Romic Environmental Technologies Corp.

AZD 009015389

Chandler, Arizona
TSD Facility

Section B

Introduction and Facility Description

January 2005

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Appendices

B INTRODUCTION AND FACILITY DESCRIPTION

B1 INTRODUCTION

This Part B hazardous waste permit application is being submitted to the United States Environmental Protection Agency by Romic Environmental Technologies Corp. The purpose of the application is to obtain a hazardous waste facility permit for the Romic Environmental Technologies—Southwest facility located at 6760 West Allison Rd., Chandler, Arizona 85226-5130 (herein referred to as the facility and/or Romic). The facility is currently operating under interim status; the original Part A application was submitted by a previous operator in 1980.

A facility location map is provided as Figure B-1, and a site plan is provided as Figure B-2.

B2 GENERAL INFORMATION

Name of Applicant	Romic Environmental Technologies Corporation – Southwest		
Facility Mailing Address	6760 West Allison Road PO Box 5004 Chandler, AZ 85226-5130		
Standard Industrial Classification (SIC) Code	4953		
EPA ID#	AZD009015389		
Facility Telephone **Facsimile**	520-796-1040 520-796-6214		
Operator of Facility	Romic Environmental Technologies Corporation		
Facility Contacts	Michael Therrien Micki Schultz	General Manager E, H & S Manager	520-796-6275 520-796-6250
Location Information:	Township 2S, Range 4E Longitude: -111 degrees, 57 minutes, 26 seconds Latitude: 33 degrees, 17 minutes, 20 seconds		

B3 GENERAL FACILITY STANDARDS

Romic Environmental Technologies Inc. – Southwest (Romic) is a hazardous waste management services company. A facility location map is provided as Figure B-1, and a Site Plan is provided as Figure B-2. The Facility is a full service commercial hazardous waste treatment and storage facility that is primarily engaged in resource recovery. Romic's objective is to provide reliable waste management services for a broad base of customers in various locations including, but not limited to, the southwestern United States, Mexico, Central America, and Southeast Asia. The facility anticipates accepting a range of hazardous and certain non-hazardous wastes. Industrial wastes are currently shipped to the Facility for recycling and treatment from various industries, including:

- Dry cleaning
- Printing
- Electronics
- Aerospace
- Paint
- Automotive

In addition, the Facility receives household hazardous waste (e.g., motor oil, paints, cleaners, etc.) from household waste collection events.

Specific examples of waste-types managed at the Facility include industrial and household wastes, including halogenated and non-halogenated solvents, freon and freon substitutes, waste oils, sludges, oxidizers, corrosive wastes, resins/adhesives, debris/solids, soils, wastewaters, resin bed media, paints, aerosols, batteries, fluorescent tubes, and labpacks. Detailed information regarding both current and proposed incoming waste streams and waste acceptance procedures at the Facility is presented in Section C-Waste Characterization.

The Facility does not accept the following types of hazardous waste for treatment or processing:

- Radioactive waste
- Explosives
- Wastes containing polychlorinated biphenyls (PCBs) at levels of 50 parts per million (ppm) and above
- Etiological waste
- Pathogenic waste

The facility can receive, store and process wastes in either bulk loads (e.g., tanker trucks, roll-off bins, etc.) or containers (e.g., 55-gallon drums, totes, etc.). The wastes are transported to the Facility by properly licensed transporters. Customers within our service area benefit by a comprehensive testing program designed to maximize waste minimization and chemical recycling. All containers manifested to the facility are inspected and assigned a unique tracking number, which is marked on the container using a bar code label. The containers may be stored within a designated storage area prior to transfer to the assigned process area. The storage areas are equipped with secondary containment and roofs, and are operated so that incompatible wastes (e.g., strong acids and strong bases) are segregated. Section D-Tank and Container Storage, provides detailed descriptions of both current and proposed onsite hazardous waste operations. This facility is modeled on designs and procedures developed at Romic's forty-plus years of operation at the East Palo Alto, California, plant.

The Facility reclaims, recycles, treats, and stores hazardous waste using the following management options:

Primary Management Processes

- Solvent Recycling and Ethylene Glycol Recycling through distillation
- Fuel Blending
- Liquefaction
- Wastewater Treatment
- Neutralization
- Inorganic Treatment
- Solids Consolidation
- Off-Site Transfer

B4 MISCELLANEOUS MANAGEMENT ACTIVITIES

- Small Container Management*:* Field service technicians receive, re-pack, and/or consolidate small quantity chemicals (e.g., outdated chemicals, labpacks) for onsite management using one or more facility-approved processes, or for shipment to an approved off-site facility.
- Waste Compaction
- Aerosol Depressurization
- Drum Wash
- Truck Wash

Exempt Hazardous Waste Activities

- Ten-Day Transfer
- 90-Day Generator
- Universal Waste Handling
- Drum Crushing
- Household Hazardous Waste Collection Events

B5 ON SITE DISPOSAL

There are no wastes disposed on-site by any means; no deep well injection, incineration or landfill activities occurs at Romic. All waste is transferred off-site for ultimate disposal or reuse.

Romic Southwest is permitted under the federal National Pollutant Discharge Elimination System (NPDES) Storm Water Multi-Sector General Permit for storm water discharges under the terms and conditions imposed by this general permit.

B6 GENERAL FACILITY INFORMATION

Romic Southwest is located on the Gila River Indian Reservation, in the Lone Butte Industrial Park. A facility boundary map is provided as Figure B-3.

County:	Maricopa
Indian Reservation:	Gila River Indian Reservation
Industrial Park:	Lone Butte Industrial Development Corporation 6960 West Allison Road Chandler, Arizona 85226-5130 520-796-1033

Romic as well as other industries located in the industrial park lease the property from the Gila River Indian Community. A legal property description and land use map are provided in Appendix B-1.

The adjacent land owner:

Gila River Indian Community
P.O. Box 398
Sacaton, Arizona 85247

520-562-6000

The contact person for the Gila River Indian Community, Department of Environmental Quality, RCRA programs is:

Dan Marsin

520-562-2234

The industrial park is zoned for heavy industry. Romic is surrounded by manufacturing and distribution plants to the west, south and east, and a highway (San Tan Freeway, Loop. 202) to the north.

B6.1 FLOOD PLAIN

The facility is located in an area designated as "Zone D" which is defined as an undetermined flood hazard. A flood zone determination map is provided in Appendix B-2. A letter indicating there was no impact from two 100-year floods in Lone Butte Industrial Park is also included in Appendix B-2.

B6.2 DRAINAGE

Storm water that falls on active areas of the Facility drains towards blind sumps located at various points within the containment areas. The storm water is collected from these sumps, pumped into rain water storage tanks, and tested prior to discharge. Clean rainwater may be discharged, per the Stormwater Permit, to Allison Road via the driveways. If rainwater analysis indicates contamination, the rainwater is transferred offsite for disposal. The location of the storm water catch basins are at rail spur secondary containment areas shown on Figure B-4. Drainage from the roofs is routed to the driveway for drainage out of the facility onto Allison Road.

Cooling tower and boiler blowdown wastewater is discharged under permit No. 24 to the City of Chandler treatment facility via Lone Butte sewers. Romic is a Zero Process Wastewater Discharger. The

facility would be subject to categorical pretreatment standards as a Centralized Waste Treatment facility if there was process wastewater discharge. Romic does not discharge process wastewater into the sewer system at this time. Upon issue of the RCRA Part B, Romic will revise the wastewater discharge permit and install a wastewater treatment system.

B6.3 RAIN DATA

Average rainfall data was obtained from the Weather Bureau, Western Region, *Estimated Return Periods for Short Duration Precipitation in Arizona, 1969*. The maximum 25-year, 24-hour storm event was determined to be approximately 3.12 inches.

B6.4 WIND ROSE

The prevailing wind direction in the vicinity of the Facility is primarily from west to east, northeast and south easternly directions. The data was obtained from the meteorological station at Sky Harbor Airport and based on 1991 data. (See Figure B-5.)

B7 GEOLOGY AND HYDROGEOLOGY

The following is a description of the site geology and hydrogeology. Hydrogeology data was obtained, in part, from well data collected during the drilling of two local wells (Bert E. Perry, Well Drilling Contractor, 1968, see Appendix B-3). These documents were prepared according to routine well drilling recordkeeping.

B7.1 GEOLOGY

The Romic facility is located in the East Salt River Valley (SRV) which is part of the geologic Basin and Range physiographic province. (The cadastral location of the Romic facility is Section 4, Township 2 South, Range 4 East.) The East SRV is a basin filled with alluvial sediments several thousands feet thick. Romic is located within the part of the East SRV that is bounded on the north by the Salt River, to the west by South Mountain, to the south by the Santan Mountains, and to the east by the Superstition Mountains.

The Facility is located approximately 100 feet above a minor aquifer, and 1000 feet above a usable aquifer, which is the source of water for Lone Butte Industrial Park. The site is capped by up to 100 feet of recent alluvial fill material. A clay layer up to 1,000 feet thick underlies the surficial fill. Intermixed with this clay are other constituents such as sand, gravel, shale and sandstone.

B7.2 HYDROGEOLOGY

As discussed above, there are generally two regional aquifers in the immediate area. Information contained in well logs 1 and 2 as recorded by Bert E Perry, Well Drilling Contractors, indicates there is an aquifer located at a minimum of 900 feet below ground level. It is the understanding of Romic that this aquifer is the source of water to Lone Butte Industrial Park. In May 2004, Lone Butte Monitoring Well #4 was installed on Nelson Road, approximately 500 feet southwest of Romic. The Gila River Department of Environmental Quality indicated that depth to groundwater in this well is approximately 74 feet. This log generated by Layne Christensen Company is also included in Appendix B-3.

B7.3 REMEDIATION ACTIVITIES

There are no groundwater monitoring wells located at the Facility; however a map of area monitoring wells is provided as Figure B-6.

The following chronology recaps remediation activities performed on the facility site.

July 1988 – Consent Agreement/Final Order signed.

