FINAL

Community Environmental Response Facilitation Act (CERFA) Report Pueblo Depot Activity Colorado

Prepared for

U.S. ARMY ENVIRONMENTAL CENTER
ABERDEEN PROVING GROUND, MARYLAND 21010

Prepared by

ENVIRONMENTAL RESOURCES MANAGEMENT, INC.
855 Springdale Drive
Exton, PA 19341

11 APRIL 1994

AEC Form 45, 1 Feb 93 replaces THAMA Form 45 which is obsolete.

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REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	April 1994	Final

4. TITLE AND SUBTITLE
Community Environmental Response Facilitation Act (CERFA) Report, Pueblo Depot Activity, Colorado

5. FUNDING NUMBERS
Contract No. DAAA15-91-D-0011; Delivery Order DA06

6. AUTHOR(S)
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7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
ERM, Inc.
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8. PERFORMING ORGANIZATION REPORT NUMBER
N/A

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
U.S. Army Environmental Center
Aberdeen Proving Ground, MD 21010

10. SPONSORING/MONITORING AGENCY REPORT NUMBER
SFIM-AEC-EC-CR-94052

11. SUPPLEMENTARY NOTES
Report is contained in one volume

12a. DISTRIBUTION/AVAILABILITY STATEMENT
Distribution Unlimited

12b. DISTRIBUTION CODE

13. ABSTRACT (Maximum 200 words)

This report presents the results of the Community Environmental Response Facilitation Act (CERFA) investigation conducted by Environmental Resources Management (ERM) at Pueblo Depot Activity (PUDA), a U.S. Government property selected for closure by the Base Realignment and Closure (BRAC) Commission under Public Laws 100-526 and 101-510. Under CERFA (Public Law 102-426), Federal agencies are required to identify expeditiously real property that can be immediately reused and redeveloped. Satisfying this objective requires the identification of real property where no hazardous substances or petroleum products, regulated by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), were stored for one year or more, known to have been released, or disposed.

PUDA is a 23,135-acre site located in Pueblo County, Colorado. PUDA currently serves as a supply depot activity. Past operations of environmental significance include equipment maintenance, detonation and deactivation of munitions, missile facilities, and storage of chemical munitions.

ERM reviewed existing investigation documents; U.S. Environmental Protection Agency (EPA), State, and county regulatory records; environmental data bases; and title documents pertaining to PUDA during this investigation. In addition, ERM conducted interviews and visual inspections of PUDA as well as visual inspections of and data base searches for the surrounding properties. A meeting was held on 7 April 1994 to resolve comments resulting from regulatory agency review of the draft report. The meeting was attended by representatives of ERM, EPA, the Colorado Department of Health (CDH), and the Army.

Information in this CERFA report was current as of April 1994. This information was used to divide the installation into four categories of parcels: CERFA Parcels, CERFA Qualified Parcels, CERFA Disqualified Parcels, and CERFA Excluded Parcels, as defined by the Army.

The total BRAC property acreage at PUDA is 23,135 acres. Areas of the facility that have no history of CERCLA-regulated hazardous substance or petroleum product release, disposal, or storage; and no history of other environmental hazards (such as asbestos, radon gas, lead-based paint, unexploded ordnance, radionuclides, or not in-use equipment containing polychlorinated biphenyls), are categorized as CERFA Parcels. Eighteen (18) CERFA Parcels, comprising 15,829.3 acres, were identified. Most of the property at the installation's boundary is contained in CERFA Parcels. CERFA Parcels are found throughout the installation.

14. SUBJECT TERMS	15. NUMBER OF PAGES
Pueblo Depot Activity, CERFA Base Closure, BRAC	81
	16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	SAR

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ACRONYMS AND ABBREVIATIONS

ACM	Asbestos Containing Material
AEHA	Army Environmental Hygiene Agency
AREE	Area Requiring Environmental Evaluation
AST	Aboveground Storage Tank
AWS	Ammunition Warehouse Storage
BRAC	Base Realignment and Closure
CDH	Colorado Department of Health
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
Cl-36	Chlorine-36
Co-60	Cobalt-60
Cs-137	Cesium-137
DARA	Department of the Army Radioactive Material Authorization
DOT	Department of Transportation
DRMO	Defense Reutilization and Marketing Office
DU	Depleted Uranium
EPA	Environmental Protection Agency
ERM	Environmental Resources Management
ERNS	Emergency Response Notification System
FS	Feasibility Study

FY	Fiscal Year
GC	Gas Chromatograph
H-3	Tritium
IRP	Installation Restoration Program
LBP	Lead-based Paint
mCi	Millicuries
NEPA	National Environmental Policy Act
Ni-63	Nickel-63
NPDES	National Pollutant Discharge Elimination System
NRC	Nuclear Regulatory Commission
^{o}F	Degrees Fahrenheit
PA	Preliminary Assessment
PCB	Polychlorinated Biphenyl
PCE	Perchloroethene
pCi/l	Picocuries Per Liter
POL	Petroleum, Oil, and Lubricant
ppb	Parts Per Billion
ppm	Parts Per Million
PUDA	Pueblo Depot Activity
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RFNA	Red Fuming Nitric Acid

RI	Remedial Investigation
SI	Site Inspection
SWMU	Solid Waste Management Unit
TCA	1,1,1-Trichloroethane
TCE	Trichloroethene
TTC	Transportation Test Control
UDMH	Unsymmetrical Dimethyl Hydrazine
USAEC	U.S. Army Environmental Center
USATHAMA	U.S. Army Toxic and Hazardous Materials Agency
USDA	U.S. Department of Agriculture
UST	Underground Storage Tank
UXO	Unexploded Ordnance

EXECUTIVE SUMMARY

This report presents the results of the Community Environmental Response Facilitation Act (CERFA) investigation conducted by Environmental Resources Management (ERM) at Pueblo Depot Activity (PUDA), a U.S. Government property selected for closure by the Base Realignment and Closure (BRAC) Commission under Public Laws 100-526 and 101-510. Under CERFA (Public Law 102-426), Federal agencies are required to identify expeditiously real property that can be immediately reused and redeveloped. Satisfying this objective requires the identification of real property where no hazardous substances or petroleum products, regulated by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), were stored for one year or more, known to have been released, or disposed.

PUDA is a 23,135-acre site located in Pueblo County, Colorado. PUDA currently serves as a supply depot activity. Past operations of environmental significance include equipment maintenance, detonation and deactivation of munitions, missile facilities, and storage of chemical munitions.

ERM reviewed existing investigation documents; U.S. Environmental Protection Agency (EPA), State, and county regulatory records; environmental data bases; and title documents pertaining to PUDA during this investigation. In addition, ERM conducted interviews and visual inspections of PUDA as well as visual inspections of and data base searches for the surrounding properties. A meeting was held on 7 April 1994 to resolve comments resulting from regulatory agency review of the draft report. The meeting was attended by representatives of ERM, EPA, the Colorado Department of Health (CDH), and the Army.

Information in this CERFA report was current as of April 1994. This information was used to divide the installation into four categories of parcels: CERFA Parcels, CERFA Qualified Parcels, CERFA Disqualified Parcels, and CERFA Excluded Parcels, as defined by the Army.

The total BRAC property acreage at PUDA is 23,135 acres. Areas of the facility that have no history of CERCLA-regulated hazardous substance or petroleum product release, disposal, or storage; and no history of other environmental hazards (such as asbestos, radon gas, lead-based paint, unexploded ordnance, radionuclides, or not in-use equipment containing polychlorinated biphenyls), are categorized as CERFA Parcels. Eighteen (18) CERFA Parcels, comprising 15,829.3 acres, were identified. Most of the property at the installation's boundary is contained in CERFA Parcels. CERFA Parcels are found throughout the installation.

Areas of the facility that had no evidence of CERCLA-regulated hazardous substance or petroleum product release, disposal, or storage, but contained other environmental hazards (such as asbestos, radon gas, lead-based paint, unexploded ordnance, radionuclides, or not in-use equipment containing polychlorinated biphenyls) were categorized as CERFA Qualified Parcels. Forty-five (45) CERFA Qualified Parcels, comprising 3,302 acres, were identified.

Areas of the facility, for which there is a history of release, disposal, or storage for one year or more of CERCLA-regulated hazardous substances or petroleum products or had a release of the other environmental hazards identified above were categorized as CERFA Disqualified Parcels. Fifty-five (55) CERFA Disqualified Parcels, comprising 3,529.7 acres, were identified.

Areas on the facility that will be retained by the Federal Government or that have already been transferred by deed are categorized as CERFA-Excluded Parcels. Four (4) CERFA Excluded Parcels, comprising 744 acres, were identified.

The primary objective of CERFA is satisfied by the identification of CERFA Parcels and CERFA Qualified Parcels. As a result, concurrence has been sought from the regulatory agencies on these two categories of parcels. This CERFA Report has been reviewed by the U.S. Army Environmental Center (USAEC), EPA Region VIII, and CDH. Comments received from regulatory agencies and USAEC's response to these comments are located in the Appendix.

This report contains maps that summarize the categorization of PUDA on the basis of the above definitions. This Executive Summary should be read only in conjunction with the complete CERFA Report for this installation. The CERFA Report provides the relevant environmental history to substantiate the parcel categorization. This report does not address other property transfer requirements that may be applicable under the National Environmental Policy Act (NEPA), nor does it address natural resource considerations such as the threat to plant or animal life.

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

Public Laws 100-526 and 101-510 designated more than 100 Department of Army facilities for closure and realignment. As a result, it became necessary to expedite the environmental investigation and cleanup process, as necessary, prior to the release and reuse of Army Base Realignment and Closure (BRAC) property. The BRAC environmental restoration program was established in 1989 with the first round (BRAC 88) of base closures and continued with subsequent rounds (BRAC 91, BRAC 93, etc.). The BRAC program is patterned after the Army's Installation Restoration Program (IRP), except that it has been expanded to include such categories of contamination as asbestos, radon, polychlorinated biphenyls (PCBs), and others that are not normally addressed under the Army IRP.

The BRAC environmental restoration program begins by conducting enhanced Preliminary Assessments (PAs). The term "enhanced" is used to distinguish these assessments from previous IRP preliminary assessments since the BRAC PAs are conducted from a property transfer perspective and evaluate areas which are not included in the IRP (e.g., asbestos, radon, PCBs). The enhanced PAs include reviews of existing installation documents, regulatory records, and aerial photographs; a site visit and visual inspection; and employee interviews. Enhanced PAs were conducted for BRAC 88 and BRAC 91 installations, and are currently underway at BRAC 93 installations. An Enhanced PA was prepared for Pueblo Depot Activity in October 1989 by Ebasco Environmental under the direction of USAEC (formerly the U.S. Army Toxic and Hazardous Materials Agency [USATHAMA]).

In October 1992, Public Law 102-426, the Community Environmental Response Facilitation Act (CERFA) amended Section 120 (h) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and established new requirements with respect to contamination assessment, cleanup, and regulatory agency notification/concurrence for federal facility closures. CERFA requires the federal government, before termination of federal activities on real property owned, to identify property where no hazardous substances were stored, released, or disposed of. Also, the designation must be concurred with by the appropriate regulatory agency (U.S. Environmental Protection Agency for National Priority List (NPL) bases and state for non-NPL bases). These requirements retroactively affect the Army BRAC 88 and BRAC 91 environmental restoration activities, and are being

implemented at BRAC 93 sites concurrently with their enhanced PAs. The primary CERFA objective is for federal agencies to expeditiously identify real property offering the greatest opportunity for immediate reuse and redevelopment. Although CERFA does not mandate the Army transfer real property so identified, the first step in satisfying the objective is the requirement to identify real property where no CERCLA-regulated hazardous substances or petroleum products were stored, released, or disposed.

Environmental Resources Management, Inc. (ERM) was awarded the task to identify real property where no CERCLA-regulated hazardous substances or petroleum products were stored, released, or disposed at twelve BRAC 88 sites. Under this task, an Execution Plan was developed to describe the process in satisfying the CERFA task objective. The purpose of this report is to present the findings for Pueblo Depot Activity (PUDA), Colorado.

1.2 *DEFINITION OF TERMS*

The following definitions are used to categorize and label parcels identified on the installation:

- CERFA Parcel - A portion of the installation real property for which investigation reveals no evidence of storage for one year or more, release, or disposal of CERCLA hazardous substances, petroleum, or petroleum derivatives and no evidence of being threatened by migration of such substances. CERFA Parcels include areas where PCB containing equipment is in operation, but there is no evidence of release. CERFA Parcels also include any portion of the installation which once contained related environmental, hazard, or safety issues including unexploded ordnance (UXO) located on firing ranges or impact areas, radon, stored (not in-use) PCB containing equipment, asbestos contained within building materials, radionuclides contained within products being used for their intended purposes, and lead-based paint applied to building material surfaces, but which have since been fully remediated or removed.
- CERFA Qualified Parcel - A portion of the installation real property for which investigation reveals no evidence of storage for one year or more, release, or disposal of CERCLA hazardous substances, petroleum, or petroleum derivatives and no evidence of being threatened by migration of such substances. Parcel does, however, contain related environmental, hazard, or safety issues including unexploded ordnance (UXO) located on firing ranges or impact areas, radon, radionuclides contained within products being used for their intended purposes, asbestos contained within building materials,

lead-based paint applied to building material surfaces, or stored (not in use) PCB-containing equipment.

- CERFA Disqualified Parcel - A portion of the installation real property for which investigation reveals evidence of a release, disposal, or storage for more than one year of a CERCLA hazardous substance, petroleum, or petroleum derivative; or a portion of the installation threatened by such a release or disposal. CERFA Disqualified Parcels also include any portion of the installation where PCB, asbestos containing material, lead-based paint residue, radionuclides, or any ordnance has been disposed of, and any locations where chemical ordnance has been stored. Additionally, CERFA Disqualified Parcels include any areas in which CERCLA hazardous substances or petroleum products have been released or disposed of and subsequently fully remediated.
- CERFA Excluded Parcel - A portion of the installation real property retained by the Department of Defense, and therefore not explicitly investigated for CERFA. CERFA Excluded Parcels also include any portions of the installation which have already been transferred by deed to a party outside the federal government, or by transfer assembly to another federal agency.

The following labels are used in conjunction with the identified parcels. Each parcel is given a unique number to which the appropriate labels are attached.

- P = CERFA Parcel
- Q = CERFA Qualified Parcel
- D = CERFA Disqualified Parcel
- E = CERFA Excluded Parcel

EXAMPLE: 4P indicates that the fourth parcel is in the CERFA Parcel category.

The presence of related environmental, hazard, and safety issues, responsible for placing a parcel in the CERFA Qualified Parcel category, is indicated by the following labels:

- A = Asbestos
- L = Lead-Based Paint
- P = PCB
- R = Radon
- X = Unexploded Ordnance (UXO)

- RD = Radionuclides

EXAMPLE: 5Q L indicated that the fifth parcel is in the CERFA Qualified Parcel category because of the presence of lead-based paint.

The following designations are used to indicate the type of contamination or storage present in a parcel. Conditions responsible for placing a parcel in the CERFA Disqualified category are indicated by the following:

- PR = Petroleum Release
- PS = Petroleum Storage
- HR = Hazardous Release
- HS = Hazardous Storage

EXAMPLE: 12D-HR indicates that the twelfth parcel is in the CERFA Disqualified category because of evidence of hazardous release.

For all parcels, (P) [i.e., P with parentheses around it] is used to indicate that the presence of the contamination is possible, but that data is unavailable for verification.

EXAMPLE: 9Q-A(P) indicates that the ninth parcel is in the CERFA Qualified Parcel category because of the possible presence (unverified) of ACM.

OTHER EXAMPLES:

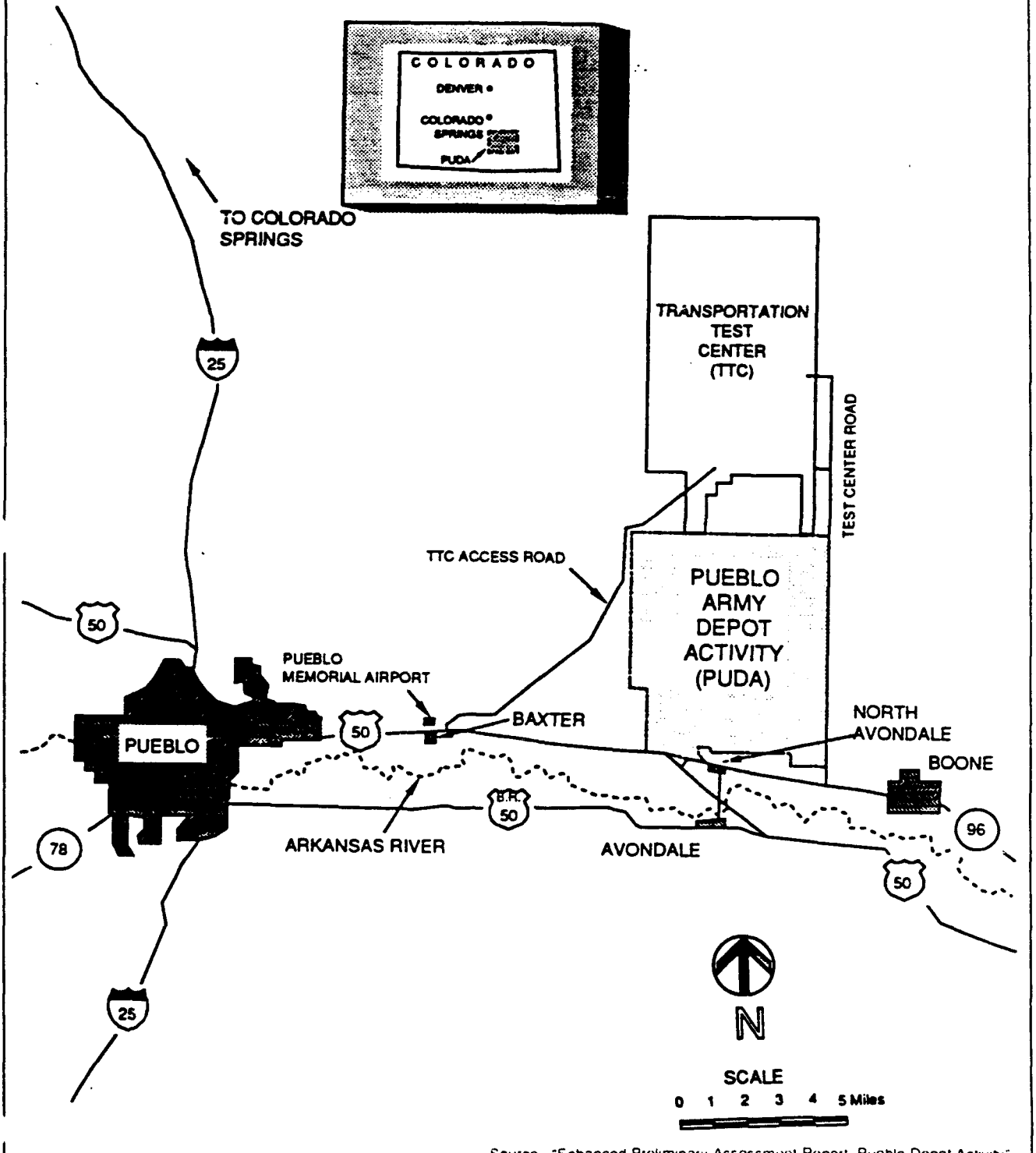
Parcel label 15D-HR/PS/A(P) indicates that the 15th parcel is in the CERFA Disqualified category based on evidence of a hazardous substance release and petroleum storage. It also contains possible ACM.

Parcel label 8Q-X/R indicates that the eighth parcel is in the CERFA Qualified Parcel category because of the presence of unexploded ordnance and radon.

1.3 *GEOGRAPHICAL/ENVIRONMENTAL SETTING*

The Pueblo Depot Activity (PUDA) comprises 23,135 acres in Pueblo County in southeastern Colorado, approximately 7 miles east of the city of Pueblo and north of the Arkansas River (Figure 1.3-1). The facility is owned by the U.S. Army and operates under the authority of Tooele Army Depot located near Salt Lake City, Utah. Approximately 285 personnel are currently employed at PUDA.

Figure 1.3-1
Location Map
Pueblo Depot Activity
Pueblo, Colorado



Source "Enhanced Preliminary Assessment Report Pueblo Depot Activity" Ebasco Environmental March 1990

PUDA is located in the western portion of the Colorado Piedmont section of the Great Plains physiographic province. The depot is situated on a rolling upland terrace that is an erosional remnant of a much larger terrace. The terrace surface slopes southward at approximately 25 feet per mile, with elevations ranging from about 4,650 to 4,800 feet above sea level. Erosion of the terrace by tributaries to the Arkansas River has created local relief of about 100 feet.

The climate is semi-arid, typified by low humidity (41 percent average), abundant sunshine (74 percent average), low precipitation (12 inches per year), and large diurnal temperature fluctuations. The average annual temperature is about 52 degrees Fahrenheit (^{O}F), with average daily maximum and minimum temperatures of about 68 ^{O}F and 38 ^{O}F, respectively. Precipitation follows two seasonal patterns. From October to May, precipitation generally occurs in the form of snow. Most of the area's moisture occurs from June to September when summer thunderstorms provide more intense precipitation. Wind direction and speed vary seasonably and diurnally. Wind speeds average approximately seven miles per hour in the fall and early winter, and eleven miles per hour in the spring. Strong winds usually blow from the north and west and are most common in late winter and early spring. Diurnal variations in wind direction occur throughout the year with prevailing up-valley winds from the east/southeast during the day and down-valley winds from the west at night.

The terrace upon which the facility is located is drained in its western portion by Chico Creek, in the central portion by Boone Creek, and in the east by Haynes Creek. These three drainages tend to flow only after periods of rainfall or snowmelt. An unnamed, north-south drainage is present in the southern portion of the facility.

Two manmade surface water bodies and several springs occur on site. The surface water bodies (Linda Ann Reservoir and a small spring fed pond near the Ammunition Workshop Area) are located on bedrock and are recharged by spring water. Springs occur along the western, southern, and eastern edges of the terrace as a result of aquifer discharge at the alluvium-bedrock contact. Surface water not lost to evapotranspiration or infiltration ultimately drains to the Arkansas River.

Ground water is found in alluvial deposits underneath the site. The alluvial sediments comprising the uppermost aquifer are as much as 77 feet thick and consist of fine to coarse sand, very fine gravel, silt, clay, and some fine to coarse gravel and cobbles. The sediments are poorly sorted and generally become coarser and cleaner with increasing depth. Ground

water is generally under water-table conditions. The alluvial aquifer is thickest overlying bedrock troughs and thinnest along terrace edges where the alluvium has been removed by erosion. The aquifer overlies the Pierre Shale (a confining layer) and other low permeability strata of the upper Cretaceous. Together, these confining layers are more than 2,000 feet thick. Below these confining layers is the Dakota Sandstone aquifer.

Regional ground water flow in the alluvial aquifer is to the south and southeast. Depth to ground water ranges from zero to approximately 70 feet. PUDA's primary water supply is obtained from nine wells completed in the alluvial aquifer in the south central portion and four wells in the north central portion of the facility. Recharge to the aquifer is generally from the north/northwest as underflow within the boundaries of the site. Aquifer tests indicate that the hydraulic conductivity ranges from 47 to 80 feet per day and permeability ranges from 19 to 33 square micrometers.

Water quality in the alluvial aquifer has progressively deteriorated because of historical excessive pumpage of PUDA water supply wells. Hardness has approximately doubled and dissolved solids content has increased approximately 35% over a 20-year period.

The Dakota Sandstone is the first significant aquifer below the alluvial aquifer. It is separated from the alluvial deposits by the Pierre Shale (hydraulic conductivity = 10^{-8} to 10^{-11} feet/day) and a sequence of low permeability shale and limestone deposits ranging from 2,000 to 2,500 feet thick. Water quality of this aquifer is reported to be poor, having high concentrations of dissolved solids and naturally-occurring radioactive particles.

The land surrounding PUDA is primarily undeveloped grazing and range lands and scattered ranches. This area has been zoned for grazing and other agricultural uses with minimum lot sizes of 40 acres. The nearest ranch is located approximately 0.75 mile north of the facility boundary. A small portion of the northern boundary of PUDA is shared by the Transportation Test Center (TTC). TTC is a facility previously owned and operated by the U.S. Department of Transportation (DOT). Although TTC is still owned by the Federal Government, it is currently operated by the Association of American Railroads under an agreement with DOT. To the south, along the Arkansas River, some light commercial and residential zoning exists near the towns of Boone, North Avondale, and Avondale.

Access to PUDA is provided by U.S. Highway 50, a four lane expressway that intersects Interstate 25 in Pueblo to the west and is connected to PUDA to the east via an interchange at the installation's main gate. Along

the western and northern borders of PUDA is the TTC access road. Several small dirt roads are also present around the periphery of the installation. Within the facility a system of approximately 170 miles of interior roads is maintained.

PUDA is located in Pueblo County. The county had an estimated population of 126,070 residents in 1992. The nearby city of Pueblo had an estimated population of 101,038 that same year. The remainder of the population is dispersed throughout the county in small communities, or on farms or ranches. The communities of Boone, North Avondale, and Avondale are located south of PUDA.

2.0 SCOPE OF INVESTIGATION

The scope of the CERFA investigation includes:

- Review of previous environmental investigations, assessments, reports, etc.
- Review of applicable government regulatory records: federal, state, and local (where applicable and available).
- Interviews with representatives from the installation (or command responsible for the installation), other federal agencies, regulatory officials, and others.
- Review of maps, aerial photographs (where available), and conduct of aerial overflight.
- Inspection of adjacent property that potentially could contaminate the BRAC property.
- Detailed site inspection (the scope of these site inspections was determined principally by the review of previous investigations and assessments).
- Review of recorded chain of title documents.

These seven activities are specifically included within the statutory scope of CERFA. All seven activities were conducted during the CERFA investigation at PUDA.

2.1 EXISTING INVESTIGATION DOCUMENTS

Throughout its operation, a number of activities at PUDA have been conducted that could have an impact on environmental conditions. The size of the facility and the scope of its activities have been addressed in a number of environmental studies. The documents listed below were used as primary sources of information throughout the CERFA investigation.

1. *RCRA Facility Assessment*, Colorado Department of Health, Hazardous Materials and Waste Management Division, June 1992.
2. *Pueblo Depot Activity RCRA Facility Investigation Report*, U.S. Army Corps of Engineers (USACE), Huntsville Division, prepared by Engineering-Science, Inc., September 12, 1990.

3. *Master Environmental Plan*, U.S. Army Toxic and Hazardous Materials Agency (USATHAMA), prepared by Ebasco Environmental, July 1990.

4. *Enhanced Preliminary Assessment Report*, USATHAMA, prepared by Ebasco Environmental, March 1990.

5. *Memorandum: UST Summary Request*, PUDA to USACE, August 31, 1993.

6. *Underground Storage Tank Summary, Pueblo Army Depot Activity Project*, PUDA, April 20, 1992.

7. *PUDA Satellite Operators List*, 1993.

8. *PUDA Spill Reports*, 1990-1993.

9. *PUDA Aerial Photographs* 1970, 1980, 1990.

10. *Asbestos Survey for Pueblo Depot Activity*, USACE, Sacramento, California, 1989.

11. *PCB Inventory*, PUDA, Fourth Quarter 1989.

12. *PCB Field Reports*, PUDA, 1987-1992.

13. *PCB Inventory*, PUDA, April 1, 1991.

14. *Radon Monitoring Test Results*, PUDA, 1991-1992.

2.2 *GOVERNMENT REGULATORY RECORDS*

Federal/State Records

A review of PUDA records was conducted at the Colorado Department of Health (CDH) and the U.S. Environmental Protection Agency, Region VIII (EPA). Documents obtained from CDH represented a primary source upon which many of the classifications in Section 4 were made. ERM's review included the following documents:

Corrective Action Correspondence, dated 1/01/88

Analytical Results, U.S. Geological Survey, May and June 1990, dated 1/01/91

Certification For Deactivation Incinerator Closure, dated 6/17/91

Tables of Sampled Concentrations From Wells and Seeps, Calendar Year 1991, dated 1/01/92

Hazardous Waste Management Plan, dated 2/01/92

RCRA Hazardous Waste Permit Application, Volumes I through V, dated 4/01/92

IRA Investigation Chemical Data Acquisition Plan, dated 6/02/92

Magnetometer Survey at PUDA, dated 7/24/92

RCRA Part B Permit Application For Subpart X Miscellaneous Unit, Volumes I through VII, dated 8/01/92

Correspondence, 1993 to (current), dated 1/01/93

Closure Plan Correspondence, 1993 to (current), dated 1/01/93

Sampling and Analysis Plan for Deactivation Furnace, Phase III, dated 5/01/93

RCRA Facility Investigation Work Plan, dated 6/11/93

Corrective Action Correspondence, dated 6/11/93

RCRA Part B Permit for PUDA (#92-06-15-01), issued July 15, 1992

A search of the EPA's Emergency Response Notification System (ERNS) database over the period 30 January-2 February 1994 identified no reports of releases of oil or hazardous substances at PUDA since the inception of the database in 1986. ERNS collects information on releases reported to Federal authorities.

Local Records

Records at the Pueblo County Health Department were not reviewed because the agency indicated that these records would only duplicate records found at the CDH.

NRC Records

Installation officials provided the following information regarding Nuclear Regulatory Commission (NRC) licenses for PUDA:

- Building 945 contains a calibration instrument for an X-ray machine. This instrument contains 100 millicuries (mCi) of Cesium-137 for which the NRC has issued License No. 0516870-03. The license is current.
- A private contractor held an NRC license for radioactive material used in Building 529. The license (number unknown) has long since

expired (date unknown) and there is reportedly no residual radioactive contamination.

AEHA Records

A records search conducted by the U.S. Army Environmental Hygiene Agency (AEHA) revealed a number of reports regarding the use of radioactive materials at PUDA. In addition to NRC license No. 0516870-03 listed above, the following information regarding NRC licensing was identified:

- License No. 05-26955-01, expiring 30 September 1993, was issued for use of Cs-137 in an instrument calibrator to be used in Building 529. This may be the second license listed above, as the licensee is listed as "Department of the Army, Area Calibration and Repair Center".
- License No. 43-1407-02, expiring 28 February 1993, was issued for use of Ni-63 in a gas chromatograph (GC) in Building 487. The license was issued to Tooele Army Depot, but authorized storage and use at PUDA.
- License No. SUB 1391, expiring 31 August 1992, was issued for use of depleted uranium (DU) as shielding material in a linear accelerator to be installed in Building 711. The DU was stored in Building 945 at the time of the report identified by AEHA, June 1988. The license was issued to Tooele Army Depot, but authorized storage and use at PUDA.

Several Department of the Army Radioactive Material Authorizations (DARA) have also been issued to PUDA.

- DARA No. 43-01-01, expiring 31 October 1987, authorized use of H-3, Ni-63, and Cl-36 in various instruments. At the time of the report identified by AEHA (June 1988), the instruments were located in Building 945 and 529.
- DARA No. 43-01-04, which extended DARA No. 43-01-01 through 30 September 1996.
- DARA No. A43-20-02, expiring 31 October 1987, authorized use of Co-60, Cs-137, and Ni-63 check sources. The material was stored and used in the Building 3 radioactive analysis laboratory.

Reports were also obtained regarding use of radioactive materials in such activities as radium dial and watch repair, calibration and maintenance of tracking instruments, speedometers, and tachometers, and medical applications. Most of these activities were terminated in the 1960s or early 1970s and are not expected to affect environmental conditions at the site .

2.3 *INTERVIEWS*

Table 2.3-1 provides a summary for those individuals interviewed during the CERFA investigation. ERM participated in a meeting with Army, EPA, and CDH officials on 7 April 1994. The purpose of the meeting was to discuss and resolve regulatory agency comments on the draft report.

2.4 *VISUAL INSPECTIONS*

The visual inspection was conducted 4-7 October 1993 and consisted of vehicle and walking tours of the 23,135 acre facility along with tours of representative buildings, structures, and activities (there are 922 storage igloos and approximately 352 buildings at PUDA). The inspection was preceded by an extensive review of documentation provided by PUDA and USAEC including 1970, 1980 and 1990 aerial photographs of the site. In addition, an aerial flyover of the entire facility was performed on 10 November 1993. The overflight focused on identification of new areas of potential concern and used aerial photographs and information from installation officials to guide the inspection. The overflight was conducted by helicopter and lasted approximately 1.5 hours.

Mr. Mark Mahoney, CERFA Project Officer, USAEC; Mr. Curtis Turner, Environmental Engineer, PUDA; Mr. Nick Brown, Safety Specialist, PUDA; and Mr. Carl Nardin, Engineering Geologist, USACE, accompanied ERM personnel and provided background information during the inspection.

2.5 *TITLE DOCUMENTS*

ERM conducted a review of tract maps and transfer documents to identify the prior property owners of the BRAC portion of FCGM at the time of its transfer to the Army. The purpose of this review was to collect additional information concerning the property's prior use and environmental condition at the time of its transfer to the Army. Based on this review, no additional information was collected. Previous ownership and the dates of transfer to the Army are indicated on Figure 5.2-1.

Table 2.3-1
List of Interviewees for PUDA CERFA Assessment

Interview No.	Date	Name	Telephone	Organization/Position	Length of Service
I-1	10/93 to 12/93	Mark Mahoney	(410) 671-16	U.S. Army Environmental Center PUDA CERFA Project Officer	3 Years
I-2	10/93 to 12/93	Curtis Turner	(719) 549-4210	PUDA Environmental Engineer	30 Years
I-3	10/1/93	Carl Nardin	(401) 221-3020	USACE, Omaha District Engineering Geologist	2 Years
I-4	10/93 to 12/93	Patricia Steranka	(719) 549-4544	PUDA Manager of Industrial Risk Assessment	12 Years
I-5	10/1/93	David Vigil	(719) 549-4232	PUDA Facility Assistance Coordinator	10 Years
I-6	10/1/93	Bob Andrews	(719) 549-4221	PUDA Chief of Supply & Chemical Munitions	43 Years
I-7	10/1/93	Ron Connell	(719) 549-4745	PUDA Chief of Human Resources Management	10 Years
I-8	10/93 to 11/93	Nick Brown	(719) 549-4987	PUDA Safety Specialist	20 Years
I-9	11/1/93	Susan Chaki	(303) 692-3341	CDH Unit Leader	5 Years
I-10	11/1/93	Charles Johnson	(303) 692-3348	CDH Engineer	2 Years
I-11	4/7/94	Floyd Nichols	(303) 294-1978	EPA Region VIII	
I-12	4/7/94	Dave Kruchek	(303) 692-3328	CDH Geologist	6 Months

3.0 *PROPERTY BACKGROUND INFORMATION*

This section provides a description of the BRAC property and a discussion of its operational history (Section 3.1), and a description of any changes to environmental conditions since the last environmental assessment or investigation (Section 3.2).

3.1 *PROPERTY DESCRIPTION AND OPERATIONAL HISTORY*

The history of the site and surrounding area is varied and well documented and includes references to Spanish military expeditions of the late 17th and early 18th centuries, railroad development, and the rise of agriculture at the start of the 1900s. The defense industry buildup, sparked by World War II, stimulated the local economy in the 1940s and included construction of Pueblo Depot Activity.

The PUDA site was selected in 1941 when the United States entered World War II. The land was acquired in 1941 and 1942 under the First War Powers Act of 1941 and Executive Order 9001 (December 27, 1941). A major portion of the land (20,500 acres) was acquired by condemnation and purchased from private owners. In 1965, an additional 3,660 acres was obtained from the State of Colorado, bringing the total area of the depot to 24,200 acres. Since 1965, PUDA has released some properties along the southeast boundary. As of 24 February 1994, PUDA encompasses approximately 23,135 acres.

Construction of PUDA began in 1942 on ground that had previously been used for cattle grazing. The USACE constructed ammunition igloos and the first depot buildings before the Ordnance Corps assumed responsibility for PUDA in April 1942. After World War II, PUDA was charged with a variety of responsibilities. These included the storage and shipment of general supplies; maintenance of returned combat materials; ammunition supply, renovation and demilitarization; chemical and conventional munitions storage; and maintenance of Sergeant, Pershing, and Nike missiles. Between 1955 and 1966, sealed nuclear warheads were stored at PUDA.

Pueblo Depot Activity became the Pueblo Army Depot under the newly created Supply and Maintenance Command, in 1962. Missile maintenance responsibilities continued through 1974 when realignment transferred most of these activities to Letterkenny Army Depot in Pennsylvania. At that time, Pueblo Army Depot was redesignated Pueblo Depot Activity.

Responsibility for PUDA was reassigned to Tooele Army Depot in Utah. The current mission of the facility is threefold:

1. To operate a supply depot activity under the command of Tooele Army Depot, providing for the receipt, storage, issue, maintenance, and disposal of assigned commodities.
2. To provide limited maintenance to preclude deterioration of activity facilities, and to retain limited shipping and receiving capabilities for assigned commodities.
3. To fulfill requirements under the BRAC Restoration Program.

Activities at the Pueblo Army Depot in the past have included vehicle maintenance operations, open equipment storage, warehouses used to store military equipment, igloos used to store both conventional and chemical munitions, ammunition workshops, missile facilities, firing ranges, demilitarization areas, open detonation areas, a deactivation furnace, drainage systems, and a landfill. In compliance with the Army BRAC Program, the conventional munitions storage and general supply missions are scheduled to be transferred by September 30, 1994. Some mission functions will remain to support the static storage of chemical munitions in G-Block. Demilitarization of chemical munitions is not scheduled for completion prior to 2004.

Waste management operations at PUDA have included the use and disposal of solvents, explosives, conventional munitions and ordnance, chemical munitions including mustard agent, waste oils, plating wastes, photographic wastes, painting wastes, and propellants. CDH has issued PUDA a Resource Conservation and Recovery Act (RCRA) Part B permit to store hazardous wastes. PUDA is also currently operating RCRA interim status units to manage reactive hazardous waste (i.e., waste propellant and explosives). As previously stated, PUDA is submitting a RCRA Part B application to construct a chemical demilitarization operation to incinerate chemical munitions at the site.

A workplan for investigation of Solid Waste Management Units (SWMUs) at PUDA has been submitted to CDH in connection with the installation's Part B permits. The SWMUs targeted for investigation are Nos. 32, 34, 39, 40, 41, 42, 43, 44, and 45.

3.2 *CHANGES TO REAL PROPERTY ENVIRONMENTAL CONDITIONS SINCE ENHANCED PA INVESTIGATION*

ERM conducted an interview with Mr. Curtis Turner, Environmental Engineer, PUDA on 26 October 1993. Mr. Turner stated that real property environmental conditions at PUDA have remained unchanged since the issuance of the Enhanced PA in March of 1990. No significant incidents such as fires, explosions, or spills have occurred at the site; and no property has been transferred or acquired since that time.

4.0 *INVESTIGATION RESULTS*

This section describes the results of the CERFA investigation by identifying areas of environmental concern, both those previously identified in prior investigations and those uncovered as a result of the CERFA site visit. In addition, Section 4 identifies parcels in accordance with the parcel definitions contained in Section 1.2.

The principal documents used to identify Areas Requiring Environmental Investigation (AREEs) were the Enhanced PA and a Master Environmental Plan. Additional environmental impacts were identified during the records review and site visit. Results of this investigation are presented in Sections 4.1 through 4.5.

4.1 *PREVIOUSLY IDENTIFIED AREAS REQUIRING ENVIRONMENTAL EVALUATION (AREES)*

This section describes the previously identified AREEs, which are numbered sequentially to correspond to the Parcel numbers on the site map (Figure 5.1-1) and the accompanying map table (Table 5.1-1). Each site name also includes the appropriate CERFA Parcel identifiers, which describe the basis for Parcel selection (see Section 1.2). The sites included in this section are only those which have been determined to be CERFA Disqualified Parcels. CERFA Qualified Parcels are described in Section 4.4. CERFA Disqualified Parcels not previously identified are described in Section 4.2.

Septic systems and oil separators are located throughout the PUDA facility. All septic systems and oil separators are being investigated as solid waste management units (SWMUs #39 and #40, respectively) under the facility's RCRA permit because of the potential for releases from hazardous wastes and hazardous waste constituents. All septic system and oil separator locations are, therefore, considered disqualified parcels despite the fact that some of the septic systems may have only been used for the disposal of sewage. The following septic systems are designated as SWMU #39.

SOLID WASTE MANAGEMENT UNIT (SWMU #39) FACILITIES WITH KNOWN SEPTIC TANK SYSTEMS			
Septic Tank Numbers	Facility	System Size	Type of Pipe
1	88	Unknown	Vitrified Clay
2	115	500 Gallon	Unknown
3	156	817 Gal/Day	Vitrified Clay
4	175	873 Gal/Day	Vitrified Clay
5	182	Unknown	Unknown
6	186	300 Gallons	Vitrified Clay
7	187	300 Gallons	Vitrified Clay
8	194	Unknown	Unknown
9	406	5,000 Gallons	Vitrified Clay
10	406	Unknown	2 Dry Wells
11	412-413	167 Gal/Day	Cast Iron
12	417	100 Gal/Day	Cast Iron
13	485	1,000 Gallons	Vitrified Clay
14	491	600 Gallons	Vitrified Clay
15	492	2,000 Gallons	Unknown
16	493	2,000 Gallons	Unknown
17	500	1,500 Gallons	Cast Iron
18	821	1,200 Gal/Day	Vitrified Clay
19	823	873 Gal/Day	Vitrified Clay
20	935	500 Gallons	Vitrified Clay
21	940	500 Gallons	Vitrified Clay
22	945	300 Gallons	Vitrified Clay
23	158	Unknown	Vitrified Clay

The following oil separators are designated as SWMU #40.

SOLID WASTE MANAGEMENT UNIT (SWMU #40) OIL SEPARATOR LOCATIONS	
Oil Separator Number	Location
1	Main east
2	Building 547 (east)
3	Building 547 (south)
4	Building 537
5	AWS-6
6	Building 595
7	Building 560
8	Building 67
9	Building 51
10	Building 531

There has been no survey of lead-based paint (LBP) at PUDA. However, all buildings constructed prior to 1978 (which includes all buildings at PUDA except Building 540) are presumed to contain LBP.

Therefore, all Parcels that contain buildings have an "L(P)" in the Parcel label to indicate the possible (P) existence of LBP (L).

Table 4.4-1 includes ACM identification by building number.

There have been extensive surveys of asbestos-containing material (ACM) at PUDA. Additionally, all buildings constructed prior to 1985 are presumed to contain ACM.

Table 4.4-1 includes ACM identification by building number.

All Parcels that contain buildings verified to contain ACM will include an "A" in the Parcel label. All Parcels containing buildings not tested for ACM (and therefore presumed to contain ACM) will include an "A(P)" in the Parcel label.

Table 4.4-1
Buildings with CERFA Qualifiers
Pueblo Depot Activity, Colorado

Building	Qualifiers		
1		L(P)	
2		L(P)	
3		L(P)	
5		L(P)	
6	A	L(P)	
11	A	L(P)	
12	A	L(P)	
13	A	L(P)	
14	A	L(P)	
15	A	L(P)	
16	A	L(P)	
17	A	L(P)	
18	A	L(P)	
19	A	L(P)	
20	A	L(P)	
21	A	L(P)	
22	A	L(P)	
23	A	L(P)	
24	A	L(P)	
25	A	L(P)	
26	A	L(P)	
27	A	L(P)	
28	A	L(P)	
29	A	L(P)	
30	A(P)	L(P)	
31	A	L(P)	R
36	A	L(P)	
38		L(P)	
41	A(P)	L(P)	
42	A(P)	L(P)	
45	A	L(P)	
46	A	L(P)	
47	A	L(P)	
49	A	L(P)	
51	A	L(P)	
54	A	L(P)	
61	A	L(P)	
66	A	L(P)	
67	A	L(P)	

Table 4.4-1
Buildings with CERFA Qualifiers
Pueblo Depot Activity, Colorado

Building	Qualifiers		
68	A(P)	L(P)	
69	A(P)	L(P)	
70	A	L(P)	
72	A(P)	L(P)	
73	A(P)	L(P)	
74	A(P)	L(P)	
75	A(P)	L(P)	
76	A(P)	L(P)	
77	A(P)	L(P)	
78	A	L(P)	
79	A(P)	L(P)	
80	A(P)	L(P)	
81	A(P)	L(P)	
82	A	L(P)	
83	A(P)	L(P)	
84	A(P)	L(P)	
85	A	L(P)	
86	A(P)	L(P)	
87	A	L(P)	
88	A	L(P)	
89	A	L(P)	
90	A(P)	L(P)	
91		L(P)	
92	A(P)	L(P)	
96	A(P)	L(P)	
97	A(P)	L(P)	
99		L(P)	
100	A(P)	L(P)	P
109		L(P)	R
111	A	L(P)	
112	A	L(P)	
113	A	L(P)	
115	A	L(P)	
116	A(P)	L(P)	
120	A(P)	L(P)	
121	A(P)	L(P)	
122	A	L(P)	
123	A(P)	L(P)	
125	A	L(P)	

Table 4.4-1
Buildings with CERFA Qualifiers
Pueblo Depot Activity, Colorado

Building	Qualifiers		
126	A	L(P)	
127	A	L(P)	
128	A(P)	L(P)	
131	A	L(P)	
135	A(P)	L(P)	
137	A(P)	L(P)	
139	A(P)	L(P)	
144	A(P)	L(P)	
150	A(P)	L(P)	
152	A(P)	L(P)	
153	A	L(P)	
154	A	L(P)	
155	A	L(P)	
156	A(P)	L(P)	
157	A(P)	L(P)	
158	A(P)	L(P)	
159	A	L(P)	
162	A(P)	L(P)	
163		L(P)	
164	A(P)	L(P)	
165	A(P)	L(P)	
166	A(P)	L(P)	
167	A(P)	L(P)	
168	A(P)	L(P)	
175	A	L(P)	
180	A	L(P)	
181	A	L(P)	
182	A	L(P)	
184	A	L(P)	
186	A	L(P)	
187	A	L(P)	
190	A(P)	L(P)	R
195	A(P)	L(P)	R
201	A(P)	L(P)	
202	A(P)	L(P)	
203	A(P)	L(P)	
204	A(P)	L(P)	
205	A(P)	L(P)	
206	A(P)	L(P)	

Table 4.4-1
Buildings with CERFA Qualifiers
Pueblo Depot Activity, Colorado

Building	Qualifiers		
207	A(P)	L(P)	
208	A(P)	L(P)	
209	A(P)	L(P)	
231	A	L(P)	
241	A(P)	L(P)	
243	A	L(P)	
299		L(P)	
406	A	L(P)	
412		L(P)	
413	A	L(P)	
414		L(P)	
416	A	L(P)	
417	A	L(P)	
481	A(P)	L(P)	R
482	A(P)	L(P)	R
485	A(P)	L(P)	
491	A(P)	L(P)	
492	A(P)	L(P)	
493	A(P)	L(P)	
501	A	L(P)	
503	A	L(P)	
507	A(P)	L(P)	
508	A(P)	L(P)	
509	A(P)	L(P)	
510	A(P)	L(P)	
511	A(P)	L(P)	
512	A(P)	L(P)	
513	A(P)	L(P)	
519	A	L(P)	
520	A	L(P)	
522	A	L(P)	
524	A	L(P)	
525	A	L(P)	
526	A(P)	L(P)	R
527	A	L(P)	
528	A	L(P)	
529	A	L(P)	
530	A	L(P)	
531	A	L(P)	

Table 4.4-1
Buildings with CERFA Qualifiers
Pueblo Depot Activity, Colorado

Building	Qualifiers		
532	A	L(P)	
533	A(P)	L(P)	
534	A(P)	L(P)	
535	A	L(P)	
536	A(P)	L(P)	
537	A(P)	L(P)	
540	A(P)		
541	A	L(P)	
542	A	L(P)	
543	A	L(P)	
544	A(P)	L(P)	R
545	A	L(P)	
546		L(P)	
547		L(P)	
552	A	L(P)	
553	A	L(P)	
554	A	L(P)	
555	A	L(P)	
556	A(P)	L(P)	
558	A(P)	L(P)	
560	A	L(P)	
561	A(P)	L(P)	
562	A	L(P)	
565	A(P)	L(P)	
566	A	L(P)	
567	A	L(P)	
569	A(P)	L(P)	
570	A	L(P)	
573	A(P)	L(P)	
575	A	L(P)	
576	A(P)	L(P)	
577	A(P)	L(P)	
578	A(P)	L(P)	
579	A	L(P)	
580	A	L(P)	
581	A(P)	L(P)	
582	A(P)	L(P)	
583	A(P)	L(P)	
584	A(P)	L(P)	

Table 4.4-1
Buildings with CERFA Qualifiers
Pueblo Depot Activity, Colorado

Building	Qualifiers		
585	A(P)	L(P)	
586	A(P)	L(P)	
588	A(P)	L(P)	
589	A(P)	L(P)	
590	A	L(P)	
591	A(P)	L(P)	
592	A	L(P)	
593	A(P)	L(P)	
594	A	L(P)	
595	A	L(P)	
596	A	L(P)	
597	A	L(P)	
598	A(P)	L(P)	
599		L(P)	
600	A(P)	L(P)	
610	A(P)	L(P)	
611	A(P)	L(P)	R
612	A(P)	L(P)	
620	A(P)	L(P)	
621	A(P)	L(P)	R
622	A(P)	L(P)	
630	A	L(P)	
701	A	L(P)	
706	A	L(P)	
711	A	L(P)	
712	A	L(P)	
713	A	L(P)	
716	A	L(P)	
717		L(P)	
718		L(P)	
725	A(P)	L(P)	
731	A	L(P)	
736	A	L(P)	
741	A	L(P)	
742	A	L(P)	
743	A	L(P)	
746	A	L(P)	
750	A(P)	L(P)	
761	A	L(P)	

Table 4.4-1
Buildings with CERFA Qualifiers
Pueblo Depot Activity, Colorado

Building	Qualifiers	
810	A	L(P)
821	A	L(P)
822	A	L(P)
823	A	L(P)
935	A	L(P)
940	A	L(P)
945	A	L(P)

A Asbestos-containing material
A(P) Asbestos-containing material (probable)
L Lead-based paint
L(P) Lead-based paint (probable)
R Radon

1. *North Demolition Area [Parcel 1D-HR/X]*

The North Demolition Area, which is also known as solid waste management unit (SWMU) # 1, has been used for the demilitarization of conventional munitions since 1953. There are known releases of hazardous constituents to soil, ground water, and air within the area. Releases to surface water are suspected. Hazardous constituents include metals, semivolatile compounds, propellants, explosives (TNT, DNT, RDX, HMX), and unexploded ordnance (UXO). Based upon a review of aerial photographs and discussions with PUDA and USACE officials, the boundaries of this Parcel have been expanded relative to the boundaries shown in previous investigations.

2. *Demolition Area [Parcel 2D-HR(P)/A(P)/L(P)/X]*

This parcel is comprised of the following:

The Demolition Area, which is also known as SWMU #2, was used for the demilitarization of conventional munitions. There are suspected releases of hazardous constituents to soil, ground water and surface water. Hazardous constituents may include metals, semivolatile compounds, explosives (TNT, DNT, RDX, HMX), propellants, and UXO.

Disposal Area North of Disassembly Plant

The Disposal Area North of the Disassembly Plant is also known as SWMU #45. The release of hazardous constituents to soil and ground water is suspected. Hazardous constituents may include volatile and semivolatile compounds, solvents, and metals.

Ammunition Disassembly Plant, Multiple Buildings

These primary structure, separated by earthen bunkers, comprise the former ammunition disassembly plant. This area, which is known as SWMU #46, is south of the Demolition Area (SWMU #2). Releases of volatile and semivolatile compounds and metals are suspected. UXO fragmentations are present in the area.

3. *Unexploded Ordnance Area [Parcel 3D-HR/X]*

The Unexploded Ordnance Area, which is also known as SWMU #3, is the site of scattered munitions from a lightning strike in the late 1940s. The Enhanced PA states that UXO is present in the soil. CDH's RCRA Facility Assessment (RFA) indicates suspected releases to the soils of hazardous

waste and/or hazardous constituents. Hazardous constituents may include metals, volatile and semivolatile compounds, and explosives (TNT, DNT, RDX, HMX). There are known releases of heavy metals including lead, cadmium, and barium in the south central portion of this parcel.

The boundaries of this parcel have been extended to include the Deactivation Furnace, which is also known as the Popping Furnace and SWMU #11. The Deactivation Furnace was used from 1968 until 1989 for the demilitarization of explosives, small caliber ammunition and some fuses. There are known releases of hazardous constituents to the soil and possibly the ground water associated with this Parcel. Hazardous constituents include metals, explosives (TNT, DNT, RDX, HMX), and UXO (possible). The unit will be closed in accordance with a State of Colorado RCRA closure plan.

4. *Parcel 4D-HR/X(P)*

This Parcel is comprised of the following:

East Burn Area #1

The East Burn Area #1, which is also known as SWMU #4, was used for the demilitarization of conventional munitions from 1946 to 1953. There are known releases of hazardous constituents to soil and suspected releases to surface and ground water. Hazardous constituents include metals, volatile and semivolatile compounds, propellants, explosives (TNT, DNT, RDX, HMX), and UXO (possible).

East Burn Area #2

The East Burn Area #2, which is also known as SWMU #5, was used for the demilitarization of conventional munitions from 1946 to 1953. There are known releases of hazardous constituents to soil and suspected releases to surface and ground water. Hazardous constituents include metals, volatile and semivolatile compounds, propellants, explosives (TNT, DNT, RDX, HMX), and UXO (possible).

Surveillance Test Range

The Surveillance Test Range, which is also known as SWMU #32, was used as a munitions and weapons test range for many years. There are suspected releases of hazardous constituents to the soil and ground water. The constituents may include explosives (TNT, DNT, RDX, HMX), and metals.

Former Rifle/Pistol Range

The Former Rifle/Pistol Range, which is also known as SWMU #33, has been used since the 1960s. There are known releases of lead along with other metals to the soil although no significant impact to the environment is expected. Other possible hazardous constituents include explosives (TNT, DNT, RDX, and HMX).

Explosion Pits West of Surveillance Test Range

Explosion pits located west of the surveillance test range were identified in a 1980 aerial photograph. The presence of nine explosion pits in the area were confirmed during the site fly-over. There are suspected releases of metals, volatile and semivolatile compounds, and propellants to the soils. The pits may also contain UXO.

5. *USTs at Building 731 [Parcel 5D-HS/PS/PR/A/L(P)]*

Four underground storage tanks (USTs) containing heating oil were present at Building 731 with capacities ranging from 10,000 to 20,000 gallons. There was evidence of releases associated with the tanks. The tanks were removed and some remediation was conducted (i.e., contaminated/saturated soil was removed) during the months of November and December 1991. Hazardous wastes in the form of used charcoal filters from M17 gas masks were also generated and stored in this building. The filters were stored in a 55-gallon drum at a hazardous waste satellite storage area.

6. *North Burn Area #1 [Parcel 6D-HR/X(P)]*

The North Burn Area #1, which is also known as SWMU #6, has been used for the open burning of conventional munitions, chemical and hazardous wastes, and rocket propellant since 1953. There are known releases of hazardous constituents to soil, ground water, and air. Releases of hazardous constituents to surface water are suspected. Hazardous constituents include metals, volatile and semivolatile compounds, propellants, explosives (TNT, DNT, RDX, HMX), and UXO (possible).

7. *North Burn Area #2 [Parcel 7D-HR/X(P)]*

The North Burn Area #2, which is also known as SWMU #7, has been used for the open burning of conventional munitions, chemical and hazardous wastes, and rocket propellant since 1953. The Pyrotechnic Burning Cage, which is also known as SWMU #10, is located within the boundaries of this Parcel. It was used for the demilitarization of small

arms and munitions from the 1960s until 1985. There are known releases of hazardous constituents to soil, ground water, and air associated with this Parcel. Releases of hazardous constituents to surface water are suspected. Hazardous constituents include metals, volatile and semivolatile compounds, mustard and mustard degradation products, propellants, explosives (TNT, DNT, RDX, HMX), and UXO (possible).

8. "Homemade Furnace" [Parcel 8D-HR/PS(P)/X(P)]

The "Homemade Furnace", which is also known as SWMU #8, was used for the demilitarization of small arms munitions from 1950 until 1967. There are known releases of hazardous constituents to the soil, ground water, and surface water. Hazardous constituents may include metals, volatile and semivolatile compounds, explosives (TNT, DNT, RDX, HMX), and UXO. An aboveground tank was also likely present to store petroleum to fire the furnace.

9. Building 527 [Parcel 9D-HS/A/L(P)]

Building 527 at one time contained a paint booth and dip tank. Paint and solvent wastes were generated and managed within the building.

10. Parcel 10D-HS/HR/PS/PR/A/L(P)

This Parcel is comprised of the following:

Building 535

Building 535 at one time contained a paint booth. Paint and solvent wastes were generated and managed within the building and hazardous wastes are currently being accumulated in this building. An oil separator (SWMU #40) is associated with this building. Releases of petroleum and hazardous substances associated with this building are suspected.

Building 537

Steam cleaning of combat vehicles occurred in the building. An oil separator (SWMU #40) is located south of the building. Release of petroleum and hazardous substances associated with this building are suspected.

Building 531

A 90-day hazardous waste accumulation area is currently present in Building 531.

Building 547

Paint stripping operations utilizing sandblasting machinery were at one time located in Building 547, which is also known as SWMU #36. Apparently, approximately two tons per month of a fine powdery waste were generated and the dusts were routed through a bag house filter system. A sufficient concentration of cadmium was present in the paint residue to classify the material as a hazardous waste. More recent sampling found no hazardous constituents in the paint residue. The operations have been shut down for more than 2 years. There are known releases of hazardous wastes including cadmium and solvents, associated with this building. Asbestos was completely removed from Building 547 in 1988. The RCRA Part B permit identifies two oil separators (SWMU #40) associated with this building.

Landfill

The Landfill, which is also known as SWMU #14, was used to manage solid waste at the facility. There are known releases of hazardous constituents to the soil and ground water associated with this area. Hazardous constituents include solvents, metals, volatile and semivolatile compounds, and explosives (TNT, DNT, RDX, HMX). The Landfill is being remediated in accordance with a corrective action order issued by CDH and a ground water treatment system is scheduled to be installed in 1994. Contaminated ground water is migrating to the south. Consequently, the boundary of this Disqualified Parcel has been extended beyond the landfill boundary. Petroleum contamination was also found in the landfill. The Inert Burning Cage, which is also known as SWMU #9, is also located within this Parcel. It was used for the burning of sanitary wastes until the early 1970s. CDH has determined that SWMU No. 9 requires no further actions.

Plating Waste Drainage Ditch (Unnamed Ditch) and Building 539 (Former Plating Shop)

The Plating Waste Drainage Ditch (Unnamed Ditch) and former Building 539 (Former Plating Shop) are also known as SWMU #28. There are known releases of hazardous constituents to the soil, ground water, and possibly surface water associated with this area. Hazardous constituents include semivolatile compounds, pesticides, explosives (TNT, DNT, RDX, HMX), PCBs, solvents, and metals. The area is being remediated in accordance with a corrective action order issued by CDH and a ground water treatment system is scheduled to be installed in 1994. Contaminated ground water is migrating to the south. Consequently, the

boundary of this Disqualified Parcel has been extended beyond the landfill boundary.

Fire Protection Training Area

The Fire Protection Training Area, which is also known as SWMU #29, was used to train the PUDA Fire Department. The release of hazardous constituents and petroleum to the soil and ground water is suspected. The hazardous constituents may include volatile and semivolatile compounds, solvents, explosives (TNT, DNT, RDX, HMX), and metals.

Storage Sheds, West of Burma Road

Storage sheds, which are also known as SWMU #47, were observed during the CERFA site visit, in 1990 aerial photographs and during the CERFA fly-over. There are known releases of hazardous constituents including volatile, and semivolatile compounds, solvents, and metals.

Land Disturbance West of Vehicle Test Track

Two trenches were observed in the 1990 aerial photograph west of the vehicle test track and in the northeast part of the former solid waste landfill. The presence of the trenches and also two excavated areas east of the trenches were confirmed during the site fly-over. PUDA personnel indicated that one of the areas were used for the burial of missile carcasses and metal contamination is suspected. The second trench was used for the disposal of asbestos.

