

Honeywell  
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Syracuse, NY 13212  
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315-552-9780 Fax

May 12, 2011

Mr. Richard Mustico, P.E.  
Project Manager  
Division of Environmental Remediation  
Remedial Bureau D  
New York State Department of Environmental Conservation  
625 Broadway – 12<sup>th</sup> Floor  
Albany, New York 12233-7016

**RE: LCP Bridge Street OU1 Site (Site # 7-34-049), Village of Solvay, Onondaga County, NY**  
**Order on Consent: Index # D7-0001-00-12**  
**LCP OU1 Proposed Soil Removal – West Ditch, Wetland A and Dredge Spoils Areas**

Dear Mr. Mustico:

Based on Operation Maintenance & Monitoring (OM&M) sampling, elevated mercury concentrations were detected and delineated in site soils and sediments along the West Ditch, Wetland A and in the Dredge Spoils area (Figure 1). This letter provides the details of the proposed removal activities to address these areas. NYSDEC comments dated 3/23/11 have been addressed and are reflected in this letter.

All work shall be conducted in accordance with the Construction Health and Safety Plan (CHASP), Construction Quality Assurance Project Plan (CQAPP), and the Construction Sampling and Analysis Plan (CSAP) (Parsons, 2004). Erosion control features will be installed and maintained in accordance with the Geddes Brook IRM Storm Water Pollution Prevention Plan (SWPPP). Temporary facilities, such as trailers and utilities, will be installed to support the construction activities as required.

### ***West Ditch***

#### **Site Preparation**

Vegetation located in the proposed removal areas (grasses, small shrubs) will be handled with the excavated soil. A portion of the site security fence will be removed to facilitate soil removal; temporary fencing will be installed as appropriate to maintain site security.

#### **Soil/Sediment Removal**

The proposed removal along the West Ditch is divided into two areas. West Ditch Area 1, as indicated on Drawing C-002, extends from the west end of the HDPE culverts installed near the groundwater extraction system building to Wetland A. The proposed depth of excavation in this

area is 2 feet or to underlying clay with an estimated 2,276 cubic yards of material excavated and placed in the soil/sediment containment area. Following excavation, post-excavation samples will be collected in accordance with the CSAP and CQAPP. Based on the sample results, a decision will be made by Honeywell and the NYSDEC on the necessity of additional excavation. After excavation and post-excavation sampling are complete, the area will be restored to maintain positive drainage with bank run gravel, 6 inches of topsoil and seeded with the conservation seed mix specified in Table 1.

West Ditch Area 2, as indicated on Drawing C-002, extends from the eastern end of the HDPE culverts installed near the groundwater extraction system building past sample location LCP1-SED-103. The proposed depth of excavation in this area is 1 foot or to underlying clay with an estimated 386 cubic yards of material excavated and placed in the soil/sediment containment area. Following excavation, post excavation samples will be collected as indicated above for Area 1. After excavation and confirmatory sampling are complete, the area will be graded to maintain positive drainage and restored with six inches of topsoil and the Conservation Seed Mix specified in Table 1.

### ***Wetland A***

#### **Site Preparation**

Vegetation located in the proposed removal areas (grasses, small shrubs) will be handled with the excavated soil/sediment.

#### **Soil/Sediment Removal**

The proposed removal in and around the Wetland A basin is divided into two areas. Wetland A Area 1, as indicated on drawing C-003, is located immediately west of the former MW-26 excavation area between Wetlands A & B. The proposed depth of excavation in this area is 1 foot to address the residual contamination identified in sample LCP1-SS-107. The estimated volume to be excavated and placed in the soil/sediment containment area is 326 cubic yards.

Following excavation, post-excavation samples will be collected in accordance with the CSAP and CQAPP indicated above. Based on the sample results, Honeywell and NYSDEC will decide on the necessity of additional excavation. After completion of excavation and post-excavation sampling, the area will be restored with 6 inches of topsoil and seeded with the conservation seed mix specified in Table 1.

Wetland A Area 2, as indicated on Drawing C-003, extends from the West Ditch discharge location into the Wetland A basin through sample location LCP1-SED-97. The proposed depth of excavation in this area is 1 foot with an estimated 377 yards of material excavated and placed in the soil/sediment containment area. Following excavation, post excavation samples will be collected as indicated above for Wetland A Area 1. The area will be restored with 6 inches of topsoil and seeded with the Wet Meadow seed mix specified in Table 2.

## ***Dredge Spoils Area***

### **Site Preparation**

Prior to removals, a wetland delineation will be performed within the Dredge Spoils Area. This delineation will be conducted in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Revised Final Work Plan, Wetlands/ Floodplain Assessment, Onondaga Lake (O'Brien and Gere/Parsons, 2004b). Field activities and reporting will focus on wetland delineation, assessment of values and functions, and characterization of flora and fauna, as well as floodplain delineation.

The vegetation located in the proposed removal areas includes grasses, small shrubs and trees. The grasses and small shrubs will be handled with the soils. The trees will be chipped up and managed in the soil/sediment containment area.

