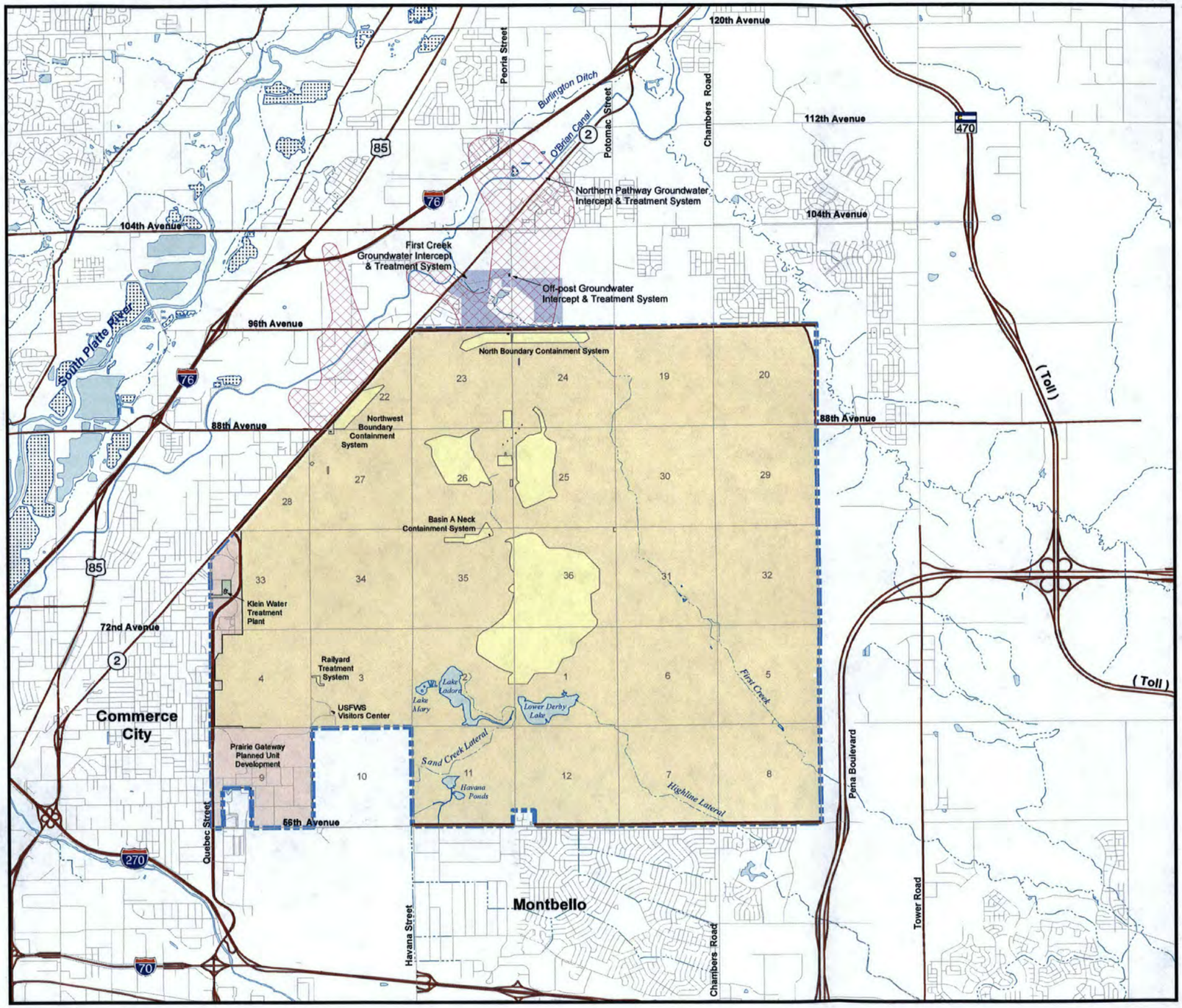
FIGURES

RMA Regional Reference Figure 1.1-1



- Off-Post Operable Unit
- RMA On-Post Operable Unit
- U.S. Army Jurisdiction
- RMA National Wildlife Refuge
- South Adams County
- Prairie Gateway Planned Unit Development
- Shell Property
- Section Lines
- 100-Ft Highway Setbacks
- Lakes & Ponds
- Buildings
- Intermittent Streams
- Ditches, Canals

Denver Metro Area

N

0 2,750 5,500 11,000 16,500

Feet

NAD27-NGVD29 Datum, US Survey Feet, Colorado North Zone

Sources: U.S. Army BIMS, U.S. Army COE, USGS DLG, USFWS, URS - Washington Division, Tetra Tech-EC, RVO GIS