Hazardous Waste Storage/Building 540

The Hazardous Waste Storage Building, which is also known as SWMU #27, is currently used to store hazardous wastes generated at the facility. CDH has recommended no further remedial action because the RFA did not determine that any hazardous waste or hazardous constituents have been released or disposed of within the area.

Missile Facility/Building 529

The Missile Facility in Building 529, which is also known as SWMU #41, was used from the 1960s until the 1980s for maintenance of the Pershing missile system. Solvents, paints, propellants, and petroleum and metal compounds were stored and used in the building and hazardous wastes were generated and accumulated. Releases of hazardous constituents to the soil including paints, solvents, volatile and semivolatile compounds, propellants and metals are suspected. Cesium-137 was also stored in the

Building and used as a source. An oil separator is located southeast of Building 529.

Ditch North and East of Building 529 Flowing to Boone Creek

This drainage was observed in 1990 and 1957 aerial photographs and confirmed during the CERFA fly-over. This new area is being identified based on potential historical and current runoff from vehicle maintenance areas containing petroleum and possibly hazardous substances.

11. Sanitary Sewage Treatment Plant [Parcel 11D-HS/HR(P)/A(P)/L(P)/R]

The sanitary sewage treatment plant, which is also known as SWMU #25, was constructed in 1942 to treat domestic waste water from the administrative and warehouse areas. Effluent from the plant is treated with gaseous chlorine and collected in a concrete holding pond prior to discharge to a dry water course that connects to Boone Creek. It is suspected that hazardous waste or hazardous constituents were released to the environment including volatile and semi-volatile compounds, metals, and explosives.

12. Parcel 12D-HR(P)/X(P)

This Parcel is comprised of the following:

East Chemical Disposal Ground

The East Chemical Disposal Ground, which is also known as SWMU #12, was used as a thermal destruction area for munitions containing mustard agent from 1942 to 1946. There are suspected releases of hazardous constituents to the soil and ground water associated with this area. Hazardous constituents may include metals, volatile and semivolatile compounds, mustard and mustard degradation products, explosives (TNT, DNT, RDX, HMX), and UXO.

Sodium-Filled Valve Disposal Site

The Sodium-Filled Valve Disposal Site, which is also known as SWMU #16, was used for a one-time only burial of sodium-filled valves in the 1960s. CDH recommends no further remedial action.

13. West Chemical Burial Ground [Parcel 13D-HR/X(P)]

The West Chemical Burial Ground, which is also known as SWMU #13, was used for the thermal destruction of chemical munitions containing

mustard agent from 1965 to 1968. There are known releases of hazardous constituents to the soil and suspected releases to the ground water associated with this area. Hazardous constituents include metals, volatile and semivolatile compounds, mustard and mustard degradation products, explosives (TNT, DNT, RDX, HMX), and UXO (possible).

14. Oil Separator Associated with Building 560 [Parcel 14D-HR(P)/PR(P)/A/L(P)]

An oil separator (SWMU #40) is associated with Building 560. Petroleum wastes are generated at this location and the release of petroleum and hazardous constituents to the soil and ground water is suspected.

15. UST at Building 125 [Parcel 15D-PS/PR/A/L(P)]

An approximately 6,000-gallon diesel fuel UST is present at Building 125. The tank remains in use and there are reports of diesel spills. PUDA has scheduled the tank for a tank tightness test and to be retrofitted to comply with leak detection and cathodic protection requirements.

16. UST at Building 109 [Parcel 16D-PS/PR/R/L(P)]

A 1,000-gallon kerosene UST was present at Building 109. The tank was removed in February of 1992. The tank was found to be leaking at the time of removal and some soil contamination was removed. Building 109 is also considered CERFA Qualified for the presence of radon. Radon was measured in the building in excess of a USATHAMA action level of 4.0 picocuries per liter (pCi/l).

17. Parcel 17D-HR/PS/PR/A/L(P)

This Parcel is comprised of the following:

TNT Washout Facility and Discharge System

The TNT Washout Facility and Discharge System, which is also known as SWMU #17, was used for the disposal of TNT and related compounds from the 1940s until 1974. There are known releases of hazardous constituents to soil and ground water including metals, volatile and semivolatile compounds, and explosives. Surface water releases are also suspected. The TNT Washout Facility is being remediated in accordance with a corrective action order issued by CDH and a ground water treatment system is scheduled to be installed in 1994.

Unsymmetrical Dimethyl Hydrazine (UDMH) Washout Disposal Area

The UDMH Washout Disposal Area, which is also known as SWMU #18, was used for the disposal of UDMH and Red Fuming Nitric Acid (RFNA) in the 1950s. Both of these compounds are components of liquid rocket fuel. There have been known releases of hazardous constituents to soil of these constituents and releases to ground water are suspected.

RFNA Washout Disposal Area

The RFNA Washout Disposal Area, which is also known as SWMU #19, was the site of a RFNA release in 1955.

West Lagoon

The West Lagoon, which is also known as SWMU #22, is located near the TNT Washout Facility and Discharge System Facility and the UDMH Washout Disposal Area. There are known releases of hazardous constituents to the soil and ground water associated with this area. Hazardous constituents may include volatile and semivolatile compounds, explosives (TNT, DNT, RDX, HMX), and metals.

Industrial Waste Lagoons (Borrow Pits)

There are two excavation pits located southeast of the TNT Washout Facility (SWMU #17) and northeast of the West Lagoon (SWMU #22). The history of these pits has not been well documented and there is a concern that hazardous constituents may have been managed in this area. These pits have been labeled in previous documents and site maps as "Industrial Waste Lagoons". For consistency, they are so designated in the CERFA report. Site personnel have stated that there are no existing records to indicate that these pits were ever actually in use. However, the site, designated SWMU # 44 by CDH, is to be investigated by soil sampling of each pit.

UST at AWS-E

An approximately 10,000-gallon diesel fuel UST was present at this location. The tank was removed in 1992. There were reports of a release from the tank and some remediation of soils has occurred at the site.

UST at AWS-1

A 10,000-gallon diesel fuel UST was present at AWS-1. The tank was removed in February of 1992 and was in good condition at the time of removal.

Oil Separator Associated with Building AWS-6

An oil separator (SWMU #40) is associated with Building AWS-6. Petroleum wastes are generated at this location and the release of petroleum and hazardous constituents to the soil and ground water are suspected.

Septic Tank System Associated with Building 821

A septic tank system (SWMU #39) was reportedly associated with Building 821. The release of petroleum and hazardous substances to the soil and ground water is suspected.

Septic Tank System Associated with Building 823

A septic tank system (SWMU #39) was reportedly associated with Building 823. The release of petroleum and hazardous substances to the soil and ground water is suspected.

18. USTs at Building 510 [Parcel 18D-PS/PR/A(P)/L(P)]

Five USTs were present at Building 510. Three approximately 10,000-gallon tanks contained kerosene and two tanks with capacities of 10,000 gallons and 12,000 gallons contained gasoline. The tanks were removed in December of 1991. Four of the tanks were found to be leaking at the time of removal and some remediation has occurred at the site. There is known ground water remediation in this area.

19. UST at Building 567 [Parcel 19D-PS/A/L(P)]

A 2,000-gallon underground gasoline storage tank was present at Building 567. The tank was removed in 1992 and sampling does not indicate any soil contamination at the site.

20. Concentrated RFNA Disposal Area [Parcel 20D-HR]

The RFNA Disposal Area, which is also known as SWMU #20, was used to manage RFNA. There have been known releases of hazardous

constituents including solvents and explosives to the soil. Releases to ground water are suspected. PUDA and USACE indicate that solvents (i.e., acetone and tetrachloroethene) have been detected in this area.

21. East Lagoons [Parcel 21D-HR(P)]

The East Lagoons, which are also known as SWMU #21, were constructed in 1977 to receive wastewater from boiler blowdown and industrial wastewater from the warehouse area. There are suspected releases of hazardous constituents to the soil and ground water. Hazardous constituents may include volatile and semivolatile compounds, cyanide, solvents, and metals. Raw sewage is currently being diverted in the southeast lagoon.

22. USTs at Building 82 [Parcel 22D-PS/A/L(P)]

There are three diesel fuel USTs and one gasoline UST at this location. The tanks have not yet been permanently closed. Tank #1 has been scheduled for a tank tightness test and to be retrofitted to comply with leak detection and cathodic protection requirements. PUDA has requested that Tank #4 be removed.

23. Mercury Storage Igloos [Parcel 23D-HS/L(P)]

The Mercury Storage Igloos, which are also known as SWMU #23, were used to store mercury compounds (i.e., vials of mercury). There are no known releases associated with this mercury storage.

24. Zinc Chlorate/Chromate Burial Area [Parcel 24D-HR]

The Zinc Chlorate/Chromate Burial Area, which is also known as SWMU #24, was used as the burial site for cans of either zinc chlorate or zinc chromate in the 1960s. The exact location of this site is not defined. The boundaries of the parcel as shown on Figure 5.1-1 encompasses three possible locations for this site.

25. Mercury Storage in Building 543 [Parcel 25D-HS/A/L(P)/R]

Mercury was stored in Building 543. The mercury was moved to the Mercury Storage Igloos (SWMU #23) in 1970. There are no known releases associated with this mercury storage. Part of Building 544, which was found to contain radon at greater than 4.0 pCi/l, is also included in this parcel.

26. *Disposal Site, Approximately 1,200 feet East of H Block [Parcel 26D-HR(P)]*

During the CERFA site visit, a pile of approximately 64 cubic feet of building material resembling transite was identified. The presence of the material was confirmed during the CERFA fly-over. This site is being identified as a new area of environmental concern based on the fact that building material containing transite often contains asbestos. Pursuant to CERFA guidance, asbestos disposal is a Disqualifying factor.

27. *Building 711 [Parcel 27D-HS/A/L(P)]*

Paint-related materials are stored along with other materials in Building 711.

28. *Building 299 [Parcel 28D-HS/PS/L(P)]*

There are reports that a laboratory was located in Building 299 and that mustard agent was also stored in the building. An AST was also located next to the building.

29. *USTs at Building 599 [Parcel 29D-PS/PR/A/L(P)]*

Two 200-gallon gasoline USTs were present at Building 599. The tanks were removed in January of 1992. The tanks were found to be leaking at the time of removal and have been partially remediated. Benzene has been detected in the ground water.

30. *UST at Building 612 [Parcel 30D-PS/PR(P)/A(P)/L(P)]*

A 200-gallon gasoline UST was present at Building 612. The tank was removed in January of 1992 and was in poor condition at the time of removal.

31. *UST at Building 5 [Parcel 31D-PS/PR(P)/A/L(P)]*

A 200-gallon gasoline UST was present at Building 5. The tank was removed in February of 1992 and was in poor condition at the time of removal.

32. *Building 716 [Parcel 32D-HS/A(P)/L(P)]*

Building 716 at one time contained a paint booth. Paint wastes and solvent wastes were generated and stored within the building.

33. *Building 144 [Parcel 33D-HS/HR(P)/A(P)/L(P)]*

A photo laboratory was once located in Building 144. Chemicals, including those used in photo processing, such as spent fixers and solvents, which are regulated as hazardous wastes, were stored and used in the building. North of Building 140 is a skeet range and contamination is suspected. Suspected contamination associated with this parcel includes heavy metals (e.g., lead, silver) and volatile and semi-volatile compounds.

34. *Former Test Range East of the East Lagoons [Parcel 34D-HR(P)/X(P)]*

This area is comprised of the following:

The Former Test Range East of the East Lagoons, which is also known as SWMU #34, was used from the 1940s until the 1980s. There are suspected releases of explosives (TNT, DNT, RDX, HMX), metals to the soil, and UXO.

Land Disturbance North of Sewage Treatment Plant

A land disturbance located approximately 800 feet north of the sewage treatment plant was identified in a 1990 aerial photograph and was confirmed during the CERFA fly-over. PUDA personnel indicated the land disturbance was the location of an old pistol range. This area is considered Disqualified based upon the likelihood of soil contamination from lead.

35. *Parcel 35D-HR(P)/HS/PR/PS/A/L(P)*

This Parcel is comprised of the following:

Vehicle Maintenance Buildings/Buildings 590 and 595

Buildings 590 and 595, which are also known as SWMU #35, were the site of vehicle maintenance operations. Hazardous wastes were also generated in these buildings. There are possible releases of petroleum and hazardous constituents to ground water and soils associated with this parcel. In addition, surface water may have been impacted. Hazardous constituents include volatile and semivolatile compounds, solvents, and metals. An aboveground heating oil tank which was present at Building 590 was removed in February of 1992. A tank nozzle associated with the tank was found to be leaking at the time of removal and the contamination was remediated. An oil separator (SWMU #40) is also located near Building 595.

USTs at Building 588

Two USTs containing diesel fuel and gasoline were present at Building 588. The diesel fuel tank had a capacity of approximately 2,000 gallons. The gasoline tank had a capacity of approximately 850 gallons. The tanks were removed and partially remediated during the winter of 1992. No releases were documented and sampling indicated that this area is clean.

UST at Building 589

A 900-gallon waste oil UST was present at Building 589. The tank was removed and partially remediated during the winter of 1992.

36. *Septic Tank System Associated with Building 175 [Parcel 36D-HR(P)/PR(P)/A/L(P)]*

A septic tank system (SWMU #39) was reportedly associated with Building 175. The release of petroleum and hazardous substances to the soil and ground water is suspected.

37. *Parcel 37D-HS/HR(P)/PS/PR/A/L(P)*

This Parcel is comprised of the following:

Buildings 45, 46, and 47

Buildings 45 and 46, which are known as SWMU #37, were used for general vehicle maintenance operations. Waste oils and hazardous wastes including corrosives and solvents are currently generated and accumulated in these buildings. Metals, solvents and waste oils were stored in these buildings. Hazardous waste is currently being accumulated in Building 47. There are suspected releases of petroleum to the soil associated with this parcel. CDH recommends no further remedial action because the RFA did not determine that any hazardous waste or hazardous constituents were disposed of at the site.

Oil Separator Associated with Building 67

An oil separator (SWMU #40) is associated with Building 67. Petroleum wastes are generated at this location and the release of petroleum and hazardous constituents to the soil and ground water is suspected.

USTs at Building 74

Two 10,000-gallon diesel fuel USTs were present at Building 74. The tanks were removed in January of 1991. The tanks were found to be leaking at the time of removal and have been partially remediated.

USTs at Building 51

Three diesel fuel USTs were present at Building 51 with capacities of approximately 6,000 gallons, 20,000 gallons, and 40,000 gallons. The tanks were removed during the winter of 1991 through 1992. Two tanks were found to be leaking at the time of removal and have been partially remediated. An oil separator is also reportedly associated with this building. Petroleum and hazardous substance releases are suspected from the separator.

38. Building 406 [Parcel 38D-HS/HR(P)/PS/PR/A/L(P)]

Building 406, which is also known as SWMU #38, was the site of a laboratory used to reclaim gold and silver in the 1960s and 1970s. Solvents, corrosives, and possibly cyanides were used and stored at the site and possibly discharged into a septic tank system. Releases of these materials to the soil and ground water are suspected. A kerosene UST, which was used for heating, was present at Building 406. According to USACE, the tank was removed during the winter of 1992. The tank was found to be leaking at the time of removal and the contamination was remediated. Soil was remediated and ground water contamination is suspected.

39. Building 92 [Parcel 39D-HS/HR(P)/PS/PR(P)/A/L(P)]

Used oil, antifreeze, and brake fluid are stored in Building 92. A septic tank system (SWMU #39) is associated with Building 88.

40. Ground Water Contamination [Parcel 40D-HR(P)/PR/A/L(P)]

This parcel contains property affected by releases from Parcels 35D and 29D. Buildings 593, 594, and 586 are included in this parcel. The full extent of contamination is under investigation.

41. Building 701 [Parcel 41D-HS/A/L(P)]

Paint-related materials are stored along with other materials in Building 701.

42. *Parcel 42D-HR/PS/PR(P)/A/L(P)/X(P)*

This Parcel is comprised of the following:

Pits South of Guided Missile Workshop

The Pits South of the Guided Missile Workshop are also known as SWMU #42. The pits were in existence prior to the 1970s and were apparently used for the open detonation of conventional munitions and unexploded munitions. There are known releases of hazardous constituents to the soil and releases to ground water are suspected. Hazardous constituents include volatile and semivolatile compounds, solvents, propellants, metals, explosives (TNT, DNT, RDX, HMX), and UXO (possible).

UST at Building 935

An approximately 6,200-gallon kerosene UST was present at Building 935. The tank was removed in February of 1992. The tank was reportedly in fair condition. A septic tank system (SWMU #39) was reportedly associated with Building 935. The release of petroleum to the soil and ground water is suspected.

UST at Building 940

An approximately 6,200-gallon kerosene UST was present at Building 940. The tank was removed in February of 1992 and was reportedly in fair condition. A septic tank system (SWMU #39) was reportedly associated with Building 940. The release of petroleum to the soil and ground water is suspected.

UST at Building 945

An approximately 1,200-gallon kerosene UST was present at Building 945. The tank was removed in February of 1992. The tank was found to be leaking at the time of removal and was partially remediated. A septic tank system (SWMU #39) was reportedly associated with Building 945.

43. *Vehicle Staging/Storage Area Northeast of Building 594 [Parcel 43D-HS(P)/HR(P)/PS(P)/A(P)/L(P)]*

This vehicle staging and storage area is also known as SWMU #43. The storage of hazardous constituents and releases to the soil and ground water are suspected. Hazardous constituents may include volatile and semivolatile compounds, solvents, and metals. This area includes a ditch that runs south and drains this area.

44. *Parcel 44D-HR(P)/HS/PS/PR(P)/A/L(P)*

This parcel consists of the following:

Building 417

Paint-related materials are stored along with other materials in Building 417. A septic tank system (SWMU #39) was reportedly associated with Building 417. The release of petroleum and hazardous constituents to the soil and ground water is suspected.

UST at Building 414

A 1,000-gallon kerosene UST was present at Building 414. The tank was removed during the winter of 1992. The tank was found to be poor condition at the time of removal. The release of petroleum to the soil and ground water is suspected.

45. *Building 412 [Parcel 45D-HR(P)/PS/PR/L(P)/A]*

A 250-gallon diesel fuel UST was present at Building 412. The tank was removed during the winter of 1992. The tank was found to be leaking at the time of removal and has been remediated. A septic tank system (SWMU #39) was also reportedly associated with Buildings 412 and 413. The release of petroleum to the soil and ground water is suspected.

46. *Pesticide and Herbicide Storage [Parcel 46D-HS/A/L(P)]*

Pesticides and herbicides have been stored in three portable structures.

47. *Parcel 47D-PS(P)/A/L(P)*

This parcel is comprised of the following:

UST at Building 11

There are reports that a 250-gallon fuel UST was present at Building 11. PUDA personnel searched for the tank but were unable to locate it.

UST at Building 12

There are reports that a 250-gallon fuel UST was present at Building 12. PUDA personnel searched for the tank but were unable to locate it.

48. Parcel 48D-PS(P)/A/L(P)

This Parcel is comprised of the following:

UST at Building 25

There are reports that a 250-gallon fuel UST was present at Building 25. PUDA personnel searched for the tank but were unable to locate it.

UST at Building 26

There are reports that a 250-gallon fuel UST was present at Building 26. PUDA personnel searched for the tank but were unable to locate it.

UST at Building 27

There are reports that a 250-gallon fuel UST was present at Building 27. PUDA personnel searched for the tank but were unable to locate it.

49. Land Disturbance Near Northwest Corner of North Burn Area #2 [Parcel 49D-HR(P)]

A land disturbance near the northwest corner of North Burn Area #2 (which is also known as SWMU #7) was observed in the 1990 aerial photograph. There are known releases of hazardous constituents at the North Burn Area #2. Cinder blocks and concrete rubble were visible at the site during the CERFA fly-over. This area is being included because of its proximity to North Burn Area #2, evidence that the land disturbance is man-made, and evidence that the area was used as a disposal site.

50. Land Disturbance Approximately 2,000 Feet West of Swimming Pool [Parcel 50D-PS]

A truck staging area was identified in a 1990 aerial photograph, and its presence was confirmed during the CERFA fly-over. The area is used for the maintenance and repair of on-site vehicles. This area is considered Disqualified because of the presence of petroleum products.

51. West Defense Reutilization and Marketing Office (DRMO) Yard [Parcel 51D-HS/PS/HR/P/A/L(P)]

The DRMO yard was observed during the CERFA site visit and during the CERFA fly-over. According to PUDA personnel, the area was used to store surplus supplies including hazardous substances (i.e., batteries and

various chemicals) along with petroleum products and transformers containing PCBs. An industrial radiation survey (No. 27-43-EZVV-93) provided by AEHA indicated that three compressors/impellers containing thorium-232 were found in the yard on 30 June 1993. The equipment was returned to the facility of origin (not specified in the report). DRMO policy prohibits sale of radioactive material to the public. A buyer had been scheduled to pick up the equipment on the day of the survey. In addition, PUDA personnel indicated that transformers had historically been stored in the area and indicated one known release and remediation of PCBs had occurred in the area.

52. *East DRMO Salvage Yard [Parcel 52D-HS/PS]*

The east DRMO salvage yard is located approximately 1,000 feet east of DRMO buildings. The DRMO salvage yard was observed during the CERFA site visit and during the CERFA fly-over. According to PUDA personnel, the area was used to store surplus supplies including hazardous substances (i.e., batteries and chemicals) and petroleum products.

53. *Building 706 [Parcel 53D-HS/A/L(P)]*

Paint-related materials are stored along with other materials in Building 706.

54. *Septic Tank System Associated with Building 156 [Parcel 54D-HR(P)/PR(P)/A/L(P)]*

A septic tank system (SWMU #39) was reportedly associated with Building 156. The release of petroleum and hazardous substances to the soil and ground water is suspected.

55. *Septic Tanks at Unidentified Building [Parcel 55D-HR(P)/A(P)/L(P)]*

According to a map provided by installation officials, three septic tank systems (SWMU #39) are located in this area. There are suspected releases of hazardous constituents from these septic systems. This building could not be identified from site maps.

4.2 *ADDITIONAL AREAS IDENTIFIED*

During the CERFA investigation, the below listed areas of environmental concern were identified. Although identified during the CERFA investigation, each is included in a Disqualified Parcel in Section 4.1.

AREE	Parcel
Land disturbance near northwest corner of North Burn Area No. 2.	49D
Land disturbance approximately 2,000 feet west of swimming pool	50D
West DRMO Yard	51D
East DRMO Salvage Yard	52D
Land disturbance west of Vehicle Test Track	10D
Explosion pits west of Surveillance Test Range	4D
Land disturbance north of Sewage Treatment Plant	34D
Disposal site, approximately 1,200 feet east of H Block	26D

4.3 *ADJACENT/SURROUNDING PROPERTIES*

Adjacent properties to the east, west, and south of PUDA consist of undeveloped prairies used primarily for ranching. A small portion of the northern boundary of PUDA is shared by the TTC. The TTC occupies a total of 52 square miles, and has been identified by CDH as a site where hazardous wastes have been improperly stored and disposed. These wastes include waste oils, fuel oils, solvents, paints, acids, caustics, and various other volatile and semivolatile organic compounds.

ERM contacted Ms. Susan Chaki of CDH regarding any environmental incidents at TTC. She indicated that an illegal surface impoundment was used to manage solvents including trichloroethene (TCE), 1,1,1-trichloroethane (TCA), and perchloroethene (PCE) at TTC. The ground water around the impoundment was investigated and trace amounts of PCE were detected. The investigation determined that a shale layer, about 15 feet below the surface, bounded the ground water. Wells drilled away from the impoundment wee found to be dry. The ground water appears to be localized around the impoundment. Ms. Chaki estimates that this impoundment is approximately two miles north of the northern boundary of PUDA. Because of the distance of the contaminated site from PUDA and the apparent localized contamination, it is unlikely that the contamination from the TTC facility would impact PUDA.

4.4 *RELATED ENVIRONMENTAL, HAZARD, AND SAFETY ISSUES*

Military installations frequently contain issues which the U.S. Army Environmental Center (USAEC) believes fall outside of the provisions of CERFA. For example, while a release of lead-based paint onto the ground may be a CERCLA concern, the application of lead-based paint to a building surface is generally not. However, lead-based paint applied to buildings may represent a safety hazard to young children. Similarly, other substances or materials commonly applied to or found in buildings (for example, radon and asbestos) may not be explicitly regulated under CERCLA, but may require a notice to potential transferees and lessees that they exist.

USAEC has sought to balance the statutory requirements of CERFA with the law's intent to identify uncontaminated property to the public which can be expeditiously reused. Notice has been provided for those parcels which appear to be uncontaminated under the definition provided in CERFA, but which may contain environmental, hazard, or safety issues. Buildings which contain asbestos-containing materials, lead-based paint, or naturally occurring radon fall into this category and are identified as "CERFA Qualified Parcels" in this CERFA report. Parcels which contain stored (not in use) equipment containing 50 parts per million (ppm) or more of polychlorinated biphenyl (PCB) oil, low level radionuclide-containing equipment such as dials and weapon site posts, and unexploded ordnance are also designated "CERFA Qualified Parcels".

In those cases, however, where for example, asbestos or PCBs have been disposed in the environment, the parcel has been identified as "CERFA Disqualified". In this example, the designation indicates that a CERCLA hazard may exist at this location.

The sites described below are numbered to follow the sequence established by Sections 4.1 and 4.2 and correspond to the site map (Figure 5.1-1) and accompanying map table. Sites with CERFA Qualifiers that are located within Disqualified Parcels are discussed in Section 4.1. A general discussion of several of the environmental, hazard, and safety issues at PUDA precedes the listing of the individual Parcels.

Asbestos-Containing Material (ACM)

All of the buildings at PUDA except Building 540, the Hazardous Waste Storage Building, were constructed in the 1940s through the 1970s when asbestos was commonly used as a construction and fireproofing material. No ACM was identified in any of the munitions storage igloos and none is suspected.

Table 4.4-1 provides a listing of buildings at PUDA and identifies the status of ACM as verified or possible (P).

No suspect ACM was identified in the following buildings: 91, 94, 109, 163, 299, 412, 414, 440, 546, 599, 717, 718, 762, 763, 804, 808. Asbestos has been removed from the following buildings: 2; 5; 38; 99; the east half of 528; and 547. All buildings constructed prior to 1985 which have not been tested or from which asbestos has not been removed are presumed to contain asbestos.

Lead-Based Paint (LBP)

No survey of LBP in buildings has been conducted at PUDA. LBP was commonly used prior to 1978. All of the buildings at PUDA except for Building 540, Hazardous Waste Storage Building, were constructed prior to 1978. All of the buildings at PUDA except for Building 540, therefore, are presumed to contain LBP.

Radionuclides

The Enhanced PA identified previous radioactive materials storage in the following buildings: 528, 529, 591, 560, 531, 417, 416, and 945. Ms. Pat Sterenka, Manager of Industrial Risk Management, of PUDA was interviewed concerning this topic. She indicated that the radioactive material had consisted of items such as: altimeters with radium dials, compasses with tritium, and helicopter housings with magnesium/thorium alloy. All materials contained low levels of radioactivity and none is considered to justify a designation of CERFA Qualification.

Only one building, Building 945, still contains a radioactive source. This building houses a calibration instrument for an X-ray machine, and contains 100 millicuries of Cesium-137. This instrument also does not justify a designation of CERFA Qualification. A review of NRC licenses suggests that radioactive materials may have been stored in Buildings 3, 487, and 711.

Radon

A radon monitoring directive, issued in 1991, called for a comprehensive one-year radon survey of all buildings at PUDA. Radon levels were measured in all buildings except igloos, buildings to be demolished, and buildings in extreme disrepair. Results from the 1991-1992 radon monitoring were reviewed by ERM and indicated that radon exceeded 4.0 pCi/l in eleven buildings. Eight of the buildings are sheds built to shelter

wells and are rarely entered. Radon levels slightly above 4.0 pCi/l were detected in seven well sheds, two warehouses, and the sewage treatment building. The associated building types and numbers are as follows: well shed buildings 94, 109, 190, 195, 481, 482, 611, 621; warehouses buildings 526 and 544; and sewage treatment building 31. The highest detected radon level was 20.1 pCi/l measured in well shed building 621. Only Building 109 is already included as a Disqualified Parcel (Parcel 16D, described in Section 4.1). Warehouses 526 and 544 are partially located within Disqualified Parcels based on activities at adjacent sites. Buildings 94, 481, and 482 could not be identified from site maps.

Unexploded Ordnance (UXO)

UXO consists of munitions, explosive dusts, and munition debris that failed to completely detonate during firing, testing, or demilitarization activities. A number of areas at the PUDA facility have historically been used for testing and demilitarization operations. These include the following areas: the North Demolition Area (SWMU # 1); the Demolition Area (SWMU #2); the Unexploded Ordnance Area (SWMU #3); East Burn Area #1 (SWMU #4); East Burn Area #2 (SWMU #5); North Burn Area #1 (SWMU #6); North Burn Area #2 (SWMU #7); Homemade Furnace (SWMU #8); Deactivation Incinerator (SWMU #11); Chemical Disposal Ground (SWMU#12); Chemical Burial Ground (SWMU #13); Surveillance Test Range (SWMU #32); Former Rifle/Pistol Test Range (SWMU #33); Former Test Range Near East Lagoon (SWMU #34); the Pits South of Guided Missile Workshop (SWMU #42); and the Pits located West of the Surveillance Test Area.

All of the sites known or suspected to contain UXO are included in the discussion in Section 4.1 because they are located within Disqualified Parcels.

PCBs

Instruments containing PCBs in excess of 50 ppm are stored at the DRMO Yard. This site has been discussed in connection with Disqualified Parcel 51 in Section 4.1. PCB-containing instruments that are in service are not CERFA concerns.

The following areas have been designated CERFA Qualified Parcels based upon the consideration of one or more of the environmental, hazard, and safety issues described above:

56. *Igloo Block B [Parcel 56Q-L(P)]*

57. *Igloo Block C [Parcel 57Q-L(P)]*

58. *Igloo Block D [Parcel 58Q-L(P)]*

59. *Igloo Block E [Parcel 59Q-L(P)]*

60. *Igloo Block F [Parcel 60Q-L(P)]*

61. *Igloo Block H [Parcel 61Q-L(P)]*

62. *Air Pollution Building [Parcel 62Q-A(P)/L(P)]*

63. *Unidentified Building [Parcel 63Q-A(P)/L(P)]*

This building could not be identified from site maps.

64. *Igloo Block A [Parcel 64Q-L(P)]*

65. *Unidentified Building between Blocks H and J [Parcel 65Q-A(P)/L(P)]*

This building could not be identified from site maps.

66. *Gate No. 32 [Parcel 66Q-A(L)/L(P)]*

67. *Igloo Block J [Parcel 67Q-L(P)]*

68. *Igloos South of Block J [Parcel 68Q-L(P)]*

69. *Powder Magazine Road Building [Parcel 69Q-A(P)/L(P)]*

70. *Buildings Near Gate 8 [Parcel 70Q-A(P)/L(P)]*

71. *Building 158 [Parcel 71Q-A(P)/L(P)]*

72. *Building 157 [Parcel 72Q-A(P)/L(P)]*

73. *Building 150 [Parcel 73Q-A(P)/L(P)]*

74. *Building 190 [Parcel 74Q-A(P)/L(P)/R]*

75. *Building 195 [Parcel 75Q-A(P)/L(P)/R]*

76. *Buildings 135 and 137 [Parcel 76Q-A(P)/L(P)]*

77. *Building 139 [Parcel 77Q-A(P)/L(P)]*

78. *Building 556 [Parcel 78Q-A(P)/L(P)]*

79. *Liquid Propane Storage Area [Parcel 79Q-A(P)/L(P)]*

80. *Buildings 501, 503, 520, 522 [Parcel 80Q-A/L(P)]*

81. *Building 519 [Parcel 81Q-A/L(P)]*

82. *Buildings 99 and 100 [Parcel 82Q-P/A/L(P)]*

Building 99 is scheduled to be used in a fire training exercise. Building 100 has been used to store PCB transformers.

83. *Building 731 [Parcel 83Q-A/L(P)]*

84. *Building 90 [Parcel 84Q-A(P)/L(P)]*

Part of this building is included within Parcel 39D.

85. *Multiple Buildings [Parcel 85Q-A/L(P)/R]*

Buildings 526 and 544, which were identified during the radon survey as containing levels of radon greater than 4.0 pCi/l, are included in this cluster.

86. *Buildings 611 and 621 [Parcel 86Q-A(P)/L(P)/R]*

87. *Building 610 [Parcel 87Q-A(P)/L(P)]*

88. *Buildings 599 and 600 [Parcel 88Q-A(P)/L(P)]*

89. *Building 164 [Parcel 89Q-A/L(P)]*

90. *Buildings 713 and 712 [Parcel 90Q-A(P)/L(P)]*

91. *Building 750 [Parcel 91Q-A(P)/L(P)]*

92. *Buildings 736, 725, 741, 743, 746 [Parcel 92Q-A/L(P)]*

93. *Buildings 126, 127, 121, 122, 123, 120, Bath House [Parcel 93Q-A/L(P)]*

94. *Building 75 [Parcel 94Q-A(P)/L(P)]*

95. *Buildings 6, 36, 38, 41, 42, 61, 66, 70, 76, 80, 86 [Parcel 95Q-A/L(P)]*

Asbestos has been removed from Building 38.

96. *Buildings 1, 2, 3, 5, 24, 25, 26, 27, 28, 29, 49, 54, 78 [Parcel 96Q-A/L(P)]*

Asbestos has been removed from Buildings 2 and 5.

97. *Buildings 14, 15, 16, 17, 18, 19, 20 [Parcel 97Q-A/L(P)]*

98. *Buildings 30, 111, 112, 113 [Parcel 98Q-A/L(P)]*

99. *Building 87 [Parcel 99Q-A/L(P)]*

100. *Buildings 79, 80, 81, 84, 96, 97 [Parcel 100Q-A(P)/L(P)]*

4.5 *CERFA EXCLUDED PROPERTY*

Under current plans the PUDA facility will be used for the demilitarization of munitions (i.e., mustard gas and mustard agent) until at least the year 2004. As a result, PUDA intends to maintain a number of buildings and other property to carry out this mission. The locations listed below have been designated by PUDA as necessary to conduct chemical demilitarization operations, and are therefore considered to be Excluded from the CERFA process. They are listed in the form of CERFA

Excluded Parcels, numbered to follow the sequence established throughout this report. The first Excluded Parcel follows the last of the 18 CERFA Parcels (118P).

119. One Acre Near Northern Installation Boundary [Parcel 119E]

This single acre of property is located just north of C Block within Parcel 101P.

120. G Block and land East of G Block [Parcel 120E]

The Chemical Munitions Storage Area, which is also known as G Block and SWMU #26, is currently used to store chemical munitions including mustard agent. Hazardous wastes including liquid mustard agent and agent-contaminated solid wastes are generated and accumulated in this area. Hazardous waste is currently being accumulated in igloos G-1109, G-1110, and a shed located in the southeast corner of G Block. Buildings within G Block to be retained include 485, 487, 491, and 492. CDH has recommended no further remedial action because the RFA did not determine that any hazardous waste or hazardous constituents were disposed of at the site.

121. Northeastern Portion of H Block [Parcel 121E]

This piece of property encompasses six acres and several igloos in H Block.

122. One Acre in Southwestern Quadrant of the Installation [Parcel 122E]

This single acre is located within CERFA Parcel 116P and adjacent to Qualified Parcel 84Q.

A number of buildings will also provide support to PUDA during the chemical demilitarization effort. Although they will be maintained by PUDA, these buildings are not considered Excluded from the CERFA process. Many of these buildings fall into Disqualified or Qualified Parcels. Buildings in this category include Buildings 1, 2, 3, 5, 36, 38, 45, 46, 47, 49, 51, 54, 61, 66, 78, 85, 125, 531, 593, and 734.

5.0 SITE PARCELIZATION

After concluding the review of investigation documents, regulatory records, personnel interviews and visual inspections, ERM identified parcels on the installation as CERFA Parcel, CERFA Qualified Parcels, CERFA Disqualified Parcels, or CERFA Excluded Parcels in accordance with the definitions in Section 1.2. The parcels are delineated on a map of the BRAC portion of the installation using a one-acre square grid for boundary definition

The Army chose a one-acre grid system to aid in the presentation of data gathered during the CERFA report investigation, and to facilitate use of the document by reuse groups and others. The one-acre grid provided a consistent method to report and locate environmental or other concerns. In the many cases where the concerns are much smaller than one acre, the grid system simplifies the depiction of the concern. Accordingly, the areal extent of many small areas of concern, such as UST sites, are liberally depicted in the CERFA report.

Additionally, the one-acre grid size was chosen as a generally redevelopable parcel size for either industrial or residential uses. However, the grid does not drive reuse nor restrict it. Reuse decisions should be made irrespective of the grid.

The entire one-acre grid square is colored or shaded to indicate the applicable parcel category based on the history of storage or release for any portion of that square. Parcels are labeled according to a system outlined in Section 1.2 of this report to indicate the applicable parcel category and the contaminating circumstances. Parcel labels are connected to the respective parcel boundaries by a line or are located within the parcel boundaries.

Where CERFA Disqualified Parcels and CERFA Qualified Parcels have coincided, the overlapped area has been designated CERFA Disqualified. Labels for any such overlapped parcels also indicate the presence of the qualifying hazards. CERFA Excluded Parcels have been excluded from this investigation of contaminant locations and therefore have no overlapping CERFA Disqualified Parcels or CERFA Qualified Parcels. Structures within CERFA Disqualified Parcels that contain qualifying safety hazards are designated with the applicable qualifying label, where map scale permits this level of detail.

ERM's investigation and subsequent parcelization of PUDA determined that 15,829.3 acres of the facility fall within the CERFA Parcel category. Approximately 3,302 acres of the facility are categorized as CERFA Qualified Parcels. 3,529.7 acres constitute the CERFA Disqualified portion of the installation. 744 acres of the property is designated CERFA Excluded.

In determining the applicable parcel categories for the installation property, ERM observed the following guidance provided by the USAEC for specific circumstances:

- Buildings constructed prior to 1978 are assumed to contain lead-based paint. A similar assumption is made for asbestos in buildings constructed prior to 1985.
- Storage of petroleum products, petroleum derivatives and CERCLA regulated hazardous substances will prevent an area from becoming a CERFA Parcel as long as that storage is for one year or greater. The quantity of substances stored is not relevant to determining the applicable parcel category. However, if the operation requiring such substances is in the immediate area, and the storage is in limited quantities for immediate use, the area is not precluded from being a CERFA Parcel.
- Non-leaking equipment containing less than 50 ppm PCBs does not preclude an area from becoming a CERFA Parcel. Non-leaking, out-of-service equipment with greater than 50 ppm PCBs will place an area in the CERFA Qualified Parcel category. An area is designated CERFA Disqualified if there is a known release containing greater than 50 ppm PCBs.
- Areas where there are transport systems or process equipment which handle hazardous material or petroleum products and upon which there have been no release, storage, or disposal are categorized as CERFA Parcels.
- Ordnance disposal locations are designated CERFA Disqualified. This does not include ordnance impact areas which are designated CERFA Qualified Parcels.
- Routine pesticide and herbicide application in accordance with manufacturer's directions and chlorofluorocarbons and halon in operational systems do not preclude an area from becoming a CERFA Parcel.
- Coal storage piles and railroad tracks do not be themselves preclude an area from becoming a CERFA Parcel.

5.1 *CERFA CATEGORY AND DESIGNATION MAP*

Table 5.1-1 and Figure 5.1-1 identify the breakdown of PUDA according to the criteria for parcel identification under CERFA.

5.2 *CERFA TRACT MAP*

The property boundaries and all property transfers including prior ownership information is shown in Figure 5.2-1.

5.3 *CERFA PARCEL DESIGNATORS*

Figure 5.3-1 summarizes the breakdown of PUDA according to the criteria for parcel identification under CERFA.

T 1-1
Pueblo Depot Activity
Pueblo, CO

PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
1D-HR/X (165 acres)	North Demolition Area (SWMU #1) Coordinates: 26,155	Disqualified Qualified	Releases of hazardous constituents to soil, ground water and air. Suspected releases to surface water. Releases include metals semivolatile compounds, propellants, and explosives. Unexploded ordnance	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division) PUDA Aerial photographs, 1970, 1980, 1990	None to date
2D-HR(P)/A(P)/L(P)/X(P) Parcel Coordinates: 23,81 (478 acres)	Demolition Area (SWMU #2)	Disqualified Qualified	Suspected releases of hazardous constituents to soil, ground water, and surface water including metals, semivolatile compounds, explosives, and propellants. Unexploded ordnance (P).	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
	Disposal Area North of Disassembly Plant (SWMU #45)	Disqualified	Suspected releases of hazardous constituents to soil and ground water including volatile and semivolatile compounds, solvents, and metals.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
	Ammunition Disassembly Plant, Multiple Buildings	Qualified	Asbestos (P). Lead paint (P).		
3D-HR/X Parcel Coordinates: 90,65 (154 acres)	Unexploded Ordnance Area (SWMU #3)	Disqualified Qualified	Suspected releases of hazardous constituents to soil including metals, volatile and semivolatile compounds, explosives. PUDA official indicated no knowledge of the potential presence of mustard degradation products in this area. Unexploded ordnance	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
	Deactivation Incinerator (SWMU #11)	Disqualified Qualified	Releases of hazardous constituents to soil and suspected releases to ground water including metals, volatile and semivolatile compounds, and explosives. Unexploded ordnance (P).	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
4D-HR/X(P) Parcel Coordinate 135,73 (1,005 acres)	East Burn Area #1 (SWMU #4)	Disqualified Qualified	Releases of hazardous constituents soil and suspected releases to ground water and surface water including metals, volatile and semivolatile compounds, propellants, and explosives. Unexploded ordnance (P).	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division) PUDA Aerial photographs, 1970, 1980, 1990	None to date
	East Burn Area #2 (SWMU #5)	Disqualified Qualified	Releases of hazardous constituents to soil and suspected releases to ground water and surface water including metals volatile and semivolatile compounds, propellants, and explosives. Unexploded ordnance (P).	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
	Surveillance Test Range (SWMU #32)	Disqualified	Suspected releases of hazardous constituents to soil and ground water including explosives, and metals.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous	None to date

Table 5.1-1
Pueblo Depot Activity
Pueblo, CO

PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
		Qualified	nexploded ordnance.	Materials and Waste Management Division)	
	Former Rifle/Pistol Range (SWMU #33)	Disqualified	releases of hazardous constituents to soil including explosives, metals, and lead.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
		Qualified	Unexploded ordnance (P).		
	Explosion pits west of Surveillance Test Range	Disqualified	Suspected presence of metals, volatile and semivolatile compounds and propellants.	1980 aerial photo, 1993 fly-over	None to date
		Qualified	Unexploded ordnance (P).		
5D-HS/PS/PR/A/L(P) (2 acres)	USTs at Building 731 Coordinates: 88,56	Disqualified	Four diesel fuel storage tanks and evidence of releases. Hazardous wastes generated and stored.	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA)	Tanks closed in 1991 Soil remediated.
		Qualified	Asbestos	Memorandum: UST Summary Request, August 31, 1993, (PUDA to U.S. Army Corp of Engineers)	
			Lead paint (P).		
6D-HR/X(P) (164 acres)	North Burn Area #1 (SWMU #6) Coordinates: 22, 135	Disqualified	Releases of hazardous constituents to soil, ground water and air and suspected releases to surface water including metals, volatile and semivolatile compounds, propellants, and explosives.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
		Qualified	Unexploded ordnance (P).		
7D-HR/X(P) (234 acres)	North Burn Area #2 (SWMU #7) and Pyrotechnic Burning Cage (SWMU #10) Coordinates: 21, 121	Disqualified	Releases of hazardous constituents to soil, ground water and air and suspected releases to surface water including metals, volatile and semivolatile compounds, mustard and mustard degradation products, propellants, and explosives. Area will be investigated in conjunction with SWMU #10.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division) PUDA Aerial photographs, 1970, 1980, 1990	None to date
		Qualified	Unexploded ordnance (P).		
8D-HR/PS(P)/X(P) (21 acres)	Homemade Furnace (SWMU #8) Coordinates: 21,102	Disqualified	Suspected releases hazardous constituents to soil, ground water, and surface water including metals, volatile and semivolatile compounds, and explosives. Suspected fuel AST (unknown location).	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
		Qualified	Unexploded ordnance (P).		
9D-HS/A/L(P) (4 acres)	Building 527 Coordinates: 86, 31	Disqualified	Paint and solvent waste generation.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
		Qualified	Asbestos (P).		
			Lead paint (P).		

T. .1-1
Pueblo Depot Activity
Pueblo, CO

PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
10D-HS/HR/PS/PR/A/I (P) Parcel Coordinates 68.22 (666.5 acres)	Building 535	Disqualified	Paint and solvent wastes generated. Known oil separator associated with building. Suspected releases of petroleum and hazardous substances from separator.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
		Qualified	Asbestos (P). Lead paint (P).	PUDA Aerial photographs, 1970, 1980, 1990	
	Landfill (SWMU #14) and Inert Burning Cage (SWMU #9)	Disqualified	Releases of hazardous constituents to soil and ground water including solvents, metals, volatile and semivolatile compounds, and explosives.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	Area is being remediated according to CDH Corrective Action Order.
	Building 531	Disqualified	Hazardous waste storage		
	Fire Protection Training Area (SWMU #29)	Disqualified	Releases of hazardous constituents to soil and suspected release to ground water including volatile and semivolatile compounds, solvents, explosives and metals.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
	Building 537	Disqualified	Steam cleaning of vehicles. Oil separator associated with building. Suspected releases of petroleum and hazardous substances.	Enhanced Preliminary Assessment Report, March 1990 (U.S. Army Toxic and Hazardous Materials Agency prepared by Ebasc Environmental)	None to date
		Qualified	Asbestos Lead paint (P).		
	Building 547 (SWMU #36)	Disqualified	Releases of petroleum and hazardous constituents to soils, surface and ground water including volatile and semivolatile compounds, solvents, corrosives, and metals. Oil separator in building. Hazardous waste generation and storage from sandblasting of paint.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
		Qualified	Lead paint (P).		

Table 5.1-1
Pueblo Depot Activity
Pueblo, CO

PARCEL NUMBER SIZE	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
	Hazardous Waste Storage - Building 540 (SWMU #27)	Disqualified Qualified	Storage of hazardous waste. Asbestos (P) Lead paint (P)	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date CDH recommends no further remedial action
	Plating Waste Drainage Ditch (Unnamed Ditch) and Building 539 (SWMU #28)	Disqualified	Releases of hazardous constituents to soil and ground water, and suspected releases to surface water including semivolatile compounds, pesticides, explosives, PCBs, solvents and metals.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	Area is being remediated according to CDH Corrective Action Order
	Missile Facility - Building 529 (SWMU #41)	Disqualified Qualified	Suspected releases of petroleum and hazardous constituents to the soil including paints, volatile and semivolatile compounds, solvents, propellants, and metals. Petroleum and listed hazardous constituents stored in building. Unexploded ordnance (P).	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
	Ditch north of Building 529 which flows to Boone Creek	Disqualified	Suspected release of petroleum and hazardous substances.	1957 and 1990 aerial. Site visit and fly-over.	None to date
	Septic Tank at Building 115	Disqualified Qualified	Release of petroleum and hazardous substances to soil and ground water is suspected. Asbestos Lead paint (P).	RCRA Facility Assessment, June 1992 (Colorado Dept. of Health, Hazardous Materials and Waste Division)	None to date
	Oil separator associated with Building 531	Disqualified Qualified	Oil separator. Petroleum wastes generated. Suspected releases of petroleum and hazardous substances to soil and ground water. Asbestos Lead paint (P).	RCRA Facility Assessment, June 1992 (Colorado Dept. of Health, Hazardous Materials and Waste Division)	None to date
	Buildings 501, 503, 520, 522, 524, 536, 532, 241	Qualified	Asbestos Lead paint (P)		
	Buildings 116 and 534	Qualified	Asbestos (P) Lead paint (P)		

PARCEL NUMBER SIZE	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
	Storage Sheds, West of Burma Rd.	Disqualified	Storage of petroleum products, releases of hazardous constituents including solvents and metals.	Site visit, 1990 aerial photo, 1993 fly-over	None to date
	Land disturbance west of vehicle test track	Disqualified	Suspected burial of Pershing missile carcasses and propellant.	1990 aerial, site visit, 1993 fly-over	None to date
11D-HS/HR(P)/A(P)/L(P)/R (14.71 acres)	Sewage Treatment Plant Building Coordinates: 106, 17	Disqualified Qualified	Suspected releases of hazardous constituents, including volatiles, semivolatiles, metals, and explosives Asbestos (P). Lead paint (P). Radon		
12D-HR(P)/X(P) Parcel Coordinates: 130,110 (4 acres)	Chemical Disposal Ground (SWMU #12)	Disqualified Qualified	Suspected releases of hazardous constituents to soil and ground water including metals, volatile and semivolatile compounds, mustard and mustard degradation products, and explosives. Unexploded ordnance (P).	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
	Sodium-Filled Valve Disposal Site (SWMU #16)	Disqualified	Possible radioactive material. However, CDH recommends no further remedial action suggesting that RFA did not indicate any hazardous waste or hazardous constituents were disposed of at site.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
13D-HR/X/(P) (12 acres)	West Chemical Burial Ground (SWMU #13) Coordinates: 24, 96	Disqualified Qualified	Releases of hazardous constituents to soil and suspected releases to ground water including metals, volatile and semivolatile compounds, mustard and mustard degradation products, and explosives. Unexploded ordnance (P).	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
14D-HR(P)/PR(P)/A/L(P) (4 acres)	Oil Separator associated with Building 560 Coordinates: 75, 35	Disqualified Qualified	Oil separator. Petroleum wastes generated. Suspected releases of petroleum and hazardous substances to soil and ground water. Asbestos Lead paint (P).	RCRA Facility Assessment, June 1992 (Colorado Dept. of Health, Hazardous Materials and Waste Division)	None to date
15D-PS/PR/A/L(P) (1 acre)	UST at Building 125 Coordinates: 54, 30	Disqualified Qualified	Diesel fuel storage tank and evidence of spill. Asbestos Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA) Memorandum: UST Summary Request, August 31, 1993, (PUDA to U.S. Army	None to date

Table 5.1-1
Pueblo Depot Activity
Pueblo, CO

PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
16D-PS/PR/R/L(P) (1 acre)	UST at Building 109 Coordinates: 88, 18	Disqualified Qualifi -	Kerosene storage tank and found to be leaking. Radon. Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA) Memorandum: UST Summary Request, August 31, 1993, (PUDA to U.S. Army Corp of Engineers)	Tank was closed on 2/5/92
17D-HR/PS/PR/A/L(P) Parcel Coordinates: 46,51 (149 acres)	TNT Washout Facility Discharge System (SWMU #17)	Disqualified	Releases of hazardous constituents to soil and ground water and suspected releases to surface water including metals, volatile and semivolatile compounds, and explosives.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	Area is being remediated according to CDH Corrective Action Order.
	UDMH Washout Disposal Area (SWMU #18)	Disqualified	Releases of hazardous constituents to soil and suspected releases to ground water including UDMH and RFNA.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	Area is being remediated according to CDH Corrective Action Order.
	Red Fuming Nitric Acid (RFNA) Washout Disposal Area (SWMU #19)	Disqualified	Releases of RFNA to soil.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
	West Lagoon (SWMU #22)	Disqualified	Releases of hazardous constituents to soil and ground water including volatile and semivolatile compounds, explosives, and metals	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	Area is being remediated according to CDH Corrective Action Order.
	Industrial Waste Lagoons (SWMU #44)	Disqualified	Suspected releases of hazardous constituents to soil and ground water including volatile and semivolatile compounds, solvents, and metals.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	Sampling to be conducted.
	UST at AWS-E	Disqualified Qualified	10,000-gallon diesel fuel storage tank and reported release from tank. Asbestos (P). Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA) Memorandum: UST Summary Request, August 31, 1993, (PUDA to U.S. Army Corp of Engineers)	Tank was closed in 1992
	UST at AWS-1	Disqualified Qualified	10,000-gallon diesel fuel underground storage tank removed in 1992. Asbestos (P). Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA)	None to date

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Pueblo, CO

PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
	Oil Separator Associated with Building AWS-6	Disqualified Qualified	Suspected releases of petroleum and hazardous substances to soil and ground water from oil separator. Asbestos (P). Lead paint (P).	PUDA Satellite Operators List	None to date
	Septic system associated with Building 821	Disqualified Qualified	Septic system. Suspected releases of petroleum and hazardous substances to soil and ground water. Asbestos Lead paint (P).	RCRA Facility Assessment, June 1992 (Colorado Dept. of Health, Hazardous Materials and Waste Division)	None to date
	Septic system associated with Building 823	Disqualified Qualified	Septic system. Suspected releases of petroleum and hazardous substances to soil and ground water. Asbestos Lead paint (P).	RCRA Facility Assessment, June 1992 (Colorado Dept. of Health, Hazardous Materials and Waste Division)	None to date
18D-PS/PR/A(P)/L(P) (6 acres)	USTs at Building 510 Coordinates: 71, 31	Disqualified Qualified	Three kerosene storage tanks & two gasoline storage tanks. Four tanks were leaking/one was in good condition. Asbestos Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA) Memorandum: UST Summary Request, August 31, 1993, (PUDA to U.S. Army Corp of Engineers)	Tanks were closed on 12/14/91
19D-PS/A/L(P) (1 acre)	UST at Building 567 Coordinates: 89, 37	Disqualified Qualified	Gasoline storage tank. Asbestos Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA) Memorandum: UST Summary Request, August 31, 1993, (PUDA to U.S. Army Corp of Engineers)	Tank closed in 1992
20D-HR (12 acres)	Concentrated Red Fuming Nitric Acid (RFNA) Disposal Area (SWMU #20) Coordinates: 151, 89	Disqualified	Releases of hazardous constituents to soil and suspected releases to ground water including solvents and explosives.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
21D-HR(P) (33 acres)	East Lagoons (SWMU #21) Coordinates: 99, 24	Disqualified	Suspected releases of hazardous constituents to soil and ground water including volatile and semivolatile compounds, cyanide, solvents, and metals.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date

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Pueblo Depot Activity
Pueblo, CO

PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
22D-PS/A/L(P) (1 acre)	USTs at Building 82 Coordinates: 60, 26	Disqualified Qualified	Three diesel fuel tanks and one gasoline tank. Asbestos Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA) Memorandum: UST Summary Request, August 31, 1993, (PUDA to U.S. Army Corp of Engineers)	None to date
23D-HS/L(P) (14 acres)	Mercury Storage Igloos (SWMU #23) Coordinates: 62, 61	Disqualified	Storage of mercury and mercury compounds in igloos.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
24D-HR (61 acres)	Zinc Chlorate/Chromate Burial Area (SWMU #24) Coordinates: 30, 132	Disqualified	Releases of hazardous constituents to soil and ground water including zinc chlorate or zinc chromate.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
25D-HS/A/L(P)/R (8 acres)	Building 543 Coordinates: 86, 33	Disqualified Qualified	Storage of mercury. Asbestos, Radon (Bldg. 544) Lead paint (P).	Enhanced Preliminary Assessment Report, March 1990 (U.S. Army Toxic and Hazardous Materials Agency prepared by Ebasco Environmental)	None to date
26D-HR(P) (4 acres)	Disposal Site, Approximately 1,200 feet East of H Block Coordinates: 108, 111	Disqualified	Asbestos disposal (possible).	Site visit, 1993 fly-over	
27D-HS/A/L(P) (4 acres)	Building 711 Coordinates: 94, 53	Disqualified Qualified	Paint-related material stored. Asbestos Lead paint (P).	PUDA Satellite Operators List	None to date
28D-HS/PS/L(P) (2 acres)	Building 299 Coordinates: 55, 160	Disqualified Qualified	Laboratory was located in building. AST located adjacent to building. Asbestos Lead paint (P).	Enhanced Preliminary Assessment Report, March 1990 (U.S. Army Toxic and Hazardous Materials Agency prepared by Ebasco Environmental)	None to date
29D-PS/PR/A/L(P) (9 acres)	USTs at Building 599 Coordinates: 82, 41	Disqualified Qualified	Two 200-gallon gasoline underground storage tanks, both tanks were leaking. Benzene detected in ground water. Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA) Memorandum: UST Summary Request, August 31, 1993, (PUDA to U.S. Army Corp of Engineers)	Tanks were closed on 1/30/92

PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
30D-PS/PR(P)/A(P)/L(P) (1 acre)	UST at Building 612 Coordinates: 88, 45	Disqualified Qualified	Gasoline underground storage tank. Tank in poor condition, suspected releases. Asbestos (P). Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA)	Tank was closed on 2/27/92
31D-PS/PR(P)/A/L(P) (1 acre)	UST at Building 5 Coordinates: 60, 18	Disqualified Qualified	Gasoline underground storage tank. Tank in poor condition, suspected releases. Asbestos Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA)	None to date
32D-HS/A(P)/L(P) (4 acres)	Building 716 Coordinates: 97, 53	Disqualified Qualified	Storage of paints, solvents, and their wastes. Asbestos Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA)	None to date
33D-HS/HR(P)/A(P)/L(P) (1 acre)	Building 144 Coordinates: 53, 32	Disqualified Qualified	Photo chemicals stored and used in building. Skeet range located north of building. Asbestos (P). Lead paint (P).	Enhanced Preliminary Assessment Report, March 1990 (U.S. Army Toxic and Hazardous Materials Agency prepared by Ebasco Environmental)	None to date
34D-HR(P)/X(P) Parcel Coordinates: 106,30 (244.5 acres)	Former Test Range Near East Lagoon (SWMU #34)	Disqualified Qualified	Suspected releases of hazardous constituents to soil including explosives and metals. Unexploded ordnance (P).	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
	Land disturbance north of sewage treatment plant	Disqualified	Suspected lead contamination in soil from pistol range.	Site visit, 1993 fly-over	None to date
35D-HS/HR(P)/PS/PR/A/L(P) Parcel Coordinates: 76,40 (19 acres)	Vehicle Maintenance Buildings 590 and 595 (SWMU #35)	Disqualified Qualified	Hazardous wastes generated. Releases of hazardous constituents to soil and ground water and suspected releases to surface water including volatile and semivolatile compounds, solvents, and metals. Leaking underground diesel tank. Oil separator associated with building. Asbestos Lead paint (P).	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date

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PARCEL NUMBER SIZE	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
	USTs at Building 588	Disqualified Qualified	Diesel and gasoline underground storage tanks. Asbestos (P). Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Project, April 20, 1992 (PUDA)	Tank removed in 1992
	UST at Building 589	Disqualified Qualified	Waste oil underground storage tank. Asbestos (P). Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Project, April 20, 1992 (PUDA)	Tank removed in 1992
36D-HR(P)/PR(P)/A/L(P) (2 acres)	Septic system associated with Building 175 Coordinates: 58, 80	Disqualified Qualified	Septic system. Suspected releases of petroleum and hazardous substances to soil and ground water. Asbestos Lead paint (P).	RCRA Facility Assessment, June 1992 (Colorado Dept. of Health, Hazardous Materials and Waste Division)	None to date
37D-HS/HR(P)/PS/ PR/A/L(P) Parcel Coordinates: 63,20 (8 acres)	Buildings 45, 46, and 47 (SWMU #37)	Disqualified Qualified	Corrosives, solvents, and waste oils generated in buildings. Suspected petroleum release to the soil. Asbestos Lead paint (P).	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	CDH recommends no further action
	Oil Separator associated with Building 67	Disqualified Qualified	Suspected releases of hazardous constituents and petroleum to soil and ground water. Oil separator associated with buildings. Asbestos Lead paint (P).	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
	USTs at Building 74	Disqualified Qualified	Two 10,000-gallon diesel fuel tanks were found to be leaking. Asbestos (P). Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA) Memorandum: UST Summary Request, August 31, 1993, (PUDA to U.S. Army Corp of Engineers)	Tanks were closed on 1/21 & 1/22/92
	USTs at Building 51	Disqualified Qualified	Three diesel fuel tanks. Two tanks were leaking. Oil separator also associated with building. Suspected hazardous substances released. Asbestos Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA) Memorandum: UST Summary Request, August 31, 1993, (PUDA to U.S. Army Corp of Engineers)	Tanks were closed on 12/16/91, 1/14/92 & 2/15/92

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PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
38D-HS/HR(P)/PS/PR/A/L(P) (20 acres)	Building 406 (SWMU #38) Coordinates: 107, 67	Disqualified Qualfied	Suspected releases of hazardous constituents to soil and ground water including corrosives, solvents, and cyanide. Petroleum UST (leaking) was removed from building. Asbestos Lead paint (P).	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
39D-HS/PS/HR(P)/PR(P)/A/L(P) Parcel Coordinates: 62,27 (3 acres)	Septic Tank System Associated with Building 88	Disqualified Qualified	Suspected releases of hazardous constituents and petroleum to soil and ground water. Asbestos Lead paint (P).	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
	Building 92	Disqualified Qualified	Used oil, antifreeze and brake fluid stored. Asbestos (P). Lead paint (P).	PUDA Satellite Operators List	None to date
40D-HR(P)/PR/A/L(P) Parcel Coordinates: 88,40 (13 acres)	Ground Water Contamination	Disqualified	Ground water contamination suspected from releases at Parcels 29D and 35D		Under investigation
	Buildings 586, 593, 594	Qualified	Asbestos Lead paint (P)		
41D-HS/A/L(P) (4 acres)	Building 701 Coordinates: 88, 50	Disqualified Qualified	Paint-related materials stored. Asbestos Lead paint (P).	PUDA Satellite Operators List	None to date
42D-HR/PS/PR(P)/A/L(P)/X(P) Parcel Coordinates: 130,43 (92 acres)	Pits South of Guided Missile Workshop (SWMU #42)	Disqualified Qualified	Releases of hazardous constituents to soil and suspected releases to ground water including volatile and semivolatile compounds, solvents, propellants, metals, and explosives. Unexploded ordnance (P)	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
	UST at Building 935	Disqualified Qualified	6,200-gallon kerosene storage tank. Septic tank suspected. Suspected release of petroleum and hazardous substances to soil and ground water. Asbestos Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA) Memorandum: UST Summary Request, August 31, 1993, (PUDA to U.S. Army Corp of Engineers)	Tank was closed on 2/4/92
	UST at Building 940	Disqualified	6,200-gallon kerosene storage tank. Suspected septic tank. Suspected release of petroleum and hazardous substances to soil and ground water.	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April	Tank was closed on

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PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
		Qualified	Asbestos Lead paint (P).	20, 1992 (PUDA) Memorandum: UST Summary Request, August 31, 1993, (PUDA to U.S. Army Corp of Engineers)	2/4/92
	UST at Building 945	Disqualified Qualified	6,200 gallon kerosene storage tank. Suspected septic tank. Suspected release of petroleum and hazardous substances to soil and ground water. Asbestos Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity Project, April 20, 1992 (PUDA) Memorandum: UST Summary Request, August 31, 1993, (PUDA to U.S. Army Corp of Engineers)	Tank was closed on 2/1/92
43D-HS(P)/HR(P)/PS(P)/A(P)/L(P) (30 acres)	Vehicle Staging and Storage Area Northeast of Building 594 (SWMU #43) Coordinates: 91, 42	Disqualified	Suspected releases of hazardous constituents to soil and ground water including volatile and semivolatile compounds, solvents, and metals.	RCRA Facility Assessment, June 1992 (Colorado Department of Health, Hazardous Materials and Waste Management Division)	None to date
44D-HS/HR(P)/PS/PR(P)/A/L(P) Parcel Coordinates: 100,68 (3 acres)	Building 417	Disqualified Qualified	Storage of paint-related materials. Septic tank suspected. Suspected release of petroleum and hazardous substances to soil and ground water. Asbestos Lead paint (P)	PUDA Satellite Operators List	None to date
	UST at Building 414	Disqualified Qualified	1,000-gallon kerosene underground storage tank in poor condition at time of removal. Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Project, April 20, 1992 (PUDA)	Tank removed in 1992.
45D-HR(P)/PS/PR/A/L(P) Parcel Coordinates: 102,66 (3 acres)	UST at Building 412	Disqualified Qualified	250-gallon diesel underground storage tank found leaking. Septic tank system. Suspected releases of petroleum and hazardous substances to the soil and ground water. Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Project, April 20, 1992 (PUDA)	Tank removed in 1992
	Septic system associated with Building 412 and 413	Disqualified Qualified	Septic system. Suspected releases of petroleum and hazardous substances to soil and ground water. Asbestos Lead paint (P).	RCRA Facility Assessment, June 1992 (Colorado Dept. of Health, Hazardous Materials and Waste Division)	None to date

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Pueblo Depot Activity
Pueblo, CO

PARCEL NUMBER SIZED	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
46D-HS/A/L(P) (1 acre)	Pesticide and Herbicide Building Coordinates: 84, 47	Disqualified Qualified	Storage of pesticides and herbicides. Asbestos Lead paint (P)	Enhanced Preliminary Assessment Report, March 1990 (U.S. Army Toxic and Hazardous Materials Agency prepared by Ebasco Environmental)	None to date
47D-PS(P)/A/L(P) Parcel Coordinates: 61,16 (2 acres)	UST at Building 11	Disqualified Qualified	Suspected 250-gallon underground tank which has not been found. Asbestos Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity, April 20, 1992 (PUDA)	None to date
	UST at Building 12	Disqualified Qualified	Suspected 250-gallon underground tank which has not been found. Asbestos Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity, April 20, 1992 (PUDA)	None to date
48D-PS(P)/A/L(P) Parcel Coordinates: 64,17 (2 acres)	UST at Building 25	Disqualified Qualified	Suspected 250-gallon underground tank which has not been found. Asbestos Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity, April 20, 1992 (PUDA)	None to date
	UST at Building 26	Disqualified Qualified	Suspected 250-gallon underground tank which has not been found. Asbestos Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity, April 20, 1992 (PUDA)	None to date
	UST at Building 27	Disqualified Qualified	Suspected 250-gallon underground tank which has not been found. Asbestos Lead paint (P).	Underground Storage Tank Summary, Pueblo Army Depot Activity, April 20, 1992 (PUDA)	None to date
49D-HR(P) (8 acres)	Land disturbance near Northwest Corner of North Burn Area #2 Coordinates: 17, 130	Disqualified	Disposal area (P).	1990 Aerial Photo, 1993 fly-over	None to date
50D-PS (8 acres)	Land disturbance approximately 2000 ft west of swimming pool Coordinates: 46, 30	Disqualified	Petroleum storage at truck maintenance area.	1990 Aerial Photo, 1993 fly-over	None to date

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Pueblo Depot Activity
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PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
51D-HS/HR/PS/P/A/L(P) (16 acres)	West DRMO Yard Coordinates: 60,42	Disqualified	Storage of petroleum products, PCB transformers, batteries and various chemicals. Known PCB release has been remediated.	Site visit, 1993 fly-over	None to date
52D-HS/PS (12 acres)	East DRMO Salvage Yard Coordinates: 64, 41	Disqualified	Storage of petroleum and hazardous substances.	Site visit, 1993 fly-over	None to date
53D-HS/A/L(P) (4 acres)	Building 706 Coordinates: 91,53	Disqualified Qualified	Paint-related material stored. Asbestos Lead paint (P).	PUDA Satellite Operators List	None to date
54D-HR(P)/PR(P)/A/L(P) (2 acres)	Septic system associated with Building 156 Coordinates: 59, 50	Disqualified Qualified	Release of petroleum and hazardous substances to soil and ground water is suspected. Asbestos Lead paint (P).	RCRA Facility Assessment, June 1992 (Colorado Dept. of Health, Hazardous Materials and Waste Division)	None to date
55D-HR(P)/A(P)/L(P) (2acres)	Septic Tank Systems at Unidentified Building Coordinates: 51, 89	Disqualified Qualified	Septic systems suspected of hazardous material releases Asbestos (P). Lead paint (P).		
56Q-L(P) (397 acres)	Igloo Block B Coordinates: 45, 115	Qualified	Lead paint (P).		
57Q-L(P) (398 acres)	Igloo Block C Coordinates: 70,150	Qualified	Lead paint (P).		
58Q-L(P) (400 acres)	Igloo Block D Coordinates: 70,125	Qualified	Lead paint (P).		
59Q-L(P) (398 acres)	Igloo Block E Coordinates: 70,100	Qualified	Lead paint (P).		
60Q-L(P) (384 acres)	Igloo Block F Coordinates: 70,70	Qualified	Lead paint (P).		
61Q-L(P) (382 acres)	Igloo Block H Coordinates: 92,122	Qualified	Lead paint (P).		

PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
62Q-A(P)/L(P) (1 acre)	Air Pollution Building Coordinates: 31,100	Qualified	Asbestos (P). Lead paint (P).		
63Q-A(P)/L(P) (2 acres)	Unidentified Building Coordinates: 52,93	Qualified	Asbestos (P). Lead paint (P).		
64Q-L(P) (413 acres)	Igloo Block A Unidentified Building Coordinates: 45, 143	Qualified	Lead paint (P). Lead paint (P).		
65Q-A(P)/L(P) (1 acre)	Unidentified Building Coordinates: 86,103	Qualified	Asbestos (P). Lead paint (P).		
66Q-A(P)/L(P) (1 acre)	Gate No. 32 Coordinates: 47,20	Qualified	Asbestos (P). Lead paint (P).		
67Q-L(P) (275 acres)	Igloo Block J Coordinates: 92,91	Qualified	Lead paint (P).		
68Q-L(P) (3 acres)	Igloos South of Block J Coordinates: 86,80	Qualified	Lead paint (P).		
69Q-A(P)/L(P) (1 acre)	Powder Magazine Road Building Coordinates: 86,78	Qualified	Asbestos (P). Lead paint (P).		
70Q-A(P)/L(P) (2 acres)	Buildings Near Gate 5 Coordinates: 109,64	Qualified	Asbestos (P). Lead paint (P).		
71Q-A(P)/L(P) (1 acre)	Building 158 Coordinates: 58,52	Qualified	Asbestos (P). Lead paint (P).		
72Q-A(P)/L(P) (2 acre)	Building 157 Coordinates: 63,51	Qualified	Asbestos (P). Lead paint (P).		
73Q-A(P)/L(P) (1 acre)	Building 150 Coordinates: 59,40	Qualified	Asbestos (P). Lead paint (P).		

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PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
74Q-A(P)/L(P)/R (1 acre)	Building 190 Coordinates: 61,38	Qualified	Asbestos (P). Lead paint (P). Radon		
75Q-A(P)/L(P)/R (1 acre)	Building 195 Coordinates: 66,43	Qualified	Asbestos (P). Lead paint (P). Radon		
76Q-A(P)/L(P) (2 acres)	Buildings [illegible] and 137 Coordinates: 66,34	Qualified	Asbestos (P). Lead paint (P).		
77Q-A(P)/L(P) (1 acre)	Building 139 Coordinates: 69,34	Qualified	Asbestos (P). Lead paint (P).		
78Q-A(P)/L(P) (2 acres)	Building 556 Coordinates: 70,36	Qualified	Asbestos (P). Lead paint (P).		
79Q-A(P)/L(P) (6 acres)	Liquid Propane Storage Area Coordinates: 109,69	Qualified	Asbestos (P). Lead paint (P).		
80Q-A/L(P) (1 acre)	Building 131 Coordinates: 53,30	Qualified	Asbestos Lead paint (P)		
81Q-A/L(P) (1 acre)	Building 519 Coordinates: 71,32	Qualified	Asbestos Lead paint (P).		
82Q-P/A/L(P) (1 acre)	Buildings 99, 100 Coordinates: 65,29	Qualified	Asbestos Lead paint (P). PCB transformer storage in Building 100.		
[illegible] A/L(P) (1 acre)	Building 731 Coordinates: 87,56	Qualified	Asbestos Lead paint (P).		

PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
84Q-A(P)/L(P) (1 acre)	Building 90 *Part of this building is* included with Parcel 39A Coordinates 63,27	Qualified	Asbestos (P) Lead paint (P)		
85Q-A/L(P), R (145 acres)	Multiple Buildings Coordinates 80,38	Qualified	Asbestos Lead paint (P). Radon		
86Q-A(P)/L(P)/R (2 acres)	Buildings 611 and 621 Coordinates 89,42	Qualified	Asbestos (P). Lead paint (P). Radon		
87Q-A(P)/L(P) (1 acre)	Building 610 Coordinates 87,43	Qualified	Asbestos (P) Lead paint (P).		
88Q-A(P)/L(P) (1 acre)	Buildings 599 and 600 Coordinates 82,42	Qualified	Asbestos (P) Lead paint (P).		
89Q-A(P)/L(P) (2 acres)	Building 164 Coordinates 78,53	Qualified	Asbestos Lead paint (P).		
90Q-A/L(P) (2 acres)	Buildings 713 and 712 Coordinates 95,54	Qualified	Asbestos Lead paint (P).		
91Q-A(P)/L(P) (1 acre)	Building 750 Coordinates 99,56	Qualified	Asbestos (P) Lead paint (P).		
92Q-A/L(P) (9 acres)	Buildings 736, 725, 741, 743 746 Coordinates 93,56	Qualified	Asbestos Lead paint (P).		
93Q-A/L(P) (8 acres)	Buildings 126, 127, 121, 122, 123, 120, Bath House Coordinates 55,29	Qualified	Asbestos Lead paint (P).		
94Q-A(P)/L(P) (4 acres)	Building 75 Coordinates 56,25	Qualified	Asbestos (P) Lead paint (P).		

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PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
95Q-A/L(P) (15 acres)	Buildings 6, 36, 38, 41, 42, 61, 66, 70, 80, 86 Coordinates: 60,21	Qualified	Asbestos Lead paint (P).		
96Q-A/L(P) (11 acres)	Buildings 1, 2, 3, 5, 24, 25, 26, 27, 28, 29, 49, 54, 78 Coordinates: 63,18	Qualified	Asbestos Lead paint (P).		
97Q-A/L(P) (4 acres)	Buildings 14, 15, 16, 17, 18, 19, 20 Coordinates: 63,15	Qualified	Asbestos Lead paint (P).		
98Q-A/L(P) (30 acres)	Buildings 30, 111, 112, 113 Coordinates: 68,22	Qualified	Asbestos Lead paint (P).		
99Q-A/L(P) (1 acre)	Building 87 Coordinates: 63,25	Qualified	Asbestos Lead paint (P).		
100Q-A(P)/L(P) (7 acres)	Buildings 79, 80, 81, 84, 96, 97 Coordinates: 61,28	Qualified	Asbestos (P) Lead paint (P).		
101P (1229.5 acres)	Coordinates: 10, 150	CERFA Parcel	No issues.		
102P (1021.2 acres)	Coordinates: 10, 105	CERFA Parcel	No issues.		
103P (649.76 acres)	Coordinates: 80, 165	CERFA Parcel	No issues.		
104P (638 acres)	Coordinates: 60, 135	CERFA Parcel	No issues.		
105P (682 acres)	Coordinates: 70, 110	CERFA Parcel	No issues.		
106P (3641.7 acres)	Coordinates: 130, 130	CERFA Parcel	No issues.		
107P (955.6 acres)	Coordinates: 35, 80	CERFA Parcel	No issues.		

PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
108P (924.6 acres)	Coordinates: 30, 55	CERFA Parcel	No issues.		
109P (925.5 acres)	Coordinates: 30, 25	CERFA Parcel	No issues.		
110P (343.4 acres)	Coordinates: 150, 70	CERFA Parcel	No issues.		
111P (852 acres)	Coordinates: 140, 40	CERFA Parcel	No issues.		
112P (798 acres)	Coordinates: 100, 75	CERFA Parcel	No issues.		
113P (1067 acres)	Coordinates: 110, 50	CERFA Parcel	No issues.		
114P (7 acres)	Coordinates: 92, 37	CERFA Parcel	No issues.		
115P (666.5 acres)	Coordinates: 105, 12	CERFA Parcel	No issues.		
116P (634.5 acres)	Coordinates: 55, 12	CERFA Parcel	No issues.		
117P (796 acres)	Coordinates: 60, 40	CERFA Parcel	No issues.		
118P (2 acres)	Coordinates: 62, 16	CERFA Parcel	No issues.		
119E (1 acre)	One Acre Near Northern Installation Boundary Coordinates: 68, 160	Excluded	To be retained by PUDA for chemical demilitarization operations	PUDA	
120E (736 acres)	G Block and Land East of G Block Coordinates: 98, 145	Excluded	To be retained by PUDA for chemical demilitarization operations	PUDA	
121E (6 acres)	Northeastern Portion of H Block Coordinates: 100, 128	Exlcuded	To be retained by PUDA for chemical demilitarization operations	PUDA	

Table 5.1-1
Pueblo Depot Activity
Pueblo, CO

PARCEL NUMBER (SIZE)	NAME AND LOCATON	CATEGORY	BASIS	SOURCE	REMEDIATION
122E (1 acre)	One ... e in Southwestern Quadrant of the installation Coordinates 64, 27	Excluded	To be retained by PUDA for chemical demilitarization operations	PUDA	

Parcel Category
D = CERFA Disqualified Parcel
Q = CERFA Qualified Parcel
E = CERFA Excluded Parcel
P = CERFA Parcel

(P) = Possible

Disqualified Parcel
PS = Petroleum Storage
PR = Petroleum Release/Disposal
HS = Hazardous Materials Storage
HR = Hazardous Materials Release/Disposal

Qualified Designations
A = Asbestos
B = Lead-Based Paint
P = PCBs (Polychlorinated biphenyls)
R = Radon
X = UXO (unexploded ordnance)
RD = Radionuclides

Pueblo Previous Owners

Tract. No.	Name of Previous Owner (Transferror)	Date of Transfer			Acreage Fee
1	Thatcher Land & Cattle Co.	22	October	1942	120.00
2	Thatcher Land & Cattle Co.	22	October	1942	80.00
3	Thatcher Land & Cattle Co.	22	October	1942	18,466.49
4	State of Colorado	6	May	1942	640.0
5	Elizabeth C. Wellington, Nee Hilbish	22	October	1942	160.0
6	Melvin and James Nielson	22	October	1942	800.0
7	Atachison, Topeka & Santa Fe R.R. Co.	22	October	1942	80.00
8	Excelsior Irrigation Co.	22	October	1942	30.0
9	Melvin Nielsen	22	October	1942	80.00
10	Excelsior Land & Livestock Co.	17	March	1943	80.00
11-L	Missouri Pacific Railroad Co.	3	December	1943	Unclear
A	General Services Administration		Unclear		Unclear
B-1	General Services Administration	1	April	1985	Unclear
B-2	General Services Administration	1	April	1985	Unclear

Note: *The tract numbers and identifiers are not in consecutive order in order to stay consistent with historical tract numbers and identifiers.*

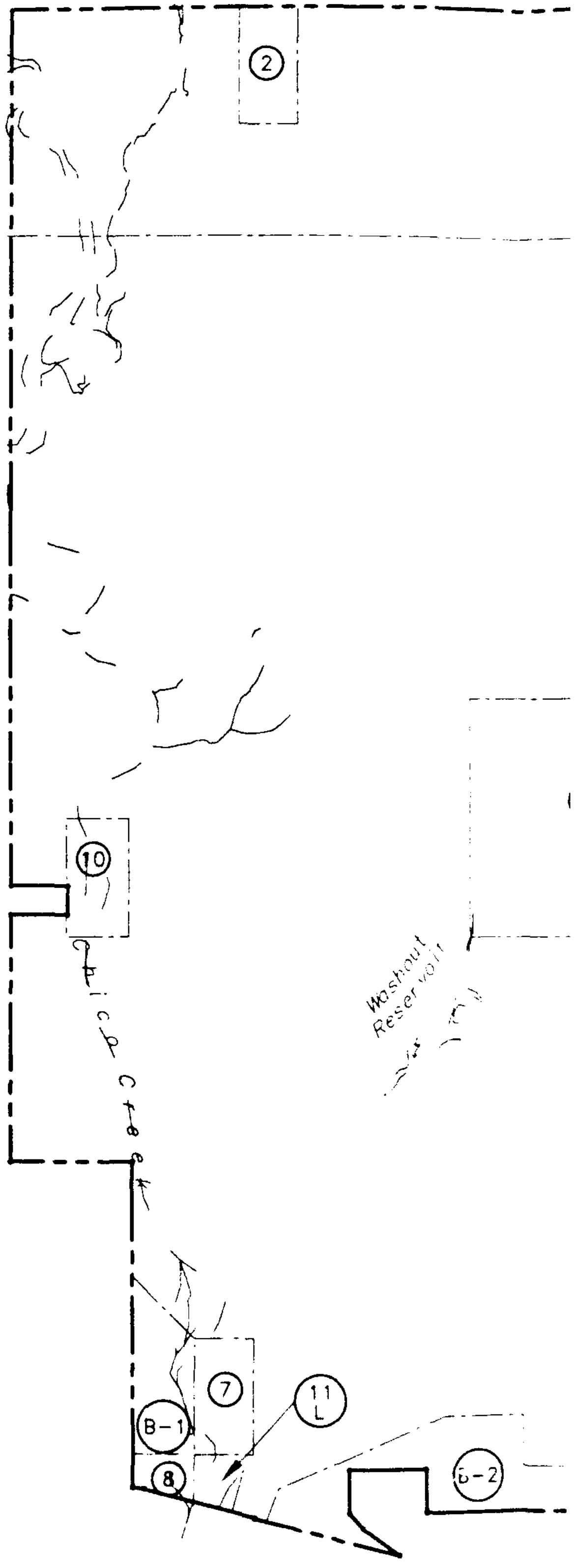
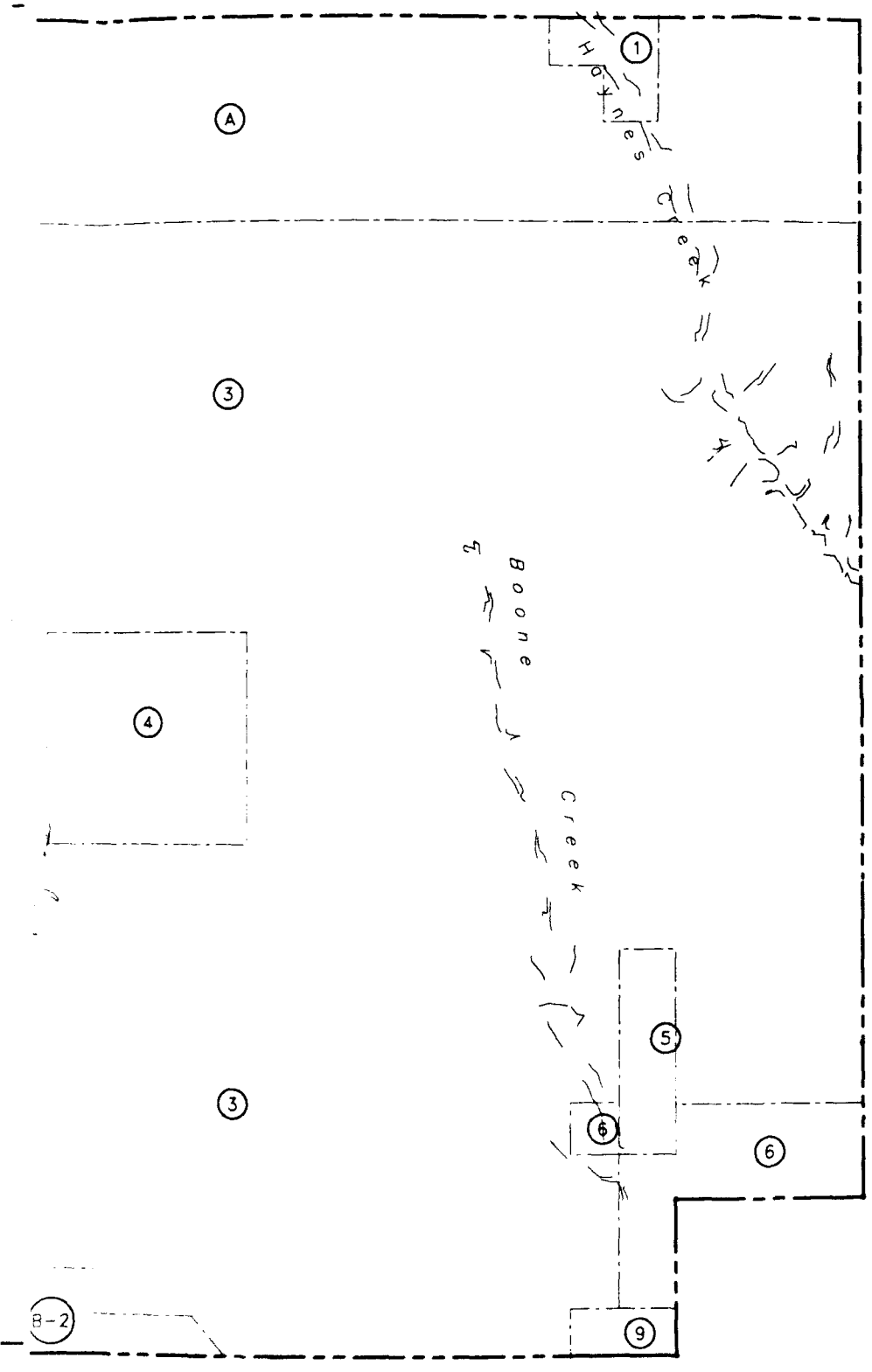


Figure 5.2-1
Tract Map
Pueblo Depot Activity
Pueblo, Colorado



Legend

Property Boundary (Real BRAC Property)

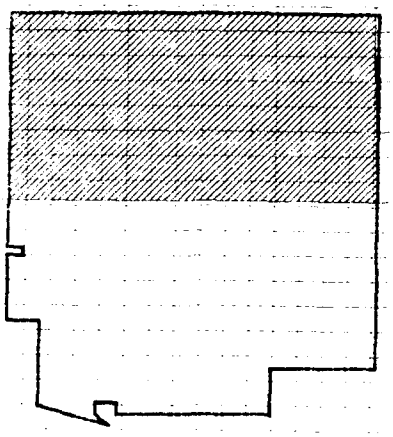
Tract Boundary

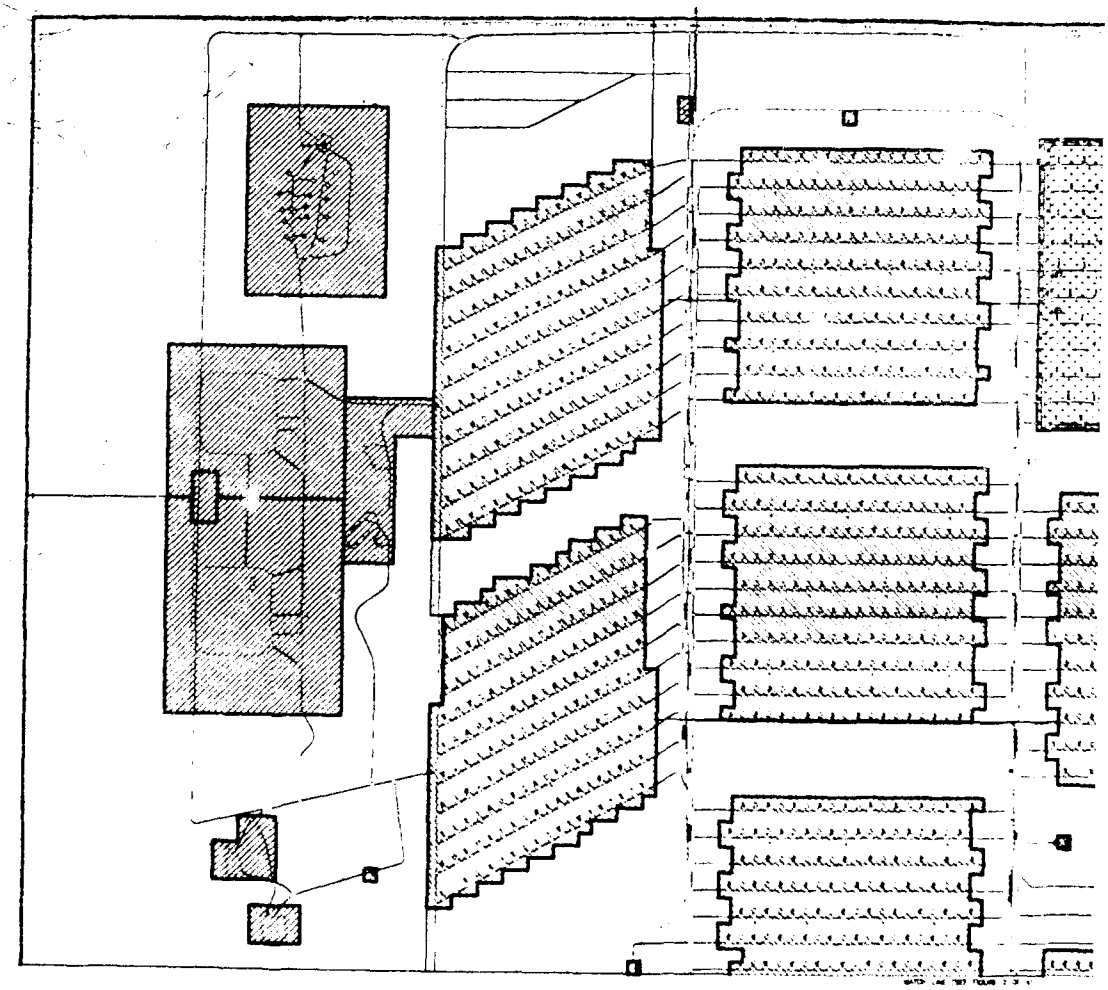
(3) Tract Label

4000 0 4000

Scale in Feet

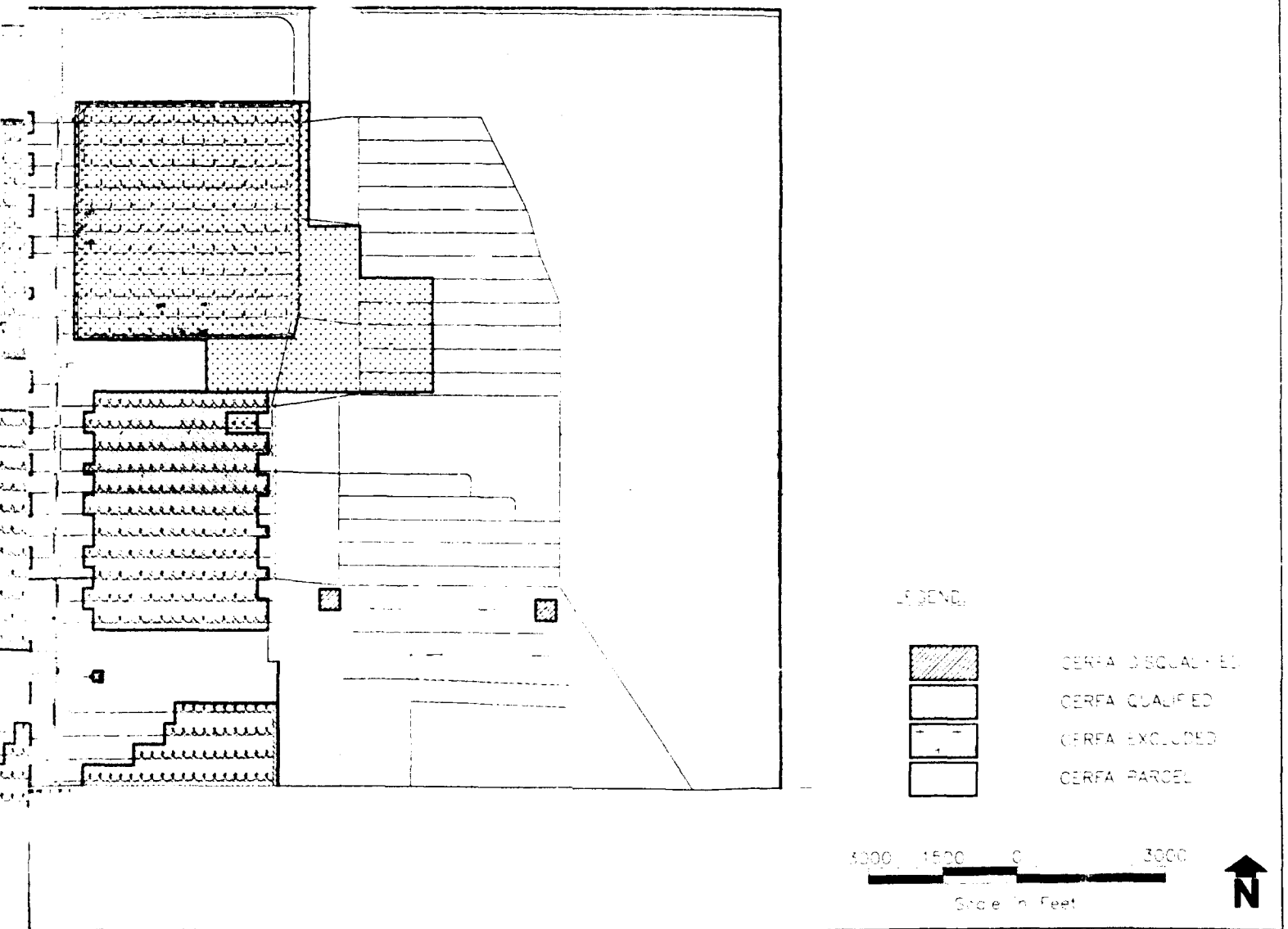
N

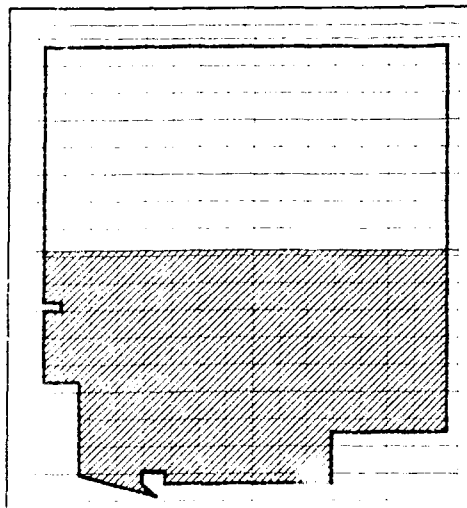


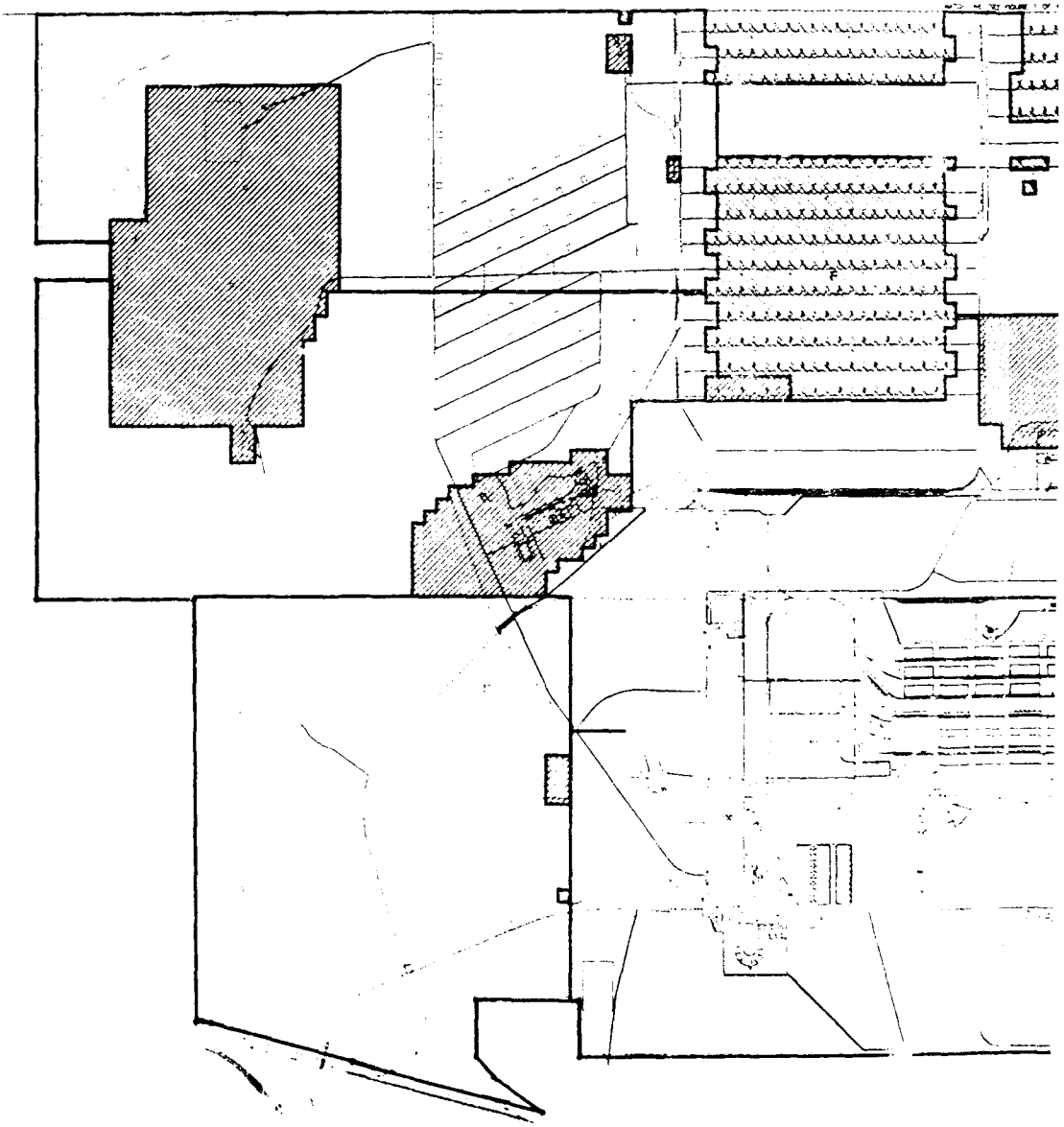



U.S. ARMY ENVIRONMENTAL CENTER

Figure 5.3-1
CERFA Parcel Designations
Pueblo Depot Activity
Pueblo, Colorado

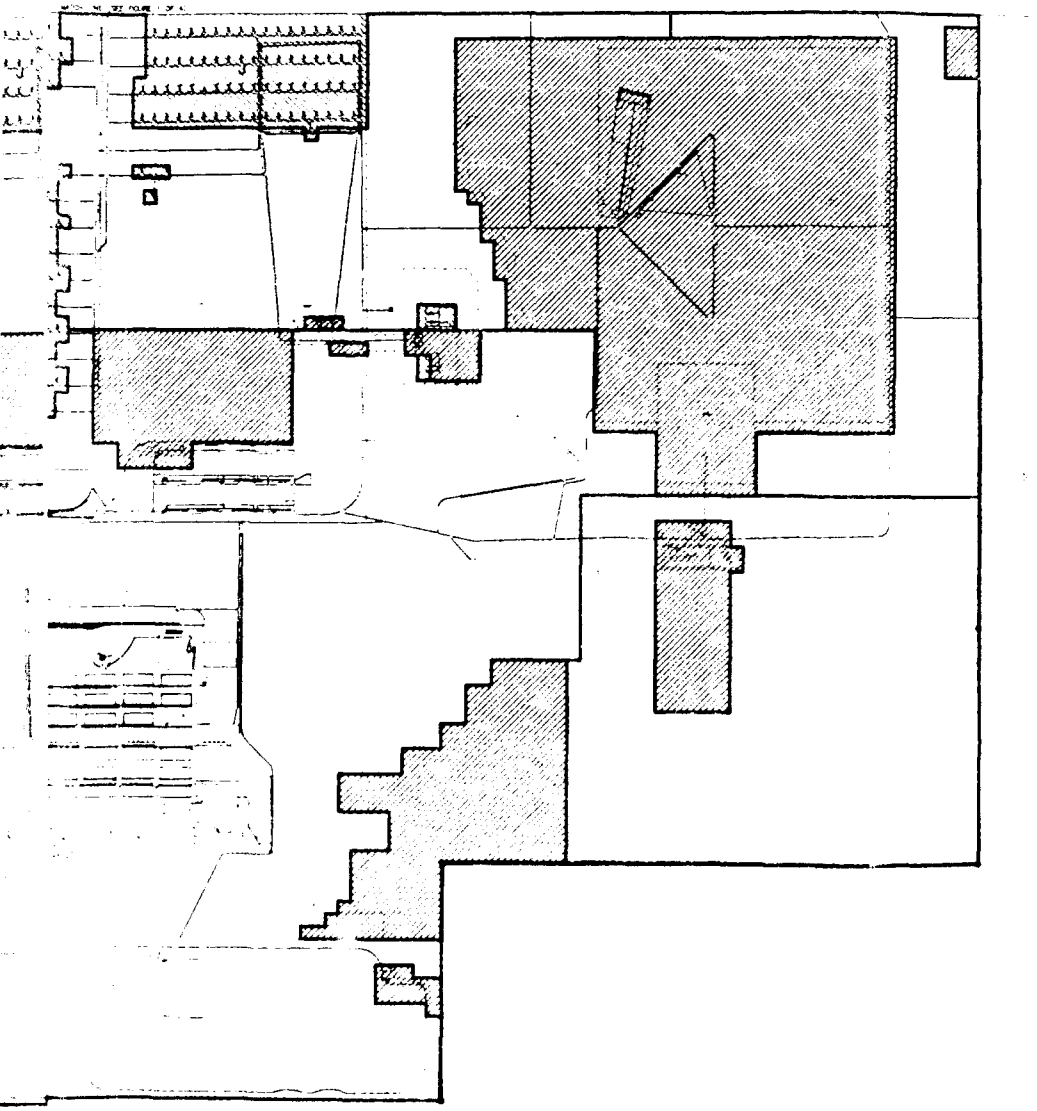


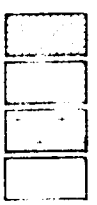





U.S. ARMY ENVIRONMENTAL CENTER

Figure 5.3-1
CERFA Parcel Designations
Pueblo Depot Activity
Pueblo, Colorado





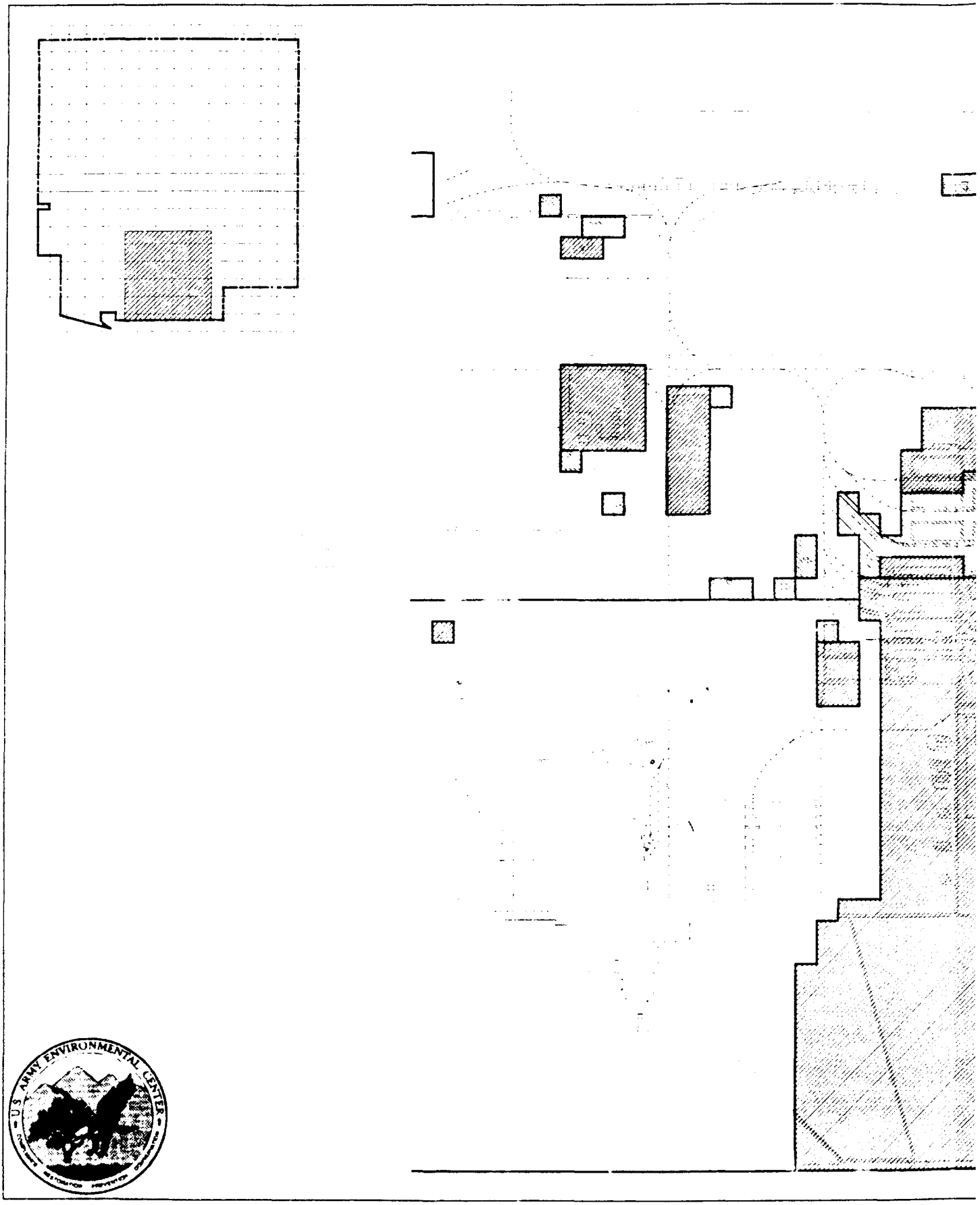
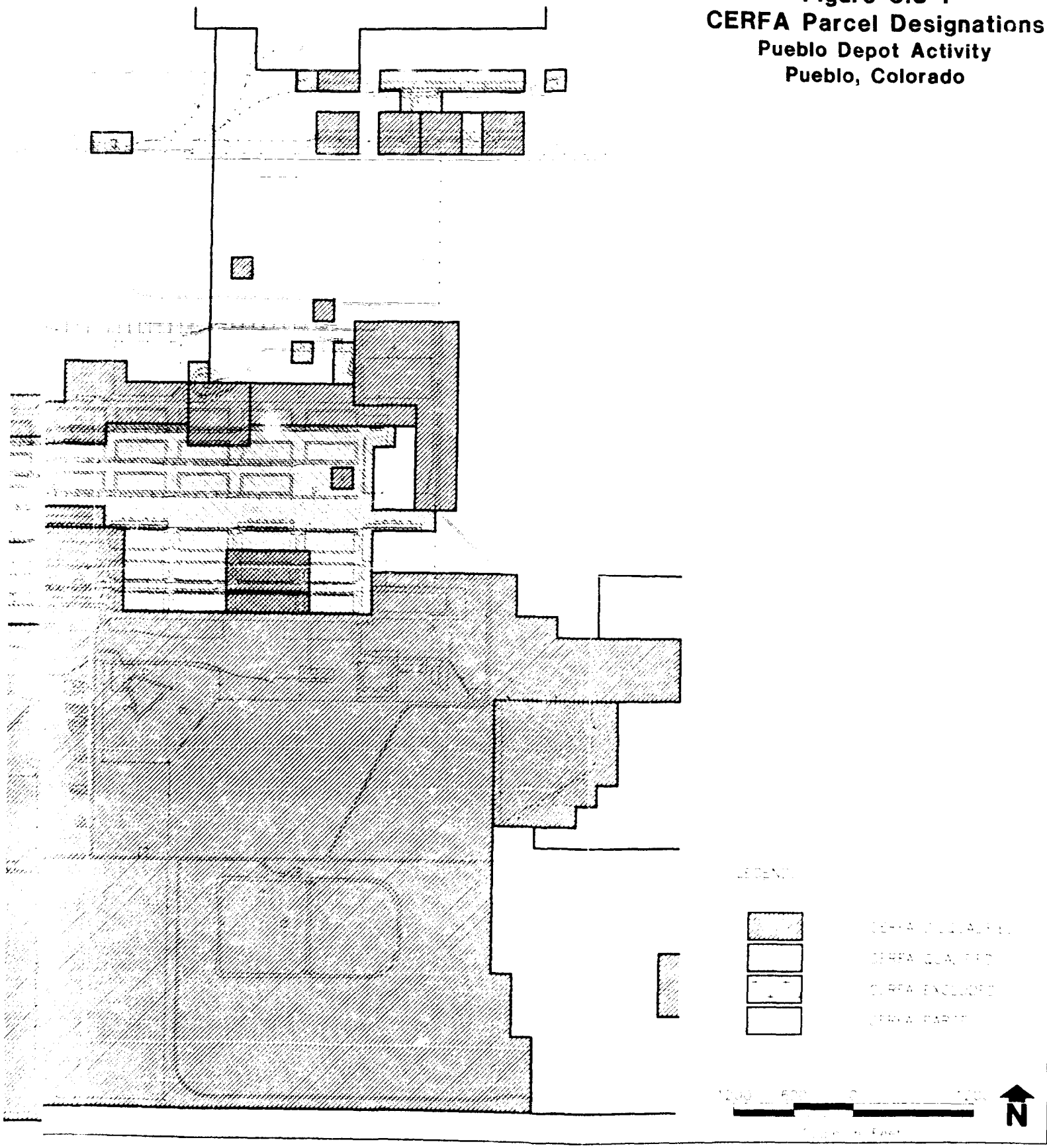


Figure 5.3-1
CERFA Parcel Designations
Pueblo Depot Activity
Pueblo, Colorado



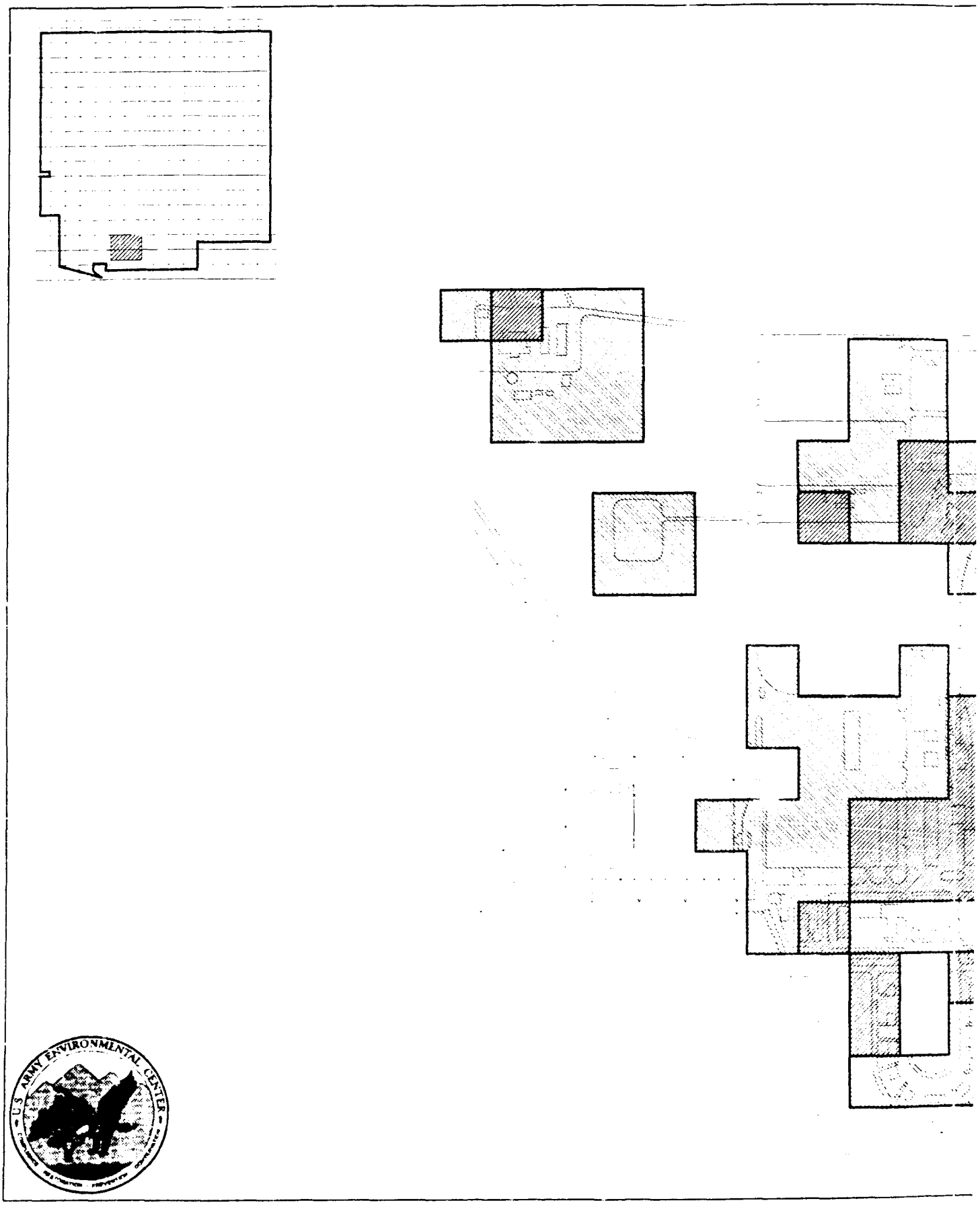
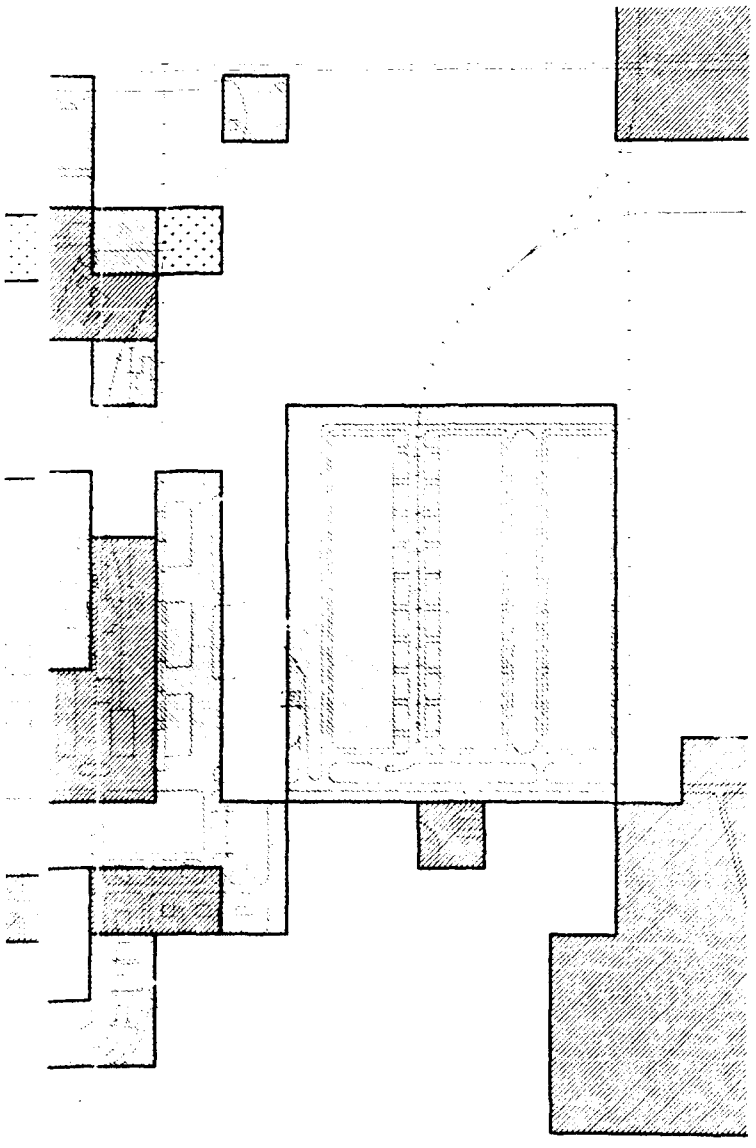
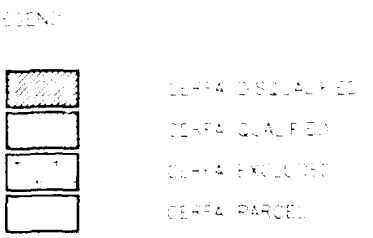
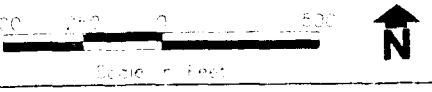
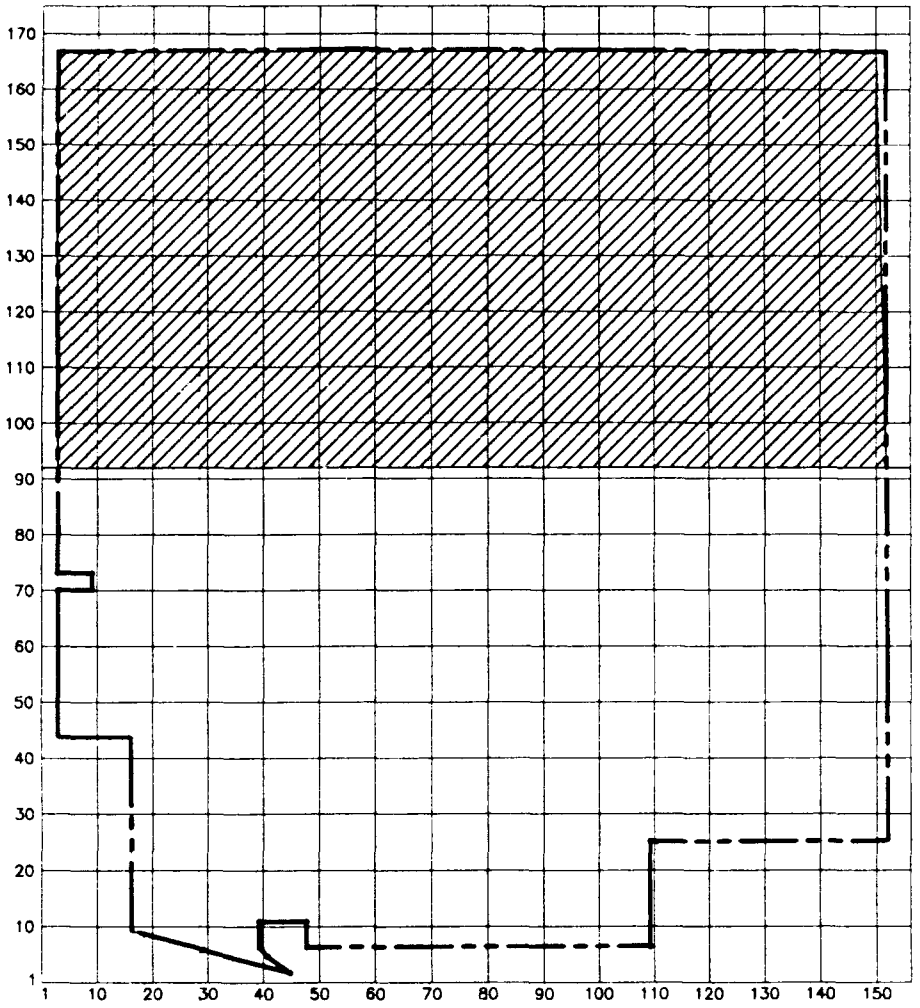

