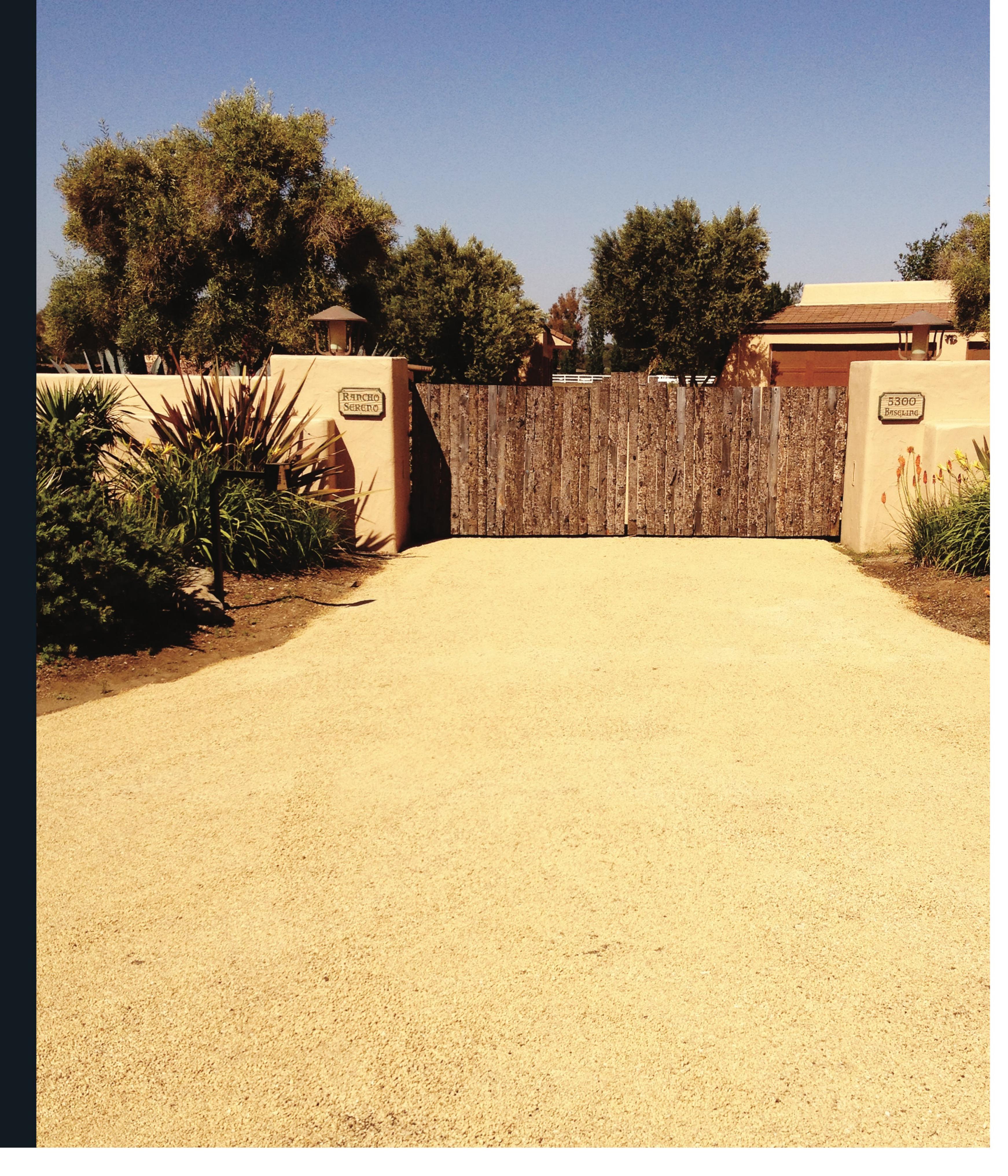


### Protect Your Investment.

It's always a good idea to require that your contractors carry worker's compensation insurance. Why? Because if your contractor isn't covered and an on-the-job injury occurs you could be financially responsible.

Suppose you bring a contractor whose employee suffers a back injury while on a client site. The contractor company is uninsured, but that won't stop the employee from seeking damages. When he doesn't get any compensation from his employer, your property is the next logical place to turn. An unless you're paying premiums to cover contractors, he may not be covered by your insurance, so you could be either paying his medical bills out of pocket or facing a lawsuit.

As with general liability insurance, you can require in your agreement that independent contractors carry worker's compensation insurance. Alternately, you can add the contractor employee's onto your own policy, and then pass the costs on to the contractor as part of your project.





# Is Your Asphalt Paving CONTINATION Licensed For The Job?

The C12 and C32 licenses are the two state Contractor licenses that relate to asphalt. Ramsey Asphalt has both.



### Earthwork & Paving Contractors

An earthwork and paving contractor digs, moves, and places material forming the surface of the earth, other than water, in such a manner that a cut, fill, excavation, grade, trench, backfill, or tunnel (if incidental thereto) can be executed, including the use of explosives for these purposes. This classification includes the mixing, fabrication and placing of paving and any other surface.

Lic# 881030 C12/C32



### Parking & Highway Improvement Contractors

A parking and highway improvement contractor applies and installs protective coatings, vehicle stops, guard rails, and mechanical devices, directional lines, buttons, markers, signs and arrows on the horizontal surface of any game court, parking facility, airport, highway or roadway constructed of concrete, asphalt or similar material. This classification includes the surface for preparatory work necessary for the application of protective coatings but does not include the re-paving of these surfaces.

### Identifying Types of Asphalt Damage.

Asphalt damage first appears as a graying in color and light raveling. At this point, fine hairline cracks are usually undetectable but are prevalent in the pavement.



### Cracking

As the raveling continues, the asphalt continues to weaken and the fine hairline cracks spread and deepen. At this point, the asphalt is no longer impervious to water. As water enters the cracks, it will begin to erode the sub-base thereby weakening the foundation of the asphalt. The asphalt pavement structure is only as strong as the base it sits on and is now susceptible to the weight of the vehicles depressing the weaker areas. The cracking will gradually intensify and begin a process known as alligator cracking.

Alligator cracking gets its name because the cracking resembles the hide of an alligators back. The cracks will continue to worsen as more water enters and vehicles continue to compress the sub-base. Soon you will see signs of imminent failure as soil pumps up through these cracks. This is the last stage of failure as soil pumps up through these cracks. This is the last stage of failure as the asphalt breaks into small pieces and starts to pop out and form pot holes or larger ruts.



#### Potholes

Areas of asphalt where cracking has been allowed to continue to the point where larger pieces of asphalt break away.



