

# MAINTENANCE FACILITIES The Wisconsin Survey

By Robert J. Erdahl

In the last issue of *The Grass Roots*, I analyzed the results of a survey of thirty Wisconsin golf course maintenance facilities. My discussion included a treatment of all maintenance facility components as well as a description of what I concluded were the "Best Maintenance Facilities" in Wisconsin. In addition, I touched on the storage of topdressing, fuels, fertilizer and pesticides. The intent of Part 1 was to define the current state of maintenance facilities in Wisconsin along with future trends in design and construction.

In part two of my article, I'd like to tell a story. It is the story of dreams and realities. The dream is a new maintenance facility for North Shore Country Club. The realities are the bumpy roads that must be traversed to achieve that dream.

From the survey results discussed in Part 1 of this article, I knew that many of you are also dreaming of a new maintenance facility for your golf course. It is my hope that this story can help to smooth out some of those rough roads you are sure to encounter en route to the realization of your dream.

My story is titled "Dreams and Realities: The Planning of a Maintenance Facility at North Shore Country Club." Read if for entertainment. Take notes on my mistakes. At this point, I can't tell you if the story is fiction or non-fiction, because we are still many months away from laying the first brick.

#### PART 2.

#### Dreams and Realities: The Planning of a Maintenance Facility at North Shore Country Club

#### Preface

It almost goes without saying that every WGCSA member wants and needs a maintenance facility that can keep pace with the demands of modern golf course management. Wants and needs, however, are quickly tempered by the real world. Forces such as member attitudes, financial resources and government restrictions are just a few of the realities that confront our efforts to plan and construct new maintenance facilities. This story tells how the planning of a maintenance facility at NSCC was shaped by a host of factors, many of them unforeseen when we started the project. It is meant to be a preview of what you can expect if you undertake the quest for a new maintenance facility at your golf course.

#### Chapter 1 - Getting Started

When I started at NSCC back in 1984, the existing maintenance facility consisted of two buildings that seemed adequate enough to support my management programs. The first, an 1,800 sq. ft. heated, steel building contained the workshop, a small bathroom and a small locker room. The second, a two story, 80 year old dairy barn with 2,800 sq. ft. on each level contained the cold storage and a 200 sq. ft. heated office.

Over the past seven years, however, we have just plain outgrown each component of these two buildings. My equipment inventory has tripled, I have twice as many employees (including five women) and the work shop is jammed year round. Add to these problems a grossly inadequate pesticide storage-mixing-loading situation and you end up with a real mess.

Obviously my employees and I knew that the maintenance facility was outdated and in some respects just plain illegal. But did any of my members care about the condition of the maintenance facility? I guess a better question might be: Did any of my members even know about the conditions? Since the answer to both these questions was no, there was only one person to blame—yours truly.

I accepted that blame about 18 months ago and decided to take some action. With poison pen in hand, I fired off reports on building a new maintenance facility to the big three—Board of Directors, Long Range Planning Committee, and Green Committee.

Lo and behold; everyone listened, everyone cared and everyone agreed that we needed a new maintenance facility. In fact, it took only 2 months for the subject of a new maintenance facility to go from total obscurity to the number

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one priority of the Long Range Planning Committee and the top spot in the 1991 budget.

How did it happen so fast? Well, a number of factors fell into place quite nicely. First and foremost, the leadership of the Board of Directors, the Long Range Planning Committee and the Green Committee all agreed that immediate action was needed to update our maintenance facility. Second, the Long Range Planning Committee was receptive to a building project that could be paid by budgeted capital improvement funds and did not require an increase in the club's mortgage debt. (NSCC completed a \$1.25 million clubhouse renovation in 1988 and the Long Range Planning Committee did not want to extend the club's line of credit.) And third, the current focus on environmental issues made the entire membership aware of the need to improve our pesticide storage-mixing-loading capabilities.

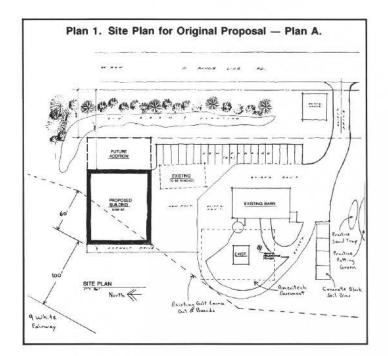
You can see that to a certain extent, my success in persuading club officials that we needed a maintenance facility was a function of the right people being in positions of influence and power. Nothing at all would have been done, however, if I had not made some noise and communicated the problem. I guess the old squeaky wheel theory really does work.

