

CAMU Semi-Annual Geosynthetics Inspection Form  
Corrective Action Management Unit  
U. S. Steel - Gary Works  
Gary, Indiana

Date: April 12-13, 2017

Project Location: U.S. Steel Gary Works

Inspector: Ed Snyder

Weather: Clear, 53 degrees, NW wind 2 mph

Unit 1 Inspection

Pt No	Waypoint	Figure 1 Reference	Northing	Easting	Photo No.	Remarks	Date Repaired
1	1	1-PT-1	4607054	469237	3	Exposed liner on top slope above old patch on north slope	May 26, 20107
2	2	1-PT-2	4607056	469228	4	Exposed liner on top slope next to old patch on north slope	May 26, 20107
3	3	1-PT-3	4607060	469223	5	Exposed liner on north slope	May 26, 20107
4	4	1-PT-4	4607050	469176	6	Exposed liner on north slope east of old patch	May 26, 20107
5	5	1-PT-5	4670034	469164	7	Exposed liner on northeast corner	May 26, 20107
6	6	1-PT-6	4606685	469254	8	Exposed liner on inner cell road, east side	May 26, 20107
7	7	1-PT-7	4606695	469254	9	Tear in geonet on inner cell road, east side	May 26, 20107
8	8	1-PT-8	4606700	469256	10	Exposed liner on inner cell road, east side	May 26, 20107
9	9	1-PT-9	4606706	469253	11	Exposed liner on inner cell road, east side	May 26, 20107
10	10	1-PT-10	4606734	469253	12	Tear in geonet on inner cell road, east side	May 26, 20107
11	11	1-PT-11	4606750	469254	13	Exposed liner on inner cell road, east side	May 26, 20107
12	12	1-PT-12	4606792	469254	14	Exposed liner on inner cell road, east side	May 26, 20107

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 April 12-13, 2017 inspection was performed by comparing observations from inspections performed over the past several years.  
The observations of exposed geomembrane documented in 2017 appear to be new, while the other observations may, or may not have been documented during the previous inspections.  
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 document during previous inspections in many cases was similar to the current observation.  
Adverse deterioration (such as exposure of the underlying geomembrane) was observed at the locations noted above.  
All rocks and gravels need to removed between patch's and repaired patch repairs before zip tying geocomposite.

Repairs

Locations of repairs are noted on Figure 1.  
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 gravels need to removed between patch's and repaired patch repairs before zip tying geocomposite.

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

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Project Location: U.S. Steel Gary Works

Inspector: Ed Snyder

Weather: 4/12/2017: Clear 55 degrees, N wind 5 mph; 4/13/17: Rain in the AM, 44 degrees, SE wind 11 mph