August 1988 – Purchased facility out of bankruptcy from Ben Fisler.

February 1989 – Harding Lawson Associated conducted sampling of Phase I, II and III Areas. Sampling consisted of collecting 38 surface soil samples and subsurface soil samples from 20 borings. The sample intervals included 1-1.5', 5-5.5', and 10-10.5'. The samples were analyzed for the following constituents:

PCBs	Cyanide
Pesticides	Phenols
Total petroleum hydrocarbons	Sulfides
EP Tox metals	Volatile organic compounds (subsurface samples only)

Analytical results showed that the only contaminant that exceeded the EPA recommended action level was total petroleum hydrocarbons (TPH). The TPH contaminated soil was limited in depth from the surface to approximately one foot. Isolated areas of soil contamination were detected to depths of three feet.

September 1989 – Received EPA approval that Phase I area was adequately remediated.

September 1989 – Emcon Associates conducted sampling of Phase II Area. Sampling consisted of collecting 29 surface soil samples and subsurface soil samples from 28 borings. The sample intervals included 1-1.5', 5-5.5', and 10-10.5'. The samples were analyzed for the following constituents:

PCBs	Pesticides
Total petroleum hydrocarbons	Total metals
Cyanide	Phenols
Sulfides	Volatile organic compounds (subsurface samples only)

Analytical results showed that the only contaminant that exceeded the EPA recommended action level was total petroleum hydrocarbons (TPH). The TPH contaminated soil was limited in depth

from the surface to approximately one foot. Isolated areas of soil contamination were detected to depths of three feet.

October 1989 – Remediation of Phase II Area was completed.

November 1989 – Construction of drum storage building was completed. The building was lined with a high-density polyvinyl liner and the concrete was coated with a chemical resistant sealant.

July 1990 – Emcon Associates conducted sampling of Phase III Area. Sampling consisted of collecting soil samples from 23 soil borings at sample intervals of 0-3'', 1-1.5', 4-5.5', and 9.5-10'. The samples were analyzed for the following constituents:

PCBs	Pesticides
Total petroleum hydrocarbons	Phenols
Sulfides	Total metals
Volatile organic compounds (subsurface samples only)	

Analytical results showed that the only contaminant that exceeded the EPA recommended action level was total petroleum hydrocarbons (TPH). The TPH contaminated soil was limited in depth from the surface to approximately one foot. Isolated areas of soil contamination were detected to depths of three feet.

January through March 1991 – Remediation of abandoned drum pads, truck loading dock and one tank farm. New tank farm lined with high-density polyethylene liner was completed.

May through June 1991 – Additional Phase II sampling requested by EPA. Sampling included addition of nine new sampling locations with as many as three depth intervals (.5-1', 4.5-5', and 9.5-10'). Samples were analyzed for a variety of constituents including:

PCBs	Pesticides
Total petroleum hydrocarbons	Total phenols
Total sulfides	TCLP metals
Total metals	Polynuclear aromatics
Volatile organics	

Note that EPA obtained split samples and that not all samples were analyzed for the complete constituent list referenced above.

Analytical results showed that the only contaminant that exceeded the EPA recommended action level was total petroleum hydrocarbons (TPH). The TPH contaminated soil was limited in depth from the surface to approximately one foot. Isolated areas of soil contamination were detected to depths of three feet. Pesticides were detected in one surface sample above EPA action limits.

June 1991 – Site was subdivided into smaller areas to expedite remediation efforts. Phase II and III were subdivided into seven remediation areas.

August through September 1991 – Remediation of subarea one completed. Railroad tracks extended around north of drum storage building. Concrete rail loading containment area constructed.

September through October 1991 – Remediation of subarea two completed. Concrete drive was installed on the East Side of the facility equipped with automatic gate. Concrete access to the rail loading facility and drum storage building was complete.

November through December 1991 – Remediation of subareas three and four was completed. Concrete drive was installed along the West Side of the facility equipped with automatic gate. Installation of a new tank farm equipped with high-density polyethylene liner was completed in the central portion of the facility.

January 1992 – Remediation of subarea six was 75% completed. Installation of a new tank farm equipped with high-density polyethylene liner was installed in the northwest portion of the facility.

March 1992 – Remediation of subarea five was completed. New waste handling area was installed in the central portion of the site. This area and the tank farm completed in December 1991 had a roof structure built over it.

April through June 1992 – Complete remediation of subareas six and seven.

New tank farm equipped with high-density polyethylene liner was constructed along the west portion of the facility. This area contains the thin filming process equipment.

August 1992 – Remediation complete. Construction of the new building in the southeast portion of the facility started. Building contains a tank farm on the north side and both building and tank farm are lined with high-density polyethylene. It will become the acid/base storage building and process area.

December 1992 – Acid/base storage building complete. Process area is complete and will be operational upon approval of our Part B permit.

B7.4 SEISMICITY

The 1996 USGS report *Geologic Map of Arizona* was reviewed to identify that the Romic Facility is not located within 200 ft of a fault which has had displacement in Holocene time. Therefore, from available published reports, the Facility is in compliance with the seismic guidelines of 40 CFR 270.14(b)(11)(A).

B8 OTHER ENVIRONMENTAL PERMITS

Several agencies have jurisdiction over the activities conducted by the Facility as they relate to the environmental activities. The following agencies require permits or approvals for the activities conducted onsite: U.S. EPA, U.S. DOT, and the City of Chandler. A listing of all environmental permits held by the Facility is included as Appendix B-4.

B9 OTHER FEDERAL LAWS

The EPA has determined that compliance with the National Historic Preservation Act (NHPA), the Endangered Species Act, and the Fish and Wildlife Coordination Act may be applicable to Romic's RCRA Part B Permit Application. The EPA is coordinating inter-federal agency discussions to determine applicability. The consultation process under Section 106 of the NHPA was begun in April, 2004.

The issuance of a RCRA Part B Permit to the Facility will not fall under the jurisdiction or require consideration of the following Federal Laws:

- The Wildlife and Scenic Rivers Act;
- The Coastal Zone Management Act

Further, the Clean Air Act Risk Management Program requirements (40 CFR Part 68) do not apply because Romic does not have threshold quantities of regulated substances on-site.

B10 TRAFFIC

B10.1 ONSITE TRAFFIC

The average weekly traffic volumes onsite are summarized below:

Traffic Volumes

Weekdays		
Passenger Cars		
From 5:30 a.m. to 8:30 a.m.	30-50 cars arriving	5 cars leaving
From 2:30 p.m. to 7:00 p.m.	5 cars arriving	30-50 cars leaving
10 passenger cars containing visitors, vendors, etc. visit the facility each day. Their times of arrival are random between 8:00 a.m. and 5:00 p.m.		
Trucks		
4-10 trucks arrive and leave the facility each working day. The times of arrival varies between 6:30 a.m. and 5:30 p.m. unless special arrangements have been made.		
Weekends		
During the weekend 2-8 people may be on duty during each shift. Therefore, up to 8 vehicles leave and arrive at the beginning of each shift.		
Trucks		
No deliveries are accepted on weekends unless special arrangements have been made.		

On-site traffic is controlled by scheduling waste shipments, controlling access to waste management areas, using established traffic routes, and traffic control signs. The traffic patterns for waste transportation vehicles and intra-facility operational equipment are described below and depicted in Figure B-7. The facility controlled access points are identified in Figure B-8.

To avoid backups and delays, waste transportation vehicles are pre-scheduled for arrival or pickup when possible. Waste transportation vehicles enter the facility through the main gate at the southwest side of the facility, which is accessed from Allison Road. Vehicles must follow the directions of facility personnel and adhere to traffic control signs at all times. Traffic control signs are posted throughout the facility as appropriate. Vehicles are directed to the proper loading/unloading or operational area by facility personnel.

If the vehicle's load/unload destination is occupied, the vehicle will pull up next to the load/unload area and wait for the next available opportunity to be loaded/unloaded. Vehicles leaving load/unload pads will exit the facility through the southeast gate, or as directed.

The roadways and parking areas within the operations portion of the facility are constructed of concrete with subgraded and compacted base to handle the maximum load limits of waste transportation vehicles (80,000 pounds gross). Internal roadways consist of the main access and exit drives. The active traffic areas of the facility are constructed and designed to support loads in excess of 80,000 pounds. The concrete roadways and surfaces are maintained to ensure adequate access for emergency equipment. Maintenance, including grading and filling holes, is performed on an as-needed basis.

B10.2 TRAFFIC TO/FROM FACILITY

Access to the Facility is controlled as shown in Figure B-8. No traffic signals or stacking lanes are present on Allison Road because of the light traffic use on the roadway. The routes that trucks use to travel to and from the Facility are designated truck routes through Arizona.

Vehicles traveling to or departing from the Facility primarily use I-10. Vehicle access routes to the Facility are described below.

From Freeway (I-10) Westbound

Wild Horse Pass Boulevard/Sundust Road exit, right (east) on Sundust Road to 56th Street. Left (north) on 56th Street to West Allison Road. Right (east) on Allison Road to facility.

From Freeway (I-10) Eastbound

Wild Horse Pass Boulevard/Sundust Road exit, right (east) on Sundust Road to 56th Street. Left (north) on 56th Street to West Allison Road. Right (east) on Allison Road to facility.

From Chandler Boulevard, West of Kyrene

South on 56th Street. Left (east) on West Allison Road to the facility.

From Chandler Boulevard, East of 56th Street

South on Kyrene. Right (West) on West Allison Road to the facility.