U.S. ARMY ENVIRONMENTAL CENTER

Figure 5.3-1
CERFA Parcel Designations
Pueblo Depot Activity
Pueblo, Colorado





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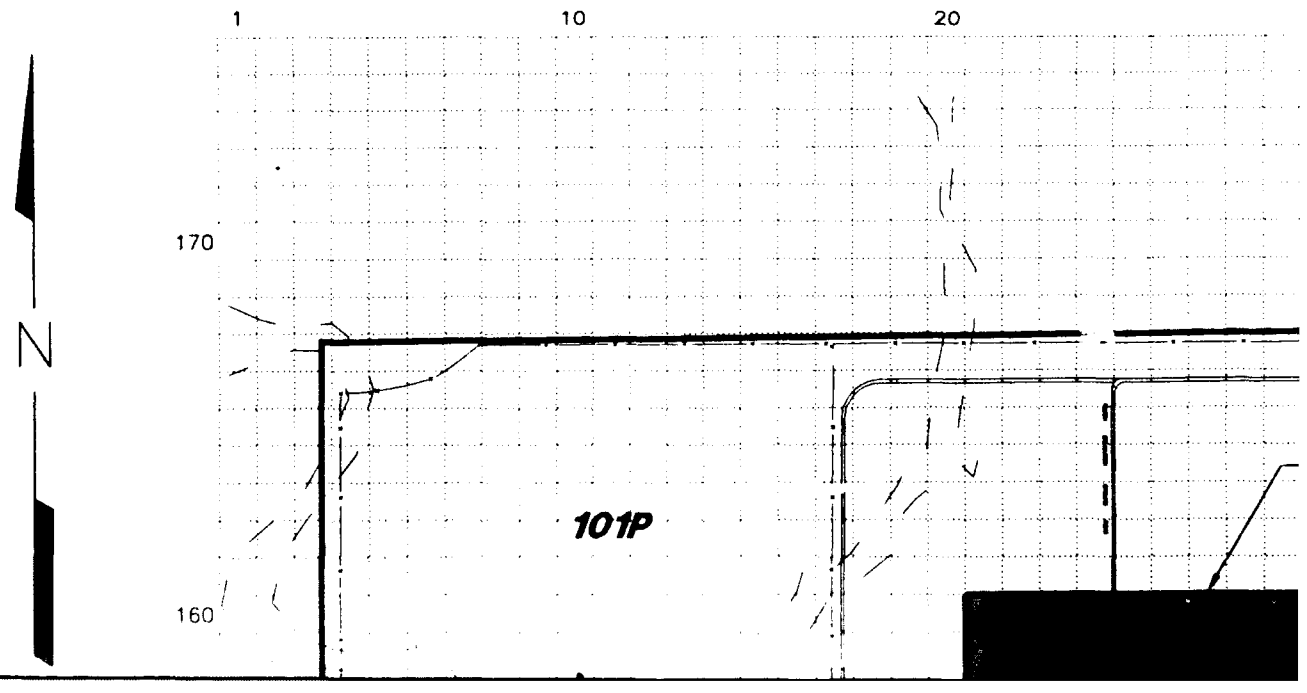
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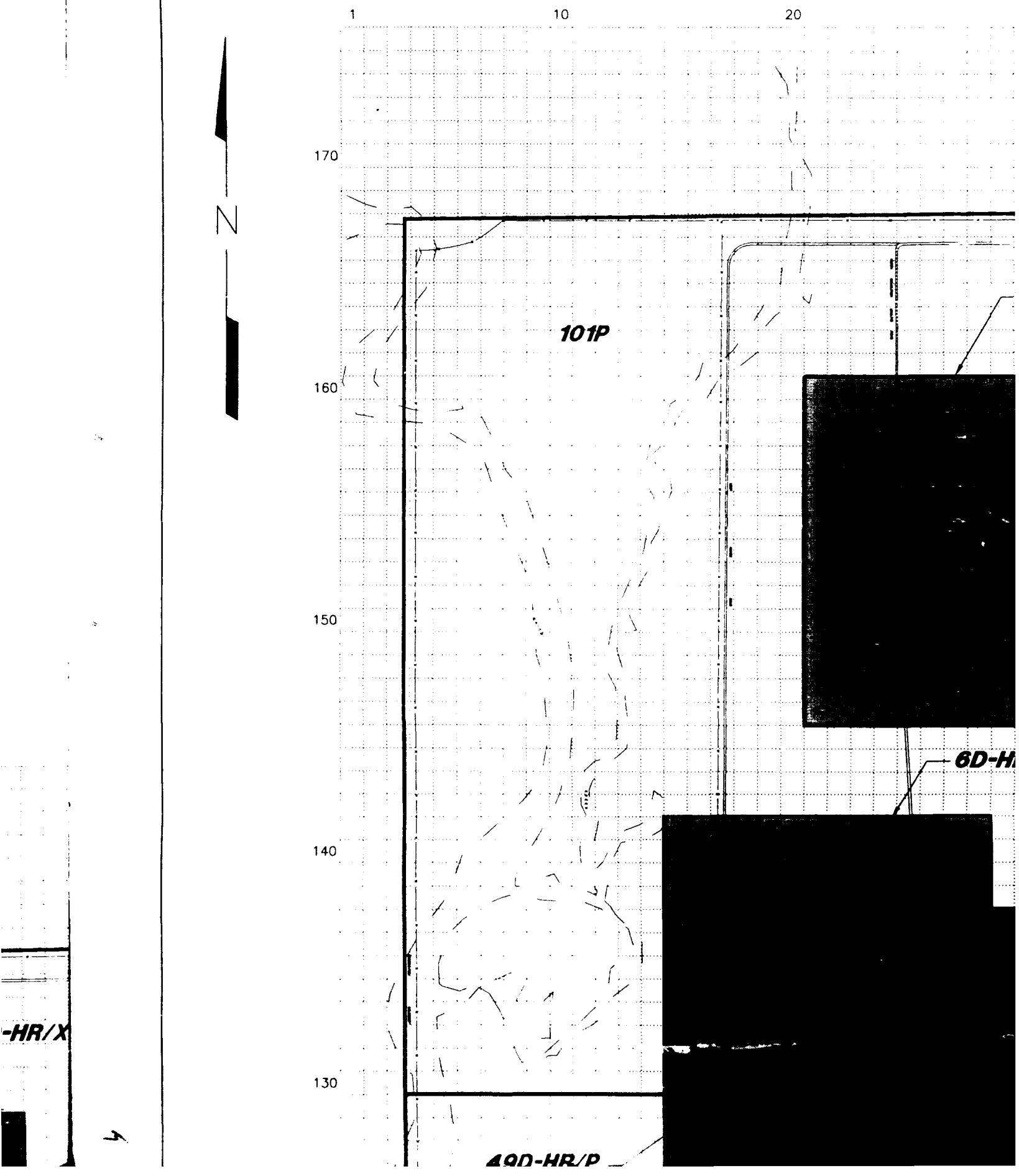
101P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150
140
130
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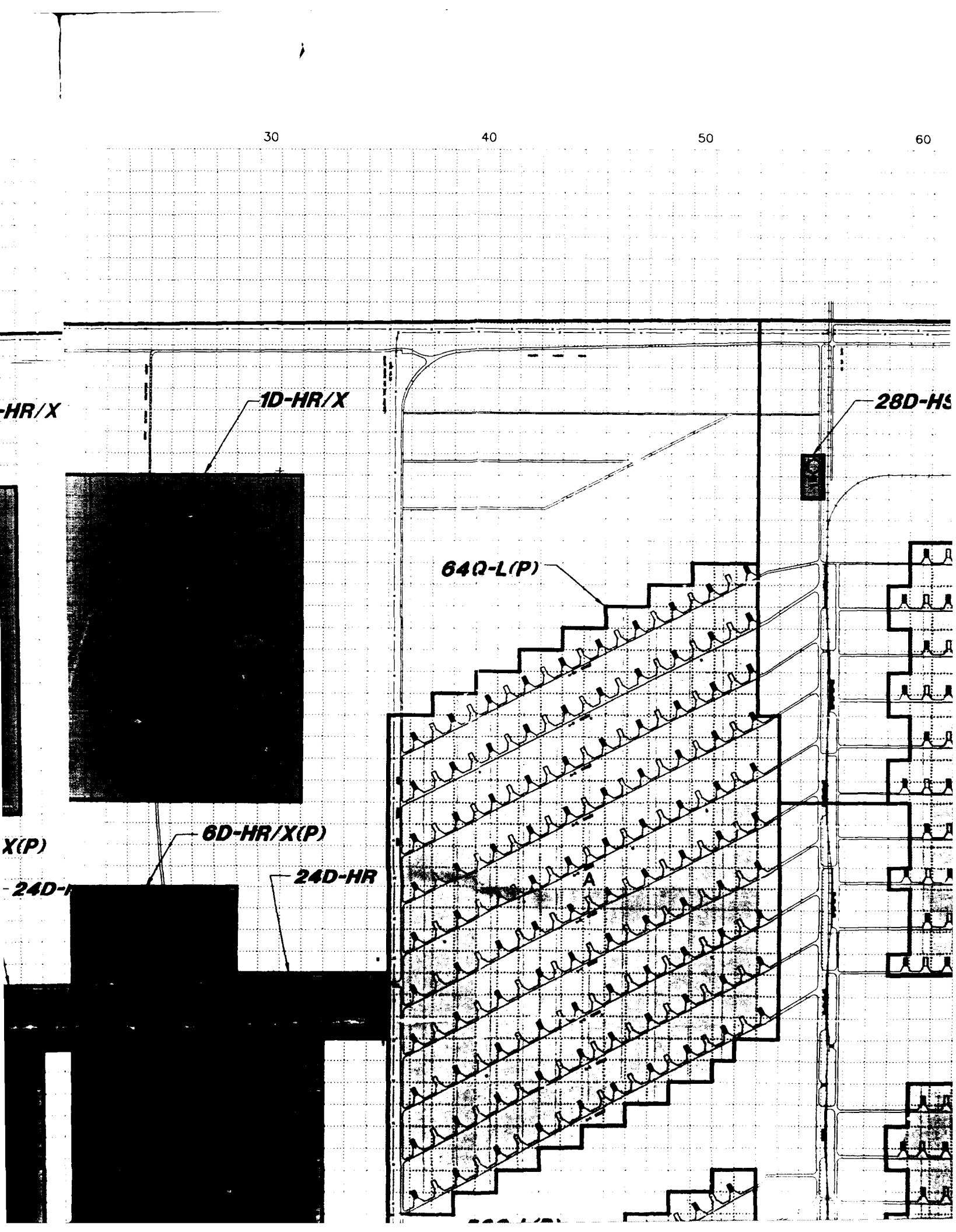
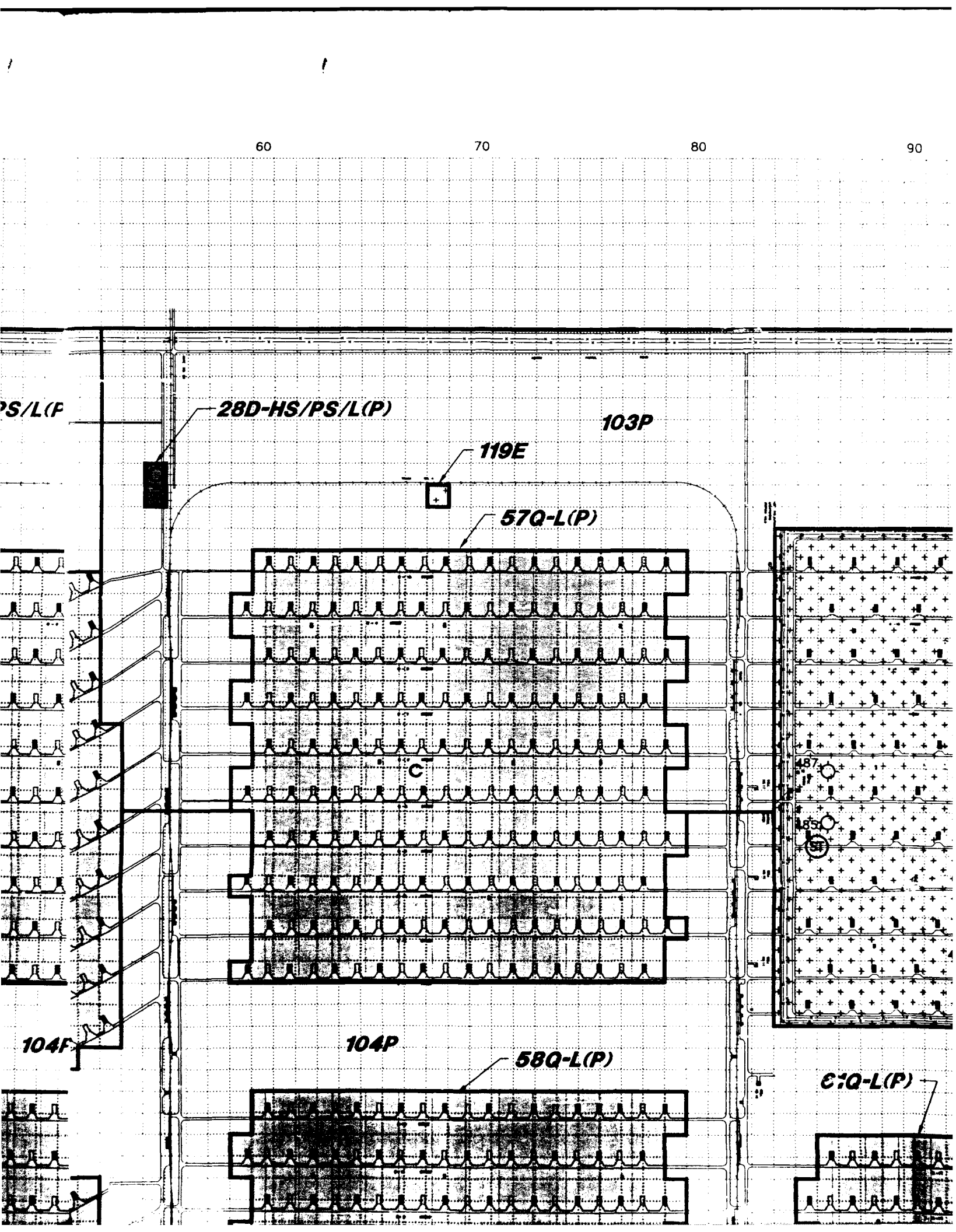
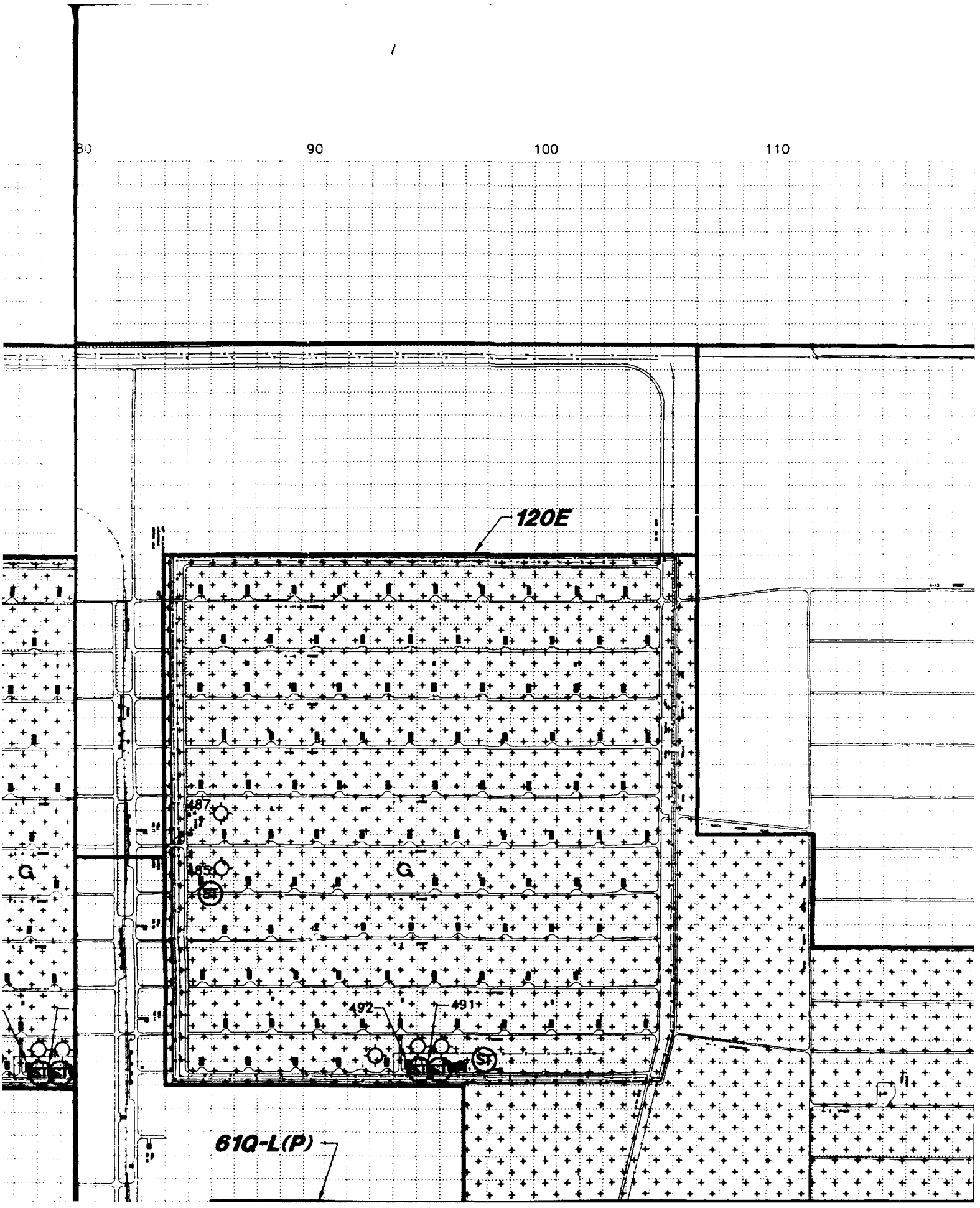
101P
6D-H
49D-HR/P
-HR/X


30
40
50
60
-HR/X
1D-HR/X
28D-HS
64Q-L(P)
X(P)
6D-HR/X(P)
24D-HR
A


60
70
80
90
28D-HS/PS/L(P)
103P
119E
57Q-L(P)
C
104F
104P
58Q-L(P)


80
90
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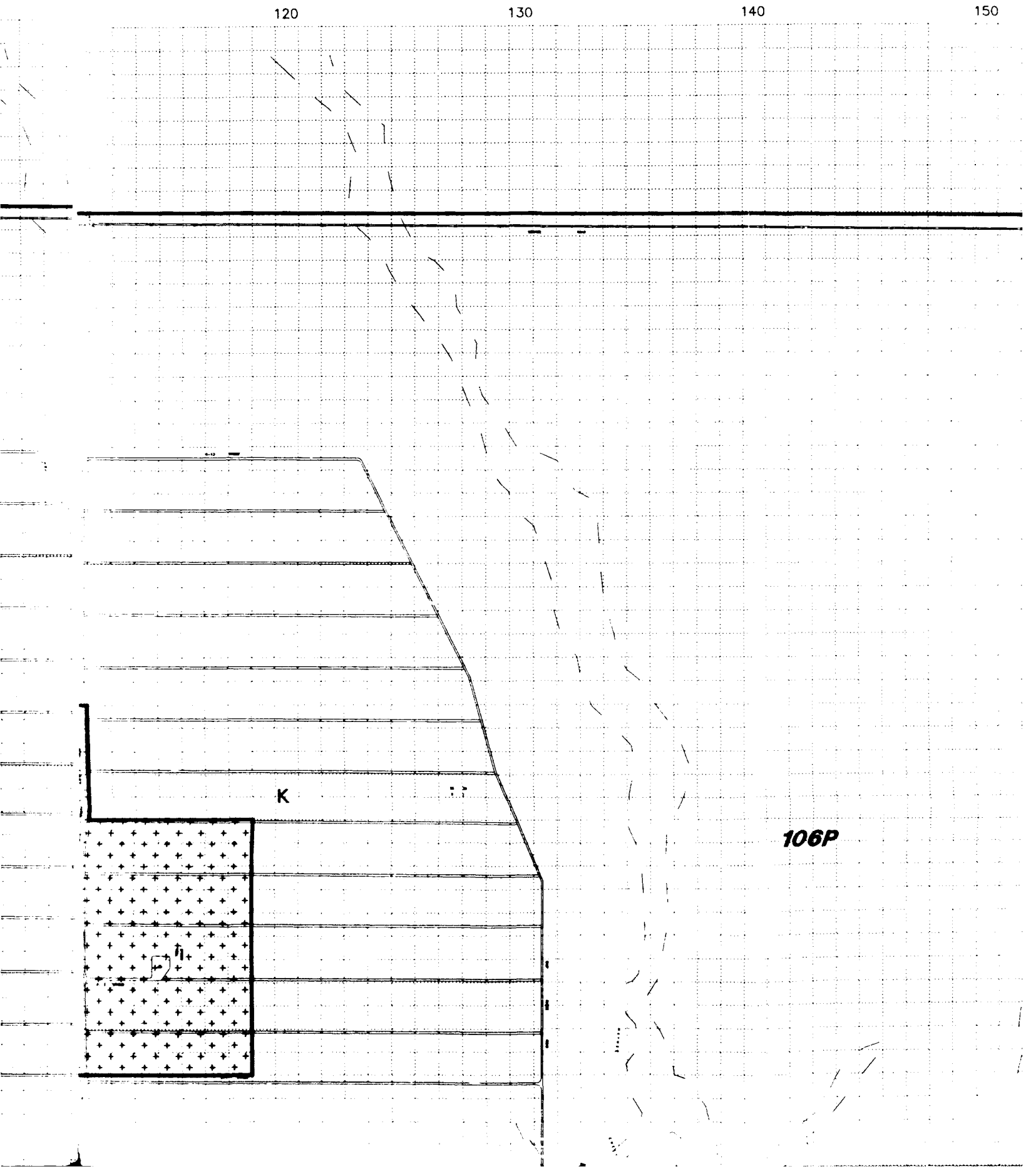
120E
487
485
492
491
610-L(P)


120
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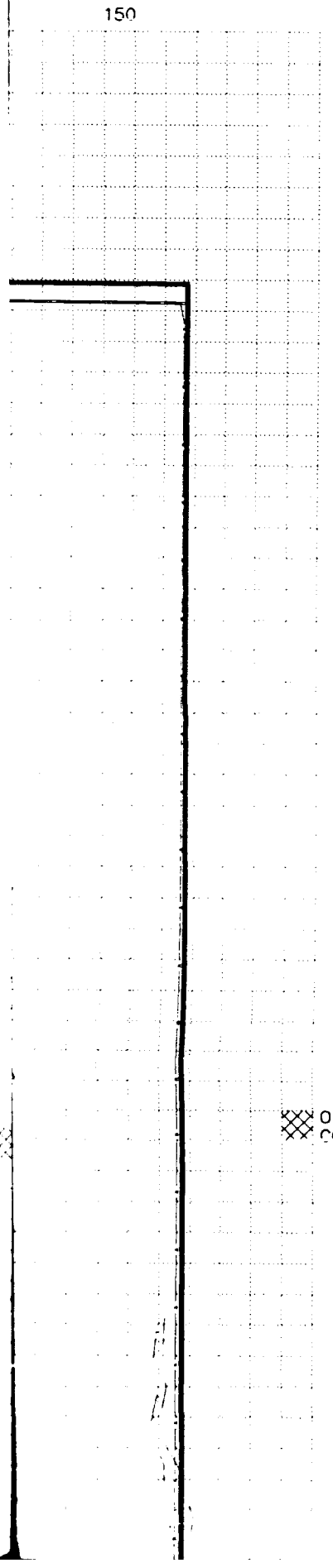
140
150
K
106P



ONE ACRE GRID SQUARE
COORDINATE LOCATION: 156,140

LEGEND:

CERFA DISQUALIFIED

CERFA QUALIFIED

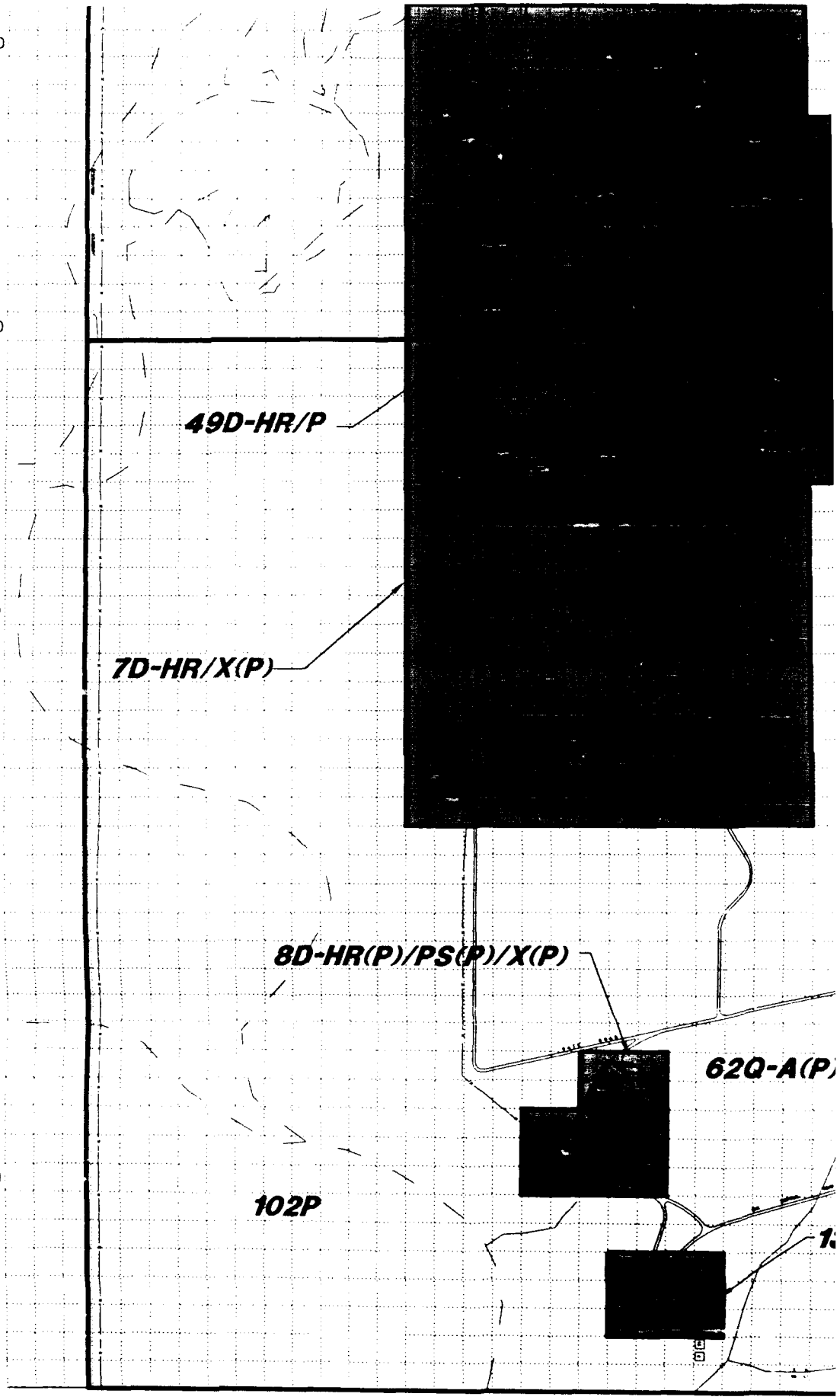
CERFA EXCLUDED

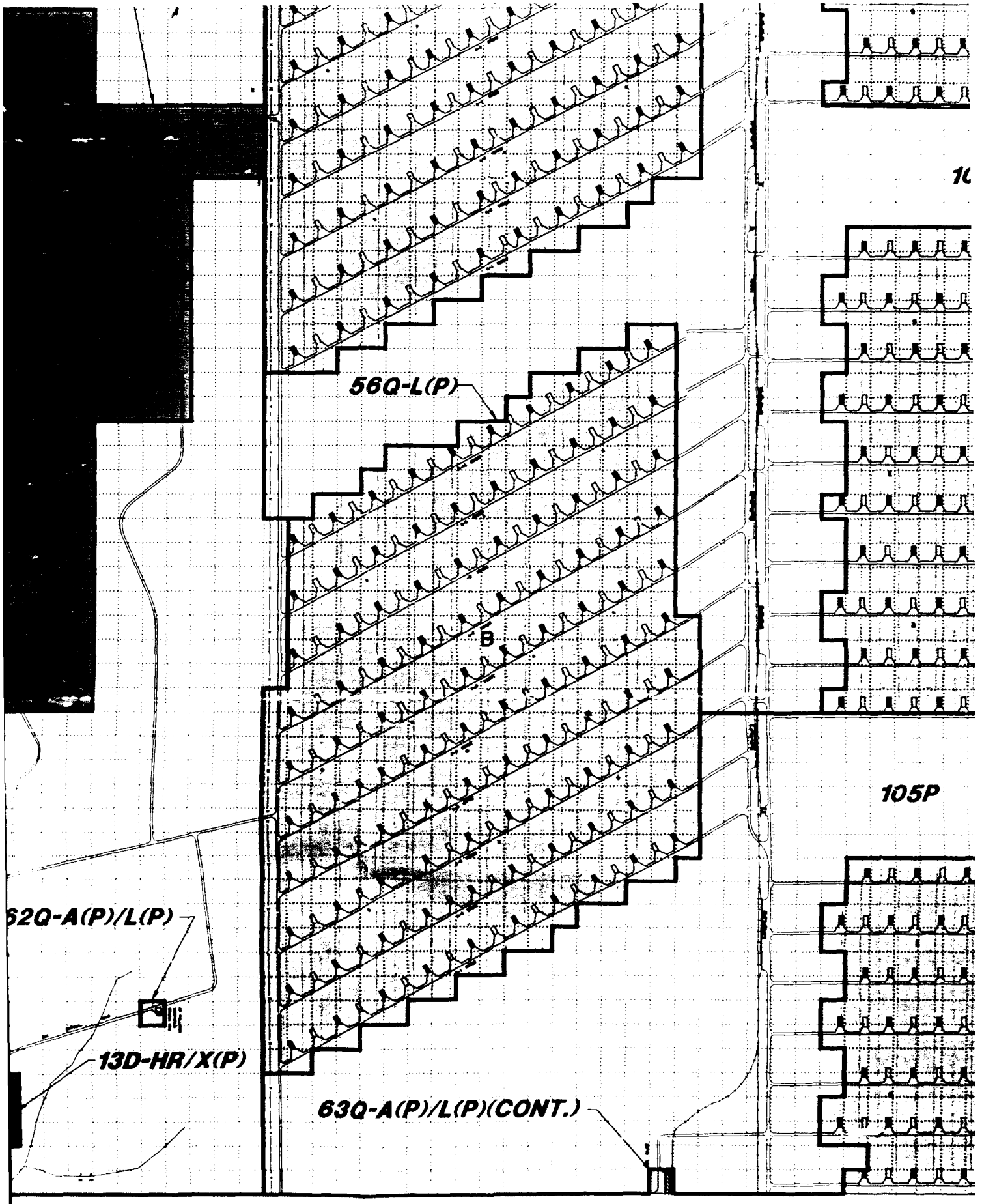
CERFA PARCEL

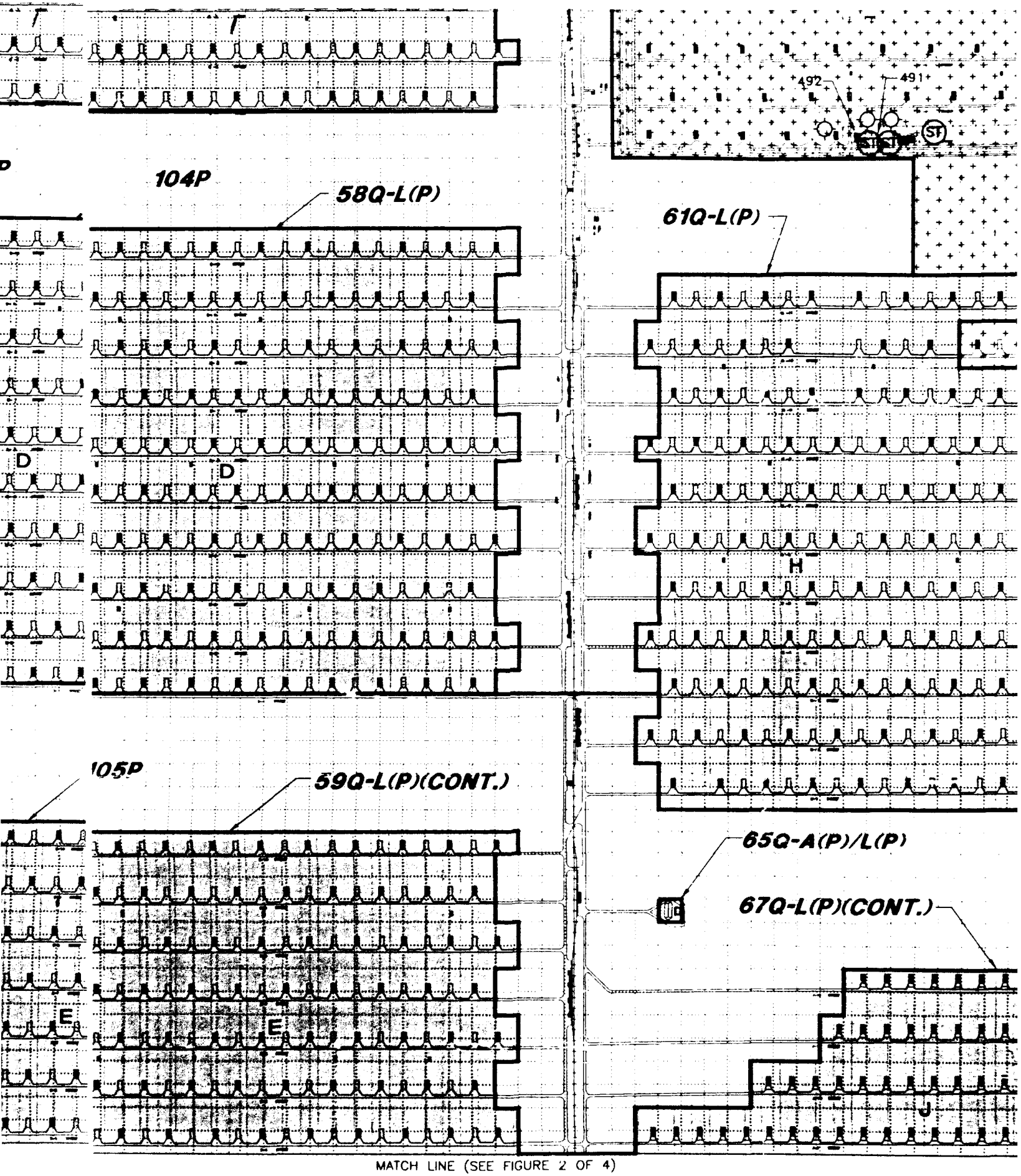
PARCEL LABEL

5D-PR/HR

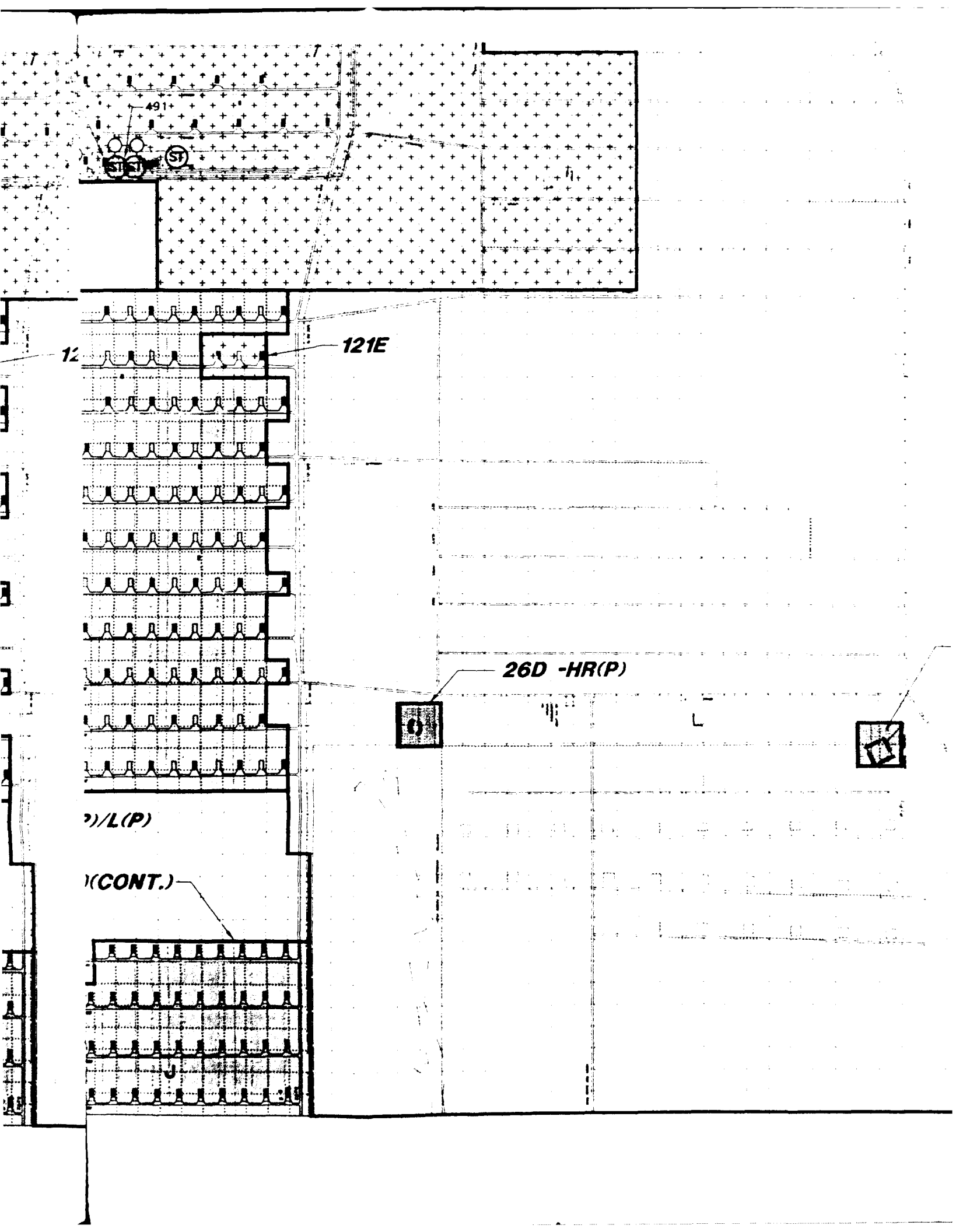
PARCEL DESIGNATION

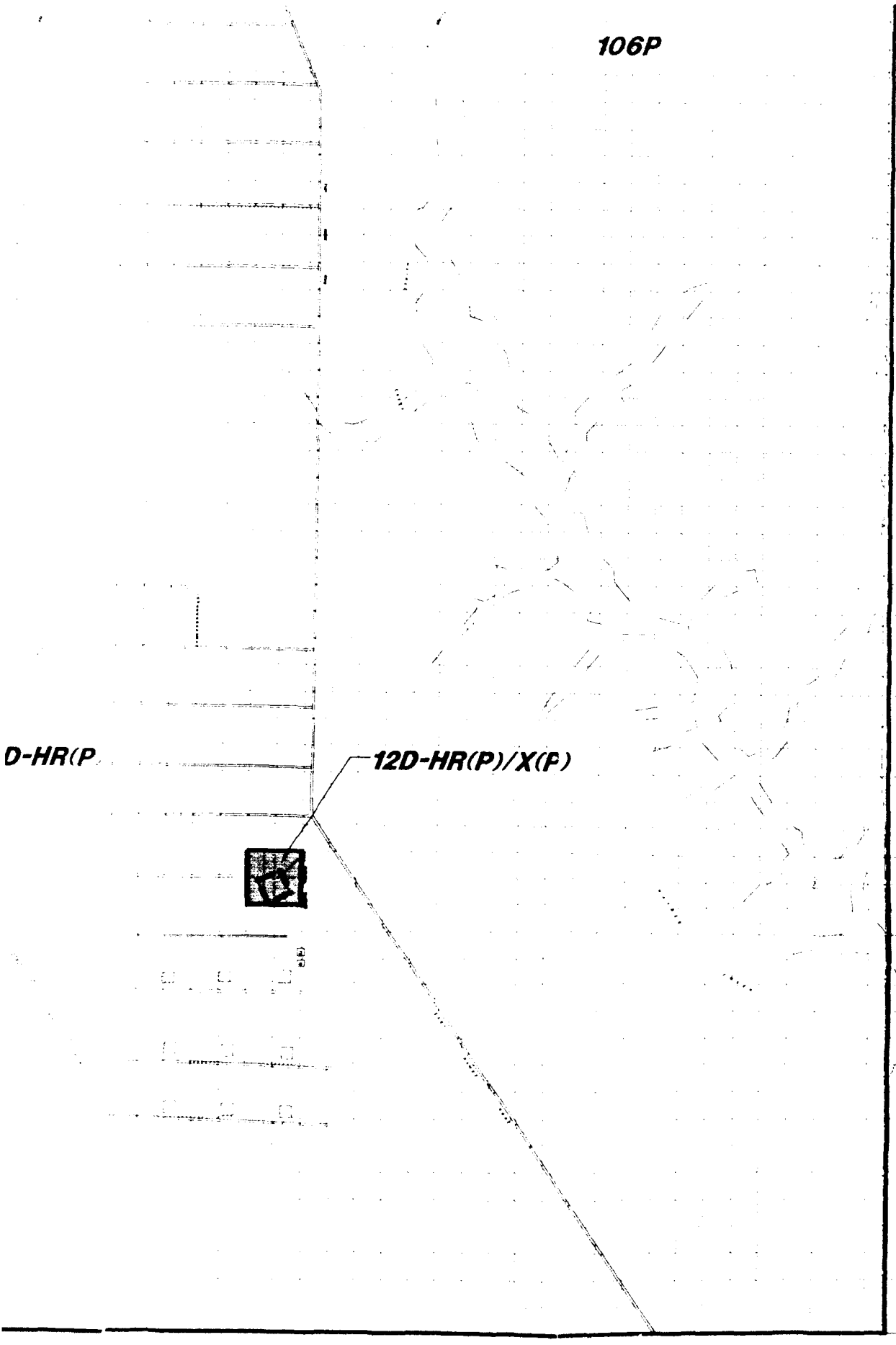

140
130
120
110
100
49D-HR/P
7D-HR/X(P)
8D-HR(P)/PS(P)/X(P)
62Q-A(P)
102P


56Q-L(P)
105P
62Q-A(P)/L(P)
13D-HR/X(P)
63Q-A(P)/L(P)(CONT.)



MATCH LINE (SEE FIGURE 2 OF 4)

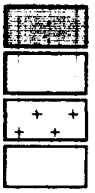

491
121E
26D -HR(P)
)/L(P)
)(CONT.)



81

XXX ONE ACRE GRID SQUARE
XXX COORDINATE LOCATION: 156,140

LEGEND:



CERFA DISQUALIFIED

CERFA QUALIFIED

CERFA EXCLUDED

CERFA PARCEL

PARCEL LABEL

5D-PR/HR

- PARCEL DESIGNATION
- PARCEL CATEGORY
- PARCEL NUMBER AS NOTED ON DRAWING AND TABLE

PARCEL CATEGORY

D = CERFA DISQUALIFIED PARCEL
Q = CERFA QUALIFIED PARCEL
E = CERFA EXCLUDED PARCEL
P = CERFA PARCEL

DISQUALIFIED DESIGNATIONS

PS = PETROLEUM STORAGE
PR = PETROLEUM RELEASE/DISPOSAL
HS = HAZARDOUS MATERIALS STORAGE
HR = HAZARDOUS MATERIALS RELEASE/DISPOSAL

QUALIFIED DESIGNATIONS

A = ASBESTOS
L = LEAD-BASED PAINT
P = PCBs (POLYCHLORINATED BIPHENYLS)
R = RADON
X = UXO (UNEXPLODED ORDNANCE)
RD = RADIONUCLIDE

(P) POSSIBLE DISQUALIFIER/QUALIFIER

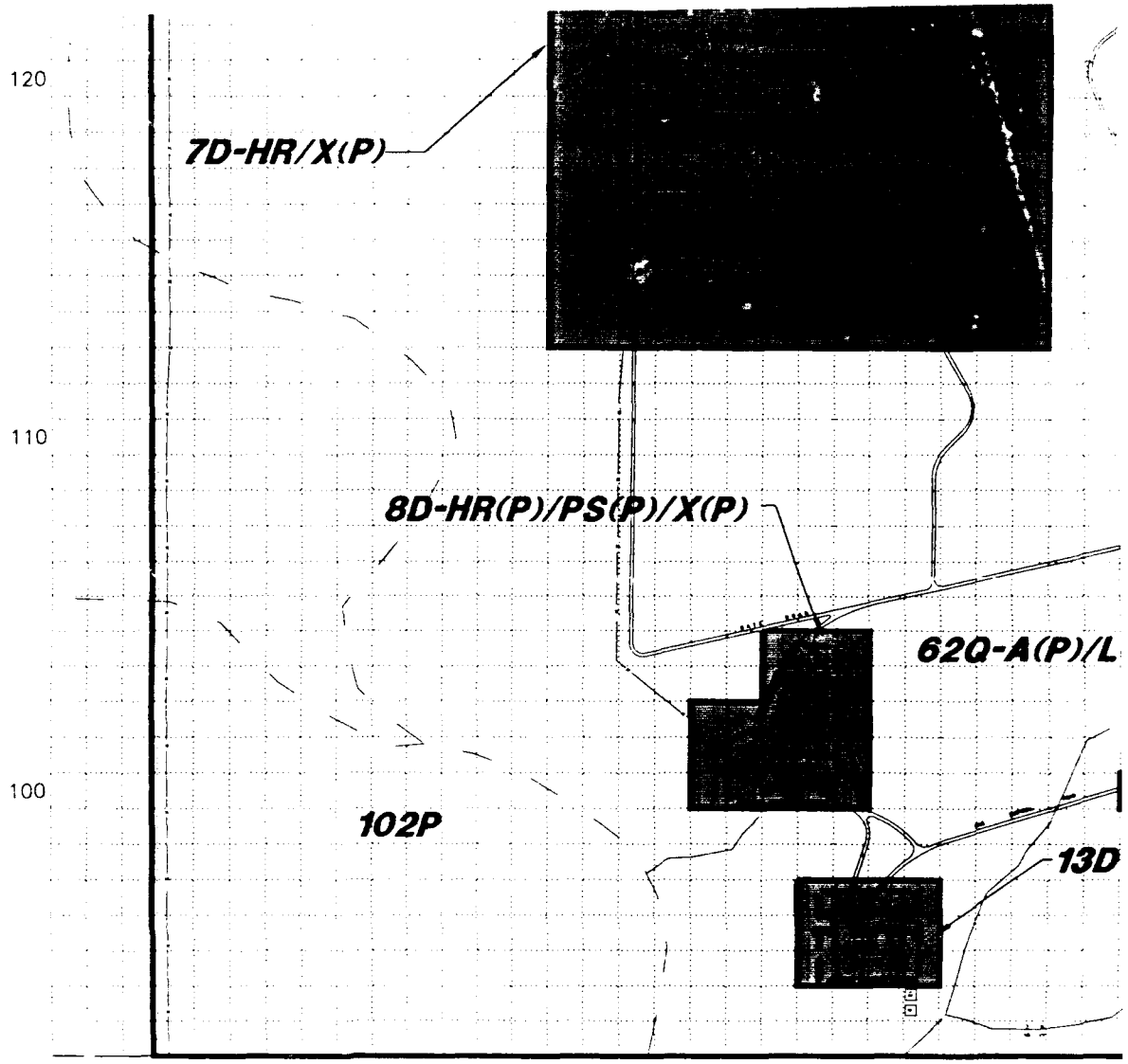
ST SEPTIC TANK WITH HAZARDOUS MATERIAL CONCERNS

NON-LEAKING UST OR AST (FORMER OR ACTIVE)

LEAKING UST OR AST (FORMER OR ACTIVE)

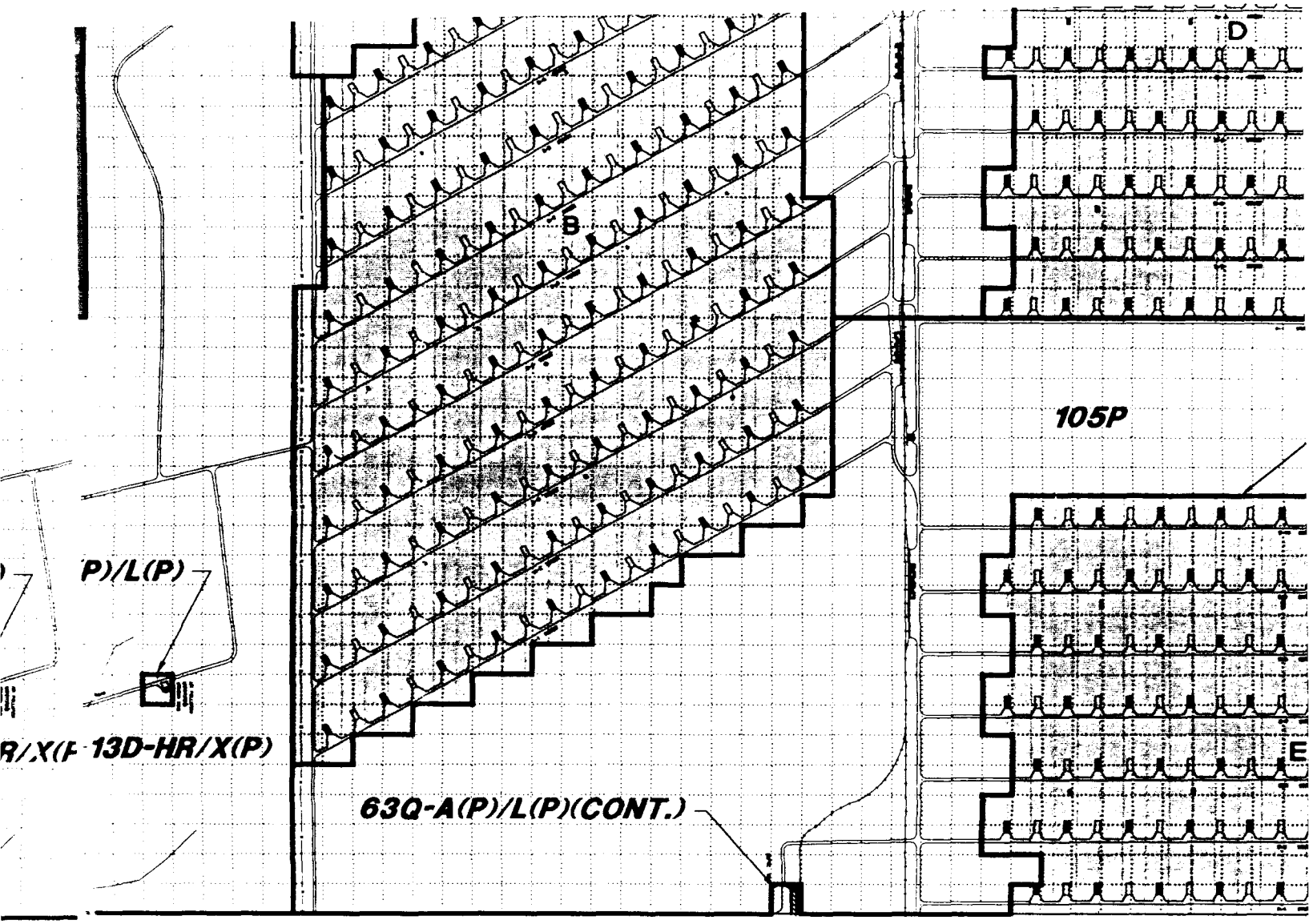
RELEASE OR DISPOSAL OF PETROLEUM OR HAZARDOUS MATERIALS

81 BUILDING WITH CERFA QUALIFIER(S) IN A DISQUALIFIED PARCEL

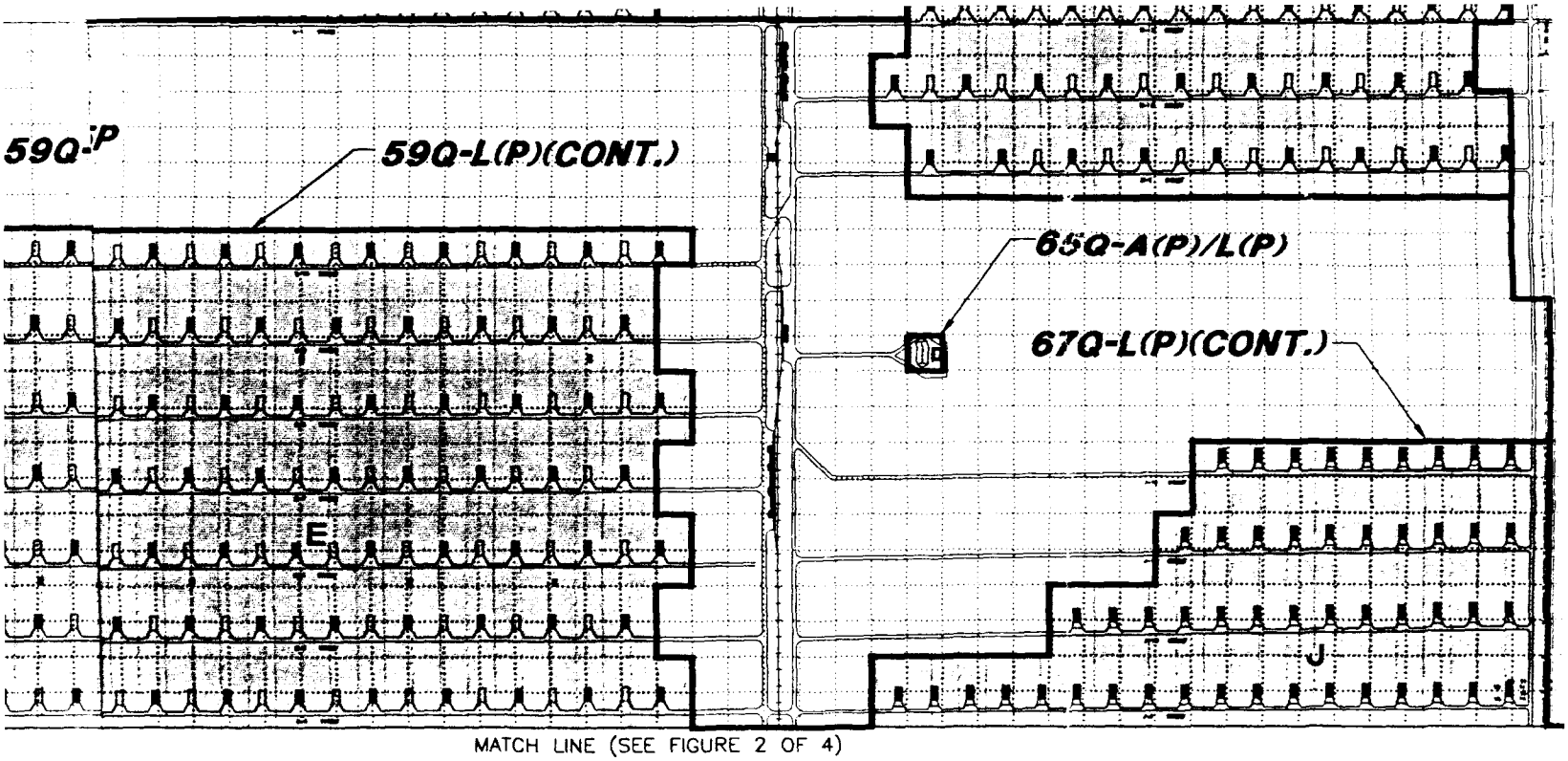


U.S. ARMY ENVIRONMENTAL CENTER

NO.	DATE	APPR.	REVISION



NO.	DATE	APPR.	



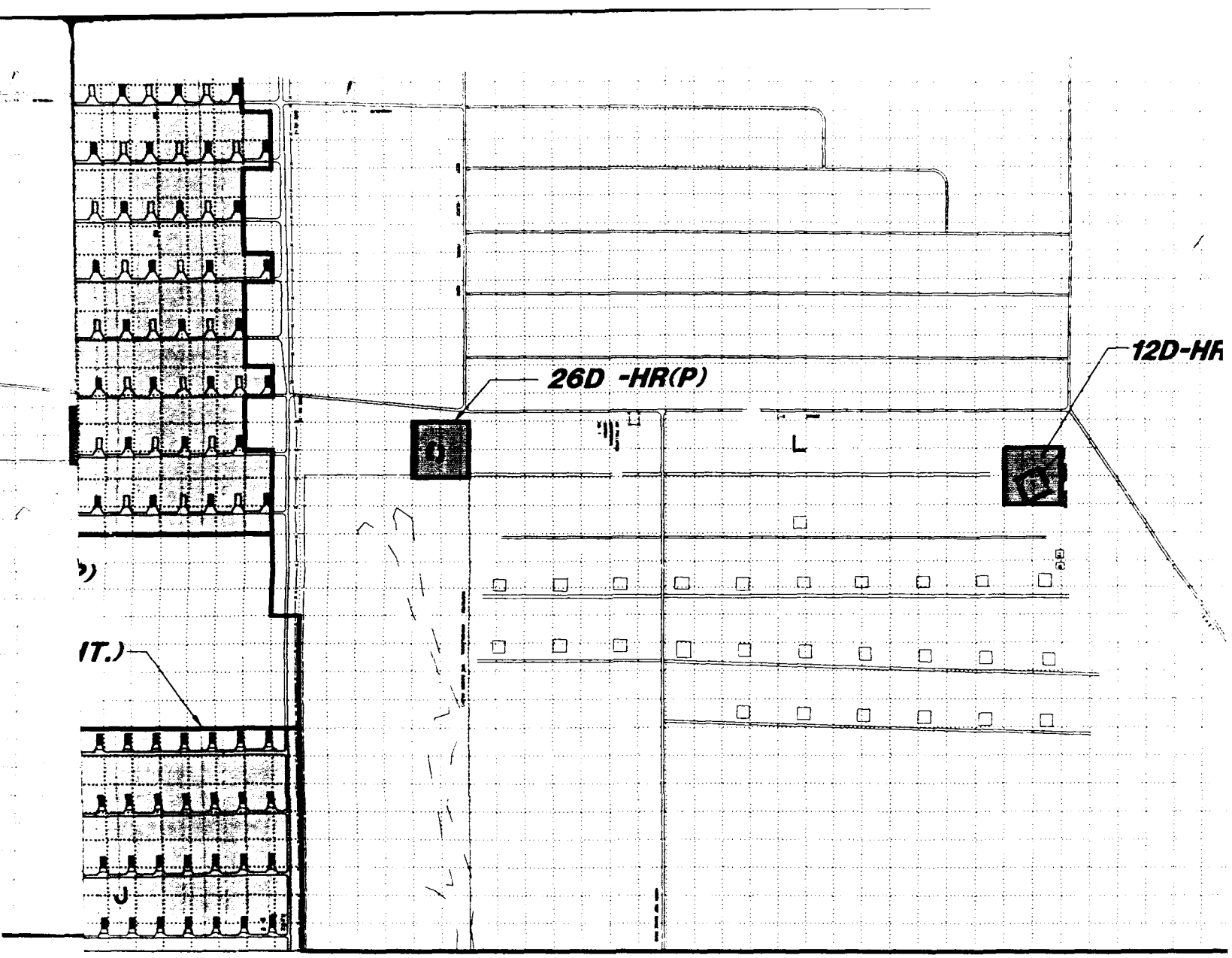
MATCH LINE (SEE FIGURE 2 OF 4)

REV.	REVISION

Pueblo

Environmental Resourc

Exton, Pennsylvania 19341 (215)



Depot North

Pueblo Depot Activity North

Colorado

Mana

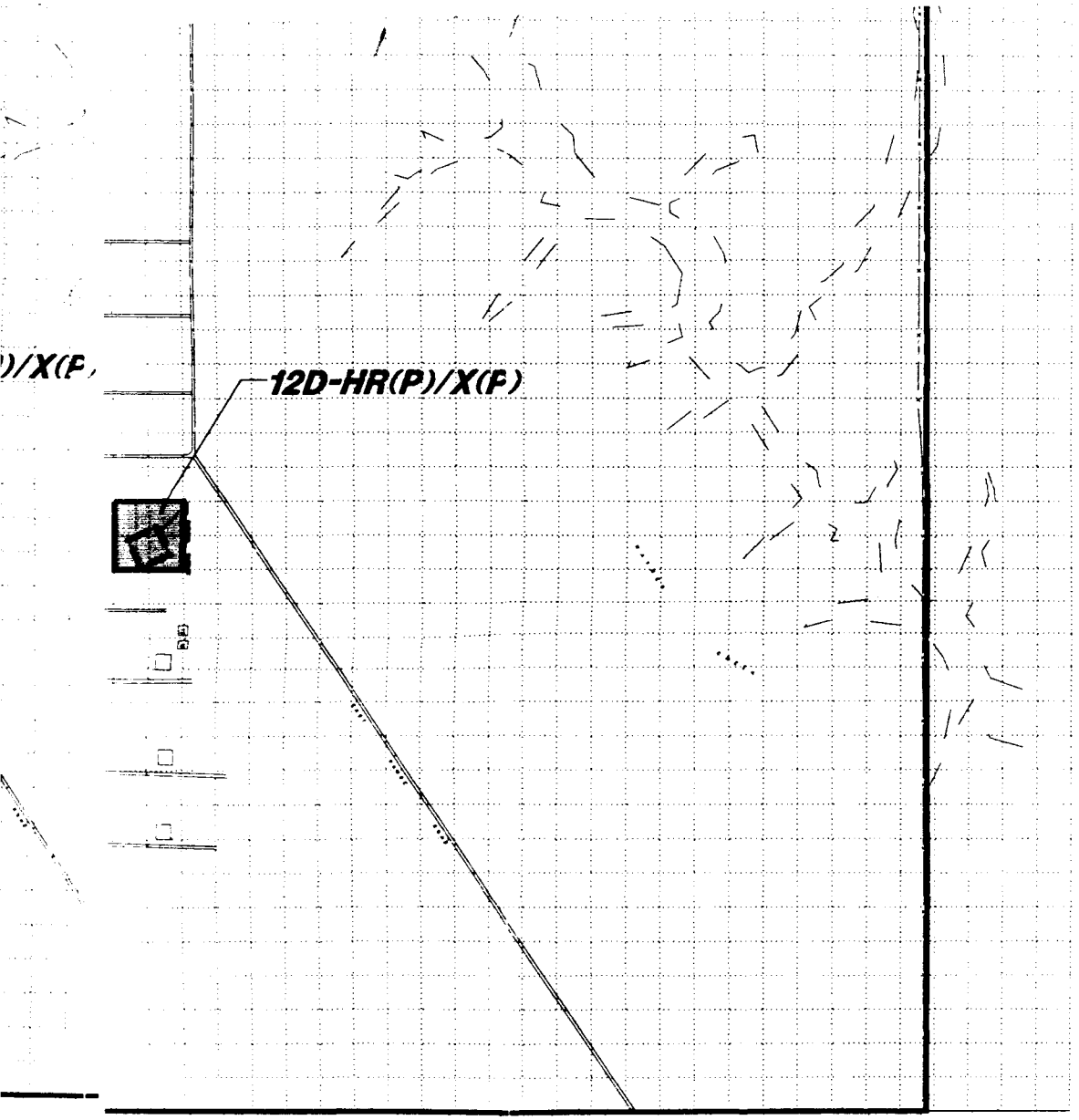
nmental Resources Management, Inc.