### **Removal**

The proposed removal in the Dredge Spoils Area, as indicated on Drawing C-004, is divided into three areas. The depth of excavation for Dredge Spoils Area 1, located at the western end of the remedial area is 3 feet with an estimated 1,810 cubic yards of material excavated and placed in the soil/sediment containment area. Following excavation, post-excavation samples will be collected in accordance with the CSAP and CQAPP indicated above. Following excavation the area will be restored with a minimum of 6 inches of topsoil and the conservation seed mix specified in Table 1.

Dredge Spoils Area 2, as indicated on Drawing C-004, extends from Area 1 to the steam line crossing and associated access road. The proposed depth of excavation is to the underlying clay layer, with an average removal depth of 2 feet. The estimated volume of material to be excavated and placed in the soil/sediment containment area from Area 2 is 9,500 cubic yards. Following excavation, post-excavation samples will be collected in accordance with the CSAP and CQAPP indicated above. Following excavation, the area will be restored with 6 inches of topsoil and the conservation seed mix specified in Table 1.

Dredge Spoils Area 3, as indicated on construction drawing C-004, is a small drainage channel running in front of the wooded area to the east of the steam line. The proposed depth of excavation is to the underlying clay layer, with an average cut of 2 feet. The estimated volume of material to be excavated and placed in the soil/sediment containment area from Area 3 is 954 cubic yards. Following excavation, post-excavation samples will be collected in accordance with the CSAP and CQAPP indicated above. Following excavation the small channel will be restored with 6 inches of topsoil and the wet meadow seed mix specified in Table 2.

### ***Restoration***

Restoration of disturbed areas is shown on Figure C-005 through C-007. Topsoil will meet Specification 02990 and wetland plantings will be completed per Specification 02910 of the Final (100%) Design Report for the LCP Bridge St. OU-1 Site (Parsons, 2004a). The restoration seed mix presented in Tables 1 and 2 will supersede the seed mix(s) specified in the 100% design. Figure C-008 depicts a typical cross section and restoration for the West Ditch Area and Dredge Spoils Area. A 5 year invasive species control plan as specified for Wetlands A and B will also be conducted at all three excavation areas.

### ***Soil/Sediment Containment Area Management***

The estimated total volume of material to be brought to the soil/sediment containment area from the West Ditch, Wetland A, and Dredge Spoils areas is 15,629 cubic yards. A temporary stockpile area will be designated within the soil/sediment containment area based on the anticipated placement schedule of the Geddes Brook sediments. The temporary stockpile area will be managed in accordance with the Geddes Brook IRM SWPPP.

### ***Schedule***

The anticipated schedule for the completion of the work identified above is provided as Attachment C.

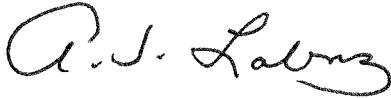
### ***References***

- Parsons, 2004b. Final (100%) Design Report for the LCP Bridge Street Site (OU-1). March 2004. Revised September 2004.
- O'Brien and Gere/Parsons, 2004a. Revised Final Work Plan Wetlands/Floodplain Assessment, Onondaga Lake. September 3, 2004.

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Please contact me or Mike Broschart (315) 552-9678 if you have any questions or require additional information.

Sincerely,



Alfred J. Labuz  
Remediation Manager

Attachments

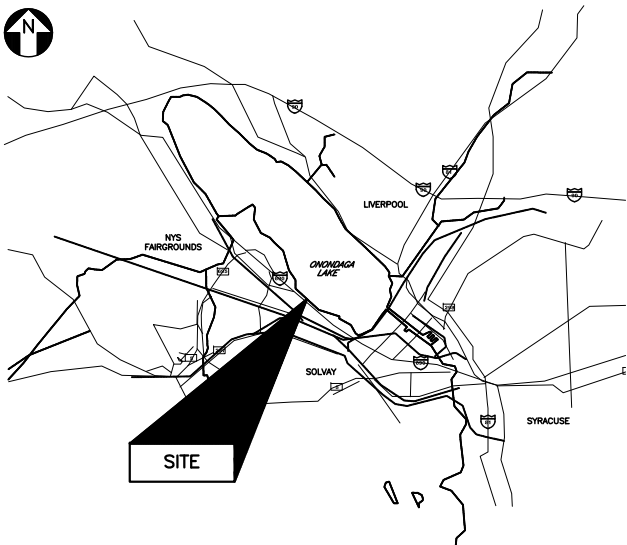
cc: Argie Cirillo, Esq., USEPA (Cover Ltr Only)  
Mark Granger, USEPA (4 hard copies)  
Geoffrey Laccetti, NYSDOH (Cover Ltr Only)  
Mark Sergott, NYSDOH (1 hard copy, 1 PDF)  
Harry Warner, NYSDEC (1 hard copy)  
Margaret Sheen, Esq., NYSDEC (Cover Ltr Only)  
Joseph Heath, Esq.(ec Cover Ltr Only)  
Jeanne Shenandoah, HETF/Onondaga Nation (1 hard copy plus ec Cover Ltr Only)  
Thane Joyal, Onondaga Nation, (1 PDF)  
Heidi Kuhl, Onondaga Nation (1 hard copy)  
Curtis Waterman, Onondaga Nation (ec Cover Ltr Only)  
Alma Lowry, Onondaga Nation (ec Cover Ltr Only)  
Fred Kirschner, AESE, Inc. (1 PDF)  
Brian Israel, Arnold & Porter (1 PDF)  
Bill Hague, Honeywell (1 PDF)  
Steve Miller, Parsons (1 PDF)  
Michael Broschart, Parsons (1 hard copy)  
Chris Calkins, OBG (1 hard copy)  
Brian White, OBG (1 hard copy)

