

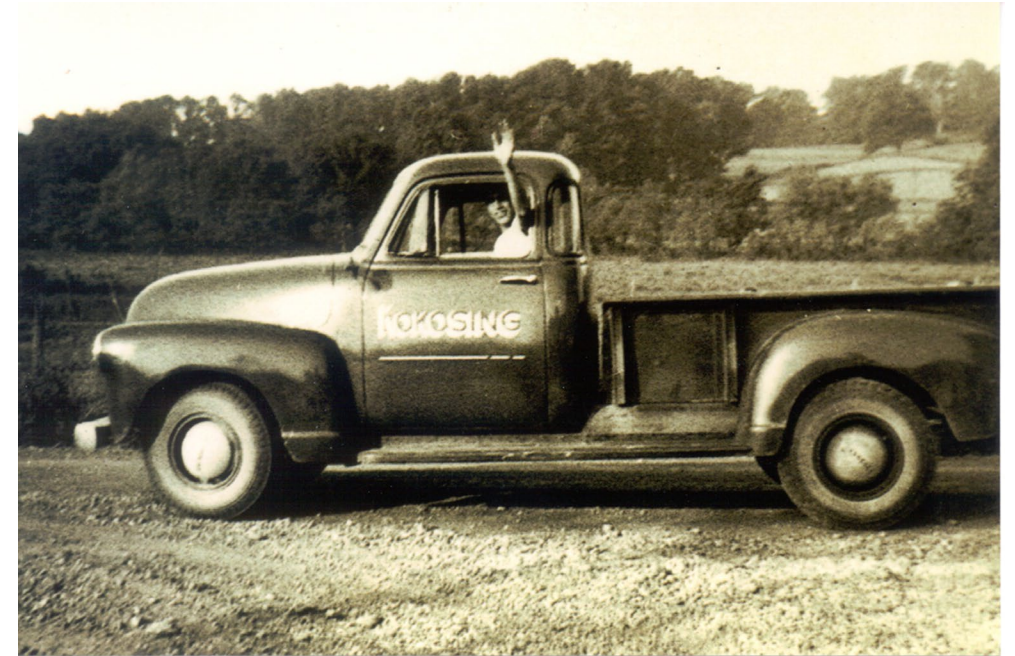
Ohio's Longitudinal Joint Specifications Contractor Perspective

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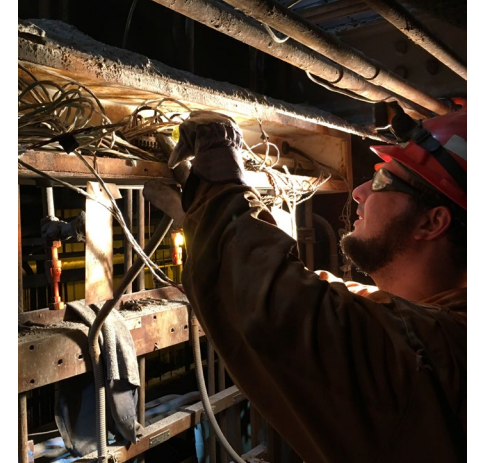
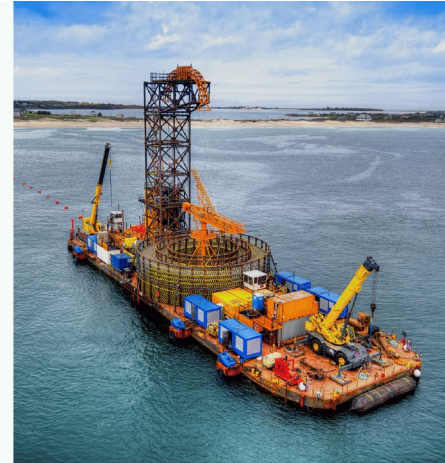
WHO IS KOKOSING?