Remediation Venture Office GIS

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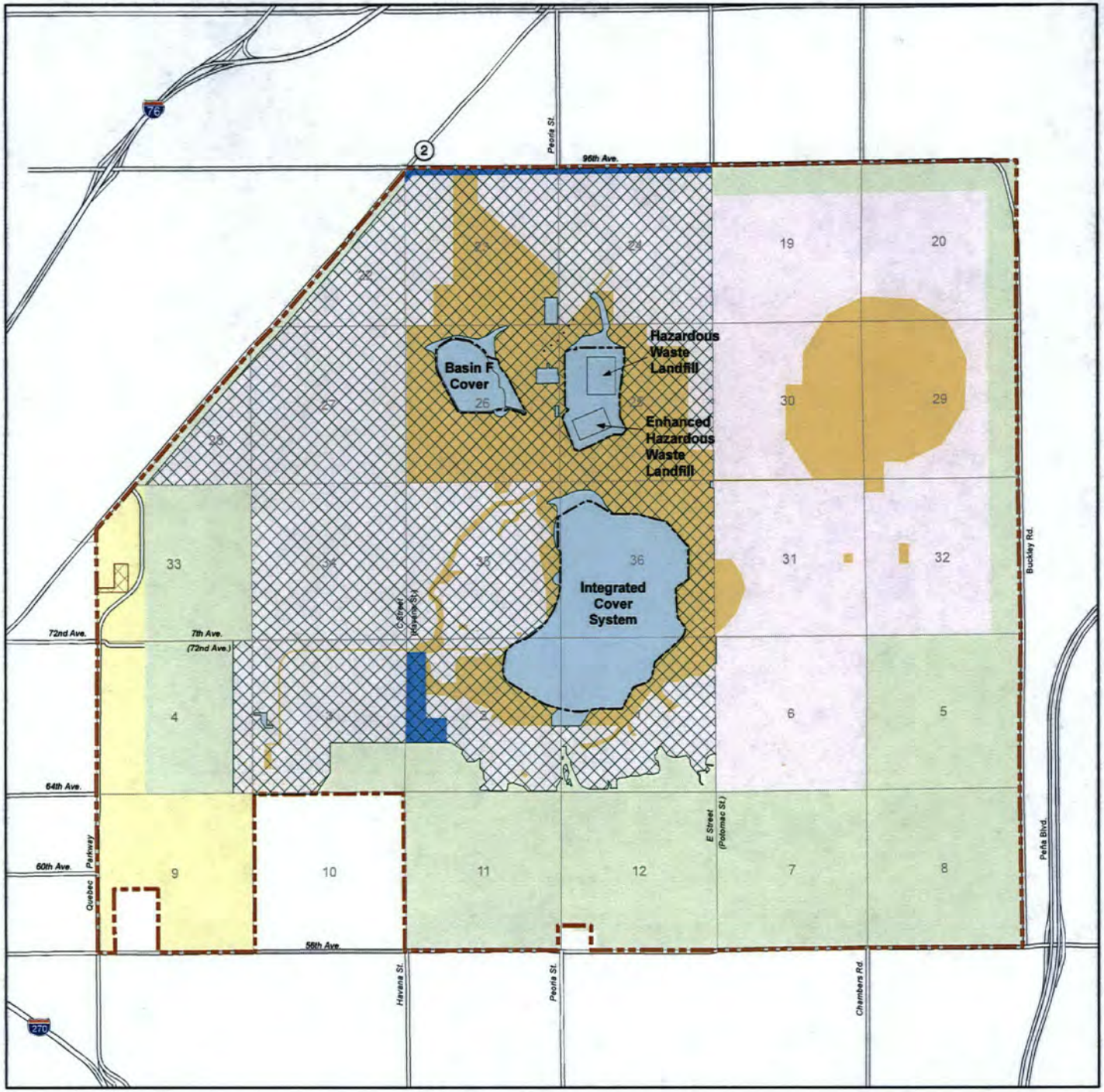
9/16/2011

Rocky Mountain Arsenal On-Post Deletion Areas



Deletion Areas

- Western Tier Deletion (Jan. 2003)
- Surface Deletion Area (Jan. 2004)
- Selected Perimeter Deletion Area (Jan. 2004)
- Internal Parcel Deletion Area (Jul. 2006)
- Central & Eastern Areas Deletion (Sep. 2010)
- Areas Remaining to be Deleted

- Army Maintained Area
- RMA On-Post Operable Unit
- Surface Deletion Only with Groundwater Remaining on NPL
- South Adams County - Klein Treatment Facility