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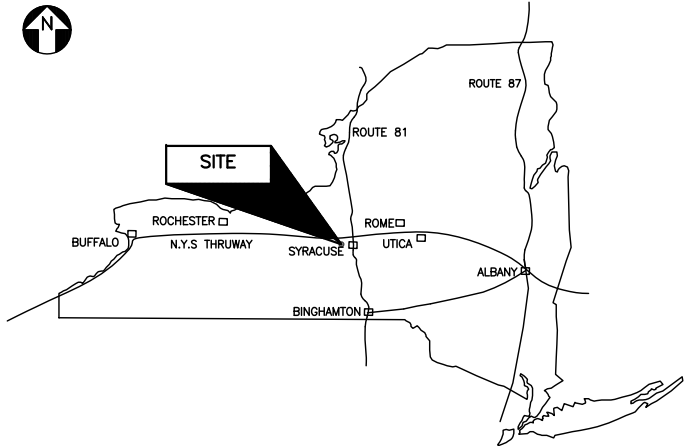
## **Attachment A**

### **Figures/Drawings**

# LCP (FORMER LINDEN CHEMICAL PLANT) OM&M REMOVALS



SITE LOCATION MAP  
NOT TO SCALE



THE STATE OF NEW YORK  
NOT TO SCALE

## DRAWING INDEX

### TITLE SHEET AND DRAWING INDEX

- G-001**  
**C-001**  
**C-002**  
**C-003**  
**C-004**  
**C-005**  
**C-006**  
**C-007**  
**C-008**
- EXISTING SITE PLAN**  
**WEST DITCH SAMPLE RESULTS/EXCAVATION PLAN**  
**WETLAND A SAMPLE RESULTS/EXCAVATION PLAN**  
**DREDGE SPOILS AREA SAMPLE RESULTS/EXCAVATION PLAN**  
**WEST DITCH AREA RESTORATION PLAN**  
**WETLAND A AREA RESTORATION PLAN**  
**DREDGE SPOILS AREA RESTORATION PLAN**  
**EXCAVATION AND RESTORATION DETAILS**

PRELIMINARY DRAFT  
SETTLEMENT CONFIDENTIAL  
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**PARSONS**  
COMMERCIAL TECHNOLOGY GROUP

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JOB  
446662

WBS  
05172

PROJECT TITLE  
**LCP OM&M REMOVALS  
2011**

LCP BRIDGE STREET SITE  
SYRACUSE, NEW YORK

DRAWING TITLE

TITLE SHEET AND DRAWING INDEX

SCALE  
NO SCALE  
(IF PRINTED ON 22X34 SHEET)

DRAWING NO.  
**446662-G-001**

REV.  
**A**

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CONSTRUCTION



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A ISSUED FOR COMMENT (IN PROGRESS) MM/DD/YY

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DRAWN BY	DATE	MM/DD/YY	SEAL		
CHECKED BY	DATE	MM/DD/YY			
APPROVED BY	DATE	MM/DD/YY			
PROJECT MGR.	DATE	MM/DD/YY			

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WBS XXXXX

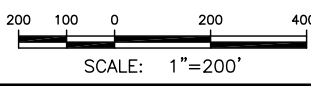
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**LCP OM&M REMOVALS 2011**

