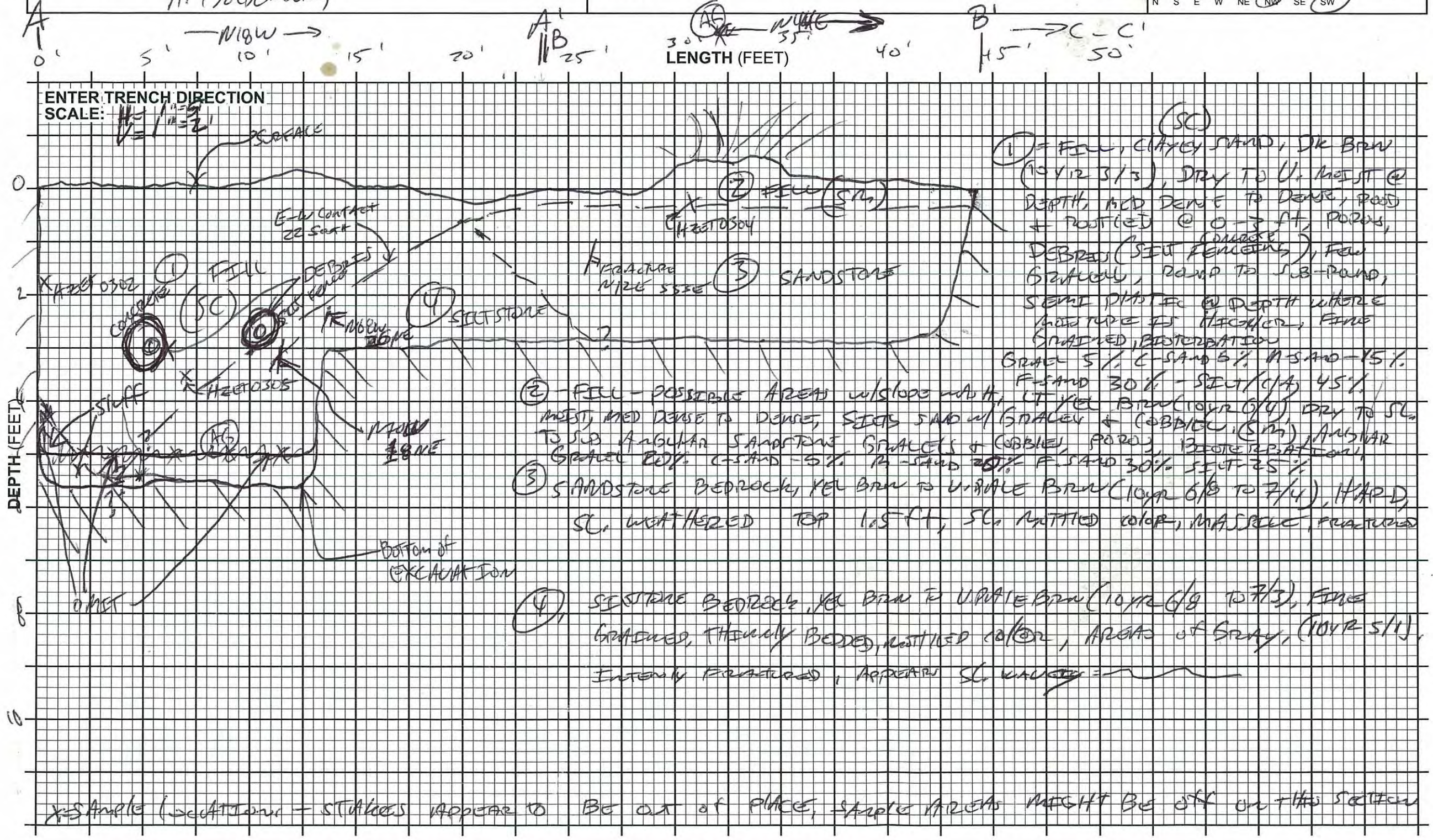
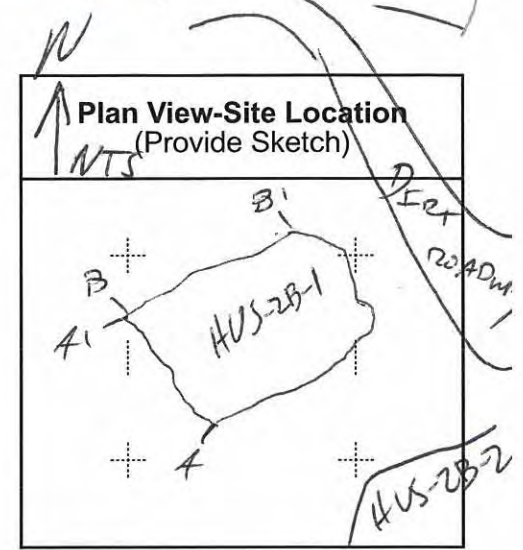


Project Name ESRA - OUTFALL 008				FIELD TRENCH LOG A-A'-B-B'			
Trench Number HUS-2B-1		Project Number NA		Elevation and Datum NA		Location HUS-2B-1	
Equipment Supplier MRE		Operator DALE WILMER		Date and Time Started 10/20/09		Date and Time Completed 10/20/09	
Equipment Type CAT EXCAVATOR 322C		Trench Orientation A-A' N18W / B-B' N44E		Total Depth 25' 5"		Total Number of Samples 4	
Bucket Width 4'	Trench Length	Trench Width EXCAVATION	No. of Samples 4	Bulk 0	Grab 4	Drive 0	Hand Auger 0
Geologist or Hydrogeologist/Date A. GOLDBERG				Checked by/Date		Refusal? (Circle One) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If Yes Depth = TD	
						Photo? (Circle One) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
						% Man-Made Debris 2-5%	
						Wall of Trench Shown (Circle One) N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/> NE <input checked="" type="checkbox"/> NW <input checked="" type="checkbox"/> SE <input type="checkbox"/> SW <input type="checkbox"/>	



EXPLANATION

SOIL TYPE CONTACT (SHARP)

OTHER CONTACT (AS INDICATED ON LOG)

FILL/NATIVE BOUNDARY

ANALYTICAL SAMPLE LOCATION (WRITE SAMPLE NUMBER OUT TO SIDE)

GEOTECHNICAL SAMPLE LOCATION (WRITE SAMPLE NUMBER OUT TO SIDE)