N

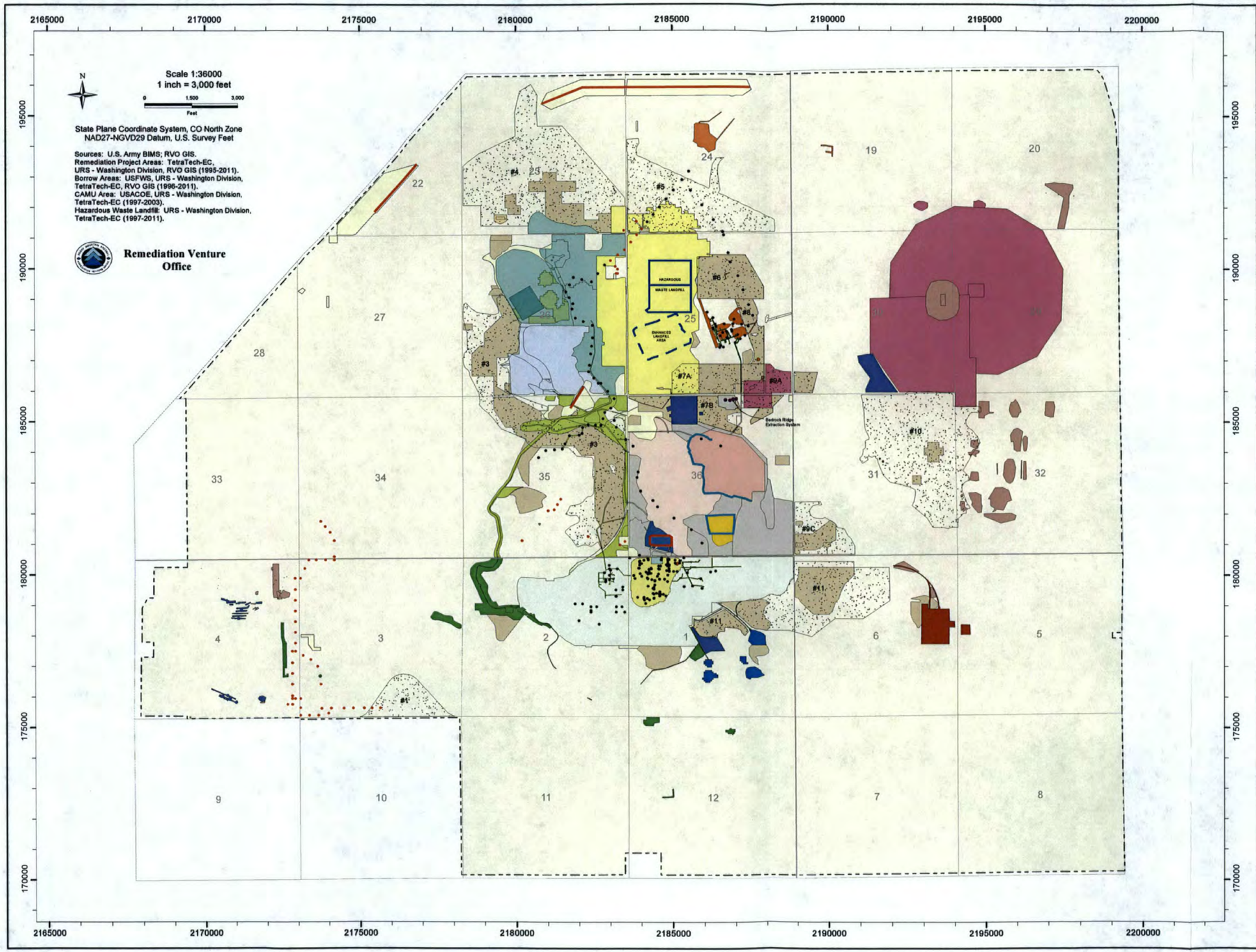
0 2,400 4,800 9,600

Feet

State Plane Coordinate System, CO North Zone
NAD27-NGVD29 Datum, U.S. Survey Feet

Sources: U.S. Army BIMS; TetraTech-EC, URS - Washington Division, RVO GIS

Remediation Venture Office GIS	
GIS Analyst: J. Thompson	Figure 1.3-1
Date: 9/16/2011	
Scale:	
Prepared For: S. Ache	
Approved: DPRA	
File Location: S:\giswork\gis\RA_Summary_Report\mxds\deletion_stages_fig_1-3-1.mxd	



Remediation Implementation Project Areas

Disposal Facilities - Basin A/Landfills
- Construct Hazardous Waste Landfill, Associated Influent/Effluent Basins, and Uncontaminated Detention Basin (1)
- CAMU Area Site Project (1)
- Operational Construction of Enhanced Hazardous Waste Landfill (2)
- Basin A Consolidation & Remediation (3)

Early Start Projects
- Sanitary Sewer Manhole Plugging - Phase I (4)
- South Plants Central Processing Area and Complex Trench Chemical Sewer Plugging (5)
- Shell/Complex Trench Slurry Walls (6)
- Post-ROD Removal Actions for Structures (7) (Not Shown)

PHASE I: Outlying Areas
- Toxic Storage Yards Soil Remediation (8)
- Existing Sanitary Landfill Remediation (9)
- Lake Sediments Remediation (10)
- Burial Trenches Soil Remediation (11)
- Munitions (Testing) Soil Remediation (12)
- Miscellaneous Northern Tier Soil Remediation (13)
- Miscellaneous Southern Tier Soil Remediation (14)
- Section 36 Bedrock Ridge Extraction System (15)
- South Plants Structures Demolition and Removal (16) (Not Shown)
- Miscellaneous Structures Demolition and Removal (17) (Not Shown)

PHASE II: South Plants
- Buried M-1 Pits Soil Remediation (18)
- Hex Pit Soil Remediation (19)
- South Plants Central Processing Area (20) Soil Remediation
- South Plants Balance of Areas Soil Remediation (21)

