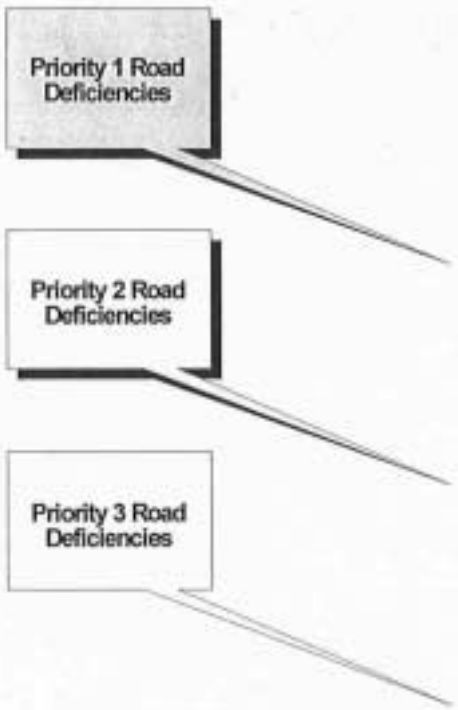
Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001

Roadway Deficiency Bubble Type:



Other Roadway Features:

Guard Walls:
- ashlar stone
- concrete-core
- jersey barrier
- removable rail
- random rubble stone
- mixed stone

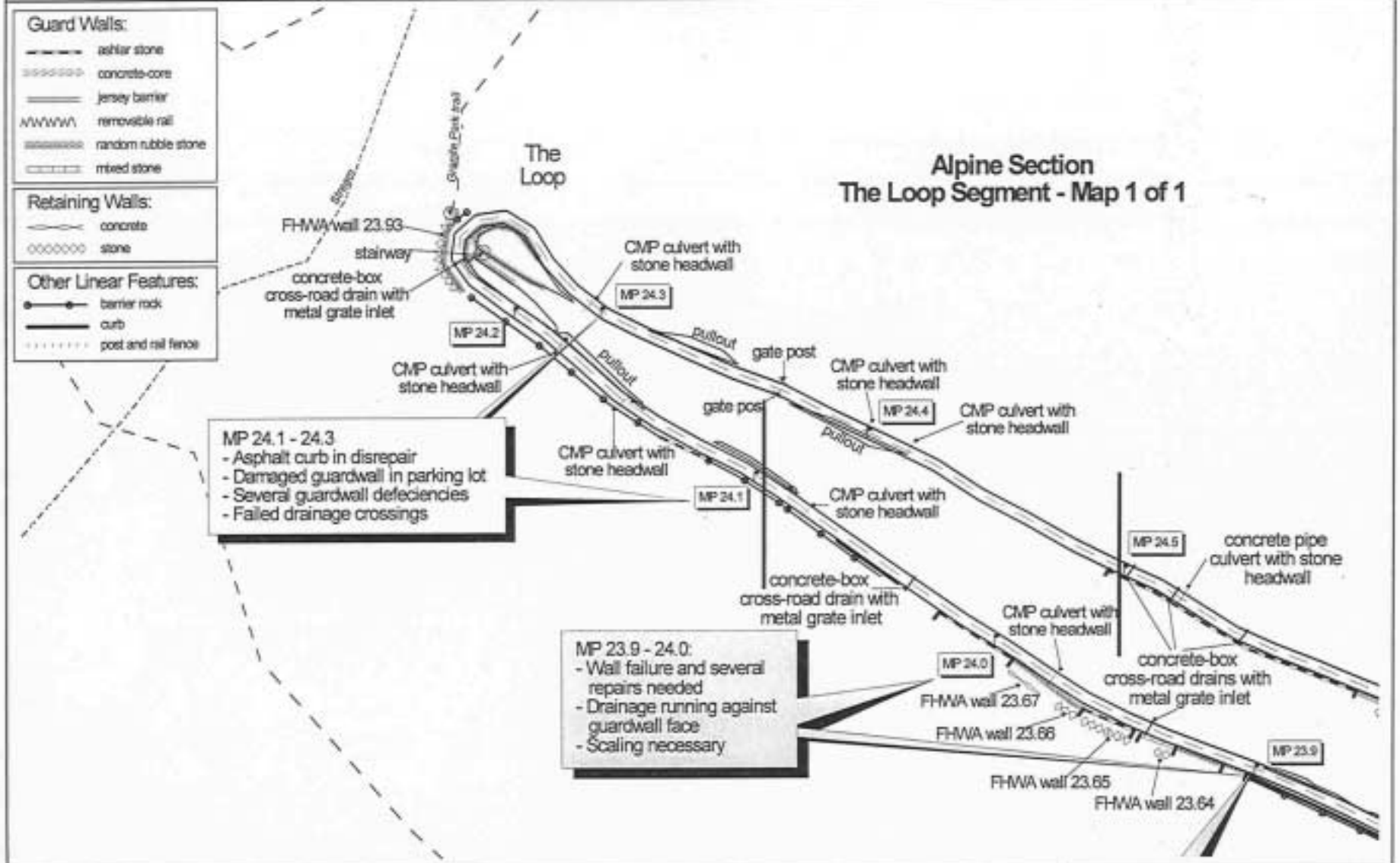
Retaining Walls:
- concrete
- stone

Other Linear Features:
- barrier rock
- curb
- post and rail fence

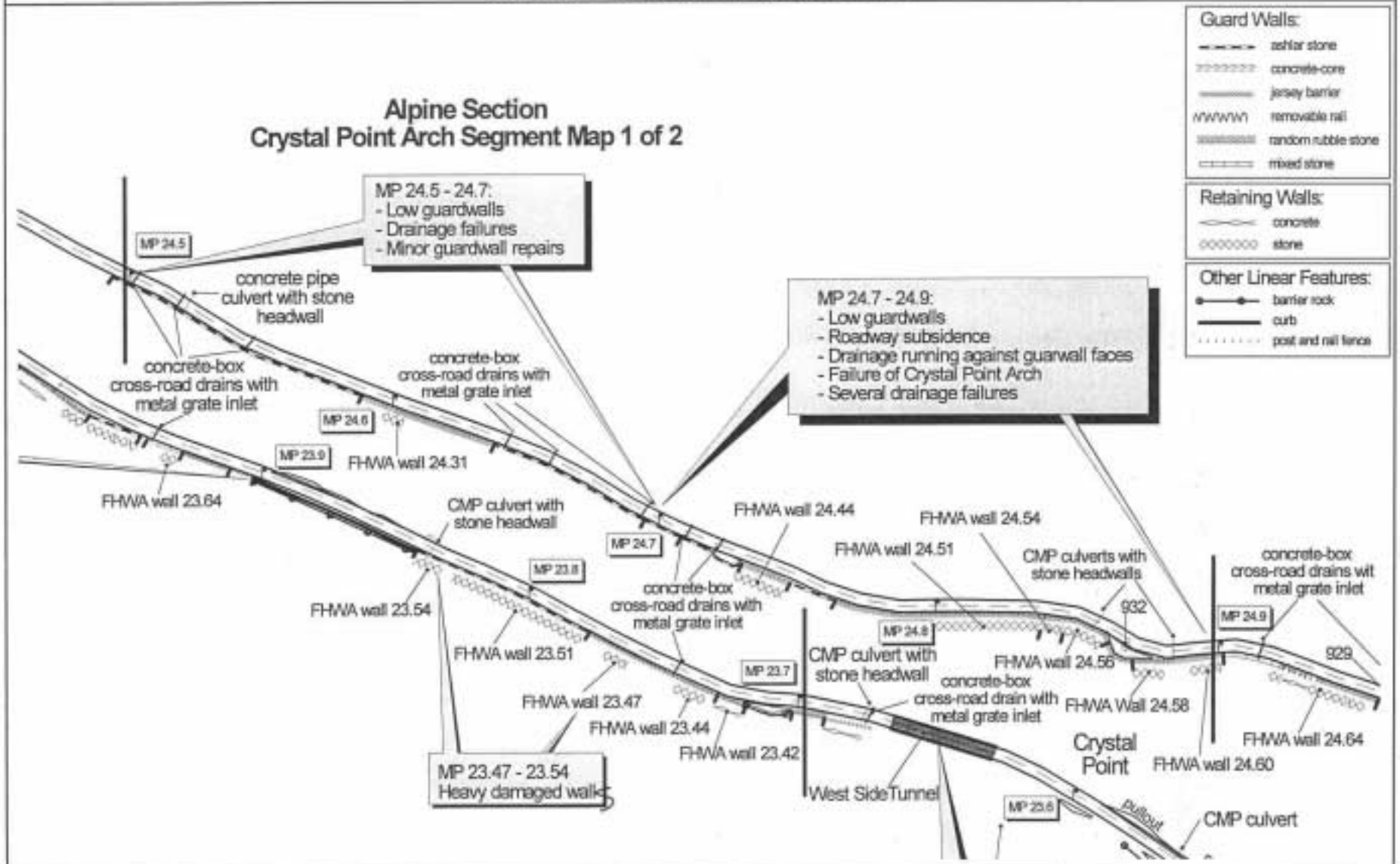
Map Legend

Washington Infrastructure Services

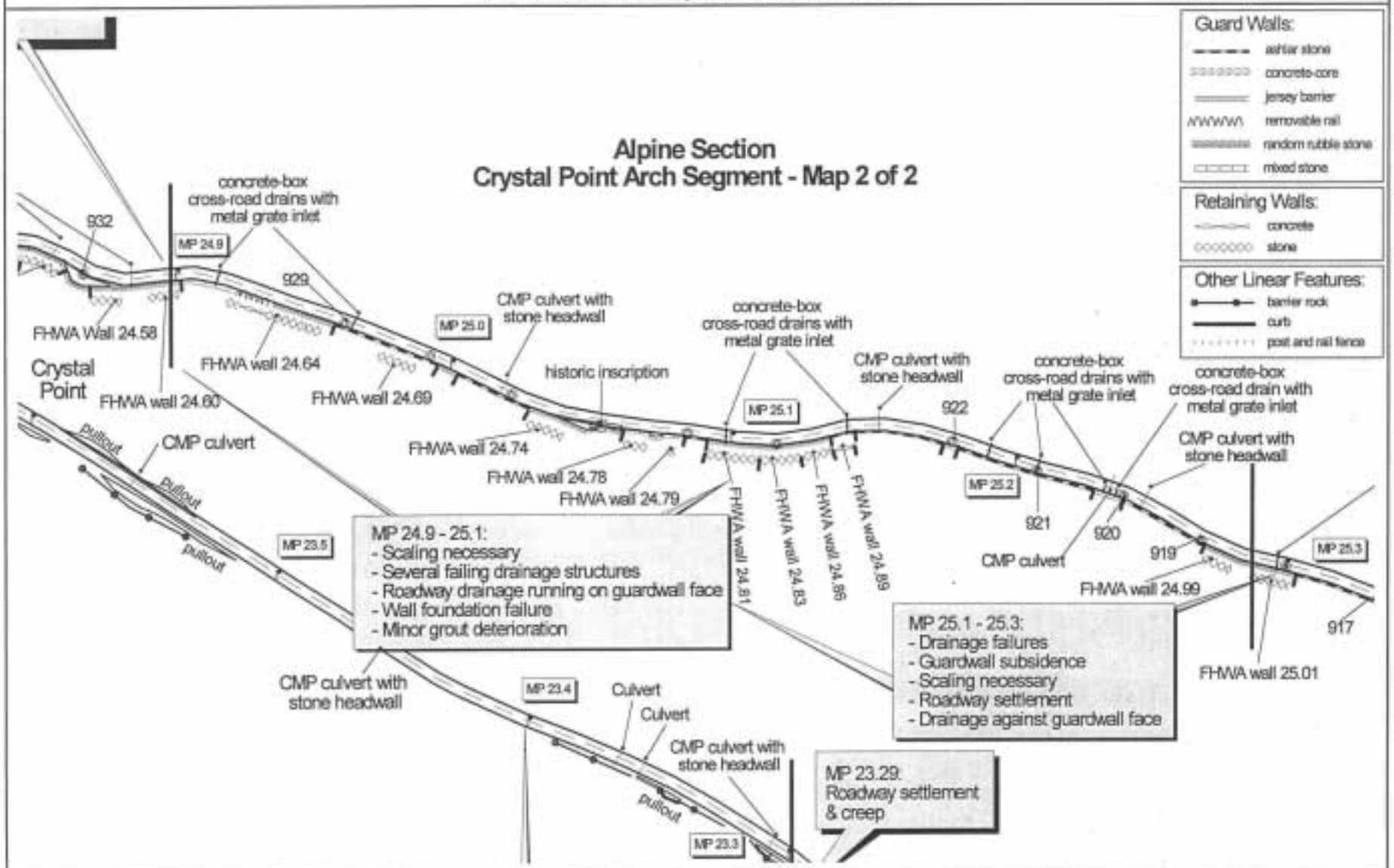
Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001

