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United States Environmental Protection Agency
Region 4

OTIE
Oneida Total Integrated Enterprises

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

35TH AVENUE REMOVAL INVESTIGATION
BIRMINGHAM, ALABAMA
JEFF CROWLEY, ON-SCENE COORDINATOR

FIELD SAMPLING LOGBOOK

Book 2 **of** 2

Inclusive Dates: week of 1-14-13

List of Sampling Team in logbook:

Name	Initials	Organization/Duties
(b) (6)		Doug Frakey, Team Leader

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Sampling Procedures and Methodology

Unless specified elsewhere in this logbook, all soil samples will be collected in accordance with the EPA Science and Ecosystem Division (SESD) Field Branches Quality System and Technical Procedures (FBQSTP) Soil Sampling (SESDPROC-300-R2) based on the following design.

The total number of 5-point composite surface soil samples (0-4 inches below ground surface) to be collected from each property will be based on the lot size as follows:

- For residential properties with a total parcel lot size equal to or less than (≤) 5,000 square feet - the front yard and back yards of each property. If the property has a substantial side yard (primarily corner lots), then one composite soil sample may also be collected from the side yard. Aliquots will be collected away from influences with drip lines and burn areas in a five dice configuration (each of the four corners and the center).
- For residential properties with a total parcel lot size greater than (>) 5,000 square feet and ≤ ¼-acre - the property should be divided into two roughly equal surface areas. If the property has a substantial side yard (primarily corner lots), then one composite soil sample may be collected from the side yard with the remainder of the property being divided into two roughly equal surface areas. Aliquots will be collected away from influences including drip lines and burn areas with reasonably equal spacing between aliquots.
- Residential properties over ¼-acre in parcel lot size will be divided into ¼-acre sections. When dividing any such property with a substantial side yard (primarily corner lots), one composite soil sample may be collected from the side yard. Aliquots will be collected away from influences including drip lines and burn areas in a five dice configuration, if possible, with reasonably equal spacing between aliquots.

Grab surface soil samples will be collected from apparent exposure pathways where active play sets are located.

Three-point composite surface soil samples will be collected from distinct vegetable gardens from each residential property.

Samples shall not be collected under paved areas or under stationary fixed structures.

Grab sediment samples will be collected in accordance with EPA SESD FBSTP Sediment Sampling (SESDPROC-200-R2) from any surface water drainage pathways located on individual properties, as directed by the OSC, and in and along the banks of the 34th Street North Ditch.

Each surface soil or sediment sample should be homogenized in a stainless steel bowl. One 8-ounce jar will be filled and the remaining sample material will be placed in zip-top bags for screening. Information identifying the location, sample, and date/time will be inscribed on each jar and zip-top bag.

All sample bags will be screened for metals in accordance with SESD FBQSTP Field XRF Measurement (SESDPROC-107-R2) using a Niton XRF. The sample will be dried before sieving or analysis is performed. Once the sample has dried, the sample will be divided into two subsamples; one subsample will be sieved through a #10 screen (2 mm) and the other will be left unsieved. Once separated into sieved and unsieved samples, the zip-top bag will be compressed by folding over the excess plastic and removing as much air and space from the sample as possible. The XRF will be placed directly on the exterior of the compressed sample in the plastic zip-top bag to measure metals concentrations. Following XRF screening, the unsieved portion of the sample material will be containerized into one 8-ounce jars and the sieved portion of the sample will be containerized into another 8-ounce jar.

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Based on the site DQOs the 8-ounce jars of surface soil and sediment samples should be submitted to PEL, Tampa, Florida (a NELAC certified laboratory) for low level PAH, and/or TCL SVOC, RCRA metals, PCB, and/or Hexavalent Chromium analysis. RCRA metals will be analyzed from both the sieved and unsieved portions of the sample. All other analysis will be conducted on the unsieved portion.

The location of each aliquot will also be logged in accordance with SESD FBQSTP Global Positioning System (SESDPROC- 110-R3) using a Trimble GPS.

A description of the color and texture of the aliquot material will be recorded in each box.

The ***station ID*** for each location will consist of seven characters, beginning with the six digit Property ID designation for the property followed by a alphabetic letter beginning with "A".

e.g. CV0001A would be the station ID for the front yard 5-pt composite sample collected at the property with Property ID CV0001.

The ***sample ID*** for each sample is the station ID with "CS" (composite soil), "GS" (grab soil), "SD" (sediment), or "SW" (surface water) appended, therefore, the sample ID for this sample would be CV0001A-CS. Co-located duplicates will be designated by appending a "D" to the end of the sample ID. Pan splits will be identified by appending an "SP" to the end of the sample ID.

