

Company Starts 101st Construction Year



One hundred years ago **George W. Koss**, a young engineer working for a railroad, set out on his own to assemble the people, equipment, and capital required to be a builder, a contractor. In 1912 Koss Construction was in business, building mostly small railroad bridges, and soon thereafter some of the very first hard roads in Iowa.

Within the first decade of business, this young company was working across multiple states delivering both large bridge structures and concrete pavements. The early success of the company is memorialized by the size and diversity of the projects being constructed by the late twenties, from the Mendota bridge over the Minnesota River to the toll road from the Port of Callao to Lima in Peru, South America.

One hundred years later we cannot ascertain how Koss Construction was able to finance such rapid growth, nor can we offer many details on the equipment fleet of that era. But, the people who had joined together as a company are still known to us today -- L. V. Hites was the Chief Engineer and Frank Kratoska the Superintendent. We know both were critical to the success of these early projects, and the company's quick growth. Kratoska like so many great men and women of his generation started with only an eighth grade education and a solid Midwestern work ethic, but he would see his career rise to the point that he was overseeing millions of dollars of new construction while enjoying the company's supreme confidence in his abilities.

Fifty years ago Koss Construction Company had a backlog of over two million square yards of concrete pavement and a budget of over \$300,000 allocated to the purchase of new equipment. The year before, 1961, the Sunflower Division had just delivered one-million square yards, a first for a company division. But, what was noteworthy in the spring of 1962 edition of the Hard Roaders Outlook was the full page

article on Lois Staley having reached the 20-year milestone on the company Honor Roll. It was noted that this was a second career for Lois, after raising three daughters she joined the Sunflower Paving Division as Personnel Director in the Field Office.

Today, we have a backlog of over two-million square yards, as well as 400,000 tons of hot-mixed asphalt. Our budget for new equipment will likely exceed three million dollars and the Sunflower paving Division paved over 1,000,000 square yards last year. But, in another fifty or one-hundred years what will be remembered of 2012? If history is any lesson, it will be the people who call themselves Hard Roaders. 2012 is noteworthy already with an Honor Roll recognizing Mark Newlin reaching the 30 year milestone, Trent Doyle the 25 year milestone, Tom Breyfogle and Randy Brown the twenty year mark, Bill Marquart fifteen years; 2012 is the year



Mike Pitts retired and Tyson Bahner, Chris Berroth, and Steve Gruber were hired; the year Sam Bartley, Mark Haines, and Janine Mohan received promotions.

This is the beginning of the one hundredth construction season for Koss Construction Company. Take a look around you; the people you see are as good as any this company has known, which make 2012 a great year to begin our second century as a company.

NEW GAME

6" Bonded Concrete Overlay on Interstate 70, Kansas Owners Perspective by Andy Gisi, P.E. - Geotechnical Engineer, Kansas Department of Transportation

The "hay days of blow and go" interstate construction is behind us. The interstate system has been built and is in need of new life. Total reconstruction is expensive and not sustainable. Surface preservation is the new game. State Highway Agencies are challenged to develop comparable and competitive preservation actions.



The pavement was constructed in 1964 and consisted of a hot mix asphalt surface and base for a total of 15 1/2". Over its 47 years of life the original pavement was resurfaced and rehabilitated five times and an additional 8.7" of

HMA was added to the structure. The first action at 10 years into its life was a 3" HMA overlay. At year 23 KDOT constructed a slurry seal. At year 28 KDOT milled and overlaid with HMA. At year 32 KDOT milled the top 4", constructed a 4" cold in-place recycled layer, constructed a 4" hot recycled layer, and capped it with 2" of HMA surface. The next action was at year 40 consisting of ultra thin bituminous asphalt surface. And at year 47 KDOT constructed the 6" bonded concrete overlay.

While the results of the investigation indicated the pavement should be reconstructed the funds budgeted for the project were insufficient. Fortunately over the past 28 years KDOT has developed a considerable tool box of fixes for its pavements as a result of its robust pavement management system. For over 40 years KDOT tried to maintain the pavement using HMA actions. As time went on the life of the actions were less. If KDOT continued on this path its efforts would become less cost effective each time. Therefore a change was needed.

The combined success of KDOT and the Contractor will determine what's in store for the future. The proper pavement design process, the selection of materials, and the workmanship are the key to success.

Contractor's Perspective by Tim Gerhardt, P.E. - Vice President, Construction, Koss Construction Company

For a concrete paving contractor, this looked like a great opportunity. I-70 west of Salina has been 220 miles of full depth asphalt since

it was originally constructed. Along with a product delivered in place for less than \$50 per ton, concrete paving can deliver the horizontal, vertical and geometric control that routine asphalt overlays are unable to achieve.



