



June 1, 2017

Reference No. 3711082

Mr. Christopher Mannes, III, P.E.
NYSDEC, Region 7
615 Erie Boulevard West
Syracuse, New York 13204

**Re: Work Plan – Supplemental Sampling and Investigation Activities
Celi Drive BCP Site, 5762 Celi Drive, Dewitt, New York
NYSDEC BCP Site #C734108**

Dear Mr. Mannes:

GHD Consulting Services Inc. (GHD) is submitting this work plan on behalf of GSP Holdings, Inc. (Formerly known as GSP, Inc., or GSP) to outline proposed supplemental sampling and investigation activities at the above referenced Brownfield Cleanup Program (BCP) Site, in accordance with requests received from the New York State Department of Environmental Conservation (NYSDEC) by letter dated February 21, 2017. The objective of these proposed activities is to further refine the nature and extent of soil and groundwater contamination based on historic groundwater sampling analytical results. In general, the NYSDEC and NYSDOH have requested further investigation of Arsenic detections in samples taken from MW-7, Polychlorinated Biphenyl (PCB) detection in MW-4, and elevated Nickel detections in upgradient well MW-3. The proposed scope of work for the supplemental investigation is provided below.

1. Groundwater Sampling

Groundwater samples will be taken from six (6) of the eight (8) Site monitoring wells, including MW-1, MW-2, MW-4, MW-6, MW-7, and MW-8 (Figure 1), utilizing low-flow sampling techniques (i.e., peristaltic pump) with dedicated tubing for each monitoring well. Prior to sampling, the depth to water and total depth of well will be recorded, and the volume of water in the well will be calculated. To minimize the turbidity of the groundwater samples, the wells will be purged using low-flow methods until field parameters (i.e., pH, temperature, conductivity, dissolved oxygen, oxidation reduction potential, and turbidity) stabilize, at which point groundwater samples will be taken for laboratory analysis. Stabilized water (i.e., adequate purge) will be based on 3 consecutive readings where: 1) turbidity is within 10 percent; 2) pH is within 0.1 standard units; 3) specific conductance is within 0.005 mS/cm; 4) dissolved oxygen is within 10 percent; 5) oxidation reduction potential is within 10 mV; and 6) temperature is within 3%. Groundwater samples will be placed directly from the dedicated tubing into certified pre-cleaned bottles provided by the laboratory.

The groundwater samples will be sent to a NYSDOH ELAP-certified laboratory to be analyzed as follows:

- Samples taken from MW-1, MW-2, MW-6, and MW-7 will be analyzed for total arsenic by Environmental Protection Agency (EPA) Method 6010. In addition, for quality assurance/quality



control (QA/QC) purposes one (1) blind field duplicate sample, one (1) matrix spike (MS) sample, and one (1) matrix spike duplicate (MSD) sample will be taken from one (1) of these wells for laboratory analysis for total arsenic.

- Samples taken from MW-4 and MW-8 will be analyzed for polychlorinated biphenyls (PCBs) by EPA Method 8082. In addition, for QA/QC purposes one (1) blind field duplicate sample, one (1) MS sample, and one (1) MSD sample will be taken from one (1) of these wells for laboratory analysis for PCBs.

Groundwater monitoring well purge water will be containerized in a steel 55-gallon drum, which will be staged on-Site to await characterization and proper disposal off-Site at a later date by GSP. The laboratory will provide a Category B data package and a NYSDEC EQUIS Electronic Data Deliverable (EDD).

2. Soil Sampling

Soil samples will be taken from each of twelve (12) locations in proximity of two (2) groundwater monitoring wells (Figure 2), as follows:

- MW-3 Assessment of Nickel: Collect one (1) soil sample from 0 to 6 inches below ground surface at each of four (4) locations around MW-3. The proposed locations will be approximately 10 feet north, south, east, and west of the existing monitoring well. Each of the samples will be submitted to the laboratory for total nickel analysis by EPA Method 6010. In addition, for QA/QC purposes one (1) blind field duplicate sample, one (1) MS sample, and one (1) MSD sample will be taken from one (1) of these locations for laboratory analysis for total nickel.
- MW-4 Assessment of PCBs: Collect a total of twelve (12) soil samples from locations around MW-4. Actual locations and depths of samples will be field determined based on sample location conditions. The proposed locations will be approximately 10 and 20 feet north, south, east, and west of the existing monitoring well. Two (2) soil samples will be taken from each of the four (4) locations 10 feet away from the well: one (1) from 0 to 12 inches bgs and one (1) from 12 to 18 inches bgs. Each of these samples will be submitted to the laboratory to be analyzed for PCBs by EPA Method 8082. In addition, one (1) soil sample will be taken from each of the four (4) locations 20 feet away from the well, from 0 to 12 inches bgs. Each of these samples will be submitted to the laboratory "on hold" pending analytical results of the samples taken closer to MW-4. Also, for QA/QC purposes one (1) blind field duplicate sample, one (1) MS sample, and one (1) MSD sample will be taken from one (1) of the locations within 10 feet of MW-4 for laboratory analysis for PCBs. The samples submitted "on hold" will only be analyzed if the samples taken closer to MW-4 identify PCB concentrations.

