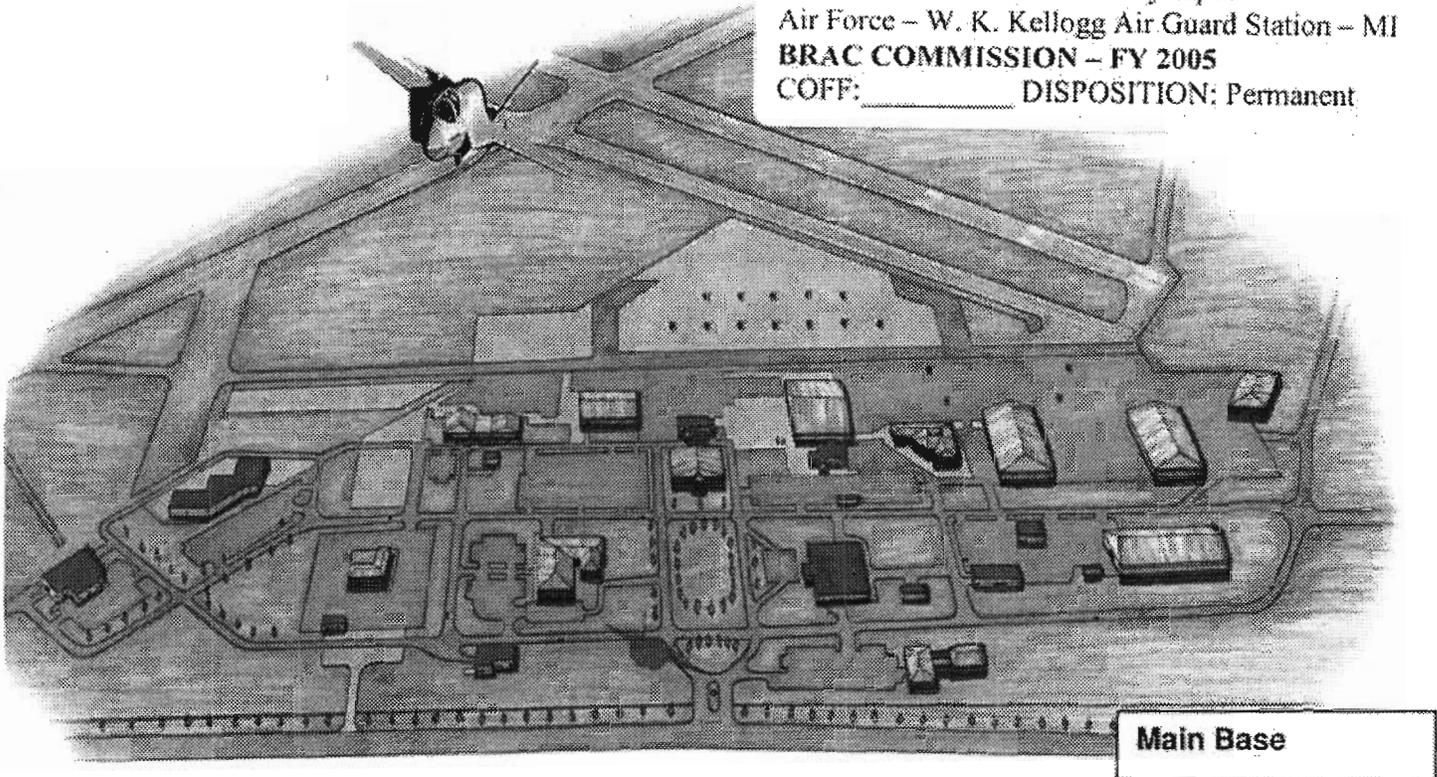


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103-06A – AF49 – Community Input
Air Force – W. K. Kellogg Air Guard Station – MI
BRAC COMMISSION – FY 2005
COFF: _____ DISPOSITION: Permanent



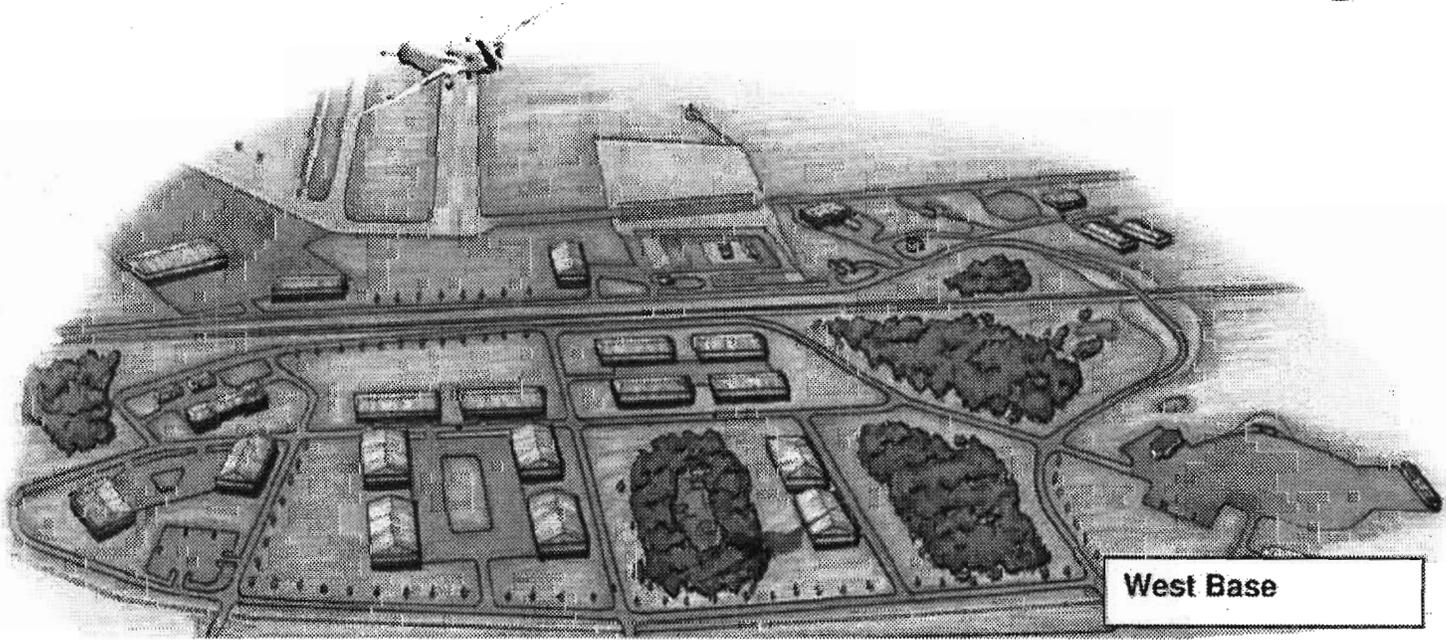
Main Base

BRAC Commission

JUL 27 2005

Received

110th Fighter Wing Land Use Plan Battle Creek Air National Guard Base, Michigan



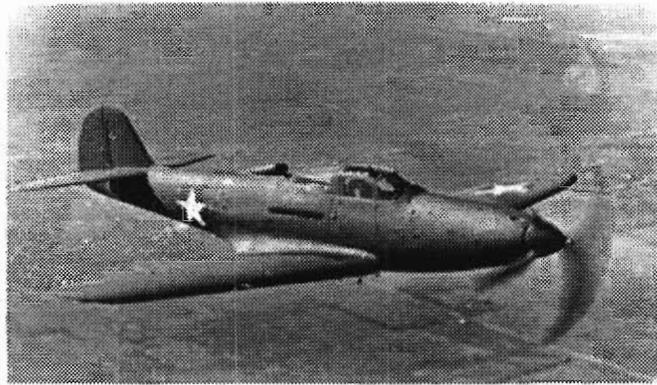
West Base

The purpose of this study is to provide a comprehensive land use plan to identify areas available for development at the Battle Creek Air National Guard Base. This information will give key personnel in the base development process detailed information on space available for future development, identify potential constraints on land use, and identify types of functions that would be best suited to the areas available. The study also identifies constraints associated with "open" areas. An initial base master plan was completed in 1987. Since that time various new facilities have been constructed, as well as several renovations and additions to existing facilities. In addition, the master plan was prepared reflecting a contingent of 18 OA-37 aircraft, which are no longer operating on the premises. This land use plan includes construction activities that have occurred, as well as those that are under construction or funded/planned for the near future. It takes into account the current A-10 squadron and future mission planning.

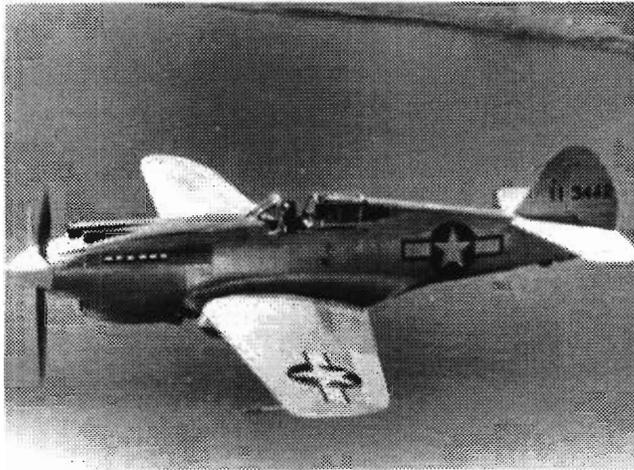


History and Mission

History: The 110 Fighter Wing lineage traces from the 361st Fighter Group, 375th Fighter Squadron, assigned to the Eighth Army Air Force during World War II. The 361st, based in Bottisham,



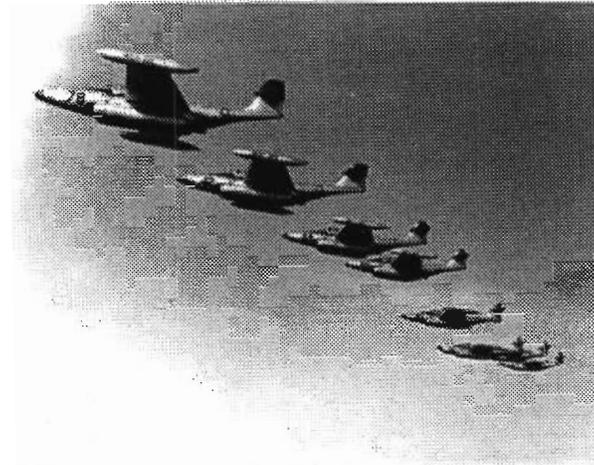
England during the war, flew the famed P-47 Thunderbolts and P-51 Mustangs. When the War ended, these units deactivated but in 1946 were reactivated as the 127th Fighter Group and 172nd Fighter Squadron, respectively.



Governor Kim Sigler designated Kellogg Field as the location for the 172nd Fighter Squadron in 1946. One year later, P-51 Mustangs arrived as the first assigned combat aircraft. In 1951, the 172nd FS mobilized for the Korean War and became attached

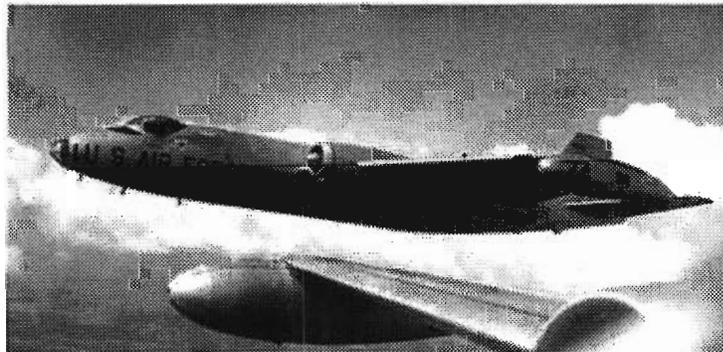
to the 56th Fighter Wing at Selfridge AFB, MI. After deactivation, the 172nd continued flying the Mustang, re-designated the F-51 by the Air Force, until it acquired its first jet aircraft in 1954.

