

4966/30473#2



**Remediation and Liability Management Company Inc.**

**James F. Hartnett  
Program Manager**

January 30, 2002

Gerald Rider, P.E., Chief  
Operation & Maintenance Section  
Division of Environmental Remediation  
625 Broadway, 11<sup>th</sup> Floor  
Albany, New York 12233-7014

Re: Ley Creek PCB Dredgings Site (Registry # 7-34-044)  
NYSDEC Order on Consent Index # D-7-0008-97-06  
2001 Annual OM&M Inspection Report

Dear Mr. Rider,

Enclosed please find documentation pertaining to the 2001 OM&M site inspections, performed in accordance with the NYSDEC-approved Operation, Maintenance, and Monitoring Manual, for the Ley Creek PCB Dredgings Site. The documentation enclosed consists of two letter reports, one each for the site inspection and wetland evaluation, which include inspection photos and site figures.

Deficiencies identified in the site inspection and wetland evaluation letter reports will be addressed by REALM during the upcoming 2002 construction season, as site conditions allow.

Should you or your staff have any questions regarding the contents of this annual OM&M inspection report, please contact me at (315) 764-2239.

Sincerely,

James F. Hartnett  
Remediation Program Manager

Enclosure

cc: Robert Nunes (USEPA)

BAK



**O'BRIEN & GERE**  
ENGINEERS, INC.

January 23, 2002

James F. Hartnett  
Remediation and Liability Management Company, Inc.  
c/o GM Powertrain - Massena Casting Plant  
Remediation Project Office  
Rt. 37 East, Box 460  
Massena, New York 13662-0460

Re: Ley Creek PCB Dredgings Site  
2001 OM&M Wetland Evaluation

File: 4966/30473 #2

Dear Jim:

This letter presents the results of wetland evaluation efforts performed at the Ley Creek PCB Dredgings Site (the Site), located in Syracuse, New York. Steve Mooney and Ron Chiarello of O'Brien & Gere Engineers, Inc. (O'Brien & Gere) performed the evaluation on October 15, 2001, in accordance with Section 2.6. Wetlands of the Operation, Maintenance and Monitoring Manual (OM&M Manual).

The OM&M Manual specifies that wetland evaluation is to be performed following the first full growing season (2001) and the subsequent four years (2002 through 2005). This wetland evaluation (Year 2001 Evaluation) represents the first full growing season following New York State Department of Environmental Conservation (NYSDEC) approval of the OM&M Manual and the first opportunity to perform the wetland evaluation.

**BACKGROUND**

As was stated in the Wetland Assessment Report for the Site (O'Brien & Gere 1998), eight emergent wetlands, totaling approximately 1.4 acres and dominated by dense stands of common reed (*Phragmites australis*) were identified at the Site prior to implementation of the Remedial Action. These wetlands were considered fringe wetlands based on their location adjacent to Ley Creek. The implementation of the Remedial Action at the Site temporarily eliminated these wetlands. A wetland restoration plan, which consisted of the planting of reed canary grass (*Phalaris arundinacea*), was proposed and approved by NYSDEC and United States Environmental Protection Agency (USEPA) for the impacted wetlands at the Site. The wetland restoration plan was based on an evaluation of pre-remediation Site conditions and anticipated post-remediation site conditions. The wetland restoration was incorporated in the remedial design. Figures 1 through 5 of this letter report depict the locations of the restored wetland areas at the Site.



## INSPECTIONS/MAINTENANCE ACTIVITIES

In accordance with the OM&M Manual, a site visit was performed by a qualified O'Brien & Gere wetland scientist during the first growing season to evaluate the condition of the restored wetlands and to identify maintenance activities that would be required to support the success of the wetland restoration. Based on this visit, and the subsequent wetland evaluation, which included the collection of ground cover information, O'Brien & Gere recommends, that additional seeding with reed canary grass, be performed in the restored wetlands.

## RESTORATION EVALUATION OBJECTIVES AND CRITERIA

This letter report presents the results of the first evaluation effort for the restored wetlands at the Site. Restoration success is based on the target percentage of ground cover and the density of planted species (reed canary grass). The target restoration goal for restored wetlands at the Site, as specified in Section 2.6 of the OM&M Manual, is 90% ground cover within the sample plots of seeded (reed canary grass) and wetland species. The performance standard for wetlands restoration at the Site is measured by the percent of established ground cover, either through planting or natural recruitment.

The OM&M Manual requires that a minimum of three, nine square-foot sample plots be used to evaluate ground cover in the restored wetlands. Four sample plots were used during the 2001 evaluation. Data collected for these sample plots were recorded on field data forms developed by O'Brien & Gere and are included as Attachment 1 of this letter. The sample plot locations are identified on Figures 1 through 5 of this letter.

In accordance with the OM&M Manual, percent ground cover evaluation plots were located randomly in apparently representative areas along the access road at the Site. The percent vegetative ground cover and percent ground cover by species was visually estimated within each plot and recorded on field data forms (Attachment 1). The data forms included species observed within the sample plot, percent ground cover for each species observed, the United States Fish and Wildlife Service (USFWS) indicator status for each species as described in the USFWS NERC-99/18.21 document dated 1988 - *National List of Plant Species That Occur in Wetlands*, total percent ground cover, and the percent of the total ground which are hydrophytic species (FAC, FACW and OBL).

## RESULTS AND DISCUSSION

### General observations

A majority of the restored wetland areas were found to be lacking in cover of the planted target species (reed canary grass). In fact, portions of the restored wetland areas were lacking adequate ground cover and comprised predominantly bare ground. This condition was apparent in other areas at the Site. A photograph log of the sample plot areas is included as Attachment 2.

Also, although not identified in any of the sample plots performed, *Phragmites australis* (common reed), a highly invasive species, was present in portions of the restored wetland areas and along the banks of Ley Creek in the Site area.

Percent ground cover results

Four ground cover sample plots were evaluated within the restored wetlands at the Site. Data collected from the sample plots are presented on the field data forms included as Attachment 1. The comparison of observed percent ground cover to target criteria is presented in Table 1. As depicted on the field data forms, Plot 4 was the only plot that met or exceeded the target ground cover percentage of 90% for seeded (reed canary grass) and wetland species. For a majority of the Site restored wetlands, the target ground cover percentages have not yet been met.

CONCLUSIONS AND RECOMMENDATIONS

Evaluation efforts performed during the first full growing season following NYSDEC and USEPA approval of the O&M Plan and the first opportunity to perform the wetland evaluation at Ley Creek PCB Dredgings Site indicated that the restored wetlands did not attain the specified wetland success criteria. Ground cover of the planted species (reed canary grass) was lacking in a majority of the restored wetlands at the site. In addition, a portion of the restored wetlands also consisted of bare ground.

O'Brien & Gere recommends the following activities to be performed within the restored wetlands at the times presented below, to continue their progress towards meeting the success criteria:

- Additional seeding of herbaceous wetland species (reed canary grass) is recommended in the emergent portion of this wetland, and should be performed in late Spring 2002. Fertilizer 6-44-12 should be applied at a rate of 300 lbs per acre and FINN HST soil conditioner should be applied at a rate of 2.5 gallons per acre. Conwed HYDRO MULCH 2000 should be applied at a rate of 2,500 lbs per acre to minimize the potential of newly applied seed/fertilizer/soil conditioner being carried away during high discharge periods within Ley Creek.

The next wetland evaluation will be performed in 2002 in accordance with the OM&M Manual.

If you should have any questions pertaining to the information presented in this letter, please feel free to contact Douglas Crawford or me at (315) 437-6100.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.



Bradley A. Kubiak  
Design Engineer

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cc: Ron Chiarello  
Douglas Crawford, P.E.  
Maureen Markert, P.E.