Each soil sample will be collected using either a hand trowel or hand auger, depending on the conditions encountered at the time of sample collection and the proposed depth of the sample interval. Excess soil removed from the sample locations will be placed back into the borings to restore the areas. Between



each sampling location, any non-dedicated sampling devices will be decontaminated by washing in an Alconox and potable water solution, rinsing with potable water, and allowing to air dry. The location of each sample will be staked and labelled in the field for future reference. The laboratory will provide a Category B data package and a NYSDEC EQUIS EDD.

3. Data Usability Summary Report

The laboratory will provide a Category B data deliverable package so that a data usability summary report (DUSR) may be completed for the groundwater and soil samples, by an independent third party.

The DUSR is carried out to evaluate the quality control measures that were implemented during the field and laboratory analytical programs, with the objective of determining whether the reported analytical data are representative. The DUSR will evaluate whether all analytical requirements were met and documented and will review the Site data to determine whether they are adequate to draw conclusions regarding the nature and extent of contamination.

The following items will be reviewed as part of the DUSR:

- completeness (number of samples taken and analyzed compared to plans)
- chain of custody determined to be complete and accurate
- holding times met
- instrument calibration
- relative percent difference between field duplicates
- reasonableness of data (e.g., relationships between total and soluble analytes)
- blank contamination.

The results of the DUSR will be used to update the laboratory results summary tables for the report and the EDD that will be submitted to the NYSDEC EQUIS Database for upload. A copy of the DUSR will also be included in the final report.

4. Reporting

Following completion of field activities, receipt of laboratory analytical results, and receipt of the DUSR, a Supplemental Sampling and Investigation Summary Letter Report will be prepared and submitted to NYSDEC and NYSDOH for review and acceptance. The report will contain a description of the methods used and the data acquired, and will, at a minimum, include the following:

- discussion of investigation methods and results, as well as any deviations from the approved methods proposed in this work plan



- Site figures showing approximate sample locations and pertinent analyte concentrations
- field parameter results summary tables
- laboratory analytical results summary tables including parameters that were detected and those that exceeded applicable standards, criteria, and guidance (SCGs)
- copies of laboratory analytical reports
- copy of the data usability summary report
- EQuls upload confirmation.

5. Schedule

The field sampling activities will be scheduled upon receipt of NYSDEC and NYSDOH approval of this Work Plan and will be completed within thirty days of approvals.

Please contact me (315-679-5838) or Ian McNamara (315-679-5732) if you have questions or require additional information.

Sincerely,

GHD CONSULTING SERVICES INC.

A handwritten signature in blue ink, appearing to read 'Damian J. Vanetti'.