From 1954 through 1957, the 172nd carried out fighter-bomber and fighter-interceptor missions flying the F-86 Sabre and F-89 Scorpion. In 1956, the unit expanded when National Guard Bureau changed the unit from



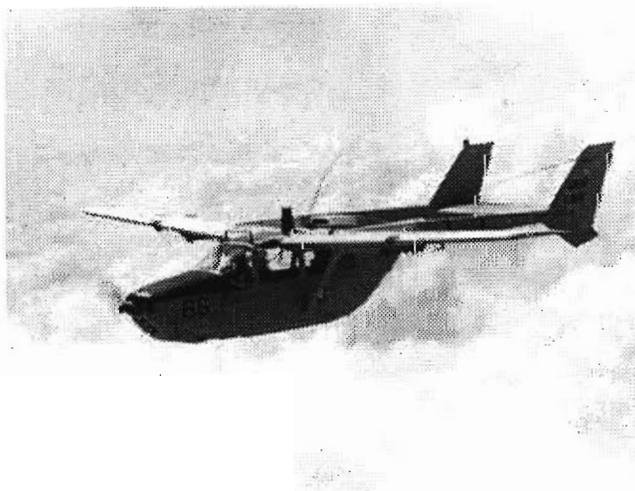
squadron to group status and designated the new group the 110 Fighter Group.

In 1958, the unit mission changed to tactical reconnaissance and the unit began flying the RB-57 Canberra. The unit flew RB-57's thirteen



years, longer than any other assigned aircraft to the 110th.

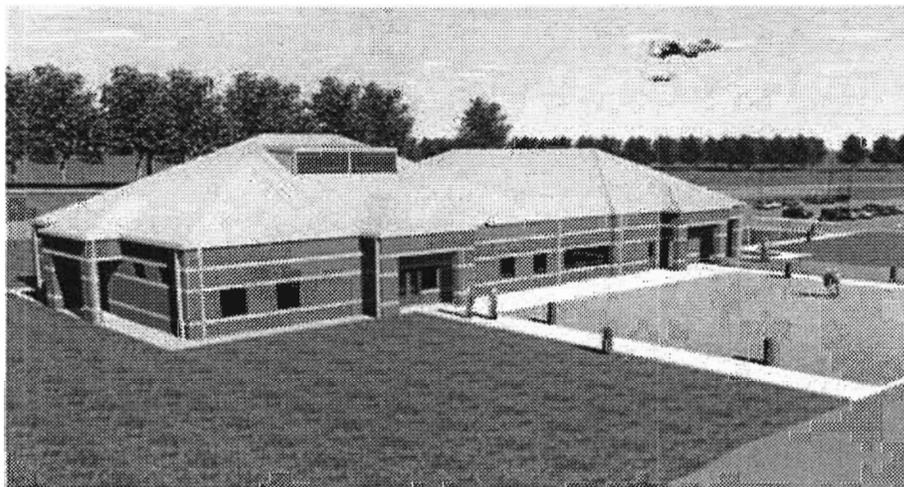
In June 1971, the unit was redesignated the 110 Tactical Air Support Group. The new



mission changed to tactical air support and forward air control (FAC) tasking. The unit began this mission flying the propeller driven O-2 Skymaster, then in 1980 converted to jets again, flying the

OA-37 Dragonfly. In 1991, the 110 TASG transitioned to a new aircraft, the A-10 Thunderbolt. Since the arrival of the A-10 in 1991, the base has executed over \$28 million dollars in new facility construction including 29 new facilities.

Mission: The Battle Creek Air National Guard Base, located at W.K. Kellogg Regional Airport, received federal recognition in September 1947. During its over fifty years, the unit has carried out a variety of combat reconnaissance and tactical air support



missions. It has grown from sixty-six men who attended the first squadron Unit Training

Assembly (UTA) in 1947, to almost one thousand men and women who comprise the 110 Fighter Wing today.

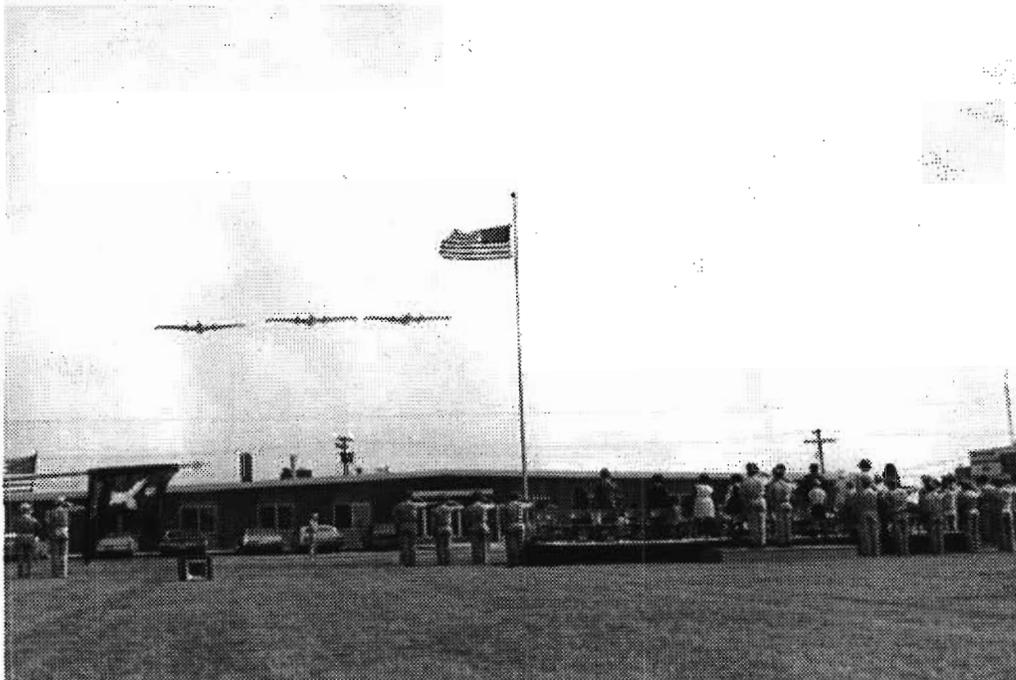


Since 1991, the 110 Fighter Wing at Battle Creek Air National Guard Base has been federally tasked with a close air support (CAS) mission. This includes the

capability to carry out a forward air control (FAC) role.

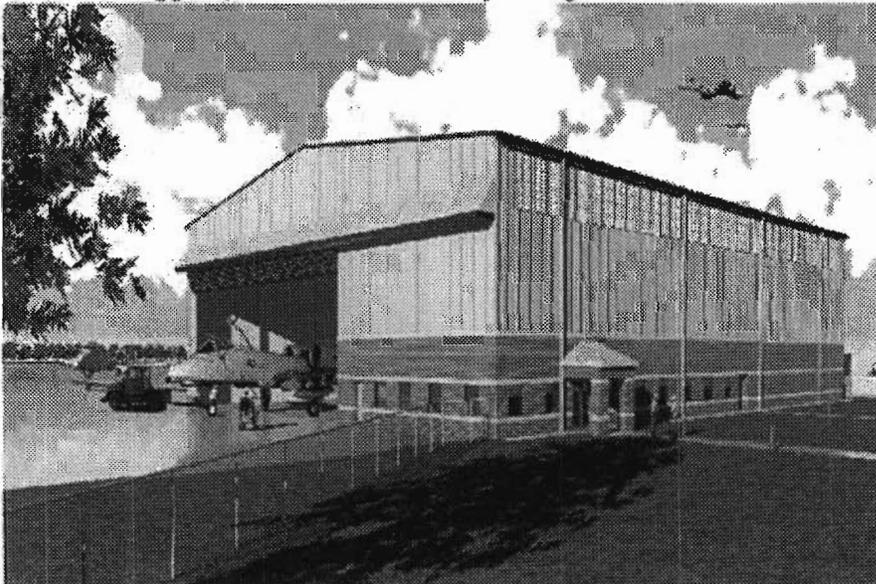
Mission success depends on the contributions of all members of the 110 Fighter Wing, who work together to provide a variety of support and administrative functions. Members require continual training to maintain their readiness and capability for assigned missions. Members continually deploy, throughout the United States and overseas, for training and to support active duty forces. During peacetime, the 110 Fighter Wing comes under the jurisdiction of the Michigan Governor through the Adjutant General, Department of Military and Veterans Affairs, Michigan National Guard. When directed by the state, the 110 Fighter Wing can aid in natural disasters, assist in controlling civil disorders, and provide humanitarian relief activities.

When federally activated by the President of the United States, the 110 Fighter Wing falls under its gaining command, Air Combat Command (ACC) with assignment to the Eighth Air Force, headquartered in Louisiana. The 110 Fighter Wing might be activated in its entirety to carry out its primary mission. In addition, wing personnel possess the individual skills and abilities needed to deploy as single or small group elements in support of worldwide tasking.



In real-world operations, close air support requires air action against any hostile targets that threaten or lie in proximity to friendly forces. The CAS role also requires coordinated integration of air missions with the movement of those forces. Forward air controllers (FACs) assist in that coordination by forward air observation in the battle area. From there, they direct the action of combat aircraft specifically engaged in support of land forces.

The 110- Fighter Wing flies the Fairchild Republic A/OA-10 Thunderbolt II. The Air Force acquired the Thunderbolt II specifically for the CAS role. The A-10 inherited its name from the historic P-47 Thunderbolt, often used for close air support during World War II. The current Thunderbolt II can easily maneuver at low speeds and altitude. This gives it the ability to deliver accurate and deadly firepower, especially against enemy tanks. Its rugged platform allows it to fly a long combat radius, loiter for lengthy periods

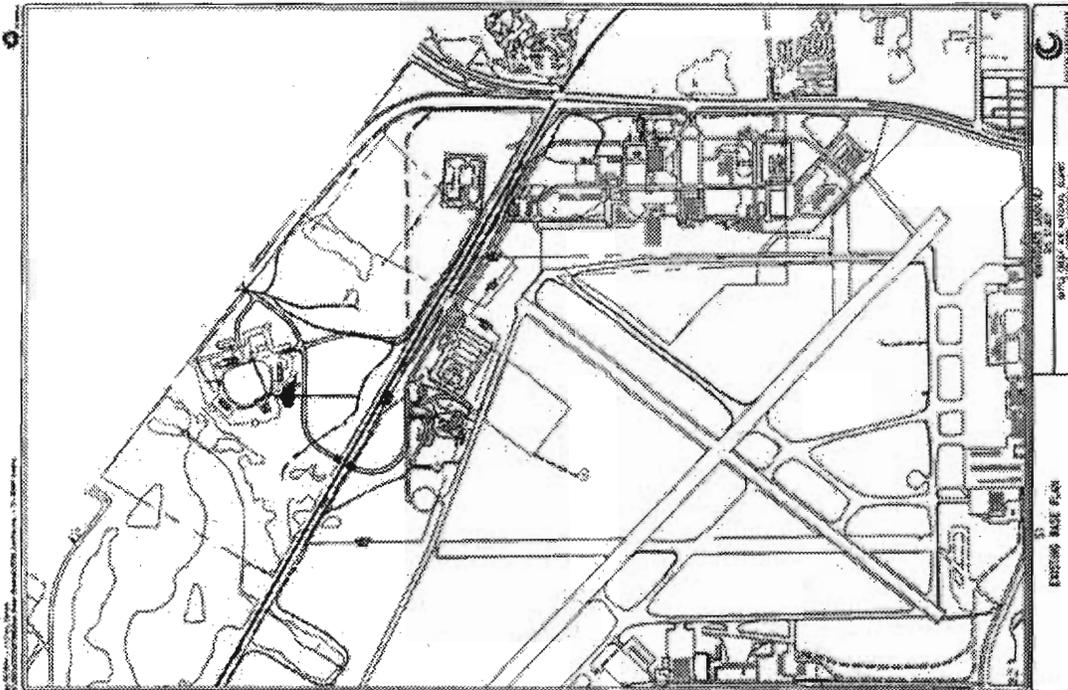


in the battle area, and still survive in a hostile environment. Its design permits operation from forward area

bases, which often have limited service facilities and short takeoff and landing access.

