

DUPLICATE

RTR 12-24-01

ROZAK ENGINEERING

Civil, Construction & Environmental Consulting

P.O. Box 350

Kenai, Alaska 99611

(907) 283-5640

Fax (907) 283-0747

DELIVERED TO ADEC PER REQUEST FROM DEAN EICHHOLZ 12-21-01

December 7, 2001

Mr. Paul Horwath, PE, Environmental Engineer
Alaska Dept. of Environmental Conservation
Division of Spill Prevention and Response, STP
43335 Kalifornsky Beach Rd, Suite 11
Soldotna, Alaska 99669

RECEIVED

DEC 24 2001

Department of
Environmental Conservation
KDO

Subject: Kenai Airport Fuel Service, Interim Remedial Action Plan Revision #1
UST Facility ID #2187, Reckey #90230026801

Dear Mr. Horwath:

At the direction of Dan Pitts and Dean Eichholz, the following revision to the interim action plan dated November 10, 2001 is submitted for your review and approval. The revision, shown in plan view on Figure 3 (attached), consists of excavating the area between the existing culverts to groundwater to create an evaporation pond. It is anticipated that the pond will increase the volatilization of gasoline contaminants that are migrating off the subject property. The pond may also make it possible to evaluate the effectiveness of the sparge system by visually examining the distribution of air bubbles generated by the sparge line.

The main component of the original remedial action plan consisted of installing 140 lineal feet of horizontal air sparge line to reduce the off-site migration of contaminants to cleanup levels. The proposed sparge line would be about 20 feet south of the Flying Network apron—about 10 feet up-slope of existing drainage swale. The flow line of the swale aligns with a 30 inch diameter corrugated metal pipe (CMP) culvert on the west and a 24 inch CMP on the east. The layout of the proposed design is shown on Figure 1 (attached). The sparge line would be installed in a trench, about 1 1/2 feet below the ground water table, with drain rock placed above the pipe to the water surface. The trench cross section and construction notes for the original design are attached (Figure 2).

The pond will be about 110-120 feet long, about 5-10' wide at the west and 20-25' wide at the east. The centerline of the pond will be excavated 4-5 feet. The sides around the pond will be sloped no steeper than 3H:1V to minimize erosion and possible undercutting of the nearby pavement. New chain link fence will be added to the existing fence to restrict access to the pond. There will be a 3' wide access gate near monitor well MW-6. The added portion of the fence will be removed and the pond will be filled to the existing grades after the remedial action has been completed and approved by the department.

Construction of the horizontal air sparge trench will be similar to the original design except there will be less backfill over the trench, the drain rock over the sparge line will be closer to the

Implementation Schedule?
Air Blower?

surface, the trench will be closer to the 30" CMP, and the deeper excavation for the pond may allow the sparge line to be installed deeper. Figure 4 is shows a typical cross section at the 30" CMP. The approximate location of the proposed sparge trench is shown

We recommend excavating the pond and installing the trench as soon as weather permits and the water table drops within 0.5 foot of the seasonal low to allow for the deepest possible installation of the sparge line. We propose to monitor the water table monthly and schedule the installation as soon as the water table approaches the desired level. We estimate this will occur before April 15, 2002.

