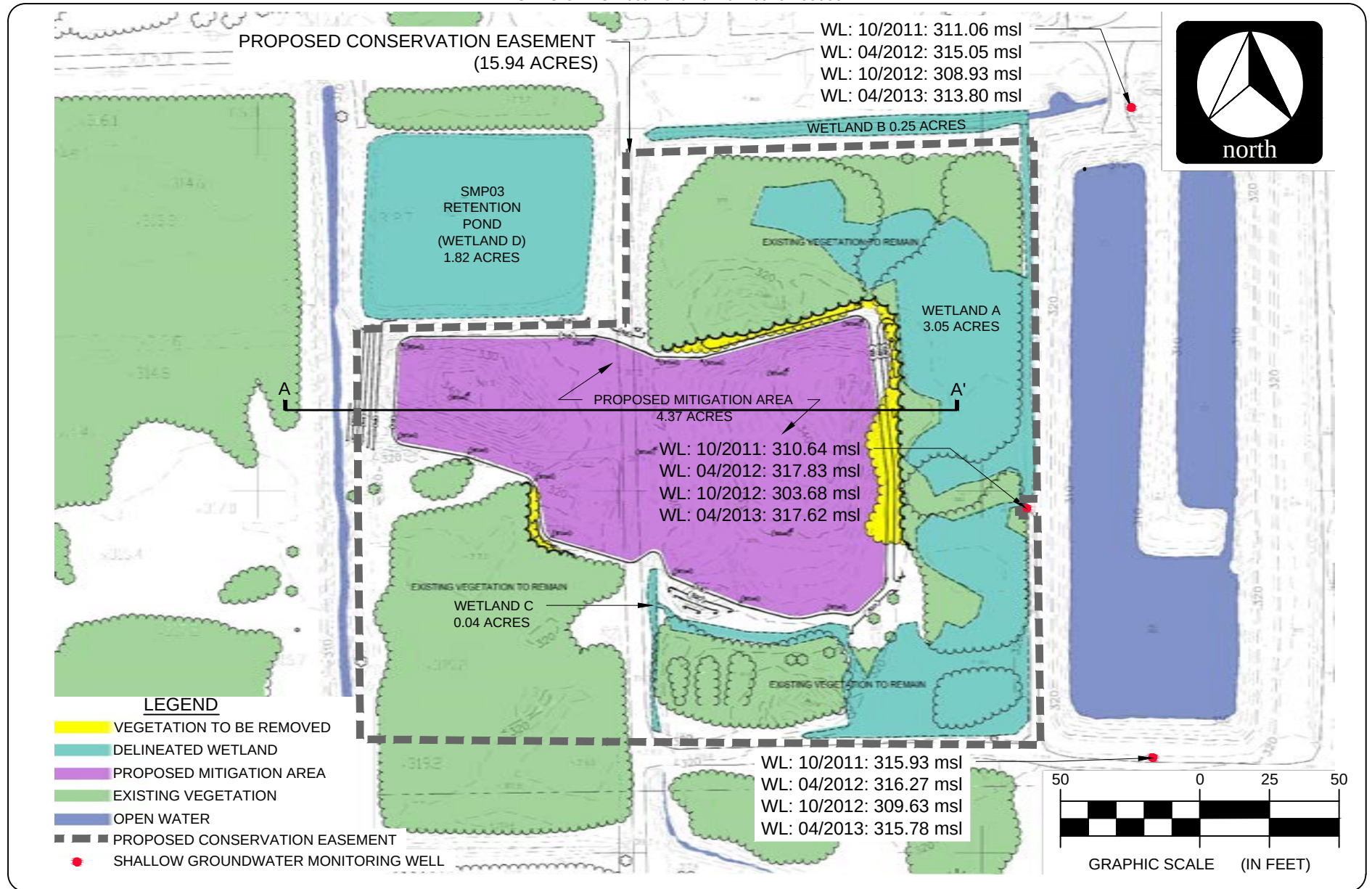


Draft Wetland Mitigation and Monitoring Plan

APPENDIX D

Proposed Mitigation Area (Concept Plan)



PROJECT TITLE: RMU-2 LANDFILL EXPANSION

DRAWING TITLE: DRAFT WETLAND MITIGATION PLAN

DRAWN BY: KG

CHECKED BY: JP

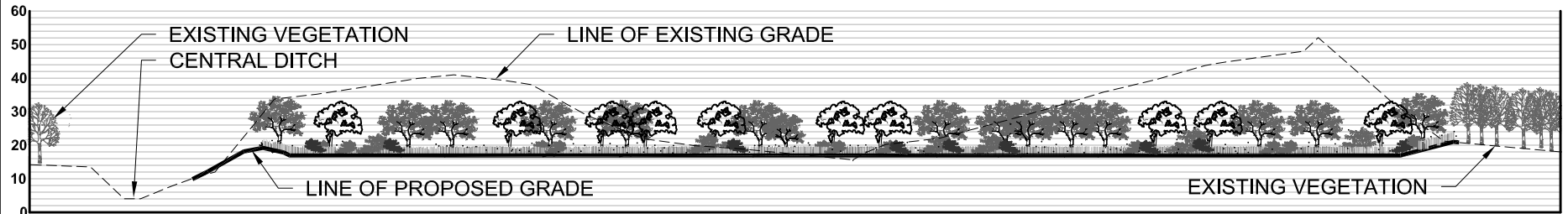
edr JOB NUMBER: 09022

DRAWING NUMBER: L-1

SCALE: 1" = 50'-0"