PATH: I:\DVT1\PROJECTS\4966\30473\DWGS\OM&M\002.DWG

PLOT DATE: 1/23/02

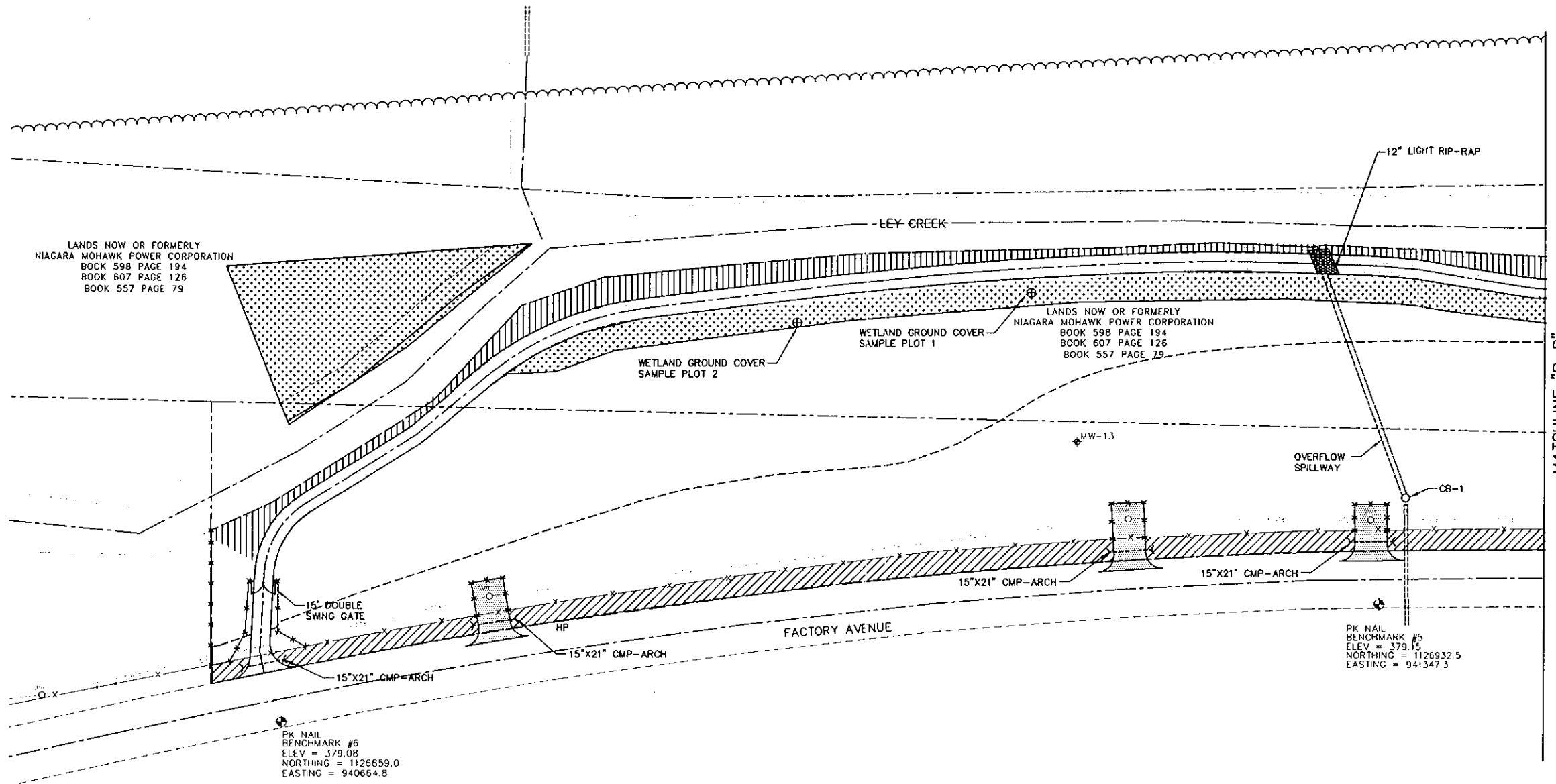


FIGURE 1

- LEGEND**
- SEEDED WITH CANARY GRASS
  - OVERHEAD WIRES
  - PROPERTY BOUNDARY
  - EDGE OF WOODS
  - UTILITY POLE
  - GUY WIRE
  - SANITARY SEWER
  - SANITARY MANHOLE
  - CATCH BASIN
  - SECURITY FENCE (SEE GENERAL NOTE 4)
  - PAVEMENT
  - GRAVEL ACCESS ROAD
  - LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
  - CATCH BASIN
  - MODIFIED MONITORING WELL
  - MONITORING WELL PRESUMED DESTROYED
  - ABANDONED MONITORING WELL
  - NEW MONITORING WELL
  - LIMITS OF EROSION CONTROL MAT
  - LIMITS OF COVER SYSTEM
  - LIMITS OF NON-WOVEN GEOTEXTILE
  - WETLAND GROUND COVER SAMPLE PLOT LOCATION

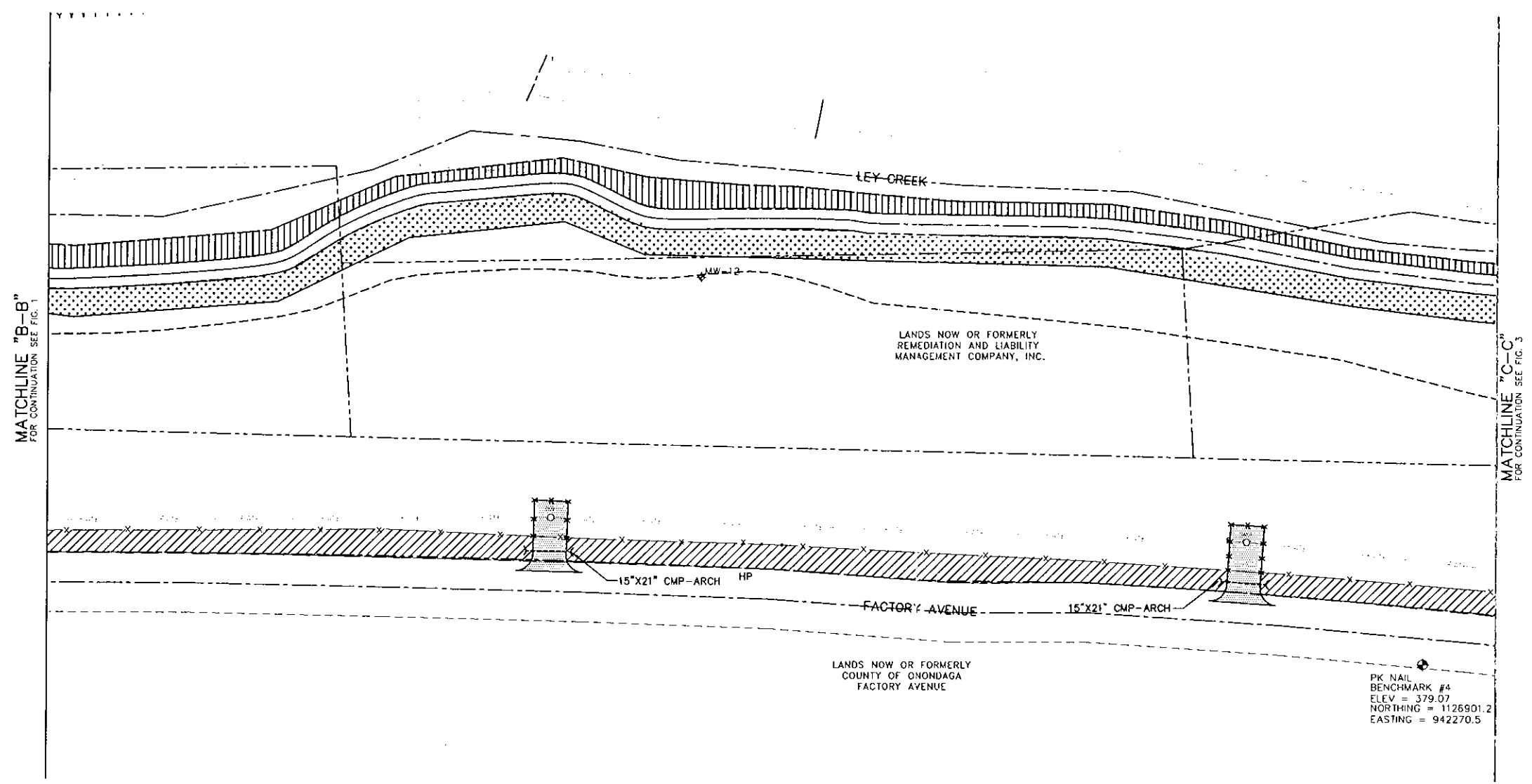
LEY CREEK PCB DREDGINGS SITE  
SYRACUSE, NEW YORK  
SITE REMEDIATION PROJECT



**OM&M PARTIAL  
SITE PLAN  
WETLAND  
EVALUATION**

FILE NO. 4966.30473.006  
JANUARY 2002





MATCHLINE "B-B"  
FOR CONTINUATION SEE FIG. 1

MATCHLINE "C-C"  
FOR CONTINUATION SEE FIG. 3

LANDS NOW OR FORMERLY  
REMEDATION AND LIABILITY  
MANAGEMENT COMPANY, INC.

LANDS NOW OR FORMERLY  
COUNTY OF ONONDAGA  
FACTORY AVENUE

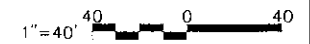
PK NAIL  
BENCHMARK #4  
ELEV = 379.07  
NORTHING = 1126901.2  
EASTING = 942270.5

FIGURE 2

LEGEND

- SEEDED WITH CANARY GRASS
- OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SANITARY SEWER
- SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MW-08G7C MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- WETLAND GROUND COVER SAMPLE PLOT LOCATION