- Kokosing is an award-winning and nationally renowned construction company.
- As one of the largest family-owned contractors in the country, we pride ourselves on our ability to perform a wide range of major construction projects throughout the Midwest and Mid-Atlantic with an extensive breadth of resources we provide for our customers.



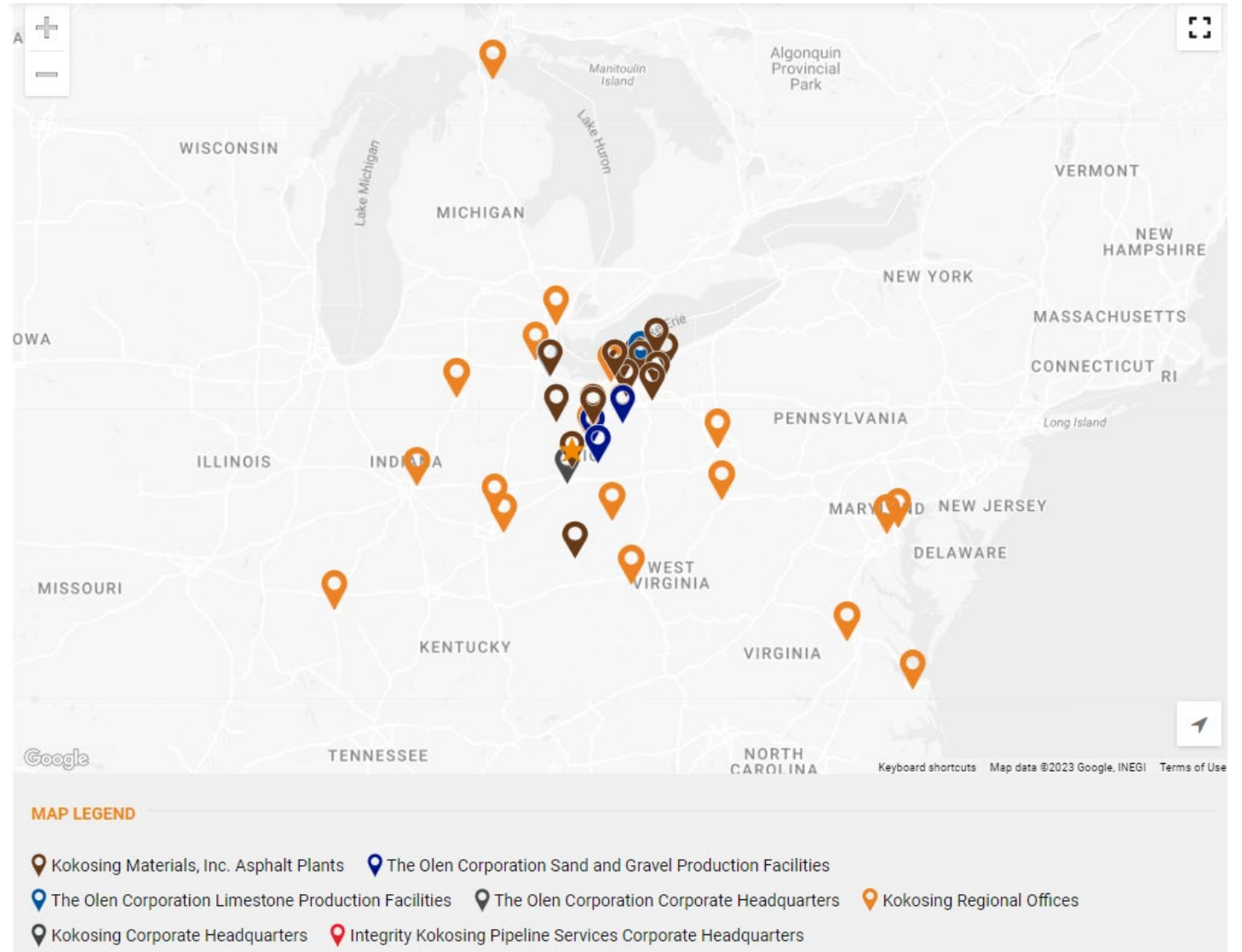
OUR AREAS OF EXPERTISE

- Heavy Civil
- Industrial Manufacturing
- Industrial Maintenance
- Marine
- Power + Energy
- Sitework
- Transportation
- Water Treatment