DATE: 07/01/2013





SECTION A-A'

VERTICAL SCALE: 1" = 50'-0"

HORIZONTAL SCALE: 1" = 100'-0"

FORESTED WETLAND PLANTING

BOTANICAL NAME	COMMON NAME	SIZE	ROOT	COMMENTS
SALIX NIGRA	BLACK WILLOW	2.5"-3" CAL.	BALL&BURLAP	MIN. SPACING 30' O.C.
FRAXINUS PENNSYLVANICA	GREEN ASH	2"-2.5" CAL.	BALL&BURLAP	MIN. SPACING 30' O.C.
CORNUS RACEMOSA	GRAY DOGWOOD	8' HT.	BALL&BURLAP	MIN. SPACING 8' O.C.
ACER RUBRUM	RED MAPLE	2"-2.5" CAL	BALL&BURLAP	MIN. SPACING 30' O.C.

SEEDING -

ERNST RETENTION BASIN WILD LIFE MIX

ERNMX #: ERNMX-127

SEEDING RATE: 20 lb PER ACRE, OR 1/2 lb PER 1000 FT²

ERNST CONSERVATION SEEDS

1-800-873-3321

NORTHEAST WETLAND SHRUB / HERB MIX MIX

CODE: STCMX-10

SEEDING RATE: 2 lb PER ACRE @ 5 SEEDS PER SQ. FT.

SOUTHERN TIER CONSULTING

(585) 968-3120

PROJECT TITLE: **RMU-2 LANDFILL EXPANSION**

DRAWING TITLE: **DRAFT WETLAND MITIGATION PLAN**

DRAWN BY: **KG**

CHECKED BY: **JP**

edr JOB NUMBER: **09022**

DRAWING NUMBER: **L-2**

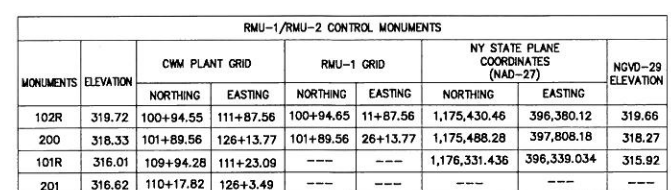
SCALE: **AS NOTED**

DATE: **07/01/2012**



APPENDIX D

Site Plans

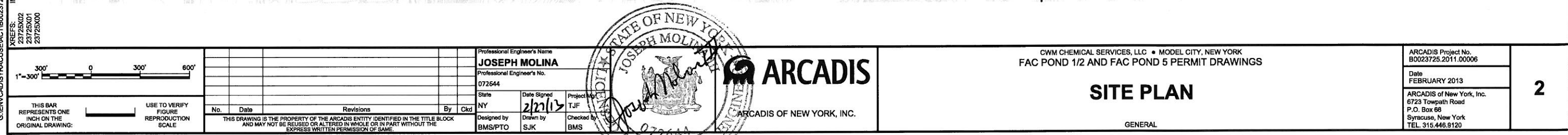


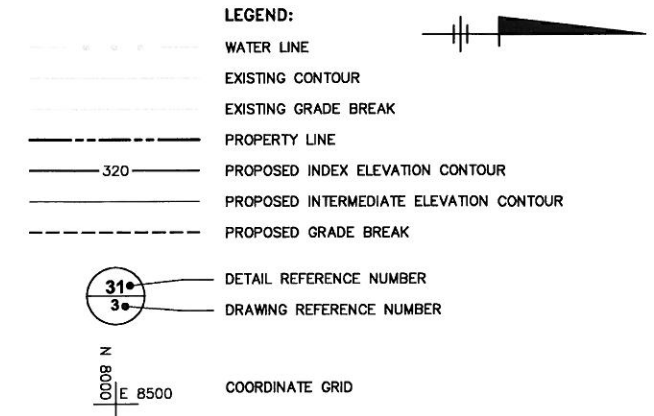
CONTROL MONUMENTS NOTE:

1. RMU-1 EASTING GRID COORDINATES ARE SIMPLIFIED PLANT GRID COORDINATES. SUBTRACTING 10,000 FROM THE CWM PLANT GRID EASTING COORDINATE WILL CONVERT THE CWM PLANT GRID TO THE RMU-1 GRID. NOTE THAT NO CONVERSION IS REQUIRED FOR NORTHING COORDINATES.

