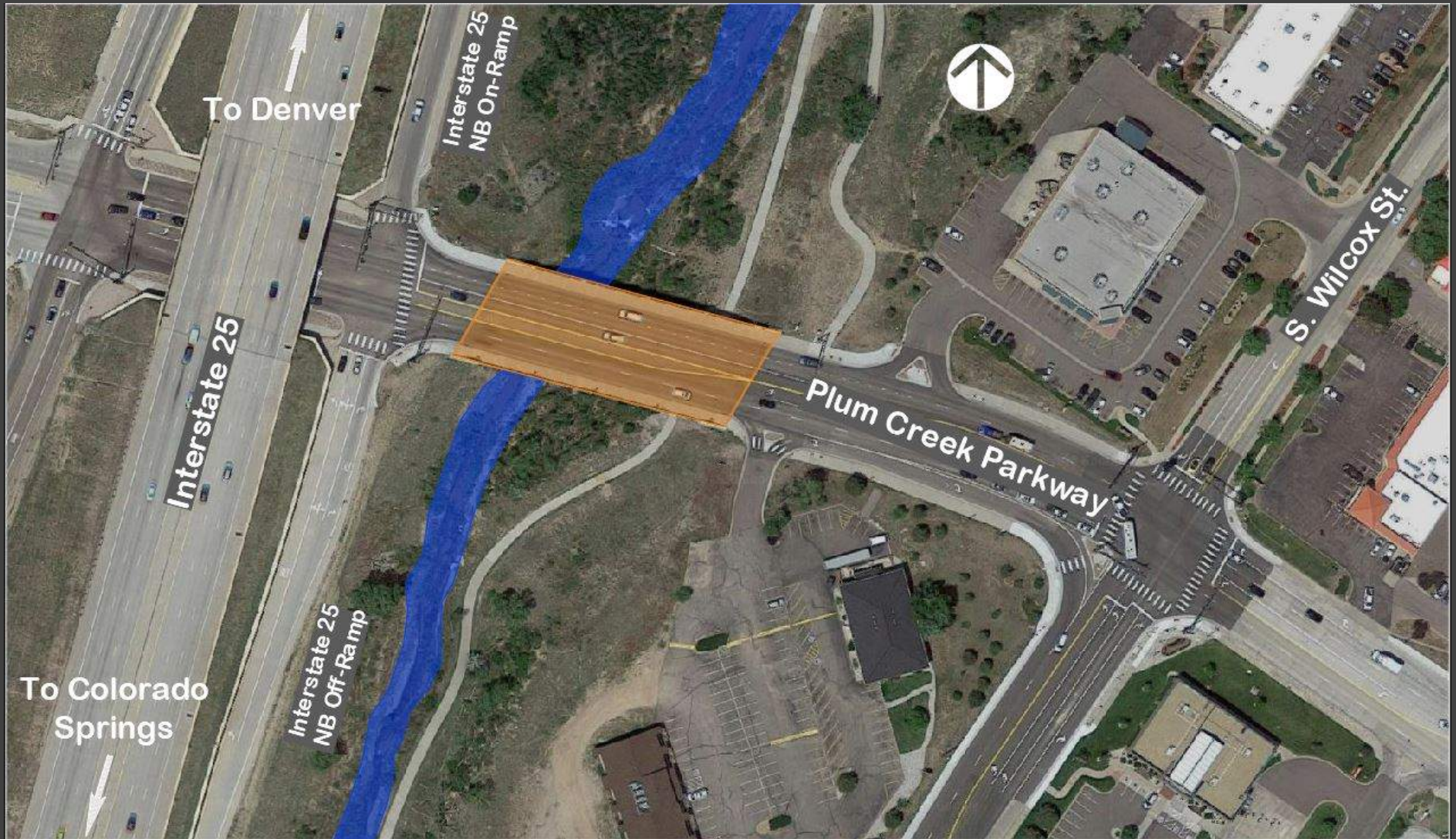


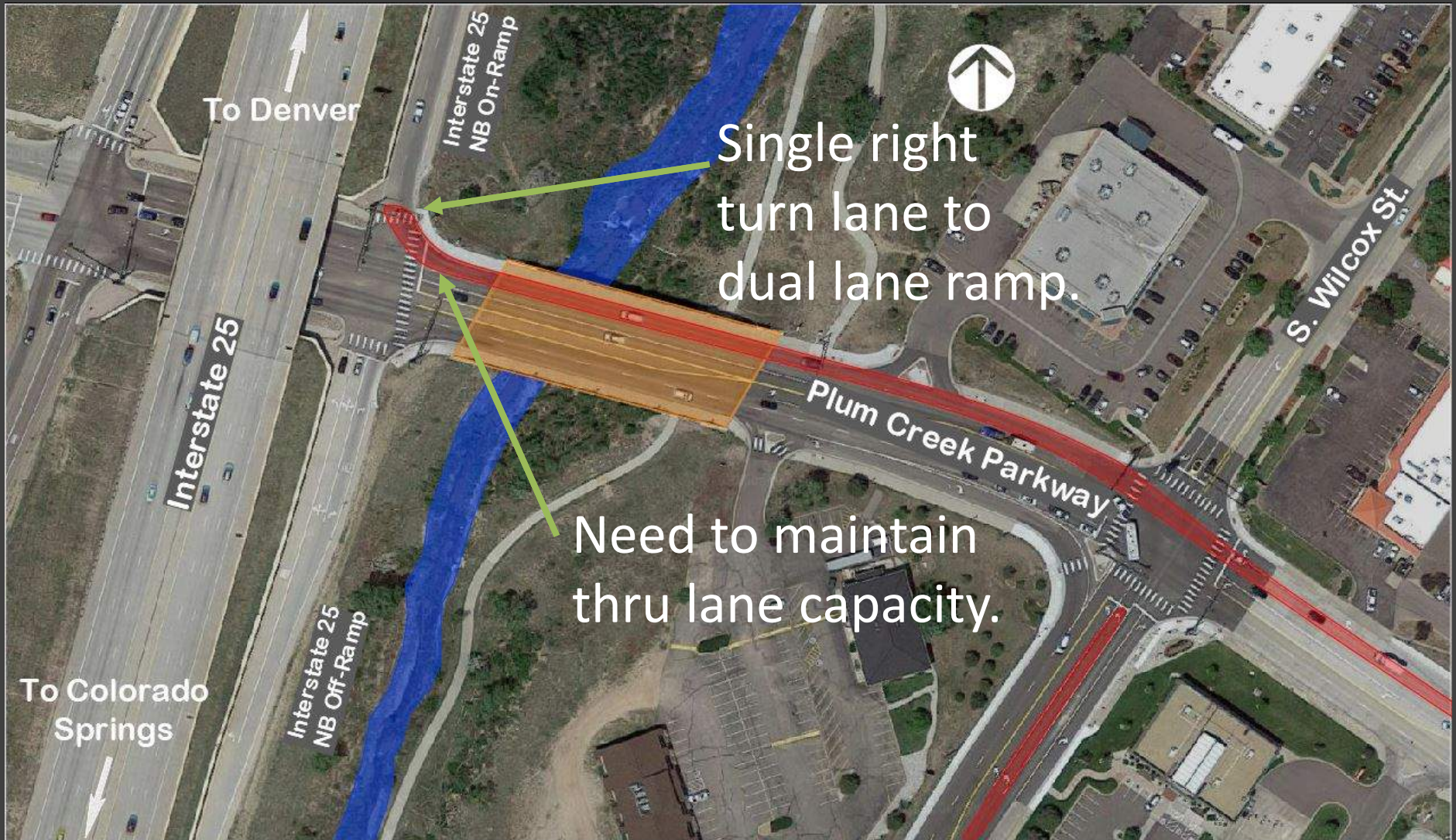
PREPARING AN INTERSECTION FOR VARIABLE LANE USE

FEHR  PEERS

Geography



PROBLEM



Single right turn lane to dual lane ramp.

Need to maintain thru lane capacity.

PROBLEM



Single through+right turn lane onto NB I-25. Funding to widen structure a ways off.