LCP BRIDGE STREET SITE  
SYRACUSE, NEW YORK

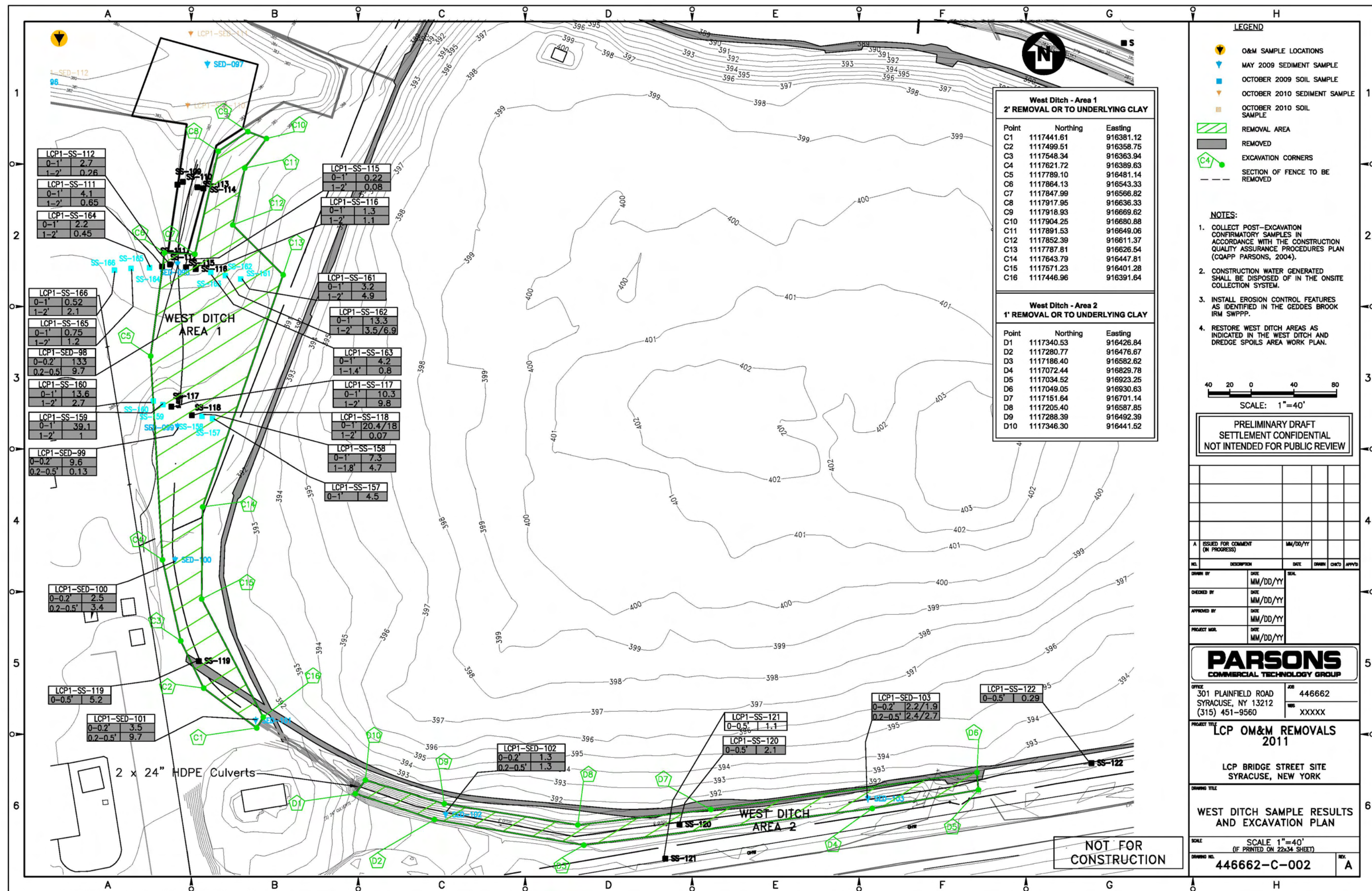
DRAWING TITLE  
**EXISTING SITE PLAN**

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DRAWING NO. **446662-C-001** REV. **A**

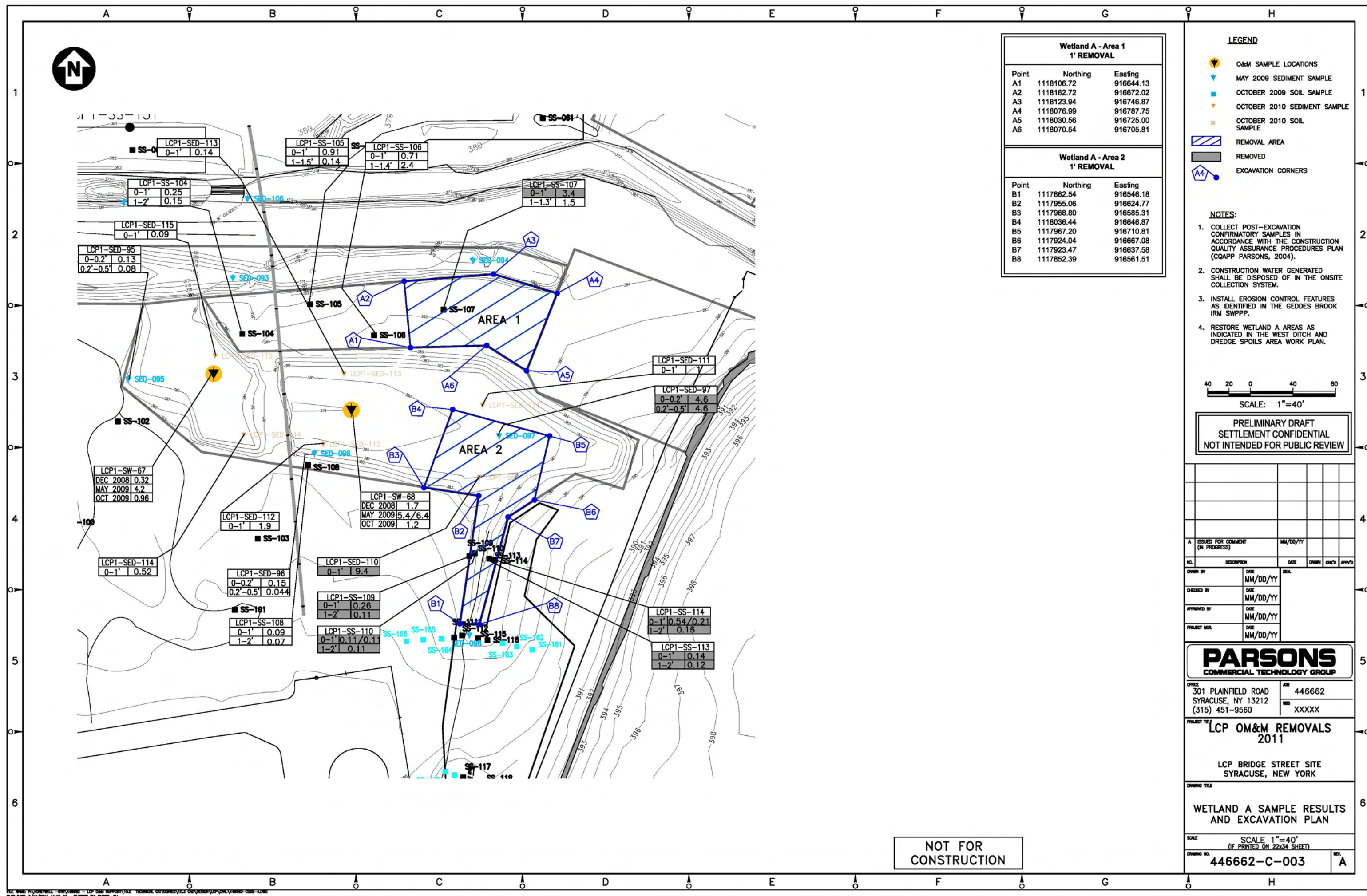
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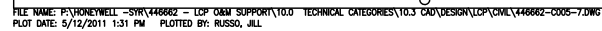