In total, four contracts cover approximately 30 miles of I-70 in Ellsworth and Lincoln Counties. Two projects (Lincoln County and the middle Ellsworth County) were let in July of 2010. Preliminary grading, crossovers, and other work was scheduled and completed in 2010 to allow for paving in the 2011 season. Just as paving began in 2011, the remaining two Ellsworth County projects were let and awarded. Because

a crossover could not be constructed at the Ellsworth / Lincoln county line (due to width of median and geometry), there was an overlap of approximately five miles between two adjacent projects. This potential physical and contractual constraint was soon turned from problematic - to an opportunity that combined the phasing of the two contracts and eliminated crossovers. This also provided a significant cost savings.

The milling operation was stringline controlled and required multiple passes to accommodate the different driving lane and shoulder cross



slopes. Specifications limited the temperature of the underlying surface to a maximum of 120 degrees. Water would typically cool the pavement about 20 degrees, but with daytime temperatures in July well over 100 degrees, and winds

regularly in excess of 30mph, the cooling effect did not last long. With concern for the effect that temperatures would have on the pavement, including the ability to saw effectively to control cracking, paving was scheduled for nighttime hours in July and August.

The mainline paving included both driving lanes and the inside shoulder in one pass. The paving operation was a typical high production paving train and plant that could, and did, deliver over 3000 cubic yards per day. A Rex Model 'S' Central Mix Plant produced the concrete for transport in tractor trailers to the dual Rex Belt Placers. A G&Z 850 paver was used to consolidate and finish the slab, cure and texture applied with a Gomaco tractor. The 6' square joint spacing with 30' wide paving required four longitudinal control joints and one longitudinal construction joint. Tie bars were specified every 3' in the longitudinal joints resulting in two tie bars per panel. 3000 cubic yards per day at 6" thick and 30' wide yielded about a mile of paving. Typical daily profilograph results were in the single digits on the 0.00" blanking band. A mile of paving required almost 50,000 lineal feet of sawing.

These projects provided a unique platform to apply some innovative technology. A Ground Penetrating Radar (GPR) was employed on the paver to provide

real time monitoring of the inserted tie bars on the longitudinal control joints. A display screen on the paver provided the paving foremen and KDOT inspectors the opportunity to see where the bars were and make



adjustments when needed during the paving. The GPR could also be used very efficiently to evaluate steel placement in hardened concrete. Stringless milling and paving technology was also demonstrated on the last section of mainline pavement. This demonstration provided the paving crew, and the Department, with confidence that this technology was practical and could achieve comparable results to the traditional stringline method.

The 2011 paving on these I-70 overlays was successful and expectations are high as the 2012 season starts the completion of this 30 mile stretch of pavement.

Koss Construction Company

2012 Honor Roll

30-YEAR ASSOCIATES

★ ★ ★ ★ ★ ★ ★ ★

Rodney J. Stryker	.....37
Mark A. Newlin	.....30

25-YEAR ASSOCIATES

★ ★ ★ ★ ★ ★ ★ ★

Kelly D. Moore	.....29	Alfred D. Adams	.....26	Trent E. Doyle	..... 25
G. Allen Payne	.....27	Thomas L. Rodgers Jr	.....26		

20-YEAR ASSOCIATES

★ ★ ★ ★ ★ ★ ★ ★

David M. Howard	.....24	Lydia Blixt	.....21	Thomas A. Breyfogle	..... 20
Vernon R. Reed	.....24	Tim W. Gerhardt	.....21	Randy W. Brown	..... 20
Abel G. Salinas	.....22	Jose Q. Jaquez	.....21		

15-YEAR ASSOCIATES

★ ★ ★ ★ ★ ★ ★ ★

Steven D. Andris	..... 19	Mario R. Barrera	.....17	Alvaro DeLeon	..... 16
Juan M. Ibarra	..... 19	Mark A. Haines	.....17	Donald D. Hill	..... 16
Pascual A. Ruiz	..... 18	Lynn D. Maxey	.....17	William S. Marquart	..... 15
Clinton R. Myers	..... 18	Randy A. Caruthers	.....16		