SOLUTION

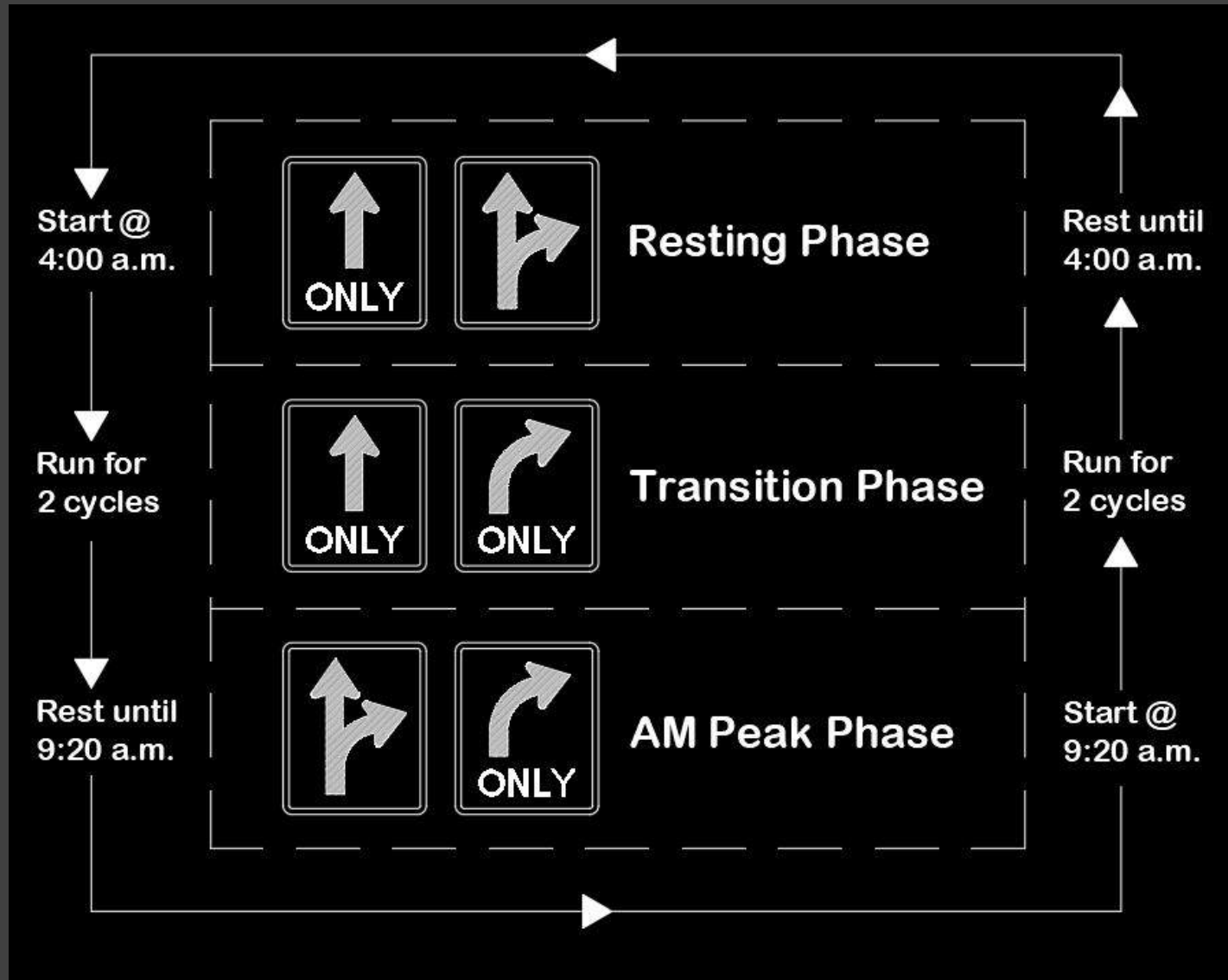


CHALLENGES



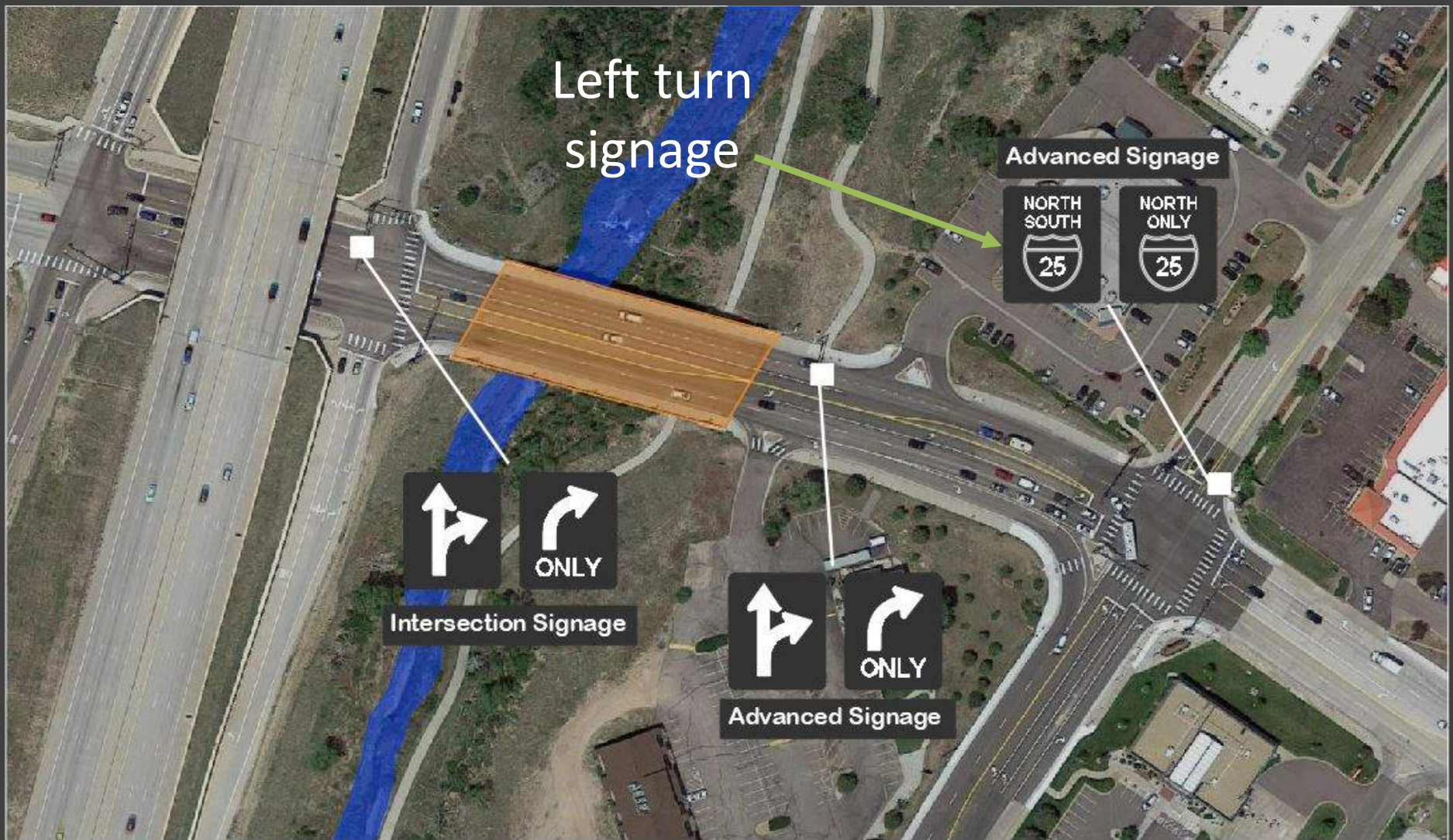
Variable message signs with fixed library of two messages.