Weather: 4/13/2017: Rain in the morning, 44 degrees, SE wind 11 mph

Unit 2 Inspection

Pt No	Waypoint	Figure 1 Reference	Northing	Easting	Photo No.	Remarks	Date Repaired
1	1	2-PT-1	4606989	469259	15	Exposed liner down slope inner road, west side	May 26, 20107
2	2	2-PT-2	4606873	469259	16	Exposed liner down slope inner road, west side old patch gone	May 26, 20107
3	3	2-PT-3	4606975	469257	17	Exposed liner down slope inner road, west side	May 26, 20107
4	4	2-PT-4	4606604	469481	18	Exposed liner down slope inner road, southeast corner	May 26, 20107
5	5	2-PT-5	4606679	469497	19	Exposed liner on east side between two old patchs	May 26, 20107
6	6	2-PT-6	4606691	469499	20	Exposed liner next to old patch	May 26, 20107
7	7	2-PT-7	4606703	469498	21	Exposed liner on east side down slope	May 26, 20107
8	8	2-PT-8	4606714	469499	22	Exposed liner below existing patch	May 26, 20107
9	9	2-PT-9	4606724	469499	23	Holes in geonet down slope	May 26, 20107
10	10	2-PT-10	4606774	469501	24	Exposed liner on east side down slope	May 26, 20107
11	11	2-PT-11	4606786	469502	25	exposed liner on seam old patch gone	May 26, 20107
12	12	2-PT-12	4606810	469526	26	Exposed liner on north side down slope	May 26, 20107
13	13	2-PT-13	4606937	469538	27	Exposed liner on north side down slope	May 26, 20107
14	14	2-PT-14	4606961	469482	28	Exposed liner on north side down slope	May 26, 20107
15	15	2-PT-15	4606967	469465	29	Exposed liner on north side down slope at seam	May 26, 20107
16	16	2-PT-16	4606972	469455	30/31	Tear in geonet and exposed liner next to tear 10 feet to west	May 26, 20107
17	17	2-PT-17	4606980	469437	32	Tear in geonet	May 26, 20107
18	18	2-PT-18	4606984	469425	33	Exposed liner on north side down slope	May 26, 20107
19	19	2-PT-19	4606987 / 4606992	469425 / 469408	34/35	Exposed liner between locations on north slope	May 26, 20107
20	20	2-PT-20	4606992	469392	36	Tear in geonet	May 26, 20107
21	21	2-PT-21	4607001	469379	37	Exposed liner on north side down slope	May 26, 20107
22	22	2-PT-22	4607003	469374	38	Exposed liner on north side down slope between patchs	May 26, 20107
23	23	2-PT-23	4607019	469331	39	Exposed liner on north side down slope between patchs	May 26, 20107
24	24	2-PT-24	4607021 / 4607025	469329 / 469314	40/41	Exposed liner between locations on north slope	May 26, 20107
25	25	2-PT-25	4607026	469312	42	Exposed liner on north side down slope	May 26, 20107
26	26	2-PT-26	4607021	469283	43	Exposed liner on north side down slope	May 26, 20107

Legend

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previously documented, the description document during previous inspections in many cases was similar to the current observation.

Adverse deterioration (such as exposure of the underlying geomembrane) was observed at the locations noted above.

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Repairs

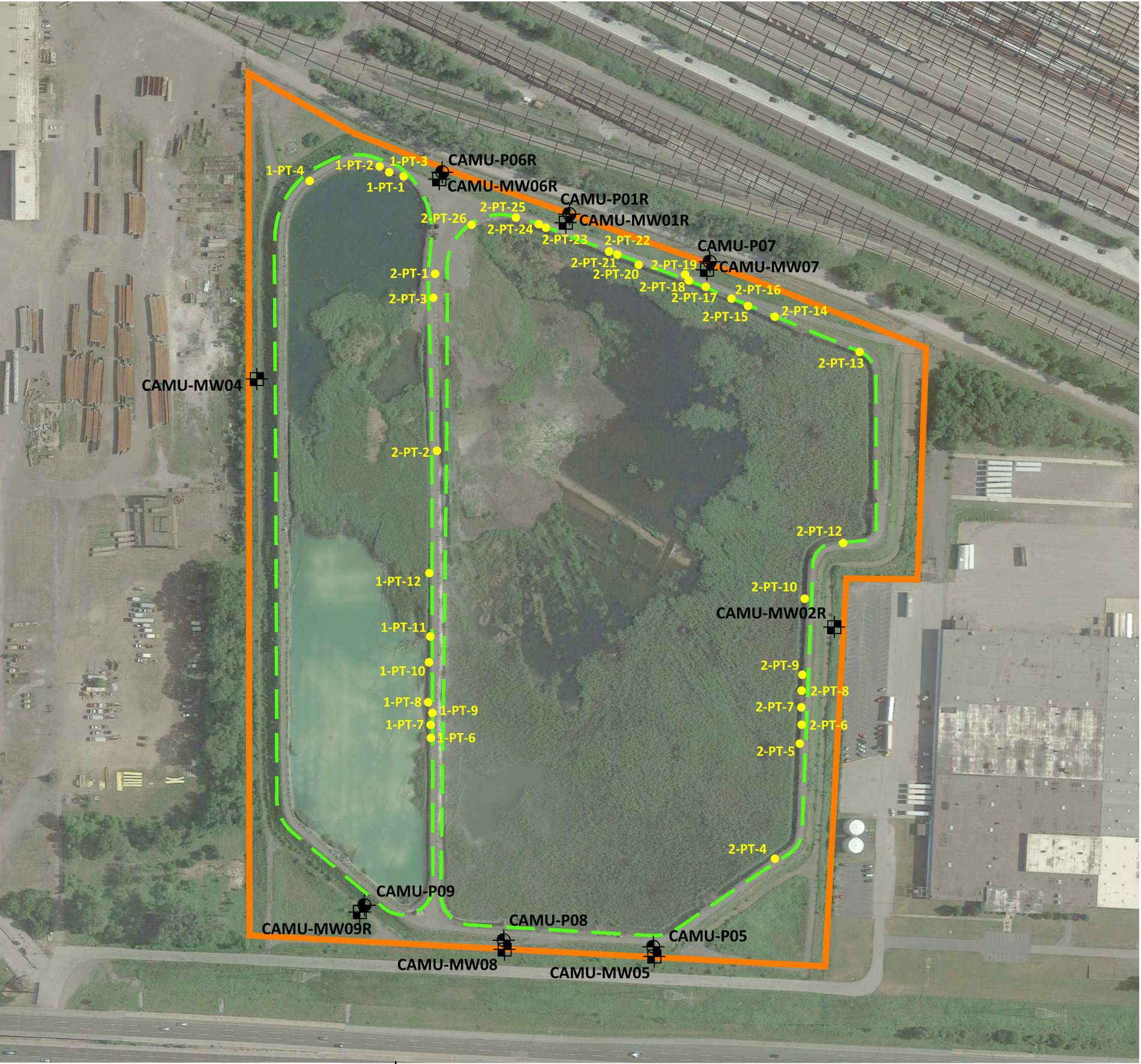
Locations of repairs are noted on Figure 1.