-3500

nnsylvania 19341 (215) 524-3500

ERM

CHECKED
DESIGN ENGINEEF
PROJECT GEOLOC
PROJECT MANAGE
APPROVED
APPROVED



PARCEL C
PARCEL N
ON DRAW

PARCEL C

D = C
Q = C
E = C
P = C

DISQUALIF

PS =
PR =
HS =
HR =

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A = AS
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R = R
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RD = R

(P) POSSIBLE

(ST) SEPTIC TA
MATERIAL

NON-LEAK
(FORMER

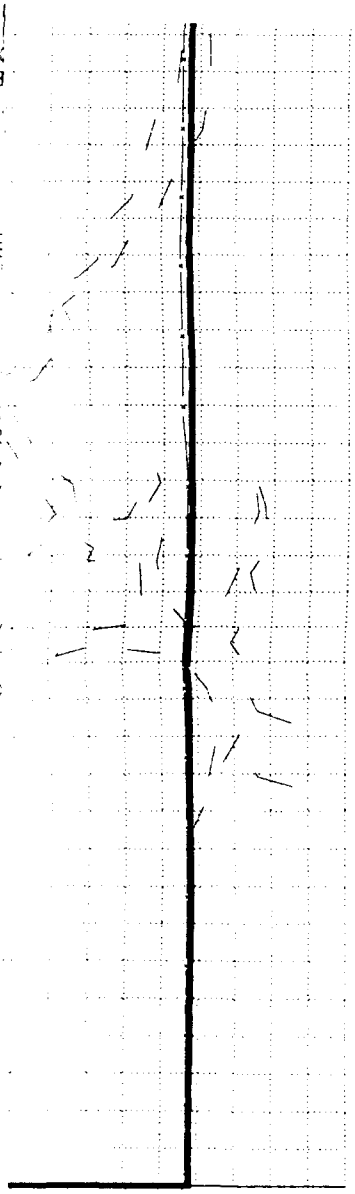
LEAKING U
(FORMER

RELEASE O
OR HAZA

81 BUILDING

1000 50

CHECKED	DATE	**CERFA Category and Designation Ma**			
DESIGN ENGINEER					
PROJECT GEOLOGIST					
PROJECT MANAGER					
APPROVED		DRAWN M.K. Bond/CMP	DATE 12.12.93/04.22.94	CLIENT APP	
APPROVED		SCALE 1" = 1000'	W.O. No. PM307.70.01/1403 -1	ISSUED FO	



PARCEL CATEGORY

D = CERFA DISQUALIFIED PARCEL
Q = CERFA QUALIFIED PARCEL
E = CERFA EXCLUDED PARCEL
P = CERFA PARCEL

DISQUALIFIED DESIGNATIONS

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PR = PETROLEUM RELEASE/DISPOSAL
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RD = RADIONUCLIDE

(P) POSSIBLE DISQUALIFIER/QUALIFIER

ST SEPTIC TANK WITH HAZARDOUS MATERIAL CONCERNS

NON-LEAKING UST OR AST (FORMER OR ACTIVE)

LEAKING UST OR AST (FORMER OR ACTIVE)

RELEASE OR DISPOSAL OF PETROLEUM OR HAZARDOUS MATERIALS

81 BUILDING WITH CERFA QUALIFIER(S) IN A DISQUALIFIED PARCEL

1000 500 0 1000 2000
Scale in Feet

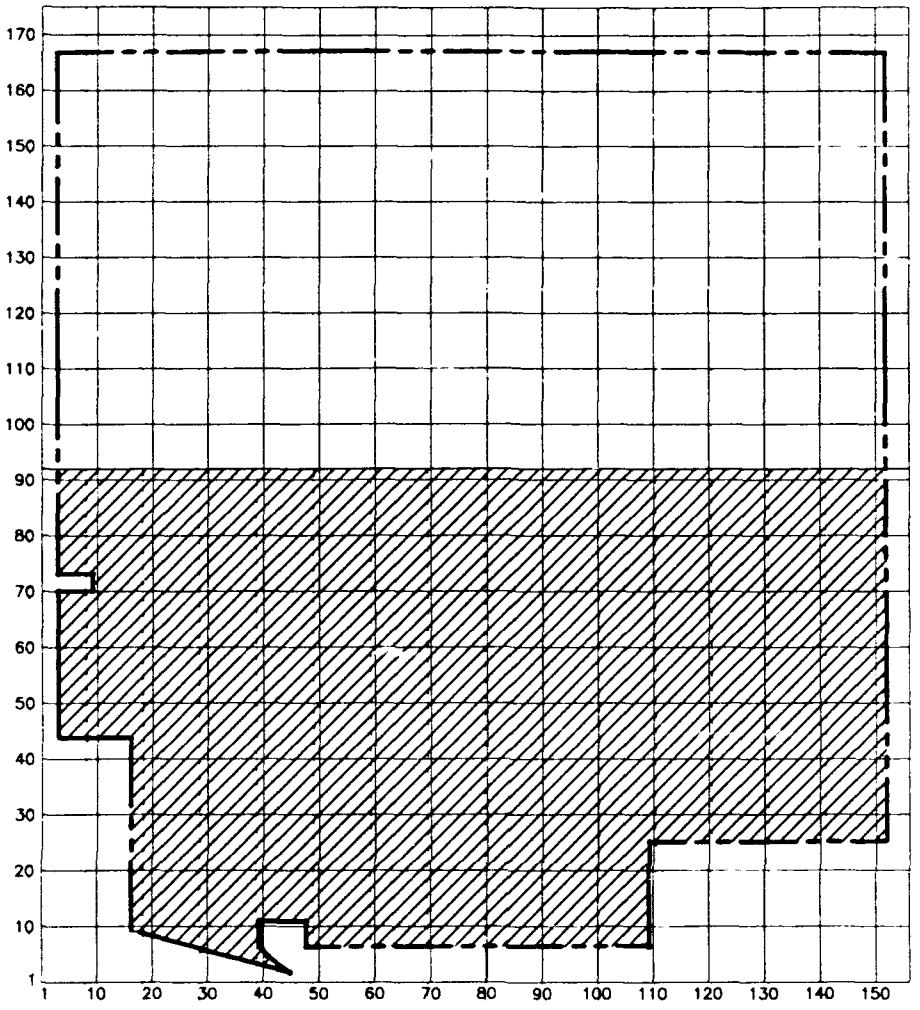
CERFA Category and Designation Map

DRAWING NO.

Figure 5.1-1

REV. NO.

Bond/CMP	DATE 12.12.93/04.22.94	CLIENT APPROVAL	
1000'	W.O. No. PM307.70.01/1403 -1	ISSUED FOR DATE	SHEET 1 OF 4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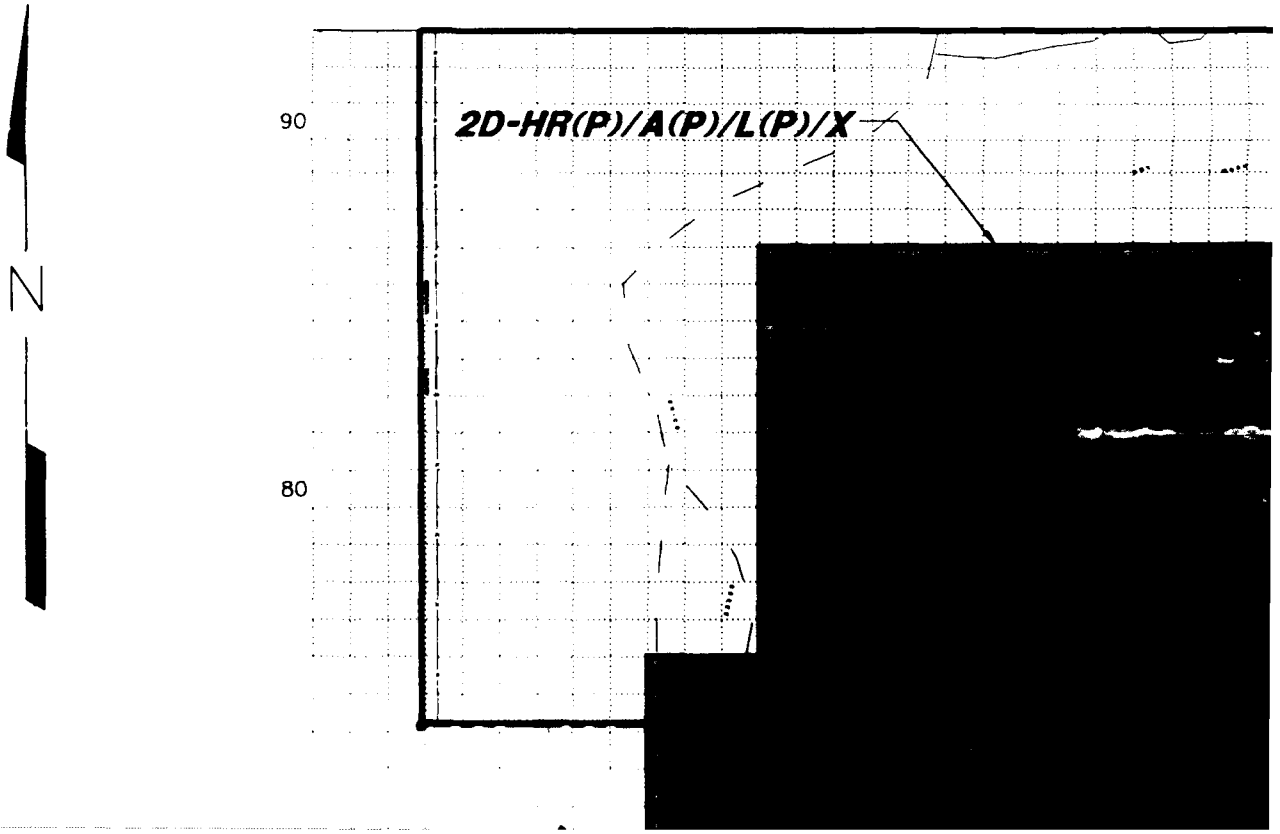
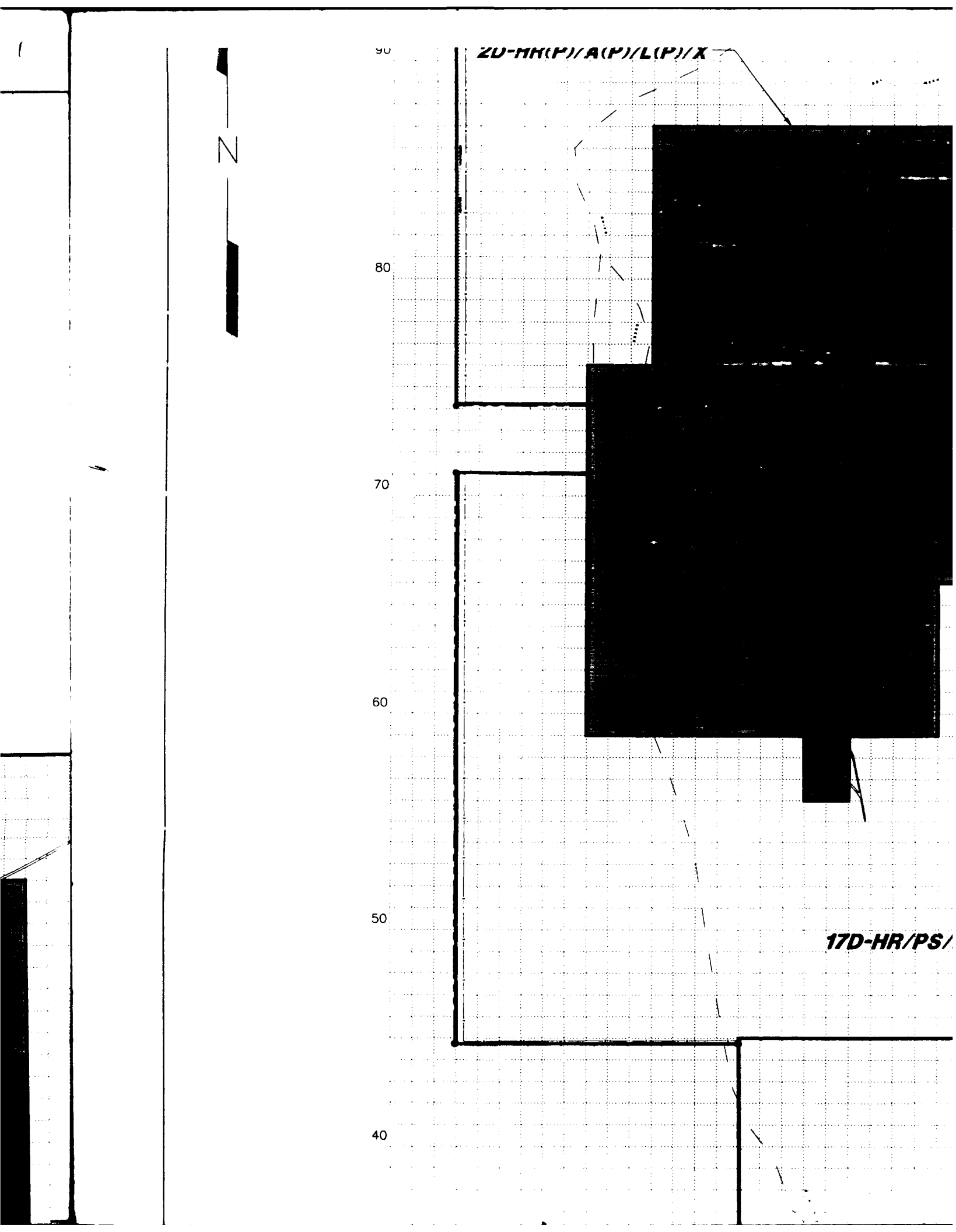
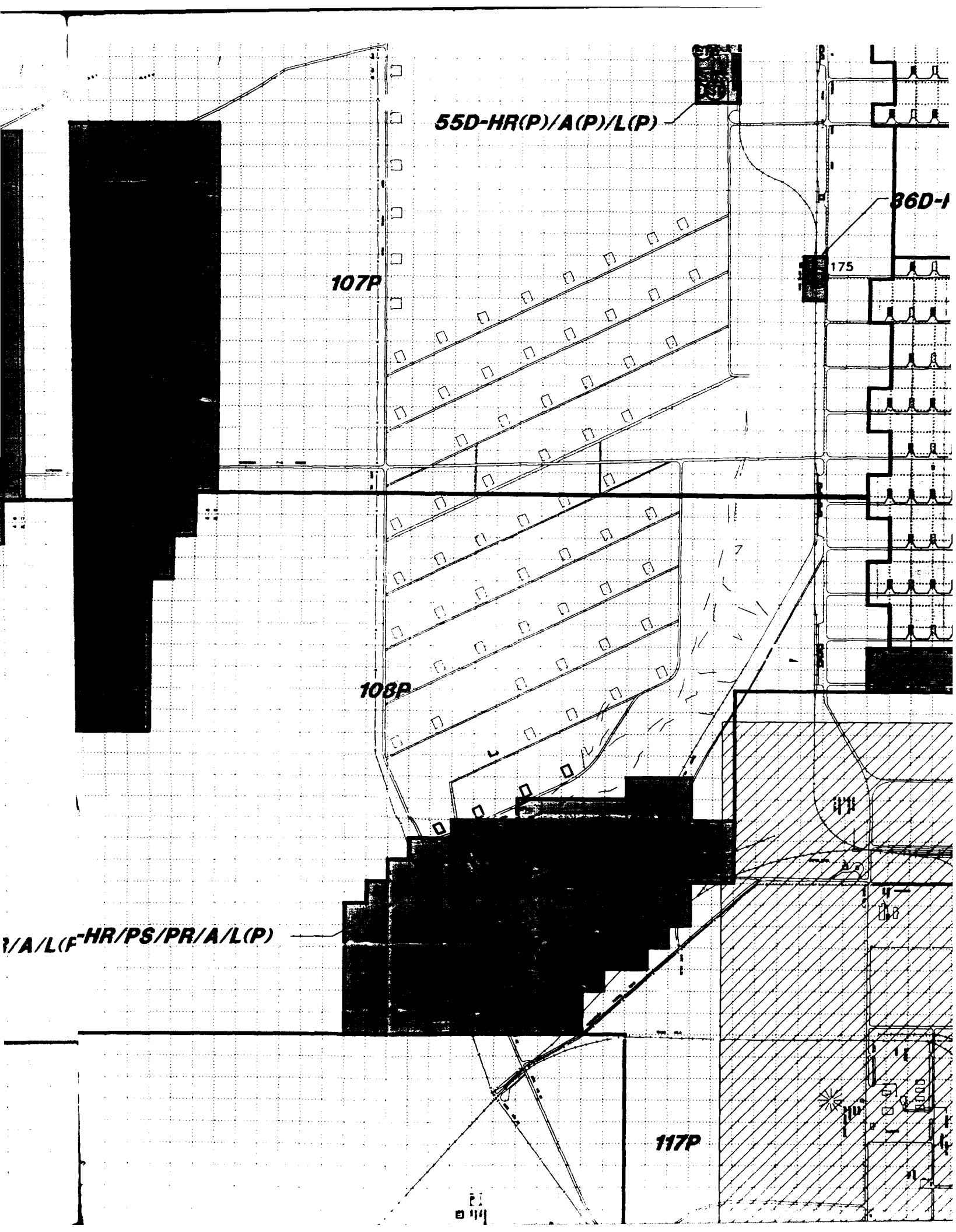
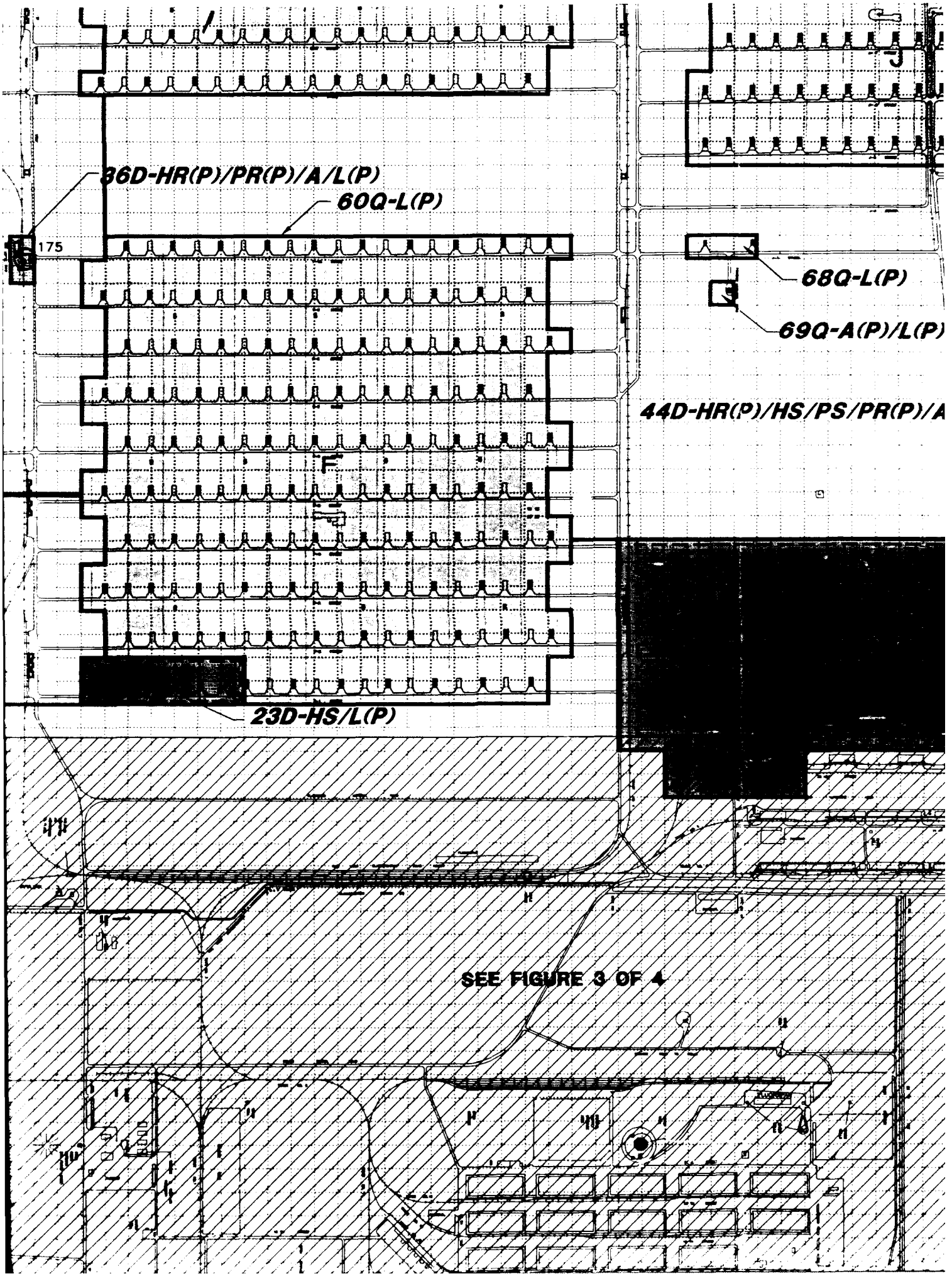
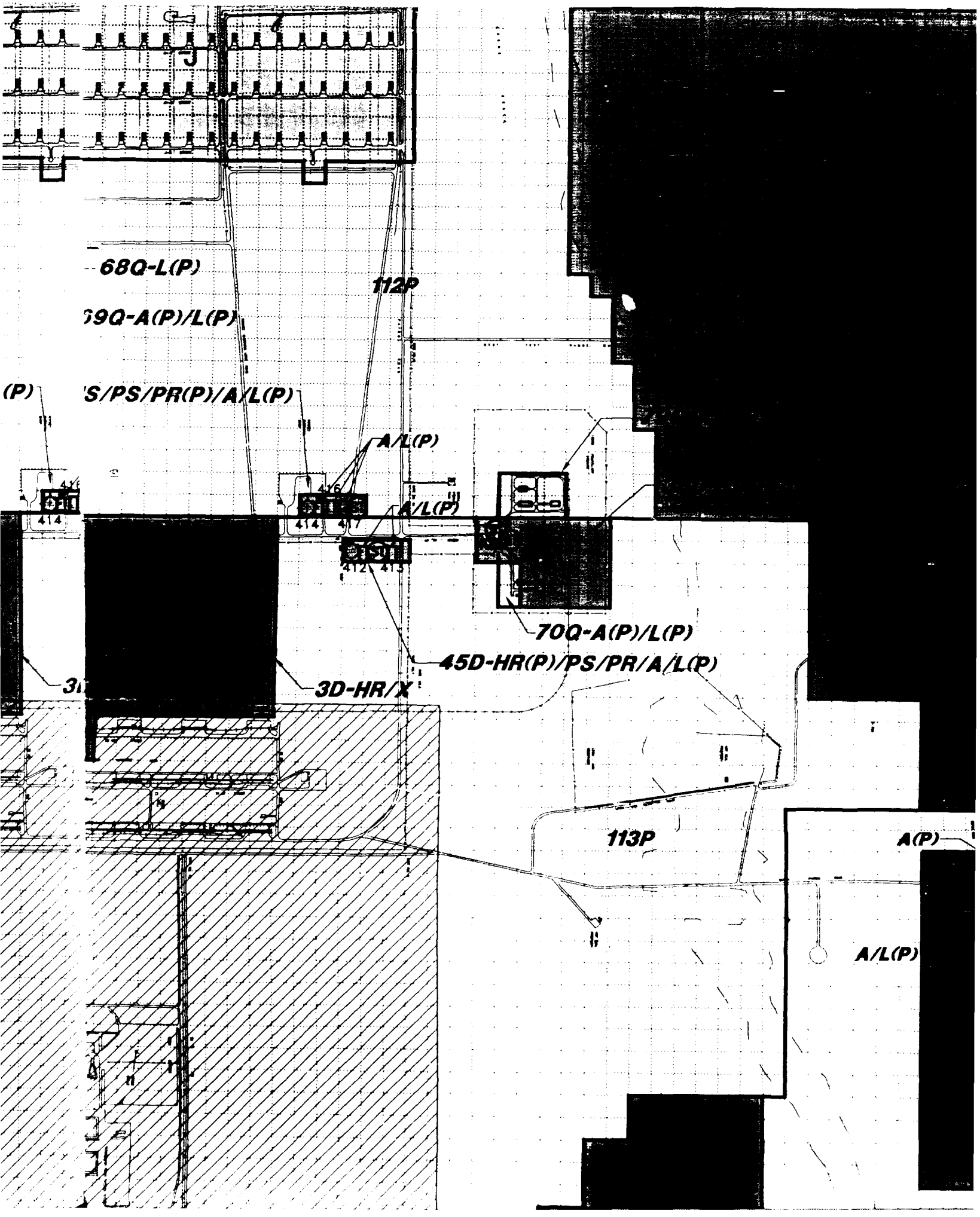
1 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

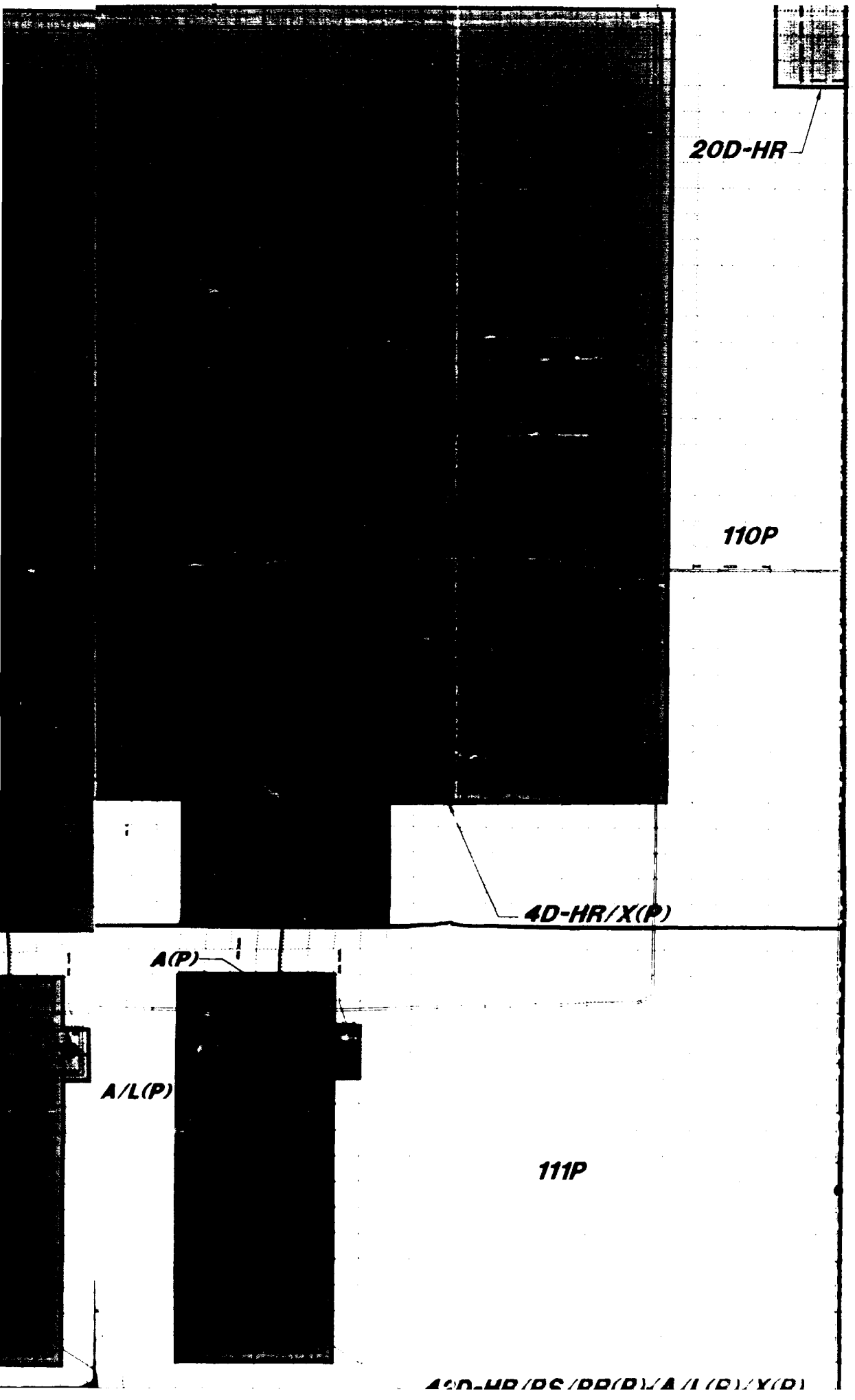

N
90
80
2D-HR(P)/A(P)/L(P)/X


N
90
80
70
60
50
40
20-HR(P)/A(P)/L(P)/X
17D-HR/PS/


55D-HR(P)/A(P)/L(P)
36D-
175
107P
108P
-HR/PS/PR/A/L(P)
117P


36D-HR(P)/PR(P)/A/L(P)
60Q-L(P)
175
68Q-L(P)
69Q-A(P)/L(P)
44D-HR(P)/HS/PS/PR(P)/A
23D-HS/L(P)
SEE FIGURE 3 OF 4

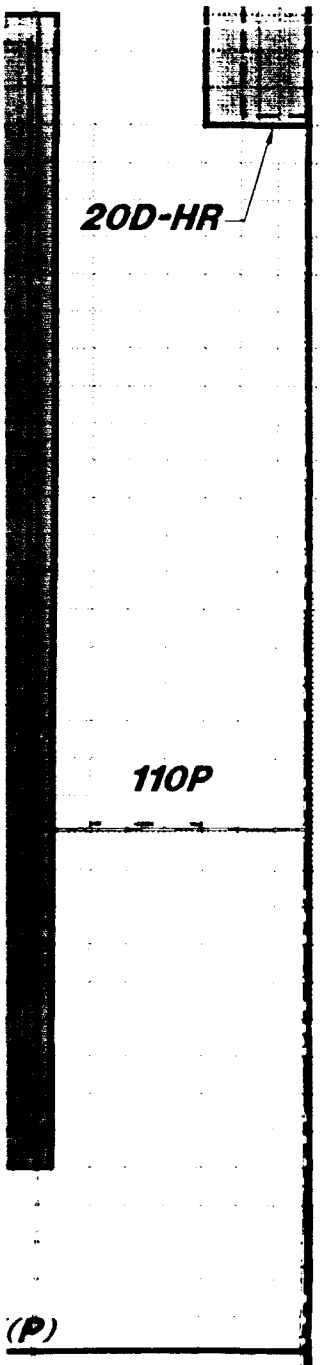

68Q-L(P)
112P
39Q-A(P)/L(P)
(P)
S/PS/PR(P)/A/L(P)
A/L(P)
A/L(P)
414
416
414
417
412
413
70Q-A(P)/L(P)
45D-HR(P)/PS/PR/A/L(P)
3D-HR/X
113P
A(P)
A/L(P)



CNE ACRE GRID SQUA
COORDINATE LOCATION

LEGEND:

5D-PR/HR



ONE ACRE GRID SQUARE
COORDINATE LOCATION: 156,55

LEGEND:

CERFA DISQUALIFIED

CERFA QUALIFIED

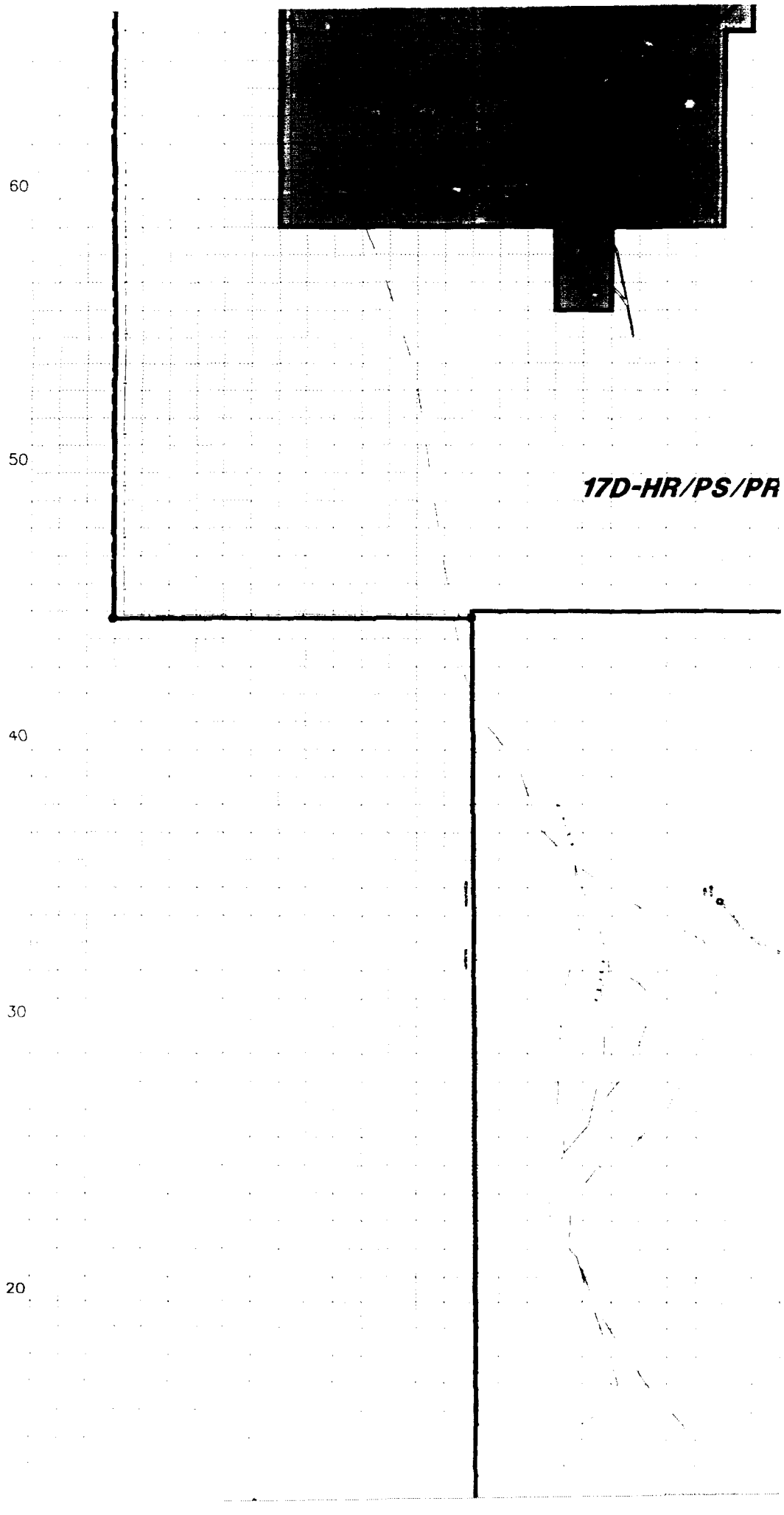
CERFA EXCLUDED

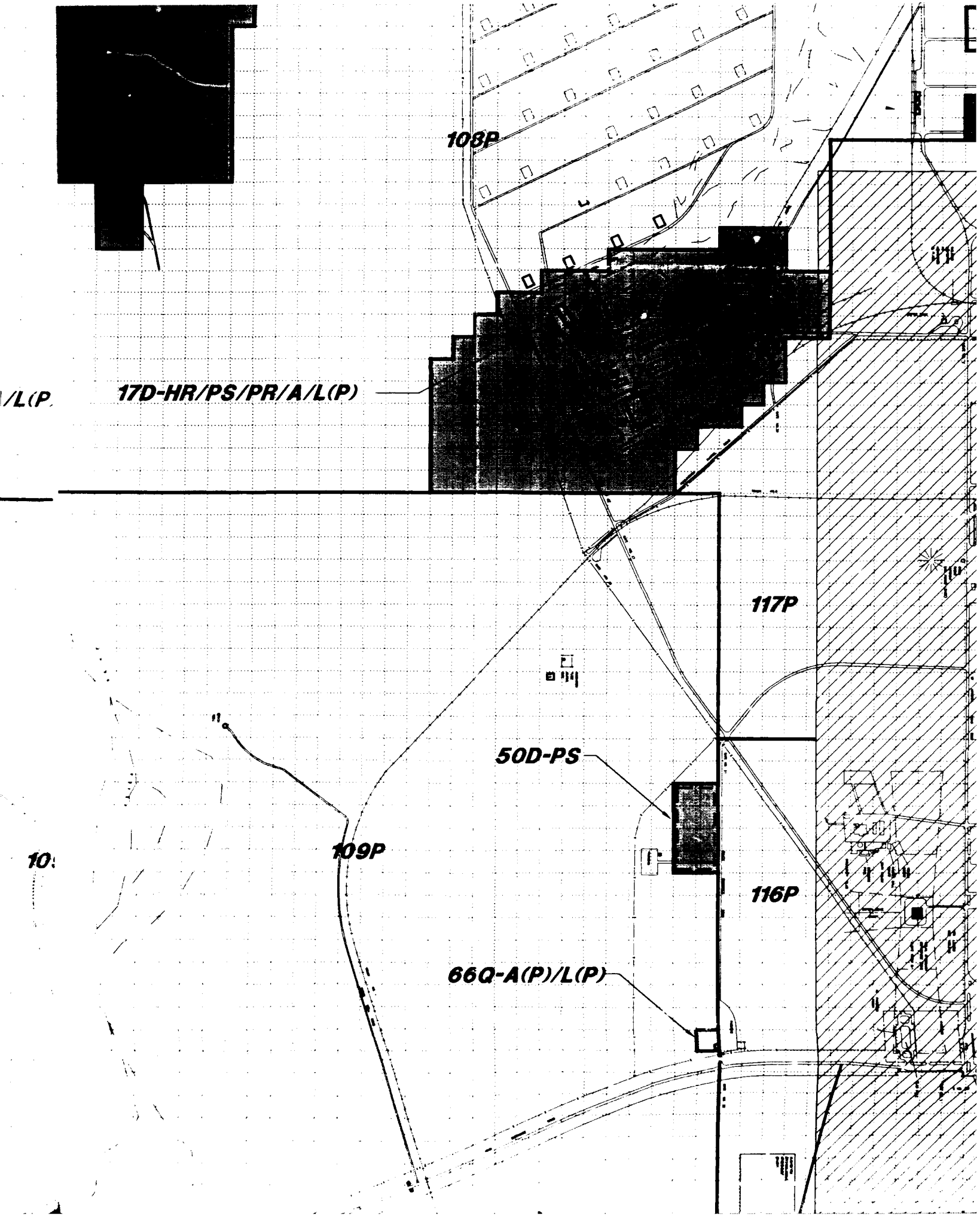
CERFA PARCEL

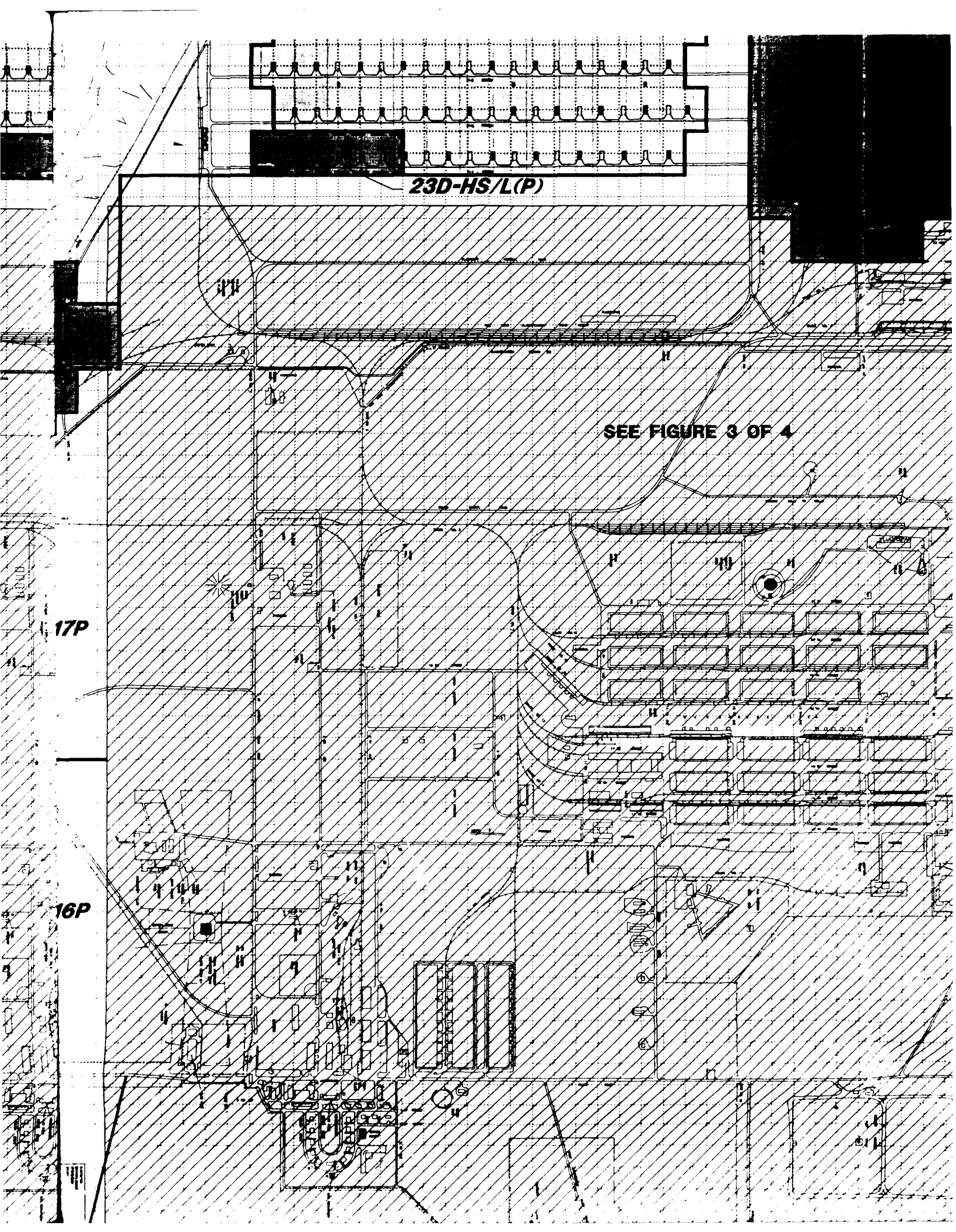
PARCEL LABEL

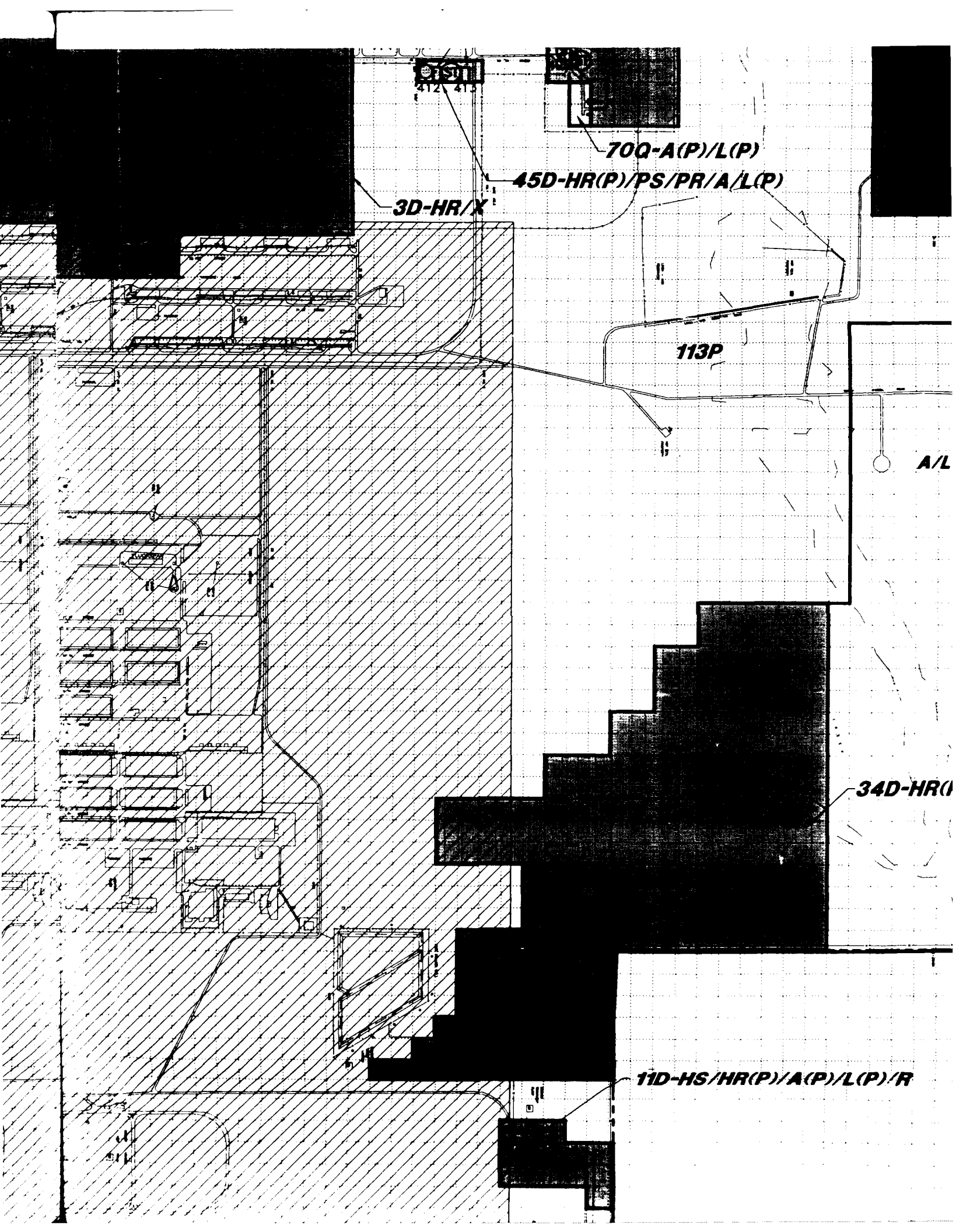
5D-PR/HR

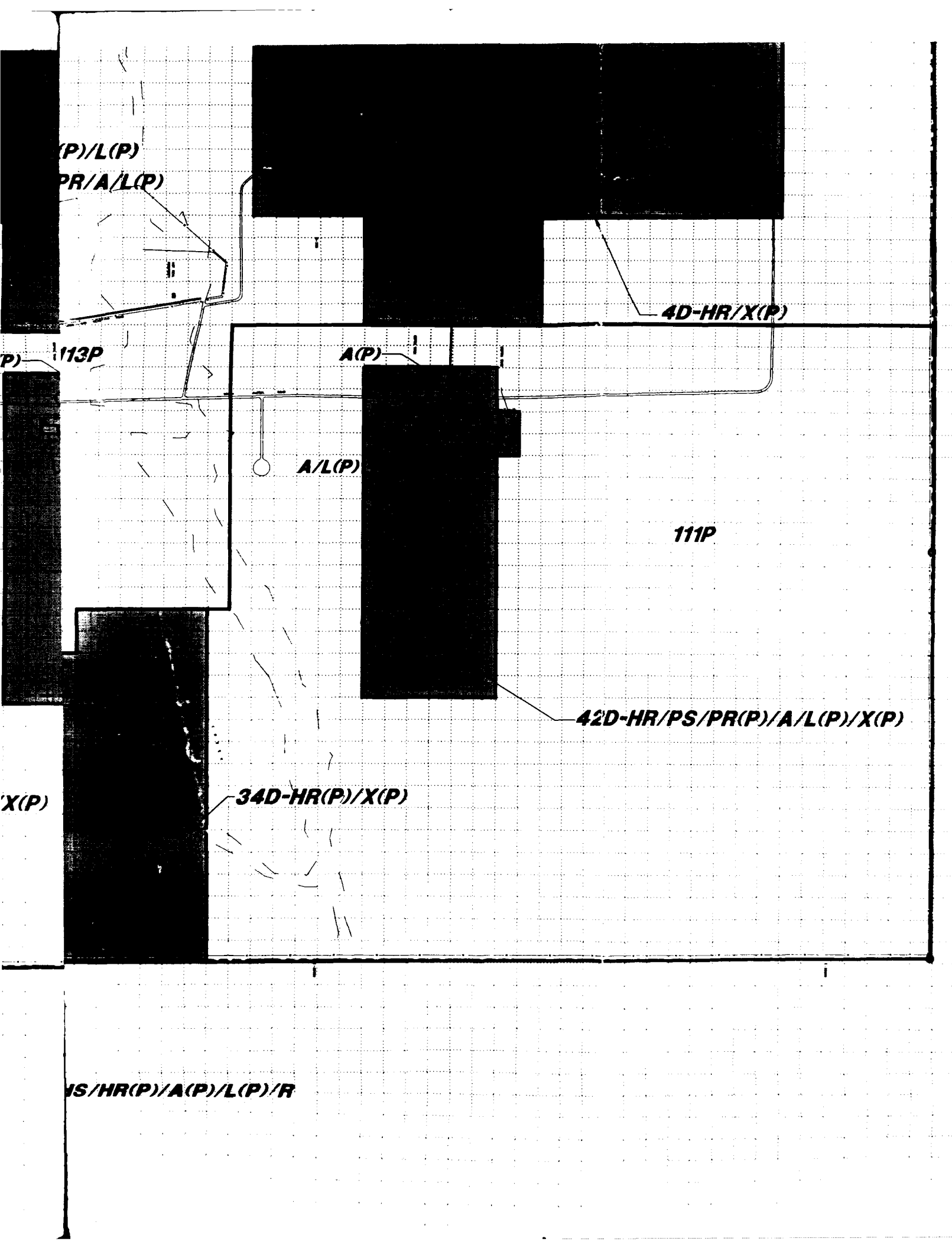
- PARCEL DESIGNATION
- PARCEL CATEGORY
- PARCEL NUMBER AS NOTED ON DRAWING AND TABLE

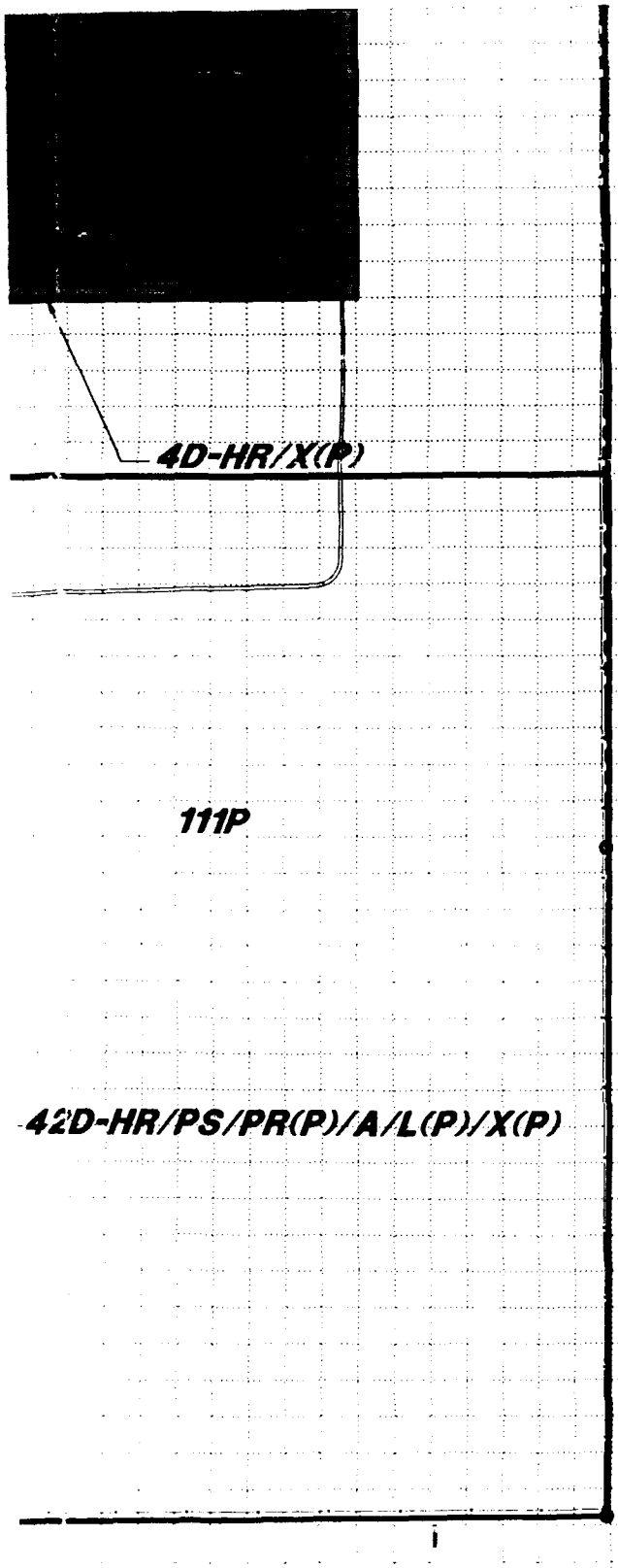

60
50
17D-HR/PS/PR
40
30
20


108P
17D-HR/PS/PR/A/L(P)
117P
50D-PS
109P
116P
66Q-A(P)/L(P)


23D-HS/L(P)
SEE FIGURE 3 OF 4
17P
16P


70Q-A(P)/L(P)
45D-HR(P)/PS/PR/A/L(P)
3D-HR/X
113P
A/L
34D-HR(
11D-HS/HR(P)/A(P)/L(P)/R


(P)/L(P)
PR/A/L(P)
4D-HR/X(P)
P)
113P
A(P)
A/L(P)
111P
42D-HR/PS/PR(P)/A/L(P)/X(P)
X(P)
34D-HR(P)/X(P)
IS/HR(P)/A(P)/L(P)/R



ONE ACRE GRID SQUARE
COORDINATE LOCATION: 156,55

LEGEND:

CERFA DISQUALIFIED

CERFA QUALIFIED

CERFA EXCLUDED

CERFA PARCEL

PARCEL LABEL

5D-PR/HR

PARCEL DESIGNATION

PARCEL CATEGORY

PARCEL NUMBER AS NOTED ON DRAWING AND TABLE

PARCEL CATEGORY

D = CERFA DISQUALIFIED PARCEL
Q = CERFA QUALIFIED PARCEL
E = CERFA EXCLUDED PARCEL
P = CERFA PARCEL

DISQUALIFIED DESIGNATIONS

PS = PETROLEUM STORAGE
PR = PETROLEUM RELEASE DISPOSAL
HS = HAZARDOUS MATERIALS STORAGE
HR = HAZARDOUS MATERIALS RELEASE/D

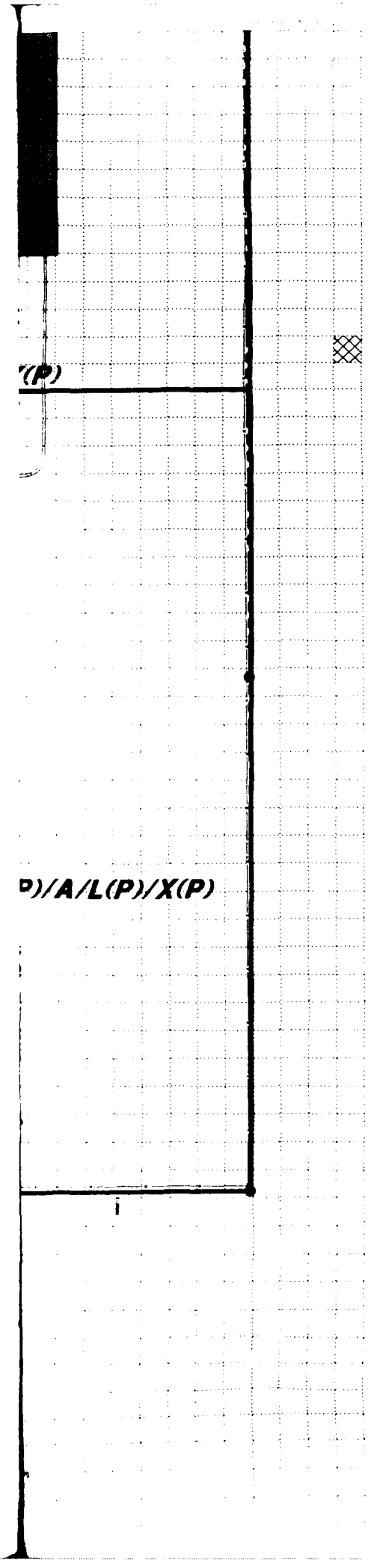
QUALIFIED DESIGNATIONS

A = ASBESTOS
L = LEAD-BASED PAINT
P = PCBs (POLYCHLORINATED BIPHENYLS
R = RADON
X = UXO (UNEXPLODED ORDNANCE)
RD = RADIONUCLIDE

(P) POSSIBLE DISQUALIFIED/QUALIFIER

ST SEPTIC TANK WITH HAZARDOUS MATERIAL CONCERNS

OIL WATER SEPARATOR



ONE ACRE GRID SQUARE
COORDINATE LOCATION: 156,55

LEGEND:

CERFA DISQUALIFIED

CERFA QUALIFIED

CERFA EXCLUDED

CERFA PARCEL

PARCEL LABEL

5D-PR/HR

- PARCEL DESIGNATION
- PARCEL CATEGORY
- PARCEL NUMBER AS NOTED ON DRAWING AND TABLE

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HS = HAZARDOUS MATERIALS STORAGE
HR = HAZARDOUS MATERIALS RELEASE/DISPOSAL