SHADING TO DENOTE STAINING

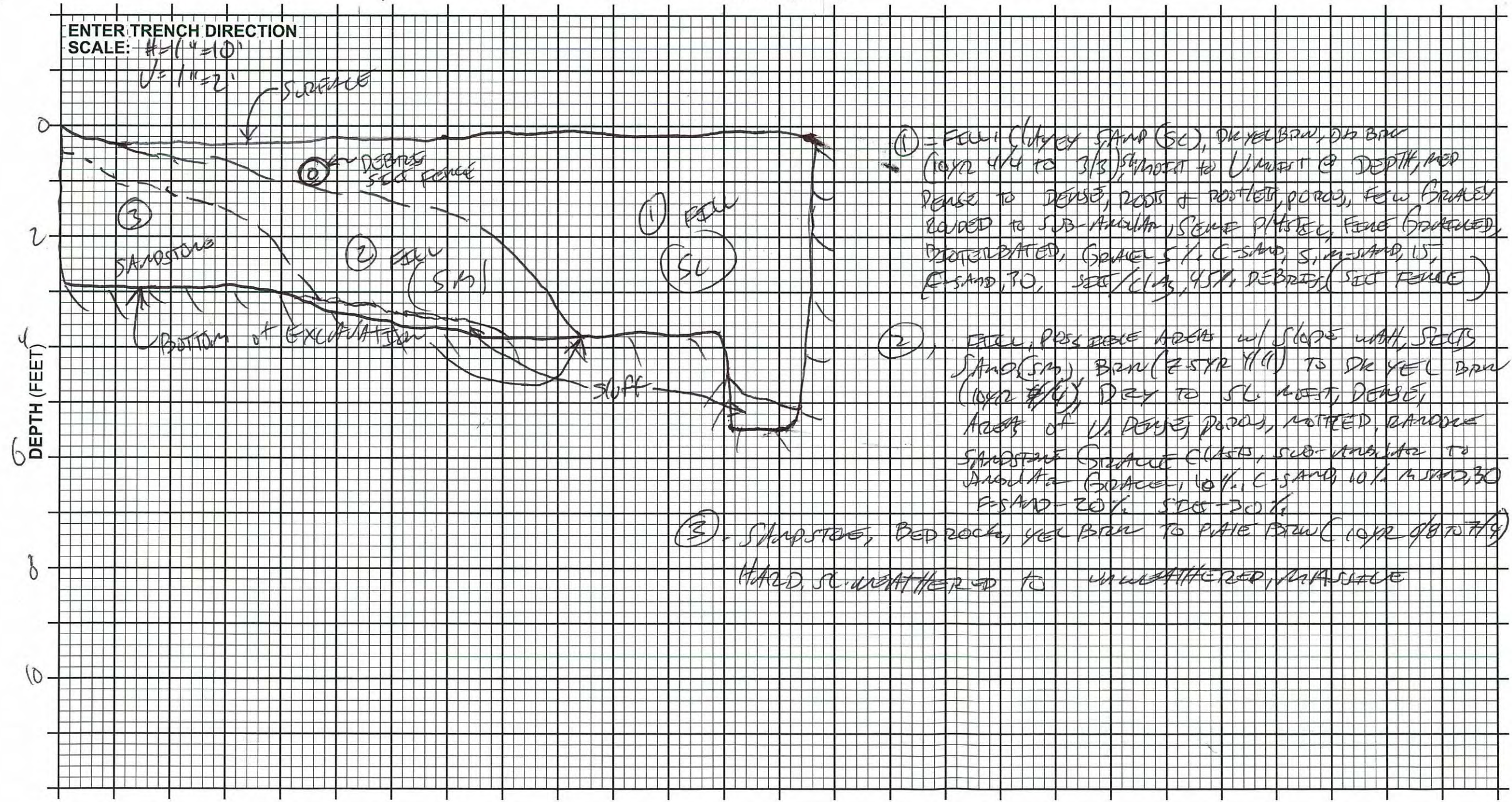
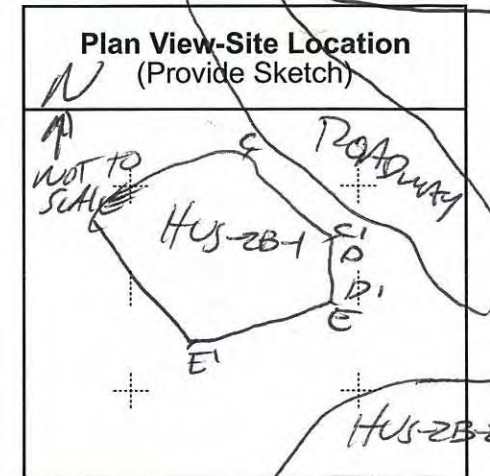
BASE OF EXCAVATION

SHOW LOCATIONS AND TYPES OF ALL MAJOR DEBRIS

/// = BRUSH/VEGETATION

? = unknown

Project Name SS FL - ISRA OUT FALL 008				FIELD TRENCH LOG (C-C'-D-D'-E-E')			
Trench Number HUS-ZB-1		Project Number MA		Elevation and Datum NA		Location HUS-ZB-1	
Equipment Supplier CAT EXCAVATOR 322C		Operator DAVE WILSON		Date and Time Started 10/20/09		Date and Time Completed 10/20/09	
Equipment Type MPE		Trench Orientation C-C' N48W / D-D' N75E / E-E' N75E		Total Depth ~5.5		Total Number of Samples 0	
Bucket Width 4'	Trench Length 170	Trench Width EXCAVATION	No. of Samples 0	Bulk 0	Grab 0	Drive 0	Hand Auger 0
Geologist or Hydrogeologist/Date A. Goldenberg				Checked by/Date		Wall of Trench Shown (Circle One) N <input type="radio"/> S <input type="radio"/> E <input type="radio"/> W <input type="radio"/> NE <input type="radio"/> NW <input type="radio"/> SE <input type="radio"/> SW	
						Refusal? (Circle One) Yes <input type="radio"/> No <input checked="" type="radio"/> If Yes Depth = AREAS REFUSED	
						Photo? (Circle One) Yes <input type="radio"/> No <input checked="" type="radio"/> NA	
						% Man-Made Debris 25	



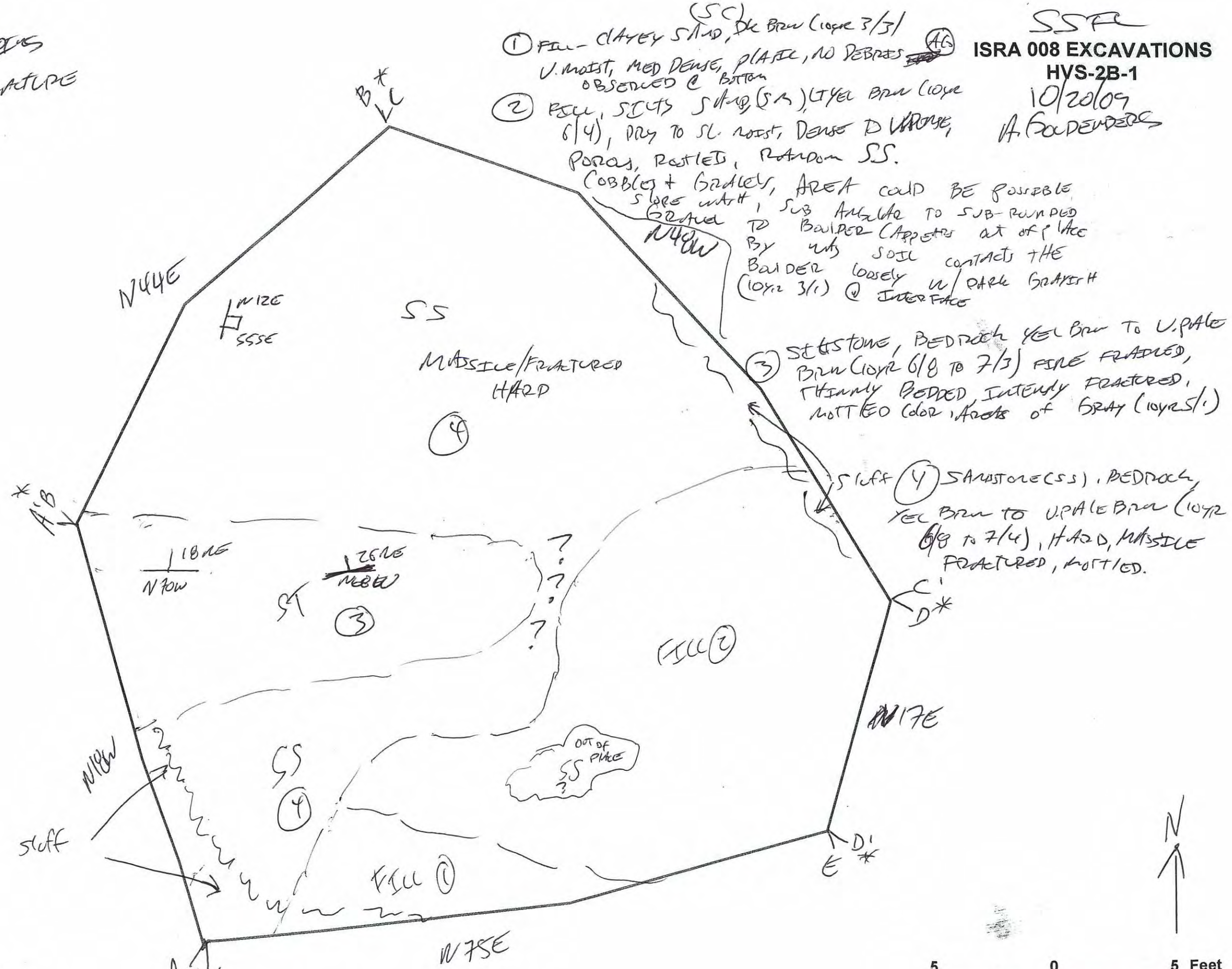
- EXPLANATION**
- SOIL TYPE CONTACT (SHARP)
 - OTHER CONTACT (AS INDICATED ON LOG)
 - FILL/NATIVE BOUNDARY
 - ANALYTICAL SAMPLE LOCATION (WRITE SAMPLE NUMBER OUT TO SIDE)
 - GEOTECHNICAL SAMPLE LOCATION (WRITE SAMPLE NUMBER OUT TO SIDE)
 - SHADING TO DENOTE STAINING
 - BASE OF EXCAVATION
 - SHOW LOCATIONS AND TYPES OF ALL MAJOR DEBRIS