Existing Facilities/Overall Base Plan – Sheet S1

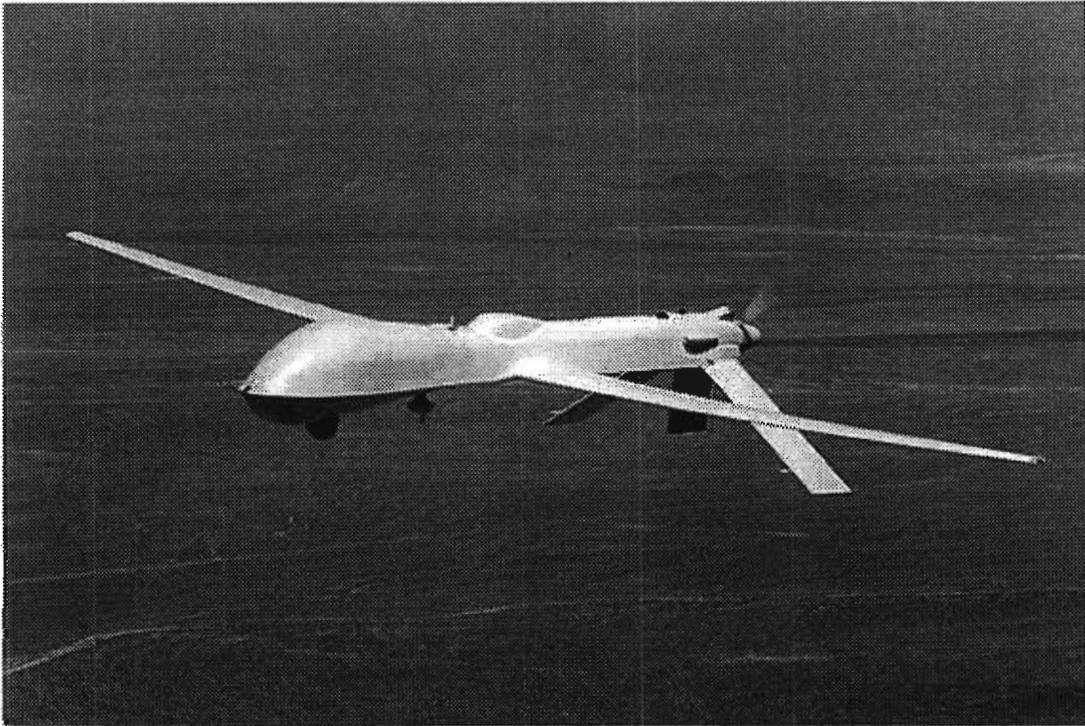
The existing base consists of approximately 320 acres of land leased from the City of Battle Creek adjacent to the W.K. Kellogg Airport, located in Battle Creek, MI. The current lease expires in 2036. The base is currently pursuing a new lease to be signed in 2009 and expiring in 2059. The base is bounded by the airport on the east and south sides, Martin Luther King Drive on the West, and Dickman Road on the north. The base is divided into east and west sides by the Canadian National Railroad, which runs north and south through the center of the base. The east side is the original base site, and contains the majority of the existing base facilities. The recently completed Munitions project included construction of a bridge over the railroad tracks, connecting the two sides of the base and opening the west side for future development. Apron and taxiway space are located on the south side of the base.



Utilities

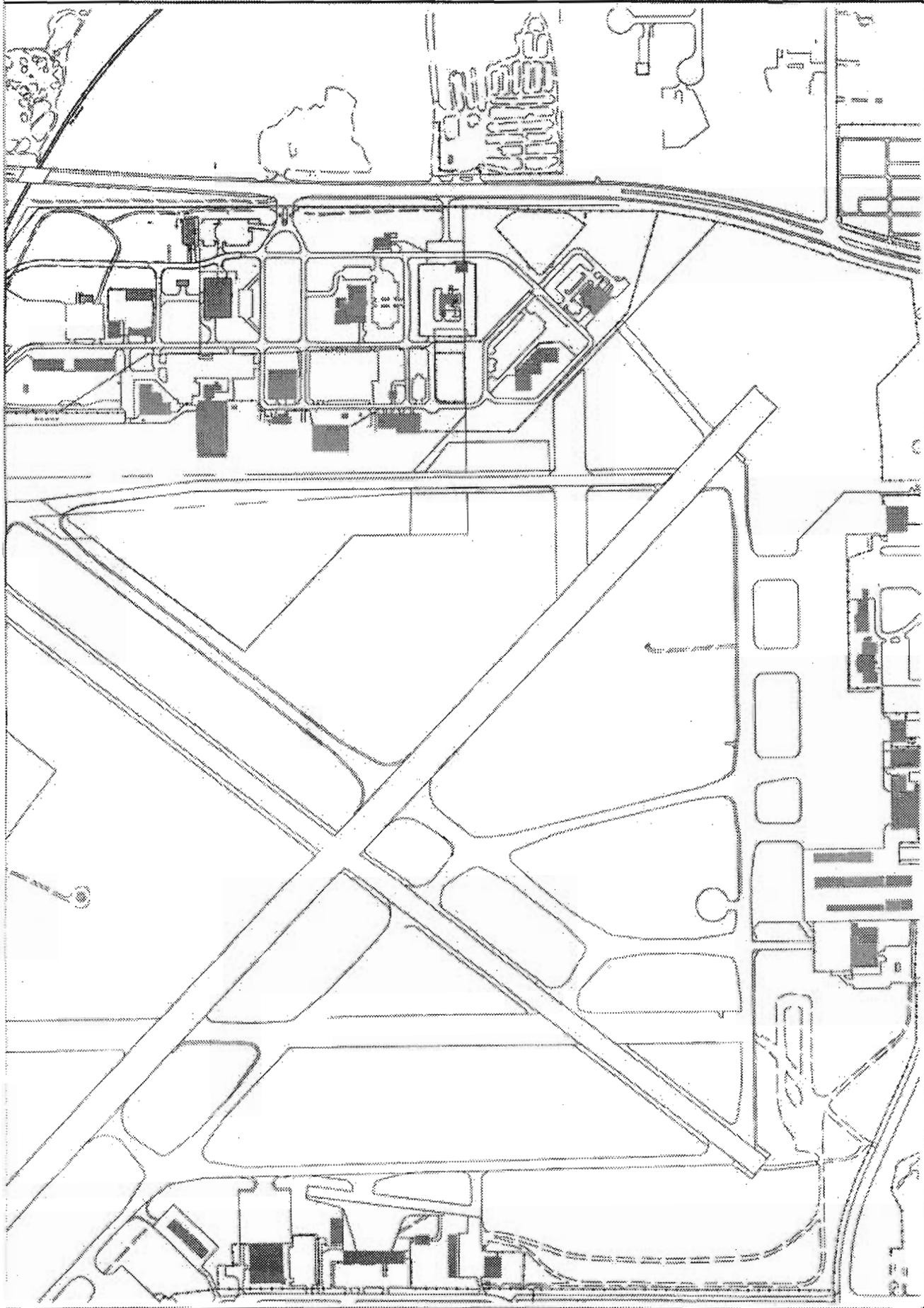
The east side of the base is currently served electric from Consumers Energy, natural gas from SEMCO, and domestic water and sanitary sewer from the City of Battle Creek. These services are each routed to a single service point, adjacent to the main entrance, and distributed on base. The base is provided communication services through a main feed east of the main gate off Dickman Road. The main feed is then distributed at building 6905, with plans to put the main hub in building 6904 in the near future. On-site storm utilities are collected and routed to a detention pond on the west parcel.

The west side of the base has a separate electric service from Consumers Energy, routed from Martin Luther King Drive. The Munitions complex and Vehicle Maintenance complex each have separate gas feeds from SEMCO. Storm drainage is performed with local (within or adjacent to each complex) on-site drainage and retention. Utility pipes under the Canadian National Railroad right of way provided as part of the Vehicle Maintenance Project provide the opportunity to loop electrical and water service giving the base a redundant source in case of service interruption.



Ground Transportation Network

The existing ground transportation network consists of a main access gate off Dickman Road with two alternate gates. The first alternate gate is located east of the main gate with access from Dickman Road. The second alternate gate is located adjacent to the new munitions complex off Martin Luther King Drive. Existing streets and parking are in good condition and are adequate to handle existing traffic loads as well as any loads conceivably generated by new missions. Existing base parking is adequate to meet current loads. There is an on-going effort to bring the existing parking lots into conformance with AT/FP standards. This should not have a significant impact on capacity.



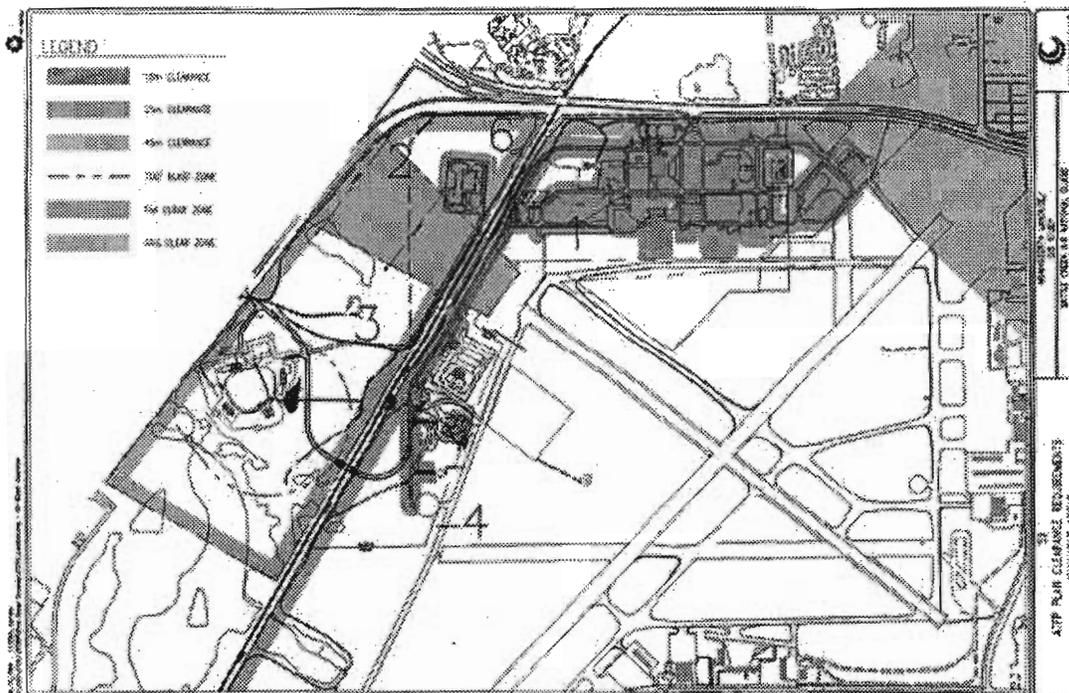
 CAPITAL CONSULTANTS www.capitalconsultants.com	MBMV032679 LANDUSE/ GIS STUDY	S1 EXISTING BASE PLAN
	BATTLE CREEK AIR NATIONAL GUARD BATTLE CREEK, MICHIGAN	

The existing Civil Engineering building site and adjacent storage buildings are slated for replacement. The new Civil Engineering Complex will be located away from the existing site and will open up an area adjacent to the existing aircraft parking ramp. This site would be ideal for new facilities requiring access to the airfield (Area 1). This also has the potential for the existing aircraft parking apron to be expanded if required to support a new mission. Possible other areas for future construction include northwest of the new Vehicle Maintenance complex (Area 2), northwest of the new railroad overpass (Area 3), and south of the existing run-up pad (Area 4). Area 5 is immediately adjacent to the south side of runway 13's clearance zone. Area 6 is immediately north of the existing storm detention basin on the west parcel.



