

2017 Sunshine Canyon Landfill Action Plan

Los Angeles County
Solid Waste Management Committee
Integrated Waste Management Task Force
April 20, 2017

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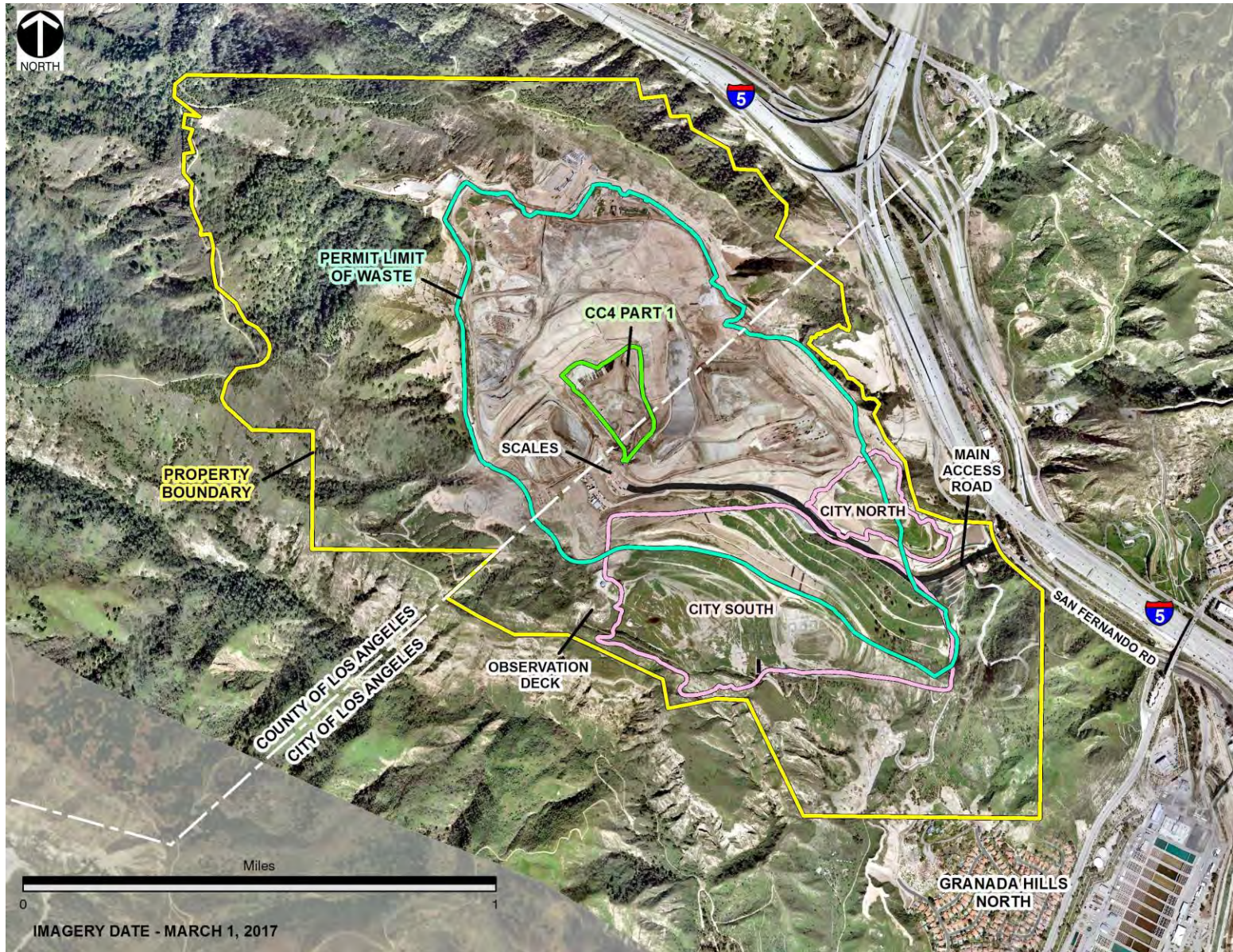
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What are we going to do?

- **Goal:** Eliminate offsite odor
- **Actions:**
 1. Collect and control landfill gas (Presented Today)
 2. Control waste odors on site
 3. Reduce conditions for future odors



Sunshine Canyon Site Orientation



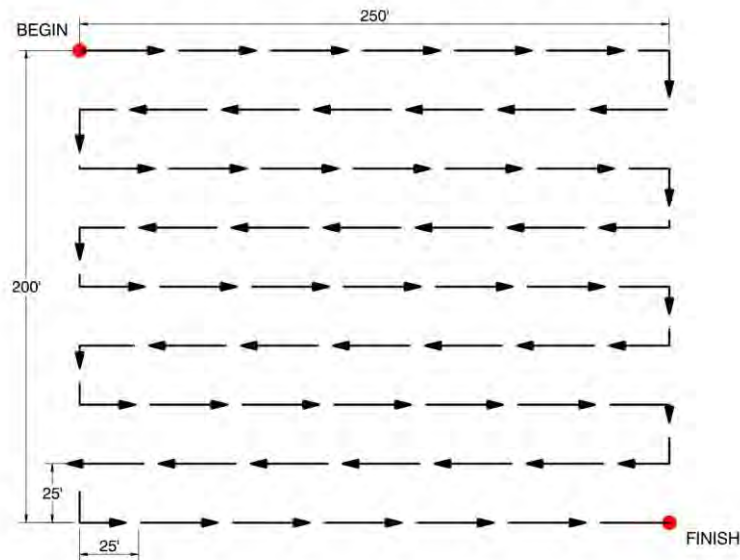
Action #1: Collect and Control Landfill Gas

Current Status

- Odors from fugitive gas emissions resulted from requirement to deviate from industry standard operating procedures
- Watered-in gas wells are presenting a new and extreme challenge to efficient gas collection
- The Order for Abatement, and our own additional measures, described herein, constitute a system augmentation to address unique conditions