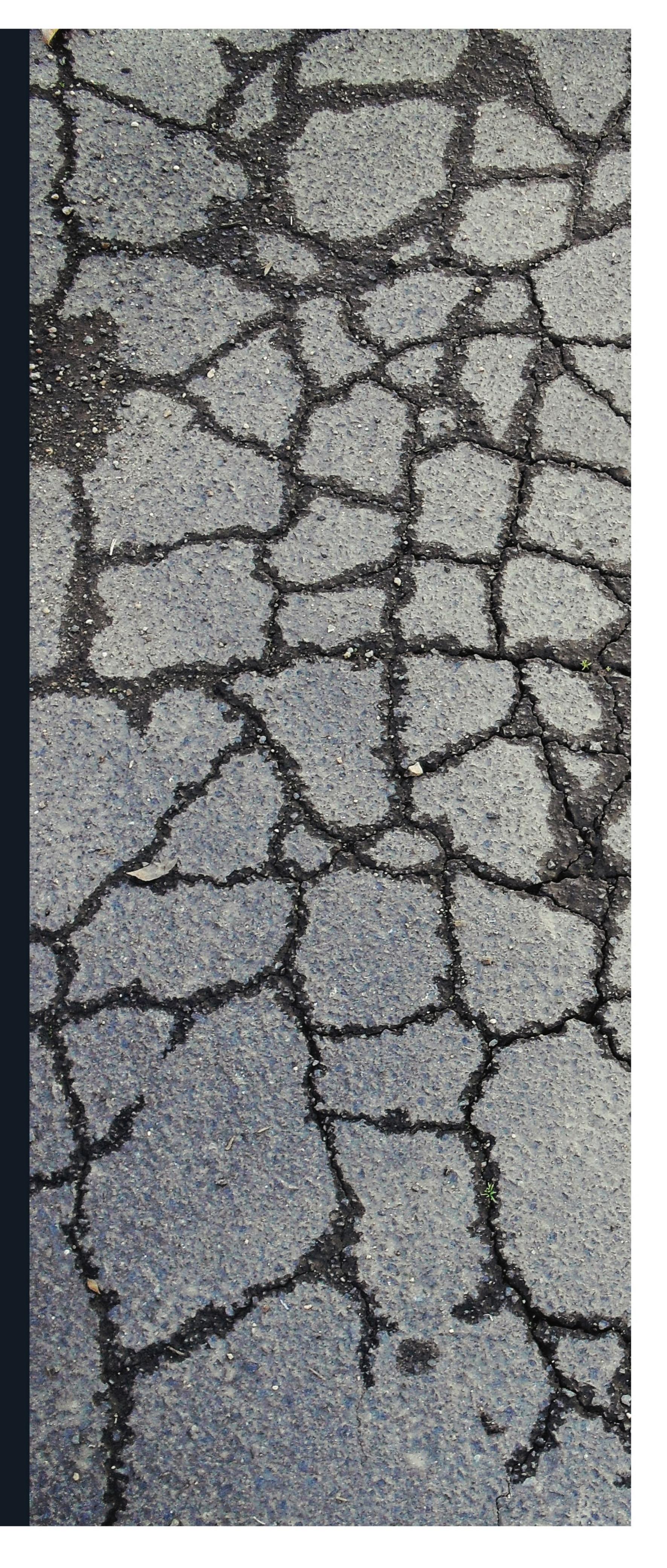
### Upheaval

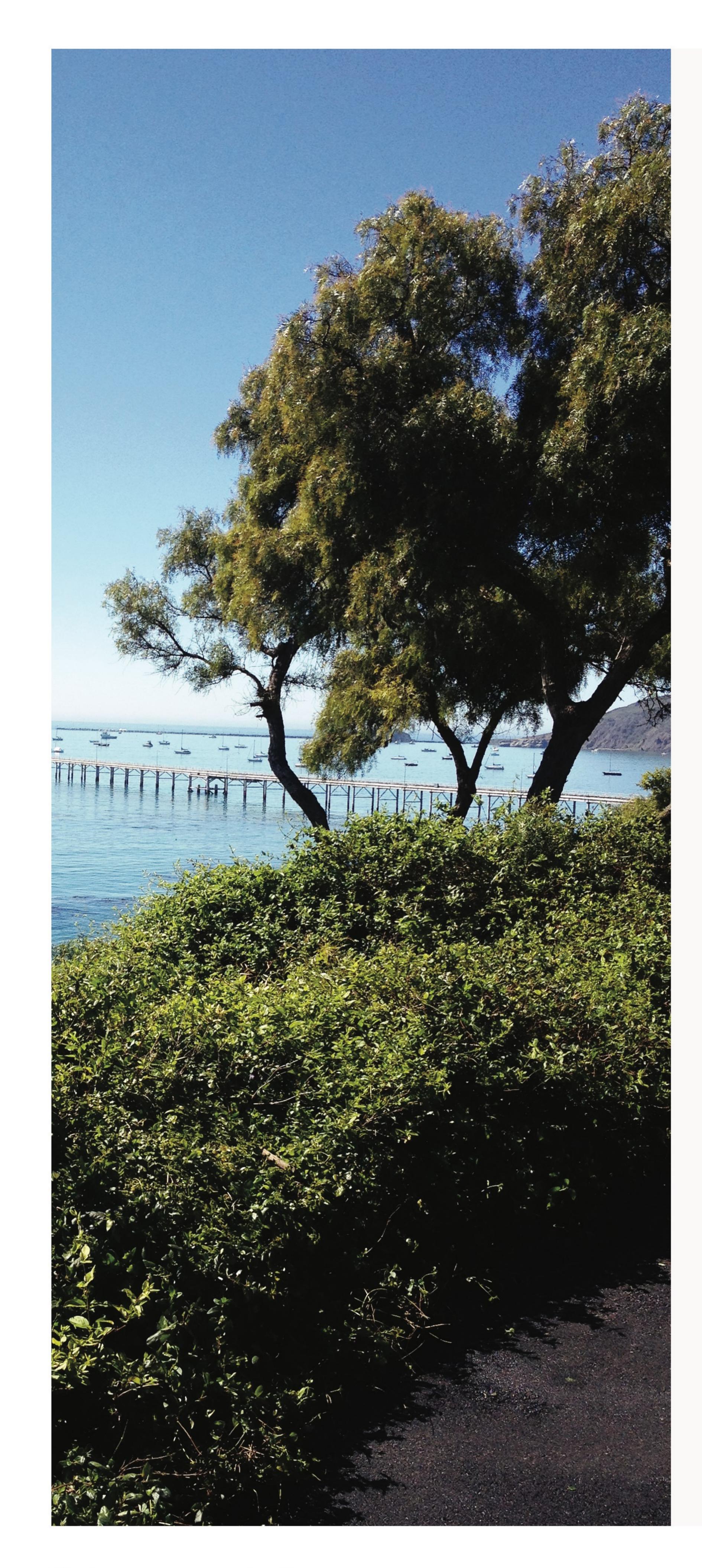
Areas of asphalt where elements from below the surface cause the sub-base to rise and cause upward pressure to the structure, most commonly tree roots.



