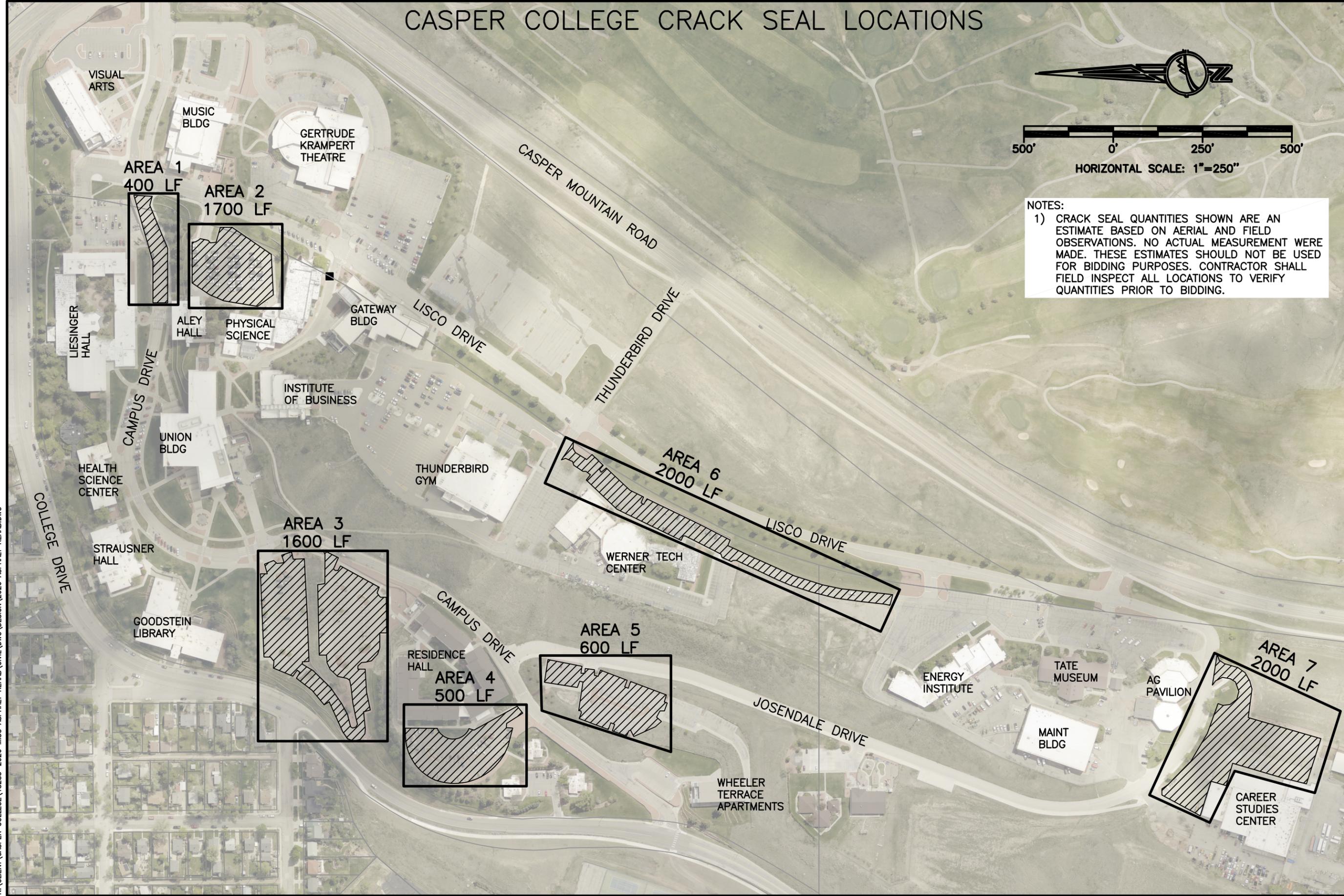
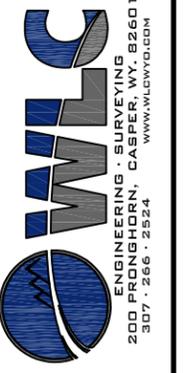


CASPER COLLEGE CRACK SEAL LOCATIONS



HORIZONTAL SCALE: 1"=250"

NOTES:
 1) CRACK SEAL QUANTITIES SHOWN ARE AN ESTIMATE BASED ON AERIAL AND FIELD OBSERVATIONS. NO ACTUAL MEASUREMENT WERE MADE. THESE ESTIMATES SHOULD NOT BE USED FOR BIDDING PURPOSES. CONTRACTOR SHALL FIELD INSPECT ALL LOCATIONS TO VERIFY QUANTITIES PRIOR TO BIDDING.



W.O. No.: 18283
 Book No.:
 Acad File: 2026 ASPHALT REHAB.dwg
 Drwg. By: JLS
 Chk. By: XXX
 FOR: CASPER COLLEGE FACILITIES OPERATIONS

REVISIONS

CC 2026 CRACK SEAL
 AREA MAP
 CASPER COLLEGE CAMPUS

SHEET NO. 1
 DATE: 2/20/26

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PLANT MIX PAVEMENT CRACK SEALING

1. DESCRIPTION

- A. This section describes the requirements for sealing cracks in plant mix pavement after surface milling has been completed.