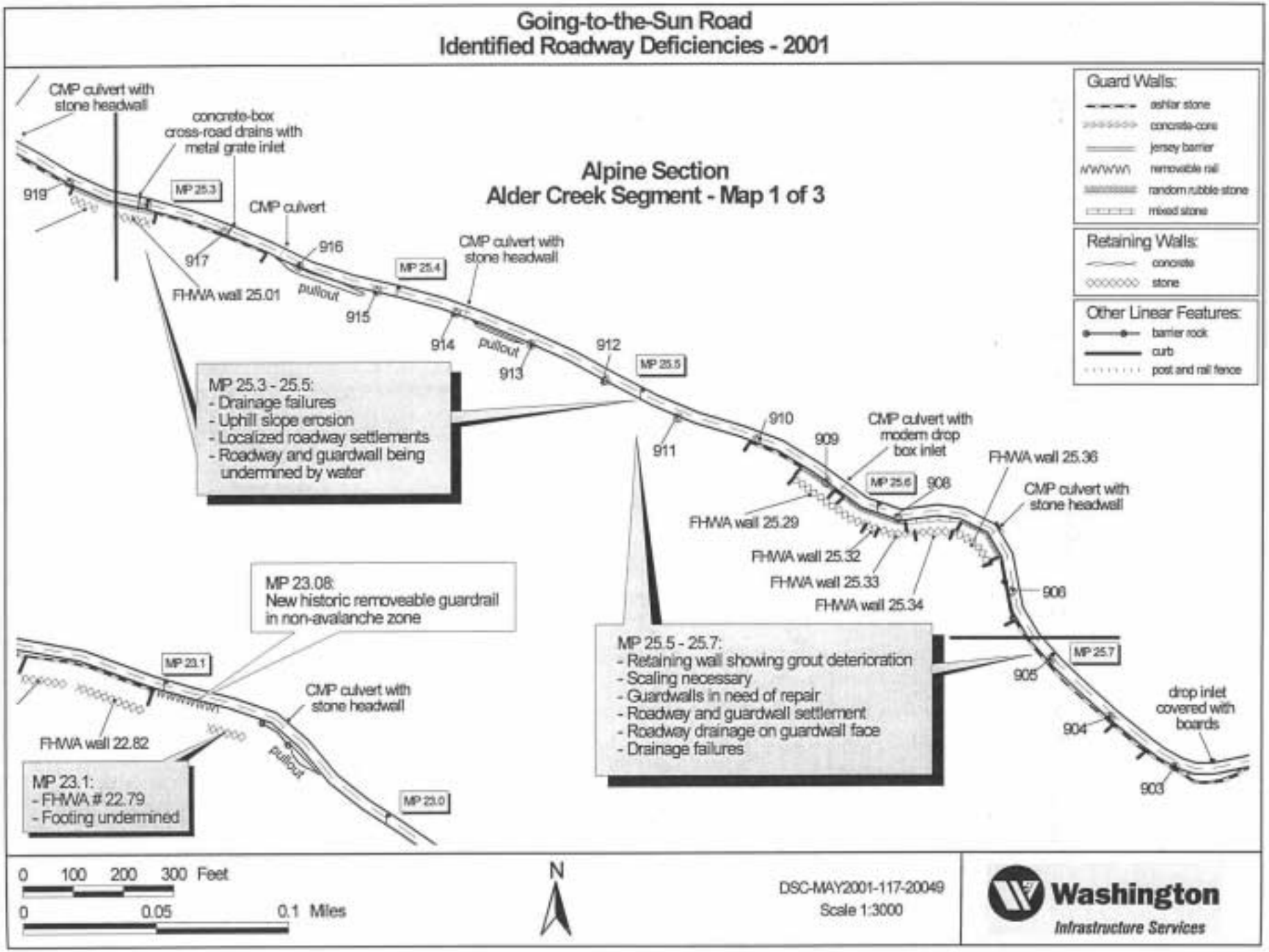


Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001

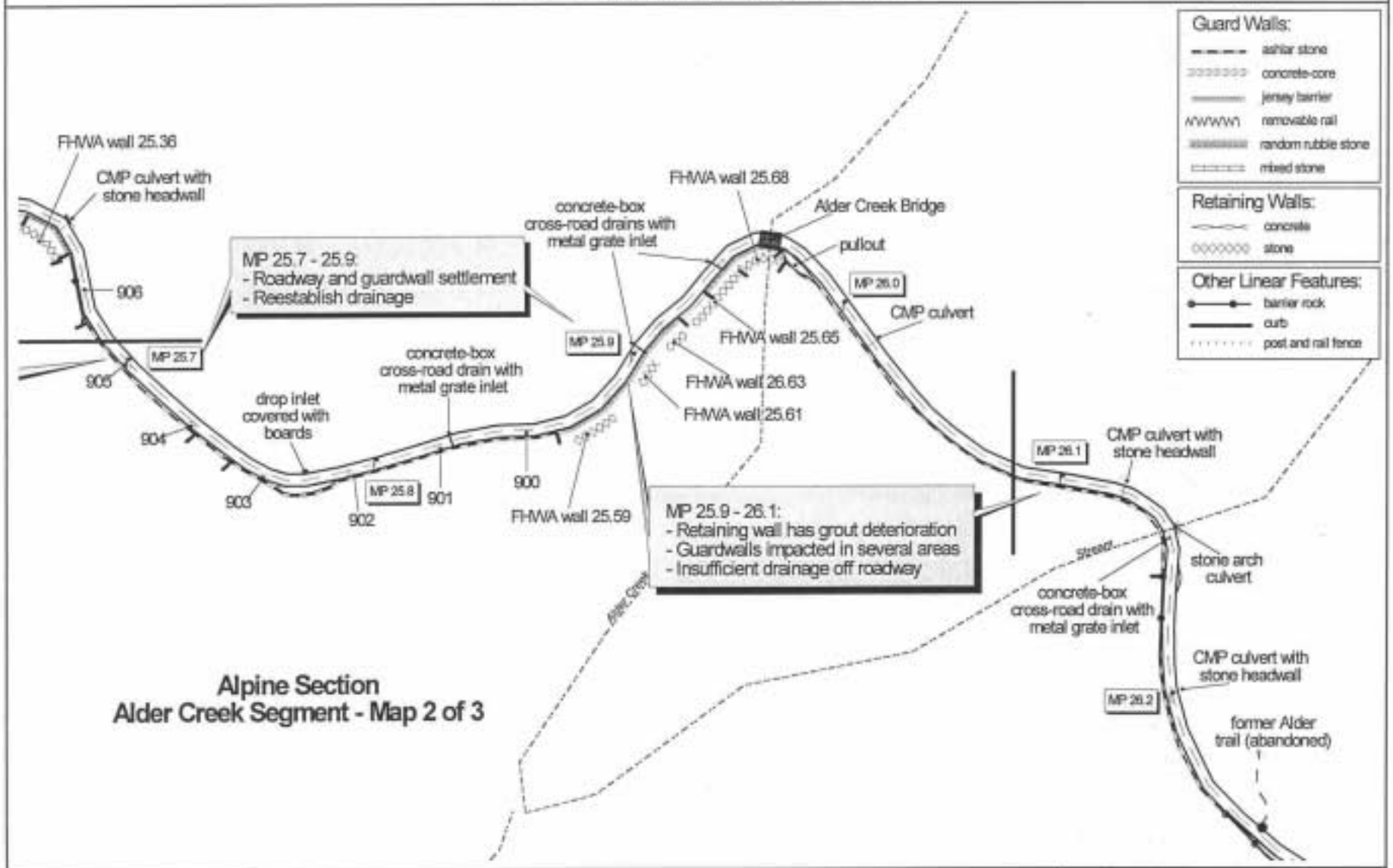


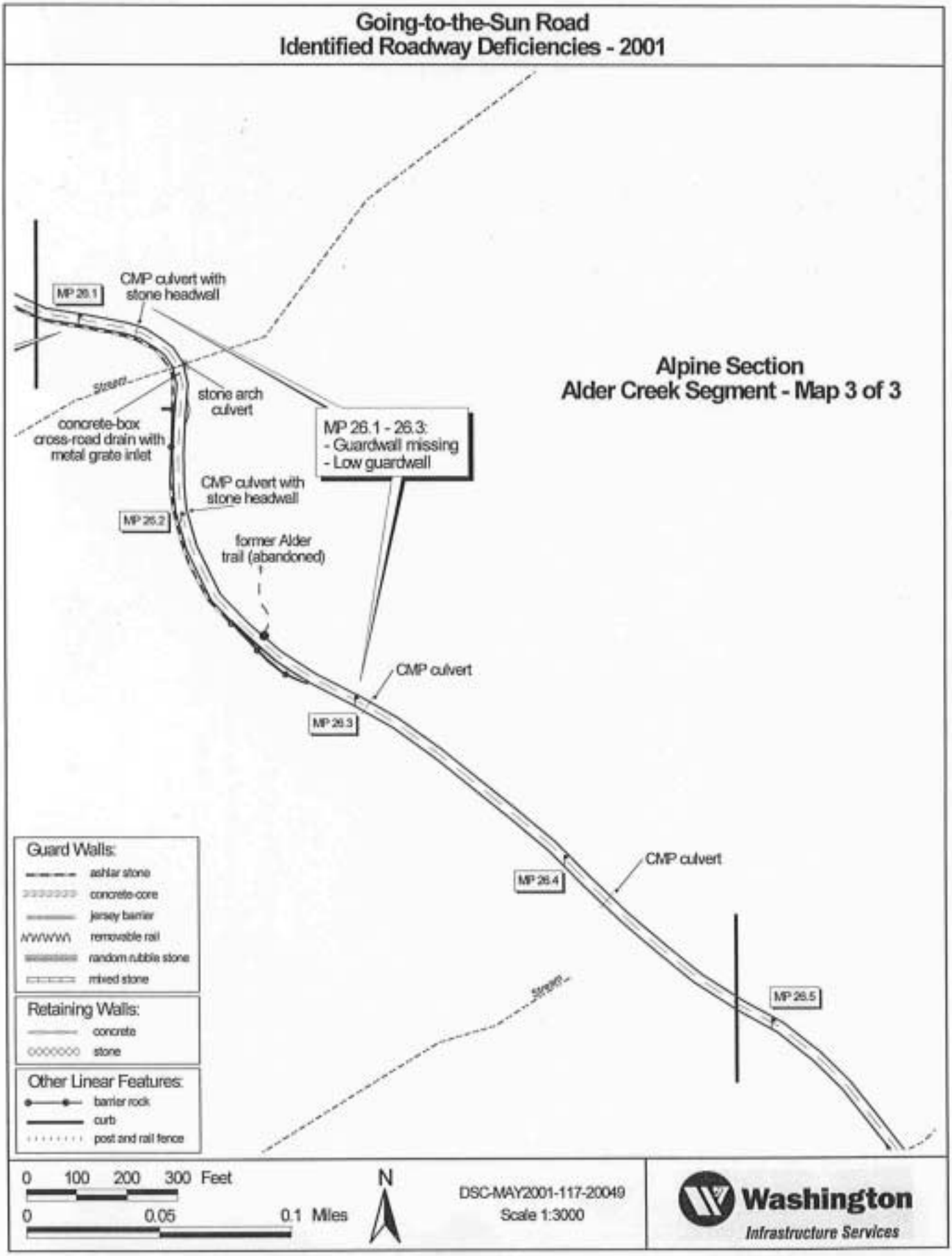
Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001