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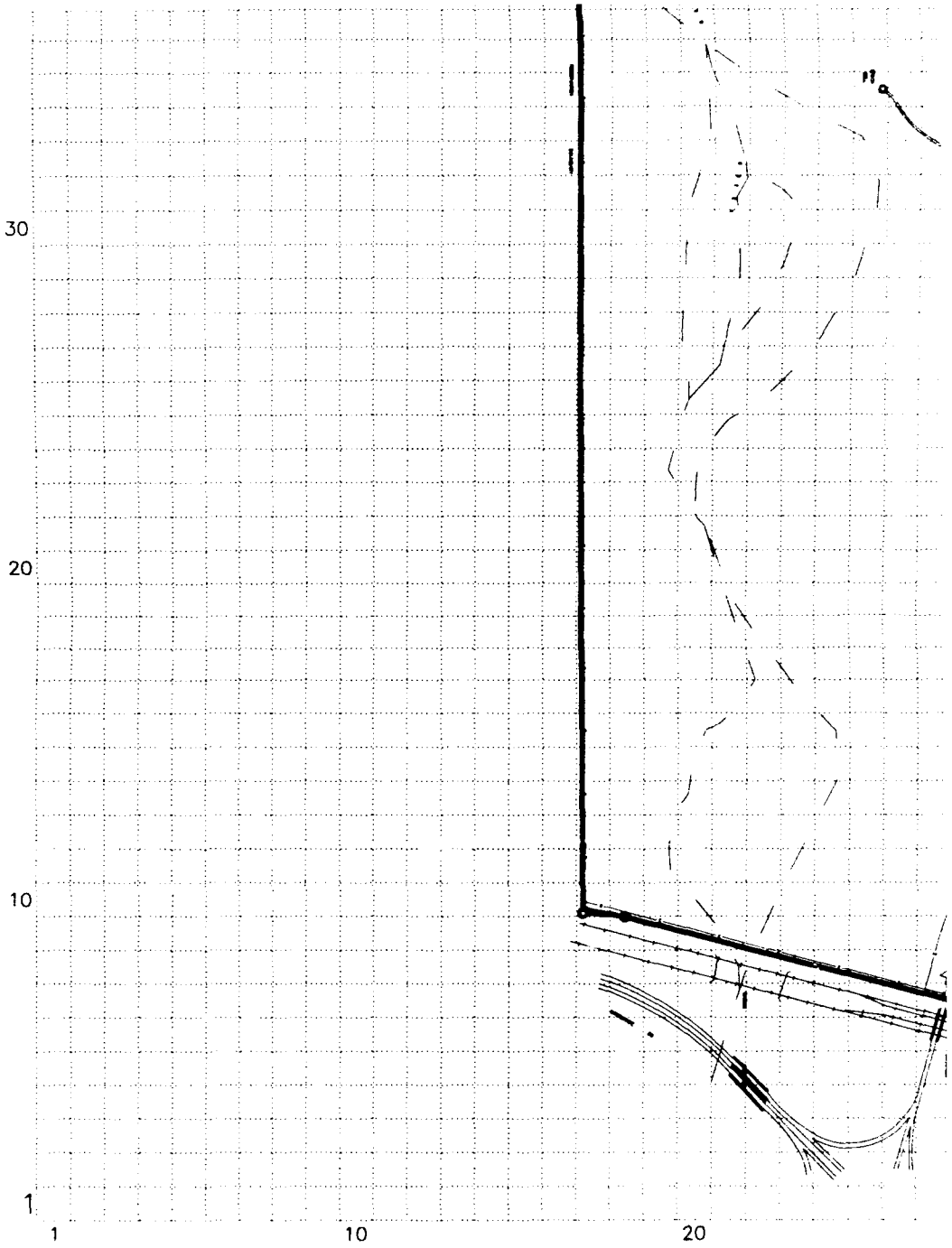
R = RADON
X = UXO (UNEXPLODED ORDNANCE)
RD = RADIONUCLIDE

(P) POSSIBLE DISQUALIFIED/QUALIFIER

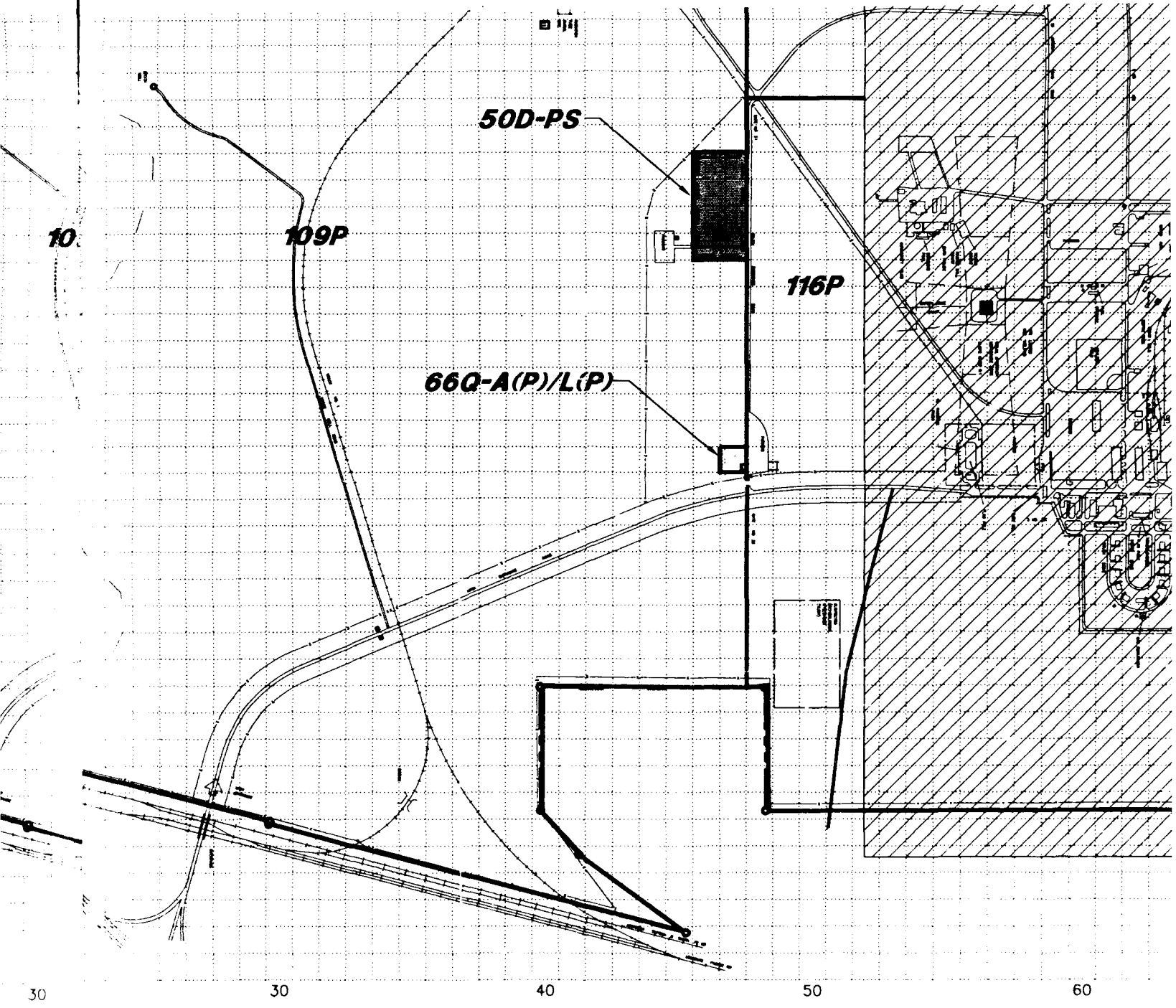
ST SEPTIC TANK WITH HAZARDOUS MATERIAL CONCERNS

OIL WATER SEPARATOR

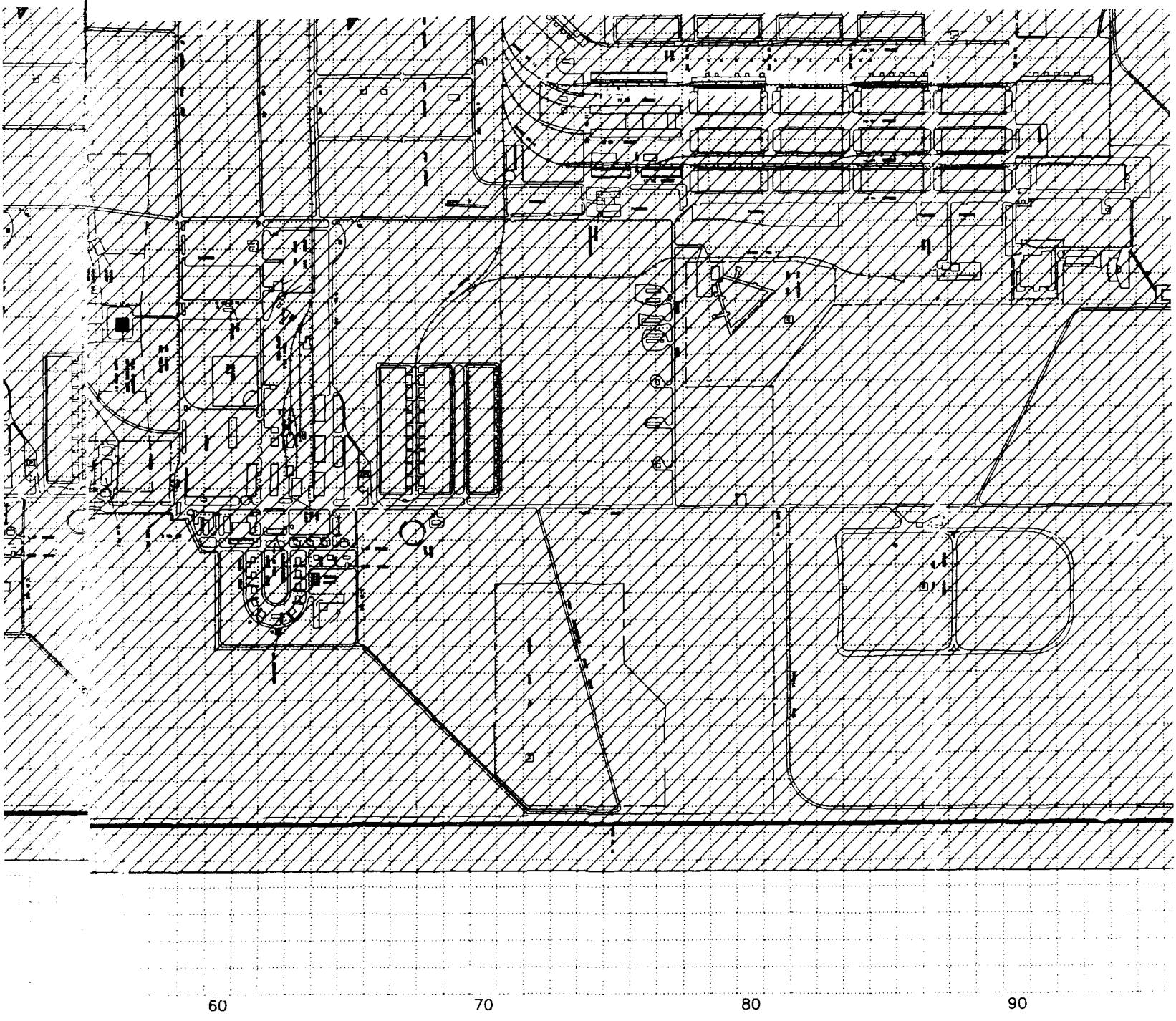
NON-LEAKING UST OR AST



NO.	DATE	APPR.	REVISION



NO.	DATE	APPR.	

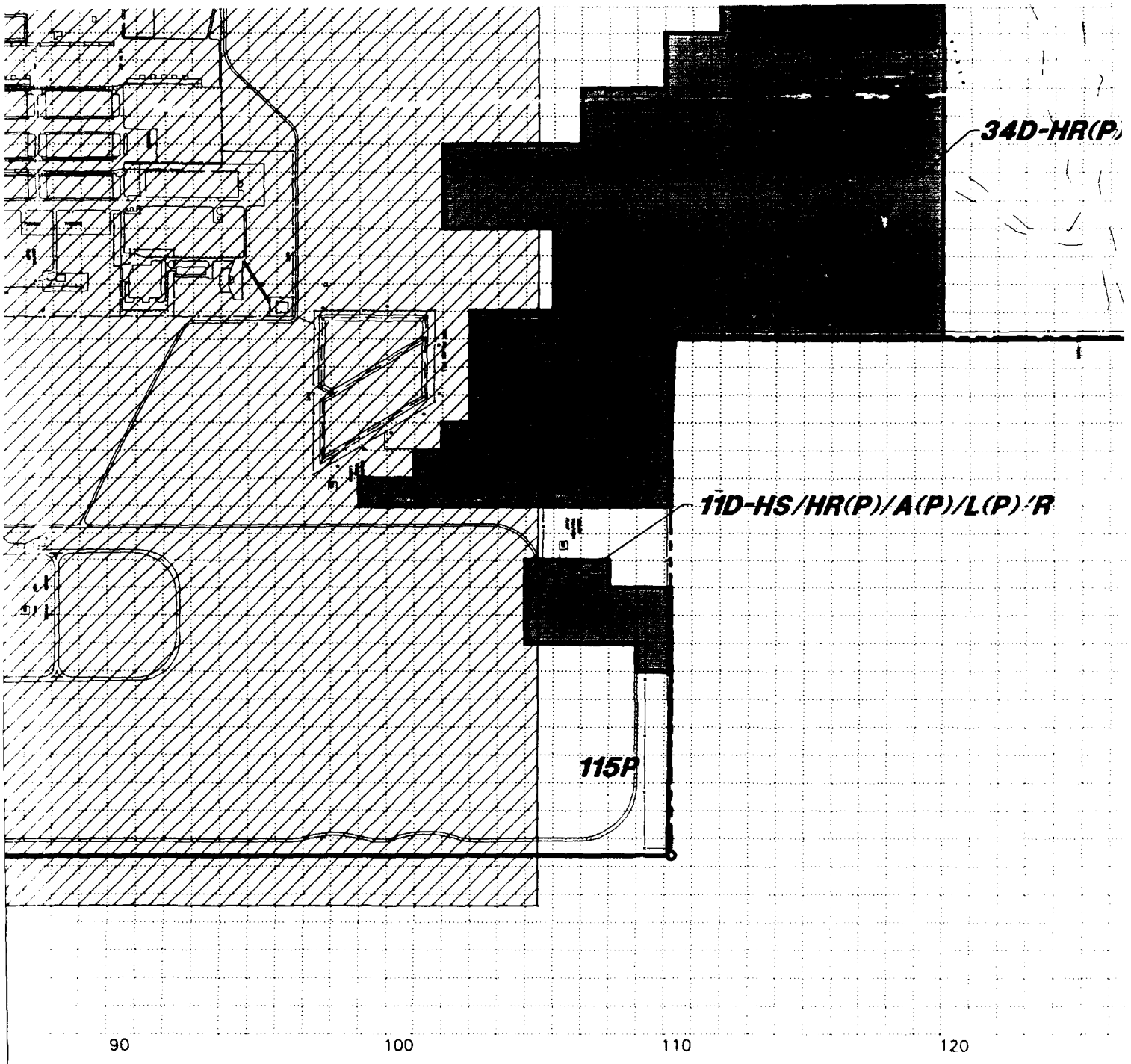


REVISION

Pueblo

Environmen

Exton, Pennsylva



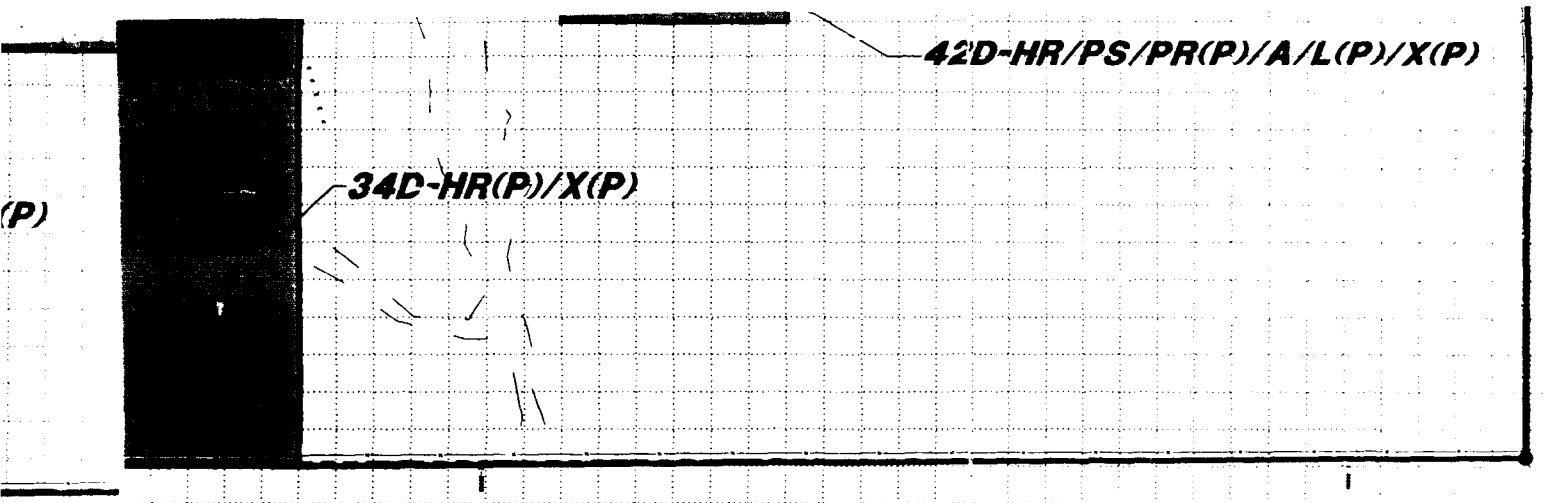
Pueblo Depot Activity
South

Pueblo **Colorado**

Environmental Resources Management, Inc.

Exton, Pennsylvania 19341 (215) 524-3500

ERM



120 130 140 150

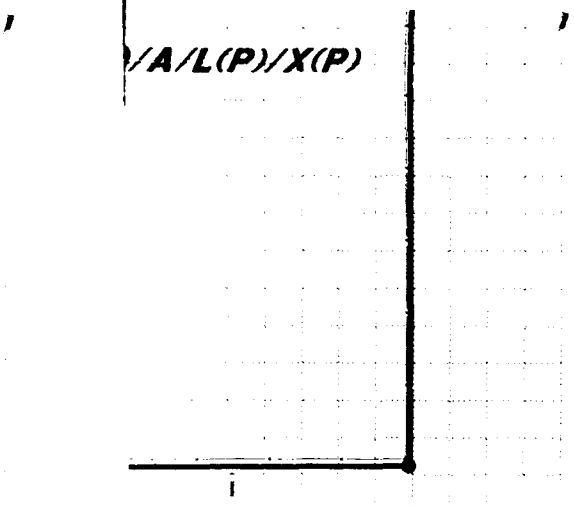
130

CHECKED	DATE	**CERFA Categor**	
DESIGN ENGINEER			
PROJECT GEOLOGIST			
PROJECT MANAGER			
APPROVED		DRAWN M.K. Bond/CMP	DATE 12
APPROVED		SCALE 1" = 1000'	W.O. No. P

Colorado

CHEC
DESIGN
PROJ
PROJE
APPR
APPROV

RM



PARCEL CATEGORY

D = CERFA DISQUALIFIED PARCEL
Q = CERFA QUALIFIED PARCEL
E = CERFA EXCLUDED PARCEL
P = CERFA PARCEL

DISQUALIFIED DESIGNATIONS

PS = PETROLEUM STORAGE
PR = PETROLEUM RELEASE DISPOSAL
HS = HAZARDOUS MATERIALS STORAGE
HR = HAZARDOUS MATERIALS RELEASE/DISPOSAL

QUALIFIED DESIGNATIONS

A = ASBESTOS
L = LEAD-BASED PAINT
P = PCBs (POLYCHLORINATED BIPHENYLS)
R = RADON
X = UXO (UNEXPLODED ORDNANCE)
RD = RADIONUCLIDE

(P) POSSIBLE DISQUALIFIED/QUALIFIER

ST SEPTIC TANK WITH HAZARDOUS MATERIAL CONCERNS

OIL WATER SEPARATOR

NON-LEAKING UST OR AST (FORMER OR ACTIVE)

LEAKING UST OR AST (FORMER OR ACTIVE)

RELEASE OR DISPOSAL OF PETROLEUM OR HAZARDOUS MATERIALS

81 BUILDING WITH CERFA QUALIFIER(S) IN A DISQUALIFIED PARCEL

150

1000 500 0 1000 2000
Scale in Feet

ind Des

CERFA Category and Designation Map

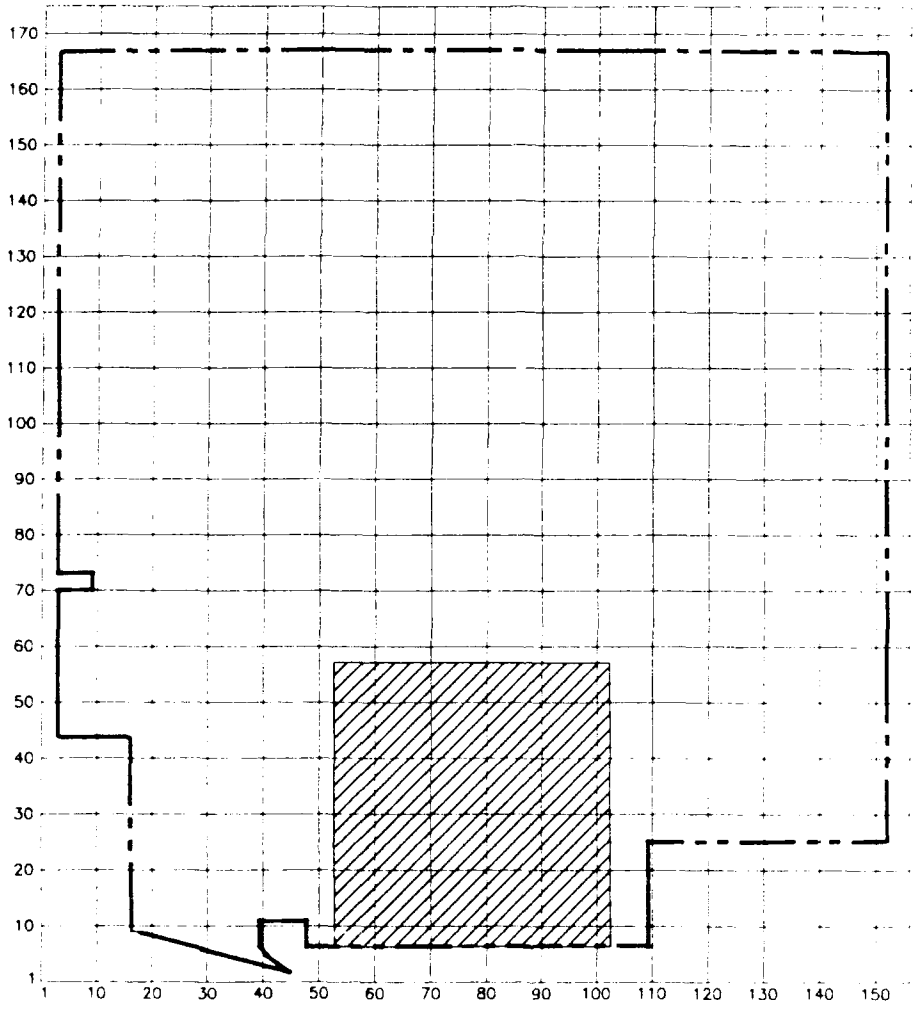
DRAWING NO.

Figure 5.1-1

REV NO

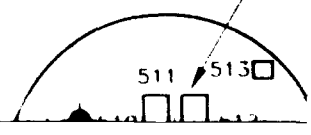
93/04.22	Bond/CMP	DATE 12.12.93/04.22.94	CLIENT APPROVAL
7.70.01/I	1000'	W O No PM307.70.01/1402 -1	ISSUED FOR DATE

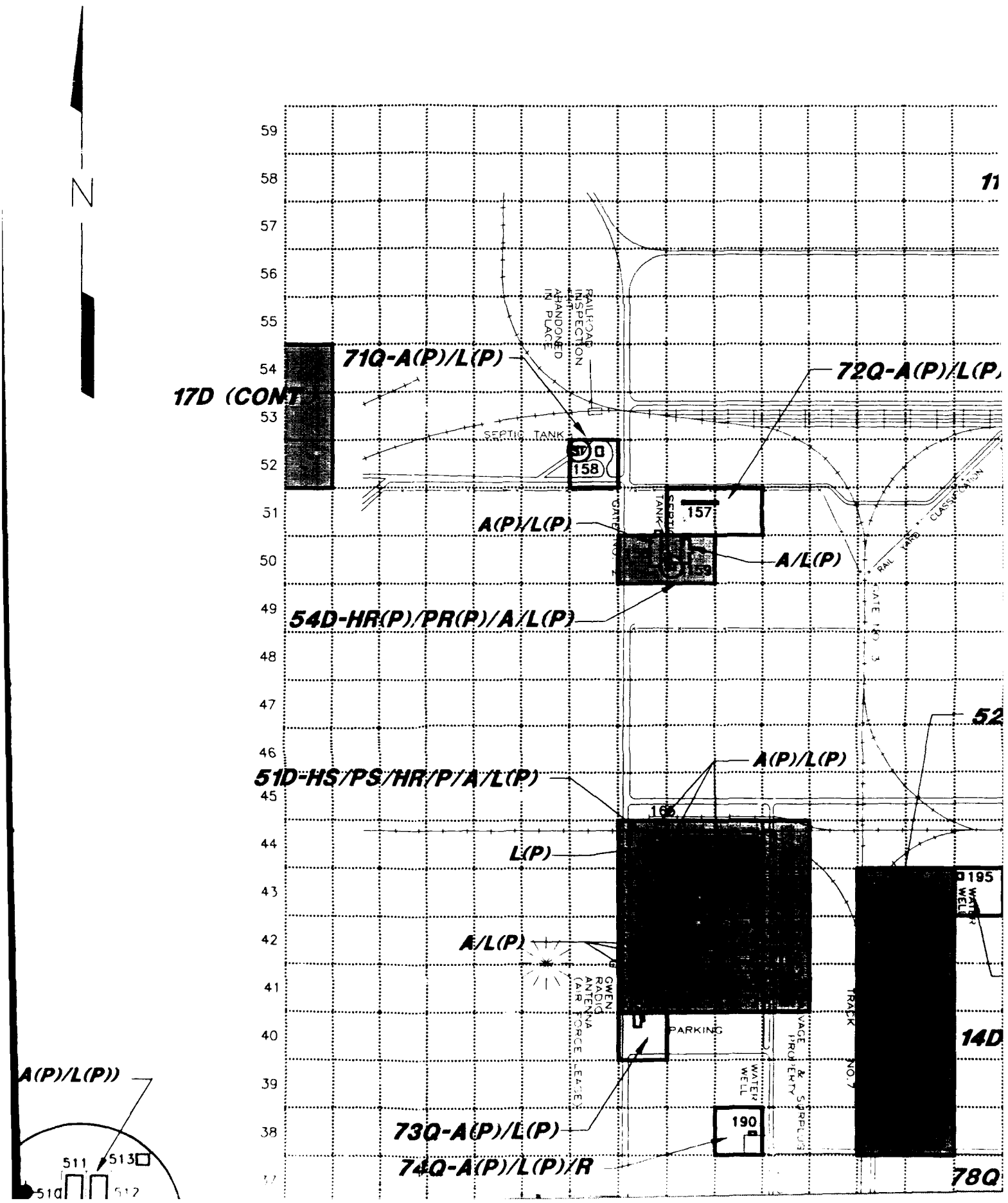
SHEET 2 OF 4

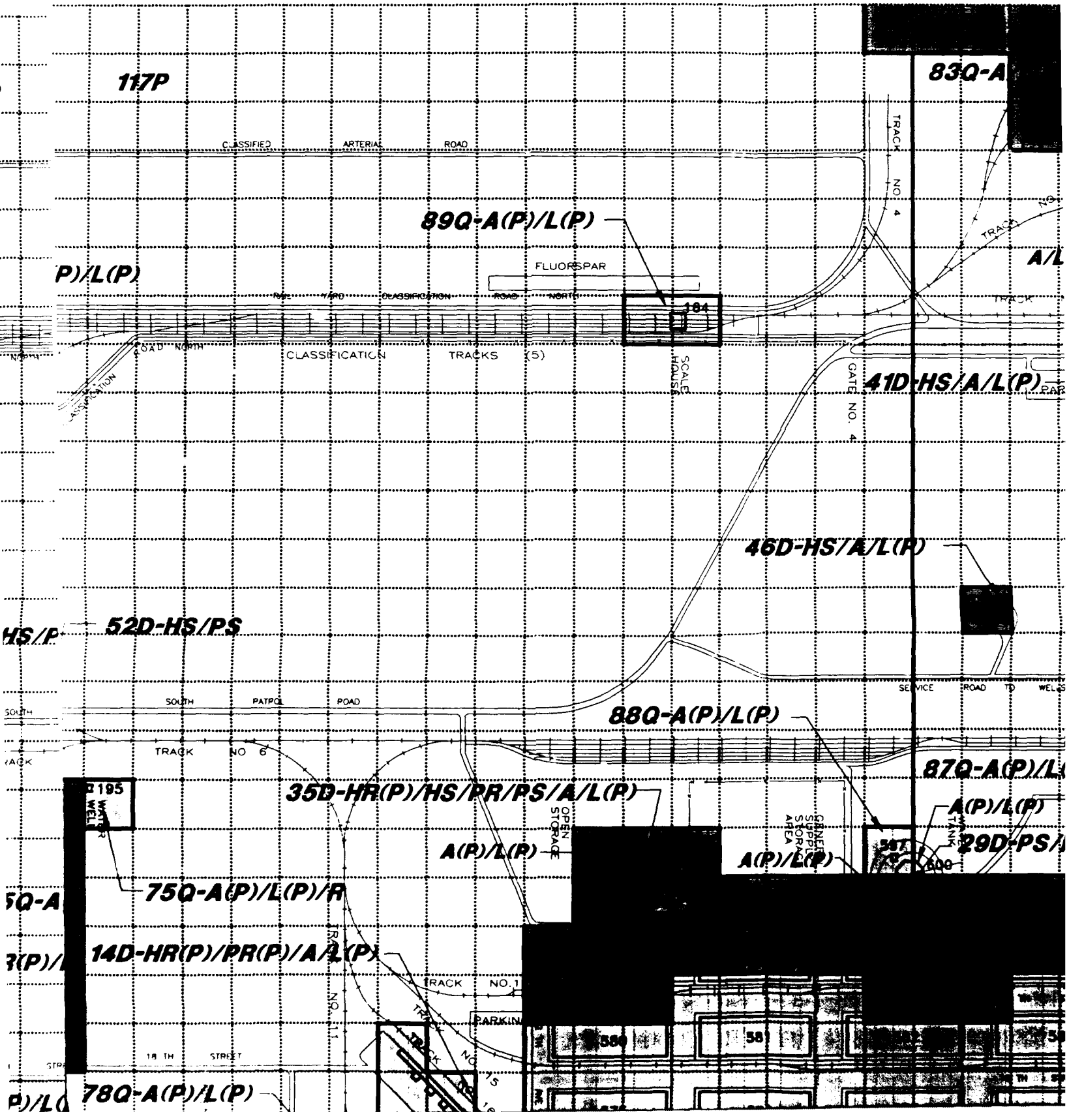


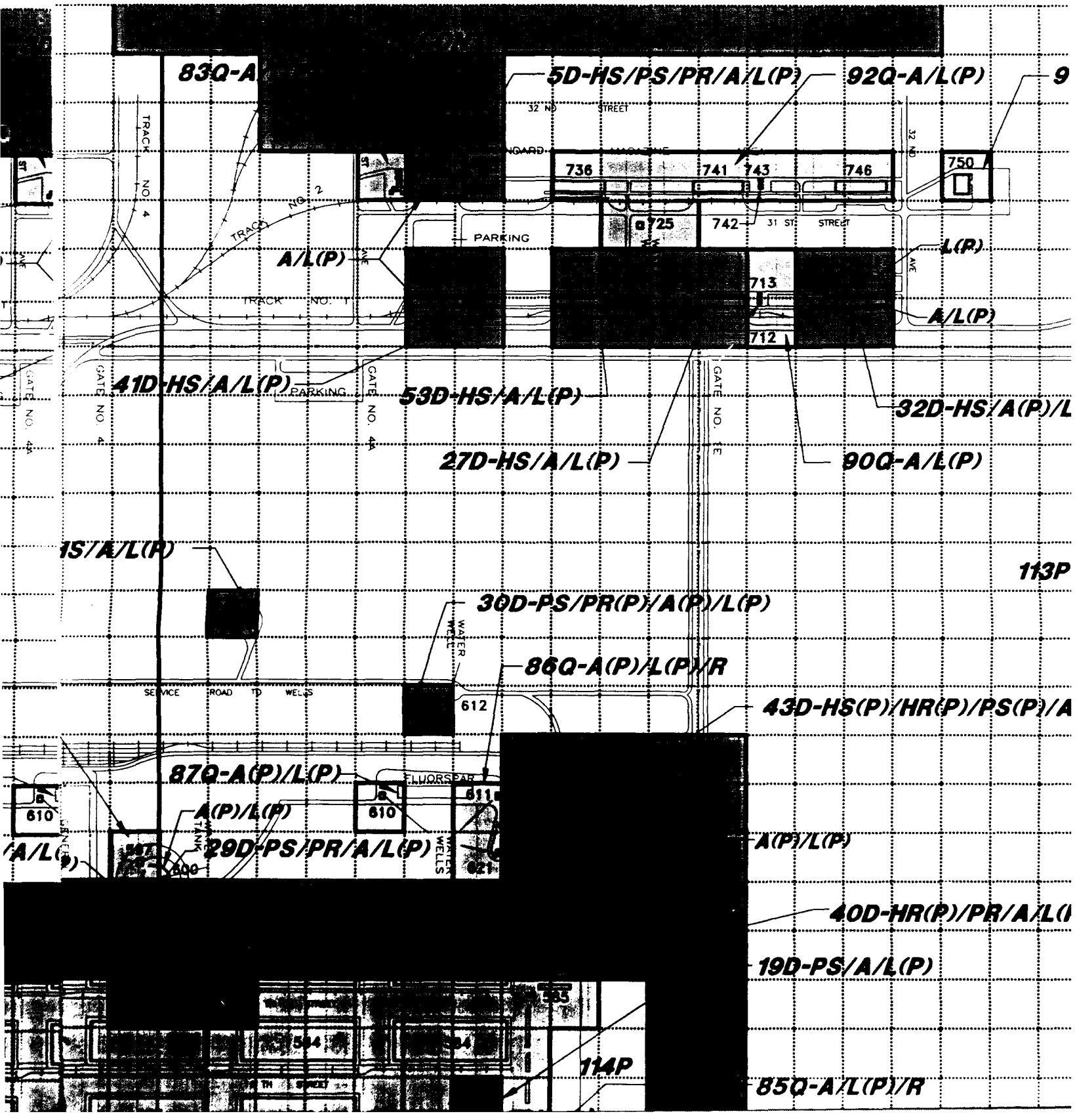
N

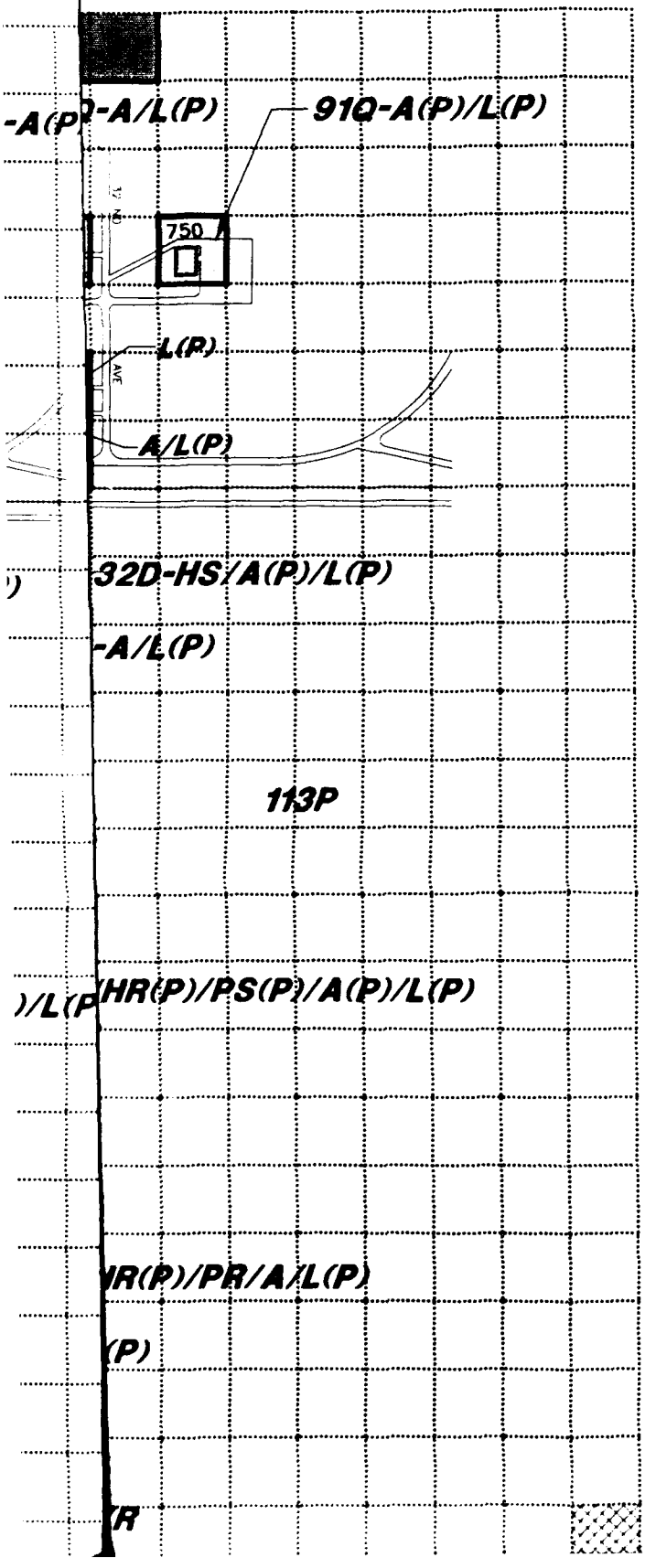
(ALL BUILDINGS A(P)/L(P))




N
59
58
57
56
55
54
53
52
51
50
49
48
47
46
45
44
43
42
41
40
39
38
37
71Q-A(P)/L(P)
17D (CONT
72Q-A(P)/L(P)
RAILROAD INSPECTION ABANDONED IN PLACE
SEPTIC TANK
158
157
A(P)/L(P)
A/L(P)
54D-HR(P)/PR(P)/A/L(P)
51D-HS/PS/HR/P/A/L(P)
L(P)
A/L(P)
GWEN RADIO ANTENNA (AIR FORCE LEASE)
PARKING
WATER WELL
190
195
WATER WELL
TRACK NO. 7
73Q-A(P)/L(P)
74Q-A(P)/L(P)/R
78Q
14D
A(P)/L(P))
511
513
512
510

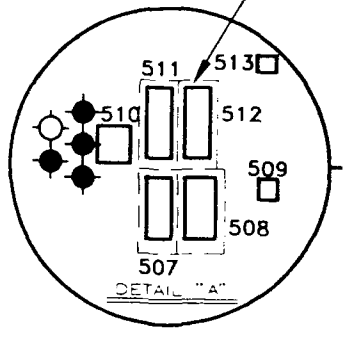

117P
83Q-A
89Q-A(P)/L(P)
FLUORSPAR
CLASSIFICATION
TRACKS (5)
SCALE HOUSE
184
41D-HS/A/L(P)
GATE NO. 4
46D-HS/A/L(P)
52D-HS/PS
SOUTH PATROL ROAD
TRACK NO 6
88Q-A(P)/L(P)
35D-HR(P)/HS/PR/PS/A/L(P)
A(P)/L(P)
75Q-A(P)/L(P)/R
14D-HR(P)/PR(P)/A/L(P)
TRACK NO. 1
18 TH STREET
78Q-A(P)/L(P)
OPEN STORAGE
GENERAL SUPPLY STORAGE AREA
WATER TANK
29D-PS
PARKING

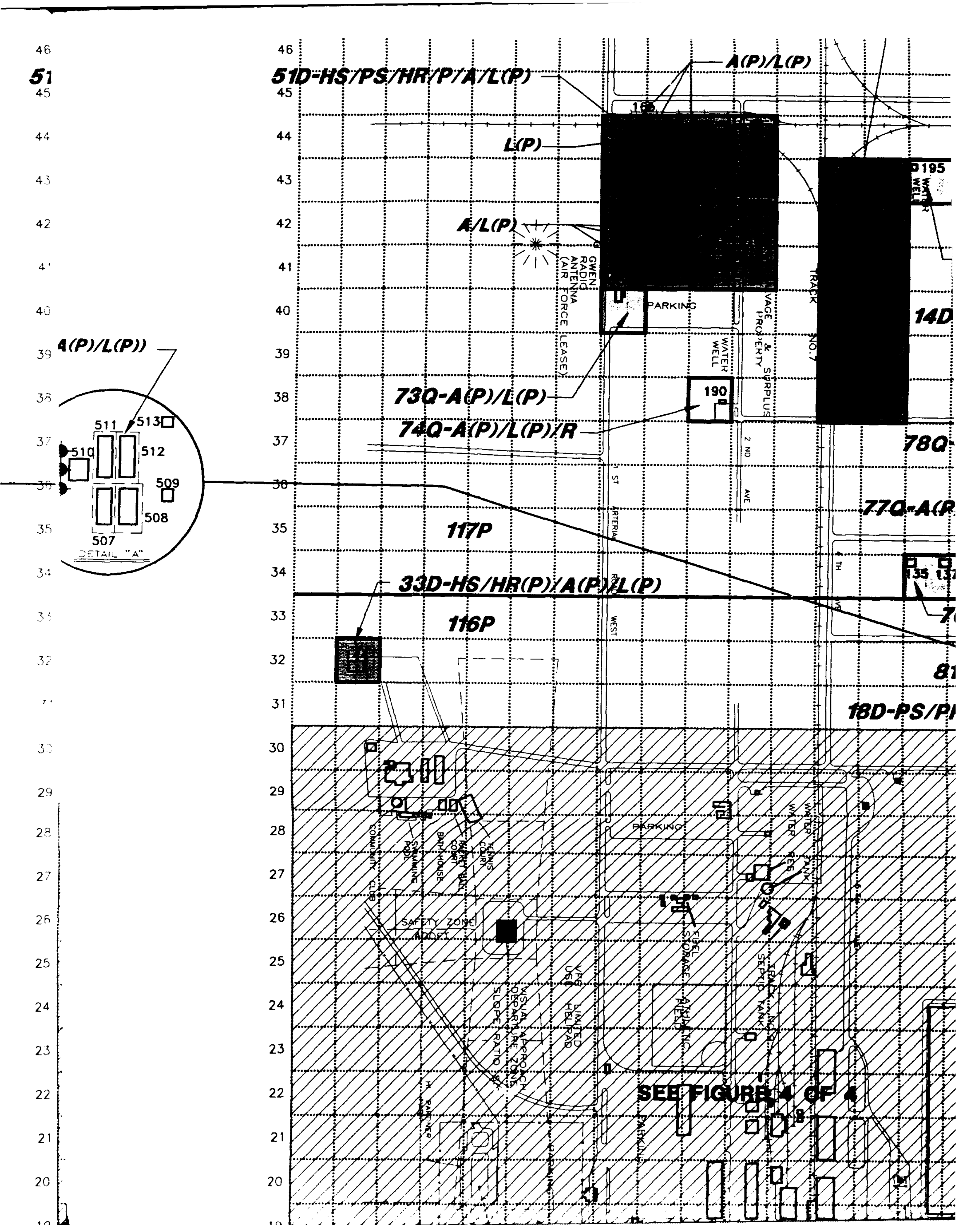

83Q-A
5D-HS/PS/PR/A/L(P)
92Q-A/L(P)
9
32 ND STREET
736
741
743
746
750
725
742
31 ST STREET
PARKING
A/L(P)
L(P)
713
712
TRACK NO. 4
TRACK NO. 2
TRACK NO. 1
GATE NO. 4
GATE NO. 4A
GATE NO. 1E
41D-HS/A/L(P)
53D-HS/A/L(P)
32D-HS/A(P)/L
27D-HS/A/L(P)
90Q-A/L(P)
113P
30D-PS/PR(P)/A(P)/L(P)
WATER WELL
86Q-A(P)/L(P)/R
SERVICE ROAD TO WELLS
612
43D-HS(P)/HR(P)/PS(P)/A
87Q-A(P)/L(P)
610
A(P)/L(P)
29D-PS/PR/A/L(P)
WATER TANK
WATER WELLS
621
40D-HR(P)/PR/A/L(
19D-PS/A/L(P)
114P
85Q-A/L(P)/R

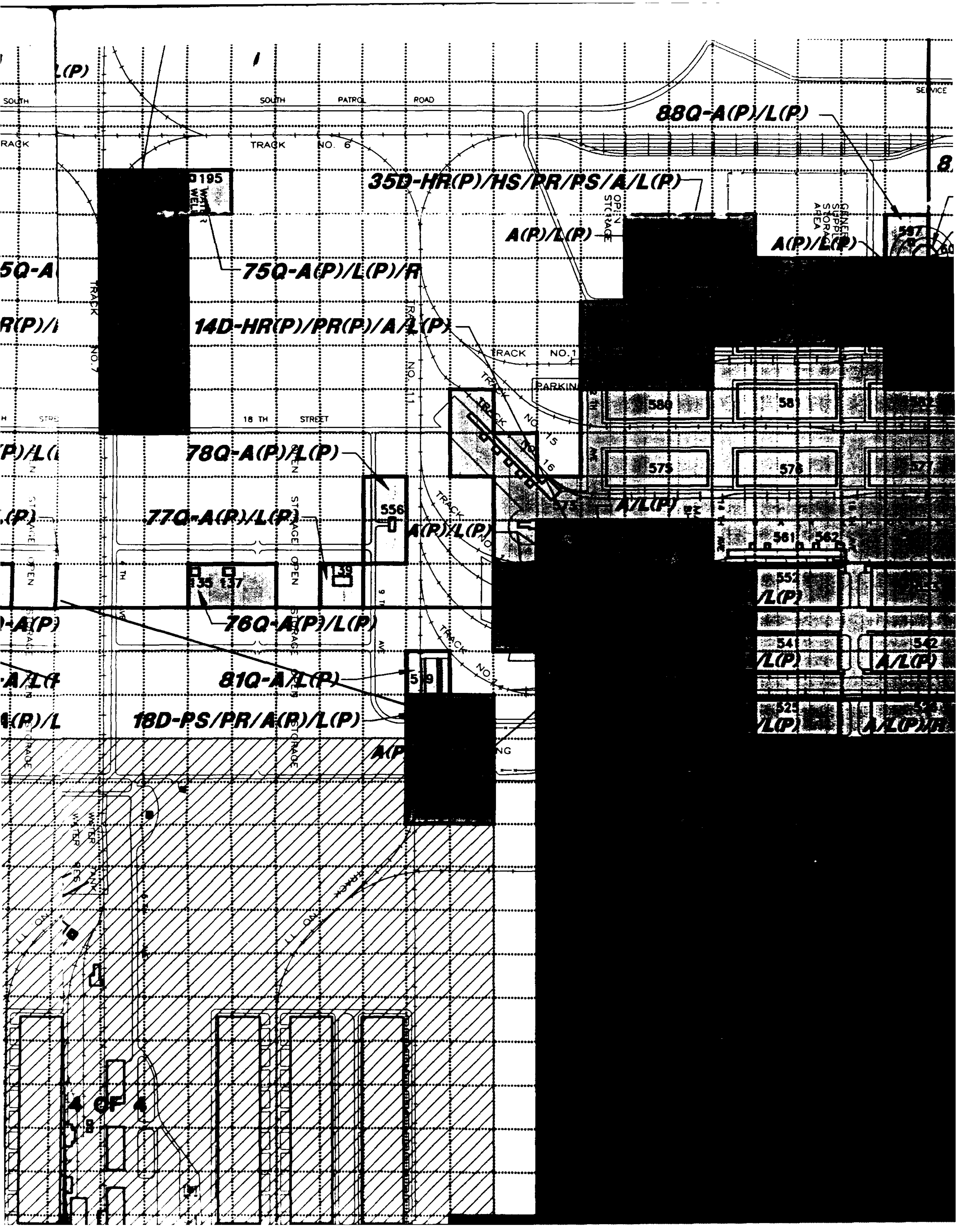


ONE ACRE GRID SQUARE
COORDINATE LOCATION 105 37

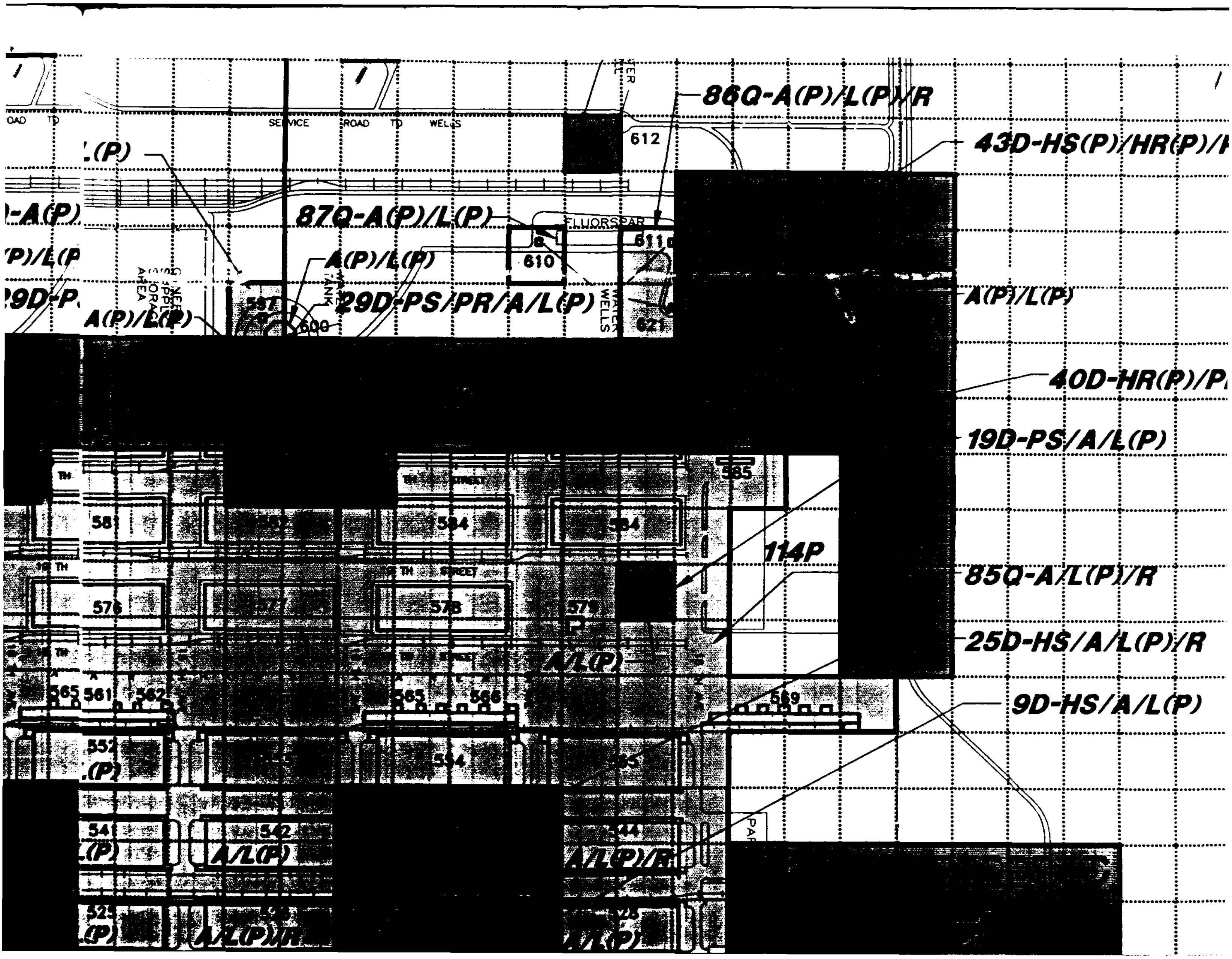
(ALL BUILDINGS A(P)/L(P))

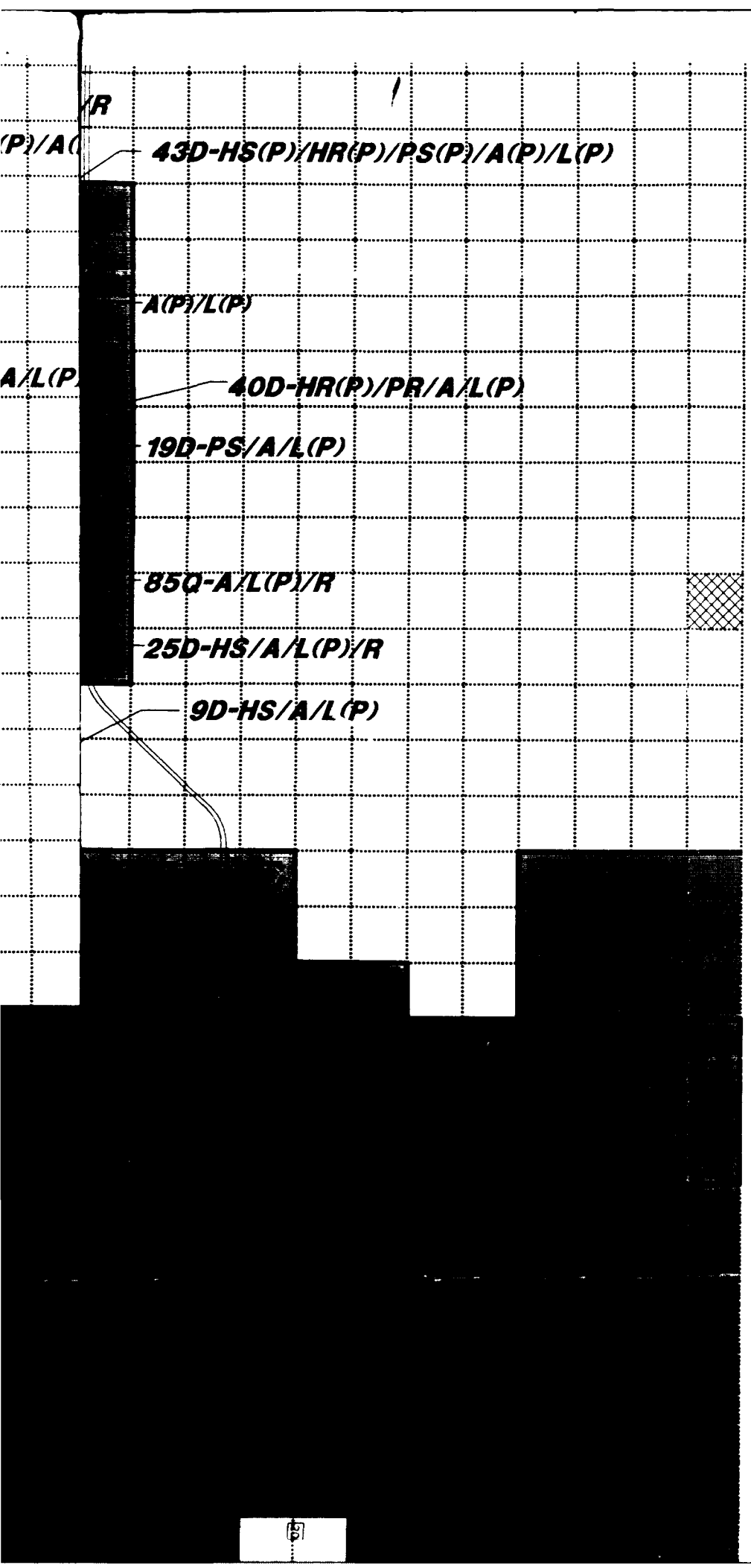



51D-HS/PS/HR/P/A/L(P)
A(P)/L(P)
L(P)
A/L(P)
GWEN RADIO ANTENNA (AIR FORCE LEASE)
PARKING
WATER WELL
SALVAGE PROPERTY & SURPLUS
TRACK NO.7
195
WATER WELL
14D
73Q-A(P)/L(P)
74Q-A(P)/L(P)/R
190
78Q
2 ND AVE
1 ST ARTERIAL RD WEST
4 TH
77Q-A(P
117P
116P
33D-HS/HR(P)/A(P)/L(P)
135
18D-PS/P
A(P)/L(P))
511
512
513
510
509
508
507
DETAIL "A"
PARKING
COMMUNITY CLUB
SWIMMING POOL
BATH HOUSE
TENNIS COURT
WATER TANK
WATER RES.
SAFETY ZONE
FUEL STORAGE
SEPTIC TANK
TRACK NO.
ATHLETIC FIELD
VFR USE LIMITED HELIPAD
VISUAL APPROACH DEPARTURE ZONE SLOPE RATIO 8:1
SEE FIGURE 4 OF 4
PARKING



SOUTH PATROL ROAD
SERVICE
TRACK NO. 6
88Q-A(P)/L(P)
35D-HR(P)/HS/PR/PS/A/L(P)
195 WATER WELL
OPEN STORAGE
GENERAL SUPPLIES STORAGE AREA
A(P)/L(P)
75Q-A(P)/L(P)/R
14D-HR(P)/PR(P)/A/L(P)
TRACK NO. 7
TRACK NO. 11
TRACK NO. 1
TRACK NO. 15
TRACK NO. 16
PARKING
18 TH STREET
78Q-A(P)/L(P)
77Q-A(P)/L(P)
76Q-A(P)/L(P)
81Q-A/L(P)
18D-PS/PR/A(P)/L(P)
556
135 137
139
519
580 581 575 576 561 562 552 541 542 525
A/L(P)
OPEN STORAGE
[redacted]


86Q-A(P)/L(P)/R
43D-HS(P)/HR(P)/
SERVICE ROAD TO WELLS
612
87Q-A(P)/L(P)
FLUORSPAR
610
A(P)/L(P)
29D-PS/PR/A/L(P)
WATER WELLS
621
A(P)/L(P)
40D-HR(P)/P
19D-PS/A/L(P)
585
584
114P
85Q-A/L(P)/R
578
579
25D-HS/A/L(P)/R
A/L(P)
561
562
565
566
569
9D-HS/A/L(P)
552
554
542
A/L(P)/R



ONE ACRE GRID SQUARE
COORDINATE LOCATION: 105,37

LEGEND:

CERFA

CERFA

CERFA

CERFA

PARCE

5D-PR/HR

PARCE

PARCE

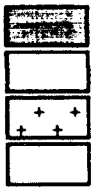
PARCE
ON D

PARCE

D =
Q =
E =
P =

GRID SQUARE
E LOCATION: 105,37

LEGEND:



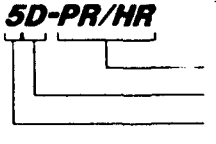
CERFA DISQUALIFIED

CERFA QUALIFIED

CERFA EXCLUDED

CERFA PARCEL

PARCEL LABEL



PARCEL DESIGNATION

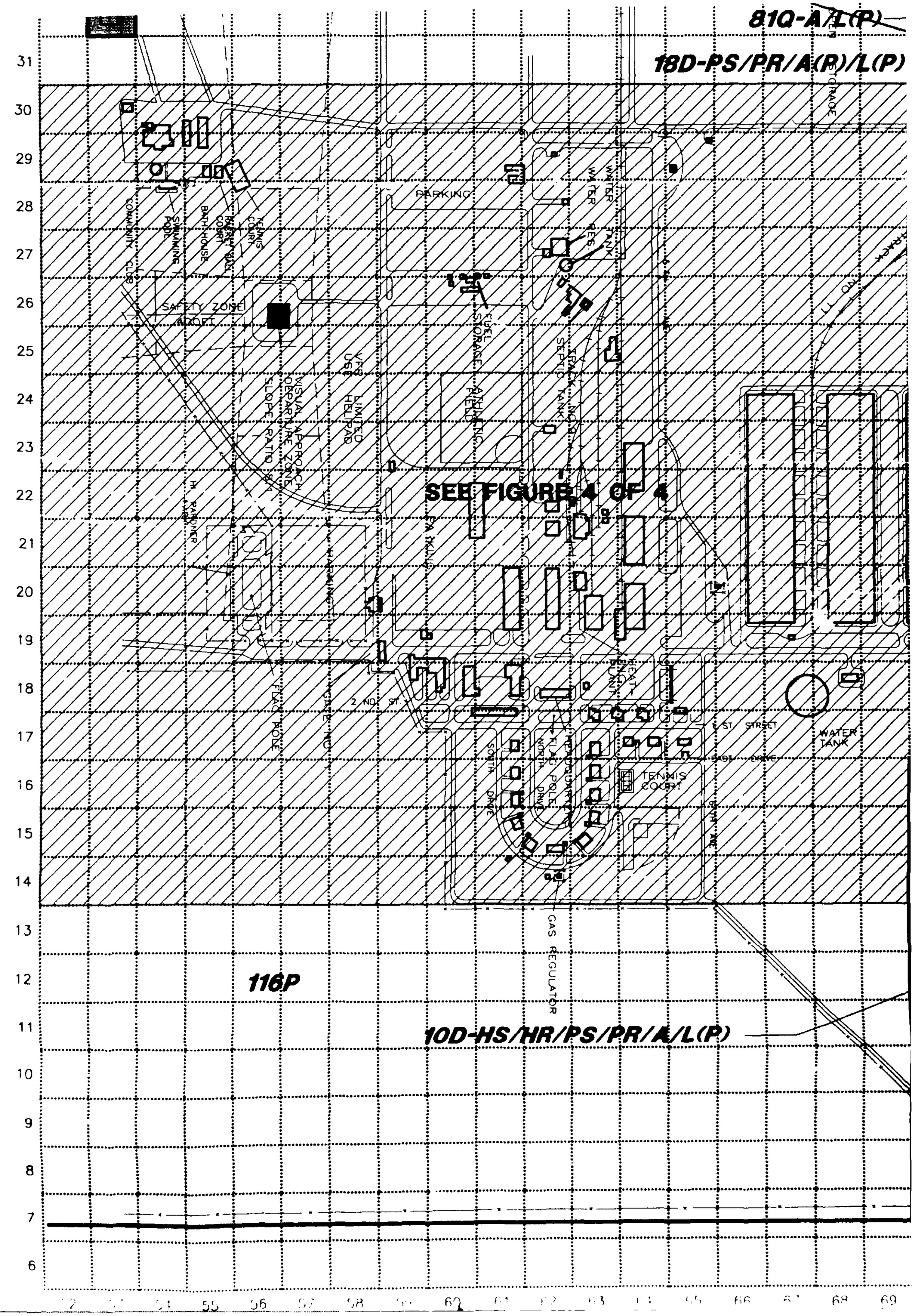
PARCEL CATEGORY

PARCEL NUMBER AS NOTED ON DRAWING AND TABLE

PARCEL CATEGORY

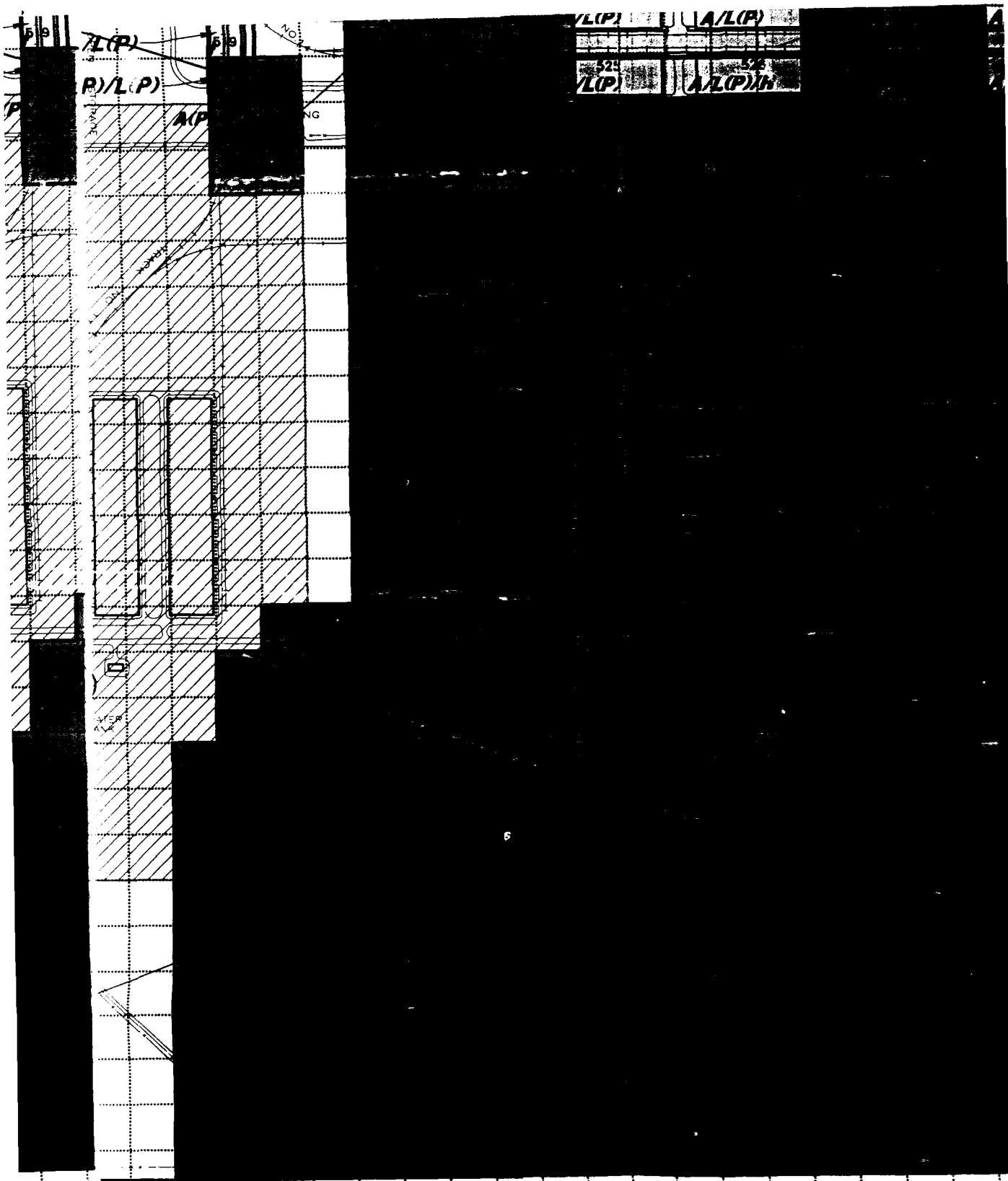
D = CERFA DISQUALIFIED PARCEL
Q = CERFA QUALIFIED PARCEL
E = CERFA EXCLUDED PARCEL
F = CERFA PARCEL

DISQUALIFIED DESIGNATIONS



81Q-A/L(P)
18D-PS/PR/A(P)/L(P)
COMMUNITY CLUB
SWIMMING POOL
BATH HOUSE
TENNIS COURT
PARKING
WATER TANK
WATER RES.
SAFETY ZONE
FUEL STORAGE
SEPTIC TANK
VFR LIMITED USE HELIPAD
VISUAL APPROACH DEPARTURE ZONE SLOPE RATIO 8:1
ATHLETIC FIELD
SEE FIGURE 4 OF 4
PARKING
FLAG POLE
2 ND. ST.
HEAT PLANT
SOUTH DRIVE
NORTH DRIVE
FLAG POLE
HEADQUARTERS
TENNIS COURT
WATER TANK
EAST DRIVE
GAS REGULATOR
116P
10D-HS/HR/PS/PR/A/L(P)

PROJECT GEOLOGIST		**CERFA Category**	
PROJECT MANAGER			
APPROVED		DRAWN M.K. Bond/CMP	DATE 12.
APPROVED		SCALE 1" = 1000'	W.O. No. PM.