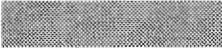
Development Restrictions – Sheet S2

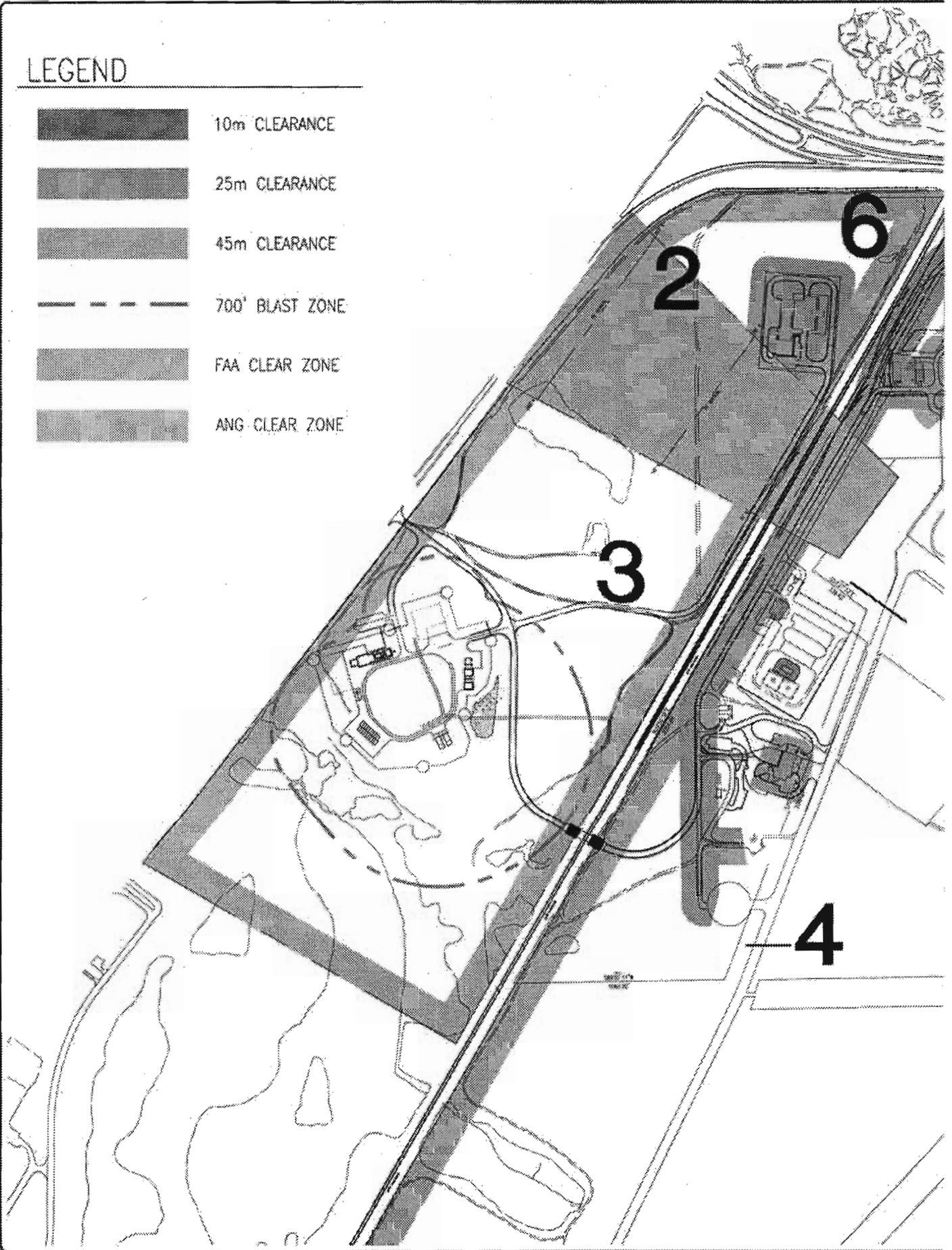
Current requirements for AT/FP have resulted in several setback requirements to minimize the occurrence and impact of attacks on base. These requirements are dictated in UFC 4-010-01, dated 8 Oct 2003. In summary, clear zones are required of 45 meters (149 feet) from the uncontrolled perimeter fence around the base, including the railroad tracks; 25 meters (82 feet) from buildings with more than 10 occupants, parking areas and roadways; and 10 meters (33 feet) from all other buildings. These setback requirements are summarized on sheet S2. In addition, the required FAA vertical clearances are shown for runway 13/31, and the ANG Clearance Zone 1 is shown for runway 5/23. Explosive quantity-distance zones for the munitions complex have also been included on this plan.





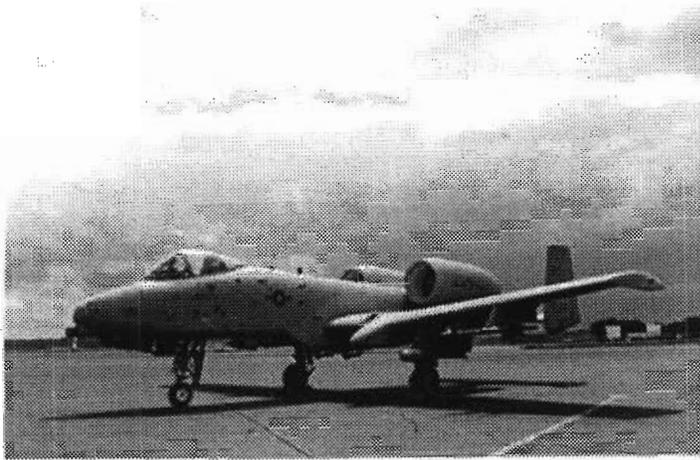
LEGEND

-  10m CLEARANCE
-  25m CLEARANCE
-  45m CLEARANCE
-  700' BLAST ZONE
-  FAA CLEAR ZONE
-  ANG CLEAR ZONE



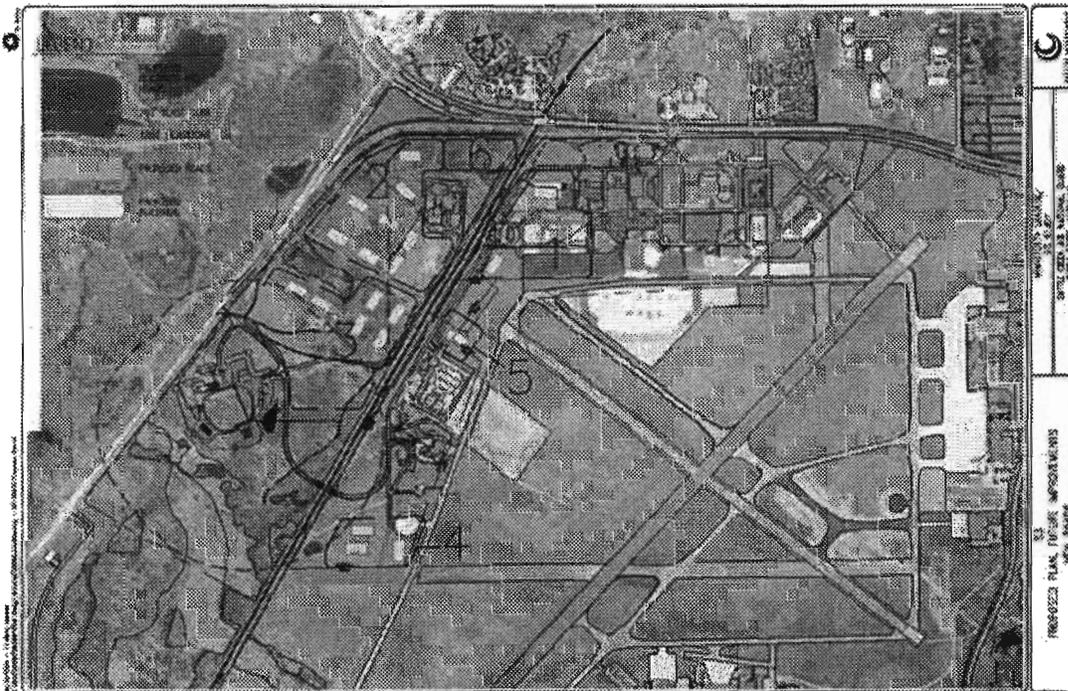
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Future Mission – Available Areas

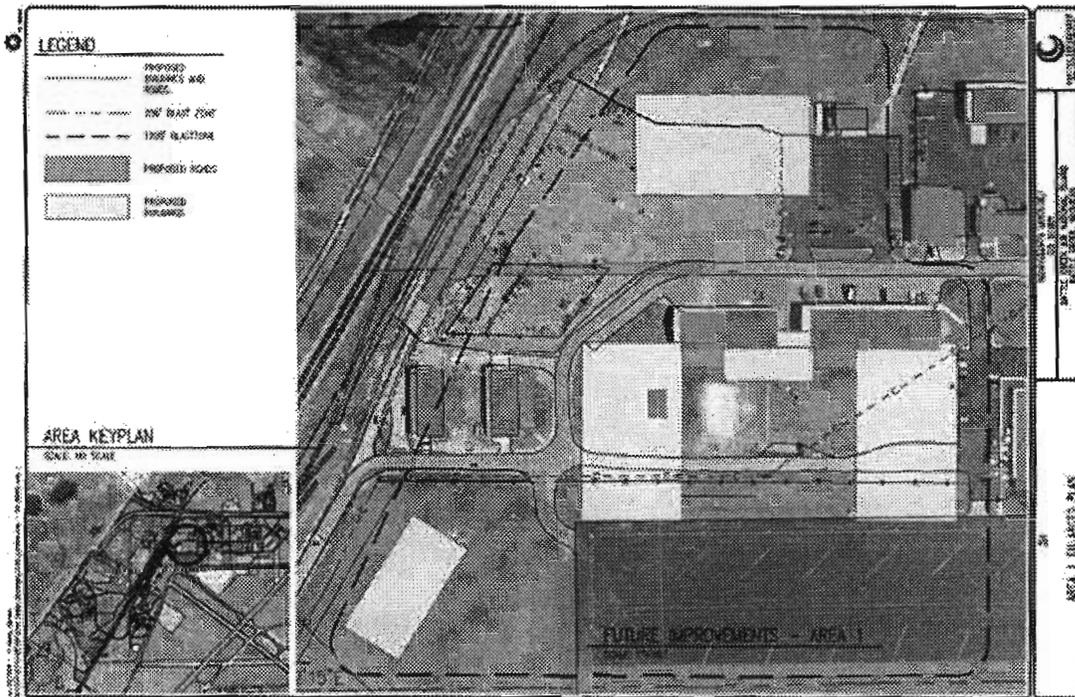


The existing base affords several excellent areas for future development containing approximately 69 acres of land suitable for several diverse uses (Sheet S3). Future planning takes

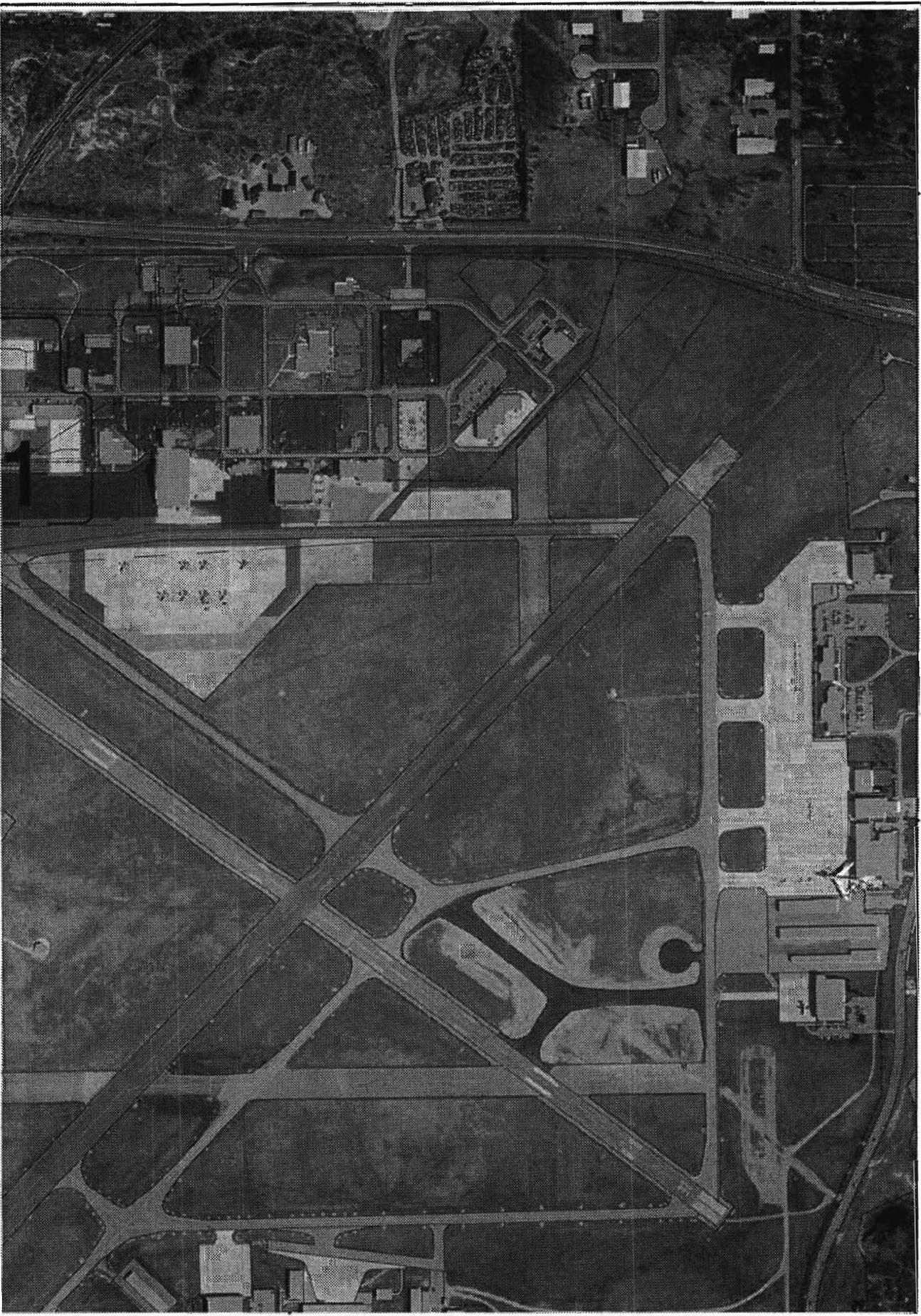
into account the continued operation of the existing squadron of A-10's, with the potential addition of future missions. These future missions may replace the current mission, augment it, or perform a completely separate function. Future missions could be located in new additional hangars, and will require additional support facilities.