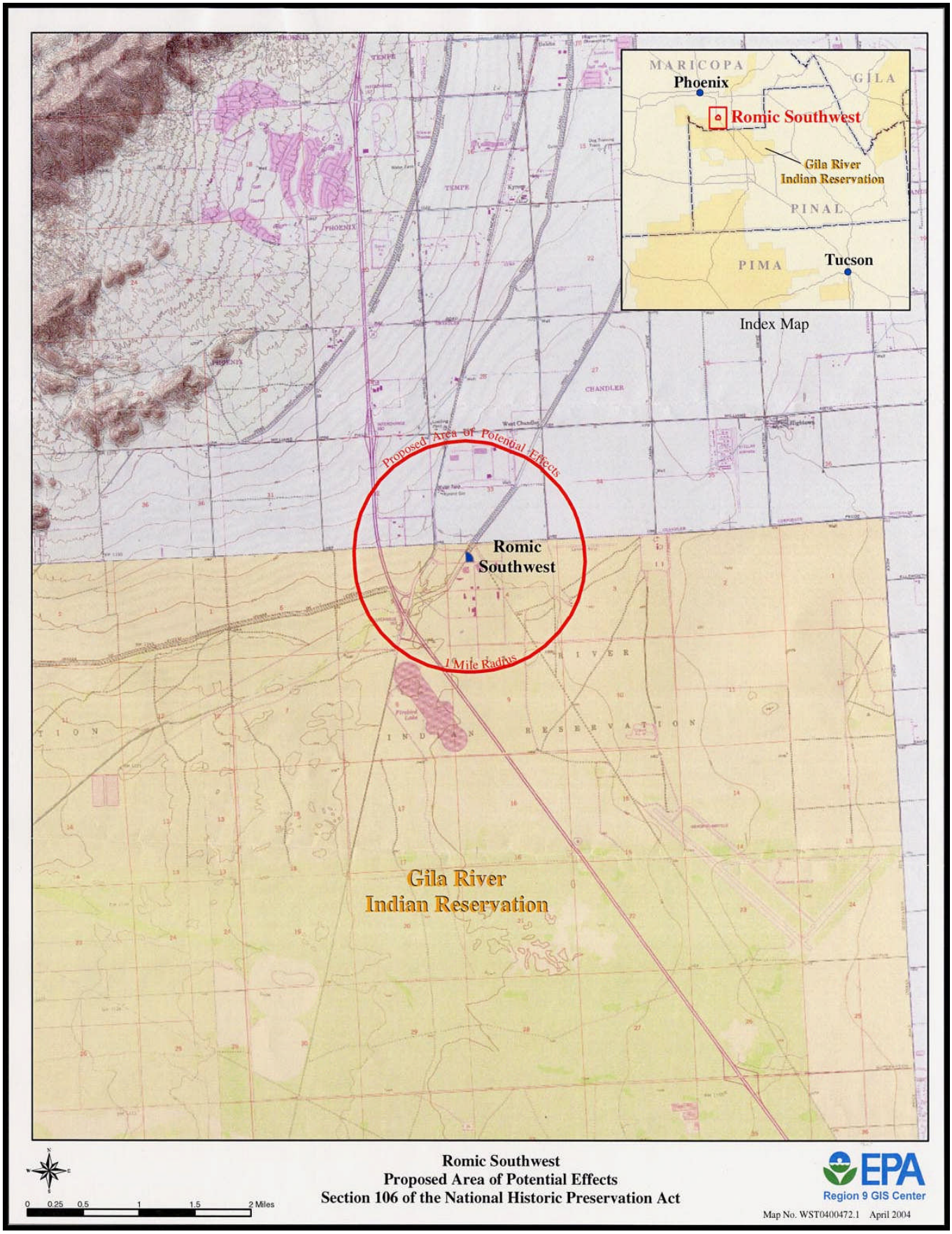
From 202 (San Tan Freeway) Westbound

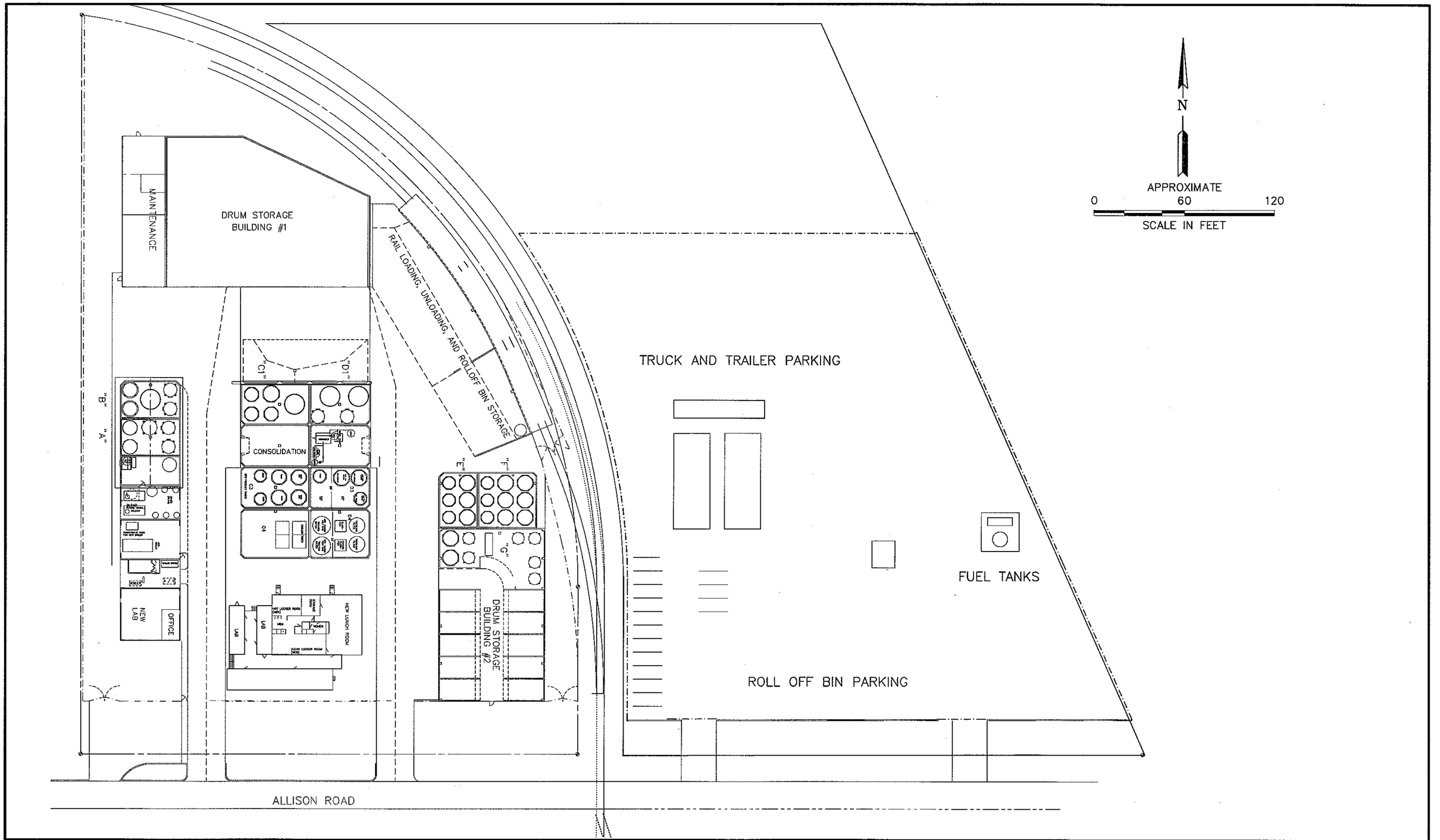
Kyrene Road exit, left (south) onto Kyrene Road. Right (west) onto Allison Road to the facility.

Roadways in Romic's neighborhood are constructed of asphalt and are under the jurisdiction of the Lone Butte Industrial Park/Gila River Indian Community. The maximum gross vehicle weight allowed is 80,000 pounds as specified by DOT. The maximum gross weight of all loaded vehicles leaving the facility does not exceed the 80,000-pound limit.

FIGURES

Figure B-1
Facility Location and Topographic Map





REFERENCE: BASEMAP PROVIDED BY:
ROMIC
ENVIRONMENTAL TECHNOLOGIES CORP.
ROMIC SOUTHWEST, CHANDLER, ARIZONA

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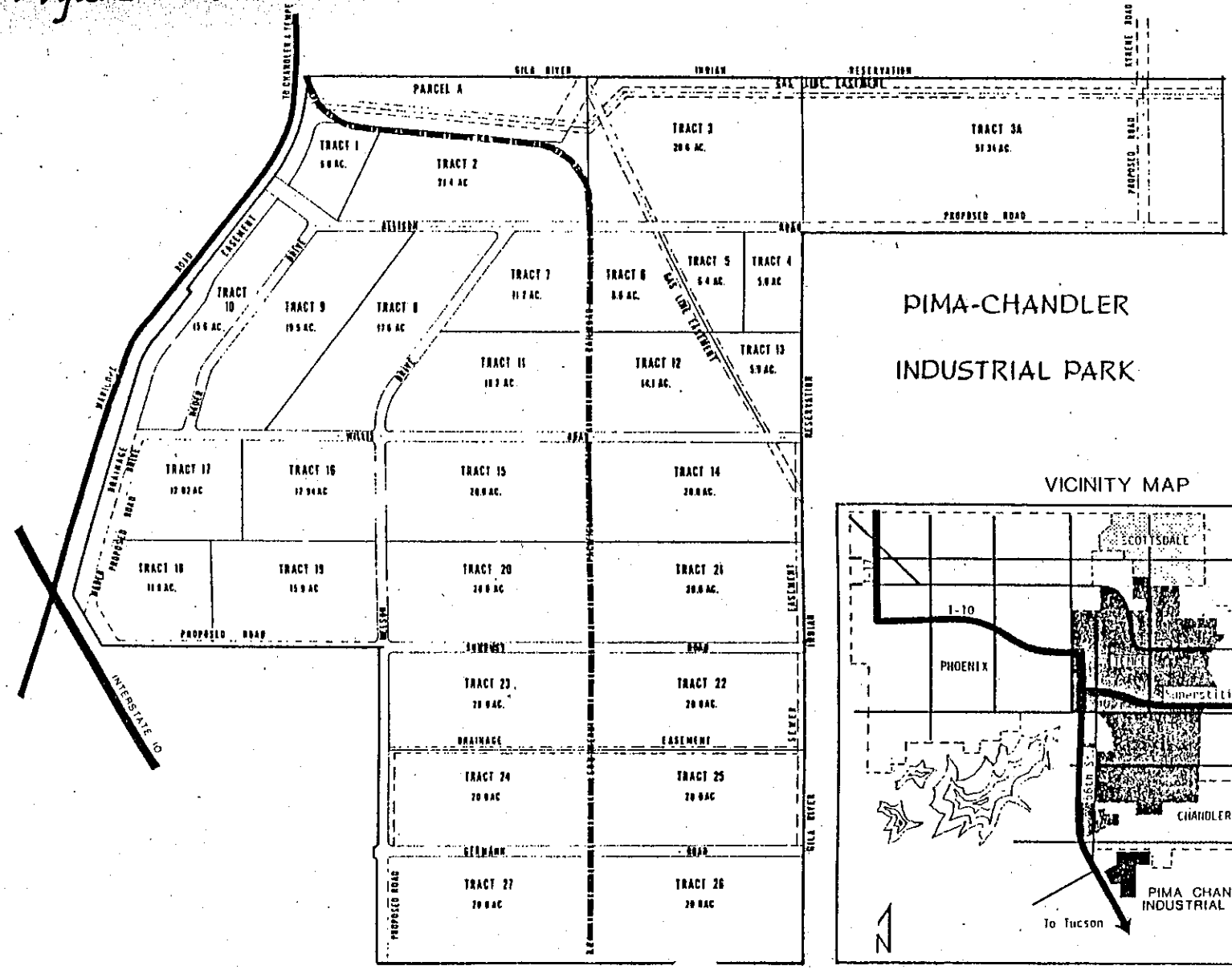
Facility Layout/Site Plan

