

Plan For a “Second Asset” From the First Step



Leave some trees on site or plant some.

Plan now for future use.

Retain material for later development.

Allow for roads and lots.

Shape shorelines during mining.

AGGREGATES MANAGER

OPERAT Plan For a “

Mining: Start to Finish

Like most things in life, you get out of a reclamation plan what you put into it. While it is part of the permitting process today in most locales, many producers are beginning to see their reclamation plans as more than something they must do — looking to the potential of their sites and shaping their plans to fit a vision of what they can do with the land.

Most local governments have adopted standards and criteria for zoning that producers have to meet, according to Bob Ford, co-founder of Lansing, Mich.-based Bauer Ford Reclamation Design. “These minimum standards usually include reclamation of side slopes to a certain angle, setbacks for mining activity, reducing noise and dust levels, planning for transportation and truck routes, and working with sight lines. Once a producer meets these criteria, the permits are usually granted,” Ford says. He explains that the optimum reclamation plan, however, entails additional foresight for possible end use of the land. “Being able to start on a site that hasn’t yet been disturbed is the ideal,” he says.

Kuhlman Corp., based in Toledo, Ohio, planned its greenfield site near Tecumseh, Mich., very carefully when it purchased the 750-acre tract for proposed sand and gravel mining in 1987. “We worked for a year to create a mining and reclamation plan for the site before we

unveiled it to the township,” says Tim Goligoski, Kuhlman Corp. president. “And to be honest, the citizens’ initial reaction to mining was not good. They had issues with what it would look like, the dust, questions of whether it would ruin the environment. It took four years to sort it out, but we received our first permit for CTE Sand & Gravel in 1992.” At the time, Kuhlman Corp. also put plans in place for future use, including lakeside residential development.

Today, Goligoski says the relationship between CTE and the township is a good one. “The important factor is that we stuck to our plan,” he says. “We let them know what it would look like during mining — promising berms and landscaping, etc. — then we implemented that plan. And we always had our permits renewed.”

Earl Lafave, co-owner of Beck Companies in the Detroit area, says he realized years ago that with planning, a mining property can go from “eyesore to eye-catcher,” and become a second asset later as prime real estate.

“But you have to focus on more than mining,” he says. “There’s more involved than just getting the stone out of the ground. And a good master plan allows proactive thinking during the mining stage. If you think residual value, and stop mining with enough land and aggregate left to develop the property, you’ll see there’s a difference between gross revenue and profit.”

1 The way it was



In the past, aggregate operations were not regulated as closely as they are today. Local governments and agencies did not require companies to reduce noise and dust, build berms, or landscape the properties. Producers also were not required to produce a plan for future use. The practice resulted in mined-out properties that require both work and money to reclaim later for beneficial use.

4 Work in progress



Extra steps with an eye toward future use include more than proactively moving earth and don’t have to be expensive or difficult to implement. For example, by planting trees on part of the property during the mining phase, producers can create their own source of mature trees for use at the end of the site’s mining lifecycle — without incurring much cost or upkeep.

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'Second Asset' From the First Step

OUR EXPERTS

2 The way it can be



Many older aggregate operations have now been reclaimed for use as parks, nature areas, office or industrial complexes, and even housing developments. And, if a mining company looks far enough ahead during mining and processing — considering the possibilities for the property's use upon completion — it can simultaneously shape the land to accommodate future use and raise its value to create a "second asset."

3 Out of sight



On the simplest level, a reclamation plan is part of the permitting process. At a minimum, it should include setbacks from the property line, slope stabilization for safety, berms and landscaping to minimize noise and visual impact, and dust control strategies. But having a plan — and living up to it — can also go a long way toward improving neighbor relations during the mining phase.

5 Shaping the future



Shape the land for future use with the overburden and materials on site. Plan for shorelines and property parcels if the location and market indicate the site will provide desirable housing. Determine a point of diminishing return and stop mining when the payback will become greater during the property's second life. Retain enough land and aggregate on site to create roads and develop housing so that material doesn't have to be purchased and brought back on site during development.

6 Second life



With proper planning, aggregate operations can become second assets at the end of the mining and processing phases. An aggregate site does not have to be viewed as an eyesore by neighbors — and can even be developed later into an eyecatcher, complete with upscale homes and desirable lifestyle amenities. The key is to create the plan, bring in experts — from land planners to hydrogeologists to developers, revisit the plan annually, and live up to it.



Bob Ford, American Society of Landscape Architects, is president and co-founder of Bauer-Ford Reclamation in Lansing, Mich., a leading land planning firm that specializes in reclamation planning of aggregate operations across the nation. Ford has more than 30 years of experience in land planning as a consultant, educator, and developer, and has worked with Tony Bauer for most of his career.