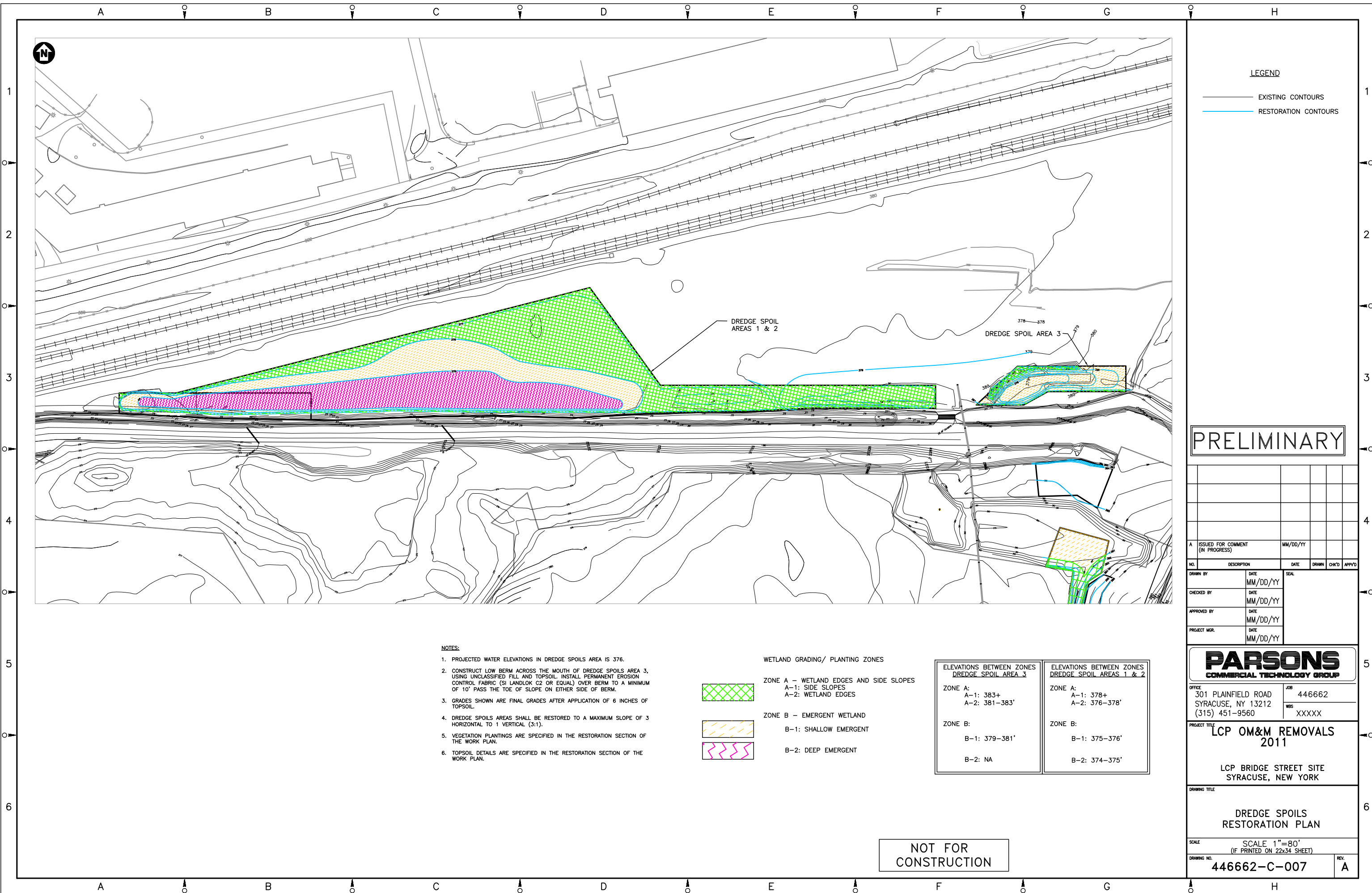












LEGEND

- EXISTING CONTOURS
- RESTORATION CONTOURS

PRELIMINARY

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PROJECT MGR. DATE MM/DD/YY

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PROJECT TITLE  
**LCP OM&M REMOVALS 2011**

