DEPARTMENT OF THE ARMY
FORT WINGATE DEPOT ACTIVITY
P.O. BOX 268
FORT WINGATE, NM 87316

October 22, 2014

Mr. John Kieling
Chief, Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

Re: NOTIFICATION OF PERMITTEE-INITIATED INTERIM MEASURE FOR PARCEL 24 AT FORT WINGATE DEPOT ACTIVITY, MCKINLEY COUNTY, NEW MEXICO

Dear Mr. Kieling:

The Department of the Army respectfully submits this notification to implement Permittee-Initiated Interim Measures (PIIM) per the Resource Conservation and Recovery Act (RCRA) permit Section VII.G.3 for the removal of igloo drain pipes that are coated with lead-based paint, and removal of soil below select igloo drain pipe outfalls in Parcel 24 of Igloo Block A. It is our intention to complete the Interim Measures (IM) during the spring/summer of 2015 time frame while our contractor, Zapata Incorporated (ZAPATA), is onsite performing IM activities at Parcel 21 at Fort Wingate Depot Activity (FWDA) near Gallup, New Mexico.

The U.S. Army Corps of Engineers (USACE) completed a Release Assessment Report (RAR) at Parcel 24, dated January 31, 2014. The RAR concluded that based on data collected from x-ray fluorescence (XRF) and analytical data from 2008 and 2010; lead, arsenic, and mercury exceeded New Mexico Environment Department (NMED) soil screening levels (SSLs) (or the site-specific background concentration protocol established for arsenic) in soils below certain igloo drain outfalls in Parcel 24. A summary of those exceedances is provided on attached Table 1. The RAR recommended removal of all igloo drain pipes (each igloo is equipped with two drain pipes), and impacted soil removal from beneath 84 igloo drain pipe outfalls from 46 igloos within the Parcel 24 portion of Igloo Block A.

Based on the RAR conclusions the Army will remove all igloo drain pipes from the igloos in Parcel 24. Additionally, approximately 1/4 cubic yard (CY) of soil will be removed from beneath both igloo drain pipe outfalls of the following igloos:

- A-903, A-905, A-909, A-912, A-913, A-914, A-915, A-916, A-917, A-918, A-920, A-922, A-923, A-925, A-926, A-929, A-933, A-935, A-936, A-939, A-941, A-942, A-943, A-944, A-946, A-948, A-950, A-951, A-952, A-955, A-962, A-964, A-969, A-970, A-971, A-976, and A-977.

Soil will be removed from below the drain pipe outfalls from only the left (west) side igloo drain pipes of the following igloos:

- A-927, A-934, A-945, A-963, and A-965.

Soil will be removed from below the drain pipe outfalls from only the right (east) side igloo drain pipe outfalls of the following igloos:

- A-907, A-924, A-938, A-947, and A-975.

The remaining igloos in Parcel 24 did not have detected SSL exceedances in soil; therefore, only the drain pipes will be removed from those igloos and no soil excavation is necessary. A site map (Figure 1) has been attached showing the location of each igloo requiring drain pipe removal, and identifies which igloo drain locations require soil excavation and sampling.

Drain pipes will be removed from each of the igloos (right and/or left drains) using a flush cutting power saw (i.e., band saw or reciprocating saw). Measures will be implemented to ensure lead paint particles will not endanger workers cutting the drain pipes. Cuttings from the drain pipes will be collected by a sheet of polyethylene plastic placed under the drain pipe during the cutting process to ensure lead particles are not spread onto surrounding uncontaminated soil. Once the igloo drain pipes have been removed, the pipes and plastic sheeting will be packaged and labeled as lead-containing materials. The cutoff pipes will then be transported to a local scrap metal recycler (All City Recycling and Towing) in Gallup, New Mexico for recycling of the metal pipes. After igloo drain pipe removal, all resulting exposed holes in the igloos will be filled with concrete mix to a depth of six inches into the igloo walls.

After excavation of the approximately ¼ CY of soil from beneath the specified igloo drain pipe outfalls listed previously, a discrete confirmation soil sample will be collected from the bottom of each excavation and analyzed for the metals that exceeded NMED SSLs for lead and/or mercury, or the background protocol for arsenic (Table 1). This will ensure remaining analyte (metals) concentrations are below the established cleanup standards. If concentrations of analytes of concern from initial confirmation samples are found to exceed cleanup standards, additional soil will be removed and follow-up confirmation sampling will be completed until the cleanup standards are met.

All soil that is excavated from beneath the igloo drains (expected total of approximately 21 CY) will be combined in a roll off container and sampled for RCRA hazardous waste characterization for arsenic, lead and mercury using the Toxicity Characteristic Leaching Procedure (TCLP) following Environmental Protection Agency (EPA) Method 1311/6020A/7471B to confirm that the material is RCRA non-hazardous waste. The soil will then be transported for disposal as non-hazardous solid waste at the San Juan County Landfill in Aztec, New Mexico.