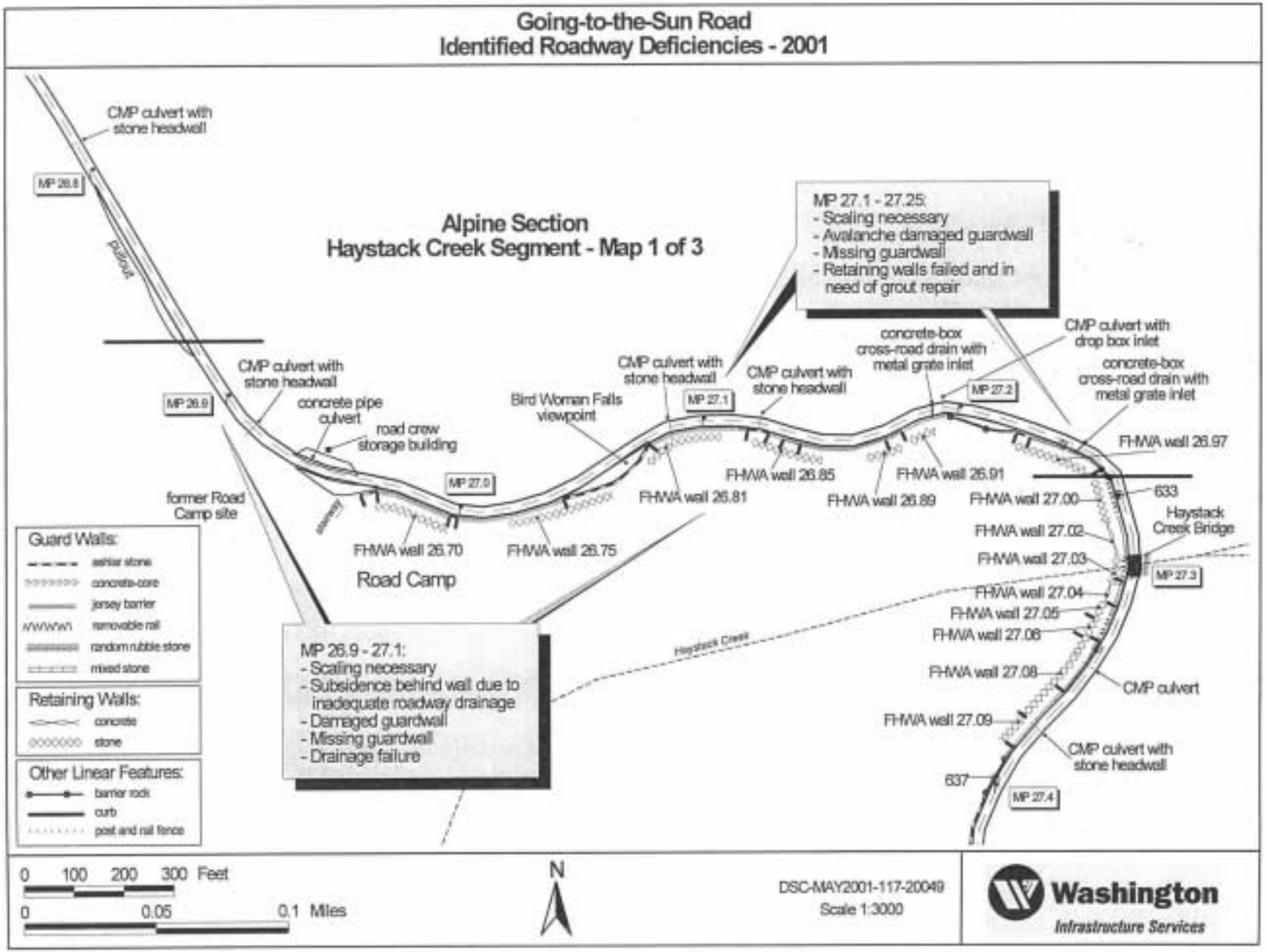


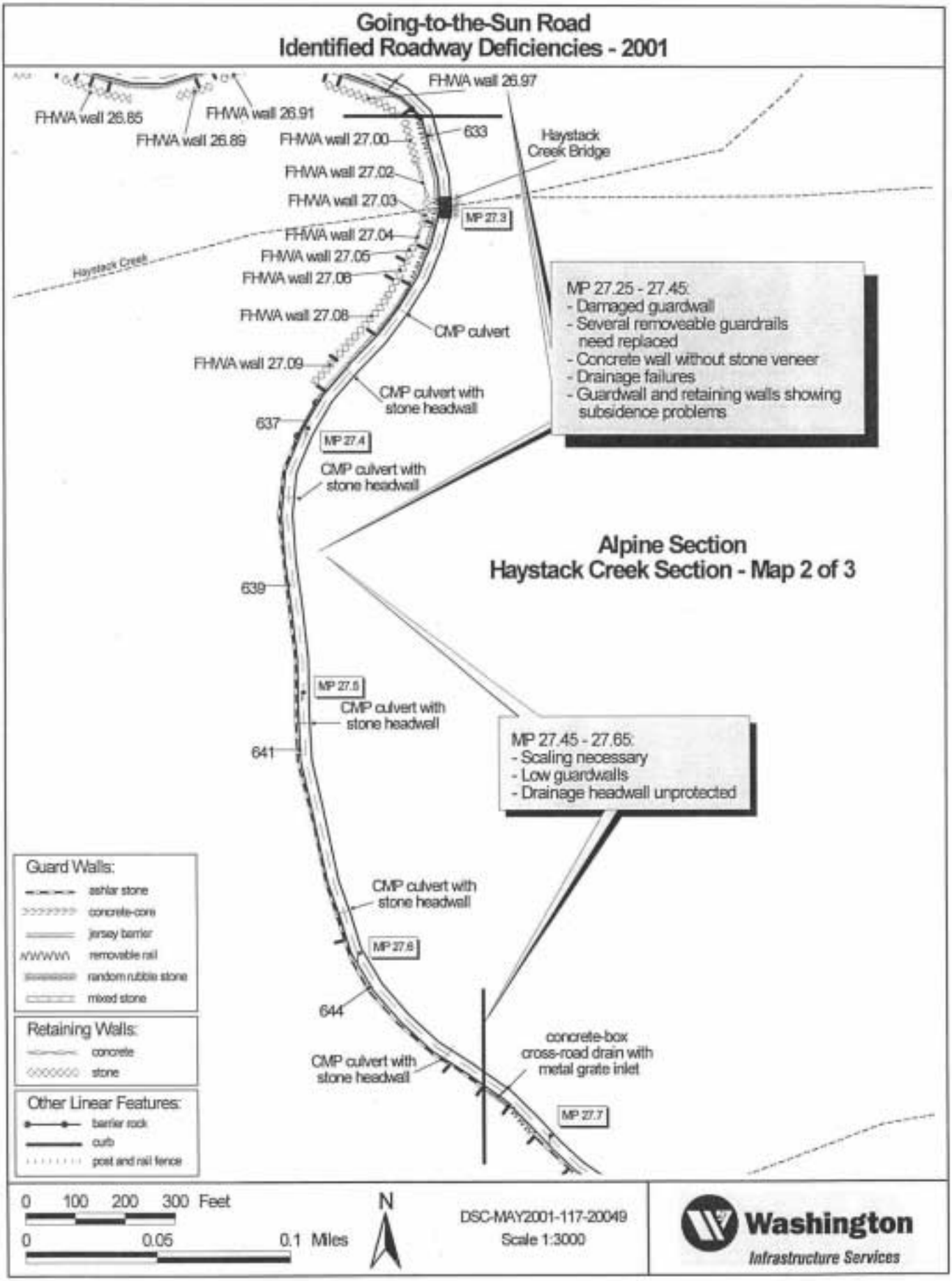

Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001
Alpine Section
Alder Creek Segment - Map 1 of 3
Guard Walls:
ashlar stone
concrete-core
jersey barrier
removable rail
random rubble stone
mixed stone
Retaining Walls:
concrete
stone
Other Linear Features:
barrier rock
curb
post and rail fence
CMP culvert with stone headwall
concrete-box cross-road drains with metal grate inlet
CMP culvert
CMP culvert with stone headwall
CMP culvert with modern drop box inlet
CMP culvert with stone headwall
CMP culvert with stone headwall
drop inlet covered with boards
FHWA wall 25.01
FHWA wall 25.29
FHWA wall 25.32
FHWA wall 25.33
FHWA wall 25.34
FHWA wall 25.36
FHWA wall 22.82
pullout
pullout
pullout
MP 23.0
MP 23.1
MP 25.3
MP 25.4
MP 25.5
MP 25.6
MP 25.7
919
917
916
915
914
913
912
911
910
909
908
906
905
904
903
MP 25.3 - 25.5:
- Drainage failures
- Uphill slope erosion
- Localized roadway settlements
- Roadway and guardwall being undermined by water
MP 23.08:
New historic removeable guardrail in non-avalanche zone
MP 25.5 - 25.7:
- Retaining wall showing grout deterioration
- Scaling necessary
- Guardwalls in need of repair
- Roadway and guardwall settlement
- Roadway drainage on guardwall face
- Drainage failures
MP 23.1:
- FHWA # 22.79
- Footing undermined
0 100 200 300 Feet
0 0.05 0.1 Miles
N
DSC-MAY2001-117-20049
Scale 1:3000
Washington
Infrastructure Services

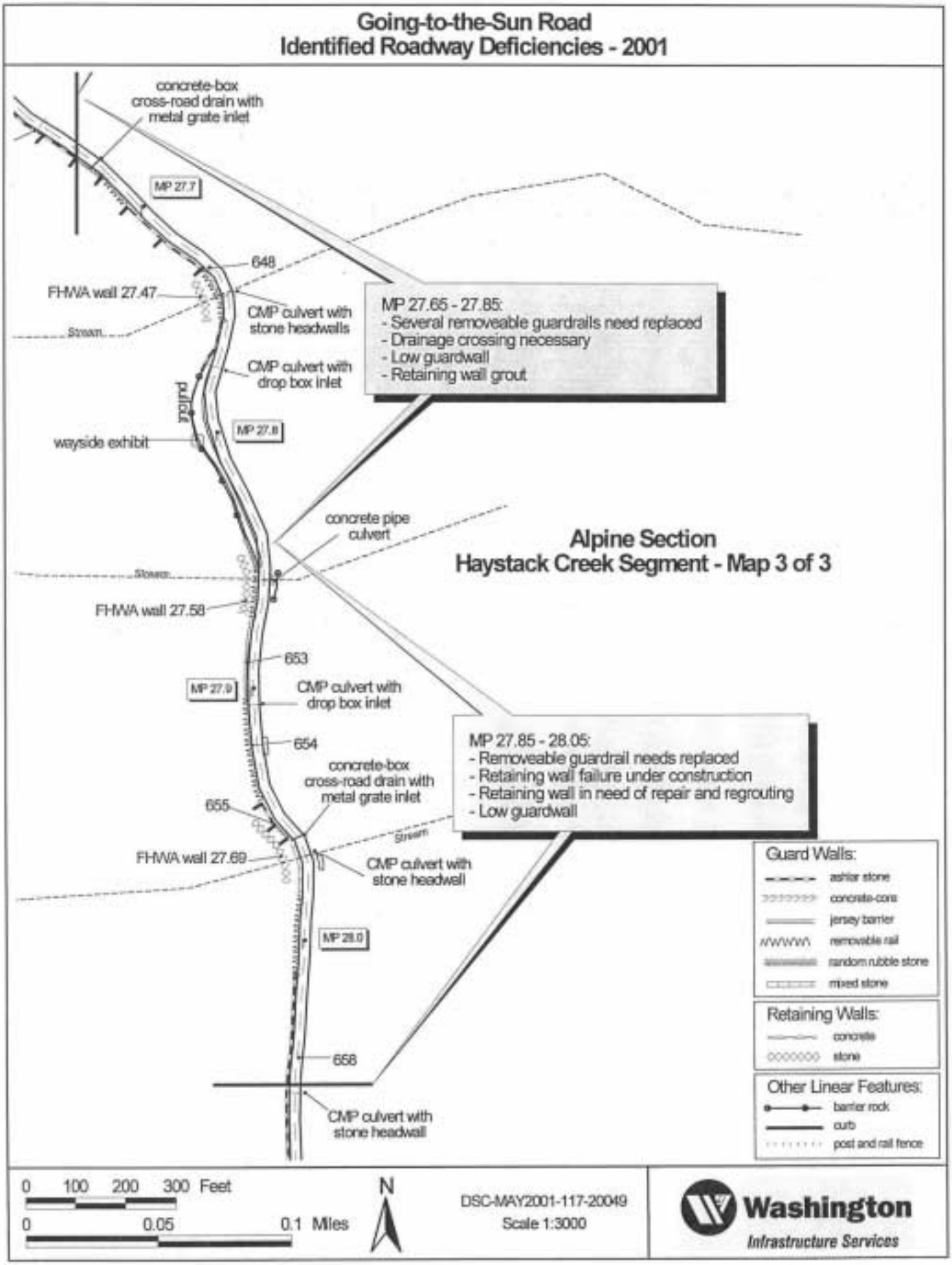
Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001

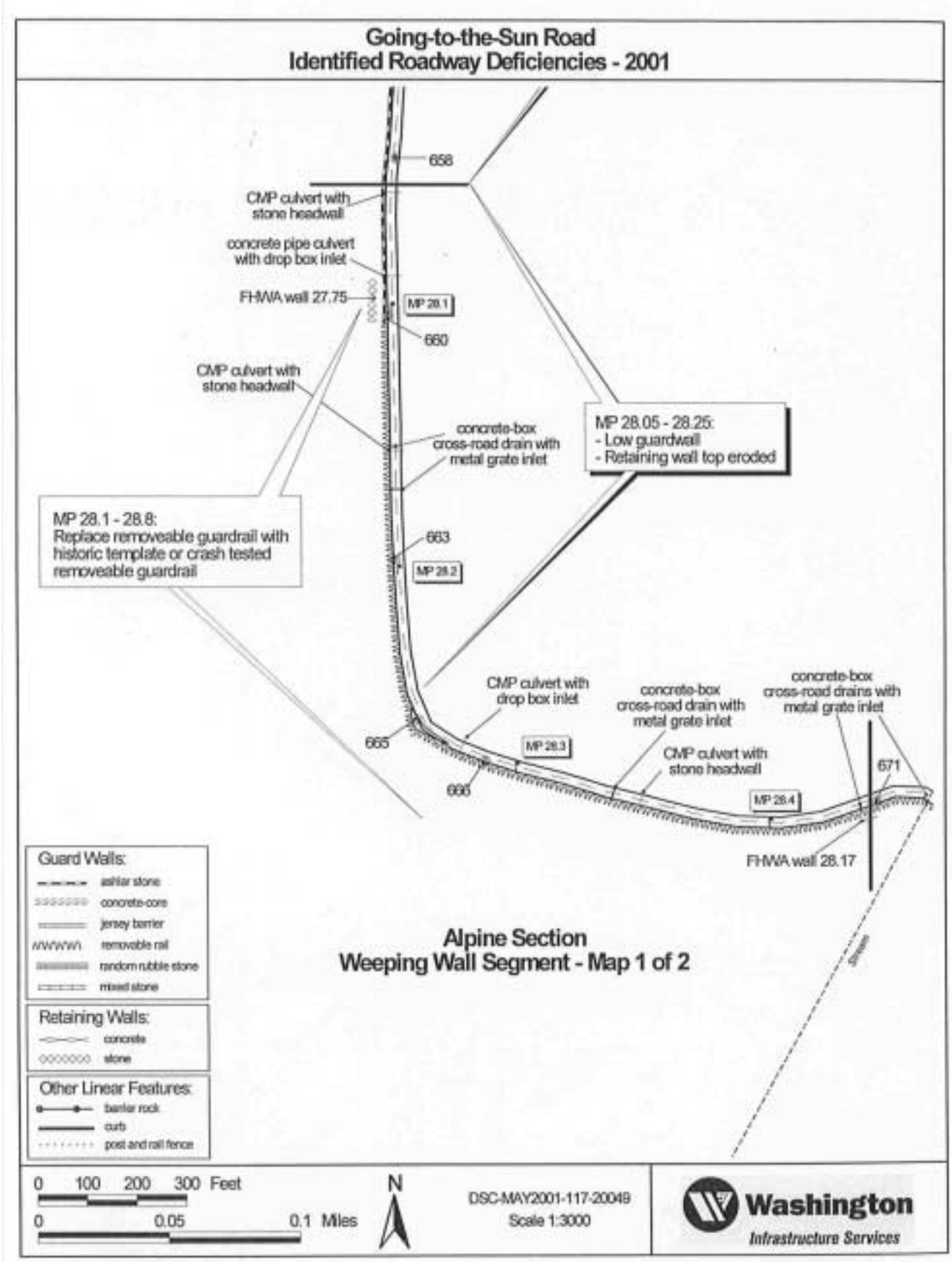



Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001
Alpine Section
Alder Creek Segment - Map 3 of 3
MP 26.1
CMP culvert with stone headwall
stream
stone arch culvert
concrete-box cross-road drain with metal grate inlet
MP 26.1 - 26.3:
- Guardwall missing
- Low guardwall
CMP culvert with stone headwall
MP 26.2
former Alder trail (abandoned)
CMP culvert
MP 26.3
CMP culvert
MP 26.4
MP 26.5
stream
Guard Walls:
ashlar stone
concrete-core
jersey barrier
removable rail
random rubble stone
mixed stone
Retaining Walls:
concrete
stone
Other Linear Features:
barrier rock
curb
post and rail fence
0 100 200 300 Feet
0 0.05 0.1 Miles
N
DSC-MAY2001-117-20049
Scale 1:3000
Washington
Infrastructure Services

