

Southbound left turn truck movement
(Existing)

Potential future entrance impact on free right turn
(Short term)

New traffic signal
(Long term)

Lack of Road Closed signing behind Type 3 barrier
(Existing)

Opposing left turn truck overlap
(Existing)

Inappropriate stop bar for channelized right turn
(Existing)

Shiloh Rd.

Potential inadequate capacity
(Short term)

New traffic signal
(Long term)

Zoo Dr.

Potential impacts of future west leg
(Short term - with development)

No posted speed limit on Zoo Drive
(Existing)

Coordinated signal system on Zoo Drive
(Long term)

Lack of sidewalks and crosswalks except east side of I-90 bridge on Zoo Drive
(Short term - with adjacent development to generate pedestrian traffic)

KEY

- Geometric Elements
- Safety
- Capacity
- Traffic Control
- Bicycles and Pedestrians
- Street and Highway Lighting

 Critical Deficiency (requires I-90 bridge structure widening or interchange reconfiguration)



Project # AMTDOT0306

| | | | | | | |
|--|---------|------|------------|----------|-----|--------|
| BILLINGS I-90 INTERCHANGE STUDY DEFICIENCIES - SHILOH INTERCHANGE - EXIT 443 | | | | | | |
| Scale | 1"=200' | Date | March 2006 | Drawn by | RAC | Figure |
| | | | | | | 3A |



serving you with pride
 BILLINGS I-90
 INTERCHANGE STUDY



KEY

Geometric Elements

Safety

Capacity

Traffic Control

Bicycles and Pedestrians

Street and Highway Lighting

 Critical Deficiency (requires I-90 bridge structure widening or interchange reconfiguration)





Lack of advance I-90 guide signs on Zoo Drive
(Existing)

Inadequate capacity
(Long term)

Potential need for right turn overlap
phase or "free" right turn
(Long term)

Potential platoon deficiency due
to new traffic signal
(Long term)

Potential platoon deficiency due
to signalized double left turn
(Long term Alt #2)

New traffic signal
(Long term)

Potential platoon deficiency due to
signalized double left turn
(Long term)

Potential platoon deficiency due to
new traffic signal
(Long term)

Potential need for right turn overlap phase
(Long term Alt #2)

Potential inadequate capacity
(Long term Alt #2)

I-90 mainline highway lighting does not meet CIL standards
(Short term - interchange meets MDT CIL volume guidelines
in Short term 2008)

Inappropriate stop bar for channelized right turn
(Existing)

Opposing left turn truck overlap
(Existing)

Southbound right angle accidents - potential visibility problem
(Existing)

Potential inadequate capacity without traffic signal
(Long term)

Potential inadequate capacity with traffic signal
(Long term Alt #2)

New traffic signal
(Long term Alt. #2)

Inappropriate stop bar for channelized right turn
(Existing)

KEY

- Geometric Elements
- Safety
- Capacity
- Traffic Control
- Bicycles and Pedestrians
- Street and Highway Lighting

Critical Deficiency (requires I-90 bridge structure widening or interchange reconfiguration)