Confirmation soil sample identification will follow the FWDA sample identification nomenclature protocol. Additionally, quality assurance/quality control (QA/QC) sample (i.e., duplicates, matrix spike/matrix spike duplicates [MS/MSDs]) frequency for confirmation samples will be 1:10 for duplicates, and 1:20 for MS/MSDs.

Following the completion of the IM, a brief letter report documenting the findings of the field effort will be submitted for approval.

Sincerely,

SMITH.STEVEN.W.1231038520

Digitally signed by SMITH.STEVEN.W.1231038520
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=SMITH.STEVEN.W.1231038520
Date: 2014.10.24 10:44:06 -05'00'

FOR Mark Patterson
BRAC Environmental Coordinator

CF:
John Kieling, NMED HWB
Chuck Hendrickson, U.S. EPA Region 6
FWDA Administrative Record
Bill O'Donnell (BRACD)
Steven Smith (USACE SWF)
Larry Rodgers, Navajo Nation
Darrell Tsabetsaye, Zuni Pueblo
Clayton Seoutewa, Southwest Region BIA Zuni
Eldine Stevens, DOI/BIA
Judith Wilson, DOI/BIA
Rose Duwyenie, BIA-NR)
Angela Kelsey, BIA
Administrative Record, Ohio
Steven Morrissette, ZAPATA

Table 1 - Previous Soil Cleanup Level Exceedances
Parcel 24 - Igloo Block A
Fort Wingate Depot Activity - New Mexico

