THIS SHEET IS INCLUDED TO SHOW SOIL INFORMATION.
DETAILS AND NOTES SHOWN ELSEWHERE IN THESE PLANS SHALL BE USED FOR STRUCTURE CONSTRUCTION.

GEOTECHNICAL DESIGN

LICENSED PROFESSIONAL ENGINEER Robert L. Stanley 08468 IOWA

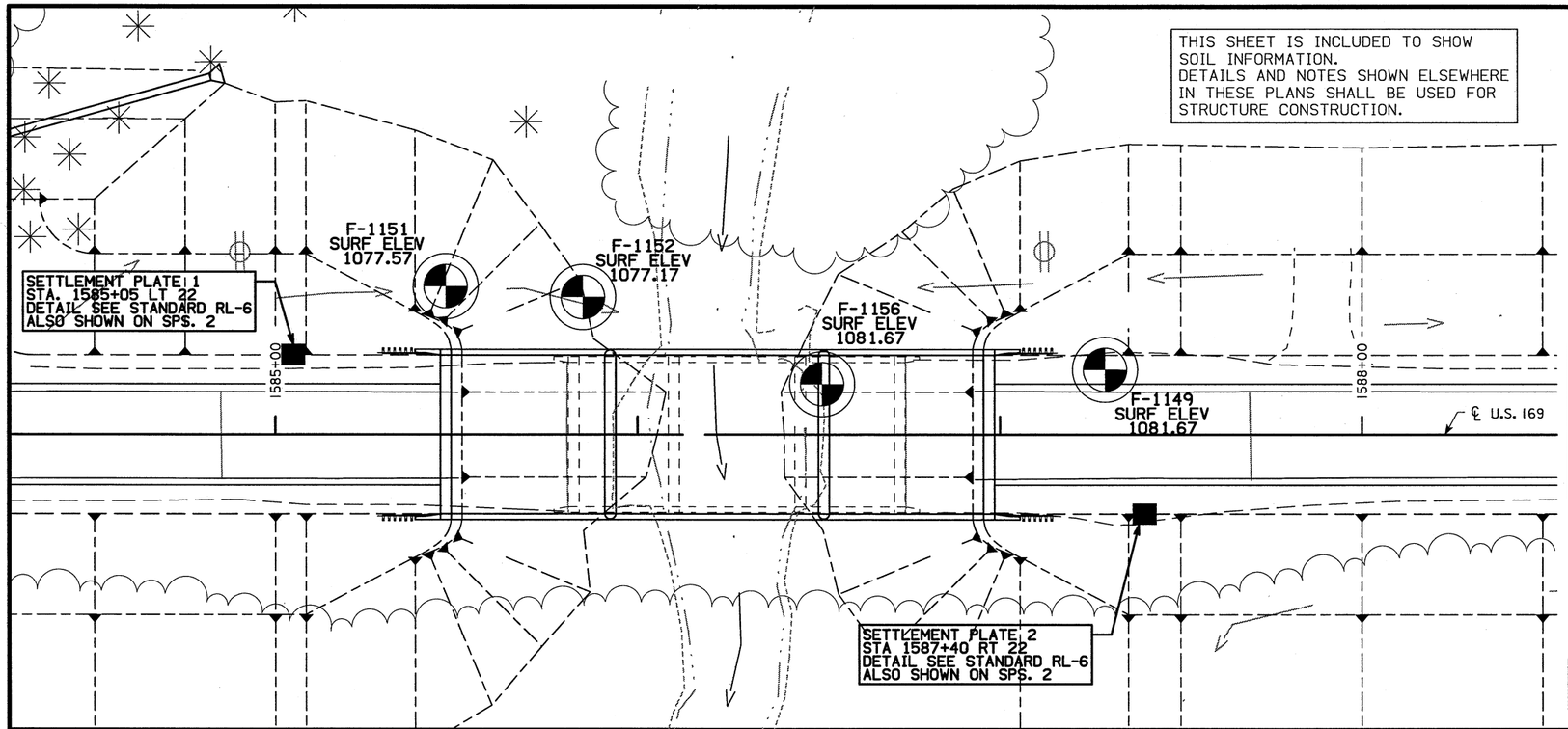
I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Signature Robert Stanley Date 4-13-09