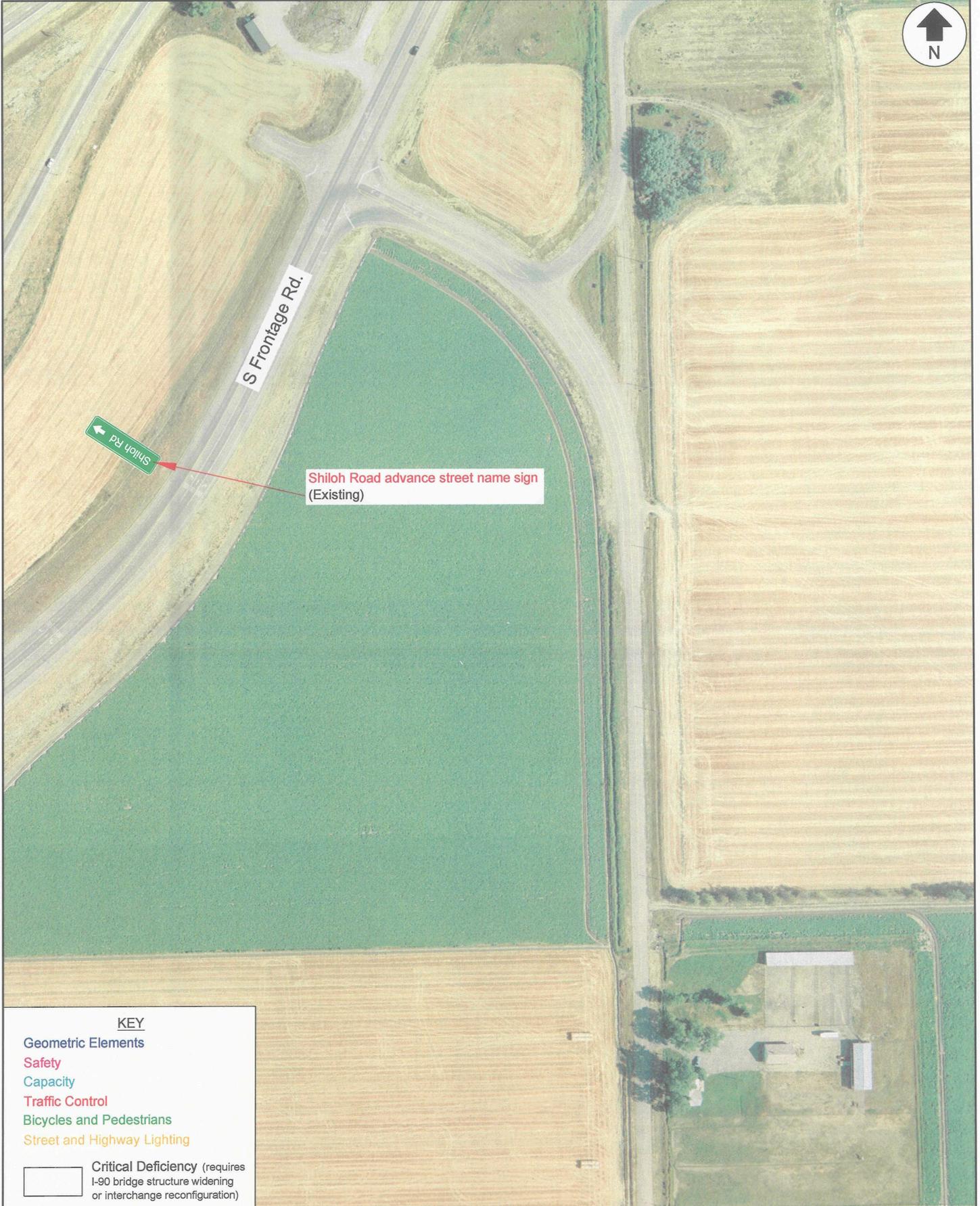
Shiloh Road advance street name sign
(Existing)

Lack of Road Closed signing behind Type 3 barrier
(Existing)



| | | | | | |
|--|---------|------|------------|----------|-----|
| BILLINGS I-90 INTERCHANGE STUDY | | | | | |
| DEFICIENCIES - SHILOH INTERCHANGE - EXIT 443 | | | | | |
| Scale | 1"=200' | Date | March 2006 | Drawn by | RAC |
| Figure | 3E | | | | |





KEY

Geometric Elements

Safety

Capacity

Traffic Control

Bicycles and Pedestrians

Street and Highway Lighting



Critical Deficiency (requires I-90 bridge structure widening or interchange reconfiguration)



BILLINGS I-90 INTERCHANGE STUDY
DEFICIENCIES - SHILOH INTERCHANGE - EXIT 443

Scale 1"=200' | Date March 2006 | Drawn by RAC | Figure 3F







S Billings Blvd

Stone St

Newman Ln.

Jct I-90 sign before previous intersection
(Existing)