Fugitive Emissions Detected by Surface Scans

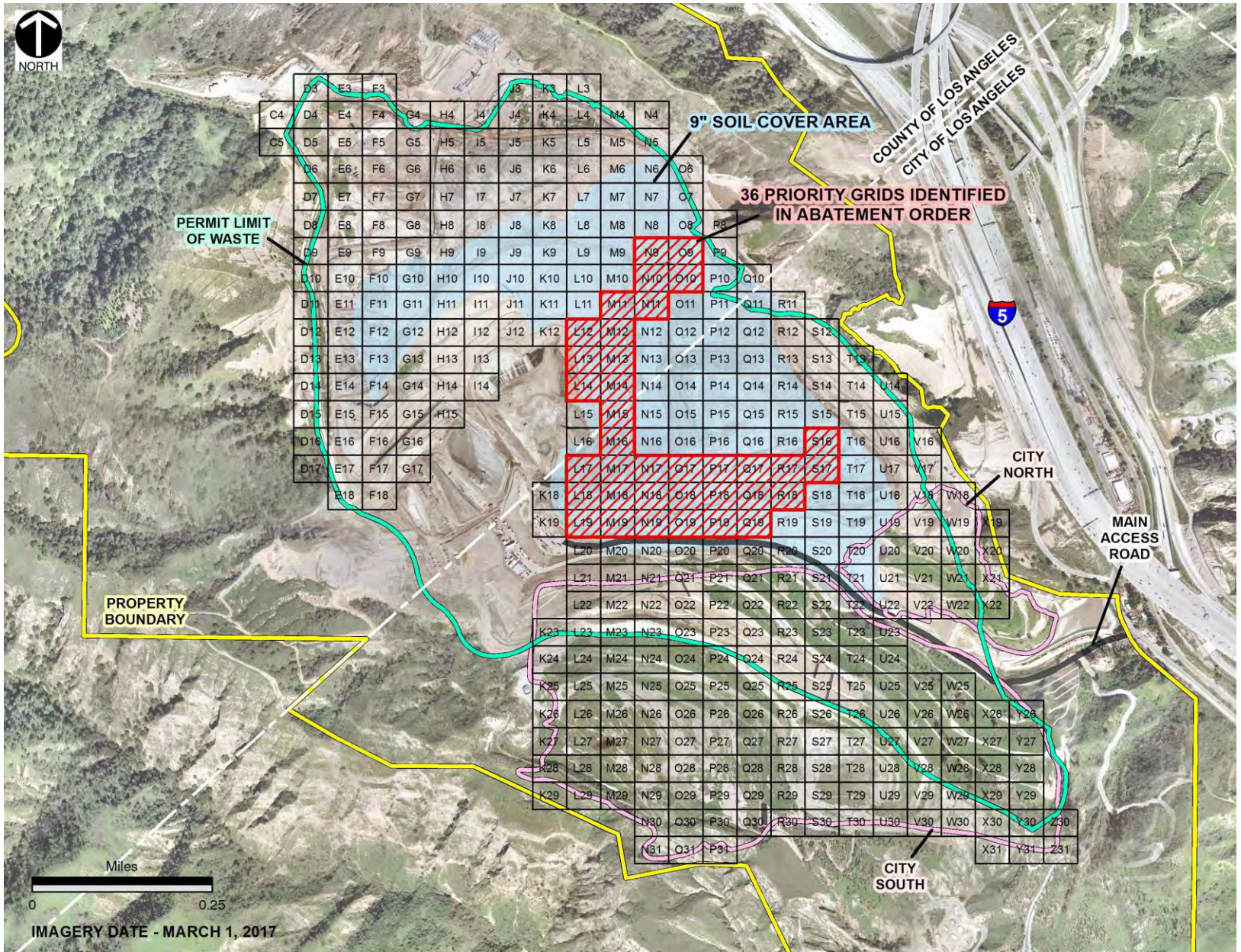
- Uncollected gas that diffuses through the cover and into the air
- Can be directly located with surface scans
- Monthly scans conducted to pinpoint fugitive emissions



Typical grid scan route



Scan instrument



Landfill Gas Odor Control

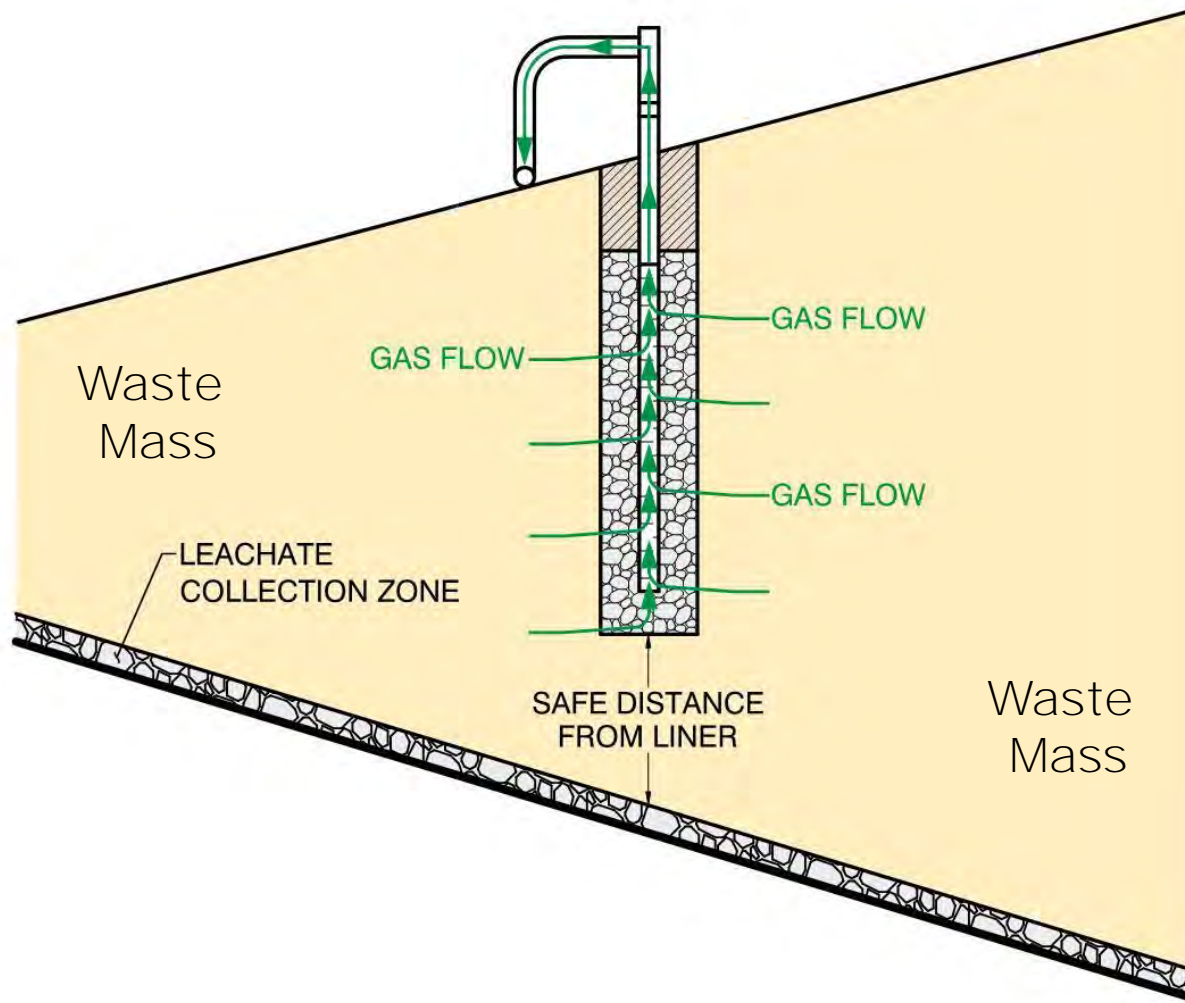
Primary Solution – Improve gas collection

- Efficient gas collection with minimal cover is effective
- Adding or replacing more than 150 gas wells to improve coverage
- Adding pumps to over 250 gas wells (unusual need for Southern California landfills)

