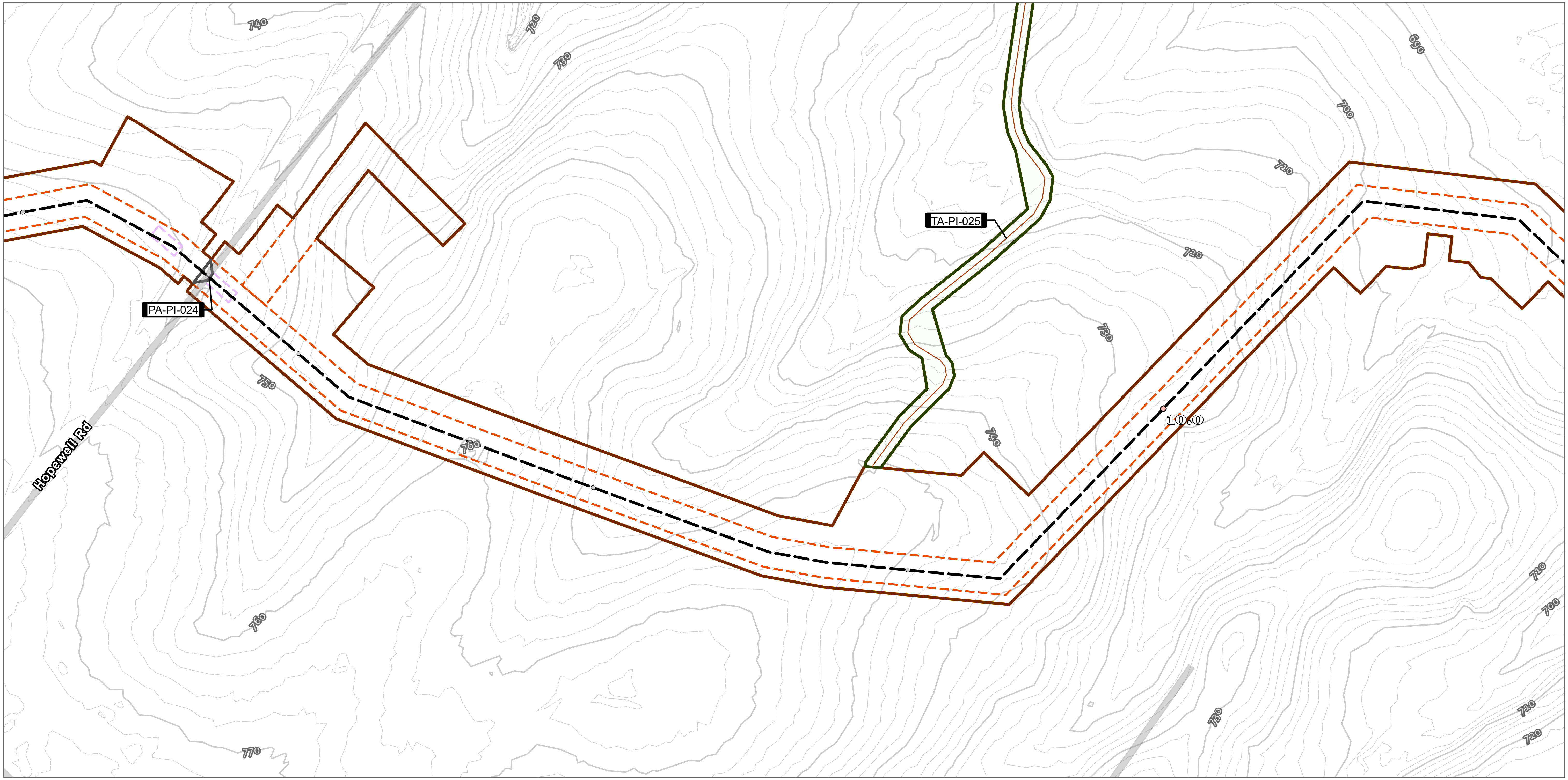


- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

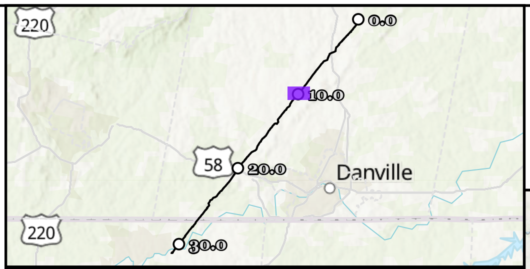
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

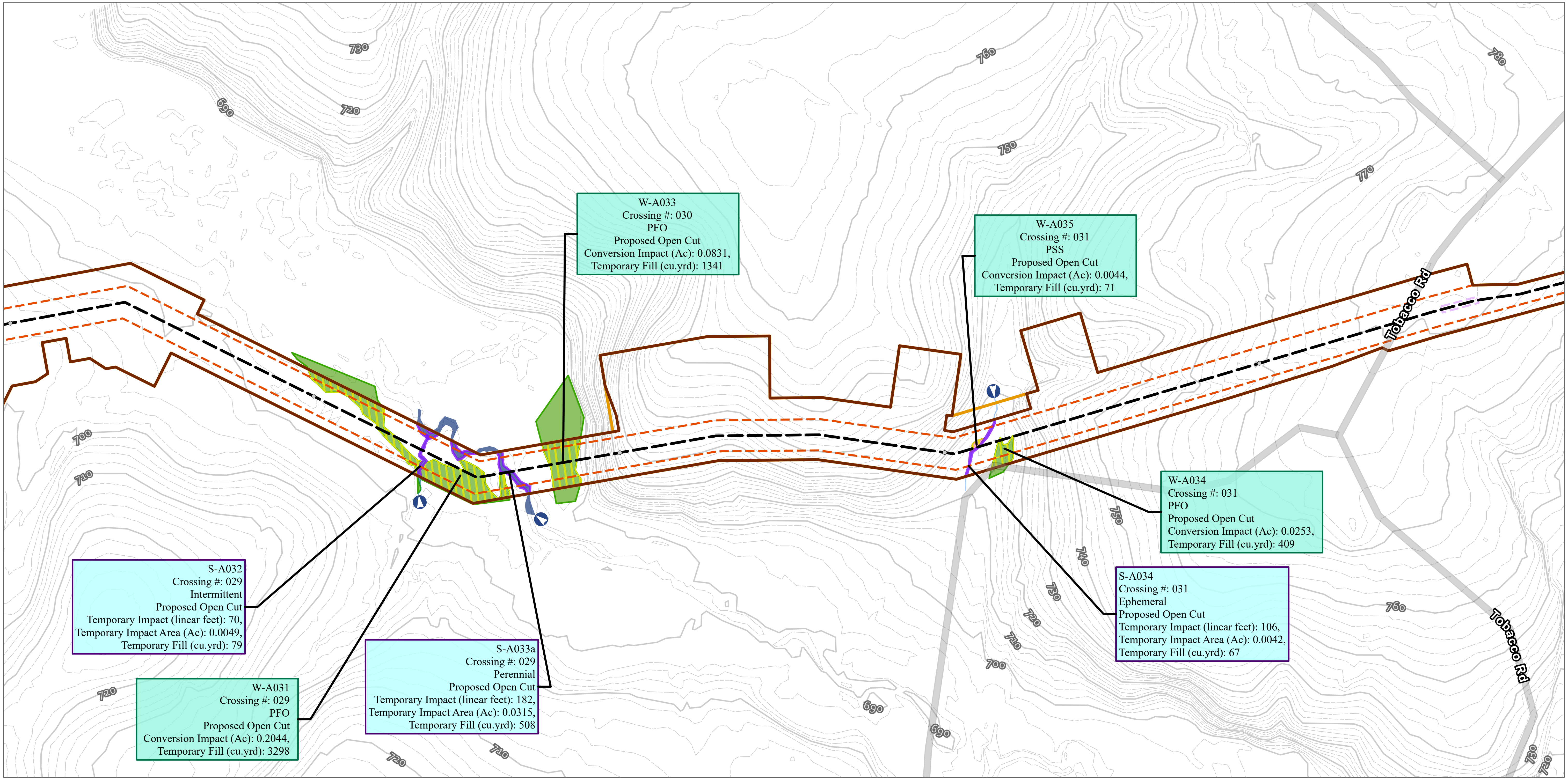
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 23
CL-023

DATE: JULY 2025

MVP
SOUTHGATE



W-A033
Crossing #: 030
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.0831,
Temporary Fill (cu.yrd): 1341

W-A035
Crossing #: 031
PSS
Proposed Open Cut
Conversion Impact (Ac): 0.0044,
Temporary Fill (cu.yrd): 71

W-A034
Crossing #: 031
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.0253,
Temporary Fill (cu.yrd): 409

S-A032
Crossing #: 029
Intermittent
Proposed Open Cut
Temporary Impact (linear feet): 70,
Temporary Impact Area (Ac): 0.0049,
Temporary Fill (cu.yrd): 79

S-A034
Crossing #: 031
Ephemeral
Proposed Open Cut
Temporary Impact (linear feet): 106,
Temporary Impact Area (Ac): 0.0042,
Temporary Fill (cu.yrd): 67

S-A033a
Crossing #: 029
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 182,
Temporary Impact Area (Ac): 0.0315,
Temporary Fill (cu.yrd): 508

W-A031
Crossing #: 029
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.2044,
Temporary Fill (cu.yrd): 3298

- ● TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ‒ ‒ H-650 PIPELINE
- — PERMANENT ACCESS ROAD
- — TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

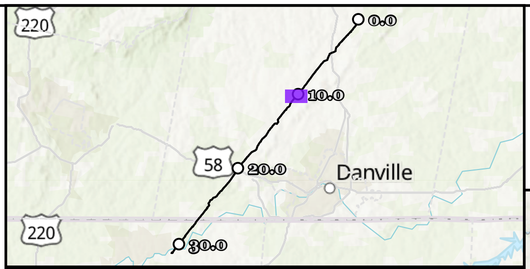
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- ▱ COUNTY BOUNDARY
- ▱ STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

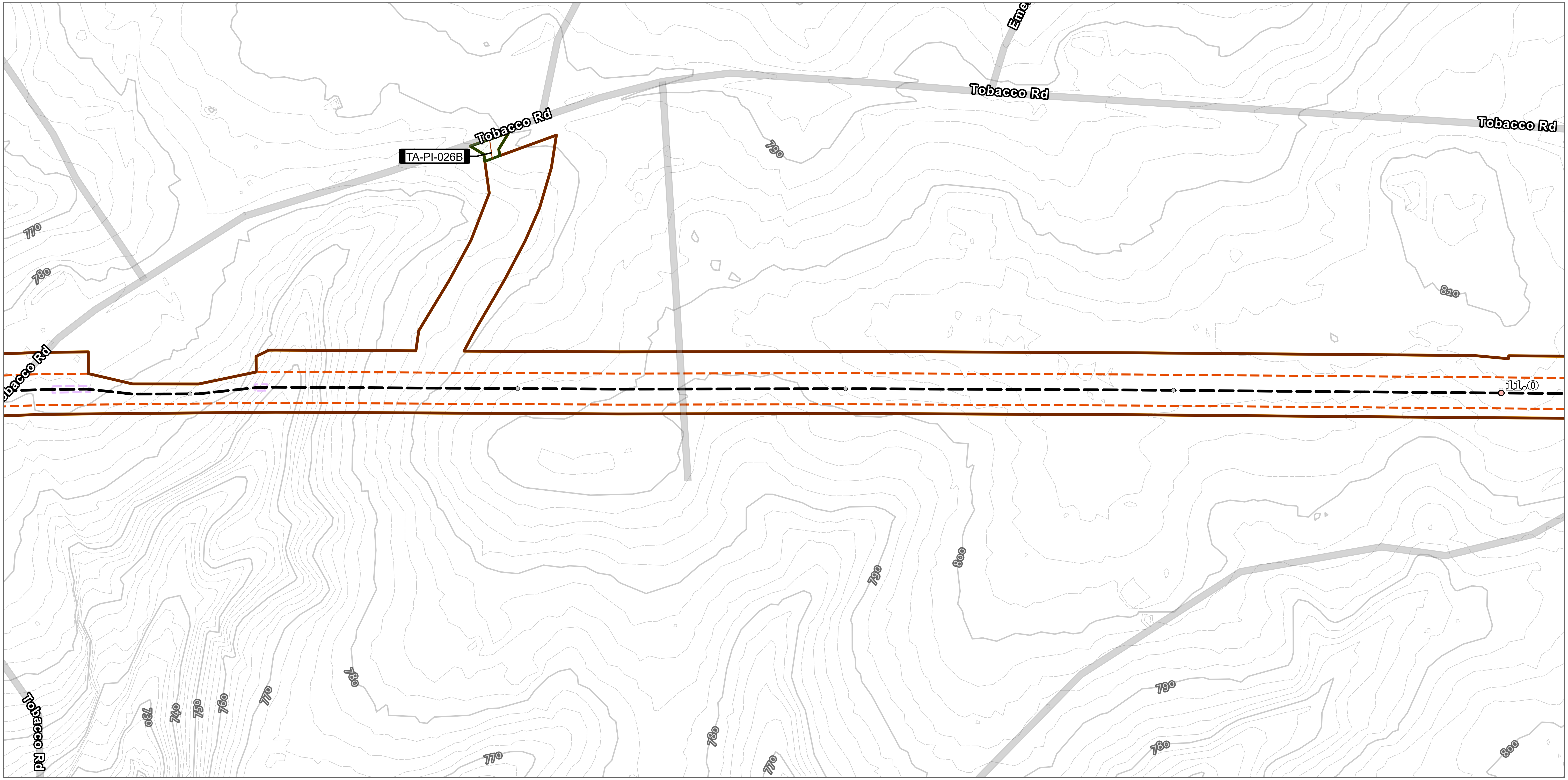
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 24
CL-024

DATE: JULY 2025

MVP
SOUTHGATE



- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

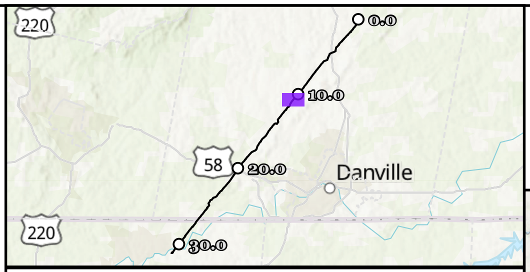
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

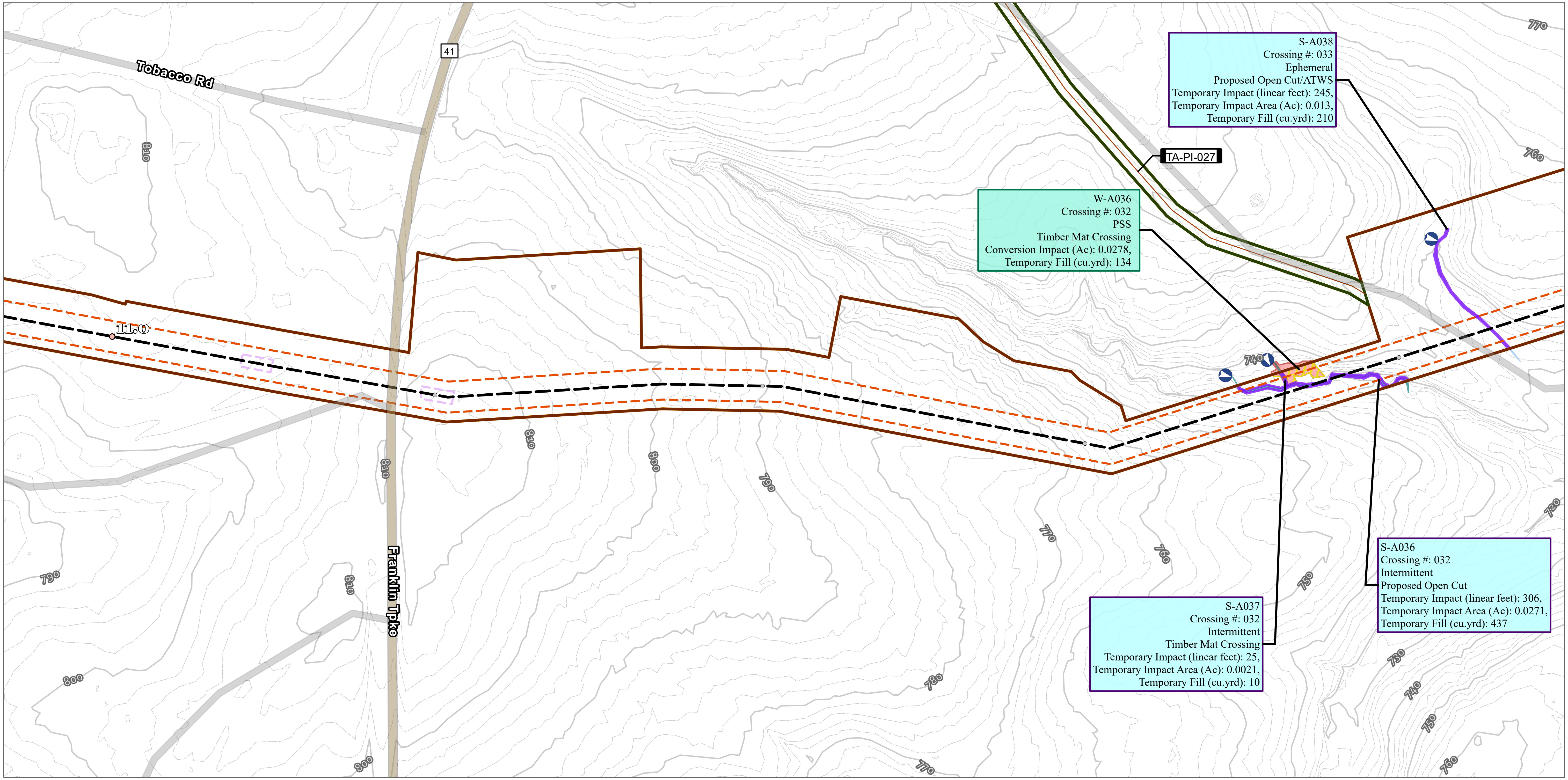
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 25
CL-025

DATE: JULY 2025

MVP SOUTHGATE



S-A038
Crossing #: 033
Ephemeral
Proposed Open Cut/ATWS
Temporary Impact (linear feet): 245,
Temporary Impact Area (Ac): 0.013,
Temporary Fill (cu.yrd): 210

W-A036
Crossing #: 032
PSS
Timber Mat Crossing
Conversion Impact (Ac): 0.0278,
Temporary Fill (cu.yrd): 134

S-A037
Crossing #: 032
Intermittent
Timber Mat Crossing
Temporary Impact (linear feet): 25,
Temporary Impact Area (Ac): 0.0021,
Temporary Fill (cu.yrd): 10

S-A036
Crossing #: 032
Intermittent
Proposed Open Cut
Temporary Impact (linear feet): 306,
Temporary Impact Area (Ac): 0.0271,
Temporary Fill (cu.yrd): 437

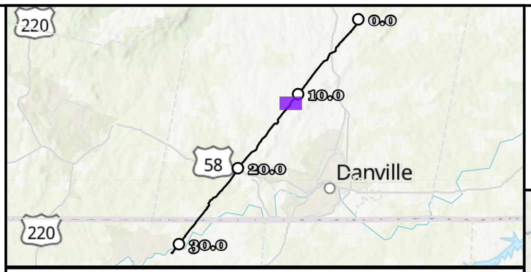
● TENTH MILE POST
● MILE POST
△ MAIN LINE VALVE
● METER STATIONS
🟨 CONTRACTOR YARD
H-650 PIPELINE
PERMANENT ACCESS ROAD
TEMPORARY ACCESS ROAD

TEMPORARY ACCESS ROAD
PERMANENT ACCESS ROAD
LIMITS OF CONSTRUCTION WORKSPACE
OPERATIONAL WORKSPACE
BORE PITS
LAYDOWN YARD / STAGING AREA
SURVEY AREA

STREAM FLOW DIRECTION
STREAM IMPACT
TEMPORARY
PERMANENT
STREAM TYPE
EPHEMERAL
INTERMITTENT
PERENNIAL

WETLAND IMPACT
▨ TEMPORARY
▨ CONVERSION
▨ SECONDARY IMPACT
WETLAND TYPE
PALUSTRINE EMERGENT
PALUSTRINE FORESTED
PALUSTRINE SCRUB-SHRUB
PALUSTRINE UNCONSOLIDATED BOTTOM

COUNTY BOUNDARY
STATE BOUNDARY
ELEVATION - CONTOUR - INDEX
ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

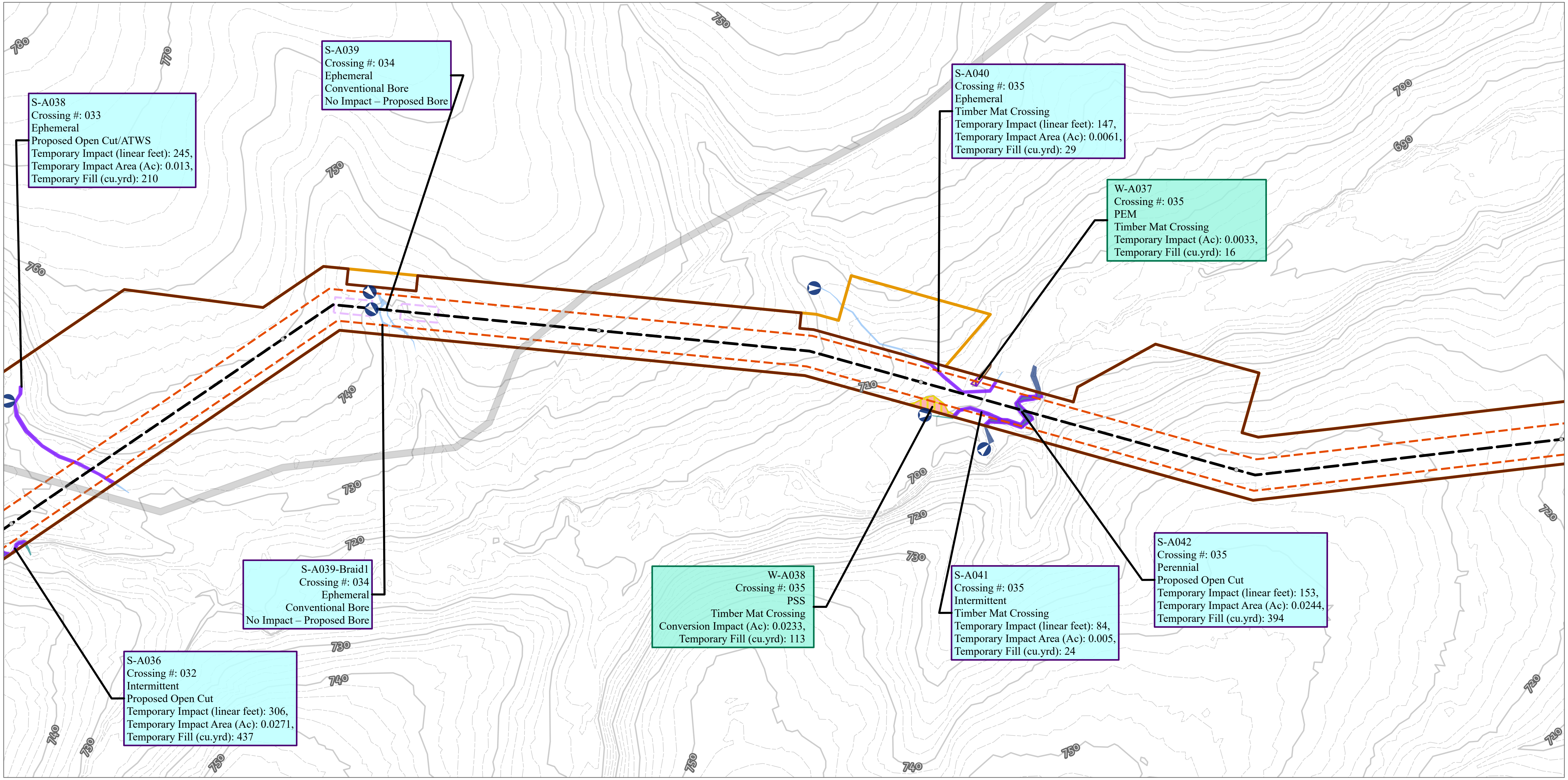
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 26
CL-026

DATE: JULY 2025

MVP SOUTHGATE



S-A038
Crossing #: 033
Ephemeral
Proposed Open Cut/ATWS
Temporary Impact (linear feet): 245,
Temporary Impact Area (Ac): 0.013,
Temporary Fill (cu.yrd): 210

S-A039
Crossing #: 034
Ephemeral
Conventional Bore
No Impact – Proposed Bore

S-A040
Crossing #: 035
Ephemeral
Timber Mat Crossing
Temporary Impact (linear feet): 147,
Temporary Impact Area (Ac): 0.0061,
Temporary Fill (cu.yrd): 29

W-A037
Crossing #: 035
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.0033,
Temporary Fill (cu.yrd): 16

S-A039-Braid1
Crossing #: 034
Ephemeral
Conventional Bore
No Impact – Proposed Bore

W-A038
Crossing #: 035
PSS
Timber Mat Crossing
Conversion Impact (Ac): 0.0233,
Temporary Fill (cu.yrd): 113

S-A041
Crossing #: 035
Intermittent
Timber Mat Crossing
Temporary Impact (linear feet): 84,
Temporary Impact Area (Ac): 0.005,
Temporary Fill (cu.yrd): 24

S-A042
Crossing #: 035
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 153,
Temporary Impact Area (Ac): 0.0244,
Temporary Fill (cu.yrd): 394

S-A036
Crossing #: 032
Intermittent
Proposed Open Cut
Temporary Impact (linear feet): 306,
Temporary Impact Area (Ac): 0.0271,
Temporary Fill (cu.yrd): 437

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- — PERMANENT ACCESS ROAD
- — TEMPORARY ACCESS ROAD

- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA

- ➤ STREAM FLOW DIRECTION

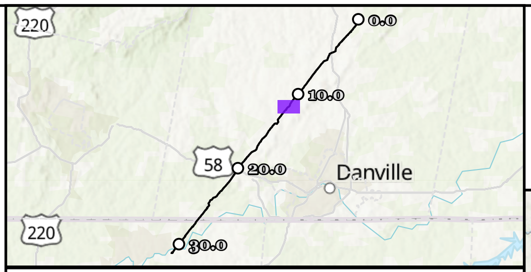
STREAM IMPACT
- ～ TEMPORARY
- ～ PERMANENT

STREAM TYPE
- ～ EPHEMERAL
- ～ INTERMITTENT
- ～ PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- ⬭ PALUSTRINE EMERGENT
- ⬭ PALUSTRINE FORESTED
- ⬭ PALUSTRINE SCRUB-SHRUB
- ⬭ PALUSTRINE UNCONSOLIDATED BOTTOM

- ⬚ COUNTY BOUNDARY
- ⬚ STATE BOUNDARY
- ⁄ ELEVATION - CONTOUR - INDEX
- ⁄ ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

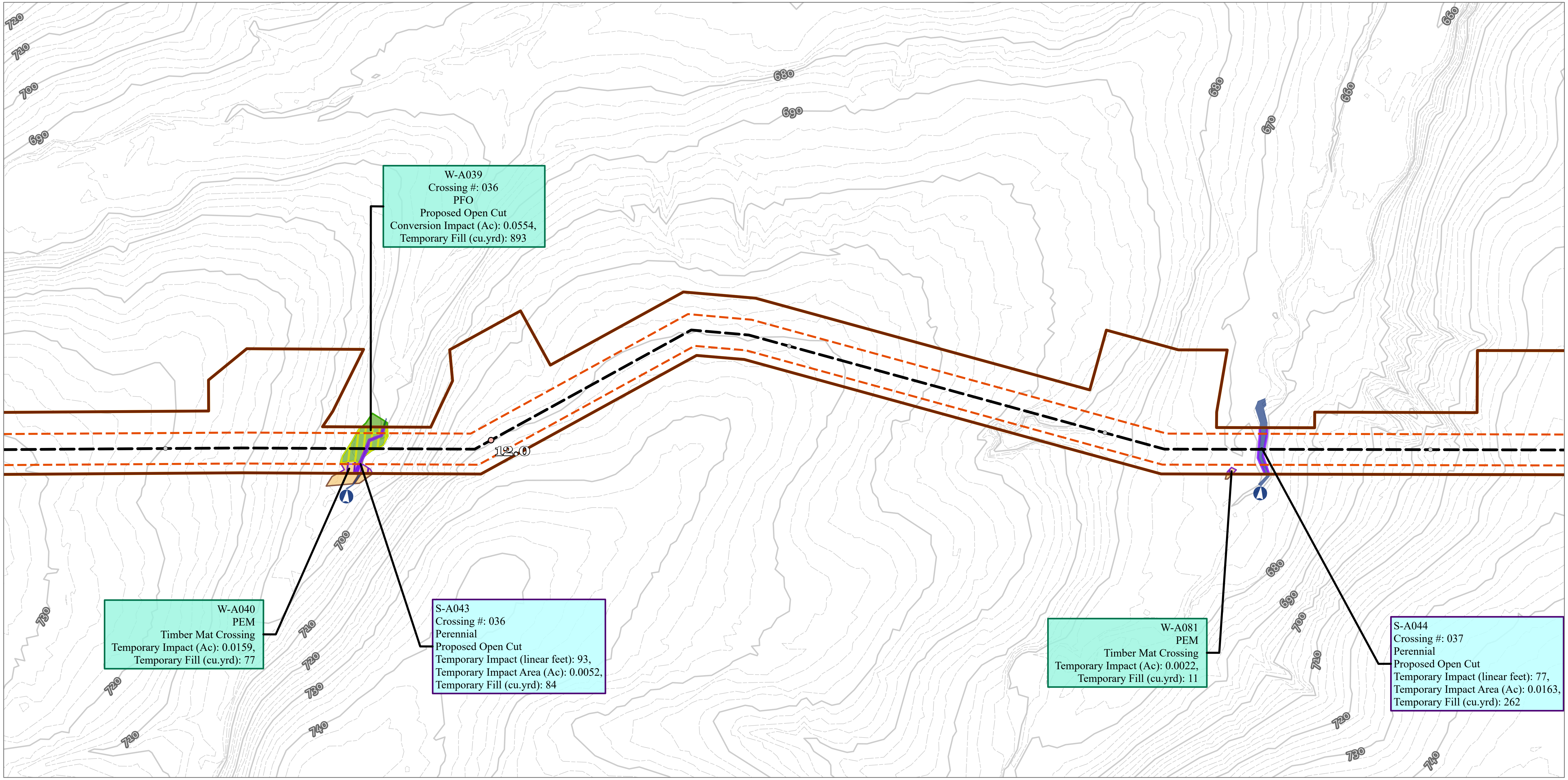
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 27
CL-027

DATE: JULY 2025

MVP
SOUTHGATE



W-A039
Crossing #: 036
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.0554,
Temporary Fill (cu.yrd): 893

W-A040
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.0159,
Temporary Fill (cu.yrd): 77

S-A043
Crossing #: 036
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 93,
Temporary Impact Area (Ac): 0.0052,
Temporary Fill (cu.yrd): 84

W-A081
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.0022,
Temporary Fill (cu.yrd): 11

S-A044
Crossing #: 037
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 77,
Temporary Impact Area (Ac): 0.0163,
Temporary Fill (cu.yrd): 262

- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

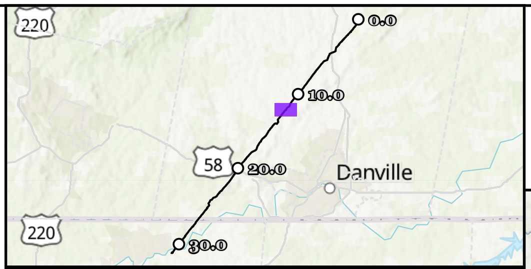
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

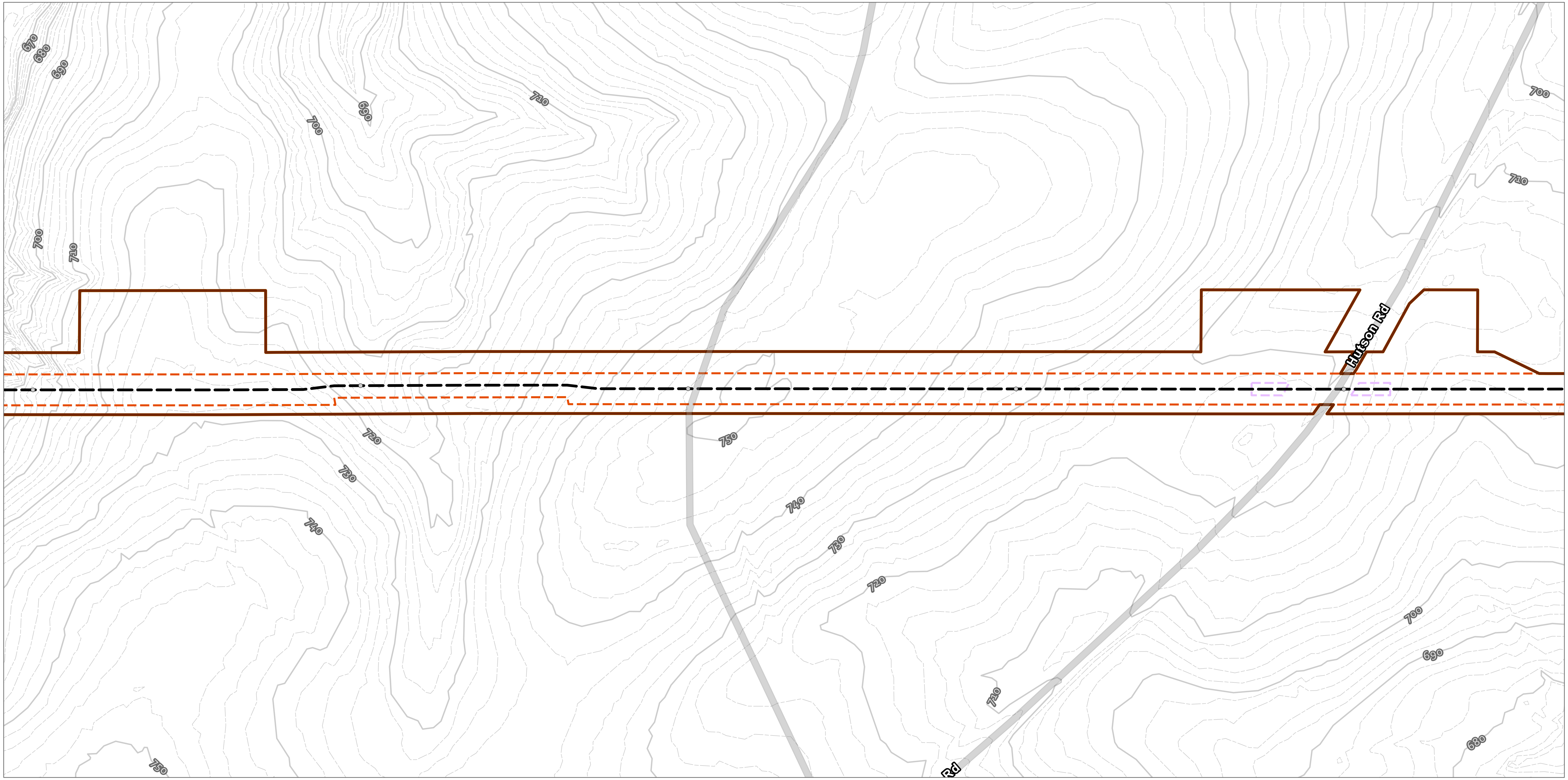
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 28
CL-028

DATE: JULY 2025

MVP
SOUTHGATE



- ● TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ⦿ METER STATIONS
- 🟨 CONTRACTOR YARD
- ━ ━ H-650 PIPELINE
- ─ PERMANENT ACCESS ROAD
- ─ TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

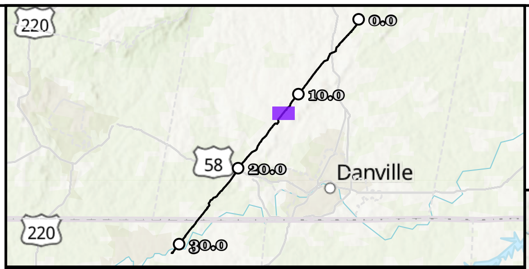
STREAM IMPACT
- ▱ TEMPORARY
- ▱ PERMANENT

STREAM TYPE
- ▬ EPHEMERAL
- ▬ INTERMITTENT
- ▬ PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- ▬ PALUSTRINE EMERGENT
- ▬ PALUSTRINE FORESTED
- ▬ PALUSTRINE SCRUB-SHRUB
- ▬ PALUSTRINE UNCONSOLIDATED BOTTOM

- ▭ COUNTY BOUNDARY
- ▭ STATE BOUNDARY
- ─ ELEVATION - CONTOUR - INDEX
- ─ ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400
1" = 200'

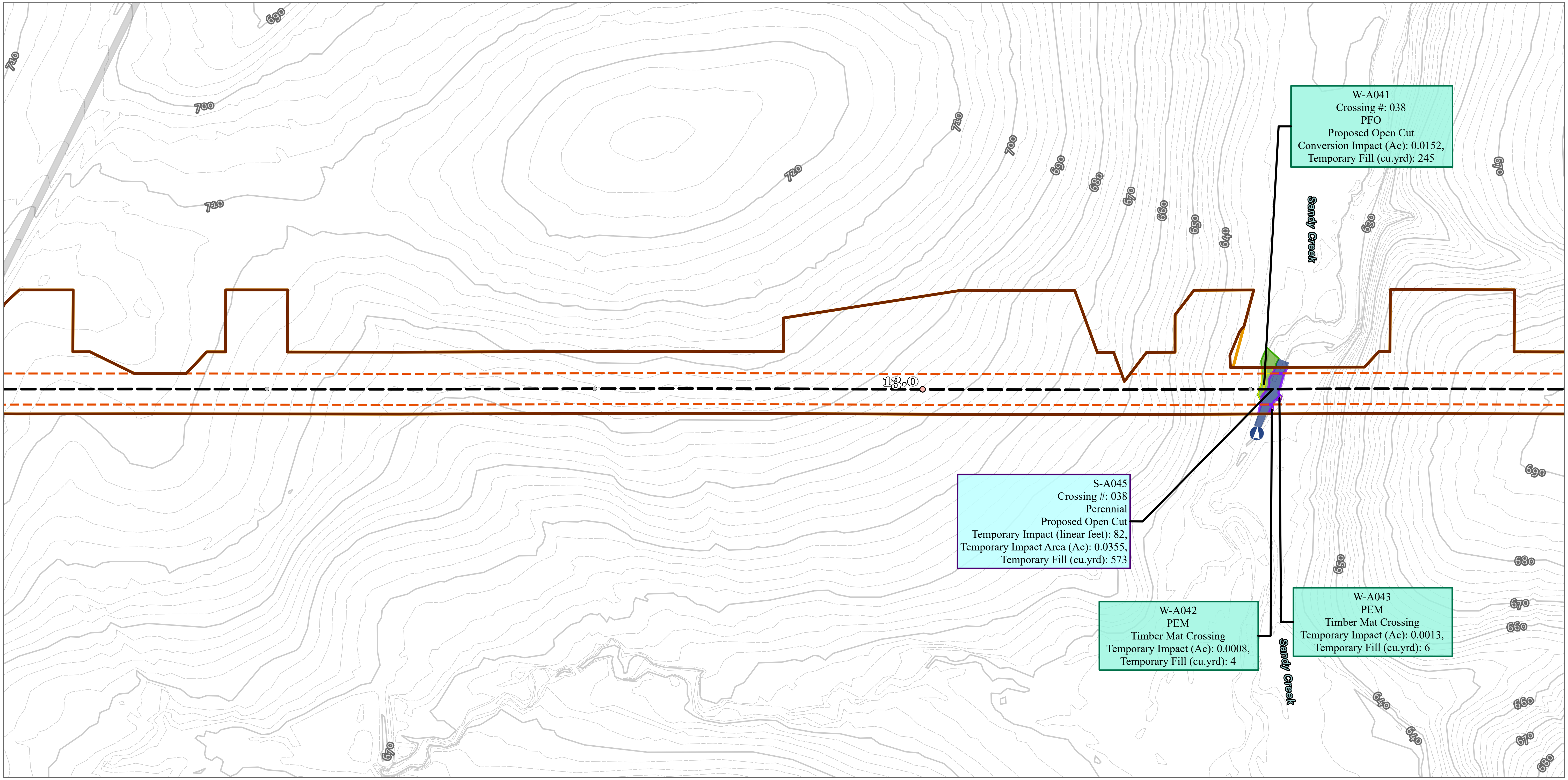
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 29
CL-029

DATE: JULY 2025

MVP SOUTHGATE



W-A041
Crossing #: 038
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.0152,
Temporary Fill (cu.yrd): 245

S-A045
Crossing #: 038
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 82,
Temporary Impact Area (Ac): 0.0355,
Temporary Fill (cu.yrd): 573

W-A042
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.0008,
Temporary Fill (cu.yrd): 4

W-A043
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.0013,
Temporary Fill (cu.yrd): 6

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

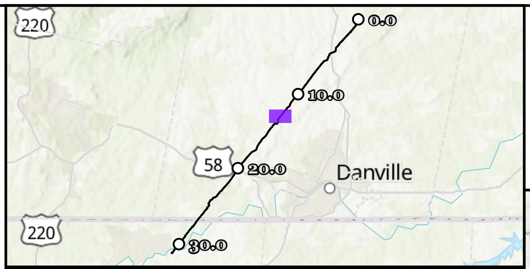
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

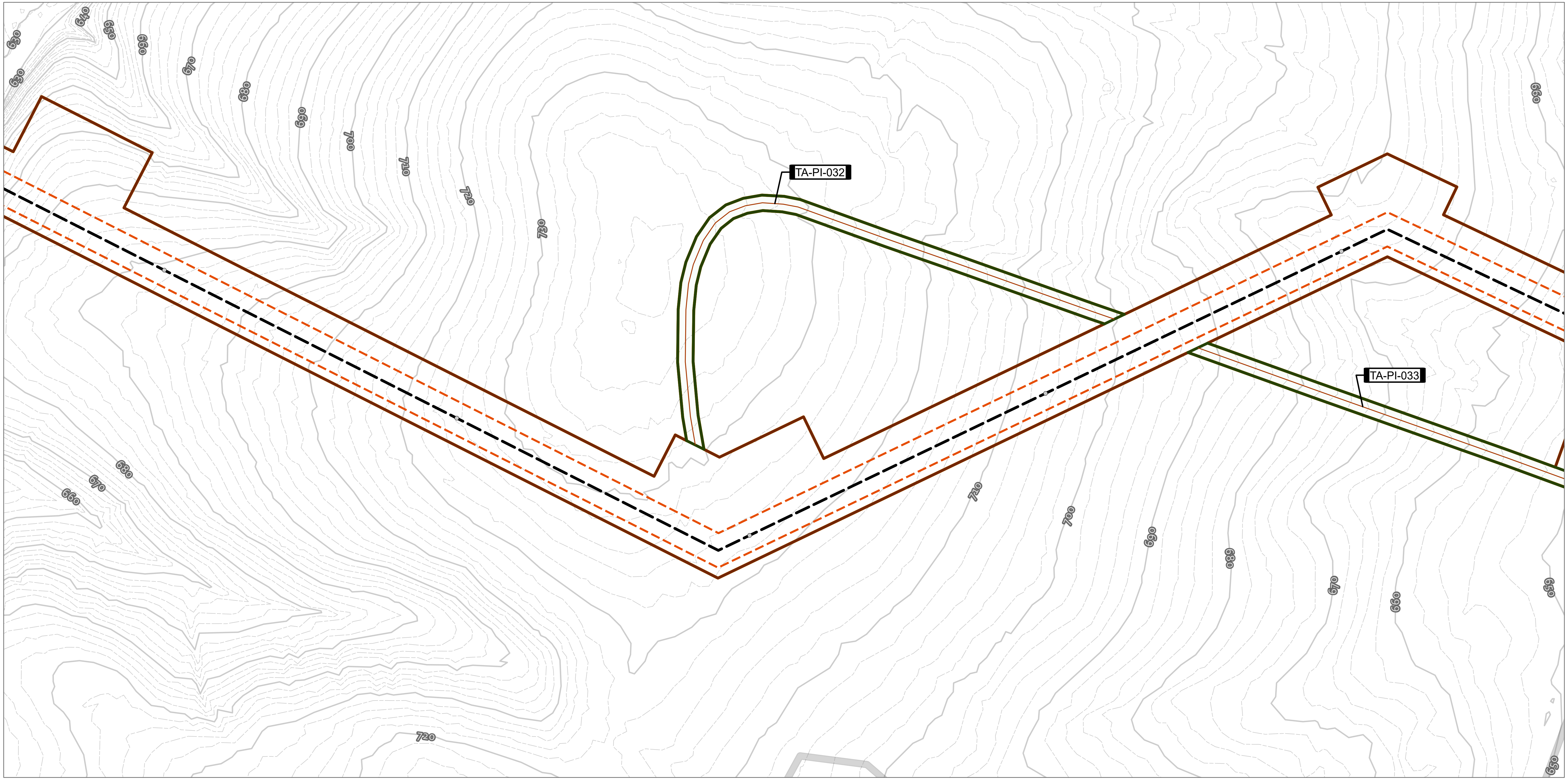
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE: FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 30
CL-030

DATE: JULY 2025

MVP
SOUTHGATE



TENTH MILE POST
MILE POST
MAIN LINE VALVE
METER STATIONS
CONTRACTOR YARD
H-650 PIPELINE
PERMANENT ACCESS ROAD
TEMPORARY ACCESS ROAD

TEMPORARY ACCESS ROAD
PERMANENT ACCESS ROAD
LIMITS OF CONSTRUCTION WORKSPACE
OPERATIONAL WORKSPACE
BORE PITS
LAYDOWN YARD / STAGING AREA
SURVEY AREA

STREAM FLOW DIRECTION

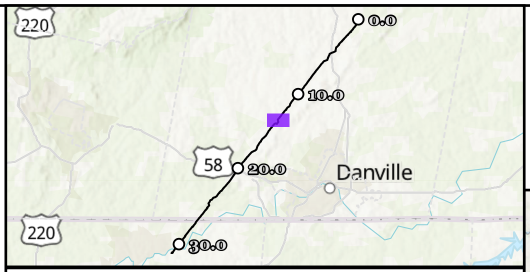
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

COUNTY BOUNDARY
STATE BOUNDARY
ELEVATION - CONTOUR - INDEX
ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400
1" = 200'

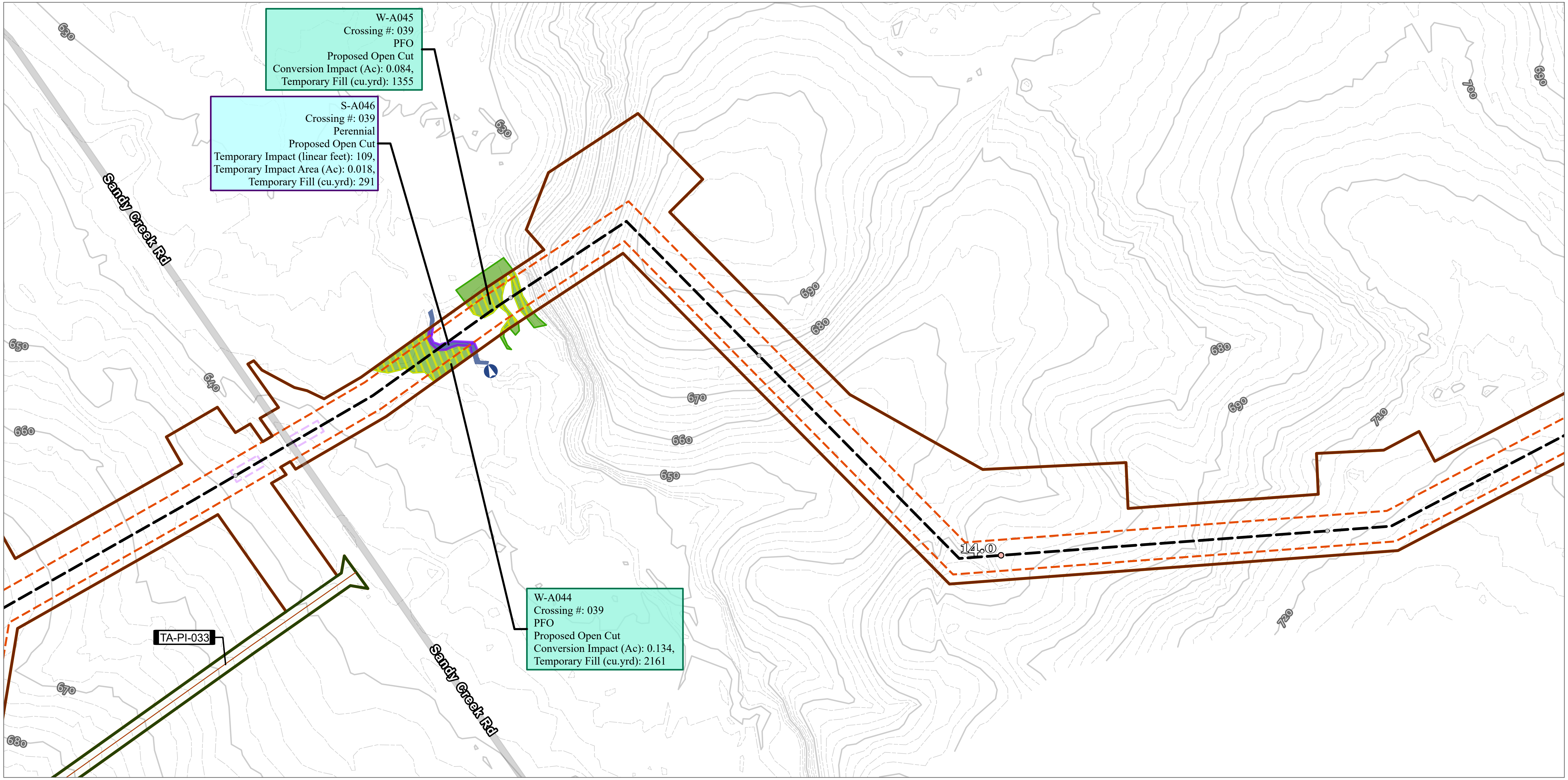
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 31
CL-031

DATE: JULY 2025

MVP SOUTHGATE



W-A045
Crossing #: 039
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.084,
Temporary Fill (cu.yrd): 1355

S-A046
Crossing #: 039
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 109,
Temporary Impact Area (Ac): 0.018,
Temporary Fill (cu.yrd): 291

W-A044
Crossing #: 039
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.134,
Temporary Fill (cu.yrd): 2161

- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- ▬ PERMANENT ACCESS ROAD
- ▬ TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ● STREAM FLOW DIRECTION

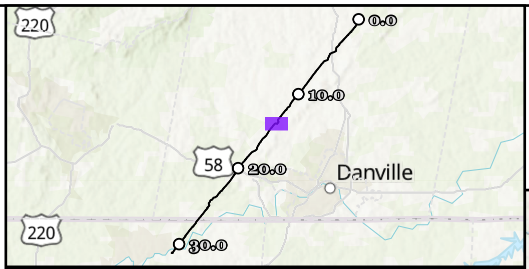
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- ▱ COUNTY BOUNDARY
- ▱ STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

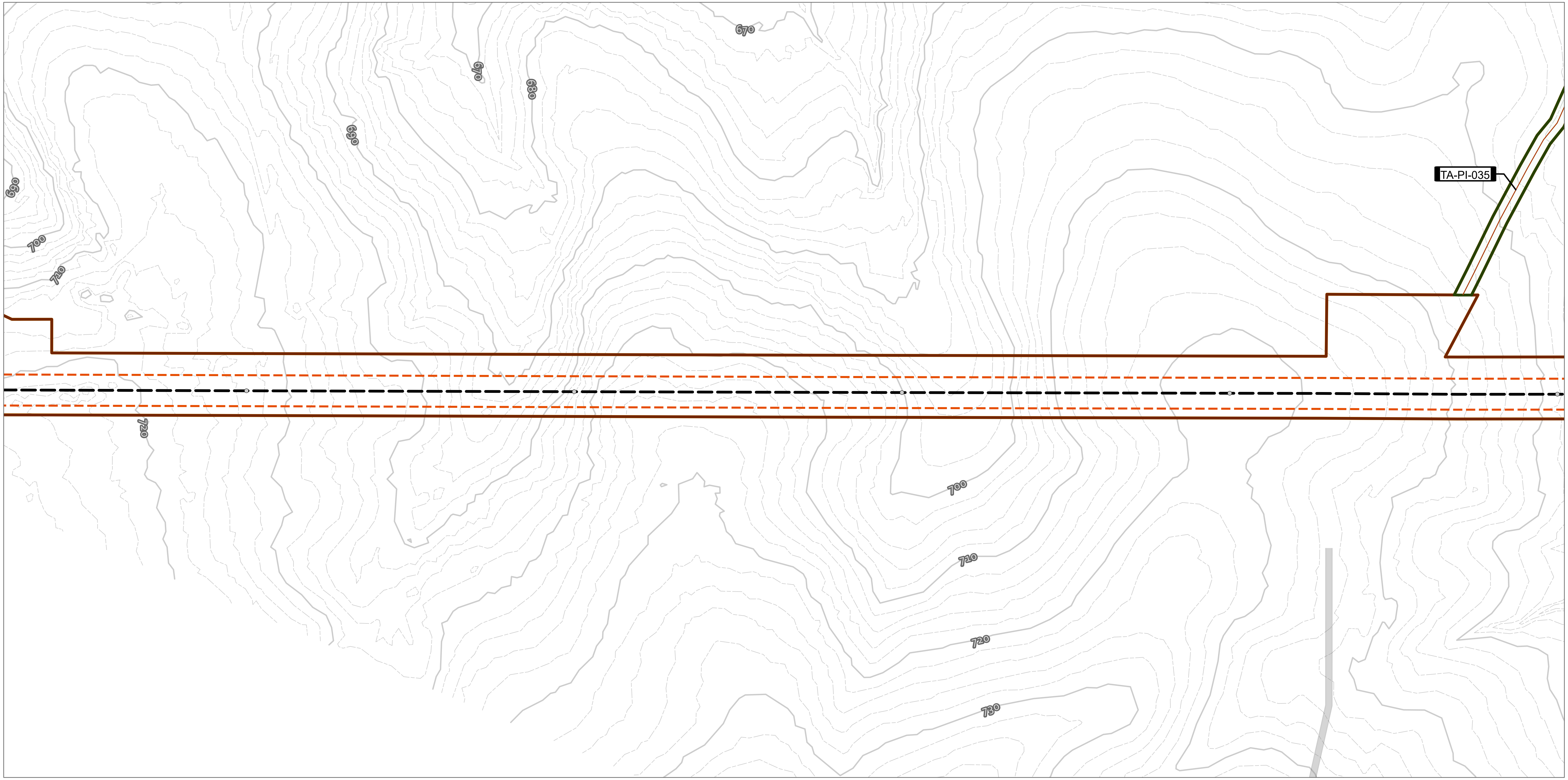
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 32
CL-032

DATE: JULY 2025

MVP SOUTHGATE



- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

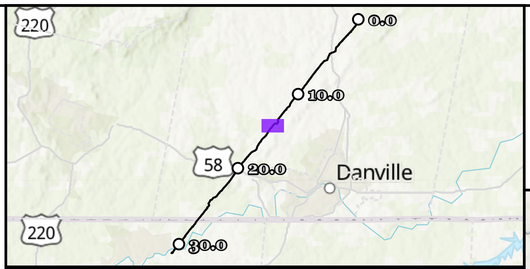
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

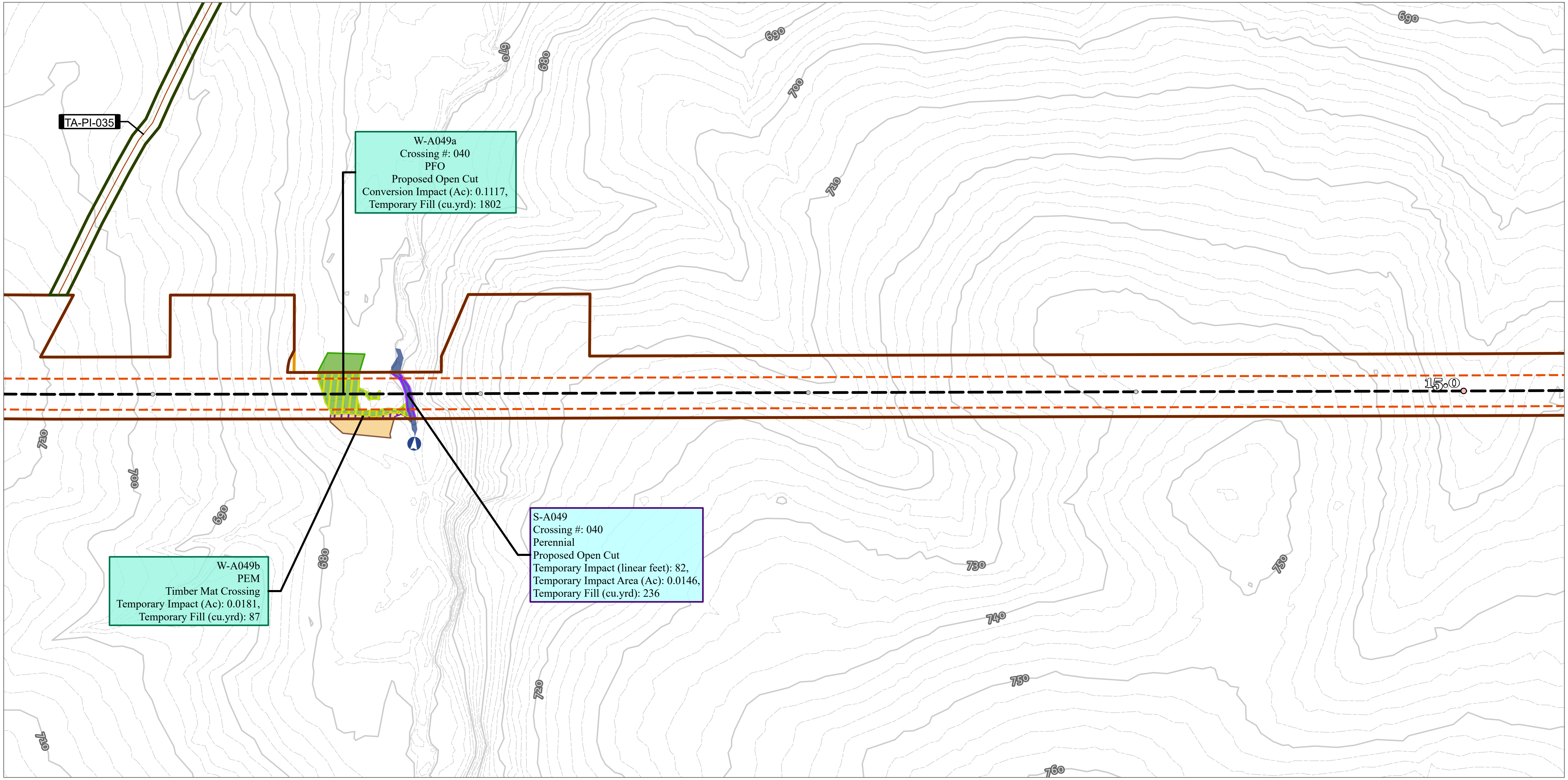
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 33
CL-033

DATE: JULY 2025

MVP SOUTHGATE



W-A049a
Crossing #: 040
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.1117,
Temporary Fill (cu.yrd): 1802

S-A049
Crossing #: 040
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 82,
Temporary Impact Area (Ac): 0.0146,
Temporary Fill (cu.yrd): 236

W-A049b
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.0181,
Temporary Fill (cu.yrd): 87

- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- ─ PERMANENT ACCESS ROAD
- ─ TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ● STREAM FLOW DIRECTION

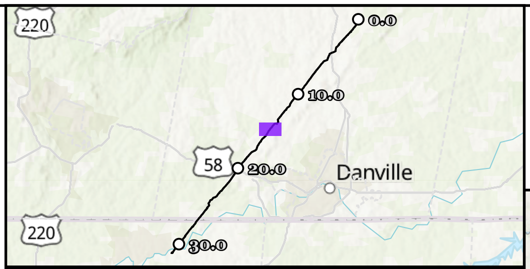
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- ▭ COUNTY BOUNDARY
- ▭ STATE BOUNDARY
- ─ ELEVATION - CONTOUR - INDEX
- ─ ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

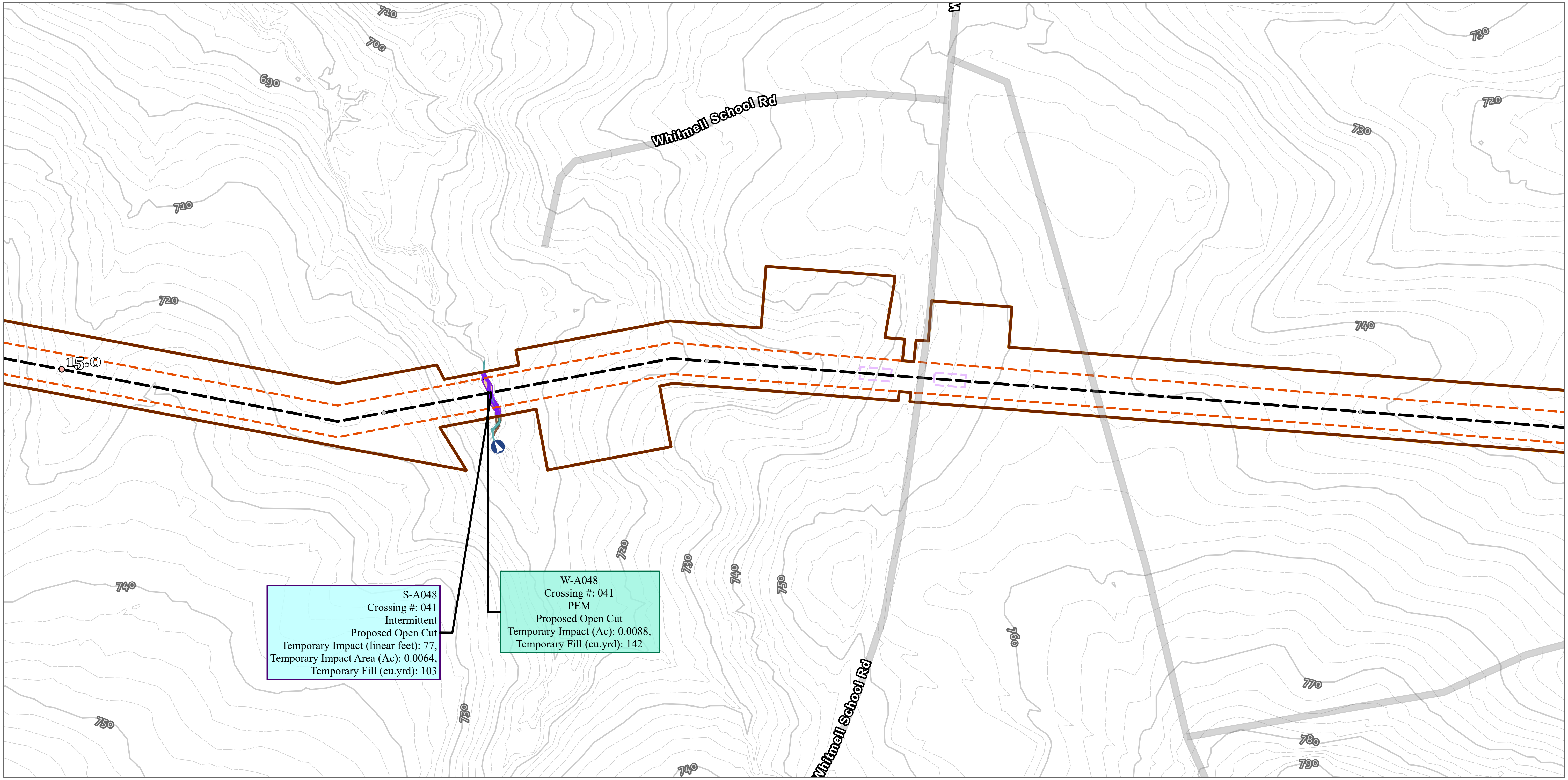
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 34
CL-034

DATE: JULY 2025

MVP SOUTHGATE



S-A048
Crossing #: 041
Intermittent
Proposed Open Cut
Temporary Impact (linear feet): 77,
Temporary Impact Area (Ac): 0.0064,
Temporary Fill (cu.yrd): 103

W-A048
Crossing #: 041
PEM
Proposed Open Cut
Temporary Impact (Ac): 0.0088,
Temporary Fill (cu.yrd): 142

- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- ‒ ‒ H-650 PIPELINE
- — PERMANENT ACCESS ROAD
- — TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ● STREAM FLOW DIRECTION

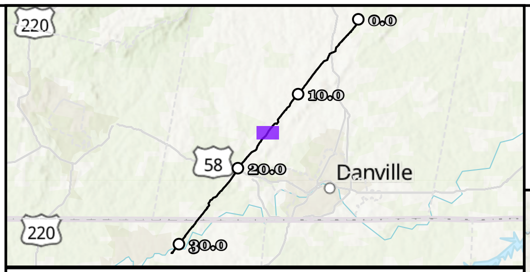
STREAM IMPACT
- ▱ TEMPORARY
- ▱ PERMANENT

STREAM TYPE
- ▬ EPHEMERAL
- ▬ INTERMITTENT
- ▬ PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- ▬ PALUSTRINE EMERGENT
- ▬ PALUSTRINE FORESTED
- ▬ PALUSTRINE SCRUB-SHRUB
- ▬ PALUSTRINE UNCONSOLIDATED BOTTOM

- ▱ COUNTY BOUNDARY
- ▱ STATE BOUNDARY
- ⁄ ELEVATION - CONTOUR - INDEX
- ⁄ ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

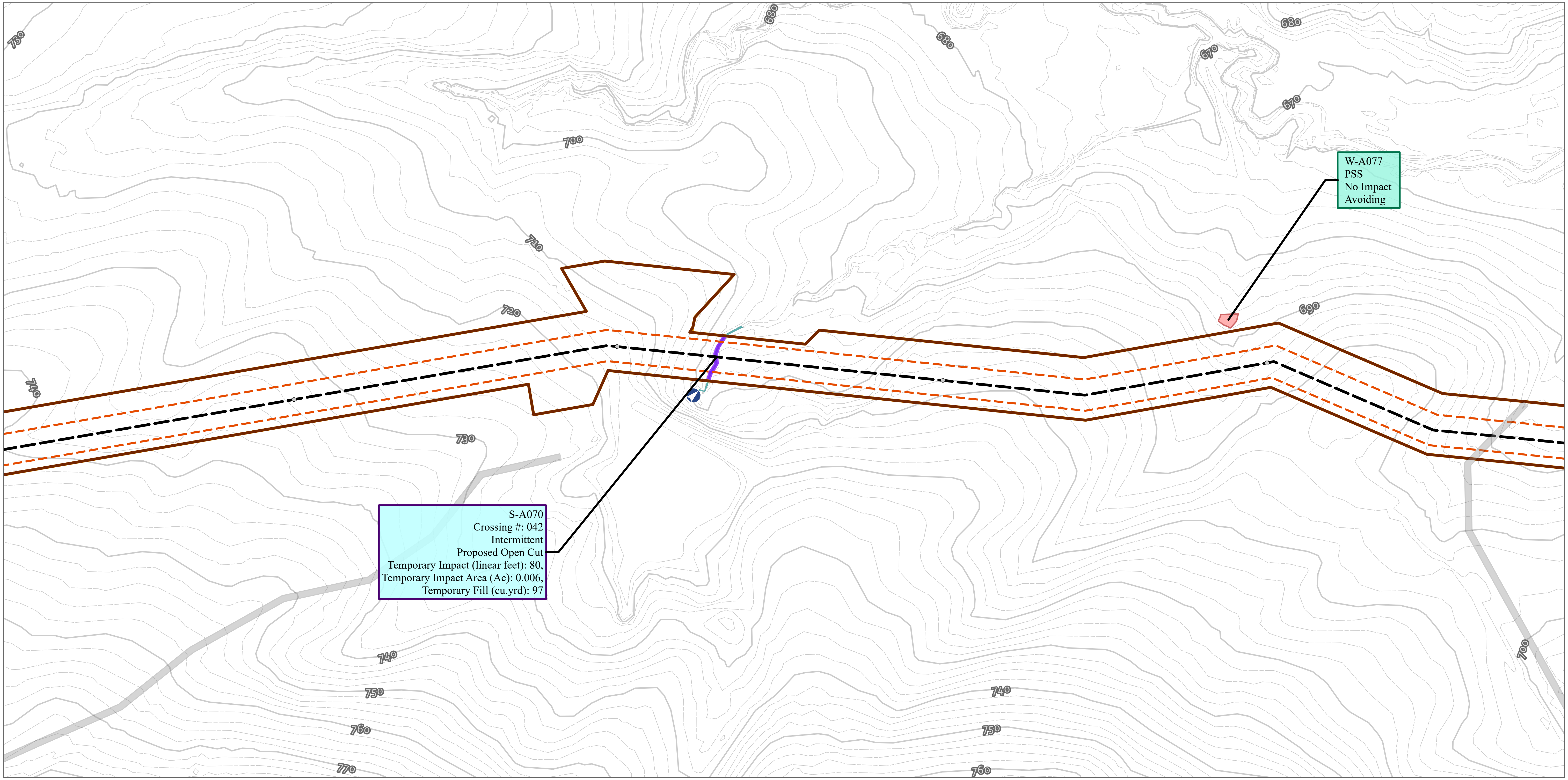
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 35
CL-035

DATE: JULY 2025

MVP SOUTHGATE



W-A077
PSS
No Impact
Avoiding

S-A070
Crossing #: 042
Intermittent
Proposed Open Cut
Temporary Impact (linear feet): 80,
Temporary Impact Area (Ac): 0.006,
Temporary Fill (cu.yrd): 97

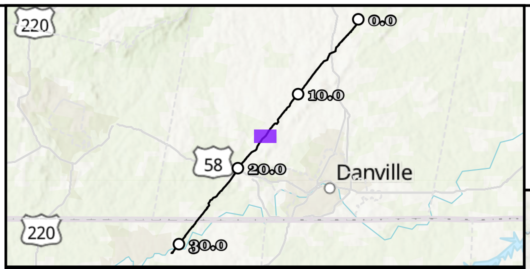
TENTH MILE POST
MILE POST
MAIN LINE VALVE
METER STATIONS
CONTRACTOR YARD
H-650 PIPELINE
PERMANENT ACCESS ROAD
TEMPORARY ACCESS ROAD

TEMPORARY ACCESS ROAD
PERMANENT ACCESS ROAD
LIMITS OF CONSTRUCTION WORKSPACE
OPERATIONAL WORKSPACE
BORE PITS
LAYDOWN YARD / STAGING AREA
SURVEY AREA

STREAM FLOW DIRECTION
STREAM IMPACT
TEMPORARY
PERMANENT
STREAM TYPE
EPHEMERAL
INTERMITTENT
PERENNIAL

WETLAND IMPACT
TEMPORARY
CONVERSION
SECONDARY IMPACT
WETLAND TYPE
PALUSTRINE EMERGENT
PALUSTRINE FORESTED
PALUSTRINE SCRUB-SHRUB
PALUSTRINE UNCONSOLIDATED BOTTOM

COUNTY BOUNDARY
STATE BOUNDARY
ELEVATION - CONTOUR - INDEX
ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

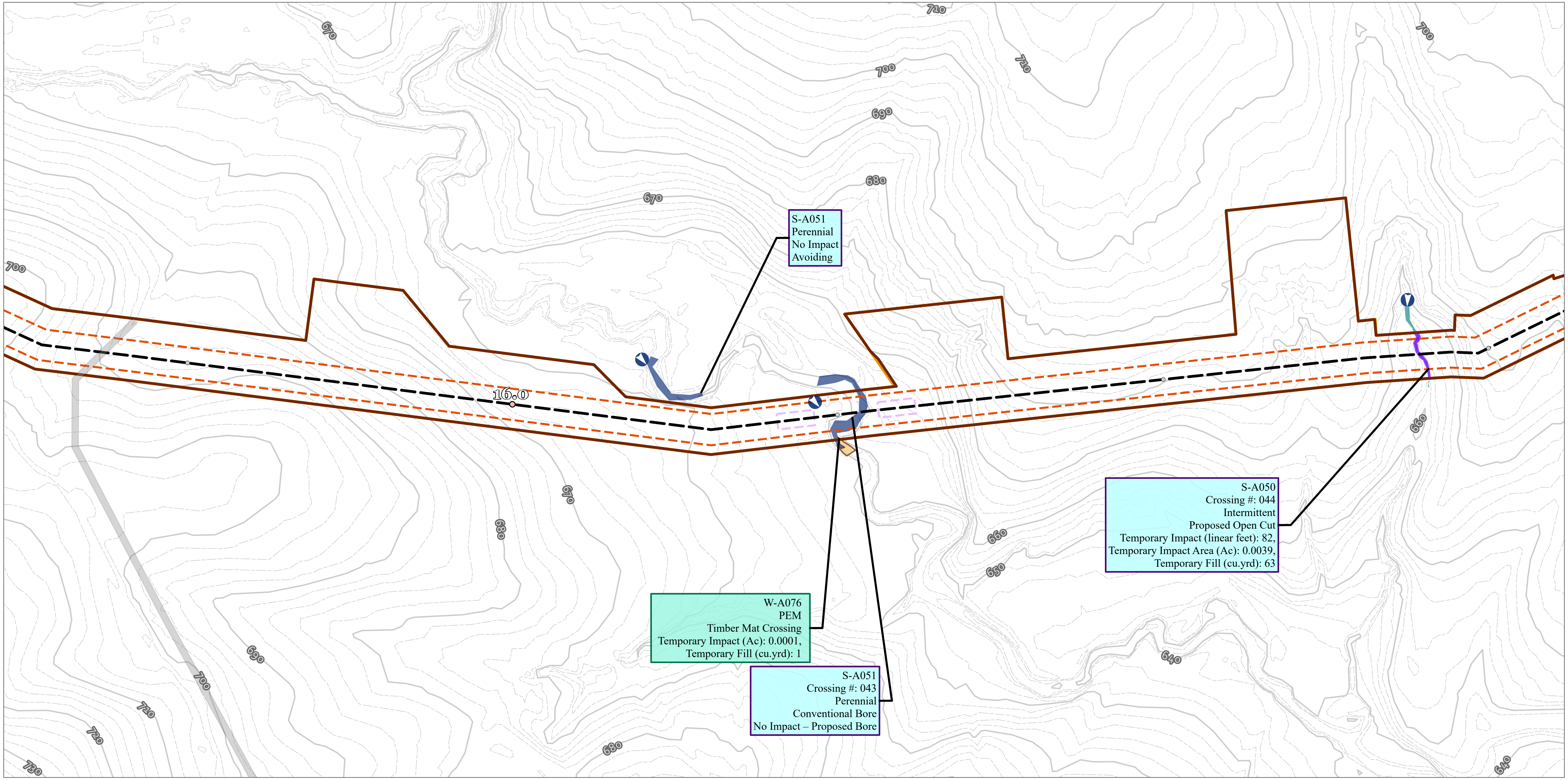
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 36
CL-036

DATE: JULY 2025

MVP SOUTHGATE



S-A051
Perennial
No Impact
Avoiding

S-A050
Crossing #: 044
Intermittent
Proposed Open Cut
Temporary Impact (linear feet): 82,
Temporary Impact Area (Ac): 0.0039,
Temporary Fill (cu.yrd): 63

W-A076
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.0001,
Temporary Fill (cu.yrd): 1

S-A051
Crossing #: 043
Perennial
Conventional Bore
No Impact – Proposed Bore

- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

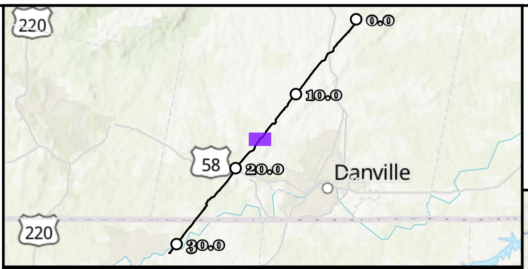
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

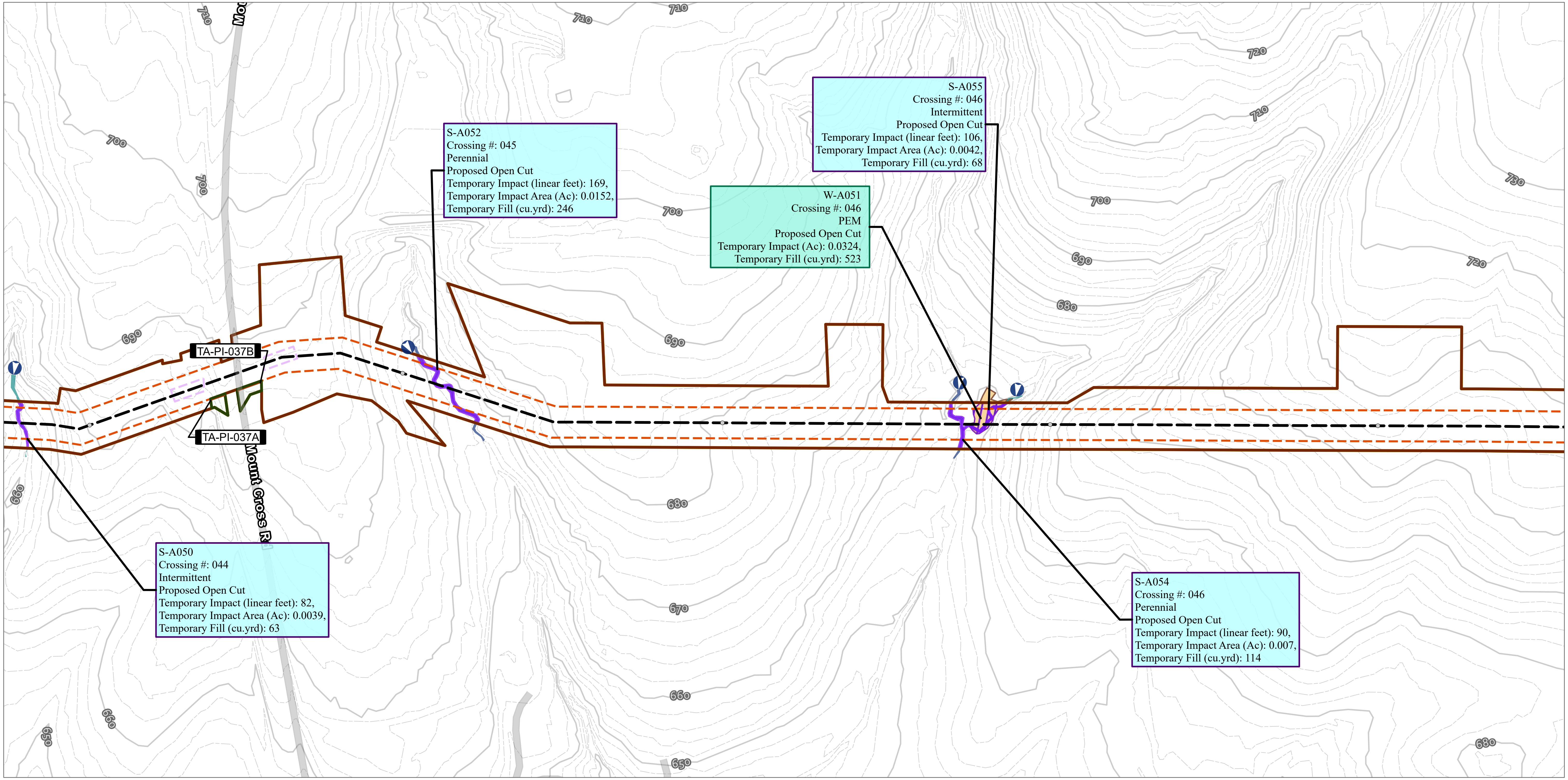
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 37
CL-037

DATE: JULY 2025

MVP
SOUTHGATE



S-A052
Crossing #: 045
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 169,
Temporary Impact Area (Ac): 0.0152,
Temporary Fill (cu.yrd): 246

S-A055
Crossing #: 046
Intermittent
Proposed Open Cut
Temporary Impact (linear feet): 106,
Temporary Impact Area (Ac): 0.0042,
Temporary Fill (cu.yrd): 68

W-A051
Crossing #: 046
PEM
Proposed Open Cut
Temporary Impact (Ac): 0.0324,
Temporary Fill (cu.yrd): 523

S-A050
Crossing #: 044
Intermittent
Proposed Open Cut
Temporary Impact (linear feet): 82,
Temporary Impact Area (Ac): 0.0039,
Temporary Fill (cu.yrd): 63

S-A054
Crossing #: 046
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 90,
Temporary Impact Area (Ac): 0.007,
Temporary Fill (cu.yrd): 114

- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ‒ ‒ H-650 PIPELINE
- — PERMANENT ACCESS ROAD
- — TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

STREAM IMPACT

- TEMPORARY
- PERMANENT

STREAM TYPE

- EPHEMERAL
- INTERMITTENT
- PERENNIAL

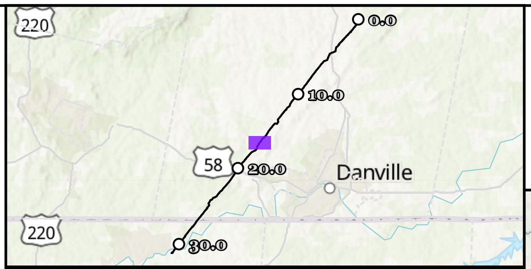
WETLAND IMPACT

- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE

- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200

FEET

1:2,400

1" = 200'

PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

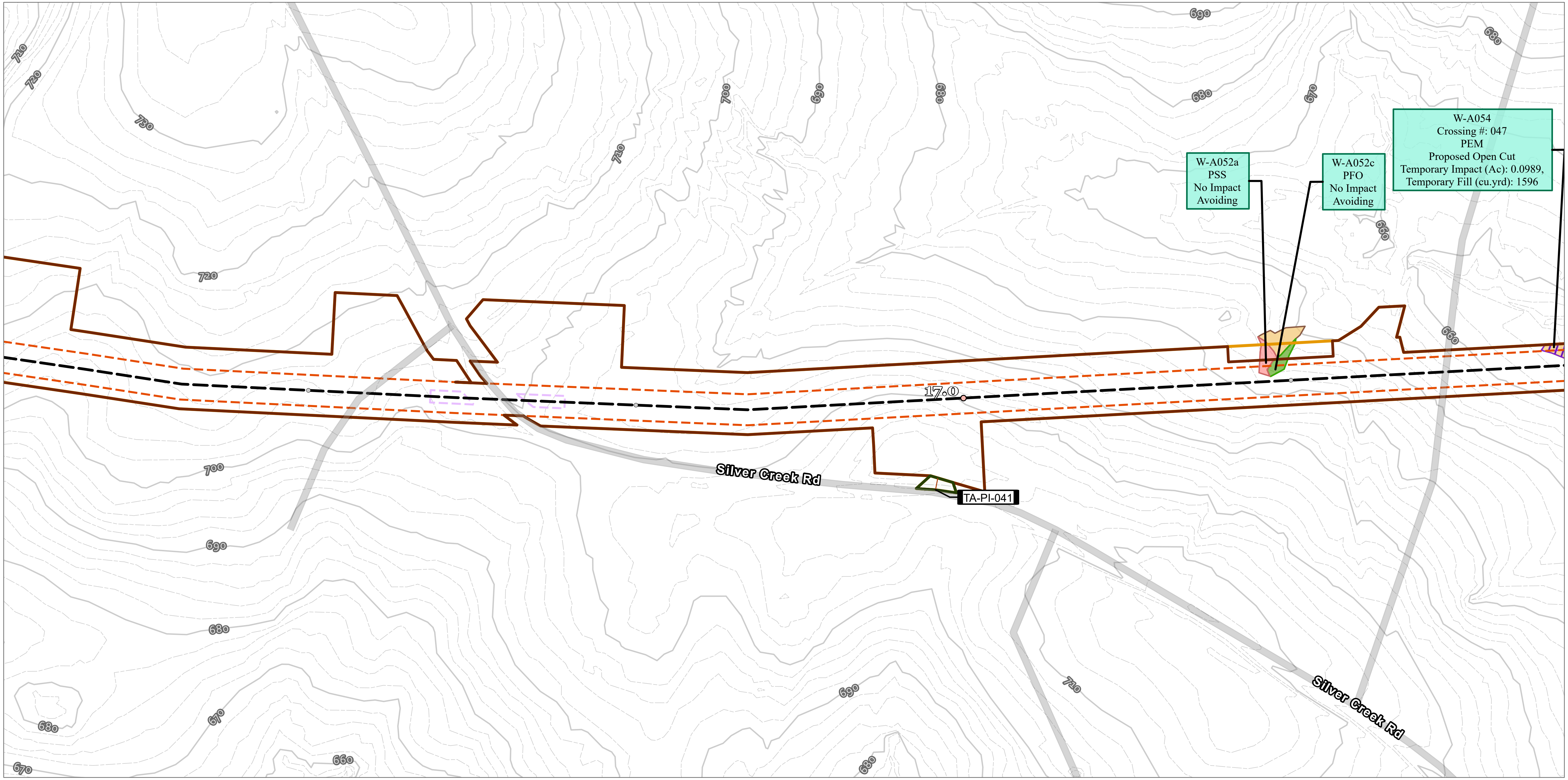
TITLE:

FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 38
CL-038

DATE: JULY 2025

MVP SOUTHGATE



W-A052a
PSS
No Impact
Avoiding

W-A052c
PFO
No Impact
Avoiding

W-A054
Crossing #: 047
PEM
Proposed Open Cut
Temporary Impact (Ac): 0.0989,
Temporary Fill (cu.yrd): 1596

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ⦿ METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- ― PERMANENT ACCESS ROAD
- ― TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

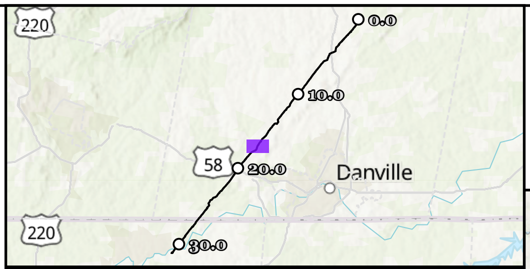
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400
1" = 200'

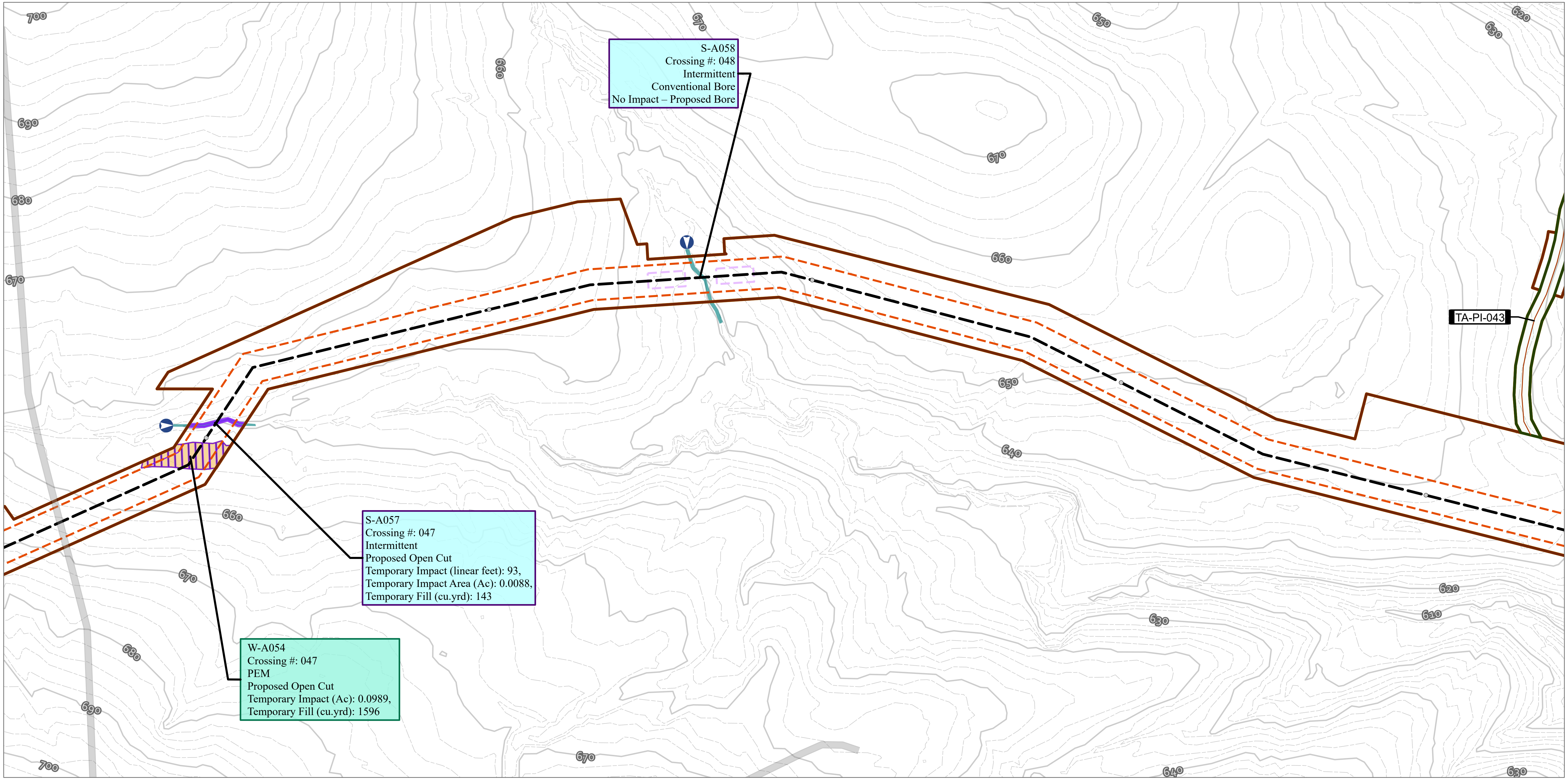
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 39
CL-039

DATE: JULY 2025

MVP SOUTHGATE



S-A058
Crossing #: 048
Intermittent
Conventional Bore
No Impact – Proposed Bore

S-A057
Crossing #: 047
Intermittent
Proposed Open Cut
Temporary Impact (linear feet): 93,
Temporary Impact Area (Ac): 0.0088,
Temporary Fill (cu.yrd): 143

W-A054
Crossing #: 047
PEM
Proposed Open Cut
Temporary Impact (Ac): 0.0989,
Temporary Fill (cu.yrd): 1596

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- ― PERMANENT ACCESS ROAD
- ― TEMPORARY ACCESS ROAD

- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA

- ➤ STREAM FLOW DIRECTION

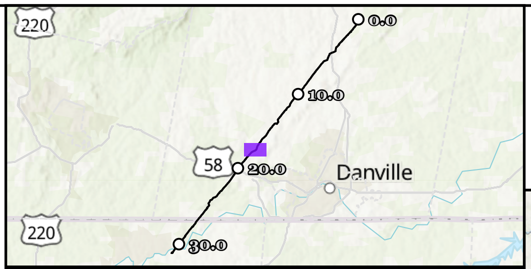
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

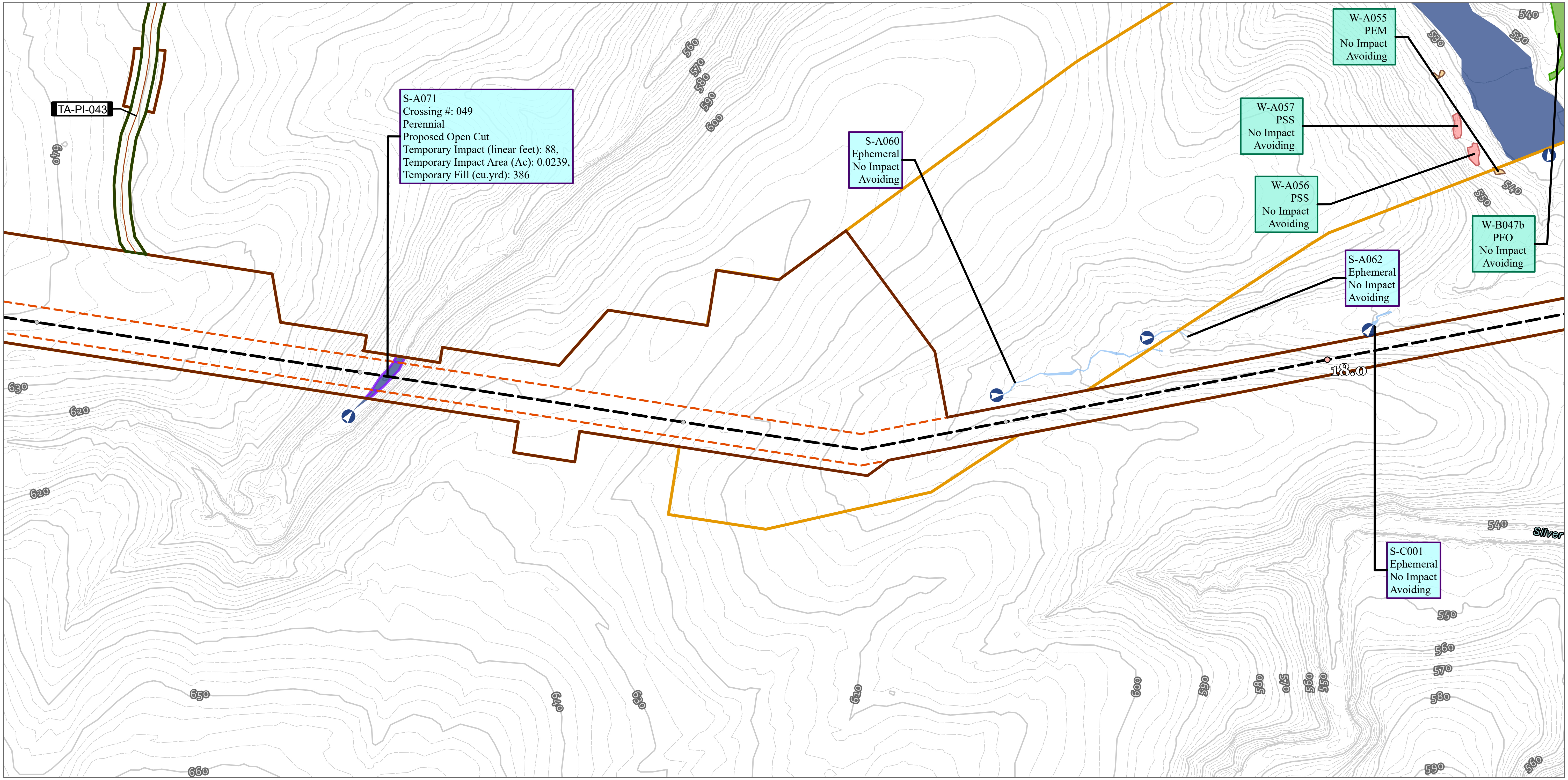
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 40
CL-040

DATE: JULY 2025

MVP SOUTHGATE



S-A071
Crossing #: 049
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 88,
Temporary Impact Area (Ac): 0.0239,
Temporary Fill (cu.yrd): 386

S-A060
Ephemeral
No Impact
Avoiding

W-A055
PEM
No Impact
Avoiding

W-A057
PSS
No Impact
Avoiding

W-A056
PSS
No Impact
Avoiding

W-B047b
PFO
No Impact
Avoiding

S-A062
Ephemeral
No Impact
Avoiding

S-C001
Ephemeral
No Impact
Avoiding

- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD

- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA

- STREAM FLOW DIRECTION

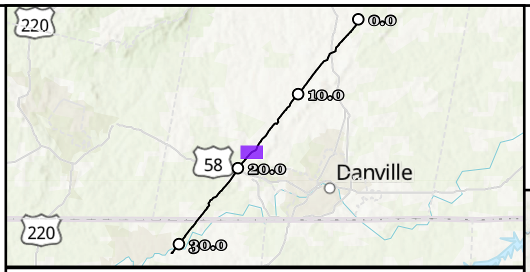
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

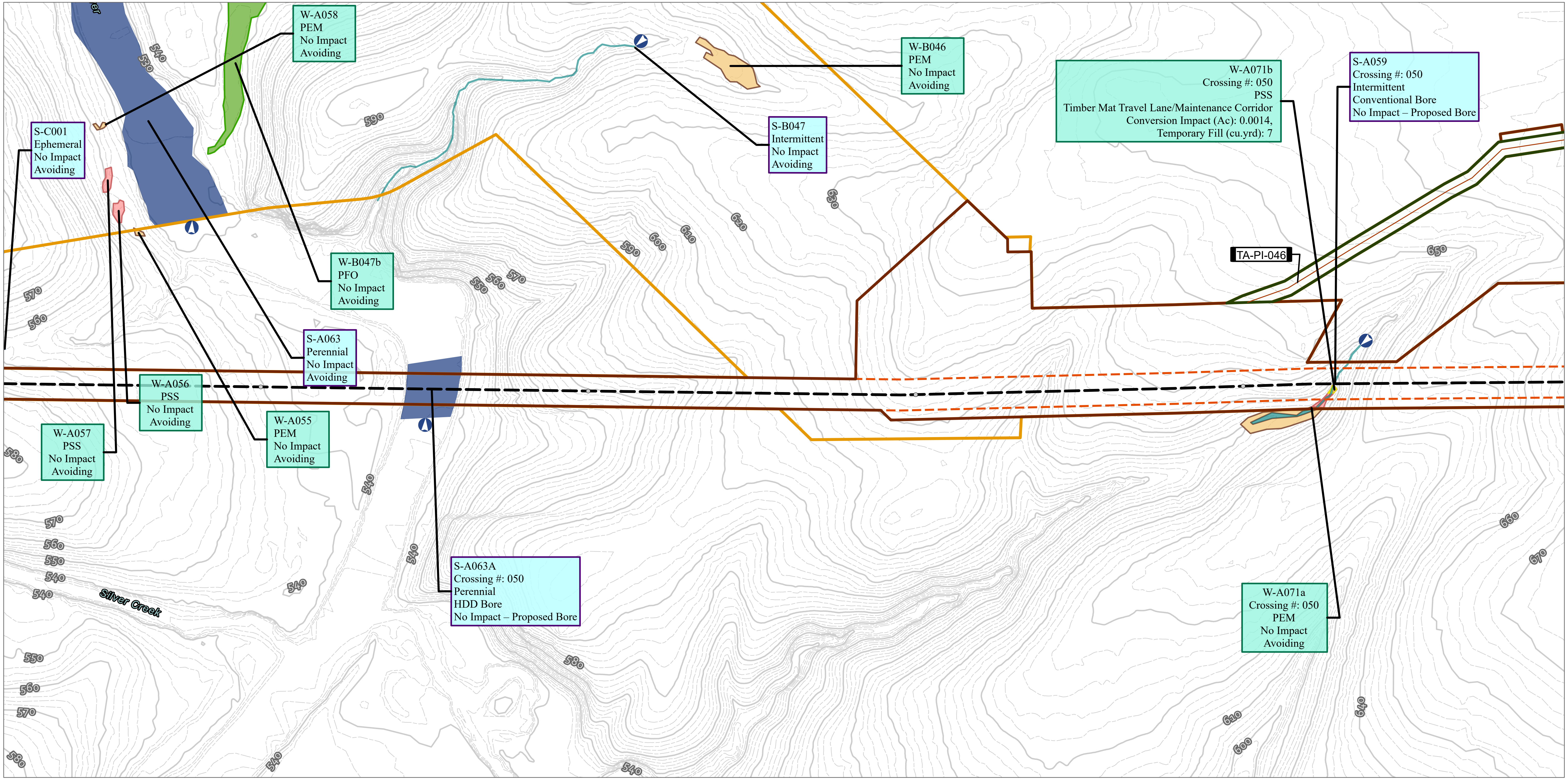
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 41
CL-041

DATE: JULY 2025

MVP SOUTHGATE



- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

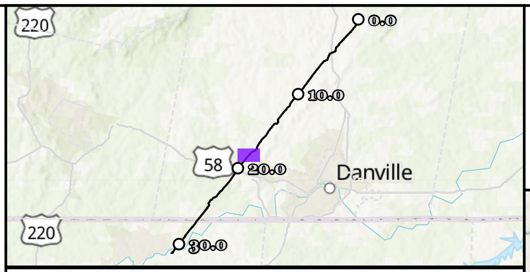
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

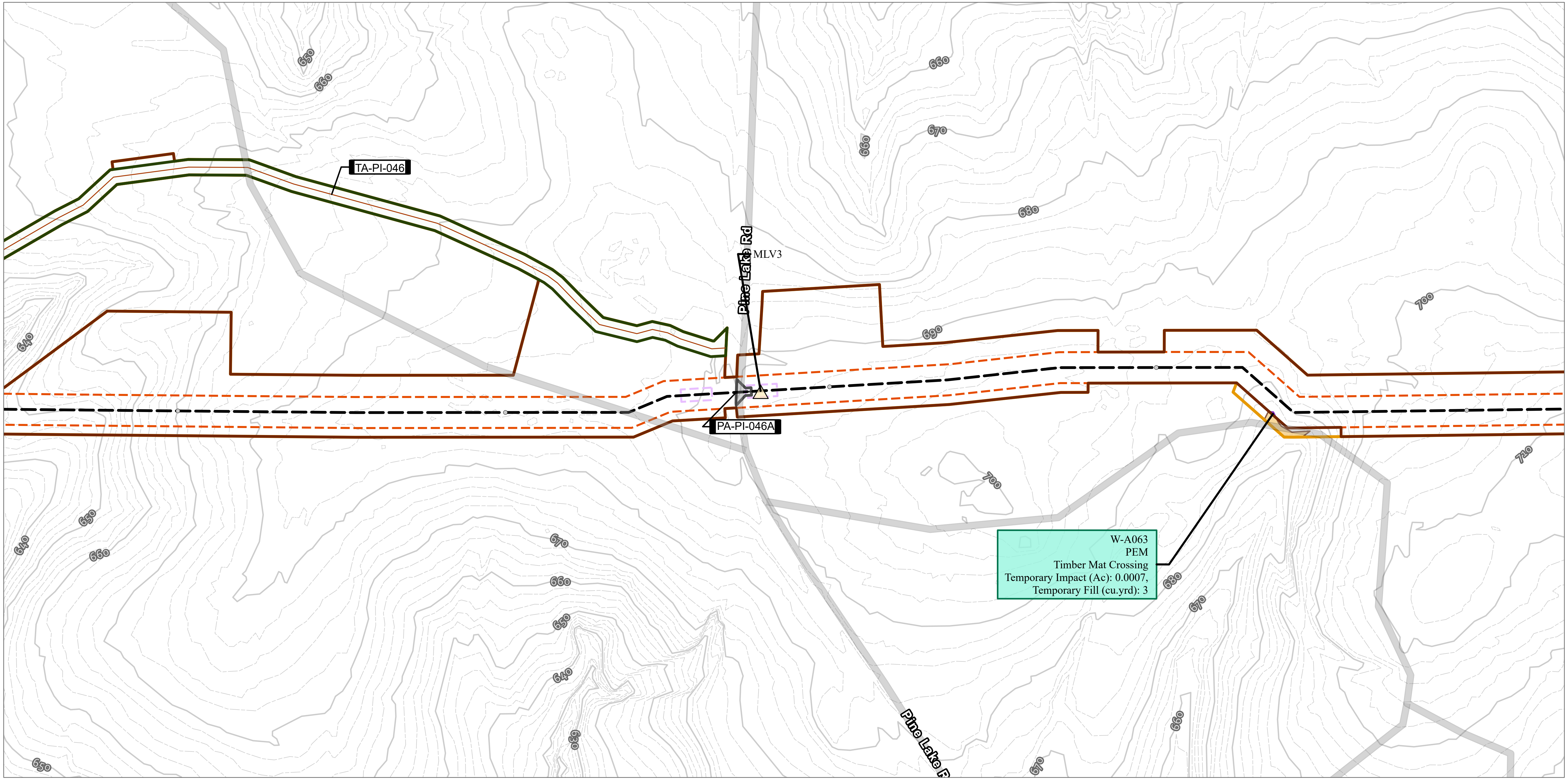
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 42
CL-042

DATE: JULY 2025

MVP SOUTHGATE



W-A063
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.0007,
Temporary Fill (cu.yrd): 3

- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD

- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA

- STREAM FLOW DIRECTION

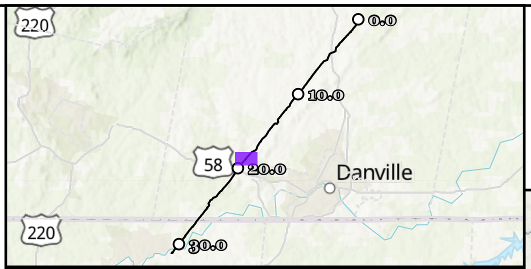
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

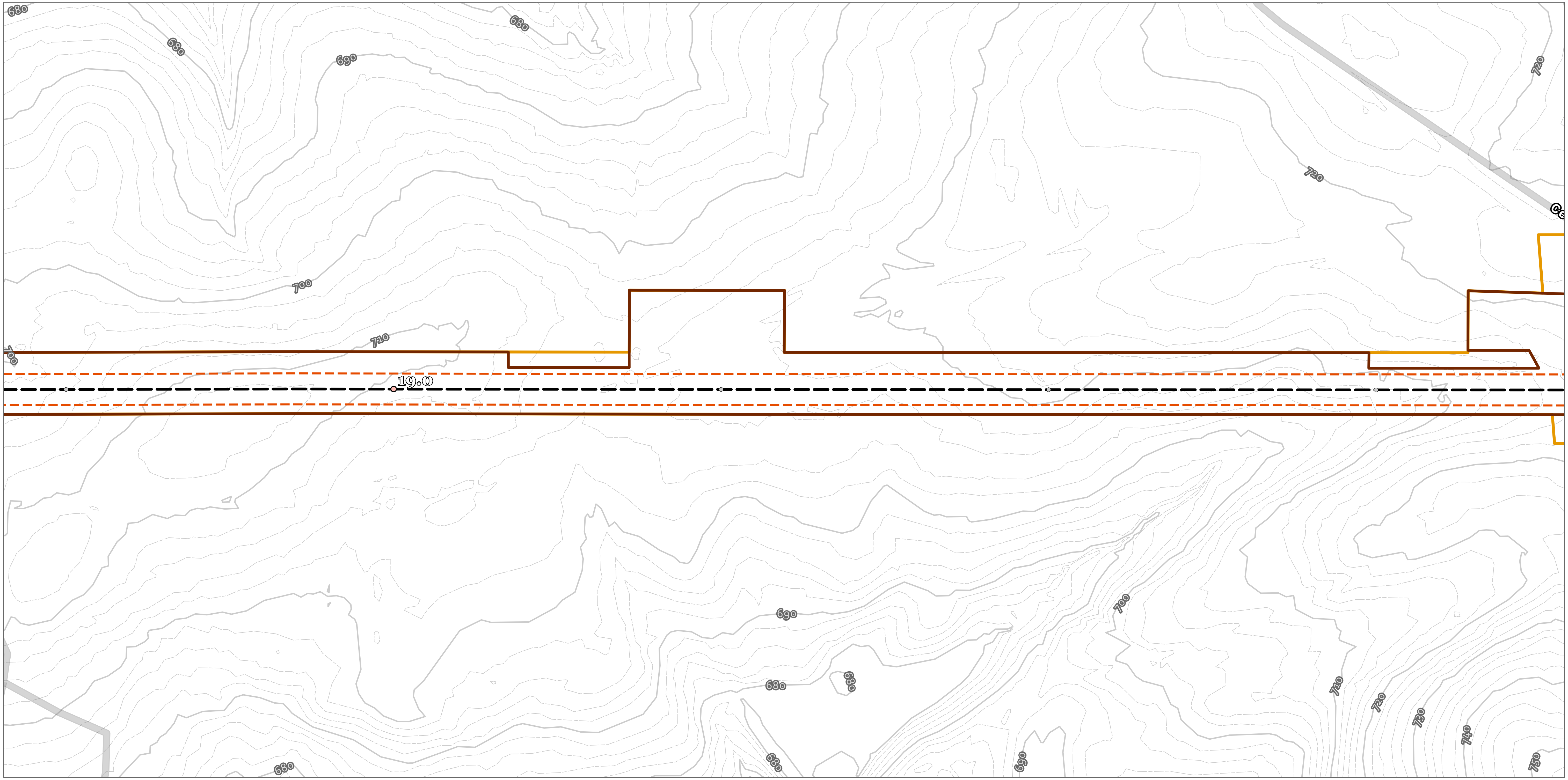
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 43
CL-043

DATE: JULY 2025

MVP
SOUTHGATE



- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

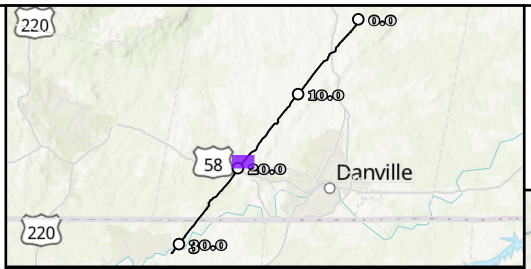
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

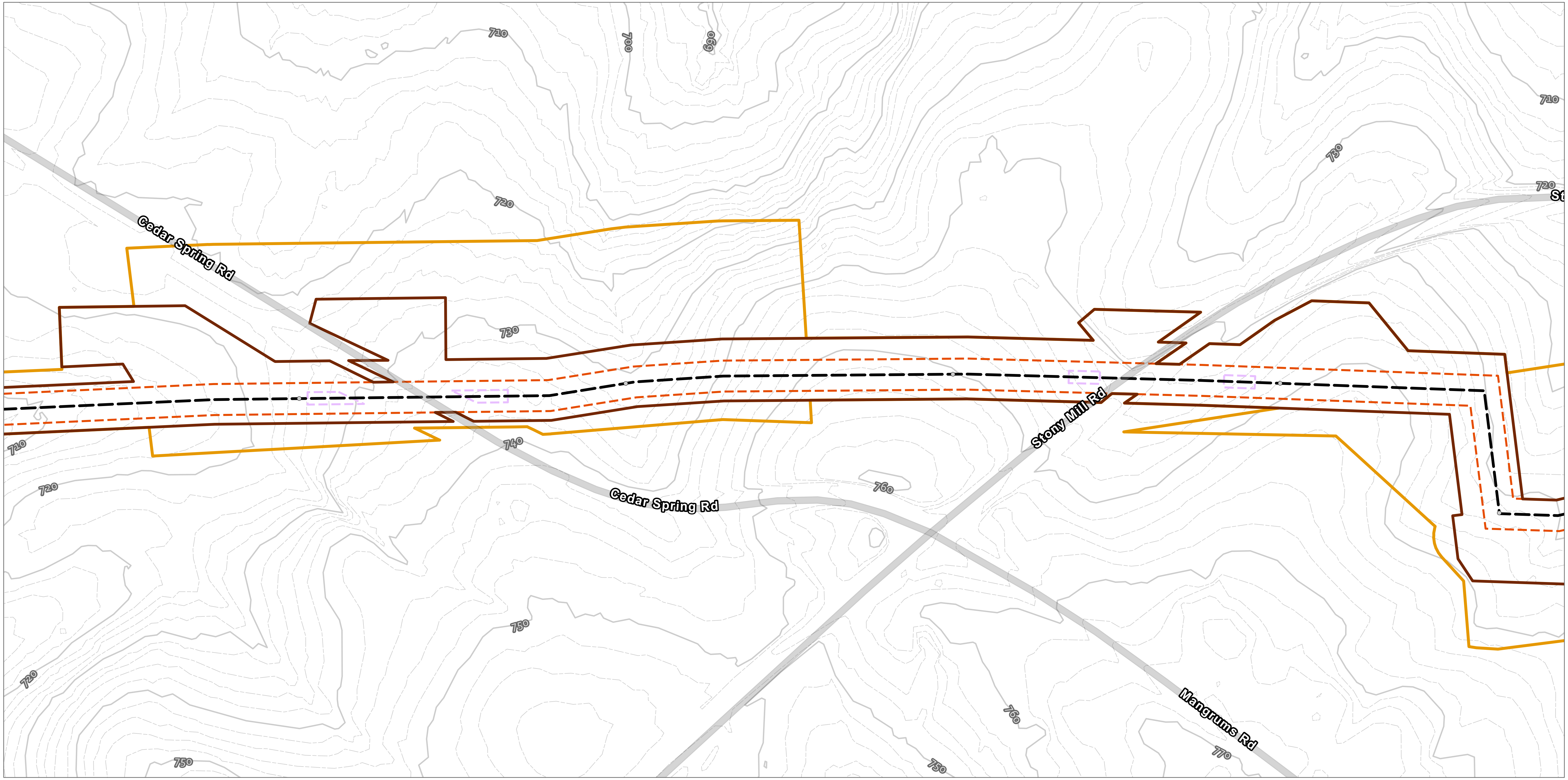
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 44
CL-044