### Sinkholes

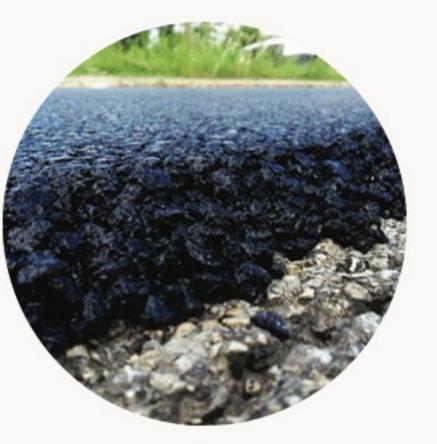
Areas of asphalt where the sub-base is insufficient to sustain the demands placed on the surface. Specifications for installing asphalt pavement structures exist to ensure the asphalt can adequately support the weight and volume of the vehicles.





### ASphalt Overlay, Patch or Replace?

Your parking lot or road needs repair but how do you know if it needs an overlay, skin patch or complete replacement. The photo details your issues, here are your options.



### Overlay

When an asphalt pavement surface deteriorates to the point of needing repair, an asphalt overlay is an effective solution. A standard asphalt overlay consists of a new layer of asphalt applied over the existing asphalt surface. The thickness of an overlay should range 1.5" to 2". The existing asphalt surface may be milled if grades need to be maintained or alter. Milling is a process by which a machine is used to plane the pavement surface to an appropriate depth before it is covered with the new layer. Once the milling is finished and the overlay is completed, the customer is left with a brand new surface ready for pavement striping.



### Skin Patching

A skin patch differs from removal and replacement because the existing asphalt is not removed. This type of repair should only be used when there is no base failure. Skin Patch is also used to isolate asphalt that is Spaulding (loose and rough) to extend the life of the asphalt (3-10 Yrs.). Skin patches generally use a fine sand aggregate as opposed to course aggregate because the edges of the patch are "feathered" out to zero thickness. Usually skin patching to improve the appearance of pavement or to stop water penetration. Skin patches are generally 1.5" or less in thickness.



### Removal & Replacement

Severe sub grade deficiencies may require complete removal of part or all of the pavement and base material. After excavation and removal, pre-existing conditions in the sub grade such as moisture, shallow utility lines, missing aggregate base, or incorrectly prepared sub grade may require additional steps in base preparation. When pre-existing condition have been corrected, new aggregate is supplied as needed and recompacted. The new asphalt is then placed and compacted with vibratory rollers to finish the process.

### ASPITAIT Milling & Conform Grinding.

Pavement milling (cold planning, asphalt milling, or profiling) is the process of removing at least part of the surface of a paved area such as a road, bridge or parking lot.



Milling removes anywhere from just enough thickness to level and smooth the surface to a full depth removal. There are a number of different reasons for milling a paved area instead of simply repaying over the existing surface.

Grinding or cold planning is the removing a desired thickness of asphalt. Grinding or cold planning can be used to remove the asphalt without damaging the base material. Grinding the edges of the asphalt prior to overlaying ensures that the complete asphalt thickness is achieved at the edges and the transition is smooth.



#### Petromat

Petromat is a pavement reinforcing fabric specifically designed for the paving industry. Its primary function is to strengthen and reinforce the base course of asphalt upon which the new asphalt will be placed. An additional benefit is that it helps to mitigate mirror or reflective cracking (cracks in the existing asphalt) from coming up through to the new asphalt.

Studies have shown that installing asphalt less than 2" over paving fabric will not reduce the reflective cracking and in fact conversely if the petromat is installed correctly it will reduce reflective cracking by 80-90%, Ramsey Asphalt Construction uses state of the art equipment and professional personnel to provide you the highest quality job in the industry.



#### Overlay

An "overlay" is the paving of a second layer of asphalt over existing asphalt. An overlay can be done when the existing asphalt is in overall good condition but may have some problem areas. Depending on the degree of cracking, crumbling or sunken areas, those areas can be cut out, patched and then a new layer can be paved. An overlay should NEVER be done on a driveway or parking lot that is severely cracked, crumbling, wavy or has sinking, soft spots. The new layer of asphalt will follow the old asphalt cracks (reflective cracking) and waves in a very short period of time.

Prior to paving an overlay, a tac coat primer should be used. This is the glue that is used to adhere the new asphalt layer to the existing asphalt. One important factor in determining whether or not to use this process is to keep in mind that overlaying raises the elevation of the existing parking lot. This is not always a desirable result. If it should be evident that raising the elevation of the parking lot is not an option, the next possibility would be to grind the existing parking lot down 2" and placing a new asphalt course over the newly ground parking lot.

# Are All Asphalt Paving Contractors Created Equal?

### We Say Absolutely Not!

Ramsey Asphalt utilizes the latest in paving technologies to make sure that every job lasts for years to come. Don't just take our word for it. See for yourself.