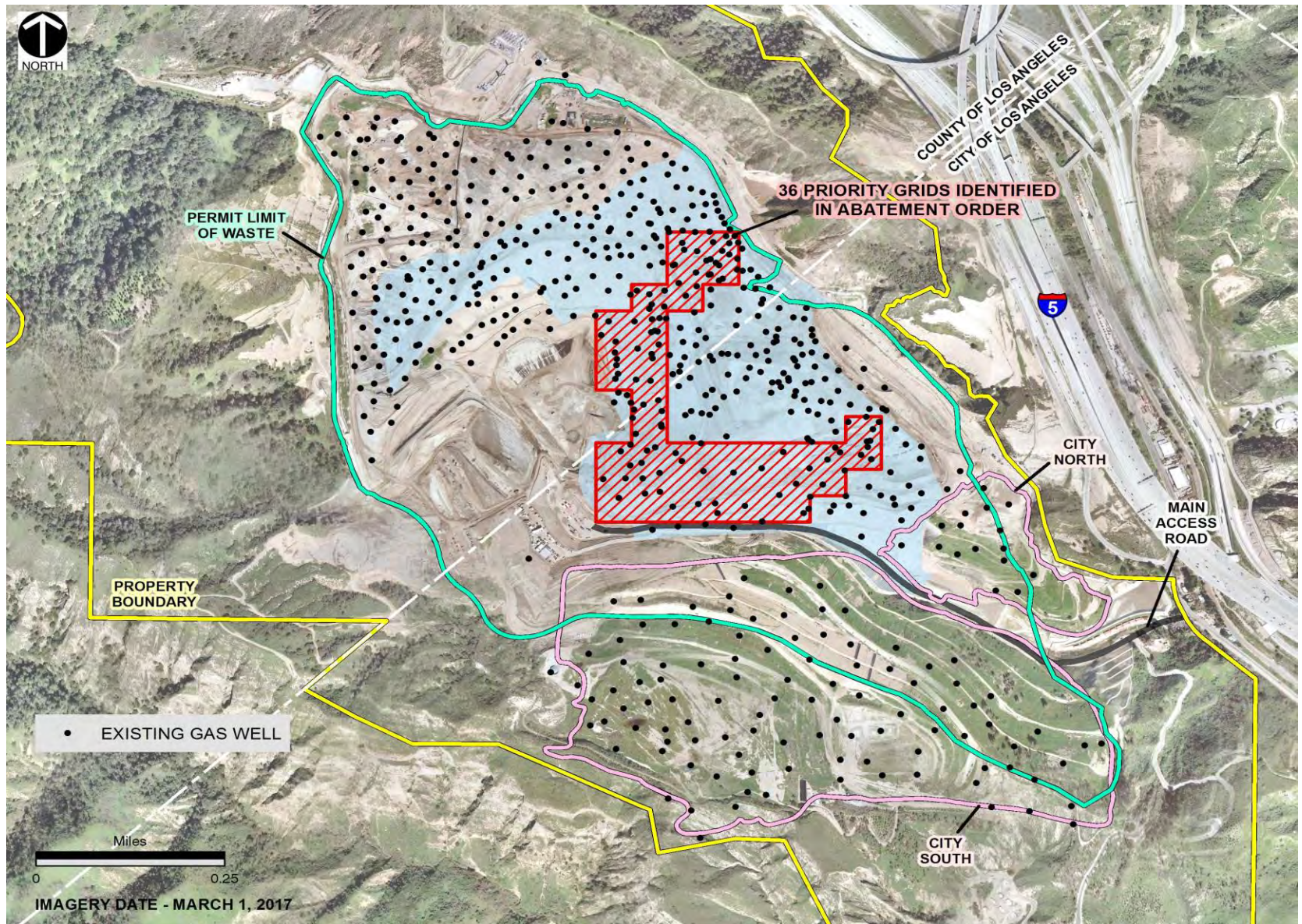
Secondary Solution – Enhanced cover

- No cover works well without efficient gas collection
- SCL always meets Federal and State cover requirements
- Enhance intermediate cover over 115 acres