KEY

Geometric Elements

Safety

Capacity

Traffic Control

Bicycles and Pedestrians

Street and Highway Lighting



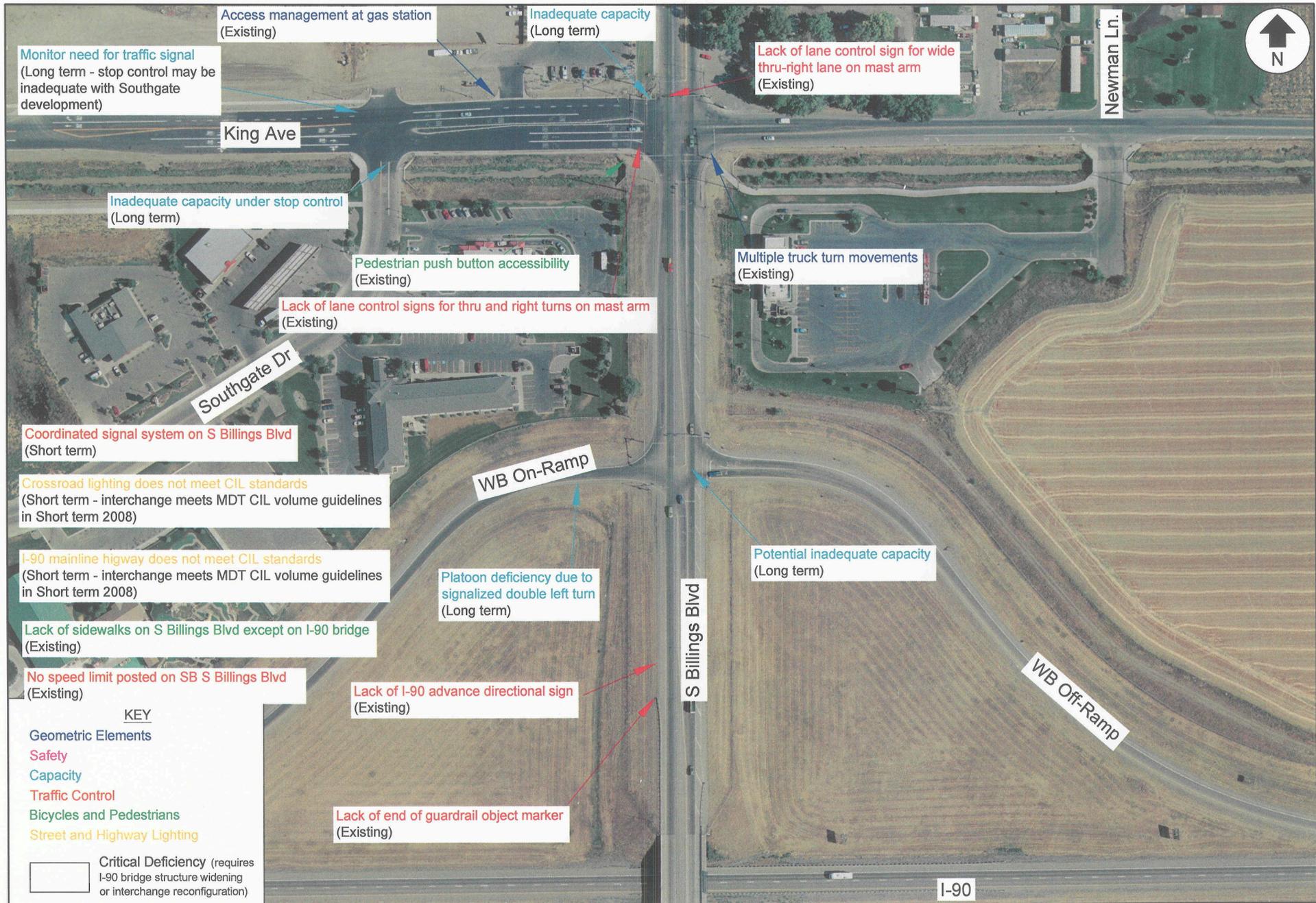
Critical Deficiency (requires I-90 bridge structure widening or interchange reconfiguration)