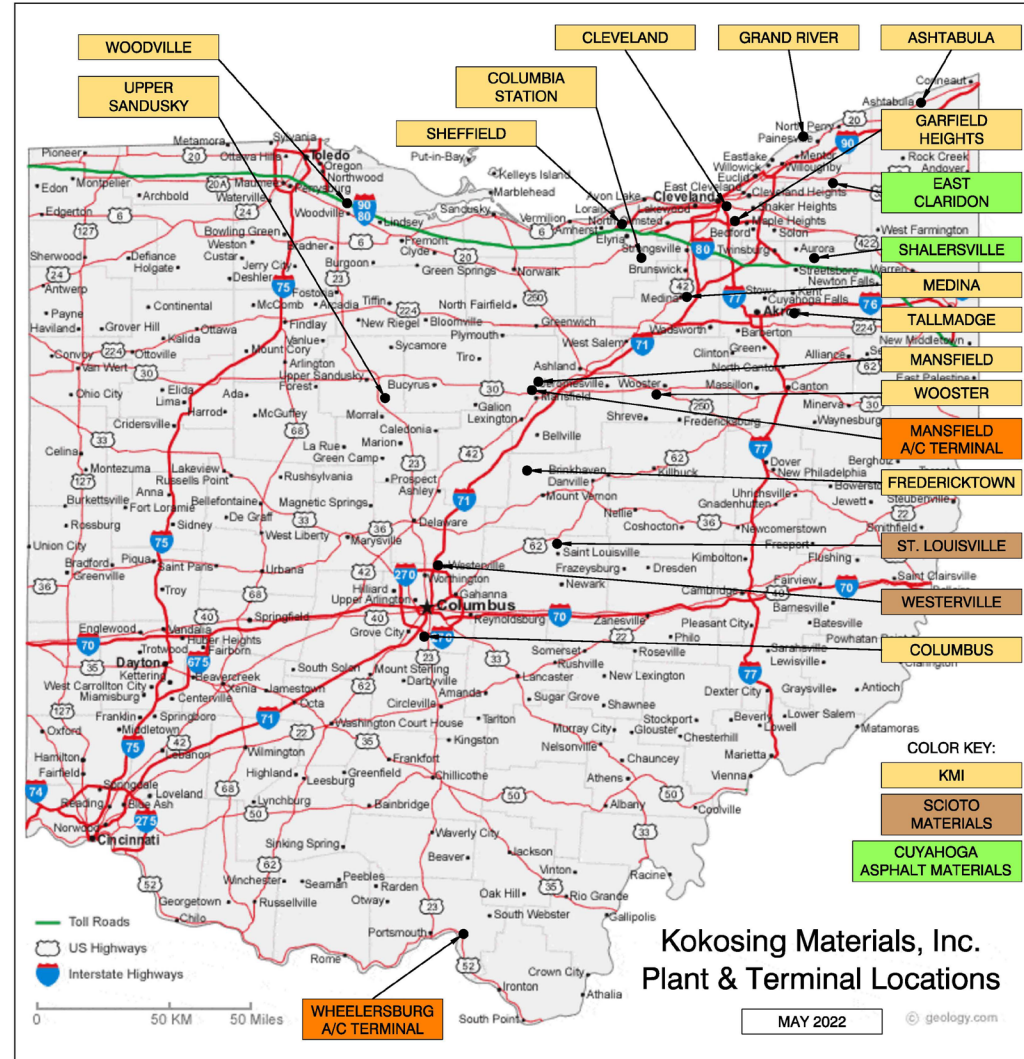
LOCATIONS

Multiple locations in the
 Midwest and Mid-Atlantic



ASPHALT LOCATIONS

- Kokosing Materials Inc. (KMI) has 20 plant/terminal locations across the state of Ohio.