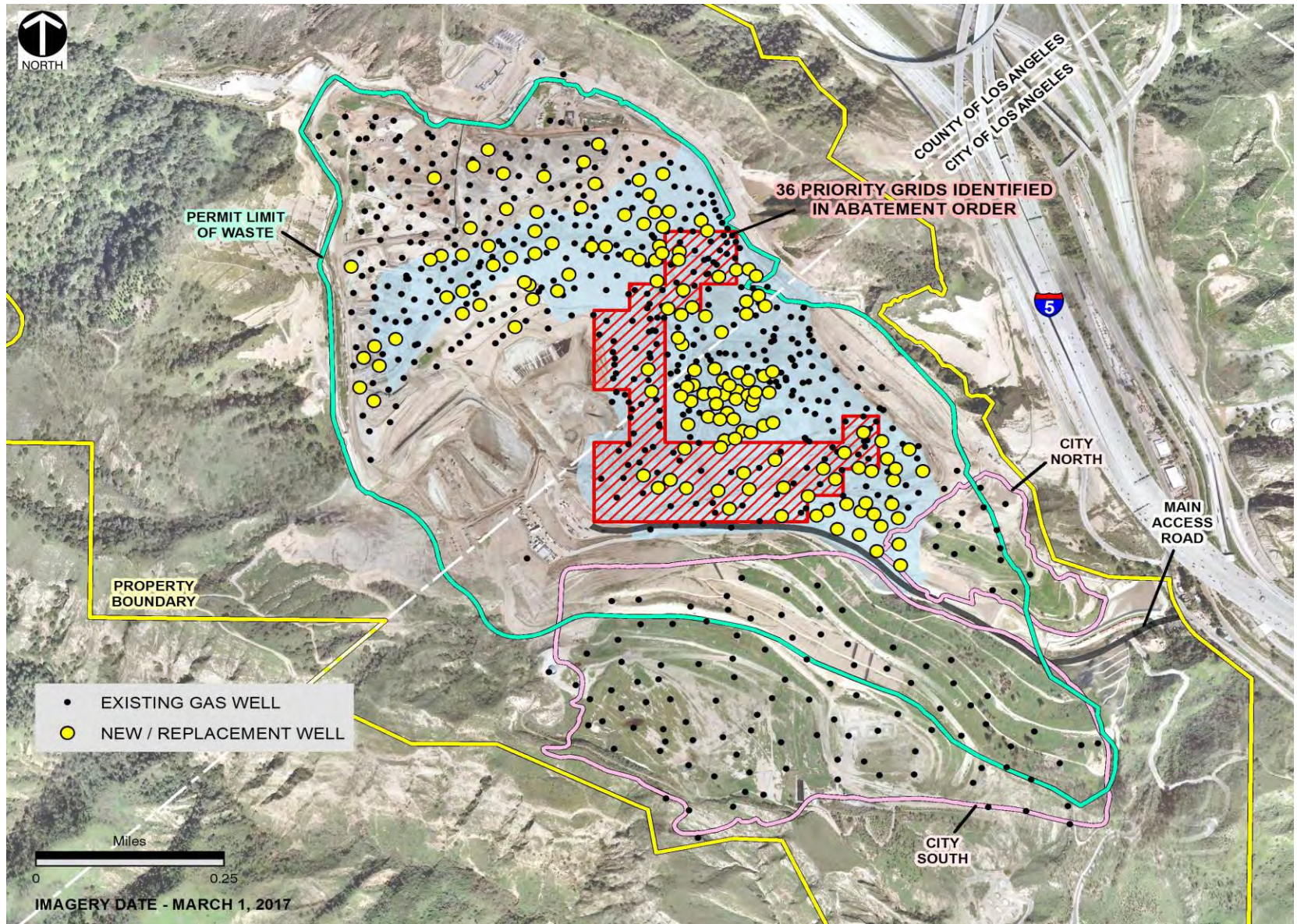
Proper Gas Well Operation



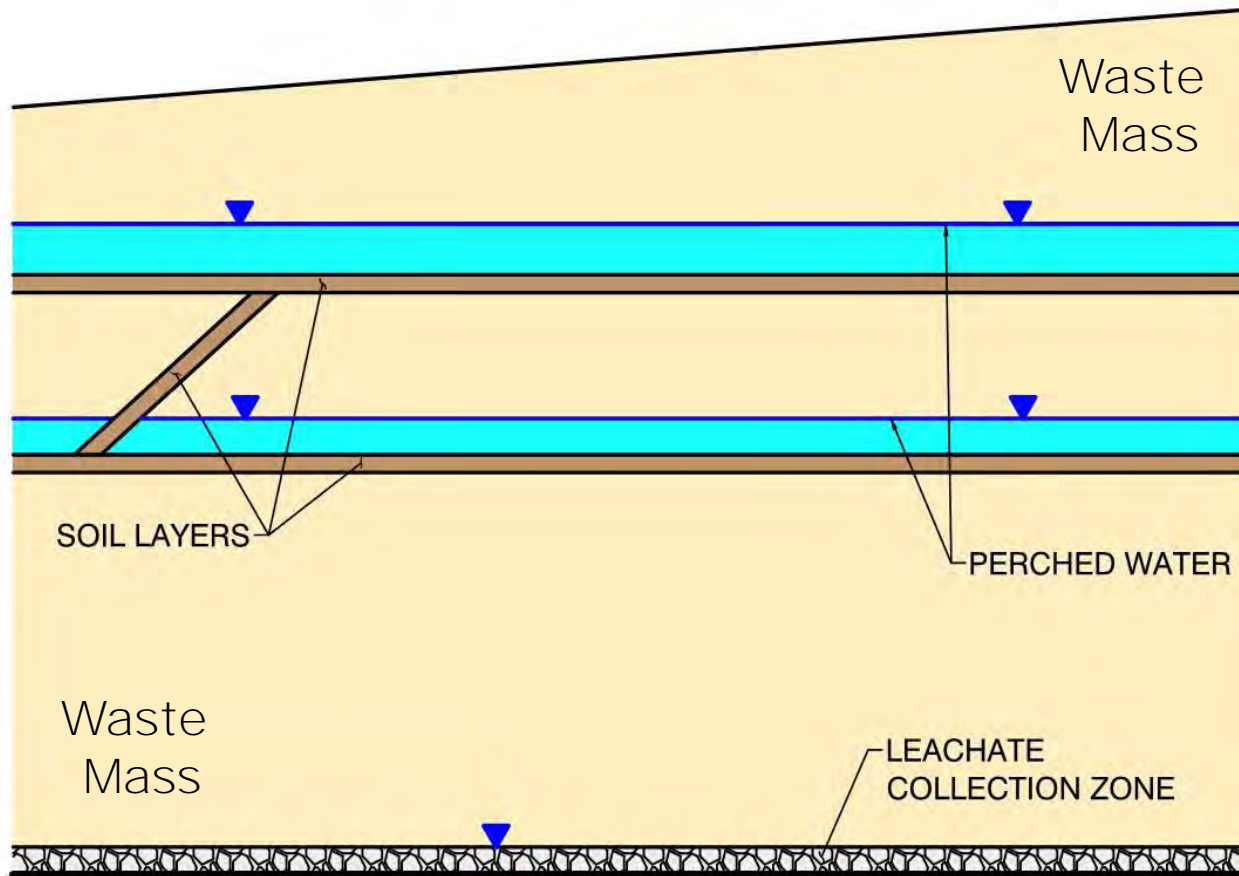
Existing Gas Wells



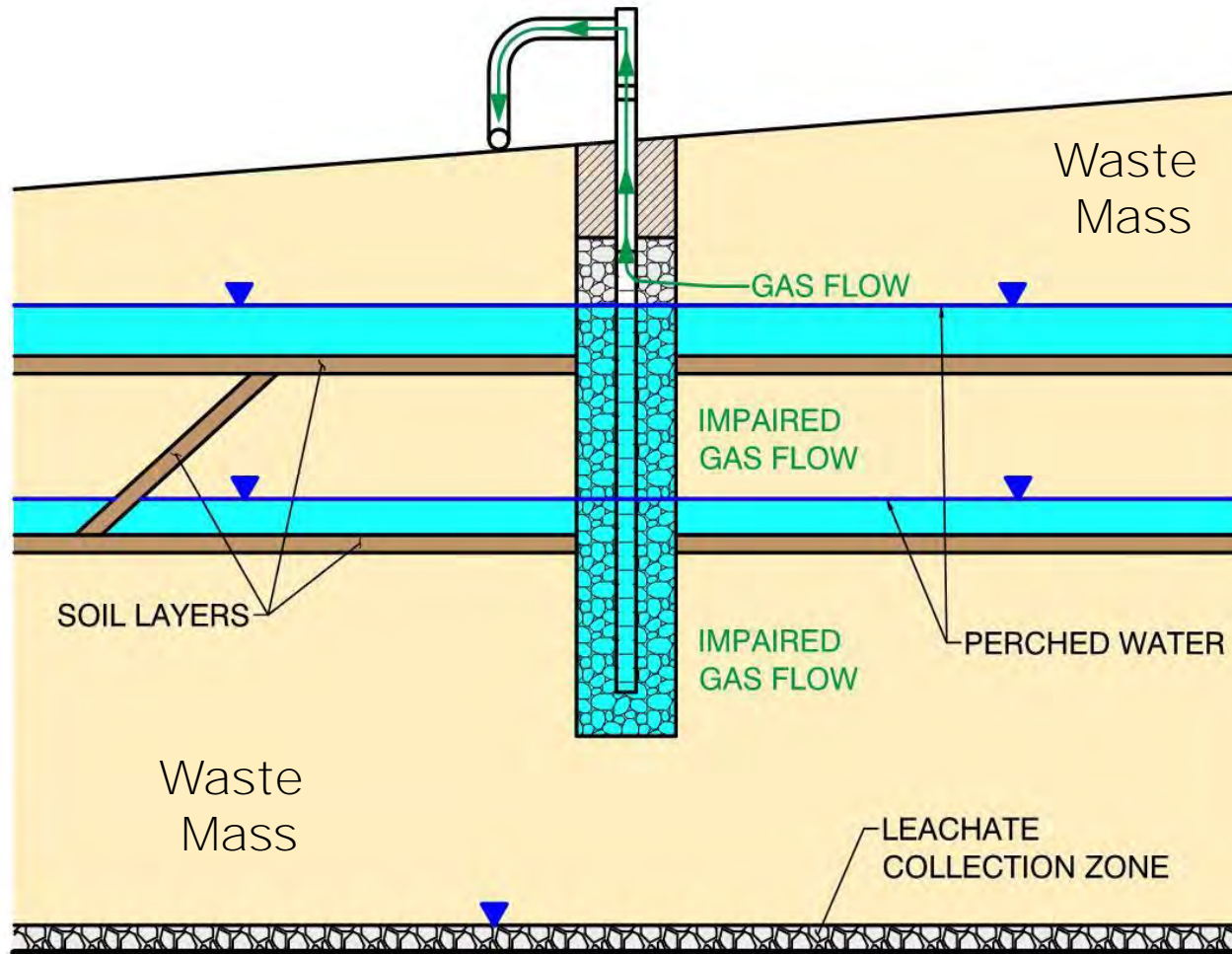
New and Replacement Gas Wells



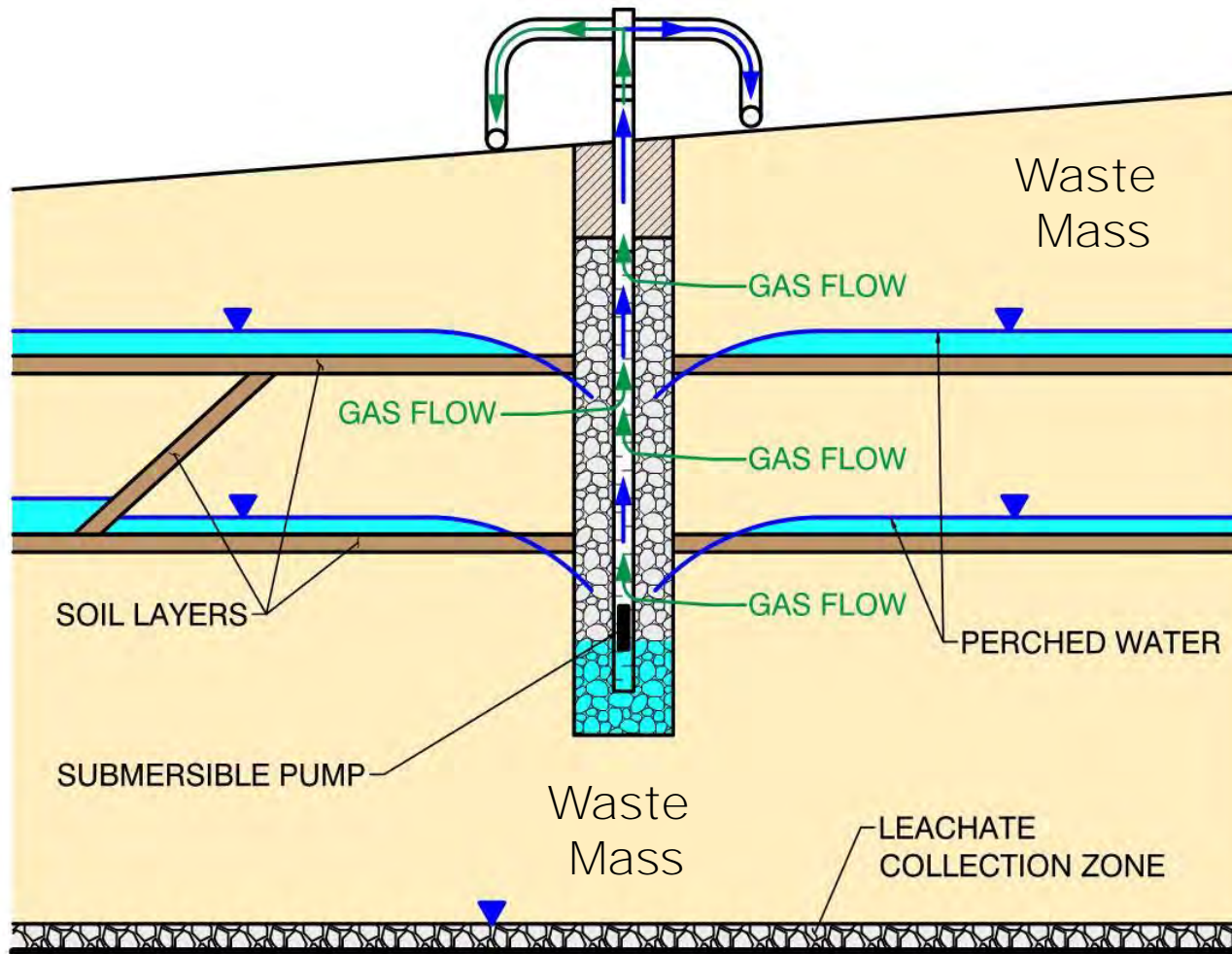
Perched Water