LCP BRIDGE STREET SITE  
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DRAWING TITLE

**DREDGE SPOILS  
RESTORATION PLAN**

SCALE SCALE 1"=80'  
(IF PRINTED ON 22x34 SHEET)

DRAWING NO. **446662-C-007** REV. **A**

NOTES:

- PROJECTED WATER ELEVATIONS IN DREDGE SPOILS AREA IS 376.
- CONSTRUCT LOW BERM ACROSS THE MOUTH OF DREDGE SPOILS AREA 3, USING UNCLASSIFIED FILL AND TOPSOIL. INSTALL PERMANENT EROSION CONTROL FABRIC (SI LANDLOK C2 OR EQUAL) OVER BERM TO A MINIMUM OF 10' PASS THE TOE OF SLOPE ON EITHER SIDE OF BERM.
- GRADES SHOWN ARE FINAL GRADES AFTER APPLICATION OF 6 INCHES OF TOPSOIL.
- DREDGE SPOILS AREAS SHALL BE RESTORED TO A MAXIMUM SLOPE OF 3 HORIZONTAL TO 1 VERTICAL (3:1).
- VEGETATION PLANTINGS ARE SPECIFIED IN THE RESTORATION SECTION OF THE WORK PLAN.
- TOPSOIL DETAILS ARE SPECIFIED IN THE RESTORATION SECTION OF THE WORK PLAN.

WETLAND GRADING/ PLANTING ZONES

ZONE A - WETLAND EDGES AND SIDE SLOPES  
A-1: SIDE SLOPES  
A-2: WETLAND EDGES

ZONE B - EMERGENT WETLAND

B-1: SHALLOW EMERGENT  
B-2: DEEP EMERGENT

ELEVATIONS BETWEEN ZONES  
DREDGE SPOIL AREA 3

ZONE A:  
A-1: 383+  
A-2: 381-383'