LEY CREEK PCB DREDGINGS SITE  
SYRACUSE, NEW YORK  
SITE REMEDIATION PROJECT



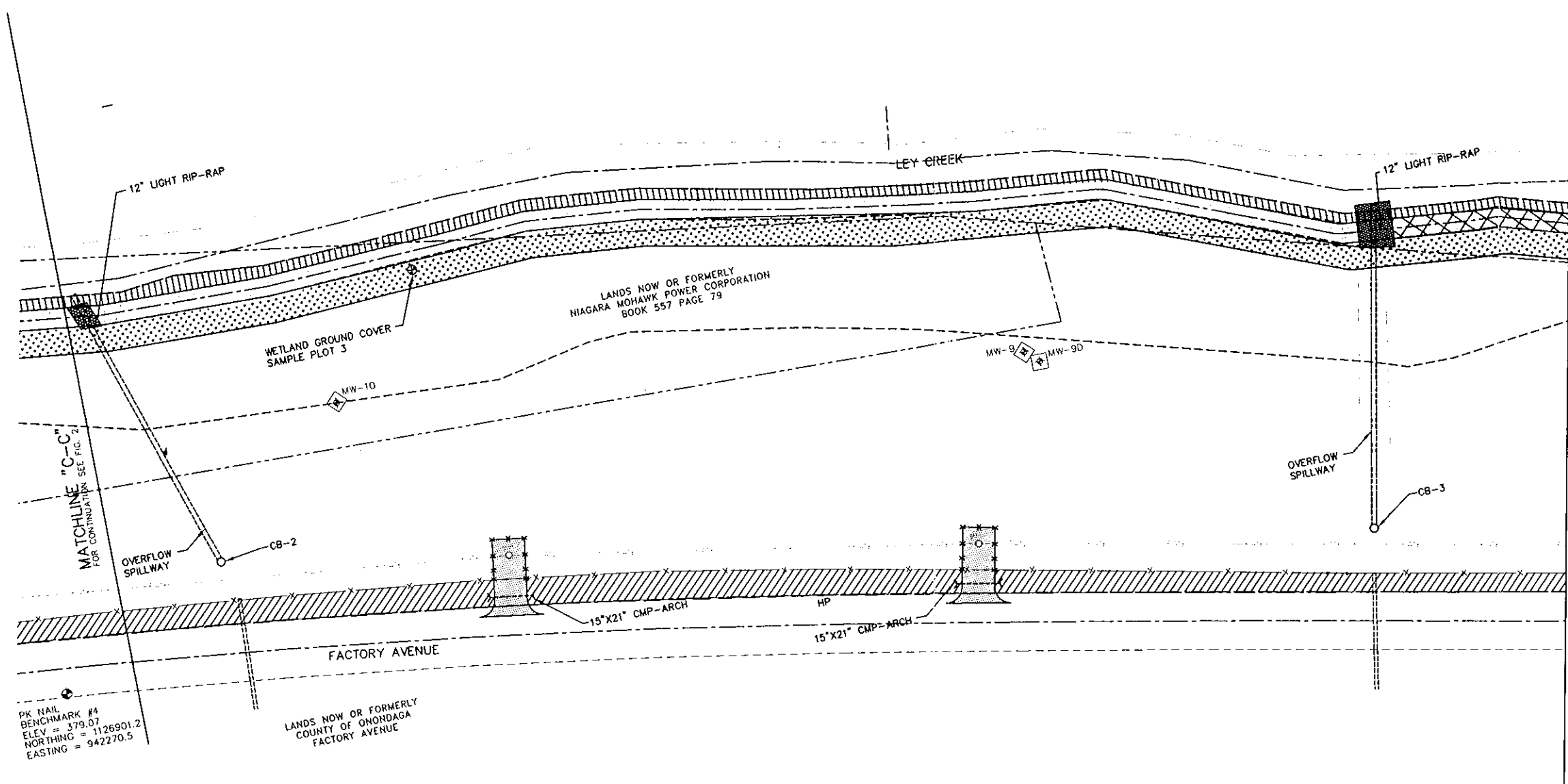
OM&M PARTIAL  
SITE PLAN  
WETLAND  
EVALUATION

FILE NO. 4966.30473.007  
JANUARY 2002



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PLOT DATE: 1/22/02



PK NAIL  
BENCHMARK #4  
ELEV = 379.07  
NORTHING = 1126901.2  
EASTING = 942270.5

LANDS NOW OR FORMERLY  
COUNTY OF ONONDAGA  
FACTORY AVENUE

LANDS NOW OR FORMERLY  
NIAGARA MOHAWK POWER CORPORATION  
BOOK 557 PAGE 79

MATCHLINE "C-C"  
FOR CONTINUATION SEE FIG. 2

MATCHLINE "D-D"  
FOR CONTINUATION SEE FIG. 4

FIGURE 3

LEGEND

- SEEDED WITH CANARY GRASS
- OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SANITARY SEWER
- SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MW-OBG7C MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- WETLAND GROUND COVER SAMPLE PLOT LOCATION

LEY CREEK PCB DREDGINGS SITE  
SYRACUSE, NEW YORK  
SITE REMEDIATION PROJECT



OM&M PARTIAL  
SITE PLAN  
WETLAND  
EVALUATION

FILE NO. 4966.30473.008  
JANUARY 2002



MATCHLINE "D-D"  
FOR CONTINUATION SEE FIG. 3

MATCHLINE "E-E"  
FOR CONTINUATION SEE FIG. 5

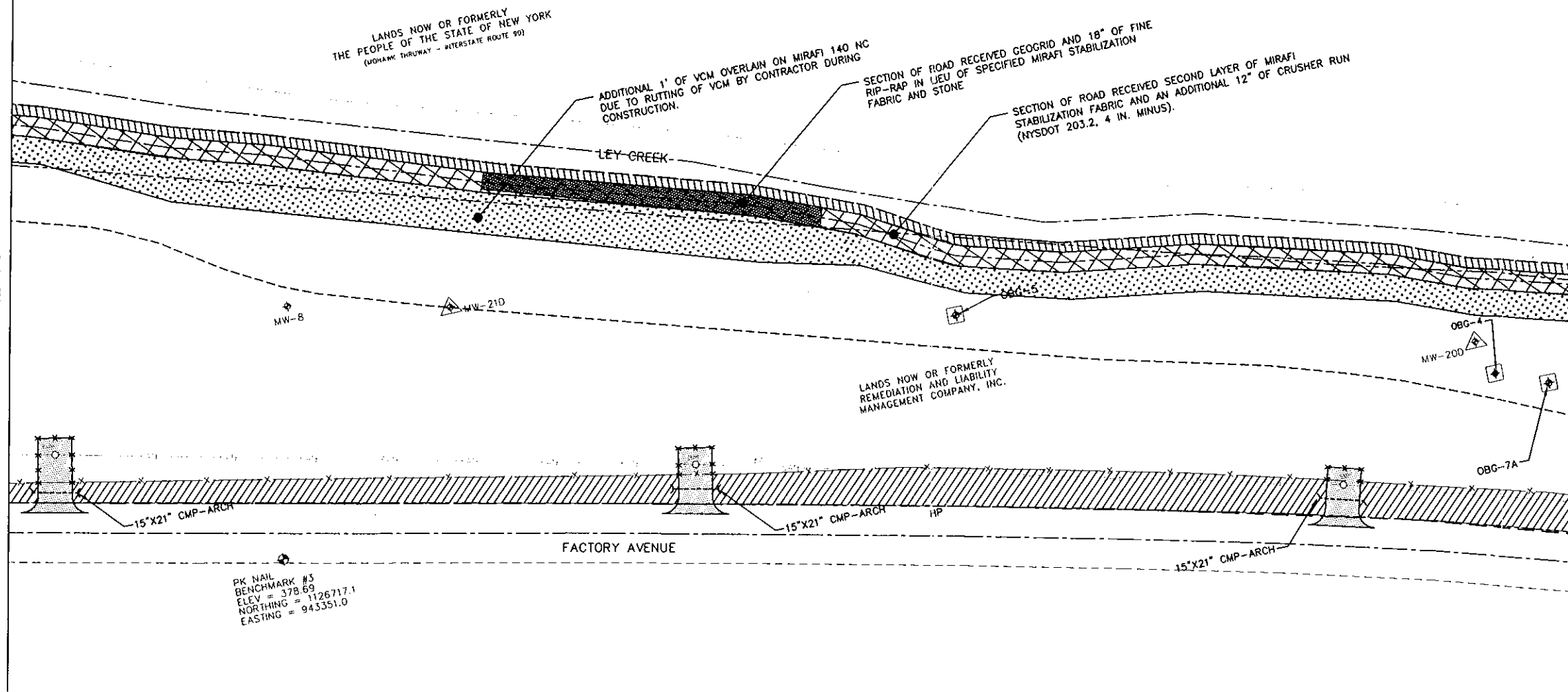


FIGURE 4

- LEGEND**
- SEEDED WITH CANARY GRASS
  - OVERHEAD WIRES
  - PROPERTY BOUNDARY
  - EDGE OF WOODS
  - UTILITY POLE
  - GUY WIRE
  - SANITARY SEWER
  - SANITARY MANHOLE
  - CATCH BASIN
  - SECURITY FENCE (SEE GENERAL NOTE 4)
  - PAVEMENT
  - GRAVEL ACCESS ROAD
  - LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
  - CATCH BASIN
  - MODIFIED MONITORING WELL
  - MONITORING WELL PRESUMED DESTROYED
  - ABANDONED MONITORING WELL
  - NEW MONITORING WELL
  - LIMITS OF EROSION CONTROL MAT
  - LIMITS OF COVER SYSTEM
  - LIMITS OF NON-WOVEN GEOTEXTILE
  - WETLAND GROUND COVER SAMPLE PLOT LOCATION