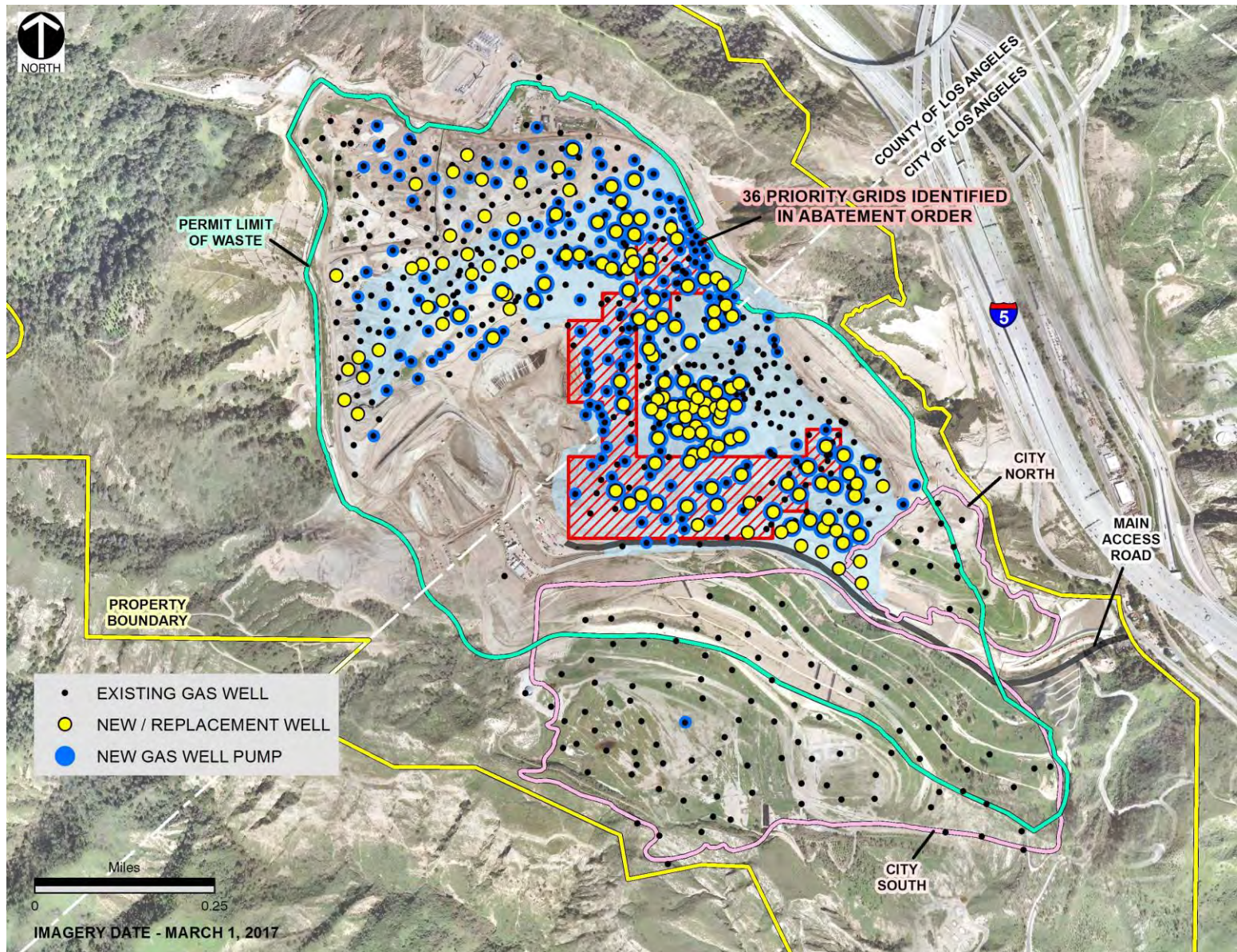
Watered-in Gas Well



Dewatering Pump Installation



New and Proposed Gas Well Pumps



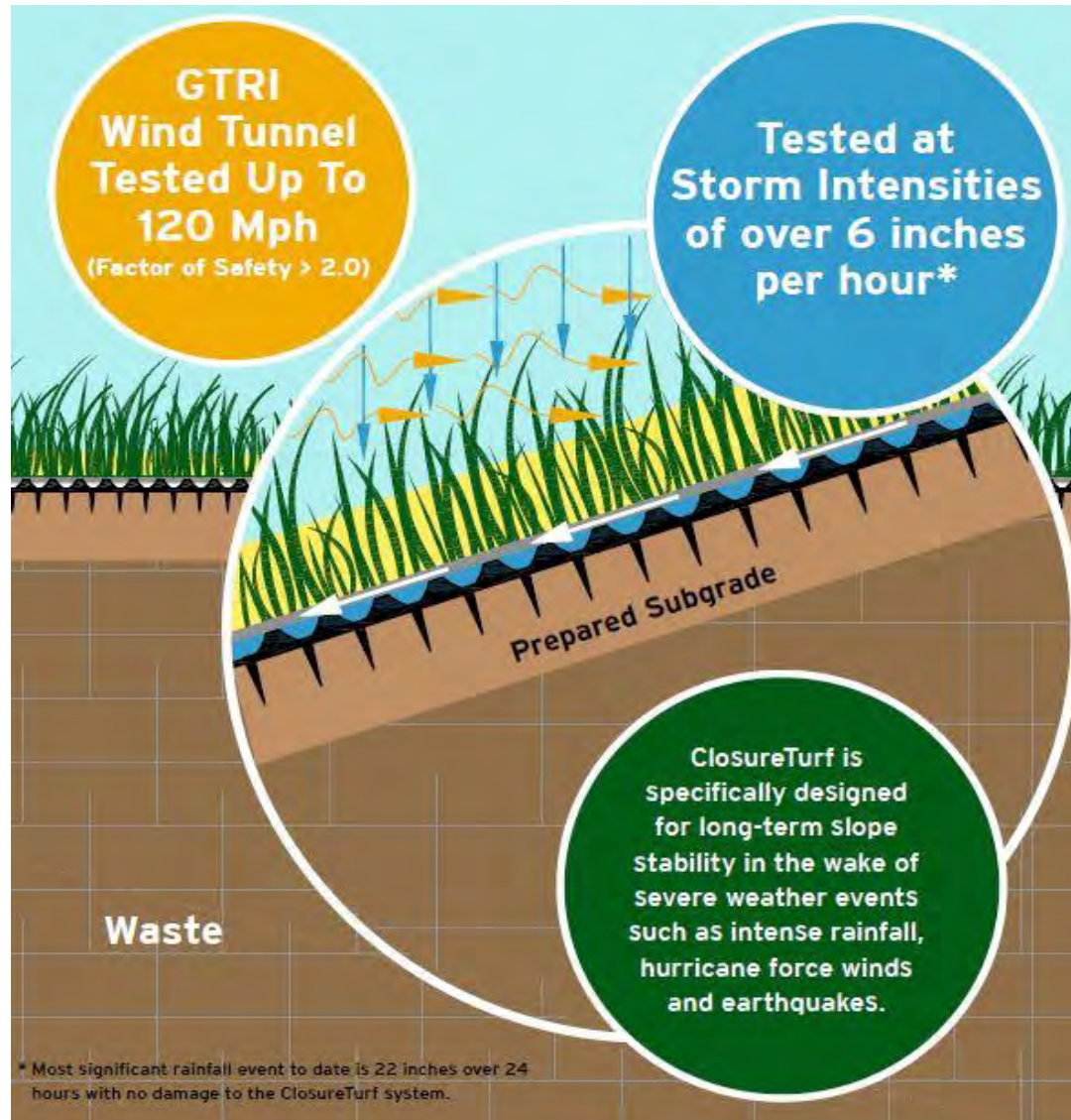
Enhanced Intermediate Cover

- Until the gas extraction system improvements become effective, enhanced intermediate cover will help prevent gas odors from escaping
- Third-party engineering report identified best enhanced intermediate cover options, three of which we are proposing:
 1. Closure Turf
 2. Intermediate spray-on cover
 3. Vegetative cover



