

## CLEAN CLOSURE OF AREA A

- All wastes were removed from Area A in 1996 and transferred to other landfill cells
- Allows unrestricted public use of 33 acres and reduces landfill maintenance costs
- Excavated clean soil was used for the cover on the other landfill cells



Excavation of wastes from Area A in 1996. The wastes were transported in trucks across Imjin Road and placed in the other areas of the landfill.



CLEAN CLOSURE WAS DEMONSTRATED BY 80 SAMPLES ANALYZED FOR POTENTIAL CONTAMINANTS

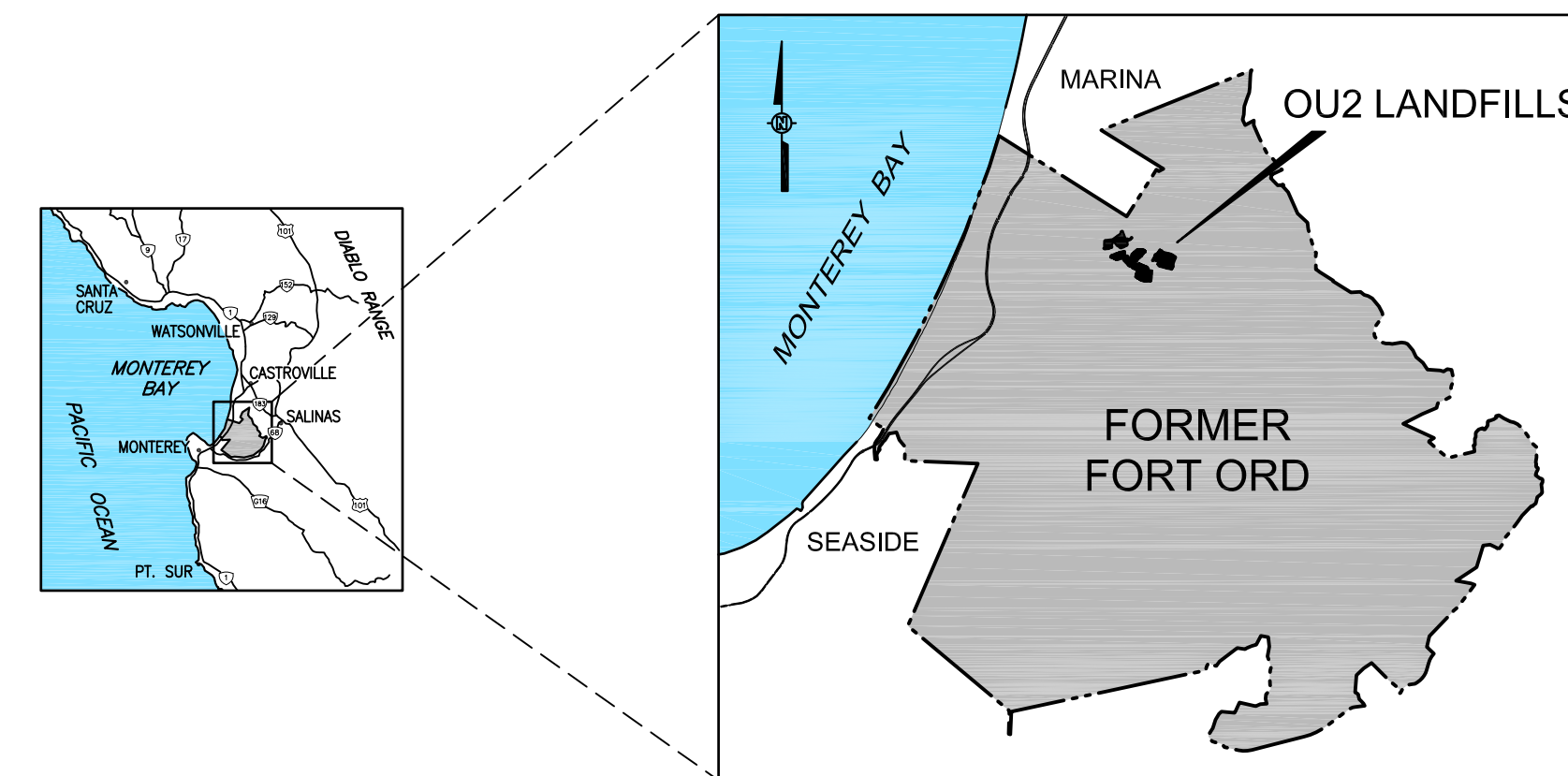


Area A in 2004. All wastes have been removed. The area was transferred to the City of Marina in March 2006.