LEY CREEK PCB DREDGINGS SITE  
SYRACUSE, NEW YORK  
SITE REMEDIATION PROJECT



**OM&M PARTIAL  
SITE PLAN  
WETLAND  
EVALUATION**

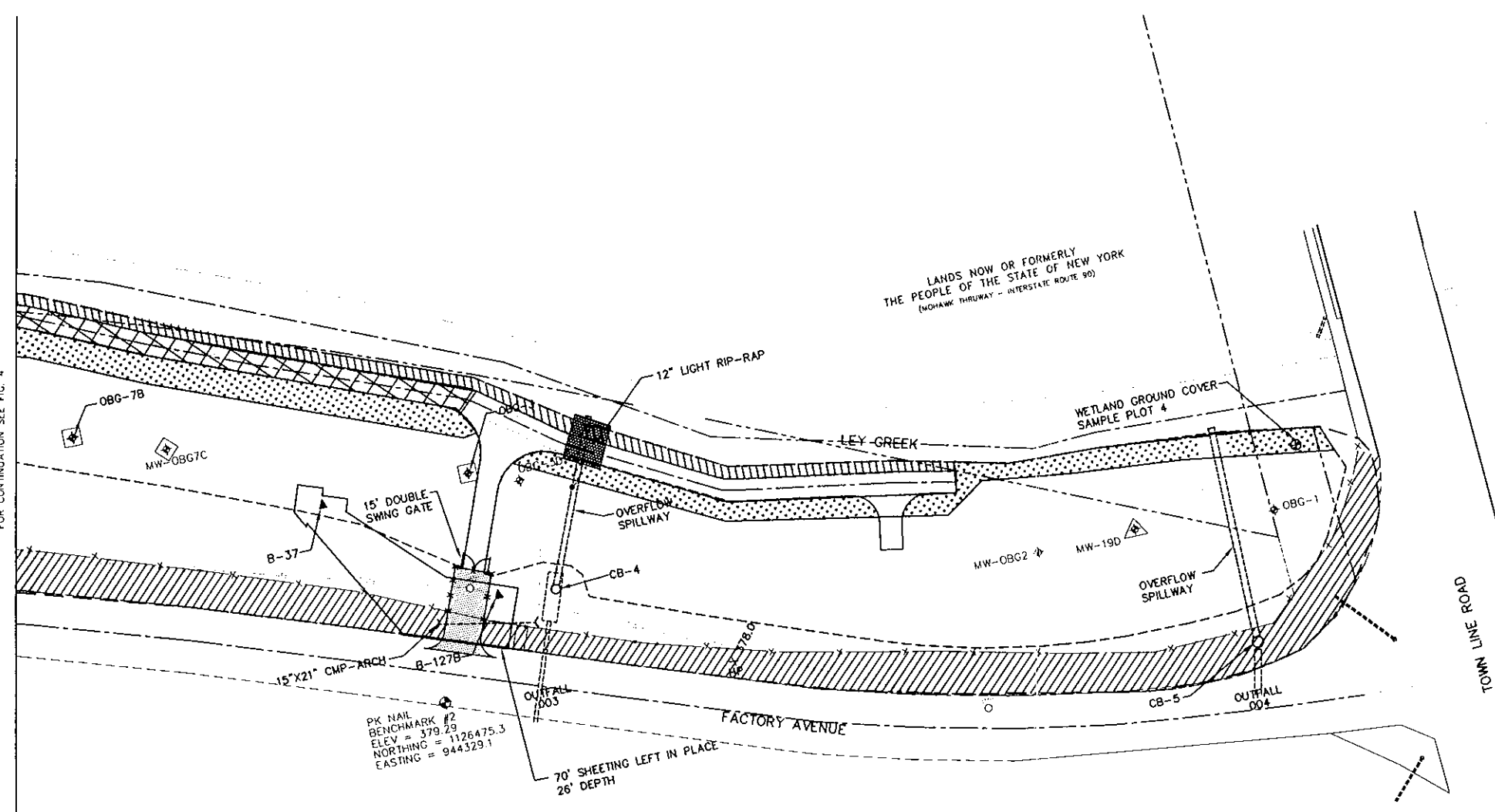
FILE NO. 4966.30473.009  
JANUARY 2002



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PLOT DATE: 1/22/02

MATCHLINE "E-E"  
FOR CONTINUATION SEE FIG. 4



PK NAIL  
BENCHMARK #2  
ELEV = 379.29  
NORTHING = 1126475.3  
EASTING = 944329.1

LANDS NOW OR FORMERLY  
THE PEOPLE OF THE STATE OF NEW YORK  
(MOHAWK THRUWAY - INTERSTATE ROUTE 90)



FIGURE 5

LEGEND

- SEEDED WITH CANARY GRASS
- OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SANITARY SEWER
- SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MW-OBG7C MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- WETLAND GROUND COVER SAMPLE PLOT LOCATION

LEY CREEK PCB DREDGINGS SITE  
SYRACUSE, NEW YORK  
SITE REMEDIATION PROJECT



OM&M PARTIAL  
SITE PLAN  
WETLAND  
EVALUATION

FILE NO. 4966.30473.010  
JANUARY 2002



**Ground Cover Data Form**

**GROUND COVER DATA FORM**

Site: GM Ley Creek Site - Restored Wetland  
 Date: 10/15/2001  
 Investigator(s): S. Mooney & R. Chiarello  
 Plot: Plot 1  
 Wetland type: Emergent

Species	Indicator Status	Percent cover
<i>Phalaris arundinacea</i>	FACW+	45
<i>Dactylis glomerata</i>	FACU	30
<i>Lolium perenne</i>	FACU-	5
<i>Trifolium repens</i>	FACU-	5
<i>Acer negundo</i>	FAC+	1
<b>Total ground cover (%)</b>		86
<b>% desirable ground cover</b>		45 <sup>a</sup>
<b>% ground cover hydrophytic (FAC, FACW and OBL)</b>		52 <sup>b</sup>

Note

<sup>a</sup>Calculated by subtracting % cover of undesirable wetland species, i.e., *Lythrum salicaria*, *Phragmites australis*, if present, and non-wetland species from total % ground cover.

<sup>b</sup>Calculated by adding percent cover for each indicator status and dividing by total ground cover %.

## GROUND COVER DATA FORM

**Site:** GM Ley Creek Site - Restored Wetland  
**Date:** 10/15/2001  
**Investigator(s):** S. Mooney & R. Chiarello  
**Plot:** Plot 2  
**Wetland type:** Emergent

Species	Indicator Status	Percent cover
<i>Dactylis glomerata</i>	FACU	15
Unidentified dead stalks ( <i>L. perenne?</i> )	FACU-	10
<i>Trifolium repens</i>	FACU-	5
<b>Total ground cover (%)</b>		30
<b>% desirable ground cover</b>		0 <sup>a</sup>
<b>% ground cover hydrophytic (FAC, FACW and OBL)</b>		0 <sup>b</sup>

Note

<sup>a</sup>Calculated by subtracting % cover of undesirable wetland species, i.e., *Lythrum salicaria*, *Phragmites australis*, if present, and non-wetland species from total % ground cover.

<sup>b</sup>Calculated by adding percent cover for each indicator status and dividing by total ground cover %.

## GROUND COVER DATA FORM

**Site:** GM Ley Creek Site - Restored Wetland  
**Date:** 10/15/2001  
**Investigator(s):** S. Mooney & R. Chiarello  
**Plot:** Plot 3  
**Wetland type:** Emergent

Species	Indicator Status	Percent cover
<i>Phalaris arundinacea</i>	FACW+	50
<i>Populus deltoides</i> (seedlings)	FAC	10
<b>Total ground cover (%)</b>		60
<b>% desirable ground cover</b>		60 <sup>a</sup>
<b>% ground cover hydrophytic (FAC, FACW and OBL)</b>		100 <sup>b</sup>

Note

<sup>a</sup>Calculated by subtracting % cover of undesirable wetland species, i.e., *Lythrum salicaria*, *Phragmites australis*, if present, and non-wetland species from total % ground cover.

<sup>b</sup>Calculated by adding percent cover for each indicator status and dividing by total ground cover %.

## GROUND COVER DATA FORM

**Site:** GM Ley Creek Site - Restored Wetland  
**Date:** 10/15/2001  
**Investigator(s):** S. Mooney & R. Chiarello  
**Plot:** Plot 4  
**Wetland type:** Emergent

Species	Indicator Status	Percent cover
<i>Phalaris arundinacea</i>	FACW+	85
<i>Polygonum persicaria</i>	FACW	2
<i>Impatiens</i> sp.	FACW	2
<i>Plantago major</i>	FACU	2
<i>Cassia</i> sp.	FACU	2
<i>Acer negundo</i>	FAC+	2
<b>Total ground cover (%)</b>		95
<b>% desirable ground cover</b>		91 <sup>a</sup>
<b>% ground cover hydrophytic (FAC, FACW and OBL)</b>		96 <sup>b</sup>

Note

<sup>a</sup>Calculated by subtracting % cover of undesirable wetland species, *i.e.*, *Lythrum salicaria*, *Phragmites australis*, if present, and non-wetland species from total % ground cover.

<sup>b</sup>Calculated by adding percent cover for each indicator status and dividing by total ground cover %.