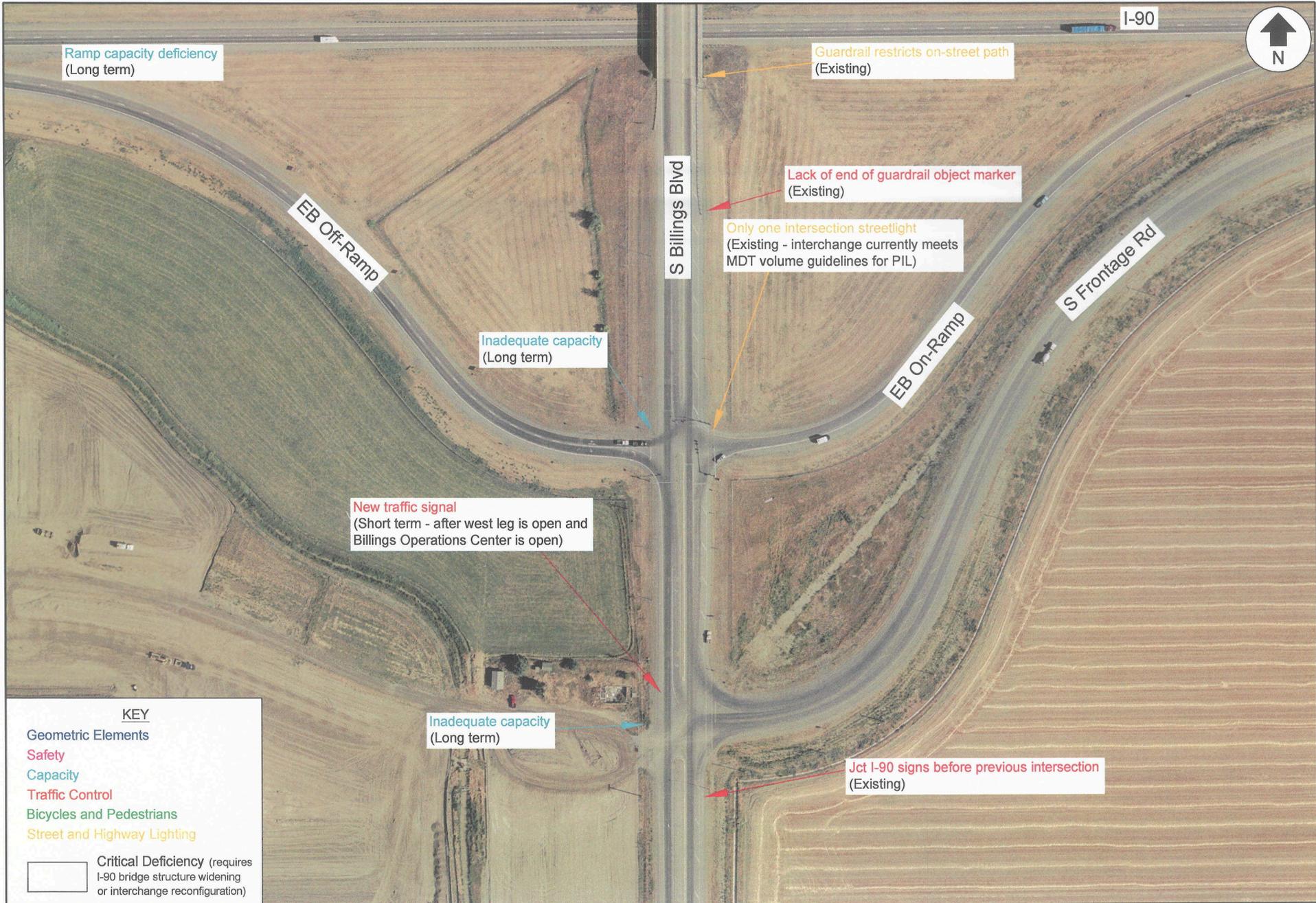


BILLINGS I-90 INTERCHANGE STUDY
DEFICIENCIES - SOUTH BILLINGS BOULEVARD - EXIT 447

| | | | | | | | |
|-------|---------|------|------------|----------|-----|--------|----|
| Scale | 1"=200' | Date | March 2006 | Drawn by | RAC | Figure | 4A |
|-------|---------|------|------------|----------|-----|--------|----|











Potential inadequate capacity and signal timing updates (Long term)

Skewed Intersection (Existing)

State Ave.

Belknap Ave.

Access management (Existing)

Truck turn movements (Existing)

Lack of lane control signs on mast arm (Existing)

Sugar Ave.