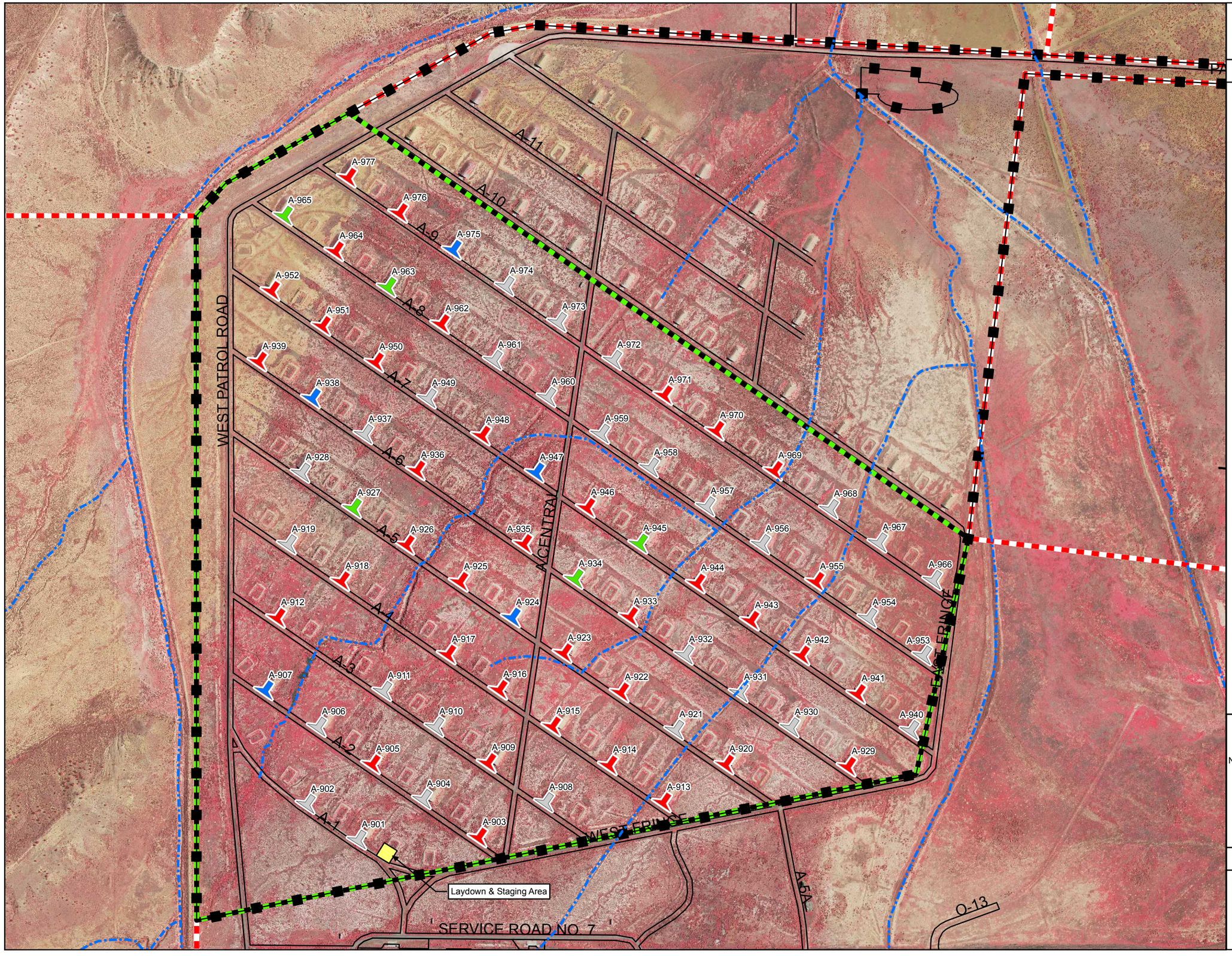
Igloo ID	Sample ID	Date Sampled	Analyte	Results (mg/kg)	SSL (mg/kg)
A-903	2418A-903SS-C-SO	9/19/2008	Lead	775	400
	2418A-903SS-L-XRF-SO	9/30/2010	Lead	1,333	400
A-905	2418A-905SS-L-XRFC-SO	10/5/2010	Arsenic	4.1[2]	5.6[1]
			Lead	440	400
	2418A-905SS-R-XRF-SO	9/30/2010	Arsenic	45.3	5.6[1]
A-907	2418A-907SS-R-XRF-SO	9/30/2010	Lead	2,691	400
A-909	2418A-909SS-C-SO	9/19/2010	Lead	954	400
	2418A-909SS-L-XRF-SO	10/1/2010	Lead	1,582	400
	2418A-909SS-R-XRF-SO	10/5/2010	Lead	480	400
A-912	2418A-912SS-C-SO	9/19/2008	Lead	443	400
A-913	2418A-913SS-C-SO	9/18/2008	Lead	415	400
A-914	2418A-914SS-C-SO	9/18/2008	Lead	438	400
	2418A-914SS-R-XRFC-SO	10/5/2010	Lead	640	400
A-915	2418A-915SS-C-SO	9/18/2008	Lead	1,000	400
A-916	2418A-916SS-C-SO	9/18/2008	Lead	948	400
A-917	2418A-917SS-C-SO	9/18/2008	Lead	609	400
A-918	2418A-918SS-C-SO	9/19/2008	Lead	1,090	400
A-920	2418A-920SS-L-XRF-SO	10/1/2010	Lead	497	400
	2418A-920SS-R-XRFC-SO	10/5/2010	Lead	1,400	400
A-922	2418A-922SS-C-SO	9/17/2010	Lead	626	400
	2418A-922SS-R-XRF-SO	10/1/2010	Lead	514	400
A-923	2418A-923SS-C-SO	9/18/2010	Lead	582	400
A-924	2418A-924SS-R-XRFC-SO	10/5/2010	Lead	2,300	400
A-925	2418A-925SS-C-SO	9/18/2008	Lead	762	400
A-926	2418A-926SS-C-SO	9/18/2008	Lead	464	400
A-927	2418A-927SS-L-XRF-SO	10/1/2010	Lead	512	400
A-929	2418A-929SS-C-SO	9/16/2008	Lead	1,390	400
	2418A-929SS-R-XRF-SO	10/5/2010	Arsenic	4.0[2]	5.6[1]
			Lead	3,900	400
A-933	2418A-933SS-C-SO	9/17/2008	Lead	1,790	400
A-934	2418A-934SS-L-XRF-C-SO	10/5/2010	Lead	430	400
A-935	2418A-935SS-C-SO	9/17/2008	Lead	506	400
	2418A-935SS-L-XRF-SO	10/1/2010	Lead	5,290	400
A-936	2418A-936SS-C-SO	9/17/2008	Lead	824	400
	2418A-936SS-L-XRF-C-SO	10/5/2010	Lead	660	400
	2418A-936SS-L-XRF-SO	10/1/2010	Arsenic	20.2	5.6[1]
	2418A-936SS-R-XRF-SO	10/1/2010	Arsenic	1,088	5.6[1]
			Lead	11,540	400
A-938	2418A-938SS-R-XRF-SO	10/1/2010	Lead	445	400
A-939	2418A-939SS-C-SO	9/17/2008	Lead	1,340	400
A-941	2418A-941SS-C-SO	9/15/2008	Lead	741	400
	2418A-941SS-R-XRF-SO	10/1/2010	Lead	1,021	400
A-942	2418A-942SS-C-SO	9/15/2008	Lead	429	400

Table 1 - Previous Soil Cleanup Level Exceedances
Parcel 24 - Igloo Block A
Fort Wingate Depot Activity - New Mexico