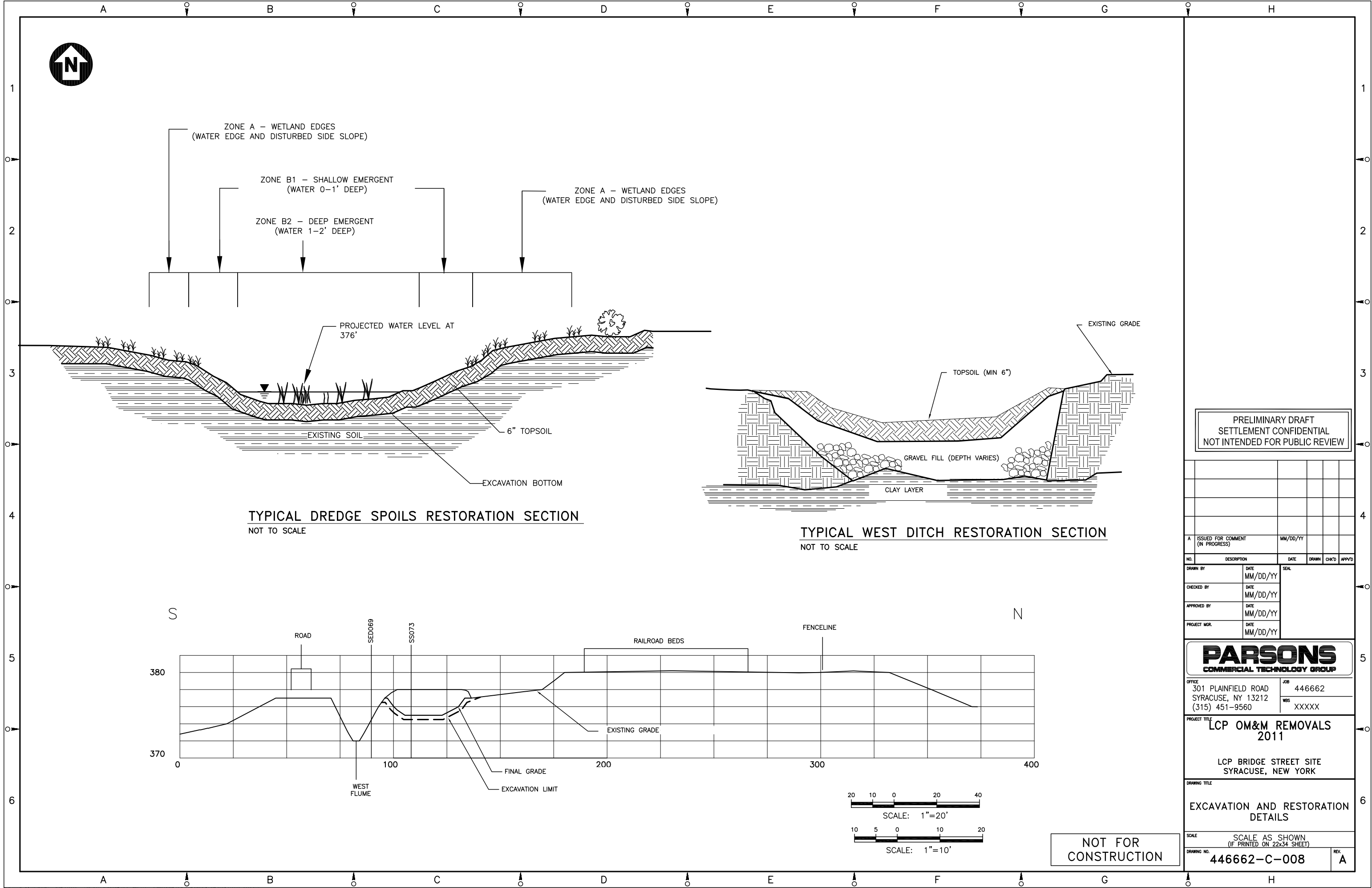
ZONE B:  
B-1: 379-381'  
B-2: NA

ELEVATIONS BETWEEN ZONES  
DREDGE SPOIL AREAS 1 & 2

ZONE A:  
A-1: 378+  
A-2: 376-378'

ZONE B:  
B-1: 375-376'  
B-2: 374-375'

NOT FOR  
CONSTRUCTION



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NO.	DESCRIPTION	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
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APPROVED BY		MM/DD/YY							
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PROJECT TITLE  
**LCP OM&M REMOVALS  
2011**

LCP BRIDGE STREET SITE  
SYRACUSE, NEW YORK

DRAWING TITLE  
**EXCAVATION AND RESTORATION  
DETAILS**

SCALE  
SCALE AS SHOWN  
(IF PRINTED ON 22x34 SHEET)

DRAWING NO.  
**446662-C-008**

REV.  
**A**

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## **Attachment B**

### **Tables**



**Table 1**  
**Conservation Seed Mix**

<b>SPECIES</b>	<b>WEIGHT (lbs./acre)</b>
<a href="#">White clover(a) (<i>Trifolium repens</i>)</a>	5.0 lbs.
Birdsfoot trefoil <sup>(a)</sup> ( <i>Lotus corniculata</i> )	5.0 lbs.
Perennial ryegrass ( <i>Lolium perenne</i> )	10.0 lbs.
Timothy grass ( <i>Phleum pratense</i> )	10.0 lbs.
Orchard grass ( <i>Dactylis glomerata</i> )	10.0 lbs.
Smooth brome grass ( <i>Bromus inermis</i> )	10.0 lbs.
<b>Total lbs./acre</b>	<b>50.0 lbs.</b>

[\(a\) Legume requires addition of inoculant prior to seeding.](#)

Notes:

- 1) Apply Conservation Seed Mix by hand or mechanical spreader to prepared surface at rate of 50 lbs./acre, lightly rake and roll into surface.
- 2) Apply mulch immediately after application of seed.

**Table 2**  
**Wet Meadow Seed Mix**

<b>SPECIES</b>	<b>WEIGHT (lbs./acre) (%)</b>
Redtop ( <i>Agrostis alba</i> )	4.0 lbs. (13.3%)
Cosmos sedge ( <i>Carex comosa</i> )	4.0 lbs. (6.6%)
Fox sedge ( <i>Carex vulpinoidea</i> )	4.0 lbs. (6.6%)
Lake sedge ( <i>Carex lacustris</i> )	2.0 lbs. (3.3%)
Blunt broom sedge ( <i>Carex scoparia</i> )	2.0 lbs. (6.6%)
Green bulrush ( <i>Scirpus atrovirens</i> )	2.0 lbs. (6.6%)
Wool grass ( <i>Scirpus cyperinus</i> )	3.0 lbs. (3.3%)
Broad-leaf cattail ( <i>Typha latifolia</i> )	2.0 lbs. (6.6%)
Beggar-ticks ( <i>Bidens cernua</i> )	2.0 lbs. (6.6%)
Fowl mannagrass ( <i>Glyceria striata</i> )	2.0 lbs. (3.3%)
Pennsylvania smartweed ( <i>Polygonum pennsylvanicum</i> )	2.0 lbs. (3.3%)
Marsh smartweed ( <i>Polygonum hydropiperoides</i> )	2.0 lbs. (6.6%)
Spikerush ( <i>Eleocharis obtusa</i> )	1.0 lbs. (3.3%)
Soft rush ( <i>Juncus effusus</i> )	2.0 lbs. (3.3%)
Eastern burreed ( <i>Sparganium americanum</i> )	2.0 lbs. (6.6%)
Blue vervain ( <i>Verbena hastata</i> )	2.0 lbs. (6.6%)
Rice cutgrass ( <i>Leersia oryzoides</i> )	2.0 lbs. (6.6%)
<b>Total lbs. per acre</b>	<b>40.0 lbs.</b>
Annual rye ( <i>Lolium multiflorum</i> )	10 lbs./acre

Notes:



















- 1) Apply Wet Meadow Seed Mix by hand or mechanical spreader to prepared surface at rate of 40 lbs./acre.
- 2) Apply annual rye cover crop at a rate of 10 lbs./acre immediately following Wet Meadow seed mix placement.