* A-A' } Geologic
 B-B' } sections
 C-C' } of excavation
 D-D' } side walls
 E-E' }
 ? = UNSURE

f = BEDDINGS
 H = FRACTURE

SSR
 ISRA 008 EXCAVATIONS
 HVS-2B-1
 10/20/09
 A. FORDENBERG

- ① Fill - clayey sand, dk brown (loam 3/3) v. moist, med dense, plastic, no pebbles observed @ bottom
- ② Fill, silty sand (SA), light brown (loam 6/4), dry to sl. moist, dense to v. loose, porous, rattled, random SS.



COBBLES + BOULDERS, AREA COULD BE POSSIBLE
 SOILS WITH SUB ANGULAR TO SUB-ROUNDED
 TO BAULDER CAPSULES AT OF PLACE
 BY WHY SOIL CONTACTS THE
 BAULDER LOOSELY W/ DARK GRAYISH
 (loam 3/1) @ INTERFACE

③ SANDSTONE, BEDROCK YEL BROWN TO U. PALE
 BROWN (loam 6/8 TO 7/3) FINE FRACTURED,
 THINLY BEDDED, INTENSELY FRACTURED,
 MOTTLED (darker areas of GRAY (loam 5/1))

④ SANDSTONE (SS), BEDROCK,
 YEL BROWN TO U. PALE BROWN (loam
 6/8 TO 7/4), HARD, MASSIVE
 FRACTURED, MOTTLED.

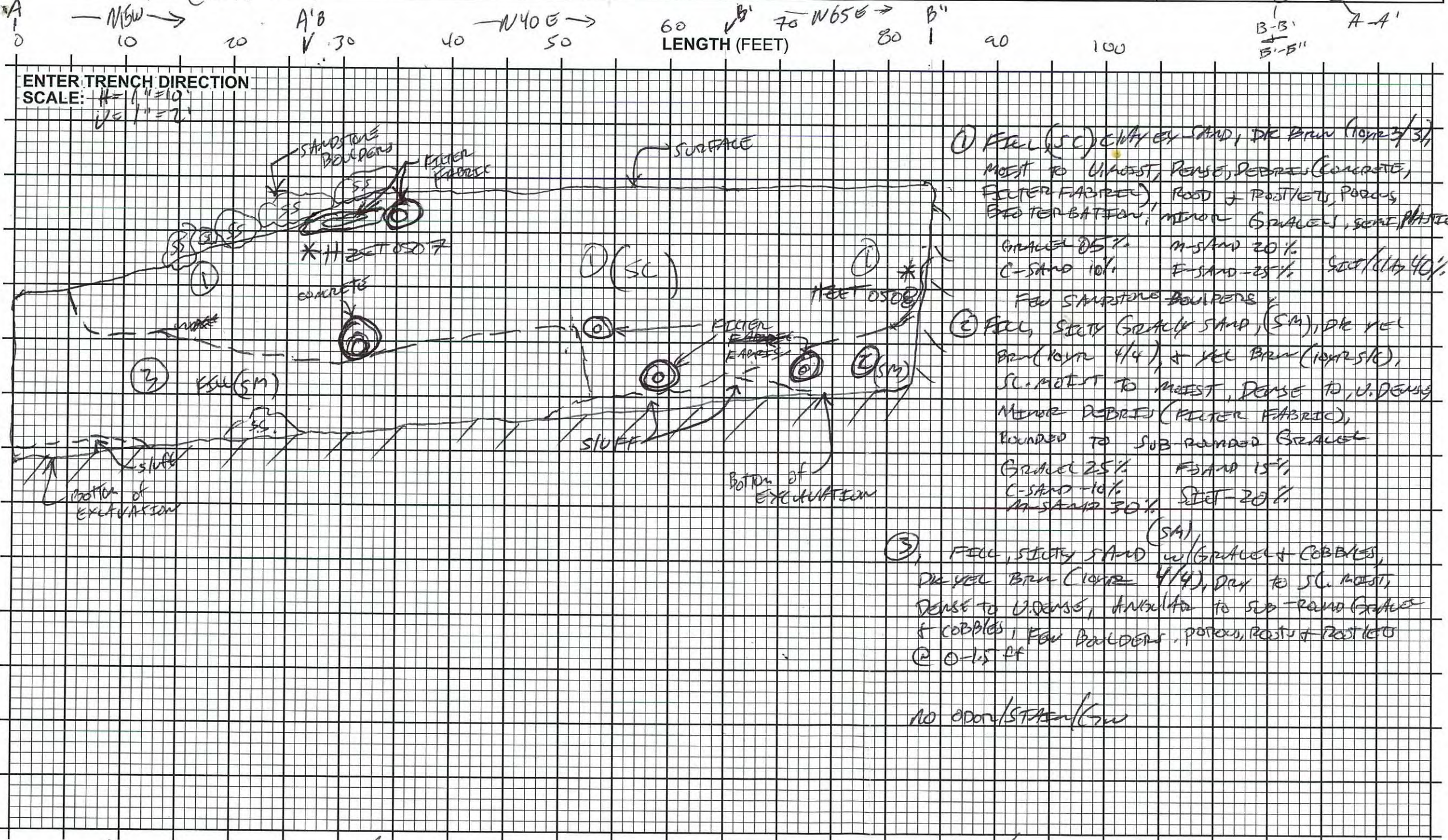
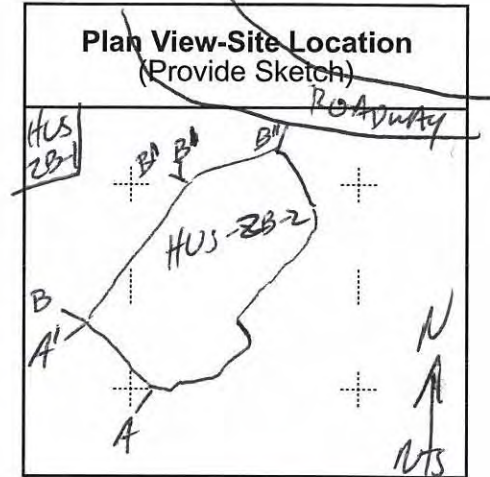
*SEE TRENCH LOGS FOR SIDE WALL LITHOLOGY



