Football has been a part of New Mexico State University since 1893 when the first official game was played in an open field. Growth of the athletic program and the college at several times through the years made it necessary to provide more modern facilities. The most recent effort began in 1974, but ended with the failure of a bond election.

Backers for a new stadium did not give up, however. During the 1977 Legislature, a bill sponsored by State Senator Lamar Gwaltney appropriated $4 million dollars to construct a new 22,000 seat stadium, and a dream of many years was on its way to becoming a reality.

Boehning, Protz & Associates, Architects, assumed the task of making this dream come true under odds which a lot of people thought were impossible considering the low budget and time deadline of September 16, 1978.

In May, 1977, an intensive programming and design effort was undertaken by the architects resulting in a preliminary design which met the requirements, the budget, and the schedule initially envisioned. This design was approved by the Board of Regents on May 13, 1977.

The design development of this preliminary design continued immediately thereafter. The criteria used for design and construction were as follows:

**CONSTRAINTS**

Besides the relatively tight $4,000,000 construction budget, the major project constraints were site related. Although the designated site, a 200 + acre corner of the campus, was more than adequate to accommodate the athletic and parking needs, several site characteristics limited the suitability of various portions of the site. Most critical of these were: (1) The Tortugas Arroyo cutting through the southeast portion of the site; and (2) A 30 foot deep sanitary landfill pit located in the south central portion of the site. The stadium property had to avoid the Tortugas Arroyo and all development, including parking, had to avoid the landfill pit.

**SPECIAL CONDITIONS**

Two special conditions strongly influenced the choice of the design concept: the existing soil characteristics and Owner’s in house earth moving capabilities. The soil on the site is an easily excavated sandy soil with good bearing characteristics. The Owner has a large collection of earthmoving machinery, including selfpropelled scrapers, bulldozers, compacting rollers, watering trucks, etc.

**SOLUTION**

The stadium is comprised of two crescent shaped, earth seating berms surrounding an oval shaped bowl which accommodates the football playing area. The football field is oriented on a north-north-west, south-south-east axis, in line with the existing Pan Am Center arena. The field orientation is nearly optimal in relation to autumn afternoon sun position and implies that the western seating area is the home team side. It has a natural turf playing surface.
The earth seating berms, built from the material excavated from the center bowl area, rise 48 feet from grade. The bottom of the excavated bowl, or playing field level is 12-13 feet below existing grade. The second phase of construction provided reinforced concrete risers, treads and bench seats to accommodate the spectators. According to NMSU Athletic Director Keith Colson, visiting coaches and officials from some areas of the country that do not understand the concept of excavating and building berms have asked if the “hole” was there before the stadium.

The upper level berm seating is separated from the lower bowl seating by a mid-level concourse, 12'-6" wide. Concession stands, public toilets, handicapped seating areas, and other support facilities are connected with this main public circulation artery.

At the top of the western seating berm, with its back to the afternoon sun, is a complete pressbox. This facility includes rooms for writers, radio broadcasters, coaches' spotters, as well as lounge and toilet facilities.

At the north end of the stadium, between the two crescent seating berms, is a varsity locker building with locker and dressing facilities for both home and visiting teams. Team rooms, weight rooms, coaches and officials lockers, etc. are also included in this building. The locker building was designed to accommodate future expansion.
ACCESS
At the south end of the stadium, a ramped vehicular roadway come up to grade from the playing field, permitting emergency vehicle access to the field.

Parking for 5,500 cars is provided. 2,000 of these parking spaces are now existing around the Pan Am Center. 3,500 new parking spaces are provided under this phase of construction with provisions made for future expansion of 2,000 parking spaces.

LIGHTING & SECURITY
A four pole lighting system permits nighttime football playing. This level of illumination will be expandable to a level which will permit color television. A perimeter fence encloses the entire stadium as a security measure.

CONSTRUCTION PHASING
In order to meet the completion deadline of the stadium by September 16, 1978, the construction followed a fast track procedure. Separate contracts were awarded in advance of completion of all the contract documents. As previously mentioned in the special conditions, the Owner's earthmoving capability was heavily involved in the construction process.

The following is a description of the phases.

Phase I Earthwork: This phase was the prime area where NMSU Physical Plant was able to utilize its expertise and equipment to cut projects costs. The berm and site were excavated and graded to within 6" to 18" of final grade. This included some installation of utility lines.

Phase II Concrete: This phase included all work related to forming and pouring the grandstands and concourse. During this phase, NCAA regulations were changed for Class IA athletic programs. To meet this mandate seating had to be expanded from the originally programmed 22,000 to 30,000 seats in order for NMSU to remain classified as a major athletic university.

Phase III Facilities: This phase included all work at the pressbox, locker room, and rooms along the concourse: restrooms, concessions, police and first aid.

Phase IV Seating: Included in this phase was the seating and installation of same. The Aggie Booster Club donating backs for the seats of two upper level sections as VIP seating areas.

Phase V Landscaping: This phase included chainlink fence surrounding the facility and landscaping at the berm and other related stadium facilities. This is another area where NMSU Physical Plant was able to utilize its expertise and equipment to cut project costs.

AFTERWORDS
In recent years the average attendance for home football games was approximately 8,000. On the evening of September 16, 1978, when the new Aggie
Memorial Stadium was opened and dedicated as scheduled, there were in excess of 30,000 fans to witness the event setting a new State of New Mexico record for attendance at a sporting event. During the 1978 football season there was an average attendance in excess of 17,000 with the 1979 season establishing a new record for NMSU of more than 18,000 average attendance exceeding NCAA Division I-A attendance criteria.

Athletic Director Colson states, "As the proprietor of this facility, NMSU feels it is perfect for our needs. A beautiful setting, adequate seating, excellent lighting, parking, restrooms, concession areas, and the dressing room facility has all necessary rooms and storage. The pedestrian flow is smooth, and the concourse provides easy entrance and exit. The pressbox is beautifully done all on one level for the working media with no VIP section, which is what was desired."

"Most coaches and administrators who have visited our stadium are amazed at the facility when we tell them the cost and the time frame within it was built."

The successful completion of this project could not have been accomplished without the total cooperation and dedication of everyone connected with it, especially NMSU's Board of Regents; Administration; Athletic, Physical Plant and Agriculture Departments and its Stadium Committee. Ray Ward and Son Construction and all of its crew, subcontractors and suppliers are also commended for their cooperation and diligence.

D. Craig Protz, AIA