Competitors Paving After 2 Weeks



Competitors Paving
After 90 Days



### Concrete

### Removal, Replacement & New Installation.

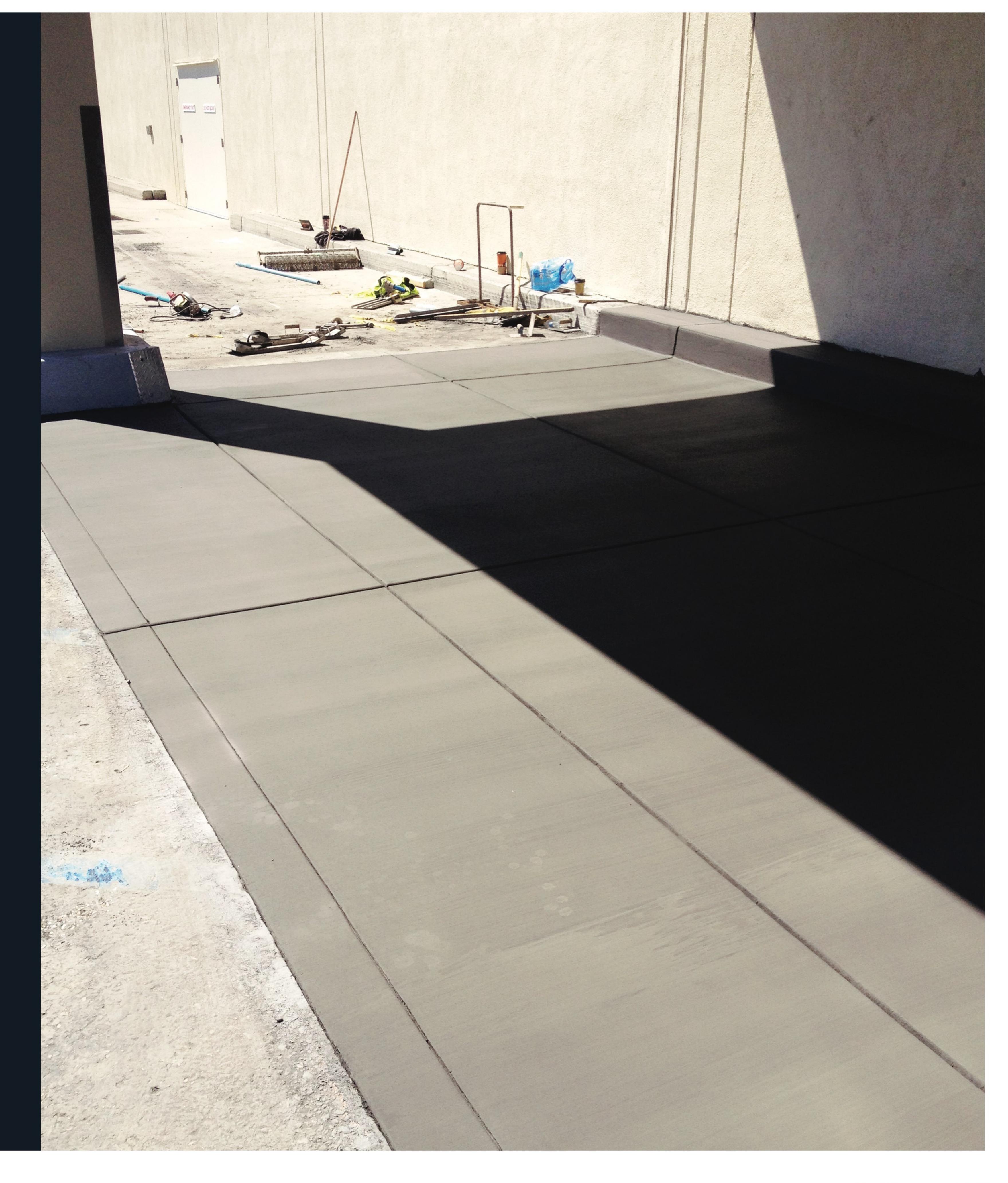
We are experienced and equipped to handle an array of concrete flatwork projects including sidewalk installation and repairs, curbs, gutters, patio, driveways and ADA compliant ramps.

We can provide a variety of finishes including broom finish, exposed aggregate, stamped, colored and decorative. Our crews are experienced with new construction, repairs or restoration and projects that involve both.

Because the density of concrete holds up against water erosion better than asphalt, it is primarily used to form curbs and gutters but can also be used as a traffic surface. The scope of work for concrete installation will change depending on how much weight and traffic the surface will be subject to.

Installing concrete is a three step process.

First, the area must be prepared and forms are set to hold the liquid concrete in place. Next, the concrete is poured into these forms and smoothed out by hand. Finally, when the materials have dried, the forms are removed and any landscaping or asphalt may be installed.



### Crack Filling

### Hot Asphalt, Hot Rubberized or Cold Pour Crack Filling.

Why treating cracks is important? It is common to use one of these processes prior to the application of Slurry sealing the asphalt.

- Prevent water from entering and weakening the base and subgrade.
- Prevent debris (incompressible materials) from entering cracks/ joints



- Prepare road surface for the overlay or maintenance treatments
- Cost Effective- "fix the roof now so that you don't have to fix the house later"

### Hot Asphalt

There are several ways to deal with cracks; the method of dealing with them depends on their size and depth. Large cracks of 1" or greater, should be filled with Hot Asphalt Mix. In these cases, the cracks will be blown out and cleaned of debris, then filled with fine mix asphalt (asphalt with little or no rocks). The asphalt in the cracks will then be compacted using a vibratory plate.

#### Hot Rubberized

Cracks of 1" or less will typically be filled with Hot Rubberized Crack Fill or Cold Pour. Hot rubberized crack fill involves blowing out the cracks with compressed air and filling them with a hot, rubberized fill material. Following this procedure, the asphalt will typically be slurry sealed. However, crack fill is not a final solution to the problem of cracking; it is realistically a temporary fix for a more complex problem. The natural expansion and contraction of the asphalt itself will often tend to squeeze the mixture up and out of the crack or, in the case of contraction, will cause the material to sink deeper in the crack. Additionally, in areas of extreme temperatures or in areas of very porous soil, the high temperatures can actually cause the material to melt and dissipate into the soil beneath.

#### Cold Pour

Cold Pour is often used instead of hot rubberized crack fill. The applications are similar to the hot process. The advantage of the hot mixed process is better adherence to the existing asphalt and usually a longer lasting product. Cold Pour consists basically of a substance that is nothing more than a thickened version of the same material used in Slurry Seal.





### Overview Of Asphalt Sealer Systems.

Asphalt sealers are not slurry seals (Caltrans section 37.2 specifications)

Many refer to asphalt sealers as slurry seals.

Asphalt sealers have been in use for over 40 years and today there are basically three different sealer systems: asphalt emulsion based sealers, clay emulsion based sealers and coal tar based sealers.

The first two systems are the ones most commonly used in California; coal tar systems are not heavily used except around asphalt paved areas sensitive to the dripping of oils and distillates such as airplane and truck fueling areas. They are still used extensively in the Eastern and SE United States but there have been health and environmental concerns regarding their use.

These first two systems are plant blended compounds typically containing emulsified asphalt binder and selected mineral and fiber fillers (such as sand, slate, carbon black and cellulose fibers). They are intended to improve surface texture, protect the asphalt pavements from effects of weather erosion and oxidation, and provide a smooth, non-abrasive surface. Recommended for use on all asphalt parking lots and driveways, giving them a uniformly colored watertight seal. These sealers do not add thickness or structural quality to the asphalt.

# **Seal Coating**What Property Owners & Managers Should Look For.

Asphalt sealer emulsion does not start to cure unless the surface temperature is 70 degrees and rising. As a result the times of seal to ensure the best result for from Mid-March through late October.

Also proper surface preparation: the asphalt should be as clean as possible—even power washed if needed. An asphalt sealer will fail if it is placed over a dirty surface. If there is a chance that there will still be some dusty areas when the sealer is applied, then you should consider requiring the area receive a tack coat applied first. Oil and grease spots should be cleaned (or even removed and replaced if bad enough), followed by the application of an oil spot sealer prior to the seal coat application. Otherwise, the oil will soak through the sealer.