Printed or Typed Name Robert L. Stanley

My license renewal date is December 31, 2010

Pages or sheets covered by this seal: SPS.1 - SPS.3



$-H_2O-$ WATER	SOILS BOOK NO. N.A.		
(S) SAMPLE	SHELBY	DENS. CORE	
PLUGGED	BLOW	SELECT SAND	
M MOISTURE	UNSUITABLE	SANDY SOIL	
SHALE	ROCK	SELECT SOIL	

SOUTH BOUND LANE

N

0 ENGLISH 40
SCALE IN FEET

LOCATION

US 169 OVER INDIAN CREEK
T-91N R-29W
SECTION 23
CORINTH TOWNSHIP
HUMBOLDT COUNTY
BRIDGE MAINT. NO. 4670.4S169

DESIGN FOR 0° SKEW

150'-0 X 44'-0 CONTINUOUS CONCRETE SLAB BRIDGE

45'-6 END SPANS 59'-0 INTERIOR SPAN

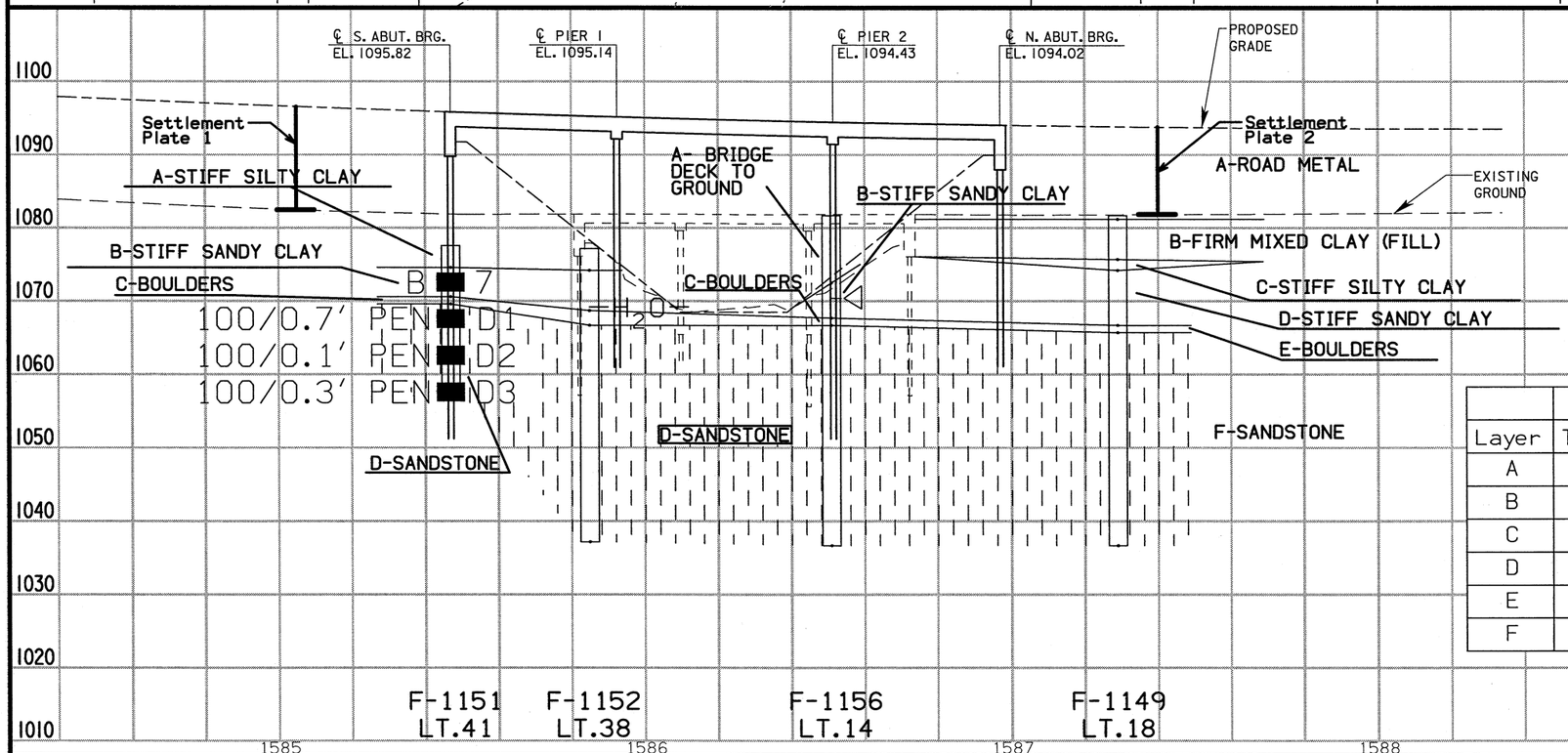
SOIL PROFILE SHEET

STATION 1586+22.00

HUMBOLDT COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

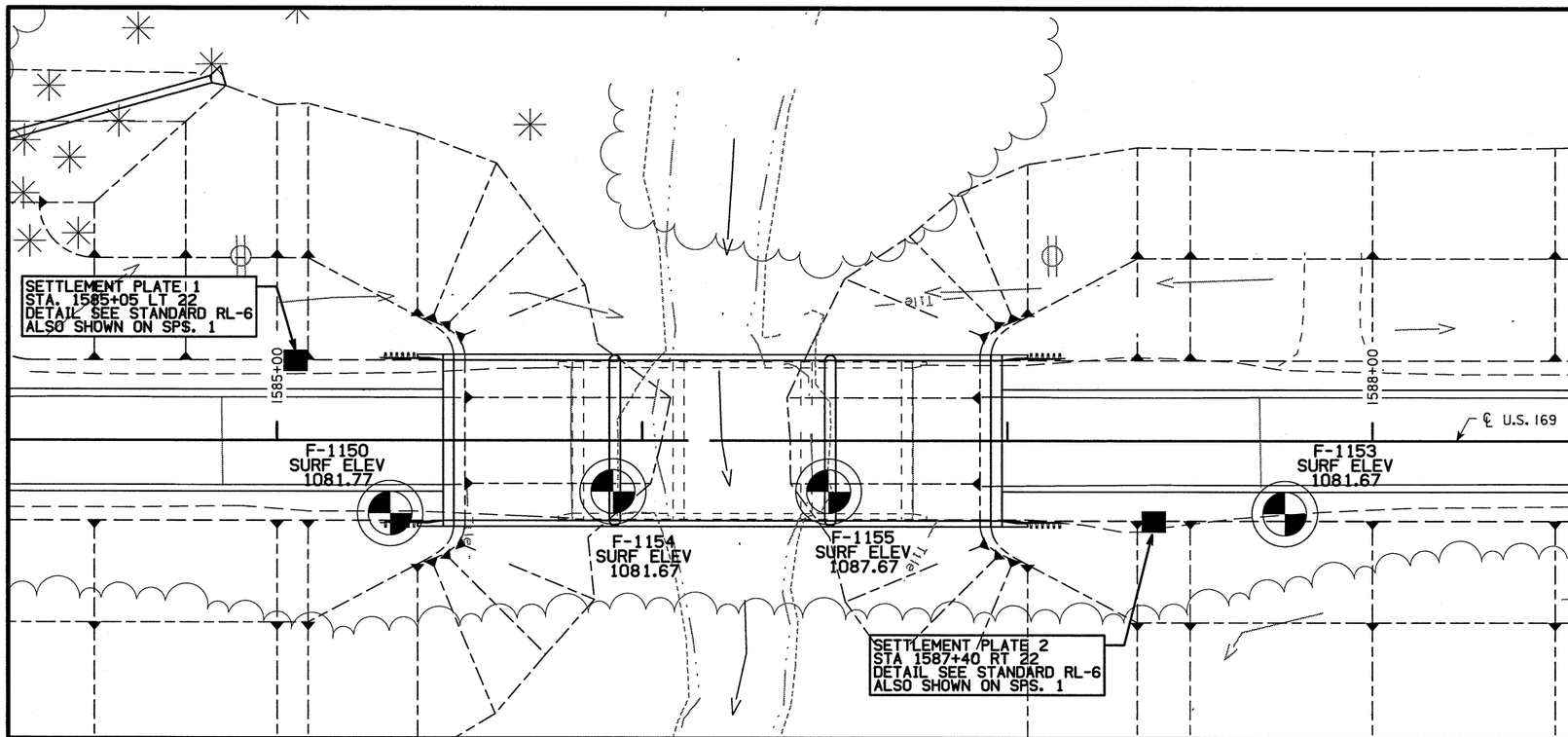
DESIGN SHEET NO. 1 OF 3 FILE NO. 30037 DESIGN NO. 209



Boring No.	Date Drilled	GroundWater Level (Ft.)
F-1151	09/16/08	WASH BORE
F-1152	09/16/08	8.0
F-1156	09/16/08	11.3 DRY
F-1149	09/16/08	12.7