What was the next move? Why, form a committee to plan the new maintenance facility of course! The truth is I cannot complain a bit about the committee that was formed because it contained engineers and building contractors that did not want to screw around: they wanted a reasonably priced (not cheap), well-constructed building. Once again, the right people in the right place made it much easier to move the planning process ahead.

#### Chapter 2 - Rip It All Down and Start Over

For the first meeting of the maintenance facility committee, I was charged with coming up with a preliminary design that incorporated all my requirements and also described how the two existing buildings fit into the picture. Does that sound like a blank check, or what? Well, it did to me and I didn't waste any time in filling in the blank.

My first move was to contact several superintendents who had just recently finished planning or building a new main-



tenance facility. I added their ideas and experiences to mine and tried to come up with a better mouse trap. What I ended up with was a 60'x160', two story building with 13,600 sq. ft. of usable floor space. Believe me, it had all the bells and whistles!

As for the two existing buildings (along with an old farmhouse that is used for winter storage), I figured we could tear them down after the new building was up and running. After all, they were outdated, utilized space inefficiently and had a few structural problems. Besides, they were old!

Well, I got straightened out at our first committee meeting. First off, a building with 13,600 sq. ft. of usable floor space would cost approximately \$340,000 (assuming construction costs of \$25 per sq. ft.) Secondly, tearing down the 3 existing buildings would cost an additional \$30,000. And last of all, paving, landscaping and site work would add another \$40,000. The \$410,000 price tag was too rich for NSCC blood.

I knew that would be the case, but I wanted to start at the top and work my way down. Sometimes if your aim isn't high enough, you don't hit the intended target.

After further investigation and more meetings, the committee came up with these recommendations:

1) The new maintenance building should have 9,000 sq. ft. of usable floor space and cost \$225,000 (based on \$25 per sq. ft.).

2) Paving, landscaping and site work should not exceed \$30,000.

3) The barn should be kept and reinforced at a cost of \$10,000.

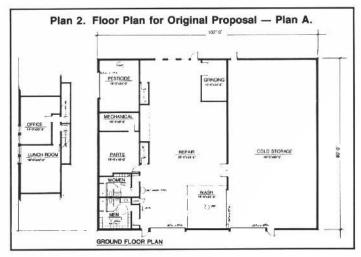
4) The farmhouse should be kept and used as storage space for the clubhouse.

5) The 1,800 sq. ft. building should be torn down at a cost of \$5,000.

I was extremely pleased with these recommendations since the net result was a two building maintenance facility with 14,000 sq. ft. of usable floor space. The total cost of \$270,000 fit into the budget so the project was still full speed ahead.

#### Chapter 3 — Pretty Pictures

With a neighborhood of \$400,000 homes right across the street from the maintenance facility location, the committee was very sensitive about the appearance of both the new building and the entire maintenance complex. To assist us in designing a maintenance building that didn't look like a maintenance building, we engaged the services of BHS Architects, Inc.





The intention was to have BHS come up with the concept drawings needed for the City of Mequon's Planning Commission and then have the builder we select use the concept drawings to draft the detailed construction documents required by the State of Wisconsin.

Throughout the rest of the story, I will be referring to Plans 1-8 which accompany this article. Plans 1-7 are BHS drawings and Plan 8 is the work of Wandsneider & Associates, NSCC's landscape architect. All the plans are reduced copies of actual blueprints.

At our first meeting with BHS, we were given a capsule look at the best way to get our building approved by Mequon's Planning Commission. These were the recommendations:

 Keep the building as small as possible and as low as possible—a two story design may not be approved.

2) The building should contain architectural features that disguise the appearance of a big rectangular shape.

 The exterior must be constructed from all natural materials—no steel will be allowed.

4) The roof should match the angle of nearby homes and be constructed with textured asphalt shingles.

5) The entire maintenance facility complex should be hidden behind landscaped berms.