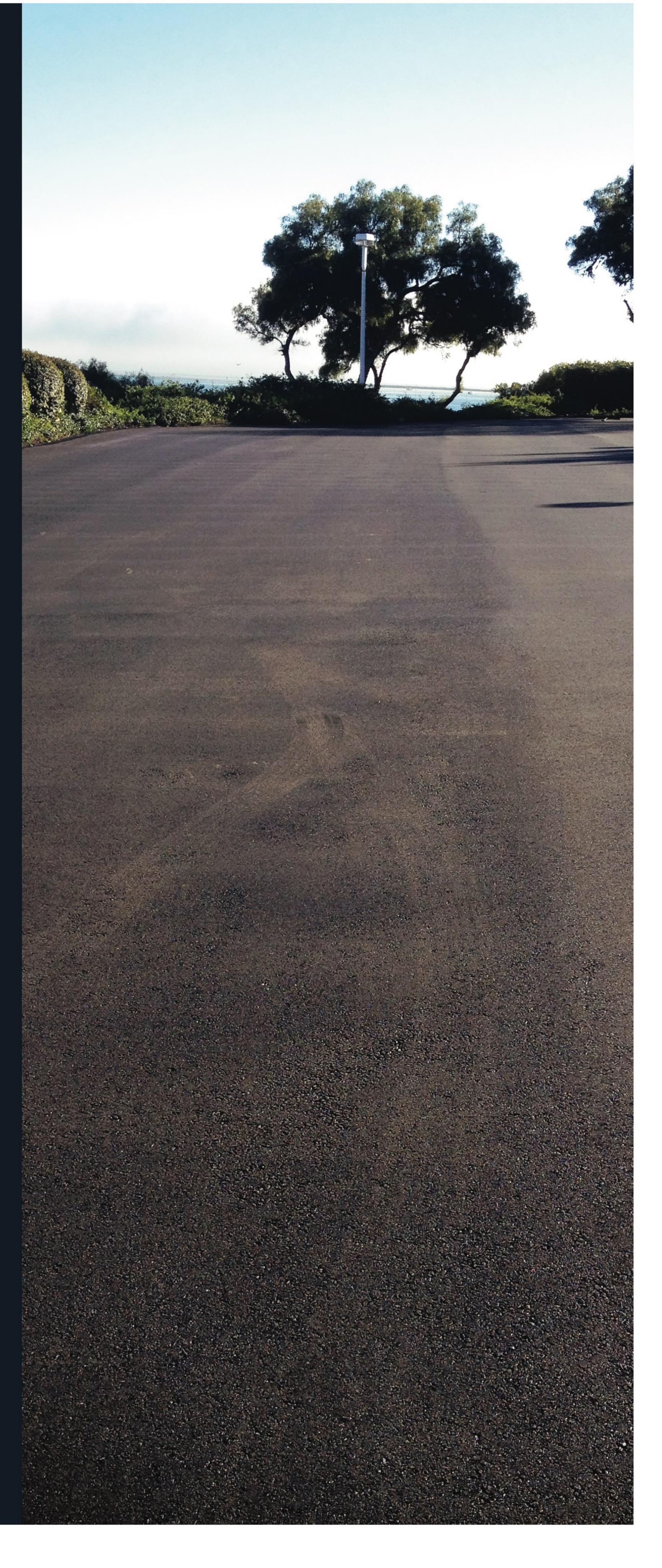
Cracks over ¼ inch but less than 1 inch should be cleaned and filled, using a cold or hot applied crack filler. Cracks over 1 inch should be filled with fine aggregate asphalt hot mix. Asphalt sealers are not designed to fill cracks—the sealer may seal cracks for a short time but will quickly reappear. The asphalt pavement should be dry although on very warm days or with very porous pavements, it is recommended that the pavement be pre-misted with water to keep the seal coat from drying out too quickly.

As previously mentioned asphalt sealing does not add any structural qualities to the asphalt pavement, so all failed asphalt should be removed and replaced with new asphalt hot mix.

The seal coat material should be diluted according to the manufacturers recommendations. It is important to add the correct amount of water—too much water will overdilute the sealer, causing it to lose its cementing or adhesion qualities, causing early failure. Not adding any water at all can cause the sealer to be too thick, causing shrinkage cracking and also leading to failure. The water and sealer should be fully mixed before application. The amount of sealer used depends on the pavement surface.

Traffic should be kept off the sealcoat for as long as possible and practical-preferably at least 24 hours in warm weather but this is usually not possible on large parking lots so some scuffing from vehicles turning their tires may occur. Watering for irrigation around the sealed asphalt should be turned off for a minimum 24 hours also.

If an asphalt pavement is properly designed and constructed, a maintenance plan of scheduled asphalt sealing will add many years of pavement service.



## Sealcoating Misconceptions & Realities.

Sealcoat is a wondrous thing. Typically between ten and thirty cents per square foot, it's an inexpensive way to turn a tired and gray parking lot or road into a striking and attractive black beauty. We've found that there are a number of widely held misconceptions about seal coating. Here they are, in no particular order.



### Misconception

A brand new asphalt surface needs to be seal coated right away to "protect your investment."

