls to I-94

ST. Croix County

1. GENERAL

Three borings were made for the proposed 8'x6'x200' twin box culverts to carry the proposed STH 35 over a Kinnicinic Creek at about station 339+45. The site is located about 400 feet south of Radio Road. The twin boxes will replace the present single span structure that appears to be in good condition. The 8 foot high approach fills look to be in good condition. Mostly rolling hills with farm fields for cover make up the surrounding terrain. At the time the site reconnaissance was done the Kinnicinic Creek was a dry run. There was a abandoned rail road bed just west of the structure. Rock boulders were noted and a limestone rock outcrop is located about .5 miles north of the site. The surface soil is mostly sand.

2. SUBSURFACE CONDITION

Three borings conforming to AASHTO Method T-206, Standard Penetration Test, to estimate relative soil density, access culvert support potential and recover samples for soil texture identification and classification. soil textures in the borings logs are field identifications made by the drillers and were later verified in the C.O. Geotechnical Lab.

Boring 1 was taken at station 339+45 70 feet right of the existing centerline. Boring 1 was logged as the following; elevation 931.2 to 927 firm dark brown silt with a trace of gravel, 927 to 922 firm brown sand with a trace of gravel, 922 to 903 loose brown coarse sand with a trace of gravel, 903 to 899 loose brown sandy silt.

Boring 2 was taken at station 339+75 27 feet left of the existing centerline. Boring 2 was logged as the following; elevation 931.3 to 929 loose dark brown silt with a trace of gravel, 929 to 927.5 loose brown silty sand with a little gravel, 927.5 to 922 firm brown fine sand, 922 to 920.5 very dense yellow sandstone.

Boring 3 was taken at station 340+10 130 feet left of the existing centerline. Boring 3 was logged as the following; elevation 931.5 to 930 dark brown silt, 930 to 927 firm brown sandy silt with a little gravel, 927 to 923 firm brown to white sand, 923 to 921.5 very dense brown to yellow sandstone.

The creek bed elevation is about 930.5. The creek was dry at the time the borings were taken.

3. RECOMMENDATIONS

A) The culvert should set at about elevation 929.5 which would put it in a loose to firm silt to sandy silt.

B) Build the approach fills with a grade 1 or 2 granular backfill.

C) If the creek is flowing the sub soils may have to be sub excavated 1 foot and a 1 foot breaker run stone construction platform may be needed to build the culvert on. If the creek bed is dry the breaker run stone platform would not be needed.

D) Let the newly constructed fills set for 2 months before paving for settlement purposes.

If you have any questions, please contact the Geotechnical Unit.

STATE PROJECT NUMBER PROJECT NO. |

Dec 04 04:30:37



































 Gravel
 Sand
 Clay
 Silt
 Organic Matter
 Water
 Air
 Root Zone
 Surface Layer
 Substrate
 Foundation
 Base Layer
 Drainage Layer
 Protection Layer
 Insulation Layer
 Vapor Barrier
 Structural Layer
 Foundation
 Base Layer
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Figure 1

Work

100

11-11-1964


 Crane Hoist
Elevators
Traction Climb

1. ☐ **Not a member**
 2. ☐ **Member**
 3. ☐ **Student**
 4. ☐ **Teacher**
 5. ☐ **Parent**
 6. ☐ **Other**

THE UNIVERSITY OF CHICAGO

It is a good idea to get a good idea of the situation before you start.

the company's 1997 sales of \$1.2 billion, up from \$1.1 billion in 1996.

will bring the US economy

SUBSPACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDING INFORMATION

type of sales strategy, it will not be a primary element of business strategy.

1. 凡在本行開辦之各項業務，均應遵守本行所訂之各項規章，並應隨時注意本行所訂之各項規章，如有違反者，本行將依法究辦。

[illegible]

THESE RESULTS ARE IN ACCORD WITH THE FINDINGS OF OTHER STUDIES THAT HAVE SHOWN THAT THE USE OF A SINGLE-STEP PROCESS IS MORE EFFECTIVE THAN A TWO-STEP PROCESS IN IMPROVING STUDENT PERFORMANCE.

with active and passive flexion and extension and in various planes of movement.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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AD	10/13/79	10/13/79
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SAVING JOBS

STRUCTURE C-33-24	1004	110	120
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SUBSURFACE

EXPLORATION	X
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[illegible]

1000

FIELD BORING LOG

EL3(S) 385

State of Wisconsin/Department of Transportation

Boring No. 1 Structure C55-24 County ST CROIX Sheet 1 of 1

Project 7200-04-00 Road 5TH "35"

Station 339+45 Offset 70' RT & Surface Elevation 931.2

EL3(S) 385

State of Wisconsin/Department of Transportation

Boring No. 1 Structure C-25-24 County 121 CROIX Sheet 1 of 1
Project 7200-04-00 Road 5TH "35"
Station 339+45 Offset 70' RT Surface Elevation 931.2

GROUND WATER OBSERVATIONS

While drilling _____	Time after drilling _____			
Before casing removal _____	Depth to water _____	1 hour 7.5		
After Boring Completed _____	Depth to cave-in _____			
Cave In _____	Water Notes _____			

MOISTURE		DRILLING METHOD				Start	04-4-95	Unit	/
D = Damp	HS = Hollowstem	ST = Shelby tube	A = Auger	E = Easy					
M = Moist	WA = Washhead	SS = Split spoon	C = Coring	M = Medium					
W = Wet	RB = Rockbit	DM = Drilling mud	W = Wash	H = Hard					
						Finish	04-5-95	Chief	KOWALD

Sample No.	Moisture	Blows on Sampler		Sample and Recovery	VISUAL FIELD CLASSIFICATION AND REMARKS	Unconfined Strength	Boulders	Blows on		Drilling Method
		0/6	6/12					Casing	Probe	
					Top Soil					
1	DM	3	6		Firm Dark B. Silt tr of gravel					
2	M	13	6							
3	M	4	4		Firm B. Fine to coarse SAND tr of gravel					
4	MW	5	3							
5	W	4	4		Loose B. coarse SAND tr of gravel					
6	W	3	3		Loose					
7	W	5	7							
8	W	2	2		Loose B. sandy silt					
					EOB # 1					
					3210					

Checked by	Final	Boring No.
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