DATE: JULY 2025

MVP SOUTHGATE



- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- ― PERMANENT ACCESS ROAD
- ― TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

STREAM IMPACT

- TEMPORARY
- PERMANENT

STREAM TYPE

- EPHEMERAL
- INTERMITTENT
- PERENNIAL

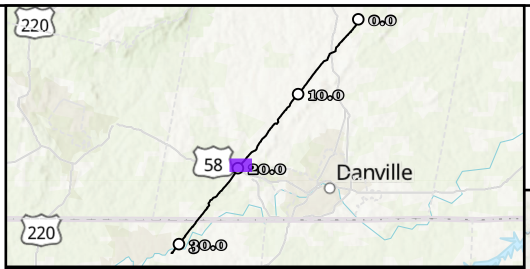
WETLAND IMPACT

- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE

- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400
1" = 200'

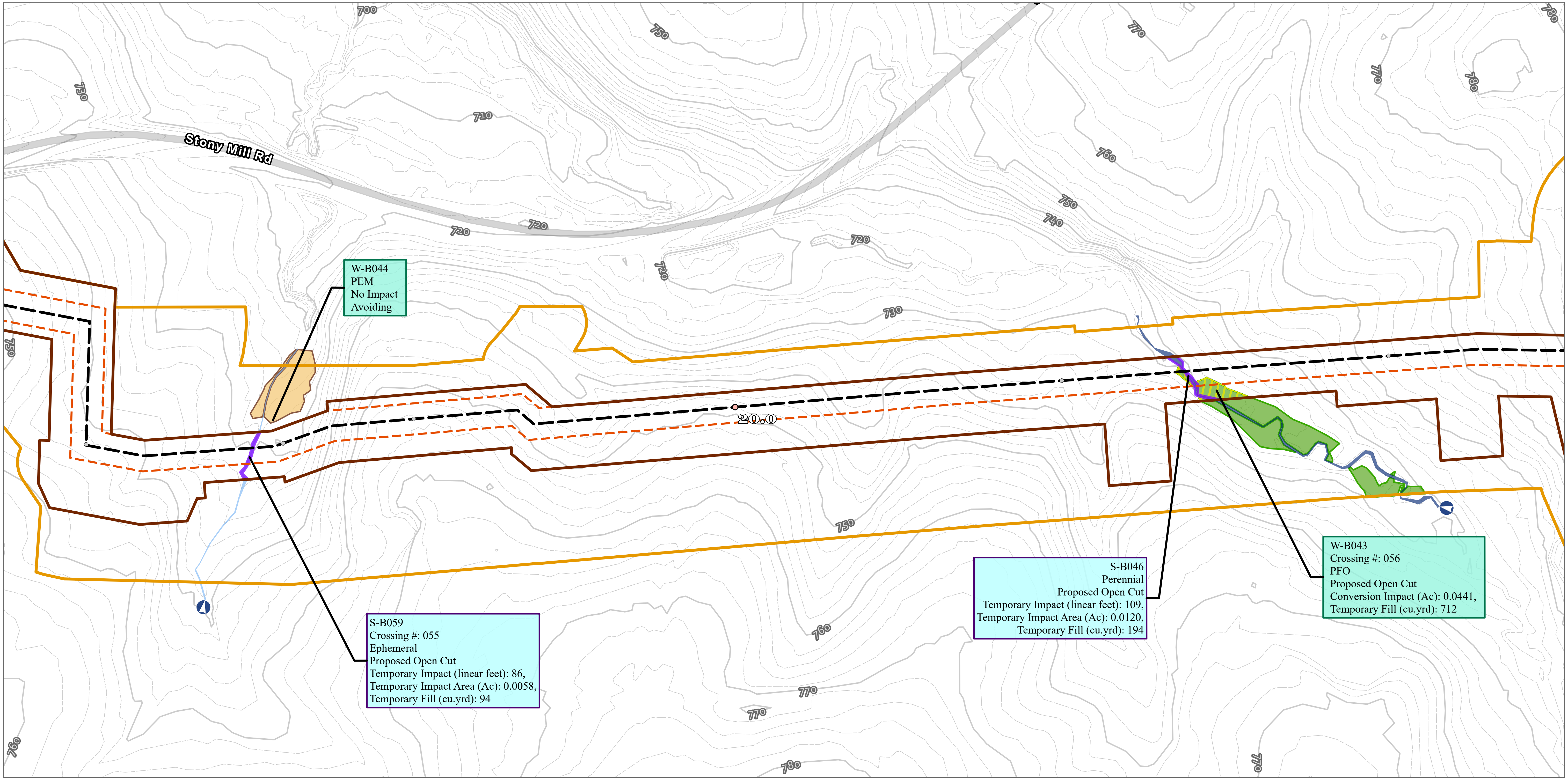
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 45
CL-045

DATE: JULY 2025

MVP SOUTHGATE



W-B044
PEM
No Impact
Avoiding

S-B059
Crossing #: 055
Ephemeral
Proposed Open Cut
Temporary Impact (linear feet): 86,
Temporary Impact Area (Ac): 0.0058,
Temporary Fill (cu.yrd): 94

S-B046
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 109,
Temporary Impact Area (Ac): 0.0120,
Temporary Fill (cu.yrd): 194

W-B043
Crossing #: 056
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.0441,
Temporary Fill (cu.yrd): 712

- ○ TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ╌ H-650 PIPELINE
- — PERMANENT ACCESS ROAD
- — TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ⬚ OPERATIONAL WORKSPACE
- ⬚ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

STREAM IMPACT

- TEMPORARY
- PERMANENT

STREAM TYPE

- EPHEMERAL
- INTERMITTENT
- PERENNIAL

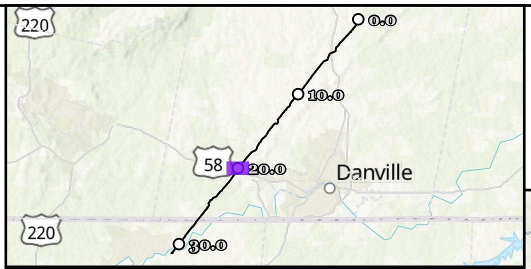
WETLAND IMPACT

- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE

- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- ⬚ COUNTY BOUNDARY
- ⬚ STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400 1" = 200'

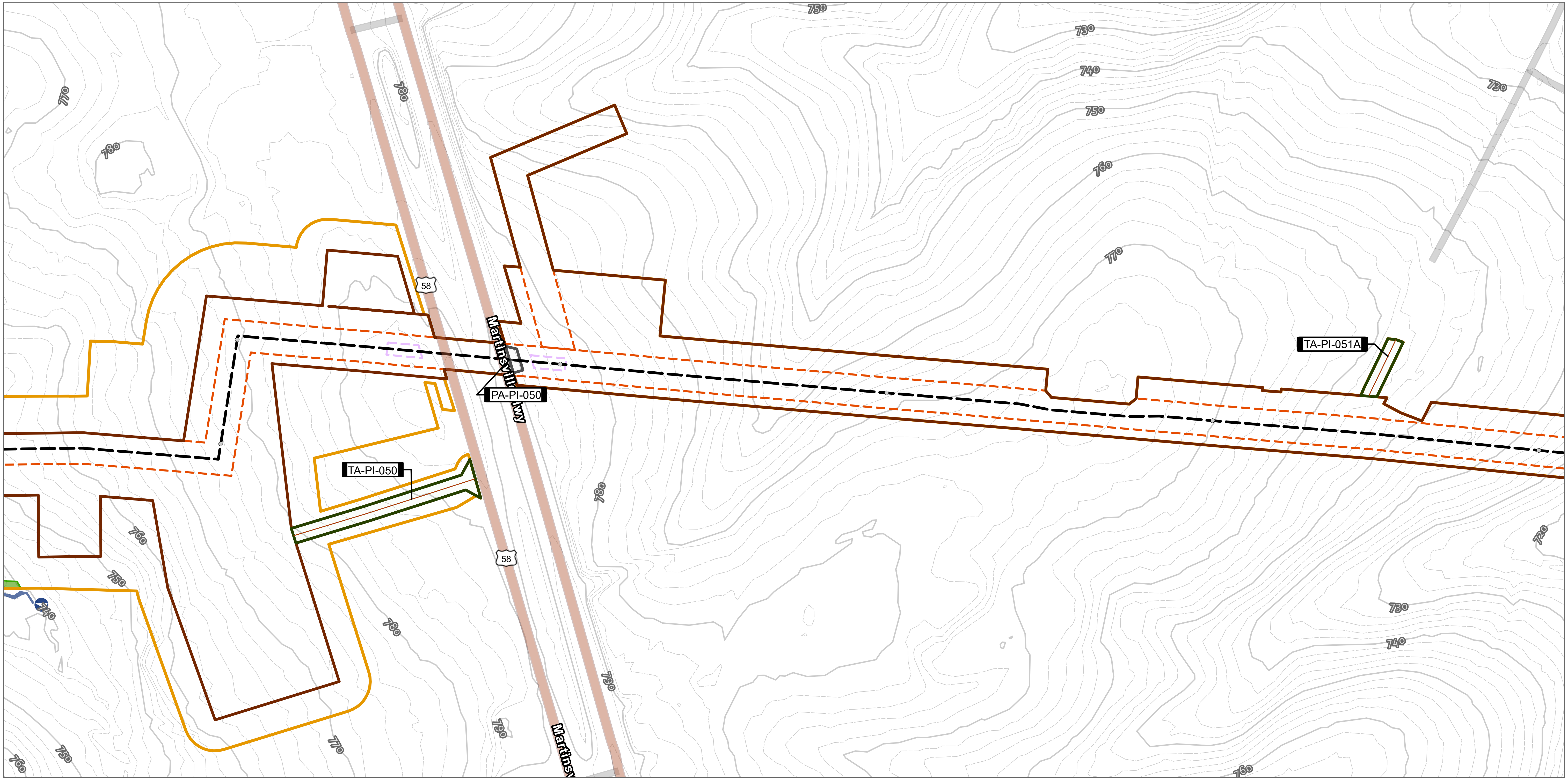
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 46
CL-046

DATE: JULY 2025

MVP SOUTHGATE



- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ╌ H-650 PIPELINE
- ─ PERMANENT ACCESS ROAD
- ─ TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ● STREAM FLOW DIRECTION

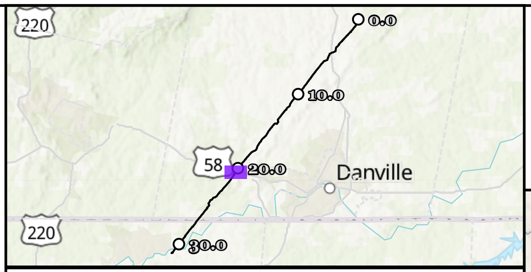
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

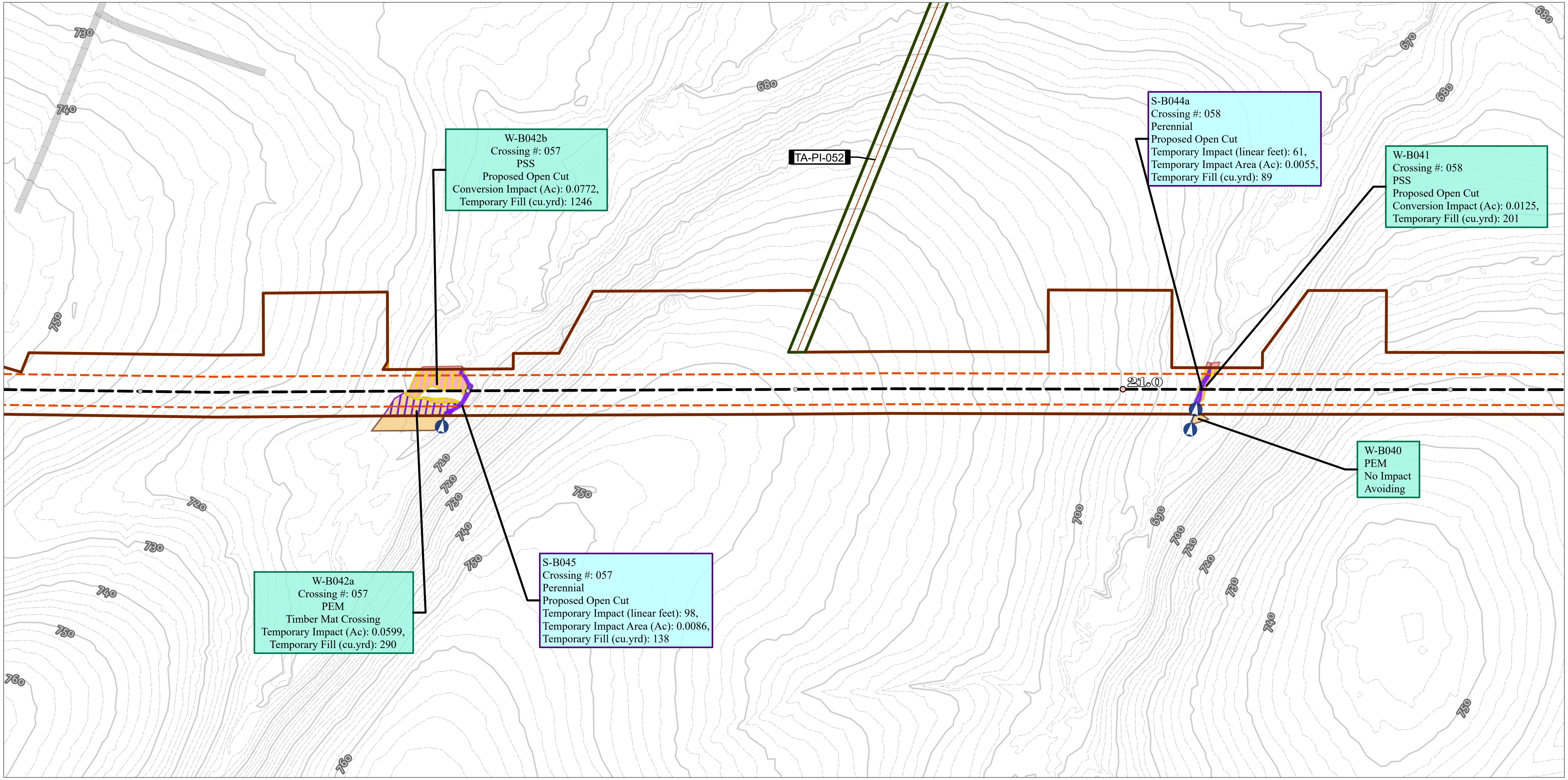
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 47
CL-047

DATE: JULY 2025

MVP SOUTHGATE



W-B042b
Crossing #: 057
PSS
Proposed Open Cut
Conversion Impact (Ac): 0.0772,
Temporary Fill (cu.yrd): 1246

S-B044a
Crossing #: 058
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 61,
Temporary Impact Area (Ac): 0.0055,
Temporary Fill (cu.yrd): 89

W-B041
Crossing #: 058
PSS
Proposed Open Cut
Conversion Impact (Ac): 0.0125,
Temporary Fill (cu.yrd): 201

W-B040
PEM
No Impact
Avoiding

S-B045
Crossing #: 057
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 98,
Temporary Impact Area (Ac): 0.0086,
Temporary Fill (cu.yrd): 138

W-B042a
Crossing #: 057
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.0599,
Temporary Fill (cu.yrd): 290

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- ― PERMANENT ACCESS ROAD
- ― TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

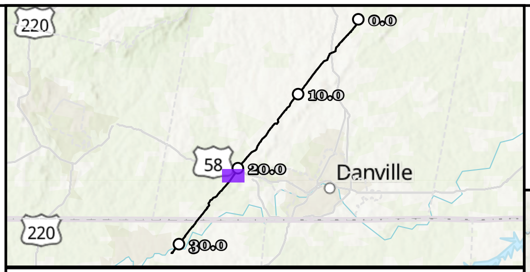
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

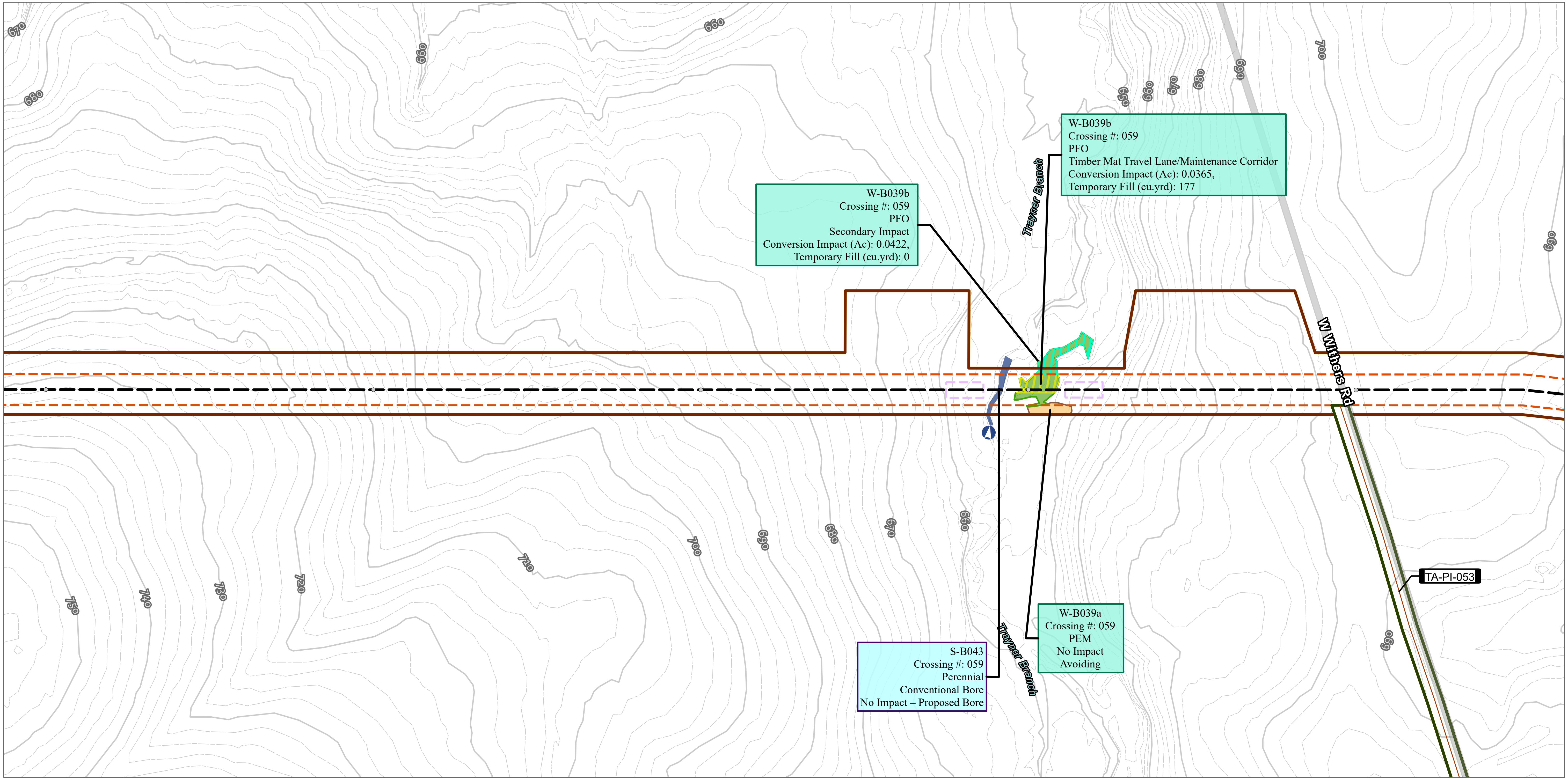
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 48
CL-048

DATE: JULY 2025

MVP SOUTHGATE



W-B039b
Crossing #: 059
PFO
Secondary Impact
Conversion Impact (Ac): 0.0422,
Temporary Fill (cu.yrd): 0

W-B039b
Crossing #: 059
PFO
Timber Mat Travel Lane/Maintenance Corridor
Conversion Impact (Ac): 0.0365,
Temporary Fill (cu.yrd): 177

W-B039a
Crossing #: 059
PEM
No Impact
Avoiding

S-B043
Crossing #: 059
Perennial
Conventional Bore
No Impact – Proposed Bore

- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

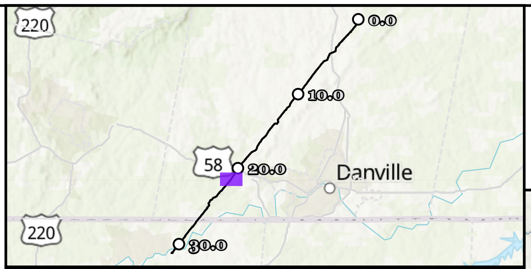
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



NOTES:
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0 100 200
FEET
1:2,400
1" = 200'

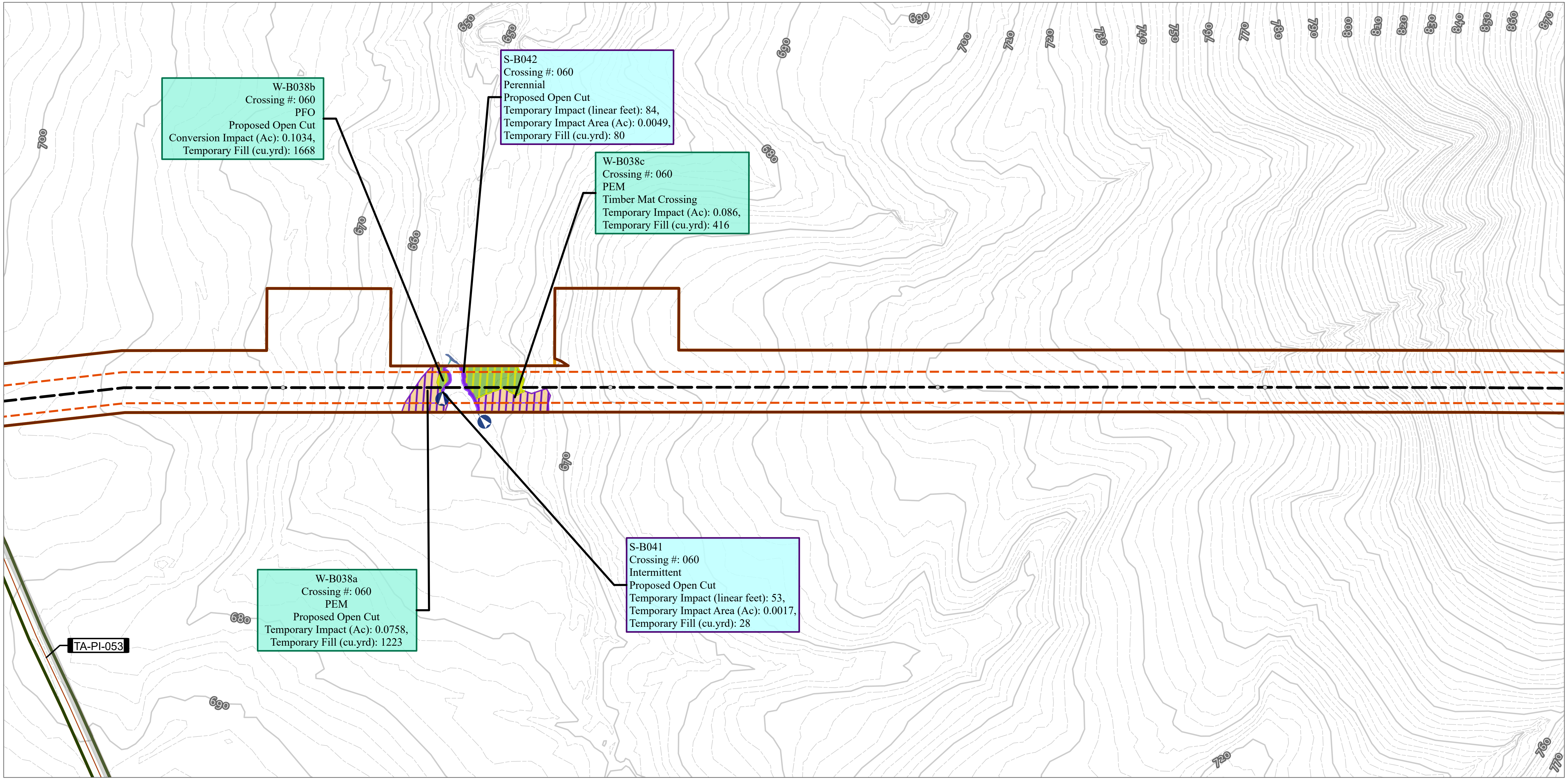
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 49
CL-049

DATE: JULY 2025

MVP SOUTHGATE



W-B038b
Crossing #: 060
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.1034,
Temporary Fill (cu.yrd): 1668

S-B042
Crossing #: 060
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 84,
Temporary Impact Area (Ac): 0.0049,
Temporary Fill (cu.yrd): 80

W-B038c
Crossing #: 060
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.086,
Temporary Fill (cu.yrd): 416

S-B041
Crossing #: 060
Intermittent
Proposed Open Cut
Temporary Impact (linear feet): 53,
Temporary Impact Area (Ac): 0.0017,
Temporary Fill (cu.yrd): 28

W-B038a
Crossing #: 060
PEM
Proposed Open Cut
Temporary Impact (Ac): 0.0758,
Temporary Fill (cu.yrd): 1223

- TENTH MILE POST
- MILE POST
- △ MAIN LINE VALVE
- METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

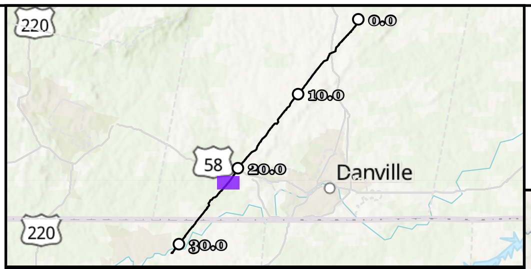
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

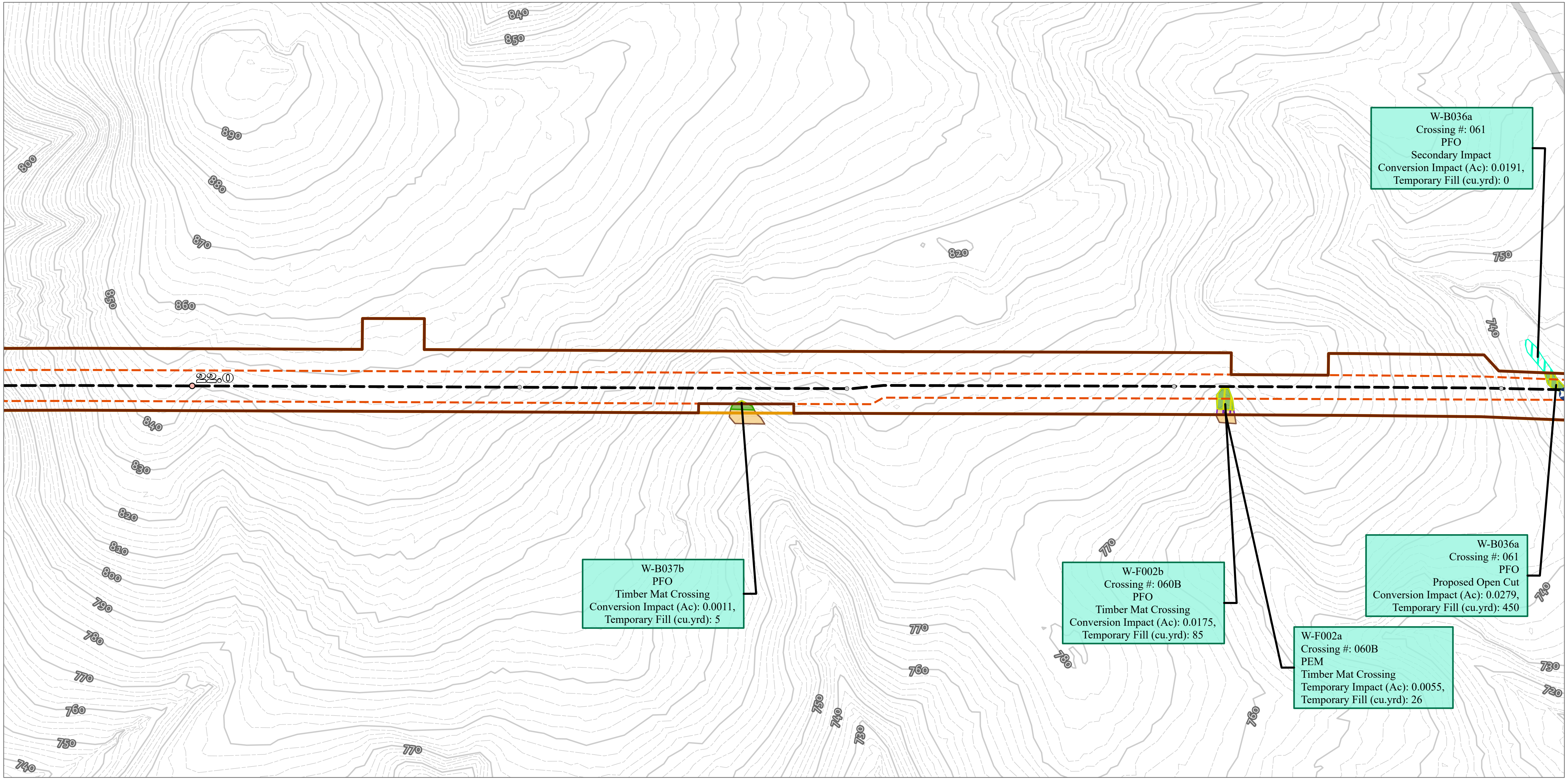
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 50
CL-050

DATE: JULY 2025

MVP
SOUTHGATE



W-B036a
Crossing #: 061
PFO
Secondary Impact
Conversion Impact (Ac): 0.0191,
Temporary Fill (cu.yrd): 0

W-B037b
PFO
Timber Mat Crossing
Conversion Impact (Ac): 0.0011,
Temporary Fill (cu.yrd): 5

W-F002b
Crossing #: 060B
PFO
Timber Mat Crossing
Conversion Impact (Ac): 0.0175,
Temporary Fill (cu.yrd): 85

W-B036a
Crossing #: 061
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.0279,
Temporary Fill (cu.yrd): 450

W-F002a
Crossing #: 060B
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.0055,
Temporary Fill (cu.yrd): 26

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ⊙ METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

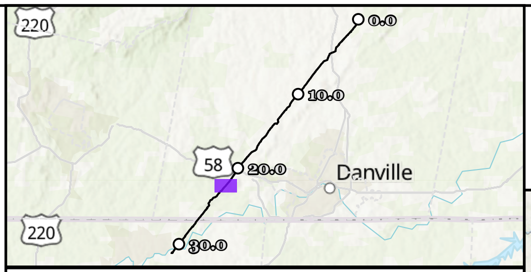
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

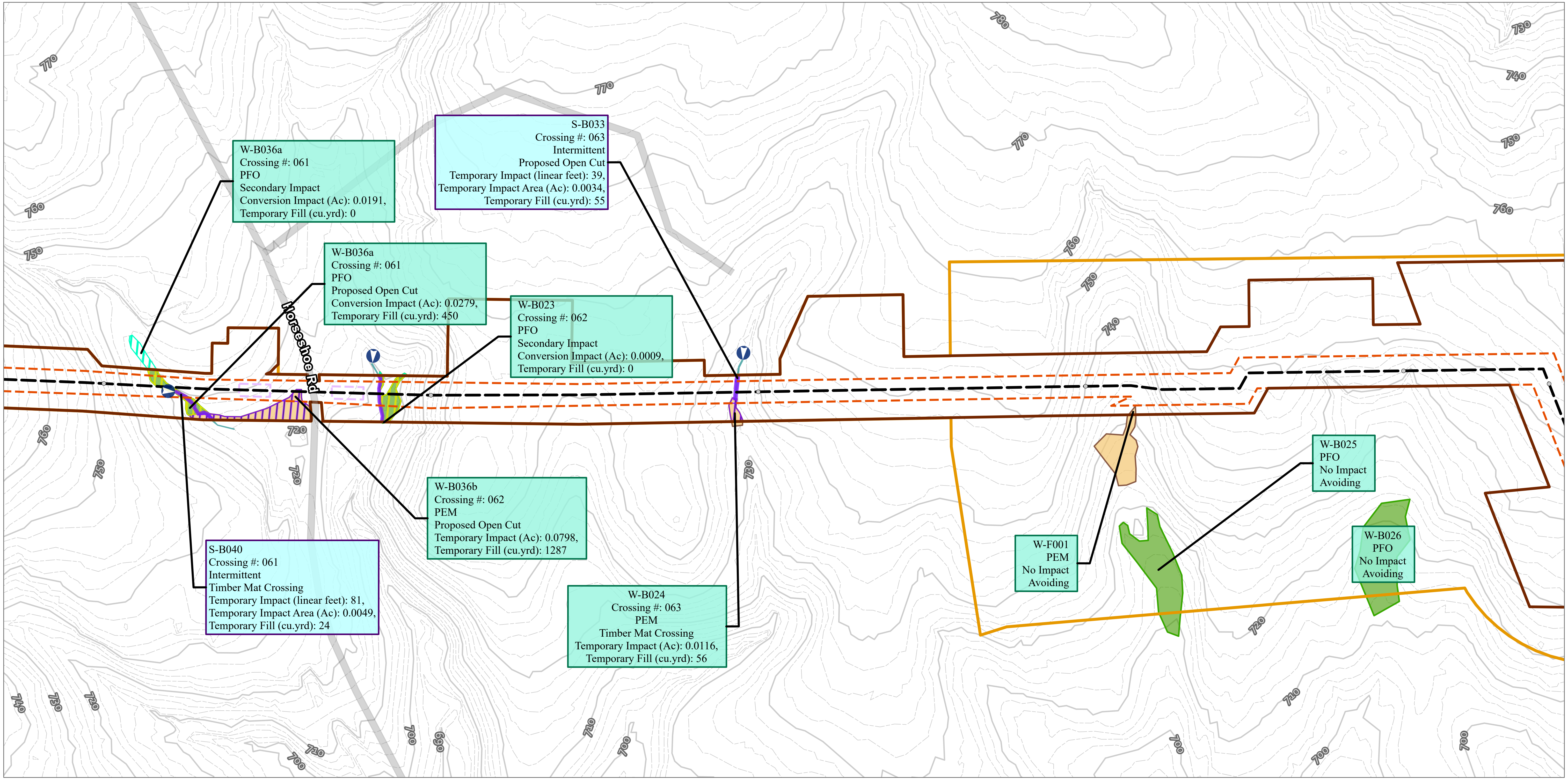
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 51
CL-051

DATE: JULY 2025

MVP
SOUTHGATE



- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

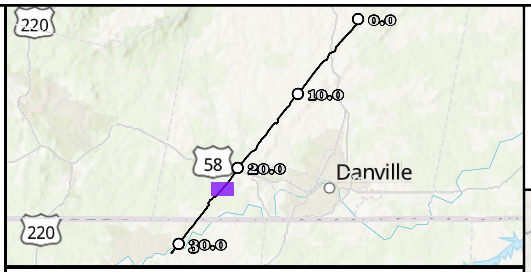
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400 1" = 200'

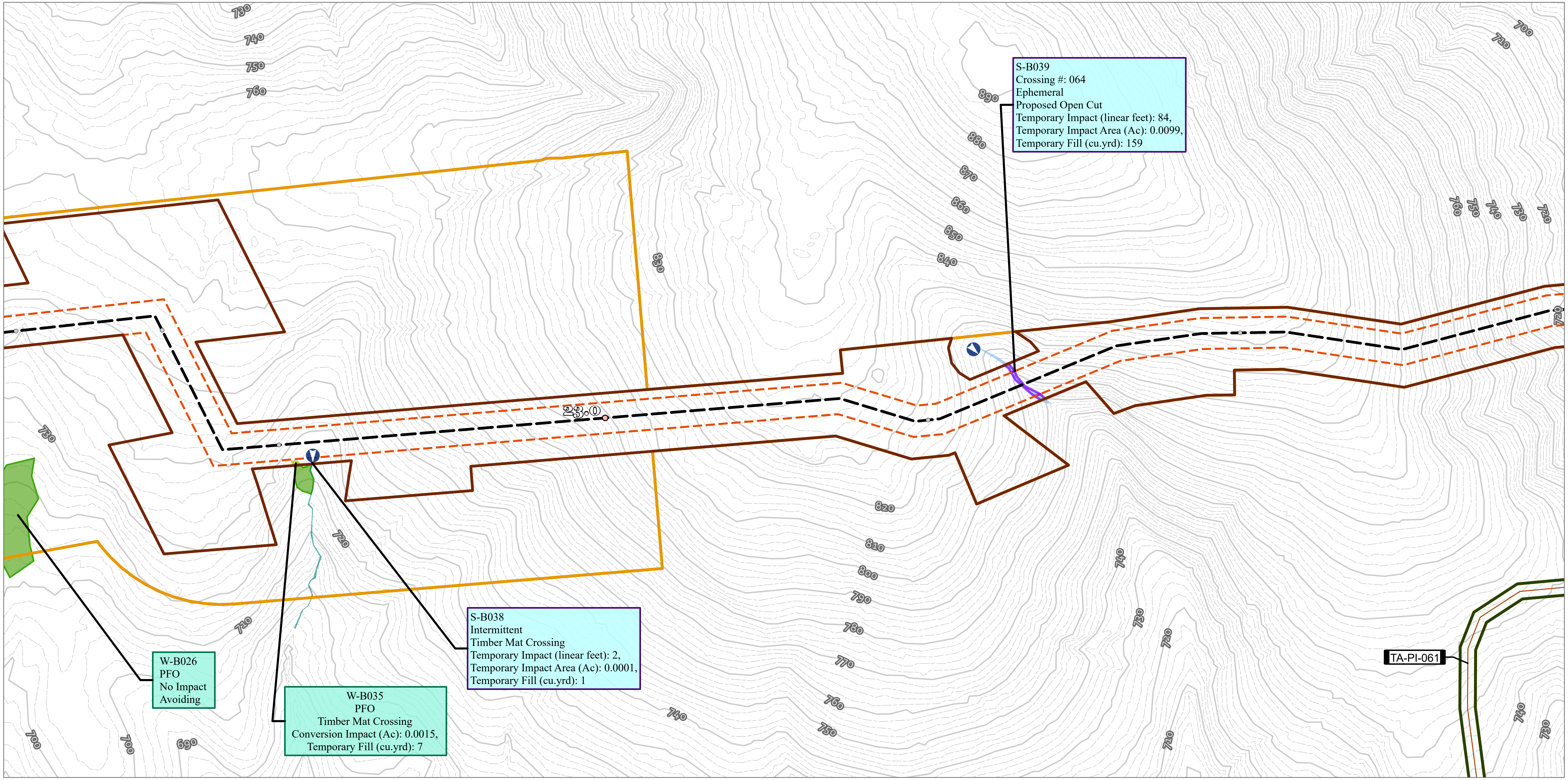
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 52
CL-052

DATE: JULY 2025

MVP SOUTHGATE



S-B039
Crossing #: 064
Ephemeral
Proposed Open Cut
Temporary Impact (linear feet): 84,
Temporary Impact Area (Ac): 0.0099,
Temporary Fill (cu.yrd): 159

S-B038
Intermittent
Timber Mat Crossing
Temporary Impact (linear feet): 2,
Temporary Impact Area (Ac): 0.0001,
Temporary Fill (cu.yrd): 1

W-B026
PFO
No Impact
Avoiding

W-B035
PFO
Timber Mat Crossing
Conversion Impact (Ac): 0.0015,
Temporary Fill (cu.yrd): 7

- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

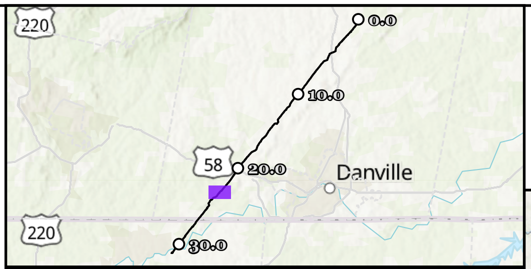
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

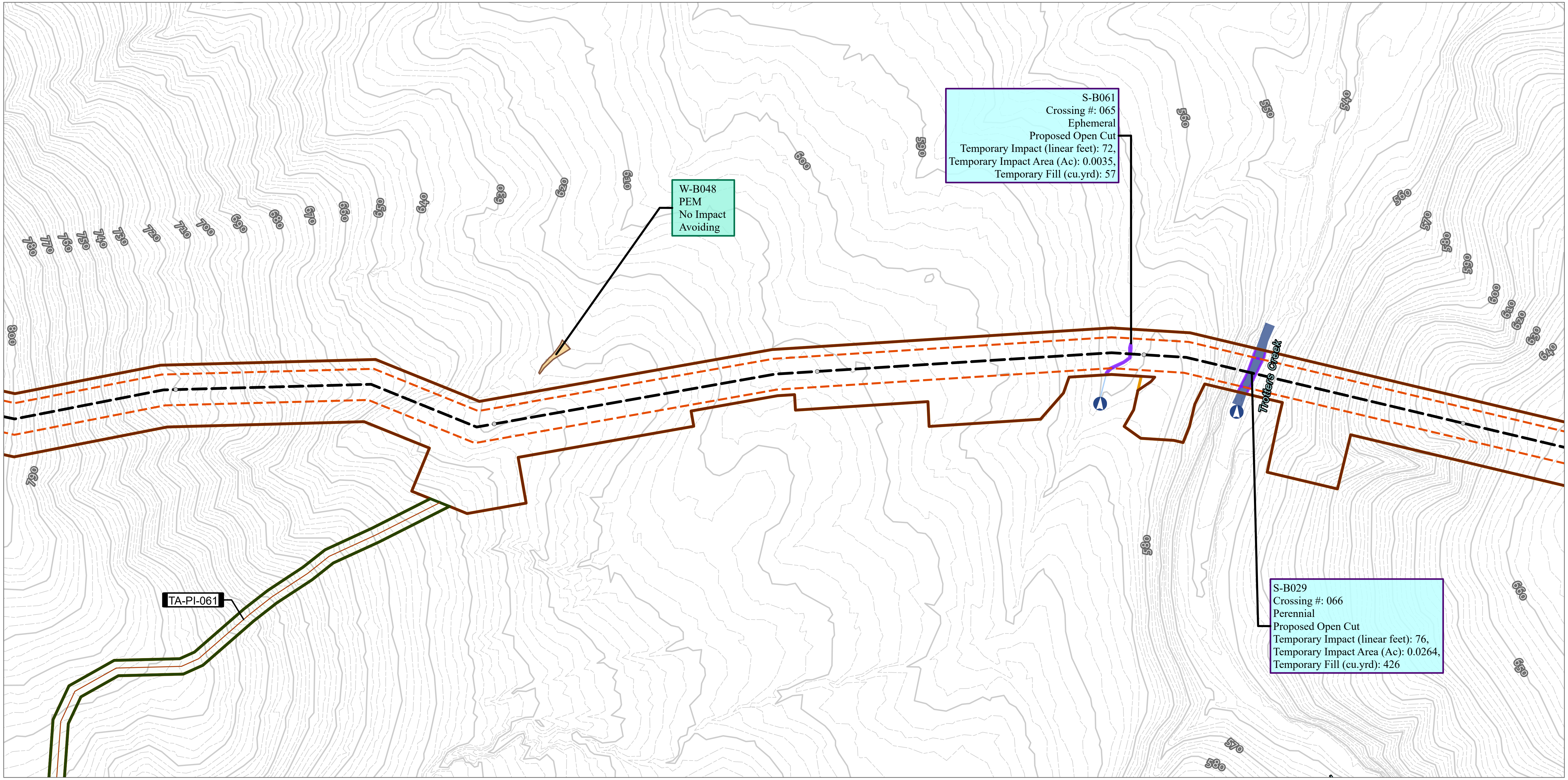
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 53
CL-053

DATE: JULY 2025

MVP SOUTHGATE



W-B048
PEM
No Impact
Avoiding

S-B061
Crossing #: 065
Ephemeral
Proposed Open Cut
Temporary Impact (linear feet): 72,
Temporary Impact Area (Ac): 0.0035,
Temporary Fill (cu.yrd): 57

S-B029
Crossing #: 066
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 76,
Temporary Impact Area (Ac): 0.0264,
Temporary Fill (cu.yrd): 426

- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

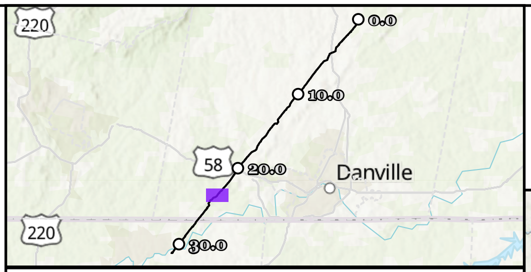
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

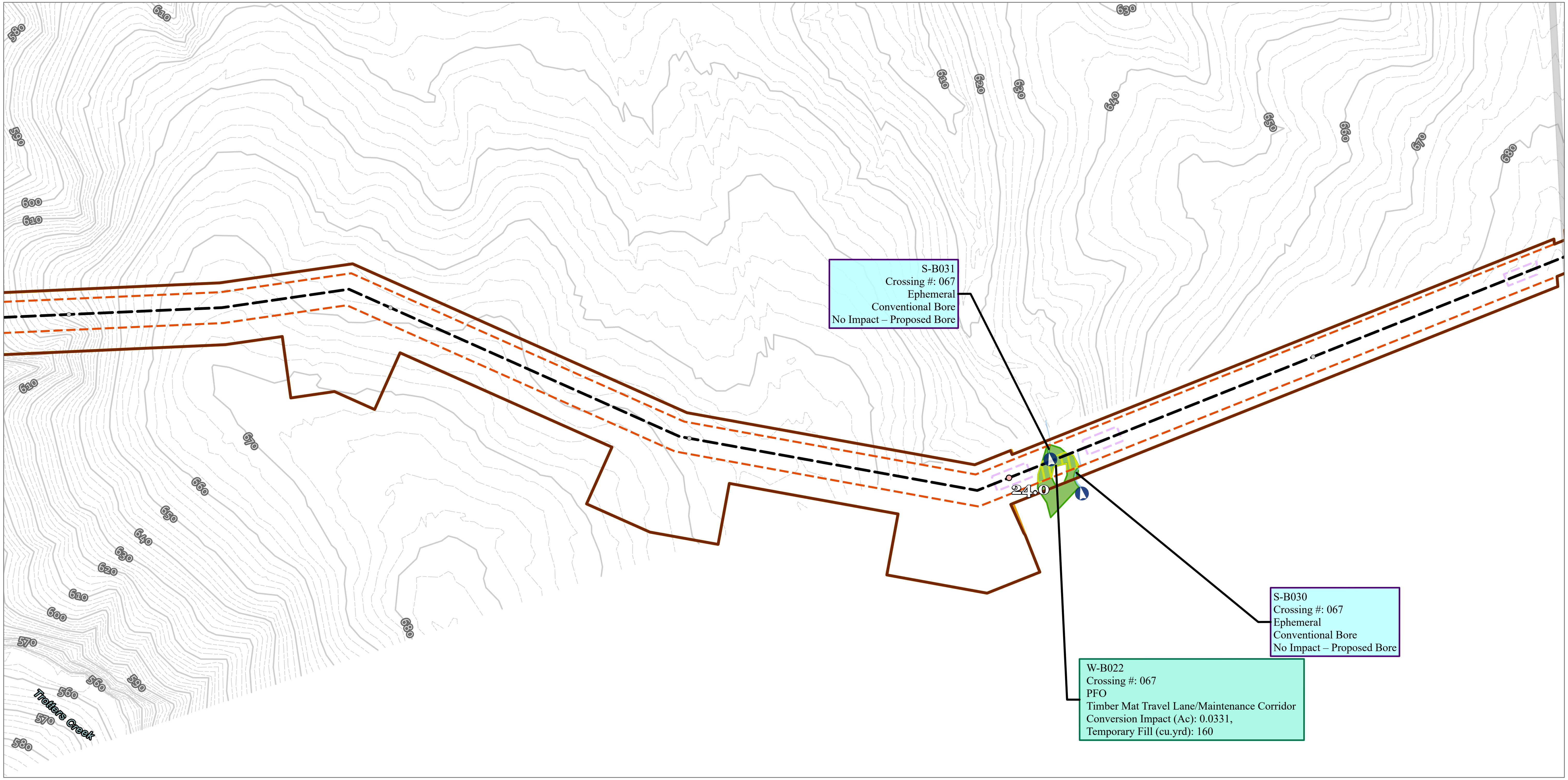
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE: FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 54
CL-054

DATE: JULY 2025

MVP SOUTHGATE



S-B031
Crossing #: 067
Ephemeral
Conventional Bore
No Impact – Proposed Bore

S-B030
Crossing #: 067
Ephemeral
Conventional Bore
No Impact – Proposed Bore

W-B022
Crossing #: 067
PFO
Timber Mat Travel Lane/Maintenance Corridor
Conversion Impact (Ac): 0.0331,
Temporary Fill (cu.yrd): 160

- ● TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

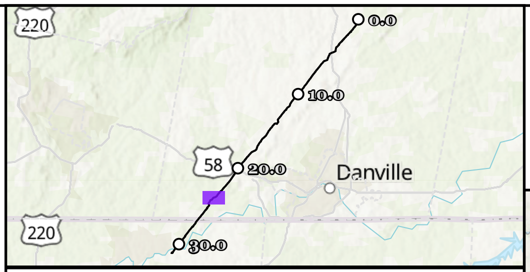
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

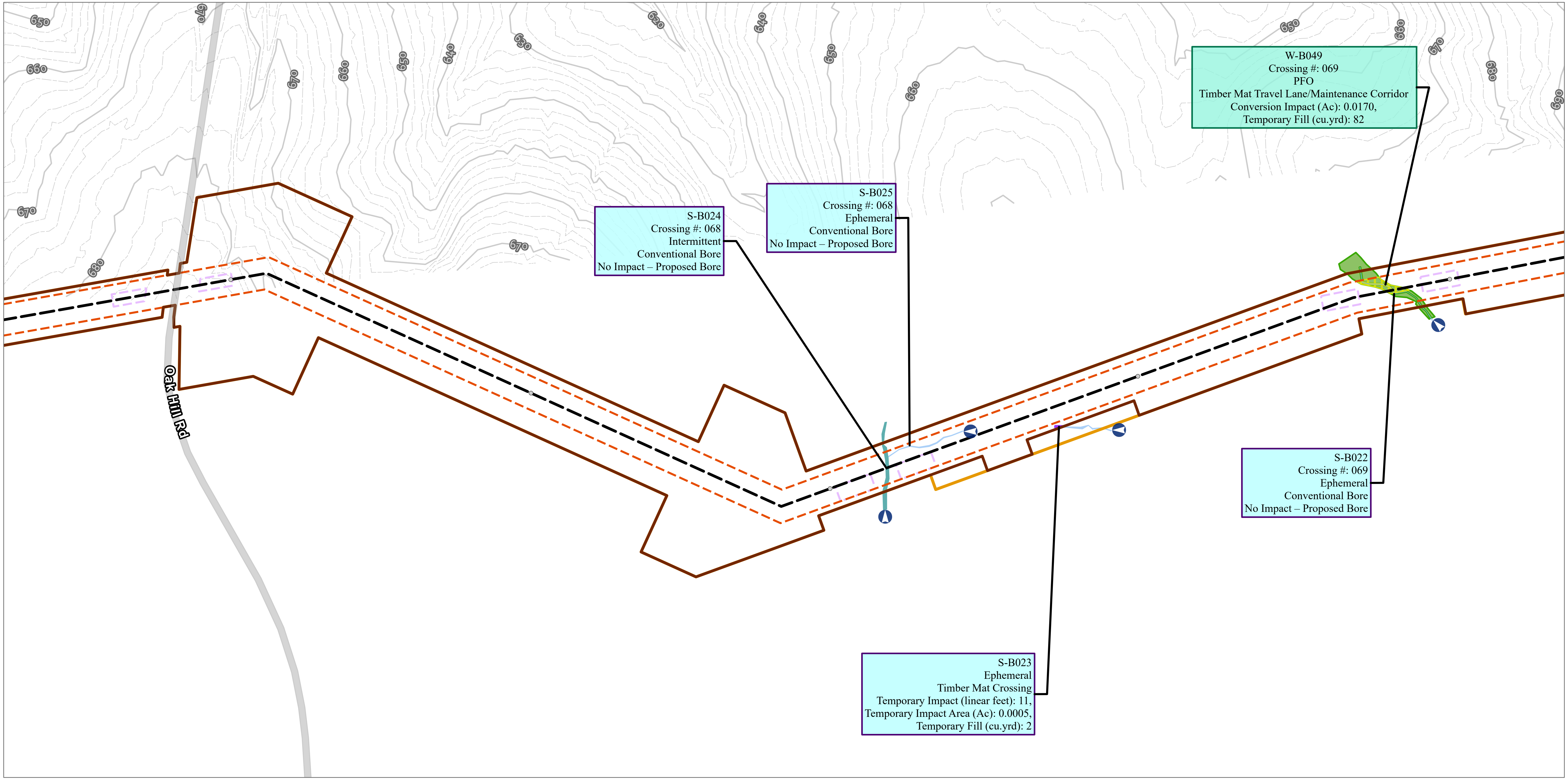
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 55
CL-055

DATE: JULY 2025

MVP SOUTHGATE



W-B049
Crossing #: 069
PFO
Timber Mat Travel Lane/Maintenance Corridor
Conversion Impact (Ac): 0.0170,
Temporary Fill (cu.yrd): 82

S-B025
Crossing #: 068
Ephemeral
Conventional Bore
No Impact – Proposed Bore

S-B024
Crossing #: 068
Intermittent
Conventional Bore
No Impact – Proposed Bore

S-B022
Crossing #: 069
Ephemeral
Conventional Bore
No Impact – Proposed Bore

S-B023
Ephemeral
Timber Mat Crossing
Temporary Impact (linear feet): 11,
Temporary Impact Area (Ac): 0.0005,
Temporary Fill (cu.yrd): 2

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ━ ━ H-650 PIPELINE
- ― PERMANENT ACCESS ROAD
- ― TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

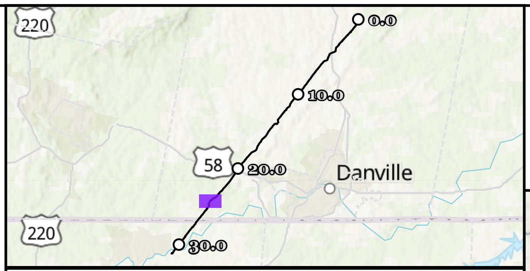
STREAM IMPACT
- ◯ TEMPORARY
- ◯ PERMANENT

STREAM TYPE
- ● EPHEMERAL
- ● INTERMITTENT
- ● PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- ● PALUSTRINE EMERGENT
- ● PALUSTRINE FORESTED
- ● PALUSTRINE SCRUB-SHRUB
- ● PALUSTRINE UNCONSOLIDATED BOTTOM

- ▭ COUNTY BOUNDARY
- ▭ STATE BOUNDARY
- ― ELEVATION - CONTOUR - INDEX
- ― ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

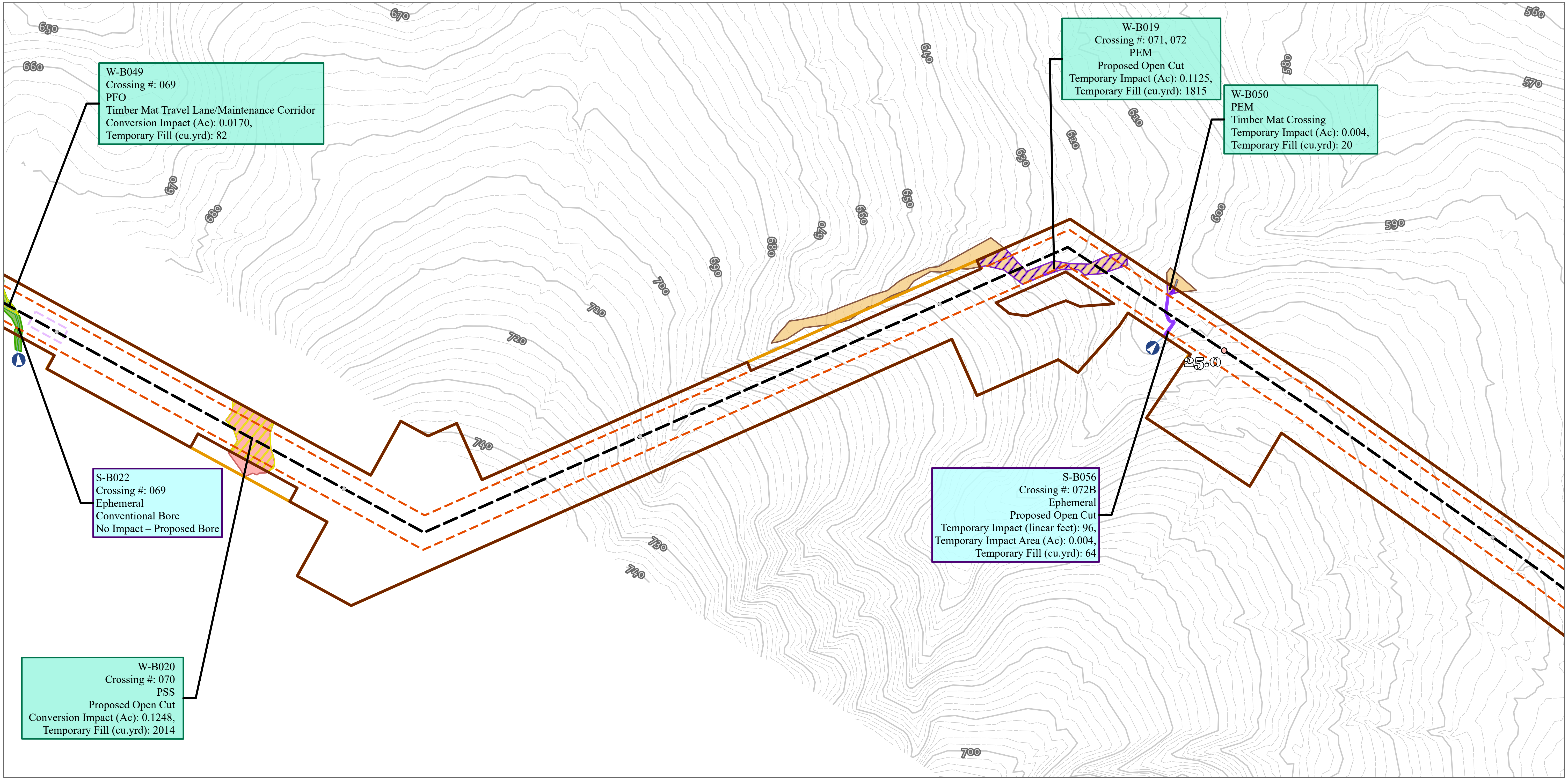
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 56
CL-056

DATE: JULY 2025

MVP SOUTHGATE



W-B049
Crossing #: 069
PFO
Timber Mat Travel Lane/Maintenance Corridor
Conversion Impact (Ac): 0.0170,
Temporary Fill (cu.yrd): 82

W-B019
Crossing #: 071, 072
PEM
Proposed Open Cut
Temporary Impact (Ac): 0.1125,
Temporary Fill (cu.yrd): 1815

W-B050
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.004,
Temporary Fill (cu.yrd): 20

S-B022
Crossing #: 069
Ephemeral
Conventional Bore
No Impact – Proposed Bore

S-B056
Crossing #: 072B
Ephemeral
Proposed Open Cut
Temporary Impact (linear feet): 96,
Temporary Impact Area (Ac): 0.004,
Temporary Fill (cu.yrd): 64

W-B020
Crossing #: 070
PSS
Proposed Open Cut
Conversion Impact (Ac): 0.1248,
Temporary Fill (cu.yrd): 2014

- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

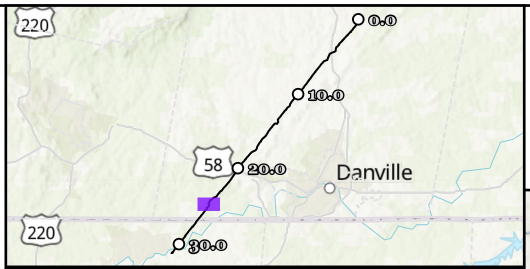
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

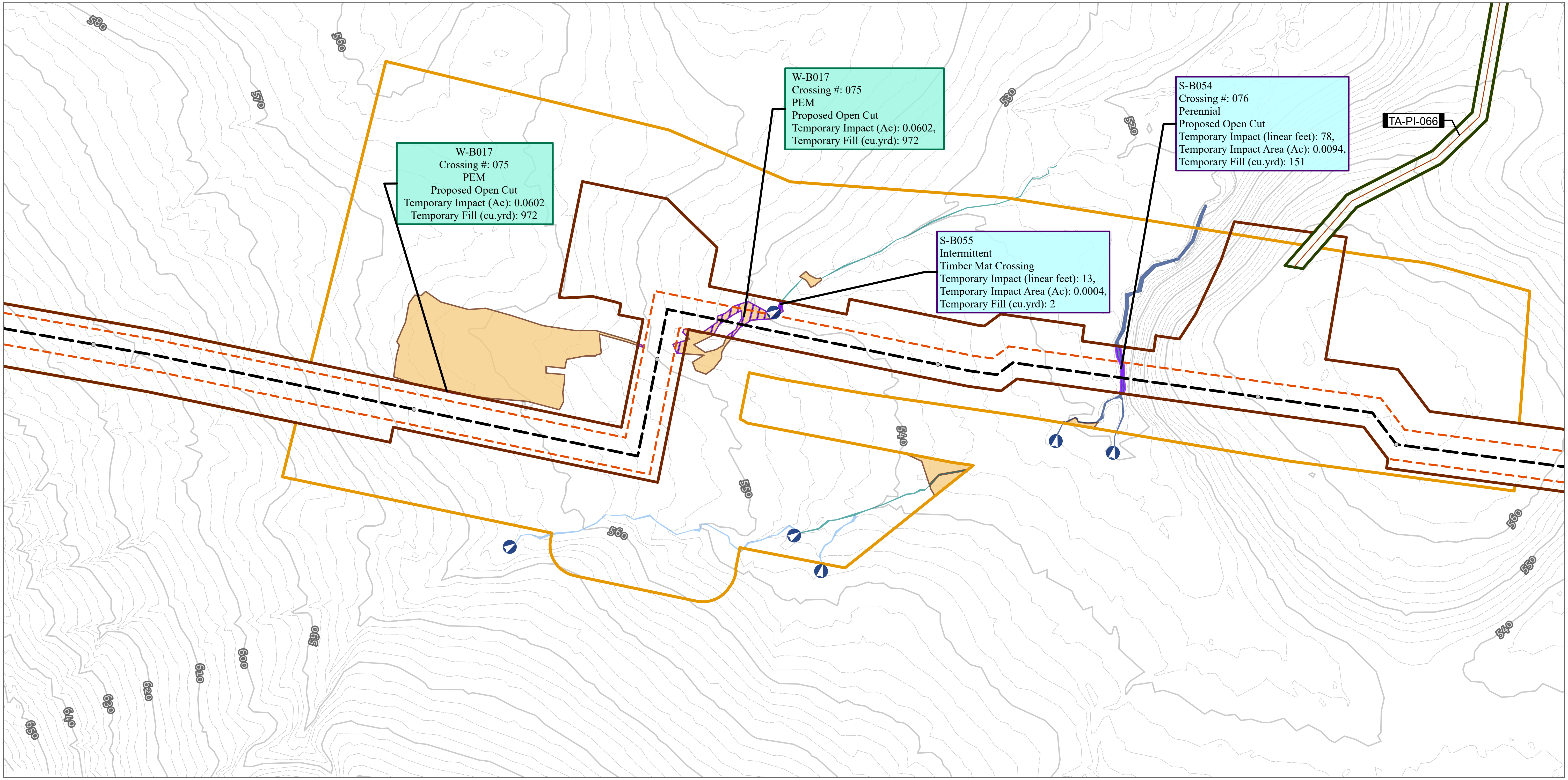
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 57
CL-057

DATE: JULY 2025

MVP SOUTHGATE



W-B017
Crossing #: 075
PEM
Proposed Open Cut
Temporary Impact (Ac): 0.0602
Temporary Fill (cu.yrd): 972

W-B017
Crossing #: 075
PEM
Proposed Open Cut
Temporary Impact (Ac): 0.0602,
Temporary Fill (cu.yrd): 972

S-B054
Crossing #: 076
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 78,
Temporary Impact Area (Ac): 0.0094,
Temporary Fill (cu.yrd): 151

S-B055
Intermittent
Timber Mat Crossing
Temporary Impact (linear feet): 13,
Temporary Impact Area (Ac): 0.0004,
Temporary Fill (cu.yrd): 2

- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- — PERMANENT ACCESS ROAD
- — TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

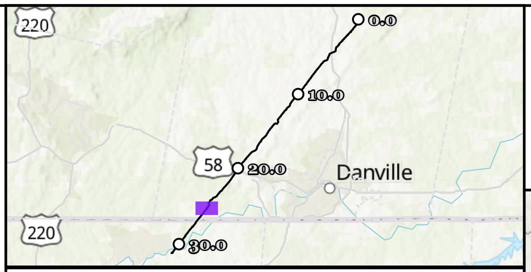
STREAM IMPACT
- ▱ TEMPORARY
- ▱ PERMANENT

STREAM TYPE
- ▬ EPHEMERAL
- ▬ INTERMITTENT
- ▬ PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- ▬ PALUSTRINE EMERGENT
- ▬ PALUSTRINE FORESTED
- ▬ PALUSTRINE SCRUB-SHRUB
- ▬ PALUSTRINE UNCONSOLIDATED BOTTOM

- ▭ COUNTY BOUNDARY
- ▭ STATE BOUNDARY
- — ELEVATION - CONTOUR - INDEX
- — ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

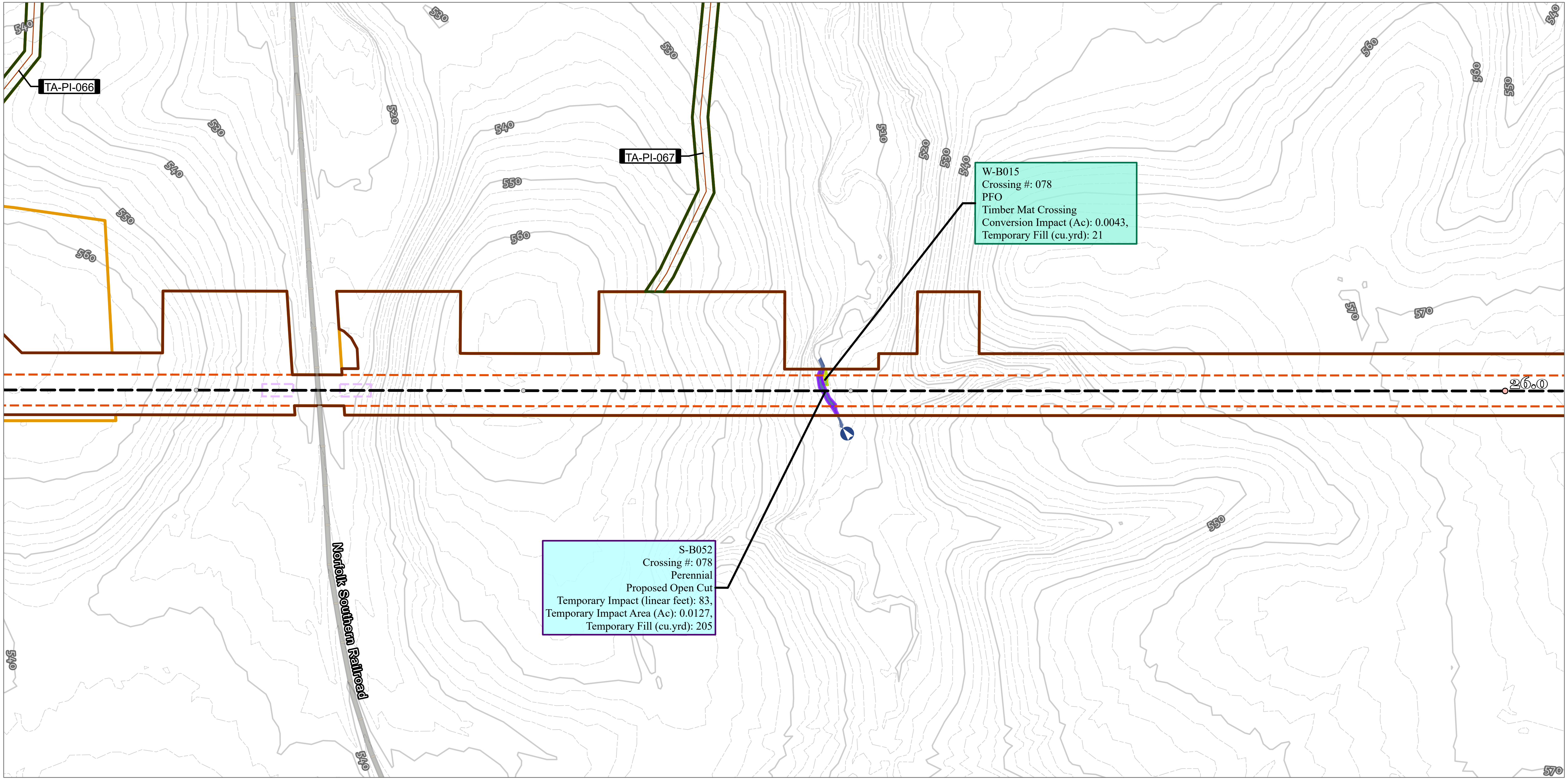
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 58
CL-058

DATE: JULY 2025

MVP
SOUTHGATE



W-B015
Crossing #: 078
PFO
Timber Mat Crossing
Conversion Impact (Ac): 0.0043,
Temporary Fill (cu.yrd): 21

S-B052
Crossing #: 078
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 83,
Temporary Impact Area (Ac): 0.0127,
Temporary Fill (cu.yrd): 205

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- ─ PERMANENT ACCESS ROAD
- ─ TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

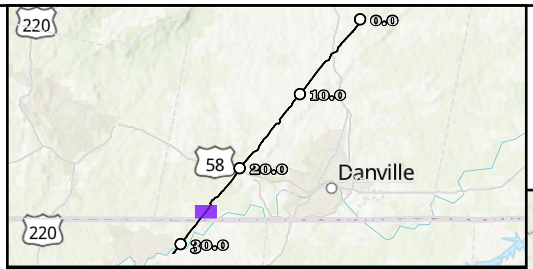
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400
1" = 200'

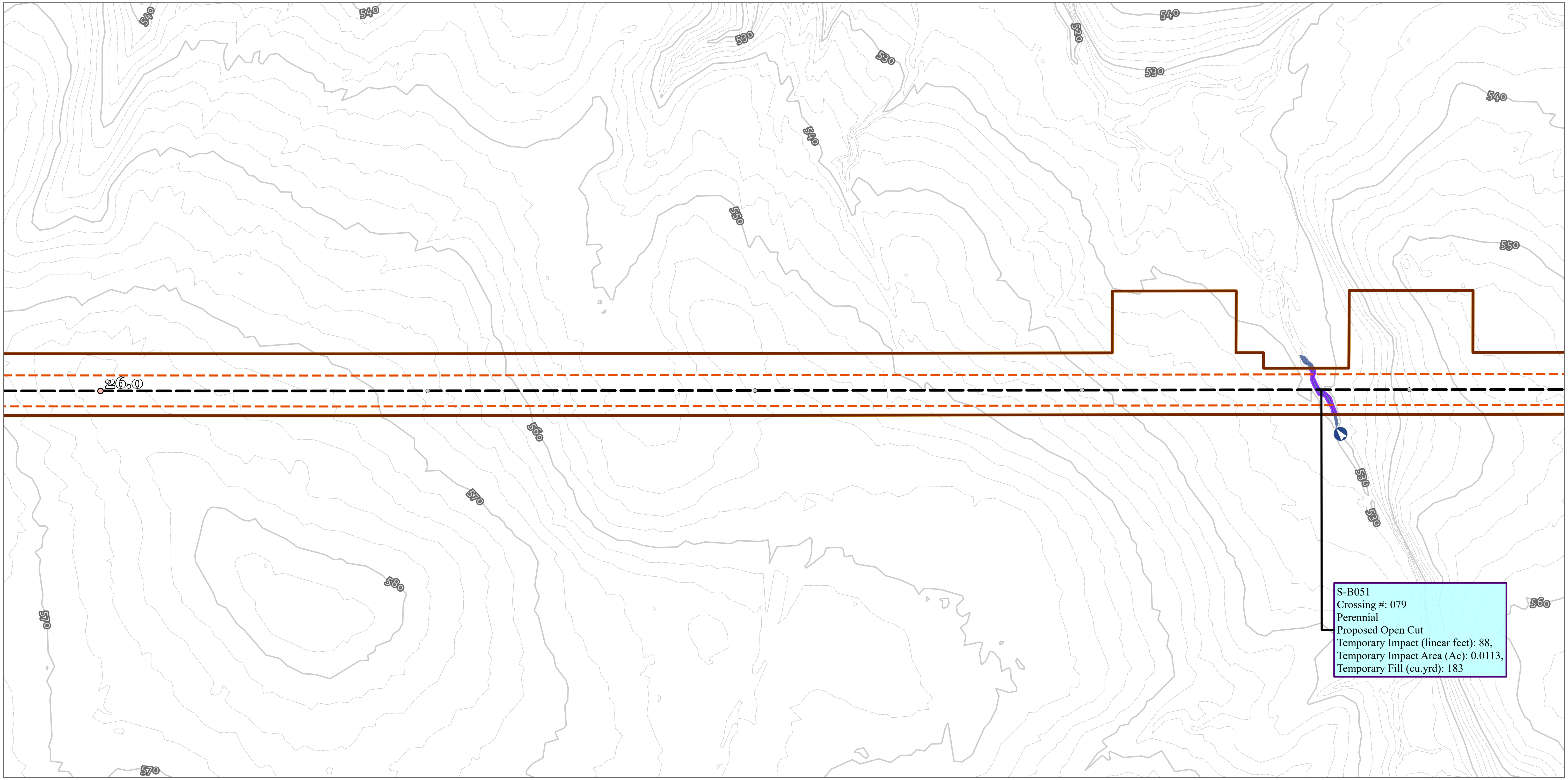
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 59
CL-059

DATE: JULY 2025

MVP SOUTHGATE



S-B051
Crossing #: 079
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 88,
Temporary Impact Area (Ac): 0.0113,
Temporary Fill (cu.yrd): 183

- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- ─ PERMANENT ACCESS ROAD
- ─ TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

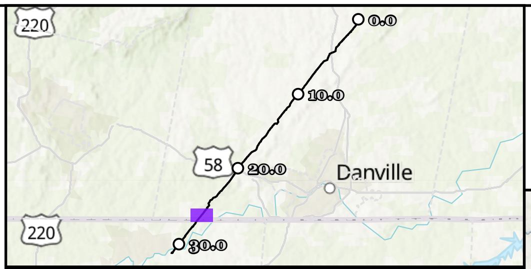
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- ▭ COUNTY BOUNDARY
- ▭ STATE BOUNDARY
- ─ ELEVATION - CONTOUR - INDEX
- ─ ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

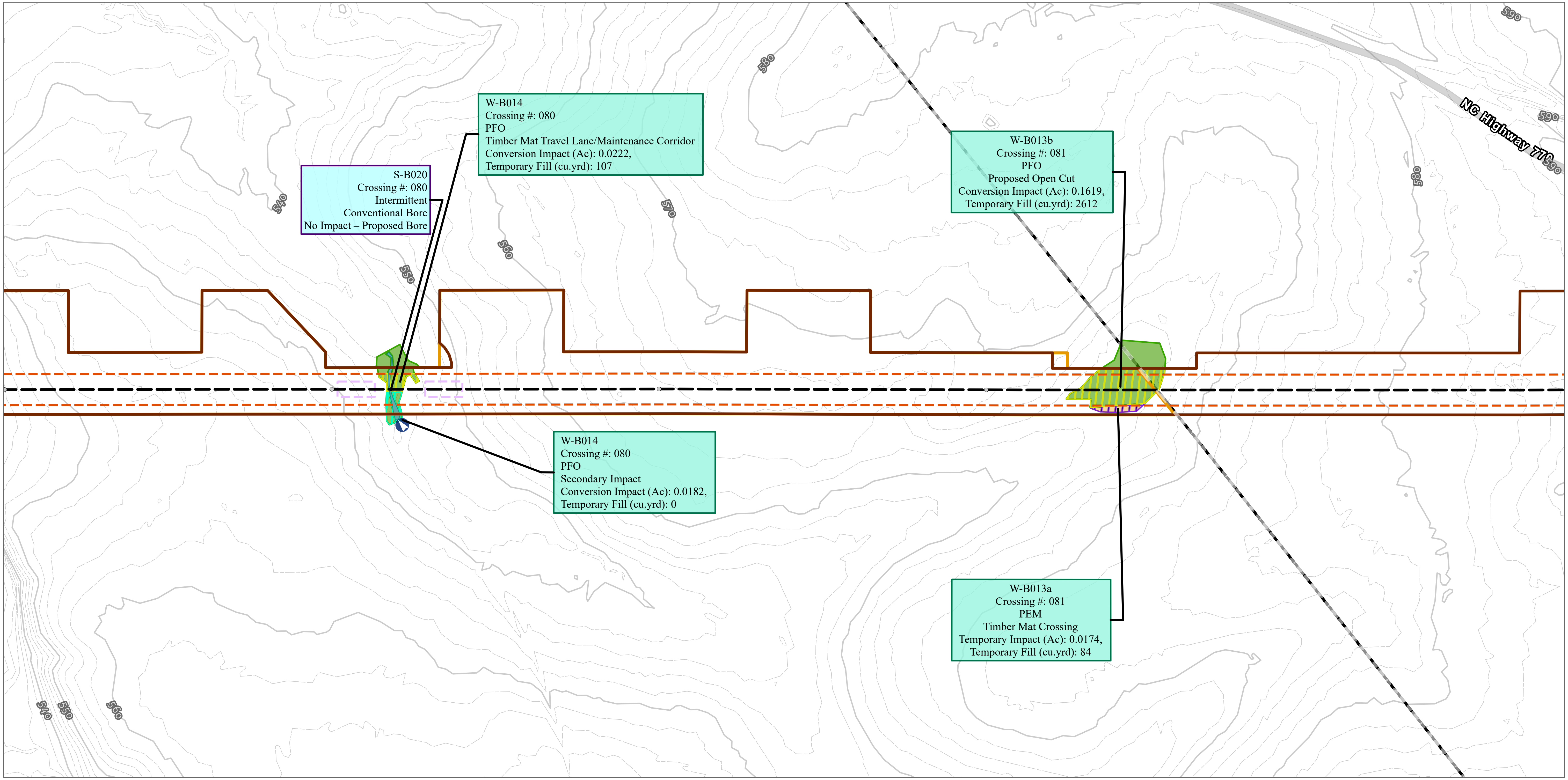
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 60
CL-060

DATE: JULY 2025

MVP SOUTHGATE


590
580
NC Highway 770
590
590
585
W-B014
Crossing #: 080
PFO
Timber Mat Travel Lane/Maintenance Corridor
Conversion Impact (Ac): 0.0222,
Temporary Fill (cu.yrd): 107
S-B020
Crossing #: 080
Intermittent
Conventional Bore
No Impact – Proposed Bore
W-B013b
Crossing #: 081
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.1619,
Temporary Fill (cu.yrd): 2612
540
570
560
550
W-B014
Crossing #: 080
PFO
Secondary Impact
Conversion Impact (Ac): 0.0182,
Temporary Fill (cu.yrd): 0
W-B013a
Crossing #: 081
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.0174,
Temporary Fill (cu.yrd): 84
540
550
560

- ∘ TENTH MILE POST
- ∘ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- ━ ━ H-650 PIPELINE
- ― PERMANENT ACCESS ROAD
- ― TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ● STREAM FLOW DIRECTION

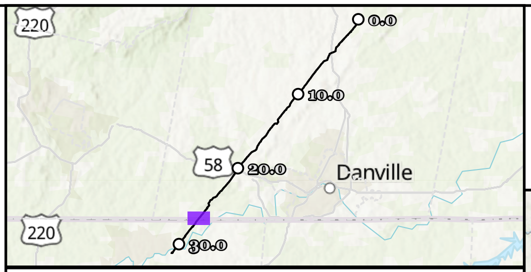
STREAM IMPACT
- ▱ TEMPORARY
- ▱ PERMANENT

STREAM TYPE
- ▬ EPHEMERAL
- ▬ INTERMITTENT
- ▬ PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- ▬ PALUSTRINE EMERGENT
- ▬ PALUSTRINE FORESTED
- ▬ PALUSTRINE SCRUB-SHRUB
- ▬ PALUSTRINE UNCONSOLIDATED BOTTOM

- ▭ COUNTY BOUNDARY
- ▭ STATE BOUNDARY
- ― ELEVATION - CONTOUR - INDEX
- ― ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

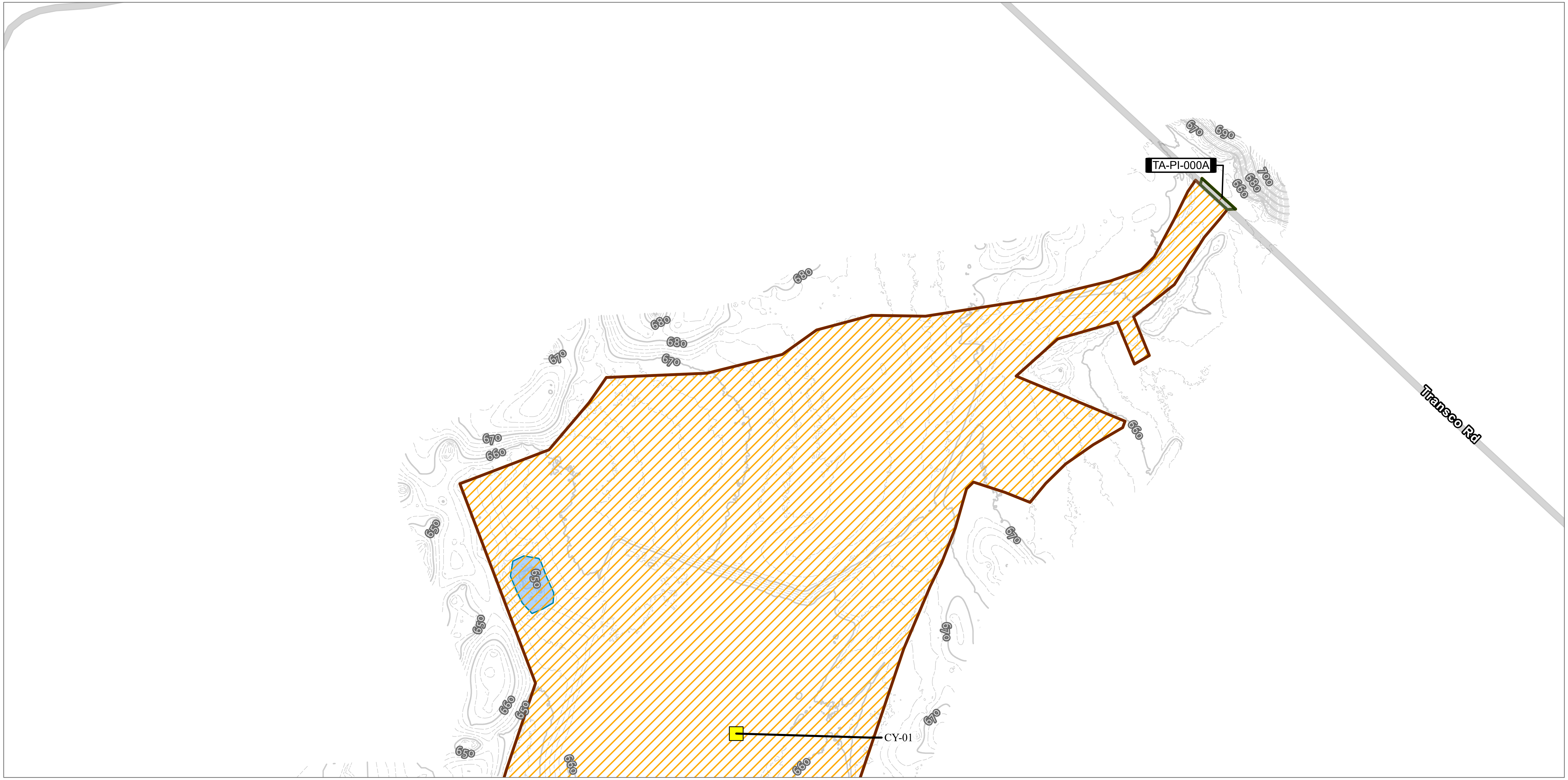
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 61
CL-061

DATE: JULY 2025

MVP SOUTHGATE



- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- — PERMANENT ACCESS ROAD
- — TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

STREAM IMPACT

- TEMPORARY
- PERMANENT

STREAM TYPE

- EPHEMERAL
- INTERMITTENT
- PERENNIAL

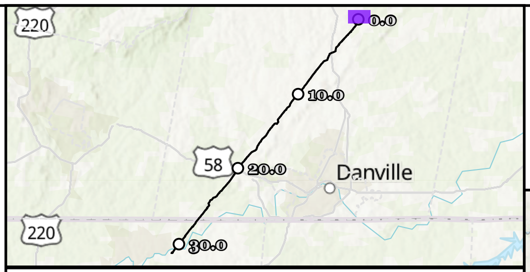
WETLAND IMPACT

- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE

- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

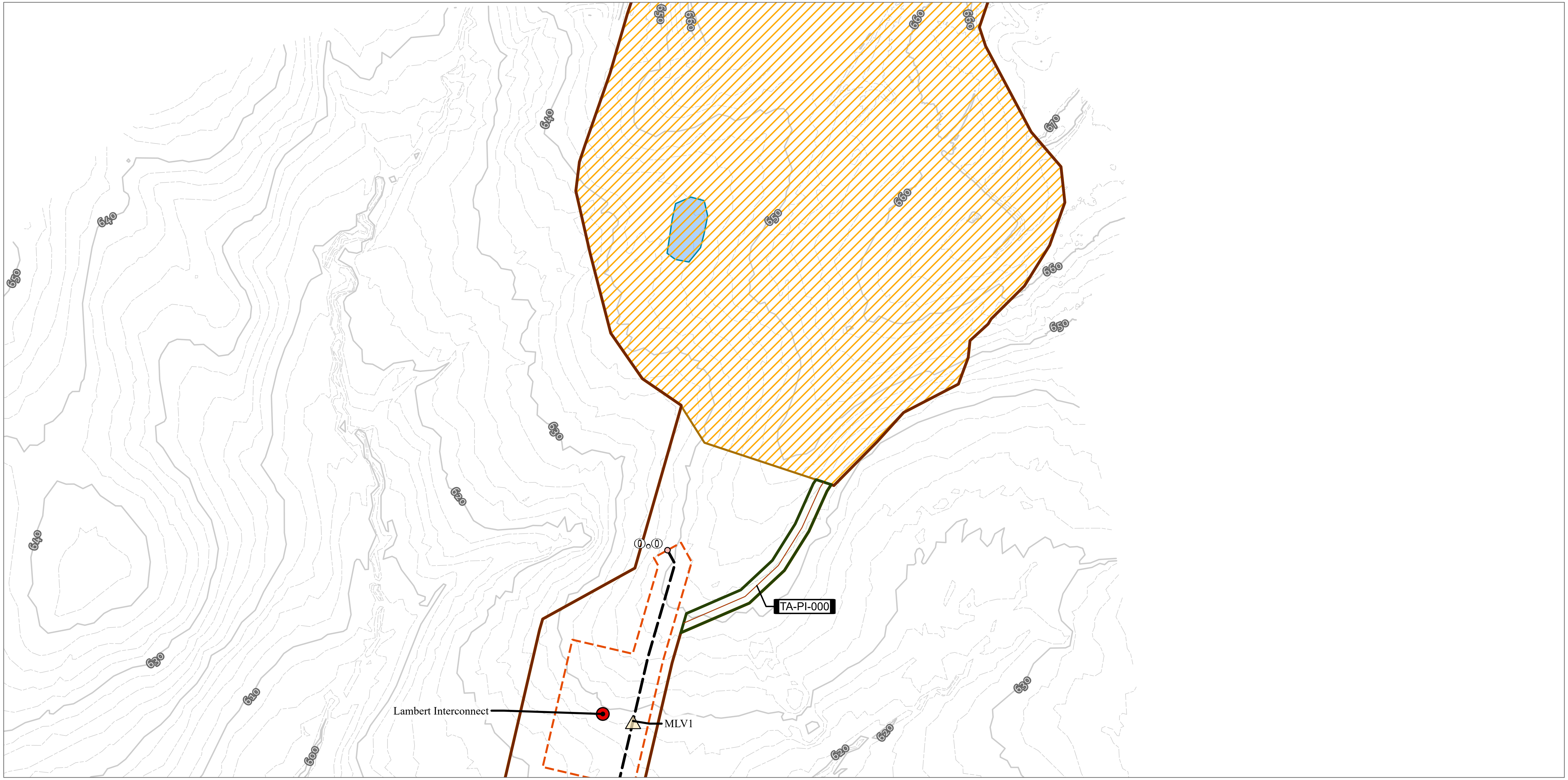
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 62
AR-001

DATE: JULY 2025

MVP SOUTHGATE



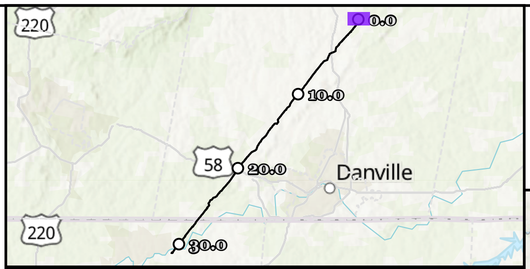
TENTHE MILE POST
MILE POST
△ MAIN LINE VALVE
● METER STATIONS
🟨 CONTRACTOR YARD
H-650 PIPELINE
PERMANENT ACCESS ROAD
TEMPORARY ACCESS ROAD

TEMPORARY ACCESS ROAD
PERMANENT ACCESS ROAD
LIMITS OF CONSTRUCTION WORKSPACE
OPERATIONAL WORKSPACE
BORE PITS
LAYDOWN YARD / STAGING AREA
SURVEY AREA

STREAM FLOW DIRECTION
STREAM IMPACT
TEMPORARY
PERMANENT
STREAM TYPE
EPHEMERAL
INTERMITTENT
PERENNIAL

WETLAND IMPACT
▨ TEMPORARY
▨ CONVERSION
▨ SECONDARY IMPACT
WETLAND TYPE
PALUSTRINE EMERGENT
PALUSTRINE FORESTED
PALUSTRINE SCRUB-SHRUB
PALUSTRINE UNCONSOLIDATED BOTTOM

COUNTY BOUNDARY
STATE BOUNDARY
ELEVATION - CONTOUR - INDEX
ELEVATION - CONTOUR - INTERMEDIATE



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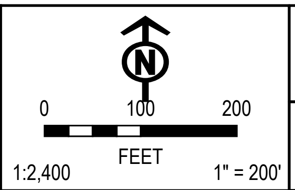


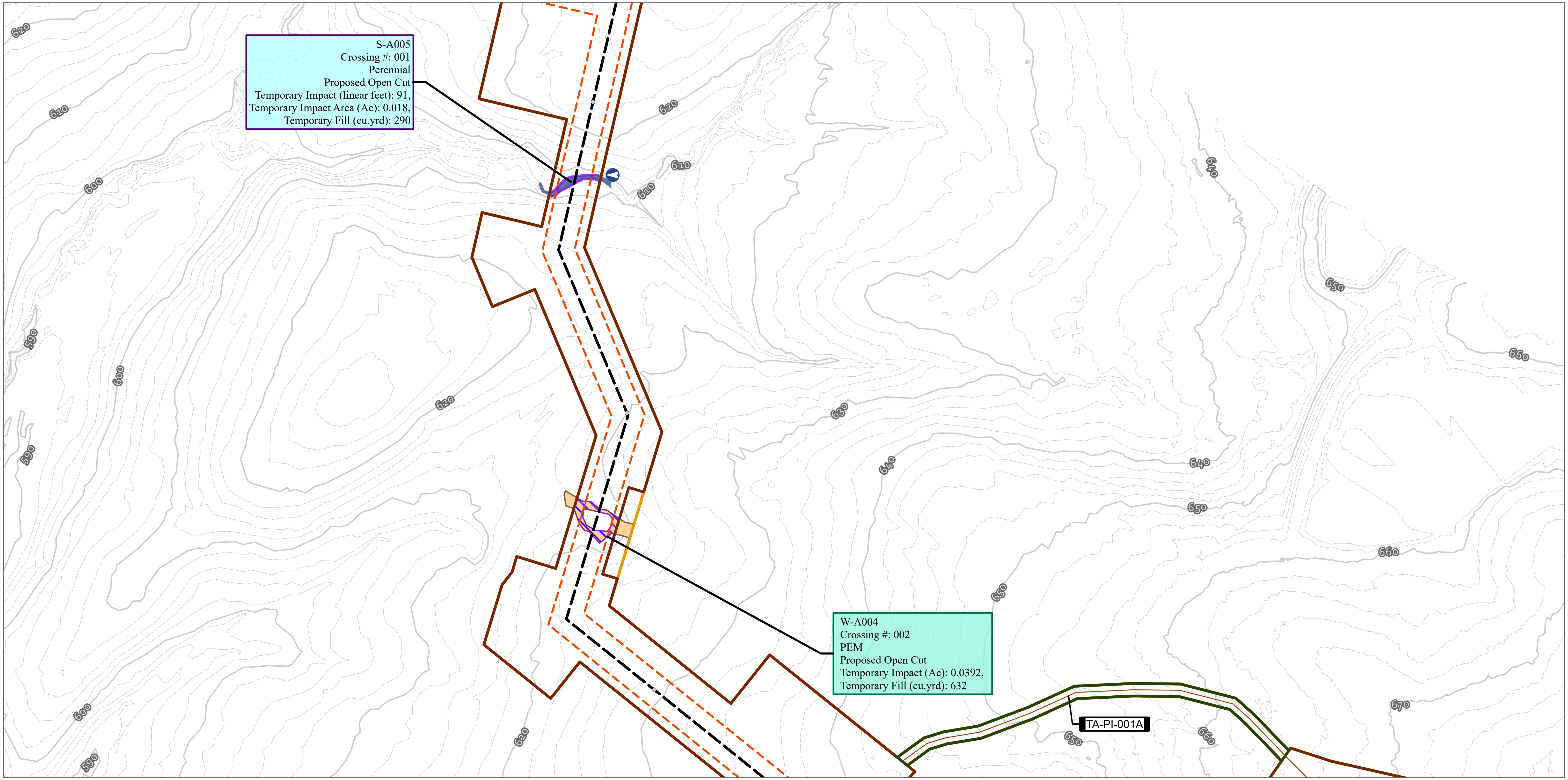
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 63
AR-002

DATE: JULY 2025

MVP SOUTHGATE


S-A005
Crossing #: 001
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 91,
Temporary Impact Area (Ac): 0.018,
Temporary Fill (cu.yrd): 290
W-A004
Crossing #: 002
PEM
Proposed Open Cut
Temporary Impact (Ac): 0.0392,
Temporary Fill (cu.yrd): 632
TA-PI-001A
620
610
600
590
630
640
650
660
670

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

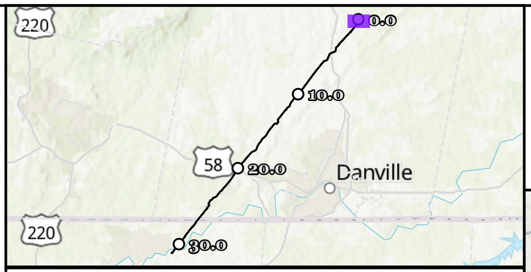
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

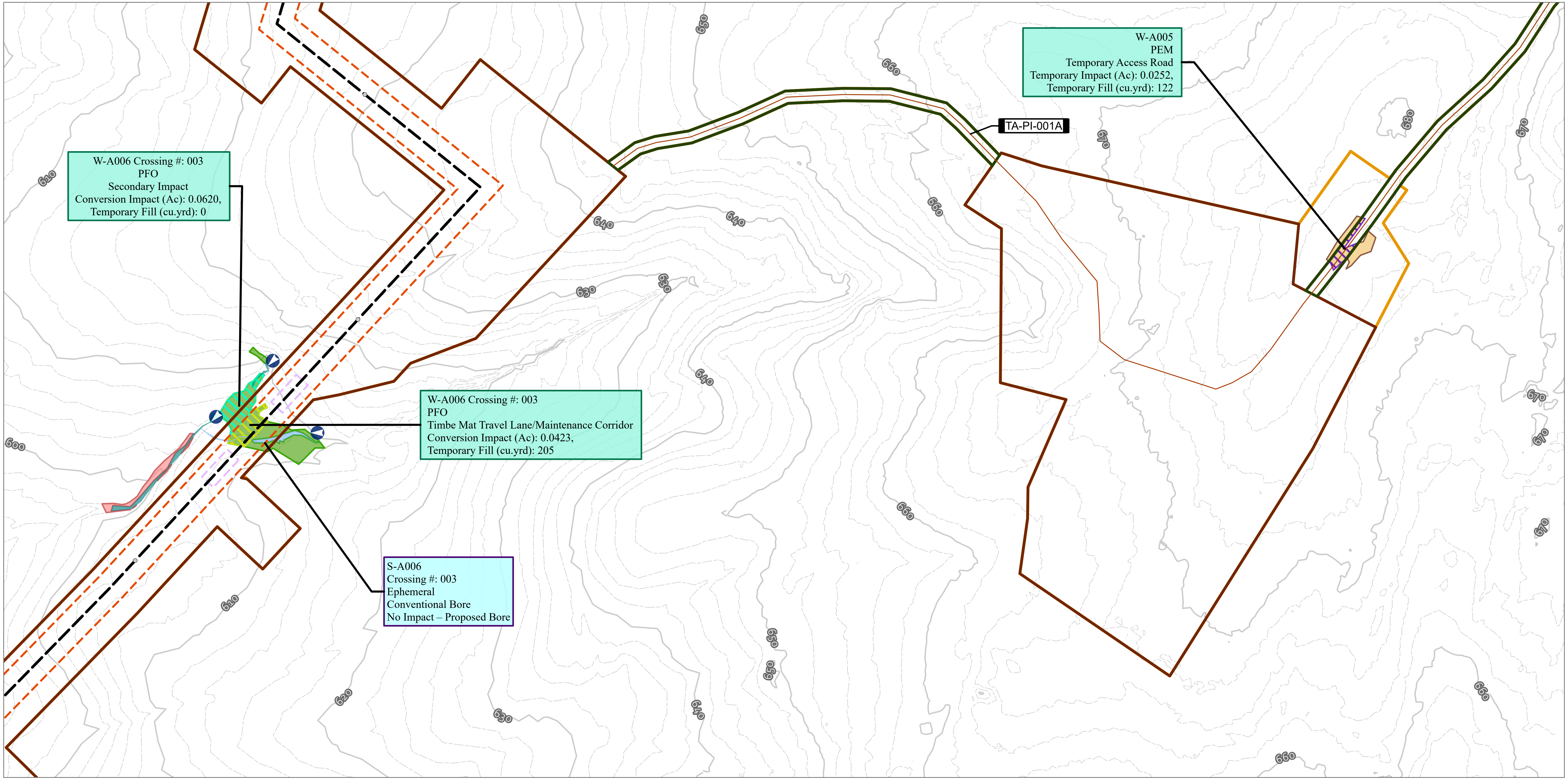
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 64
AR-003

DATE: JULY 2025

MVP SOUTHGATE



W-A005
PEM
Temporary Access Road
Temporary Impact (Ac): 0.0252,
Temporary Fill (cu.yrd): 122

W-A006 Crossing #: 003
PFO
Secondary Impact
Conversion Impact (Ac): 0.0620,
Temporary Fill (cu.yrd): 0

W-A006 Crossing #: 003
PFO
Timbe Mat Travel Lane/Maintenance Corridor
Conversion Impact (Ac): 0.0423,
Temporary Fill (cu.yrd): 205

S-A006
Crossing #: 003
Ephemeral
Conventional Bore
No Impact – Proposed Bore

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- ― PERMANENT ACCESS ROAD
- ― TEMPORARY ACCESS ROAD
- ▭ TEMPORARY ACCESS ROAD
- ▭ PERMANENT ACCESS ROAD
- ▭ LIMITS OF CONSTRUCTION WORKSPACE
- ▭ OPERATIONAL WORKSPACE
- ▭ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▭ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

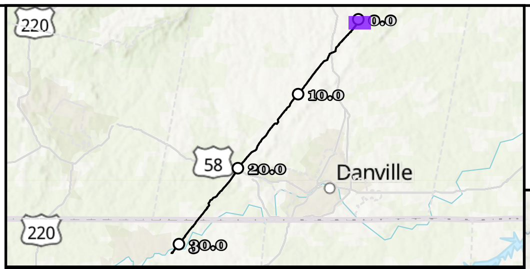
STREAM IMPACT
- ▭ TEMPORARY
- ▭ PERMANENT

STREAM TYPE
- ▬ EPHEMERAL
- ▬ INTERMITTENT
- ▬ PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- ▬ PALUSTRINE EMERGENT
- ▬ PALUSTRINE FORESTED
- ▬ PALUSTRINE SCRUB-SHRUB
- ▬ PALUSTRINE UNCONSOLIDATED BOTTOM

- ▭ COUNTY BOUNDARY
- ▭ STATE BOUNDARY
- ― ELEVATION - CONTOUR - INDEX
- ― ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

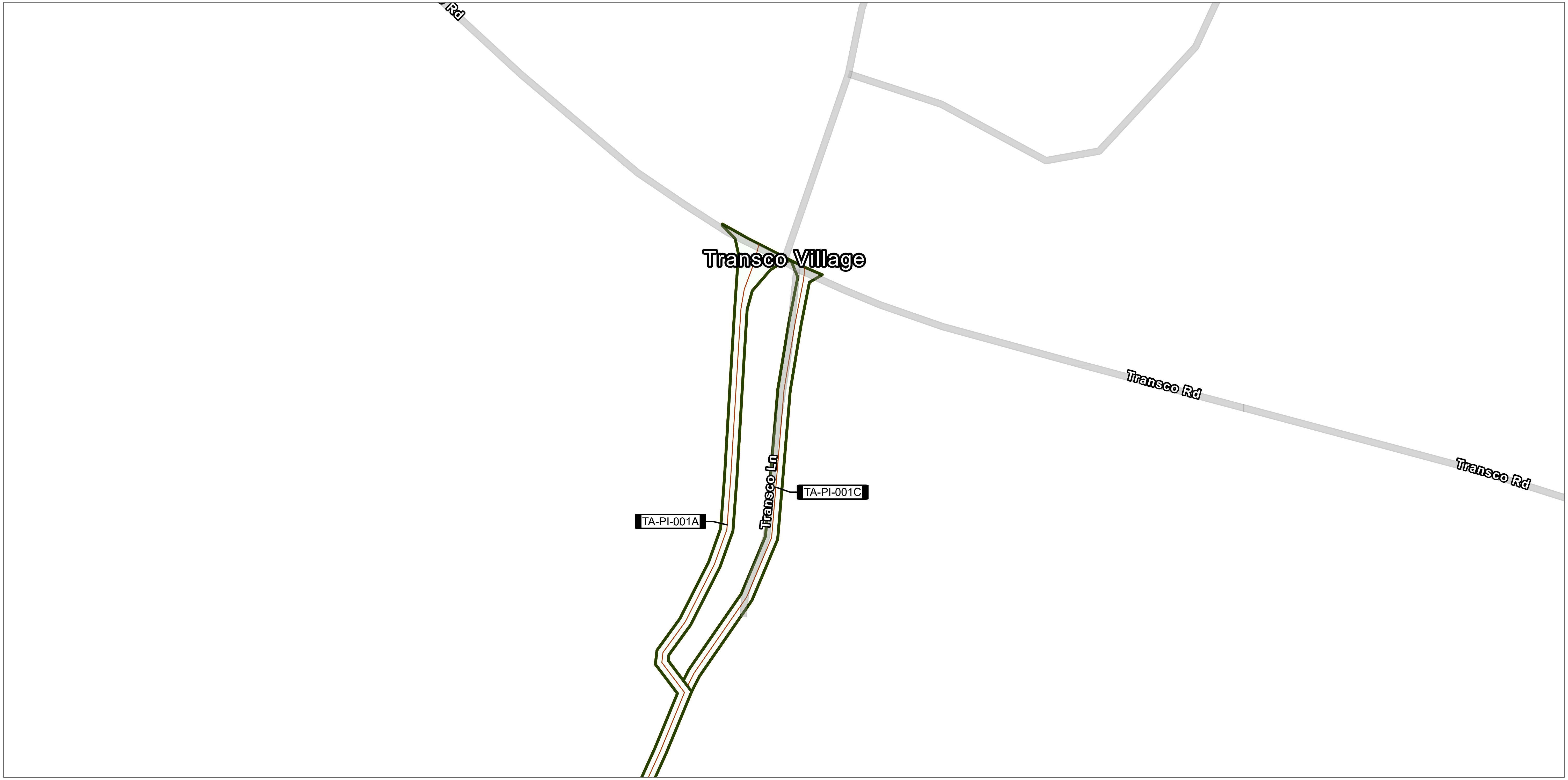
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 65
AR-004

DATE: JULY 2025

MVP
SOUTHGATE



- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

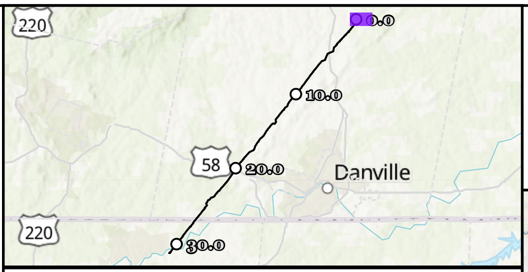
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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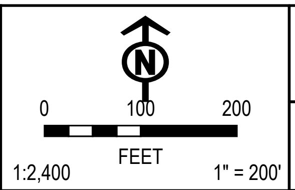


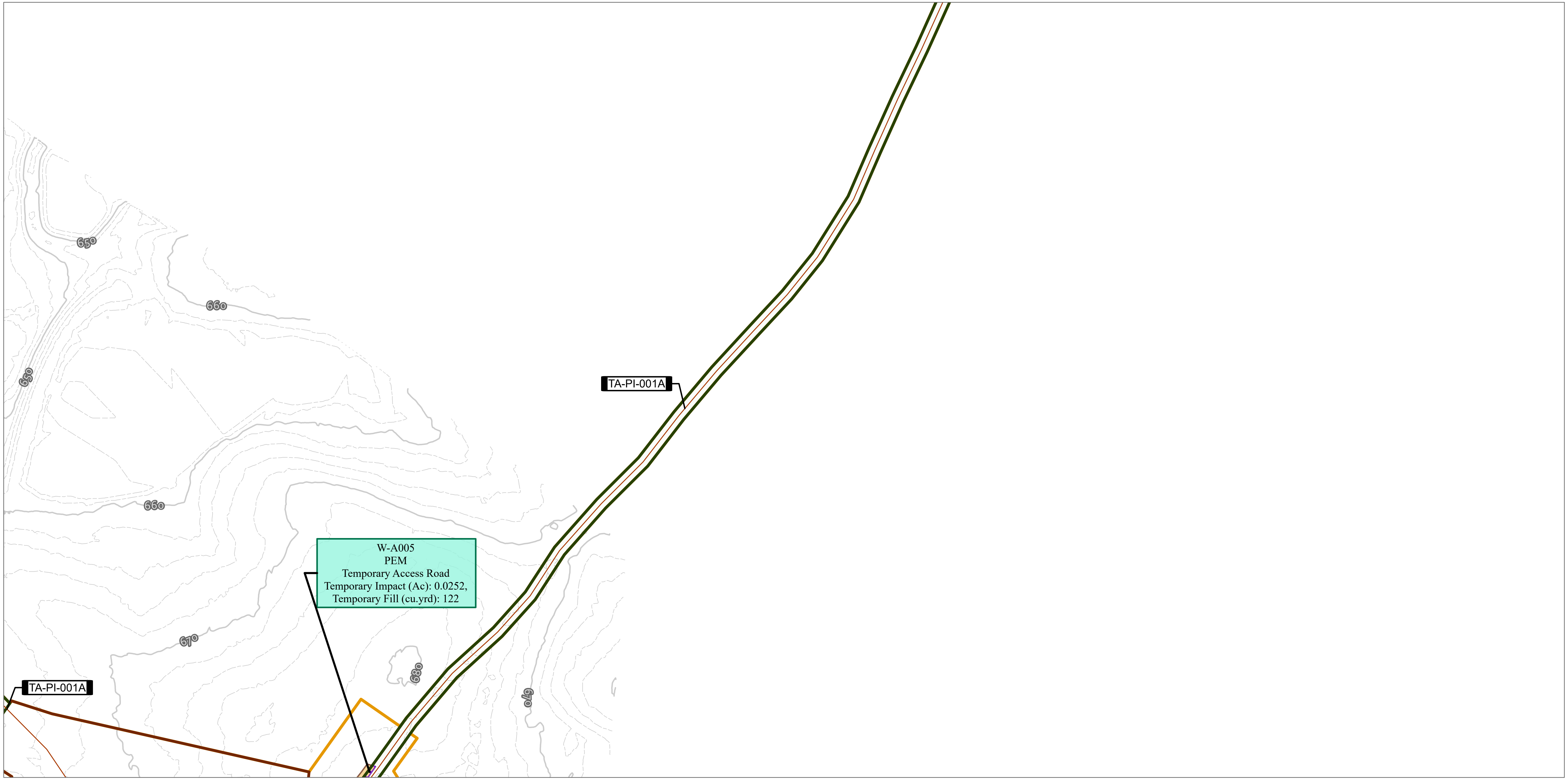
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 66
AR-005

DATE: JULY 2025

MVP SOUTHGATE



W-A005
PEM
Temporary Access Road
Temporary Impact (Ac): 0.0252,
Temporary Fill (cu.yrd): 122

- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

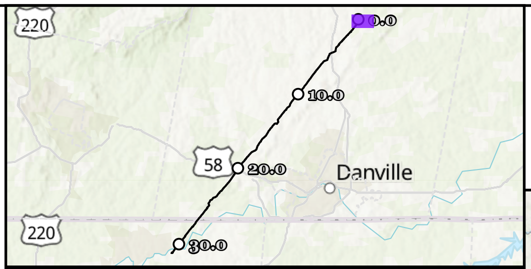
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

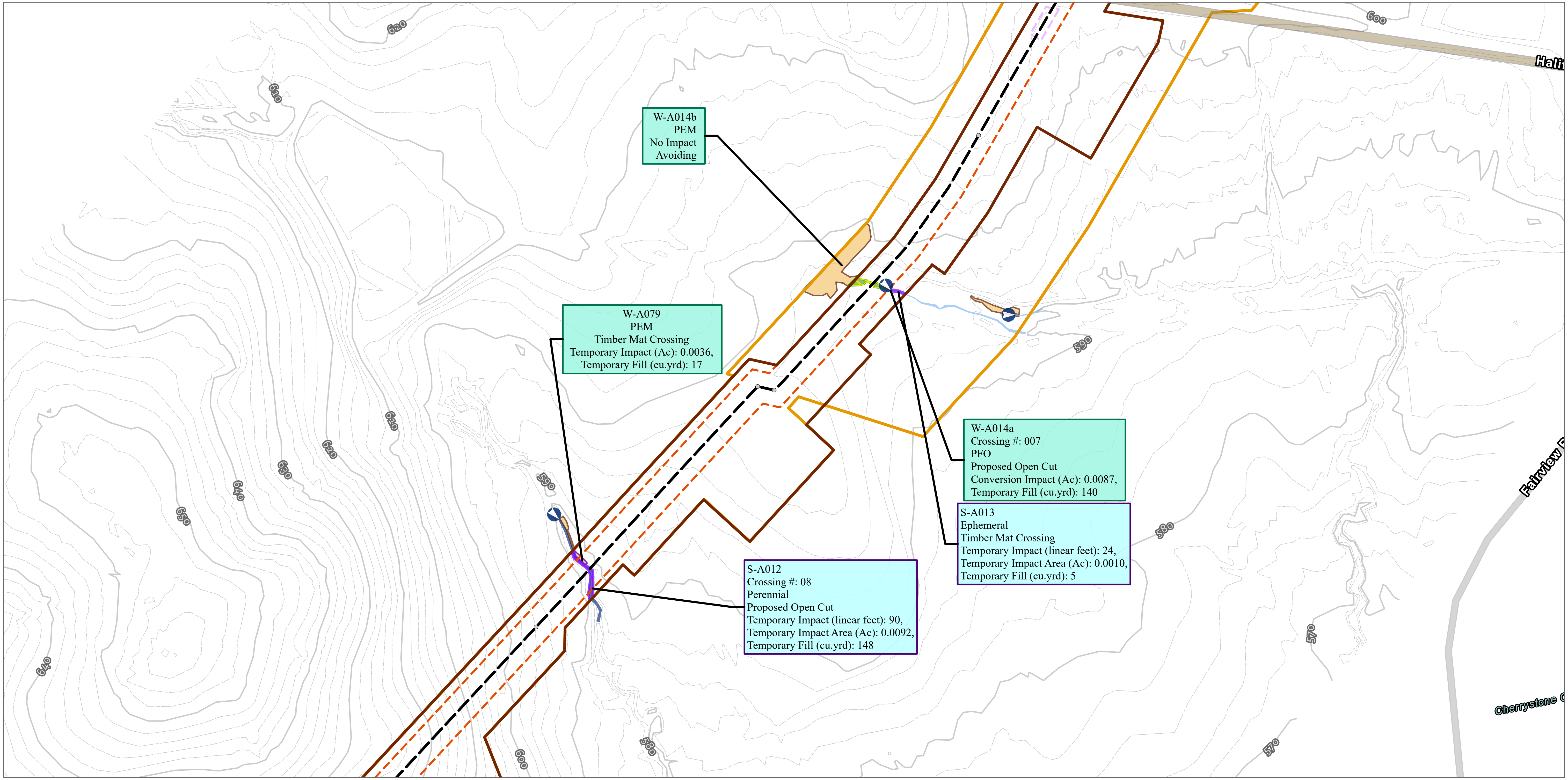
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 67
AR-006