### Reality

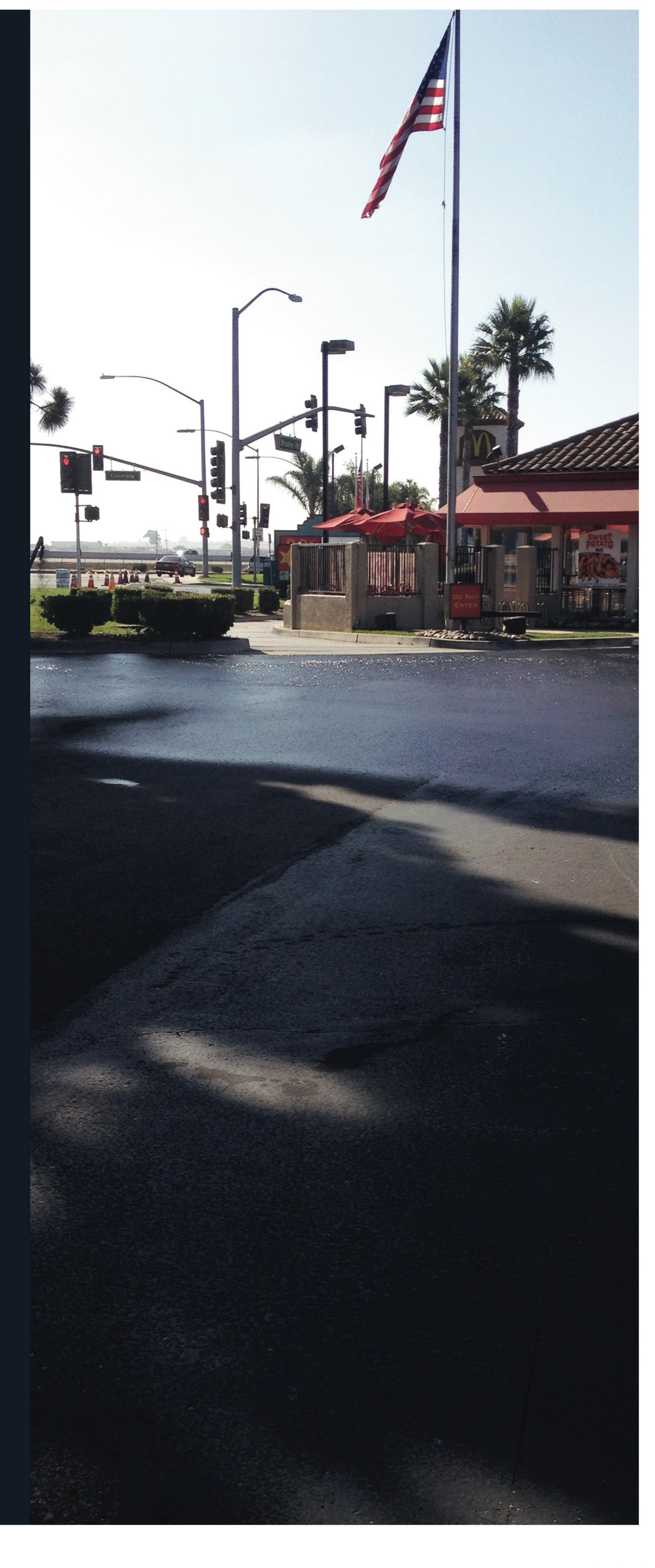
Sealcoat replenishes the top layer of oil to prevent the asphalt from becoming brittle and it prevents and combats raveling (fine aggregates coming loose from the surface). An entirely brand new asphalt surface needs neither. We typically recommend that the surface be seal coated before the first signs of raveling (loss of fine aggregate from the surface), which is usually anywhere from 1-3 years from new. The timeframe will depend on how much traffic, sunlight, and water flow there is on the asphalt.

#### Best Advice

Simply re-stripe the markings on the asphalt after a few years if sealcoat isn't necessary yet. It's extremely inexpensive and will provide a nice aesthetic improvement.

Additional note — Often it makes sense to have repairs and seal coating on the same cycle for mostly aesthetic reasons. The fine aggregates on the joints of the patch repairs do benefit from the sealcoat application and the entire surface ends up looking the same. Truth be told though, those patches would last just as long without a sealcoat – they just wouldn't look as good.

Cracks, poorly constructed repair joints, and surface imperfections are still visible soon after seal coating is completed.



## Sealcoating Misconceptions & Realities.

### Misconception

Sealcoat will fix cracks and "buy time" for replacement.

### Reality

Sealcoat is a surface treatment only. It is not a flexible material and has no structural strength. As soon as the first vehicle passes over those sealcoat covered cracks, the sealcoat itself cracks and allows water back in to compromise the integrity of the base which contributes to further structural damage. While a sealcoat will improve the appearance of asphalt with structural damage, it will do nothing to make the asphalt last longer.

#### Best Advice

If the pavement needs full rehabilitation, consider saving money toward that end, rather than using it toward a sealcoat even if it means the pavement may look worse for some period of time. If you do decide to sealcoat distressed pavement, make sure stakeholders have a clear understanding of its limitations.

### Misconception

Sealcoat "extends the life of the asphalt."

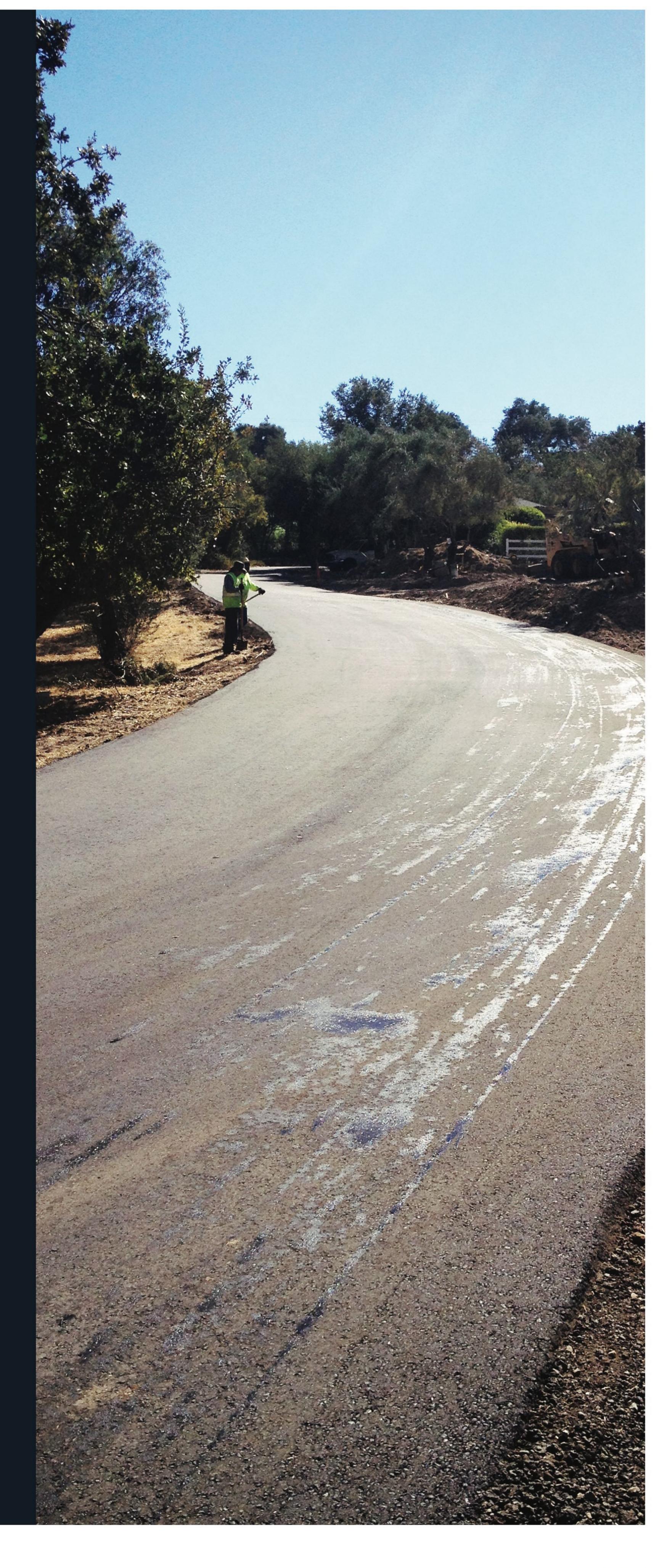
### Reality

A better way to say this is that it allows the asphalt to have the full life it should, which is typically 20-40 years. We've seen asphalt falling apart from the top down due to a lack of seal coating even though it was only 10-15 years old. With only one sealcoat application, the condition could have been prevented and the asphalt lasted another 10-25 years. On the other hand, we've had customers tell us they expected their asphalt to last forever because they've seal coated it regularly! The seal coating will have protected the surface, but done nothing to revitalize the oil holding the rocks together within the asphalt itself.