Area 1: Area 1 is relatively flat and contains approximately 17 acres of area (Sheet S4). It is large enough to house two additional hangars, a squadron operations building and one other large facility. It can also allow expansion of the existing west aircraft parking ramp if required. It is adjacent to the flight line making it ideal for missions requiring direct access to the flightline. This area is currently served with gas, water, electric, sanitary and storm sewer.







S3

PROPOSED PLAN, FUTURE IMPROVEMENTS
NEW ROADS

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GIS STUDY

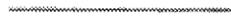
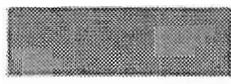
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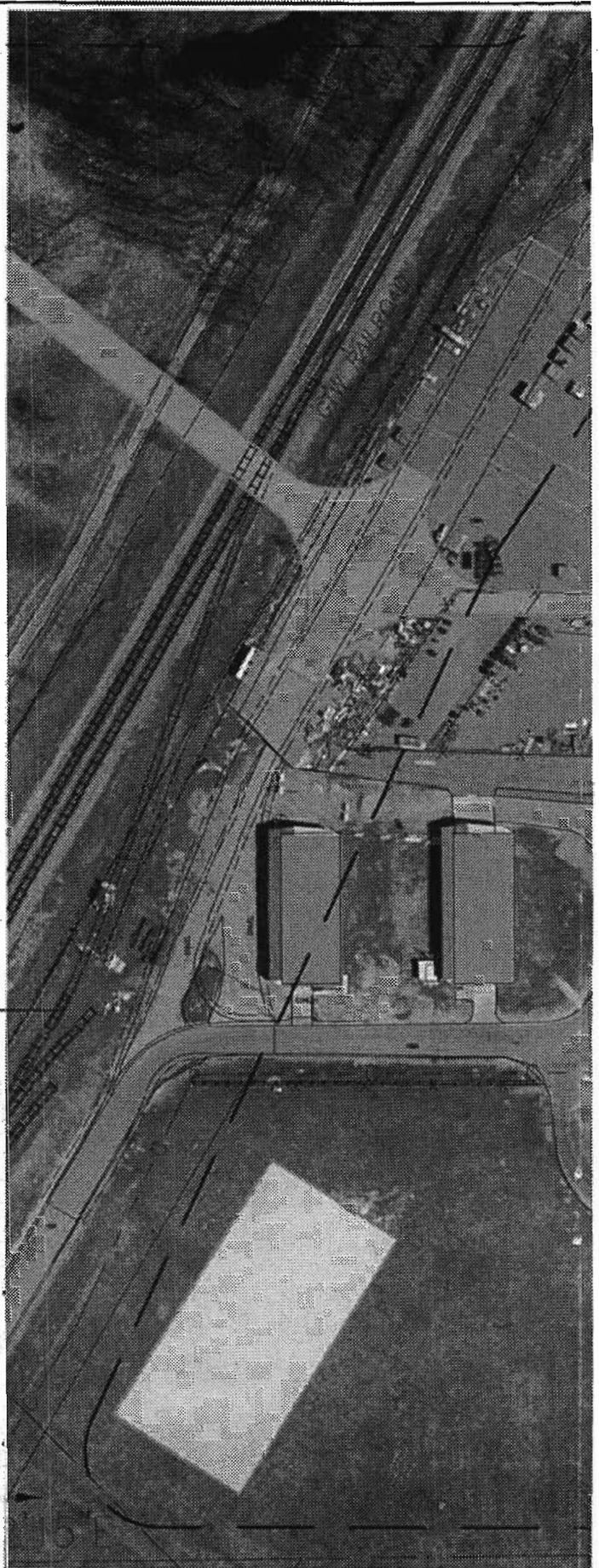


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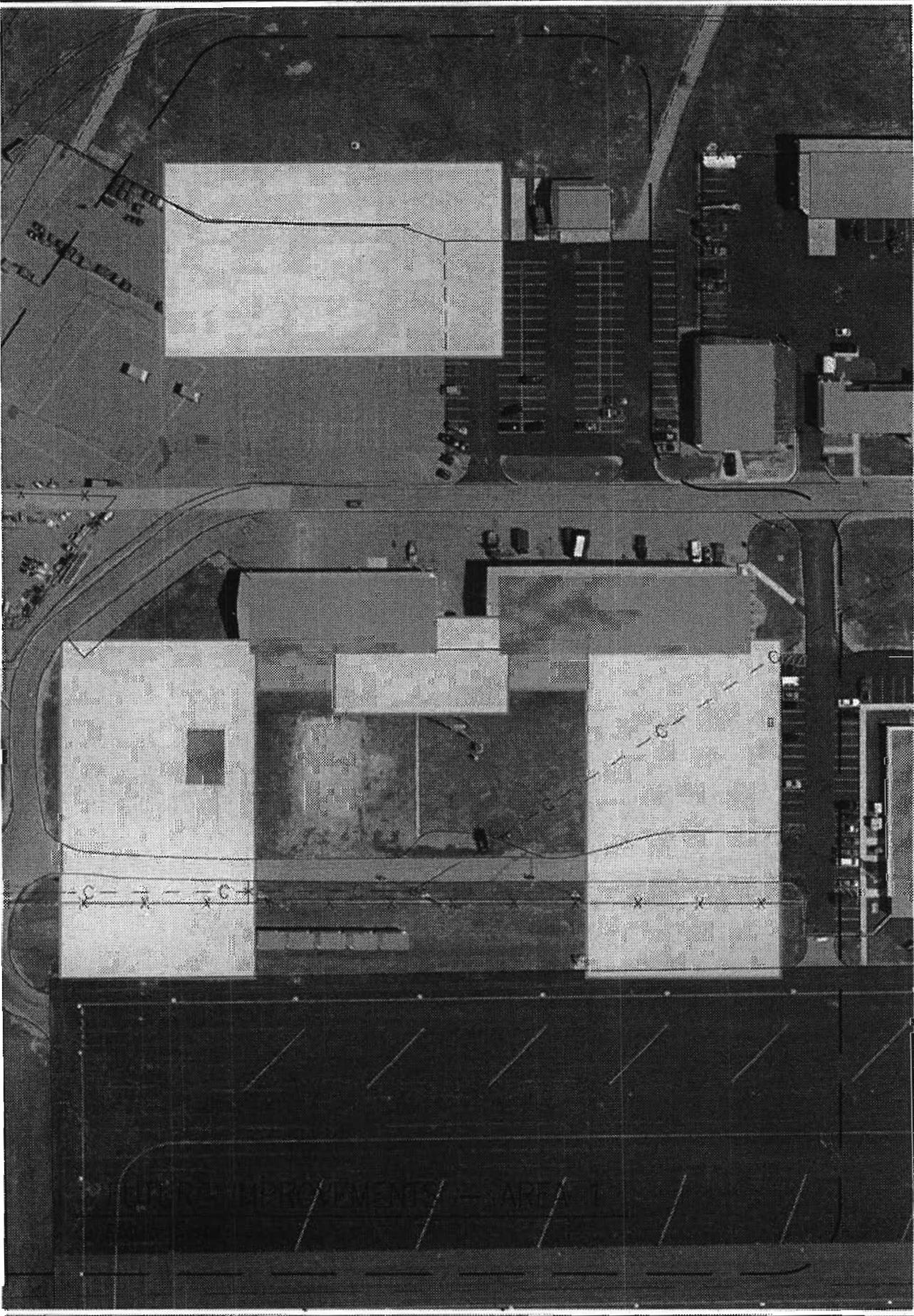
-  PROPOSED BUILDINGS AND ROADS
-  700' BLAST ZONE
-  1200' BLASTZONE
-  PROPOSED ROADS
-  PROPOSED BUILDINGS

AREA KEYPLAN

SCALE: NO SCALE



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S4

AREA 1 ENLARGED PLAN

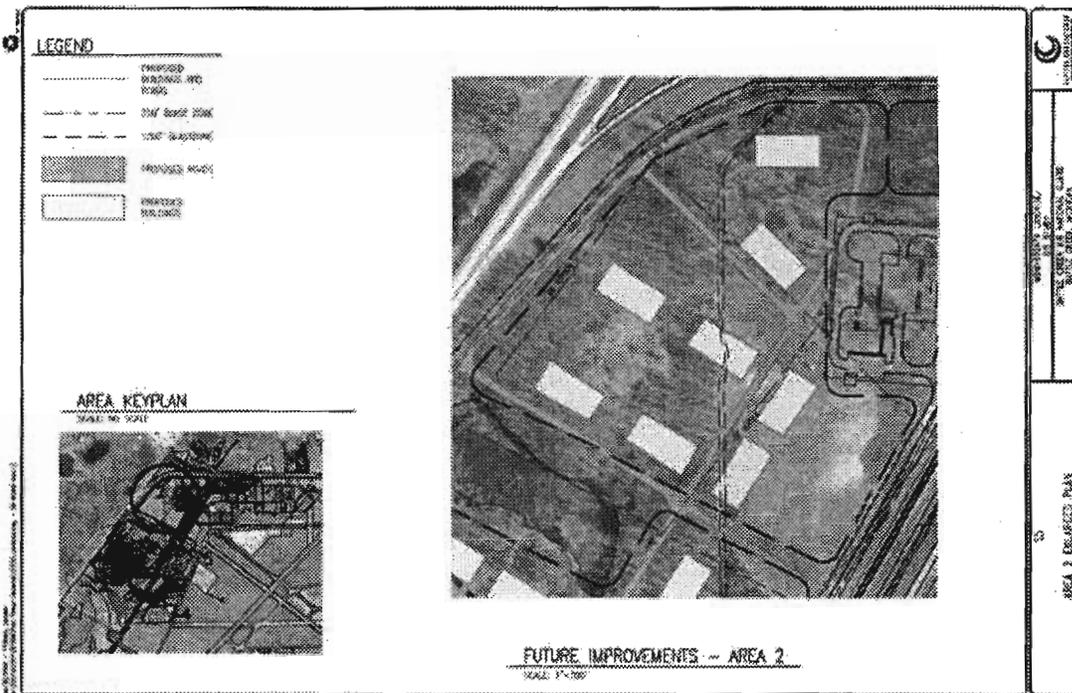
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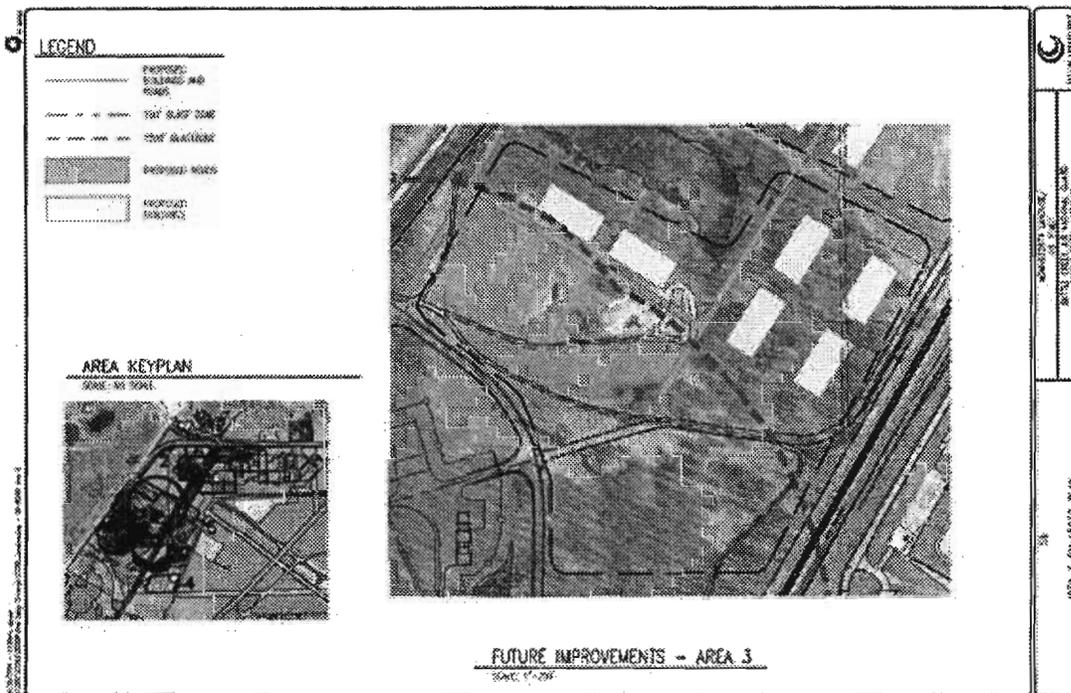