DATE: JULY 2025

MVP SOUTHGATE


W-A014b
PEM
No Impact
Avoiding
W-A079
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.0036,
Temporary Fill (cu.yrd): 17
W-A014a
Crossing #: 007
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.0087,
Temporary Fill (cu.yrd): 140
S-A013
Ephemeral
Timber Mat Crossing
Temporary Impact (linear feet): 24,
Temporary Impact Area (Ac): 0.0010,
Temporary Fill (cu.yrd): 5
S-A012
Crossing #: 08
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 90,
Temporary Impact Area (Ac): 0.0092,
Temporary Fill (cu.yrd): 148
620
610
620
630
640
650
610
620
590
640
600
580
590
580
570
570
600
Hali
Fairview R
Cherrystone C

- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

STREAM IMPACT

- TEMPORARY
- PERMANENT

STREAM TYPE

- EPHEMERAL
- INTERMITTENT
- PERENNIAL

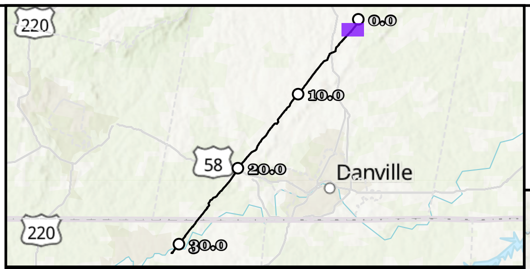
WETLAND IMPACT

- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE

- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400
1" = 200'

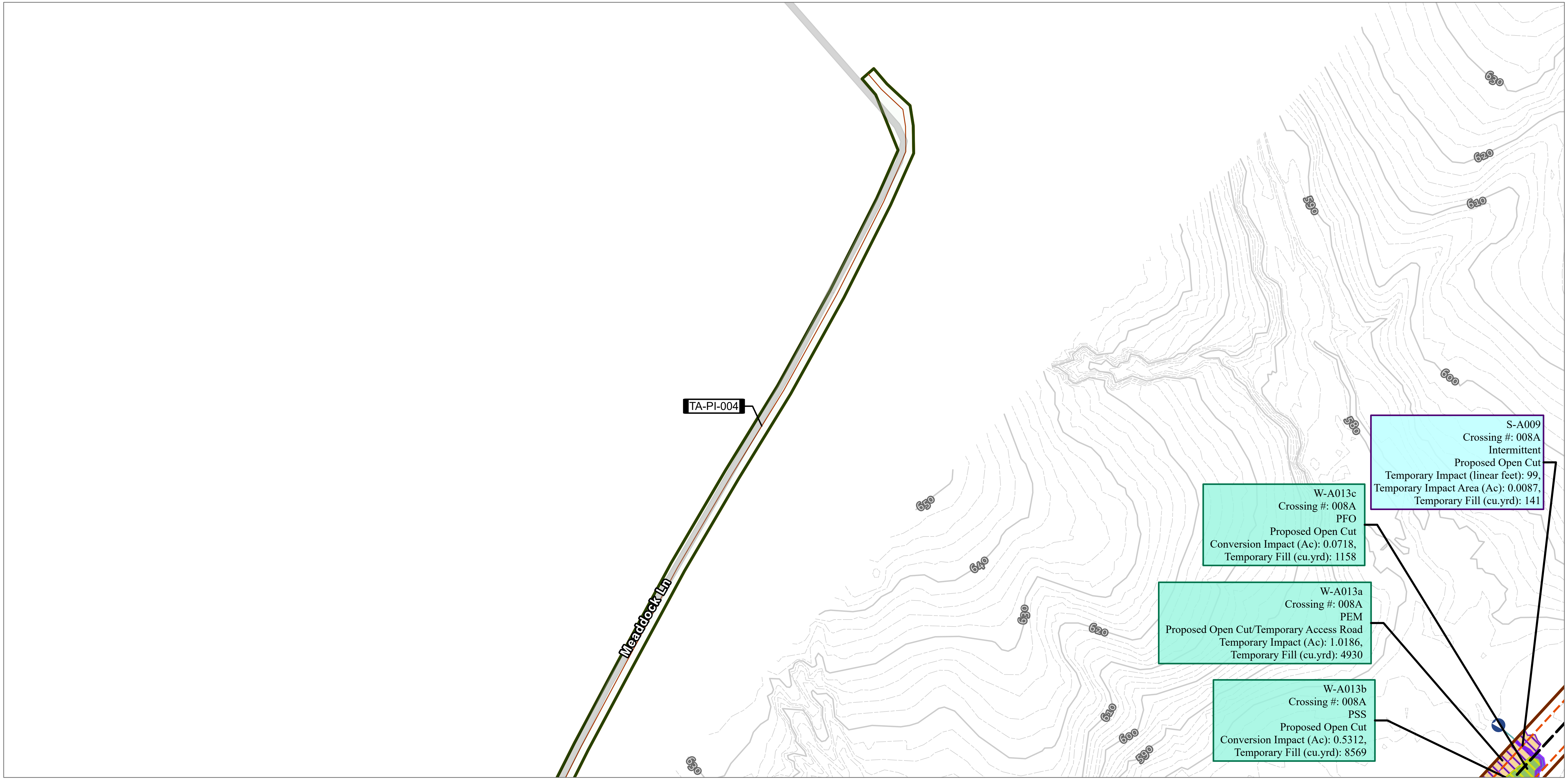
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 68
AR-007

DATE: JULY 2025

MVP SOUTHGATE



S-A009
Crossing #: 008A
Intermittent
Proposed Open Cut
Temporary Impact (linear feet): 99,
Temporary Impact Area (Ac): 0.0087,
Temporary Fill (cu.yrd): 141

W-A013c
Crossing #: 008A
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.0718,
Temporary Fill (cu.yrd): 1158

W-A013a
Crossing #: 008A
PEM
Proposed Open Cut/Temporary Access Road
Temporary Impact (Ac): 1.0186,
Temporary Fill (cu.yrd): 4930

W-A013b
Crossing #: 008A
PSS
Proposed Open Cut
Conversion Impact (Ac): 0.5312,
Temporary Fill (cu.yrd): 8569

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

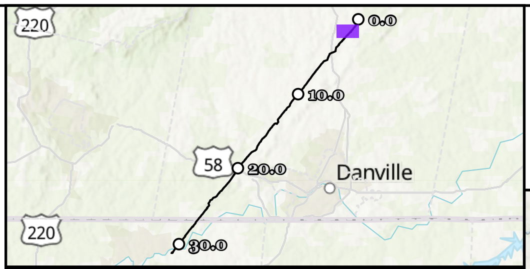
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

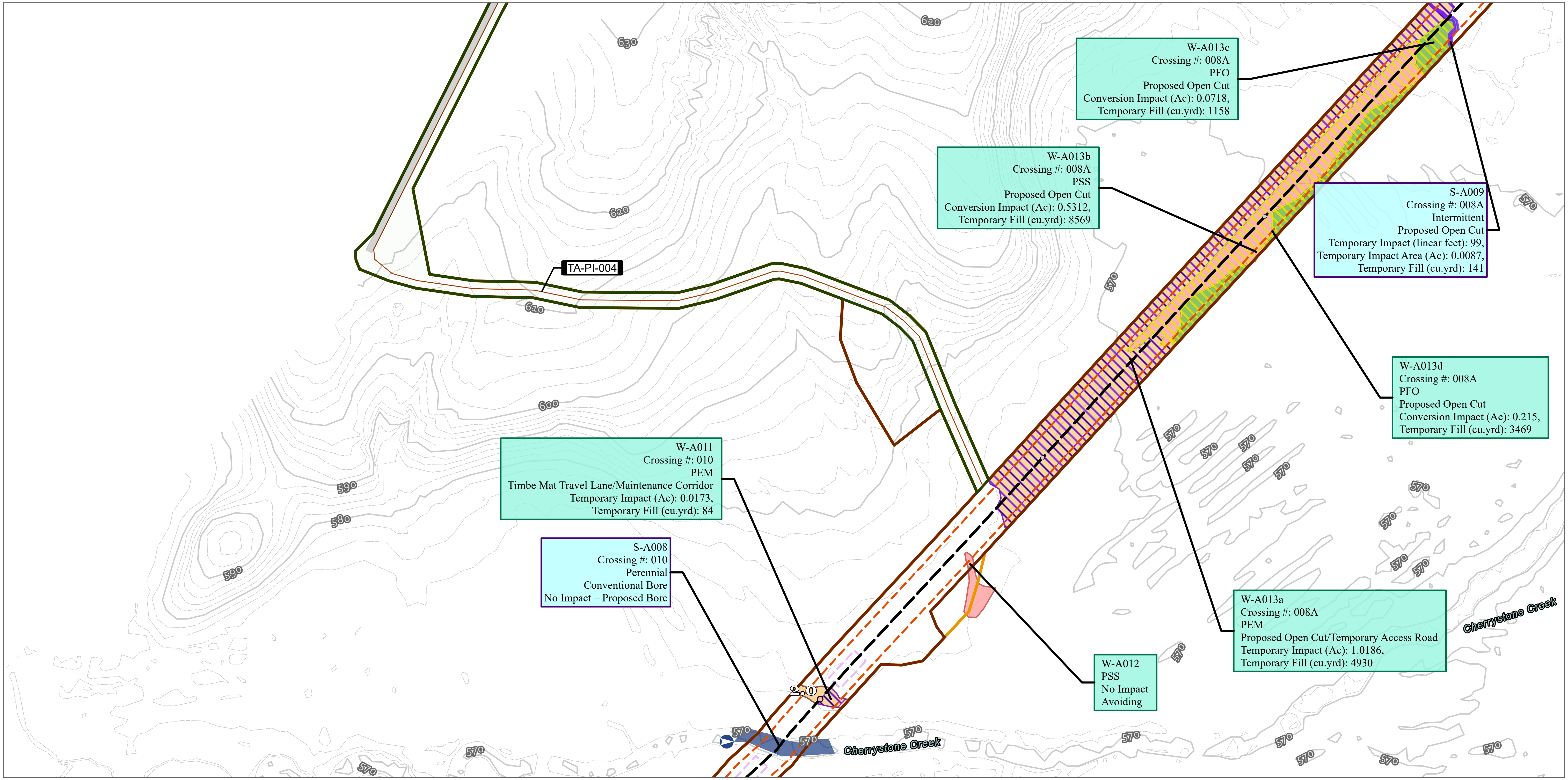
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 69
AR-008

DATE: JULY 2025

MVP SOUTHGATE



W-A013c
Crossing #: 008A
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.0718,
Temporary Fill (cu.yrd): 1158

W-A013b
Crossing #: 008A
PSS
Proposed Open Cut
Conversion Impact (Ac): 0.5312,
Temporary Fill (cu.yrd): 8569

S-A009
Crossing #: 008A
Intermittent
Proposed Open Cut
Temporary Impact (linear feet): 99,
Temporary Impact Area (Ac): 0.0087,
Temporary Fill (cu.yrd): 141

W-A013d
Crossing #: 008A
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.215,
Temporary Fill (cu.yrd): 3469

W-A011
Crossing #: 010
PEM
Timbe Mat Travel Lane/Maintenance Corridor
Temporary Impact (Ac): 0.0173,
Temporary Fill (cu.yrd): 84

S-A008
Crossing #: 010
Perennial
Conventional Bore
No Impact – Proposed Bore

W-A013a
Crossing #: 008A
PEM
Proposed Open Cut/Temporary Access Road
Temporary Impact (Ac): 1.0186,
Temporary Fill (cu.yrd): 4930

W-A012
PSS
No Impact
Avoiding

- ° TENTH MILE POST
- ° MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

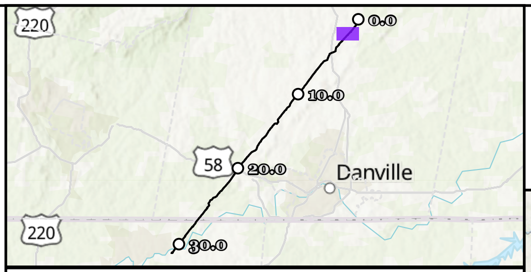
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400
1" = 200'

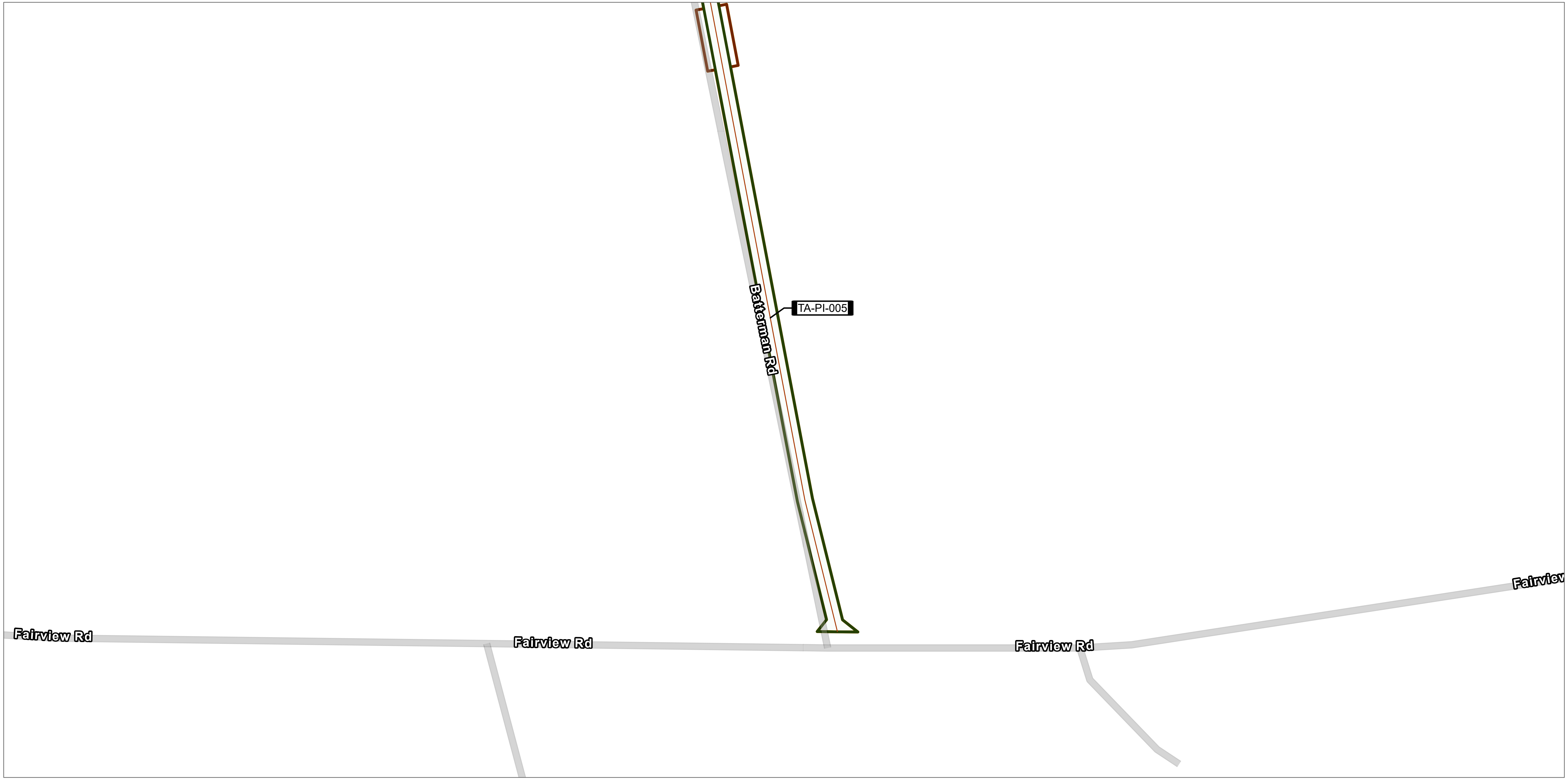
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 70
AR-009

DATE: JULY 2025

MVP SOUTHGATE



- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

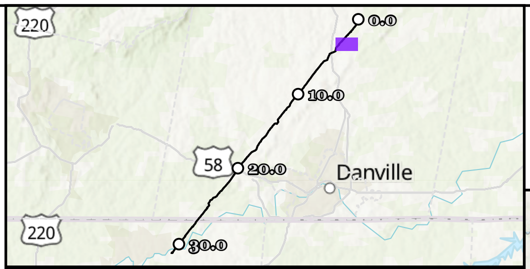
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400
1" = 200'

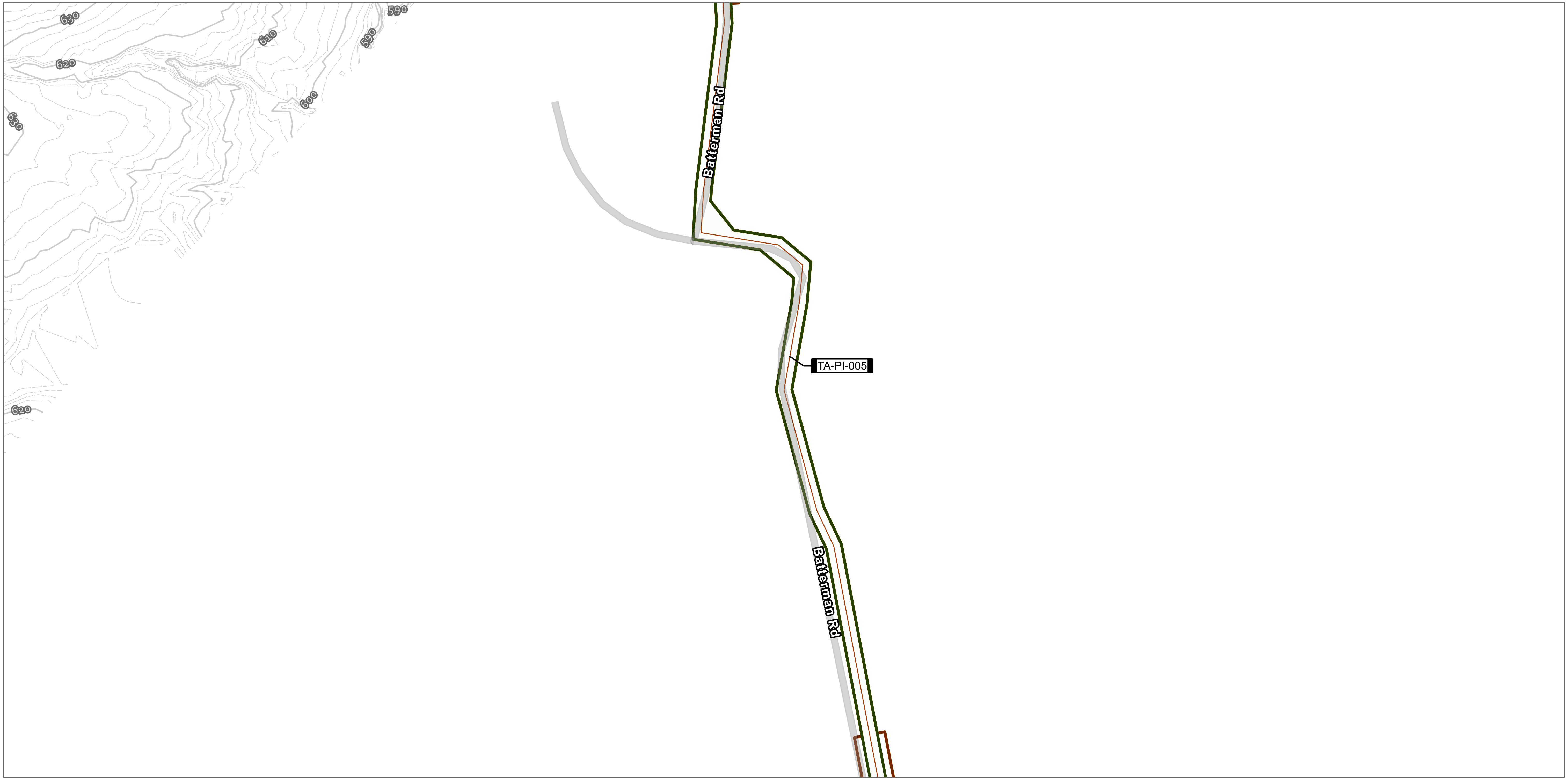
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 71
AR-010

DATE: JULY 2025

MVP SOUTHGATE



- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

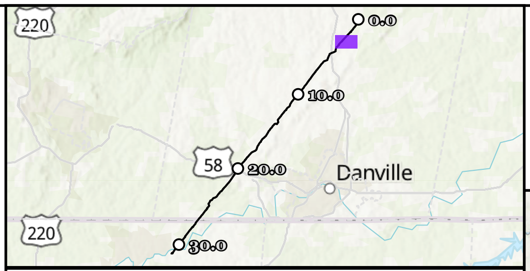
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400 1" = 200'

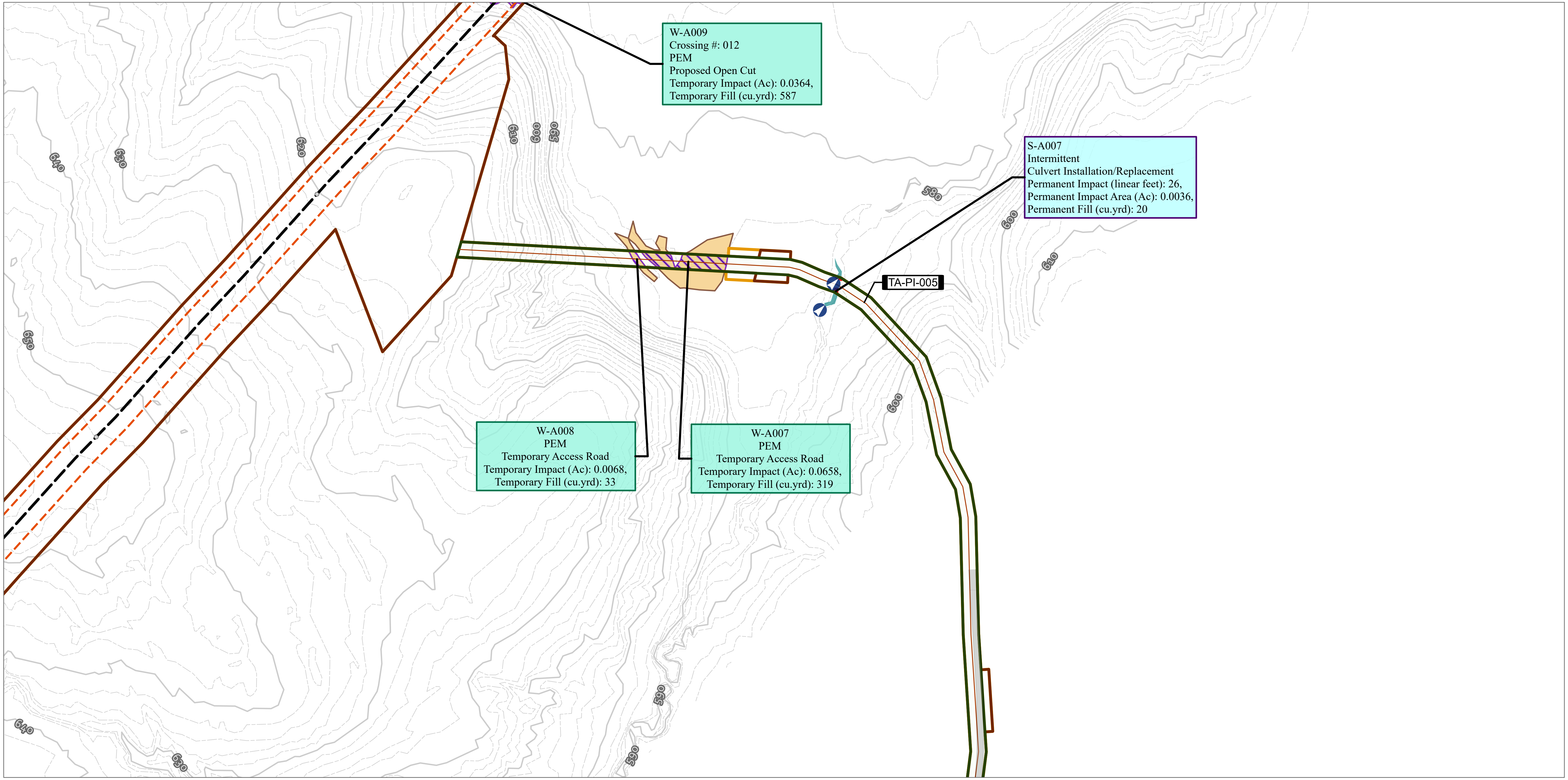
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 72
AR-011

DATE: JULY 2025

MVP SOUTHGATE



W-A009
Crossing #: 012
PEM
Proposed Open Cut
Temporary Impact (Ac): 0.0364,
Temporary Fill (cu.yrd): 587

S-A007
Intermittent
Culvert Installation/Replacement
Permanent Impact (linear feet): 26,
Permanent Impact Area (Ac): 0.0036,
Permanent Fill (cu.yrd): 20

W-A008
PEM
Temporary Access Road
Temporary Impact (Ac): 0.0068,
Temporary Fill (cu.yrd): 33

W-A007
PEM
Temporary Access Road
Temporary Impact (Ac): 0.0658,
Temporary Fill (cu.yrd): 319

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

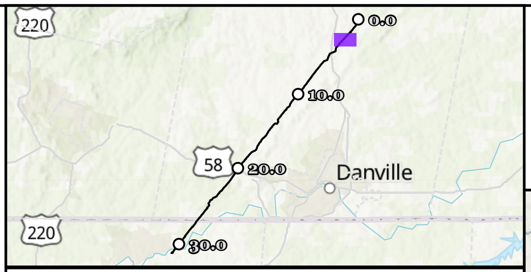
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

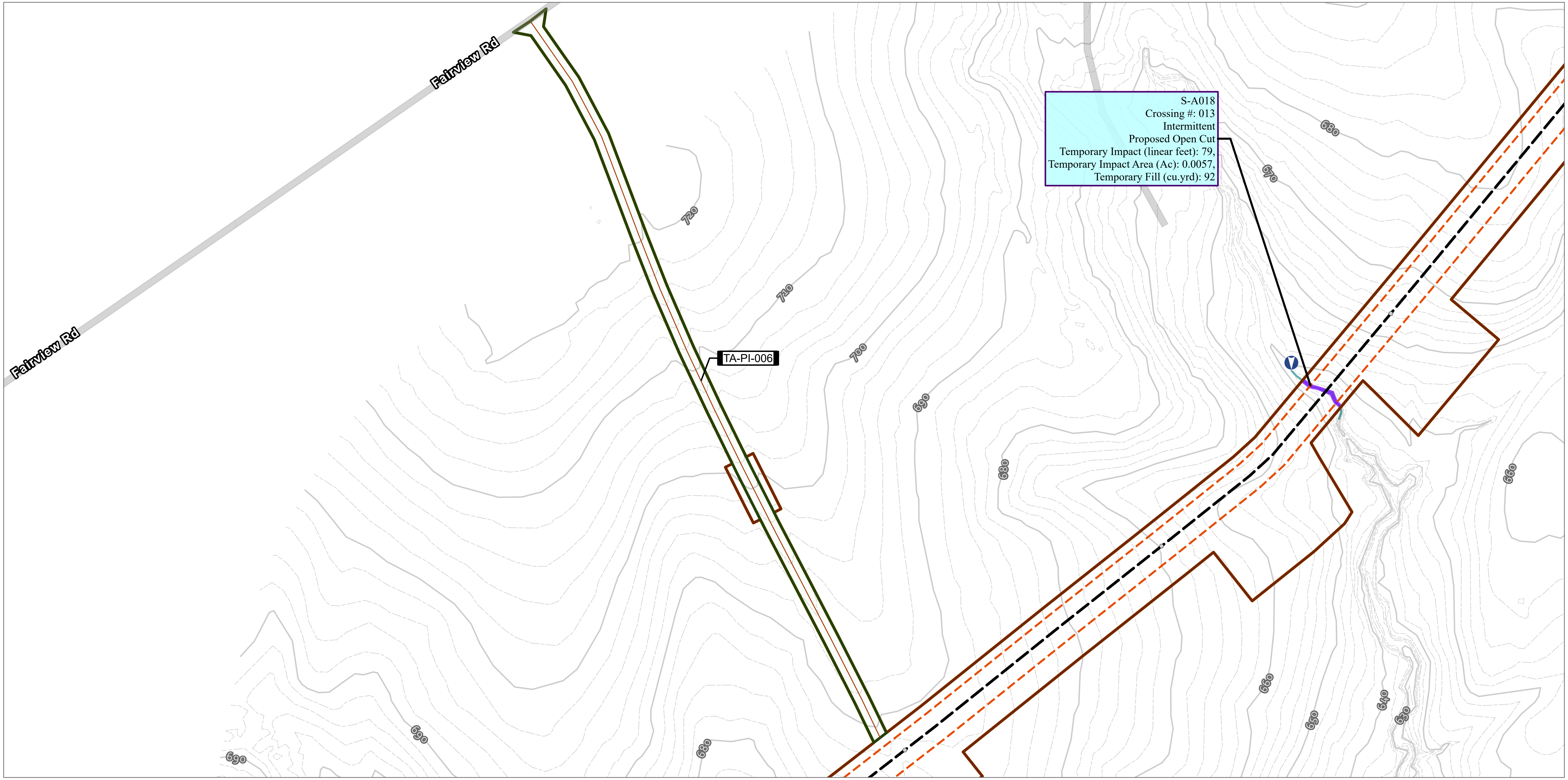
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE: FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 73
AR-012

DATE: JULY 2025

MVP SOUTHGATE



S-A018
Crossing #: 013
Intermittent
Proposed Open Cut
Temporary Impact (linear feet): 79,
Temporary Impact Area (Ac): 0.0057,
Temporary Fill (cu.yrd): 92

TENTH MILE POST
MILE POST
MAIN LINE VALVE
METER STATIONS
CONTRACTOR YARD
H-650 PIPELINE
PERMANENT ACCESS ROAD
TEMPORARY ACCESS ROAD

TEMPORARY ACCESS ROAD
PERMANENT ACCESS ROAD
LIMITS OF CONSTRUCTION WORKSPACE
OPERATIONAL WORKSPACE
BORE PITS
LAYDOWN YARD / STAGING AREA
SURVEY AREA

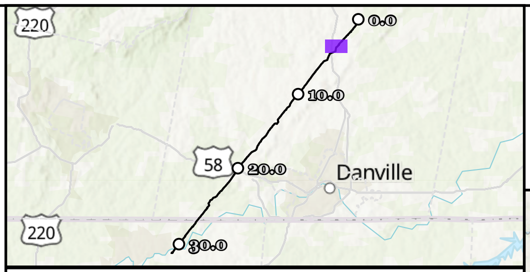
STREAM FLOW DIRECTION
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

COUNTY BOUNDARY
STATE BOUNDARY
ELEVATION - CONTOUR - INDEX
ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

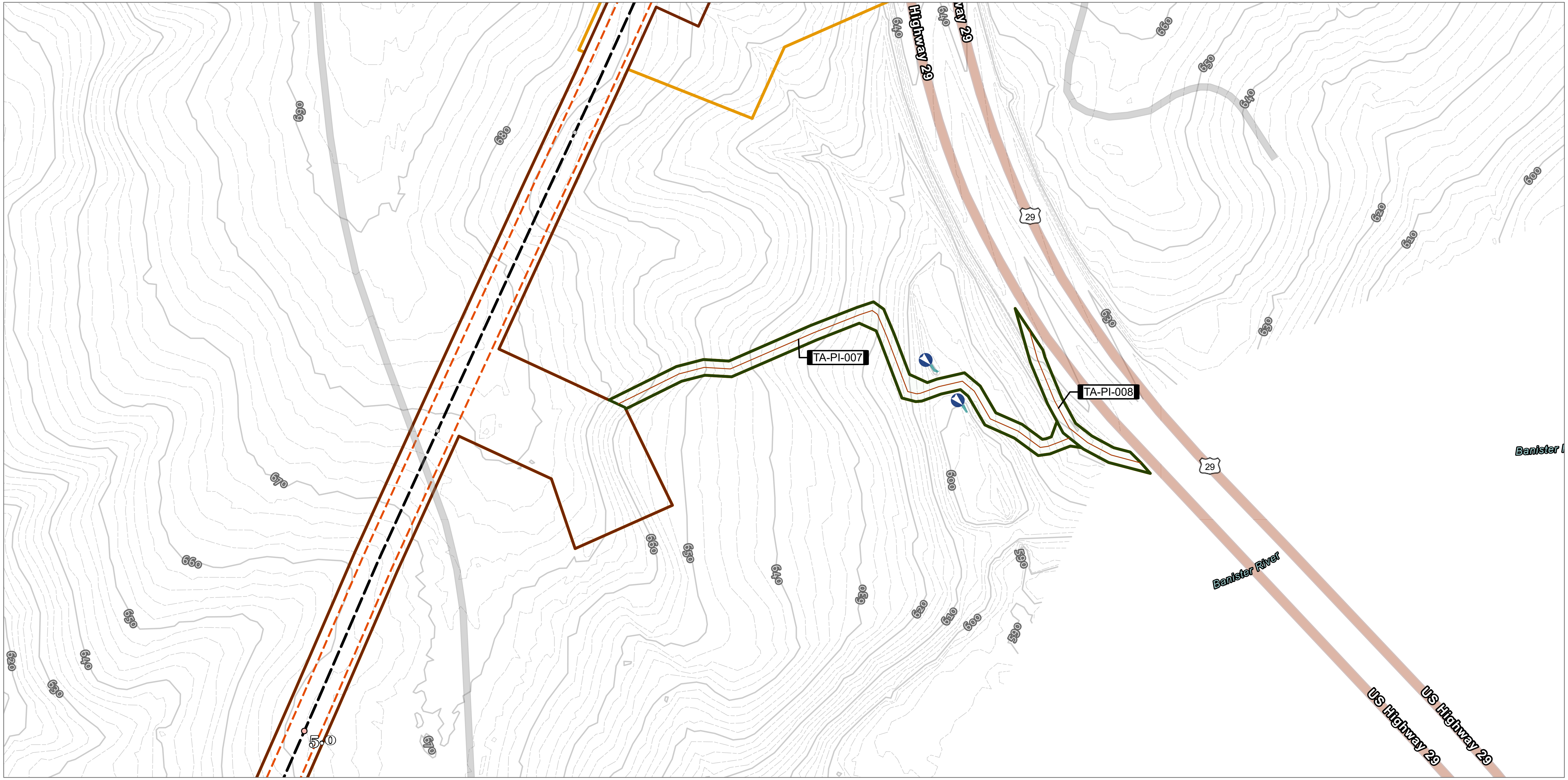
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 74
AR-013

DATE: JULY 2025

MVP SOUTHGATE



- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

STREAM IMPACT

- TEMPORARY
- PERMANENT

STREAM TYPE

- EPHEMERAL
- INTERMITTENT
- PERENNIAL

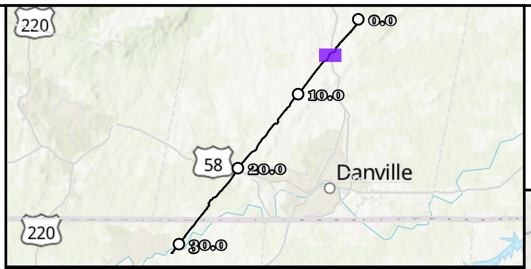
WETLAND IMPACT

- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE

- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400
1" = 200'

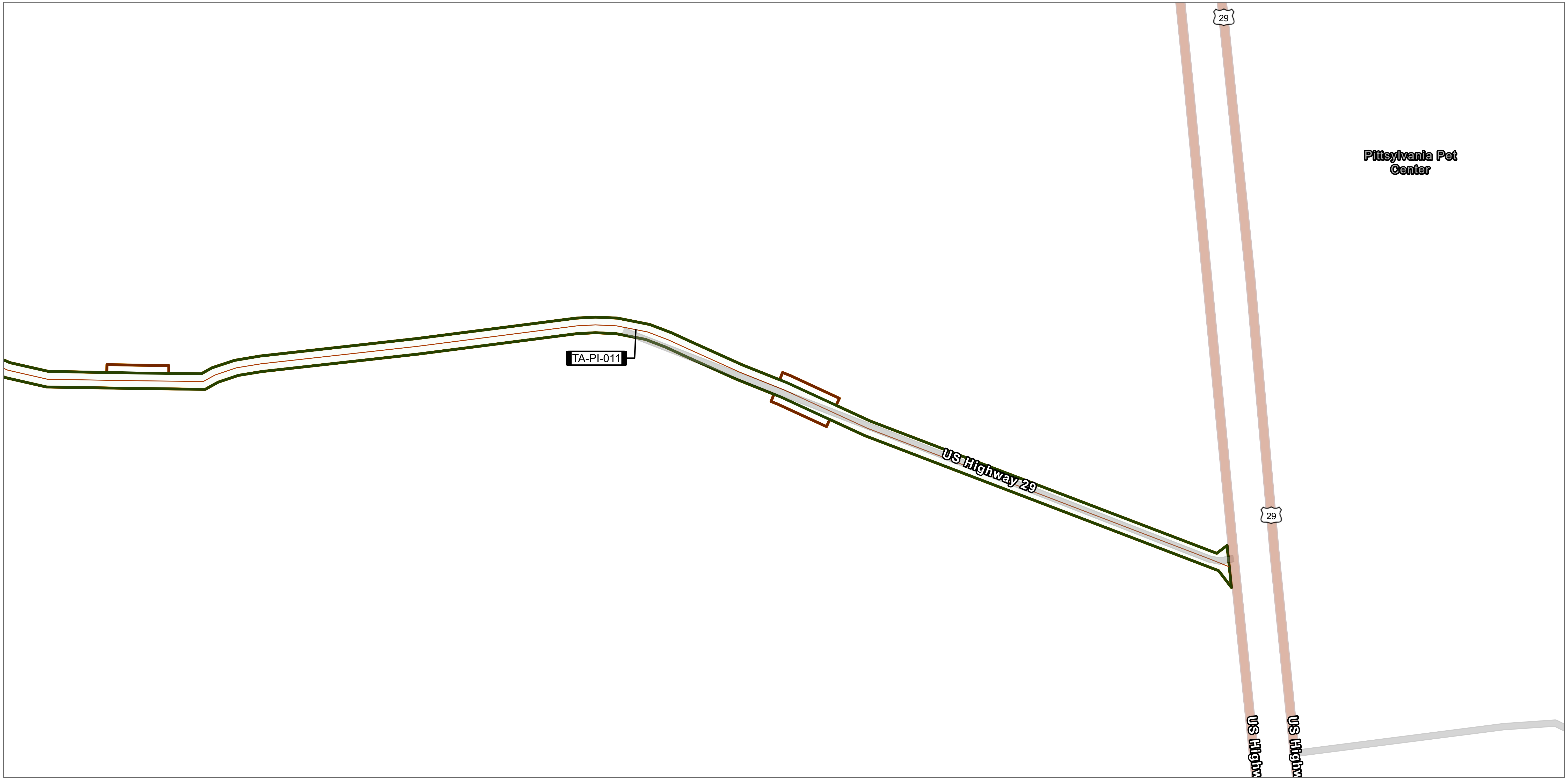
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 75
AR-014

DATE: JULY 2025

MVP SOUTHGATE



TENTH MILE POST
MILE POST
MAIN LINE VALVE
METER STATIONS
CONTRACTOR YARD
H-650 PIPELINE
PERMANENT ACCESS ROAD
TEMPORARY ACCESS ROAD

TEMPORARY ACCESS ROAD
PERMANENT ACCESS ROAD
LIMITS OF CONSTRUCTION WORKSPACE
OPERATIONAL WORKSPACE
BORE PITS
LAYDOWN YARD / STAGING AREA
SURVEY AREA

STREAM FLOW DIRECTION

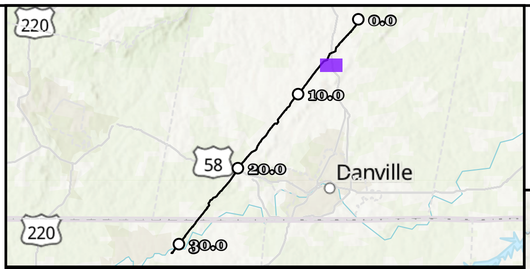
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

COUNTY BOUNDARY
STATE BOUNDARY
ELEVATION - CONTOUR - INDEX
ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

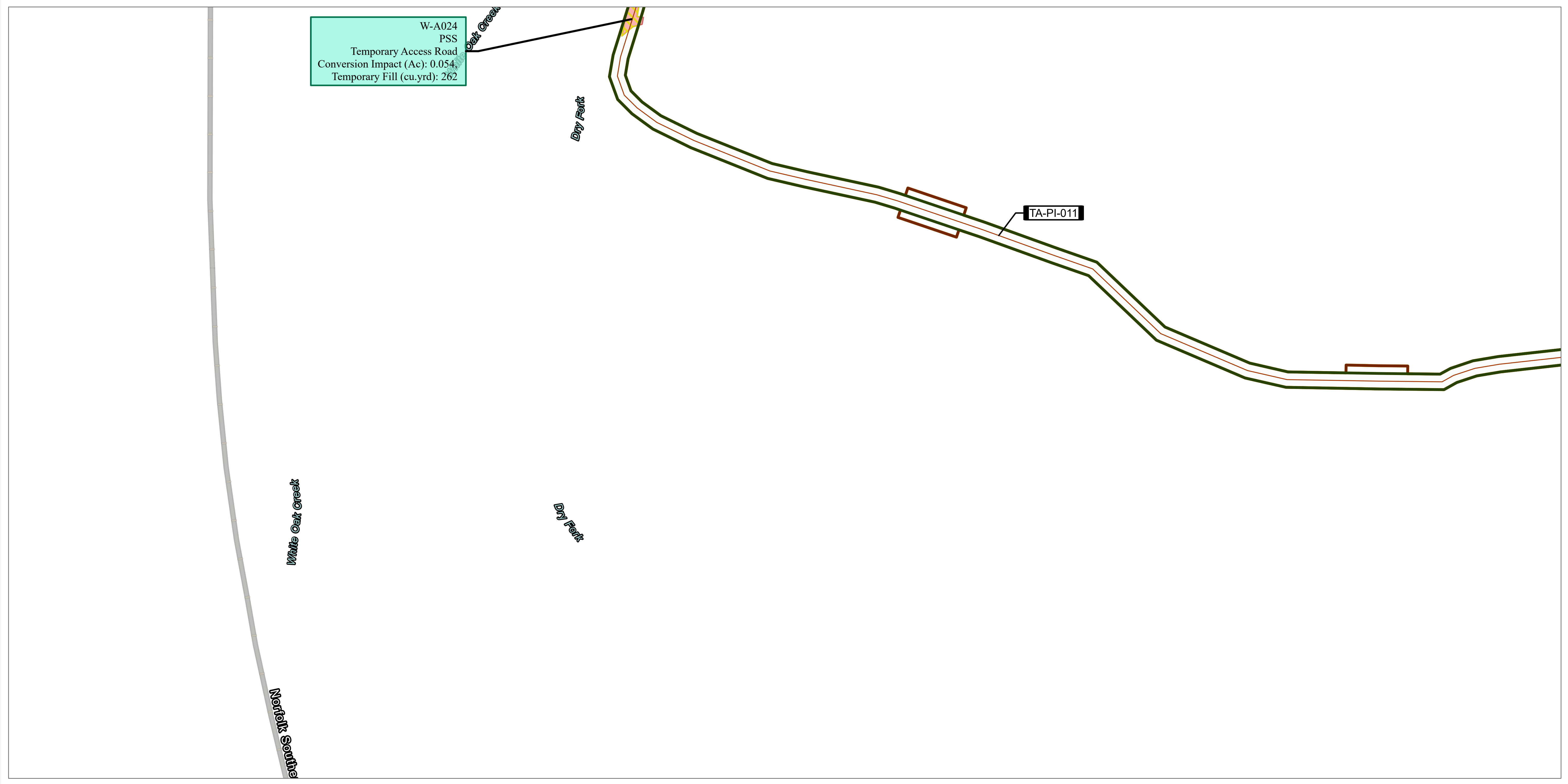
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 76
AR-015

DATE: JULY 2025

MVP SOUTHGATE



- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ━ ━ H-650 PIPELINE
- ― PERMANENT ACCESS ROAD
- ― TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

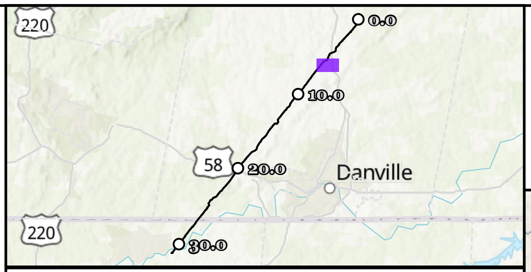
STREAM IMPACT
- ○ TEMPORARY
- ○ PERMANENT

STREAM TYPE
- ● EPHEMERAL
- ● INTERMITTENT
- ● PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- ● PALUSTRINE EMERGENT
- ● PALUSTRINE FORESTED
- ● PALUSTRINE SCRUB-SHRUB
- ● PALUSTRINE UNCONSOLIDATED BOTTOM

- ▭ COUNTY BOUNDARY
- ▭ STATE BOUNDARY
- ― ELEVATION - CONTOUR - INDEX
- ― ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200

FEET

1:2,400 1" = 200'

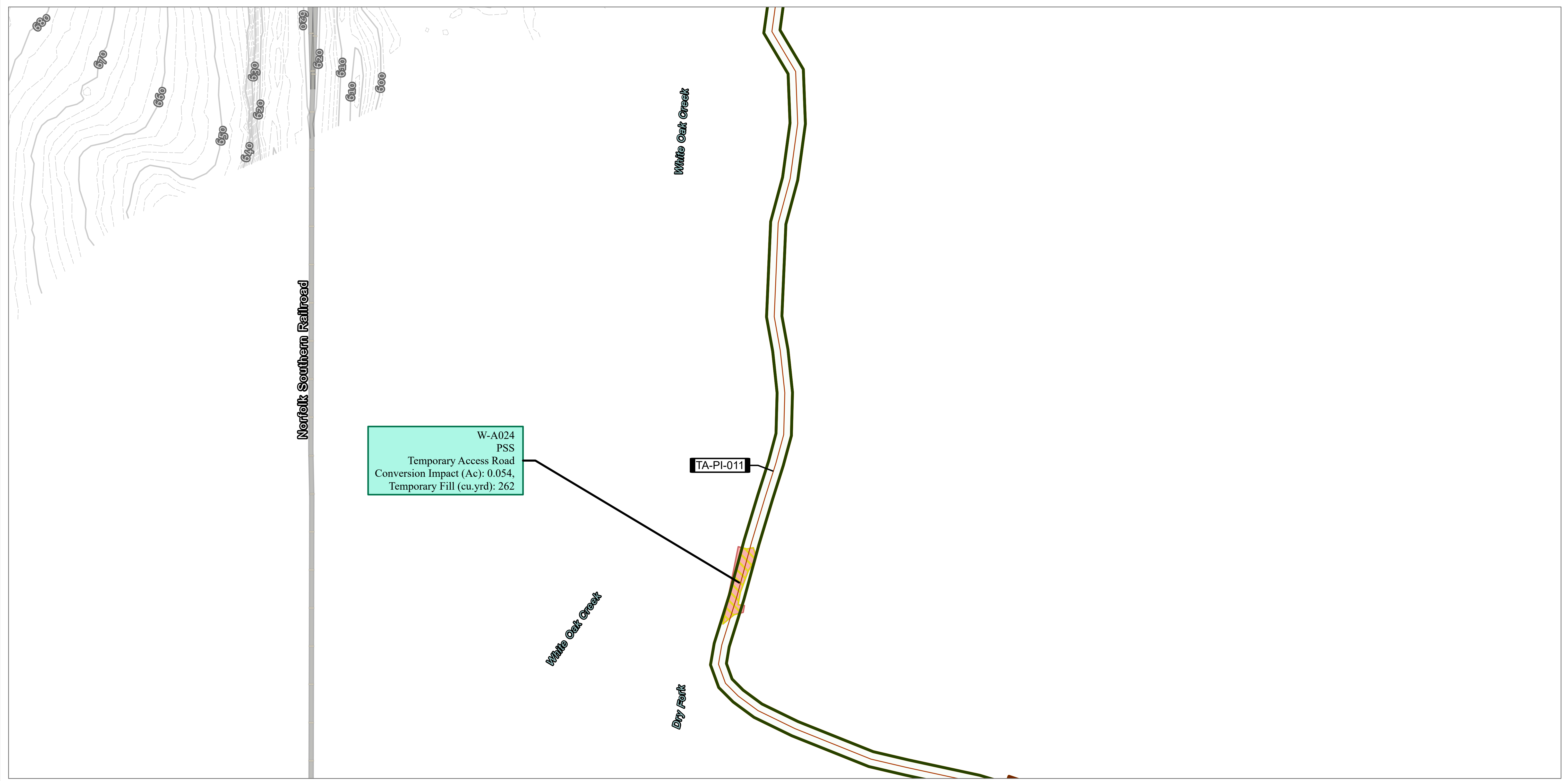
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 77
AR-016

DATE: JULY 2025

MVP SOUTHGATE



W-A024
PSS
Temporary Access Road
Conversion Impact (Ac): 0.054,
Temporary Fill (cu.yrd): 262

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

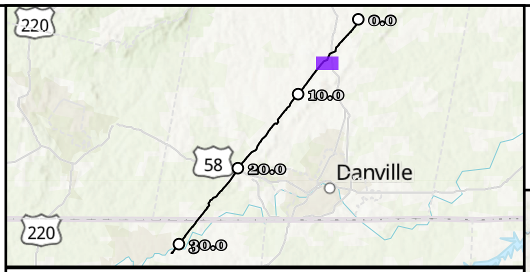
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200

FEET

1:2,400 1" = 200'

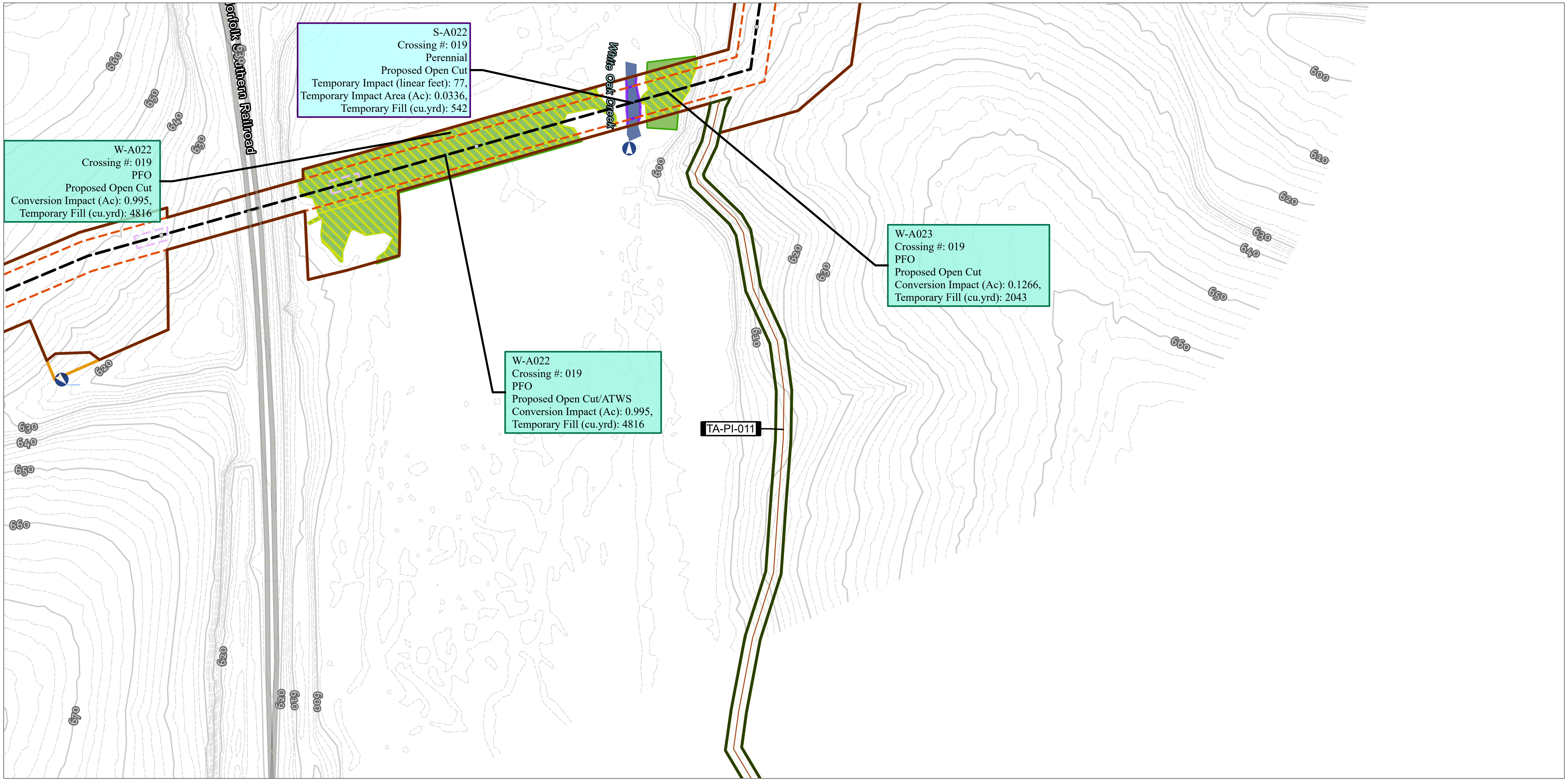
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 78
AR-017

DATE: JULY 2025

MVP
SOUTHGATE


S-A022
Crossing #: 019
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 77,
Temporary Impact Area (Ac): 0.0336,
Temporary Fill (cu.yrd): 542
W-A022
Crossing #: 019
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.995,
Temporary Fill (cu.yrd): 4816
W-A022
Crossing #: 019
PFO
Proposed Open Cut/ATWS
Conversion Impact (Ac): 0.995,
Temporary Fill (cu.yrd): 4816
W-A023
Crossing #: 019
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.1266,
Temporary Fill (cu.yrd): 2043
TA-PI-011
orfolk Southern Railroad
White Oak Creek
600
610
620
630
640
650
660
670

- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

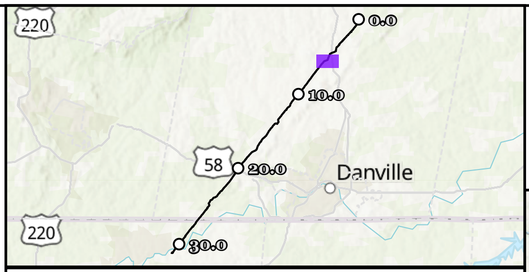
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

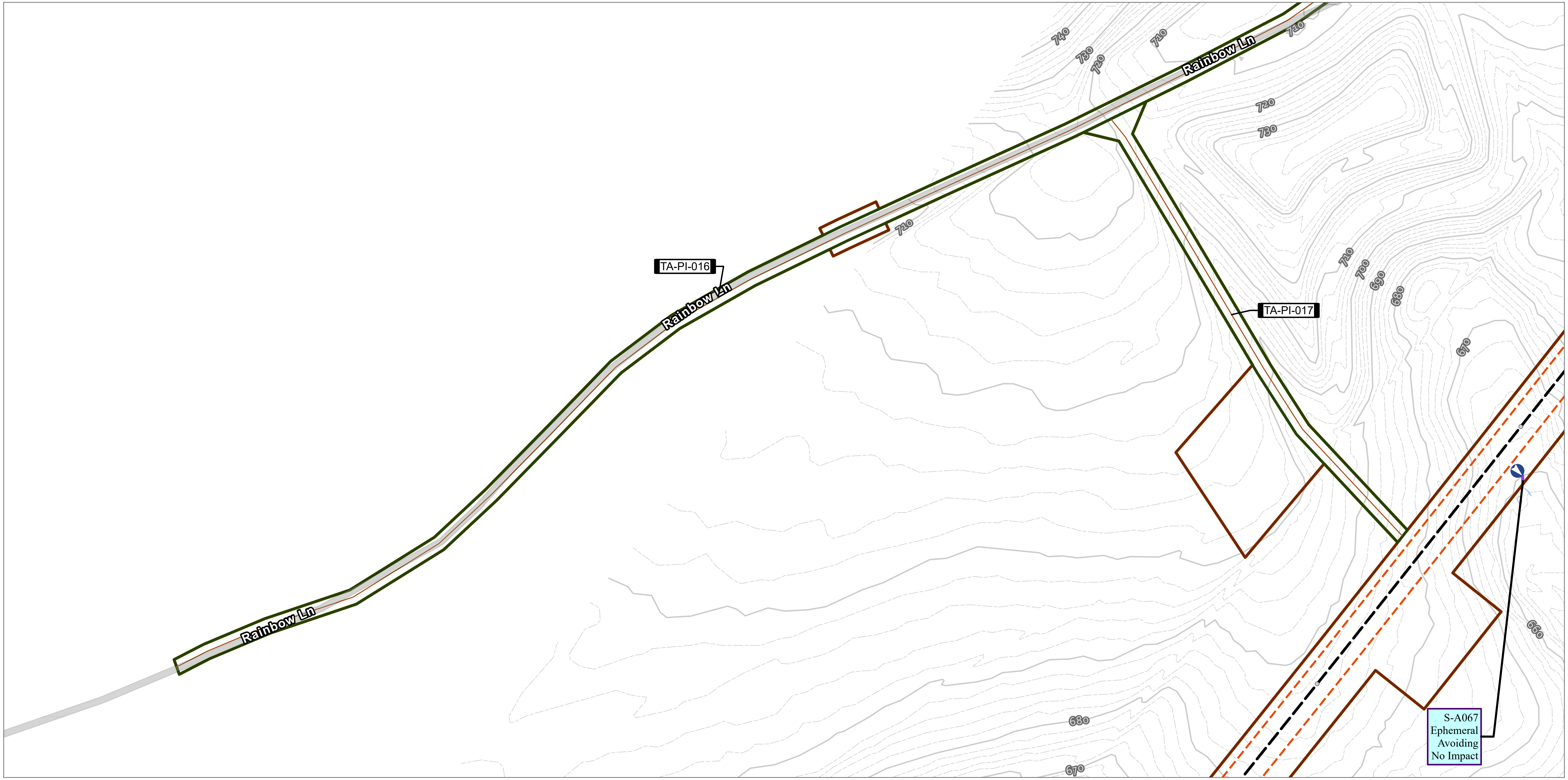
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 79
AR-018

DATE: JULY 2025

MVP SOUTHGATE



- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ⦿ METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- ─ PERMANENT ACCESS ROAD
- ─ TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

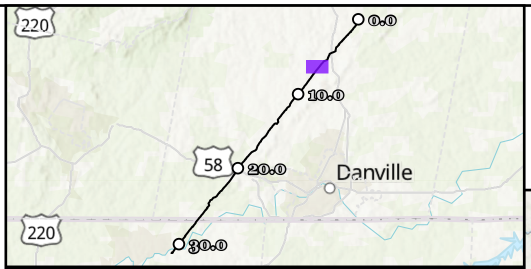
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200

FEET

1:2,400

1" = 200'

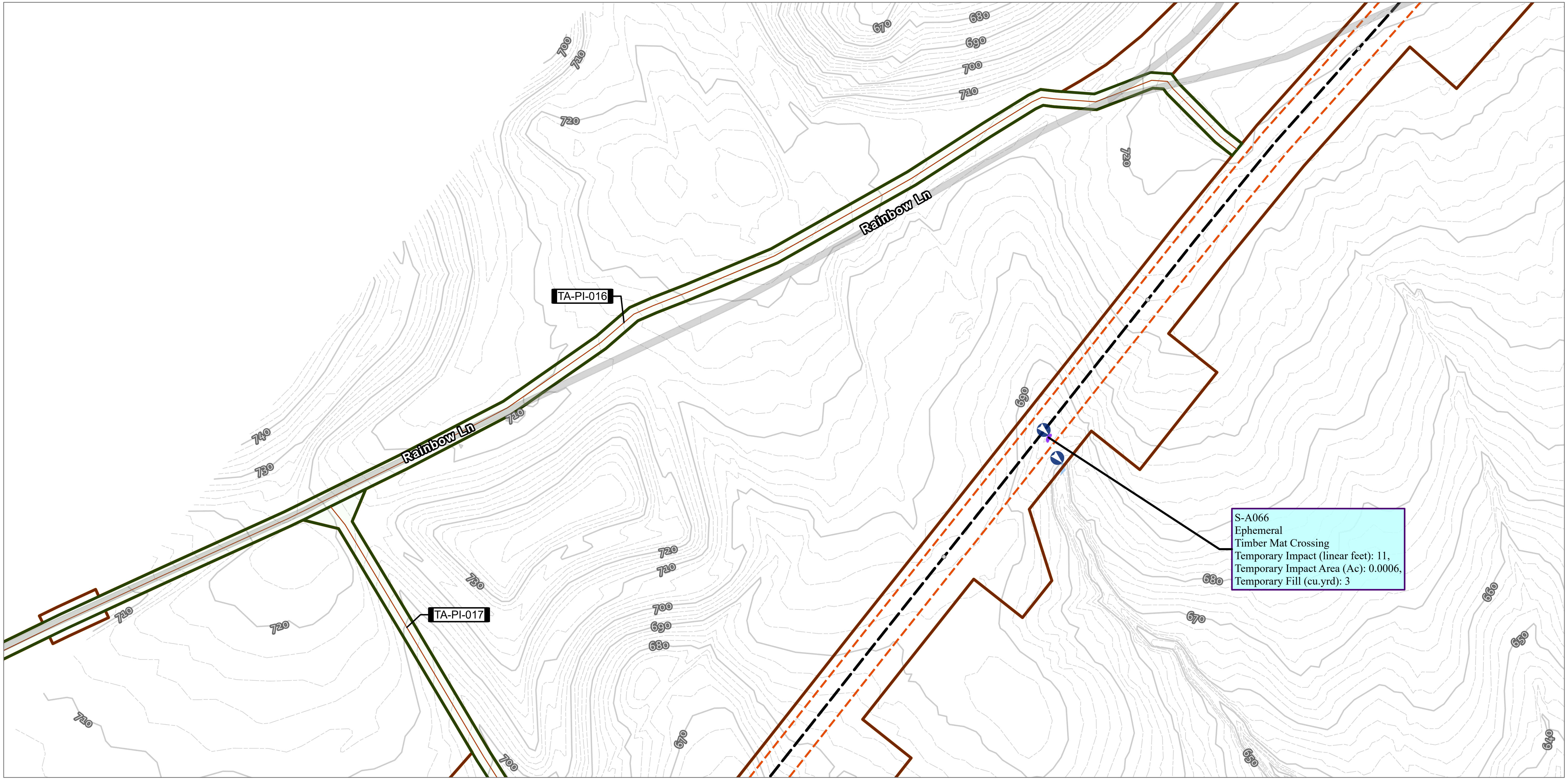
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 80
AR-019

DATE: JULY 2025

MVP
SOUTHGATE



S-A066
Ephemeral
Timber Mat Crossing
Temporary Impact (linear feet): 11,
Temporary Impact Area (Ac): 0.0006,
Temporary Fill (cu.yrd): 3

- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

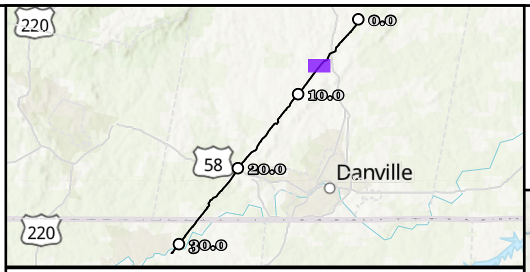
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200

FEET

1:2,400 1" = 200'

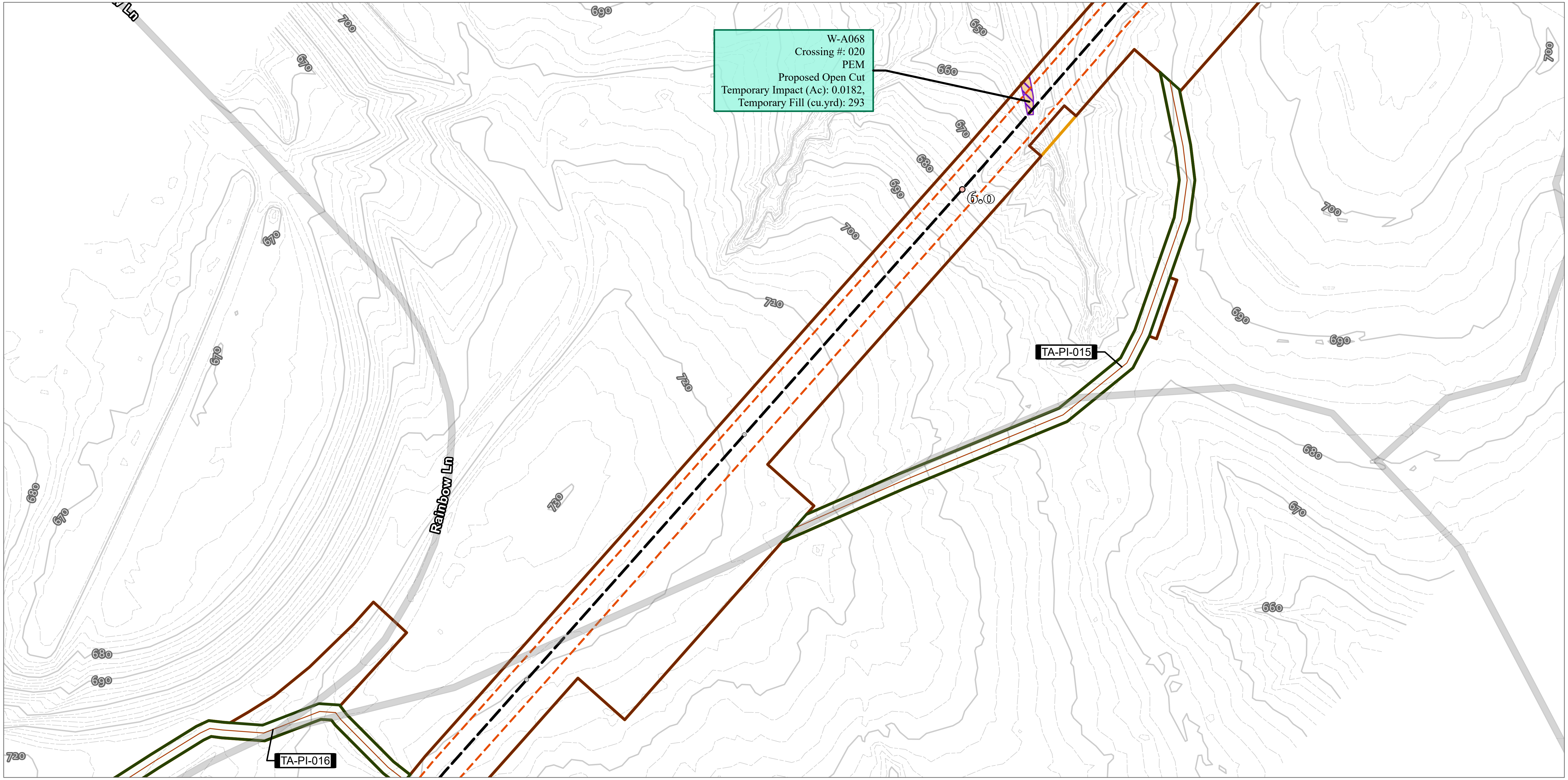
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 81
AR-020

DATE: JULY 2025

MVP SOUTHGATE



- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD

- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA

- STREAM FLOW DIRECTION

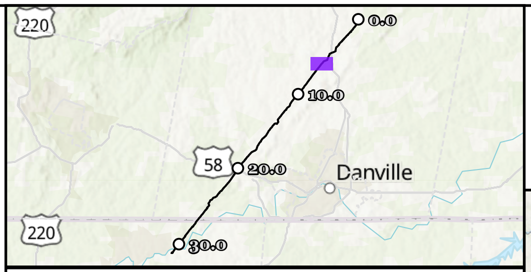
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

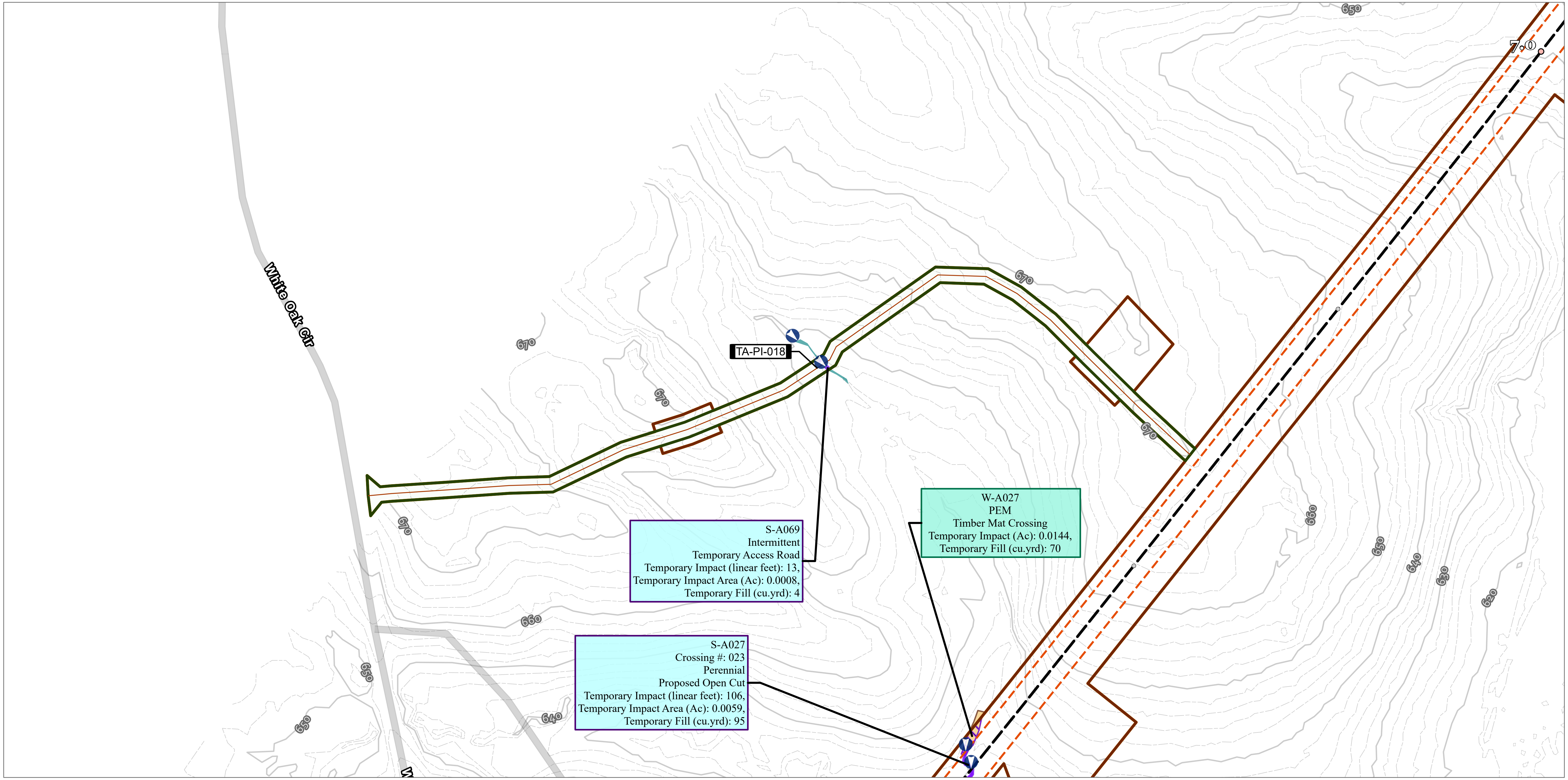
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 82
AR-021

DATE: JULY 2025

MVP
SOUTHGATE



S-A069
Intermittent
Temporary Access Road
Temporary Impact (linear feet): 13,
Temporary Impact Area (Ac): 0.0008,
Temporary Fill (cu.yrd): 4

W-A027
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.0144,
Temporary Fill (cu.yrd): 70

S-A027
Crossing #: 023
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 106,
Temporary Impact Area (Ac): 0.0059,
Temporary Fill (cu.yrd): 95

- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD

- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA

- STREAM FLOW DIRECTION

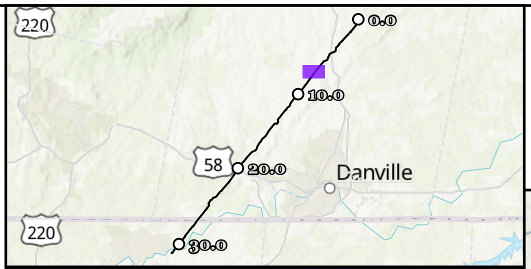
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

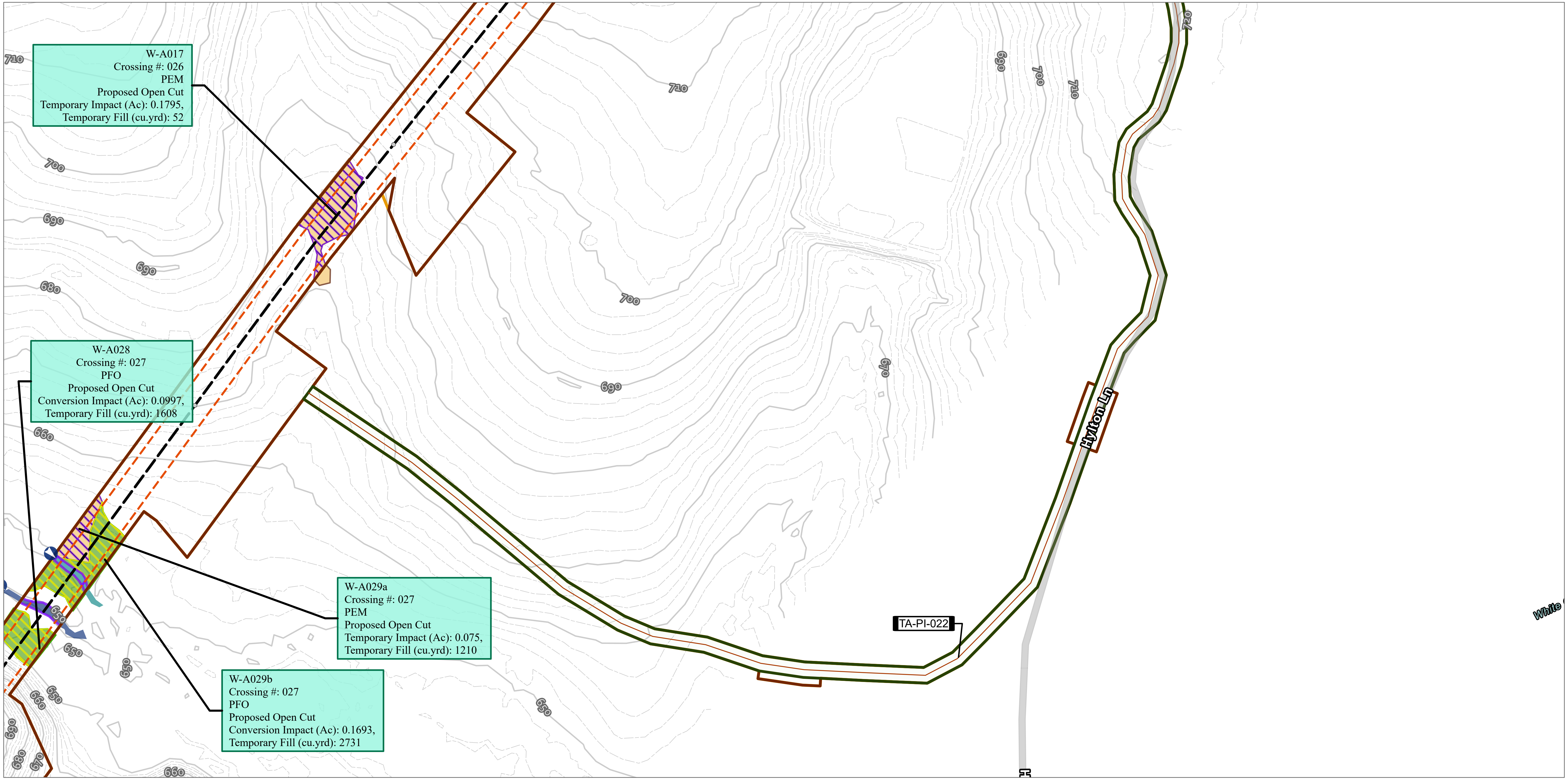
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 83
AR-022

DATE: JULY 2025

MVP SOUTHGATE



W-A017
Crossing #: 026
PEM
Proposed Open Cut
Temporary Impact (Ac): 0.1795,
Temporary Fill (cu.yrd): 52

W-A028
Crossing #: 027
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.0997,
Temporary Fill (cu.yrd): 1608

W-A029a
Crossing #: 027
PEM
Proposed Open Cut
Temporary Impact (Ac): 0.075,
Temporary Fill (cu.yrd): 1210

W-A029b
Crossing #: 027
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.1693,
Temporary Fill (cu.yrd): 2731

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

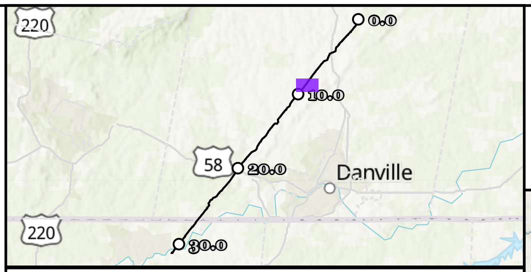
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

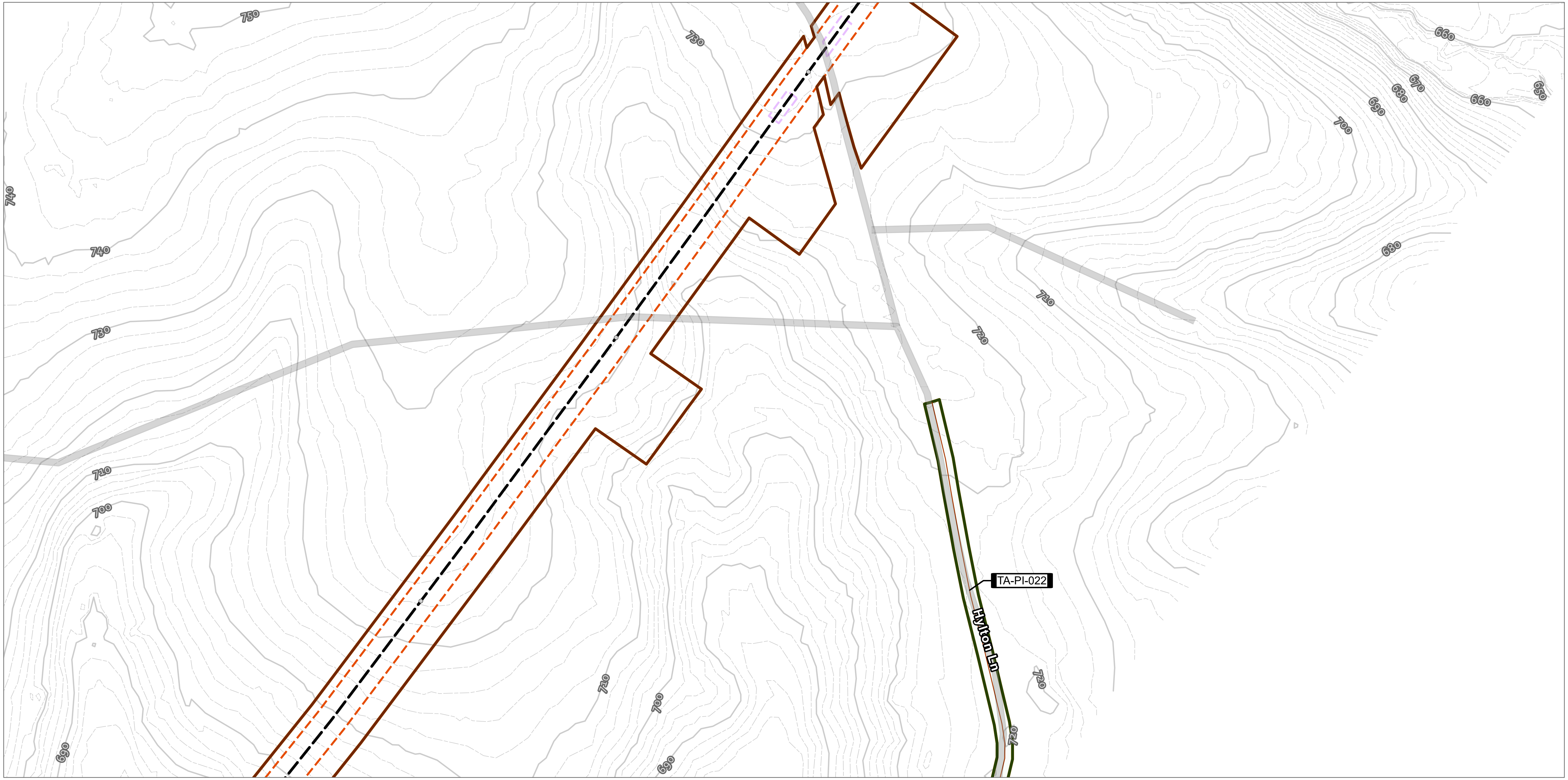
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE: FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 84
AR-023

DATE: JULY 2025

MVP SOUTHGATE



- ◦ TENTH MILE POST
- ◦ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

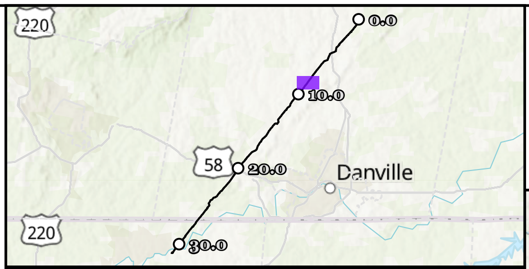
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200

FEET

1:2,400 1" = 200'

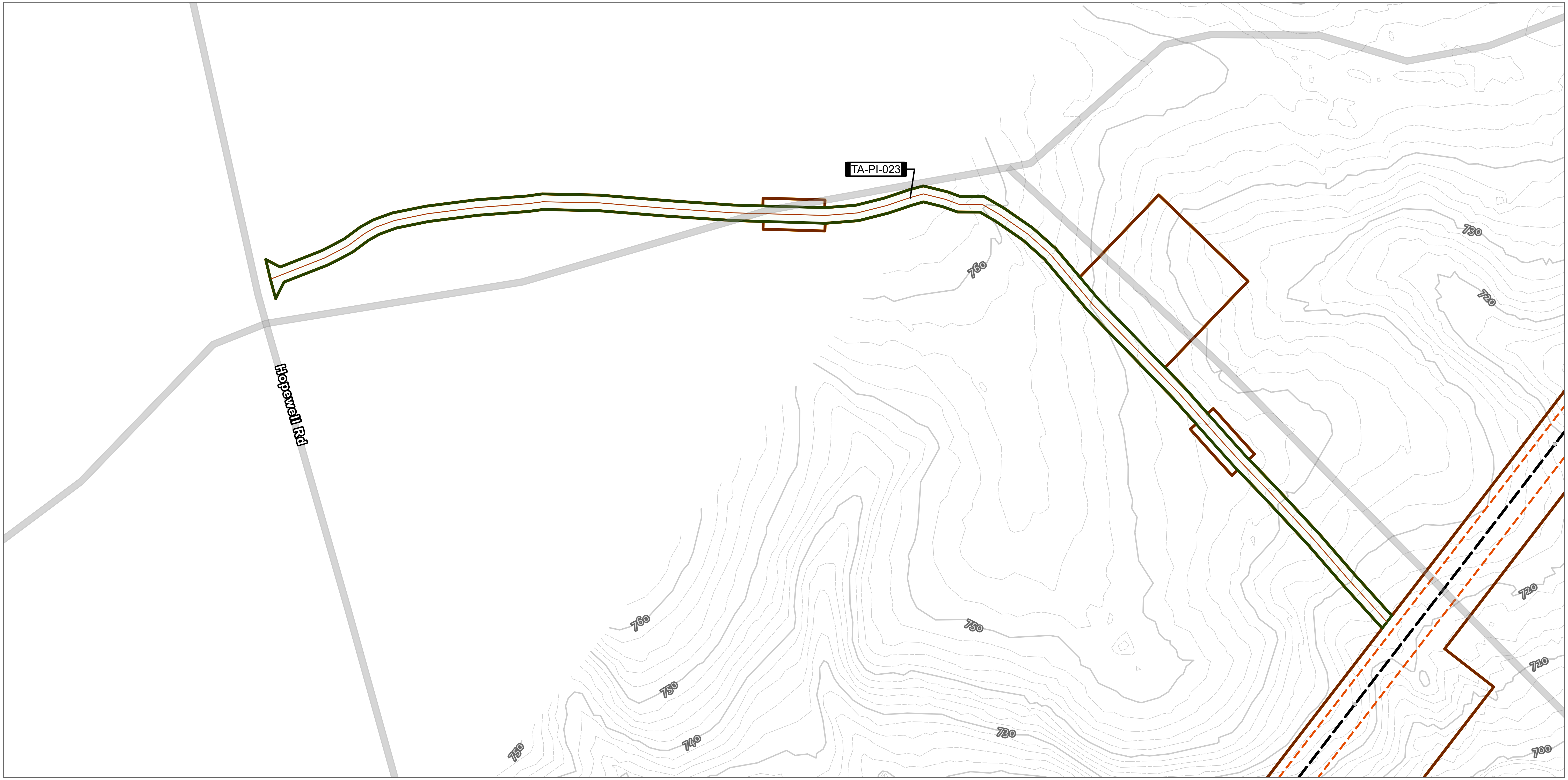
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 85
AR-024

DATE: JULY 2025

MVP SOUTHGATE



- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- ➤ STREAM FLOW DIRECTION

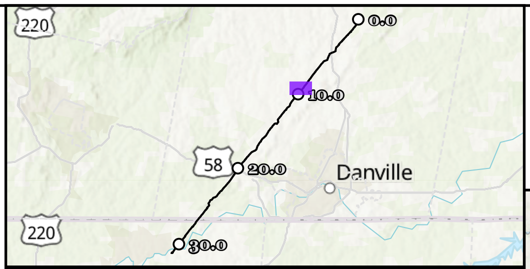
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

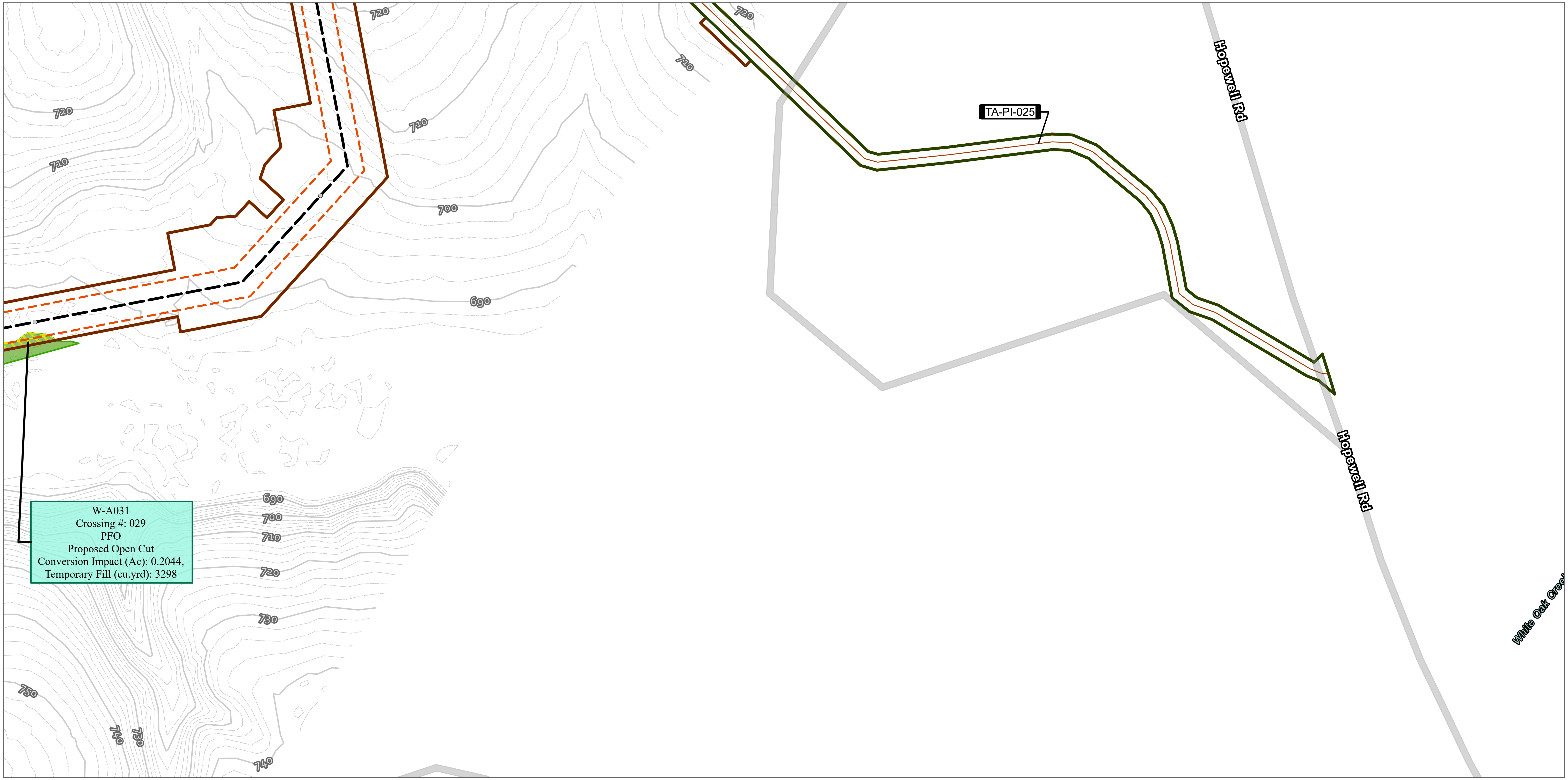
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE: FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 86
AR-025

DATE: JULY 2025

MVP SOUTHGATE



W-A031
Crossing #: 029
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.2044,
Temporary Fill (cu.yrd): 3298

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

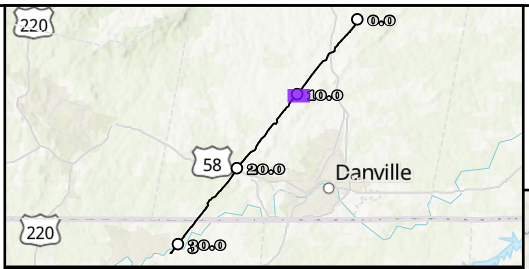
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400
1" = 200'

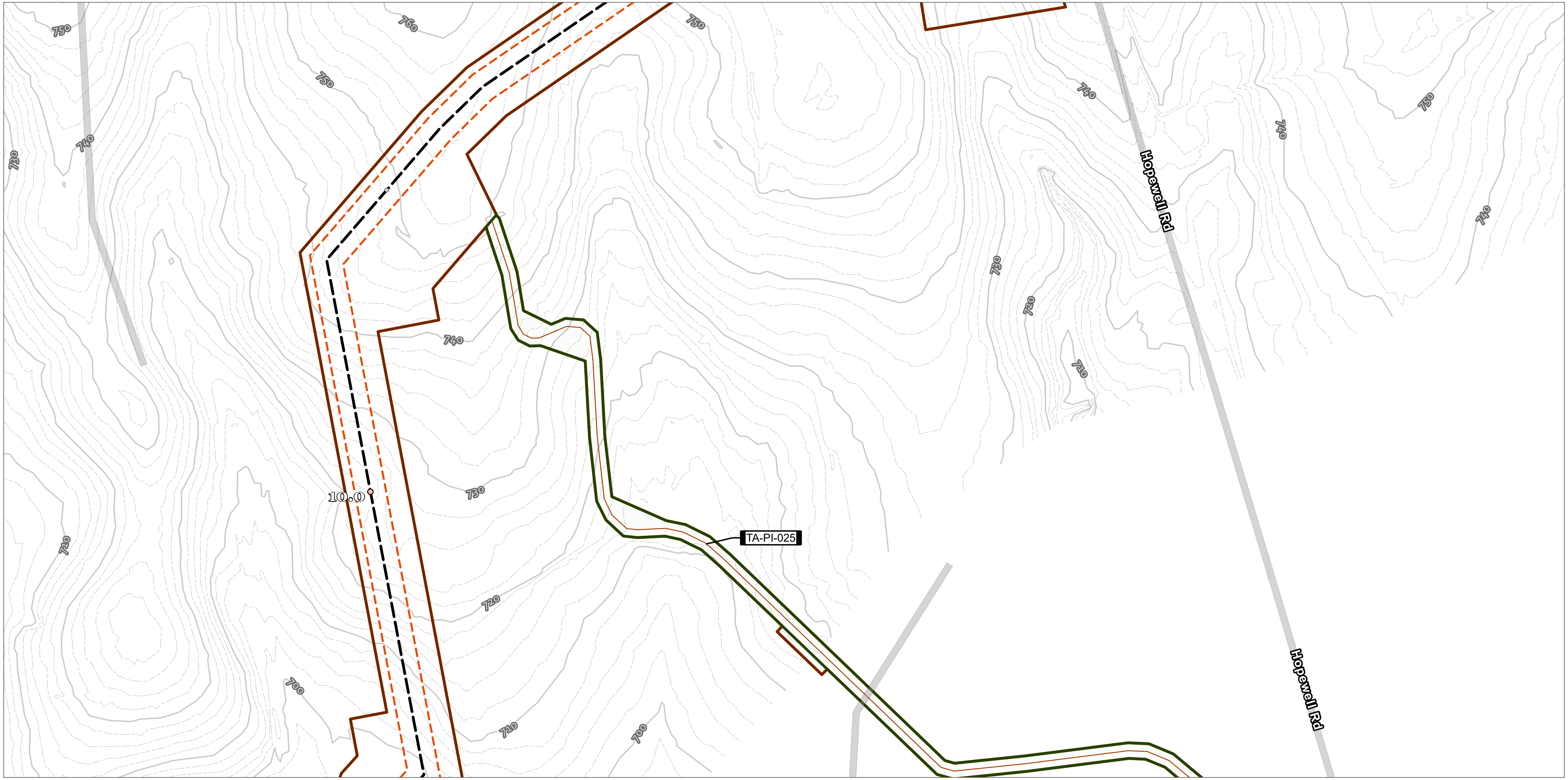
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 87
AR-026

DATE: JULY 2025

MVP
SOUTHGATE



- ● TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- ― PERMANENT ACCESS ROAD
- ― TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ⬚ OPERATIONAL WORKSPACE
- ⬚ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

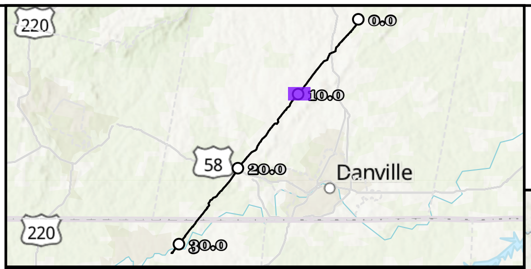
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- ⬚ COUNTY BOUNDARY
- ⬚ STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200

FEET

1:2,400

1" = 200'

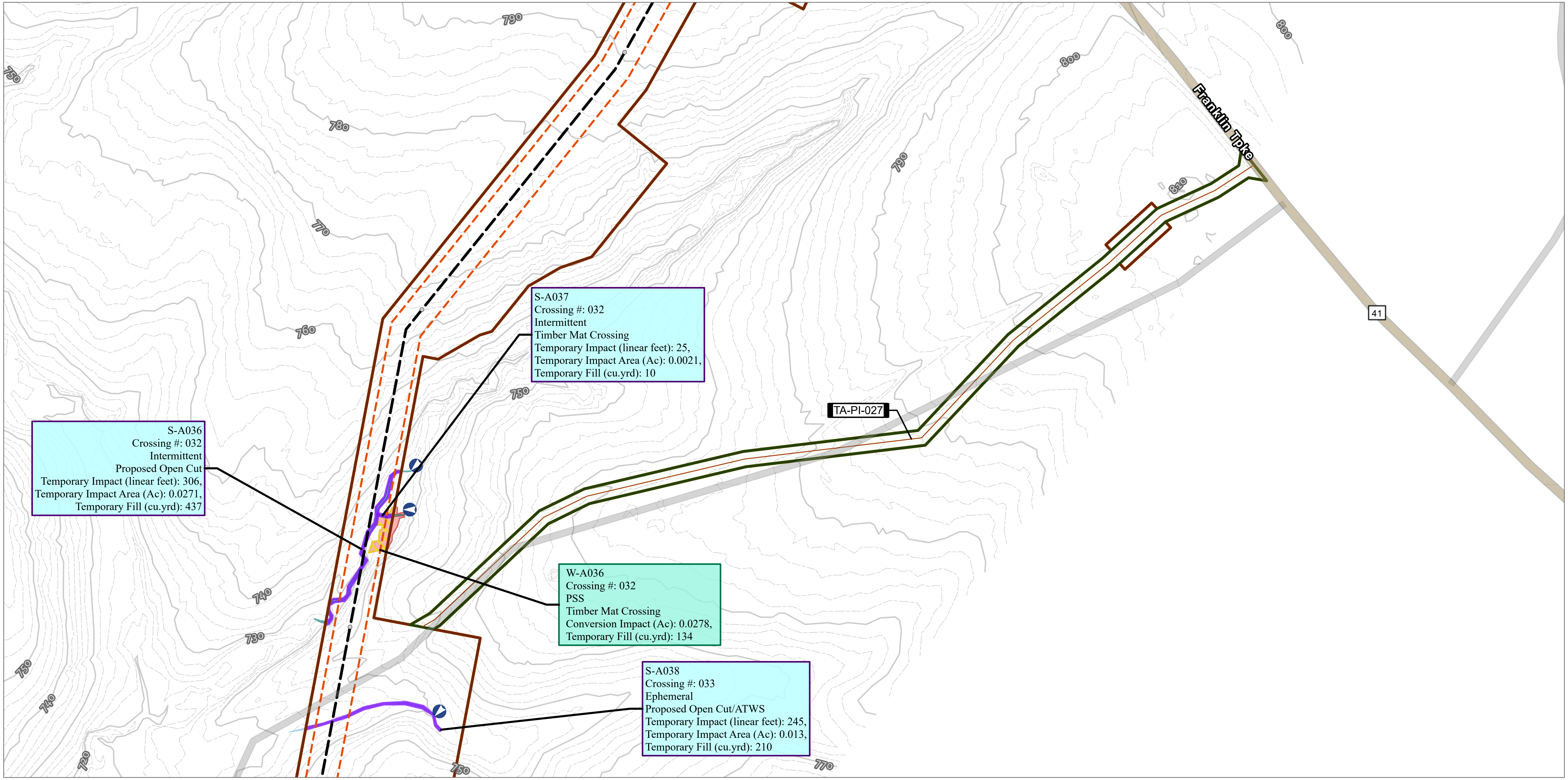
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 88
AR-027

DATE: JULY 2025

MVP SOUTHGATE



S-A037
Crossing #: 032
Intermittent
Timber Mat Crossing
Temporary Impact (linear feet): 25,
Temporary Impact Area (Ac): 0.0021,
Temporary Fill (cu.yrd): 10

S-A036
Crossing #: 032
Intermittent
Proposed Open Cut
Temporary Impact (linear feet): 306,
Temporary Impact Area (Ac): 0.0271,
Temporary Fill (cu.yrd): 437

W-A036
Crossing #: 032
PSS
Timber Mat Crossing
Conversion Impact (Ac): 0.0278,
Temporary Fill (cu.yrd): 134

S-A038
Crossing #: 033
Ephemeral
Proposed Open Cut/ATWS
Temporary Impact (linear feet): 245,
Temporary Impact Area (Ac): 0.013,
Temporary Fill (cu.yrd): 210

TENTH MILE POST
MILE POST
MAIN LINE VALVE
METER STATIONS
CONTRACTOR YARD
H-650 PIPELINE
PERMANENT ACCESS ROAD
TEMPORARY ACCESS ROAD

TEMPORARY ACCESS ROAD
PERMANENT ACCESS ROAD
LIMITS OF CONSTRUCTION WORKSPACE
OPERATIONAL WORKSPACE
BORE PITS
LAYDOWN YARD / STAGING AREA
SURVEY AREA

STREAM FLOW DIRECTION

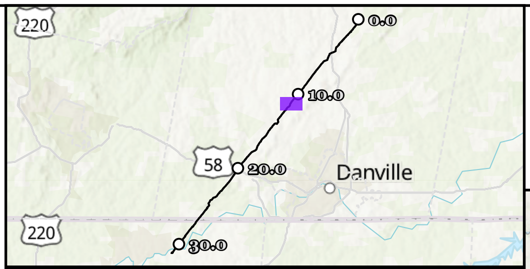
STREAM IMPACT
TEMPORARY
PERMANENT

STREAM TYPE
EPHEMERAL
INTERMITTENT
PERENNIAL

WETLAND IMPACT
TEMPORARY
CONVERSION
SECONDARY IMPACT

WETLAND TYPE
PALUSTRINE EMERGENT
PALUSTRINE FORESTED
PALUSTRINE SCRUB-SHRUB
PALUSTRINE UNCONSOLIDATED BOTTOM

COUNTY BOUNDARY
STATE BOUNDARY
ELEVATION - CONTOUR - INDEX
ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

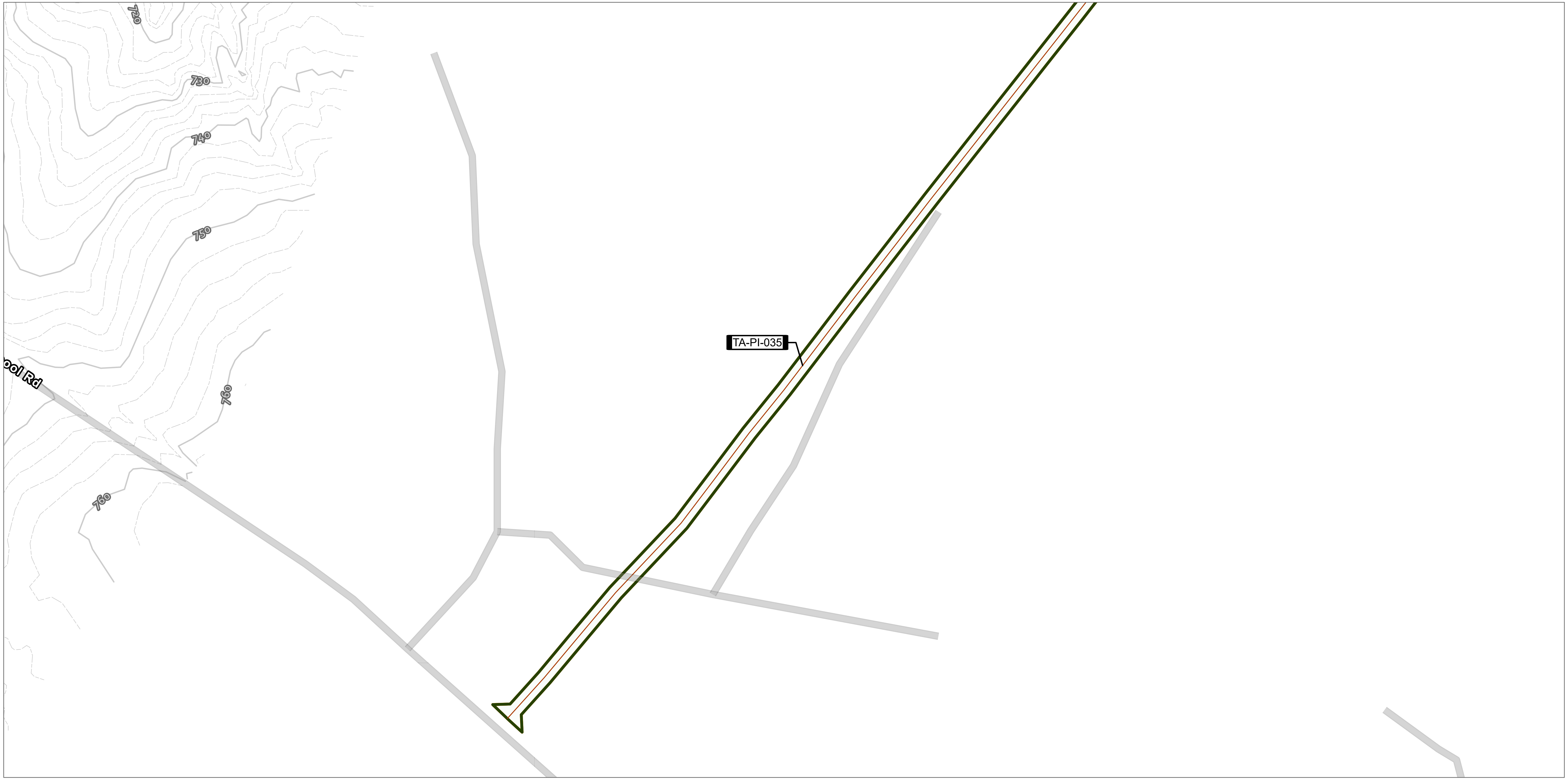
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 89
AR-028

DATE: JULY 2025

MVP SOUTHGATE



- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ● STREAM FLOW DIRECTION

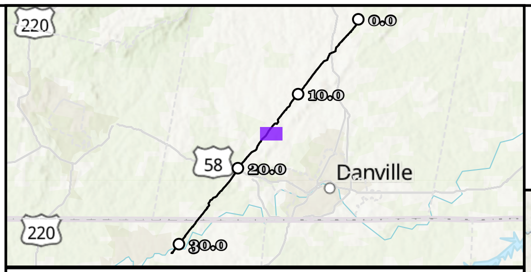
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200

FEET

1:2,400 1" = 200'

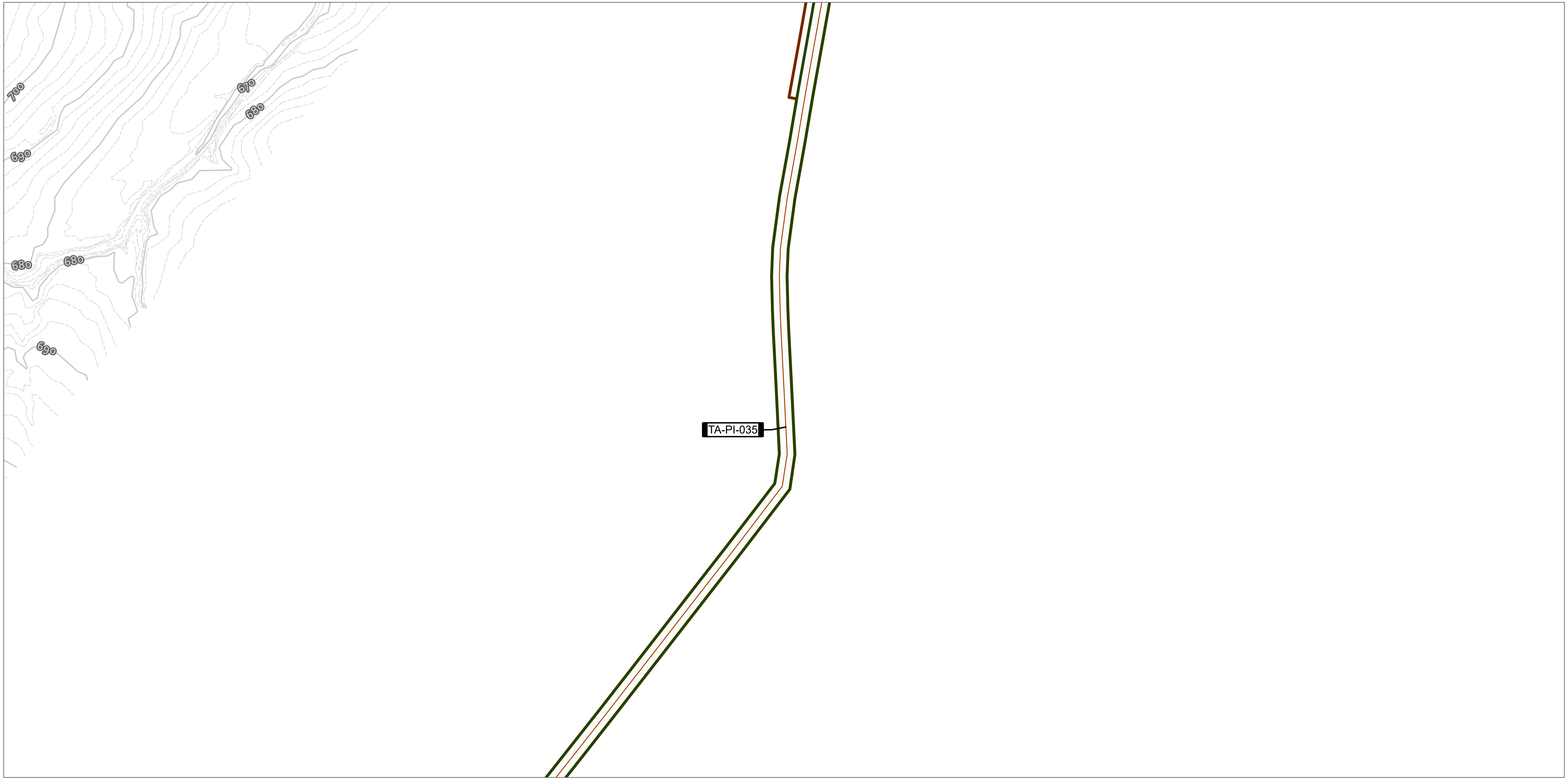
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 90
AR-029

DATE: JULY 2025

MVP SOUTHGATE



- ° TENTH MILE POST
- ° MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- — PERMANENT ACCESS ROAD
- — TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

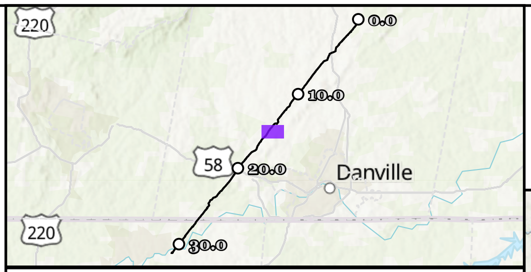
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400 1" = 200'