Eventually the effects of age catch up with it.

#### Best Advice

Make sure your reserve study or long-term planning does not assume an asphalt life longer than 40 years, no matter how much seal coating has been done.



## Sealcoating Misconceptions & Realities.

### Misconception

There's no such thing as "too much sealcoat."

### Reality

There is indeed and it's a huge problem! We've seen asphalt surfaces in great structural and surface condition where owners, managers, or boards have been a bit overzealous in their quest for proper maintenance and a smooth, black surface. Eventually the thick layers of sealcoat start to crack and peel (see photo). The only solution to this condition is to replace or overlay the asphalt (or in some cases, put a slurry seal on it, which is not always possible or desirable). Regardless, fixing asphalt that has been over-sealed is an expensive proposition.

### Best Advice

Look closely at the asphalt. You can't see individual rocks in surfaces with many layers of sealcoat on them. Also look for the unique jagged, hairline cracks in the sealcoat itself (see photo for an example). If over-sealing is becoming a problem, the surface may simply need to be allowed to wear for a few years. In other cases, it may be possible to vary the application rate, placing one thin coat with latex over thick areas and two coats over worn asphalt and new repairs. We'll always help out if over-sealing is be becoming a problem.

### Misconception

Sealcoat does nothing for surface preservation and is just a useless "paint job."

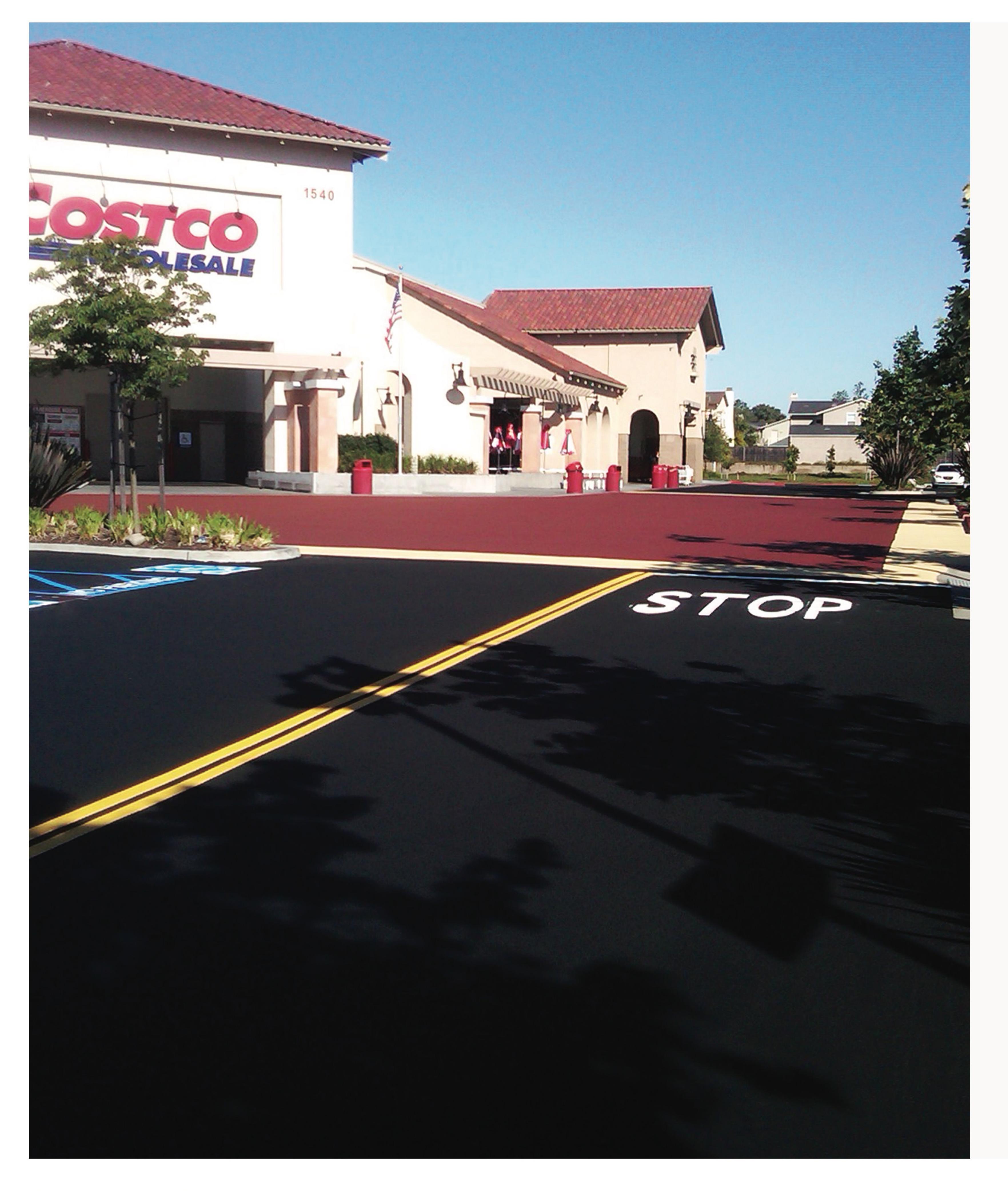
### Reality

Knowledgeable skeptics point out that asphalt does not need to be sealed until ALL of the previous seal has worn off in a given area. This is true. In addition, some roadways and parking lots get so much lightweight vehicle traffic that the rolling action of rubber tires kneads the asphalt, moving the oils through it and keeping it alive and well. But many owners re-seal their asphalt proactively on a 4 to 7 year cycle instead of waiting until all of the previous application has worn off. The seal can start to look "streaky" as it wears because the wear is inherently uneven — some areas are exposed to more traffic and water flow than others. Because the sealcoat really needs to be applied to the entire surface to look right, this means some of the areas with lesser wear are getting sealed before they truly need it.

#### Best Advice

Let us help you plan your maintenance cycles so you're protecting the areas in greatest need while not risking "over-sealing" areas that are not exposed to a lot of surface wear.





## Striping Knowing its importance.

Striping is the application of traffic paint to an asphalt or concrete surface. Traffic paint is a specially designed paint used on roadway surfaces and provides direction and information to the persons in the area.

and dry prior to the application of traffic paint.

The areas to be painted are marked out using chalk lines to be sure the striping is precise.

