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WETLAND ASSESSMENT FOR OPERABLE UNIT 7 ACCELERATED ACTION

Environmental Restoration • Rocky Flats Environmental Technology Site

November 1995

ADMIN RECORD

BZ-A-000439

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Wetland Assessment for Operable Unit 7
Accelerated Action

1.0 Project Description

The Department of Energy proposes a Fall 1995 construction project at the Rocky Flats Environmental Technology Site, located north of Golden, Colorado, portions of which would take place in wetlands. The project requires construction of a passive seep interception and treatment system to collect and treat water emanating from the east face of the Present Landfill (named Individual Hazardous Substance Site 114) in Operable Unit 7 (see photograph, *Present Landfill and East Landfill Pond*). The objective of this accelerated action is to reduce contaminant loading to the East Landfill Pond by striving to meet chemical-specific Applicable or Relevant and Appropriate Requirement (ARAR) concentration limits for the specific pollutants. Water would be intercepted at the seep (SW097) with a temporary system (see Figure 1), including 3-in. perforated polyvinyl chloride (PVC) collection pipe, drain rock, and a precast manhole base section. A 45 yd^2 area in the vicinity of the seep will be excavated to an approximate depth of 2-5 ft (to the weathered bedrock), and the manhole base section, drain rock, and collection pipe will be emplaced. The collection pipe will be backfilled with drain rock to direct the seep flow to the manhole base section, which in turn acts as a flow and head equalizing basin. From the concrete manhole, a 3-in. solid PVC double-contained pipe, offset at 45 degrees, will direct the intercepted seep to a series of carbon-based reactor tanks housed in a steel tank. The discharge pipe is 2-in. solid PVC and treated water is discharged from the steel tank directly to the pond. The pond will be maintained at an elevation of 5,919 ft or lower to allow for efficient operation of the interception and treatment system. A temporary dike consisting of hay bales, liner material, and rip rap will be placed upstream of the seep to prevent surface-water runoff and sediments from entering the seep interception system (see Figure 2).

The interception and treatment system is scheduled to operate until July 1997, at which time Interim Measure construction will begin.

The East Landfill Pond and some areas along the pond edge exhibit typical wetland characteristics. Part of the seep intercept and treatment system must be located in the wetland area at the upstream end of the pond, specifically, the intercept system, which captures the seep flow. Because of this requirement, Title 10, Part 1022, "Compliance with Floodplain/Wetlands Environmental Review Requirements" has been identified as a potential ARAR. For this project, mitigation of wetland effects would be deferred and addressed in the

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G95\ES\Caption Pgs. OU7 2510 .drw

Present Landfill and East Landfill Pond (June 1991)

Landfill Closure Interim Measure/Interim Response Action Decision Document and Closure Plan.

2.0 Wetlands Effects

Construction of the seep interception and treatment system would permanently remove less than 45 yd^2 of wetland vegetation to allow for excavation and placement of the intercept system. Also, as a result of backhoe access and operational maneuvering, some flattening of wetland vegetation is expected to occur. The seep interception and treatment system may also disrupt the local hydrology by removing water that would otherwise remain in the environment, and that could result in eventual encroachment of upland vegetation.

3.0 Alternatives

The no action alternative is the only other action considered feasible for this project. The no action alternative will result in no adverse impacts to wetland areas because no construction activities will occur. However, because the seep contains a listed waste (FO39) as defined by the Code of Federal Regulations, Title 40, Part 261.31, "Hazardous Waste from Non-Specific Sources," it must be collected and treated.

4.0 Mitigation of Wetland Impacts

This construction project will minimize impact on wetlands by offsetting the treatment portion of the system from the intercept portion by 45 degrees, which will ensure placement of the treatment system away from the wetlands. In addition, existing roads will be used where possible and access to the work site will be limited to authorized personnel only.

