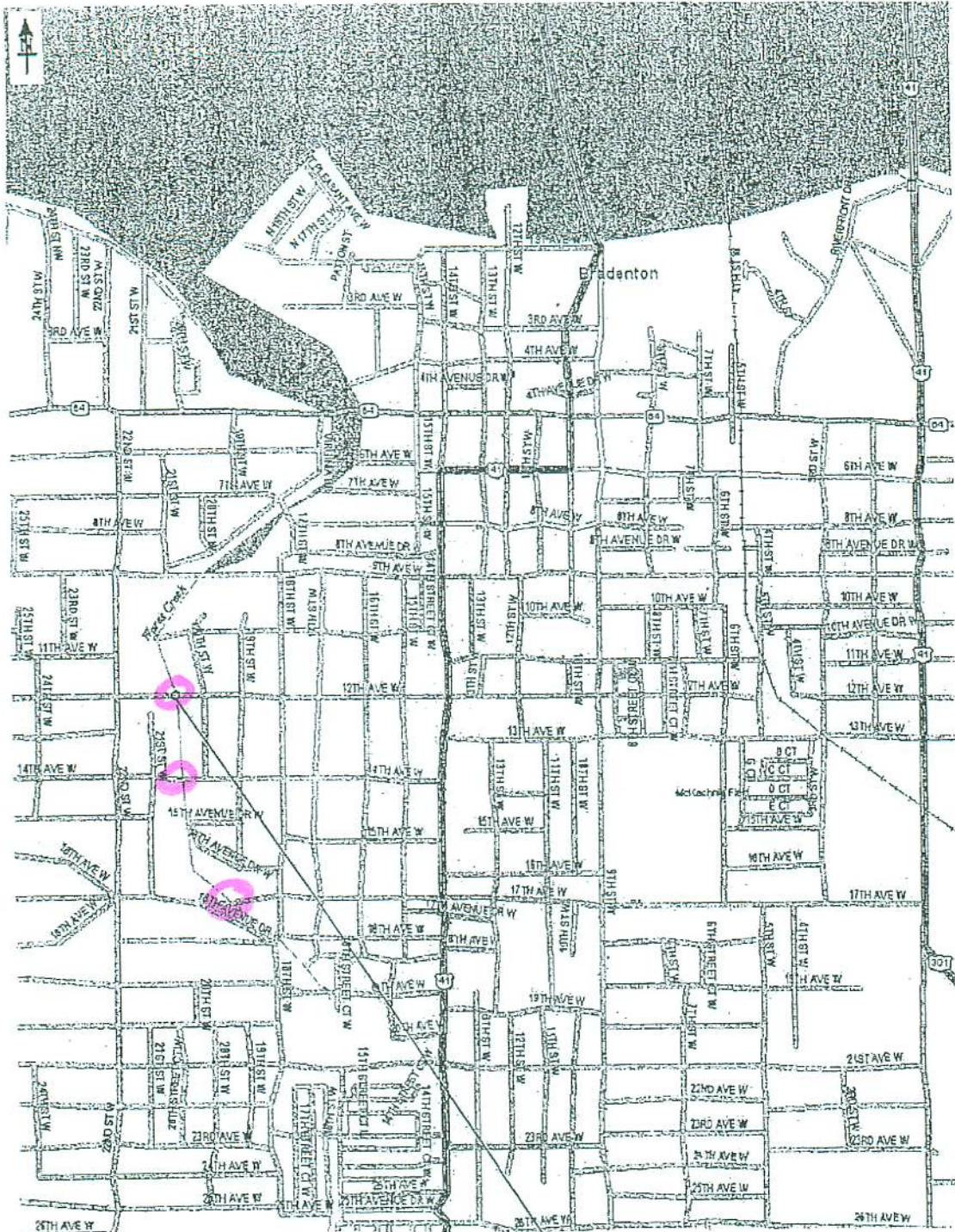
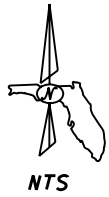