Ramsey Asphalt uses specially designed striping machines that apply the paint evenly and provide a professional result every time.

There are multiple uses for striping, such as: the common car stall, handicap designated parking, directional arrows, number stencils, or reserved parking spaces. Striping typically takes place the day after new asphalt or seal coat has been applied.

last, and may show up through seal coat after a few years of wear. Any striping that is no longer desirable should be "blacked out" (covered with black paint) prior to seal coating to be sure it will not show through in the future. In some cases, a longer lasting surface is preferred. In these cases, two coats of traffic paint will be recommended. Ramsey Asphalt Construction provides all of your signage needs as well.

Whether it be "No Parking," "Parking By Permit Only," or custom signage, we will work with you to create and install your signs. Signs can be installed in planters or drilled into the harder surfaces, such as asphalt or concrete.

It is important to note that striping is made to

## What is Chip Sealing?

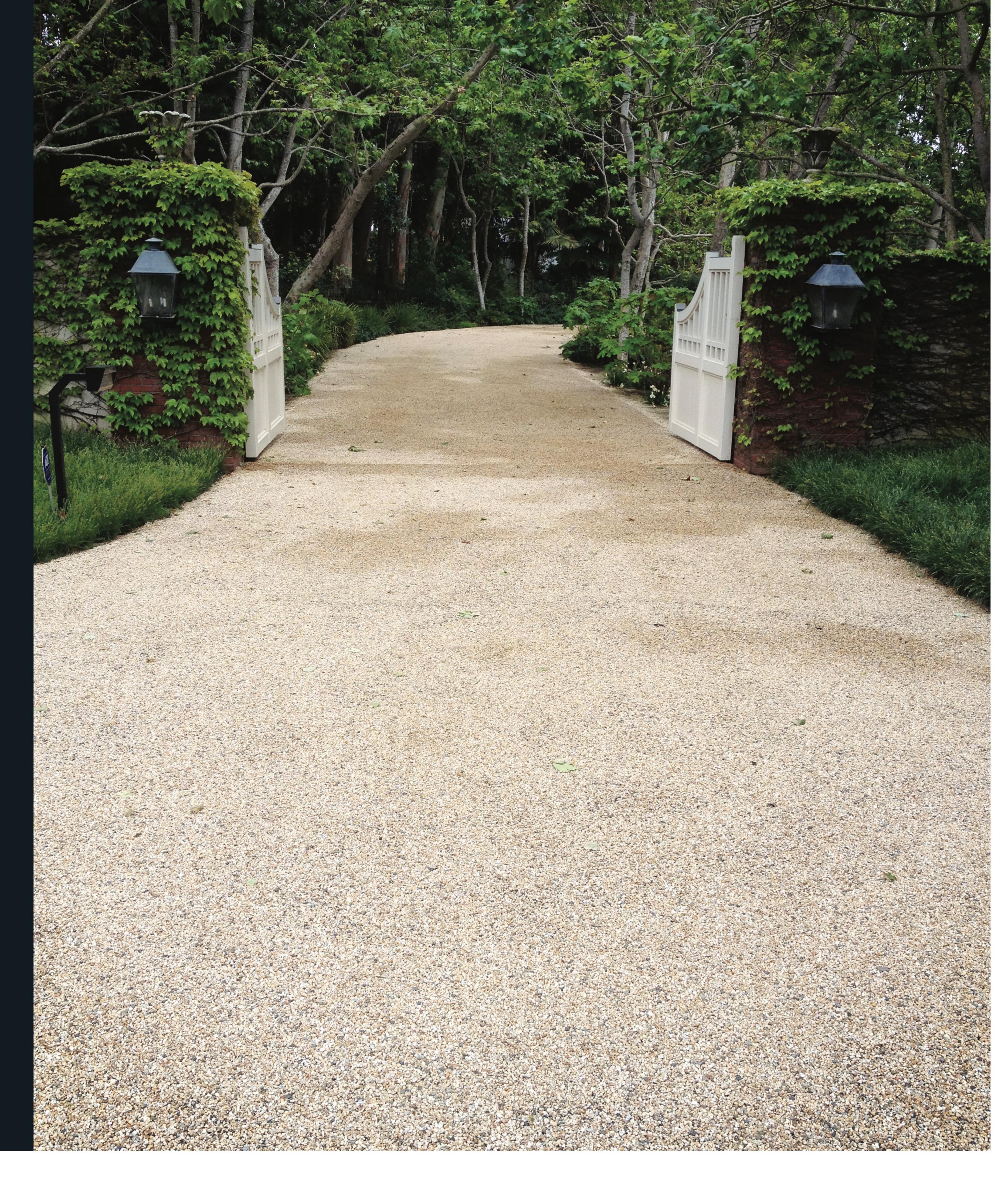
Chip sealing is a cost-effective way to both build a durable driveway and a decorative driveway or private road. Chip sealing is a coating of hot applied liquid asphalt emulsions. The second step is to imbed crushed rock chips in the surface.

The top surface of stone is left free of asphalt so the black asphalt is covered and the rock is the only color that shows. This result in a wearing course of rock glued in place by the asphalt coating applied over the base pavement. The rock selected controls the final driveway color.

The end result is a thick layer of asphalt and a layer of fine crushed rock over the existing pavement. These two components work together for years to provide a protective layer that defends against water penetration into the base material, frost heaves and asphalt oxidation. This treatment creates long lasting durable driveway.

A chip seal application provides the following benefits:

- Creates a warm rustic driving surface
- Skid resistance
- Chip Seals eliminate the need to crack seal
- Smoothed irregularities



## Chip Seal For Private Roads

For private roads, chip sealing is a distinctive, durable pavement surface choice for either new construction or maintenance needs. This offers associations and subdivision developers more than just a hard pavement surface for cars to drive on.

With chip seals the durability and appearance work together to enhance the properties aesthetics.

Typical stone, gravel or dirt private roads do have a rural look but suffer from dust in the summer and mud in the spring. These types of roads also need periodic grading and maintenance due to traffic moving the material around. A solid decorative stone chip seal surface is an excellent alternative. The chip seal keeps the warm natural look but avoids the need for periodic applications with dust suppressants, raking and grading program that takes time and money for maintenance.



### Resurfacing

Private roads that are structurally solid but in need of care can be cost effectively up graded to a new surface for less than a new pavement over lay with asphalt. The thick layer of asphalt in the chip seal process provides the durability and water sealing qualities. The top color or natural stone surface provides a distinct look of a private country estate.



### Chip Seal

The process of chip sealing is outstanding in sealing the existing road surface from water intrusion. But it also protects the asphalt from weathering and oxidation. Applications of chip seal can and often prolongs the life of the road by 8 to 12 years. This time frame can be much greater depending upon the age and condition of the particular private road and the amount of traffic that the private road receives.