# OPERABLE UNIT 2 LANDFILLS CLOSURE AND MAINTENANCE

August 2011



## OPERABLE UNIT 2 LANDFILLS

- Used for residential and on-base commercial waste disposal from 1956 to 1987
- Placed on Superfund National Priority List in 1990 after groundwater contamination was found associated with the landfill
- Wastes were removed from Area A in 1996 and transferred to the landfill cells south of Imjin Parkway
- Area A was clean-closed in 2001
- Soils excavated from other Fort Ord remediation sites have been placed in the landfill as foundation for the cover
- The engineered cover was completed over Areas B, C, D, F, and most of E in 1998
- The engineered cover was completed on Area E in 2002
- See Site 39 for other information



AERIAL PHOTO OF OPERABLE UNIT 2 LANDFILLS

## LANDFILL GAS MONITORING AND CONTROL

- Landfill gas is produced in all landfills by decomposition of organic matter
- Landfill gas consists mostly of methane and carbon dioxide with small amounts of other organic gases
- The Army monitors landfill gas in soil around the landfill to ensure that the methane concentration is less than the maximum allowed by State regulations at the property boundary (5% methane)
- The Army has installed a landfill gas extraction and treatment system
- Landfill gas is extracted from Areas D, E, and F and is treated (see photo of treatment system below)



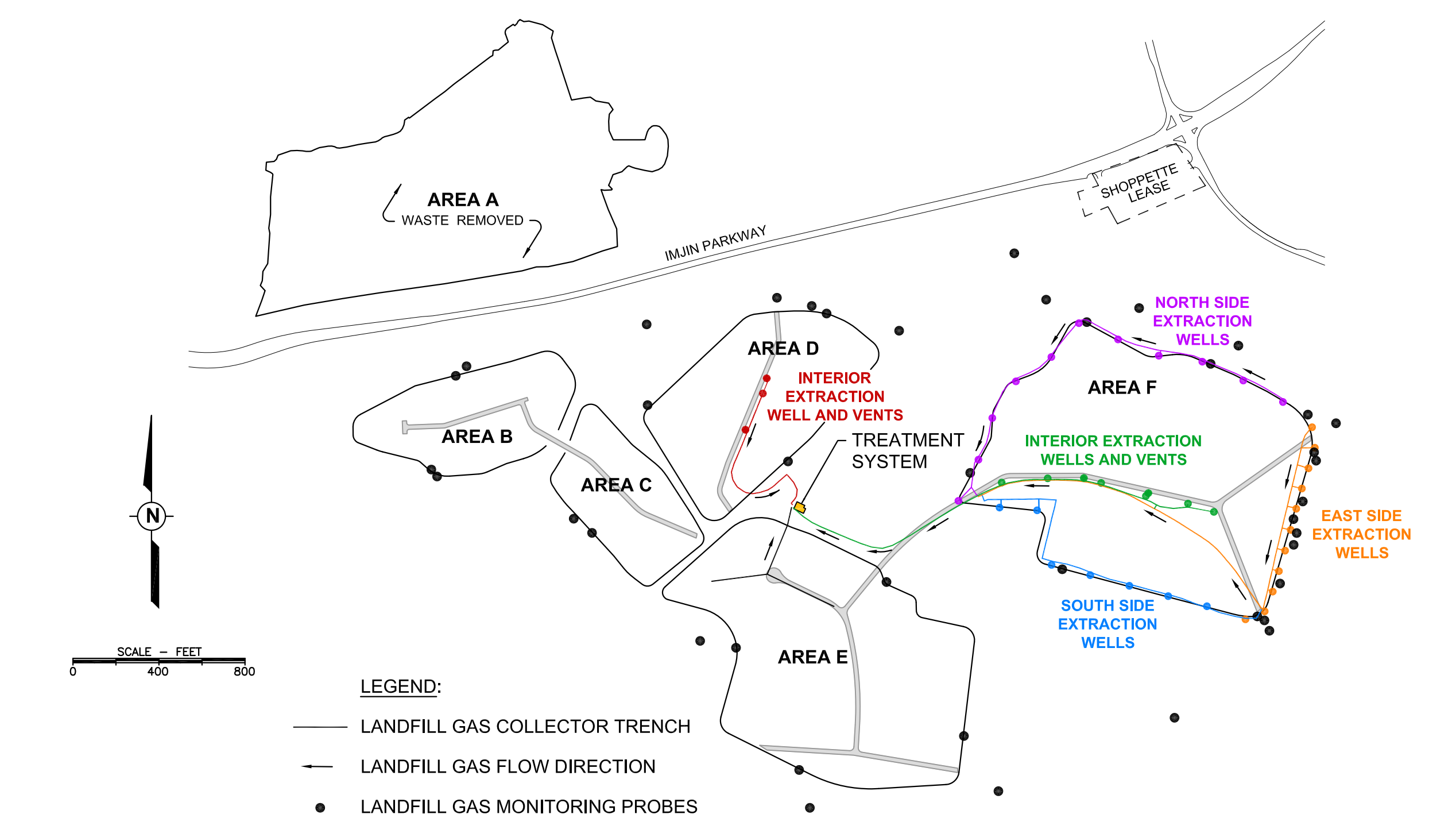
A line of extraction wells at the edge of Area F (to the right in the photograph) extracts landfill gas for treatment. Monitoring probes installed along the fence to the left show that the landfill gas in the soil at the property boundary does not exceed State standards.



