

CAMU Semi-Annual Geosynthetics Inspection Form

Corrective Action Management Unit
U. S. Steel - Gary Works
Gary, Indiana

Date: September 12 - 13, 2017

Project Location: U.S. Steel Gary Works

Inspector: Ed Snyder

Weather: September 12, 2017: Clear, 68 dgrees, NE wind 14 mph

Unit 1 Inspection

Pt No	Waypoint	Northing	Easting	Picture	Remarks	Date Repaired
1-PT-1	1	4607053	469174	105	Exposed liner on the top of slope above old patch on the north slope	October 21, 2017
1-PT-2	2	4607037	469163	No photo	Exposed liner on the top of slope next to old patch on the north slope	October 21, 2017
1-PT-3	3	4606799	469154	107	Exposed liner on the west slope	October 21, 2017
1-PT-4	4	4606784	469160	108	Exposed liner on the west slope east of an old patch	October 21, 2017
1-PT-5	5	4606617	469255	109	Exposed liner on the east slope and 20 feet north	October 21, 2017
1-PT-6	6	4606703	469253	110	Exposed liner between patches along the east slope	October 21, 2017
1-PT-7	7	4606738	469254	111	Tear in geonet between patchs along the east slope	October 21, 2017
1-PT-8	8	4606748 / 4606762	469254 / 469252	112	Exposed liner between patches along the east slope	October 21, 2017
1-PT-9	9	4606789	469253	No photo	Exposed liner inner between patches along the east slope	October 21, 2017

Legend

UV is the woven textile protection layer, GC is the double sided geocomposite. Net is the geonet sandwiched between two geotextiles which make up the geocomposite.
In-place - means in good shape with minimal deterioration.

General comments:

The September 12-13, 2017 inspection was performed by comparing observations from inspections performed over the past several years.
The observations of exposed geomembrane documented appear to be new.
The hand held GPS location used to document new observations may differ from previous documented locations by as much as 3 meters. Even though the GPS location may not match the exact location previously documented, the description documented during previous inspections in many cases was similar to the current observation.
Exposure of the underlying geomembrane was observed at the locations noted above.

Repairs

Repairs to the exposed geomembrane will be performed by placing double sided geocomposite over the exposed geomembrane, and fastening the geocomposite to the existing net (which overlies the geomembrane) with plastic ties as recommended by the manufacturer.
All rocks and gravel recommended to be removed between patches and repaired before zip-tying the geocomposite.

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Corrective Action Management Unit
U. S. Steel - Gary Works
Gary, Indiana

Date: September 12 - 13, 2017

Project Location: U.S. Steel Gary Works

Inspector: Ed Snyder

Weather: September 12, 2017: Clear, 70 degrees, N wind 5 mph
September 13, 2017: Rain in the morning, 44 degrees, SE wind 11 mph

Unit 2 Inspection

						Date
Pt No	Waypoint	Northing	Easting	Picture No.	Remarks	Repaired
2-PT-1	10	4606640 / 4606647	469494 / 469497	114	Exposed liner on the east slope	October 21, 2017
2-PT-2	11	4606773 / 4606773	469497 / 469502	115	Exposed liner on the east slope	October 21, 2017
2-PT-3	12	4606786	469502	116	Exposed liner on the east slope	October 21, 2017
2-PT-4	13	4606826	469547	117	Exposed liner on the east slope	October 21, 2017
2-PT-5	14	4606959	469482	118	Exposed liner on the north slope	October 21, 2017
2-PT-6	15	4607022	469317	119	Exposed liner on the north slope	October 21, 2017
2-PT-7	16	4606566	469259	120	Exposed liner on the southwest slope	October 21, 2017