**ATTACHMENT 2**

**Photograph log**



Photo 1: Looking east at area of restored wetland evaluation Plot 1.  
Date photo taken: 10/15/2001



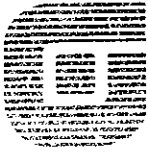
Photo 2: Looking west at area of restore wetland evaluation plot 2.  
Date photo taken: 10/15/2001



Photo 3: Looking west at area of restored wetland evaluation Plot 3.  
Date photo taken: 10/15/2001



Photo 4: Looking east at area of restored wetland evaluation Plot 4.  
Date photo taken: 10/15/2001



**O'BRIEN & GERE**  
ENGINEERS, INC.

73AK

January 23, 2002

James F. Hartnett  
Remediation and Liability Management Company, Inc.  
c/o GM Powertrain - Massena Casting Plant  
Remediation Project Office  
Rt. 37 East, Box 460  
Massena, New York 13662-0460

Re: Ley Creek PCB Dredgings Site  
2001 OM&M Inspection

File: 4966/30473 #2

Dear Jim:

The purpose of this letter report is to document the Operation, Maintenance, and Monitoring (OM&M) site inspection conducted on December 14, 2001 by O'Brien & Gere Engineers, Inc. (O'Brien & Gere) at the Ley Creek PCB Dredgings Site (the Site), located in Syracuse, New York. This inspection was performed in accordance with the NYSDEC-approved OM&M manual, dated September 2001. Attached to this letter report are the OM&M checklist, inspection photographs, and site figures associated with the site inspection.

The OM&M manual specifies that inspection and monitoring will be performed in May, July, and September for the first year and that the first year will begin after the final inspection is completed and NYSDEC has approved the Remedial Action Engineering report. The Remedial Action Engineering Report was approved by NYSDEC on October 15, 2001. Although the months specified in the OM&M manual had passed by the approval date, an inspection was performed due to the length of time since the field construction had been completed.

**SITE INSPECTION**

On December 14, 2001, an OM&M site inspection was performed at the Site. The inspection checklist along with the comments is attached. The inspection photographs are also attached along with a short description of the contents of the photographs. The approximate locations of where the photographs were taken are shown in the attached site figures.

The condition of the vegetative cover has improved since the 2000 construction season and is noticeably better established after the first year application of the seed/fertilizer/soil conditioner. This first year application was performed on October 1, 2001 by Miller Landscaping, LLC. Attached to this letter is a copy of the daily report documenting the application of the 2001 seed/fertilizer/soil conditioner and seed mixture tag.



No major deficiencies were observed during the OM&M site inspection that would warrant immediate attention. Minor deficiencies that were observed are documented in the inspection photographs. Below is a description of the minor deficiencies with reference to the associated photographs and figures:

- DEBRIS ACCUMULATION: (Photographs 1 and 16. Figures 5 and 1.) Debris was observed to be accumulated on the grate for CB-5/004 and around the grate of CB-1.
- WASHED OUT MATERIALS: (Photograph 9. Figure 3.) Materials from erosion of ditch washed into the flowpath leading to CB-3.
- SINK HOLE: (Photograph 1. Figure 5.) An area immediately south of CB-5/004 was observed to have settlement (sinkhole) of the vegetative cover.
- GULLY EROSION: (Photograph 2 and 8. Figures 5 and 8.) Two areas of gully erosion were observed at the Site during the OM&M inspection. The first leading down to the CB-5/004 overflow spillway and the second leading down to the CB-3 flowpath.
- RILL EROSION: (Photographs 4 and 7. Figure 4.) There were two main areas of rill erosion observed at the Site and are depicted on the two referenced photographs. The rill erosion was on the slope leading to the stone access road.
- CB-4/003 OVERFLOW SPILLWAY EROSION: (Photograph 3. Figure 5.) Erosion of the interface between the rip-rap and the vegetative cover material has occurred in the CB-4/003 overflow spillway.
- CB-1 OVERFLOW SPILLWAY: (Photographs 11-15. Figure 1.) There are three areas of erosion associated with the CB-1 overflow spillway. The first area identified in the photographs is erosion that has occurred near the outlet structure of CB-1. The second area is erosion of the vegetative cover in the overflow spillway and the third is an area of gully erosion leading down to the catch basin.
- VEGETATIVE COVER DAMAGE: (Photographs 5, 6 13, and 20. Figures 1 and 4.) The majority of the vegetative cover damage is from vehicles leaving ruts in the vegetative cover. The damage has resulted in poor vegetation establishment.
- STONE ACCESS ROAD DAMAGE: (Photographs 13 and 19. Figure 1.) Rutting of the stone access road was observed at the western end of the Site in the area around CB-1. Silt deposition on the stone access road was also noted during the OM&M inspection.

### CONCLUSIONS AND RECOMMENDATIONS

Vegetation establishment at the Site has improved since the 2000 construction season, but is still not considered fully established. Below is a list of recommended measures to correct the deficiencies observed during the OM&M inspection:

- Remove debris accumulated around CB-1 and CB-5/004

- Remove washed out materials from CB-3 flow path leading to catch basin
- Repair "sink hole" behind CB-5/004
- Repair areas of erosion on slopes and around overflow spillways
- Repair areas of damaged cover
- Repair rutting in stone access road

The next semi-annual OM&M inspection is scheduled to occur in the Spring of 2002.

If you should have any questions pertaining to the information presented in this letter, please feel free to contact Douglas Crawford or me at (315) 437-6100

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

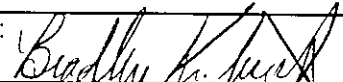


Bradley A. Kubiak  
Design Engineer

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cc: Douglas Crawford, P.E.  
Maureen Markert, P.E.

OM&M Inspection checklist

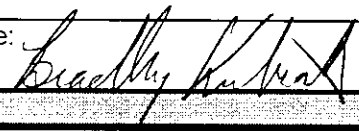
Date Performed: <b>December 14, 2001</b>	Weather: <b>Light rain 35-45 F</b>
Site Name: <b>Ley Creek PCB Dredgings Site</b>	Inspector Name: <b>Bradley Kubiak</b>
Site Location: <b>Syracuse, New York</b>	Inspector Signature: 

Item	Task	Response		Comments
		Yes	No	
Vegetative Cover	<b>Visually inspect surface conditions.</b>			
	1. Areas of settlement?	<b>X</b>		Photo 1 - Sink hole north of catch basin in spillway
	2. Areas of erosion?	<b>X</b>		Photo 2 - Erosion near CB-5/004. Mirafi in view.
		<b>X</b>		Photo 3 - View of Erosion in CB-4/003 spillway
		<b>X</b>		Photo 4 - Rill erosion on slope leading to acces road
		<b>X</b>		Photo 7 - Rill erosion on slope leading to access road
		<b>X</b>		Photo 8 - Gully erosion in ditch leading to CB-3
		<b>X</b>		Photo 9 - Results of gully erosion-materials in flowpath
		<b>X</b>		Photo 11 and 12 - Erosion near outlet of CB-1
		<b>X</b>		Photo 14 - Erosion of cover in CB-1 spillway
		<b>X</b>		Photo 15 - Gully erosion leading to CB-1

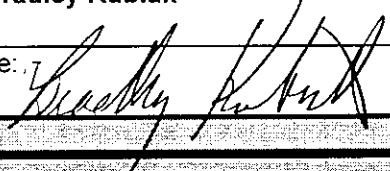
OM&M Inspection checklist

Date Performed: <b>December 14, 2001</b>			Weather: <b>Light rain 35-45 F</b>	
Site Name: <b>Ley Creek PCB Dredgings Site</b>			Inspector Name: <b>Bradley Kubiak</b>	
Site Location: <b>Syracuse, New York</b>			Inspector Signature: 	
<b>Vegetative Cover</b>	3. Areas where geotextile visible due to erosion?	<b>X</b>		Photo 2 - Erosion near CB-5/004. Mirafi in view.
	4. Areas of slope instability?		<b>X</b>	
	5. Lack or thinning vegetation?		<b>X</b>	
	6. Presence of burrowing animals?		<b>X</b>	
	7. Areas of damage?	<b>X</b>		Photos 5 and 6 - Area of damage near MW-21D
		<b>X</b>		Photo 13 - Area of cover damaged along access road
		<b>X</b>		Photo 20 - Area of cover damaged along access road
	8. Drainage problems?		<b>X</b>	
	9. Mowing required?		<b>X</b>	
<b>Access Road</b>	<b>Visually inspect conditions.</b>			
	1. Areas of settlement?		<b>X</b>	
	2. Areas of erosion?		<b>X</b>	

OM&M Inspection checklist

Date Performed: <b>December 14, 2001</b>			Weather: <b>Light rain 35-45 F</b>	
Site Name: <b>Ley Creek PCB Dredgings Site</b>			Inspector Name: <b>Bradley Kubiak</b>	
Site Location: <b>Syracuse, New York</b>			Inspector Signature: 	
<b>Access Road</b>	3. Areas rutted or potholes present?	<b>X</b>		Photos 13 and 19 - Rutting of access road
	4. Areas of damage?	<b>X</b>		Photo 13 - Area of access road with silt deposition
<b>Surface Water Drainage</b>	<b>Visually inspect ditches, catch basins, etc.</b>			
	1. Accumulation of debris?	<b>X</b>		Photos 1 and 16 - Debris on and around grates
	2. Excessive scouring?	<b>X</b>		Photo 3 - View of erosion in CB-4/003 spillway
		<b>X</b>		Photo 8 - Gully erosion in ditch leading to CB-3
		<b>X</b>		Photo 9 - Results of gully erosion-materials in flowpath
		<b>X</b>		Photo 14 - Erosion of cover in CB-1 spillway
		<b>X</b>		Photo 15 - Gully erosion leading to CB-1
	3. Areas of damage?		<b>X</b>	
<b>Ground Water Monitoring Wells</b>	<b>Visually inspect conditions.</b>			
	1. Casings secure and locked?	<b>X</b>		
	2. Areas of damage?		<b>X</b>	