CHALLENGES

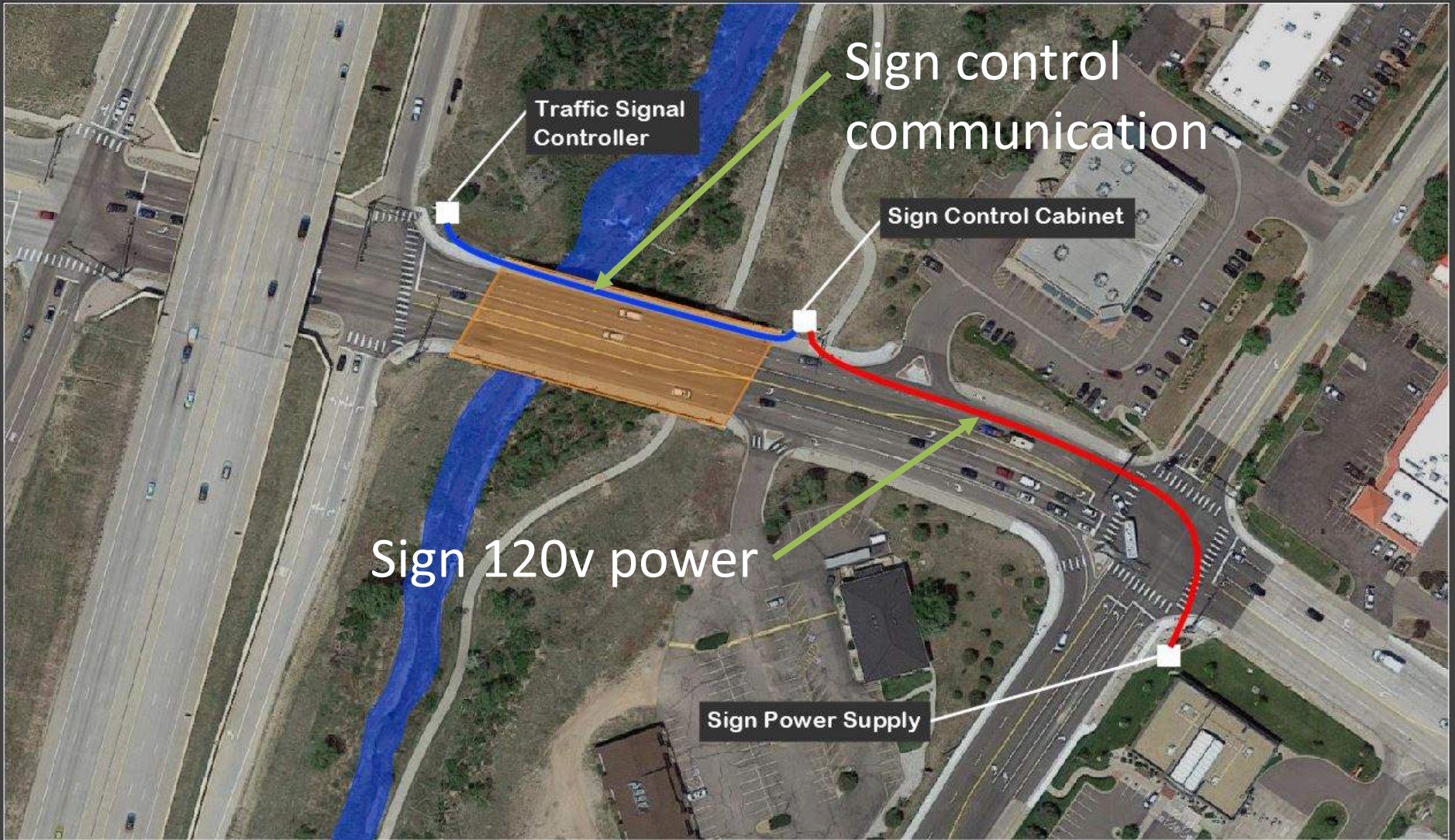


Variable
message
sign
sequence.