Project Name SSFL ISRA OUTFALL 008				FIELD TRENCH LOG A-A'/B-B'/B'-B''			
Trench Number HUS-2B-2		Project Number NA		Elevation and Datum NA		Location HUS-2B-2	
Equipment Supplier CAT / MPE		Operator DAVE WISMER		Date and Time Started 10/20/09		Date and Time Completed 10/21/09	
Equipment Type CAT EXCAVATOR 322C		Trench Orientation A-A' N15W / B-B' N40E / B'-B'' N05E		Total Depth 25		Total Number of Samples N/A	
Bucket Width 4'		Trench Length 284'		Trench Width EXCAVATION		Refusal? (Circle One) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If Yes Depth = SOUTHERN AREA REFUSAL	
Geologist or Hydrogeologist/Date A. CALDERBERG		No. of Samples N/A		Bulk <input type="checkbox"/> Grab <input type="checkbox"/>		Photo? (Circle One) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No.	
		Checked by/Date		Drive <input checked="" type="checkbox"/> Hand Auger <input checked="" type="checkbox"/>		% Man-Made Debris 5	
				Wall of Trench Shown (Circle One) N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/> NE <input type="checkbox"/> NW <input checked="" type="checkbox"/> SE <input type="checkbox"/> SW <input type="checkbox"/>			



HUS-2A



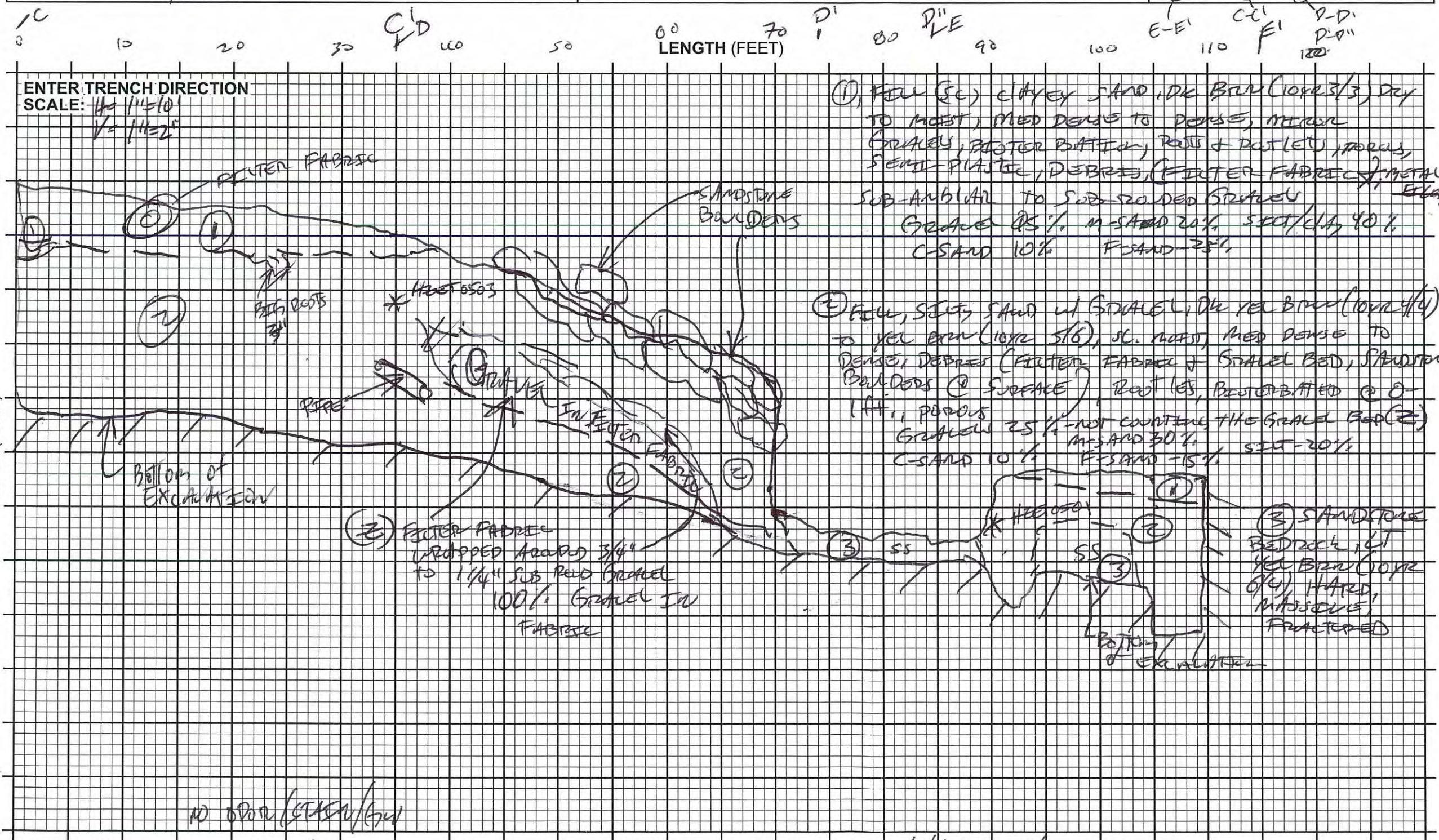
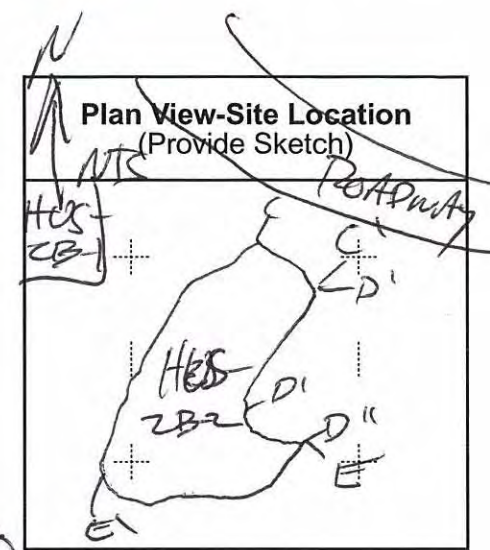
- ① FILL (SC) CLAY EX SAND, DK BRN (10yr 3/3), MOST TO MEDIUM, DENSE, DEBRIS (CONCRETE, FILTER FABRIC), ROD & POSTS, PORES, BOTTLE BATH, MINOR GRAVEL, SCRAP METAL
GRAVEL 25% M-SAND 20%
C-SAND 10% F-SAND 25% Silt/clay 40%
FEW SANDSTONE BOULDERS
- ② FILL, SILTY GRACILY SAND (SM), DK YEL BRN (10yr 4/4), + YEL BRN (10yr 5/6), SC. MOST TO MEDIUM, DENSE TO U.DENSE, MINOR DEBRIS (FILTER FABRIC), ROUNDED TO SUB-ROUNDED GRAVEL
GRAVEL 25% F-SAND 15%
C-SAND 10% SILT 20%
- ③ FILL, SILTY SAND (SM) w/ GRAVEL + COBBLES, DK YEL BRN (10yr 4/4), DK TO SC. MOST, DENSE TO U.DENSE, TRANSITION TO SUB-ROUNDED GRAVEL + COBBLES, FEW BOULDERS, PORES, RODS + POSTS
② 0-1.5 ft

- EXPLANATION**
- SOIL TYPE CONTACT (SHARP)
 - - - OTHER CONTACT (AS INDICATED ON LOG)
 - - - FILL/NATIVE BOUNDARY
 - X ANALYTICAL SAMPLE LOCATION (WRITE SAMPLE NUMBER OUT TO SIDE)
 - G GEOTECHNICAL SAMPLE LOCATION (WRITE SAMPLE NUMBER OUT TO SIDE)
 - //// SHADING TO DENOTE STAINING
 - //// BASE OF EXCAVATION
 - SHOW LOCATIONS AND TYPES OF ALL MAJOR DEBRIS (CONCRETE, FILTER FABRIC, ...)