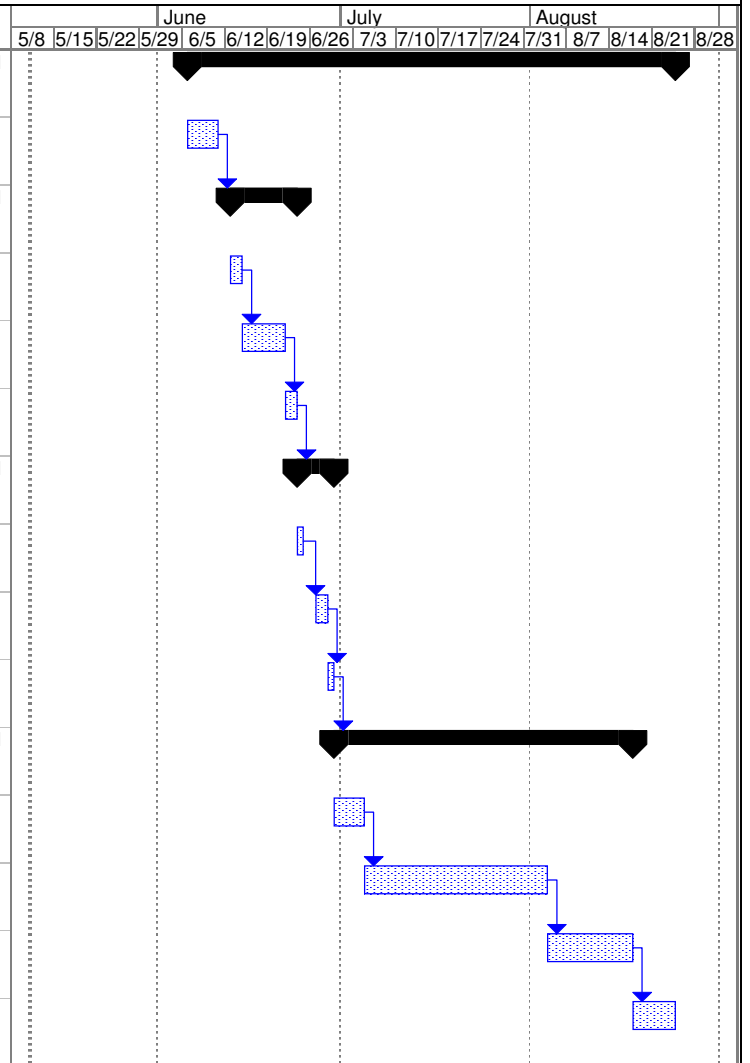
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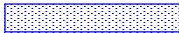







## **Attachment C**

### **Schedule**

# **Attachment C** **LCP OU1** **West Ditch, Wetland A, & Dredge Spoil Area Removal**

ID		Task Name	Duration	Start	Finish	June							July				August							
						5/8	5/15	5/22	5/29	6/5	6/12	6/19	6/26	7/3	7/10	7/17	7/24	7/31	8/7	8/14		8/21	8/28	
1		LCP OU1 West Ditch, Wetland A, & Dredge Spoil Area Material R	58 days	Mon 6/6/11	Wed 8/24/11																			
2		Mobilization	5 days	Mon 6/6/11	Fri 6/10/11																			
3		West Ditch	9 days	Mon 6/13/11	Thu 6/23/11																			
4		Site Preparartion	2 days	Mon 6/13/11	Tue 6/14/11																			
5		Soil/Sediment Removal	5 days	Wed 6/15/11	Tue 6/21/11																			
6		Restoration	2 days	Wed 6/22/11	Thu 6/23/11																			
7		Wetland A	4 days	Fri 6/24/11	Wed 6/29/11																			
8		Site Preparartion	1 day	Fri 6/24/11	Fri 6/24/11																			
9		Soil/Sediment Removal	2 days	Mon 6/27/11	Tue 6/28/11																			
10		Restoration	1 day	Wed 6/29/11	Wed 6/29/11																			
11		Dredge Spoil Area	35 days	Thu 6/30/11	Wed 8/17/11																			
12		Site Preparartion	3 days	Thu 6/30/11	Mon 7/4/11																			
13		Soil/Sediment Removal	22 days	Tue 7/5/11	Wed 8/3/11																			
14		Restoration	10 days	Thu 8/4/11	Wed 8/17/11																			
15		Demobilization	5 days	Thu 8/18/11	Wed 8/24/11																			



Project: Attachment C Date: Wed 5/11/11	Task		Milestone		External Tasks	
	Split		Summary		External Milestone	
	Progress		Project Summary		Deadline	