Combining our desire to build 9,000 sq. ft. of usable floor space with the recommendations of BHS, we arrived at the building design shown in Plans 1-4. Features of this design included:

1) An 8,000 sq. ft. first floor.

2) A profile that lowers the roof peak 6' under that of a similar two story building and results in only 800 sq. ft. on the second floor and 9' high overhead doors that are just tall enough for my largest equipment.

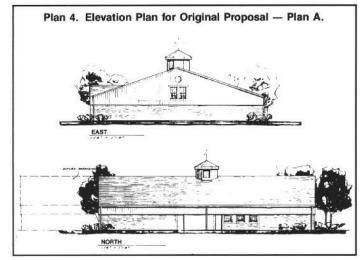
3) Decorative concrete block walls that are 12' high.

4) Extensive wood, board and batten siding that matches the barn.

5) An acceptable roof angle and shingle material.

6) Special architectural treatments such as dormers for overhead doors, decorative windows and an oversize cupola.

We all realized that these exterior, cosmetic touches would increase the cost of the building and probably force us to make some cuts in some of the interior details. The added expense was accepted as the cost of being good neighbors and constructing an attractive building that would not adversely affect property values in the surrounding residential area.



Most of the floor plan shown in Plan 2 is pretty much self explanatory with the exception of the 2 stairways to the second level that are required by State of Wisconsin Building Codes. I think you would agree that every superintendent has his own ideas on how to lay out a maintenance facility. Plan 2 represents my best effort based on the restrictions imposed by the size and height of the building.

I'm sure you're interested in my inclusion of a pesticide room in the building.

The building was placed on the site facing south (see Plan 1) which would present only an 80' exposure of the building towards the neighboring homes to the east. Extensive berms and landscaping along Range Line Road screens the building and the adjacent parking area. The existing 30'x60' building would remain during construction and then be torn down to make room for the asphalt shop yard. I'll cover some of the other details shown on Plan 1 in a future chapter.

#### Chapter 4 - Red Tape

As many of you know, dealing with government agencies can be a true test of a person's patience and determination. In most situations, I usually have just enough of the former and an excess of the latter. This time, however, I wasn't quite so sure!

First came the City of Mequon, where we needed approval from the Engineering Department and the Planning Commission. I was surprised to learn that the city was mainly concerned with the appearance and location of the building. How the building functioned on the inside was of virtually no concern. Given the care taken in the design and location of the building, I assumed that gaining city approval would be relatively easy. We'll see if I was right in the next chapter.

Next came the State of Wisconsin, where the detailed construction documents are reviewed by the Department of Industry, Health and Labor Relations (DIHLR). It is here that the structural design and the interior functions must be approved.

In order to insure DIHLR's approval of the building, I had many conversations with Madison early on in the project. I assumed that the construction documents generated by our builder would satisfy all the structural requirements and bath and locker room specifications found in the various state building codes. I was really only concerned about one part of the building—the pesticide room.

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Right from the start, it had been my desire to incorporate a pesticide storage-mixing-loading room into the new building. I thought it would be convenient to use and economical to construct since the foundation, structure and utilities would already be in place. I knew DIHLR would be very tough on a pesticide room in an occupied building, so I tried to cover all the potential problems with the following specifications:

1) Walls and ceiling with 4 hour fire rating.

2) A sealed concrete floor with a 4" curb.

 A self contained sump in the floor that would provide for rinsate and spilled product to be pumped into a holding tank and stored for reuse.

- 4) Access only from outside.
- 5) Explosion proof lighting and heating.
- 6) Upper and lower level exhaust systems.
- 7) Separate, secure storage area.
- 8) Flammable pesticides stored in fire proof cabinets.
- 9) Pump shower and eye wash.
- 10) Water supply protected by backflow preventer.

In lengthy telephone conversations with DIHLR representatives, they seemed to be fairly impressed with my design. They did, however, have some real concerns about the safety of the occupied second floor just above the pesticide room. The topic of explosion blow-out panels came up a few times along with some other changes that may have to be made depending upon the exact nature of the chemical being handled in the room. They didn't say no and they didn't say yes. Instead, they hedged their bet until they could see the construction documents and review the Material Safety Data Sheets for all the pesticides that would be used in the room.