*SAMPLE STAKES MOVED FOR MISSING DUE TO EXCAVATION BEING COVERED w/ PLASTIC B/C OF RAIN

C-C' D-D' -E-E'

Project Name				FIELD TRENCH LOG			
Trench Number		Project Number		Elevation and Datum		Location	
HUS-2B-2		N/A		NA		HUS-2B-2	
Equipment Supplier		Operator		Date and Time Started		Date and Time Completed	
MPE		DAVE WILSON		10/21/09		10/21/09	
Equipment Type		Trench Orientation		Total Depth		Total Number of Samples	
CAT 322C		SEE PLAN VIEW		14.2		N/A	
Bucket Width		Trench Length		Trench Width		No. of Samples	
4'		2110		EXCAVATION		N/A	
Geologist or Hydrogeologist/Date		Checked by/Date		Drive		Hand Auger	
A. GOLDENBERG				Ø		Ø	
				Wall of Trench Shown (Circle One)		% Man-Made Debris	
				N S E W NE NW SE SW		15% - 20%	



- EXPLANATION**
- SOIL TYPE CONTACT (SHARP)
 - - - OTHER CONTACT (AS INDICATED ON LOG)
 - - - FILL/NATIVE BOUNDARY
 - X ANALYTICAL SAMPLE LOCATION (WRITE SAMPLE NUMBER OUT TO SIDE)
 - G GEOTECHNICAL SAMPLE LOCATION (WRITE SAMPLE NUMBER OUT TO SIDE)
 - //// SHADING TO DENOTE STAINING
 - //// BASE OF EXCAVATION
 - SHOW LOCATIONS AND TYPES OF ALL MAJOR DEBRIS

*SAMPLE STARS MOVED +/- MISSING DUE TO EXCAVATION BEING COVERED W/ PLASTIC B/C OF RAINS.

ISRA 008 EXCAVATIONS

HVS-2B-2

A. Greenberg
10/21/09

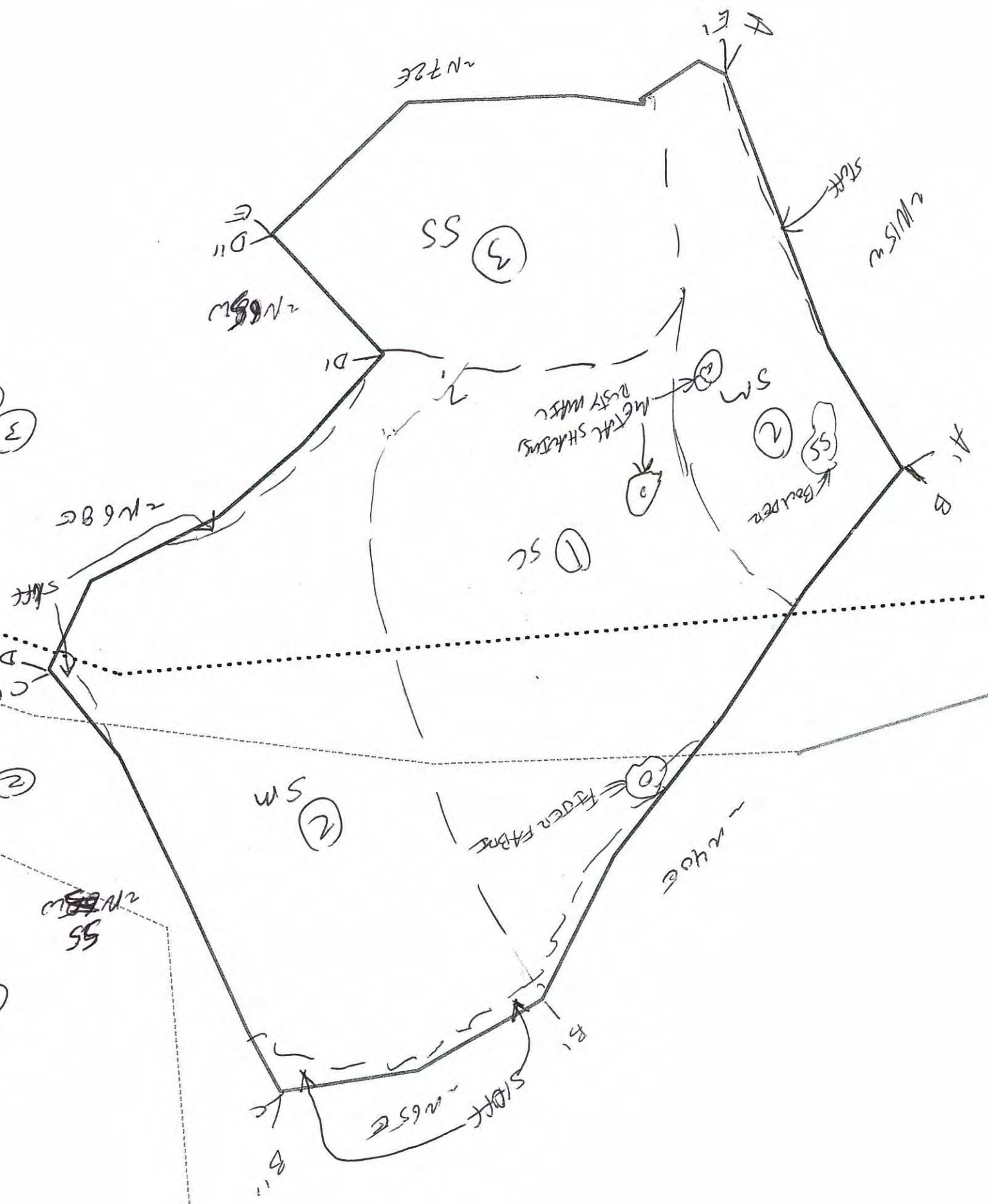
① Fill - clayey sand, the brown (or 3/7) SC
Moss, dense, minor debris, few
gravelly, silt - plastic
m-sand - 20%
gravel - 5%
f-sand - 25
silt - 40%
STD fill 40%

② - STDS sand of gravel + cobbles
few boulders of red iron to
red brown (type 4/4 to 5/6), SC moss
to moss, dense to voids, debris
(metal) pieces, sub-roped to sub-
filler (gravelly + cobbles
gravel + cobbles 20%
c-sand - 10%
m-sand - 70%
f-sand - 15%
STD 25%