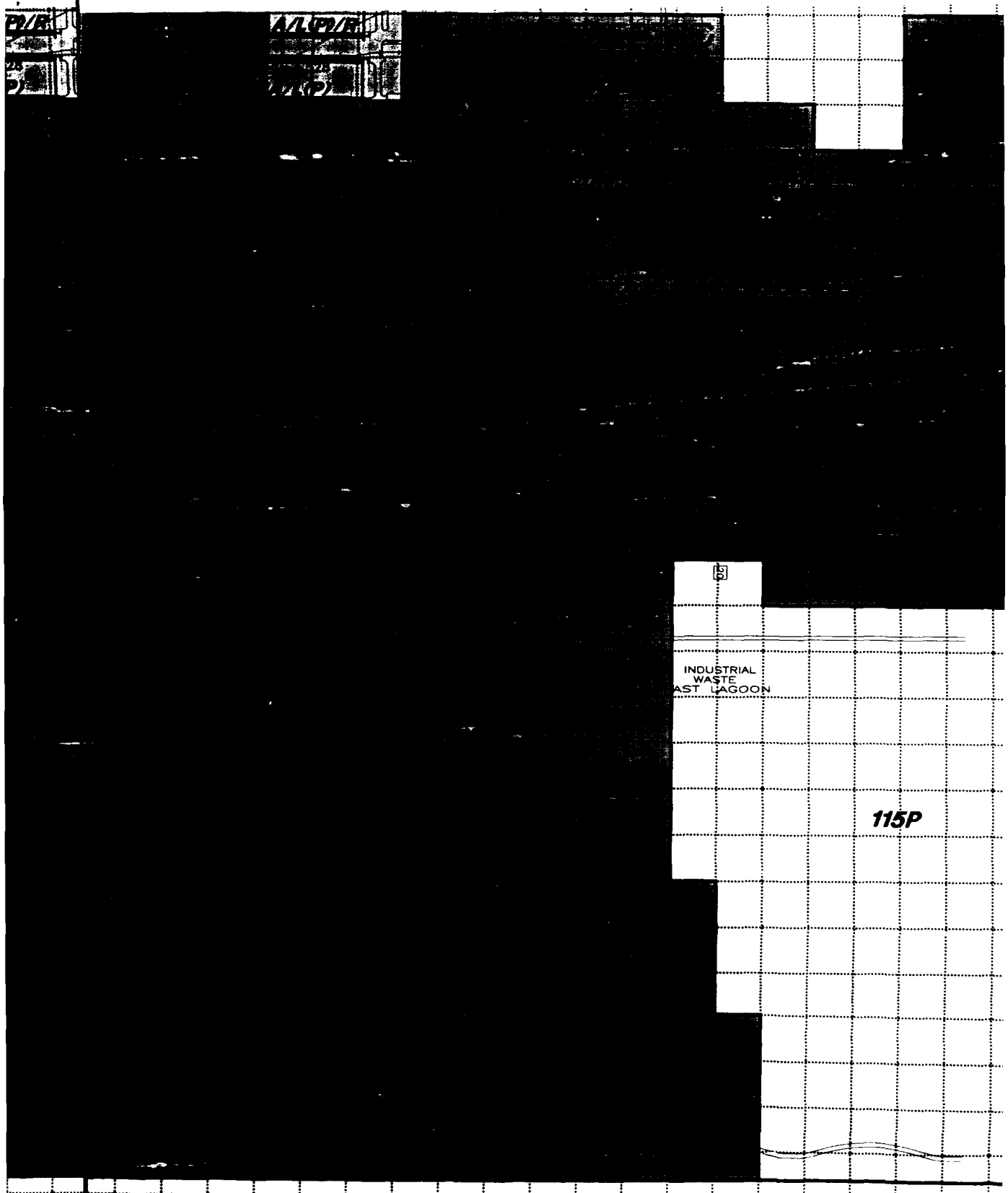


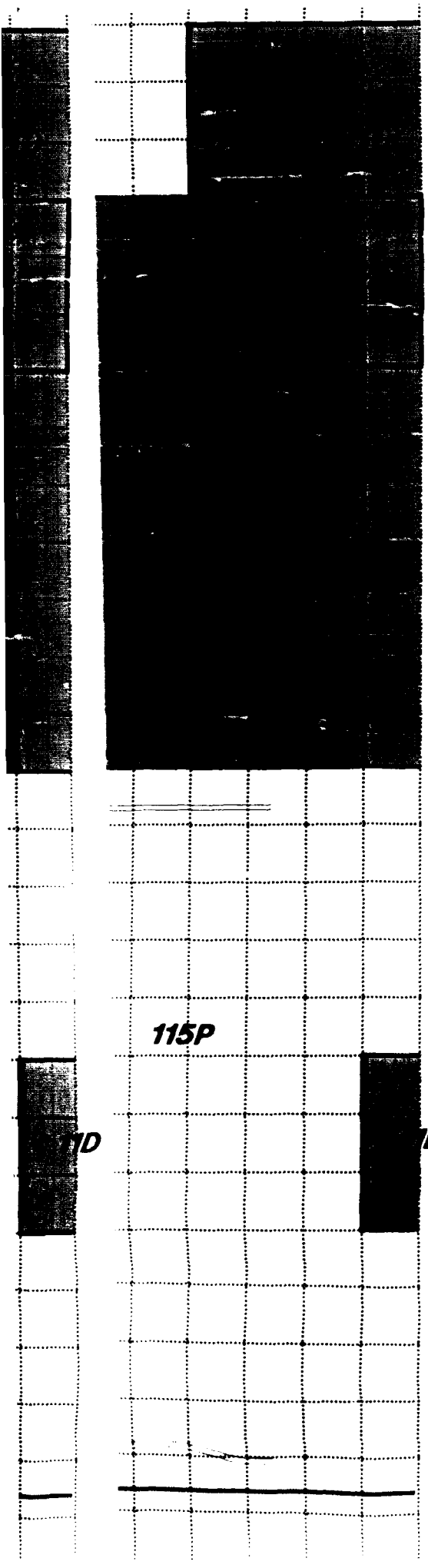
ıd Des

CERFA Category and Designation Map

Figure 5.1-1

93/04.22	Bond/CMP	DATE 12.12.93/04.22.94	CLIENT APPROVAL	REV. NO.
.70.01/I	1000'	W.O. No. PM307.70.01/1402 – 1	ISSUED FOR DATE	SHEET 2 OF 4





LEGEND:

CERFA DISQUALIFIED

CERFA QUALIFIED

CERFA EXCLUDED

CERFA PARCEL

PARCEL LABEL:

5D-PR/HR

- PARCEL DESIGNATION
- PARCEL CATEGORY
- PARCEL NUMBER AS NOTED ON DRAWING AND TABLE

PARCEL CATEGORY

D = CERFA DISQUALIFIED PARCEL
Q = CERFA QUALIFIED PARCEL
E = CERFA EXCLUDED PARCEL
P = CERFA PARCEL

DISQUALIFIED DESIGNATIONS

PS = PETROLEUM STORAGE
PR = PETROLEUM RELEASE/DISPOSAL
HS = HAZARDOUS MATERIALS STORAGE
HR = HAZARDOUS MATERIALS RELEASE/DISP

QUALIFIED DESIGNATIONS

A = ASBESTOS
L = LEAD-BASED PAINT
P = PCBs (POLYCHLORINATED BIPHENYLS)
R = RADON
X = UXO (UNEXPLODED ORDNANCE)
RD = RADIONUCLIDE

(P) POSSIBLE DISQUALIFIER/QUALIFIER

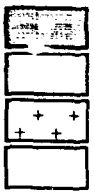
OIL WATER SEPARATOR

(ST) SEPTIC TANK WITH HAZARDOUS MATERIAL CONCERNS

NON-LEAKING UST OR AST (FORMER OR ACTIVE)

LEAKING UST OR AST (FORMER OR ACTIVE)

LEGEND:



CERFA DISQUALIFIED

CERFA QUALIFIED

CERFA EXCLUDED

CERFA PARCEL

PARCEL LABEL

5D-PR/HR

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- PARCEL CATEGORY
- PARCEL NUMBER AS NOTED ON DRAWING AND TABLE

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HR = HAZARDOUS MATERIALS RELEASE/DISPOSAL

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R = RADON
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RD = RADIONUCLIDE

(P) POSSIBLE DISQUALIFIER/QUALIFIER

OIL WATER SEPARATOR

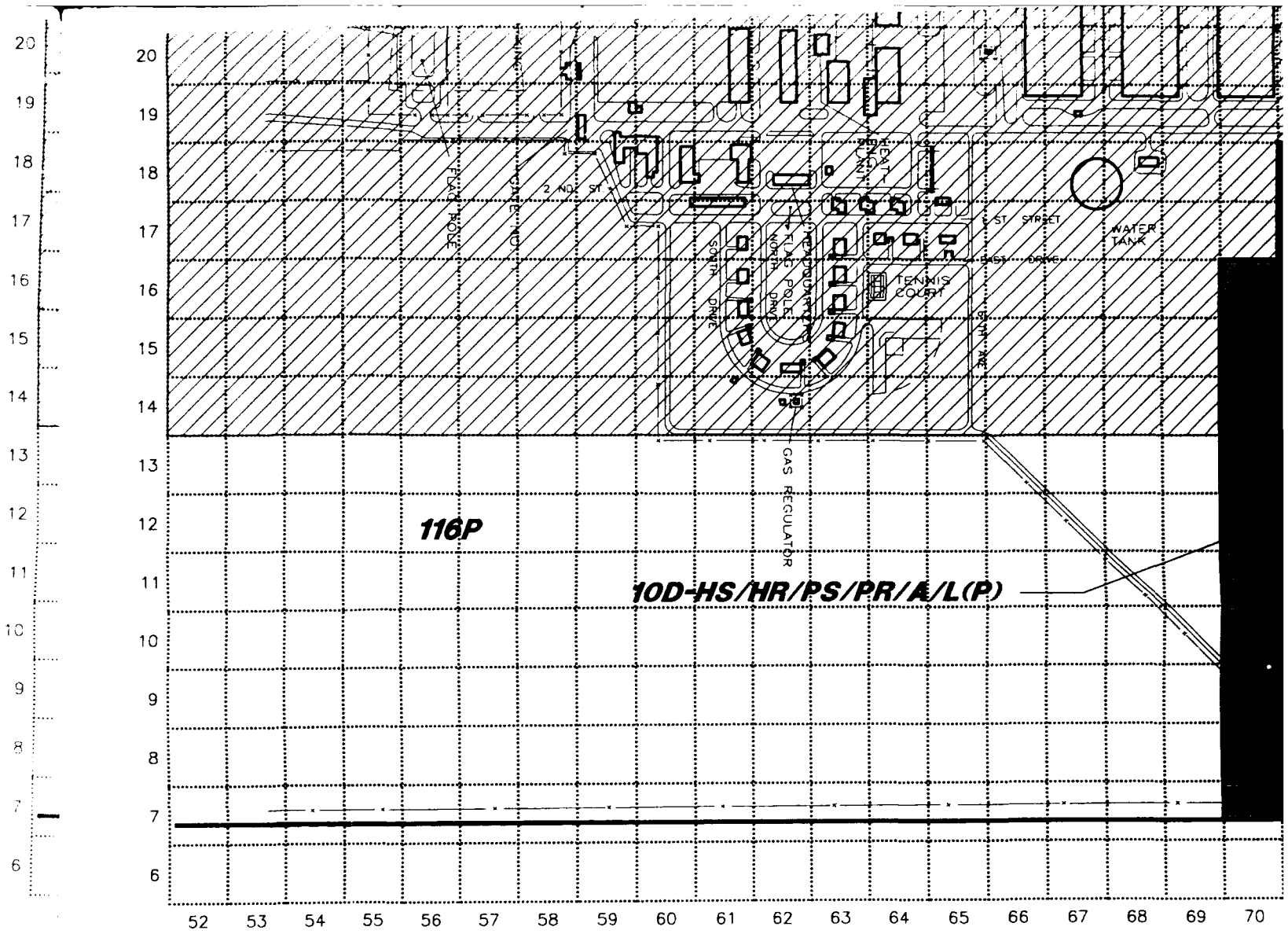
(ST) SEPTIC TANK WITH HAZARDOUS MATERIAL CONCERNS

NON-LEAKING UST OR AST (FORMER OR ACTIVE)

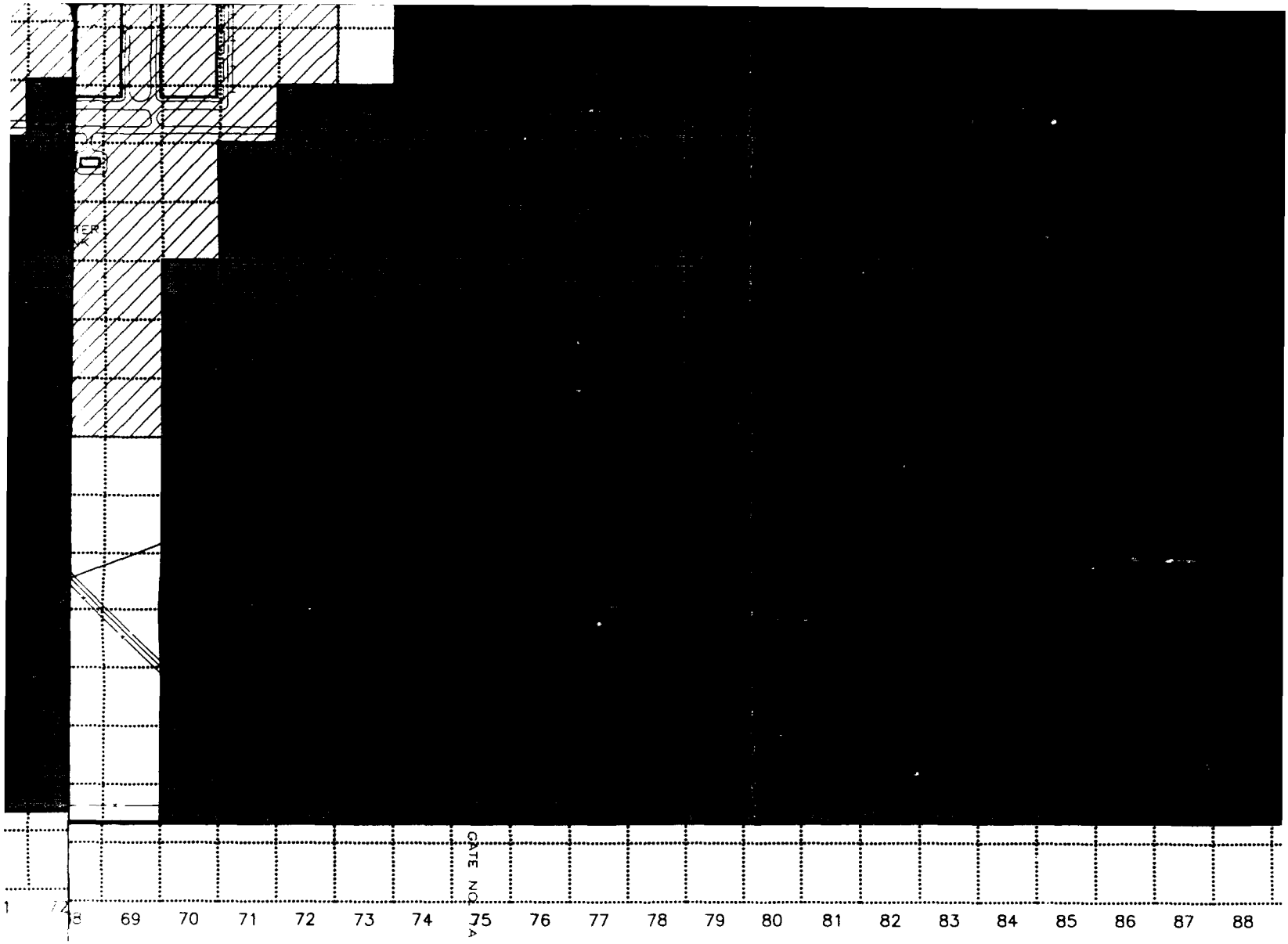
LEAKING UST OR AST (FORMER OR ACTIVE)

[illegible] OR DISPOSAL OF PETROLEUM

NO.	DATE	APPR.	REVISION



NO.	DATE	APPR.	RE



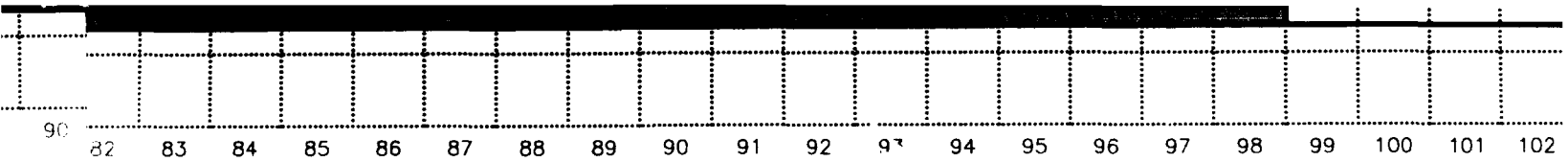
REVISION	

Pueblo Depot

Pueblo

Environmental Resources Mana

Exton, Pennsylvania 19341 (215) 524-3500



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ment

Pueblo Depot Activity

Colorado

ronmental Resources Management, Inc.

Pennsylvania 19341 (215) 524-3500

ERM

CHECKED

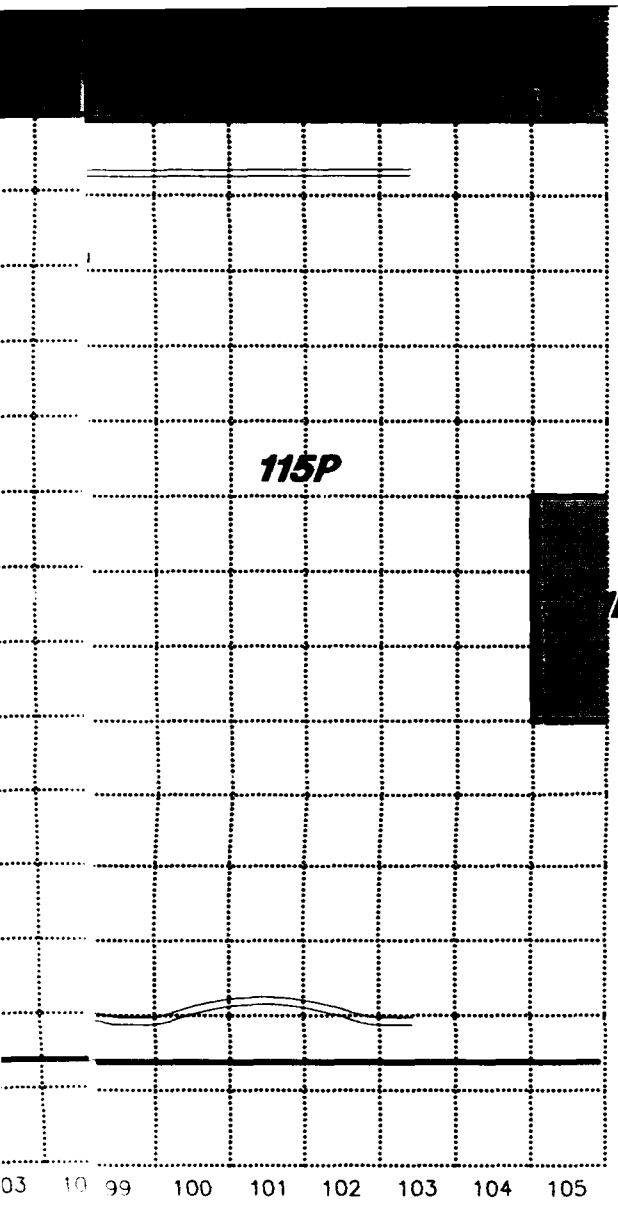
DESIGN ENGINE

PROJECT GEOL

PROJECT MANA

APPROVED

APPROVED



Q = CERFA QUALIFIED PARCEL
E = CERFA EXCLUDED PARCEL
P = CERFA PARCEL

DISQUALIFIED DESIGNATIONS

PS = PETROLEUM STORAGE
PR = PETROLEUM RELEASE/DISPOSAL
HS = HAZARDOUS MATERIALS STORAG
HR = HAZARDOUS MATERIALS RELEAS

QUALIFIED DESIGNATIONS

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RD = RADIONUCLIDE

(P) POSSIBLE DISQUALIFIER/QUALIFIER

OIL WATER SEPARATOR

(ST) SEPTIC TANK WITH HAZARDOUS MATERIAL CONCERNS

NON-LEAKING UST OR AST (FORMER OR ACTIVE)

LEAKING UST OR AST (FORMER OR ACTIVE)

RELEASE OR DISPOSAL OF PETROLEUM OR HAZARDOUS MATERIALS

81 BUILDING WITH CERFA QUALIFIER(S) IN A

500 250 0

Scale in Fe

CHECKED		DATE
DESIGN ENGINEER		
PROJECT GEOLOGIST		
PROJECT MANAGER		
APPROVED		
APPROVED		

CERFA Category and Designation Map

DRAWN M.K. Bond/CMP	DATE 12.13.93/04.22.94	CLIENT APPRO
SCALE 1" = 500'	W.O. No. PM307.70.01/1401-1	ISSUED FOR

D = CERFA DISQUALIFIED PARCEL
Q = CERFA QUALIFIED PARCEL
E = CERFA EXCLUDED PARCEL
P = CERFA PARCEL

DISQUALIFIED DESIGNATIONS

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PR = PETROLEUM RELEASE/DISPOSAL
HS = HAZARDOUS MATERIALS STORAGE
HR = HAZARDOUS MATERIALS RELEASE/DISPOSAL

QUALIFIED DESIGNATIONS

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RD = RADIONUCLIDE

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OIL WATER SEPARATOR

(ST) SEPTIC TANK WITH HAZARDOUS MATERIAL CONCERNS

NON-LEAKING UST OR AST (FORMER OR ACTIVE)

LEAKING UST OR AST (FORMER OR ACTIVE)

RELEASE OR DISPOSAL OF PETROLEUM OR HAZARDOUS MATERIALS

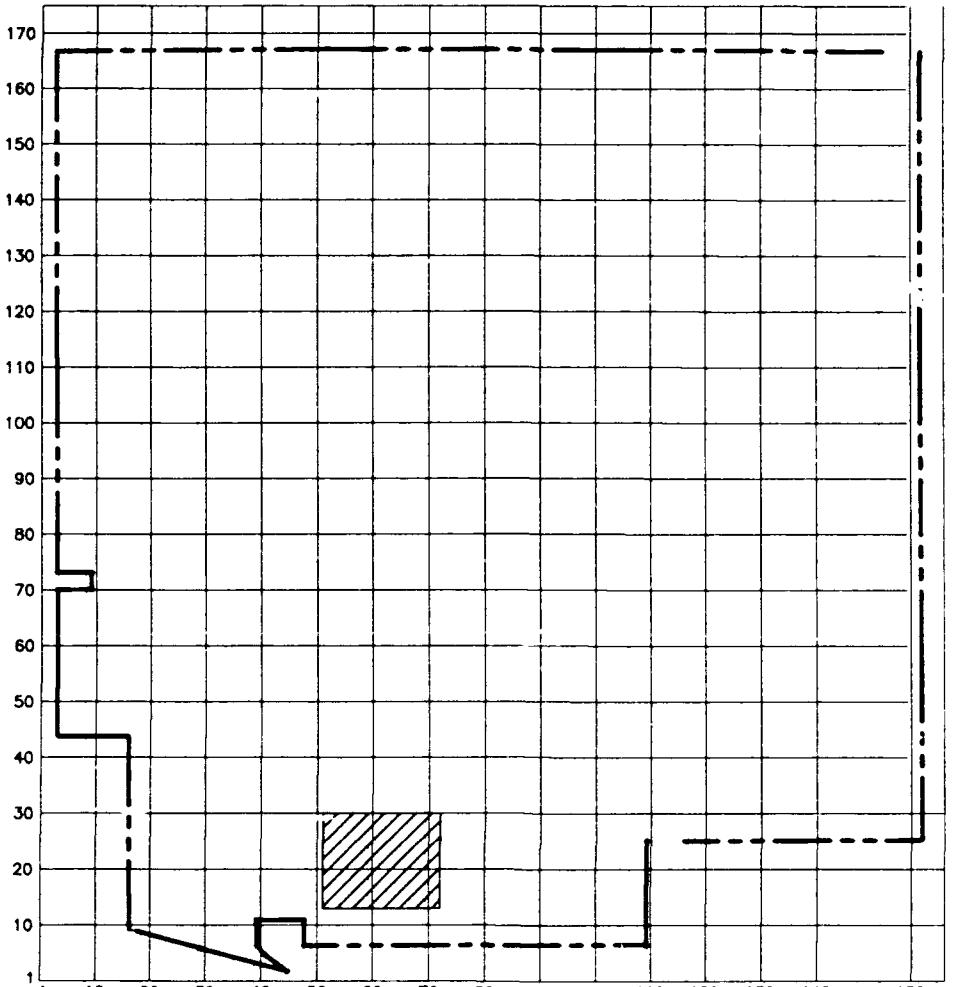
81 BUILDING WITH CERFA QUALIFIER(S) IN A DISQUALIFIED PARCEL

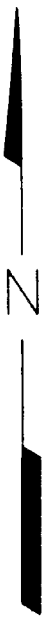
500 250 0 500 1000
Scale in Feet

CERFA Category and Designation Map

DRAWING NO.
Figure 5.1-1
REV. NO.

Bond/CMP	DATE 12.13.93/04.22.94	CLIENT APPROVAL	
= 500'	W.O. NO. PM307.70.01/1401-1	ISSUED FOR DATE	SHEET 3 OF 4





15D-PS/

30

29

80Q-A/L

28

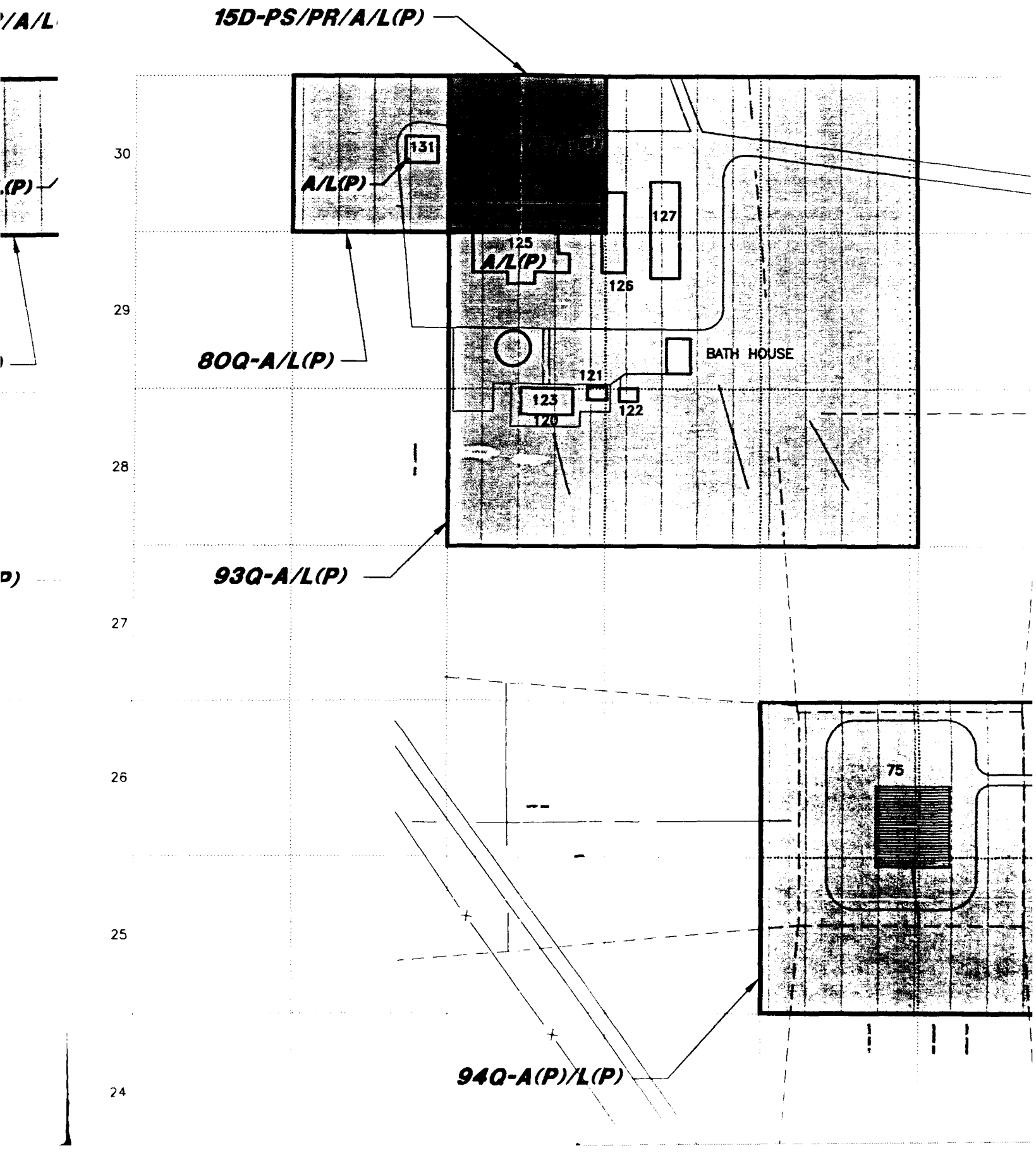
93Q-A/

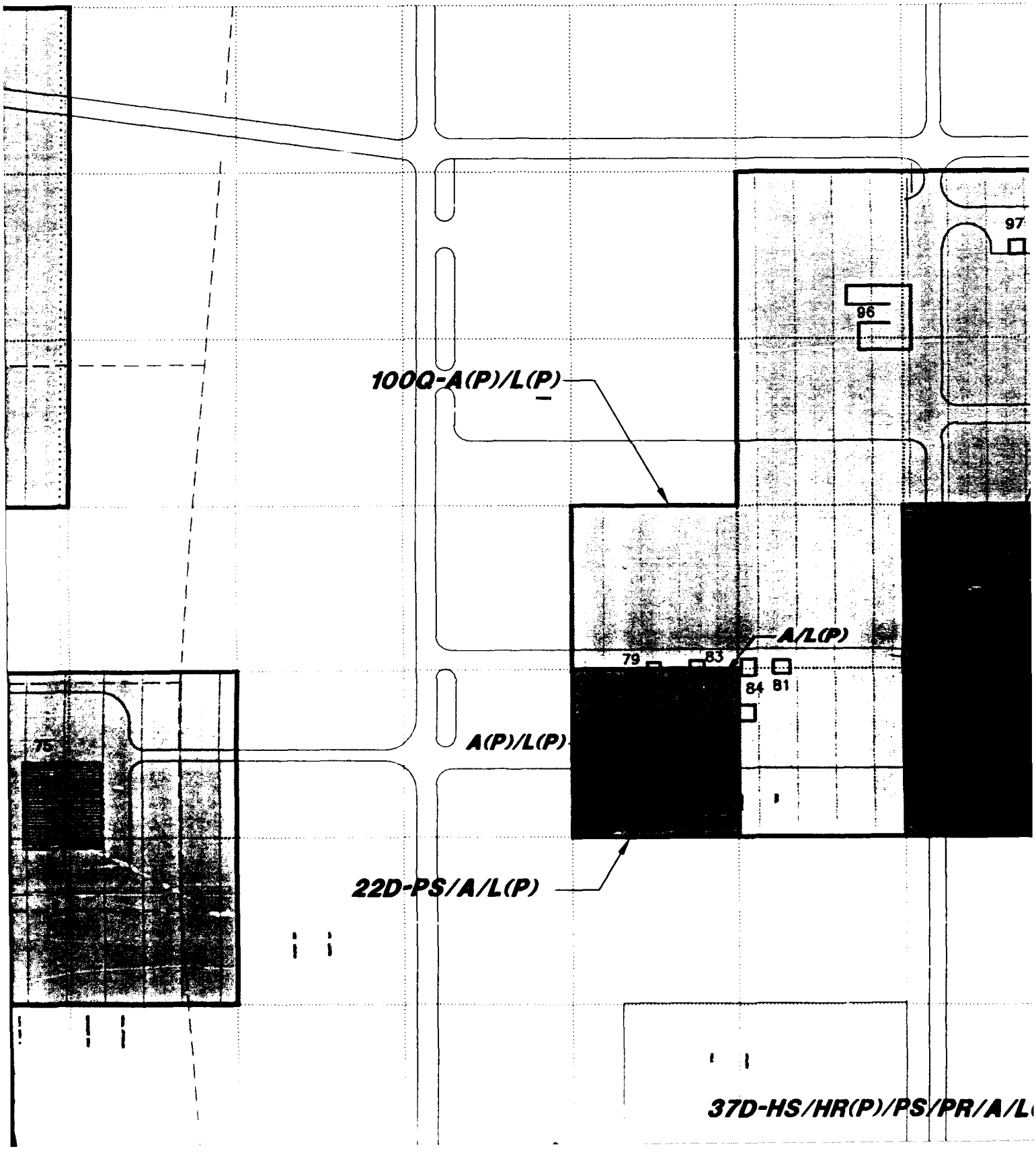
27

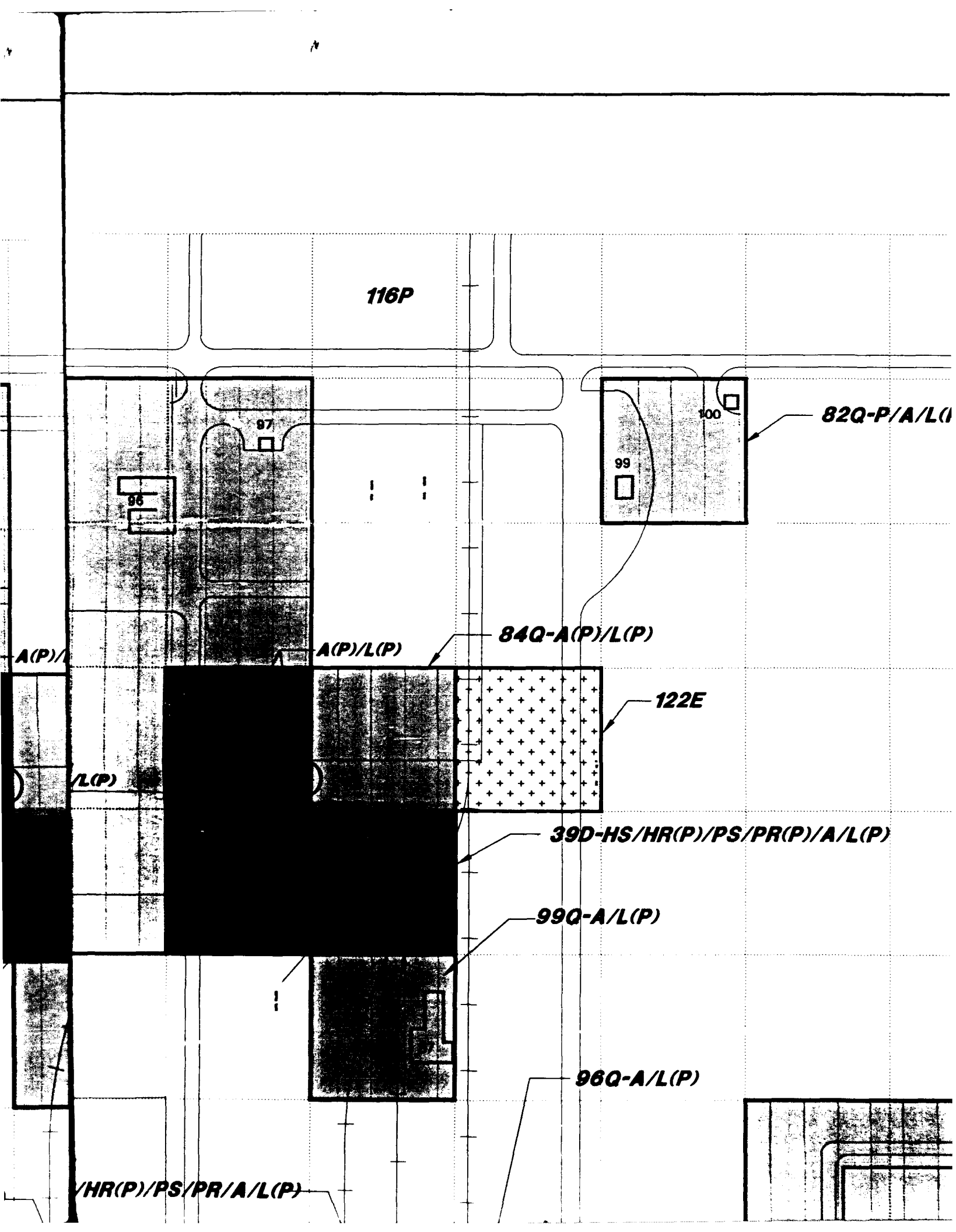
26

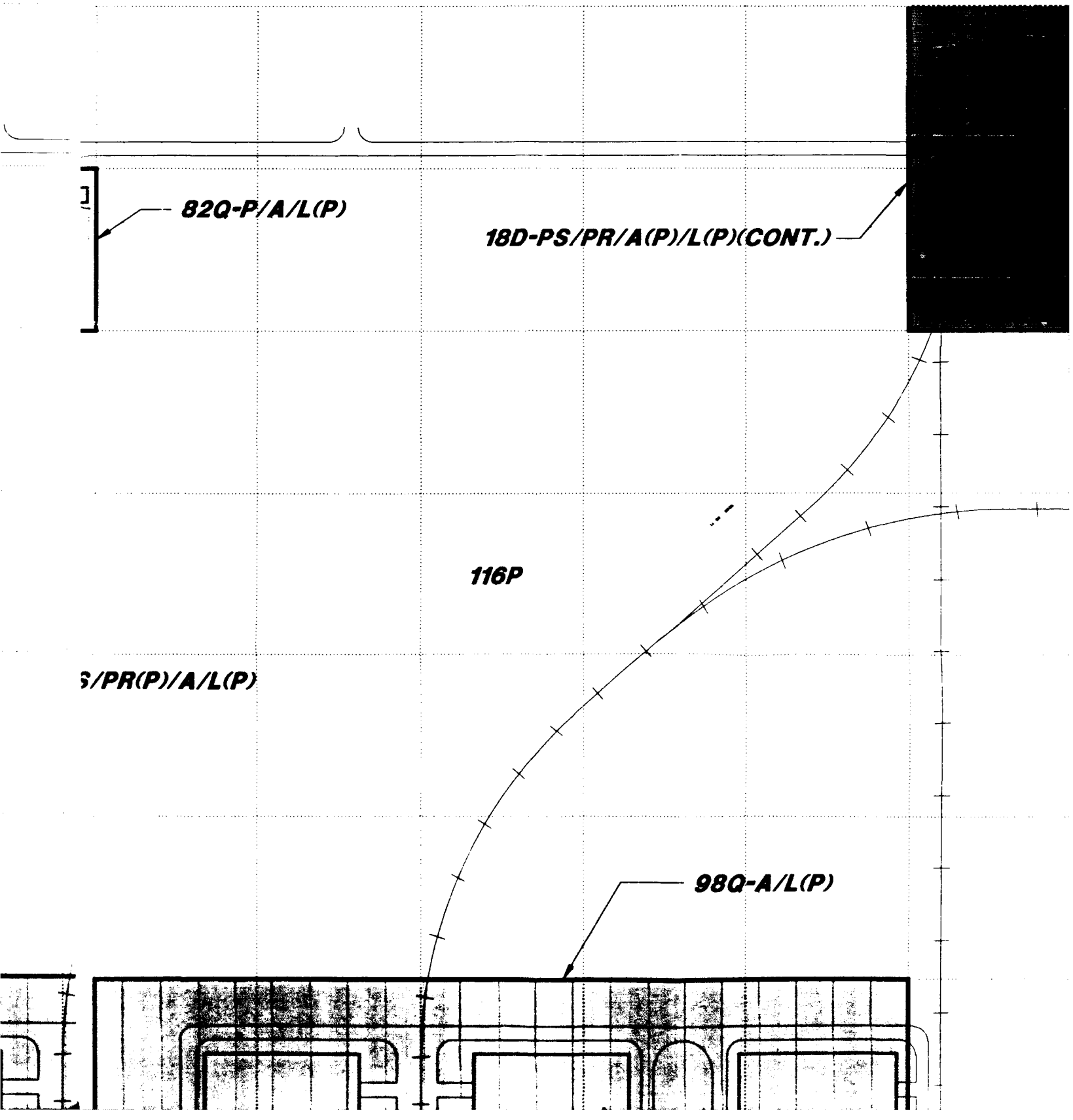
25

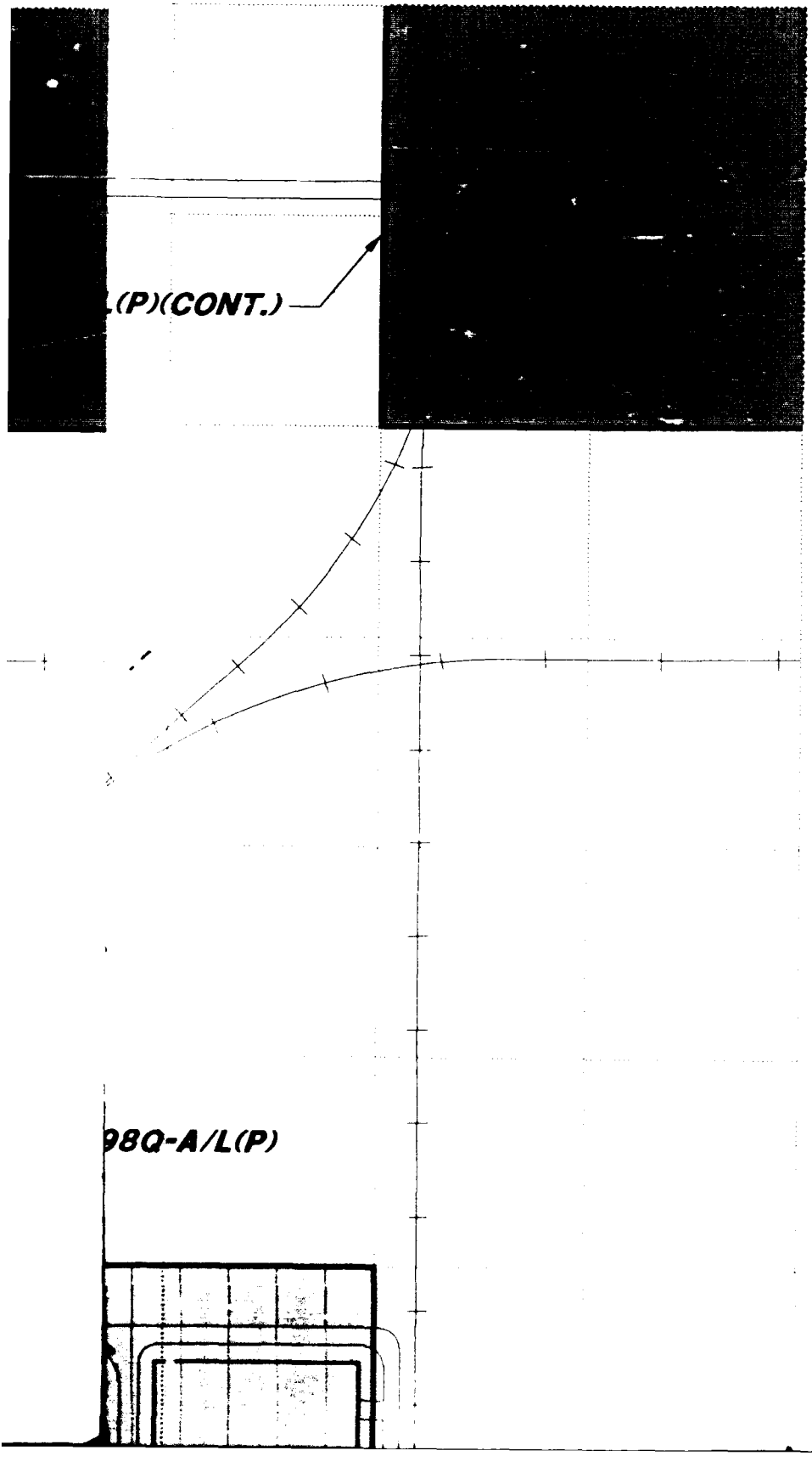
24

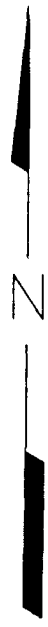

15D-PS/PR/A/L(P)
131
A/L(P)
127
125
A/L(P)
126
80Q-A/L(P)
BATH HOUSE
121
123
122
120
93Q-A/L(P)
75
94Q-A(P)/L(P)
30
29
28
27
26
25
24


97
96
100Q-A(P)/L(P)
A/L(P)
79
83
84
81
75
A(P)/L(P)
22D-PS/A/L(P)
37D-HS/HR(P)/PS/PR/A/L


116P
97
96
100
99
82Q-P/A/L(
84Q-A(P)/L(P)
A(P)/L(P)
A(P)/
122E
/L(P)
39D-HS/HR(P)/PS/PR(P)/A/L(P)
99Q-A/L(P)
96Q-A/L(P)
/HR(P)/PS/PR/A/L(P)


82Q-P/A/L(P)
18D-PS/PR/A(P)/L(P)(CONT.)
116P
S/PR(P)/A/L(P)
98Q-A/L(P)


(P)(CONT.)
98Q-A/L(P)



26

25

24

23

22

21

20

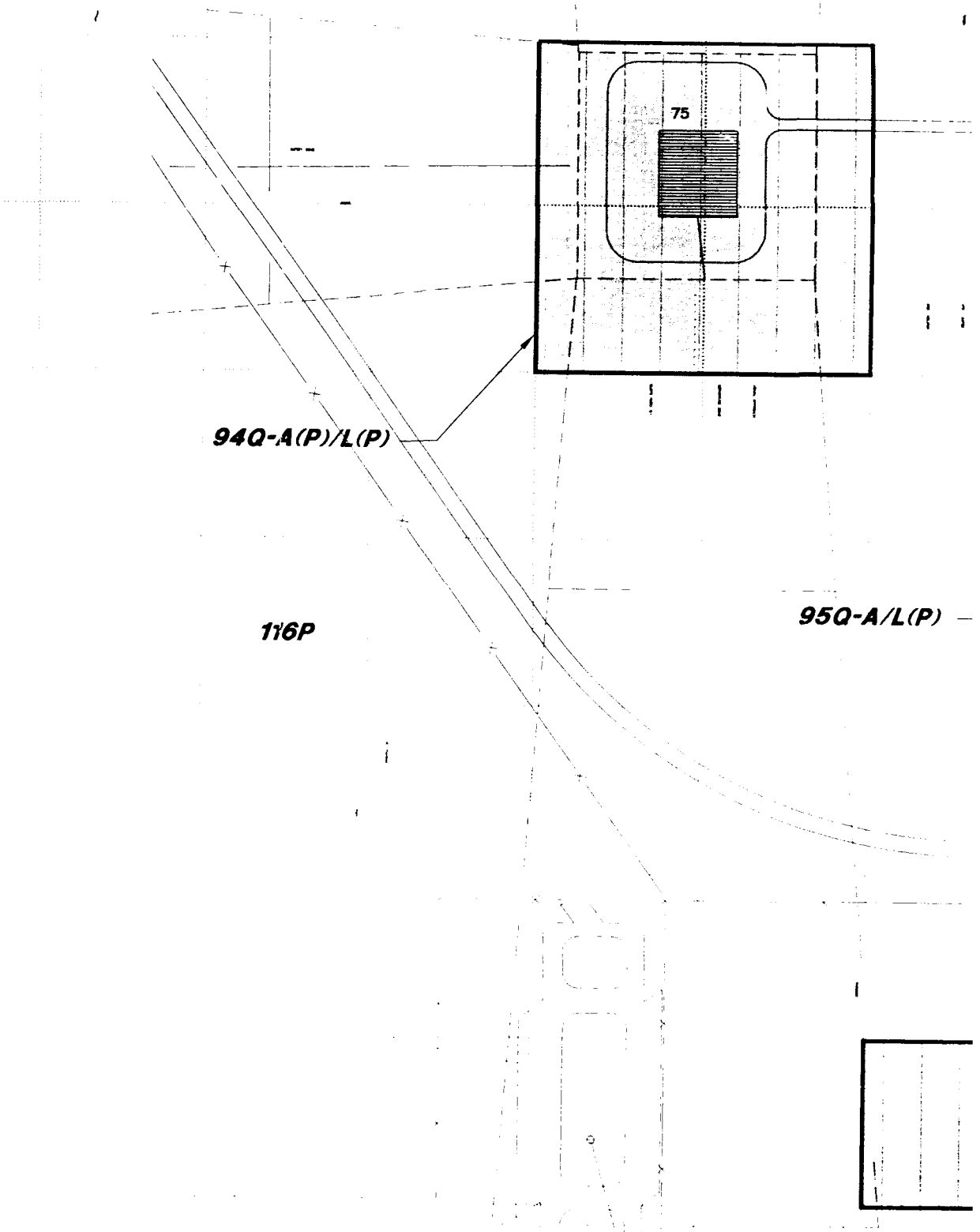
19

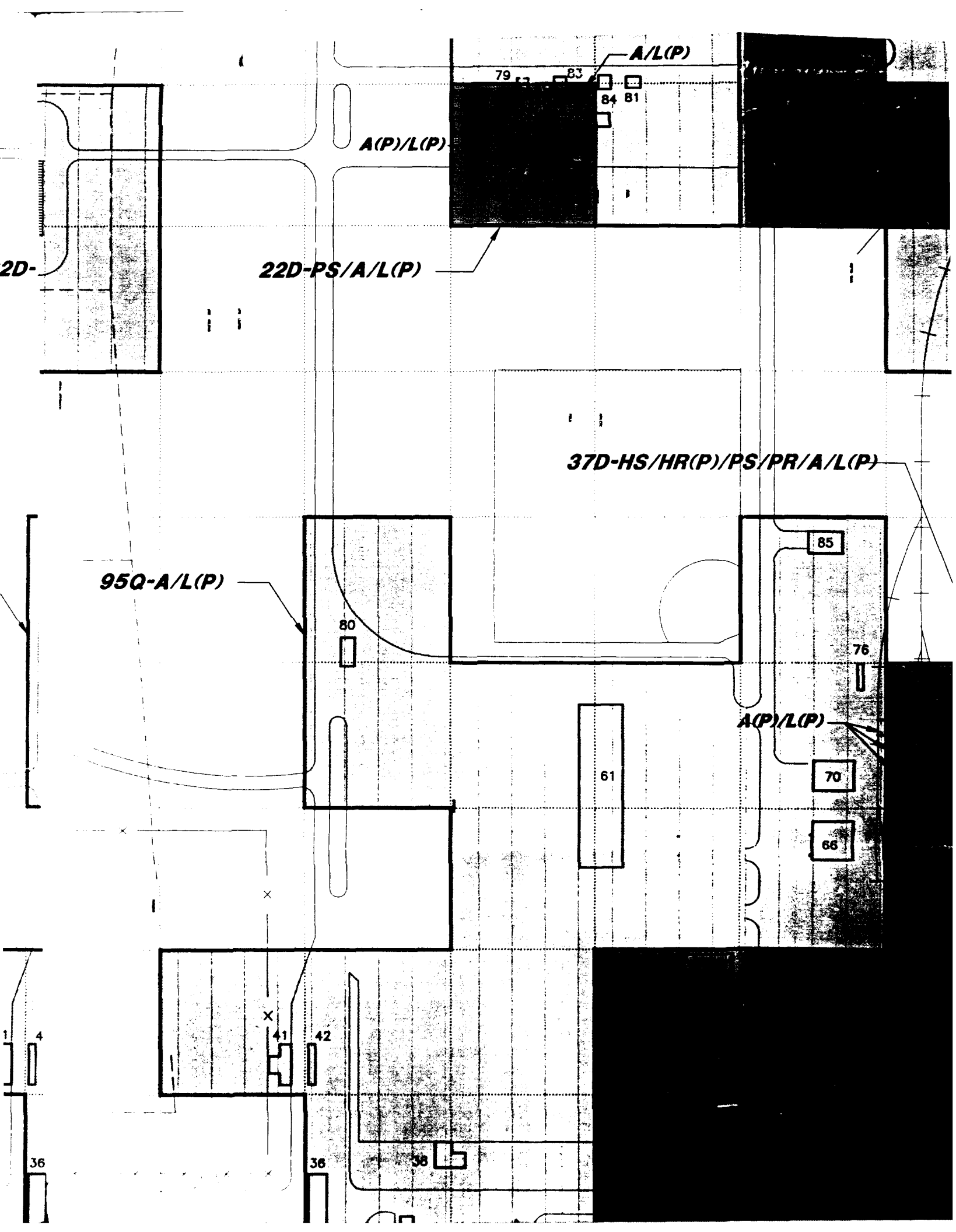
MATERIAL CONCERNS

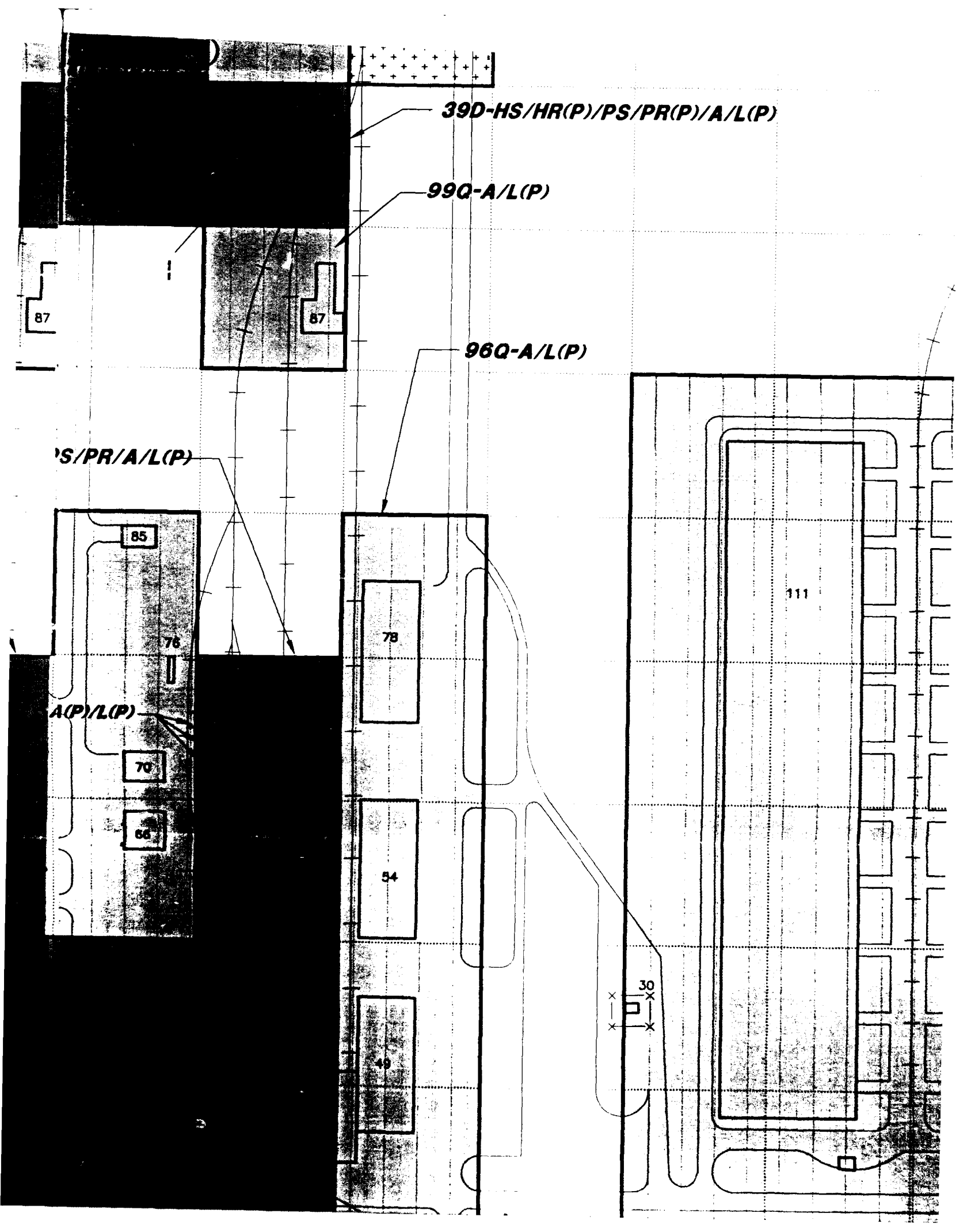
NON-LEAKING UST OR AST (FORMER OR ACTIVE)