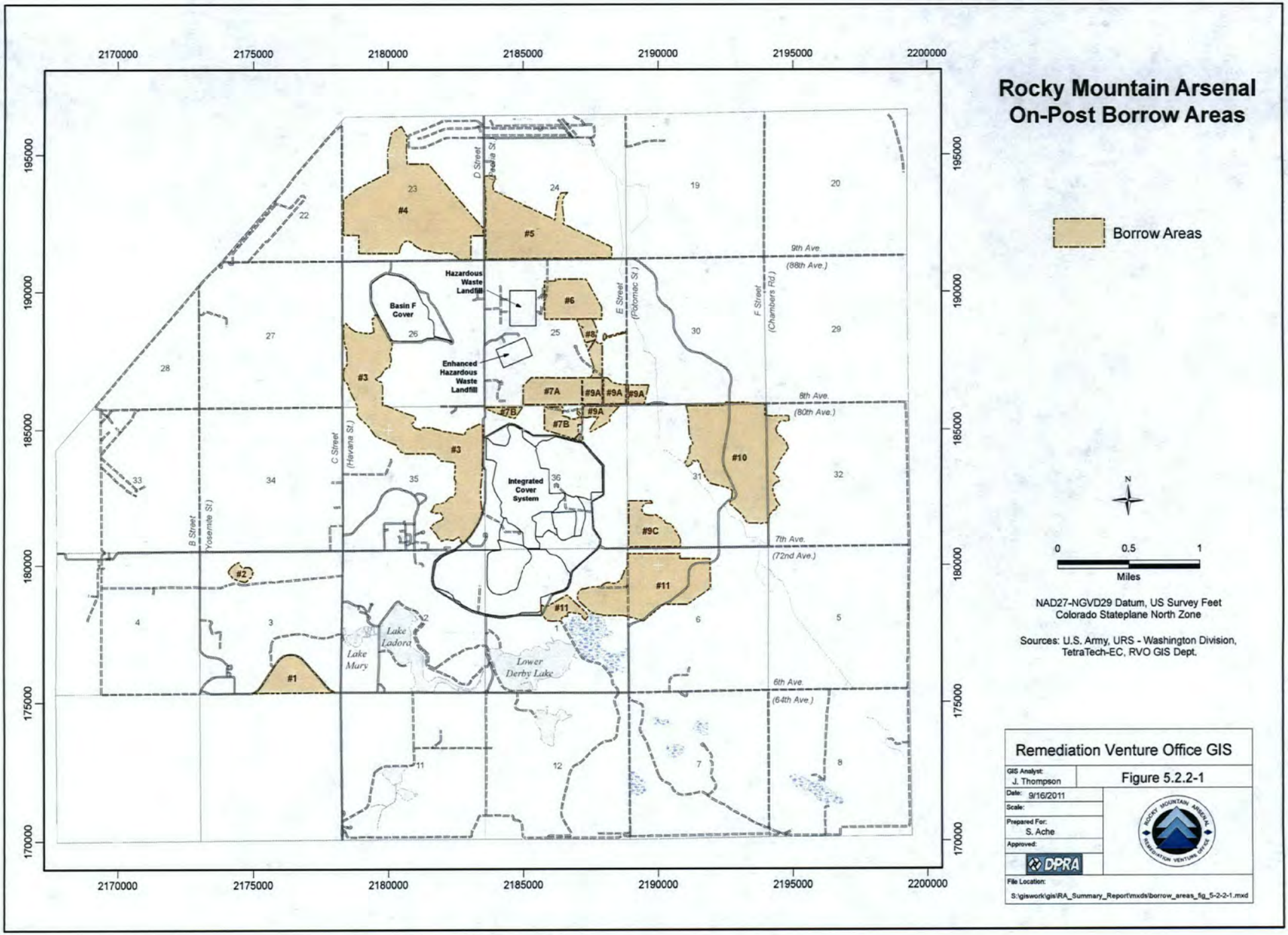
PHASE III: Sections 35 & 36 Sites
- Sanitary Sewer Manhole Plugging - Phase II (22)
- Section 36 Balance of Areas Soil Remediation (23)
- Secondary Basins Soil Remediation (24)
- Complex (Army) Disposal Trenches Remediation (25)
- Shell Disposal Trenches Remediation (26)
- North Plants Soil Remediation (27)
- Section 35 Soil Remediation (28)
- North Plants Structures Demolition and Removal (29) (Not Shown)

PHASE IV: Basin F and Lime Basins
- Basin F Waste Pile Remediation (30)
- Former Basin F Principal Threat Soil Remediation (31)
- Basin F & Basin F Exterior Remediation (32)
- Section 36 Lime Basins Soil Remediation (33)

Site Wide Programs
- RCRA - Equivalent Cover Demonstration (34)
- Borrow Areas: # = Borrow Area Number
- RER Soil Areas
- Treatment System Slurry Walls (48, 50, 51)
- Chemical Sewer Excavation in South Plants Balance of Areas (Phase II) and North Plants Soil Remediation (Phase III).
- Rocky Mountain Arsenal (U.S. Army Jurisdiction)
- USFWS National Wildlife Refuge

Remediation Venture Office GIS

GIS Analyst: J. Thompson	Figure 3.0-1
Date: 9/16/2011	
Scale:	
Prepared For: S. Ache	
Approved: DPRA	
File Location: S:\giswork\gis\RA_Summary_Report\mxds\remareas_17x11.mxd	



Rocky Mountain Arsenal On-Post Borrow Areas

Borrow Areas

N

0 0.5 1

Miles

NAD27-NGVD29 Datum, US Survey Feet
Colorado Stateplane North Zone

Sources: U.S. Army, URS - Washington Division, TetraTech-EC, RVO GIS Dept.