ADDRESS (b) (6) PROPERTY ID: CV0471

DATE: 1/17/13 ARRIVAL TIME: 0915

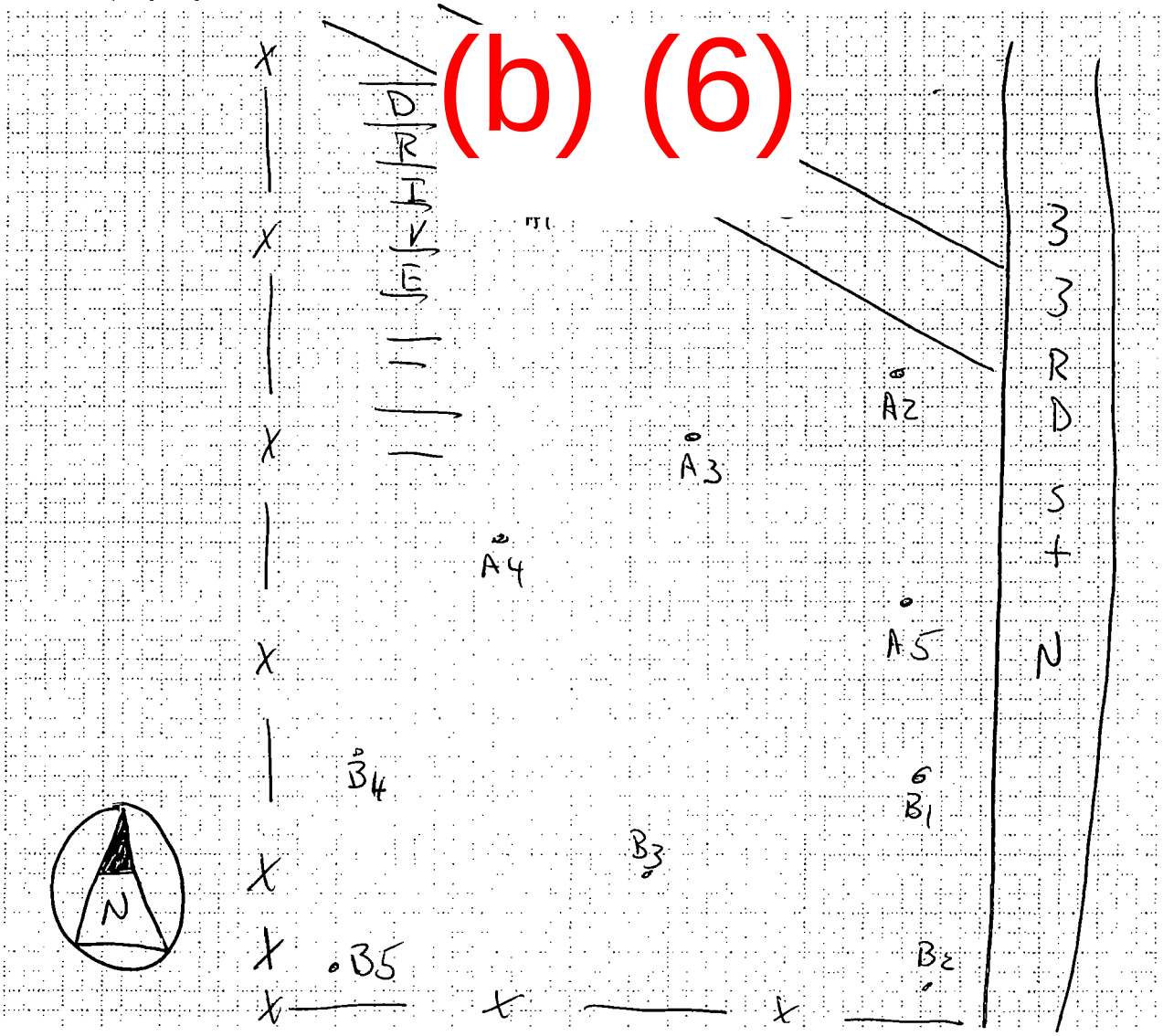
Other pertinent information (weather conditions, etc.):

35° Rain / Snow

PROPERTY COMMENTS:

Empty Parcel

Grid for property sketch



STATION ID: CV0471A SAMPLE ID: CV0471A-CS

SAMPLE COLLECTION TIME: 0935

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Front/SIDE Pic 3

Collection: (Composite) or Grab MS/MSD? Y or (N)

Field Duplicate or Split: *Yes or* (No) *If yes, indicate* Duplicate/split sample station ID: _____

GPS Coordinates: Trimble [✓] Instrument #: 020168 Logged? Y or N

Aliquot #1: *Latitude:* 33.55720939 N *Longitude* 86.80063828 W
Media description: Brown Silty Soil - wet

Aliquot #2 *Latitude:* 33.55716243 N *Longitude* 86.800582258 W
Media description: Brown Silty Soil - wet

Aliquot #3: *Latitude:* 33.55713673 N *Longitude* 86.80064399 W
Media description: Brown silty Soil - wet

Aliquot #4: *Latitude:* 33.55708526 N *Longitude* 86.80059389 W
Media description: Brown Silty Soil - wet

Aliquot #5: *Latitude:* 33.55710292 N *Longitude* 86.80072416 W
Media description: Brown Silty soil - wet

STATION ID: CV0471B SAMPLE ID: CV0471B-CS

SAMPLE COLLECTION TIME: 0950

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Front/Side Pic 4

Collection: (Composite) or Grab MS/MSD? Y or (N)

Field Duplicate or Split: *Yes or* (No) *If yes, indicate* Duplicate/split sample station ID: _____

GPS Coordinates: Trimble [✓] Instrument #: 020168 Logged? Y or N

Aliquot #1: *Latitude:* 33.55704139 N *Longitude* 86.80061599 W
Media description: Brown Silty soil - wet

Aliquot #2 *Latitude:* 33.55697151 N *Longitude* 86.80062264 W
Media description: Brown Silty Soil - wet

Aliquot #3: *Latitude:* 33.55700726 N *Longitude* 86.80075300 W
Media description: Brown silty soil - wet

Aliquot #4: *Latitude:* 33.55706 N *Longitude* _____ W
Media description: Brown Silty soil - wet

Aliquot #5: *Latitude:* 33.55697284 N *Longitude* 86.80089851 W
Media description: Brown silty soil - wet