Closure Turf Example

Option #1 - Closure Turf



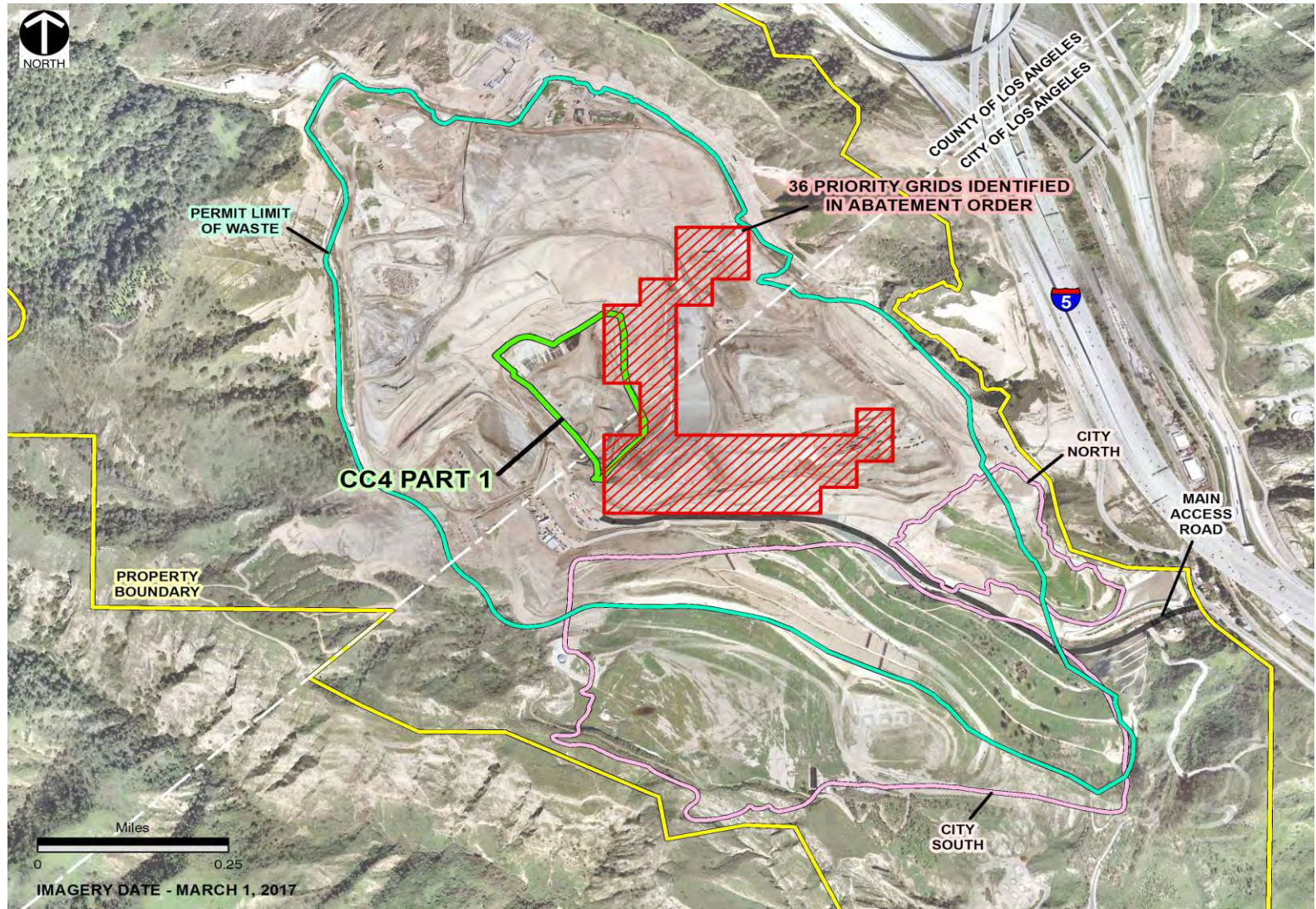
Option #2 – Intermediate Spray-on Cover



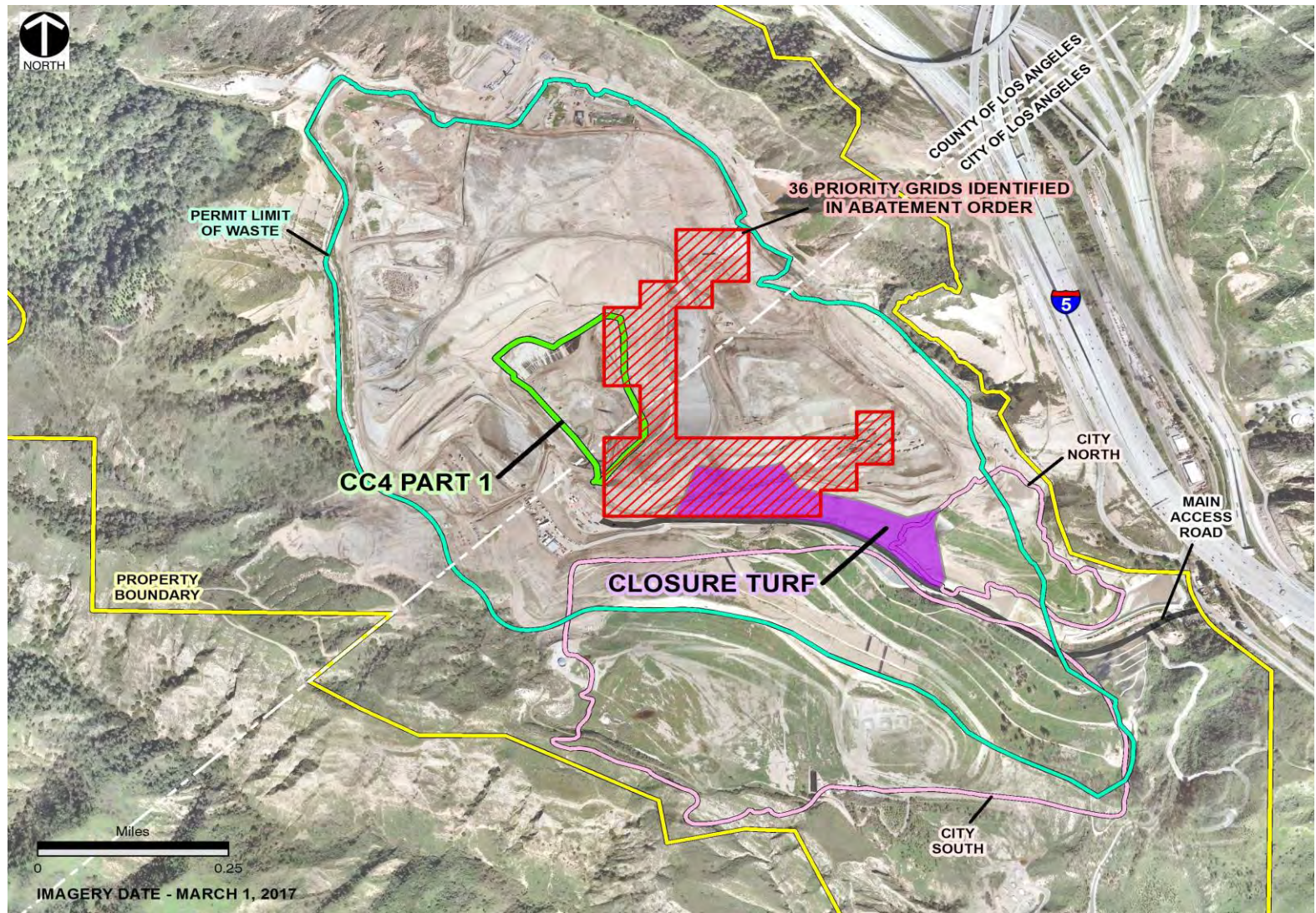
Option #3 – Vegetative Cover



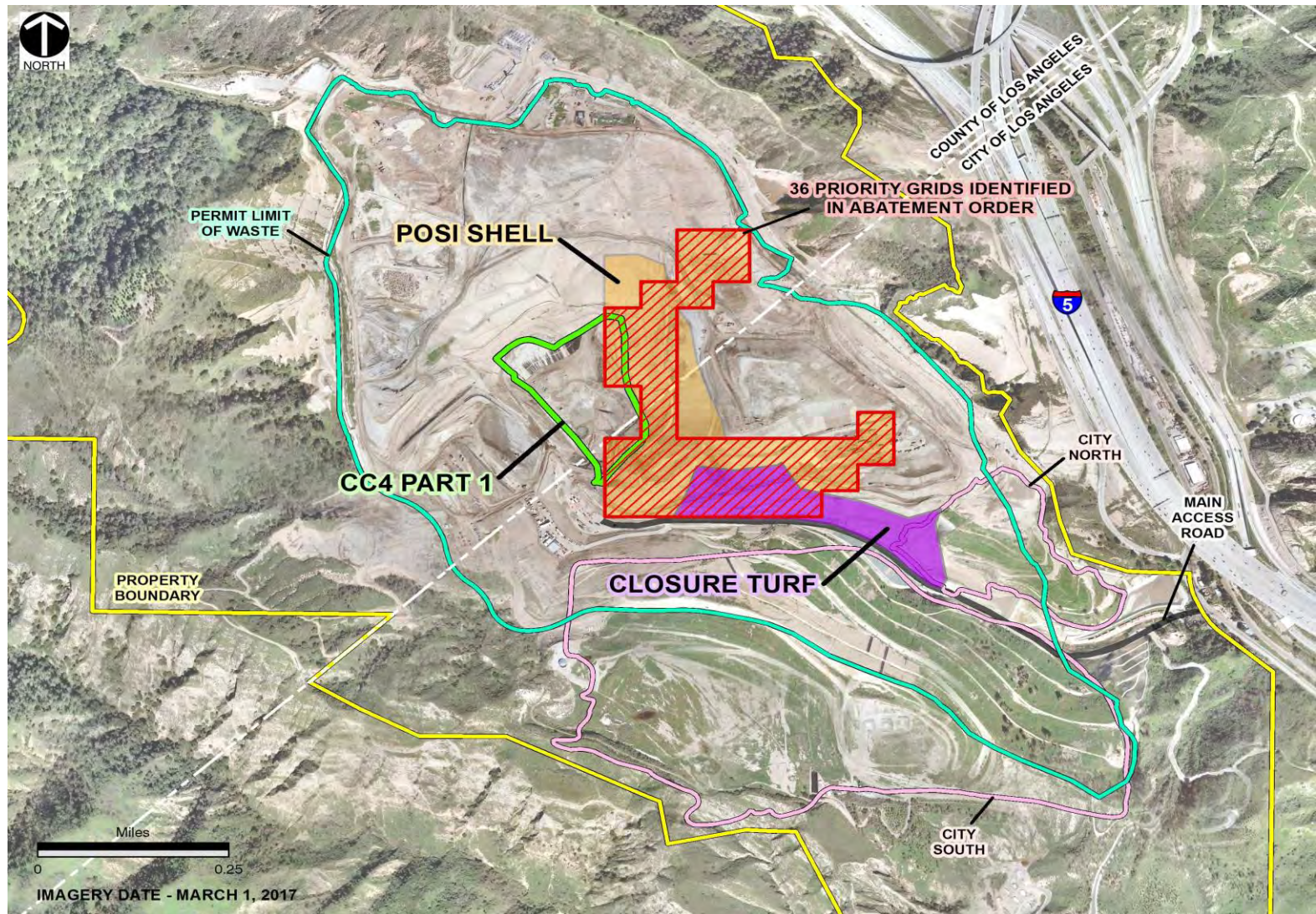
Locations for Enhanced Intermediate Covers