2. MATERIALS

- A. Provide and use sealant in accordance with ASTM D 6690 or AASTHO M324.
- B. Provide and use backer rod in accordance with ASTM D 5249, type 1, with a melting temperature higher than the sealant's application temperature.
- C. Provide and use aggregate with a plasticity index of 3 or less and in accordance with the following gradation.

Gradation Requirements: Blotter

Sieve	% Passing
$\frac{3}{8}$ in	100
No. 4	85 to 100
No. 200	0 to 20

- 1. Other materials may be used as blotter material, including portland cement, fly ash, sawdust, blotter paper, or biodegradable, non-toxic, non-hazardous compounds designed to form a temporary protective barrier over the sealant to prevent tracking.

3. EQUIPMENT

3.1 Removing Existing Sealant

- A. Provide a plow, ripping tooth, wire brush, saw, or other equipment to remove existing sealant from cracks. Use carbide-tipped blades or better.

3.2 Rout Crack

- A. Provide mechanical, power-driven routing equipment that produces a reservoir with vertical sides and a flat bottom to the required dimensions. Do not use star bit type routers or equipment designed to plow the cracks to size. Use carbide-tipped blades or better.

3.3 Clean and Dry Crack

- A. Provide an air compressor that produces clean, oil-free, compressed air with an output of at least 125 ft³/min; equip with a $\frac{3}{4}$ -inch diameter or smaller nozzle. Do not use backpack blowers. Provide compressed air heat lances that produce clean, oil-free, compressed air at least 750 °F at a velocity of at least 650 ft/s. Do not use direct flame driers.

3.4 Install Sealant

- A. Provide a melting machine with a melting capacity of at least 100 gal/h while continuously maintaining the recommended sealant application temperature. Equip to continuously agitate and mix the sealant during application.
- B. Apply sealant with a pressure-type applicator equipped with a wand with the tip attached to a fixed-sized nozzle or an inside diameter cup of 2 in ± 0.25 in or an approved equal.
- C. Provide a compressed air heater if required by conditions.
- D. Provide a U-shaped squeegee for smoothing the sealant.

4. CONSTRUCTION

4.1 Removing Existing Sealant

- A. Remove existing sealant from cracks without damaging the pavement.

4.2 Routing

- A. Rout no more than can be sealed each day, and in accordance with Table 4.2, Routing Dimensions.

**Table 4.2
Routing Dimensions**

Crack Width	Sealant	
	AASHTO M 324	
< 1/8 in	does not need routing or sealing	
1/8 in to less than 1/2 in	route to 1/2 in wide × 3/4 in deep	
1/2 in to 3/4 in	does not need routing	
> 3/4 in	does not need routing	

4.3 Clean and Dry Crack

- A. Use compressed air to clean cracks and reservoirs of dust, dirt, and other deleterious materials. Prepare cracks by using compressed air heat lances, but do not overheat the pavement. Before applying sealant, clean and dry cracks exposed to precipitation. The engineer will inspect prepared cracks before sealing.
- B. Before reopening to traffic, remove debris using a power broom or other approved means. Remove swept material from curb and gutter areas.

4.4 Certification

- A. Provide quality control data from sealant manufacturer/supplier for production run of crack sealant that meets project requirements.

4.5 Install Sealant

4.5.1 General

- A. Provide the engineer two copies of the sealant manufacturer's recommendations for preparation, handling, mixing, and application 14 calendar days before sealing.
- B. Seal cracks only in dry weather. Ensure that pavement inside the crack is at least 40 °F unless the manufacturer requires a higher temperature; if necessary, heat the pavement. Keep the sealant at the manufacturer recommended application temperature. Do not begin installing sealant until the equipment has stabilized for temperature and agitation/mixing.
- C. Seal cracks or portions of cracks greater than 1/8 in wide, unless otherwise approved by the engineer. Apply sealant from the bottom up. When using the cup attachment, hold it firmly against the roadway surface during application. When using squeegees, smooth sealant tightly against the pavement. Center the squeegeed band on the crack so that the width on either side of the crack is no more than 1 in.
- D. Seal cracks so that the finished, cured surface is to the configuration specified:
 - 1. **Flush Configuration.** Flush with the pavement and is not recessed into the crack by shrinkage.
 - 2. **Recessed Configuration.** Recess below the pavement 1/4 in. Do not use squeegees or wands with a 2 in inside diameter cup.
- E. If sealant flows out the end of the crack, plug or dike the end as approved by the engineer. Remove spilled sealant, and reseal properly. Remove excess sealant from roadway while it is still liquid. If sealant pulls out or tracking occurs, apply blotter material to minimize damage. Replace sealant damaged by tracking at no additional cost to the Owner.
- F. Do not mix sealant from different manufacturers in the sealing machine. Purge the machine (empty the kettle, hoses, etc.) of sealant before switching sealants. Follow manufacturer recommendations for mixing sealant from different production runs.

4.5.2 Backer Rod

- A. Install backer rod only when
 - 1. AASHTO M 324 Type IV WY Modified sealant is specified;
 - 2. Excessive material is being consumed; and
 - 3. Full depth of crack, including routed reservoir if applicable, exceeds 1 1/2 in.

B. Install backer rod with the top edge recessed $\frac{3}{4}$ in below the pavement. Install AASHTO M 324 Modified sealant.

END OF SECTION