③ Sandstone Bedrock, CT red brown
(10yr 6/4), Hand, massive, fractured

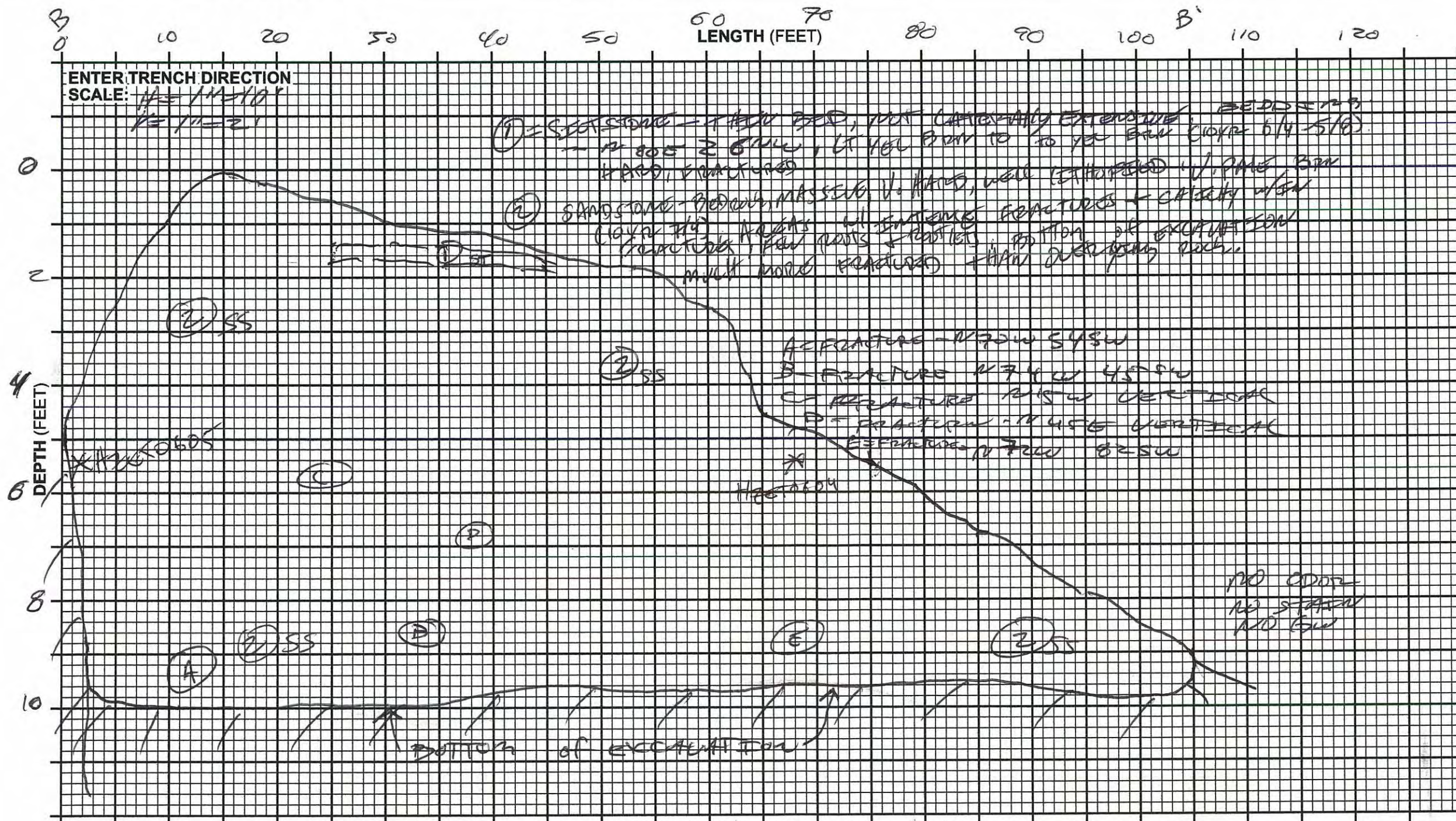
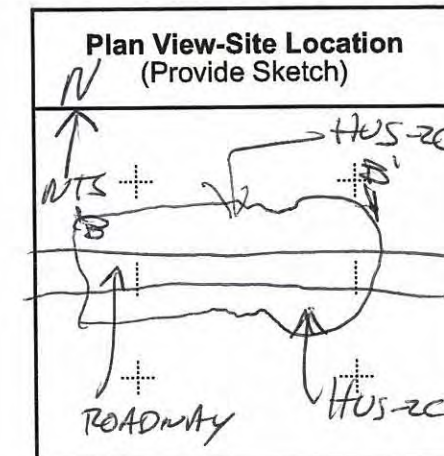


- SECTION 1065 -





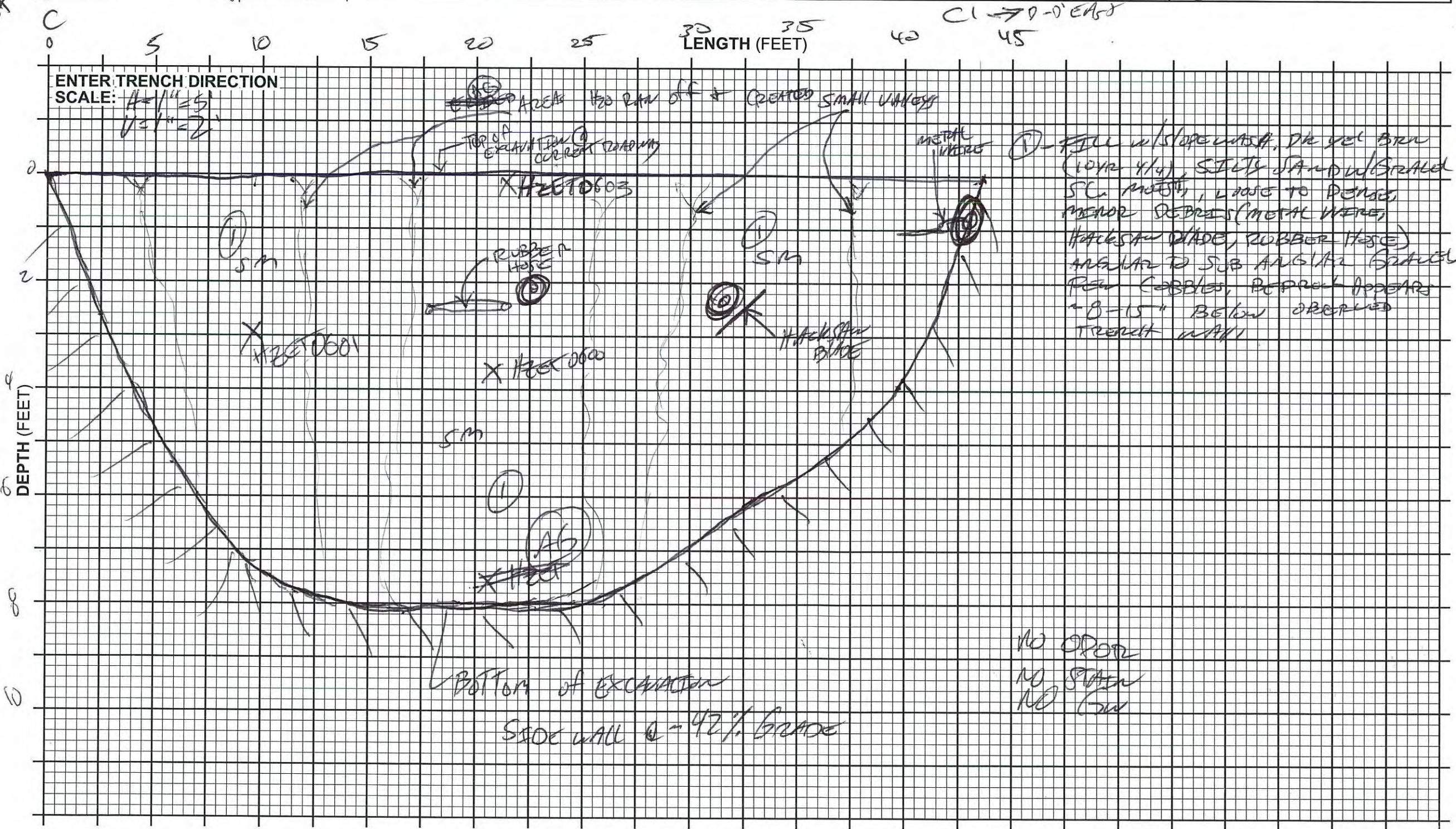
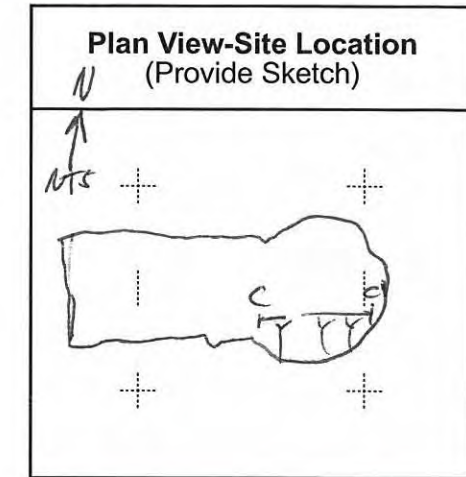
Project Name SSEL ^(AS) ISPA - OUTFALL 008			FIELD TRENCH LOG B-B1			
Trench Number HVS-2C	Project Number NA	Elevation and Datum NA	Location HAPPY VALLEY		Sheet <u>1</u> of <u>1</u>	
Equipment Supplier MPE	Operator DAVE WILSON	Date and Time Started 10/16/09	Date and Time Completed 10/16/09	Refusal? (Circle One) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If Yes Depth =	
Equipment type EXCAVATOR CAT 322C	Trench Orientation N70W	Total Depth ~10'	Total Number of Samples 2		Photo? (Circle One) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
Bucket Width 1'	Trench Length ~104'	Trench Width EXCAVATION	No. of Samples 2	Bulk <input checked="" type="checkbox"/>	Grab <input checked="" type="checkbox"/>	
Geologist or Hydrogeologist/Date A. Goldenshly		Checked by/Date		Wall of Trench Shown (Circle One) N <input checked="" type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/> NE <input type="checkbox"/> NW <input type="checkbox"/> SE <input type="checkbox"/> SW		