NOTES:

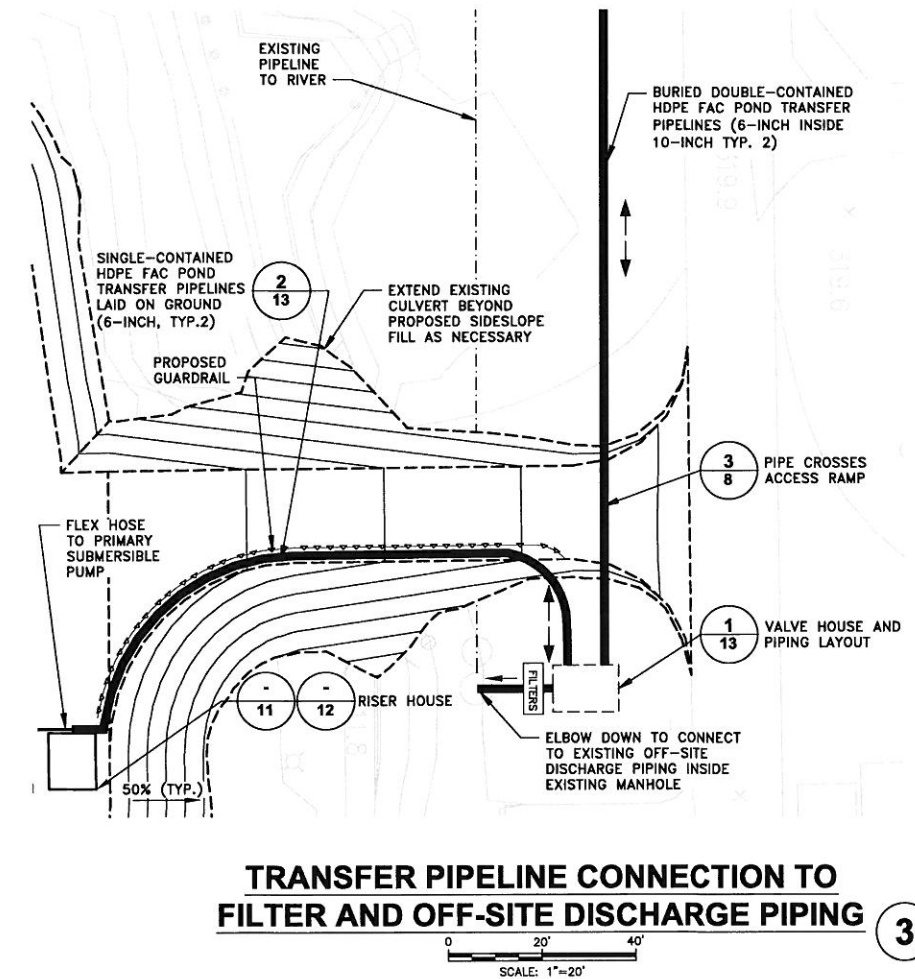
1. TOPOGRAPHIC BASE MAP CONSISTS OF COMBINATION OF DATA COMPILED BY PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY DATED 5/31/01 BY AIR SURVEY CORP. (PROJECT NO.71010503). AND AN AUGUST 2008 SURVEY BY ENSOL, INC.
2. VERTICAL DATUM BASED ON NGS MEAN SEA LEVEL.
3. GRID COORDINATES SHOWN ARE CWM PLANT GRID.
4. CONTOUR INTERVAL 2 FT.
5. DASHED CONTOURS INDICATE THAT GROUND IS PARTIALLY OBSCURED BY VEGETATION OR SHADOWS. THESE AREAS MAY NOT MEET STANDARD ACCURACY AND REQUIRE FIELD VERIFICATION.
6. PROPERTY LINE IS APPROXIMATE. EASEMENTS AND RIGHT-OF-WAYS NOT SHOWN.
7. REFER TO DRAWINGS IN ATTACHMENT D-1 OF THE OVERALL SITE/RMU-1 PERMIT FOR FURTHER DETAIL.
8. REFER TO DRAWINGS IN ATTACHMENT J FOR FURTHER DETAIL.





1. SEE DRAWING 2 FOR BASEMAP INFORMATION.
2. PROPOSED GRADES REPRESENT FINAL GRADING (TOP OF BALLAST LAYER ON FLOOR AND TOP OF PRIMARY LINER ON INTERIOR SIDESLOPES).

CULVERT ID	SIZE	SLOPE %
BENEATH ACCESS RAMP	24"	0.3%
BENEATH ROAD	36"	0.3%



TRANSFER PIPELINE CONNECTION TO FILTER AND OFF-SITE DISCHARGE PIPING

SCALE: 1"=20'