I must admit that after my conversations with DIHLR, my enthusiasm for the pesticide room was dampened a bit. I decided to stick with my original plan, however, feeling confident that the details could be worked out to DIHLR's satisfaction and still keep the room affordable. As a backup position, I reasoned that if I had to eliminate the pesticide room from the new building, the construction savings could be put toward a separate pesticide building.

#### Chapter 5 — Back to the Drawing Board

By this time we had finalized the concept drawings, practiced our sales pitch and were ready for our appearance before the Planning Commission. Wouldn't you know that the very day of the meeting we ran into a major problem! We found out that 50 of the homeowners from the neighborhood across the street had all signed a petition opposing the building and were going to show up in force at the meeting to air their grievances.

Needless to say, we had made a major blunder. The very people we had worked so hard to satisfy with our building design were opposed to the project and probably had the power to stop it altogether. Why hadn't we consulted with them? Why hadn't we invited them to a little get together at the clubhouse and presented our case? I felt miserable. We were so close, and now just hours before the meeting, our chances of gaining approval for the building seemed to have vanished.

When I arrived at City Hall for the meeting, I was surprised not to find a large group of irate neighbors. I was relieved to learn that since it was not a public hearing, only the homeowner's alderman would be allowed to speak on their behalf. When our turn came up, the alderman presented the petition, the commission members asked a few questions and we were told to come back with a building design and location that took into consideration the concerns of our neighbors. It took only 10 minutes to shoot down sixteen months of planning!

Well, we had lost the first battle but the war was far from over! That very night we met with a small group of the neighbors and got a feel for their objections. We also set up a meeting at which we could explain our building proposal and hopefully work out an agreement.

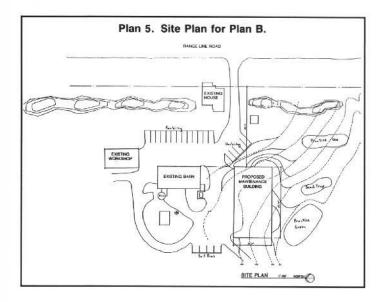
After sleeping on it, I realized that the chances for an agreement were probably very slim because the neighbors were just plain against an expansion of our maintenance facility. In fact, they were extremely upset at the way we were operating our present facility. Their petition had also included complaints about early morning noise of equipment, late night noise from the night watermen, the sand and gravel bins and even the less than late model cars my employees drove to work. It looked like we had a very bumpy road ahead of us!

At this point we had two choices. We could either battle with the neighbors over our original proposal (Plan A) or come up with an alternative proposal (Plan B) that was more acceptable. We opted for coming up with a Plan B and using a little strategy to gain the neighbor's approval.

At our first meeting with the neighbors, we started by laying out our Plan A and explaining why we needed this building in this location. We used Plan 1 to prove that the site we selected was the only workable location due to space limitations imposed by the proximity of 9 white fairway, the Ameritech easement, the existing structures, the soil bins and the practice area.

They didn't buy it! What followed, was a tense 90 minutes of the neighbors picking building locations out all over the

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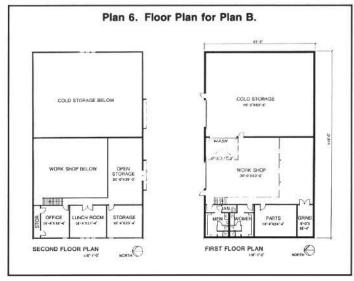
golf course and us shooting down their ideas one after another. Finally in desperation, one of the neighbors suggested that we could probably make room for a smaller building at the south end of the barn; and in that location the building would not be visible from the neighborhood. Bingo! They had arrived at the exact location of our Plan B. In short order, we agreed to redesign the building and change the location. The neighbors left the meeting feeling victorious because they had decided on where the building should be located. We left the meeting breathing a sigh of relief!

We held one more meeting with the neighbors to go over the features of our Plan B proposal. They weren't thrilled with it, but they finally seemed to realize that we would not be denied our building and had compromised as much as we could. After that meeting, there was no longer any organized opposition.

The final hurdle was another appearance before the Planning Commission, this time with our Plan B proposal. What a difference! It took just 10 minutes for the commission to grant us approval. We were even commended for our cooperation with the neighbors!