Remediation Venture Office GIS	
GIS Analyst: J. Thompson	Figure 5.2.2-1
Date: 9/16/2011	
Scale:	
Prepared For: S. Ache	
Approved:	
DPRA	
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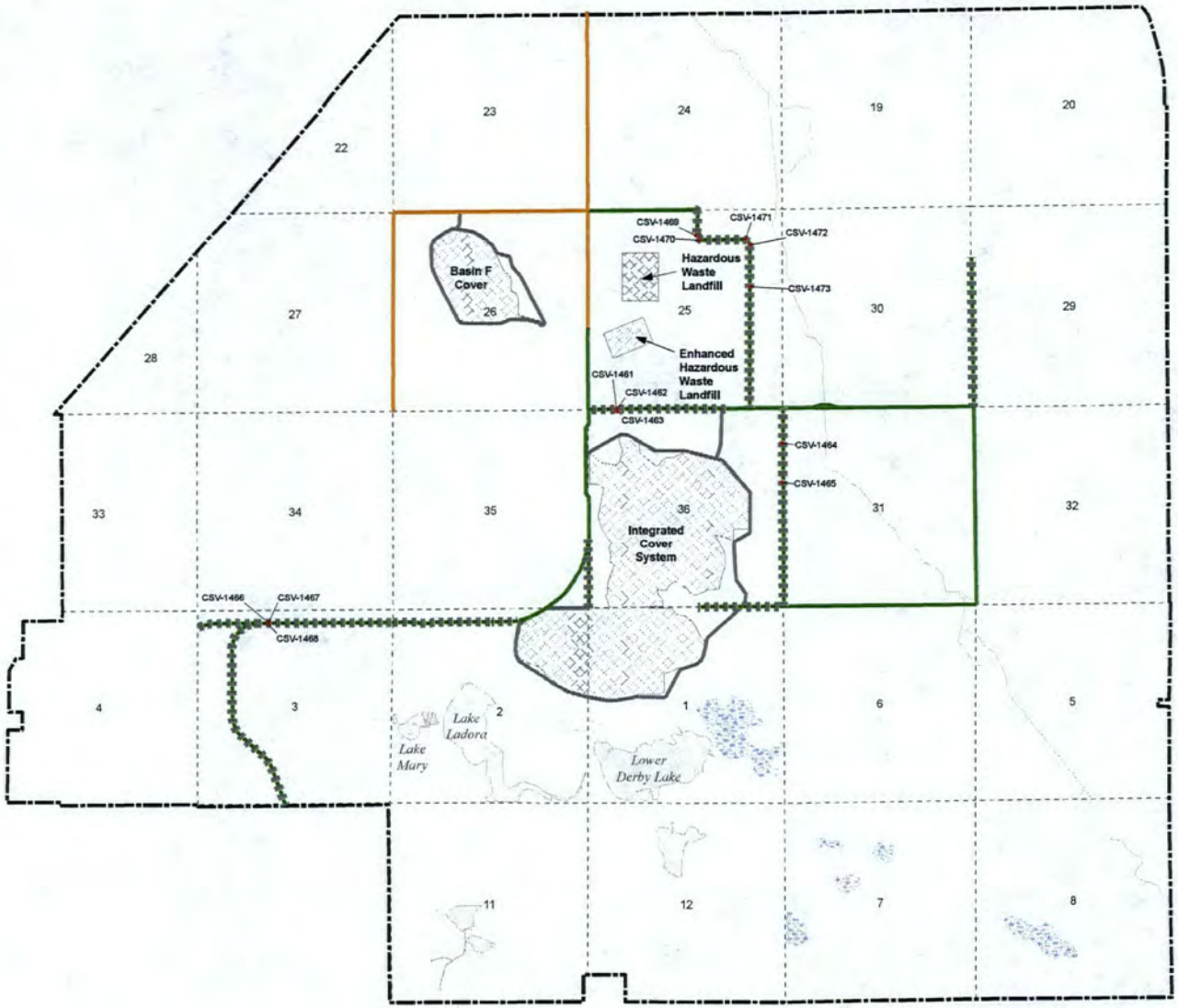

Rocky Mountain Arsenal Site-Wide Haul Roads

Caps and Covers

Army Maintained Area Roads

Haul Roads Constructed in Support of Remedy

Primary Haul Road

Joint Use Road

Removed

Confirmatory Soil Samples

N

NAD27-NGVD29 Datum, US Survey Feet
Colorado Stateplane North Zone

0 0.5 1
Miles

Sources: U.S. Army, URS - Washington Division, TetraTech-EC, RVO GIS Dept.

Remediation Venture Office GIS	
GIS Analyst: J. Thompson	Figure 5.9.2-1
Date: 9/16/2011	
Scale:	
Prepared For: S. Ache	
Approved: DPRA	