SCALE(S) AS INDICATED		Professional Engineer's Name JOSEPH MOLINA		Professional Engineer's No. 072644		 		CWM CHEMICAL SERVICES, LLC • MODEL CITY, NEW YORK FAC POND 1/2 AND FAC POND 5 PERMIT DRAWINGS		ARCADIS Project No. 80023725.2011.00006	
THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING:  USE TO VERIFY FIGURE REPRODUCTION SCALE		State NY		Date Signed 2/27/13		Project Mgr. T.J.F.		FAC POND GRADING PLANS		Date FEBRUARY 2013	
No. Date Revisions By Ckd		Designed by BMS/PTO		Drawn by S.J.K		Checked by BMS		ARCADIS OF NEW YORK, INC. GENERAL		ARCADIS of New York, Inc. 6723 Towpath Road P.O. Box 66 Syracuse, New York TEL. 315.446.9120	
		THIS DRAWING IS THE PROPERTY OF THE ARCADIS ENTITY IDENTIFIED IN THE TITLE BLOCK AND MAY NOT BE REUSED OR ALTERED IN WHOLE OR IN PART WITHOUT THE EXPRESSED WRITTEN PERMISSION OF ARCADIS								3	

CITY: SYRACUSE DIV: GROUP: ENV: CAD: DB: K DAVIS G STOWELL L FORAKER LD: PIC: W POPHAM PM: W RANKIN TM: B STONE LTR: ON: OFF: REF: G: ENV: CAD: SYRACUSE: ACT: 1800237252009000006: DWG: CONTRACT: PERMIT: 23725242: DWG LAYOUT: 8: SAVED: 11/13/2009 12:44 PM: BY: SARTORI, KATHERINE

FILES: IMAGES: PROJECT NAME: 23725X02 23725X01 23725X00 23725X13 23725X12

1"=70'

0 70' 140'

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING.

USE TO VERIFY FIGURE REPRODUCTION SCALE

No.	Date	Revisions	By	Ckd

THIS DRAWING IS THE PROPERTY OF THE ARCADIS ENTITY IDENTIFIED IN THE TITLE BLOCK AND MAY NOT BE REPRODUCED OR ALTERED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF SAME.