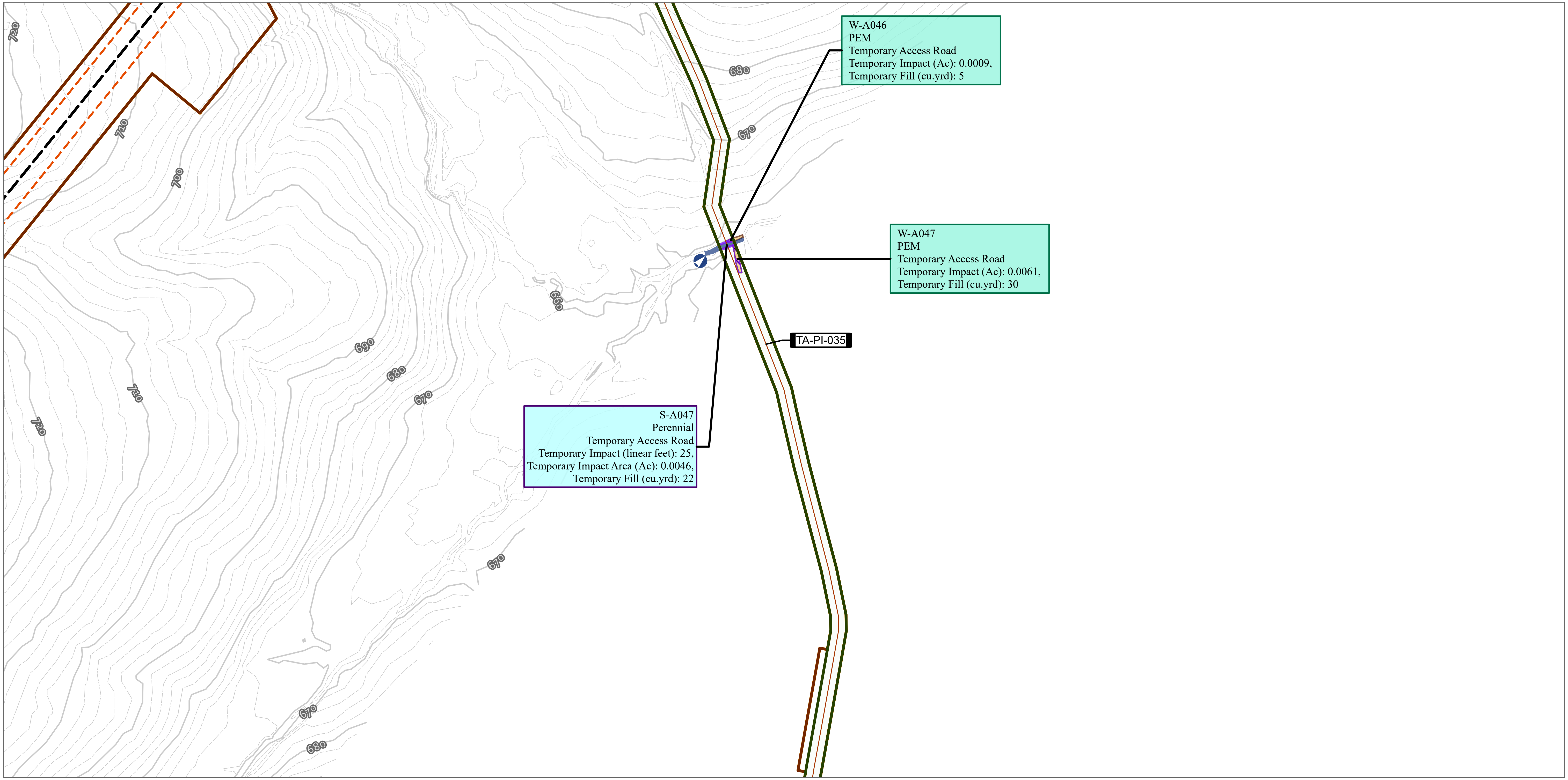
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 91
AR-030

DATE: JULY 2025

MVP SOUTHGATE



W-A046
PEM
Temporary Access Road
Temporary Impact (Ac): 0.0009,
Temporary Fill (cu.yrd): 5

W-A047
PEM
Temporary Access Road
Temporary Impact (Ac): 0.0061,
Temporary Fill (cu.yrd): 30

S-A047
Perennial
Temporary Access Road
Temporary Impact (linear feet): 25,
Temporary Impact Area (Ac): 0.0046,
Temporary Fill (cu.yrd): 22

- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

STREAM IMPACT
- TEMPORARY
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STREAM TYPE
- EPHEMERAL
- INTERMITTENT
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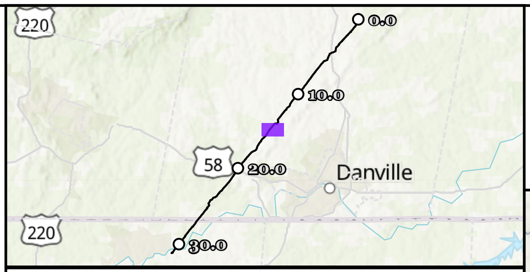
WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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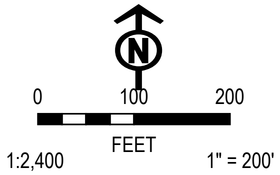


1:2,400
1" = 200'

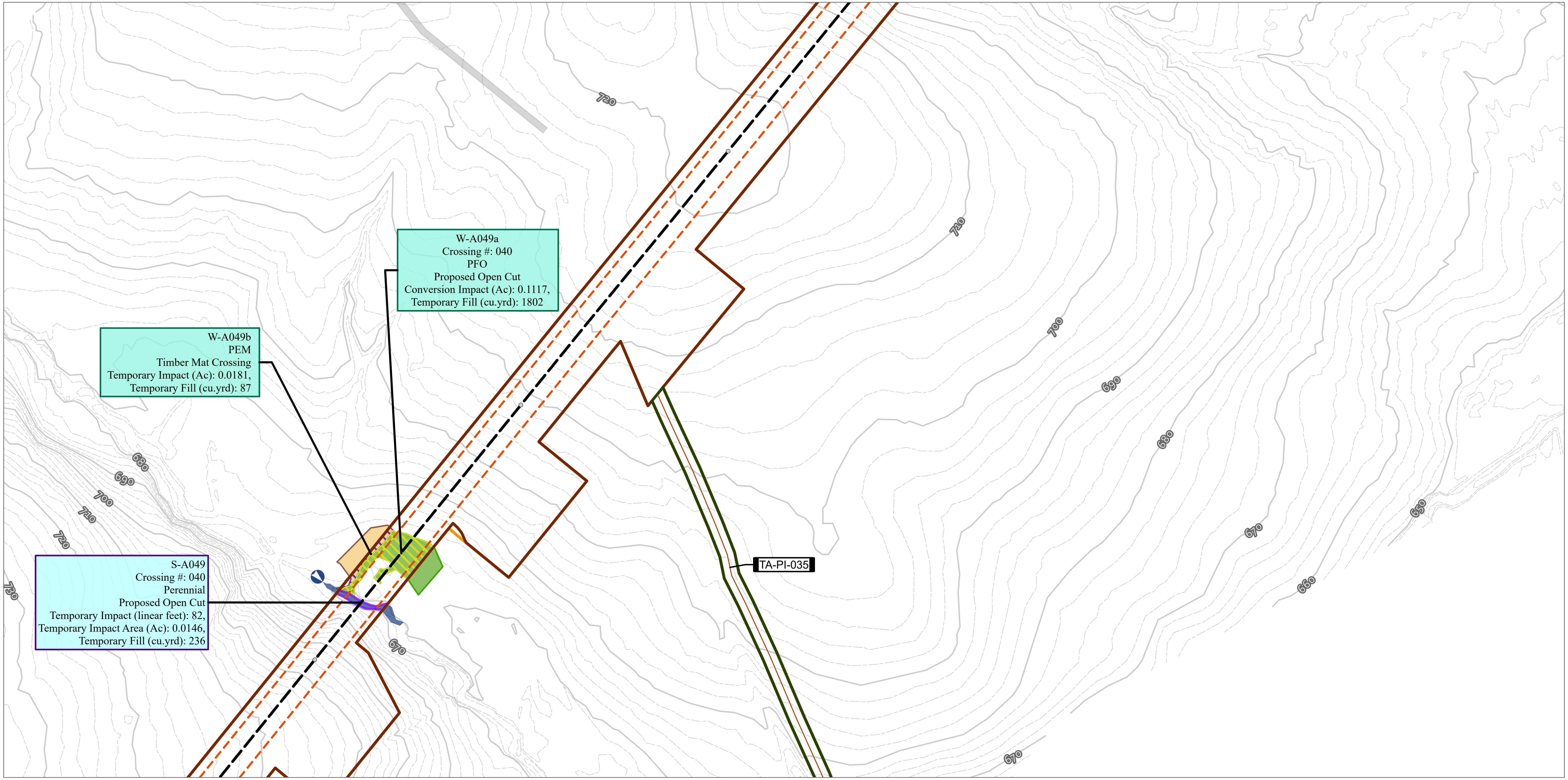
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 92
AR-031

DATE: JULY 2025

MVP SOUTHGATE



720
720
710
700
690
680
670
660
650
670
W-A049a
Crossing #: 040
PFO
Proposed Open Cut
Conversion Impact (Ac): 0.1117,
Temporary Fill (cu.yrd): 1802
W-A049b
PEM
Timber Mat Crossing
Temporary Impact (Ac): 0.0181,
Temporary Fill (cu.yrd): 87
S-A049
Crossing #: 040
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 82,
Temporary Impact Area (Ac): 0.0146,
Temporary Fill (cu.yrd): 236
680
690
700
710
720
730
670
TA-PI-035

- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
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- PERMANENT

STREAM TYPE
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WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
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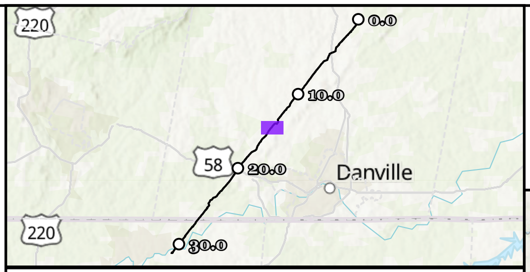
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400
1" = 200'

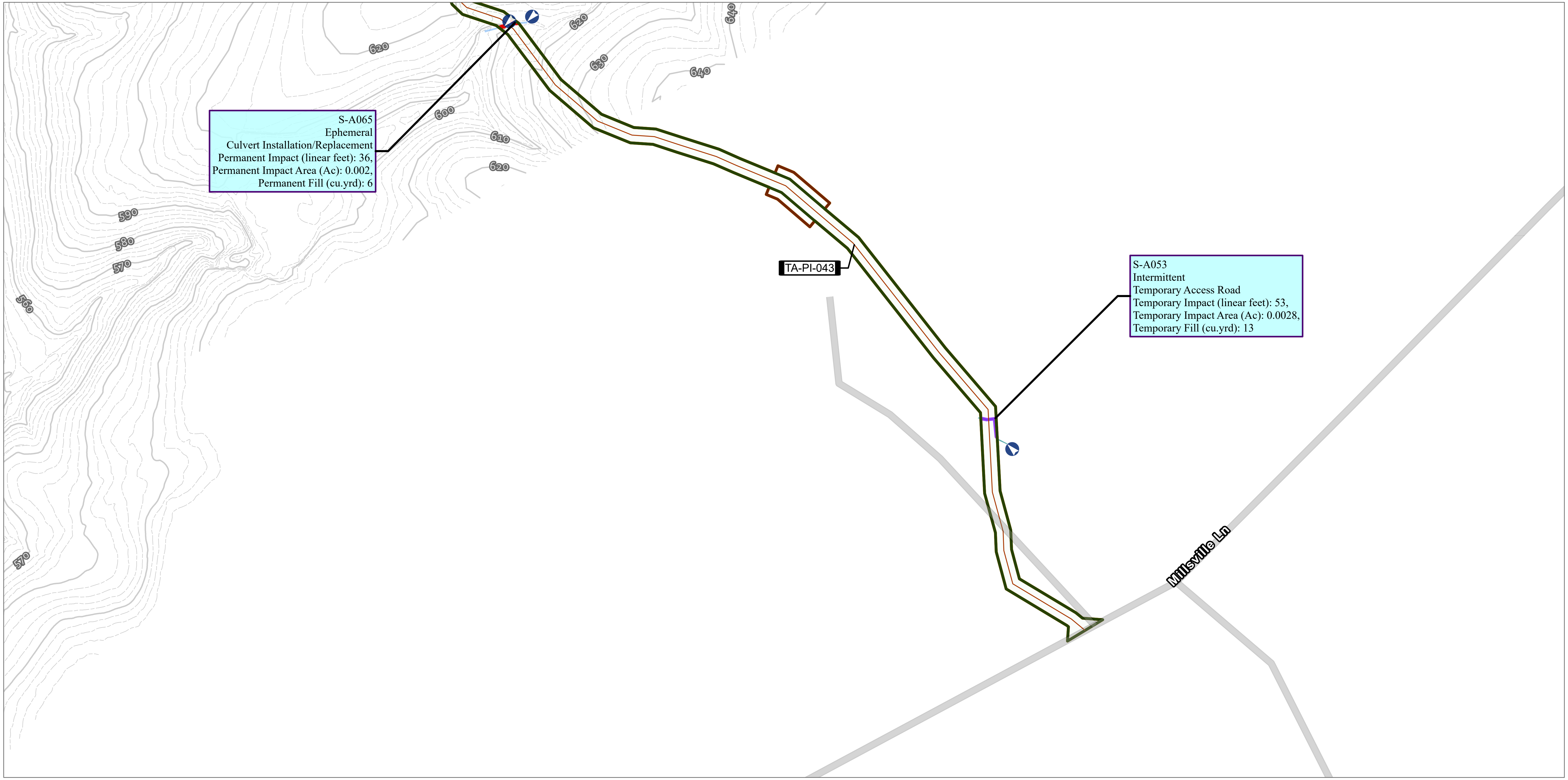
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 93
AR-032

DATE: JULY 2025

MVP SOUTHGATE



S-A065
Ephemeral
Culvert Installation/Replacement
Permanent Impact (linear feet): 36,
Permanent Impact Area (Ac): 0.002,
Permanent Fill (cu.yrd): 6

S-A053
Intermittent
Temporary Access Road
Temporary Impact (linear feet): 53,
Temporary Impact Area (Ac): 0.0028,
Temporary Fill (cu.yrd): 13

- ● TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
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- STREAM FLOW DIRECTION

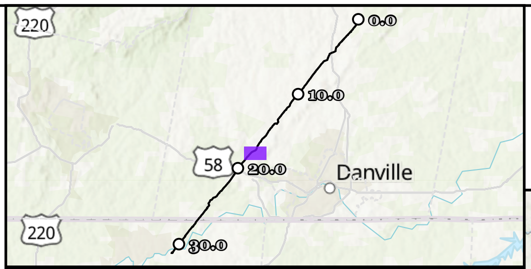
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

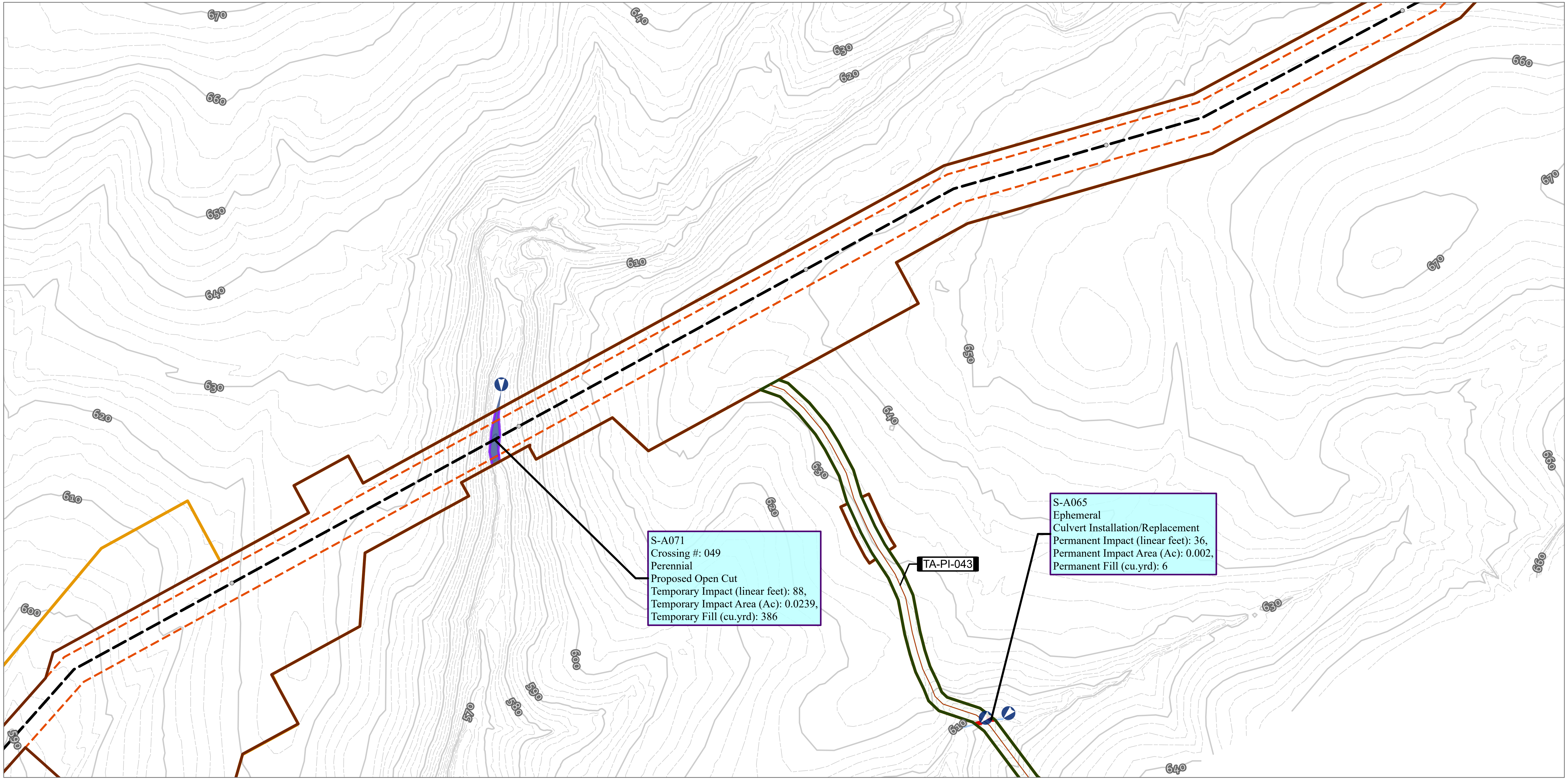
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 94
AR-033

DATE: JULY 2025

MVP
SOUTHGATE



S-A071
Crossing #: 049
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 88,
Temporary Impact Area (Ac): 0.0239,
Temporary Fill (cu.yrd): 386

S-A065
Ephemeral
Culvert Installation/Replacement
Permanent Impact (linear feet): 36,
Permanent Impact Area (Ac): 0.002,
Permanent Fill (cu.yrd): 6

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

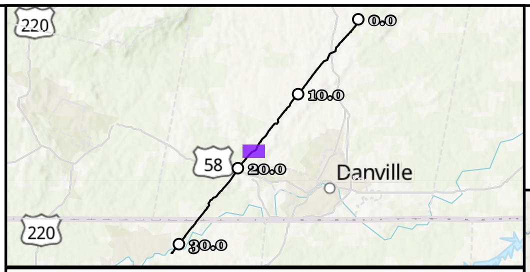
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400
1" = 200'

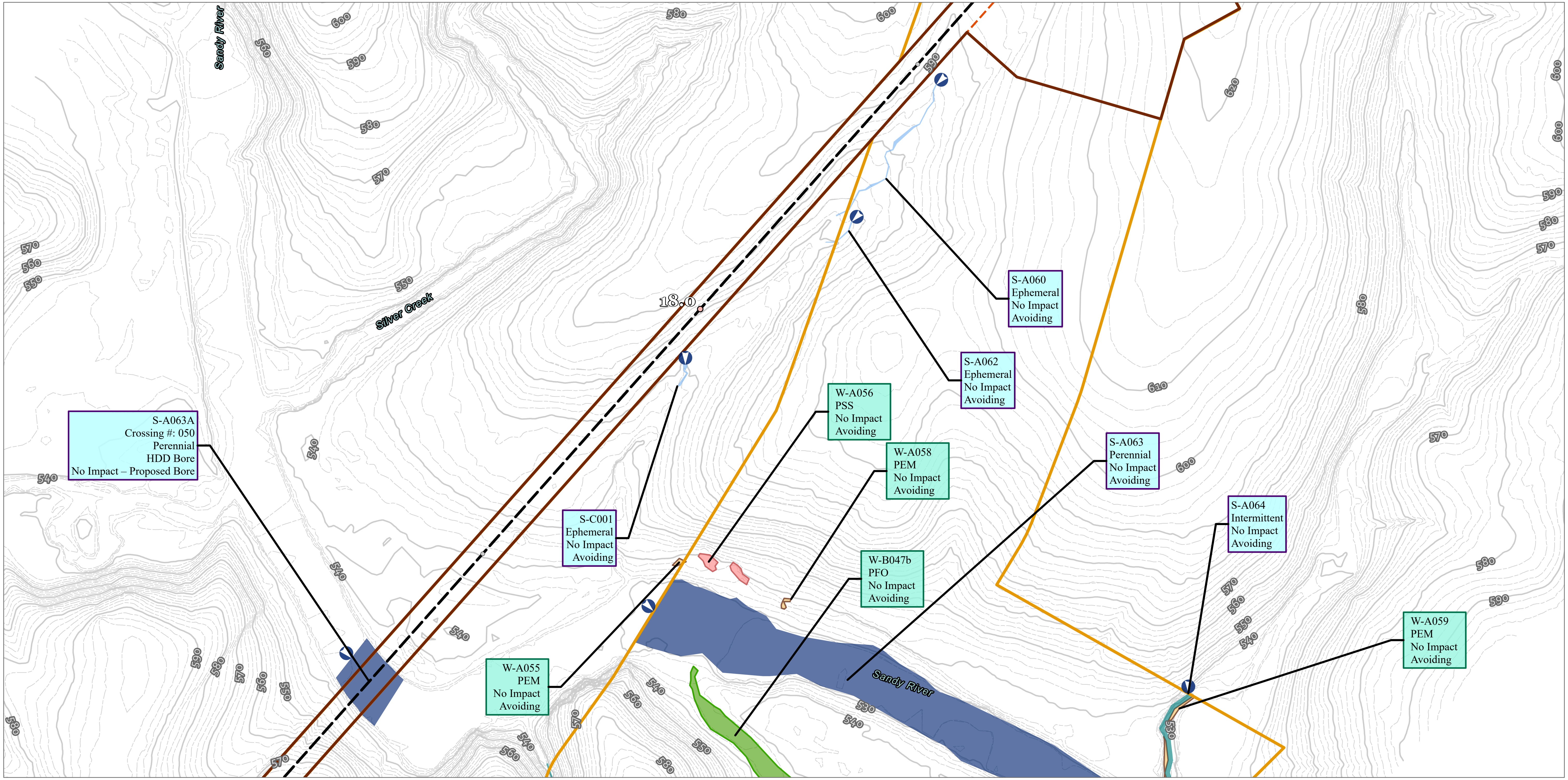
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 95
AR-034

DATE: JULY 2025

MVP SOUTHGATE



- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

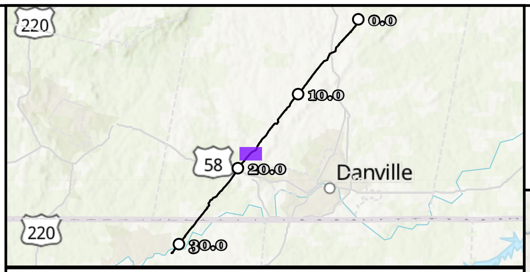
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

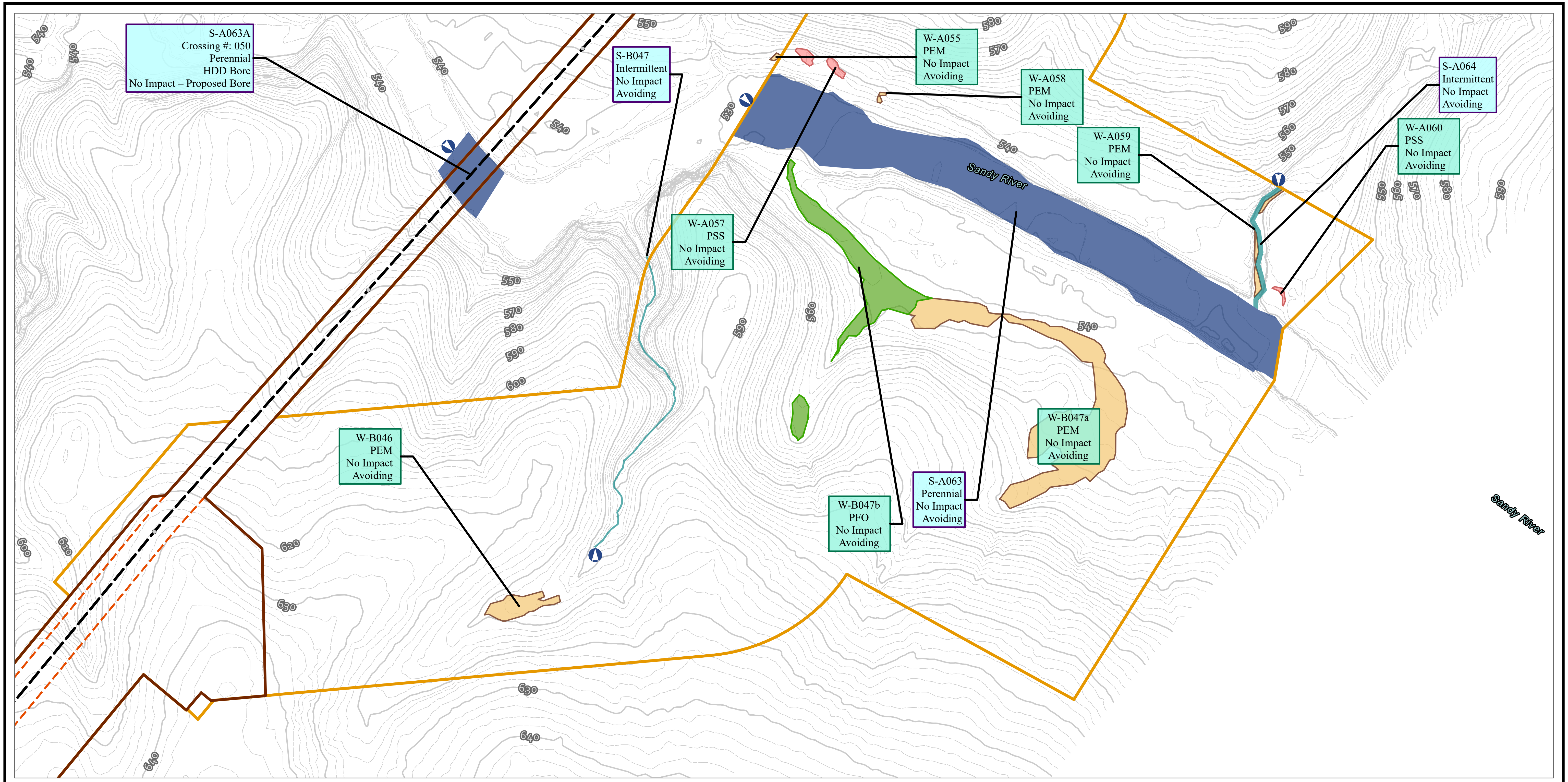
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 96
AR-035

DATE: JULY 2025

MVP SOUTHGATE



- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

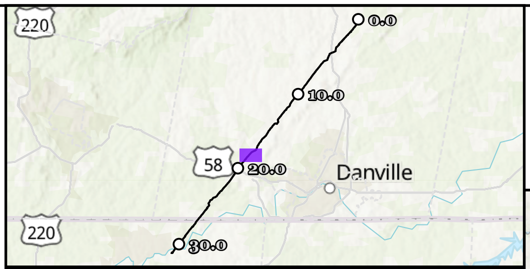
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

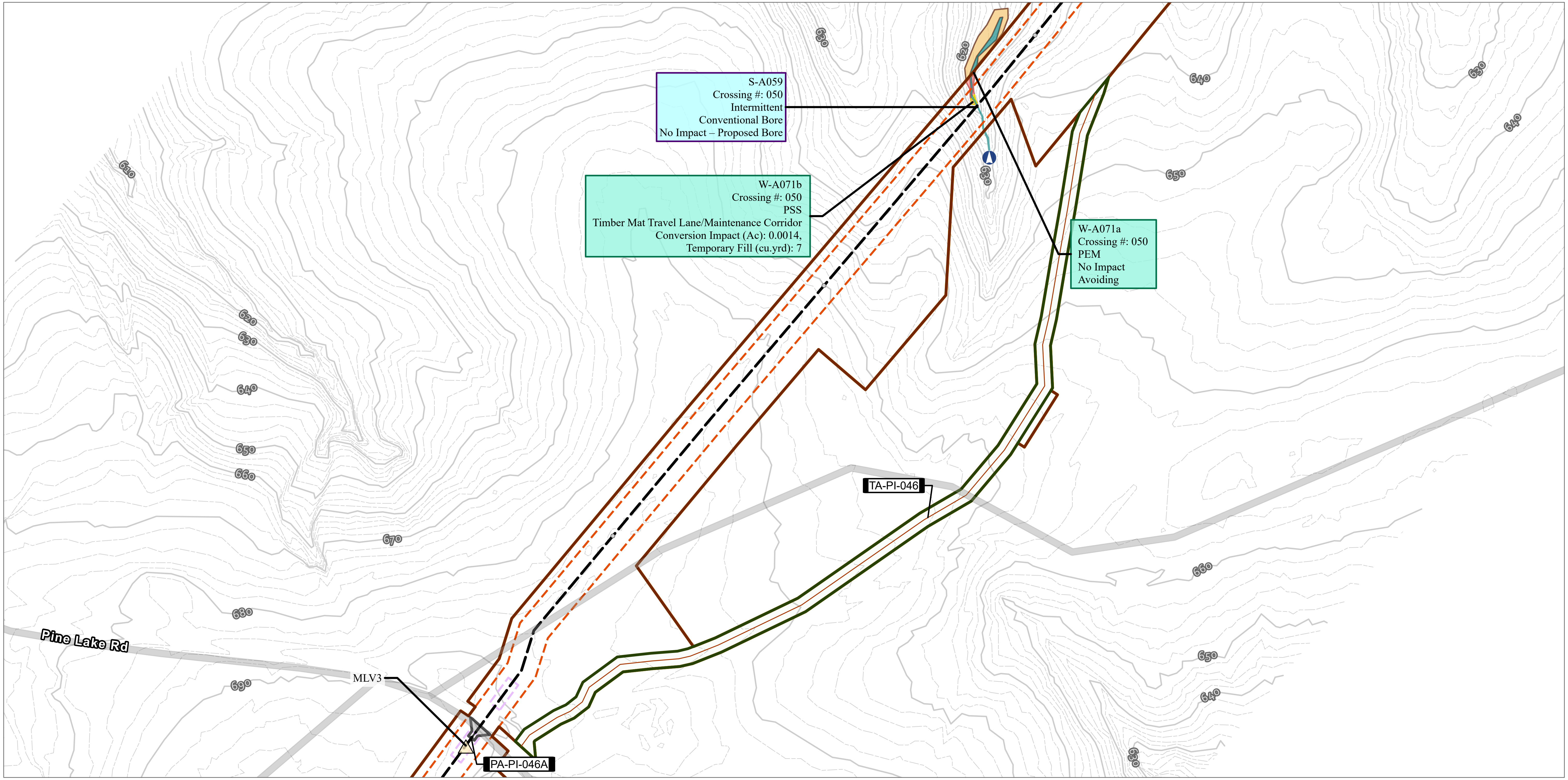
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 97
AR-036

DATE: JULY 2025

MVP SOUTHGATE



S-A059
Crossing #: 050
Intermittent
Conventional Bore
No Impact – Proposed Bore

W-A071b
Crossing #: 050
PSS
Timber Mat Travel Lane/Maintenance Corridor
Conversion Impact (Ac): 0.0014,
Temporary Fill (cu.yrd): 7

W-A071a
Crossing #: 050
PEM
No Impact
Avoiding

- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

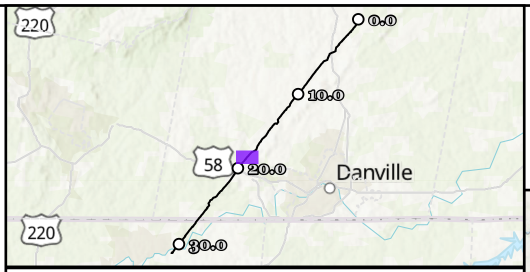
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200

FEET

1:2,400 1" = 200'

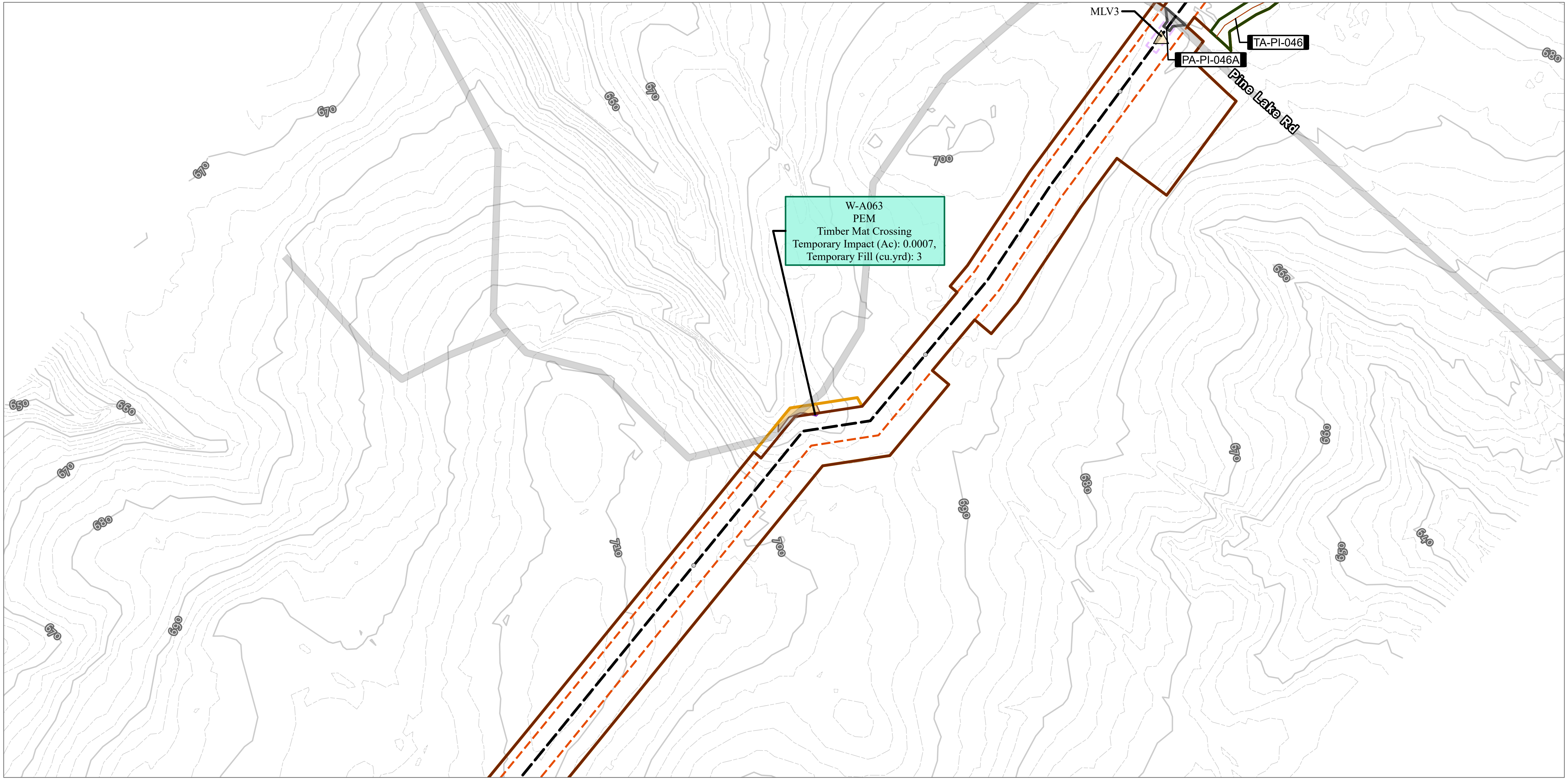
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 98
AR-037

DATE: JULY 2025

MVP SOUTHGATE



- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ━ ━ H-650 PIPELINE
- ━ PERMANENT ACCESS ROAD
- ━ TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

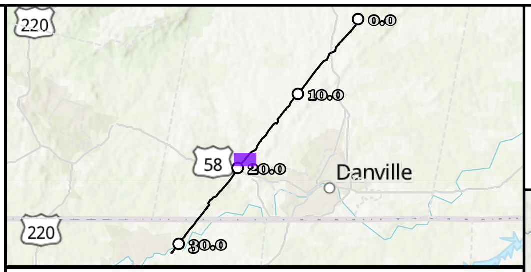
STREAM IMPACT
- ▱ TEMPORARY
- ▱ PERMANENT

STREAM TYPE
- ▬ EPHEMERAL
- ▬ INTERMITTENT
- ▬ PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- ▬ PALUSTRINE EMERGENT
- ▬ PALUSTRINE FORESTED
- ▬ PALUSTRINE SCRUB-SHRUB
- ▬ PALUSTRINE UNCONSOLIDATED BOTTOM

- ▭ COUNTY BOUNDARY
- ▭ STATE BOUNDARY
- ╱ ELEVATION - CONTOUR - INDEX
- ╱ ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400
1" = 200'

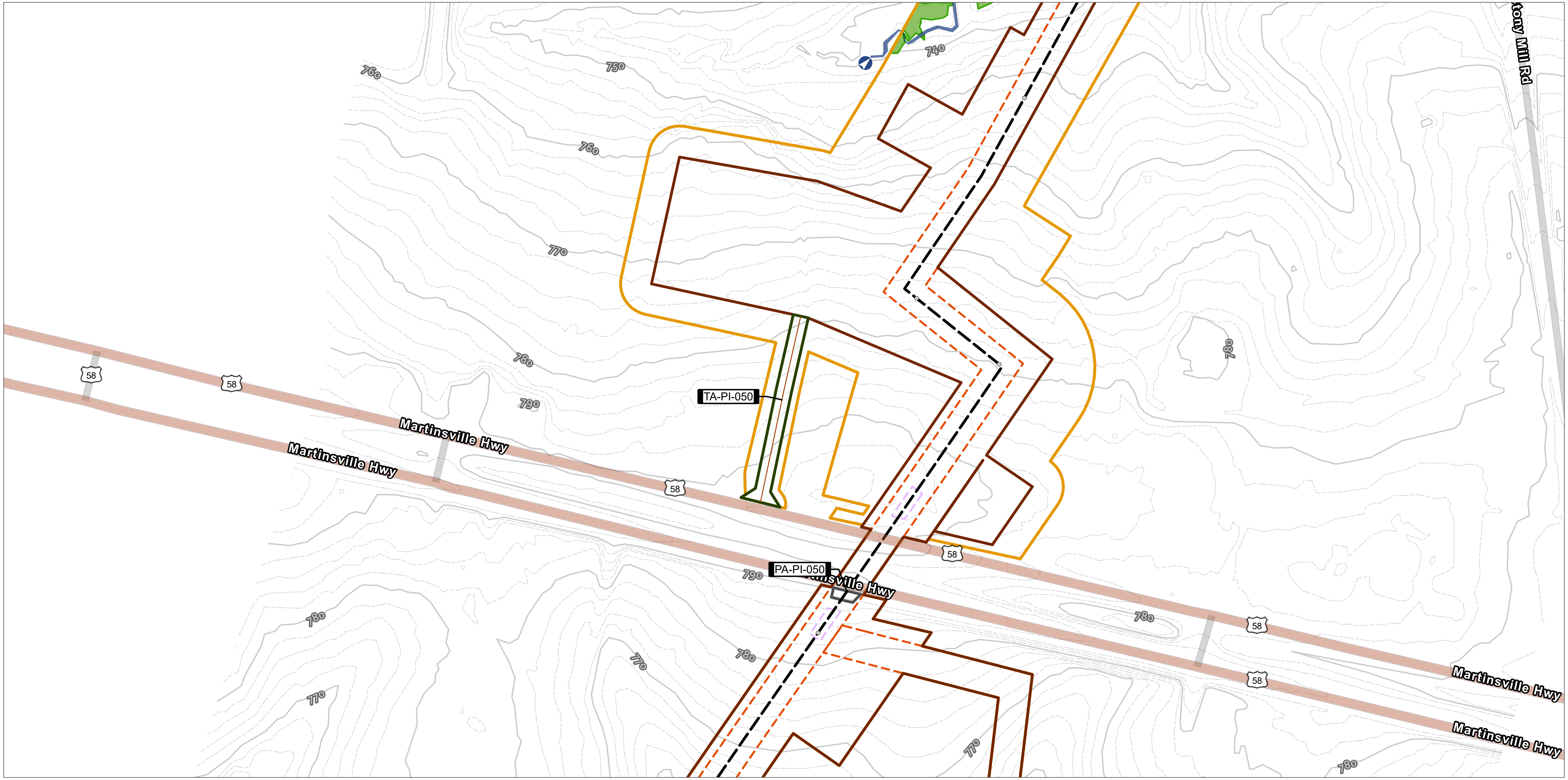
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 99
AR-038

DATE: JULY 2025

MVP SOUTHGATE



- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- — PERMANENT ACCESS ROAD
- — TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

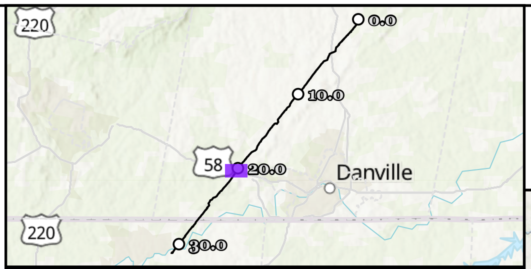
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400
1" = 200'

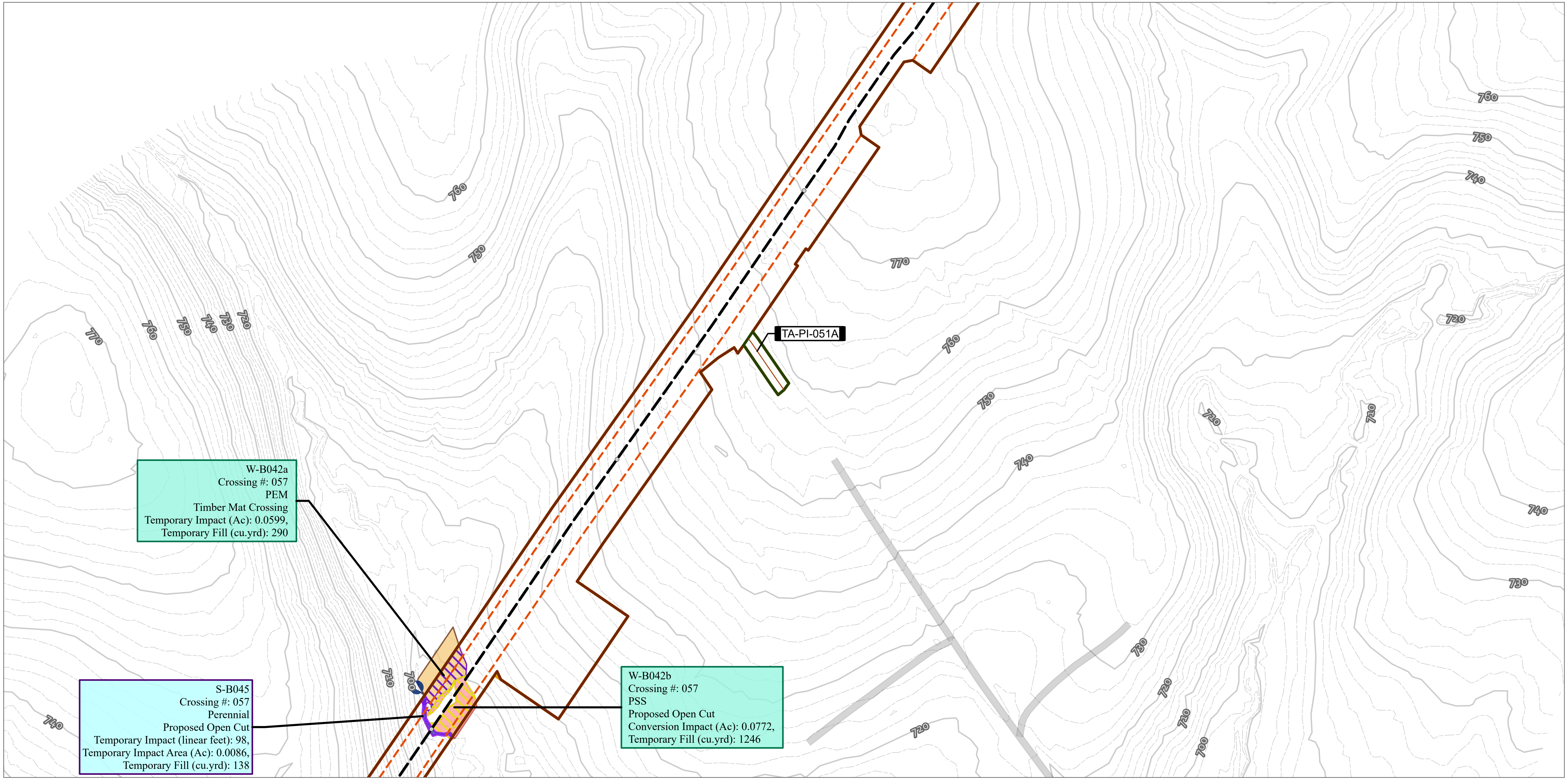
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 100
AR-039

DATE: JULY 2025

MVP SOUTHGATE



- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- ― PERMANENT ACCESS ROAD
- ― TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

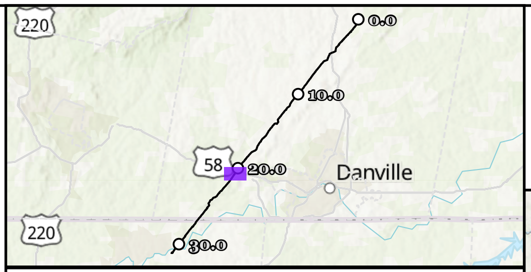
STREAM IMPACT
- ⬭ TEMPORARY
- ⬭ PERMANENT

STREAM TYPE
- ⬬ EPHEMERAL
- ⬬ INTERMITTENT
- ⬬ PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- ⬬ PALUSTRINE EMERGENT
- ⬬ PALUSTRINE FORESTED
- ⬬ PALUSTRINE SCRUB-SHRUB
- ⬬ PALUSTRINE UNCONSOLIDATED BOTTOM

- ▭ COUNTY BOUNDARY
- ▭ STATE BOUNDARY
- ╱ ELEVATION - CONTOUR - INDEX
- ╱ ELEVATION - CONTOUR - INTERMEDIATE



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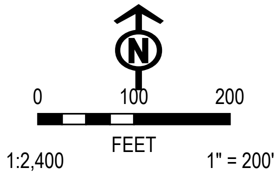


1:2,400
1" = 200'

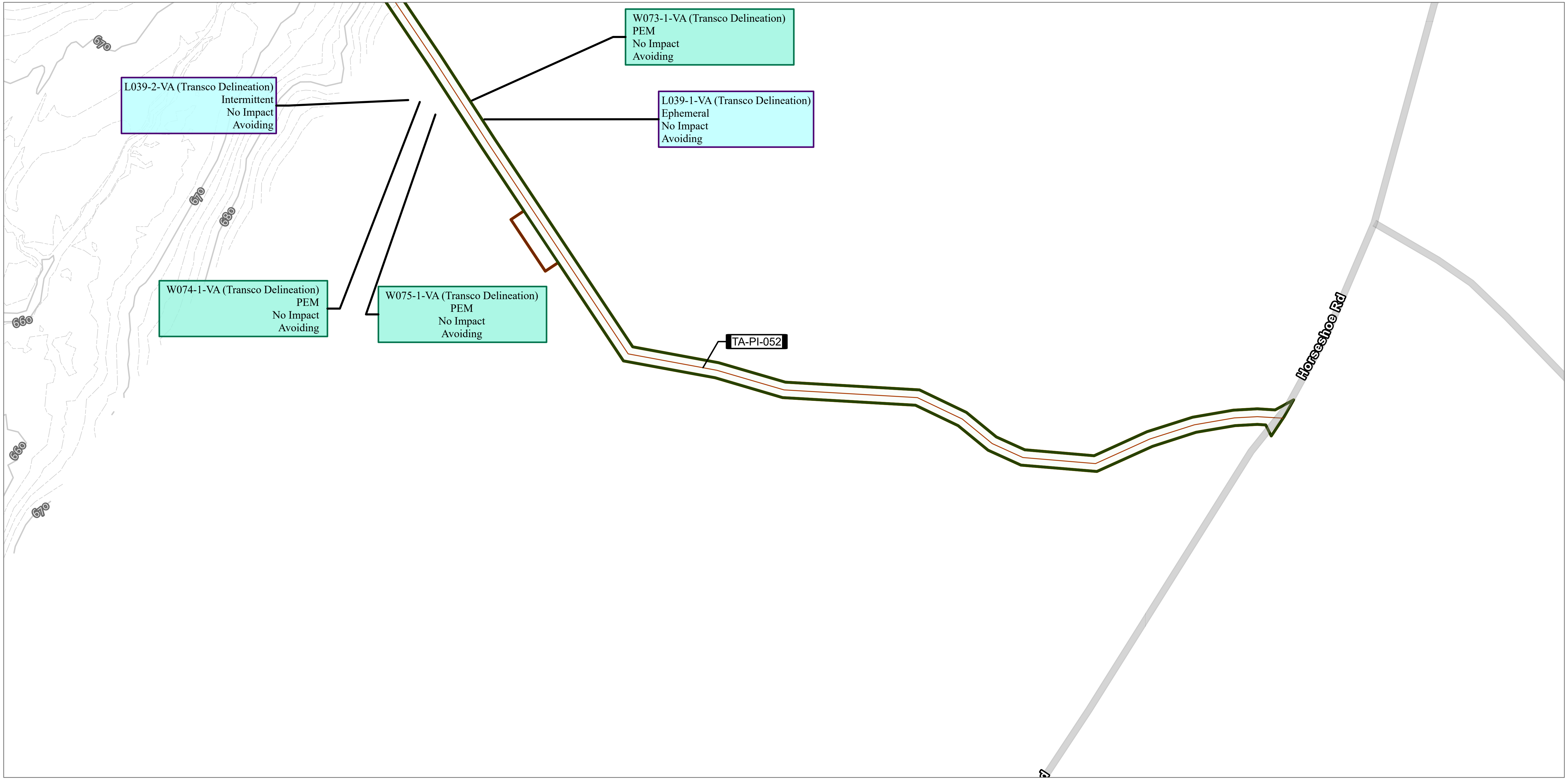
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 101
AR-040

DATE: JULY 2025

MVP SOUTHGATE


W073-1-VA (Transco Delineation)
PEM
No Impact
Avoiding
L039-2-VA (Transco Delineation)
Intermittent
No Impact
Avoiding
L039-1-VA (Transco Delineation)
Ephemeral
No Impact
Avoiding
W074-1-VA (Transco Delineation)
PEM
No Impact
Avoiding
W075-1-VA (Transco Delineation)
PEM
No Impact
Avoiding
TA-PI-052
Horseshoe Rd
670
670
680
660
660
670

- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- ━ ━ H-650 PIPELINE
- ━ PERMANENT ACCESS ROAD
- ━ TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

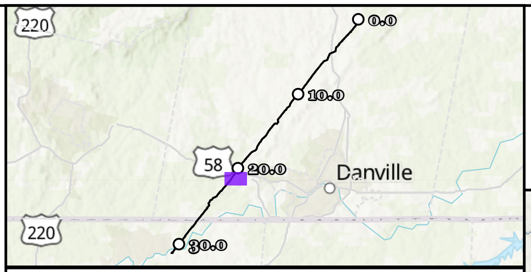
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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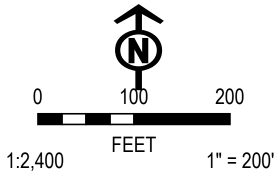


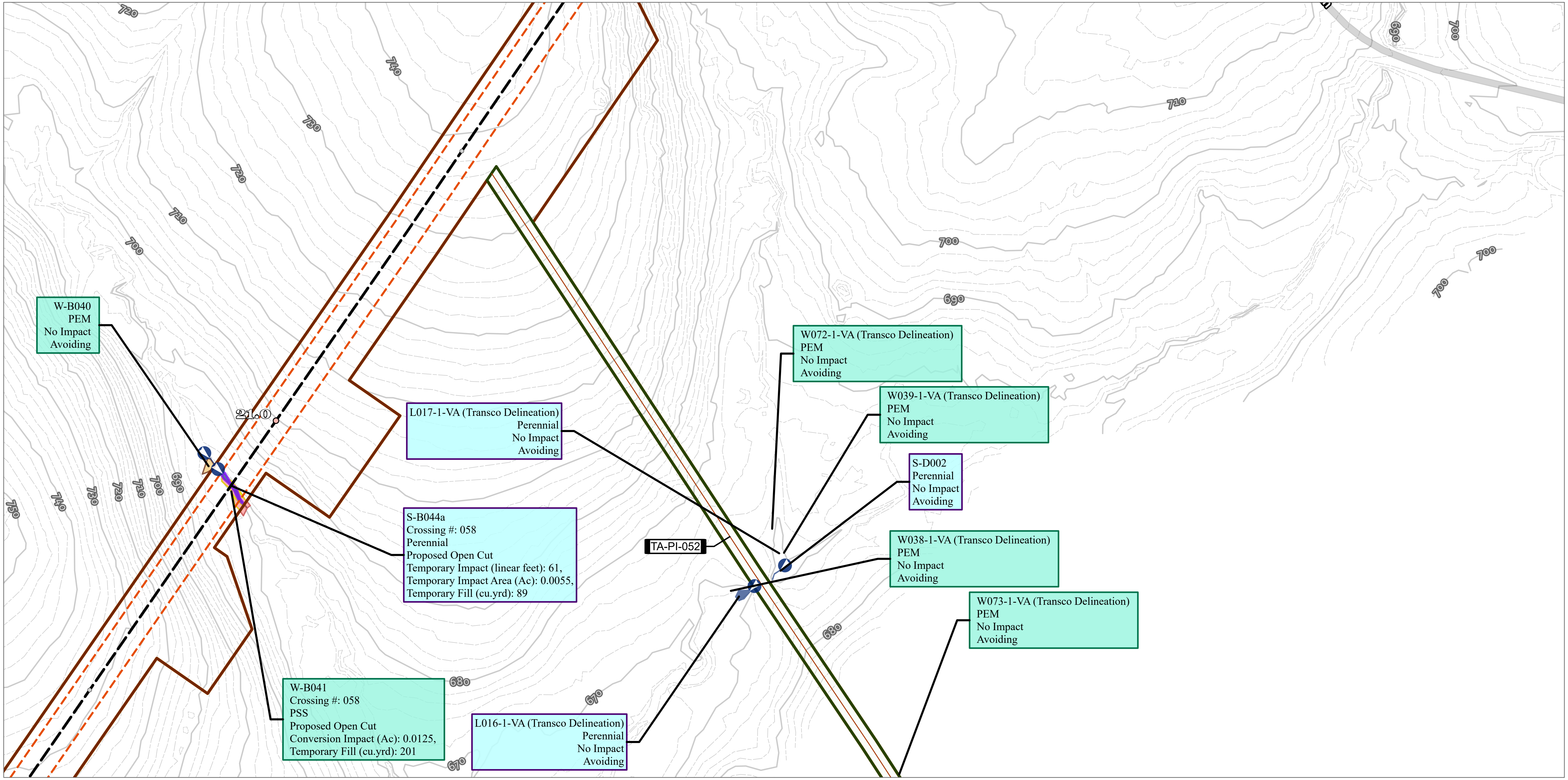
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 102
AR-041

DATE: JULY 2025

MVP SOUTHGATE



W-B040
PEM
No Impact
Avoiding

L017-1-VA (Transco Delineation)
Perennial
No Impact
Avoiding

S-B044a
Crossing #: 058
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 61,
Temporary Impact Area (Ac): 0.0055,
Temporary Fill (cu.yrd): 89

W-B041
Crossing #: 058
PSS
Proposed Open Cut
Conversion Impact (Ac): 0.0125,
Temporary Fill (cu.yrd): 201

L016-1-VA (Transco Delineation)
Perennial
No Impact
Avoiding

W072-1-VA (Transco Delineation)
PEM
No Impact
Avoiding

W039-1-VA (Transco Delineation)
PEM
No Impact
Avoiding

S-D002
Perennial
No Impact
Avoiding

W038-1-VA (Transco Delineation)
PEM
No Impact
Avoiding

W073-1-VA (Transco Delineation)
PEM
No Impact
Avoiding

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

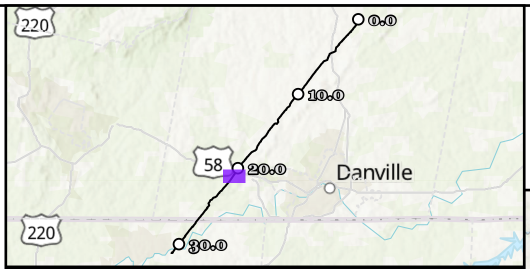
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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1:2,400
1" = 200'

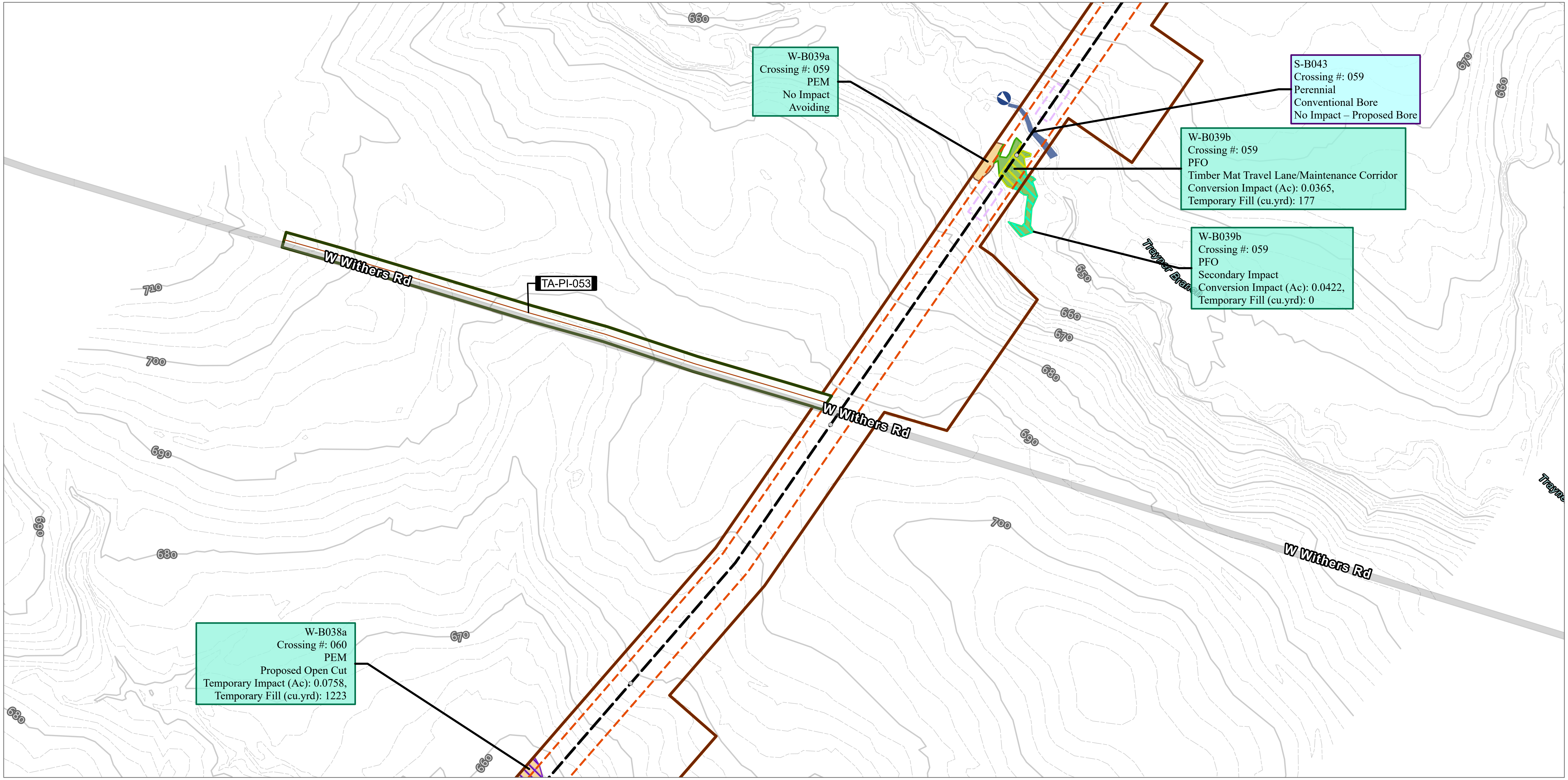
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 103
AR-042

DATE: JULY 2025

MVP SOUTHGATE



W-B039a
Crossing #: 059
PEM
No Impact
Avoiding

S-B043
Crossing #: 059
Perennial
Conventional Bore
No Impact – Proposed Bore

W-B039b
Crossing #: 059
PFO
Timber Mat Travel Lane/Maintenance Corridor
Conversion Impact (Ac): 0.0365,
Temporary Fill (cu.yrd): 177

W-B039b
Crossing #: 059
PFO
Secondary Impact
Conversion Impact (Ac): 0.0422,
Temporary Fill (cu.yrd): 0

W-B038a
Crossing #: 060
PEM
Proposed Open Cut
Temporary Impact (Ac): 0.0758,
Temporary Fill (cu.yrd): 1223

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

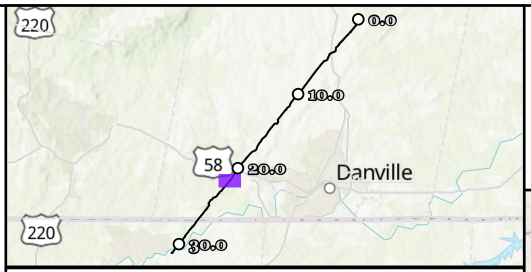
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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FEET
1:2,400
1" = 200'

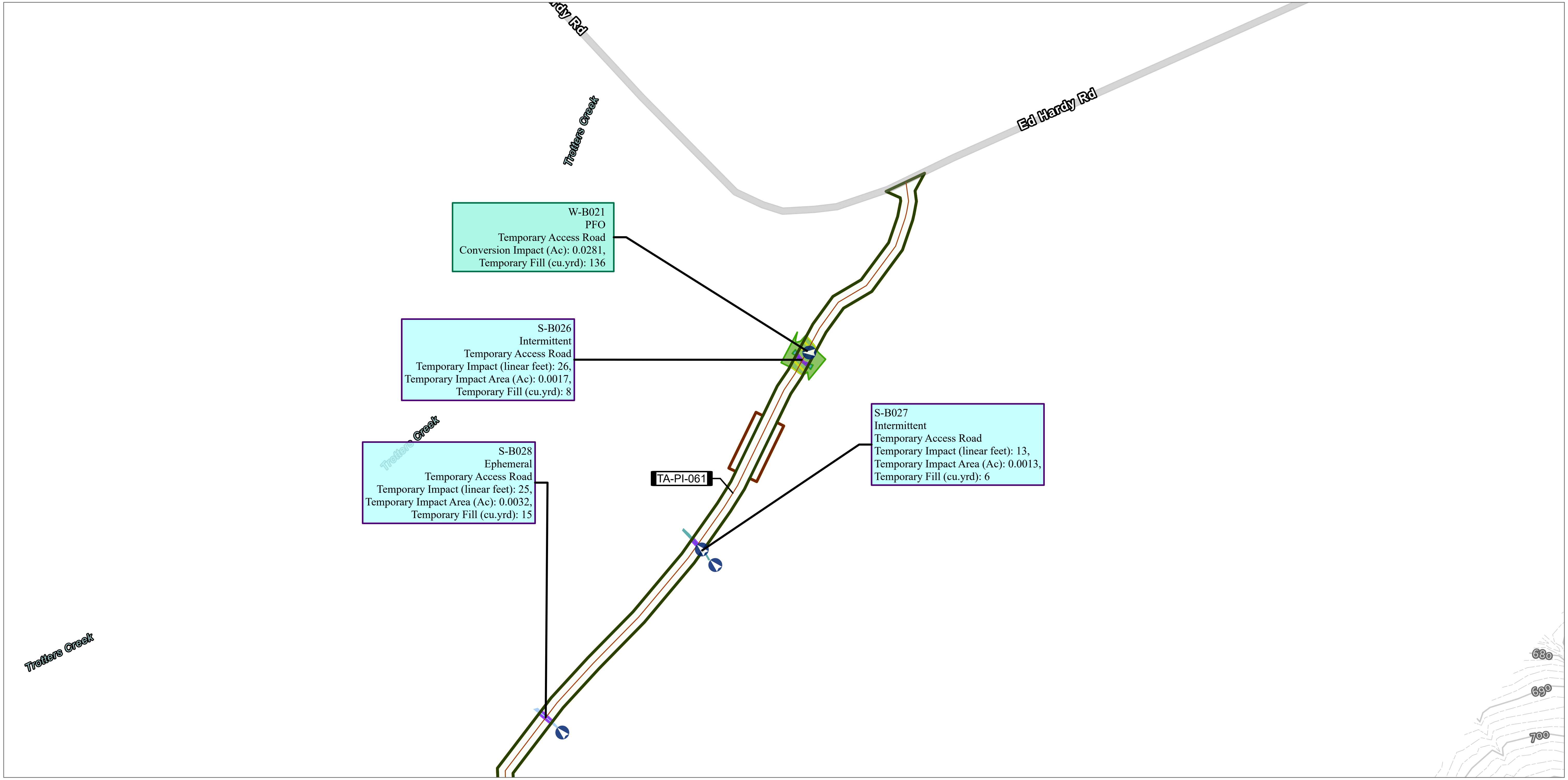
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 104
AR-043

DATE: JULY 2025

MVP SOUTHGATE


Ed Hardy Rd
Ed Hardy Rd
Trotters Creek
Trotters Creek
Trotters Creek
W-B021
PFO
Temporary Access Road
Conversion Impact (Ac): 0.0281,
Temporary Fill (cu.yrd): 136
S-B026
Intermittent
Temporary Access Road
Temporary Impact (linear feet): 26,
Temporary Impact Area (Ac): 0.0017,
Temporary Fill (cu.yrd): 8
S-B028
Ephemeral
Temporary Access Road
Temporary Impact (linear feet): 25,
Temporary Impact Area (Ac): 0.0032,
Temporary Fill (cu.yrd): 15
TA-PI-061
S-B027
Intermittent
Temporary Access Road
Temporary Impact (linear feet): 13,
Temporary Impact Area (Ac): 0.0013,
Temporary Fill (cu.yrd): 6
680
690
700

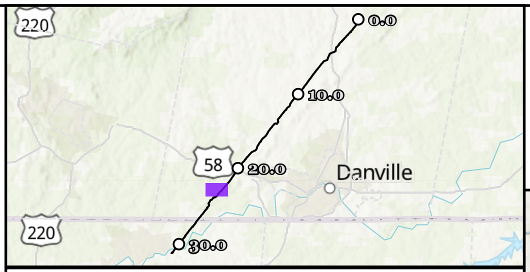
○ TENTH MILE POST
○ MILE POST
△ MAIN LINE VALVE
● METER STATIONS
🟨 CONTRACTOR YARD
H-650 PIPELINE
PERMANENT ACCESS ROAD
TEMPORARY ACCESS ROAD

TEMPORARY ACCESS ROAD
PERMANENT ACCESS ROAD
LIMITS OF CONSTRUCTION WORKSPACE
OPERATIONAL WORKSPACE
BORE PITS
LAYDOWN YARD / STAGING AREA
SURVEY AREA

STREAM FLOW DIRECTION
STREAM IMPACT
TEMPORARY
PERMANENT
STREAM TYPE
EPHEMERAL
INTERMITTENT
PERENNIAL

WETLAND IMPACT
▨ TEMPORARY
▨ CONVERSION
▨ SECONDARY IMPACT
WETLAND TYPE
PALUSTRINE EMERGENT
PALUSTRINE FORESTED
PALUSTRINE SCRUB-SHRUB
PALUSTRINE UNCONSOLIDATED BOTTOM

COUNTY BOUNDARY
STATE BOUNDARY
ELEVATION - CONTOUR - INDEX
ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

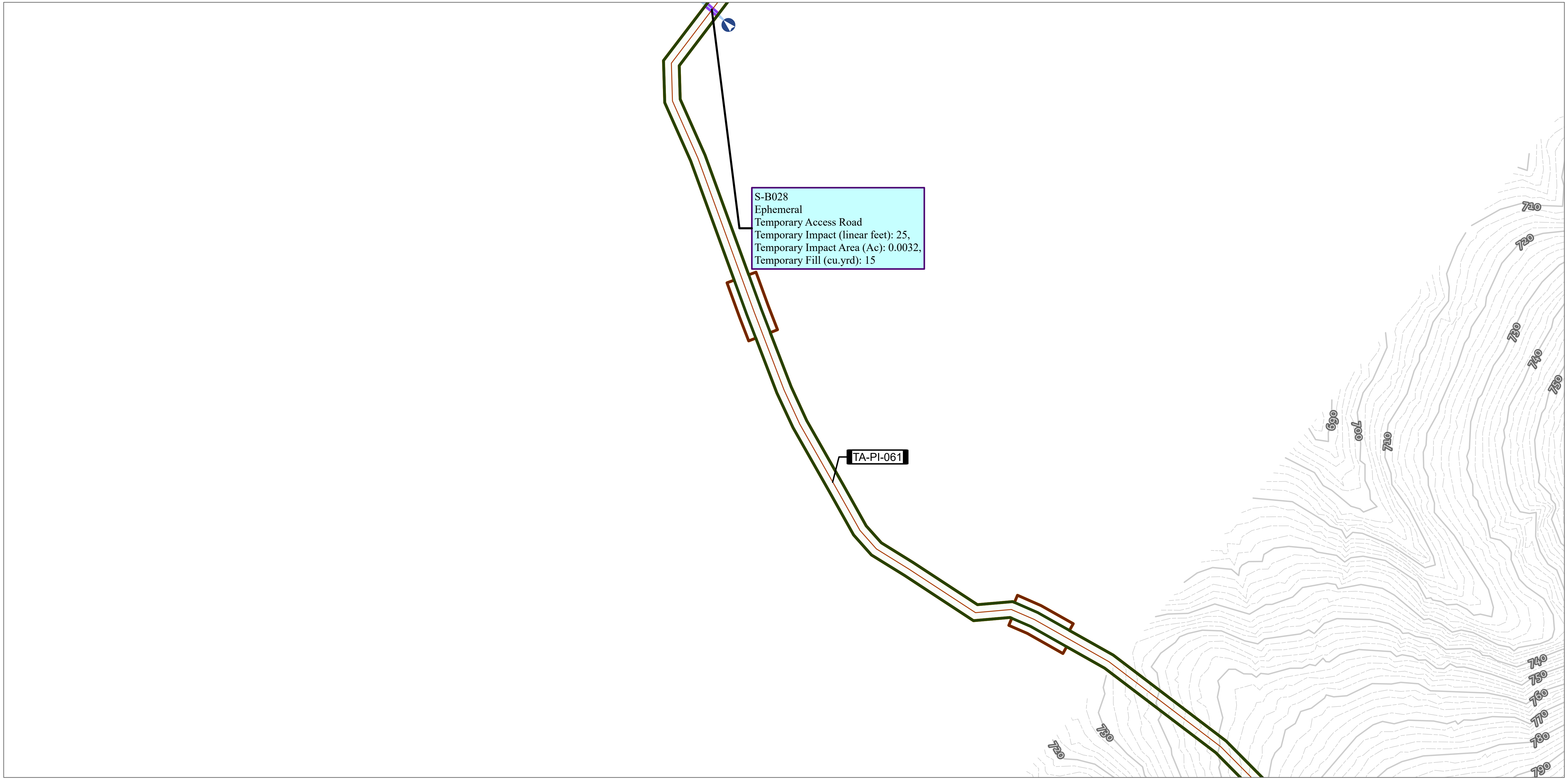
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 105
AR-044

DATE: JULY 2025

MVP SOUTHGATE


S-B028
Ephemeral
Temporary Access Road
Temporary Impact (linear feet): 25,
Temporary Impact Area (Ac): 0.0032,
Temporary Fill (cu.yrd): 15
TA-PI-061
710
720
730
740
750
690
700
710
740
750
760
770
780
790
730
720

- ○ TENTH MILE POST
- ○ MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- — PERMANENT ACCESS ROAD
- — TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

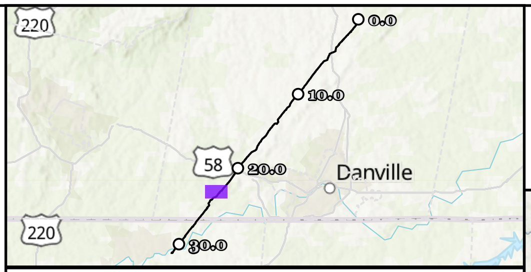
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- ▭ COUNTY BOUNDARY
- ▭ STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N
0 100 200
FEET
1:2,400
1" = 200'

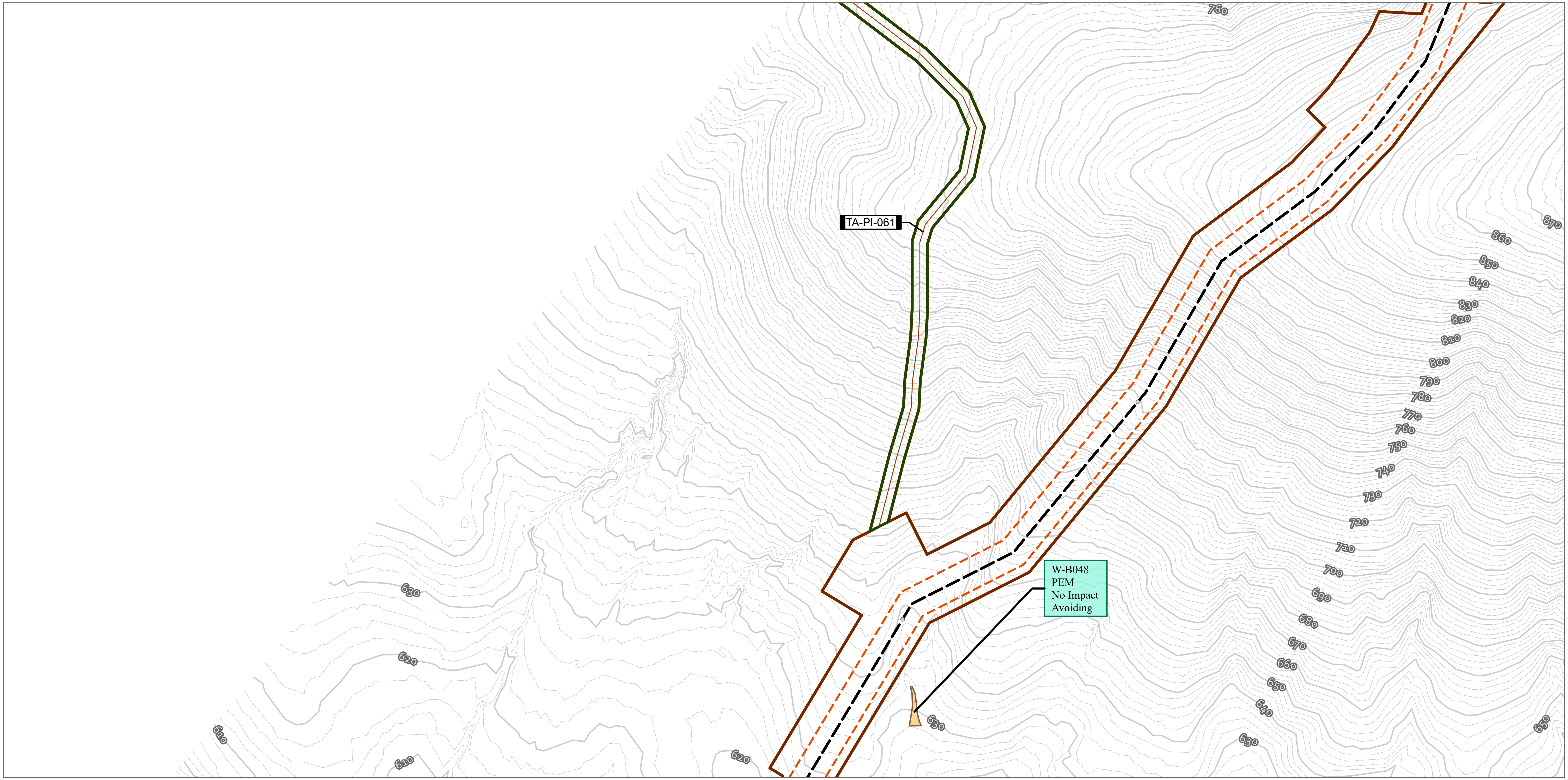
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE: FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 106
AR-045

DATE: JULY 2025

MVP SOUTHGATE



- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ◉ METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- ― PERMANENT ACCESS ROAD
- ― TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

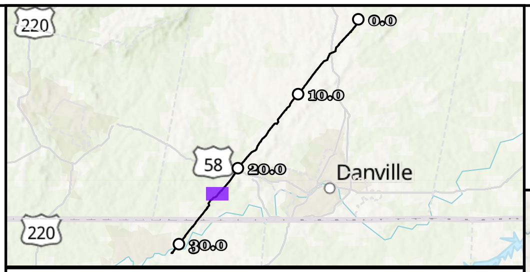
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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N

0 100 200
FEET
1:2,400
1" = 200'

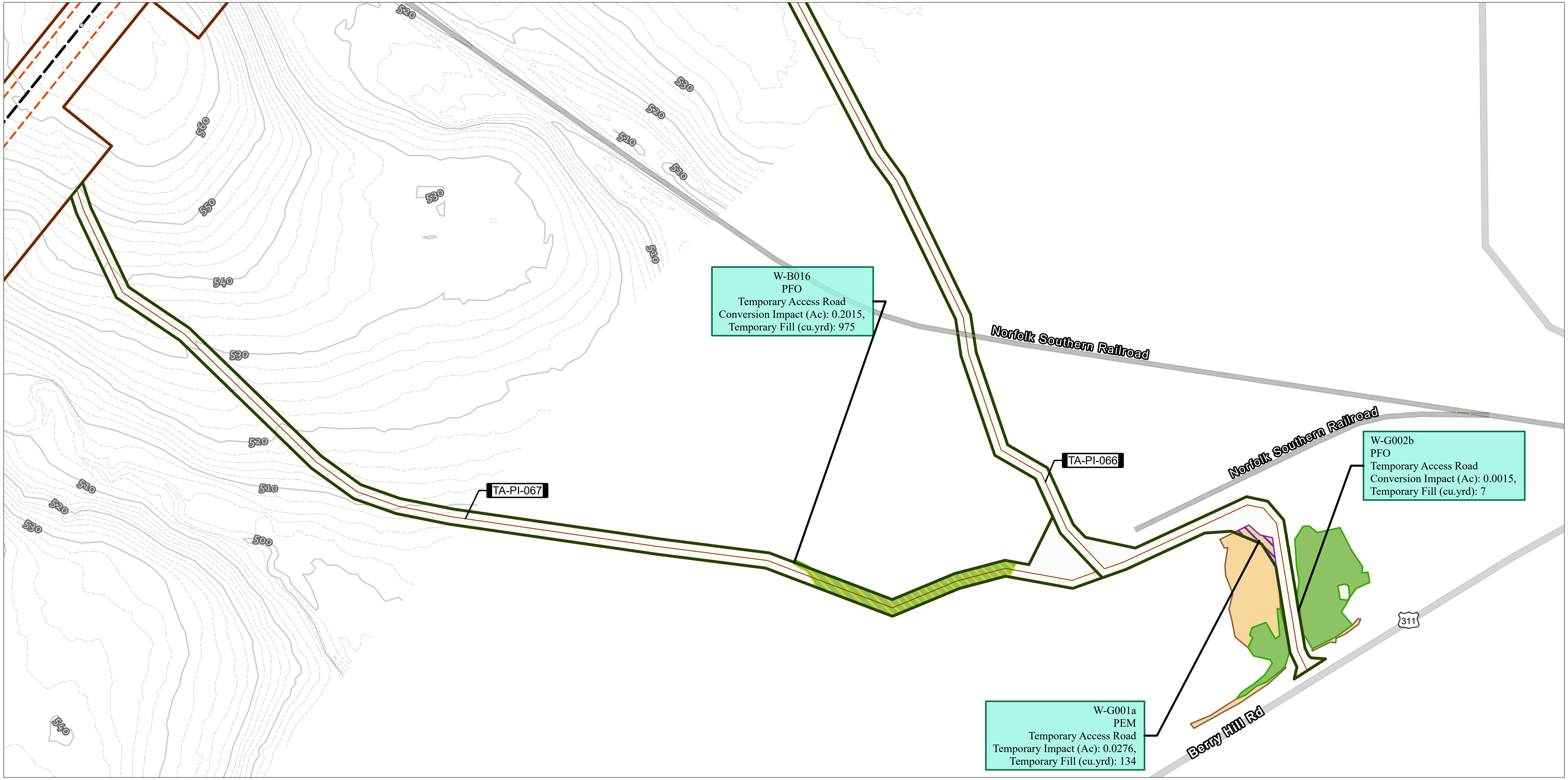
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 107
AR-046

DATE: JULY 2025

MVP
SOUTHGATE



W-B016
PFO
Temporary Access Road
Conversion Impact (Ac): 0.2015,
Temporary Fill (cu.yrd): 975

W-G002b
PFO
Temporary Access Road
Conversion Impact (Ac): 0.0015,
Temporary Fill (cu.yrd): 7

W-G001a
PEM
Temporary Access Road
Temporary Impact (Ac): 0.0276,
Temporary Fill (cu.yrd): 134

- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- ━ ━ H-650 PIPELINE
- ─ PERMANENT ACCESS ROAD
- ─ TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

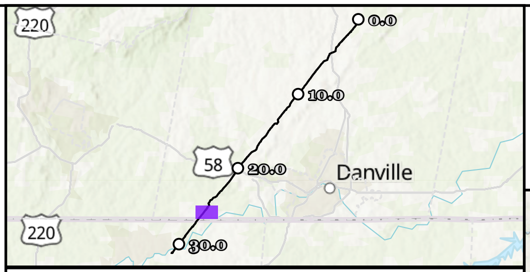
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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0 100 200
FEET
1:2,400
1" = 200'

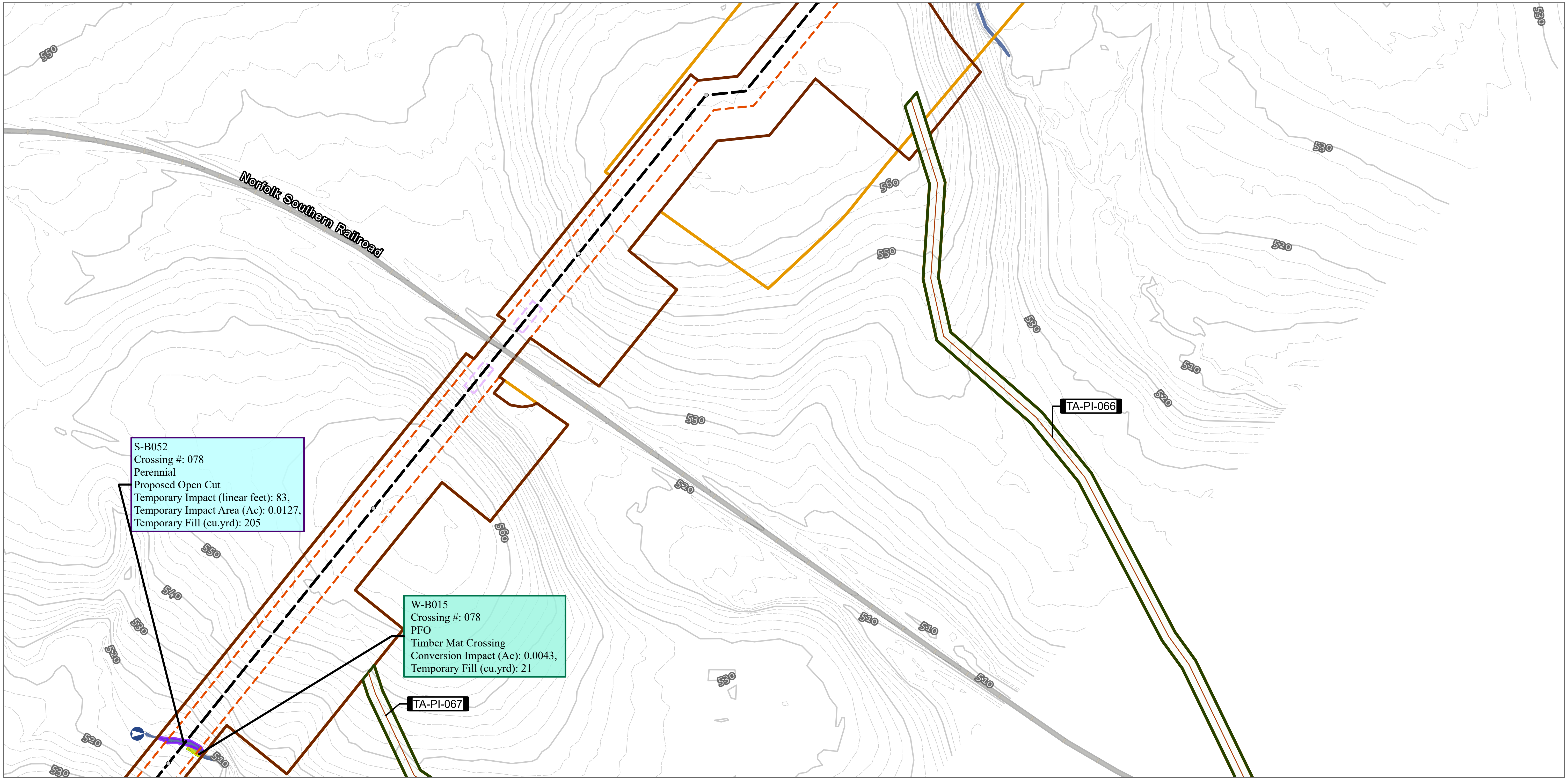
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 108
AR-047

DATE: JULY 2025

MVP SOUTHGATE



S-B052
Crossing #: 078
Perennial
Proposed Open Cut
Temporary Impact (linear feet): 83,
Temporary Impact Area (Ac): 0.0127,
Temporary Fill (cu.yrd): 205

W-B015
Crossing #: 078
PFO
Timber Mat Crossing
Conversion Impact (Ac): 0.0043,
Temporary Fill (cu.yrd): 21

- ● TENTH MILE POST
- ● MILE POST
- △ MAIN LINE VALVE
- ● METER STATIONS
- 🟨 CONTRACTOR YARD
- ▬ ▬ H-650 PIPELINE
- ▬ PERMANENT ACCESS ROAD
- ▬ TEMPORARY ACCESS ROAD
- ▱ TEMPORARY ACCESS ROAD
- ▱ PERMANENT ACCESS ROAD
- ▱ LIMITS OF CONSTRUCTION WORKSPACE
- ▱ OPERATIONAL WORKSPACE
- ▱ BORE PITS
- ▨ LAYDOWN YARD / STAGING AREA
- ▱ SURVEY AREA
- ➤ STREAM FLOW DIRECTION

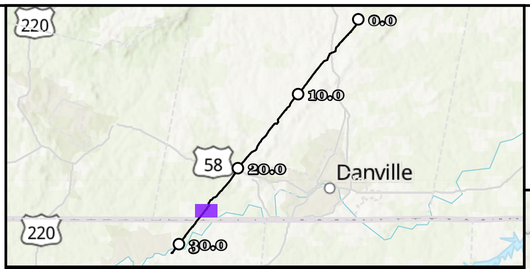
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- ▨ TEMPORARY
- ▨ CONVERSION
- ▨ SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- ▭ COUNTY BOUNDARY
- ▭ STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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FEET
1:2,400
1" = 200'

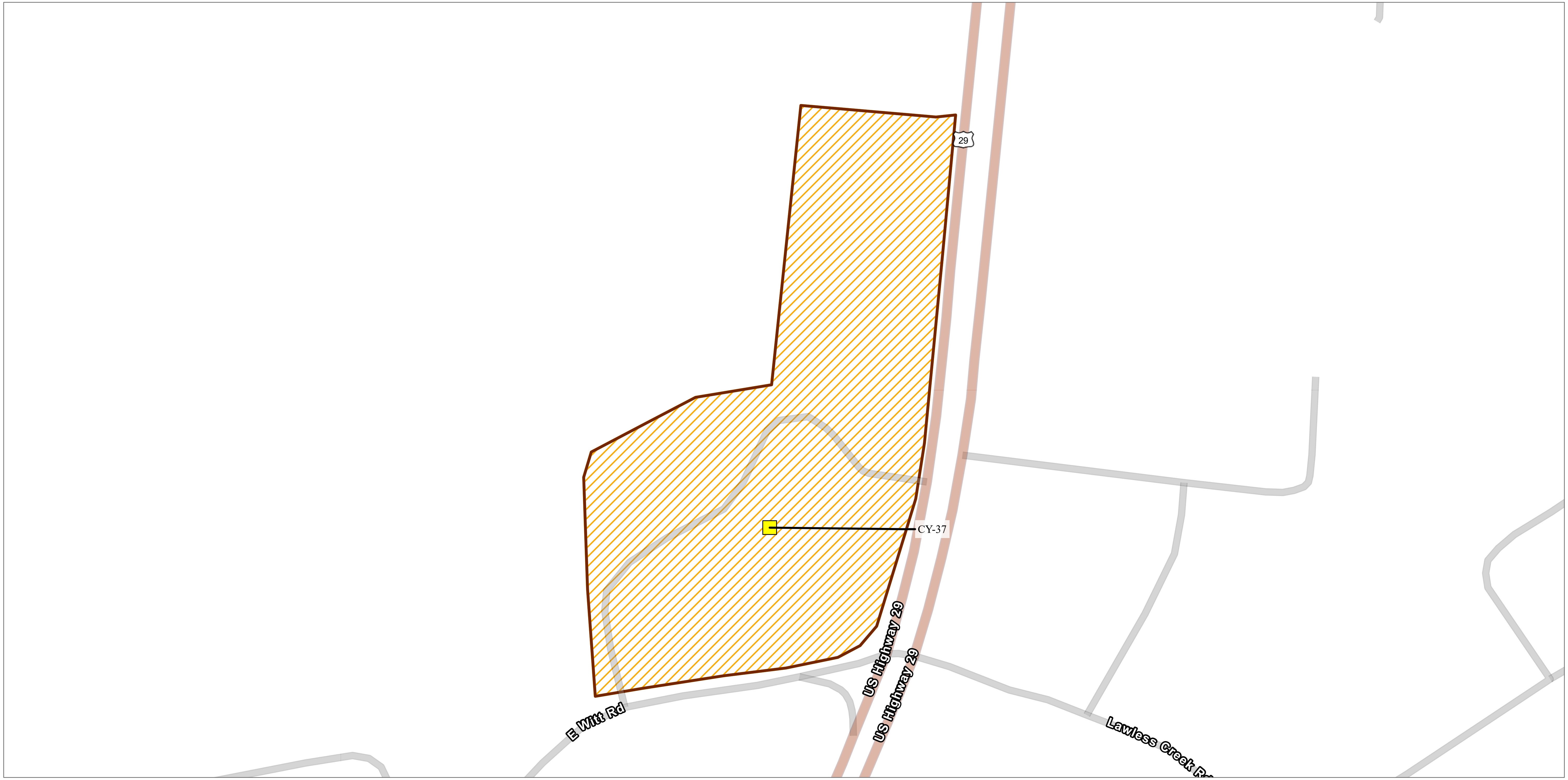
PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 109
AR-048

DATE: JULY 2025

MVP SOUTHGATE



- TENTH MILE POST
- MILE POST
- MAIN LINE VALVE
- METER STATIONS
- CONTRACTOR YARD
- H-650 PIPELINE
- PERMANENT ACCESS ROAD
- TEMPORARY ACCESS ROAD
- TEMPORARY ACCESS ROAD
- PERMANENT ACCESS ROAD
- LIMITS OF CONSTRUCTION WORKSPACE
- OPERATIONAL WORKSPACE
- BORE PITS
- LAYDOWN YARD / STAGING AREA
- SURVEY AREA
- STREAM FLOW DIRECTION

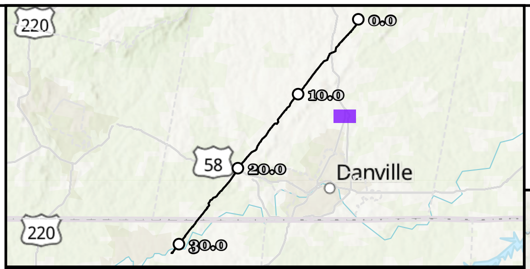
STREAM IMPACT
- TEMPORARY
- PERMANENT

STREAM TYPE
- EPHEMERAL
- INTERMITTENT
- PERENNIAL

WETLAND IMPACT
- TEMPORARY
- CONVERSION
- SECONDARY IMPACT

WETLAND TYPE
- PALUSTRINE EMERGENT
- PALUSTRINE FORESTED
- PALUSTRINE SCRUB-SHRUB
- PALUSTRINE UNCONSOLIDATED BOTTOM

- COUNTY BOUNDARY
- STATE BOUNDARY
- ELEVATION - CONTOUR - INDEX
- ELEVATION - CONTOUR - INTERMEDIATE



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FEET
1:2,400
1" = 200'

PROJECT: MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIG A-2
VA WETLAND AND WATERBODY IMPACT

PAGE: 110
CY-037

DATE: JULY 2025

MVP
SOUTHGATE

ATTACHMENT 2

UPDATED IMPACT TABLES *(Provided Under Separate Cover)*

ATTACHMENT 3

EXCERPT FROM FEBRUARY 2020 FEIS

project capable of transporting similar volumes of natural gas may result in the expansion of existing natural gas transportation systems or the construction of new infrastructure; both of which are likely to result in impacts comparable to those described in section 4.0 of this EIS, we conclude that in addition to not meeting the Project objective, the No Action Alternative is also not likely to provide a significant environmental advantage. Therefore, we dismiss it from further consideration.

3.3 SYSTEM ALTERNATIVES

System alternatives to the proposed action would make use of existing natural gas transmission systems/facilities to meet the stated purpose of the Project. Implementing a system alternative would make it unnecessary to construct all or part of the Project, although some modifications or additions to an existing transmission system may be necessary. Existing pipeline systems and systems under construction are depicted on figure 3.3-1.

3.3.1 Existing and Approved Natural Gas Pipeline Systems

There are currently two existing FERC-jurisdictional natural gas pipeline transportation systems operating near the Project area: Transcontinental Gas Pipe Line Company LLC (Transco) and East Tennessee. There is also one approved FERC-jurisdictional natural gas pipeline system, the Atlantic Coast Pipeline (ACP) Project that is currently under construction. It consists of 604 miles of natural gas pipeline in West Virginia, Virginia, and North Carolina. The ACP Project is approximately 100 miles east of the proposed Project Dan River and Haw River interconnects. Additionally, one non-jurisdictional pipeline system owned by Cardinal Pipeline Company, LLC (Cardinal Pipeline) is operating near the Project. Without modifications, these pipeline systems currently do not have the available individual capacity, combined available capacity, nor direct physical connection to transport the required volumes of natural gas to the delivery points proposed for the Project. . Therefore, we do not consider use of existing pipeline systems as a technically feasible alternative to the Project.

3.3.2 Modifications of Existing and Approved Natural Gas Pipeline Systems

Since none of the existing or approved pipeline systems in the Project area have the capacity to meet the Project’s purpose, each system would require modifications to meet the purpose of the Project. The modifications could include additional pipeline construction to connect to the natural gas supply, delivery area, or both; pipeline construction to create additional transportation capacity; additional compression; or some combination of these options.

3.3.2.1 Transco Pipeline System Alternative

The existing Transco system consists of various diameter pipelines totaling approximately 10,200 miles between Texas and New York. The system has a peak design capacity of almost 15 Bcf/d of natural gas to markets in the Northeast, Mid-Atlantic, and Southeast regions of the United States. The Southgate Project would be located adjacent to the Transco system in Virginia and North Carolina from mileposts (MPs) 0.4 to 32.9.

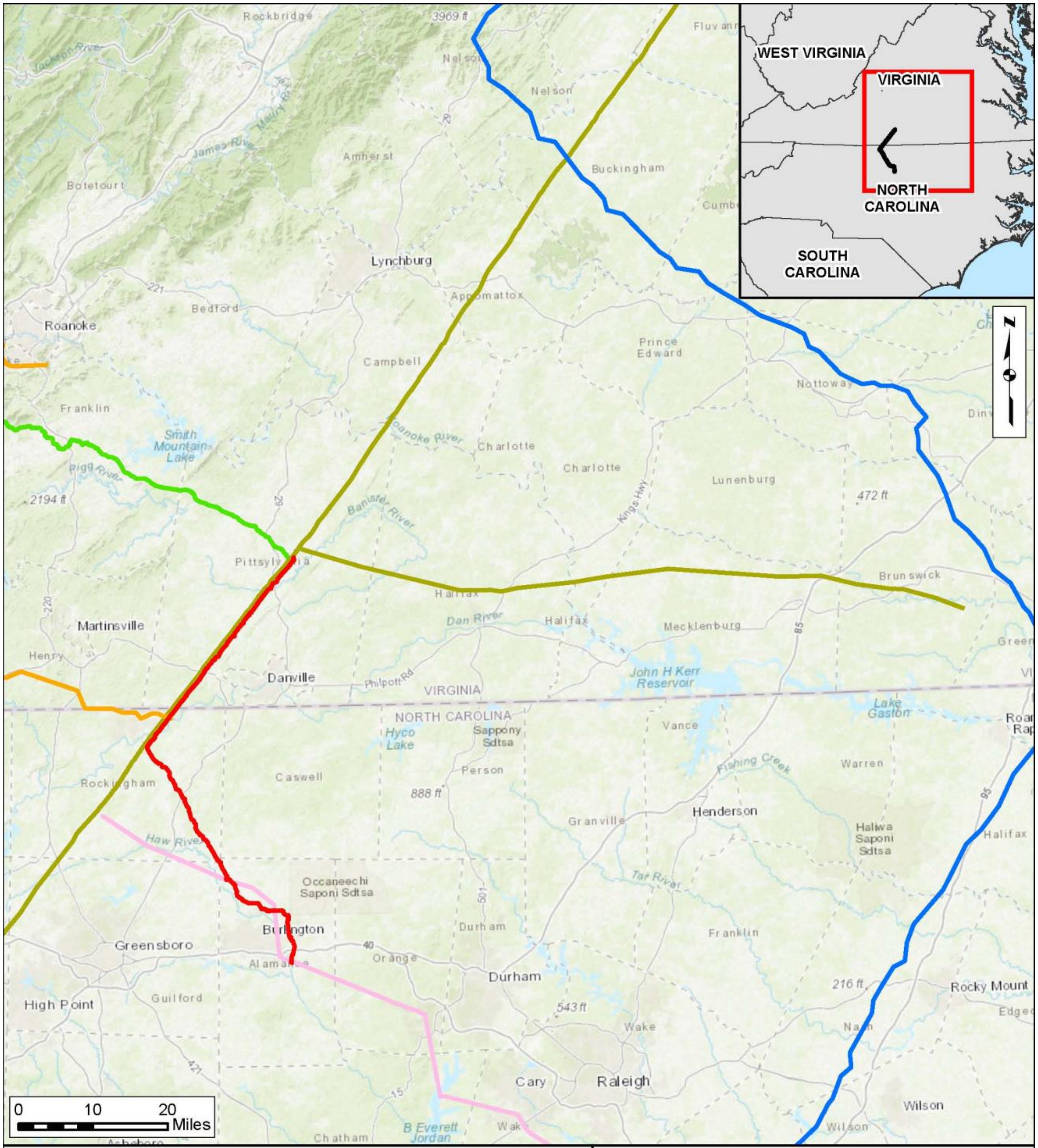

Figure 3.3-1

Southgate Project

System Alternatives

In comments on the draft EIS, Transco noted that although the firm transportation capacity of its system is currently fully subscribed, it could modify its existing system to provide the capacity sought by DENC by collocating a new 37.7-mile pipeline lateral along the existing right-of-way for the Cardinal Pipeline, and modifying an existing compressor station in Rockingham County, North Carolina. Additional system upgrades would likely be necessary before Transco would be able to provide the additional 375,000 dekatherms per day (Dth/d) of firm transportation service on its mainline from the Project's proposed receipt point with the MVP mainline to the interconnection between Transco and Cardinal Pipeline.

Mountain Valley responded to these comments stating that Transco's System Alternative would not meet several of the Southgate Project objectives that DENC considered prior to contracting for capacity on the Southgate Project, including increased competition and resiliency, risk diversification, and a direct physical connection to East Tennessee's interstate pipeline system. DENC agreed with Mountain Valley, stating that the Transco System Alternative would not meet the Southgate Project need with less environmental impact and at a lower cost, noting two reasons: 1) Transco failed to explain how its proposal would resolve Transco's lack of available firm capacity on its mainline; and 2) that its alternative would be unable to meet their timing needs for bringing the Southgate Project's proposed capacity online.

We conclude that undefined modifications would be required along Transco's mainline. Transco did not explain what upgrades would be needed to resolve its mainline system's lack of available firm capacity. The impacts of these upgrades may be less than, similar to, or greater than those that would occur as proposed by the Southgate Project. Therefore, we are unable to determine that this alternative would provide a significant environmental advantage.

Finally, as Mountain Valley and DENC pointed out, beginning the numerous permitting processes anew would cause delays that would be inconsistent with DENC's timing needs for bringing into service this additional capacity. While this last factor was not included as a Southgate Project objective, it is clearly a consideration that could affect the economic feasibility of the Southgate Project. Therefore, this alternative is not considered further in this analysis.

3.3.2.2 East Tennessee System Alternative

The East Tennessee pipeline system has the capacity to transport 1.9 billion cubic feet per day (bcf/d) of natural gas and extends from Nashville, Tennessee, through Virginia, to Eden, North Carolina where it interconnects with the Transco pipeline system. The East Tennessee pipeline system does not connect with the Southgate Project's proposed receipt point with the Mountain Valley Pipeline. The Southgate Project would interconnect with the East Tennessee pipeline system at the LN 3600 Interconnect taking gas to delivery points. To meet the purpose of the Project, modifications to the East Tennessee pipeline system would be required to supply 375 MMcf/d of natural gas to the DENC distribution system. The modifications would include upgrades similar to the Project including approximately 30 miles of pipeline collocated with the Transco pipeline system, 40 miles of new pipeline, and additional compression. These modifications would result in environmental impacts similar to those that would occur as proposed by the Project. Therefore, we conclude that this alternative would not provide a significant environmental advantage.

3.3.2.3 Atlantic Coast Pipeline System Alternative

The ACP Project, currently under construction, consists of 604 miles of natural gas pipeline in West Virginia, Virginia, and North Carolina. As noted above, the ACP Project is approximately 100 miles east of the T-15 Dan River and T-21 Haw River interconnects. In comments on the draft EIS, ACP states that rather than connecting to the western side of DENC's system as proposed by Mountain Valley, deliveries from ACP to DENC could occur on the eastern side of DENC's service territory. ACP contends that the ACP System Alternative could provide the additional gas through a combination of 140,000 Dth/d of available capacity on its system, ancillary facility enhancements, and upgrades to the existing Piedmont system, on which ACP has leased capacity.

As ACP acknowledged, the ACP System Alternative would not connect to the Project's proposed receipt points with the mainline Mountain Valley Pipeline or with East Tennessee's interstate pipeline system. Nor would the ACP System Alternative facilitate deliveries to the Southgate Project's proposed delivery points on DENC's distribution system in Rockingham and Alamance Counties, North Carolina. For these reasons, we find that the ACP System Alternative does not meet the stated purpose of the Southgate Project.

In order to connect the ACP Project with DENC's receipt points, a minimum of 100 miles of new pipeline (and associated compression) infrastructure would be required. Therefore, we conclude that the use of the ACP System Alternative would not provide a significant environmental advantage. For these reasons, the ACP Project is not considered further in this analysis.

3.3.2.4 Cardinal Pipeline System

The Cardinal Pipeline Company, co-owned by affiliates of Transco, Piedmont Natural Gas Company, and Dominion Energy, operates 105 miles of 24-inch-diameter intrastate pipeline in North Carolina originating in Rockingham County at an interconnect with the Transco pipeline system, extending southwest to Wake County. The Cardinal Pipeline Company transports natural gas from the Transco pipeline system to the Dominion Energy distribution system and Piedmont Natural Gas system. To meet the objective of the Southgate Project, modifications to the existing Cardinal Pipeline similar to those described above (i.e., a lateral and compression) would be necessary. Providing the gas to this lateral would either require the use of the Transco system, as described above, or additional pipeline construction. The impacts of these upgrades may be less than, similar to, or greater than those that would occur as proposed by the Project. Therefore, we cannot conclude that this alternative would provide a significant environmental advantage.

3.4 ROUTE ALTERNATIVES AND VARIATIONS

Early in the development of the Project, Mountain Valley considered a pipeline route that was largely collocated with existing utility rights-of-way. Upon more detailed route evaluation and after the determination of the presence of constraints such as residential areas, ponds, and side slopes, Mountain Valley subsequently incorporated minor deviations in the Project route. During the course of the pre-filing and environmental scoping process, Mountain Valley incorporated at least 46 of the 122 route variations into the Southgate route to avoid and/or minimize impacts on specific resources at the request of landowners and stakeholders.

Major route alternatives represent substantial deviations from a proposed route that may offer significant environmental advantages compared to the proposed route. Smaller route alternatives represent deviations to the proposed route between certain mileposts in a particularly sensitive area that may offer a significant environmental advantage to the proposed route. Minor route variations include minor deviations (or reroutes) over a short distance that might avoid a specific resource at that location.

We evaluated three major route alternatives including the Berry Hill Alternative, Lake Cammack East Alternative, and the North-South Alternative. The locations of the major route alternatives are shown on figure 3.4-1. We also evaluated six minor route alternatives including the Haw River Alternative, Haw River West Alternative, Green Level Alternative, Jimmie Kerr Road Alternative, Duke Energy Powerline Extension Alternative, and City of Burlington Alternative. The locations of the minor route alternatives are shown on figures 3.4-2 through 3.4-7. Finally, we evaluated eight minor route variations including the Nicholson Variation, Whitehead Variation, Robert Pollok-Hill View Farms Variation, Moore Variation, Strader Variation, Madren Variation, Taylor East Variation, and Taylor West Variation. The locations of the minor route variations are shown on figures 3.4-8 through 3.4-14.

Mountain Valley incorporated several route variations that we evaluated in the draft EIS into its proposed pipeline route filed with the Commission on October 23, 2019.[1] Therefore, these route variations are incorporated into the Proposed Action and are no longer evaluated in this section. These variations include the Bombardier Variation, Shambley Variation 1, Shambley Variation 2, Martin Marietta Variation, and Town of Haw River Variation.

On October 23, 2019, in response to alternatives considered in the draft EIS, Mountain Valley submitted impact analysis comparison tables for each alternative based on changes in the current proposed route and new information gathered on each alternative or route variation. The revised data represents refinements to the previous data that are derived largely from new 2016 U.S. Geological Survey (USGS) National Land Cover Dataset, revised 2019 pipeline and electrical utility data, and other updated sources. The revisions do not alter our conclusions.

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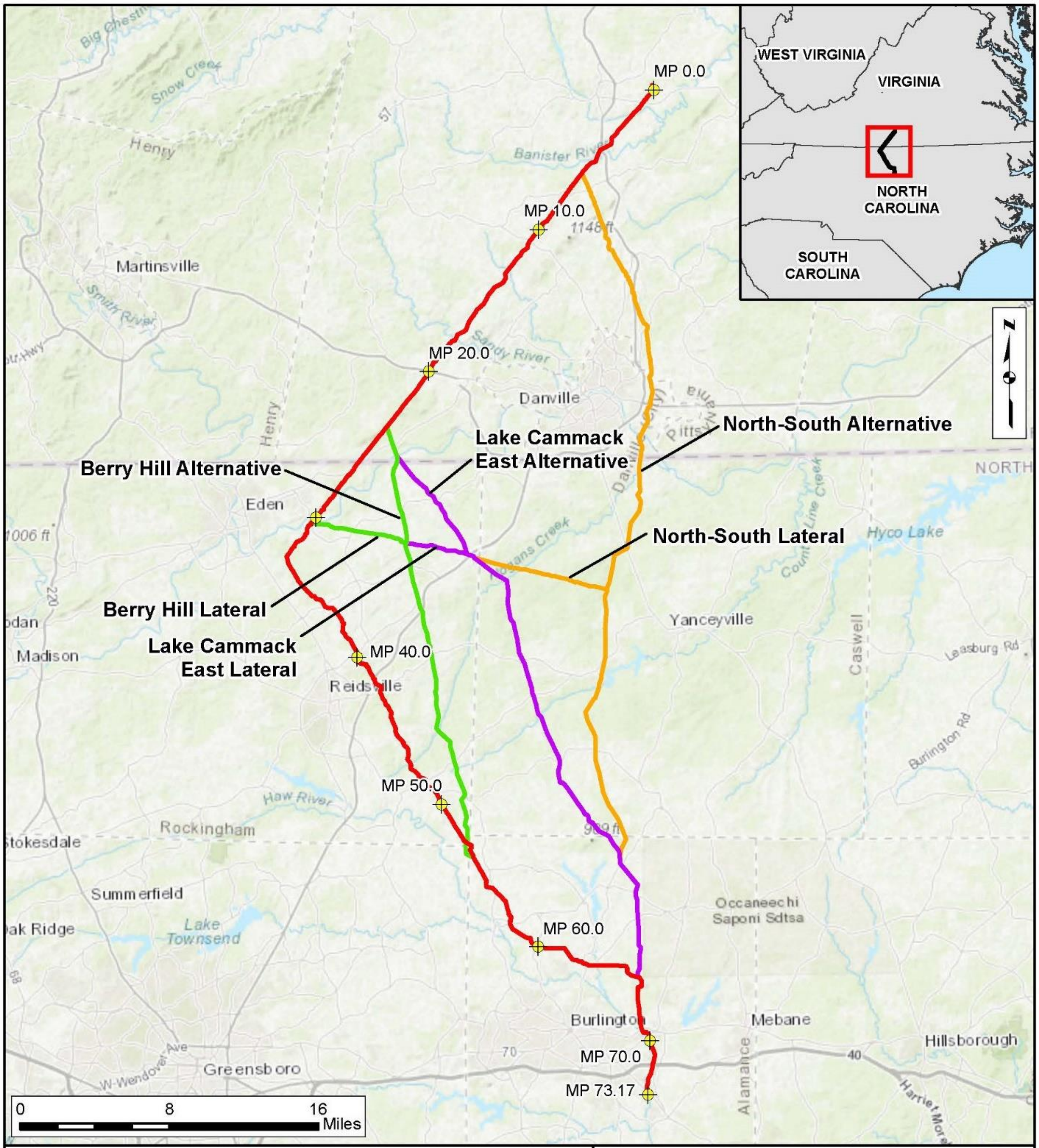
[1] This information can be viewed on the FERC website at http://www.ferc.gov. Using the "eLibrary" link, select "Advanced Search" from the eLibrary menu and enter the accession number in the "Numbers: Accession Number" field. Accession number 20191023-5022 contains supplemental project information filed on October 23, 2019. Accession number 20191220-5298 contains revised alignment sheets for the Project.