S. 27th St.

Lack of end of guardrail object marker (Existing)

Lack of sidewalks and crosswalks, except on I-90 bridge on S 27th Street (Existing)

KEY

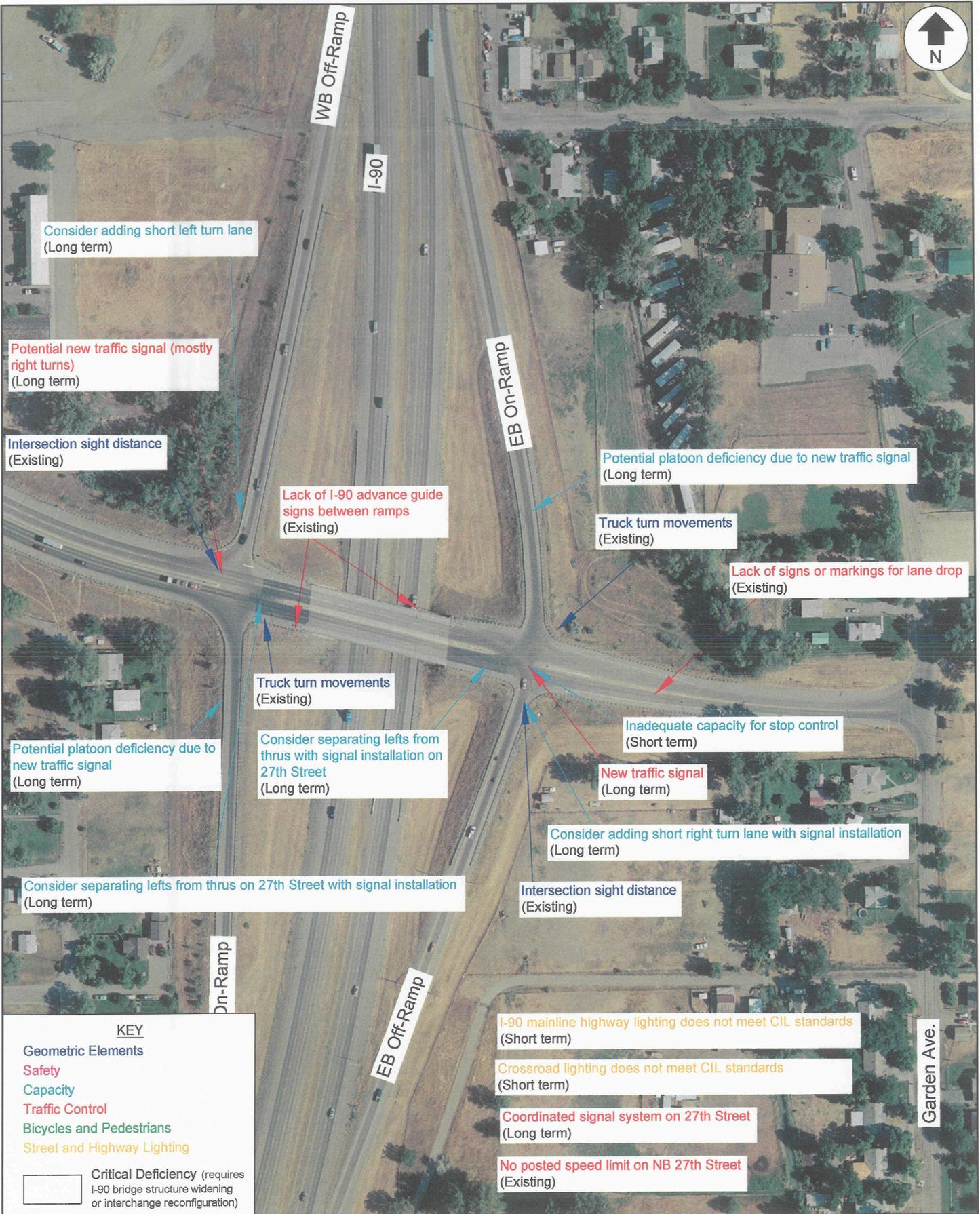
- Geometric Elements
- Safety
- Capacity
- Traffic Control
- Bicycles and Pedestrians
- Street and Highway Lighting

Critical Deficiency (requires I-90 bridge structure widening or interchange reconfiguration)



| | | | | | | |
|--|---------|------|------------|----------|-----|-----------|
| BILLINGS I-90 INTERCHANGE STUDY | | | | | | |
| DEFICIENCIES - 27TH STREET INTERCHANGE -EXIT 450 | | | | | | |
| Scale | 1"=200' | Date | March 2006 | Drawn by | RAC | Figure 5B |







No deficiencies

B

D

No deficiencies

C

E

No deficiencies

A