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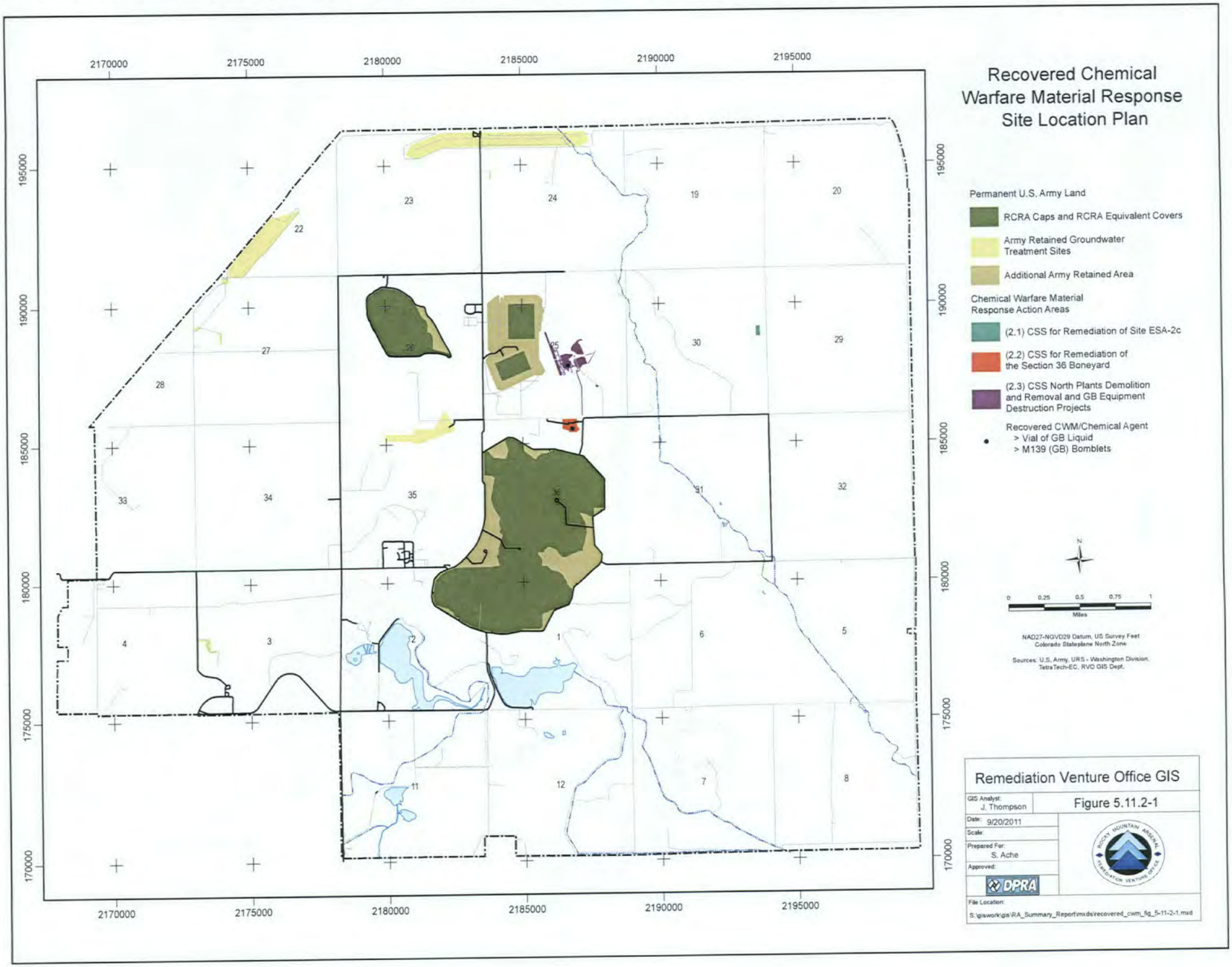
2170000
2175000
2180000
2185000
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2195000
195000
190000
185000
180000
175000
170000
Recovered Chemical Warfare Material Response Site Location Plan
Permanent U.S. Army Land
RCRA Caps and RCRA Equivalent Covers
Army Retained Groundwater Treatment Sites
Additional Army Retained Area
Chemical Warfare Material Response Action Areas
(2.1) CSS for Remediation of Site ESA-2c
(2.2) CSS for Remediation of the Section 36 Boneyard
(2.3) CSS North Plants Demolition and Removal and GB Equipment Destruction Projects
Recovered CWM/Chemical Agent
> Vial of GB Liquid
> M139 (GB) Bomblets
N
0 0.25 0.5 0.75 1
Miles
NAD27-NGVD29 Datum, US Survey Feet
Colorado Stateplane North Zone
Sources: U.S. Army, URS - Washington Division, TetraTech-EC, RVO GIS Dept.
Remediation Venture Office GIS
GIS Analyst: J. Thompson
Figure 5.11.2-1
Date: 9/20/2011
Scale:
Prepared For: S. Ache
Approved:
DPRA
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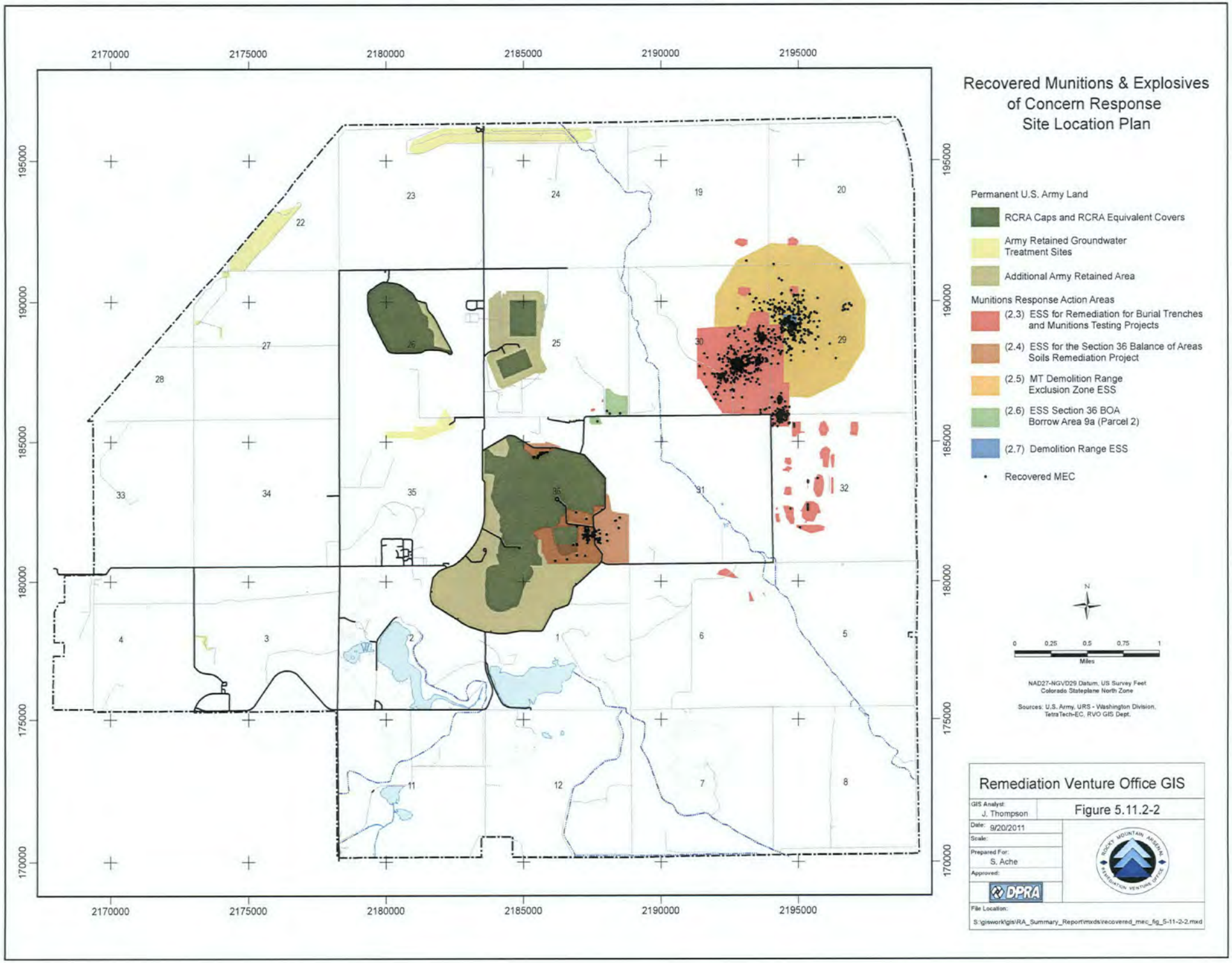