Romic - Southwest
Chandler, Arizona
Figure B-2

Figure B-3



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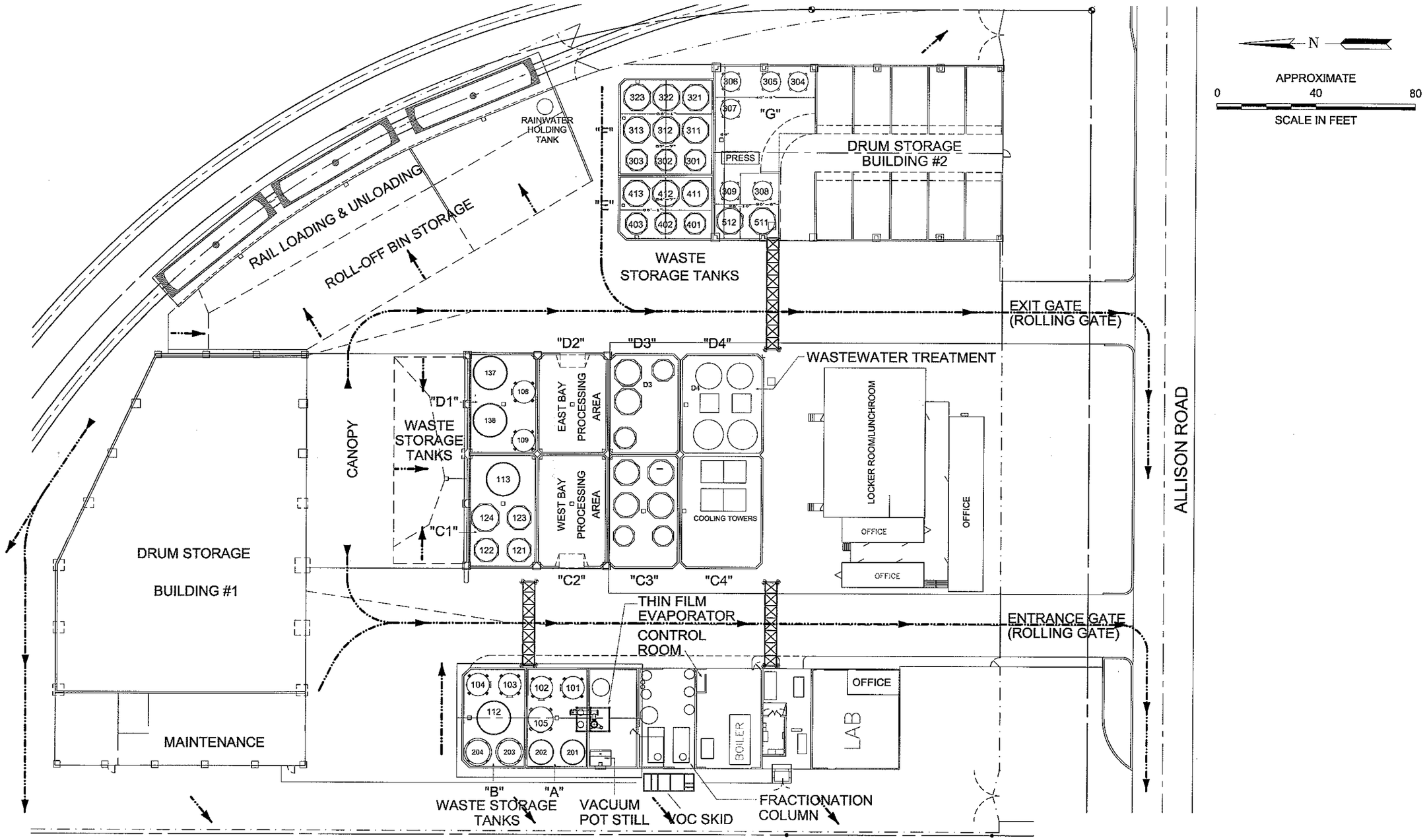

REFERENCE: BASEMAP PROVIDED BY:

ROMIC
ENVIRONMENTAL TECHNOLOGIES CORP.
ROMIC SOUTHWEST, CHANDLER, ARIZONA

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Site Drainage Map

Romic - Southwest
Chandler, Arizona

Figure B-4

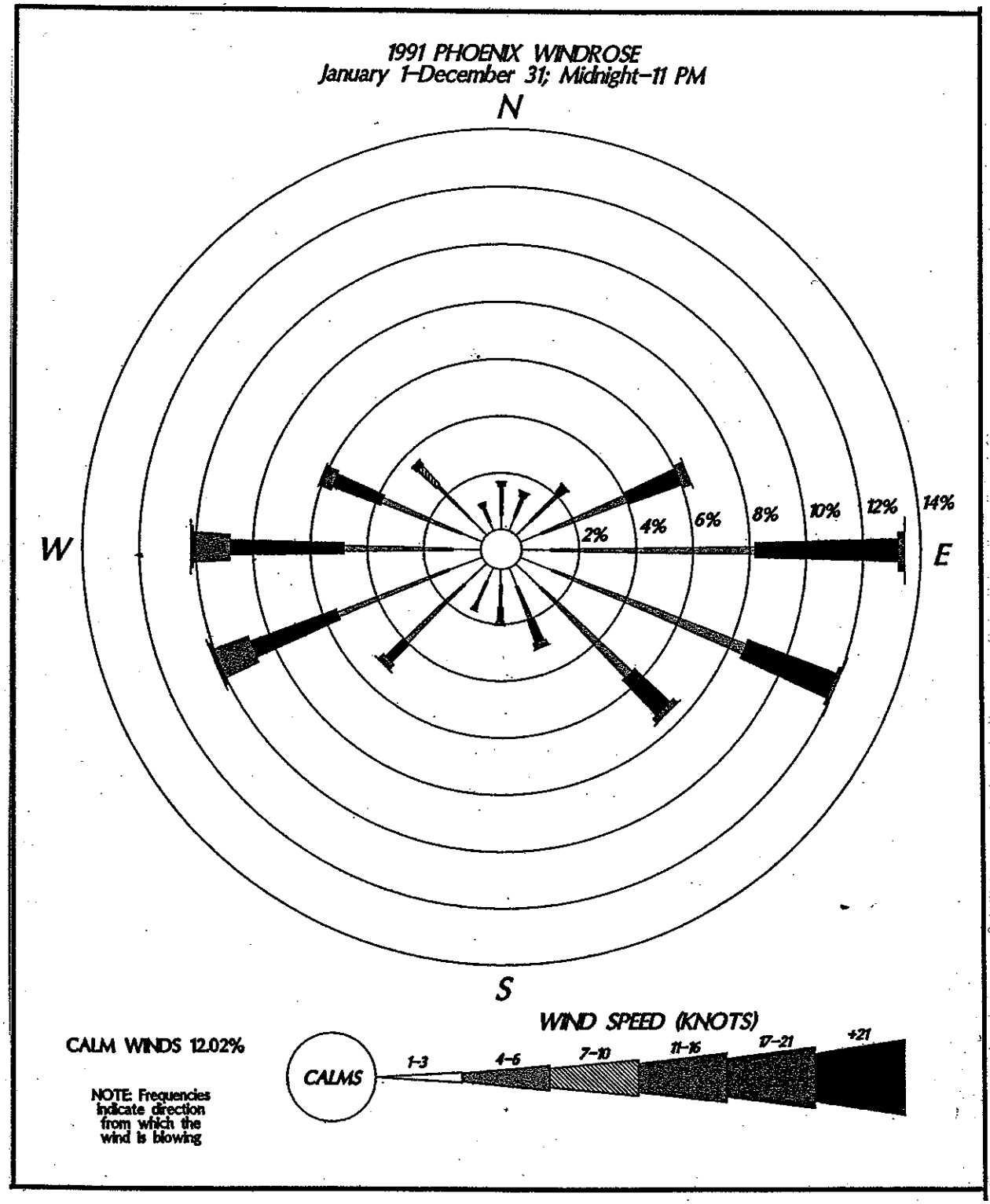
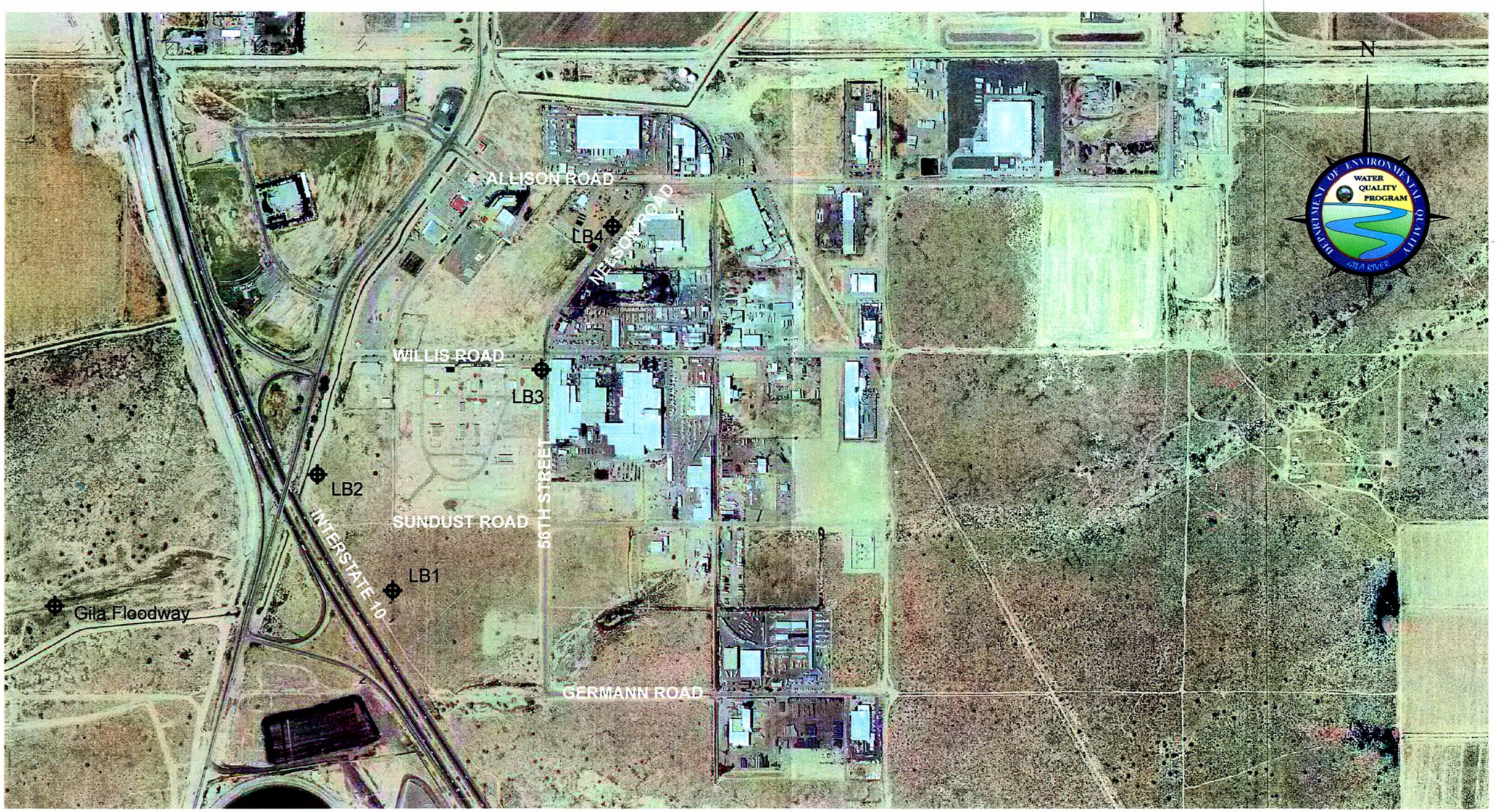