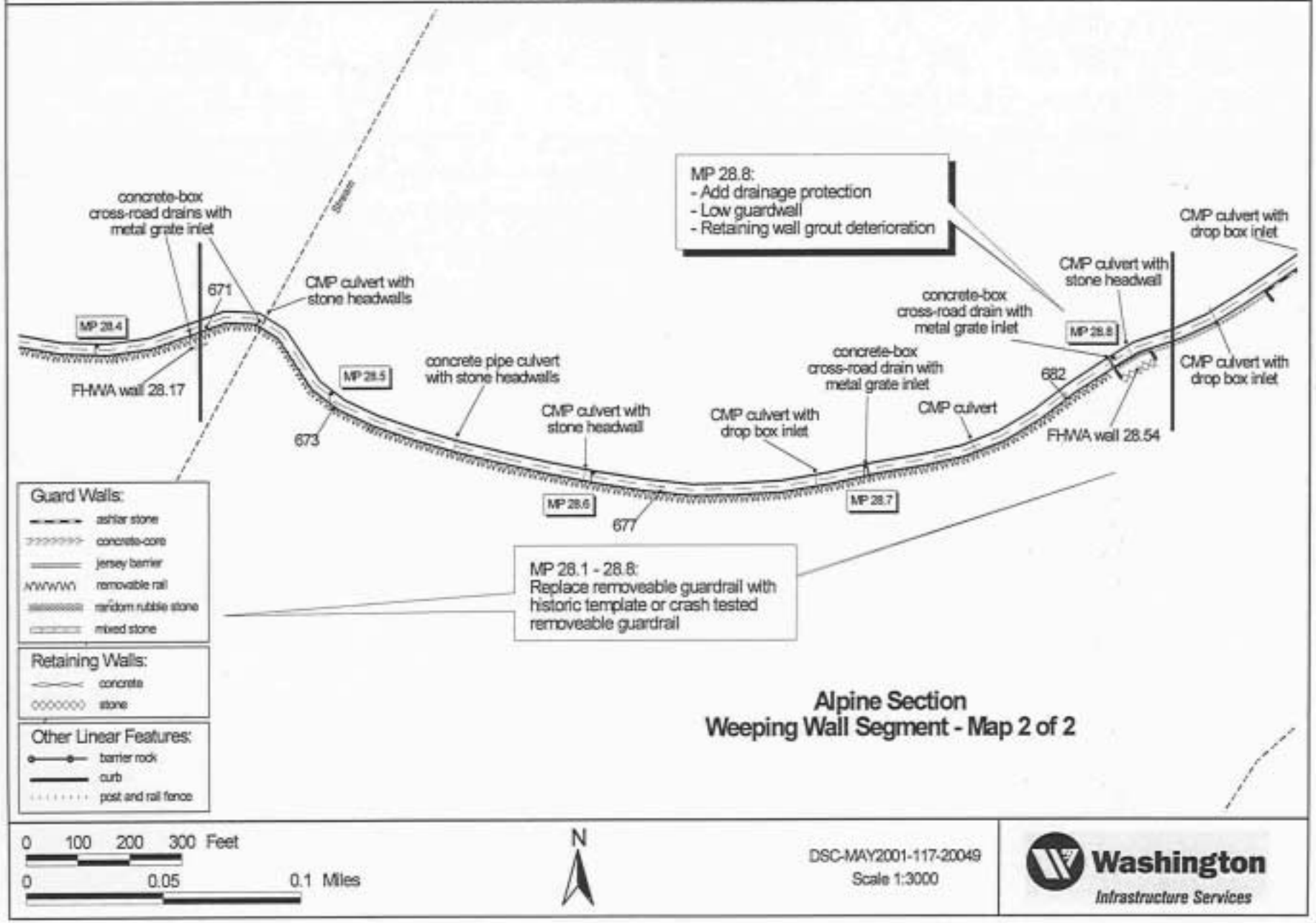

Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001
Alpine Section
Haystack Creek Segment - Map 1 of 3
CMP culvert with stone headwall
MP 26.8
Pullout
CMP culvert with stone headwall
MP 26.9
concrete pipe culvert
road crew storage building
former Road Camp site
Road Camp
MP 27.0
FHWA wall 26.70
FHWA wall 26.75
Bird Woman Falls viewpoint
CMP culvert with stone headwall
FHWA wall 26.81
MP 27.1
CMP culvert with stone headwall
FHWA wall 26.85
FHWA wall 26.89
concrete-box cross-road drain with metal grate inlet
FHWA wall 26.91
MP 27.2
CMP culvert with drop box inlet
concrete-box cross-road drain with metal grate inlet
FHWA wall 26.97
633
FHWA wall 27.00
Haystack Creek Bridge
FHWA wall 27.02
FHWA wall 27.03
MP 27.3
FHWA wall 27.04
FHWA wall 27.05
FHWA wall 27.06
FHWA wall 27.08
CMP culvert
FHWA wall 27.09
CMP culvert with stone headwall
637
MP 27.4
Haystack Creek
MP 27.1 - 27.25:
- Scaling necessary
- Avalanche damaged guardwall
- Missing guardwall
- Retaining walls failed and in need of grout repair
MP 26.9 - 27.1:
- Scaling necessary
- Subsidence behind wall due to inadequate roadway drainage
- Damaged guardwall
- Missing guardwall
- Drainage failure
Guard Walls:
ashlar stone
concrete-core
jersey barrier
removable rail
random rubble stone
mixed stone
Retaining Walls:
concrete
stone
Other Linear Features:
barrier rock
curb
post and rail fence
0 100 200 300 Feet
0 0.05 0.1 Miles
N
DSC-MAY2001-117-20049
Scale 1:3000
Washington
Infrastructure Services

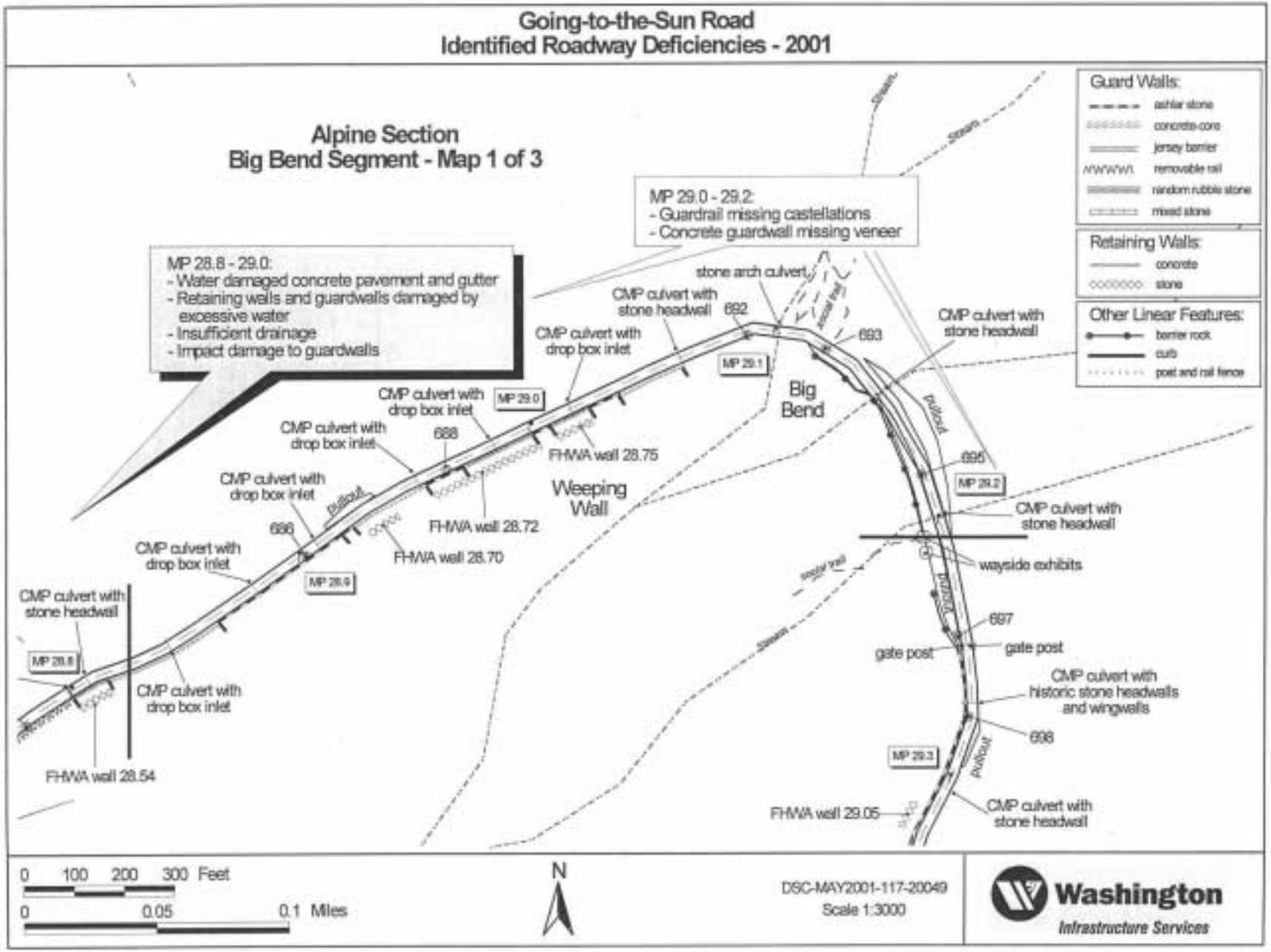

Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001
FHWA wall 26.85
FHWA wall 26.89
FHWA wall 26.91
FHWA wall 26.97
FHWA wall 27.00
633
Haystack Creek Bridge
FHWA wall 27.02
FHWA wall 27.03
MP 27.3
FHWA wall 27.04
FHWA wall 27.05
FHWA wall 27.06
Haystack Creek
FHWA wall 27.08
CMP culvert
FHWA wall 27.09
CMP culvert with stone headwall
637
MP 27.4
CMP culvert with stone headwall
MP 27.25 - 27.45:
- Damaged guardwall
- Several removeable guardrails need replaced
- Concrete wall without stone veneer
- Drainage failures
- Guardwall and retaining walls showing subsidence problems
Alpine Section
Haystack Creek Section - Map 2 of 3
639
MP 27.5
CMP culvert with stone headwall
641
MP 27.45 - 27.65:
- Scaling necessary
- Low guardwalls
- Drainage headwall unprotected
CMP culvert with stone headwall
MP 27.6
644
concrete-box cross-road drain with metal grate inlet
CMP culvert with stone headwall
MP 27.7
Guard Walls:
ashlar stone
concrete-core
jersey barrier
removable rail
random rubble stone
mixed stone
Retaining Walls:
concrete
stone
Other Linear Features:
barrier rock
curb
post and rail fence
0 100 200 300 Feet
0 0.05 0.1 Miles
N
DSC-MAY2001-117-20049
Scale 1:3000
Washington
Infrastructure Services