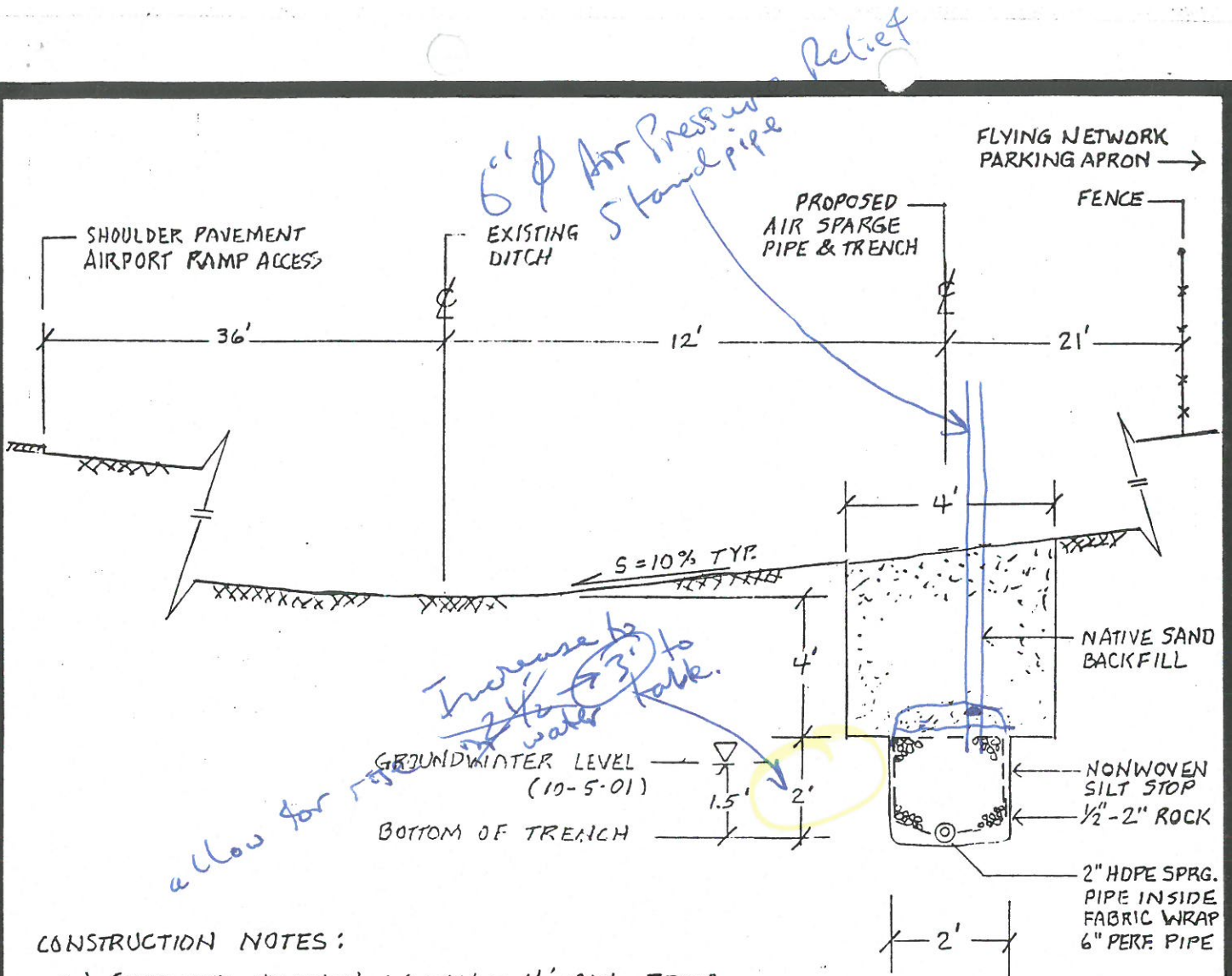
Prepared by,



Ronald T. Rozak, PE
Consultant

Attachments: Figure 1. Estimated Benzene Contours Reported April 2001
Figure 2. Section – Proposed Air Sparging Trench
Figure 3. Plan—Air Sparge Trench
Figure 4 Section at Outlet of 30" CMP

cc: Dan Pitts, Kenai Airport Fuel Service
Jack LaShot, Kenai City Engineer



CONSTRUCTION NOTES:

- 1.) EXCAVATE TRENCH WIDTH = 4' MIN. FROM SURFACE TO 0.5' MIN. ABOVE GROUNDWATER (GW) AND 2' MIN. WIDTH FOR 1.5' MIN. DEPTH BELOW GW.
- 2.) WRAP 12" WIDE SILT STOP AROUND 2" SCH. 40 SPARGE PIPE, CENTERED ON HOLES.
- 3.) INSTALL SPARGE PIPE LEVEL $\pm 0.1'$; BOTTOM OF PIPE 1.5' MIN. BELOW GW AT TIME OF DIGGING.
- 4.) PLACE NON-WOVEN SILT STOP FABRIC, AMOCO #4545 OR EQUAL, IN TRENCH OVER SPARGE / PERF. PIPE, PLACE 1/2" - 2" DRAIN ROCK ON FABRIC TO 0.5' ABOVE GW. FOLD FABRIC OVER TOP OF ROCK WITH 1' LAP (MIN.).
- 5.) BACKFILL REST OF TRENCH WITH EXCAVATED SOIL, GRADE SURFACE TO ENSURE NO DEPRESSION AT TRENCH.
- 6.) INSTALL HDPE AIR LINE AT GW DEPTH FROM EAST END OF SPARGE PIPE TO SPARGE BLOWER LOCATION NEAR SE CORNER PAVED APRON AT FLYING NETWORK. INSULATE AIRLINE WITH 2" FOAM WRAP, INCLUDING RISER TO SURFACE AT COMPRESSOR LOCATION.