Figure B-5

Area Wind Rose Diagram

Phoenix, Arizona



LEGEND

⊕ LB1 GROUNDWATER MONITOR WELL

0 1/2 1 MILE

0 1000 2000 3000 FEET

TCE INVESTIGATION SITE MAP - MONITORING WELL LOCATIONS

PHASE I REMEDIAL INVESTIGATION

TCE INVESTIGATION AREA

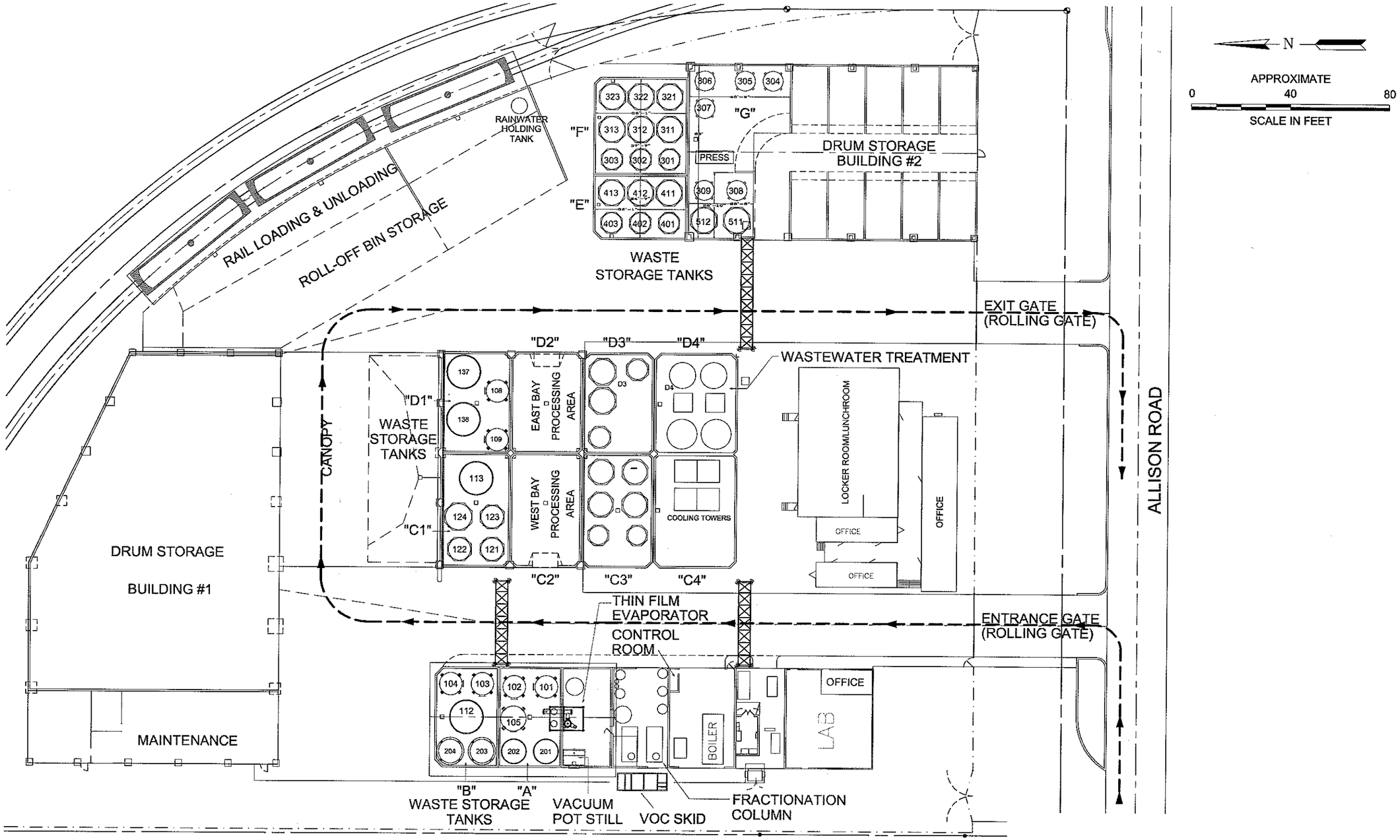
GILA RIVER INDIAN COMMUNITY, ARIZONA

PROJECT NUMBER: 34.78005.0001

DRAWING FILE: S:\Projects\34.78005 Gila River\34.78005.0001 Lone Butte GW Inv\Report\ Fig 2 - Site Map.cdr

FIGURE B-6□

Source: ATC Assoc. Tempe, Az



REFERENCE: BASEMAP PROVIDED BY:

ROMIC
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ROMIC SOUTHWEST, CHANDLER, ARIZONA