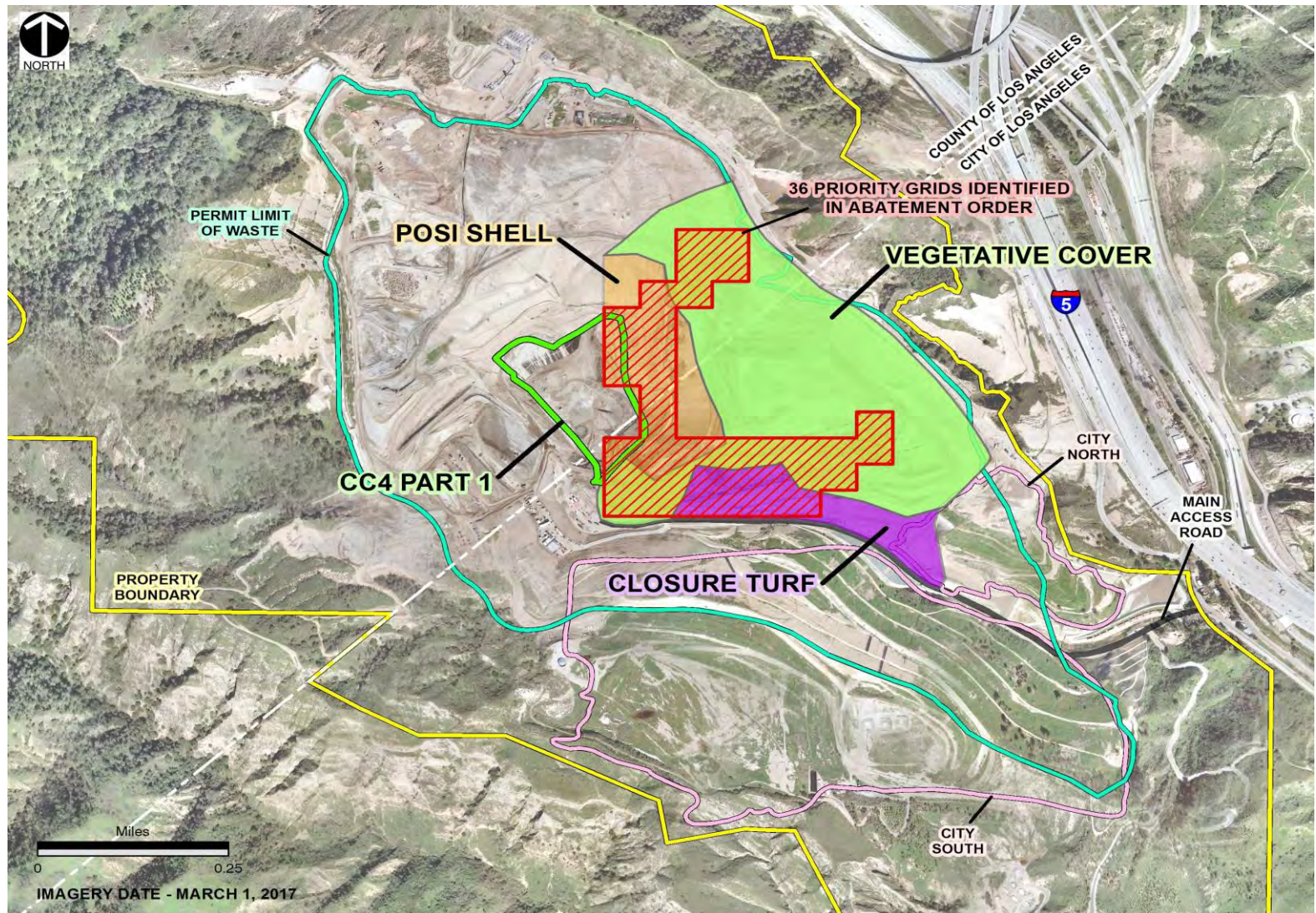
Locations for Enhanced Intermediate Covers



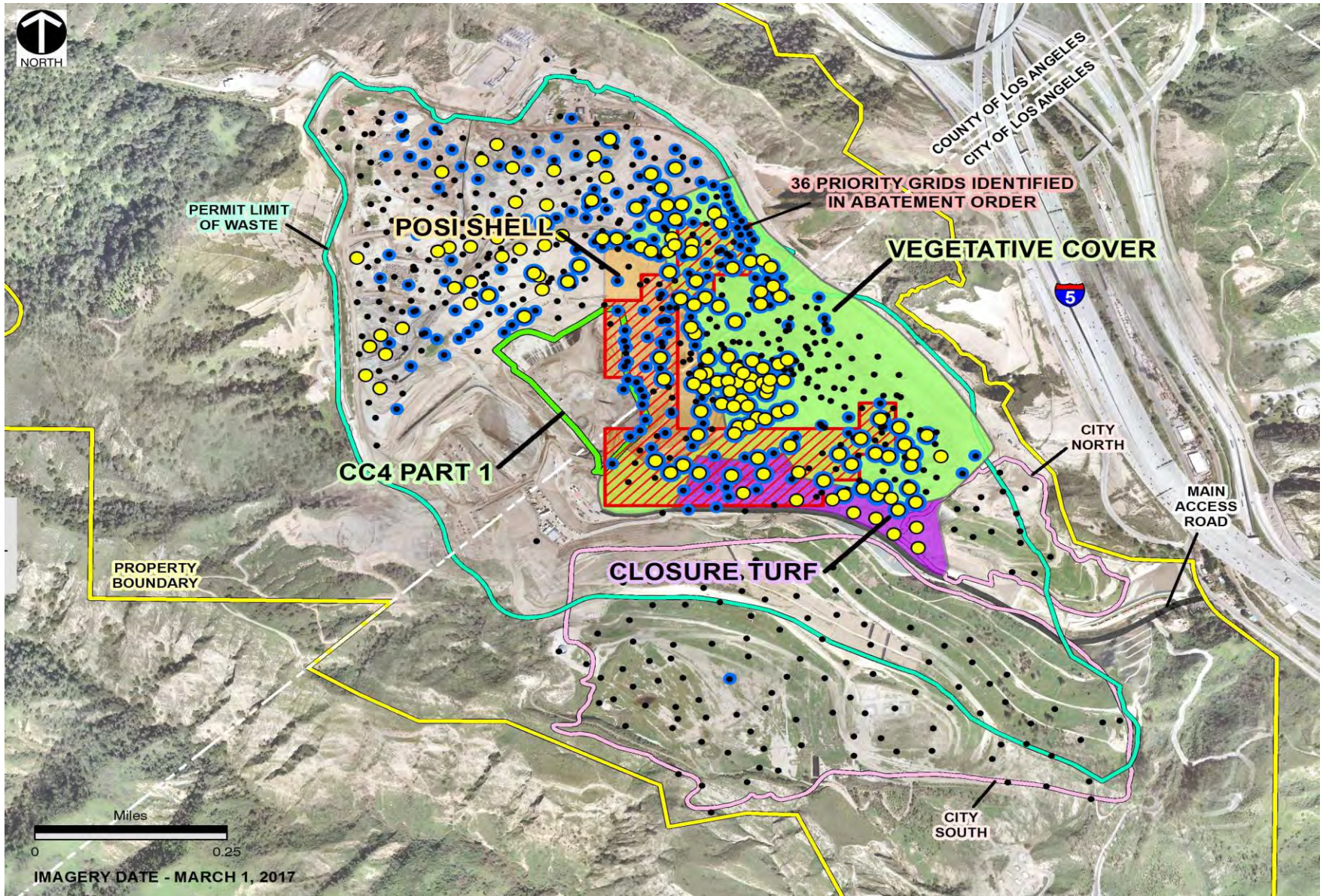
Locations for Enhanced Intermediate Covers



Locations for Enhanced Intermediate Covers



Comprehensive Solutions



When We Are Going to Do It

Action	Target Month of Completion	Current Progress
Add or replace more than 150 gas wells	July	36 gas wells added or replaced
Install pumps in more than 250 gas wells	August	150 pumps installed
Apply 37 acres of intermediate spray-on cover	August	Approximately 4 acres currently applied
Install 21 acres of closure turf	August	Design completed; materials ordered
Prepare soil and seed 57 acres of vegetative cover	December	5-acre test plot underway (intermediate spray-on currently being applied)

Community Outreach

- Weekly e-Blast
 - Provides specific schedule updates and tracking of progress
- Expanded website with information updated weekly
 - Sunshinecanyon.com
- Quarterly Newsletters
- Neighborhood Group Outreach
 - Granada Hills Neighborhood Council
 - Community Advisory Committee

Thank You

SUNSHINE CANYON
Landfill