ADDRESS: (b) (6) PROPERTY ID: CV0464

DATE: 1/17/13 ARRIVAL TIME: 1010

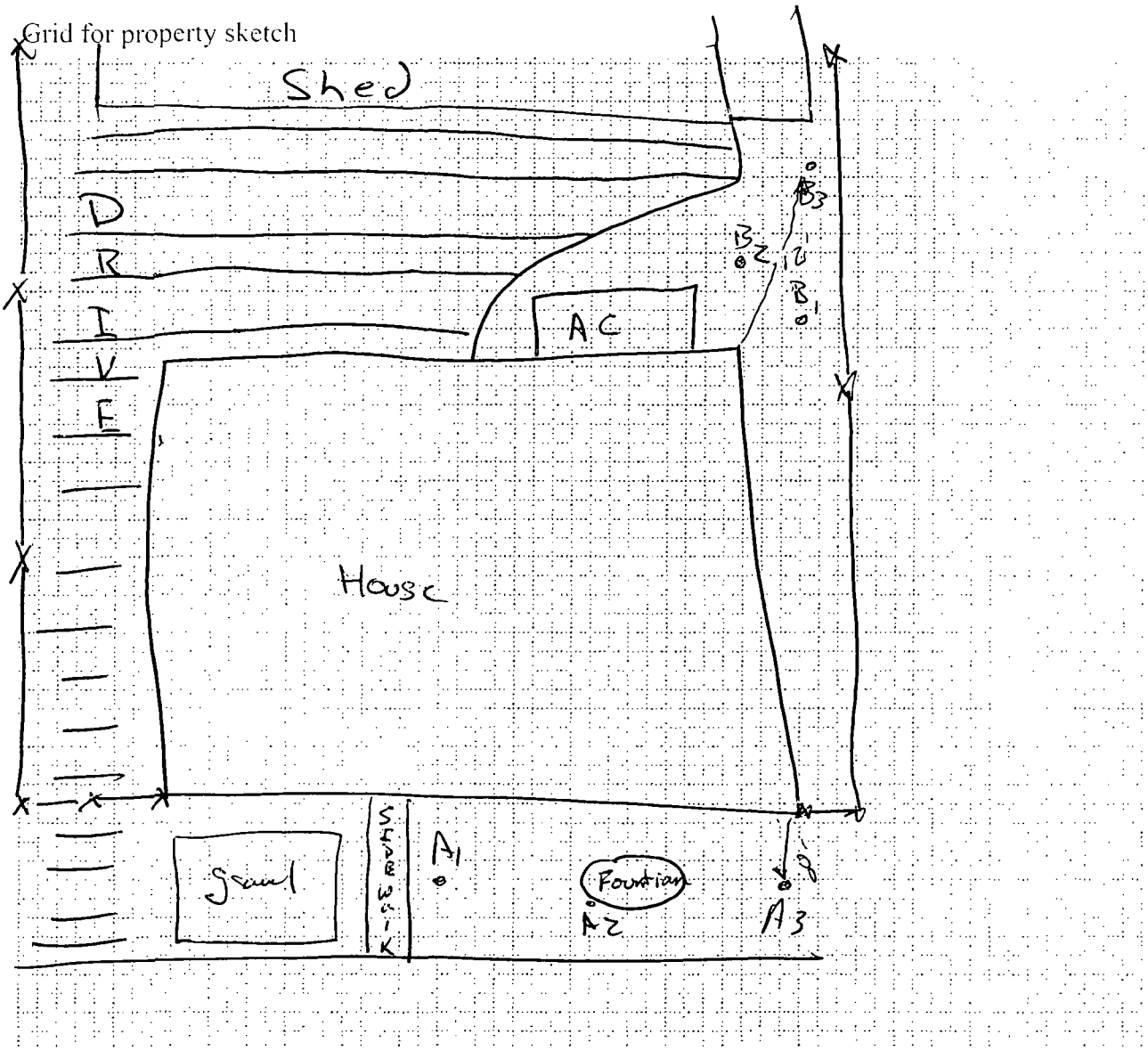
Other pertinent information (weather conditions, etc.):

35° Rain/Snow

PROPERTY COMMENTS:

Only Small area of Soil front & Back

Grid for property sketch



STATION ID: CV0464A **SAMPLE ID:** CV0464A-CS

SAMPLE COLLECTION TIME: 1020

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Front Yard Pic7

Collection: (Composite) or Grab **MS/MSD?** Y or (N)

Field Duplicate or Split: *Yes or* (No) *If yes, indicate* **Duplicate/split sample station ID:** _____

GPS Coordinates: Trimble [✓] Instrument #: 020168 Logged? Y or N

Aliquot #1: *Latitude:* 33.556427705 N *Longitude* 86.800477774 W

Media description: Brown silty soil - wet

Aliquot #2 *Latitude:* 33.55640262 N *Longitude* 86.80048241 W

Media description: Brown silty soil - wet

Aliquot #3: *Latitude:* 33.55636892 N *Longitude* 86.80047343 W

Media description: Brown silty soil - wet

Aliquot #4: ~~*Latitude:*~~ _____ N *Longitude* _____ W

Media description: _____

Aliquot #5: *Latitude:* _____ N *Longitude* _____ W

Media description: _____

STATION ID: CV0464B **SAMPLE ID:** CV0464B-CS

SAMPLE COLLECTION TIME: 1035

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Back Yard. Pic 8

Collection: (Composite) or Grab **MS/MSD?** Y or (N)

Field Duplicate or Split: *Yes or* (No) *If yes, indicate* **Duplicate/split sample station ID:** _____