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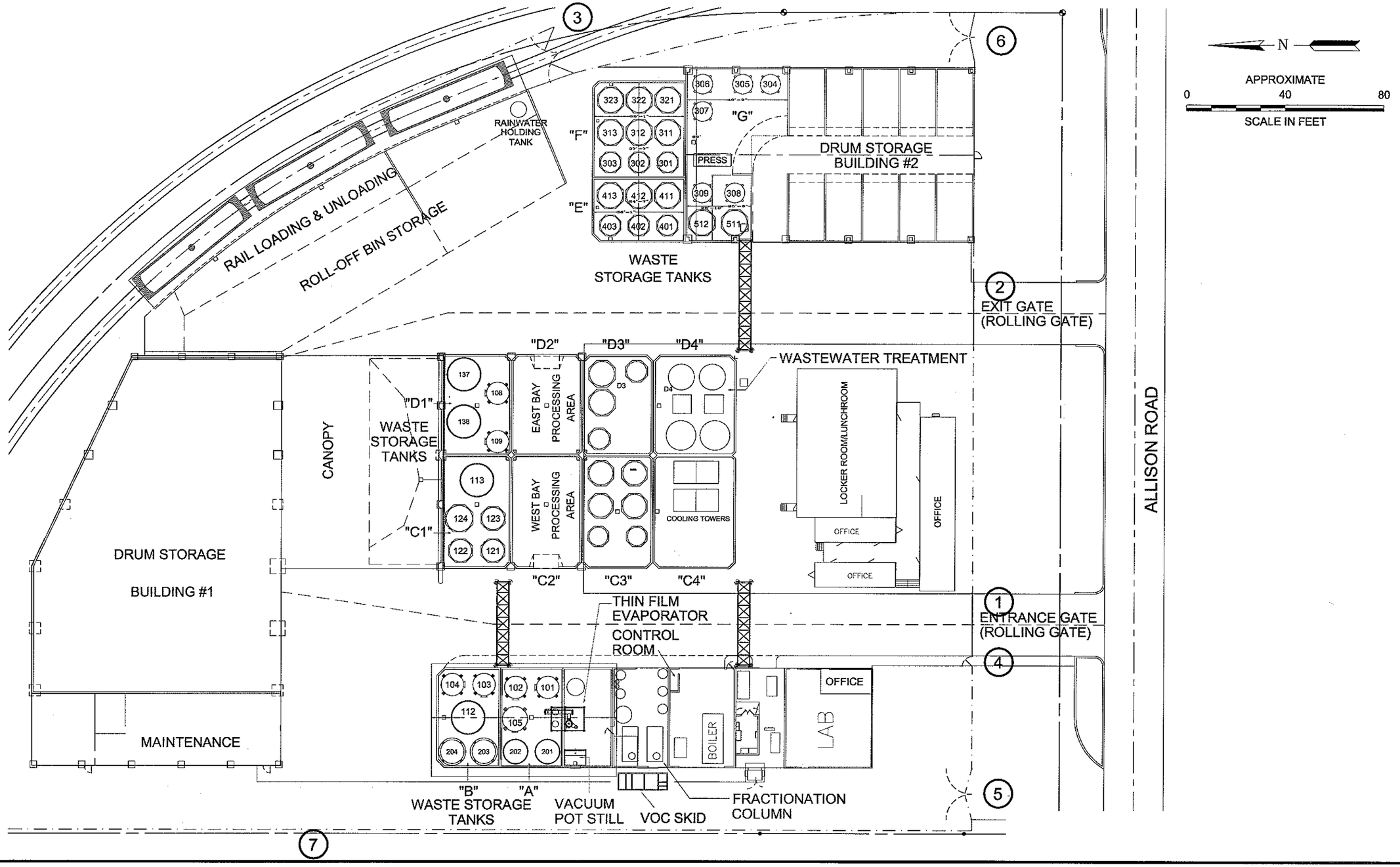
Traffic Patterns on Site

Romic - Southwest
Chandler, Arizona

Figure B-7



REFERENCE: BASEMAP PROVIDED BY:

ROMIC ENVIRONMENTAL TECHNOLOGIES CORP.
ROMIC SOUTHWEST, CHANDLER, ARIZONA

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LEGEND:

1. Electrically Controlled Access (ENTRY)
2. Electrically Controlled Access (EXIT)
3. Railroad Access
4. Controlled Access (Personnel)
5. Controlled Access
6. Controlled Access
7. Controlled Access (Fire Truck Only)

Controlled Access Points

Romic - Southwest
Chandler, Arizona

Figure B-8

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APPENDIX B-1

LEGAL PROPERTY DESCRIPTION

BOUNDARY AND LAND USE MAP

Lone Butte Retail/Industrial Tenants

Source: Lone Butte Industrial Park 11/13/95
See Appendix B-1 Schematic (Key)

Tract 1
A Park Office
B Vacant

Tract 2
A Payless Cashways
B Romic Chemicals

Tract 3
A Romic Chemical
B Sanifill
C Vacant

Tract 3A
Vacant

Tract 4
Pima Valve

Tract 5
A Intermountain Road Builders
B Vacant

Tract 6
Ryobi Outdoor Products

Tract 7
A Waxman Resources
B Vacant
C Waxman Resources
D Waxman Resources
E Waste Management, Inc.

Tract 8
A Jack Gray Transport
B Vacant
C US West Vector

Tract 9
A GR Telecom
B GR Gaming Commission
C GR Casino Offices
D GLS Landscaping
E Vacant

Tract 10
A GR Casino
B Pac Scientific Machine Shop
C Vacant

Tract 11
A Arizona Box
B KT Fabrication
C Induction Billet
D Pimalco Parking

Tract 12
A Thermo Rock
B Vacant

Tract 13
A Advanced Materials Tech
B Vacant

Tract 14
A Vacant
B Container Dist Corp
C Plymouth Tube

Tract 15
A Pimalco
B BMC West
C PSI Tube Mill

Tract 16
Pacific Scientific

Tract 17
A Rock Solid
B Vacant

Tract 18
Vacant

Tract 19
Pacific Scientific Addition

Tract 20
A BMC West

Tract 21
A Maricopa Propane and Ferrell Gas
B Vacant

Tract 22
A Allen Moore Diversified
B Vacant

Tract 23
A Animal Nutrition
B Solkatronics
C Vacant

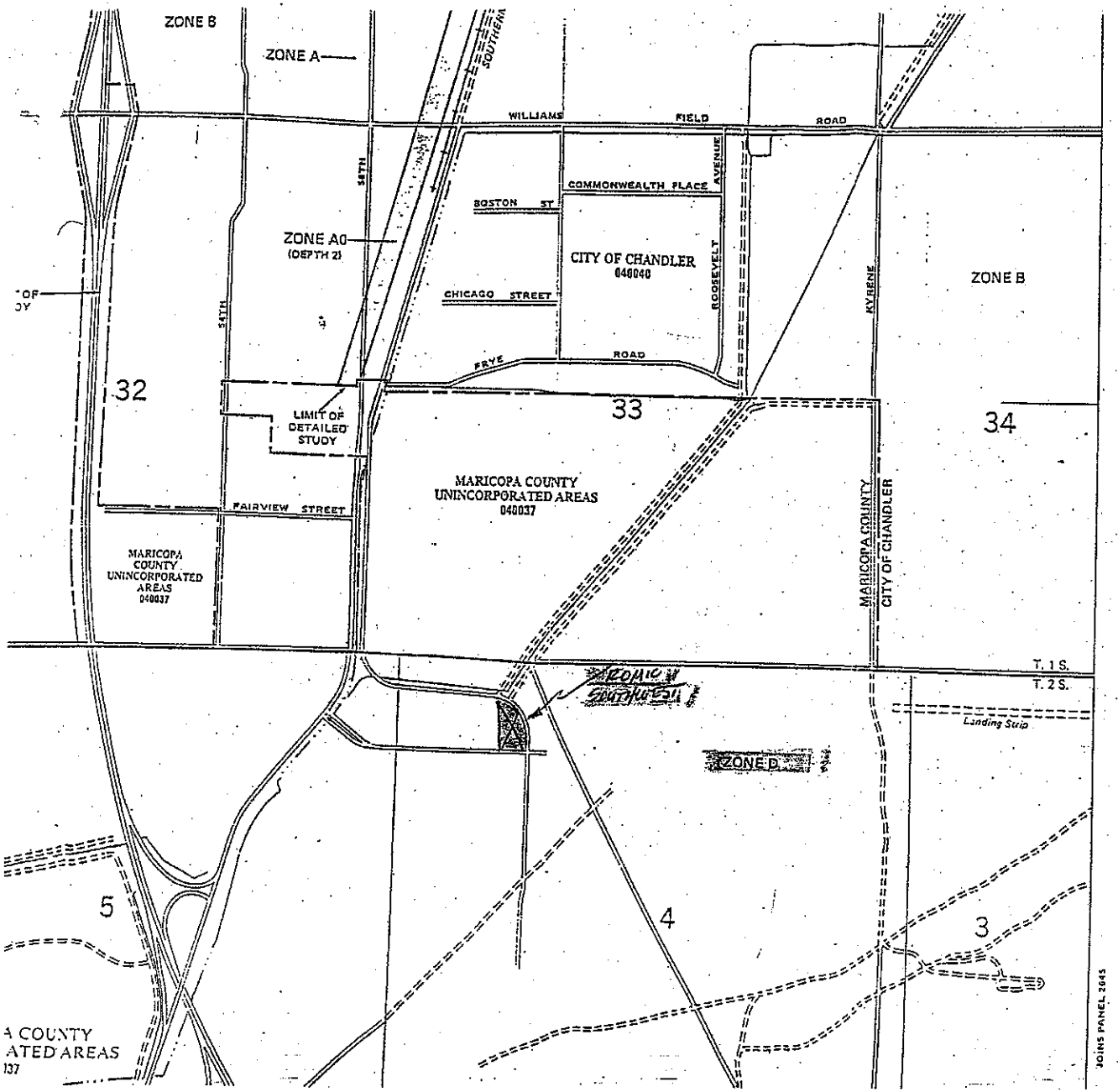
Tract 24
Vacant

Tract 25
A Home Depot
B Triangle Truss
C Vacant

Tract 26
A Doors Building
B Vacant

Tract 27
Vacant

Tract 28
A Ariel O'otham
B Vacant



Elevation Reference Mark RM7x

Zone D Boundary

River Mile •M1.5

••Referenced to the National Geodetic Vertical Datum of 1929

EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined but possible flood hazards
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1 V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all map features outside Special Flood Hazard Areas.

Certain areas not in the Special Flood Hazard Areas (zones A and V) may be protected by flood control structures.

Coastal base flood elevations apply only landward of the shoreline.

Corporate limits shown are current as of the date of this map. The user should contact appropriate community officials to determine if corporate limits have changed subsequent to the issuance of the map.

For community map revision history prior to countywide mapping, see Section 5.4 of the Flood Insurance Study Report.

For adjoining map panels, see separately printed Map Index.