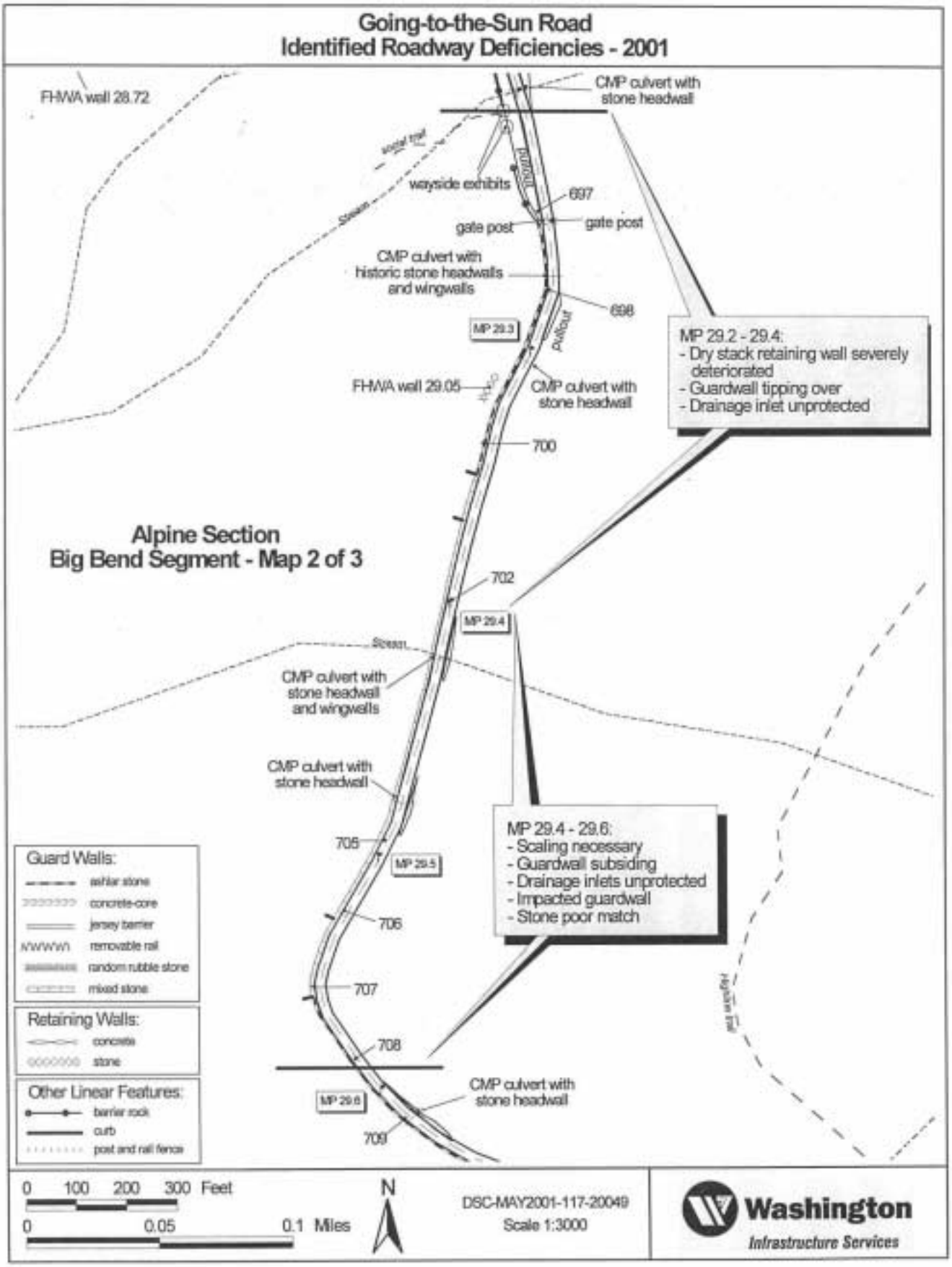

Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001
concrete-box cross-road drain with metal grate inlet
MP 27.7
648
FHWA wall 27.47
CMP culvert with stone headwalls
Stream
CMP culvert with drop box inlet
paved
MP 27.8
wayside exhibit
MP 27.65 - 27.85:
- Several removeable guardrails need replaced
- Drainage crossing necessary
- Low guardwall
- Retaining wall grout
concrete pipe culvert
Alpine Section
Haystack Creek Segment - Map 3 of 3
Stream
FHWA wall 27.58
653
MP 27.9
CMP culvert with drop box inlet
654
concrete-box cross-road drain with metal grate inlet
655
MP 27.85 - 28.05:
- Removeable guardrail needs replaced
- Retaining wall failure under construction
- Retaining wall in need of repair and regrouting
- Low guardwall
Stream
FHWA wall 27.69
CMP culvert with stone headwall
MP 28.0
658
CMP culvert with stone headwall
Guard Walls:
ashlar stone
concrete-core
jersey barrier
removable rail
random rubble stone
mixed stone
Retaining Walls:
concrete
stone
Other Linear Features:
barrier rock
curb
post and rail fence
0 100 200 300 Feet
0 0.05 0.1 Miles
N
DSC-MAY2001-117-20049
Scale 1:3000
Washington
Infrastructure Services

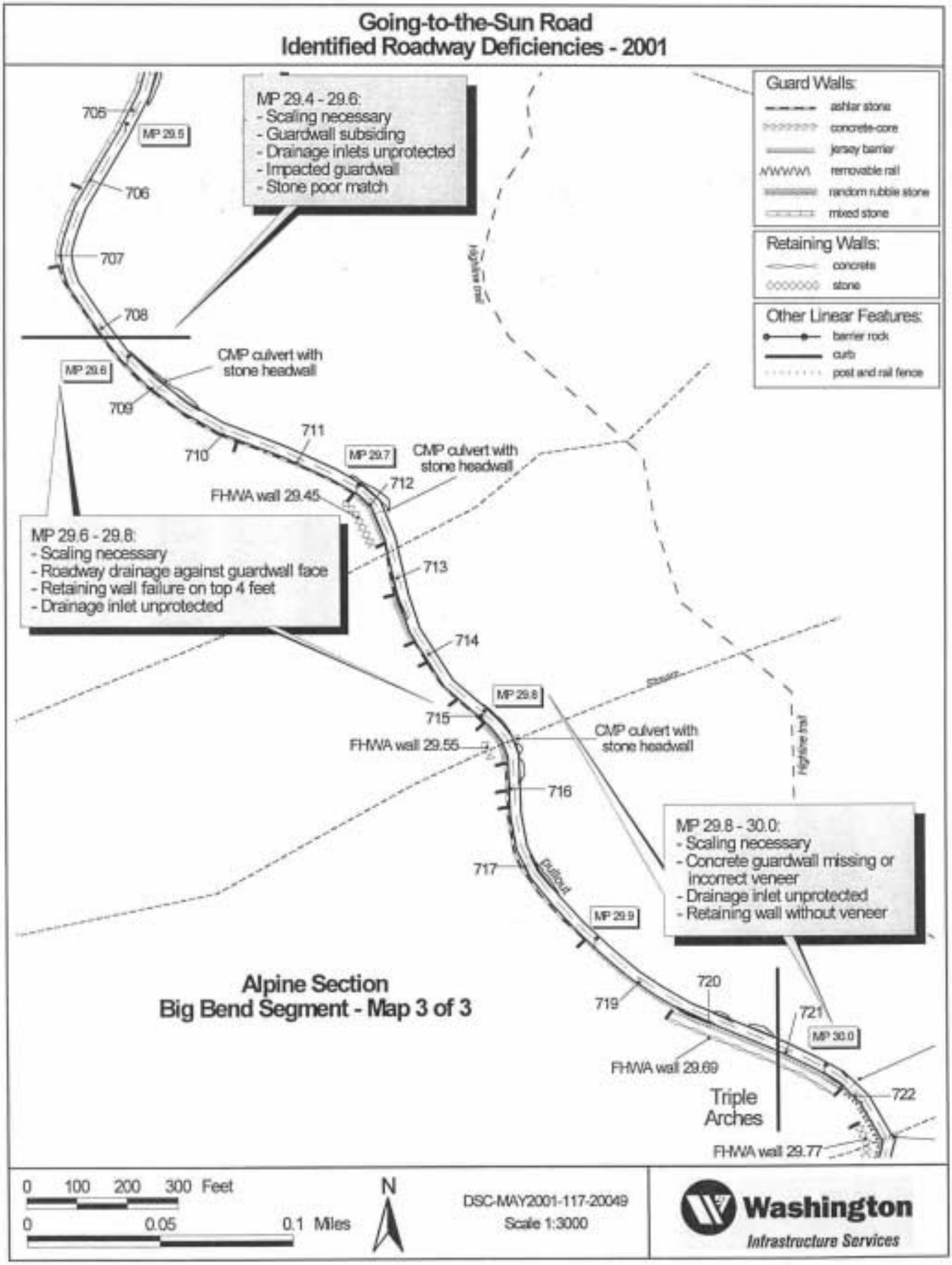

Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001
658
CMP culvert with stone headwall
concrete pipe culvert with drop box inlet
FHWA wall 27.75
MP 28.1
660
CMP culvert with stone headwall
concrete-box cross-road drain with metal grate inlet
MP 28.05 - 28.25:
- Low guardwall
- Retaining wall top eroded
MP 28.1 - 28.8:
Replace removeable guardrail with historic template or crash tested removeable guardrail
663
MP 28.2
CMP culvert with drop box inlet
concrete-box cross-road drain with metal grate inlet
concrete-box cross-road drains with metal grate inlet
665
MP 28.3
CMP culvert with stone headwall
671
666
MP 28.4
FHWA wall 28.17
Guard Walls:
ashlar stone
concrete-core
jersey barrier
removable rail
random rubble stone
mixed stone
Retaining Walls:
concrete
stone
Other Linear Features:
barrier rock
curb
post and rail fence
Alpine Section
Weeping Wall Segment - Map 1 of 2
0 100 200 300 Feet
0 0.05 0.1 Miles
N
DSC-MAY2001-117-20049
Scale 1:3000
Washington
Infrastructure Services

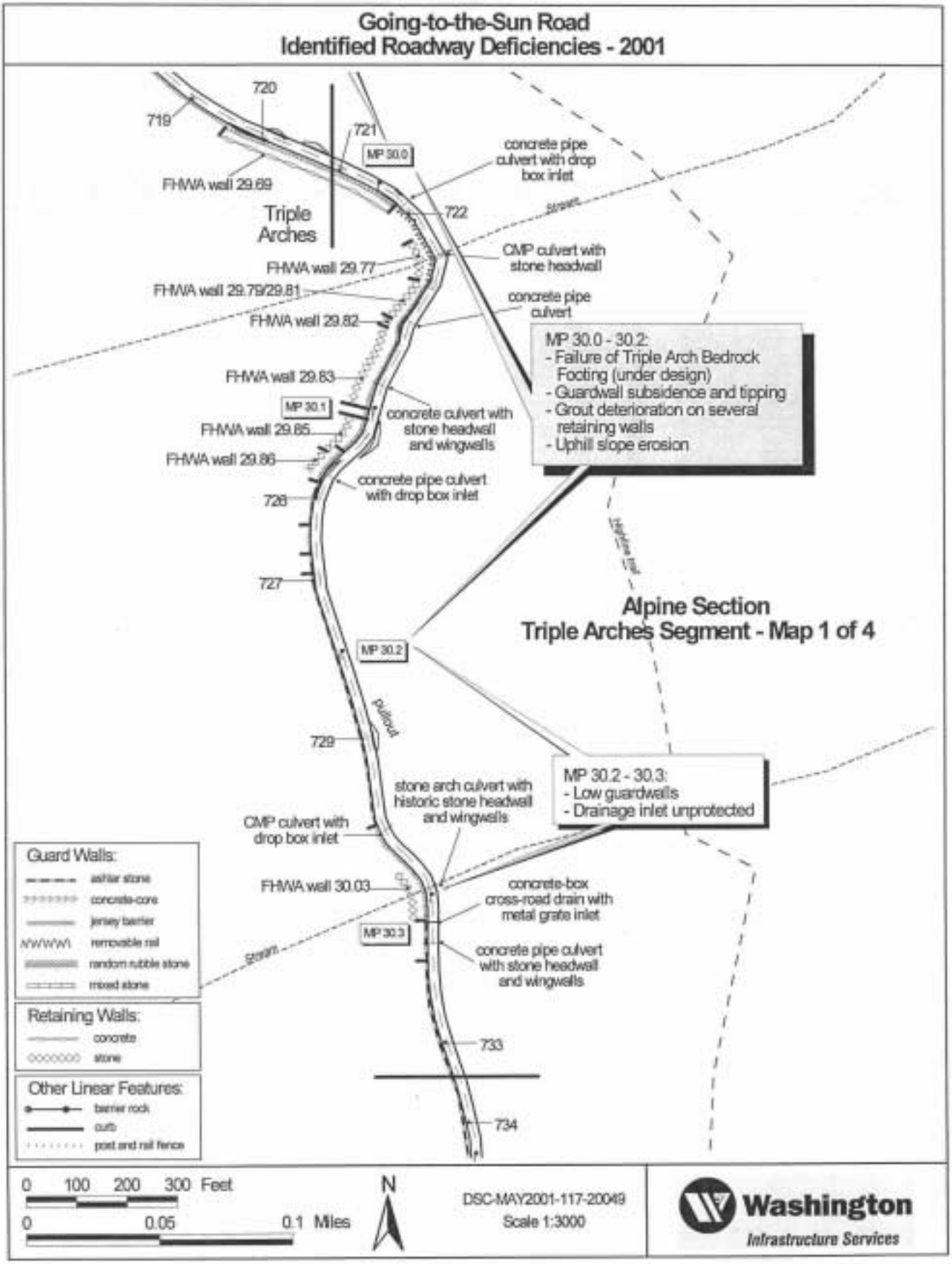
Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001