Professional Engineer's Name
JOSEPH MOLINA

Professional Engineer's No.
072644

State
NY

Date Signed
11/12/09

Project Mgr.
WAR

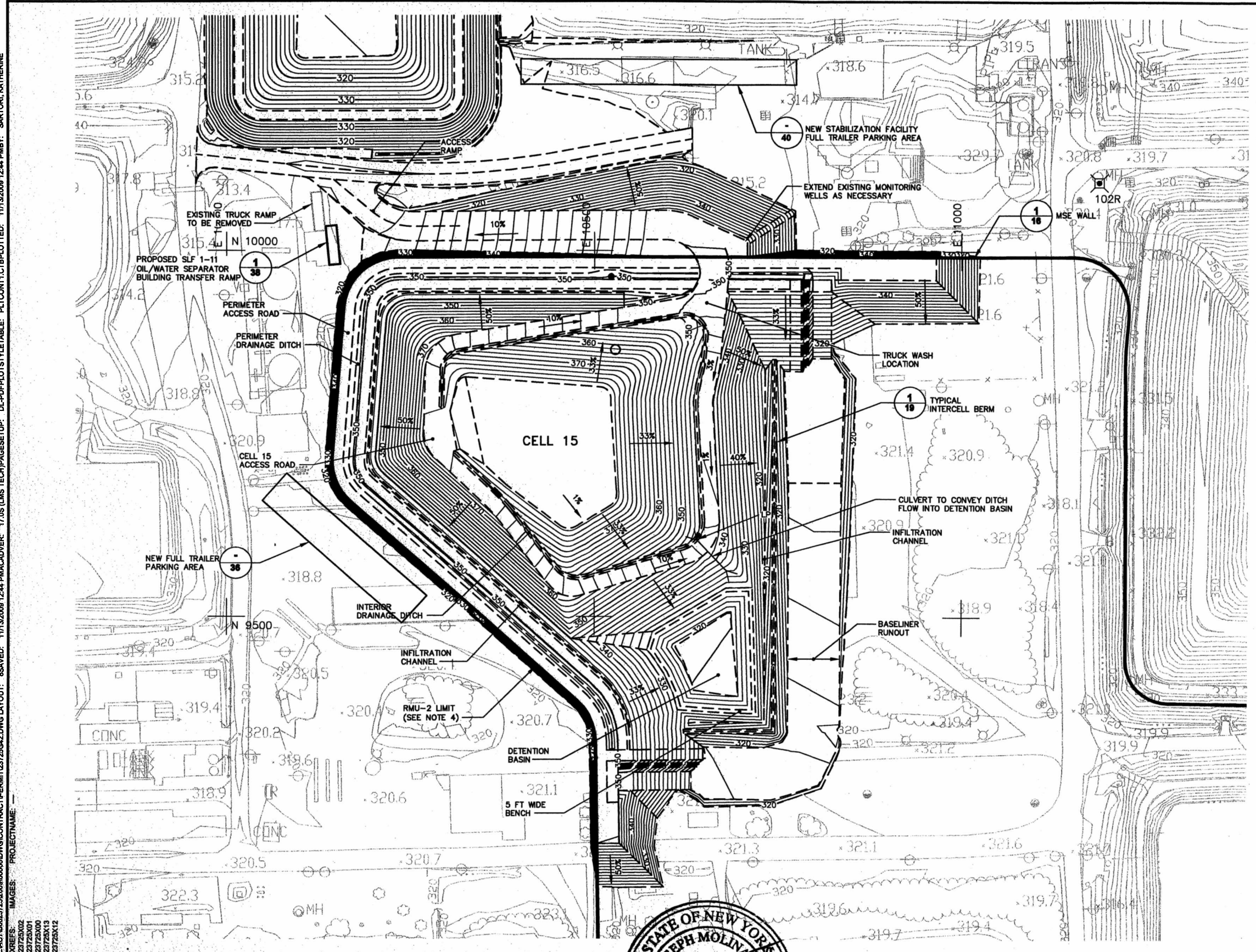
Designed by
BMS/PTO

Drawn by
BKD

Checked by
BMS

SEAL OF THE STATE OF NEW YORK
JOSEPH MOLINA
072644
REGISTERED PROFESSIONAL ENGINEER

ARCADIS
ARCADIS OF NEW YORK, INC.



LEGEND:

- APPROXIMATE PROPERTY LINE
- 310--- PROPOSED INDEX ELEVATION CONTOUR
- 308--- PROPOSED INTERMEDIATE ELEVATION CONTOUR
- PROPOSED GRADE BREAK
- PROPOSED RISER MANHOLE (2 13, 3 20)
- PROPOSED LEACHATE RISER VAULT
- x320.0 PROPOSED SPOT ELEVATION
- LP PROPOSED PERIMETER DITCH LOW POINT
- HP PROPOSED PERIMETER DITCH HIGH POINT
- 200' PERMANENT CONTROL MONUMENT
- E 12500 N 10000 COORDINATE GRID
- 2 14 DETAIL REFERENCE NUMBER
- 14 DRAWING REFERENCE NUMBER

- NOTES:**
- REFER TO DRAWING NO. 2 FOR ADDITIONAL BASE MAP INFORMATION.
 - PROPOSED GRADES SHOWN REPRESENT A COMBINATION OF FINAL AND INTERIM MSE WALL GRADES, OPERATIONS LAYER GRADES, AND INTERIM WASTE GRADES.
 - ACCESS ROADS TO BE CONSTRUCTED UP TO TOP OF MSE WALL AND OVER CELL SEPARATION BERM LOCATIONS AS NEEDED.
 - RMU-2 LIMIT REPRESENTS TOE OF PERIMETER MSE WALL.