	F-1151	F-1152	F-1156	F-1149
Layer	Thickness	Thickness	Thickness	Thickness
A	3.0	3.0	9.2	0.5
B	4.0	5.5	4.8	5.5
C	1.0	2.0	1.0	1.5
D	12.0	29.5	30.	7.5
E	--	--	--	1.0
F	--	--	--	29.0

ENGLISH	IOWA DOT	DESIGN TEAM	STANLEY/SCHAPPAUGH	HUMBOLDT	COUNTY	PROJECT NUMBER	NHSN-169-7(43)--2R-46	SHEET NUMBER	SPS.1



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$-H_2O-$ WATER	SOILS BOOK NO. N.A.		
(S) SAMPLE	SHELBY	DENS. CORE	
PLUGGED	BLOW	SELECT SAND	
M MOISTURE	UNSUITABLE	SANDY SOIL	
SHALE	ROCK	SELECT SOIL	

LOCATION

US 169 OVER INDIAN CREEK
T-91N R-29W
SECTION 23
CORINTH TOWNSHIP
HUMBOLDT COUNTY
BRIDGE MAINT. NO. 4670.4S169

NORTH BOUND LANE

N

0 ENGLISH 40
SCALE IN FEET

DESIGN FOR 0° SKEW

150'-0 X 44'-0 CONTINUOUS CONCRETE SLAB BRIDGE

45'-6 END SPANS 59'-0 INTERIOR SPAN

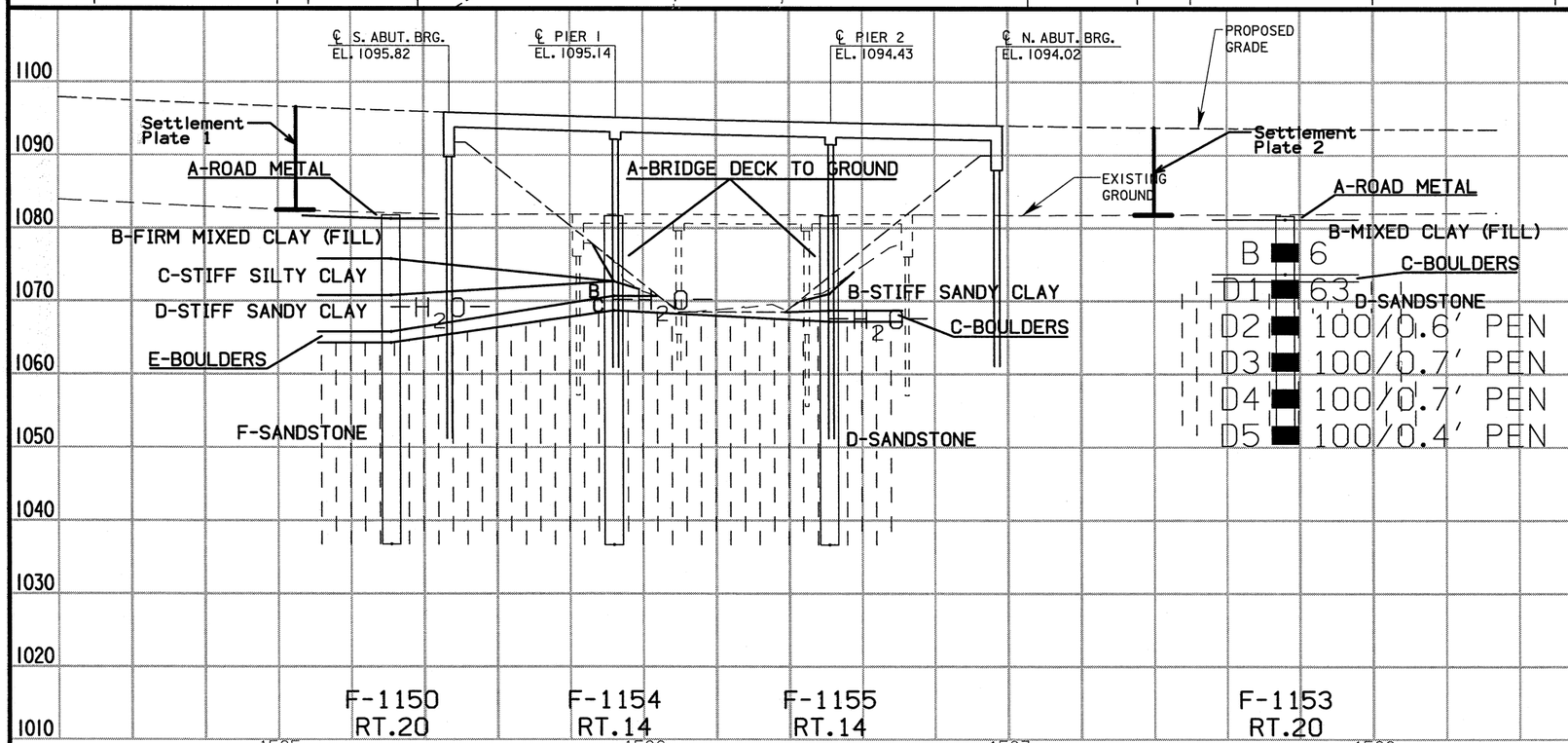