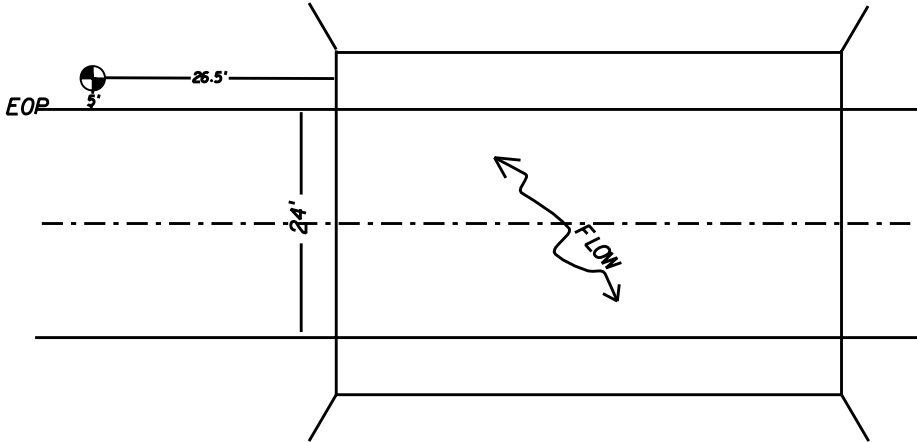


LOCATION:
TOWNSHIP 34S
RANGE 17E
SECTION 34
LATITUDE 27.489181° NORTH
LONGITUDE -82.581988° WEST

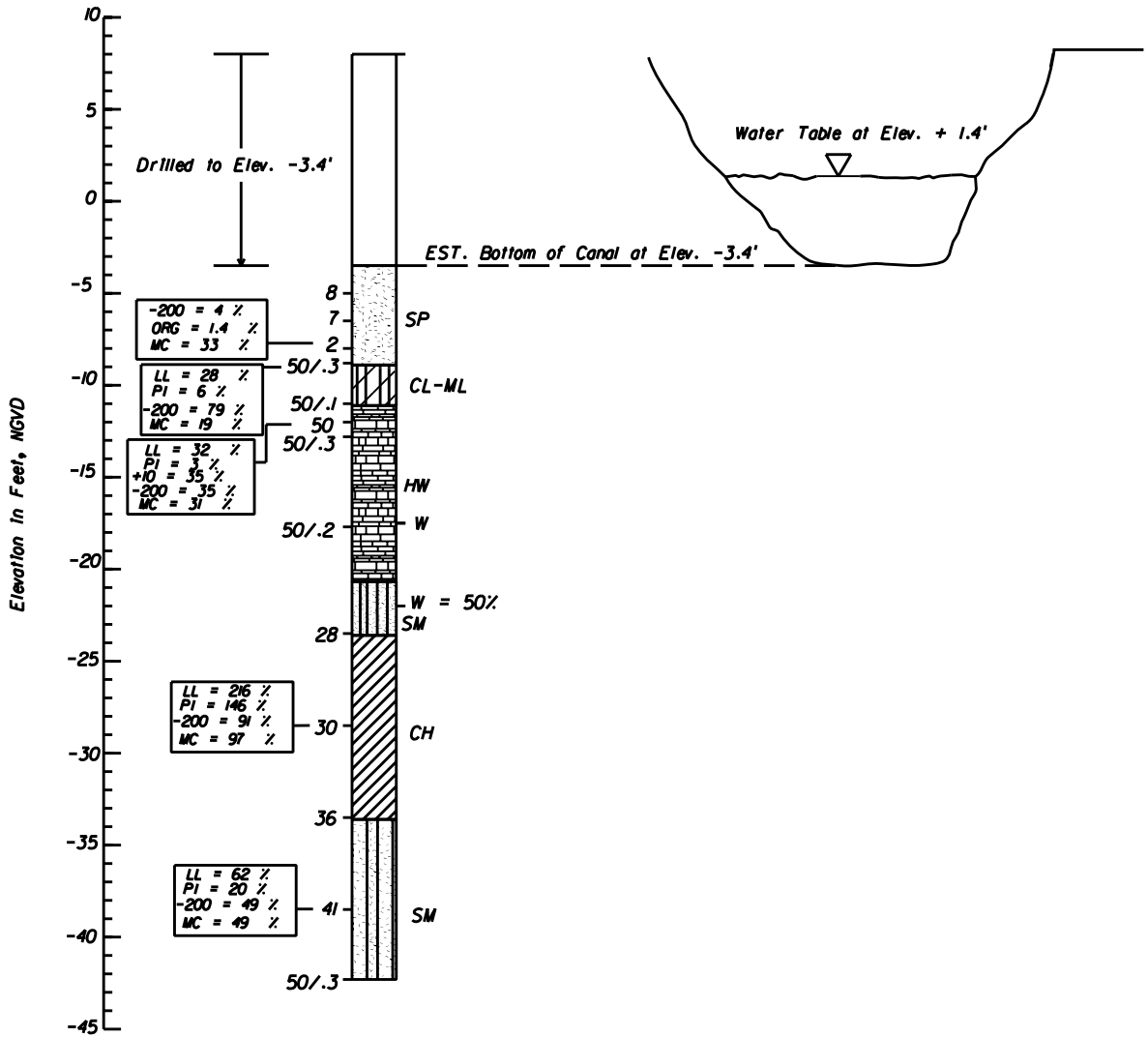


LEGEND :