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2175000
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Recovered Munitions & Explosives of Concern Response Site Location Plan
Permanent U.S. Army Land
RCRA Caps and RCRA Equivalent Covers
Army Retained Groundwater Treatment Sites
Additional Army Retained Area
Munitions Response Action Areas
(2.3) ESS for Remediation for Burial Trenches and Munitions Testing Projects
(2.4) ESS for the Section 36 Balance of Areas Soils Remediation Project
(2.5) MT Demolition Range Exclusion Zone ESS
(2.6) ESS Section 36 BOA Borrow Area 9a (Parcel 2)
(2.7) Demolition Range ESS
Recovered MEC
N
0 0.25 0.5 0.75 1
Miles
NAD27-NGVD29 Datum, US Survey Feet
Colorado Stateplane North Zone
Sources: U.S. Army, URS - Washington Division, TetraTech-EC, RVO GIS Dept.
Remediation Venture Office GIS
GIS Analyst: J. Thompson
Figure 5.11.2-2
Date: 9/20/2011
Scale:
Prepared For: S. Ache
Approved:
DPRA
File Location:
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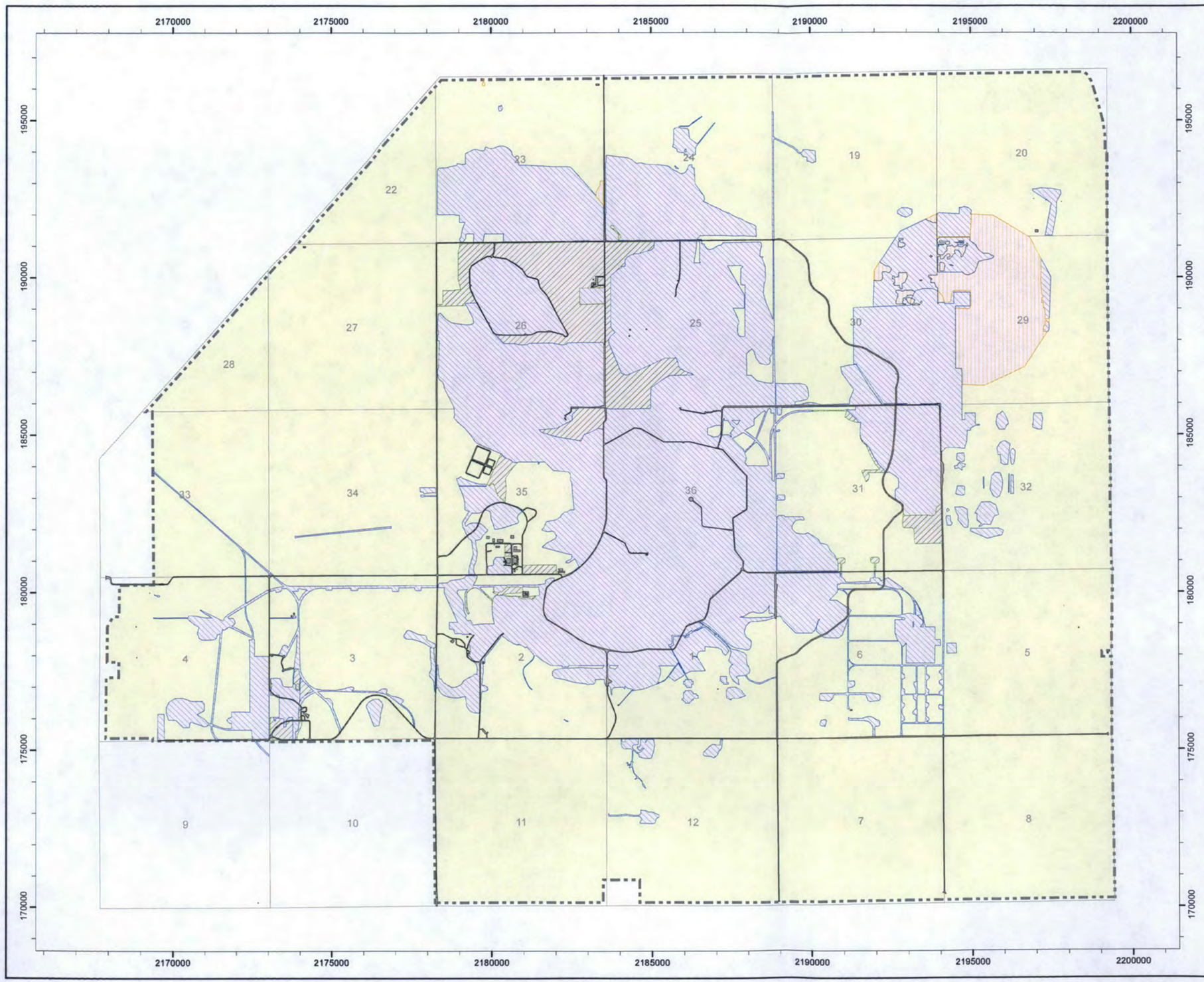
Rocky Mountain Arsenal Revegetation Map