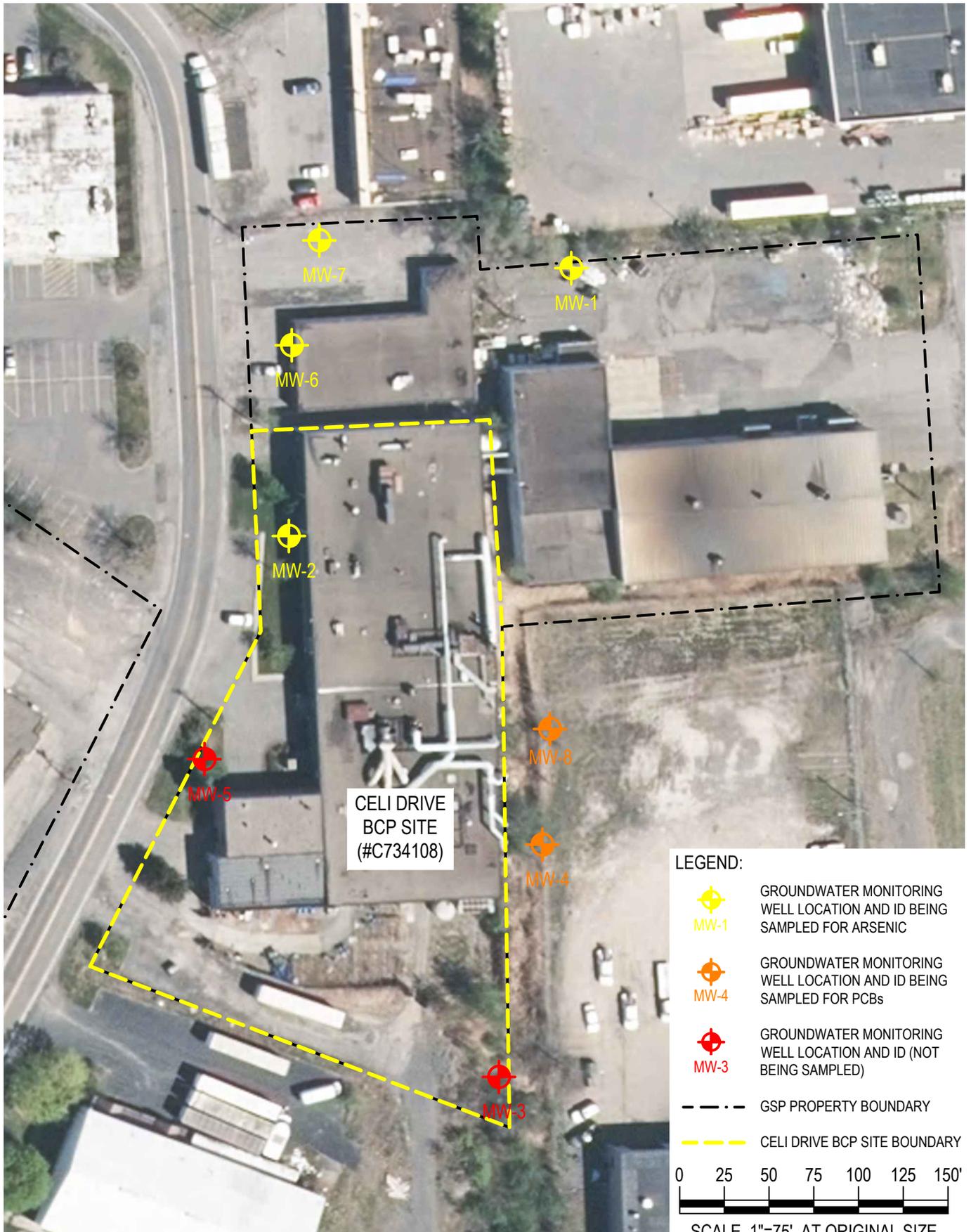
Damian J. Vanetti, P.E.
Principal Engineer - Environment

DJV

Enclosures:

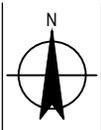
- Figure 1 – Proposed Groundwater Monitoring Sample Well Locations
- Figure 2 – Proposed Soil Sample Locations

cc: Mr. Richard Jones, NYSDOH (w/enclosures)
Ms. Doreen Simmons, Hancock & Estabrook (w/enclosures)
Ms. Holly Austin, Hancock & Estabrook (w/enclosures)
Ms. Kimberly Jeffery, GSP Holdings, Inc. (w/enclosures)
Mr. Tom Gerhardt, GSP Holdings, Inc. (w/enclosures)