Tim Goligowski is president of Kuhlman Corp., a 106-year-old construction product and ready-mixed concrete supply company based in Toledo, Ohio. A family-owned company, Kuhlman Corp. is vertically integrated, also providing sand and gravel, bulk material operations and warehousing, residential land development, and wholesale distribution of construction materials for concrete, masonry, and water/sewer.



Earl Lafave is co-founder and co-owner of the Beck Companies, including Beck Development and Metro Transport in the metro Detroit area. Beck Companies began in the 1970s as a hauling business with "two men and two trucks." Today, they are multi-faceted with more than 75 employees and specializing in taking aggregate sites from the mining stage to award-winning home communities. To view a current development, please visit www.hiddenlakeonline.com.

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Voices of Experiences

Bob Ford

The minimum reclamation plan for permitting purposes typically addresses most common concerns citizens have today about aggregate mining, including visibility, dust, noise, and truck traffic, according to Bob Ford, co-founder of Bauer Ford Reclamation, based in Lansing, Mich.

Some examples of minimum criteria include planning for material transportation on- and off-site, with road upgrades and routing to a Class A road as soon as possible. “Another thing producers should consider is minimizing visibility from nearby road corridors or housing through setbacks, berms, and landscaping,” Ford says. “They need to address how they will diminish the impacts of noise and dust. And slope angles affect visibility and safety. Agencies typically require slopes to be set at 3:1, but with a good plan, slopes can be arranged to create a safe and interesting landscape to buffer mining activities.”

The ideal reclamation plan will also include steps to ensure the best use of the land after mining is complete. “If a mining company only works to meet the local standards, it usually doesn’t create long-term land value,” Ford says.

“The end use of the land can be difficult to see,” he says. “The producer must try to forecast the possibilities, which are market-driven — whether the land will be used for housing, industrial, commercial, open space, recreation, etc. But ultimately, the mining company must begin to understand it has options and contemplate all possible uses for the land while mining is still taking place.”

Ford says important factors to consider when planning for end use of a site include the geology, making sure to preserve any significant features of the site that can become part of a development theme later.

Tim Goligoski

“We purchased the land for CTE Sand & Gravel in 1987 because we needed a sand supply for our ready-mixed concrete,” says Tim Goligoski, president of Kuhlman Corp., based in Toledo, Ohio. Shortly after this purchase, Kuhlman also hired Bauer Ford Reclamation to help create its mining and reclamation plans for the Tecumseh, Mich., site.

“We were dealing with a history of bad mining practices in the township by others, so the citizens had issues with our proposed use of the land,” Goligoski says. He explains that Bauer Ford worked with the company’s geologist and created a mining plan in five phases that included four lakes. The plan also proposed options for what the site would look like when the mining phase was complete. “We worked with the potential created by the lakes, and residential development was our final goal,” he says.

Kuhlman unveiled the plan to the township in 1989 and received its first permit for CTE in 1992.

“We had a series of five-year permits, where we had to go back to the township for approval. So every three to five years, we would revisit the plan, always working with Bauer Ford, and re-addressing such things as ‘Where are we mining during this phase? Where are we processing? What is now required for berming and landscaping?’” Goligoski says.

The result was a gradual acceptance by the township. “We had a plan to follow for 20-plus years, with guidelines by which we would mine,” Goligoski says. “But more importantly, we lived up to the plan. We did what we said we would do. That was huge.

“In this business, you have to understand there are people opposed to what you’re doing. But if you live up to your commitments, you can make it work.”

Earl Lafave

When Earl Lafave and his brother started Beck Companies in the mid-1970s, he says the duo saw their existing Detroit-area trucking/transport company as a launching point. “We evolved from transportation to the production of aggregate. And from there, we saw that a by-product of aggregate in Michigan is lake property,” he says.

Lafave says his primary recommendation for producers who have land in the right markets is to create a master plan that includes mining through reclamation and development. “The formula is different for rural properties, versus properties in the path of future development,” he notes. “But if you determine it makes sense, then decide at what point development should begin in order to maximize the value of the land.”

The biggest mistake Lafave sees among producers is to focus on mining every possible ton. “In the end, that producer becomes reactive and not proactive. He took out too much material, and didn’t leave room for roads or houses,” he says.

“When forming your plan, you need access to good land planners, geologists, hydrologists, a development team, and even builders,” Lafave recommends. “A good master plan allows for proactive thinking. Think payback and residual value, leaving enough land set back from the property line to develop it — and leaving enough aggregate on site to use in development.”

Lafave explains that a diminished point of return exists for marketable properties where the payback from development becomes greater than the payback from mining aggregate. “Mining is a long-term process anyway, and if you plan your development proactively when you go in, it will become part of your profit down the road,” he adds.