- EXPLANATION**
- SOIL TYPE CONTACT (SHARP)
 - - - OTHER CONTACT (AS INDICATED ON LOG)
 - - - FILL/NATIVE BOUNDARY
 - X ANALYTICAL SAMPLE LOCATION (WRITE SAMPLE NUMBER OUT TO SIDE)
 - G GEOTECHNICAL SAMPLE LOCATION (WRITE SAMPLE NUMBER OUT TO SIDE)
 - //// SHADING TO DENOTE STAINING
 - //// BASE OF EXCAVATION
 - SHOW LOCATIONS AND TYPES OF ALL MAJOR DEBRIS
 - VV = VEGETATION

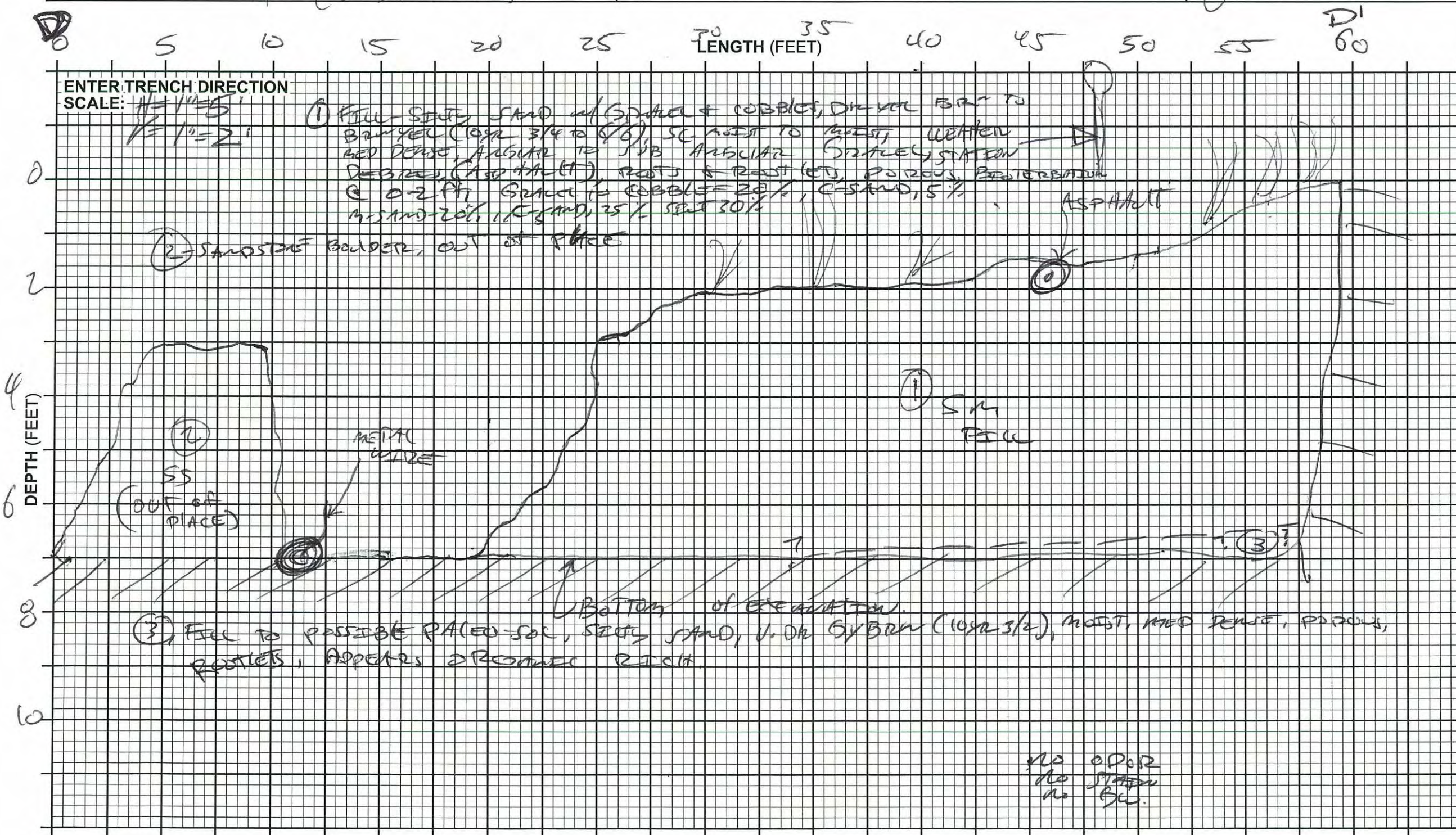
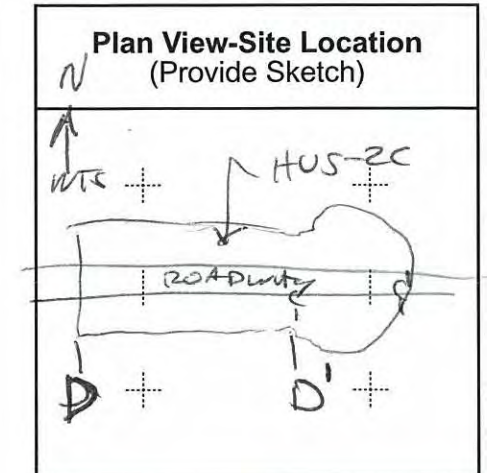
* SAMPLE STAKES ARE MOVED FOR ARE OUT OF PLACE DUE TO PLASTIC OVER THE EXCAVATION DURING THE RAIN

Project Name <i>SSR - ISOA OXPAV 000</i>			FIELD TRENCH LOG <i>C-C'</i>		
Trench Number <i>HVS-2L C-C'</i>		Project Number <i>NA</i>	Elevation and Datum <i>NA</i>	Location <i>HARRY VALLEY HVS-2C</i>	Sheet <i>1</i> of <i>1</i>
Equipment Supplier <i>MPE</i>		Operator <i>DAVE WILSON</i>	Date and Time Started <i>10/6/09 10:16:09</i>	Date and Time Completed <i>10/6/09 10:16:09</i>	Refusal? (Circle One) Yes <input type="radio"/> No <input checked="" type="radio"/> If Yes Depth =
Equipment Type <i>EXCAVATOR CAT 322C</i>		Trench Orientation <i>E-W</i>	Total Depth <i>~8'</i>	Total Number of Samples <i>3</i>	Photo? (Circle One) Yes <input type="radio"/> No <input checked="" type="radio"/>
Bucket Width <i>4'</i>	Trench Length <i>43</i>	Trench Width <i>EXCAVATION</i>	No. of Samples <i>3</i>	Bulk <i>0</i>	Grab <i>3</i>
Geologist or Hydrogeologist/Date <i>A. GILGOMBSON</i>			Checked by/Date	Drive <i>0</i>	Hand Auger <i>0</i>
			Wall of Trench Shown (Circle One) N <input checked="" type="radio"/> E <input type="radio"/> W <input type="radio"/> NE <input type="radio"/> NW <input type="radio"/> SE <input type="radio"/> SW		
			% Man-Made Debris <i>AG 2%</i>		



- EXPLANATION**
- SOIL TYPE CONTACT (SHARP)
 - OTHER CONTACT (AS INDICATED ON LOG)
 - FILL/NATIVE BOUNDARY
 - ANALYTICAL SAMPLE LOCATION (WRITE SAMPLE NUMBER OUT TO SIDE)
 - GEOTECHNICAL SAMPLE LOCATION (WRITE SAMPLE NUMBER OUT TO SIDE)
 - SHADING TO DENOTE STAINING
 - BASE OF EXCAVATION
 - SHOW LOCATIONS AND TYPES OF ALL MAJOR DEBRIS