GPS Coordinates: Trimble [✓] Instrument #: 020168 Logged? Y or N

Aliquot #1: *Latitude:* 33.556362774 N *Longitude* 86.800254641 W

Media description: Brown silty soil - wet

Aliquot #2 *Latitude:* 33.55637769 N *Longitude* 86.80023716 W

Media description: Brown silty soil - wet

Aliquot #3: *Latitude:* 33.55635510 N *Longitude* 86.80019646 W

Media description: Brown silty soil - wet

Aliquot #4: ~~*Latitude:*~~ _____ N *Longitude* _____ W

Media description: _____

Aliquot #5: *Latitude:* _____ N *Longitude* _____ W

Media description: _____

ADDRESS: (b) (6) PROPERTY ID: CV0459

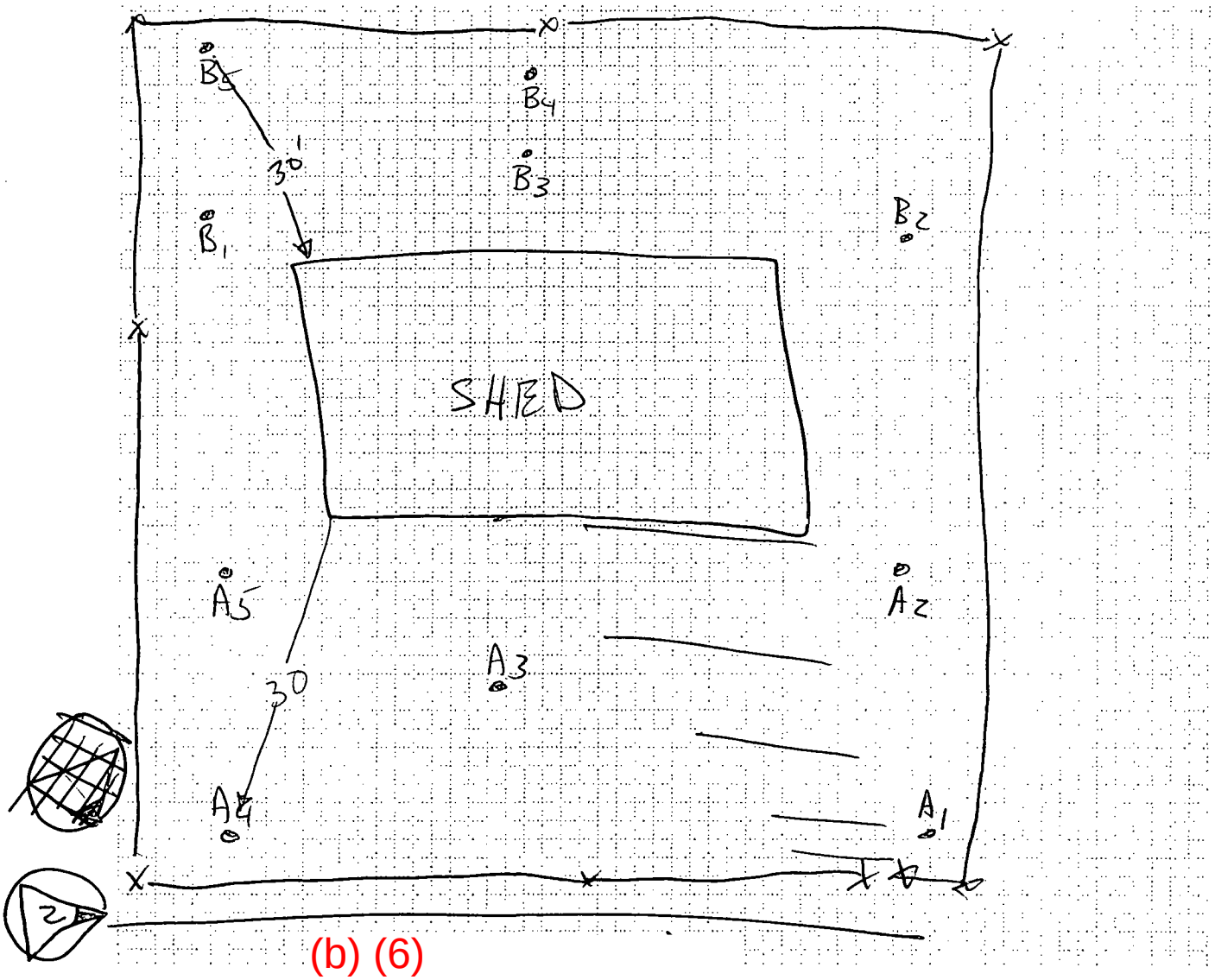
DATE: 1/17/13 ARRIVAL TIME: 1055

Other pertinent information (weather conditions, etc.):

35° Rain/Snow

PROPERTY COMMENTS:

Grid for property sketch



STATION ID: CV0459A **SAMPLE ID:** CV0459A-CS

SAMPLE COLLECTION TIME: 1110

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Front yard. Pic 9

Collection: (Composite) or Grab **MS/MSD?** Y or (N)

Field Duplicate or Split: *Yes or* (No) *If yes, indicate* **Duplicate/split sample station ID:** _____

GPS Coordinates: Trimble [✓] Instrument #: 020168 Logged? Y or N

Aliquot #1: *Latitude:* ~~CV0459A~~ 33.55619170 N *Longitude* 86.80064968 W
Media description: Brown silty soil - wet

Aliquot #2 *Latitude:* 33.55608319 N *Longitude* 86.80064877 W
Media description: Brown silty soil - wet

Aliquot #3: *Latitude:* 33.55613043 N *Longitude* 86.80070101 W
Media description: Brown silty soil - wet

Aliquot #4: *Latitude:* 33.55608319 N *Longitude* 86.80064877 W
Media description: Brown silty soil - wet

Aliquot #5: *Latitude:* 33.55608803 N *Longitude* 86.80072418 W
Media description: Brown silty soil - wet

STATION ID: CV0459B **SAMPLE ID:** CV0459B-CS

SAMPLE COLLECTION TIME: 1125

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Back yard. Pic 10

Collection: (Composite) or Grab **MS/MSD?** Y or (N)

Field Duplicate or Split: *Yes or* (No) *If yes, indicate* **Duplicate/split sample station ID:** _____

GPS Coordinates: Trimble [✓] Instrument #: 020168 Logged? Y or N

Aliquot #1: *Latitude:* 33.55608821 N *Longitude* 86.80082129 W
Media description: Brown silty soil - wet

Aliquot #2 *Latitude:* 33.55620080 N *Longitude* 86.80083694 W
Media description: Brown silty soil - wet

Aliquot #3: *Latitude:* 33.55612661 N *Longitude* 86.80090406 W
Media description: Brown silty soil - wet