#### Chapter 6 — The Real Thing

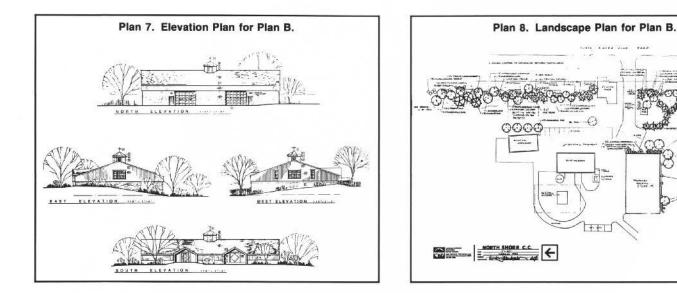
Now let's take a look at some details of the approved Plan B. Please refer to Plans 5-8 throughout this discussion.



A quick look at the site plan (Plan 5) shows that Plan B allowed us to keep the 30'x60' building. This turned out to be a real bonus because I decided not to incorporate the "Pesticide Room" into the new building. Instead, the pesticide storage and mixing/loading operations will take place in the 30'x60' building. The exact design of these facilities will depend on new EPA regulations that are due out shortly and continued attempts to get detailed specifications from the DIHLR and DNR. I guess I finally decided to remove the "Pesticide Room" from the new building because I got scared off by a combination of DIHLR, the local fire chief, and a gut feeling that it just wasn't going to work.

The Plan B location also required moving the soil bins and the practice trap; two relatively inexpensive items that are more than offset by the benefits of the entire project. In addition, the access to the practice green would be reduced due to the proximity of the new building. Note that this is our second practice green and it is relatively far from the clubhouse so it is used mainly as a nursery.

Plan 6 shows that the building has 6,500 sq. ft. on the first floor and an additional 2,100 sq. ft. on the second floor. Since the building is set into a hillside (see Plan 7), the overall height could be raised to a full two stories while still maintaining a relatively low profile. This full two story design allowed the use of 12' high overhead doors and much greater utilization of the second story than in Plan A.



Since Plan 6 was drawn, there have been a few minor changes. The men's locker room will be three feet wider which will narrow the parts room by an equal amount. In addition, the janitor's closet will be relocated to free up additional floor space for the men. On the second floor, the lunch room and office will trade places with the new lunch room gaining three feet in width. I made this change so that my office would have three windows and a better view!

The exterior appearance of the building (Plan 7) is very similar to what was described for the Plan A proposal. The decorative block walls, wood siding, roof treatments and special architectural features remain unchanged. The major change is moving the dormers from around the overhead doors to the more visible south elevation. The western dormer has functioning doors that open into the second story storage area. The eastern dormer is for architectural symmetry and does not have functional doors.

Finally, Plan 8 details the location and type of plants to be used on the landscaped berms that will shield the maintenance facility from our neighbors and traffic on Range Line Road.

#### Chapter 7 — How Much Will it Really Cost?

We are still involved in the bidding process on our building, but here is my best estimate for the cost of this project:

1) 65'x110' 2 story building	
2) Asphalt paving of shop yard	. 25,000
3) Barn reinforcing	. 8,000
4) Pesticide facilities in 30'x60' building	. 10,000
TOTAL	\$303,000

Please note that the shaping of the berms is included in the price of the building and the landscaping plants will be planted by my crew and purchased with other funds. The cost of relocating the soil bins and the practice sand trap are also not included.

It was difficult swallow, but the Long Range Planning Committee approved the \$303,000 figure. If all goes according to plan (which it rarely seems to do!), we should start construction around October 1, 1991 and take occupancy near February 1, 1992. That puts the fulfillment of my dream only ten months away.

Now, how about you? How far away is your dream of a new maintenance facility? I hope my story and plans have edged you a little closer to your dream. I wish you luck.

## MGCSA Offers Invitation to U.S. OPEN Hospitality

The Minnesota Golf Course Superintendents Association cordially invites members of the WGCSA attending the U.S. Open to visit our hospitality tent. The 1991 U.S. Open will be played June 10-16 at Hazeltine National in Chaska, Minnesota.

The tent will be open every day from 8 A.M. to 6 P.M. (Monday through Sunday) and will be located between the clubhouse and the practice tee. There will be refreshments provided and the opportunity for visiting with Minnesota superintendents. The hospitality tent will be hosted by MGCSA superintendents, assistants and spouses.

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