Day before Super Bowl XXIII the field was covered for half time practice.



AFTER THE SUPER BOWL:

NO REST FOR THE

he adrenaline had been pumping around Joe Robbie Stadium for months in preparation for Super Bowl XXIII. Everyone from the head office to the grounds crew gave everything they had to meet the expectations of millions of football fans around the world.

As the scoreboard clock flashed the final seconds of the game, groundskeeper Gary Morris felt a tremendous load had been lifted from his back. Standing beside him were Chip and George Toma, the NFL's turf team, and consultant Tom Mascaro. They had battled the elements together to showcase the stadium and natural turf gridiron, which Joe Robbie had worked years to build for his Miami Dolphins.

As the San Francisco Forty Niners celebrated their victory over the Cincinnati Bengals and the NFL crew prepared to turn the gridiron back to Morris, he took stock of the field. The former golf course superintendent was already thinking ahead to a series of events scheduled for the stadium in a few short weeks. There is indeed no rest for the weary.



Geotextile, plywood, and plastic protected the field from the mud events.



Dirt from motocross was hauled in by truck without permanent damage to the field.

After an event like the Super Bowl, you would think the turf and crew would get a brief respite. They certainly deserved one. However, Super Bowl XXIII was just the kickoff for 1989's events at Joe Robbie Stadium. Three weeks after the game, two consecutive professional soccer matches were played on the turf. Another three weeks passed, and two more back-to-back events were held—the "Super Bowl of Monsters [Trucks] and Mud" and a motocross race.

Even the 36-year-old Morris' 16 years of work in golf course maintenance couldn't have prepared him for what lay ahead. His experience included an assistant superintendent position at the PGA National Golf Course and his superintendent post at Emerald Hills Golf Course, both in Florida.

"With all the different kinds of events you have at a stadium, you never know what to expect from the turf," said Morris, a Miami native and self-described Dolphins fan. "I enjoy it! It's more challenging than working on a golf course."

To a great extent, Morris credits stadium manager Glen Mon, who moved from the Los Angeles Memorial Coliseum two years ago, for "helping me through the transition from golf course to stadium." Mon's experience and guidance, as well as Mas-

caro's 40 years of turf knowledge, proved invaluable to the relatively new ground-skeeper.

His full-time assistant, Jim Romeo, has been tremendously helpful, Morris added. "Jim is also responsible for the Dolphins training camp at St. Thomas University in Miami, where they have two full-size fields," he said.

While the damage soccer players can do to a field is substantial, the turf can be absolutely obliterated by high-powered dirt bikes and monster trucks, which look like Tonka Toys on steroids with their six-foot high tires and five-ton axles, and by the 16 million pounds of clay dumped on the field for them to play on. Even beyond that, there was no rest in sight for Joe Robbie Stadium.

Basepaths and a pitcher's mound had to be installed for a three-week baseball exhibition series that followed. Then came more soccer games, a rock concert, and still more soccer. By the time the stands had emptied after all these diverse events it was August 14. On that date, the Miami Dolphins squared off against the Chicago Bears in their first 1989 NFL preseason game.

The field was ready. The turf was beautiful. What's more, in essence, it was the same grass on which the Super Bowl had been played, eight months earlier.

How was all this possible for a natural turf field? The answer lay in hard work, technology, planning, and teamwork.

When Super Bowl XXIII was over, it was decided by Morris, Mon, and Mascaro that major renovation of the Prescription Athletic Turf (PAT) field would be postponed until after the monster truck and motocross events were held. Still, some repair and protection chores could not wait.

The logo area in the center of the field was excavated. All of the sod and soil were removed to a depth of five inches. The soil at the bottom of the excavation was then





spaded and turned over, six inches deeper. The excavation was filled with soil matching the PAT profile.

New sod was put in place, but not rolled. Sod and soil were allowed to settle naturally. The objective behind this was to have plenty of loose soil under the new sod, so that the roots could grow deeply. After a week or so, the area was rolled to make it even with the rest of the field.

The remainder of the field was still covered with ryegrass, which shaded the bermudagrass and made it difficult for it to



Installing the infield for preseason baseball exhibitions.

grow. Overseeding with the ryegrass, almost 6,000 pregerminated pounds of it, had provided a thick, lush carpet for the Super Bowl. The field was lightly aerated to help the bermudagrass and reduce compaction, and was then lined for the first two international soccer games.