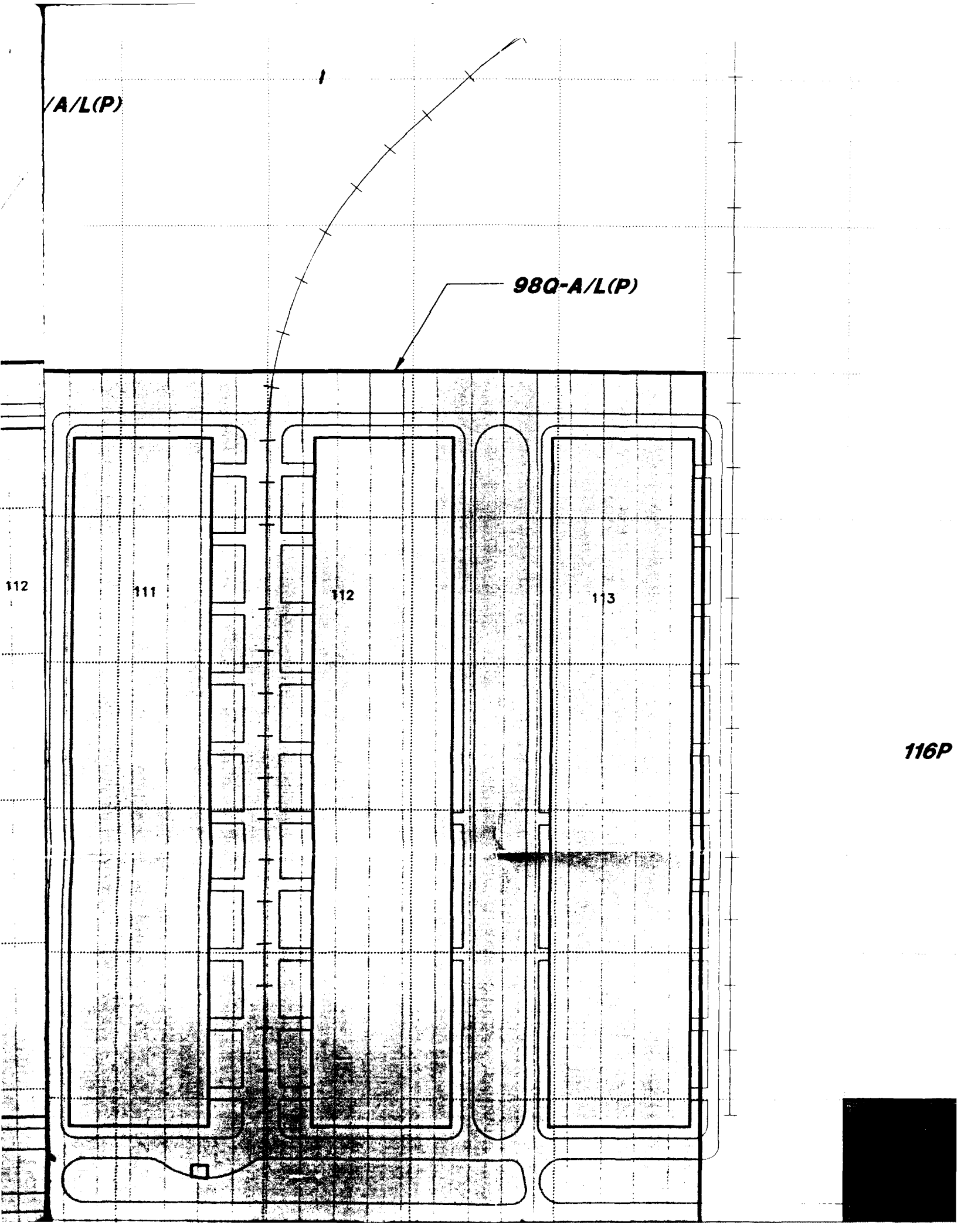
LEAKING UST OR AST (FORMER OR ACTIVE)

RELEASE OR DISPOSAL OF PETROLEUM OR HAZARDOUS MATERIALS




A/L(P)
79
83
84
81
A(P)/L(P)
2D-
22D-PS/A/L(P)
37D-HS/HR(P)/PS/PR/A/L(P)
85
95Q-A/L(P)
80
76
A(P)/L(P)
61
70
66
1
4
41
42
36
36
38


39D-HS/HR(P)/PS/PR(P)/A/L(P)
99Q-A/L(P)
96Q-A/L(P)
'S/PR/A/L(P)
A(P)/L(P)
87
87
85
76
70
66
78
54
49
111
30


/A/L(P)
98Q-A/L(P)
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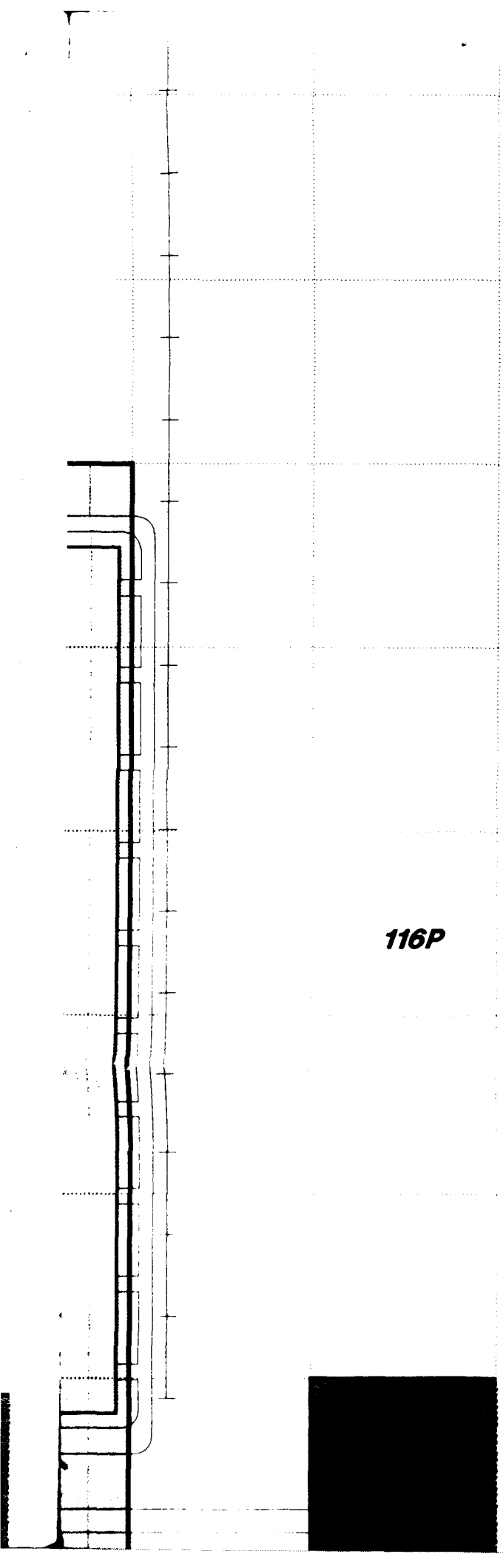
111
112
113
116P



LEGEND:

CERFA DISQUALIFIED

CERFA QUALIFIED

CERFA EXCLUDED

CERFA PARCEL

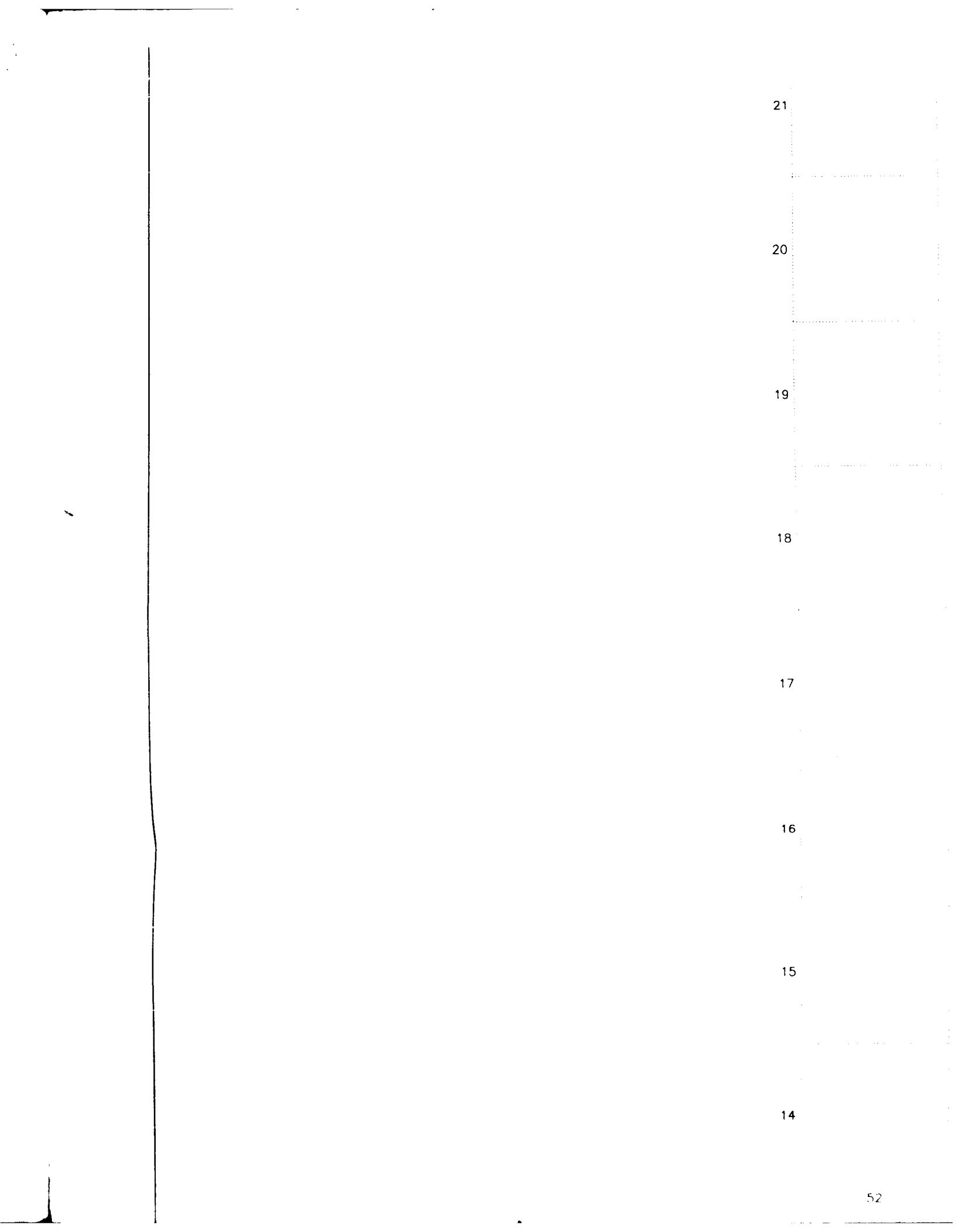
PARCEL LABEL

5D-PR/HR

PARCEL DESIGNATION

PARCEL CATEGORY

PARCEL NUMBER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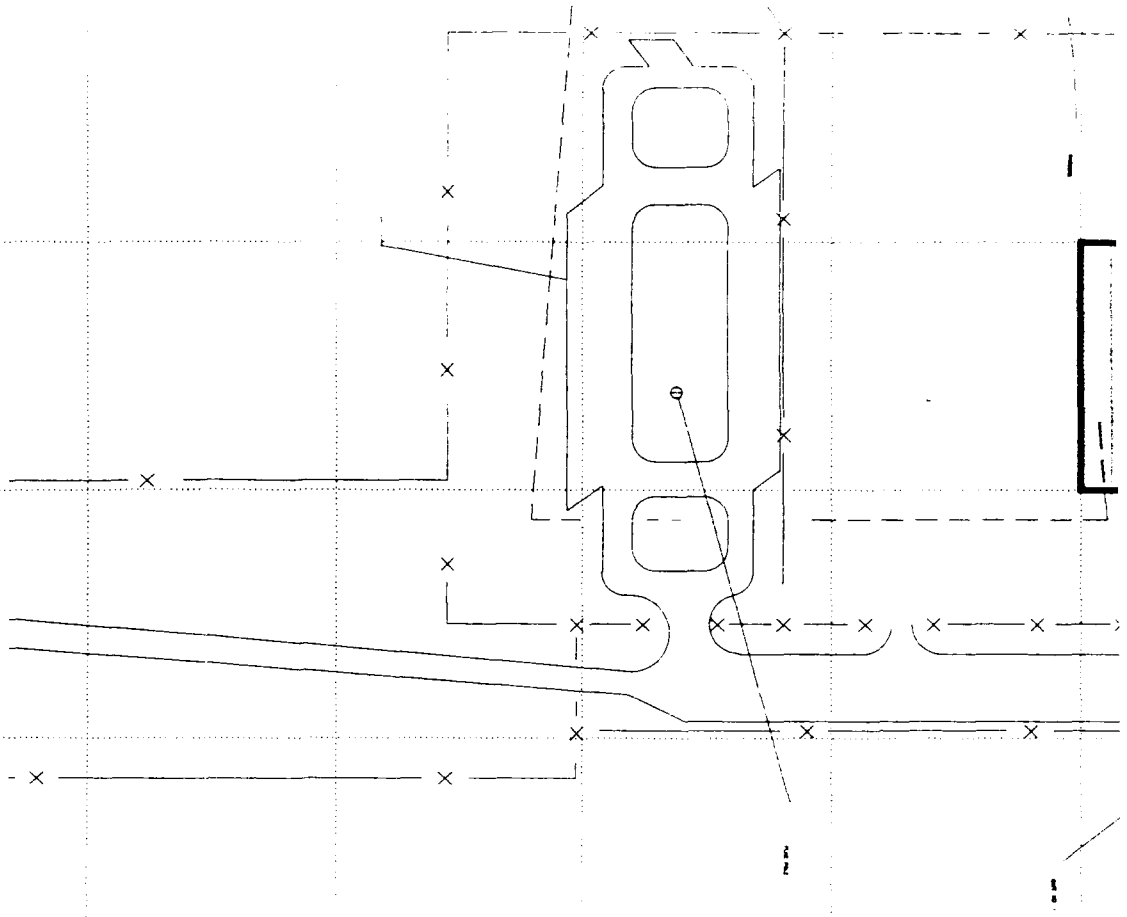
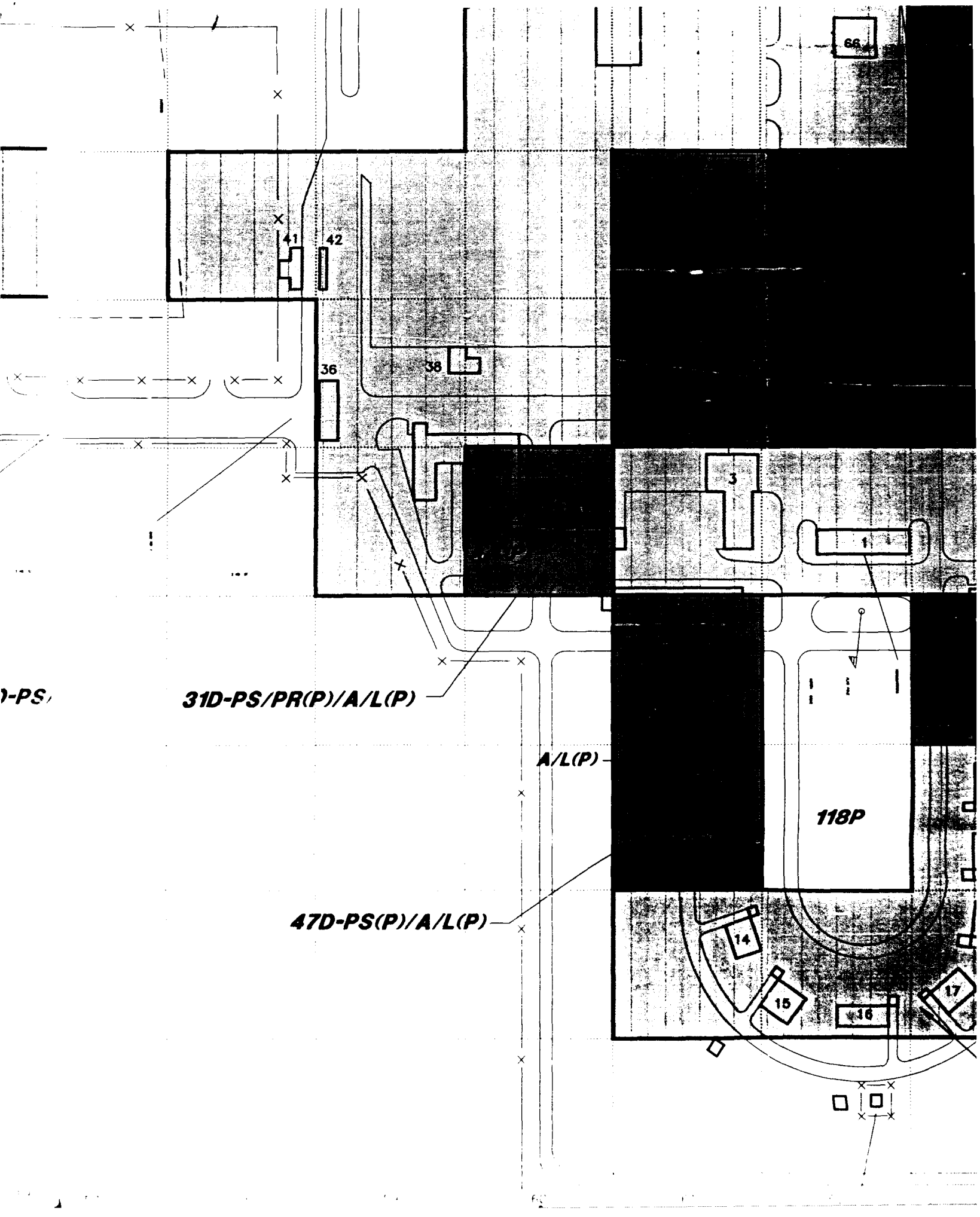
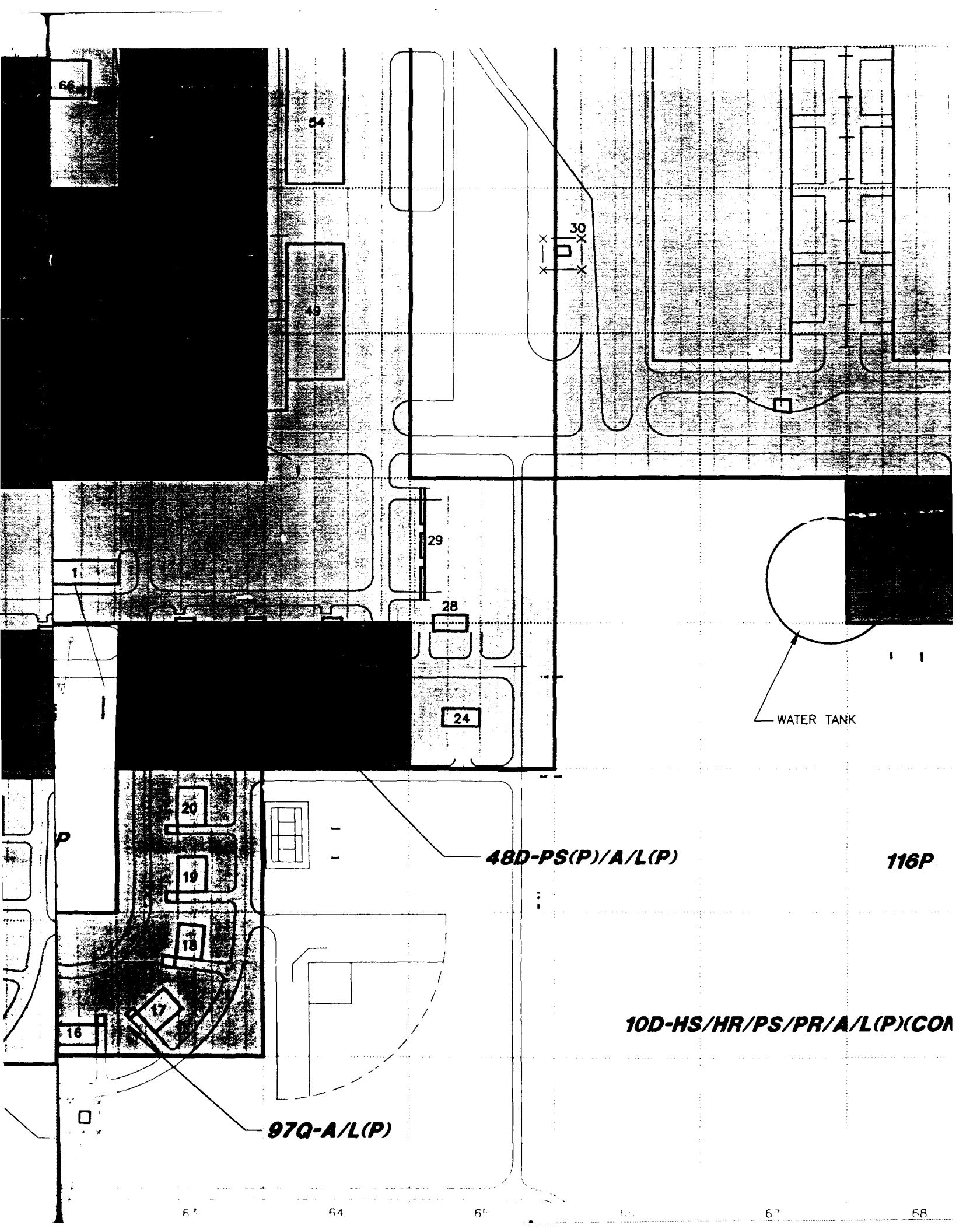
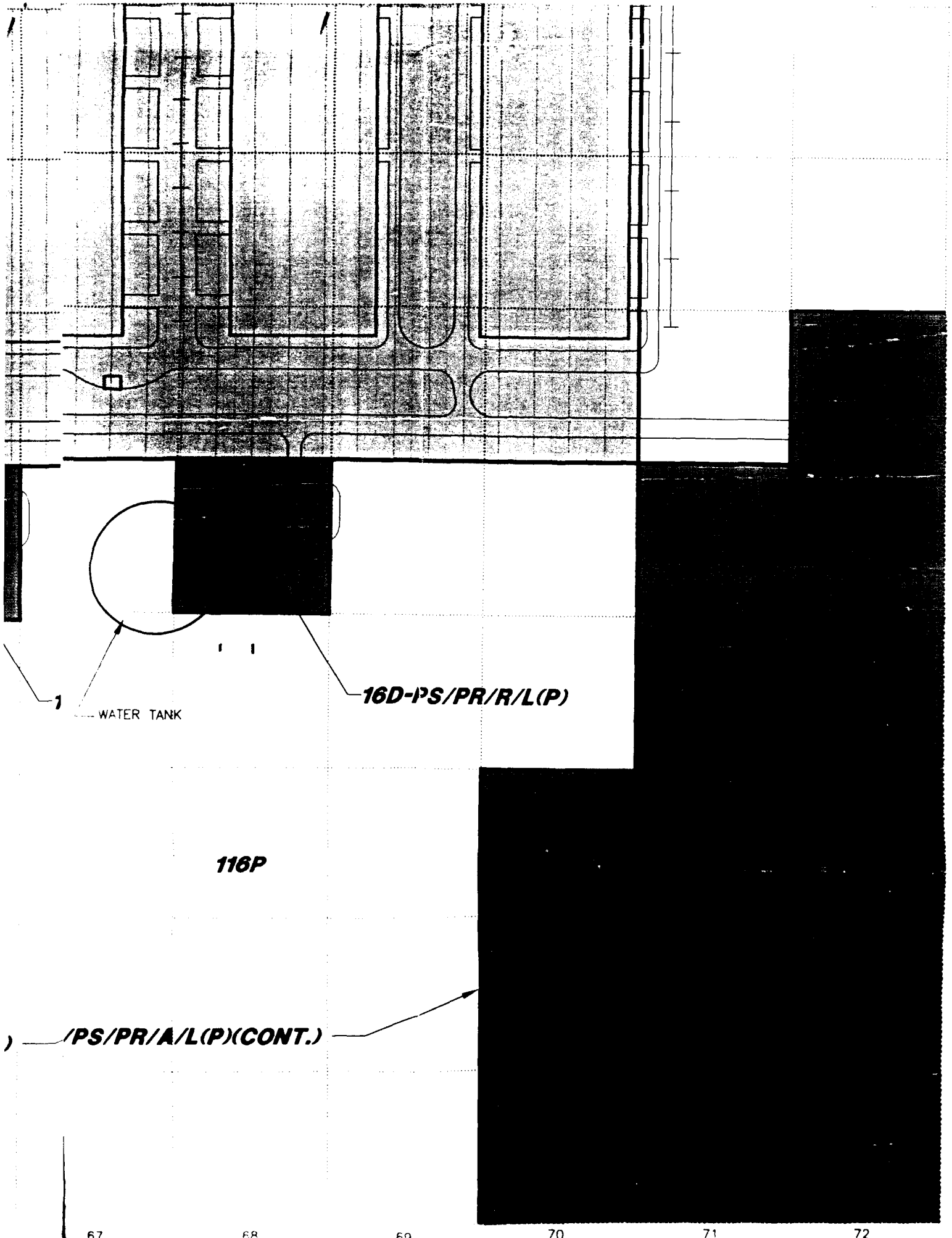
17
16
15
14

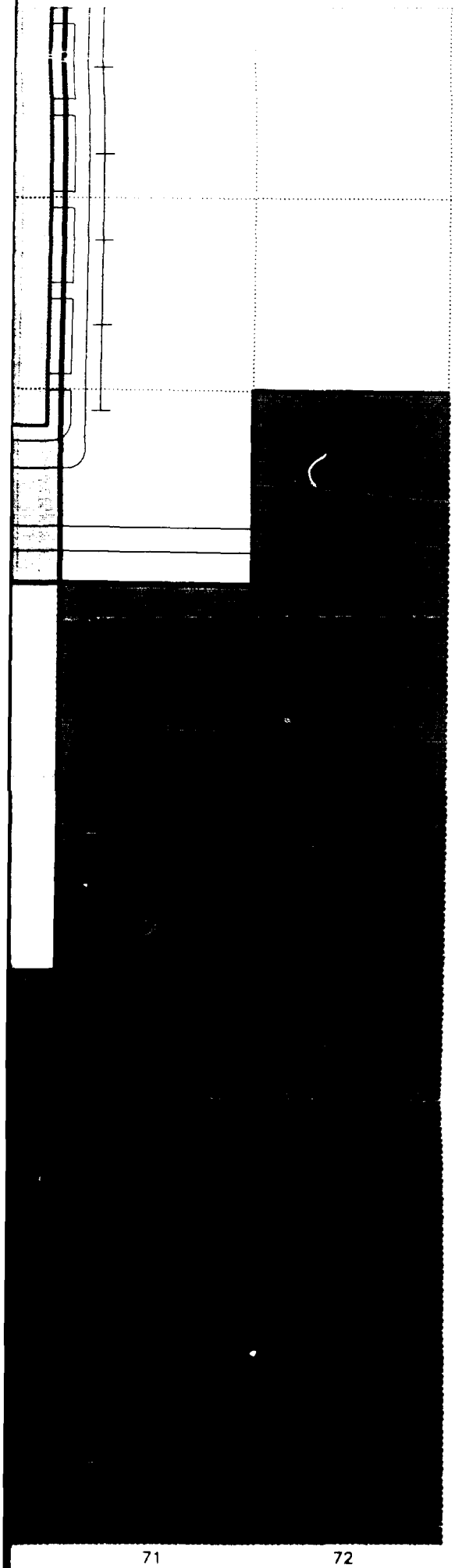


116P


66
41
42
36
38
3
1
)-PS/
31D-PS/PR(P)/A/L(P)
A/L(P)
118P
47D-PS(P)/A/L(P)
14
15
16
17


66
54
30
49
29
1
28
24
WATER TANK
20
19
18
17
16
48D-PS(P)/A/L(P)
116P
10D-HS/HR/PS/PR/A/L(P)(CON
97Q-A/L(P)
63
64
65
67
68


WATER TANK
16D-PS/PR/R/L(P)
116P
/PS/PR/A/L(P)(CONT.)
67
68
69
70
71
72



LEGEND:

CERFA DISQUALIFIED

CERFA QUALIFIED

CERFA EXCLUDED

CERFA PARCEL

PARCEL LABEL

5D-PR/HR

- PARCEL DESIGNATION
- PARCEL CATEGORY
- PARCEL NUMBER AS NOTED ON DRAWING AND TABLE

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(P) POSSIBLE DISQUALIFIER/QUALIFIER

OIL WATER SEPARATOR

ST SEPTIC TANK WITH HAZARDOUS MATERIAL CONCERNS

NON-LEAKING UST OR AST (FORMER OR ACTIVE)

LEAKING UST OR AST (FORMER OR ACTIVE)

RELEASE OR DISPOSAL OF PETROLEUM OR HAZARDOUS MATERIALS

81 BUILDING WITH CERFA QUALIFIER(S) IN A DISQUALIFIED PARCEL

18

17

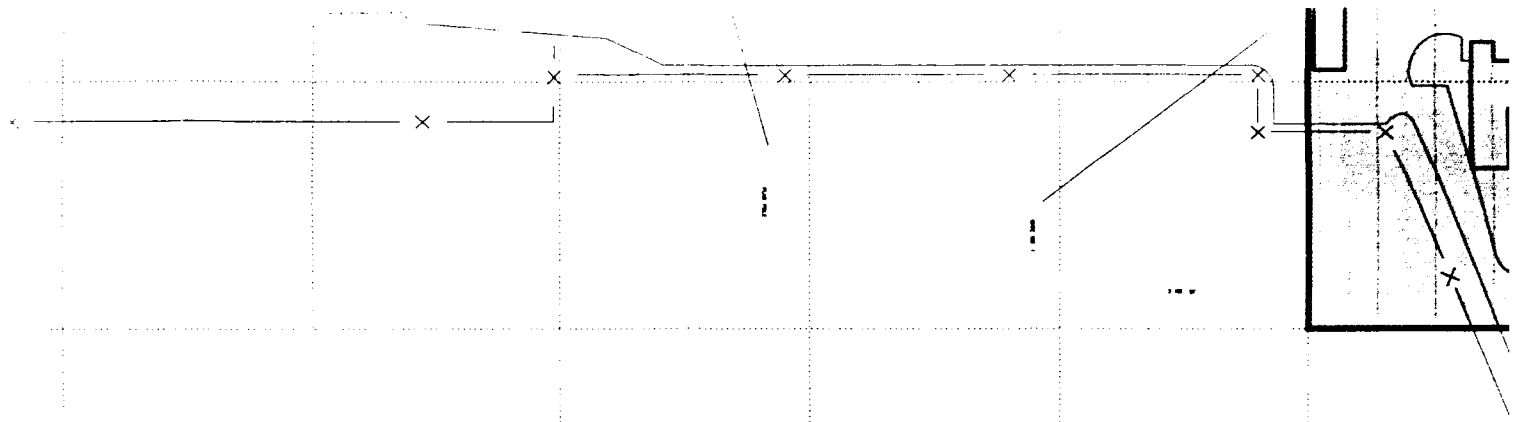
16

15

14

52

NO.	DATE	APPR.	REVISION



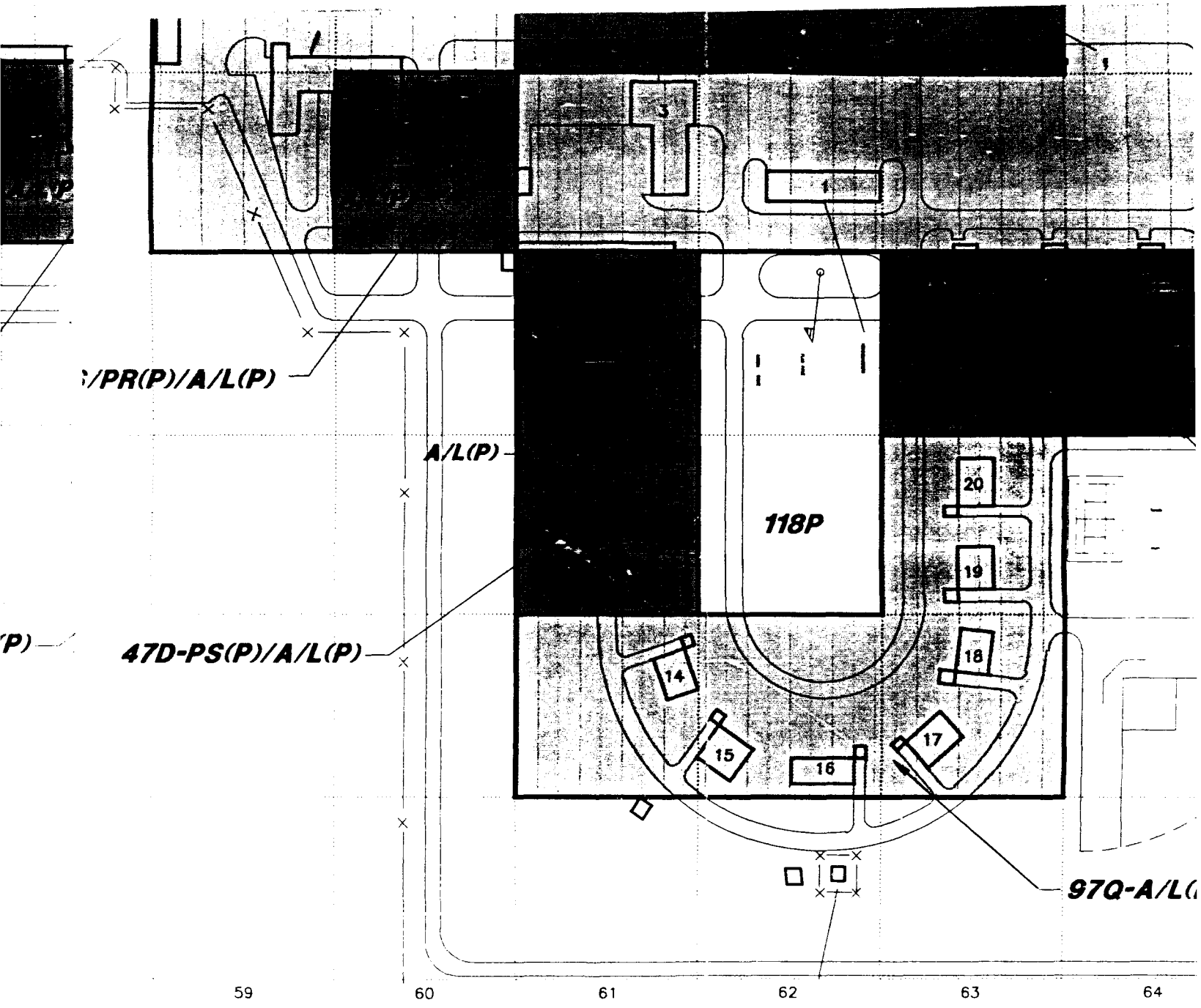
31D-PS/PR(P)/A/L(P)

47D-PS(P)/A

116P

53 54 55 56 57 58 59

NO	DATE	APPR.	REVISION



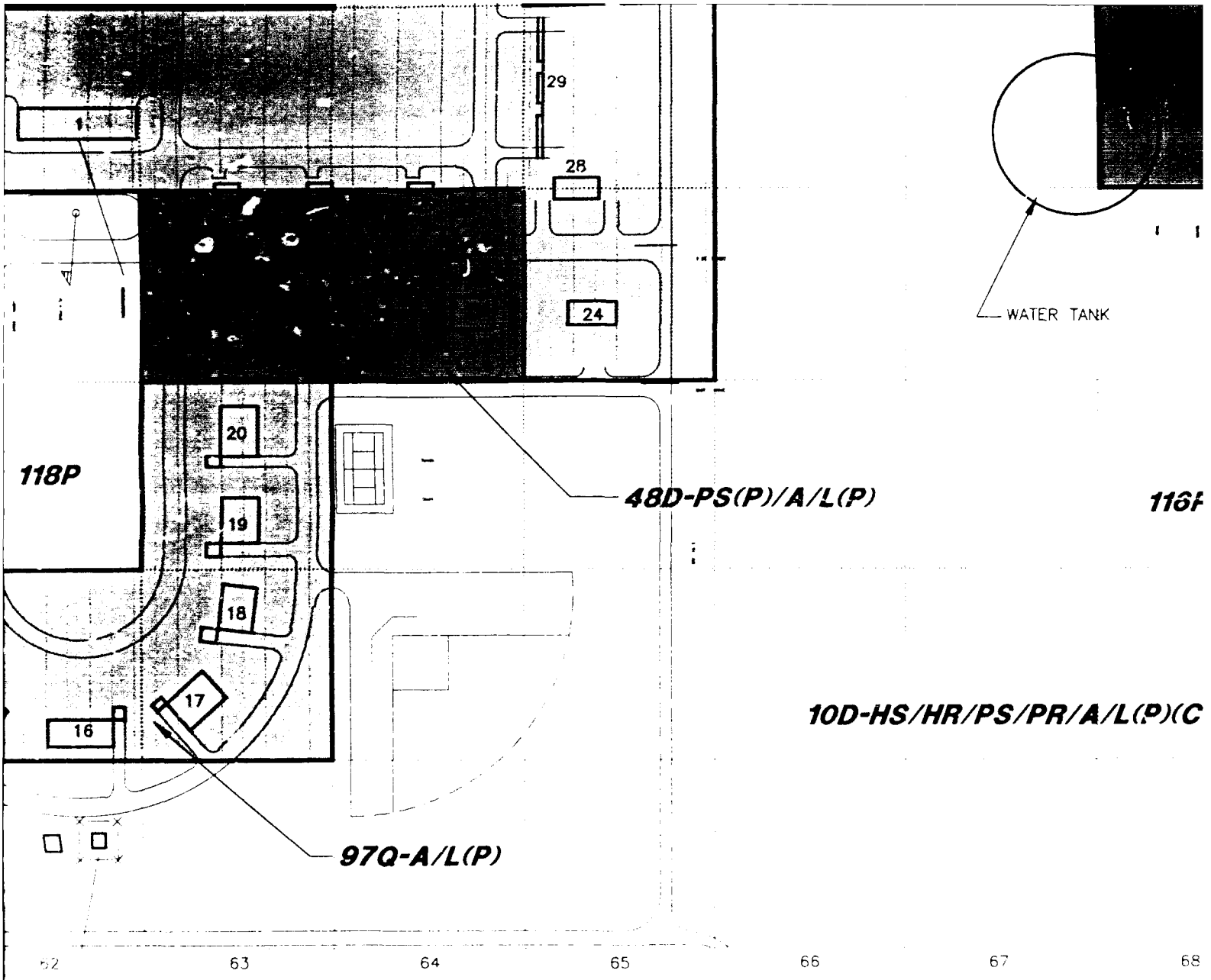
REVISION

Pueblo Depo

Pueblo

Environmental Resources Ma

Exton, Pennsylvania 19341 (215) 524-350

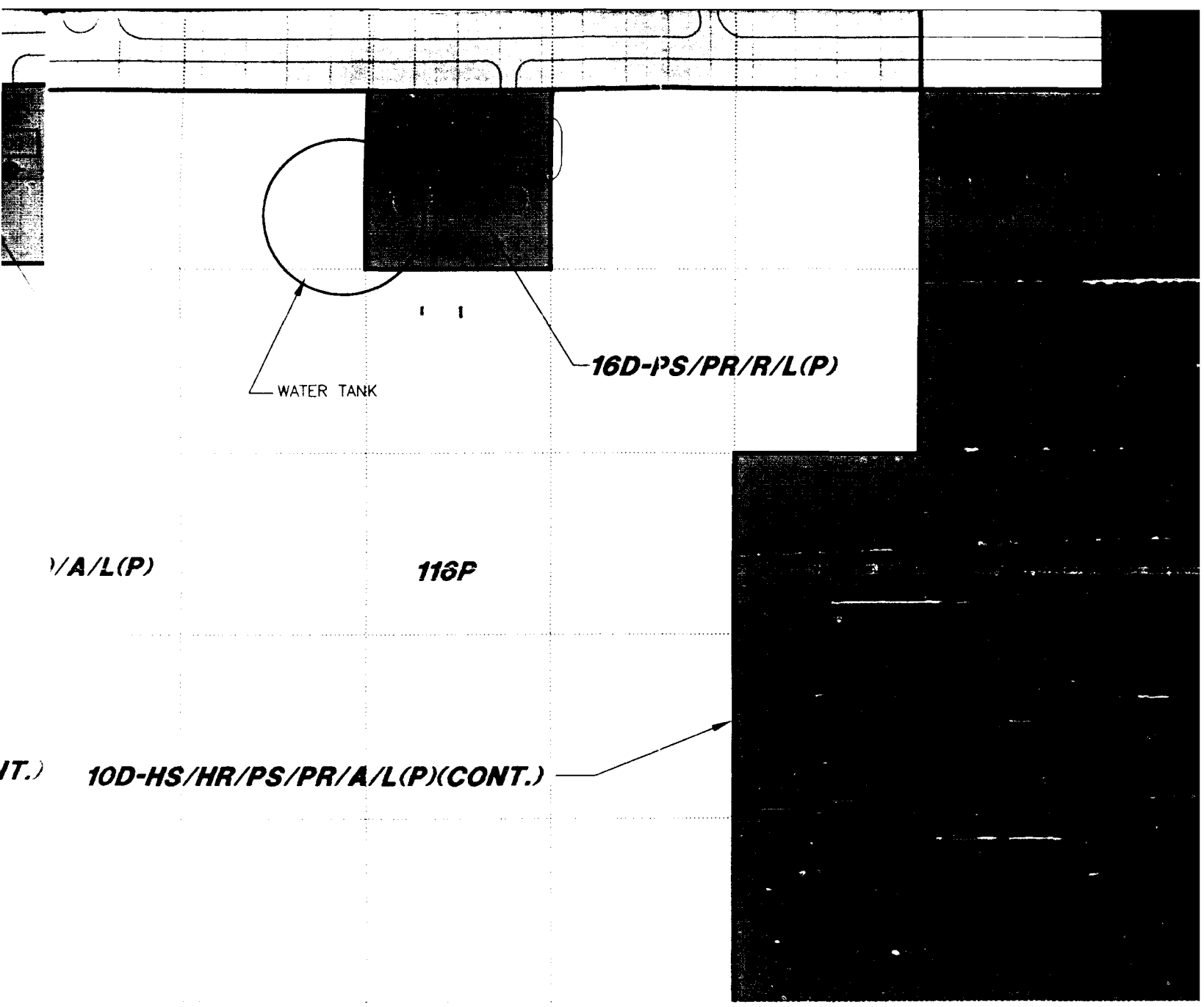


Pueblo Depot Activity

Pueblo **Colorado**

Environmental Resources Management, Inc.

ERM



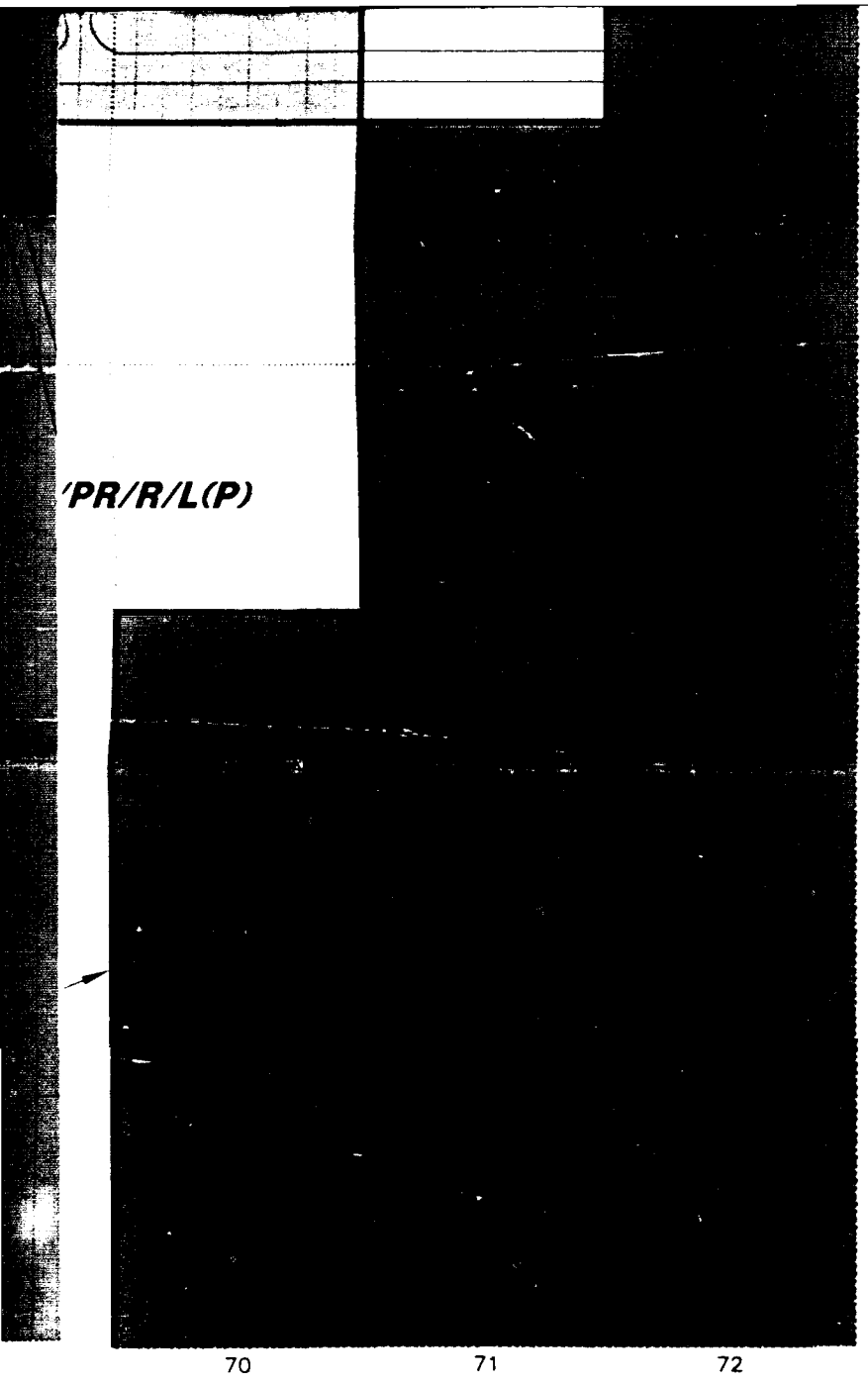
Colorado

ERM

CHECKED	DATE
DESIGN ENGINEER	
PROJECT GEOLOGIST	
PROJECT MANAGER	
APPROVED	
APPROVED	

CERFA Category a

DRAWN: M.K. Bond/CMP	DATE: 12.12.
SCALE: 1" = 150'	JOB NO: PM30



PARCEL DESIGNATION
PARCEL CATEGORY
PARCEL NUMBER AS NOTED ON DRAWING AND TABLE

PARCEL CATEGORY

D = CERFA DISQUALIFIED PARCEL
Q = CERFA QUALIFIED PARCEL
E = CERFA EXCLUDED PARCEL
P = CERFA PARCEL

DISQUALIFIED DESIGNATIONS

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PR = PETROLEUM RELEASE/DISPOSAL
HS = HAZARDOUS MATERIALS STORAGE
HR = HAZARDOUS MATERIALS RELEASE/

QUALIFIED DESIGNATIONS

A = ASBESTOS
L = LEAD-BASED PAINT
P = PCBs (POLYCHLORINATED BIPHENYL
R = RADON
X = UXO (UNEXPLODED ORDNANCE)
RD = RADIONUCLIDE

(P) POSSIBLE DISQUALIFIER/QUALIFIER

OIL WATER SEPARATOR

ST SEPTIC TANK WITH HAZARDOUS MATERIAL CONCERNS

NON-LEAKING UST OR AST (FORMER OR ACTIVE)

LEAKING UST OR AST (FORMER OR ACTIVE)

RELEASE OR DISPOSAL OF PETROLEUM OR HAZARDOUS MATERIALS

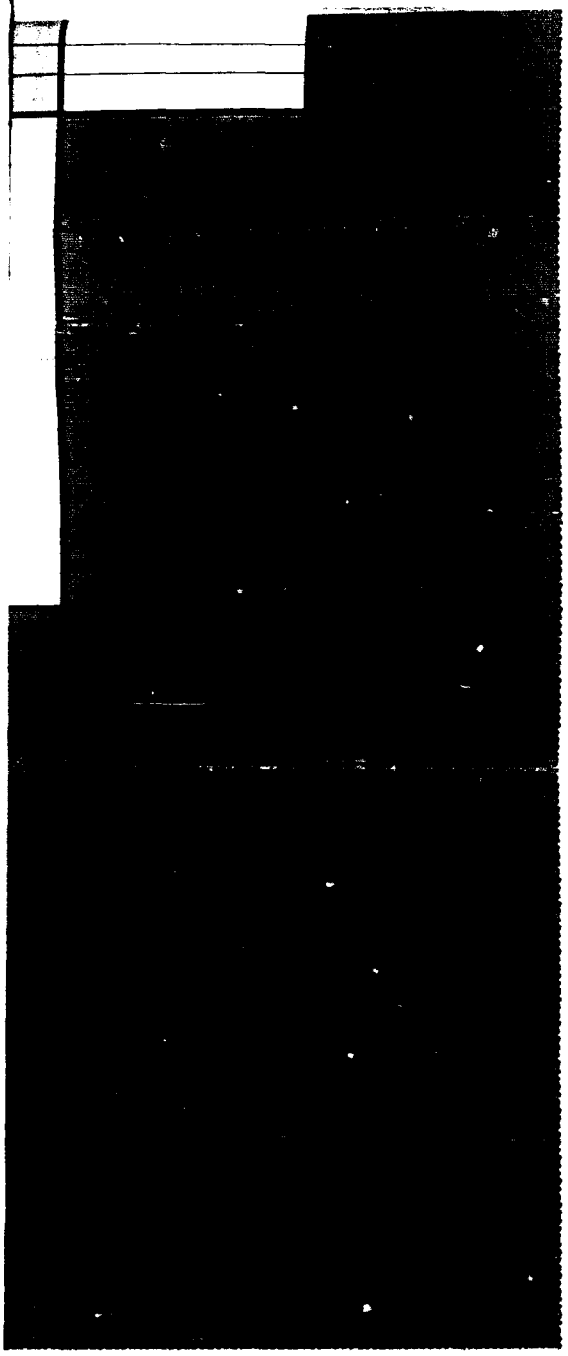
81 BUILDING WITH CERFA QUALIFIER(S) IN A DISQUALIFIED PARCEL

150 75 0 150 300
Scale in Feet

CERFA Category and Designation Map

DRAWING NO. Figure 5.

DRAWN: M.K. Bond/CMP	DATE: 12.12.93/04.22.94	CLIENT APPROVAL	
SCALE: 1" = 150'	W.O. No.: PM307.70.01/1404-1	ISSUED FOR: DATE:	SHEET: 4



PARCEL DESIGNATION
PARCEL CATEGORY
PARCEL NUMBER AS NOTED ON DRAWING AND TABLE

PARCEL CATEGORY

D = CERFA DISQUALIFIED PARCEL
Q = CERFA QUALIFIED PARCEL
E = CERFA EXCLUDED PARCEL
P = CERFA PARCEL

DISQUALIFIED DESIGNATIONS

PS = PETROLEUM STORAGE
PR = PETROLEUM RELEASE/DISPOSAL
HS = HAZARDOUS MATERIALS STORAGE
HR = HAZARDOUS MATERIALS RELEASE/DISPOSAL

QUALIFIED DESIGNATIONS

A = ASBESTOS
L = LEAD–BASED PAINT
P = PCBs (POLYCHLORINATED BIPHENYLS)
R = RADON
X = UXO (UNEXPLODED ORDNANCE)
RD = RADIONUCLIDE

(P) POSSIBLE DISQUALIFIER/QUALIFIER

OIL WATER SEPARATOR

ST SEPTIC TANK WITH HAZARDOUS MATERIAL CONCERNS

NON–LEAKING UST OR AST (FORMER OR ACTIVE)

LEAKING UST OR AST (FORMER OR ACTIVE)

RELEASE OR DISPOSAL OF PETROLEUM OR HAZARDOUS MATERIALS

81 BUILDING WITH CERFA QUALIFIER(S) IN A DISQUALIFIED PARCEL

150 75 0 150 300
Scale in Feet

CERFA Category and Designation Map

DRAWING NO.

Figure 5.1-1

REV. NO

Bond/CMP	DATE 12.12.93/04.22.94	CLIENT APPROVAL	
= 150'	N.C. N. PM307.70.01/1404–1	ISSUED FOR DATE	SHEET 4 OF 4

Appendix

STATE OF COLORADO

COLORADO DEPARTMENT OF HEALTH
Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
Denver, Colorado 80222-1530
Phone (303) 692-2000

Laboratory Building
4210 E. 11th Avenue
Denver, Colorado 80220-3716
(303) 691-4700

Roy Romer
Governor

Patricia A. Nolan, M.D., M.P.H.
Executive Director

CERTIFIED MAIL NUMBER: _____
Return Receipt Requested

March 23, 1994

LTC Paul E. Wojciechowski
Department of the Army
U.S. Army Environmental Center
Aberdeen Proving Ground, Maryland 21010-5401

RE: Draft Community Response Facilitation Act (CERFA) Report, Pueblo Depot Activity (PDA)

Dear Mr. Wojciechowski:

In response to your letter of December 17, 1993, as amended by the letter of January 31, 1994, requesting concurrence on the Draft CERFA Report and the identification of "uncontaminated" parcels for PDA in accordance with Public Law 102-426 (CERFA), Section 120(h)(4) of the Comprehensive Environmental Response, Compensation, Liability Act (CERCLA), the Colorado Department of Health, Hazardous Materials and Waste Management Division (the Division), hereby advises that the State is unable to concur with the CERFA Report at this time.

The position of the Division reflects concerns that adequate characterization or delineation of the parcels, as designated in the CERFA Report, has not been accomplished. We do not consider the documents listed as having been reviewed or the personnel interviewed for this CERFA Report, sufficient for:

1) characterization of the historical uses of the properties
2) characterization of the extent of soil or groundwater contamination
3) substantiation of the conclusions as stated in this report.

PDA has been issued a State of Colorado Hazardous Waste Permit (#92-06-15 01). This Permit, which is not listed as one of the documents reviewed, was issued on July 15, 1992. This Permit identifies 48 Solid Waste Management Units (SWMUs) which are in various stages of investigation to determine if contamination of the buildings, soil or groundwater has occurred and the extent of the contamination identified. Until these

investigations are concluded, the extent of possible contamination in the soil as well as groundwater are unknown. The results of investigations to date have shown contamination to be present in areas designated in the Draft CERFA Report to be uncontaminated. The Draft CERFA Report fails to properly identify and characterize the parcels associated with all of the SWMUS as listed in the Permit. These concerns prevent appropriate characterization of uncontaminated or "clean" parcels.

PDA and Army personnel are continually investigating historical documents and conducting site investigations to determine if other SWMUs exist or if the areal extent of current SWMUs should be expanded. Since issuance of the Permit, three (3) new SWMUs have been added. Recent site investigations have indicated larger areal extent of several existing SWMUs and the Draft CERFA Report indicates the existence of additional SWMUs previously unknown. These continual changes and additions to areas with possible hazardous contamination are indicative of the incomplete nature of the historical records at PDA. As a result, the Division is unable to concur with the conclusions concerning uncontaminated or "clean" parcels as presented in the Draft CERFA Report.

As stated above, PDA is a State Permitted Facility, and has enforceable requirements for investigation and remediation of each SWMU before reuse of any property within the SWMU may occur.

Even though the State can not concur with the Draft CERFA Report, we welcome the opportunity to meet with the Department of Defense or Army personnel to resolve discrepancies between the Draft CERFA Report and information that we have, so that we may be able to concur with the release of some of the parcels designated in the Draft CERFA Report.

If you have any questions regarding this correspondence, please call David Kruchek at 303-692-3328.

Sincerely,

Gary W. Baughman

Gary W. Baughman, Chief
Hazardous Facilities Section
Hazardous Waste Control Program

cc: Jackey Edwards, PDA
Roy Romer, Governor of Colorado
Pat Steranka, PDA
Curtis Turner, PDA
Ronald Connell, PDA
David Packard, USACE
Charles Finley, PDA Reuse Committee
Mark Mahoney, USDOD-EB
Brad Cameron, AGO
Debbie Sherer, EPA
Floyd Nichols, EPA
Dutch Gruse, PCCHD
Jackie Berardini, CDH