EFFECTIVE DATE OF
COUNTYWIDE FLOOD INSURANCE RATE MAP
APRIL 15, 1988

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL:

Panel # 2640
Flood MAP From
CHANDLER CITY ENGINEER

Legal Description

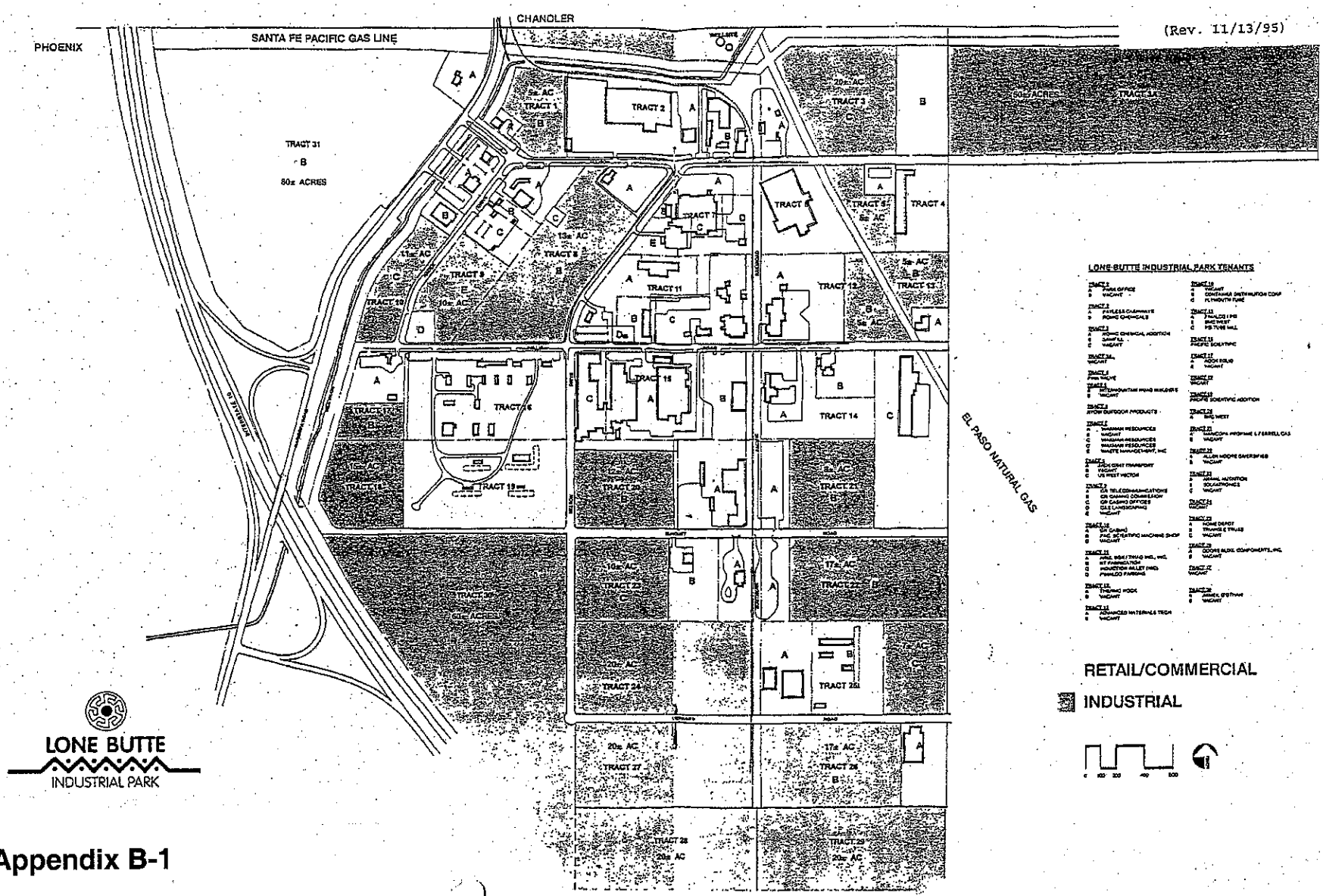
Two parcels of land, one in Tract 2 and one in Tract 3, of the Pima-Chandler Industrial Park as recorded in Book 124, Page 23, Maricopa County Recorder, Phoenix, Arizona both being a portion of the northwest quarter of the northwest quarter of Section 4, T2S, R4E of the G. & S.R.B. & M., Maricopa County, Arizona, more particularly described as follows:

Parcel in Tract 2

Commencing at the NE corner NW ¼ NW ¼ of said Section 4,
bear S 0° 01' 57" E a distance of 803.02 feet to a point of curvature along the centerline of a 30 foot wide railroad easement;
thence bear S 89° 58' 03" W a distance of 15.00 feet to the point of curvature on the Westerly right of way line of said railroad easement and the TRUE POINT OF BEGINNING;
thence bear Northerly and Northwesterly along a tangent curve to the left having a radius of 385.00 feet, a central angle of 81° 50' 07" and a length of 549.89 feet to a point on the curve;
thence bear S 0° 01' 11" E a distance of 493.25 feet to a point on the Northerly right of way line of Allison Road;
thence bear N 89° 52' 00" E along said right of way line a distance of 330.00 feet to a point on the Westerly edge of the aforementioned railroad easement;
thence bear N 0° 01' 57" E a distance of 111.82 feet to the TRUE POINT OF BEGINNING, containing 3.037 net acres.

Parcel in Tract 3

Commencing at the SW corner of said Tract 3,
bear N 0° 01' 57" W on the west tract line a distance of 30 feet;
thence bear N 89° 52' 00" E a distance of 15 feet, to the TRUE POINT OF BEGINNING;
thence bear N 89° 52' 00" E a distance of 334.76 feet;
thence bear N 23° 53' 30" W a distance of 703.61 feet;
thence bear S 46° 32' 49" W a distance of 69.73 feet;
thence bear N 86° 40' 06" W a distance of 9.66 feet;
thence bear S 0° 01' 57" E a distance of 596.78 feet, to the TRUE POINT OF BEGINNING, containing 2.958 net acres.



Appendix B-1

Boundary and Surrounding Land Use Map

APPENDIX B-2

FLOOD PLAIN MAP

FLOOD PLAIN LETTER OF IMPACT

GILA RIVER INDIAN COMMUNITY
SACATON, AZ. 85247

TRIBAL ENVIRONMENTAL HEALTH SERVICES
P.O. Box 147
(602) 562-3321 or 528-1226/1227
FTS 764-1226/1227

April 28, 1993

Mr. Mark Worley
Romic Chemical Corporation
2081 Ray Road
East Palo Alto, CA 94303

Subject: Flood Hazards at the Lone Butte Industrial Park

Dear Mr. Worley:

As discussed with you last week, two major flooding events, considered 100-year floods, have occurred in the Chandler, Arizona area over the past ten years. The first flood occurred in 1983 and the second flood occurred in January of this year.

The flooding associated with these storm events did not impact the Lone Butte Industrial Park. It is our belief from these experiences and our evaluation of hydrologic reports that the Romic-Southwest facility would not be adversely effected by sheet flow during a 100-year flood event.

If you have any questions regarding this matter please contact me at (602) 562-3321 Ext. 1226.

Sincerely,

Kenneth E Bailey

Kenneth E. Bailey, Director
Environmental Health Services

APPENDIX B-3

WELL DRILLING LOGS

S, 4E 4bba P20 | PIMA,CHNDLER IND A-2 | indust/dom | ACTIVE | A |

[redacted]BERT E. PERRY[redacted] (2-4) 4 BAA

WELL DRILLING CONTRACTOR
6338 E. APACHE TRAIL
MESA, ARIZONA

PHONE 985-2603

WELL #2

LICENSE 23256

December 17, 1968

Well no 2 log
Lone Butte

Location- N.W.COR- 4-T2S-R4E
SOUTH OF WILLIAMS FIELD RD 1 MI
EAST OF OLD MARICOPA RD ½ MI.

0	- 3	Top soil
3	- 46	Calechie & Red Clay
46	- 60	Red Clay
60	- 72	Sandy Gravel
72	- 143	Clay Gravel & Boulders
143	- 188	Clay, sand & Gravel
188	- 267	Hard Clay Congomerate
267	- 290	Clay & Gravel
290	- 340	Clay
340	- 356	Hard Brown Clay & Gravel
356	- 430	Sticky Hard Brown Clay. Trace of Gravel
430	- 458	Sticky Red Clay
458	- 460	Hard Sandstone Shell
460	- 470	Silty Red Clay
470	- 598	Sticky Red Clay
598	- 601	Hard Shell
601	- 658	Sticky Red Clay & Red Shale. Thin layers Hard Shell
658	- 690	Dark Brown Silty Clay
690	- 693	Clay & Gravel. Water.
693	- 725	Clay, sand & Gravel
725	- 737	Lightly cemented Sand & Gravel
737	- 778	Clay Broken Rock Gravel
778	- 810	Clay & broken quite coarse Rock. A litter clearner.
810	- 840	Clay, sand & Gravel. More Clay & sand.
840	- 919	Clay, Sand & Gravel. Lightly cemented.

20" casing 49' 10" cemented to surface.
16" casing 400' 9" cemented bottom 20' feet.
12" casing set 390' 8" to 919'
12" perforated 690 to 907 6/ft. by 3 Well swabbed 24 hours. 95' of sand pulled

BERT E. PERRY

WELL DRILLING CONTRACTOR

8328 E. APACHE TRAIL
MESA, ARIZONA

PHONE 986-2803

LICENSE 28260

Sept. 8, 1968

Lone Butte Well No. 1

0	- 1	Top Soil
1	- 10	Red Clay
10	- 31	Red Clay trace of Gravel
31	- 50	Sandy Clay Water table 31'
50	- 54	Calachie
54	- 66	Fine sand
66	- 77	Yellow Clay
77	- 117	Sand & gravel Boulders, Cemented ribs
117	- 135	Boulders & gravel
135	- 154	Clean gravel & boulders
154	- 176	Clay & gravel
176	- 182	Broken rock running clay
182	- 262	Hard brown clay conglomarate, layers cemented gravel
262	- 293	Clay & gravel
293	- 310	Sticky clay with thin sand & gravel streaks
310	- 352	Sticky clay trace gravel
352	- 361	Layers sand & gravel & sticky clay
362	- 403	Sticky clay
403	- 410	Sticky clay & sand streaks
410	- 415	Sticky clay
415	- 500	Red clay
500	- 575	Red Clay
575	- 590	Red clay trace gravel
590	- 679	Red Clay 627 a little water estimate 5Gpm 8gr water
679	- 682	Hard shell
682	- 700	Clay and sand layers
700	- 738	Cemented gravel (broken granite)
738	- 767	Sand & gravel; broken rockset with small amount of clay thin layers soft cemented shells
767	- 772	sticky brown clay
772	- 794	Clay & gravel
794	- 805	Clean sand & gravel
805	- 815	Sticky clay layers & gravel layers
815	- 835	Sticky clay layers with layers cemented gravel
835	- 852	Cemented gravel
852	- 862	Sand & gravel compacted, slightly cemented (caving)
862	- 869	Clean sand
869	- 885	Cemented gravel
885	- 889	Sand gravel & soft clay
889	- 892	Cemented gravel
892	- 902	Hard clay & gravel