- = SP, Poorly graded sands and gravelly sands, little or no fines.
- = SM, Silty sands, sand-silt mixtures.
- = CH, Inorganic clays of high plasticity, fat clays.
- = CL-ML, Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays lean clays to inorganic silts, very fine sands, rock flour, silty or clayey, fine sands.
- = WH, Highly weathered Limestone.



BORING NO. B-1
ELEV. 8.02'
06/20/06



NOTES :

Numbers to the left of borings indicate SPT values for 12" penetration. (Unless otherwise noted.)

W = 100% water loss unless otherwise noted.

= Water Table

= SPT Boring Location

Type Rig = CME 75

Hammer Used = Automatic

Corrosion Series Test Results

Resistivity	Chlorides	Sulfates	pH
Ohms - cm	ppm	ppm	
97	6,000	961	7.0

GRANULAR MATERIALS-

Relative Density	Safety Hammer	Automatic Hammer
	SPT N-Value	SPT N-Value
	Blow/Foot	Blow/Foot
Very Loose	Less than 4	Less than 3
Loose	4 - 10	3 - 7
Medium Dense	10 - 30	7 - 21
Dense	30 - 50	21 - 35
Very Dense	Greater than 50	Greater than 35

SILTS AND CLAYS-

Consistency	Safety Hammer	Automatic Hammer
	SPT N-Value	SPT N-Value
	Blow/Foot	Blow/Foot
Very Soft	Less than 2	Less than 1
Soft	2 - 4	1 - 3
Firm	4 - 8	3 - 6
Stiff	8 - 15	6 - 11
Very Stiff	15 - 30	11 - 21
Hard	Greater than 30	Greater than 21

REVISIONS						DRAWN BY		NAMES		DATES		ENGINEER OF RECORD		FLORIDA DEPARTMENT OF TRANSPORTATION		SHEET TITLE			
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DRAWN BY	DML	07/06	CHECKED BY	MEH	07/06	DESIGNED BY	-	-	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME	SHEET NO.
						CHECKED BY	-	-	APPROVED BY	Mary E. Haviland, P.E.	07/06	801 N. Broadway Ave. Bartow, Florida 33830-3809	MANATEE		12TH. AVENUE WEST OVER WARES CREEK BRIDGE NUMBER 135252				



LEGEND :

 = HW, Highly weathered Limerock.

 = CH₄ inorganic clays of high plasticity, fat clays.

NOTES :

Numbers to the left of borings indicate SPT values for 12" penetration. (Unless otherwise noted.)

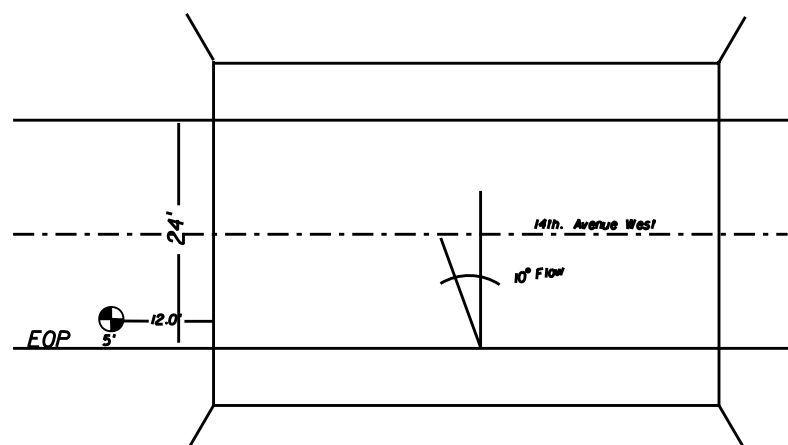
W = 100% water loss unless otherwise noted.