SOIL PROFILE SHEET

STATION 1586+22.00

HUMBOLDT COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 2 OF 3 FILE NO. 30037 DESIGN NO. 209



Boring No.	Date Drilled	GroundWater Level (Ft.)
F-1150	09/16/08	12.6
F-1154	09/16/08	11.5
F-1155	09/16/08	14.1
F-1153	09/16/08	WASH BORE

	F-1150	F-1154	F-1155	F-1153
Layer	Thickness	Thickness	Thickness	Thickness
A	0.5	9.0	10.7	0.5
B	5.5	2.0	2.3	7.5
C	5.0	2.0	1.5	1.0
D	5.0	32.0	30.5	21.0
E	1.5	--	--	--
F	37.5	--	--	--

ENGLISH	IOWA DOT	DESIGN TEAM	STANLEY/SCHAPPAUGH	HUMBOLDT	COUNTY	PROJECT NUMBER	NHSN-169-7(43)--2R-46	SHEET NUMBER	SPS.2

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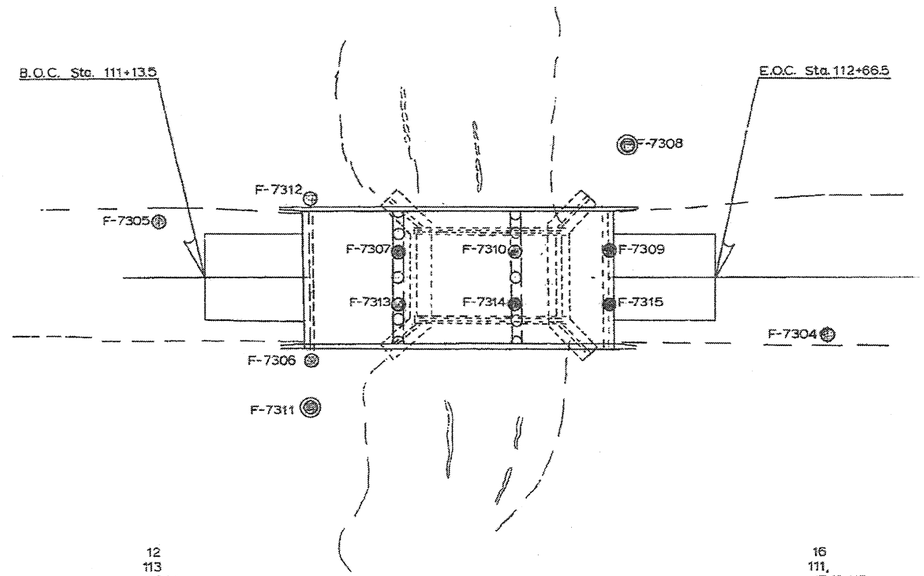
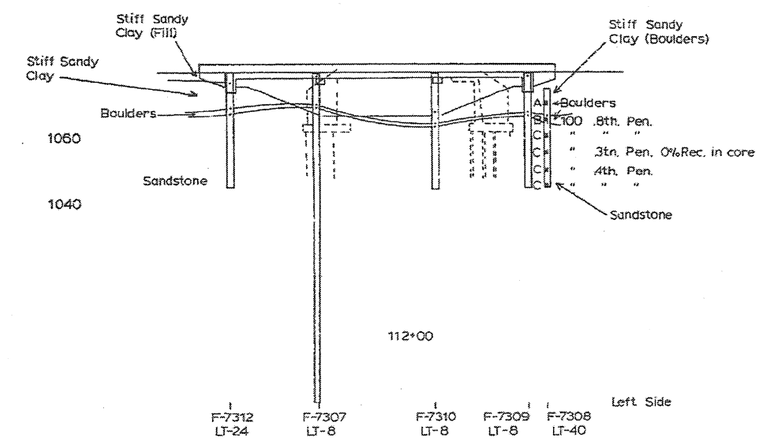
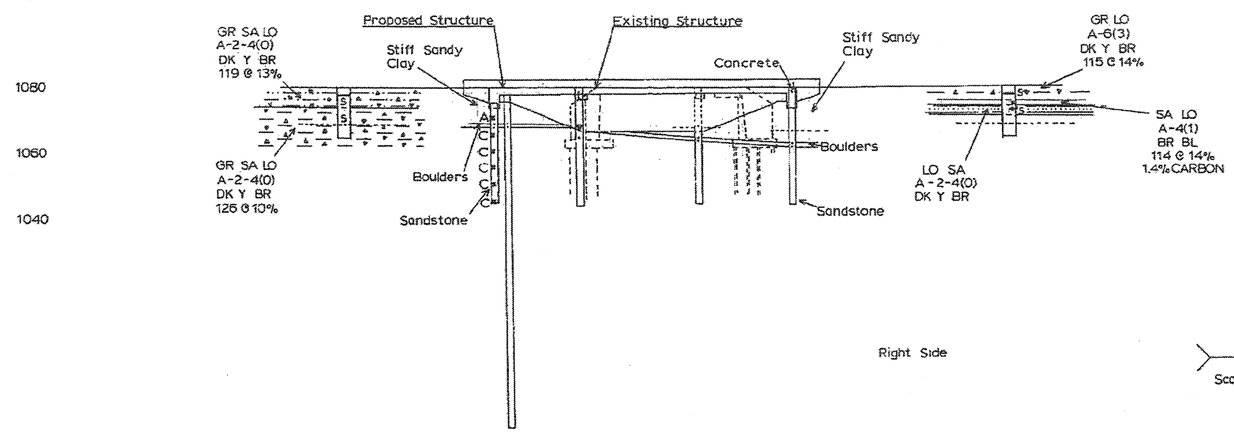
1981 SOILS BORING INFORMATION
DO NOT SCALE