10-YEAR ASSOCIATES

★ ★ ★ ★ ★ ★ ★ ★

Bruce Henderson	..... 14	Robert L. Kennedy	.....12	Joe A. Kilburn	..... 11
Jeffrey L. Jay	..... 14	Pamela S. Koerth	.....12	Jamie Lalicker	..... 11
Daniel L. Vestal	..... 14	David K. Kenworthy	.....12	Arturo Marin	..... 11
Dwayne H. Yearns	..... 14	Antonio Lopez	.....12	David Michael Pitts	..... 11
Maurice R. Dunseth	..... 13	Michael S. Purkey	.....12	David C. Vestal	..... 11
Jennifer J. Fleming	..... 13	Jose I. Salinas	.....12	Raul Gonzalez	..... 10
Douglas B. Hawkins	..... 13	Sandra L. Wilson	.....12	Gary Haas	..... 10
Ray D. Lalicker	..... 13	George F. Cecrle	.....11	Bradley J. Pohlmeier	..... 10
Rick D. Shelton	..... 13	Salvador DeCasas	.....11	George Roberts	..... 10
Wilbur D. Turner	..... 13	Ely Gardea	.....11		
Arnulfo Garcia	..... 12	Dale Heronime	.....11		

5-YEAR ASSOCIATES

★ ★ ★ ★ ★ ★ ★ ★

Benjamin Carrillo	.....9	Tim C. Ossman	.....8	Ray Little	..... 6
Sergio Cervantes	.....9	Alan E. Peimann	.....8	Matthew Lyman	..... 6
Francisco Chavira	.....9	Sergio Lechuga Ruiz	.....8	Alberth C. Ruiz	..... 6
Tyson Funk	.....9	Steven L. Smith	.....8	Christopher Wilson	..... 6
Jose I. Garcia	.....9	Jeffrey S. Tatman	.....8	Stephanie Anderson	..... 5
Garry Kennedy	.....9	Victor D. Zarate	.....8	John Casady	..... 5
Virginia Kurzen	.....9	Greta Barton	.....7	Armando V. Garcia	..... 5
Tyronn Rothchild	.....9	Juan C. Deleon-Perez	.....7	Carl Guess	..... 5
Matthew Boyer	.....8	Rebecca A. Harmon	.....7	Michael Huff	..... 5
Ruben Escamilla	.....8	Mike L. Payne	.....7	Janine Mohan	..... 5
John W. Guay	.....8	Edward D. Perez	.....7		
John S. Hart	.....8	Steven Tackett	.....7		

The number denotes completed years of service; does not include the 2012 season.

“THE STARS ON THE SLEEVE TELL THE STORY”

Personnel News

Mark A. Haines has been promoted to Senior Engineer, Mark joined the company in 1995 after graduating from Iowa State University. Mark has come through the ranks, Field Engineer, Project Engineer, QC Manager, and Estimator over these seventeen years and now leads a very efficient and productive staff in the office.

Janine Mohan has been promoted to Engineering Assistant. Janine joined the company in 2006 with a computer science degree as well as construction company back office experience. Janine now provides job costing support to our engineering staff.



David “Mike” Pitts has retired from the company. Mike joined the company in 2001 as Equipment Manager. Mike deserves a lot of the credit for the quality of our equipment fleet today. His experience and dedication to the company will be missed.

Samuel R. Bartley has been promoted to Equipment Manager. Sam is responsible for the Pauline Shop and providing support to the Divisions on their equipment maintenance and repairs. He is the primary point of contact for all equipment and related vendors.

Tyson Bahner has joined the Sooner Division as QC Technician. Tyson has an Engineering Technician degree from Pittsburg State University. Like so many of our engineers and managers, Tyson is on his way to learning our operations and products via our quality control efforts.

Christopher Berroth has joined the Sunflower Division as QC Technician after a summer internship in 2011. Chris has a Construction Management degree from Pittsburg State University. Chris is also on his way to learning the fundamentals of what we do as a part of our quality control organization.

Steven M. Gruber has joined the company as Truck Foreman for the Sunflower Division. Steve ran his own trucking business for many years around the Topeka area and knows our trucking needs and requirements very well.

Koss Construction Company Health Insurance

To provide the best value of health and welfare benefits for our employees, last year it was decided to move our health insurance to Coventry Health Care of Kansas and our dental insurance to Delta Dental of Kansas. Our employees with health insurance coverage should have noted on their payroll checks after January 1, 2012 their portion of the health insurance was reduced by some 15% to 20%.



Now, after three months with the new insurance companies we have received some good comments and some not so glowing reviews of individual experiences. We contacted Willis of Greater Kansas, Inc., our insurance consultants regarding some of the comments we have received. Willis stated that they have moved quite a bit of business to Coventry in the past few years and they have seen it takes about a year or so to get adjusted to the new insurance company. So hang in there and if you need assistance with any piece of our health and welfare package, contact Pam Koerth or Allen Payne in the corporate office for assistance.