A-943	2418A-943SS-C-SO	9/15/2008	Lead	669	400
	2418A-943SS-L-XRF-SO	10/1/2010	Lead	764	400
A-944	2418A-944SS-C-SO	9/15/2008	Lead	434	400
A-945	2418A-945SS-L-XRF-SO	9/15/2008	Arsenic	43.9	5.6[1]
A-946	2418A-946SS-C-SO	9/16/2008	Lead	1,460	400
	2418A-946SS-R-XRF-SO	10/2/2010	Lead	2,142	400
A-947	2418A-947SS-R-XRF-SO	10/2/2010	Lead	2,404	400
A-948	2418A-948SS-C-SO	9/16/2008	Lead	603	400
	2418A-948SS-R-XRFC-SO	10/5/2010	Arsenic	4.3[2]	5.6[1]
A-950	2418A-950SS-C-SO	9/16/2008	Lead	423	400
	2418A-950SS-R-XRF-SO	10/2/2010	Lead	995	400
A-951	2418A-951SS-C-SO	9/16/2008	Lead	499	400
A-952	2418A-952SS-C-SO	9/16/2008	Lead	1,020	400
A-955	2418A-955SS-C-SO	9/13/2008	Lead	413	400
	2418A-955SS-L-XRF-SO	10/2/2010	Lead	2,327	400
	2418A-955SS-R-XRF-SO	10/2/2010	Lead	784	400
A-962	2418A-962SS-C-SO	9/15/2008	Lead	428	400
	2418A-962SS-L-XRF-SO	10/4/2010	Lead	523	400
A-963	2418A-963SS-L-XRF-SO	10/4/2010	Arsenic	26.9	5.6[1]
A-964	2418A-964SS-C-SO	9/15/2008	Lead	407	400
	2418A-964SS-XRFC-SO	10/5/2010	Lead	740	400
A-965	2418-965SS-L-XRF-SO	10/4/2010	Lead	444	400
A-969	2418A-969SS-C-SO	9/12/2008	Lead	977	400
	2418A-969SS-R-XRF-SO	10/4/2010	Lead	491	400
A-970	2418A-970SS-C-SO	9/12/2008	Lead	494	400
	2418A-970SS-L-XRF-SO	10/4/2010	Mercury	17	15.6
A-971	2418A-971SS-C-SO	9/12/2008	Lead	720	400
A-975	2418A-975SS-R-XRF-SO	10/4/2010	Lead	447	400
A-976	2418A-976SS-C-SO	9/13/2008	Lead	481	400
A-977	2418A-977SS-C-SO	9/13/2008	Lead	606	400
	2418A-977SS-L-XRF-SO	10/4/2010	Lead	828	400

[1] = NMED's two step process for Arsenic levels was used to evaluate the Arsenic levels at Parcel 24 - Igloo Block A. A study by the USACE (at Fort Wingate) and USGS (NM State wide) on the background concentrations of Arsenic determined that the appropiate background level should be 5.6 mg/kg. This number should be used as the SSL over the State's current SSL of 3.9. However, if the levels at the site exceed the 5.6, the levels must be compared to each other to determine if they are consistant. If they are not, further investigation or soil removal must be conducted at the site. Arsenic levels at Igloo Block A were not consistent, and therfore require further investigation or removal. Soil will be removed from all Igloo drains that have arsenic (with both the NMED 3.9 and the background 5.6), lead and mercury exceendances.

[2] = Arsenic level was detected above NMED's 3.9 mg/kg SSL, but is below the 5.6 mg/kg background level.



A-Block Igloo Locations & Designated Soil Excavations
Parcel 24 - Igloo Block A (AOC 18)
Fort Wingate, NM

Project Number	Date	Figure
R20179	OCTOBER 2014	1

KEY

- Arroyo
- Road
- Laydown & Staging Area
- Igloo Block A
- Parcel Boundary
- Parcel 24
- Igloo

Igloos Requiring Soil Excavation Based on SSL Exceedences

- Both Drains
- Left Drain (West Side)
- Right Drain (East Side)

GN 0° 26' MN 9° 44'

0 300 600 Feet

Source(s)

ZAPATA, USACE, 2009 Color Infrared Aerial Photo

Projection

NAD 1983 StatePlane New Mexico West FIPS 3003 Feet
Note: Main Data Frame Rotated to True North

Note(s)

Engineering scale may only be accurate on a map size of 11 x 17

Magnetic Declination Date: 06/16/2014
Magnetic Declination Shifting by 0° 7' W per year

Checked By	Engineering Scale	Drawn By
SEM	1 " = 600 '	GIS

US Army Corps of Engineers