CWM CHEMICAL SERVICES, LLC • MODEL CITY, NEW YORK
RESIDUALS MANAGEMENT UNIT 2 PERMIT DRAWING

CELL 15 INITIAL FILL PROGRESSION

GENERAL

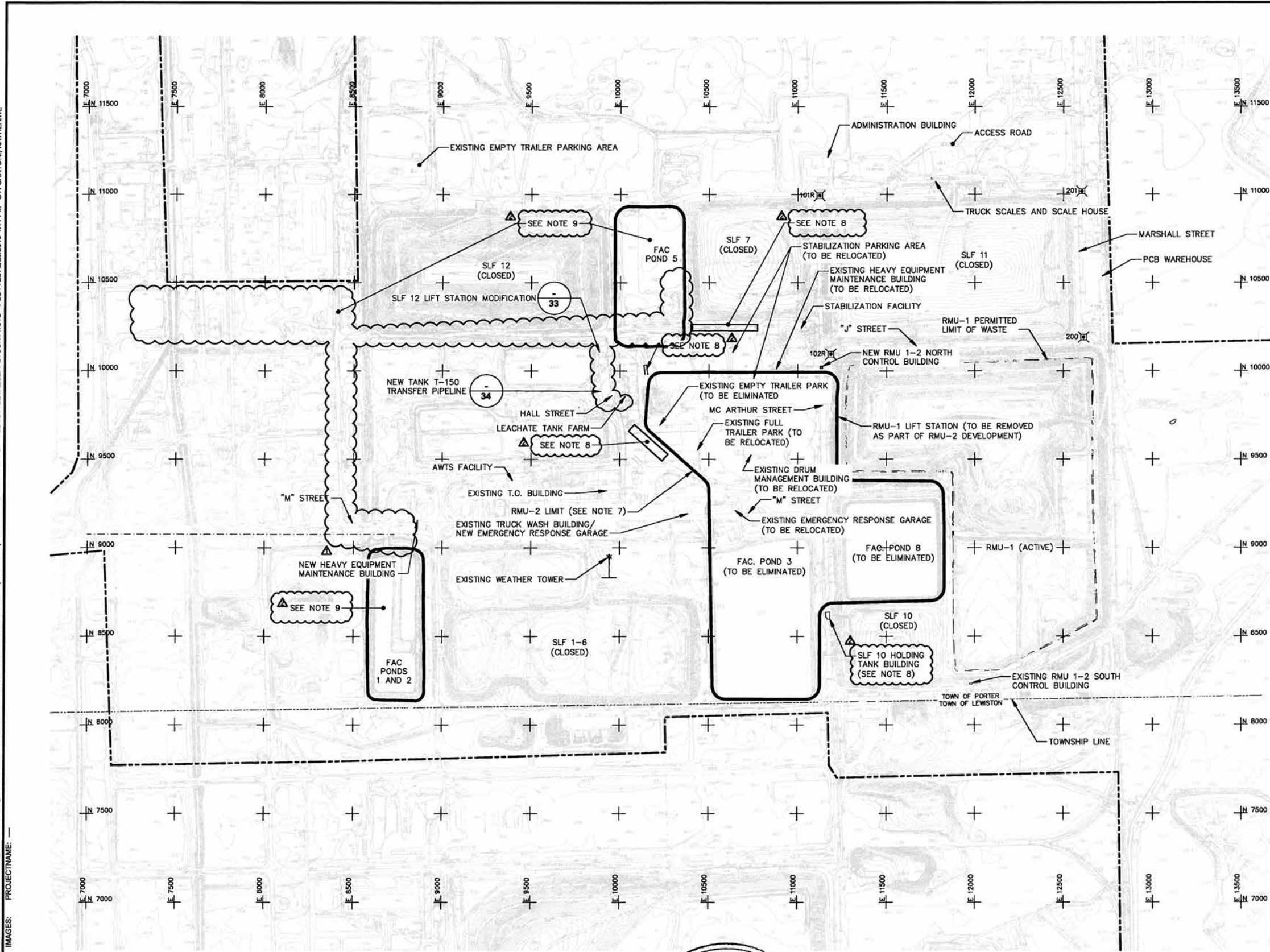
ARCADIS Project No.
80023725.2009.00006

Date
AUGUST 2009

ARCADIS of New York, Inc.
6723 Towpath Road
P.O. Box 66
Syracuse, New York
TEL 315.446.91220

8

CITY: SYRACUSE DIV/GRP: ENV/CD DB: K. DAVIS K. WOOD K. SARTORI PIC: W. POPHAM PM: W. RANKIN TM: B. STONE LTR: ONE-OFF-REF-
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XREFS: 23725X02 23725X01 23725X00
IMAGES: PROJECTNAME: -



- LEGEND:**
- BRUSHLINE
 - CABLE MARKER
 - CATCH BASIN
 - DROP INLET
 - FENCE
 - FIRE HYDRANT
 - GUARD RAIL
 - LIGHT POLE
 - MISCELLANEOUS POLE
 - MONUMENT
 - POST
 - RAILROAD TRACKS
 - SIGN
 - SWAMP
 - TRAFFIC LIGHT
 - TREE
 - TREELINE
 - UNIDENTIFIED OBJECT
 - UTILITY POLE
 - VALVE
 - WATER LINE
 - EXISTING CONTOUR
 - EXISTING GRADEBREAK
 - PROPERTY LINE

200' CONTROL MONUMENT (SEE TABLE BELOW)

2
33
DETAIL REFERENCE NUMBER
DRAWING REFERENCE NUMBER

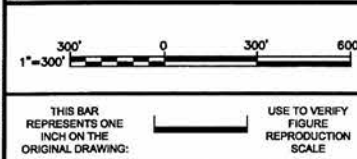
0000
E 13500
N 7000 COORDINATE GRID (SEE NOTE 3)

RMU-1/RMU-2 CONTROL MONUMENTS								
MONUMENTS	ELEVATION	CWM PLANT GRID		RMU-1 GRID		NY STATE PLANE COORDINATES (NAD-27)		NGVD-29 ELEVATION
		NORTHING	EASTING	NORTHING	EASTING	NORTHING	EASTING	
102R	319.72	100+94.55	111+87.56	100+94.65	111+87.56	1,175,430.46	396,380.12	319.66
200	318.33	101+89.56	126+13.77	101+89.56	26+13.77	1,175,488.28	397,808.18	318.27
101R	316.01	109+94.28	111+23.09			1,176,331.436	396,339.034	315.92
201	316.62	110+17.82	126+3.49					

CONTROL MONUMENTS NOTE:

1. RMU-1 EASTING GRID COORDINATES ARE SIMPLIFIED PLANT GRID COORDINATES. SUBTRACTING 10,000 FROM THE CWM PLANT GRID EASTING COORDINATE WILL CONVERT THE CWM PLANT GRID TO THE RMU-1 GRID. NOTE THAT NO CONVERSION IS REQUIRED FOR NORTHING COORDINATES.