Below is information assembled by Willis with regards to our Medical, Prescription Drugs and Dental plans that should help answer some of the questions you may have.

Health Insurance Changes, effective January 1, 2012.

Medical: We have changed our medical insurance coverage to Coventry Health Care of Kansas, Inc. in order to give our employee's a more cost effective plan for 2012. As a consumer of health care, we need to ask questions when we visit our providers. Question what services they are advising you to use. For example, an X-Ray may be sufficient instead of an MRI and the X-Ray is much more cost effective. Some

procedures require a pre-authorization request be submitted by you or your physician. If your question is insurance related and your physician is unsure, contact Coventry. If an authorization request is denied, it may be there are other more cost effective procedures that should be attempted first.

Prescription Drugs: Remember to ask your physician if a generic is available and appropriate. If you do end up needing to take a Brand-Name drug, check your Coventry Drug Formulary List for the Tier. If your prescription is not on the formulary, you may still purchase it but you will share more of the cost. If you would like to know if a drug you are taking is on the formulary, you can find this information online at www.chckansas.com. You can also contact your benefits office or call Customer Service at 800-969-3343. See the Formulary explanation at bottom of page.

Go to www.CHCKansas.com and register on My Online Services to view personalized plan information, claims, EOB's, print a temporary ID card, order a new ID card, see the status of authorization requests, to see prescription drug information, use pharmacy tools, and do Provider searches. See Coventry contact phone numbers below:

Customer Service — 800-969-3343

Pharmacy Help Desk — 800-378-7040

Behavioral Health and Substance Abuse Services — 866-607-5970

Delta Dental Plan: Our new dental insurer is Delta Dental of Kansas, effective 1/1/12. Changing to Delta Dental gave us a broader network of dentist, along with cost savings for our plan and for you. Go to www.Deltadentalks.com to register and view your personalized plan information. You can print an ID card, search for a provider, pull forms, view benefits and claims, etc. Contact DDKS at 1-800-234-3375 or email them at ddpkc@deltadentalks.com.

Category of drug dispensed:	Definition:	Copayment as shown on the Pharmacy Rider you received with this packet:
Generic prescription	If a formulary generic prescription is dispensed.	You pay the lowest-tier copayment shown on the Pharmacy Rider.
Formulary Brand-Name prescription — no Generic available	If a formulary brand-name drug is dispensed and there is no generic equivalent available.	You pay the middle-tier copayment shown on your Pharmacy Rider.
Any Nonformulary prescription	Any nonformulary prescription drug is dispensed. This includes nonformulary brand-name and nonformulary generic.	You pay the nonformulary copayment shown on your Pharmacy Rider.
Brand-Name prescription—Generic available	If a formulary brand-name drug or a nonformulary brand-name drug is dispensed at the request of the member or physician , and there is a generic available.	You pay the brand-name copayment or the nonformulary copayment (whichever is applicable) shown on your Pharmacy Rider plus the difference between the average wholesale price of the brand-name prescription drug and the allowed cost of the generic drug.

Paving Awards

The Missouri/Kansas chapter of the ACPA held their annual workshop and Awards lunch during the first week of March. Koss Construction Company representatives made several trips to the front to receive numerous awards for projects completed in Kansas.

- **DIVIDED HIGHWAYS (URBAN) - US-50, Finney County, Kansas (Koss #59)**
- **DIVIDED HIGHWAYS (RURAL) - US-54, Pratt & Kingman Counties, Kansas (Koss #55 & K#65)**
- **STATE & PRIMARY ROADS - K-61, McPherson County, Kansas (Koss #60 & K#61)**
- **OVERLAYS I-70, Ellsworth & Lincoln Counties, Kansas (K#66 & K#67)**
- **SMOOTHEST DAYS PAVING I-70, Ellsworth County, Kansas (K#66)**

The Asphalt Division completed a very nice project in southwest Oklahoma early last year and it was selected as a winner by the Oklahoma Asphalt Pavement Association.

- **WINNER - CITY, COUNTY, BIA OR STATE HIGHWAY SH-6, Greer County, Oklahoma (K#948)**

And the Oklahoma/Arkansas Chapter of the ACPA selected our LeFlore County, Oklahoma project as a winner in their awards program.

- **STATE HIGHWAYS US-59, LeFlore County, Oklahoma (K#62)**

Congratulations to all who contributed to these Award winning projects. There is not much better than the pride associated with completing quality pavements.