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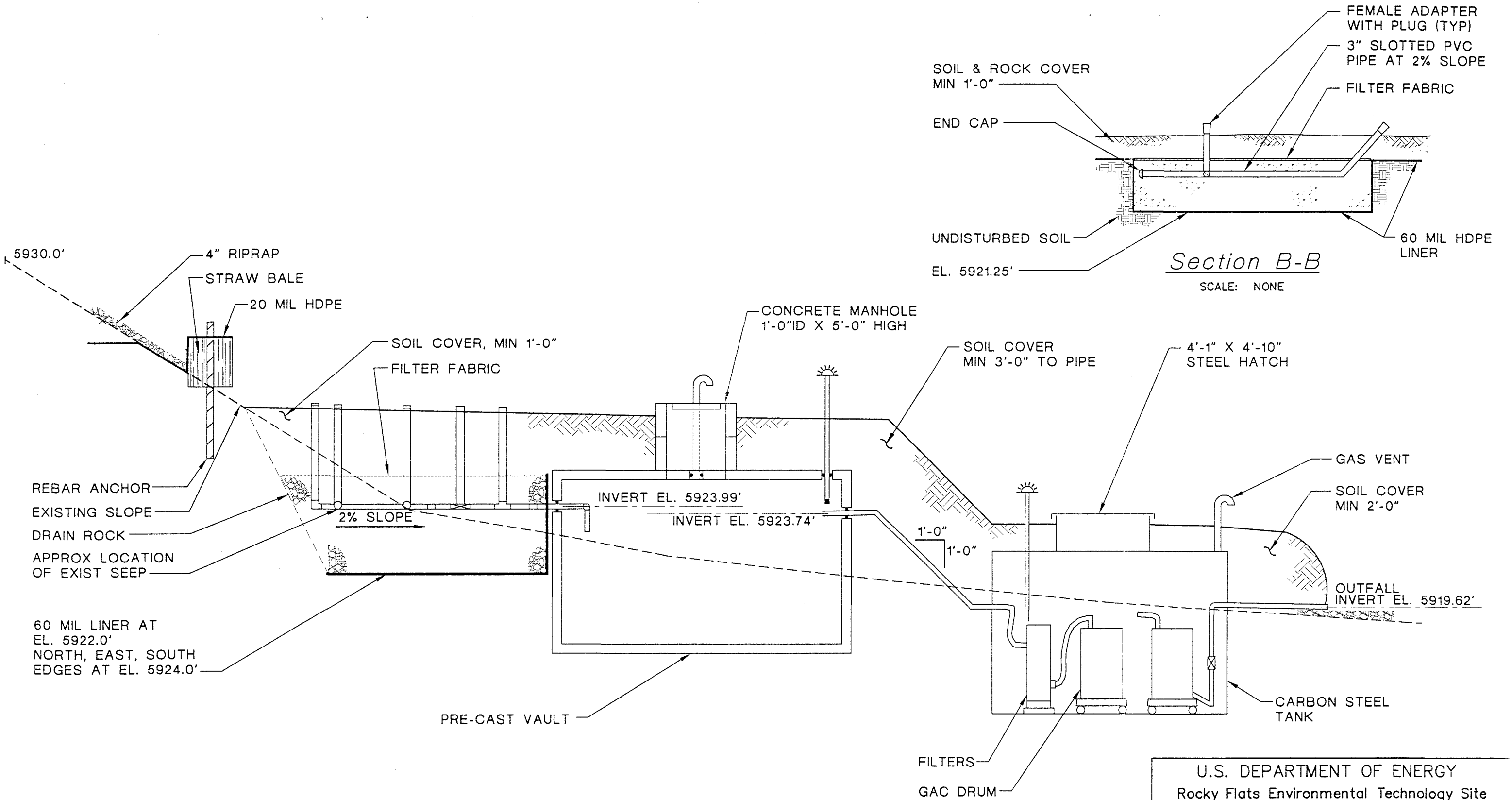
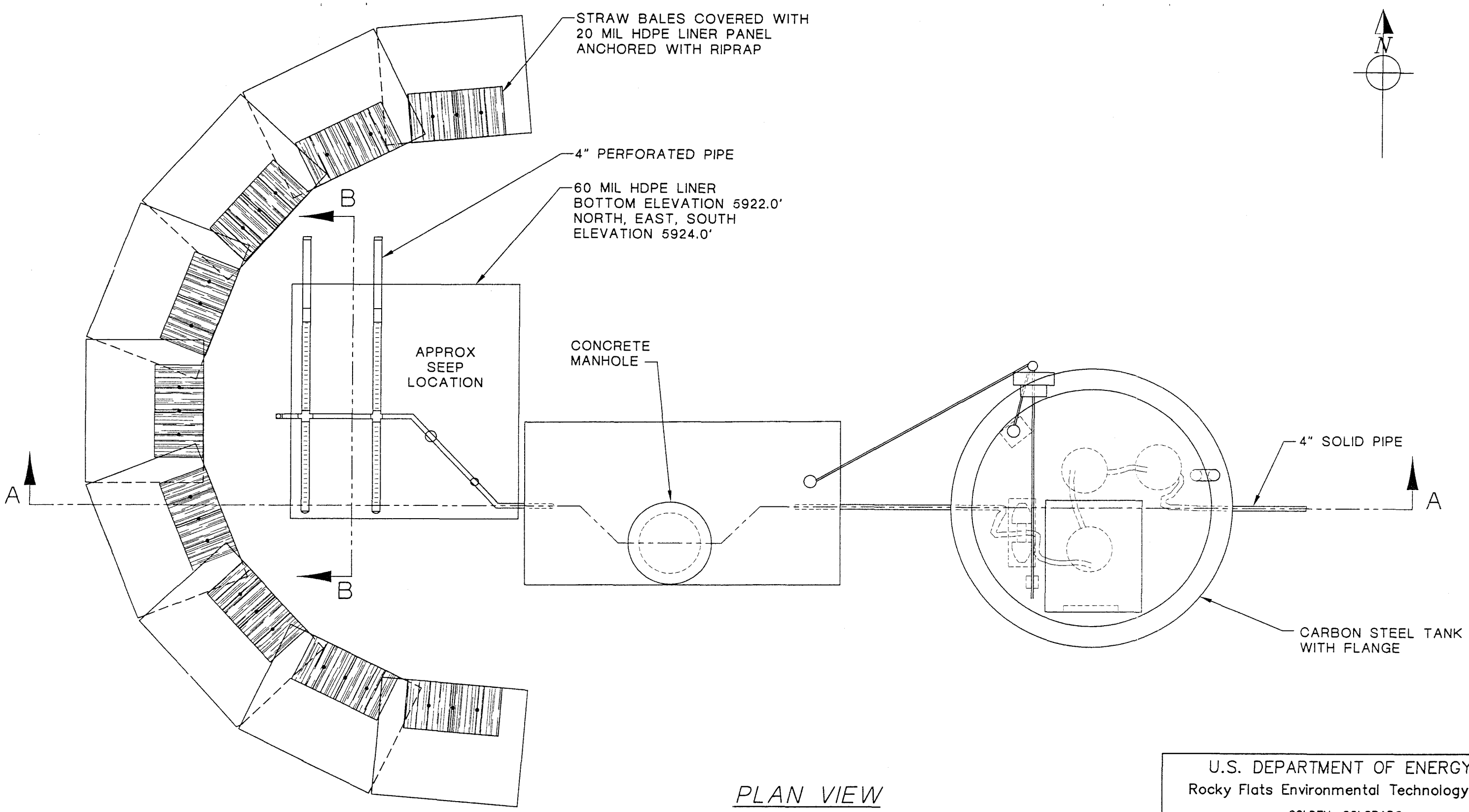


U.S. DEPARTMENT OF ENERGY
Rocky Flats Environmental Technology Site
GOLDEN, COLORADO

Passive Collection and Treatment System
Cross Sections

Wetland Assessment | Operable Unit No. 7

November 1995 | Figure 1



PLAN VIEW

SCALE
0 2.0' 4.0'

U.S. DEPARTMENT OF ENERGY Rocky Flats Environmental Technology Site GOLDEN, COLORADO	
Passive Collection and Treatment System Plan View Wetland Assessment — Operable Unit No. 7	
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