- NOTES:**
- TOPOGRAPHIC BASE MAP CONSISTS OF COMBINATION OF DATA COMPILED BY PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY DATED 5/31/01 BY AIR SURVEY CORP. (PROJECT NO.71010503), AND AN AUGUST 2008 SURVEY BY ENSOL, INC.
 - VERTICAL DATUM BASED ON NGS MEAN SEA LEVEL.
 - GRID COORDINATES SHOWN ARE CWM PLANT GRID.
 - CONTOUR INTERVAL 2 FT.
 - DASHED CONTOURS INDICATE THAT GROUND IS PARTIALLY OBSCURED BY VEGETATION OR SHADOWS. THESE AREAS MAY NOT MEET STANDARD ACCURACY AND REQUIRE FIELD VERIFICATION.
 - PROPERTY LINE IS APPROXIMATE. EASEMENTS AND RIGHT-OF-WAYS NOT SHOWN.
 - RMU-2 LIMIT REPRESENTS TOE OF PERIMETER MSE WALL.
 - REFER TO DRAWINGS IN ATTACHMENT D-1 OF THE OVERALL SITE/RMU-1 PERMIT FOR FURTHER DETAIL.
 - REFER TO DRAWINGS IN ATTACHMENT D-2 OF THE OVERALL SITE/RMU-1 PERMIT FOR FURTHER DETAIL.



REVISED CALLOUTS AND NOTES			
No.	Date	Revisions	
1	2/2013	REVISED CALLOUTS AND NOTES	
2	1/2012	REDESIGNED FAC POND TRANSFER PIPELINE	

Professional Engineer's Name
JOSEPH MOLINA
Professional Engineer's No.
072644

State
NY

Date Signed
2/27/13

Project No.
WAR

Designed by
BMS/PTO

Drawn by
SJK

Checked by
BMS



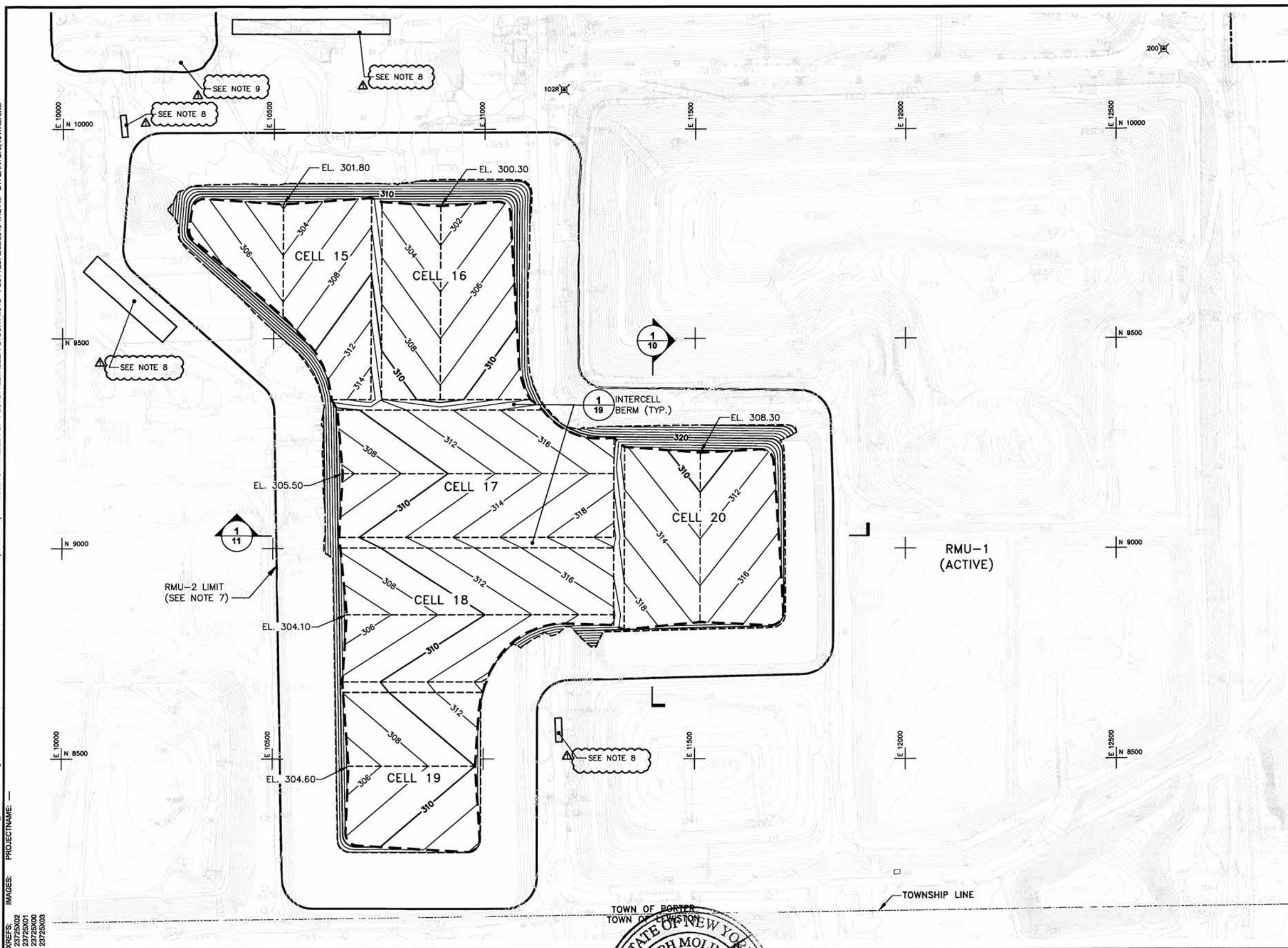
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RESIDUALS MANAGEMENT UNIT 2 PERMIT DRAWING