▽ = **Water Table**

 = SPT Boring Location

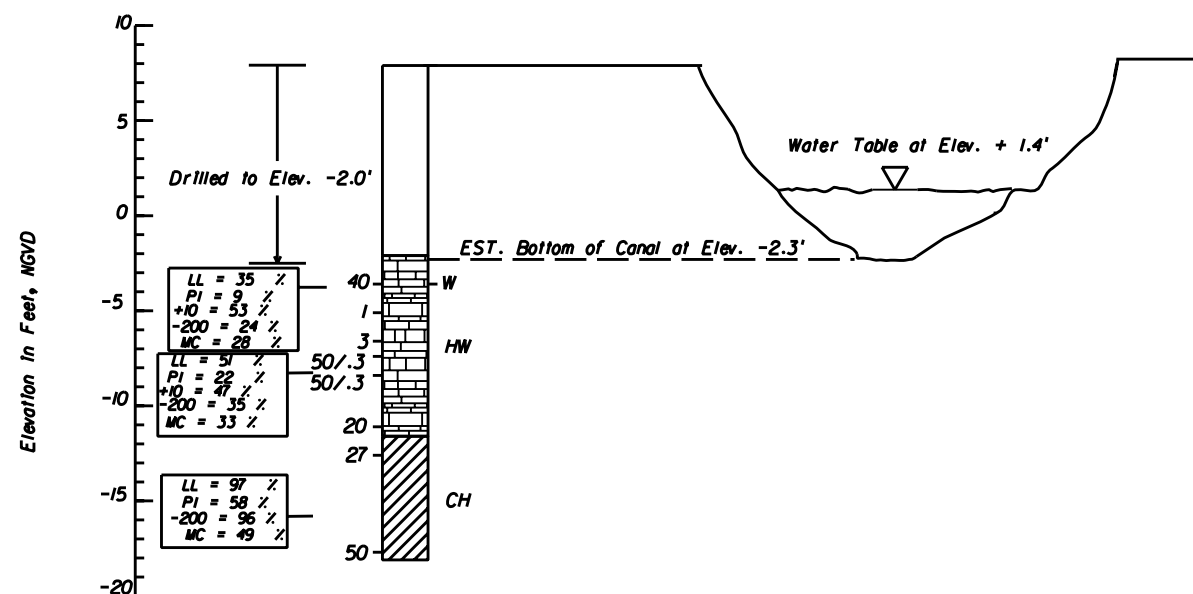
Type Rlg = CME 75

Hammer Used = Automatic



BORING NO. B-1
ELEV. 7.89'

06/21/06



Corrosion Series Test Results

<u>Resistivity</u>	<u>Chlorides</u>	<u>Sulfates</u>	<u>pH</u>
Ohms - cm	ppm	ppm	
430	2,000	178	7.2