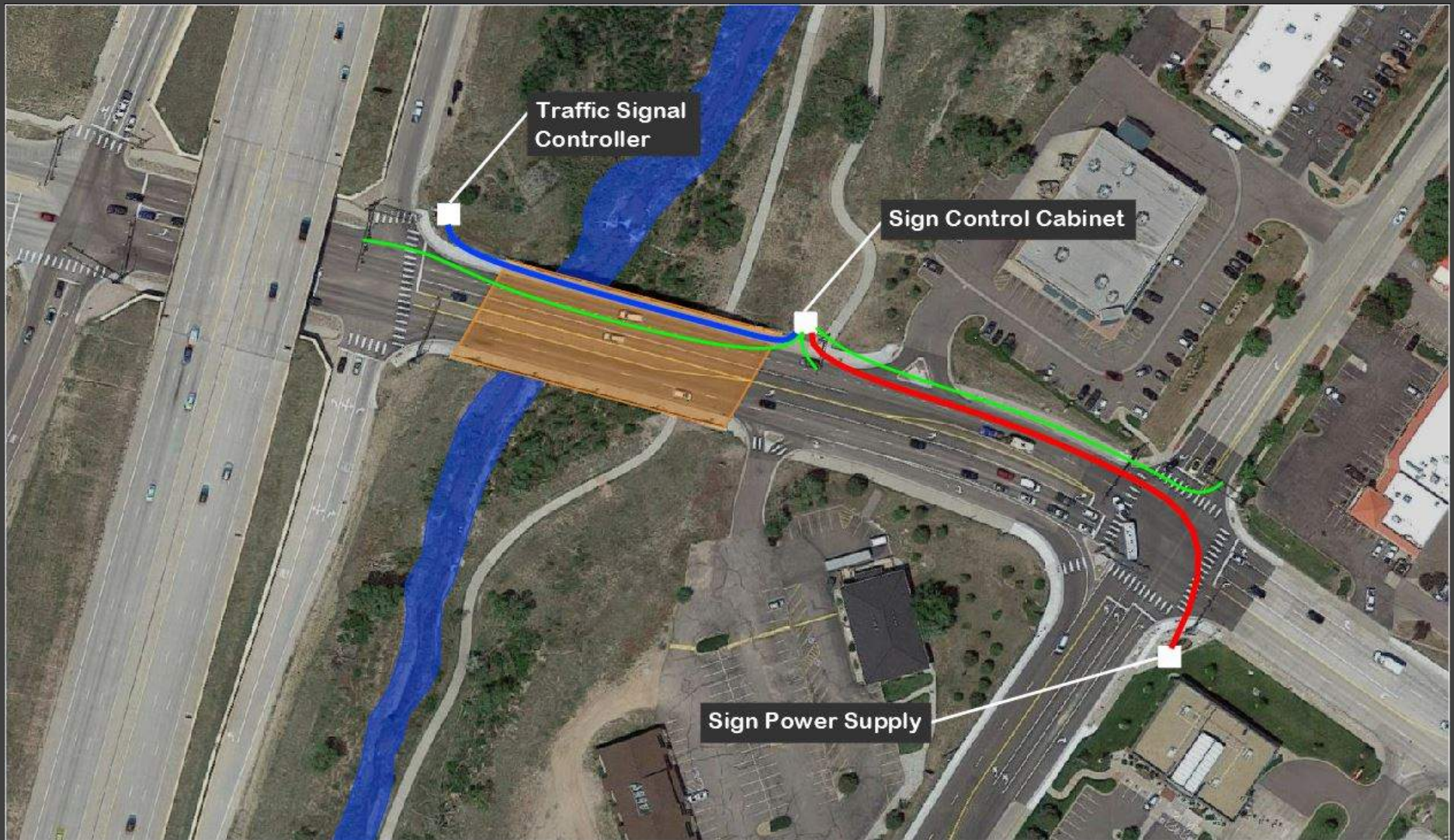
CHALLENGES



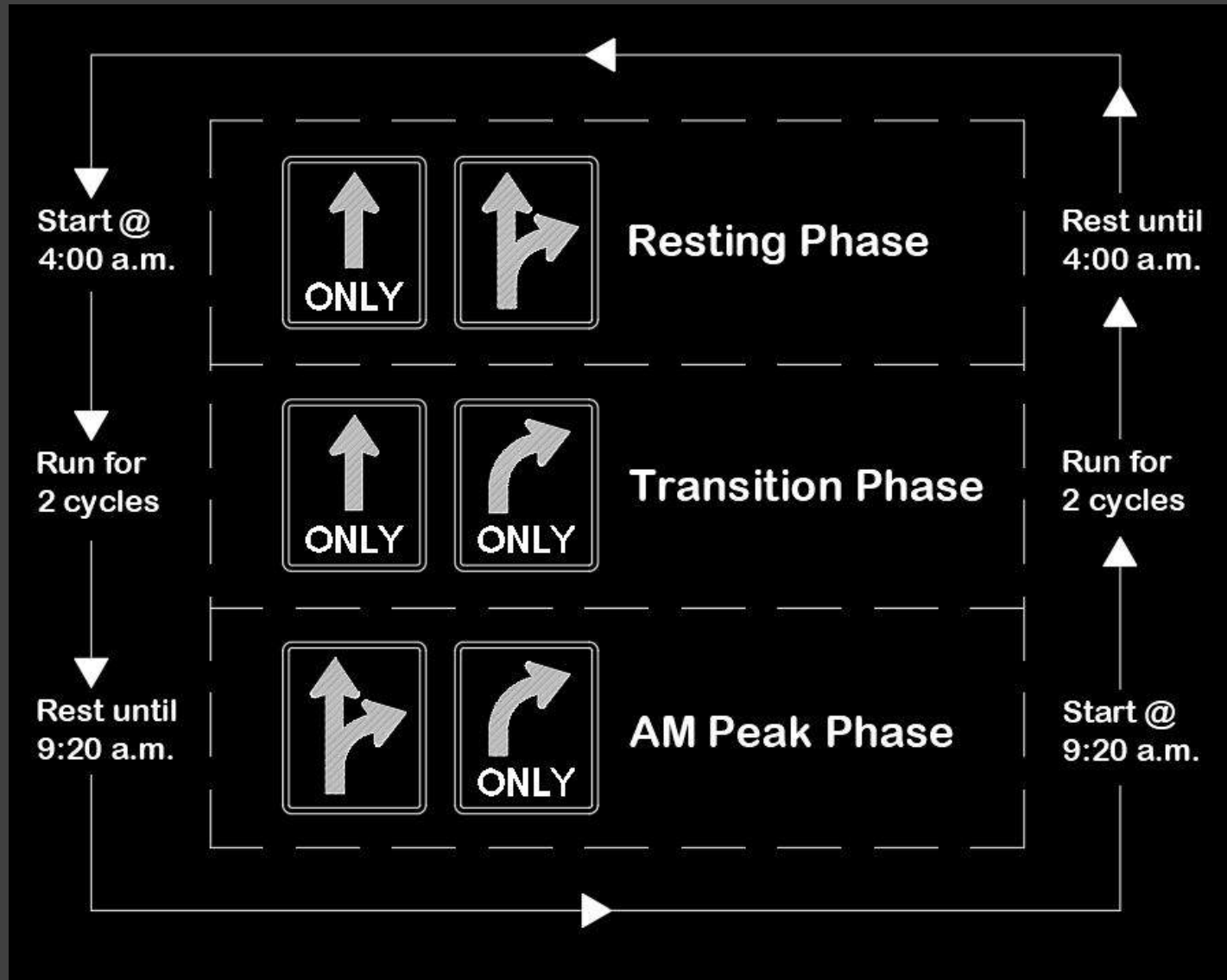
SIGN CONTROL



SIGN CONTROL



SIGN CONTROL

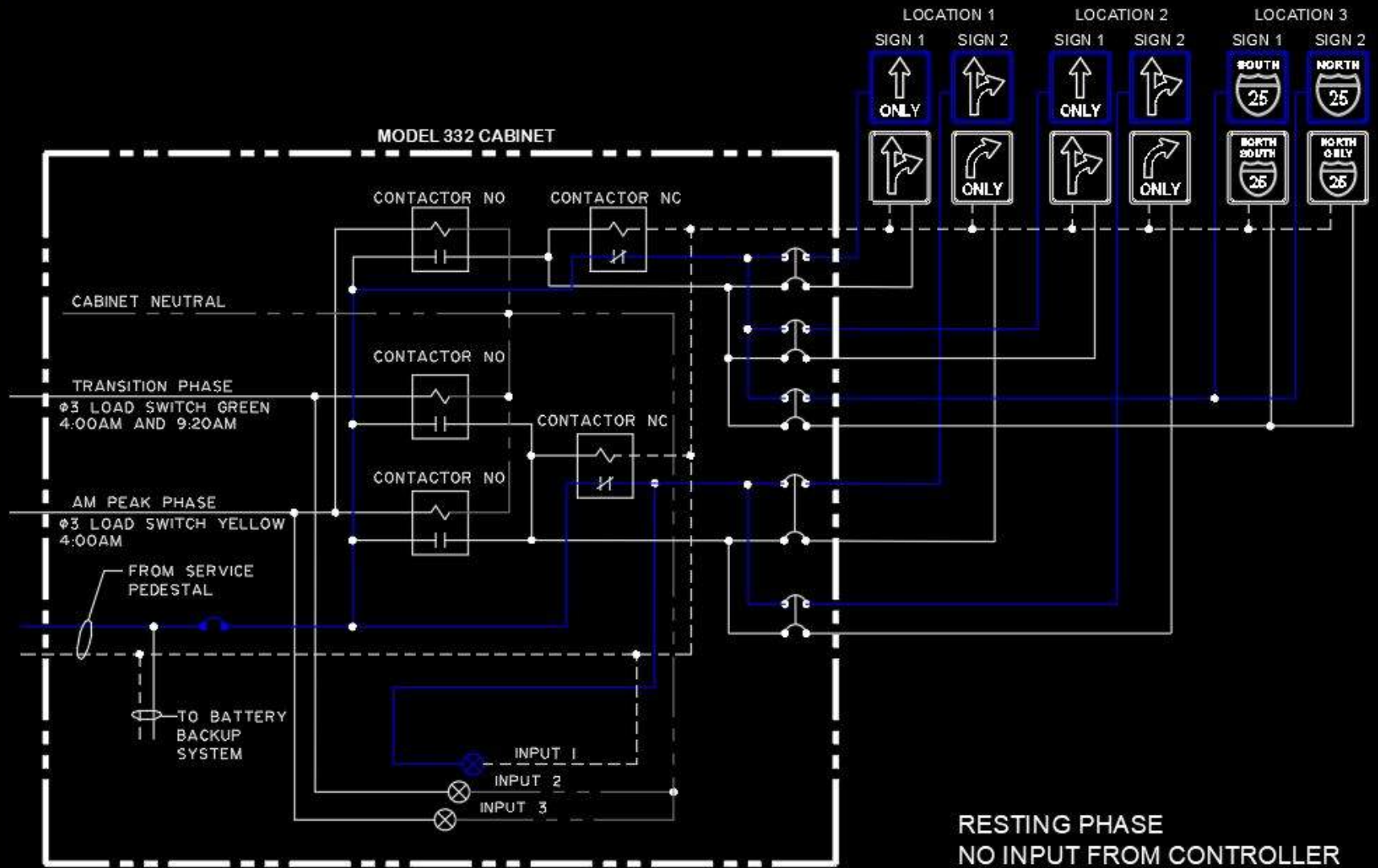