RMU-2 SITE
GENERAL

ARCADIS Project No.
B0023725-2009.00008
Date
AUGUST 2009
ARCADIS of New York, Inc.
6723 Towpath Road
P.O. Box 66
Syracuse, New York
TEL. 315.446.9120

2

CITY: SYRACUSE DIVISION: ENVCAD DB: K. DAVIS L. FORAKER K. DAVIS LD: PIC: W. POKHAM PK: W. RANKIN TM: B. STONE LVR: ON-OFF-REF-
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LEGEND:

- APPROXIMATE PROPERTY LINE
- 310 PROPOSED INDEX ELEVATION CONTOUR
- 308 PROPOSED INTERMEDIATE ELEVATION CONTOUR
- PROPOSED GRADE BREAK
- PROPOSED LOW PERMEABILITY CUT-OFF WALL
- 200' PERMANENT CONTROL MONUMENT
- EXISTING GROUNDWATER MONITORING WELLS
- COORDINATE GRID
- DETAIL REFERENCE NUMBER (4/15)
- DRAWING REFERENCE NUMBER (4/15)
- SECTION REFERENCE (1/10)

- NOTES:**
1. REFER TO DRAWING NO. 2 FOR ADDITIONAL BASE MAP INFORMATION.
 2. PROPOSED GRADES SHOWN ARE APPROXIMATE LIMITS OF EXCAVATION. TOPSOIL, GENERAL FILL AND CLAY WITHIN THE EXCAVATION AREA WILL BE STRIPPED AND STOCKPILED IN AREAS DESIGNATED BY THE OWNER.
 3. SURFACE DRAINAGE SHALL BE DIRECTED AROUND EXCAVATIONS. SURFACE WATER SHALL BE PUMPED TO ADJACENT DRAINAGE DITCHES AND ROUTED TO EXISTING STORMWATER RETENTION BASINS DURING CONSTRUCTION.
 4. PROPOSED SPOT ELEVATIONS AT CELL LOW POINTS REPRESENT GENERAL FLOOR SUBGRADE ELEVATION AND DO NOT REPRESENT SUMP EXCAVATING GRADES. ADDITIONAL EXCAVATION IS REQUIRED BELOW GRADES SHOWN ON THIS DRAWING AT EACH CELL SUMP LOCATION. SEE DRAWING NOS. 12, 13, AND 14 FOR ADDITIONAL INFORMATION. PRIOR TO SUMP EXCAVATION, THE POTENTIAL FOR UPLIFT SHALL BE IDENTIFIED BY THE PROTOCOL OUTLINED IN THE RMU-2 CONSTRUCTION QUALITY ASSURANCE MANUAL. APPROPRIATE CONDITIONS SHALL EXIST PRIOR TO SUMP EXCAVATIONS.
 5. RELOCATE OR ABANDON EXISTING UTILITIES PER PROJECT SPECIFICATIONS AND WITH AUTHORIZATION OF OWNER.
 6. DEMOLISH EXISTING FACILITIES (e.g., BUILDING STRUCTURES, FOUNDATIONS) WITHIN LIMITS OF LANDFILL PER PROJECT SPECIFICATIONS AND WITH AUTHORIZATION OF OWNER.
 7. RMU-2 LIMIT REPRESENTS TOE OF PERIMETER MSE WALL.
 8. REFER TO DRAWINGS IN ATTACHMENT D-1 OF THE OVERALL SITE/RMU-1 PERMIT FOR FURTHER DETAIL.
 9. REFER TO DRAWINGS IN ATTACHMENT D-2 OF THE OVERALL SITE/RMU-1 PERMIT FOR FURTHER DETAIL.

1"=120'

0 120' 240'

USE TO VERIFY FIGURE REPRODUCTION SCALE

Professional Engineer's Name JOSEPH MOLINA Professional Engineer's No. 072644		State NY		Date Signed 2/27/13	Project No. WAR
Designed by BMS/PTO		Drawn by SJK		Checked by BMS	

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EXCAVATION GRADES

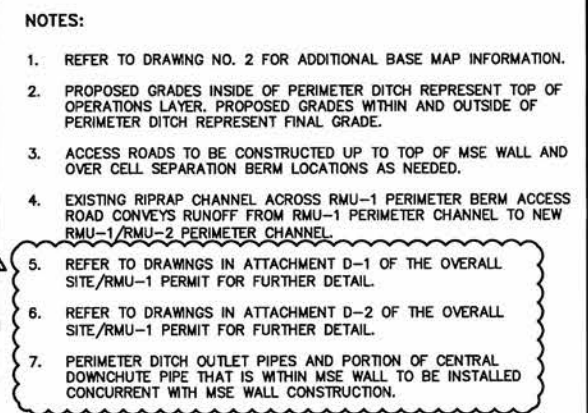
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ARCADIS Project No.
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Date
AUGUST 2009

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