OM&M Inspection checklist

Date Performed: <b>December 14, 2001</b>		Weather: <b>Light rain 35-45 F</b>	
Site Name: <b>Ley Creek PCB Dredgings Site</b>		Inspector Name: <b>Bradley Kubiak</b>	
Site Location: <b>Syracuse, New York</b>		Inspector Signature: 	
<b>Sanitary Sewer Access Paths</b>	<b>Visually inspect conditions.</b>		
	1. Cracks in asphalt?		<b>X</b>
	2. Manhole covers in place?	<b>X</b>	
	3. Debris accumulating in access paths?		<b>X</b>
<b>Physical Site Security</b>	<b>Visually inspect fences and gates</b>		
	1. Signs intact?	<b>X</b>	
	2. Fence breached?		<b>X</b>
	3. Access gates locked?	<b>X</b>	
	4. Areas of damage?		<b>X</b>
<b>Note any additional comments.</b>			



12/14/01

Photo 1 - View of CB-5/004. Debris accumulated on grate.



12/14/01

Photo 2 - Erosion area with Mirafi indicator fabric in view.



12/14/01

Photo 3 - View of erosion in CB-4/003 overflow spillway.



12/14/01

Photo 4 - View of rill erosion of slope leading down to stone access road.



12/14/01

Photo 5 - View of damaged vegetative cover area east of MW-21D.



12/14/01

Photo 6 - View of damage vegetative cover area west of MW-21D.



12/14/01

Photo 7 - View of rill erosion of slope leading down to stone access road.



12/14/01

Photo 8 - View of gully erosion in ditch leading to CB-3.



12/14/01  
Photo 9 - View of area leading to CB-3.



12/14/01  
Photo 10 - View from CB-3 spillway heading west.



12/14/01  
Photo 11 - View of erosion area around CB-1 outlet structure.



12/14/01  
Photo 12 - View of erosion area around CB-1 outlet structure.



12/14/01

Photo 13 - View of damaged area around CB-1 outlet structure.



12/14/01

Photo 14 - View or erosion in CB-1 overflow spillway.



12/14/01

Photo 15 - View of gully erosion leading CB-1 off the vegetative cover.



12/14/01

Photo 16 - View of CB-1 with debris accumulated around grate.



12/14/01  
Photo 17 - View from CB-1 overflow spillway heading east.

12/14/01  
Photo 18 - View from CB-1 overflow spillway heading west.



12/14/01  
Photo 19 - View of ruts in access road heading west from CB-1.

12/14/01  
Photo 20 - View of damaged vegetative cover.



12/14/01  
Photo 21 - View from CB-4/003 overflow spillway heading east.



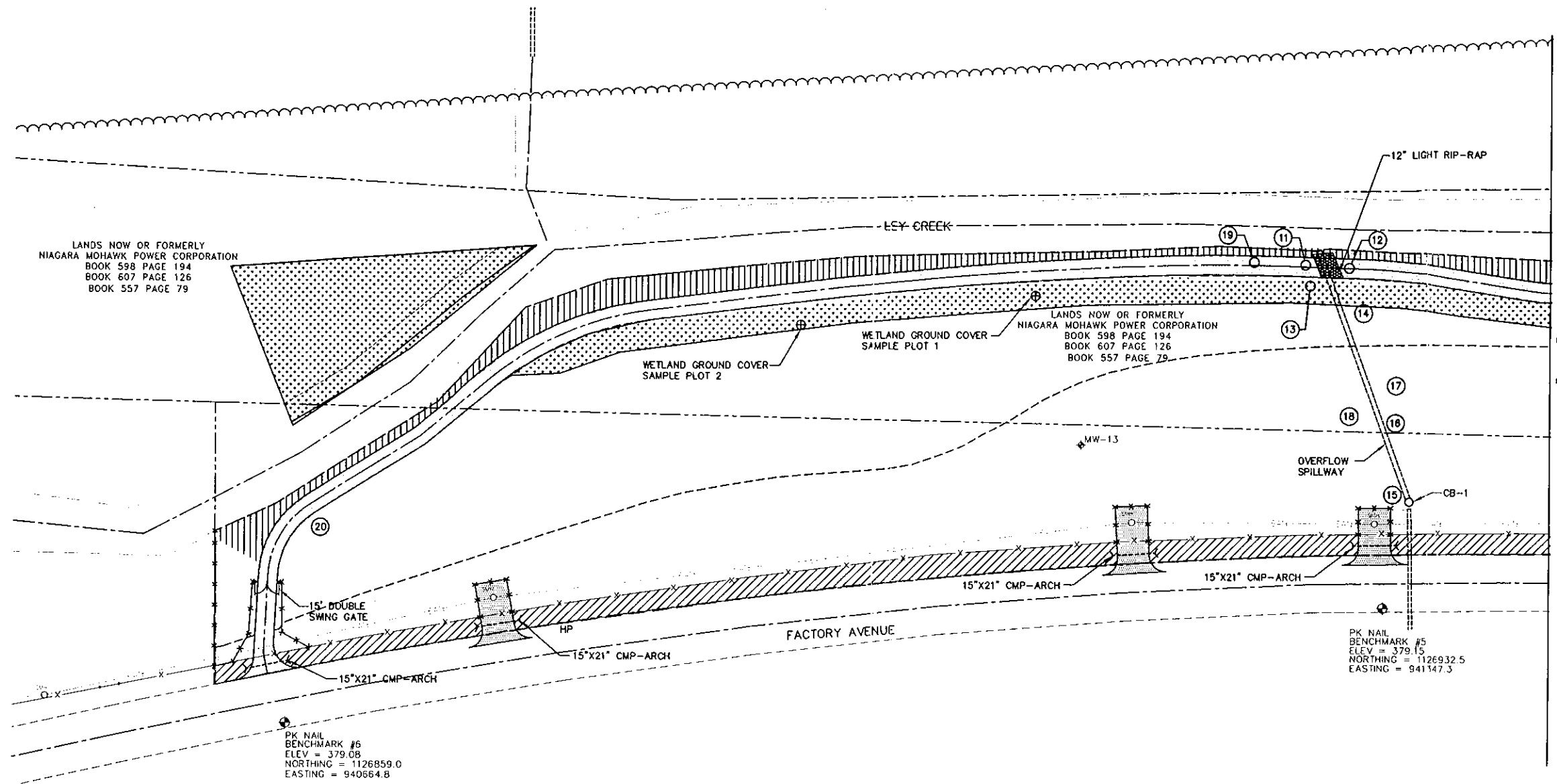
12/14/01  
Photo 22 - View from CB-4/003 overflow spillway heading west.



12/14/01  
Photo 23 - View of bank along Ley Creek heading west.

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PLOT DATE: 1/22/02



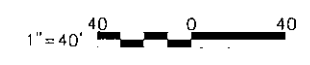
MATCHLINE "B-B"  
FOR CONTINUATION SEE FIG. 2

FIGURE 1

LEGEND

- SEEDED WITH CANARY GRASS
- OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SANITARY SEWER
- SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MW-OBG7C MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- PHOTO LOCATION
- WETLAND GROUND COVER SAMPLE PLOT LOCATION