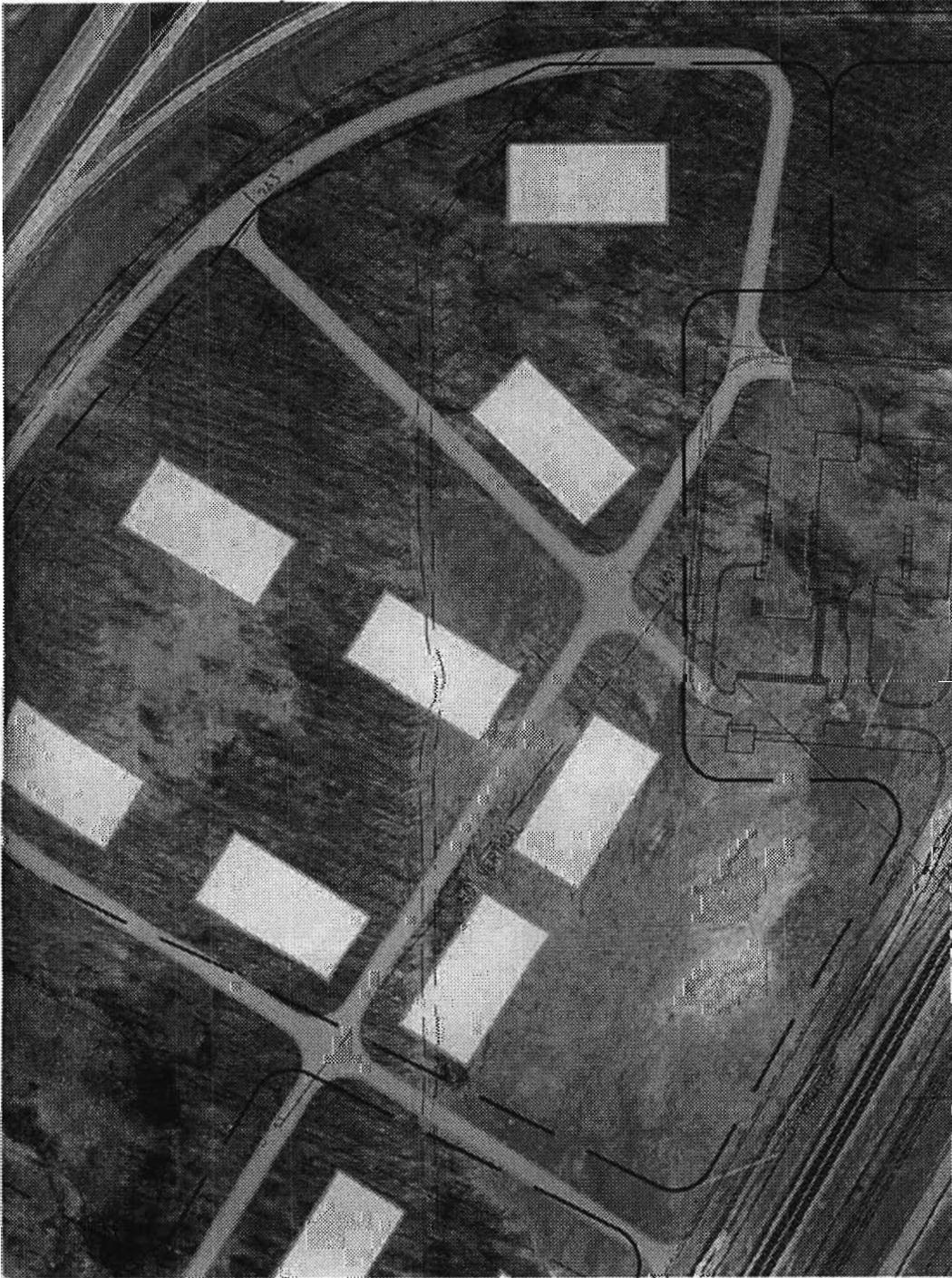
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Area 2: Area 2 is located on the west property, has rolling terrain and contains approximately 25 acres of area (Sheet S5); it is the desired location for the replacement for the Civil Engineering facilities. In addition, the area immediately to the south of Area 2, within the FAA clear zone, could be developed provided any structure falls under the 1:20 vertical clearance requirement, as runway 13/31 is not an active ANG runway. Area 2 is ideally suited for support functions or other missions not related to the flightline. The area is large enough to hold the future Civil Engineering Complex and other functions. This area is currently served with gas, water and electric from the adjacent Vehicle Maintenance complex. Sanitary sewer would need to be extended under the railroad tracks, or to Martin Luther King Avenue. Storm sewer service would need to be routed via existing drainage ditches to the existing detention areas.



Area 3: Area 3 is on the west property, north of the bridge abutment, and contains approximately 12 acres of area (Sheet S6). It consists of lightly rolling terrain. This area is suited for the same types of functions as Area 2. This area is not currently served with gas, water or electric. These utilities could be extended from either the Vehicle Maintenance or Munitions Complex, or directly from Martin Luther King Avenue. Sanitary sewer would need to be extended under the railroad tracks, or to Martin Luther King Avenue. Storm sewer service would need to be routed via existing drainage ditches to the existing detention areas.





UTURE IMPROVEMENTS — AREA 2

1"=200'

S5

AREA 2 ENLARGED PLAN

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GIS STUDY

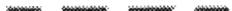
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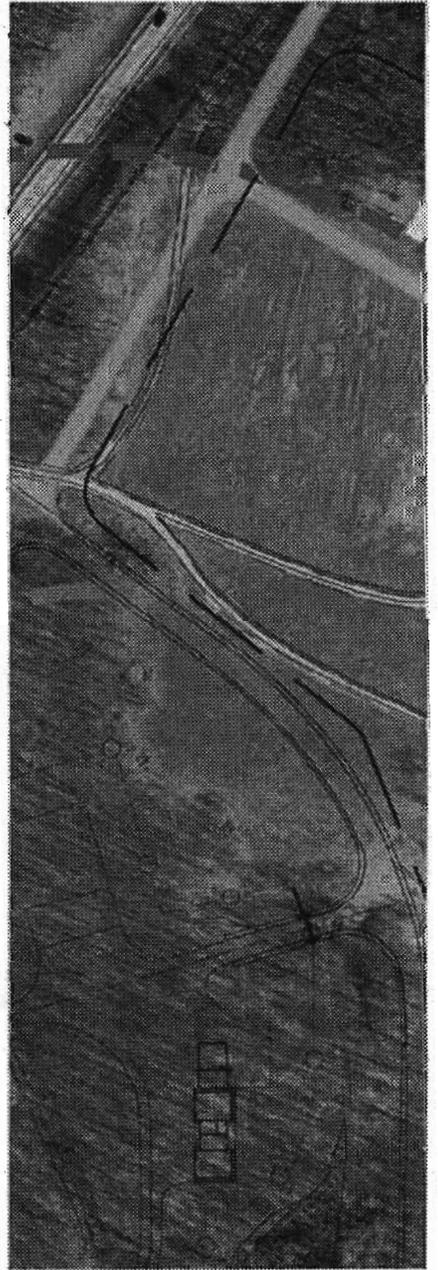
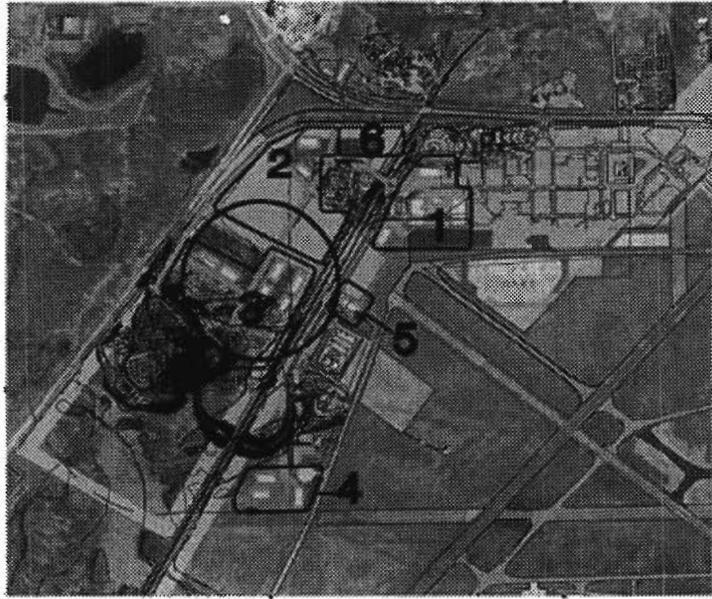


LEGEND

-  PROPOSED BUILDINGS AND ROADS
-  700' BLAST ZONE
-  1200' BLASTZONE
-  PROPOSED ROADS
-  PROPOSED BUILDINGS

AREA KEYPLAN

SCALE: NO SCALE

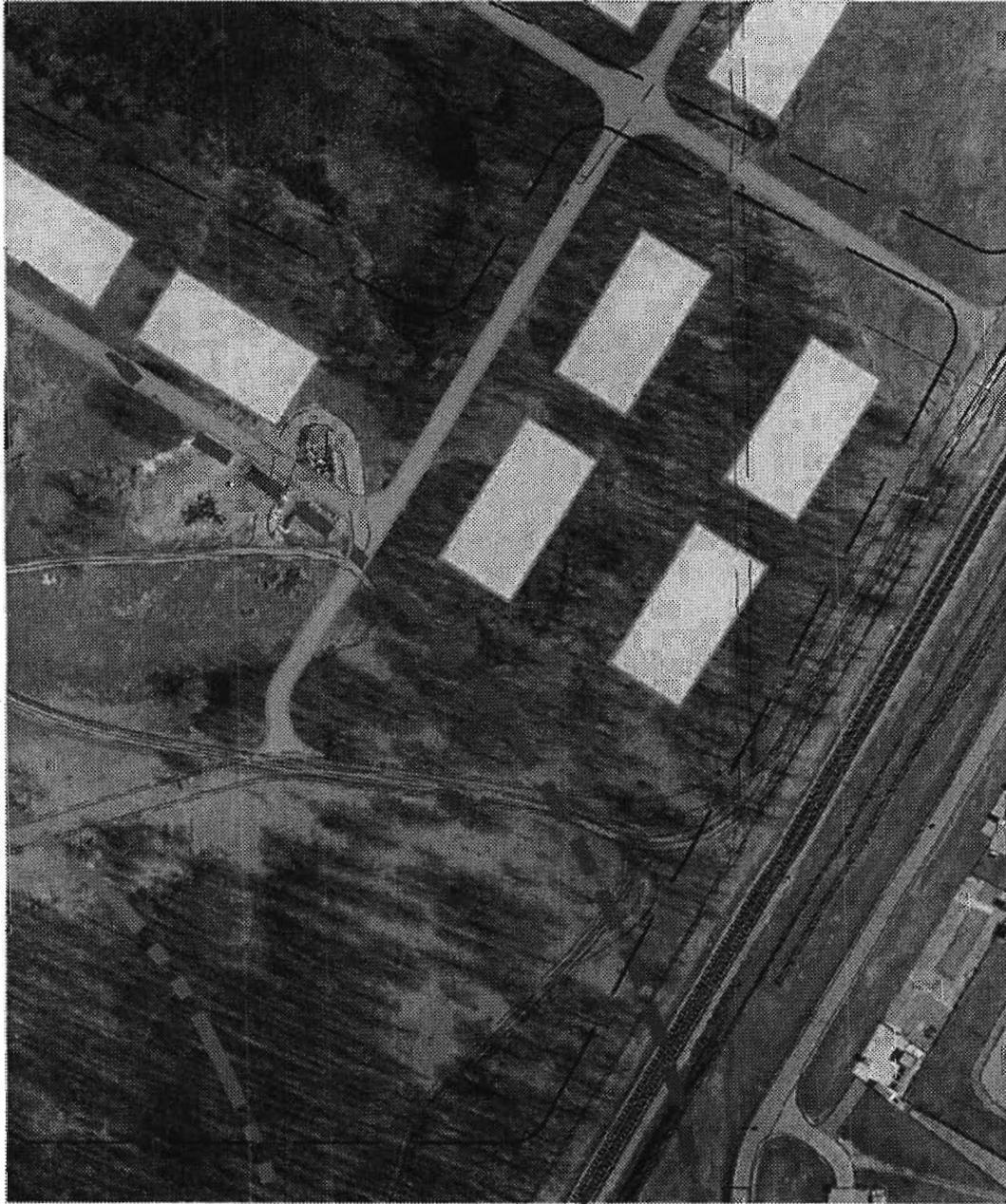


FUTURE

SCALE: 1"=20'