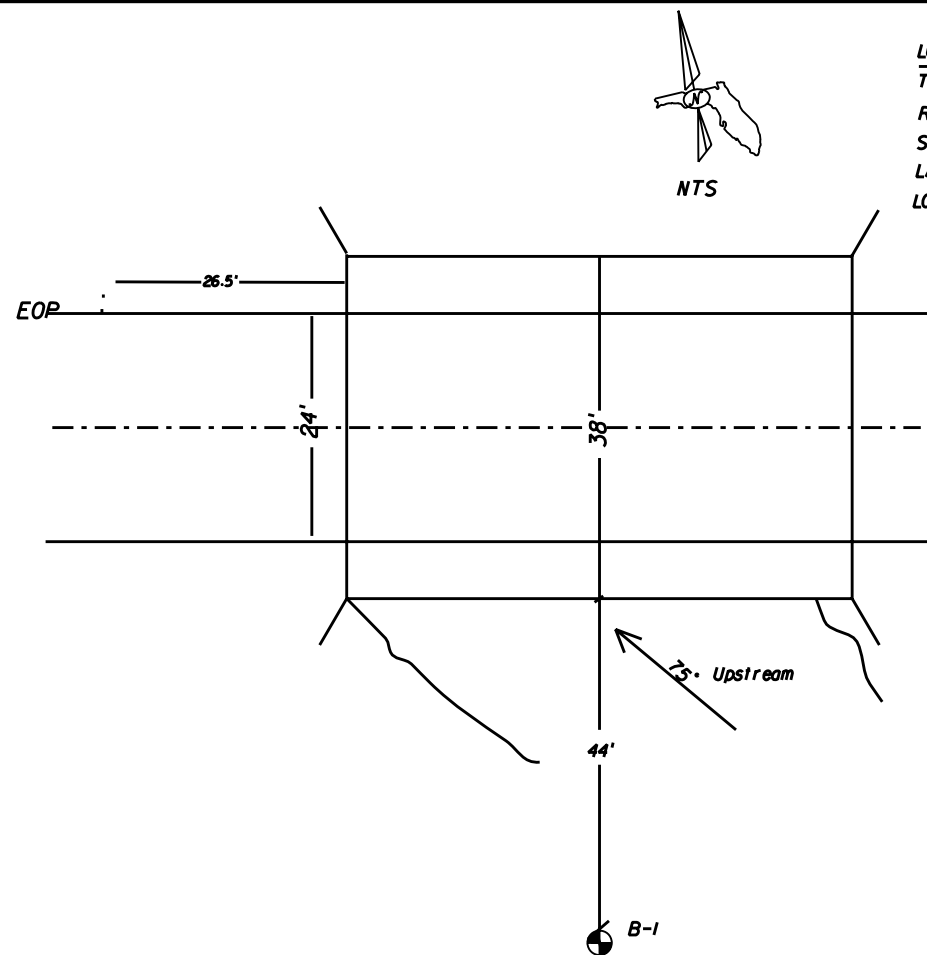
GRANULAR MATERIALS-

	Safety Hammer SPT N-Value Blow/Foot	Automatic Hammer SPT N-Value Blow/Foot
Relative Density		
Very Loose	Less than 4	Less than 3
Loose	4 - 10	3 - 7
Medium Dense	10 - 30	7 - 21
Dense	30 - 50	21 - 35
Very Dense	Greater than 50	Greater than 35

SILTS AND CLAYS-

	Safety Hammer SPT N-Value Blow/Foot	Automatic Hammer SPT N-Value Blow/Foot
Very Soft	Less than 2	Less than 1
Soft	2 - 4	1 - 3
Firm	4 - 8	3 - 6
Stiff	8 - 15	6 - 11
Very Stiff	15 - 30	11 - 21
Hard	Greater than 30	Greater than 21

DATE BY DESCRIPTION DATE BY DESCRIPTION						NAMES DRAWN BY CHECKED BY DESIGNED BY CHECKED BY APPROVED BY DML MEH - - Mary E. Haviland, P.E. DATES 07/06 07/06 - -		ENGINEER OF RECORD. Mary E. Haviland, P.E. #54811 (863) 599-4425 FLA. DEPT. OF TRANSPORTATION MATERIALS OFFICE DISTRICT 1 801 N. Broadway Ave. Bartow, Florida 33630-3809		FLORIDA DEPARTMENT OF TRANSPORTATION ROAD NO. COUNTY FINANCIAL PROJECT ID MANATEE			SHEET TITLE. REPORT OF CORE BORING PROJECT NAME. 14TH. AVENUE WEST OVER WARES CREEK BRIDGE NUMBER 135253 SHEET NO.	
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LOCATION:
TOWNSHIP 34S
RANGE 17E
SECTION 34
LATITUDE 27.484602° NORTH
LONGITUDE -82.580761° WEST

LEGEND :