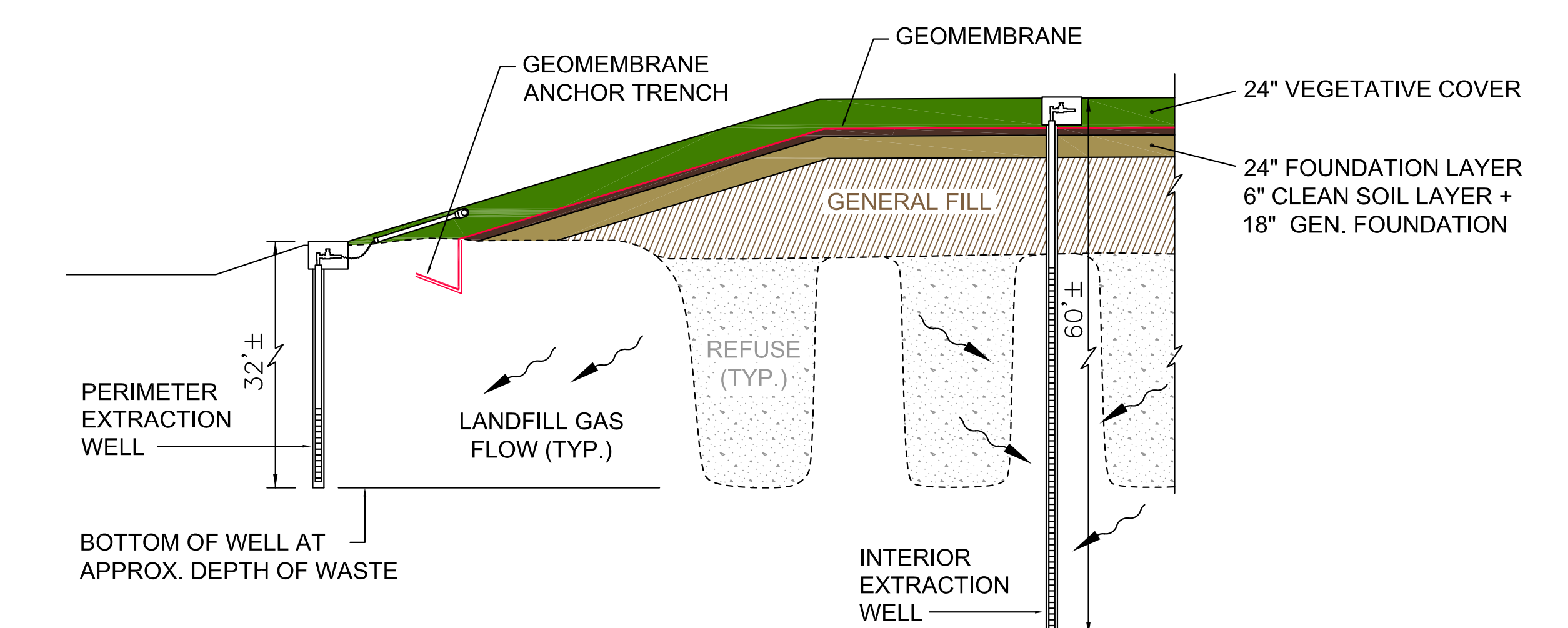
Landfill gas monitoring probes are monitored at least quarterly to ensure compliance with State regulations.



Landfill gas thermal treatment unit installed February 2006.



## LANDFILL GAS MONITORING & EXTRACTION SYSTEM



TYPICAL LANDFILL CROSS SECTION

## ENGINEERED COVER

- The engineered cover placed over the landfill prevents human or animal contact with the wastes and percolation of rainwater
- The cover consists of soil and an impermeable geomembrane



Geomembrane being installed on Area B in 1997. A special machine is used to weld together the adjacent seams to produce an impermeable layer within the cover.



Construction of the engineered cover on Area F in 1998. Clean vegetative cover soil is being spread out over the geomembrane.



The soil on top of the landfill is planted with native species. The landfill provides an open space habitat.