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IMPROVEMENTS - AREA 3



S6

AREA 3 ENLARGED PLAN

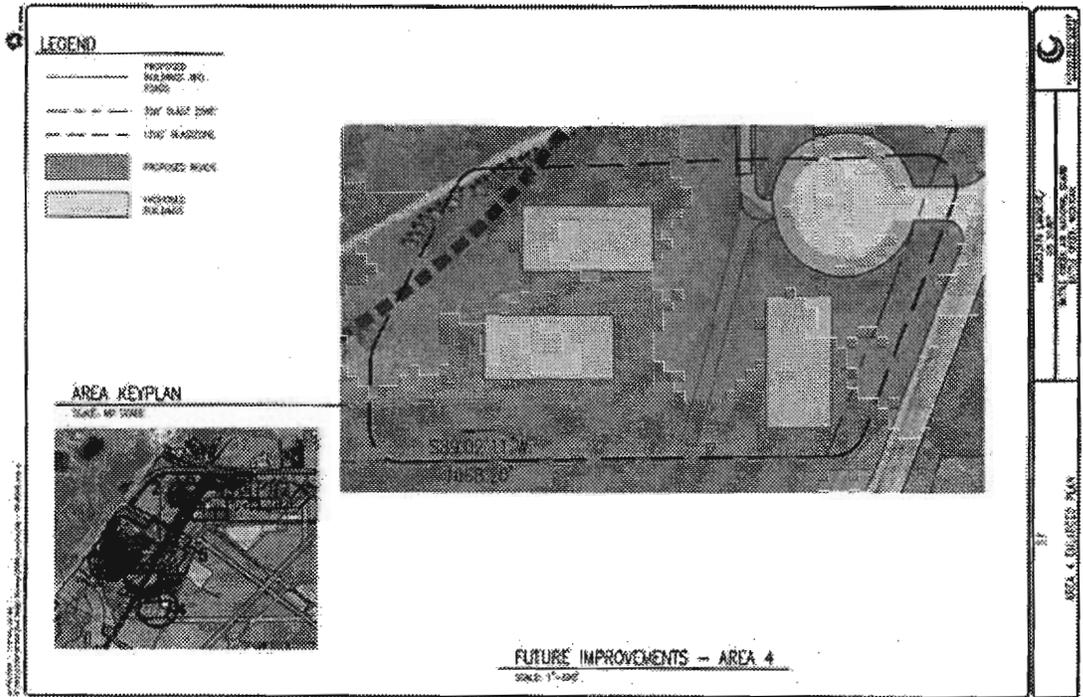
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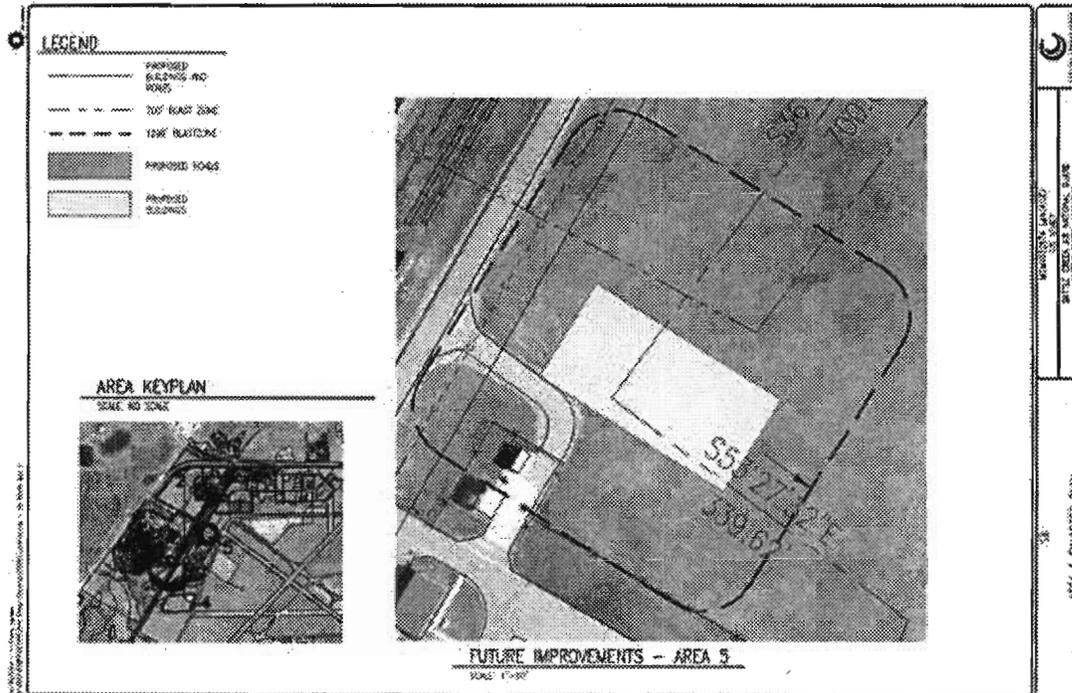


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Area 4: Area 4 is south of the existing power check pad, and contains 8 acres of area (Sheet S7). Due to the noise generated by the pad and its location on an isolated part of the base, it would only be suitable for storage facilities not requiring a high degree of security. Utilities would need to be extended from the Fire Crash/Rescue building; this would involve upgrade of the existing sanitary force main.

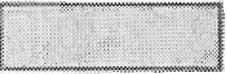


Area 5: Area 5 is the area immediately adjacent to the approach area for runway 13, and contains 3 acres of area (Sheet S8). Due to the proximity of the approach area, it would only be suitable for storage facilities. Utilities could be extended from the fuel depot.



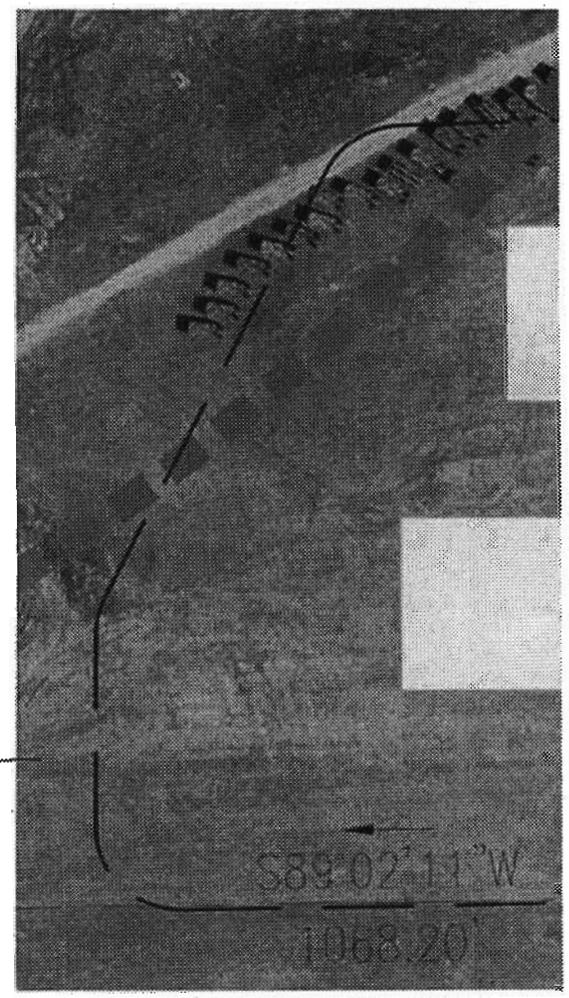
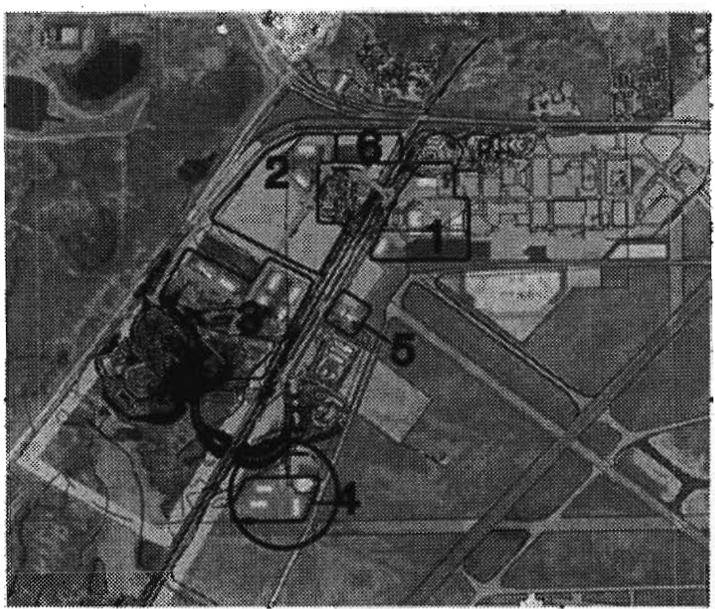