⊕ Milepost
🟥 Proposed Pipeline Route
🟩 Berry Hill Alternative
🟪 Lake Cammack East Alternative
🟧 North-South Alternative

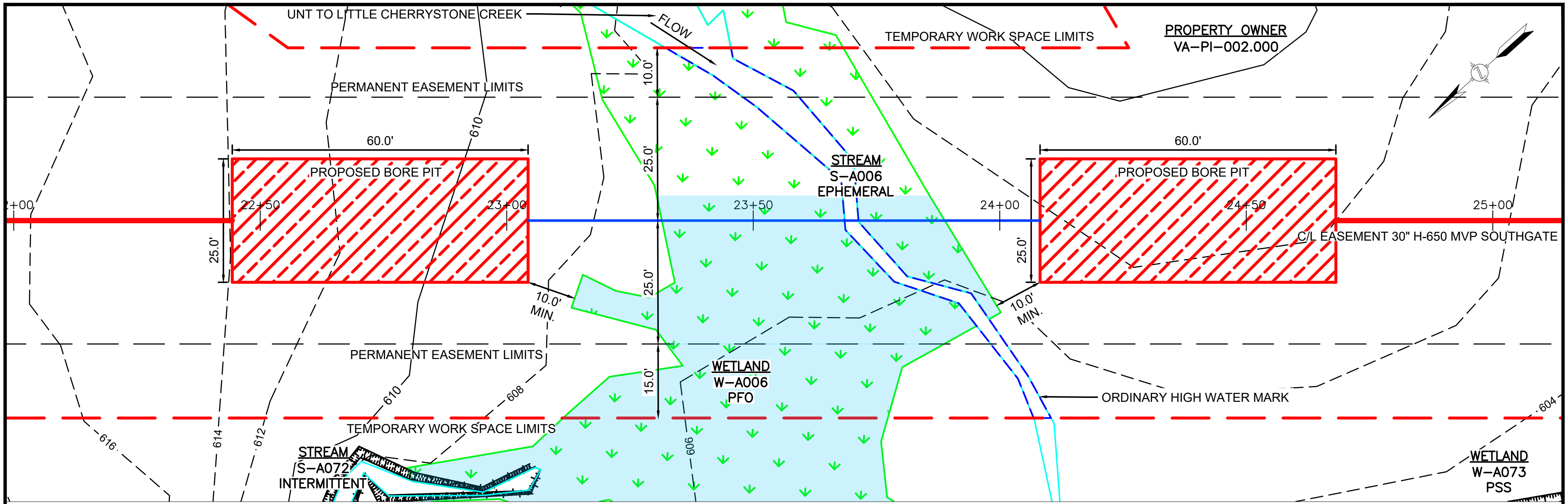
Figure 3.4-1

Southgate Project

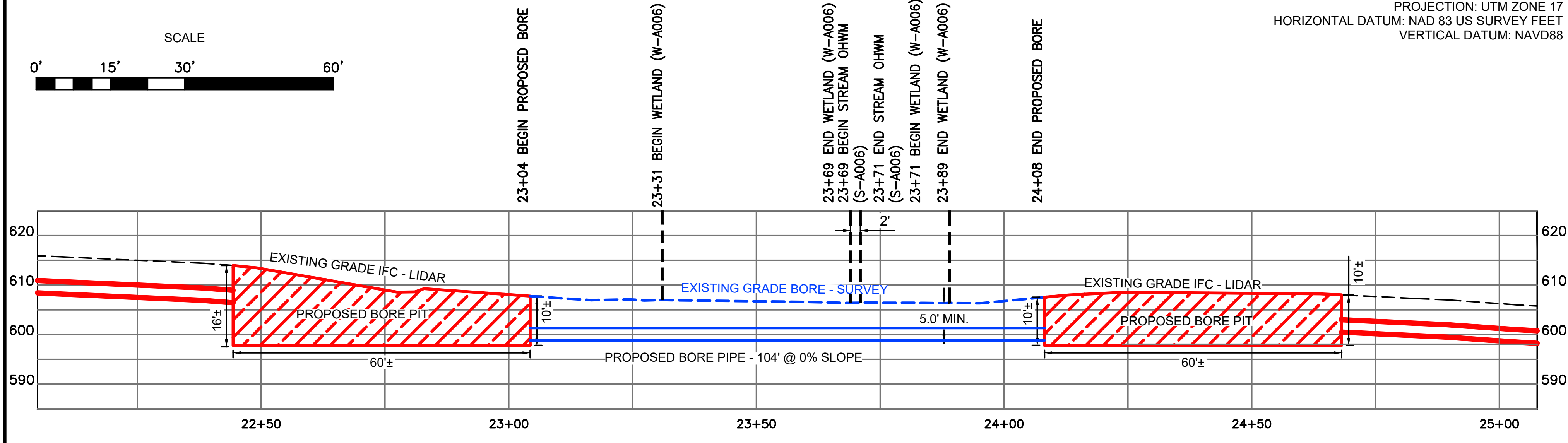
Major Route Alternatives

ATTACHMENT 4

UPDATED PLAN AND PROFILE DRAWINGS



PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88


SCALE
0'
15'
30'
60'
23+04 BEGIN PROPOSED BORE
23+31 BEGIN WETLAND (W–A006)
23+69 END WETLAND (W–A006)
23+69 BEGIN STREAM OHWM (S–A006)
23+71 END STREAM OHWM (S–A006)
23+71 BEGIN WETLAND (W–A006)
23+89 END WETLAND (W–A006)
24+08 END PROPOSED BORE
620
610
600
590
620
610
600
590
2'
EXISTING GRADE IFC - LIDAR
EXISTING GRADE BORE - SURVEY
EXISTING GRADE IFC - LIDAR
PROPOSED BORE PIT
PROPOSED BORE PIT
16'±
10'±
10'±
10'±
5.0' MIN.
60'±
60'±
PROPOSED BORE PIPE - 104' @ 0% SLOPE
22+50
23+00
23+50
24+00
24+50
25+00

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

C/L OF EASEMENT		TOP OF BANK		PROPOSED BORE PIT	
BORE PATH		TOE OF BANK		IMPACT AREA	
PERMANENT EASEMENT		EXISTING PIPELINE		ADD. TEMPORARY WORK SPACE(ATWS)	
WORK SPACE LIMITS		OVERHEAD POWER			
ACCESS ROAD		OVERHEAD TELEPHONE			
ROAD RIGHT-OF-WAY		WETLAND			
PROPERTY LINE		STREAM			
FENCE LINE		ORDINARY HIGH WATER MARK			

TRC

PLAN & PROFILE

CROSSING 003

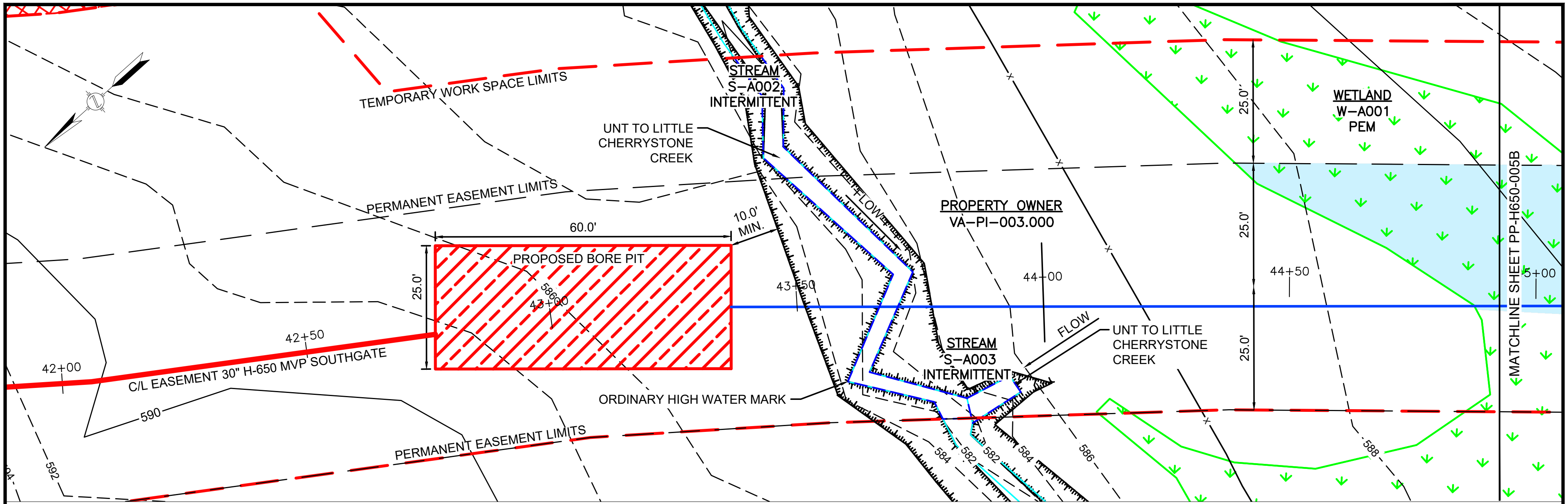
MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

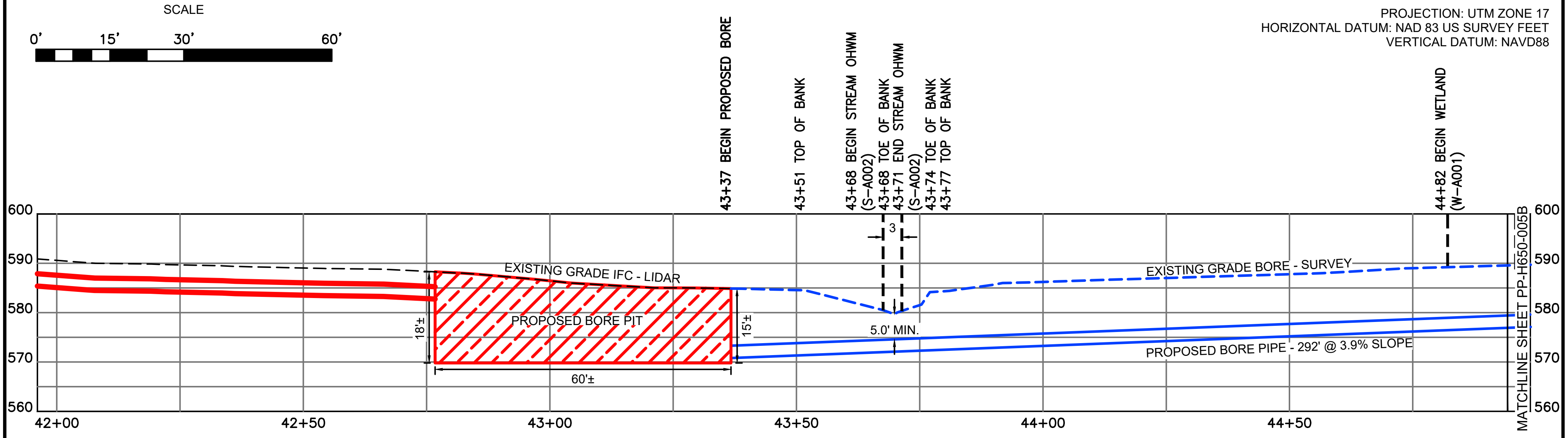
DRAWING NO. **PP-H650-003**

REV. P2

GENERAL NOTES:

- STATIONING IS FOR REFERENCE ONLY. SEE IFC ALIGNMENT FOR ACTUAL STATIONING.
- SPOIL PILES FROM EXCAVATED MATERIAL WILL BE KEPT A MINIMUM OF 10 FEET FROM THE ORDINARY HIGH WATER MARK AND WILL BE CONTAINED BY SEDIMENT BARRIERS.
- BORE PIT DIMENSIONS ARE APPROXIMATE, CONTRACTOR TO DETERMINE EXACT DIMENSIONS DEPENDING ON FIELD CONDITIONS.
- EXACT BORE ALIGNMENT SUBJECT TO CHANGE, WITHIN THE EXTENTS OF THE PERMANENT EASEMENT, DEPENDING ON FIELD CONDITIONS. MOUNTAIN VALLEY WILL MAINTAIN ELEVATIONS AND MINIMUM DISTANCES FROM RESOURCES AS SHOWN.
- MINIMUM 3' COVER BETWEEN STREAMBED AND TOP OF PIPELINE UNLESS OTHERWISE NOTED.




SCALE
0'
15'
30'
60'
43+37 BEGIN PROPOSED BORE
43+51 TOP OF BANK
43+68 BEGIN STREAM OHWM (S-A002)
43+68 TOE OF BANK
43+71 END STREAM OHWM (S-A002)
43+74 TOE OF BANK
43+77 TOP OF BANK
44+82 BEGIN WETLAND (W-A001)
600
590
580
570
560
3
EXISTING GRADE IFC - LIDAR
EXISTING GRADE BORE - SURVEY
PROPOSED BORE PIT
18'±
15'±
5.0' MIN.
60'±
PROPOSED BORE PIPE - 292' @ 3.9% SLOPE
42+00
42+50
43+00
43+50
44+00
44+50
MATCHLINE SHEET PP-H650-005B

PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 2

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

- C/L OF EASEMENT
- BORE PATH
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- ACCESS ROAD
- ROAD RIGHT-OF-WAY
- PROPERTY LINE
- FENCE LINE
- TOP OF BANK
- TOE OF BANK
- EXISTING PIPELINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- WETLAND
- STREAM
- ORDINARY HIGH WATER MARK
- ▨ PROPOSED BORE PIT
- IMPACT AREA
- ADD. TEMPORARY WORK SPACE(ATWS)

TRC

PLAN & PROFILE

CROSSING 005

MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO.

PP-H650-005A

REV.

P2

GENERAL NOTES:

- STATIONING IS FOR REFERENCE ONLY. SEE IFC ALIGNMENT FOR ACTUAL STATIONING.
- SPOIL PILES FROM EXCAVATED MATERIAL WILL BE KEPT A MINIMUM OF 10 FEET FROM THE ORDINARY HIGH WATER MARK AND WILL BE CONTAINED BY SEDIMENT BARRIERS.
- BORE PIT DIMENSIONS ARE APPROXIMATE, CONTRACTOR TO DETERMINE EXACT DIMENSIONS DEPENDING ON FIELD CONDITIONS.
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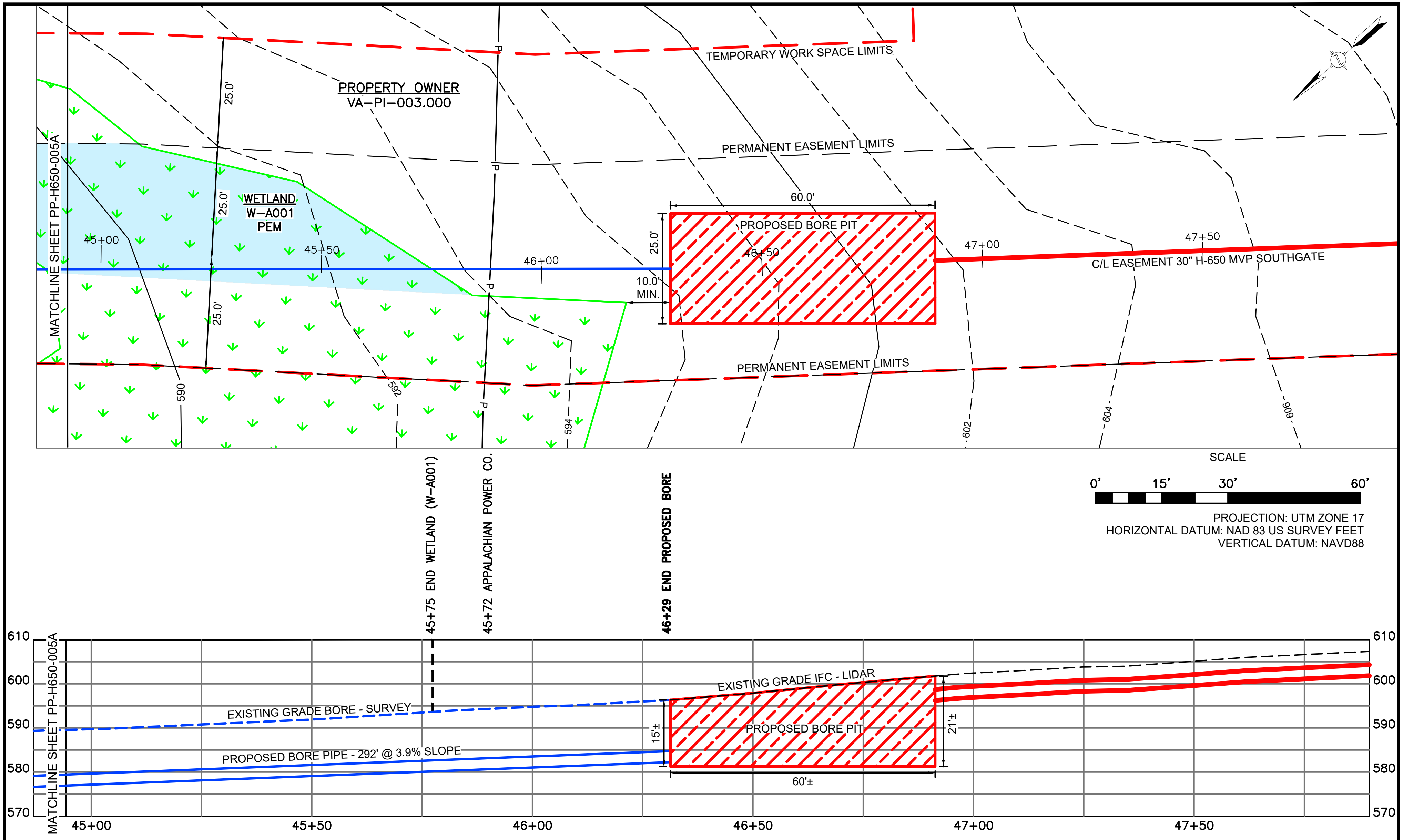
- MINIMUM 3' COVER BETWEEN STREAMBED AND TOP OF PIPELINE UNLESS OTHERWISE NOTED.


TEMPORARY WORK SPACE LIMITS
PROPERTY OWNER
VA–PI–003.000
PERMANENT EASEMENT LIMITS
WETLAND
W–A001
PEM
25.0'
60.0'
PROPOSED BORE PIT
10.0' MIN.
45+00
45+50
46+00
46+50
47+00
47+50
C/L EASEMENT 30" H-650 MVP SOUTHGATE
MATCHLINE SHEET PP-H650-005A
590
592
594
602
604
606
P
SCALE
0'
15'
30'
60'
PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88
45+75 END WETLAND (W-A001)
45+72 APPALACHIAN POWER CO.
46+29 END PROPOSED BORE
610
600
590
580
570
EXISTING GRADE IFC - LIDAR
EXISTING GRADE BORE - SURVEY
PROPOSED BORE PIPE - 292' @ 3.9% SLOPE
15'±
21'±
60'±

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	2 OF 2

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

🟥	C/L OF EASEMENT
—	BORE PATH
- - -	PERMANENT EASEMENT
- - -	WORK SPACE LIMITS
—	ACCESS ROAD
—R/W—	ROAD RIGHT-OF-WAY
—	PROPERTY LINE
—x—	FENCE LINE
—	TOP OF BANK
—	TOE OF BANK
—‖—	EXISTING PIPELINE
—P—	OVERHEAD POWER
—T—	OVERHEAD TELEPHONE
✓ ✓ ✓	WETLAND
—	STREAM
- - -	ORDINARY HIGH WATER MARK
▨	PROPOSED BORE PIT
🟦	IMPACT AREA
▨	ADD. TEMPORARY WORK SPACE(ATWS)

TRC

PLAN & PROFILE
CROSSING 005
MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO.	REV.
PP-H650-005B	P2

GENERAL NOTES:

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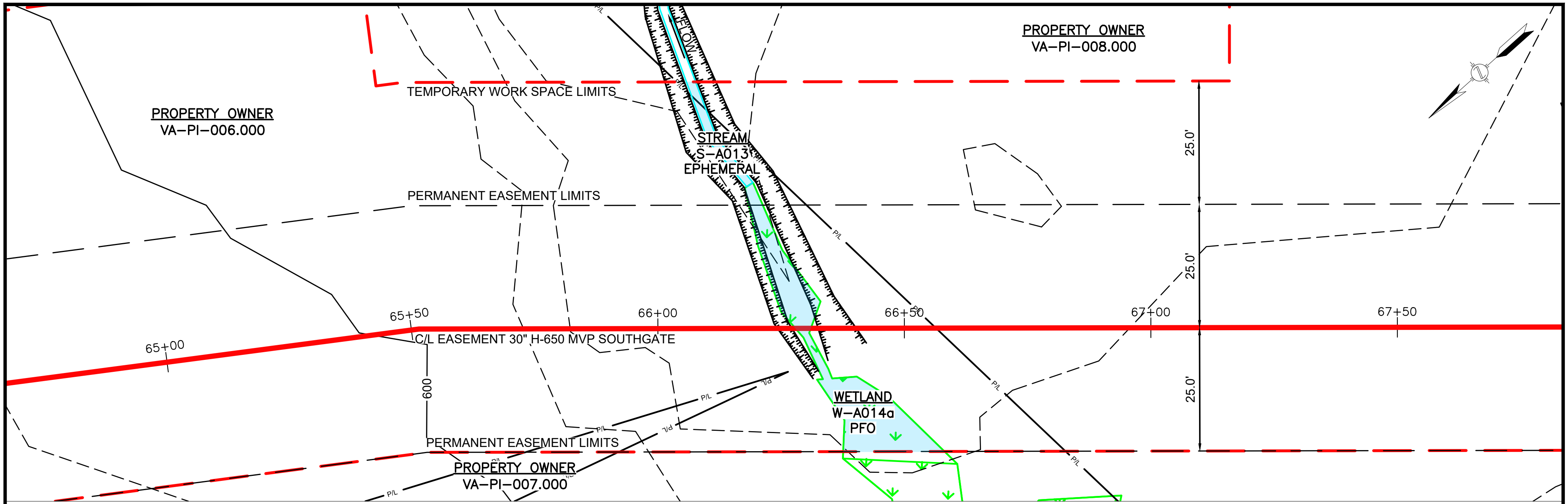
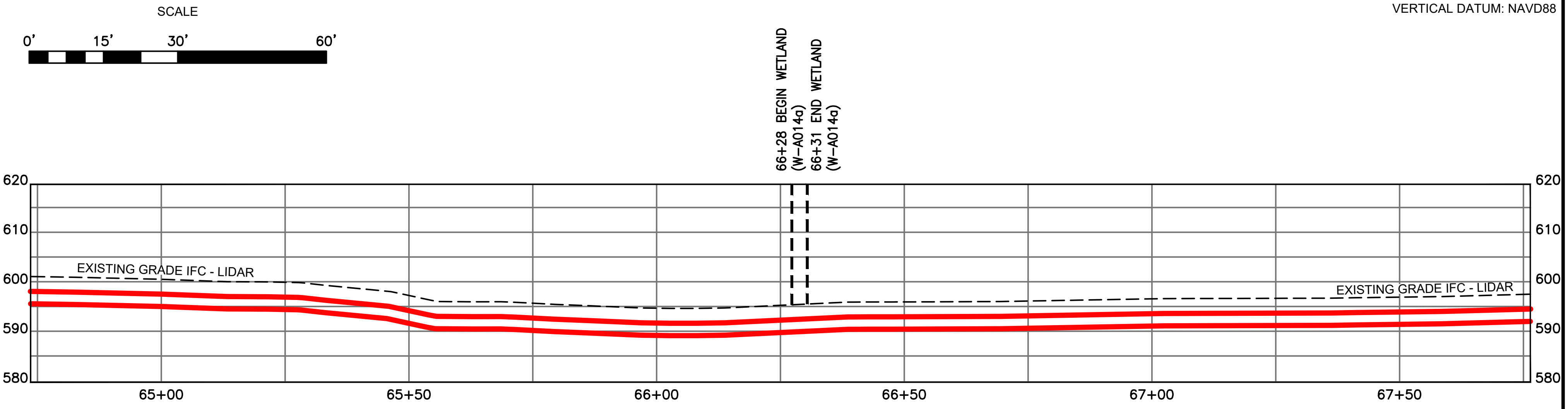
- MINIMUM 3' COVER BETWEEN STREAMBED AND TOP OF PIPELINE UNLESS OTHERWISE NOTED.



PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88



DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

- C/L OF EASEMENT
- BORE PATH
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- ACCESS ROAD
- ROAD RIGHT-OF-WAY
- PROPERTY LINE
- FENCE LINE
- TOP OF BANK
- TOE OF BANK
- EXISTING PIPELINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- WETLAND
- STREAM
- ORDINARY HIGH WATER MARK
- PROPOSED BORE PIT
- IMPACT AREA
- ADD. TEMPORARY WORK SPACE(ATWS)

TRC

PLAN & PROFILE

CROSSING 007

MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO. **PP-H650-007**

REV. P2

GENERAL NOTES:

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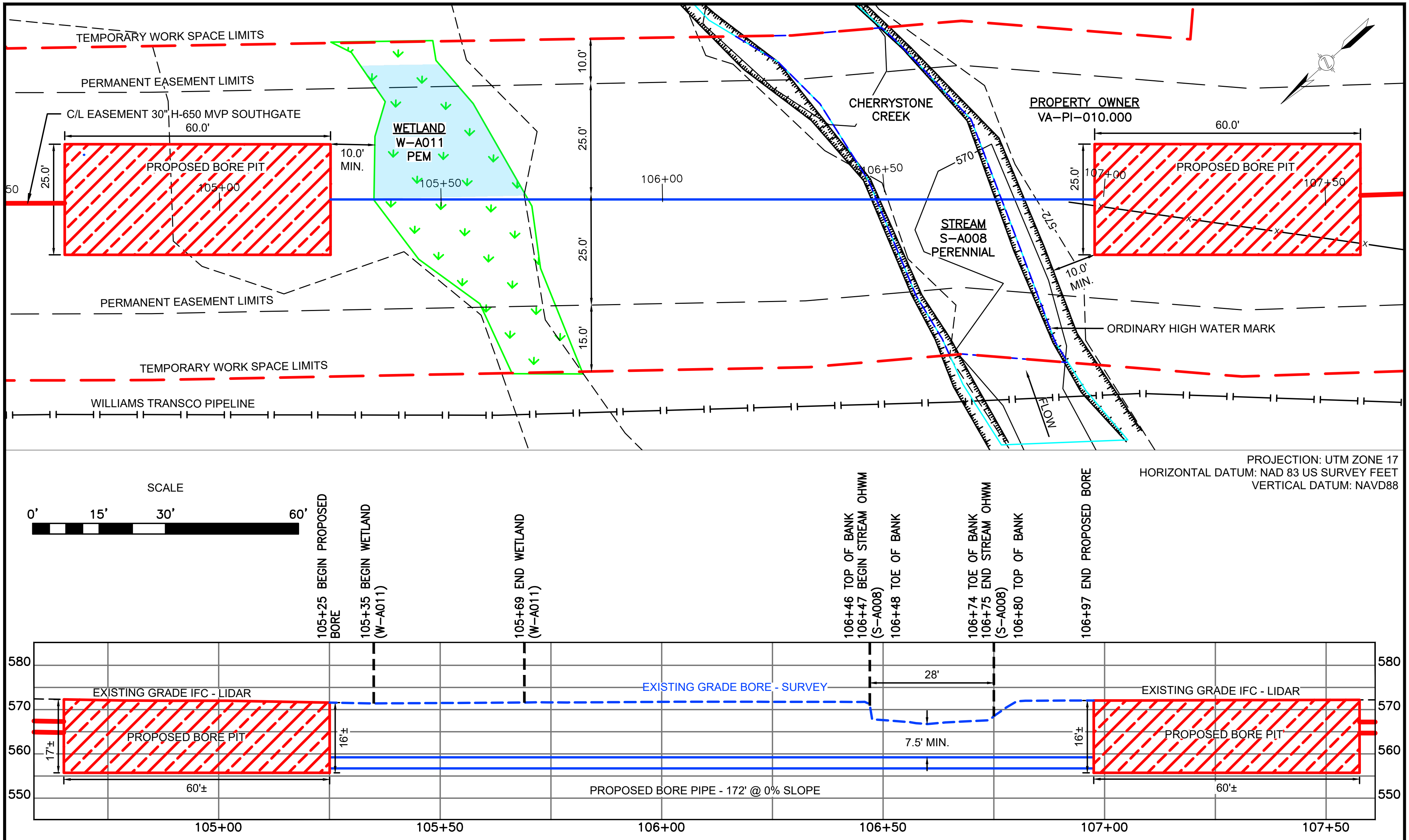

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

- C/L OF EASEMENT
- BORE PATH
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- ACCESS ROAD
- ROAD RIGHT-OF-WAY
- PROPERTY LINE
- FENCE LINE
- TOP OF BANK
- TOE OF BANK
- EXISTING PIPELINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- WETLAND
- STREAM
- ORDINARY HIGH WATER MARK
- PROPOSED BORE PIT
- IMPACT AREA
- ADD. TEMPORARY WORK SPACE(ATWS)

TRC

PLAN & PROFILE

CROSSING 010

MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO.	REV.
PP-H650-009	P2

GENERAL NOTES:

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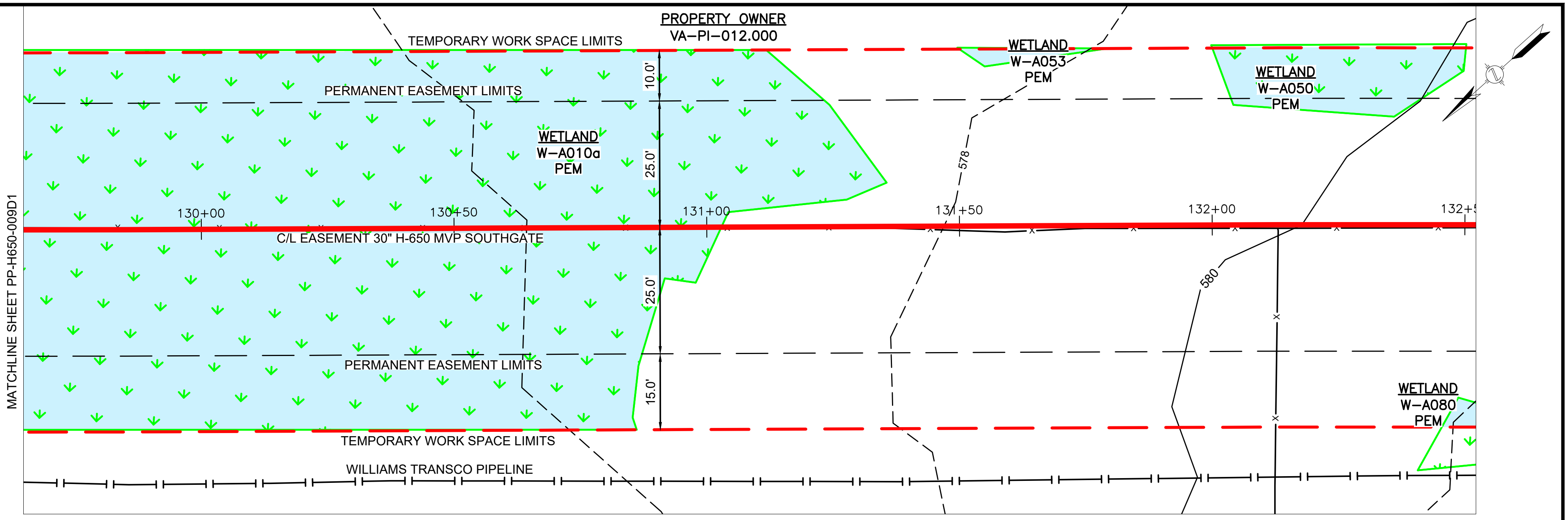
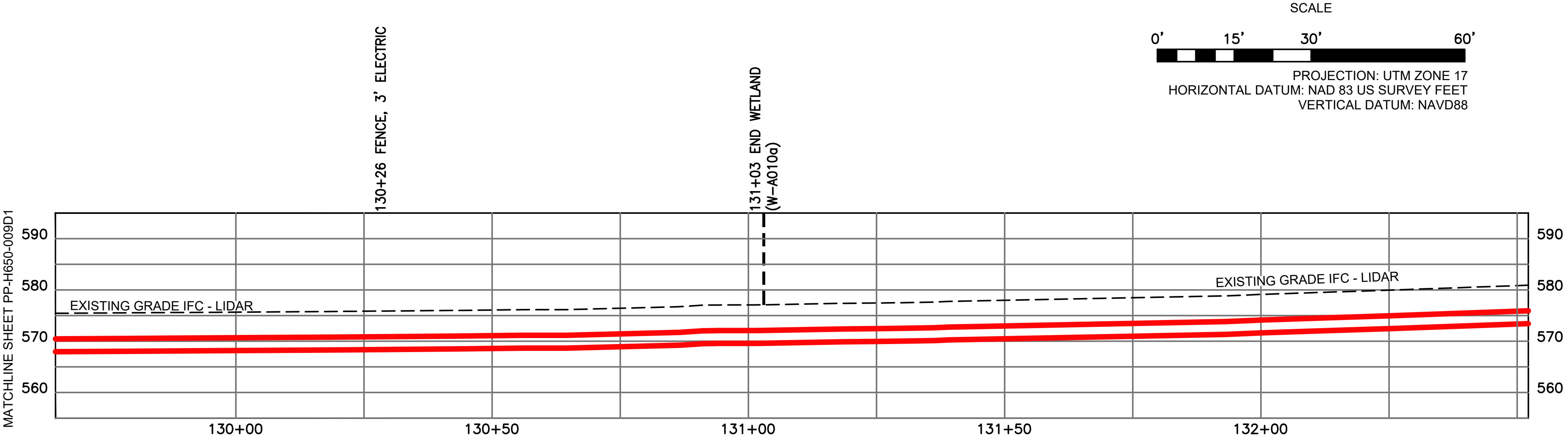

PROPERTY OWNER
VA–PI–012.000
TEMPORARY WORK SPACE LIMITS
PERMANENT EASEMENT LIMITS
WETLAND
W–A010a
PEM
WETLAND
W–A053
PEM
WETLAND
W–A050
PEM
WETLAND
W–A080
PEM
10.0'
25.0'
25.0'
15.0'
578
580
130+00
130+50
131+00
131+50
132+00
132+
C/L EASEMENT 30" H-650 MVP SOUTHGATE
PERMANENT EASEMENT LIMITS
TEMPORARY WORK SPACE LIMITS
WILLIAMS TRANSCO PIPELINE
MATCHLINE SHEET PP-H650-009D1


SCALE
0'
15'
30'
60'
130+26 FENCE, 3' ELECTRIC
131+03 END WETLAND
(W–A010a)
590
580
570
560
EXISTING GRADE IFC - LIDAR
EXISTING GRADE IFC - LIDAR
130+00
130+50
131+00
131+50
132+00
MATCHLINE SHEET PP-H650-009D1

PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	8 OF 8

JOB NO.

PROJECT ID:

H-650

Mountain Valley
PIPELINE LLC

LEGEND:

🟥	C/L OF EASEMENT		TOP OF BANK	▨	PROPOSED BORE PIT
	BORE PATH		TOE OF BANK	🟦	IMPACT AREA
- - -	PERMANENT EASEMENT		EXISTING PIPELINE		
	WORK SPACE LIMITS	P	OVERHEAD POWER		
	ACCESS ROAD	T	OVERHEAD TELEPHONE		
R/W	ROAD RIGHT-OF-WAY		WETLAND		
	PROPERTY LINE		STREAM	▨	ADD. TEMPORARY WORK SPACE(ATWS)
x	FENCE LINE		ORDINARY HIGH WATER MARK		

TRC

PLAN & PROFILE
CROSSING 011
MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO.	REV.
PP-H650-009D2	P2

GENERAL NOTES:

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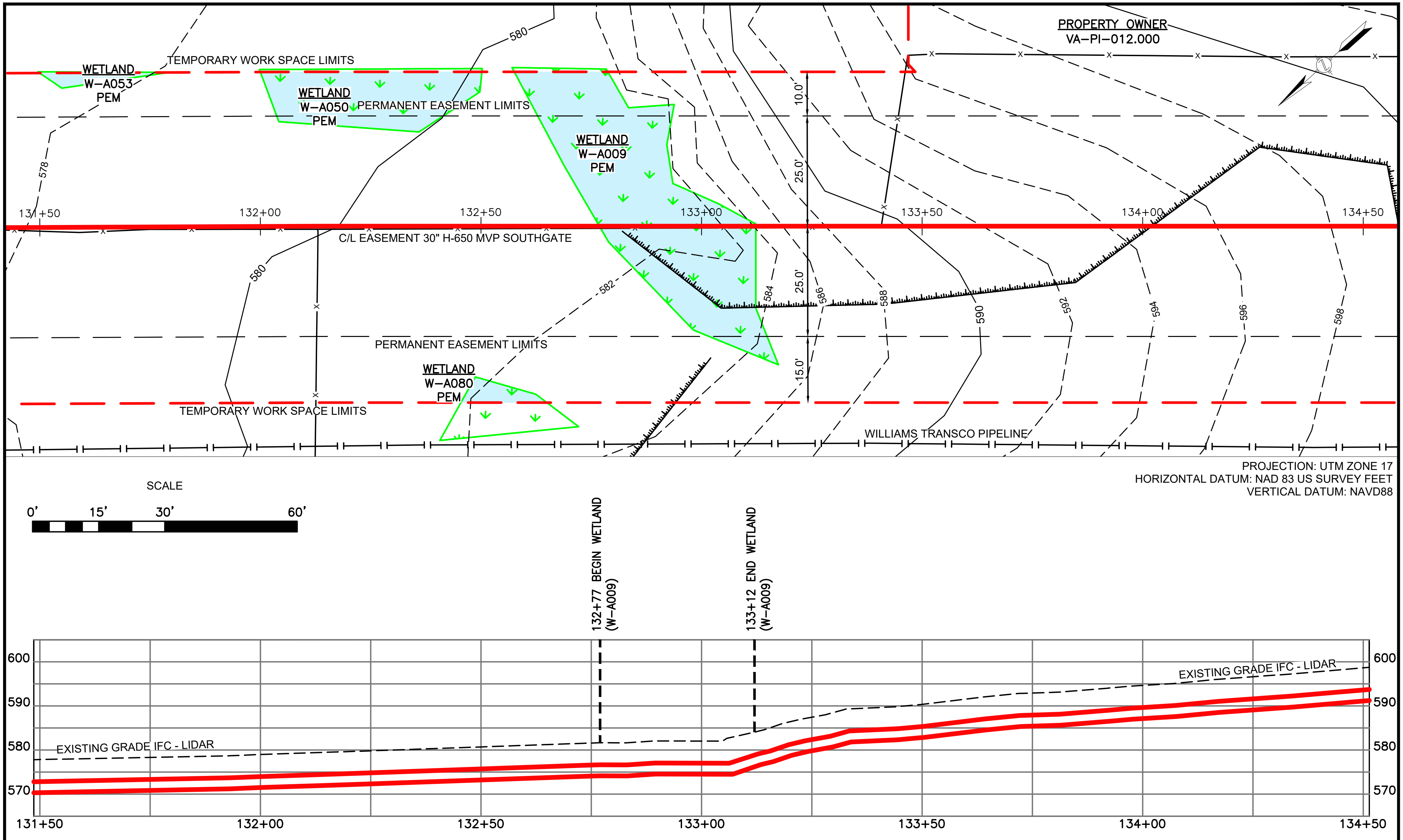
- MINIMUM 3' COVER BETWEEN STREAMBED AND TOP OF PIPELINE UNLESS OTHERWISE NOTED.



PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley
PIPELINE LLC

LEGEND:

- C/L OF EASEMENT
- BORE PATH
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- ACCESS ROAD
- ROAD RIGHT-OF-WAY
- PROPERTY LINE
- FENCE LINE
- TOP OF BANK
- TOE OF BANK
- EXISTING PIPELINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- WETLAND
- STREAM
- ORDINARY HIGH WATER MARK
- PROPOSED BORE PIT
- IMPACT AREA
- ADD. TEMPORARY WORK SPACE(ATWS)

TRC

PLAN & PROFILE

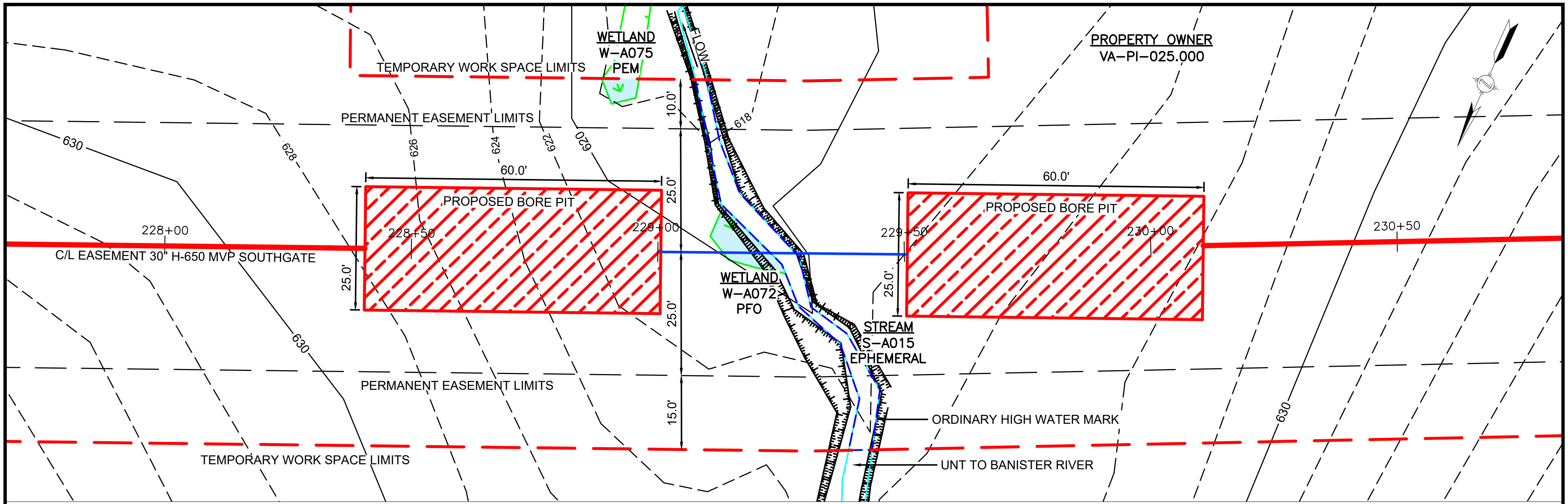
CROSSING 012

MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

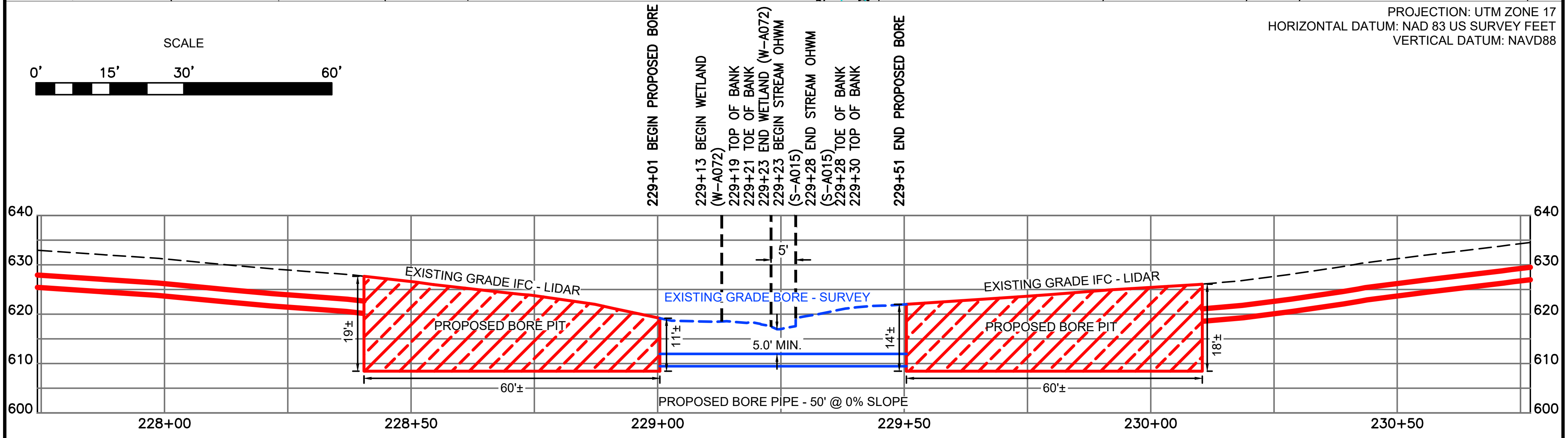
DRAWING NO.	REV.
PP-H650-010	P2

GENERAL NOTES:

- STATIONING IS FOR REFERENCE ONLY. SEE IFC ALIGNMENT FOR ACTUAL STATIONING.
- SPOIL PILES FROM EXCAVATED MATERIAL WILL BE KEPT A MINIMUM OF 10 FEET FROM THE ORDINARY HIGH WATER MARK AND WILL BE CONTAINED BY SEDIMENT BARRIERS.
- BORE PIT DIMENSIONS ARE APPROXIMATE, CONTRACTOR TO DETERMINE EXACT DIMENSIONS DEPENDING ON FIELD CONDITIONS.
- EXACT BORE ALIGNMENT SUBJECT TO CHANGE, WITHIN THE EXTENTS OF THE PERMANENT EASEMENT, DEPENDING ON FIELD CONDITIONS. MOUNTAIN VALLEY WILL MAINTAIN ELEVATIONS AND MINIMUM DISTANCES FROM RESOURCES AS SHOWN.
- MINIMUM 3' COVER BETWEEN STREAMBED AND TOP OF PIPELINE UNLESS OTHERWISE NOTED.



PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88



SCALE
0'
15'
30'
60'
229+01 BEGIN PROPOSED BORE
229+13 BEGIN WETLAND (W–A072)
229+19 TOP OF BANK
229+21 TOE OF BANK
229+23 END WETLAND (W–A072)
229+23 BEGIN STREAM OHWM (S–A015)
229+28 END STREAM OHWM (S–A015)
229+28 TOE OF BANK
229+30 TOP OF BANK
229+51 END PROPOSED BORE
640
630
620
610
600
5'
EXISTING GRADE IFC - LIDAR
EXISTING GRADE BORE - SURVEY
PROPOSED BORE PIT
19'±
11'±
14'±
18'±
5.0' MIN.
60'±
PROPOSED BORE PIPE - 50' @ 0% SLOPE
228+00
228+50
229+00
229+50
230+00
230+50

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

- C/L OF EASEMENT
- BORE PATH
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- ACCESS ROAD
- ROAD RIGHT-OF-WAY
- PROPERTY LINE
- FENCE LINE
- TOP OF BANK
- TOE OF BANK
- EXISTING PIPELINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- WETLAND
- STREAM
- ORDINARY HIGH WATER MARK
- PROPOSED BORE PIT
- IMPACT AREA
- ADD. TEMPORARY WORK SPACE(ATWS)

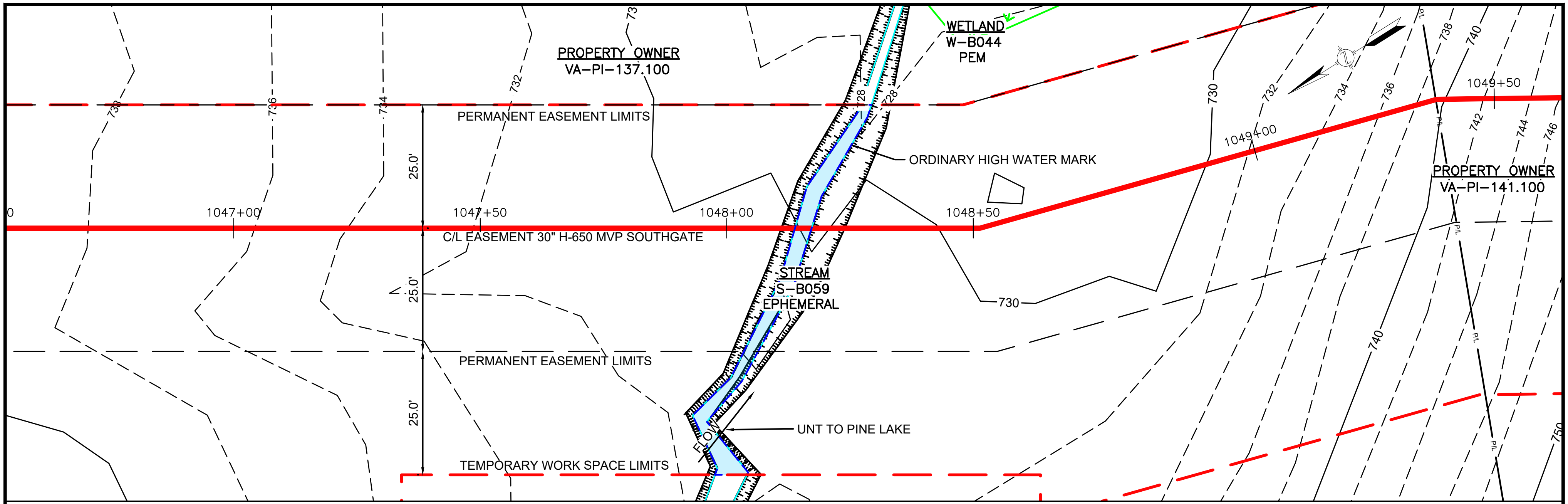
TRC

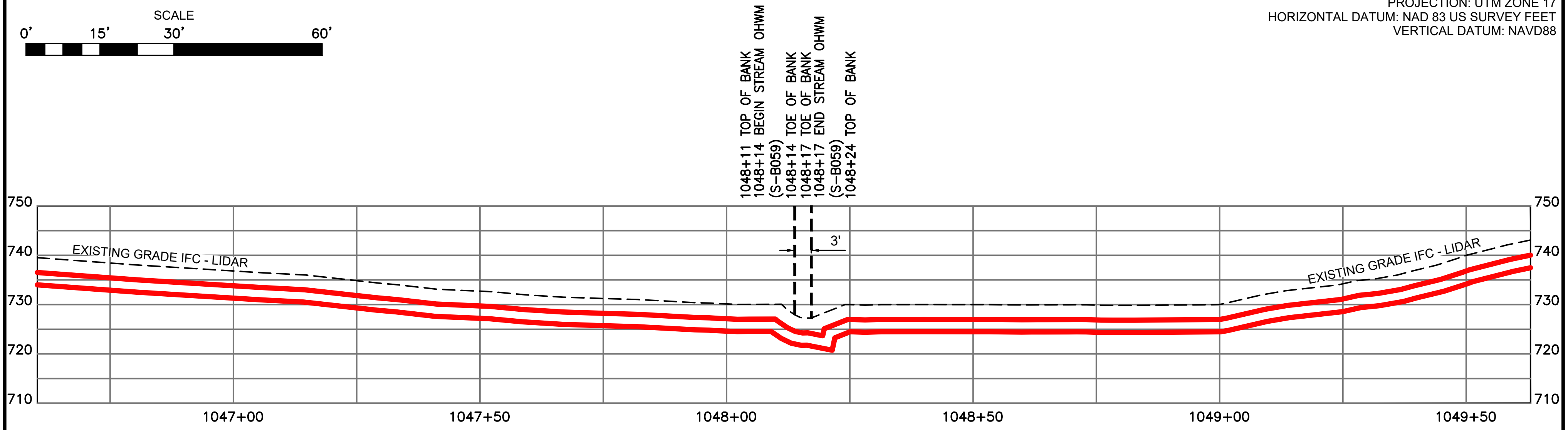
PLAN & PROFILE
CROSSING 015
MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO.
PP-H650-013

REV.
P2

GENERAL NOTES:
- STATIONING IS FOR REFERENCE ONLY. SEE IFC ALIGNMENT FOR ACTUAL STATIONING.
- SPOIL PILES FROM EXCAVATED MATERIAL WILL BE KEPT A MINIMUM OF 10 FEET FROM THE ORDINARY HIGH WATER MARK AND WILL BE CONTAINED BY SEDIMENT BARRIERS.
- BORE PIT DIMENSIONS ARE APPROXIMATE, CONTRACTOR TO DETERMINE EXACT DIMENSIONS DEPENDING ON FIELD CONDITIONS.
- EXACT BORE ALIGNMENT SUBJECT TO CHANGE, WITHIN THE EXTENTS OF THE PERMANENT EASEMENT, DEPENDING ON FIELD CONDITIONS. MOUNTAIN VALLEY WILL MAINTAIN ELEVATIONS AND MINIMUM DISTANCES FROM RESOURCES AS SHOWN.
- MINIMUM 3' COVER BETWEEN STREAMBED AND TOP OF PIPELINE UNLESS OTHERWISE NOTED.





PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

▬	C/L OF EASEMENT		TOP OF BANK	▨	PROPOSED BORE PIT
―	BORE PATH		TOE OF BANK	🟦	IMPACT AREA
- - -	PERMANENT EASEMENT		EXISTING PIPELINE		
▬ ▬	WORK SPACE LIMITS		OVERHEAD POWER		
▬	ACCESS ROAD		OVERHEAD TELEPHONE		
	ROAD RIGHT-OF-WAY		WETLAND		
	PROPERTY LINE	―	STREAM	▨	ADD. TEMPORARY WORK SPACE(ATWS)
	FENCE LINE	- - -	ORDINARY HIGH WATER MARK		

TRC

PLAN & PROFILE

CROSSING 055

MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO.	REV.
PP-H650-048	P2

GENERAL NOTES:
- STATIONING IS FOR REFERENCE ONLY. SEE IFC ALIGNMENT FOR ACTUAL STATIONING.
- SPOIL PILES FROM EXCAVATED MATERIAL WILL BE KEPT A MINIMUM OF 10 FEET FROM THE ORDINARY HIGH WATER MARK AND WILL BE CONTAINED BY SEDIMENT BARRIERS.
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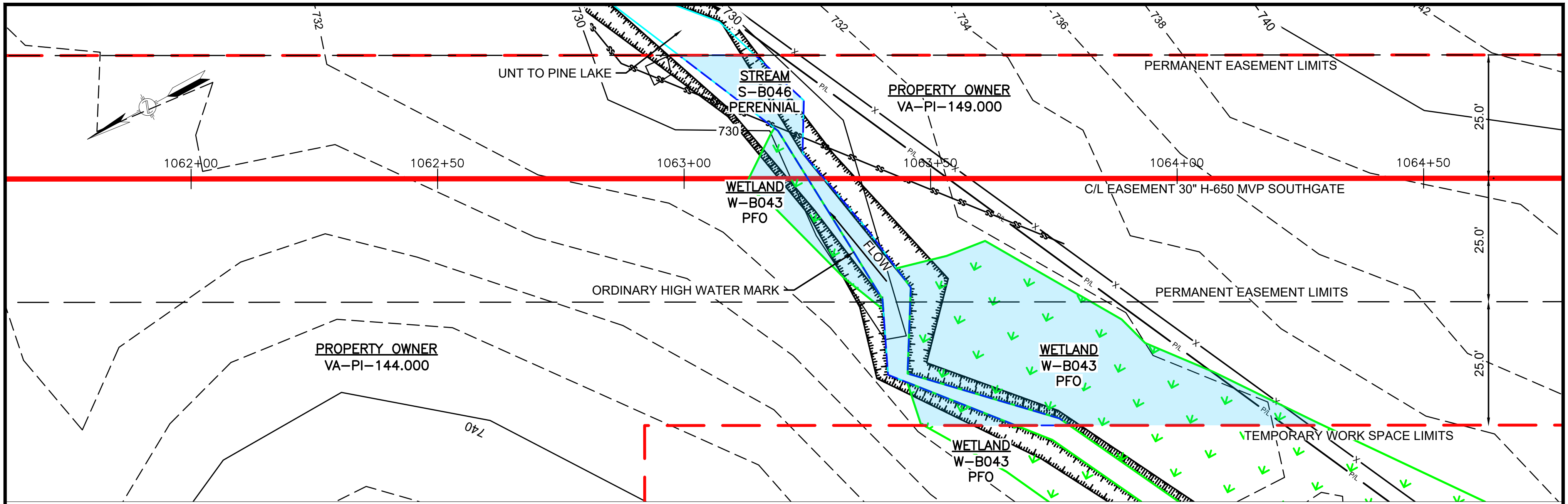
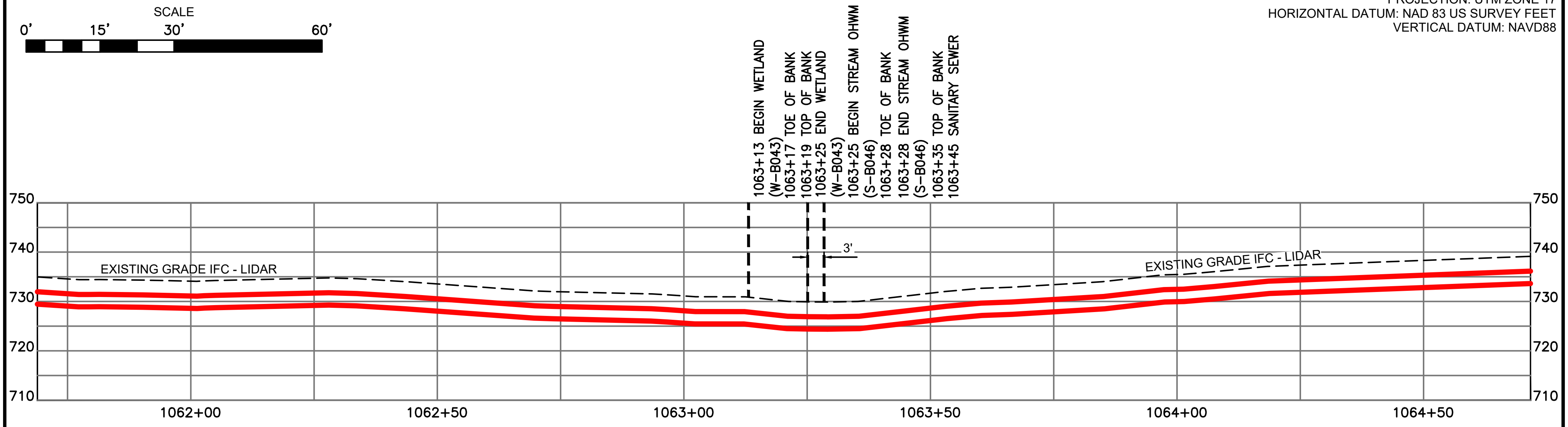


PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88



SCALE
0'
15'
30'
60'
1063+13 BEGIN WETLAND (W-B043)
1063+17 TOE OF BANK
1063+19 TOP OF BANK
1063+25 END WETLAND (W-B043)
1063+25 BEGIN STREAM OHWM (S-B046)
1063+28 TOE OF BANK
1063+28 END STREAM OHWM (S-B046)
1063+35 TOP OF BANK
1063+45 SANITARY SEWER
750
740
730
720
710
EXISTING GRADE IFC - LIDAR
3'
EXISTING GRADE IFC - LIDAR
1062+00
1062+50
1063+00
1063+50
1064+00
1064+50

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

- C/L OF EASEMENT
- BORE PATH
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- ACCESS ROAD
- ROAD RIGHT-OF-WAY
- PROPERTY LINE
- FENCE LINE
- TOP OF BANK
- TOE OF BANK
- EXISTING PIPELINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- WETLAND
- STREAM
- ORDINARY HIGH WATER MARK
- PROPOSED BORE PIT
- IMPACT AREA
- ADD. TEMPORARY WORK SPACE(ATWS)

TRC

PLAN & PROFILE
CROSSING 056
MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO.	REV.
PP-H650-049	P2

GENERAL NOTES:

- STATIONING IS FOR REFERENCE ONLY. SEE IFC ALIGNMENT FOR ACTUAL STATIONING.
- SPOIL PILES FROM EXCAVATED MATERIAL WILL BE KEPT A MINIMUM OF 10 FEET FROM THE ORDINARY HIGH WATER MARK AND WILL BE CONTAINED BY SEDIMENT BARRIERS.
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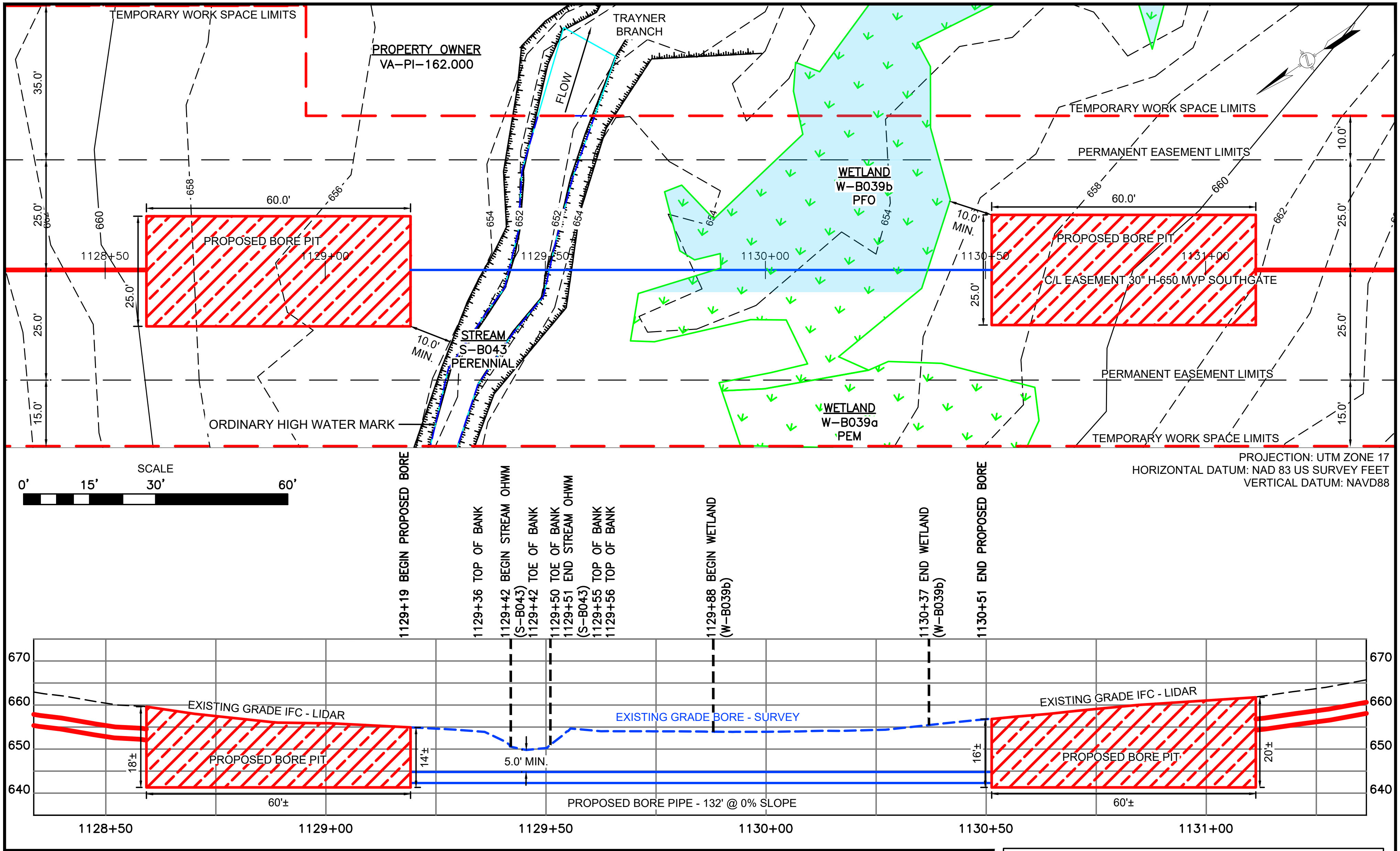
TEMPORARY WORK SPACE LIMITS
PROPERTY OWNER
VA-PI-162.000
TRAYNER BRANCH
FLOW
TEMPORARY WORK SPACE LIMITS
PERMANENT EASEMENT LIMITS
WETLAND
W-B039b
PFO
60.0'
PROPOSED BORE PIT
1128+50
1129+00
1129+50
1130+00
1130+50
1131+00
C/L EASEMENT 30" H-650 MVP SOUTHGATE
10.0' MIN.
STREAM
S-B043
PERENNIAL
WETLAND
W-B039a
PEM
ORDINARY HIGH WATER MARK
PERMANENT EASEMENT LIMITS
TEMPORARY WORK SPACE LIMITS
35.0'
25.0'
15.0'
10.0'
652
654
656
658
660
662
SCALE
0'
15'
30'
60'
PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88
1129+19 BEGIN PROPOSED BORE
1129+36 TOP OF BANK
1129+42 BEGIN STREAM OHWM (S-B043)
1129+42 TOE OF BANK
1129+50 TOE OF BANK
1129+51 END STREAM OHWM (S-B043)
1129+55 TOP OF BANK
1129+56 TOP OF BANK
1129+88 BEGIN WETLAND (W-B039b)
1130+37 END WETLAND (W-B039b)
1130+51 END PROPOSED BORE
670
660
650
640
EXISTING GRADE IFC - LIDAR
EXISTING GRADE BORE - SURVEY
PROPOSED BORE PIT
18'±
14'±
16'±
20'±
5.0' MIN.
60'±
PROPOSED BORE PIPE - 132' @ 0% SLOPE

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

C/L OF EASEMENT	TOP OF BANK	PROPOSED BORE PIT
BORE PATH	TOE OF BANK	IMPACT AREA
PERMANENT EASEMENT	EXISTING PIPELINE	ADD. TEMPORARY WORK SPACE(ATWS)
WORK SPACE LIMITS	OVERHEAD POWER	
ACCESS ROAD	OVERHEAD TELEPHONE	
ROAD RIGHT-OF-WAY	WETLAND	
PROPERTY LINE	STREAM	
FENCE LINE	ORDINARY HIGH WATER MARK	

TRC

PLAN & PROFILE

CROSSING 059

MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO.

PP-H650-052

REV.

P2

GENERAL NOTES:

- STATIONING IS FOR REFERENCE ONLY. SEE IFC ALIGNMENT FOR ACTUAL STATIONING.
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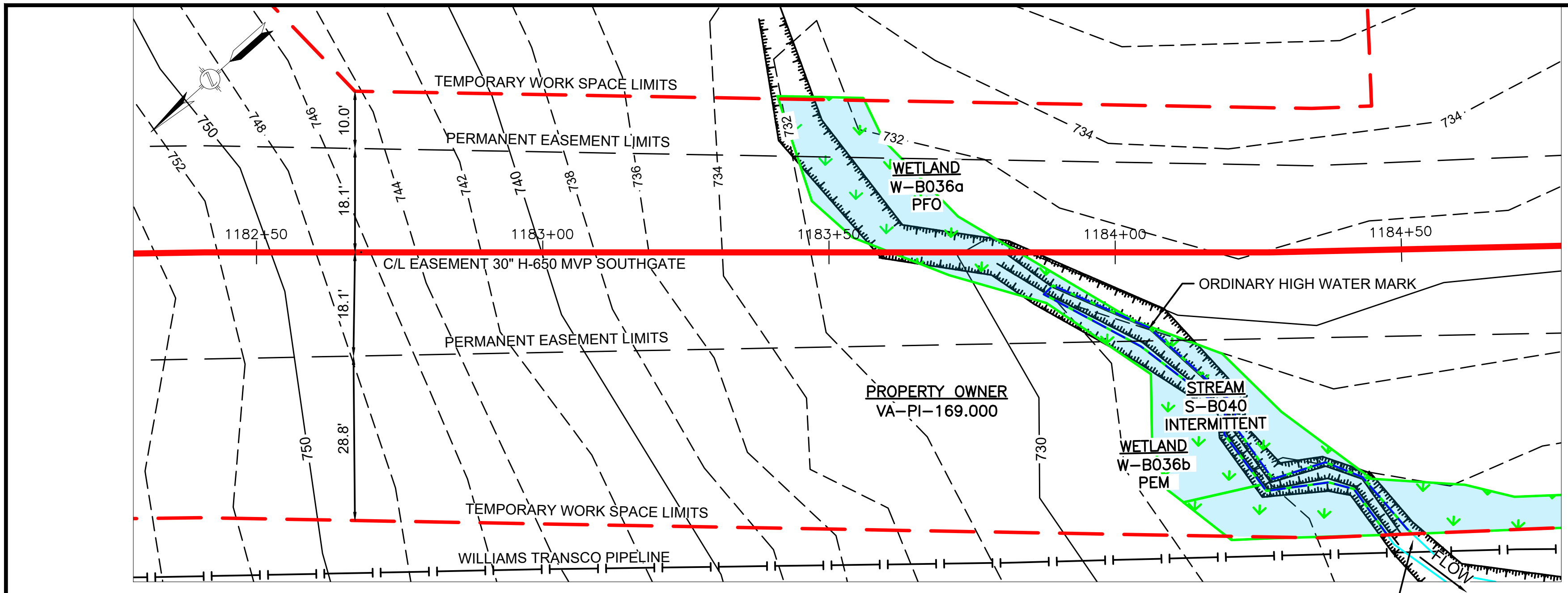
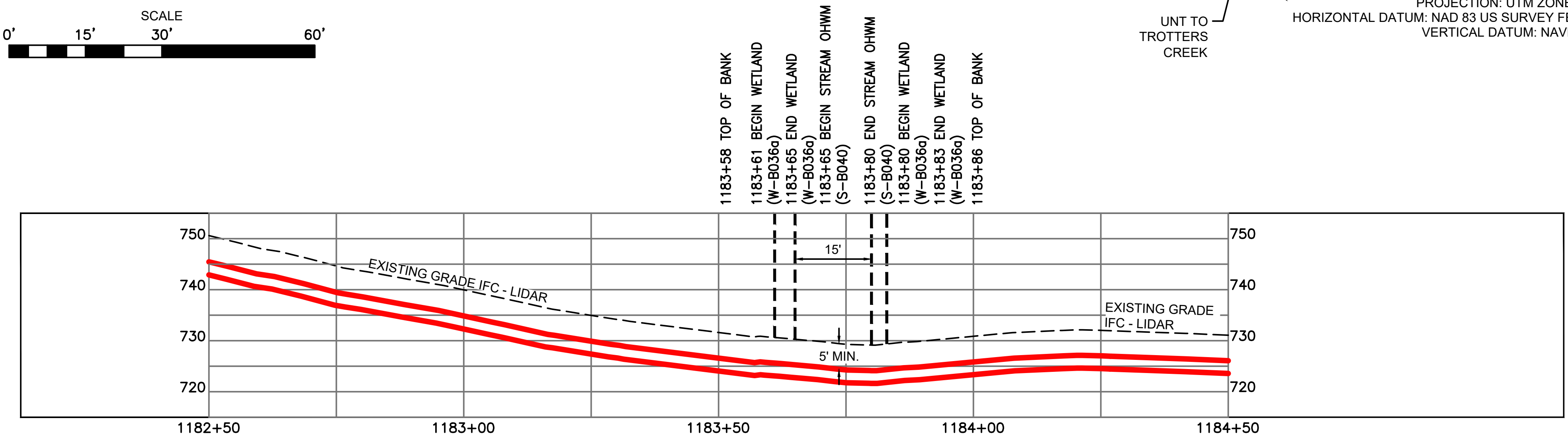


PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88


1183+58 TOP OF BANK
1183+61 BEGIN WETLAND (W-B036a)
1183+65 END WETLAND (W-B036a)
1183+65 BEGIN STREAM OHWM (S-B040)
1183+80 END STREAM OHWM (S-B040)
1183+80 BEGIN WETLAND (W-B036a)
1183+83 END WETLAND (W-B036a)
1183+86 TOP OF BANK
750
740
730
720
750
740
730
720
15'
5' MIN.
EXISTING GRADE IFC - LIDAR
EXISTING GRADE IFC - LIDAR
1182+50
1183+00
1183+50
1184+00
1184+50

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

	C/L OF EASEMENT		TOP OF BANK	▨	PROPOSED BORE PIT
	BORE PATH		TOE OF BANK		IMPACT AREA
	PERMANENT EASEMENT		EXISTING PIPELINE		
	WORK SPACE LIMITS		OVERHEAD POWER		
	ACCESS ROAD		OVERHEAD TELEPHONE		
	ROAD RIGHT-OF-WAY		WETLAND		
	PROPERTY LINE		STREAM	▨	ADD. TEMPORARY WORK SPACE(ATWS)
	FENCE LINE		ORDINARY HIGH WATER MARK		

TRC

PLAN & PROFILE

CROSSING 061

MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO.

PP-H650-054A

REV.

P2

GENERAL NOTES:

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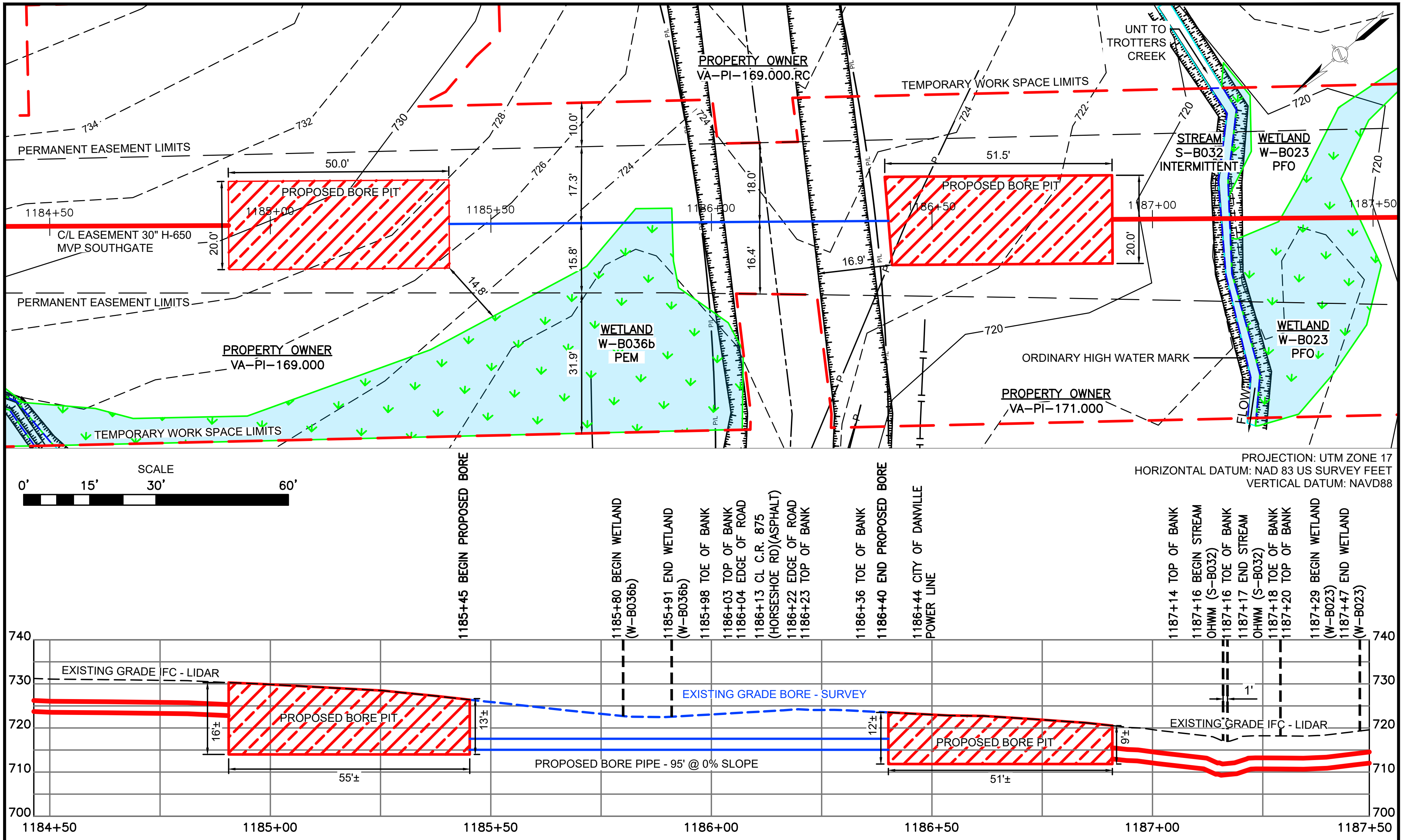

PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

▬	C/L OF EASEMENT		TOP OF BANK	▨	PROPOSED BORE PIT
―	BORE PATH		TOE OF BANK		IMPACT AREA
- - -	PERMANENT EASEMENT		EXISTING PIPELINE		
- - -	WORK SPACE LIMITS		OVERHEAD POWER		
	ACCESS ROAD		OVERHEAD TELEPHONE		
	ROAD RIGHT-OF-WAY		WETLAND		
	PROPERTY LINE		STREAM	▨	ADD. TEMPORARY WORK SPACE(ATWS)
	FENCE LINE	- - -	ORDINARY HIGH WATER MARK		

TRC

PLAN & PROFILE
CROSSING 062 & 062B
MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO.	REV.
PP-H650-054B	P2

GENERAL NOTES:
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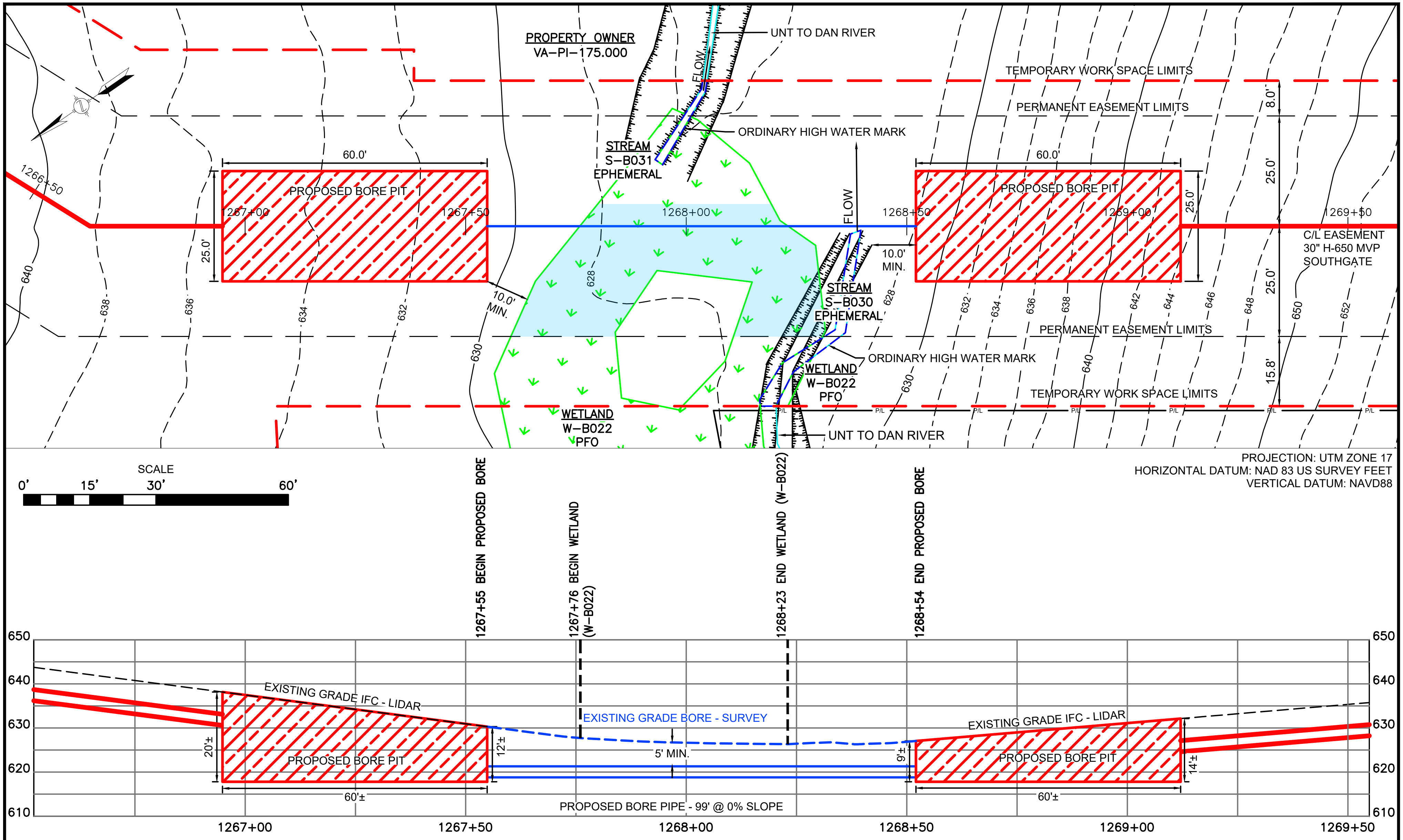

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

🟥	C/L OF EASEMENT		TOP OF BANK	▨	PROPOSED BORE PIT
	BORE PATH		TOE OF BANK		IMPACT AREA
	PERMANENT EASEMENT		EXISTING PIPELINE		
	WORK SPACE LIMITS		OVERHEAD POWER		
	ACCESS ROAD		OVERHEAD TELEPHONE		
	ROAD RIGHT-OF-WAY	✓	WETLAND		
	PROPERTY LINE		STREAM		
	FENCE LINE		ORDINARY HIGH WATER MARK	▨	ADD. TEMPORARY WORK SPACE(ATWS)

TRC

PLAN & PROFILE
CROSSING 067
MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO. **PP-H650-058**

REV. P2

GENERAL NOTES:
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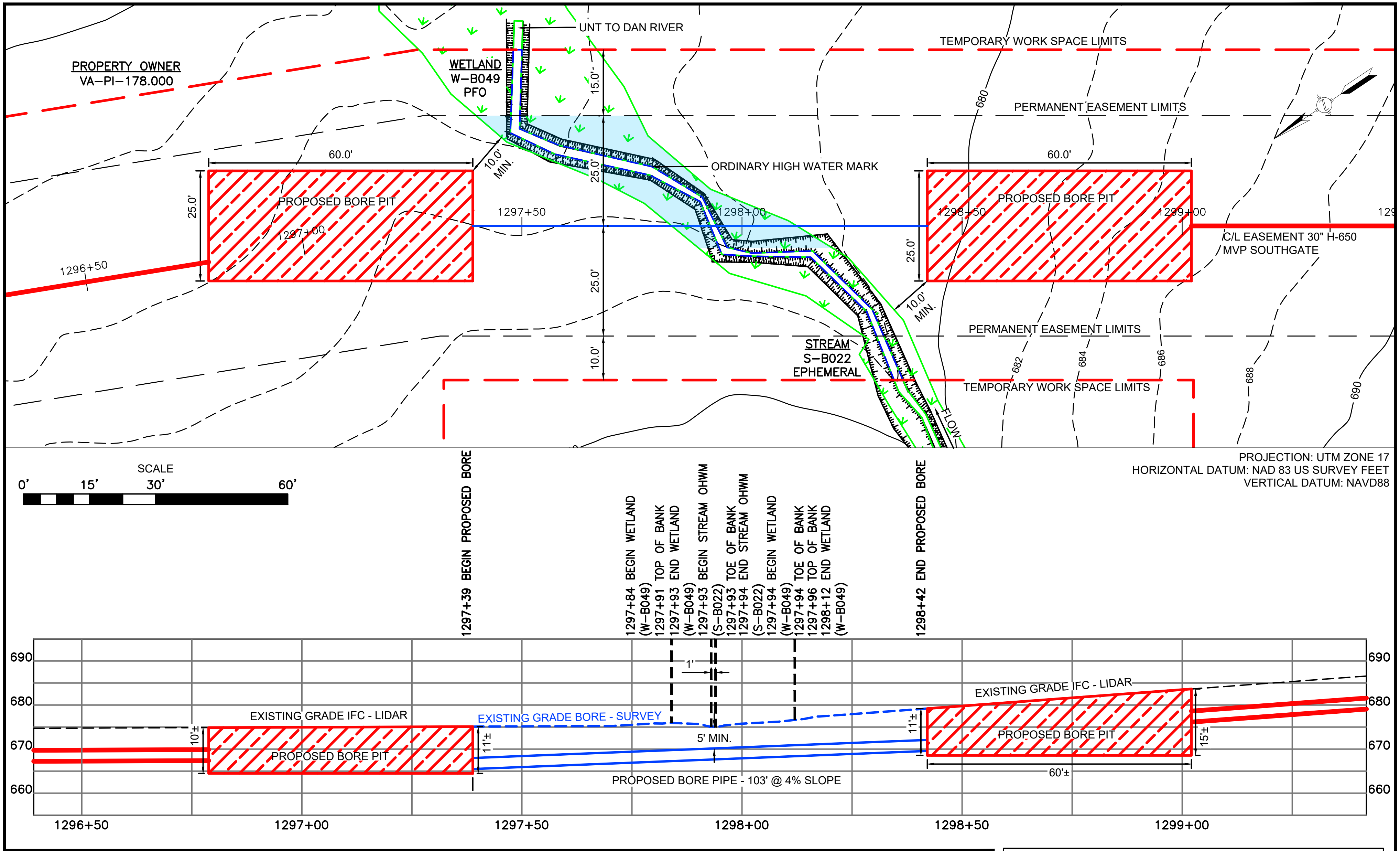

PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

▬	C/L OF EASEMENT
▬	BORE PATH
- - -	PERMANENT EASEMENT
▬ ▬	WORK SPACE LIMITS
▬ ▬	ACCESS ROAD
—R/W—	ROAD RIGHT-OF-WAY
—●—	PROPERTY LINE
—×—	FENCE LINE
—'—'—	TOP OF BANK
—,—,—	TOE OF BANK
—I I—	EXISTING PIPELINE
—P—	OVERHEAD POWER
—T—	OVERHEAD TELEPHONE
✓ ✓ ✓	WETLAND
—	STREAM
— —	ORDINARY HIGH WATER MARK
▨	PROPOSED BORE PIT
🟦	IMPACT AREA
▨	ADD. TEMPORARY WORK SPACE(ATWS)

TRC

PLAN & PROFILE

CROSSING 069

MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO.	REV.
PP-H650-060	P2

GENERAL NOTES:

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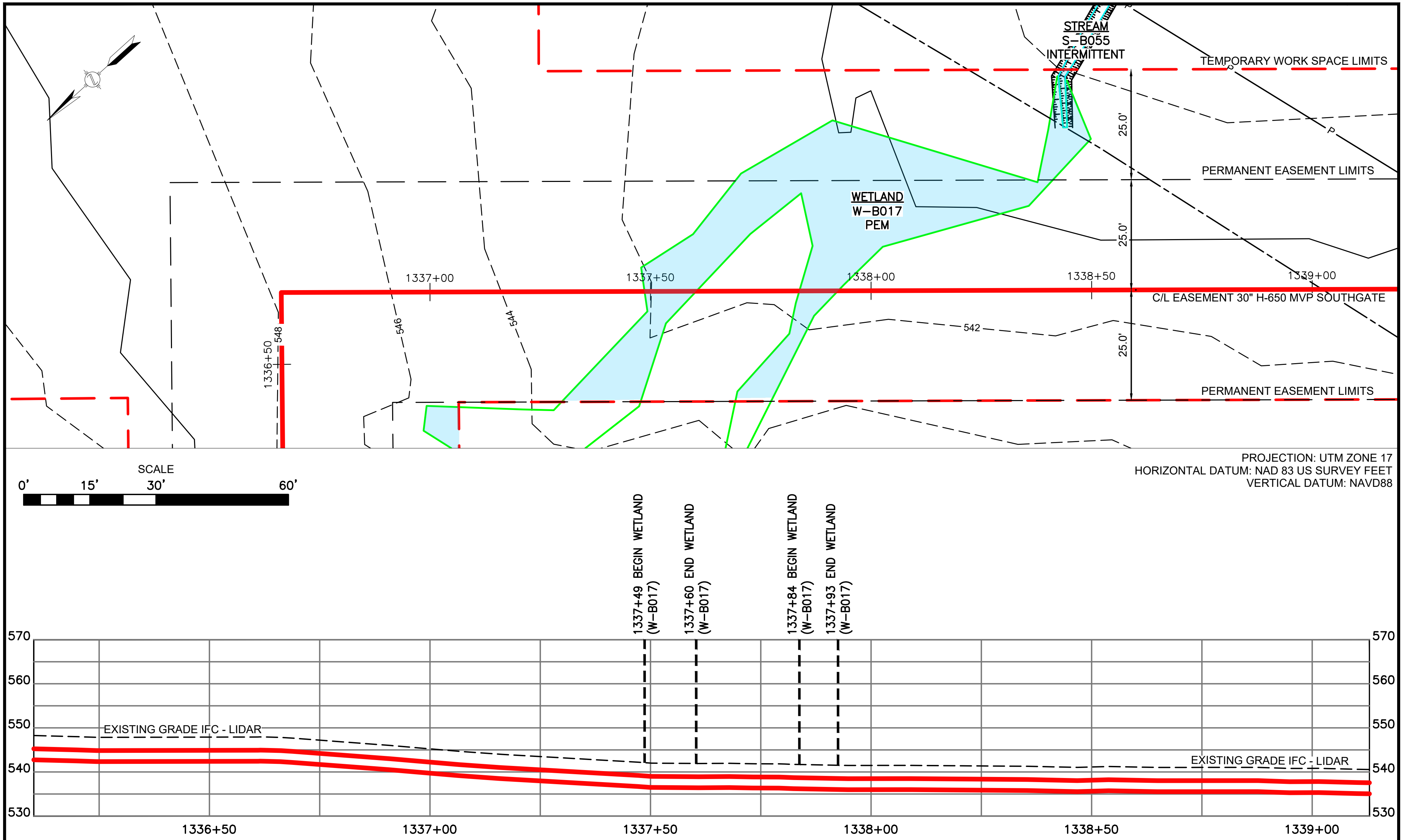

STREAM
S-B055
INTERMITTENT
TEMPORARY WORK SPACE LIMITS
25.0'
PERMANENT EASEMENT LIMITS
WETLAND
W-B017
PEM
25.0'
1337+00
1337+50
1338+00
1338+50
1339+00
C/L EASEMENT 30" H-650 MVP SOUTHGATE
548
546
544
542
1336+50
25.0'
PERMANENT EASEMENT LIMITS
SCALE
0'
15'
30'
60'
1337+49 BEGIN WETLAND (W-B017)
1337+60 END WETLAND (W-B017)
1337+84 BEGIN WETLAND (W-B017)
1337+93 END WETLAND (W-B017)
570
560
550
540
530
EXISTING GRADE IFC - LIDAR
EXISTING GRADE IFC - LIDAR
1336+50
1337+00
1337+50
1338+00
1338+50
1339+00

PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

	C/L OF EASEMENT		TOP OF BANK	▨	PROPOSED BORE PIT
	BORE PATH		TOE OF BANK		IMPACT AREA
	PERMANENT EASEMENT		EXISTING PIPELINE		
	WORK SPACE LIMITS		OVERHEAD POWER		
	ACCESS ROAD		OVERHEAD TELEPHONE		
	ROAD RIGHT-OF-WAY		WETLAND		
	PROPERTY LINE		STREAM	▨	ADD. TEMPORARY WORK SPACE(ATWS)
	FENCE LINE		ORDINARY HIGH WATER MARK		

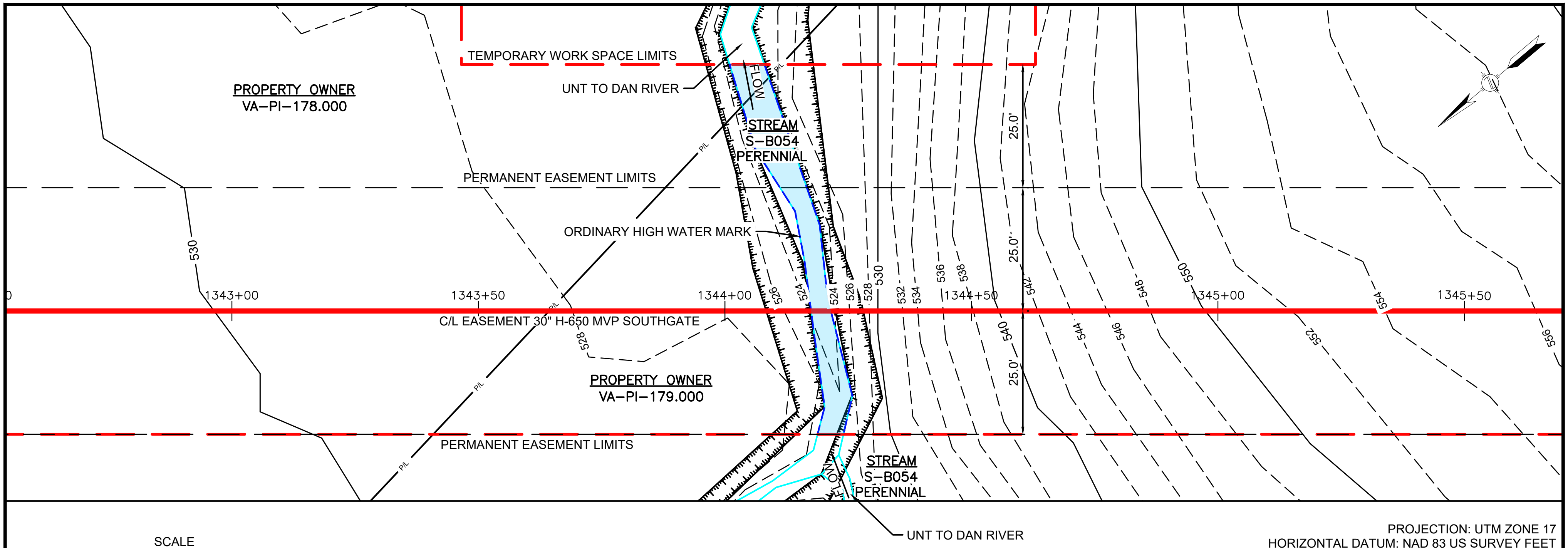
TRC

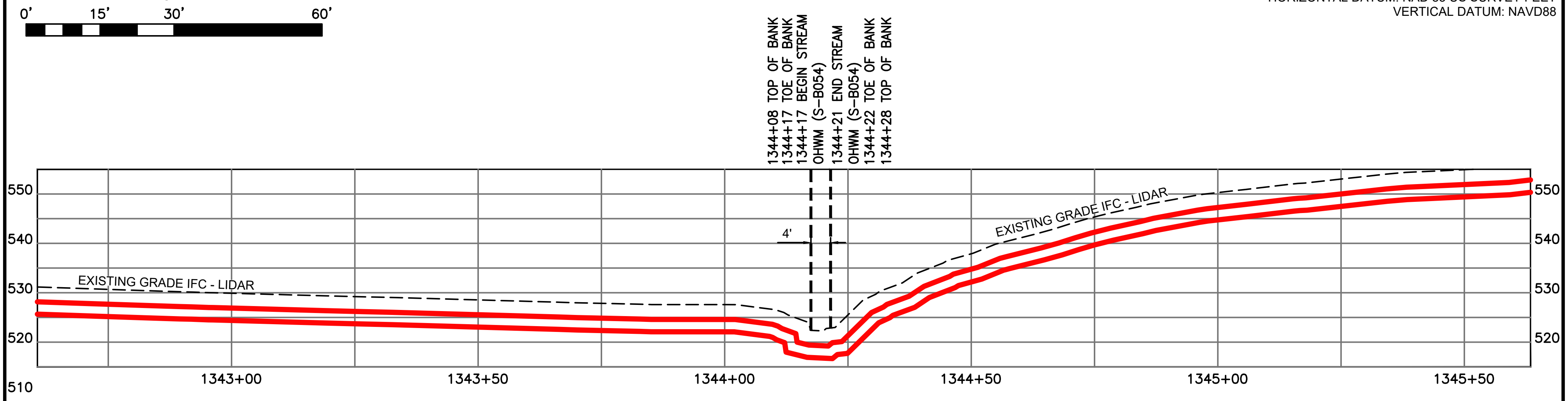
PLAN & PROFILE
CROSSING 075
MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO. **PP-H650-066**

REV. P2

GENERAL NOTES:
- STATIONING IS FOR REFERENCE ONLY. SEE IFC ALIGNMENT FOR ACTUAL STATIONING.
- SPOIL PILES FROM EXCAVATED MATERIAL WILL BE KEPT A MINIMUM OF 10 FEET FROM THE ORDINARY HIGH WATER MARK AND WILL BE CONTAINED BY SEDIMENT BARRIERS.
- BORE PIT DIMENSIONS ARE APPROXIMATE, CONTRACTOR TO DETERMINE EXACT DIMENSIONS DEPENDING ON FIELD CONDITIONS.
- EXACT BORE ALIGNMENT SUBJECT TO CHANGE, WITHIN THE EXTENTS OF THE PERMANENT EASEMENT, DEPENDING ON FIELD CONDITIONS. MOUNTAIN VALLEY WILL MAINTAIN ELEVATIONS AND MINIMUM DISTANCES FROM RESOURCES AS SHOWN.
- MINIMUM 3' COVER BETWEEN STREAMBED AND TOP OF PIPELINE UNLESS OTHERWISE NOTED.





PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

- C/L OF EASEMENT
- BORE PATH
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- ACCESS ROAD
- ROAD RIGHT-OF-WAY
- PROPERTY LINE
- FENCE LINE
- TOP OF BANK
- TOE OF BANK
- EXISTING PIPELINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- WETLAND
- STREAM
- ORDINARY HIGH WATER MARK
- ▨ PROPOSED BORE PIT
- IMPACT AREA
- ▨ ADD. TEMPORARY WORK SPACE(ATWS)

TRC

PLAN & PROFILE
CROSSING 076
MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO.
PP-H650-067

REV.
P2

GENERAL NOTES:
- STATIONING IS FOR REFERENCE ONLY. SEE IFC ALIGNMENT FOR ACTUAL STATIONING.
- SPOIL PILES FROM EXCAVATED MATERIAL WILL BE KEPT A MINIMUM OF 10 FEET FROM THE ORDINARY HIGH WATER MARK AND WILL BE CONTAINED BY SEDIMENT BARRIERS.
- BORE PIT DIMENSIONS ARE APPROXIMATE, CONTRACTOR TO DETERMINE EXACT DIMENSIONS DEPENDING ON FIELD CONDITIONS.
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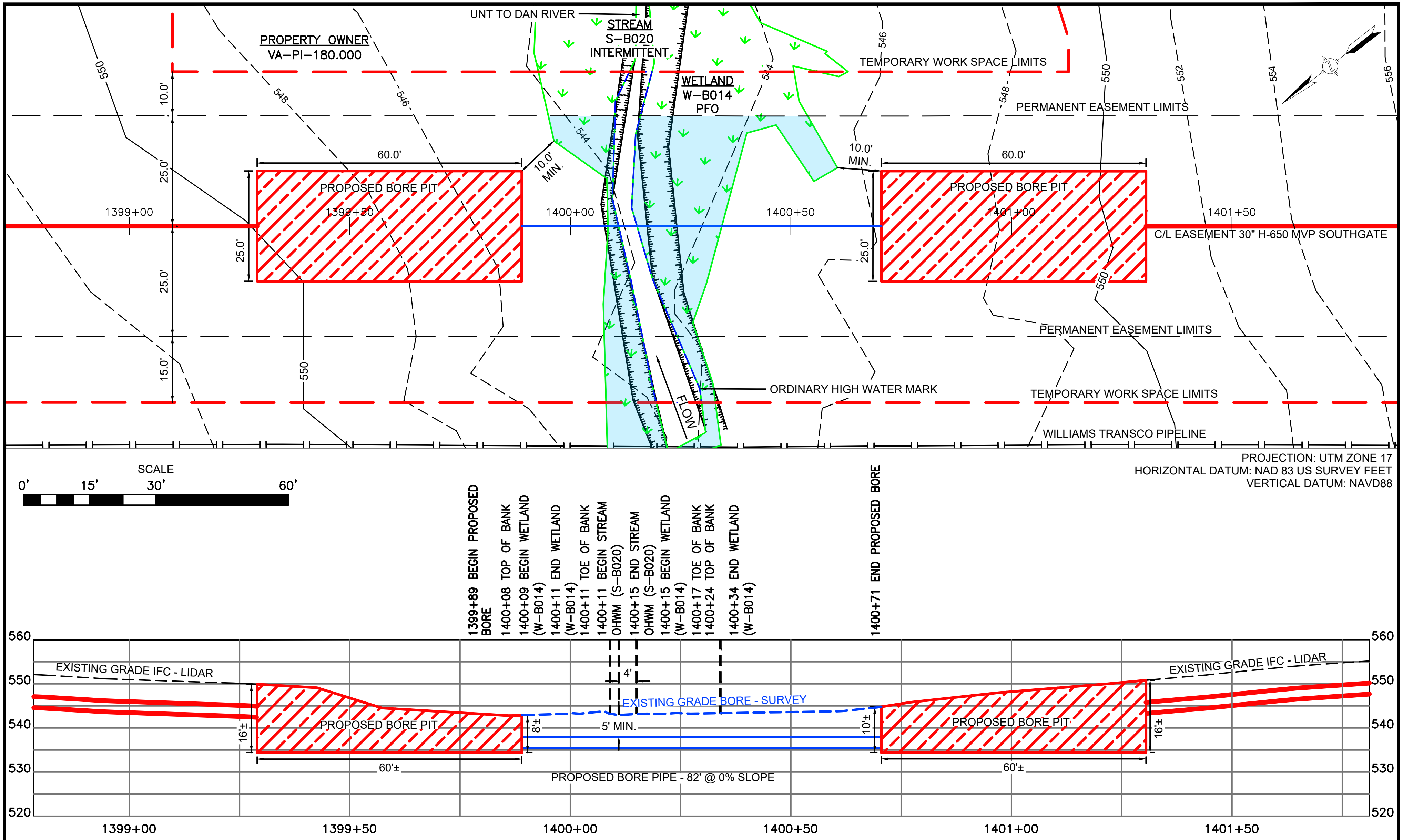
- MINIMUM 3' COVER BETWEEN STREAMBED AND TOP OF PIPELINE UNLESS OTHERWISE NOTED.


UNT TO DAN RIVER
STREAM
S-B020
INTERMITTENT
PROPERTY OWNER
VA-PI-180.000
WETLAND
W-B014
PFO
TEMPORARY WORK SPACE LIMITS
PERMANENT EASEMENT LIMITS
60.0'
10.0' MIN.
PROPOSED BORE PIT
1399+00
1399+50
1400+00
1400+50
1401+00
1401+50
C/L EASEMENT 30" H-650 MVP SOUTHGATE
10.0'
25.0'
15.0'
550
548
546
544
552
554
556
FLOW
ORDINARY HIGH WATER MARK
WILLIAMS TRANSCO PIPELINE
SCALE
0'
15'
30'
60'
PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88
1399+89 BEGIN PROPOSED BORE
1400+08 TOP OF BANK
1400+09 BEGIN WETLAND (W-B014)
1400+11 END WETLAND (W-B014)
1400+11 TOE OF BANK
1400+11 BEGIN STREAM OHWM (S-B020)
1400+15 END STREAM OHWM (S-B020)
1400+15 BEGIN WETLAND (W-B014)
1400+17 TOE OF BANK
1400+24 TOP OF BANK
1400+34 END WETLAND (W-B014)
1400+71 END PROPOSED BORE
560
550
540
530
520
EXISTING GRADE IFC - LIDAR
EXISTING GRADE BORE - SURVEY
4'
16'±
8'±
10'±
5' MIN.
60'±
PROPOSED BORE PIPE - 82' @ 0% SLOPE

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

▬	C/L OF EASEMENT	┬┬┬	TOP OF BANK	▨	PROPOSED BORE PIT
▬	BORE PATH	┴┴┴	TOE OF BANK	▭	IMPACT AREA
- - -	PERMANENT EASEMENT	─┤├─	EXISTING PIPELINE		
▬ ▬ ▬	WORK SPACE LIMITS	─P─	OVERHEAD POWER		
▬ ▬ ▬	ACCESS ROAD	─T─	OVERHEAD TELEPHONE		
─R/W─	ROAD RIGHT-OF-WAY	✓ ✓ ✓	WETLAND		
─●─	PROPERTY LINE	─	STREAM	▦	ADD. TEMPORARY WORK SPACE(ATWS)
─x─	FENCE LINE	─ ─ ─	ORDINARY HIGH WATER MARK		

TRC

PLAN & PROFILE
CROSSING 080
MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO.	REV.
PP-H650-071	P2

GENERAL NOTES:
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- BORE PIT DIMENSIONS ARE APPROXIMATE, CONTRACTOR TO DETERMINE EXACT DIMENSIONS DEPENDING ON FIELD CONDITIONS.
- EXACT BORE ALIGNMENT SUBJECT TO CHANGE, WITHIN THE EXTENTS OF THE PERMANENT EASEMENT, DEPENDING ON FIELD CONDITIONS. MOUNTAIN VALLEY WILL MAINTAIN ELEVATIONS AND MINIMUM DISTANCES FROM RESOURCES AS SHOWN.
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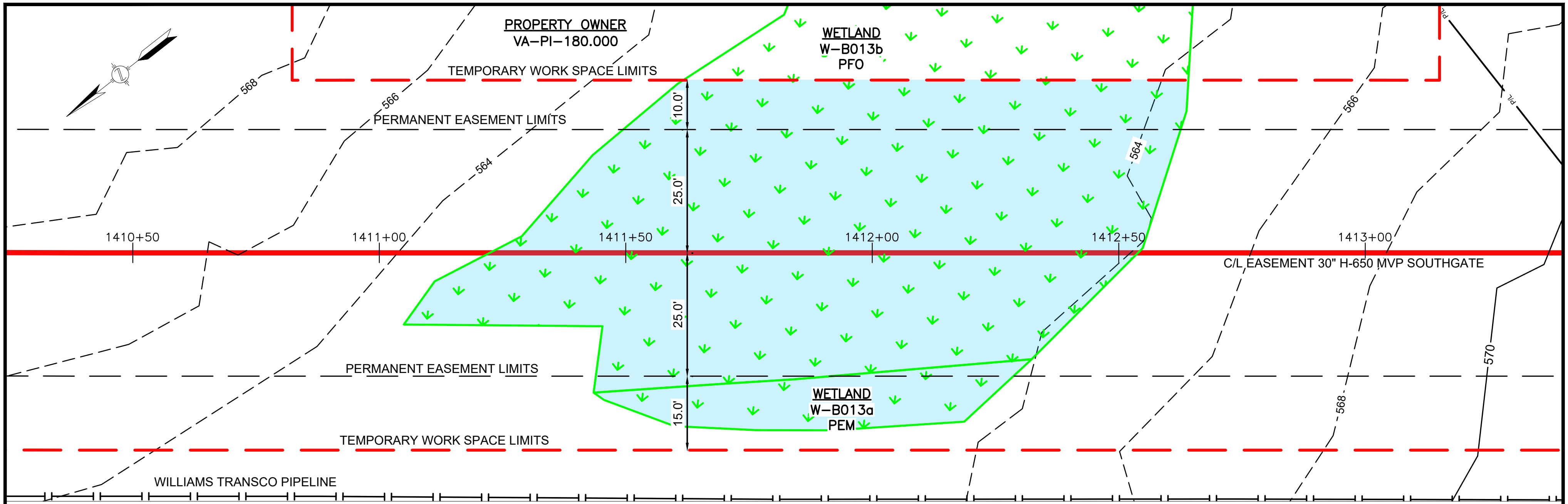
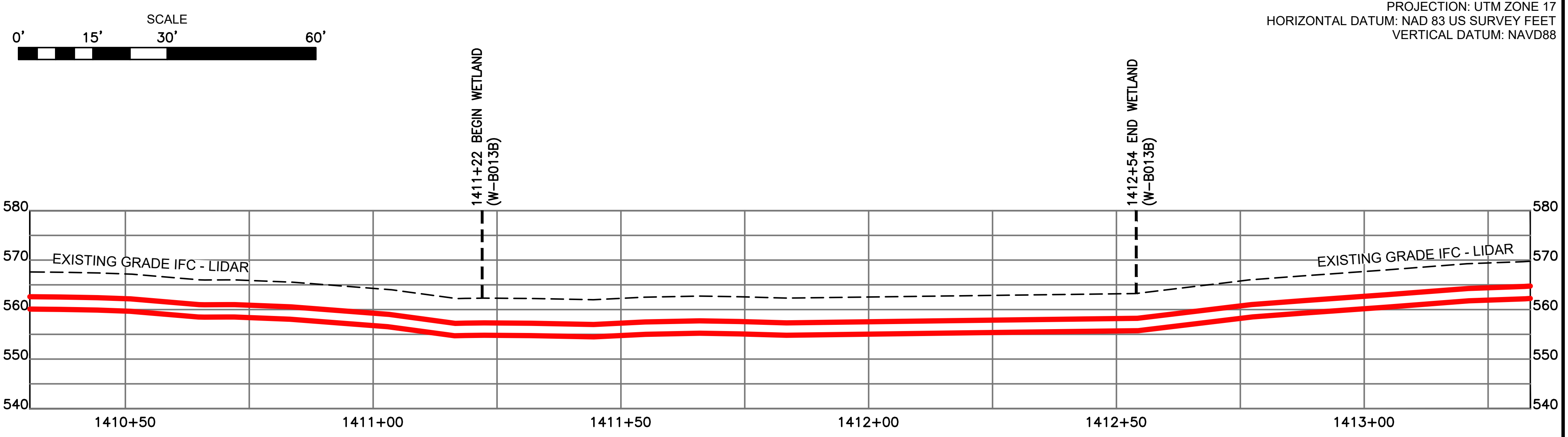

PROPERTY OWNER
VA-PI-180.000
WETLAND
W-B013b
PFO
TEMPORARY WORK SPACE LIMITS
PERMANENT EASEMENT LIMITS
568
566
564
566
564
570
568
10.0'
25.0'
25.0'
15.0'
1410+50
1411+00
1411+50
1412+00
1412+50
1413+00
C/L EASEMENT 30" H-650 MVP SOUTHGATE
PERMANENT EASEMENT LIMITS
WETLAND
W-B013a
PEM
TEMPORARY WORK SPACE LIMITS
WILLIAMS TRANSCO PIPELINE
P/L
P/L



PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

- C/L OF EASEMENT
- BORE PATH
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- ACCESS ROAD
- ROAD RIGHT-OF-WAY
- PROPERTY LINE
- FENCE LINE
- TOP OF BANK
- TOE OF BANK
- EXISTING PIPELINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- WETLAND
- STREAM
- ORDINARY HIGH WATER MARK
- PROPOSED BORE PIT
- IMPACT AREA
- ADD. TEMPORARY WORK SPACE(ATWS)

TRC

PLAN & PROFILE
CROSSING 081
MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
PITTSYLVANIA COUNTY, VA

DRAWING NO.	REV.
PP-H650-072	P2

GENERAL NOTES:

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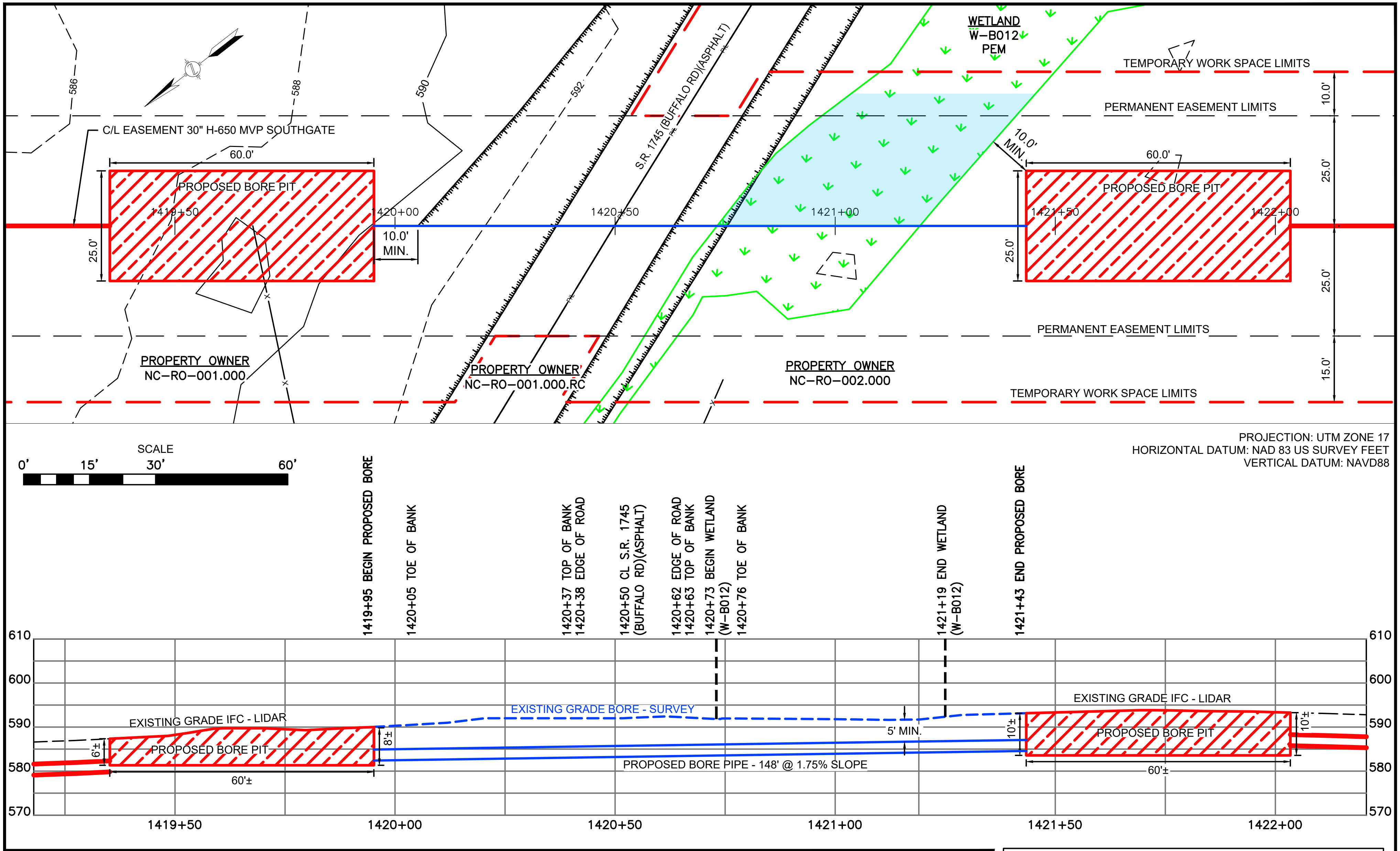

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

	C/L OF EASEMENT		TOP OF BANK	▨	PROPOSED BORE PIT
	BORE PATH		TOE OF BANK		IMPACT AREA
	PERMANENT EASEMENT		EXISTING PIPELINE		
	WORK SPACE LIMITS		OVERHEAD POWER		
	ACCESS ROAD		OVERHEAD TELEPHONE		
	ROAD RIGHT-OF-WAY		WETLAND	▨	ADD. TEMPORARY WORK SPACE(ATWS)
	PROPERTY LINE		STREAM		
	FENCE LINE		ORDINARY HIGH WATER MARK		

TRC

PLAN & PROFILE
CROSSING 082
MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
ROCKINGHAM COUNTY, NC

DRAWING NO. **PP-H650-073**

REV. P2

GENERAL NOTES:

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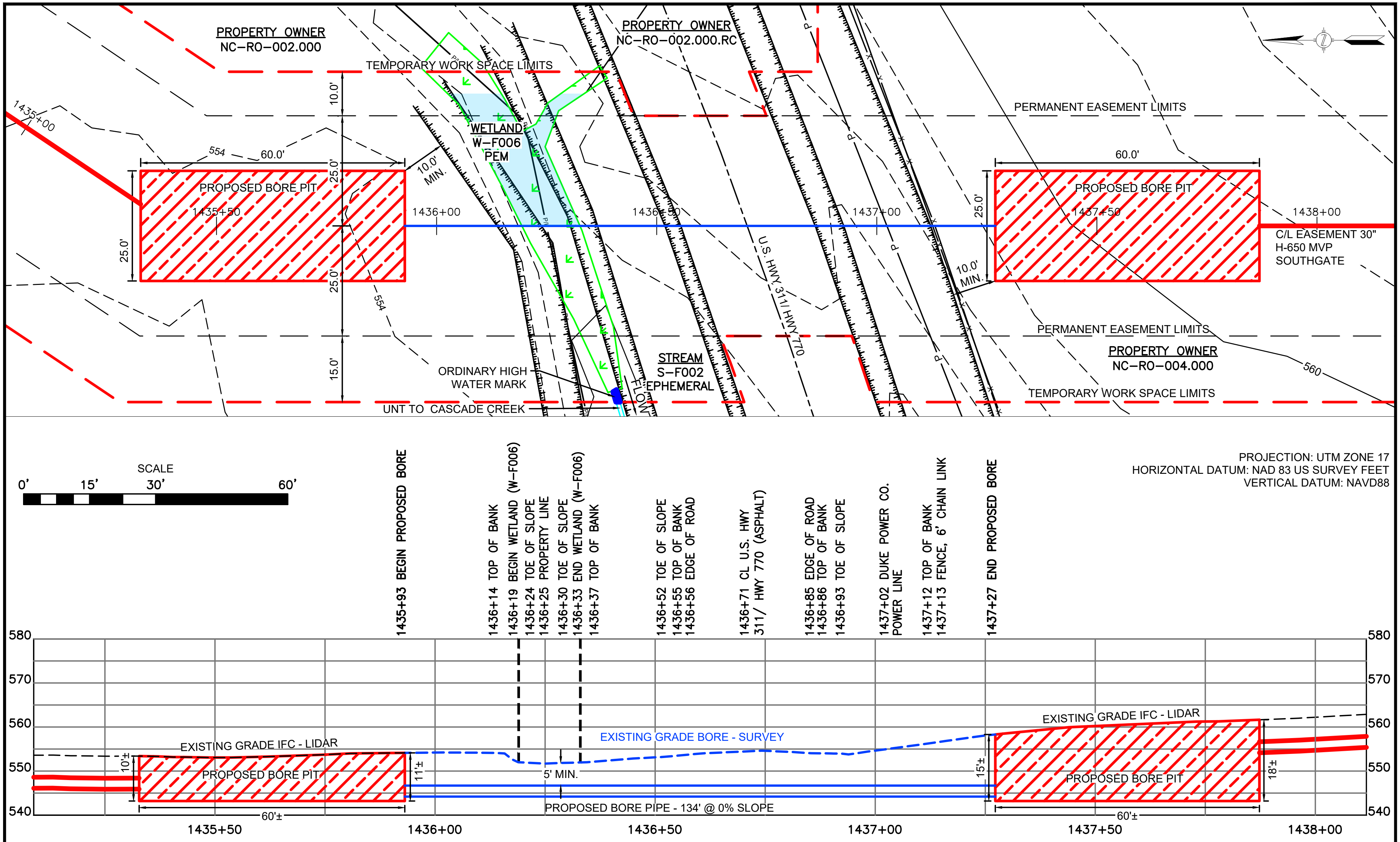

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	1 OF 1

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

- C/L OF EASEMENT
- BORE PATH
- PERMANENT EASEMENT
- WORK SPACE LIMITS
- ACCESS ROAD
- ROAD RIGHT-OF-WAY
- PROPERTY LINE
- FENCE LINE
- TOP OF BANK
- TOE OF BANK
- EXISTING PIPELINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- WETLAND
- STREAM
- ORDINARY HIGH WATER MARK
- ▨ PROPOSED BORE PIT
- IMPACT AREA
- ▨ ADD. TEMPORARY WORK SPACE(ATWS)

TRC

PLAN & PROFILE
CROSSING 083B
MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
ROCKINGHAM COUNTY, NC

DRAWING NO.
PP-H650-074A

REV.
P2

GENERAL NOTES:
- STATIONING IS FOR REFERENCE ONLY. SEE IFC ALIGNMENT FOR ACTUAL STATIONING.
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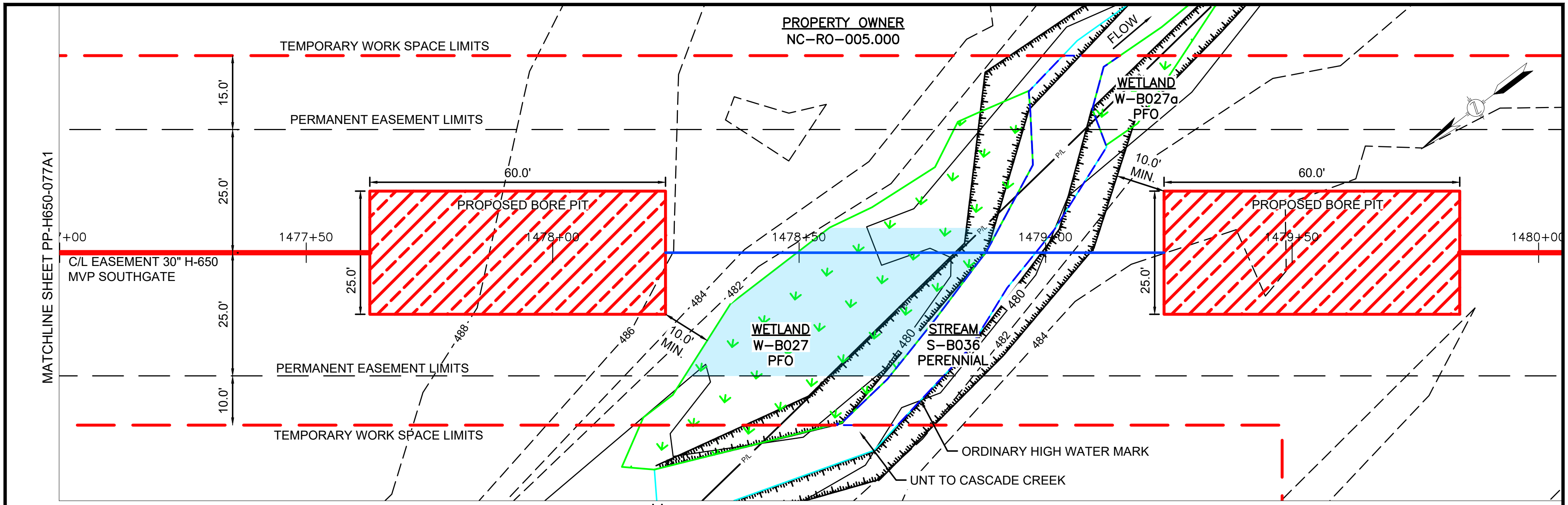

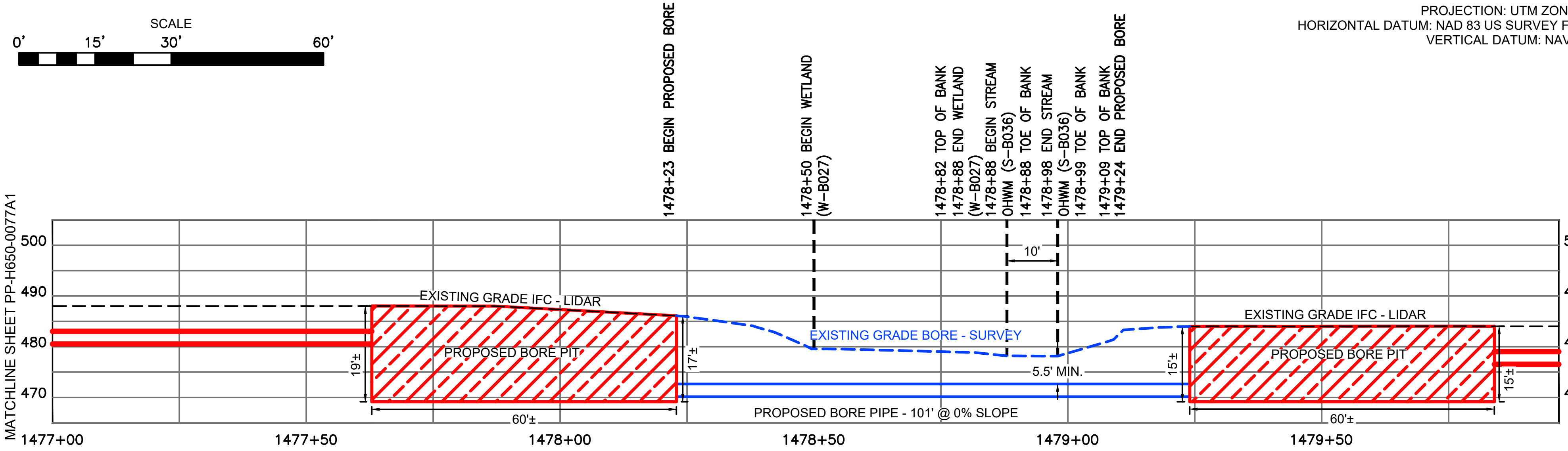
SCALE
0'
15'
30'
60'
1478+23 BEGIN PROPOSED BORE
1478+50 BEGIN WETLAND (W-B027)
1478+82 TOP OF BANK
1478+88 END WETLAND (W-B027)
1478+88 BEGIN STREAM OHWM (S-B036)
1478+88 TOE OF BANK
1478+98 END STREAM OHWM (S-B036)
1478+99 TOE OF BANK
1479+09 TOP OF BANK
1479+24 END PROPOSED BORE
MATCHLINE SHEET PP-H650-0077A1
500
490
480
470
EXISTING GRADE IFC - LIDAR
EXISTING GRADE BORE - SURVEY
10'
PROPOSED BORE PIT
19'±
17'±
5.5' MIN.
15'±
15'±
60'±
PROPOSED BORE PIPE - 101' @ 0% SLOPE
1477+00
1477+50
1478+00
1478+50
1479+00
1479+50

PROJECTION: UTM ZONE 17
HORIZONTAL DATUM: NAD 83 US SURVEY FEET
VERTICAL DATUM: NAVD88

DRAWN	SMR	DATE	04/30/2025
CHECKED	MWC	DATE	04/30/2025
APP'D	MLT	DATE	04/30/2025
SCALE	AS NOTED	SHEET	2 OF 2

JOB NO.