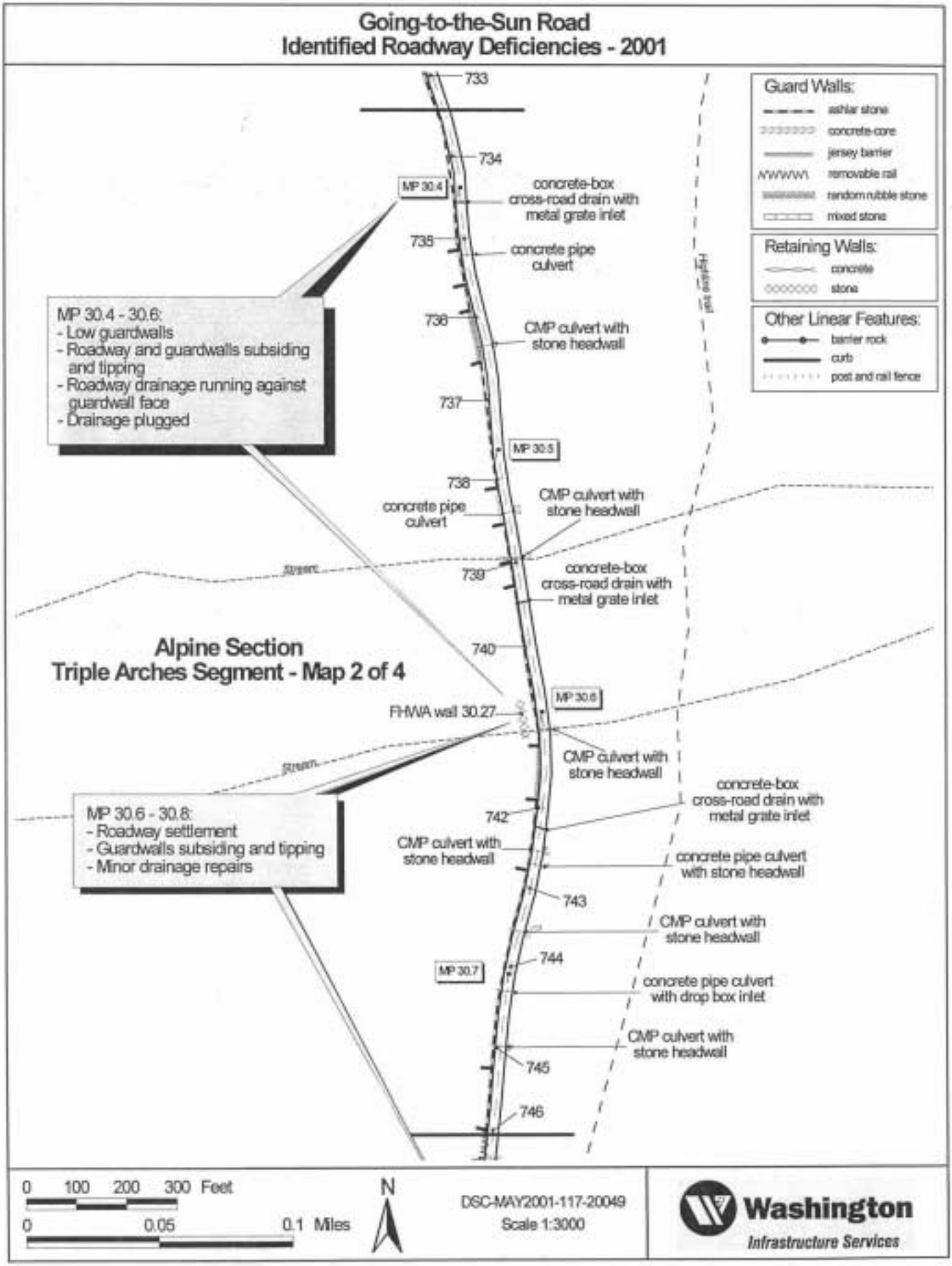


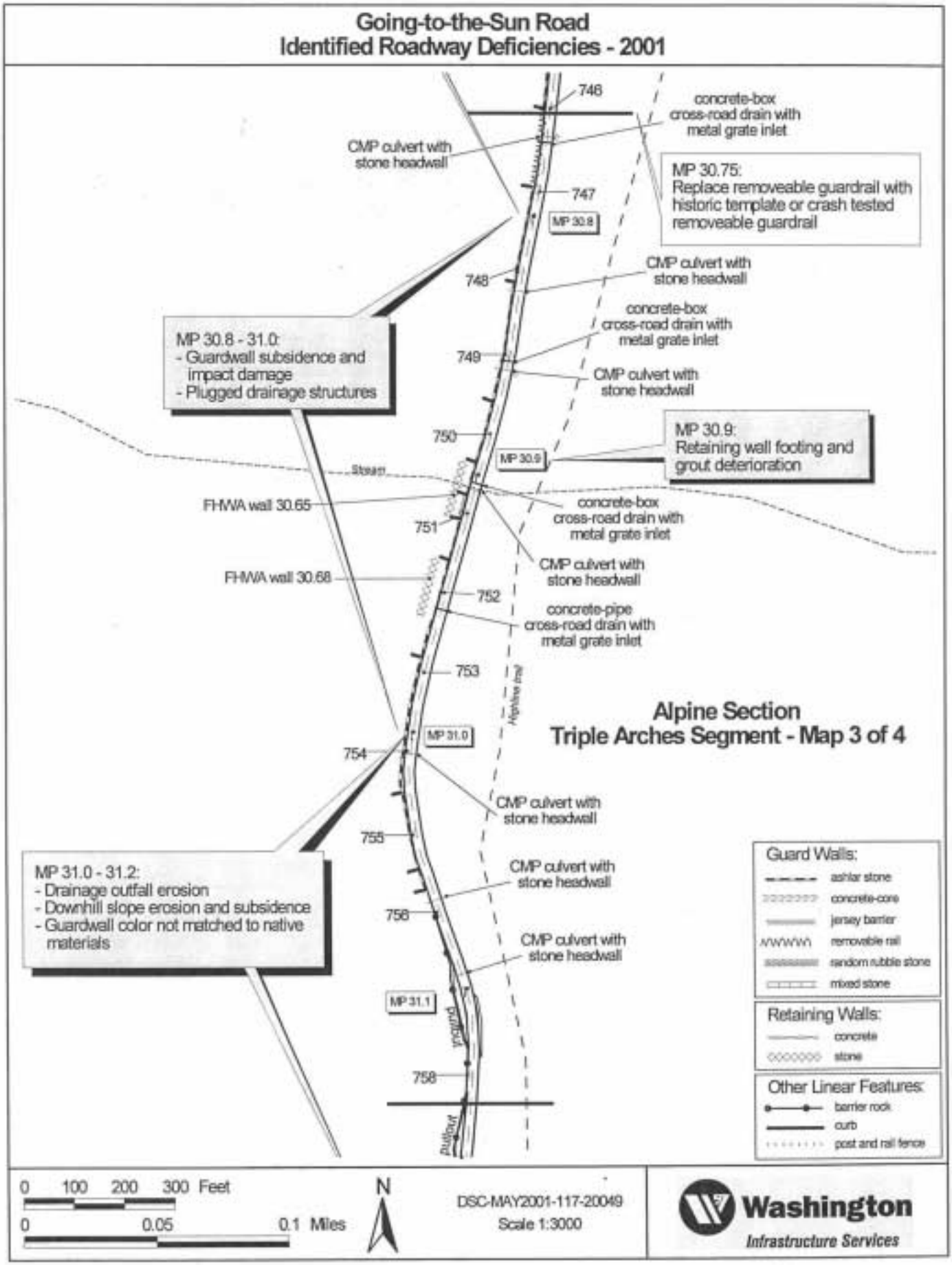

Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001
Alpine Section
Big Bend Segment - Map 1 of 3
MP 28.8 - 29.0:
- Water damaged concrete pavement and gutter
- Retaining walls and guardwalls damaged by excessive water
- Insufficient drainage
- Impact damage to guardwalls
MP 29.0 - 29.2:
- Guardrail missing castellations
- Concrete guardwall missing veneer
Guard Walls:
ashlar stone
concrete-core
jersey barrier
removable rail
random rubble stone
mixed stone
Retaining Walls:
concrete
stone
Other Linear Features:
barrier rock
curb
post and rail fence
CMP culvert with stone headwall
CMP culvert with drop box inlet
stone arch culvert
692
693
695
696
697
698
688
MP 28.8
MP 28.9
MP 29.0
MP 29.1
MP 29.2
MP 29.3
Big Bend
Weeping Wall
FHWA wall 28.54
FHWA wall 28.70
FHWA wall 28.72
FHWA wall 28.75
FHWA wall 29.05
wayside exhibits
gate post
CMP culvert with historic stone headwalls and wingwalls
Stream
Pullout
0 100 200 300 Feet
0 0.05 0.1 Miles
N
DSC-MAY2001-117-20049
Scale 1:3000
Washington
Infrastructure Services

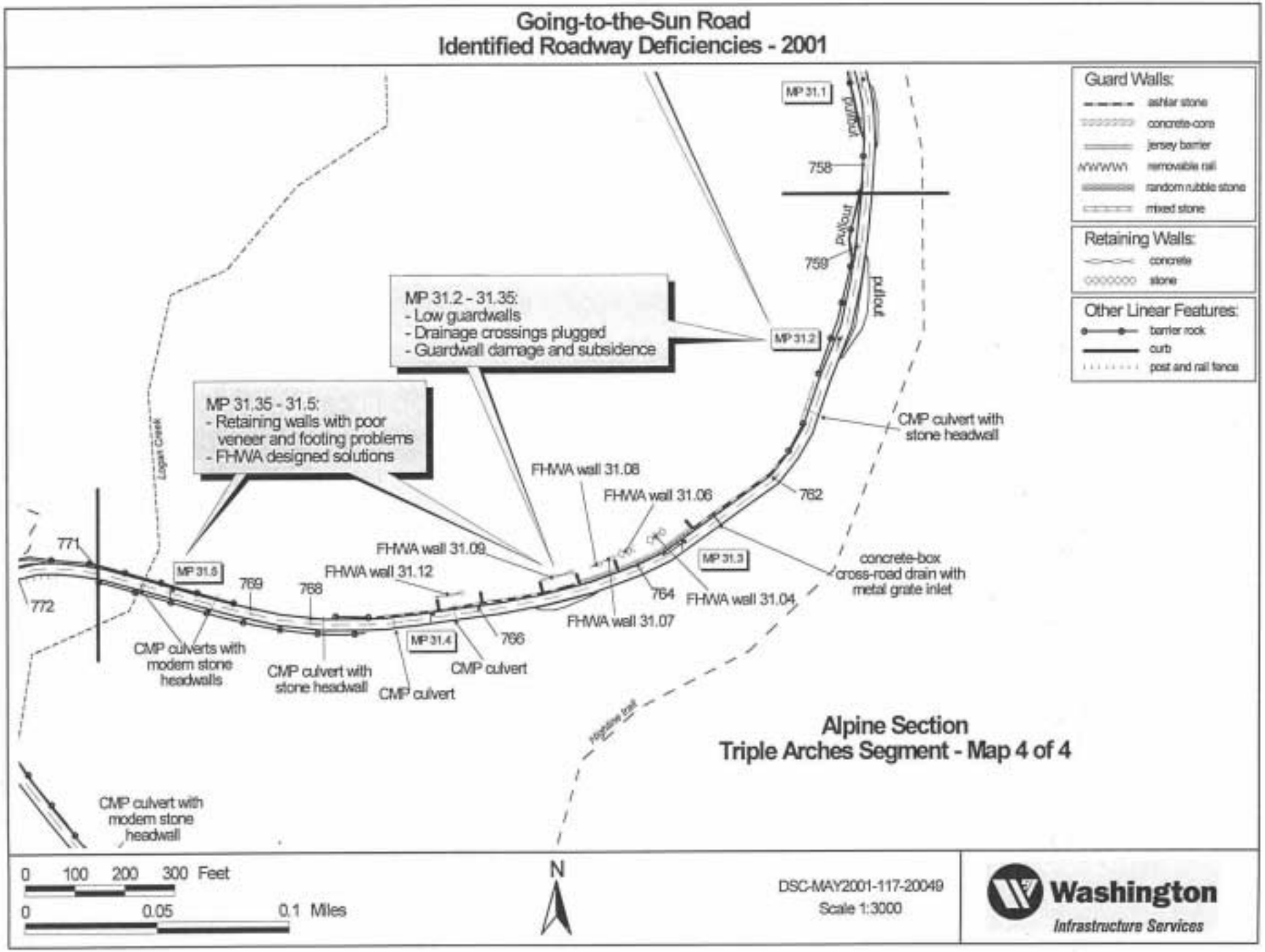

Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001
FHWA wall 28.72
CMP culvert with stone headwall
wayside exhibits
697
gate post
gate post
CMP culvert with historic stone headwalls and wingwalls
698
MP 29.3
FHWA wall 29.05
CMP culvert with stone headwall
700
MP 29.2 - 29.4:
- Dry stack retaining wall severely deteriorated
- Guardwall tipping over
- Drainage inlet unprotected
Alpine Section
Big Bend Segment - Map 2 of 3
702
MP 29.4
CMP culvert with stone headwall and wingwalls
CMP culvert with stone headwall
705
MP 29.5
706
MP 29.4 - 29.6:
- Scaling necessary
- Guardwall subsiding
- Drainage inlets unprotected
- Impacted guardwall
- Stone poor match
707
708
MP 29.6
CMP culvert with stone headwall
709
Guard Walls:
ashlar stone
concrete-core
jersey barrier
removable rail
random rubble stone
mixed stone
Retaining Walls:
concrete
stone
Other Linear Features:
barrier rock
curb
post and rail fence
0 100 200 300 Feet
0 0.05 0.1 Miles
N
DSC-MAY2001-117-20049
Scale 1:3000
Washington
Infrastructure Services


Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001
MP 29.4 - 29.6:
- Scaling necessary
- Guardwall subsiding
- Drainage inlets unprotected
- Impacted guardwall
- Stone poor match
MP 29.6 - 29.8:
- Scaling necessary
- Roadway drainage against guardwall face
- Retaining wall failure on top 4 feet
- Drainage inlet unprotected
MP 29.8 - 30.0:
- Scaling necessary
- Concrete guardwall missing or incorrect veneer
- Drainage inlet unprotected
- Retaining wall without veneer
Guard Walls:
ashlar stone
concrete-core
jersey barrier
removable rail
random rubble stone
mixed stone
Retaining Walls:
concrete
stone
Other Linear Features:
barrier rock
curb
post and rail fence
CMP culvert with stone headwall
FHWA wall 29.45
FHWA wall 29.55
FHWA wall 29.69
FHWA wall 29.77
Triple Arches
Highline trail
Pullout
MP 29.5
MP 29.6
MP 29.7
MP 29.8
MP 29.9
MP 30.0
705
706
707
708
709
710
711
712
713
714
715
716
717
719
720
721
722
Alpine Section
Big Bend Segment - Map 3 of 3
0 100 200 300 Feet
0 0.05 0.1 Miles
N
DSC-MAY2001-117-20049
Scale 1:3000
Washington
Infrastructure Services


Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001
720
719
721
MP 30.0
FHWA wall 29.69
Triple Arches
concrete pipe culvert with drop box inlet
722
CMP culvert with stone headwall
FHWA wall 29.77
FHWA wall 29.79/29.81
FHWA wall 29.82
concrete pipe culvert
MP 30.0 - 30.2:
- Failure of Triple Arch Bedrock Footing (under design)
- Guardwall subsidence and tipping
- Grout deterioration on several retaining walls
- Uphill slope erosion
FHWA wall 29.83
MP 30.1
FHWA wall 29.85
FHWA wall 29.86
concrete culvert with stone headwall and wingwalls
concrete pipe culvert with drop box inlet
728
727
Alpine Section
Triple Arches Segment - Map 1 of 4
MP 30.2
729
MP 30.2 - 30.3:
- Low guardwalls
- Drainage inlet unprotected
stone arch culvert with historic stone headwall and wingwalls
CMP culvert with drop box inlet
FHWA wall 30.03
concrete-box cross-road drain with metal grate inlet
MP 30.3
concrete pipe culvert with stone headwall and wingwalls
733
734
Guard Walls:
ashlar stone
concrete-core
jersey barrier
removable rail
random rubble stone
mixed stone
Retaining Walls:
concrete
stone
Other Linear Features:
barrier rock
curb
post and rail fence
0 100 200 300 Feet
0 0.05 0.1 Miles
N
DSC-MAY2001-117-20049
Scale 1:3000
Washington
Infrastructure Services


Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001
Guard Walls:
ashlar stone
concrete-core
jersey barrier
removable rail
random rubble stone
mixed stone
Retaining Walls:
concrete
stone
Other Linear Features:
barrier rock
curb
post and rail fence
733
734
MP 30.4
concrete-box cross-road drain with metal grate inlet
735
concrete pipe culvert
736
CMP culvert with stone headwall
737
MP 30.5
738
concrete pipe culvert
CMP culvert with stone headwall
739
concrete-box cross-road drain with metal grate inlet
740
MP 30.6
FHWA wall 30.27
CMP culvert with stone headwall
concrete-box cross-road drain with metal grate inlet
742
CMP culvert with stone headwall
concrete pipe culvert with stone headwall
743
CMP culvert with stone headwall
744
MP 30.7
concrete pipe culvert with drop box inlet
CMP culvert with stone headwall
745
746
MP 30.4 - 30.6:
- Low guardwalls
- Roadway and guardwalls subsiding and tipping
- Roadway drainage running against guardwall face
- Drainage plugged
MP 30.6 - 30.8:
- Roadway settlement
- Guardwalls subsiding and tipping
- Minor drainage repairs
Alpine Section
Triple Arches Segment - Map 2 of 4
Highline Trail
Stream
Stream
0 100 200 300 Feet
0 0.05 0.1 Miles
N
DSC-MAY2001-117-20049
Scale 1:3000
Washington
Infrastructure Services


Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001
746
concrete-box cross-road drain with metal grate inlet
CMP culvert with stone headwall
MP 30.75:
Replace removeable guardrail with historic template or crash tested removeable guardrail
747
MP 30.8
CMP culvert with stone headwall
748
concrete-box cross-road drain with metal grate inlet
MP 30.8 - 31.0:
- Guardwall subsidence and impact damage
- Plugged drainage structures
749
CMP culvert with stone headwall
750
MP 30.9
MP 30.9:
Retaining wall footing and grout deterioration
Stream
FHWA wall 30.65
concrete-box cross-road drain with metal grate inlet
751
CMP culvert with stone headwall
FHWA wall 30.68
752
concrete-pipe cross-road drain with metal grate inlet
753
Alpine trail
Alpine Section
Triple Arches Segment - Map 3 of 4
MP 31.0
754
CMP culvert with stone headwall
755
CMP culvert with stone headwall
MP 31.0 - 31.2:
- Drainage outfall erosion
- Downhill slope erosion and subsidence
- Guardwall color not matched to native materials
756
CMP culvert with stone headwall
MP 31.1
Pullout
758
Pullout
Guard Walls:
ashlar stone
concrete-core
jersey barrier
removable rail
random rubble stone
mixed stone
Retaining Walls:
concrete
stone
Other Linear Features:
barrier rock
curb
post and rail fence
0 100 200 300 Feet
0 0.05 0.1 Miles
N
DSC-MAY2001-117-20049
Scale 1:3000
Washington
Infrastructure Services


Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001
Guard Walls:
ashlar stone
concrete-core
jersey barrier
removable rail
random rubble stone
mixed stone
Retaining Walls:
concrete
stone
Other Linear Features:
barrier rock
curb
post and rail fence
MP 31.1
758
759
pullout
MP 31.2
MP 31.2 - 31.35:
- Low guardwalls
- Drainage crossings plugged
- Guardwall damage and subsidence
MP 31.35 - 31.5:
- Retaining walls with poor veneer and footing problems
- FHWA designed solutions
Logan Creek
CMP culvert with stone headwall
762
FHWA wall 31.08
FHWA wall 31.06
FHWA wall 31.09
FHWA wall 31.12
MP 31.3
concrete-box cross-road drain with metal grate inlet
764
FHWA wall 31.04
FHWA wall 31.07
771
772
MP 31.5
769
768
MP 31.4
766
CMP culverts with modern stone headwalls
CMP culvert with stone headwall
CMP culvert
CMP culvert
Alpine Section
Triple Arches Segment - Map 4 of 4
CMP culvert with modern stone headwall
0 100 200 300 Feet
0 0.05 0.1 Miles
N
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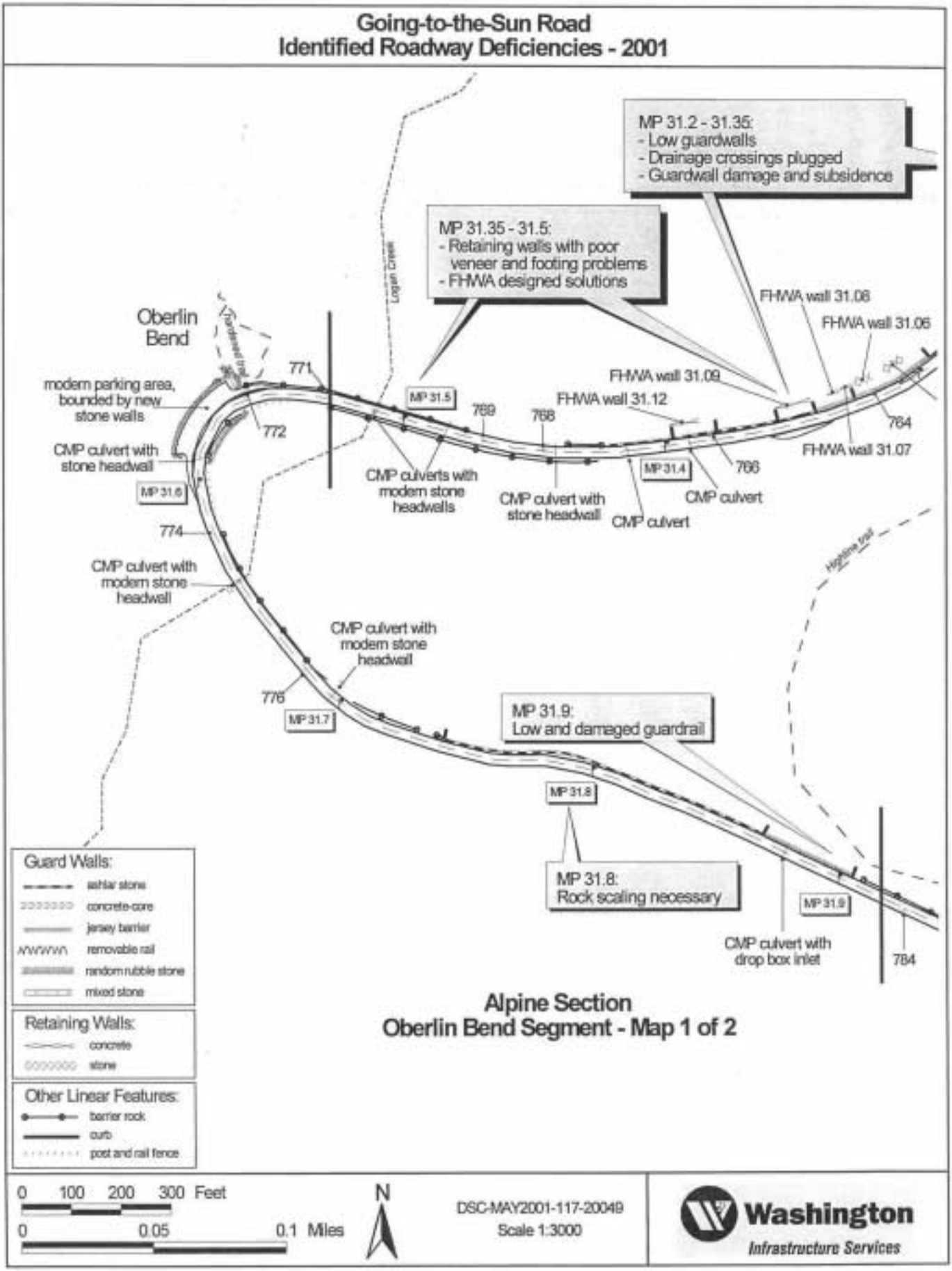
Scale 1:3000
Washington
Infrastructure Services


Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001
MP 31.2 - 31.35:
- Low guardwalls
- Drainage crossings plugged
- Guardwall damage and subsidence
MP 31.35 - 31.5:
- Retaining walls with poor veneer and footing problems
- FHWA designed solutions
Logan Creek
Oberlin Bend
Handwood trail
FHWA wall 31.08
FHWA wall 31.06
FHWA wall 31.09
FHWA wall 31.12
FHWA wall 31.07
771
772
774
776
769
768
766
764
MP 31.5
MP 31.4
MP 31.6
MP 31.7
MP 31.8
MP 31.9
modern parking area, bounded by new stone walls
CMP culvert with stone headwall
CMP culverts with modern stone headwalls
CMP culvert with stone headwall
CMP culvert
CMP culvert
CMP culvert with modern stone headwall
CMP culvert with modern stone headwall
Highline trail
MP 31.9:
Low and damaged guardrail
MP 31.8:
Rock scaling necessary
CMP culvert with drop box inlet
784
Guard Walls:
ashlar stone
concrete-core
jersey barrier
removable rail
random rubble stone
mixed stone
Retaining Walls:
concrete
stone
Other Linear Features:
barrier rock
curb
post and rail fence
Alpine Section
Oberlin Bend Segment - Map 1 of 2
0 100 200 300 Feet
0 0.05 0.1 Miles
N
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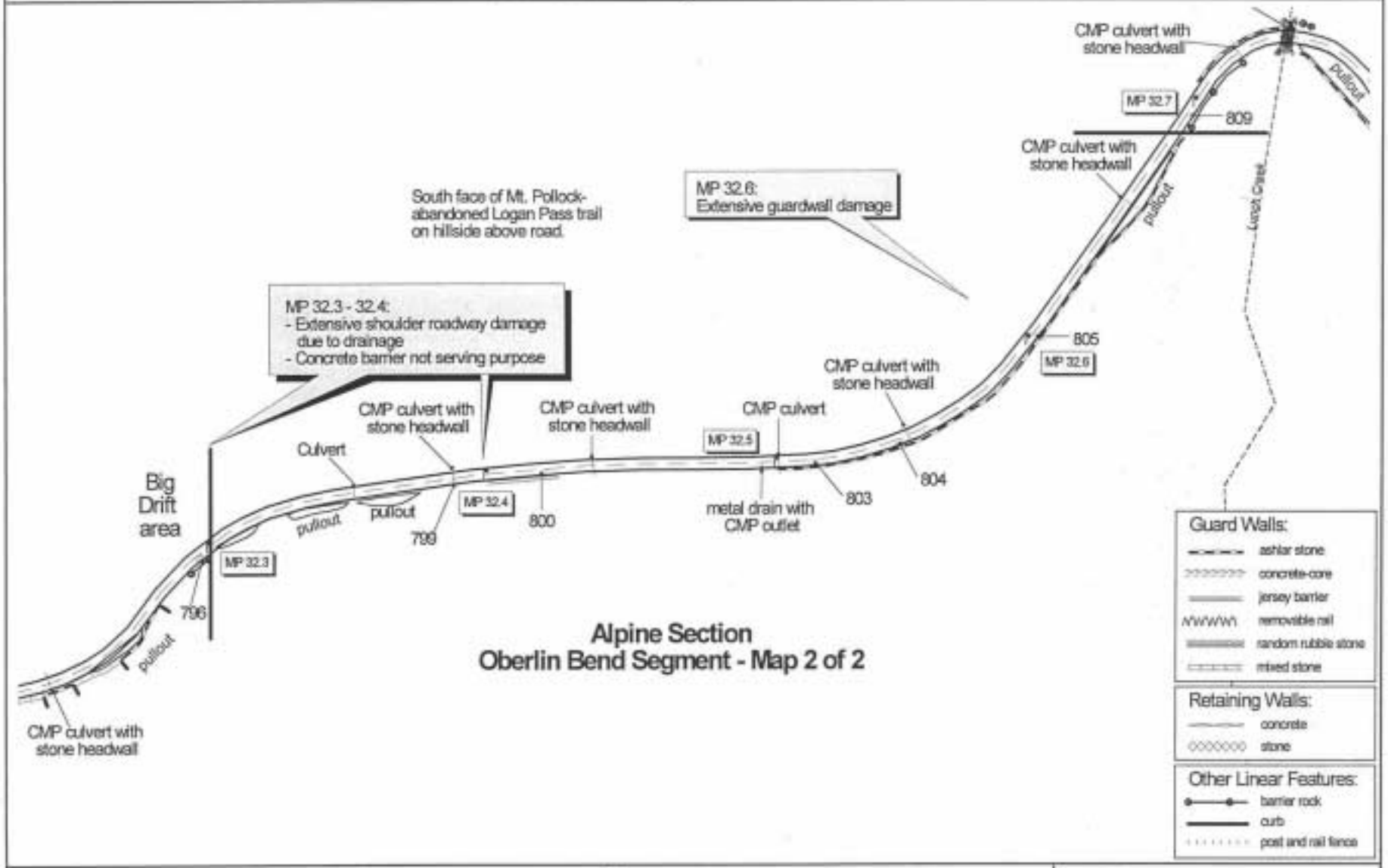
Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001