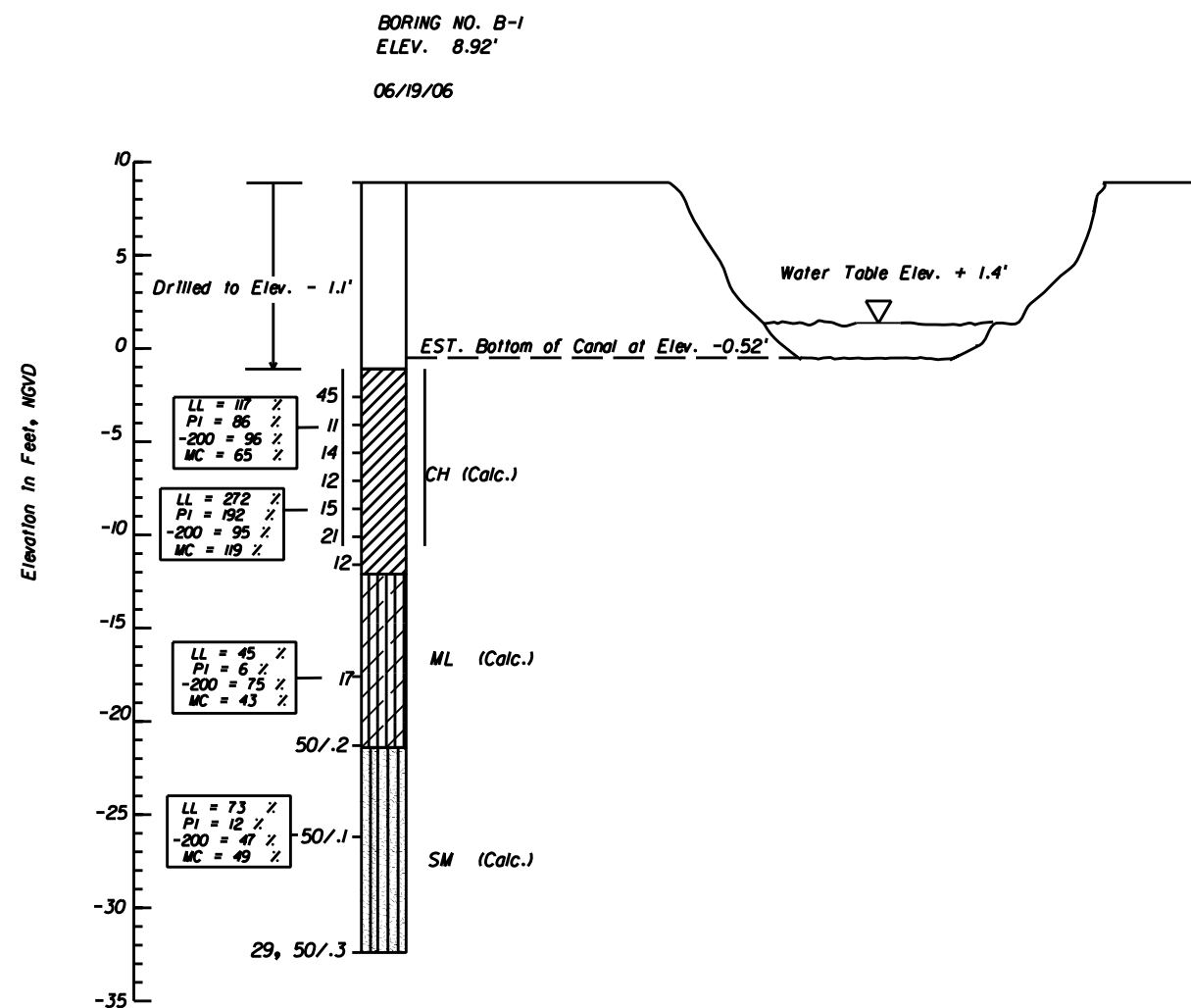
- ▨ = SM, Silty sands, sand-silt mixtures.
- ▨ = CH, Inorganic clays of high plasticity, fat clays.
- ▨ = ML, Inorganic silts, very fine sands, rock flour, silty or clayey, fine sands.

NOTES :

Numbers to the left of borings indicate SPT values for 12" penetration. (Unless otherwise noted.)

- = Casing Used.
- ▽ = Water Table
- ⊕ = SPT Boring Location

Type Rig = CME 75
Hammer Used = Automatic



Corrosion Series Test Results

Resistivity	Chlorides	Sulfates	pH
Ohms - cm	ppm	ppm	
1,600	60	117	7.3

GRANULAR MATERIALS-

Relative Density	Safety Hammer	Automatic Hammer
	SPT N-Value	SPT N-Value
	Blow/Foot	Blow/Foot
Very Loose	Less than 4	Less than 3
Loose	4 - 10	3 - 7
Medium Dense	10 - 30	7 - 21
Dense	30 - 50	21 - 35
Very Dense	Greater than 50	Greater than 35

SILTS AND CLAYS-

Consistency	Safety Hammer	Automatic Hammer
	SPT N-Value	SPT N-Value
	Blow/Foot	Blow/Foot
Very Soft	Less than 2	Less than 1
Soft	2 - 4	1 - 3
Firm	4 - 8	3 - 6
Stiff	8 - 15	6 - 11
Very Stiff	10 - 30	11 - 21
Hard	Greater than 30	Greater than 21

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

NAME	DATES
DRAWN BY DML	07/06
CHECKED BY MEH	07/06
DESIGNED BY	
CHECKED BY	
APPROVED BY Mary E. Haviland, P.E.	

ENGINEER OF RECORD:
Mary E. Haviland, P.E., #54811
18631 519-4225
FLA. DEPT. OF TRANSPORTATION
MATERIALS OFFICE
DISTRICT 1
801 N. Broadway Ave.
Bartow, Florida 33830-3809

FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	MANATEE	

SHEET TITLE:

REPORT OF CORE BORING

PROJECT NAME:
17TH. AVENUE WEST OVER WARES CREEK
BRIDGE NUMBER 135254

SHEET NO.

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 6105-23.003, F.A.C.