CUT MOISTURE 12
CUT DEN LBS/FT.³ 113
PLASTIC LIMIT 16,14

16
111,
17,19,NP





WASH BORE DATA

TYPE	STATION	DIST. &	BENDER NO.	DEPTH	BLOWS/FT	% REC	
ST	112+41	LT-40	F-7308-A	4.0- 5.0	0		Boulders
"	"	"	" B	9.0- 9.8	100		.8ths Pen.
"	"	"	" C	14.0- 14.8	100		" "
"	"	"	" C	19.0- 19.3	100		.3ths "
"	"	"	" C	24.0-24.4	100		.4ths "
"	"	"	" C	29.0-29.4	100		" "
ST	111+45	RT-39	F-7311-A	4.0- 5.0	12		
"	"	"	" C	9.0- 9.8	100		.8ths Pen.
"	"	"	" C	14.0-14.4	100		.4ths Pen.
"	"	"	" C	19.0-19.5	100		.5ths Pen.
"	"	"	" C	24.0-24.4	100		.4ths Pen.
"	"	"	" C	29.0-29.5	100		.5ths Pen.

Scale 1" = 20'

N

F-7306 Shown off true sta.
RT-25

F-7305 LT-17
F-7311 RT-39
F-7313 RT-8
F-7314 RT-8
F-7315 RT-8
F-7304 RT-17

111+00
112+00
113+00

ROAD: U.S. 169 DATE: JULY 15, 1981
SOIL SURVEY
INDIAN CREEK BRIDGE

SILTY CLAY LOAM
SILTY CLAY
SILTY LOAM
CLAY LOAM
CLAY
SILT
WATER
GRAV. SANDY LOAM
GRAVELLY SAND
GRAVELLY LOAM
SANDY LOAM
LOAMY SAND
LOAM
SAND

SOILS DESIGN HUMBOLDT COUNTY

PROJECT NUMBER BRF-169-7(13)38-46

STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IOWA	2		16	21

ENGLISH	IOWA DOT	DESIGN TEAM STANLEY/SCHAPPAUGH	HUMBOLDT COUNTY	PROJECT NUMBER NHSN-169-7(43)--2R-46	SHEET NUMBER SPS.3

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