Alpine Section
Oberlin Bend Segment - Map 2 of 2

0 100 200 300 Feet

0 0.05 0.1 Miles

N

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Scale 1:3000

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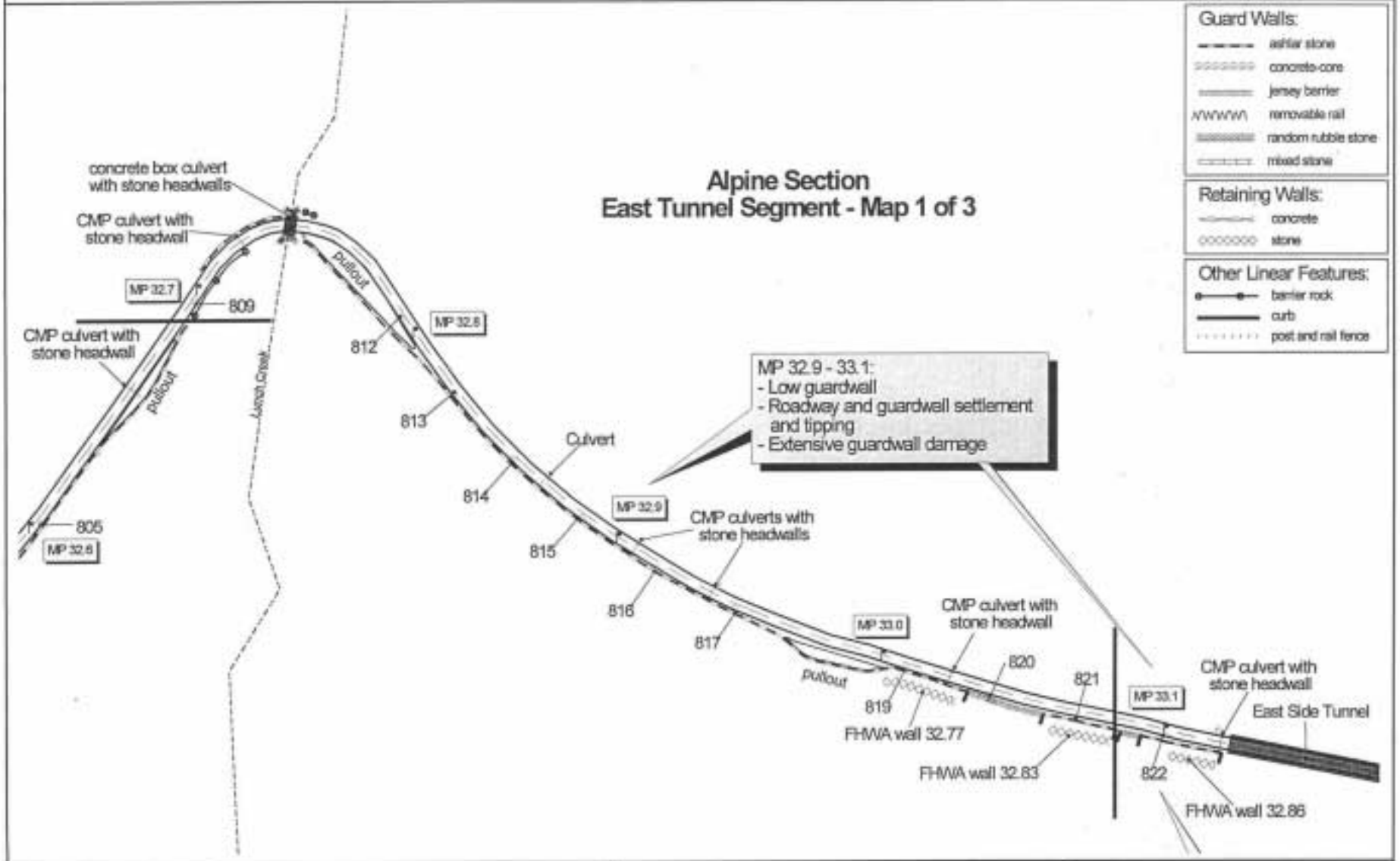
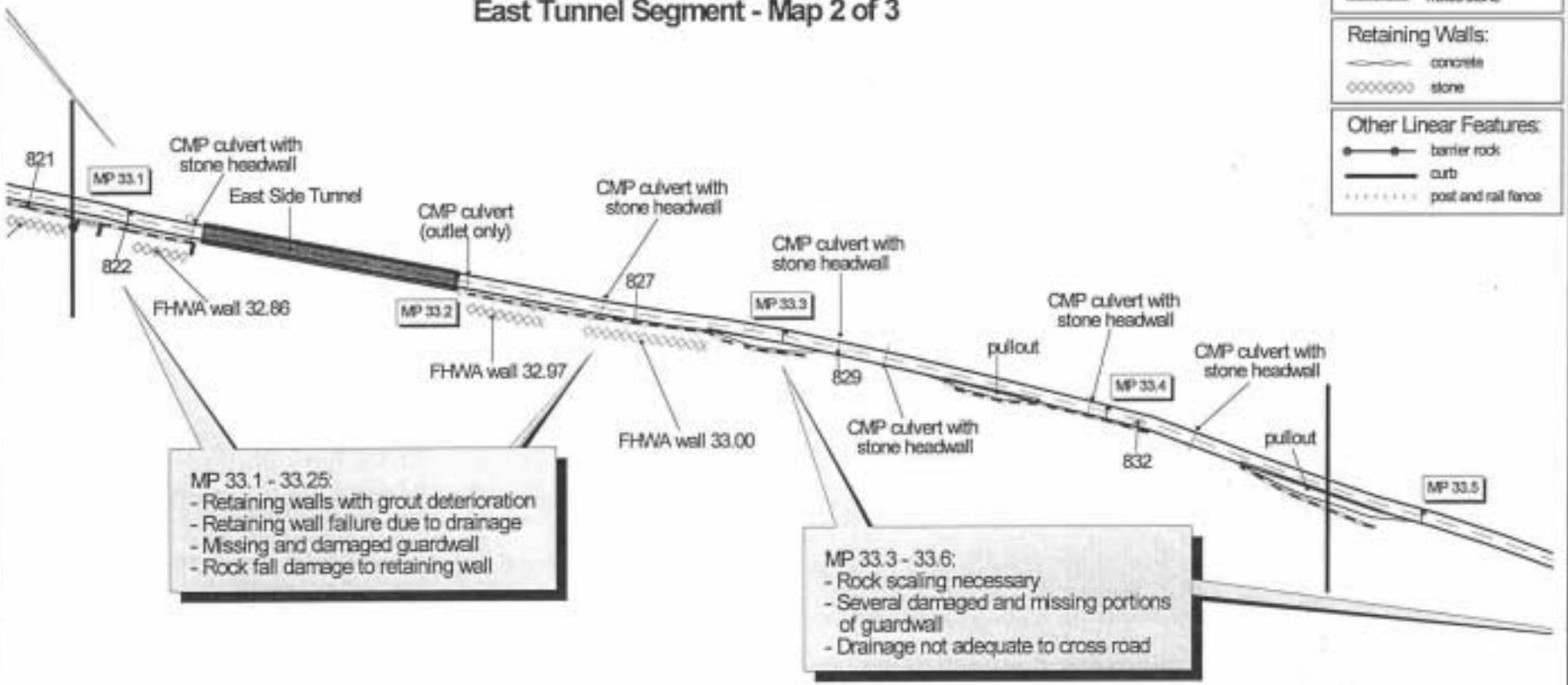
Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001



Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001

Alpine Section
East Tunnel Segment - Map 2 of 3



Guard Walls:
- ashlar stone
- concrete-core
- jersey barrier
- removable rail
- random rubble stone
- mixed stone

Retaining Walls:
- concrete
- stone

Other Linear Features:
- barrier rock
- curb
- post and rail fence

MP 33.1 - 33.25:
- Retaining walls with grout deterioration
- Retaining wall failure due to drainage
- Missing and damaged guardwall
- Rock fall damage to retaining wall

MP 33.3 - 33.6:
- Rock scaling necessary
- Several damaged and missing portions of guardwall
- Drainage not adequate to cross road

0 100 200 300 Feet

0 0.05 0.1 Miles

N

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Scale 1:3000

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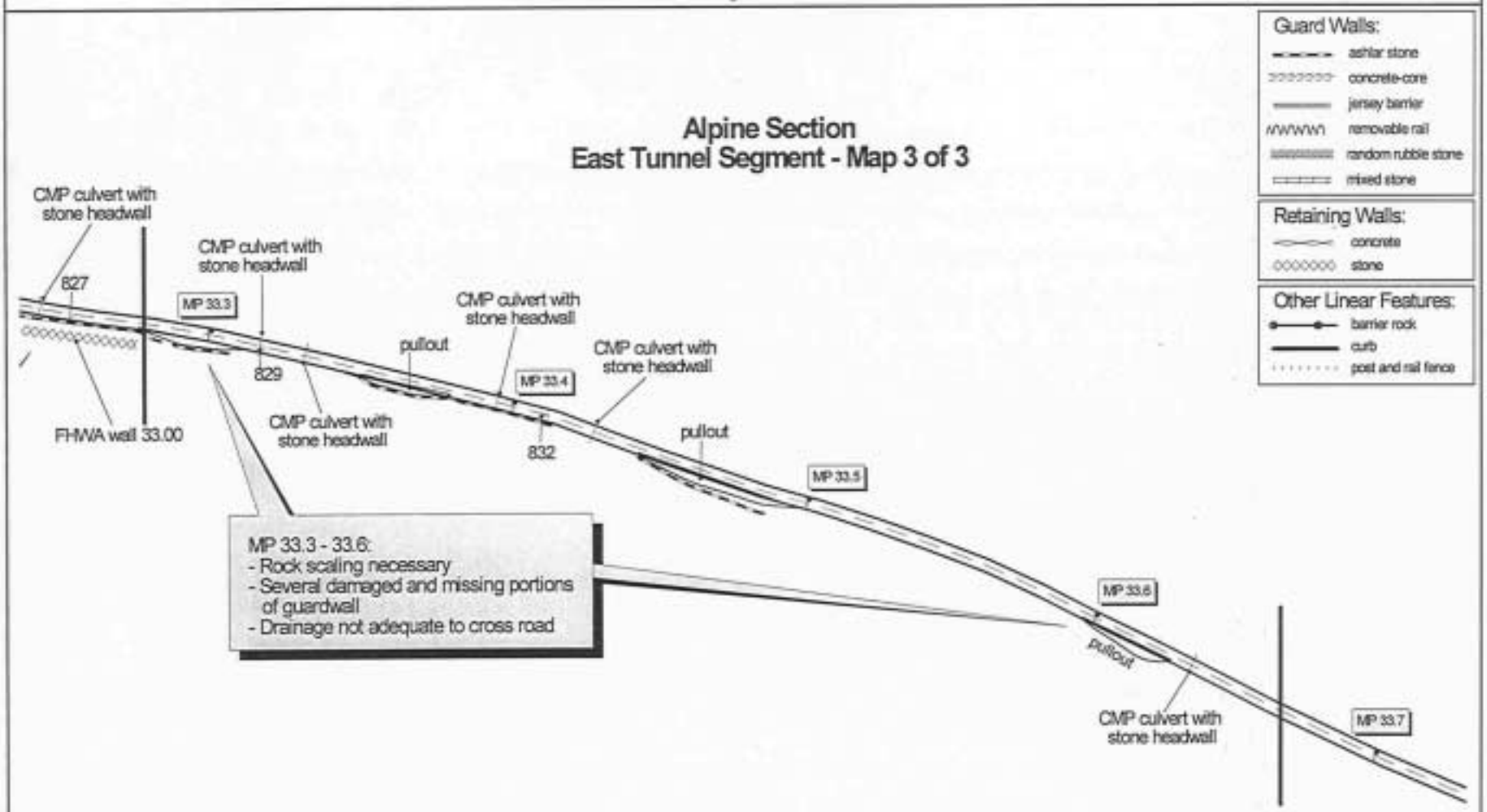
Going-to-the-Sun Road
Identified Roadway Deficiencies - 2001

Alpine Section
East Tunnel Segment - Map 3 of 3



0 100 200 300 Feet

0 0.05 0.1 Miles

N

DSC-MAY2001-117-20049
Scale 1:3000

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