No controller input required

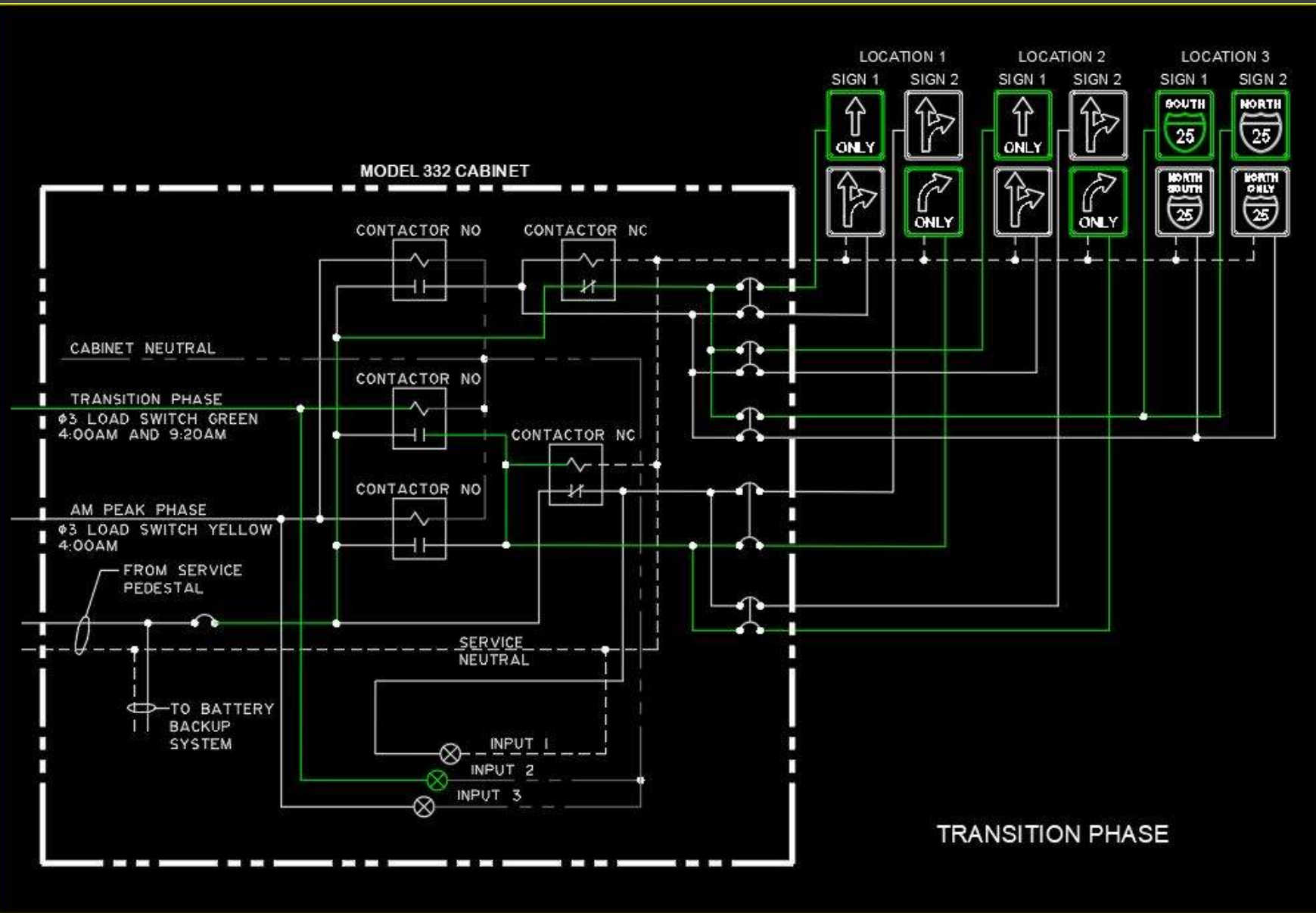
Controller transition phase input

Controller AM Peak phase input

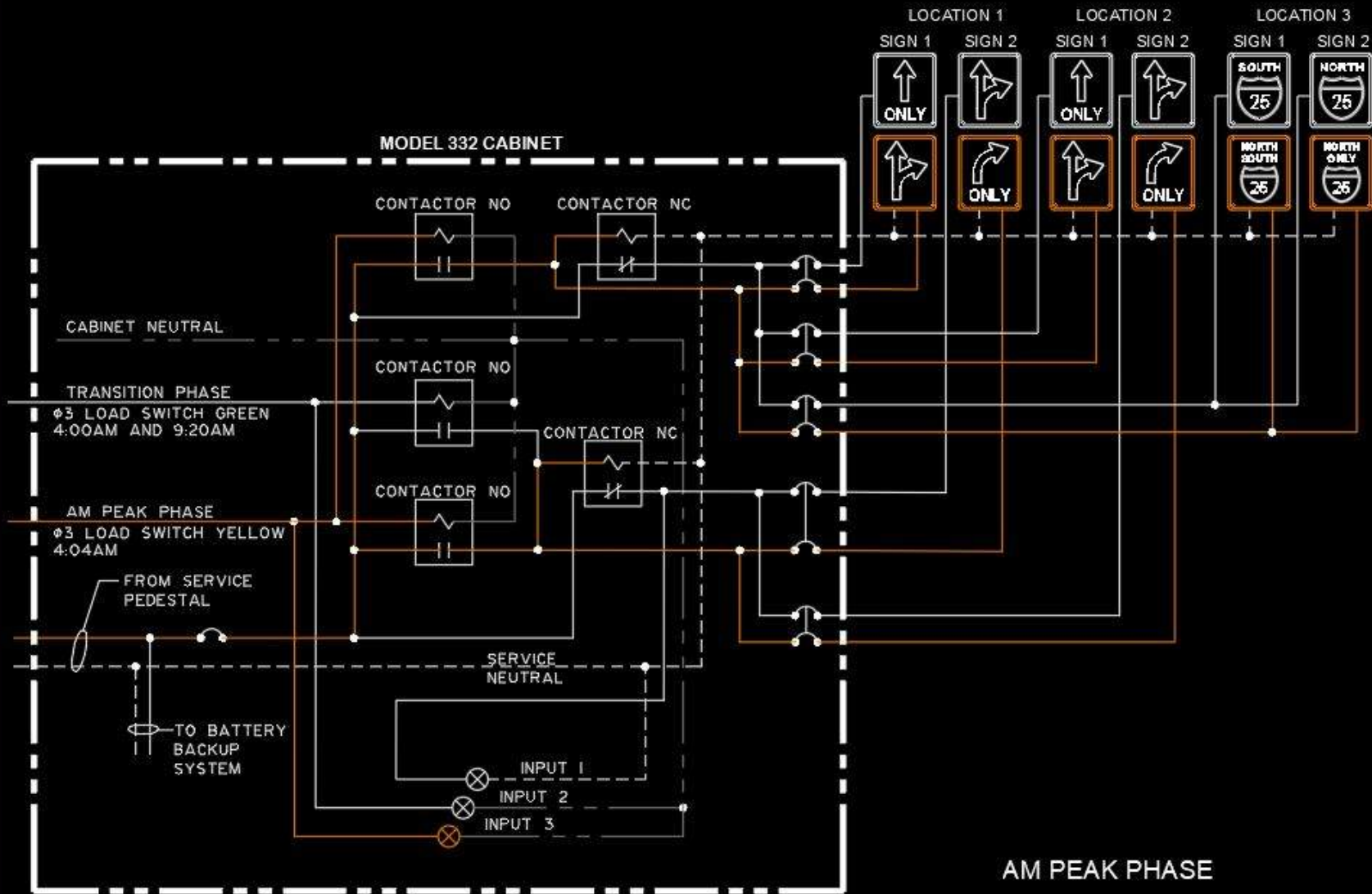