LEYS CREEK PCB DREDGINGS SITE  
SYRACUSE, NEW YORK  
SITE REMEDIATION PROJECT



OM&M  
PARTIAL SITE PLAN

FILE NO. 4966.30473.001  
JANUARY 2002



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PLOT DATE: 1/22/02

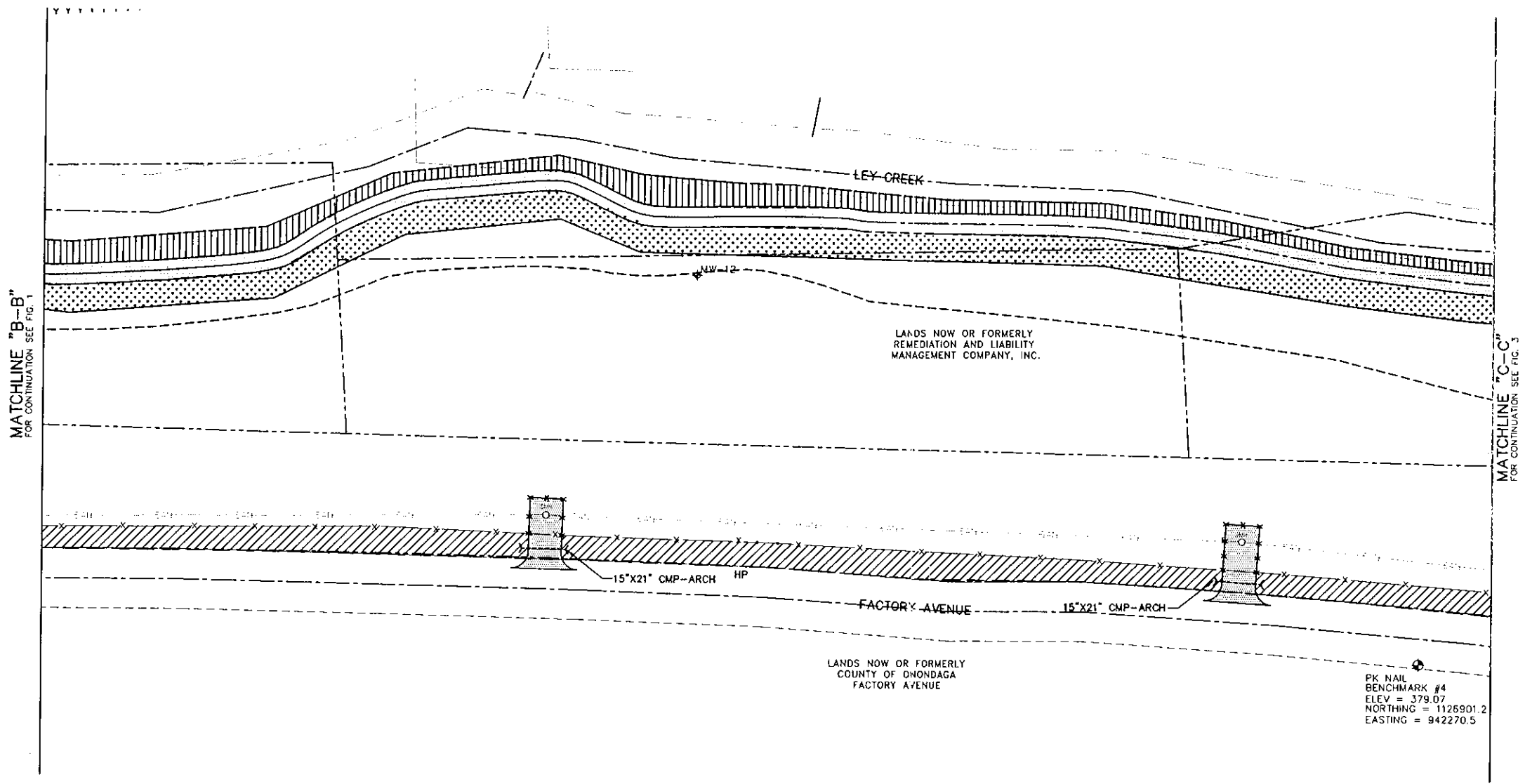
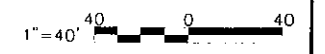


FIGURE 2

LEGEND

- SEEDED WITH CANARY GRASS
- OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SANITARY SEWER
- SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MW-OBG7C MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- WETLAND GROUND COVER SAMPLE PLOT LOCATION

LEY CREEK PCB DREDGINGS SITE  
SYRACUSE, NEW YORK  
SITE REMEDIATION PROJECT



OM&M  
PARTIAL SITE PLAN

FILE NO. 4966.30473.002  
JANUARY 2002



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PLOT DATE: 1/22/02

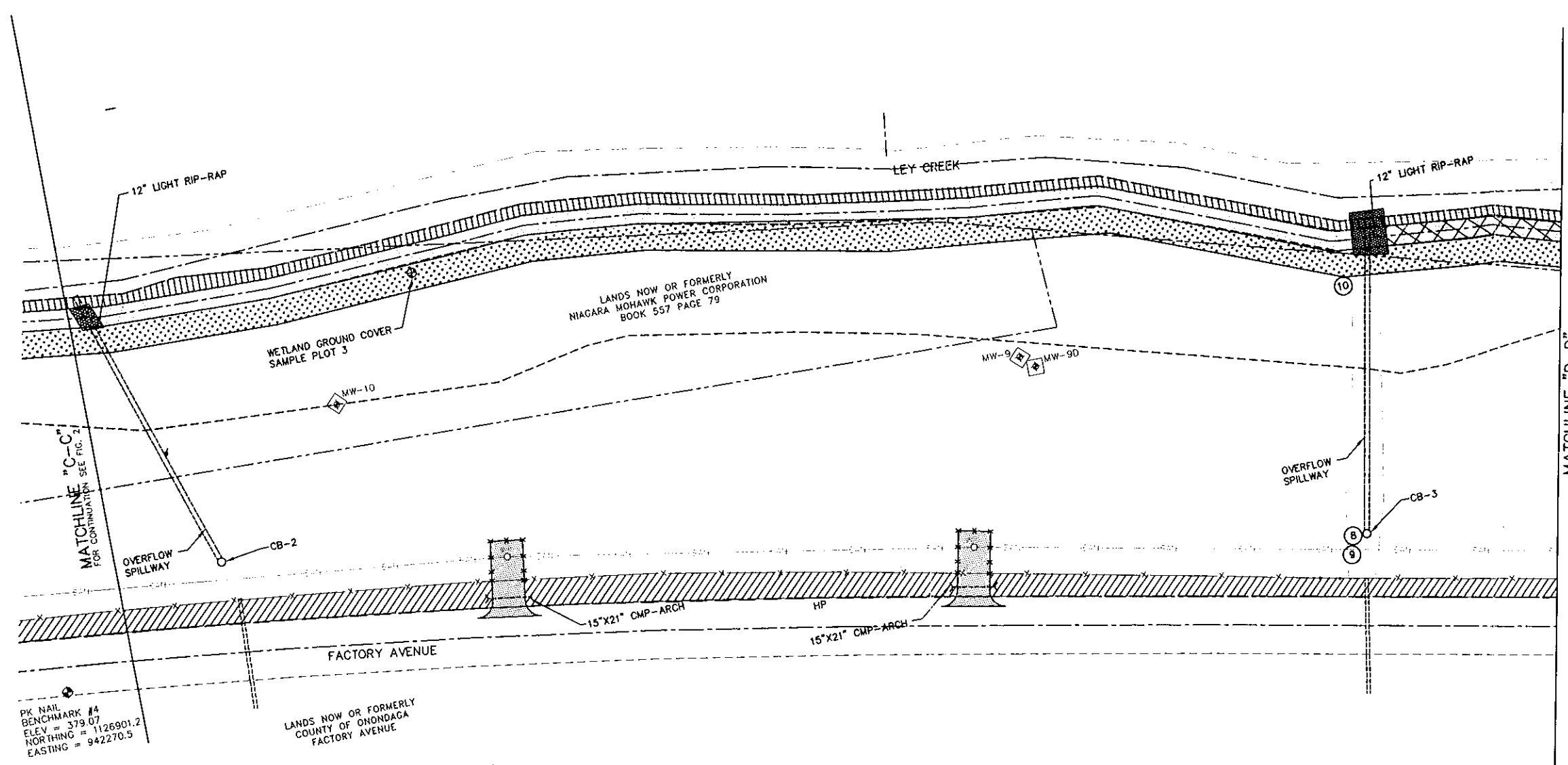


FIGURE 3

LEGEND

- SEEDED WITH CANARY GRASS
- OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SANITARY SEWER
- SANITARY MANHOLE
- CATCH BASIN
- SECURITY FENCE (SEE GENERAL NOTE 4)
- PAVEMENT
- GRAVEL ACCESS ROAD
- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
- CATCH BASIN
- MODIFIED MONITORING WELL
- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- PHOTO LOCATION
- WETLAND GROUND COVER SAMPLE PLOT LOCATION