Aliquot #4: *Latitude:* 33.55612224 N *Longitude* 86.80099828 W
Media description: Brown silty soil - wet

Aliquot #5: *Latitude:* 33.55608416 N *Longitude* 86.80105042 W
Media description: Brown silty soil - wet

ADDRESS: (b) (6) PROPERTY ID: CV0406

DATE: 1/17/13 ARRIVAL TIME: 1315

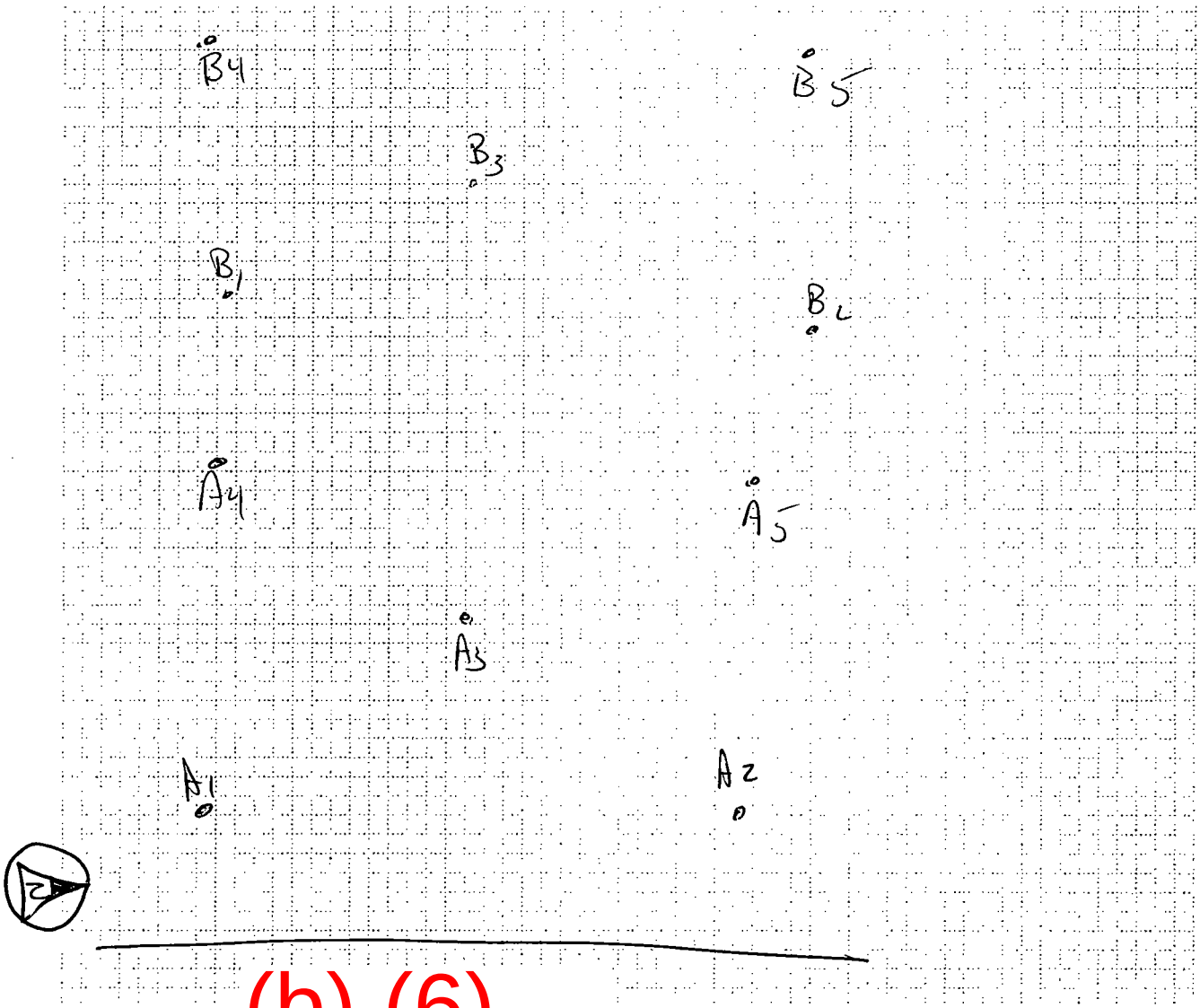
Other pertinent information (weather conditions, etc.):

35° SNOW

PROPERTY COMMENTS:

No structure

Grid for property sketch



STATION ID: CV0406 SAMPLE ID: CV0406A-CS

SAMPLE COLLECTION TIME: 1330A

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Front yard. Pic 11

Collection: (Composite) or Grab MS/MSD? Y or (N)

Field Duplicate or Split: *Yes or* (No) *If yes, indicate* Duplicate/split sample station ID: _____

GPS Coordinates: Trimble [✓] Instrument #: 020168 Logged? Y or N

Aliquot #1: *Latitude:* 33.55806105 N *Longitude* 86.79960035 W

Media description: Dk Brown silty soil - wet - orange clay

Aliquot #2 *Latitude:* 33.55799685 N *Longitude* 86.79960906 W

Media description: Dk Brown silty soil - wet - Orange clay

Aliquot #3: *Latitude:* 33.55803445 N *Longitude* 86.79967618 W

Media description: Brown silty soil - wet - orange clay

Aliquot #4: *Latitude:* 33.55805416 N *Longitude* 86.79973478 W

Media description: Brown silty soil - wet - orange clay

Aliquot #5: *Latitude:* 33.55799710 N *Longitude* 86.79974592 W

Media description: Brown silty soil - wet - org clay

STATION ID: CV0406 SAMPLE ID: CV0406B-CS

SAMPLE COLLECTION TIME: 1340D

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Back of Parcel Pic 12

Collection: (Composite) or Grab MS/MSD? Y or (N)

Field Duplicate or Split: *Yes or* (No) *If yes, indicate* Duplicate/split sample station ID: _____

