

Cart paths bring materials and labor costs into play

by STEVE & SUZ TRUSTY

Cart paths provide a hard-surface route for golf carts at frequently-damaged spots on the course, or in a course-wide trail. In times of wet weather, golfers can still play when cart paths are in place as an alternate route for fairway traffic.

Many superintendents believe cart paths are a convenience to the golfers, and that they help speed up play without adversely affecting course aesthetics.

The road less travelled

Probable ball landing zones help determine path routes. Cart paths should be close enough to fairway landing zones to allow easy access for golfers, yet not so close the paths come into play.

Hiding cart paths from view along the edge of the roughs may be best for aesthetics, but forcing players to walk long distances from car to ball and back slows play. Construction materials that blend with the environment or accent other course features make visible

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paths seem less intrusive.

The most appealing, functional and cost-effective cart paths are developed cooperatively between the architect, developer, course owner and superintendent. In today's litigation-happy environment, a civil engineer may be required in cart path design to insure structural integrity and user safety.

Environmental concerns should be addressed in the initial design stages. Paths, even on bridges or elevated crossovers, in wetlands or other environmentally fragile areas, generally require pre-approval by the appropriate regulatory agencies.

Cart paths, especially curbed ones, can be used to channel and control water runoff.

Material mix

Material options have expanded greatly in recent years. Stone and simulated stone pavers come in a wide variety of sizes, shapes and finishes. Traditional rock and wood mulch materials have been joined by such "natural" by-products of regional industries as hulls and crushed shells. Concrete costs have dropped and installation methods improved. Textile reinforcement materials extend the life of asphalt and make spot repairs

more practical.

Native soils of sand or heavy clay may allow natural surface cart paths over most of some courses. These can be augmented in extremely wet or dry sections and heavy traffic areas with concrete, asphalt or pavers.

Consider maintenance costs

Upfront costs, projected cart path "life" and long-term maintenance costs all must be considered.

Degree of use, site-specific characteristics and regional weather conditions influence cart path life. Natural and mulched paths may need annual renovation. Asphalt path life can range from 12 to 18





years; concrete and interlocking paver paths may last 50 years.

"Bring the superintendent into the golf course design process early on to assess long-term maintenance," of cart paths, suggests Nolan Meggers of John Deere.

Meggers says to consider:

- Labor hours and cost
- Equipment needed to maintain paths
- Turf bordering the path

The superintendent, says Meggers, will see the practical aspects that better balance the cost equation.

"Maybe an elevated section of the path with sloping sides is planned to keep golfers from driving onto the fairway at a critical point," suggests Meggers. "But too steep a bank may limit mowing options or require considerable hand work with a string trimmer. Upkeep of a natural mulch path in a heavily wooded area may be less labor-intensive than continual removal of slippery fallen leaves from a concrete path."

A clearer picture of true costs can be obtained by tracking labor hours related to maintenance of cart paths and bordering turf in various sections of the course. This information is essential in plotting future budgets or when considering

cart path renovations.

Wide bodies

Consider equipment use throughout the course, notes Meggers. Cart paths become the preferred route in transporting equipment to the work site and such traffic does add to path use. Paths should be wide enough and sturdy enough to support passage of heavy equipment. Well-maintained paths expose equipment to fewer bumps and bounces, resulting in less adjustment, maintenance and repair time.

Cart paths are becoming wider, up to eight feet on single paths. Double lane paths of 12 to 14 feet accommodate heavy traffic near the club house, two-way traffic, double-back routes and stop-offs on par 5s.

Wider paths increase upfront construction costs but may pay for themselves in reduced maintenance because the biggest issue with cart paths is keeping golfers on them.

The "two wheels on the path, two wheels in the grass syndrome" of golf car maneuvers creates patches of turf wear and destruction at tees, greens and prime fairway landing zones. Curbs at these spots make it more difficult for drivers to stray from the path. Performed curbing "strips" or pres-

◀ **Fairway width and the flight of the ball make it difficult to keep paths entirely out of play.**

sure-treated lumber can be used to add curbing to existing paths. But consider extra string trimmer maintenance time that may be required along curbed areas.

If major path widening or renovation isn't possible, creating graveled or mulched cut-outs at regular intervals in heavy use areas may encourage golf car drivers to park or pass at those points.

Some cart paths cover only small sections of a course, often at tees. This results in extra turf wear at entry and exit points. A flared cart path at these points helps to spread the traffic over a wider section of turf, reducing the wear on any one spot.

A new angle

When golf cars stray from cart paths, the exit points along the fairway bear the brunt of wear, even when golfers are urged to employ the "cross at 90 degrees" rule. A system of changing those exit points daily, such as movable decorative

fencing, can keep turf damage within the manageable range.

During wet conditions, golf car entry onto the turf often can be restricted at specific sites by ropes strung along portions of the cart path. While this eliminates turf damage at those spots, it often transfers damage to the next most convenient exit point.

Even with rules in place, drivers of turf vehicles will often make sharp turns or sudden stops and starts, and tire tracks and turf wear patterns remain.

Wear-resistant turf

Grass varieties selected by the superintendent for wear, compaction tolerance and regional adaptability may better withstand moderate golf car stress. A well-planned program of cultivation, topdressing, irrigation, fertilization, mowing height adjustments and thatch level monitoring will increase turf density. Restricting turf access during overly wet or dry periods, when still-green turf is frozen or while turf is dormant can eliminate severe damage.

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