PROJECT ID:

H-650

Mountain Valley PIPELINE LLC

LEGEND:

▬	C/L OF EASEMENT		TOP OF BANK	▨	PROPOSED BORE PIT
▬	BORE PATH		TOE OF BANK	▭	IMPACT AREA
- - -	PERMANENT EASEMENT		EXISTING PIPELINE		
- - -	WORK SPACE LIMITS		OVERHEAD POWER		
	ACCESS ROAD		OVERHEAD TELEPHONE		
	ROAD RIGHT-OF-WAY		WETLAND		
	PROPERTY LINE		STREAM	▨	ADD. TEMPORARY WORK SPACE(ATWS)
	FENCE LINE	- - -	ORDINARY HIGH WATER MARK		

TRC

PLAN & PROFILE

CROSSING 086A & 086B

MVP SOUTHGATE AMENDMENT PROJECT
PROPOSED H-650 PIPELINE
ROCKINGHAM COUNTY, NC

DRAWING NO.

PP-H650-077A2

REV.

P2

GENERAL NOTES:

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ATTACHMENT 5

UPDATED TABLE 12 (CROSSING METHODS)

Table 12. Crossing Method Determination Summary
Individual Permit Application
MVP Southgate Amendment Project

USACE District	Crossing #	Waterbody	Crossing Methods Evaluated	Crossing Length	Pit Depth	Deep Stream	Maximum Average Slope (%)	Sufficient Stockpile Storage Available	Total Cost ($)	Proposed Crossing Method	Crossing Method Decision Rationale
Norfolk	H650-001	S-A005	Dry-Ditch Open-Cut	103	-	N	10.0	Y	$79,080.00	Dry-Ditch Open-Cut	This small UNT to Cherrystone Creek (less than five feet wide) would require a bore pit that is at least 25 feet deep. Due to this depth, the use of a bench and interim access ramp would be required which would create a large volume of material to be excavated and stockpiled. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		26				$479,230.00		
Norfolk	H650-002	W-A004	Dry-Ditch Open-Cut	78	-	N	3.8	N	$28,080.00	Dry-Ditch Open-Cut	The open cut method would result in a temporary impact of approximately 0.04 acre of a PEM wetland. Avoiding/minimizing the minor impact through a conventional bore is an unreasonably high cost relative to the proposed construction method. The lack of sufficient space to stockpile the material further complicates a trenchless crossing. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		13				$228,055.00		
Norfolk	H650-003	W-A006, S-A006	Dry-Ditch Open-Cut	104	-	N	9.2	Y	$79,440.00	Conventional Bore	There are no significant constraints on available crossing methods or significant environmental impacts relevant to the available methods. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		16				$270,582.00		
Norfolk	H650-004	W-A003a, W-A003b, S-A004	Dry-Ditch Open-Cut	402	-	N	10.3	N	$186,720.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact to one wetland and Little Cherrystone Creek. Avoiding/minimizing this minor impact through a conventional bore would require a relatively deep bore pit more than 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit in an already restricted workspace. In addition, the length of the crossing exceeds capabilities of conventional bore machines, and the configuration of the LOD does not allow for non-conventional techniques without impacting other wetlands and streams. Therefore the conventional bore method is not feasible. A conventional bore crossing would extend the duration of this crossing from 10 to 29 days, thereby increasing the noise, aesthetic, and other impacts on nearby persons.
			Conventional Bore		23				$865,530.00		
Norfolk	H650-005	S-A002, S-A003, W-A001	Dry-Ditch Open-Cut	284	-	N	8.9	Y	$144,240.00	Conventional Bore	There are no significant constraints on available crossing methods or significant environmental impacts relevant to the available methods. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		20				$592,753.00		
Norfolk	H650-007	W-A014	Dry-Ditch Open-Cut	82	-	N	5.6	Y	$71,520.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of approximately 0.07 acre of a PEM wetland. Additionally, a trenchless crossing of this resource would result in the safety risk of operating heavy equipment for an extended time with a private landowner in close proximity, thereby increasing the noise, aesthetic, and other impacts on nearby persons.
			Conventional Bore		12				$220,194.00		
Norfolk	H650-008	S-A012	Dry-Ditch Open-Cut	63	-	N	6.5	Y	$64,680.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact to one small (less than five feet in width) UNT to Cherrystone Creek. A conventional bore crossing would result in an increase in cost by 3.9 times and an increase in the duration of the crossing by 4 days. Additionally, due to the soil type and proximity to other wetlands and a pond, there would likely be groundwater infiltration during bore pit dewatering operations given the soil type and proximity to other wetlands and the pond on this parcel. A pump discharge would have to placed far enough away from the immediate crossing vicinity so as not to impact the landowner's pond.
			Conventional Bore		18				$251,825.00		
Norfolk	H650-008A	S-A009, W-A013a, W-A013b, W-A013c, W-A013d	Dry-Ditch Open-Cut	1150	-	N	0.0	Y	$456,000.00	Dry-Ditch Open-Cut	The length of the crossing exceeds capabilities of conventional bore machines, and the configuration of the LOD does not allow for non-conventional techniques without impacting other wetlands and streams. Therefore the conventional bore method is not feasible. A longer bore that would incorporate next wetland complex would not be feasible because the elevation of the terrain on the downstream end of the crossing is too great to fabricate a pullback string. Additionally, this crossing would require a bore pit that is at least 25 feet deep. Due to this depth, the use of a bench and interim access ramp would be required, which would create a large volume of material to be excavated and stockpiled.
			Conventional Bore		25				$1,953,043.00		
Norfolk	H650-010	W-A011, S-A008	Dry-Ditch Open-Cut	172	-	Y	1.4	N	$103,920.00	Conventional Bore	The depth of Cherrystone Creek is greater than 2 feet, indicating potential high flows, especially during storm events. Setting up dam and pump operations for open-cut crossings during large flow events wil require larger bladders and more pumps, further restricting the workspace to an impracticable width. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		17				$401,831.00		
Norfolk	H650-011	W-A010b, W-A010a, W-A010c	Dry-Ditch Open-Cut	2000	-	N	0.0	Y	$720,000.00	Dry-Ditch Open-Cut	The length of the crossing exceeds capabilities of conventional bore machines, and the configuration of the LOD does not allow for non-conventional techniques without impacting other wetlands and streams. Therefore, the conventional bore method is not feasible.
			Conventional Bore		20				$3,093,546.00		
Norfolk	H650-012	W-A009	Dry-Ditch Open-Cut	64	-	N	10.5	N	$23,040.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of 0.04 acre of PEM wetland. Avoiding/minimizing this minor impact through a conventional bore would require a bore pit at least 20 feet deep. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit in an already restricted workspace. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		21				$326,378.00		
Norfolk	H650-013	S-A018	Dry-Ditch Open-Cut	52	-	N	12.0	Y	$60,720.00	Dry-Ditch Open-Cut	This small UNT to Banister River (less than five feet wide) would require a bore pit that is approximately 24 feet deep. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit

Table 12. Crossing Method Determination Summary
Individual Permit Application
MVP Southgate Amendment Project

USACE District	Crossing #	Waterbody	Crossing Methods Evaluated	Crossing Length	Pit Depth	Deep Stream	Maximum Average Slope (%)	Sufficient Stockpile Storage Available	Total Cost ($)	Proposed Crossing Method	Crossing Method Decision Rationale
			Conventional Bore		24				$505,265.00		in an already restricted workspace. Additionally, a conventional bore crossing would extend the duration of this crossing by 6 days, thereby increasing the noise, aesthetic, and other impacts on nearby persons. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
Norfolk	H650-014	W-A019, S-A019	Dry-Ditch Open-Cut	82	-	N	10.6	Y	$71,520.00	Dry-Ditch Open-Cut	Avoiding/minimizing the temporary impact to 0.07 acre of PFO wetland through a conventional bore would require a deep bore pit of approximately 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit in an already restricted workspace. Additionally, a trenchless crossing of this resource would result in the safety risk of operating heavy equipment for an extended time with a private landowner in close proximity, thereby increasing the noise, aesthetic, and other impacts on nearby persons.
			Conventional Bore		20				$279,565.00		
Norfolk	H650-015	W-A072, S-A015	Dry-Ditch Open-Cut	50	-	N	12.4	Y	$60,000.00	Conventional Bore	There are no significant constraints on available crossing methods or significant environmental impacts relevant to the available methods. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		19				$241,979.00		
Norfolk	H650-016	S-A017	Dry-Ditch Open-Cut	45	-	N	11.8	Y	$58,200.00	Dry-Ditch Open-Cut	Avoiding/minimizing the minor impact to this UNT to Banister River (less than five feet wide) through a conventional bore would require a deep bore pit of over 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit in an already restricted workspace. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		23				$467,640.00		
Norfolk	H650-017A	S-B060, W-A073a,W-A073b	Dry-Ditch Open-Cut	120	-	N	6.3	Y	$85,200.00	Dry-Ditch Open-Cut	The Bannister River directly south of this crossing will be bored to avoid impacts to federally listed species and to avoid the anticipated high flows in the stream that would make an open-cut crossing difficult. In order to perform a trenchless crossing of the Banister River, the stream and wetland complex at this crossing must be open-cut in order to facilitate construction of the bore pits associated with the Banister River. A trenchless crossing of the entire complex is not feasible due to bore pits that would be excessively deep.
			Conventional Bore		15				$175,200.00		
Norfolk	H650-017B	S-A020	Dry-Ditch Open-Cut	88	-	Y	3.3	N	$73,680.00	Conventional Bore	The depth of the Banister River is greater than 2 feet, indicating potential high flows, especially during storm events. Setting up dam-and-pump operations for open-cut crossings during large flow events would require larger bladders and more pumps, further restricting the workspace to an impracticable width. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		19				$292,892.00		
Norfolk	H650-018	W-A020, S-A021, W-A021	Dry-Ditch Open-Cut	204	-	N	8.9	N	$115,440.00	Dry-Ditch Open-Cut	Avoiding/minimizing the temporary impact to this UNT to the Banister River and 0.1 acre of PFO wetland through a conventional bore would require a deep bore pit of over 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint and spoils material from the bore pit in an already restricted workspace. Bore length is also longer than the desired length, increasing the chance of bore deflection or failure. Additionally, a conventional bore crossing would extend the duration of this crossing from 10 to 20 days, thereby increasing the noise, aesthetic, and other impacts on nearby persons.
			Conventional Bore		21				$571,881.00		
Norfolk	H650-019	W-A023, S-A022, W-A022	Dry-Ditch Open-Cut	880	-	Y	11.7	N	$358,800.00	Dry-Ditch Open-Cut	The wetland complex is too long to bore in conjunction with the abutting railroad. The railroad must be bored, and the only feasible method of crossing the railroad is to open cut the wetland complex and have railroad bore pit within the wetland on the upstream side. Avoiding/minimizing this minor impact through a conventional bore would require a relatively deep bore pit more than 50 feet, thereby requiring the excavation of an interim ramp and bench and dramatically increasing the space occupied by the bore pit and spoil pile. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		50				$2,454,030.00		
Norfolk	H650-020	W-A068	Dry-Ditch Open-Cut	51	-	N	14.3	Y	$18,360.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of 0.02 acre of PEM wetland. Avoiding/minimizing this minor impact through a conventional bore would require a bore pit nearly 30 feet deep - requiring the operator to work from a shallow bench within the pit. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		29				$531,210.00		
Norfolk	H650-021	W-A070b, W-A070c, W-A070a, W-A032	Dry-Ditch Open-Cut	177	-	N	9.6	N	$63,720.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of 0.04 acre of PEM wetland and 0.1 acre of PFO wetland. Avoiding/minimizing this minor impact through a conventional bore would require a bore pit of approximately 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit in an already restricted workspace. Additionally, a conventional bore crossing would extend the duration of this crossing from 3 to 17 days, thereby increasing the noise, aesthetic, and other impacts on nearby persons. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		20				$404,564.00		
Norfolk	H650-022	S-A028	Dry-Ditch Open-Cut	38	-	N	14.8	N	$55,680.00	Dry-Ditch Open-Cut	Avoiding/minimizing this minor impact to an ephemeral UNT to White Oak Creek through a conventional bore would require a bore pit at least 20 feet deep. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit in an already restricted workspace. The lack of sufficient space to stockpile the material would further complicate a trenchless crossing. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		21				$306,686.00		

Table 12. Crossing Method Determination Summary
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USACE District	Crossing #	Waterbody	Crossing Methods Evaluated	Crossing Length	Pit Depth	Deep Stream	Maximum Average Slope (%)	Sufficient Stockpile Storage Available	Total Cost ($)	Proposed Crossing Method	Crossing Method Decision Rationale
Norfolk	H650-023	S-A027, S-A026	Dry-Ditch Open-Cut	164	-	N	29.8	Y	$101,040.00	Dry-Ditch Open-Cut	These UNT to White Oak Creek would require a bore pit that is at least 35 feet deep. Due to this depth, the use of a bench and interim access ramp would be required, which would create a large volume of material to be excavated and stockpiled. Additionally, a conventional bore crossing would extend the duration of this crossing from 22 to 9 days, thereby increasing the potential for an erosion or sedimentation event to occur. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		37				$993,032.00		
Norfolk	H650-024	S-A025	Dry-Ditch Open-Cut	95	-	N	24.0	N	$76,200.00	Dry-Ditch Open-Cut	This small, ephemeral UNT to White Oak Creek (less than five feet wide) would require a bore pit that is at least 30 feet deep. Due to this depth, the use of a bench and interim access ramp would be required, which would create a large volume of material to be excavated and stockpiled. The lack of sufficient space to stockpile the material would further complicate a trenchless crossing. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		30				$924,280.00		
Norfolk	H650-025	W-A025, S-A024, S-A023	Dry-Ditch Open-Cut	98	-	N	49.8	Y	$77,280.00	Dry-Ditch Open-Cut	This crossing is situated on a long and steep slope that would involve logistically difficult construction conditions and would require an excessively deep bore pit for a trenchless crossing. Bore pits at least 25 feet deep would be required, which would require the use of a bench and interim access ramp and create a large volume of material to be excavated and stockpiled. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		27				$627,235.00		
Norfolk	H650-026	W-A017	Dry-Ditch Open-Cut	169	-	N	8.8	Y	$60,840.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of 0.18 acre to one PEM wetland. Avoiding/minimizing this minor impact through a conventional bore would require a bore pit at least 20 feet deep. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit in an already restricted workspace. A conventional bore crossing would extend the duration of this crossing from 3 to 16 days, thereby increasing the potential for an erosion or sedimentation event to occur. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		20				$388,317.00		
Norfolk	H650-027	W-A029b, W-A029a, S-A001, S-A029, W-A028	Dry-Ditch Open-Cut	290	-	N	53.2	Y	$146,400.00	Dry-Ditch Open-Cut	This crossing is situated on a long and steep slope that would involve logistically difficult construction conditions and would require an excessively deep bore pit for a trenchless crossing. Bore pits at least 25 feet deep would be required, which would require the use of a bench and interim access ramp and create a large volume of material to be excavated and stockpiled. Additionally, a conventional bore crossing would extend the duration of this crossing from 10 to 26 days, thereby increasing the potential for an erosion or sedimentation event to occur. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		26				$747,683.00		
Norfolk	H650-028	W-A030b, W-A030a, S-A031	Dry-Ditch Open-Cut	223	-	N	19.8	N	$122,280.00	Dry-Ditch Open-Cut	This UNT to White Oak Creek and PSS/PEM wetland crossing would require a bore pit that is at least 25 feet deep. Due to this depth, the use of a bench and interim access ramp would be required, which would create a large volume of material to be excavated and stockpiled. The lack of sufficient space to stockpile the material would further complicate a trenchless crossing. Additionally, a conventional bore crossing would extend the duration of this crossing from 3 to 24 days, thereby increasing the potential for an erosion or sedimentation event to occur. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		27				$782,330.00		
Norfolk	H650-029	W-A031 (1), S-A033a, S-A032, W-A031 (2), S-A033b	Dry-Ditch Open-Cut	265	-	N	1.4	N	$137,400.00	Dry-Ditch Open-Cut	The wetland and stream complex crosses a point of intersection in the pipeline and cannot be crossed with a single bore. Using two bores to cross the wetland and stream complex would likely result in temporary impacts to the wetland and stream complex due to the bore pit locations.
			Conventional Bore		12				$496,508.00		
Norfolk	H650-030	W-A033	Dry-Ditch Open-Cut	66	-	N	63.9	N	$23,760.00	Dry-Ditch Open-Cut	This crossing is situated on a long and steep slope that would involve logistically difficult construction conditions and would require an excessively deep bore pit for a trenchless crossing. Avoiding/minimizing this minor impact through a conventional bore would require a bore pit of approximately 24 feet deep. This depth, combined with the severity of the slope on which it would be situated, would exceed the reach of the excavator and require the operator to work from a shallow bench within the pit. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed
			Conventional Bore		24				$370,404.00		
Norfolk	H650-031	W-A035, S-A034, W-A034	Dry-Ditch Open-Cut	98	-	N	30.6	N	$77,280.00	Dry-Ditch Open-Cut	This crossing is situated on a long and steep slope that would involve logistically difficult construction conditions and would require an excessively deep bore pit for a trenchless crossing. Avoiding/minimizing this minor impact through a conventional bore would require a bore pit at least 35 feet deep. Due to this depth, the use of a bench and interim access ramp would be required, which would create a large volume of material to be excavated and stockpiled. Additionally, a conventional bore crossing would extend the duration of this crossing from 9 to 21 days, thereby increasing the noise, aesthetic, and other impacts on nearby persons. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		35				$1,020,005.00		
Norfolk	H650-032	S-A036, S-A037, W-A036	Dry-Ditch Open-Cut	233	-	N	7.4	N	$125,880.00	Dry-Ditch Open-Cut	Avoiding/minimizing the minor impact to this UNT to Sandy Creek (less than five feet wide) and 0.03 acre of PSS wetland through a conventional bore would require a deep bore pit of over 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint and spoils material from the bore pit in an already restricted workspace. Additionally, a conventional bore crossing would extend the duration of this crossing from 10 to 22 days, thereby increasing the potential for an erosion or sedimentation event to occur. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		23				$637,058.00		
Norfolk	H650-033	S-A038	Dry-Ditch Open-Cut	42	-	N	10.0	Y	$57,120.00	Dry-Ditch Open-Cut	This ephemeral stream is a very small (less than five feet in width) UNT to Sandy Creek with little to no observable flow, and open cut would result in minor temporary impacts to this feature. This stream will already be impacted as it is completely within ATWS-1096.

Table 12. Crossing Method Determination Summary
Individual Permit Application
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USACE District	Crossing #	Waterbody	Crossing Methods Evaluated	Crossing Length	Pit Depth	Deep Stream	Maximum Average Slope (%)	Sufficient Stockpile Storage Available	Total Cost ($)	Proposed Crossing Method	Crossing Method Decision Rationale
			Conventional Bore		18				$207,464.00		Additionally, with the lack of buffer due to the ATWS, a conventional bore crossing would extend the duration of this crossing from 1 to 11 days, further increasing the potential for an erosion or sedimentation event to occur.
Norfolk	H650-034	S-A039-Braid1, S-A039	Dry-Ditch Open-Cut	48	-	N	8.9	N	$59,280.00	Conventional Bore	There are no significant constraints on available crossing methods or significant environmental impacts relevant to the available methods. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		17				$216,224.00		
Norfolk	H650-035	W-A038, S-A040, W-A037, S-A041, S-A042	Dry-Ditch Open-Cut	200	-	N	11.6	N	$114,000.00	Dry-Ditch Open-Cut	This crossing would require a bore pit that is at least 25 feet deep. Due to this depth, the use of a bench and interim access ramp would be required, which would create a large volume of material to be excavated and stockpiled. The lack of sufficient space to stockpile the material would further complicate a trenchless crossing. Additionally, a conventional bore crossing would extend the duration of this crossing from 10 to 24 days, thereby increasing the potential for an erosion or sedimentation even to occur. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		28				$794,425.00		
Norfolk	H650-036	W-A039, S-A043	Dry-Ditch Open-Cut	90	-	N	20.9	Y	$74,400.00	Dry-Ditch Open-Cut	This small UNT to Sandy Creek (less than five feet wide) and PFO wetland crossing would require a bore pit that is at least 25 feet deep. Due to this depth, the use of a bench and interim access ramp would be required, which would create a large volume of material to be excavated and stockpiled. The lack of sufficient space to stockpile the material would further complicate a trenchless crossing. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		25				$451,115.00		
Norfolk	H650-037	S-A044	Dry-Ditch Open-Cut	38	-	N	13.1	Y	$55,680.00	Dry-Ditch Open-Cut	Avoiding/minimizing the minor impact to the stream through a conventional bore would require a deep bore pit of over 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit in an already restricted workspace. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		22				$324,955.00		
Norfolk	H650-038	W-A041, S-A045	Dry-Ditch Open-Cut	67	-	N	18.0	N	$66,120.00	Dry-Ditch Open-Cut	Avoiding/minimizing the minor impact to the stream through a conventional bore would require a deep bore pit of over 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint and spoils material from the bore pit in an already restricted workspace. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		23				$399,265.00		
Norfolk	H650-039	W-A044, S-A046, W-A045 (1), W-A045 (2)	Dry-Ditch Open-Cut	277	-	N	28.6	N	$141,720.00	Dry-Ditch Open-Cut	This crossing would require a bore pit that is at least 30 feet deep. Due to this depth, the use of a bench and interim access ramp would be required, which would create a large volume of material to be excavated and stockpiled. The lack of sufficient space to stockpile the material would further complicate a trenchless crossing. Additionally, a conventional bore crossing would extend the duration of this crossing from 10 to 26 days, thereby increasing the noise, aesthetic, and other impacts on nearby persons. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		30				$1,030,129.00		
Norfolk	H650-040	W-A049a, S-A049	Dry-Ditch Open-Cut	172	-	Y	20.6	Y	$103,920.00	Dry-Ditch Open-Cut	This crossing presents unique challenges under any method. It would require a bore pit that is at least 30 feet deep, and the bore length is longer than is ideal. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		32				$1,036,698.00		
Norfolk	H650-041	W-A048, S-A048	Dry-Ditch Open-Cut	38	-	N	13.1	N	$55,680.00	Dry-Ditch Open-Cut	Avoiding/minimizing the minor impact to this UNT to Sandy Creek (less than five feet wide) and 0.01 acre of PEM wetland through a conventional bore would require a deep bore pit of nearly 20 feet. The additional equipment and excess spoil materials would greatly limit the available space in a work area that has already been minimized, which would increase the construction difficulty. The lack of sufficient space to stockpile the material would further complicate a trenchless crossing. Additionally, a trenchless crossing of this resource would increase the noise, aesthetic, and other impacts on nearby persons due to the operating of heavy equipment for an extended time with a private landowner in close proximity. The open-cut method would also reduce the construction duration near a private drinking water well on the property.
			Conventional Bore		19				$229,026.00		
Norfolk	H650-042	S-A070	Dry-Ditch Open-Cut	34	-	N	13.5	N	$54,240.00	Dry-Ditch Open-Cut	Avoiding/minimizing the minor impact to this UNT to Silver Creek (less than five feet wide) through a conventional bore would require a deep bore pit of over 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint and spoils material from the bore pit in an already restricted workspace. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		23				$319,116.00		
Norfolk	H650-043	S-A051	Dry-Ditch Open-Cut	104	-	N	5.3	Y	$79,440.00	Conventional Bore	There are no significant constraints on available crossing methods or significant environmental impacts relevant to the available methods. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		18				$311,685.00		
Norfolk	H650-044	S-A050	Dry-Ditch Open-Cut	47	-	N	17.3	N	$58,920.00	Dry-Ditch Open-Cut	This small UNT to Silver Creek (less than five feet wide) would require a bore pit that is at least 25 feet deep. Due to this depth, the use of a bench and interim access ramp would be required, which would create a large volume of material to be excavated and stockpiled. The lack of sufficient space to stockpile the material would further complicate a trenchless crossing. Additionally, a conventional bore crossing would extend the duration of this crossing from 9 to 14 days, thereby increasing the noise, aesthetic, and other impacts on nearby persons. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		25				$488,830.00		

Table 12. Crossing Method Determination Summary
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USACE District	Crossing #	Waterbody	Crossing Methods Evaluated	Crossing Length	Pit Depth	Deep Stream	Maximum Average Slope (%)	Sufficient Stockpile Storage Available	Total Cost ($)	Proposed Crossing Method	Crossing Method Decision Rationale
Norfolk	H650-045	S-A052	Dry-Ditch Open-Cut	92	-	N	9.0	Y	$75,120.00	Dry-Ditch Open-Cut	Avoiding/minimizing the minor impact to this UNT to Silver Creek (less than five feet wide) through a conventional bore would require a deep bore pit of over 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit in an already restricted workspace. Additionally, a conventional bore crossing would extend the duration of this crossing from 9 to 14 days, thereby increasing the noise, aesthetic, and other impacts on nearby persons. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		21				$394,660.00		
Norfolk	H650-046	S-A054, W-A051, S-A055	Dry-Ditch Open-Cut	96	-	N	16.1	N	$76,560.00	Dry-Ditch Open-Cut	These small UNT to Silver Creek (each less than five feet wide) and PEM wetland would require a bore pit that is approximately 24 feet deep. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit in an already restricted workspace. The lack of sufficient space to stockpile the material would further complicate a trenchless crossing. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		24				$578,640.00		
Norfolk	H650-047	W-A054, S-A057	Dry-Ditch Open-Cut	134	-	N	4.8	N	$90,240.00	Dry-Ditch Open-Cut	Avoiding/minimizing the minor impact to this UNT to Sandy River (less than five feet wide) and 0.1 acre of PEM wetland through a conventional bore would require a deep bore pit of nearly 20 feet. The additional equipment and excess spoil materials would greatly limit the available space in a work area that has already been minimized, which would increase the construction difficulty. The lack of sufficient space to stockpile the material would further complicate a trenchless crossing. Additionally, a conventional bore crossing would extend the duration of this crossing from 9 to 17 days, thereby increasing the noise, aesthetic, and other impacts on nearby persons.
			Conventional Bore		18				$360,052.00		
Norfolk	H650-048	S-A058	Dry-Ditch Open-Cut	51	-	N	6.9	N	$60,360.00	Conventional Bore	There are no significant constraints on available crossing methods or significant environmental impacts relevant to the available methods. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		16				$216,037.00		
Norfolk	H650-049	S-A071	Dry-Ditch Open-Cut	56	-	N	28.5	Y	$62,160.00	Dry-Ditch Open-Cut	This UNT to Sandy River would require a bore pit that is at least 30 feet deep. Due to this depth, the use of a bench and interim access ramp would be required, which would create a large volume of material to be excavated and stockpiled. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		32				$931,283.00		
Norfolk	H650-055	S-B059	Dry-Ditch Open-Cut	41	-	N	7.2	N	$56,760.00	Dry-Ditch Open-Cut	This ephemeral stream is a very small (less than five feet in width) UNT to the Sandy River, and open cut would result in minor temporary impacts to this feature. Additionally, a trenchless crossing of this resource would result in the safety risk of operating heavy equipment for an extended time with a private landowner in close proximity, thereby increasing the noise, aesthetic, and other impacts on nearby persons.
			Conventional Bore		15				$183,169.00		
Norfolk	H650-056	S-B046, W-B043	Dry-Ditch Open-Cut	81	-	N	9.2	Y	$71,160.00	Dry-Ditch Open-Cut	Avoiding/minimizing the minor impact to this UNT to Sandy River (less than five feet wide) and 0.1 acre of PEM wetland through a conventional bore would require a deep bore pit of nearly 20 feet. The additional equipment and excess spoil materials would greatly limit the available space in a work area that has already been minimized, which would increase the construction difficulty. Additionally, a trenchless crossing of this resource would result in the safety risk of operating heavy equipment for an extended time with a private landowner in close proximity, thereby increasing the noise, aesthetic, and other impacts on nearby persons.
			Conventional Bore		19				$278,105.00		
Norfolk	H650-057	W-B042, S-B045	Dry-Ditch Open-Cut	148	-	N	37.4	Y	$95,280.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact to one PEM/PSS wetland and UNT to Trayner Branch (less than five feet wide). This crossing is situated on a steep slope that would involve logistically difficult construction conditions and would require an excessively deep bore pit for a trenchless crossing. Bore pits at least 25 feet deep would be required, which would create a large volume of material to be excavated and stockpiled. Due to this depth, the use of a bench and interim access ramp would be also be required. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		27				$691,100.00		
Norfolk	H650-058	W-B041, S-B044a	Dry-Ditch Open-Cut	48	-	N	13.6	Y	$59,280.00	Dry-Ditch Open-Cut	Avoiding/minimizing the minor impact to this UNT to Trayner Branch (less than five feet wide) and 0.01 acre of PSS wetland through a conventional bore would require a deep bore pit of over 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit in an already restricted workspace. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		22				$348,689.00		
Norfolk	H650-059	S-B043, W-B039b	Dry-Ditch Open-Cut	132	-	N	9.6	Y	$89,520.00	Conventional Bore	There are no significant constraints on available crossing methods or significant environmental impacts relevant to the available methods. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		20				$366,266.00		
Norfolk	H650-060	W-B038a, S-B041, S-B042, W-B038b, W-B038c	Dry-Ditch Open-Cut	249	-	N	13.3	Y	$131,640.00	Dry-Ditch Open-Cut	This crossing would require a bore pit that is at least 30 feet deep. Due to this depth, the use of a bench and interim access ramp would be required, which would create a large volume of material to be excavated and stockpiled. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		32				$1,039,488.00		
Norfolk	H650-060B	W-F002b	Dry-Ditch Open-Cut	139	-	N	8.8	Y	$50,040.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of 0.02 acre of PFO wetland. A conventional bore crossing would extend the duration of this crossing from 3 to 15 days, thereby increasing the noise, aesthetic, and other impacts on nearby persons. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		15				$335,383.00		

Table 12. Crossing Method Determination Summary
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USACE District	Crossing #	Waterbody	Crossing Methods Evaluated	Crossing Length	Pit Depth	Deep Stream	Maximum Average Slope (%)	Sufficient Stockpile Storage Available	Total Cost ($)	Proposed Crossing Method	Crossing Method Decision Rationale
Norfolk	H650-061	W-B036a, S-B040	Dry-Ditch Open-Cut	93	-	N	19.4	N	$75,480.00	Dry-Ditch Open-Cut	Avoiding/minimizing the minor impact to this UNT to Trotters Creek (less than five feet wide) and 0.02 acre of PFO wetland through a conventional bore would require a deep bore pit of approximately 24 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint and spoils from the bore pit in an already restricted workspace. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		24				$400,689.00		
Norfolk	H650-062	W-B036b	Dry-Ditch Open-Cut	99	-	N	4.6	Y	$35,640.00	Conventional Bore	This wetland will be bored in conjunction with C.R. 875. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		13				$258,715.00		
Norfolk	H650-062B	S-B032, W-B023	Dry-Ditch Open-Cut	118	-	N	25.6	N	$84,480.00	Dry-Ditch Open-Cut	Avoiding/minimizing the minor impact to this UNT to Trotters Creek (less than five feet wide) and 0.03 acre of PFO wetland through a conventional bore would require a bore pit that is at least 30 feet deep. Due to this depth, the use of a bench and interim access ramp would be required, which would create a large volume of material to be excavated and stockpiled. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		34				$852,797.00		
Norfolk	H650-063	S-B033, W-B024	Dry-Ditch Open-Cut	37	-	N	11.7	N	$55,320.00	Dry-Ditch Open-Cut	Avoiding/minimizing the minor impact to this UNT to Trotters Creek (less than five feet wide) and 0.01 acre of PEM wetland through a conventional bore would require a deep bore pit of over 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint and spoils material from the bore pit in an already restricted workspace. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		21				$323,494.00		
Norfolk	H650-064	S-B039	Dry-Ditch Open-Cut	66	-	N	20.1	N	$65,760.00	Dry-Ditch Open-Cut	This ephemeral UNT to Trotters Creek would require a bore pit that is at least 30 feet deep. Due to this depth, the use of a bench and interim access ramp would be required, which would create a large volume of material to be excavated and stockpiled. The lack of sufficient space to stockpile the material would further complicate a trenchless crossing. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		31				$891,074.00		
Norfolk	H650-065	S-B061	Dry-Ditch Open-Cut	56	-	N	12.4	N	$62,160.00	Dry-Ditch Open-Cut	Avoiding/minimizing the minor impact to this UNT to Trotters Creek (less than five feet wide) through a conventional bore would require a deep bore pit of over 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint and spoils material from the bore pit in an already restricted workspace. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		21				$337,533.00		
Norfolk	H650-066	S-B029	Dry-Ditch Open-Cut	57	-	N	45.2	N	$62,520.00	Dry-Ditch Open-Cut	This crossing is situated on a steep slope that would involve logistically difficult construction conditions and would require an excessively deep bore pit for a trenchless crossing. Bore pits at least 30 feet deep would be required, which would create a large volume of material to be excavated and stockpiled. Due to this depth, the use of a bench and interim access ramp would be also be required. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		33				$951,012.00		
Norfolk	H650-067	W-B022, S-B031, S-B030	Dry-Ditch Open-Cut	99	-	N	11.4	N	$77,640.00	Conventional Bore	There are no significant constraints on available crossing methods or significant environmental impacts relevant to the available methods. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		20				$299,818.00		
Norfolk	H650-068	S-B024, S-B025	Dry-Ditch Open-Cut	44	-	N	9.3	N	$57,840.00	Conventional Bore	There are no significant constraints on available crossing methods or significant environmental impacts relevant to the available methods. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		16				$196,683.00		
Norfolk	H650-069	W-B049, S-B022	Dry-Ditch Open-Cut	103	-	N	7.3	N	$79,080.00	Conventional Bore	There are no significant constraints on available crossing methods or significant environmental impacts relevant to the available methods. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		15				$278,256.00		
Norfolk	H650-070	W-B020	Dry-Ditch Open-Cut	121	-	N	19.7	N	$43,560.00	Dry-Ditch Open-Cut	Avoiding/minimizing this temporary impact to 0.12 acre of PSS through a conventional bore would require a bore pit nearly 25 feet deep. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint and spoils material from the bore pit in an already restricted workspace. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		23				$459,837.00		
Norfolk	H650-071	W-B019 (1)	Dry-Ditch Open-Cut	117	-	N	16.7	N	$42,120.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of 0.07 acre of PEM wetland. Avoiding/minimizing this temporary impact to 0.07 acre of PEM wetland through a conventional bore would require a bore pit at least 20 feet deep. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint and spoils material from the bore pit in an already restricted workspace. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		20				$280,428.00		
Norfolk	H650-072A	W-B019 (2)	Dry-Ditch Open-Cut	79	-	N	9.2	N	$28,440.00	Dry-Ditch Open-Cut	Avoiding/minimizing this temporary impact to 0.04 acre of PEM wetland through a conventional bore would require a bore pit of approximately 17 feet deep. The lack of sufficient space to stockpile the material would further complicate a trenchless crossing. The presence of cobbles in the surface soil also indicates potentially problematic subsurface conditions for conventional auger bore machines.Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		17				$224,948.00		

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Norfolk	H650-072B	S-B056	Dry-Ditch Open-Cut	56	-	N	10.7	N	$62,160.00	Dry-Ditch Open-Cut	This ephemeral stream is a very small (less than five feet in width) UNT to Sandy Creek, and open cut would result in minor temporary impacts to this feature. Avoiding/minimizing this minor impact through a conventional bore would require a bore pit at nearly 20 feet deep. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint and spoils material from the bore pit in an already restricted workspace. Furthermore, the presence of cobbles in the surface soil indicates potentially problematic subsurface conditions for conventional auger bore machines.
			Conventional Bore		19				$237,038.00		
Norfolk	H650-074	W-B017 (1)	Dry-Ditch Open-Cut	145	-	N	15.0	N	$52,200.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of approximately 0.15 acre of a PEM wetland. The configuration of the right-of-way at this crossing includes a 90-degree point of intersection that would not allow for enough space to establish a bore pit while avoiding impacts to nearby wetlands. Furthermore, avoiding/minimizing the minor impact through a conventional bore is an unreasonably high cost relative to the proposed construction method.
			Conventional Bore		11				$298,473.00		
Norfolk	H650-075	W-B017 (2)	Dry-Ditch Open-Cut	122	-	N	2.2	N	$43,920.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of approximately 0.15 acre of a PEM wetland. Avoiding/minimizing the minor impact through a conventional bore is an unreasonably high cost relative to the proposed construction method.
			Conventional Bore		13				$278,594.00		
Norfolk	H650-076	S-B054	Dry-Ditch Open-Cut	64	-	N	21.9	N	$65,040.00	Dry-Ditch Open-Cut	This small UNT to Dan River (less than five feet wide) would require a bore pit that is at least 30 feet deep. Due to this depth, the use of a bench and interim access ramp would be required, which would create a large volume of material to be excavated and stockpiled. The lack of sufficient space to stockpile the material would further complicate a trenchless crossing. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		30				$705,448.00		
Norfolk	H650-078	S-B052, W-B015	Dry-Ditch Open-Cut	60	-	N	18.9	Y	$63,600.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact to an UNT to the Dan River and less than 0.01 acre of a PFO wetland. Avoiding/minimizing this minor impact through a conventional bore would require a bore pit at least 20 feet deep. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit in an already restricted workspace. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		21				$471,270.00		
Norfolk	H650-079	S-B051	Dry-Ditch Open-Cut	57	-	N	10.2	Y	$62,520.00	Dry-Ditch Open-Cut	Avoiding/minimizing the minor impact to this UNT to the Dan River (less than five feet wide) through a conventional bore would require a deep bore pit of over 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit in an already restricted workspace. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		21				$352,694.00		
Norfolk	H650-080	W-B014 (1), S-B020, W-B014 (2)	Dry-Ditch Open-Cut	82	-	N	10.7	Y	$71,520.00	Conventional Bore	There are no significant constraints on available crossing methods or significant environmental impacts relevant to the available methods. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		16				$270,431.00		
Norfolk	H650-081	W-B013b	Dry-Ditch Open-Cut	174	-	N	6.4	Y	$62,640.00	Dry-Ditch Open-Cut	Avoiding/minimizing this minor impact through a conventional bore crossing would extend the duration of this crossing from 3 to 16 days, thereby increasing the potential for an erosion or sedimentation event to occur. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		16				$391,050.00		
Wilmington	H650-082	W-B012	Dry-Ditch Open-Cut	148	-	N	3.6	N	$53,280.00	Conventional Bore	This wetland will be bored in conjunction with Buffalo Road. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		10				$298,286.00		
Wilmington	H650-083	W-B011	Dry-Ditch Open-Cut	46	-	N	9.4	N	$58,560.00	Dry-Ditch Open-Cut	The open-cut method would result in minor temporary impacts of 0.03 acre to a PEM wetland. In order to complete this bore without impacts to other wetlands in close proximity (W-F003, S-B018, S-B019), the centerline would need to be offset. This would require additional welds that are not contemplated in the standard base lay cost, especially since this crossing is between two road bores that are effectively set in their locations. Additionally, avoiding impacts to those other resources requires further reduces the available workspace for stockpiling material from the bore pit excavation.
			Conventional Bore		15				$181,335.00		
Wilmington	H650-083B	W-F006	Dry-Ditch Open-Cut	134	-	N	5.0	N	$48,240.00	Conventional Bore	There are no significant constraints on available crossing methods or significant environmental impacts relevant to the available methods. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		18				$328,083.00		
Wilmington	H650-084	W-B032, S-F005	Dry-Ditch Open-Cut	120	-	N	15.6	Y	$43,200.00	Dry-Ditch Open-Cut	Avoiding/minimizing this temporary impact to an UNT of Cascade Creek and 0.11 acre of PEM wetland through a conventional bore would require a relatively deep bore pit more than 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit

Table 12. Crossing Method Determination Summary
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USACE District	Crossing #	Waterbody	Crossing Methods Evaluated	Crossing Length	Pit Depth	Deep Stream	Maximum Average Slope (%)	Sufficient Stockpile Storage Available	Total Cost ($)	Proposed Crossing Method	Crossing Method Decision Rationale
			Conventional Bore		22				$435,541.00		in an already restricted workspace. Additionally, a conventional bore crossing would extend the duration of this crossing from 9 to 16 days, thereby increasing the noise, aesthetic, and other impacts on nearby persons. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
Wilmington	H650-085A	W-B031b, W-B031a	Dry-Ditch Open-Cut	305	-	N	0.0	Y	$109,800.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of approximately 0.5 acre of PEM and PSS wetlands. The duration of the trenchless crossing is over 7 times longer than the open-cut process due to only crossing wetlands, thereby increasing the noise, aesthetic, and other impacts on nearby persons. Additionally, the crossing length exceeds 300 feet at this location. Reducing the time at the crossing and permanently stabilizing this area will reduce the potential for sedimentation and erosion. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		17				$710,208.00		
Wilmington	H650-085B	W-B028 (1)	Dry-Ditch Open-Cut	36	-	N	2.5	N	$12,960.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of approximately 0.1 acre of a PEM wetland. Avoiding/minimizing the minor impact through a conventional bore is an unreasonably high cost relative to the proposed construction method.
			Conventional Bore		10				$143,900.00		
Wilmington	H650-085C	W-B028 (2)	Dry-Ditch Open-Cut	287	-	N	1.3	N	$103,320.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of approximately 0.4 acre of PEM wetland. Because this wetland complex is so large, it would have to be trammed across in order to get equipment in to set up bore pits and stage pipe for a bore crossing. Additionally, the size of the wetland complex indicates this ground is saturated which would require substantial continuous dewatering operations in the bore pits. A conventional bore crossing would extend the duration of this crossing from 3 to 15 days, thereby increasing the noise, aesthetic, and other impacts on nearby persons. The lack of sufficient space to stockpile the material would further complicate a trenchless crossing.
			Conventional Bore		9				$505,793.00		
Wilmington	H650-086A	W-B028 (3), W-B056a	Dry-Ditch Open-Cut	241	-	N	0.0	N	$86,760.00	Dry-Ditch Open-Cut	Avoiding/minimizing the temporary impact to 0.3 acre of PEM wetland and 0.05 acre of PSS wetland through a conventional bore would extend the duration of this crossing from 3 to 17 days, thereby increasing the noise, aesthetic, and other impacts on nearby persons. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		9				$434,066.00		
Wilmington	H650-086B	W-B027, S-B036	Dry-Ditch Open-Cut	101	-	N	2.6	N	$78,360.00	Conventional Bore	There are no significant constraints on available crossing methods or significant environmental impacts relevant to the available methods. The direct aquatic impact will be avoided/minimized by use of the conventional bore method.
			Conventional Bore		19				$302,738.00		
Wilmington	H650-087B	W-F013	Dry-Ditch Open-Cut	52	-	N	0.7	Y	$18,720.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of approximately 0.03 acre of a PEM wetland. Avoiding/minimizing the minor impact through a conventional bore is an unreasonably high cost relative to the proposed construction method.
			Conventional Bore		9				$158,126.00		
Wilmington	H650-087C	W-F009	Dry-Ditch Open-Cut	315	-	N	0.0	Y	$118,800.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of approximately 0.55 acre of a PEM wetland. The duration of the trenchless crossing is 7 times longer than the open-cut process due to only crossing a wetland, thereby increasing the noise, aesthetic, and other impacts on nearby persons. Additionally, the crossing length exceeds 300 feet at this location. Reducing the time at the crossing and permanently stabilizing this area will reduce the potential for sedimentation and erosion. The length of the bore also exceeds the limits of the equipment needed for a conventional bore.
			Conventional Bore		11				$481,800.00		
Wilmington	H650-088	W-F011, W-F012, W-B010	Dry-Ditch Open-Cut	225	-	N	2.0	Y	$81,000.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of approximately 0.09 acre of a PEM wetland. Avoiding/minimizing the minor impact through a conventional bore is an unreasonably high cost relative to the proposed construction method.
			Conventional Bore		11				$415,273.00		
Wilmington	H650-089	W-B009b	Dry-Ditch Open-Cut	124	-	N	1.9	Y	$44,640.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of approximately 0.05 acre of a PEM wetland. Avoiding/minimizing the minor impact through a conventional bore is unreasonably high relative to the proposed construction method.
			Conventional Bore		14				$286,081.00		
Wilmington	H650-090	W-B009a, S-B015	Dry-Ditch Open-Cut	274	-	N	11.1	Y	$140,640.00	Dry-Ditch Open-Cut	Avoiding/minimizing the temporary impact to this UNT to the Dan River and 0.14 acre of PFO wetland through a conventional bore would require a deep bore pit of over 20 feet. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit in an already restricted workspace. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		21				$783,710.00		
Wilmington	H650-091	S-B016	Dry-Ditch Open-Cut	32	-	N	4.9	N	$53,520.00	Dry-Ditch Open-Cut	Avoiding the temporary impact to this UNT to the Dan River through a conventional bore would require moving bore pits to the eastern edge of the permanent easement as the stream ends before crossing the centerline. Due to the stream terminating before crossing the centerline, this feature will likely be avoided during the construction of this crossing.
			Conventional Bore		10				$128,926.00		
Wilmington	H650-092	W-B008, S-B017	Dry-Ditch Open-Cut	46	-	N	16.4	Y	$58,560.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of 0.01 acre of PEM wetland and an UNT to the Dan River (less than five feet wide). Avoiding/minimizing this minor impact through a conventional bore would require a bore pit at least 20 feet deep. This depth would require engineered shoring and sloping plans, which increases the complexity of the excavation. To maintain a safe excavation per OSHA requirements, this excavation may require sloping and increase the footprint of the bore pit in an already restricted workspace. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		21				$332,067.00		
Wilmington	H650-093	S-B011	Dry-Ditch Open-Cut	52	-	N	21.0	Y	$60,720.00	Dry-Ditch Open-Cut	This small UNT to Dan River (less than five feet wide) would require a bore pit that is at least 25 feet deep. Due to this depth, the use of a bench and interim access ramp would be required, which would create a large volume of material to be excavated and stockpiled

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			Conventional Bore		25				$377,367.00		Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
Wilmington	H650-094	W-B052a, W-B052b	Dry-Ditch Open-Cut	65	-	N	9.3	Y	$23,400.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of approximately 0.03 acre of a PFO wetland. Avoiding/minimizing the minor impact through a conventional bore is unreasonably high relative to the proposed construction method.
			Conventional Bore		15				$218,209.00		
Wilmington	H650-095	S-B009	Dry-Ditch Open-Cut	31	-	N	35.1	Y	$53,160.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact to one ephemeral UNT to the Dan River (less than five feet wide). This crossing is also situated on a long and steep slope that would involve logistically difficult construction conditions and would require an excessively deep bore pit for a trenchless crossing. Bore pits at least 35 feet deep would be required, which would necessitate the use of a bench and interim access ramp and create a large volume of material to be excavated and stockpiled. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		35				$885,645.00		
Wilmington	H650-096	S-B008	Dry-Ditch Open-Cut	45	-	N	1.8	Y	$58,200.00	Dry-Ditch Open-Cut	Impacts to this stream are required as it is within the pull back area for the Dan River HDD. Additionally, a trenchless crossing of this resource would result in an extended time with a private landowner residence/camp in close proximity, thereby increasing the noise, aesthetic, and other impacts on nearby persons. Furthermore, surface soil data indicates that the groundwater level at this location is high and that the soil is frequently flooded. The bore pits would be within the 100-year floodplain and constant bore pit dewatering activities would be required to complete the trenchless crossing.
			Conventional Bore		12				$175,308.00		
Wilmington	H650-097	W-B005	Dry-Ditch Open-Cut	1020	-	N	0.0	Y	$367,200.00	Dry-Ditch Open-Cut	Impacts to this wetland are required as it is within the pull back area for the Dan River HDD. Inclusion of this wetland in the HDD is not feasible without rerouting the pipeline. The crossing is too long and exceeds capabilities of conventional bore machines, and the configuration of the LOD does not allow for non-conventional techniques without impacting other wetlands and streams. Therefore the conventional bore method is not feasible.
			Conventional Bore		15				$1,489,200.00		
Wilmington	H650-099	W-B056	Dry-Ditch Open-Cut	79	-	N	1.9	Y	$28,440.00	Dry-Ditch Open-Cut	The open-cut method would result in a temporary impact of approximately 0.04 acre of a PEM wetland. Avoiding/minimizing the minor impact through a conventional bore is unreasonably high relative to the proposed construction method.
			Conventional Bore		10				$206,680.00		
Wilmington	H650-100	W-B002, S-B002	Dry-Ditch Open-Cut	350	-	N	0.0	Y	$168,000.00	Dry-Ditch Open-Cut	The trenchless crossing method would not be practicable because the length of bore required to avoid wetland impacts exceeds the limitations of the technology. The upland areas between this wetland are not large enough to accommodate a bore pit, and are not accessible without some kind of wetland impacts. If the entire complex were to be bored, it would complicate the tie-in to the receiver at the Dan River Interconnect since the bore would be situated deeper than typical pipeline construction. Furthermore, a trenchless crossing would extend the duration of this crossing from 9 to 22 days, thereby increasing the noise, aesthetic, and other impacts on nearby persons.
			Conventional Bore		10				$602,340.00		
Wilmington	H650-101	W-B002	Dry-Ditch Open-Cut	93	-	N	1.9	Y	$33,480.00	Dry-Ditch Open-Cut	Avoiding/minimizing the temporary impact to 0.4 acre of PEM wetland through a conventional bore would extend the duration of this crossing with a private landowner in close proximity, thereby increasing the noise, aesthetic, and other impacts on nearby persons. Furthermore, the conventional bore crossing cost to avoid the temporary impacts is unreasonably high relative to the proposed construction method.
			Conventional Bore		10				$227,120.00		

ATTACHMENT 6

AMENDMENT PROJECT AND SSEP SHARED LOD FIGURES

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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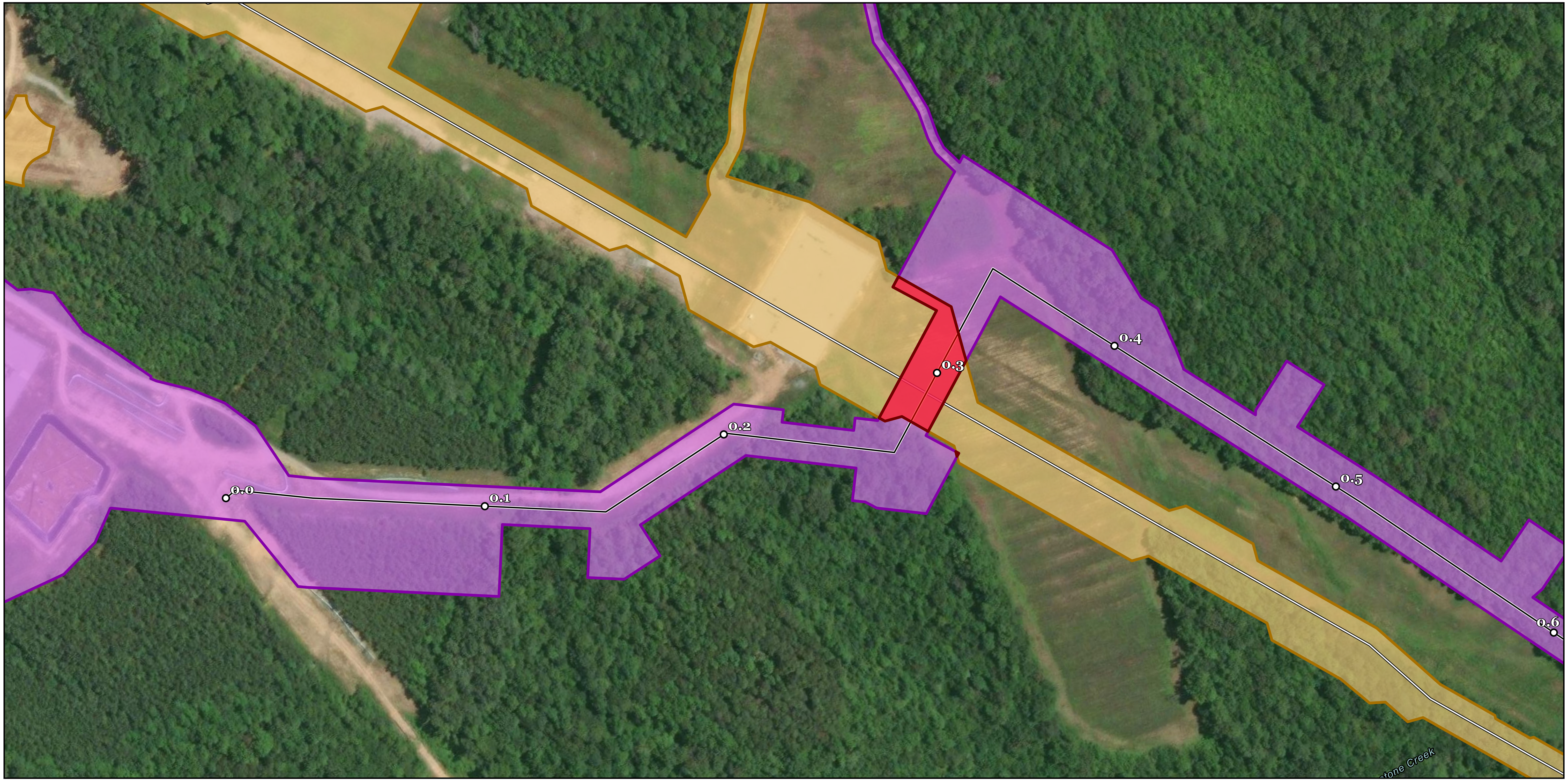
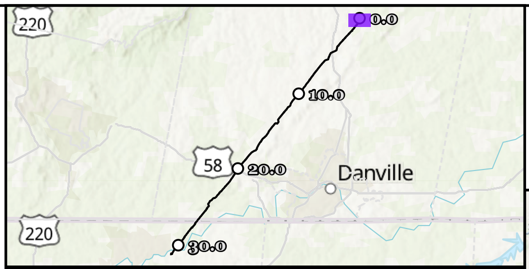


- 🟥 LOD OVERLAP
- ○ SOUTHGATE MILEPOST
- — SOUTHGATE CENTERLINE
- 🟪 SOUTHGATE LOD
- ═ SSEP CENTERLINE
- 🟨 SSEP LOD



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N

0 100 200
FEET
1:2,400 1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 1
CL-001

DATE: JULY 2025

MVP SOUTHGATE

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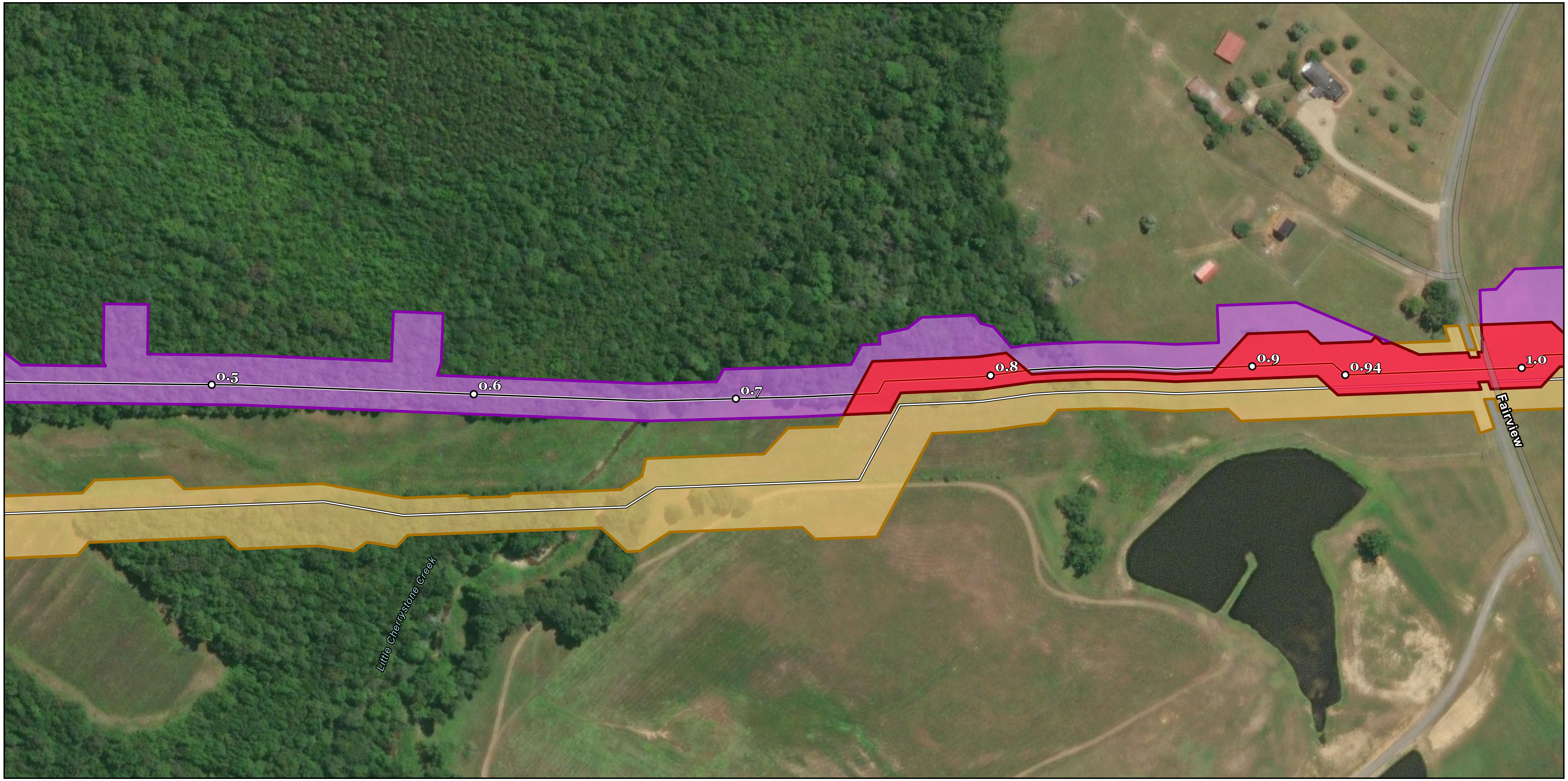
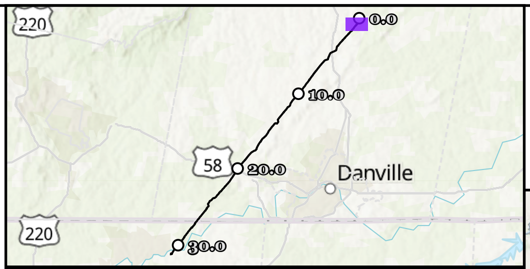


- 🟥 LOD OVERLAP
- ○ SOUTHGATE MILEPOST
- — SOUTHGATE CENTERLINE
- 🟪 SOUTHGATE LOD
- ═ SSEP CENTERLINE
- 🟨 SSEP LOD



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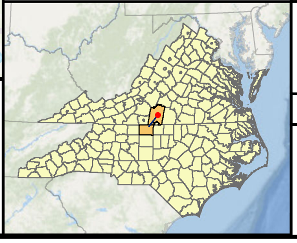
FEET
1:2,400 1" = 200'



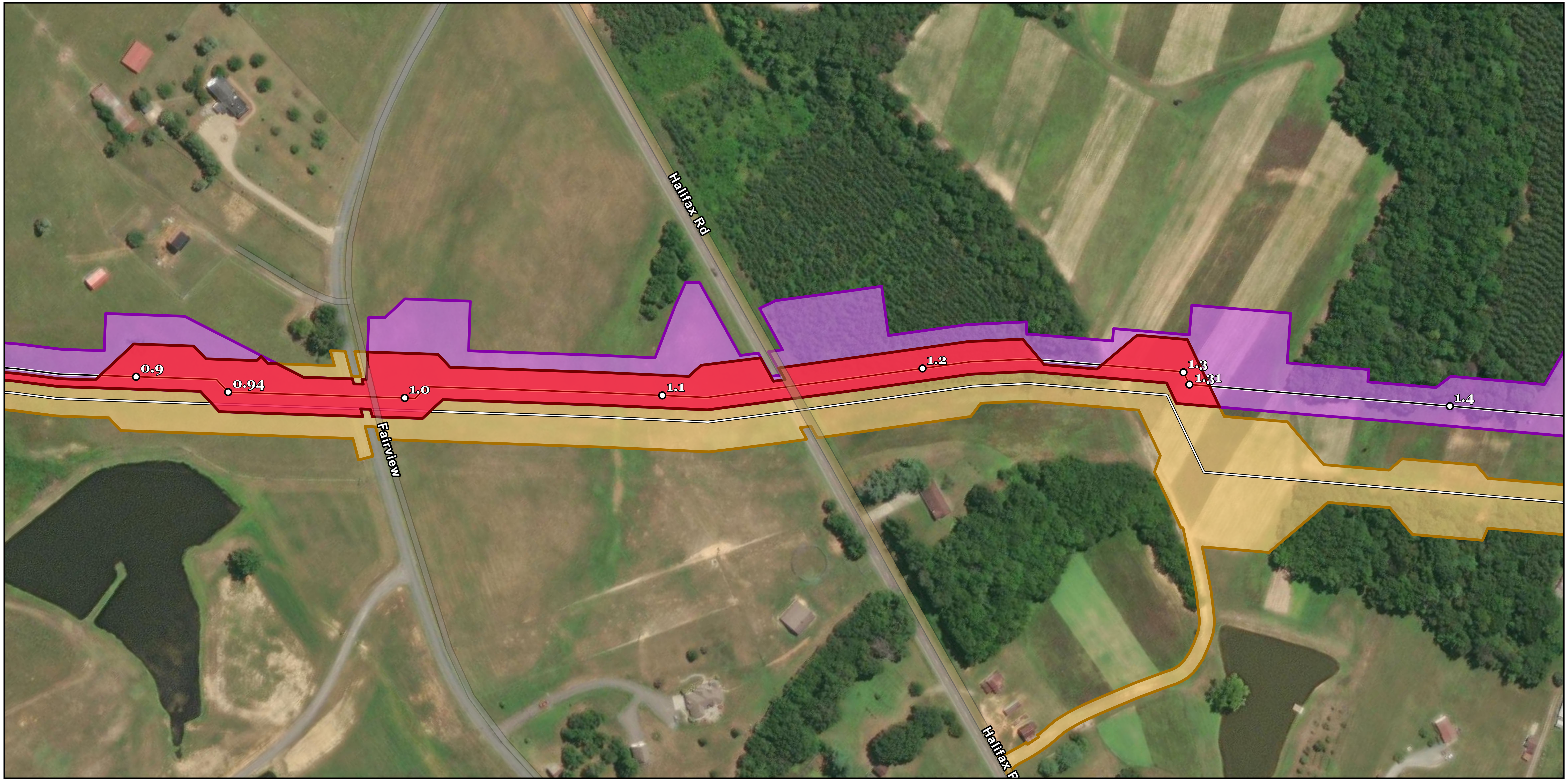
PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

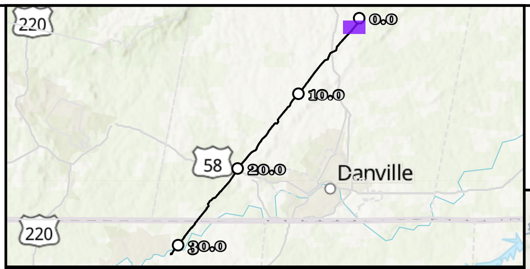
PAGE: 2
CL-002

DATE:
JULY 2025

MVP SOUTHGATE



🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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0 100 200
FEET
1:2,400
1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 3
CL-003

DATE:
JULY 2025

MVP
SOUTHGATE

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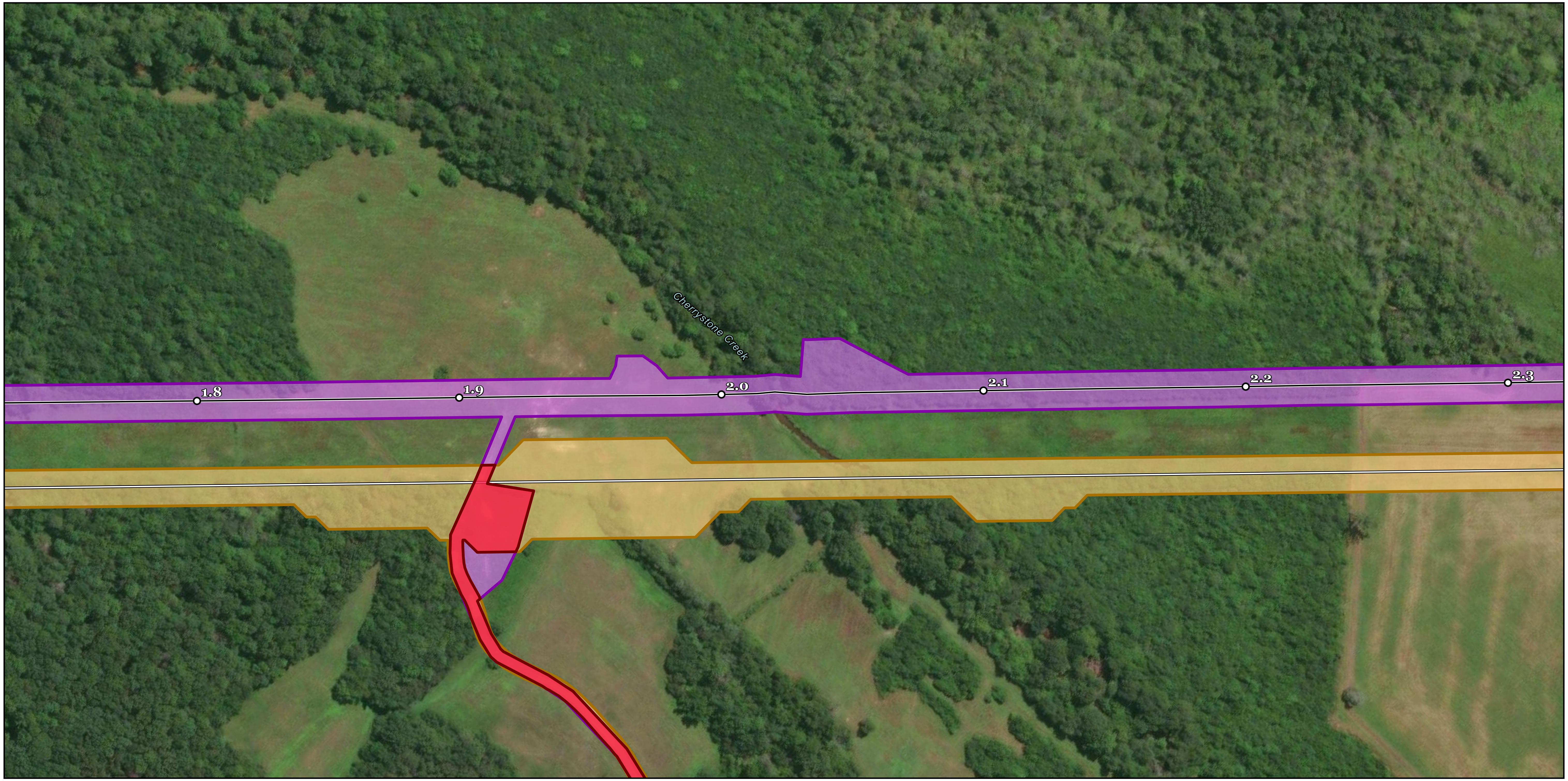
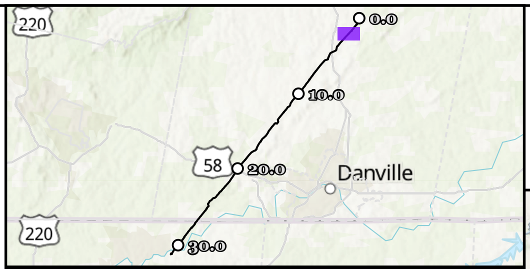


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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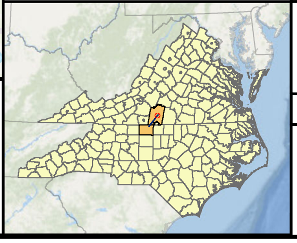
0 100 200
FEET
1:2,400
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 4
CL-005

DATE:
JULY 2025

MVP SOUTHGATE

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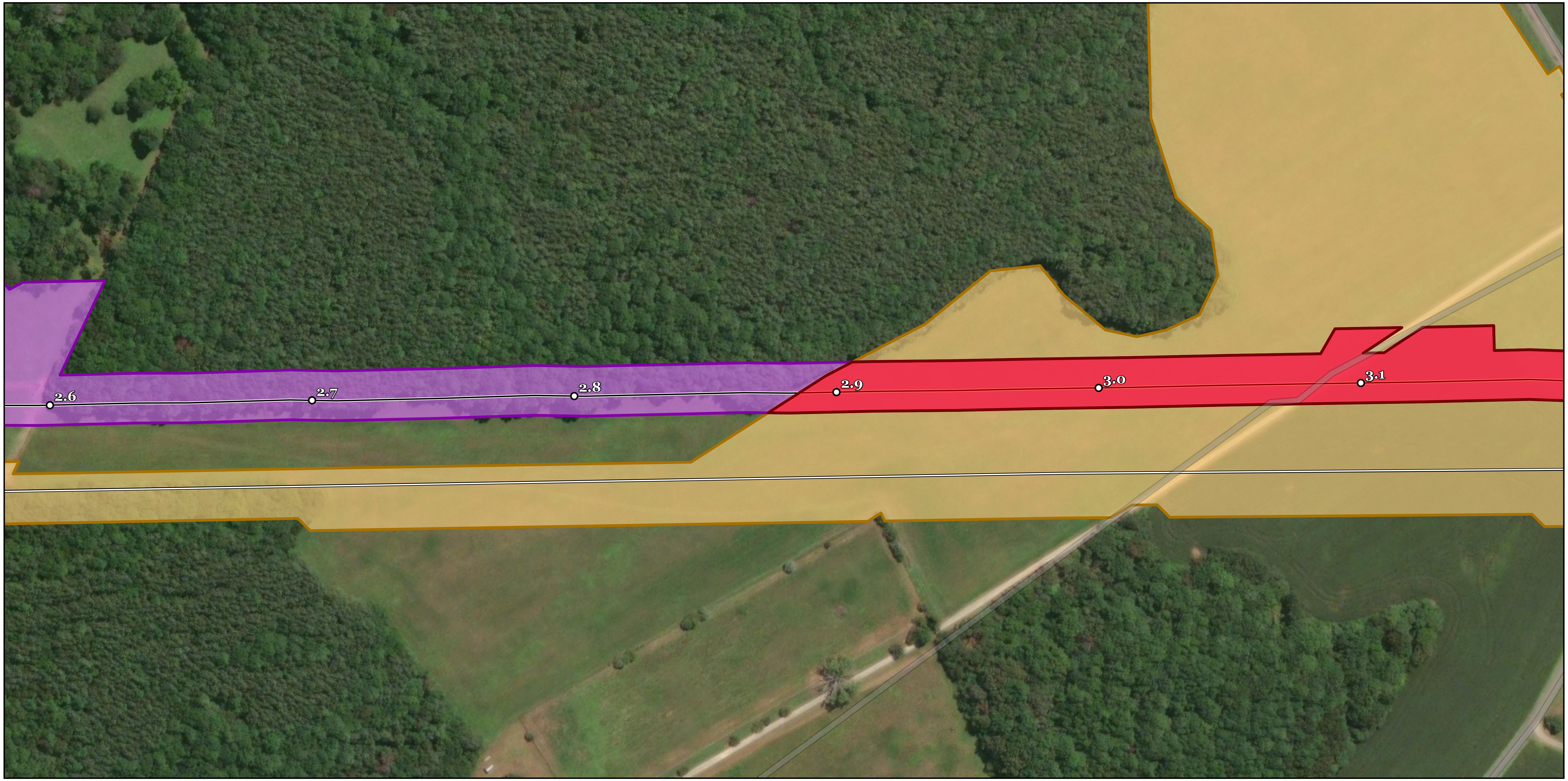
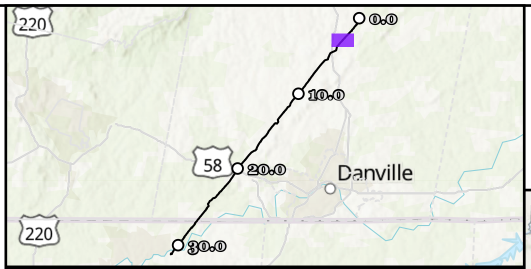


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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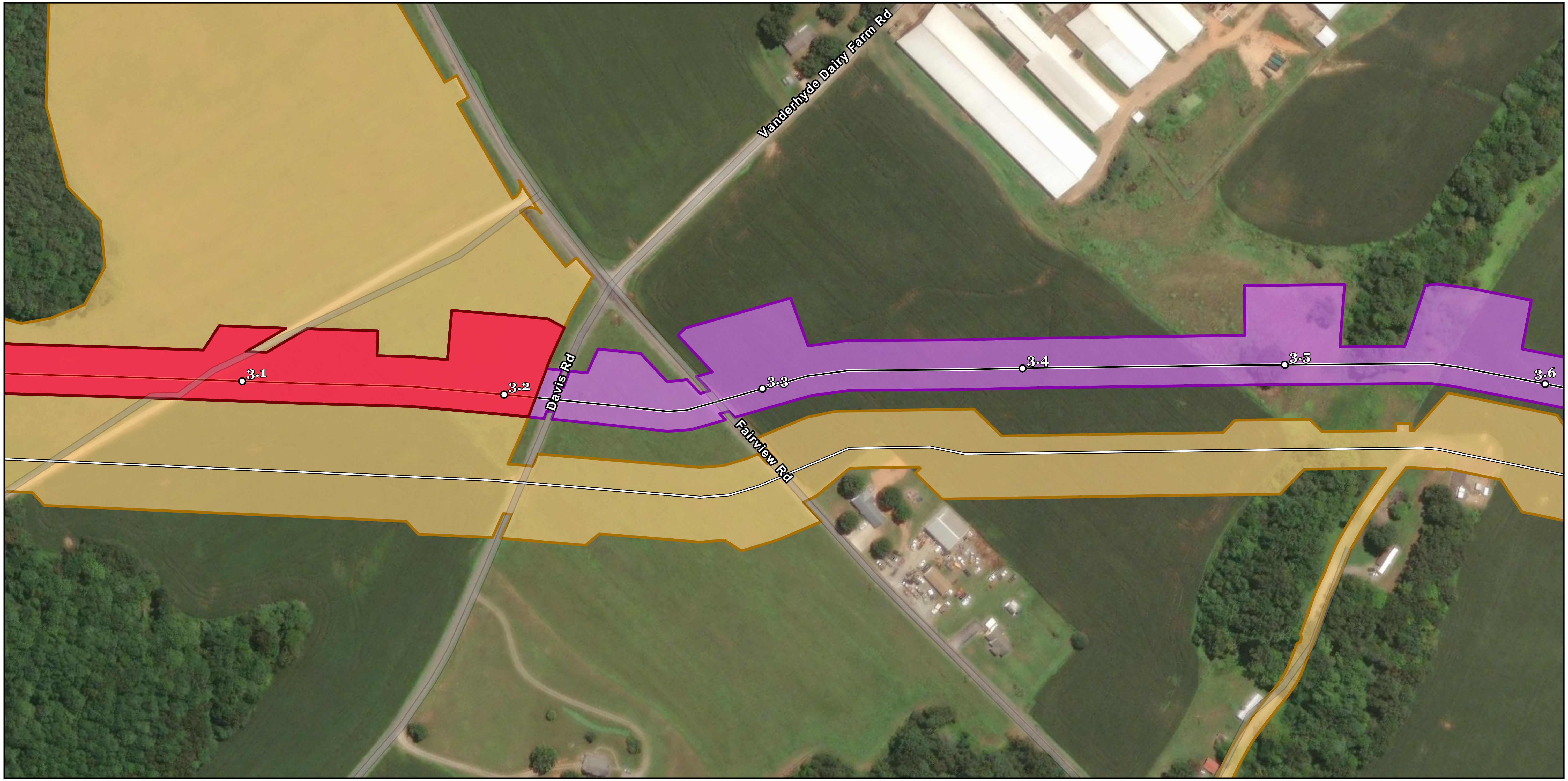
0 100 200
FEET
1:2,400
1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 5
CL-007

DATE: JULY 2025



🟥 LOD OVERLAP
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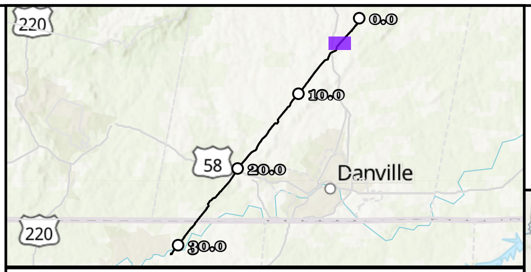
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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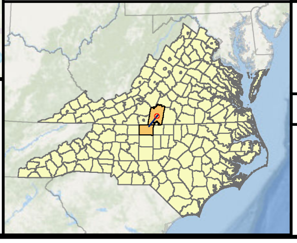
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 6
CL-008

DATE: JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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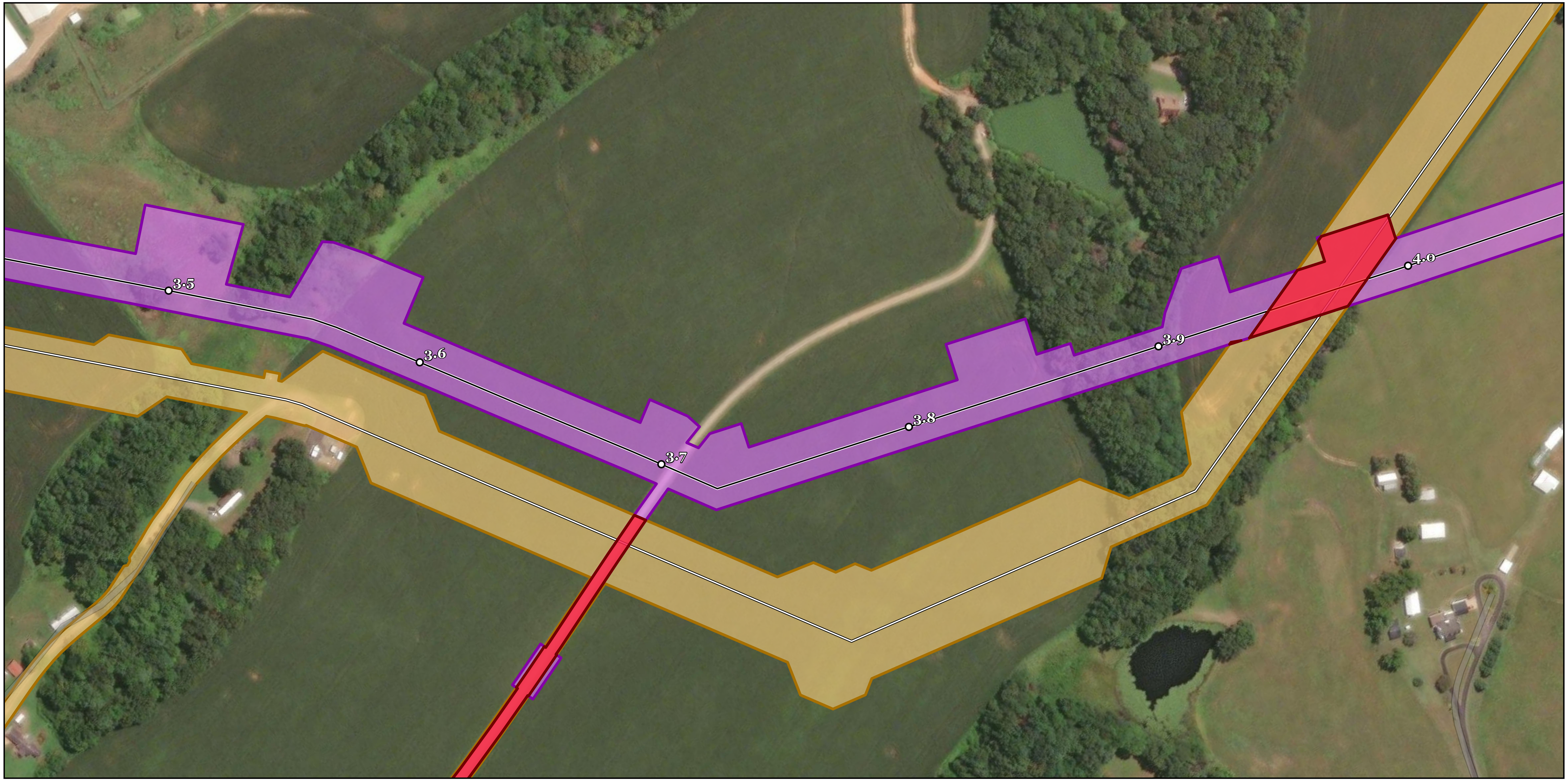
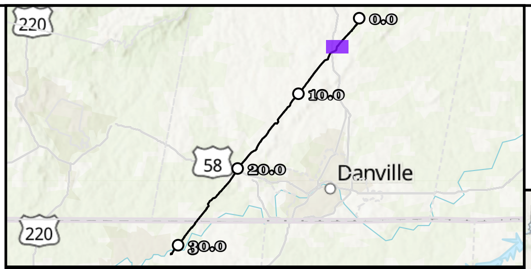


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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N

0 100 200
FEET
1:2,400
1" = 200'

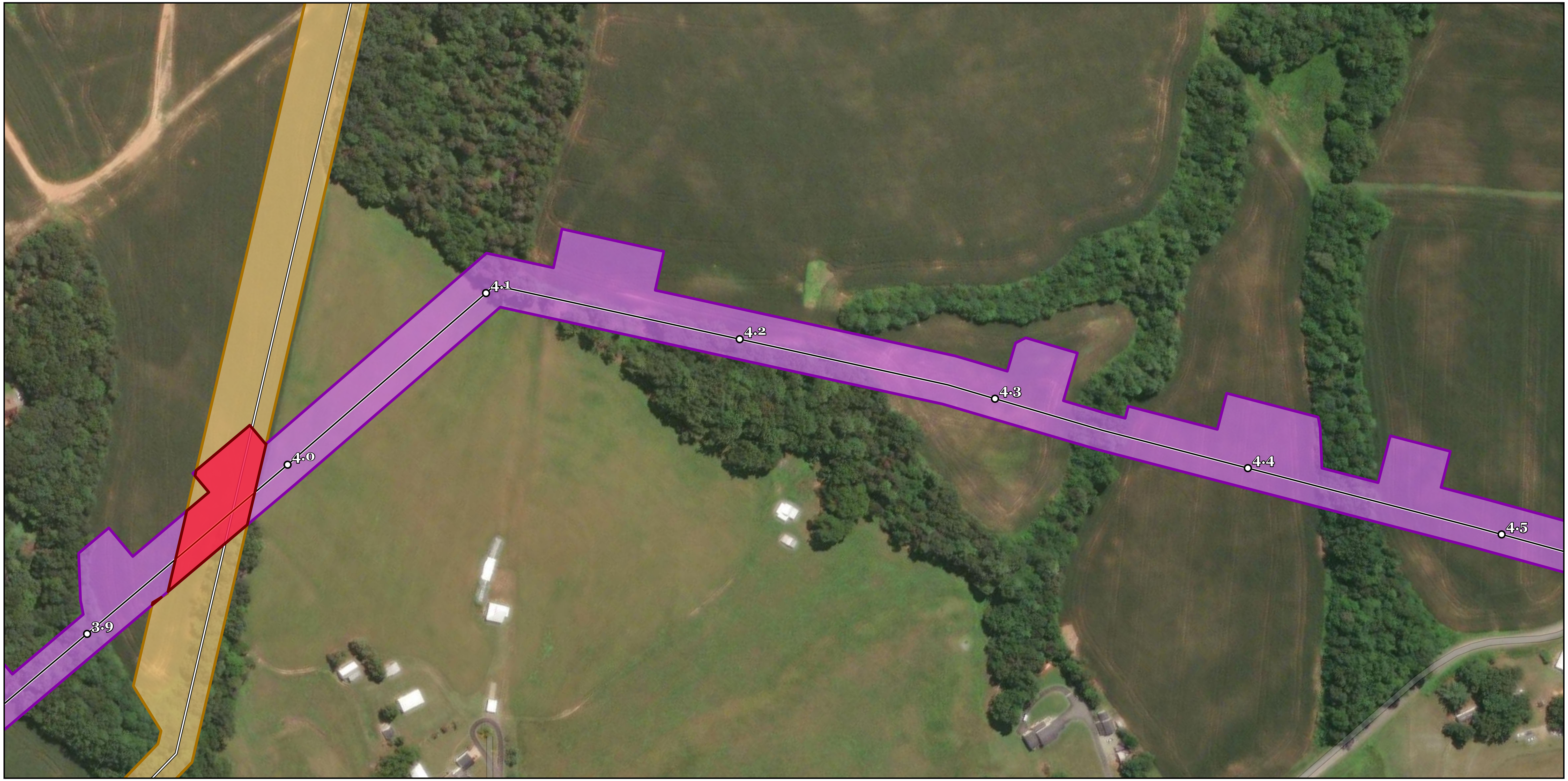
PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

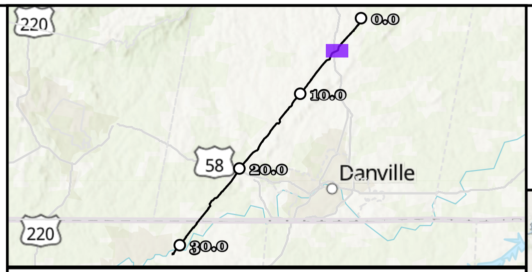
PAGE: 7
CL-009

DATE:
JULY 2025

MVP
SOUTHGATE



🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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0 100 200
FEET
1:2,400
1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 8
CL-010

DATE: JULY 2025

MVP SOUTHGATE

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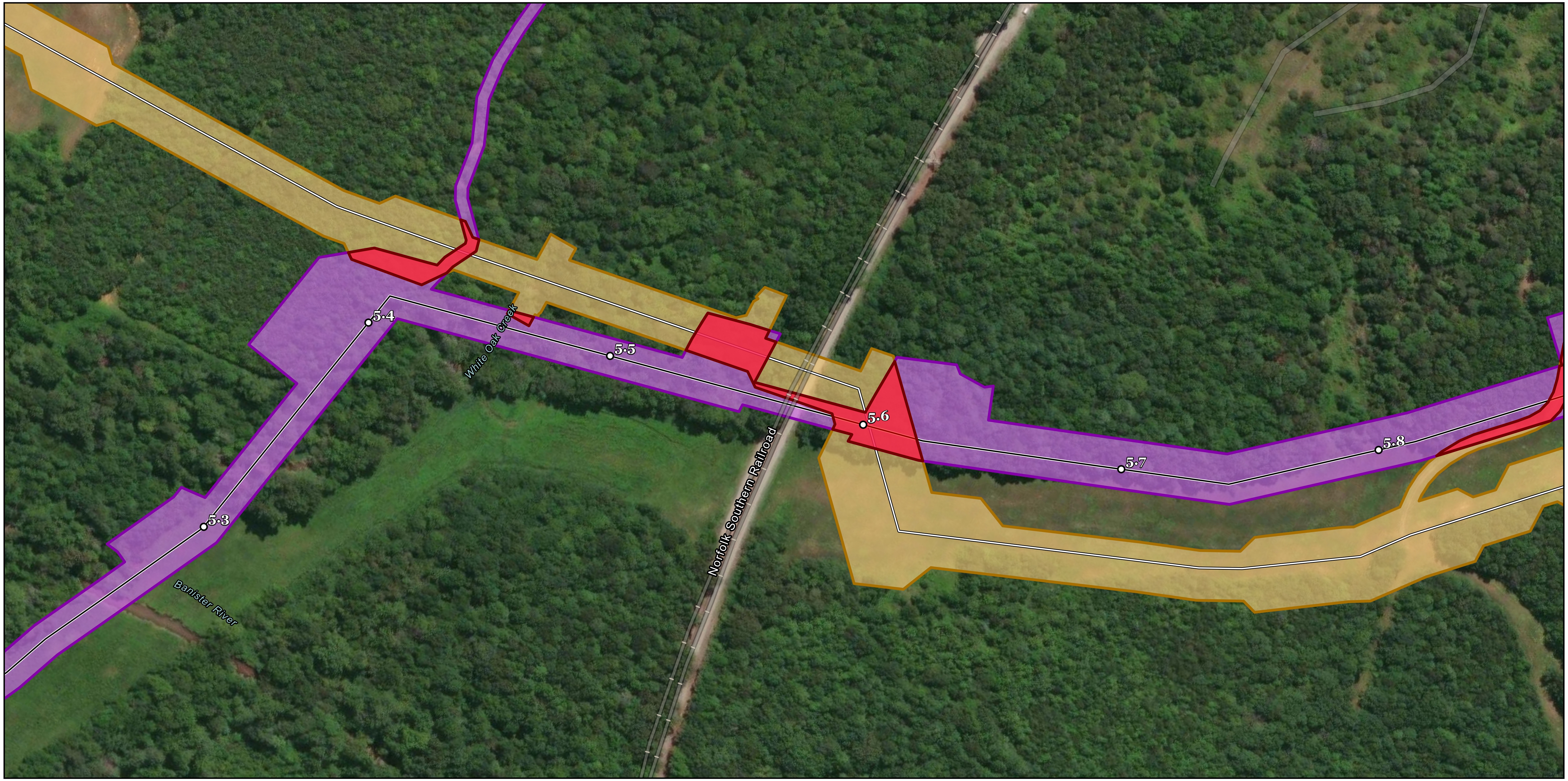
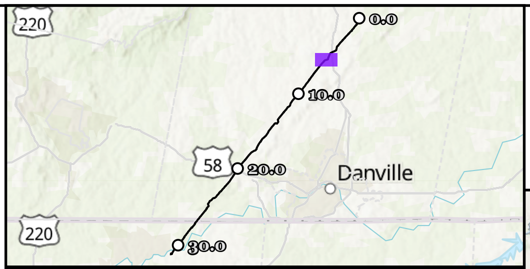


- 🟥 LOD OVERLAP
- ○ SOUTHGATE MILEPOST
- — SOUTHGATE CENTERLINE
- 🟪 SOUTHGATE LOD
- ═ SSEP CENTERLINE
- 🟨 SSEP LOD



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0 100 200
FEET
1:2,400
1" = 200'

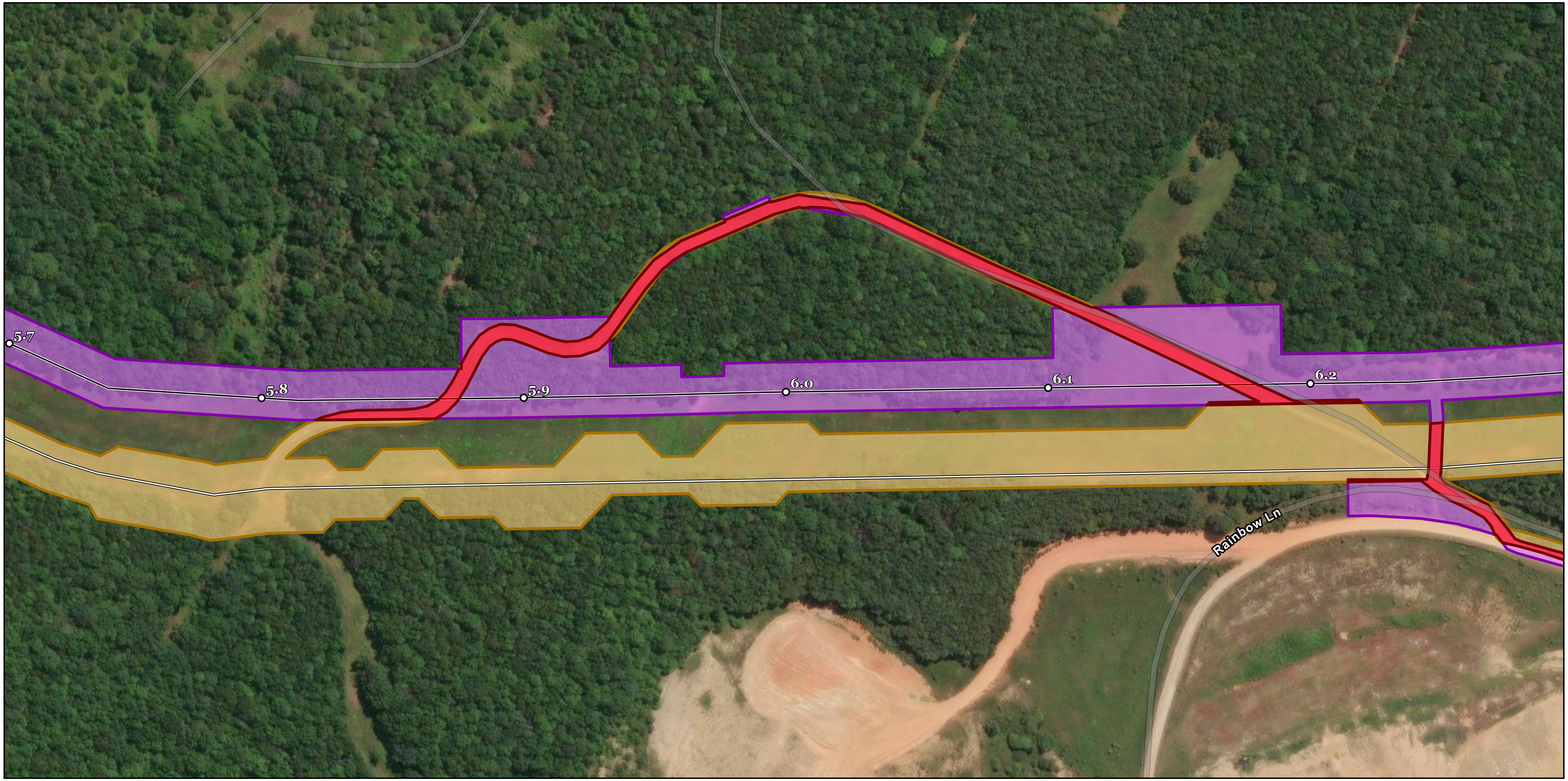
PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

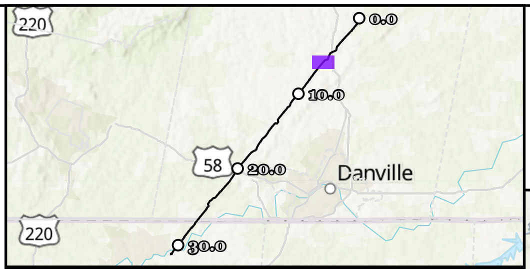
PAGE: 9
CL-013

DATE: JULY 2025

MVP SOUTHGATE



🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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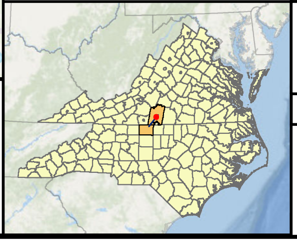
0 100 200
FEET
1:2,400
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 10
CL-014

DATE:
JULY 2025

MVP SOUTHGATE

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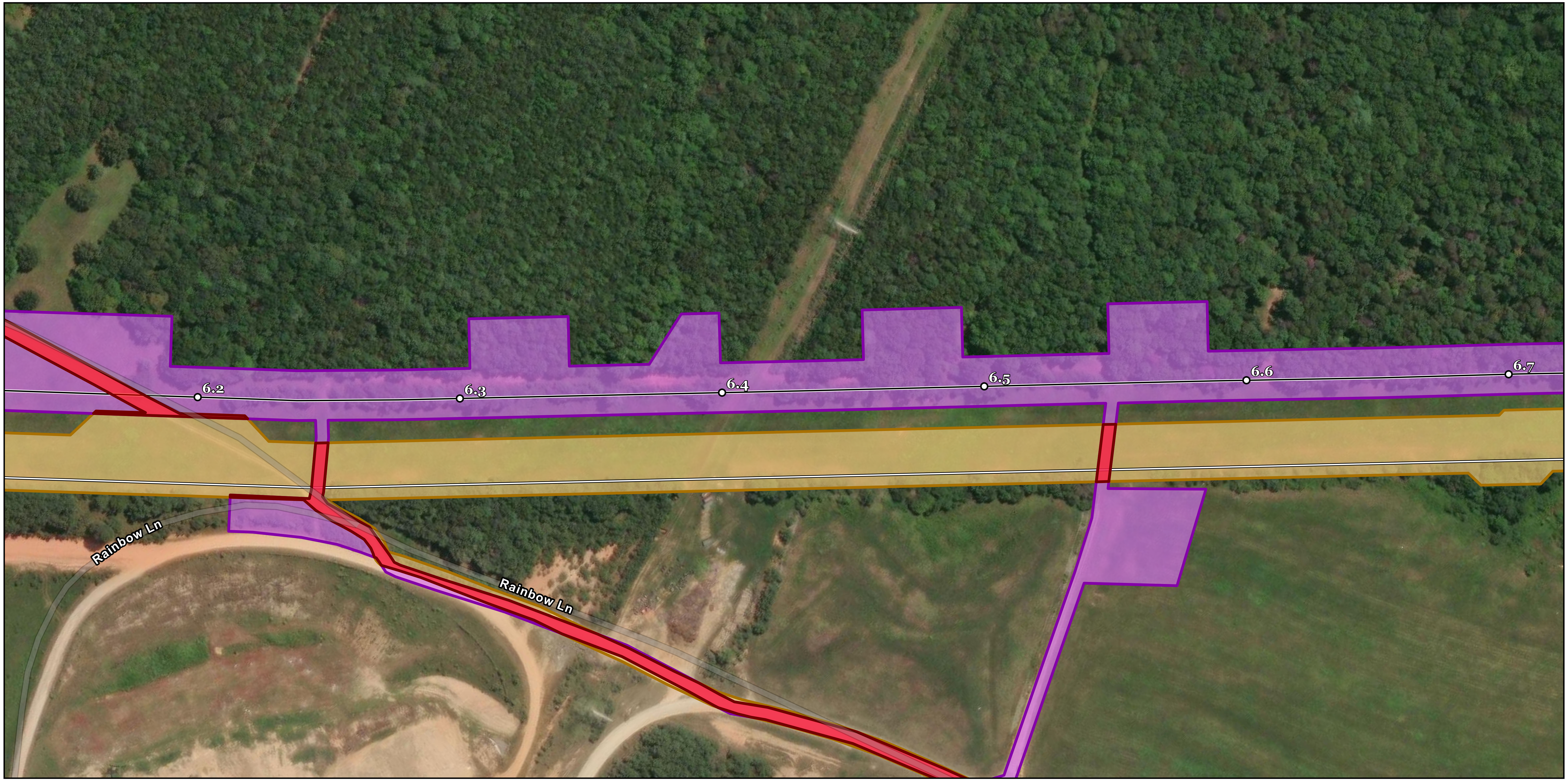
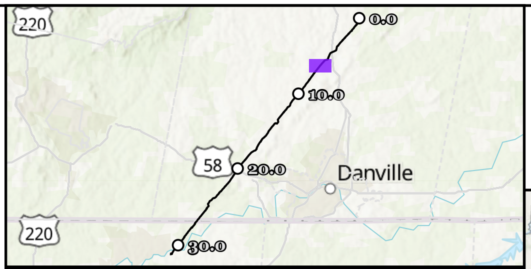


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
▨ SOUTHGATE LOD
═ SSEP CENTERLINE
▨ SSEP LOD



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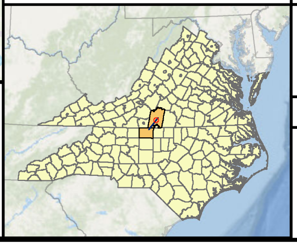
0 100 200
FEET
1:2,400
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 11
CL-015