LOW BID?

Project
Number

220004 AWA

Crawfo
US 30-

Contractor

SHELLY & SAN

AV

**KOKOSING CO
INC**



As I hurtled through space, one
 thought kept crossing my mind -
 every part of this rocket was
 supplied by the lowest bidder.

— *John Glenn* —

AZ QUOTES

Federal
State

E170(088)

Bid Amount

\$6,646,814.33

\$6,647,355.65



RISK AND PRICE

- You pay more to reduce your risk
- You get paid more to take on risk



INDUSTRY INPUT

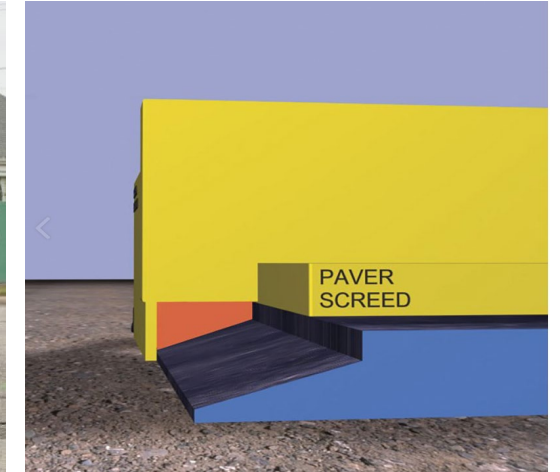
TABLE 447.05-1 JOINT DENSITY LOTS

LOT PWT	Pay Factor Surface Course
PWT ≥ 90	$\left[\frac{(PWT - 90)}{10} \times 0.02 \right] + 1$
PWT = 61 to 89	1.00
PWT = 50 to 60	$1 - \left[\frac{(60 - PWT)}{10} \times 0.05 \right]$
PWT ≤ 49	0.95



VOLUNTARY TRIALS

- Tapered wedge
- Notched wedge
- Cutter on backhoe bucket
- Backup while the mat was still 'warm'
- Trim with mill



NOT A BEAUTY CONTEST

- Don't starve the joint
- A nice looking joint is not a well compacted joint



POTENTIAL DEVELOPMENTS

HOT SHOULDER JOINT NEEDED?



447.02 Joint Construction. Make a hot longitudinal joint between the mainline pavement lane and the adjoining shoulder and all ramps and the adjoining shoulders. If a hot longitudinal joint is specified between the mainline pavement lanes, the Contractor may construct a cold longitudinal joint between the mainline pavement lanes and the adjoining shoulders. Cold longitudinal joints will be tested according to [447.05](#).



OTHER APPLICATIONS

ODOT SS 874 – LONGITUDINAL JOINT PREPARATION



A. Method 1. Use either a minimum 10-inch (250 mm) diameter cutting wheel attached to self-propelled equipment, or planing equipment conforming to C&MS Item 254 *Pavement Planing*.

Use equipment conforming to Supplemental Specification 875 *Longitudinal Joint Adhesive*.

B. Method 2. Use equipment conforming to Supplemental Specification 872 *Void Reducing Asphalt Membrane*.



SUMMARY/CONCLUSIONS

- Specify results, not methods
 - The low bid environment will drive contractors to the best way to give you what you want
- Increased risk increases price
 - Avoid overly-punitive specs
- Solicit industry input and listen
 - We may have ideas to help you get what you want
- Allow voluntary trials
 - Allowed contractors to try methods with very low risk
- Change one thing at a time
 - Innovation is great, but you need to know what worked
- Recognize additional benefits
 - Look for new applications ability to change old specs



QUESTIONS?