SECTION - PROPOSED AIR SPARGING TRENCH

Kenai Airport Fuel Service, Interim Corrective Action

PLAN - AIR SPARGE TRENCH

KENAI AIRPORT FUEL SERVICE
INTERIM CORRECTIVE ACTION

R.T. ROZAK

12-6-01

ROZAK ENGINEERING

1" = 40'

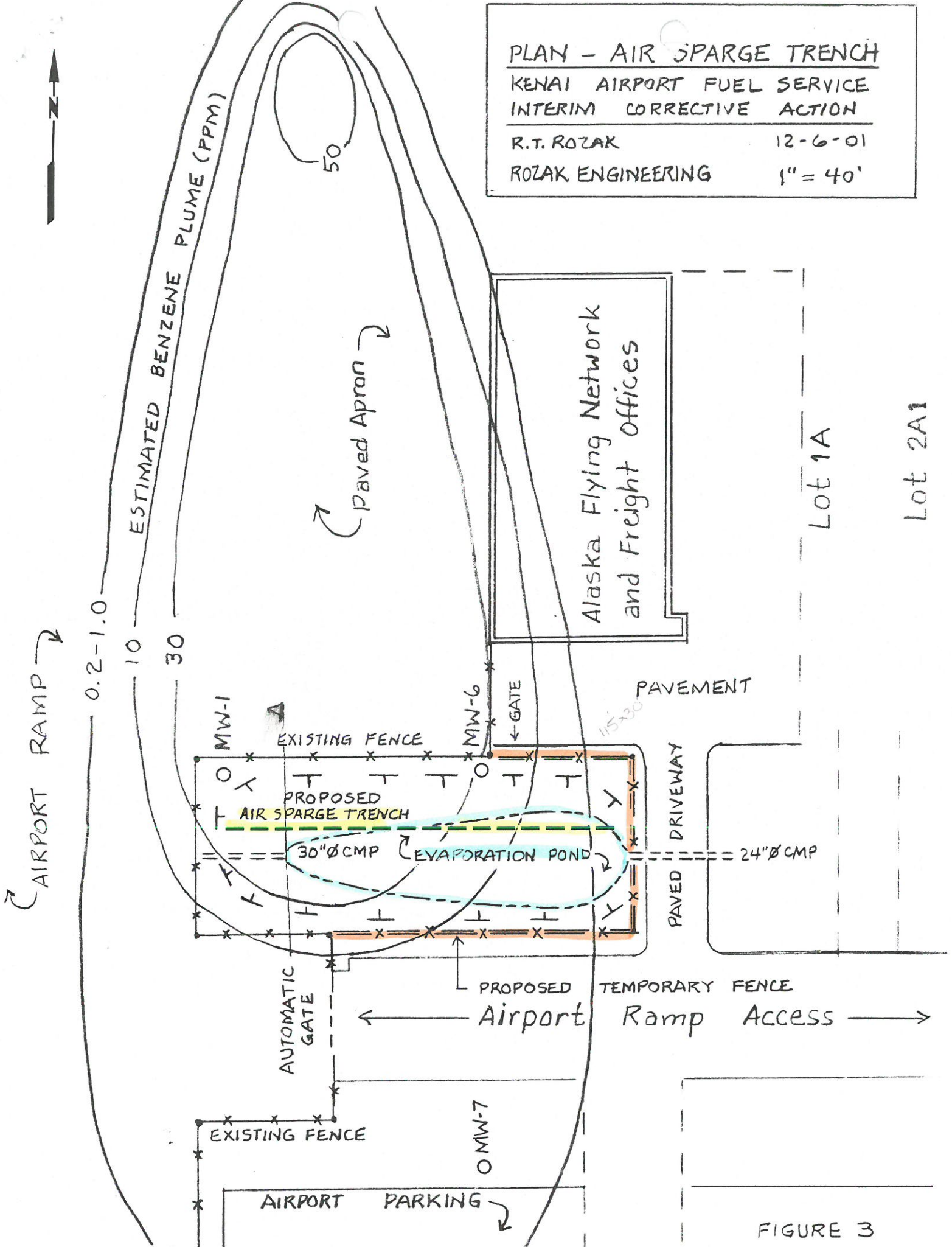


FIGURE 3

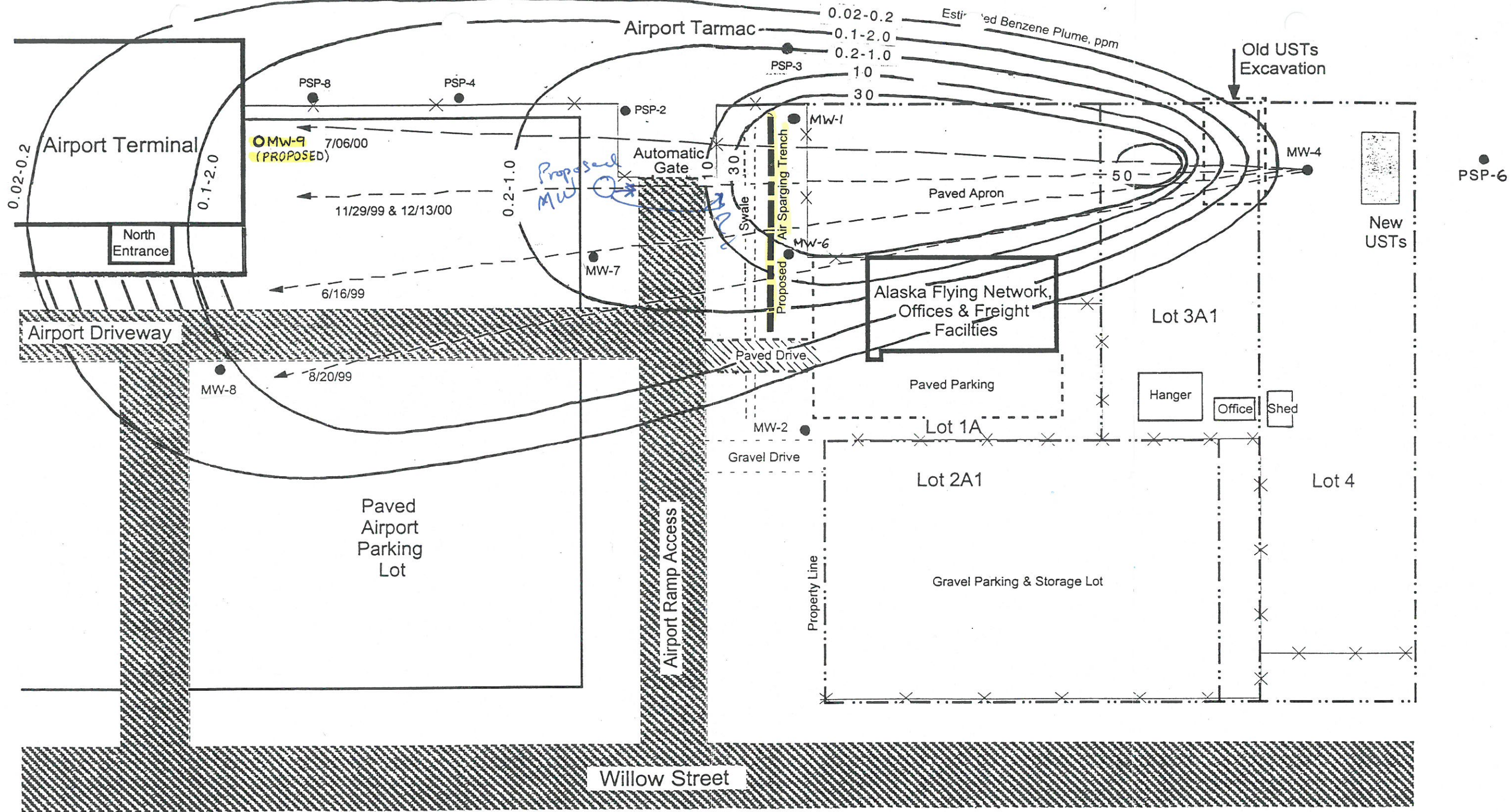


Figure 1. Estimated Benzene Contours Reported April 2001

Legend

Kenai Airport Fuel Service ADEC Reckey #90230026801
 Rozak Engineering Rev. No. 2 11-02-01
 Added Proposed MW-9 and Proposed Air Sparging Trench

- MW
- - - - - Property Line
- x-x- Chain Link Fence
- ← Groundwater Flow
- ▨ Asphalt Pavement