Legend

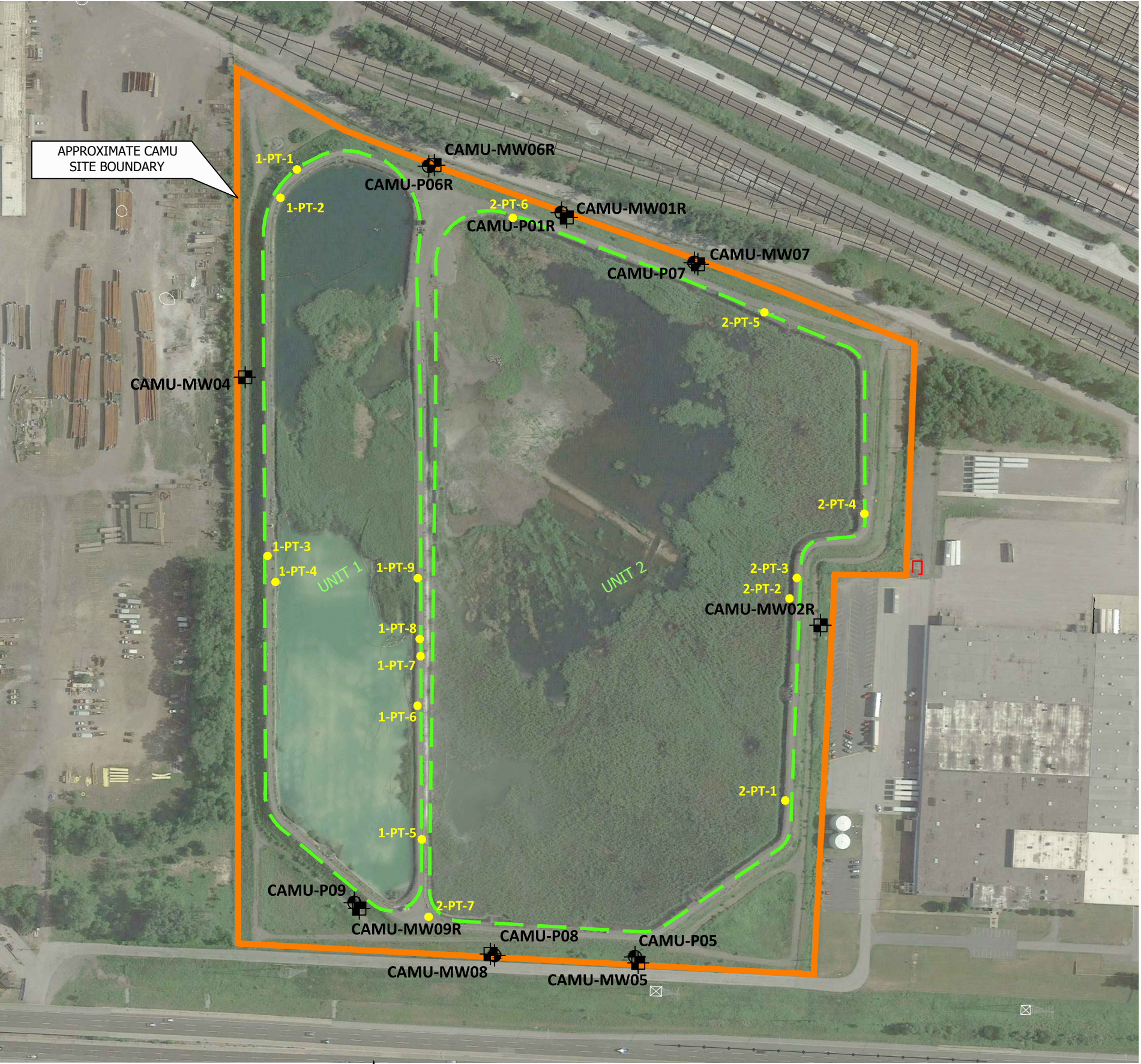
UV is the woven textile protection layer, GC is the double sided geocomposite. Net is the geonet sandwiched between two geotextiles which make up the geocomposite.
In-place - means in good shape with minimal deterioration, if any.

General comments:

The September 12-13, 2017 inspection was performed by comparing observations from inspections performed over the past several years.
The observations of exposed geomembrane documented appear to be new.
The hand held GPS location used to document new observations may differ from previous documented locations by as much as 3 meters. Even though the GPS location may not match the exact location previously documented, the description documented during previous inspections in many cases was similar to the current observation.
Exposure of the underlying geomembrane was observed at the locations noted above.

Repairs

Repairs to the exposed geomembrane will be performed by placing double sided geocomposite over the exposed geomembrane, and fastening the geocomposite to the existing net (which overlies the geomembrane) with plastic ties as recommended by the manufacturer.
All rocks and gravel recommended to be removed between patches and repaired before zip-tying the geocomposite.



LEGEND

- CAMU BOUNDARY
- UNITS 1 & 2 BOUNDARY
- PIEZOMETER LOCATION
- MONITORING WELL LOCATION
- UNIT INSPECTION POINT LOCATION

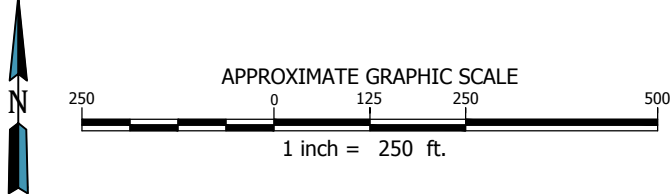
Unit 1 Inspection

Pt No	Northing	Easting
1-PT-1	4607053	469174
1-PT-2	4607037	469163
1-PT-3	4606799	469154
1-PT-4	4606784	469160
1-PT-5	4606617	469255
1-PT-6	4606703	469253
1-PT-7	4606738	469254
1-PT-8	4606748 / 4606762	469254 / 469252
1-PT-9	4606789	469253

Unit 2 Inspection

Pt No	Northing	Easting
2-PT-1	4606640 / 4606647	469494 / 469497
2-PT-2	4606773 / 4606773	469497 / 469502
2-PT-3	4606786	469502
2-PT-4	4606826	469547
2-PT-5	4606959	469482
2-PT-6	4607022	469317
2-PT-7	4606566	469259

SOURCE: IMAGE ADAPTED FROM GOOGLE EARTH IMAGERY DATED JUNE 2016.
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SEMI-ANNUAL LINER INSPECTION
DOCUMENTATION - SEPTEMBER 2017
CORRECTIVE ACTION MANAGEMENT UNIT
U. S. STEEL - GARY WORKS, GARY, IN
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DRAWN BY: RMD
REVIEWED BY: SB
DATE: 9/19/2017
FILE: 4262-300
CAD: site CAMU.dwg
FIGURE 1