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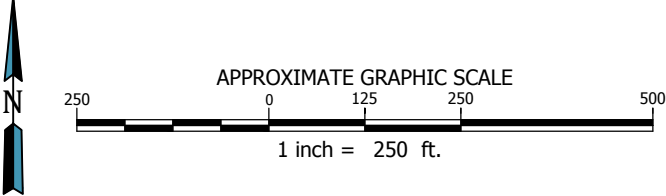
LEGEND

- 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	4607054	469237
1-PT-2	4607056	469228
1-PT-3	4607060	469223
1-PT-4	4607050	469176
1-PT-5	4670034	469164
1-PT-6	4606685	469254
1-PT-7	4606695	469254
1-PT-8	4606700	469256
1-PT-9	4606706	469253
1-PT-10	4606734	469253
1-PT-11	4606750	469254
1-PT-12	4606792	469254

Unit 2 Inspection		
Pt No	Northing	Easting
2-PT-1	4606989	469259
2-PT-2	4606873	469259
2-PT-3	4606975	469257
2-PT-4	4606604	469481
2-PT-5	4606679	469497
2-PT-6	4606691	469499
2-PT-7	4606703	469498
2-PT-8	4606714	469499
2-PT-9	4606724	469499
2-PT-10	4606774	469501
2-PT-11	4606786	469502
2-PT-12	4606810	469526
2-PT-13	4606937	469538
2-PT-14	4606961	469482
2-PT-15	4606967	469465
2-PT-16	4606972	469455
2-PT-17	4606980	469437
2-PT-18	4606984	469425
2-PT-19	4606987 / 4606992	469425 / 469408
2-PT-20	4606992	469392
2-PT-21	4607001	469379
2-PT-22	4607003	469374
2-PT-23	4607019	469331
2-PT-24	4607021 / 4607025	469329 / 469314
2-PT-25	4607026	469312
2-PT-26	4607021	469283

SOURCE: IMAGE ADAPTED FROM GOOGLE EARTH IMAGERY DATED JUNE 2016.  
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PREPARED FOR:



GROUNDWATER MONITORING WELL &  
PIEZOMETER LOCATION MAP  
CORRECTIVE ACTION MANAGEMENT UNIT  
U. S. STEEL - GARY WORKS, GARY, IN

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REVIEWED BY: RS/SB  
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**FIGURE 1**