SIGN CONTROL CABINET



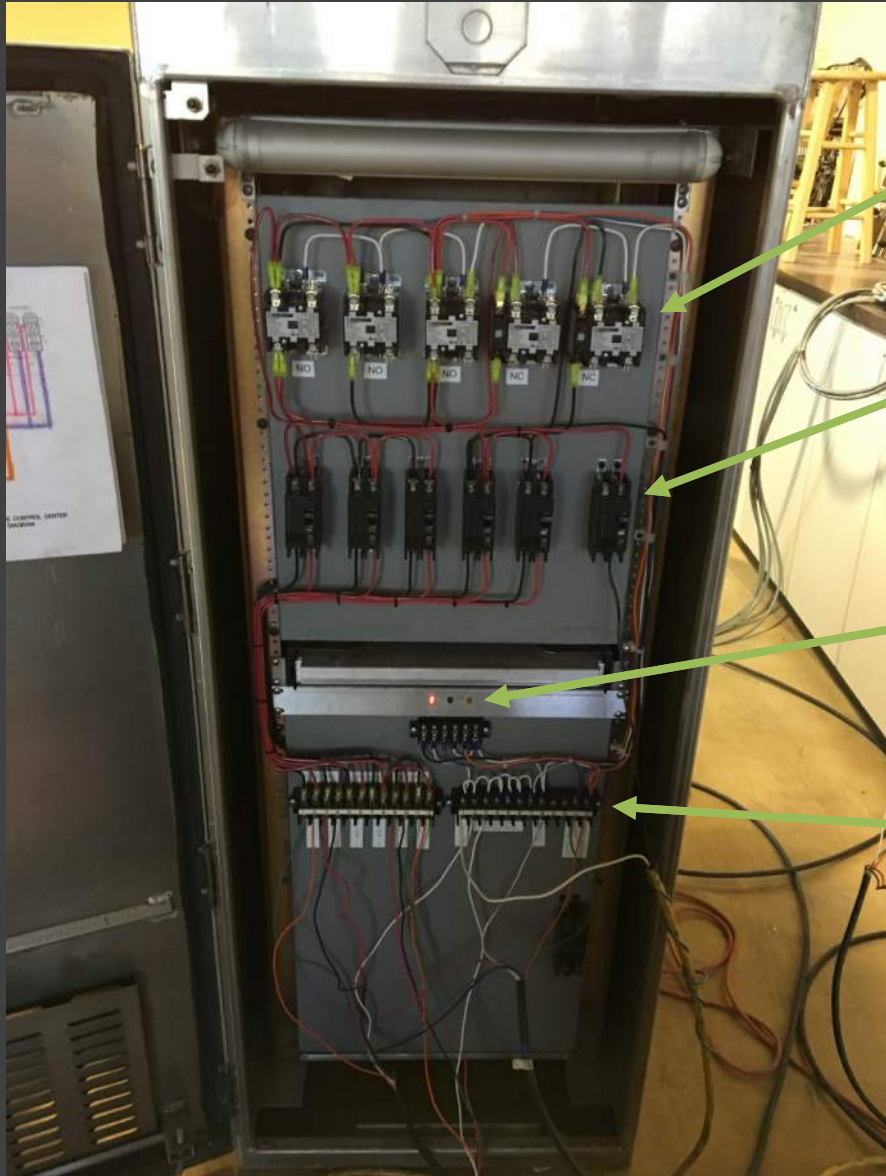
SIGN CONTROL CABINET



SIGN CONTROL CABINET



SIGN CONTROL CABINET



Contactors

Sign circuit breakers

LED status panel

Sign connection
terminal blocks

BENCH TESTING



COLLABORATION

FEHR & PEERS



COLORADO
Department of Transportation



Contractors

Questions?