Preparation for the monster trucks and motorcycles was more critical to the survival of the turf. Many tons of mud and clay were hauled into the stadium by tractors with 20foot trailers, and spread by bulldozers to create the tracks. To keep this dirt from contaminating the PAT system, the entire field was first covered with a geotextile, which in turn was covered by plywood. For six days. dirt rested atop this protective layer.

After the events, the dirt was removed and the plywood and geotextile were taken up. Morris and his nine-man crew expected the worst. The turf didn't look great. In fact, everyone involved initially thought the entire field would have to be resodded. But much to their surprise, the bermuda's root system, although shallow and living off of its reserves, was still very much alive. As expected, much of the ryegrass was smothered and the painted areas were quite thin.

More than 200 gallons of white and colored latex paint had been used to create brilliant logos and lines for the Super Bowl, and it had to be removed. Rather than resodding, the crew used a Verti-Groove machine, invented by Mascaro, which removes a thin slice of soil to a depth of six inches, to aerify and remove as much of the paint as possible. The machine, with its 1/2inch spacing of the cutting blades, one foot apart, was set for full depth.

"The Verti-Groover has been a big contributing factor in the health of our root system," said Morris. "It removes more soil than a regular aerator. It moves more soil, more quickly."

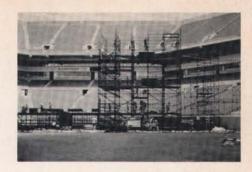
Instead of scattering the paint-laden soil with a dragmat, vacuum, or sweeper, it was picked up using flat shovels. Several members of the stadium cleaning crew were enlisted to remove the soil and haul it away.

After the verti-grooving was finished and the soil was removed, the field was topdressed with the same material as the field profile. Two weeks later, the operation was repeated. Although not all the paint was removed, it was hoped that the remainder would degrade over time.

Using 2,000 pounds of ryegrass seed, Morris and his crew overseeded the field after the motocross and monster truck events. It was the first time the field had been overseeded since the Super Bowl, and it has not been overseeded since. "We had a warm winter which played havoc with the overseeding process," added Morris. "We had to pregerminate the seed."

The turf responded quickly to overseeding, fertilization, irrigation, and deep aerification. Within three weeks it was ready for a professional baseball exhibition series, which included the Boston Red Sox and Baltimore Orioles. To prepare for the games, sod had to be removed for the basepaths and pitcher's mound. An outside contractor, experienced in this type of operation, was hired for the job.

Once again, the geotextile was used. It was laid down where the sod had been removed, so that the clay placed on the



skinned areas would not contaminate the PAT system profile. A nursery was established with the removed sod on the far side of the parking lot for emergency use.

After the baseball exhibition, the geotextile and the clay that topped it were removed. The soil was deeply tilled and new sod was installed. It was placed on the loosened soil, and was not rolled until the roots had firmly anchored the sod. This rooting took place quickly. Then the sod was rolled to bring it down to field level.

One week later, the field was lined for more soccer. The 419 bermudagrass was in great shape. The rock concert followed. For this event, the turf was again covered with a geotextile. A stage was erected, and 10,000 chairs were placed on the field. The concert, featuring the rock group The Who, was a sellout.



Using Verti-Groove to aerify and remove paint.

As soon as the concert finished and the audience left the stadium, the crew began the work of clearing the field and taking up the geotextile. Another soccer game was scheduled to be played within a week, and this one was going to be videotaped for broadcast to the United Kingdom. But 10,000 chairs, each with four legs, left 40,000 small impressions in the field, and it had to be aerified again. The turf would soon be "aerified" once more, but not by Morris and his crew. The cleats of the Dolphins and the Bears would do the job. The NFL preseason was beginning.

Technology has of course contributed to the success of Joe Robbie Stadium's natural turf. But without the team effort and planning of the people involved, it couldn't

have happened.

Hosting one of the most exhilarating Super Bowls in history is a tough act to follow, but quarterback Dan Marino, with his ballistic arm, and the Miami Dolphins should keep things exciting for their fans and opponents. As for the natural field at Joe Robbie Stadium, it's already a winner.