DATE:
JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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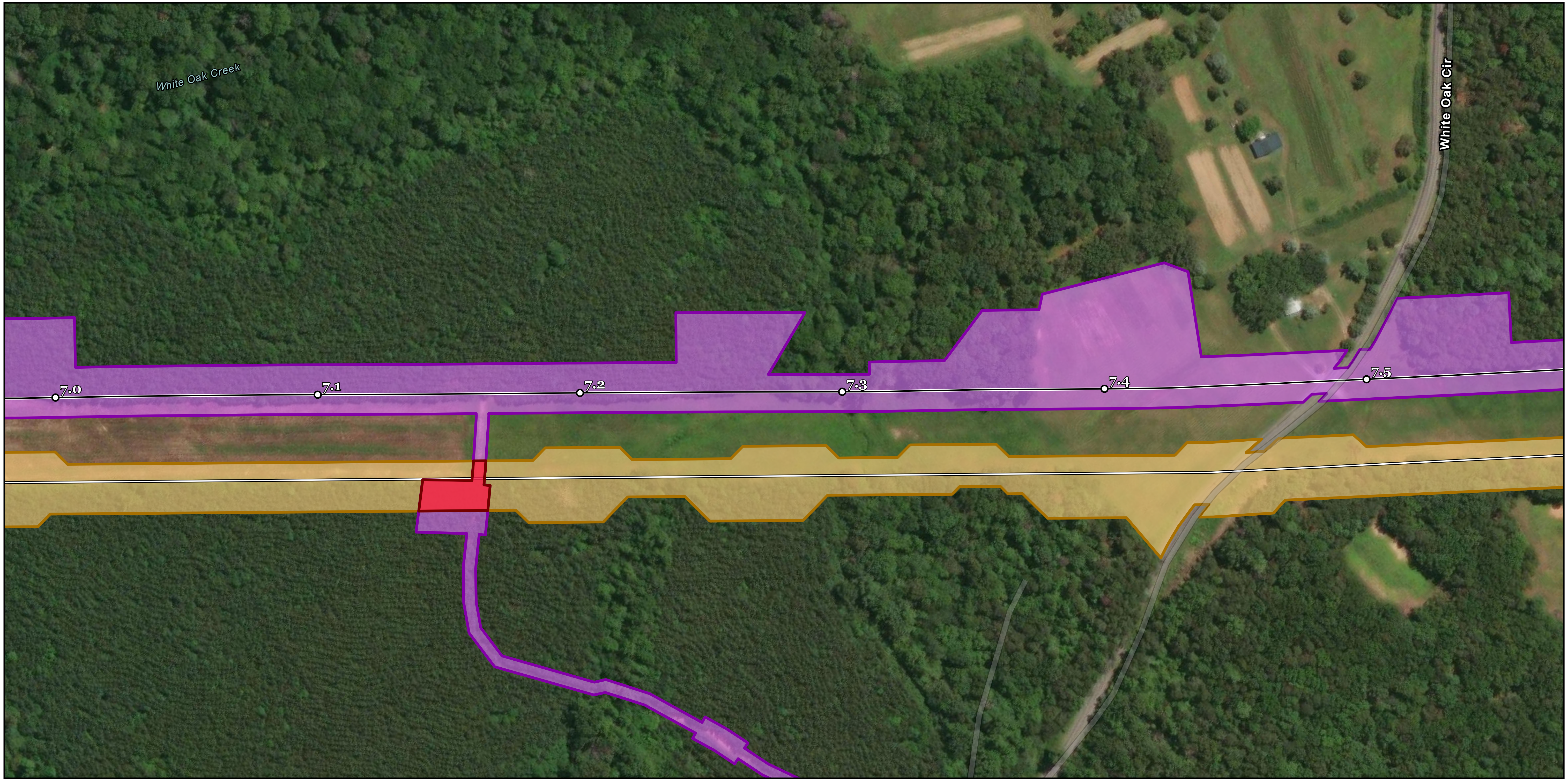
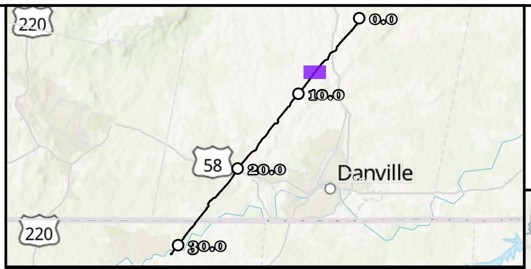


- 🟥 LOD OVERLAP
- ○ SOUTHGATE MILEPOST
- — SOUTHGATE CENTERLINE
- 🟪 SOUTHGATE LOD
- ═ SSEP CENTERLINE
- 🟧 SSEP LOD



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0 100 200
FEET
1:2,400
1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 12
CL-017

DATE:
JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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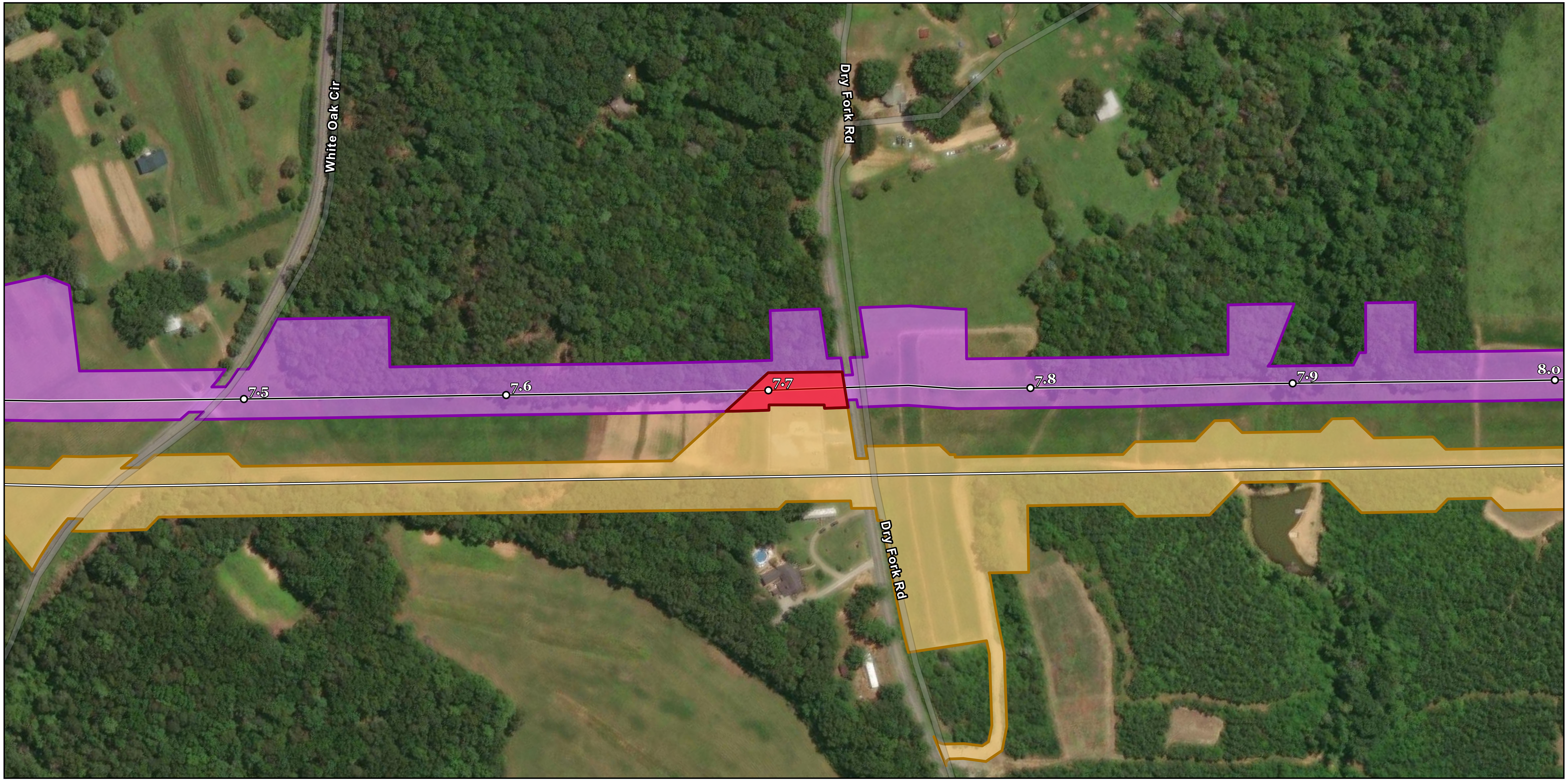
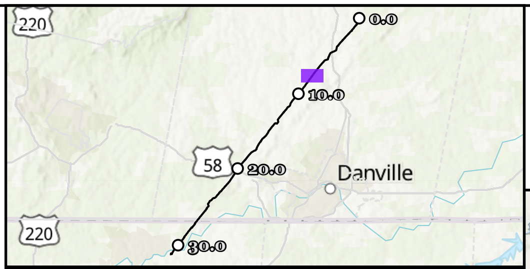


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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0 100 200
FEET
1:2,400
1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 13
CL-018

DATE:
JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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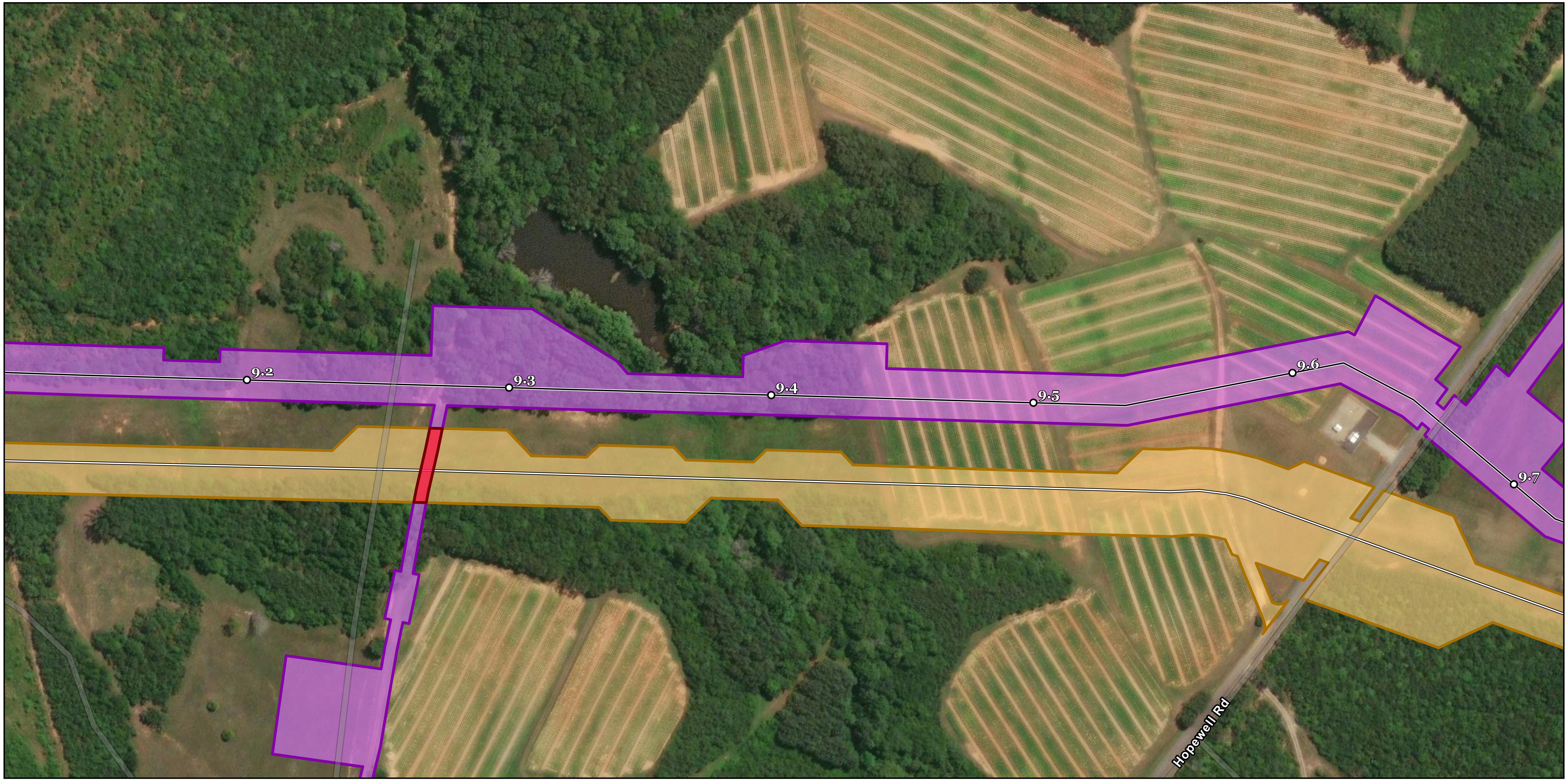
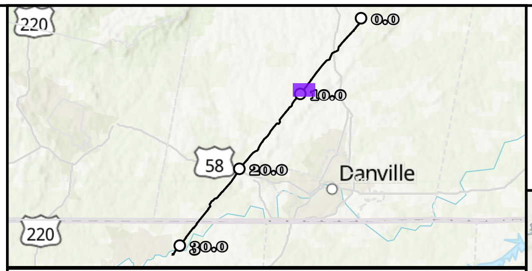


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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0 100 200
FEET
1:2,400
1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 14
CL-022

DATE: JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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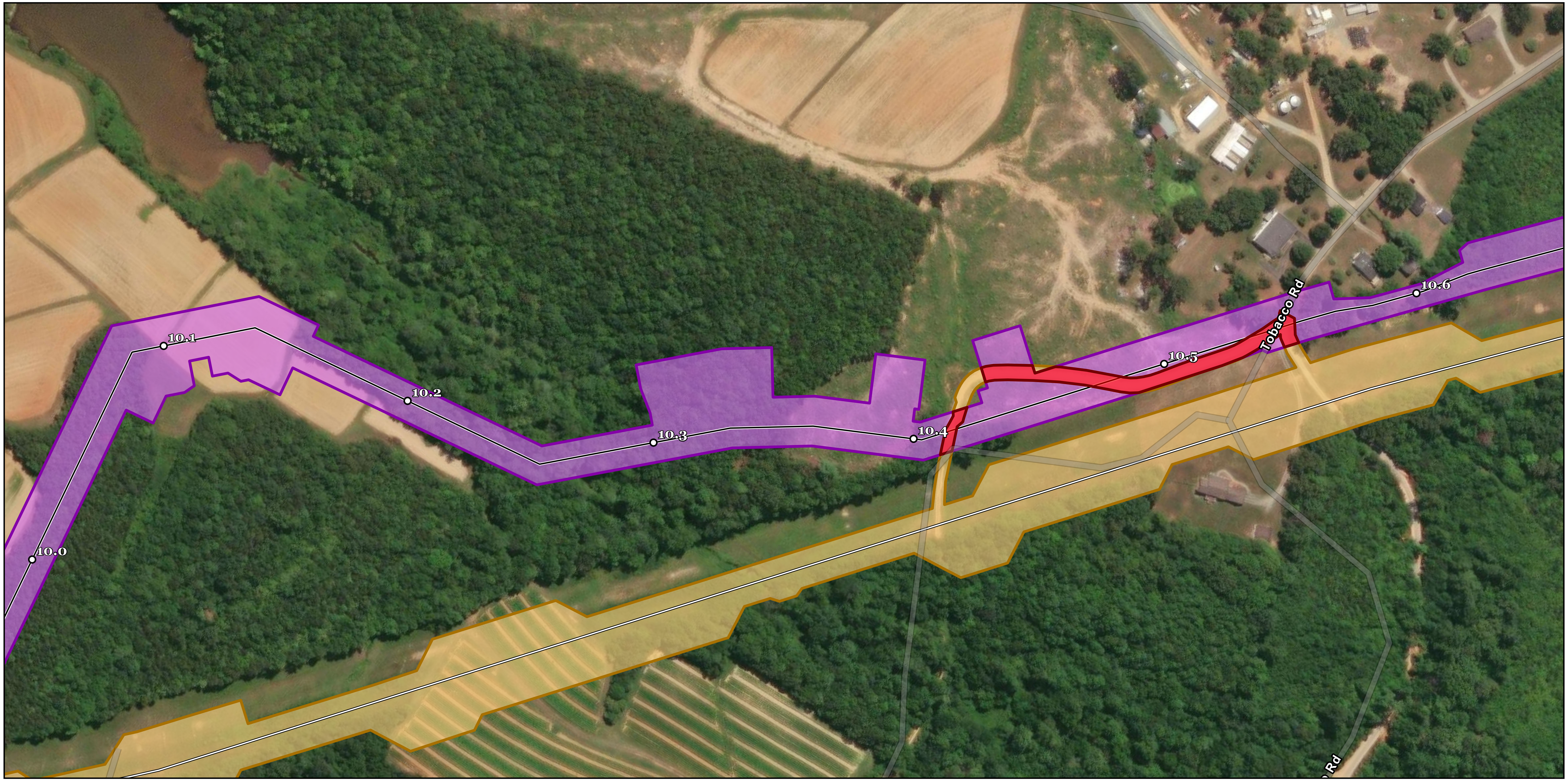
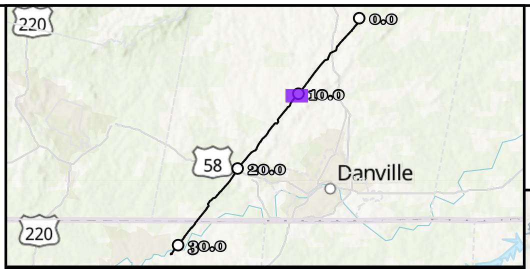


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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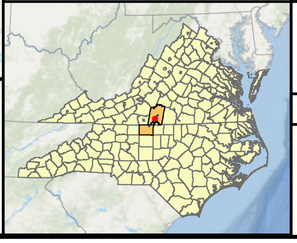
0 100 200
FEET
1:2,400
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 15
CL-024

DATE:
JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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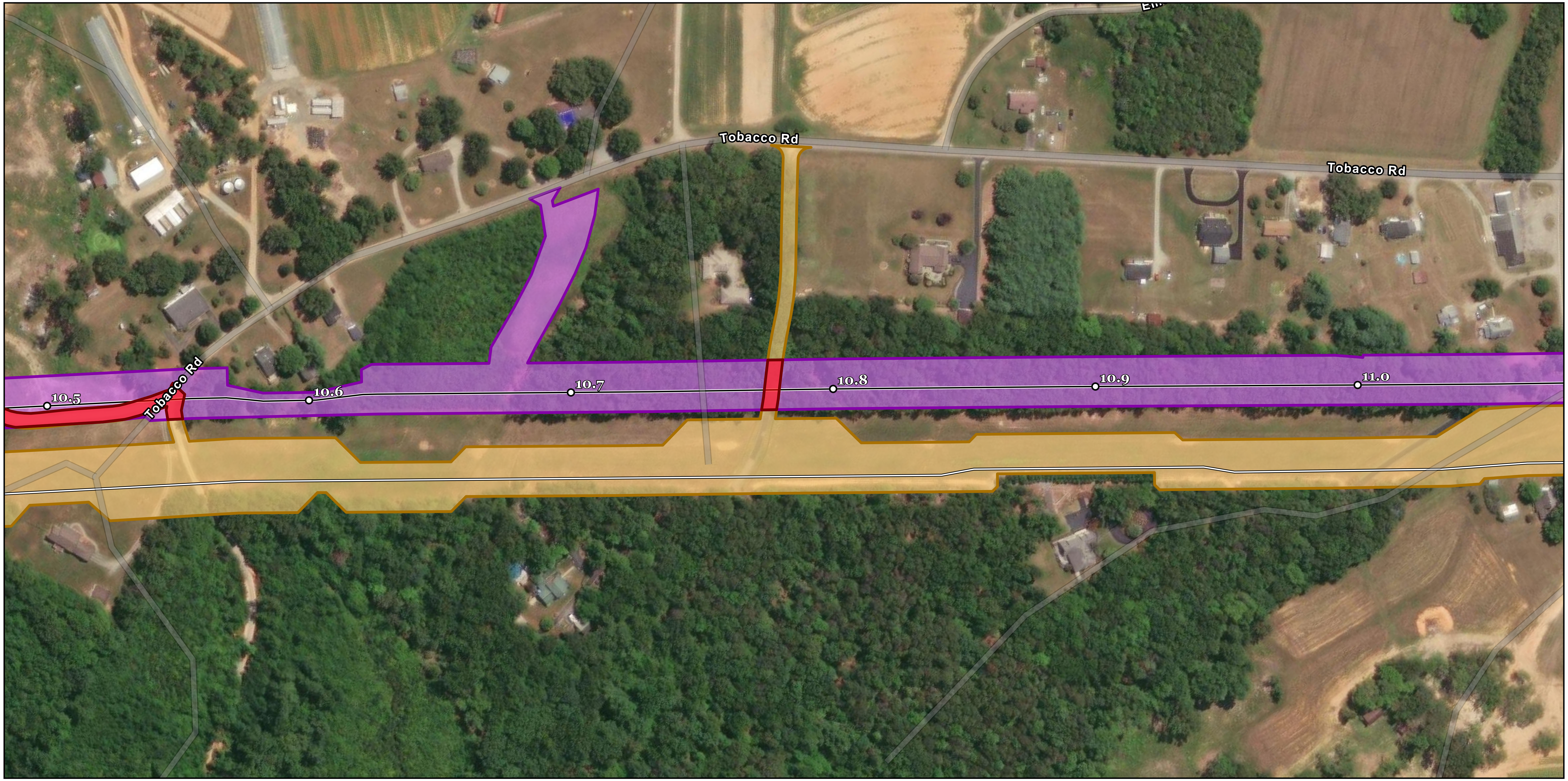
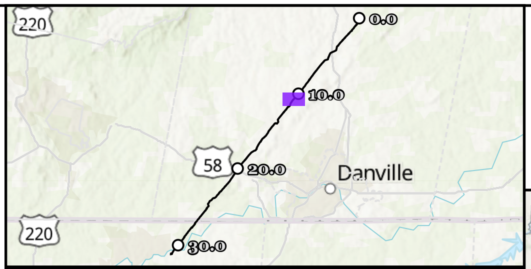


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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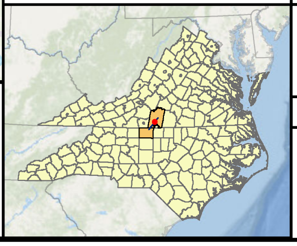
0 100 200
FEET
1:2,400
1" = 200'



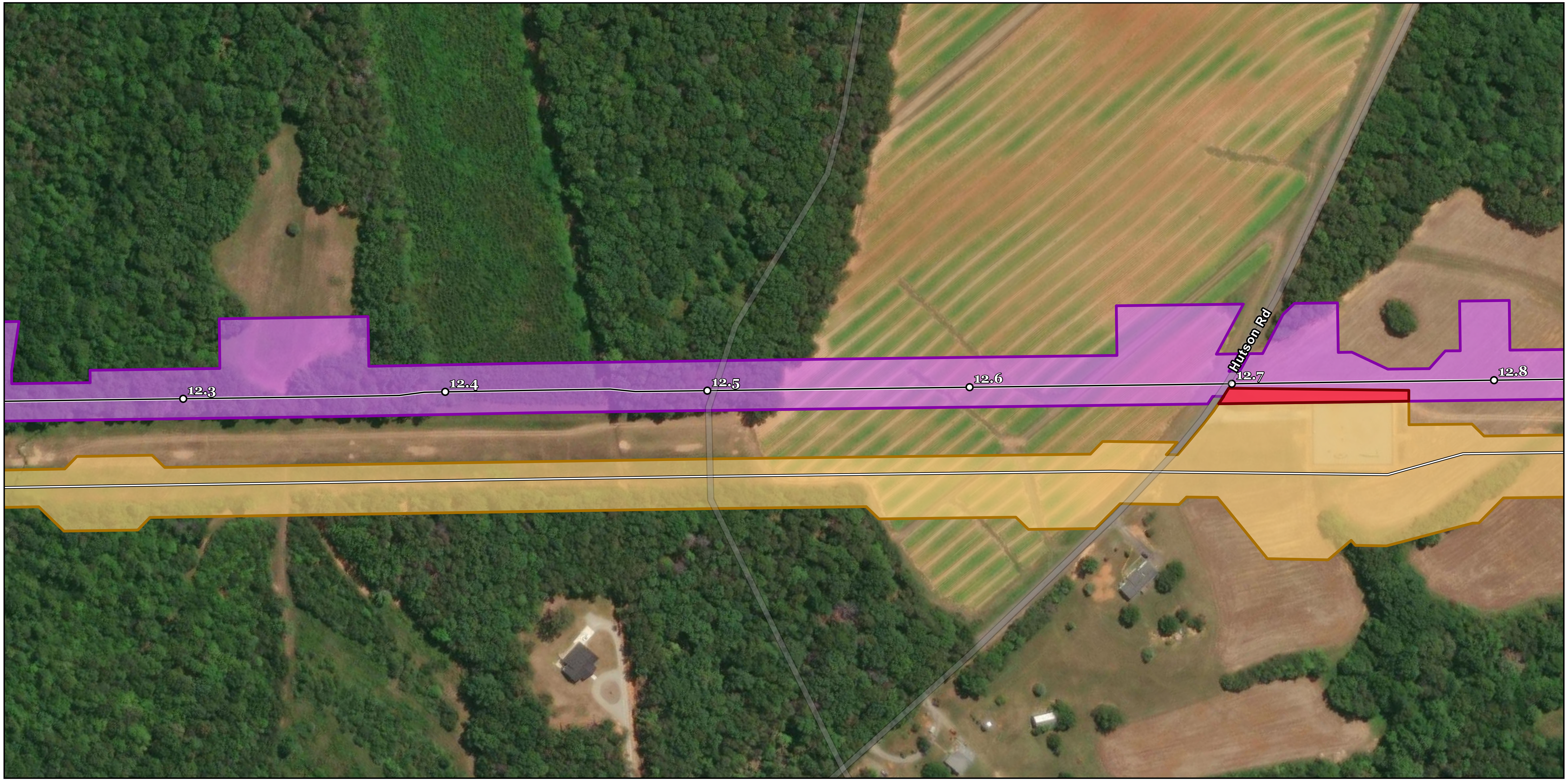
PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

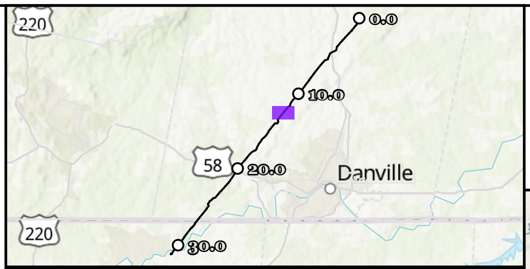
PAGE: 16
CL-025

DATE: JULY 2025

MVP SOUTHGATE



🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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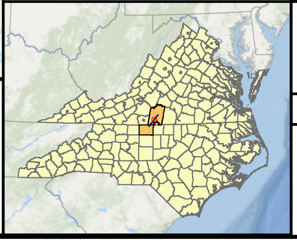
0 100 200
FEET
1:2,400
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 17
CL-029

DATE:
JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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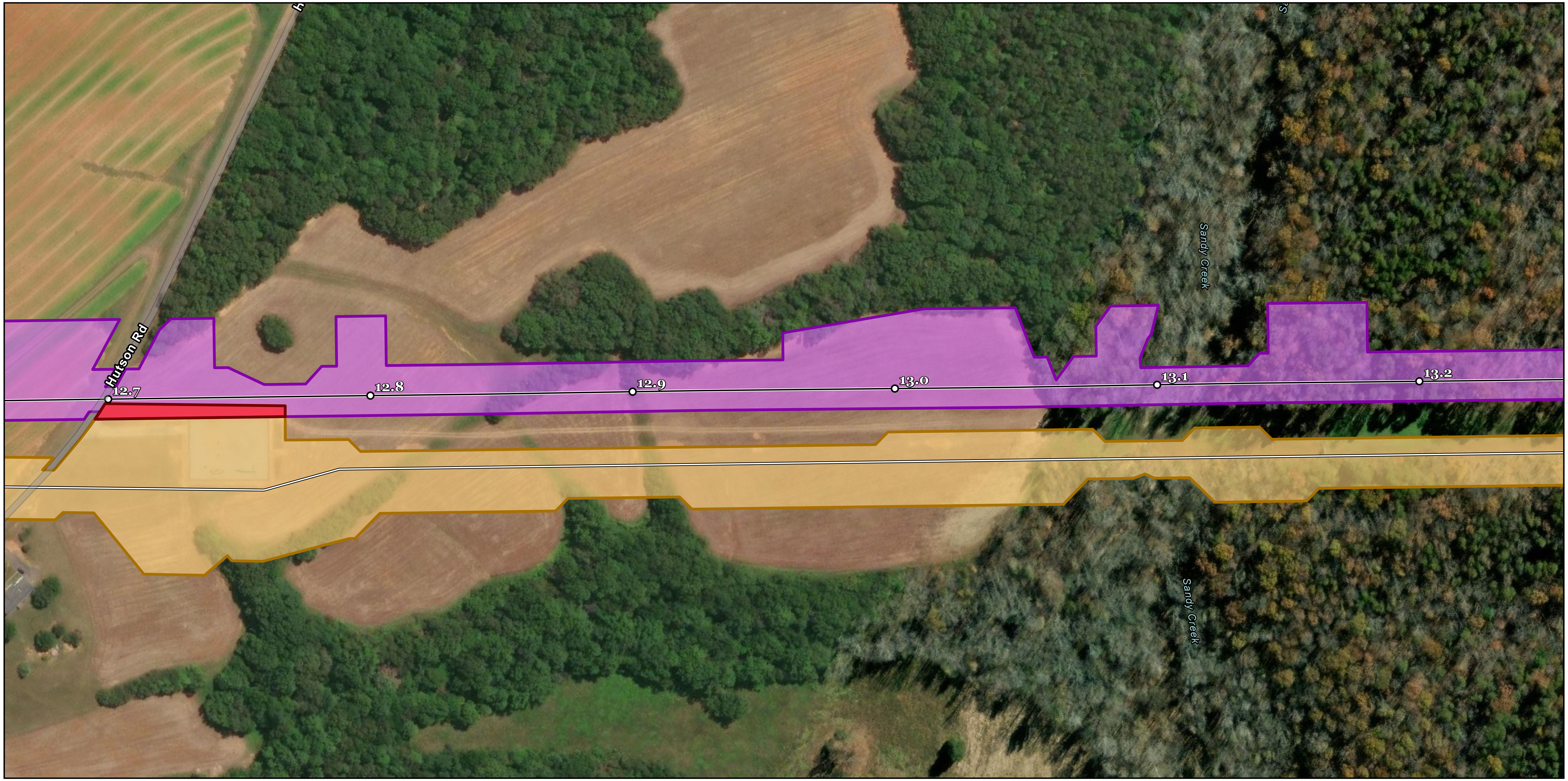
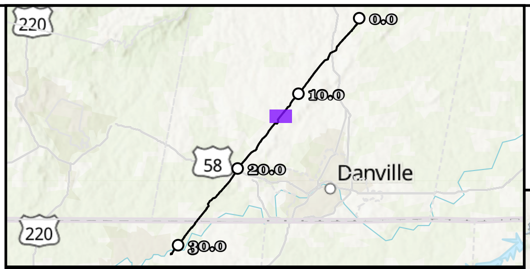


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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0 100 200
FEET
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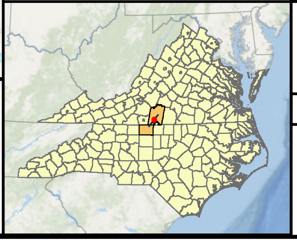
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 18
CL-030

DATE: JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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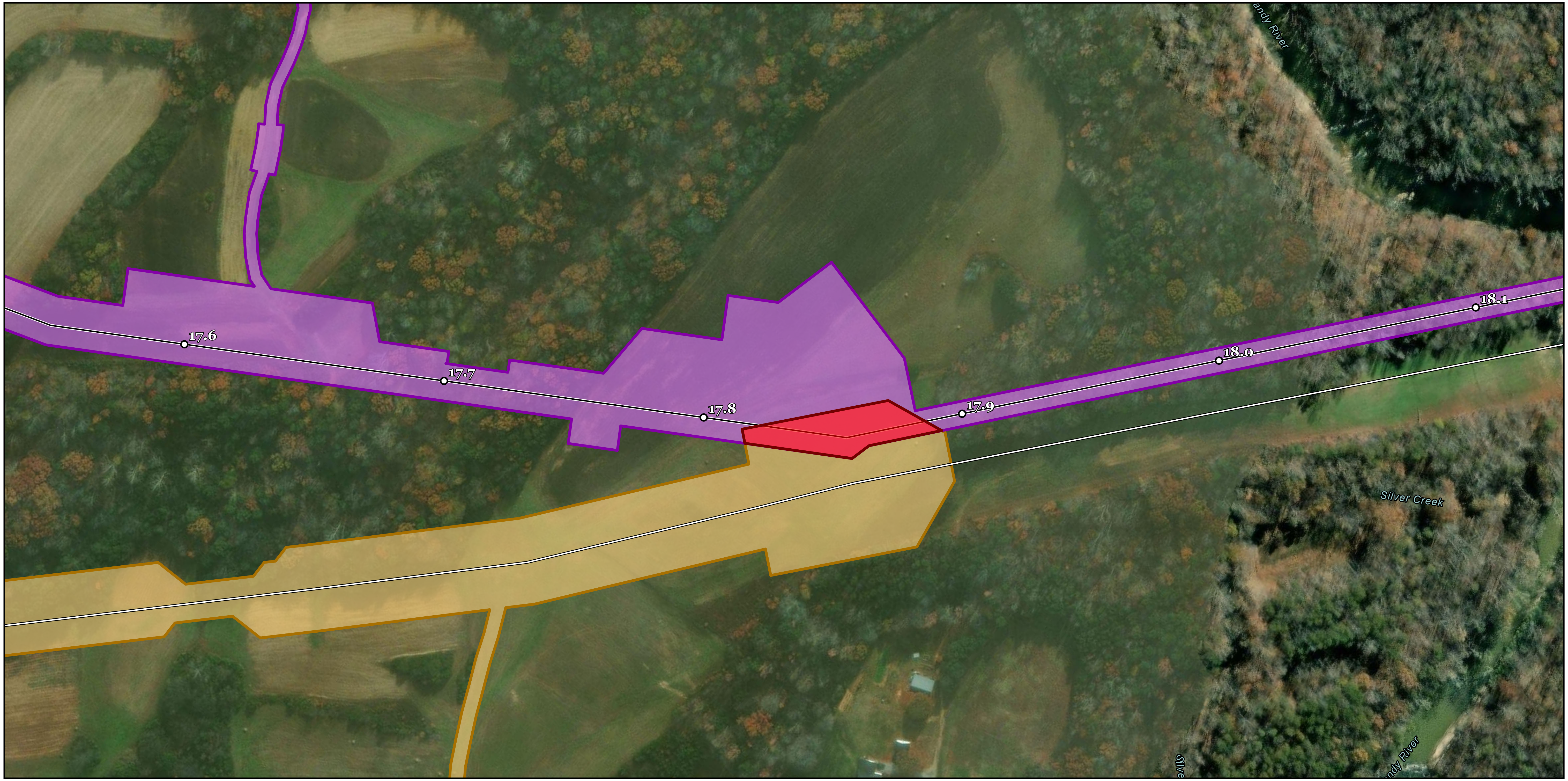
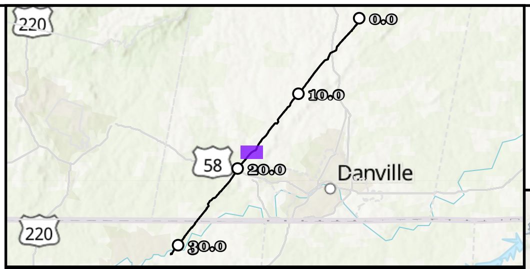


- 🟥 LOD OVERLAP
- ○ SOUTHGATE MILEPOST
- — SOUTHGATE CENTERLINE
- 🟪 SOUTHGATE LOD
- ═ SSEP CENTERLINE
- 🟧 SSEP LOD



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N

0 100 200
FEET
1:2,400
1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 19
CL-041

DATE:
JULY 2025

MVP SOUTHGATE

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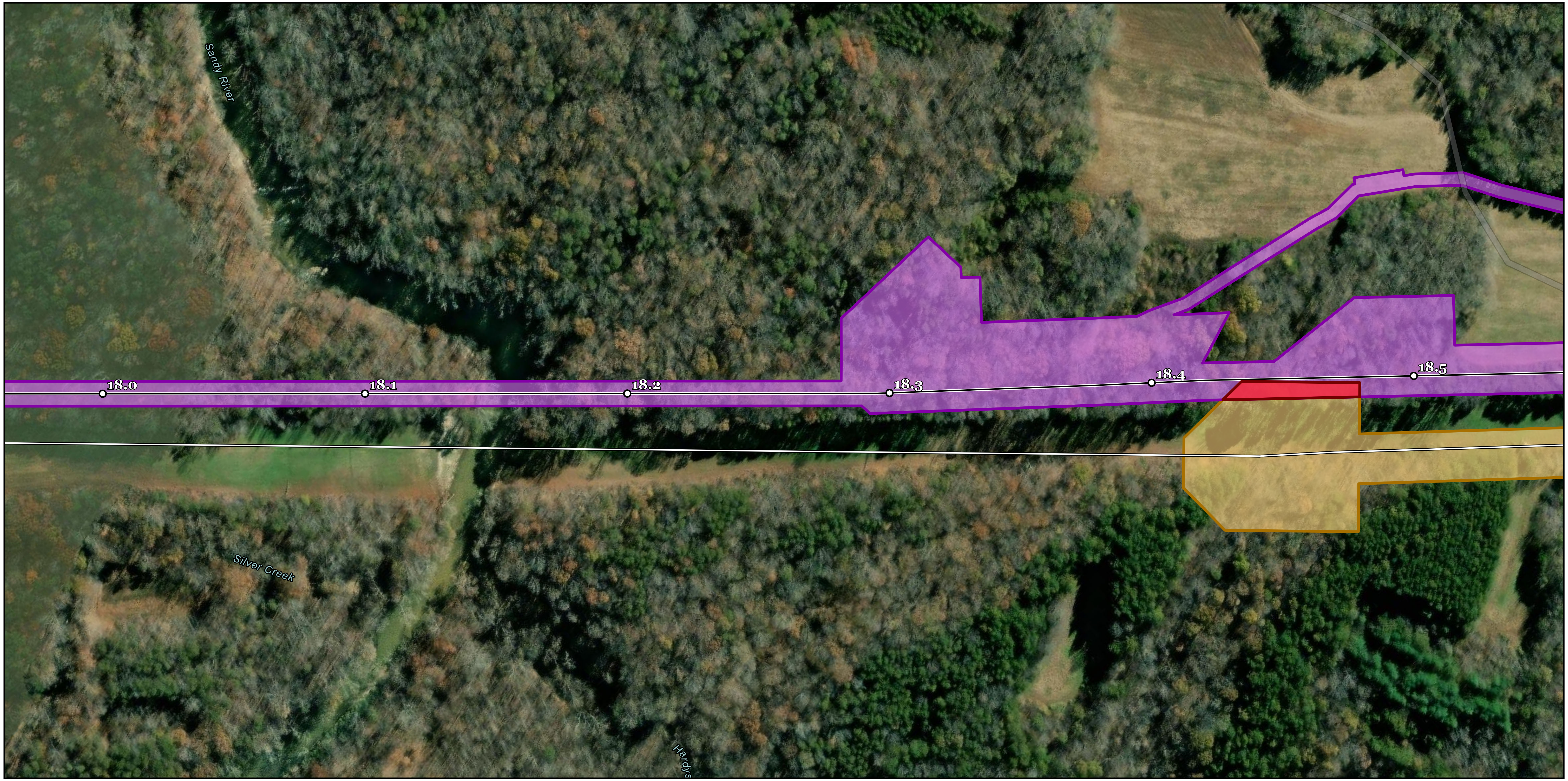
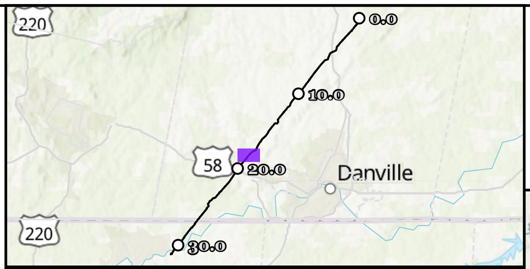


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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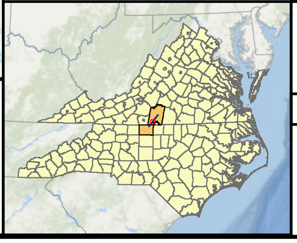
0 100 200
FEET
1:2,400
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 20
CL-042

DATE: JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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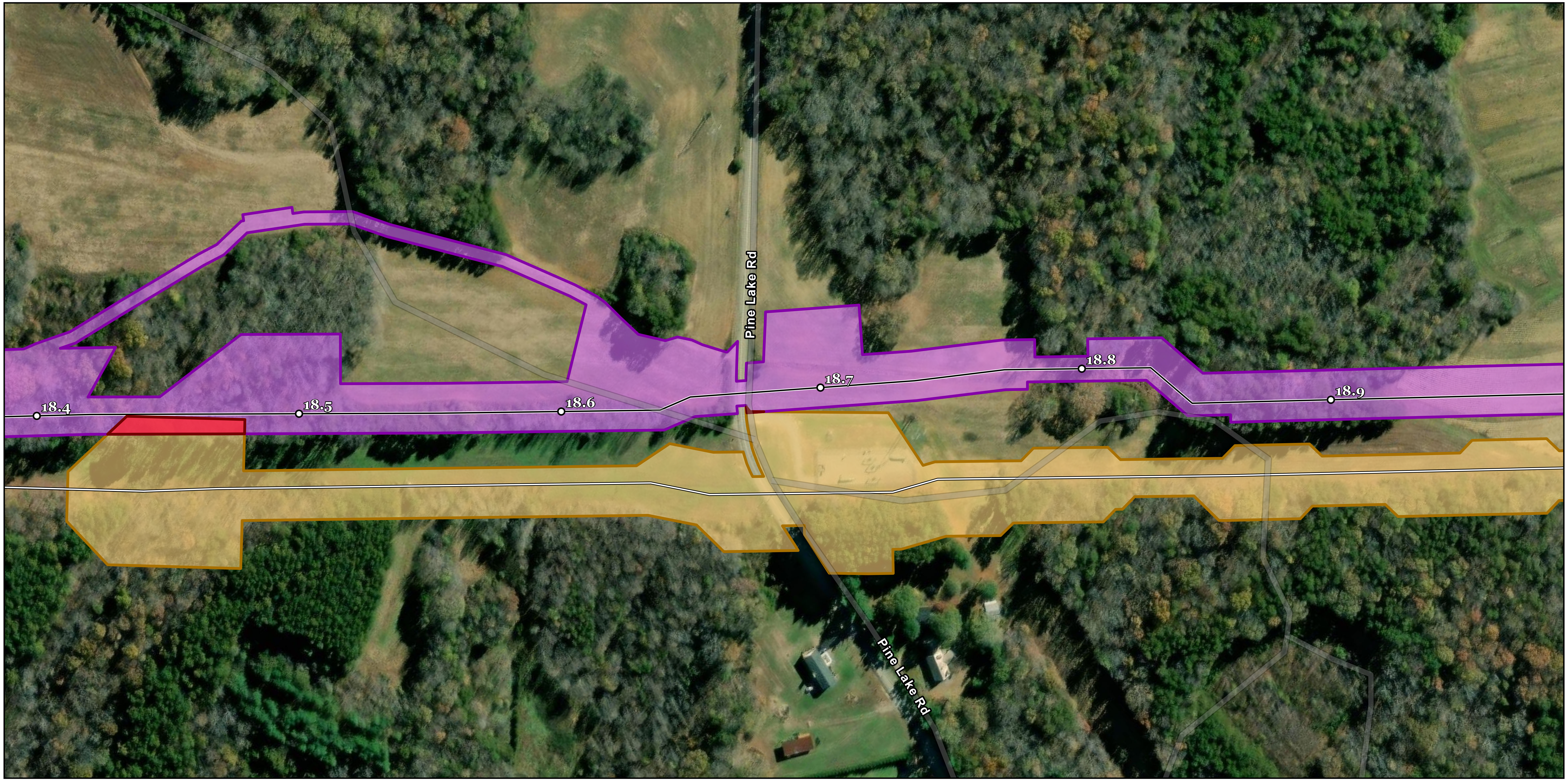
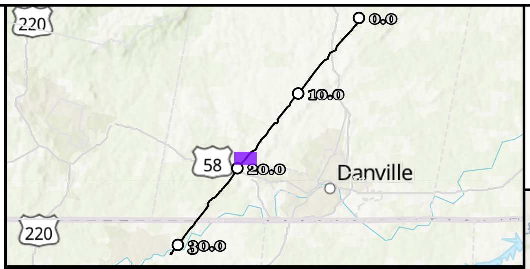


🟥	LOD OVERLAP
○	SOUTHGATE MILEPOST
—	SOUTHGATE CENTERLINE
🟪	SOUTHGATE LOD
═	SSEP CENTERLINE
🟨	SSEP LOD



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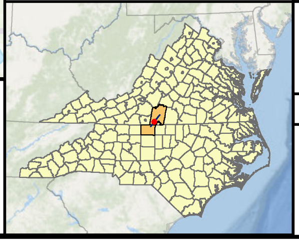
0 100 200
FEET
1:2,400 1" = 200'



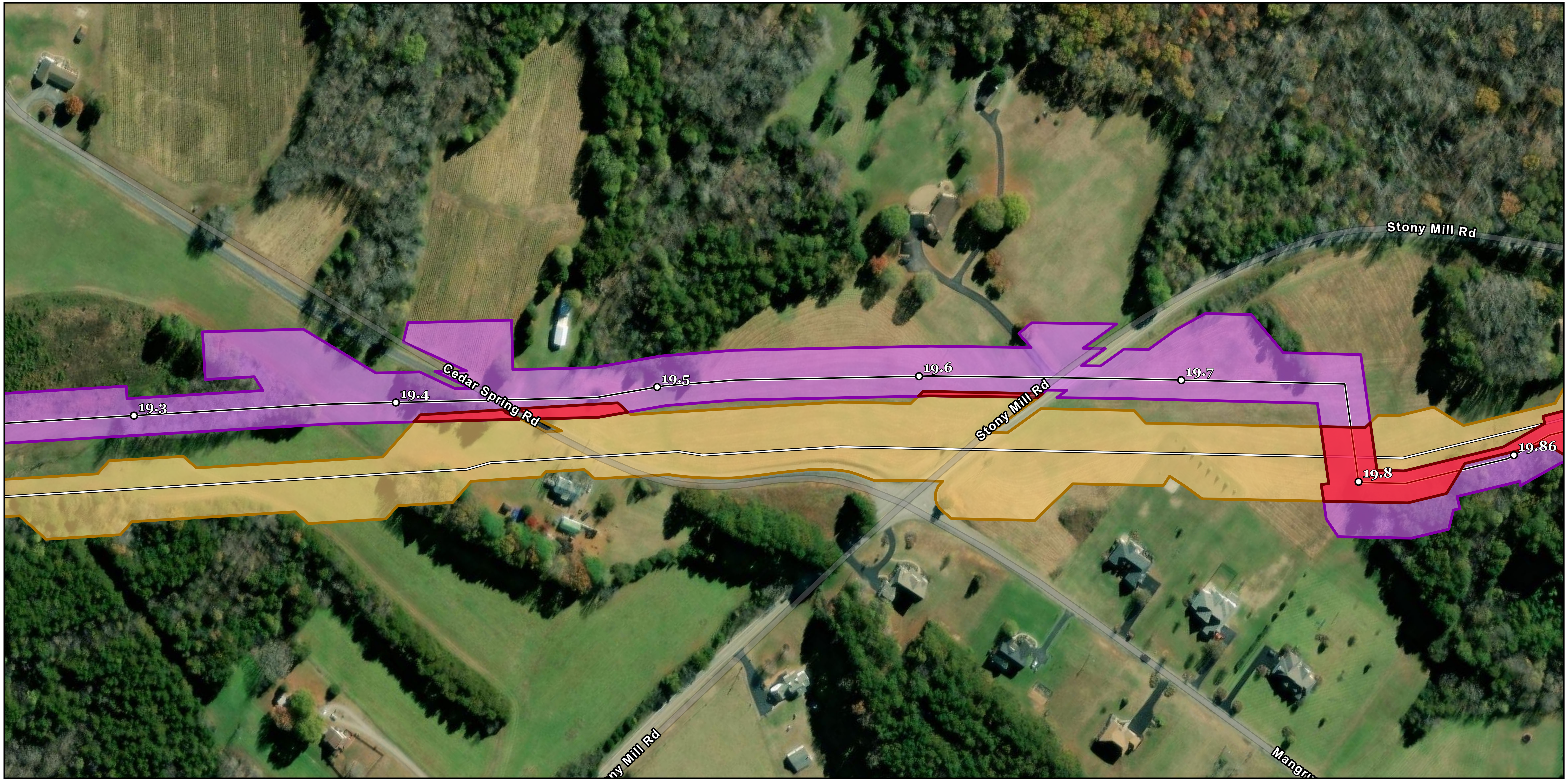
PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

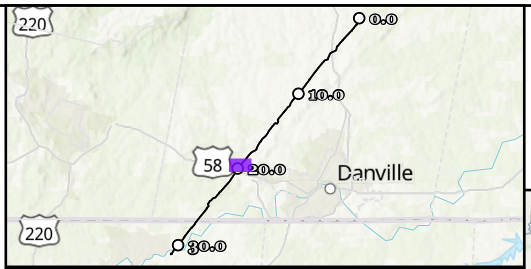
PAGE: 21
CL-043

DATE: JULY 2025

MVP SOUTHGATE



🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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0 100 200
FEET
1:2,400
1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 22
CL-045

DATE:
JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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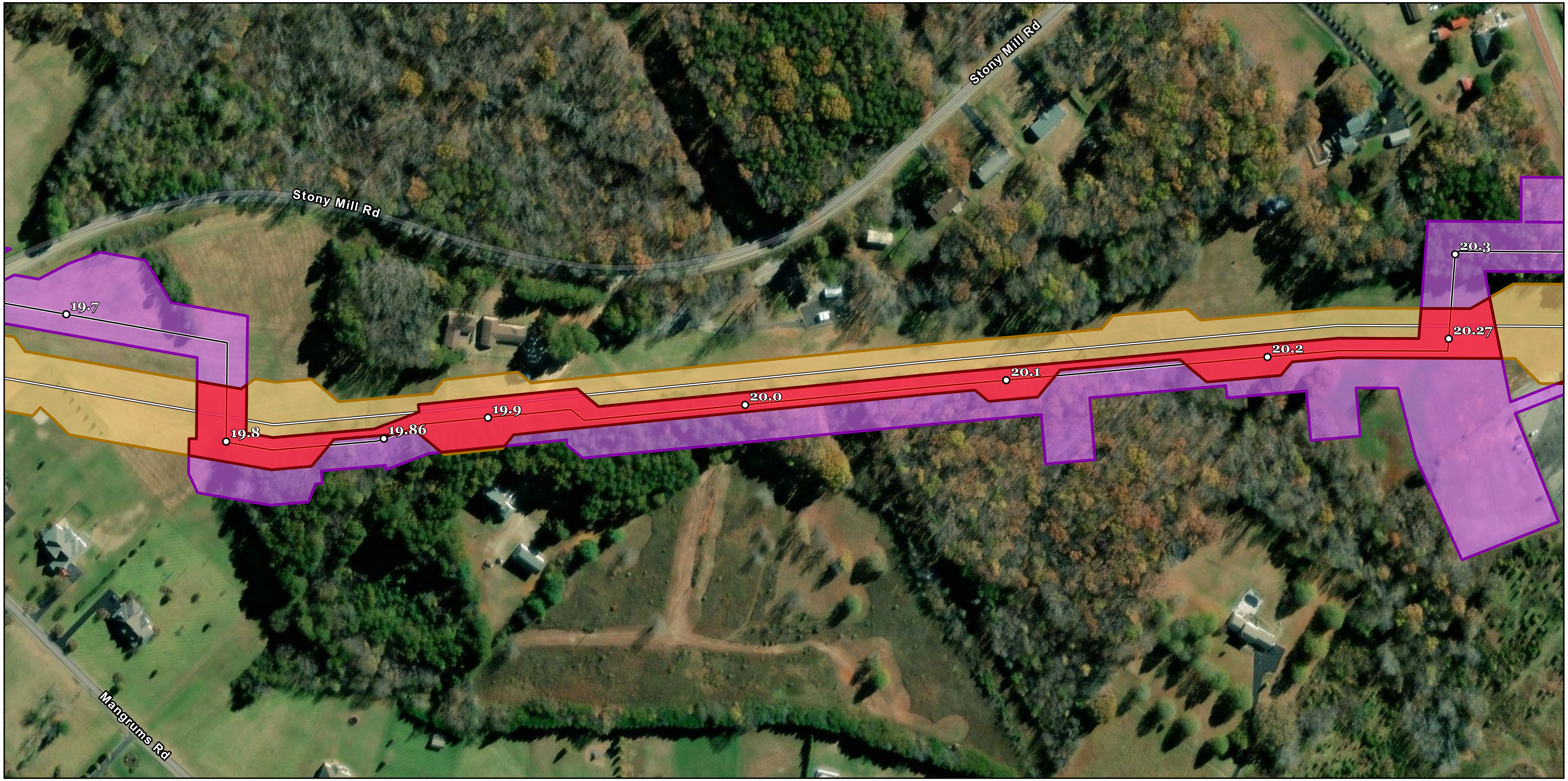
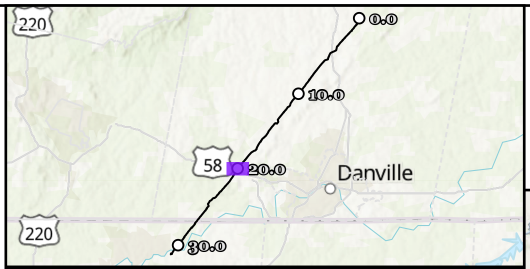


- 🟥 LOD OVERLAP
- ○ SOUTHGATE MILEPOST
- — SOUTHGATE CENTERLINE
- 🟪 SOUTHGATE LOD
- ═ SSEP CENTERLINE
- 🟨 SSEP LOD



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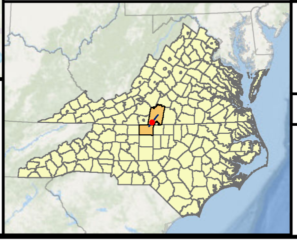
0 100 200
FEET
1:2,400
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 23
CL-046

DATE: JULY 2025

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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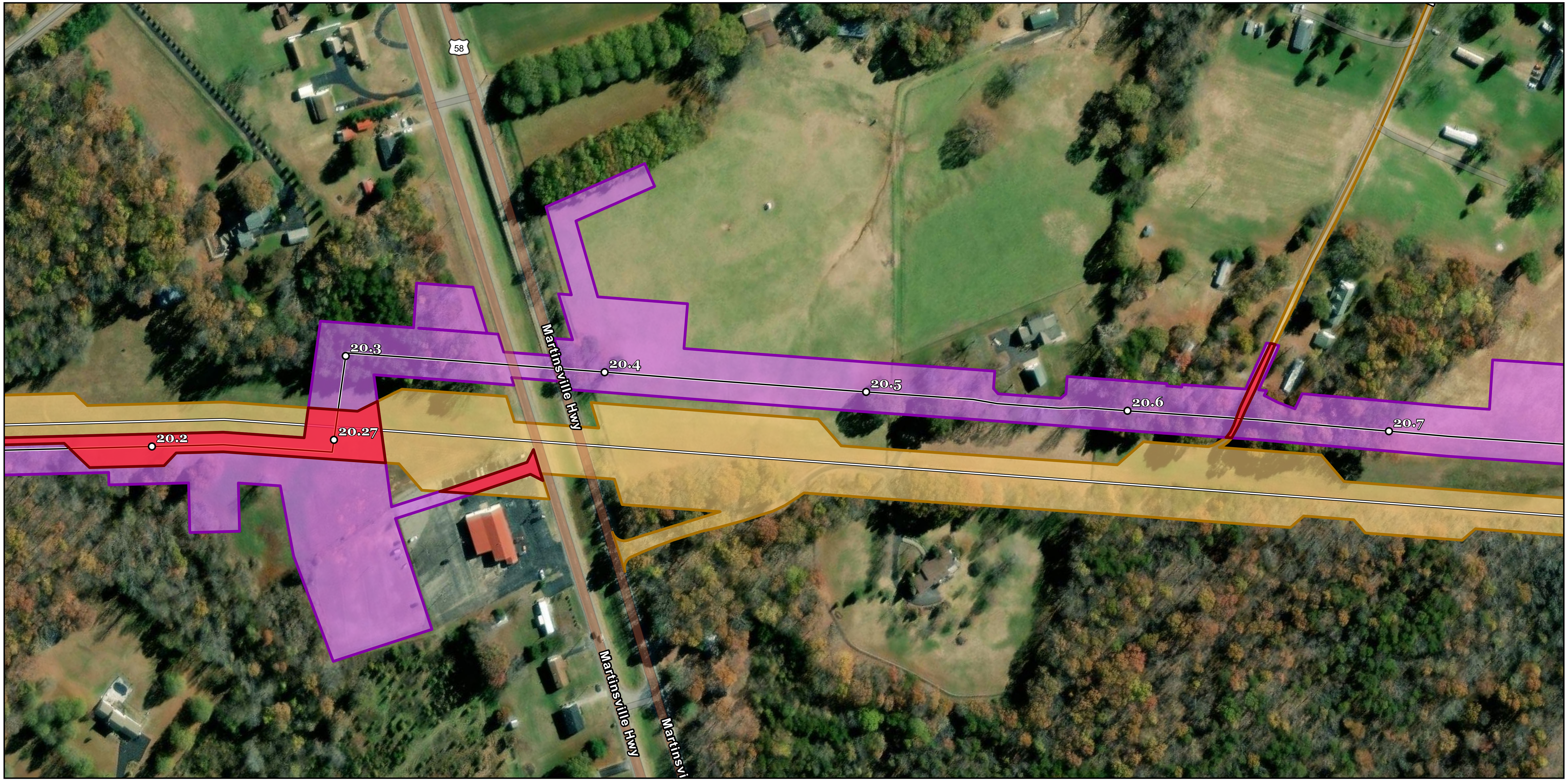
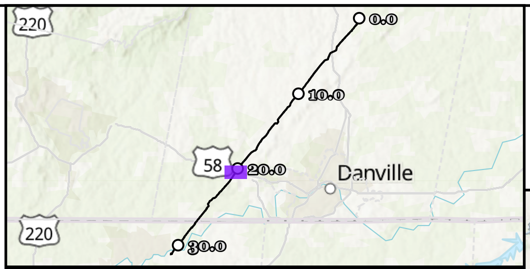


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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0 100 200
FEET
1:2,400
1" = 200'

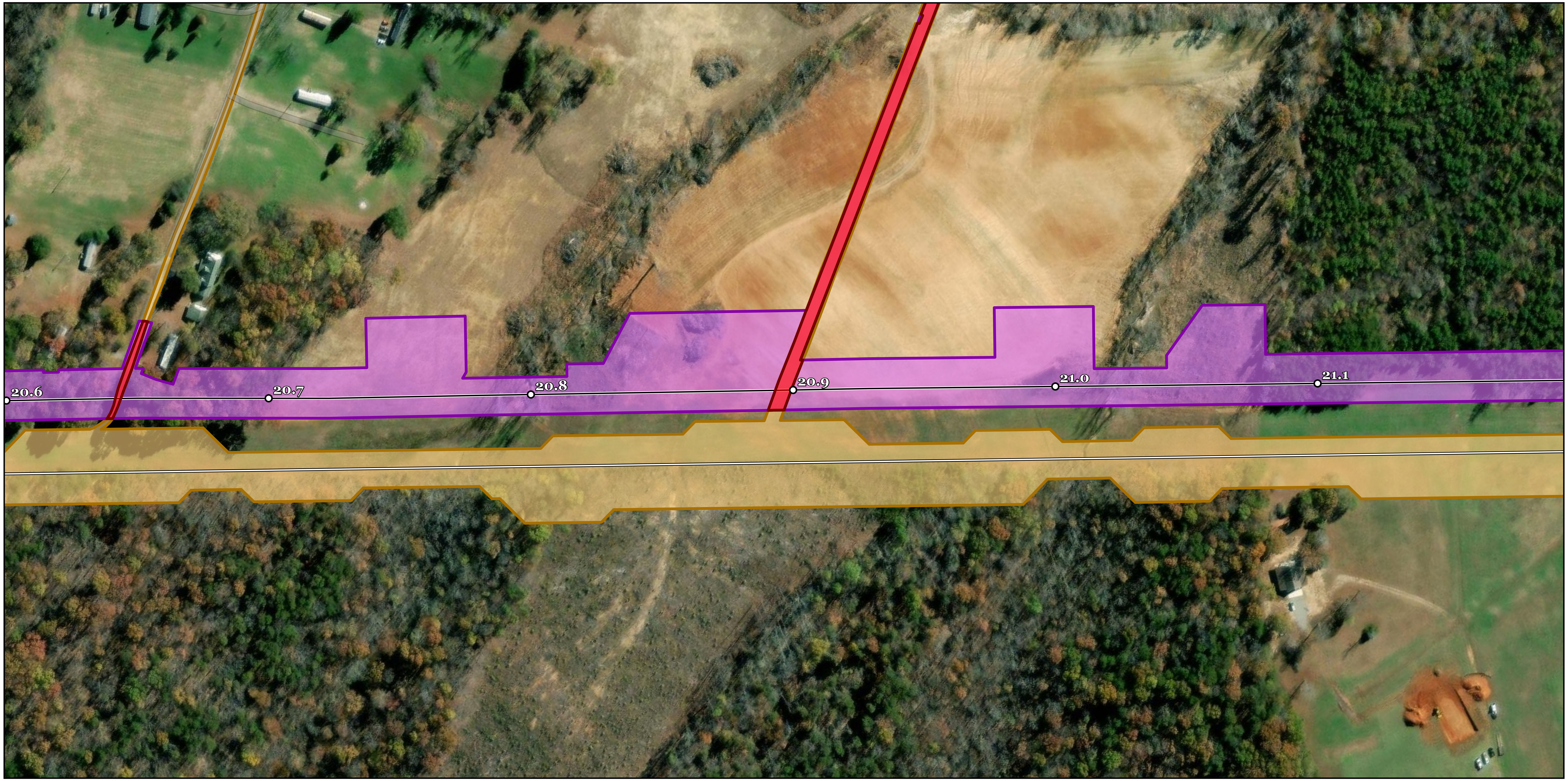
PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

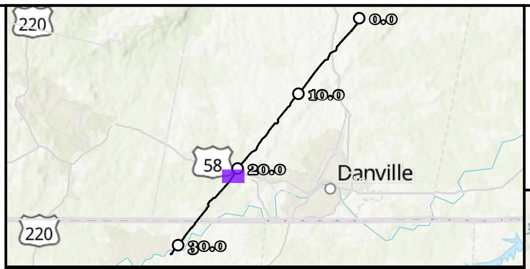
PAGE: 24
CL-047

DATE:
JULY 2025

MVP SOUTHGATE



🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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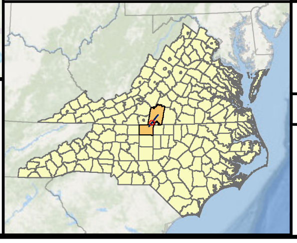
0 100 200
FEET
1:2,400
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 25
CL-048

DATE:
JULY 2025

MVP
SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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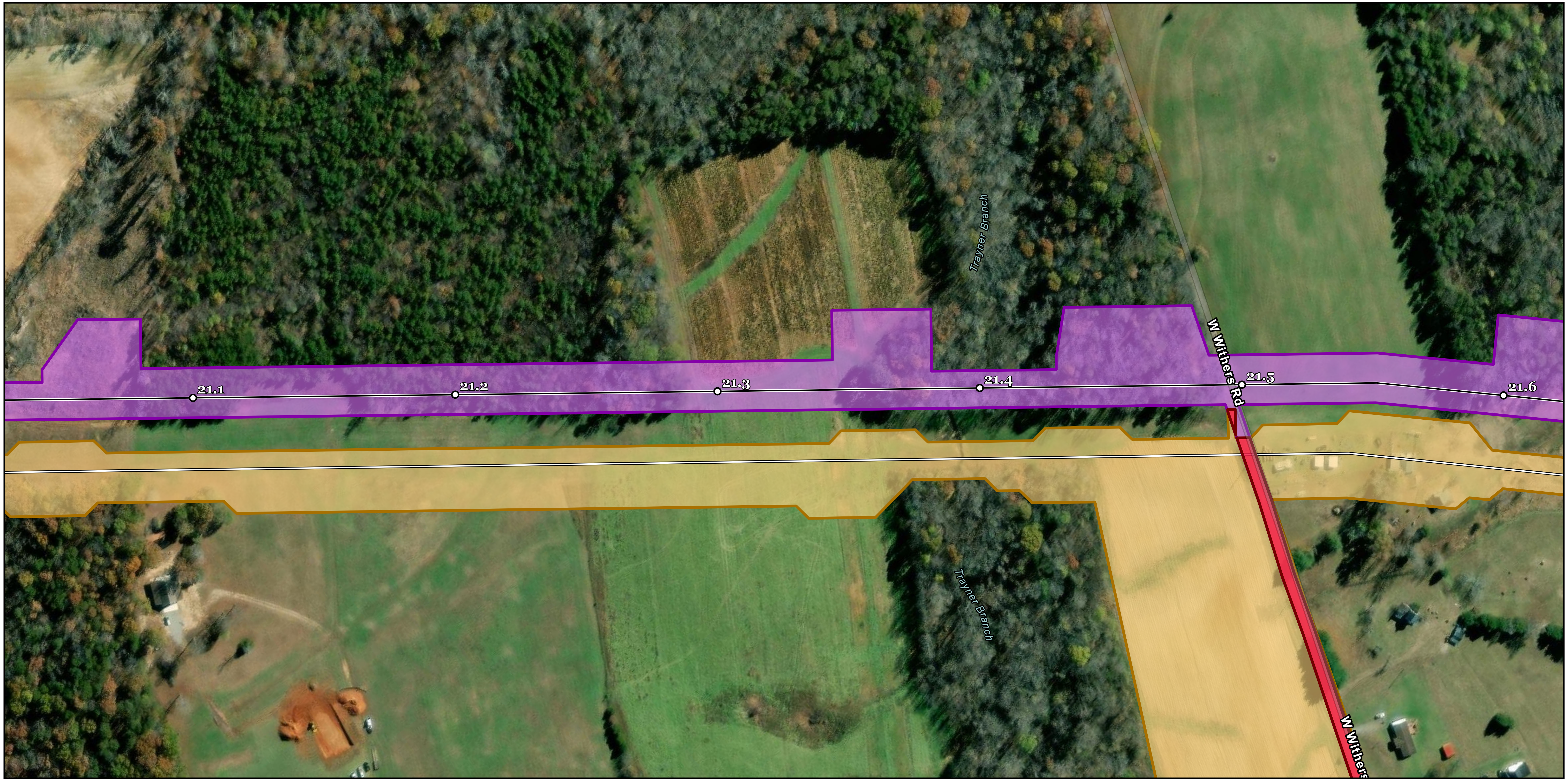
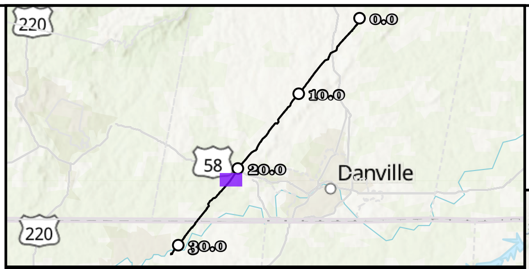


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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0 100 200
FEET
1:2,400
1" = 200'

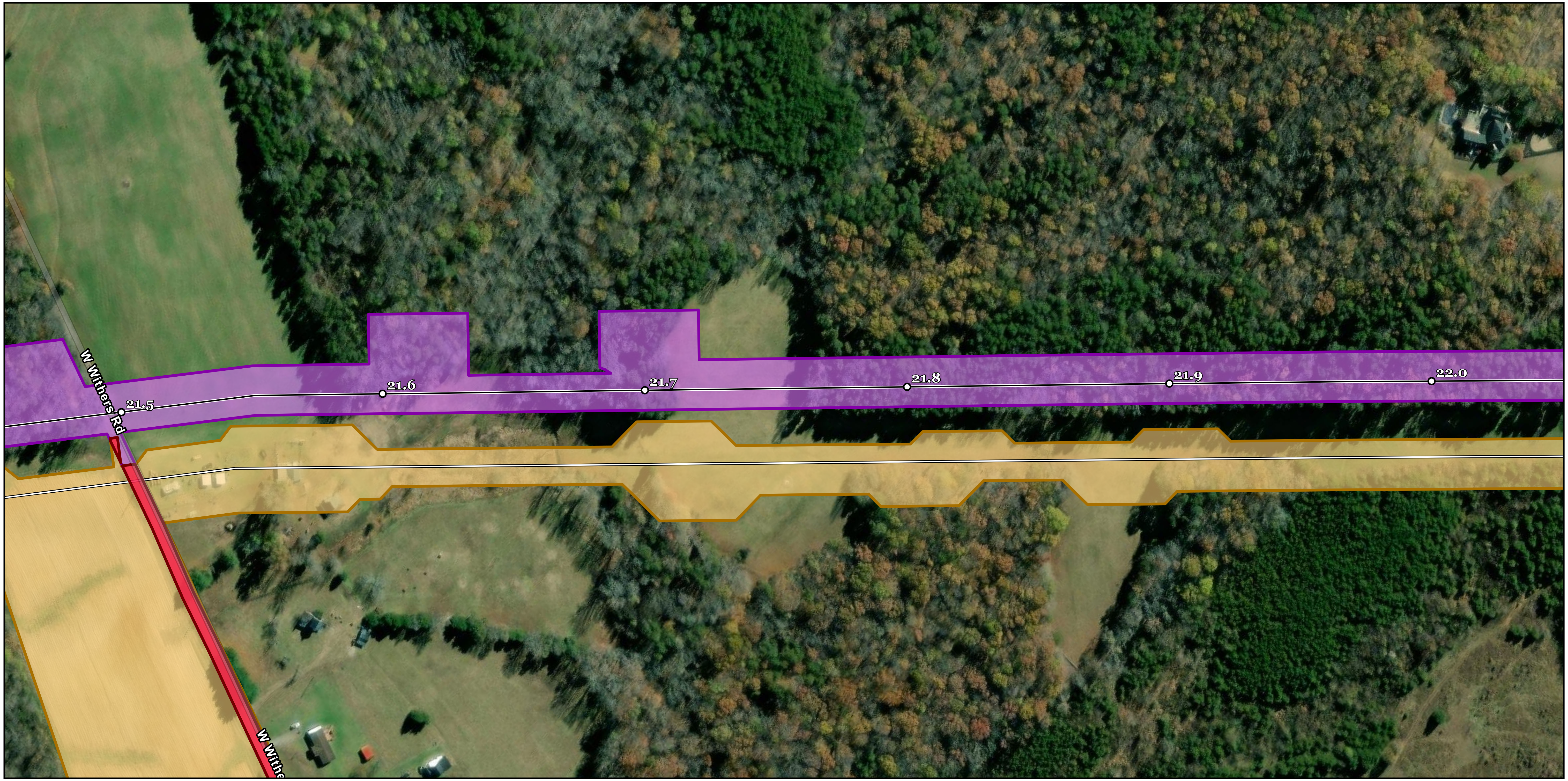
PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

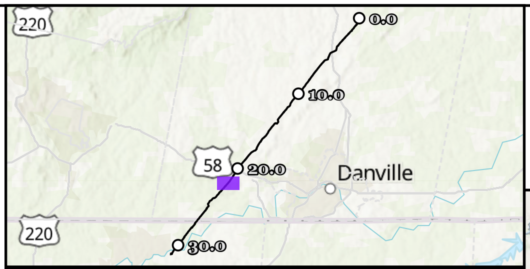
PAGE: 26
CL-049

DATE:
JULY 2025

MVP
SOUTHGATE



🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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0 100 200
FEET
1:2,400
1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 27
CL-050

DATE:
JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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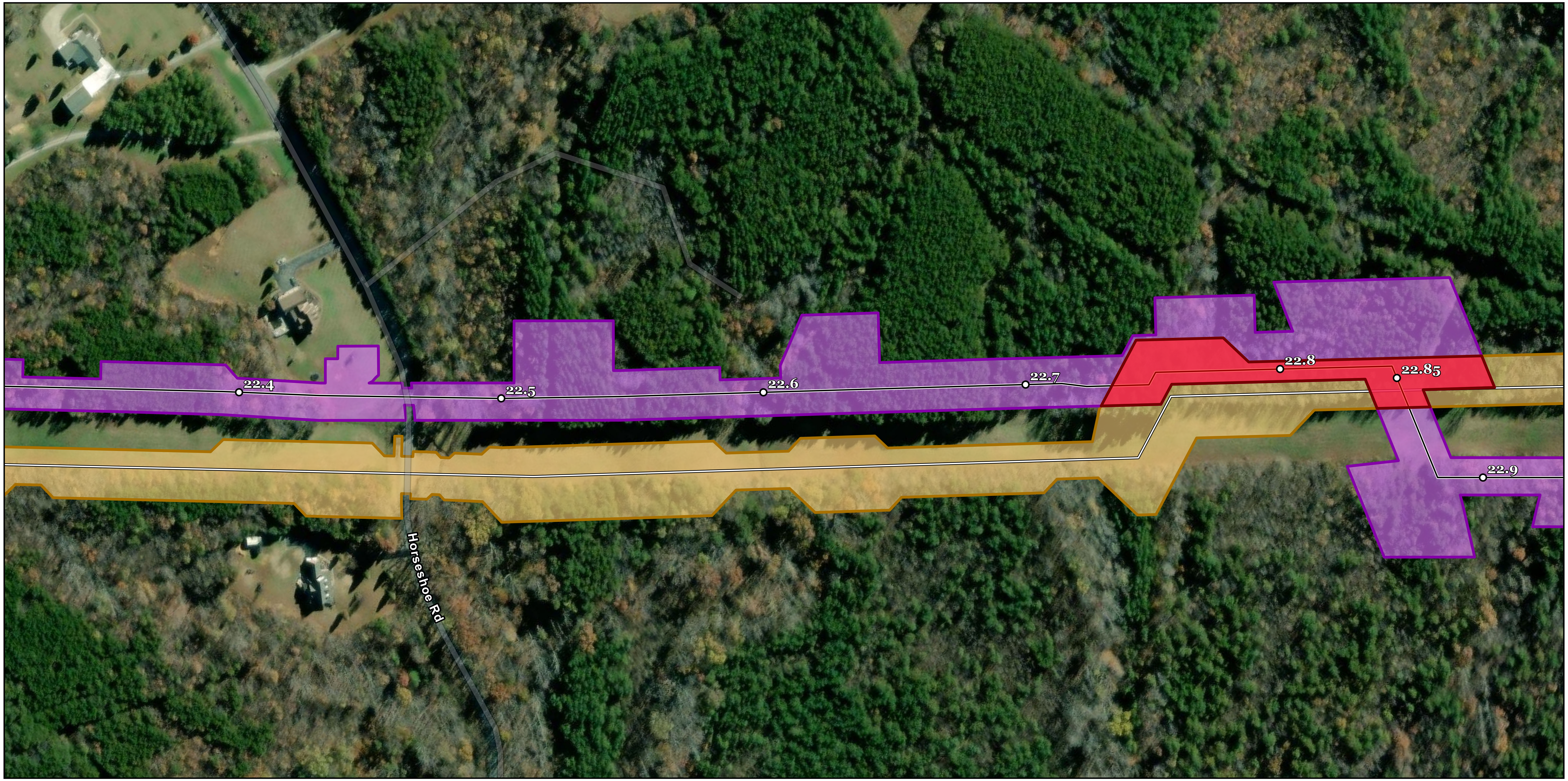
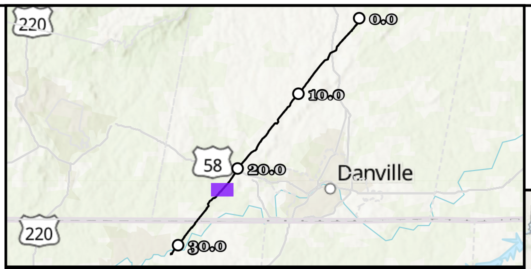


- 🟥 LOD OVERLAP
- ○ SOUTHGATE MILEPOST
- — SOUTHGATE CENTERLINE
- 🟪 SOUTHGATE LOD
- ═ SSEP CENTERLINE
- 🟨 SSEP LOD



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0 100 200
FEET
1:2,400
1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 28
CL-052

DATE: JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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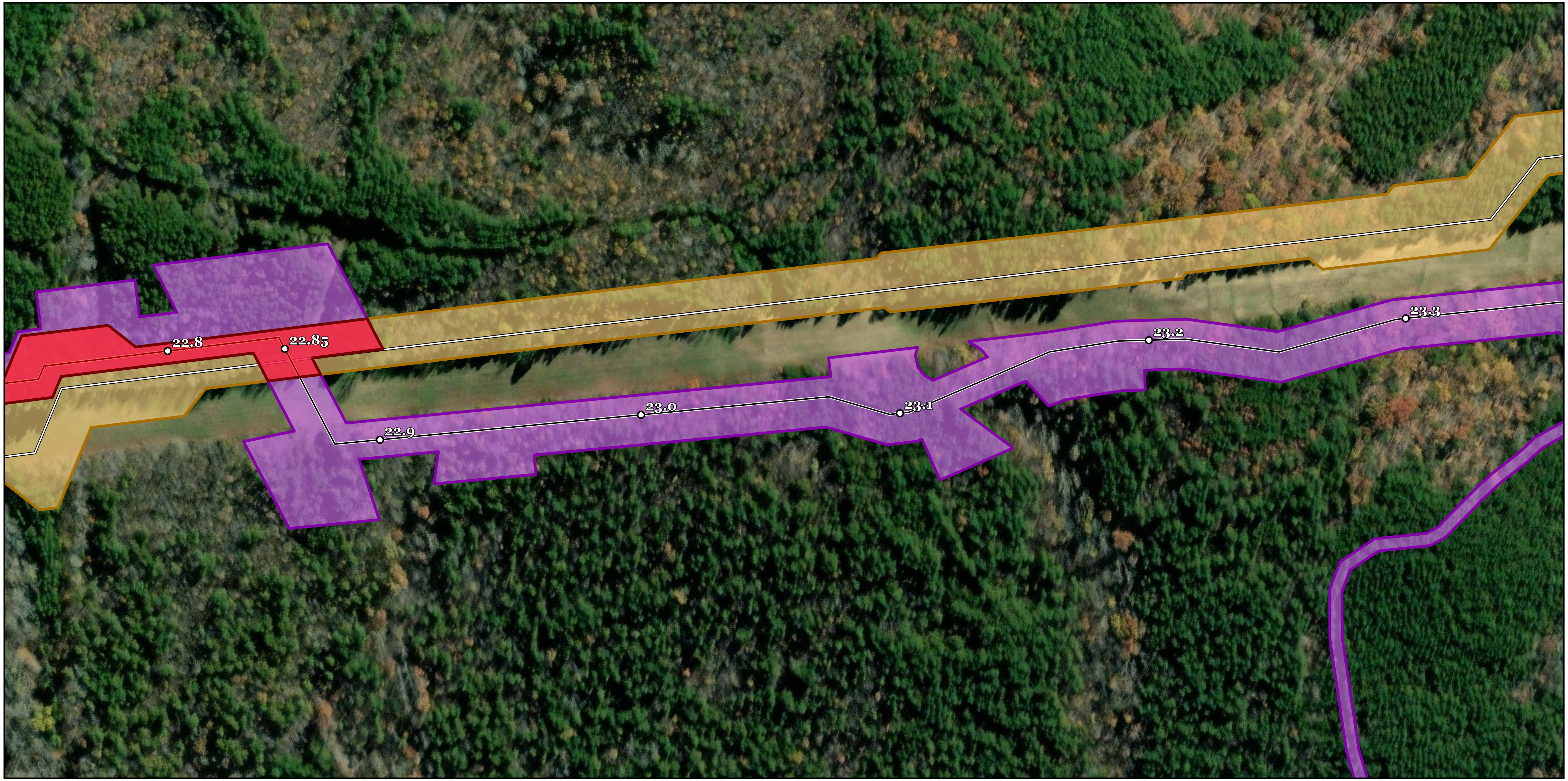
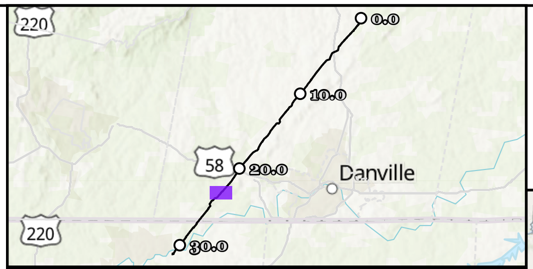


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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0 100 200
FEET
1:2,400 1" = 200'

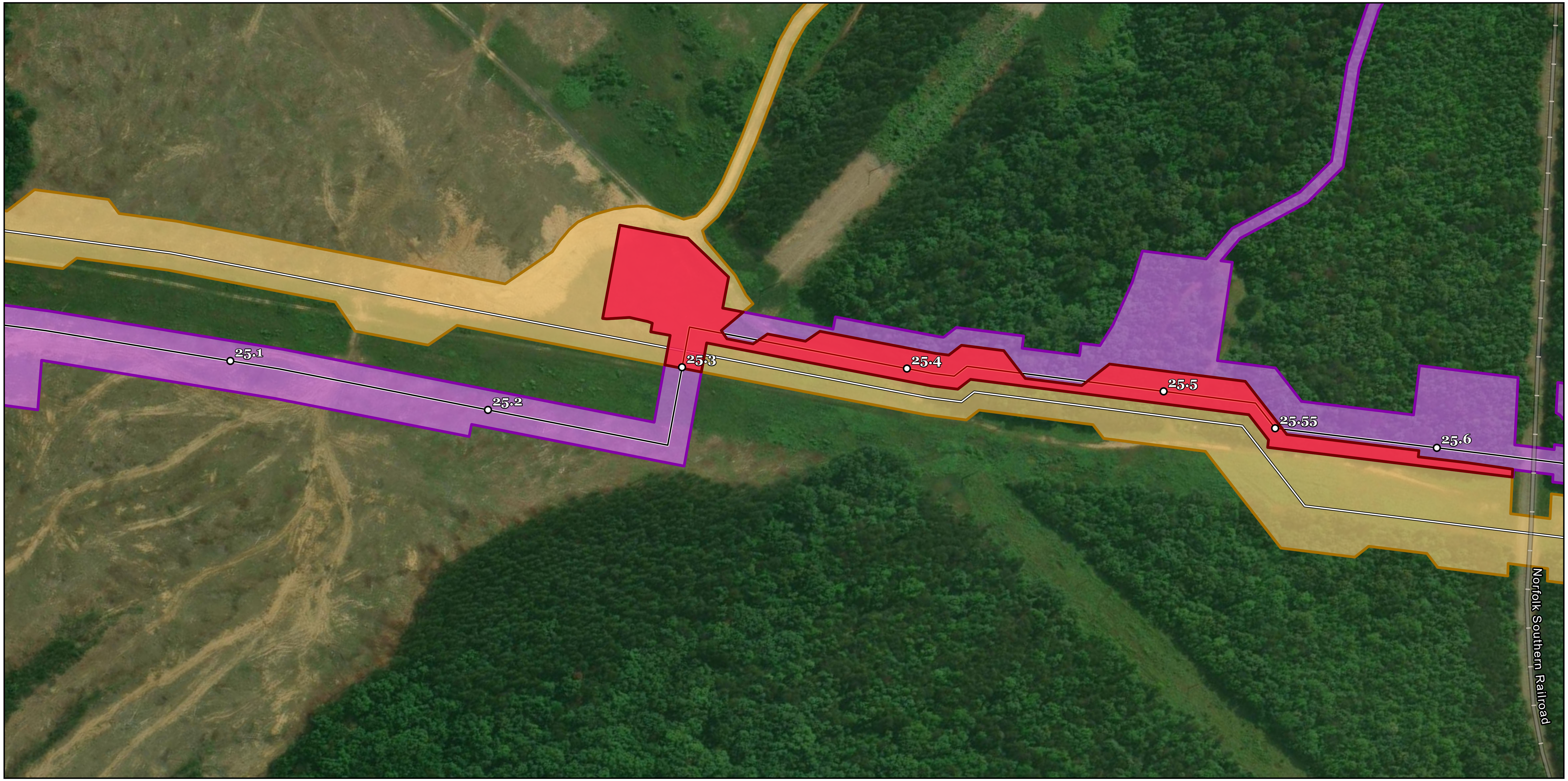
PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

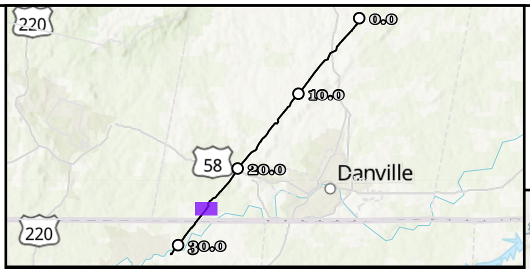
PAGE: 29
CL-053

DATE: JULY 2025

MVP SOUTHGATE



🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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0 100 200
FEET
1:2,400 1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 30
CL-058

DATE: JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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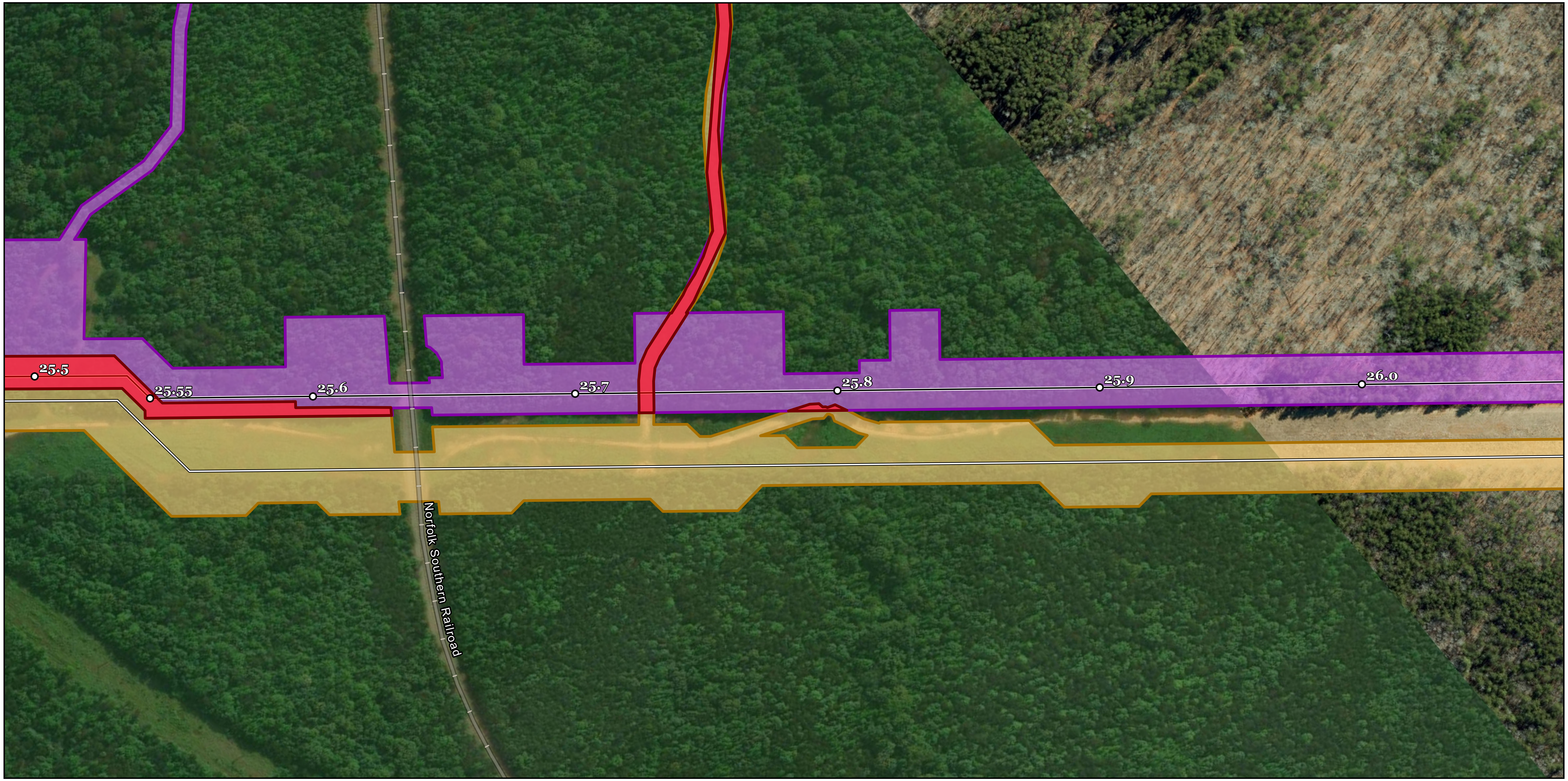
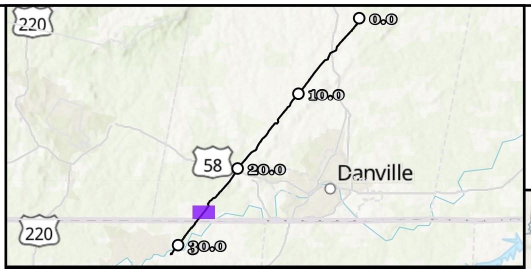


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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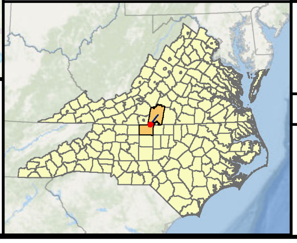
0 100 200
FEET
1:2,400
1" = 200'



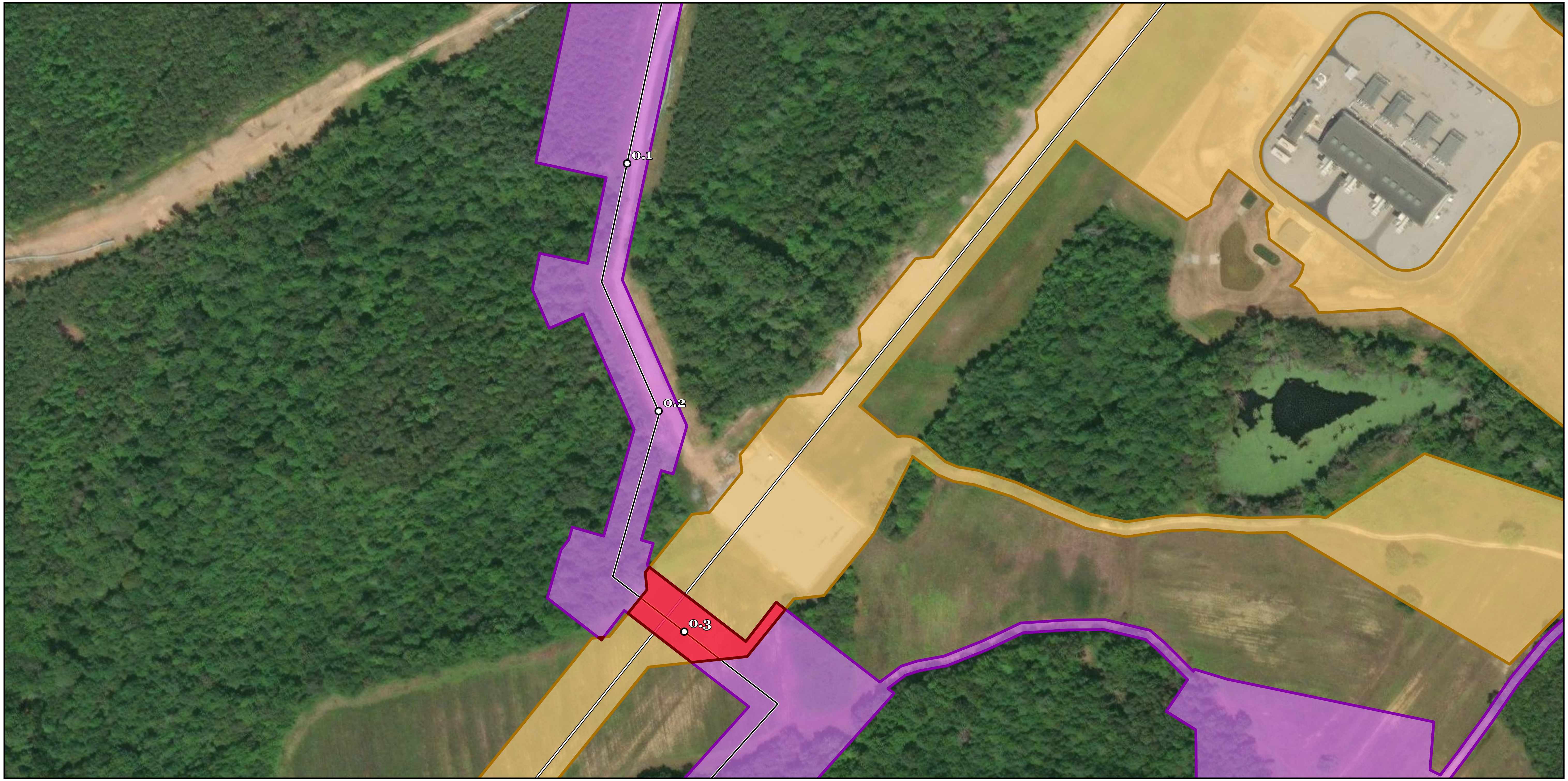
PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 31
CL-059

DATE: JULY 2025

MVP SOUTHGATE



🟥 LOD OVERLAP

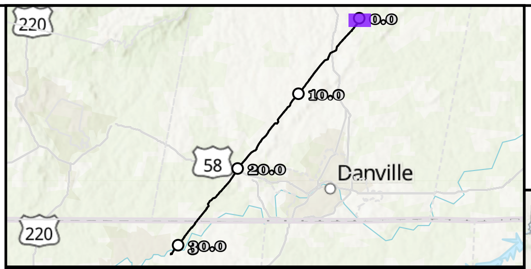
○ SOUTHGATE MILEPOST

— SOUTHGATE CENTERLINE

▨ SOUTHGATE LOD

═ SSEP CENTERLINE

▨ SSEP LOD



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N

0 100 200

FEET

1:2,400 1" = 200'

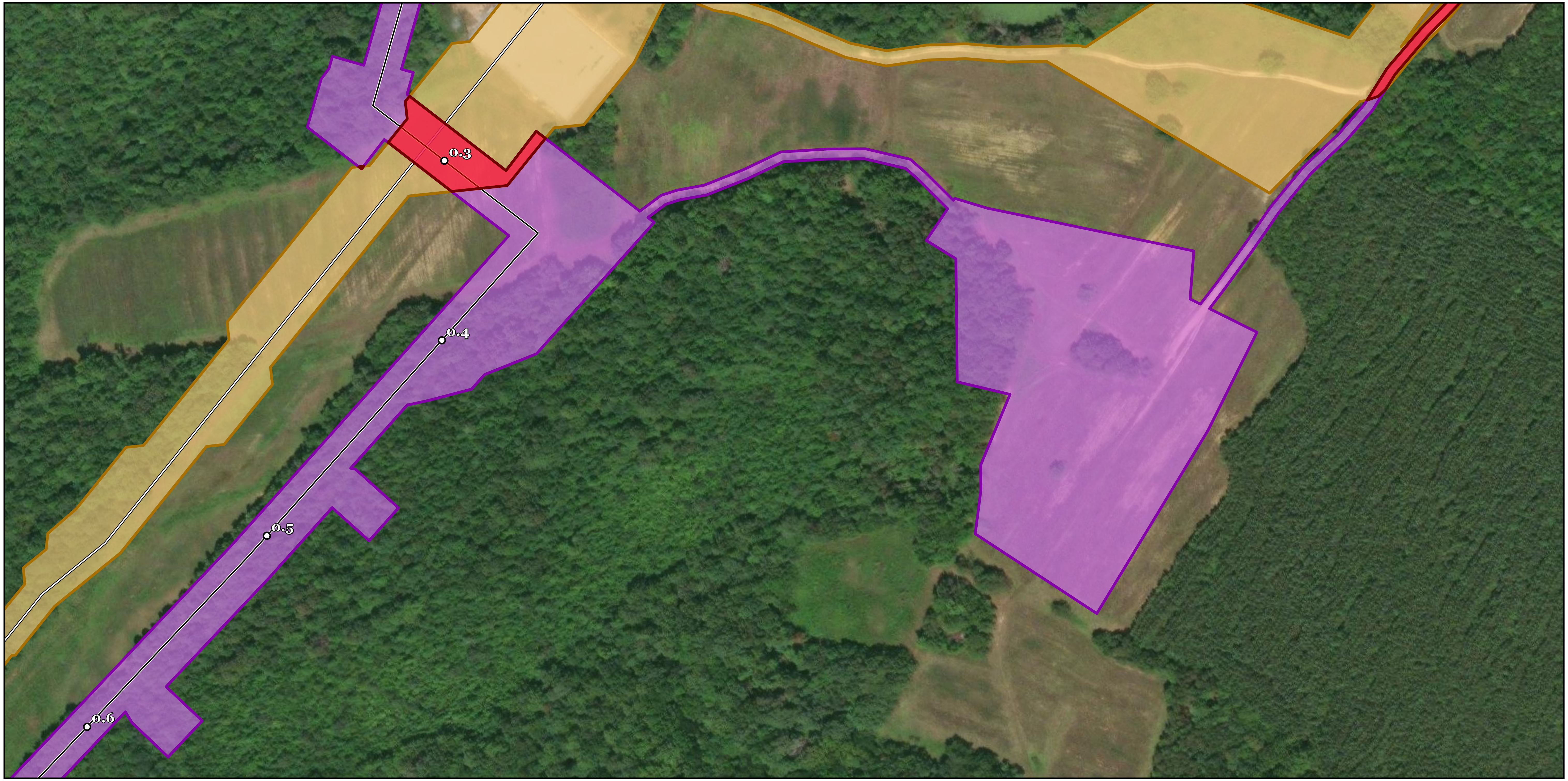
PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 32
AR-003

DATE: JULY 2025

MVP SOUTHGATE



🟥 LOD OVERLAP

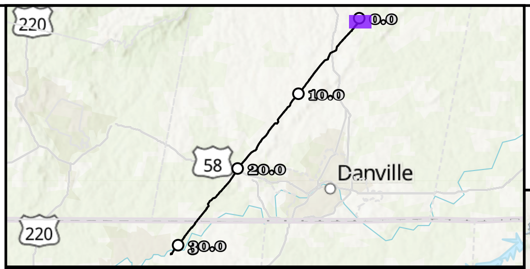
○ SOUTHGATE MILEPOST

— SOUTHGATE CENTERLINE

🟪 SOUTHGATE LOD

═ SSEP CENTERLINE

🟧 SSEP LOD



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0 100 200

FEET

1:2,400 1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 33
AR-004

DATE: JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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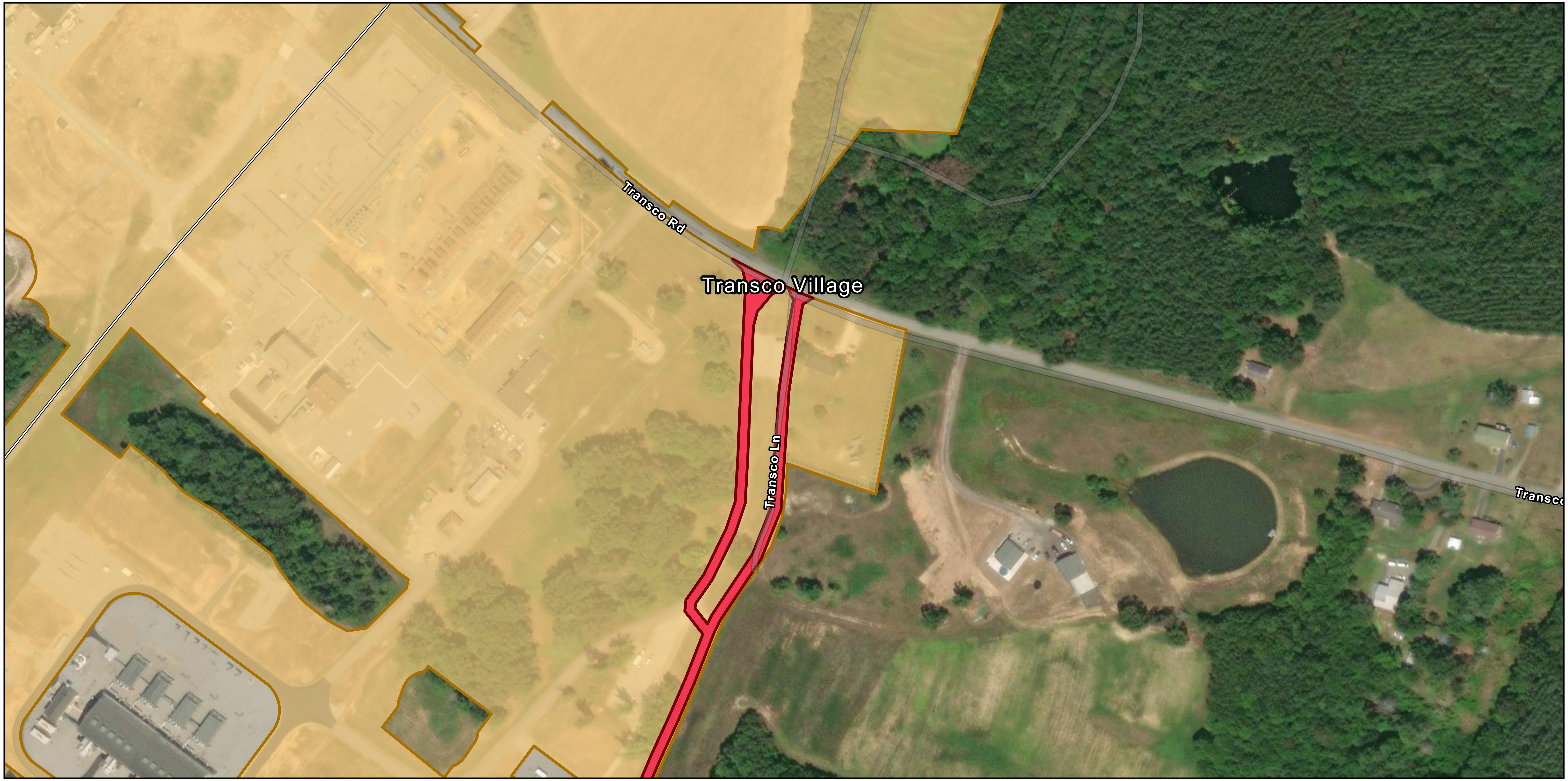
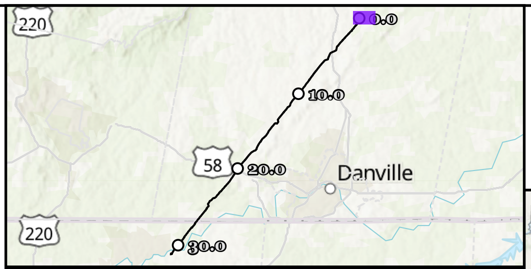


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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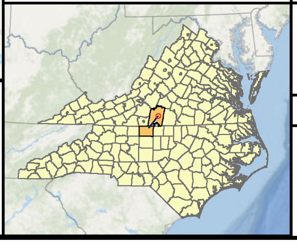
1:2,400
1" = 200'



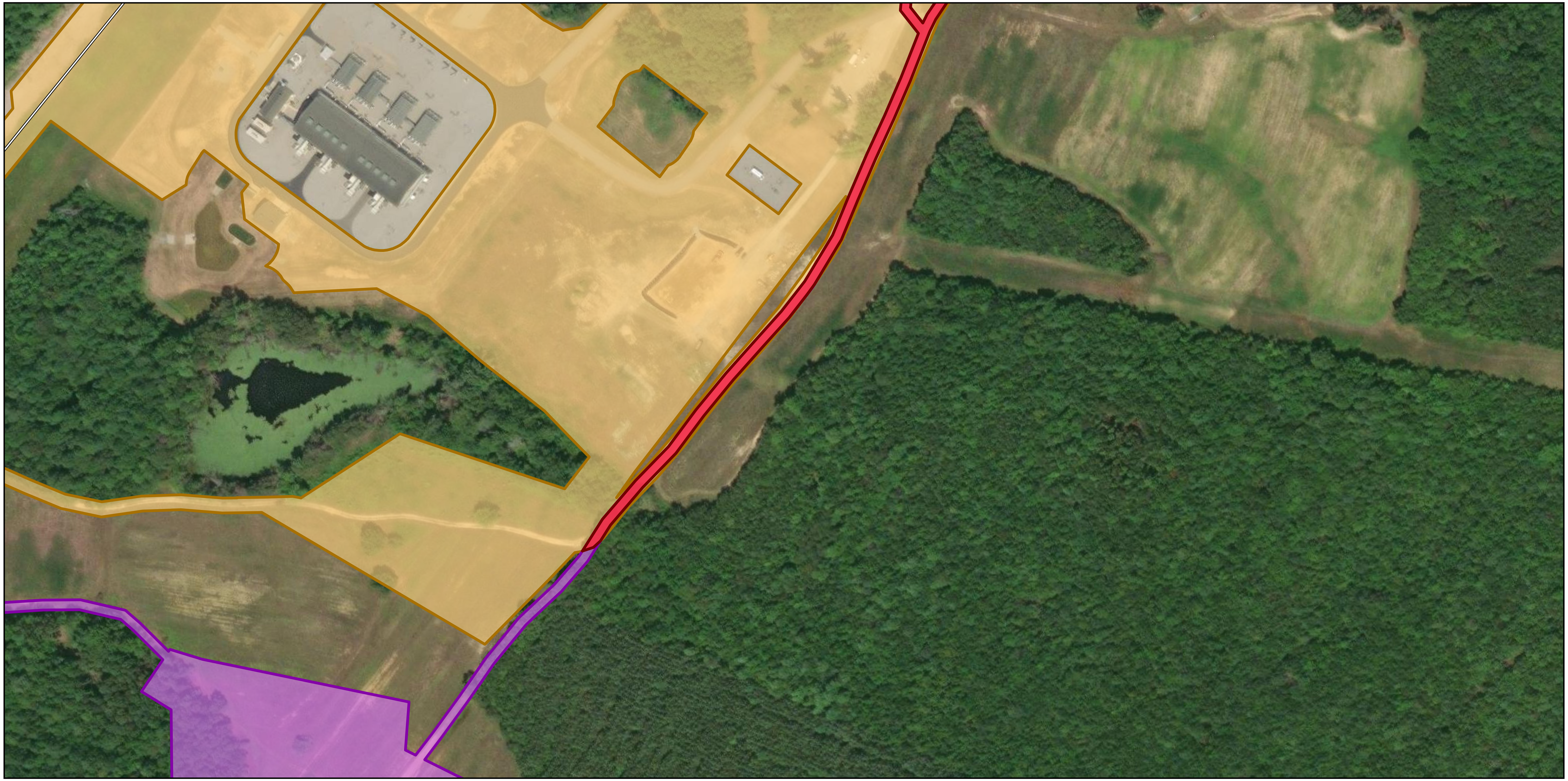
PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

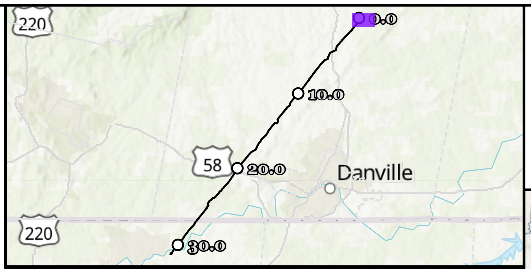
PAGE: 34
AR-005

DATE:
JULY 2025

MVP SOUTHGATE



- 🟥 LOD OVERLAP
- ○ SOUTHGATE MILEPOST
- — SOUTHGATE CENTERLINE
- 🟪 SOUTHGATE LOD
- ═ SSEP CENTERLINE
- 🟧 SSEP LOD



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FEET
1:2,400 1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 35
AR-006

DATE: JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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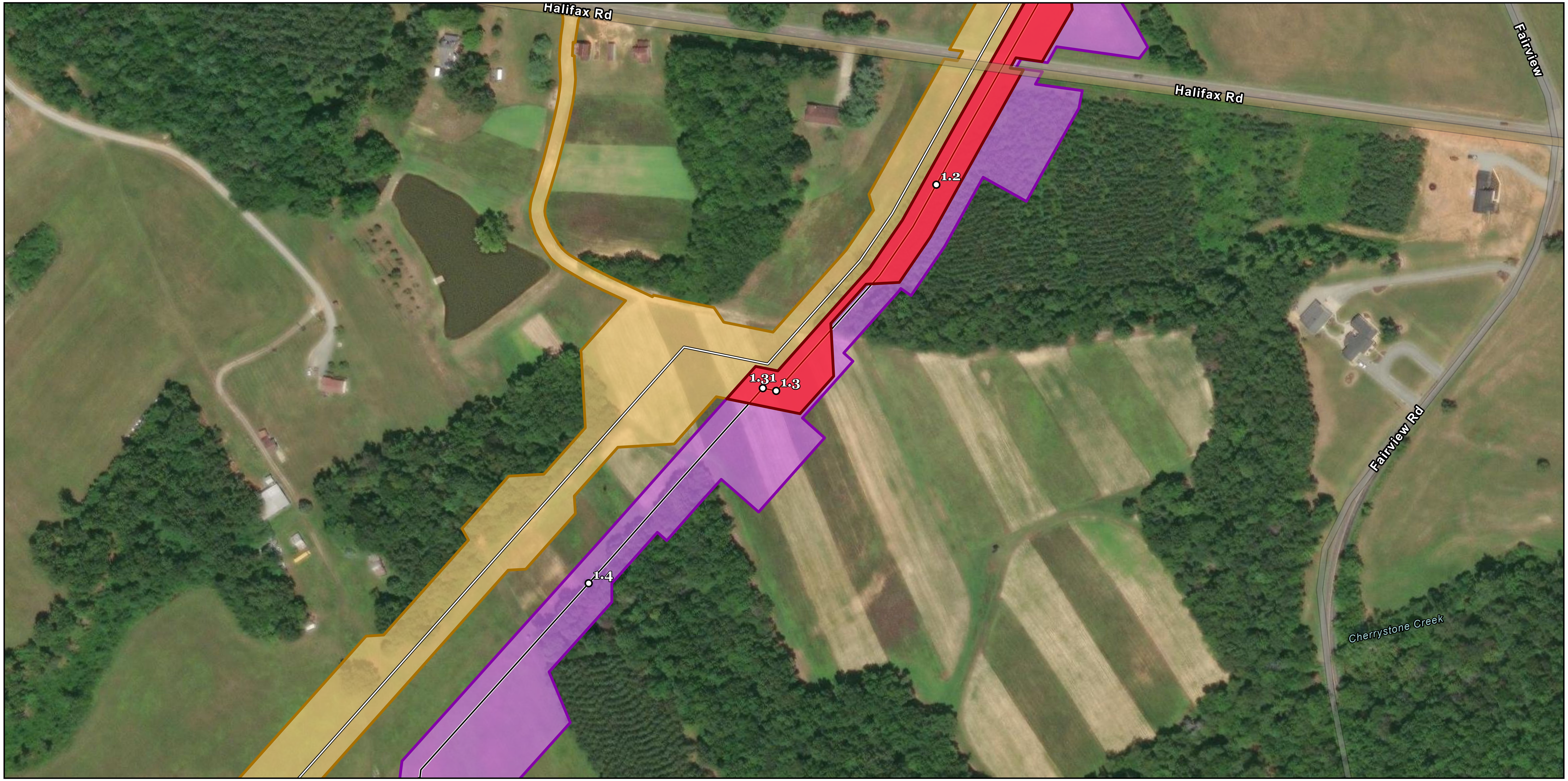
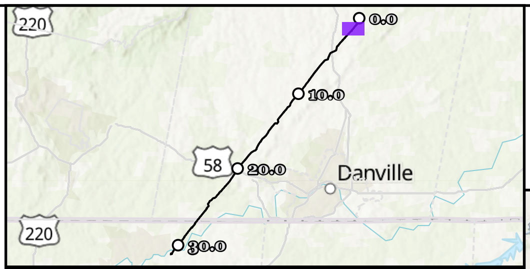


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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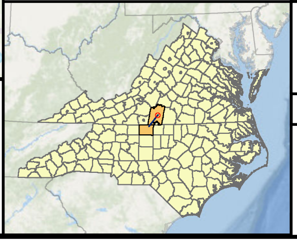
FEET
1:2,400
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 36
AR-007