Legend

- Rocky Mountain Arsenal
- Sections
- Disturbed Areas
- Revegetation Planned
- Revegetation Completed / No Further Action
- Minor Disturbance / No Further Action
- Road and Buildings

Areas disturbed during remediation include excavations, covers, roads, laydown and parking areas, graded areas, potholed areas, and tilled areas.

Completed revegetation areas include areas completed through 2010 and those areas planned for 2011.

Planned revegetation areas include areas planned for revegetation in 2012 and 2013.

N

Scale 1:36000
1 inch = 3,000 feet

0 1,500 3,000
Feet

State Plane Coordinate System, CO North Zone
NAD27-NGVD29 Datum, U.S. Survey Feet

Sources: U.S. Army BIMS; TetraTech-EC, URS - Washington Division, RVO GIS

Remediation Venture Office GIS

GIS Analyst: J. Thompson	Figure 5.13.2-1
Date: 9/16/2011	
Scale:	
Prepared For: S. Ache	
Approved: DPRA	

File Location:
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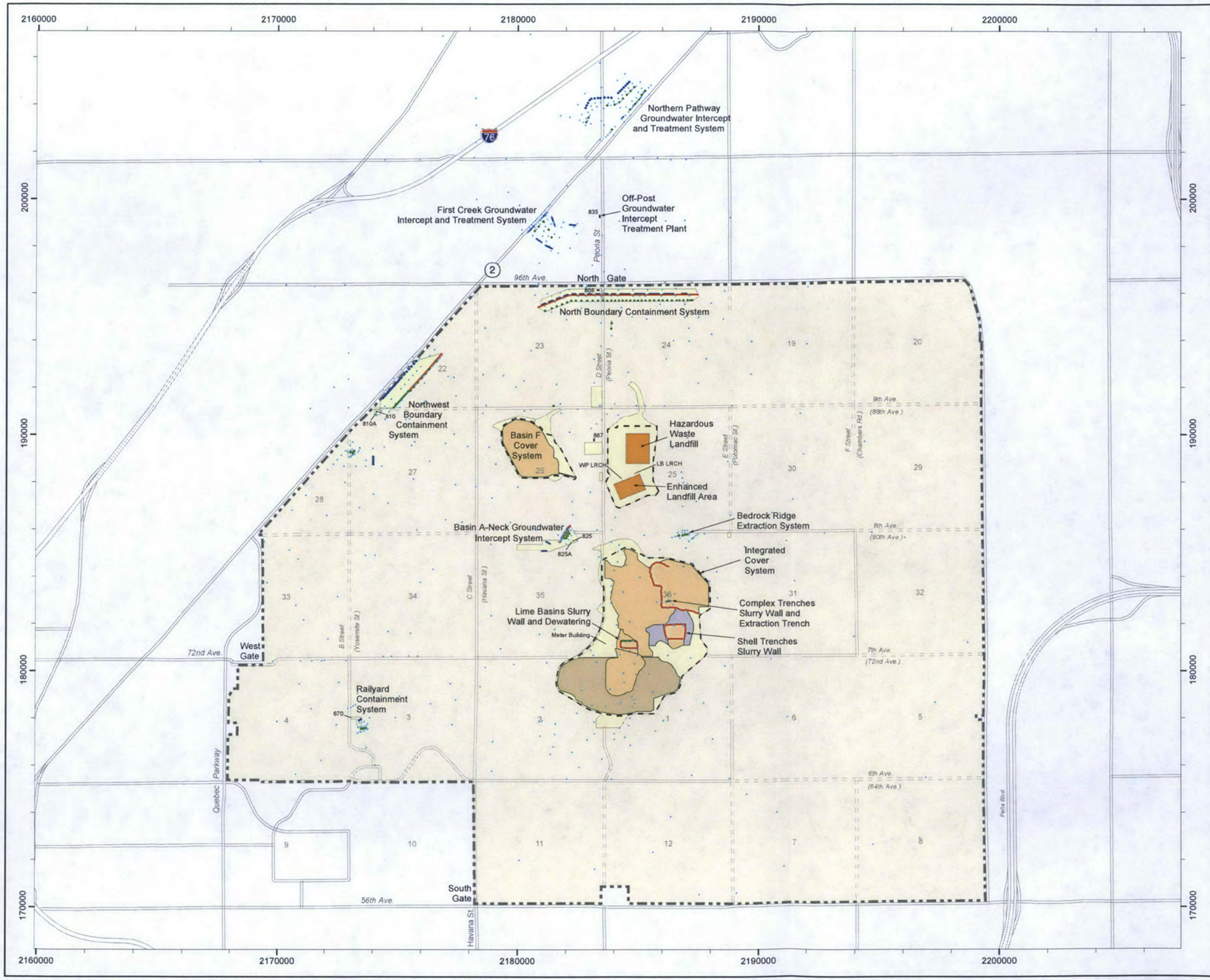

Rocky Mountain Arsenal Long-Term Operations and Maintenance

Legend

- Rocky Mountain Arsenal
- U.S. Army Jurisdiction
- USFWS National Wildlife Refuge
- Army Maintained Area Boundary
- RCRA Cap
- RCRA-Equivalent Cover
- 3-Foot Soil Cover
- 2-Foot Soil Cover
- Buildings
- Slurry walls
- Dewatering Trench
- Recharge Trench
- Extraction Wells
- Recharge Wells
- Long Term Monitoring Plan Wells

Note: Details related to the long-term O&M systems and requirements are provided in the Long-Term Care Plan, HWL Post-Closure Plan, ELF Post-Closure Plan, Basin F Post-Closure Plan, Long-Term Monitoring Plan for Groundwater and Surface Water, and the Land Use Control Plan

N

Scale 1:48000
1 inch = 4,000 feet

0 2,000 4,000
Feet

State Plane Coordinate System, CO North Zone
NAD27-NGVD29 Datum, U.S. Survey Feet

Sources: U.S. Army BIMS; TetraTech-EC, URS - Washington Division, RVO GIS

Remediation Venture Office GIS

GIS Analyst: J. Thompson	Figure 7.0-1
Date: 9/16/2011	
Scale:	
Prepared For: S. Ache	
Approved: DPRA	

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