GPS Coordinates: Trimble [✓] Instrument #: 020168 Logged? Y or N

Aliquot #1: *Latitude:* 33.55800619 N *Longitude* 86.79979876 W

Media description: Brown silty soil - wet

Aliquot #2 *Latitude:* 33.55806313 N *Longitude* 86.79981963 W

Media description: Brown silty soil - wet

Aliquot #3: *Latitude:* 33.55803596 N *Longitude* 86.79988664 W

Media description: Brown silty soil - wet

Aliquot #4: *Latitude:* 33.55800504 N *Longitude* 86.79994107 W

Media description: Brown silty soil - wet

Aliquot #5: *Latitude:* 33.55806360 N *Longitude* 86.79994357 W

Media description: Brown silty soil - wet

ADDRESS: (b) (6) PROPERTY ID: CV0503

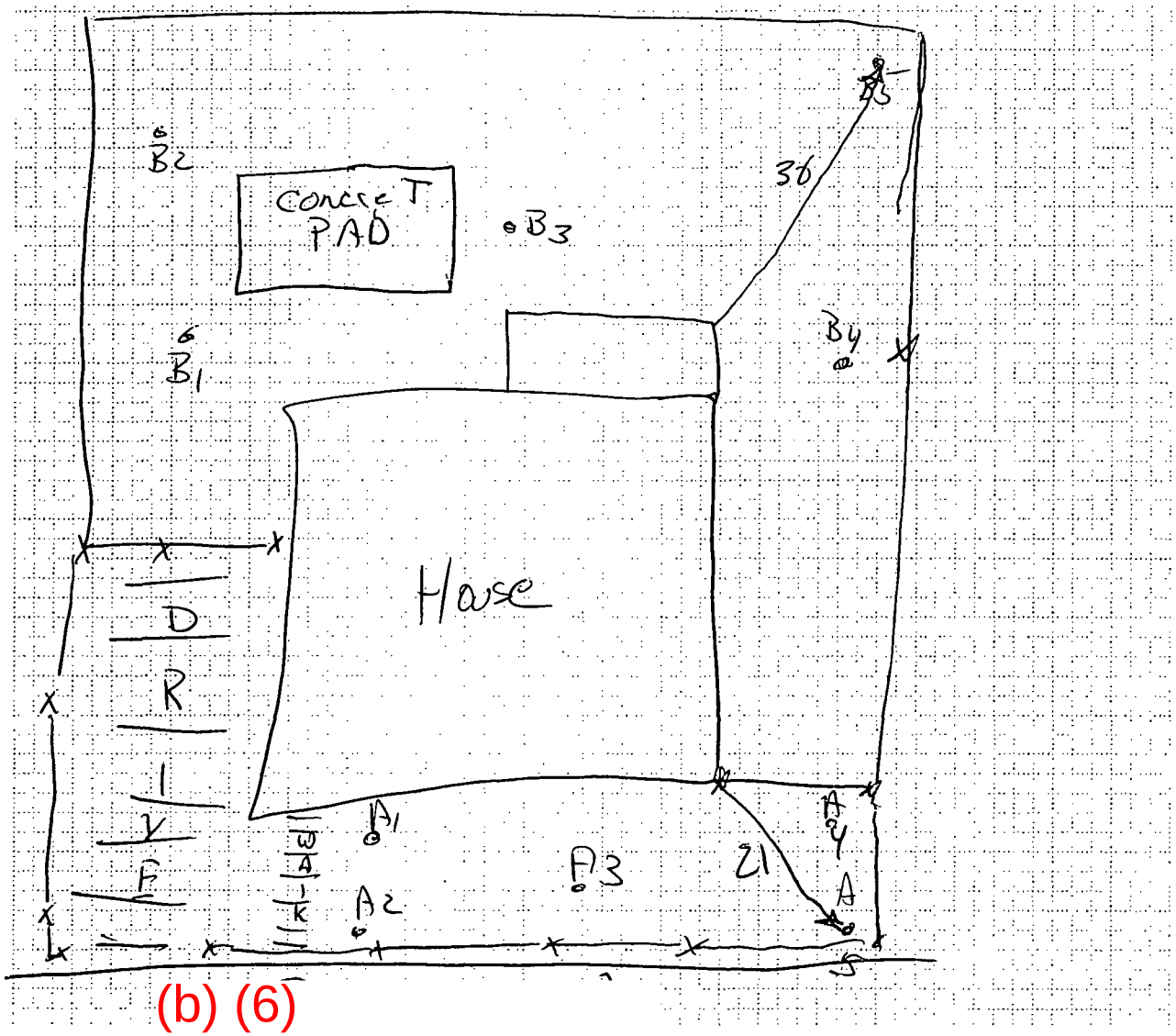
DATE: 1/18/13 ARRIVAL TIME: 0845

Other pertinent information (weather conditions, etc.):

37° Sonny

PROPERTY COMMENTS:

Grid for property sketch



STATION ID: CV0503A **SAMPLE ID:** CV0503A-CS

SAMPLE COLLECTION TIME: 0900

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Front yard.

Collection: (Composite) or Grab **MS/MSD?** Y or (N) Pic 1

Field Duplicate or Split: *Yes or No* ***If yes, indicate*** **Duplicate/split sample station ID:**

GPS Coordinates: Trimble [✓] Instrument #: 020168 Logged? Y or N

Aliquot #1: *Latitude:* 33.55697247 N *Longitude* 86.80755430 W
Media description: Black silty soil

Aliquot #2 *Latitude:* 33.55694972 N *Longitude* 86.80750488 W
Media description: Black silty soil

Aliquot #3: *Latitude:* 33.55695207 N *Longitude* 86.80755023 W
Media description: Black silty soil

Aliquot #4: *Latitude:* 33.55692824 N *Longitude* 86.80761217 W
Media description: Black silty soil

Aliquot #5: *Latitude:* 33.5569820 N *Longitude* 86.80761667 W
Media description: Black silty soil

STATION ID: CV0503B **SAMPLE ID:** CV0503B-CS

SAMPLE COLLECTION TIME: 0915 Pic 2

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Back yard.