2012 Safety Score Board



Picture from 1973

The Safety Score Board is a capsule view of the accidents that have occurred and the number of hours worked on each project so far this year through March 31, 2012. Any incidents that did not require medical treatment or only first aid are not included in these figures. Last year for the same time period, there were four (4) workers compensation recordable accidents of which two (2) were lost time accidents. For the vehicle/equipment accidents last year, there were two (2) backing accidents and two (2) collision accidents. All of the vehicle/equipment accidents were preventable. This year only one of the five (5) accidents was non-preventable and happened when a member of the traveling public hit the paver on our project in Prairie County, Arkansas, Koss #958. Fortunately, no Koss employees were injured when that accident occurred.

It should be noted that the number one cause of equipment/vehicle accidents is backing. This is an area where we must improve. The good news is that we are off to a great start this year for workers compensation personal injury accident. Keep up the good work!

SCORE BOARD

JOB #	COUNTY	STATE	HOURS WORKED	LT ACCID	VEH/ W/C ACCID	VEH/ EQUIP ACCID
SOONER CONCRETE DIVISION:						
KOSS #24	DIV. OVERHEAD	KS	4771.00	0	0	0
KOSS #57	RENO	KS	10,314.00	0	0	0
KOSS #68	NEOSHO	KS	799.00	0	0	0
KOSS #69	WILSON	KS	1,107.50	0	0	0
KOSS #70	RILEY	KS	362.00	0	0	0
KOSS #71	RILEY	KS	0.00	0	0	0
KOSS #75	KINGMAN	KS	0.00	0	0	0
KOSS #76	KINGMAN	KS	0.00	0	0	0
KOSS #77	KINGMAN	KS	70.00	0	0	0
DIVISION TOTAL			12,652.50	0	0	0
ASPHALT DIVISION:CENTRAL DIVISION:						
KOSS #26	DIV. OVERHEAD	KS	1,741.00	0	0	0
KOSS #958	PRAIRIE	AR	21,565.00	0	0	3
KOSS #956	BOX BUTTE	NE	0.00	0	0	0
DIVISION TOTAL			23,306.00	0	0	3

JOB #	COUNTY	STATE	HOURS WORKED	LT ACCID	W/C ACCID	EQUIP ACCID
SUNFLOWER CONCRETE DIVISION:						
KOSS #21	DIV. OVERHEAD	KS	5,027.50	0	0	0
KOSS #66	ELLSWORTH	KS	1,108.50	0	0	0
KOSS #67	LINCOLN	KS	541.00	0	0	0
KOSS #72	SHERMAN	KS	1,138.50	0	0	1
KOSS #73	ELLSWORTH	KS	860.00	0	0	0
KOSS #74	ELLSWORTH	KS	1,406.00	0	0	0
DIVISION TOTAL			10,081.50	0	0	1
KOSS #23	CENTRAL SHOP	KS	3,338.50	0	0	1
DIVISION TOTAL			3,338.50	0	0	1

Field Office Upgrades

Fundamental to delivering the projects that we have built for the last 100 years, is the ability to move everything from one location to the next. Everything must be loaded or, if it has wheels, towed to the next project. Our Field Offices are no exception and the company has used these offices effectively through the years for Managers and Superintendents as well as Technical and Administrative positions. The Field Office is usually the first contact, and the first impression, that many have with the Company. Organization and appearance are certainly important.

This summer will see the deployment of the third new Field Office in the last three years. These new units were built to the specifications and layout that the company has found most effective. Each has ample space for all the required functions as well as storage. They are well insulated and provide a comfortable place to work year round. They are equipped with the latest technologies to keep the lines of communication open and provide the information and data needed by all. They can be quickly readied for transport and set-up shortly after arrival at the next site.



Real Time Control

Real time quality control reporting is becoming more important every year. Most DOT's offer incentive payments based on consistently producing materials that meet or exceed their specification requirements.

This is one reason it is paramount that not only the field technician, but also the company as whole is aware of our current materials performance. Currently test results are summarized daily for field management personnel and home office engineers.

While a daily report is useful for incentive calculations, it however does not provide us with information soon enough to modify our process in real time. New technology now enables the company the ability to see these test results in real time.



The Quality Control department has developed spreadsheets for internet connected handheld devices that will report test results in real time. The field technician will submit results on the handheld, and then the results will be automatically routed to others within the company. The devices also make available project specific mix design data and all previous test results submitted no matter where the technician may be on the jobsite.

In addition to quality control, the technicians now will report stab depth and yield numbers generated by the Paving Superintendents. More eyes on project information will provide us with an opportunity to correct deficient material or inefficiencies in a timely manner.

Please visit our website at <http://www.kossconstruction.com>