DATE: JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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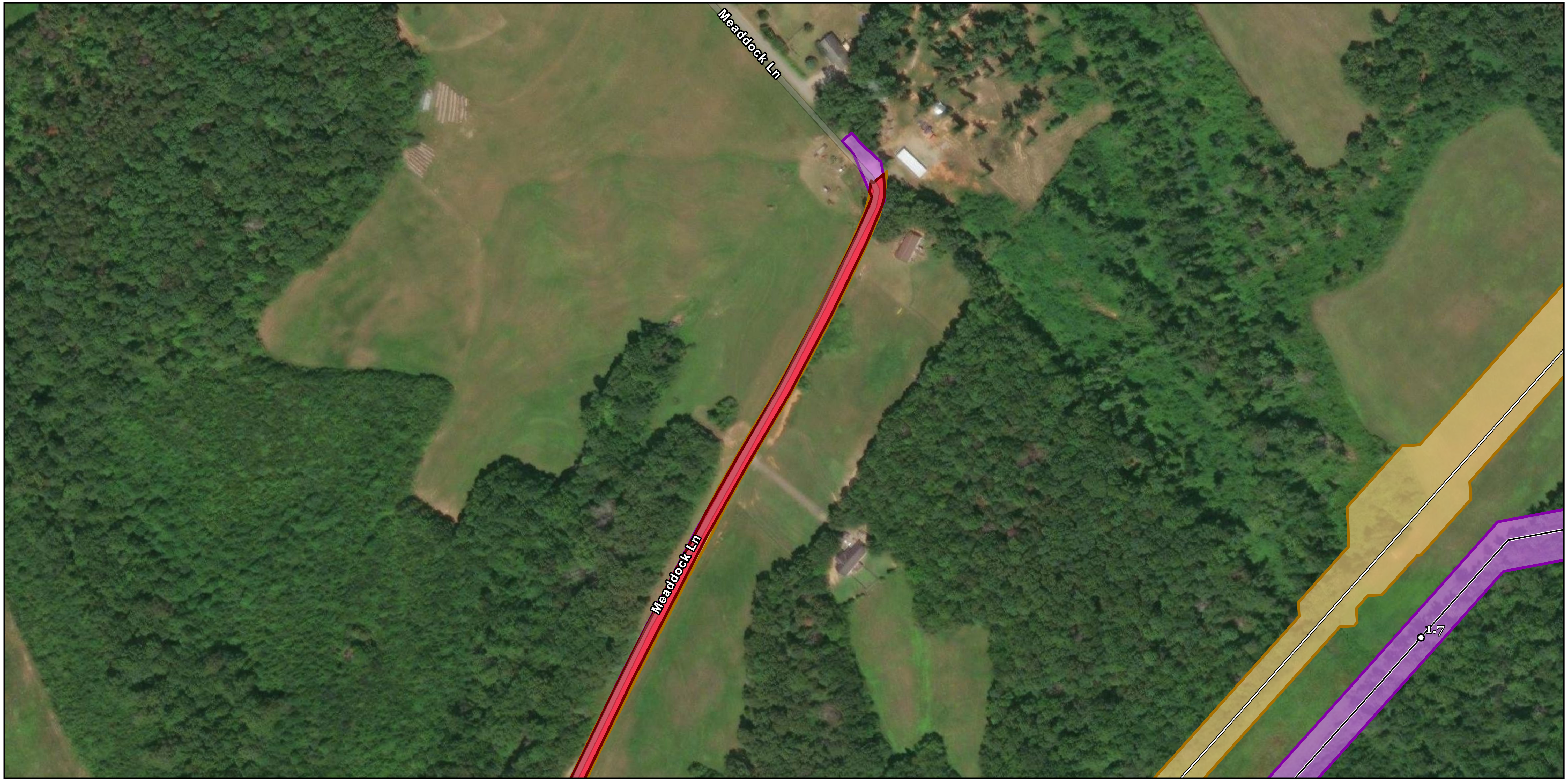
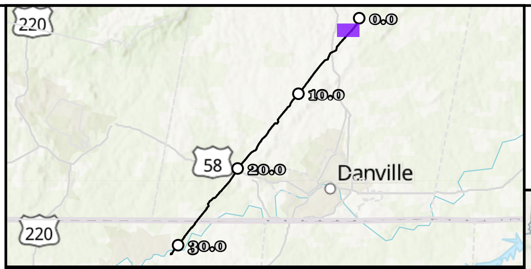


- 🟥 LOD OVERLAP
- ○ SOUTHGATE MILEPOST
- — SOUTHGATE CENTERLINE
- 🟪 SOUTHGATE LOD
- ═ SSEP CENTERLINE
- 🟧 SSEP LOD



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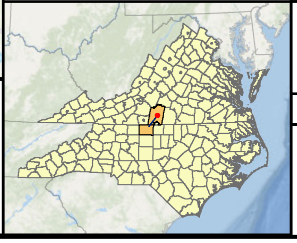
FEET
1:2,400
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 37
AR-008

DATE:
JULY 2025

MVP
SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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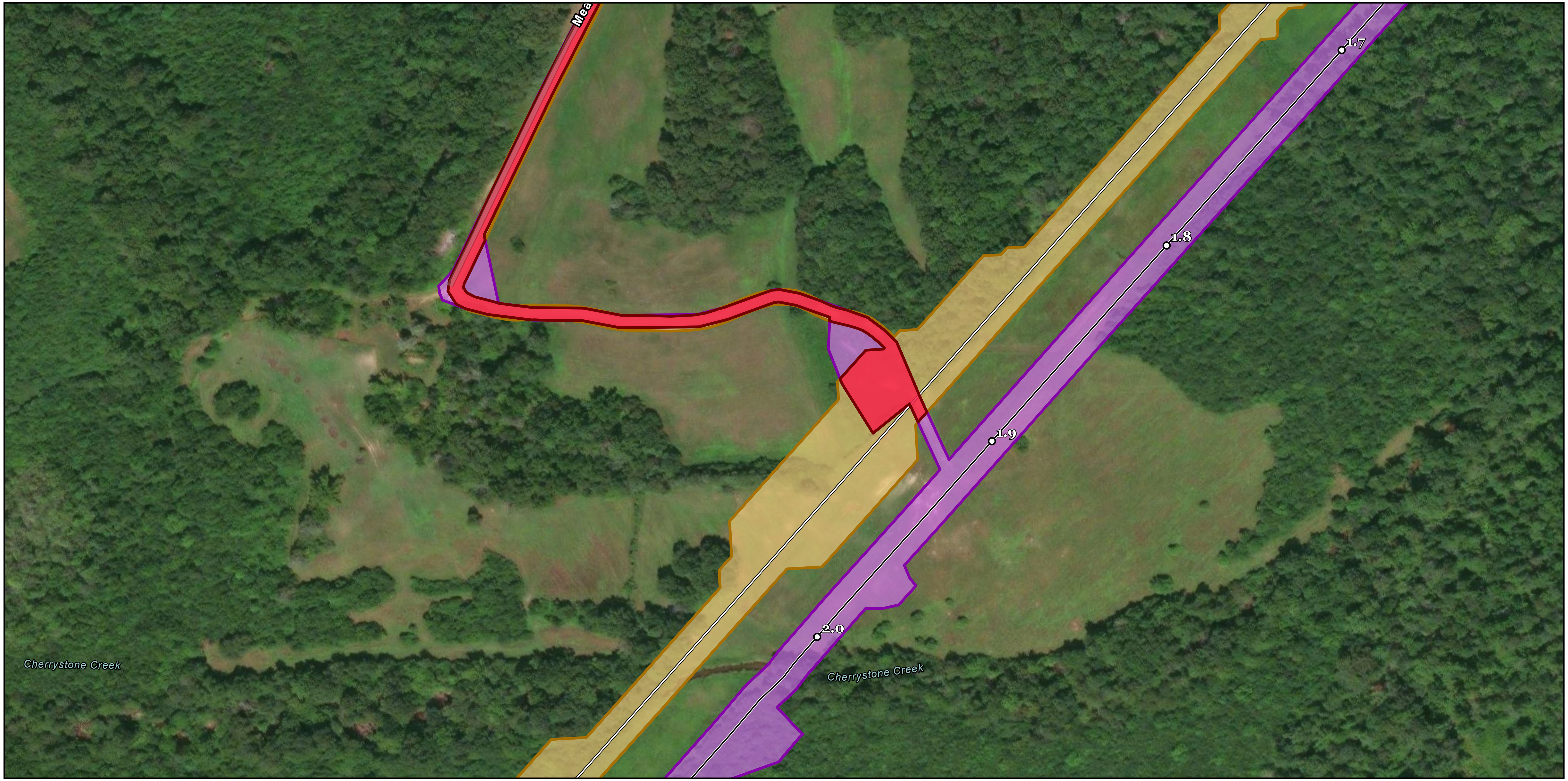
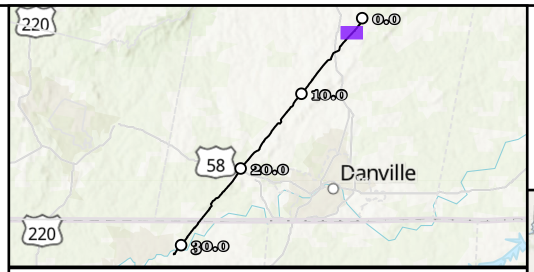


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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FEET
1:2,400
1" = 200'

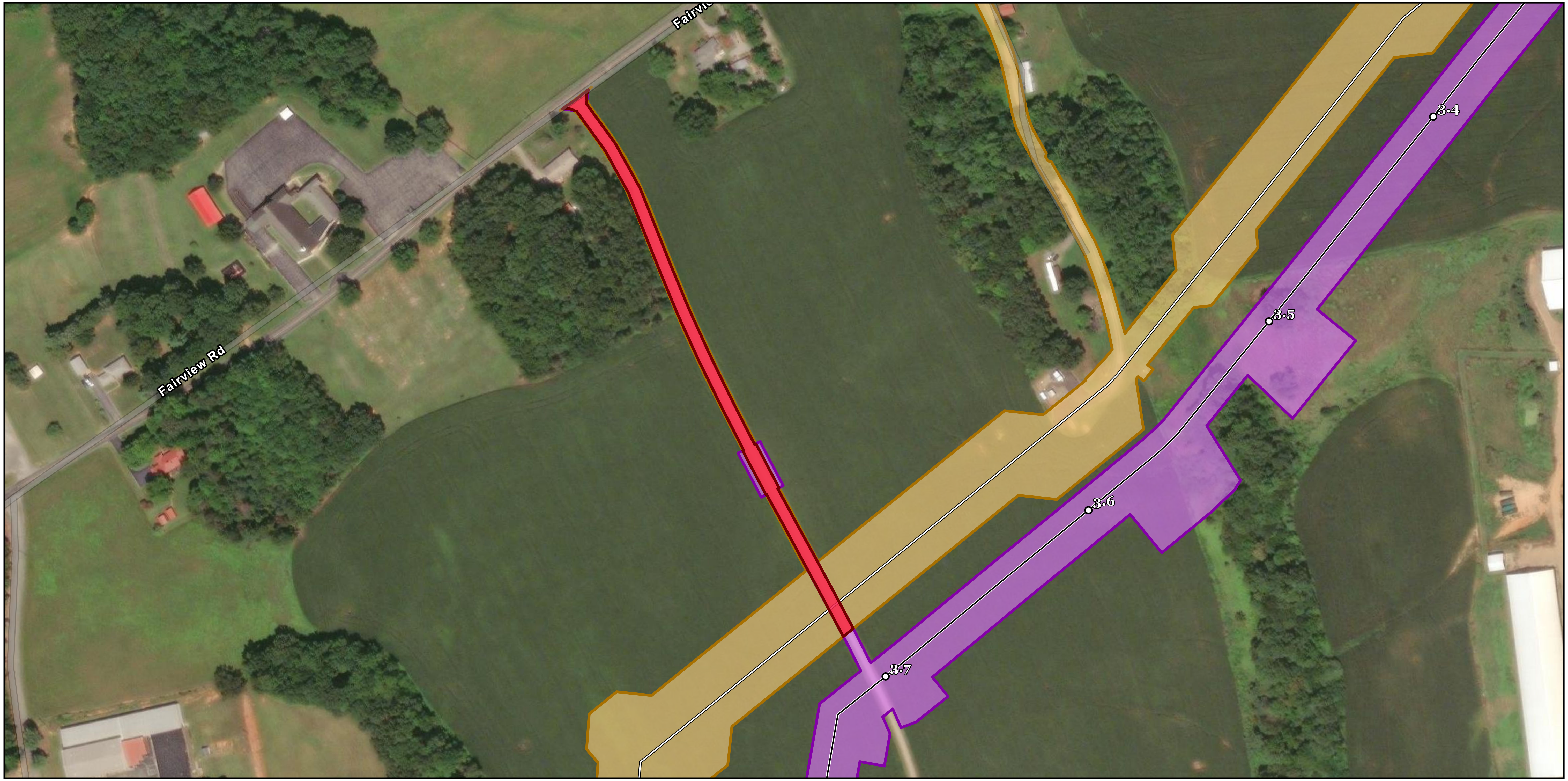
PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

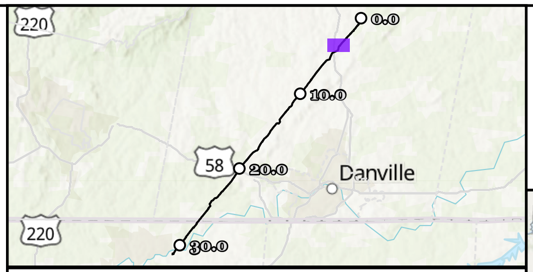
PAGE: 38
AR-009

DATE: JULY 2025

MVP
SOUTHGATE



🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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0 100 200
FEET
1:2,400 1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 39
AR-013

DATE: JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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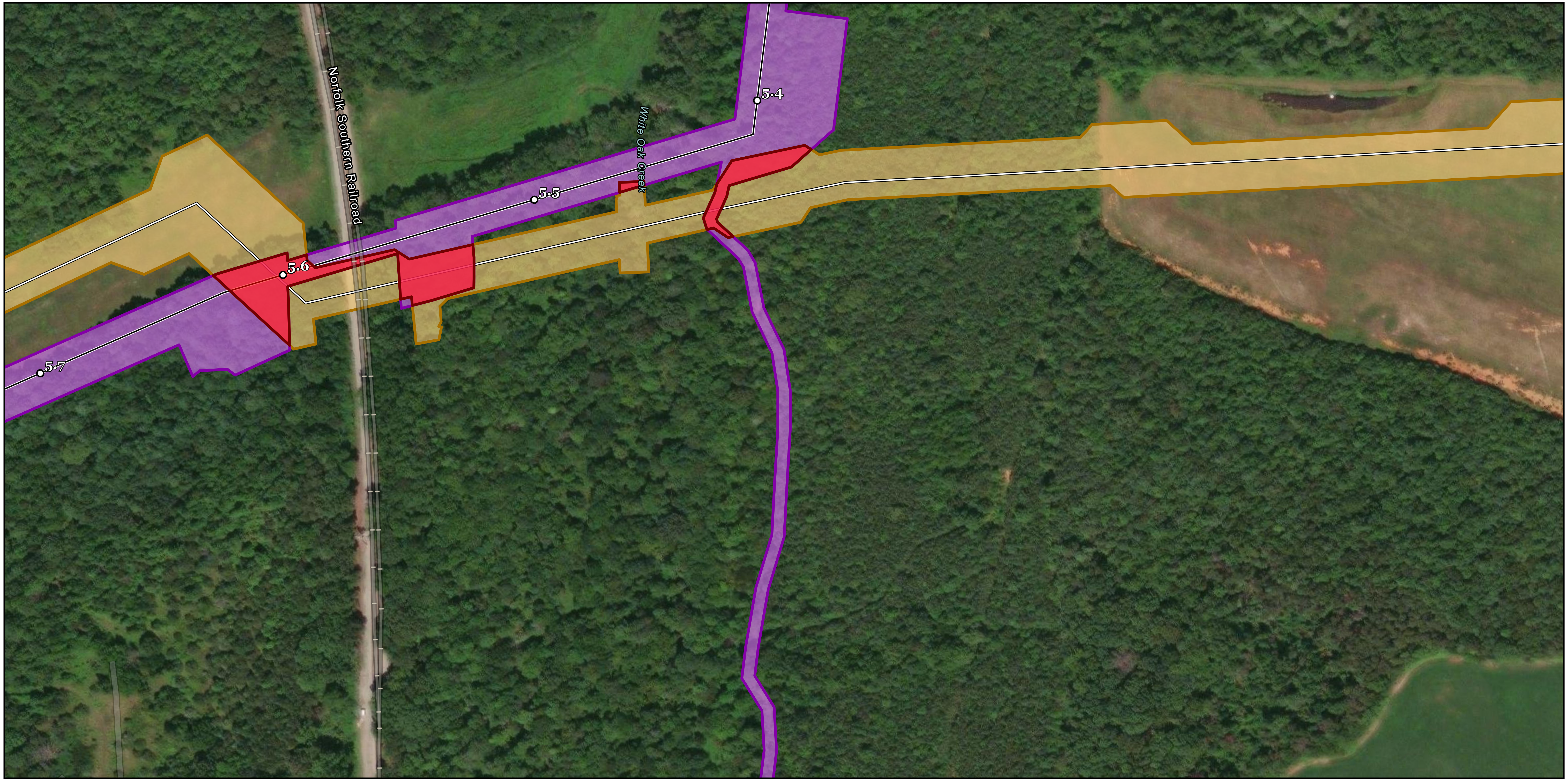
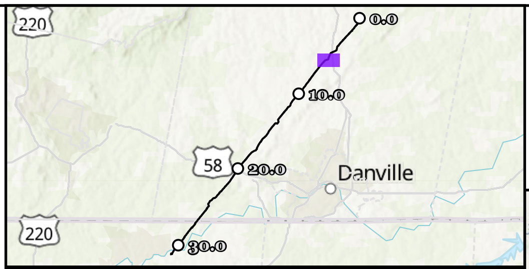


- 🟥 LOD OVERLAP
- ○ SOUTHGATE MILEPOST
- — SOUTHGATE CENTERLINE
- 🟪 SOUTHGATE LOD
- ═ SSEP CENTERLINE
- 🟨 SSEP LOD



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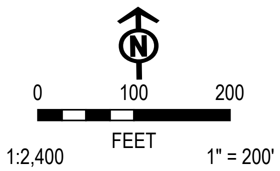

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 40
AR-018

DATE: JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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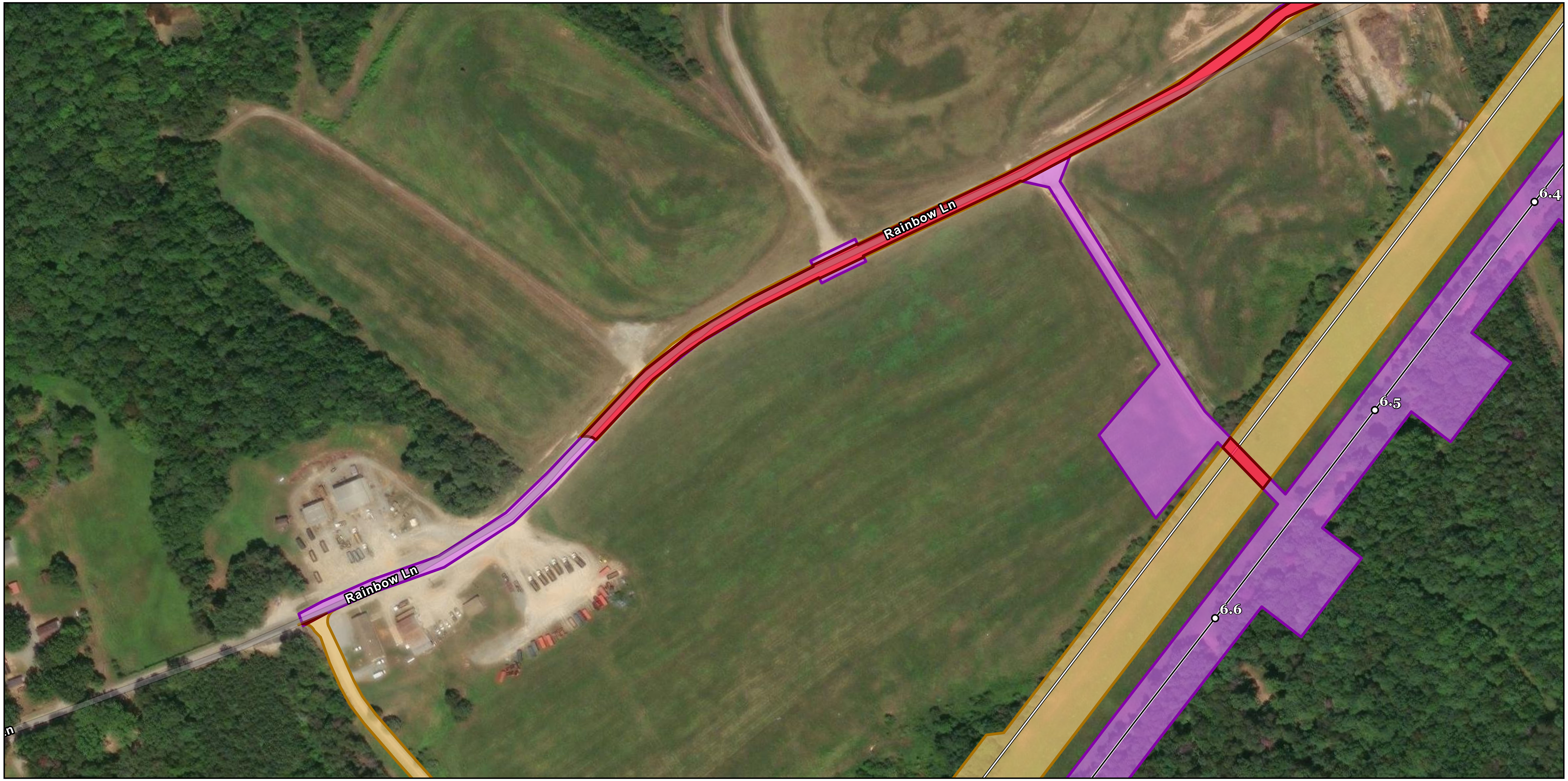
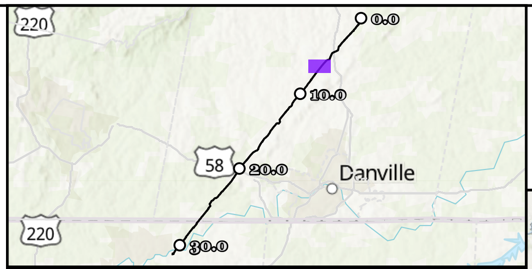


- 🟥 LOD OVERLAP
- ○ SOUTHGATE MILEPOST
- — SOUTHGATE CENTERLINE
- 🟪 SOUTHGATE LOD
- ═ SSEP CENTERLINE
- 🟧 SSEP LOD



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FEET
1:2,400 1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 41
AR-019

DATE: JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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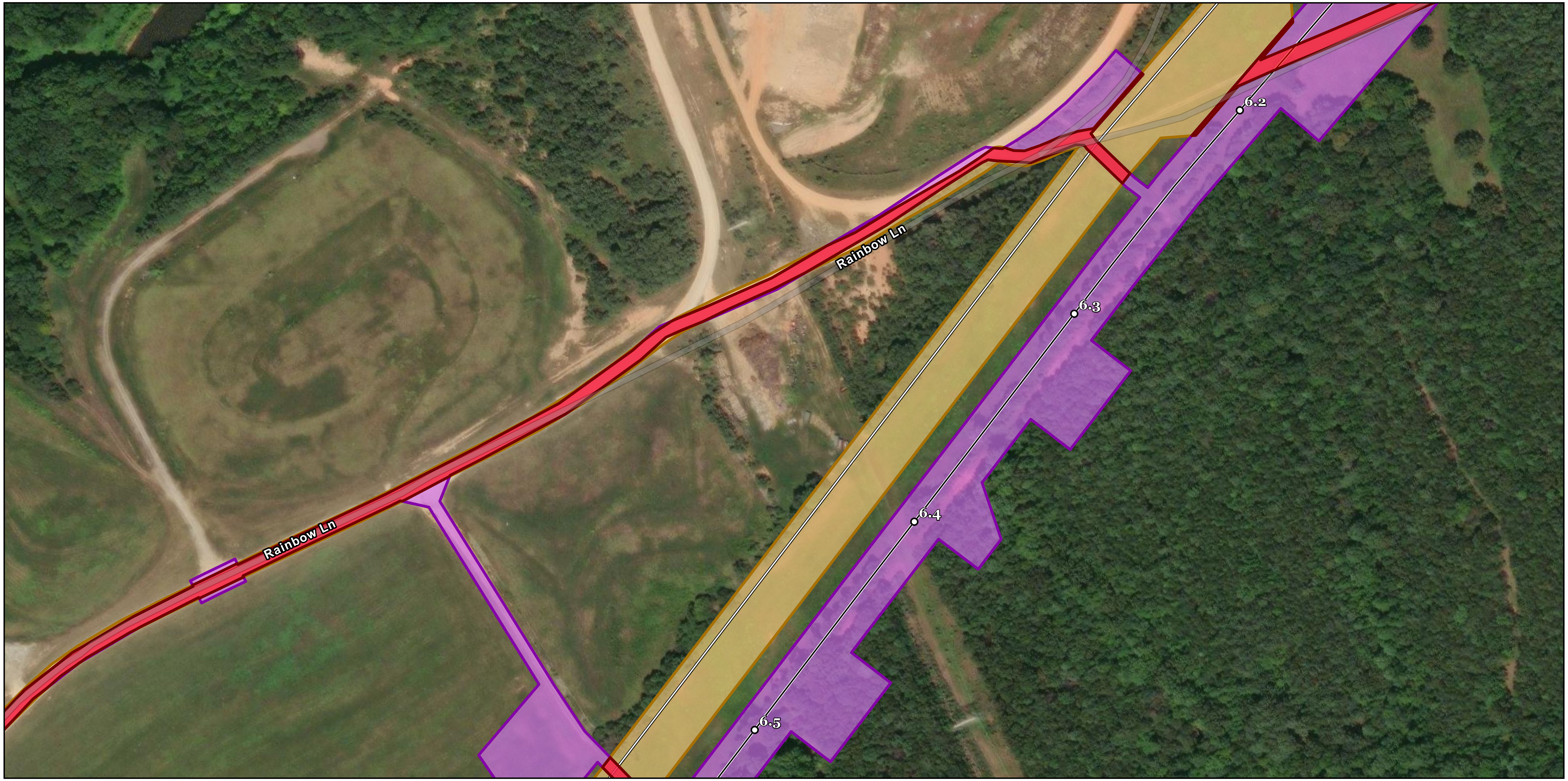
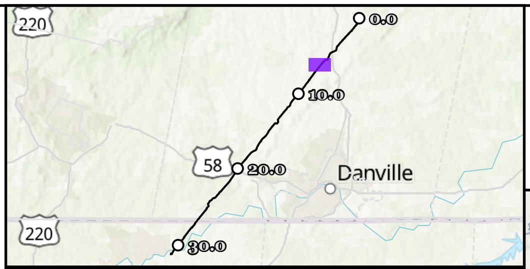


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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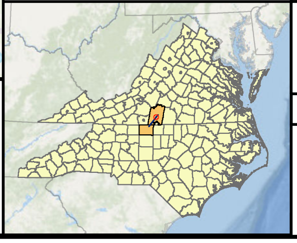
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 42
AR-020

DATE: JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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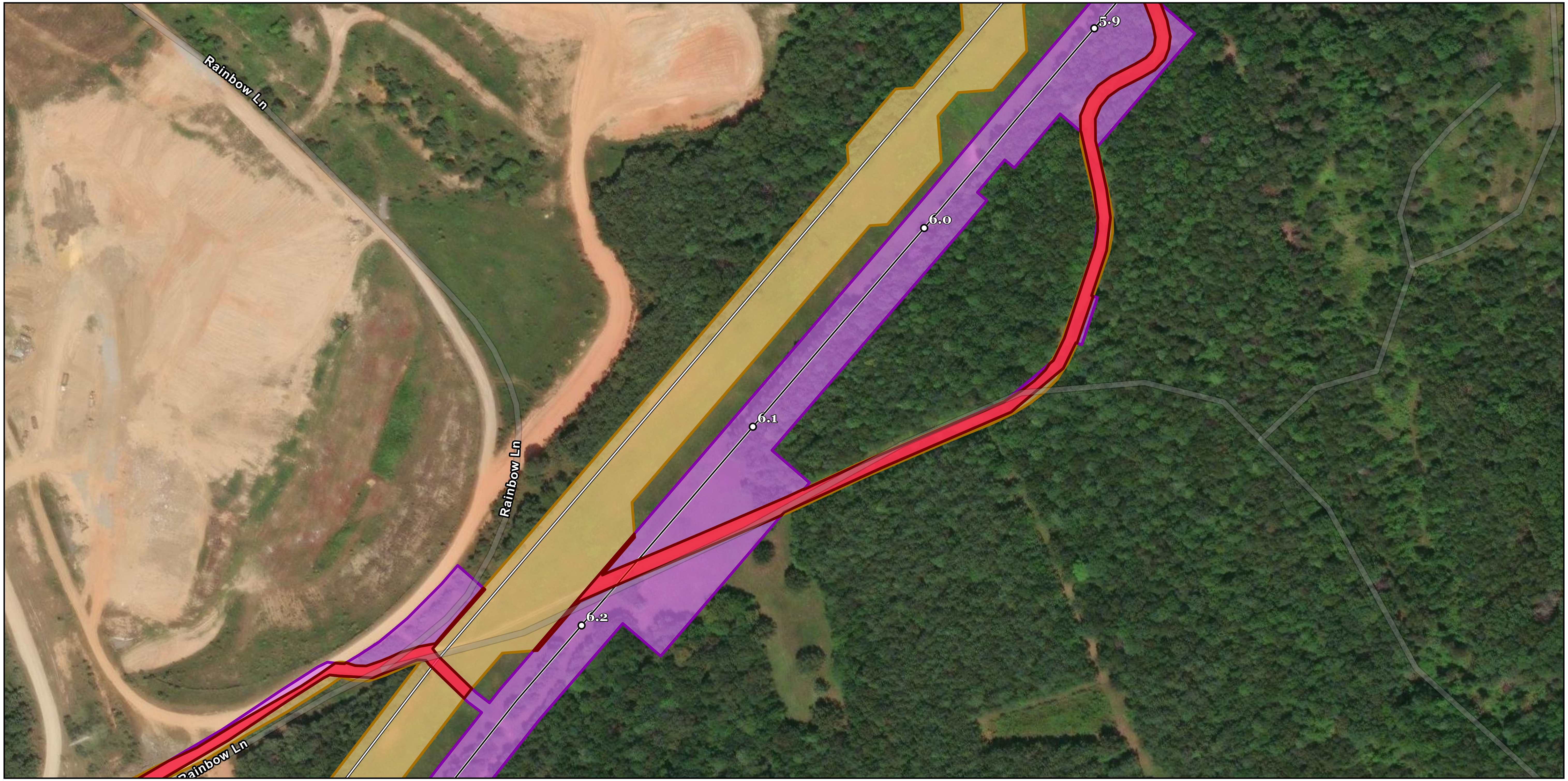
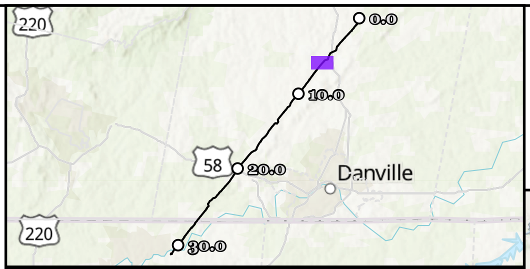


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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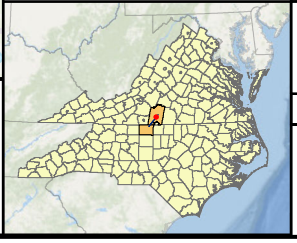
FEET
1:2,400 1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 43
AR-021

DATE: JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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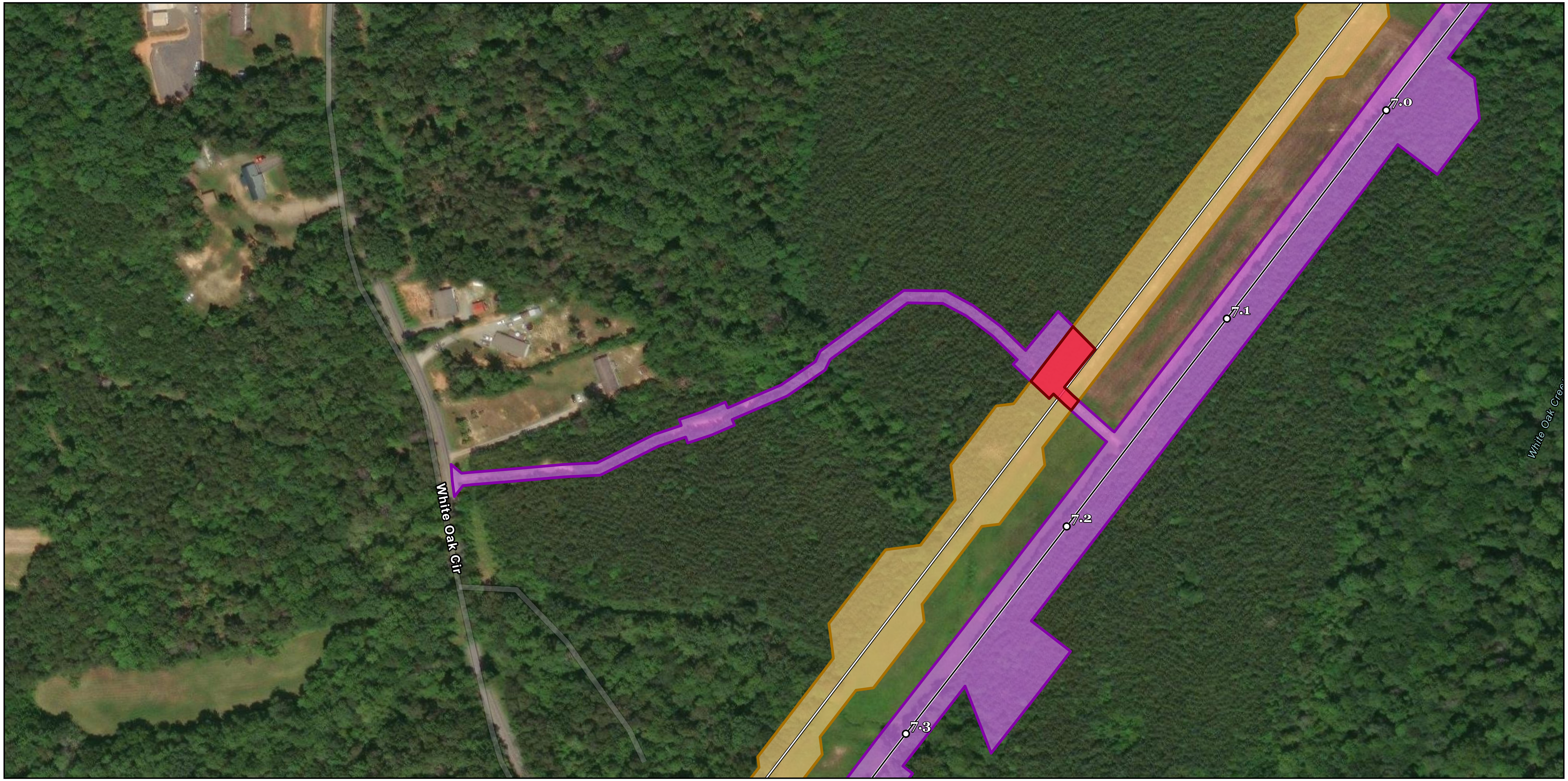
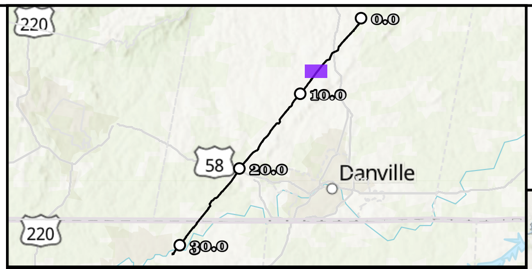


- 🟥 LOD OVERLAP
- ○ SOUTHGATE MILEPOST
- — SOUTHGATE CENTERLINE
- 🟪 SOUTHGATE LOD
- ═ SSEP CENTERLINE
- 🟨 SSEP LOD



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0 100 200

FEET

1:2,400 1" = 200'

PROJECT:

MVP Southgate Amendment Project
Pittsylvania County, Virginia

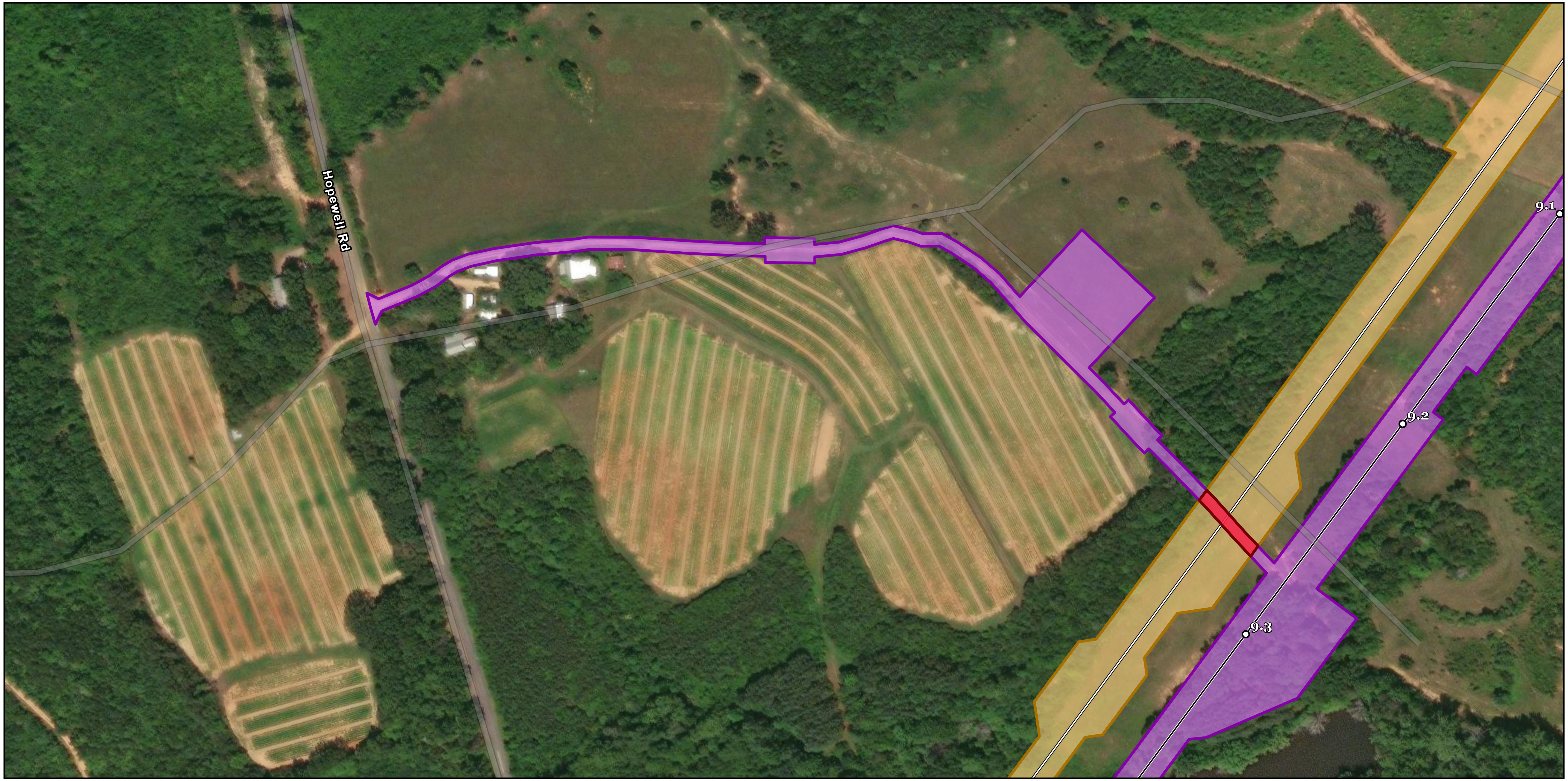
TITLE:

FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

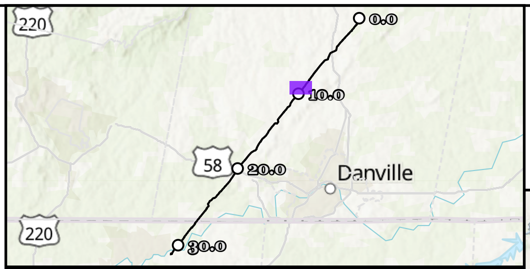
PAGE: 44
AR-022

DATE: JULY 2025

MVP SOUTHGATE



🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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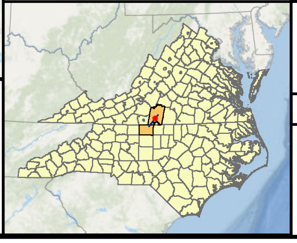
0 100 200
FEET
1:2,400 1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 45
AR-025

DATE: JULY 2025

MVP SOUTHGATE

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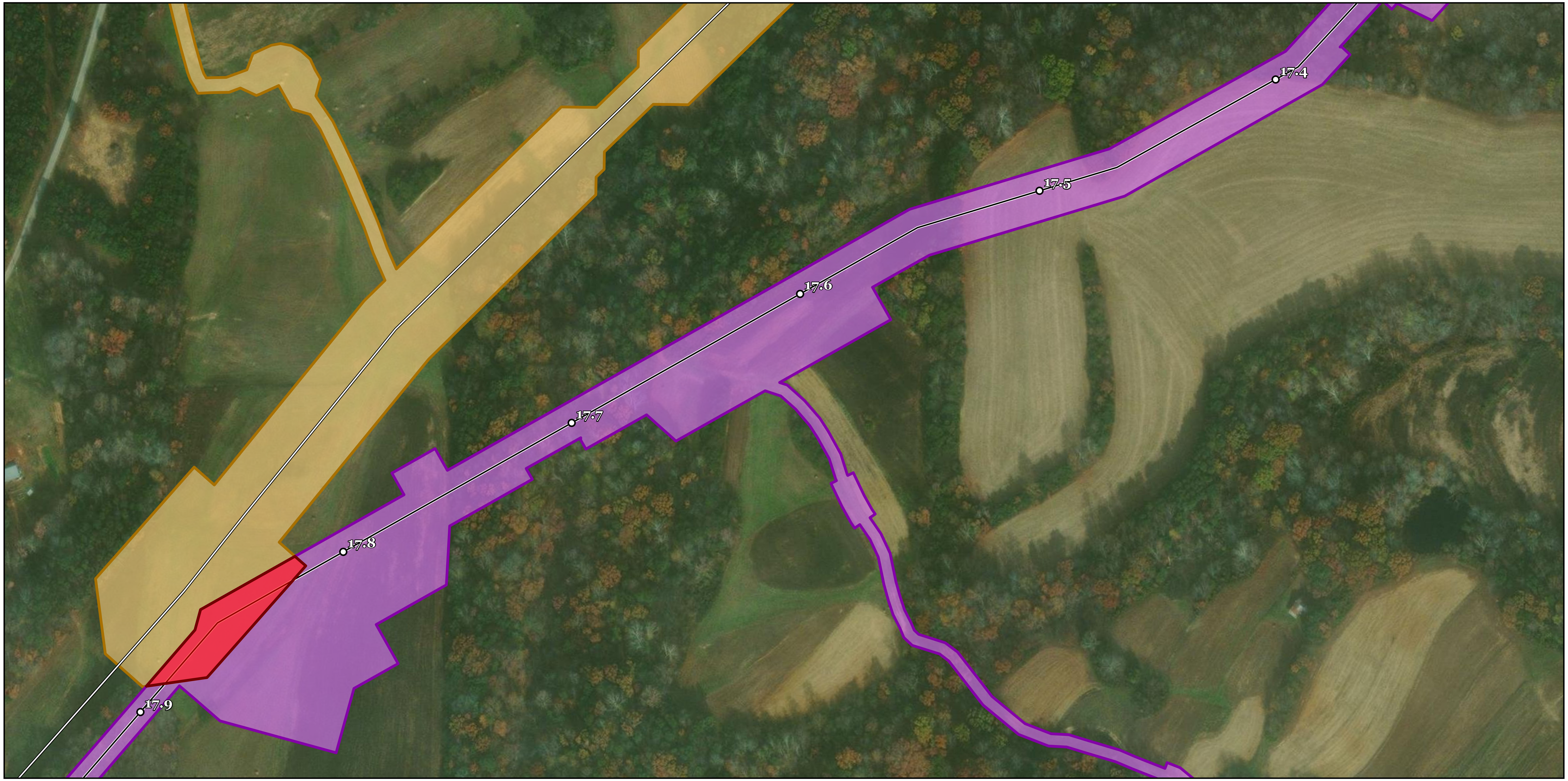
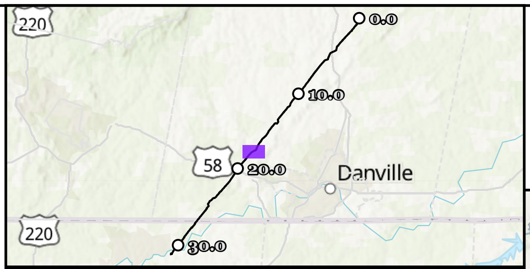


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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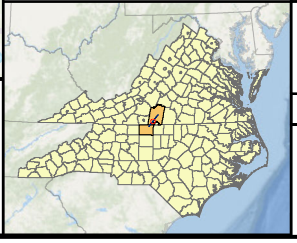
FEET
1:2,400
1" = 200'



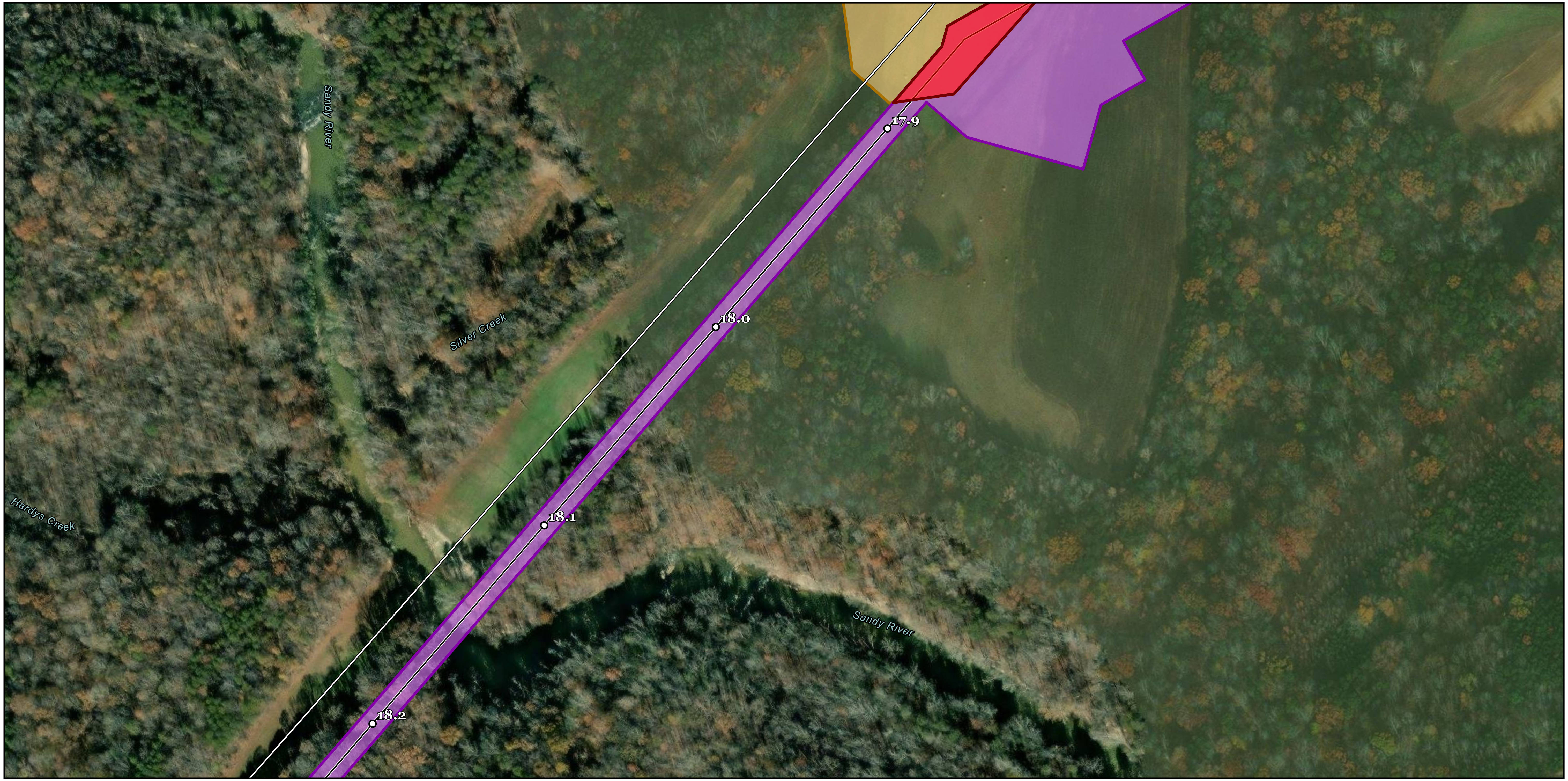
PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

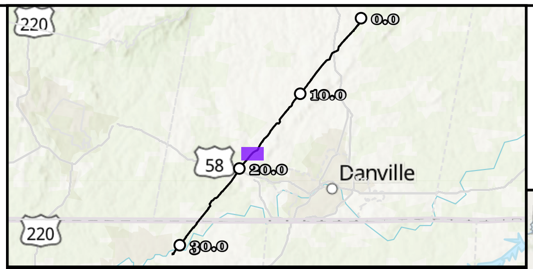
PAGE: 46
AR-034

DATE:
JULY 2025

MVP
SOUTHGATE



🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



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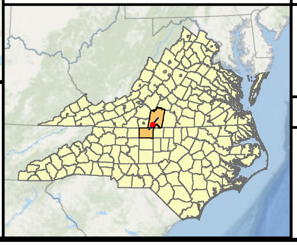
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 47
AR-035

DATE: JULY 2025

MVP SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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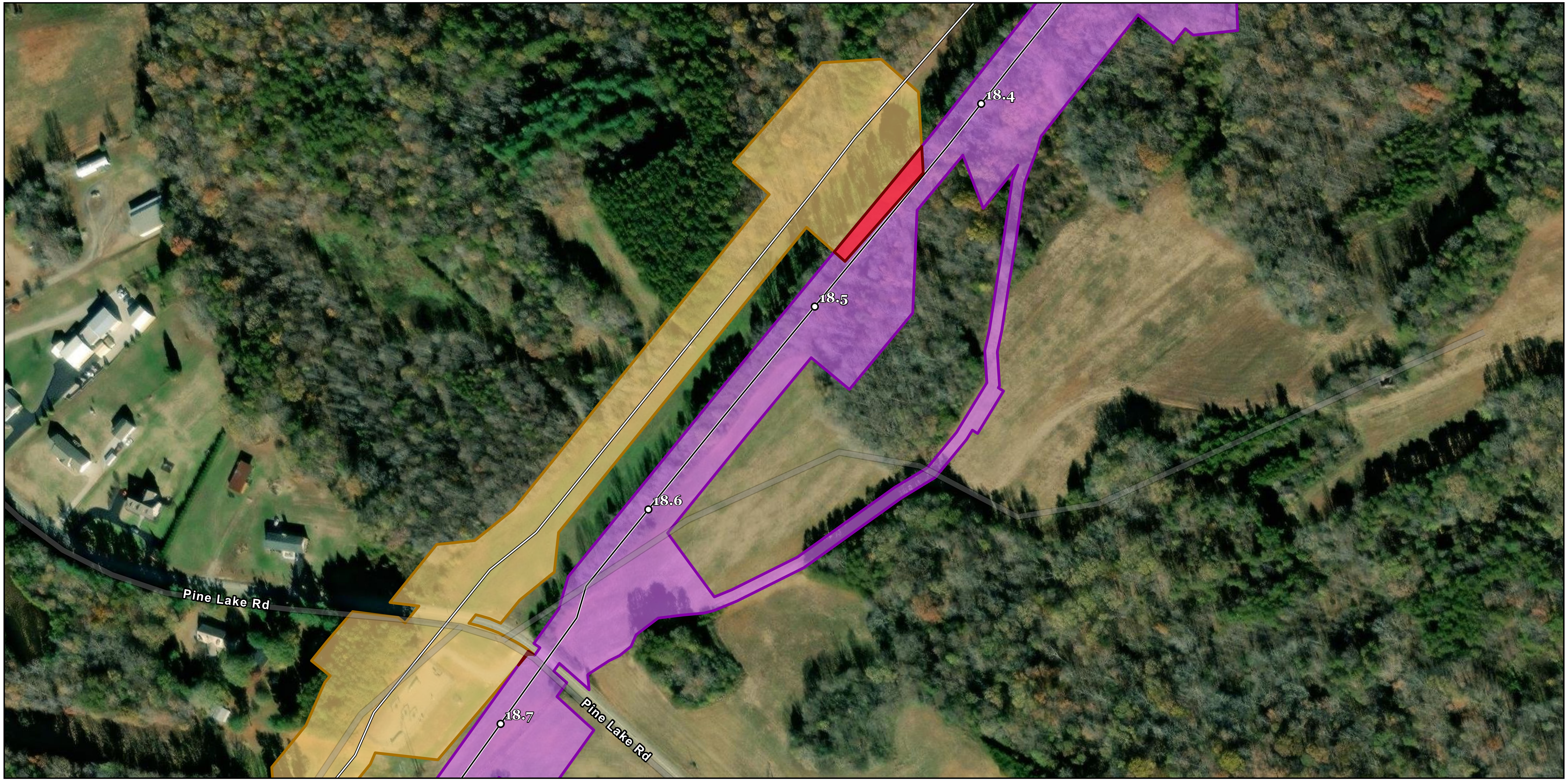
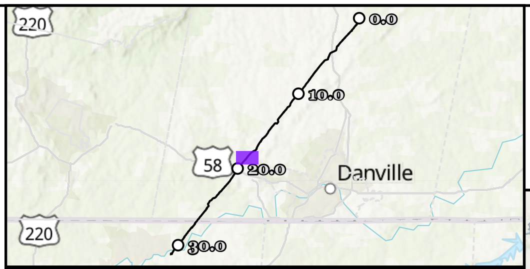


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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FEET
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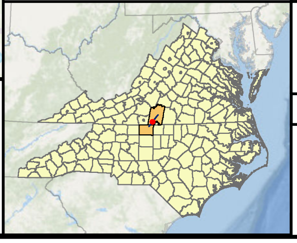
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 48
AR-037

DATE: JULY 2025

MVP SOUTHGATE

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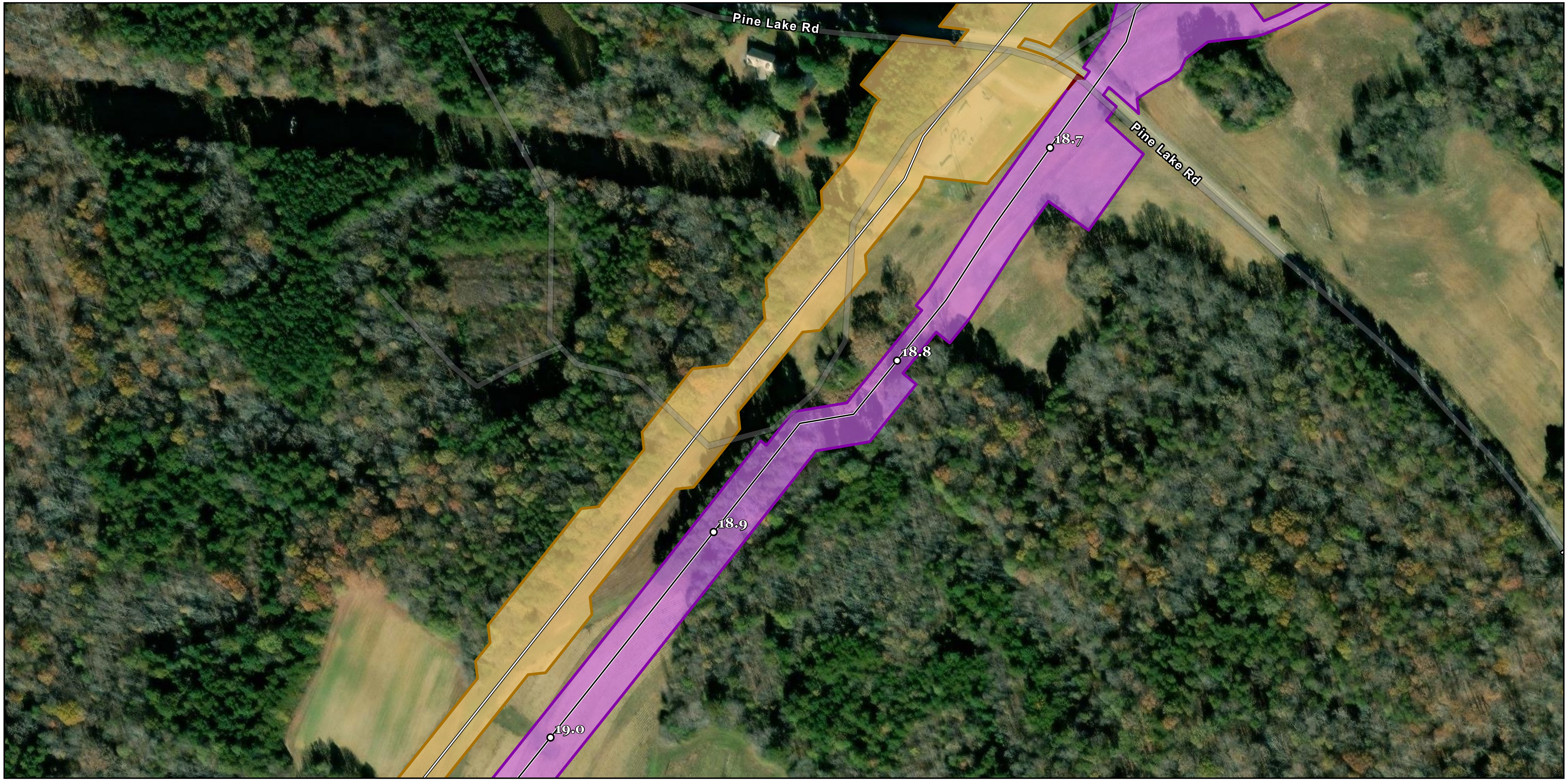
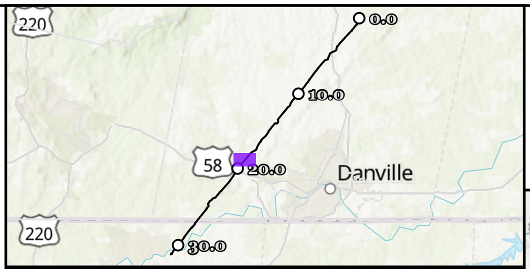


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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FEET
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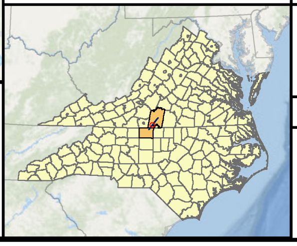
1" = 200'



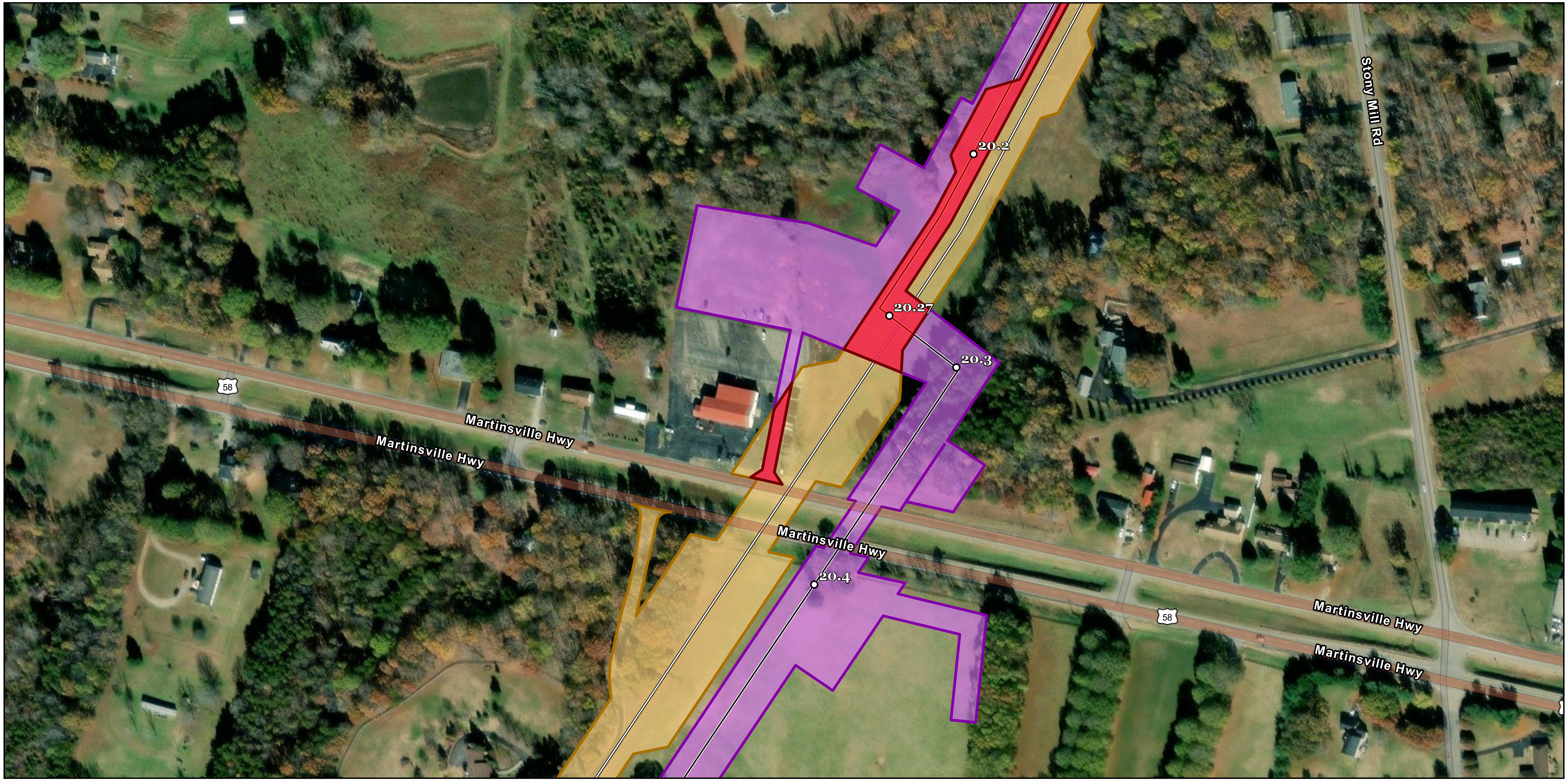
PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

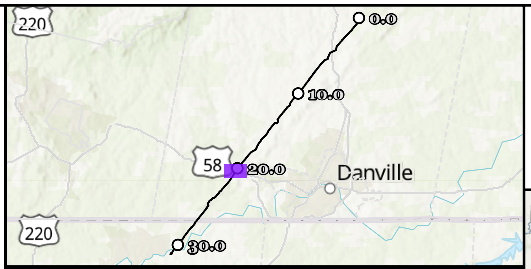
PAGE: 49
AR-038

DATE: JULY 2025

MVP SOUTHGATE



- 🟥 LOD OVERLAP
- ○ SOUTHGATE MILEPOST
- — SOUTHGATE CENTERLINE
- 🟪 SOUTHGATE LOD
- ═ SSEP CENTERLINE
- 🟧 SSEP LOD



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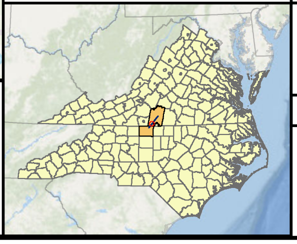

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 50
AR-039

DATE: JULY 2025

MVP SOUTHGATE

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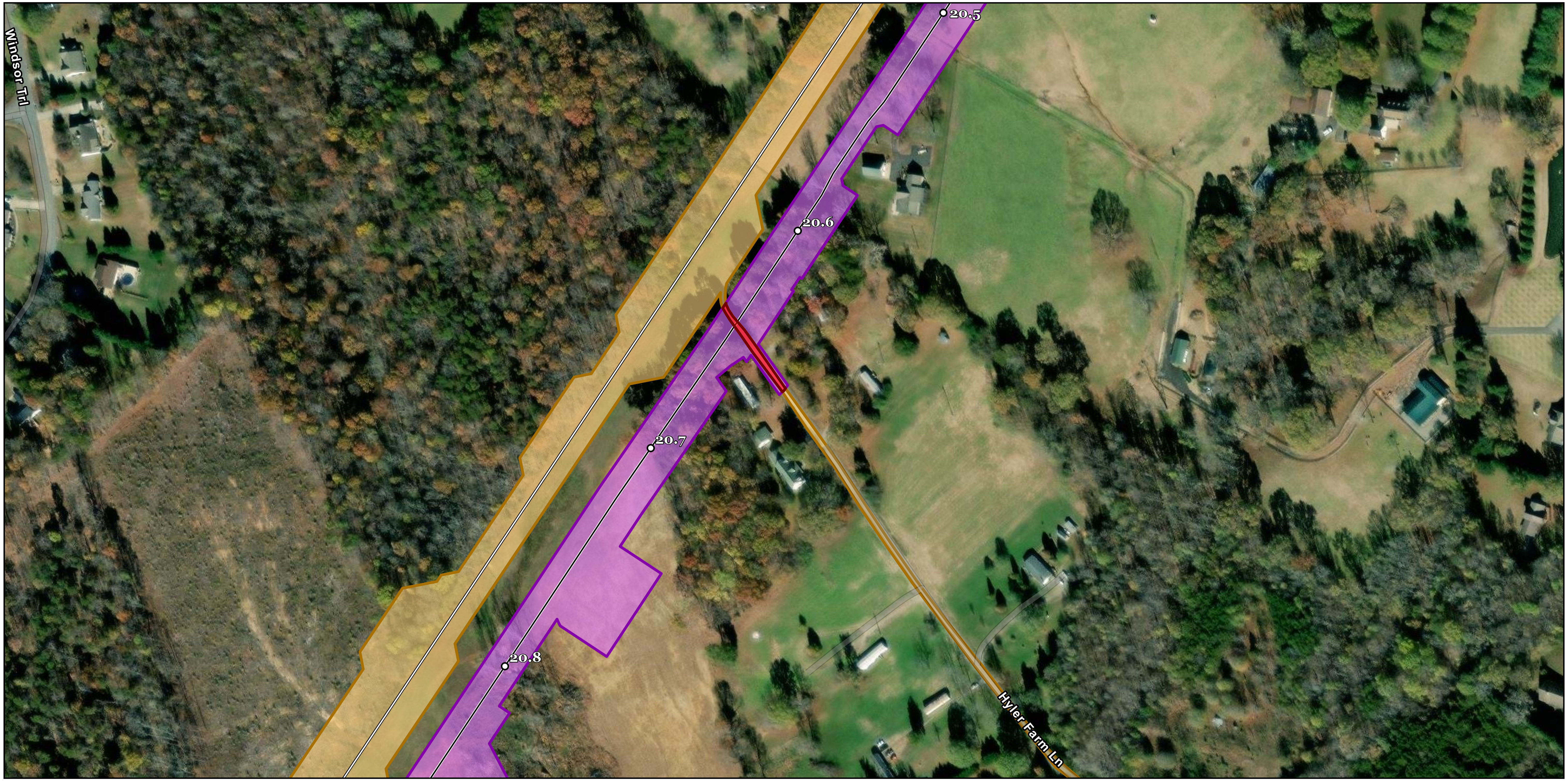
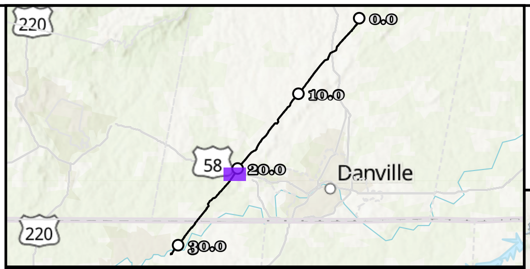


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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FEET
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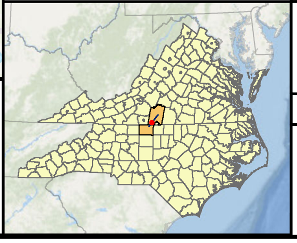
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 51
AR-040

DATE: JULY 2025

MVP SOUTHGATE

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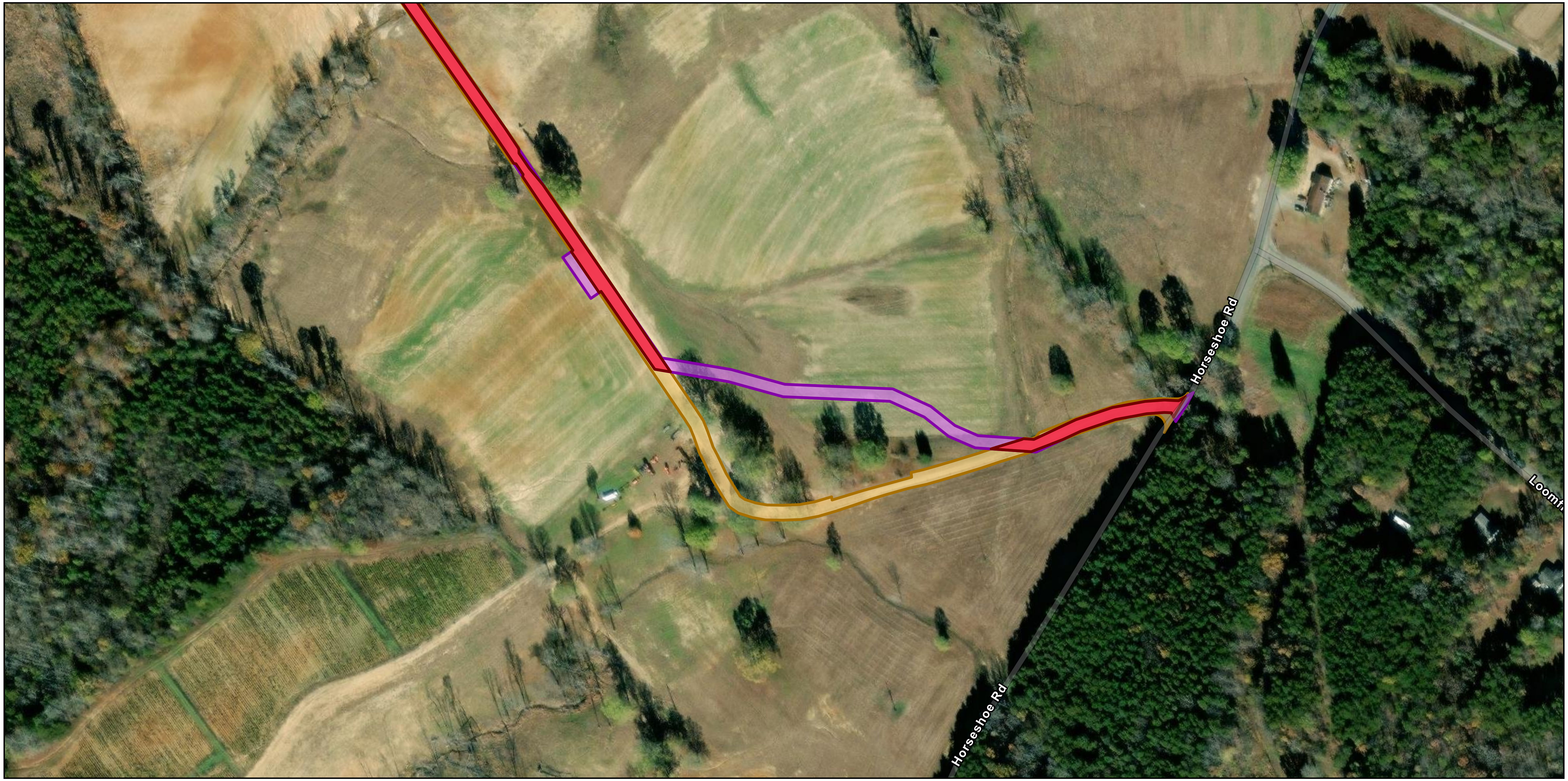
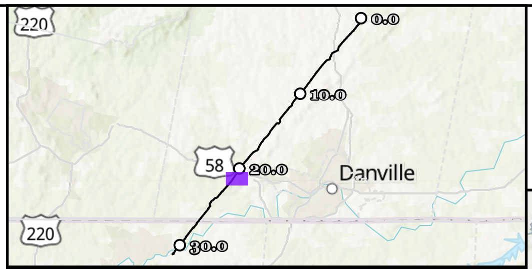


- 🟥 LOD OVERLAP
- ○ SOUTHGATE MILEPOST
- ― SOUTHGATE CENTERLINE
- 🟪 SOUTHGATE LOD
- ═ SSEP CENTERLINE
- 🟨 SSEP LOD



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0 100 200

FEET

1:2,400 1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:

FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 52
AR-041

DATE: JULY 2025

MVP SOUTHGATE

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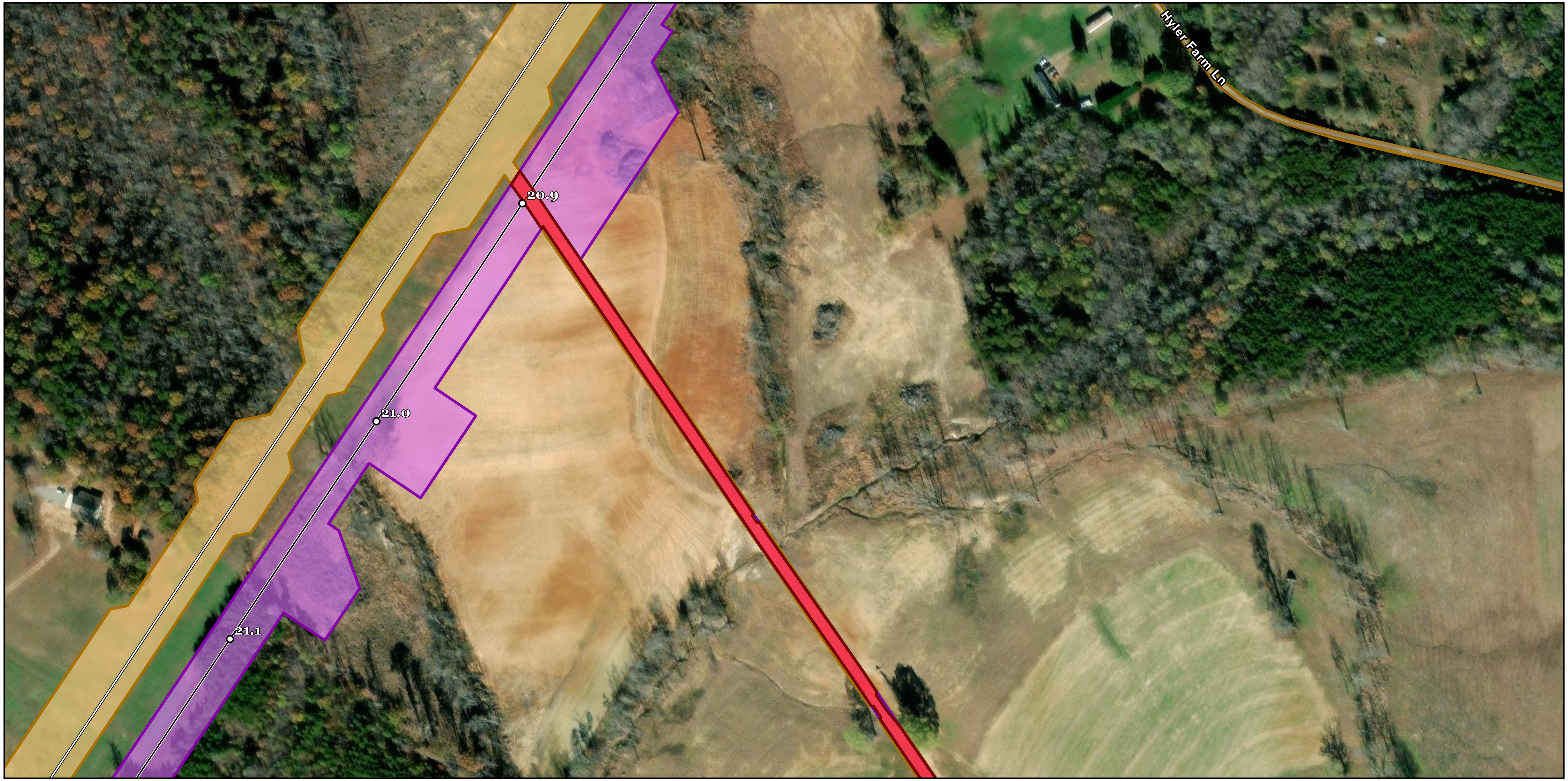
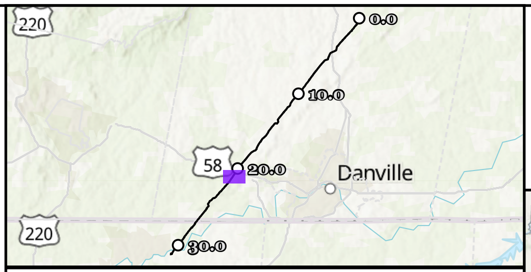


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟧 SSEP LOD



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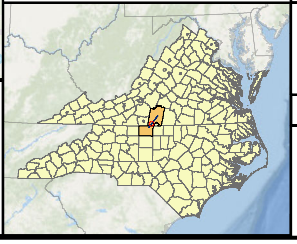
FEET
1:2,400
1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 53
AR-042

DATE:
JULY 2025

MVP
SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
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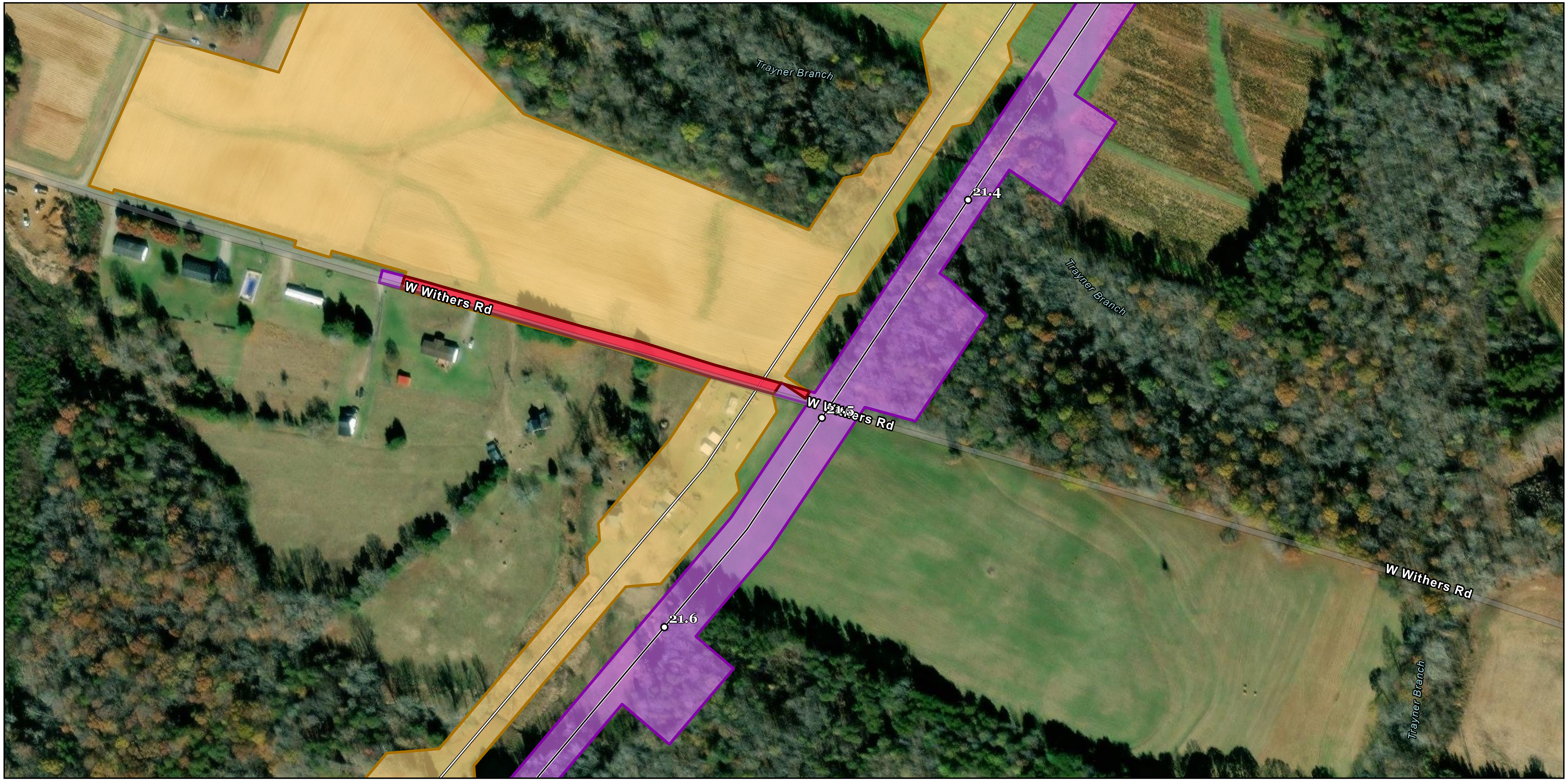


🟥 LOD OVERLAP

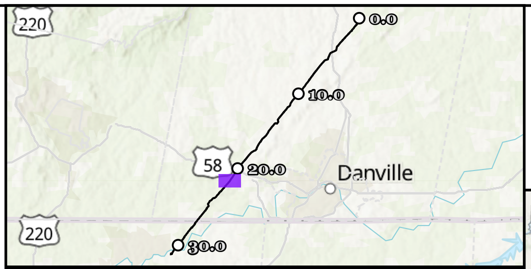
○ SOUTHGATE MILEPOST

— SOUTHGATE CENTERLINE

🟪 SOUTHGATE LOD

═ SSEP CENTERLINE

🟧 SSEP LOD



NOTES:
1: THIS FIGURE IS INTENDED TO BE VIEWED OR PRINTED IN COLOR ON 11"X17" SIZE SHEET.
2: BASE MAP SERVICES: NC CGIA, MAXAR, MICROSOFT, ESRI, GEBCO, GARMIN, NATURALVUE, VGIN, ESRI, TOMTOM, GARMIN, FAO, NOAA, USGS, EPA, NPS, USFWS, ESRI, USGS, ESRI COMMUNITY MAPS CONTRIBUTORS, STATE OF NORTH CAROLINA DOT, VGIN, © OPENSTREETMAP, MICROSOFT, ESRI, TOMTOM, GARMIN, SAFEGRAPH, GEOTECHNOLOGIES, INC, METI/NASA, USGS,

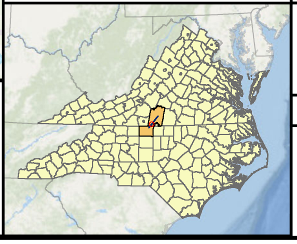
N

0 100 200

FEET

1:2,400

1" = 200'



PROJECT:

MVP Southgate Amendment Project
Pittsylvania County, Virginia

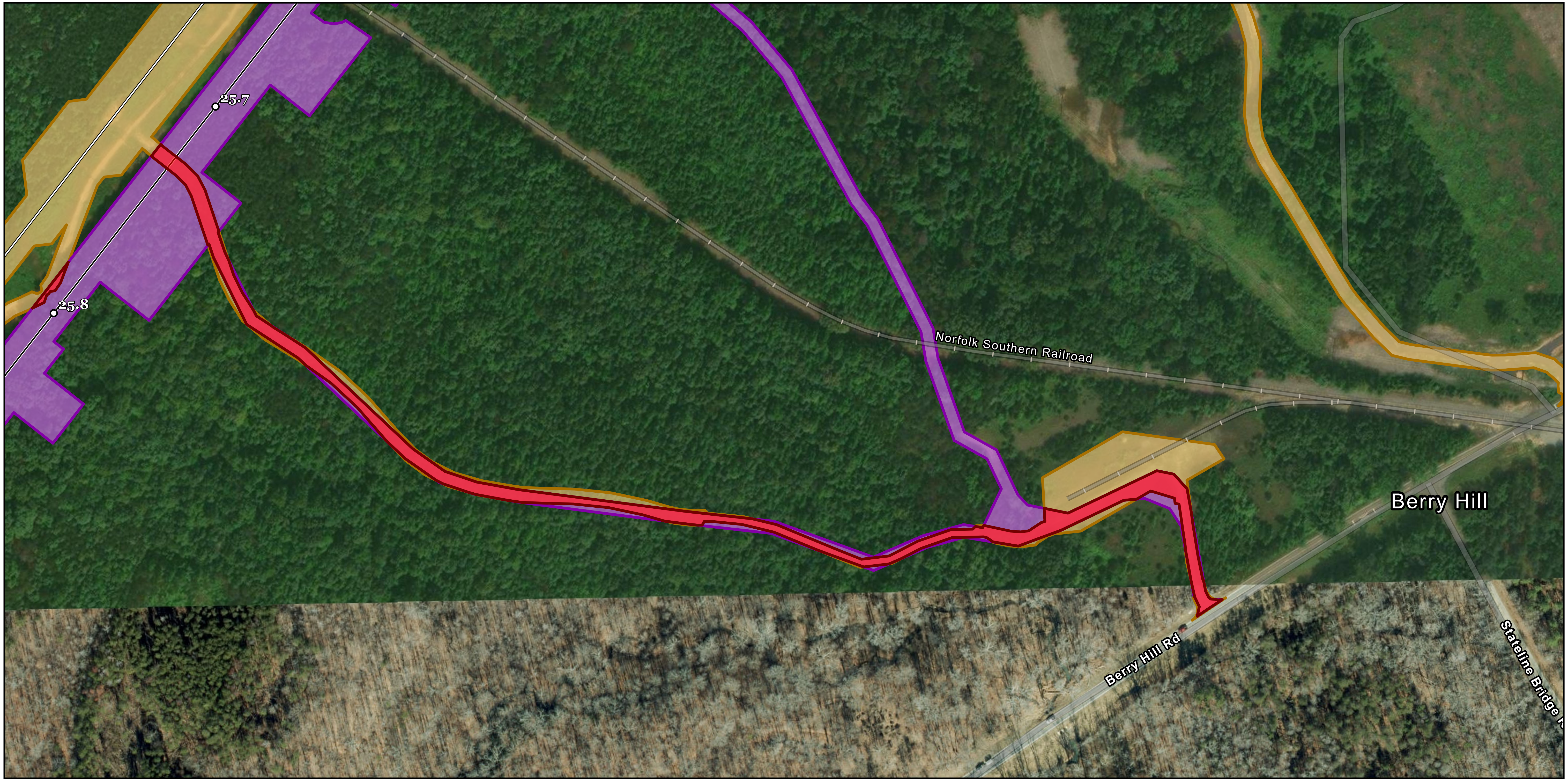
TITLE:

FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

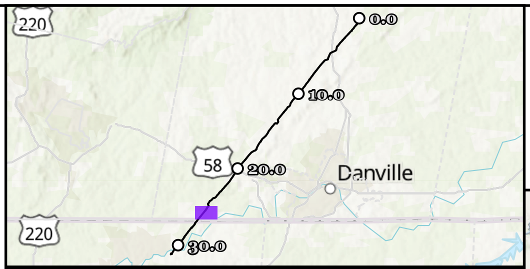
PAGE: 54
AR-043

DATE: JULY 2025

MVP SOUTHGATE



🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



NOTES:
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2: BASE MAP SERVICES: NC CGIA, MAXAR, MICROSOFT, ESRI, GEBCO, GARMIN, NATURALVUE, VGIN, ESRI, TOMTOM, GARMIN, FAO, NOAA, USGS, EPA, NPS, USFWS, ESRI, USGS, ESRI COMMUNITY MAPS CONTRIBUTORS, STATE OF NORTH CAROLINA DOT, VGIN, © OPENSTREETMAP, MICROSOFT, ESRI, TOMTOM, GARMIN, SAFEGRAPH, GEOTECHNOLOGIES, INC, METI/NASA, USGS,

N
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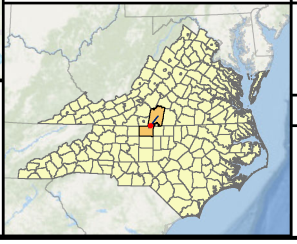
FEET
1:2,400 1" = 200'



PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 55
AR-047

DATE: JULY 2025

MVP
SOUTHGATE

Coordinate System: NAD 1927 BLM Zone 17N; Map Rotation: 0
-- Saved By: <ACP>cmking2 </ACP>on 7/8/2025, 08:56:44 AM; File Path: C:\Users\cmking2\OneDrive - Burns & McDonnell\Documents\ArcGIS\Projects\171151_MVP_Southgate\FERC\MVP_FERC_FigureTemplate 1\MVP_FERC_FigureTemplate\TRC\MVP vs SSE Figure APRX\SouthgateIP_DataProcessing_MVP_SSE.aprx; Layout Name: Fig_

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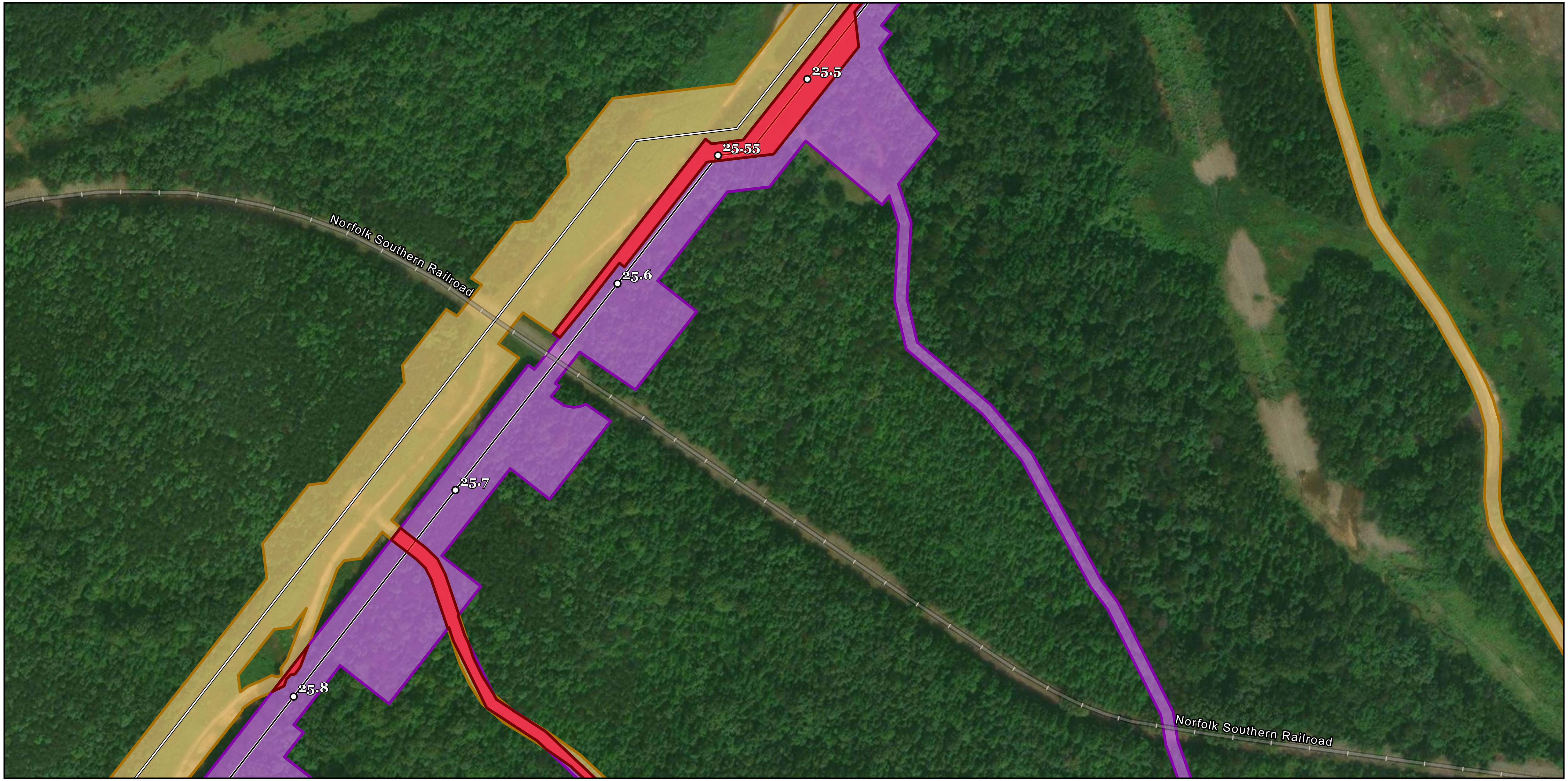
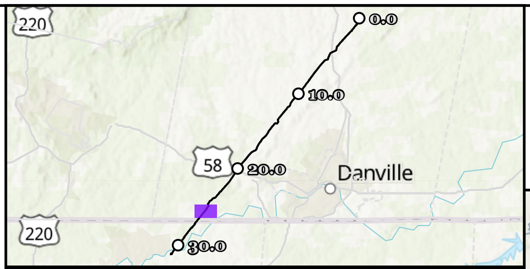


🟥 LOD OVERLAP
○ SOUTHGATE MILEPOST
— SOUTHGATE CENTERLINE
🟪 SOUTHGATE LOD
═ SSEP CENTERLINE
🟨 SSEP LOD



NOTES:
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2: BASE MAP SERVICES: NC CGIA, MAXAR, MICROSOFT, ESRI, GEBCO, GARMIN, NATURALVUE, VGIN, ESRI, TOMTOM, GARMIN, FAO, NOAA, USGS, EPA, NPS, USFWS, ESRI, USGS, ESRI COMMUNITY MAPS CONTRIBUTORS, STATE OF NORTH CAROLINA DOT, VGIN, © OPENSTREETMAP, MICROSOFT, ESRI, TOMTOM, GARMIN, SAFEGRAPH, GEOTECHNOLOGIES, INC, METI/NASA, USGS,

N

0 100 200
FEET
1:2,400
1" = 200'

PROJECT:
MVP Southgate Amendment Project
Pittsylvania County, Virginia

TITLE:
FIGURE 8C
SOUTHGATE LOD AND SSEP LOD

PAGE: 56
AR-048

DATE: JULY 2025

MVP SOUTHGATE

ATTACHMENT 7

W-A004 PAIRED WETLAND/UPLAND DATA FORMS AND SITE PHOTOGRAPHS

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP Southgate Project City/County: Pittsylvania County Sampling Date: 2024-06-04

Applicant/Owner: Mountain Valley Pipeline, LLC State: Virginia Sampling Point: SP-A010

Investigator(s): W. Jackson, C. Jerrett Section, Township, Range: ______

Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Concave Slope (%): 2

Subregion (LRR or MLRA): P 136 Lat: 36.82747 Long: -79.34429 Datum: NAD 83

Soil Map Unit Name: 23B - Clover fine sandy loam, 2 to 7 percent slopes NWI classification: ______

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ______ No ✓ (If no, explain in Remarks.)

Are Vegetation ______, Soil ______, or Hydrology ______ significantly disturbed? Are "Normal Circumstances" present? Yes ______ No ✓

Are Vegetation ______, Soil ______, or Hydrology ✓ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No ___	**Is the Sampled Area within a Wetland?**	Yes ✓ No ___
Hydric Soil Present?	Yes ✓ No ___		
Wetland Hydrology Present?	Yes ✓ No ___		

Remarks:

Wetland sample plot within PEM W-A004. The USACE Antecedent Precipitation Tool indicates normal conditions were present 3 months prior to survey. Significant rainfall event within the past 24 hours, hydrology problematic.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

✓ Surface Water (A1)
✓ High Water Table (A2)
✓ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Sparsely Vegetated Concave Surface (B8)
✓ Drainage Patterns (B10)
___ Moss Trim Lines (B16)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
✓ Geomorphic Position (D2)
___ Shallow Aquitard (D3)
___ Microtopographic Relief (D4)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ✓ No ______ Depth (inches): 0.25
Water Table Present? Yes ✓ No ______ Depth (inches): 0
Saturation Present? Yes ✓ No ______ Depth (inches): 0
(includes capillary fringe)

Wetland Hydrology Present? Yes ✓ No ______

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Indicators A1, A2, A3, B10, and D2 are met. Indicators A1, A2, and A3, may be misapplied due to recent significant rainfall event, however, wetland hydrology is still present.

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: SP-A010

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

50% of total cover: ________ 20% of total cover: ________

Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	= Total Cover		

50% of total cover: ________ 20% of total cover: ________

Herb Stratum (Plot size: 5 ft r)			
1. Microstegium vimineum	5	✔	FAC
2. Persicaria longiseta	5	✔	FAC
3. Parthenocissus quinquefolia	5	✔	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	15 = Total Cover		

50% of total cover: 7.5 20% of total cover: 3

Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

50% of total cover: ________ 20% of total cover: ________

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	66.66	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	15 (A)		50 (B)

Prevalence Index = B/A = 3.33

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✔ No ______

Remarks: (Include photo numbers here or on a separate sheet.)

Dominance test is met. Radii for plot sampling sizes reflect only areas exhibiting hydrology within the concave drainage. Trees and shrubs were all rooted outside the wetland on convex landforms.

SOIL

Sampling Point: SP-A010

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0 - 4	10YR 6/2	100					Clay Loam	
4 - 20	10YR 6/2	80	10YR 6/6	20	C	M	Sandy Clay Loam	
-								
-								
-								
-								
-								
-								
-								

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ 2 cm Muck (A10) **(LRR N)**
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)

___ Dark Surface (S7)
___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
___ Thin Dark Surface (S9) **(MLRA 147, 148)**
___ Loamy Gleyed Matrix (F2)
✓ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)
___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
___ Umbric Surface (F13) **(MLRA 136, 122)**
___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
___ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

___ 2 cm Muck (A10) **(MLRA 147)**
___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
___ Very Shallow Dark Surface (TF12)
___ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ______

Depth (inches): ______

Hydric Soil Present? Yes ✓ **No** ______

Remarks:

Indicator F3 is met.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: MVP Southgate Project City/County: Pittsylvania County Sampling Date: 2024-06-04

Applicant/Owner: Mountain Valley Pipeline, LLC State: Virginia Sampling Point: SP-A011

Investigator(s): W. Jackson, C. Jerrett Section, Township, Range: ______

Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Concave Slope (%): 2

Subregion (LRR or MLRA): P 136 Lat: 36.82746 Long: -79.344397 Datum: NAD 83

Soil Map Unit Name: 23B - Clover fine sandy loam, 2 to 7 percent slopes NWI classification: ______

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ______ No ✓ (If no, explain in Remarks.)

Are Vegetation ______, Soil ______, or Hydrology ______ significantly disturbed? Are "Normal Circumstances" present? Yes ______ No ✓

Are Vegetation ______, Soil ______, or Hydrology ✓ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ___	No ✓	**Is the Sampled Area within a Wetland?**	Yes ____ No ✓
Hydric Soil Present?	Yes ✓	No ___		
Wetland Hydrology Present?	Yes ✓	No ___		

Remarks:

Upland sample plot adjacent to PEM W-A004. The USACE Antecedent Precipitation Tool indicates normal conditions were present 3 months prior to survey. Significant rainfall event within the past 24 hours, hydrology problematic.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ______	No ✓	Depth (inches): ______
Water Table Present?	Yes ✓	No ______	Depth (inches): 6
Saturation Present? (includes capillary fringe)	Yes ✓	No ______	Depth (inches): 0

Wetland Hydrology Present? Yes ✓ **No** ______

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Indicators A2, A3, and D2 are present. Indicators A2 and A3 may be misapplied due to recent rainfall event.

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: SP-A011

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	50	✔	FAC
2. Liriodendron tulipifera	15		FACU
3. Quercus phellos	10		FAC
4. Ulmus rubra	5		FAC
5. Juglans nigra	5		FACU
6.			
7.			
	85 = Total Cover		
50% of total cover: 42.5	20% of total cover: 17		

Sapling/Shrub Stratum (Plot size: 15 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Rubus allegheniensis	35	✔	FACU
2. Liquidambar styraciflua	10	✔	FAC
3. Fraxinus pennsylvanica	5		FACW
4.			
5.			
6.			
7.			
8.			
9.			
	50 = Total Cover		
50% of total cover: 25	20% of total cover: 10		

Herb Stratum (Plot size: 5 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Microstegium vimineum	35	✔	FAC
2. Parthenocissus quinquefolia	15	✔	FACU
3. Liquidambar styraciflua	10		FAC
4. Rubus allegheniensis	10		FACU
5. Sambucus nigra	5		FAC
6. Lonicera japonica	5		FACU
7. Euonymus americanus	5		FAC
8. Smilax rotundifolia	5		FAC
9.			
10.			
11.			
	90 = Total Cover		
50% of total cover: 45	20% of total cover: 18		

Woody Vine Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Parthenocissus quinquefolia	5	✔	FACU
2.			
3.			
4.			
5.			
	5 = Total Cover		
50% of total cover: 2.5	20% of total cover: 1		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	6	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	50.00	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	135	x 3 =	405
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	230 (A)		775 (B)

Prevalence Index = B/A = 3.36

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1] Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ______ **No** ✔

Remarks: (Include photo numbers here or on a separate sheet.)

No tests for hydrophytic vegetation are met.

SOIL

Sampling Point: SP-A011

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 4	10YR 6/2	100					Clay Loam	
4 - 20	10YR 6/2	80	10YR 5/6	20	C	M	Sandy Clay Loam	
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) **(LRR N)**
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
☐ Thin Dark Surface (S9) **(MLRA 147, 148)**
☐ Loamy Gleyed Matrix (F2)
☑ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
☐ Umbric Surface (F13) **(MLRA 136, 122)**
☐ Piedmont Floodplain Soils (F19) **(MLRA 148)**
☐ Red Parent Material (F21) **(MLRA 127, 147)**

Indicators for Problematic Hydric Soils[3]:

☐ 2 cm Muck (A10) **(MLRA 147)**
☐ Coast Prairie Redox (A16) **(MLRA 147, 148)**
☐ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ____________

Depth (inches): ____________

Hydric Soil Present? **Yes** ✓ **No** ______

Remarks:

Indicator F3 is met.

ATTACHMENT 8

WATER DIVISION PERMIT APPLICATION FEE FORM

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER DIVISION PERMIT APPLICATION FEE FORM

INSTRUCTIONS

Applicants for individual Virginia Pollutant Discharge Elimination System (VPDES), Virginia Pollution Abatement (VPA), Virginia Water Protection (VWP), and Groundwater Withdrawal (GW) permits are required to pay permit application fees, with the exception of farming operations engaged in production for market and permits pertaining to maintenance dredging for federal navigation channels or other Corps of Engineers or Department of the Navy-sponsored dredging projects. Fees are also required for registration for coverage under most general permits (see Fee Schedule, page 4 of this form).

NOTE: This form is NOT appropriate for Virginia Stormwater Management Program (VSMP) Construction General Permit (VAR10) fee payments.

The permit Fee Schedule is included on pages 3-4 of this form, and includes fees for permit issuance, reissuance*, and for permit modification. Except for VWP permits, fees must be paid when applications are submitted. Applicants for VWP permits will be notified by the DEQ of the fee due. Applications will be considered incomplete if the proper fee is not paid and will not be processed until the fee is received.

* Note: the reissuance fee does not apply to individual VPDES and VPA permits - see the fee schedule for details.

Once you have determined the fee for the type of application you are submitting, complete this form. The form and your check or money order payable to "Treasurer of Virginia" should be mailed to:

Department of Environmental Quality
Receipts Control
P.O. Box 1104
Richmond, VA 23218

You should retain a copy of the form and your check for your records. Please direct any questions regarding this form or fee payment to the DEQ Office to which you are submitting your application.

APPLICANT NAME: Jeffrey Klinefelter

ADDRESS: 2200 Energy Drive
Canonsburg PA, 15317

DAYTIME PHONE: (724) 873 -1378 (Area Code)

IRS EMPLOYER IDENTIFICATION NUMBER (EIN): 82-5219955
[*aka* Federal Tax Identification Number (FIN)]

FACILITY/ACTIVITY NAME: MVP Southgate Amendment Project

LOCATION: Pittsylvania County, Virginia; Centroid of Project: 36.687423, -79.487574

TYPE OF PERMIT APPLIED FOR: (from Fee Schedule) VWP Individual / Surface Water Impacts

TYPE OF ACTION: ☑ **New Issuance** ☐ **Reissuance** ☐ **Modification**

AMOUNT OF FEE SUBMITTED (from Fee Schedule)**:** $24,180

EXISTING PERMIT NUMBER (if applicable)**:** 25-0752

DEQ OFFICE TO WHICH APPLICATION OR REGISTRATION SUBMITTED (check one)

☐ **Abingdon/SWRO**
☑ **Richmond/Headquarters**
☐ **Harrisonburg/VRO**
☐ **Roanoke/BRRO**
☐ **Woodbridge/NRO**
☐ **Virginia Beach/TRO**
☐ **Glen Allen/PRO**

FOR DEQ USE ONLY
Date: **DC#:**

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FEE SCHEDULES

A. VPDES and VPA Individual Permits. Applications for issuance of new individual VPDES or VPA permits, and for permittee-initiated major modifications that become effective before the stated permit expiration date. (Flows listed are facility "design" flows. Land application rates listed are facility "design" rates.) [NOTE: VPDES and VPA permittees pay an Annual Permit Maintenance Fee (APMF) instead of a reapplication fee for reissuance, and the APMF is invoiced separately by DEQ.]

TYPE OF INDIVIDUAL PERMIT	ISSUANCE	MODIFICATION	LAND APP MOD
VPDES Industrial Major	$24,000	$12,000	
VPDES Municipal Major	$21,300	$10,650	$1,000 [1]
VPDES Industrial Minor / No Standard Limits	$10,200	$5,100	
VPDES Industrial Minor / Standard Limits	$3,300	$3,300	
VPDES Industrial Stormwater	$7,200	$3,600	
VPDES Municipal Stormwater MS4 Individual (Large and Medium)	$16,000	$5,000	
VPDES Municipal Stormwater MS4 Individual (Small)	$8,000	$2,500	
VPDES Municipal Minor / Greater Than 100,000 GPD	$7,500	$3,750	$1,000 [1]
VPDES Municipal Minor / 10,001 GPD - 100,000 GPD	$6,000	$3,000	$1,000 [1]
VPDES Municipal Minor / 1,001 GPD - 10,000 GPD	$5,400	$2,700	$1,000 [1]
VPDES Municipal Minor / 1,000 GPD or Less	$2,000	$1,000	
VPDES Municipal that includes authorization for land application, distribution, or marketing of biosolids or land disposal of sewage sludge	$5,000 [1]	$1,000 [1]	$1,000 [1]
VPA Industrial Wastewater Operation / Land Application of 10 or More Inches Per Year	$15,000	$7,500	
VPA Industrial Wastewater Operation / Land Application of Less Than 10 Inches Per Year	$10,500	$5,250	
VPA Industrial Sludge Operation	$7,500	$3,750 [2]	
VPA Municipal Wastewater Operation	$13,500	$6,750	
VPA Municipal Biosolids Operation	$5,000	$1,000 [2,3]	
VPA Combined Sludge Operation - Mun. Biosolids & Ind. Sludges (except WTP residuals)	$7,500	$3,750 [2]	
All other VPA operations not specified above	$750	$375	

[1] To be paid in addition to any required VPDES issuance or modification fee. The modification fee shall apply for any addition of land application sites to a permit.

[2] The modification fee shall apply to any addition of land application sites to a permit.

[3] When adding any industrial source (excluding water treatment plant residuals) to a permit that only authorizes the land application of municipal biosolids, the modification fee for a VPA combined sludge operation shall apply.

B. Virginia Water Protection (VWP) Individual Permits. Applications for issuance of new individual, and reissuance or major modification of existing individual VWP permits. Only one permit application fee will be assessed per application; for a permit application involving more than one of the operations described below, the governing fee shall be based upon the primary purpose of the proposed activity. (Withdrawal amounts shown are maximum daily withdrawals.)

TYPE OF INDIVIDUAL PERMIT	ISSUANCE/REISSUANCE	MODIFICATION
VWP Individual / Surface Water Impacts (Wetlands, Streams and/or Open Water)	$2,400 plus $220 for each 4,356 sq. ft. (1/10 acre) (or portion thereof) of incremental impact over 87,120 sq. ft. (two acres) ($60,000 maximum)	$1,200 plus $110 for each 4,356 sq. ft. (1/10 acre) (or portion thereof) of incremental impact over 87,120 sq. ft. (two acres) ($30,000 maximum)
VWP Individual / Nonmetallic Mineral Mining	$2,400 plus $220 for each 4,356 sq. ft. (1/10 acre) (or portion thereof) of incremental impact over 87,120 sq. ft. (two acres) ($7,500 maximum)	$1,200 plus $110 for each 4,356 sq. ft. (1/10 acre) (or portion thereof) of incremental impact over 87,120 sq. ft. (two acres) ($3,750 maximum)
VWP Individual/Minimum Instream Flow – Surface Water Withdrawals equal to or greater than 3,000,000 gallons on any day	$25,000	$5,000
VWP Individual / Minimum Instream Flow – Surface Water Withdrawals between 2,000,000 and 2,999,999 gallons on any day	$20,000	$5,000
VWP Individual / Minimum Instream Flow – Surface Water Withdrawals between 1,000,000 and 1,999,999 gallons on any day	$15,000	$5,000
VWP Individual / Minimum Instream Flow – Surface Water Withdrawals < 1,000,000 gallons on any day that do not otherwise qualify for a general VWP permit for water withdrawals	$10,000	$5,000
VWP Individual / Reservoir – Major (any new or expanded reservoir with greater than or equal to 17 acres of total surface water impacts (stream and wetlands), or a water	$35,000	$12,500

TYPE OF INDIVIDUAL PERMIT	ISSUANCE/REISSUANCE	MODIFICATION
withdrawal of greater than or equal to 3,000,000 gallons in any one day)		
VWP Individual / Reservoir – Minor (any new or expanded reservoir with less than 17 acres of total surface water impacts (stream and wetlands), or a water withdrawal of less than 3,000,000 gallons in any one day)	$25,000	$12,500

C. Groundwater Withdrawal (GW) Individual Permits. Applications for issuance of new individual, and reissuance or major modification of existing individual GW permits.

TYPE OF INDIVIDUAL PERMIT	ISSUANCE/REISSUANCE	MODIFICATION
Groundwater Withdrawal / Initial Permit for an Existing Withdrawal Based Solely on Historic Withdrawals	$1,200	$600
Groundwater Withdrawal – effective through 12/31/2018	$6,000	$3,000
Groundwater Withdrawal – effective 1/1/2019	$9,000	$3,000

D. Registration Statements (VPDES and VPA permits) or Applications (VWP permits) for General Permit Coverage.

TYPE OF GENERAL PERMIT	ISSUANCE
VPDES General Permit for Domestic Sewage Discharges Less Than or Equal to 1,000 GPD (VAG40)	Zero ($0)
VPDES General Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation & Hydrostatic Tests (VAG83)	Zero ($0)
VPDES General Permit for Discharges Resulting from the Application of Pesticides to Surface Waters of Virginia (VAG87)	Zero ($0)
VPDES General Permit for Storm Water Discharges Associated with Industrial Activity (VAR05)	$500
VPA General Permit for Pollutant Management Activities for Animal Feeding Operations and Animal Waste Management (VPG1)	Zero ($0)
VPA General Permit for Poultry Waste Management (VPG2)	Zero ($0)
VPDES General Permit for Concrete Product Facilities (VAG11)	$600
VPDES General Permit for Noncontact Cooling Water Discharges of 50,000 GPD or Less (VAG25)	$600
VPDES General Permit for Seafood Processing Facilities (VAG52)	$600
VPDES General Permit for Potable Water Treatment Plants (VAG64)	$600
VPDES General Permit for Vehicle Wash Facilities and Laundry Facilities (VAG75)	$600
VPDES General Permit for Nonmetallic Mineral Mining (VAG84)	$600
VPDES General Permit for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia (VAN)	$600
VPDES General Permit for Municipal Separate Storm Sewer Systems (MS4) – Small (VAR04)	$4000
VWP General / Less Than 4,356 sq. ft. (1/10 acre) of Surface Water Impact (Wetlands, Streams and/or Open Water)	$0
VWP General / 4,356 sq. ft. to 21,780 sq. ft. (1/10 acre to 1/2 acre) of Surface Water Impact (Wetlands, Streams and/or Open Water)	$600
VWP General / 21,781 sq. ft. to 43,560 sq. ft. (greater than 1/2 acre to one acre) of Surface Water Impact (Wetlands, Streams and/or Open Water)	$1,200
VWP General / 43,561 sq. ft. to 87,120 sq. ft. (greater than one acre to two acres) of Surface Water Impact (Wetlands, Streams and/or Open Water)	$1,200 plus $120 for each 4,356 sq. ft. (1/10 acre) (or portion thereof) of incremental impact over 43,560 sq. ft. (one acre) ($2,400 maximum)
VWP General / Minimum Instream Flow / Reservoir - Water withdrawals and/or pond construction	$2,400

NOTE: This form is NOT appropriate for Virginia Stormwater Management Program (VSMP) Construction General Permit (VAR10) fee payments. Please refer to the following web site hyperlink to obtain appropriate VAR10 permit fee forms:

Hyperlink to the DEQ Virginia Stormwater Management, Construction Stormwater Permit Program website.