Collection: (Composite) or Grab **MS/MSD?** Y or N

Field Duplicate or Split: (Yes) or *No* ***If yes, indicate*** **Duplicate/split sample station ID:** CV0503B-CS-D

GPS Coordinates: Trimble [✓] Instrument #: 020168 Logged? Y or N

Aliquot #1: *Latitude:* 33.55681084 N *Longitude* 86.80747912 W
Media description: Black silty soil

Aliquot #2 *Latitude:* 33.55673463 N *Longitude* 86.80747314 W
Media description: Black silty soil

Aliquot #3: *Latitude:* 33.55675212 N *Longitude* 86.80753636 W
Media description: Black silty soil

Aliquot #4: *Latitude:* 33.55677180 N *Longitude* 86.80761475 W
Media description: Black silty soil

Aliquot #5: *Latitude:* 33.55670634 N *Longitude* 86.80761174 W
Media description: Black soil silty

ADDRESS: (b) (6) Fm 0226 PROPERTY ID: _____

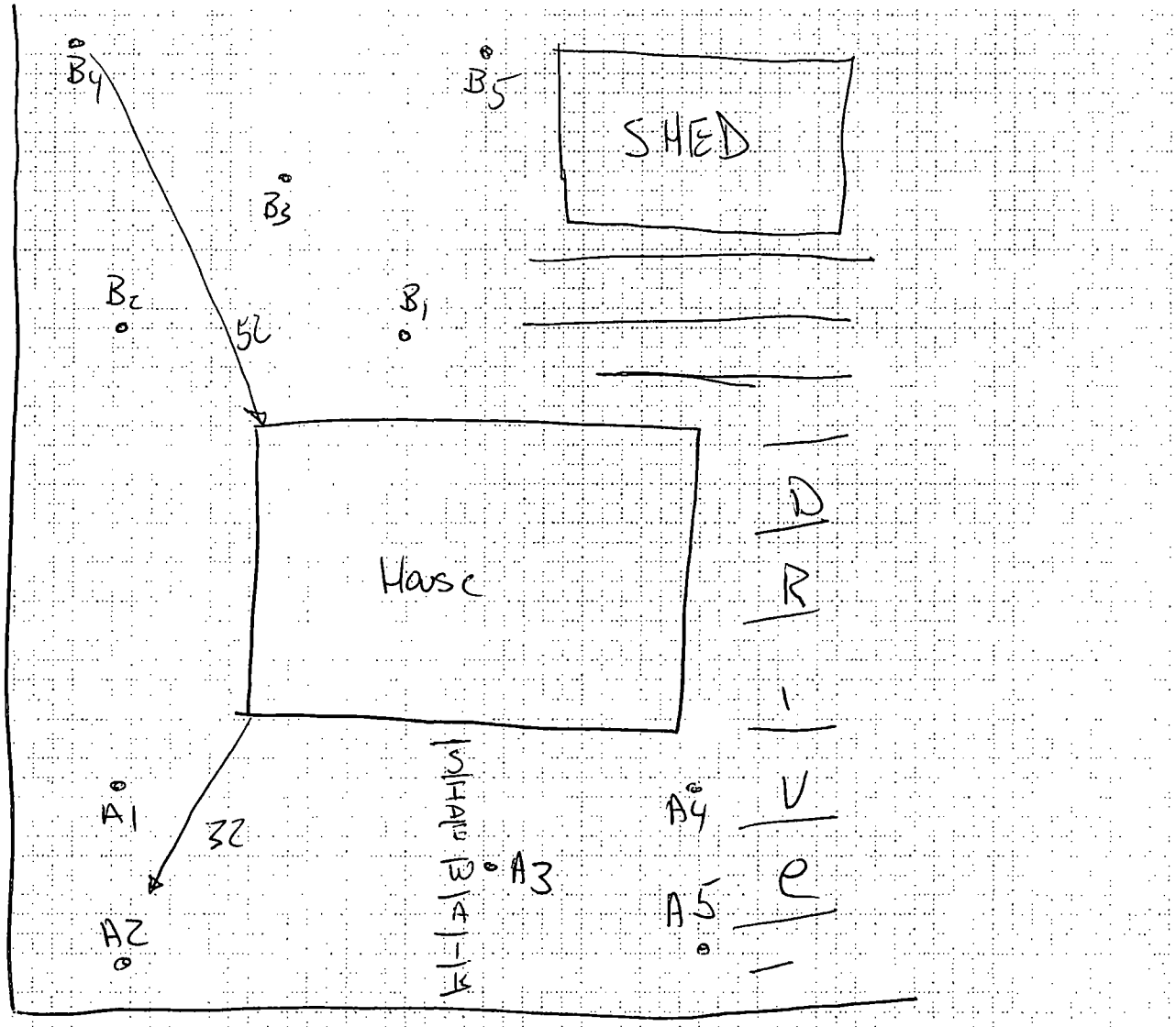
DATE: 1/18/13 ARRIVAL TIME: 0930

Other pertinent information (weather conditions, etc.):

37° Sunny

PROPERTY COMMENTS:

Grid for property sketch



STATION ID: FM0226A **SAMPLE ID:** FM0226A-CS

SAMPLE COLLECTION TIME: 1000

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Front Yard.