Casing set at 902
Perforated from 682' to 892'

LOG OF WELL LB-4

SHEET 1 OF 4

Client Gila River Indian Community
Project Name Phase II Groundwater Investigation
Number 34.78005.0001
Location Lone Butte Industrial Area
Drill Contractor Layne Christensen Company
Drill Method Dual-Wall Percussion (Becker AP-1000)
Drilling Started 5/12/04 Ended 5/12/04
Logged By J. Griffke
Elevation 1150.6 Mean Sea Level
Total Depth 105.0
Depth To Water ATD 78.0 / AD 74.0

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	Sample Time	USCS	LITHOLOGY	DESCRIPTION	WELL CONSTRUCTION DETAIL	ELEVATION (feet)
						Asphalt pavement to approximately 3" below ground surface. Clay with sand (CL). Yellowish red (5YR, 4/6). 75% to 85% clay, 15% to 25% fine to medium sand. Lenses of very stiff clay approximatey 1/2" diameter. Dry. Medium stiff. No odors or staining.		1155
5	CU LB4-5'		0838					
10	CU LB4-10'		0842	CL		Clay with sand as above except color is light brown (10YR, 8/3).		1160
15	CU LB4-15'		0846			Clay with sand as above except color is yellowish red (5YR, 4/6).		1165
20	CU LB4-20'		0850				Neat cement/bentonite slurry	1170
25	CU LB4-25'		0854	CL		Clay with sand (CL). Yellowish red (5YR, 4/6). 65% to 80% clay, 10% to 20% fine to coarse sand, 10% to 15% fine gravel (subangluar to subrounded, caliche). Homogeneous. Dry. Medium stiff. No odors or staining.		1175
	CU							

(continued)

VATC ASSOCIATES INC.
1625 West University Drive
Tempe AZ 85281
(480)894-2056
(480)894-2497

Remarks Elevation in feet above mean sea level as determined by well vault elevation survey by Pima Maricopa Irrigation Project, dated June 8, 2004. Lithologic descriptions are based upon field classification of cuttings brought to ground surface.

See key sheet for symbols and abbreviations used above.

LOG AEWINGS LB-5

4 LOGS.GPJ LOG AEWINGS.GDT 7/6/04

LOG OF WELL LB-4

SHEET 2 OF 4

Client Gila River Indian Community
Project Name Phase II Groundwater Investigation
Number 34.78005.0001
Location Lone Butte Industrial Area

Drill Contractor Layne Christensen Company
Drill Method Dual-Wall Percussion (Becker AP-1000)
Drilling Started 5/12/04 Ended 5/12/04
Logged By J. Griffke

Elevation 1150.6 Mean Sea Level
Total Depth 105.0
Depth To Water ATD 78.0 AD 74.0

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	Sample Time	USCS	LITHOLOGY	DESCRIPTION	WELL CONSTRUCTION DETAIL	ELEVATION (feet)
	LB4-30'		0858			Clay with sand (CL). Yellowish red (5YR, 4/6). 65% to 80% clay, 10% to 20% fine to coarse sand, 10% to 15% fine gravel (subangluar to subrounded, caliche). Homogeneous. Dry. Medium stiff. No odors or staining. *(continued)*		
35	CU LB4-35'		0904			Clay with sand as above except color is light brown (10YR, 6/3).		1185
40	CU LB4-40'		0907	CL				1190
45	CU LB4-45'		0915			Much caliche gravels and cobbles from 39 to 48 feet below ground surface.	Hydrated 1/4"-diameter bentonite pellets	1195
50	CU LB4-50'		0923			Clay (CL). Yellowish red (5YR, 4/6). 90% to 95% clay, 5% to 10% medium sand. Homogeneous. Dry. Medium stiff. No odors or staining.		1200
55	CU LB4-55'		0930	CL		Clay as above except trace fine gravel (angular, caliche). Frequent more consistent (hard) clay chunks 1" to 2" diameter are white.		1205
	CU			SC		*(continued)*		

LOGS.GPJ LOG AEWANN6.GDT 7/8/04

LOG AEWANN6 LB-3

VATC ASSOCIATES INC.
1625 West University Drive
Tempe AZ 85281
(480)894-2056
(480)894-2497

Remarks Elevation in feet above mean sea level as determined by well vault elevation survey by Pima Maricopa Irrigation Project, dated June 8, 2004. Lithologic descriptions are based upon field classification of cuttings brought to ground surface.

See key sheet for symbols and abbreviations used above.

LOG OF WELL LB-4

SHEET 3 OF 4

Client: Gila River Indian Community
Project Name: Phase II Groundwater Investigation
Number: 34.78005.0001
Location: Lone Butte Industrial Area
Drill Contractor: Layne Christensen Company
Drill Method: Dual-Wall Percussion (Becker AP-1000)
Drilling Started: 5/12/04 Ended: 5/12/04
Logged By: J. Griffike
Elevation: 1150.6 Mean Sea Level
Total Depth: 105.0
Depth To Water: ATD 78.0 AD 74.0

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	Sample Time	USCS	LITHOLOGY	DESCRIPTION	WELL CONSTRUCTION DETAIL	ELEVATION (feet)
	LB4-60'		0932	SC		Clayey sand (SC). Yellowish red (5YR, 4/6). 75% to 85% fine sand, 15% to 25% clay. Homogeneous. Moist. Weak cementation. No odors or staining.*(continued)*		
65	CU LB4-65'		0934					1215
				CL		Clay with sand (CL). Yellowish red (5YR, 4/6). 80% to 90% clay, 10% to 20% fine sand. Homogeneous. Moist. Hard. No odors or staining.		
70	CU LB4-70'		0937					1220
75	CU LB4-75'		0939				No. 3 Colorado Silica Sand 4" Sch 40 PVC slot screen with 0.02" slots (flush-threaded)	1225
				GP		Poorly graded gravel (GP). Dark brown (10YR, 3/3). 45% to 55% medium gravel (subrounded to rounded, metagranitic/granitic), 45% to 55% medium to coarse sand, trace to 5% clay. Homogeneous. Wet. Weak cementation. No odors or staining.		
80	CU LB4-80'		0941					1230
85	CU LB4-85'		0948					1235
	CU							

(continued)

ATC ASSOCIATES INC.
1625 West University Drive
Tempe AZ 85281
(480)894-2056
(480)894-2497

Remarks: Elevation in feet above mean sea level as determined by well vault elevation survey by Pima Maricopa Irrigation Project, dated June 8, 2004. Lithologic descriptions are based upon field classification of cuttings brought to ground surface.

See key sheet for symbols and abbreviations used above.

LOG AEWMN05 LB-4LOGS.GPJ LOG AEWMN05.GDT 7/6/04

LOG OF WELL LB-4

SHEET 4 OF 4

Client Gila River Indian Community
Project Name Phase II Groundwater Investigation
Number 34.78005.0001
Location Lone Butte Industrial Area

Drill Contractor Layne Christensen Company
Drill Method Dual-Wall Percussion (Becker AP-1000)
Drilling Started 5/12/04 Ended 5/12/04
Logged By J. Griffke

Elevation 1150.6 Mean Sea Level
Total Depth 105.0
Depth To Water ATD 78.0 AD 74.0

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	Sample Time	USCS	LITHOLOGY	DESCRIPTION	WELL CONSTRUCTION DETAIL	ELEVATION (feet)
	LB4-90'		0955	GP		Poorly graded gravel (GP). Dark brown (10YR, 3/3). 45% to 55% medium gravel (subrounded to rounded, metagranitic/granitic), 45% to 55% medium to coarse sand, trace to 5% clay. Homogeneous. Wet. Weak cementation. No odors or staining. *(continued)*		
95	CU LB4-95'		1005	SW SC		Well graded sand with clay and gravel (SW-SC). Dark brown (10YR, 3/3). 40% to 50% fine to coarse sand, 25% to 35% fine to medium gravel (subrounded to rounded, metagranitic/granitic), 10% to 20% clay. Homogeneous. Wet. Weak cementation. No odors or staining.		1245
100	CU LB4-100'		1015					1250
105	CU LB4-105'		1023			Bottom of hole at 105 feet		1255
110								1260
115								1265

J-4 LOGS.GPJ LOG AEWIN05.GDT 7/6/04

LOG AEWIN05 LB-4

VATC ASSOCIATES INC.
1625 West University Drive
Tempe AZ 85281
(480)894-2056
(480)894-2497

Remarks Elevation in feet above mean sea level as determined by well vault elevation survey by Pima Maricopa Irrigation Project, dated June 8, 2004. Lithologic descriptions are based upon field classification of cuttings brought to ground surface.

See key sheet for symbols and abbreviations used above.

APPENDIX B-4

ENVIRONMENTAL PERMITS

ROMIC
ENVIRONMENTAL
TECHNOLOGIES CORP.

Environmental Permits

EPA Hazardous Waste Facility Permit	AZD009015389
City of Chandler Industrial Waste Water Discharge Permit	24
NPDES Permit To Discharge Treated Groundwater	AZR05A71F
US Department of Transportation Hazardous Materials Certification of Registration	060101002044J

ROMIC ENVIRONMENTAL TECHNOLOGIES CORP.

Environmental Permits

EPA Hazardous Waste Activity Notification, Interim Status (Part A)	AZD009015389
City of Chandler Industrial Waste Water Discharge Permit	24
NPDES Permit To Discharge Stormwater	AZR05A71F
U.S. Department of Transportation Hazardous Materials Certification of Registration	053003 008 008LN