Project Name CSFL-ISA OUTFALL COB				FIELD TRENCH LOG D-D'			
Trench Number HUS-2C D-D'		Project Number		Elevation and Datum NA		Location HAPPY VALLEY-HUS-2C	
Equipment Supplier MPE		Operator DAVE WILMER		Date and Time Started 10/16/09-LOGGED		Date and Time Completed 10/16/09 (LOGGED)	
Equipment Type EXCAVATOR CAT322C		Trench Orientation E-W		Total Depth 6'		Total Number of Samples 1	
Bucket Width 4'	Trench Length 38'	Trench Width EXCAVATION		No. of Samples 1	Bulk 0	Grab 1	Drive 0
Geologist or Hydrogeologist/Date A. GIDENBERG				Checked by/Date		Wall of Trench Shown (Circle One) N <input checked="" type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/> NE <input type="checkbox"/> NW <input type="checkbox"/> SE <input type="checkbox"/> SW <input type="checkbox"/>	
Refusal? (Circle One) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		If Yes Depth =		Photo? (Circle One) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		% Man-Made Debris 2%	



- ? - UNSURE**
- EXPLANATION**
- SOIL TYPE CONTACT (SHARP)
 - - - OTHER CONTACT (AS INDICATED ON LOG)
 - - - FILL/NATIVE BOUNDARY
 - X ANALYTICAL SAMPLE LOCATION (WRITE SAMPLE NUMBER OUT TO SIDE)
 - G GEOTECHNICAL SAMPLE LOCATION (WRITE SAMPLE NUMBER OUT TO SIDE)
 - //// SHADING TO DENOTE STAINING
 - //// BASE OF EXCAVATION
 - SHOW LOCATIONS AND TYPES OF ALL MAJOR DEBRIS
- VEGETATION

ISRA 008 EXCAVATIONS
HVS-2C



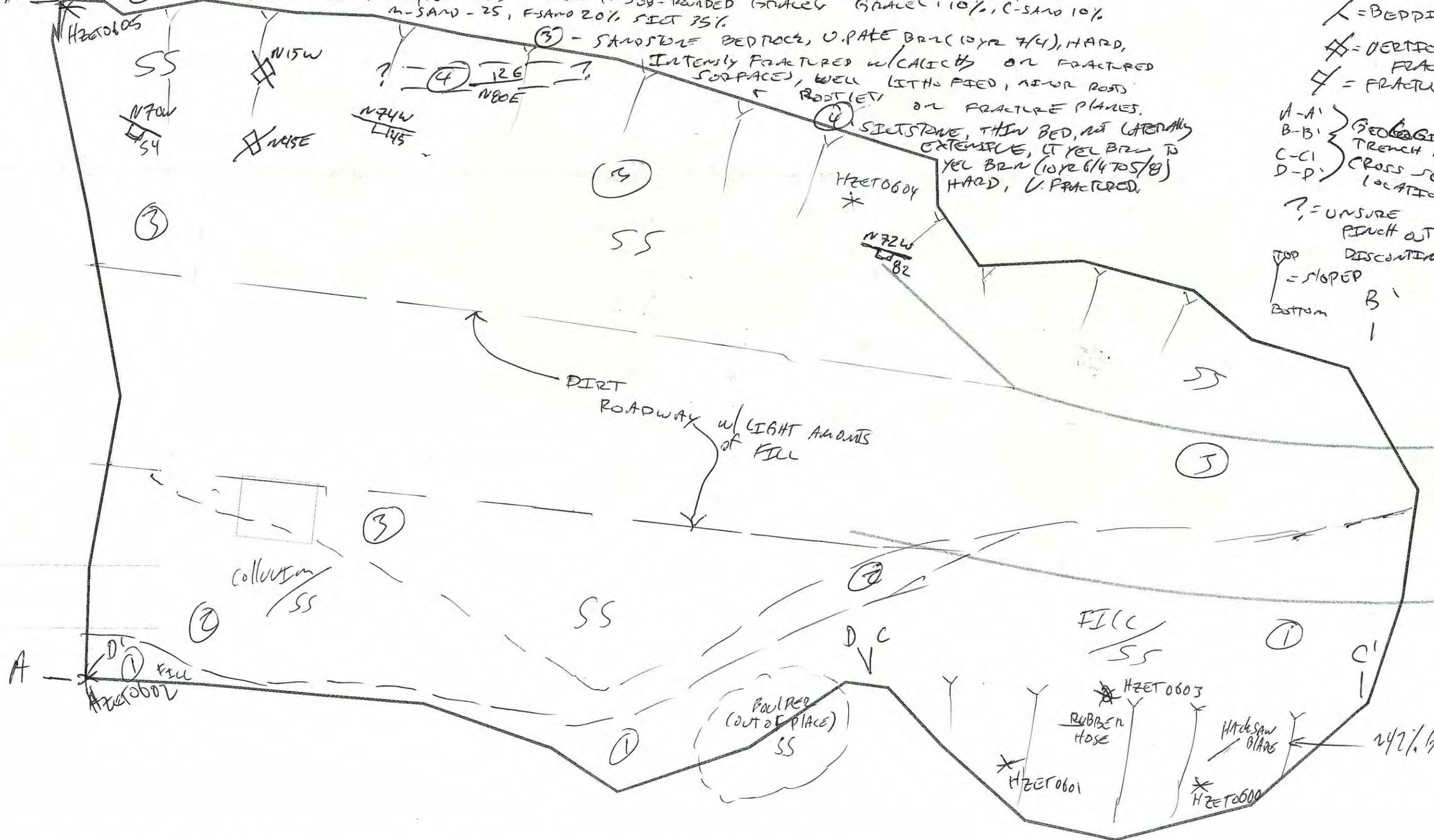
① FILL (SILTY SAND w/ GRAVEL + COBBLES, DK YEL BRN (10yr 3/4) TO DK YEL (10yr 6/6) SL. MIST TO MIST, MED DENSE TO DENSE, ANGULAR TO SUB-ANGULAR GRAVEL + COBBLES. DEBRIS (RUBBER HOSE, HATCHSAW BLADE, ASPHALT), AREAS WHERE BEDROCK IS 2-15" BELOW GROUND SURFACE, TO THE EAST, TO THE WEST IS IN DOWN TO BEDROCK GRAVEL + COBBLE 15%, C-SANDS 7%, M-SAND 25%, F-SAND 20% SICT 35%, POROUS, BISTEN BATED (MIST)

② - COLLUVIUM, SILTY SAND DK BRN TO STRONG BRN (7.5yr 3/3 TO 4/6) MIST, DENSE, ROOTS + ROOTLES, SL. POROUS, FEW SUB ANGULAR TO SUB-ROUNDED GRAVEL GRAVEL 10%, C-SAND 10% M-SAND - 25, F-SAND 20% SICT 35%

③ - SANDSTONE BEDROCK, U.PATE BRN (10yr 7/4), HARD, INTENSELY FRACTURED w/ CALCITE ON FRACTURED SURFACES, WELL LITHIFIED, FEW ROOTS ROOTLES ON FRACTURE PLANES.

④ SILTSTONE, THIN BED, NOT LATERALLY EXTENSIVE, LT YEL BRN TO YEL BRN (10yr 6/4 TO 5/8) HARD, U. FRACTURED.

- / = BEDDING
- ⊠ = VERTICAL FRACTURE
- ⊞ = FRACTURE
- A-A' } GEOLOGIC TRENCH WALL
- B-B' } CROSS SECTION LOCATION
- C-C' } CROSS SECTION LOCATION
- D-D' } CROSS SECTION LOCATION
- ? = UNSURE PINCH OUT OR DISCONTINUOUS.
- TOP = SLOPED
- BOTTOM = 1



* Sample locations/sample flags are marked AND/OR ARE OUT OF PLACE DUE TO PLASTIC OVER THE EXCAVATIONS FROM RAC