Collection: (Composite) or Grab **MS/MSD?** Y or (N) Pic 3

Field Duplicate or Split: *Yes or No* ***If yes, indicate*** **Duplicate/split sample station ID:** _____

GPS Coordinates: Trimble [✓] Instrument #: 020168 Logged? Y or N

Aliquot #1: *Latitude:* 33.57125939 N *Longitude* 86.80481694 W
Media description: Brown silty soil - wet

Aliquot #2 *Latitude:* 33.57129586 N *Longitude* 86.80481618 W
Media description: Brown silty soil wet

Aliquot #3: *Latitude:* 33.57127822 N *Longitude* 86.80474978 W
Media description: Brown silty soil wet

Aliquot #4: *Latitude:* 33.57128806 N *Longitude* 86.80464101 W
Media description: Brown silty soil wet

Aliquot #5: *Latitude:* 33.57125004 N *Longitude* 86.80464293 W
Media description: Brown silty soil wet

STATION ID: FM0226B **SAMPLE ID:** FM0226B-CS

SAMPLE COLLECTION TIME: 1015 Pic 4

Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):

Back Yard.

Collection: (Composite) or Grab **MS/MSD?** Y or N

Field Duplicate or Split: *Yes or* (No) ***If yes, indicate*** **Duplicate/split sample station ID:** _____

GPS Coordinates: Trimble [✓] Instrument #: 020168 Logged? Y or N

Aliquot #1: *Latitude:* 33.57147333 N *Longitude* 86.80469576 W
Media description: Brown silty soil - wet

Aliquot #2 *Latitude:* 33.57147575 N *Longitude* 86.80482500 W
Media description: Brown silty soil - wet

Aliquot #3: *Latitude:* 33.57153589 N *Longitude* 86.80476025 W
Media description: Brown silty soil

Aliquot #4: *Latitude:* 33.57162247 N *Longitude* 86.80481135 W
Media description: Brown silty soil

Aliquot #5: *Latitude:* 33.57160856 N *Longitude* 86.80470033 W
Media description: Brown silty soil

ADDRESS: _____ PROPERTY ID: _____

DATE: _____ ARRIVAL TIME: _____

Other pertinent information (weather conditions, etc.):

_____

PROPERTY COMMENTS:

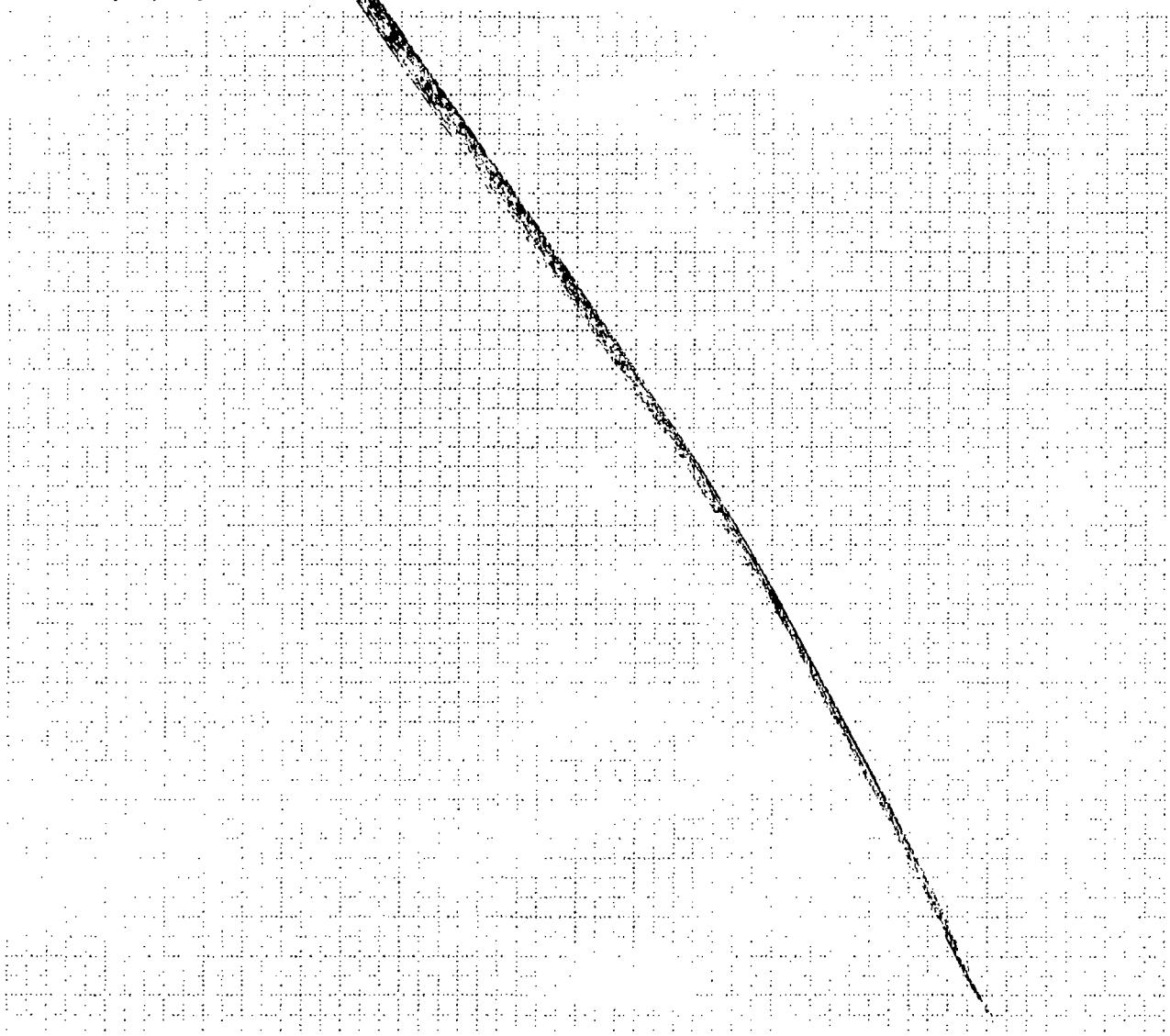
_____

_____

_____

_____

Grid for property sketch



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