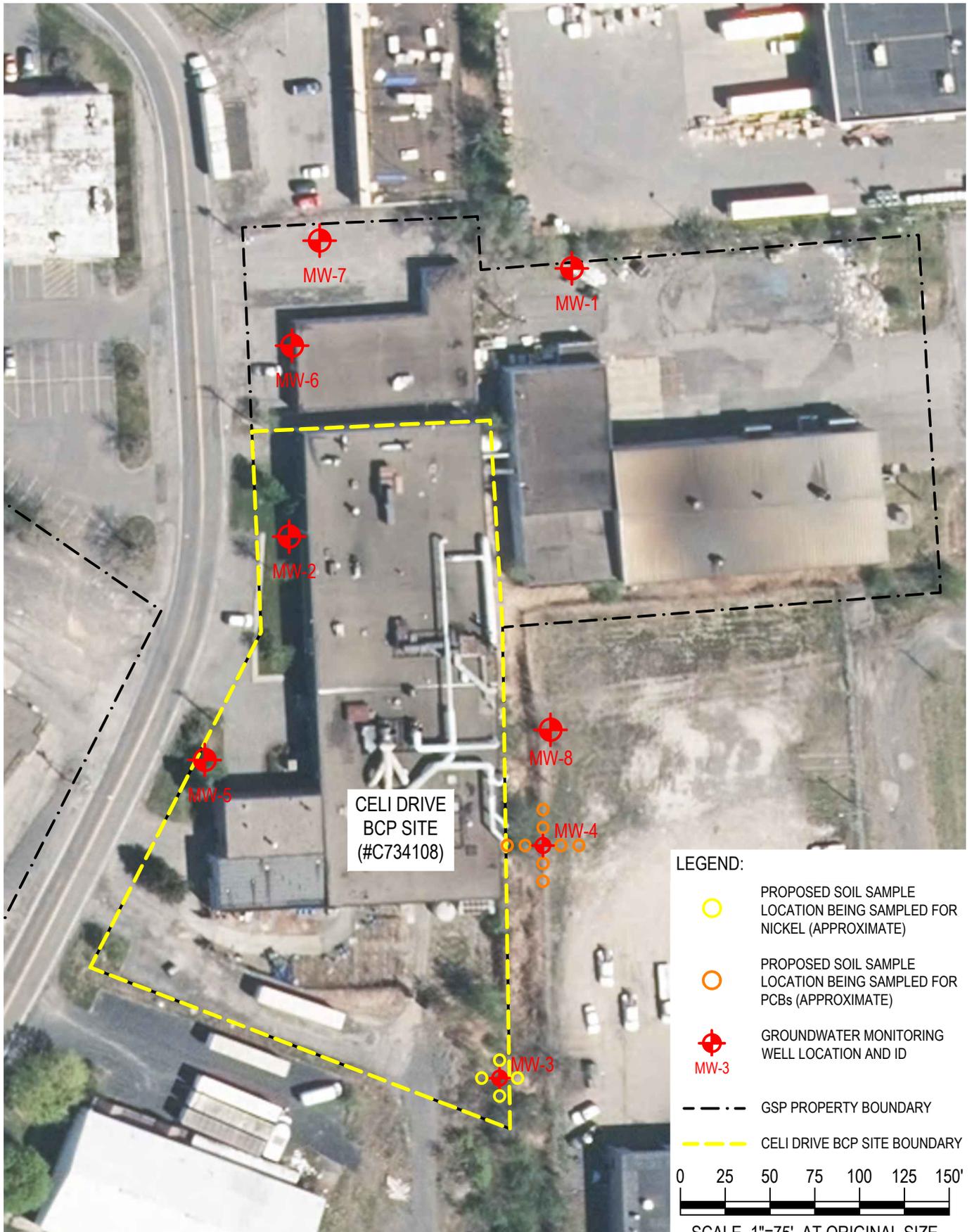
NOTES:

1. Site features are from a field survey completed by D.W. Hannig L.S., P.C. dated November 8, 2002 and revised 9-1-2005, 3-2-2010, 5-10-2010, 6-15-2010, 6-24-2010, and 4-1-2014.
2. Aerial photographs are 2015 half foot 4 band central zone index from the NYSGIS Clearinghouse website: <http://gis.ny.gov/>



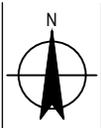
GSP Holdings, Inc.
 Celi Drive BCP Site (BCP Site #C734108)
 Supplemental Sampling and Investigation Work Plan
**Proposed Groundwater Sample
 Locations**

Job Number | 37-11082
 Revision | A
 Date | 05.25.2017
Figure 1



NOTES:

1. Site features are from a field survey completed by D.W. Hannig L.S., P.C. dated November 8, 2002 and revised 9-1-2005, 3-2-2010, 5-10-2010, 6-15-2010, 6-24-2010, and 4-1-2014.
2. Aerial photographs are 2015 half foot 4 band central zone index from the NYSGIS Clearinghouse website: <http://gis.ny.gov/>



GSP Holdings, Inc.
 Celi Drive BCP Site (BCP Site #C734108)
 Supplemental Sampling and Investigation Work Plan
 Proposed Soil Sample Locations

Job Number | 37-11082
 Revision | A
 Date | 05.25.2017

Figure 2