LEY CREEK PCB DREDGINGS SITE  
SYRACUSE, NEW YORK  
SITE REMEDIATION PROJECT



OM&M  
PARTIAL SITE PLAN

FILE NO. 4966.30473.003  
JANUARY 2002



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PLOT DATE: 1/22/02

MATCHLINE "D-D"  
FOR CONTINUATION SEE FIG. 3

MATCHLINE "E-E"  
FOR CONTINUATION SEE FIG. 5

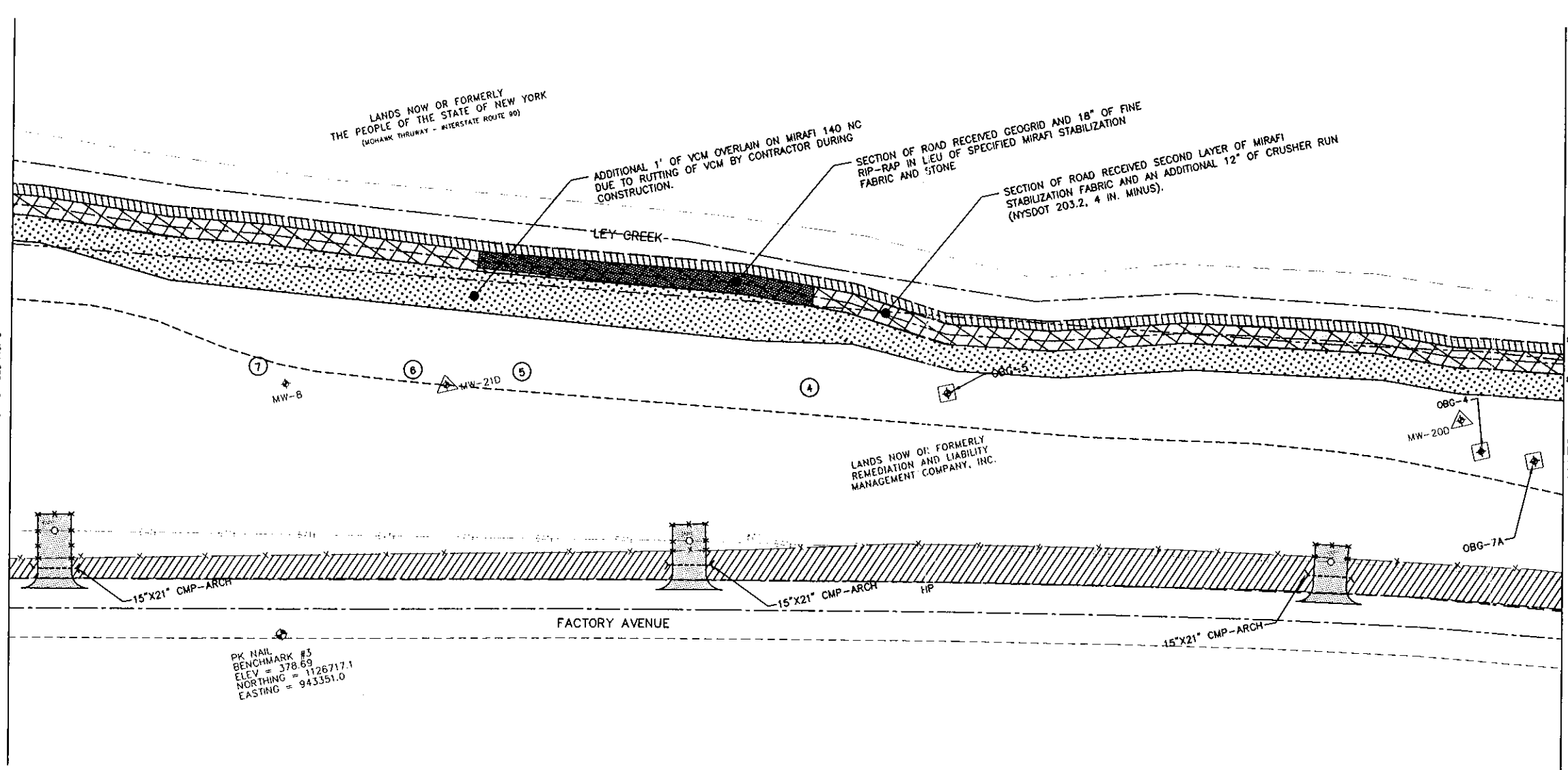
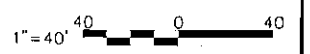


FIGURE 4

LEGEND

- SEEDED WITH CANARY GRASS
- OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
- GUY WIRE
- SANITARY SEWER
- SANITARY MANHOLE
- CATCH BASIN
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- LIMITS OF SOIL LOCATED ALONG FACTORY AVENUE RELOCATED BENEATH COVER SYSTEM
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- MONITORING WELL PRESUMED DESTROYED
- ABANDONED MONITORING WELL
- NEW MONITORING WELL
- LIMITS OF EROSION CONTROL MAT
- LIMITS OF COVER SYSTEM
- LIMITS OF NON-WOVEN GEOTEXTILE
- PHOTO LOCATION
- WETLAND GROUND COVER SAMPLE PLOT LOCATION

LEY CREEK PCB DREDGINGS SITE  
SYRACUSE, NEW YORK  
SITE REMEDIATION PROJECT



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PARTIAL SITE PLAN

FILE NO. 4966.30473.004  
JANUARY 2002



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PLOT DATE: 1/22/02

MATCHLINE "E-E"  
FOR CONTINUATION SEE FIG. 4

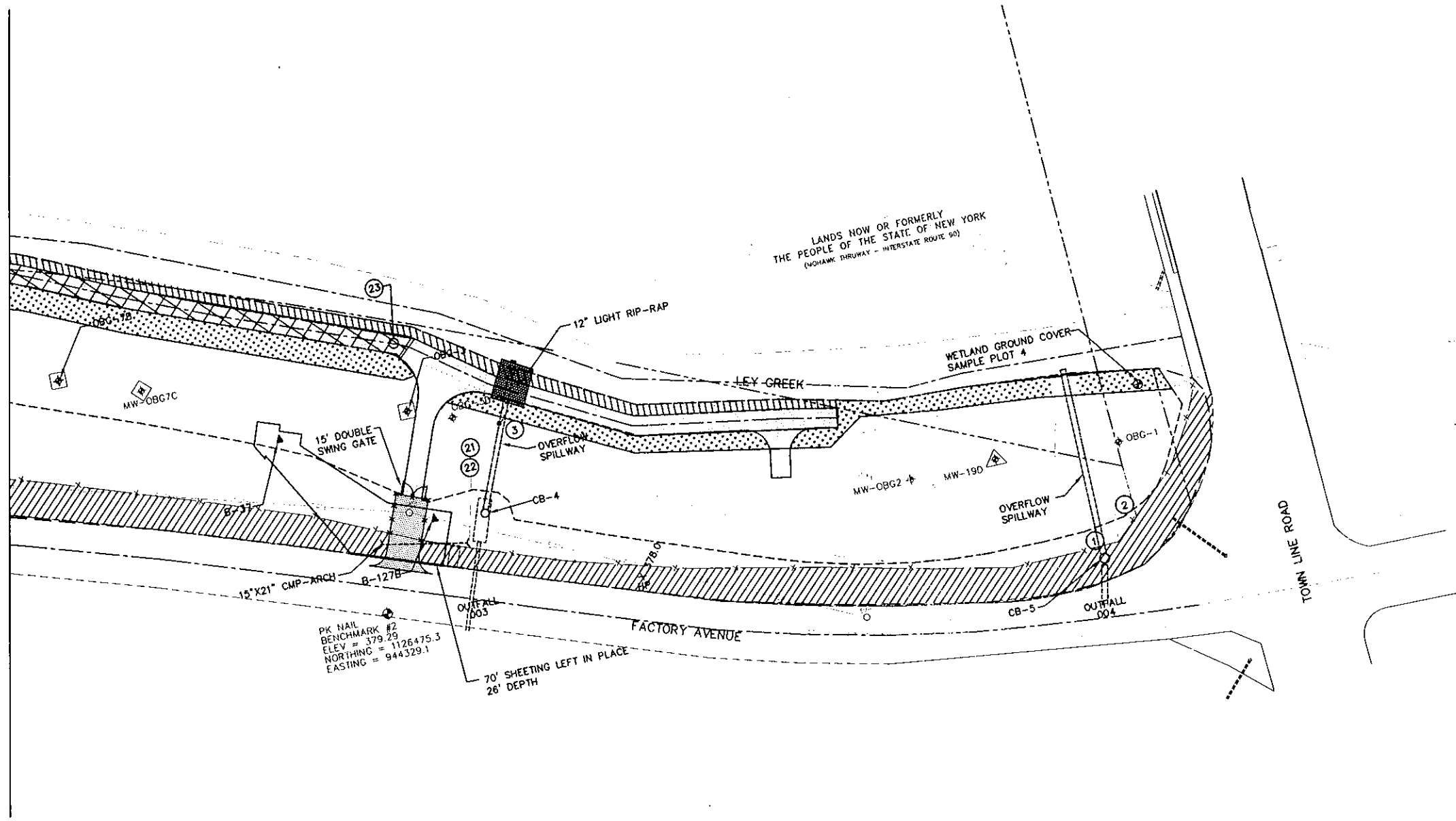
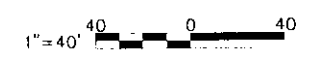


FIGURE 5

LEGEND

- SEEDED WITH CANARY GRASS
- OVERHEAD WIRES
- PROPERTY BOUNDARY
- EDGE OF WOODS
- UTILITY POLE
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LEY CREEK PCB DREDGINGS SITE  
SYRACUSE, NEW YORK  
SITE REMEDIATION PROJECT



OM&M  
PARTIAL SITE PLAN

FILE NO. 4966.30473.005  
JANUARY 2002



SPECIAL GRASS MIXTURE

SEP 2001 LOT MB 374

EMPIRE BIRDSFOOT TREFOIL

CLIMAX TIMOTHY

MEDIUM RED CLOVER

crop 1.53% weeds 0.01% inert 0.09%

Net Weight: 42 LBS. (3 ACRES)

Job Number: GM - LEY CREEK

MILLERS LAWN & LANDSCAPE

PURITY GERM

42.34% 87%

41.99% 85%

14.04% 91%

# MERRITT SEED CO.

7880 GATES RD.

BALDWINVILLE, N.Y. 13027

TELEPHONE: 315-638-0610

All orders are subject to the following conditions of sale: Merritt Seed Company warrants that seed, plants or bulbs sold will be labeled on the containers and that they will conform to the label description as required under State and Federal Seed Laws. Merritt Seed Company's liability on this warranty is limited in amount to the purchase price of the seeds, plants or bulbs.

Merritt Seed Company makes no other or further warranty, express or implied, and MERRITT SPECIFICALLY AND EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. WE MAKE NO OTHER OR FURTHER WARRANTIES, EXPRESS OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

Merritt's liability for (1) breach of contract, or (2) mistake or omission in connection with seeds, plants or bulbs, shall similarly be limited in amount to the purchase price. Merritt also reserves the right to replace the seeds, plants or bulbs with conforming goods.

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