LEGEND

-  PROPOSED BUILDINGS AND ROADS
-  700' BLAST ZONE
-  1200' BLASTZONE
-  PROPOSED ROADS
-  PROPOSED BUILDINGS

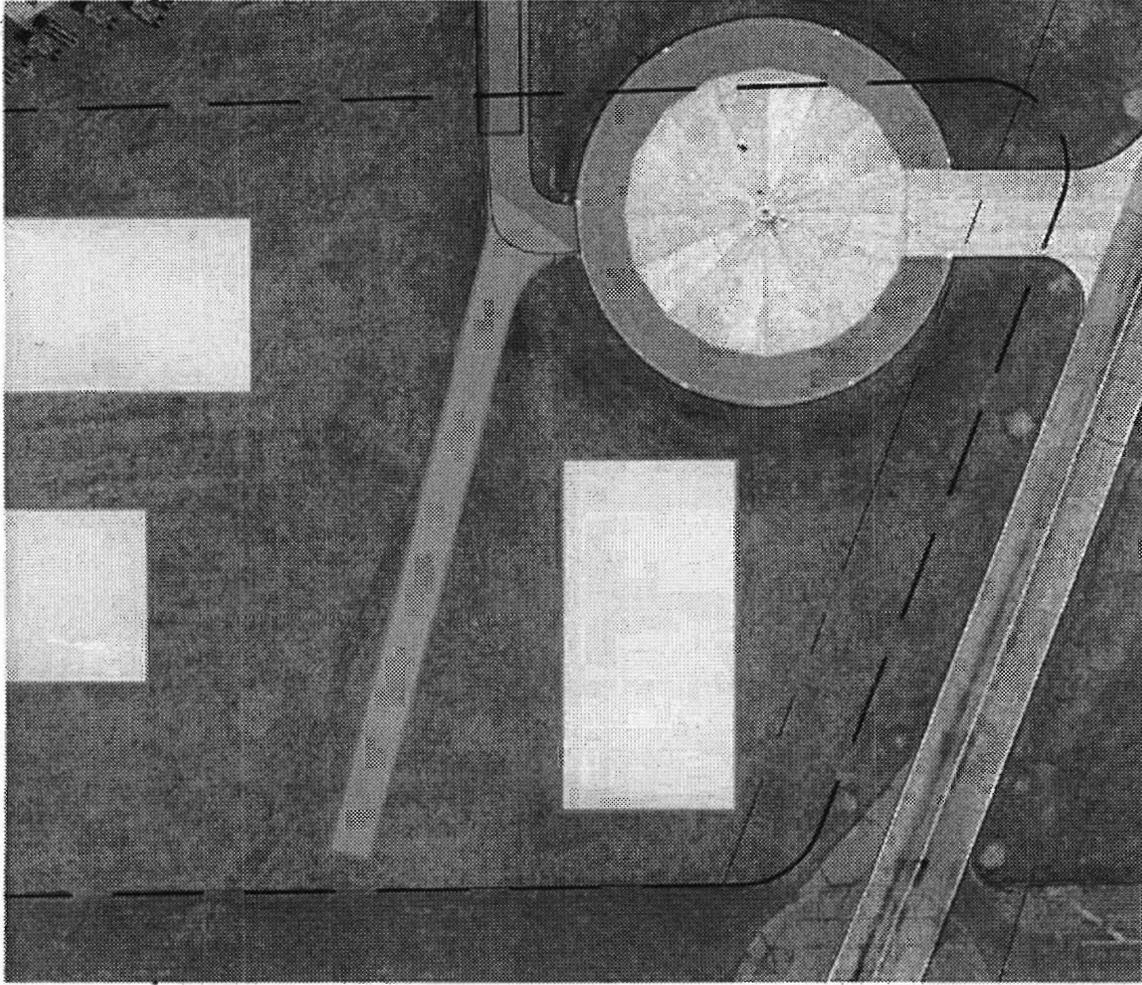
AREA KEYPLAN

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E IMPROVEMENTS - AREA 4

100'

S7

AREA 4 ENLARGED PLAN

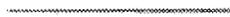
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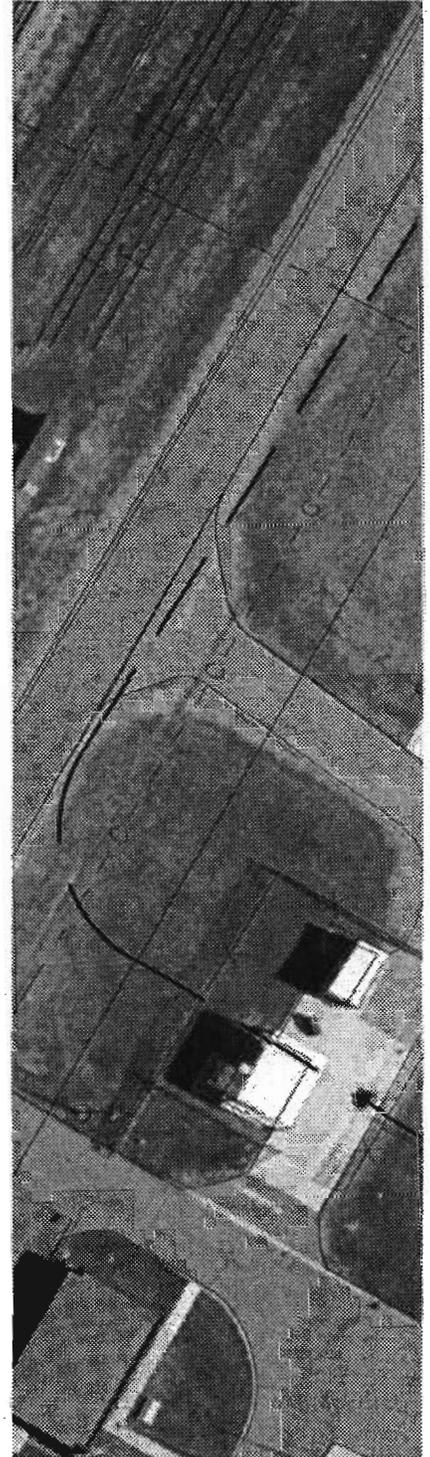


LEGEND

-  PROPOSED BUILDINGS AND ROADS
-  700' BLAST ZONE
-  1200' BLASTZONE
-  PROPOSED ROADS
-  PROPOSED BUILDINGS

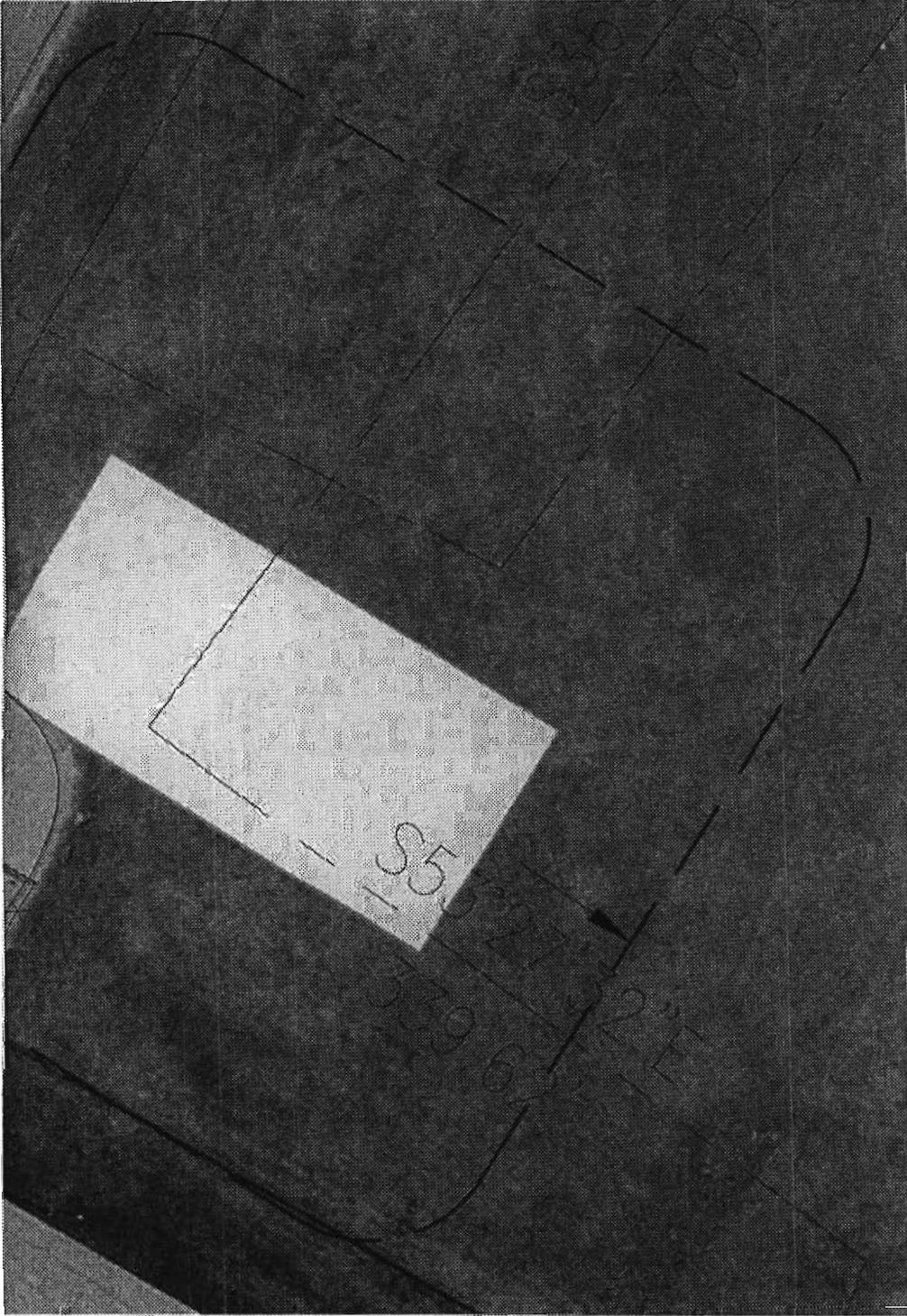
AREA KEYPLAN

SCALE: NO SCALE



FUTURE IM

SCALE: 1"=60'



PROVEMENTS - AREA 5

S8

AREA 5 ENLARGED PLAN

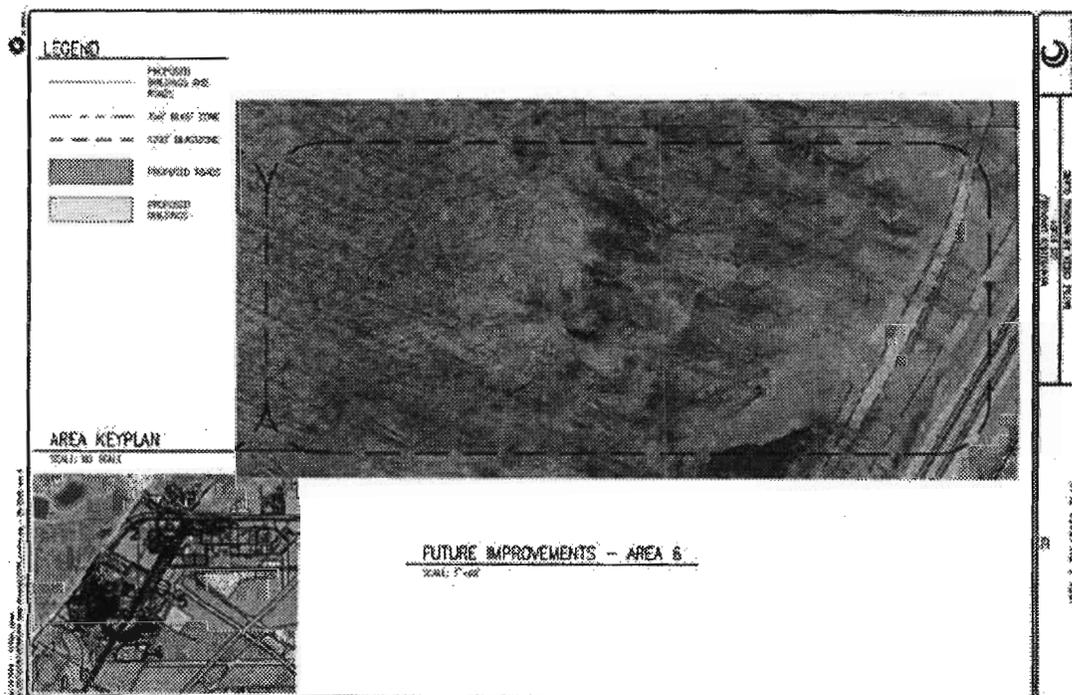
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Area 6: Area 6 is the area immediately to the north of the existing detention pond on the west parcel, and consists of 4 acres (Sheet S9). The area lends itself to support functions or new missions not requiring immediate access to the flightline or the rest of the base. Development of this area would require some extensive earthwork to prepare the site. This area is currently served with gas, water and electric from the adjacent Vehicle Maintenance complex. Sanitary sewer would need to be extended under the railroad tracks, or to Martin Luther King Drive. Storm sewer service would need to be routed via existing drainage ditches to the existing detention areas.



Ground Transportation: Additional service drives would connect the available areas. Notional drives are shown on the area sheets. These roads would be customized to meet the requirements of actual land uses. Extending Mustang Avenue to the new Thunderbolt extension to the east and to the existing Scorpion Road to the west would create a direct east-west corridor across the main base to facilitate traffic circulation and would prepare the road for a potential grade crossing of the railroad tracks. This would

facilitate improvement of the west base, and would allow Mustang Avenue to become the main east to west route through the base facilities.





LEGEND

- PROPOSED BUILDINGS AND ROADS
- - - - - 700' BLAST ZONE
- - - - - 1200' BLASTZONE
- PROPOSED ROADS
- PROPOSED BUILDINGS



AREA KEYPLAN

SCALE: NO SCALE



FUTURE IMPROVE

SCALE: 1"=60'

MENTS - AREA 6



S9

AREA 6 ENLARGED PLAN

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